

## Errata

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### HP References in this Manual

This manual may contain references to HP or Hewlett-Packard. Please note that Hewlett-Packard's former test and measurement, semiconductor products and chemical analysis businesses are now part of Agilent Technologies. We have made no changes to this manual copy. The HP XXXX referred to in this document is now the Agilent XXXX. For example, model number HP8648A is now model number Agilent 8648A.

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## **OPERATING AND SERVICE MANUAL**

# **MODEL 3585A SPECTRUM ANALYZER**

Serial Numbers: 1750A00101 and greater

### **WARNING**

*To help minimize the possibility of electrical fire or shock hazards, do not expose this instrument to rain or excessive moisture.*

## **VOLUME II**

**Manual Part No. 03585-90001**

**Microfiche Part No. 03585-90051**

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- I. GENERAL INFORMATION
- II. INSTALLATION AND INTERFACE
- III. OPERATING INSTRUCTIONS

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Section

- VIII. SERVICE



## CATHODE-RAY TUBE WARRANTY AND INSTRUCTIONS

The cathode-ray tube (CRT) supplied in your Hewlett-Packard Instrument and replacement CRT's purchased from -hp- are warranted by the Hewlett-Packard Company against electrical failure for a period of one year from the date of shipment from Colorado Springs. Broken tubes and tubes with phosphor or mesh burns are not included under this warranty. No other warranty is expressed or implied.

### INSTRUCTION TO CUSTOMERS

If the CRT is broken when received, a claim should be made with the responsible carrier. All warranty claims with Hewlett-Packard should be processed through your nearest Hewlett-Packard Sales/Service Office (listed at rear of instrument manual).

### INSTRUCTIONS TO SALES/SERVICE OFFICE

Return defective CRT in the replacement CRT packaging material. If packaging material is not available, contact CRT Customer Service in Colorado Springs. The Colorado Springs Division must evaluate all CRT claims for customer warranty, Material Failure Report (MFR) credit, and Heart System credit. A CRT Failure Report form (see reverse side of this page) must be completely filled out and sent with the defective CRT to the following address:

**HEWLETT-PACKARD COMPANY**  
1900 Garden of the Gods Road  
Colorado Springs, Colorado 80907

**Parcel Post Address:**  
P.O. Box 2197  
Colorado Springs, Colorado 80901

Attention: CRT Customer Service

Defective CRT's not covered by warranty may be returned to Colorado Springs for disposition. These CRT's, in some instances, will be inspected and evaluated for reliability information by our engineering staff to facilitate product improvements. The Colorado Springs Division is equipped to safely dispose of CRT's without the risks involved in disposal by customers or field offices. If the CRT is returned to Colorado Springs for disposal and no warranty claim is involved, write "Returned for Disposal Only" in item No. 5 on the form.

Do not use this form to accomplish CRT repairs. In order to have a CRT repaired, it must be accompanied by a customer service order (repair order) and the shipping container must be marked "Repair" on the exterior.

## SAFETY SUMMARY

***The following general safety precautions must be observed during all phases of operation, service, and repair of this instrument. Failure to comply with these precautions or with specific warnings elsewhere in this manual violates safety standards of design, manufacture, and intended use of the instrument. Hewlett-Packard Company assumes no liability for the customer's failure to comply with these requirements.***

### **GROUND THE INSTRUMENT.**

To minimize shock hazard, the instrument chassis and cabinet must be connected to an electrical ground. The instrument is equipped with a three-conductor ac power cable. The power cable must either be plugged into an approved three-contact electrical outlet or used with a three-contact to two-contact adapter with the grounding wire (green) firmly connected to an electrical ground (safety ground) at the power outlet. The power jack and mating plug of the power cable meet International Electrotechnical Commission (IEC) safety standards.

### **DO NOT OPERATE IN AN EXPLOSIVE ATMOSPHERE.**

Do not operate the instrument in the presence of flammable gases or fumes. Operation of any electrical instrument in such an environment constitutes a definite safety hazard.

### **KEEP AWAY FROM LIVE CIRCUITS.**

Operating personnel must not remove instrument covers. Component replacement and internal adjustments must be made by qualified maintenance personnel. Do not replace components with power cable connected. Under certain conditions, dangerous voltages may exist even with the power cable removed. To avoid injuries, always disconnect power and discharge circuits before touching them.

### **DO NOT SERVICE OR ADJUST ALONE.**

Do not attempt internal service or adjustment unless another person, capable of rendering first aid and resuscitation, is present.

### **USE CAUTION WHEN EXPOSING OR HANDLING THE CRT.**

Breakage of the Cathode-ray Tube (CRT) causes a high-velocity scattering of glass fragments (implosion). To prevent CRT implosion, avoid rough handling or jarring of the instrument. Handling of the CRT shall be done only by qualified maintenance personnel using approved safety mask and gloves.

### **DO NOT SUBSTITUTE PARTS OR MODIFY INSTRUMENT.**

Because of the danger of introducing additional hazards, do not install substitute parts or perform any unauthorized modification to the instrument. Return the instrument to a Hewlett-Packard Sales and Service Office for service and repair to ensure that safety features are maintained.

### **DANGEROUS PROCEDURE WARNINGS.**

Warnings, such as the example below, precede potentially dangerous procedures throughout this manual. Instructions contained in the warnings must be followed.

**WARNING**

**Dangerous voltages, capable of causing death, are present in this instrument.  
Use extreme caution when handling, testing, and adjusting.**

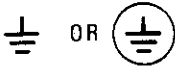
## General Definitions of Safety Symbols Used On Equipment



Instruction manual symbol: the product will be marked with this symbol when it is necessary for the user to refer to the instruction manual in order to protect against damage to the instrument.



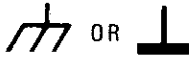
Indicates dangerous voltage (terminals fed from the interior by voltage exceeding 1000 volts must be so marked).



Protective conductor terminal. For protection against electrical shock in case of a fault. Used with field wiring terminals to indicate the terminal which must be connected to ground before operating equipment.



Low-noise or noiseless, clean ground (earth) terminal. Used for a signal common, as well as providing protection against electrical shock in case of a fault. A terminal marked with this symbol must be connected to ground in the manner described in the installation (operating) manual, and before operating the equipment.



Frame or chassis terminal. A connection to the frame (chassis) of the equipment which normally includes all exposed metal structures.



Alternating current (power line).



Direct current (power line).



Alternating or direct current (power line).

**WARNING**

The WARNING sign denotes a hazard. It calls attention to a procedure, practice, or the like, which, if not correctly performed or adhered to, could result in personal injury.

**CAUTION**

The CAUTION sign denotes a hazard. It calls attention to an operating procedure, practice, or the like, which if not correctly performed or adhered to, could result in damage to or destruction of part or all of the product.

## **SECTION IV**

### **PERFORMANCE TESTS**

#### **4-1. INTRODUCTION.**

4-2. This section contains the procedures for the performance tests which verify that the 3585A will meet its published specifications as listed in Table 1-1. Access to the interior of the instrument is not needed to perform any of the tests. Two different types of tests are included in this section: Semi-Automatic Performance Tests and Operational Verification Tests. The Semi-Automatic Performance Tests are used to verify that the 3585A meets its published specifications. The Operational Verification Tests will give you a good indication that the 3585A is working as specified; however, they do not verify that the 3585A meets *all* its specifications.

#### **4-3. RECOMMENDED TEST EQUIPMENT.**

4-4. The equipment that is recommended for testing the 3585A is listed in Table 4-1. If the recommended model is not available, use a substitute that meets the "Required Characteristics" given in the table. When using the Semi-Automatic Performance Tests, see Paragraph 4-14 for further instructions.

**Table 4-1. Recommended Test Equipment.**

Instrument	Required Characteristics	Usage		Recommended Model
		Semi-Automatic Performance Test	Operational Verification Tests	
Audio Oscillator	Frequency: 1kHz Distortion: $\leq -90$ dB Amplitude: 0.1Vrms	x	x	-hp- 339 or -hp- 239
Attenuator: Variable 10dB/Step Variable 1dB/Step See Note 1	Range: 0 - 120dB Range: 0 - 12dB	x x	x x	hp- 355D -hp- 355C
Bridge: Directional 50 $\Omega$ 75 $\Omega$ See Note 2, 3	Frequency: 0.1 - 40 MHz Return Loss > 30dB Directivity > 40dB	x x	x x	-hp- 8721A -hp- 8721A Option 00B
Calculator	Compatible with -hp- 9825A Software and I/O	x		-hp- 9825
Calculator ROM's	HP-IB* and -hp- 9825A Compatible	x		-hp- 98210A and hp- 98213A
Filter: 9MHz Low Pass	See Figure 4-14	x	x	
Frequency Counter	Range: 5 to 10 MHz Resolution: 0.1 Hz Accuracy: $\pm 1$ count, $+ 5 \times 10^{-10}$ /day	x	x	-hp- 5328A Option 010
Frequency Synthesizer	Freq. Range: 200 Hz to 40.1 MHz Amp. Range: + 10 to -85 dBm Amplitude Accuracy: $\pm 0.25$ dBm	x	x	-hp- 3335A
Frequency Synthesizer	Freq. Range: 1 kHz to 33 MHz Amplitude Range: -25 dBm Amplitude Accuracy: $\pm 0.4$ dB	x	x	-hp- 3330B
Function Generator See Note 3	Frequency: 1.2kHz Square Wave: 100ns rise time dc Offset: $\pm 1$ V	x		-hp- 3311A
HP-IB* Interconnection Cables		x		-hp- 10631
HP-IB* Interface Cable	-hp- 9825A Compatible	x		-hp- 98034A
Impedance Matching Network (50 $\Omega$ to 75 $\Omega$ Minimum Loss Pad)	Frequency: 0.1 to 40 MHz VSWR < 1.05	x	x	-hp- 8542B
Mixer: Double Balanced See Note 3	Frequency: 0.1 - 40MHz	x		-hp- 10534
Oscilloscope See Note 2	Vertical Scale: $\geq 5$ mV/Div. Horizontal Scale: $\geq 50$ nsec/Div.		x	-hp- 1740A
Power Supply: DC See Note 4	Voltage range: 0 - 10 V DC	x		-hp- 6213A
Printer: Impact Summer	Plotter Capability See Figure 4-15	x x	 x	 -hp- 9871A
Termination: Feedthrough 50 $\Omega$ 75 $\Omega$	$\pm 0.1$ ohm, 1 Watt	x x	x x	-hp- 11048C -hp- 11094C
Thermal Voltage Converter: 50 $\Omega$ , 0.5 V See Note 4	Frequency: 0.1 - 60MHz Calibration Data	x		-hp- 11051A Option 01
Voltage Divider: 10 to 1 Terminated in 50 $\Omega$ See Note 4	See Figure 4-7	x		
Voltmeter: Digital See Note 4	Full Scale Range: 1Vdc Accuracy: + 0.004% Resolution: 6 Digits Input Resistance: > 1 M $\Omega$	x		-hp- 3455A

**NOTES**

1. Attenuator must be calibrated by standards lab. Correction factors are required for the Operational Verification Tests.
2. Required for the Operation Verification Return Loss Test.
3. Required for the Semi-Automatic Performance Test Return Loss procedure.
4. Required to run the calibrator accuracy program.

\*Hewlett-Packard Interface Bus.

#### **4-5. SEMI-AUTOMATIC PERFORMANCE TESTS OVERVIEW.**

4-6. Due to the vast number of features incorporated in the 3585A, Semi-Automatic Performance testing is a highly desirable alternative to the Operational Verification tests. The function of Semi-Automatic Performance testing is to free the operator from the time consuming data gathering and documentation normally associated with Performance Tests. Semi-Automatic Performance Tests will check all of the specifications and do so in a much more detailed manner than the Operational Verification Tests. The Semi-Automatic Performance Tests give you a confidence level of 99% and take approximately 2 1/4 hours to complete.

4-7. The Semi-automatic Performance Tests and associated instructions are contained on the cassette tape (Part Number 03585-10001) included with the 3585A. In order to run the Performance Tests automatically, the program contained on the cassette tape is loaded into the -hp- 9825A calculator memory and run. Once the program is started, instructions for running the Performance Tests are printed by the calculator or displayed on the 3585A CRT. After the instructions have been completed, the calculator will proceed to execute the present test and document the data. This process gives the operator a neatly typed summary of the performance of the 3585A in a minimum amount of time.

#### **4-8. OPERATIONAL VERIFICATION TESTS OVERVIEW.**

4-9. The Operational Verification Tests are done manually for the 3585A and are designed to be run with a minimum amount of equipment. A comparison of the required test equipment is presented in Table 4-1. These tests give the user a good indication of the overall condition of the 3585A. Using this method of testing a 90% level of confidence that the 3585A meets all its specifications is obtained. The Operational Verification tests take about 3 hours to run (as compared to 2 1/4 hours for a complete semi-automatic characterization).

#### **4-10. PERFORMANCE TEST CARD.**

4-11. A Performance Test Card is provided at the end of this section for your convenience, to record the performance of the 3585A during the Operational Verification Tests. This card can be removed from the manual and used as a permanent record of the incoming inspection or of a routine Performance Test. The Performance Test Card may be reproduced without the written permission of Hewlett-Packard. The Performance Test Card is not used for the Semi-Automatic Performance Tests. The printer documents the tests results for you in a form similar to that of the Performance Test Card.

#### **4-12. CALIBRATION CYCLE.**

4-13. The 3585A requires verification of its specified performance every 12 months. The Performance Tests can also be used as a part of incoming inspection or after a repair is made to the instrument. The filter screen on the fan should be cleaned each time the instrument's performance is checked.

#### **4-14. SEMI-AUTOMATIC PERFORMANCE TESTS.**

##### **4-15. Program Summary.**

4-16. Table 4-2 is a list of the programs used during the Semi-Automatic Performance Tests. The Performance Test cassette tape file numbers are also contained in this table so that any program may be run individually.



**Table 4-2. Summary of Programs Used For Semi-Automatic Performance Testing.**

Size	Maximum Size	Track	File	Test Title
3440	5000	0	0	"10/14/77 GRIND":
4910	5000	0	1	"03/03/78; instrument interconnect test & Header"
4988	5000	0	2	"06/10/78": "Turn on/Cal Offset"
4954	5000	0	3	"06/10/78": "Source Accuracy"
2016	5000	0	4	"02/07/78": "Calibrator Accuracy" (Optional)
1574	5000	0	5	"02/13/78 Range Calibration":
2928	5000	0	6	"6/10/78": "Amplitude Linearity"
3264	5000	0	7	"6/14/78": "Ref Level Set Accuracy"
3720	5000	0	8	"6/10/78": "Flatness, 50 ohm, no cal, 10 Hz to 40 M"
3630	5000	0	9	"06/10/78": "Flatness, 1 M, 20 Hz to 40 MHz"
3372	5000	0	10	"06/13/78": "RETURN LOSS"
1978	5000	0	11	"6/14/78": "Noise vs. BANDWIDTH"
1610	5000	0	12	"06/10/78": "1 M Input Noise, open circuit"
1234	5000	0	13	"10/21/77 Marker Accuracy":
4340	5000	0	14	"4/14/78": "Low Freq. Response/LO sidebands"
1084	5000	0	15	"4/18/78": "Residual Spurs"
2160	5000	0	16	"04/13/78": "Conv/Input Spurs and Image"
2014	5000	0	17	"06/07/78": "IF Harmonic Distortion"
3224	5000	0	18	"6/10/78": "Harmonic Distortion"
4018	5000	0	19	"6/13/78": "IM Distortion"
3648	5000	0	20	"BW MEAS 5/31/78":
2324	5000	0	21	"10/24/77": "Tracking Generator Flatness"
1710	5000	0	22	"04/18/78": "Step IF, Fraction N Spurs"
1820	5000	0	23	"10/24/77": "API Spurs in Multiple Loop"
346	5000	0	24	"10/24/77 End of Perf. Test message":
4998	5000	0	25	"Dynamic Range Chart 1/20/78":
1014	5000	0	26	"HP-IB Test for Op. Verification 3/08/78":

**4-17. Semi-Automatic Performance Test Equipment.**

4-18. The Semi-Automatic Performance Test software is designed to be run with a particular set of HP-IB compatible instruments. These instruments are denoted by an asterisk (\*) in Table 4-3. Critical specifications for this equipment may be found in Table 4-1. For usage of equipment other than that listed in Table 4-3, refer to Paragraph 4-19.

**Table 4-3. Semi-Automatic Performance Test Equipment List**

-hp- 03585-10001	Semi-Automatic Performance Test Cartridge	
*-hp- 9825A	Programmable Calculator	
*-hp- 9871A	Character Impact Printer	
*-hp- 3335A	Frequency Synthesizer	
*-hp- 3330B	Frequency Synthesizer	
*-hp- 3455A	Digital Voltmeter	
*-hp- 98034A	HP-IB Interface	
	Frequency Counter . . . . .	-hp- 5328A
	Function Generator . . . . .	-hp- 3311A
	Audio Oscillator . . . . .	-hp- 339A
	50Ω Return Loss Bridge . . . . .	-hp- 8721A
	75Ω Return Loss Bridge . . . . .	-hp- 8721A Option 008
	50Ω Feed Thru Termination . . . . .	-hp- 11048C
	75Ω Feed Thru Termination . . . . .	-hp- 11094B
	10dB/Step Attenuator . . . . .	-hp- 355D
	1dB/Step Attenuator . . . . .	-hp- 355C
	0.5V Thermal Voltage Converter . . . . .	-hp- 11051A Option 01
	Double Balanced Mixer . . . . .	-hp- 10534A
	HP-IB Cables . . . . .	-hp- 10631
	10:1 Voltage Divider Terminated in 50Ω . . . . .	(See Figure 4-7)
	Frequency Summer . . . . .	(See Figure 4-15)
	9MHz Low Pass Filter . . . . .	(See Figure 4-14)
	DC Power Supply . . . . .	-hp- 6213A
	50/75Ω Minimum Loss Pad . . . . .	-hp- 85428B

**4-19. Test Equipment Substitutions.**

4-20. The included Semi-Automatic Performance Test software is designed to be used with the calculator, printer and frequency synthesizers listed under Recommended Test Equipment, Table 4-3. Other HP-IB compatible controllers and instruments may be used for the tests; however, the user must write his own software to be compatible with his particular equipment. To facilitate this, flow charts of the Semi-Automatic Performance Tests are included in Appendix 4-A. Substitute test equipment must meet the critical specifications listed in Table 4-1.

**NOTE**

*HP-IB is Hewlett-Packard's implementation of IEEE std 488-1975, "standard digital interface for programmable instrumentation".*

**4-21. Program Failures.**

4-22. If, while running a program everything comes to a grinding halt, you are sure the program is gathering false data or an error message is displayed on the calculator, the following steps should be taken:

- a. Press
- b. Check the equipment set-up to be sure all connections and control settings are correct.
- c. Press

If this procedure fails to correct the problem, then try this procedure:

- a. Press
- b. Find out which program you are trying to run. The 9871A printout should be useful in finding this information.
- c. Using the Performance Test title (or the previous test title) go to Table 4-2 and find the file number for the program that you are trying to run.
- d. Enter these commands on the 9825A calculator:

,

File No. From Step C.

- e. Press

**4-23. Running Individual Semi-Automatic Performance Tests.**

4-24. To run one of the individual programs shown in Table 4-2 the following command sequence should be entered on the 9825A calculator:

- a.
- b.   ,

Chosen File No.

- c.

**NOTE**

*When individual programs are run it is assumed that all the needed equipment has been correctly connected and checked with the Instrument Interconnect Test in File No. 1.*

If more than one Program is to be run, only Steps B and C need to be executed after all three steps have been executed once.

**4-25. HP-IB Address Switch Settings.**

4-26. The HP-IB Address switch settings for the instruments used in the Semi-Automatic Performance Tests are listed in Table 4-4. If the Addresses for the 3585A, 3330B or 9871A are incorrectly set, a qualified service technician must set them correctly. The procedure for changing the 3585A HP-IB address can be found in Paragraph 2-32. For instructions on changing the other instruments HP-IB addresses, refer to each instruments individual manual. The -hp- 3335A and -hp- 3455A HP-IB Instrument Listen Address switches are located on their respective rear panels and may be changed for these tests.

**Table 4-4. HP-IB Address Switch Settings**

Instrument	HP-IB Listen Address (5-Bit Decimal Code)
-hp- 3585A Spectrum Analyzer	11
-hp- 9871A Impact Printer	1
-ho- 3335A Frequency Synthesizer	5
-hp- 3330B Frequency Synthesizer	4
-hp- 3455A Digital Voltmeter	22

**WARNING**

*HP-IB Address switches which require access to the interior of the instrument should be changed only by qualified service personal.*

**3585A Switch Settings**

```

FRONT ↑↑
-----
| 0 | 7
| 0 | 6
| 0 | 5
|0  | 4
| 0 | 3
|0  | 2
|0  | 1
-----
    
```

**3335A Switch Settings**

```

-----
1 | 0 0 |
0 |0 0 0 |
-----
  5 4 3 2 1
    
```

**9871A Switch Settings**

```

-----
5 |0 | | |0 |
4 |0 | | |0 |
3 |0 | | OR |0 |
2 |0 | | |0 |
1 | |0 | |0 |
-----
  ON<- ->ON
    
```

**3330B Switch Settings**

```

S1 S2 S3 S4 S5
0 0 1 0 0
    
```

**3455A Switch Settings**

```

-----
1 |0 0 0 |
0 | |0 0 |
-----
  5 4 3 2 1
    
```

**4-27. Manual Tests**

4-28. Before proceeding with the calculator controlled portion of the Semi-Automatic Performance Tests, two manual tests must be performed. The first of these tests is for frequency accuracy, and the second test checks the 1 M ohm input impedance and capacitance.

**4-29. Frequency Accuracy**

4-30. This test verifies the frequency accuracy of the 3585A by using an external counter to check the internal frequency reference. It is important that the frequency counter used to do this test has a reference which is more accurate than that of the 3585A.

Specification: Counter Accuracy,  $\pm 0.3\text{Hz} \pm 1 \times 10^{-7}/\text{month}$

Procedure:

a. Allow the instruments used in this test to warm up for 15 to 20 minutes before beginning this test.

b. Set the synthesizer controls for:

FREQUENCY.....9 MHz  
 AMPLITUDE.....0 dBm

c. Set the 3585A controls for:

INSTRUMENT PRESET  
 MANUAL SWEEP.....9 MHz  
 COUNTER.....on

d. Using a BNC “T” connector, connect the synthesizer’s 50 ohm output to the frequency counter and the 3585A 50 ohm input.

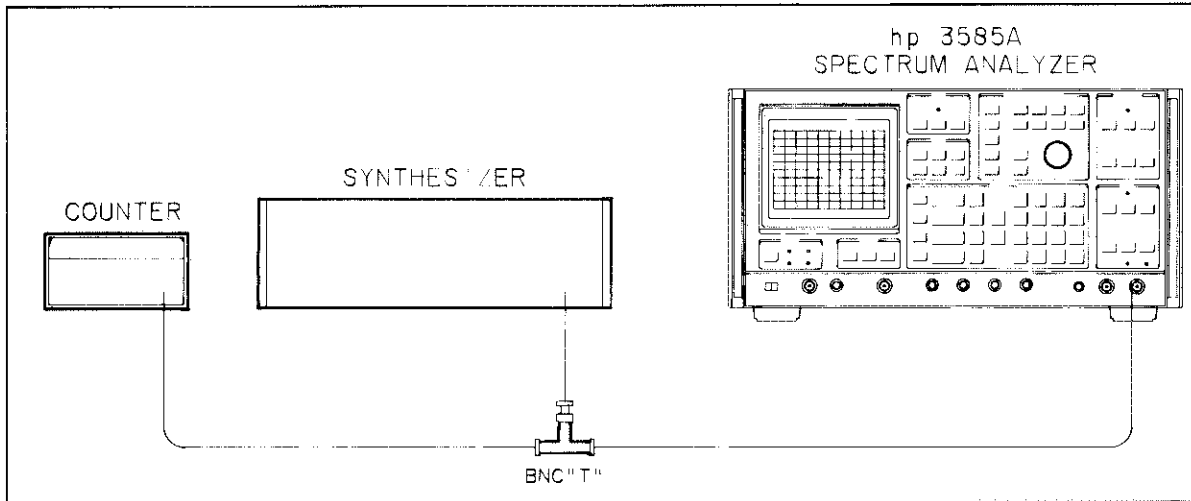
**NOTE**

*Be sure that the synthesizer and the 3585A are operating on their own internal references. disconnect any reference connection common to both instruments.*

e. Record the frequency difference between the frequency counter and the 3585A counter reading. Difference frequency equals \_\_\_\_\_ Hz.

f. The 3585A frequency accuracy is specified in terms of frequency drift; therefore, if the frequency accuracy derived from this test is not in accordance with your requirements, turn to Section 5 of this manual for the Reference Oscillator Adjustment procedure.

g. This completes the Frequency Accuracy Test, reconnect any necessary references.



**Figure 4-1. Frequency Accuracy Test**

**4-31. 1 M Ohm Input Impedance Test.**

4-32. These tests verify that the 3585A meets the Input Impedance specifications for the 1 MΩ, 30 pf Input Impedance setting.

**Equipment Required:**

- Resistor: 1MΩ ± 1%, 1/8W film.....-hp- Part No. 0757-0344
- 50Ω Feed Thru Termination.....-hp- 11048C
- Synthesizer.....-hp- 3335A

Specification: 1MΩ ± 3%, < 30 pf

**Procedure:**

- a. Set the 3585A controls as follows:

```

INSTRUMENT PRESET
CENTER FREQUENCY.....1 kHz
MANUAL SWEEP.....on
RES. BW.....100 Hz
dB/DIV......2 dB
RANGE......0 dBm
INPUT IMPEDANCE.....1 MΩ
    
```

- b. Connect the 50Ω termination to the 3585A 1 MΩ input. Connect the synthesizer output to the termination input.

- c. Set the synthesizer controls for:

```

FREQUENCY......1 kHz
AMPLITUDE......0 dBm
    
```

- d. Set the 3585A controls for OFFSET on. Allow time for the marker reading to stabilize and press the ENTER OFFSET button.
- e. Using short clip leads, insert the 1 M $\Omega$  resistor between the output of the termination and the 3585A 1 M $\Omega$  input as shown in Figure 4-2.
- f. The 3585A marker amplitude reading should be  $-6.0 \text{ dB} \pm 0.44 \text{ dB}$ , verifying that the input resistance is  $1 \text{ M}\Omega \pm 5\%$ .
- g. Press the 3585A ENTER OFFSET button.
- h. Set the synthesizer frequency to 10 kHz.
- i. Set the 3585A for a CENTER FREQUENCY of 10 kHz.
- j. The 3585A marker reading should be between  $-2 \text{ dB}$  and  $-3 \text{ dB}$ , verifying that the shunt capacitance is less than 30 pf.

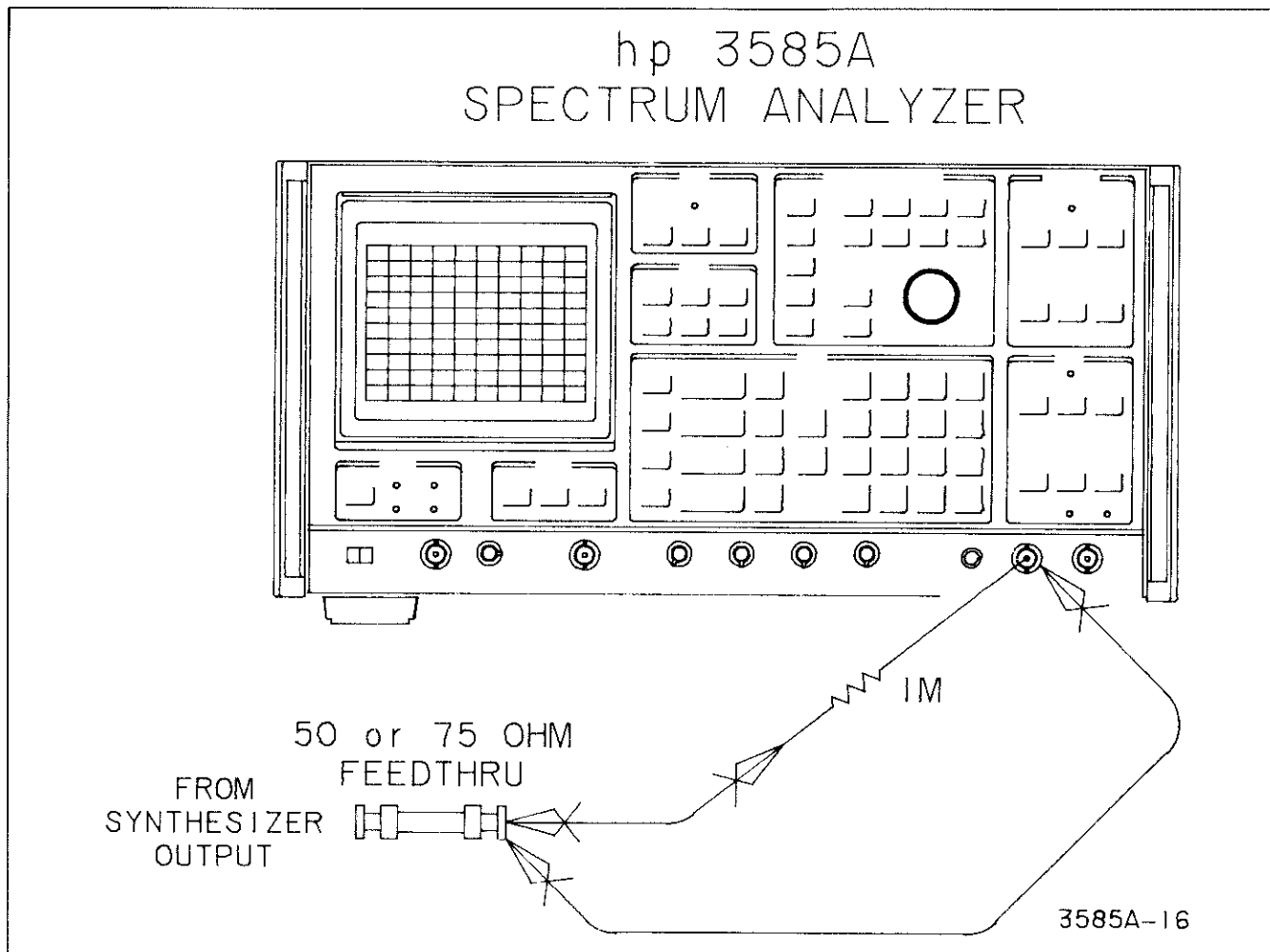


Figure 4-2. 1 M Ohm Input Impedance Test.

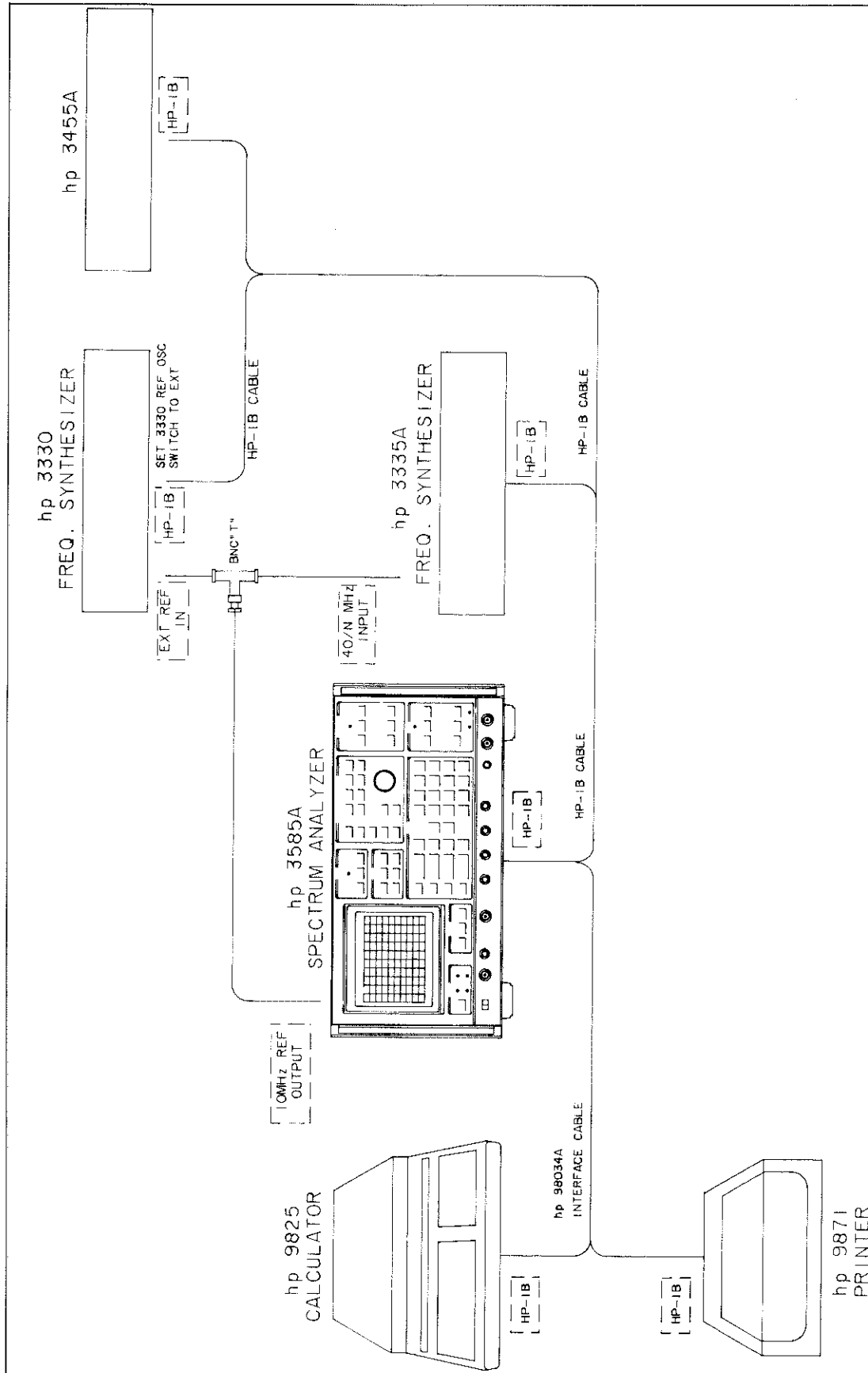


Figure 4-3. Semi-Automatic Performance Test Equipment Set-up.



### 4-33. Semi-Automatic Performance Test Equipment Set-up.

4-34. To run the Semi-Automatic Performance Tests, the -hp- 9825A Calculator, -hp- 9871 Printer, -hp- 3335A Frequency Synthesizer, -hp- 3330 Frequency Synthesizer and -hp- 3585A Spectrum Analyzer must be connected together as shown in Figure 4-3 and remain so for all of the performance tests unless otherwise noted.

### 4-35. Semi-Automatic Performance Test Procedure.

- a. Turn the calculator power off.
- b. Insert the calculator ROM's described in the Recommended Test Equipment list, Table 4-1, and into the slots under the calculator keyboard (see Figure 4-4).
- c. Check the rotary switch setting (Figure 4-5) on the HP-IB interface cable. The pointer should be on "7". If the pointer is at some other setting, use a small screwdriver to set it on "7".
- d. Turn the calculator, printer, synthesizer and spectrum analyzer power on.
- e. Load the supplied performance test cassette tape (Part Number 03585-10001) into the cassette tape slot.
- f. Press **LOAD** **0** on the calculator keyboard.
- g. Press **EXECUTE**
- h. After the run light has gone out, press **RUN** on the calculator keyboard.
- i. From this point on, the calculator will give instructions for what to do next. The manual does contain equipment set-ups for some of the tests. As these tests are encountered, the calculator will refer you to the equipment set-up diagram in the manual.

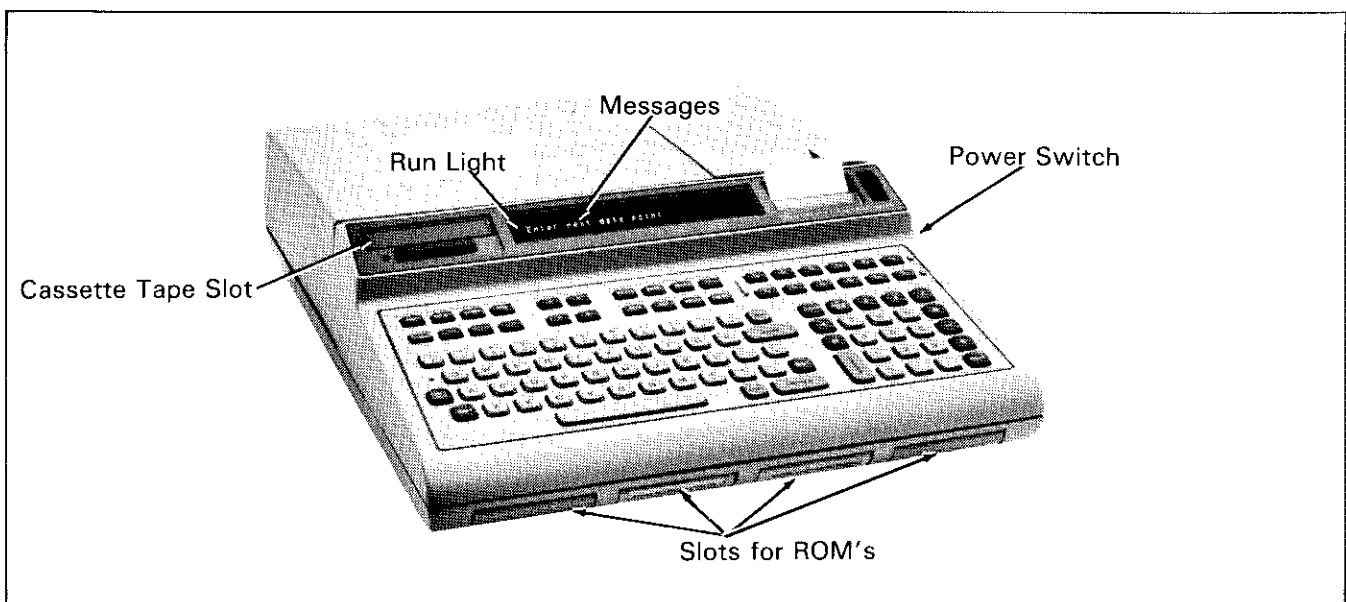
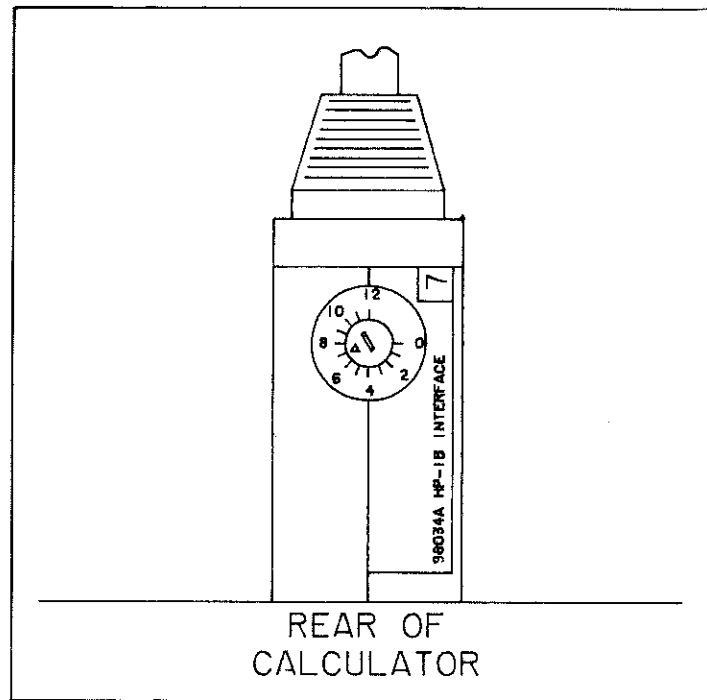


Figure 4-4. HP 9825A Calculator



**Figure 4-5. HP-IB Interface Cable Switch Setting.**

#### **4-36. Source Accuracy Program.**

4-37. The purpose of the source accuracy program is to calibrate the amplitude flatness of the synthesizer. This is done so that the synthesizer's corrected amplitude will be perfectly flat for the Calibrator Flatness and Range Calibration tests. The results of the Calibrator Flatness test will show how accurately the 3585A is being calibrated with respect to frequency.

4-38. To begin the Source Accuracy program, the calibration data for the N.B.S.\*-Certified Thermal Converter is entered into the calculator memory (this information can be obtained by ordering Option 01 with your -hp- 11051A Thermal Converter). After entering the frequency-related calibration data, a reference output voltage is obtained for a known input voltage. This is accomplished by a DC to DC transfer measurement. This measurement involves inputting a DC signal to the Thermal Converter that is equivalent to a 6 dBm signal into 50Ω. Next, the output of the synthesizer is applied to the N.B.S.\*-Certified Thermal Converter. The output of the Thermal Converter is monitored using a high accuracy, high resolution digital voltmeter. The program will adjust the output of the synthesizer until the previously measured Thermal converter output voltage is read by the digital voltmeter. The output level and frequency of the synthesizer are then stored in the calculator memory. Thirty-three frequencies are calibrated in this manner across the 40 MHz range. Once the 40 MHz range has been calibrated, the correction factors stored in the calculator's memory are recorded onto the performance test tape for use in later programs.

\*U.S. National Bureau of Standards.

**NOTE**

*It is very important that the synthesizer and output cable used to perform the source accuracy program are the same ones used to perform the calibrator flatness and range calibration tests.*

4-39. The data that is recorded on the tape for the source calibration test is only valid for one particular synthesizer-cable combination. Anytime the synthesizer or output cable is changed, a new set of source calibration data must be taken. For this reason, a space is provided at the beginning of the source calibration program to enter any pertinent information about the synthesizer, output cables or conditions.

**4-40. Using the Source Accuracy Program.**

4-41. The Source Accuracy program is structured in such a way so that maximum flexibility is available to the user. Because of this flexibility, guidelines are needed to help you understand the workings of this test. The flow chart of Figure 4-6 outlines the workings of this program. As you can see, the program centers around the menu which will appear as follows:

```
YOUR MENU IS:
ENTER THERMAL CONVERTER CALIBRATION DATA.....0
MEASURE THE THERMAL CONVERTER OUTPUT.....1
MEASURE THE SOURCE FOR CORRECTION DATA.....2
MANIPULATE DATA..(Print, Load, Record).....3
ENTER ONE OPTION # ON THE CALCULATOR KEYBOARD, CONT.
```

From the menu any of the four paths are available. When each path is completed a message will be displayed like this one:

```
GO BACK TO THE MENU.....CONTINUE
END.....1, CONTINUE
```

This message allows you to continue working in the Source Accuracy program for as long as you desire.

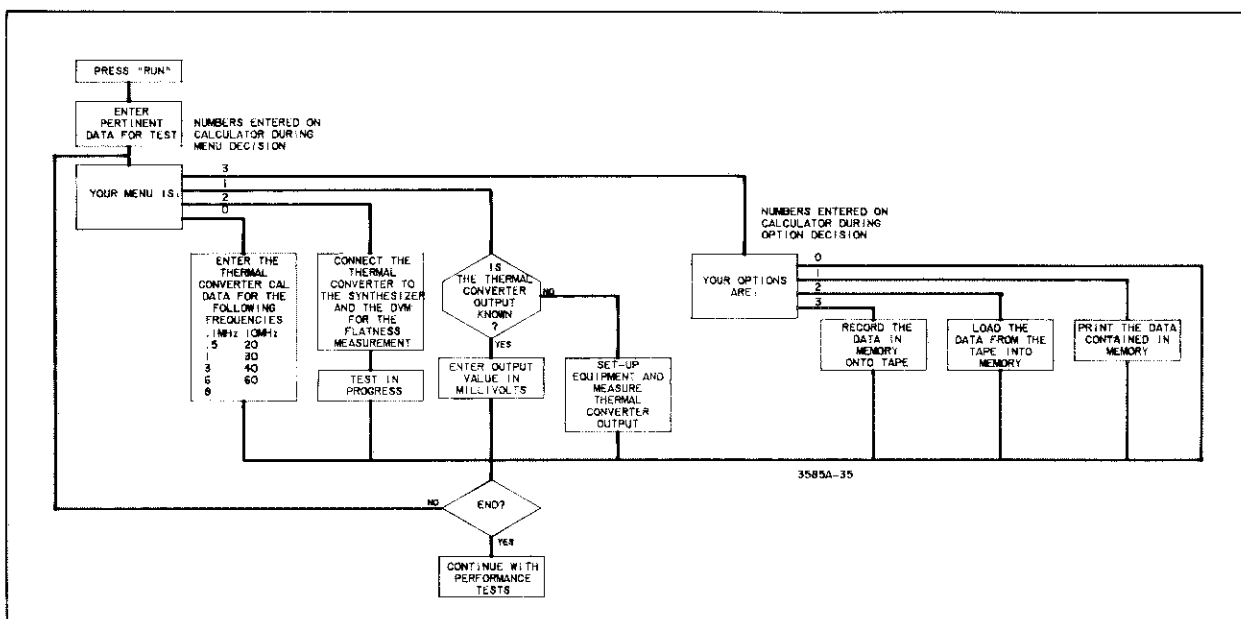
4-42. From the “List of Operations” (Table 4-5), a typical usage of the Source Accuracy program can be derived. This is the normal way in which the Source Accuracy program should be run. This typical usage would involve entering the Thermal Converter calibration data, measuring the Thermal Converter output, measuring the synthesizer for calibration data and recording the data. This sequence of events may be accomplished by performing operations a, b, c and d of Table 4-5. Another possibility is that the recorded Thermal Converter calibration data is correct, but a new set of synthesizer correction data needs to be taken. This may be accomplished by completing operations g and d. Data on the tape may be checked at any time by using operations e and f. Operation e may also be used during the running of the Source Accuracy program to check the data presently in memory.

**NOTE**

*Unless the source accuracy program has been run within the last 30 days, it should be run again. This will assure that the data used to check the 3585A calibrator is valid.*

**Table 4-5. List of Operations.**

<p>a. To enter the Thermal Converter calibration data.</p>	<ol style="list-style-type: none"> <li>1. go to the menu</li> <li>2. choose path #0</li> </ol>
<p>b. To measure the Thermal Converter output voltage.</p>	<ol style="list-style-type: none"> <li>1. go to the menu</li> <li>2. choose path #1</li> <li>3. answer "no" to the question</li> <li>4. take the measurement as directed</li> </ol>
<p>c. To measure the synthesizer for correction data.</p>	<ol style="list-style-type: none"> <li>1. go to the menu</li> <li>2. choose path #2</li> <li>3. connect the equipment as directed</li> <li>4. wait for the completion of the test</li> </ol>
<p>d. To record the correction data onto the Performance Test tape.</p>	<ol style="list-style-type: none"> <li>1. go to the menu</li> <li>2. choose path #3</li> <li>3. choose option #3</li> <li>4. follow the instructions for recording the data</li> </ol>
<p>e. To print the correction and Thermal Converter calibration data contained in memory.</p>	<ol style="list-style-type: none"> <li>1. go to the menu</li> <li>2. choose path #3</li> <li>3. choose option #1</li> </ol>
<p>f. To load the correction data from the Performance Test tape into memory</p>	<ol style="list-style-type: none"> <li>1. go to the menu</li> <li>2. choose path #3</li> <li>3. choose option #2</li> </ol>
<p>g. To use the Thermal Converter calibration data and take a new set of synthesizer correction data.</p>	<ol style="list-style-type: none"> <li>1. go to the menu</li> <li>2. choose path #3</li> <li>3. choose option #2</li> <li>4. go to the menu</li> <li>5. choose path #1</li> <li>6. go to the menu</li> <li>7. choose path #2</li> </ol>



**Figure 4-6. Source Accuracy Program Flowchart.**

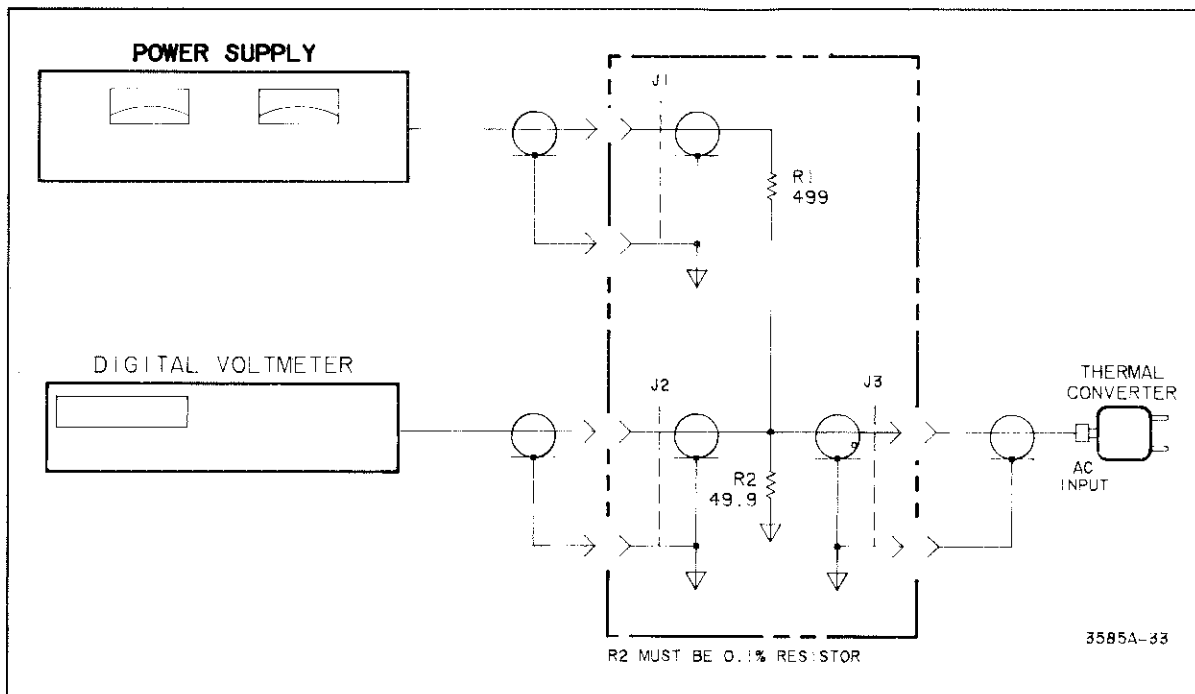


Figure 4-7. Thermal Converter Output Calibration.

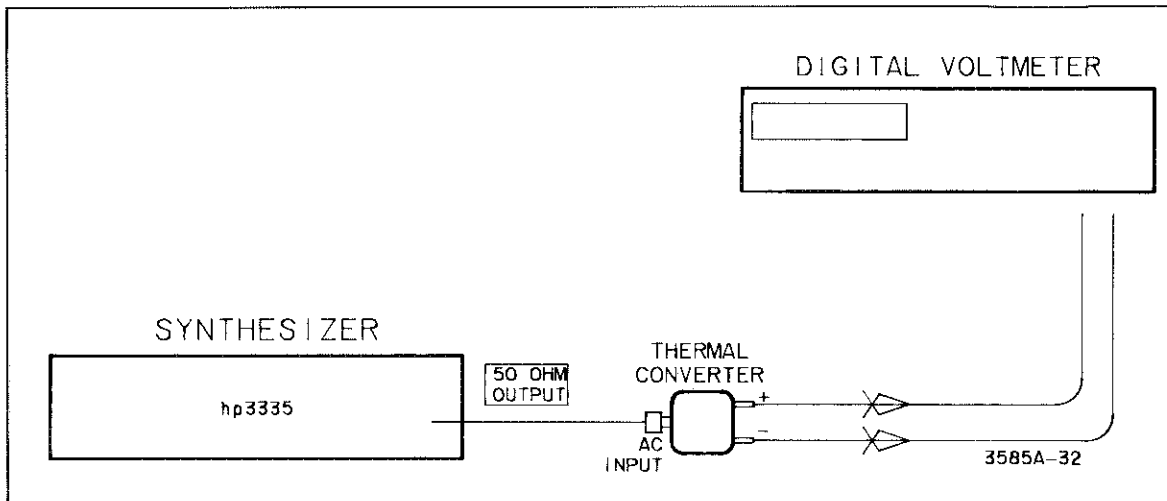


Figure 4-8. Measurement of Frequency Synthesizer For Calibration Data.

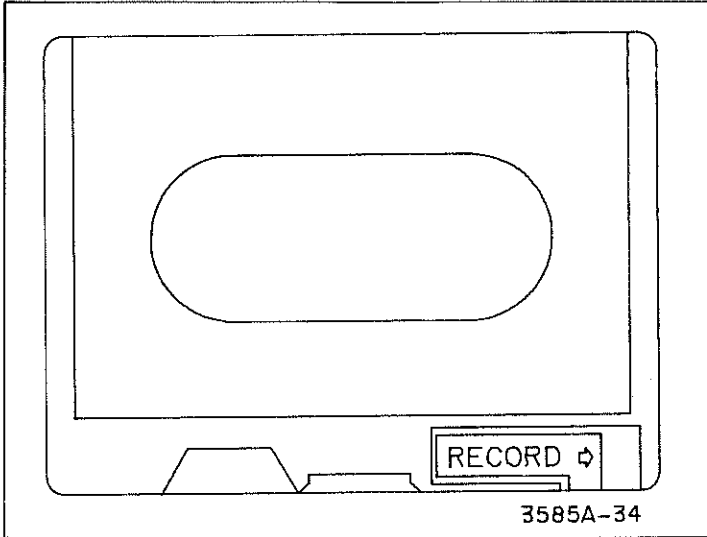


Figure 4-9. 9825A Cassette Tape.

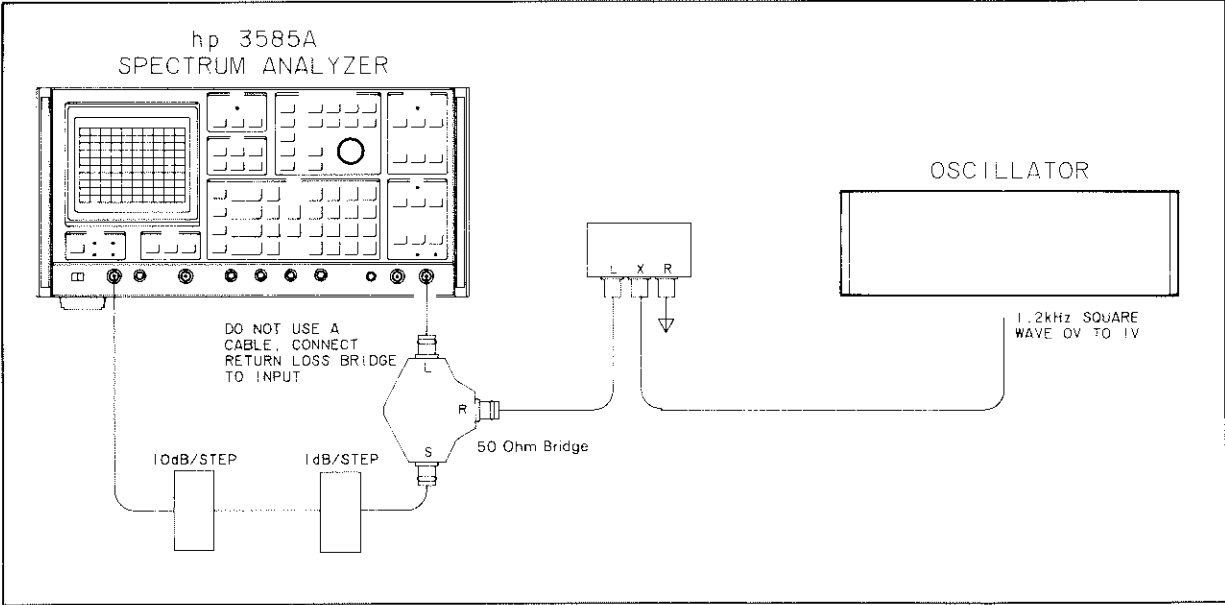


Figure 4-10. 50 ohm Return Loss Test (Automatic Tests).

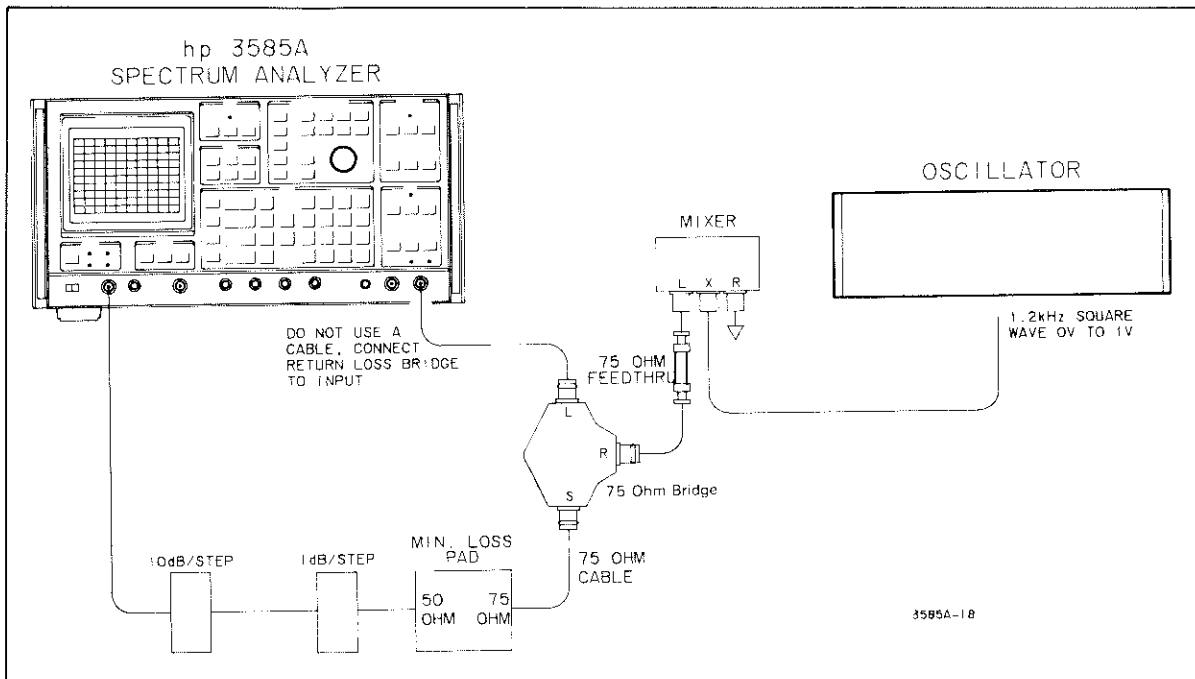


Figure 4-11. 75 ohm Return Loss Test (Automatic Tests).

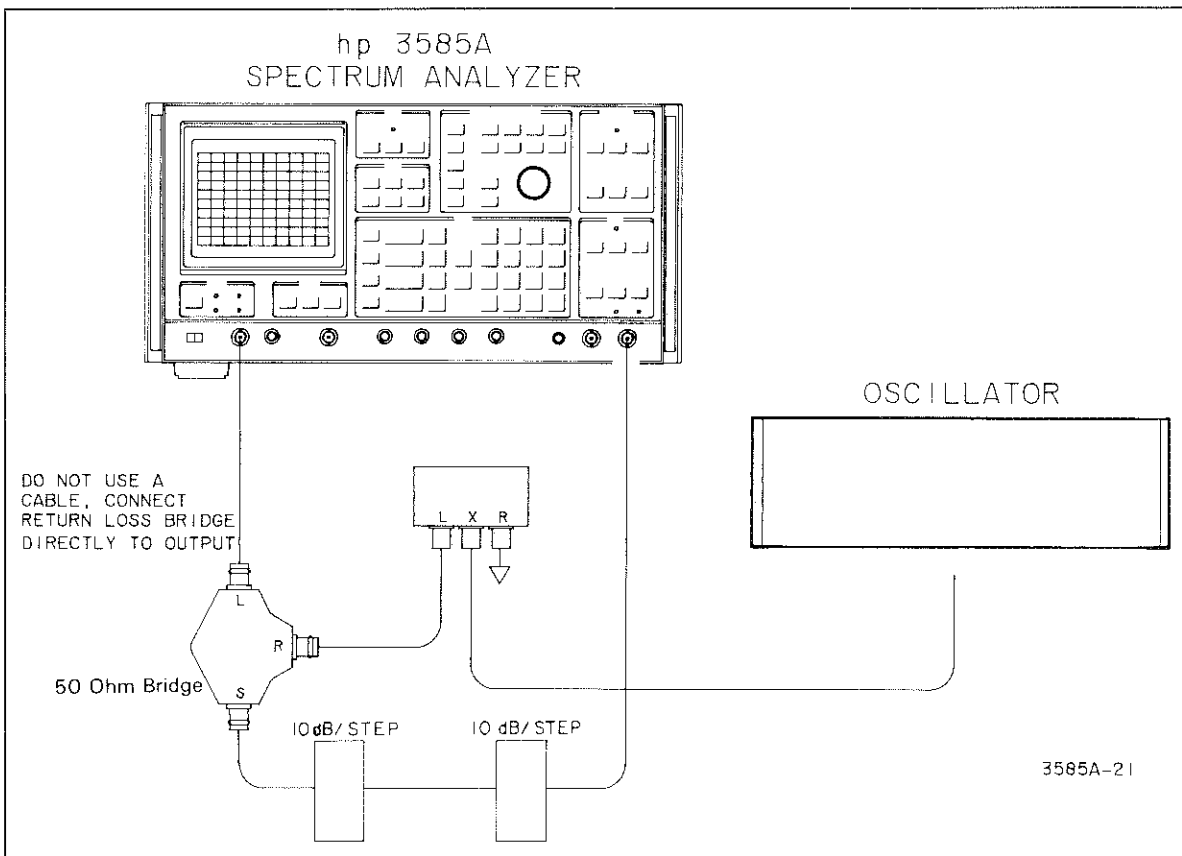


Figure 4-12. Tracking Generator Return Loss Test (Automatic Tests).

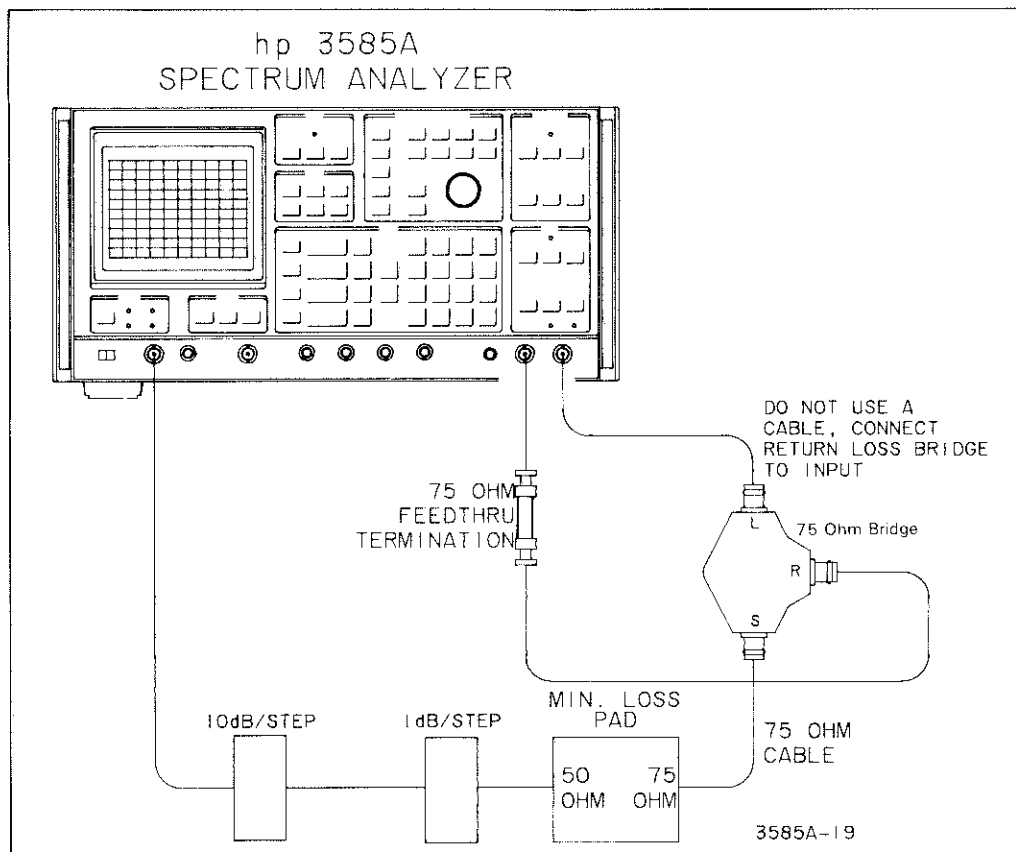
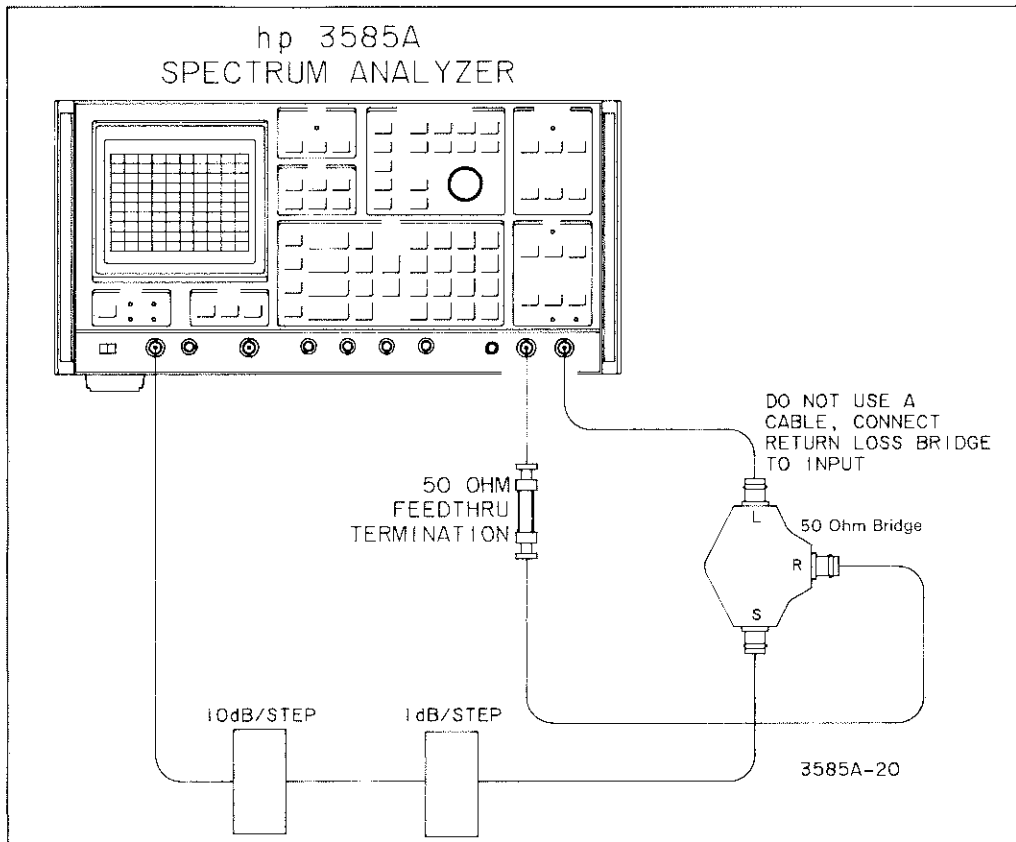


Figure 4-13. Terminated Input Return Loss Test (Automatic Tests).



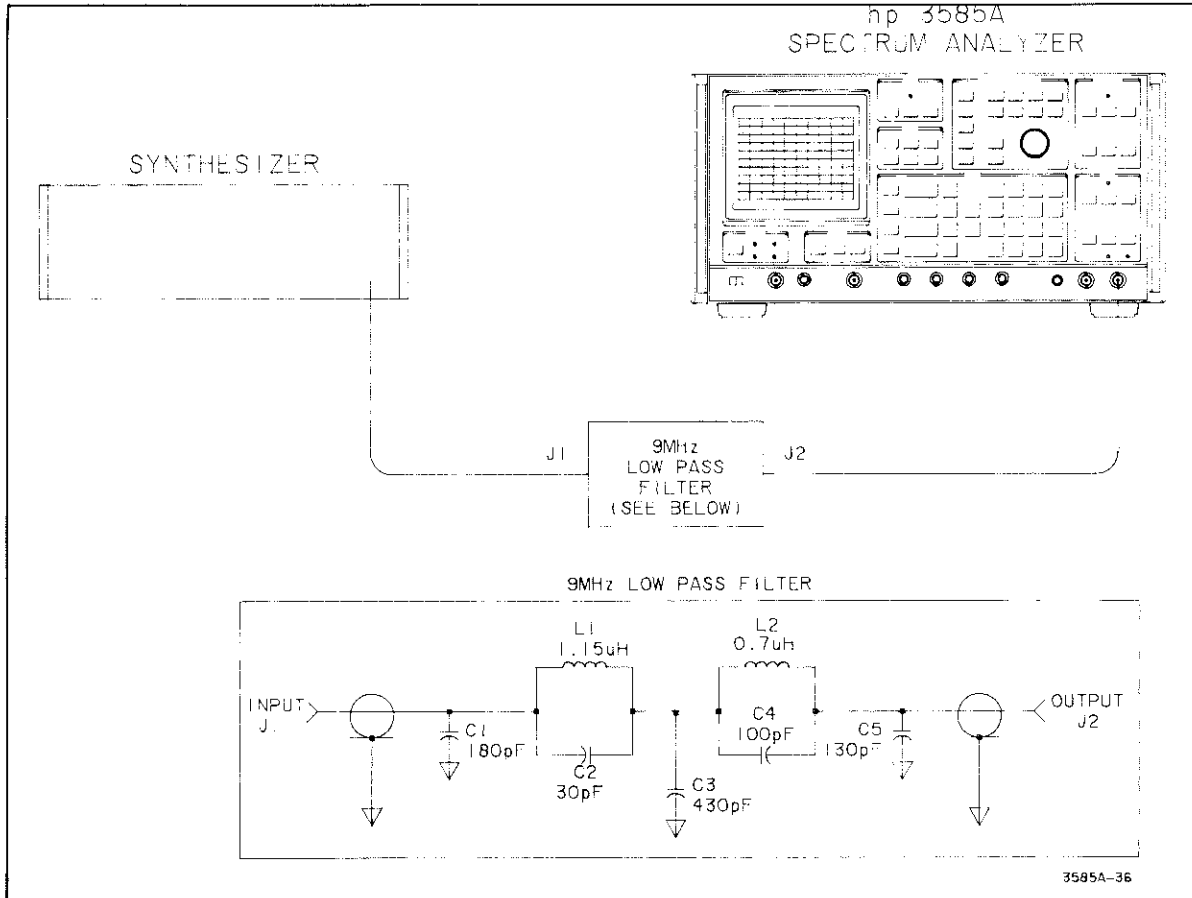


Figure 4-14. Harmonic Distortion Test

		-hp- Part No.
C1	180pf 5%, 300V	0140-0197
C2	30pf 5%, 300V	0162-2199
C3	430pf 5%, 300V	0160-0939
C4	100pf 5%, 300V	0162-0939
C5	130pf 5%, 300V	0140-0195
L1,2	1μH adjustable, 10% Adjust as shown in Figure 4-20	9100-3312

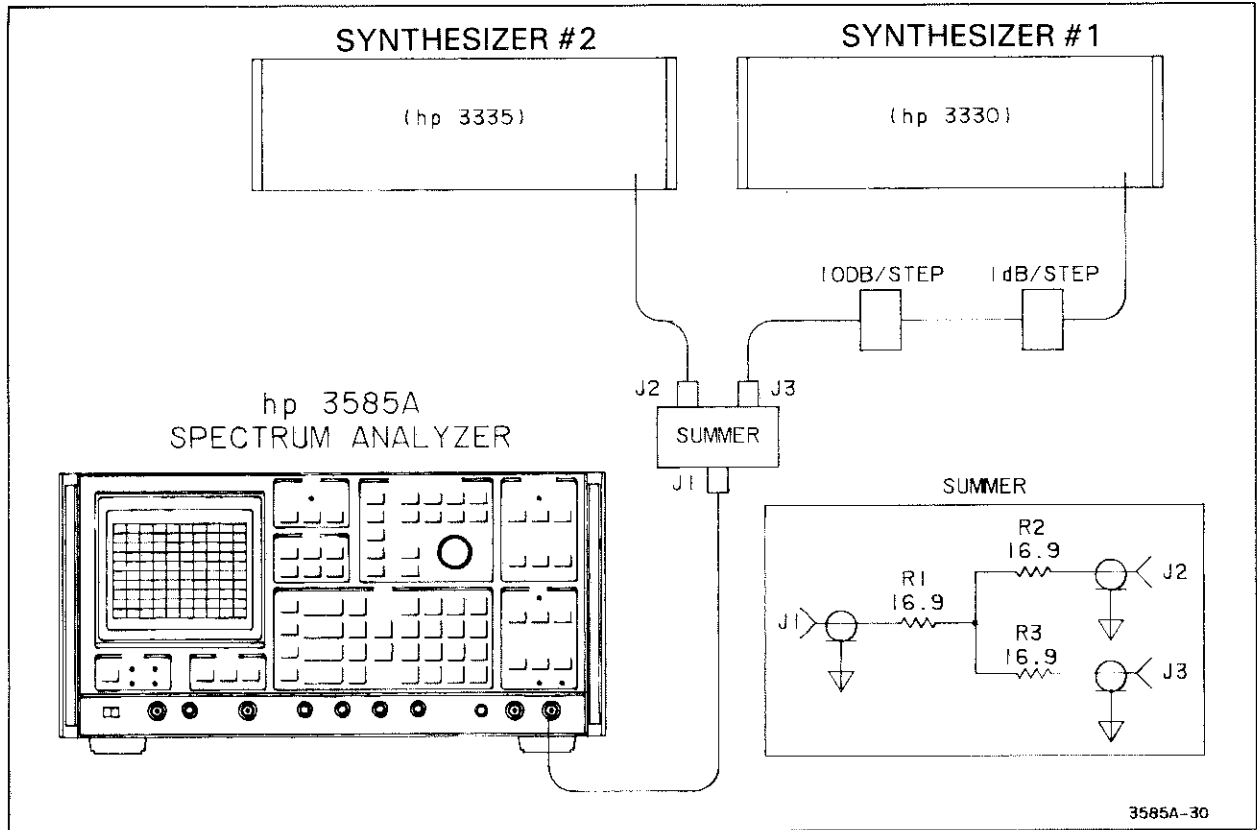


Figure 4-15. Intermodulation Distortion Test.

**4-43. OPERATIONAL VERIFICATION TESTS**

4.44. This portion of Section IV contains the following Operational Verification Tests:

<b>Test Name</b>	<b>Paragraph</b>
Frequency Accuracy.....	4-47
Calibrator Test (Optional).....	4-49
Cal Offset Test (Optional).....	4-51
Range Calibration Test.....	4-53
Amplitude Linearity Test.....	4-55
Reference Level Accuracy Test.....	4-57
50/75Ω Frequency Response Test.....	4-59
1 MΩ Frequency Response Test.....	4-61
Return Loss Tests.....	4-63
1 MΩ Input Impedance Test.....	4-65
Marker Accuracy Test.....	4-67
Noise Test.....	4-69
Zero Response Test.....	4-71
Low Frequency Responses Test.....	4-73
Local Oscillator Sidebands Test.....	4-75
Residual Spurs Test.....	4-77
Harmonic Distortion Test.....	4-79
Intermodulation Distortion Test.....	4-81
Bandwidth Tests.....	4-83
Fractional N API Spur Test.....	4-85
Tracking Generator Flatness Test.....	4-87
HP-IB Check (Optional).....	4-89

**4-45. Synthesizer Reference Connections.**

4-46. Unless otherwise specified the synthesizer reference oscillator input (40/N MHz input for the 3335A) should be connected to the 3585A 10 MHz REF OUTPUT. This will assure accurate frequency measurements during the Operational Verification Tests.

**4-47. Frequency Accuracy.**

4-48. This test verifies the frequency accuracy of the 3585A by using an external counter to check the internal frequency reference. It is important that the frequency counter used to do this test has a reference which is more accurate than that of the 3585A.

Specification: Counter Accuracy,  $\pm 0.3\text{Hz} \pm 1 \times 10^{-7}/\text{month}$

Equipment Required:

Frequency Counter.....-hp- 5328A  
Frequency Synthesizer.....-hp- 3335A

Procedure:

a. Allow the instruments used in this test to warm up for 15 to 20 minutes before beginning this test.

b. Set the synthesizer controls for:

FREQUENCY.....9 MHz  
AMPLITUDE.....0 dBm

c. Set the 3585A controls for:

INSTRUMENT PRESET  
MANUAL ENTRY.....9 MHz  
COUNTER ..... on

d. Using a BNC "T" connector, connect the synthesizer's 50 ohm output to the frequency counter and the 3585A 50 ohm input.

**NOTE**

*Be sure that the synthesizer and the 3585A are operating on their own internal references. Disconnect any reference connection common to both instruments.*

e. Record the frequency difference between the frequency counter and the 3585A counter reading. Difference frequency equals \_\_\_\_\_ Hz.

f. If the frequency accuracy derived from this test is not in accordance with your requirements, turn to Section 5 of this manual for the Reference Oscillator Adjustment procedure.

g. This completes the Frequency Accuracy Test, reconnect the references as outlined in Paragraph 4-45.

**4-49. Calibrator Test. (Optional)**

4-50. This test makes a two point test of the calibrator flatness to check for any high frequency roll-off.

Equipment Required:

Frequency Synthesizer . . . . . -hp- 3335A

Specification: At 100kHz, -25dBm  $\pm$  0.25dB  
At 40MHz, the 100kHz reading  $\pm$  0.25dB

Procedure:

- a. Set the synthesizer for:

FREQUENCY . . . . . 100 kHz  
AMPLITUDE . . . . . -25 dBm

- b. Set the 3585A controls for:

dB/DIV . . . . . 1 dB  
CENTER FREQUENCY . . . . . 100 kHz  
MANUAL SWEEP . . . . . on

- c. Connect the 3585A 50 $\Omega$  input to the synthesizer 50 $\Omega$  output.

d. The marker amplitude reading should be -25 dBm  $\pm$  0.25 dB to verify proper operation of the calibrator.

- e. Set the 3585A controls for:

OFFSET . . . . . on  
ENTER OFFSET  
CENTER FREQUENCY . . . . . 40 MHz

- f. Set the synthesizer controls for:

FREQUENCY . . . . . 40 MHz

g. The marker amplitude reading should be less than  $\pm$  0.25 dB verifying that the high frequency roll-off of the calibrator is not excessive.

**4-51. Cal Offset Test. (Optional)**

4-52. This test is a check of the amplitude and frequency offsets within the 3585A when the calibration system is turned off. It's purpose is to check the adjustment of the 3585A IF section for large errors which the calibration system may mask. A failure in this test indicates a need to adjust the IF section.

Equipment Required:

Frequency Synthesizer.....-hp- 3335A

Specification: See Table 4-6.

Procedure:

- a. Set the synthesizer controls for:

FREQUENCY..... 10 MHz  
 AMPLITUDE.....-25 dBm

- b. Connect the 50Ω output of the synthesizer to the 50Ω input of the 3585A.

- c. Set the 3585A controls for:

RECALL 602  
 INSTRUMENT PRESET  
 RES. BW HOLD.....on  
 CENTER FREQUENCY..... 10 MHz  
 FREQUENCY SPAN.....50 kHz  
 REFERENCE LEVEL.....-22 dBm  
 dB/DIV..... 1 dB  
 SWEEP TIME..... 0.8 sec  
 OFFSET.....on  
 ENTER OFFSET  
 SAVE 1  
 RECALL 601  
 INSTRUMENT PRESET  
 RECALL 1

**Table 4-6. Cal Offset Settings.**

Res. BW	Freq. Span	Freq. Test Limit	Amplitude Test Limit
30 kHz	50 kHz	± 3.5 kHz	± 3.5 dB
10 kHz	20 kHz	± 3.5 kHz	± 3.5 dB
3 kHz	5 kHz	± 3.5 kHz	± 3.5 dB
1 kHz	2 kHz	± 3 kHz	± 3.5 dB
300 Hz	500 Hz	± 900 Hz	± 3.5 dB
100 Hz	200 Hz	± 300 Hz	± 3.5 dB
30 Hz	50 Hz	± 90 Hz	± 3.5 dB
10 Hz	20 Hz	30 Hz	± 3.5 dB
3 Hz	7 Hz	± 9 Hz	± 3.5 dB

- d. Place the marker on the most positive point of the CRT trace. The marker reading in the upper right of the CRT will assist you in finding this point.
- e. Enter the Offset and Marker reading on the Performance Test Card.
- f. Repeat Steps d and e for each of the Resolution Bandwidths in Table 4-6.

#### 4-53. Range Calibration.

4-54. This test verifies that the Range Calibration system is working as specified.

Equipment Required:

Frequency Synthesizer . . . . .-hp- 3335A

Specification:

$\pm 0.7$  dB (Equals the Reference Level Accuracy ( $\pm 0.4$  dB) for a -25 dBm signal plus the Amplitude Linearity spec (0.3 dB) for a signal 5 dB below the Reference Level)

Procedure:

- a. Connect the 50 $\Omega$  output of the synthesizer to the 3585A 50 $\Omega$  input.
- b. Set the synthesizer controls for:

FREQUENCY . . . . .150 kHz  
AMPLITUDE . . . . .-25 dBm

- c. Set the 3585A controls for:

INSTRUMENT PRESET  
CENTER FREQUENCY . . . . .150 kHz  
REFERENCE LEVEL . . . . .-20 dBm  
1 dB/DIV  
RES BW . . . . .10 Hz  
MANUAL SWEEP . . . . .on  
REF LEVEL TRACK . . . . .off  
OFFSET . . . . .on  
ENTER OFFSET

- d. Set the 3585A controls for:

RANGE UP

- e. Check the marker reading, it should be less than  $\pm 0.7$  dB to verify that the RANGE shown is within spec.
- f. Repeat steps d and e until all ranges have been checked.

**4-55. Amplitude Linearity Test.**

4-56. This test confirms that the 3585A will read the amplitude of the input signal correctly within the limits of the specification. A frequency synthesizer with a very accurate, calibrated output is used as the source.

Equipment Required:

- 10dB/step Attenuator.....-hp-355D
- Frequency Synthesizer.....-hp-3335A

Specification:

Amplitude Linearity	0dB	-20dB	-50dB	-80dB	-100dB
	± 0.3dB	± 0.6dB	± 1 dB	± 2 dB	

Procedures:

- a. Connect the 3585A Tracking Generator output to the input of the attenuator. Connect the output of the attenuator to the 50Ω input of the 3585A.
- b. Set the attenuator to 0 dB of attenuation.
- c. Set the 3585A controls for:

```

INSTRUMENT PRESET
CENTER FREQUENCY.....1 MHz
RES. BW.....3 Hz
VIDEO BW.....3 Hz
RANGE.....0 dBm
MANUAL SWEEP.....on
    
```

- d. Adjust the AMPLITUDE of the 3585A Tracking Generator so that the marker amplitude reads .0 dBm.
- e. Set the Variable Attenuator for one of the settings listed in Column A, Table 4-7.
- f. Add the Correction Factor (Column B) to the Ideal reading (Column C) and enter this value in Column D.
- g. Record the 3585A Marker Reading in Column E.
- h. Subtraction of Column D from Column E should yield a value within the Test Tolerance of Column F, thereby verifying the Amplitude Linearity specification.
- i. Repeat Steps e thru h until all the Variable Attenuator settings have been checked.



**Table 4-7. Amplitude Linearity Test.**

(A) Variable Attenuator	(B) Correction Factor*	(C) Ideal Reading	(D) Correct Reading (B + C)	(E) 3585A Marker Reading**	(F) Test Tolerance
0 dB	-----	00.0 dB	00.0 dB	00.0 dB	-----
-10 dB	-----	-10.0 dB	----- dB	----- dB	± 0.3 dB
-20 dB	-----	-20.0 dB	----- dB	----- dB	± 0.3 dB
-30 dB	-----	-30.0 dB	----- dB	----- dB	± 0.6 dB
-40 dB	-----	-40.0 dB	----- dB	----- dB	± 0.6 dB
-50 dB	-----	-50.0 dB	----- dB	----- dB	± 0.6 dB
-60 dB	-----	-60.0 dB	----- dB	----- dB	± 1.0 dB
-70 dB	-----	-70.0 dB	----- dB	----- dB	± 1.0 dB
-80 dB	-----	-80.0 dB	----- dB	----- dB	± 1.0 dB
-90 dB	-----	-90.0 dB	----- dB	----- dB	± 2.0 dB

**4-57. Reference Level Accuracy.**

4-58. This test verifies that the 3585A meets the specification for Reference Level Accuracy.

Equipment Required:

Frequency Synthesizer . . . . .-hp- 3335A

Specifications: Reference Level Accuracy, Terminated Input

+ 10dB	-50dB	-70dB	-100dB
± 0.4dB	± 0.7dB	± 1.5dB	

Procedure:

- a. Connect the 50Ω output of the synthesizer to the 50Ω input of the 3585A.
- b. Set the synthesizer controls for:

FREQUENCY . . . . .20 MHz  
 AMPLITUDE . . . . .10 dBm  
 AMPLITUDE INCR. . . . . 10 dBm

- c. Set the 3585A controls for:

INSTRUMENT PRESET  
 RANGE . . . . .0 dBm  
 REFERENCE LEVEL . . . . .10 dBm  
 REF LVL TRACK . . . . .off  
 1 dB/DIV  
 RES BW . . . . .100 Hz  
 VIDEO BW . . . . .1 Hz  
 MANUAL SWEEP . . . . .on

\*Correction factor must be obtained from attenuator calibration data.  
 \*\*If noise jitter is present, use average marker reading.

d. Enter the marker amplitude reading in Column (C). Subtract the value in Column (C) from that in Column (A) and enter this value in Column (D). The value in Column (D) should not exceed the Test Tolerance of Column (E). This will confirm that the 3585A meets its Reference Level Accuracy spec.

e. Set the Synthesizer Level to the next value in Column (A) and the 3585A REFERENCE LEVEL for the next value in Column (B) as shown in Table 4-8.

f. Repeat Steps d and e until all values in Table 4-8 have been checked.

**Table 4-8. Reference Level Accuracy Tests.**

(A) Synthesizer Level	(B) 3585A Reference Level	(C) 3585A Marker Reading	(D) Synthesizer Level Minus The 3585A Marker Reading (A-C)	(E) Test Tolerance
+ 10 dBm	+ 10 dBm	_____	_____	± 0.4 dB
0 dBm	0 dBm	_____	_____	± 0.4 dB
- 10 dBm	- 10 dBm	_____	_____	± 0.4 dB
- 20 dBm	- 20 dBm	_____	_____	± 0.4 dB
- 30 dBm	- 30 dBm	_____	_____	± 0.4 dB
- 40 dBm	- 40 dBm	_____	_____	± 0.4 dB
- 50 dBm	- 50 dBm	_____	_____	± 0.7 dB
- 60 dBm	- 60 dBm	_____	_____	± 0.7 dB
- 70 dBm	- 70 dBm	_____	_____	± 1.5 dB
- 80 dBm	- 80 dBm	_____	_____	± 1.5 dB

**4-59. 50/75Ω Frequency Response Test.**

4-60. In this test the 50Ω and 75Ω flatness of the instrument is checked against the output of the internal calibrator. The display shows the Tracking Generator switched through the internal calibrator, which is assumed to be flat, sweeping across the frequency range of the instrument. The maximum and minimum points of the sweep are measured. This gives the total deviation of the 3585A 50 or 75Ω input relative to the flatness of the calibrator.

Specification:

Frequency Response, Terminated Input: ±0.5 dB referenced to 20.1 MHz

Procedure:

a. Set the 3585A controls for:

```

RECALL 604
INSTRUMENT PRESET
START FREQUENCY.....0.1 MHz
STOP FREQUENCY.....40.1 MHz
REFERENCE LEVEL.....-20 dBm
dB/DIV.....1 dB
REF LVL TRACK.....off
RANGE.....-25 dBm
    
```

- b. Press the SINGLE SWEEP button on the 3585A.
- c. Wait until the sweep is completed. The trace you now see is the flatness of the 50Ω input.
- d. Move the marker to the center of the trace. The marker amplitude reading in the upper right-hand corner of the display will help you find this point.
- e. Set the 3585A controls for OFFSET on and ENTER OFFSET.
- f. Using the marker, find the point on the trace which gives the greatest positive or negative deviation as shown by the marker amplitude reading.
- g. The marker amplitude reading displayed is the greatest deviation from the calibrator flatness for the range shown. Record this value under Maximum Amplitude Deviation on the Performance Test Card.
- h. Set the 3585A controls for RANGE.....STEP UP.
- i. Repeat Steps b thru h until all ranges have been tested.
- j. Set the 3585A controls for:

RANGE.....-25 dBm  
 INPUT IMPEDANCE.....75Ω  
 SINGLE SWEEP

- k. Wait until the sweep is completed. The trace you now see is the flatness of the 75Ω input.
- l. Repeat Steps d thru f and enter the results on the Performance Test Card.

**4-61. 1 M Ohm Frequency Response Test.**

4-62. This test checks the frequency response of the 1 MΩ input relative to the flatness of the 50Ω input. Ideally the difference between the two signals would be zero.

Equipment Required:

50Ω Feed Thru Termination.....-hp- 11048C

Specification:

High Impedance Frequency Response

20Hz	10MHz	40MHz
± 0.7dB	± 1.5dB	

Procedure:

- a. Set the 3585A controls for:

```

INSTRUMENT PRESET
STOP FREQUENCY.....10 MHz
dB/DIV.....1 dB
RANGE.....0 dBm
RES. BW.....3 kHz
RES. BW HOLD.....on
RECALL .....4
    
```

- b. Connect the 3585A Tracking Generator output to the 3585A 50Ω input.
- c. Adjust the Tracking Generator Amplitude control for the center of its range.
- d. Allow one complete sweep to occur. Press the STORE A → B key of the 3585A.
- e. Connect a 50Ω termination to the 1 MΩ input of the 3585A. Connect the output of the Tracking Generator to the input of this termination.

- f. Set the 3585A controls for:

```

INPUT.....1 MΩ
B TRACE.....off
A-B.....on
    
```

- g. Move the marker to the most negative point on the displayed trace. (Ignore the LO feedthrough point at 0 Hz)

- h. Set the 3585A controls for:

```

OFFSET.....on
ENTER OFFSET
    
```

- i. Move the marker to the most positive point on the displayed trace. (Ignore the LO feed-through point at 0 Hz)

- j. Record the marker amplitude on the Performance Test Card as the 1 MΩ unflatness for the 0 to 10 MHz band. The marker amplitude should be less than ± 0.7 dB to verify the specification.

- k. Set the 3585A controls for:

```

START FREQUENCY.....10 MHz
STOP FREQUENCY.....40 MHz
INPUT.....50Ω
A-B.....off
    
```

- l. Repeat Steps b thru i.

m. Record the marker amplitude on the Performance Test Card as the 1 MΩ unflatness for the 10 MHz to 40 MHz band. The marker amplitude reading should be less than ± 1.5 dB to verify the specification.

**4-63. Return Loss Tests.**

4-64. These tests verify that the 3585A meets the Return Loss specification for the 50Ω, 75Ω and Terminated inputs.

Equipment Required:

- 100 MHz Oscilloscope.....-hp- 1740A
- 50Ω Return Loss Bridge.....-hp- 8721A
- 75Ω Return Loss Bridge.....-hp- 8721 Option 008
- 50Ω Feed Thru Termination.....-hp- 11048C
- 75Ω Feed Thru Termination.....-hp- 11094B
- 50/75Ω Min. Loss Pad.....-hp-85428B
- (2) 12” 75Ω Cables.....-hp- 11170E
- Male BNC/BNC Adapter.....-hp- Part No. 1250-0216
- Frequency Synthesizer.....-hp-3335A

Specification:

- Return Loss, 50Ω or 75Ω Terminated Input..... > 26 dB
- 50Ω or 75Ω Dummy Load..... > 14 dB (Optional)

Procedure:

a. Set the 3585A controls for:

- INSTRUMENT PRESET
- MANUAL SWEEP.....40 MHz
- RANGE.....5 dBm

b. Set the synthesizer controls for:

- FREQUENCY.....40 MHz
- AMPLITUDE.....10.5 dBm

c. Set the oscilloscope controls for:

- VERTICAL SCALE.....0.1 V/DIV (ac coupled)
- HORIZONTAL SCALE.....0.05μ sec/DIV

d. Connect the equipment as shown in Figure 4-16.

e. Check the waveform amplitude displayed on the scope. The amplitude displayed should equal 0.35 V p-p. Adjust the synthesizer as necessary to obtain this amplitude.

f. Remove the shorting connection from the Load port of the Return Loss Bridge.

- g. Connect the Return Loss Bridge Load port to the 50 $\Omega$  input of the 3585A.
- h. Read the amplitude of the waveform on the scope display. It should be less than 0.0175 V p-p. This confirms that the 50 $\Omega$  (75 $\Omega$ ) Return Loss of the 3585A is greater than 26 dB.
- i. Press the 1 M $\Omega$  input impedance key on the 3585A.
- j. Again check the amplitude of the scope waveform. It should be less than 0.07 V p-p. This will confirm that the Return Loss of the Terminated input is greater than 14 dB.
- k. Connect the equipment as shown in Figure 4-17 for the 75 $\Omega$  Return Loss tests.
- l. Press the 75 $\Omega$  input impedance key on the 3585A.
- m. Repeat Steps d thru i for the values in parenthesis.
- n. Change the synthesizer frequency to 15 MHz.
- o. Set the 3585A controls for MANUAL SWEEP 15 MHz.
- p. Repeat Steps c thru m.
- q. This completes the Return Loss Tests. Disconnect the test equipment.

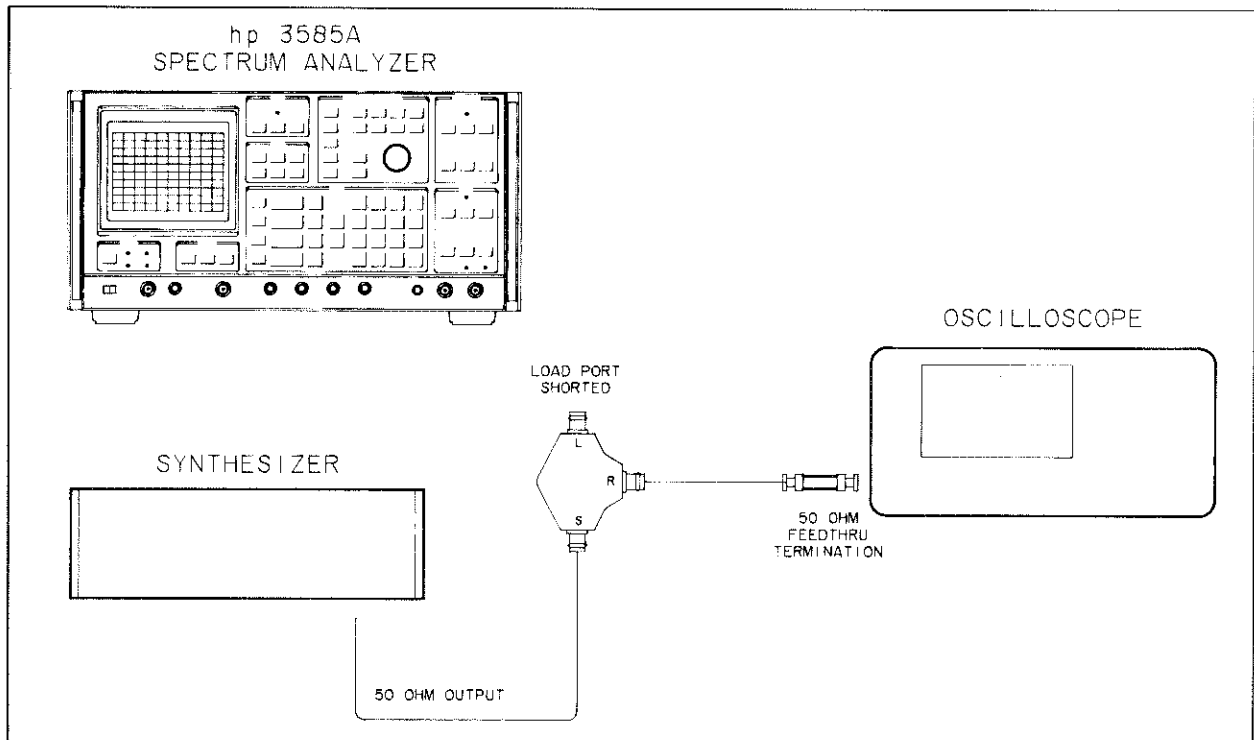
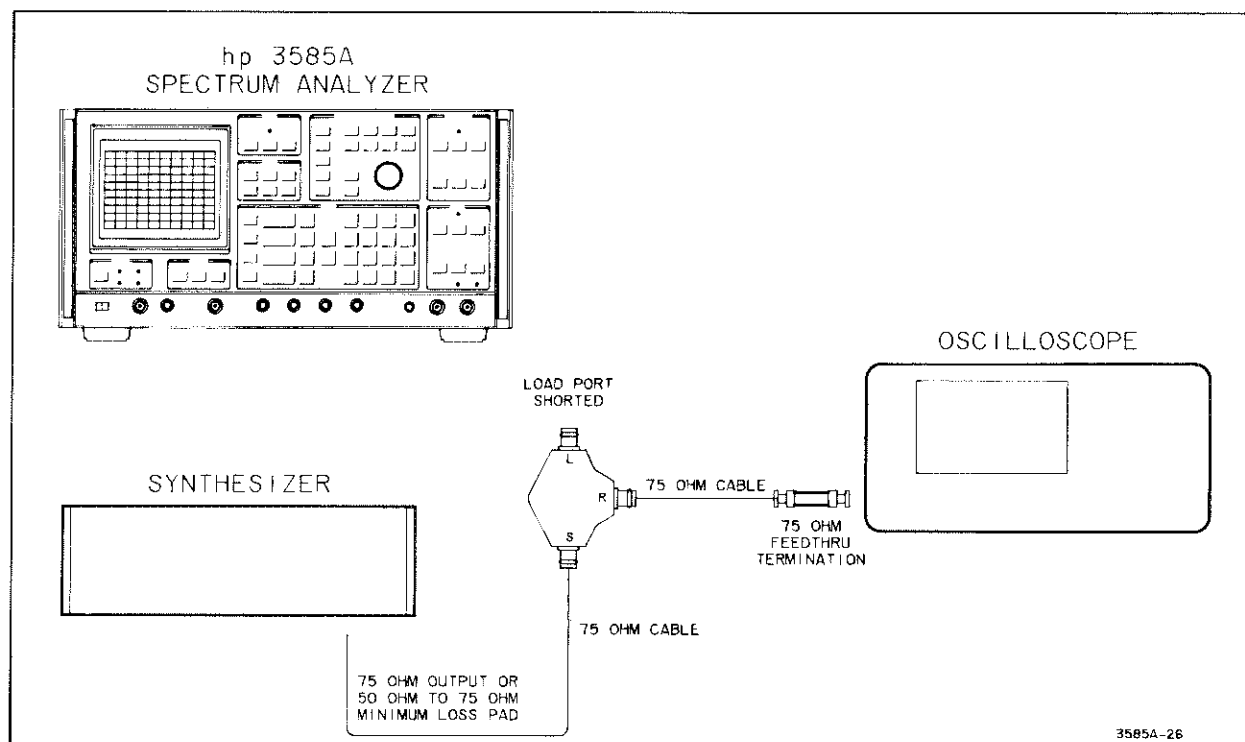


Figure 4-16. 50 $\Omega$  Return Loss Test (Operational Verification).



**Figure 4-17. 75Ω Return Loss Test (Operational Verification).**

**4-65. 1 M ohm Input Impedance Test.**

4-66. These tests verify that the 3585A meets the Input Impedance specifications for the 1 MΩ, 30 pf Input Impedance setting.

Equipment Required:

Resistor:

- 1 MΩ ± 1%, 1/8W Film.....-hp- Part No. 0757-0344
- 50Ω Feed Thru Termination.....-hp- 11048C
- Synthesizer.....-hp- 3335A

Specification:

$$1M\Omega \pm 3\%, < 30 \text{ pf}$$

Procedure:

- a. Set the 3585A controls as follows:

INSTRUMENT PRESET  
 CENTER FREQUENCY.....1 kHz  
 MANUAL SWEEP.....on  
 RES. BW.....100 Hz  
 RANGE.....0 dBm  
 INPUT IMPEDANCE.....1 MΩ

b. Connect the 50Ω termination to the 3585A 1 MΩ input. Connect the synthesizer output to the termination input.

c. Set the synthesizer controls for:

FREQUENCY.....1 kHz  
 AMPLITUDE.....0 dBm

d. Set the 3585A controls for OFFSET on. Allow time for the marker reading to stabilize, then press the ENTER OFFSET button.

e. Using short clip leads, insert the 1 MΩ resistor between the output of the termination and the 3585A 1 MΩ input as shown in Figure 4-18.

f. The 3585A marker amplitude reading should be  $-6.0 \text{ dB} \pm 0.44 \text{ dB}$ , verifying that the input resistance is  $1 \text{ M}\Omega \pm 5\%$ .

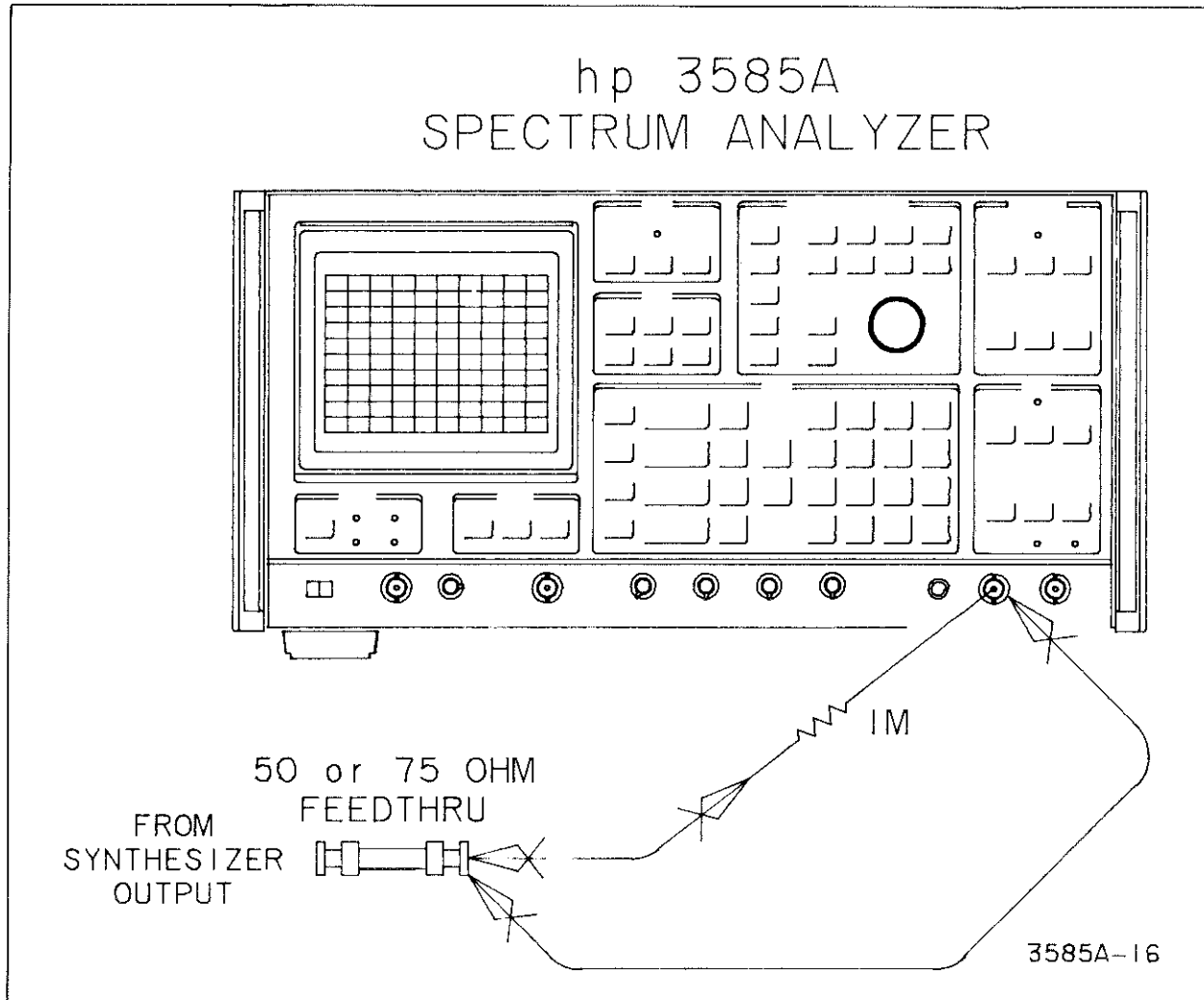
g. Press the 3585A ENTER OFFSET button.

h. Set the synthesizer frequency to 10 kHz.

i. Set the 3585A for a CENTER FREQUENCY of 10 kHz.

j. The 3585A marker reading should be between -2 dB and -3 dB, verifying that the shunt capacitance is less than 30 pf.





**Figure 4-18. 1 M ohm Input Impedance Test.**

**4-67. Marker Accuracy.**

4-68. This test verifies that the 3585A meets its marker accuracy specification.

Specification:

$$\pm 0.2\% \text{ of frequency span} \pm \text{Resolution Bandwidth setting}$$

Procedure:

- a. Set the 3585A controls for:

INSTRUMENT PRESET

- b. Connect the 50Ω output of the synthesizer to the 50Ω input of the 3585A.

c. Set the synthesizer controls for:

FREQUENCY.....20.08 MHz  
 AMPLITUDE.....-25 dBm

d. Put the marker at the peak of the response shown on the 3585A CRT.

e. The marker frequency should read between 20.00 MHz and 20.16 MHz thereby verifying that the 3585A marker reads within  $\pm 0.2\%$  of the input frequency.

**4-69. Noise.**

4-70. This test is used to determine the average noise level in each of the resolution bandwidths.

Specification: 50/75Ω input, -25 dBm Range

Res. BW	Specification
30 kHz	-100 dBm
10 kHz	-104 dBm
3 kHz	-108 dBm
1 kHz	-111 dBm
300 Hz	-115 dBm
100 Hz	-122 dBm
30 Hz	-127 dBm
10 Hz	-132 dBm
3 Hz	-137 dBm

Procedure:

a. Disconnect all inputs to the 3585A.

b. Set the 3585A controls for:

INSTRUMENT PRESET  
 CENTER FREQUENCY.....9.35 MHz  
 REFERENCE LEVEL.....-75 dBm  
 RES. BW.....30 kHz  
 VIDEO BW.....30 Hz  
 MANUAL SWEEP.....on

c. Read the marker amplitude. Take an average of the readings displayed. This average value should be below the test tolerance shown in Table 4-9.

d. Record the average noise reading, across from the BW displayed, on the Performance Test Card.

e. Set the 3585A controls for RES. BW STEP DOWN.

f. Repeat Steps c thru e until all Resolution Bandwidths have been measured for their average noise level.

**Table 4-9. Noise Test.**

(A) 3585A Res BW	(B) Average Noise Reading	(C) Test Tolerance
30 kHz	_____	-100
10 kHz	_____	-104
3 kHz	_____	-108
1 kHz	_____	-111
300 Hz	_____	-115
100 Hz	_____	-122
30 Hz	_____	-127
10 Hz	_____	-132
3 Hz	_____	-137

**4-71. Zero Response.**

4-72. This test measures the amplitude of the local oscillator feedthrough. This response occurs at 0 Hz due to the local oscillator passing directly through the IF section.

Specification:

$$\text{LO Feed Through} < -15 \text{ dB below range}$$

Procedure:

- a. Disconnect all inputs to the 3585A.
- b. Set the 3585A controls for:

INSTRUMENT PRESET  
RANGE.....0 dBm

- c. Using the MANUAL ENTRY key set the manual frequency to 0 Hz.
- d. Read the marker amplitude. The reading should be less than -15 dB.
- e. Record the marker amplitude reading under zero response on the Performance Test Card.

**4-73. Low Frequency Responses.**

4-74. Within the 3585A there are several frequencies which may be picked up by the sensitive analog circuits. These frequencies include:

- 60 Hz\* Power Line
- 5 kHz A/D clock
- 20 KHz (approx) Power Supply Switching Oscillator
- 30 kHz (approx) CRT High Voltage Oscillator
- 100 kHz Fractional N Clock
- 1 MHz Fractional N Step Loop Clock
- 10 MHz Internal Reference

\*or other power line frequency.

These frequencies and their harmonics will be used to verify that all Low Frequency Responses are less than -120 dBm.

Specification:

Residual Responses < -120 dBm

Procedure:

- a. Disconnect all inputs to the 3585A.
- b. Set the 3585A controls for:

```

INSTRUMENT PRESET
REFERENCE LEVEL.....-75 dBm
RES. BW.....3 Hz
VIDEO BW.....1 Hz
MANUAL SWEEP.....on

```

- c. Set the 3585A controls for:

```

CENTER FREQUENCY.....] One of the frequencies
CF STEP SIZE.....] in Table 4-10.

```

d. The marker is now displaying the amplitude of the frequency chosen in Step c. Record the marker reading across from the frequency chosen in Step c on the Performance Test Card.

e. Set the 3585A controls for CENTER FREQUENCY....STEP UP. This will increment the marker to the next harmonic component of the frequency chosen in Step c.

f. Take an average reading of the marker amplitude. Record the reading across from the frequency chosen in Step c and under the harmonic presently being measured.

g. Repeat Steps e and f until the fifth harmonic of the frequency entered in Step c has been measured.

- h. Repeat Steps c thru g until all frequencies in Table 4-10 have been checked.

- i. Set the 3585A controls for:

```

INSTRUMENT PRESET
CENTER FREQUENCY.....20 kHz
FREQUENCY SPAN.....2 kHz
AUTO RANGE.....off
RANGE.....-25 dBm
INPUT IMPEDANCE.....1 MΩ

```

j. Connect a coaxial cable between the EXT TRIGGER input and the 1 MΩ input of the 3585A. You are now looking at the Power Supply Switching frequency and possibly the fourth harmonic of the 5 kHz A/D clock.

k. Set the marker on the most positive point of the largest response. this will be at 20 kHz  $\pm$  20 Hz.

l. Set the 3585A controls for COUNTER on. Wait for the counter reading to stabilize before proceeding.

m. Set the 3585A controls for:

```

MKR → CF
COUNTER.....off
REFERENCE LEVEL.....-75 dBm
FREQUENCY SPAN.....1 MHz
RES. BW.....10 Hz
VIDEO BW.....3 Hz
INPUT IMPEDANCE.....50Ω
MANUAL SWEEP.....on
    
```

n. Enter the displayed CENTER FREQUENCY value as a CF STEP SIZE.

o. Enter the CENTER FREQUENCY reading under the correct frequency heading (Power Supply or CRT Oscillator) on the Performance Test Card.

p. Read the 3585A marker amplitude and enter the value as the first harmonic on the Performance Test Card.

q. Set the 3585A controls for CENTER FREQUENCY - STEP UP. This increments the marker to the next harmonic of the original CENTER FREQUENCY reading.

r. Read the marker amplitude. Record the reading under the correct harmonic on the Performance Test Card.

s. Repeat Steps q and r up through the fifth harmonic of the original CENTER FREQUENCY.

t. Set the 3585A controls for:

```

INSTRUMENT PRESET
CENTER FREQUENCY.....28 kHz
FREQUENCY SPAN.....15 kHz
AUTO RANGE.....off
RANGE.....-25 dBm
INPUT IMPEDANCE.....1 MΩ
    
```

u. Disconnect the cable from the EXT TRIGGER input and hold the end of the cable on the CRT display. You are now observing the CRT High Voltage Oscillator Frequency.

v. Set the marker on the most positive point of the response.

w. Repeat Steps l thru s.

**Table 4-10. Low Frequency Responses.**

Description	Frequency	Harmonics				
		*1	*2	*3	*4	*5
Line Frequency	60 Hz*	_____	_____	_____	_____	_____
A/D Clock	5 kHz	_____	_____	_____	_____	_____
Fractional N Clock	100 kHz	_____	_____	_____	_____	_____
Step Loop Clock	1 MHz	_____	_____	_____	_____	_____
Internal Reference	10 MHz	_____	_____	_____	_____	_____
Power Supply	_____	_____	_____	_____	_____	_____
CRT Oscillator	_____	_____	_____	_____	_____	_____

**4-75. Local Oscillator Sidebands.**

4-76. The OVEN REF output on the rear panel of the 3585A is a source relatively free of Local Oscillator Sidebands. The OVEN REF output is used as the input for this test. This test checks to what extent internal frequencies are mixing with the input signal in the Local Oscillator and appearing on the output.

Specification:

Spurious Responses < -80 dB below signal

Procedure:

- a. In this test use the frequencies from Table 4-10 (omitting 10 MHz).
- b. Disconnect the OVEN REF OUT from the EXT REF IN. Both of these connectors are found on the rear panel of the 3585A.
- c. Connect the OVEN REF OUT to the front panel 50Ω input.
- d. Set the 3585A controls for:

INSTRUMENT PRESET  
 CENTER FREQUENCY.....10 MHz  
 COUNTER..... on

- e. When the counter reading is stable, set the 3585A controls for:

MARKER → CF  
 COUNTER..... off  
 OFFSET..... on  
 ENTER OFFSET  
 REFERENCE LEVEL.....-50 dBm  
 RES. BW.....3 Hz  
 VIDEO BW.....3 Hz  
 MANUAL SWEEP..... on  
 SAVE 1

- f. Set the 3585A controls for a CF STEP SIZE equal to one of the frequencies for the Low Frequency Responses test, Table 4-10.

- g. Set the 3585A controls for MANUAL ENTRY - STEP DOWN. this puts the marker one CF STEP SIZE lower in frequency.
- h. Take an average reading of the marker amplitude. Enter this number on the Performance Test Card under the correct sideband frequency.
- i. Repeat Steps f and g two more times.
- j. Press the STEP UP key four times. This puts the marker on the first upper sideband frequency (+ 1).
- k. Take an average reading of the marker amplitude. Enter this number on the Performance Test Card under the correct sideband harmonic frequency.
- l. Press the STEP UP key on the 3585A. This puts the marker one CF STEP SIZE higher in frequency.
- m. Repeat Steps k and l two more times.
- n. Set the 3585A controls for RECALL 1. This returns you to the original Center Frequency.
- o. Repeat Steps f thru n until all the frequencies in the Low Frequency Response Test Table have been tested.
- p. Reconnect the OVEN REF OUT and the EXT REF IN on the rear panel. This completes the Local Oscillator Sideband Test.

**4-77. Residual spurs.**

4-78. This test checks for mixing product harmonics of the 90 MHz and 10 MHz internal reference frequencies. Due to frequency offsets in the IF the exact frequency of these mixing products is not known; therefore, a 1 kHz span is used to account for any frequency offsets.

Specification:

Residual Responses < -120 dBm

Procedure:

- a. Disconnect all inputs to the 3585A.
- b. Set the 3585A controls for:

```

INSTRUMENT PRESET
REFERENCE LEVEL.....-75 dBm
RES. BW.....30 Hz
VIDEO BW.....1 Hz
RANGE.....-25 dBm
MANUAL SWEEP.....on

```

c. Set the 3585A CENTER FREQUENCY for each of the frequencies listed in Table 4-11. The average value of the marker reading, when placed on the most positive point, should be less than -120 dBm verifying that the 3585A meets its Residual Spur specification..

**Table 4-11. Residual Spur Test Frequencies.**

39.825 MHz
29.475 MHz
23.1 MHz
16.2 MHz
14.7375 MHz
9.5625 MHz
37.2375 MHz
32.0625 MHz
9.72 MHz
5.58 MHz
27.72 MHz

**4-79. Harmonic Distortion.**

4-80. This test verifies that the harmonic distortion produced by the 3585A is less than -80 dB below signal. The filter shown for this test removes the harmonic distortion of the sources. This leaves only the distortion of the 3585A.

Equipment Required:

- 9MHz Low Pass Filter . . . . . (see Figure 4-19)
- Frequency Synthesizer . . . . . -hp- 3335A

Specification:

Spurious Responses < -80 dB below signal

Procedure:

- a. Connect the output of the 3585A Tracking Generator to the input of the filter shown in Figure 4-18. Connect the output of the filter to the 3585A 50Ω input.
- b. Compare the displayed trace with that of Figure 4-20. This will confirm that the filter is operating properly.
- c. Disconnect the filter.
- d. Set the 3585A controls for:

```

INSTRUMENT PRESET
CENTER FREQUENCY . . . . . 9 MHz
CENTER FREQUENCY STEP . . . . . 9 MHz
RES. BW . . . . . 10 Hz
RANGE . . . . . -25 dBm
MANUAL SWEEP . . . . . on
    
```

- e. Set the synthesizer frequency at 9 MHz, -25 dBm.



f. Connect the 50Ω output of the synthesizer to the input of the filter. Connect the output of the filter to the 50Ω input of the 3585A (see Figure 4-21).

g. Set the 3585A controls for:

```

OFFSET..... on
ENTER OFFSET
REFERENCE LEVEL.....-50 dBm

```

h. Set the 3585A for CENTER FREQUENCY UP. Read the marker amplitude and record it on the Performance Test Card.

i. Repeat Step h until the forth harmonic has been checked. All values should be less than -80 dB verifying that the instrument meets its Harmonic Distortion specification.

j. Disconnect the synthesizer and filter from the 3585A.

k. Connect the low distortion Audio Oscillator to the 50Ω input of the 3585A.

l. Set the Audio Oscillator for:

```

FREQUENCY.....1 kHz
OUTPUT LEVEL.....0.1 V

```

m. Set the 3585A controls for:

```

OFFSET..... off
RANGE.....-20 dBm
REFERENCE LEVEL.....-20 dBm
CENTER FREQUENCY.....1 kHz
COUNTER..... on

```

n. When the counter reading is stable, enter these commands on the 3585A:

```

MARKER → CF
COUNTER.....off

```

o. Enter the CENTER FREQUENCY reading as the CF STEP SIZE.

p. Repeat Steps g thru i.

q. Disconnect the Audio Oscillator. This completes the Harmonic Distortion Test.

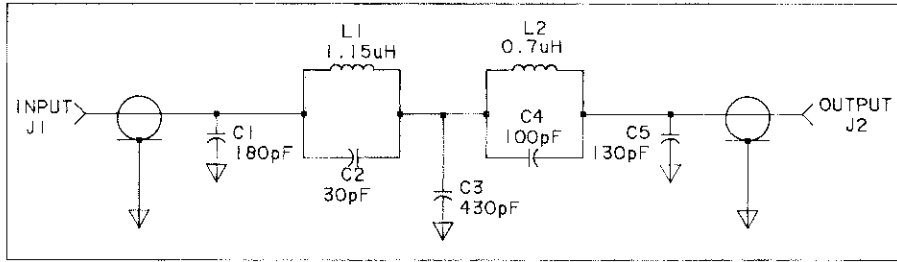


Figure 4-19. 9 MHz Low Pass Filter.

3585A-36

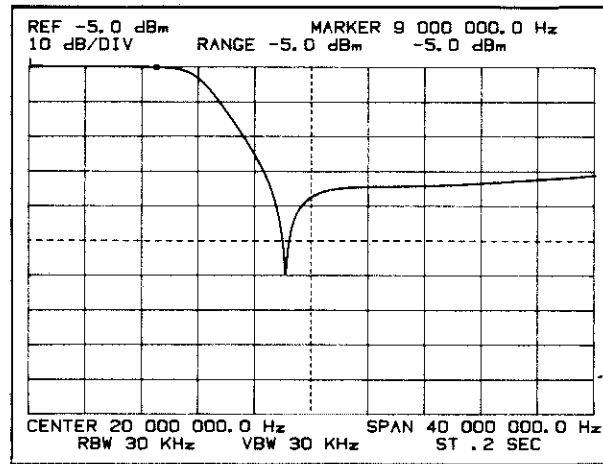


Figure 4-20. Approximate Filter Response.

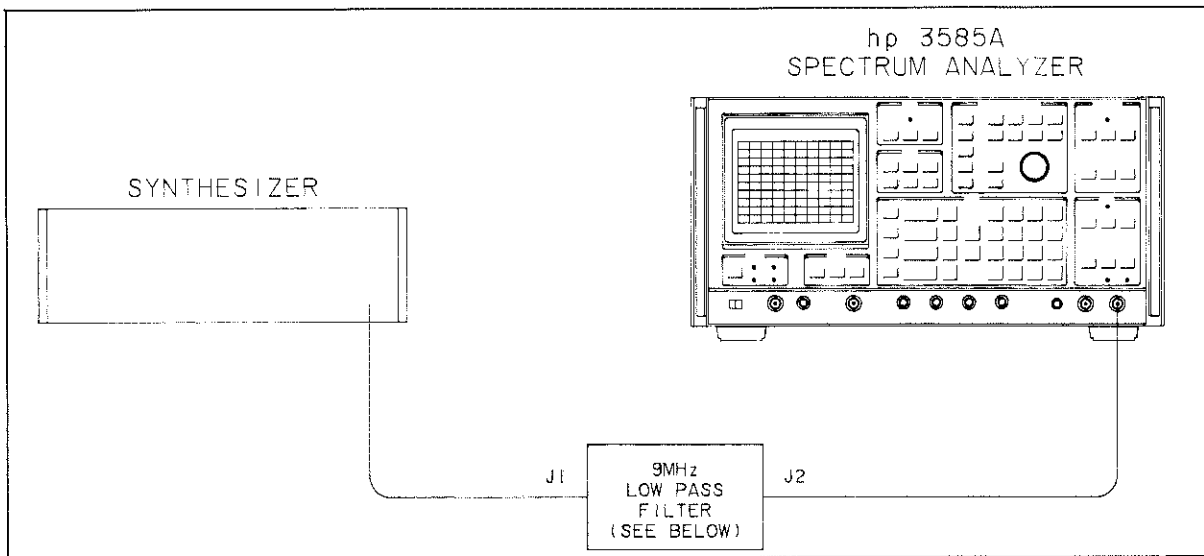


Figure 4-21. Harmonic Distortion Test.

**4-81. Intermodulation Distortion Test.**

4-82. This test places two signals 100 Hz apart at the input of the 3585A. The second and third order IM products are then checked against the specification.

**Equipment Required:**

Frequency Synthesizer . . . . .-hp-3335A  
 Frequency Synthesizer . . . . .-hp- 3330B  
 10 dB/Step Attenuator . . . . .-hp-355D  
 1 dB/Step Attenuator . . . . .-hp- 355C  
 Frequency Summer . . . . .(See Figure 4-22)

**Specification:****Intermodulation Distortion:**

For two signals, each at least 6 dB below the RANGE setting and separated in frequency by at least 100 Hz, referred to the larger of the two signals.

< -80 dB; except 2nd order IM with one or both of the input signals within the range of 10 MHz to 40 MHz, < -70 dB

**Procedure:**

- a. Set the 3585A controls for:

INSTRUMENT PRESET  
 CENTER FREQUENCY . . . . .1.65 kHz  
 FREQUENCY SPAN . . . . .350 Hz  
 OFFSET . . . . .on

b. Connect synthesizer #1 and #2 to the summer as shown in Figure 4-23. Connect the output of the summer to the 50Ω input of the 3585A. Set the attenuators for 0 dB of attenuation.

- c. Set the controls of synthesizer #1 for:

FREQUENCY . . . . .1.6 kHz  
 AMPLITUDE . . . . .-25 dBm

- d. Set the controls of synthesizer #2 for:

FREQUENCY . . . . .1.7 kHz  
 AMPLITUDE . . . . .-25 dBm

- e. All one complete sweep to occur on the 3585A.

- f. Move the marker to the maximum point on the 1.6 kHz (33 MHz) response.
- g. Press ENTER OFFSET on the 3585A.
- h. Watching the offset frequency in the upper right-hand corner of the 3585A display, move the marker until the frequency reads -100 Hz  $\pm$  1 Hz (see Figure 4-24).
- i. The marker amplitude reading should be less than -80 dB to verify that the 3585A meets its Intermodulation Distortion specification.
- j. Move the marker until the offset frequency reads 200 Hz  $\pm$  1 Hz.
- k. The marker amplitude reading should be less than -80 dB to verify that the 3585A meets its Intermodulation Distortion specification.

l. Set the 3585A controls for:

```

MARKER  $\rightarrow$  CF
MANUAL SWEEP
CLEAR A
CENTER FREQUENCY.....100 Hz
    
```

m. The marker reading is the second order IM distortion product and should be less than -80 dB (-70 dB) verifying that the 3585A meets its IM Distortion specification.

n. Set the controls of synthesizer #1 for:

```

FREQUENCY.....33 MHz
                (13 MHz for the -hp- 3330B)
AMPLITUDE.....-25 dBm
For the 3330B this requires using the rear panel
output and an attenuator to get the required fre-
quency and level.
    
```

o. Set the controls of synthesizer #2 for:

```

FREQUENCY.....33.0001 MHz
AMPLITUDE.....-25 dBm
    
```

p. Set the 3585A controls for:

```

CENTER FREQUENCY.....33.00005MHz
CONT. SWEEP
    
```

- q. Repeat Steps e thru m using the values in parenthesis.
- r. This completes the test, disconnect all inputs to the 3585A.

SUMMER

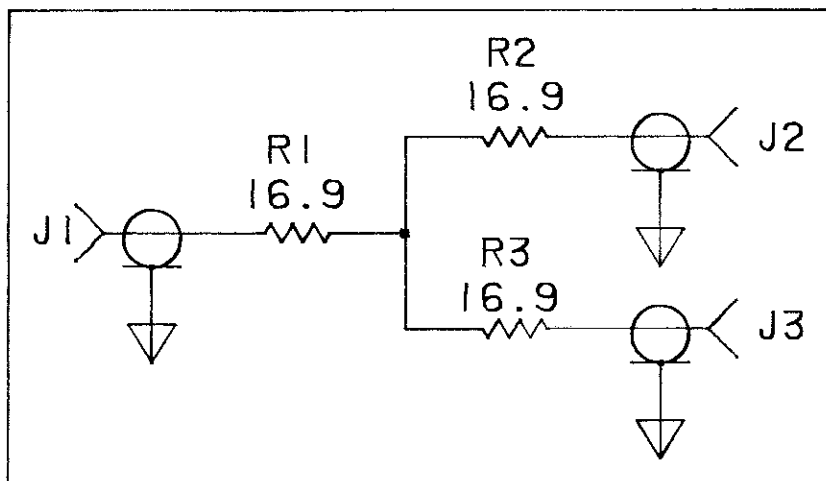


Figure 4-22. Frequency Summer.

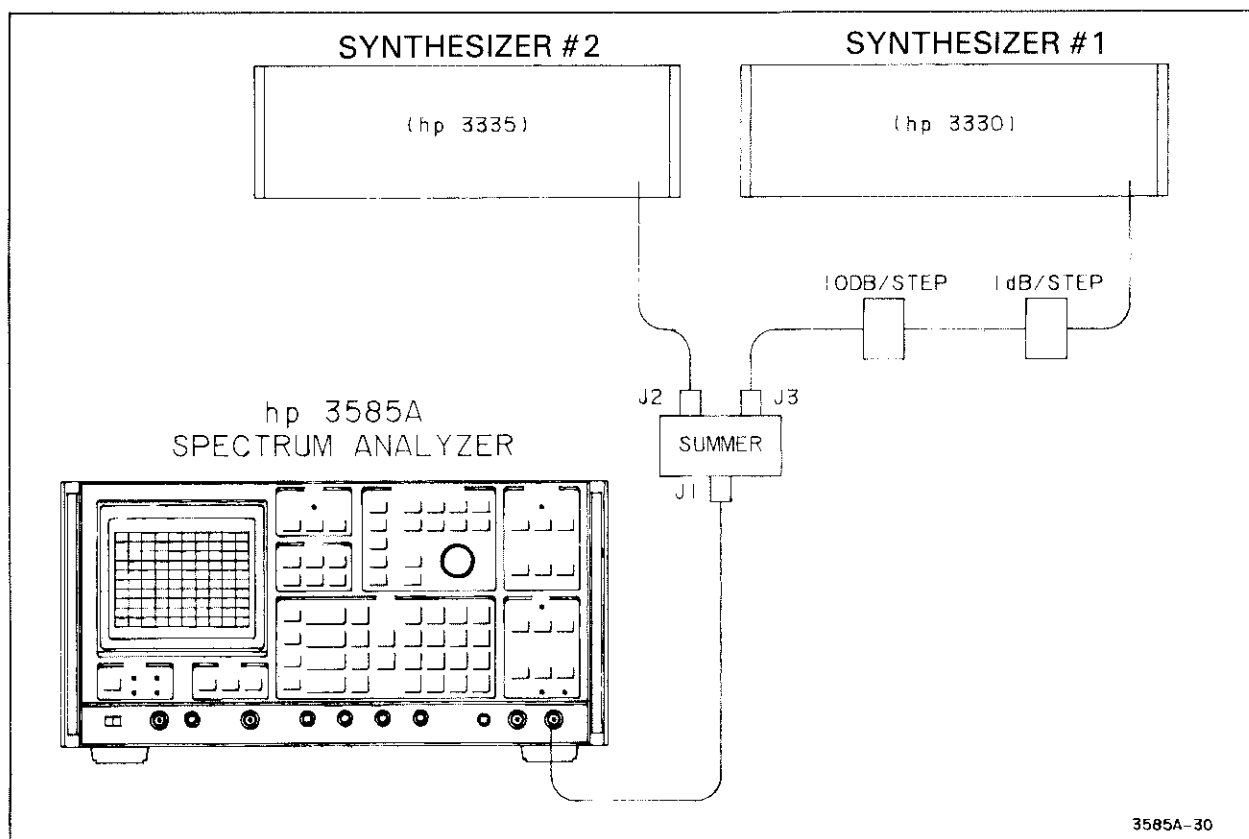


Figure 4-23. Intermodulation Distortion Test.

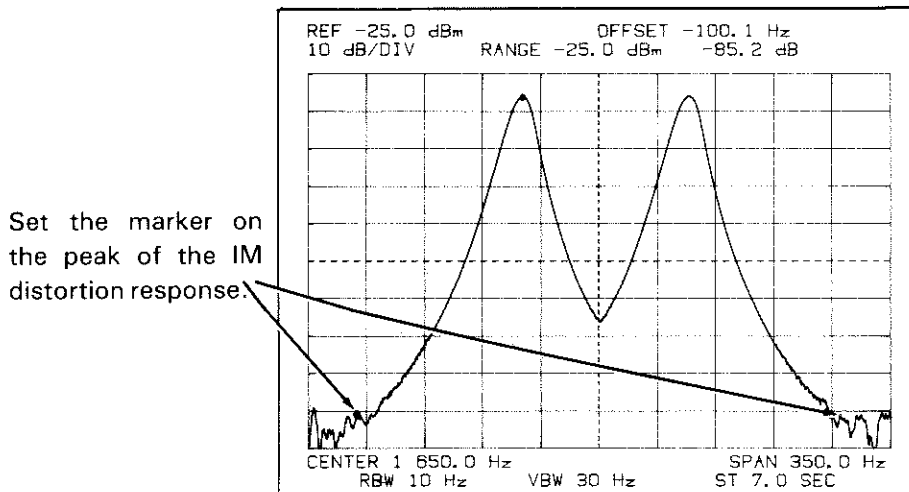


Figure 4-24. IM Distortion Response.

**4-83. Bandwidth Tests.**

These tests will verify that the 3585A meets its 3 dB, Bandwidth and Shape Factor specifications.

Specification:

- Resolution Bandwidth Accuracy
- 3 dB Bandwidth . . . . . ± 20% of BW setting at the 3 dB points
- Selectivity (Shape Factor) . . . . . < 11:1

Procedure:

- a. Set the 3585A controls for:

```

RECALL 602
INSTRUMENT PRESET
CENTER FREQUENCY . . . . . 10 MHz
FREQUENCY SPAN . . . . . 10 Hz
REFERENCE LEVEL . . . . . -24.5 dBm
dB/DIV . . . . . 1 dB
RES. BW . . . . . 3 Hz
RES. BW HOLD . . . . . on
    
```

- b. Initially this test checks the 3 dB points of each Resolution Bandwidth; therefore, ignore the values in parenthesis until instructed otherwise.

- c. Allow one complete sweep to occur. Now put the marker on the most positive point of the trace, using the marker amplitude reading as your guide.

- d. Set the 3585A controls for:

```

OFFSET . . . . . on
ENTER OFFSET
    
```



**Table 4-12. Bandwidth Control Settings.**

RES. BW	Frequency Span	
	3 dB	60 dB
3 Hz	10 Hz	100 Hz
10 Hz	30 Hz	200 Hz
30 Hz	100 Hz	500 Hz
100 Hz	200 Hz	2 kHz
300 Hz	1 kHz	5 kHz
1 kHz	2 kHz	20 kHz
3 kHz	10 kHz	50 kHz
10 kHz	20 kHz	100 kHz
30 kHz	100 kHz	500 kHz

**4-85. Fractional N API Spur Test.**

4-86. This test checks that the Fractional N API circuitry is operating properly by checking the spurious response level.

Specification:

Spurious Responses < -80 dB below signal

Procedure:

- a. Set the synthesizer controls for:

FREQUENCY.....37,648,955 Hz  
 AMPLITUDE..... + 10dBm

- b. Connect the 50Ω output of the synthesizer to the 50Ω input of the 3585A.

- c. Set the 3585A controls for:

INSTRUMENT PRESET  
 CENTER FREQUENCY.....37,650,055 Hz  
 FREQUENCY SPAN.....200 Hz  
 REFERENCE LEVEL.....-30 dBm  
 RANGE.....0 dBm  
 VIDEO BW.....10Hz

- d. Allow one complete sweep to occur.

e. All points on the display should read less than -80 dB, verifying that the 3585A passes this Fractional N API Spur test.

**4-87. Tracking Generator Flatness Test.**

4-88. This test compares the output of the calibrator to the output of the Tracking Generator. Any unflatness contributed by the input section is subtracted out.



## Specification:

Tracking Generator Frequency Response  $\pm 0.7$  dB

## Procedure:

- a. Set the 3585A controls for:

```

RECALL 604
INSTRUMENT PRESET
dB/DIV..... 1 dB
REFERENCE LEVEL..... -20 dBm

```

- b. Allow a complete sweep to occur, then enter these commands:

```

STORE A → B
INSTRUMENT PRESET
dB/DIV..... 1 dB
RANGE..... 0 dBm

```

- c. Connect the Tracking Generator output to the 3585A 50 $\Omega$  input.

d. Adjust the Tracking Generator Amplitude control so that the displayed trace is in the middle of the CRT display.

- e. Turn the A-B function on.

- f. Move the marker to the most negative point on the trace.

- g. Set the 3585A controls for:

```

OFFSET.....on
ENTER OFFSET

```


h. Move the marker to the most positive point on the trace. The marker amplitude should read less than 1.5 dB thereby verifying that the 3585A Tracking Generator meets its flatness specification.

**4-89. HP-IB Check (Optional).**

4-90. Up to this point the 3585A has been checked only as a bench operated instrument. If the instrument is to be used with a controller, the HP-IB interface should be checked. The program shown in Figure 4-23 will check the HP-IB operation of the instrument to a high level of confidence. This program is flow charted using controller independent language (meta message) so that it may be adapted to your controller. If you have a -hp- 9825A calculator, a listing of this program appears in Table 4-14. The program is also contained on File 26, Trace 0 of the Semi-Automatic Performance Test tape (P.N. 0J3585-10001). If an error is detected in the HP-IB interface of the 3585A, an error number will be printed out. The error definitions are contained in Table 4-13 and may be used to help locate problems on the 3585A HP-IB board.

4-91. To run the HP-IB check with the -hp- 9825A calculator, insert the Semi-Automatic Performance Test tape in the calculator tape slot and press the following keys:

**LOAD**      **2**      **6**      **EXECUTE**

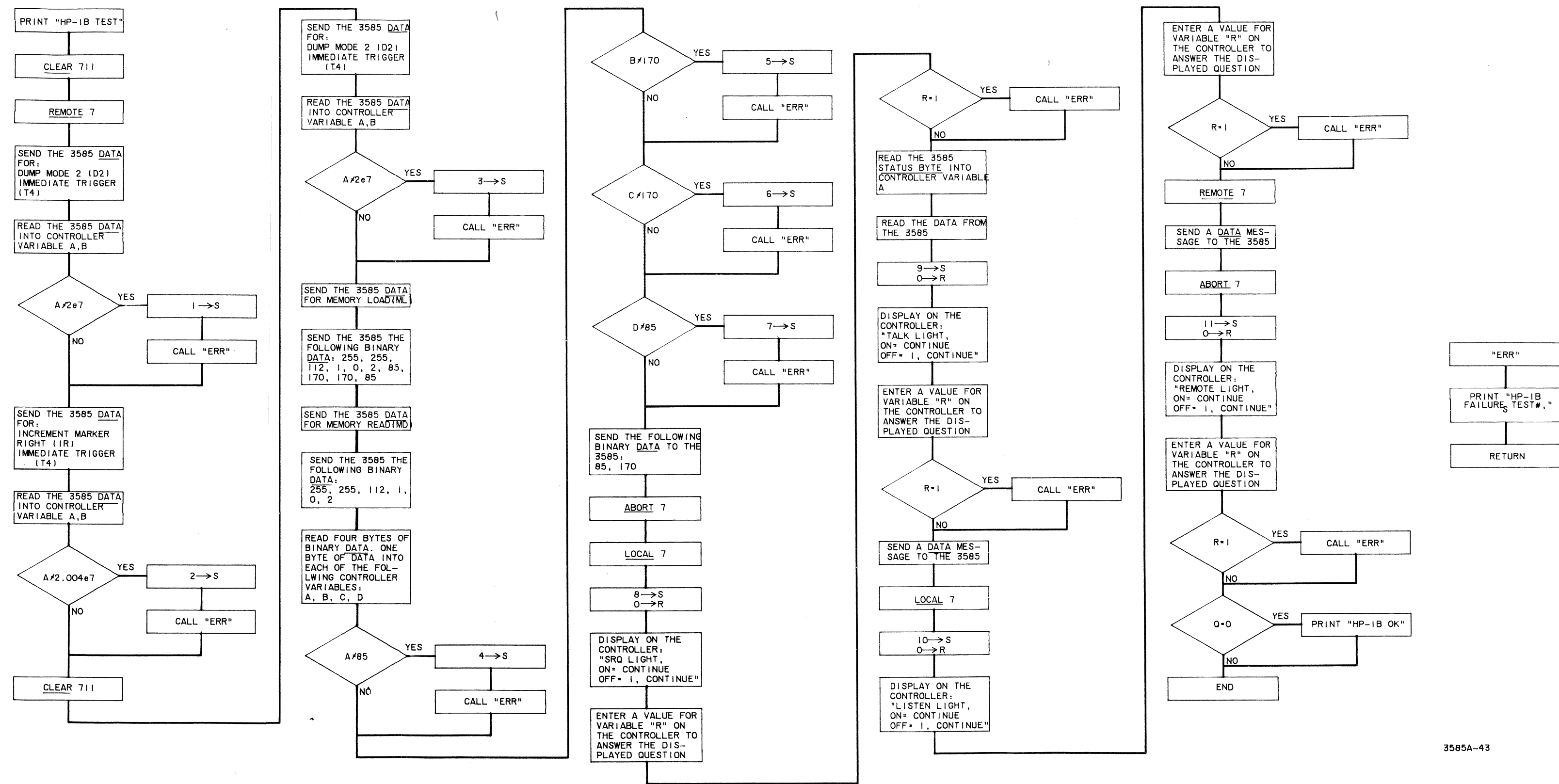
When the lazy ‘‘T’’ (  ) has reappeared on the 9825A display, press the **RUN** key. To complete the test, follow the instructions on the calculator display. If no HP-IB errors are found by the test, ‘‘HP-IB OK’’ will be printed by the calculator. This ends the HP-IB check program.

**Table 4-13. HP-IB Error Definitions.**

Error #	Explanation
1	} Large HP-IB Problem; DSA Required
2	
3	
4	} Data Line Problem
5	
6	
7	
8	} Front Panel Light or Interface Problem; otherwise use DSA
9	
10	
11	

**Table 4-14. HP-IB Check Program Listing For The 9825A Calculator.**

```
0: "HP-IB Test for Op. Verification 3/08/78":
1: spc 2;prt "HPIB Test";spc 2;0→Q
2: clr 711
3: rem 7
4: wrt 711,"D2T4"
5: red 711,A,B
6: if A#2e7;1→S;gsb "ERR"
7: wrt 711,"IRT4"
8: red 711,A,B
9: if A#2.004e7;2→S;gsb "ERR"
10: clr 711
11: wrt 711,"D2T4"
12: red 711,A,B
13: if A#2e7;3→S;gsb "ERR"
14: wrt 711,"ML"
15: wtb 731,255,255,112,1,0,2,85,170,170,85
16: wrt 711,"MD"
17: wtb 731,255,255,112,1,0,2
18: rdb(711)→A;rdb(711)→B;rdb(711)→C;rdb(711)→D
19: if A#85;4→S;gsb "ERR"
20: if B#170;5→S;gsb "ERR"
21: if C#170;6→S;gsb "ERR"
22: if D#85;7→S;gsb "ERR"
23: wtb 711,85,170
24: cli 7
25: lcl 7;8→S
26: 0→R;beep;ent "SRQ Light on=cont;off=1,cont",R;if R=1;gsb "ERR"
27: rds(711)→A
28: red 711;9→S
29: 0→R;beep;ent "Talk Light on=cont;off=1,cont",R;if R=1;gsb "ERR"
30: wrt 711
31: lcl 7;10→S
32: 0→R;beep;ent "Listen Light on=cont;off=1,cont",R;if R=1;gsb "ERR"
33: rem 7
34: wrt 711
35: cli 7;11→S
36: 0→R;beep;ent "Remote Light on=cont;off=1,cont",R;if R=1;gsb "ERR"
37: if Q=0;prt "HPIB OK";spc 2
38: end
39: "ERR":prt "HPIB Failure      Test #",S;spc 2;1→Q
40: ret
*6082
```



3585A-43

Figure 4-23. HP-IB Check Flowchart. 4-55/4-56

## PERFORMANCE TEST CARD

Hewlett-Packard Model 3585A

Spectrum Analyzer

Serial No. \_\_\_\_\_

Tests Performed By \_\_\_\_\_

Date \_\_\_\_\_

### FREQUENCY ACCURACY TEST

Frequency difference from reference \_\_\_\_\_ Hz

### CALIBRATOR TEST

Frequency	3585A Marker Reading
100 kHz	_____ dBm
40 MHz	_____ dB

### CAL OFFSET TEST

Res. BW	3585A Offset Frequency Reading	Frequency Test Limit	3585A Amplitude Reading	Amplitude Test Limit
300 Hz	_____ Hz	± 3.5 kHz	_____ dB	± 3.5 dB
10 kHz	_____ Hz	± 3.5 kHz	_____ dB	± 3.5 dB
3 kHz	_____ Hz	± 3.5 kHz	_____ dB	± 3.5 dB
1 kHz	_____ Hz	± 3 kHz	_____ dB	± 3.5 dB
300 Hz	_____ Hz	± 900 Hz	_____ dB	± 3.5 dB
100 Hz	_____ Hz	± 300 Hz	_____ dB	± 3.5 dB
30 Hz	_____ Hz	± 90 Hz	_____ dB	± 3.5 dB
10 Hz	_____ Hz	± 30 Hz	_____ dB	± 3.5 dB
3 Hz	_____ Hz	± 9 Hz	_____ dB	± 3.5 dB

### RANGE CALIBRATION TEST

Test Limit ± .7 dB

Range	Marker Reading
-25 dBm	_____ 0 dB
-20 dBm	_____ dB
-15 dBm	_____ dB
-10 dBm	_____ dB
- 5 dBm	_____ dB
0 dBm	_____ dB
5 dBm	_____ dB
10 dBm	_____ dB
15 dBm	_____ dB
20 dBm	_____ dB
25 dBm	_____ dB
30 dBm	_____ dB

**PERFORMANCE TEST CARD (Cont'd)**

**AMPLITUDE LINEARITY TEST**

(A) Variable Attenuator	(B) Correction Factor*	(C) Ideal Reading	(D) Correct Reading	(E) 3585A Marker Reading**	(F) Test Tolerance
0 dB	- - - - -	00.0 dB	00.0 dB	00.0 dB	----
-10 dB	_____	-10.0 dB	_____ dB	_____ dB	± 0.3 dB
-20 dB	_____	-20.0 dB	_____ dB	_____ dB	± 0.3 dB
-30 dB	_____	-30.0 dB	_____ dB	_____ dB	± 0.6 dB
-40 dB	_____	-40.0 dB	_____ dB	_____ dB	± 0.6 dB
-50 dB	_____	-50.0 dB	_____ dB	_____ dB	± 1.0 dB
-60 dB	_____	-60.0 dB	_____ dB	_____ dB	± 1.0 dB
-70 dB	_____	-70.0 dB	_____ dB	_____ dB	± 1.0 dB
-80 dB	_____	-80.0 dB	_____ dB	_____ dB	± 2.0 dB
-90 dB	_____	-90.0 dB	_____ dB	_____ dB	± 2.0 dB

\* Correction factor must be obtained from attenuator calibration data.

\*\* If noise jitter is present, use average marker reading.

**REFERENCE LEVEL ACCURACY TESTS**

(A) Synthesizer Level	(B) 3585A Reference Level	(C) 3585A Marker Reading	(D) Synthesizer Level Minus The 3585A Marker Reading	(E) Test Tolerance
+ 10 dBm	+ 10 dBm	_____ dBm	_____ dB	± 0.4 dB
0 dBm	0 dBm	_____ dBm	_____ dB	± 0.4 dB
- 10 dBm	- 10 dBm	_____ dBm	_____ dB	± 0.4 dB
- 20 dBm	- 20 dBm	_____ dBm	_____ dB	± 0.4 dB
- 30 dBm	- 30 dBm	_____ dBm	_____ dB	± 0.4 dB
- 40 dBm	- 40 dBm	_____ dBm	_____ dB	± 0.4 dB
- 50 dBm	- 50 dBm	_____ dBm	_____ dB	± 0.7 dB
- 60 dBm	- 60 dBm	_____ dBm	_____ dB	± 0.7 dB
- 70 dBm	- 70 dBm	_____ dBm	_____ dB	± 1.5 dB
- 80 dBm	- 80 dBm	_____ dBm	_____ dB	± 1.5 dB

**50Ω FREQUENCY RESPONSE TEST**

Test Limit ± .5 dB

Range	Maximum Amplitude Deviation
- 25 dBm	_____ dB
- 20 dBm	_____ dB
- 15 dBm	_____ dB
- 10 dBm	_____ dB
- 5 dBm	_____ dB
0 dBm	_____ dB
5 dBm	_____ dB
10 dBm	_____ dB
15 dBm	_____ dB
20 dBm	_____ dB
25 dBm	_____ dB
30 dBm	_____ dB

## PERFORMANCE TEST CARD (Cont'd)

### 75Ω FREQUENCY RESPONSE TEST

Test Limit  $\pm .5$  dB

Range	Maximum Unflatness
- 25 dBm	_____ dB

### 1 MΩ FREQUENCY RESPONSE TEST

Frequency	Maximum Unflatness	Test Limit
0 to 10 MHz	_____ dB	$\pm 0.7$ dB
10 MHz to 40 MHz	_____ dB	$\pm 1.5$ dB

### RETURN LOSS TESTS

Input	Test Limit < 17.5 mV p-p		Test Limit
	40 MHz	15 MHz	
50Ω	_____	_____	17.5 mV
Terminated (50Ω)	_____	_____	70 mV
75Ω	_____	_____	17.5 mV
Terminated (75Ω)	_____	_____	70 mV

### 1 MΩ INPUT IMPEDANCE TEST

Frequency	3585A Reading	Test Limit
0 kHz	_____ dB	-5.56 to -6.44 dB
10 kHz	_____ dB	-2 to -3 dB

### MARKER ACCURACY TEST

Test Limit <  $\pm 0.2\%$  Of Span

Ideal Reading	3585A Reading	Test Limit
20.08 MHz	_____ MHz	20-20.16 MHz

**PERFORMANCE TEST CARD (Cont'd)**

**DYNAMIC RANGE TESTS**

**NOISE**

<b>3585A Res. BW</b>	<b>9.36 MHz Average Noise Reading</b>	<b>Test Limit</b>
30 kHz	_____ dBm	-100
10 kHz	_____ dBm	-104
3 kHz	_____ dBm	-108
1 kHz	_____ dBm	-111
300 Hz	_____ dBm	-115
100 Hz	_____ dBm	-122
30 Hz	_____ dBm	-127
10 Hz	_____ dBm	-132
3 Hz	_____ dBm	-137

**ZERO RESPONSE TEST**

Test Limit < -15 dB Below Range

3585A reading = \_\_\_\_\_ dB

**LOW FREQUENCY RESPONSES**

<b>Description</b>	<b>Frequency</b>	<b>Harmonics</b>				
		<b>*1</b>	<b>*2</b>	<b>*3</b>	<b>*4</b>	<b>*5</b>
Line Frequency	60 Hz	_____	_____	_____	_____	_____
A/D Clock	5 kHz	_____	_____	_____	_____	_____
Fractional N Clock	100 kHz	_____	_____	_____	_____	_____
Step Loop Clock	1 MHz	_____	_____	_____	_____	_____
Internal Reference	10 MHz	_____	_____	_____	_____	_____
Power Supply	_____	_____	_____	_____	_____	_____
CRT Oscillator	_____	_____	_____	_____	_____	_____



**PERFORMANCE TEST CARD (Cont'd)**  
**LOCAL OSCILLATOR SIDEBANDS**

Test Limit > -80 dB Down From Signal

Frequency	Sideband Harmonics					
	-3	-2	-1	+1	+2	+3
60 Hz	_____	_____	_____	_____	_____	_____
5 kHz	_____	_____	_____	_____	_____	_____
100 kHz	_____	_____	_____	_____	_____	_____
1 MHz	_____	_____	_____	_____	_____	_____
Power Supply _____ Hz	_____	_____	_____	_____	_____	_____
CRT Oscillator _____ Hz	_____	_____	_____	_____	_____	_____

**RESIDUAL SPURS**

Test Limit < -120 dBm

Frequency	3585A Reading
39.825 MHz	_____ dBm
29.475 MHz	_____ dBm
23.1 MHz	_____ dBm
16.2 MHz	_____ dBm
14.7375 MHz	_____ dBm
9.5625 MHz	_____ dBm
37.2375 MHz	_____ dBm
32.0625 MHz	_____ dBm
9.72 MHz	_____ dBm
5.58 MHz	_____ dBm
27.72 MHz	_____ dBm

**HARMONIC DISTORTION TEST**

Test Limit < -80 dB Down From Signal

Fundamental Frequency	Harmonics		
	2	3	4
1 kHz	_____ dB	_____ dB	_____ dB
9 MHz	_____ dB	_____ dB	_____ dB

**INTERMODULATION DISTORTION TEST**

Synthesizer #1 Frequency	100 Hz Below Frequency Shown ( $2F_1 - F_2$ )	200 Hz Above Frequency Shown ( $2F_2 - F_1$ )	100 Hz ( $F_2 - F_1$ )
	1 kHz	_____ dB	_____ dB
33 MHz	_____ dB	_____ dB	_____ dB

**PERFORMANCE TEST CARD (Cont'd)**

**BANDWIDTH TESTS**

<b>3585A Res. BW</b>	<b>3 dB Bandwidth Test Limit <math>\pm 20\%</math> of BW</b>	<b>60 dB Bandwidth</b>	<b>Shape Factor Test Limit &lt; 11:1</b>
30 kHz	_____ Hz	_____ Hz	_____
10 kHz	_____ Hz	_____ Hz	_____
3 kHz	_____ Hz	_____ Hz	_____
1 kHz	_____ Hz	_____ Hz	_____
300 Hz	_____ Hz	_____ Hz	_____
100 Hz	_____ Hz	_____ Hz	_____
30 Hz	_____ Hz	_____ Hz	_____
10 Hz	_____ Hz	_____ Hz	_____
3 Hz	_____ Hz	_____ Hz	_____

**FRACTIONAL N API SPUR TEST**

Maximum Point On Displayed Trace \_\_\_\_\_ dB

**TRACKING GENERATOR FLATNESS TEST**

Test Limit <  $\pm 0.7$  dB

3585A Maximum Unflatness Reading \_\_\_\_\_ dB

## SECTION V ADJUSTMENTS

### 5-1. INTRODUCTION.

5-2. This section contains complete adjustment procedures for the Model 3585A Spectrum Analyzer. Table 5-1 lists the adjustments and their locations.

**Table 5-1. Adjustment Locations.**

Adjustment	Paragraph Location	Affected Components	Service Group
Low Voltage Power Supplies (A71-75)	5-11	A75R9,R15, A72R31, R19	I
90MHz Reference Board (A21)	5-13	A21R125	B-1
10MHz Oven Oscillator (A81)	5-15	A81R2	B - 1
Oven Output Shutdown	5-17	A81R9	B - 1
CRT Control and High Voltage Power Supply (A63,65,67)	5-19	A67R46,R6,R105,R116, A65R13,A63R4,R16, R38	D-2,4
CRT Graphics (A64,67)	5-20	A67R59,R85,R54,R80, R3,R2,R1	D-4
CRT Alphanumerics (A64)	5-21	A64R72,C23,R48,R62, R14,R16,R1	D-3
Fractional N (A31-34)	5-22	A34R32,A31L3, A32R49,R56	B-4,5
L.O. Step Loop (A23-26)	5-23	A23L1	B-3
First L.O. VTO and Sum Loop	5-24	A27R2,R11	B-2
Video Filter and A/D (A15,16)	5-25	A16R21,R19,A15R4	A-5,6
Log Amp and 30kHz Filter (A14)	5-26	A14L5,L7,R57,R53 A17R105,A15R7	A-3,4,5
Log Amp Slope Adjustment (A14)	5-27	A14R43,R17,R7,R8, R14,R21,R26	A-4
Reference Level DC Offset (A15)	5-28	A15R9,R7	A-5

Table 5-1. Adjustment Locations (Cont'd).

	Adjustment	Paragraph Location	Affected Components	Service Group
Δ2	IF Filters (A17-19)	5-29	A19C39,C41	A-3
	Fifth Crystal Stage	5-30	A19L7,C41	
	Fourth Crystal Stage	5-31	A19L6,C30	
	Fourth LC Stage	5-32	A19L5,R28	
	Fifth LC Stage	5-33	A19L4,R20	
	Third Crystal Stage	5-34	A18L6,C24,L4	
	Third LC Stage	5-35	A18L5,R15	
	Second Crystal Stage	5-36	A17L7,C39	
	First Crystal Stage	5-37	A17L6,C29,L8	
	First LC Stage	5-38	A17L5,R20	
Second LC Stage	5-39	A17L4,R12		
Δ2	Final IF Filter Adjustments (A17)	5-40	A17C27,C37,C22,C28, C39,R26,R28,R30,R32, R34	A-3
Δ2	16dB Amplifiers (A18)	5-41	A18R77,R71,R65	A-3
	Conversion Section	5-42	A2C3,L7,L8,L11,L12, A3L1,L3,L5,L7,C8, A4L7,C2,C3,A5L1-6,T3, T4	A-2
	Input Section	5-44	A-1	A-1
	Calibrator Symmetry	5-46	A1R52	
	Flatness	5-47	A1R131,C83,L18,C86, L19,C89,L21,C92	
	Range Up Detector	5-48	A1R173	
	Range Down Detector	5-49	A1R174	
	Top Of Screen Amplitude	5-50	A17R105	
	Calibrator Level	5-51	A1R39	
	1MΩ Amplitude	5-52	A1R108	
	1MΩ Flatness	5-53	A1C21,C27	
	1MΩ Input Capacitance	5-54	A1C18	
	Local Oscillator Feedthrough	5-55	A1R170	
	Harmonic Distortion	5-56	A1R110	
	Electrical Isolation	5-57		
	Tracking Generator	5-58	A52R68,C50,C16	E
	HP-IB	5-59	A44R9	F
	X-Y Plotter	5-60	A62R4	H

### 5-3. Equipment Required.

5-4. Table 5-2 lists the equipment required to perform the adjustments on the 3585A. Equipment that meets or exceeds the required characteristics given in the table may be substituted for the recommended models.

**Table 5-2. Recommended Adjustment Equipment.**

Equipment	Required Characteristics	Recommended Model
Digital Volt/Ohmmeter	DC Volts: 2V,20V,200V range Accuracy: $\pm 0.04\%$ Input Impedance $10M\Omega$ Ohms: 200 Accuracy: $\pm 0.07\%$	-hp- 3466A
High Frequency AC Voltmeter	AC Volts: 0.3V,3V range Frequency Response: 100Hz to 1MHz Input Impedance: $10M\Omega$ Accuracy: $\pm 1\%$	-hp- 400E
Oscilloscope	Bandwidth: dc to 100MHz Vertical Range: 5mV/div to 20V/div Horizontal Range: 50nsec/div to 100msec/div	-hp- 1740A
High Voltage Probe	Accuracy: $\leq 1\%$ Input Impedance: $\geq 10^9$ Ohms Measurement Range: $\geq 6kV$	-hp- 3440A-K05
Frequency Counter	Frequency Range: 10Hz to 150MHz Accuracy: $\pm 1$ count $\pm$ time base error Resolution: 0.1Hz	-hp- 5382A
Frequency Synthesizer	Frequency Range: 200Hz to 40MHz Amplitude Accuracy: $\pm 0.27dB$	-hp- 3335A
Attenuator 1dB/Step	Attenuation Range: 0 to 12dB Accuracy: $\pm 0.2dB$ Frequency Range: dc to 40MHz	-hp- 355C
Attenuator 10dB/Step	Attenuator Range: 0 to 100dB Accuracy: $\pm 0.5dB$ Frequency Range: dc to 40MHz	-hp- 355D
9MHz Low Pass Filter	(See Figure 4-14)	
10k $\Omega$ Resistor	$\pm 1\%$ , 1/8 Watt	-hp- P.N. 0757-0442
BNC-To-Seaelectro Adapter Cable	Supplied with instrument	-hp- P.N. 03585-61616
Optional _____ Spectrum Analyzer	Frequency Range: 100kHz to 150MHz Amplitude Accuracy: $\pm 3dB$	-hp- 8558B
Resistor Probe	20:1 Resistive Divider 1k $\Omega$ Input Resistance	-hp- 10020A

### 5-5. Test Point And Adjustment Locations.

5-6. Test point and adjustment location are shown on PC board component location diagrams in the Adjustment Procedures. The component location diagram for the Input and Conversion Section is shown in Figure 5-44 (foldout) at the end of this section.\* For many of the adjustments it is necessary to remove the PC board from the card nest. *Always set the 3585A LINE switch to off before removing or replacing a PC board unless instructed to do otherwise.* Some adjustments require power to be left on to retain the control settings. When instructed to leave the power on while removing or replacing a PC board be careful to keep the PC edge connector properly aligned. Misalignment of the PC edge connector during insertion can short the power supplies.

### 5-7. ADJUSTMENT SEQUENCE.

5-8. The adjustment procedures are presented in a logical sequence that will minimize interaction between adjustments. Although the performance tests might indicate that only one or two adjustments are needed, we recommend that you start at the beginning and do all of the adjustments in the order in which they are given. There are three exceptions to this rule: 1) The display section and 2) Oven Oscillator may be done independent of all other adjustments; and 3) the IF Filter adjustments are very time consuming and may be omitted if the instrument passes the Bandwidth Measurement Test. The Final IF Adjustment procedure should be done whether or not the IF Filter adjustments are omitted. Also note that any repair or adjustment made on the A1-A16 boards requires that all the adjustments for these boards be made.

### 5-9. Synthesizer Connections.

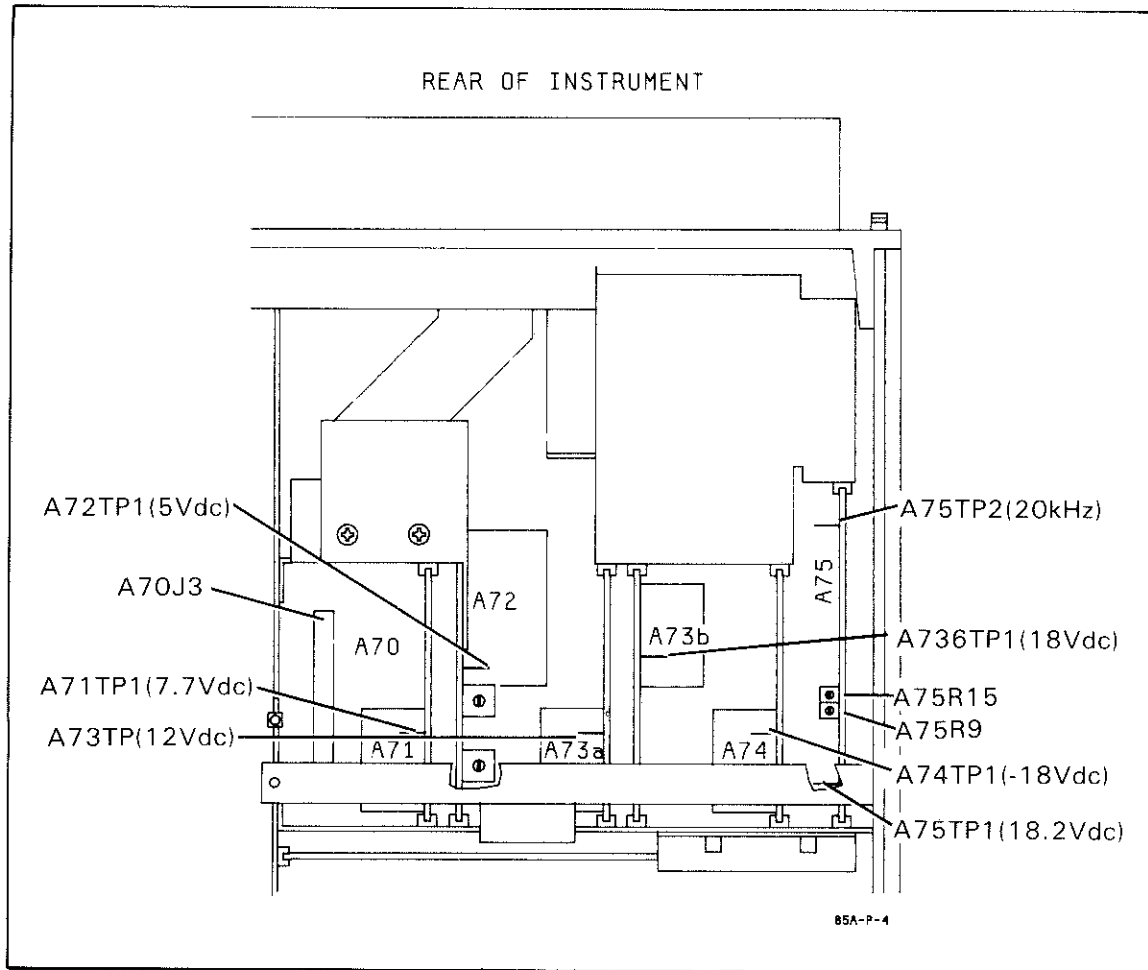
5-10. Unless otherwise noted the synthesizer used to perform the adjustments must be frequency locked to the 3585A's 10MHz REF OUTPUT. Failure to make this connection will degrade the accuracy of the adjustments.

### 5-11. Low Voltage Power Supply Adjustments (A71-75).

5-12. These adjustments set the 18V reference voltage, 20KHz oscillator and 5V supply associated with the Low Voltage Power supplies.

- a. Remove the plastic cover from the Low Voltage Power Supply Section.
- b. Remove the metal PC board hold-down bar.
- c. Connect a DVM to A75TP1.
- d. Adjust A75R9 for a voltage reading of  $+18.2V \pm 0.02V$ .
- e. Remove the DVM.
- f. Using a 10:1 scope probe, connect a Frequency Counter to A75TP2.

\*Also at the end of this section is Figure 5-45, which shows the location of all boards accessible from the top of the instrument.

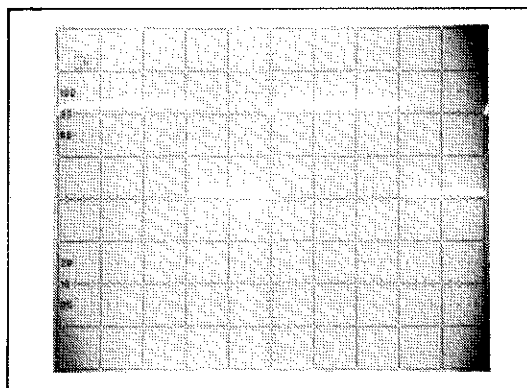


**Figure 5-1. Power Supply Adjustment Locations.**

- g. Adjust A75R15 for a frequency reading of 20KHz  $\pm$  10Hz.
- h. Using a 10:1 probe, connect an oscilloscope to A75TP2. Set the Oscilloscope controls as follows:

VERTICAL ..... 0.2V/Div.  
 HORIZONTAL ..... 10 $\mu$ sec/Div.  
 INPUT ..... DC coupled

- i. Verify that the observed waveform is within  $\pm$  10% of that shown in Figure 5-2.
- j. Connect the DVM to A72TP1. Adjust A72R31 for 5.4V  $\pm$  0.05V.
- k. Turn the 3585A power off. Remove PC boards A71 and A72.
- l. Disconnect the cable from A70J3. Replace PC boards A71 and A72.



**Figure 5-2. Power Supply Clock Output.**

- m. Connect a  $1\Omega$ , 25W resistor from A72TP1 to chassis ground.

**WARNING**

*The  $1\Omega$  resistor used for this adjustment can reach a temperature that will cause burns. Handle this resistor with caution.*

- n. Turn the 3585A power on. Adjust A72R19 so that the yellow current limit indicator just goes out.
- o. Turn the 3585A power off. Disconnect the resistor from A72.
- p. Remove the A71 and A72 board. Reconnect the cable associated with A70J3. Replace the A71 and A72 boards.
- q. Using a DVM, check each of the voltages below to verify that the various power supplies are working properly.

A74TP1	$-18V \pm 0.9V$
A73bTP1	$+18V \pm 0.9V$
A73aTP1	$+12V \pm 0.6V$
A71TP1	$+7.7V \pm 0.6V$

- r. Disconnect the DVM. Replace the PC board Hold-down bar and the plastic cover for the power supplies. This completes the Low Voltage Power Supply Adjustments.

### 5-13. 90MHz Reference Board Adjustments (A21).

5-14. This adjustment sets the frequency of the 90MHz crystal oscillator on the A21 board. This crystal oscillator is used during warm-up and in the absence of an EXT REF INPUT.

- a. Disconnect the cables from A21J1 and A21J7.
- b. Connect a frequency counter to A21J1.



- c. Adjust A21R125 (see Figure 5-45) for a frequency reading of  $90\text{MHz} \pm 20\text{Hz}$ .
- d. Reconnect the A21J1 and A21J7 cables.

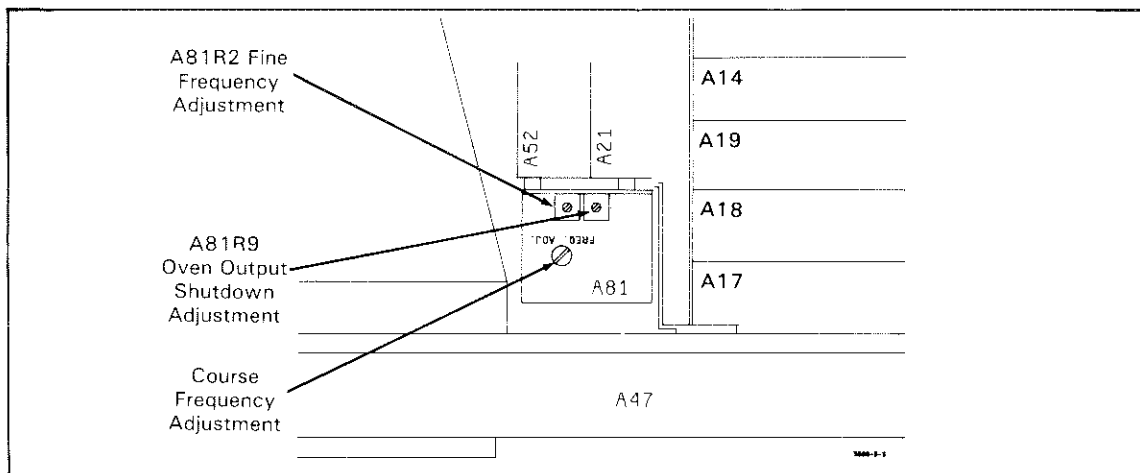
### 5-15. 10MHz Oven Oscillator Adjustments.

5-16. This adjustment sets the frequency of the 3585A oven oscillator. It is important that a frequency counter with greater accuracy and stability than that of the 3585A reference be used for this adjustment.

#### NOTE

*All instruments used for this adjustment should be turned on for at least 20 minutes (preferably longer) prior to beginning adjustments.*

- a. Remove any connections between the synthesizer reference connectors and the 3585A rear panel reference connectors.
- b. Connect both the 3585A and the synthesizer to their own internal references. For the 3585A, use the supplied BNC shorting bar to connect the OVEN REF OUT to the EXT REF IN.
- c. Connect the Frequency counter to A21J1.
- d. Remove the screw on the A81 Oven assembly that covers the course frequency adjustment (see Figure 5-3).
- e. Adjust A81R2 to the center of its range.
- f. Adjust the Course Frequency control on the A81 board so that the frequency counter reads  $90\text{MHz} \pm 1\text{Hz}$ . Allow time for the oven oscillator to stabilize after each adjustment.
- g. Disconnect the frequency counter from A21J1. Reconnect the proper cable to A21J1.



**Figure 5-3. Oven Oscillator Adjustment Locations.**

- h. Set the synthesizer for:

FREQUENCY.....9MHz  
 AMPLITUDE.....0dBm

- i. Set the 3585A controls for:

INSTRUMENT PRESET  
 CENTER FREQUENCY.....9MHz  
 COUNTER.....on  
 MANUAL SWEEP.....on

j. Using a BNC “Tee”, connect the synthesizer output to the 3585A 50Ω input and the external Frequency Counter input.

k. Adjust the fine frequency adjustment, A81R2, (and the course frequency adjustment if necessary) so that the 3585A counter frequency matches the external Frequency Counter reading. Again, allow 5-10 minutes between adjustments so that the oven oscillator will stabilize.

- l. Replace the screw that covers the course Frequency Adjustment.

m. If other adjustments are to be made, reconnect the 3585A 10MHz REF OUTPUT to the synthesizer reference input.

### 5-17. Oven Output Shutdown Adjustment.

5-18. This adjustment sets the point where the Oven Oscillator will begin to be used as the 3585A's reference. During warm-up the Oven Oscillator's frequency is off far enough to cause the 3585A L.O. to come unlocked. This adjustment causes the OVEN REF OUT to be shut-off during this warm-up period.

#### NOTE

*Allow the instrument to warm up 20 minutes or more before beginning this adjustment.*

- a. Remove the jumper between the OVEN REF OUT and the EXT REF IN on the 3585A.
- b. Connect the OVEN REF OUT to the 3585A 50Ω input.
- c. After the 3585A has completed Autoranging, turn the AUTORANGE function off.
- d. Adjust A81R9 (SHUT) to the point where the 10MHz signal level just turns off (on ≈ +7 dBm    off ≈ -35dBm).
- e. Adjust A81R9 one eighth turn counter-clockwise.
- f. Replace the jumper between the OVEN REF OUT and the EXT REF IN.
- g. Disconnect all inputs to the counter and the 3585A. Connect the 3585A 10MHz. Ref Output to the 3335 40/N Ref Input.

h. This completes the Reference Oscillator Adjustments.

**5-19. CRT Control And High Voltage Power Supply Adjustments.**

- a. Turn the 3585A power off. Turn the 3585A on its left side. Remove the bottom cover.
- b. Place the XYZ board (A67) on a PC extender board. The PC extender should be screwed in place for stability. Leave all cables connected to A67.
- c. Unplug the cables from the "Xin" and "Yin" connectors. Using clip leads, short the "Xin" pins together. Now short the "Yin" pins together.
- d. Move A67J11 to the "T" position and disconnect A67J6.

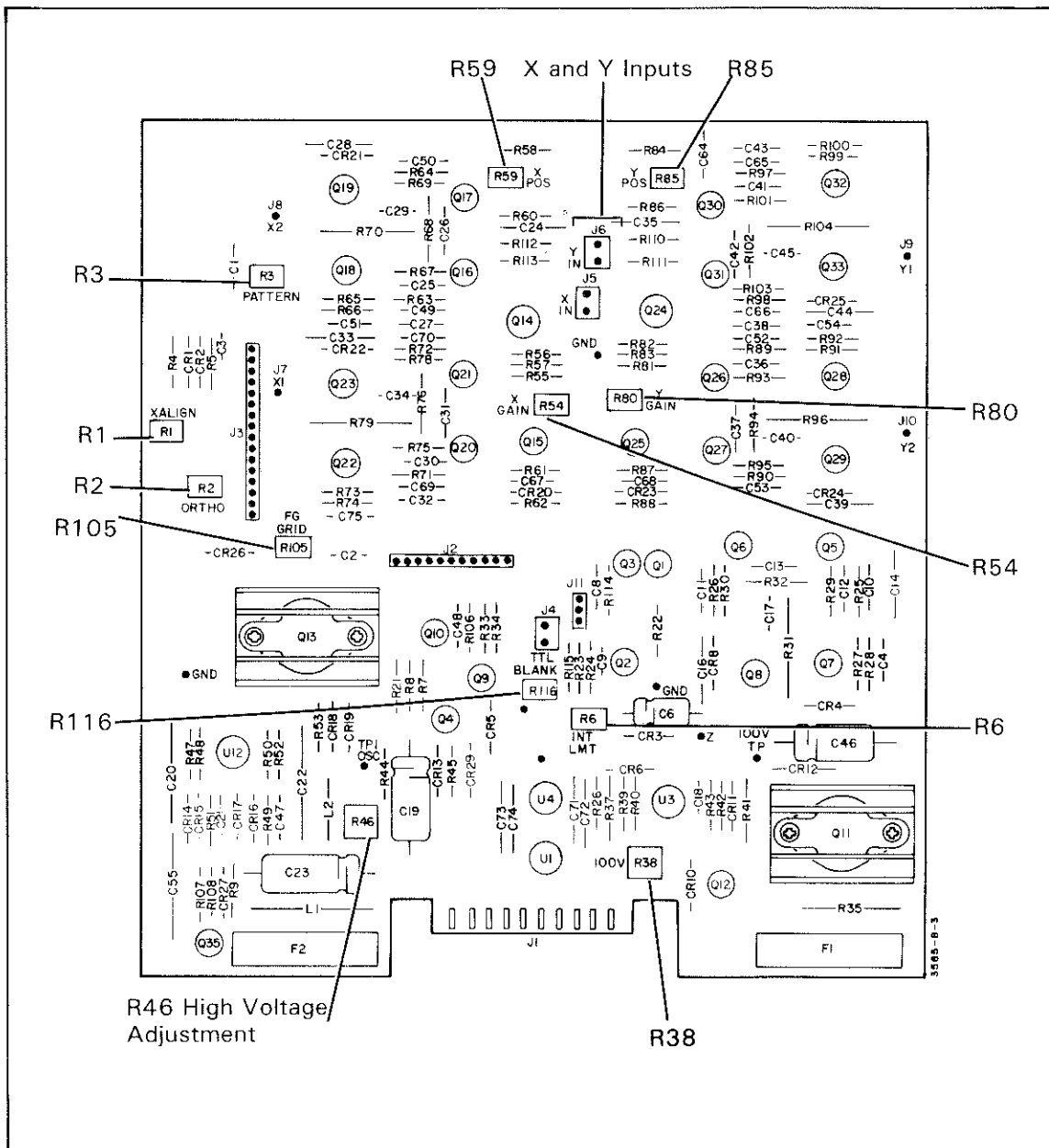


Figure 5-4. XYZ Board (A67).

- e. Set the oscilloscope controls for:

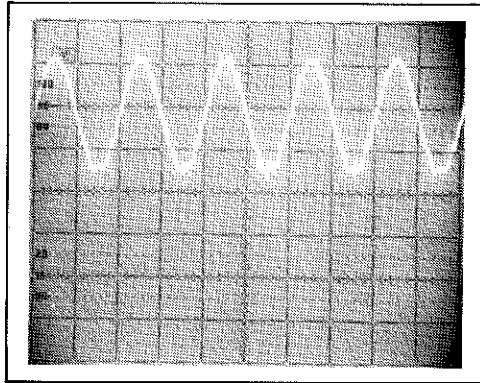
VERTICAL.....1V/Div (DC coupled)  
HORIZONTAL..... 10ms/Div

- f. Using a 10:1 probe, connect the oscilloscope to the “OSC” test point (A67TP1).

**WARNING**

*The voltages involved in the following measurements may cause serious injury or even death. USE EXTREME CAUTION.*

- g. Turn the 3585A power on. Turn the front panel intensity control fully C.W. Verify that A67TP1 measures approximately 26Vp-p centered +18V above ground potential.



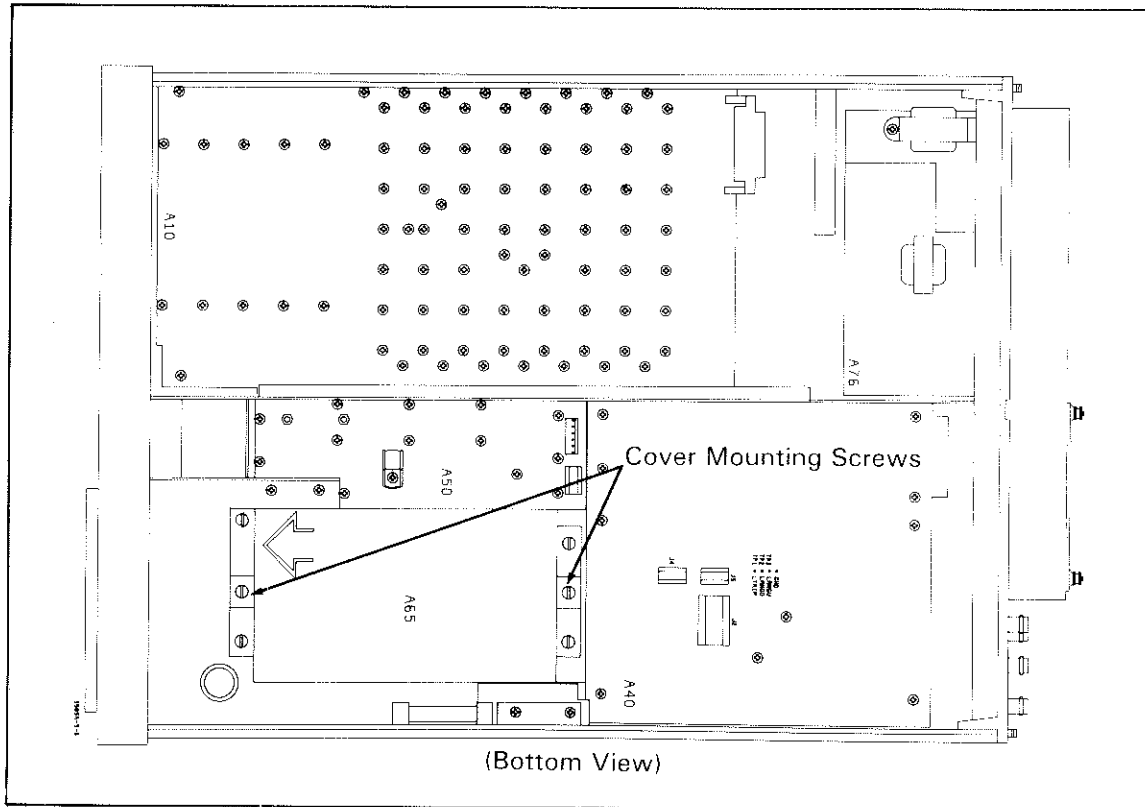
**Figure 5-5. High Voltage Oscillator Output.**

- h. Turn the front panel intensity control fully C.C.W. and verify that the A67TP1 output is +18V DC.
- i. Disconnect the scope probe.
- j. Connect a DVM (200V range) to the 100V A67TP2. Adjust A67R38 for a reading of  $100V \pm 0.25V$ .
- k. Turn the 3585A power off. Disconnect DVM.

**WARNING**

*The voltages present inside the high voltage power supply box can cause serious injury or death. **Never** place an uninsulated conductive tool or object inside this box.*

- l. Set the intensity control to the “9 o’clock” position.
- m. Remove the aluminum cover from high voltage section (see Figure 5-6 for screw locations) on the bottom side of the 3585A.



**Figure 5-6. High Voltage Cover Mounting Locations.**

**WARNING**

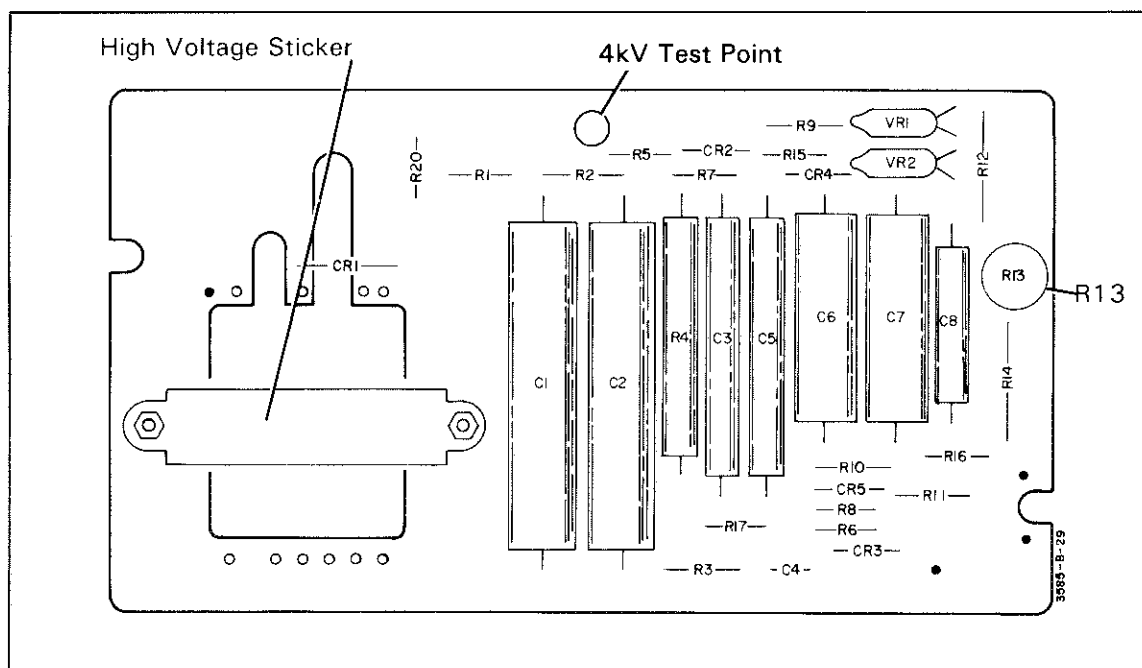
*Extremely dangerous voltages can remain on the High Voltage board (A65) even when the instrument is turned off. Injury or death may result if an uninsulated tool or object is placed on the board.*

- n. Connect the calibrated, high voltage probe to A65TP1 (plated through hole in PC board).

**WARNING**

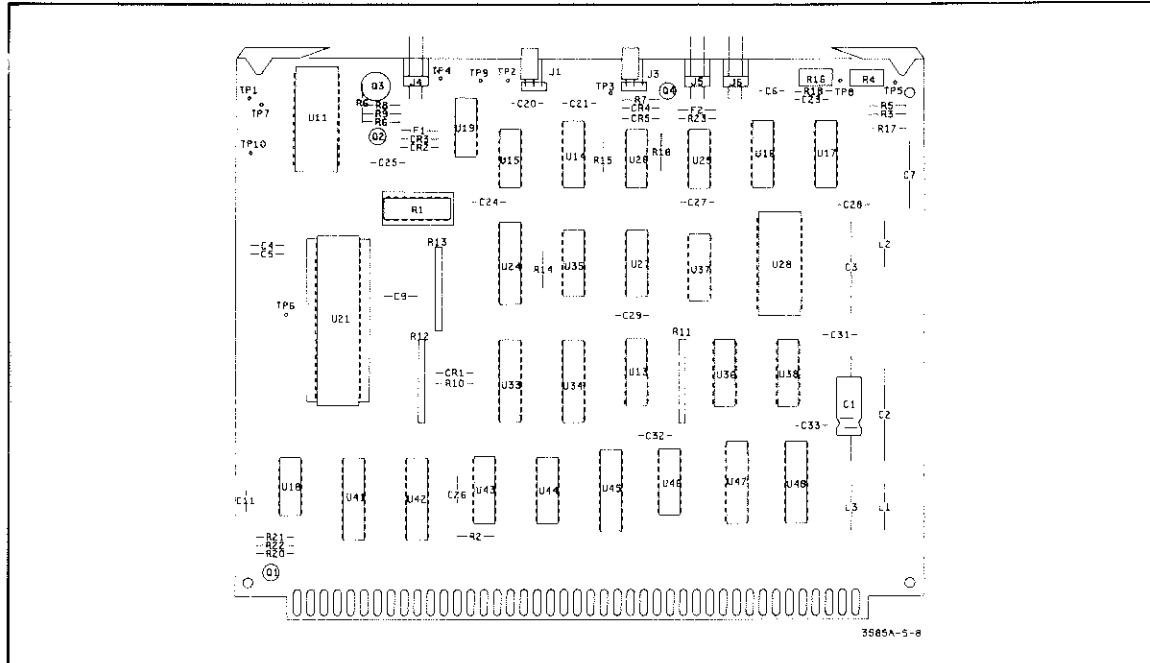
*4kV will be measured when the instrument is turned on. USE EXTREME CAUTION to avoid serious injury or death.*

- o. Turn the 3585A power on.
- p. Adjust A67R46 for a voltage reading equal to the voltage marked on the high voltage sticker  $\pm 10V$ . See Figure 5-7 for the location of this sticker.
- q. Remove the high voltage probe from the test point.



**Figure 5-7. High Voltage Board (A65).**

- r. Using the front panel focus control, focus the 3585A CRT display. If the round dot on the instrument's CRT can be focused with the focus control between the 10 o'clock and 2 o'clock positions, proceed at step v.
- s. Set the focus control to the 12 o'clock position. Set the astigmatism control fully C.C.W.
- t. Adjust the focus limit pot (A65R13) for the smallest, most symmetrical round dot on the 3585A CRT.
- u. Turn the 3585A power off. Replace the high voltage cover and the instruments bottom cover. Set the 3585A back in a normal upright position.
- v. Remove the shorts from the "Xin" and "Yin" inputs on the A67 board. Reconnect the proper cables to these inputs.
- w. Move the test jumper A63J3 to the "T" position (see Figure 5-8).
- x. Set the oscilloscope for:
- Vertical Scale.....0.1V/Div (DC coupled)  
Horizontal Scale.....0.05 $\mu$ sec/Div
- y. Connect a 10:1 scope probe to A63TP1. Verify that the signal amplitude is  $\leq 0.7V$  to  $\geq 3.5V$  minimum.
- z. Verify that the rise and fall time of the waveform is between 10 and 70 nsec between the 10% and 90% points (see Figure 5-9).



**Figure 5-8. Display Processor Board (A63).**

aa. Connect a DVM to A63TP5 and adjust A63R4 for the voltage stamped on the A63U21 nanoprocessor  $\pm 0.2V$ .

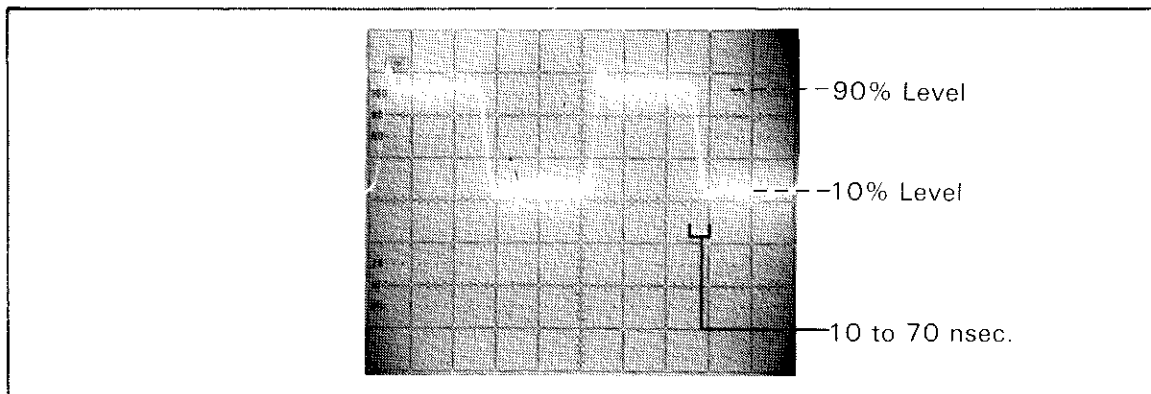
bb. Set the oscilloscope for:

Vertical Scale.....0.2V/Div (DC coupled)  
 Horizontal Scale.....0.05 $\mu$ sec/Div

cc. Connect a 10:1 scope probe to A63TP3 and adjust A63R16 for a pulse width of 250 nsec between the centers of the rising and falling edges. (See Figure 5-10)

**NOTE**

*If no pulse is observed on the oscilloscope, move A63J1 to the "T" position for a moment and then back to the "N" position.*



**Figure 5-9. Display Processor Clock Output.**

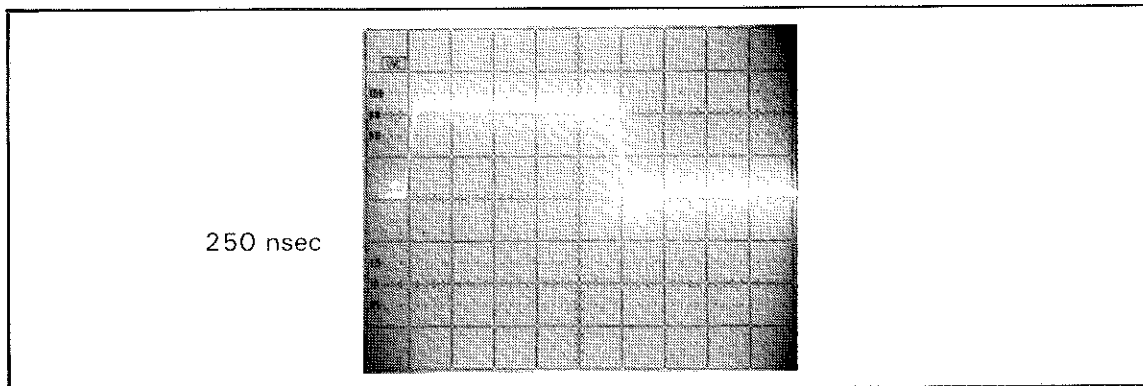


Figure 5-10. Sample Pulse Generator Output.

- dd. Turn the front panel intensity control fully C.W.
- ee. Adjust A67R6 so that there are no extra dots on the screen.

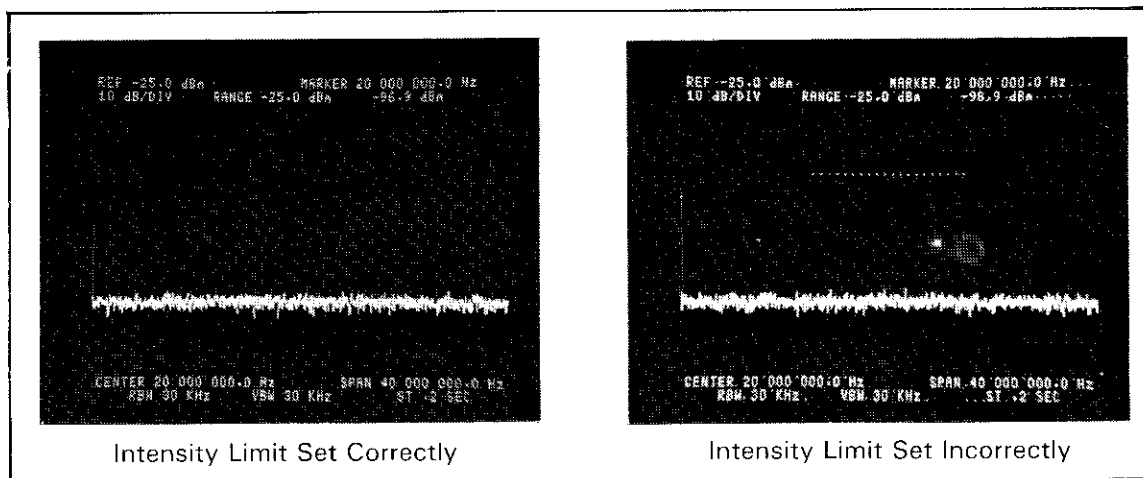


Figure 5-11. Location Of Extra CRT Dots.

- ff. Connect a DVM set for DC volts to A67TP6. Record the reading \_\_\_\_\_ V.
- gg. Connect the DVM to A67TP5. Record the reading \_\_\_\_\_ V.
- hh. Subtract the reading in step ff from those taken in step gg. The difference should be 8V or greater. If the difference is less than 8V, turn A67R6 slightly C.C.W. and continue at step ff. (Typically the voltage difference will be 20V or greater.)
- ii. Adjust the front panel intensity control so that the trace is just visible.
- jj. Turn the front panel graticule control fully C.W.
- kk. Adjust A67R105 for uniform brightness across the CRT display.
- ll. Adjust A67R116 for the maximum desired graticule illumination.
- mm. Turn the 3585A power off. Move test jumper A67J11 to the "N" position.



nn. Replace the A67 board. Replace the screws that hold the board to the chassis and the protective plastic cover over the board.

oo. This completes the CRT control and high voltage power supply adjustments.

#### **5-20. CRT Graphics Adjustment.**

- a. Attach a DVM to A64TP8. Adjust A64R72 for  $5.00\text{Vdc} \pm .005\text{V}$ . Disconnect DVM.
- b. Move the test jumper A63J3 to the "T" position.
- c. The display should now appear roughly similar to Figure 5-12.

#### **NOTE**

*Refer to Figure 5-13 (foldout) for pictures of the effect of each Graphic Adjustment.*

d. Adjust A67R59 (X position), A67R85 (Y position), A67R54 (X gain) and A67R80 (Y gain) so that the displayed pattern is vertically and horizontally aligned with the CRT graticule. (Preliminary adjustment.) See Figure 5-14 for adjustment locations.

- e. Adjust A67R3 (pattern) for the best vertical alignment.
- f. Adjust A67R2 (orthogonality) for the best vertical alignment.
- g. Adjust A67R1 (X align) for the best alignment along the X axis.
- h. Repeat Steps d thru g until alignment matches that of Figure 5-12.
- i. Observe the retrace line very carefully. If the line is wiggly as shown in Figure 5-12, adjust A64C23 (comp) for a straight retrace line.
- j. Move test jumper A64J1 to the "T" position.
- k. Adjust A64R48 (LD OFS) so that any bumps on the retrace line are gone. A straight retrace line should be the resulting display.
- l. Move test jumper A64J1 to the "N" position.
- m. Adjust A64R62 (LD gain) for an overshoot condition (see Figure 5-13).
- n. Adjust A64R62 so that the overshoot condition just disappears.
- o. Adjust A67R59 (X position) and A67R54 (X gain) so that the ends of the retrace line and bottom pattern line are aligned with the vertical lines of the CRT graticule (see Figure 5-12).
- p. Adjust A67R85 (Y position) and A67R80 (Y gain) so that the CRT graticule lines cut through the upper and lower lines of the displayed pattern (see Figure 5-12).

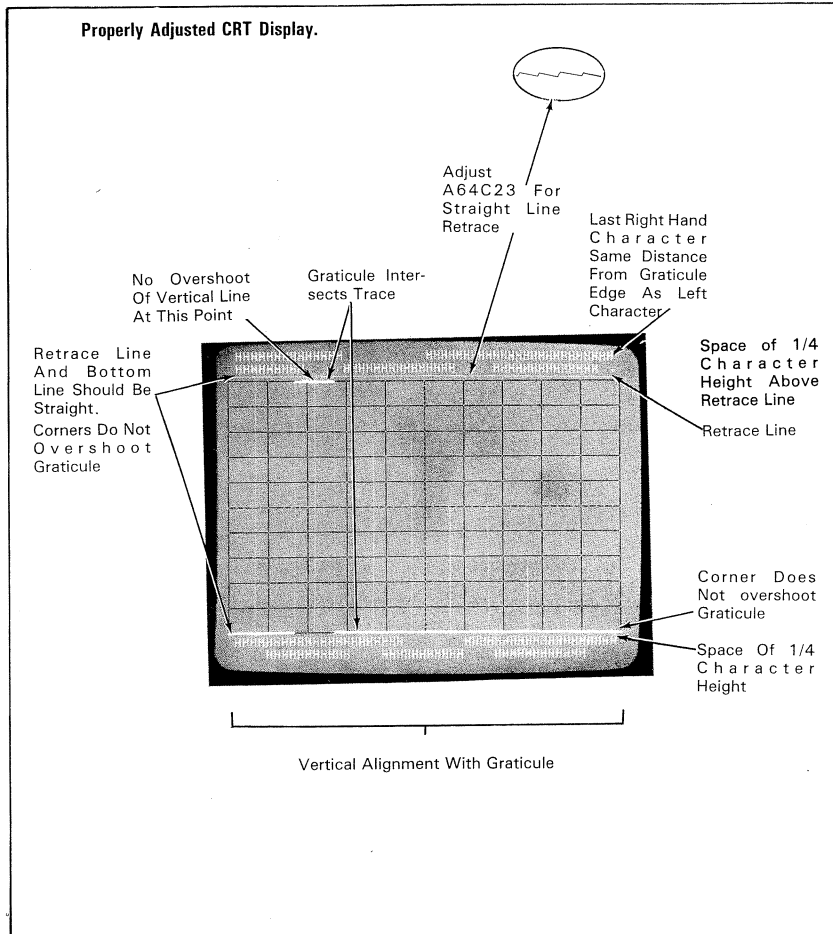


Figure 5-12. CRT Test Pattern.

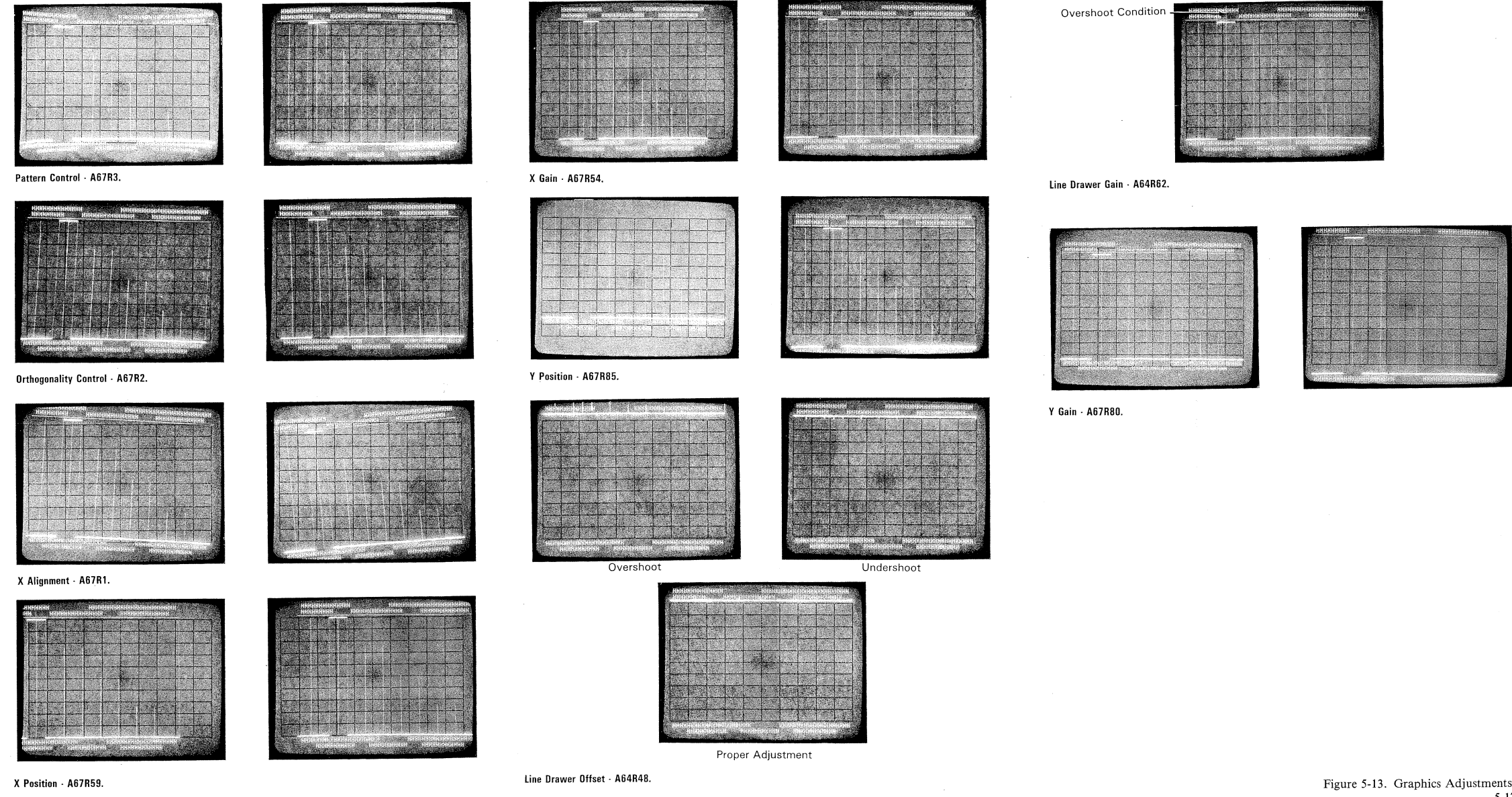


Figure 5-13. Graphics Adjustments.  
5-17

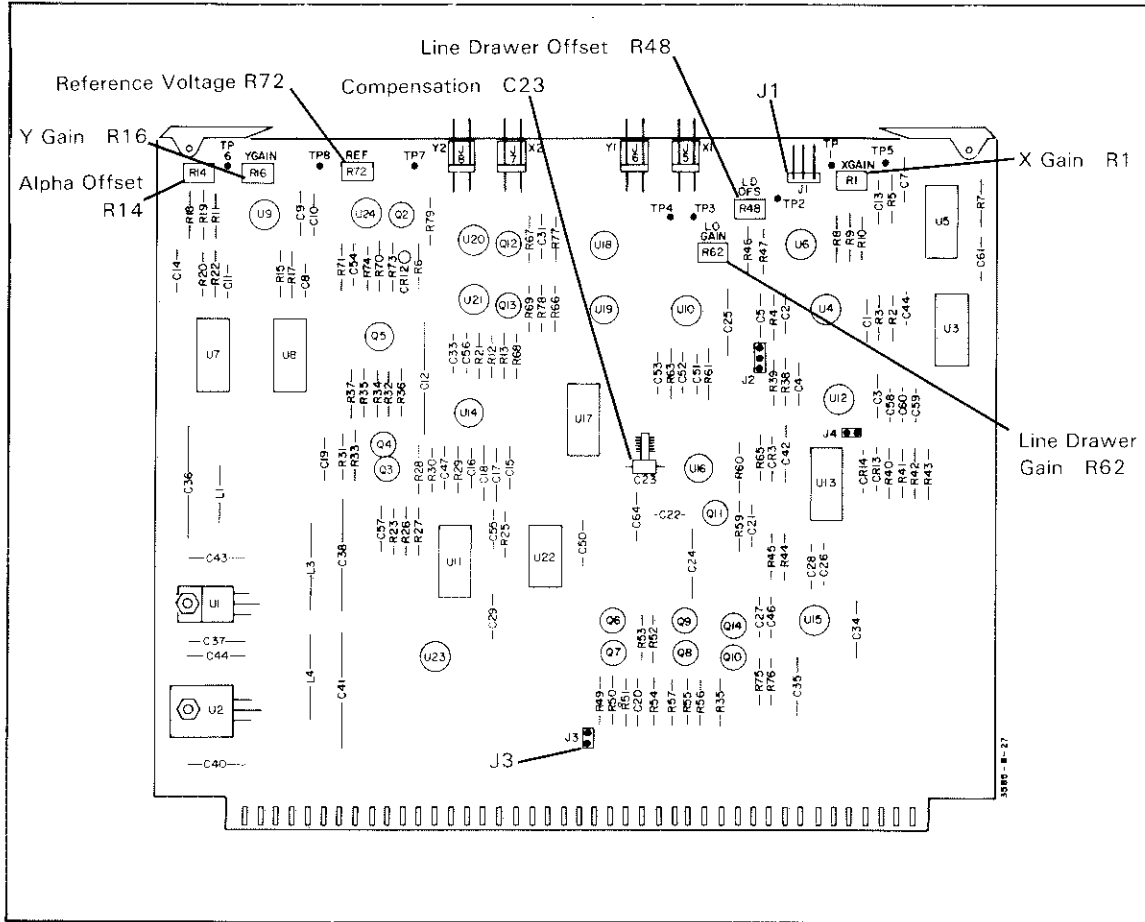


Figure 5-14. Analog Display Driver Board (A64).

5-21. CRT Alphanumeric Alignment.

- a. Be sure test jumper A63J3 is in the "T" position.

**NOTE**

*Refer to Figure 5-15 for pictures of the effect of Alphanumeric Adjustment.*

- b. Adjust A64R14 (A OFS) so that the second line of alphanumeric characters is about 1/4 of one character height above the top graticule line.
- c. Adjust A64R16 (Y gain) so that the third line of alphanumeric characters is 1/4 of one character height below the bottom graticule line.
- d. Adjust A64R1 (X gain) so that the last alphanumeric character is the same distance from the right-hand edge of the trace as the first alphanumeric character is from the left-hand edge of the trace.
- e. Move the test jumper A63J3 to the "N" position. This completes the graphics and alphanumeric adjustments.

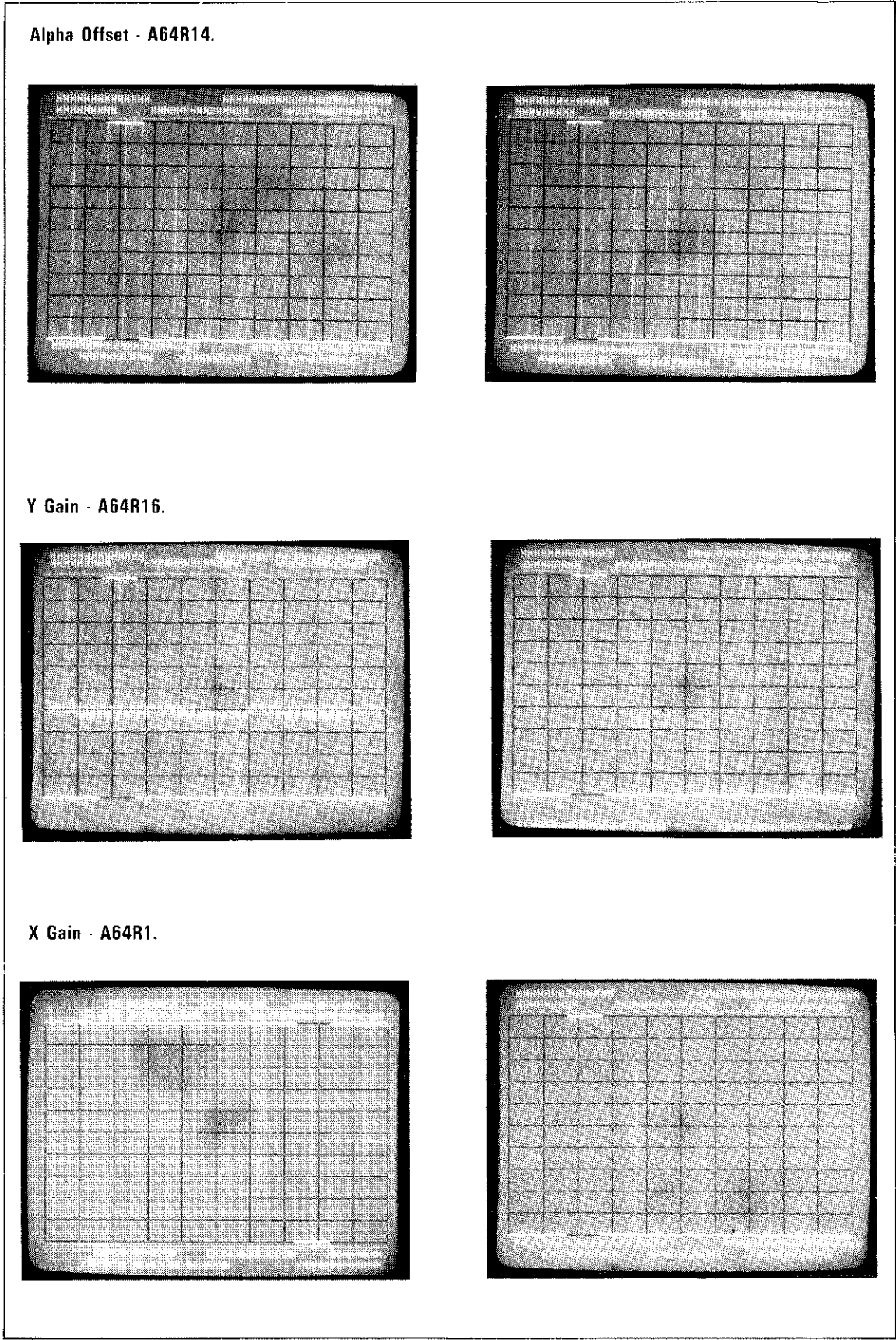


Figure 5-15. CRT Alphanumeric Adjustments.



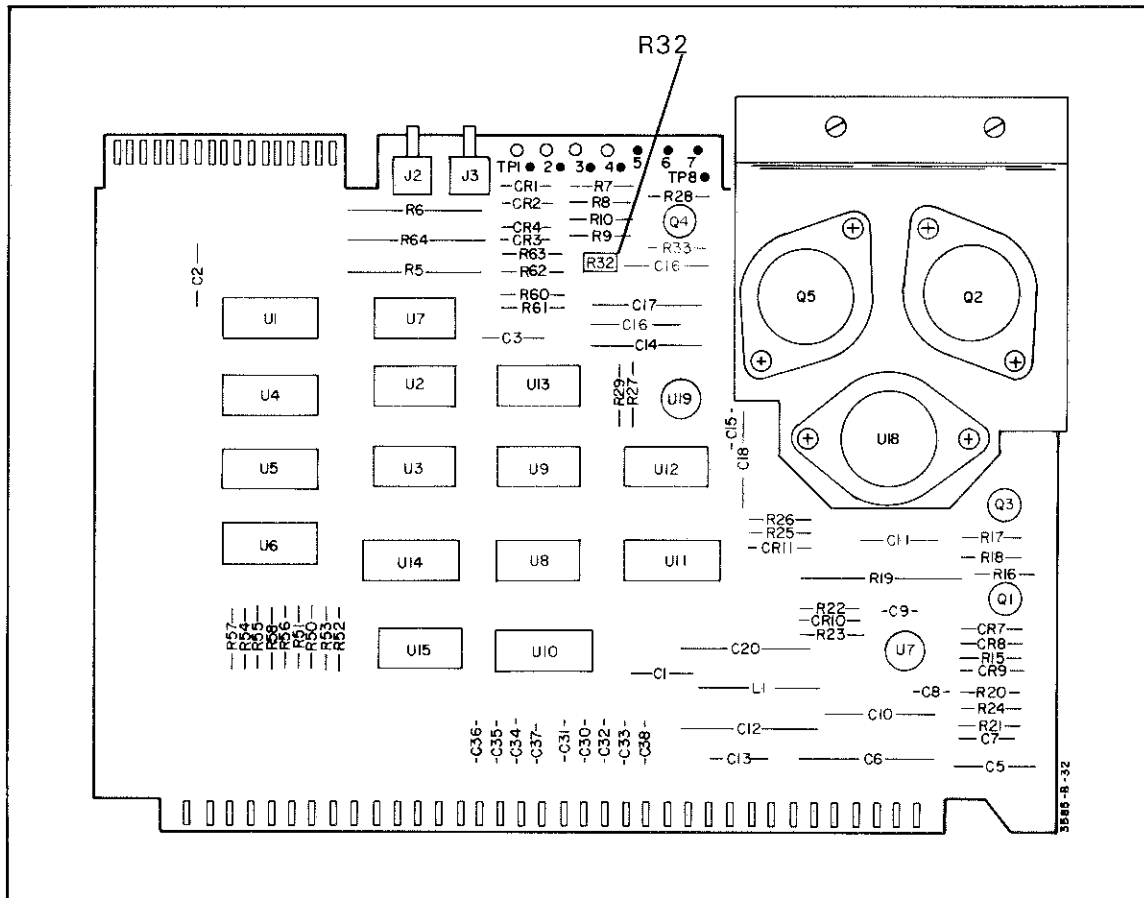
**5-22. Fractional N Adjustments.**

- a. Connect a DVM set for DC volts to A34TP5. Adjust A34R32 for  $5.3V_{dc} \pm 0.05V$ .
- b. Verify that A34TP6 measures  $+15.0V_{dc} \pm 0.8V$  and that A34TP8 measures  $-15.0V_{dc} \pm 0.8V$ .
- c. Disconnect the DVM.
- d. Turn the 3585A power off. Place the A31 board on a PC board extender. Turn the 3585A power on.
- e. Set the 3585A controls for:

```

RECALL 601
INSTRUMENT PRESET
RES. BW.....3KHz
RES. BW HOLD.....on
START FREQUENCY.....0.4MHz
STOP FREQUENCY.....1.65MHz
MANUAL ENTRY.....0.4MHz
    
```

- f. Connect the DVM to A31TP1 and adjust A31L3 for  $+7.70V_{dc} \pm 0.05V$ .



**Figure 5-16. LO Control Board (A34).**

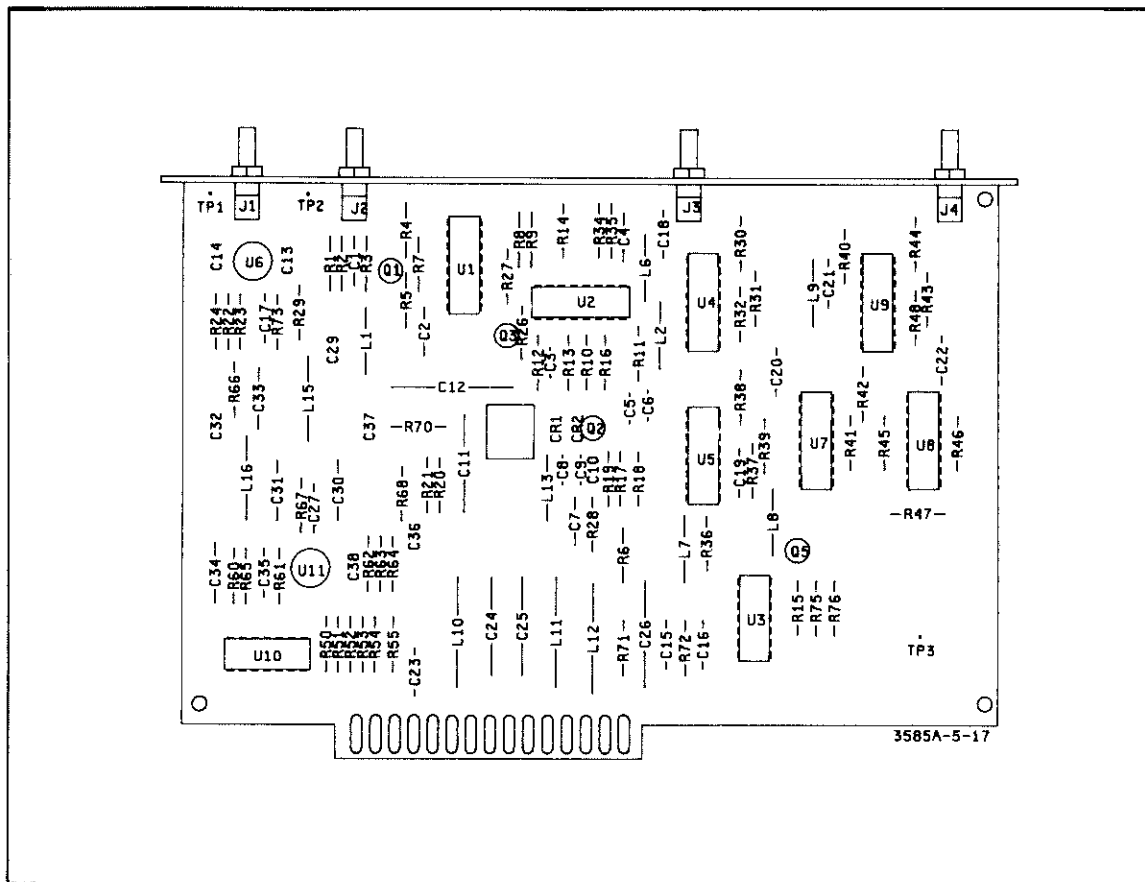


Figure 5-17. Fractional N VTO (A31).

- g. Disconnect the DVM.
- h. Turn the 3585A power off. Return the A31 board to its proper place in the card nest. Turn the 3585A power on.
- i. Set the 3585A controls for:
  - RECALL 601
  - INSTRUMENT PRESET
  - RES. BW .....3KHz
  - MANUAL ENTRY.....1MHz
  - CF STEP SIZE.....500Hz
  - MANUAL FREQUENCY.....
- j. Verify that the MANUAL frequency reads 1,000,500Hz on the CRT display.
- k. Set your oscilloscope controls for:
  - Vertical Scale.....0.01V/Div. (AC coupled)
  - Horizontal Scale.....50µsec/Div.
  - Trigger.....external
- l. Connect a 10:1 probe to the input of the scope. Connect the scope probe to A31TP2.

m. Connect a second 10:1 probe to the External Trigger input. Connect this probe to A33TP1.

n. Adjust A32R49 (API1, see Figure 5-45) for a minimum amount of ripple on the scope waveform. (See Figure 5-18.)

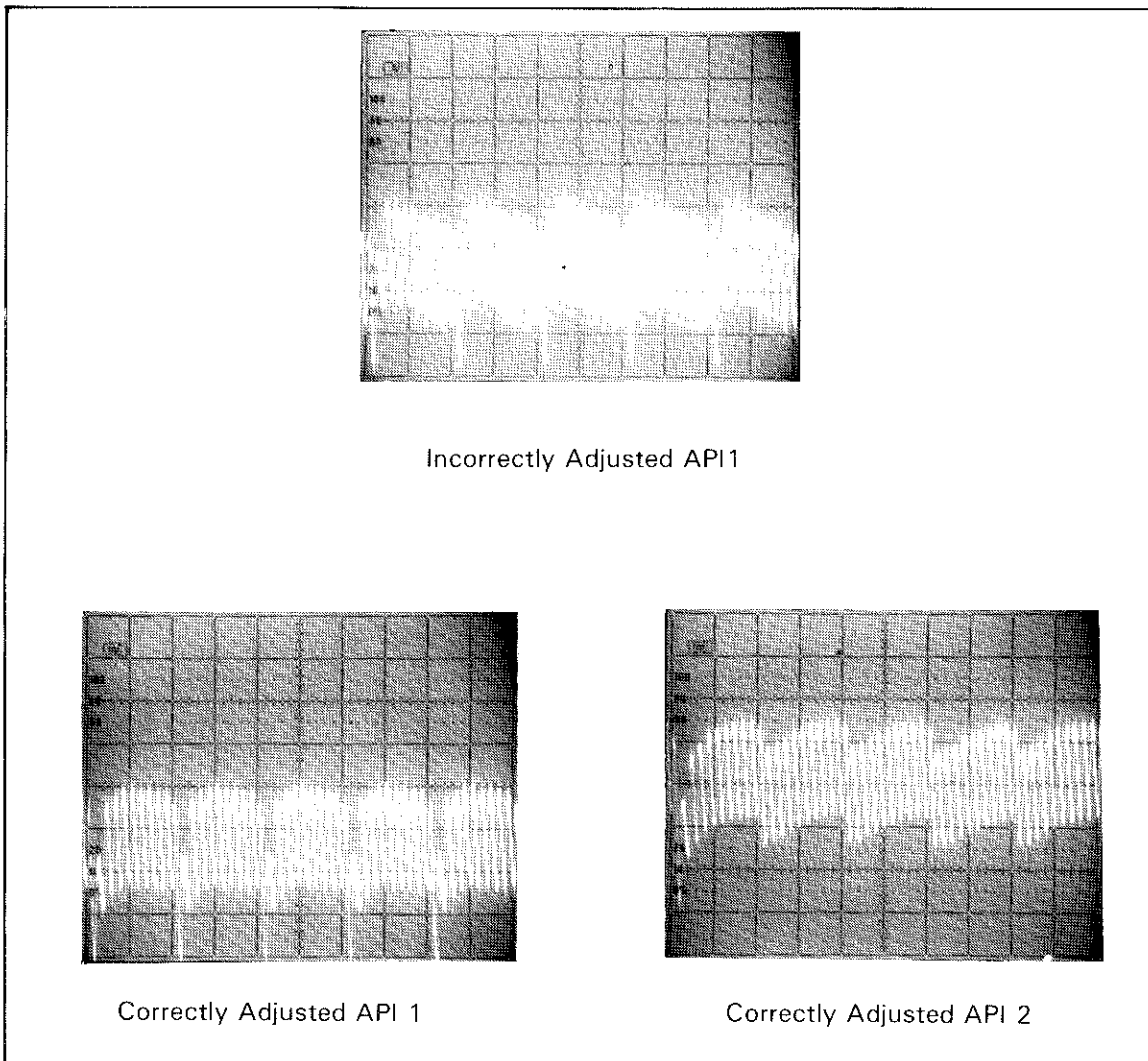
o. Set the 3585A controls for:

MANUAL FREQUENCY.....  
 CF STEP SIZE.....50Hz  
 MANUAL FREQUENCY.....

p. Verify that the MANUAL frequency now reads 1,000,050 Hz on the CRT display.

q. Adjust A32R56 (API2, see Figure 5-45) for a minimum amount of ripple on the scope waveform. (See Figure 5-18.)

r. Disconnect the oscilloscope connections. This completes the Fractional N adjustments.



**Figure 5-18. API Adjustment Waveforms.**

**5-23. L.O. Step Loop Adjustments.**

a. Turn the 3585A power off. Place the Step VTO board (A23) on a PC extender. Turn the power back on.

**NOTE**

*Steps b. thru g. are functional checks. If a Spectrum Analyzer is not available these steps may be omitted.*

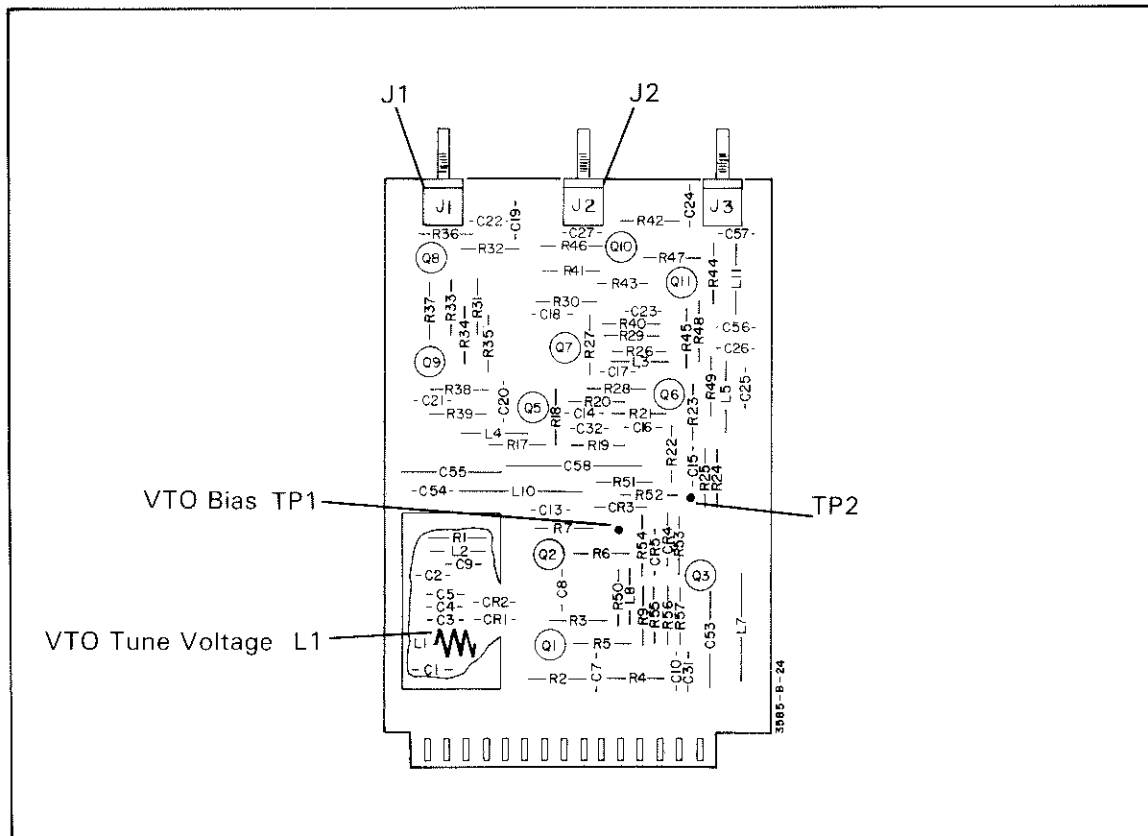
b. Set the 3585A controls as follows:

RECALL 601  
 INSTRUMENT PRESET  
 CENTER FREQUENCY.....0Hz  
 FREQUENCY SPAN.....0Hz  
 CF STEP SIZE.....40MHz  
 RES. BW.....3KHz

c. Disconnect the cable at A23J2. Connect a spectrum analyzer to A23J2 and verify that the signal level is approximately -6dBm or greater (typically -4dBm).

d. Remove the spectrum analyzer from A23J2.

e. Disconnect the cable at A23J1 and connect it at A23J2.



**Figure 5-19. Step Loop VTO Board (A23).**




f. Connect the spectrum analyzer to A23J1 and verify that the signal level is approximately -10dBm or greater (typically -7dBm).

g. Remove the spectrum analyzer from A23J1. Connect the proper cables to A23J1 and A23J2 (A23J1 to A26J2; A23J2 to A25J3)

h. Using a DVM, check the Bias voltage at A23TP1. This test point should read -4.6Vdc  $\pm$  0.2V.

i. Move the DVM to A23TP2. Squeeze or expand the oscillator coil (A23L1) to obtain a voltage of -2.0Vdc  $\pm$  0.1V.

j. Press "MANUAL FREQUENCY. . . .  " on the 3585A and verify that the voltage at A23TP2 is  $\geq$  +5.0Vdc.

k. Turn the 3585A power off. Remove the Step VTO (A23) board from its PC extender and return it to the card nest. Turn the 3585A power on.

l. Set the 3585A controls for:


```

RECALL 601
INSTRUMENT PRESET
CENTER FREQUENCY.....0Hz
FREQUENCY SPAN.....0Hz
RES. BW.....3KHz
CF STEP SIZE.....40MHz

```

m. Connect a frequency counter to A23J2. The frequency reading should be 98MHz  $\pm$  10Hz.

n. Enter:

Center Frequency 

o. The Frequency Counter reading should be 138MHz  $\pm$  10Hz.

p. Disconnect the cable at A23J1. If the frequency counter now reads 144MHz  $\pm$  0.5MHz, continue at step u.

q. If the frequency counter reading is not within the limits of 144MHz  $\pm$  0.5MHz, turn the 3585A power off. Place the Step Phase Detector board (A26) on a PC extender. Turn the 3585A power back on.

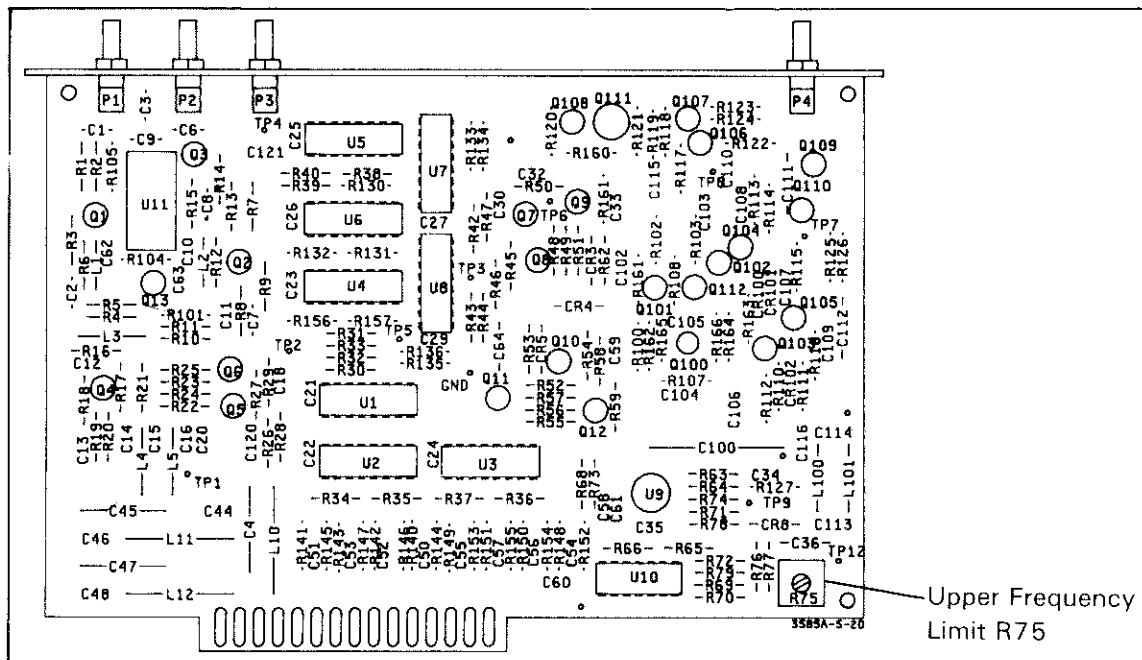
r. Set the 3585A controls for:

```

RECALL 601
INSTRUMENT PRESET
CENTER FREQUENCY.....0Hz
FREQUENCY SPAN.....0Hz

```

s. With the cable at A23J1 still disconnected, adjust A26R75 so that the frequency counter reads 144MHz  $\pm$  0.5 MHz.



**Figure 5-20. Step Loop Phase Detector Board.**

- t. Turn the 3585A power off. Replace the A26 board in the card nest and restore power to the 3585A.
- u. Verify that the “STEP” light on the A34 board goes on when the A23J1 cable is disconnected.
- v. Reconnect the proper cable to A23J1 (A23J1 to A26J2).
- w. Verify that the “STEP” and “SUM” lights on the A34 board go on when the A26J3 cable is disconnected.
- x. Reconnect the proper cable to A26J3 (A26J3 to A21J6).
- y. Set the 3585A controls for:

INSTRUMENT PRESET  
 RES. BW.....3KHz  
 SWEEP TIME......36 sec.

- z. Verify that the frequency counter is now changing in 1MHz increments from 98MHz to 138MHz.
- aa. Reconnect the proper cable to A23J2 (A23J2 to A25J3). This completes the L.O. Step Loop Adjustments.

**5-24. First L.O. VTO And Sum Loop Adjustments.**

- a. Turn the 3585A power off. Place the First L.O. VTO (A22) on a PC extender board and turn the power back on.

b. Set the 3585A controls for:


RES. BW HOLD.....ON  
 CENTER FREQUENCY.....0Hz  
 FREQUENCY SPAN.....0Hz  
 CF STEP SIZE.....40MHz  
 RES. BW.....30KHz

c. Connect a frequency counter to A22J1.

d. Verify that the frequency counter now reads 100.35MHz.

e. Using a DVM, check that the voltage at A22TP1 measures -5.0Vdc  $\pm$  0.1V.

f. Adjust the voltage at A22TP2 by squeezing or expanding oscillator coil A22L1. The voltage reading should be -2.0Vdc  $\pm$  0.1V. Be sure to remove any tools from A22L1 before making your voltage reading.

g. Enter CENTER FREQUENCY . . . STEP  on the 3585A keyboard.

h. The frequency counter should now read 140.35MHz.

i. Turn the 3585A power off. Replace the A22 board in the card nest and turn the 3585A power back on.

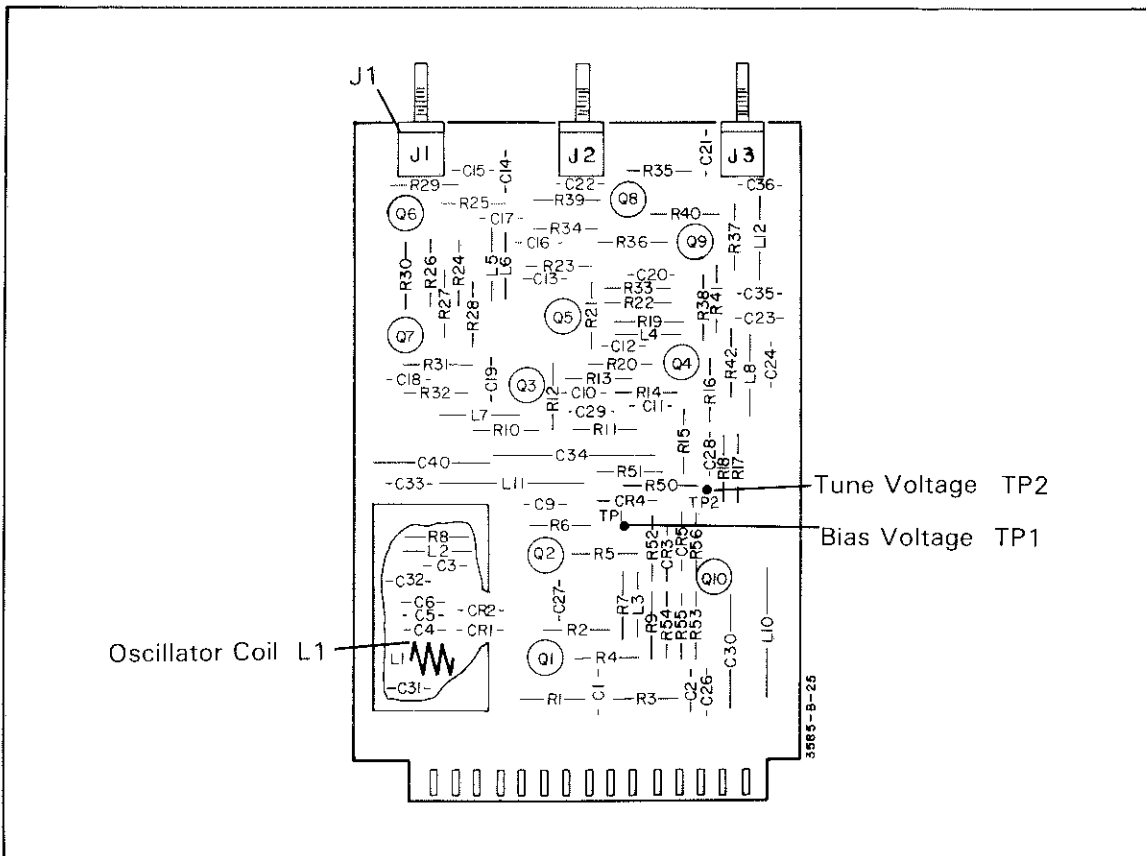


Figure 5-21. First LO VTO Board.

j. Set the 3585A controls for:

RES. BW HOLD.....ON  
 CENTER FREQUENCY.....0Hz  
 FREQUENCY SPAN.....0Hz  
 CF STEP SIZE.....40MHz  
 RES. BW.....3KHz

k. Adjust your oscilloscope controls for:


Vertical Scale.....0.01V/Div. (dc coupled)  
 Horizontal Scale.....0.1msec/Div. (internal trigger)

l. Connect the scope probe to A28TP4 ( $\Sigma$  Loop Error, see Figure 5-45).

m. Adjust A27R2 (Offset, see Figure 5-45) for an average value of 0 Vdc on the oscilloscope.

n. Press CENTER FREQUENCY . . . STEP  on the 3585A keyboard.

o. Adjust A27R11 (slope, see Figure 5-45) for an average value of 0 Vdc on the oscilloscope.

p. Press CENTER FREQUENCY . . . STEP  . Repeat steps m thru p until the voltage displayed on the oscilloscope at this time equals 0 Vdc  $\pm$  0.05V (half of one vertical division).

q. Set the 3585A controls for:

START FREQUENCY.....0Hz  
 STOP FREQUENCY.....40MHz

r. Adjust A27R2 (offset) so that the waveform displayed on the scope varies less than 150mVp-p.

s. Verify that the “FRN” and “SUM” lights on the A34 board are blinking.

t. Verify that the “SUM” light on the A34 board stays on when the cable connected to A23J2 is removed.

u. Reconnect the proper cable to A23J2 (A23J2 to A25J3).

v. This completes the First L.O. and Sum Loop Adjustments.

**5-25. Video Filter And A/D Converter Adjustments.**

a. Set the 3585A controls for:

RECALL 601  
 INSTRUMENT PRESET  
 RANGE ..... + 30dBm

b. Using short clip leads, connect A16TP1 to ground. Adjust A16R21 for a 3585A marker reading of -69.9dBm. Now adjust A16R21 so that the marker reading is -70.0dBm, which will be *just slightly* below the -69.9dBm adjustment point.

c. Remove the clip lead from A16TP1.

d. Connect A15TP1 to A15TP5 using a short clip lead.

e. Connect A DVM to A15TP1. Adjust A15R4 for a reading of  $5.000V \pm 0.001V$ .

f. Set the 3585A controls for:

dB/DIV ..... 1dB

g. Adjust A16R19 for a 3585A marker reading of +30.00dBm.

h. Remove the shorting clip between A15TP1 and A15TP5. This completes the Video Filter and A/D Converter Adjustments.

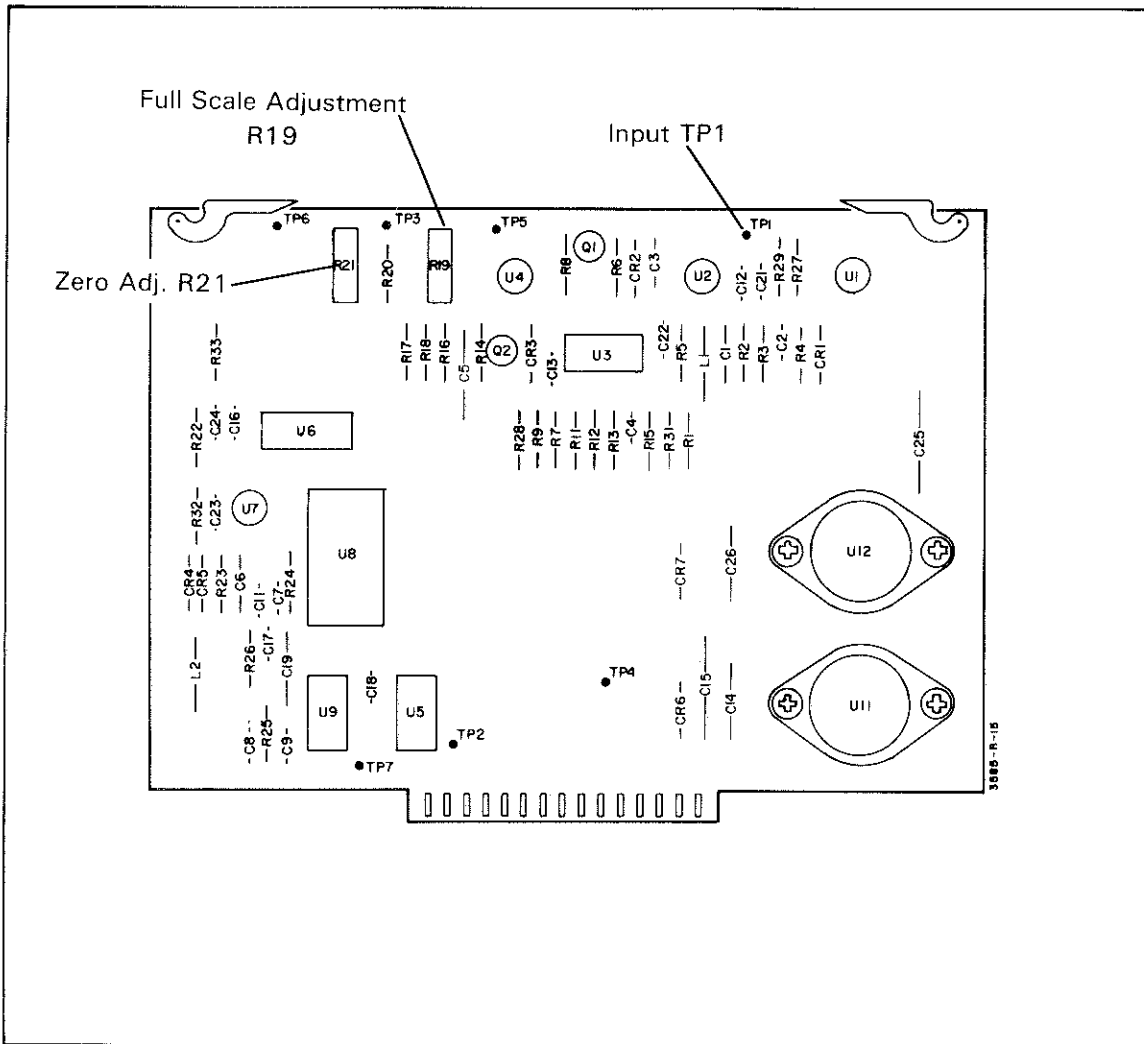


Figure 5- 22. A/D Converter Board (A16).

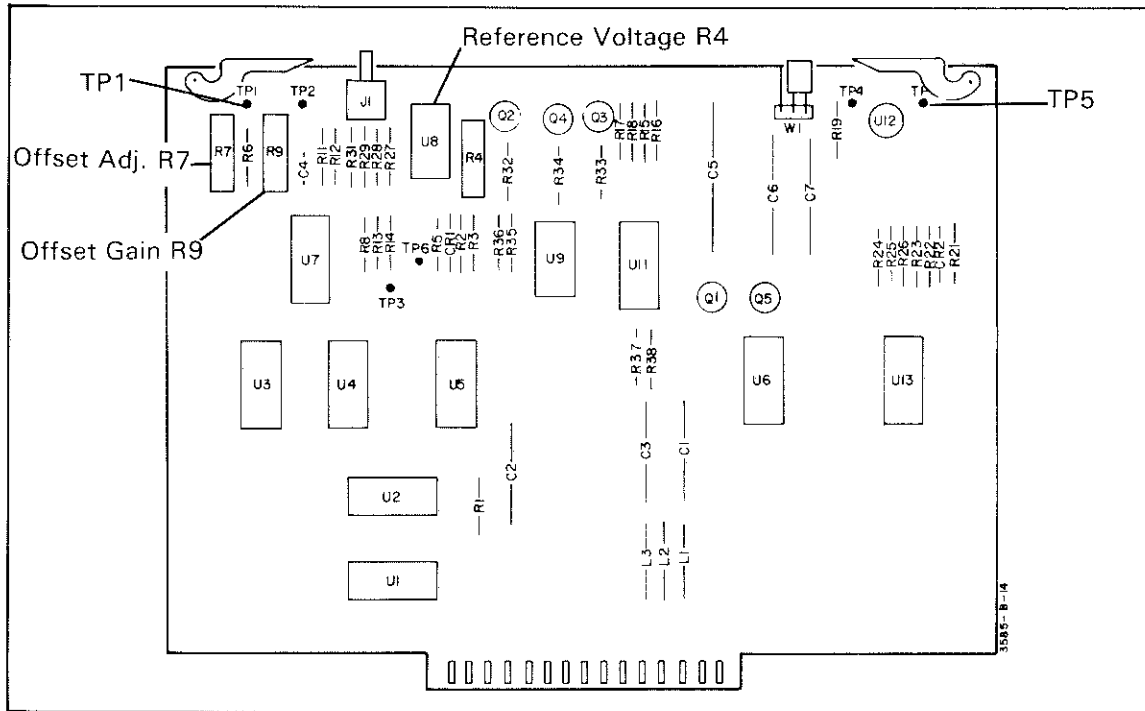


Figure 5-23. Video Filter Board.

**5-26. Log Amp And 30KHz Filter Adjustments.**

- a. Turn the 3585A power off. Remove the metal covers on the A14 thru A19 boards.
- b. Place the A14 board on a PC extender. Restore power to the 3585A.
- c. Set the 3585A controls for:

```

RECALL 601
INSTRUMENT PRESET
CENTER FREQUENCY.....350KHz
FREQUENCY SPAN.....100KHz
RES BW.....30KHz
dB/DIV ..... 1dB
MANUAL SWEEP.....on
    
```

d. Terminate the Tracking Generator output with a 50Ω feedthrough termination. Using the BNC to Sealectro adapter cable, connect the termination output to A17J1.

e. Adjust the Tracking Generator Amplitude control so that the peak of the trace is near the center of the screen.

f. Turn the 3585A COUNTER on. Once the Counter reading has stabilized press the MKR → CF key. Turn the COUNTER function off.

g. Adjust A14L5 and L7 for a maximum marker amplitude reading. Continue adjusting these inductors until no further improvement can be obtained. Look for a symmetrical wave shape and maximum amplitude when adjusting.

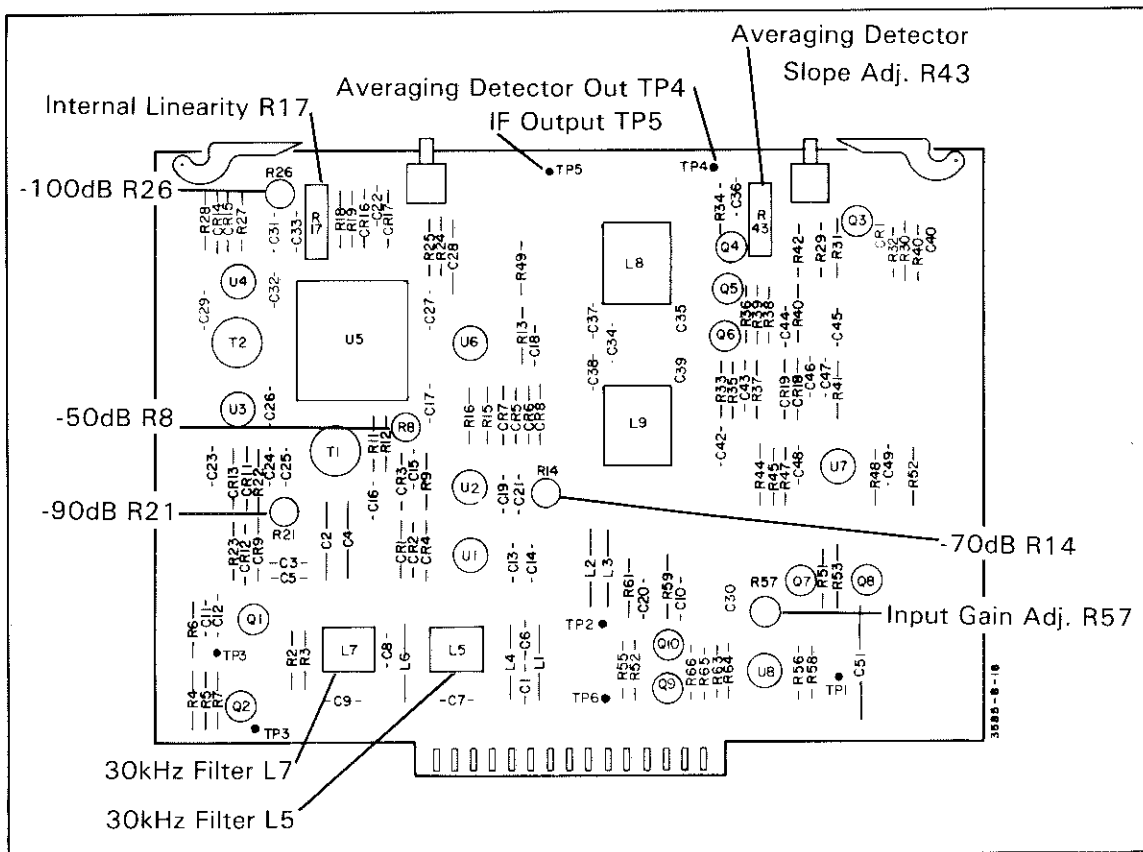


Figure 5-24. Log Amp Board.

h. Disconnect the cable from the Tracking Generator to A17J1.

i. Set the 3585A controls for:

```

RECALL 601
INSTRUMENT PRESET
CENTER FREQUENCY..... 350KHz
RANGE ..... + 30dBm
AUTORANGE ..... off
REFERENCE LEVEL..... + 27dBm
dB/DIV ..... 5dB
MANUAL SWEEP..... on
CLEAR A
    
```

j. Set the Synthesizer controls for:

```

FREQUENCY ..... 350KHz
AMPLITUDE.....-3.0dBm
    
```

k. Connect the output of the Synthesizer to a 50Ω termination. Using the BNC to Sealec-tro adapter cable, connect the output of the 50Ω termination to A17J1.

l. Using a 1:1 probe connect a high frequency ac voltmeter to A17TP2 and adjust A17R105 for a reading of 280mV RMS ± 3mV.

- m. Again using the high frequency ac voltmeter, adjust A14R57 for a reading of 270mV RMS  $\pm$  2mV at A14TP5.
- n. Disconnect the high frequency voltmeter.
- o. Measure the dc voltage at A14TP4 and adjust A14R53 for a voltage reading of -5.7Vdc  $\pm$  0.1V.
- p. Adjust A15R7 for a marker reading of +27.0dBm.
- q. Set the 3585A controls for 1dB/DIV.
- r. Again adjust A15R7 for a marker reading of +27.00dBm.

**5-27. Log Amp Slope Adjustment.**

- a. Place the A14 board in the card nest.

**NOTE**

*The Log amp linearity is affected by the card nest shielding. Therefore, the procedure for adjusting the A14 board is as follows:*

1. *Take a reading according to the instructions.*
2. *Remove the A14 board (power should remain on).*
3. *Make a slight adjustment of the specified resistor. (R43,R17,R8,R14,R21,R26)*
4. *Replace the A14 board.*
5. *Repeat until the required reading is obtained.*

- b. Set the synthesizer controls for:

FREQUENCY ..... 350KHz  
 AMPLITUDE ..... -3.0dBm

- c. Connect the 50Ω output of the Synthesizer to a 10dB/step attenuator. Connect the output of the attenuator to a 50Ω termination and the output of the 50Ω termination to A11J1 using the BNC to Sealectro adapter cable. Set the attenuator for 0 dB of attenuation.

- d. Set the 3585A controls for:

RECALL 601  
 INSTRUMENT PRESET  
 CENTER FREQUENCY ..... 350KHz  
 RANGE ..... + 30dBm  
 AUTORANGE ..... off



REFERENCE LEVEL..... + 27dBm  
 dB/DIV ..... 5dB  
 MANUAL SWEEP..... on  
 OFFSET..... on  
 ENTER OFFSET

e. Check that the marker amplitude now reads .00dB. If it does not read this value, again press ENTER OFFSET.

f. Set the attenuator for 30dB of attenuation.

g. Algebraically subtract the 3585A marker amplitude reading from the corrected -30dB reading (column D, Table 5-3). Multiply the difference by three, change the polarity and record the result; \_\_\_\_dB. In formula form:

$$(\text{marker reading} + 30) \times 3 = \text{correction factor}$$

h. Set the attenuator for 0 dB of attenuation.

i. Adjust A14R43 for the correction factor calculated in step g.

j. Set the 3585A controls for:

dB/DIV ..... 2dB  
 ENTER OFFSET

k. Set the attenuator for 10dB of attenuation.

l. Algebraically subtract the 3585A marker amplitude reading from the corrected -10dB reading (column D, Table 5-3). Multiply the result by ten, change the sign and record the result; \_\_\_\_dB. In formula form:

$$-(\text{marker reading} + 10) \times 10 = \text{correction factor}$$

**Table 5-3. Log Amplifier Adjustments.**

(A) Variable Attenuator	(B) Correction Factor*	(C) Ideal Reading	(D) Correct Reading	(E) Adjustment Tolerance
-30dB	_____	-30.00dB	_____ dB	± 0.05
-10dB	_____	-10.00dB	_____ dB	± 0.02
0dB**	_____	-50.0dB	_____ dB	± 0.1
-20dB**	_____	-70.0dB	_____ dB	± 0.1
-40dB**	_____	-90.0dB	_____ dB	± 0.1
-50dB**	_____	-100.0dB	_____ dB	± 0.1

\*Correction factor must be obtained from attenuator calibration data.  
 \*\*For these adjustments, the synthesizer amplitude is lowered to give the proper input level.

- m. Set the attenuator for 0 dB of attenuation.
- n. Adjust A14R17 for the correction factor calculated in step l.
- o. Repeat steps f thru n until the 3585A marker amplitude readings are  $-30\text{dB} \pm 0.05\text{dB}$  when the attenuator is set for 30dB and  $-10\text{dB} \pm 0.02\text{dB}$  when the attenuator is set for 10dB.
- p. Set the attenuator for 0 dB of attenuation.
- q. Turn the 3585A OFFSET function off.
- r. Enter: 1dB/Div.
- s. Adjust A15R7 for a marker amplitude reading of +27.00dBm.
- t. When adjusting the -50, -70, -90 and -100dB points on the Log Linearity curve it is important to have the A14 board in the card nest. To do the required adjustments simply remove the A14 board, adjust the variable resistor and replace the board in the card nest to check the results of the adjustment.
- u. Set the 3585A controls for:

```

VIDEO BW .....1Hz
dB/DIV ..... 10dB
OFFSET ..... on
ENTER OFFSET
    
```

- v. Verify that the marker amplitude reading is 0.0dB.
- w. Set the Synthesizer controls for:

```

AMPLITUDE INCREMENT .....50dB
AMPLITUDE ..... 
    
```

- x. Adjust A14R8 for a 3585A marker amplitude reading of  $-50.0\text{dB} \pm 0.1\text{dB}$ .
- y. Set the external attenuator for 20dB of attenuation.
- z. Adjust A14R14 for a 3585A marker amplitude reading of  $-70.0\text{dB} \pm 0.1\text{dB}$ .
- aa. Set the external attenuator for 40dB of attenuation.
- bb. Adjust A14R21 for a 3585A marker amplitude reading of  $-90.0\text{dB} \pm 0.1\text{dB}$ .
- cc. Set the external attenuator for 50dB of attenuation.
- dd. Adjust A14R26 for a 3585A marker amplitude reading of  $-100.0\text{dB} \pm 0.1\text{dB}$ . This will be *just slightly* below the -99.9dB point.
- ee. Set the external attenuator for 0 dB of attenuation. Enter AMPLITUDE . . .STEP UP on the frequency Synthesizer (synthesizer amplitude -3.0dBm).

ff. Verify that the marker amplitude reading is  $0.0\text{dB} \pm 0.1\text{dB}$ . If it is outside of the stated limits, press ENTER OFFSET and continue at step v.

gg. Verify that the voltage at A14TP4 measures  $-5.7\text{Vdc} \pm 0.1\text{V}$ .

### 5-28. Reference Level DC Offset Adjustment.

a. Using short clip leads, short A14TP4 to ground.

b. Set the 3585A controls for:

```
REFERENCE LEVEL.....-25dBm
SAVE 1
REFERENCE LEVEL.....-24.9dBm
SAVE 2
```

c. Using a DVM measure the dc voltage at A15TP5. Record the voltage reading: \_\_\_\_ V.

d. Enter RECALL 1 on the 3585A keyboard.

e. Measure the dc voltage at A15TP5. Record the reading: \_\_\_\_ V.

f. Subtract the first reading from the second reading. The difference should be 195mV. If the difference voltage is not 195mV, set the 3585A controls for:

```
RECALL 2
```

Adjust A15R9 slightly.

g. Repeat steps c thru f until the difference voltage reads 195mV.

h. Remove the shorting lead from A14TP5 to ground.

i. Set the 3585A controls for:

```
RECALL 601
INSTRUMENT PRESET
RANGE ..... + 30dBm
REFERENCE LEVEL..... + 27dBm
dB/DIV ..... 1dB
MANUAL ENTRY..... 350KHz
```

j. Check that the attenuator is set for  $0\text{dB}$  of attenuation and that the Synthesizer is set at  $-3.0\text{dBm}$ .

k. Adjust A15R7 for a marker amplitude reading of  $+27.00\text{dBm}$ .

f. Replace the metal cover on the A14 thru A16 boards and tighten down the associated screws.

**Δ2 5-29. I.F. Filter Adjustments.**

**NOTE**

*Use a non-metallic adjusting tool for all I.F. Filter adjustments.*

- a. Turn the 3585A power off. Remove the aluminum cover on the A17, A18 and A19 boards.
- b. Place the A19 board on a PC extender. Restore power to the 3585A.
- c. Move the test jumper A19J1 to the "T" position.

**NOTE**

*The component locators for the IF boards (A17-A19) are contained on Figure 5-34.*

- d. Set the synthesizer for a Frequency of 350KHz and an Amplitude of -2.0dBm.
- e. Remove the cable from the A17J1 connector.
- f. Connect the output of the synthesizer to a 50Ω termination. Connect the output of the termination to the A17J1 connector.
- g. Set the 3585A controls for:

```

RECALL 609
INSTRUMENT PRESET
CENTER FREQUENCY.....350KHz
CF STEP SIZE.....1.3Hz
RES. BW.....
RES. BW.....3Hz
dB/DIV ..... 1dB
MANUAL SWEEP.....on
CLEAR A
    
```

- h. Adjust A19C29 and A19C39 for a maximum marker amplitude reading. Adjust the REF LEVEL as necessary to keep the marker within the graticule area. (See Figure 5-25.)
- i. Press the 3585A STORE A → B key.
- j. Disconnect the synthesizer.
- k. Connect the output of the Tracking Generator to a 50Ω termination. Connect the output of the 50Ω termination to the A17J1 connector.

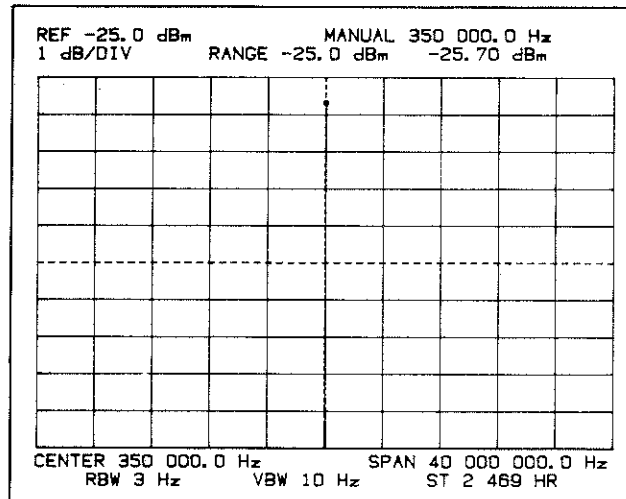


Figure 5-25. IF Adjustment Display #1.

l. Set the 3585A controls for:

FREQUENCY SPAN.....50KHz  
 RES BW.....300Hz  
 SWEEP.....cont  
 dB/DIV.....10dB

m. Move the marker to the peak of the trace and press MKR → CF.

n. Adjust A19C41 so that the displayed trace is symmetrical about the marker.

o. Using the STEP keys, start narrowing the FREQUENCY SPAN. As you narrow the span the peak of the response will move to the left or the right. When this occurs, move the marker to the peak of the response and press MKR → CF. continue narrowing the span until a frequency span of 10Hz is reached.

p. Set the 3585A controls for:

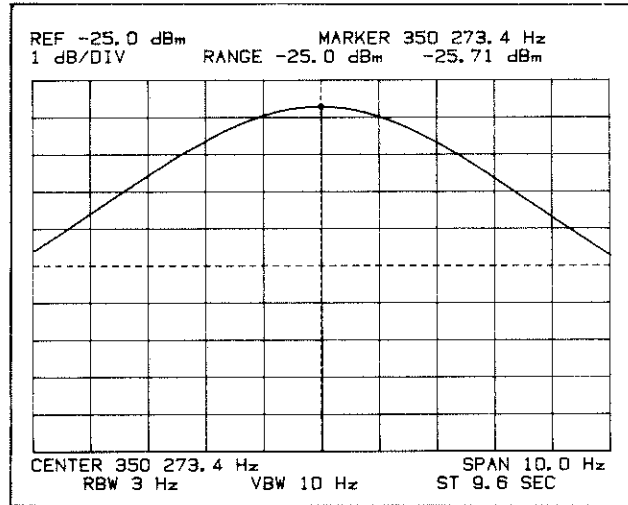
dB/DIV.....1dB  
 SWEEP TIME.....9.6sec  
 B Trace.....on

q. Move the marker to the most positive point on the trace and press MKR → CF.

r. Adjust the Tracking Generator amplitude control so that the peak of the A trace and the peak of the B trace are of equal amplitude.

s. Repeat the previous two steps until the A trace is symmetrical and equal to the amplitude of the B trace. (See Figure 5-26.)

t. Press the STORE A → B key of the 3585A. The stored trace will now serve as the reference trace for the rest of the I.F. Filter adjustments.



**Figure 5-26. IF Adjustment Display #2.**

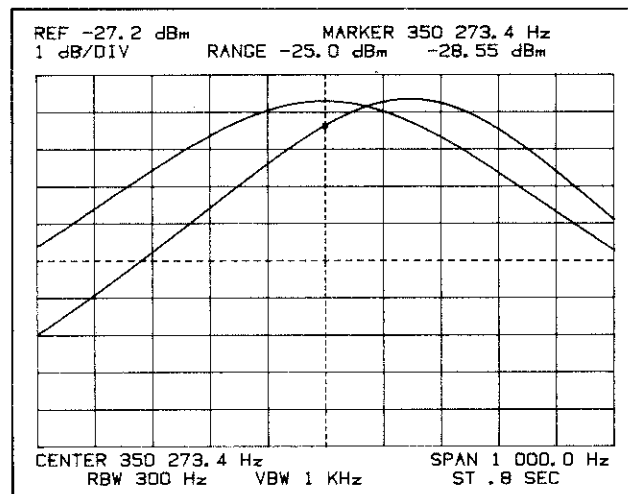
**Δ2 5-30. Fifth Crystal Stage Adjustment.**

a. DO NOT TURN THE 3585A POWER OFF. Remove the PC extender and place the A19 board in the card nest.

b. Make the following keyboard entries on the 3585A:

```
RES BW.....300Hz
RES BW HOLD.....on
FREQUENCY SPAN.....1KHz
```

c. Both the A and B traces should now be displayed as in Figure 5-27.



**Figure 5-27. Off-Center IF Stage.**

d. Press the REF LVL key of the Marker/Continuous Entry group. Using the Continuous Entry control, adjust the reference level until the peak of the A trace is equal in amplitude to the peak of the B trace.

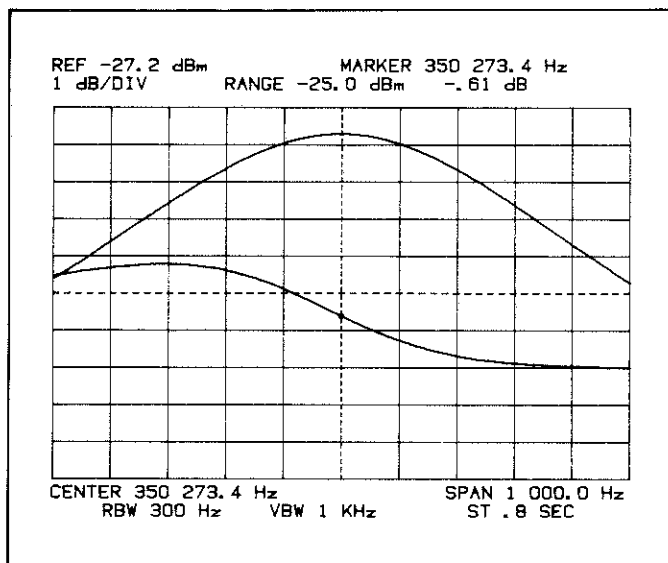


Figure 5-28. Off-Center IF Stage, A-B Mode.

e. Set the 3585A controls for:

MARKER.....on  
 A-B.....on  
 SWEEP.....cont  
 dB/DIV.....10dB

f. Adjust A19C67 so that the A trace approximates a straight, horizontal line.

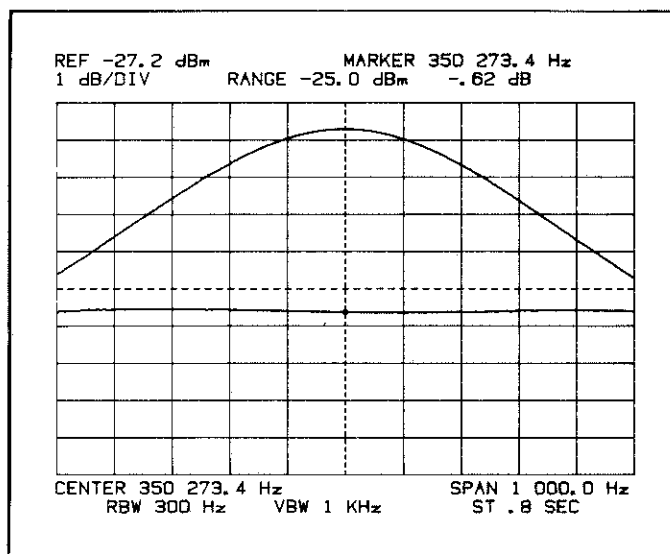


Figure 5-29. Correctly Adjusted IF Stage, A-B Mode.

g. On the 3585A keyboard enter the following commands:

A-B.....off  
 FREQUENCY SPAN.....50KHz  
 dB/Div.....10dB

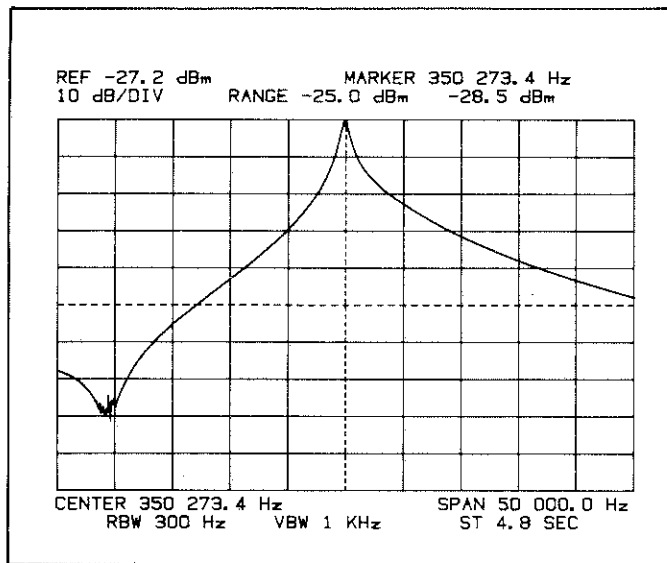


Figure 5-30. Unsymmetrical IF Display.

h. Adjust A19C41 for the best possible trace symmetry.

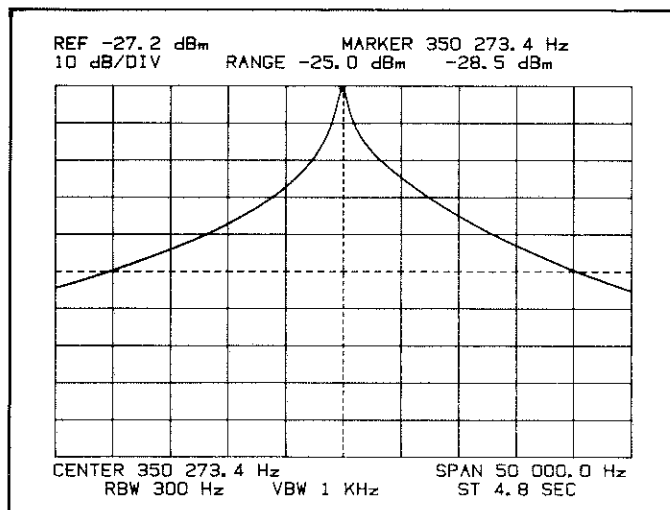


Figure 5-31. Symmetrical IF Display.

Δ2 5-31. Fourth Crystal Stage Adjustment.

a. DO NOT TURN THE 3585A POWER OFF. Remove the A17 board. Move test jumper A19J1 to the "OP" position and test jumper A19J2 to the "T" position.

b. Set the 3585A controls for:

FREQUENCY SPAN.....1KHz  
 RES BW.....300Hz  
 dB/DIV ..... 1dB  
 A-B ..... on



c. Adjust A19C66 so that the A trace approximates a straight, horizontal line.

d. Set the 3585A controls for:

A-B.....off  
 FREQUENCY SPAN.....50KHz  
 dB/DIV ..... 10dB

e. Adjust A19C30 for the best possible trace symmetry.

#### Δ2 5-32. Fourth LC Stage Adjustment.

a. DO NOT TURN THE 3585A POWER OFF. Place the A19 board on a PC extender.

b. Move test jumper A19J2 to the “OP” position and test jumper A19J3 to the “T” position. Check that A19J4 is in the “OP” position.

c. Enter the following 3585A keyboard settings:

RES BW.....1KHz  
 FREQUENCY SPAN.....3.3KHz  
 dB/DIV ..... 1dB  
 A-B..... on

d. Adjust A19L5 so that the A trace approximates a straight, horizontal line.

e. Set the 3585A controls for:

A-B.....off  
 RES BW.....30KHz  
 OFFSET..... on

f. Allow a complete sweep to occur, then press ENTER OFFSET.

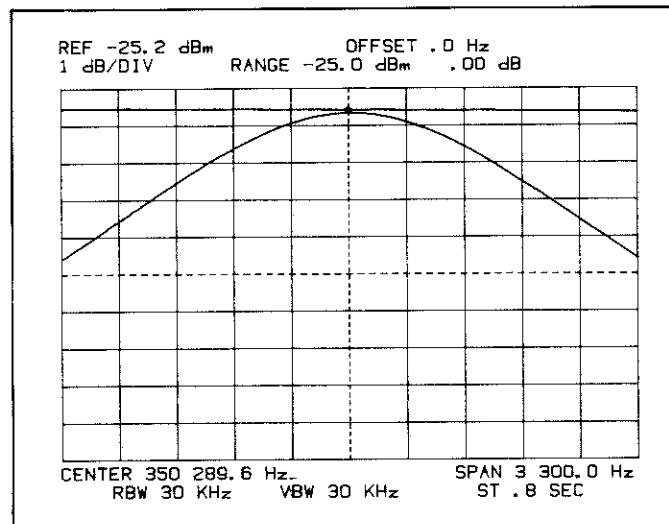
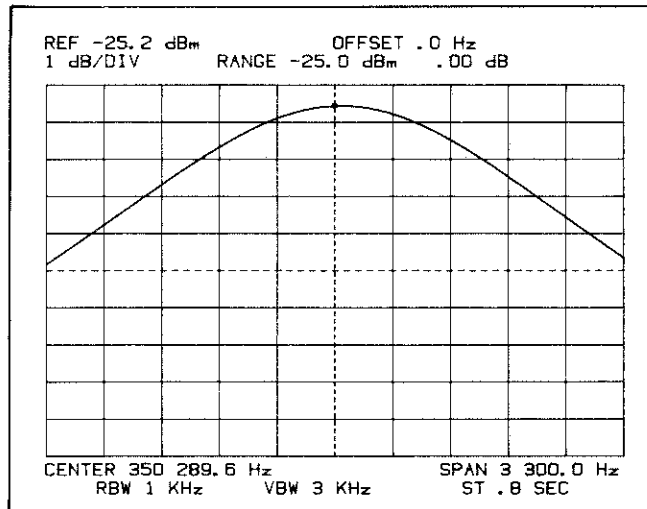


Figure 5-32. LC Stage, 30kHz Amplitude Reference.

g. Enter a RES BW of 1KHz on the 3585A.

h. Adjust A19R28 so that the marker amplitude reading equals .00dB.



**Figure 5-33. LC Stage, 1kHz Amplitude Adjustment.**

**Δ2 5-33. Fifth LC Stage Adjustment.**

a. Move test jumper A19J3 to the “OP” position and test jumper A19J4 to the “T” position.

b. Enter the following 3585A keyboard settings:

```

OFFSET ..... off
FREQUENCY SPAN.....3.3KHz
A-B ..... on
    
```

c. Adjust A19L4 so that the A trace approximates a straight, horizontal line.

d. Set the 3585A controls for:

```

A-B.....off
RES BW.....30KHz
OFFSET ..... on
    
```

e. Allow a complete sweep to occur, then press ENTER OFFSET.

f. Set the 3585A controls for a RES BW of 1KHz.

g. Adjust A19R20 for a marker amplitude reading of .00dB.

h. Move test jumper A19J4 to the “OP” position.



**Δ2 5-34. Third Crystal Stage Adjustment.**

a. DO NOT TURN THE 3585A POWER OFF. The stored trace and center frequency information must not be lost when the A17 or A18 boards are placed on PC extenders.

b. Leaving the 3585A power on, remove the A18 board, A19 board and the PC extender from the instrument.

- c. CAREFULLY put the A19 board back in the correct slot of the card nest.
- d. Being careful not to short the PC connector pins together, insert the PC extender in the A18 board position of the card nest.
- e. Place the A18 board on the PC extender.
- f. Check that the B trace is still intact. The A trace may have glitches on it, but this does not cause a problem. If the B trace information is good, proceed with the adjustments. If the B trace has been lost or altered, go back to the beginning of the I.F. filter adjustment and complete all the adjustments up to Fifth Crystal Filter Adjustment. This will re-establish your reference trace. You may then continue at the Third Crystal Stage Adjustment.
- g. Enter the following 3585A keyboard settings:



```

OFFSET ..... off
CF STEP SIZE ..... 1.2Hz
RES BW .....  
RES BW ..... 300Hz
FREQUENCY SPAN ..... 1KHz
dB/DIV ..... 1dB

```

- h. Adjust A18L6 for the maximum possible marker amplitude reading.
- i. **DO NOT TURN THE 3585A POWER OFF.** Remove the A18 board and the PC extender. Replace the A18 board in the card nest.
- j. Enter the following 3585A keyboard setting:

```

RES. BW .....  
A-B ..... on

```

- k. Adjust A18L4 so that the A trace approximates a straight, horizontal line.
- l. Set the 3585A controls for:

```

A-B ..... off
FREQUENCY SPAN ..... 50KHz
dB/DIV ..... 10dB

```

- m. Adjust A18C24 for the best possible trace symmetry.
- n. Set the 3585A controls for:



```

MANUAL SWEEP ..... on
dB/DIV ..... 1dB
OFFSET ..... on
ENTER OFFSET
CLEAR A

```

**Δ1 5-35. Third LC Stage Adjustment.**

- a. DO NOT TURN THE 3585A POWER OFF. Place the A18 board on a PC extender.
- b. Set the 3585A controls for:

```
RES. BW .....  
SWEEP ..... Cont
RES BW ..... 1KHz
FREQUENCY SPAN ..... 3.3KHz
A-B ..... on
```



- c. Adjust A18L5 so that the A trace approximates a straight, horizontal line.
- d. Enter the following 3585A keyboard settings:

```
A-B ..... off
RES BW ..... 30KHz
OFFSET ..... on
```

- e. Allow time for a complete sweep to occur, then press ENTER OFFSET.
- f. Set the 3585A controls for a RES BW of 1KHz.
- g. Adjust A18R15 for a marker amplitude reading of .00dB.

**Δ2 5-36. Second Crystal Stage Adjustment.**

- a. DO NOT TURN THE 3585A POWER OFF.
- b. Remove the A17 board, A18 board and the PC extender from the instrument.
- c. CAREFULLY put the A18 board back in the correct slot of the card nest.
- d. Move test jumper A17J4 to the “T” position and place the A17 board on the PC extender.
- e. Check that the B trace is still intact. The A trace may have glitches on it, but this does not cause a problem. If the B trace information is good, procede with the adjustments. If it has been lost or altered, go back to the beginning of the I.F. Filter Adjustments and complete all the adjustments up to the Fifth Crystal Stage Adjustment. This will re-establish your reference trace. You may then continue at the Second Crystal Stage Adjustment.
- f. Set the 3585A controls for:

```
CF STEP SIZE ..... 1.1Hz
RES BW .....  
RES BW ..... 300Hz
FREQUENCY SPAN ..... 1KHz
dB/DIV ..... 1dB
A-B ..... on
```

g. Adjust A17C71 so that the A trace approximates a straight, horizontal line.



h. Enter the following 3585A keyboard settings:

```
A-B..... off
FREQUENCY SPAN.....50KHz
dB/DIV ..... 10dB
```

i. Adjust A17C39 for the best possible trace symmetry.

j. DO NOT TURN THE 3585A POWER OFF. Remove the A17 board and place it on a PC extender.

k. Enter:



```
RES. BW.....  
dB/DIV ..... 1dB
FREQUENCY SPAN.....1kHz
```

l. Adjust A17L8 for the maximum possible marker amplitude.

#### **Δ2 5-37. First Crystal Stage Adjustment.**

a. DO NOT TURN THE 3585A POWER OFF. Move test jumper A17J4 to the “OP” position and test jumper A17J5 to the “T” position. Remove the PC extender and replace the A17 board back in the card nest.

b. Set the 3585A controls for:

```
RES. BW.....  
FREQUENCY SPAN.....1KHz
dB/DIV ..... 1dB
A-B ..... on
```

c. Adjust A17C70 so that the A trace approximates a straight, horizontal line.

d. Set the 3585A controls for:

```
A-B..... off
FREQUENCY SPAN.....50KHz
dB/DIV ..... 10dB
```



e. Adjust A17C29 for the best possible trace symmetry.

#### **Δ2 5-38. Second LC Stage Adjustment.**

a. DO NOT TURN THE 3585A POWER OFF. Remove the A17 board and place it on a PC extender. Move test jumper A17J5 to the “OP” position and test jumper A17J2 to the “T” position.

b. Set the 3585A controls for:

```

RES BW.....
RES BW.....1KHz
FREQUENCY SPAN.....3.3KHz
dB/DIV.....1dB
A-B.....on

```

c. Adjust A17L5 so that the A trace approximates a straight, horizontal line.

d. Set the 3585A controls for:

```

A-B.....off
RES BW.....30KHz
OFFSET.....on

```

e. Allow a complete sweep to occur, then enter:

```

ENTER OFFSET
RES BW.....1KHz

```

f. Adjust A17R20 for a marker amplitude reading of .00dB.

**Δ2 5-39. First LC Stage Adjustment.**

a. Move test jumper A17J2 to the “OP” position and test jumper A17J3 to the “T” position.

b. Set the 3585A controls for:

```

FREQUENCY SPAN.....3.3KHz
dB/DIV.....1dB
A-B.....on

```

c. Adjust A17L4 so that the A trace approximates a straight, horizontal line.

d. Set the 3585A controls for:

```

A-B.....off
RES BW.....30KHz
OFFSET.....on

```

e. Allow a complete sweep to occur, then enter:

```

ENTER OFFSET
RES BW.....1KHz

```

f. Adjust A17R12 for a marker amplitude reading of .00dB.

g. Move test jumper A17J3 to the “OP” position. Check that all test jumpers on the A17 board are in the “OP” position.

- h. Turn the 3585A power off. Remove the A17 board from the PC extender and replace it in the card nest.
- i. Replace the metal cover over the A17 - A19 boards. Insert and tighten down all screws that hold down the cover. Restore power to the 3585A.

#### Δ2 5-40. Final I.F. Filter Adjustments.

#### NOTE

*Make the following I.F. adjustments only after the I.F. board cover is properly screwed down.*

- a. Set the synthesizer controls for:

FREQUENCY ..... 350KHz  
 AMPLITUDE ..... -2.0dBm

- b. Connect the output of the synthesizer to a 50Ω termination. Connect the output of the termination to the A17J1 connector.



- c. Set the 3585A controls for:

RECALL 609  
 INSTRUMENT PRESET  
 CF STEP SIZE ..... 1.1Hz  
 RES BW ..... 3Hz  
 MANUAL SWEEP ..... on  
 dB/DIV ..... 1dB  
 CLEAR A

- d. Adjust A17C27 for the maximum possible marker amplitude reading. Adjust the REF LEVEL as necessary to keep the marker below the top of the screen.



- e. Adjust A17C37 for the maximum possible marker amplitude reading.

- f. Set the 3585A controls for:

CF STEP SIZE ..... 1.2Hz  
 RES BW .....  

- g. Adjust A18C22 for the maximum possible marker amplitude reading.

- h. Set the 3585A controls for:

CF STEP SIZE ..... 1.3Hz  
 RES BW .....  

- i. Adjust A19C28 and A19C39 for the maximum possible marker amplitude reading.

j. Set the 3585A controls for:

```

RECALL 601
INSTRUMENT PRESET
MANUAL SWEEP.....on
dB/DIV ..... 1dB
CLEAR A
OFFSET ..... on
ENTER OFFSET
RES BW.....300Hz
    
```

k. Adjust the REF LEVEL as necessary to keep the marker below the top of the screen.

l. Adjust A17R26 for a .00dB marker reading.

m. Enter RES BW Step  on the 3585A keyboard.

n. Adjust A17R28 for a .00dB marker reading.

o. Enter RES BW Step  on the 3585A keyboard.

p. Adjust A17R30 for a .00dB marker reading.

q. Enter RES BW Step  on the 3585A keyboard.

r. Adjust A17R32 for a .00dB marker reading.

s. Enter RES BW Step  on the 3585A keyboard.

t. Adjust A17R34 for a .00dB marker reading.

**Δ2 5-41. 16dB Amplifier Adjustment.**

a. Disconnect the synthesizer from the A17J1 connector.

b. Connect the Tracking Generator output to a 10dB/step attenuator. Connect the 10dB/step attenuator to a 1dB/step attenuator and place a 50Ω termination on the output of the 1dB/step attenuator. Connect the output of the termination to the A17J1 connector.

c. Set the 3585A controls for:

```

INSTRUMENT PRESET
CENTER FREQUENCY.....350KHz
FREQUENCY SPAN.....100KHz
RES BW.....10KHz
dB/DIV ..... 2dB
MANUAL SWEEP..... on
RANGE.....-25dBm
REFERENCE LEVEL.....-28dBm
    
```



d. Adjust the Tracking Generator amplitude for a marker amplitude reading of -28.00dBm.

e. Set the 3585A controls for:

OFFSET ..... on  
ENTER OFFSET

f. Set the external attenuators for 16dB of attenuation.

g. Set the 3585A REFERENCE LEVEL to -44dBm.

h. Adjust A18R77 for an offset marker amplitude reading of -16.00dB.

i. Set the external attenuators for 32dB of attenuation.

j. Set the 3585A REFERENCE LEVEL to -60dBm.

k. Adjust A18R71 for an offset marker amplitude reading of -32.00dBm.

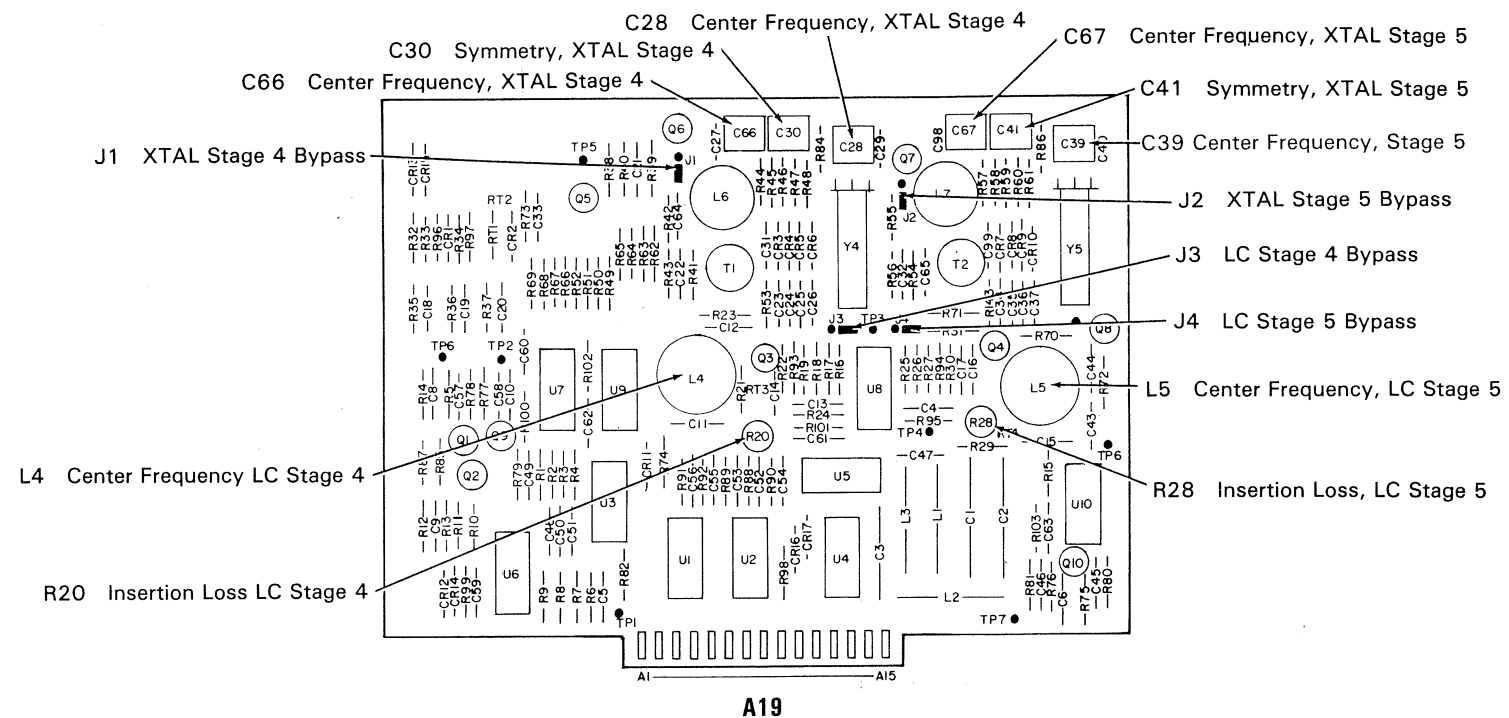
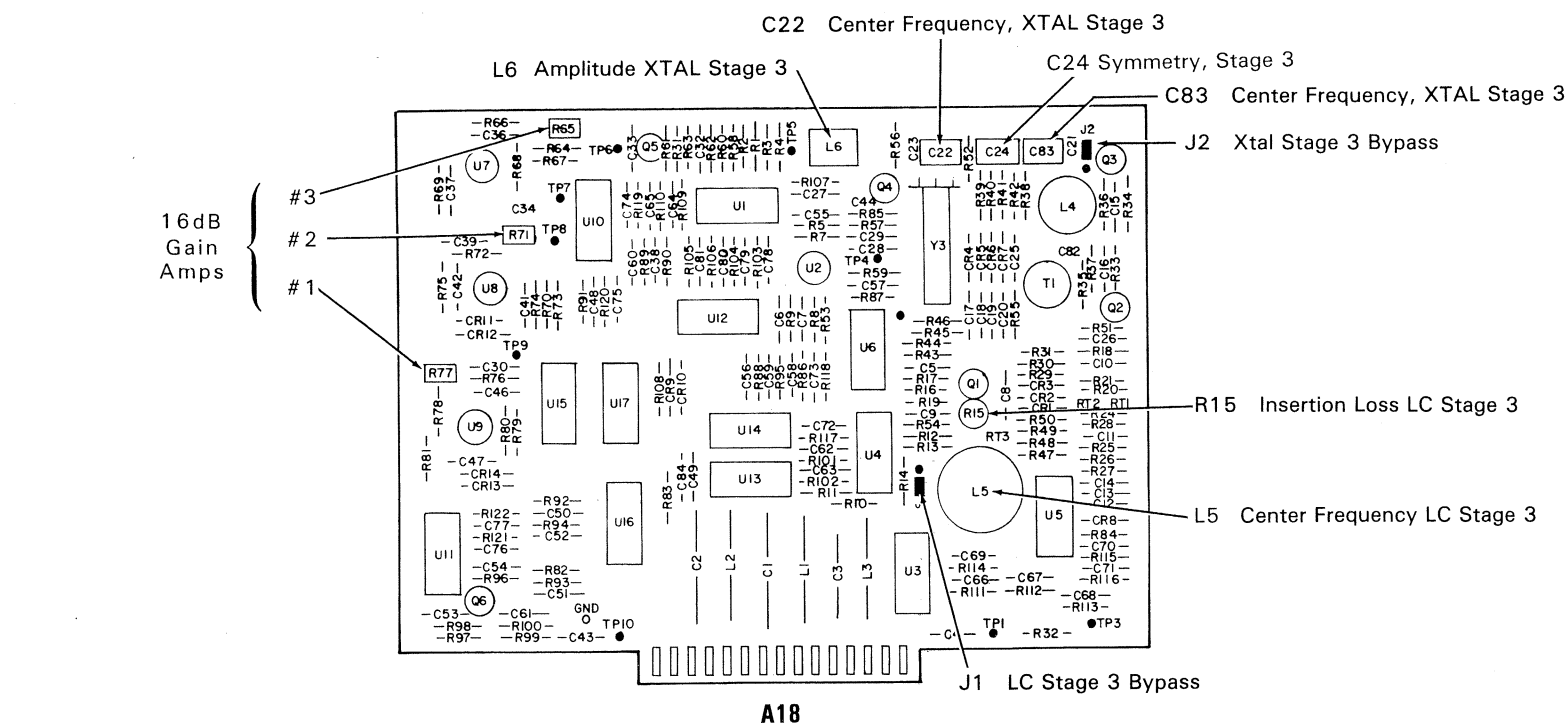
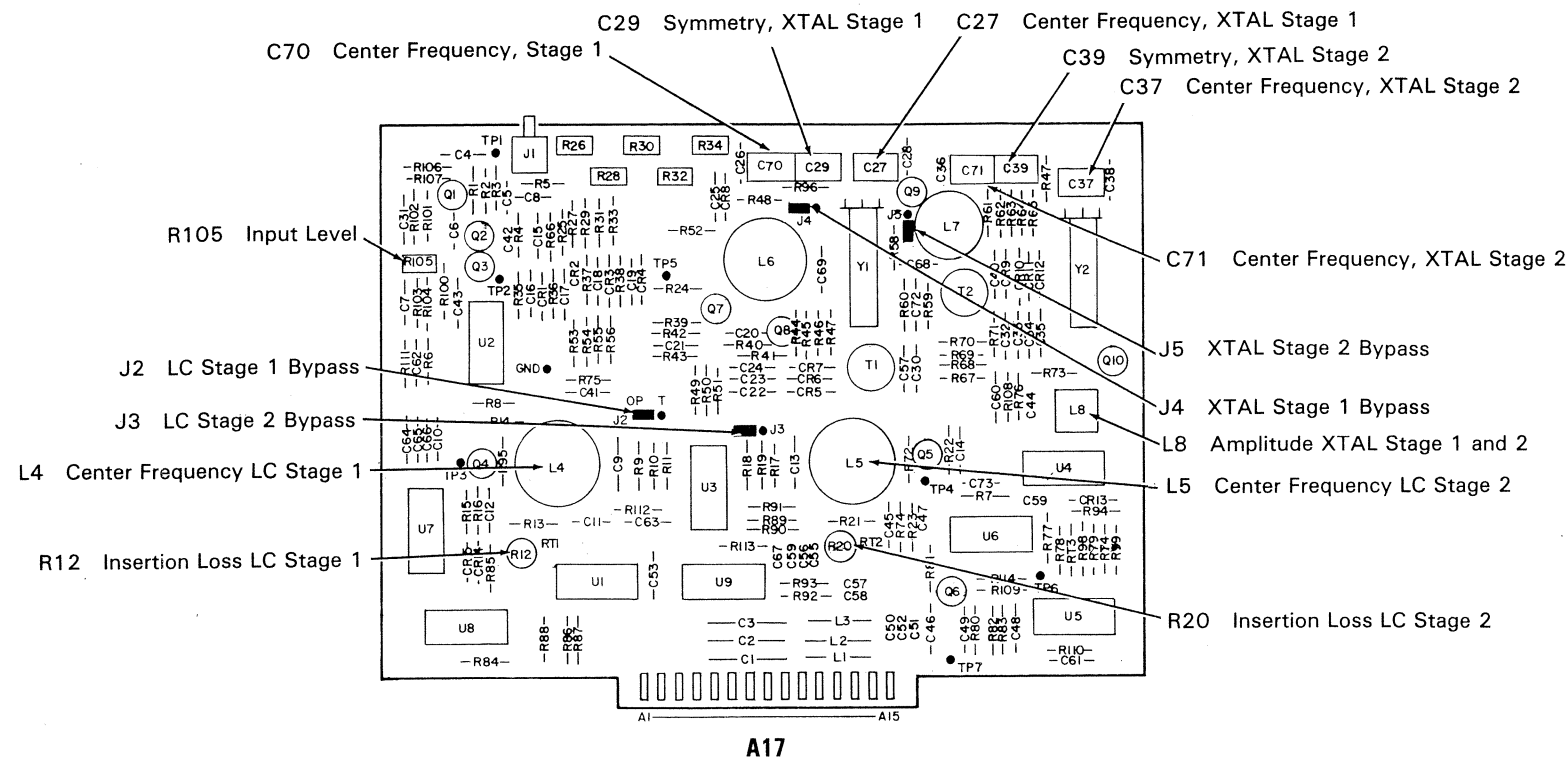


Figure 5-34. IF Boards (A17-A19).  
5-49/5-50

- l. Set the external attenuators for 48dB of attenuation.
- m. Set the 3585A REFERENCE LEVEL to -76dBm.
- n. Adjust A18R65 for an offset marker amplitude reading of -48.00dB.
- o. Disconnect the Tracking Generator from A17J1. Reconnect the cable from A6CJ1 to A17J1.

#### 5-42. CONVERSION SECTION ADJUSTMENTS.

5-43. This section adjusts the filters associated with the first, second and third mixers. These filters are of two basic types, peak and notch. Peak filters will be adjusted for a maximum amplitude and notch filters for a minimum.

#### NOTE

*The Source used for these adjustments must be frequency locked to the 3585A with the 10MHz REF OUTPUT.*

#### NOTE

*All top, bottom and side screws on the input section must be in place and tight before making these adjustments.*

- a. Turn the 3585A power off.
- b. Set the 3585A on its left side and remove the bottom cover.
- c. Adjustment of the Conversion Section requires its removal from the instrument; therefore, disconnect all cables connected to the Input/Conversion Section.
- d. Collect a stack of books approximately eight inches high. This stack of books will be used as a support for the Input/Conversion Section.
- e. Place the stack of books in the position shown in Figure 5-35. Be careful not to touch the high voltage section.
- f. Remove the seven screws which hold the Input/Conversion Section in the instrument.
- g. Carefully remove the input section by moving it toward the rear of the instrument until the input connectors clear the front panel.
- h. Place the Input/Conversion Section on the stack of books, bottom side down (Conversion side up).
- i. Connect a Spectrum Analyzer to the A50J1 90MHz output with the BNC-to-Sealelectro adapter cable. This output is located on the bottom side of the Tracking Generator Motherboard.
- j. Verify that the 90MHz output level is  $+15\text{dBm} \pm 3\text{dB}$ .

k. Connect the Spectrum Analyzer to the A50J2 10MHz output. This output is also located on the bottom of the Tracking Generator Motherboard.

l. Verify that the 10MHz output level is  $+18\text{dBm} \pm 3\text{dB}$ .

m. Reconnect all cables to the Input/Conversion Section.

n. Turn the 3585A power on.

o. Check that the instrument down ranges to the  $-25\text{dBm}$  Range with no input signal.

p. Press the INSTRUMENT PRESET key of the 3585A.

q. Connect an Ohmmeter to the  $50\Omega$  input. Ground lead to the outer shell of the  $50\Omega$  input connector and the ohms lead to the center pin of the input connector.

r. The Ohmmeter should now read  $50\Omega \pm 2\Omega$ .

s. Press the  $1\text{M}\Omega$  Impedance key. This action terminates the input with a  $50\Omega$  load.

t. The Ohmmeter should now read  $50\Omega \pm 2\Omega$ . (This reading should be slightly different than the previous  $50\Omega$  reading.)

u. Press the  $75\Omega$  Impedance key on the 3585A.

v. The Ohmmeter should now read  $75\Omega \pm 2\Omega$ .

w. Press the  $1\text{M}\Omega$  Impedance key. This action terminates the input with a  $75\Omega$  load.

x. The Ohmmeter should now read  $75\Omega \pm 2\Omega$ . (This reading should be slightly different than the previous  $5\Omega$  reading.)

y. Set the 3585A controls for:

```

RECALL 601
INSTRUMENT PRESET
MANUAL ENTRY.....9MHz
dB/DIV ..... 1dB

```

z. Set the synthesizer controls for:

```

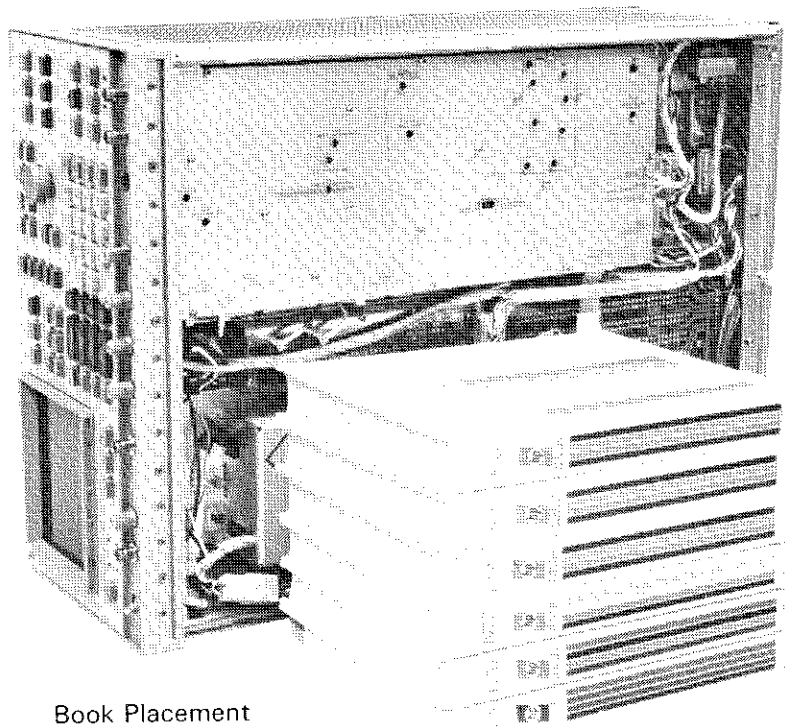
FREQUENCY.....9MHz
AMPLITUDE ..... 0dBm

```

aa. Connect the synthesizer output to the 3585A  $50\Omega$  input.

#### NOTE

*Use a non-metallic adjusting tool for all Conversion section adjustments.*



Book Placement

Conversion Section In Position For Adjustment

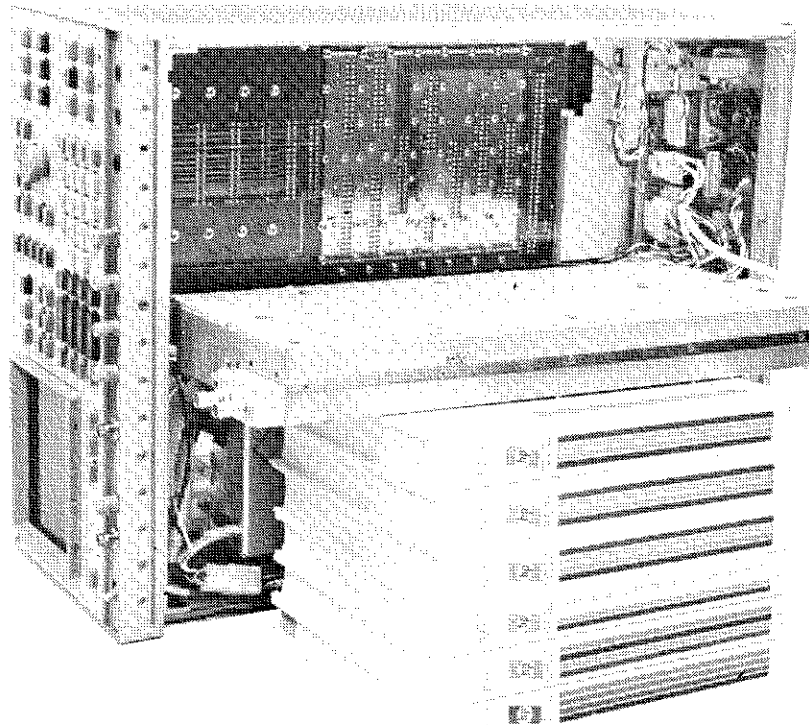
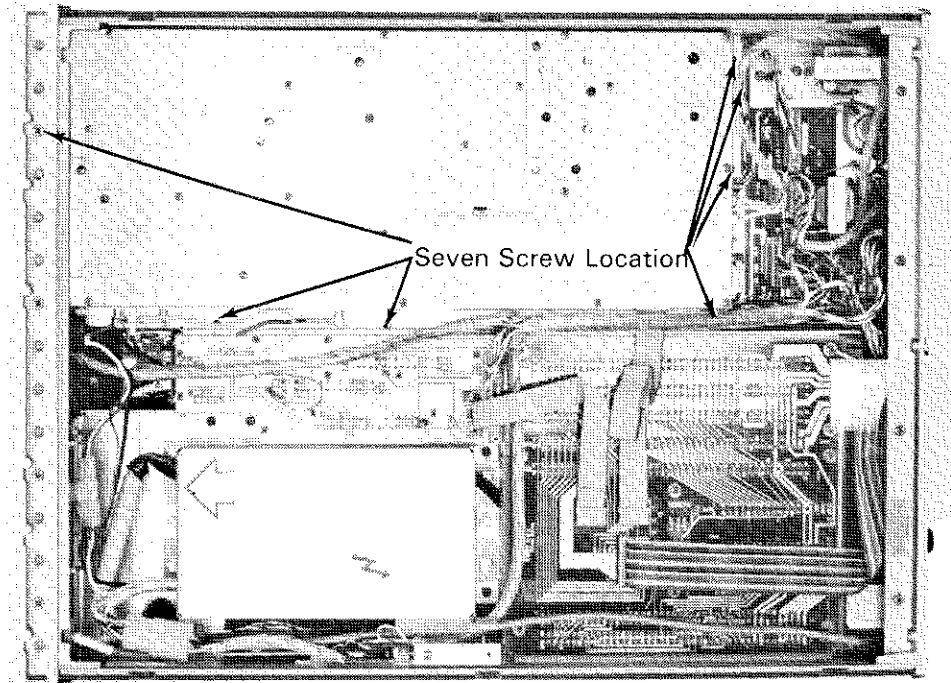
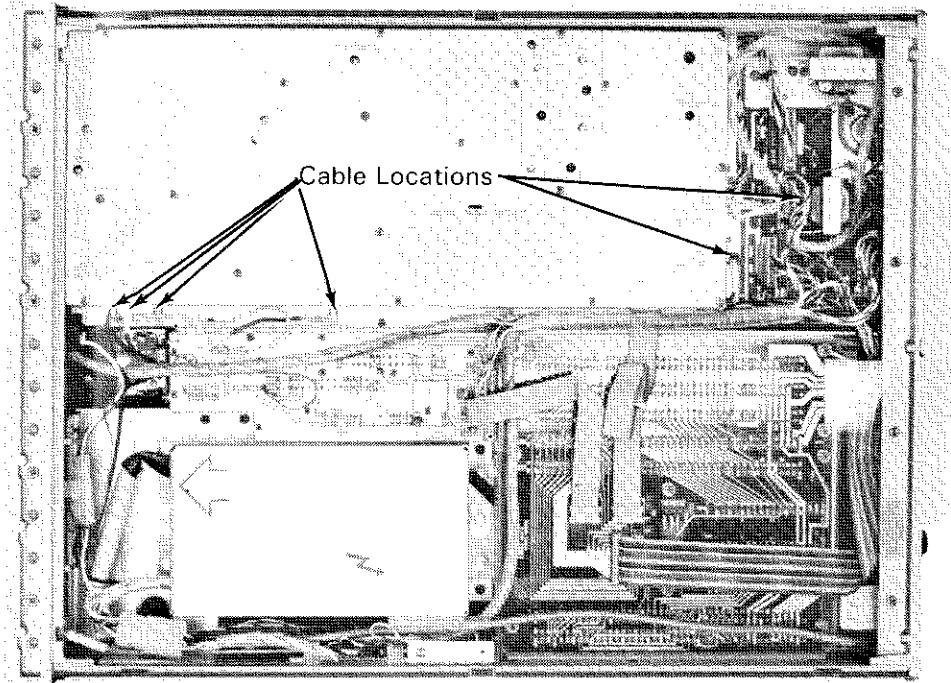
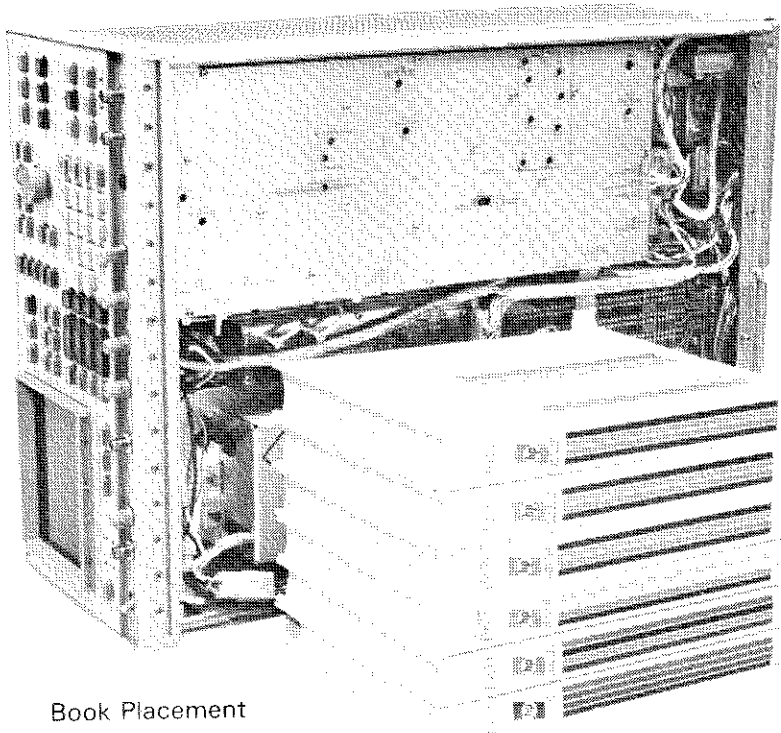


Figure 5-35. Removal Of The Input/Conversion Section.  
5-53/5-54







Book Placement

Conversion Section In Position For Adjustment

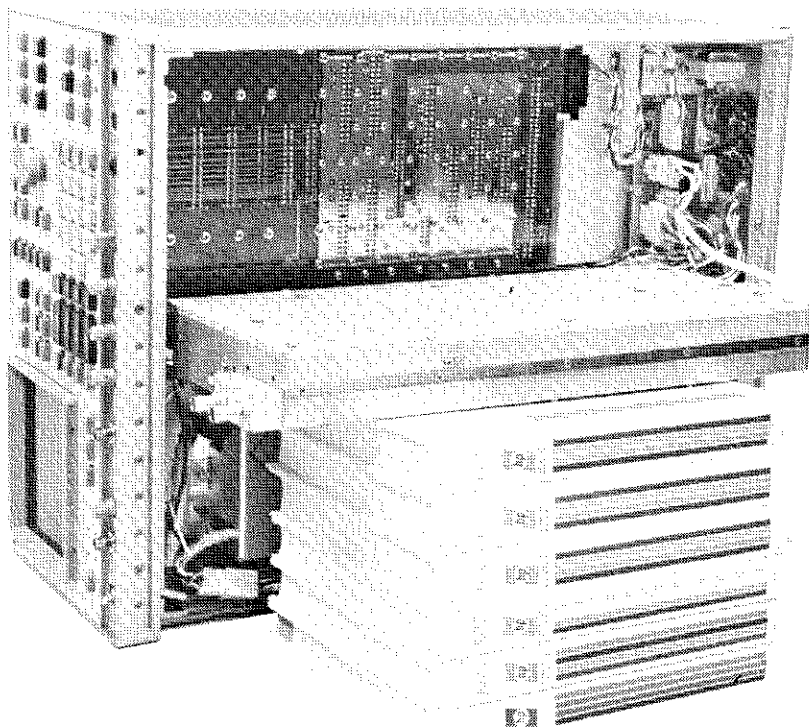


Figure 5-35. Removal Of The Input/Conversion Section.  
5-53/5-54

**NOTE**

*When more than one component is called out for adjustment in any given step, adjust them in the order listed.*

**NOTE**

*Figure 5-45 shows the location of the Input/Conversion section adjustments.*

- bb. Adjust the REF LEVEL as necessary to keep the marker near the center of the screen.
- cc. Adjust the 100.35MHz Passband Filter using A3L7, L5, L3 and L1. Adjust for the maximum marker amplitude possible.
- dd. Adjust the 10.35MHz Passband Filter using A5L6, L4, L2 and A4L7. Adjust these controls for the most positive marker amplitude reading possible.
- ee. Set the 3585A controls for:

```
CENTER FREQUENCY.....8.3MHz
RANGE.....-10dBm
dB/DIV..... 10dB
MANUAL SWEEP..... on
RES BW.....100Hz
VIDEO BW.....1Hz
```

- ff. Adjust the Stopband of the 10.35MHz Filter using A5L5, L3 and L1. Adjust for a *minimum* marker amplitude reading. Adjustment should yield a marker amplitude reading less than -95dBm.

- gg. Set the 3585A controls for:

```
PRESET (RBW-VBW-ST)
CENTER FREQUENCY.....9MHz
MANUAL SWEEP..... on
RANGE..... 0dBm
dB/DIV..... 1dB
CLEAR A
```

- hh. Adjust the 350kHz filter using A5T3 and T4. Adjust for a maximum marker amplitude reading.

- ii. Move test jumper A2J5 to the "TEST" position.

- jj. Adjust the REFERENCE LEVEL as necessary to keep the marker near midscreen.

- kk. Adjustment of the first half of the 100.35MHz Passband Filter is accomplished using A2L7, L8, L11 and L12. Adjust these components for a maximum marker amplitude reading. A2L7 and L8 are bendable wire inductor adjustments.



- ll. Move test jumper A2J5 back to the "NORM" position.
- mm. Adjust the REFERENCE LEVEL as necessary to keep the marker near midscreen.
- nn. Set the synthesizer for a FREQUENCY of 33MHz.
- oo. Set the 3585A controls for:

MANUAL ENTRY.....12.3MHz  
 dB/DIV ..... 10dB  
 RES BW.....100Hz  
 VIDEO BW.....1Hz  
 RANGE.....-10dBm

pp. Adjust A3L2 and C8 for a minimum marker amplitude reading. Proper adjustment will yield a marker amplitude reading of less than -95dBm.

- qq. Set the 3585A controls for:

PRESET (RBW-VBW-ST)  
 MANUAL ENTRY.....33MHz  
 RANGE ..... 0dBm  
 dB/DIV ..... 1dB

- rr. Adjust the REFERENCE LEVEL as necessary to keep the marker near midscreen.
- ss. Adjust A3L7, L5, L3 and L1 for a maximum marker amplitude reading. Adjust this group of inductors several times to insure that the peak of the 100.35MHz filter has been obtained. (If necessary adjust the Reference Level to keep the marker on screen.)

#### Δ1 NOTE

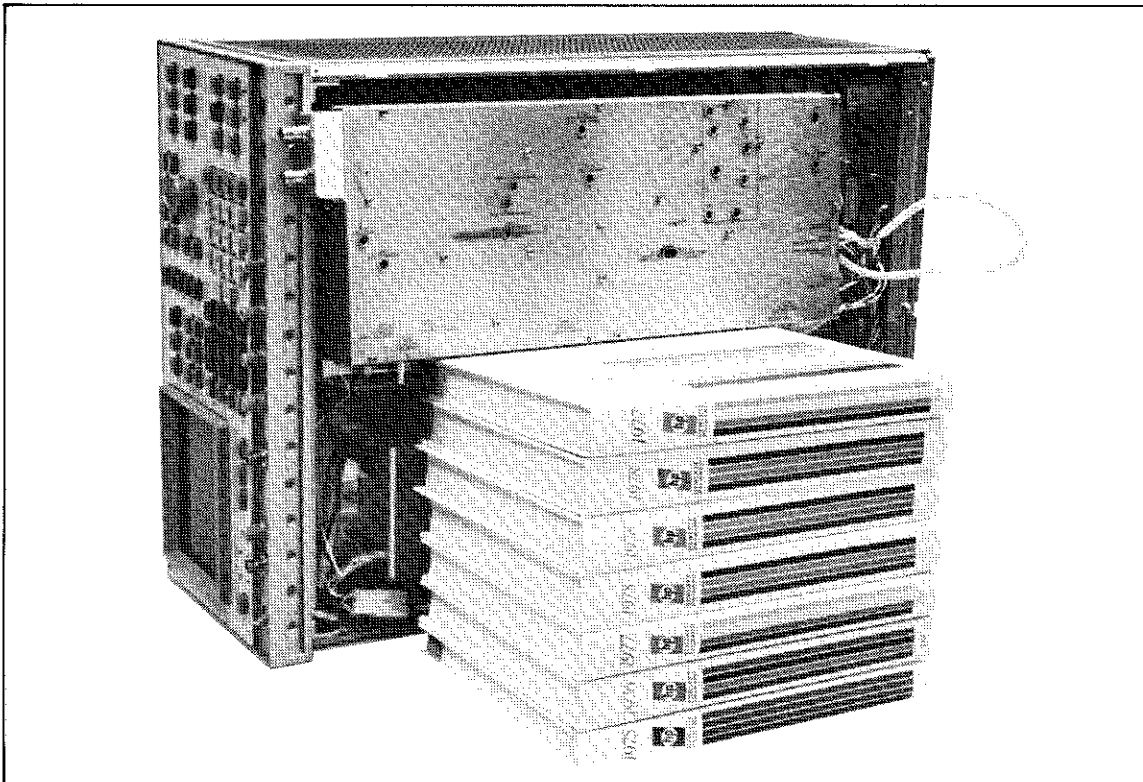
**Do not adjust A4C2 and C3 (steps tt thru xx) unless repairs have been made on the A4 board.**

- Δ1 tt. Using a 20:1, 1KΩ resistive probe (-hp- 10020A) and a Spectrum Analyzer, place the probe tip on the exposed portion of A4C3. The 90MHz IF signal is available on this portion of C3.
- Δ1 uu. Adjust A4C2 for a maximum amplitude on the Spectrum Analyzer.
- Δ1 vv. Observe the amplitude on the Spectrum Analyzer. Remove the probe from A4C3.
- Δ1 ww. Adjust A4C3 slightly. Place the probe tip on A4C3 and check the amplitude. Continue adjusting A4C3 until a maximum amplitude response is obtained.
- Δ1 xx. This complete the Conversion Section Adjustments.

**5-44. INPUT SECTION.**

5-45. This section contains procedures to make the required adjustments on the Input board. These adjustments include Calibrator Symmetry, Input flatness, Autorange trip points, Calibrator Output Level, 1MΩ flatness, Amplitude and Input capacitance, LO Feed-through and Harmonic Distortion.

- a. Being careful not to harm any of the cables connected to the Input/Conversion Section, turn the Input box on its side so that the bottom (Input Section, A1 board) is accessible (see Figure 5-36.).



**Figure 5-36. Input/Conversion Box Positioning For Adjustment.**

**5-46. Calibrator Symmetry Adjustment.**

- a. Set the 3585A controls for:

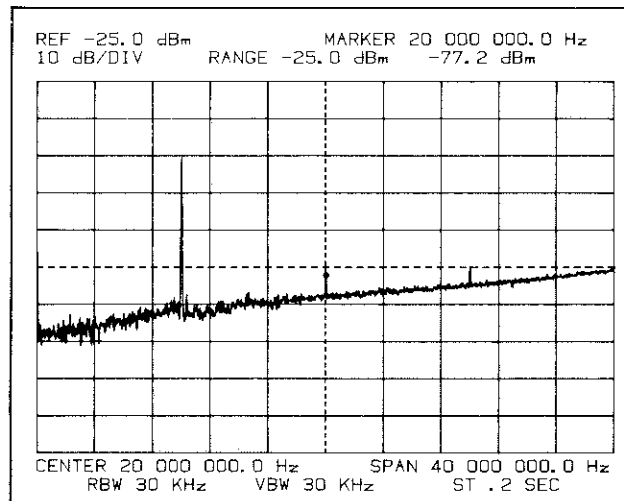
```

RECALL 605
INSTRUMENT PRESET
RANGE.....-25dBm
AUTORANGE..... off
    
```

- b. Remove the cable from A1J3.

c. Slowly replace the cable until a display similar to figure 5-37 is obtained. When this display is obtained, do not push the cable in any further.

d. Adjust the CAL SYMMETRY control, R52, for the maximum possible marker amplitude.



**Figure 5-37. Calibrator Symmetry Adjustment (A2R52).**

e. Push the cable completely onto A1J3. check that a display similar to Figure 5-38 is obtained.

**NOTE**

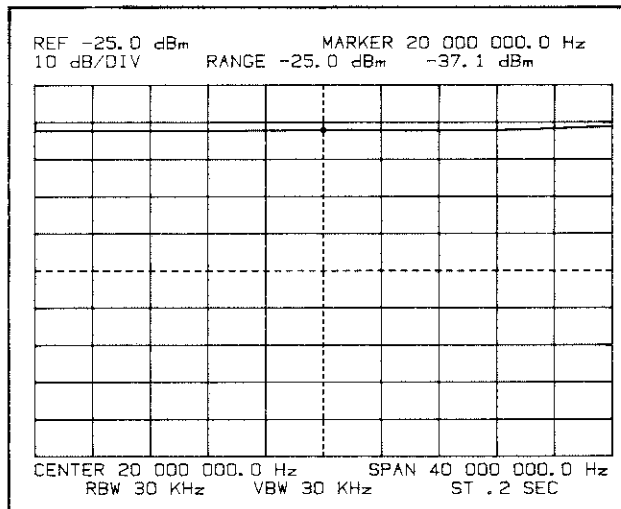
*If the instrument passes the Calibrator Accuracy test in the Performance Test section, go on to paragraph 5-47. Only if the Calibrator Accuracy Test has failed and you are certain your source is not at fault should you perform the following steps.*

f. Using the results of the Calibrator Accuracy Test, determine if the 40MHz point is higher or lower than the 10MHz point.

g. Select a new A1C50\* from the list below. Choose a smaller value to raise the 40MHz point and a larger value to lower the 40MHz point. (This capacitor affects the Calibrator's frequency response above 20MHz.)

Capacitor Value	-hp- Part Number
10pf	0160-2257
12pf	0160-2259
16pf	0160-2262

- h. Remove the Input/Conversion box from the 3585.
- i. Remove the cover on the Input board side.
- j. Replace A1C50\*.
- k. Replace the cover and all screws.
- l. Replace the Input/Conversion box in the instrument.
- m. Retest the Calibrator Flatness with the Calibrator Accuracy Test.



**Figure 5-38. Normal Display For Test Mode 05.**

**5-47. Flatness Adjustment.**

- a. Move test jumper A15W1 to the “TEST” position.
- b. Set the 3585A controls for:

```

RECALL 605
INSTRUMENT PRESET
CENTER FREQUENCY.....20.1MHz
dB/DIV ..... 2dB
RANGE ..... - 25dBm
AUTORANGE.....off
    
```

- c. Using the Continuous Entry control, adjust the REF LVL so that the trace is centered on the CRT.
- d. The 3585A is now in its 0.2dB/DIV mode. This allows very fine adjustment of the instruments flatness.
- e. Adjust the input flatness with the following components in the order shown.

A1R131, C83, L18, C86, L19, C89, L21, C92

The input flatness of the instrument should resemble Figure 5-39 when completely adjusted. The effect of each adjustment is shown in Figure 5-40 (foldout). Continue adjustment of the instrument flatness until the peak to peak variation of the trace is less than 0.2dB (1 division).

- f. Move test jumper A15W1 to the “NORM” position.

**5-48. Range Up Detector Adjustment.**

- a. Set the synthesizer controls for:

```

FREQUENCY ..... 30kHz
AMPLITUDE ..... -24dBm
    
```

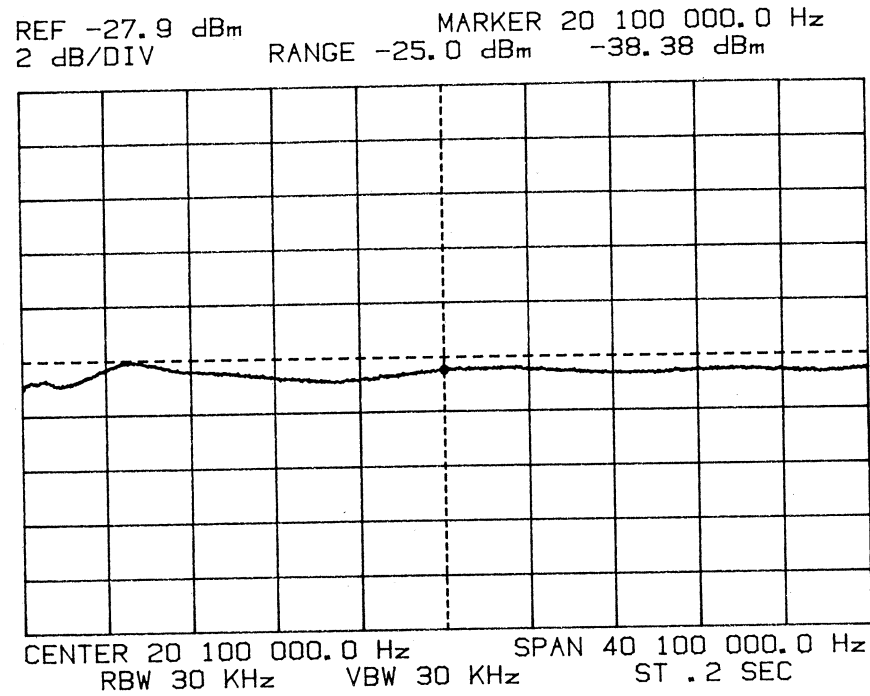
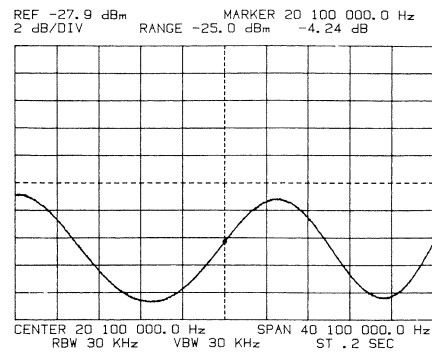
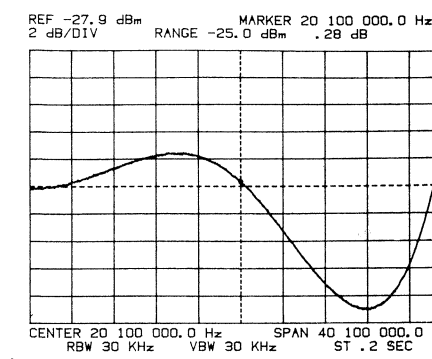
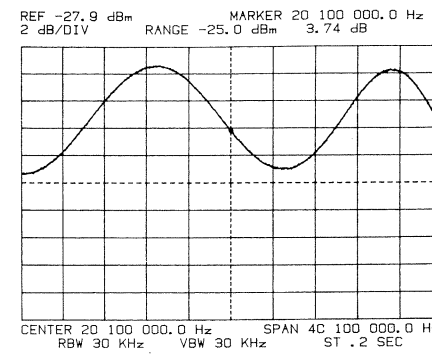


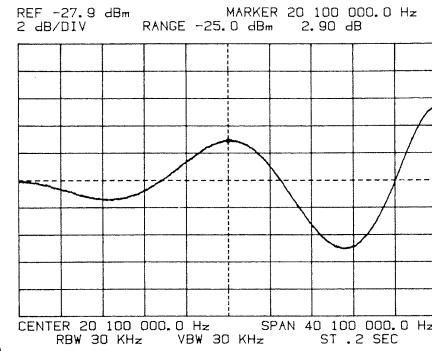
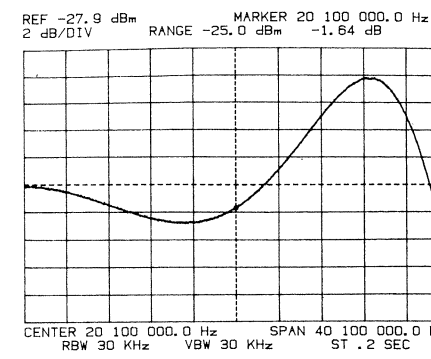
Figure 5-39. Properly Adjusted Input Flatness.



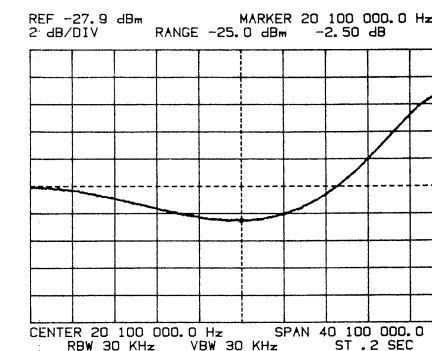
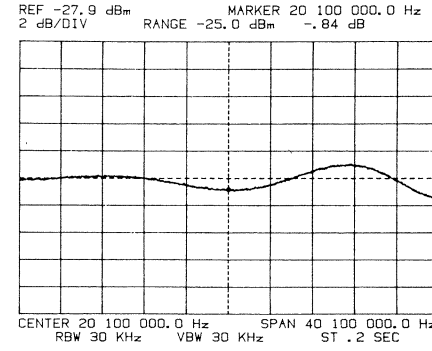
R31



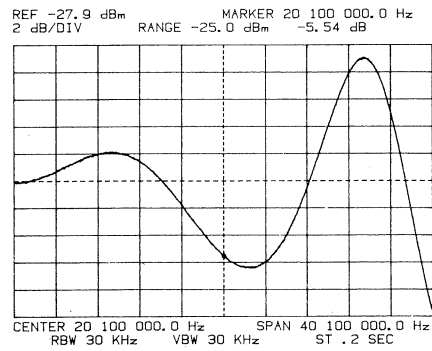
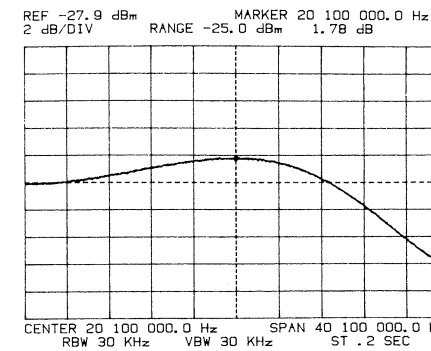
L19



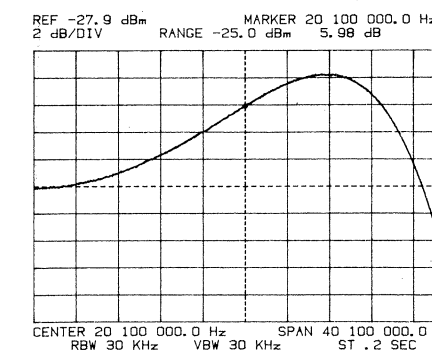
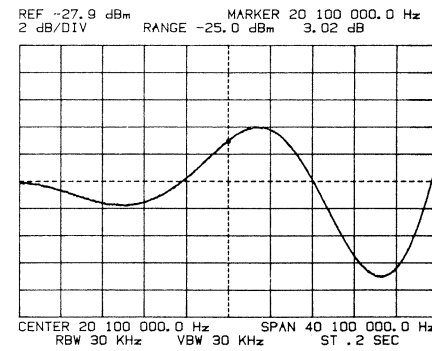
C83



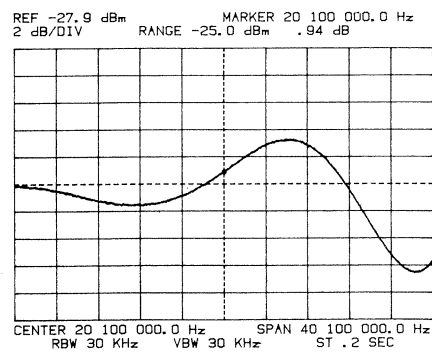
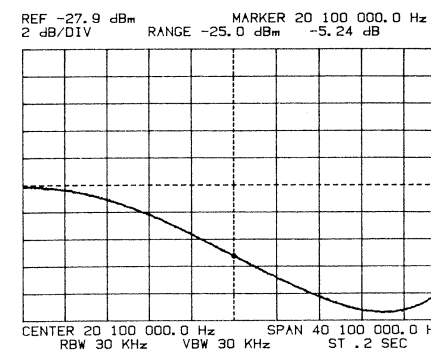
C89



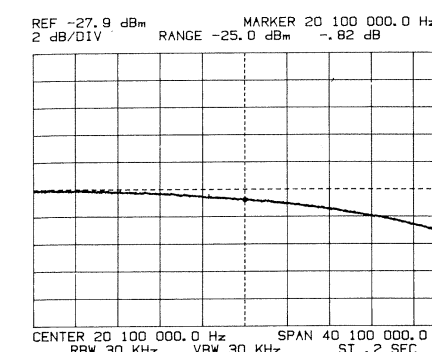
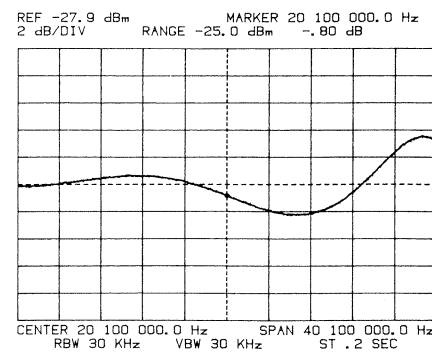
L18



L21



C86



C92

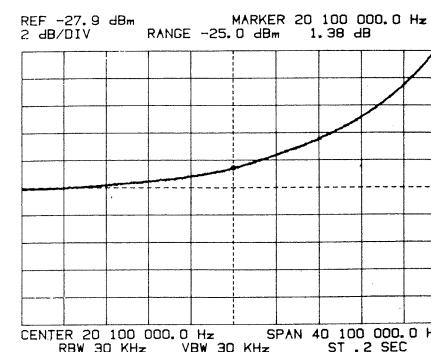


Figure 5-40. Input Flatness Adjustments.  
 5-61/5-62

b. Set the 3585A controls for:

```

RECALL 601
INSTRUMENT PRESET
RANGE.....-25dBm
AUTORANGE.....off

```

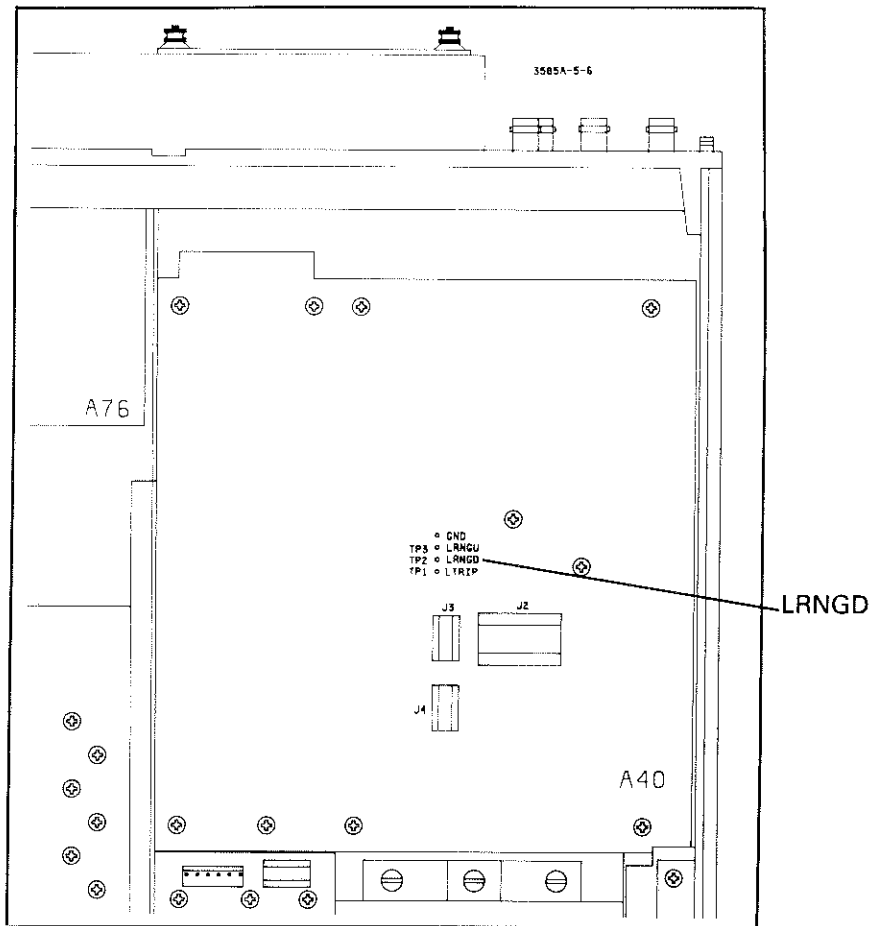
c. Adjust the RANGE UP THRESHOLD, A1R173, so that the front panel OVERLOAD light is lit. Now adjust A1R173 so that the OVERLOAD light just goes out.

**5-49. Range Down Detector Adjustment.**

a. Set the 3585A to the 0dBm RANGE.

b. Set the synthesizer for an AMPLITUDE of -6dBm.

c. Connect a dc voltmeter (10V range) to the Digital motherboard, pin A45B19 or A40TP2 (LRNGD). This is accessible from the bottom of the instrument as shown in Figure 5-41.



**Figure 5-41. Range Down Monitor Point (LRNGD).**

d. Adjust the Range Down Threshold, A1R174, so that the voltmeter reading just goes to a low logic level (<0.5V).

e. Remove the voltmeter.

**5-50. Top Of Screen Amplitude Adjustment.**

- a. Set the synthesizer controls for:

FREQUENCY ..... 150kHz  
 AMPLITUDE ..... -25dBm

- b. Set the 3585A controls for:

RECALL 601  
 INSTRUMENT PRESET  
 CENTER FREQUENCY ..... 150kHz  
 RANGE ..... -25dBm  
 AUTORANGE ..... off  
 RES BW ..... 30kHz  
 dB/DIV ..... 1dB  
 MANUAL SWEEP ..... on

- c. Adjust A17R105 for a marker amplitude reading of  $-25.00\text{dBm}$ .  
 d. Enter SAVE 1 on the 3585A.

**5-51. Calibrator Level Adjustment.****NOTE**

*It is important that the amplitude accuracy of the source used for this adjustment is excellent. The amplitude accuracy of the 3585A depends on the amplitude accuracy of this source.*

- a. Set the 3585A control for:

INSTRUMENT PRESET  
 RECALL 1 (same settings as in top of Screen  
 Amplitude Adjustments)

- b. Adjust A1R39 so that the marker amplitude reads exactly  $-25.00\text{dBm}$ . The results of this adjustment can only be analyzed after performing the next two steps.  
 c. Enter RECALL 4 on the 3585A keyboard.  
 d. View the results of your adjustment. Repeat the two previous steps until a marker reading of exactly  $-25.00\text{dBm}$  is obtained after a calibration (RECALL 4).

**5-52. 1M $\Omega$  Amplitude Adjustment.**

- a. Terminate the 1M $\Omega$  3585A input with a 50 $\Omega$  feedthrough termination. Move the synthesizer output from the 3585A 50 $\Omega$  input to the 50 $\Omega$  termination on the 1M $\Omega$  input.  
 b. Press the 1M $\Omega$  IMPEDANCE key on the 3585A.  
 c. Adjust A1R108 for a marker amplitude reading of  $-25.20\text{dBm}$ .



**5-53. 1MΩ Flatness Adjustment.**

- a. Connect a 10dB/step attenuator to the output of the Tracking Generator. Connect the output of the Attenuator to the 50Ω termination on the 1MΩ input.
- b. Set the attenuator for 40dB of attenuation.
- c. Turn the Tracking Generator Amplitude control fully clockwise.
- d. Set the 3585A controls for:

```

START FREQUENCY.....1kHz
STOP FREQUENCY.....100kHz
RANGE.....-25dBm
AUTORANGE.....off
dB/DIV ..... 2dB
    
```

- e. Move test jumper A15W1 to the “TEST” position.
- f. Using the Continuous Entry Control, adjust the REF LVL so that the trace is centered on the display.
- g. Press STORE A → B on the 3585A.
- n. Set the 3585A to the -5dBm RANGE.
- i. Set the external attenuator for 20dB.
- j. Adjust A1C21 so that the A trace overlaps the B trace as closely as possible (see Figure 5-42).
- k. Set the 3585A for the +15dBm RANGE.
- l. Set the external attenuator for 0dB.
- m. Adjust A1C27 so that the A trace overlaps the B trace as closely as possible.

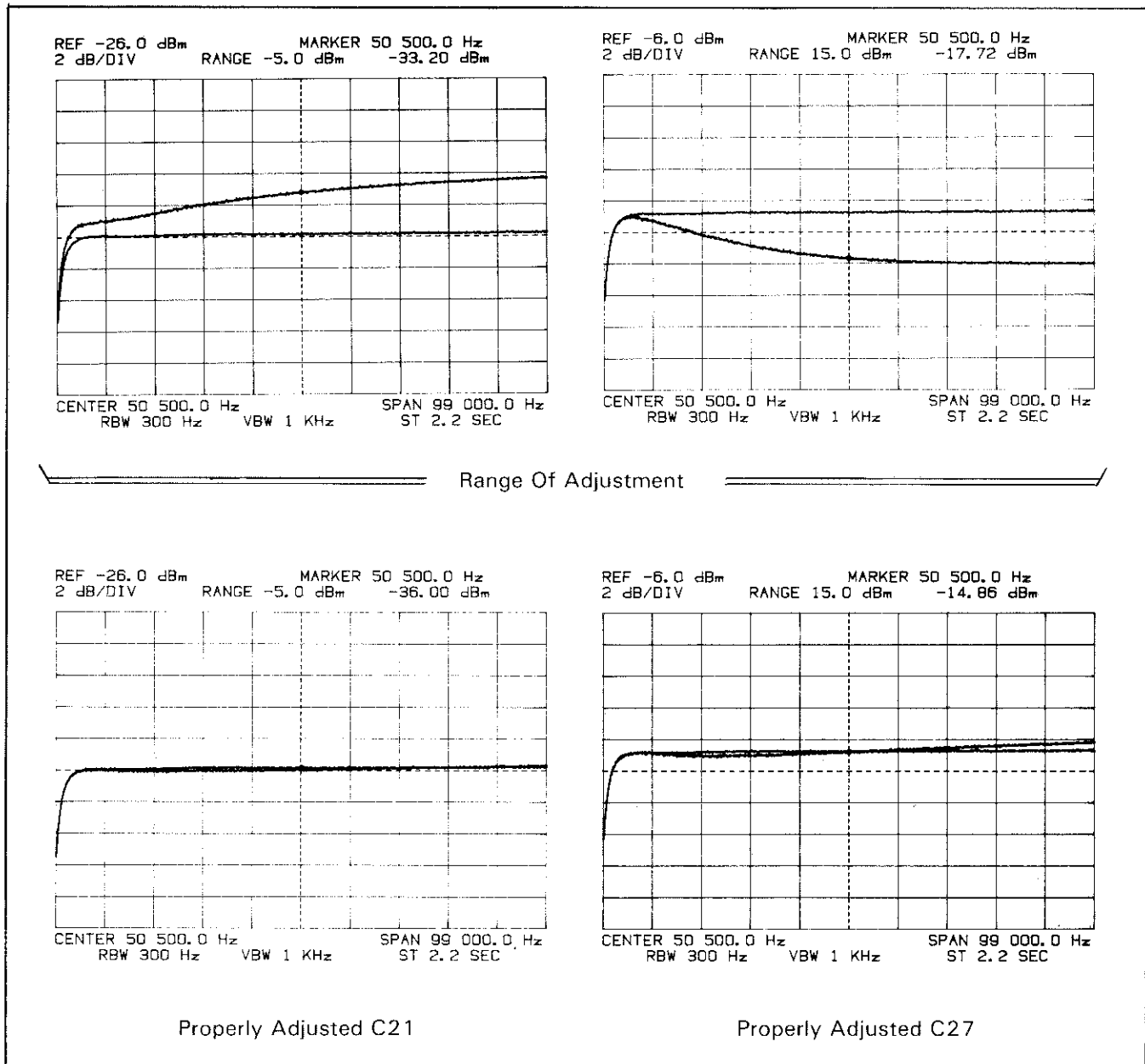
**5-54. 1MΩ Input Capacitance Adjustment.**

- a. Using the same connections as before, set the external attenuator for 40dB of attenuation.
- b. Replace the 50Ω termination with a 10kΩ series resistor (±1%, 1/8W, -hp- Part Number 0757-0442). This resistor should be connected as shown in Figure 5-43. Use short clip leads to connect the resistor to the attenuator and the 3585A 50Ω input.
- c. Set the 3585A controls for:

```

RANGE.....-25dBm
START FREQUENCY.....100Hz
STOP FREQUENCY.....1MHz
dB/DIV ..... 1dB
    
```





**Figure 5-42. 1MΩ Low Frequency Flatness Adjustment.**

- d. Using the Continuous entry Control, adjust the REF LVL so that the trace is centered on the display.
- e. Press the STORE A → B key on the 3585A.
- f. Set the 3585A for a RANGE of -5dBm.
- g. Adjust the attenuator for 20dB.
- h. Adjust A1C18 so that the A trace overlaps the B trace as closely as possible (see Figure 5-44).
- i. Remove all inputs to the 3585A.

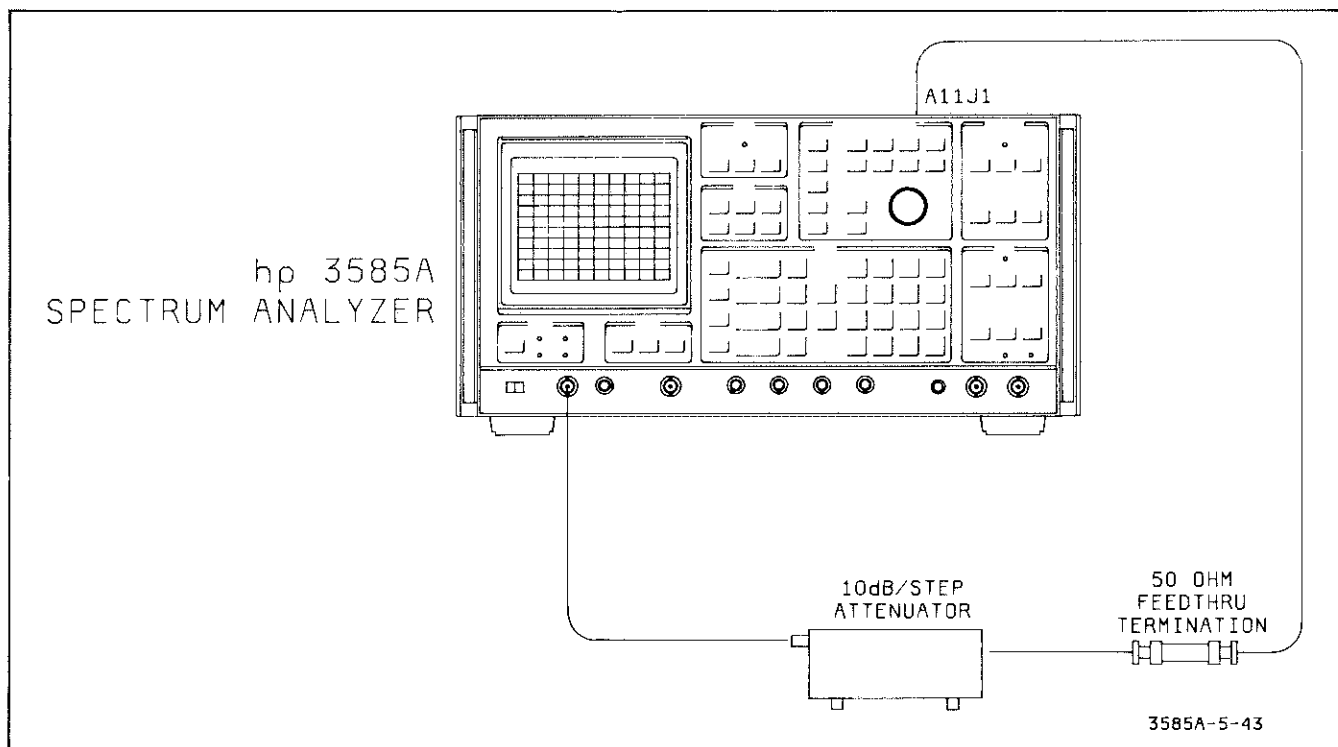


Figure 5-43. 1MΩ Input Capacitance Adjustment Set-Up.

5-55. Local Oscillator Feedthrough Adjustment.

a. Enter:

INSTRUMENT PRESET  
 RANGE ..... 0dBm  
 MANUAL ENTRY.....0Hz

b. Adjust A1R170 for a minimum marker reading (minimum LO feedthrough). Verify that the marker reads  $\leq -15$ dBm.

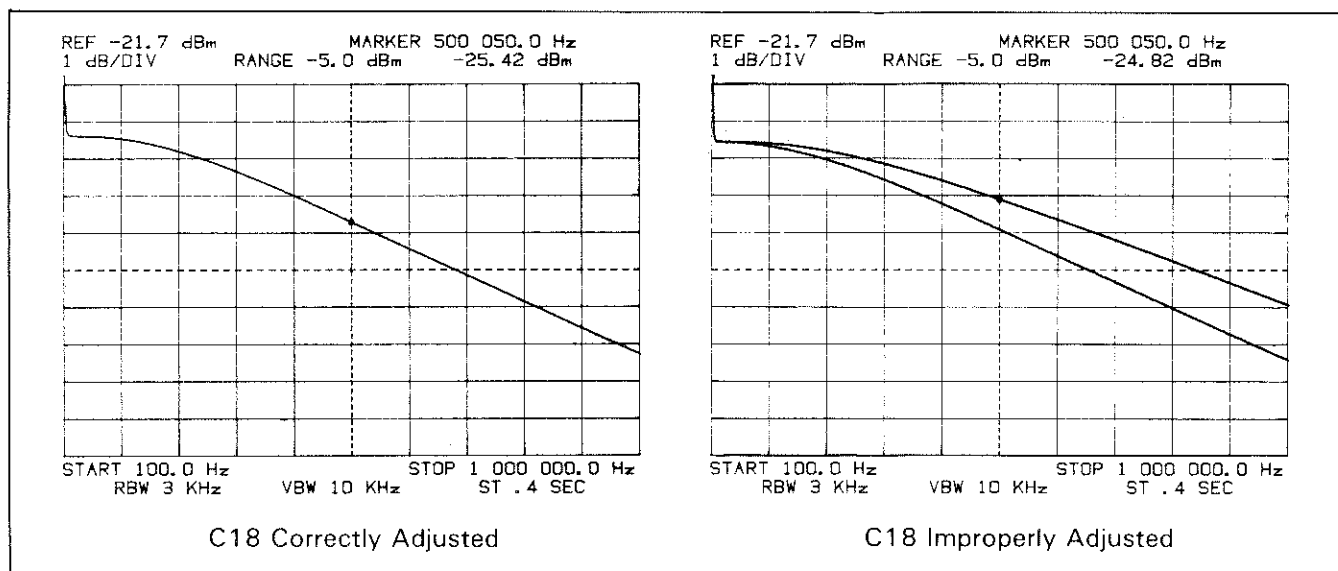


Figure 5-44. 1MΩ Input Capacitance Display.

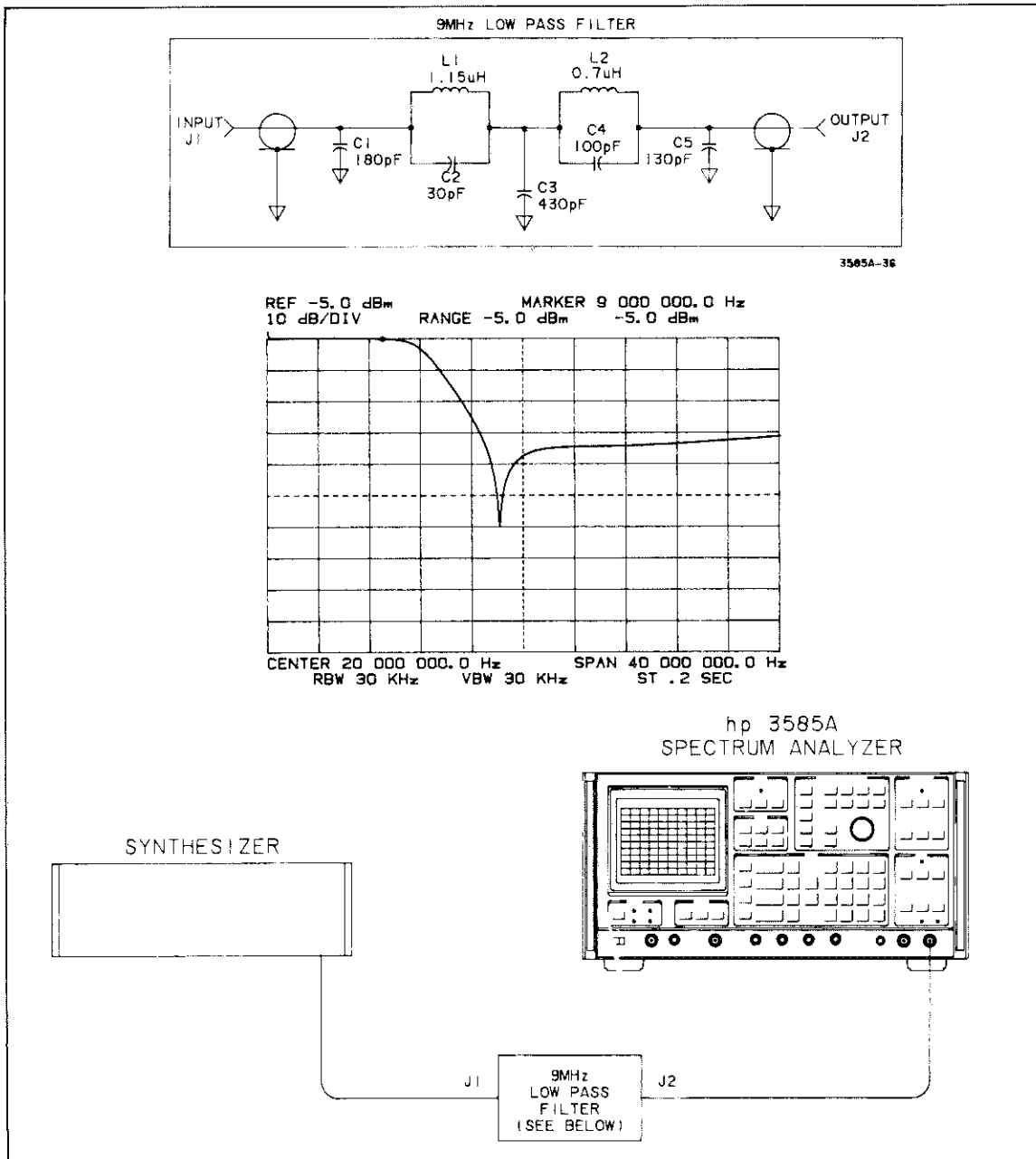
**5.56. Harmonic Distortion Adjustment.**

a. Make sure that the Frequency Synthesizer's reference is locked to the 3585A's 10MHz REF OUTPUT.

b. Set the Frequency Synthesizer for:

FREQUENCY.....9MHz  
 AMPLITUDE ..... -25dBm

c. Connect the Frequency Synthesizer, 9MHz, Low Pass Filter and 3585A as shown in Figure 5-45.



**Figure 5-45. Harmonic Distortion Adjustment Set-Up.**

d. Set the 3585A controls for:

```

INSTRUMENT PRESET
MANUAL ENTRY.....9MHz
RES BW.....3Hz
VIDEO BW.....1Hz
MKR → REF LVL
OFFSET.....on
ENTER OFFSET

```

e. The marker is presently on the fundamental frequency. The marker amplitude has been entered as a reference (marker reading should be .0dBm).

f. Enter:

```

MANUAL SWEEP.....18MHz

```

g. Adjust A1R110 for a minimum marker reading. This adjustment changes the bias of the 11dB Gain Amp so that Second Harmonic Distortion is minimized.

h. Verify that the marker reading is < -80dB. If not, go to the Distortion and Spurs Service Group (Service Group J) to repair the problem.

i. Disconnect the Synthesizer and 9MHz filter.

**5-57. Electrical Isolation Test.**

a. Turn the 3585A power off.

b. Carefully replace the Input/Conversion Section in the 3585A mainframe. Replace and tighten the seven mounting screws.

c. Connect all the *coaxial* cables to the Input/Conversion Section.

d. Before connecting the power supply cable, connect an ohmmeter between the 3585A frame and the screw closest to A1R108.

e. The ohmmeter should read infinite resistance. This indicates that the Input/Conversion Section is properly isolated from dc ground loops. If the ohmmeter shows a shorted condition, check the capacitors on A6a,b,c or d.

f. Remove the ohmmeter.

g. Connect the power supply cable to the Input/Conversion Section.

h. Turn the 3585A power on.

i. Press INSTRUMENT PRESET and check that the instrument calibrates. If it does not, recheck all cable connections to the Input/Conversion Section.

j. Turn the 3585A power off and replace the bottom cover.

**5-58. Tracking Generator Adjustments.**

- a. Connect a Digital Voltmeter to A51TP2.
- b. Adjust A52C50 for  $+4\text{Vdc} \pm 0.5\text{V}$ .
- c. Disconnect the Digital Voltmeter.
- d. Using a short length of shielded cable, connect the Tracking Generator output to the Terminated ( $50\Omega$ ) input.
- e. Set the Tracking Generator Amplitude control fully clockwise to the detent position (0dBm).
- f. Enter:

```

INSTRUMENT PRESET
RANGE ..... 0dBm
dB/DIV ..... 1dB
REFERENCE LEVEL ..... 2dBm

```

- g. Adjust A52C16 for the flattest amplitude response of the Tracking Generator output.
- h. Enter:

```

REFERENCE LEVEL ..... 0dBm
RECALL 4

```

- i. Adjust A52R68 for a marker reading of .00dBm.
- j. Disconnect the cable connecting the Tracking Generator to the input. This completes the Tracking Generator Adjustments.

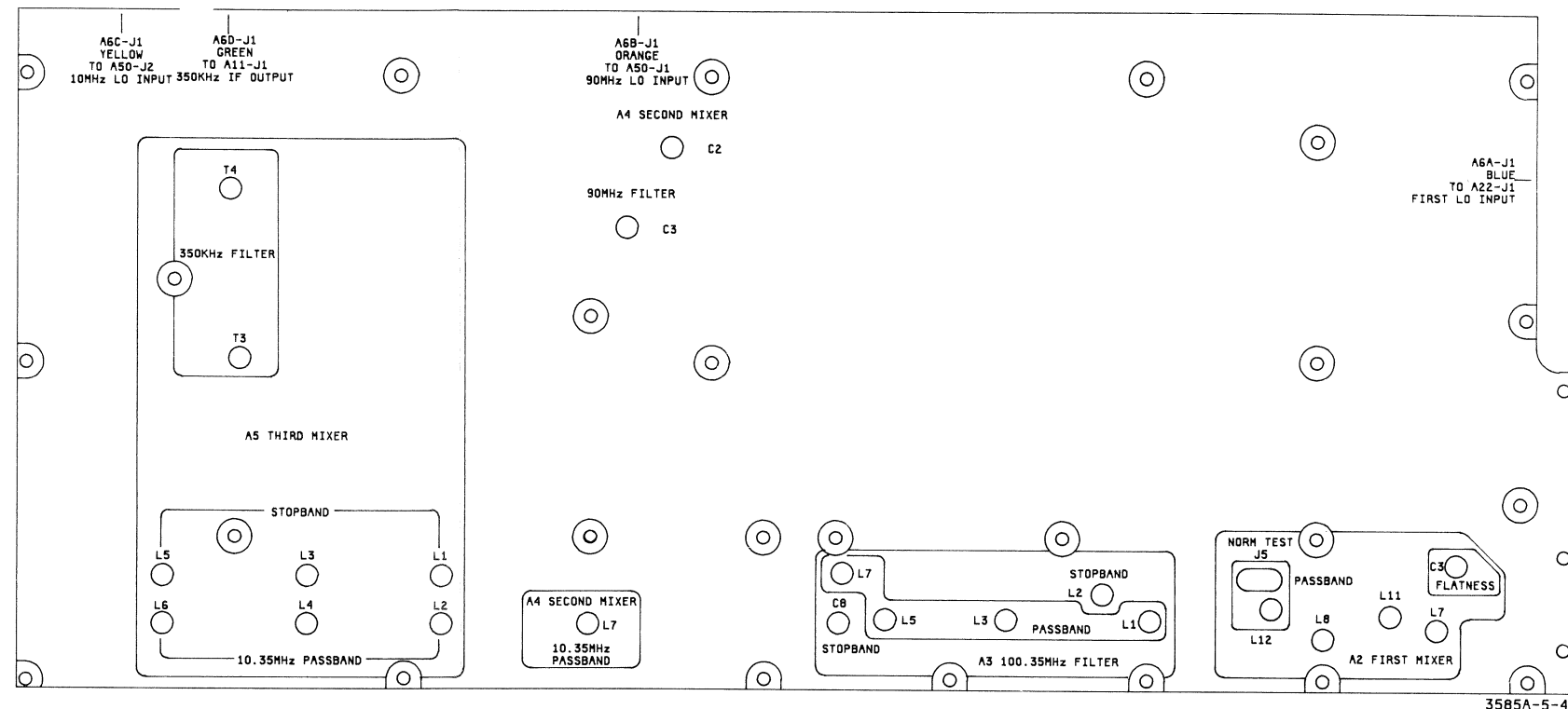
**5-59. HP-IB Adjustment.**

- a. Turn the 3585A power off.
- b. Remove the HP-IB board (A44, tabs = yellow, yellow) from the card nest.
- c. Note the voltage stamped on the Processor (U16), \_\_\_\_\_ Vdc.
- d. Replace the HP-IB board back in the card nest.
- e. Turn the 3585A power on.
- f. Connect a DVM to A44TP5. Set the DVM for the 20Vdc range.
- g. Adjust A44R9 (see Figure 5-47) for the voltage stamped on A44U16  $\pm 0.2\text{V}$ .
- h. Disconnect the DVM. This completes the HP-IB Adjustments.

**5-60. X-Y Plotter Adjustment.**

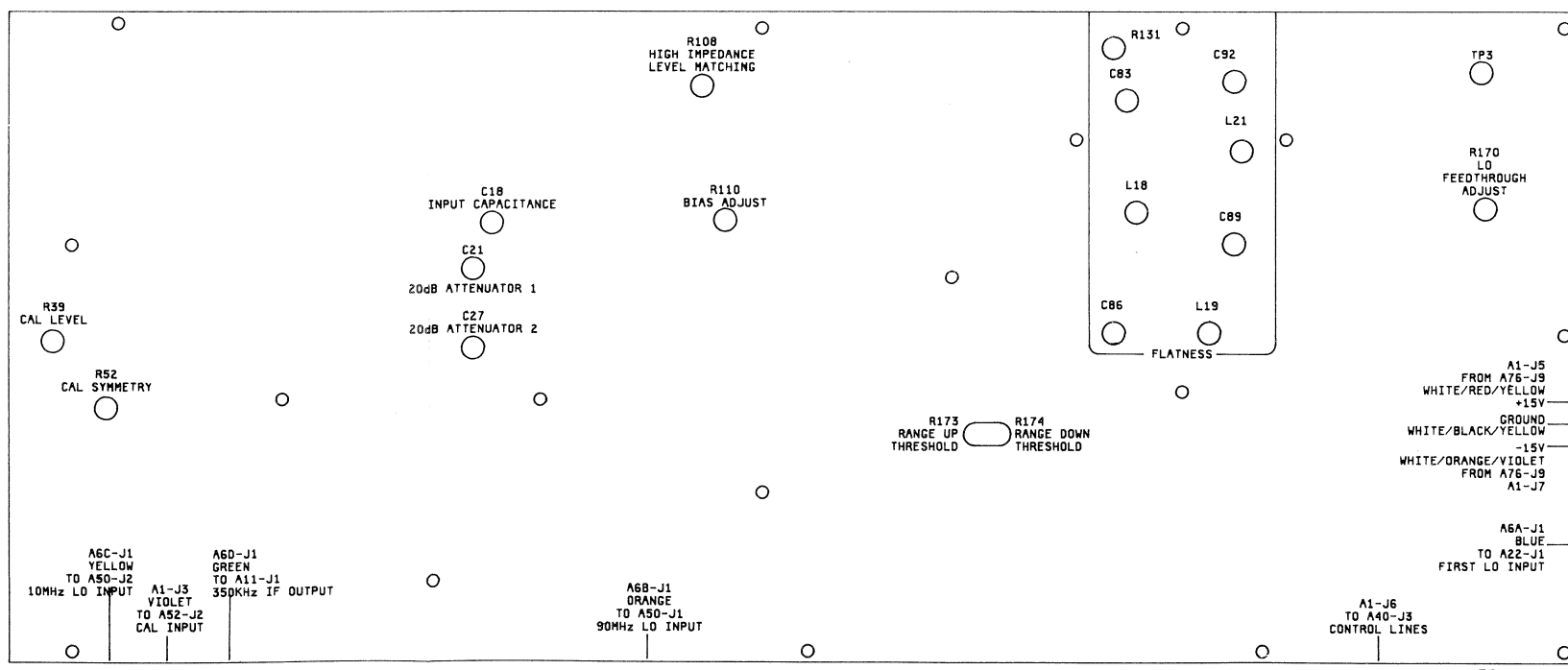
- a. Connect a DVM to A62TP1 (REF). Set the DVM to the 20Vdc range.
- b. Adjust A62R4 (see Figure 5-47) for a dc voltage reading of  $-10.24\text{Vdc} \pm 0.02\text{V}$ .
- c. Disconnect the DVM. This completes the X-Y Plotter Adjustments.

Conversion Side (A2-A5)



3585A-5-49

Input Side (A1)



3585A-5-49

Figure 5-46. Input/Conversion Section Adjustment Locations. 5-73/5-74





## SECTION VI

# REPLACEABLE PARTS

### 6-1. INTRODUCTION.

6-2. This section contains information for ordering replacement parts. Table 6-3 lists the parts in alphanumeric order of their reference designators and provides the following information:

- a. -hp- Part Number.
- b. Total quantity used in the instrument (Qty column). The total quantity of a part is given the first time the part number appears.
- c. Description of the part. (See Table 6-1 for abbreviations.)
- d. Typical manufacturer of the part in a five-digit code. (See Table 6-2 for list of manufacturers.)
- e. Manufacturer's part number.

### 6-3. Chassis Mounted and Miscellaneous Parts.

6-4. Chassis mounted components, mechanical parts and miscellaneous parts not having reference designators are listed near the end of Table 6-3. Exploded view drawings showing chassis and chassis mounted parts are at the end of this manual section.

### 6-5. ORDERING INFORMATION.

6-6. To obtain replacement parts, address your order or inquiry to the nearest Hewlett-Packard Sales and Service Office located in the back of the book. Identify parts by their -hp- Part Numbers. Include the instrument model and serial number.

### 6-7. Non-Listed Parts.

6-8. To obtain a part this is not listed, include:

- a. Instrument model number.
- b. Instrument serial number.
- c. Description of the part.
- d. Function and location of the part.

Table 6-1. Standard Abbreviations.

ABBREVIATIONS			
Ag	silver	Hz	hertz (cycle(s) per second)
Al	aluminum	ID	inside diameter
A	ampere(s)	imp	impregnated
Au	gold	incd	incandescent
C	capacitor	ins	insulation(ied)
cer	ceramic	kΩ	kiloohm(s) = 10 <sup>+3</sup> ohms
coef	coefficient	KHz	kilohertz = 10 <sup>+3</sup> hertz
com	common	L	inductor
comp	composition	lin	linear taper
conn	connection	log	logarithmic taper
dep	deposited	mA	milliamperes(s) = 10 <sup>-3</sup> amperes
DPDT	double-pole double-throw	MHz	megahertz = 10 <sup>+6</sup> hertz
DPST	double-pole single-throw	MΩ	megohm(s) = 10 <sup>+6</sup> ohms
elect	electrolytic	met flm	metal film
encap	encapsulated	mfr	manufacturer
F	farad(s)	ms	millisecond
FET	field effect transistor	mtg	mounting
fxd	fixed	mV	millivolt(s) = 10 <sup>-3</sup> volts
GaAs	gallium arsenide	μF	microfarad(s)
GHz	gigahertz = 10 <sup>+9</sup> hertz	μs	microsecond(s)
gd	guard(ied)	μV	microvolt(s) = 10 <sup>-6</sup> volts
Ge	germanium	my	Mylar ®
gnd	ground(ied)	nA	nanoampere(s) = 10 <sup>-9</sup> amperes
H	henry(ies)	NC	normally closed
Hg	mercury	Ne	neon
		NO	normally open
		NPO	negative positive zero (zero temperature coefficient)
		ns	nanosecond(s) = 10 <sup>-9</sup> seconds
		nr	not separately replaceable
		Ω	ohm(s)
		obd	order by description
		OD	outside diameter
		p	peak
		pA	picoampere(s)
		pc	printed circuit
		pF	picofarad(s) 10 <sup>-12</sup> farads
		piv	peak inverse voltage
		p/o	part of
		pos	position(s)
		poly	polystyrene
		pot	potentiometer
		p-p	peak-to-peak
		ppm	parts per million
		prec	precision (temperature coefficient, long term stability and/or tolerance)
		R	resistor
		Rh	rhodium
		rms	root-mean-square
		rot	rotary
		Se	selenium
		sect	section(s)
		Si	silicon
		sl	slide
		SPDT	single-pole double-throw
		SPST	single-pole single-throw
		Ta	tantalum
		TC	temperature coefficient
		TiO <sub>2</sub>	titanium dioxide
		tog	toggle
		tol	tolerance
		trim	trimmer
		TSTR	transistor
		V	volt(s)
		vacw	alternating current working voltage
		var	variable
		vdcw	direct current working voltage
		W	watt(s)
		w/	with
		w/w	working inverse voltage
		w/o	without
		ww	wirewound
		*	optimum value selected at factory, average value shown (part may be omitted)
		**	no standard type number assigned selected or special type
		®	Dupont de Nemours
DESIGNATORS			
A	assembly	FL	filter
B	motor	HR	heater
BT	battery	IC	integrated circuit
C	capacitor	J	jack
CR	diode or thyristor	K	relay
DL	delay line	L	inductor
DS	lamp	M	meter
E	misc electronic part	MP	mechanical part
F	fuse	P	plug
		Q	transistor
		QCR	transistor diode
		R(p)	resistor(pack)
		RT	thermistor
		S	switch
		T	transformer
		TB	terminal board
		TC	thermocouple
		TP	test point
		TS	terminal strip
		U	microcircuit
		V	vacuum tube, neon bulb, photocell, etc.
		W	wire
		X	socket
		XDS	lampholder
		XF	fuseholder
		Y	crystal
		Z	network

Table 6-2. Code List of Manufacturers.

Manufacturer Number	Manufacturer Name	Address
00853	Sangamo Elec co S Carolina Div	Pickens, SC 29671
01121	Allen-Bradley Co	Milwaukee, WI 53204
01295	Texas Instr Inc Semicond Cmpnt Div	Dallas, TX 75222
01928	RCA Corp Solid State Div	Somerville, NJ 08876
02111	Spectrol Electronics Corp	City of Ind, CA 91745
02660	Amphenol Sales Div of Bunker-Ramo	Broadview, IL 60153
03888	DKI Pyrofilm Corp	Whippany, NJ 07981
04713	Motorola Semiconductor Products	Phoenix, AZ 85062
06001	GE Co Elek Cap & Bat Prod Dept	Irmo, SC 29063
06915	Richco Plastic Co	Chicago, IL 60646
07263	Fairchild Semiconductor Div	Mountain View, CA 94042
07716	TRW Inc Burlington Div	Burlington, IA 52601
12954	Stemens Corp Components Group	Scottsdale, AZ 95252
12969	Unitrode Corp	Watertown, MA 02172
13606	Sprague Elect Co Semiconductor Div	concord, NH 03301
14099	Semtech Corp	Newbury Park, CA 91320
16299	Corning GI Wk Elec Cmpnt Div	Raleigh, NC 27604
17856	Siliconix Inc	Santa Clara, CA 95054
18324	Signetics Corp	Sunnyvale, CA 94086
19701	Mepco/Electra Corp	Mineral Wells, TX 76067
22526	Berg Electronic Inc	Cumberland, PA 17070
23936	Pamotor Div William J Purdy	Burlingame, CA 94010
24355	Analog Devices Inc	Norwood, MA 02062
24546	corning Glass Works (Bradford)	Bradford, PA 16701
26654	Varadyne Inc	Santa Monica, CA 90404
27014	National Semiconductor Corp	Santa Clara, CA 95051
27167	Corning Glass Works (Wilmington)	Wilmington, NC 28401
28480	Hewlett-Packard Co Corporate HQ	Palo Alto, CA 94304
29832	Teledyne Philbrick Nexus	Dedham, MA 02026
32997	Bourns Inc Trimpot Prod Div	Riverside, CA 92507
34335	Advanced Micro Devices Inc	Sunnyvale, CA 94086
34371	Harris Semicon Div Harris-Intertype	Melbourne, FL 32901
34785	Dek Inc	Chicago, IL 60185
51642	Centre Engineering Inc	State College, OA 16801
52763	Stettner-Trush Inc	Cazenovia, NY 13035
53021	Sangamo Electric Co	Springfield, IL 62702
54294	Cutler-Hammer-Inc Shallcross Mfg Co	Selma, NC 27576
55576	Synertek	Santa Clara, CA 95051
56289	Sprague Electric Co	North Adams, MA 01247
72136	Electro Motive Corp Sub IEC	Willimantic, CT 06226
72982	Erie Technological Products Inc	Erie, PA 16512
73138	Beckman Instruments Inc Helipot Div	Fullerton, CA 92634
74970	Johnson E F Co	Waseca, MN 56093
75915	Littelfuse Inc	Des Plaines, IL 60016
80103	Lambda Electronics Corp	Melville, NY 11746
84411	TRW Capacitor Div	Ogallala, NE 69153
91637	Dale Electronics Inc	Columbus, NE 68601

Table 6-3. Replaceable Parts

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
A1	03585-66501	2	1	INPUT ASSEMBLY	28480	03585-66501
A1C1	0160-3622	8	168	CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A1C2	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A1C3	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A1C4	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A1C5	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A1C6	0160-2055	9	61	CAPACITOR-FXD .01UF +80-20% 100VDC CER	28480	0160-2055
A1C7	0160-2257	3	10	CAPACITOR-FXD 10PF +-5% 500VDC CER 0+-60	28480	0160-2257
A1C8	0160-2055	9		CAPACITOR-FXD .01UF +80-20% 100VDC CER	28480	0160-2055
A1C9	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A1C10	0160-2262	0	2	CAPACITOR-FXD 16PF +-5% 500VDC CER 0+-30	28480	0160-2262
A1C11	0160-2055	9		CAPACITOR-FXD .01UF +80-20% 100VDC CER	28480	0160-2055
A1C12	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A1C13	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A1C14	0160-2055	9		CAPACITOR-FXD .01UF +80-20% 100VDC CER	28480	0160-2055
A1C15	0160-2055	9		CAPACITOR-FXD .01UF +80-20% 100VDC CER	28480	0160-2055
A1C16	0160-2055	9		CAPACITOR-FXD .01UF +80-20% 100VDC CER	28480	0160-2055
A1C17	0160-2055	9		CAPACITOR-FXD .01UF +80-20% 100VDC CER	28480	0160-2055
A1C18	0121-0451	3	10	CAPACITOR-V TRMR-AIR 1.7-11PF 250V	74970	187-0106-005
A1C19	0160-2266	4	6	CAPACITOR-FXD 24PF +-5% 500VDC CER 0+-30	28480	0160-2266
A1C20	0160-2255	1	2	CAPACITOR-FXD 8.2PF +-25PF 500VDC CER	28480	0160-2255
A1C21	0121-0451	3		CAPACITOR-V TRMR-AIR 1.7-11PF 250V	74970	187-0106-005
A1C22	0160-2250	6	3	CAPACITOR-FXD 5.1PF +-25PF 500VDC CER	28480	0160-2250
A1C23	0160-2055	9		CAPACITOR-FXD .01UF +80-20% 100VDC CER	28480	0160-2055
A1C24	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A1C25	0160-2254	0	1	CAPACITOR-FXD 7.5PF +-25PF 500VDC CER	28480	0160-2254
A1C26	0160-2306	3	4	CAPACITOR-FXD 27PF +-5% 300VDC MICA	28480	0160-2306
A1C27	0121-0451	3		CAPACITOR-V TRMR-AIR 1.7-11PF 250V	74970	187-0106-005
A1C28	0160-2250	6		CAPACITOR-FXD 5.1PF +-25PF 500VDC CER	28480	0160-2250
A1C29	0160-0128	3	13	CAPACITOR-FXD 2.2UF +-20% 50VDC CER	28480	0160-0128
A1C31	0160-2260	8	2	CAPACITOR-FXD 13PF +-5% 500VDC CER 0+-30	28480	0160-2260
A1C32	0160-0128	3		CAPACITOR-FXD 2.2UF +-20% 50VDC CER	28480	0160-0128
A1C33	0150-0050	0	94	CAPACITOR-FXD 1000PF +80-20% 1KVDC CER	28480	0150-0050
A1C34	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A1C35	0160-0205	7	1	CAPACITOR-FXD 10PF +-5% 500VDC MICA	28480	0160-0205
A1C36	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A1C37	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A1C38	0180-0197	8	29	CAPACITOR-FXD 2.2UF+-10% 20VDC TA	56289	150D225X0020A2
A1C39	0160-0128	3		CAPACITOR-FXD 2.2UF +-20% 50VDC CER	28480	0160-0128
A1C40	0150-0050	9		CAPACITOR-FXD 1000PF +80-20% 1KVDC CER	28480	0150-0050
A1C41	0160-2055	9		CAPACITOR-FXD .01UF +80-20% 100VDC CER	28480	0160-2055
A1C42	0160-2055	9		CAPACITOR-FXD .01UF +80-20% 100VDC CER	28480	0160-2055
A1C43	0160-2055	9		CAPACITOR-FXD .01UF +80-20% 100VDC CER	28480	0160-2055
A1C44	0160-2055	9		CAPACITOR-FXD .01UF +80-20% 100VDC CER	28480	0160-2055
A1C45	0160-2055	9		CAPACITOR-FXD .01UF +80-20% 100VDC CER	28480	0160-2055
A1C46	0160-2055	9		CAPACITOR-FXD .01UF +80-20% 100VDC CER	28480	0160-2055
A1C47	0160-2055	9		CAPACITOR-FXD .01UF +80-20% 100VDC CER	28480	0160-2055
A1C48	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A1C49	0180-0210	6	19	CAPACITOR-FXD 3.3UF+-20% 15VDC TA	56289	150D335X0015A2
A1C50	0160-2262	3		CAPACITOR-FXD 16PF +-5% 500VDC CER 0+-60	28480	0160-2262
A1C51	0180-0210	6		CAPACITOR-FXD 3.3UF+-20% 15VDC TA	56289	150D335X0015A2
A1C52	0180-1701	2	2	CAPACITOR-FXD 6.8UF+-20% 6VDC TA	56289	150D685X0006A2
A1C53	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A1C54	0180-0210	6		CAPACITOR-FXD 3.3UF+-20% 15VDC TA	56289	150D335X0015A2
A1C55	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A1C56	0180-0210	6		CAPACITOR-FXD 3.3UF+-20% 15VDC TA	56289	150D335X0015A2
A1C57	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A1C58	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A1C59	0160-0128	3		CAPACITOR-FXD 2.2UF +-20% 50VDC CER	28480	0160-0128
A1C61	0160-2150	5	4	CAPACITOR-FXD 33PF +-5% 300VDC MICA	28480	0160-2150
A1C62	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A1C63	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A1C64	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A1C65	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A1C66	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A1C67	0180-0375	4	2	CAPACITOR-FXD 68UF+-10% 20VDC TA	56289	150D686X0020B2
A1C68	0180-0210	6		CAPACITOR-FXD 3.3UF+-20% 15VDC TA	56289	150D335X0015A2
A1C69	0180-0210	6		CAPACITOR-FXD 3.3UF+-20% 15VDC TA	56289	150D335X0015A2
A1C70	0180-0375	4		CAPACITOR-FXD 68UF+-10% 20VDC TA	56289	150D686X0020B2
A1C72	0160-2055	9		CAPACITOR-FXD .01UF +80-20% 100VDC CER	28480	0160-2055

See introduction to this section for ordering information  
 \*Indicates factory selected value

Table 6-3. Replaceable Parts

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
A1C73	0180-1714	7	2	CAPACITOR-FXD 330UF+-10% 6VDC TA	56289	1500337X900682
A1C74	0180-1714	7		CAPACITOR-FXD 330UF+-10% 6VDC TA	56289	1500337X900682
A1C75	0180-0228	6	10	CAPACITOR-FXD 22UF+-10% 15VDC TA	56289	1500226X901582
A1C76	0180-0228	6		CAPACITOR-FXD 22UF+-10% 15VDC TA	56289	1500226X901582
A1C77	0180-0210	6		CAPACITOR-FXD 3.3UF+-20% 15VDC TA	56289	1500335X001542
A1C78	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A1C79	0160-2055	9		CAPACITOR-FXD .01UF +80-20% 100VDC CER	26480	0160-2055
A1C80	0160-3558	9	15	CAPACITOR-FXD .1UF +-20% 50VDC CER	26480	0160-3558
A1C81	0160-2055	9		CAPACITOR-FXD .01UF +80-20% 100VDC CER	26480	0160-2055
A1C82	0160-2261	9	4	CAPACITOR-FXD 15PF +-5% 500VDC CER 0+-30	26480	0160-2261
A1C83	0121-0451	3		CAPACITOR-V TRMR=AIR 1.7-11PF 250V	74970	187-0106-005
A1C84	0160-2262	0		CAPACITOR-FXD 16PF +-5% 500VDC CER 0+-30	26480	0160-2262
A1C85	0160-2200	6	8	CAPACITOR-FXD 43PF +-5% 300VDC MICA	26480	0160-2200
A1C86	0121-0451	3		CAPACITOR-V TRMR=AIR 1.7-11PF 250V	74970	187-0106-005
A1C87	0160-2241	5	3	CAPACITOR-FXD 2.2PF +--.25PF 500VDC CER	26480	0160-2241
A1C88	0140-0204	4	10	CAPACITOR-FXD 47PF +-5% 500VDC MICA	72136	DM15E470J0500MV1CR
A1C89	0121-0451	3		CAPACITOR-V TRMR=AIR 1.7-11PF 250V	74970	187-0106-005
A1C90	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A1C91	0160-2306	3		CAPACITOR-FXD 27PF +-5% 300VDC MICA	26480	0160-2306
A1C92	0121-0451	3		CAPACITOR-V TRMR=AIR 1.7-11PF 250V	74970	187-0106-005
A1C93	0160-0229	7	8	CAPACITOR-FXD 33UF+-10% 10VDC TA	56289	1500336X901062
A1C94	0160-0210	6		CAPACITOR-FXD 3.3UF+-20% 15VDC TA	56289	1500335X001542
A1C95	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A1C96	0180-0210	6		CAPACITOR-FXD 3.3UF+-20% 15VDC TA	56289	1500335X001542
A1C97	0180-0166	9	1	CAPACITOR-FXD 60UF+-20% 6VDC TA	56289	1500606X000662
A1C98	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A1C99	0160-3829	7	1	CAPACITOR-FXD .47UF +-10% 50VDC	26480	0160-3829
A1C100	0160-2055	9		CAPACITOR-FXD .01UF +80-20% 100VDC CER	26480	0160-2055
A1C101	0160-2150	5		CAPACITOR-FXD 33PF +-5% 300VDC MICA	26480	0160-2150
A1C102	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A1C103	0180-0210	6		CAPACITOR-FXD 3.3UF+-20% 15VDC TA	56289	1500335X001542
A1C104	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A1C105	0180-0210	6		CAPACITOR-FXD 3.3UF+-20% 15VDC TA	56289	1500335X001542
A1C106	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A1C107	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A1C108	0160-0128	3		CAPACITOR-FXD 2.2UF +-20% 50VDC CER	26480	0160-0128
A1C109	0160-2605	5	1	CAPACITOR-FXD .02UF +80-20% 25VDC CER	26480	0160-2605
A1C110	0160-2241	5		CAPACITOR-FXD 2.2PF +--.25PF 500VDC CER	26480	0160-2241
A1C111	0160-0128	3		CAPACITOR-FXD 2.2UF +-20% 50VDC CER	26480	0160-0128
A1C112	0180-1701	2		CAPACITOR-FXD 6.8UF+-20% 6VDC TA	56289	1500685X000642
A1C113	0160-0174	9	5	CAPACITOR-FXD .47UF +80-20% 25VDC CER	26480	0160-0174
A1C114	0160-2055	9		CAPACITOR-FXD .01UF +80-20% 100VDC CER	26480	0160-2055
A1C115	0160-2055	9		CAPACITOR-FXD .01UF +80-20% 100VDC CER	26480	0160-2055
A1C116	0160-2055	9		CAPACITOR-FXD .01UF +80-20% 100VDC CER	26480	0160-2055
A1C117	0160-2055	9		CAPACITOR-FXD .01UF +80-20% 100VDC CER	26480	0160-2055
A1C118	0160-2055	9		CAPACITOR-FXD .01UF +80-20% 100VDC CER	26480	0160-2055
A1C119	0160-2055	9		CAPACITOR-FXD .01UF +80-20% 100VDC CER	26480	0160-2055
A1C120	0160-3874	2	2	CAPACITOR-FXD 10PF +-5PF 200VDC CER	26480	0160-3874
A1C121	0180-0098	8	3	CAPACITOR-FXD 100UF+-20% 20VDC TA	56289	1500107X002052
A1C122	0180-0197	8		CAPACITOR-FXD 2.2UF+-10% 20VDC TA	56289	1500225X902042
A1C123	0180-0197	8		CAPACITOR-FXD 2.2UF+-10% 20VDC TA	56289	1500225X902042
A1C124	0160-2055	9		CAPACITOR-FXD .01UF +80-20% 100VDC CER	26480	0160-2055
A1C125	0180-0098	8		CAPACITOR-FXD 100UF+-20% 20VDC TA	56289	1500107X002052
A1CR1	1901-0040	1	58	DIODE-SWITCHING 30V 50MA 2NS DO-35	26480	1901-0040
A1CR2	1901-0040	1		DIODE-SWITCHING 30V 50MA 2NS DO-35	26480	1901-0040
A1CR3	1901-0025	2	2	DIODE-GEN PRP 100V 200MA DO-7	26480	1901-0025
A1CR4	1901-0025	2		DIODE-GEN PRP 100V 200MA DO-7	26480	1901-0025
A1CR5	1902-0777	3	6	DIODE-ZNR 1N825 6.2V 5% DO-7 PDS.4W	04713	1N825
A1CR6	1902-3182	0	2	DIODE-ZNR 12.1V 5% DO-7 PDS.4W TC+-.064%	26480	1902-3182
A1CR7	1902-3182	0		DIODE-ZNR 12.1V 5% DO-7 PDS.4W TC+-.064%	26480	1902-3182
A1CR8	1901-0050	3	20	DIODE-SWITCHING 80V 200MA 2NS DO-35	26480	1901-0050
A1CR9	1901-0050	3		DIODE-SWITCHING 80V 200MA 2NS DO-35	26480	1901-0050
A1CR10	1902-0064	1	5	DIODE-ZNR 7.5V 5% DO-7 PDS.4W TC+-.05%	26480	1902-0064
A1CR13	1901-0050	3		DIODE-SWITCHING 80V 200MA 2NS DO-35	26480	1901-0050
A1CR15	1901-0050	3		DIODE-SWITCHING 80V 200MA 2NS DO-35	26480	1901-0050
A1CR16	1902-3085	2	1	DIODE-ZNR 4.75V 5% DO-7 PDS.4W TC+-.019%	26480	1902-3085
A1CR17	1901-0050	3		DIODE-SWITCHING 80V 200MA 2NS DO-35	26480	1901-0050
A1CR18	1901-0518	8	8	DIODE-SCHOTTKY	26480	1901-0518
A1CR19	1901-0518	8		DIODE-SCHOTTKY	26480	1901-0518
A1CR20	1901-0518	8		DIODE-SCHOTTKY	26480	1901-0518
A1CR21	1901-0040	1		DIODE-SWITCHING 30V 50MA 2NS DO-35	26480	1901-0040
A1CR22	1901-0040	1		DIODE-SWITCHING 30V 50MA 2NS DO-35	26480	1901-0040
A1CR23	1901-0040	1		DIODE-SWITCHING 30V 50MA 2NS DO-35	26480	1901-0040
A1CR24	1902-0064	1		DIODE-ZNR 7.5V 5% DO-7 PDS.4W TC+-.05%	26480	1902-0064
A1CR25	1902-0064	1		DIODE-ZNR 7.5V 5% DO-7 PDS.4W TC+-.05%	26480	1902-0064
A1CR26	1902-0064	1		DIODE-ZNR 7.5V 5% DO-7 PDS.4W TC+-.05%	26480	1902-0064
A1CR27	1901-0040	1		DIODE-SWITCHING 30V 50MA 2NS DO-35	26480	1901-0040
A1CR28	1901-0040	1		DIODE-SWITCHING 30V 50MA 2NS DO-35	26480	1901-0040

See introduction to this section for ordering information  
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Table 6-3. Replaceable Parts

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
A1CR29	1902-0057	2	1	DIODE-ZNR 6.49V 5% DO-7 PD=.4W TC=+.029X	28480	1902-0057
A1CR30	1990-0486	6	9	LED-VISIBLE LUM-INT=1MCD IF=20MA=MAX	28480	5082-4684
A1CR31	1902-3190	0	2	DIODE-ZNR 13V 5% DO-7 PD=.4W TC=+.06X	28480	1902-3190
A1CR32	1902-3190	0		DIODE-ZNR 13V 5% DO-7 PD=.4W TC=+.06X	28480	1902-3190
A1CR33	1901-0662	3	4	DIODE=PWR RECT 100V 6A	04713	MR751
A1CR34	1901-0662	3		DIODE=PWR RECT 100V 6A	04713	MR751
A1J1	1250-1596	3	1	CONNECTOR-BNC SPES	28480	1250-1596
A1J3	1250-1368	7	10	CONNECTOR-RF SMB M PC 50-OHM	28480	1250-1368
A1J4	1251-1636	4	8	CONNECTOR=SGL CONT SKT .04-IN-BSC-SZ RND	28480	1251-1636
A1J5	1251-1636	4		CONNECTOR=SGL CONT SKT .04-IN-BSC-SZ RND	28480	1251-1636
A1J6	1200-0474	9		SOCKET-IC 14-CONT DIP-SLDR	28480	1200-0474
A1J7	1251-1636	4		CONNECTOR=SGL CONT SKT .04-IN-BSC-SZ RND	28480	1251-1636
A1K1	0490-0508	2	13	RELAY 2C 12VDC-COIL .5A 28VDC	28480	0490-0508
A1K2	0490-0508	2		RELAY 2C 12VDC-COIL .5A 28VDC	28480	0490-0508
A1K3	0490-0508	2		RELAY 2C 12VDC-COIL .5A 28VDC	28480	0490-0508
A1K4	0490-0508	2		RELAY 2C 12VDC-COIL .5A 28VDC	28480	0490-0508
A1K5	0490-0508	2		RELAY 2C 12VDC-COIL .5A 28VDC	28480	0490-0508
A1K6	0490-0508	2		RELAY 2C 12VDC-COIL .5A 28VDC	28480	0490-0508
A1K7	0490-0508	2		RELAY 2C 12VDC-COIL .5A 28VDC	28480	0490-0508
A1K8	0490-0508	2		RELAY 2C 12VDC-COIL .5A 28VDC	28480	0490-0508
A1K9	0490-0508	2		RELAY 2C 12VDC-COIL .5A 28VDC	28480	0490-0508
A1K11	0490-0508	2		RELAY 2C 12VDC-COIL .5A 28VDC	28480	0490-0508
A1K12	0490-0508	2		RELAY 2C 12VDC-COIL .5A 28VDC	28480	0490-0508
A1K13	0490-0508	2		RELAY 2C 12VDC-COIL .5A 28VDC	28480	0490-0508
A1K14	0490-0508	2		RELAY 2C 12VDC-COIL .5A 28VDC	28480	0490-0508
A1L1	9140-0308	8	1	COIL-MLD 120NH 5% Q=50 .155DX,375LG-NOM	28480	9140-0308
A1L2	9100-3560	6	17	COIL-MLD 5.6UH 5% Q=45 .155DX,375LG-NOM	28480	9100-3560
A1L3	9140-0144	0	51	COIL-MLD 4.7UH 10% Q=45 .095DX,25LG-NOM	28480	9140-0144
A1L4	9140-0144	0		COIL-MLD 4.7UH 10% Q=45 .095DX,25LG-NOM	28480	9140-0144
A1L5	9140-0144	0		COIL-MLD 4.7UH 10% Q=45 .095DX,25LG-NOM	28480	9140-0144
A1L6	9140-0144	0		COIL-MLD 4.7UH 10% Q=45 .095DX,25LG-NOM	28480	9140-0144
A1L7	9140-0144	0		COIL-MLD 4.7UH 10% Q=45 .095DX,25LG-NOM	28480	9140-0144
A1L8	9140-0144	0		COIL-MLD 4.7UH 10% Q=45 .095DX,25LG-NOM	28480	9140-0144
A1L9	9140-0144	0		COIL-MLD 4.7UH 10% Q=45 .095DX,25LG-NOM	28480	9140-0144
A1L11	9140-0144	0		COIL-MLD 4.7UH 10% Q=45 .095DX,25LG-NOM	28480	9140-0144
A1L12	9140-0144	0		COIL-MLD 4.7UH 10% Q=45 .095DX,25LG-NOM	28480	9140-0144
A1L13	9140-0144	0		COIL-MLD 4.7UH 10% Q=45 .095DX,25LG-NOM	28480	9140-0144
A1L14	9140-0144	0		COIL-MLD 4.7UH 10% Q=45 .095DX,25LG-NOM	28480	9140-0144
A1L15	9140-0144	0		COIL-MLD 4.7UH 10% Q=45 .095DX,25LG-NOM	28480	9140-0144
A1L16	9140-0144	0		COIL-MLD 4.7UH 10% Q=45 .095DX,25LG-NOM	28480	9140-0144
A1L18	9100-0685	0	1	COIL .156DX,625LG-NOM	28480	9100-0685
A1L19	9100-4041	0	3	COIL 11.5T	28480	9100-4041
A1L20	9100-2247	4	13	COIL-MLD 100NH 10% Q=34 .095DX,25LG-NOM	28480	9100-2247
A1L21	9100-4041	0		COIL 11.5T	28480	9100-4041
A1L22	9140-0144	0		COIL-MLD 4.7UH 10% Q=45 .095DX,25LG-NOM	28480	9140-0144
A1L23	9140-0144	0		COIL-MLD 4.7UH 10% Q=45 .095DX,25LG-NOM	28480	9140-0144
A1L24	9140-0144	0		COIL-MLD 4.7UH 10% Q=45 .095DX,25LG-NOM	28480	9140-0144
A1L25	9140-0144	0		COIL-MLD 4.7UH 10% Q=45 .095DX,25LG-NOM	28480	9140-0144
A1L26	9140-0144	0		COIL-MLD 4.7UH 10% Q=45 .095DX,25LG-NOM	28480	9140-0144
A1L27	9140-0144	0		COIL-MLD 4.7UH 10% Q=45 .095DX,25LG-NOM	28480	9140-0144
A1L28	9100-3560	6		COIL-MLD 5.6UH 5% Q=45 .155DX,375LG-NOM	28480	9100-3560
A1L29	9100-3560	6		COIL-MLD 5.6UH 5% Q=45 .155DX,375LG-NOM	28480	9100-3560
A1L30	9140-0158	6	7	COIL-MLD 1UH 10% Q=32 .095DX,25LG-NOM	28480	9140-0158
A1L31	9100-3560	6		COIL-MLD 5.6UH 5% Q=45 .155DX,375LG-NOM	28480	9100-3560
A1L32	9100-3560	6		COIL-MLD 5.6UH 5% Q=45 .155DX,375LG-NOM	28480	9100-3560
A1L33	9100-3560	6		COIL-MLD 5.6UH 5% Q=45 .155DX,375LG-NOM	28480	9100-3560
A1L34	9100-3560	6		COIL-MLD 5.6UH 5% Q=45 .155DX,375LG-NOM	28480	9100-3560
A1L35	9100-3560	6		COIL-MLD 5.6UH 5% Q=45 .155DX,375LG-NOM	28480	9100-3560
A1L36	9100-3560	6		COIL-MLD 5.6UH 5% Q=45 .155DX,375LG-NOM	28480	9100-3560
A1L37	9100-3560	6		COIL-MLD 5.6UH 5% Q=45 .155DX,375LG-NOM	28480	9100-3560
A1L38	9100-3560	6		COIL-MLD 5.6UH 5% Q=45 .155DX,375LG-NOM	28480	9100-3560
A1L39	9140-0144	0		COIL-MLD 4.7UH 10% Q=45 .095DX,25LG-NOM	28480	9140-0144
A1Q1	1853-0066	7	6	TRANSISTOR PNP SI TO-92 PD=625MW	28480	1853-0066
A1Q2	1854-0071	8	24	TRANSISTOR NPN SI PD=300MW FT=200MHZ	28480	1854-0071
A1Q3	1854-0071	7		TRANSISTOR NPN SI PD=300MW FT=200MHZ	28480	1854-0071
A1Q4	1853-0066	8		TRANSISTOR PNP SI TO-92 PD=625MW	28480	1853-0066
A1Q5	1853-0066	8		TRANSISTOR PNP SI TO-92 PD=625MW	28480	1853-0066
A1Q6	1855-026A	6	1	TRANSISTOR J-FET N-CHAN D-MODE TO-92 SI	17856	J309
A1Q7	1854-0296	8	5	TRANSISTOR NPN SI TO-92 PD=310MA	28480	1854-0296
A1Q8	1854-0401	7	1	TRANSISTOR NPN SI TO-72 PD=175MA	28480	1854-0401
A1Q9	1853-0354	7	6	TRANSISTOR PNP SI TO-92 PD=550MW	28480	1853-0354
A1Q10	1854-0351	6	12	TRANSISTOR NPN SI TO-18 PD=360MW	28480	1854-0351

See introduction to this section for ordering information  
 \*Indicates factory selected value



Table 6-3. Replaceable Parts

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
A1Q1	1853-0354	7		TRANSISTOR PNP SI TO-92 PD=350MW	28480	1853-0354
A1Q2	1854-0305	0	7	TRANSISTOR NPN SI TO-18 PD=400MW	28480	1854-0305
A1Q3	1854-0404	7	4	TRANSISTOR NPN 2N930 SI TO-39 PD=1W	01928	2N930
A1Q4	1854-0305	0		TRANSISTOR NPN SI TO-18 PD=400MW	28480	1854-0305
A1Q15	1854-0247	9	2	TRANSISTOR NPN SI TO-39 PD=1W FT=800MHZ	28480	1854-0247
A1Q16	1854-0485	7	11	TRANSISTOR NPN SI TO-104 PD=175MW	28480	1854-0485
A1Q17	1854-0296	8		TRANSISTOR NPN SI TO-92 PD=310MW	28480	1854-0296
A1Q18	1854-0305	0		TRANSISTOR NPN SI TO-18 PD=400MW	28480	1854-0305
A1Q19	1853-0354	7		TRANSISTOR PNP SI TO-92 PD=350MW	28480	1853-0354
A1Q20	1853-0066	8		TRANSISTOR PNP SI TO-92 PD=625MW	28480	1853-0066
A1Q21	1854-0071	7		TRANSISTOR NPN SI PD=300MW FT=200MHZ	28480	1854-0071
A1Q22	1853-0066	8		TRANSISTOR PNP SI TO-92 PD=625MW	28480	1853-0066
A1Q23	1853-0066	8		TRANSISTOR PNP SI TO-92 PD=625MW	28480	1853-0066
A1Q24	1853-0051	1	1	TRANSISTOR PNP 2N4037 SI TO-5 PD=1W	01928	2N4037
A1Q25	1854-0039	7		TRANSISTOR NPN 2N3053S SI TO-39 PD=1W	01928	2N3053S
A1R1	0760-0026	2	1	RESISTOR 75 2% 1W MO TC=0+200	28480	0760-0026
A1R2	0757-0801	4	1	RESISTOR 150 1% .5W F TC=0+100	28480	0757-0801
A1R3	0683-6805	3	18	RESISTOR 68 5% .25W FC TC=400/+500	01121	C86805
A1R4	0683-1025	9	169	RESISTOR 1K 5% .25W FC TC=400/+600	01121	C81025
A1R5	0683-1025	9		RESISTOR 1K 5% .25W FC TC=400/+600	01121	C81025
A1R6	0683-6805	3		RESISTOR 68 5% .25W FC TC=400/+500	01121	C86805
A1R7	0683-4735	4	14	RESISTOR 47K 5% .25W FC TC=400/+800	01121	C84735
A1R8	0683-4735	4		RESISTOR 47K 5% .25W FC TC=400/+800	01121	C84735
A1R9	0683-6805	3		RESISTOR 68 5% .25W FC TC=400/+500	01121	C86805
A1R11	0698-4840	3	1	RESISTOR 115 1% .5W F TC=0+100	28480	0698-4840
A1R12	0757-0003	8	1	RESISTOR 26.1 1% .5W F TC=0+100	28480	0757-0003
A1R13	0698-5019	0	1	RESISTOR 32.4 1% .5W F TC=0+100	28480	0698-5019
A1R14	0683-6805	3		RESISTOR 68 5% .25W FC TC=400/+500	01121	C86805
A1R15	0757-0167	5	1	RESISTOR 143 1% .25W F TC=0+100	24546	C5-1/4-T0-143R-F
A1R16	0698-8154	0	1	RESISTOR 75 .1% 1W F TC=0+25	07716	BR5-1-T9-75R0-B
A1R17	0757-0410	1	2	RESISTOR 301 1% .125W F TC=0+100	24546	C4-1/8-T0-301R-F
A1R18	0683-7505	2	6	RESISTOR 75 5% .25W FC TC=400/+500	01121	C87505
A1R19	0683-6805	3		RESISTOR 68 5% .25W FC TC=400/+500	01121	C86805
A1R20	0683-2225	3		RESISTOR 2.2K 5% .25W FC TC=400/+700	01121	C82225
A1R21	0683-7505	2		RESISTOR 75 5% .25W FC TC=400/+500	01121	C87505
A1R22	0757-0410	1		RESISTOR 301 1% .125W F TC=0+100	24546	C4-1/8-T0-301R-F
A1R23	0683-7505	2		RESISTOR 75 5% .25W FC TC=400/+500	01121	C87505
A1R24	0683-6805	3		RESISTOR 68 5% .25W FC TC=400/+500	01121	C86805
A1R25	0683-6805	3		RESISTOR 68 5% .25W FC TC=400/+500	01121	C86805
A1R26	0698-6979	3	2	RESISTOR 111.1K .1% .125W F TC=0+25	28480	0698-6979
A1R27	0698-6305	9	2	RESISTOR 900K .1% .25W F TC=0+25	28480	0698-6305
A1R28	0683-6805	3		RESISTOR 68 5% .25W FC TC=400/+500	01121	C86805
A1R29	0698-6979	3		RESISTOR 111.1K .1% .125W F TC=0+25	28480	0698-6979
A1R31	0698-6305	9		RESISTOR 900K .1% .25W F TC=0+25	28480	0698-6305
A1R32	0683-2205	9	30	RESISTOR 22 5% .25W FC TC=400/+500	01121	C82205
A1R33	0698-3225	6	1	RESISTOR 1.43K 1% .125W F TC=0+100	24546	C4-1/8-T0-1431-F
A1R34	0683-1045	3	26	RESISTOR 100K 5% .25W FC TC=400/+800	01121	C81045
A1R35	0683-1025	9		RESISTOR 1K 5% .25W FC TC=400/+600	01121	C81025
A1R36	0698-4467	0	1	RESISTOR 1.05K 1% .125W F TC=0+100	24546	C4-1/8-T0-1051-F
A1R37	0698-4375	9	1	RESISTOR 30.9 1% .125W F TC=0+100	03888	PME55-1/8-T0-30R9-F
A1R38	0698-3262	1	1	RESISTOR 40.2 1% .125W F TC=0+100	24546	C4-1/8-T0-4022-F
A1R39	2100-3296	8	2	RESISTOR-TRMR 1K 10% C TOP-ADJ 17-TRN	28480	2100-3296
A1R40	0683-6225	1	3	RESISTOR 6.2K 5% .25W FC TC=400/+700	01121	C86225
A1R41	0683-1035	1	87	RESISTOR 10K 5% .25W FC TC=400/+700	01121	C81035
A1R42	0683-6825	7	24	RESISTOR 6.8K 5% .25W FC TC=400/+700	01121	C86825
A1R43	0698-4425	0	2	RESISTOR 1.54K 1% .125W F TC=0+100	24546	C4-1/8-T0-1541-F
A1R44	0698-0421	6	3	RESISTOR 249 1% .125W F TC=0+100	24546	C4-1/8-T0-249R-F
A1R45	0683-2245	7	6	RESISTOR 220K 5% .25W FC TC=800/+900	01121	C82245
A1R46	0683-2245	7		RESISTOR 220K 5% .25W FC TC=800/+900	01121	C82245
A1R47	0683-1015	7	64	RESISTOR 100 5% .25W FC TC=400/+500	01121	C81015
A1R48	0683-1015	7		RESISTOR 100 5% .25W FC TC=400/+500	01121	C81015
A1R49	0683-1015	7		RESISTOR 100 5% .25W FC TC=400/+500	01121	C81015
A1R50	0698-4398	6	1	RESISTOR 86.6 1% .125W F TC=0+100	24546	C4-1/8-T0-866R-F
A1R51	0683-1015	7		RESISTOR 100 5% .25W FC TC=400/+500	01121	C81015
A1R52	2100-3345	8	1	RESISTOR-TRMR 10 10% C TOP-ADJ 17-TRN	28480	2100-3345
A1R53	0683-1025	9		RESISTOR 1K 5% .25W FC TC=400/+600	01121	C81025
A1R54	0683-1025	9		RESISTOR 1K 5% .25W FC TC=400/+600	01121	C81025
A1R55	0683-1025	9		RESISTOR 1K 5% .25W FC TC=400/+600	01121	C81025
A1R56	0683-1025	9		RESISTOR 1K 5% .25W FC TC=400/+600	01121	C81025
A1R57	0698-4456	7	1	RESISTOR 549 1% .125W F TC=0+100	24546	C4-1/8-T0-549R-F
A1R58	0683-6825	7		RESISTOR 6.8K 5% .25W FC TC=400/+700	01121	C86825
A1R59	0683-1025	9		RESISTOR 1K 5% .25W FC TC=400/+600	01121	C81025
A1R60	0698-4407	8	4	RESISTOR 118 1% .125W F TC=0+100	24546	C4-1/8-T0-118R-F
A1R61	0683-6825	7		RESISTOR 6.8K 5% .25W FC TC=400/+700	01121	C86825

See introduction to this section for ordering information  
 \*Indicates factory selected value

Table 6-3. Replaceable Parts

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
A1R62	0683-1015	7	147	RESISTOR 100 5% .25W FC TC=-400/+500	01121	CB1015
A1R63	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	CB4705
A1R64	0683-1035	1		RESISTOR 10K 5% .25W FC TC=-400/+700	01121	CB1035
A1R65	0683-4705	6		RESISTOR 47 5% .25W FC TC=-400/+500	01121	CB4705
A1R66	0683-1015	7		RESISTOR 100 5% .25W FC TC=-400/+500	01121	CB1015
A1R67	0683-1035	1	34	RESISTOR 10K 5% .25W FC TC=-400/+700	01121	CB1035
A1R68	0683-1035	1		RESISTOR 10K 5% .25W FC TC=-400/+700	01121	CB1035
A1R69	0683-4735	4		RESISTOR 47K 5% .25W FC TC=-400/+800	01121	CB4735
A1R71	0683-4735	4		RESISTOR 47K 5% .25W FC TC=-400/+800	01121	CB4735
A1R72	0683-5105	4		RESISTOR 51 5% .25W FC TC=-400/+500	01121	CB5105
A1R73	0683-4735	4	1	RESISTOR 47K 5% .25W FC TC=-400/+800	01121	CB4735
A1R74	0683-1045	3		RESISTOR 100K 5% .25W FC TC=-400/+800	01121	CB1045
A1R75	0683-4735	4		RESISTOR 47K 5% .25W FC TC=-400/+800	01121	CB4735
A1R76	0683-1035	1		RESISTOR 10K 5% .25W FC TC=-400/+700	01121	CB1035
A1R78	0698-6369	5		RESISTOR 1M .1% .25W F TC=0+-25	28480	0698-6369
A1R81	0683-5115	6	8	RESISTOR 510 5% .25W FC TC=-400/+600	01121	CB5115
A1R82	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	CB4705
A1R83	0683-4725	2		RESISTOR 4.7K 5% .25W FC TC=-400/+700	01121	CB4725
A1R84	0683-4725	2		RESISTOR 4.7K 5% .25W FC TC=-400/+700	01121	CB4725
A1R85	0683-1035	1		RESISTOR 10K 5% .25W FC TC=-400/+700	01121	CB1035
A1R86	0698-4442	1	3	RESISTOR 4.42K 1% .125W F TC=0+-100	24546	C4=1/8-T0=4421-F
A1R87	0698-4407	8		RESISTOR 118 1% .125W F TC=0+-100	24546	C4=1/8-T0=118R-F
A1R88	0698-4407	8		RESISTOR 118 1% .125W F TC=0+-100	24546	C4=1/8-T0=118R-F
A1R89	0683-9135	8		RESISTOR 91K 5% .25W FC TC=-400/+800	01121	CB9135
A1R91	0683-9135	8		RESISTOR 91K 5% .25W FC TC=-400/+800	01121	CB9135
A1R92	0757-0393	9	1	RESISTOR 47.5 1% .125W F TC=0+-100	24546	C4=1/8-T0=47R5-F
A1R93	0698-4411	4		RESISTOR 140 1% .125W F TC=0+-100	24546	C4=1/8-T0=140R-F
A1R94	0683-6805	3		RESISTOR 68 5% .25W FC TC=-400/+500	01121	CB6805
A1R95	0698-3437	2		RESISTOR 133 1% .125W F TC=0+-100	24546	C4=1/8-T0=133R-F
A1R96	0698-4399	7		RESISTOR 88.7 1% .125W F TC=0+-100	24546	C4=1/8-T0=88R7-F
A1R97	0683-6805	3	1	RESISTOR 68 5% .25W FC TC=-400/+500	01121	CB6805
A1R98	0698-4561	5		RESISTOR 118 1% .25W F TC=0+-100	28480	0698-4561
A1R99	0698-1149	5		RESISTOR 86.6 1% .25W F TC=0+-100	24546	C5=1/4-T0=86R2-F
A1R101	0698-4407	8		RESISTOR 118 1% .125W F TC=0+-100	24546	C4=1/8-T0=118R-F
A1R102	0683-6805	3		RESISTOR 68 5% .25W FC TC=-400/+500	01121	CB6805
A1R103	0757-0262	5	2	RESISTOR 221 1% .125W F TC=0+-100	24546	C4=1/8-T0=221R-F
A1R104	0698-4377	1		RESISTOR 37.4 1% .125W F TC=0+-100	24546	C4=1/8-T0=37R4-F
A1R105	0757-0262	5		RESISTOR 221 1% .125W F TC=0+-100	24546	C4=1/8-T0=221R-F
A1R106	0683-6805	3		RESISTOR 68 5% .25W FC TC=-400/+500	01121	CB6805
A1R107	0698-4546	6		RESISTOR 63.4 1% .25W F TC=0+-100	24546	C5=1/4-T0=63R4-F
A1R108	2100-3288	8	1	RESISTOR=TRMR 50 20% C TOP-ADJ 17-TRN	28480	2100-3288
A1R109	0698-4415	8		RESISTOR 165 1% .125W F TC=0+-100	24546	C4=1/8-T0=165R-F
A1R110	2100-3210	6		RESISTOR=TRMR 10K 10% C TOP-ADJ 1-TRN	28480	2100-3210
A1R111	0683-6805	3		RESISTOR 68 5% .25W FC TC=-400/+500	01121	CB6805
A1R112	0683-4705	4		RESISTOR 47 5% .5W CC TC=0+412	01121	EB4705
A1R113	8150-3375	5	1	WIRE 22AWG W/BK PVC 1X22 80C	28480	8150-3375
A1R114	0683-1035	1		RESISTOR 10K 5% .25W FC TC=-400/+700	01121	CB1035
A1R115	0698-4453	4		RESISTOR 402 1% .125W F TC=0+-100	24546	C4=1/8-T0=402R-F
A1R116	0683-1035	1		RESISTOR 10K 5% .25W FC TC=-400/+700	01121	CB1035
A1R117	0698-0085	0		RESISTOR 2.61K 1% .125W F TC=0+-100	24546	C4=1/8-T0=2611-F
A1R118	0757-0407	6	7	RESISTOR 200 1% .125W F TC=0+-100	24546	C4=1/8-T0=201-F
A1R119	0757-0407	6		RESISTOR 200 1% .125W F TC=0+-100	24546	C4=1/8-T0=201-F
A1R120	0683-6805	3		RESISTOR 68 5% .25W FC TC=-400/+500	01121	CB6805
A1R121	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	CB4705
A1R122	0683-2225	3		RESISTOR 2.2K 5% .25W FC TC=-400/+700	01121	CB2225
A1R123	0683-2715	6	13	RESISTOR 270 5% .25W FC TC=-400/+600	01121	CB2715
A1R124	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
A1R125	0698-4453	4		RESISTOR 402 1% .125W F TC=0+-100	24546	C4=1/8-T0=402R-F
A1R126	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	CB4705
A1R127	0683-1035	1		RESISTOR 10K 5% .25W FC TC=-400/+700	01121	CB1035
A1R128	0683-1015	7	1	RESISTOR 100 5% .25W FC TC=-400/+500	01121	CB1015
A1R129	0687-3311	8		RESISTOR 330 10% .5W CC TC=0+529	01121	EB3311
A1R130	0683-2215	1		RESISTOR 220 5% .25W FC TC=-400/+600	01121	CB2215
A1R131	2100-3296	8		RESISTOR=TRMR 1K 10% C TOP-ADJ 17-TRN	28480	2100-3296
A1R132	0698-4414	7		RESISTOR 158 1% .125W F TC=0+-100	24546	C4=1/8-T0=158R-F
A1R133	0698-4121	3	2	RESISTOR 11.3K 1% .125W F TC=0+-100	24546	C4=1/8-T0=1132-F
A1R134	0683-0275	9		RESISTOR 2.7 5% .25W FC TC=-400/+500	01121	CB275
A1R135	0698-3558	8		RESISTOR 4.02K 1% .125W F TC=0+-100	24546	C4=1/8-T0=4021-F
A1R136	0683-0335	2		RESISTOR 3.3 5% .25W FC TC=-400/+500	01121	CB335
A1R137	0698-4499	8		RESISTOR 54.9K 1% .125W F TC=0+-100	24546	C4=1/8-T0=5492-F
A1R138	0757-0434	9	2	RESISTOR 3.65K 1% .125W F TC=0+-100	24546	C4=1/8-T0=3651-F
A1R139	0683-0335	2		RESISTOR 3.3 5% .25W FC TC=-400/+500	01121	CB335
A1R140	0683-1225	1		RESISTOR 1.2K 5% .25W FC TC=-400/+700	01121	CB1225
A1R141	0683-1015	7		RESISTOR 100 5% .25W FC TC=-400/+500	01121	CB1015
A1R142	0683-2205	9		RESISTOR 22 5% .25W FC TC=-400/+500	01121	CB2205

See introduction to this section for ordering information  
 \*Indicates factory selected value



Table 6-3. Replaceable Parts

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
A1R143	0757-0401	0	7	RESISTOR 100 1% .125W F TC=0+/-100	24546	C4=1/8-T0=101-F
A1R144	0757-0401	0		RESISTOR 100 1% .125W F TC=0+/-100	24546	C4=1/8-T0=101-F
A1R145	0683-1045	3		RESISTOR 100K 5% .25W FC TC=400/+800	01121	CB1045
A1R146	0683-4725	2		RESISTOR 4.7K 5% .25W FC TC=400/+700	01121	CB4725
A1R147	0698-3496	3	2	RESISTOR 3.57K 1% .125W F TC=0+/-100	24546	C4=1/8-T0=357R-F
A1R148	0683-3005	9	1	RESISTOR 30 5% .25W FC TC=400/+500	01121	CB3005
A1R149	0683-7515	4	6	RESISTOR 750 5% .25W FC TC=400/+600	01121	CB7515
A1R150	0683-1005	5	11	RESISTOR 10 5% .25W FC TC=400/+500	01121	CB1005
A1R151	0683-1015	7		RESISTOR 100 5% .25W FC TC=400/+500	01121	CB1015
A1R152	0683-1015	7		RESISTOR 100 5% .25W FC TC=400/+500	01121	CB1015
A1R153	0757-0280	3	20	RESISTOR 1K 1% .125W F TC=0+/-100	24546	C4=1/8-T0=1001-F
A1R154	0683-1035	1		RESISTOR 10K 5% .25W FC TC=400/+700	01121	CB1035
A1R155	0683-2045	5	6	RESISTOR 200K 5% .25W FC TC=800/+900	01121	CB2045
A1R156	0683-4705	8		RESISTOR 47 5% .25W FC TC=400/+500	01121	CB4705
A1R157	0683-0365	8	1	RESISTOR 3.6 5% .25W FC TC=400/+500	01121	CB3665
A1R158	0683-6825	7		RESISTOR 6.8K 5% .25W FC TC=400/+700	01121	CB6825
A1R159	0683-2035	3	20	RESISTOR 20K 5% .25W FC TC=400/+800	01121	CB2035
A1R160	0683-4725	2		RESISTOR 4.7K 5% .25W FC TC=400/+700	01121	CB4725
A1R161	0683-2035	3		RESISTOR 20K 5% .25W FC TC=400/+800	01121	CB2035
A1R162	0683-1045	3		RESISTOR 100K 5% .25W FC TC=400/+800	01121	CB1045
A1R163	0683-4705	8		RESISTOR 47 5% .25W FC TC=400/+500	01121	CB4705
A1R164	0683-6825	7		RESISTOR 6.8K 5% .25W FC TC=400/+700	01121	CB6825
A1R165	0683-4745	6	2	RESISTOR 470K 5% .25W FC TC=800/+900	01121	CB4745
A1R166	0683-2035	3		RESISTOR 20K 5% .25W FC TC=400/+800	01121	CB2035
A1R167	0683-1045	3		RESISTOR 100K 5% .25W FC TC=400/+800	01121	CB1045
A1R168	0683-3945	6	2	RESISTOR 390K 5% .25W FC TC=800/+900	01121	CB3945
A1R169	0683-3945	6		RESISTOR 390K 5% .25W FC TC=800/+900	01121	CB3945
A1R170	2100-0558	9	3	RESISTOR-TRMR 20K 10% C TOP-ADJ 1-TRN	28480	2100-0558
A1R171	0683-2035	3		RESISTOR 20K 5% .25W FC TC=400/+800	01121	CB2035
A1R172	0757-0457	6	1	RESISTOR 47.5K 1% .125W F TC=0+/-100	24546	C4=1/8-T0=4752-F
A1R173	2100-3286	6	2	RESISTOR-TRMR 10K 10% C TOP-ADJ 17-TRN	32997	3292N-1=103
A1R174	2100-3286	6		RESISTOR-TRMR 10K 10% C TOP-ADJ 17-TRN	32997	3292N-1=103
A1R175	0683-1025	9		RESISTOR 1K 5% .25W FC TC=400/+600	01121	CB1025
A1R176	0683-1025	9		RESISTOR 1K 5% .25W FC TC=400/+600	01121	CB1025
A1R177	0683-1045	3		RESISTOR 100K 5% .25W FC TC=400/+800	01121	CB1045
A1R178	0683-1035	1		RESISTOR 10K 5% .25W FC TC=400/+700	01121	CB1035
A1R179	0683-2025	1	6A	RESISTOR 2K 5% .25W FC TC=400/+700	01121	CB2025
A1R180	0683-5125	6	14	RESISTOR 5.1K 5% .25W FC TC=400/+700	01121	CB5125
A1R181	0683-1045	3		RESISTOR 100K 5% .25W FC TC=400/+800	01121	CB1045
A1R182	0683-1045	3		RESISTOR 100K 5% .25W FC TC=400/+800	01121	CB1045
A1R183	0683-1045	3		RESISTOR 100K 5% .25W FC TC=400/+800	01121	CB1045
A1R184	0683-1045	3		RESISTOR 100K 5% .25W FC TC=400/+800	01121	CB1045
A1R185	0683-1045	3		RESISTOR 100K 5% .25W FC TC=400/+800	01121	CB1045
A1R186	0683-1045	3		RESISTOR 100K 5% .25W FC TC=400/+800	01121	CB1045
A1R187	0683-1045	3		RESISTOR 100K 5% .25W FC TC=400/+800	01121	CB1045
A1R188	0683-1015	7		RESISTOR 100 5% .25W FC TC=400/+500	01121	CB1015
A1R189	0683-2215	1		RESISTOR 220 5% .25W FC TC=400/+600	01121	CB2215
A1R190	0683-1025	9		RESISTOR 1K 5% .25W FC TC=400/+600	01121	CB1025
A1R191	0683-1015	7		RESISTOR 100 5% .25W FC TC=400/+500	01121	CB1015
A1R192	0683-2215	1		RESISTOR 220 5% .25W FC TC=400/+600	01121	CB2215
A1R193	0683-2225	3		RESISTOR 2.2K 5% .25W FC TC=400/+700	01121	CB2225
A1R194	0683-2225	3		RESISTOR 2.2K 5% .25W FC TC=400/+700	01121	CB2225
A1R195	0683-2225	3		RESISTOR 2.2K 5% .25W FC TC=400/+700	01121	CB2225
A1R196	0683-2225	3		RESISTOR 2.2K 5% .25W FC TC=400/+700	01121	CB2225
A1R197	0683-2225	3		RESISTOR 2.2K 5% .25W FC TC=400/+700	01121	CB2225
A1R198	0683-2225	3		RESISTOR 2.2K 5% .25W FC TC=400/+700	01121	CB2225
A1R199	0683-2225	3		RESISTOR 2.2K 5% .25W FC TC=400/+700	01121	CB2225
A1R201	0683-4735	4		RESISTOR 47K 5% .25W FC TC=400/+800	01121	CB4735
A1R202	0683-4735	4		RESISTOR 47K 5% .25W FC TC=400/+800	01121	CB4735
A1R203	0683-4735	4		RESISTOR 47K 5% .25W FC TC=400/+800	01121	CB4735
A1R204	0683-1065			RESISTOR 10M 5% .25W FC TC=900/+100	01607	CB1065
A1R205	0683-1065			RESISTOR 10M 5% .25W FC TC=900/+100	01607	CB1065
A1T1	9011-1393	9	1	COIL, XFMR-TRIFILAR, .375DIAx, 625HI, ENCAP	28480	9100-1393
A1T2	08552-6024	9	3	TRANSFORMER	28480	08552-6024
A1TP3	1251-2501	4	7	CONNECTOR=8GL CONT SKT .022-IN=HSC-SZ	28480	1251-2501
A1TP3	1251-4045	5		CONNECTOR	28480	1251-4045
A1U1	1858-0004	4	4	TRANSISTOR ARRAY	0192B	CA3049
A1U2	1826-0043	4	14	OP AMP GP TO=99	0192B	CA307T
A1U3	1858-0004	4		TRANSISTOR ARRAY	0192B	CA3049
A1U4	1826-0043	4		OP AMP GP TO=99	0192B	CA307T
A1U5	1826-0043	4		OP AMP GP TO=99	0192B	CA307T
A1U6	1826-0035	4	1	OP AMP LOW-DRIFT TO=99	27014	LM308AH
A1U7	1820-0270	7	1	WIDEBAND AMPL VID TO=100	07263	733HC
A1U8	1826-0111	7	3	OP AMP GP DUAL TO=99	04713	MC1458C
A1U9	1858-0047	5	2	TRANSISTOR ARRAY DA-PIN	13606	ULN=2003A
A1U10	1858-0047	5		TRANSISTOR ARRAY DA-PIN	13606	ULN=2003A

See introduction to this section for ordering information  
 \*Indicates factory selected value

Table 6-3. Replaceable Parts

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
A1U11	1820-0946	4	3	IC GATE CMOS NOR QUAD 2-INP	0192B	CD4001AF
A1U12	1820-0946	4		IC GATE CMOS NOR QUAD 2-INP	0192B	CD4001AF
A1U13	1820-0946	4		IC GATE CMOS NOR QUAD 2-INP	0192B	CD4001AF
A1U14	1820-1145	7	1	IC BFR CMOS INV HEX 1-INP	0192B	CD4049AF
A1U15	1990-0577	6	4	OPTO-ISOLATOR LED-PDIO/XSTR IF=50MA-MAX	28480	5082-4355
A1U16	1990-0577	6		OPTO-ISOLATOR LED-PDIO/XSTR IF=50MA-MAX	28480	5082-4355
A1U17	1990-0577	6		OPTO-ISOLATOR LED-PDIO/XSTR IF=50MA-MAX	28480	5082-4355
A1U18	1990-0444	6	2	OPTO-ISOLATOR LED-PDIO/XSTR IF=25MA-MAX	28480	5082-4351
A1U19	1990-0444	6		OPTO-ISOLATOR LED-PDIO/XSTR IF=25MA-MAX	28480	5082-4351
A1U20	1990-0577	6		OPTO-ISOLATOR LED-PDIO/XSTR IF=50MA-MAX	28480	5082-4355
A1M66	03585-61666	0	1	CABLE ASSEMBLY	28480	03585-61666
A1 MISCELLANEOUS PARTS						
	0340-0060	4	1	TERMINAL-STUD SPCL-FDTHRU PRESS-MTG	28480	0340-0060
	03585-21208	2	1	BAR, CONNECTOR MOUNTING	28480	03585-21208
	1200-0473	8	12	SOCKET-IC 16-CONT DIP DIP-SLDR	28480	1200-0473
	9170-0894	0	4	CORE-SHIELDING BEAD	28480	9170-0894
	1251-0600	0	30	CONNECTOR-SGL CONT PIN 1,14-MM-BSC-SZ SQ	28480	1251-0600
A2	03585-66502	3	1	PC ASSEMBLY, 1ST MIXER	28480	03585-66502
A2C1	0180-1794	4	1	CAPACITOR-FXD 22UF +-10% 35VDC TA	28480	0180-1794
A2C4	0160-3879	7	14	CAPACITOR-FXD .01UF +-20% 100VDC CER	28480	0160-3879
A2C8	0160-3879	7		CAPACITOR-FXD .01UF +-20% 100VDC CER	28480	0160-3879
A2C9	0160-2055	9		CAPACITOR-FXD .01UF +80-20% 100VDC CER	28480	0160-2055
A2C11	0160-2055	9		CAPACITOR-FXD .01UF +80-20% 100VDC CER	28480	0160-2055
A2C12	0160-3879	7		CAPACITOR-FXD .01UF +-20% 100VDC CER	28480	0160-3879
A2C13	0140-0077	9	1	CAPACITOR-FDTHRU 100PF 10% 500V MICA	72982	666-053 0140 101K
A2C14	0160-2395	0	1	CAPACITOR-FXD 360PF +-10% 500VDC MICA	53021	M=100
A2C15	0160-2266	4		CAPACITOR-FXD 24PF +-5% 500VDC CER 0+-30	28480	0160-2266
A2C16	0160-2257	3		CAPACITOR-FXD 10PF +-5% 500VDC CER 0+-60	28480	0160-2257
A2C17	0160-2243	7	1	CAPACITOR-FXD 2.7PF +-0.25PF 500VDC CER	28480	0160-2243
A2CR1	1906-0211	8	1	DIODE-ARRAY VF DIFF=20MV	28480	5082-2831
A2J1	1251-1636	4		CONNECTOR-SGL CONT SKT .04-IN-BSC-SZ RND	28480	1251-1636
A2J2	1250-1314	3	6	CONNECTOR-RF SM-SLD FEM PC 50-OHM	28480	1250-1314
A2J3	1251-1636	4		CONNECTOR-SGL CONT SKT .04-IN-BSC-SZ RND	28480	1251-1636
A2J4	1251-2501	4		CONNECTOR-SGL CONT SKT .022-IN-BSC-SZ	28480	1251-2501
A2J4	1251-4045	5		CONNECTOR	28480	1251-4045
A2J5	1251-4822	6	5	CONNECTOR 3-PIN M POST TYPE	28480	1251-4822
A2J5	1258-0141	8		JUMPER REMOVABLE	28480	1258-0141
A2L1	9100-0539	3	8	COIL-MLD 10UH 5% Q=55 .155DX,375LG-NOM	28480	9100-0539
A2L6	9100-3551	5	8	COIL-MLO 1UH 5% Q=50 .155DX,375LG-NOM	28480	9100-3551
A2L7	03585-32402	1	1	COIL, 25 NH	28480	03585-32402
A2L8	03585-32401	0	1	COIL, 7 NH	28480	03585-32401
A2L9	03585-32403	2	1	INDUCTOR, SHORTED	28480	03585-32403
A2L11	9100-1379	1	1	INDUCTOR, VAR	28480	9100-1379
A2L12	9100-4041	0		COIL 11.5T	28480	9100-4041
A2R1	0683-6805	3		RESISTOR 68 5% .25W FC TC=-400/+500	01121	C86805
A2R3	0683-2215	1		RESISTOR 220 5% .25W FC TC=-400/+600	01121	C82215
A2R4	0683-1615	3	3	RESISTOR 160 5% .25W FC TC=-400/+600	01121	C81615
A2R5	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	C84705
A2R6	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	C84705
A2R7	0683-3305	2	6	RESISTOR 33 5% .25W FC TC=-400/+500	01121	C83305
A2R8	0686-1215	5	1	RESISTOR 120 5% .5W CC TC=0+529	01121	E81215
A2R9	0683-2215	1		RESISTOR 220 5% .25W FC TC=-400/+600	01121	C82215
A2R10	0683-1615	3		RESISTOR 160 5% .25W FC TC=-400/+600	01121	C81615
A2R11	0683-1015	1	2	RESISTOR 100 5% .25W FC TC=-400/+500	01121	C81015
A2R12	0683-1015	1		RESISTOR 100 5% .25W FC TC=-400/+500	01121	C81015
A2R13	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	C84705
A2R14	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	C84705
A2R15	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	C84705
A2R16	0683-1015	7		RESISTOR 100 5% .25W FC TC=-400/+500	01121	C81015
A2R17	0683-1015	7		RESISTOR 100 5% .25W FC TC=-400/+500	01121	C81015
A2R18	0683-2215	1		RESISTOR 220 5% .25W FC TC=-400/+600	01121	C82215
A2R19	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	C81025
A2SH1	8160-0289	5	1	SHIELD	28480	8160-0289
A2T1	08552-6044	1		TRANSFORMER, 6-TURNS	28480	08552-6044
A2T2	9100-4038	1	2	TRANSFORMER BEAD (CORE) WITH CT PRI & SEC	28480	9100-4038
A2T3	9100-4039	6	2	TRANSFORMER-POWER	28480	9100-4039
A2T4	08552-6024	9		TRANSFORMER	28480	08552-6024

See introduction to this section for ordering information  
 \*Indicates factory selected value

Table 6-3. Replaceable Parts

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
A2U1	1858-0015	7	1	TRANSISTOR ARRAY, SPECIAL	28480	1858-0015
				A2 MISCELLANEOUS PARTS		
	03585-00301	2	1	HEAT SINK	28480	03585-00301
	0380-0333	8	4	STANDOFF-RVT-ON .312-IN-LG 4=40THD	00000	ORDER BY DESCRIPTION
	1200-0473	8		SOCKET-IC 16-CONT DIP DIP-SLDR	28480	1200-0473
A3	03585-66503	4	1	100-35 MHZ IF	28480	03585-66503
A3C1	0160-2265	3	4	CAPACITOR-FXD 22PF +-5% 500VDC CER 0+-30	28480	0160-2265
A3C2	0160-2266	4		CAPACITOR-FXD 24PF +-5% 500VDC CER 0+-30	28480	0160-2266
A3C3	0160-2266	4		CAPACITOR-FXD 24PF +-5% 500VDC CER 0+-30	28480	0160-2266
A3C4	0160-2266	4		CAPACITOR-FXD 24PF +-5% 500VDC CER 0+-30	28480	0160-2266
A3C5	0160-2249	3	3	CAPACITOR-FXD 4.7PF +-25PF 500VDC CER	28480	0160-2249
A3C6	0160-2265	3		CAPACITOR-FXD 22PF +-5% 500VDC CER 0+-30	28480	0160-2265
A3C7	0160-2265	3		CAPACITOR-FXD 22PF +-5% 500VDC CER 0+-30	28480	0160-2265
A3C8	0121-0451	3		CAPACITOR-V TRMR-AIR 1.7-11PF 250V	74970	187-0106-005
A3C9	0160-2265	3		CAPACITOR-FXD 22PF +-5% 500VDC CER 0+-30	28480	0160-2265
A3C10	0160-2249	3		CAPACITOR-FXD 4.7PF +-25PF 500VDC CER	28480	0160-2249
A3C11	0160-3847	9	182	CAPACITOR-FXD .01UF +100-0X 50VDC CER	28480	0160-3847
A3C12	0160-3879	7		CAPACITOR-FXD .01UF +-20X 100VDC CER	28480	0160-3879
A3C13	0160-3879	7		CAPACITOR-FXD .01UF +-20X 100VDC CER	28480	0160-3879
A3C14	0150-0029	2	2	CAPACITOR-FXD 1PF +-10X 500VDC TI D10X	28480	0150-0029
A3J1	1251-2501	4		CONNECTOR-SGL CONT SKT .022-IN-BSC-SZ	28480	1251-2501
A3J2	1251-4045	5		CONNECTOR	28480	1251-4045
A3J2	1251-2501	4		CONNECTOR-SGL CONT SKT .022-IN-BSC-SZ	28480	1251-2501
A3J2	1251-4045	5		CONNECTOR	28480	1251-4045
A3L1	9100-1376	8	5	INDUCTOR - VAR	28480	9100-1376
A3L2	9100-1376	8		INDUCTOR - VAR	28480	9100-1376
A3L3	9100-1376	8		INDUCTOR - VAR	28480	9100-1376
A3L4	9140-0263	4	1	COIL-MLD 240NH 5X Q=45 .1550X.375LG-NOM	28480	9140-0263
A3L5	9100-1376	8		INDUCTOR - VAR	28480	9100-1376
A3L6	9100-3548	0	3	COIL-MLD 470NH 5X Q=45 .155DX.375LG-NOM	28480	9100-3548
A3L7	9100-1376	8		INDUCTOR - VAR	28480	9100-1376
A3L8	9140-0144	0		COIL-MLD 4.7UH 10X Q=45 .095DX.25LG-NOM	28480	9140-0144
A3Q1	1854-0305	0		TRANSISTOR NPN SI TO-18 PD=400MW	28480	1854-0305
A3Q2	1854-0305	0		TRANSISTOR NPN SI TO-18 PD=400MW	28480	1854-0305
A3R1	0683-1035	1		RESISTOR 10K 5% .25W FC TC=400/+700	01121	C81035
A3R2	0683-4705	8		RESISTOR 47 5% .25W FC TC=400/+500	01121	C84705
A3R3	0683-1035	1		RESISTOR 10K 5% .25W FC TC=400/+700	01121	C81035
A3R4	0683-6815	5	18	RESISTOR 680 5% .25W FC TC=400/+600	01121	C86815
A3R5	0683-4705	8		RESISTOR 47 5% .25W FC TC=400/+500	01121	C84705
A3R6	0683-1315	0	1	RESISTOR 130 5% .25W FC TC=400/+600	01121	C81315
A3R7	0683-6805	3		RESISTOR 68 5% .25W FC TC=400/+500	01121	C86805
A3R9	0683-0685	5	1	RESISTOR 6.8 5% .25W FC TC=400/+500	01121	C86805
A3R10	0683-0475	1	1	RESISTOR 4.7 5% .25W FC TC=400/+500	01121	C84705
A3TP1	0360-0124	3	141	CONNECTOR-SGL CONT PIN .04-IN-BSC-SZ RND	28480	0360-0124
A4	03585-66504	5	1	PC ASSEMBLY, 2ND MIXER	28480	03585-66504
A4C1	0140-0193	0	3	CAPACITOR-FXD 82PF +-5% 300VDC MICA	72136	DM15E820J0300WV1CR
A4C2	0121-0451	3		CAPACITOR-V TRMR-AIR 1.7-11PF 250V	74970	187-0106-005
A4C3	0121-0451	3		CAPACITOR-V TRMR-AIR 1.7-11PF 250V	74970	187-0106-005
A4C4	0160-3879	7		CAPACITOR-FXD .01UF +-20X 100VDC CER	28480	0160-3879
A4C5	0160-0945	2	3	CAPACITOR-FXD 910PF +-5% 100VDC MICA	28480	0160-0945
A4C6	0160-2205	1	3	CAPACITOR-FXD 120PF +-5% 300VDC MICA	28480	0160-2205
A4C7	0160-3879	7		CAPACITOR-FXD .01UF +-20X 100VDC CER	28480	0160-3879
A4C8	0160-3879	7		CAPACITOR-FXD .01UF +-20X 100VDC CER	28480	0160-3879
A4C9	0140-0192	9	2	CAPACITOR-FXD 68PF +-5% 300VDC MICA	72136	DM15E680J0300WV1CR
A4C10	0140-0191	8	3	CAPACITOR-FXD 56PF +-5% 300VDC MICA	72136	DM15E560J0300WV1CR
A4C11	0140-0190	7	10	CAPACITOR-FXD 39PF +-5% 300VDC MICA	72136	DM15E390J0300WV1CR
A4C12	0160-3879	7		CAPACITOR-FXD .01UF +-20X 100VDC CER	28480	0160-3879
A4C13	0160-3879	7		CAPACITOR-FXD .01UF +-20X 100VDC CER	28480	0160-3879
A4C14	0160-3879	7		CAPACITOR-FXD .01UF +-20X 100VDC CER	28480	0160-3879
A4C15	0160-2306	3		CAPACITOR-FXD 27PF +-5% 300VDC MICA	28480	0160-2306
A4C16	0160-4381	8	3	CAPACITOR-FXD 1.5PF +-25PF 200VDC CER	28480	0160-4381
A4C17	0160-4381	8		CAPACITOR-FXD 1.5PF +-25PF 200VDC CER	28480	0160-4381
A4C18	0160-4381	8		CAPACITOR-FXD 1.5PF +-25PF 200VDC CER	28480	0160-4381
A4CR1	1906-0210	7	1	DIODE-ARRAY VF DIFF=20MV	28480	5082-2830
A4J1	1250-1314	3		CONNECTOR-RF SM-SLD FEM PC 50-0HM	28480	1250-1314
A4J2	1251-2501	4		CONNECTOR-SGL CONT SKT .022-IN-BSC-SZ	28480	1251-2501
A4J2	1251-4045	5		CONNECTOR	28480	1251-4045
A4J3	1251-1636	4		CONNECTOR-SGL CONT SKT .04-IN-BSC-SZ RND	28480	1251-1636
A4J4	1251-2501	4		CONNECTOR-SGL CONT SKT .022-IN-BSC-SZ	28480	1251-2501
A4J4	1251-4045	5		CONNECTOR	28480	1251-4045

See introduction to this section for ordering information  
 \*Indicates factory selected value

Table 6-3. Replaceable Parts

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
A4L1	9140-0144	0		COIL-MLD 4,7UH 10% Q#45 .095DX,25LG-NOM	28480	9140-0144
A4L2	9100-3548	0		COIL-MLD 470NH 5% Q#45 .155DX,375LG-NOM	28480	9100-3548
A4L3	9100-2252	1	2	COIL-MLD 270NH 10% Q#30 .095DX,25LG-NOM	28480	9100-2252
A4L4	9100-2260	1	3	COIL-MLD 1,8UH 10% Q#32 .095DX,25LG-NOM	28480	9100-2260
A4L5	9140-0210	1	14	COIL-MLD 100UH 5% Q#50 .155DX,375LG-NOM	28480	9140-0210
A4L6	9140-0142	8	4	COIL-MLD 2,2UH 10% Q#32 .095DX,25LG-NOM	28480	9140-0142
A4L7	9140-0297	4	5	COIL-VAR 1,98UH-2,42UH Q#150 PC-MTG	28480	9140-0297
A4L8	9140-0144	0		COIL-MLD 4,7UH 10% Q#45 .095DX,25LG-NOM	28480	9140-0144
A4L9	9100-3548	0		COIL-MLD 470NH 5% Q#45 .155DX,375LG-NOM	28480	9100-3548
A4Q1	1854-0247	9		TRANSISTOR NPN SI TQ=39 PD=1W FT=800MHZ	28480	1854-0247
A4Q2	1854-0305	0		TRANSISTOR NPN SI TQ=18 PD=400MW	28480	1854-0305
A4Q3	1854-0305	0		TRANSISTOR NPN SI TQ=18 PD=400MW	28480	1854-0305
A4R2	0683-4715	0	52	RESISTOR 470 5% .25W FC TC=-400/+600	01121	C84715
A4R3	0683-2205	9		RESISTOR 22 5% .25W FC TC=-400/+500	01121	C82205
A4R4	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	C81025
A4R5	0683-1015	7		RESISTOR 100 5% .25W FC TC=-400/+500	01121	C81015
A4R6	0683-2205	9		RESISTOR 22 5% .25W FC TC=-400/+500	01121	C82205
A4R7	0683-6805	3		RESISTOR 68 5% .25W FC TC=-400/+500	01121	C86805
A4R8	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	C84705
A4R9	0683-1525	4	33	RESISTOR 1,5K 5% .25W FC TC=-400/+700	01121	C81525
A4R10	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	C84705
A4R11	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	C81025
A4R12	0683-2715	6		RESISTOR 270 5% .25W FC TC=-400/+600	01121	C82715
A4R13	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	C84705
A4R14	0683-4715	0		RESISTOR 470 5% .25W FC TC=-400/+600	01121	C84715
A4T1	9100-4038	5		TRANSFORMER BEAD CORE; WITH CT PRI & SEC	28480	9100-4038
A4T2	9100-4039			TRANSFORMER-POWER	28480	9100-4039
A4TP1	0360-0124	3		CONNECTOR-SGL CONT PIN .04-IN-BSC-SZ RND	28480	0360-0124
A5	03585-66505	6	1	3RD MIXER	28480	03585-66505
A5C1	0160-2205	1		CAPACITOR-FXD 120PF +-5% 300VDC MICA	28480	0160-2205
A5C2	0140-0193	0		CAPACITOR-FXD 82PF +-5% 300VDC MICA	72136	DM15E820J0300V1CR
A5C3	0140-0192	9		CAPACITOR-FXD 68PF +-5% 300VDC MICA	72136	DM15E680J0300V1CR
A5C4	0160-2203	9	2	CAPACITOR-FXD 91PF +-5% 300VDC MICA 0+70	28480	0160-2203
A5C5	0160-2150	5		CAPACITOR-FXD 33PF +-5% 300VDC MICA	28480	0160-2150
A5C6	0160-2204	0	10	CAPACITOR-FXD 100PF +-5% 300VDC MICA	28480	0160-2204
A5C7	0160-3879	7		CAPACITOR-FXD .01UF +-20% 100VDC CER	28480	0160-3879
A5C8	0180-0094	8		CAPACITOR-FXD 100UF+-20% 20VDC TA	56289	1500107X002052
A5C9	0160-3879	7		CAPACITOR-FXD .01UF +-20% 100VDC CER	28480	0160-3879
A5C10	0160-0576	5	12	CAPACITOR-FXD .1UF +-20% 50VDC CER	28480	0160-0576
A5C11	0160-0576	5		CAPACITOR-FXD .1UF +-20% 50VDC CER	28480	0160-0576
A5C12	0160-0576	5		CAPACITOR-FXD .1UF +-20% 50VDC CER	28480	0160-0576
A5C13	0160-0576	5		CAPACITOR-FXD .1UF +-20% 50VDC CER	28480	0160-0576
A5C14	0160-0576	5		CAPACITOR-FXD .1UF +-20% 50VDC CER	28480	0160-0576
A5C15	0160-0576	5		CAPACITOR-FXD .1UF +-20% 50VDC CER	28480	0160-0576
A5C16	0160-3879	7		CAPACITOR-FXD .01UF +-20% 100VDC CER	28480	0160-3879
A5C17	0140-0197	4	1	CAPACITOR-FXD 180PF +-5% 300VDC MICA	72136	DM15F181J0300V1CR
A5C18	0160-0376	3	1	CAPACITOR-FXD 68PF +-5% 500VDC MICA	28480	0160-0376
A5C19	0160-2226	6	2	CAPACITOR-FXD 2200PF +-5% 300VDC MICA	28480	0160-2226
A5C21	0160-2150	5		CAPACITOR-FXD 33PF +-5% 300VDC MICA	28480	0160-2150
A5C22	0160-2009	3	1	CAPACITOR-FXD 820PF +-5% 300VDC MICA	28480	0160-2009
A5C23	0160-3538	5	2	CAPACITOR-FXD 750PF +-5% 100VDC MICA	28480	0160-3538
A5C24	0140-0210	2	4	CAPACITOR-FXD 270PF +-5% 300VDC MICA	72136	DM15F271J0300V1CR
A5C25	0160-2223	3	1	CAPACITOR-FXD 1800PF +-5% 300VDC MICA	28480	0160-2223
A5C26	0160-2055	9		CAPACITOR-FXD .01UF +-80-20% 100VDC CER	28480	0160-2055
A5C27	0160-0576	5		CAPACITOR-FXD .1UF +-20% 50VDC CER	28480	0160-0576
A5J1	1251-2501	4		CONNECTOR-SGL CONT SKT .022-IN-BSC-SZ	28480	1251-2501
A5J1	1251-4045	5	7	CONNECTOR	28480	1251-4045
A5J2	1250-1314	3		CONNECTOR-RF SM-SLD FEM PC 50-OHM	28480	1250-1314
A5J3	1251-1636	4		CONNECTOR-SGL CONT SKT .04-IN-BSC-SZ RND	28480	1251-1636
A5J4	1251-1636	4		CONNECTOR-SGL CONT SKT .04-IN-BSC-SZ RND	28480	1251-1636
A5J5	1250-1314	3		CONNECTOR-RF SM-SLD FEM PC 50-OHM	28480	1250-1314
A5L1	9140-0297	4		COIL-VAR 1,98UH-2,42UH Q#150 PC-MTG	28480	9140-0297
A5L2	9140-0297	4		COIL-VAR 1,98UH-2,42UH Q#150 PC-MTG	28480	9140-0297
A5L3	9140-0296	3	1	COIL-VAR 3,51UH-4,29UH Q#150 PC-MTG	28480	9140-0296
A5L4	9140-0297	4		COIL-VAR 1,98UH-2,42UH Q#150 PC-MTG	28480	9140-0297
A5L5	9140-0295	2	1	COIL-VAR 8,09UH-10,40UH Q#130 PC-MTG	28480	9140-0295
A5L6	9140-0297	4		COIL-VAR 1,98UH-2,42UH Q#150 PC-MTG	28480	9140-0297
A5L7	9140-0210	1		COIL-MLD 100UH 5% Q#50 .155DX,375LG-NOM	28480	9140-0210
A5L8	9100-3551	5		COIL-MLD 1UH 5% Q#50 .155DX,375LG-NOM	28480	9100-3551
A5L9	9140-0131	5	5	COIL-MLD 10MH 5% Q#80 .24DX,74LG-NOM	28480	9140-0131
A5L10	9140-0131	5		COIL-MLD 10MH 5% Q#80 .24DX,74LG-NOM	28480	9140-0131

See introduction to this section for ordering information  
 \*Indicates factory selected value

Table 6-3. Replaceable Parts

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
ASL11	9100-1619	2	1	COIL-MLD 6.8UH 10% Q=50 .155DX.375LG-NOM	28480	9100-1619
ASL12	9140-0210	1		COIL-MLD 100UH 5% Q=50 .155DX.375LG-NOM	28480	9140-0210
ASL13	9100-3551	5		COIL-MLD 1UH 5% Q=50 .155DX.375LG-NOM	28480	9100-3551
ASL14	9140-0261	2	1	COIL-MLD 100NH 5% Q=50 .155DX.375LG-NOM	28480	9140-0261
ASQ1	1854-0485	7		TRANSISTOR NPN SI TO=104 PD=175MW	28480	1854-0485
ASQ2	1854-0215	1	36	TRANSISTOR NPN SI PD=350MW FT=300MHZ	04713	2N3904
ASQ3	1854-0215	1		TRANSISTOR NPN SI PD=350MW FT=300MHZ	04713	2N3904
ASQ4	1854-0215	1		TRANSISTOR NPN SI PD=350MW FT=300MHZ	04713	2N3904
ASR1	0757-0440	7	6	RESISTOR 7.5K 1% .125W F TC=0+-100	24546	C4-1/8-T0-7501-F
ASR2	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	C84705
ASR3	0698-3557	7	2	RESISTOR 806 1% .125W F TC=0+-100	24546	C4-1/8-T0-806R-F
ASR4	0698-3557	7		RESISTOR 806 1% .125W F TC=0+-100	24546	C4-1/8-T0-806R-F
ASR5	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	C84705
ASR6	0757-0440	7		RESISTOR 7.5K 1% .125W F TC=0+-100	24546	C4-1/8-T0-7501-F
ASR7	0683-4725	2		RESISTOR 4.7K 5% .25W FC TC=-400/+700	01121	C84725
ASR8	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	C84705
ASR9	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	C84705
ASR10	0698-4446	5	2	RESISTOR 267 1% .125W F TC=0+-100	24546	C4-1/8-T0-267R-F
ASR11	0698-4461	4	1	RESISTOR 698 1% .125W F TC=0+-100	24546	C4-1/8-T0-698R-F
ASR12	0698-4446	5		RESISTOR 267 1% .125W F TC=0+-100	24546	C4-1/8-T0-267R-F
ASR13	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	C84705
ASR14	0757-0280	3		RESISTOR 1K 1% .125W F TC=0+-100	24546	C4-1/8-T0-1001-F
ASR15	0698-0084	9	1	RESISTOR 2.15K 1% .125W F TC=0+-100	24546	C4-1/8-T0-2151-F
ASR16	0698-4453	4		RESISTOR 402 1% .125W F TC=0+-100	24546	C4-1/8-T0-402R-F
ASR17	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	C84705
ASR18	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	C84705
ASR19	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	C84705
ASR20	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	C84705
ASR21	0757-0401	0		RESISTOR 100 1% .125W F TC=0+-100	24546	C4-1/8-T0-101-F
ASR22	0757-0401	0		RESISTOR 100 1% .125W F TC=0+-100	24546	C4-1/8-T0-101-F
ASR23	0757-0408	7	1	RESISTOR 243 1% .125W F TC=0+-100	24546	C4-1/8-T0-243R-F
ASR24	0698-4462	5	1	RESISTOR 768 1% .125W F TC=0+-100	24546	C4-1/8-T0-768R-F
ASR25	0683-4725	2		RESISTOR 4.7K 5% .25W FC TC=-400/+700	01121	C84725
ASSXU1	1200-0473	8		SOCKET-IC 16-CONT DIP DIP-SLDR	28480	1200-0473
AST1	08552-6024	9		TRANSFORMER	28480	08552-6024
AST2	08552-6044	1		TRANSFORMER, 6-TURNS	28480	08552-6044
AST3	9100-4056	7	2	TRANSFORMER INDUCTANCE: 110UH +-10%	28480	9100-4056
AST4	9100-4056	7		TRANSFORMER INDUCTANCE: 110UH +-10%	28480	9100-4056
ASU1	1826-0062	7	1	IC MIXER CIRCUIT	28480	1826-0062
A6A	03585-66506	7	1	CONNECTOR BOARD	28480	03585-66506
A6B	03585-66506	7		CONNECTOR BOARD	28480	03585-66506
A6C	03585-66506	7		CONNECTOR BOARD	28480	03585-66506
A6D	03585-66506	7		CONNECTOR BOARD	28480	03585-66506
A6C1	0160-3878	6	16	CAPACITOR-FXD 1000PF +-20% 100VDC CER	28480	0160-3878
A6J1	1250-1593	0	4	ADAPTER-CDAX STR M-SMB M-SMB	28480	1250-1593
A10	03585-66510	3	1	ANALOG MOTHER BOARD	28480	03585-66510
A10C1	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A10C2	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A10C3	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A10C4	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A10C5	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A10C6	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A10C7	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A10C8	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A10C9	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A10C10	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A10C11	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A10C12	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A10C13	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A10C14	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A10C15	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A10C16	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A10C17	0160-0128	3		CAPACITOR-FXD 2.2UF +-20% 50VDC CER	28480	0160-0128
A10C18	0160-0128	3		CAPACITOR-FXD 2.2UF +-20% 50VDC CER	28480	0160-0128
A10C19	0160-0128	3		CAPACITOR-FXD 2.2UF +-20% 50VDC CER	28480	0160-0128
A10C20	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z

See introduction to this section for ordering information  
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Table 6-3. Replaceable Parts

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
A10C21	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A10C22	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A10L1	9100-0541	7	35	COIL-MLD 250UH 10% Q#3 .25DX.SLG-NOM	28480	9100-0541
A10L2	9100-0541	7		COIL-MLD 250UH 10% Q#3 .25DX.SLG-NOM	28480	9100-0541
A10L3	9100-0541	7		COIL-MLD 250UH 10% Q#3 .25DX.SLG-NOM	28480	9100-0541
A10L4	9100-0541	7		COIL-MLD 250UH 10% Q#3 .25DX.SLG-NOM	28480	9100-0541
A10L5	9100-0541	7		COIL-MLD 250UH 10% Q#3 .25DX.SLG-NOM	28480	9100-0541
A10L6	9100-0541	7		COIL-MLD 250UH 10% Q#3 .25DX.SLG-NOM	28480	9100-0541
A10L7	9100-0541	7		COIL-MLD 250UH 10% Q#3 .25DX.SLG-NOM	28480	9100-0541
A10L8	9100-0541	7		COIL-MLD 250UH 10% Q#3 .25DX.SLG-NOM	28480	9100-0541
A10L9	9100-0541	7		COIL-MLD 250UH 10% Q#3 .25DX.SLG-NOM	28480	9100-0541
A10L10	9100-0541	7		COIL-MLD 250UH 10% Q#3 .25DX.SLG-NOM	28480	9100-0541
A10L11	9100-0541	7		COIL-MLD 250UH 10% Q#3 .25DX.SLG-NOM	28480	9100-0541
A10L12	9100-0541	7		COIL-MLD 250UH 10% Q#3 .25DX.SLG-NOM	28480	9100-0541
A10L13	9100-0541	7		COIL-MLD 250UH 10% Q#3 .25DX.SLG-NOM	28480	9100-0541
A10L14	9100-0541	7		COIL-MLD 250UH 10% Q#3 .25DX.SLG-NOM	28480	9100-0541
A10L15	9100-0541	7		COIL-MLD 250UH 10% Q#3 .25DX.SLG-NOM	28480	9100-0541
A10L16	9100-0541	7		COIL-MLD 250UH 10% Q#3 .25DX.SLG-NOM	28480	9100-0541
A10L17	9100-3458	1	8	CHOKE, WIDE BAND	28480	9100-3458
A10L18	9100-3458	1		CHOKE, WIDE BAND	28480	9100-3458
A10L19	9100-3458	1		CHOKE, WIDE BAND	28480	9100-3458
A10L20	9100-0541	7		COIL-MLD 250UH 10% Q#3 .25DX.SLG-NOM	28480	9100-0541
A10L21	9100-0541	7		COIL-MLD 250UH 10% Q#3 .25DX.SLG-NOM	28480	9100-0541
A10L22	9100-0541	7		COIL-MLD 250UH 10% Q#3 .25DX.SLG-NOM	28480	9100-0541
A10L23	9100-0541	7		COIL-MLD 250UH 10% Q#3 .25DX.SLG-NOM	28480	9100-0541
A10 MISCELLANEOUS PARTS						
	1251-0472	4	1	CONNECTOR-PC EDGE 6-CONT/ROW 2-ROWS	28480	1251-0472
	1251-2035	9	3	CONNECTOR-PC EDGE 15-CONT/ROW 2-ROWS	28480	1251-2035
	1251-5160	7	1	CONNECTOR-PC EDGE 36-CONT/ROW 2-ROWS	28480	1251-5160
	1530-1942	7	1		28480	1530-1942
A14	03585-66514	7	1	PC ASSEMBLY, LOG AMPLIFIER	28480	03585-66514
A14C1	0160-0939	4	1	CAPACITOR-FXD 430PF +-5% 300VDC MICA	28480	0160-0939
A14C2	0180-0197	8		CAPACITOR-FXD 2.2UF+-10% 20VDC TA	56289	150D225X9020A2
A14C3	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A14C4	0180-0197	8		CAPACITOR-FXD 2.2UF+-10% 20VDC TA	56289	150D225X9020A2
A14C5	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A14C6	0140-0195	2	1	CAPACITOR-FXD 130PF +-5% 300VDC MICA	72136	DM15F131J0300WV1CR
A14C7	0140-0172	5	1	CAPACITOR-FXD 3000PF +-1% 100VDC MICA	72136	DM19F302F0100WV1CR
A14C8	0140-0198	5	5	CAPACITOR-FXD 200PF +-5% 300VDC MICA	72136	DM15F201J0300WV1CR
A14C9	0160-0940	7	1	CAPACITOR-FXD 2400PF +-5% 500VDC MICA	28480	0160-0940
A14C10	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A14C11	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A14C12	0150-0093	0	31	CAPACITOR-FXD .01UF +80-20% 100VDC CER	28480	0150-0093
A14C13	0140-0204	4		CAPACITOR-FXD 47PF +-5% 500VDC MICA	72136	DM15E470J0500WV1CR
A14C14	0160-0763	2	4	CAPACITOR-FXD 5PF +-10% 500VDC MICA	28480	0160-0763
A14C15	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A14C16	0140-0208	8	5	CAPACITOR-FXD 680PF +-5% 300VDC MICA	72136	DM15F681J0300WV1CR
A14C17	0140-0208	8		CAPACITOR-FXD 680PF +-5% 300VDC MICA	72136	DM15F681J0300WV1CR
A14C18	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A14C19	0140-0204	4		CAPACITOR-FXD 47PF +-5% 500VDC MICA	72136	DM15E470J0500WV1CR
A14C20	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A14C21	0160-0763	2		CAPACITOR-FXD 5PF +-10% 500VDC MICA	28480	0160-0763
A14C22	0150-0093	0		CAPACITOR-FXD .01UF +80-20% 100VDC CER	28480	0150-0093
A14C23	0140-0208	8		CAPACITOR-FXD 680PF +-5% 300VDC MICA	72136	DM15F681J0300WV1CR
A14C24	0140-0204	4		CAPACITOR-FXD 47PF +-5% 500VDC MICA	72136	DM15E470J0500WV1CR
A14C25	0160-0763	2		CAPACITOR-FXD 5PF +-10% 500VDC MICA	28480	0160-0763
A14C26	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A14C27	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A14C28	0180-0197	8		CAPACITOR-FXD 2.2UF+-10% 20VDC TA	56289	150D225X9020A2
A14C29	0160-0362	7	3	CAPACITOR-FXD 510PF +-5% 300VDC MICA	28480	0160-0362
A14C30	0160-2197	0	2	CAPACITOR-FXD 10PF +-5% 300VDC MICA	28480	0160-2197
A14C31	0160-2257	3		CAPACITOR-FXD 10PF +-5% 500VDC CER 0+-60	28480	0160-2257
A14C32	0140-0204	4		CAPACITOR-FXD 47PF +-5% 500VDC MICA	72136	DM15E470J0500WV1CR
A14C33	0160-0763	2		CAPACITOR-FXD 5PF +-10% 500VDC MICA	28480	0160-0763
A14C34	0160-3014	2	1	CAPACITOR-FXD 87PF +-1% 300VDC MICA 0-70	28480	0160-3014
A14C35	0140-0218	0	1	CAPACITOR-FXD 160PF +-2% 300VDC MICA	72136	DM15F161G0300WV1CR
A14C36	0160-0938	3	3	CAPACITOR-FXD 1000PF +-5% 100VDC MICA	28480	0160-0938
A14C37	0160-0332	1	1	CAPACITOR-FXD 133PF +-1% 300VDC MICA	28480	0160-0332
A14C38	0160-3843	5	2	CAPACITOR-FXD 560PF +-1% 100VDC MICA	28480	0160-3843
A14C39	0160-3843	5		CAPACITOR-FXD 560PF +-1% 100VDC MICA	28480	0160-3843
A14C40	0150-0093	0		CAPACITOR-FXD .01UF +80-20% 100VDC CER	28480	0150-0093

See introduction to this section for ordering information  
 \*Indicates factory selected value

Table 6-3. Replaceable Parts

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
A14C41	0160-3622	8	3	CAPACITOR-FXD .1UF +60-20% 100VDC CER	26654	2130Y5V100R104Z
A14C42	0160-0938	3		CAPACITOR-FXD 1000PF +-5% 100VDC MICA	28480	0160-0938
A14C43	0160-0127	2		CAPACITOR-FXD 1UF +-20% 25VDC CER	28480	0160-0127
A14C44	0160-3622	8		CAPACITOR-FXD .1UF +60-20% 100VDC CER	26654	2130Y5V100R104Z
A14C45	0160-3622	8		CAPACITOR-FXD .1UF +60-20% 100VDC CER	26654	2130Y5V100R104Z
A14C46	0140-0198	5	2	CAPACITOR-FXD 200PF +-5% 300VDC MICA	72136	DM15F201J0300MV1CR
A14C47	0140-0198	5		CAPACITOR-FXD 200PF +-5% 300VDC MICA	72136	DM15F201J0300MV1CR
A14C48	0160-3303	2		CAPACITOR-FXD 22PF +-5PF 100VDC MICA	28480	0160-3303
A14C49	0160-3303	2		CAPACITOR-FXD 22PF +-5PF 100VDC MICA	28480	0160-3303
A14C51	0160-0161	4		CAPACITOR-FXD .01UF +-10% 200VDC POLYE	28480	0160-0161
A14CR1	1901-0179	7	14	DIODE-SWITCHING 15V 50MA 750PS DO-7	28480	1901-0179
A14CR2	1901-0179	7		DIODE-SWITCHING 15V 50MA 750PS DO-7	28480	1901-0179
A14CR3	1901-0179	7		DIODE-SWITCHING 15V 50MA 750PS DO-7	28480	1901-0179
A14CR4	1901-0179	7		DIODE-SWITCHING 15V 50MA 750PS DO-7	28480	1901-0179
A14CR5	1901-0179	7		DIODE-SWITCHING 15V 50MA 750PS DO-7	28480	1901-0179
A14CR6	1901-0179	7	7	DIODE-SWITCHING 15V 50MA 750PS DO-7	28480	1901-0179
A14CR7	1901-0179	7		DIODE-SWITCHING 15V 50MA 750PS DO-7	28480	1901-0179
A14CR8	1901-0179	7		DIODE-SWITCHING 15V 50MA 750PS DO-7	28480	1901-0179
A14CR9	1901-0179	7		DIODE-SWITCHING 15V 50MA 750PS DO-7	28480	1901-0179
A14CR11	1901-0179	7		DIODE-SWITCHING 15V 50MA 750PS DO-7	28480	1901-0179
A14CR12	1901-0179	7	7	DIODE-SWITCHING 15V 50MA 750PS DO-7	28480	1901-0179
A14CR13	1901-0179	7		DIODE-SWITCHING 15V 50MA 750PS DO-7	28480	1901-0179
A14CR14	1901-0179	7		DIODE-SWITCHING 15V 50MA 750PS DO-7	28480	1901-0179
A14CR15	1901-0179	7		DIODE-SWITCHING 15V 50MA 750PS DO-7	28480	1901-0179
A14CR16	1902-3149	9		DIODE-ZNR 9.09V 5% DO-7 PDI=.4W TC=+.057%	28480	1902-3149
A14CR17	1902-0692	1	1	DIODE-ZNR 6.3V 1% DO-7 PDI=.4W TC=+.001%	28480	1902-0692
A14CR18	1901-0518	8		DIODE-SCHOTTKY	28480	1901-0518
A14CR19	1901-0518	8		DIODE-SCHOTTKY	28480	1901-0518
A14J1	1250-1368	7	1	CONNECTOR-RF SMB M PC 50-OHM	28480	1250-1368
A14J2	1250-1368	7		CONNECTOR-RF SMB M PC 50-OHM	28480	1250-1368
A14J3	1200-0462	5		SOCKET-IC 1-COND STRIP DIP-SLDR	28480	1200-0462
A14L1	9140-0118	8	2	COIL-MLD 500UH 5% Q=65 .19DX.44LG-NOM	28480	9140-0118
A14L2	9140-0210	1		COIL-MLD 100UH 5% Q=50 .155DX.375LG-NOM	28480	9140-0210
A14L3	9140-0210	1		COIL-MLD 100UH 5% Q=50 .155DX.375LG-NOM	28480	9140-0210
A14L4	9140-0237	2		COIL-MLD 200UH 5% Q=65 .155DX.375LG-NOM	28480	9140-0237
A14L5	9140-0294	1		COIL-VAR 90UH-110UH Q=135 PC-MTG	28480	9140-0294
A14L6	9140-0118	8	1	COIL-MLD 500UH 5% Q=65 .19DX.44LG-NOM	28480	9140-0118
A14L7	9140-0294	1		COIL-VAR 90UH-110UH Q=135 PC-MTG	28480	9140-0294
A14L8	9140-0311	3		INDUCTOR FIXED; 100UH+-5% AT 350 KHZ	28480	9140-0311
A14L9	9140-0312	4		INDUCTOR FIXED; 130UH+-5% AT 350 KHZ	28480	9140-0312
A14O1	1854-0404	0		4	TRANSISTOR NPN SI TO-18 PD=360MW	28480
A14O2	1854-0404	0	TRANSISTOR NPN SI TO-18 PD=360MW		28480	1854-0404
A14O3	1854-0071	7	TRANSISTOR NPN SI PD=300MW FT=200MHZ		28480	1854-0071
A14O4	1854-0071	7	TRANSISTOR NPN SI PD=300MW FT=200MHZ		28480	1854-0071
A14O5	1854-0071	7	TRANSISTOR NPN SI PD=300MW FT=200MHZ		28480	1854-0071
A14O6	1853-0034	0	3	TRANSISTOR PNP SI TO-18 PD=360MW	28480	1853-0034
A14O7	1853-0020	4		TRANSISTOR PNP SI PD=300MW FT=150MHZ	28480	1853-0020
A14O8	1853-0020	4		TRANSISTOR PNP SI PD=300MW FT=150MHZ	28480	1853-0020
A14O9	1854-0215	1		TRANSISTOR NPN SI PD=350MW FT=300MHZ	04713	2N3904
A14O10	1854-0215	1		TRANSISTOR NPN SI PD=350MW FT=300MHZ	04713	2N3904
A14R2	0683-1015	7	2	RESISTOR 100 5% .25W FC TC=400/+500	01121	C81015
A14R3	0757-0430	5		RESISTOR 2.21K 1% .125W F TC=0/+100	24546	C4=1/8-T0=2211-F
A14R4	0683-1835	9		RESISTOR 18K 5% .25W FC TC=400/+800	01121	C81835
A14R5	0683-1235	3		RESISTOR 12K 5% .25W FC TC=400/+800	01121	C81235
A14R6	0683-1015	7		RESISTOR 100 5% .25W FC TC=400/+500	01121	C81015
A14R7	0683-0215	9	4	RESISTOR 620 5% .25W FC TC=400/+600	01121	C86215
A14R8	2100-1738	9		RESISTOR-TRMR 10K 10% C TOP-ADJ 1-TRN	73138	82PR10K
A14R9	0698-4485	2		RESISTOR 23.2K 1% .125W F TC=0/+100	24546	C4=1/8-T0=2322-F
A14R11	0698-4435	2		RESISTOR 2.49K 1% .125W F TC=0/+100	24546	C4=1/8-T0=2491-F
A14R12	0698-4443	2		RESISTOR 4.53K 1% .125W F TC=0/+100	24546	C4=1/8-T0=4531-F
A14R13	0698-4123	5	3	RESISTOR 499 1% .125W F TC=0/+100	24546	C4=1/8-T0=499F-F
A14R14	2100-1738	9		RESISTOR-TRMR 10K 10% C TOP-ADJ 1-TRN	73138	82PR10K
A14R15	0698-4485	2		RESISTOR 23.2K 1% .125W F TC=0/+100	24546	C4=1/8-T0=2322-F
A14R16	0698-4435	2		RESISTOR 2.49K 1% .125W F TC=0/+100	24546	C4=1/8-T0=2491-F
A14R17	2100-3161	0		RESISTOR-TRMR 20K 10% C SIDE-ADJ 17-TRN	02111	43P203
A14R18	0698-3279	0	19	RESISTOR 4.99K 1% .125W F TC=0/+100	24546	C4=1/8-T0=4991-F
A14R19	0698-3279	0		RESISTOR 4.99K 1% .125W F TC=0/+100	24546	C4=1/8-T0=4991-F
A14R21	2100-2030	6		RESISTOR-TRMR 20K 10% C TOP-ADJ 1-TRN	73138	82PR20K
A14R22	0683-2035	3		RESISTOR 20K 5% .25W FC TC=400/+800	01121	C82035
A14R23	0698-4435	2		RESISTOR 2.49K 1% .125W F TC=0/+100	24546	C4=1/8-T0=2491-F
A14R24	0698-3279	0	2	RESISTOR 4.99K 1% .125W F TC=0/+100	24546	C4=1/8-T0=4991-F
A14R25	0698-4469	2		RESISTOR 1.15K 1% .125W F TC=0/+100	24546	C4=1/8-T0=1151-F
A14R26	2100-3353	8		RESISTOR-TRMR 20K 10% C SIDE-ADJ 1-TRN	32997	3386X=740=203
A14R27	0698-3279	0		RESISTOR 4.99K 1% .125W F TC=0/+100	24546	C4=1/8-T0=4991-F
A14R28	0698-4435	2		RESISTOR 2.49K 1% .125W F TC=0/+100	24546	C4=1/8-T0=2491-F

See introduction to this section for ordering information  
 \*Indicates factory selected value

Table 6-3. Replaceable Parts

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
A14R29	0683-5105	4		RESISTOR 51 5% .25W FC TC=-400/+500	01121	C85105
A14R30	0683-1015	7		RESISTOR 100 5% .25W FC TC=-400/+500	01121	C81015
A14R31	0683-1045	3		RESISTOR 100K 5% .25W FC TC=-400/+800	01121	C81045
A14R32	0683-1835	9		RESISTOR 18K 5% .25W FC TC=-400/+800	01121	C81835
A14R33	0683-5105	4		RESISTOR 51 5% .25W FC TC=-400/+500	01121	C85105
A14R34	0683-5105	4		RESISTOR 51 5% .25W FC TC=-400/+500	01121	C85105
A14R35	0683-1835	9		RESISTOR 18K 5% .25W FC TC=-400/+800	01121	C81835
A14R36	0698-4485	2		RESISTOR 23.2K 1% .125W F TC=0+-100	24546	C4-1/8-T0-2322-F
A14R37	0683-1525	4		RESISTOR 1.5K 5% .25W FC TC=-400/+700	01121	C81525
A14R38	0757-0472	5	1	RESISTOR 200K 1% .125W F TC=0+-100	24546	C4-1/8-T0-2003-F
A14R39	0698-3279	0		RESISTOR 4.99K 1% .125W F TC=0+-100	24546	C4-1/8-T0-4991-F
A14R40	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	C81025
A14R41	0698-6330	0	1	RESISTOR 2K 1% .125W F TC=0+-25	28480	0698-6330
A14R42	0698-5542	4	1	RESISTOR 20K 1% .125W F TC=0+-25	28480	0698-5542
A14R43	2100-3056	8	3	RESISTOR-TRMR 5K 10% C SIDE=ADJ 17-TRN	02111	43P502
A14R44	0698-7082	1	4	RESISTOR 100K 1% .125W F TC=0+-25	28480	0698-7082
A14R45	0698-7082	1		RESISTOR 100K 1% .125W F TC=0+-25	28480	0698-7082
A14R47	0698-7082	1		RESISTOR 100K 1% .125W F TC=0+-25	28480	0698-7082
A14R48	0698-7082	1		RESISTOR 100K 1% .125W F TC=0+-25	28480	0698-7082
A14R49	0683-1005	5		RESISTOR 10 5% .25W FC TC=-400/+500	01121	C81005
A14R51	0757-0465	6	8	RESISTOR 100K 1% .125W F TC=0+-100	24546	C4-1/8-T0-1003-F
A14R52	0698-3275	6	2	RESISTOR 2.5K 1% .125W F TC=0+-25	28480	0698-3275
A14R53	0757-0281	4	2	RESISTOR 2.74K 1% .125W F TC=0+-100	24546	C4-1/8-T0-2741-F
A14R55	0683-1035	1		RESISTOR 10K 5% .25W FC TC=-400/+700	01121	C81035
A14R56	0698-3439	4	1	RESISTOR 178 1% .125W F TC=0+-100	24546	C4-1/8-T0-178R-F
A14R57	2100-0568	1	1	RESISTOR-TRMR 100 10% C TOP=ADJ 1-TRN	28480	2100-0568
A14R58	0698-4432	9	2	RESISTOR 2.1K 1% .125W F TC=0+-100	24546	C4-1/8-T0-2101-F
A14R59	0683-1015	7		RESISTOR 100 5% .25W FC TC=-400/+500	01121	C81015
A14R61	0683-1015	7		RESISTOR 100 5% .25W FC TC=-400/+500	01121	C81015
A14R62	0698-4453	4		RESISTOR 402 1% .125W F TC=0+-100	24546	C4-1/8-T0-402R-F
A14R63	0683-3315	4	22	RESISTOR 330 5% .25W FC TC=-400/+600	01121	C83315
A14R64	0683-3315	4		RESISTOR 330 5% .25W FC TC=-400/+600	01121	C83315
A14R65	0683-3325	6	25	RESISTOR 3.3K 5% .25W FC TC=-400/+700	01121	C83325
A14R66	0683-6825	7		RESISTOR 6.8K 5% .25W FC TC=-400/+700	01121	C86825
A14T1	9100-3262	5	2	TRANSFORMER TRANSFORMER; TOROIDAL PULSE	28480	9100-3262
A14T2	9100-3262	5		TRANSFORMER TRANSFORMER; TOROIDAL PULSE	28480	9100-3262
A14U1	1826-0109	3	4	OP AMP WB T0-99	34371	HA2-2625-B0593
A14U2	1826-0109	3		OP AMP WB T0-99	34371	HA2-2625-B0593
A14U3	1826-0109	3		OP AMP WB T0-99	34371	HA2-2625-B0593
A14U4	1826-0109	3		OP AMP WB T0-99	34371	HA2-2625-B0593
A14U5	1813-0017	5	1	LOGIC AMPLIFIER	28480	1813-0017
A14U6	1826-0043	4		OP AMP GP T0-99	0192B	CA307T
A14U7	1826-0043	4		OP AMP GP T0-99	0192B	CA307T
A14U8	1826-0089	4		OP AMP WB T0-99	03545	1322
				A14 MISCELLANEOUS PARTS		
	0361-0517	0	2		28480	0361-0517
	03585-00600	8	1	SHIELD, 14-1	28480	03585-00604
	03585-00605	9	1	SHIELD, 14-2	28480	03585-00605
	0403-0211	1	3	EXTR-PC BD BRN POLYC .062-BD-THKNS	28480	0403-0211
	0403-0214	4	1	EXTR-PC BD YEL POLYC .062-BD-THKNS	28480	0403-0214
	1251-0600	0		CONNECTOR-SGL CONT PIN 1,14-MM-BSC-SZ S6	28480	1251-0600
	1480-0116	8	23	PIN-GRV .062-IN-DIA .25-IN-LG STL	28480	1480-0116
	2200-0101	0	15	SCREW-MACH 4-40 .188-IN-LG PAN-HD-POZI	00000	ORDER BY DESCRIPTION
	2200-0103	2	172	SCREW-MACH 4-40 .25-IN-LG PAN-HD-POZI	00000	ORDER BY DESCRIPTION
A15	03585-66515	8	1	VIDEO FILTER & DB BOARD	28480	03585-66515
A15C1	0180-0116	1	10	CAPACITOR-FXD 6.8UF+-10% 35VDC TA	56289	150D685X9035B2
A15C2	0180-0229	7		CAPACITOR-FXD 33UF+-10% 10VDC TA	56289	150D336X9010B2
A15C3	0180-0116	1		CAPACITOR-FXD 6.8UF+-10% 35VDC TA	56289	150D685X9035B2
A15C4	0160-2199	2	8	CAPACITOR-FXD 30PF +-5% 300VDC MICA	28480	0160-2199
A15C5	0160-3405	5	1	CAPACITOR-FXD 2UF +-10% 50VDC MET-POLYC	28480	0160-3405
A15C6	0160-0166	9	2	CAPACITOR-FXD .068UF +-10% 200VDC POLYE	28480	0160-0166
A15C7	0160-0154	5	3	CAPACITOR-FXD 2200PF +-10% 200VDC POLYE	28480	0160-0154
A15CR1	1902-0777	3		DIODE-ZNR 1N825 6.2V 5% DO-7 PDE,HW	04713	1N825
A15CR2	1901-0044	5	6	DIODE-SWITCHING 50V 50MA 6NS	28480	1901-0044
A15J1	1250-1366	7		CONNECTOR-RF SMB M PC 50-OHM	28480	1250-1366
A15L1	9100-1623	8	2	COIL-MLD 27UH 5% Q=60 .155DX,375LG-NOM	28480	9100-1623
A15L2	9100-3560	6		COIL-MLD 5.6UH 5% Q=45 .155DX,375LG-NOM	28480	9100-3560
A15L3	9100-1623	8		COIL-MLD 27UH 5% Q=60 .155DX,375LG-NOM	28480	9100-1623
A15O1	1855-0420	2	11	TRANSISTOR J-FET 2N4391 N-CHAN D-MODE	01295	2N4391
A15O2	1855-0420	2		TRANSISTOR J-FET 2N4391 N-CHAN D-MODE	01295	2N4391
A15O3	1855-0420	2		TRANSISTOR J-FET 2N4391 N-CHAN D-MODE	01295	2N4391
A15O4	1855-0420	2		TRANSISTOR J-FET 2N4391 N-CHAN D-MODE	01295	2N4391
A15O5	1855-0420	2		TRANSISTOR J-FET 2N4391 N-CHAN D-MODE	01295	2N4391

See introduction to this section for ordering information  
 \*Indicates factory selected value



Table 6-3. Replaceable Parts

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
A15R1	0683-2025	1		RESISTOR 2K 5% .25W FC TC=-400/+700	01121	C82025
A15R2	0698-4469	2		RESISTOR 1.15K 1% .125W F TC=0/+100	24546	C4=1/8-T0=1151-F
A15R3	0698-4471	6	3	RESISTOR 7.15K 1% .125W F TC=0/+100	24546	C4=1/8-T0=7151-F
A15R4	2100-3056	8		RESISTOR-TRMR 5K 10% C SIDE=ADJ 17-TRN	02111	43P502
A15R5	0698-4495	4	1	RESISTOR 37.4K 1% .125W F TC=0/+100	24546	C4=1/8-T0=3742-F
A15R6	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	C81025
A15R7	2100-3109	2	2	RESISTOR-TRMR 2K 10% C SIDE=ADJ 17-TRN	02111	43P202
A15R8	0698-3450	9	1	RESISTOR 42.2K 1% .125W F TC=0/+100	24546	C4=1/8-T0=4222-F
A15R9	2100-3154	7	3	RESISTOR-TRMR 1K 10% C SIDE=ADJ 17-TRN	02111	43P102
A15R11	0698-3274	5	3	RESISTOR 10K 1% .125W F TC=0/+25	28480	0698-3274
A15R12	0698-6318	4	1	RESISTOR 1.5K 1% .125W F TC=0/+25	03888	PME5=1/8-T9=1501-F
A15R13	0698-3275	6		RESISTOR 2.5K 1% .125W F TC=0/+25	28480	0698-3275
A15R14	0683-1035	1		RESISTOR 10K 5% .25W FC TC=-400/+700	01121	C81035
A15R15	0698-4508	0	1	RESISTOR 78.7K 1% .125W F TC=0/+100	24546	C4=1/8-T0=7872-F
A15R16	0698-3499	6	2	RESISTOR 40.2K 1% .125W F TC=0/+100	24546	C4=1/8-T0=4022-F
A15R17	0698-4202	1	1	RESISTOR 8.87K 1% .125W F TC=0/+100	24546	C4=1/8-T0=8871-F
A15R18	0757-0281	4		RESISTOR 2.74K 1% .125W F TC=0/+100	24546	C4=1/8-T0=2741-F
A15R19	0683-1035	1		RESISTOR 10K 5% .25W FC TC=-400/+700	01121	C81035
A15R21	0683-1535	6	10	RESISTOR 15K 5% .25W FC TC=-400/+800	01121	C81535
A15R22	0698-6360	6	1	RESISTOR 10K .1% .125W F TC=0/+25	28480	0698-6360
A15R23	0698-6625	6	1	RESISTOR 6K .1% .125W F TC=0/+25	28480	0698-6625
A15R24	0698-6624	5	1	RESISTOR 2K .1% .125W F TC=0/+25	28480	0698-6624
A15R25	0698-6103	5	1	RESISTOR 1.6K .1% .125W F TC=0/+50	28480	0698-6103
A15R26	0698-6355	9	1	RESISTOR 400 .1% .125W F TC=0/+25	28480	0698-6355
A15R27	0757-0449	6	9	RESISTOR 20K 1% .125W F TC=0/+100	24546	C4=1/8-T0=2002-F
A15R28	0757-0449	6		RESISTOR 20K 1% .125W F TC=0/+100	24546	C4=1/8-T0=2002-F
A15R29	0683-1035	1		RESISTOR 10K 5% .25W FC TC=-400/+700	01121	C81035
A15R31	0683-1005	5		RESISTOR 10 5% .25W FC TC=-400/+500	01121	C81005
A15R32	0683-2035	3		RESISTOR 20K 5% .25W FC TC=-400/+800	01121	C82035
A15R33	0683-2035	3		RESISTOR 20K 5% .25W FC TC=-400/+800	01121	C82035
A15R34	0683-2035	3		RESISTOR 20K 5% .25W FC TC=-400/+800	01121	C82035
A15R35	0683-2035	3		RESISTOR 20K 5% .25W FC TC=-400/+800	01121	C82035
A15R36	0683-2025	1		RESISTOR 2K 5% .25W FC TC=-400/+700	01121	C82025
A15R37	0683-2035	3		RESISTOR 20K 5% .25W FC TC=-400/+800	01121	C82035
A15R38	0683-2035	3		RESISTOR 20K 5% .25W FC TC=-400/+800	01121	C82035
A15TP1	0360-0124	3		CONNECTOR-SGL CONT PIN .04-IN-BSC-SZ RND	28480	0360-0124
A15TP2	0360-0124	3		CONNECTOR-SGL CONT PIN .04-IN-BSC-SZ RND	28480	0360-0124
A15TP3	0360-0124	3		CONNECTOR-SGL CONT PIN .04-IN-BSC-SZ RND	28480	0360-0124
A15TP4	0360-0124	3		CONNECTOR-SGL CONT PIN .04-IN-BSC-SZ RND	28480	0360-0124
A15TP5	0360-0124	3		CONNECTOR-SGL CONT PIN .04-IN-BSC-SZ RND	28480	0360-0124
A15TP6	0360-0124	3		CONNECTOR-SGL CONT PIN .04-IN-BSC-SZ RND	28480	0360-0124
A15U1	1820-1195	7	8	IC FF TTL LS D-TYPE POS-EDGE-TRIG COM	01295	SN74LS175N
A15U2	1820-1216	3	5	IC ODDR TTL LS 3-T0=8-LINE 3-INP	01295	SN74LS138N
A15U3	1820-1196	8	16	IC FF TTL LS D-TYPE POS-EDGE-TRIG COM	01295	SN74LS174N
A15U4	1820-1196	8		IC FF TTL LS D-TYPE POS-EDGE-TRIG COM	01295	SN74LS174N
A15U5	1820-1196	8		IC FF TTL LS D-TYPE POS-EDGE-TRIG COM	01295	SN74LS174N
A15U6	1820-1196	8		IC FF TTL LS D-TYPE POS-EDGE-TRIG COM	01295	SN74LS174N
A15U7	1820-1984	2	2	CONV 10-B/D/A 16-DIP=C	24355	AD561KD
A15U8	1826-0315	3	2	OP AMP GP QUAD 14-DIP=P	27014	LM338N
A15U9	1826-0138	8	16	COMPARATOR GP QUAD 14-DIP=P	04713	LM339P
A15U11	1826-0138	8		COMPARATOR GP QUAD 14-DIP=P	04713	LM339P
A15U12	1826-0340	4	11	OP AMP BIFET TO-99	28480	1826-0340
A15U13	1826-0510	0	2	SWITCH ANLG QUAD 16-DIP=P	27014	LF13332N
A15W1	1251-4047	7	7	CONNECTOR 3-PIN M POST TYPE	28480	1251-4047
A15W1	1258-0141	8	13	JUMPER REMOVABLE	28480	1258-0141
A15 MISCELLANEOUS PARTS						
	0403-0211	1		EXTR-PC HD BRN POLYCO .062-80-TMKNS	28480	0403-0211
	0403-0215	5	1	EXTR-PC HD GRN POLYCO .062-80-TMKNS	28480	0403-0215
	1480-0116	8		PIN-GRV .062-IN-DIA .25-IN-LG STL	28480	1480-0116
A16	03585-66516	9	1	A-DT REGISTER	28480	03585-66516
A16C1	0160-4401	3	2	CAPACITOR-FXD .01UF +-10% 100VDC POLYP	28480	0160-4401
A16C2	0140-0196	3	4	CAPACITOR-FXD 150PF +-5% 300VDC MICA	72136	DM15F151J0300V1CR
A16C3	0160-2226	6		CAPACITOR-FXD 2200PF +-5% 300VDC MICA	28480	0160-2226
A16C4	0140-0193	0		CAPACITOR-FXD 82PF +-5% 300VDC MICA	72136	DM15E20J0300V1CM
A16C5	0160-4401	3		CAPACITOR-FXD .01UF +-10% 100VDC POLYP	28480	0160-4401
A16C6	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A16C7	0160-2204	0		CAPACITOR-FXD 100PF +-5% 300VDC MICA	28480	0160-2204
A16C8	0160-2307	4	2	CAPACITOR-FXD 47PF +-5% 300VDC MICA	28480	0160-2307
A16C9	0160-2209	5	1	CAPACITOR-FXD 360PF +-5% 300VDC MICA	28480	0160-2209
A16C10	0160-2307	4		CAPACITOR-FXD 47PF +-5% 300VDC MICA	28480	0160-2307

See introduction to this section for ordering information  
 \*Indicates factory selected value

Table 6-3. Replaceable Parts

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
A16C11	0160-3622	8	27	CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A16C12	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A16C13	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A16C14	0180-0291	3		CAPACITOR-FXD 1UF+-10% 35VDC TA	56289	150D105X9035A2
A16C15	0180-1846	6		CAPACITOR-FXD 2.2UF+-10% 35VDC TA	56289	150D225X9035B2
A16C16	0160-3622	8	15	CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A16C17	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A16C18	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A16C19	0180-0291	4		CAPACITOR-FXD 1UF+-20% 10VDC TA	56289	150D475X0010A2
A16C21	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A16C22	0160-3622	8	3	CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A16C23	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A16C24	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A16C25	0180-0291	3		CAPACITOR-FXD 1UF+-10% 35VDC TA	56289	150D105X9035A2
A16C26	0180-1846	6		CAPACITOR-FXD 2.2UF+-10% 35VDC TA	56289	150D225X9035B2
A16CR1	1901-0044	5	2	DIODE-SWITCHING 50V 50MA 6NS	28480	1901-0044
A16CR2	1901-0044	5		DIODE-SWITCHING 50V 50MA 6NS	28480	1901-0044
A16CR3	1901-0044	5		DIODE-SWITCHING 50V 50MA 6NS	28480	1901-0044
A16CR4	1901-0044	5		DIODE-SWITCHING 50V 50MA 6NS	28480	1901-0044
A16CR5	1901-0044	5		DIODE-SWITCHING 50V 50MA 6NS	28480	1901-0044
A16CR6	1901-0028	5	5	DIODE-PWR RECT 400V 750MA DO-29	28480	1901-0028
A16CR7	1901-0028	5		DIODE-PWR RECT 400V 750MA DO-29	28480	1901-0028
A16L1	9140-0137	1	1	COIL-MLD 1MH 5% Q=60 .190X.44LG-NOM	28480	9140-0137
A16L2	9100-3912	2	1	COIL-MLD 15UH 5% Q=65 .155DX.375LG-NOM	28480	9100-3912
A16Q1	1854-0023	9	1	TRANSISTOR NPN SI TO-18 PD=360MW	28480	1854-0023
A16Q2	1855-0410	0	2	TRANSISTOR J-FET N-CHAN D-MODE TO-18 SI	28480	1855-0410
A16R1	0698-3242	7	1	RESISTOR 357 1% .125W F TC=0+-100	24546	C4-1/8-T0-357R-F
A16R2	0683-2025	1		RESISTOR 2K 5% .25W FC TC=-400/+700	01121	C82025
A16R3	0698-4488	5		RESISTOR 26.7K 1% .125W F TC=0+-100	24546	C4-1/8-T0-2672-F
A16R4	0698-4459	0		RESISTOR 634 1% .125W F TC=0+-100	24546	C4-1/8-T0-634R-F
A16R5	0683-2025	1		RESISTOR 2K 5% .25W FC TC=-400/+700	01121	C82025
A16R6	0683-3045	7	3	RESISTOR 300K 5% .25W FC TC=-800/+900	01121	C83045
A16R7	0683-3045	7		RESISTOR 300K 5% .25W FC TC=-800/+900	01121	C83045
A16R8	0683-1035	1		RESISTOR 10K 5% .25W FC TC=-400/+700	01121	C81035
A16R9	0683-2235	5		RESISTOR 22K 5% .25W FC TC=-400/+800	01121	C82235
A16R11	0683-2045	5		RESISTOR 200K 5% .25W FC TC=-800/+900	01121	C82045
A16R12	0683-1035	1	8	RESISTOR 10K 5% .25W FC TC=-400/+700	01121	C81035
A16R13	0683-5125	8		RESISTOR 5.1K 5% .25W FC TC=-400/+700	01121	C85125
A16R14	0683-2035	3		RESISTOR 20K 5% .25W FC TC=-400/+800	01121	C82035
A16R15	0683-2045	5		RESISTOR 200K 5% .25W FC TC=-800/+900	01121	C82045
A16R16	0683-5125	8		RESISTOR 5.1K 5% .25W FC TC=-400/+700	01121	C85125
A16R17	0698-3274	5	2	RESISTOR 10K 1% .125W F TC=0+-25	28480	0698-3274
A16R18	0698-3274	5		RESISTOR 10K 1% .125W F TC=0+-25	28480	0698-3274
A16R19	2100-3154	7		RESISTOR-TRMR 1K 10% C SIDE-ADJ 17-TRN	02111	43P102
A16R20	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	C81025
A16R21	2100-3054	6		RESISTOR-TRMR 50K 10% C SIDE-ADJ 17-TRN	02111	43P503
A16R22	0757-0476	9	2	RESISTOR 301K 1% .125W F TC=0+-100	24546	C4-1/8-T0-3013-F
A16R23	0698-4443	2		RESISTOR 4.53K 1% .125W F TC=0+-100	24546	C4-1/8-T0-4531-F
A16R24	0683-2025	1		RESISTOR 2K 5% .25W FC TC=-400/+700	01121	C82025
A16R25	0683-1525	4		RESISTOR 1.5K 5% .25W FC TC=-400/+700	01121	C81525
A16R26	0683-1015	7		RESISTOR 100 5% .25W FC TC=-400/+500	01121	C81015
A16R27	0683-1015	7	7	RESISTOR 100 5% .25W FC TC=-400/+500	01121	C81015
A16R28	0683-1015	7		RESISTOR 100 5% .25W FC TC=-400/+500	01121	C81015
A16R29	0683-1015	7		RESISTOR 100 5% .25W FC TC=-400/+500	01121	C81015
A16R31	0683-1015	7		RESISTOR 100 5% .25W FC TC=-400/+500	01121	C81015
A16R32	0683-1015	7		RESISTOR 100 5% .25W FC TC=-400/+500	01121	C81015
A16R33	0683-1015	7	RESISTOR 100 5% .25W FC TC=-400/+500	01121	C81015	
A16TP1	0360-0124	3	3	CONNECTOR-SGL CONT PIN .04-IN-BSC-SZ RND	28480	0360-0124
A16TP2	0360-0124	3		CONNECTOR-SGL CONT PIN .04-IN-BSC-SZ RND	28480	0360-0124
A16TP3	0360-0124	3		CONNECTOR-SGL CONT PIN .04-IN-BSC-SZ RND	28480	0360-0124
A16TP4	0360-0124	3		CONNECTOR-SGL CONT PIN .04-IN-BSC-SZ RND	28480	0360-0124
A16TP5	0360-0124	3		CONNECTOR-SGL CONT PIN .04-IN-BSC-SZ RND	28480	0360-0124
A16TP6	0360-0124	3	3	CONNECTOR-SGL CONT PIN .04-IN-BSC-SZ RND	28480	0360-0124
A16TP7	0360-0124	3		CONNECTOR-SGL CONT PIN .04-IN-BSC-SZ RND	28480	0360-0124
A16TP8	0360-0124	3		CONNECTOR-SGL CONT PIN .04-IN-BSC-SZ RND	28480	0360-0124
A16U1	1826-0185	5	5	OP AMP SPCL TO-99	01928	CA3080
A16U2	1826-0340	4		OP AMP BIFET TO-99	28480	1826-0340
A16U3	1826-0138	8		COMPARATOR GP QUAD 14-DIP-P	04713	LM339P
A16U4	1826-0043	4		OP AMP GP TO-99	01928	CA307T
A16U5	1820-1425	6		IC SCHMITT-TRIG TTL LS NAND QUAD 2-INP	01295	SN74LS132N
A16U6	1820-1984	2	12	CONV 10-B-D/A 16-DIP-C	24355	AD561KD
A16U7	1826-0026	3		COMPARATOR PRCN TO-99	04713	LM331G
A16U8	1820-1978	4		IC RGTR TTL L 12=817	34353	AV25L04PC
A16U9	1820-1425	6		IC SCHMITT-TRIG TTL LS NAND QUAD 2-INP	01295	SN74LS132N
A16U11	1826-0402	9		IC V RGLTR TO-3	80103	LAS=1515

See introduction to this section for ordering information  
 \*Indicates factory selected value

Table 6-3. Replaceable Parts

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
A17	03585-66517	4	1	FILTER BOARD NO. 1	28480	03585-66517
A17C1	0180-0116	1	2	CAPACITOR-FXD 6.8UF+-10% 35VDC TA	56289	150D685X9035B2
A17C2	0180-0116	8		CAPACITOR-FXD 6.8UF+-10% 35VDC TA	56289	150D685X9035B2
A17C3	0180-0229	7	3	CAPACITOR-FXD 33UF+-10% 10VDC TA	56289	150D336X9010B2
A17C4	0160-4571	8	40	CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A17C5	0160-3622	8	15	CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A17C6	0160-2257	3	1	CAPACITOR-FXD 10PF +-5% 500VDC CER 0+-60	28480	0160-2257
A17C7	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A17C8	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A17C9	0140-0184	9	5	CAPACITOR-FXD 8200PF +-1% 100VDC MICA	72136	DM20F822F0100WV1
A17C10	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A17C11	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A17C12	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A17C13	0140-0184	9		CAPACITOR-FXD 8200PF +-1% 100VDC MICA	72136	DM20F822F0100WV1CR
A17C14	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A17C15	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A17C16	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A17C17	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A17C18	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A17C19	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A17C20	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A17C21	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A17C22	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A17C23	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A17C24	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A17C25	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A17C26	0140-0191	3	2	CAPACITOR-FXD 56PF +-5% 300VDC MICA	04522	DM15E560J0300WV1CR
A17C27	0121-0180	9	2	CAPACITOR-V TRMR-CER 15-60PF 200V PC-MTG	01468	304324 15/16PF N1500
A17C28*	0140-0193	3		CAPACITOR-FXD 82PF +-5% 300VDC MICA	04522	DM15E820J0300WV1CR
A17C28**	0140-0194	1		CAPACITOR-FXD 110PF +-5% 300VDC MICA	04522	DM15F111J0300WV1CR
A17C28**	0240-0195	2		CAPACITOR-FXD 130PF +-5% 300VDC MICA	04522	DM15F131J0300WV1CR
A17C29	0121-0059	7	1	CAPACITOR-V TRMR-CER 2-8PF 350V PC-MTG	01468	304324 2/8PF NPO
A17C30	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A17C31	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A17C32	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A17C33	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A17C34	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A17C35	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A17C36	0140-0191	8		CAPACITOR-FXD 56PF +-5% 300VDC MICA	04522	DM15E560J0300WV1CR
A17C37	0121-0180	5		CAPACITOR-V TRMR-CER 15-60PF 200V PC-MTG	01468	304324 15/60PF N1500
A17C38*	0140-0193	1		CAPACITOR-FXD 82PF +-5% 300VDC MICA	04522	DM15E820J0300WV1CR
A17C38**	0140-0194	1		CAPACITOR-FXD 110PF +-5% 300VDC MICA	04522	DM15F111J0300WV1CR
A17C38**	0140-0195	2		CAPACITOR-FXD 130PF +-5% 300VDC MICA	04522	DM15F131J0300WV1CR
A17C39	0121-0059	7	1	CAPACITOR-V TRMR-CER 2-8PF 350V PC-MTG	01468	304324 2/8PF NPO
A17C40	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A17C41	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A17C42	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A17C43	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A17C44	0140-0198	5	2	CAPACITOR-FXD 200PF +-5% 300VDC MICA	72136	DM15F201J0300WV1CR
A17C45	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A17C46	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A17C47	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A17C48	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A17C49	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A17C50	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A17C51	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A17C52	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A17C53	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A17C54	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A17C55	0501-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A17C56	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A17C57	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A17C58	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A17C59	0160-3622	3		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A17C60	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A17C61	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A17C62	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A17C63	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A27C64	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A27C65	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A27C66	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A17C67	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A17C68	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A17C69	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A17C70	0121-0036	2		CAPACITOR-V TRMR-CER 5.5-18PF 350V	01468	304324 5.5/18PR NPO

See introduction to this section for ordering information  
 \*Indicates factory selected value

Table 6-3. Replaceable Parts

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
A17C71 A17C73	0121-0035 0140-0149	6	1	CAPACITOR-V TRMR-CLR 5.5-18PF 350V CAPACITOR-FXD 470PF + 5% 300VDC MICA	01468 04522	304324 5.5/18PF NPO DM15F471J0300WV1CR
A17CR1 A17CR2 A17CR3 A17CR4 A17CR5	1901-0376 1901-0376 1901-0376 1901-0376 1901-0376	6 6 6 6 6	33	DIODE-GEN PRP 35V 50MA DO-35	28480	1901-0376 1901-0376 1901-0376 1901-0376 1901-0376
A17CR6 A17CR7 A17CR8 A17CR9 A17CR10	1901-0376 1901-0376 1901-0376 1901-0376 1901-0376	6 6 6 6 6		DIODE-GEN PRP 35V 50MA DO-35	28480	1901-0376 1901-0376 1901-0376 1901-0376 1901-0376
A17CR11 A17CR12 A17CR13 A17CR14 A17CR15	1901-0376 1901-0376 1902-3149 1901-0518 1901-0518	6 6 9 8 6		DIODE-GEN PRP 35V 50MA DO-35 DIODE-ZNR 9.09V 5% DO-7 PD=1.4W TC=+.057%	28480 28480 28480 28480 28480	1901-0376 1901-0376 1902-3149 1901-0518 1901-0518
A17J1 A17J2 A17J3 A17J4 A17J5	1250-1368 1251-4822 125A-0141 1251-4822 125A-0141	7 6 8 6 8	1 10	CONNECTOR-REF SMB M PC 50-OHM CONNECTOR 3-PIN M POST TYPE	28480 28480 28480 28480 28480	1250-1368 1251-4822 125A-0141 1251-4822 125A-0141
A17J6 A17J7 A17J8 A17J9	1251-4822 125A-0141 1251-4822 125A-0141	6 8 6 8		CONNECTOR 3-PIN M POST TYPE	28480 28480 28480 28480	1251-4822 125A-0141 1251-4822 125A-0141
A17L1 A17L2 A17L3 A17L4 A17L5	9140-0210 9140-0210 9100-1618 9140-0289 9140-0289	1 1 1 4 4	2	COIL-MLD 100UH 5% Q=50 .155DX.375LG-NOM COIL-MLD 100UH 5% Q=50 .155DX.375LG-NOM COIL-MLD 5.6UH 10% Q=45 .155DX.375LG-NOM COIL-VAR 23UH-27UH Q=200 PC-VTG COIL-VAR 23UH-27UH Q=200 PC-VTG	28480 28480 28480 28480 28480	9140-0210 9140-0210 9100-1618 9140-0289 9140-0289
A17L6 A17L7 A17L8	T-58234 T-38233 9100-0543	1 1 9	1	COIL-FXD 1MH CENTER-TAP COIL-FXD 2MH COIL-VAR 900UH-1.1MH Q=112 PC-VTG	28480	9100-0543
A17Q1 A17Q2 A17Q3 A17Q4 A17Q5	1854-0215 1853-0049 1854-0351 1854-0071 1854-0071	1 5 6 7 7	3 1 1 17	TRANSISTOR NPN SI PD=350MW FT=300MHZ TRANSISTOR PNP 2N4917 SI PD=200MW TRANSISTOR NPN SI TO-18 PD=360MW TRANSISTOR NPN SI PD=300MW FT=200MHZ TRANSISTOR NPN SI PD=300MW FT=200MHZ	04713 07263 28480 28480 28480	2N3904 2N4917 1854-0351 1854-0071 1854-0071
A17Q6 A17Q7 A17Q8 A17Q9 A17Q10	1854-0071 1853-0010 1854-0215 1854-0215 1854-0071	7 2 1 1 1	3	TRANSISTOR NPN SI PD=300MW FT=200MHZ TRANSISTOR PNP SI TO-18 PD=300MW TRANSISTOR NPN SI PD=350MW FT=300MHZ TRANSISTOR NPN SI PD=350MW FT=300MHZ TRANSISTOR NPN SI PD=300MW FT=200MHZ	28480 28480 04713 04713 28480	1854-0071 1853-0010 2N3904 2N3904 1854-0071
A17R1 A17R2 A17R3 A17R4 A17R5	0683-3925 0683-2205 0683-1525 0683-2215 0683-1015	2 9 4 1 7	1 1 2 1 71	RESISTOR 3.9K 5% .25W FC TC=400/+700 RESISTOR 22 5% .25W FC TC=400/+500 RESISTOR 1.5K 5% .25W FC TC=400/+700 RESISTOR 220 5% .25W FC TC=400/+600 RESISTOR 100 5% .25W FC TC=400/+500	01121 01121 01121 01121 01121	CB3925 CB2205 CB1525 CB2215 CB1015
A17R6 A17R7 A17R8 A17R9 A17R10	0683-1015 0683-2035 0683-2035 0683-3518 0757-0279	7 3 3 0 0	15	RESISTOR 100 5% .25W FC TC=400/+500 RESISTOR 20K 5% .25W FC TC=400/+800 RESISTOR 20K 5% .25W FC TC=400/+800 RESISTOR 7.32K 1% .125W F TC=0/+100 RESISTOR 3.16K 1% .125W F TC=0/+100	01121 01121 01121 24546 24546	CB1015 CB2035 CB2035 C4-1/8-T0-7321-F C4-1/8-T0-3161-F
A17R11 A17R12 A17R13 A17R14 A17R15	069A-4451 2100-2497 0757-0283 0683-1015 0683-3325	2 9 6 6 6	3 5	RESISTOR 340 1% .125W F TC=0/+100 RESISTOR-TRMR 2K 10% C TOP-ADJ 1-TRN RESISTOR 2K 1% .125W F TC=0/+100 RESISTOR 100 5% .25W FC TC=400/+500 RESISTOR 3.3K 5% .25W FC TC=400/+700	24546 73138 24546 01121 01121	C4-1/8-T0-340R-F R2PR2K C4-1/8-T0-2001-F CB1015 CB3325
A17R16 A17R17 A17R18 A17R19 A17R20	0683-1015 069A-3518 0698-3096 0757-0016 2100-2497	7 0 3 7 9	2	RESISTOR 100 5% .25W FC TC=400/+500 RESISTOR 7.32K 1% .125W F TC=0/+100 RESISTOR 3.57K 1% .125W F TC=0/+100 RESISTOR 511 1% .125W F TC=0/+100 RESISTOR-TRMR 2K 10% C TOP-ADJ 1-TRN	01121 24546 24546 24546 73138	CB1015 C4-1/8-T0-7321-F C4-1/8-T0-357R-F C4-1/8-T0-511R-F R2PR2K
A17R21 A17R22 A17R23 A17R24 A17R25	0757-0283 0683-1015 0683-3325 0683-2035 0698-4473	6 7 6 3 9		RESISTOR 2K 1% .125W F TC=0/+100 RESISTOR 100 5% .25W FC TC=400/+500 RESISTOR 3.3K 5% .25W FC TC=400/+700 RESISTOR 20K 5% .25W FC TC=400/+800 RESISTOR 20K 5% .25W FC TC=400/+800	24546 01121 01121 01121 01121	C4-1/8-T0-2001-F CB1015 CB3325 CB2035 CB2035
A17R26 A17R27 A17R28 A17R29 A17R30	2100-3274 0757-0200 2100-3207 0757-0283 2100-3273	2 7 1 6 1	1 3 2 3	RESISTOR-TRMP 10K 10% C SIDE-ADJ 1-TRN RESISTOR 5.62K 1% .125W F TC=0/+100 RESISTOR-TRMR 5K 10% C SIDE-ADJ 1-TRN RESISTOR 2K 1% .125W F TC=0/+100 RESISTOR-TRMR 2K 10% C SIDE-ADJ 1-TRN	28480 24546 28480 24546 28480	2100-3274 C4-1/8-T0-5621-F 2100-3207 C4-1/8-T0-2001-F 2100-3273

See introduction to this section for ordering information  
\*Indicates factory selected value

Table 6-3. Replaceable Parts

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
A17R31	0757-0428	1	2	RESISTOR 1.62K 1% .125W F TC=0+-100	24546	C4-1/8-TO-1621-F
A17R32	2100-3273	1		RESISTOR-TRMR 2K 10% C SIDE-ADJ 1-TRN	28480	2100-3273
A17R33	0698-4196	2	1	RESISTOR 1.07K .125W F TC=0+-100	03292	C4-1/8-TO-1071-F
A17R34	2100-3273	1		RESISTOR-TRMR 2K 10% C SIDE-ADJ 1-TRN	28480	2100-3273
A17R35	0683-1025	9	39	RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
A17R36	0683-1015	7		RESISTOR 100 5% .25W FC TC=-400/+500	01121	CB1015
A17R37	0683-1015	7		RESISTOR 100 5% .25W FC TC=-400/+500	01121	CB1015
A17R38	0683-1015	7		RESISTOR 100 5% .25W FC TC=-400/+500	01121	CB1015
A17R39	0683-2225	3	1	RESISTOR 2.2K 5% .25W FC TC=-400/+700	01121	CB2225
A17R40	0683-3315	4	1	RESISTOR 330 5% .25W FC TC=-400/+600	01121	CB3315
A17R41	0683-1015	7		RESISTOR 100 5% .25W FC TC=-400/+500	01121	CB1015
A17R42	0683-1025	3	6	RESISTOR 3K 5% .25W FC TC=-400/+700	01121	CB3025
A17R43	0683-1235	3	4	RESISTOR 12K 5% .25W FC TC=-400/+800	01121	CB1235
A17R44	0698-4482	9	1	RESISTOR 17.4K 1% .125W F TC=0+-100	01992	PME55-1/8-TO-1742-F
A17R45	0698-4473	8	1	RESISTOR 8.06K 1% .125W F TC=0+-100	24546	C4-1/81TO18061-F
A17R46	0698-4428	3	1	RESISTOR 1.69K 1% .125W F TC=0+-100	03292	C4-1/8-TO-1691-F
A17R47	0698-3178	8	1	RESISTOR 487 1% .125W F TC=0+-100	03292	C4-1/8-TO-487R-F
A17R48	0698-4453	4	2	RESISTOR 402 1% .125W F TC=0+-100	03292	C4-1/8-TO-402R-F
A17R49	0683-2025	1		RESISTOR 2K 5% .25W FC TC=-400/+700	01121	CB2025
A17R50	0683-2025	1		RESISTOR 2K 5% .25W FC TC=-400/+700	01121	CB2025
A17R51	0683-2025	1		RESISTOR 2K 5% .25W FC TC=-400/+700	01121	CB2025
A17R52	0683-2025	1		RESISTOR 2K 5% .25W FC TC=-400/+700	01121	CB2025
A17R53	0683-1045	3	15	RESISTOR 100K 5% .25W FC TC=-400/+800	01121	CB1045
A17R54	0683-1045	3		RESISTOR 100K 5% .25W FC TC=-400/+800	01121	CB1045
A17R55	0683-1045	3		RESISTOR 100K 5% .25W FC TC=-400/+800	01121	CB1045
A17R56	0683-1045	3		RESISTOR 100K 5% .25W FC TC=-400/+800	01121	CB1045
A17R57	0683-1225	1	2	RESISTOR 1.2K 5% .25W FC TC=-400/+700	01121	CB1225
A17R58	0683-1015	7		RESISTOR 100 5% .25W FC TC=-400/+500	01121	CB1015
A17R59	0683-3025	3		RESISTOR 3K 5% .25W FC TC=-400/+700	01121	CB3025
A17R60	0683-1235	3		RESISTOR 12K 5% .25W FC TC=-400/+800	01121	CB1235
A17R61	0698-4506	8		RESISTOR 73.2K 1% .125W F TC=0+-100	03292	C4-1/8-TO-7322-F
A17R62	0698-4492	1	4	RESISTOR 32.4 1% .125W F TC=0+-100	24546	C4-1/8-TO-3242-F
A17R63	0698-4471	6	2	RESISTOR 7.15K 1% .125W F TC=0+-100	03292	C4-1/8-TO-7151-F
A17R64	0698-4431	8	1	RESISTOR 2.05K 1% .125W F TC=0+-100	03292	C4-1/8-TO-2051-F
A17R65	0698-4453	4		RESISTOR 402 1% .125W F TC=0+-100	24546	CR-1/8-TO-402R-F
A17R66	0683-2025	1		RESISTOR 2K 5% .25W FC TC=-400/+700	01121	CB2025
A17R67	0683-2025	1		RESISTOR 2K 5% .25W FC TC=-400/+700	01121	CB2025
A17R68	0683-2025	1		RESISTOR 2K 5% .25W FC TC=-400/+700	01121	CB2025
A17R69	0683-2025	1		RESISTOR 2K 5% .25W FC TC=-400/+700	01121	CB2025
A17R70	0683-2025	1		RESISTOR 2K 5% .25W FC TC=-400/+700	01121	CB2025
A17R71	0683-7525	6	2	RESISTOR 7.5K 5% .25W FC TC=-400/+700	01121	CB7525
A17R72	0683-4705	8	4	RESISTOR 47 5% .25 W TC=-400/+500	01121	CB4705
A17R73	0683-1015	7		RESISTOR 100 5% .25W FC TC=-400/+500	01121	CB1015
A17R74	0683-1015	7		RESISTOR 100 5% .25W FC TC=-400/+500	01121	CB1015
A17R75	0683-1015	7		RESISTOR 100 5% .25W FC TC=-400/+500	01121	CB1015
A17R76	0698-4491	1	1	RESISTOR 30.9K 1% .125W F TC=0+-100	03292	C4-1/8-TO-3092-F
A17R77	0757-0200	7		RESISTOR 5.62K 1% .125W F TC=0+-100	24546	C4-1/8-TO-5621-F
A17R78	0757-0200	7		RESISTOR 5.62K 1% .125W F TC=0+-100	24546	C4-1/8-TO-5621-F
A17R79	0698-3382	6	1	RESISTOR 5.49K 1% .125W F TC=0+-100	24546	C4-1/8-TO-5491-F
A17R80	0683-1045	3		RESISTOR 100K 5% .25W FC TC=-400/+800	01121	CB1045

See introduction to this section for ordering information  
 \*Indicates factory selected value

Table 6-3. Replaceable Parts

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number	
A17RA1	06A3-1015	7	5	RESISTOR 100 5% .25W FC TC=-400/+500	01121	CB1015	
A17RA2	06A3-5125	8		RESISTOR 5.1K 5% .25W FC TC=-400/+700	01121	CB5125	
A17RA4	06A3-2025	1	5	RESISTOR 2K 5% .25W FC TC=-400/+700	01121	CB2025	
A17RA5	06A3-1035	1		RESISTOR 10K 5% .25W FC TC=-400/+700	01121	CB1035	
A17RA6	06A3-1025	9	9	RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025	
A17RA7	06A3-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025	
A17RA8	06A3-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025	
A17RA9	06A3-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025	
A17RA0	06A3-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025	
A17RA1	06A3-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025	
A17RA2	06A3-1025	9	9	RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025	
A17RA3	06A3-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025	
A17RA4	06A3-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025	
A17RA5	06A3-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	CB4705	
A17RA6	0698-3262	1		RESISTOR 40.2 1% .125W F TC=0/+100	24546	C4-1/8-T0-4022-F	
A17RA6	0698-4387	3	RESISTOR 60.4 1% .125W F TC=0/+100	24546	C4-1/8-T0-60R4-F		
A17RA6	0757-0277	8	RESISTOR 49.9 1% .125W F TC=0/+100	24546	C4-1/8-T0-4992-F		
A17RA6	0757-0346	2	RESISTOR 10 1% .125W F TC=0/+100	24546	C4-1/8-T0-10R0-F		
A17RA6	0757-0384	8	RESISTOR 20 1% .125W F TC=0/+100	19701	WF4C1/8-T0-20R0-F		
A17RA6	0757-0388	2	RESISTOR 30.1 1% .125W F TC=0/+100	24546	C4-1/8-T0-30R1-F		
A17RA7	0698-3262	1	RESISTOR 40.2 1% .125W F TC=0/+100	24546	C4-1/8-T0-4022-F		
A17RA7	0698-4387	3	RESISTOR 60.4 1% .125W F TC=0/+100	24546	C4-1/8-T0-60R4-F		
A17RA7	0757-0277	8	RESISTOR 49.9 1% .125W F TC=0/+100	24546	C4-1/8-T0-4992-F		
A17RA7	0757-0346	2	RESISTOR 10 1% .125W F TC=0/+100	24546	C4-1/8-T0-10R0-F		
A17RA7	0757-0384	8	RESISTOR 20 1% .125W F TC=0/+100	19701	WF4C1/8-T0-20R0-F		
A17RA7	0757-0388	2	RESISTOR 30.1 1% .125W F TC=0/+100	24546	C4-1/8-T0-30R1-F		
A17RA8	0698-4467	0	1	RESISTOR 1.05K 1% .125W F TC=0/+100	24546	C4-1/8-T0-1051-F	
A17RA9	0698-4471	6		RESISTOR 7.15K 1% .125W F TC=0/+100	24546	C4-1/8-T0-7151-F	
A17R100	06A3-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	CB4705	
A17R101	0757-0283	6		RESISTOR 2K 1% .125W F TC=0/+100	24546	C4-1/8-T0-2001-F	
A17R102	06A3-5125	8		RESISTOR 5.1K 5% .25W FC TC=-400/+700	01121	CB5125	
A17R103	06A3-3025	3		RESISTOR 3K 5% .25W FC TC=-400/+700	01121	CB3025	
A17R104	06A3-1525	4	RESISTOR 1.5K 5% .25W FC TC=-400/+700	01121	CB1525		
A17R105	2100-3207	1	RESISTOR TRMP 5K 10% C SIDE-ADJ 1-TRN	28480	2100-3207		
A17R106	0757-0439	4	2	RESISTOR 6.81K 1% .125W F TC=0/+100	24546	C4-1/8-T0-6811-F	
A17R107	06A3-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	CB4705	
A17R108	06A3-1015	7	7	RESISTOR 100 5% .25W FC TC=-400/+500	01121	CB1015	
A17R109	06A3-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	CB4705	
A17R110	06A3-1015	7		RESISTOR 100 5% .25W FC TC=-400/+500	01121	CB1015	
A17R111	06A3-1015	7		RESISTOR 100 5% .25W FC TC=-400/+500	01121	CB1015	
A17R112	06A3-1015	7		RESISTOR 100 5% .25W FC TC=-400/+500	01121	CB1015	
A17R113	06A3-1025	9	3	RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025	
A17R114	0757-0446	9		RESISTOR 15K 1% .125W F TC=0/+100	24546	C4-1/8-T0-1502-F	
A17R143	06A3-1015	7		RESISTOR 100 5% .25W FC TC=-400/+500	01121	CB1015	
A17RT1	0837-0086	7		7	7	28480	0837-0086
A17RT2	0837-0086	7	7	7	28480	0837-0086	
A17RT3	0837-0085	0	1	1	28480	0837-0085	
A17RT4	0837-0119	7	1	1	28480	0837-0119	
A17T1	9100-3262	5	5	TRANSFORMER TRANSFORMER; TOROIDAL PULSE	28480	9100-3262	
A17T2	9100-3262	5		TRANSFORMER TRANSFORMER; TOROIDAL PULSE	28480	9100-3262	
A17U1	1A20-1196	8	9	IC FF TTL LS D-TYPE POS-EDGE-TRIG COM	01295	SN74LS174N	
A17U2	1A26-0510	0		16	IC SWITCH ANLG QUAD 16-DIP-P	27014	LF13332N
A17U3	1A26-0510	0		0	IC SWITCH ANLG QUAD 16-DIP-P	27014	LF13332N
A17U4	1A26-0510	0		0	IC SWITCH ANLG QUAD 16-DIP-P	27014	LF13332N
A17U5	1A26-0510	0		0	IC SWITCH ANLG QUAD 16-DIP-P	27014	LF13332N
A17U6	1A26-0510	0	3	IC SWITCH ANLG QUAD 16-DIP-P	27014	LF13332N	
A17U7	1A20-1216	3		3	IC DCDP TTL LS 3-T0-R-LINE 3-IMP	01295	SN74LS138N
A17U8	1A20-1196	7		3	IC FF TTL LS D-TYPE POS-EDGE-TRIG COM	01295	SN74LS175N
A17U9	1A20-1196	8		3	IC FF TTL LS D-TYPE POS-EDGE-TRIG COM	01295	SN74LS174N
A17Y1				PART OF MATCHED SET			
A17Y2				PART OF MATCHED SET			
A17Y1-5	03585-82501	6	1	CRYSTALS, IF FILTER (MATCHED SET OF 5)	28480	03585-82501	
A:0 MISCELLANEOUS PARTS							
	1400-0249	0	5	CARLE TIE .062-.025-DIA .091-RO NYL	28480	1400-0249	
	1480-0116	8		6	PIN-GRV .062-IN-DIA .25-IN-LG STL	28480	1480-0116
	0403-0211	1		4	EXTR-PC RD BRN PBLVC .062-RO-THKNS	28480	0403-0211
	0360-1653	5		20	CONNECTOR-SGL CONT PIN .045-IN-RSC-SZ 50	28480	0360-1653
A18	03585-86518	5	1	IF GAIN BOARD	28480	03585-86518	
A18C1	0180-1974	1	4	CAPACITOR-FXD 10UF+-10% 35VDC TA	56289	150D106X9035R2	
A18C2	0180-1974	1		CAPACITOR-FXD 10UF+-10% 35VDC TA	56289	150D106X9035R2	
A18C3	0180-0229	7		CAPACITOR-FXD 33UF+-10% 10VDC TA	56289	150D336X9010R2	
A18C4	0160-4571	9		CAPACITOR-FXD .1UF +80-20% 50VDC DER	28480	0160-4571	
A18C5	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC DER	28480	0160-4571	

See introduction to this section for ordering information  
 \*Indicates factory selected value



Table 6-3. Replaceable Parts

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
A18C6	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A18C7	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A18C8	0140-0184	9		CAPACITOR-FXD 8200PF +-1% 100VDC MICA	72136	DM20F822F0100WVICR
A18C9	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A18C10	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A18C11	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A18C12	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A18C13	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A18C14	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A18C15	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A18C16	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A18C17	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A18C18	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A18C19	0610-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A18C20	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A18C21	0140-0191	8		CAPACITOR-FXD 56PF +-5% 300VDC MICA	04522	DM15E60J0300WVICR
A18C22	0121-0180	5		CAPACITOR-V TRMR-CER 15-60PF 200V PC-MTG	01468	304324 15/60PF N1500
A18C23*	0140-0193	8		CAPACITOR-FXD 82PF +-5% 300VDC MICA	04522	DM15E82J0300WVICR
A18C23**	0140-0194	1		CAPACITOR-FXD 110PF +-5% 300VDC MICA	04522	DM15F11J0300WVICR
A18C23**	0140-0195	2		CAPACITOR-FXD 130PF +-5% 300VDC MICA	04522	DM15F13J0300WVICR
A18C24	0121-0059	7		CAPACITOR-V TRMR-CER 2-8PF 350V PC-MTG	01468	304324 2/8PF NPO
A18C25	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A18C26	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A18C27	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A18C28	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A18C29	0160-0127	2	1	CAPACITOR-FXD 1UF +-20% 25VDC CER	28480	0160-0127
A18C30	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A18C31	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A18C32	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A18C33	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A18C34	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A18C35	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A18C37	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A18C38	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A18C39	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A18C41	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A18C42	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100S104Z
A18C43	0160-4571	8		CAPACITOR-FXD .1UF +80-25% 50VDC CER	28480	0160-4571
A18C44	0140-0198	5		CAPACITOR-FXD 200PF +-5% 300VDC MICA	72136	DM15F20J0300WVICR
A18C46	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A18C47	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A18C48	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A18C49	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A18C50	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A18C51	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A18C52	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A18C53	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A18C54	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A18C55	0160-2253	9	1	CAPACITOR-FXD 6.8PF +-25PF 500VDC CER	28480	0160-2253
A18C56	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A18C57	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A18C58	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A18C59	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A18C60	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A18C61	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A18C62	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A18C63	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A18C64	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A18C65	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A18C66	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A18C67	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A18C68	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A18C69	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A18C70	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A18C71	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A18C72	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A18C73	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A18C74	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A18C75	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A18C76	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A18C77	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A18C78	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A18C79	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A18C80	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A18C81	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A18C82	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A18C83	0121-0036	8		CAPACITOR-V TRMR-CER 5.5-18PF 550V	01468	305324 5.5/18PF NPO

See introduction to this section for ordering information  
 \*Indicates factory selected value

Table 6-3. Replaceable Parts

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
A18CB4	0160-3622	8		CAPACITOR-FXO .1UF +60-20% 100VDC CER	26654	2130V5V100R104Z
A18CR1	1901-0376	6		DIODE-GEN PRP 35V 50MA DO-35	28480	1901-0376
A18CR2	1901-0376	6		DIODE-GEN PRP 35V 50MA DO-35	28480	1901-0376
A18CR3	1901-0376	6		DIODE-GEN PRP 35V 50MA DO-35	28480	1901-0376
A18CR4	1901-0376	6		DIODE-GEN PRP 35V 50MA DO-35	28480	1901-0376
A18CR5	1901-0376	6		DIODE-GEN PRP 35V 50MA DO-35	28480	1901-0376
A18CR6	1901-0376	6		DIODE-GEN PRP 35V 50MA DO-35	28480	1901-0376
A18CR7	1901-0376	6		DIODE-GEN PRP 35V 50MA DO-35	28480	1901-0376
A18CR8	1902-3149	9		DIODE-ZNR 9.09V 5% DO-7 PDM,HW TC=+.057X	28480	1902-3149
A18CR9	1901-0518	8		DIODE-SCHOTTKY	28480	1901-0518
A18CR10	1901-0518	8		DIODE-SCHOTTKY	28480	1901-0518
A18CR11	1901-0050	3	4	DIODE-SWITCHING RAV 200MA 2NS DO-35	28480	1901-0050
A18CR12	1901-0050	3		DIODE-SWITCHING RAV 200MA 2NS DO-35	28480	1901-0050
A18CR13	1901-0050	3		DIODE-SWITCHING RAV 200MA 2NS DO-35	28480	1901-0050
A18CR14	1901-0050	3		DIODE-SWITCHING RAV 200MA 2NS DO-35	28480	1901-0050
A18HU2	1205-0011	0	0	HEAT SINK TO-5/T0-39-CS	28480	1205-0011
A18HU7	1205-0011	0		HEAT SINK TO-5/T0-39-CS	28480	1205-0011
A18HU8	1205-0011	0		HEAT SINK TO-5/T0-39-CS	28480	1205-0011
A18HU9	1205-0011	0		HEAT SINK TO-5/T0-39-CS	28480	1205-0011
A18J1	1251-4822	6		CONNECTOR 3-PIN M POST TYPE	28480	1251-4822
A18J2	1251-0141	8	10	CONNECTOR 3-PIN M POST TYPE	28480	1251-0141
A18L1	1251-4822	6		CONNECTOR 3-PIN M POST TYPE	28480	1251-4822
A18L2	1251-0141	8		CONNECTOR 3-PIN M POST TYPE	28480	1251-0141
A18L3	1251-4822	6		CONNECTOR 3-PIN M POST TYPE	28480	1251-4822
A18L4	1251-0141	8		CONNECTOR 3-PIN M POST TYPE	28480	1251-0141
A18L5	1251-4822	6		CONNECTOR 3-PIN M POST TYPE	28480	1251-4822
A18L6	1251-0141	8		CONNECTOR 3-PIN M POST TYPE	28480	1251-0141
A18L1	9100-0541	7	6	COIL-MLD 250UH 10% 0*3 .25DX,5LG-NOM	28480	9100-0541
A18L2	9100-0541	7		COIL-MLD 250UH 10% 0*3 .25DX,5LG-NOM	28480	9100-0541
A18L3	9100-0541	7		COIL-MLD 250UH 10% 0*3 .25DX,5LG-NOM	28480	9100-0541
A18L4	T-58235	7		COIL-FXD 3MH	28480	9100-0541
A18L5	9140-0289	4		COIL-VAR 23UH-27UH Q=200 PC-MTG	28480	9140-0289
A18L6	9100-0543	9		COIL-VAR 900UH-1.1MH Q=112 PC-MTG	28480	9100-0543
A18Q1	1854-0071	7		TRANSISTOR NPN 91 PD=300MA FT=200MHZ	28480	1854-0071
A18Q2	1853-0010	2		TRANSISTOR PNP 91 TO-18 PD=300MA	28480	1853-0010
A18Q3	1854-0071	7		TRANSISTOR NPN 91 PD=300MA FT=200MHZ	28480	1854-0071
A18Q4	1854-0071	7		TRANSISTOR NPN 91 PD=300MA FT=200MHZ	28480	1854-0071
A18Q5	1854-0071	7		TRANSISTOR NPN 91 PD=300MA FT=200MHZ	28480	1854-0071
A18Q6	1854-0071	7		TRANSISTOR NPN 91 PD=300MA FT=200MHZ	28480	1854-0071
A18R1	0699-0164	8	2	RESISTOR 738.5 1% .125W F TC=0+-25	28480	0699-0164
A18R2	0699-0163	7	2	RESISTOR 466 1% .125W F TC=0+-25	28480	0699-0163
A18R3	0698-8499	6	2	RESISTOR 294 1% .125W F TC=0+-25	28480	0698-8499
A18R4	0699-0162	6	2	RESISTOR 502.7 1% .125W F TC=0+-25	28480	0699-0162
A18R5	0757-0221	4	1	RESISTOR 825 1% .125W F TC=0+-100	24546	C4-1/8-T0-225R-F
A18R7	0757-0226	9		RESISTOR 1.3K 1% .125W F TC=0+-100	24546	C4-1/8-T0-1301-F
A18R8	0683-1015	7		RESISTOR 100 5% .25W FC TC=400/+500	01121	CR1015
A18R9	0683-1015	7		RESISTOR 100 5% .25W FC TC=400/+500	01121	CR1015
A18R10	0683-2035	3		RESISTOR 20K 5% .25W FC TC=400/+800	01121	CR2035
A18R11	0683-2035	3		RESISTOR 20K 5% .25W FC TC=400/+800	01121	CR2035
A18R12	0698-3518	0		RESISTOR 7.32K 1% .125W F TC=0+-100	24546	C4-1/8-T0-7321-F
A18R13	0757-0279	0		RESISTOR 3.16K 1% .125W F TC=0+-100	24546	C4-1/8-T0-3161-F
A18R14	0698-4451	2		RESISTOR 340 1% .125W F TC=0+-100	24546	C4-1/8-T0-340R-F
A18R15	2100-2497	9		RESISTOR-TMR 2K 10% C TOP-ADJ 1-TRN	73138	R2PR2K
A18R16	0757-0283	6		RESISTOR 2K 1% .125W F TC=0+-100	24546	C4-1/8-T0-2001-F
A18R17	0683-3325	6		RESISTOR 3.3K 5% .25W FC TC=400/+700	01121	CR3325
A18R18	0683-1015	7		RESISTOR 100 5% .25W FC TC=400/+500	01121	CR1015
A18R19	0683-1015	7		RESISTOR 100 5% .25W FC TC=400/+500	01121	CR1015
A18R20	0698-4393	1	1	RESISTOR 73.2 1% .125W F TC=0+-100	24546	C4-1/8-T0-73R2-F
A18R21	0698-3439	4	1	RESISTOR 178 1% .125W F TC=0+-100	24546	C4-1/8-T0-178R-F
A18R24	0757-0442	9		RESISTOR 10K 1% .125W F TC=0+-100	24546	C4-1/8-T0-1002-F
A18R25	0757-0281	4	1	RESISTOR 2.74K 1% .125W F TC=0+-100	24546	C4-1/8-T0-2741-F
A18R26	0698-3150	6	1	RESISTOR 2.37K 1% .125W F TC=0+-100	24546	C4-1/8-T0-2371-F
A18R27	0757-0428	1		RESISTOR 1.62K 1% .125W F TC=0+-100	24546	C4-1/8-T0-1621-F
A18R28	0683-1335	4	1	RESISTOR 13K 5% .25W FC TC=400/+800	01121	CR1335
A18R29	0683-4325	8	2	RESISTOR 4.3K 5% .25W FC TC=400/+700	01121	CR4325
A18R30	0683-2425	5	3	RESISTOR 2.4K 5% .25W FC TC=400/+700	01121	CR2425
A18R31	0683-2425	5		RESISTOR 2.4K 5% .25W FC TC=400/+700	01121	CR2425
A18R32	0683-2035	3		RESISTOR 20K 5% .25W FC TC=400/+800	01121	CR2035
A18R33	0683-4325	8		RESISTOR 4.3K 5% .25W FC TC=400/+700	01121	CR4325
A18R34	0683-1225	1		RESISTOR 1.2K 5% .25W FC TC=400/+700	01121	CR1225
A18R35	0683-3025	3		RESISTOR 3K 5% .25W FC TC=400/+700	01121	CR3025
A18R36	0683-1015	7		RESISTOR 100 5% .25W FC TC=400/+500	01121	CR1015
A18R37	0683-1235	3		RESISTOR 12K 5% .25W FC TC=400/+800	01121	CR1235
A18R38	0698-4506	5		RESISTOR 73.2K 1% .125W F TC=0+-100	03292	C4-1/8-T0-7322-F

See introduction to this section for ordering information  
 \*Indicates factory selected value



Table 6-3. Replaceable Parts

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
A18R39	0698-4492	1		RESISTOR 32.4K 1% .125W F TC=0+-100	03292	C4-1/8-T0-3242-F
A18R40	0698-4471	6		RESISTOR 7.15K 1% .125W F TC=0+-100	03292	C4-1/8-T0-7151-F
A18R41	0698-4481	8		RESISTOR 2.05K 1% .125W F TC=0+-100	03292	C4-1/8-T0-2051-F
A18R42	0689-4453	4	1	RESISTOR 402 1% .125W F TC=0+-100	24546	C4-1/8-T0-402R-F
A18R43	06A3-2025	1		RESISTOR 2K 5% .25W FC TC=-400/+700	01121	CB2025
A18R44	06A3-2025	1		RESISTOR 2K 5% .25W FC TC=-400/+700	01121	CB2025
A18R45	06A3-3625	9	3	RESISTOR 3.6K 5% .25W FC TC=-400/+700	01121	CB3625
A18R46	06A3-6225	1	3	RESISTOR 6.2K 5% .25W FC TC=-400/+700	01121	CB6225
A18R47	06A3-1045	3		RESISTOR 100K 5% .25W FC TC=-400/+800	01121	CB1045
A18R48	06A3-1045	3		RESISTOR 100K 5% .25W FC TC=-400/+800	01121	CB1045
A18R49	06A3-1045	3		RESISTOR 100K 5% .25W FC TC=-400/+800	01121	CB1045
A18R50	06A3-1045	3		RESISTOR 100K 5% .25W FC TC=-400/+800	01121	CB1045
A18R51	06A3-1015	7		RESISTOR 100 5% .25W FC TC=-400/+500	01121	CB1015
A18R52*	069A-3262	1		RESISTOR 40.2 1% .125W F TC=0+-100	24546	C4-1/8-T0-4022-F
A18R52*	0698-4387	3		RESISTOR 60.4 1% .125W F TC=0+-100	24546	C4-1/8-T0-60R4-F
A18R52*	0757-0277	8		RESISTOR 49.9 1% .125W F TC=0+-100	24546	C4-1/8-T0-4992-F
A18R52*	0757-0346	2		RESISTOR 10 1% .125W F TC=0+-100	24546	C4-1/8-T0-10R0-F
A18R52*	0757-0344	6		RESISTOR 20 1% .125W F TC=0+-100	19701	MF401/8-T0-20R0-F
A18R52*	0757-038A	2		RESISTOR 30.1 1% .125W F TC=0+-100	24546	C4-1/8-T0-30R1-F
A18R53	06A3-2035	3		RESISTOR 20K 5% .25W FC TC=-400/+800	01121	CB2035
A18R54	06A3-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	CB4705
A18R55	06A3-1035	1		RESISTOR 10K 5% .25W FC TC=-400/+700	01121	CB1035
A18R56	06A3-1015	5		RESISTOR 100 5% .25W FC TC=-400/+500	01121	CB1015
A18R57	06A3-1015	7		RESISTOR 100 5% .25W FC TC=-400/+500	01121	CB1015
A18R59	06A3-1015	7		RESISTOR 100 5% .25W FC TC=-400/+500	01121	CB1015
A18R59	0698-3492	9	1	RESISTOR 2.67K 1% .125W F TC=0+-100	24546	C4-1/8-T0-2671-F
A18R60	06A3-1045	3		RESISTOR 100K 5% .25W FC TC=-400/+800	01121	CB1045
A18R61	06A3-5125	7		RESISTOR 5.1K 5% .25W FC TC=-400/+700	01121	CB5125
A18R62	06A3-1015	8		RESISTOR 100 5% .25W FC TC=-400/+500	01121	CB1015
A18R63	06A3-1015	7		RESISTOR 100 5% .25W FC TC=-400/+500	01121	CB1015
A18R64	0698-4446	5	3	RESISTOR 267 1% .125W F TC=0+-100	24546	C4-1/8-T0-267R-F
A18R65	2100-3349	2	3	RESISTOR-TRMP 100 10% C SIDE-ADJ 1-TRN	28480	2100-3349
A18R66	0698-4427	2	3	RESISTOR 1.65K 1% .125W F TC=0+-100	24546	C4-1/8-T0-1651-F
A18R67	06A3-2035	3		RESISTOR 20K 5% .25W FC TC=-400/+800	01121	CB2035
A18R68	06A3-1015	7		RESISTOR 100 5% .25W FC TC=-400/+500	01121	CB1015
A18R69	06A3-1015	7		RESISTOR 100 5% .25W FC TC=-400/+500	01121	CB1015
A18R70	0698-4446	5		RESISTOR 267 1% .125W F TC=0+-100	24546	C4-1/8-T0-267R-F
A18R71	2100-3349	2		RESISTOR-TRMP 100 10% C SIDE-ADJ 1-TRN	28480	2100-3349
A18R72	0698-4427	2		RESISTOR 1.65K 1% .125W F TC=0+-100	24546	C4-1/8-T0-1651-F
A18R73	06A3-2035	3		RESISTOR 20K 5% .25W FC TC=-400/+800	01121	CB2035
A18R74	06A3-1015	7		RESISTOR 100 5% .25W FC TC=-400/+500	01121	CB1015
A18R75	06A3-1015	7		RESISTOR 100 5% .25W FC TC=-400/+500	01121	CB1015
A18R76	0698-4446	5		RESISTOR 267 1% .125W F TC=0+-100	24546	C4-1/8-T0-267R-F
A18R77	2100-3349	2		RESISTOR-TRMP 100 10% C SIDE-ADJ 1-TRN	28480	2100-3349
A18R78	069A-4427	2		RESISTOR 1.65K 1% .125W F TC=0+-100	24546	C4-1/8-T0-1651-F
A18R79	06A3-2035	3		RESISTOR 20K 5% .25W FC TC=-400/+800	01121	CB2035
A18R80	06A3-1015	7		RESISTOR 100 5% .25W FC TC=-400/+500	01121	CB1015
A18R81	06A3-1015	7		RESISTOR 100 5% .25W FC TC=-400/+500	01121	CB1015
A18R82	06A3-2035	3		RESISTOR 20K 5% .25W FC TC=-400/+800	01121	CB2035
A18R83	06A3-2025	1		RESISTOR 2K 5% .25W FC TC=-400/+700	01121	CB2025
A18R84	06A3-1025	1		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
A18R85	0698-4444	1	1	RESISTOR 19.1K 1% .125W F TC=0+-100	24546	C4-1/8-T0-1912-F
A18R86	06A3-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
A18R87	06A3-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
A18R88	06A3-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
A18R89	06A3-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
A18R90	06A3-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
A18R91	06A3-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
A18R92	06A3-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
A18R93	06A3-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
A18R94	06A3-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
A18R95	06A3-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
A18R96	06A3-1015	7		RESISTOR 100 5% .25W FC TC=-400/+500	01121	CB1015
A18R97	06A3-1015	7		RESISTOR 100 5% .25W FC TC=-400/+500	01121	CB1015

See introduction to this section for ordering information  
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Table 6-3. Replaceable Parts

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
A18R99	0683-1045	3		RESISTOR 100K 5% .25W FC TC=400/+600	01121	CB1045
A18R99	0683-5125	8		RESISTOR 5.1K 5% .25W FC TC=400/+700	01121	CB5125
A18R100	0683-1015	7		RESISTOR 100 5% .25W FC TC=400/+500	01121	CB1015
A18R101	0683-1025	9		RESISTOR 1K 5% .25W FC TC=400/+600	01121	CB1025
A18R102	0683-1025	9		RESISTOR 1K 5% .25W FC TC=400/+600	01121	CB1025
A18R103	0683-1025	9		RESISTOR 1K 5% .25W FC TC=400/+600	01121	CB1025
A18R104	0683-1025	9		RESISTOR 1K 5% .25W FC TC=400/+600	01121	CB1025
A18R105	0683-1025	9		RESISTOR 1K 5% .25W FC TC=400/+600	01121	CB1025
A18R106	0683-1025	9		RESISTOR 1K 5% .25W FC TC=400/+600	01121	CB1025
A18R107	0757-0415	6	1	RESISTOR 475 1% .125W F TC=0/+100	24546	CA-1/A-T0-475R-F
A18R10A	0683-1035	1		RESISTOR 10K 5% .25W FC TC=400/+700	01121	CB1035
A18R109	0683-1015	7		RESISTOR 100 5% .25W FC TC=400/+500	01121	CB1015
A18R110	0683-1015	7		RESISTOR 100 5% .25W FC TC=400/+500	01121	CB1015
A18R111	0683-1015	7		RESISTOR 100 5% .25W FC TC=400/+500	01121	CB1015
A18R112	0683-1015	7		RESISTOR 100 5% .25W FC TC=400/+500	01121	CB1015
A18R113	0683-1015	7		RESISTOR 100 5% .25W FC TC=400/+500	01121	CB1015
A18R114	0683-1015	7		RESISTOR 100 5% .25W FC TC=400/+500	01121	CB1015
A18R115	0683-1015	7		RESISTOR 100 5% .25W FC TC=400/+500	01121	CB1015
A18R116	0683-1015	7		RESISTOR 100 5% .25W FC TC=400/+500	01121	CB1015
A18R117	0683-1015	7		RESISTOR 100 5% .25W FC TC=400/+500	01121	CB1015
A18R118	0683-1015	7		RESISTOR 100 5% .25W FC TC=400/+500	01121	CB1015
A18R119	0683-1015	7		RESISTOR 100 5% .25W FC TC=400/+500	01121	CB1015
A18R120	0683-1015	7		RESISTOR 100 5% .25W FC TC=400/+500	01121	CB1015
A18R121	0683-1015	7		RESISTOR 100 5% .25W FC TC=400/+500	01121	CB1015
A18R122	0683-1015	7		RESISTOR 100 5% .25W FC TC=400/+500	01121	CB1015
A18R71	0837-0086	7		THERMISTOR DISC 200-OHM TC=4.4%/C-DEG	28480	0837-0086
A18R72	0837-0086	7		THERMISTOR DISC 200-OHM TC=4.4%/C-DEG	28480	0837-0086
A18R73	0837-0086	7		THERMISTOR DISC 200-OHM TC=4.4%/C-DEG	28480	0837-0086
A18T1	9100-3262	5		TRANSFORMER, TOROIDAL PULSE	28480	9100-3262
A18U1	1A26-0510	0	1	IC SWITCH ANLG QUAD 16-DIP-P	27014	LF13332N
A18U2	1A26-0089	0		IC OP AMP WB T0-99	29A32	1322
A18U3	1A26-0510	0		IC SWITCH ANLG QUAD 16-DIP-P	27014	LF13332N
A18U4	1A26-0510	0		IC SWITCH ANLG QUAD 16-DIP-P	27014	LF13332N
A18U5	1A26-0510	0		IC SWITCH ANLG QUAD 16-DIP-P	27014	LF13332N
A18U6	1A26-0510	0		IC SWITCH ANLG QUAD 16-DIP-P	27014	LF13332N
A18U7	1A26-0109	3	3	IC OP AMP WB T0-99	34371	A2-2625-80593
A18U8	1A26-0109	3		IC OP AMP WB T0-99	34371	A2-2625-80593
A18U9	1A26-0109	3		IC OP AMP WB T0-99	34371	A2-2625-80593
A18U10	1A26-0510	0		IC SWITCH ANLG QUAD 16-DIP-P	27014	LF13332N
A18U11	1A26-0510	0		IC SWITCH ANLG QUAD 16-DIP-P	27014	LF13332N
A18U12	1A20-1196	0		IC FF TTL LS D-TYPE POS-EDGE-TRIG COM	01295	SN74LS174N
A18U13	1A20-1196	0		IC FF TTL LS D-TYPE POS-EDGE-TRIG COM	01295	SN74LS174N
A18U14	1A20-1196	0		IC FF TTL LS D-TYPE POS-EDGE-TRIG COM	01295	SN74LS174N
A18U15	1A20-1196	0		IC FF TTL LS D-TYPE POS-EDGE-TRIG COM	01295	SN74LS174N
A18U16	1A20-1195	7		IC FF TTL LS D-TYPE POS-EDGE-TRIG COM	01295	SN74LS175N
A18U17	1A20-1216	3		IC DCOR TTL LS 3-T0-A-LINE 3-IMP	01295	SN74LS138N
A18Y1				NOT ASSIGNED		
A18Y2				NOT ASSIGNED		
A18Y3				PART OF MATCHED SET (SEE A17 PARTS LIST)		
				A18 MISCELLANEOUS PARTS		
	14A0-0116	8		PIN-GRV .062-IN-DIA .25-IN-LG STL	28480	14A0-0116
	0403-0211	1		EXTR-PC RD BRN POLYC .062-RD-THKNS	28480	0403-0211
	0403-0212	2	1	EXTR-PC RD RED POLYC .062-RD-THKNS	28480	0403-0212
	0360-1653	5		CONNECTOR-SGL CONT PIN .045-IN-RSC-SZ SQ	28480	0360-1653
	6960-0080	8	1	PLUG-HOLE FL-ND FOR .185-D-HOLE TFE	28480	6960-0080
	1400-0249	0		CABLE TIE .062-.625-DIA .091-WD NYL	28480	1400-0249
A19	035A5-66519	6	1	FILTER BOARD NO. 2	28480	035A5-66513
A19C1	0160-1974	1		CAPACITOR-FXD 10UF+-10% 35VDC TA	56289	150D106X9035R2
A19C2	0160-1974	1		CAPACITOR-FXD 10UF+-10% 35VDC TA	56289	150D106X9035R2
A19C3	0160-0229	7		CAPACITOR-FXD 33UF+-10% 10VDC TA	56289	150D33X9010R2
A19C4	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A19C5	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A19C6	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A19CA	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A19C9	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A19C10	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A19C11	0160-0180	9		CAPACITOR-FXD 2200PF +-1% 100VDC MICA	72136	DM20F22F0100AV1CP
A19C12	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A19C13	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A19C14	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A19C15	0160-0180	9		CAPACITOR-FXD 2200PF +-1% 100VDC MICA	72136	DM20F22F0100AV1CP
A19C16	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z

See introduction to this section for ordering information  
 \*Indicates factory selected value

Table 6-3. Replaceable Parts

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
A19C17	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A19C18	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A19C19	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A19C20	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A19C21	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A19C22	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A19C23	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A19C24	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A19C25	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A19C26	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A19C27	0140-0190	7	2	CAPACITOR-FXD 39PF +-5% 300VDC MICA	04522	DM15E390J0300WV1CR
A19C28	0121-0180	5		CAPACITOR-V TRMR-CER 15-60PF 200V PC-MTG	01468	304324 15/60PF N1500
A19C29*	0140-0193	1		CAPACITOR-FXD 82PF +-5% 300VDC MICA	04522	DM15E820J0300WV1CR
A19C29**	0140-0194	1		CAPACITOR-FXD 110PF +-5% 300VDC MICA	04522	DM15F111J0300WV1CR
A19C29**	0140-0195	2		CAPACITOR-FXD 150PF +-5% 300VDC MICA	04522	DM15F151J0300WV1CR
A19C30	0121-0059	7		CAPACITOR-V TRMR-CER 2-8PF 350V PC-MTG	01468	304324 2/8PF NPO
A19C31	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A19C32	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A19C33	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A19C34	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A19C35	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A19C36	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A19C37	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A19C38	0140-0196	3		CAPACITOR-FXD 150PF +-5% 300VDC MICA	72136	DM15F151J0300WV1CR
A19C39	0121-0180	5		CAPACITOR-V TRMR-CER 15-60PF 200V PC-MTG	01468	304324 15/60PR N1500
A19C40**	0140-0193	1		CAPACITOR-FXD 82PF +-5% 300VDC MICA	04522	DM15E820J0300WV1CR
A19C40**	0140-0194	1		CAPACITOR-FXD 110PF +-5% 300VDC MICA	04522	DM15F111J0300WV1CR
A19C40**	0140-0195	2		CAPACITOR-FXD 150PF +-5% 300VDC MICA	04522	DM15F151J0300WV1CR
A19C41	0121-0059	7		CAPACITOR-V TRMR-CER 2-8PF 350V PC-MTG	01468	304324 2/8PF NPO
A19C42	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A19C43	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A19C44	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A19C45	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A19C46	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A19C47	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A19C48	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A19C49	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A19C50	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A19C51	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A19C52	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A19C53	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A19C54	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A19C55	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A19C56	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A19C57	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A19C58	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A19C59	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A19C60	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A19C61	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A19C62	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A19C63	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A19C64	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A19C65	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A19C66	0160-0050	6		CAPACITOR-V TRMR-CER 5.5-18PF 350V	01468	304324 5.5/18PF NPO
A19C67	0121-0056	6		CAPACITOR-V TRMR-CER 5.5-18PF 350V	01468	304324 5.5/18PF NPO
A19C98	0140-0191	8		CAPACITOR-FXD 56PF +-5% 300VDC MICA	04522	DM15E560J0300WV1CR
A19C99	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A19CR1	1901-0376	6		DIODE-GEN PRP 35V 50MA DD-35	28480	1901-0376
A19CR2	1901-0376	6		DIODE-GEN PRP 35V 50MA DD-35	28480	1901-0376
A19CR3	1901-0376	6		DIODE-GEN PRP 35V 50MA DD-35	28480	1901-0376
A19CR4	1901-0376	6		DIODE-GEN PRP 35V 50MA DD-35	28480	1901-0376
A19CR5	1901-0376	6		DIODE-GEN PRP 35V 50MA DD-35	28480	1901-0376
A19CR6	1901-0376	6		DIODE-GEN PRP 35V 50MA DD-35	28480	1901-0376
A19CR7	1901-0376	6		DIODE-GEN PRP 35V 50MA DD-35	28480	1901-0376
A19CR8	1901-0376	6		DIODE-GEN PRP 35V 50MA DD-35	28480	1901-0376
A19CR9	1901-0376	6		DIODE-GEN PRP 35V 50MA DD-35	28480	1901-0376
A19CR10	1901-0376	6		DIODE-GEN PRP 35V 50MA DD-35	28480	1901-0376
A19CR11	1902-3149	9		DIODE-ZNR 9.09V 5% DD-7 PD=.4W IC=+.057%	28480	1902-3149
A19CR12	1901-0376	6		DIODE-GEN PRP 35V 50MA DD-35	28480	1901-0376
A19CR13	1901-0376	6		DIODE-GEN PRP 35V 50MA DD-35	28480	1901-0376
A19CR14	1901-0376	6		DIODE-GEN PRP 35V 50MA DD-35	28480	1901-0376
A19CR15	1901-0376	6		DIODE-GEN PRP 35V 50MA DD-35	28480	1901-0376
A19CR16	1901-0318	8		DIODE-SCHOTTKY	28480	1901-0318
A19CR17	1901-0318	8		DIODE-SCHOTTKY	28480	1901-0318
A19J1	1251-4822	6		CONNECTOR 3-PIN M POST TYPE	28480	1251-4822
	1253-0141	6			28480	1253-0141
A19J2	1251-4822	6		CONNECTOR 3-PIN M POST TYPE	28480	1251-4822
	1253-0141	6			28480	1253-0141

See introduction to this section for ordering information  
 \*Indicates factory selected value

Table 6-3. Replaceable Parts

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
A19J3	1251-4822	6		CONNECTOR 3-PIN M POST TYPE	28480	1251-4822
	1258-0141	8			28480	1258-0141
A19J4	1251-4822	6		CONNECTOR 3-PIN M POST TYPE	28480	1251-4822
	1258-0141	8			28480	1258-0141
A19L1	9100-0541	7		COIL-MLD 250UH 10% Q=3 .250X.5LG-NOM	28480	9100-0541
A19L2	9100-0541	7		COIL-MLD 250UH 10% Q=3 .250X.5LG-NOM	28480	9100-0541
A19L3	9100-0541	7		COIL-MLD 250UH 10% Q=3 .250X.5LG-NOM	28480	9100-0541
A19L4	9140-0289	4		COIL-VAR 23UH-27UH Q=200 PC-MTG	28480	9140-0289
A19L5	9140-0289	4		COIL-VAR 23UH-27UH Q=200 PC-MTG	28480	9140-0289
A19L6	T-58235	2		COIL-FXD 2MH	28480	
A19L7	T-58235	2		COIL-FXD 2MH	28480	
A19Q1	1854-0071	7		TRANSISTOR NPN SI PD=300MW FT=200MHZ	28480	1854-0071
A19Q2	1854-0071	7		TRANSISTOR NPN SI PD=300MW FT=200MHZ	28480	1854-0071
A19Q3	1854-0071	7		TRANSISTOR NPN SI PD=300MW FT=200MHZ	28480	1854-0071
A19Q4	1854-0071	7		TRANSISTOR NPN SI PD=300MW FT=200MHZ	28480	1854-0071
A19Q5	1953-0010	2		TRANSISTOR NPN SI TO=18 PD=360MW	28480	1853-0010
A19Q6	1854-0071	7		TRANSISTOR NPN SI DE=300MW FT=200MHZ	28480	1854-0071
A19Q7	1854-0071	7		TRANSISTOR NPN SI PD=300MW FT=200MHZ	28480	1854-0071
A19Q8	1854-0071	7		TRANSISTOR NPN SI PD=300MW FT=200MHZ	28480	1854-0071
A19Q9	1854-0071	7		TRANSISTOR NPN SI PD=300MW FT=200MHZ	28480	1854-0071
A19Q10	1855-0081	1	1	TRANSISTOR J-FET N-CHAN D-MODE SI	01295	2NS245
A19R1	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
A19R2	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
A19R3	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
A19R4	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
A19R5	-683-5625	3	1	RESISTOR 5.6K 5% .25W FC TC=-400/+700	01121	CB5625
A19R6	0699-0164	8		RESISTOR 738.5 1% .125W F TC=0+-25	28480	0699-0164
A19R7	0699-0163	7		RESISTOR 466 1% .125W F TC=0+-25	28480	0699-0163
A19R8	0698-8499	6		RESISTOR 294 1% .125W F TC=0+-25	28480	0698-8499
A19R9	0699-0162	5		RESISTOR 582.7 1% .125W F TC=0+-25	28480	0699-0162
A19R10	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
A19R11	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	CB4705
A19R12	0683-1015	7		RESISTOR 100 5% .25W FC TC=-400/+500	01121	CB1015
A19R13	0757-0439	4		RESISTOR 6.81K 1% .125W F TC=0+-100	24546	CA-1/8-TO-6811-F
A19R14	0683-1015	7		RESISTOR 100 5% .25W FC TC=-400/+500	01121	CB1015
A19R15	0683-2035	3		RESISTOR 20K 5% .25W FC TC=-400/+800	01121	CB2035
A19R16	0683-2035	3		RESISTOR 20K 5% .25W FC TC=-400/+800	01121	CB2035
A19R17	0698-3518	0		RESISTOR 7.32K 1% .125W F TC=0+-100	24546	CA-1/8-TO-7321-F
A19R18	0757-0279	0		RESISTOR 3.16K 1% .125W F TC=0+-100	24546	CA-1/8-TO-3161-F
A19R19	0698-4451	2		RESISTOR 340 1% .125W F TC=0+-100	24546	CA-1/8-TO-3401-F
A19R20	2100-2497	9		RESISTOR-TRMR 2K 10% C TOP-ADJ 1-TRN	73158	82PR2K
A19R21	0757-0283	6		RESISTOR 2K 1% .125W F TC=0+-100	24546	CA-1/8-TO-2001-F
A19R22	0683-3325	6		RESISTOR 3.3K 5% .25W FC TC=-400/+700	01121	CB3325
A19R23	0683-1015	7		RESISTOR 100 5% .25W FC TC=-400/+500	01121	CB1015
A19R24	0683-1015	7		RESISTOR 100 5% .25W FC TC=-400/+500	01121	CB1015
A19R25	0698-3581	0		RESISTOR 7.32K 1% .125W F TC=0+-100	24546	CA-1/8-TO-7321-F
A19R26	0698-3496	3		RESISTOR 3.57K 1% .125W F TC=0+-100	24546	CA-1/8-TO-357R-F
A19R27	0757-0416	7		RESISTOR 511 1% .125W F TC=0+-100	24546	CA-1/8-TO-511R-F
A19R28	2100-2497	9		RESISTOR-TRMR 2K 10% C TOP-ADJ 1-TRN	73158	82PR2K
A19R29	0757-0283	6		RESISTOR 2K 1% .125W F TC=0+-100	24546	CA-1/8-TO-2001-F
A19R30	0683-3325	6		RESISTOR 3.3K 5% .25W FC TC=-400/+700	01121	CB3325
A19R31	0683-1015	7		RESISTOR 100 5% .25W FC TC=-400/+500	01121	CB1015
A19R32	0698-3558	8	2	RESISTOR 4.02K 1% .125W F TC=0+-100	24546	CA-1/8-TO-4021-F
A19R33	0698-3549	8	1	RESISTOR 15.4K 1% .125W F TC=0+-100	24546	CA-1/8-TO-1542-F
A19R34	0698-4436	3	1	RESISTOR 2.8K 1% .125W F TC=0+-100	24546	CA-1/8-TO-2801-F
A19R35	0683-3935	4	1	RESISTOR 39K 5% .25W FC TC=-400/+800	01121	CB3935
A19R36	0683-1645	6	1	RESISTOR 130K 5% .25W FC TC=-800/+900	01121	CB1345
A19R37	0683-2235	5	1	RESISTOR 22K 5% .25W FC TC=-400/+800	01121	CB2235
A19R38	0683-2035	3		RESISTOR 20K 5% .25W FC TC=-400/+800	01121	CB2035
A19R39	0683-7525	6		RESISTOR 7.5K 5% .25W FC TC=-400/+700	01121	CB7525
A19R40	0683-2035	3		RESISTOR 20K 5% .25W FC TC=-400/+800	01121	CB2035
A19R41	0683-3025	3		RESISTOR 3K 5% .25W FC TC=-400/+700	01121	CB3025
A19R42	0683-1015	7		RESISTOR 100 5% .25W FC TC=-400/+500	01121	CB1015
A19R43	0683-1235	3		RESISTOR 12K 5% .25W FC TC=-400/+800	01121	CB1235
A19R44	0698-4506	8		RESISTOR 73.2K 1% .125W F TC=0+-100	03292	CA-1/8-TO-7322-F
A19R45	0698-4492	1		RESISTOR 32.4K 1% .125W F TC=0+-100	24546	CA-1/8-TO-3242-F
A19R46	0698-4471	6		RESISTOR 7.15K 1% .125W F TC=0+-100	03292	CA-1/8-TO-7151-F
A19R47	0698-4431	8		RESISTOR 2.05K 1% .125W F TC=0+-100	03292	CA-1/8-TO-2051-F
A19R48	0698-4453	4		RESISTOR 402 1% .125W F TC=0+-100	24546	CA-1/8-TO-402R-F

See introduction to this section for ordering information  
 \*Indicates factory selected value

Table 6-3. Replaceable Parts

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
A19R49	06A3-2025	1		RESISTOR 2K 5% .25W FC TC=400/+700	01121	CB2025
A19R50	06A3-2025	1		RESISTOR 2K 5% .25W FC TC=400/+700	01121	CB2025
A19R51	06A3-3625	9		RESISTOR 3.6K 5% .25W FC TC=400/+700	01121	CB3625
A19R52	06A3-6225	1		RESISTOR 6.2K 5% .25W FC TC=400/+700	01121	CB6225
A19R53	06A3-2425	5		RESISTOR 2.4K 5% .25W FC TC=400/+700	01121	CB2425
A19R54	06A3-5125	8		RESISTOR 5.1K 5% .25W FC TC=400/+700	01121	CB5125
A19R55	06A3-1015	7		RESISTOR 100 5% .25W FC TC=400/+500	01121	CB1015
A19R56	06A3-1035	1		RESISTOR 10K 5% .25W FC TC=400/+700	01121	CB1035
A19R57	069R-4506	8		RESISTOR 73.2K 1% .125W F TC=0+-100	05292	C4-1/8-T0-7822-F
A19R58	0598-4492	1		RESISTOR 32.4K 1% .125W F TC=0+-100	05292	C4-1/8-T0-3242-F
A19R59	0698-4471	6		RESISTOR 7.15K 1% .125W F TC=0+-100	05292	C4-1/8-T0-7151-F
A19R60	0598-4451	8		RESISTOR 2.05K 1% .125W F TC=0+-100	05292	C4-1/8-T0-2051-F
A19R61	0598-4453	4		RESISTOR 102 1% .125W F TC=0+-100	24546	C4-1/8-T0-102R-F
A19R62	06A3-2025	1		RESISTOR 2K 5% .25W FC TC=400/+700	01121	CB2025
A19R63	06A3-2025	1		RESISTOR 2K 5% .25W FC TC=400/+700	01121	CB2025
A19R64	06A3-3625	9		RESISTOR 3.6K 5% .25W FC TC=400/+700	01121	CB3625
A19R65	06A3-6225	1		RESISTOR 6.2K 5% .25W FC TC=400/+700	01121	CB6225
A19R66	06A3-1045	3		RESISTOR 100K 5% .25W FC TC=400/+800	01121	CB1045
A19R67	06A3-1045	3		RESISTOR 100K 5% .25W FC TC=400/+800	01121	CB1045
A19R68	06A3-1045	3		RESISTOR 100K 5% .25W FC TC=400/+800	01121	CB1045
A19R69	06A3-1045	3		RESISTOR 100K 5% .25W FC TC=400/+800	01121	CB1045
A19R70	06A3-1015	7		RESISTOR 100 5% .25W FC TC=400/+500	01121	CB1015
A19R71	069R-4443	2	1	RESISTOR 4.53K 1% .125W F TC=0+-100	24546	C4-1/8-T0-4531-F
A19R72	06A3-1015	7		RESISTOR 100 5% .25W FC TC=400/+500	01121	CB1015
A19R73	06A3-1015	7		RESISTOR 100 5% .25W FC TC=400/+500	01121	CB1015
A19R74	06A3-1025	9		RESISTOR 1K 5% .25W FC TC=400/+600	01121	CB1025
A19R75	06A3-4745	6	1	RESISTOR 470K 5% .25W FC TC=400/+900	01121	CB4745
A19R76	06A3-3025	3		RESISTOR 3K 5% .25W FC TC=400/+700	01121	CB3025
A19R77	06A3-4715	3	1	RESISTOR 470 5% .25W FC TC=400/+600	01121	CB4715
A19R78	0757-0220	3	1	RESISTOR 1K 1% .125W F TC=0+-100	24546	C4-1/8-T0-1001-F
A19R79	06A3-6225	3	1	RESISTOR 6.2K 5% .25W FC TC=400/+700	01121	CB6225
A19R80	06A3-1015	7		RESISTOR 100 5% .25W FC TC=400/+500	01121	CB1015
A19R81	06A3-1015	7		RESISTOR 100 5% .25W FC TC=400/+500	01121	CB1015
A19R82	06A3-2025	1		RESISTOR 2K 5% .25W FC TC=400/+700	01121	CB2025
A19R84*	0698-3262	1		RESISTOR 40.2 1% .125W F TC=0+-100	24546	C4-1/8-T0-4022-F
A19R84*	069A-4387	3		RESISTOR 60.4 1% .125W F TC=0+-100	24546	C4-1/8-T0-60R4-F
A19R84*	0757-0277	8		RESISTOR 49.9 1% .125W F TC=0+-100	24546	C4-1/8-T0-4992-F
A19R84*	0757-0346	2		RESISTOR 10 1% .125W F TC=0+-100	24546	C4-1/8-T0-10R0-F
A19R84*	0757-0384	8		RESISTOR 20 1% .125W F TC=0+-100	19701	MFC1/8-T0-20R0-F
A19R84*	0757-038A	2		RESISTOR 30.1 1% .125W F TC=0+-100	24546	C4-1/8-T0-30R1-F
A19R85	069A-3510	2	2	RESISTOR 453 1% .125W F TC=0+-100	24546	C4-1/8-T0-453R-F
A19R86*	0698-3262	1		RESISTOR 40.2 1% .125W F TC=0+-100	24546	C4-1/8-T0-4022-F
A19R86*	069A-43A7	3		RESISTOR 60.4 1% .125W F TC=0+-100	24546	C4-1/8-T0-60R4-F
A19R86*	0757-0277	2		RESISTOR 49.9 1% .125W F TC=0+-100	24546	C4-1/8-T0-4992-F
A19R86*	0757-0346	2		RESISTOR 10 1% .125W F TC=0+-100	24546	C4-1/8-T0-10R0-F
A19R86*	0757-0384	8		RESISTOR 20 1% .125W F TC=0+-100	19701	MFC1/8-T0-20R0-F
A19R86*	0757-038A	2		RESISTOR 30.1 1% .125W F TC=0+-100	24546	C4-1/8-T0-30R1-F
A19R87	069A-3510	2		RESISTOR 453 1% .125W F TC=0+-100	24546	C4-1/8-T0-453R-F
A19R88	06A3-1025	9		RESISTOR 1K 5% .25W FC TC=400/+600	01121	CB1025
A19R89	06A3-1025	9		RESISTOR 1K 5% .25W FC TC=400/+600	01121	CB1025
A19R90	06A3-1025	9		RESISTOR 1K 5% .25W FC TC=400/+600	01121	CB1025
A19R91	06A3-1025	9		RESISTOR 1K 5% .25W FC TC=400/+600	01121	CB1025
A19R92	06A3-1025	9		RESISTOR 1K 5% .25W FC TC=400/+600	01121	CB1025
A19R93	06A3-4705	8		RESISTOR 47 5% .25W FC TC=400/+500	01121	CB4705
A19R94	06A3-4705	8		RESISTOR 47 5% .25W FC TC=400/+500	01121	CB4705
A19R95	06A3-1015	7		RESISTOR 100 5% .25W FC TC=400/+500	01121	CB1015
A19R96	0757-0346	1	1	RESISTOR 4.32K 1% .125W F TC=0+-100	24546	C4-1/8-T0-4321-F
A19R97	069A-4464	7	1	RESISTOR 887 1% .125W F TC=0+-100	24546	C4-1/8-T0-887R-F
A19R98	06A3-1035	1		RESISTOR 10K 5% .25W FC TC=400/+700	01121	CB1035
A19R99	06A3-1015	7		RESISTOR 100 5% .25W FC TC=400/+500	01121	CB1015
A19P100	06A3-1015	7		RESISTOR 100 5% .25W FC TC=400/+500	01121	CB1015
A19P101	06A3-1015	7		RESISTOR 100 5% .25W FC TC=400/+500	01121	CB1015
A19P102	06A3-1015	7		RESISTOR 100 5% .25W FC TC=400/+500	01121	CB1015
A19P103	06A3-1015	7		RESISTOR 100 5% .25W FC TC=400/+500	01121	CB1015
A19P103	06A3-1835	9	1	RESISTOR 18K 5% .25W FC TC=400/+800	01121	CB2835

See introduction to this section for ordering information  
 \*Indicates factory selected value

Table 6-3. Replaceable Parts

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
A19RT1	0839-0026	9	1	THERMISTOR DISC 10K-OHM TC=-4.4%/C-DEG	28480	0839-0026
A19RT2	0837-0050	5	1	THERMISTOR DISC 1K-OHM TC=-4.4%/C-DEG	28480	0837-0050
A19RT3	0837-0086	7		THERMISTOR DISC 200-OHM TC=-4.4%/C-DEG	28480	0837-0086
A19RT4	0837-0086	7		THERMISTOR DISC 200-OHM TC=-4.4%/C-DEG	28480	0837-0086
A19T1	9100-3262	5		TRANSFORMER TRANSFORMER; TOROIDAL PULSE	28480	9100-3262
A19T2	9100-3262	5		TRANSFORMER TRANSFORMER; TOROIDAL PULSE	28480	9100-3262
A19U1	1A20-1196	A		IC FF TTL LS D-TYPE POS-EDGE-TRIG COM	01295	SN74LS174N
A19U2	1A20-1196	8		IC FF TTL LS D-TYPE POS-EDGE-TRIG COM	01295	SN74LS174N
A19U3	1A20-1196	8		IC FF TTL LS D-TYPE POS-EDGE-TRIG COM	01295	SN74LS174N
A19U4	1A20-1216	3		IC DCDR TTL LS 1-TO-8-LINE 3-INP	01295	SN74LS138N
A19U5	1A20-1195	7		IC FF TTL LS D-TYPE POS-EDGE-TRIG COM	01295	SN74LS175N
A19U6	1A26-0510	0		IC SWITCH ANLG QUAD 16-DIP-P	27014	LF13332N
A19U7	1A26-0510	0		IC SWITCH ANLG QUAD 16-DIP-P	27014	LF13332N
A19U8	1A26-0510	0		IC SWITCH ANLG QUAD 16-DIP-P	27014	LF13332N
A19U9	1A26-0510	0		IC SWITCH ANLG QUAD 16-DIP-P	27014	LF13332N
A19U10	1A20-1971	7	1	IC SWITCH ANLG QUAD 16-DIP-P	17856	06201CJ
A19Y1-Y2				NOT ASSIGNED		
A19Y3				PART OF MATCHED SET(SEE A17 PARTS LIST)		
A19Y4				PART OF MATCHED SET(SEE A17 PARTS LIST)		
A19Y5				A19 MISCELLANEOUS PARTS		
	1400-0249	0		CARLE TIE .062-.625-DIA .091-WD NYL	28480	1400-0249
	1480-0116	8		PIN-CPV .062-IN-DIA .25-IN-LG STL	28480	1480-0116
	0403-0211	1		EXTR-PC RD BRN POLYC .062-RD-THKNS	28480	0403-0211
	0403-0213	3	1	EXTR-PC RD BRN POLYC .062-RD-THKNS	28480	0403-0213
	1251-0600	0	9	CONNECTOR-SGL CNT PIN 1.14-44-BSC-SZ SQ	28480	1251-0600

See introduction to this section for ordering information  
 \*Indicates factory selected value

Table 6-3. Replaceable Parts

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
416U12	1826-0403	0	2	IC V RGLTR TO-3 A16 MISCELLANEOUS PARTS	80103	LAS-1815
	0403-0211	1		EXTR-PC RD BRN POLYC .062-80-THKNS	28480	0403-0211
	0403-0216	6	1	EXTR-PC RD BLU POLYC .062-80-THKNS	28480	0403-0216
	0590-1054	7	32	THREADED INSERT-NUT 6-32 .065-LG SST	28480	0590-1054
	2360-0115	4	47	SCREW-MACH 6-32 .312-IN-LG PAN-RO-POZI	00000	ORDER BY DESCRIPTION
	1480-0116	8		PIN-GRV .062-IN-DIA .25-IN-LG STL	28480	1480-0116
421	03585-66521	0	1	90/10 KHZ/REFERENCE DIVIDER	28480	03585-66521
421C1	0160-1746	5	2A	CAPACITOR-FXD 15UF+-10% 20VDC TA	56289	150D16bx902052
421C2	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
421C3	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
421C4	0160-2200	6		CAPACITOR-FXD 43PF +-5% 300VDC MICA	28480	0160-2200
421C5	0160-2200	6		CAPACITOR-FXD 43PF +-5% 300VDC MICA	28480	0160-2200
421C6	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
421C7	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
421C8	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
421C9	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
421C10	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
421C11	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
421C12	0160-4383	0	2	CAPACITOR-FXD 6.8PF +-5% 200VDC CER	28480	0160-4383
421C13	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
421C14	0160-4383	0		CAPACITOR-FXD 6.8PF +-5% 200VDC CER	28480	0160-4383
421C15	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
421C16	0160-0190	7		CAPACITOR-FXD 33PF +-5% 300VDC MICA	72136	DM15E390J0300AV1CR
421C17	0160-2202	8	9	CAPACITOR-FXD 75PF +-5% 300VDC MICA	28480	0160-2202
421C18	0160-3878	6		CAPACITOR-FXD 1000PF +-20% 100VDC CER	28480	0160-3878
421C19	0160-3878	6		CAPACITOR-FXD 1000PF +-20% 100VDC CER	28480	0160-3878
421C20	0160-0576	5		CAPACITOR-FXD .1UF +-20% 50VDC CER	28480	0160-0576
421C21	0160-0576	5		CAPACITOR-FXD .1UF +-20% 50VDC CER	28480	0160-0576
421C22	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
421C23	0160-0207	7	1	CAPACITOR-FXD 330PF +-5% 500VDC MICA	72136	DM15F331J0500AV1CR
421C24	0160-2206	2	1	CAPACITOR-FXD 160PF +-5% 300VDC MICA	28480	0160-2206
421C25	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
421C26	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
421C27	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
421C28	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
421C29	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
421C30	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
421C31	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
421C32	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
421C33	0160-2201	7	2	CAPACITOR-FXD 51PF +-5% 300VDC MICA	28480	0160-2201
421C34	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
421C35	0160-2201	7		CAPACITOR-FXD 51PF +-5% 300VDC MICA	28480	0160-2201

See introduction to this section for ordering information  
 \*Indicates factory selected value



Table 6-3. Replaceable Parts

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
A21C35	0160-1746	5		CAPACITOR-FXD 15UF+-10% 20VDC TA	56289	150D156X9020B2
A21C37	0160-0576	5		CAPACITOR-FXD .1UF +-20% 50VDC CER	28480	0160-0576
A21C38	0160-0576	5		CAPACITOR-FXD .1UF +-20% 50VDC CER	28480	0160-0576
A21C41	0160-1746	5		CAPACITOR-FXD 15UF+-10% 20VDC TA	56289	150D156X9020B2
A21C42	0160-2306	3		CAPACITOR-FXD 27PF +-5% 300VDC MICA	28480	0160-2306
A21C43	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A21C50	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A21C51	0160-0199	6	2	CAPACITOR-FXD 240PF +-5% 300VDC MICA	72136	DM15F241J0300WV1CR
A21C52	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A21C53	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A21C54	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A21C55	0160-0191	8		CAPACITOR-FXD 56PF +-5% 300VDC MICA	72136	DM15E560J0300WV1CR
A21C56	0160-3875	3	3	CAPACITOR-FXD 22PF +-5% 200VDC CER 0+-30	28480	0160-3875
A21C57	0160-3875	3		CAPACITOR-FXD 22PF +-5% 200VDC CER 0+-30	28480	0160-3875
A21C58	0160-0196	3		CAPACITOR-FXD 150PF +-5% 300VDC MICA	72136	DM15F151J0300WV1CR
A21C60	0160-0174	9		CAPACITOR-FXD .47UF +80-20% 25VDC CER	28480	0160-0174
A21C61	0160-0174	9		CAPACITOR-FXD .47UF +80-20% 25VDC CER	28480	0160-0174
A21C62	0160-1746	5		CAPACITOR-FXD 15UF+-10% 20VDC TA	56289	150D156X9020B2
A21C63	0160-0174	9		CAPACITOR-FXD .47UF +80-20% 25VDC CER	28480	0160-0174
A21C64	0160-0116	1		CAPACITOR-FXD 6.8UF+-10% 35VDC TA	56289	150D685X9035B2
A21C65	0160-0576	5		CAPACITOR-FXD .1UF +-20% 50VDC CER	28480	0160-0576
A21CR1	1901-0535	9	7	DIODE-SCHOTTKY	28480	1901-0535
A21CR2	0122-0072	6	1	DIODE-VVC 2.2PF 5% C3/C25-MIN=4.5	04713	#81058
A21CR5	1901-0040	1		DIODE-SWITCHING 30V 50MA 2NS DQ=35	28480	1901-0040
A21CR6	1901-0040	1		DIODE-SWITCHING 30V 50MA 2NS DQ=35	28480	1901-0040
A21CR7	1901-0040	1		DIODE-SWITCHING 30V 50MA 2NS DQ=35	28480	1901-0040
A21CR8	1901-0040	1		DIODE-SWITCHING 30V 50MA 2NS DQ=35	28480	1901-0040
A21CR9	1901-0040	1		DIODE-SWITCHING 30V 50MA 2NS DQ=35	28480	1901-0040
A21CR10	1901-0040	1		DIODE-SWITCHING 30V 50MA 2NS DQ=35	28480	1901-0040
A21CR11	1901-0040	1		DIODE-SWITCHING 30V 50MA 2NS DQ=35	28480	1901-0040
A21CR12	1901-0040	1		DIODE-SWITCHING 30V 50MA 2NS DQ=35	28480	1901-0040
A21J1	1250-1512	3	45	CONNECTOR-RF SMB M PC 50-OHM	28480	1250-1512
A21J2	1250-1512	3		CONNECTOR-RF SMB M PC 50-OHM	28480	1250-1512
A21J3	1250-1512	3		CONNECTOR-RF SMB M PC 50-OHM	28480	1250-1512
A21J4	1250-1512	3		CONNECTOR-RF SMB M PC 50-OHM	28480	1250-1512
A21J5	1250-1512	3		CONNECTOR-RF SMB M PC 50-OHM	28480	1250-1512
A21J6	1250-1512	3		CONNECTOR-RF SMB M PC 50-OHM	28480	1250-1512
A21J7	1250-1512	3		CONNECTOR-RF SMB M PC 50-OHM	28480	1250-1512
A21J8	1250-1512	3		CONNECTOR-RF SMB M PC 50-OHM	28480	1250-1512
A21J9	1250-1512	3		CONNECTOR-RF SMB M PC 50-OHM	28480	1250-1512
A21J10	1250-1314	3		CONNECTOR-RF SM-SLD FEM PC 50-OHM	28480	1250-1314
A21J11	1250-1314	3		CONNECTOR-RF SM-SLD FEM PC 50-OHM	28480	1250-1314
A21L1	9100-1618	1		COIL-MLD 5.6UH 10% Q=45 .155DX,375LG-NOM	28480	9100-1618
A21L2	9100-2255	4	10	COIL-MLD 470NH 10% Q=35 .095DX,25LG-NOM	28480	9100-2255
A21L3	9140-0144	0	0	COIL-MLD 4.7UH 10% Q=45 .095DX,25LG-NOM	28480	9140-0144
A21L4	9100-2247	4		COIL-MLD 100NH 10% Q=34 .095DX,25LG-NOM	28480	9100-2247
A21L5	9140-0144	0		COIL-MLD 4.7UH 10% Q=45 .095DX,25LG-NOM	28480	9140-0144
A21L6	9140-0144	0		COIL-MLD 4.7UH 10% Q=45 .095DX,25LG-NOM	28480	9140-0144
A21L7	9140-0144	0		COIL-MLD 4.7UH 10% Q=45 .095DX,25LG-NOM	28480	9140-0144
A21L8	9140-0144	0		COIL-MLD 4.7UH 10% Q=45 .095DX,25LG-NOM	28480	9140-0144
A21L9	9100-2255	4		COIL-MLD 470NH 10% Q=35 .095DX,25LG-NOM	28480	9100-2255
A21L10	9140-0144	0		COIL-MLD 4.7UH 10% Q=45 .095DX,25LG-NOM	28480	9140-0144
A21L11	9100-2255	4		COIL-MLD 470NH 10% Q=35 .095DX,25LG-NOM	28480	9100-2255
A21L12	9140-0144	0		COIL-MLD 4.7UH 10% Q=45 .095DX,25LG-NOM	28480	9140-0144
A21L13	9100-2247	4		COIL-MLD 100NH 10% Q=34 .095DX,25LG-NOM	28480	9100-2247
A21L14	9140-0144	0		COIL-MLD 4.7UH 10% Q=45 .095DX,25LG-NOM	28480	9140-0144
A21L20	9140-0144	0		COIL-MLD 4.7UH 10% Q=45 .095DX,25LG-NOM	28480	9140-0144
A21L21	9140-0144	0		COIL-MLD 4.7UH 10% Q=45 .095DX,25LG-NOM	28480	9140-0144
A21L22	9140-0142	8		COIL-MLD 2.2UH 10% Q=32 .095DX,25LG-NOM	28480	9140-0142
A21L23	9100-1618	1		COIL-MLD 5.6UH 10% Q=45 .155DX,375LG-NOM	28480	9100-1618
A21L24	9140-0144	0		COIL-MLD 4.7UH 10% Q=45 .095DX,25LG-NOM	28480	9140-0144
A21L25	9140-0144	0		COIL-MLD 4.7UH 10% Q=45 .095DX,25LG-NOM	28480	9140-0144
A21L26	9140-0144	0		COIL-MLD 4.7UH 10% Q=45 .095DX,25LG-NOM	28480	9140-0144
A21L27	9140-0144	0		COIL-MLD 4.7UH 10% Q=45 .095DX,25LG-NOM	28480	9140-0144
A21L28	9140-0144	0		COIL-MLD 4.7UH 10% Q=45 .095DX,25LG-NOM	28480	9140-0144
A21L29	9140-0144	0		COIL-MLD 4.7UH 10% Q=45 .095DX,25LG-NOM	28480	9140-0144
A21L30	9140-0144	0		COIL-MLD 4.7UH 10% Q=45 .095DX,25LG-NOM	28480	9140-0144
A21L31	9140-0144	0		COIL-MLD 4.7UH 10% Q=45 .095DX,25LG-NOM	28480	9140-0144
A21L32	9140-0144	0		COIL-MLD 4.7UH 10% Q=45 .095DX,25LG-NOM	28480	9140-0144
A21L41	9100-1618	1		COIL-MLD 5.6UH 10% Q=45 .155DX,375LG-NOM	28480	9100-1618
A21L42	9140-0158	6		COIL-MLD 1UH 10% Q=32 .095DX,25LG-NOM	28480	9140-0158
A21L50	9140-0144	0		COIL-MLD 4.7UH 10% Q=45 .095DX,25LG-NOM	28480	9140-0144
A21L51	9140-0158	6		COIL-MLD 1UH 10% Q=32 .095DX,25LG-NOM	28480	9140-0158
A21L52	9140-0144	0		COIL-MLD 4.7UH 10% Q=45 .095DX,25LG-NOM	28480	9140-0144
A21L53	9140-0210	1		COIL-MLD 100UH 5% Q=50 .155DX,375LG-NOM	28480	9140-0210
A21L54	9100-1618	1		COIL-MLD 5.6UH 10% Q=45 .155DX,375LG-NOM	28480	9100-1618
A21L55	9100-2258	7	2	COIL-MLD 1.2UH 10% Q=32 .095DX,25LG-NOM	28480	9100-2258

See introduction to this section for ordering information  
 \*Indicates factory selected value



Table 6-3. Replaceable Parts

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
A21L56	9140-0158	6		COIL-MLD 1UH 10x Q#32 .095Dx.25LG-NOM	28480	9140-0158
A21Q1	1853-0354	7	12	TRANSISTOR PNP SI TO-92 PD=350MW	28480	1853-0354
A21Q2	1853-0203	5		TRANSISTOR PNP SI TO-18 PD=360MW	28480	1853-0203
A21Q3	1853-0203	5	13	TRANSISTOR PNP SI TO-18 PD=360MW	28480	1853-0203
A21Q4	1853-0203	5		TRANSISTOR PNP SI TO-18 PD=360MW	28480	1853-0203
A21Q5	1853-0010	2		TRANSISTOR PNP SI TO-18 PD=360MW	28480	1853-0010
A21Q6	1853-0010	2	22	TRANSISTOR PNP SI TO-18 PD=360MW	28480	1853-0010
A21Q7	1853-0010	2		TRANSISTOR PNP SI TO-18 PD=360MW	28480	1853-0010
A21Q8	1853-0010	2		TRANSISTOR PNP SI TO-18 PD=360MW	28480	1853-0010
A21Q9	1853-0010	2		TRANSISTOR PNP SI TO-18 PD=360MW	28480	1853-0010
A21Q10	1853-0010	2		TRANSISTOR PNP SI TO-18 PD=360MW	28480	1853-0010
A21Q11	1853-0010	2	22	TRANSISTOR PNP SI TO-18 PD=360MW	28480	1853-0010
A21Q12	1853-0010	2		TRANSISTOR PNP SI TO-18 PD=360MW	28480	1853-0010
A21Q13	1853-0089	5		TRANSISTOR PNP 2N4917 SI PD=200MW	07263	2N4917
A21Q14	1853-0089	5		TRANSISTOR PNP 2N4917 SI PD=200MW	07263	2N4917
A21Q15	1853-0010	2		TRANSISTOR PNP SI TO-18 PD=360MW	28480	1853-0010
A21Q16	1855-0062	8	1	TRANSISTOR J-FET N-CHAN D-MODE SI	28480	1855-0062
A21Q17	1855-0009	1	1	TRANSISTOR NPN 2N769 SI TO-18 PD=300MW	04713	2N769
A21R1	0683-1025	9	4	RESISTOR 1K 5% .25W FC TC=-400/+600	01121	C81025
A21R2	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	C81025
A21R3	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	C84705
A21R4	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	C84705
A21R5	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	C84705
A21R6	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	C84705
A21R7	0683-4715	0		RESISTOR 470 5% .25W FC TC=-400/+600	01121	C84715
A21R8	0683-6815	5		RESISTOR 680 5% .25W FC TC=-400/+600	01121	C86815
A21R9	0683-6815	5		RESISTOR 680 5% .25W FC TC=-400/+600	01121	C86815
A21R10	0683-6815	5		RESISTOR 680 5% .25W FC TC=-400/+600	01121	C86815
A21R11	0683-3315	4		RESISTOR 330 5% .25W FC TC=-400/+600	01121	C83315
A21R12	0683-3315	4		RESISTOR 330 5% .25W FC TC=-400/+600	01121	C83315
A21R13	0683-1805	3	RESISTOR 18 5% .25W FC TC=-400/+500	01121	C81805	
A21R14	0683-1805	3	RESISTOR 18 5% .25W FC TC=-400/+500	01121	C81805	
A21R15	0683-1805	3	RESISTOR 18 5% .25W FC TC=-400/+500	01121	C81805	
A21R16	0683-6815	5	RESISTOR 680 5% .25W FC TC=-400/+600	01121	C86815	
A21R17	0683-6815	5	RESISTOR 680 5% .25W FC TC=-400/+600	01121	C86815	
A21R18	0683-6815	5	RESISTOR 680 5% .25W FC TC=-400/+600	01121	C86815	
A21R19	0683-6815	5	RESISTOR 680 5% .25W FC TC=-400/+600	01121	C86815	
A21R20	0683-4715	0	RESISTOR 470 5% .25W FC TC=-400/+600	01121	C84715	
A21R21	0683-3905	8	RESISTOR 39 5% .25W FC TC=-400/+500	01121	C83905	
A21R22	0683-6815	5	RESISTOR 680 5% .25W FC TC=-400/+600	01121	C86815	
A21R23	0683-4715	0	RESISTOR 470 5% .25W FC TC=-400/+600	01121	C84715	
A21R24	0683-3905	8	RESISTOR 39 5% .25W FC TC=-400/+500	01121	C83905	
A21R25	0683-6815	5	RESISTOR 680 5% .25W FC TC=-400/+600	01121	C86815	
A21R26	0683-1025	9	RESISTOR 1K 5% .25W FC TC=-400/+600	01121	C81025	
A21R30	0683-6815	5	RESISTOR 680 5% .25W FC TC=-400/+600	01121	C86815	
A21R31	0683-6815	5	RESISTOR 680 5% .25W FC TC=-400/+600	01121	C86815	
A21R32	0683-4715	0	RESISTOR 470 5% .25W FC TC=-400/+600	01121	C84715	
A21R33	0683-1025	9	RESISTOR 1K 5% .25W FC TC=-400/+600	01121	C81025	
A21R34	0683-1025	9	RESISTOR 1K 5% .25W FC TC=-400/+600	01121	C81025	
A21R35	0683-1025	9	RESISTOR 1K 5% .25W FC TC=-400/+600	01121	C81025	
A21R36	0683-1025	9	RESISTOR 1K 5% .25W FC TC=-400/+600	01121	C81025	
A21R38	0683-4715	0	RESISTOR 470 5% .25W FC TC=-400/+600	01121	C84715	
A21R39	0683-1015	7	RESISTOR 100 5% .25W FC TC=-400/+500	01121	C81015	
A21R40	0683-4715	0	RESISTOR 470 5% .25W FC TC=-400/+600	01121	C84715	
A21R41	0683-1025	9	RESISTOR 1K 5% .25W FC TC=-400/+600	01121	C81025	
A21R42	0683-1025	9	RESISTOR 1K 5% .25W FC TC=-400/+600	01121	C81025	
A21R43	0683-1025	9	RESISTOR 1K 5% .25W FC TC=-400/+600	01121	C81025	
A21R44	0683-1025	9	RESISTOR 1K 5% .25W FC TC=-400/+600	01121	C81025	
A21R45	0683-1025	9	RESISTOR 1K 5% .25W FC TC=-400/+600	01121	C81025	
A21R46	0683-1025	9	RESISTOR 1K 5% .25W FC TC=-400/+600	01121	C81025	
A21R47	0683-1025	9	RESISTOR 1K 5% .25W FC TC=-400/+600	01121	C81025	
A21R48	0683-4705	8	RESISTOR 47 5% .25W FC TC=-400/+500	01121	C84705	
A21R49	0683-4705	8	RESISTOR 47 5% .25W FC TC=-400/+500	01121	C84705	
A21R50	0683-1025	9	RESISTOR 1K 5% .25W FC TC=-400/+600	01121	C81025	
A21R51	0683-1025	9	RESISTOR 1K 5% .25W FC TC=-400/+600	01121	C81025	
A21R52	0683-1025	9	RESISTOR 1K 5% .25W FC TC=-400/+600	01121	C81025	
A21R53	0683-1025	9	RESISTOR 1K 5% .25W FC TC=-400/+600	01121	C81025	
A21R54	0683-4705	8	RESISTOR 47 5% .25W FC TC=-400/+500	01121	C84705	
A21R55	0683-4705	8	RESISTOR 47 5% .25W FC TC=-400/+500	01121	C84705	
A21R56	0683-1025	9	RESISTOR 1K 5% .25W FC TC=-400/+600	01121	C81025	
A21R57	0683-1025	9	RESISTOR 1K 5% .25W FC TC=-400/+600	01121	C81025	
A21R58	0683-4715	0	RESISTOR 470 5% .25W FC TC=-400/+600	01121	C84715	
A21R59	0683-3905	8	RESISTOR 39 5% .25W FC TC=-400/+500	01121	C83905	

See introduction to this section for ordering information.  
\*Indicates factory selected value

Table 6-3. Replaceable Parts

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
A21R60	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
A21R61	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
A21R62	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
A21R63	0683-4715	0		RESISTOR 470 5% .25W FC TC=-400/+600	01121	CB4715
A21R64	0683-3905	8		RESISTOR 39 5% .25W FC TC=-400/+500	01121	CB3905
A21R65	0683-1805	3		RESISTOR 18 5% .25W FC TC=-400/+500	01121	CB1805
A21R66	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	CB4705
A21R72	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
A21R73	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	CB4705
A21R74	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
A21R75	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	CB4705
A21R76	0683-4715	0		RESISTOR 470 5% .25W FC TC=-400/+600	01121	CB4715
A21R77	0683-2225	3		RESISTOR 2.2K 5% .25W FC TC=-400/+700	01121	CB2225
A21R78	0683-1015	7		RESISTOR 100 5% .25W FC TC=-400/+500	01121	CB1015
A21R79	0683-2215	1		RESISTOR 220 5% .25W FC TC=-400/+600	01121	CB2215
A21R80	0683-2205	9		RESISTOR 22 5% .25W FC TC=-400/+500	01121	CB2205
A21R81	0683-2205	9		RESISTOR 22 5% .25W FC TC=-400/+500	01121	CB2205
A21R82	0683-1015	7		RESISTOR 100 5% .25W FC TC=-400/+500	01121	CB1015
A21R83	0683-4715	0		RESISTOR 470 5% .25W FC TC=-400/+600	01121	CB4715
A21R84	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	CB4705
A21R85	0683-4715	0		RESISTOR 470 5% .25W FC TC=-400/+600	01121	CB4715
A21R86	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	CB4705
A21R87	0683-3305	2		RESISTOR 33 5% .25W FC TC=-400/+500	01121	CB3305
A21R88	0683-2225	3		RESISTOR 2.2K 5% .25W FC TC=-400/+700	01121	CB2225
A21R89	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	CB4705
A21R100	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	CB4705
A21R101	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
A21R102	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
A21R103	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	CB4705
A21R104	0683-2215	1		RESISTOR 220 5% .25W FC TC=-400/+600	01121	CB2215
A21R105	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
A21R106	0683-1015	7		RESISTOR 100 5% .25W FC TC=-400/+500	01121	CB1015
A21R107	0683-1015	7		RESISTOR 100 5% .25W FC TC=-400/+500	01121	CB1015
A21R108	0683-2715	6		RESISTOR 270 5% .25W FC TC=-400/+600	01121	CB2715
A21R109	0683-3315	4		RESISTOR 330 5% .25W FC TC=-400/+600	01121	CB3315
A21R110	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
A21R111	0683-2715	6		RESISTOR 270 5% .25W FC TC=-400/+600	01121	CB2715
A21R112	0683-6825	7		RESISTOR 6.8K 5% .25W FC TC=-400/+700	01121	CB6825
A21R113	0683-2715	6		RESISTOR 270 5% .25W FC TC=-400/+600	01121	CB2715
A21R114	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
A21R115	0683-3315	4		RESISTOR 330 5% .25W FC TC=-400/+600	01121	CB3315
A21R116	0683-1515	2	6	RESISTOR 150 5% .25W FC TC=-400/+600	01121	CB1515
A21R117	0683-4715	0		RESISTOR 470 5% .25W FC TC=-400/+600	01121	CB4715
A21R118	0683-4715	0		RESISTOR 470 5% .25W FC TC=-400/+600	01121	CB4715
A21R119	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
A21R120	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
A21R121	0683-6805	3		RESISTOR 68 5% .25W FC TC=-400/+500	01121	CB6805
A21R122	0683-2245	7		RESISTOR 220K 5% .25W FC TC=-800/+900	01121	CB2245
A21R123	0683-1045	3		RESISTOR 100K 5% .25W FC TC=-400/+800	01121	CB1045
A21R124	0698-4486	3	5	RESISTOR 24.9K 1% .125W F TC=0+/-100	24546	C4=1/8-T0-2492-F
A21R125	2100-3274	2	3	RESISTOR-TRMR 10K 10% C SIDE=ADJ 1-TRM	28480	2100-3274
A21R126	0698-3228	9	3	RESISTOR 49.9K 1% .125W F TC=0+/-100	28480	0698-3228
A21R127	0683-1055	5		RESISTOR 1M 5% .25W FC TC=-800/+900	01121	CB1055
A21R128	0683-1055	5		RESISTOR 1M 5% .25W FC TC=-800/+900	01121	CB1055
A21R129	0683-2735	0	3	RESISTOR 27K 5% .25W FC TC=-400/+800	01121	CB2735
A21R130	0683-2245	7		RESISTOR 220K 5% .25W FC TC=-800/+900	01121	CB2245
A21R131	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
A21R132	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
A21R133	0683-2245	7		RESISTOR 220K 5% .25W FC TC=-800/+900	01121	CB2245
A21R134	0683-1055	5		RESISTOR 1M 5% .25W FC TC=-800/+900	01121	CB1055
A21R135	0698-4486	3		RESISTOR 24.9K 1% .125W F TC=0+/-100	24546	C4=1/8-T0-2492-F
A21R136	0757-0270	1	1	RESISTOR 249K 1% .125W F TC=0+/-100	24546	C4=1/8-T0-2493-F
A21R140	0683-4715	0		RESISTOR 470 5% .25W FC TC=-400/+600	01121	CB4715
A21T1	9100-4039	6		TRANSFORMER-POWER	28480	9100-4039
A21T2	08552-6044	1		TRANSFORMER	28480	08552-6044
A21T3	08552-6044	1		TRANSFORMER	28480	08552-6044
A21TP1-			2			
A21TP26	0360-0124	3		CONNECTOR=SGL CONT PIN .04-IN=8SC=S2 RND	28480	0360-0124
A21U1	1820-0810	1	5	IC RCVR ECL LINE RCVR TPL 2-INP	04713	MC10116P
A21U2	1820-0806	5	13	IC GATE ECL OR-NOR DUAL 4-5-INP	04713	MC10109P
A21U3	1820-0806	5		IC GATE ECL OR-NOR DUAL 4-5-INP	04713	MC10109P
A21U4	1820-0806	5		IC GATE ECL OR-NOR DUAL 4-5-INP	04713	MC10109P
A21U5	1820-0806	5		IC GATE ECL OR-NOR DUAL 4-5-INP	04713	MC10109P

See introduction to this section for ordering information  
 \*Indicates factory selected value

Table 6-3. Replaceable Parts

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
A21U6	1A20-0817	8	13	IC FF ECL D-M/S DUAL	04713	MC10131P
A21U7	1A20-0817	8		IC FF ECL D-M/S DUAL	04713	MC10131P
A21U8	1A20-0806	5		IC GATE ECL OR-NOR DUAL 4-5-INP	04713	MC10109P
A21U9	1A20-0810	1		IC RCVR ECL LINE RCVR TPL 2-INP	04713	MC10116P
A21U10	1A20-0806	5		IC GATE ECL OR-NOR DUAL 4-5-INP	04713	MC10109P
A21U11	1A20-0806	5		IC GATE ECL OR-NOR DUAL 4-5-INP	04713	MC10109P
A21U12	1A20-0806	5		IC GATE ECL OR-NOR DUAL 4-5-INP	04713	MC10109P
A21U13	1A20-0806	5		IC GATE ECL OR-NOR DUAL 4-5-INP	04713	MC10109P
A21U14	1A20-0803	2	3	IC GATE ECL OR-NOR TPL	04713	MC10105P
A21U15	1A20-0693	8	3	IC FF TTL S D-TYPE POS-EDGE-TRIG	01295	SN74LS24N
A21U16	1A20-1442	7	2	IC CNTR TTL LS DECD ASYNCHRO	01295	SN74LS290N
A21U17	1A20-1442	7		IC CNTR TTL LS DECD ASYNCHRO	01295	SN74LS290N
A21U18	1A20-0686	9	2	IC GATE TTL S AND TPL 3-INP	01295	SN74S11N
A21U23	1A20-0803	2		IC GATE ECL OR-NOR TPL	04713	MC10105P
A21U24	1A26-0111	7		OP AMP GP DUAL TO-99	04713	MC1458G
A21U25	1A26-0065	0	1	COMPARATOR PRCN 8-0IP-P	01295	SN72311P
A21V1	0410-1141	3	1	CRYSTAL, 89.99 MHZ	28480	0410-1141
A21 MISCELLANEOUS PARTS						
	03585-04107	4	1	COVER, 21	28480	03585-04107
	0370-2583	3	14	KNOB	28480	0370-2583
	5001-0173	7	7	PC GROUND CLIP	28480	5001-0173
	2950-0078	9	37	NUT-HEX-DBL-CHAM 10-32-TMD .067-IN-TMK	28480	2950-0078
	2190-0124	4	45	WASHER-LK INTL T NO. 10 .195-IN-ID	28480	2190-0124
A22	03585-66522	7	1	1ST LD VOLTAGE CONTROLLED OSCILLATOR	28480	03585-66522
A22C1	0150-0050	9		CAPACITOR-FXD 1000PF +80-20% 1KVDC CER	28480	0150-0050
A22C2	0150-0050	9		CAPACITOR-FXD 1000PF +80-20% 1KVDC CER	28480	0150-0050
A22C3	0160-2202	8		CAPACITOR-FXD 75PF +-5% 300VDC MICA	28480	0160-2202
A22C4	0160-2202	8		CAPACITOR-FXD 75PF +-5% 300VDC MICA	28480	0160-2202
A22C5	0160-2202	8		CAPACITOR-FXD 75PF +-5% 300VDC MICA	28480	0160-2202
A22C7	0150-0050	9		CAPACITOR-FXD 1000PF +80-20% 1KVDC CER	28480	0150-0050
A22C8	0150-0050	9		CAPACITOR-FXD 1000PF +80-20% 1KVDC CER	28480	0150-0050
A22C9	0160-2199	2		CAPACITOR-FXD 30PF +-5% 300VDC MICA	28480	0160-2199
A22C10	0150-0050	9		CAPACITOR-FXD 1000PF +80-20% 1KVDC CER	28480	0150-0050
A22C13	0160-2204	0		CAPACITOR-FXD 1000PF +-5% 300VDC MICA	28480	0160-2204
A22C14	0150-0050	9		CAPACITOR-FXD 1000PF +80-20% 1KVDC CER	28480	0150-0050
A22C15	0150-0050	9		CAPACITOR-FXD 1000PF +80-20% 1KVDC CER	28480	0150-0050
A22C16	0150-0050	9		CAPACITOR-FXD 1000PF +80-20% 1KVDC CER	28480	0150-0050
A22C17	0150-0050	9		CAPACITOR-FXD 1000PF +80-20% 1KVDC CER	28480	0150-0050
A22C18	0150-0050	9		CAPACITOR-FXD 1000PF +80-20% 1KVDC CER	28480	0150-0050
A22C19	0150-0050	9		CAPACITOR-FXD 1000PF +80-20% 1KVDC CER	28480	0150-0050
A22C20	0150-0050	9		CAPACITOR-FXD 1000PF +80-20% 1KVDC CER	28480	0150-0050
A22C21	0150-0050	9		CAPACITOR-FXD 1000PF +80-20% 1KVDC CER	28480	0150-0050
A22C22	0150-0050	9		CAPACITOR-FXD 1000PF +80-20% 1KVDC CER	28480	0150-0050
A22C23	0150-0050	9		CAPACITOR-FXD 1000PF +80-20% 1KVDC CER	28480	0150-0050
A22C24	0150-0050	9		CAPACITOR-FXD 1000PF +80-20% 1KVDC CER	28480	0150-0050
A22C25	0150-0050	9		CAPACITOR-FXD 1000PF +80-20% 1KVDC CER	28480	0150-0050
A22C26	0150-0050	9		CAPACITOR-FXD 1000PF +80-20% 1KVDC CER	28480	0150-0050
A22C27	0150-0050	9		CAPACITOR-FXD 1000PF +80-20% 1KVDC CER	28480	0150-0050
A22C31	0150-0093	0		CAPACITOR-FXD .01UF +80-20% 100VDC CER	28480	0150-0093
A22C32	0150-0050	9		CAPACITOR-FXD 1000PF +80-20% 1KVDC CER	28480	0150-0050
A22C53	0160-1746	5		CAPACITOR-FXD 150PF+-10% 20VDC TA	56289	150D156X9020b2
A22C54	0150-0093	0		CAPACITOR-FXD .01UF +80-20% 100VDC CER	28480	0150-0093
A22C55	0160-1746	5		CAPACITOR-FXD 150PF+-10% 20VDC TA	56289	150D156X9020b2
A22C56	0160-2940	1	2	CAPACITOR-FXD 470PF +-5% 300VDC MICA	28480	0160-2940
A22C57	0160-2207	3	2	CAPACITOR-FXD 300PF +-5% 300VDC MICA	28480	0160-2207
A22C58	0160-2672	6	2	CAPACITOR-FXD .047UF +-5% 80VDC POLYE	28480	0160-2672
A22C59	0160-4387	4	2	CAPACITOR-FXD 47PF +-5% 200VDC CER 0+-30	28480	0160-4387
A22C60	0160-4387	4		CAPACITOR-FXD 47PF +-5% 200VDC CER 0+-30	28480	0160-4387
A22CR1	0122-0089	5	9	DIODE-VVC 29PF 10% C3/C25-MIN=5 BYR=30V	04713	4V109
A22CR2	0122-0089	5		DIODE-VVC 29PF 10% C3/C25-MIN=5 BYR=30V	04713	4V109
A22CR3	1901-0535	9		DIODE-SC-OTTKY	28480	1901-0535
A22CR4	1907-3054	9	3	DIODE-ZNR 3.05V 5% DO-7 PD=.4W TC=-.055X	28480	1907-3054
A22CR5	1901-0640	1		DIODE-SWITCHING 30V 50MA 2NS DD-35	28480	1901-0640
A22J1	1250-1512	3		CONNECTOR-RF SMB M PC 50-0HM	28480	1250-1512
A22J2	1250-1512	3		CONNECTOR-RF SMB M PC 50-0HM	28480	1250-1512
A22J3	1250-1512	3		CONNECTOR-RF SMB M PC 50-0HM	28480	1250-1512
A22L1	9100-3900	8	2	COIL-FIXED COIL ASSY; 3 TURNS	28480	9100-3900
A22L2	9100-2255	4		COIL-MLO 470NH 10% Q=35 .0950X.25LG-NOM	28480	9100-2255
A22L3	9100-2255	4		COIL-MLO 470NH 10% Q=35 .0950X.25LG-NOM	28480	9100-2255
A22L4	9100-1620	5	11	COIL-MLO 150H 10% Q=65 .1550X.375LG-NOM	28480	9100-1620
A22L5	9100-1620	5		COIL-MLO 150H 10% Q=65 .1550X.375LG-NOM	28480	9100-1620

See introduction to this section for ordering information  
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Table 6-3. Replaceable Parts

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
A22L7	9100-0541	7		COIL-MLD 250UH 10% Q#3 .25DX.5LG-NDM	28480	9100-0541
A22L8	9140-0142	8		COIL-MLD 2.2UH 10% Q#32 .095DX.25LG-NDM	28480	9140-0142
A22L10	9140-0131	5		COIL-MLD 10MH 5% Q#80 .24DX.74LG-NDM	28480	9140-0131
A22L11	9140-0210	1		COIL-MLD 100UH 5% Q#50 .155DX.375LG-NDM	28480	9140-0210
A22L12	9100-2247	4		COIL-MLD 100NH 10% Q#34 .095DX.25LG-NDM	28480	9100-2247
A22L13	9100-2247	4		COIL-MLD 100NH 10% Q#34 .095DX.25LG-NDM	28480	9100-2247
A22Q1	1854-0345	8	40	TRANSISTOR NPN 2N5179 SI T0-72 PD=200MW	04713	2N5179
A22Q2	1854-0345	8		TRANSISTOR NPN 2N5179 SI T0-72 PD=200MW	04713	2N5179
A22Q3	1854-0071	7		TRANSISTOR NPN SI PD=300MW FT=200MHZ	28480	1854-0071
A22Q5	1854-0345	8		TRANSISTOR NPN 2N5179 SI T0-72 PD=200MW	04713	2N5179
A22Q6	1854-0345	8		TRANSISTOR NPN 2N5179 SI T0-72 PD=200MW	04713	2N5179
A22Q7	1854-0345	8		TRANSISTOR NPN 2N5179 SI T0-72 PD=200MW	04713	2N5179
A22Q8	1854-0345	8		TRANSISTOR NPN 2N5179 SI T0-72 PD=200MW	04713	2N5179
A22Q9	1854-0345	8		TRANSISTOR NPN 2N5179 SI T0-72 PD=200MW	04713	2N5179
A22Q10	1854-0345	8		TRANSISTOR NPN 2N5179 SI T0-72 PD=200MW	04713	2N5179
A22Q11	1854-0345	8		TRANSISTOR NPN 2N5179 SI T0-72 PD=200MW	04713	2N5179
A22R1	0757-0401	0		RESISTOR 100 1% .125W F TC=0/+100	24546	C4=1/8-T0=101-F
A22R2	0683-1035	1		RESISTOR 10K 5% .25W FC TC=400/+700	01121	CB1035
A22R3	0683-2205	9		RESISTOR 22 5% .25W FC TC=400/+500	01121	CB2205
A22R4	0683-5125	8		RESISTOR 5.1K 5% .25W FC TC=400/+700	01121	CB5125
A22R5	0683-1235	3		RESISTOR 12K 5% .25W FC TC=400/+800	01121	CB1235
A22R6	0683-1235	3		RESISTOR 12K 5% .25W FC TC=400/+800	01121	CB1235
A22R7	0683-2205	9		RESISTOR 22 5% .25W FC TC=400/+500	01121	CB2205
A22R9	0683-4705	8		RESISTOR 47 5% .25W FC TC=400/+500	01121	CB4705
A22R17	0683-1035	1		RESISTOR 10K 5% .25W FC TC=400/+700	01121	CB1035
A22R18	0683-4705	8		RESISTOR 47 5% .25W FC TC=400/+500	01121	CB4705
A22R19	0683-1035	1		RESISTOR 10K 5% .25W FC TC=400/+700	01121	CB1035
A22R20	0683-7515	4		RESISTOR 750 5% .25W FC TC=400/+600	01121	CB7515
A22R21	0683-1015	7		RESISTOR 100 5% .25W FC TC=400/+500	01121	CB1015
A22R22	0683-5615	1	2	RESISTOR 560 5% .25W FC TC=400/+600	01121	CB5615
A22R23	0683-4705	8		RESISTOR 47 5% .25W FC TC=400/+500	01121	CB4705
A22R24	0683-5625	3	9	RESISTOR 5.6K 5% .25W FC TC=400/+700	01121	CB5625
A22R25	0683-5625	3		RESISTOR 5.6K 5% .25W FC TC=400/+700	01121	CB5625
A22R26	0683-3315	4		RESISTOR 330 5% .25W FC TC=400/+600	01121	CB3315
A22R27	0683-4705	8		RESISTOR 47 5% .25W FC TC=400/+500	01121	CB4705
A22R28	0683-2725	8	22	RESISTOR 2.7K 5% .25W FC TC=400/+700	01121	CB2725
A22R29	0683-4715	0		RESISTOR 470 5% .25W FC TC=400/+600	01121	CB4715
A22R30	0683-4705	8		RESISTOR 47 5% .25W FC TC=400/+500	01121	CB4705
A22R31	0683-2025	1		RESISTOR 2K 5% .25W FC TC=400/+700	01121	CB2025
A22R32	0683-4705	8		RESISTOR 47 5% .25W FC TC=400/+500	01121	CB4705
A22R33	0683-2725	8		RESISTOR 2.7K 5% .25W FC TC=400/+700	01121	CB2725
A22R34	0683-4705	8		RESISTOR 47 5% .25W FC TC=400/+500	01121	CB4705
A22R35	0683-3325	6		RESISTOR 3.3K 5% .25W FC TC=400/+700	01121	CB3325
A22R36	0683-4705	8		RESISTOR 47 5% .25W FC TC=400/+500	01121	CB4705
A22R37	0683-2205	9		RESISTOR 22 5% .25W FC TC=400/+500	01121	CB2205
A22R38	0683-2205	9		RESISTOR 22 5% .25W FC TC=400/+500	01121	CB2205
A22R39	0683-3315	4		RESISTOR 330 5% .25W FC TC=400/+600	01121	CB3315
A22R40	0683-4705	8		RESISTOR 47 5% .25W FC TC=400/+500	01121	CB4705
A22R41	0683-2025	1		RESISTOR 2K 5% .25W FC TC=400/+700	01121	CB2025
A22R42	0683-4705	8		RESISTOR 47 5% .25W FC TC=400/+500	01121	CB4705
A22R43	0683-2725	8		RESISTOR 2.7K 5% .25W FC TC=400/+700	01121	CB2725
A22R44	0683-4705	8		RESISTOR 47 5% .25W FC TC=400/+500	01121	CB4705
A22R45	0683-3325	6		RESISTOR 3.3K 5% .25W FC TC=400/+700	01121	CB3325
A22R46	0683-4705	8		RESISTOR 47 5% .25W FC TC=400/+500	01121	CB4705
A22R47	0683-2205	9		RESISTOR 22 5% .25W FC TC=400/+500	01121	CB2205
A22R48	0683-6205	7	1	RESISTOR 62 5% .25W FC TC=400/+500	01121	CB6205
A22R49	0683-3315	4		RESISTOR 330 5% .25W FC TC=400/+600	01121	CB3315
A22R50	0683-2025	1		RESISTOR 2K 5% .25W FC TC=400/+700	01121	CB2025
A22R51	0698-4452	3	2	RESISTOR 374 1% .125W F TC=0/+100	24546	C4=1/8-T0=374H-F
A22R52	0757-0450	9	1	RESISTOR 22.1K 1% .125W F TC=0/+100	24546	C4=1/8-T0=2212-F
A22R53	0683-6825	7		RESISTOR 6.8K 5% .25W FC TC=400/+700	01121	CB6825
A22R54	0683-2025	1		RESISTOR 2K 5% .25W FC TC=400/+700	01121	CB2025
A22R55	0698-3279	0		RESISTOR 4.99K 1% .125W F TC=0/+100	24546	C4=1/8-T0=4991-F
A22R56	0757-0442	9		RESISTOR 10K 1% .125W F TC=0/+100	24546	C4=1/8-T0=1002-F
A22R57	0683-3325	6		RESISTOR 3.3K 5% .25W FC TC=400/+700	01121	CB3325
A221P1	0360-0124	3		CONNECTOR-SGL CONT PIN .04-IN-BSC=SZ RND	28480	0360-0124
A221P2	0360-0124	3		CONNECTOR-SGL CONT PIN .04-IN-BSC=SZ RND	28480	0360-0124
				A22 MISCELLANEOUS PARTS		
	03585-05222	6	1	LID, A22	28480	03585-05222
	0370-2583	3		KNOB	28480	0370-2583
	1600-0702	4	2	SHIELD OSC	28480	1600-0702
	2950-0078	9		NUT-MEX-DBL-CH4M 10-32-THD .067-IN-THK	28480	2950-0078

See introduction to this section for ordering information  
 \*Indicates factory selected value

Table 6-3. Replaceable Parts

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
	2190-0124	4		WASHER-LK INTL T NO. 10 .195-IN-ID	28480	2190-0124
A23	03585-66523	8	1	STEP SYN VTO	28480	03585-66523
A23C1	0150-0050	9		CAPACITOR-FXD 1000PF +80-20% 1KVDC CER	28480	0150-0050
A23C2	0150-0050	9		CAPACITOR-FXD 1000PF +80-20% 1KVDC CER	28480	0150-0050
A23C3	0150-2199	2		CAPACITOR-FXD 30PF +-5% 300VDC MICA	28480	0150-2199
A23C4	0150-2202	8		CAPACITOR-FXD 75PF +-5% 300VDC MICA	28480	0150-2202
A23C5	0150-2202	8		CAPACITOR-FXD 75PF +-5% 300VDC MICA	28480	0150-2202
A23C6	0150-2202	8		CAPACITOR-FXD 75PF +-5% 300VDC MICA	28480	0150-2202
A23C9	0150-2204	0		CAPACITOR-FXD 100PF +-5% 300VDC MICA	28480	0150-2204
A23C10	0150-0050	9		CAPACITOR-FXD 1000PF +80-20% 1KVDC CER	28480	0150-0050
A23C11	0150-0050	9		CAPACITOR-FXD 1000PF +80-20% 1KVDC CER	28480	0150-0050
A23C12	0150-0050	9		CAPACITOR-FXD 1000PF +80-20% 1KVDC CER	28480	0150-0050
A23C13	0150-0050	9		CAPACITOR-FXD 1000PF +80-20% 1KVDC CER	28480	0150-0050
A23C14	0150-0050	9		CAPACITOR-FXD 1000PF +80-20% 1KVDC CER	28480	0150-0050
A23C15	0150-0050	9		CAPACITOR-FXD 1000PF +80-20% 1KVDC CER	28480	0150-0050
A23C16	0150-2200	6		CAPACITOR-FXD 43PF +-5% 300VDC MICA	28480	0150-2200
A23C17	0150-2261	9		CAPACITOR-FXD 15PF +-5% 500VDC CER 0+-30	28480	0150-2261
A23C18	0150-0050	9		CAPACITOR-FXD 1000PF +80-20% 1KVDC CER	28480	0150-0050
A23C19	0150-0050	9		CAPACITOR-FXD 1000PF +80-20% 1KVDC CER	28480	0150-0050
A23C20	0150-0050	9		CAPACITOR-FXD 1000PF +80-20% 1KVDC CER	28480	0150-0050
A23C21	0150-0050	9		CAPACITOR-FXD 1000PF +80-20% 1KVDC CER	28480	0150-0050
A23C22	0150-0050	9		CAPACITOR-FXD 1000PF +80-20% 1KVDC CER	28480	0150-0050
A23C23	0150-0050	9		CAPACITOR-FXD 1000PF +80-20% 1KVDC CER	28480	0150-0050
A23C24	0150-0050	9		CAPACITOR-FXD 1000PF +80-20% 1KVDC CER	28480	0150-0050
A23C26	0150-0093	0		CAPACITOR-FXD .01UF +80-20% 100VDC CER	28480	0150-0093
A23C27	0150-0050	9		CAPACITOR-FXD 1000PF +80-20% 1KVDC CER	28480	0150-0050
A23C28	0150-0050	9		CAPACITOR-FXD 1000PF +80-20% 1KVDC CER	28480	0150-0050
A23C29	0150-0050	9		CAPACITOR-FXD 1000PF +80-20% 1KVDC CER	28480	0150-0050
A23C30	0150-0050	9		CAPACITOR-FXD 1000PF +80-20% 1KVDC CER	28480	0150-0050
A23C31	0150-0050	9		CAPACITOR-FXD 1000PF +80-20% 1KVDC CER	28480	0150-0050
A23C32	0150-0050	9		CAPACITOR-FXD 1000PF +80-20% 1KVDC CER	28480	0150-0050
A23C33	0150-0093	0		CAPACITOR-FXD .01UF +80-20% 100VDC CER	28480	0150-0093
A23C34	0150-2672	6		CAPACITOR-FXD .047UF +-5% 80VDC POLYE	28480	0150-2672
A23C35	0150-0210	2		CAPACITOR-FXD 270PF +-5% 300VDC MICA	72136	DM15F271J0300V1C0R
A23C36	0150-0196	3		CAPACITOR-FXD 150PF +-5% 300VDC MICA	72136	DM15F151J0300V1C0R
A23C40	0150-1746	5		CAPACITOR-FXD 15UF+-10% 20VDC TA	56289	150D156X9020B2
A23C41	0122-0089	5		DIODE-VVDC 29PF 10% C3/C25-MIN#5 5VR=30V	04713	MV109
A23C42	0122-0089	5		DIODE-VVDC 29PF 10% C3/C25-MIN#5 5VR=30V	04713	MV109
A23C43	1901-0040	1		DIODE-SWITCHING 30V 50MA 2NS DD-35	28480	1901-0040
A23C44	1901-0535	9		DIODE-SCHOTTKY	28480	1901-0535
A23C45	1902-3054	5		DIODE-ZNR 3.65V 5% DO-7 PD=.4W TC=-.055X	28480	1902-3054
A23J1	1250-1512	3		CONNECTOR-RF SMB M PC 50-0HM	28480	1250-1512
A23J2	1250-1512	3		CONNECTOR-RF SMB M PC 50-0HM	28480	1250-1512
A23J3	1250-1512	3		CONNECTOR-RF SMB M PC 50-0HM	28480	1250-1512
A23L1	9100-3900	4		COIL-FIXED COIL ASSY; 3 TURNS	28480	9100-3900
A23L2	9100-2255	4		COIL-MLD 470NH 10% Q#35 .0950X.25LG-NOM	28480	9100-2255
A23L3	9100-0142	8		COIL-MLD 2.2UH 10% Q#32 .0950X.25LG-NOM	28480	9100-0142
A23L4	9100-2255	4		COIL-MLD 470NH 10% Q#35 .0950X.25LG-NOM	28480	9100-2255
A23L5	9100-2247	4		COIL-MLD 100NH 10% Q#34 .0950X.25LG-NOM	28480	9100-2247
A23L6	9100-2247	4		COIL-MLD 100NH 10% Q#34 .0950X.25LG-NOM	28480	9100-2247
A23L7	9100-1620	5		COIL-MLD 15UH 10% Q#65 .1550X.375LG-NOM	28480	9100-1620
A23L8	9100-1620	5		COIL-MLD 15UH 10% Q#65 .1550X.375LG-NOM	28480	9100-1620
A23L10	9100-0541	7		COIL-MLD 250UH 10% Q#3 .25DX.5LG-NOM	28480	9100-0541
A23L11	9100-0131	5		COIL-MLD 10MH 5% Q#80 .24DX.74LG-NOM	28480	9100-0131
A23L12	9100-1641	0	4	COIL-MLD 240UH 5% Q#65 .1550X.375LG-NOM	28480	9100-1641
A23M1	1854-0345	8		TRANSISTOR NPN 2N5179 SI TO-72 PD=200MW	04713	2N5179
A23M2	1854-0345	8		TRANSISTOR NPN 2N5179 SI TO-72 PD=200MW	04713	2N5179
A23M3	1854-0345	8		TRANSISTOR NPN 2N5179 SI TO-72 PD=200MW	04713	2N5179
A23M4	1854-0345	8		TRANSISTOR NPN 2N5179 SI TO-72 PD=200MW	04713	2N5179
A23M5	1854-0345	8		TRANSISTOR NPN 2N5179 SI TO-72 PD=200MW	04713	2N5179
A23M6	1854-0345	8		TRANSISTOR NPN 2N5179 SI TO-72 PD=200MW	04713	2N5179
A23M7	1854-0345	8		TRANSISTOR NPN 2N5179 SI TO-72 PD=200MW	04713	2N5179
A23M8	1854-0345	8		TRANSISTOR NPN 2N5179 SI TO-72 PD=200MW	04713	2N5179
A23M9	1854-0345	8		TRANSISTOR NPN 2N5179 SI TO-72 PD=200MW	04713	2N5179
A23M10	1854-0071	7		TRANSISTOR NPN SI PD=300MW FT=200MHZ	28480	1854-0071
A23N1	0683-1035	1		RESISTOR 10K 5% .25W FC TC=-400/+700	01121	CB1035
A23N2	0683-2205	5		RESISTOR 22 5% .25W FC TC=-400/+500	01121	CB2205
A23N3	0683-1235	3		RESISTOR 5.1K 5% .25W FC TC=-400/+700	01121	CB5125
A23N4	0683-1235	3		RESISTOR 12K 5% .25W FC TC=-400/+800	01121	CB1235
A23N5	0683-1235	3		RESISTOR 12K 5% .25W FC TC=-400/+800	01121	CB1235
A23N6	0683-2205	9		RESISTOR 22 5% .25W FC TC=-400/+500	01121	CB2205
A23N7	0683-2205	1		RESISTOR 2K 5% .25W FC TC=-400/+700	01121	CB2205
A23N8	0757-0401	0		RESISTOR 100 1% .125W F TC=0+-100	24546	C4-1/8-T0-101-F
A23N9	0683-0705	9		RESISTOR 47 5% .25W FC TC=-400/+500	01121	CB4705
A23N10	0683-1035	1		RESISTOR 10K 5% .25W FC TC=-400/+700	01121	CB1035

See introduction to this section for ordering information  
 \*Indicates factory selected value



Table 6-3. Replaceable Parts

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
A23R11	0683-1035	1		RESISTOR 10K 5% .25W FC TC=-400/+700	01121	CB1035
A23R12	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	CB4705
A23R13	0683-7515	4		RESISTOR 750 5% .25W FC TC=-400/+600	01121	CB7515
A23R14	0683-1015	7		RESISTOR 100 5% .25W FC TC=-400/+500	01121	CB1015
A23R15	0683-5615	1		RESISTOR 560 5% .25W FC TC=-400/+600	01121	CB5615
A23R16	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	CB4705
A23R17	0683-5625	3		RESISTOR 5.6K 5% .25W FC TC=-400/+700	01121	CB5625
A23R18	0683-5625	3		RESISTOR 5.6K 5% .25W FC TC=-400/+700	01121	CB5625
A23R19	0683-3315	4		RESISTOR 330 5% .25W FC TC=-400/+600	01121	CB3315
A23R20	0683-2725	8		RESISTOR 2.7K 5% .25W FC TC=-400/+700	01121	CB2725
A23R21	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	CB4705
A23R22	0683-4715	0		RESISTOR 470 5% .25W FC TC=-400/+600	01121	CB4715
A23R23	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	CB4705
A23R24	0683-2025	1		RESISTOR 2K 5% .25W FC TC=-400/+700	01121	CB2025
A23R25	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	CB4705
A23R26	0683-2725	8		RESISTOR 2.7K 5% .25W FC TC=-400/+700	01121	CB2725
A23R27	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	CB4705
A23R28	0683-3325	6		RESISTOR 3.3K 5% .25W FC TC=-400/+700	01121	CB3325
A23R29	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	CB4705
A23R30	0683-2205	9		RESISTOR 22 5% .25W FC TC=-400/+500	01121	CB2205
A23R31	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	CB4705
A23R32	0683-3315	4		RESISTOR 330 5% .25W FC TC=-400/+600	01121	CB3315
A23R33	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	CB4705
A23R34	0683-2025	1		RESISTOR 2K 5% .25W FC TC=-400/+700	01121	CB2025
A23R35	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	CB4705
A23R36	0683-2725	8		RESISTOR 2.7K 5% .25W FC TC=-400/+700	01121	CB2725
A23R37	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	CB4705
A23R38	0683-3325	6		RESISTOR 3.3K 5% .25W FC TC=-400/+700	01121	CB3325
A23R39	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	CB4705
A23R40	0683-2205	9		RESISTOR 22 5% .25W FC TC=-400/+500	01121	CB2205
A23P41	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	CB4705
A23P42	0683-3315	4		RESISTOR 330 5% .25W FC TC=-400/+600	01121	CB3315
A23P50	0757-0446	3	1	RESISTOR 15K 1% .125W F TC=0+100	24546	C4=1/8-T0=1502-F
A23P51	0698-4452	3		RESISTOR 374 1% .125W F TC=0+100	24546	C4=1/8-T0=374R-F
A23P52	0683-2025	1		RESISTOR 2K 5% .25W FC TC=-400/+700	01121	CB2025
A23P53	0683-3325	6		RESISTOR 3.3K 5% .25W FC TC=-400/+700	01121	CB3325
A23P54	0698-3155	1	2	RESISTOR 4.64K 1% .125W F TC=0+100	24546	C4=1/8-T0=4641-F
A23P55	0698-4477	2	1	RESISTOR 10.5K 1% .125W F TC=0+100	24546	C4=1/8-T0=1052-F
A23P56	0683-6825	7		RESISTOR 6.8K 5% .25W FC TC=-400/+700	01121	CB6825
A23TP1	0360-0124	3		CONNECTOR-SGL CONT PIN .04-IN-BSC-S2 RND	28480	0360-0124
A23TP2	0360-0124	3		CONNECTOR-SGL CONT PIN .04-IN-BSC-S2 RND	28480	0360-0124
A23TP3	0360-0124	3		CONNECTOR-SGL CONT PIN .04-IN-BSC-S2 RND	28480	0360-0124
A23 MISCELLANEOUS PARTS						
	03585-05223	7	1	LID, A23	28480	03585-05223
	0370-2583	3		KNOB	28480	0370-2583
	1600-0702	4		SHIELD, OSC.	28480	1600-0702
	2950-0078	9		NUT-HEX-DBL-CHAM 10-32-TMD .067-IN-TMK	28480	2950-0078
	2190-0124	4		WASHER-LK INTL T NO. 10 .195-IN-ID	28480	2190-0124
A24	03585-66524	9	1	PC ASSEMBLY, BUFFER	28480	03585-66524
A24C1	0150-0050	9		CAPACITOR-FXD 1000PF +80-20% 1KVDC CER	28480	0150-0050
A24C2	0150-0050	9		CAPACITOR-FXD 1000PF +80-20% 1KVDC CER	28480	0150-0050
A24C3	0150-0050	9		CAPACITOR-FXD 1000PF +80-20% 1KVDC CER	28480	0150-0050
A24C4	0150-0050	9		CAPACITOR-FXD 1000PF +80-20% 1KVDC CER	28480	0150-0050
A24C5	0150-0050	9		CAPACITOR-FXD 1000PF +80-20% 1KVDC CER	28480	0150-0050
A24C6	0150-0050	9		CAPACITOR-FXD 1000PF +80-20% 1KVDC CER	28480	0150-0050
A24C7	0150-0050	9		CAPACITOR-FXD 1000PF +80-20% 1KVDC CER	28480	0150-0050
A24C8	0150-0050	9		CAPACITOR-FXD 1000PF +80-20% 1KVDC CER	28480	0150-0050
A24C9	0150-0050	9		CAPACITOR-FXD 1000PF +80-20% 1KVDC CER	28480	0150-0050
A24C10	0150-0050	9		CAPACITOR-FXD 1000PF +80-20% 1KVDC CER	28480	0150-0050
A24C11	0150-0050	9		CAPACITOR-FXD 1000PF +80-20% 1KVDC CER	28480	0150-0050
A24C12	0150-0050	9		CAPACITOR-FXD 1000PF +80-20% 1KVDC CER	28480	0150-0050
A24C13	0150-0050	9		CAPACITOR-FXD 1000PF +80-20% 1KVDC CER	28480	0150-0050
A24C14	0150-0050	9		CAPACITOR-FXD 1000PF +80-20% 1KVDC CER	28480	0150-0050
A24C15	0150-0050	9		CAPACITOR-FXD 1000PF +80-20% 1KVDC CER	28480	0150-0050
A24C16	0150-0050	9		CAPACITOR-FXD 1000PF +80-20% 1KVDC CER	28480	0150-0050
A24C17	0150-0050	9		CAPACITOR-FXD 1000PF +80-20% 1KVDC CER	28480	0150-0050
A24C18	0150-0050	9		CAPACITOR-FXD 1000PF +80-20% 1KVDC CER	28480	0150-0050
A24C19	0140-1746	5		CAPACITOR-FXD 150F +-10% 20VDC TA	56289	150D156X902062
A24C20	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100K1042
A24C21	0160-2200	6		CAPACITOR-FXD 43PF +-5% 300VDC MICA	28480	0160-2200
A24C22	0160-2200	6		CAPACITOR-FXD 43PF +-5% 300VDC MICA	28480	0160-2200
A24C23	0160-4385	2	4	CAPACITOR-FXD 15PF +-5% 200VDC CER 0+-30	28480	0160-4385
A24C24	0160-4385	2		CAPACITOR-FXD 15PF +-5% 200VDC CER 0+-30	28480	0160-4385
A24C25	0160-4382	9	1	CAPACITOR-FXD 3.3PF +-5% 200VDC CER	28480	0160-4382

See introduction to this section for ordering information  
 \*Indicates factory selected value

Table 6-3. Replaceable Parts

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
A24C26	0160-4385	2	1	CAPACITOR-FXD 15PF +-5% 200VDC CER 0+-30	28480	0160-4385
A24C27	0160-3875	3		CAPACITOR-FXD 22PF +-5% 200VDC CER 0+-30	28480	0160-3875
A24C28	0160-3873	1		CAPACITOR-FXD 4,7PF +-5% 200VDC CER	28480	0160-3873
A24C29	0150-0050	9		CAPACITOR-FXD 1000PF +80-20% 1KVDC CER	28480	0150-0050
A24C30	0150-0093	0		CAPACITOR-FXD .01UF +80-20% 100VDC CER	28480	0150-0093
A24CP1	1901-0040	1		DIODE-SWITCHING 30V 50MA 2N8 DO-35	28480	1901-0040
A24J1	1250-1512	3		CONNECTOR-RF SMB M PC 50-OHM	28480	1250-1512
A24J2	1250-1512	3		CONNECTOR-RF SMB M PC 50-OHM	28480	1250-1512
A24J3	1250-1512	3		CONNECTOR-RF SMB M PC 50-OHM	28480	1250-1512
A24J4	1250-1512	3		CONNECTOR-RF SMB M PC 50-OHM	28480	1250-1512
A24L1	9100-1620	5		COIL-MLD 15UH 10% Q=65 .155DX,375LG-NOM	28480	9100-1620
A24L2	9100-1620	5		COIL-MLD 15UH 10% Q=65 .155DX,375LG-NOM	28480	9100-1620
A24L3	9100-1620	5		COIL-MLD 15UH 10% Q=65 .155DX,375LG-NOM	28480	9100-1620
A24L4	9100-1620	5		COIL-MLD 15UH 10% Q=65 .155DX,375LG-NOM	28480	9100-1620
A24L5	9100-0541	7		COIL-MLD 250UH 10% Q=3 .25DX,5LG-NOM	28480	9100-0541
A24L6	9100-2247	4		COIL-MLD 100NH 10% Q=34 .095DX,25LG-NOM	28480	9100-2247
A24L7	9100-2247	4		COIL-MLD 100NH 10% Q=34 .095DX,25LG-NOM	28480	9100-2247
A24L8	9100-2247	4		COIL-MLD 100NH 10% Q=34 .095DX,25LG-NOM	28480	9100-2247
A24L9	9100-2247	4		COIL-MLD 100NH 10% Q=34 .095DX,25LG-NOM	28480	9100-2247
A24L10	9100-2247	4		COIL-MLD 100NH 10% Q=34 .095DX,25LG-NOM	28480	9100-2247
A24L11	9100-2249	6	1	COIL-MLD 150NH 10% Q=34 .095DX,25LG-NOM	28480	9100-2249
A24L12	9140-0158	6		COIL-MLD 1UH 10% Q=32 .095DX,25LG-NOM	28480	9140-0158
A2401	1853-0020	4		TRANSISTOR PNP SI PD=300MA FT=150MHZ	28480	1853-0020
A2402	1854-0345	8		TRANSISTOR NPN 2N5179 SI TO-72 PD=200MW	04713	2N5179
A2403	1854-0345	8		TRANSISTOR NPN 2N5179 SI TO-72 PD=200MW	04713	2N5179
A2404	1854-0345	8		TRANSISTOR NPN 2N5179 SI TO-72 PD=200MW	04713	2N5179
A2405	1854-0345	8		TRANSISTOR NPN 2N5179 SI TO-72 PD=200MW	04713	2N5179
A2406	1854-0345	8		TRANSISTOR NPN 2N5179 SI TO-72 PD=200MW	04713	2N5179
A2407	1854-0345	8		TRANSISTOR NPN 2N5179 SI TO-72 PD=200MW	04713	2N5179
A2408	1854-0345	8		TRANSISTOR NPN 2N5179 SI TO-72 PD=200MW	04713	2N5179
A2409	1854-0345	8		TRANSISTOR NPN 2N5179 SI TO-72 PD=200MW	04713	2N5179
A2410	1854-0345	8		TRANSISTOR NPN 2N5179 SI TO-72 PD=200MW	04713	2N5179
A24R1	0683-2745	2	1	RESISTOR 270K 5% .25W FC TC=-400/+900	01121	C82745
A24R2	0683-5625	3		RESISTOR 5.6K 5% .25W FC TC=-400/+700	01121	C85625
A24R3	0683-5625	3		RESISTOR 5.6K 5% .25W FC TC=-400/+700	01121	C85625
A24R4	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	C84705
A24R5	0683-2715	6		RESISTOR 270 5% .25W FC TC=-400/+600	01121	C82715
A24R7	0683-2725	8		RESISTOR 2.7K 5% .25W FC TC=-400/+700	01121	C82725
A24R8	0683-3325	8		RESISTOR 3.3K 5% .25W FC TC=-400/+700	01121	C83325
A24R9	0683-3925	8		RESISTOR 3.9K 5% .25W FC TC=-400/+700	01121	C83925
A24R10	0683-4705	2		RESISTOR 47 5% .25W FC TC=-400/+500	01121	C84705
A24R11	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	C84705
A24R12	0683-3315	4		RESISTOR 330 5% .25W FC TC=-400/+600	01121	C83315
A24R13	0683-2205	9		RESISTOR 22 5% .25W FC TC=-400/+500	01121	C82205
A24R14	0683-2205	9		RESISTOR 22 5% .25W FC TC=-400/+500	01121	C82205
A24R16	0683-2025	1		RESISTOR 2K 5% .25W FC TC=-400/+700	01121	C82025
A24R17	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	C84705
A24R18	0683-2725	8		RESISTOR 2.7K 5% .25W FC TC=-400/+700	01121	C82725
A24R19	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	C84705
A24R20	0683-3325	6		RESISTOR 3.3K 5% .25W FC TC=-400/+700	01121	C83325
A24R21	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	C84705
A24R22	0683-3925	2		RESISTOR 3.9K 5% .25W FC TC=-400/+700	01121	C83925
A24R23	0683-3315	4		RESISTOR 330 5% .25W FC TC=-400/+600	01121	C83315
A24R24	0683-1015	7		RESISTOR 100 5% .25W FC TC=-400/+500	01121	C81015
A24R25	0683-2205	9		RESISTOR 22 5% .25W FC TC=-400/+500	01121	C82205
A24R26	0683-2205	9		RESISTOR 22 5% .25W FC TC=-400/+500	01121	C82205
A24R27	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	C84705
A24R29	0683-2025	1		RESISTOR 2K 5% .25W FC TC=-400/+700	01121	C82025
A24R30	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	C84705
A24R31	0683-2725	8		RESISTOR 2.7K 5% .25W FC TC=-400/+700	01121	C82725
A24R32	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	C84705
A24R33	0683-3325	8		RESISTOR 3.3K 5% .25W FC TC=-400/+700	01121	C83325
A24R34	0683-3315	4		RESISTOR 330 5% .25W FC TC=-400/+600	01121	C83315
A24R35	0683-3305	2		RESISTOR 33 5% .25W FC TC=-400/+500	01121	C83305
A24R36	0683-2205	9		RESISTOR 22 5% .25W FC TC=-400/+500	01121	C82205
A24R38	0683-4705	9		RESISTOR 47 5% .25W FC TC=-400/+500	01121	C84705
A24R39	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	C81025
A24R40	0683-7505	2		RESISTOR 75 5% .25W FC TC=-400/+500	01121	C87505
A24R41	0683-2025	1		RESISTOR 2K 5% .25W FC TC=-400/+700	01121	C82025
A24R42	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	C84705
				A24 MISCELLANEOUS PARTS		
	03585-05224	8	1	LID, 424	28480	03585-05224
	0370-2583	3		<NDB	28480	0370-2583
	2950-0078	9		NUT-HEX-DBL-CH4M 10-32-THD .067-IN-THK	28480	2950-0078
	2190-0124	4		WASHER-CK INTL T NO. 10 .195-IN-ID	28480	2190-0124

See introduction to this section for ordering information  
 \*Indicates factory selected value

Table 6-3. Replaceable Parts

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
A25	03585-66525	0	1	SM LOOP MIXER	28480	03585-66525
A25C1	0150-0050	9		CAPACITOR-FXD 1000PF +80-20% 1KVDC CER	28480	0150-0050
A25C2	0150-0050	9		CAPACITOR-FXD 1000PF +80-20% 1KVDC CER	28480	0150-0050
A25C3	0150-0050	9		CAPACITOR-FXD 1000PF +80-20% 1KVDC CER	28480	0150-0050
A25C4	0150-0050	9		CAPACITOR-FXD 1000PF +80-20% 1KVDC CER	28480	0150-0050
A25C5	0150-0050	9		CAPACITOR-FXD 1000PF +80-20% 1KVDC CER	28480	0150-0050
A25C6	0150-0050	9		CAPACITOR-FXD 1000PF +80-20% 1KVDC CER	28480	0150-0050
A25C7	0150-0050	9		CAPACITOR-FXD 1000PF +80-20% 1KVDC CER	28480	0150-0050
A25C8	0150-0050	9		CAPACITOR-FXD 1000PF +80-20% 1KVDC CER	28480	0150-0050
A25C9	0150-0050	9		CAPACITOR-FXD 1000PF +80-20% 1KVDC CER	28480	0150-0050
A25C10	0150-0050	9		CAPACITOR-FXD 1000PF +80-20% 1KVDC CER	28480	0150-0050
A25C11	0150-0050	9		CAPACITOR-FXD 1000PF +80-20% 1KVDC CER	28480	0150-0050
A25C12	0150-0050	9		CAPACITOR-FXD 1000PF +80-20% 1KVDC CER	28480	0150-0050
A25C13	0150-0050	9		CAPACITOR-FXD 1000PF +80-20% 1KVDC CER	28480	0150-0050
A25C14	0150-0050	9		CAPACITOR-FXD 1000PF +80-20% 1KVDC CER	28480	0150-0050
A25C15	0160-0363	8	1	CAPACITOR-FXD 620PF +-5% 300VDC MICA	28480	0160-0363
A25C16	0160-0938	3		CAPACITOR-FXD 1000PF +-5% 100VDC MICA	28480	0160-0938
A25C17	0160-2035	5	1	CAPACITOR-FXD 750PF +-5% 300VDC MICA	28480	0160-2035
A25C18	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A25C19	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A25C20	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A25C21	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A25C23	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A25C24	0160-1746	5		CAPACITOR-FXD 15UF+-10% 20VDC TA	56289	150D156X9020B2
A25C25	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A25C26	0160-1746	5		CAPACITOR-FXD 15UF+-10% 20VDC TA	56289	150D156X9020B2
A25C30	0150-0050	9		CAPACITOR-FXD 1000PF +80-20% 1KVDC CER	28480	0150-0050
A25C31	0150-0050	9		CAPACITOR-FXD 1000PF +80-20% 1KVDC CER	28480	0150-0050
A25C32	0160-1746	5		CAPACITOR-FXD 15UF+-10% 20VDC TA	56289	150D156X9020B2
A25C33	0160-1746	5		CAPACITOR-FXD 15UF+-10% 20VDC TA	56289	150D156X9020B2
A25J1	1250-1512	3		CONNECTOR-RF SMB M PC 50-OHM	28480	1250-1512
A25J2	1250-1512	3		CONNECTOR-RF SMB M PC 50-OHM	28480	1250-1512
A25J3	1250-1512	3		CONNECTOR-RF SMB M PC 50-OHM	28480	1250-1512
A25L1	9100-2255	4		COIL-MLD 470NH 10% Q=35 .095DX.25LG-NOM	28480	9100-2255
A25L2	9100-1620	5		COIL-MLD 15UH 10% Q=65 .155DX.375LG-NOM	28480	9100-1620
A25L3	9100-1620	5		COIL-MLD 15UH 10% Q=65 .155DX.375LG-NOM	28480	9100-1620
A25L4	9100-2255	4		COIL-MLD 470NH 10% Q=35 .095DX.25LG-NOM	28480	9100-2255
A25L5	9100-2260	1		COIL-MLD 1.8UH 10% Q=32 .095DX.25LG-NOM	28480	9100-2260
A25L6	9100-2260	1		COIL-MLD 1.8UH 10% Q=32 .095DX.25LG-NOM	28480	9100-2260
A25L9	9100-0541	7		COIL-MLD 250UH 10% Q=3 .25DX.5LG-NOM	28480	9100-0541
A25L10	9100-0541	7		COIL-MLD 250UH 10% Q=3 .25DX.5LG-NOM	28480	9100-0541
A2501	1854-0345	8		TRANSISTOR NPN 2N5179 SI TO-72 PD=200MW	04713	2N5179
A2502	1854-0345	8		TRANSISTOR NPN 2N5179 SI TO-72 PD=200MW	04713	2N5179
A2503	1854-0345	8		TRANSISTOR NPN 2N5179 SI TO-72 PD=200MW	04713	2N5179
A2504	1854-0345	8		TRANSISTOR NPN 2N5179 SI TO-72 PD=200MW	04713	2N5179
A2505	1854-0345	8		TRANSISTOR NPN 2N5179 SI TO-72 PD=200MW	04713	2N5179
A2506	1854-0345	8		TRANSISTOR NPN 2N5179 SI TO-72 PD=200MW	04713	2N5179
A2507	1854-0215	1		TRANSISTOR NPN SI PD=350MW FT=300MHZ	04713	2N3904
A2508	1854-0351	6		TRANSISTOR NPN SI TO-18 PD=360MW	28480	1854-0351
A25R1	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	CB4705
A25R2	0683-6815	5		RESISTOR 680 5% .25W FC TC=-400/+600	01121	CB6815
A25R3	0683-1005	5		RESISTOR 10 5% .25W FC TC=-400/+500	01121	CB1005
A25R4	0683-6825	7		RESISTOR 6.8K 5% .25W FC TC=-400/+700	01121	CB6825
A25R5	0683-6825	7		RESISTOR 6.8K 5% .25W FC TC=-400/+700	01121	CB6825
A25R6	0683-2215	1		RESISTOR 220 5% .25W FC TC=-400/+600	01121	CB2215
A25R7	0683-2025	1		RESISTOR 2K 5% .25W FC TC=-400/+700	01121	CB2025
A25R8	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	CB4705
A25R9	0683-2725	8		RESISTOR 2.7K 5% .25W FC TC=-400/+700	01121	CB2725
A25R10	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	CB4705
A25R11	0683-3325	6		RESISTOR 3.3K 5% .25W FC TC=-400/+700	01121	CB3325
A25R12	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	CB4705
A25R13	0683-3315	4		RESISTOR 330 5% .25W FC TC=-400/+600	01121	CB3315
A25R14	0683-2205	9		RESISTOR 22 5% .25W FC TC=-400/+500	01121	CB2205
A25R15	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	CB4705
A25R16	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	CB4705
A25R17	0683-6815	5		RESISTOR 680 5% .25W FC TC=-400/+600	01121	CB6815
A25R18	0683-1005	5		RESISTOR 10 5% .25W FC TC=-400/+500	01121	CB1005
A25R19	0683-2215	1		RESISTOR 220 5% .25W FC TC=-400/+600	01121	CB2215
A25R20	0683-2025	1		RESISTOR 2K 5% .25W FC TC=-400/+700	01121	CB2025
A25R21	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	CB4705
A25R22	0683-2725	8		RESISTOR 2.7K 5% .25W FC TC=-400/+700	01121	CB2725
A25R23	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	CB4705
A25R24	0683-3325	6		RESISTOR 3.3K 5% .25W FC TC=-400/+700	01121	CB3325
A25R25	0683-2205	9		RESISTOR 22 5% .25W FC TC=-400/+500	01121	CB2205

See introduction to this section for ordering information.  
\*Indicates factory selected value



Table 6-3. Replaceable Parts

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
A25R26	0683-3315	4		RESISTOR 330 5% .25W FC TC=-400/+600	01121	C83315
A25R27	0683-2205	9		RESISTOR 22 5% .25W FC TC=-400/+500	01121	C82205
A25R28	0683-1015	7		RESISTOR 100 5% .25W FC TC=-400/+500	01121	C81015
A25R29	0683-6825	7		RESISTOR 6.8K 5% .25W FC TC=-400/+700	01121	C86825
A25R30	0683-6825	7		RESISTOR 6.8K 5% .25W FC TC=-400/+700	01121	C86825
A25R31	0683-1035	1		RESISTOR 10K 5% .25W FC TC=-400/+700	01121	C81035
A25R32	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	C84705
A25R33	0683-2215	1		RESISTOR 220 5% .25W FC TC=-400/+600	01121	C82215
A25R34	0683-3925	2		RESISTOR 3.9K 5% .25W FC TC=-400/+700	01121	C83925
A25R35	0683-2025	1		RESISTOR 2K 5% .25W FC TC=-400/+700	01121	C82025
A25R36	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	C84705
A25R37	0683-2225	3		RESISTOR 2.2K 5% .25W FC TC=-400/+700	01121	C82225
A25R38	0683-1015	7		RESISTOR 100 5% .25W FC TC=-400/+500	01121	C81015
A25R50	0683-2025	1		RESISTOR 2K 5% .25W FC TC=-400/+700	01121	C82025
A25R51	0683-3925	2		RESISTOR 3.9K 5% .25W FC TC=-400/+700	01121	C83925
A25TP1	0360-0124	3		CONNECTOR-SGL CONT PIN .04-IN-BSC-SZ RND	28480	0360-0124
A25TP2	0360-0124	3		CONNECTOR-SGL CONT PIN .04-IN-BSC-SZ RND	28480	0360-0124
A25TP3	0360-0124	3		CONNECTOR-SGL CONT PIN .04-IN-BSC-SZ RND	28480	0360-0124
A25U1	0955-0087	8	2	DOUBLE BALANCE MIXERS	28480	0955-0087
				A25 MISCELLANEOUS PARTS		
	03585-05225	9	1	LID, A25	28480	03585-05225
	0370-2583	3		KNOB	28480	0370-2583
	5001-0173	7		PC GROUND CLIP	28480	5001-0173
	2950-0078	9		NUT-HEX-DBL-CHAM 10-32-THD .067-IN-THK	28480	2950-0078
	2190-0124	4		WASHER-LK INTL T NO, 10 .195-IN-ID	28480	2190-0124
A26	03585-6652b	1	1	STEP PHASE DETECTOR	28480	03585-6652b
A26C1	0150-0050	9		CAPACITOR-FXD 1000PF +80-20% 1KVDC CER	28480	0150-0050
A26C2	0150-0050	9		CAPACITOR-FXD 1000PF +80-20% 1KVDC CER	28480	0150-0050
A26C3	0150-0050	9		CAPACITOR-FXD 1000PF +80-20% 1KVDC CER	28480	0150-0050
A26C5	0160-4385	2		CAPACITOR-FXD 15PF +/-5% 300VDC CER 0+30	28480	0160-4385
A26C6	0150-0050	9		CAPACITOR-FXD 1000PF +80-20% 1KVDC CER	28480	0150-0050
A26C7	0150-0050	9		CAPACITOR-FXD 1000PF +80-20% 1KVDC CER	28480	0150-0050
A26C8	0150-0050	9		CAPACITOR-FXD 1000PF +80-20% 1KVDC CER	28480	0150-0050
A26C9	0150-0050	9		CAPACITOR-FXD 1000PF +80-20% 1KVDC CER	28480	0150-0050
A26C10	0150-0050	9		CAPACITOR-FXD 1000PF +80-20% 1KVDC CER	28480	0150-0050
A26C11	0150-0050	9		CAPACITOR-FXD 1000PF +80-20% 1KVDC CER	28480	0150-0050
A26C12	0150-0093	0		CAPACITOR-FXD .01UF +80-20% 100VDC CER	28480	0150-0093
A26C13	0150-0093	0		CAPACITOR-FXD .01UF +80-20% 100VDC CER	28480	0150-0093
A26C14	0160-2202	8		CAPACITOR-FXD 75PF +/-5% 300VDC MICA	28480	0160-2202
A26C15	0160-2205	1		CAPACITOR-FXD 120PF +/-5% 300VDC MICA	28480	0160-2205
A26C16	0160-2203	9		CAPACITOR-FXD 91PF +/-5% 300VDC MICA 0+70	28480	0160-2203
A26C18	0150-0093	0		CAPACITOR-FXD .01UF +80-20% 100VDC CER	28480	0150-0093
A26C20	0150-0093	0		CAPACITOR-FXD .01UF +80-20% 100VDC CER	28480	0150-0093
A26C21	0150-0093	0		CAPACITOR-FXD .01UF +80-20% 100VDC CER	28480	0150-0093
A26C22	0150-0093	0		CAPACITOR-FXD .01UF +80-20% 100VDC CER	28480	0150-0093
A26C23	0150-0093	0		CAPACITOR-FXD .01UF +80-20% 100VDC CER	28480	0150-0093
A26C24	0150-0093	0		CAPACITOR-FXD .01UF +80-20% 100VDC CER	28480	0150-0093
A26C25	0150-0093	0		CAPACITOR-FXD .01UF +80-20% 100VDC CER	28480	0150-0093
A26C26	0150-0093	0		CAPACITOR-FXD .01UF +80-20% 100VDC CER	28480	0150-0093
A26C27	0150-0093	0		CAPACITOR-FXD .01UF +80-20% 100VDC CER	28480	0150-0093
A26C29	0150-0093	0		CAPACITOR-FXD .01UF +80-20% 100VDC CER	28480	0150-0093
A26C30	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A26C32	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A26C33	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A26C34	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A26C36	0160-0174	9		CAPACITOR-FXD .47UF +80-20% 25VDC CER	28480	0160-0174
A26C38	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A26C43	0180-1746	5		CAPACITOR-FXD 15UF +/-10% 20VDC TA	56289	1500156X9020B2
A26C44	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A26C45	0180-1746	5		CAPACITOR-FXD 15UF +/-10% 20VDC TA	56289	1500156X9020B2
A26C46	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A26C47	0180-1746	5		CAPACITOR-FXD 15UF +/-10% 20VDC TA	56289	1500156X9020B2
A26C48	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A26C50	0150-0093	0		CAPACITOR-FXD .01UF +80-20% 100VDC CER	28480	0150-0093
A26C51	0150-0093	0		CAPACITOR-FXD .01UF +80-20% 100VDC CER	28480	0150-0093
A26C52	0150-0093	0		CAPACITOR-FXD .01UF +80-20% 100VDC CER	28480	0150-0093
A26C53	0150-0093	0		CAPACITOR-FXD .01UF +80-20% 100VDC CER	28480	0150-0093
A26C54	0150-0093	0		CAPACITOR-FXD .01UF +80-20% 100VDC CER	28480	0150-0093
A26C55	0150-0093	0		CAPACITOR-FXD .01UF +80-20% 100VDC CER	28480	0150-0093
A26C56	0150-0093	0		CAPACITOR-FXD .01UF +80-20% 100VDC CER	28480	0150-0093
A26C57	0150-0093	0		CAPACITOR-FXD .01UF +80-20% 100VDC CER	28480	0150-0093

See introduction to this section for ordering information.  
 \*Indicates factory selected value

Table 6-3. Replaceable Parts

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
A26C58	0150-0050	9		CAPACITOR-FXD 1000PF +80-20% 1KVDC CER	28480	0150-0050
A26C59	0180-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A26C60	0150-0050	9		CAPACITOR-FXD 1000PF +80-20% 1KVDC CER	28480	0150-0050
A26C61	0180-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A26C62	0150-0050	9		CAPACITOR-FXD 1000PF +80-20% 1KVDC CER	28480	0150-0050
A26C63	0150-0050	9		CAPACITOR-FXD 1000PF +80-20% 1KVDC CER	28480	0150-0050
A26C64	0180-0127	2		CAPACITOR-FXD .1UF +-20% 25VDC CER	28480	0160-0127
A26C100	0170-0060	3	1	CAPACITOR-FXD .047UF +-10% 400VDC POLYE	84411	663UM47394W2
A26C102	0180-2200	6		CAPACITOR-FXD .43PF +-5% 300VDC MICA	28480	0160-2200
A26C103	0180-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A26C104	0180-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A26C105	0140-0208	8		CAPACITOR-FXD 680PF +-5% 300VDC MICA	72136	DM15F681J0300WV1CR
A26C106	0180-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A26C107	0180-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A26C108	0180-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A26C109	0180-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A26C110	0180-0210	2		CAPACITOR-FXD 270PF +-5% 300VDC MICA	72136	DM15F271J0300WV1CR
A26C111	0180-0197	8		CAPACITOR-FXD 2.2UF+-10% 20VDC TA	56289	150D25X9020A2
A26C112	0180-0197	8		CAPACITOR-FXD 2.2UF+-10% 20VDC TA	56289	150D25X9020A2
A26C113	0180-0197	8		CAPACITOR-FXD 2.2UF+-10% 20VDC TA	56289	150D25X9020A2
A26C114	0140-0196	3		CAPACITOR-FXD 150PF +-5% 300VDC MICA	72136	DM15F151J0300WV1CR
A26C115	0180-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A26C116	0180-2199	2		CAPACITOR-FXD 30PF +-5% 300VDC MICA	28480	0160-2199
A26C120	0150-0093	0		CAPACITOR-FXD .01UF +80-20% 100VDC CER	28480	0150-0093
A26C121	0150-0093	0		CAPACITOR-FXD .01UF +80-20% 100VDC CER	28480	0150-0093
A26CR3	1901-0347	1	6	DIODE-SCHOTTKY 8V	28480	1901-0347
A26CR4	1901-0347	1		DIODE-SCHOTTKY 8V	28480	1901-0347
A26CR5	1901-0040	1		DIODE-SWITCHING 30V 50MA 2NS DO-35	28480	1901-0040
A26CR8	1901-0040	1		DIODE-SWITCHING 30V 50MA 2NS DO-35	28480	1901-0040
A26CR100	1901-0040	1		DIODE-SWITCHING 30V 50MA 2NS DO-35	28480	1901-0040
A26CR101	1901-0040	1		DIODE-SWITCHING 30V 50MA 2NS DO-35	28480	1901-0040
A26CR102	1901-0040	1		DIODE-SWITCHING 30V 50MA 2NS DO-35	28480	1901-0040
A26J1	1250-1512	3		CONNECTOR-RF SMB M PC 50-OHM	28480	1250-1512
A26J2	1250-1512	3		CONNECTOR-RF SMB M PC 50-OHM	28480	1250-1512
A26J3	1250-1512	3		CONNECTOR-RF SMB M PC 50-OHM	28480	1250-1512
A26J4	1250-1512	3		CONNECTOR-RF SMB M PC 50-OHM	28480	1250-1512
A26L1	9140-0158	6		COIL-MLD 1UH 10% Q=32 .095DX,25LG-NOM	28480	9140-0158
A26L2	9100-2255	5		COIL-MLD 470NH 10% Q=35 .095DX,25LG-NOM	28480	9100-2255
A26L3	9100-1620	4		COIL-MLD 15UH 10% Q=65 .155DX,375LG-NOM	28480	9100-1620
A26L4	9140-0262	3	2	COIL-MLD 200NH 5% Q=50 .155DX,375LG-NOM	28480	9140-0262
A26L5	9140-0262	3		COIL-MLD 200NH 5% Q=50 .155DX,375LG-NOM	28480	9140-0262
A26L10	9100-0541	7		COIL-MLD 250UH 10% Q=3 .25DX,5LG-NOM	28480	9100-0541
A26L11	9100-0541	7		COIL-MLD 250UH 10% Q=3 .25DX,5LG-NOM	28480	9100-0541
A26L12	9100-0541	7		COIL-MLD 250UH 10% Q=3 .25DX,5LG-NOM	28480	9100-0541
A26L100	9140-0129	1	1	COIL-MLD 220UH 5% Q=65 .155DX,375LG-NOM	28480	9140-0129
A26L101	9100-1640	9	1	COIL-MLD 160UH 5% Q=65 .155DX,375LG-NOM	28480	9100-1640
A26Q1	1854-0345	8		TRANSISTOR NPN 2N5179 SI TO-72 PD=200MW	04713	2N5179
A26Q2	1854-0345	8		TRANSISTOR NPN 2N5179 SI TO-72 PD=200MW	04713	2N5179
A26Q3	1854-0345	8		TRANSISTOR NPN 2N5179 SI TO-72 PD=200MW	04713	2N5179
A26Q4	1854-0019	3	6	TRANSISTOR NPN SI TO-18 PD=360MW	28480	1854-0019
A26Q5	1853-0203	5		TRANSISTOR PNP SI TO-18 PD=360MW	28480	1853-0203
A26Q6	1853-0203	5		TRANSISTOR PNP SI TO-18 PD=360MW	28480	1853-0203
A26Q7	1853-0203	5		TRANSISTOR PNP SI TO-18 PD=360MW	28480	1853-0203
A26Q8	1853-0203	5		TRANSISTOR PNP SI TO-18 PD=360MW	28480	1853-0203
A26Q9	1854-0019	3		TRANSISTOR NPN SI TO-18 PD=360MW	28480	1854-0019
A26Q10	1854-0071	7		TRANSISTOR NPN SI PD=300MA FT=200MHZ	28480	1854-0071
A26Q11	1853-0086	2	8	TRANSISTOR PNP SI PD=310MW FT=40MHZ	27014	2N5087
A26Q12	1853-0086	2		TRANSISTOR PNP SI PD=310MW FT=40MHZ	27014	2N5087
A26Q13	1854-0345	8		TRANSISTOR NPN 2N5179 SI TO-72 PD=200MW	04713	2N5179
A26Q100	1855-0308	5	2	TRANSISTOR J-FET DUAL N-CHAN D-MODE SI	28480	1855-0308
A26Q101	1854-0215	1		TRANSISTOR NPN SI PD=350MW FT=300MHZ	04713	2N3904
A26Q102	1853-0036	2	12	TRANSISTOR PNP SI PD=310MW FT=250MHZ	28480	1853-0036
A26Q103	1854-0215	1		TRANSISTOR NPN SI PD=350MW FT=300MHZ	04713	2N3904
A26Q104	1854-0215	1		TRANSISTOR NPN SI PD=350MW FT=300MHZ	04713	2N3904
A26Q105	1853-0036	2		TRANSISTOR PNP SI PD=310MW FT=250MHZ	28480	1853-0036
A26Q106	1855-0410	0		TRANSISTOR J-FET N-CHAN D-MODE TO-18 SI	28480	1855-0410
A26Q107	1854-0351	6		TRANSISTOR NPN SI TO-18 PD=360MW	28480	1854-0351
A26Q108	1853-0203	5		TRANSISTOR PNP SI TO-18 PD=360MW	28480	1853-0203
A26Q109	1853-0086	2		TRANSISTOR PNP SI PD=310MW FT=40MHZ	27014	2N5087
A26Q110	1854-0071	7		TRANSISTOR NPN SI PD=300MA FT=200MHZ	28480	1854-0071
A26Q111	1853-0012	4	2	TRANSISTOR PNP 2N2904A SI TO-39 PD=600MW	01295	2N2904A
A26Q112	1854-0215	1		TRANSISTOR NPN SI PD=350MW FT=300MHZ	04713	2N3904
A26R1	0683-6705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	C68705
A26R2	0683-6815	5		RESISTOR 680 5% .25W FC TC=-400/+600	01121	C68815
A26R3	0683-6705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	C68705
A26R4	0683-6825	7		RESISTOR 6.8K 5% .25W FC TC=-400/+700	01121	C68825
A26R5	0683-6825	7		RESISTOR 6.8K 5% .25W FC TC=-400/+700	01121	C68825

See introduction to this section for ordering information  
 \*Indicates factory selected value

Table 6-3. Replaceable Parts

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
A26R6	0683-4715	0		RESISTOR 470 5% .25W FC TC=-400/+600	01121	CB4715
A26R7	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	CB4705
A26R8	0683-6815	5		RESISTOR 680 5% .25W FC TC=-400/+600	01121	CB6815
A26R9	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	CB4705
A26R10	0683-6825	7		RESISTOR 6.8K 5% .25W FC TC=-400/+700	01121	CB6825
A26R11	0683-6825	7		RESISTOR 6.8K 5% .25W FC TC=-400/+700	01121	CB6825
A26R12	0683-6815	5		RESISTOR 680 5% .25W FC TC=-400/+600	01121	CB6815
A26R13	0683-2725	8		RESISTOR 2.7K 5% .25W FC TC=-400/+700	01121	CB2725
A26R14	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	CB4705
A26R15	0683-4715	0		RESISTOR 470 5% .25W FC TC=-400/+600	01121	CB4715
A26R16	0683-4715	0		RESISTOR 470 5% .25W FC TC=-400/+600	01121	CB4715
A26R17	0683-2205	9		RESISTOR 22 5% .25W FC TC=-400/+500	01121	CB2205
A26R18	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	CB4705
A26R19	0683-3325	6		RESISTOR 3.3K 5% .25W FC TC=-400/+700	01121	CB3325
A26R20	0683-1015	7		RESISTOR 100 5% .25W FC TC=-400/+500	01121	CB1015
A26R21	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	CB4705
A26R22	0683-2205	9		RESISTOR 22 5% .25W FC TC=-400/+500	01121	CB2205
A26R23	0757-0280	3		RESISTOR 1K 1% .125W F TC=0/+100	24546	C4=1/8-T0=1001-F
A26R24	0698-3558	8		RESISTOR 4.02K 1% .125W F TC=0/+100	24546	C4=1/8-T0=4021-F
A26R25	0683-3305	2		RESISTOR 33 5% .25W FC TC=-400/+500	01121	CB3305
A26R26	0757-0280	3		RESISTOR 1K 1% .125W F TC=0/+100	24546	C4=1/8-T0=1001-F
A26R27	0683-2205	9		RESISTOR 22 5% .25W FC TC=-400/+500	01121	CB2205
A26R28	0698-3558	8		RESISTOR 4.02K 1% .125W F TC=0/+100	24546	C4=1/8-T0=4021-F
A26R29	0683-1015	7		RESISTOR 100 5% .25W FC TC=-400/+500	01121	CB1015
A26R30	0683-2025	1		RESISTOR 2K 5% .25W FC TC=-400/+700	01121	CB2025
A26R31	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
A26R32	0683-2025	1		RESISTOR 2K 5% .25W FC TC=-400/+700	01121	CB2025
A26R33	0683-4715	0		RESISTOR 470 5% .25W FC TC=-400/+600	01121	CB4715
A26R34	0683-4715	0		RESISTOR 470 5% .25W FC TC=-400/+600	01121	CB4715
A26R35	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
A26R36	0683-4715	0		RESISTOR 470 5% .25W FC TC=-400/+600	01121	CB4715
A26R37	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
A26R38	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
A26R39	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
A26R40	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
A26R42	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
A26R43	0683-4715	0		RESISTOR 470 5% .25W FC TC=-400/+600	01121	CB4715
A26R44	0683-4715	0		RESISTOR 470 5% .25W FC TC=-400/+600	01121	CB4715
A26R45	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	CB4705
A26R46	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	CB4705
A26R47	0683-8215	3	3	RESISTOR 820 5% .25W FC TC=-400/+600	01121	CB8215
A26R48	0683-2215	1		RESISTOR 220 5% .25W FC TC=-400/+600	01121	CB2215
A26R49	0683-3025	3	14	RESISTOR 3K 5% .25W FC TC=-400/+700	01121	CB3025
A26R50	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
A26R51	0683-3025	3		RESISTOR 3K 5% .25W FC TC=-400/+700	01121	CB3025
A26R52	0757-0280	3		RESISTOR 1K 1% .125W F TC=0/+100	24546	C4=1/8-T0=1001-F
A26R53	0698-3558	8		RESISTOR 4.02K 1% .125W F TC=0/+100	24546	C4=1/8-T0=4021-F
A26R54	0698-4510	4	3	RESISTOR 84.5K 1% .125W F TC=0/+100	24546	C4=1/8-T0=8452-F
A26R55	0757-0280	3	7	RESISTOR 2K 1% .125W F TC=0/+100	24546	C4=1/8-T0=2001-F
A26R56	0757-0445	2	2	RESISTOR 13K 1% .125W F TC=0/+100	24546	C4=1/8-T0=1302-F
A26R57	0698-3155	1		RESISTOR 4.64K 1% .125W F TC=0/+100	24546	C4=1/8-T0=4641-F
A26R58	0683-3325	6		RESISTOR 3.3K 5% .25W FC TC=-400/+700	01121	CB3325
A26R59	0683-1825	7	5	RESISTOR 1.8K 5% .25W FC TC=-400/+700	01121	CB1825
A26R61	0683-4735	4		RESISTOR 47K 5% .25W FC TC=-400/+600	01121	CB4735
A26R62	0683-1045	3		RESISTOR 100K 5% .25W FC TC=-400/+800	01121	CB1045
A26R63	0683-2235	5		RESISTOR 22K 5% .25W FC TC=-400/+600	01121	CB2235
A26R64	0683-3015	1	3	RESISTOR 300 5% .25W FC TC=-400/+600	01121	CB3015
A26R65	0683-1235	3		RESISTOR 12K 5% .25W FC TC=-400/+800	01121	CB1235
A26R66	0683-3325	6		RESISTOR 3.3K 5% .25W FC TC=-400/+700	01121	CB3325
A26R68	0683-7525	6	4	RESISTOR 7.5K 5% .25W FC TC=-400/+700	01121	CB7525
A26R69	0683-7525	6		RESISTOR 7.5K 5% .25W FC TC=-400/+700	01121	CB7525
A26R70	0683-3325	6		RESISTOR 3.3K 5% .25W FC TC=-400/+700	01121	CB3325
A26R71	0683-1035	1		RESISTOR 10K 5% .25W FC TC=-400/+700	01121	CB1035
A26R72	0683-1535	6		RESISTOR 15K 5% .25W FC TC=-400/+800	01121	CB1535
A26R73	0683-1035	1		RESISTOR 10K 5% .25W FC TC=-400/+700	01121	CB1035
A26R74	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
A26R75	2100-3252	6	1	RESISTOR-TRMR 5K 10% C TOP-ADJ 1-TRN	28480	2100-3252
A26R76	0683-1535	6		RESISTOR 15K 5% .25W FC TC=-400/+800	01121	CB1535
A26R77	0683-3325	6		RESISTOR 3.3K 5% .25W FC TC=-400/+700	01121	CB3325
A26R78	0683-1045	3		RESISTOR 100K 5% .25W FC TC=-400/+800	01121	CB1045
A26R79	0683-3325	6		RESISTOR 3.3K 5% .25W FC TC=-400/+700	01121	CB3325
A26R100	0757-0444	1	2	RESISTOR 12.1K 1% .125W F TC=0/+100	24546	C4=1/8-T0=1212-F
A26R101	0683-2725	8		RESISTOR 2.7K 5% .25W FC TC=-400/+700	01121	CB2725
A26R102	0683-1515	2		RESISTOR 150 5% .25W FC TC=-400/+600	01121	CB1515
A26R103	0683-6215	9		RESISTOR 620 5% .25W FC TC=-400/+600	01121	CB6215

See introduction to this section for ordering information  
 \*Indicates factory selected value

Table 6-3. Replaceable Parts

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
A26R104	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	C84705
A26R105	0683-4715	0		RESISTOR 470 5% .25W FC TC=-400/+600	01121	C84715
A26R107	0683-1525	4		RESISTOR 1.5K 5% .25W FC TC=-400/+700	01121	C81525
A26R108	0683-2205	9		RESISTOR 22 5% .25W FC TC=-400/+500	01121	C82205
A26R109	0683-2735	0		RESISTOR 27K 5% .25W FC TC=-400/+800	01121	C82735
A26R110	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	C84705
A26R111	0683-2425	5	6	RESISTOR 2.4K 5% .25W FC TC=-400/+700	01121	C82425
A26R112	0683-2215	1		RESISTOR 220 5% .25W FC TC=-400/+600	01121	C82215
A26R113	0683-2215	1		RESISTOR 220 5% .25W FC TC=-400/+600	01121	C82215
A26R114	0683-1005	5		RESISTOR 10 5% .25W FC TC=-400/+500	01121	C81005
A26R115	0683-1005	5		RESISTOR 10 5% .25W FC TC=-400/+500	01121	C81005
A26R116	0683-2215	1		RESISTOR 220 5% .25W FC TC=-400/+600	01121	C82215
A26R117	0683-1525	4		RESISTOR 1.5K 5% .25W FC TC=-400/+700	01121	C81525
A26R118	0683-8215	3		RESISTOR 820 5% .25W FC TC=-400/+600	01121	C88215
A26R119	0683-4715	0		RESISTOR 470 5% .25W FC TC=-400/+600	01121	C84715
A26R120	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	C84705
A26R121	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	C84705
A26P122	0757-0283	6		RESISTOR 2K 1% .125W F TC=0+100	24546	C4-1/8-T0=2001-F
A26P123	0683-1015	7		RESISTOR 100 5% .25W FC TC=-400/+500	01121	C81015
A26R124	0683-2025	1		RESISTOR 2K 5% .25W FC TC=-400/+700	01121	C82025
A26R125	0683-2025	1		RESISTOR 2K 5% .25W FC TC=-400/+700	01121	C82025
A26R126	0683-1015	7		RESISTOR 100 5% .25W FC TC=-400/+500	01121	C81015
A26R127	0698-4123	5		RESISTOR 499 1% .125W F TC=0+100	24546	C4-1/8-T0=499R-F
A26R130	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	C81025
A26R131	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	C81025
A26R132	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	C81025
A26R133	0683-4715	0		RESISTOR 470 5% .25W FC TC=-400/+600	01121	C84715
A26R134	0683-4715	0		RESISTOR 470 5% .25W FC TC=-400/+600	01121	C84715
A26R135	0683-4715	0		RESISTOR 470 5% .25W FC TC=-400/+600	01121	C84715
A26R136	0683-4715	0		RESISTOR 470 5% .25W FC TC=-400/+600	01121	C84715
A26R140	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	C81025
A26P141	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	C81025
A26R142	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	C81025
A26R143	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	C81025
A26R144	0683-1525	4		RESISTOR 1.5K 5% .25W FC TC=-400/+700	01121	C81525
A26R145	0683-1525	4		RESISTOR 1.5K 5% .25W FC TC=-400/+700	01121	C81525
A26R146	0683-1525	4		RESISTOR 1.5K 5% .25W FC TC=-400/+700	01121	C81525
A26R147	0683-1525	4		RESISTOR 1.5K 5% .25W FC TC=-400/+700	01121	C81525
A26R148	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	C81025
A26R149	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	C81025
A26R150	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	C81025
A26R151	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	C81025
A26R152	0683-1525	4		RESISTOR 1.5K 5% .25W FC TC=-400/+700	01121	C81525
A26R153	0683-1525	4		RESISTOR 1.5K 5% .25W FC TC=-400/+700	01121	C81525
A26R154	0683-1525	4		RESISTOR 1.5K 5% .25W FC TC=-400/+700	01121	C81525
A26R155	0683-1525	4		RESISTOR 1.5K 5% .25W FC TC=-400/+700	01121	C81525
A26R156	0683-4715	0		RESISTOR 470 5% .25W FC TC=-400/+600	01121	C84715
A26R157	0683-1325	2	4	RESISTOR 1.3K 5% .25W FC TC=-400/+700	01121	C81325
A26R158	0683-1325	2		RESISTOR 1.3K 5% .25W FC TC=-400/+700	01121	C81325
A26R161	0683-2205	9		RESISTOR 22 5% .25W FC TC=-400/+500	01121	C82205
A26R162	0757-0448	5	3	RESISTOR 18.2K 1% .125W F TC=0+100	24546	C4-1/8-T0=1822-F
A26R163	0683-2205	9		RESISTOR 22 5% .25W FC TC=-400/+500	01121	C82205
A26R164	0757-0448	5		RESISTOR 18.2K 1% .125W F TC=0+100	24546	C4-1/8-T0=1822-F
A26R165	0683-2015	9	15	RESISTOR 200 5% .25W FC TC=-400/+600	01121	C82015
A26R166	0683-2015	9		RESISTOR 200 5% .25W FC TC=-400/+600	01121	C82015
A26TP1-						
A26TP13	0360-0124	3		CONNECTOR-SGL CONT PIN .04-IN-HSC-SZ RND	28480	0360-0124
A26U1	1A20-0803	2		IC GATE ECL OR-NOR TPL	04713	MC10105P
A26U2	1A20-2093	6	2	IC CNTR BCD SYNCHRD POS-EDGE-TRIG	07263	F10010DC
A26U3	1A20-2093	6		IC CNTR BCD SYNCHRD POS-EDGE-TRIG	07263	F10010DC
A26U4	1A20-0817	8		IC FF ECL D-M/S DUAL	04713	MC10131P
A26U5	1A20-0817	8		IC FF ECL D-M/S DUAL	04713	MC10131P
A26U6	1A20-0817	8		IC FF ECL D-M/S DUAL	04713	MC10131P
A26U7	1A20-0806	5		IC GATE ECL OR-NOR DUAL 4-S-IMP	04713	MC10109P
A26U8	1A20-0817	8		IC FF ECL D-M/S DUAL	04713	MC10131P
A26U9	1A26-0043	4		OP AMP GP TT-99	01926	CA3071
A26U10	1A26-0138	8		COMPARATOR GP QUAD 14-DIP-P	04713	MLM339P
A26X1	0955-0087	8		DOUBLE BALANCE MIXERS	28480	0955-0087
				A26 MISCELLANEOUS PARTS		
	03585-05226	0	1	LID, A26	28480	03585-05226
	0370-2583	3		KNOB	28480	0370-2583
	1400-0971	5	5	L-BRACKET	28480	1400-0971
	2950-0078	9		NUT-HEX=OBL-CHAM 10-32-THD .067-IN-THK	28480	2950-0078

See introduction to this section for ordering information  
 \*Indicates factory selected value

Table 6-3. Replaceable Parts

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
	2190-0124 2200-0101	4 0		WASHER-LK INTL T NO. 10 .195-IN-ID SCREW-MACH 4-40 .188-IN-LG PAN-HD-POZI	28480 00000	2190-0124 ORDER BY DESCRIPTION
A27	03585-66527	2	1	1ST LO VCO CONTROLLER	28480	03585-66527
A27C1	0160-0128	3		CAPACITOR-FXD 2.2UF +-20% 50VDC CER	28480	0160-0128
A27C2	0140-0204	4		CAPACITOR-FXD 47PF +-5% 500VDC MICA	72136	DM15E470J0500AV1CR
A27C3	0140-0204	4		CAPACITOR-FXD 47PF +-5% 500VDC MICA	72136	DM15E470J0500AV1CR
A27C4	0160-0128	3		CAPACITOR-FXD 2.2UF +-20% 50VDC CER	28480	0160-0128
A27C5	0160-2199	2		CAPACITOR-FXD 30PF +-5% 300VDC MICA	28480	0160-2199
A27C6	0160-0155	6	1	CAPACITOR-FXD 3300PF +-10% 200VDC POLY	28480	0160-0155
A27C7	0160-0503	8	3	CAPACITOR-FXD .22UF +-2% 100VDC POLY	28480	0160-0503
A27C9	0180-0197	8		CAPACITOR-FXD 2.2UF+-10% 20VDC TA	56289	150D225X902042
A27C10	0140-0204	4		CAPACITOR-FXD 47PF +-5% 500VDC MICA	72136	DM15E470J0500AV1CR
A27C11	0180-1746	5		CAPACITOR-FXD 15UF+-10% 20VDC TA	56289	150D156X902082
A27C12	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A27C13	0160-1746	5		CAPACITOR-FXD 15UF+-10% 20VDC TA	56289	150D156X902082
A27C14	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A27CR1	1901-0040	1		DIODE-SWITCHING 30V 50MA 2NS DO-35	28480	1901-0040
A27CR2	1901-0040	1		DIODE-SWITCHING 30V 50MA 2NS DO-35	28480	1901-0040
A27J1	1250-1512	3		CONNECTOR-WF SMB M PC 50-OHM	28480	1250-1512
A27L1	9100-1644	3	2	COIL-MLD 330UH 5% Q=65 .190X.44LG-NDM	28480	9100-1644
A27L2	9100-1644	3		COIL-MLD 330UH 5% Q=65 .190X.44LG-NDM	28480	9100-1644
A27L3	9140-0131	5		COIL-MLD 10MH 5% Q=80 .240X.74LG-NDM	28480	9140-0131
A27Q1	1854-0071	7		TRANSISTOR NPN SI PD=300MA FT=200MHZ	28480	1854-0071
A27Q2	1853-0020	4		TRANSISTOR PNP SI PD=300MA FT=150MHZ	28480	1853-0020
A27Q7	1855-0081	1	6	TRANSISTOR J-FET N-CHAN D-MODEL SI	01295	245245
A27Q8	1855-0081	1		TRANSISTOR J-FET N-CHAN D-MODEL SI	01295	245245
A27Q9	1853-0020	4		TRANSISTOR PNP SI PD=300MA FT=150MHZ	28480	1853-0020
A27Q10	1854-0071	7		TRANSISTOR NPN SI PD=300MA FT=200MHZ	28480	1854-0071
A27Q11	1853-0020	4		TRANSISTOR PNP SI PD=300MA FT=150MHZ	28480	1853-0020
A27R1	0757-0442	9		RESISTOR 10K 1% .125W F TC=0+-100	24546	C4-1/8-T0-1002-F
A27R2	2100-3274	2		RESISTOR-TRMR 10K 10% C SIDE-ADJ 1-TRM	28480	2100-3274
A27R3	0757-0442	9		RESISTOR 10K 1% .125W F TC=0+-100	24546	C4-1/8-T0-1002-F
A27R4	0698-3279	0		RESISTOR 4.99K 1% .125W F TC=0+-100	24546	C4-1/8-T0-4991-F
A27R5	0698-3279	0		RESISTOR 4.99K 1% .125W F TC=0+-100	24546	C4-1/8-T0-4991-F
A27R6	0683-3625	9	2	RESISTOR 3.6K 5% .25W FC TC=-400/+700	01121	C83625
A27R7	0757-0442	9		RESISTOR 10K 1% .125W F TC=0+-100	24546	C4-1/8-T0-1002-F
A27R8	0683-2445	9	2	RESISTOR 240K 5% .25W FC TC=-800/+900	01121	C82445
A27R9	0683-2445	9		RESISTOR 240K 5% .25W FC TC=-800/+900	01121	C82445
A27R10	0757-0442	7		RESISTOR 7.5K 1% .125W F TC=0+-100	24546	C4-1/8-T0-7501-F
A27R11	2100-3274	2		RESISTOR-TRMR 10K 10% C SIDE-ADJ 1-TRM	28480	2100-3274
A27R12	0683-2215	1		RESISTOR 220 5% .25W FC TC=-400/+600	01121	C82215
A27R13	0683-2215	1		RESISTOR 220 5% .25W FC TC=-400/+600	01121	C82215
A27R14	0757-0283	6		RESISTOR 2K 1% .125W F TC=0+-100	24546	C4-1/8-T0-2001-F
A27R15	0757-0283	6		RESISTOR 2K 1% .125W F TC=0+-100	24546	C4-1/8-T0-2001-F
A27R17	0757-0280	3		RESISTOR 1K 1% .125W F TC=0+-100	24546	C4-1/8-T0-1001-F
A27R18	0757-0280	3		RESISTOR 1K 1% .125W F TC=0+-100	24546	C4-1/8-T0-1001-F
A27R24	0683-1055	5		RESISTOR 1M 5% .25W FC TC=-800/+900	01121	C81055
A27R25	0683-1055	5		RESISTOR 1M 5% .25W FC TC=-800/+900	01121	C81055
A27R26	0683-4735	4		RESISTOR 47K 5% .25W FC TC=-400/+800	01121	C84735
A27R27	0683-4745	6		RESISTOR 470K 5% .25W FC TC=-800/+900	01121	C84745
A27R28	0683-3035	5	1	RESISTOR 30K 5% .25W FC TC=-400/+800	01121	C83035
A27R29	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	C84705
A27R30	0694-3582	8	2	RESISTOR 41.2K 1% .125W F TC=0+-100	24546	C4-1/8-T0-4122-F
A27R31	0757-0437	2	6	RESISTOR 4.75K 1% .125W F TC=0+-100	24546	C4-1/8-T0-4751-F
A27R32	0683-2025	1		RESISTOR 2K 5% .25W FC TC=-400/+700	01121	C82025
A27R33	0683-6825	7		RESISTOR 6.8K 5% .25W FC TC=-400/+700	01121	C86825
A27R34	0683-6825	7		RESISTOR 6.8K 5% .25W FC TC=-400/+700	01121	C86825
A27R35	0683-1525	4		RESISTOR 1.5K 5% .25W FC TC=-400/+700	01121	C81525
A27R36	0683-4725	2		RESISTOR 4.7K 5% .25W FC TC=-400/+700	01121	C84725
A27R37	0683-4725	2		RESISTOR 4.7K 5% .25W FC TC=-400/+700	01121	C84725
A27TP1	0360-0124	3		CONNECTOR-SGL CONT PIN .04-IN-RSC-SZ RND	28480	0360-0124
A27TP2	0360-0124	3		CONNECTOR-SGL CONT PIN .04-IN-RSC-SZ RND	28480	0360-0124
A27TP3	0360-0124	3		CONNECTOR-SGL CONT PIN .04-IN-RSC-SZ RND	28480	0360-0124
A27U1	1826-0043	4		OP AMP GP T0-99	01928	CA3071
A27U2	1826-0043	4		OP AMP GP T0-99	01928	CA3071
A27U3	1820-0223			OP AMP GP T0-99	02057	MLM301AG
	03585-05227	1	1	A27 MISCELLANEOUS PARTS	28480	03585-05227
	0370-2583	5		KNUR	28480	0370-2583
	1400-0971	5		L-BRACKET	28480	1400-0971
	2950-0078	9		NUT-HEX=DHL-C-M4 10-32-THD .067-IN-TMK	28480	2950-0078

See introduction to this section for ordering information  
\*Indicates factory selected value



Table 6-3. Replaceable Parts

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
	2190-0124	4		WASHER-LK INTL T NO. 10 .195-IN-ID	28480	2190-0124
	2200-0103	2		SCREW=MACH 4-40 .25-IN-LG PAN=HD-POZI	00000	ORDER BY DESCRIPTION
	2200-0101	0		SCREW=MACH 4-40 .188-IN-LG PAN=HD-POZI	00000	ORDER BY DESCRIPTION
A28	03585-66528	3	1	SM LOOP PHASE DETECTOR	28480	03585-66528
A28C1	0160-2207	3		CAPACITOR-FXD 300PF +-5% 300VDC MICA	28480	0160-2207
A28C2	0160-0362	7		CAPACITOR-FXD 510PF +-5% 300VDC MICA	28480	0160-0362
A28C3	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A28C4	0160-2204	0		CAPACITOR-FXD 100PF +-5% 300VDC MICA	28480	0160-2204
A28C5	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A28C6	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A28C7	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A28C8	0150-0093	0		CAPACITOR-FXD .01UF +80-20% 100VDC CER	28480	0150-0093
A28C9	0180-0197	8		CAPACITOR-FXD 2.2UF+-10% 20VDC TA	56289	150D225X9020A2
A28C10	0180-0197	8		CAPACITOR-FXD 2.2UF+-10% 20VDC TA	56289	150D225X9020A2
A28C11	0160-0127	2		CAPACITOR-FXD 1UF +-20% 25VDC CER	28480	0160-0127
A28C12	0140-0200	0		CAPACITOR-FXD 390PF +-5% 300VDC MICA	72136	DM15F391J0300WV1CR
A28C13	0140-020A	8	3	CAPACITOR-FXD 580PF +-5% 300VDC MICA	72136	DM15F681J0300WV1CR
A28C14	0160-2940	1		CAPACITOR-FXD 470PF +-5% 300VDC MICA	28480	0160-2940
A28C15	0180-0197	8		CAPACITOR-FXD 2.2UF+-10% 20VDC TA	56289	150D225X9020A2
A28C16	0180-0197	8		CAPACITOR-FXD 2.2UF+-10% 20VDC TA	56289	150D225X9020A2
A28C17	0180-1746	5		CAPACITOR-FXD 15UF+-10% 20VDC TA	56289	150D156X9020B2
A28C18	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A28C19	0180-1746	5		CAPACITOR-FXD 15UF+-10% 20VDC TA	56289	150D156X9020B2
A28C20	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A28C21	0180-1746	5		CAPACITOR-FXD 15UF+-10% 20VDC TA	56289	150D156X9020B2
A28C22	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A28C23	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A28C24	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A28C25	0150-0050	9		CAPACITOR-FXD 1000PF +80-20% 1KVDC CER	28480	0150-0050
A28C26	0150-0050	9		CAPACITOR-FXD 1000PF +80-20% 1KVDC CER	28480	0150-0050
A28C27	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A28CR1	1901-0347	1		DIODE-SCHOTTKY AV	28480	1901-0347
A28CR2	1901-0347	1		DIODE-SCHOTTKY BV	28480	1901-0347
A28CR3	1901-0040	1		DIODE-SWITCHING 30V 50MA 2NS DO-35	28480	1901-0040
A28CR4	1901-0040	1		DIODE-SWITCHING 30V 50MA 2NS DO-35	28480	1901-0040
A28CR5	1901-0347	1		DIODE-SCHOTTKY AV	28480	1901-0347
A28CR6	1901-0347	1		DIODE-SCHOTTKY AV	28480	1901-0347
A28J1	1250-1512	3		CONNECTOR-RF SMB M PC 50-OHM	28480	1250-1512
A28J2	1250-1512	3		CONNECTOR-RF SMB M PC 50-OHM	28480	1250-1512
A28L1	9100-1615	8	1	COIL-MLD 1.2UH 10% Q=33 .155DX.375LG-NOM	28480	9100-1615
A28L2	9100-1641	0		COIL-MLD 240UH 5% Q=65 .155DX.375LG-NOM	28480	9100-1641
A28L3	9100-1641	0		COIL-MLD 240UH 5% Q=65 .155DX.375LG-NOM	28480	9100-1641
A28L4	9140-0210	1		COIL-MLD 100UH 5% Q=50 .155DX.375LG-NOM	28480	9140-0210
A28L5	9100-0541	7		COIL-MLD 250UH 10% Q=3 .25DX.45LG-NOM	28480	9100-0541
A28L6	9140-0210	1		COIL-MLD 100UH 5% Q=50 .155DX.375LG-NOM	28480	9140-0210
A28Q1	1853-0203	5		TRANSISTOR PNP SI TD-18 PD=360MW	26480	1853-0203
A28Q2	1853-0203	5		TRANSISTOR PNP SI TD-18 PD=360MW	26480	1853-0203
A28Q3	1853-0203	5		TRANSISTOR PNP SI TD-18 PD=360MA	28480	1853-0203
A28Q4	1853-0086	2		TRANSISTOR PNP SI PD=310MW FT=40MHZ	27014	245087
A28Q5	1854-0071	7		TRANSISTOR NPN SI PD=300MW FT=200MHZ	26480	1854-0071
A28Q6	1853-0086	2		TRANSISTOR PNP SI PD=310MA FT=40MHZ	27014	245087
A28Q7	1854-0071	7		TRANSISTOR NPN SI PD=300MA FT=200MHZ	26480	1854-0071
A28R1	0683-2025	1		RESISTOR 2K 5% .25W FC TC=-400/+700	01121	C82025
A28R2	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	C81025
A28R3	0683-7515	4		RESISTOR 750 5% .25W FC TC=-400/+600	01121	C87515
A28R4	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	C81025
A28R5	0683-2025	1		RESISTOR 2K 5% .25W FC TC=-400/+700	01121	C82025
A28R6	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	C81025
A28R7	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	C81025
A28R8	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	C84705
A28R9	0683-4715	0		RESISTOR 470 5% .25W FC TC=-400/+600	01121	C84715
A28R10	0683-8215	3		RESISTOR 820 5% .25W FC TC=-400/+600	01121	C88215
A28R11	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	C84705
A28R12	0683-4715	0		RESISTOR 470 5% .25W FC TC=-400/+600	01121	C84715
A28R13	0683-3315	4		RESISTOR 330 5% .25W FC TC=-400/+600	01121	C83315
A28R14	0683-2025	1		RESISTOR 2K 5% .25W FC TC=-400/+700	01121	C82025
A28R15	0683-3025	3		RESISTOR 3K 5% .25W FC TC=-400/+700	01121	C83025
A28R16	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	C81025
A28R17	0698-3279	0		RESISTOR 4.99K 1% .125W F TC=0+-100	24546	C4-1/8-T0-4991-F
A28R18	0698-4486	3		RESISTOR 24.9K 1% .125W F TC=0+-100	24546	C4-1/8-T0-2492-F
A28R19	0698-4463	6	1	RESISTOR 845 1% .125W F TC=0+-100	03888	PME55-1/8-T0-845M-F
A28R20	0698-4486	3		RESISTOR 24.9K 1% .125W F TC=0+-100	24546	C4-1/8-T0-2492-F

See introduction to this section for ordering information  
 \*Indicates factory selected value

Table 6-3. Replaceable Parts

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
A28R21	0683-1279	0	3	RESISTOR 4.99K 1% .125W F TC=0+/-100	24546	C4-1/8-T0-4991-F
A28R22	0757-0442	9		RESISTOR 10K 1% .125W F TC=0+/-100	24546	C4-1/8-T0-1002-F
A28R23	0757-0161	9		RESISTOR 604 1% .125W F TC=0+/-100	24546	C4-1/8-T0-604R-F
A28R24	0683-2205	9		RESISTOR 22 5% .25W FC TC=-400/+500	01121	CB2205
A28R25	0683-2025	1		RESISTOR 2K 5% .25W FC TC=-400/+700	01121	CB2025
A28R26	0683-2025	1	RESISTOR 2K 5% .25W FC TC=-400/+700	01121	CB2025	
A28R27	0683-2025	1	RESISTOR 2K 5% .25W FC TC=-400/+700	01121	CB2025	
A28R28	0683-2025	1	RESISTOR 2K 5% .25W FC TC=-400/+700	01121	CB2025	
A28R29	0683-2025	1	RESISTOR 2K 5% .25W FC TC=-400/+700	01121	CB2025	
A28R30	0683-1035	1	RESISTOR 10K 5% .25W FC TC=-400/+700	01121	CB1035	
A28R31	0683-1535	6	RESISTOR 15K 5% .25W FC TC=-400/+800	01121	CB1535	
A28R32	0683-2715	6	RESISTOR 270 5% .25W FC TC=-400/+800	01121	CB2715	
A28R33	0683-1535	6	RESISTOR 15K 5% .25W FC TC=-400/+800	01121	CB1535	
A28R34	0683-2715	6	RESISTOR 270 5% .25W FC TC=-400/+800	01121	CB2715	
A28R35	0683-7525	6	RESISTOR 7.5K 5% .25W FC TC=-400/+700	01121	CB7525	
A28R36	0683-1535	6	RESISTOR 15K 5% .25W FC TC=-400/+800	01121	CB1535	
A28R37	0683-1035	1	RESISTOR 10K 5% .25W FC TC=-400/+700	01121	CB1035	
A28R38	0683-1035	1	RESISTOR 10K 5% .25W FC TC=-400/+700	01121	CB1035	
A28R39	0683-2025	1	RESISTOR 2K 5% .25W FC TC=-400/+700	01121	CB2025	
A28R40	0683-1035	1	RESISTOR 10K 5% .25W FC TC=-400/+700	01121	CB1035	
A28R41	0683-1045	3	RESISTOR 100K 5% .25W FC TC=-400/+800	01121	CB1045	
A28U1	1R20-0810	1	IC RCVR ECL LINE RCVR TPL 2-INP	04713	MC10116P	
A28U2	1R20-0817	8	IC FF ECL D-M/S DUAL	04713	MC10131P	
A28U3	1R26-0138	8	COMPARATOR GP QUAD 14-DIP-P	04713	MLM339P	
A28 MISCELLANEOUS PARTS						
	03585-05228	2	1	LID, A28	28480	03585-05228
	0370-2583	3		KNOB	28480	0370-2583
	1400-0971	5		L=BRACKET	28480	1400-0971
	2950-0078	9		NUT-HEX=OBL-CHAM 10-32-THD .067-IN-THK	28480	2950-0078
	2190-0124	4		WASHER-LK INTL T NO, 10 .195-IN-ID	28480	2190-0124
	2200-0101	0		SCREW-MACH 4-40 .188-IN-LG PAN-HD-POZI	00000	ORDER BY DESCRIPTION
A31	03585-66531	8	1	VTO DIVIDER	28480	03585-66531
A31C1	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A31C2	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A31C3	0140-0204	4		CAPACITOR-FXD 47PF +-5% 500VDC MICA	72136	DM15E470J0500MV1CH
A31C4	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A31C5	0160-2204	0		CAPACITOR-FXD 100PF +-5% 300VDC MICA	28480	0160-2204
A31C6	0160-3914	1	1	CAPACITOR-FXD .01UF +-10% 100VDC CER	28480	0160-3914
A31C7	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A31C8	0150-0069	0	3	CAPACITOR-FXD 1000PF +100-20% 500VDC CER	28480	0150-0069
A31C9	0150-0069	0		CAPACITOR-FXD 1000PF +100-20% 500VDC CER	28480	0150-0069
A31C10	0150-0069	0		CAPACITOR-FXD 1000PF +100-20% 500VDC CER	28480	0150-0069
A31C11	0160-0503	8		CAPACITOR-FXD .22UF +-2% 100VDC POLY	28480	0160-0503
A31C12	0160-1794	3	9	CAPACITOR-FXD 22UF+-10% 35VDC TA	56289	150D226X9035R2
A31C13	0160-2199	2		CAPACITOR-FXD 30PF +-5% 300VDC MICA	28480	0160-2199
A31C14	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A31C15	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A31C16	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A31C17	0160-4571	8	18	CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A31C18	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A31C19	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A31C20	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A31C21	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A31C22	0160-4571	6		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A31C23	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A31C24	0160-0228	3		CAPACITOR-FXD 22UF+-10% 15VDC TA	56289	150D226X9015R2
A31C25	0160-1794	6		CAPACITOR-FXD 22UF+-10% 35VDC TA	56289	150D226X9035R2
A31C26	0160-1794	5		CAPACITOR-FXD 22UF+-10% 35VDC TA	56289	150D226X9035R2
A31C27	0160-3622	2		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A31C29	0160-0945	8		CAPACITOR-FXD 910PF +-5% 100VDC MICA	28480	0160-0945
A31C30	0160-0300	3	4	CAPACITOR-FXD 2700PF +-10% 200VDC POLYE	28480	0160-0300
A31C31	0160-0154	5		CAPACITOR-FXD 2200PF +-10% 200VDC POLYE	28480	0160-0154
A31C32	0160-0362	7		CAPACITOR-FXD 510PF +-5% 300VDC MICA	28480	0160-0362
A31C33	0160-0299	9	1	CAPACITOR-FXD 1800PF +-10% 200VDC POLYE	28480	0160-0299
A31C34	0160-0128	3		CAPACITOR-FXD 2.2UF +-20% 50VDC CER	28480	0160-0128
A31C35	0160-0128	3		CAPACITOR-FXD 2.2UF +-20% 50VDC CER	28480	0160-0128
A31C36	0160-0945	2		CAPACITOR-FXD 910PF +-5% 100VDC MICA	28480	0160-0945
A31C37	0160-0362	7	1	CAPACITOR-FXD 510PF +-5% 300VDC GL	28480	0160-0362
A31C38	0160-2257	3		CAPACITOR-FXD 10PF +-5% 500VDC CER 0+-50	28480	0160-2257

See introduction to this section for ordering information  
 \*Indicates factory selected value

Table 6-3. Replaceable Parts

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
A31CR1	0122-0089	5		DIODE-VVC 29PF 10X C3/C25=MIN=5 BVR=30V	04713	MV109
A31CR2	0122-0089	5		DIODE-VVC 29PF 10X C3/C25=MIN=5 BVR=30V	04713	MV109
A31J1	1250-1512	3		CONNECTOR=RF SMB M PC 50-OHM	28480	1250-1512
A31J2	1250-1512	3		CONNECTOR=RF SMB M PC 50-OHM	28480	1250-1512
A31J3	1250-1512	3		CONNECTOR=RF SMB M PC 50-OHM	28480	1250-1512
A31J4	1250-1512	3		CONNECTOR=RF SMB M PC 50-OHM	28480	1250-1512
A31L1	9100-0539	3		COIL-MLD 10UH 5% Q=55 .155DX,375LG-NOM	28480	9100-0539
A31L2	9100-0539	3		COIL-MLD 10UH 5% Q=55 .155DX,375LG-NOM	28480	9100-0539
A31L3	9100-0257	6	1	COIL-VAR 297NH-363NH Q=140 PC-MTG	28480	9100-0257
A31L6	9100-0539	3		COIL-MLD 10UH 5% Q=55 .155DX,375LG-NOM	28480	9100-0539
A31L7	9100-0539	3		COIL-MLD 10UH 5% Q=55 .155DX,375LG-NOM	28480	9100-0539
A31L8	9100-0539	3		COIL-MLD 10UH 5% Q=55 .155DX,375LG-NOM	28480	9100-0539
A31L9	9100-0539	3		COIL-MLD 10UH 5% Q=55 .155DX,375LG-NOM	28480	9100-0539
A31L10	9100-0541	7		COIL-MLD 250UH 10% Q=3 .25DX,5LG-NOM	28480	9100-0541
A31L11	9100-0541	7		COIL-MLD 250UH 10% Q=3 .25DX,5LG-NOM	28480	9100-0541
A31L12	9100-0541	7		COIL-MLD 250UH 10% Q=3 .25DX,5LG-NOM	28480	9100-0541
A31L13	9100-0539	3		COIL-MLD 10UH 5% Q=55 .155DX,375LG-NOM	28480	9100-0539
A31L15	9100-1663	6	1	COIL-MLD 2.7MH 5% Q=70 .215DX,56LG-NOM	28480	9100-1663
A31L16	9100-1658	9	1	COIL-MLD 1.6MH 5% Q=65 .215DX,56LG-NOM	28480	9100-1658
A31Q1	1854-0351	6		TRANSISTOR NPN SI TO-18 PD=360MW	28480	1854-0351
A31Q2	1854-0296	8		TRANSISTOR NPN SI TO-92 PD=310MW	28480	1854-0296
A31Q3	1854-0071	7		TRANSISTOR NPN SI PD=300MW FT=200MHZ	28480	1854-0071
A31Q5	1853-0020	4		TRANSISTOR PNP SI PD=300MW FT=150MHZ	28480	1853-0020
A31R1	0683-4315	6	3	RESISTOR 430 5% .25W FC TC=-400/+600	01121	CB4315
A31R2	0683-3025	3		RESISTOR 3K 5% .25W FC TC=-400/+700	01121	CB3025
A31R3	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	CB4705
A31R4	0683-2025	1		RESISTOR 2K 5% .25W FC TC=-400/+700	01121	CB2025
A31R5	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
A31R6	0683-1525	4		RESISTOR 1.5K 5% .25W FC TC=-400/+700	01121	CB1525
A31R7	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
A31R8	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
A31R9	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
A31R10	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
A31R11	0683-1525	4		RESISTOR 1.5K 5% .25W FC TC=-400/+700	01121	CB1525
A31R12	0683-5625	3		RESISTOR 5.6K 5% .25W FC TC=-400/+700	01121	CB5625
A31R13	0683-4335	0	1	RESISTOR 43K 5% .25W FC TC=-400/+800	01121	CB4335
A31R14	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
A31R15	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
A31R16	0698-3447	4	1	RESISTOR 422 1% .125W F TC=0+-100	24546	C4-1/8-T0-422R-F
A31R17	0683-2035	3		RESISTOR 20K 5% .25W FC TC=-400/+800	01121	CB2035
A31R18	0683-2035	3		RESISTOR 20K 5% .25W FC TC=-400/+800	01121	CB2035
A31R19	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	CB4705
A31R20	0757-0419	0	2	RESISTOR 681 1% .125W F TC=0+-100	24546	C4-1/8-T0-681R-F
A31R21	0698-3162	0	2	RESISTOR 46.0K 1% .125W F TC=0+-100	24546	C4-1/8-T0-4642R-F
A31R22	0757-0442	9		RESISTOR 10K 1% .125W F TC=0+-100	24546	C4-1/8-T0-1002R-F
A31R23	0698-3160	8	1	RESISTOR 31.6K 1% .125W F TC=0+-100	24546	C4-1/8-T0-3162R-F
A31R24	0757-0460	1	1	RESISTOR 61.9K 1% .125W F TC=0+-100	24546	C4-1/8-T0-6192R-F
A31R26	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	CB4705
A31R27	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
A31R28	0683-2425	5		RESISTOR 2.4K 5% .25W FC TC=-400/+700	01121	CB2425
A31R29	0683-1015	7		RESISTOR 100 5% .25W FC TC=-400/+500	01121	CB1015
A31R30	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	CB4705
A31R31	0683-4715	0		RESISTOR 470 5% .25W FC TC=-400/+600	01121	CB4715
A31R32	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
A31R34	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
A31R35	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
A31R36	0683-1825	7		RESISTOR 1.8K 5% .25W FC TC=-400/+700	01121	CB1825
A31R37	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
A31R38	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
A31R39	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
A31R40	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
A31R41	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
A31R42	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
A31R43	0683-4715	0		RESISTOR 470 5% .25W FC TC=-400/+600	01121	CB4715
A31R44	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	CB4705
A31R45	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
A31R48	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
A31R50	0757-0434	3	1	RESISTOR 5.11K 1% .125W F TC=0+-100	24546	C4-1/8-T0-5111R-F
A31R51	0757-0449	6		RESISTOR 20K 1% .125W F TC=0+-100	24546	C4-1/8-T0-2002R-F
A31R52	0698-3558	8		RESISTOR 4.02K 1% .125W F TC=0+-100	24546	C4-1/8-T0-4021R-F
A31R53	0683-4735	4		RESISTOR 47K 5% .25W FC TC=-400/+800	01121	CB4735
A31R54	0683-7525	6		RESISTOR 7.5K 5% .25W FC TC=-400/+700	01121	CB7525
A31R55	0683-1035	1		RESISTOR 10K 5% .25W FC TC=-400/+700	01121	CB1035

See introduction to this section for ordering information  
 \*Indicates factory selected value



Table 6-3. Replaceable Parts

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
A31R60	0683-2225	3		RESISTOR 2.2K 5% .25W FC TC=-400/+700	01121	CB2225
A31R61	0683-2215	5		RESISTOR 22K 5% .25W FC TC=-400/+800	01121	CB2235
A31R62	0683-1045	3		RESISTOR 100K 5% .25W FC TC=-400/+800	01121	CB1045
A31R63	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
A31R64	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
A31R65	0683-2045	5		RESISTOR 200K 5% .25W FC TC=-800/+900	01121	CB2045
A31R66	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
A31R67	0683-1015	7		RESISTOR 100 5% .25W FC TC=-400/+500	01121	CB1015
A31R68	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
A31R70	0683-6225	1		RESISTOR 6.2K 5% .25W FC TC=-400/+700	01121	CB6225
A31R71	0683-1015	7		RESISTOR 100 5% .25W FC TC=-400/+500	01121	CB1015
A31R72	0683-1015	7		RESISTOR 100 5% .25W FC TC=-400/+500	01121	CB1015
A31R73	0683-1015	7		RESISTOR 100 5% .25W FC TC=-400/+500	01121	CB1015
A31R75	0683-3025	3		RESISTOR 3K 5% .25W FC TC=-400/+700	01121	CB3025
A31R76	0683-3025	3		RESISTOR 3K 5% .25W FC TC=-400/+700	01121	CB3025
A31R77	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
A31U1	1820-1225	4	1	IC FF ECL D-M/S DUAL	04713	MC10231P
A31U2	1820-0806	5		IC GATE ECL OR-NOR DUAL 4-5-INP	04713	MC10109P
A31U3	1820-1204	9	2	IC GATE TTL LS NAND DUAL 4-INP	01295	SN74LS20N
A31U4	1820-0806	5		IC GATE ECL OR-NOR DUAL 4-5-INP	04713	MC10109P
A31U5	1820-0806	5		IC GATE ECL OR-NOR DUAL 4-5-INP	04713	MC10109P
A31U6	1820-0223	0	4	OP AMP GP TO-99	04713	MLM301AG
A31U7	1820-0817	8		IC FF ECL D-M/S DUAL	04713	MC10131P
A31U8	1820-0817	8		IC FF ECL D-M/S DUAL	04713	MC10131P
A31U9	1820-0817	8		IC FF ECL D-M/S DUAL	04713	MC10131P
A31U10	1826-0138	8		COMPARATOR GP QUAD 14-DIP-P	04713	MLM339P
A31U11	1820-0223	0		OP AMP GP TO-99	04713	MLM301AG
				A31 MISCELLANEOUS PARTS		
	03585-05231	7	1	LID, A31	28480	03585-05231
	0370-2583	3		KNOR	28480	0370-2583
	0380-0938	9	3	INSULATOR-FLG-BSHG TFE	28480	0380-0938
	5001-0173	7		PC GROUND CLIP	28480	5001-0173
	1251-0600	0		CONNECTOR-SGL CNT PIN 1.14-MM-BSC-S2 S0	28480	1251-0600
	2950-0078	9		NUT-HEX-DBL-CHAM 10-32-THD .067-IN-THK	28480	2950-0078
	2190-0124	4		WASHER-LK INTL T NO. 10 .195-IN-10	28480	2190-0124
A32	03585-66532	9	1	PC ASSEMBLY, ANALOG	28480	03585-66532
A32C1	0160-2204	0		CAPACITOR-FXD 100PF +-5% 300VDC MICA	28480	0160-2204
A32C2	0160-2204	0		CAPACITOR-FXD 100PF +-5% 300VDC MICA	28480	0160-2204
A32C3	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130YSV100R104Z
A32C4	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130YSV100R104Z
A32C5	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130YSV100R104Z
A32C6	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130YSV100R104Z
A32C7	0160-2257	3		CAPACITOR-FXD 10PF +-5% 500VDC CER 0+-60	28480	0160-2257
A32C8	0160-0503	8		CAPACITOR-FXD .22UF +-2% 100VDC POLYCAP	28480	0160-0503
A32C9	0160-4461	5	1	CAPACITOR-FXD 150PF +-2.5% 160VDC POLYCAP	28480	0160-4461
A32C10	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A32C11	0140-0204	4		CAPACITOR-FXD 47PF +-5% 500VDC MICA	72136	DM15E470J0500V1CR
A32C12	0160-0196	5	2	CAPACITOR-FXD 24PF +-5% 300VDC MICA	28480	0160-0196
A32C13	0160-2204	0		CAPACITOR-FXD 100PF +-5% 300VDC MICA	28480	0160-2204
A32C14	0140-0149	6	1	CAPACITOR-FXD 470PF +-5% 300VDC MICA	72136	DM15F471J0300V1CR
A32C15	0150-0029	2		CAPACITOR-FXD 1PF +-10% 500VDC TI DIX	28480	0150-0029
A32C16	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A32C17	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A32C18	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130YSV100R104Z
A32C19	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130YSV100R104Z
A32C20	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130YSV100R104Z
A32C21	0180-1794	3		CAPACITOR-FXD 22UF+-10% 35VDC TA	56289	150D226X9035K2
A32C22	0180-1794	3		CAPACITOR-FXD 22UF+-10% 35VDC TA	56289	150D226X9035K2
A32C23	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130YSV100R104Z
A32C24	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130YSV100R104Z
A32C25	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130YSV100R104Z
A32C26	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130YSV100R104Z
A32C27	0180-1794	3		CAPACITOR-FXD 22UF+-10% 35VDC TA	56289	150D226X9035K2
A32C28	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130YSV100R104Z
A32C30	0180-1794	5		CAPACITOR-FXD 15UF+-10% 20VDC TA	56289	150D156X9020K2
A32C31	0180-0196	7	2	CAPACITOR-FXD 56UF+-10% 15VDC TA	56289	150D566X9015K2
A32C32	0180-0196	7		CAPACITOR-FXD 56UF+-10% 15VDC TA	56289	150D566X9015K2
A32CR1	1901-0040	1		DIODE-SWITCHING 30V 50MA 2NS 00-35	28480	1901-0040
A32CR2	1901-0040	1		DIODE-SWITCHING 30V 50MA 2NS 00-35	28480	1901-0040
A32CR3	1901-0040	1		DIODE-SWITCHING 30V 50MA 2NS 00-35	28480	1901-0040
A32CR4	1901-0040	1		DIODE-SWITCHING 30V 50MA 2NS 00-35	28480	1901-0040
A32CR5	1901-0040	1		DIODE-SWITCHING 30V 50MA 2NS 00-35	28480	1901-0040

See introduction to this section for ordering information  
 \*Indicates factory selected value

Table 6-3. Replaceable Parts

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
A32CR6	1901-0040	1		DIODE-SWITCHING 30V 50MA 2NS DO-35	28480	1901-0040
A32CR7	1901-0535	9		DIODE-SCHOTTKY	28480	1901-0535
A32CR8	1901-0535	9		DIODE-SCHOTTKY	28480	1901-0535
A32CR9	1901-0535	9		DIODE-SCHOTTKY	28480	1901-0535
A32CR10	1901-0040	1		DIODE-SWITCHING 30V 50MA 2NS DO-35	28480	1901-0040
A32CR11	1901-0535	9		DIODE-SCHOTTKY	28480	1901-0535
A32CR12	1901-0040	1		DIODE-SWITCHING 30V 50MA 2NS DO-35	28480	1901-0040
A32CR13	1902-3054	5		DIODE-ZNR 3.65V 5% DO-7 PD=.4W TCR=-.055%	28480	1902-3054
A32CR14	1901-0040	1		DIODE-SWITCHING 30V 50MA 2NS DO-35	28480	1901-0040
A32CR15	1902-0777	3		DIODE-ZNR 1N425 6.2V 5% DO-7 PD=.4W	04713	1N425
A32CR16	1902-0049	2	11	DIODE-ZNR 6.19V 5% DO-7 PD=.4W TCR+.022%	28480	1902-0049
A32J1	1250-1512	3		CONNECTOR-RF SMB M PC 50-OHM	28480	1250-1512
A32J2	1250-1512	3		CONNECTOR-RF SMB M PC 50-OHM	28480	1250-1512
A32J3	1250-1512	3		CONNECTOR-RF SMB M PC 50-OHM	28480	1250-1512
A32L1	9100-3560	6		COIL-MLD 5.6UH 5% Q=45 .155DX,375LG-NOM	28480	9100-3560
A32L2	9100-3560	6		COIL-MLD 5.6UH 5% Q=45 .155DX,375LG-NOM	28480	9100-3560
A32L3	9100-3560	6		COIL-MLD 5.6UH 5% Q=45 .155DX,375LG-NOM	28480	9100-3560
A32Q1	1853-0089	5		TRANSISTOR PNP 2N4917 SI PD=200MW	07263	2N4917
A32Q2	1853-0089	5		TRANSISTOR PNP 2N4917 SI PD=200MW	07263	2N4917
A32Q3	1853-0089	5		TRANSISTOR PNP 2N4917 SI PD=200MW	07263	2N4917
A32Q4	1854-0215	1		TRANSISTOR NPN SI PD=350MW FT=300MHZ	04713	2N3904
A32Q5	1853-0089	5		TRANSISTOR PNP 2N4917 SI PD=200MW	07263	2N4917
A32Q6	1855-0081	1		TRANSISTOR J-FET N-CHAN D-MODE SI	01295	2N5245
A32Q7	1855-0081	1		TRANSISTOR J-FET N-CHAN D-MODE SI	01295	2N5245
A32Q8	1854-0215	1		TRANSISTOR NPN SI PD=350MW FT=300MHZ	04713	2N3904
A32Q9	1854-0215	1		TRANSISTOR NPN SI PD=350MW FT=300MHZ	04713	2N3904
A32Q11	1854-0215	1		TRANSISTOR NPN SI PD=350MW FT=300MHZ	04713	2N3904
A32Q12	1853-0089	5		TRANSISTOR PNP 2N4917 SI PD=200MW	07263	2N4917
A32Q13	1853-0089	5		TRANSISTOR PNP 2N4917 SI PD=200MW	07263	2N4917
A32Q14	1854-0345	8		TRANSISTOR NPN 2N5179 SI TO-72 PD=200MW	04713	2N5179
A32Q15	1853-0089	5		TRANSISTOR PNP 2N4917 SI PD=200MW	07263	2N4917
A32Q16	1855-0082	2	1	TRANSISTOR J-FET P-CHAN D-MODE SI	28480	1855-0082
A32Q17	1853-0089	5		TRANSISTOR PNP 2N4917 SI PD=200MW	07263	2N4917
A32Q18	1854-0404	0		TRANSISTOR NPN SI TO-18 PD=360MW	28480	1854-0404
A32Q19	1854-0404	0		TRANSISTOR NPN SI TO-18 PD=360MW	28480	1854-0404
A32Q21	1855-0308	5		TRANSISTOR J-FET DUAL N-CHAN D-MODE SI	28480	1855-0308
A32Q22	1854-0296	8		TRANSISTOR NPN SI TO-92 PD=310MW	28480	1854-0296
A32Q23	1854-0296	8		TRANSISTOR NPN SI TO-92 PD=310MW	28480	1854-0296
A32Q24	1853-0089	5		TRANSISTOR PNP 2N4917 SI PD=200MW	07263	2N4917
A32Q25	1854-0215	1		TRANSISTOR NPN SI PD=350MW FT=300MHZ	04713	2N3904
A32Q26	1853-0089	5		TRANSISTOR PNP 2N4917 SI PD=200MW	07263	2N4917
A32Q27	1854-0351	6		TRANSISTOR NPN SI TO-18 PD=360MW	28480	1854-0351
A32Q28	1854-0351	6		TRANSISTOR NPN SI TO-18 PD=360MW	28480	1854-0351
A32Q29	1853-0089	5		TRANSISTOR PNP 2N4917 SI PD=200MW	07263	2N4917
A32Q31	1854-0351	6		TRANSISTOR NPN SI TO-18 PD=360MW	28480	1854-0351
A32Q32	1855-0081	1		TRANSISTOR J-FET N-CHAN D-MODE SI	01295	2N5245
A32Q33	1854-0351	6		TRANSISTOR NPN SI TO-18 PD=360MW	28480	1854-0351
A32Q34	1855-0081	1		TRANSISTOR J-FET N-CHAN D-MODE SI	01295	2N5245
A32Q35	1854-0215	1		TRANSISTOR NPN SI PD=350MW FT=300MHZ	04713	2N3904
A32Q36	1854-0351	6		TRANSISTOR NPN SI TO-18 PD=360MW	28480	1854-0351
A32Q37	1854-0351	6		TRANSISTOR NPN SI TO-18 PD=360MW	28480	1854-0351
A32Q38	1853-0089	5		TRANSISTOR PNP 2N4917 SI PD=200MW	07263	2N4917
A32Q39	1853-0089	5		TRANSISTOR PNP 2N4917 SI PD=200MW	07263	2N4917
A32R1	0683-5605	9	1	RESISTOR 56 5% .25W FC TCR=400/+500	01121	C85605
A32R3	0757-0421	9	5	RESISTOR 825 1% .125W F TCR=0/+100	24546	C4-1/8-T0-825R-F
A32R4	0757-0426	4	2	RESISTOR 1.3K 1% .125W F TCR=0/+100	24546	C4-1/8-T0-1301-F
A32R5	0757-0421	4		RESISTOR 825 1% .125W F TCR=0/+100	24546	C4-1/8-T0-825R-F
A32R6	0698-4425	0		RESISTOR 1.54K 1% .125W F TCR=0/+100	24546	C4-1/8-T0-1541-F
A32R7	0683-4705	8		RESISTOR 47 5% .25W FC TCR=400/+500	01121	C84705
A32R8	0683-4705	8		RESISTOR 47 5% .25W FC TCR=400/+500	01121	C84705
A32R9	0683-3025	3		RESISTOR 3K 5% .25W FC TCR=400/+700	01121	C83025
A32R11	0683-4715	0		RESISTOR 470 5% .25W FC TCR=400/+600	01121	C84715
A32R12	0683-4715	0		RESISTOR 470 5% .25W FC TCR=400/+600	01121	C84715
A32R13	0683-4705	8		RESISTOR 47 5% .25W FC TCR=400/+500	01121	C84705
A32R14	0683-4705	8		RESISTOR 47 5% .25W FC TCR=400/+500	01121	C84705
A32R15	0757-0421	4		RESISTOR 825 1% .125W F TCR=0/+100	24546	C4-1/8-T0-825R-F
A32R16	0757-0407	6		RESISTOR 200 1% .125W F TCR=0/+100	24546	C4-1/8-T0-201-F
A32R17	0683-5125	8		RESISTOR 5.1K 5% .25W FC TCR=400/+700	01121	C85125
A32R18	0683-2005	7	2	RESISTOR 20 5% .25W FC TCR=400/+500	01121	C82005
A32R19	0683-1825	7		RESISTOR 1.8K 5% .25W FC TCR=400/+700	01121	C81825
A32R20	0683-2025	1		RESISTOR 2K 5% .25W FC TCR=400/+700	01121	C82025
A32R22	0683-1825	7		RESISTOR 1.8K 5% .25W FC TCR=400/+700	01121	C81825
A32R23	0683-3025	3		RESISTOR 3K 5% .25W FC TCR=400/+700	01121	C83025

See introduction to this section for ordering information  
 \*Indicates factory selected value

Table 6-3. Replaceable Parts

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
A32R24	0757-0428	1	3	RESISTOR 1.62K 1% .125W F TC=0+-100	24546	C4-1/8-T0-1621-F
A32R25	0757-0444	1		RESISTOR 12.1K 1% .125W F TC=0+-100	24546	C4-1/8-T0-1212-F
A32R26	0757-0434	9		RESISTOR 3.65K 1% .125W F TC=0+-100	24546	C4-1/8-T0-3651-F
A32R27	0683-5125	8		RESISTOR 5.1K 5% .25W FC TC=-400/+700	01121	C85125
A32R28	0683-5125	8		RESISTOR 5.1K 5% .25W FC TC=-400/+700	01121	C85125
A32R29	0698-3259	6	1	RESISTOR 7.87K 1% .125W F TC=0+-100	24546	C4-1/8-T0-7871-F
A32R31	0757-0161	9		RESISTOR 604 1% .125W F TC=0+-100	24546	C4-1/8-T0-604R-F
A32R32	0683-2025	1		RESISTOR 2K 5% .25W FC TC=-400/+700	01121	C82025
A32R33	0683-2025	1		RESISTOR 2K 5% .25W FC TC=-400/+700	01121	C82025
A32R34	0683-2025	1		RESISTOR 2K 5% .25W FC TC=-400/+700	01121	C82025
A32R35	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	C81025
A32R36	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	C81025
A32R37	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	C81025
A32R38	0683-3925	2		RESISTOR 3.9K 5% .25W FC TC=-400/+700	01121	C83925
A32R39	0683-3925	2		RESISTOR 3.9K 5% .25W FC TC=-400/+700	01121	C83925
A32R41	0683-3925	2		RESISTOR 3.9K 5% .25W FC TC=-400/+700	01121	C83925
A32R42	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	C84705
A32R43	0757-0435	0	1	RESISTOR 3.92K 1% .125W F TC=0+-100	24546	C4-1/8-T0-3921-F
A32R44	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	C84705
A32R45	0757-0439	4	2	RESISTOR 6.81K 1% .125W F TC=0+-100	24546	C4-1/8-T0-6811-F
A32R46	0757-0442	9		RESISTOR 10K 1% .125W F TC=0+-100	24546	C4-1/8-T0-1002-F
A32R48	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	C84705
A32R49	2100-3054	6		RESISTOR-TRMR 50K 10% C SIDE=ADJ 17-TRN	02111	43P503
A32R50	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	C81025
A32R51	0757-0442	9		RESISTOR 10K 1% .125W F TC=0+-100	24546	C4-1/8-T0-1002-F
A32R52	0683-5625	3		RESISTOR 5.6K 5% .25W FC TC=-400/+700	01121	C85625
A32R53	0757-0442	9		RESISTOR 10K 1% .125W F TC=0+-100	24546	C4-1/8-T0-1002-F
A32R54	0757-0283	6		RESISTOR 2K 1% .125W F TC=0+-100	24546	C4-1/8-T0-2001-F
A32R55	0757-0401	0		RESISTOR 100 1% .125W F TC=0+-100	24546	C4-1/8-T0-101-F
A32R56	2100-3154	7		RESISTOR-TRMR 1K 10% C SIDE=ADJ 17-TRN	02111	43P101
A32R57	0698-4374	8	1	RESISTOR 29.4 1% .125W F TC=0+-100	03688	PME55-1/8-T0-2994-F
A32R58	0683-7332	4	1	RESISTOR 1M 1% .125W F TC=0+-100	28480	0698-7332
A32R59	0683-1065	7	1	RESISTOR 10M 5% .25W FC TC=-900/+1100	01121	C81065
A32R61	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	C84705
A32R62	0683-2025	1		RESISTOR 2K 5% .25W FC TC=-400/+700	01121	C82025
A32R63	0683-2025	1		RESISTOR 2K 5% .25W FC TC=-400/+700	01121	C82025
A32R64	0683-2025	1		RESISTOR 2K 5% .25W FC TC=-400/+700	01121	C82025
A32R65	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	C84705
A32R66	0683-1535	0		RESISTOR 15K 5% .25W FC TC=-400/+800	01121	C81535
A32R67	0698-3162	0		RESISTOR 46.4K 1% .125W F TC=0+-100	24546	C4-1/8-T0-4642-F
A32R68	0757-0439	4		RESISTOR 6.81K 1% .125W F TC=0+-100	24546	C4-1/8-T0-6811-F
A32R69	0683-1535	6		RESISTOR 15K 5% .25W FC TC=-400/+800	01121	C81535
A32R71	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	C84705
A32R72	0757-0416	7	4	RESISTOR 511 1% .125W F TC=0+-100	24546	C4-1/8-T0-511R-F
A32R73	0757-0440	7		RESISTOR 7.5K 1% .125W F TC=0+-100	24546	C4-1/8-T0-7501-F
A32R74	0757-0416	7		RESISTOR 511 1% .125W F TC=0+-100	24546	C4-1/8-T0-511R-F
A32R75	0757-0416	7		RESISTOR 511 1% .125W F TC=0+-100	24546	C4-1/8-T0-511R-F
A32R76	0757-0416	7		RESISTOR 511 1% .125W F TC=0+-100	24546	C4-1/8-T0-511R-F
A32R77	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	C84705
A32R78	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	C84705
A32R79	0683-3025	3		RESISTOR 3K 5% .25W FC TC=-400/+700	01121	C83025
A32R81	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	C84705
A32R82	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	C84705
A32R83	0683-1035	1		RESISTOR 10K 5% .25W FC TC=-400/+700	01121	C81035
A32R84	0683-1015	7		RESISTOR 10K 5% .25W FC TC=-400/+500	01121	C81015
A32R85	0683-2005	7		RESISTOR 20 5% .25W FC TC=-400/+500	01121	C82005
A32R86	0683-1015	7		RESISTOR 10K 5% .25W FC TC=-400/+500	01121	C81015
A32R87	0683-5115	6		RESISTOR 510 5% .25W FC TC=-400/+600	01121	C85115
A32R88	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	C81025
A32R89	0683-5105	4		RESISTOR 51 5% .25W FC TC=-400/+500	01121	C85105
A32R91	0757-0421	4		RESISTOR 825 1% .125W F TC=0+-100	24546	C4-1/8-T0-825R-F
A32R92	0683-2025	1		RESISTOR 2K 5% .25W FC TC=-400/+700	01121	C82025
A32R93	0683-5105	4		RESISTOR 51 5% .25W FC TC=-400/+500	01121	C85105
A32R94	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	C81025
A32R95	0683-1835	9		RESISTOR 18K 5% .25W FC TC=-400/+800	01121	C81835
A32R96	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	C81025
A32R97	0683-5105	4		RESISTOR 51 5% .25W FC TC=-400/+500	01121	C85105
A32R98	0757-0283	6		RESISTOR 2K 1% .125W F TC=0+-100	24546	C4-1/8-T0-2001-F
A32R99	0683-5115	6		RESISTOR 510 5% .25W FC TC=-400/+600	01121	C85115
A32R101	0683-5105	4		RESISTOR 51 5% .25W FC TC=-400/+500	01121	C85105
A32R102	0757-0280	3		RESISTOR 1K 1% .125W F TC=0+-100	24546	C4-1/8-T0-1001-F
A32R103	0757-0421	4		RESISTOR 825 1% .125W F TC=0+-100	24546	C4-1/8-T0-825R-F
A32R104	0683-5115	6		RESISTOR 510 5% .25W FC TC=-400/+600	01121	C85115
A32R105	0683-0825	7		RESISTOR 6.8K 5% .25W FC TC=-400/+700	01121	C86825
A32R106	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	C81025

See introduction to this section for ordering information  
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Table 6-3. Replaceable Parts

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
A32R107	0683-5105	4		RESISTOR 51 5% .25W FC TC=-400/+500	01121	CB5105
A32R108	0683-5105	4		RESISTOR 51 5% .25W FC TC=-400/+500	01121	CB5105
A32R109	0757-0419	0		RESISTOR 681 1% .125W F TC=0+-100	24546	C4-1/8-T0-681R-F
A32R111	0683-1015	7		RESISTOR 100 5% .25W FC TC=-400/+500	01121	CB1015
A32R112	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
A32U1	1A20-1196	8		IC FF TTL LS D-TYPE POS-EDGE-TRIG COM	01295	SN74LS174N
A32U2	1A21-0001	4	1	TRANSISTOR ARRAY	01928	CA3046
A32U3	1A10-0294	4	1	5330A F.L. PACKAGE	28480	1810-0294
A32U4	1A20-0817	8		IC FF ECL D-M/S DUAL	04713	MC10131P
A32U5	1A26-0021	8	1	OP AMP GP T0-99	27014	LM310H
A32 MISCELLANEOUS PARTS						
	03585-05232	8	1	LID, A32	28480	03585-05232
	0370-2583	3		KNOB	28480	0370-2583
	1400-0971	5		L-BRACKET	28480	1400-0971
	1251-0600	0		CONNECTOR-SGL CONT PIN 1,14-MM-BSC-SZ 50	28480	1251-0600
	2950-0078	9		NUT-HEX-DBL-CHAM 10-32-THD .067-IN-THK	28480	2950-0078
	2190-0124	4		WASHER-LK INTL T NO. 10 .195-IN-ID	28480	2190-0124
	2200-0101	0		SCREW-MACH 4-40 .188-IN-LG PAN-RO-POZI	00000	ORDER BY DESCRIPTION
A33	03585-66533	0	1	PC ASSEMBLY, FFS ACC	28480	03585-66533
A33C1	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A33C2	0160-3874	2		CAPACITOR-FXD .10PF +-5PF 200VDC CER	28480	0160-3874
A33C3	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A33C4	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A33C6	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A33C7	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A33C8	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A33C9	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A33C10	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A33C11	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A33C12	0140-0210	2		CAPACITOR-FXD 270PF +-5% 300VDC MICA	72136	DM15F271J0300AV1CH
A33C13	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A33C14	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A33C15	0140-0194	5	1	CAPACITOR-FXD 150UF+-10% 15VDC TA	56289	150D157X9015S2
A33C16	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A33C21	0160-4350	1	1	CAPACITOR-FXD 68PF +-5% 200VDC CER 0+-30	28480	0160-4350
A33C22	0160-4571	8		CAPACITOR-FXD .1UF +80-20% 50VDC CER	28480	0160-4571
A33CR1	1902-3030	7	1	DIODE-ZNR 3.01V 5% 00-7 PD=.4W TC=-.067%	28480	1902-3030
A33CR2	1902-0800	3	1	DIODE-ZNR 8.25V 5% 00-15 PD=.1W TC=+.053%	28480	1902-0800
A33CR3	1902-3105	7	1	DIODE-ZNR 5.62V 2% 00-7 PD=.4W TC=-.016%	28480	1902-3105
A33J2	1250-1512	3		CONNECTOR-RF SMB M PC 50-OHM	28480	1250-1512
A33J3	1250-1512	3		CONNECTOR-RF SMB M PC 50-OHM	28480	1250-1512
A33L3	9100-0541	7		COIL-MLD 250UH 10% Q=3 .25DX.5LG-NOM	28480	9100-0541
A33L4	9100-0541	7		COIL-MLD 250UH 10% Q=3 .25DX.5LG-NOM	28480	9100-0541
A33G1	1A53-00A9	5		TRANSISTOR PNP 2N4917 SI PD=200MW	07263	2N4917
A33G2	1A53-00A9	5		TRANSISTOR PNP 2N4917 SI PD=200MW	07263	2N4917
A33G3	1A53-00A9	5		TRANSISTOR PNP 2N4917 SI PD=200MW	07263	2N4917
A33G4	1A53-00A9	5		TRANSISTOR PNP 2N4917 SI PD=200MW	07263	2N4917
A33G5	1A54-0351	6		TRANSISTOR NPN SJ T0-18 PD=360MA	28480	1A54-0351
A33G6	1A53-0012	4		TRANSISTOR PNP 2N2904A SI T0-39 PD=600MA	01295	2N2904A
A33G7	1A54-0039	7		TRANSISTOR NPN 2N3053S SI T0-39 PD=1W	01928	2N3053S
A33R1	0683-5125	8		RESISTOR 5.1K 5% .25W FC TC=-400/+700	01121	CB5125
A33R2	0683-2715	6		RESISTOR 270 5% .25W FC TC=-400/+600	01121	CB2715
A33R3	0683-4315	6		RESISTOR 430 5% .25W FC TC=-400/+600	01121	CB4315
A33R4	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
A33R5	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
A33R6	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
A33R7	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
A33R8	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	CB4705
A33R9	0683-5105	4		RESISTOR 51 5% .25W FC TC=-400/+500	01121	CB5105
A33R10	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	CB4705
A33R11	0683-1515	2		RESISTOR 150 5% .25W FC TC=-400/+600	01121	CB1515
A33R12	0683-2025	1		RESISTOR 2K 5% .25W FC TC=-400/+700	01121	CB2025
A33R13	0683-2025	1		RESISTOR 2K 5% .25W FC TC=-400/+700	01121	CB2025
A33R14	0683-2025	1		RESISTOR 2K 5% .25W FC TC=-400/+700	01121	CB2025
A33R15	0683-2025	1		RESISTOR 2K 5% .25W FC TC=-400/+700	01121	CB2025
A33R20	0683-1035	1		RESISTOR 10K 5% .25W FC TC=-400/+700	01121	CB1035
A33R21	0698-4436	3	1	RESISTOR 2.8K 1% .125W F TC=0+-100	24546	L4-1/8-T0-2801-F
A33R22	0683-2025	1		RESISTOR 2K 5% .25W FC TC=-400/+700	01121	CB2025
A33R23	0683-2025	1		RESISTOR 2K 5% .25W FC TC=-400/+700	01121	CB2025
A33R24	0683-2025	1		RESISTOR 2K 5% .25W FC TC=-400/+700	01121	CB2025

See introduction to this section for ordering information  
 \*Indicates factory selected value

Table 6-3. Replaceable Parts

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
A33R25	0683-2025	1		RESISTOR 2K 5% .25W FC TC=-400/+700	01121	CB2025
A33R26	0683-2025	1		RESISTOR 2K 5% .25W FC TC=-400/+700	01121	CB2025
A33R27	0683-2025	1		RESISTOR 2K 5% .25W FC TC=-400/+700	01121	CB2025
A33R30	0683-2025	1		RESISTOR 2K 5% .25W FC TC=-400/+700	01121	CB2025
A33R31	0683-2025	1		RESISTOR 2K 5% .25W FC TC=-400/+700	01121	CB2025
A33R32	0683-2025	1		RESISTOR 2K 5% .25W FC TC=-400/+700	01121	CB2025
A33R33	0683-2015	9		RESISTOR 200 5% .25W FC TC=-400/+600	01121	CB2015
A33R34	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
A33R36	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
A33R37	0683-1525	4		RESISTOR 1.5K 5% .25W FC TC=-400/+700	01121	CB1525
A33R38	0683-3615	7	5	RESISTOR 360 5% .25W FC TC=-400/+600	01121	CB3615
A33R39	0683-3615	7		RESISTOR 360 5% .25W FC TC=-400/+600	01121	CB3615
A33R40	0683-5625	3		RESISTOR 5.6K 5% .25W FC TC=-400/+700	01121	CB5625
A33R41	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
A33R42	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
A33R45	0683-4315	6		RESISTOR 430 5% .25W FC TC=-400/+600	01121	CB4315
A33R46	0683-2715	6		RESISTOR 270 5% .25W FC TC=-400/+600	01121	CB2715
A33R47	0683-5115	6		RESISTOR 510 5% .25W FC TC=-400/+600	01121	CB5115
A33R48	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	CB4705
A33R50	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
A33R51	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
A33R52	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
A33R53	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	CB4705
A33R54	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	CB4705
A33R55	0683-5115	6		RESISTOR 510 5% .25W FC TC=-400/+600	01121	CB5115
A33R56	0683-5115	6		RESISTOR 510 5% .25W FC TC=-400/+600	01121	CB5115
A33R57	0683-2415	3	5	RESISTOR 240 5% .25W FC TC=-400/+600	01121	CB2415
A33R58	0683-1015	7		RESISTOR 100 5% .25W FC TC=-400/+500	01121	CB1015
A33R59	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	CB4705
A33R65	0683-6815	5		RESISTOR 680 5% .25W FC TC=-400/+600	01121	CB6815
A33R67	0698-3696	5	1	RESISTOR 39 5% 1% MO TC=0/+200	27167	FP32=1-T00-39R0-J
A33R68	0683-1125	0	2	RESISTOR 1.1K 5% .25W FC TC=-400/+700	01121	CB1125
A33R69	0683-2025	1		RESISTOR 2K 5% .25W FC TC=-400/+700	01121	CB2025
A33U1	1R20-0R10	1		IC RCVR ECL LINE RCVR TPL 2=INP	04713	MC10116P
A33U2	1R20-0693	8		IC FF TTL S D-TYPE POS-EDGE-TRIG	01295	SN74S74N
A33U3	1R20-0R17	8		IC FF ECL D-M/S DUAL	04713	MC10131P
A33U4	1R20-0R17	8		IC FF ECL D-M/S DUAL	04713	MC10131P
A33U5	1R20-0R20	3	1	IC FF ECL J-BAR X-BAR COM CLOCK DUAL	04713	MC10135L
A33U6	1R20-0629	0	4	IC FF TTL S J-K NEG-EDGE-TRIG	01295	SN74S112N
A33U7	1R20-0629	0		IC FF TTL S J-K NEG-EDGE-TRIG	01295	SN74S112N
A33U8	1R20-1322	2	3	IC GATE TTL S NOR QUAD 2=INP	01295	SN74S02N
A33U9	1R20-0681	4	5	IC GATE TTL S NAND QUAD 2=INP	01295	SN74S00N
A33U10	1R20-0681	4		IC GATE TTL S NAND QUAD 2=INP	01295	SN74S00N
A33U11	1R20-0681	4		IC GATE TTL S NAND QUAD 2=INP	01295	SN74S00N
A33U12	1R20-0629	0		IC FF TTL S J-K NEG-EDGE-TRIG	01295	SN74S112N
A33U13	1R20-0629	0		IC FF TTL S J-K NEG-EDGE-TRIG	01295	SN74S112N
A33U14	1R20-1279	0	2	IC CNTR TTL LS DECD UP/DOWN SYNCHRO	01295	SN74LS190N
A33U15	1R20-1279	8		IC CNTR TTL LS DECD UP/DOWN SYNCHRO	01295	SN74LS190N
A33U16	1R20-1196	8		IC FF TTL LS D-TYPE POS-EDGE-TRIG COM	01295	SN74LS174N
A33U17	1R20-1196	8		IC FF TTL LS D-TYPE POS-EDGE-TRIG COM	01295	SN74LS174N
A33U18	1R20-1144	6	12	IC GATE TTL LS NOR QUAD 2=INP	01295	SN74LS02N
A33U19	1R20-2004	9	1	IC INV TTL S HEX 1=INP	28480	1R20-2004
A33U20	1R20-0683	6	3	IC INV TTL S HEX 1=INP	01295	SN74S04N
A33U21	1R20-0R10	1		IC RCVR ECL LINE RCVR TPL 2=INP	04713	MC10116P
A33U22	1R20-0681	4		IC GATE TTL S NAND QUAD 2=INP	01295	SN74S00N
				A33 MISCELLANEOUS PARTS		
	03585-05233	9	1	LID, A33	28480	03585-05233
	0370-2583	3		KNOB	28480	0370-2583
	1400-0971	5		L-BRACKET	28480	1400-0971
	2200-0101	0		SCREW-MACH 4-40 .188-IN-LG PAN-HD-POZI	00000	ORDER BY DESCRIPTION
	2950-0078	9		NUT-HEX-DBL-CHAM 10-32-THU .067-IN-THK	28480	2950-0078
	2190-0124	4		WASHER-LK INTL T NU. 10 .195-IN-ID	28480	2190-0124
A34	03585-66534	1	1	INTERFACE, REGULATOR	28480	03585-66534
A34C1	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A34C2	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A34C3	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A34C5	0160-0291	3		CAPACITOR-FXD 10UF +-10% 35VDC TA	56289	150D105X903542
A34C6	0160-1794	3		CAPACITOR-FXD 22UF +-10% 35VDC TA	56289	150D226X903542
A34C7	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A34C8	0160-0199	6		CAPACITOR-FXD 240PF +-5% 300VDC MICA	72136	DM15F241J0300AV1CR
A34C9	0160-2257	3		CAPACITOR-FXD 10PF +-5% 500VDC CER 0+-60	28480	0160-2257
A34C10	0160-1746	5		CAPACITOR-FXD 15UF +-10% 20VDC TA	56289	150D156X902042
A34C11	0160-0291	3		CAPACITOR-FXD 10UF +-10% 35VDC TA	56289	150D105X903542

See introduction to this section for ordering information  
 \*Indicates factory selected value



Table 6-3. Replaceable Parts

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
A34C12	0180-1794	3		CAPACITOR-FXD 22UF+-10% 35VDC TA	56289	150D226X9035R2
A34C13	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A34C14	0180-1746	5		CAPACITOR-FXD 15UF+-10% 20VDC TA	56289	150D156X9020R2
A34C15	0160-2199	2		CAPACITOR-FXD 30PF +-5% 300VDC MICA	28480	0160-2199
A34C16	0180-0197	8		CAPACITOR-FXD 2.2UF+-10% 20VDC TA	56289	150D225X9020A2
A34C17	0180-0228	6		CAPACITOR-FXD 22UF+-10% 15VDC TA	56289	150D226X9015B2
A34C18	0160-0298	8	1	CAPACITOR-FXD 1500PF +-10% 200VDC POLYE	28480	0160-0298
A34C20	0180-1746	5		CAPACITOR-FXD 15UF+-10% 20VDC TA	56289	150D156X9020R2
A34C30	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A34C31	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A34C32	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A34C33	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A34C34	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A34C35	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A34C36	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A34C37	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A34C38	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A34CR1	1901-0040	1		DIODE-SWITCHING 30V 50MA 2NS 00-35	28480	1901-0040
A34CR2	1901-0040	1		DIODE-SWITCHING 30V 50MA 2NS 00-35	28480	1901-0040
A34CR3	1901-0040	1		DIODE-SWITCHING 30V 50MA 2NS 00-35	28480	1901-0040
A34CR4	1901-0040	1		DIODE-SWITCHING 30V 50MA 2NS 00-35	28480	1901-0040
A34CR7	1901-0040	1		DIODE-SWITCHING 30V 50MA 2NS 00-35	28480	1901-0040
A34CR8	1901-0040	1		DIODE-SWITCHING 30V 50MA 2NS 00-35	28480	1901-0040
A34CR9	1902-0064	1		DIODE-ZNR 7.5V 5% DO-7 PD=.4W TC=+.05%	28480	1902-0064
A34CR10	1902-0777	3		DIODE-ZNR 1N825 6.2V 5% DO-7 PD=.4W	04713	1N825
A34CR11	1902-0777	3		DIODE-ZNR 1N825 6.2V 5% DO-7 PD=.4W	04713	1N825
A34DS1	1990-0486	6		LED-VISIBLE LUM-INT=1MCD IF=20MA-MAX	28480	5082-4684
A34DS2	1990-0486	6		LED-VISIBLE LUM-INT=1MCD IF=20MA-MAX	28480	5082-4684
A34DS3	1990-0486	6		LED-VISIBLE LUM-INT=1MCD IF=20MA-MAX	28480	5082-4684
A34DS4	1990-0486	6		LED-VISIBLE LUM-INT=1MCD IF=20MA-MAX	28480	5082-4684
A34J2	1250-1368	7		CONNECTOR-RF SMB M PC 50-OHM	28480	1250-1368
A34J3	1250-1368	7		CONNECTOR-RF SMB M PC 50-OHM	28480	1250-1368
A34L1	9100-0541	7		COIL-MLO 250UM 10% N=3 .25OX.5LG-NOM	28480	9100-0541
A34Q1	1854-0351	6		TRANSISTOR NPN SI T0-18 PD=360MW	28480	1854-0351
A34Q2	1854-0063	7	2	TRANSISTOR NPN 2N3055 SI T0-3 PD=115W	28480	1854-0063
A34Q3	1853-0010	2		TRANSISTOR PNP SI T0-18 PD=360MW	28480	1853-0010
A34Q4	1854-0053	5	1	TRANSISTOR NPN 2N2218 SI T0-5 PD=800MA	04713	2N2218
A34Q5	1854-0063	7		TRANSISTOR NPN 2N3055 SI T0-3 PD=115W	28480	1854-0063
A34R5	0760-0009	1	3	RESISTOR 100K 2% 1W MO TC=0+-200	28480	0760-0009
A34R6	0760-0009	1		RESISTOR 100K 2% 1W MO TC=0+-200	28480	0760-0009
A34R7	06A3-1815	5	4	RESISTOR 180 5% .25W FC TC=-400/+600	01121	C81815
A34R8	06A3-1815	5		RESISTOR 180 5% .25W FC TC=-400/+600	01121	C81815
A34R9	06A3-1815	5		RESISTOR 180 5% .25W FC TC=-400/+600	01121	C81815
A34R10	06A3-1815	5		RESISTOR 180 5% .25W FC TC=-400/+600	01121	C81815
A34R15	06A3-1835	1		RESISTOR 18K 5% .25W FC TC=-400/+800	01121	C81835
A34R16	06A3-3315	2		RESISTOR 330 5% .25W FC TC=-400/+600	01121	C83315
A34R17	06A3-1515	4		RESISTOR 150 5% .25W FC TC=-400/+600	01121	C81515
A34R18	06A3-0275	9		RESISTOR 2.7 5% .25W FC TC=-400/+500	01121	C82705
A34R19	0813-0029	8	1	RESISTOR 1 3% 3W PN TC=0+-50	28480	0813-0029
A34R20	06A3-3635	1		RESISTOR 36K 5% .25W FC TC=-400/+800	01121	C83635
A34R21	069A-349K	5	1	RESISTOR 4.66K 1% .125W F TC=0+-100	24546	C4-1/8-T0-866R-F
A34R22	069A-3512	4	1	RESISTOR 1.18K 1% .125W F TC=0+-100	24546	C4-1/8-T0-1181-F
A34R23	06A3-3625	9		RESISTOR 3.6K 5% .25W FC TC=-400/+700	01121	C83625
A34R24	0757-0290	5	1	RESISTOR 6.19K 1% .125W F TC=0+-100	19701	MF4C1/8-T0-6191-F
A34R25	0757-0426	9		RESISTOR 1.3K 1% .125W F TC=0+-100	24546	C4-1/8-T0-1301-F
A34R26	06A3-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	C81025
A34R27	06A3-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	C81025
A34R28	06A3-1015	7		RESISTOR 100 5% .25W FC TC=-400/+500	01121	C81015
A34R29	06A3-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	C81025
A34R32	2100-3273	1	6	RESISTOR-TMR 2K 10% C S10L-ADJ 1-TRN	28480	2100-3273
A34R33	06A3-1035	1		RESISTOR 10K 5% .25W FC TC=-400/+700	01121	C81035
A34R50	06A3-2015	9		RESISTOR 200 5% .25W FC TC=-400/+600	01121	C82015
A34R51	06A3-2015	9		RESISTOR 200 5% .25W FC TC=-400/+600	01121	C82015
A34R52	06A3-2015	9		RESISTOR 200 5% .25W FC TC=-400/+600	01121	C82015
A34R53	06A3-2015	9		RESISTOR 200 5% .25W FC TC=-400/+600	01121	C82015
A34R54	06A3-2015	9		RESISTOR 200 5% .25W FC TC=-400/+600	01121	C82015
A34R55	06A3-2015	9		RESISTOR 200 5% .25W FC TC=-400/+600	01121	C82015
A34R56	06A3-2015	9		RESISTOR 200 5% .25W FC TC=-400/+600	01121	C82015
A34R57	06A3-2015	9		RESISTOR 200 5% .25W FC TC=-400/+600	01121	C82015
A34R58	06A3-2015	9		RESISTOR 200 5% .25W FC TC=-400/+600	01121	C82015
A34R60	06A3-2735	0		RESISTOR 27K 5% .25W FC TC=-400/+800	01121	C82735
A34R61	06A3-1035	1		RESISTOR 10K 5% .25W FC TC=-400/+700	01121	C81035
A34R62	06A3-1035	1		RESISTOR 10K 5% .25W FC TC=-400/+700	01121	C81035

See introduction to this section for ordering information  
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Table 6-3. Replaceable Parts

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
A34R63	0683-1035	1		RESISTOR 10K 5% .25W FC TC=+400/+700	01121	CB1035
A34R64	0760-0009	1		RESISTOR 100K 2% 1W MO TC=0/+200	28480	0760-0009
A34U1	1820-1196	8		IC FF TTL LS D-TYPE POS-EDGE-TRIG COM	01295	SN74LS174N
A34U2	1820-1144	6		IC GATE TTL LS NOR QUAD 2-INP	01295	SN74LS02N
A34U3	1820-1144	6		IC GATE TTL LS NOR QUAD 2-INP	01295	SN74LS02N
A34U4	1820-1195	7		IC FF TTL LS D-TYPE POS-EDGE-TRIG COM	01295	SN74LS175N
A34U5	1820-1195	7		IC FF TTL LS D-TYPE POS-EDGE-TRIG COM	01295	SN74LS175N
A34U6	1820-1196	8		IC FF TTL LS D-TYPE POS-EDGE-TRIG COM	01295	SN74LS174N
A34U7	1826-0138	8		COMPARATOR GP QUAD 14-DIP-P	04713	MLM339P
A34U8	1820-1197	9	8	IC GATE TTL LS NAND QUAD 2-INP	01295	SN74LS00N
A34U9	1820-1112	8	20	IC FF TTL LS D-TYPE POS-EDGE-TRIG	01295	SN74LS74N
A34U10	1820-1195	7		IC FF TTL LS D-TYPE POS-EDGE-TRIG COM	01295	SN74LS175N
A34U11	1820-1431	4	1	IC CNTX TTL LS DECD SYNCHRO	01295	SN7468162AN
A34U12	1820-0054	5	1	IC GATE TTL NAND QUAD 2-INP	01295	SN7400N
A34U13	1820-1204	9		IC GATE TTL LS NAND DUAL 4-INP	01295	SN74LS20N
A34U14	1820-1282	3	1	IC FF TTL LS J-K BAR POS-EDGE-TRIG	01295	SN7468109AN
A34U15	1820-1197	9		IC GATE TTL LS NAND QUAD 2-INP	01295	SN74LS00N
A34U17	1820-0223	0		OP AMP GP TO-99	04713	MLM301AG
A34U18	1826-0402	9		IC V RGLTR TO-3	80103	L4S-1515
A34U19	1820-0223	0		OP AMP GP TO-99	04713	MLM301AG
A34 MISCELLANEOUS PARTS						
	0340-0580	3	3	INSULATOR-XSTR RUBBER RED	28480	0340-0580
	03585-01104	5	1	HEAT SINK	28480	03585-01104
	0590-1054	7		THREADED INSERT-NUT 6-32 .065-LG SST	28480	0590-1054
	1251-0600	0		CONNECTOR-SGL CONT PIN 1,14-M-M-BSC-SZ SG	28480	1251-0600
	2360-0117	6	28	SCREW-MACH 6-32 .375-IN-LG PAN-HD-PUZI	00000	ORDER BY DESCRIPTION
	2360-0115	4		SCREW-MACH 6-32 .312-IN-LG PAN-HD-PUZI	00000	ORDER BY DESCRIPTION
A40	03585-66540	9	1	DIGITAL MOTHERBOARD	28480	03585-66540
A40J1	1251-3475	3	2	CONNECTOR 10-PIN M POST TYPE	28480	1251-3475
A40 MISCELLANEOUS PARTS						
	1200-0474	9	4	SOCKET-IC 14-CONT DIP-SLDR	28480	1200-0474
	1200-0658	1	1	SOCKET-IC 24-CONT DIP-SLDR	28480	1200-0658
	1251-2026	4	1	CONNECTOR-PC EDGE 18-CUNT/ROW 2-ROWS	28480	1251-2026
	1251-5157	2	1	CONNECTOR-PC EDGE 43-CUNT/ROW 2-ROWS	28480	1251-5157
	0360-0124	0		CONNECTOR-SGL CONT PTN .04-IN-BSC-SZ RND	72830	0360-0124
A41	03585-66541	0	1	PROCESSOR BOARD	28480	03585-66541
A41C1	0160-3847	4		CAPACITOR-FXD 4.7UF+-20% 10VDC TA	56289	150D475X0010A2
A41C2	0160-1746	5		CAPACITOR-FXD 15UF+-10% 20VDC TA	56289	150D156X9020B2
A41C3	0160-0210	6		CAPACITOR-FXD 3.3UF+-20% 15VDC TA	56289	150D335X0015A2
A41C4	0160-0229	7		CAPACITOR-FXD 33UF+-10% 10VDC TA	56289	150D336X9010B2
A41C5	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A41C6	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A41C7	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A41C8	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A41C9	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A41C10	0160-0200	0		CAPACITOR-FXD 390PF +-5% 300VDC MICA	72136	DM15F391J0300V1C8
A41C11	0160-0200	0		CAPACITOR-FXD 390PF +-5% 300VDC MICA	72136	DM15F391J0300V1C8
A41C12	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A41C13	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A41C14	0160-0229	7		CAPACITOR-FXD 33UF+-10% 10VDC TA	56289	150D336X9010B2
A41C15	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A41C16	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A41C19	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A41C20	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A41C21	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A41C22	0160-0309	4		CAPACITOR-FXD 4.7UF+-20% 10VDC TA	56289	150D475X0010A2
A41C23	0160-0207	9	1	CAPACITOR-FXD .01UF +-5% 200VDC POLYE	28480	0160-0207
A41C24	0160-2228	8	1	CAPACITOR-FXD 2700PF +-5% 300VDC MICA	28480	0160-2228
A41C25	1901-0040	1		DIODE-SWITCHING 30V 50MA 2NS D0-35	28480	1901-0040
A41C26	1902-3091	0	2	DIODE-ZNR 4.99V 5% D0-7 PDS 4W TC=-.012%	28480	1902-3091
A41C27	1901-0040	1		DIODE-SWITCHING 30V 50MA 2NS D7-35	28480	1901-0040
A41J1	1251-4822	6		CONNECTOR 3-PIN M POST TYPE	28480	1251-4822
A41J1	1258-0141	8		JUMPER REMOVABLE	28480	1258-0141
A41J2	1251-4822	6		CONNECTOR 3-PIN M POST TYPE	28480	1251-4822
A41J2	1258-0141	8		JUMPER REMOVABLE	28480	1258-0141
A41L1	9100-3458	1		CHOKE, WIDE BAND	28480	9100-3458
A41L2	9100-3458	1		CHOKE, WIDE BAND	28480	9100-3458
A41L3	9100-3458	1		CHOKE, WIDE BAND	28480	9100-3458

See introduction to this section for ordering information  
 \*Indicates factory selected value

Table 6-3. Replaceable Parts

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
A41Q1	1854-0071	7		TRANSISTOR NPN SI PD=300MA FT=200MHZ	28480	1854-0071
A41Q2	1854-0071	7		TRANSISTOR NPN SI PD=300MA FT=200MHZ	28480	1854-0071
A41R1	0683-2225	3		RESISTOR 2.2K 5% .25W FC TC=-400/+700	01121	CB2225
A41R2	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
A41R3	0683-2225	3		RESISTOR 2.2K 5% .25W FC TC=-400/+700	01121	CB2225
A41R4	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
A41R5	0683-3615	7		RESISTOR 360 5% .25W FC TC=-400/+600	01121	CB3615
A41R6	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
A41R7	0683-3615	7		RESISTOR 360 5% .25W FC TC=-400/+600	01121	CB3615
A41R8	0698-5842	7	2	RESISTOR 16 5% .25W FC TC=-400/+500	01121	CB1605
A41R9	0698-5842	7		RESISTOR 16 5% .25W FC TC=-400/+500	01121	CB1605
A41R10	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
A41R11	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
A41R12	0683-4715	0		RESISTOR 470 5% .25W FC TC=-400/+600	01121	CB4715
A41R13	0683-2225	3		RESISTOR 2.2K 5% .25W FC TC=-400/+700	01121	CB2225
A41R14	0683-2225	3		RESISTOR 2.2K 5% .25W FC TC=-400/+700	01121	CB2225
A41R16	0683-2225	3		RESISTOR 2.2K 5% .25W FC TC=-400/+700	01121	CB2225
A41R17	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
A41R18	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
A41R19	0683-1825	7		RESISTOR 1.8K 5% .25W FC TC=-400/+700	01121	CB1825
A41R20	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
A41R21	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
A41R22	0698-4489	6	1	RESISTOR 28K 1% .125W F TC=0+-100	24546	C4-1/8-T0-2802-F
A41R23	0698-4486	6		RESISTOR 24.9K 1% .125W F TC=0+-100	24546	C4-1/8-T0-2492-F
A41R24	0698-4472	3	1	RESISTOR 7.68K 1% .125W F TC=0+-100	24546	C4-1/8-T0-7681-F
A41R25	0683-2225	3		RESISTOR 2.2K 5% .25W FC TC=-400/+700	01121	CB2225
A41R26	0683-1035	1		RESISTOR 10K 5% .25W FC TC=-400/+700	01121	CB1035
A41R27	0683-3025	3		RESISTOR 3K 5% .25W FC TC=-400/+700	01121	CB3025
A41RP1	1810-0076	0	2	NETWORK-RES 9-PIN-SIP .15-PIN-SPCG	28480	1810-0076
A41RP2	1810-0076	0		NETWORK-RES 9-PIN-SIP .15-PIN-SPCG	28480	1810-0076
A41RP3	1810-0235	3	2	NETWORK-RES 16-PIN-DIP .1-PIN-SPCG	01121	316A222
A41RP4	1810-0235	3		NETWORK-RES 16-PIN-DIP .1-PIN-SPCG	01121	316A222
A41SP1	0960-0483	9	1	BUZZER	28480	0960-0483
A41TP1-B	0360-0124	3		CONNECTOR-SGL CONT PIN .04-1N-BSC-SZ RND	28480	0360-0124
A41U1	1820-1201	6	9	IC GATE TTL LS AND QUAD 2-INP	01295	SN74LS08N
A41U2	1820-1201	6		IC GATE TTL LS AND QUAD 2-INP	01295	SN74LS08N
A41U4	1820-1266	9	1	IC DRV'R MDS CLOCK DRVR TTL-T0-MDS 1-INP	04713	MMH0026CL
A41U5	1820-0681	4		IC GATE TTL S NAND QUAD 2-INP	01295	SN74S00N
A41U6	1820-0683	6		IC INV TTL S HEX 1-INP	01295	SN74S04N
A41U7	1820-1469	8	4	IC FF TTL LS J-K NEG-EDGE-TRIG CLEAR	01295	SN746S107AN
A41UA	1820-1281	2	2	IC DCOR TTL LS 2-T0-4-LINE DUAL 2-INP	01295	SN74LS139N
A41U9	1820-1201	6		IC GATE TTL LS AND QUAD 2-INP	01295	SN74LS08N
A41U10	1820-1201	6		IC GATE TTL LS AND QUAD 2-INP	01295	SN74LS08N
A41U12	1820-1201	6		IC GATE TTL LS AND QUAD 2-INP	01295	SN74LS08N
A41U14	1820-0683	6		IC INV TTL S HEX 1-INP	01295	SN74S04N
A41U15	1820-1144	6		IC GATE TTL LS NOR QUAD 2-INP	01295	SN74LS02N
A41U16	1820-1112	8		IC FF TTL LS D-TYPE POS-EDGE-TRIG	01295	SN74LS74N
A41U17	1820-1425	6		IC SCHMITT-TRIG TTL LS NAND QUAD 2-INP	01295	SN74LS132N
A41U18	1820-1198	6	9	IC GATE TTL LS NAND QUAD 2-INP	01295	SN74LS03N
A41U19	1820-1207	2	2	IC GATE TTL LS NAND 8-INP	01295	SN74LS30N
A41U20	1820-0686	9		IC GATE TTL S AND TPL 3-INP	01295	SN74S11N
A41U21	1820-1469	8		IC FF TTL LS J-K NEG-EDGE-TRIG CLEAR	01295	SN746S107AN
A41U23	1826-0205	0	1	IC TIMER TTL	18324	NE555A
A41 MISCELLANEOUS PARTS						
	0360-0679	3	6	TERMINAL-STUD SPCL-STDF PRESS-MTG	28480	0360-0679
	4040-0749	4	3	EXTR-PC BD BRN POLYC .062-BD-THKNS	28480	4040-0749
	4040-0752	9	8	EXTR-PC BU YEL POLYC .062-BD-THKNS	28480	4040-0752
	2260-0009	3	13	NUT-HEX-W/LKR 4-40-TMD .094-IN-THK	00000	ORDER BY DESCRIPTION
A42	03585-66542	1	1	RAM BOARD	28480	03585-66542
A42C1	0160-0136	3	1	CAPACITOR-FXD 250PF +-1% 300VDC MICA	28480	0160-0136
A42C2	0180-0210	6		CAPACITOR-FXD 3.3UF+-20% 15VDC TA	56289	1500335X001542
A42C3	0180-1746	6		CAPACITOR-FXD 15UF+-10% 20VDC TA	56289	1500156X902002
A42C4	0180-0354	9	3	CAPACITOR-FXD 40UF+-5% 10VDC TA	56289	1500406X501002
A42C5	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847

See introduction to this section for ordering information  
 \*Indicates factory selected value



Table 6-3. Replaceable Parts

Reference Designation	HP Part Number	C	D	Qty	Description	Mfr Code	Mfr Part Number
A42C6	0160-3847	9			CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A42C7	0160-3847	9			CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A42CA	0160-3847	9			CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A42C9	0160-3847	9			CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A42C10	0160-3847	9			CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A42C11	0160-3847	9			CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A42C12	0160-3847	9			CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A42C13	0180-0210	6			CAPACITOR-FXD 3.3UF+-20% 15VDC TA	56289	150D335X0015A2
A42C14	0180-0197	8			CAPACITOR-FXD 2.2UF+-10% 20VDC TA	56289	150D225X9020A2
A42C15	0180-0210	6			CAPACITOR-FXD 3.3UF+-20% 15VDC TA	56289	150D335X0015A2
A42C16	0180-0197	8			CAPACITOR-FXD 2.2UF+-10% 20VDC TA	56289	150D225X9020A2
A42C17	0180-0197	8			CAPACITOR-FXD 2.2UF+-10% 20VDC TA	56289	150D225X9020A2
A42C18	0180-0197	8			CAPACITOR-FXD 2.2UF+-10% 20VDC TA	56289	150D225X9020A2
A42C19	0160-3847	9			CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A42C20	0160-3847	9			CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A42C21	0180-0197	8			CAPACITOR-FXD 2.2UF+-10% 20VDC TA	56289	150D225X9020A2
A42C22	0180-0197	9			CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A42C23	0180-0210	6			CAPACITOR-FXD 3.3UF+-20% 15VDC TA	56289	150D335X0015A2
A42C24	0160-3847	9			CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A42C25	0180-0197	8			CAPACITOR-FXD 2.2UF+-10% 20VDC TA	56289	150D225X9020A2
A42C26	0180-0197	8			CAPACITOR-FXD 2.2UF+-10% 20VDC TA	56289	150D225X9020A2
A42CR1	1902-3091	0			DIODE-ZNR 4.99V 5X DO-7 PD=.4W TC=-.012X	28480	1902-3091
A42J1	1251-4047	7			CONNECTOR 3-PIN P POST TYPE	28480	1251-4047
A42J1	1258-0141	8			JUMPER REMOVABLE	28480	1258-0141
A42G1	1A53-0405	9	1		TRANSISTOR PNP 2N4209 SI TC=-16 PD=300MW	04713	2N4209
A42R1	0683-2225	3			RESISTOR 2.2K 5% .25W FC TC=-400/+700	01121	CB2225
A42R2	0683-2225	3			RESISTOR 2.2K 5% .25W FC TC=-400/+700	01121	CB2225
A42R3	0683-2225	3			RESISTOR 2.2K 5% .25W FC TC=-400/+700	01121	CB2225
A42R4	0683-1005	5			RESISTOR 10 5% .25W FC TC=-400/+500	01121	CB1005
A42R5	0683-4735	4			RESISTOR 47K 5% .25W FC TC=-400/+800	01121	CB4735
A42R6	0757-0454	3	3		RESISTOR 33.2K 1% .125W F TC=0/+100	24546	C4-1/8-10-3322-F
A42R7	0683-5115	6			RESISTOR 510 5% .25W FC TC=-400/+600	01121	CB5115
A42TF1-3	0360-0124	3			CONNECTOR-SGL CONT PIN .04-IN-35C-5Z RND	28480	0360-0124
A42U1	1818-0156	3	16		IC NMOS 4K RAM DYN 470-NS 3-S	28480	1818-0156
A42U2	1818-0156	3			IC NMOS 4K RAM DYN 470-NS 3-S	28480	1818-0156
A42U3	1818-0156	3			IC NMOS 4K RAM DYN 470-NS 3-S	28480	1818-0156
A42U4	1818-0156	3			IC NMOS 4K RAM DYN 470-NS 3-S	28480	1818-0156
A42U5	1818-0156	3			IC NMOS 4K RAM DYN 470-NS 3-S	28480	1818-0156
A42U6	1818-0156	3			IC NMOS 4K RAM DYN 470-NS 3-S	28480	1818-0156
A42U7	1820-0704	2	1		IC MV TTL MONOSTBL RETRIG	01295	SN74122N
A42U8	1820-1469	6			IC FF TTL LS JK NEG-EDGE-TRIG CLEAR	01295	SN7465107AN
A42U9	1820-1469	8			IC FF TTL LS JK NEG-EDGE-TRIG CLEAR	01295	SN7465107AN
A42U10	1818-0156	3			IC NMOS 4K RAM DYN 470-NS 3-S	28480	1818-0156
A42U11	1818-0156	3			IC NMOS 4K RAM DYN 470-NS 3-S	28480	1818-0156
A42U12	1818-0156	3			IC NMOS 4K RAM DYN 470-NS 3-S	28480	1818-0156
A42U13	1818-0156	3			IC NMOS 4K RAM DYN 470-NS 3-S	28480	1818-0156
A42U14	1818-0156	3			IC NMOS 4K RAM DYN 470-NS 3-S	28480	1818-0156
A42U15	1820-1673	6	1		IC DRVR TTL DUAL	01295	SN75322N
A42U16	1820-1197	9			IC GATE TTL LS NAND QUAD 2-INP	01295	SN74LS00N
A42U17	1820-1144	6			IC GATE TTL LS NOR QUAD 2-INP	01295	SN74LS02N
A42U18	1820-0762	2	2		IC MUXR/DATA-SEL TTL 2-TO-1-LINE QUAD	01295	SN74LS07N
A42U19	1820-1478	9	2		IC CNTL TTL LS BIN ASYNCHRO	01295	SN74LS93N
A42U20	1820-1322	2			IC GATE TTL S NOR QUAD 2-INP	01295	SN74S02N
A42U21	1818-0156	3			IC NMOS 4K RAM DYN 470-NS 3-S	28480	1818-0156
A42U22	1818-0156	3			IC NMOS 4K RAM DYN 470-NS 3-S	28480	1818-0156
A42U23	1818-0156	3			IC NMOS 4K RAM DYN 470-NS 3-S	28480	1818-0156
A42U24	1818-0156	3			IC NMOS 4K RAM DYN 470-NS 3-S	28480	1818-0156
A42U25	1818-0156	3			IC NMOS 4K RAM DYN 470-NS 3-S	28480	1818-0156
A42U26	1820-0762	2			IC MUXR/DATA-SEL TTL 2-TO-1-LINE QUAD	01295	SN74157N
A42U27	1820-1478	9			IC CNTL TTL LS BIN ASYNCHRO	01295	SN74LS93N
A42U28	1820-1198	0			IC GATE TTL LS NAND QUAD 2-INP	01295	SN74LS03N
A42U29	1820-1255	0	3		IC INV TTL HEX 1-INP	01295	SN74368N
A42U30	1820-0788	2	1		IC FF TTL D-TYPE POS-EDGE-TRIG CLEAR HEX	01295	SN74174N
A42U31	1820-1255	0			IC INV TTL HEX 1-INP	01295	SN74368N
A42U32	1820-1255	0			IC INV TTL HEX 1-INP	01295	SN74368N
A42U33	1820-1411	0	2		IC LCH TTL LS D-TYPE 4-BIT	01295	SN74LS75N
A42U34	1820-1411	0			IC LCH TTL LS D-TYPE 4-BIT	01295	SN74LS75N
A42U35	1820-0068	1	1		IC GATE TTL NAND TPL 3-INP	01295	SN7410N
A42U36	1820-1322	2			IC GATE TTL S NOR QUAD 2-INP	01295	SN74S02N
					A 42 MISCELLANEOUS PARTS		
	4040-0750	7	2		EXTR-PC RED POLYC .067-5D-TINKS	28480	4040-0750
	4040-0752	9			EXTR-PC BD YEL POLYC .067-5D-TINKS	28480	4040-0750

See introduction to this section for ordering information  
 \*Indicates factory selected value

Table 6-3. Replaceable Parts

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
A43	03585-66543	2	1	ROM BOARD	28480	03585-66543
A43C1	0180-0229	7		CAPACITOR-FXD 33UF+/-10% 10VDC TA	56289	150D336X901082
A43C2	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A43C3	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A43C4	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A43C5	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A43C6	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A43C7	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A43C8	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A43C9	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A43C10	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A43C11	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A43C12	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A43C13	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A43L1	9100-3458	1		CHOKO, WIDE BAND	28480	9100-3458
A43SXU16	1200-0473	8		SOCKET-IC 16-COMT DIP DIP-SLDR	28480	1200-0473
A43SXU17	1200-0473	8		SOCKET-IC 16-COMT DIP DIP-SLDR	28480	1200-0473
A43TP1-5	0360-0124	3		CONNECTOR-SGL CONT PIN .94-IN-BSC-SZ RND	28480	0360-0124
A43U1	1818-0644	4	1	IC 32K BIPOL ROM	55576	SYP2332 MASKED
A43U2	1818-0645	5	1	IC 32K BIPOL ROM	55576	SYP2332 MASKED
A43U3	1818-0646	6	1	IC 32K BIPOL ROM	55576	SYP2332 MASKED
A43U4	1818-0647	7	1	IC 32K BIPOL ROM	55576	SYP2332 MASKED
A43U5	1818-0648	8	1	IC 32K BIPOL ROM	28480	1818-0648
A43U6	1818-0649	9	1	IC 32K BIPOL ROM	28480	1818-0649
A43U7	1818-0650	2	1	IC 32K BIPOL ROM	28480	1818-0650
A43U8	1818-0651	3	1	IC 32K BIPOL ROM	28480	1818-0651
A43U9	1820-1281	2		IC DCDR TTL LS 2-TO-4-LINE DUAL 2-INP	01295	SN74LS139N
A43U10	1820-1445	0	4	IC LCH TTL LS 4-BIT	01295	SN74LS375N
A43U11	1820-1445	0		IC LCH TTL LS 4-BIT	01295	SN74LS375N
A43U12	1820-1445	0		IC LCH TTL LS 4-BIT	01295	SN74LS375N
A43U13	1820-1445	0		IC LCH TTL LS 4-BIT	01295	SN74LS375N
A43U14	1820-1873	8	4	IC 8FR TTL LS INV OCTL 2-INP	27014	DM81LS98N
A43U15	1820-1873	8		IC 8FR TTL LS INV OCTL 2-INP	27014	DM81LS98N
A43U16	1810-0307	0	4	NETWORK-CNCDT MODULE DIP; 16 PINS; 0.100	28480	1810-0307
A43U17	1810-0307	0		NETWORK-CNCDT MODULE DIP; 16 PINS; 0.100	28480	1810-0307
A43 MISCELLANEOUS PARTS						
	4040-0751	8	3	EXTR-PC BD ORN POLYC .062-HU-TMKNS	28480	4040-0751
	4040-0752	9		EXTR-PC BD YEL POLYC .062-RD-TMKNS	28480	4040-0752
				INSULATED JUMPER WIRE		
A44	03585-66544	3	1	HP-IB INTERFACE	28480	03585-66544
A44C1	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A44C2	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A44C3	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A44C4	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A44C5	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A44C6	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A44C7	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A44C8	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A44C9	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A44C10	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A44C11	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A44C12	0180-0354	9		CAPACITOR-FXD 40UF+/-5% 10VDC TA	56289	150D406X501082
A44C13	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A44C14	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A44C15	0180-0354	9		CAPACITOR-FXD 40UF+/-5% 10VDC TA	56289	150D406X501082
A44CR1	1901-0040	1		DIODE-SWITCHING 30V 50MA 2NS DO-35	28480	1901-0040
A44CR2	1901-0486	6		LED-VISIBLE LUM-INT=1MCD IF=20MA-MAX	28480	5082-4884
A44CR3	1902-3048	7	2	DIODE-ZNR 3.48V 5% DO-7 PD=.4W TC=-.058%	28480	1902-3048
A44CR4	1902-3048	7		DIODE-ZNR 3.48V 5% DO-7 PD=.4W TC=-.058%	28480	1902-3048
A44CR5	1902-3018	1	1	DIODE-ZNR 2.74V 5% DO-7 PD=.4W TC=-.071%	28480	1902-3018
A44CR6	1901-0040	1		DIODE-SWITCHING 30V 50MA 2NS DO-35	28480	1901-0040
A44R1	1810-0329	6	4	NETWORK-RES 10-PIN-SIP .1-PIN-SPCG	01121	2104752
A44R2	1810-0329	6		NETWORK-RES 10-PIN-SIP .1-PIN-SPCG	01121	2104752
A44R3	1810-0329	6		NETWORK-RES 10-PIN-SIP .1-PIN-SPCG	01121	2104752
A44R4	1810-0329	6		NETWORK-RES 10-PIN-SIP .1-PIN-SPCG	01121	2104752
A44R5	0643-1035	1		RESISTOR 10K 5% .25W FC TC=-400/+700	01121	CB1035
A44R6	0643-1035	1		RESISTOR 10K 5% .25W FC TC=-400/+700	01121	CB1035
A44R7	0643-3015	1		RESISTOR 300 5% .25W FC TC=-400/+600	01121	CB3015
A44R8	0643-3511	3	1	RESISTOR 665 1% .125W F TC=0/+100	28480	C4-1/8-T0-665R-F
A44R9	2100-3273	1		RESISTOR-TRM 2K 10% C SIDE-ADJ 1-TRN	28480	2100-3273
A44R10	0643-1035	1		RESISTOR 10K 5% .25W FC TC=-400/+700	01121	CB1035

See introduction to this section for ordering information  
 \*Indicates factory selected value

Table 6-3. Replaceable Parts

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
A44R11	0683-7505	2		RESISTOR 75 5% .25W FC TC=-400/+500	01121	CB7505
A44R12	0683-7505	2		RESISTOR 75 5% .25W FC TC=-400/+500	01121	CB7505
A44R13	0698-3258	5	2	RESISTOR 5.36k 1% .125W F TC=0/+100	24546	C4-1/8-T0-5361-F
A44R14	1810-0326	3	1	NETWORK-RD 10 PIN SIP; 0.1 IN SPACING	28480	1810-0326
A44R15	1810-0307	0		NETWORK-CNDCT MODULE DIP; 16 PINS; 0.100	28480	1810-0307
A44R16	0683-1325	2		RESISTOR 1.3k 5% .25W FC TC=-400/+700	01121	CB1325
A44R17	0683-2715	6		RESISTOR 270 5% .25W FC TC=-400/+600	01121	CB2715
A44S1	3101-2215	2	2	SWITCH-RKR DIP-RKR-ASSY 7-1A .05A 30VDC	28480	3101-2215
A44SR15	1200-0473	8		SOCKET-IC 16-CONT DIP DIP-SLDR	28480	1200-0473
A44SXU16	1200-0659	2	2	SOCKET-IC 40-CONT DIP-SLDR	28480	1200-0659
A44TPI-5	0360-0124	3		CONNECTOR-SGL CONT PIN .04-IN-BSC-S2 RND	28480	0360-0124
A44U1	1A20-1112	6		IC FF TTL LS D-TYPE POS-EDGE-TRIG	01295	SN74LS74N
A44U2	1A20-1425	6		IC SCHMITT-TRIG TTL LS NAND QUAD 2-INP	01295	SN74LS132N
A44U3	1A20-1199	1	8	IC INV TTL LS HEX 1-INP	01295	SN74LS04N
A44U4	1A20-1198	0		IC GATE TTL LS NAND QUAD 2-INP	01295	SN74LS03N
A44U5	1A20-1112	8		IC FF TTL LS D-TYPE POS-EDGE-TRIG	01295	SN74LS74N
A44U6	1A20-1491	6	9	IC BFR TTL LS NON-INV HEX 1-INP	01295	SN7468367AN
A44U7	1A16-1200	6	1	IC TTL 8192-BIT ROM AO-NS 3-8	18324	N828181F PROGRAMMED
A44U9	1A20-1730	6	11	IC FF TTL LS D-TYPE POS-EDGE-TRIG COM	01295	SN74LS273N
A44U10	1A20-1439	2	2	IC MUXR/DATA-SEL TTL LS 2-TO-1-LINE	01295	SN74LS258N
A44U11	1A20-1439	2		IC MUXR/DATA-SEL TTL LS 2-TO-1-LINE	01295	SN74LS258N
A44U12	1A20-1195	7		IC FF TTL LS D-TYPE POS-EDGE-TRIG COM	01295	SN74LS175N
A44U13	1A20-1201	6		IC GATE TTL LS AND QUAD 2-INP	01295	SN74LS08N
A44U14	1A20-1112	8		IC FF TTL LS D-TYPE POS-EDGE-TRIG	01295	SN74LS74N
A44U15	1A20-1198	0		IC GATE TTL LS NAND QUAD 2-INP	01295	SN74LS03N
A44U16	1A20-1691	8	1	IC MICROPROC MOS	28480	1A20-1691
A44U17	1A26-0138	8		COMPARATOR GP QUAD 14-DIP-P	04713	MLM339P
A44U18	1A26-0138	8		COMPARATOR GP QUAD 14-DIP-P	04713	MLM339P
A44U19	1A26-0138	8		COMPARATOR GP QUAD 14-DIP-P	04713	MLM339P
A44U20	1A26-0138	8		COMPARATOR GP QUAD 14-DIP-P	04713	MLM339P
A44U21	1A20-1144	6		IC GATE TTL LS NOR QUAD 2-INP	01295	SN74LS02N
A44U22	1A20-1144	6		IC GATE TTL LS NOR QUAD 2-INP	01295	SN74LS02N
A44U23	1A20-1438	1	1	IC MUXR/DATA-SEL TTL LS 2-TO-1-LINE QUAD	01295	SN74LS257AN
A44U24	1A20-1216	3		IC OADR TTL LS 3-TO-8-LINE 3-INP	01295	SN74LS138N
A44U25	1A26-0138	8		COMPARATOR GP QUAD 14-DIP-P	04713	MLM339P
A44U26	1A26-0138	8		COMPARATOR GP QUAD 14-DIP-P	04713	MLM339P
A44U27	1A26-0138	8		COMPARATOR GP QUAD 14-DIP-P	04713	MLM339P
A44U28	1A26-0138	8		COMPARATOR GP QUAD 14-DIP-P	04713	MLM339P
A44U29	1A20-1873	8		IC RFR TTL LS INV OCTL 2-INP	27014	DM81LS98N
A44U30	1A20-1730	6		IC FF TTL LS D-TYPE POS-EDGE-TRIG COM	01295	SN74LS273N
A44U31	1A20-1199	1		IC INV TTL LS HEX 1-INP	01295	SN74LS04N
A44U32	1A20-1689	4	4	IC UART TTL QUAD	04713	MC3446P
A44U33	1A20-1689	4		IC UART TTL QUAD	04713	MC3446P
A44U34	1A20-1689	4		IC UART TTL QUAD	04713	MC3446P
A44U35	1A20-1689	4		IC UART TTL QUAD	04713	MC3446P
A44U36	1A20-1730	6		IC FF TTL LS D-TYPE POS-EDGE-TRIG COM	01295	SN74LS273N
A44U37	1A20-1873	8		IC BFR TTL LS INV OCTL 2-INP	27014	DM81LS98N
A44U38	1A20-1198	0		IC GATE TTL LS NAND QUAD 2-INP	01295	SN74LS03N
A44U39	1A20-1195	7		IC FF TTL LS D-TYPE POS-EDGE-TRIG COM	01295	SN74LS175N
A44U40	1A20-1206	1	2	IC GATE TTL LS NOR TPL 3-INP	01295	SN74LS27N
A44U41	1A20-1112	8		IC FF TTL LS D-TYPE POS-EDGE-TRIG	01295	SN74LS74N
A44 MISCELLANEOUS PARTS						
	4040-0752	9		EXTR-PC HD YEL POLYC .062-BD-TMKNS	28480	4040-0752
A45	03585-66545	4	1	I/O BOARD	28480	03585-66545
A45C1	0160-3622	7		CAPACITOR-FXD 33UF+/-10% 10VDC TA	26654	150D336X9010B2
A45C2	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A45C3	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A45C4	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A45C5	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A45C6	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A45C7	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A45C8	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A45C9	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A45CR1	1990-0486	6		LED-VISIBLE LJM-INT=1MCD IF=20MA-MAX	28480	5082-6684
A45RS	0683-4715	0		RESISTOR 470 5% .25W FC TC=-400/+600	01121	CB4715
A45RP1	1A10-0231	9	3	NETWORK-RES 8-PIN-SIP .1-PIN-SPCG	01121	208A222
A45RP2	1A10-0231	9		NETWORK-RES 8-PIN-SIP .1-PIN-SPCG	01121	208A222
A45RP3	1A10-0231	9		NETWORK-RES 8-PIN-SIP .1-PIN-SPCG	01121	208A222
A45RP4	1A10-0206	8	1	NETWORK-RES 8-PIN-SIP .1-PIN-SPCG	01121	208A103

See introduction to this section for ordering information  
 \*Indicates factory selected value

Table 6-3. Replaceable Parts

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
A45S1	3101-2215	2		SWITCH-RKR DIP-RKR-ASSY 7-1A .05A 30VDC	28480	3101-2215
A45TP1-3	0360-0124	3		CONNECTOR-SGL CONT PIN .04-IN-BSC-SZ RND	28480	0360-0124
A45U1	1A20-1112	8		IC FF TTL LS D-TYPE POS-EDGE-TRIG	01295	SN74LS74N
A45U2	1A20-1112	8		IC FF TTL LS D-TYPE POS-EDGE-TRIG	01295	SN74LS74N
A45U3	1A20-1112	8		IC FF TTL LS D-TYPE POS-EDGE-TRIG	01295	SN74LS74N
A45U4	1A20-1112	8		IC FF TTL LS D-TYPE POS-EDGE-TRIG	01295	SN74LS74N
A45U5	1A20-1112	8		IC FF TTL LS D-TYPE POS-EDGE-TRIG	01295	SN74LS74N
A45U6	1A20-1198	0		IC GATE TTL LS NAND QUAD 2-INP	01295	SN74LS03N
A45U7	1A20-1198	0		IC GATE TTL LS NAND QUAD 2-INP	01295	SN74LS03N
A45U8	1A20-1197	9		IC GATE TTL LS NAND QUAD 2-INP	01295	SN74LS00N
A45U9	1A20-1197	9		IC GATE TTL LS NAND QUAD 2-INP	01295	SN74LS00N
A45U10	1A20-1208	3	1	IC GATE TTL LS OR QUAD 2-INP	01295	SN74LS32N
A45U11	1A20-1196	8		IC FF TTL LS D-TYPE POS-EDGE-TRIG COM	01295	SN74LS174N
A45U12	1A20-1196	8		IC FF TTL LS D-TYPE POS-EDGE-TRIG COM	01295	SN74LS174N
A45U13	1A20-1196	8		IC FF TTL LS D-TYPE POS-EDGE-TRIG COM	01295	SN74LS174N
A45U14	1A20-1196	8		IC FF TTL LS D-TYPE POS-EDGE-TRIG COM	01295	SN74LS174N
A45U15	1A20-1730	6		IC FF TTL LS D-TYPE POS-EDGE-TRIG COM	01295	SN74LS273N
A45U16	1A20-1730	6		IC FF TTL LS D-TYPE POS-EDGE-TRIG COM	01295	SN74LS273N
A45U17	1A20-1730	6		IC FF TTL LS D-TYPE POS-EDGE-TRIG COM	01295	SN74LS273N
A45U18	1A20-1216	3		IC DCOR TTL LS 3-TO-8-LINE 3-INP	01295	SN74LS138N
A45U19	1A20-1216	3		IC DCOR TTL LS 3-TO-8-LINE 3-INP	01295	SN74LS138N
A45U20	1A20-1245	8	3	IC DCOR TTL LS 2-TO-4-LINE DUAL 2-INP	01295	SN74LS155N
A45U21	1A20-1245	8		IC DCOR TTL LS 2-TO-4-LINE DUAL 2-INP	01295	SN74LS155N
A45U22	1A20-1245	8		IC DCOR TTL LS 2-TO-4-LINE DUAL 2-INP	01295	SN74LS155N
A45U23	1A20-1414	3	2	IC GATE TTL LS NAND TPL 3-INP	01295	SN74LS12N
A45U24	1A20-1144	6		IC GATE TTL LS NOR QUAD 2-INP	01295	SN74LS02N
A45U25	1A20-1144	6		IC GATE TTL LS NOR QUAD 2-INP	01295	SN74LS02N
A45U26	1A20-1144	6		IC GATE TTL LS NOR QUAD 2-INP	01295	SN74LS02N
A45U27	1A20-1491	6		IC BFR TTL LS NON-INV HEX 1-INP	01295	SN74683674N
A45U28	1A20-1492	7	2	IC BFR TTL LS INV HEX 1-INP	01295	SN74683684N
A45U29	1A20-1491	6		IC BFR TTL LS NON-INV HEX 1-INP	01295	SN74683674N
A45U30	1A20-1491	6		IC BFR TTL LS NON-INV HEX 1-INP	01295	SN74683674N
A45U31	1A20-1491	6		IC BFR TTL LS NON-INV HEX 1-INP	01295	SN74683674N
A45U32	1A20-1492	7		IC BFR TTL LS INV HEX 1-INP	01295	SN74683684N
A45U33	1A20-0174	0	2	IC INV TTL HEX	01295	SN7404N
A45U34	1A20-0174	0		IC INV TTL HEX	01295	SN7404N
A45U35	1A20-1199	1		IC INV TTL LS HEX 1-INP	01295	SN74LS04N
A45U36	1A20-1199	1		IC INV TTL LS HEX 1-INP	01295	SN74LS04N
A45 MISCELLANEOUS PARTS						
	4040-0752	9		EXTR-PC BD YEL POLYC .062-80-THKNS	28480	4040-0752
	4040-0753	0	2	EXTR-PC BD GRN POLYC .062-80-THKNS	28480	4040-0753
A46	03585-66546	5	1	COUNTER	28480	03585-66546
A46C1	0160-3822	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100M104Z
A46C2	0160-3822	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100M104Z
A46C3	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A46C4	0160-1746	5		CAPACITOR-FXD 15UF +-10% 20VDC TA	56289	1500156X9020B2
A46C6	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A46C7	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A46C8	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A46C9	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A46C10	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A46C11	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A46J1	1250-1368	7		CONNECTOR-RF SMS M PC 50-OHM	28480	1250-1368
A46L1	9100-3551	5		COIL-MLD 1UH 5% Q=50 .155DX .375LG-NOM	28480	9100-3551
A46M1	1854-0215	1		TRANSISTOR NPN SI PD=350MW FT=300MHZ	04713	2N3904
A46R1	0683-1025	9		RESISTOR 1K 5% .25W FC TC=+400/+600	01121	CB1025
A46R2	0683-4735	4		RESISTOR 47K 5% .25W FC TC=+400/+800	01121	CB4735
A46R3	0683-1025	9		RESISTOR 1K 5% .25W FC TC=+400/+600	01121	CB1025
A46R4	0683-1025	9		RESISTOR 1K 5% .25W FC TC=+400/+600	01121	CB1025
A46R7	0683-1025	9		RESISTOR 1K 5% .25W FC TC=+400/+600	01121	CB1025
A46R12	0683-2225	3		RESISTOR 2.2K 5% .25W FC TC=+400/+700	01121	CB2225
A46R13	0683-2225	3		RESISTOR 2.2K 5% .25W FC TC=+400/+700	01121	CB2225
A46T1	9100-3287	4	1	TRANSFORMER	28480	9100-3287
A46TP1-3	0360-0124	3		CONNECTOR-SGL CONT PIN .04-IN-BSC-SZ RND	28480	0360-0124
A46U2	1A20-1425	6		IC SCHMITT-TRIG TTL LS NAND QUAD 2-INP	01295	SN74LS132N
A46U3	1A20-1201	8		IC GATE TTL LS AND QUAD 2-INP	01295	SN74LS00N
A46U4	1A20-1112	8		IC FF TTL LS D-TYPE POS-EDGE-TRIG	01295	SN74LS74N
A46U5	1A20-1144	6		IC GATE TTL LS NOR QUAD 2-INP	01295	SN74LS02N
A46U6	1A20-1989	7	3	IC CNTP TTL LS 8IN DUAL 4-BIT	07263	74LS393PC

See introduction to this section for ordering information.  
\*Indicates factory selected value

Table 6-3. Replaceable Parts

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
A46U7	1820-1989	7	2	IC CNTR TTL LS 8IN DUAL 4-BIT	07263	74LS393PC
A46U8	1820-1989	7		IC CNTR TTL LS 8IN DUAL 4-BIT	07263	74LS393PC
A46U12	1820-1212	9		IC FF TTL LS J-K NEG-EDGE-TRIG	01295	SN74LS112N
A46U13	1820-1112	8		IC FF TTL LS D-TYPE POS-EDGE-TRIG	01295	SN74LS74N
A46U14	1820-1430	3	4	IC CNTR TTL LS 8IN SYNCHRO POS-EDGE-TRIG	01295	SN746S161AN
A46U15	1820-1430	3		IC CNTR TTL LS 8IN SYNCHRO POS-EDGE-TRIG	01295	SN746S161AN
A46U16	1820-1430	3		IC CNTR TTL LS 8IN SYNCHRO POS-EDGE-TRIG	01295	SN746S161AN
A46U17	1820-1430	3		IC CNTR TTL LS 8IN SYNCHRO POS-EDGE-TRIG	01295	SN746S161AN
A46U18	1820-1414	3		IC GATE TTL LS NAND TPL 3-INP	01295	SN74LS12N
A46U19	1820-1206	1		IC GATE TTL LS NOR TPL 3-INP	01295	SN74LS27N
A46U20	1820-1491	6		IC HFR TTL LS NON-INV HEX 1-INP	01295	SN746S367AN
A46U21	1820-1491	6		IC HFR TTL LS NON-INV HEX 1-INP	01295	SN746S367AN
A46U22	1820-1491	6		IC HFR TTL LS NON-INV HEX 1-INP	01295	SN746S367AN
A46 MISCELLANEOUS PARTS						
	4040-0752	9	5	EXTR-PC BD YEL POLYC .062-80-TMKNS	28480	4040-0752
	4040-0754	1		EXTR-PC BD BLU POLYC .062-80-TMKNS	28480	4040-0754
A47	03585-66547	6	1	ASSEMBLY, KEYBOARD	28480	03585-66547
A47C1	0160-0309	4		CAPACITOR-FXD .47UF+-20% 10VDC TA	56289	1500475X0010A2
A47C2	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A47C3	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A47C4	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A47DS1	1990-0486	6	28	LED-VISIBLE LUM-INT=1MCD IF=20MA-MAX	28480	5082-4684
A47DS2	1990-0597	0		LED-VISIBLE LUM-INT=1MCD IF=60MA-MAX	28480	5082-4150
A47DS3	1990-0597	0		LED-VISIBLE LUM-INT=1MCD IF=60MA-MAX	28480	5082-4150
A47DS4	1990-0597	0		LED-VISIBLE LUM-INT=1MCD IF=60MA-MAX	28480	5082-4150
A47DS5	1990-0597	0		LED-VISIBLE LUM-INT=1MCD IF=60MA-MAX	28480	5082-4150
A47DS6	1990-0597	0	6	LED-VISIBLE LUM-INT=1MCD IF=60MA-MAX	28480	5082-4150
A47DS7	1990-0487	7		LED-VISIBLE LUM-INT=1MCD IF=20MA-MAX	28480	5082-4584
A47DS8	1990-0487	7		LED-VISIBLE LUM-INT=1MCD IF=20MA-MAX	28480	5082-4584
A47DS9	1990-0597	0		LED-VISIBLE LUM-INT=1MCD IF=60MA-MAX	28480	5082-4150
A47DS10	1990-0597	0		LED-VISIBLE LUM-INT=1MCD IF=60MA-MAX	28480	5082-4150
A47DS11	1990-0597	0		LED-VISIBLE LUM-INT=1MCD IF=60MA-MAX	28480	5082-4150
A47DS12	1990-0597	0		LED-VISIBLE LUM-INT=1MCD IF=60MA-MAX	28480	5082-4150
A47DS13	1990-0597	0		LED-VISIBLE LUM-INT=1MCD IF=60MA-MAX	28480	5082-4150
A47DS14	1990-0597	0		LED-VISIBLE LUM-INT=1MCD IF=60MA-MAX	28480	5082-4150
A47DS15	1990-0597	0		LED-VISIBLE LUM-INT=1MCD IF=60MA-MAX	28480	5082-4150
A47DS16	1990-0597	0		LED-VISIBLE LUM-INT=1MCD IF=60MA-MAX	28480	5082-4150
A47DS17	1990-0597	0		LED-VISIBLE LUM-INT=1MCD IF=60MA-MAX	28480	5082-4150
A47DS18	1990-0597	0		LED-VISIBLE LUM-INT=1MCD IF=60MA-MAX	28480	5082-4150
A47DS19	1990-0597	0		LED-VISIBLE LUM-INT=1MCD IF=60MA-MAX	28480	5082-4150
A47DS20	1990-0597	0		LED-VISIBLE LUM-INT=1MCD IF=60MA-MAX	28480	5082-4150
A47DS21	1990-0597	0		LED-VISIBLE LUM-INT=1MCD IF=60MA-MAX	28480	5082-4150
A47DS22	1990-0597	0		LED-VISIBLE LUM-INT=1MCD IF=60MA-MAX	28480	5082-4150
A47DS23	1990-0597	0		LED-VISIBLE LUM-INT=1MCD IF=60MA-MAX	28480	5082-4150
A47DS24	1990-0597	0		LED-VISIBLE LUM-INT=1MCD IF=60MA-MAX	28480	5082-4150
A47DS25	1990-0597	0		LED-VISIBLE LUM-INT=1MCD IF=60MA-MAX	28480	5082-4150
A47DS26	1990-0597	0		LED-VISIBLE LUM-INT=1MCD IF=60MA-MAX	28480	5082-4150
A47DS27	1990-0597	0		LED-VISIBLE LUM-INT=1MCD IF=60MA-MAX	28480	5082-4150
A47DS28	1990-0487	7		LED-VISIBLE LUM-INT=1MCD IF=20MA-MAX	28480	5082-4584
A47DS29	1990-0487	7		LED-VISIBLE LUM-INT=1MCD IF=20MA-MAX	28480	5082-4584
A47DS30	1990-0487	7		LED-VISIBLE LUM-INT=1MCD IF=20MA-MAX	28480	5082-4584
A47DS31	1990-0487	7		LED-VISIBLE LUM-INT=1MCD IF=20MA-MAX	28480	5082-4584
A47DS32	1990-0487	7		LED-VISIBLE LUM-INT=1MCD IF=20MA-MAX	28480	5082-4584
A47DS33	1990-0485	5	1	LED-VISIBLE LUM-INT=800UCD IF=30MA-MAX	28480	5082-4984
A47DS34	1990-0486	6		LED-VISIBLE LUM-INT=1MCD IF=20MA-MAX	28480	5082-4684
A47J1	1251-4822	6		CONNECTOR 3-PIN M POST TYPE	28480	1251-4822
A47J1	1251-0141	8		JUMPER REMOVABLE	28480	1251-0141
A47J2	1251-4822	6		CONNECTOR 3-PIN M POST TYPE	28480	1251-4822
A47J2	1251-0141	8		JUMPER REMOVABLE	28480	1251-0141
A47J3	1251-5041	3	1	CONNECTOR 5-PIN M POST TYPE	22526	65500-105
A47J4	1251-4833	9	1	CONNECTOR 30-PIN M POST TYPE	28480	1251-4833
A47FP1	1810-0045	3	5	NETWORK-RES 8-PIN-SIP .125-PIN-SPCG	28480	1810-0045
A47FP2	1810-0045	3		NETWORK-RES 8-PIN-SIP .125-PIN-SPCG	28480	1810-0045
A47FP3	1810-0045	3		NETWORK-RES 8-PIN-SIP .125-PIN-SPCG	28480	1810-0045
A47FP4	1810-0045	3		NETWORK-RES 8-PIN-SIP .125-PIN-SPCG	28480	1810-0045
A47FP5	1810-0045	3		NETWORK-RES 8-PIN-SIP .125-PIN-SPCG	28480	1810-0045
A47S10	A47S70	5060-9436	7	70	28480	5060-9436
A47U1	1820-1461	0	4	IC FF TTL D-TYPE POS-EDGE-TRIG CLEAR	01295	SN74273
A47U2	1820-1461	0		IC FF TTL D-TYPE POS-EDGE-TRIG CLEAR	01295	SN74273
A47U3	1820-1461	0		IC FF TTL D-TYPE POS-EDGE-TRIG CLEAR	01295	SN74273
A47U4	1820-1461	0		IC FF TTL D-TYPE POS-EDGE-TRIG CLEAR	01295	SN74273
A47U5	1820-1433	6	4	IC SHF-RTDR TTL LS R=S SERIAL-IN PRL-OUT	01295	SN74LS164N

See introduction to this section for ordering information  
 \*Indicates factory selected value

Table 6-3. Replaceable Parts

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number	
A47U6	1A20-1433	6	8	IC SHF-RGTR TTL LS R-S SERIAL-IN PRL-OUT	01295	SN74LS164N	
A47U7	1A20-1433	6		IC SHF-RGTR TTL LS R-S SERIAL-IN PRL-OUT	01295	SN74LS164N	
A47U8	1A20-1433	6		IC SHF-RGTR TTL LS R-S SERIAL-IN PRL-OUT	01295	SN74LS164N	
A47U9	1A20-1112	8		IC FF TTL LS D-TYPE POS-EDGE-TRIG	01295	SN74LS74N	
A47U10	1A20-1194	6		IC CNTR TTL LS BIN UP/DOWN SYNCHRD	01295	SN74LS193N	
A47U11	1A20-1246	9	2	IC GATE TTL LS AND QUAD 2-INP	01295	SN74LS09N	
A47U12	1A20-1246	9		IC GATE TTL LS AND QUAD 2-INP	01295	SN74LS09N	
A47 MISCELLANEOUS PARTS							
	05328-40003	8	1	STAND, L.E.D.	28480	05328-40003	
A50	03585-66550	1	1	TRACK GENERATOR MOTHERBOARD	28480	03585-66550	
A50C1	0160-3558	9		CAPACITOR-FXD .1UF +-20% 50VDC CER	28480	0160-3558	
A50C2	0160-3558	9		CAPACITOR-FXD .1UF +-20% 50VDC CER	28480	0160-3558	
A50C3	0160-3558	9		CAPACITOR-FXD .1UF +-20% 50VDC CER	28480	0160-3558	
A50C4	0160-3558	9		CAPACITOR-FXD .1UF +-20% 50VDC CER	28480	0160-3558	
A50C5	0160-3558	9		CAPACITOR-FXD .1UF +-20% 50VDC CER	28480	0160-3558	
A50C6	0160-3558	9		CAPACITOR-FXD .1UF +-20% 50VDC CER	28480	0160-3558	
A50C7	0160-3558	9		CAPACITOR-FXD .1UF +-20% 50VDC CER	28480	0160-3558	
A50C8	0160-3558	9		CAPACITOR-FXD .1UF +-20% 50VDC CER	28480	0160-3558	
A50C9	0160-3558	9		CAPACITOR-FXD .1UF +-20% 50VDC CER	28480	0160-3558	
A50C10	0160-3558	9		CAPACITOR-FXD .1UF +-20% 50VDC CER	28480	0160-3558	
A50C11	0160-3558	9		CAPACITOR-FXD .1UF +-20% 50VDC CER	28480	0160-3558	
A50C12	0160-3558	9		CAPACITOR-FXD .1UF +-20% 50VDC CER	28480	0160-3558	
A50C13	0160-3558	9		CAPACITOR-FXD .1UF +-20% 50VDC CER	28480	0160-3558	
A50C14	0160-3558	9		CAPACITOR-FXD .1UF +-20% 50VDC CER	28480	0160-3558	
A50J1	1250-1593	0		ADAPTER-COAX STR M-SMB M-SMB	28480	1250-1593	
A50J2	1250-1593	0		ADAPTER-COAX STR M-SMB M-SMB	28480	1250-1593	
A50 MISCELLANEOUS PARTS							
	03585-21213	9	2	NUT, CONNECTOR GUIDE	28480	03585-21213	
	1200-0474	9	3	SOCKET-IC 14-CONT DIP-SLDR	28480	1200-0474	
	1251-2035	9		CONNECTOR-PC EDGE 15-CONT/ROW 2-ROWS	28480	1251-2035	
	1251-3276	2		CONNECTOR 6-PIN M POST TYPE	28480	1251-3276	
	1251-0600	0		CONNECTOR-SGL CONT PIN 1,14-MM-BSC-SZ SG	28480	1251-0600	
A51	03585-66551	2	1	TRACKING GENERATOR D/A	28480	03585-66551	
A51C1	0140-0190	7		CAPACITOR-FXD 39PF +-5% 300VDC MICA	72136	0M15E390J0300V1C8	
A51C2	0140-0190	7		CAPACITOR-FXD 39PF +-5% 300VDC MICA	72136	0M15E390J0300V1C8	
A51C5	0160-2055	9		CAPACITOR-FXD .01UF +-80-20% 100VDC CER	28480	0160-2055	
A51C6	0160-3622	8		CAPACITOR-FXD .1UF +-80-20% 100VDC CER	26654	2130Y5V100R104Z	
A51C8	0160-0309	4		CAPACITOR-FXD 4.7UF +-20% 10VDC TA	56289	150D475X00104Z	
A51C9	0160-3538	5		CAPACITOR-FXD 750PF +-5% 100VDC MICA	28480	0160-3538	
A51C10	0160-2202	8		CAPACITOR-FXD 75PF +-5% 300VDC MICA	28480	0160-2202	
A51C12	0160-2055	9		CAPACITOR-FXD .01UF +-80-20% 100VDC CER	28480	0160-2055	
A51C14	0160-3622	8		CAPACITOR-FXD .1UF +-80-20% 100VDC CER	26654	2130Y5V100R104Z	
A51C17	0160-3622	8		CAPACITOR-FXD .1UF +-80-20% 100VDC CER	26654	2130Y5V100R104Z	
A51C18	0160-3622	8		CAPACITOR-FXD .1UF +-80-20% 100VDC CER	26654	2130Y5V100R104Z	
A51C19	0160-3622	8		CAPACITOR-FXD .1UF +-80-20% 100VDC CER	26654	2130Y5V100R104Z	
A51C20	0140-0190	7		CAPACITOR-FXD 39PF +-5% 300VDC MICA	72136	0M15E390J0300V1C8	
A51C21	0150-0050	9		CAPACITOR-FXD 1000PF +-80-20% 1KVDC CER	28480	0150-0050	
A51C22	0140-0190	7	CAPACITOR-FXD 39PF +-5% 300VDC MICA	72136	0M15E390J0300V1C8		
A51C23	0150-0050	9		CAPACITOR-FXD 1000PF +-80-20% 1KVDC CER	28480	0150-0050	
A51C25	0160-2055	9		CAPACITOR-FXD .01UF +-80-20% 100VDC CER	28480	0160-2055	
A51C26	0160-0196	5		CAPACITOR-FXD 24PF +-5% 300VDC MICA	28480	0160-0196	
A51C27	0160-2200	6		CAPACITOR-FXD 43PF +-5% 300VDC MICA	28480	0160-2200	
A51C28	0160-2055	9		CAPACITOR-FXD .01UF +-80-20% 100VDC CER	28480	0160-2055	
A51C29	0160-2055	9		CAPACITOR-FXD .01UF +-80-20% 100VDC CER	28480	0160-2055	
A51C30	0160-2055	9		CAPACITOR-FXD .01UF +-80-20% 100VDC CER	28480	0160-2055	
A51C31	0160-2055	9		CAPACITOR-FXD .01UF +-80-20% 100VDC CER	28480	0160-2055	
A51C33	0160-2055	9		CAPACITOR-FXD .01UF +-80-20% 100VDC CER	28480	0160-2055	
A51C50	0180-0195	6		3	CAPACITOR-FXD .33UF +-20% 35VDC TA	56289	150D334X00354Z
A51C51	0180-0291	3			CAPACITOR-FXD 1UF +-10% 35VDC TA	56289	150D105X90354Z
A51C52	0180-1806	6	CAPACITOR-FXD 2.2UF +-10% 35VDC TA		56289	150D225X90354Z	
A51C53	0180-0291	3	CAPACITOR-FXD 1UF +-10% 35VDC TA		56289	150D105X90354Z	
A51CR1	1902-1329	3	3	DIODE-ZNR 6.6V	28480	1902-1329	
A51CR2	0122-0089	5		DIODE-VVC 29PF 10% C3/C25-MIN=5 8Vr=30V	04713	VV109	
A51CR4	0122-0089	5		DIODE-VVC 29PF 10% C3/C25-MIN=5 8Vr=30V	04713	VV109	
A51CR5	1901-0040	1		DIODE-SWITCHING 30V 50MA 2NS DD-35	28480	1901-0040	

See introduction to this section for ordering information  
 \*Indicates factory selected value



Table 6-3. Replaceable Parts

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
A51J1	1250-1512	3		CONNECTOR-RF SMB M PC 50-OHM	28480	1250-1512
A51J2	1250-1512	3		CONNECTOR-RF SMB M PC 50-OHM	28480	1250-1512
A51L1	9140-0210	1		COIL-MLD 100UH 5% Q=50 .155DX,375LG-NOM	28480	9140-0210
A51L2	9100-1622	7	3	COIL-MLD 24UH 5% Q=60 .155DX,375LG-NOM	28480	9100-1622
A51L3	9100-3551	5		COIL-MLD 1UH 5% Q=50 .155DX,375LG-NOM	28480	9100-3551
A51L5	9140-0285	0	1	COIL-MLD 3UH 5% Q=33 .155DX,375LG-NOM	28480	9140-0285
A51L6	9140-0210	1		COIL-MLD 100UH 5% Q=50 .155DX,375LG-NOM	28480	9140-0210
A51L7	9140-0284	9	1	COIL-MLD 2,4UH 5% Q=33 .155DX,375LG-NOM	28480	9140-0284
A51L8	9100-3551	5		COIL-MLD 1UH 5% Q=50 .155DX,375LG-NOM	28480	9100-3551
A51L9	9100-3551	5		COIL-MLD 1UH 5% Q=50 .155DX,375LG-NOM	28480	9100-3551
A51L10	9100-3551	5		COIL-MLD 1UH 5% Q=50 .155DX,375LG-NOM	28480	9100-3551
A51L11	9140-0210	1		COIL-MLD 100UH 5% Q=50 .155DX,375LG-NOM	28480	9140-0210
A51G1	1853-0010	2		TRANSISTOR PNP SI TD=18 PD=360MW	28480	1853-0010
A51G2	1854-0215	1		TRANSISTOR NPN SI PD=350MW FT=300MHZ	04713	2N3904
A51G3	1854-0215	1		TRANSISTOR NPN SI PD=350MW FT=300MHZ	04713	2N3904
A51G4	1853-0089	5		TRANSISTOR PNP 2N4917 SI PD=200MW	07263	2N4917
A51G5	1854-0485	7		TRANSISTOR NPN SI TD=104 PD=175MW	28480	1854-0485
A51G6	1854-0485	7		TRANSISTOR NPN SI TD=104 PD=175MW	28480	1854-0485
A51R1	0698-6801	0	3	RESISTOR 3,48K 1% .125W F TC=0/+25	28480	0698-6801
A51R2	0698-4504	6	1	RESISTOR 69.8K 1% .125W F TC=0/+100	24546	C4=1/8-T0=6982-F
A51R3	0683-1035	1		RESISTOR 10K 5% .25W FC TC=400/+700	01121	CB1035
A51R4	0683-1035	1		RESISTOR 10K 5% .25W FC TC=400/+700	01121	CB1035
A51R5	0698-6801	0		RESISTOR 3,48K 1% .125W F TC=0/+25	28480	0698-6801
A51R6	0698-6801	0		RESISTOR 3,48K 1% .125W F TC=0/+25	28480	0698-6801
A51R7	0698-3459	8	1	RESISTOR 383K 1% .125W F TC=0/+100	28480	0698-3459
A51R8	0698-3558	8		RESISTOR 4,02K 1% .125W F TC=0/+100	24546	C4=1/8-T0=4021-F
A51R9	0683-1025	9		RESISTOR 1K 5% .25W FC TC=400/+600	01121	CB1025
A51R10	0683-2245	7		RESISTOR 220K 5% .25W FC TC=800/+900	01121	CB2245
A51R11	0683-1535	6		RESISTOR 15K 5% .25W FC TC=400/+800	01121	CB1535
A51R12	0698-3456	3		RESISTOR 3,57K 1% .125W F TC=0/+100	24546	C4=1/8-T0=357R-F
A51R13	0683-4705	8		RESISTOR 47 5% .25W FC TC=400/+500	01121	CB4705
A51R14	0683-1035	1		RESISTOR 10K 5% .25W FC TC=400/+700	01121	CB1035
A51R15	0683-1025	9		RESISTOR 1K 5% .25W FC TC=400/+600	01121	CB1025
A51R16	0683-2725	4		RESISTOR 2,7K 5% .25W FC TC=400/+700	01121	CB2725
A51R19	0683-4705	8		RESISTOR 47 5% .25W FC TC=400/+500	01121	CB4705
A51R20	0683-1035	1		RESISTOR 10K 5% .25W FC TC=400/+700	01121	CB1035
A51R21	0683-1025	9		RESISTOR 1K 5% .25W FC TC=400/+600	01121	CB1025
A51R22	0683-4705	8		RESISTOR 47 5% .25W FC TC=400/+500	01121	CB4705
A51R23	0683-3925	2		RESISTOR 3,9K 5% .25W FC TC=400/+700	01121	CB3925
A51R24	0683-1035	1		RESISTOR 10K 5% .25W FC TC=400/+700	01121	CB1035
A51R25	0683-1035	1		RESISTOR 10K 5% .25W FC TC=400/+700	01121	CB1035
A51R26	0683-4725	2		RESISTOR 4,7K 5% .25W FC TC=400/+700	01121	CB4725
A51R27	0683-1035	1		RESISTOR 10K 5% .25W FC TC=400/+700	01121	CB1035
A51R28	0683-1035	1		RESISTOR 10K 5% .25W FC TC=400/+700	01121	CB1035
A51R29	0683-4725	2		RESISTOR 4,7K 5% .25W FC TC=400/+700	01121	CB4725
A51R30	0683-1025	9		RESISTOR 1K 5% .25W FC TC=400/+600	01121	CB1025
A51R31	0683-8225	5	1	RESISTOR 8,2K 5% .25W FC TC=400/+700	01121	CB8225
A51R32	0683-2715	6		RESISTOR 270 5% .25W FC TC=400/+600	01121	CB2715
A51R33	0683-5105	4		RESISTOR 51 5% .25W FC TC=400/+500	01121	CB5105
A51R34	0683-5105	4		RESISTOR 51 5% .25W FC TC=400/+500	01121	CB5105
A51R35	0683-1335	4	2	RESISTOR 13K 5% .25W FC TC=400/+800	01121	CB1335
A51R36	0683-5105	4		RESISTOR 51 5% .25W FC TC=400/+500	01121	CB5105
A51R37	0683-4725	2		RESISTOR 4,7K 5% .25W FC TC=400/+700	01121	CB4725
A51R38	0683-6215	9		RESISTOR 620 5% .25W FC TC=400/+600	01121	CB6215
A51R39	0683-6215	9		RESISTOR 620 5% .25W FC TC=400/+600	01121	CB6215
A51R40	0683-3305	2		RESISTOR 33 5% .25W FC TC=400/+500	01121	CB3305
A51R41	0683-5105	4		RESISTOR 51 5% .25W FC TC=400/+500	01121	CB5105
A51R42	0683-3305	2		RESISTOR 33 5% .25W FC TC=400/+500	01121	CB3305
A51R43	0683-5105	4		RESISTOR 51 5% .25W FC TC=400/+500	01121	CB5105
A51R45	0683-2415	3		RESISTOR 240 5% .25W FC TC=400/+600	01121	CB2415
A51R46	0683-2415	3		RESISTOR 240 5% .25W FC TC=400/+600	01121	CB2415
A51R47	0683-5105	4		RESISTOR 51 5% .25W FC TC=400/+500	01121	CB5105
A51R48	0683-5105	4		RESISTOR 51 5% .25W FC TC=400/+500	01121	CB5105
A51R49	0683-3315	4		RESISTOR 330 5% .25W FC TC=400/+600	01121	CB3315
A51R50	0683-2425	5		RESISTOR 2,4K 5% .25W FC TC=400/+700	01121	CB2425
A51R51	0683-4725	2		RESISTOR 4,7K 5% .25W FC TC=400/+700	01121	CB4725
A51R52	0683-5105	4		RESISTOR 51 5% .25W FC TC=400/+500	01121	CB5105
A51R53	0683-1025	9		RESISTOR 1K 5% .25W FC TC=400/+600	01121	CB1025
A51T1	08552-6044	1		TRANSFORMER, 6-TURNS	28480	08552-6044
A51P1	0360-1653	5	3	CONNECTOR-SGL CONT PIN .045-IN-BSC-SZ S3	28480	0360-1653
A51P2	0360-1653	5		CONNECTOR-SGL CONT PIN .045-IN-BSC-SZ S3	28480	0360-1653
A51P3	0360-1653	5		CONNECTOR-SGL CONT PIN .045-IN-BSC-SZ S3	28480	0360-1653

See introduction to this section for ordering information  
 \*Indicates factory selected value

Table 6-3. Replaceable Parts

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
A51U1	1820-1196	8	5	IC FF TTL LS D-TYPE POS-EDGE-TRIG COM	01295	SN74LS174N
A51U2	1826-0188	8		CONV 8-B-D/A 16-DIP-C	04713	MC1408L-8
A51U3	1820-1196	8		IC FF TTL LS D-TYPE POS-EDGE-TRIG COM	01295	SN74LS174N
A51U4	1826-0188	8		CONV 8-B-D/A 16-DIP-C	04713	MC1408L-8
A51U5	1826-0043	4		OP AMP GP TU-99	01928	CA307T
A51U6	1826-0043	4	OP AMP GP TO-99	01928	CA307T	
A51U7	1A20-1197	9	IC GATE TTL LS NAND QUAD 2-INP	01295	SN74LS00N	
A51U8	1820-0693	8	IC FF TTL S D-TYPE POS-EDGE-TRIG	01295	SN74S74N	
A51U9	1826-0309	5	OP AMP WR TO-99	24355	AD518J	
A51U10	1858-0004	4	TRANSISTOR ARRAY	01928	CA3049	
A51U12	1826-0512	2	2	IC 79M15C V RGLTR TO-39	04713	MC79M15CG
A51U13	1826-0511	1	2	IC 79M15A V RGLTR TO-39	01295	U479M15CLA
A51x1	0410-1137	7	1	CRYSTAL 10,340 MHZ	28480	0410-1137
				AS1 MISCELLANEOUS PARTS		
	03585-04109	6	1	COVER, AS1	28480	03585-04109
	0370-2583	3		KNOB	28480	0370-2583
	1205-0011	0	4	HEAT SINK TO-5/T0-39-PKG	28480	1205-0011
	2950-0078	9		NUT-HEX-DBL-CHAM 10-32-THD ,067-IN-THK	28480	2950-0078
	2190-0124	4		WASHER-LK INTL T NO. 10 ,195-IN-ID	28480	2190-0124
	1200-0185	9	2	INSULATOR-XSTR NYLON	28480	1200-0185
A52	03585-66552	3	1	TRACKING GENERATOR OUTPUT	28480	03585-66552
A52C1	0160-0291	3		CAPACITOR-FXD .1UF +-10% 35VDC TA	56289	150D105X9035A2
A52C2	0160-0291	3		CAPACITOR-FXD .1UF +-10% 35VDC TA	56289	150D105X9035A2
A52C3	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A52C4	0160-2055	9		CAPACITOR-FXD .01UF +80-20% 100VDC CER	28480	0160-2055
A52C5	0160-3456	6	10	CAPACITOR-FXD 1000PF +-10% 1KVDC CER	28480	0160-3456
A52C6	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A52C9	0160-2055	9		CAPACITOR-FXD .01UF +80-20% 100VDC CER	28480	0160-2055
A52C10	0160-0210	6		CAPACITOR-FXD 3.3UF +-20% 15VDC TA	56289	150D335X0015A2
A52C11	0160-0228	6		CAPACITOR-FXD 22UF +-10% 15VDC TA	56289	150D226X9015B2
A52C12	0160-2055	9		CAPACITOR-FXD .01UF +80-20% 100VDC CER	28480	0160-2055
A52C13	0160-0210	6		CAPACITOR-FXD 3.3UF +-20% 15VDC TA	56289	150D335X0015A2
A52C14	0160-0228	6		CAPACITOR-FXD 22UF +-10% 15VDC TA	56289	150D226X9015B2
A52C15	0160-0228	6		CAPACITOR-FXD 22UF +-10% 15VDC TA	56289	150D226X9015B2
A52C16	0121-0105	4	1	CAPACITOR-V TRMR-CER 9-35PF 200V PC-MTG	52763	304324 9/35PF N650
A52C18	0160-2250	6		CAPACITOR-FXD 5.1PF +-25PF 500VDC CER	28480	0160-2250
A52C19	0160-2234	6	2	CAPACITOR-FXD 5.1PF +-25PF 500VDC CER	28480	0160-2234
A52C20	0160-2251	7	1	CAPACITOR-FXD 5.6PF +-25PF 500VDC CER	28480	0160-2251
A52C21	0150-0091	6	1	CAPACITOR-FXD 1.5PF +-25PF 500VDC CER	28480	0150-0091
A52C22	0160-2241	5		CAPACITOR-FXD 2.2PF +-25PF 500VDC CER	28480	0160-2241
A52C24	0160-2055	9		CAPACITOR-FXD .01UF +80-20% 100VDC CER	28480	0160-2055
A52C25	0160-2055	9		CAPACITOR-FXD .01UF +80-20% 100VDC CER	28480	0160-2055
A52C26	0160-2055	9		CAPACITOR-FXD .01UF +80-20% 100VDC CER	28480	0160-2055
A52C27	0160-2055	9		CAPACITOR-FXD .01UF +80-20% 100VDC CER	28480	0160-2055
A52C28	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A52C29	0160-2261	9		CAPACITOR-FXD 15PF +-5% 500VDC CER 0+-30	28480	0160-2261
A52C30	0160-2234	6		CAPACITOR-FXD 5.1PF +-25PF 500VDC CER	28480	0160-2234
A52C31	0160-2264	2	1	CAPACITOR-FXD 20PF +-5% 500VDC CER 0+-30	28480	0160-2264
A52C32	0160-2055	9		CAPACITOR-FXD .01UF +80-20% 100VDC CER	28480	0160-2055
A52C33	0160-2261	9		CAPACITOR-FXD 15PF +-5% 500VDC CER 0+-30	28480	0160-2261
A52C34	0160-2055	9		CAPACITOR-FXD .01UF +80-20% 100VDC CER	28480	0160-2055
A52C35	0160-2055	9		CAPACITOR-FXD .01UF +80-20% 100VDC CER	28480	0160-2055
A52C36	0160-3456	6		CAPACITOR-FXD 1000PF +-10% 1KVDC CER	28480	0160-3456
A52C37	0160-2055	9		CAPACITOR-FXD .01UF +80-20% 100VDC CER	28480	0160-2055
A52C38	0160-2055	9		CAPACITOR-FXD .01UF +80-20% 100VDC CER	28480	0160-2055
A52C39	0160-2055	9		CAPACITOR-FXD .01UF +80-20% 100VDC CER	28480	0160-2055
A52C40	0160-2055	9		CAPACITOR-FXD .01UF +80-20% 100VDC CER	28480	0160-2055
A52C41	0160-2055	9		CAPACITOR-FXD .01UF +80-20% 100VDC CER	28480	0160-2055
A52C42	0160-2257	3		CAPACITOR-FXD 10PF +-5% 500VDC CER 0+-60	28480	0160-2257
A52C44	0160-2046	8	1	CAPACITOR-FXD 2PF +-5PF 500VDC MICA	28480	0160-2046
A52C57	0160-2055	9		CAPACITOR-FXD .01UF +80-20% 100VDC CER	28480	0160-2055
A52C58	0140-0190	7		CAPACITOR-FXD 30PF +-5% 300VDC MICA	72156	DM15E190J030GVV1CR
A52C59	0160-2197	0		CAPACITOR-FXD 10PF +-5% 300VDC MICA	28480	0160-2197
A52C61	0160-2055	9		CAPACITOR-FXD .01UF +80-20% 100VDC CER	28480	0160-2055
A52C62	0160-2055	9		CAPACITOR-FXD .01UF +80-20% 100VDC CER	28480	0160-2055
A52C63	0160-0210	6		CAPACITOR-FXD 3.3UF +-20% 15VDC TA	56289	150D335X0015A2
A52C63	1902-3149	9		DIODE-ZNR 9.09V 5% DO-7 PD=.4A TC=+.057%	28480	1902-3149
A52C64	1902-3149	9		DIODE-ZNR 9.09V 5% DO-7 PD=.4A TC=+.057%	28480	1902-3149
A52C66	1902-3128	4	1	DIODE-ZNR 7.32V 5% DO-7 PD=.4A TC=+.044%	28480	1902-3128
A52C67	1901-0040	1		DIODE-SWITCHING 30V 50MA 2NS DO-35	28480	1901-0040
A52C610	1901-0040	1		DIODE-SWITCHING 30V 50MA 2NS DO-35	28480	1901-0040

See introduction to this section for ordering information  
 \*Indicates factory selected value



Table 6-3. Replaceable Parts

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
A52CR11	1901-0050	3	6	DIODE-SWITCHING 80V 200MA 2NS DO-35	28480	1901-0050
A52CR12	1901-0050	3		DIODE-SWITCHING 80V 200MA 2NS DO-35	28480	1901-0050
A52CR13	1902-3002	3		DIODE-ZNR 2.37V 5% DO-7 PD=.4W TC=-.074%	28480	1902-3002
A52CR14	1902-3002	3		DIODE-ZNR 2.37V 5% DO-7 PD=.4W TC=-.074%	28480	1902-3002
A52J1	1250-1512	3		CONNECTOR-RF SMB M PC 50-OHM	28480	1250-1512
A52J2	1250-1512	3	CONNECTOR-RF SMB M PC 50-OHM	28480	1250-1512	
A52J3	1250-1512	3	CONNECTOR-RF SMB M PC 50-OHM	28480	1250-1512	
A52J4	1250-1512	3	CONNECTOR-RF SMB M PC 50-OHM	28480	1250-1512	
A52J5	1250-1512	3	CONNECTOR-RF SMB M PC 50-OHM	28480	1250-1512	
A52J7	1251-5203	9	1	CONNECTOR 6-PIN M POST TYPE	28480	1251-5203
A52L2	9140-0144	0	1	COIL-MLD 4.7UH 10% Q=45 .095DX.25LG-NOM	28480	9140-0144
A52L3	9140-0144	0		COIL-MLD 4.7UH 10% Q=45 .095DX.25LG-NOM	28480	9140-0144
A52L4	9140-0144	0		COIL-MLD 4.7UH 10% Q=45 .095DX.25LG-NOM	28480	9140-0144
A52L6	9140-0283	8		COIL-MLD 910NH 5% Q=50 .155DX.375LG-NOM	28480	9140-0283
A52L7	9100-2258	7		COIL-MLD 1.2UH 10% Q=32 .095DX.25LG-NOM	28480	9100-2258
A52L9	9140-0144	0		COIL-MLD 4.7UH 10% Q=45 .095DX.25LG-NOM	28480	9140-0144
A52L11	9100-2252	1		COIL-MLD 270NH 10% Q=30 .095DX.25LG-NOM	28480	9100-2252
A52L14	9140-0286	1	COIL-MLD 300NH 5% Q=45 .155DX.375LG-NOM	28480	9140-0286	
A52L16	9140-0144	0	COIL-MLD 4.7UH 10% Q=45 .095DX.25LG-NOM	28480	9140-0144	
A52L17	9140-0158	6	COIL-MLD 1UH 10% Q=32 .095DX.25LG-NOM	28480	9140-0158	
A52L18	9140-0144	0	COIL-MLD 4.7UH 10% Q=45 .095DX.25LG-NOM	28480	9140-0144	
A52L30	9140-0144	0	COIL-MLD 4.7UH 10% Q=45 .095DX.25LG-NOM	28480	9140-0144	
A52Q4	1855-0395	0	2	TRANSISTOR J-FET N-CHAN D-MODE SI	17856	FN2645
A52Q5	1855-0395	0		TRANSISTOR J-FET N-CHAN D-MODE SI	17856	FN2645
A52Q6	1854-0345	8		TRANSISTOR NPN 2N5179 SI TO-72 PD=200MW	04713	2N5179
A52Q7	1854-0019	3		TRANSISTOR NPN SI TO-18 PD=360MW	28480	1854-0019
A52Q8	1853-0034	0		TRANSISTOR PNP SI TO-18 PD=360MW	28480	1853-0034
A52Q9	1854-0345	8		TRANSISTOR NPN 2N5179 SI TO-72 PD=200MW	04713	2N5179
A52Q10	1854-0019	3	TRANSISTOR NPN SI TO-18 PD=360MW	28480	1854-0019	
A52Q11	1853-0034	0	TRANSISTOR PNP SI TO-18 PD=360MW	28480	1853-0034	
A52Q12	1854-0485	7	TRANSISTOR NPN SI TO-104 PD=175MW	28480	1854-0485	
A52Q13	1854-0485	7	TRANSISTOR NPN SI TO-104 PD=175MW	28480	1854-0485	
A52Q14	1854-0485	7	TRANSISTOR NPN SI TO-104 PD=175MW	28480	1854-0485	
A52Q15	1854-0485	7	TRANSISTOR NPN SI TO-104 PD=175MW	28480	1854-0485	
A52Q16	1854-0485	7	TRANSISTOR NPN SI TO-104 PD=175MW	28480	1854-0485	
A52Q17	1854-0485	7	TRANSISTOR NPN SI TO-104 PD=175MW	28480	1854-0485	
A52Q30	1855-0420	2	TRANSISTOR J-FET 2N4391 N-CHAN D-MODE	01295	2N4391	
A52Q31	1855-0420	2	TRANSISTOR J-FET 2N4391 N-CHAN D-MODE	01295	2N4391	
A52Q32	1855-0420	2	TRANSISTOR J-FET 2N4391 N-CHAN D-MODE	01295	2N4391	
A52Q33	1855-0420	2	TRANSISTOR J-FET 2N4391 N-CHAN D-MODE	01295	2N4391	
A52Q34	1855-0420	2	TRANSISTOR J-FET 2N4391 N-CHAN D-MODE	01295	2N4391	
A52Q35	1855-0420	2	TRANSISTOR J-FET 2N4391 N-CHAN D-MODE	01295	2N4391	
A52Q36	1854-0019	3	TRANSISTOR NPN SI TO-18 PD=360MW	28480	1854-0019	
A52Q37	1853-0203	5	TRANSISTOR PNP SI TO-18 PD=360MW	28480	1853-0203	
A52Q38	1854-0019	3	TRANSISTOR NPN SI TO-18 PD=360MW	28480	1854-0019	
A52R3	0683-1325	2	19	RESISTOR 1.3K 5% .25W FC TC=-400/+700	01121	CB1325
A52R4	0683-1505	0		RESISTOR 15 5% .25W FC TC=-400/+500	01121	CB1505
A52R6	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
A52R9	0683-1535	6		RESISTOR 15K 5% .25W FC TC=-400/+800	01121	CB1535
A52R10	0683-1525	4		RESISTOR 1.5K 5% .25W FC TC=-400/+700	01121	CB1525
A52R11	0683-2045	5		RESISTOR 200K 5% .25W FC TC=-800/+900	01121	CB2045
A52R12	0683-1045	3		RESISTOR 100K 5% .25W FC TC=-400/+800	01121	CB1045
A52R13	0683-1045	3		RESISTOR 100K 5% .25W FC TC=-400/+800	01121	CB1045
A52R14	0683-4725	2		RESISTOR 4.7K 5% .25W FC TC=-400/+700	01121	CB4725
A52R15	0683-2045	5		RESISTOR 200K 5% .25W FC TC=-800/+900	01121	CB2045
A52R16	0683-3315	4	RESISTOR 330 5% .25W FC TC=-400/+600	01121	CB3315	
A52R17	0683-1015	7	RESISTOR 100 5% .25W FC TC=-400/+500	01121	CB1015	
A52R18	0683-3925	2	RESISTOR 3.9K 5% .25W FC TC=-400/+700	01121	CB3925	
A52R19	0683-3325	6	RESISTOR 3.3K 5% .25W FC TC=-400/+700	01121	CB3325	
A52R21	0699-0195	5	1	RESISTOR 47.5 1% .25W F TC=0/+100	24546	0699-0195
A52R22	0683-1035	1	RESISTOR 10K 5% .25W FC TC=-400/+700	01121	CB1035	
A52R24	0683-2025	3	RESISTOR 2K 5% .25W FC TC=-400/+700	01121	CB2025	
A52R25	0683-2035	1	RESISTOR 20K 5% .25W FC TC=-400/+800	01121	CB2035	
A52R26	0683-1035	1	RESISTOR 10K 5% .25W FC TC=-400/+700	01121	CB1035	
A52R27	0683-1255	7	1	RESISTOR 1.2M 5% .25W FC TC=-900/+1100	01121	CB1255
A52R28	0757-0445	2	RESISTOR 13K 1% .125W F TC=0/+100	24546	C4=1/8-T0=1502-F	
A52R29	0698-4123	5	RESISTOR 499 1% .125W F TC=0/+100	24546	C4=1/8-T0=4992-F	
A52R30	0683-3325	6	RESISTOR 3.3K 5% .25W FC TC=-400/+700	01121	CB3325	
A52R31	0683-2025	8	RESISTOR 2K 5% .25W FC TC=-400/+700	01121	CB2025	
A52R32	0757-0277	1	1	RESISTOR 49.9 1% .125W F TC=0/+100	24546	C4=1/8-T0=4992-F
A52R33	0757-0411	2	1	RESISTOR 332 1% .125W F TC=0/+100	24546	C4=1/8-T0=332R-F
A52R34	0683-2035	3	RESISTOR 20K 5% .25W FC TC=-400/+800	01121	CB2035	
A52R35	0683-2035	3	RESISTOR 20K 5% .25W FC TC=-400/+800	01121	CB2035	
A52R36	0683-1505	0	RESISTOR 15 5% .25W FC TC=-400/+500	01121	CB1505	
A52R37	0683-2035	3	RESISTOR 20K 5% .25W FC TC=-400/+800	01121	CB2035	

See introduction to this section for ordering information  
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Table 6-3. Replaceable Parts

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
A52R38	0683-2035	3		RESISTOR 20K 5% .25W FC TC=-400/+800	01121	C82035
A52R39	069A-4421	6		RESISTOR 249 1% .125W F TC=0+-100	24546	C4=1/8-T0-249R-F
A52R42	069A-4421	6		RESISTOR 249 1% .125W F TC=0+-100	24546	C4=1/8-T0-249R-F
A52R43	0683-2415	3		RESISTOR 240 5% .25W FC TC=-400/+600	01121	C82415
A52R44	0683-5105	4		RESISTOR 51 5% .25W FC TC=-400/+500	01121	C85105
A52R45	0683-5105	4		RESISTOR 51 5% .25W FC TC=-400/+500	01121	C85105
A52R46	0683-4715	0		RESISTOR 470 5% .25W FC TC=-400/+600	01121	C84715
A52R47	0683-2215	1		RESISTOR 220 5% .25W FC TC=-400/+600	01121	C82215
A52R48	0683-5105	4		RESISTOR 51 5% .25W FC TC=-400/+500	01121	C85105
A52R49	0683-5105	4		RESISTOR 51 5% .25W FC TC=-400/+500	01121	C85105
A52R50	0683-1335	4		RESISTOR 13K 5% .25W FC TC=-400/+800	01121	C81335
A52R51	0683-4725	2		RESISTOR 4.7K 5% .25W FC TC=-400/+700	01121	C84725
A52R52	0683-4715	0		RESISTOR 470 5% .25W FC TC=-400/+600	01121	C84715
A52R53	0683-4715	0		RESISTOR 470 5% .25W FC TC=-400/+600	01121	C84715
A52R54	0683-5105	4		RESISTOR 51 5% .25W FC TC=-400/+500	01121	C85105
A52R55	0683-5105	4		RESISTOR 51 5% .25W FC TC=-400/+500	01121	C85105
A52R56	0683-5105	4		RESISTOR 51 5% .25W FC TC=-400/+500	01121	C85105
A52R57	0683-4725	2		RESISTOR 4.7K 5% .25W FC TC=-400/+700	01121	C84725
A52R58	0683-2425	5		RESISTOR 2.4K 5% .25W FC TC=-400/+700	01121	C82425
A52R59	0757-0398	4	2	RESISTOR 75 1% .125W F TC=0+-100	24546	C4=1/8-T0-75R0-F
A52R60	0757-0398	4		RESISTOR 75 1% .125W F TC=0+-100	24546	C4=1/8-T0-75R0-F
A52R61	0683-3315	3		RESISTOR 330 5% .25W FC TC=-400/+600	01121	C83315
A52R62	0757-0394	0	1	RESISTOR 51.1 1% .125W F TC=0+-100	24546	C4=1/8-T0-511R1-F
A52R63	0757-0284	7	4	RESISTOR 150 1% .125W F TC=0+-100	24546	C4=1/8-T0-151R-F
A52R64	0757-0407	6		RESISTOR 200 1% .125W F TC=0+-100	24546	C4=1/8-T0-201R-F
A52R65	0757-0440	7		RESISTOR 7.5K 1% .125W F TC=0+-100	24546	C4=1/8-T0-7501-F
A52R66	0683-5105	4		RESISTOR 51 5% .25W FC TC=-400/+500	01121	C85105
A52R67	069A-4196	2	1	RESISTOR 1.07K 1% .125W F TC=0+-100	24546	C4=1/8-T0-1071-F
A52R68	2100-3207	1		RESISTOR-TRMR 5K 10% C SIDE=ADJ 1-TRN	28480	2100-3207
A52R69	0683-5105	4		RESISTOR 51 5% .25W FC TC=-400/+500	01121	C85105
A52R70	0757-0427	0	2	RESISTOR 1.5K 1% .125W F TC=0+-100	24546	C4=1/8-T0-1501-F
A52R71	0757-0427	0		RESISTOR 1.5K 1% .125W F TC=0+-100	24546	C4=1/8-T0-1501-F
A52R72	0683-2015	9		RESISTOR 200 5% .25W FC TC=-400/+600	01121	C82015
A52R73	0683-5105	4		RESISTOR 51 5% .25W FC TC=-400/+500	01121	C85105
A52R74	0683-1015	7		RESISTOR 100 5% .25W FC TC=-400/+500	01121	C81015
A52R75	0683-4725	2		RESISTOR 4.7K 5% .25W FC TC=-400/+700	01121	C84725
A52R76	0683-5105	4		RESISTOR 51 5% .25W FC TC=-400/+500	01121	C85105
A52R77	0683-5105	4		RESISTOR 51 5% .25W FC TC=-400/+500	01121	C85105
A52R78	0683-1525	4		RESISTOR 1.5K 5% .25W FC TC=-400/+700	01121	C81525
A52R79	0683-1525	4		RESISTOR 1.5K 5% .25W FC TC=-400/+700	01121	C81525
A52R94	0683-3615	7		RESISTOR 360 5% .25W FC TC=-400/+600	01121	C83615
A52R100	0683-5105	4		RESISTOR 51 5% .25W FC TC=-400/+500	01121	C85105
A52T1	08552-6044	1		TRANSFORMER, 6-TURNS	28480	08552-6044
A52T2	08552-6044	1		TRANSFORMER, 6-TURNS	28480	08552-6044
A52U2	1826-0138	8		COMPARATOR GP QUAD 14-DIP-P	04713	MLM339P
A52U3	1826-0111	7		OP AMP GP DUAL TO-99	04713	MC1458G
A52U4	1858-0004	4		TRANSISTOR ARRAY	01928	CA3049
A52 MISCELLANEOUS PARTS						
	03585-00602	6	1	SHIELD, A52	28480	03585-00602
	03585-04108	5	1	COVER, A52	28480	03585-04108
	03585-24113	4	1	PLATE A52	28480	03585-24113
	0370-2583	3		KNOB	28480	0370-2583
	0590-0526	6	3	THREADED INSEPT-NUT 4-40 .065-LG SST	28480	0590-0526
	5001-0173	7			28480	5001-0173
	2360-0193	8	4	SCREW-MACH 6-32 .25-IN-LG PAN-HD-POZI	00000	ORDER BY DESCRIPTION
	2950-0078	9		NUT-HEX-DBL-CHAM 10-32-TMD .067-IN-THK	28480	2950-0078
	2190-0124	9		WASHER-LK INTL T NO. 10 .195-IN-ID	28480	2190-0124
A53	03585-66553	4	1	TRACKING GENERATOR VCO	28480	03585-66553
A53C45	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A53C46	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A53C47	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A53C48	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A53C49	0160-2260	8		CAPACITOR-FXD 13PF +-5% 500VDC CER 0+-30	28480	0160-2260
A53C50	0121-0059	7	1	CAPACITOR-V TRMP-CER 2-8PF 350V PC-MTG	52763	304324 2/8PF NPO
A53C51	0160-4283	9	1	CAPACITOR-FXD 100PF +-5% 200VDC CER	51642	150-200-NP0-101J
A53C52	0160-2257	3		CAPACITOR-FXD 10PF +-5% 500VDC CER 0+-60	28480	0160-2257
A53C53	0160-3456	6		CAPACITOR-FXD 1000PF +-10% 1KVDC CER	28480	0160-3456
A53C54	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A53C55	0160-2255	1		CAPACITOR-FXD 8.2PF +-25PF 500VDC CER	28480	0160-2255
A53C56	0160-2266	4		CAPACITOR-FXD 24PF +-5% 500VDC CER 0+-30	28480	0160-2266

See introduction to this section for ordering information  
 \*Indicates factory selected value

Table 6-3. Replaceable Parts

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
A53CR5	0122-0089	5		DIODE-VVC 29PF 10% C3/C25-MIN=5 BVR=30V	04713	MV109
A53J5	1251-5204	0	1	CONNECTOR 6-PIN F POST TYPE	28480	1251-5204
A53L24	9100-2247	4		COIL-MLD 100NH 10% Q=34 .095DX,25LG-NOM	28480	9100-2247
A53L25	9100-3807	4	1	COIL-MLD 110NH 5% Q=50 .1550X,375LG-NOM	28480	9100-3807
A53Q18	1853-0354	7		TRANSISTOR PNP SI T0-92 PD=350MW	28480	1853-0354
A53Q19	1854-0485	7		TRANSISTOR NPN SI T0-104 PD=175MW	28480	1854-0485
A53Q20	1853-0354	7		TRANSISTOR PNP SI T0-92 PD=350MW	28480	1853-0354
A53R22	0683-2015	9		RESISTOR 200 5% .25W FC TC=-400/+600	01121	C82015
A53R23	0683-2015	9		RESISTOR 200 5% .25W FC TC=-400/+600	01121	C82015
A53R47	0683-1015	7		RESISTOR 100 5% .25W FC TC=-400/+500	01121	C81015
A53R81	0683-1015	7		RESISTOR 100 5% .25W FC TC=-400/+500	01121	C81015
A53R82	0683-4725	2		RESISTOR 4.7K 5% .25W FC TC=-400/+700	01121	C84725
A53R83	0683-1635	7	1	RESISTOR 16K 5% .25W FC TC=-400/+800	01121	C81635
A53R84	0683-4725	2		RESISTOR 4.7K 5% .25W FC TC=-400/+700	01121	C84725
A53R85	0683-2415	3		RESISTOR 240 5% .25W FC TC=-400/+600	01121	C82415
A53R86	0683-4725	2		RESISTOR 4.7K 5% .25W FC TC=-400/+700	01121	C84725
A53R87	0683-4725	2		RESISTOR 4.7K 5% .25W FC TC=-400/+700	01121	C84725
A53R88	0683-4725	2		RESISTOR 4.7K 5% .25W FC TC=-400/+700	01121	C84725
A53R89	0683-5105	4		RESISTOR 51 5% .25W FC TC=-400/+500	01121	C85105
A53R90	0683-4725	2		RESISTOR 4.7K 5% .25W FC TC=-400/+700	01121	C84725
A53R91	0683-4725	2		RESISTOR 4.7K 5% .25W FC TC=-400/+700	01121	C84725
A53R92	0683-4725	2		RESISTOR 4.7K 5% .25W FC TC=-400/+700	01121	C84725
A53R93	0683-5105	4		RESISTOR 51 5% .25W FC TC=-400/+500	01121	C85105
453 MISCELLANEOUS PARTS						
A61	03585-66561	4	1	CLOCK ASSEMBLY	28480	03585-66561
A61C1	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A61C2	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A61C3	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A61C4	0140-0198	5		CAPACITOR-FXD 200PF +-5% 300VDC MICA	72136	DM15F201J0300WVICR
A61C5	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A61C6	0160-0168	1	2	CAPACITOR-FXD .1UF +-10% 200VDC POLYE	28480	0160-0168
A61C7	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A61C8	0180-0197	8		CAPACITOR-FXD 2.2UF+-10% 20VDC TA	56289	150D225X9020A2
A61C9	0140-0202	2	1	CAPACITOR-FXD 15PF +-5% 500VDC MICA	72136	DM15C150J0500WVICR
A61C10	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A61C11	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A61C12	0140-0198	5		CAPACITOR-FXD 200PF +-5% 300VDC MICA	72136	DM15F201J0300WVICR
A61C13	0160-0168	1		CAPACITOR-FXD .1UF +-10% 200VDC POLYE	28480	0160-0168
A61C14	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A61C15	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A61C16	0160-2199	2		CAPACITOR-FXD 30PF +-5% 300VDC MICA	28480	0160-2199
A61C17	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A61C18	0180-2614	8	2	CAPACITOR-FXD 100UF+-10% 30VDC TA	56289	150D107X9030S2
A61C19	0180-2614	8		CAPACITOR-FXD 100UF+-10% 30VDC TA	56289	150D107X9030S2
A61C20	0180-0094	4	1	CAPACITOR-FXD 100UF+75-10% 25VDC AL	56289	30D107G025D02
A61C21	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A61C22	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A61C23	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A61CR1	1902-0041	4	2	DIODE-ZAR 5.1V 5% DO-7 PD=.4W TC=-.069%	28480	1902-0041
A61J1	1250-1368	7		CONNECTOR-RF SMB M PC 50-OHM	28480	1250-1368
A61L1	9100-1629	4	1	COIL-MLO 47UH 5% Q=55 .155DX,375LG-NOM	28480	9100-1629
A61L4	9100-1638	5	2	COIL-MLO 130UH 5% Q=65 .155DX,375LG-NOM	28480	9100-1638
A61L5	9100-1638	5		COIL-MLO 130UH 5% Q=65 .155DX,375LG-NOM	28480	9100-1638
A61L6	9100-1622	7		COIL-MLO 24UH 5% Q=60 .155DX,375LG-NOM	28480	9100-1622
A61Q1	1853-0010	2		TRANSISTOR PNP SI T0-18 PD=360MW	28480	1853-0010
A61Q2	1853-0010	2		TRANSISTOR PNP SI T0-18 PD=360MW	28480	1853-0010
A61R1	0683-2715	6		RESISTOR 270 5% .25W FC TC=-400/+600	01121	C82715
A61R2	0683-2225	3		RESISTOR 2.2K 5% .25W FC TC=-400/+700	01121	C82225
A61R3	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	C84705
A61R4	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	C84705
A61R5	0683-3325	6		RESISTOR 3.3K 5% .25W FC TC=-400/+700	01121	C83325
A61R6	0683-7515	4		RESISTOR 750 5% .25W FC TC=-400/+600	01121	C87515
A61R7	0683-1625	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	C81025
A61R8	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	C81025
A61R9	0698-4509	1	2	RESISTOR 80.6K 1% .125W F TC=0/+100	24546	C4=1/8-T0=8062=F
A61R10	0698-4509	1		RESISTOR 80.6K 1% .125W F TC=0/+100	24546	C4=1/8-T0=8062=F

See introduction to this section for ordering information  
 \*Indicates factory selected value

Table 6-3. Replaceable Parts

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
A61R11	0698-3499	6	2	RESISTOR 40.2K 1% .125W F TC=0+-100	24546	C4-1/8-T0-4022-F
A61R12	0757-0424	7		RESISTOR 1.1K 1% .125W F TC=0+-100	24546	C4-1/8-T0-1101-F
A61R13	0683-2025	1		RESISTOR 2K 5% .25W FC TC=400/+700	01121	C82025
A61R14	0683-3025	3		RESISTOR 3K 5% .25W FC TC=400/+700	01121	C83025
A61R15	0686-2015	5		RESISTOR 200 5% .5W CC TC=0+529	01121	E82015
A61R16	0683-1025	9	2	RESISTOR 1K 5% .25W FC TC=400/+600	01121	C81025
A61R17	0683-1025	9		RESISTOR 1K 5% .25W FC TC=400/+600	01121	C81025
A61R18	0698-4505	7		RESISTOR 71.5K 1% .125W F TC=0+-100	24546	C4-1/8-T0-7152-F
A61R19	0698-4505	7		RESISTOR 71.5K 1% .125W F TC=0+-100	24546	C4-1/8-T0-7152-F
A61R20	0698-4494	3		RESISTOR 35.7K 1% .125W F TC=0+-100	24546	C4-1/8-T0-3572-F
A61R21	0757-0424	7	1	RESISTOR 1.1K 1% .125W F TC=0+-100	24546	C4-1/8-T0-1101-F
A61R22	0683-2025	1		RESISTOR 2K 5% .25W FC TC=400/+700	01121	C82025
A61R23	0683-3025	3		RESISTOR 3K 5% .25W FC TC=400/+700	01121	C83025
A61R24	0683-1025	9		RESISTOR 1K 5% .25W FC TC=400/+600	01121	C81025
A61R25	0683-1025	9		RESISTOR 1K 5% .25W FC TC=400/+600	01121	C81025
A61TP1-7	0360-0124			CONNECTOR-SGL CONT PIN .04-IN-RSC-SZ RND	28480	0360-0124
A61U1	1A20-1197	9	1	IC GATE TTL LS NAND QUAD 2-INP	01295	SN74LS00N
A61U2	1A20-1277	6		IC CNTR TTL LS DECD UP/DOWN SYNCHRO	01295	SN74LS192N
A61U3	1A20-0630	3		IC MISC TTL	04713	MC4044P
A61U4	1A20-1420	1		IC CNTR TTL LS DIV-X=12 ASYNCHRO	01295	SN74LS92N
A61U5	1A26-0043	4		OP AMP GP TO-99	01928	CA307T
A61U6	1A20-0567	5	2	IC MV TTL DUAL	04713	MC4024P
A61U7	1A20-0630	3		IC MISC TTL	04713	MC4044P
A61U8	1A20-1194	6		IC CNTR TTL LS RIN UP/DOWN SYNCHRO	01295	SN74LS193N
A61U9	1A20-1201	6		IC GATE TTL LS AND QUAD 2-INP	01295	SN74LS08N
A61U10	1A20-1194	0		IC GATE TTL LS NAND QUAD 2-INP	01295	SN74LS03N
A61U11	1A20-1198	0	4	IC GATE TTL LS NAND QUAD 2-INP	01295	SN74LS03N
A61U12	1A26-0043	4		OP AMP GP TO-99	01928	CA307T
A61U13	1A20-0567	5		IC MV TTL DUAL	04713	MC4024P
				A61 MISCELLANEOUS PARTS		
	4040-0749	4	2	EXTR-PC RD BRN POLYC .062-8D-TMKNS	28480	03585-26561
	4040-0754	1		EXTR-PC RD BLU POLYC .062-8D-TMKNS	28480	4040-0749
	1480-0116	1		PIN-GRV .062-IN-DIA .25-IN-LG STL	28480	4040-0754 1480-0116
A62	03585-66562	5	1	X-Y PLOTTER ANALYZER	28480	03585-66562
A62C1	0160-0097	7	7	CAPACITOR-FXD 470F +-10% 35VDC TA	56289	1500476x903552
A62C2	0160-0097	7		CAPACITOR-FXD 470F +-10% 35VDC TA	56289	1500476x903552
A62C3	0160-0097	7		CAPACITOR-FXD 470F +-10% 35VDC TA	56289	1500476x903552
A62C4	0160-0164	7		CAPACITOR-FXD .039UF +-10% 200VDC POLYE	28480	0160-0164
A62C5	0160-0161	4		CAPACITOR-FXD .01UF +-10% 200VDC POLYE	28480	0160-0161
A62C6	0160-0165	8	8	CAPACITOR-FXD .056UF +-10% 200VDC POLYE	28480	0160-0165
A62C7	0160-3847	1		CAPACITOR-FXD .01UF 50V	28480	0160-3847
A62C8	0160-3847	1		CAPACITOR-FXD .01UF 50V	28480	0160-3847
A62C9	0160-3847	1		CAPACITOR-FXD .01UF 50V	28480	0160-3847
A62C10	0160-3847	1		CAPACITOR-FXD .01UF 50V	28480	0160-3847
A62C11	0160-3847	1	1	CAPACITOR-FXD .01UF 50V	28480	0160-3847
A62C12	0160-3847	1		CAPACITOR-FXD .01UF 50V	28480	0160-3847
A62C13	0160-3847	1		CAPACITOR-FXD .01UF 50V	28480	0160-3847
A62C14	0160-3847	1		CAPACITOR-FXD .01UF 50V	28480	0160-3847
A62C15	0160-0291	3		CAPACITOR-FXD 1UF +-10% 35VDC TA	56289	1500105x903542
A62CR1	1902-1329	3	3	DIODE-ZNR 6.6V	28480	1902-1329
A62CR2	1901-0050	3		DIODE-SWITCHING 80V 200MA 2NS DO-35	28480	1901-0050
A62CR3	1901-0050	3		DIODE-SWITCHING 80V 200MA 2NS DO-35	28480	1901-0050
A62CR4	1901-0050	3		DIODE-SWITCHING 80V 200MA 2NS DO-35	28480	1901-0050
A62CR5	1901-0050	3		DIODE-SWITCHING 80V 200MA 2NS DO-35	28480	1901-0050
A62CR6	1901-0518	8	1	DIODE-SCHOTTKY	28480	1901-0518
A62CR7	1901-0518	8		DIODE-SCHOTTKY	28480	1901-0518
A62CR8	1902-3104	6		DIODE-ZNR 5.62V 5% DO-7 PD=.4W TC=+.016X	28480	1902-3104
A62CR9	1901-0518	8		DIODE-SCHOTTKY	28480	1901-0518
A62F1	2110-0384	0		5	FUSE .062A 125V FAST-BLD .281X.093	28480
A62F2	2110-0384	0	FUSE .062A 125V FAST-BLD .281X.093		28480	2110-0384
A62J1	1251-4795	2	2	CUNNECTOR 2-PIN M POST TYPE	28480	1251-4795
A62J2	1251-4795	2		CUNNECTOR 2-PIN M POST TYPE	28480	1251-4795
A62L1	9140-1622	7	1	COIL-MLD 240H 5% Q=60 .155DX.375LG-NOM	28480	9140-1622
A62L2	9140-0210	1		COIL-MLD 100UH 5% Q=50 .155DX.375LG-NOM	28480	9140-0210
A62L3	9140-0210	1		COIL-MLD 100UH 5% Q=50 .155DX.375LG-NOM	28480	9140-0210
A62Q1	1A54-0215	1	1	TRANSISTOR NPN SI PD=350MW FT=300MHZ	04713	2N3904
A62Q2	1A54-0215	1		TRANSISTOR NPN SI PD=350MW FT=300MHZ	04713	2N3904
A62R1	0698-4473	8	2	RESISTOR 8.06K 1% .125W F TC=0+-100	24546	C4-1/8-T0-8061-F
A62R2	0757-0286	1		RESISTOR 9.09K 1% .125W F TC=0+-100	19701	MF4C1/8-T0-9091-F
A62R3	0698-3152	4		RESISTOR 3.48K 1% .125W F TC=0+-100	24546	C4-1/8-T0-3481-F
A62R4	2100-3273	1		RESISTOR-TRMR 2K 10% C SIDE-ADJ 1-TRV	28480	2100-3273
A62R5	0757-0465	6		RESISTOR 100K 1% .125W F TC=0+-100	24546	C4-1/8-T0-1003-F

See introduction to this section for ordering information  
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Table 6-3. Replaceable Parts

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
A62R6	0757-0465	6		RESISTOR 100K 1% .125W F TC=0+-100	24546	C4-1/8-T0=1003-F
A62R7	0757-0465	6		RESISTOR 100K 1% .125W F TC=0+-100	24546	C4-1/8-T0=1003-F
A62RA	0757-0476	6		RESISTOR 301K 1% .125W F TC=0+-100	24546	C4-1/8-T0=3013-F
A62R9	0757-0280	3		RESISTOR 1K 1% .125W F TC=0+-100	24546	C4-1/8-T0=1001-F
A62R10	0683-4725	2		RESISTOR 4.7K 5% .25W FC TC=400/+700	01121	CB4725
A62R11	0757-0280	3		RESISTOR 1K 1% .125W F TC=0+-100	24546	C4-1/8-T0=1001-F
A62R12	0683-4725	2		RESISTOR 4.7K 5% .25W FC TC=400/+700	01121	CB4725
A62R13	0683-3325	6		RESISTOR 3.3K 5% .25W FC TC=400/+700	01121	CB3325
A62R14	0683-1025	9		RESISTOR 1K 5% .25W FC TC=400/+600	01121	CB1025
A62U1	1820-1195	7		IC FF TTL LS D-TYPE POS-EDGE-TRIG COM	01295	SN74LS175N
A62U2	1820-1196	8		IC FF TTL LS D-TYPE POS-EDGE-TRIG COM	01295	SN74LS174N
A62U3	1820-1789	5	2	CONV 10-B/D/A 16-DIP-P	24355	AD7530JN
A62U4	1820-1194	6		IC CNTR TTL LS BIN JP/DOWN SYNCHRG	01295	SN74LS193N
A62U5	1820-1194	6		IC CNTR TTL LS BIN JP/DOWN SYNCHRO	01295	SN74LS193N
A62U6	1820-1194	6		IC CNTR TTL LS BIN UP/DOWN SYNCHRO	01295	SN74LS193N
A62U7	1820-1789	5		CONV 10-B/D/A 16-DIP-P	24355	AD7530JN
A62U8	1826-0315	3		OP AMP GP QUAD 14-DIP-P	27014	LM348N
A62U9	1820-1207	2		IC GATE TTL LS NAND 8-INP	01295	SN74LS30N
A62 MISCELLANEOUS PARTS						
	0360-0124	3		CONNECTOR-SGL CNT PIN .04-IN-BSC-SZ WND	28480	0360-0124
	1480-0116	8		PIN-GRV .062-IN-DIA .25-IN-LG STL	28480	1480-0116
	4040-0750	7		EXTR-PC BD RED POLYC .062-BD-THKNS	28480	4040-0750
	4040-0754	1		EXTR-PC RD BLU POLYC .062-BD-THKNS	28480	4040-0754
A63	03585-66563	6	1	DISPLAY, LOGIC	28480	03585-66563
A63C1	0160-2336	3	1	CAPACITOR-FXD 650UF+-20% 13VDC TA	06001	69F233067
A63C2	0160-0097	7		CAPACITOR-FXD 47UF+-10% 35VDC TA	56289	150D476X903552
A63C3	0160-0097	7		CAPACITOR-FXD 47UF+-10% 35VDC TA	56289	150D476X903552
A63C4	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A63C5	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A63C6	0160-2198	1	1	CAPACITOR-FXD 20PF +-5% 300VDC MICA	28480	0160-2198
A63C7	0160-3809	3	1	CAPACITOR-FXD .39UF +-5% 50VDC MELT-POLYC	28480	0160-3809
A63C9	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A63C11	0160-0191	8		CAPACITOR-FXD 56PF +-5% 300VDC MICA	72136	DM156560J0300AVICR
A63C20	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A63C21	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A63C23	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A63C24	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A63C25	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A63C26	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A63C27	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A63C28	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A63C29	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A63C31	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A63C32	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A63C33	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A63C41	1901-0050	3		DIODE-SWITCHING 80V 200MA 2NS DO-35	28480	1901-0050
A63C42	1902-0597	5	1	DIODE-ZNR 56.2V 5% DO-15 PD=1W TC=+.081%	28480	1902-0597
A63C43	1901-0050	3		DIODE-SWITCHING 80V 200MA 2NS DO-35	28480	1901-0050
A63C44	1901-0050	3		DIODE-SWITCHING 80V 200MA 2NS DO-35	28480	1901-0050
A63C45	1901-0050	3		DIODE-SWITCHING 80V 200MA 2NS DO-35	28480	1901-0050
A63F1	2110-0343	1	1	FUSE .25A 125V FAST-BLO .281X.093	28480	2110-0343
A63F2	2110-0384	0		FUSE .062A 125V FAST-BLO .281X.093	28480	2110-0384
A63J1	1251-4047	7		CONNECTOR 3-PIN M POST TYPE	28480	1251-4047
A63J1	1251-0141	4		JUMPER REMOVABLE	28480	1251-0141
A63J3	1251-4047	7		CONNECTOR 3-PIN M POST TYPE	28480	1251-4047
A63J3	1251-0141	8		JUMPER REMOVABLE	28480	1251-0141
A63J4	1251-4795	2		CONNECTOR 2-PIN M POST TYPE	28480	1251-4795
A63J5	1251-4795	2		CONNECTOR 2-PIN M POST TYPE	28480	1251-4795
A63L1	9100-3560	6		COIL-MLD 5.6UH 5% Q=45 .1550X.375LG-NOM	28480	9100-3560
A63L2	9100-3560	6		COIL-MLD 5.6UH 5% Q=45 .1550X.375LG-NOM	28480	9100-3560
A63L3	9100-3458	1		CHUKE, WIDE BAND	28480	9100-3458
A63Q1	1853-0036	2		TRANSISTOR PNP SI PD=310MW FT=250MHZ	28480	1853-0036
A63Q2	1854-0215	1		TRANSISTOR NPN SI PD=350MW FT=300MHZ	04713	2N3904
A63Q3	1854-0263	9	1	TRANSISTOR NPN 2N3019 SI TO-39 PD=800MW	04713	2N3019
A63Q4	1854-0215	1		TRANSISTOR NPN SI PD=350MW FT=300MHZ	04713	2N3904
A63R1	1810-0307	0		NETWORK-CONDUCT MODULE DIPJ 16 PINS; 0,100	28480	1810-0307
A63R2	0683-4725	2		RESISTOR 4.7K 5% .25W FC TC=400/+700	01121	CB4725
A63R3	0757-0440	7		RESISTOR 7.5K 1% .125W F TC=0+-100	24546	C4-1/8-T0=7501-F
A63R4	2100-3273	1		RESISTOR-TMR 2K 1% C SIDE-ADJ 1-THN	28480	2100-3273
A63R5	0757-0280	3		RESISTOR 1K 1% .125W F TC=0+-100	24546	C4-1/8-T0=1001-F

See introduction to this section for ordering information  
 \*Indicates factory selected value



Table 6-3. Replaceable Parts

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
A63R6	0683-4725	2		RESISTOR 4.7K 5% .25W FC TC=-400/+700	01121	CB4725
A63R7	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	CB4705
A63R8	0683-7515	4		RESISTOR 750 5% .25W FC TC=-400/+600	01121	CB7515
A63R9	0683-4725	2		RESISTOR 4.7K 5% .25W FC TC=-400/+700	01121	CB4725
A63R10	0683-4715	0		RESISTOR 470 5% .25W FC TC=-400/+600	01121	CB4715
A63R12	1810-0326	3	1	NETWORK-RES 10-PIN-SIP .1-PIN-SPCG	28480	1810-0326
A63R14	0683-1035	1		RESISTOR 10K 5% .25W FC TC=-400/+700	01121	CB1035
A63R15	0683-4725	2		RESISTOR 4.7K 5% .25W FC TC=-400/+700	01121	CB4725
A63R16	2100-3353	8		RESISTOR-TRMR 20K 10% C SIDE-ADJ 1-TRN	32997	3386X-Y46-203
A63R17	0698-3265	4	1	RESISTOR 118K 1% .125W F TC=0/+100	24546	C4-178-T0-1183-F
A63R18	0683-1035	1		RESISTOR 10K 5% .25W FC TC=-400/+700	01121	CB1035
A63R19	0683-4715	0		RESISTOR 470 5% .25W FC TC=-400/+600	01121	CB4715
A63R20	0683-4725	2		RESISTOR 4.7K 5% .25W FC TC=-400/+700	01121	CB4725
A63R21	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
A63R22	0683-2025	1		RESISTOR 2K 5% .25W FC TC=-400/+700	01121	CB2025
A63R23	0683-6225	1		RESISTOR 6.2K 5% .25W FC TC=-400/+700	01121	CB6225
A63RF11	1810-0279	5	2	NETWORK-RES 10-PIN-SIP .1-PIN-SPCG	01121	210A472
A63RF13	1810-0279	5		NETWORK-RES 10-PIN-SIP .1-PIN-SPCG	01121	210A472
A63SR1	1200-0473	8		SOCKET-IC 16-CONT DIP DIP-SLDR	28480	1200-0473
A63SU21	1200-0659	2		SOCKET-IC 40-CONT DIP-SLDR	28480	1200-0659
A63TP1-10	0360-0124	3		CONNECTOR-SGL CONT PIN .04-IN-BSC-SZ RND	28480	0360-0124
A63U11	1816-1192	5	1	IC TTL 8192-BIT ROM 80-NS 3-S	18324	N42S181F PROGRAMMED
A63U13	1820-1091	6		IC BFR TTL LS NON-INV HEX 1-INP	01295	SN74LS367AN
A63U14	1820-1195	7		IC FF TTL LS D-TYPE POS-EDGE-TRIG COM	01295	SN74LS175N
A63U15	1820-1202	7	1	IC GATE TTL LS NAND TPL 3-INP	01295	SN74LS10N
A63U16	1820-1212	9		IC FF TTL LS J-K NEG-EDGE-TRIG	01295	SN74LS112N
A63U17	1820-1423	4	1	IC MV TTL LS MONOSTBL RETRIG DUAL	01295	SN74LS123N
A63U18	1820-1112	8		IC FF TTL LS D-TYPE POS-EDGE-TRIG	01295	SN74LS74N
A63U19	1820-1112	8		IC FF TTL LS D-TYPE POS-EDGE-TRIG	01295	SN74LS74N
A63U21	1820-1692	9	1	IC MICPROG MOS	28480	1820-1692
A63U24	1820-1759	9	2	IC BFR TTL LS NON-INV UCTL	27014	DM81LS97N
A63U25	1820-1144	6		IC GATE TTL LS NOR QUAD 2-INP	01295	SN74LS02N
A63U26	1820-1197	9		IC GATE TTL LS NAND QUAD 2-INP	01295	SN74LS00N
A63U27	1820-1194	6		IC CNTR TTL LS BIN UP/DOWN SYNCHRO	01295	SN74LS193N
A63U28	181A-0531	8	1	IC NMOS ROM 450-NS 3-S	18324	2607F MASKED
A63U33	1820-1794	2	1	IC BFR TTL LS NON-INV UCTL	27014	DM81LS95N
A63U34	1820-1759	9		IC BFR TTL LS NON-INV UCTL	27014	DM81LS97N
A63U45	1820-1216	3		IC DCDR TTL LS 3-TO-8-LINE 3-INP	01295	SN74LS138N
A63U36	1816-1183	4	1	IC TTL 1K ROM 50-NS 3-S	07263	93427PC PROGRAMMED
A63U37	1820-1194	6		IC CNTR TTL LS BIN UP/DOWN SYNCHRO	01295	SN74LS193N
A63U38	1820-1194	6		IC CNTR TTL LS BIN UP/DOWN SYNCHRO	01295	SN74LS193N
A63U41	1820-1730	6		IC FF TTL LS D-TYPE POS-EDGE-TRIG COM	01295	SN74LS273N
A63U42	1820-1730	6		IC FF TTL LS D-TYPE POS-EDGE-TRIG COM	01295	SN74LS273N
A63U43	1820-1444	9	2	IC MUXR/DATA-SEL TTL LS 2-TO-1-LINE QUAD	01295	SN74LS298N
A63U44	1820-1444	9		IC MUXR/DATA-SEL TTL LS 2-TO-1-LINE QUAD	01295	SN74LS298N
A63U45	1820-1730	6		IC FF TTL LS D-TYPE POS-EDGE-TRIG COM	01295	SN74LS273N
A63U46	1820-1470	1	1	IC MUXR/DATA-SEL TTL LS 2-TO-1-LINE QUAD	01295	SN74LS157N
A63U47	1820-1730	6		IC FF TTL LS D-TYPE POS-EDGE-TRIG COM	01295	SN74LS273N
A63U48	1820-1730	6		IC FF TTL LS D-TYPE POS-EDGE-TRIG COM	01295	SN74LS273N
463 MISCELLANEOUS PARTS						
	1480-0116	8		PIN-GRV .062-IN-DIA .25-IN-LG STL	28480	1480-0116
	0380-0938	9		INSULATOR-FLG-RSHG TFE	28480	0380-0938
	4040-0751	8		EXTR-PC BD ORN POLYC .062-80-THKNS	28480	4040-0751
	4040-0754	1		EXTR-PC BD BLU POLYC .062-80-THKNS	28480	4040-0754
A64	03585-66564	7	1	ANALOG DISPLAY	28480	03585-66564
A64C1	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A64C2	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A64C3	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A64C4	0160-2257	5		CAPACITOR-FXD 10PF +-5% 500VDC CER 0+-60	28480	0160-2257
A64C5	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A64C6	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A64C7	0140-0190	7		CAPACITOR-FXD 39PF +-5% 300VDC MICA	72136	DM15E390J0300AV1CR
A64C8	0140-0190	7		CAPACITOR-FXD 39PF +-5% 300VDC MICA	72136	DM15E390J0300AV1CR
A64C9	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A64C10	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A64C11	0140-0190	7		CAPACITOR-FXD 39PF +-5% 300VDC MICA	72136	DM15E390J0300AV1CR
A64C12	0160-4265	7	1	CAPACITOR-FXD .47UF +-20% 50VDC	84411	HEW 386
A64C15	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A64C16	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A64C17	0160-1846	6		CAPACITOR-FXD 2.2UF +-10% 35VDC TA	56289	1500225X9035B2

See introduction to this section for ordering information  
 \*Indicates factory selected value

Table 6-3. Replaceable Parts

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
A64C18	0160-1846	6		CAPACITOR-FXD 2.2UF±10% 35VDC TA	56289	150D225X9035B2
A64C19	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A64C20	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A64C21	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A64C22	0160-2249	3		CAPACITOR-FXD 4.7PF ±.25PF 500VDC CER	28480	0160-2249
A64C23	0121-0493	3	1	CAPACITOR-V TRMR-AIR 1.7-11PF 250V	74970	187-0306-105
A64C24	0160-4438	6	1	CAPACITOR-FXD 470PF ±2.5% 160VDC POLYP	28480	0160-4438
A64C25	0160-4682	2	1	CAPACITOR-FXD 1000PF ±2.5% 160VDC POLYP	28480	0160-4682
A64C26	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A64C27	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A64C28	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A64C29	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A64C33	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A64C34	0180-0291	3		CAPACITOR-FXD 1UF±10% 35VDC TA	56289	150D105X9035A2
A64C35	0180-0291	3		CAPACITOR-FXD 1UF±10% 35VDC TA	56289	150D105X9035A2
A64C36	0180-2249	5	1	CAPACITOR-FXD 47UF±10% 20VDC TA	56289	150D476X9020R2
A64C37	0180-2205	3	2	CAPACITOR-FXD .33UF±10% 35VDC 1A	56289	150D334X9035A2
A64C38	0180-0097	7		CAPACITOR-FXD 47UF±10% 35VDC TA	56289	150D476X9035S2
A64C40	0180-2205	3		CAPACITOR-FXD .33UF±10% 35VDC TA	56289	150D334X9035A2
A64C41	0180-0097	7		CAPACITOR-FXD 47UF±10% 35VDC TA	56289	150D476X9035S2
A64C42	0180-0197	8		CAPACITOR-FXD 2.2UF±10% 20VDC TA	56289	150D225X9020A2
A64C43	0180-0291	3		CAPACITOR-FXD 1UF±10% 35VDC TA	56289	150D105X9035A2
A64C44	0180-0291	3		CAPACITOR-FXD 1UF±10% 35VDC TA	56289	150D105X9035A2
A64C46	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A64C47	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A64C50	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A64C51	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A64C52	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A64C53	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A64C54	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A64C55	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A64C61	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A64C63	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A64C64	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A64C65	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A64C66	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A64C67	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A64CR3	1902-0041	4		DIODE-ZNR 5.11V 5% DO-7 PD=.4W TC=-.009%	28480	1902-0041
A64CR4	1902-3002	3		DIODE-ZNR 2.37V 5% DO-7 PD=.4W TC=-.074%	28480	1902-3002
A64CR5	1902-3002	3		DIODE-ZNR 2.37V 5% DO-7 PD=.4W TC=-.074%	28480	1902-3002
A64CR6	1902-3002	3		DIODE-ZNR 2.37V 5% DO-7 PD=.4W TC=-.074%	28480	1902-3002
A64CR7	1902-3002	3		DIODE-ZNR 2.37V 5% DO-7 PD=.4W TC=-.074%	28480	1902-3002
A64CR12	1902-1329	3		DIODE-ZNR 6.6V	28480	1902-1329
A64CR13	1901-0050	3		DIODE-SWITCHING 80V 200MA 2NS DG-35	28480	1901-0050
A64CR14	1901-0050	3		DIODE-SWITCHING 80V 200MA 2NS DG-35	28480	1901-0050
A64F1	2110-0384	0		FUSE .062A 125V FAST-BLO .281X.093	28480	2110-0384
A64F2	2110-0384	0		FUSE .062A 125V FAST-BLO .281X.093	28480	2110-0384
A64J1	1251-4047	7		CONNECTOR 3-PIN M POST TYPE	28480	1251-4047
A64J1	1258-0141	8		JUMPER REMOVABLE	28480	1258-0141
A64J2	1251-4047	7		CONNECTOR 3-PIN M POST TYPE	28480	1251-4047
A64J2	1258-0141	8		JUMPER REMOVABLE	28480	1258-0141
A64J3	1251-4047	7		CONNECTOR 3-PIN M POST TYPE	28480	1251-4047
A64J3	1258-0141	8		JUMPER REMOVABLE	28480	1258-0141
A64J5	1251-4795	2		CONNECTOR 2-PIN M POST TYPE	28480	1251-4795
A64J6	1251-4795	2		CONNECTOR 2-PIN M POST TYPE	28480	1251-4795
A64J7	1251-4795	2		CONNECTOR 2-PIN M POST TYPE	28480	1251-4795
A64J8	1251-4795	2		CONNECTOR 2-PIN M POST TYPE	28480	1251-4795
A64L1	9100-3561	7	3	COIL-MLO 6.2UH 5% Q=45 .1550X.375LG-NDM	28480	9100-3561
A64L3	9100-3561	7		COIL-MLO 6.2UH 5% Q=45 .1550X.375LG-NDM	28480	9100-3561
A64L4	9100-3561	7		COIL-MLO 6.2UH 5% Q=45 .1550X.375LG-NDM	28480	9100-3561
A64Q1	1853-0036	2		TRANSISTOR PNP SI PD=310MW FT=250MHZ	28480	1853-0036
A64Q2	1854-0215	1		TRANSISTOR NPN SI PD=350MW FT=300MHZ	04713	2N3904
A64Q3	1853-0036	2		TRANSISTOR PNP SI PD=310MW FT=250MHZ	28480	1853-0036
A64Q4	1854-0215	1		TRANSISTOR NPN SI PD=350MW FT=300MHZ	04713	2N3904
A64Q5	1854-0515	4	1	TRANSISTOR-DUAL NPN TO-77 PD=600MW	28480	1854-0515
A64Q6	1853-0036	2		TRANSISTOR PNP SI PD=310MW FT=250MHZ	28480	1853-0036
A64Q7	1853-0036	2		TRANSISTOR PNP SI PD=310MW FT=250MHZ	28480	1853-0036
A64Q8	1854-0215	1		TRANSISTOR NPN SI PD=350MW FT=300MHZ	04713	2N3904
A64Q9	1854-0215	1		TRANSISTOR NPN SI PD=350MW FT=300MHZ	04713	2N3904
A64Q10	1853-0083	9	1	TRANSISTOR-DUAL PNP PD=600MW	28480	1853-0083
A64Q11	1855-0269	7	1	TRANSISTOR MOSFET N-CHAN E-MODE SI	18524	80214
A64Q14	1854-0475	5	3	TRANSISTOR-DUAL NPN PD=750MW	28480	1854-0475

See introduction to this section for ordering information  
 \*Indicates factory selected value

Table 6-3. Replaceable Parts

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
A64R1	2100-3352	7	1	RESISTOR-TRMR 1K 10% C SIDE-ADJ 1-TRN	28480	2100-3352
A64R2	0699-0165	9	1	RESISTOR 5K 1% .125W F TC=0+50	26480	0699-0165
A64R3	0698-4435	2		RESISTOR 2,49K 1% .125W F TC=0+100	24546	C4-1/8-T0-2491-F
A64R4	0698-3223	4	1	RESISTOR 1,24K 1% .125W F TC=0+100	24546	C4-1/8-T0-1241-F
A64R5	0698-4435	2		RESISTOR 2,49K 1% .125W F TC=0+100	24546	C4-1/8-T0-2491-F
A64R6	0683-4725	2		RESISTOR 4,7K 5% .25W FC TC=-400/+700	01121	C84725
A64R7	0698-4435	2		RESISTOR 2,49K 1% .125W F TC=0+100	24546	C4-1/8-T0-2491-F
A64R8	0757-0430	5		RESISTOR 2,21K 1% .125W F TC=0+100	24546	C4-1/8-T0-2211-F
A64R9	0757-0280	3		RESISTOR 1K 1% .125W F TC=0+100	24546	C4-1/8-T0-1001-F
A64R10	0698-4367	9	1	RESISTOR 20,5 1% .125W F TC=0+100	03888	PME55-1/8-T0-20R5-F
A64R11	0757-0123	3	1	RESISTOR 34,8K 1% .125W F TC=0+100	28480	0757-0123
A64R14	2100-3353	8		RESISTOR-TRMR 20K 10% C SIDE-ADJ 1-TRN	32997	3386X-V46-203
A64R15	0698-4435	2		RESISTOR 2,49K 1% .125W F TC=0+100	24546	C4-1/8-T0-2491-F
A64R16	2100-3273	1		RESISTOR-TRMR 2K 10% C SIDE-ADJ 1-TRN	26480	2100-3273
A64R17	0698-4435	2		RESISTOR 2,49K 1% .125W F TC=0+100	24546	C4-1/8-T0-2491-F
A64R18	0698-4376	0	1	RESISTOR 32,4 1% .125W F TC=0+100	24546	C4-1/8-T0-32R4-F
A64R19	0698-4468	1	3	RESISTOR 1,13K 1% .125W F TC=0+100	24546	C4-1/8-T0-1131-F
A64R20	0698-4435	2		RESISTOR 2,49K 1% .125W F TC=0+100	24546	C4-1/8-T0-2491-F
A64R22	0698-4435	2		RESISTOR 2,49K 1% .125W F TC=0+100	24546	C4-1/8-T0-2491-F
A64R23	0698-3279	0		RESISTOR 4,99K 1% .125W F TC=0+100	24546	C4-1/8-T0-4991-F
A64R25	0757-0442	9		RESISTOR 10K 1% .125W F TC=0+100	24546	C4-1/8-T0-1002-F
A64R26	0757-0442	9		RESISTOR 10K 1% .125W F TC=0+100	24546	C4-1/8-T0-1002-F
A64R27	0757-0280	3		RESISTOR 1K 1% .125W F TC=0+100	24546	C4-1/8-T0-1001-F
A64R28	0757-0436	1	1	RESISTOR 4,32K 1% .125W F TC=0+100	24546	C4-1/8-T0-4321-F
A64R29	0698-3258	5		RESISTOR 5,36K 1% .125W F TC=0+100	24546	C4-1/8-T0-5361-F
A64R30	0683-3325	6		RESISTOR 3,3K 5% .25W FC TC=-400/+700	01121	C83325
A64R31	0683-1525	4		RESISTOR 1,5K 5% .25W FC TC=-400/+700	01121	C81525
A64R32	0698-0063	4	1	RESISTOR 5,23K 1% .125W F TC=0+100	91637	CMF-1/8-T1-5231-F
A64R33	0683-1035	1		RESISTOR 10K 5% .25W FC TC=-400/+700	01121	C81035
A64R34	0683-1035	1		RESISTOR 10K 5% .25W FC TC=-400/+700	01121	C81035
A64R36	0683-2025	1		RESISTOR 2K 5% .25W FC TC=-400/+700	01121	C82025
A64R37	0698-4471	6		RESISTOR 7,15K 1% .125W F TC=0+100	24546	C4-1/8-T0-7151-F
A64R38	0698-3549	7	1	RESISTOR 2,49K 1% .125W F TC=0+25	26480	0698-3549
A64R39	0698-6329	7	1	RESISTOR 845 1% .125W F TC=0+25	26480	0698-6329
A64R40	0698-6317	7	4	RESISTOR 500 .1% .125W F TC=0+25	03888	PME55-1/8-T9-500R-B
A64R41	0698-6317	3		RESISTOR 500 .1% .125W F TC=0+25	03888	PME55-1/8-T9-500R-B
A64R42	0698-6317	3		RESISTOR 500 .1% .125W F TC=0+25	03888	PME55-1/8-T9-500R-B
A64R43	0698-6317	3		RESISTOR 500 .1% .125W F TC=0+25	03888	PME55-1/8-T9-500R-B
A64R44	0698-6340	2	1	RESISTOR 4K 1% .125W F TC=0+25	26480	0698-6340
A64R45	0698-5552	6	1	RESISTOR 1K 1% .125W F TC=0+25	26480	0698-5552
A64R46	0757-0465	6		RESISTOR 100K 1% .125W F TC=0+100	24546	C4-1/8-T0-1003-F
A64R47	0757-0465	6		RESISTOR 100K 1% .125W F TC=0+100	24546	C4-1/8-T0-1003-F
A64R48	2100-3354	9	3	RESISTOR-TRMR 50K 10% C SIDE-ADJ 1-TRN	28480	2100-3354
A64R49	0683-6825	7		RESISTOR 6,8K 5% .25W FC TC=-400/+700	01121	C86825
A64R50	0698-0479	4	2	RESISTOR 14K 1% .125W F TC=0+100	24546	C4-1/8-T0-1402-F
A64R51	0683-1525	4		RESISTOR 1,5K 5% .25W FC TC=-400/+700	01121	C81525
A64R52	0698-4432	9		RESISTOR 2,1K 1% .125W F TC=0+100	24546	C4-1/8-T0-2101-F
A64R53	0683-2425	5		RESISTOR 2,4K 5% .25W FC TC=-400/+700	01121	C82425
A64R54	0683-2025	1		RESISTOR 2K 5% .25W FC TC=-400/+700	01121	C82025
A64R55	0683-3325	6		RESISTOR 3,3K 5% .25W FC TC=-400/+700	01121	C83325
A64R56	0683-3325	6		RESISTOR 3,3K 5% .25W FC TC=-400/+700	01121	C83325
A64R57	0683-1125	0		RESISTOR 1,1K 5% .25W FC TC=-400/+700	01121	C81125
A64R59	0683-4725	2		RESISTOR 4,7K 5% .25W FC TC=-400/+700	01121	C84725
A64R60	0683-1035	1		RESISTOR 10K 5% .25W FC TC=-400/+700	01121	C81035
A64R61	0698-0092	9	1	RESISTOR 2,61K 1% .125W F TC=0+25	03888	PME55-1/8-T0-2611-F
A64R62	2100-3351	6		RESISTOR-TRMR 500 10% C SIDE-ADJ 1-TRN	28480	2100-3351
A64R63	0698-3151	7	1	RESISTOR 2,87K 1% .125W F TC=0+100	24546	C4-1/8-T0-2871-F
A64R65	0683-1225	1		RESISTOR 1,2K 5% .25W FC TC=-400/+700	01121	C81225
A64R66	0683-1045	3		RESISTOR 100K 5% .25W FC TC=-400/+800	01121	C81045
A64R67	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	C84705
A64R68	0683-1045	3		RESISTOR 100K 5% .25W FC TC=-400/+800	01121	C81045
A64R69	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	C84705
A64R70	0698-4121	3	0	RESISTOR 11,3K 1% .125W F TC=0+100	24546	C4-1/8-T0-1132-F
A64R71	0698-4478	1	1	RESISTOR 10,7K 1% .125W F TC=0+100	24546	C4-1/8-T0-1072-F
A64R72	2100-3207	5		RESISTOR-TRMR 5K 10% C SIDE-ADJ 1-TRN	28480	2100-3207
A64R73	0698-4492	1	1	RESISTOR 32,4K 1% .125W F TC=0+100	24546	C4-1/8-T0-3242-F
A64R74	0698-4473	8		RESISTOR 8,06K 1% .125W F TC=0+100	24546	C4-1/8-T0-8061-F
A64R75	0683-2025	1		RESISTOR 2K 5% .25W FC TC=-400/+700	01121	C82025
A64R76	0683-2025	1		RESISTOR 2K 5% .25W FC TC=-400/+700	01121	C82025
A64R79	0683-3015	1		RESISTOR 300 5% .25W FC TC=-400/+600	01121	C83015
A64R80	0683-2025	1		RESISTOR 2K 5% .25W FC TC=-400/+700	01121	C82025
A64R81	0698-0083	8	1	RESISTOR 1,96K 1% .125W F TC=0+100	24546	C4-1/8-T0-1961-F
A64R82	0757-0283	6		RESISTOR 2K 1% .125W F TC=0+100	24546	C4-1/8-T0-2001-F
A64R83	0683-0515	0	2	RESISTOR 5,1 5% .25W FC TC=-400/+500	01121	C85165
A64R84	0683-0515	0		RESISTOR 5,1 5% .25W FC TC=-400/+500	01121	C85165

See introduction to this section for ordering information  
 \*Indicates factory selected value



Table 6-3. Replaceable Parts

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
A64R85	0683-3025	3		RESISTOR 3K 5% .25W FC TC=400/+700	01121	CB3025
A64R86	0683-3025	3		RESISTOR 3K 5% .25W FC TC=400/+700	01121	CB3025
A64R87	0683-4715	0		RESISTOR 470 5% .25W FC TC=400/+600	01121	CB4715
A64R90	0683-1045	3		RESISTOR 100K 5% .25W FC TC=400/+800	01121	CB1045
A64R91	0683-1045	3		RESISTOR 100K 5% .25W FC TC=400/+800	01121	CB1045
A64R92	0683-1015	7		RESISTOR 100 5% .25W FC TC=400/+500	01121	CB1015
A64TP1-11	0306-0124	3		CONNECTOR-SGL CONT PIN .04-IN-BSC-52 RND	28480	0360-0124
A64U1	1A26-0396	0	1	IC 7815 V RGLTR TO=220	07263	7815UC
A64U2	1A26-0214	1	1	IC V RGLTR TO=220	04713	MC7915CT
A64U3	1A26-0508	6	1	CONV 10-B-D/A 16-DIP-C	24355	AD561JD
A64U4	1A26-0413	2	2	OP AMP LOW-BIAS-H-IMPD TO=99	34371	HA2-2605-5
A64U5	1A26-0188	8		CONV 8-B-D/A 16-DIP-C	14713	MC1408L-8
A64U6	1A26-0340	4		OP AMP BIFET TO=99	28480	1A26-0340
A64U7	1A26-0188	8		CONV 8-B-D/A 16-DIP-C	04713	MC1408L-8
A64U8	1A26-0188	8		CONV 8-B-D/A 16-DIP-C	04713	MC1408L-8
A64U9	1A26-0043	4		OP AMP GP TO=99	0192B	CA307T
A64U10	1A26-0413	2		OP AMP LOW-BIAS-H-IMPD TO=99	34371	HA2-2605-5
A64U11	1A26-0374	4	1	SWITCH CUR 16-DIP-C	07263	9650-1DC
A64U12	1A26-0340	4		OP AMP BIFET TO=99	28480	1A26-0340
A64U13	1A26-1546	2	1	MULTIPLXR ANLG DUAL 16-DIP-C	04713	MC140528CL
A64U14	1A26-0340	4		OP AMP BIFET TO=99	28480	1A26-0340
A64U15	1A26-0340	4		OP AMP BIFET TO=99	28480	1A26-0340
A64U16	1A26-0340	4		OP AMP BIFET TO=99	28480	1A26-0340
A64U17	1A26-0510	0		SWITCH ANLG QUAD 16-DIP-P	27014	LF13332N
A64U18	1A26-0340	4		OP AMP BIFET TO=99	28480	1A26-0340
A64U19	1A26-0340	4		OP AMP BIFET TO=99	28480	1A26-0340
A64U20	1A26-0340	4		OP AMP BIFET TO=99	28480	1A26-0340
A64U21	1A26-0340	4		OP AMP BIFET TO=99	28480	1A26-0340
A64U22	1A26-1274	3	1	IC GATE TTL LS NAND DUAL 4-INP	01295	SN74LS22N
A64U23	1A26-0043	4		OP AMP GP TO=99	0192B	CA307T
A64U24	1A26-0043	4		OP AMP GP TO=99	0192B	CA307T
A64 MISCELLANEOUS PARTS						
	0380-0938	9		INSULATOR-FLG-PHSG TFE	28480	0380-0938
	4040-0752	9		EXTR-PC HD YEL POLYC .062-BD-THKNS	28480	4040-0752
	4040-0754	1		EXTR-PC HD BLU POLYC .062-BD-THKNS	28480	4040-0754
A65	03585-66565			HIGH VOLTAGE BOARD	28480	03585-66565
	2360-0115	4		SCREW-P4CH 6-32 .312-IN-LG PAN-HD-PDZI	00000	ORDER BY DESCRIPTION
	0590-1054	7		THREADED INSERT-NUT 6-32 .065-LG SST	28480	0590-1054
	1480-0116	8		PIN-GRV .062-IN-DIA .25-IN-LG STL	28480	1480-0116
A67	03585-66567	0	1	X-Y-Z BOARD	28480	03585-66567
A67C1	0150-0012	3	21	CAPACITOR-FXD .01UF +-20% 1KVDC CER	56289	C023A102J103MS38
A67C2	0150-0012	3		CAPACITOR-FXD .01UF +-20% 1KVDC CER	56289	C023A102J103MS38
A67C3	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A67C4	0150-0012	3		CAPACITOR-FXD .01UF +-20% 1KVDC CER	56289	C023A102J103MS38
A67C6	0180-0269	5	2	CAPACITOR-FXD 1UF+50-10% 150VDC AL	56289	30D105G150B42
A67C8	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A67C10	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A67C11	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A67C12	0150-0012	3		CAPACITOR-FXD .01UF +-20% 1KVDC CER	56289	C023A102J103MS38
A67C13	0150-0012	3		CAPACITOR-FXD .01UF +-20% 1KVDC CER	56289	C023A102J103MS38
A67C14	0180-0269	5		CAPACITOR-FXD 1UF+50-10% 150VDC AL	56289	30D105G150B42
A67C16	0180-0197	8		CAPACITOR-FXD 2.2UF+-10% 20VDC TA	56289	150D225X9020A2
A67C17	0160-2237	9	1	CAPACITOR-FXD 1.2PF +-25PF 500VDC CER	28480	0160-2237
A67C18	0160-0195	4	1	CAPACITOR-FXD 1000PF +-20% 250VAC(RMS)	28480	0160-0195
A67C19	0180-0089	7	2	CAPACITOR-FXD 10UF+50-10% 150VDC AL	56289	30D105G150D02
A67C20	0160-0164	7		CAPACITOR-FXD .039UF +-10% 200VDC POLYE	28480	0160-0164
A67C21	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A67C22	0160-0166	9		CAPACITOR-FXD .068UF +-10% 200VDC POLYE	28480	0160-0166
A67C23	0180-0141	2	3	CAPACITOR-FXD 50UF+75-10% 50VDC AL	56289	30D50G050D02
A67C24	0180-0229	7		CAPACITOR-FXD 33UF+-10% 10VDC TA	56289	150D336X9010B2
A67C25	0150-0012	3		CAPACITOR-FXD .01UF +-20% 1KVDC CER	56289	C023A102J103MS38
A67C26	0150-0012	3		CAPACITOR-FXD .01UF +-20% 1KVDC CER	56289	C023A102J103MS38
A67C27	0150-0012	3		CAPACITOR-FXD .01UF +-20% 1KVDC CER	56289	C023A102J103MS38
A67C28	0160-0197	8		CAPACITOR-FXD 2.2UF+-10% 20VDC TA	56289	150D225X9020A2
A67C29	0160-2235	7	4	CAPACITOR-FXD .75PF +-25PF 500VDC CER	28480	0160-2235
A67C30	0150-0012	3		CAPACITOR-FXD .01UF +-20% 1KVDC CER	56289	C023A102J103MS38
A67C31	0150-0012	3		CAPACITOR-FXD .01UF +-20% 1KVDC CER	56289	C023A102J103MS38
A67C32	0150-0012	3		CAPACITOR-FXD .01UF +-20% 1KVDC CER	56289	C023A102J103MS38
A67C33	0180-0197	8		CAPACITOR-FXD 2.2UF+-10% 20VDC TA	56289	150D225X9020A2
A67C34	0160-2235	7		CAPACITOR-FXD .75PF +-25PF 500VDC CER	28480	0160-2235
A67C35	0180-0229	7		CAPACITOR-FXD 33UF+-10% 10VDC TA	56289	150D336X9010B2
A67C36	0150-0012	3		CAPACITOR-FXD .01UF +-20% 1KVDC CER	56289	C023A102J103MS38
A67C37	0150-0012	3		CAPACITOR-FXD .01UF +-20% 1KVDC CER	56289	C023A102J103MS38
A67C38	0150-0012	3		CAPACITOR-FXD .01UF +-20% 1KVDC CER	56289	C023A102J103MS38
A67C39	0180-0197	8		CAPACITOR-FXD 2.2UF+-10% 20VDC TA	56289	150D225X9020A2

See introduction to this section for ordering information  
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Table 6-3. Replaceable Parts

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
A67C40	0160-2235	7	3	CAPACITOR-FXD .75PF +-25PF 500VDC CER	28480	0160-2235
A67C41	0150-0012	3	3	CAPACITOR-FXD .01UF +-20% 1KVDC CER	56289	C023A102J103MS38
A67C42	0150-0012	3	3	CAPACITOR-FXD .01UF +-20% 1KVDC CER	56289	C023A102J103MS38
A67C43	0150-0012	3	3	CAPACITOR-FXD .01UF +-20% 1KVDC CER	56289	C023A102J103MS38
A67C44	0160-0197	8	3	CAPACITOR-FXD 2.2UF+-10% 20VDC TA	56289	150D225X9020A2
A67C45	0160-2235	7	3	CAPACITOR-FXD .75PF +-25PF 500VDC CER	28480	0160-2235
A67C46	0160-0089	7	3	CAPACITOR-FXD 10UF-50-10% 150VDC AL	56289	30D106F150D02
A67C47	0160-3847	9	3	CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A67C48	0160-3847	9	3	CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A67C49	0160-3847	9	3	CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A67C50	0160-3847	9	3	CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A67C51	0150-0012	3	3	CAPACITOR-FXD .01UF +-20% 1KVDC CER	56289	C023A102J103MS38
A67C52	0160-3847	9	3	CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A67C53	0160-3847	9	3	CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A67C54	0150-0012	3	3	CAPACITOR-FXD .01UF +-20% 1KVDC CER	56289	C023A102J103MS38
A67C55	0160-0161	4	3	CAPACITOR-FXD .01UF +-10% 200VDC POLYE	28480	0160-0161
A67C64	0150-0012	3	3	CAPACITOR-FXD .01UF +-20% 1KVDC CER	56289	C023A102J103MS38
A67C65	0160-3847	9	3	CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A67C66	0160-3847	9	3	CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A67C67	0160-3847	9	3	CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A67C68	0160-3847	9	3	CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A67C69	0160-3847	9	3	CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A67C70	0160-3847	9	3	CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
A67C71	0160-0195	6	3	CAPACITOR-FXD .33UF+-20% 35VDC TA	56289	150D334X0035A2
A67C72	0160-0195	6	3	CAPACITOR-FXD .33UF+-20% 35VDC TA	56289	150D334X0035A2
A67C73	0160-0291	3	3	CAPACITOR-FXD 1UF+-10% 35VDC TA	56289	150D105X9035A2
A67C74	0160-0291	3	3	CAPACITOR-FXD 1UF+-10% 35VDC TA	56289	150D105X9035A2
A67C75	0150-0012	3	3	CAPACITOR-FXD .01UF +-20% 1KVDC CER	56289	C023A102J103MS38
A67CR1	1902-3237	6	2	DIODE-ZNR 20V 5% DO-7 PD=.4W TC=+.073%	28480	1902-3237
A67CR2	1902-3311	7	3	DIODE-ZNR 38.3V 5% DO-7 PD=.4W TC=+.081%	28480	1902-3311
A67CR3	1902-3311	7	3	DIODE-ZNR 38.3V 5% DO-7 PD=.4W TC=+.081%	28480	1902-3311
A67CR4	1901-0096	7	1	DIODE-SWITCHING 120V 50MA 100NS	28480	1901-0096
A67CR5	1902-3237	6	2	DIODE-ZNR 20V 5% DO-7 PD=.4W TC=+.073%	28480	1902-3237
A67CR6	1901-0050	3	2	DIODE-SWITCHING 80V 200MA 2NS DO-35	28480	1901-0050
A67CR8	1902-0049	2	3	DIODE-ZNR 6.19V 5% DO-7 PD=.4W TC=+.022%	28480	1902-0049
A67CR10	1902-3193	3	1	DIODE-ZNR 13.3V 5% DO-7 PD=.4W TC=+.059%	28480	1902-3193
A67CR11	1902-0049	2	3	DIODE-ZNR 6.19V 5% DO-7 PD=.4W TC=+.022%	28480	1902-0049
A67CR12	1902-0934	4	1	DIODE-ZNR 1453A08 120V 5% DO-29 PD=5W	04713	1N53806
A67CR13	1902-3311	7	2	DIODE-ZNR 38.3V 5% DO-7 PD=.4W TC=+.081%	28480	1902-3311
A67CR14	1902-0049	2	2	DIODE-ZNR 6.19V 5% DO-7 PD=.4W TC=+.022%	28480	1902-0049
A67CR15	1902-0049	2	2	DIODE-ZNR 6.19V 5% DO-7 PD=.4W TC=+.022%	28480	1902-0049
A67CR16	1901-0050	3	3	DIODE-SWITCHING 80V 200MA 2NS DO-35	28480	1901-0050
A67CR17	1901-0050	3	3	DIODE-SWITCHING 80V 200MA 2NS DO-35	28480	1901-0050
A67CR18	1901-0029	6	3	DIODE-PNR RECT 600V 750MA DO-29	28480	1901-0029
A67CR19	1901-0029	6	3	DIODE-PNR RECT 600V 750MA DO-29	28480	1901-0029
A67CR20	1902-0049	2	2	DIODE-ZNR 6.19V 5% DO-7 PD=.4W TC=+.022%	28480	1902-0049
A67CR21	1902-0049	2	2	DIODE-ZNR 6.19V 5% DO-7 PD=.4W TC=+.022%	28480	1902-0049
A67CR22	1902-0049	2	2	DIODE-ZNR 6.19V 5% DO-7 PD=.4W TC=+.022%	28480	1902-0049
A67CR23	1902-0049	2	2	DIODE-ZNR 6.19V 5% DO-7 PD=.4W TC=+.022%	28480	1902-0049
A67CR24	1902-0049	2	2	DIODE-ZNR 6.19V 5% DO-7 PD=.4W TC=+.022%	28480	1902-0049
A67CR25	1902-0049	2	2	DIODE-ZNR 6.19V 5% DO-7 PD=.4W TC=+.022%	28480	1902-0049
A67CR26	1902-3301	5	2	DIODE-ZNR 34.8V 5% DO-7 PD=.4W TC=+.078%	28480	1902-3301
A67CR27	1902-3301	5	2	DIODE-ZNR 34.8V 5% DO-7 PD=.4W TC=+.078%	28480	1902-3301
A67CR29	1901-0029	6	3	DIODE-PNR RECT 600V 750MA DO-29	28480	1901-0029
A67F1	2110-0001	8	1	FUSE 1A 250V FAST-BLO 1.25X.25 UL IEC	75915	312001
A67J2	1251-4794	1	3	CONNECTOR-SGL CONT PIN .025-IN-BSC-SZ S9	28480	1251-4794
A67J3	1251-4794	1	3	CONNECTOR-SGL CONT PIN .025-IN-BSC-SZ SC	28480	1251-4794
A67J4	1251-3618	6	5	CONNECTOR 2-PIN M POST TYPE	28480	1251-3618
A67J5	1251-3618	6	5	CONNECTOR 2-PIN M POST TYPE	28480	1251-3618
A67J6	1251-3618	6	5	CONNECTOR 2-PIN M POST TYPE	28480	1251-3618
A67J11	1251-4794	1	3	CONNECTOR-SGL CONT PIN .025-IN-BSC-SZ S9	28480	1251-4794
A67J11	1258-0141	8	1	JUMPER REMOVABLE	28480	1258-0141
A67L1	9140-0171	3	1	COIL-MLD 400H 10% Q=20, 2960X, 96ALG-NDM	28480	9140-0171
A67L2	9100-1641	0	1	COIL-MLD 2400H 5% Q=65, 1550X, 375LG-NDM	28480	9100-1641
A67Q1	1854-0215	1	5	TRANSISTOR NPN SI PD=350MW FT=300MHZ	04713	2N3904
A67Q2	1853-0089	5	5	TRANSISTOR PNP 2N4917 SI PD=200MW	07263	2N4917
A67Q3	1853-0089	5	5	TRANSISTOR PNP 2N4917 SI PD=200MA	07263	2N4917
A67Q4	1854-0215	1	5	TRANSISTOR NPN SI PD=350MW FT=300MHZ	04713	2N3904
A67Q5	1853-0036	2	5	TRANSISTOR PNP SI PD=310MW FT=250MHZ	28480	1853-0036
A67Q6	1854-0071	7	5	TRANSISTOR NPN SI PD=300MW FT=200MHZ	28480	1854-0071
A67Q7	1853-0232	0	5	TRANSISTOR PNP SI TO-39 PD=1W FT=200MHZ	28480	1853-0232
A67Q8	1854-0419	7	5	TRANSISTOR NPN SI TO-39 PD=1W FT=200MHZ	28480	1854-0419
A67Q9	1854-0215	1	5	TRANSISTOR NPN SI PD=350MW FT=300MHZ	04713	2N3904
A67Q10	1854-0039	7	5	TRANSISTOR NPN 2N3053S SI TO-39 PD=1W	01928	2N3053S

See introduction to this section for ordering information  
 \*Indicates factory selected value

Table 6-3. Replaceable Parts

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
A67Q11	1854-0237	7	1	TRANSISTOR NPN SI TO-66 PD=20W FT=10MHZ	28480	1854-0237
A67Q12	1854-0234	4	1	TRANSISTOR NPN 2N3440 SI TO-5 PD=1W	01928	2N3440
A67Q13	1854-0476	6	1	TRANSISTOR NPN 2N3879 SI TO-66 PD=35W	01928	2N3879
A67Q14	1854-0475	5		TRANSISTOR-DUAL NPN PD=750MW	28480	1854-0475
A67Q15	1854-0071	7		TRANSISTOR NPN SI PD=300MW FT=200MHZ	28480	1854-0071
A67Q16	1853-0036	2		TRANSISTOR PNP SI PD=310MW FT=250MHZ	28480	1853-0036
A67Q17	1854-0071	7		TRANSISTOR NPN SI PD=300MW FT=200MHZ	28480	1854-0071
A67Q18	1853-0232	0		TRANSISTOR PNP SI TO-39 PD=1W FT=200MHZ	28480	1853-0232
A67Q19	1854-0419	7		TRANSISTOR NPN SI TO-39 PD=1W FT=200MHZ	28480	1854-0419
A67Q20	1853-0036	2		TRANSISTOR PNP SI PD=310MW FT=250MHZ	28480	1853-0036
A67Q21	1854-0071	7		TRANSISTOR NPN SI PD=300MW FT=200MHZ	28480	1854-0071
A67Q22	1853-0232	0		TRANSISTOR PNP SI TO-39 PD=1W FT=200MHZ	28480	1853-0232
A67Q23	1854-0419	7		TRANSISTOR NPN SI TO-39 PD=1W FT=200MHZ	28480	1854-0419
A67Q24	1854-0475	5		TRANSISTOR-DUAL NPN PD=750MW	28480	1854-0475
A67Q25	1854-0071	7		TRANSISTOR NPN SI PD=300MW FT=200MHZ	28480	1854-0071
A67Q26	1853-0036	2		TRANSISTOR PNP SI PD=310MW FT=250MHZ	28480	1853-0036
A67Q27	1854-0071	7		TRANSISTOR NPN SI PD=300MW FT=200MHZ	28480	1854-0071
A67Q28	1853-0232	0		TRANSISTOR PNP SI TO-39 PD=1W FT=200MHZ	28480	1853-0232
A67Q29	1854-0419	7		TRANSISTOR NPN SI TO-39 PD=1W FT=200MHZ	28480	1854-0419
A67Q30	1853-0036	2		TRANSISTOR PNP SI PD=310MW FT=250MHZ	28480	1853-0036
A67Q31	1854-0071	7		TRANSISTOR NPN SI PD=300MW FT=200MHZ	28480	1854-0071
A67Q32	1853-0232	0		TRANSISTOR PNP SI TO-39 PD=1W FT=200MHZ	28480	1853-0232
A67Q33	1854-0419	7		TRANSISTOR NPN SI TO-39 PD=1W FT=200MHZ	28480	1854-0419
A67Q35	1884-0073	2	1	THYRISTOR-SCR TO-5 VRRM=100	28480	1884-0073
A67R1	2100-3353	8		RESISTOR-TRMR 20K 10% C SIDE=ADJ 1-TRN	32997	3386X-Y46-203
A67R2	2100-3353	8		RESISTOR-TRMR 20K 10% C SIDE=ADJ 1-TRN	32997	3386X-Y46-203
A67R3	2100-3354	9		RESISTOR-TRMR 50K 10% C SIDE=ADJ 1-TRN	28480	2100-3354
A67R4	0683-5135	0	1	RESISTOR 51K 5% .25W FC TC=-400/+800	01121	CB5135
A67R5	0683-2225	3		RESISTOR 2.2K 5% .25W FC TC=-400/+700	01121	CB2225
A67R6	2100-3354	9		RESISTOR-TRMR 50K 10% C SIDE=ADJ 1-TRN	28480	2100-3354
A67R7	0698-3497	4	3	RESISTOR 6.04K 1% .125W F TC=0+-100	24546	C4-1/8-T0-604R-F
A67R8	0698-4510	4		RESISTOR 84.5K 1% .125W F TC=0+-100	24546	C4-1/8-T0-8452-F
A67R9	0683-0275	9		RESISTOR 2.7 5% .25W FC TC=-400/+500	01121	CB2755
A67R21	0683-1015	7		RESISTOR 100 5% .25W FC TC=-400/+500	01121	CB1015
A67R22	0757-0442	9		RESISTOR 10K 1% .125W F TC=0+-100	24546	C4-1/8-T0-1002-F
A67R23	0683-2425	5		RESISTOR 2.4K 5% .25W FC TC=-400/+700	01121	CB2425
A67R24	0683-4715	0		RESISTOR 470 5% .25W FC TC=-400/+800	01121	CB4715
A67R25	0698-3279	0		RESISTOR 0.99K 1% .125W F TC=0+-100	24546	C4-1/8-T0-4991-F
A67R26	0683-5125	8		RESISTOR 5.1K 5% .25W FC TC=-400/+700	01121	CB5125
A67R27	0757-0437	2		RESISTOR 4.75K 1% .125W F TC=0+-100	24546	C4-1/8-T0-4751-F
A67R28	0683-1525	6		RESISTOR 1.5K 5% .25W FC TC=-400/+700	01121	CB1525
A67R29	0757-0346	2	10	RESISTOR 10 1% .125W F TC=0+-100	24546	C4-1/8-T0-10R0-F
A67R30	0757-0346	2		RESISTOR 10 1% .125W F TC=0+-100	24546	C4-1/8-T0-10R0-F
A67R31	0757-0190	4	5	RESISTOR 20K 1% .5W F TC=0+-100	28480	0757-0190
A67R32	0686-4335	6	5	RESISTOR 43K 5% .5W CC TC=0+765	01121	EB4335
A67R33	0698-4479	4		RESISTOR 14K 1% .125W F TC=0+-100	24546	C4-1/8-T0-1402-F
A67R34	0698-4471	6		RESISTOR 7.15K 1% .125W F TC=0+-100	24546	C4-1/8-T0-7151-F
A67R35	0764-0005	5	1	RESISTOR 10K 5% 2W MO TC=0+-200	28480	0764-0005
A67R36	0757-0273	4	2	RESISTOR 3.01K 1% .125W F TC=0+-100	24546	C4-1/8-T0-3011-F
A67R37	0686-7535	4	1	RESISTOR 75K 5% .5W CC TC=0+765	01121	EB7535
A67R38	2100-0558	9		RESISTOR-TRMR 20K 10% C TOP=ADJ 1-TRN	28480	2100-0558
A67R39	0698-3497	4		RESISTOR 6.04K 1% .125W F TC=0+-100	24546	C4-1/8-T0-604R-F
A67R40	0698-3497	4		RESISTOR 6.04K 1% .125W F TC=0+-100	24546	C4-1/8-T0-604R-F
A67R41	0683-3005	5	1	RESISTOR 30 5% .5W CC TC=0+412	01121	EB3005
A67R42	0757-0273	4		RESISTOR 3.01K 1% .125W F TC=0+-100	24546	C4-1/8-T0-3011-F
A67R43	0683-1045	3		RESISTOR 100K 5% .25W FC TC=-400/+800	01121	CB1045
A67R44	0698-3457	6	1	RESISTOR 316K 1% .125W F TC=0+-100	28480	0698-3457
A67R45	0757-0467	8	1	RESISTOR 121K 1% .125W F TC=0+-100	24546	C4-1/8-T0-1213-F
A67R46	2100-3253	7	2	RESISTOR-TRMR 50K 10% C TOP=ADJ 1-TRN	28480	2100-3253
A67R47	0757-0465	6		RESISTOR 100K 1% .125W F TC=0+-100	24546	C4-1/8-T0-1003-F
A67R48	0757-0465	6		RESISTOR 100K 1% .125W F TC=0+-100	24546	C4-1/8-T0-1003-F
A67R49	0683-2265	1	1	RESISTOR 22K 5% .25W FC TC=-900/+1200	01121	CB2265
A67R50	0683-1215	9	1	RESISTOR 120 5% .25W FC TC=-400/+600	01121	CB1215
A67R51	0757-0479	2	1	RESISTOR 392K 1% .125W F TC=0+-100	19701	MF4C1/8-T0-3923-F
A67R52	0683-3915	0	5	RESISTOR 390 5% .25W FC TC=-400/+600	01121	CB3915
A67R53	0757-0280	3		RESISTOR 1K 1% .125W F TC=0+-100	24546	C4-1/8-T0-1001-F
A67R54	2100-3351	6		RESISTOR-TRMR 500 10% C SIDE=ADJ 1-TRN	28480	2100-3351
A67R55	0757-0280	3		RESISTOR 1K 1% .125W F TC=0+-100	24546	C4-1/8-T0-1001-F
A67R56	0757-0280	3		RESISTOR 1K 1% .125W F TC=0+-100	24546	C4-1/8-T0-1001-F
A67R57	0757-0280	3		RESISTOR 1K 1% .125W F TC=0+-100	24546	C4-1/8-T0-1001-F
A67R58	0757-0431	6	1	RESISTOR 2.43K 1% .125W F TC=0+-100	24546	C4-1/8-T0-2431-F
A67R59	2100-3349	2	2	RESISTOR-TRMR 100 10% C SIDE=ADJ 1-TRN	28480	2100-3349
A67R60	0757-0284	7		RESISTOR 150 1% .125W F TC=0+-100	24546	C4-1/8-T0-151-F
A67R61	0757-0428	1		RESISTOR 1.62K 1% .125W F TC=0+-100	24546	C4-1/8-T0-1621-F

See introduction to this section for ordering information.  
 \*Indicates factory selected value

Table 6-3. Replaceable Parts

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
A67R62	0698-4468	1		RESISTOR 1.13K 1% .125W F TC=0+/-100	24546	C4-1/8-T0-1131-F
A67R63	0698-3279	0		RESISTOR 4.99K 1% .125W F TC=0+/-100	24546	C4-1/8-T0-4991-F
A67R64	0683-5125	8		RESISTOR 5.1K 5% .25W FC TC=-400/+700	01121	CB5125
A67R65	0757-0437	2		RESISTOR 4.75K 1% .125W F TC=0+/-100	24546	C4-1/8-T0-4751-F
A67R66	0683-1525	4		RESISTOR 1.5K 5% .25W FC TC=-400/+700	01121	CB1525
A67R67	0757-0346	2		RESISTOR 10 1% .125W F TC=0+/-100	24546	C4-1/8-T0-10R0-F
A67R68	0686-4335	6		RESISTOR 43K 5% .5W CC TC=0+765	01121	EB4335
A67R69	0757-0346	2		RESISTOR 10 1% .125W F TC=0+/-100	24546	C4-1/8-T0-10R0-F
A67R70	0757-0190	4		RESISTOR 20K 1% .5W F TC=0+/-100	28480	0757-0190
A67R71	0698-3279	0		RESISTOR 4.99K 1% .125W F TC=0+/-100	24546	C4-1/8-T0-4991-F
A67R72	0683-5125	8		RESISTOR 5.1K 5% .25W FC TC=-400/+700	01121	CB5125
A67R73	0757-0437	2		RESISTOR 4.75K 1% .125W F TC=0+/-100	24546	C4-1/8-T0-4751-F
A67R74	0683-1525	4		RESISTOR 1.5K 5% .25W FC TC=-400/+700	01121	CB1525
A67R75	0757-0346	2		RESISTOR 10 1% .125W F TC=0+/-100	24546	C4-1/8-T0-10R0-F
A67R76	0686-4335	6		RESISTOR 43K 5% .5W CC TC=0+765	01121	EB4335
A67R78	0757-0346	2		RESISTOR 10 1% .125W F TC=0+/-100	24546	C4-1/8-T0-10R0-F
A67R79	0757-0190	4		RESISTOR 20K 1% .5W F TC=0+/-100	28480	0757-0190
A67R80	2100-3351	0		RESISTOR-TRMR 500 10% C SIDE-ADJ 1-TRN	28480	2100-3351
A67R81	0757-0280	3		RESISTOR 1K 1% .125W F TC=0+/-100	24546	C4-1/8-T0-1001-F
A67R82	0757-0280	3		RESISTOR 1K 1% .125W F TC=0+/-100	24546	C4-1/8-T0-1001-F
A67R83	0757-0280	3		RESISTOR 1K 1% .125W F TC=0+/-100	24546	C4-1/8-T0-1001-F
A67R84	0698-4439	6	1	RESISTOR 3.24K 1% .125W F TC=0+/-100	24546	C4-1/8-T0-3241-F
A67R85	2100-3349	2		RESISTOR-TRMR 100 10% C SIDE-ADJ 1-TRN	28480	2100-3349
A67R86	0757-0284	7		RESISTOR 150 1% .125W F TC=0+/-100	24546	C4-1/8-T0-151-F
A67R87	0757-0428	1		RESISTOR 1.62K 1% .125W F TC=0+/-100	24546	C4-1/8-T0-1621-F
A67R88	0698-4468	1		RESISTOR 1.13K 1% .125W F TC=0+/-100	24546	C4-1/8-T0-1131-F
A67R89	0698-3279	0		RESISTOR 4.99K 1% .125W F TC=0+/-100	24546	C4-1/8-T0-4991-F
A67R90	0683-5125	8		RESISTOR 5.1K 5% .25W FC TC=-400/+700	01121	CB5125
A67R91	0757-0437	2		RESISTOR 4.75K 1% .125W F TC=0+/-100	24546	C4-1/8-T0-4751-F
A67R92	0683-1525	4		RESISTOR 1.5K 5% .25W FC TC=-400/+700	01121	CB1525
A67R93	0757-0346	2		RESISTOR 10 1% .125W F TC=0+/-100	24546	C4-1/8-T0-10R0-F
A67R94	0686-4335	6		RESISTOR 43K 5% .5W CC TC=0+765	01121	EB4335
A67R95	0757-0346	2		RESISTOR 10 1% .125W F TC=0+/-100	24546	C4-1/8-T0-10R0-F
A67R96	0757-0190	4		RESISTOR 20K 1% .5W F TC=0+/-100	28480	0757-0190
A67R97	0698-3279	0		RESISTOR 4.99K 1% .125W F TC=0+/-100	24546	C4-1/8-T0-4991-F
A67R98	0683-5125	8		RESISTOR 5.1K 5% .25W FC TC=-400/+700	01121	CB5125
A67R99	0757-0437	2		RESISTOR 4.75K 1% .125W F TC=0+/-100	24546	C4-1/8-T0-4751-F
A67R100	0683-1525	4		RESISTOR 1.5K 5% .25W FC TC=-400/+700	01121	CB1525
A67R101	0757-0346	2		RESISTOR 10 1% .125W F TC=0+/-100	24546	C4-1/8-T0-10R0-F
A67R102	0686-4335	6		RESISTOR 43K 5% .5W CC TC=0+765	01121	EB4335
A67R103	0757-0346	2		RESISTOR 10 1% .125W F TC=0+/-100	24546	C4-1/8-T0-10R0-F
A67R104	0757-0190	4		RESISTOR 20K 1% .5W F TC=0+/-100	28480	0757-0190
A67R105	2100-3253	7		RESISTOR-TRMR 50K 10% C TOP-ADJ 1-TRN	28480	2100-3253
A67R106	0698-4510	4		RESISTOR 84.5K 1% .125W F TC=0+/-100	24546	C4-1/8-T0-8452-F
A67R107	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
A67R108	0683-4715	0		RESISTOR 470 5% .25W FC TC=-400/+600	01121	CB4715
A67R110	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	CB4705
A67R111	0757-0407	6		RESISTOR 200 1% .125W F TC=0+/-100	24546	C4-1/8-T0-201-F
A67R112	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	CB4705
A67R113	0757-0407	6		RESISTOR 200 1% .125W F TC=0+/-100	24546	C4-1/8-T0-201-F
A67R114	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	CB4705
A67R115	0683-4725	2		RESISTOR 4.7K 5% .25W FC TC=-400/+700	01121	CB4725
A57TR1-9	0350-0124	3		CONNECTOR-SGL CONT PIN .084-IN-BSC-SZ RND	28480	0350-0124
A67U1	1A26-0512	2		IC 78M15C V RGLTR T0=39	04713	MC78M15CG
A67U2	1A26-0167	3	1	OP AMP PRGMBL T0=99	01928	CA3094AT
A67U3	1A20-0196	6	1	IC 723 V RGLTR T0=100	04713	MC1723CG
A67U4	1A26-0511	1		IC 79M15A V RGLTR T0=39	01295	U479M15CLA
				A67 MISCELLANEOUS PARTS		
	0340-0566	5	1	INSULATOR-XSTR RUBBER RED	28480	0340-0566
	1205-0033	6	10	HEAT SINK T0=5/T0=39-PKG	28480	1205-0033
	1205-0050	7	2	HEAT SINK T0=5/T0=39-PKG	28480	1205-0050
	1205-0085	2	2	HEAT SINK T0=66-PKG	28480	1205-0085
	1205-0247	4	5	HEAT SINK T0=66-PKG	28480	1205-0247
	2110-0269	0	12	FUSEHOLDER-CLIP TYPE,250-FUSE	28480	2110-0269
	2260-0001	5	3	NUT-HEX-DBL-CHAM 4=40-THD .094-IN=THK	28480	2260-0001
	1251-0600	0		CONNECTOR-SGL CONT PIN 1.14-MM-BSC-SZ S0	28480	1251-0600
	0403-0029	9	2	BUMPER FOOT-SCR .5-IN=OD .25-IN=THK BLK	28480	0403-0029
	2360-0117	6		SCREW-MACH 6=32 .375-IN=LG PAN=HD=POZI	00000	ORDER BY DESCRIPTION
	0400-0018	0		GROMMET-CHAN NCH .052-IN=THK-PAL	28480	0400-0018
	2190-0007	2	4	WASHER-LK INTL T NO. 6 .141-IN=TD	28480	2190-0007
	0590-1054	7		THREADDED INSERT-NUT 6=32 .065=LG SST	28480	0590-1054

See introduction to this section for ordering information  
 \*Indicates factory selected value

Table 6-3. Replaceable Parts

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
	2190-0005	0	2	WASHER=LK EXT T NO. 4 .116-IN-ID	28480	2190-0005
	3050-0716	5	4	WASHER=FL MTLG NO. 5 .128-IN-ID	28480	3050-0716
	2200-0105	4	2	SCREW=MACH 4-40 .312-IN-LG PAN=HD=POZI	00000	ORDER BY DESCRIPTION
A70	03585-66570	5	1	POWER SUPPLY BOARD	28480	03585-66570
A70C1	0180-0696	2	1	CAPACITOR=FXD 2600UF+50-10% 75VDC AL	00853	1012627075882A
A70C2	0180-2316	7	1	CAPACITOR=FXD 900UF+50-10% 100VDC AL	56289	36D901F100A82A
A70C3	0180-0291	3	3	CAPACITOR=FXD 1UF+-10% 35VDC TA	56289	150D105X9035A2
A70C4	0180-0291	3	3	CAPACITOR=FXD 1UF+-10% 35VDC TA	56289	150D105X9035A2
A70C5	0180-0291	3	3	CAPACITOR=FXD 1UF+-10% 35VDC TA	56289	150D105X9035A2
A70C6	0180-0291	3	3	CAPACITOR=FXD 1UF+-10% 35VDC TA	56289	150D105X9035A2
A70C7	0180-0291	3	3	CAPACITOR=FXD 1UF+-10% 35VDC TA	56289	150D105X9035A2
A70CR1	1902-1204	3	2	DIODE=ZNR 1N2984B 20V 5% DO-4 PD=10W	12954	1N2984B
A70CR2	1902-1204	3	3	DIODE=ZNR 1N2984B 20V 5% DO-4 PD=10W	12954	1N2984B
A70CR3	1902-0643	2	1	DIODE=ZNR 1N2979B 15V 5% DO-4 PD=10W	28480	1902-0643
A70CR4	1902-1198	4	1	DIODE=ZNR 1N2973B 9.1V 5% DO-4 PD=10W	12954	1N2973B
A70CR5	1902-1217	8	1	DIODE=ZNR 6.2V 5% DO-4 PD=10W TC=+.035%	28480	1902-1217
A70R1	0764-0020	4	2	RESISTOR 5.6K 5% 2W MO TC=0+-200	28480	0764-0020
A70R2	0764-0020	4	4	RESISTOR 5.6K 5% 2W MO TC=0+-200	28480	0764-0020
A70R3	0687-1031	5	1	RESISTOR 10K 10% .5W CC TC=0+-765	01121	E81031
A70 MISCELLANEOUS PARTS						
	2740-0002	4	5	NUT=HEX=DBL=CHAM 10-32-THD .125-IN-TMK	00000	ORDER BY DESCRIPTION
	0380-0741	2	2	STANDOFF=RVT=DN .187-IN-LG 6-32THD	00000	ORDER BY DESCRIPTION
	2190-0011	8	9	WASHER=LK INTL T NO. 10 .195-IN-ID	28480	2190-0011
	0590-1136	6	6	THREADED INSERT=NUT 10-32 .125-LG	28480	0590-1136
	2880-0128	7	4	SCREW=MACH 10-32 .25-IN-LG PAN=HD=POZI	00000	ORDER BY DESCRIPTION
	0380-0059	5	7	SPACER=RVT=DN .25-IN-LG .152-IN-ID	00000	ORDER BY DESCRIPTION
	1251-2034	8	5	CONNECTOR=PC EDGE 10=CONT/ROW 2=ROWS	28480	1251-2034
	1251-0600	0	0	CONNECTOR=SGL CONT PIN 1.14=MM=BSC=SZ SQ	28480	1251-0600
	1251-2035	9	9	CONNECTOR=PC EDGE 15=CONT/ROW 2=ROWS	28480	1251-2035
	1251-3276	2	2	CONNECTOR 6-PIN M POST TYPE	28480	1251-3276
	8150-0406	7	7	WIRE 18AWG R 300V PVC 19X30 80C	28480	8150-0406
	1251-4659	7	2	CONNECTOR 14-PIN M POST TYPE	28480	1251-4659
	8150-0404	5	5	WIRE 18AWG D 300V PVC 19X30 80C	28480	8150-0404
	1251-4692	8	1	CONNECTOR 8-PIN M POST TYPE	22526	65645-408
	8150-0403	8	8	WIRE 18AWG BK PVC 19 X 30 80C	28480	8150-0403
	8150-0408	9	9	WIRE 18AWG BL 300V PVC 19X30 80C	28480	8150-0408
A71	03585-66571	6	1	+7.7V POWER SUPPLY	28480	03585-66571
A71C1	0180-2687	5	4	CAPACITOR=FXD 47UF+100-10% 100VDC AL	28480	0180-2687
A71C2	0160-3622	8	8	CAPACITOR=FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A71C3	0180-2686	4	3	CAPACITOR=FXD 470UF+100-10% 25VDC AL	28480	0180-2686
A71C4	0160-3456	6	6	CAPACITOR=FXD 1000PF +-10% 1KVDC CER	28480	0160-3456
A71C5	0180-0116	1	1	CAPACITOR=FXD 6.8UF+-10% 35VDC TA	56289	150D685X9035B2
A71C6	0180-0309	4	4	CAPACITOR=FXD 4.7UF+-20% 10VDC TA	56289	150D475X0010A2
A71C7	0180-3622	8	8	CAPACITOR=FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A71C8	0180-0309	4	4	CAPACITOR=FXD 4.7UF+-20% 10VDC TA	56289	150D475X0010A2
A71C9	0160-0300	3	3	CAPACITOR=FXD 2700PF +-10% 200VDC POLYE	28480	0160-0300
A71C10	0180-0116	1	1	CAPACITOR=FXD 6.8UF+-10% 35VDC TA	56289	150D685X9035B2
A71C11	0160-2055	9	9	CAPACITOR=FXD .01UF +80-20% 100VDC CER	28480	0160-2055
A71C12	0160-3456	6	6	CAPACITOR=FXD 1000PF +-10% 1KVDC CER	28480	0160-3456
A71C13	0160-3622	8	8	CAPACITOR=FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A71C14	0160-3456	6	6	CAPACITOR=FXD 1000PF +-10% 1KVDC CER	28480	0160-3456
A71C15	0160-3622	8	8	CAPACITOR=FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A71CR1	1901-0040	1	1	DIODE=SWITCHING 30V 50MA 2NS DO-35	28480	1901-0040
A71CR2	1902-0202	9	4	DIODE=ZNR 15V 5% DO-15 PD=1W TC=+.05%	28480	1902-0202
A71CR3	1990-0598	1	4	LED=VISIBLE LUM=INT=800UDD IF=60MA=MAX	28480	5082-4190
A71CR4	1901-0026	3	14	DIODE=PNR RECT 200V 750MA DO-29	28480	1901-0026
A71CR5	1990-0597	0	0	LED=VISIBLE LUM=INT=1MCD IF=60MA=MAX	28480	5082-4150
A71F1	2110-0043	8	4	FUSE 1.5A 250V FAST-BLO 1.25X.25 UL IEC	28480	2110-0043
A71L1	9140-0244	1	3	INDUCTOR 1MH	28480	9140-0244
A71Q1	1853-0086	2	2	TRANSISTOR PNP SI PD=310MW FT=40MHZ	27014	2N5087
A71Q2	1854-0022	8	3	TRANSISTOR NPN SI T0-39 PD=700MW	07263	517843
A71Q4	1854-0215	1	1	TRANSISTOR NPN SI PD=350MW FT=300MHZ	04713	2N3904
A71R1	0811-1826	1	3	RESISTOR .05 10% 3W PA TC=0+-200	28480	0811-1826
A71R2	0757-0407	6	6	RESISTOR 200 1% .125W F TC=0+-100	24546	C4-1/8-TU-201-F
A71R3	0683-4715	0	0	RESISTOR 470 5% .25W FC TC=400/+600	01121	CB0715
A71R5	0757-0453	2	1	RESISTOR 30.1K 1% .125W F TC=0+-100	24546	C4-1/8-TU-3012-F
A71R7	0683-1505	0	0	RESISTOR 15 5% .25W FC TC=400/+500	01121	CB1505

See introduction to this section for ordering information  
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Table 6-3. Replaceable Parts

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
A71R8	0683-1505	0		RESISTOR 15 5% .25W FC TC=-400/+500	01121	CB1505
A71R9	0683-1505	0		RESISTOR 15 5% .25W FC TC=-400/+500	01121	CB1505
A71R10	0683-1505	0		RESISTOR 15 5% .25W FC TC=-400/+500	01121	CB1505
A71R11	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
A71R12	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
A71R13	0683-1035	1		RESISTOR 10K 5% .25W FC TC=-400/+700	01121	CB1035
A71R14	0683-1035	1		RESISTOR 10K 5% .25W FC TC=-400/+700	01121	CB1035
A71R15	0757-0442	9		RESISTOR 10K 1% .125W F TC=0/+100	24546	C4=1/8-T0=10Q2-F
A71R16	0683-1515	2		RESISTOR 150 5% .25W FC TC=-400/+600	01121	CB1515
A71R17	0683-1035	1		RESISTOR 10K 5% .25W FC TC=-400/+700	01121	CB1035
A71R18	0683-1035	1		RESISTOR 10K 5% .25W FC TC=-400/+700	01121	CB1035
A71R19	0683-1015	7		RESISTOR 100 5% .25W FC TC=-400/+500	01121	CB1015
A71R20	0698-6704	2	2	RESISTOR 24.9K .25% .125W F TC=0/+100	28480	0698-6704
A71R21	0757-0448	5		RESISTOR 18.2K 1% .125W F TC=0/+100	24546	C4=1/8-T0=1822-F
A71R22	0683-6825	7		RESISTOR 6.8K 5% .25W FC TC=-400/+700	01121	CB6825
A71R23	0683-1525	4		RESISTOR 1.5K 5% .25W FC TC=-400/+700	01121	CB1525
A71R24	0683-4725	2		RESISTOR 4.7K 5% .25W FC TC=-400/+700	01121	CB4725
A71R25	0683-1035	1		RESISTOR 10K 5% .25W FC TC=-400/+700	01121	CB1035
A71R26	0683-1035	1		RESISTOR 10K 5% .25W FC TC=-400/+700	01121	CB1035
A71R27	0683-2725	8		RESISTOR 2.7K 5% .25W FC TC=-400/+700	01121	CB2725
A71R29	0683-3915	0		RESISTOR 390 5% .25W FC TC=-400/+600	01121	CB3915
A71R29	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
A71R30	0683-2725	8		RESISTOR 2.7K 5% .25W FC TC=-400/+700	01121	CB2725
A71R31	0683-4725	2		RESISTOR 4.7K 5% .25W FC TC=-400/+700	01121	CB4725
A71TP1	0360-0124	3		CONNECTOR-SGL-CONT PIN .04-IN-BSC-S7 RND	28480	0360-0124
A71U1	1813-0110	9	1	IC V RGLTR TO-66	12969	PIC626
A71U2	1R26-0026	3		COMPARATOR PRCN TO-99	04713	MLM311G
A71U3	1R26-0026	3		COMPARATOR PRCN TO-99	04713	MLM311G
A71U4	1R20-1199	1		IC INV TTL LS HEX 1-INP	01295	SN74LS04N
A71U5	1R20-1112	8		IC FF TTL LS D-TYPE POS-EDGE-TRIG	01295	SN74LS74N
				A71 MISCELLANEOUS PARTS		
	03582-01103	1	3	HEAT SINK	28480	03582-01103
	1205-0247	4		HEAT SINK TO-66-PKG	28480	1205-0247
	1251-2551	4	10	CONNECTOR-SGL CONT SKT .031-IN-BSC-SZ	28480	1251-2551
	2110-0269	0		FUSEHOLDER-CLIP TYPE,250-FUSE	28480	2110-0269
	4040-0749	4		EXTR-PC BD BRN POLYC .062-BD-THKNS	28480	4040-0749
	4040-0755	2	5	EXTR-PC BD VID POLYC .062-BD-THKNS	28480	4040-0755
	0590-1054	7		THREADED INSERT-NUT 6-32 .065-LG SST	28480	0590-1054
	1480-0116	6		PIN-GRV .062-IN-DIA .25-IN-LG STL	28480	1480-0116
	2360-0117	6		SCREW-MACH 6-32 .375-IN-LG PAN-HD-POZI	00000	ORDER BY DESCRIPTION
	2360-0115	4		SCREW-MACH 6-32 .312-IN-LG PAN-HD-POZI	00000	ORDER BY DESCRIPTION
	2200-0103	2		SCREW-MACH 4-40 .25-IN-LG PAN-HD-POZI	00000	ORDER BY DESCRIPTION
A72	03585-66572	7	1	POWER SUPPLY, +5V	28480	03585-66572
A72C1	0180-2667	5		CAPACITOR-FXD 47UF+100-10% 100VDC AL	28480	0180-2667
A72C2	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A72C3	0180-2695	5	1	CAPACITOR-FXD 1000UF+100-10% 12VDC AL	28480	0180-2695
A72C4	0160-0154	5		CAPACITOR-FXD 2200PF +-10% 200VDC POLYE	28480	0160-0154
A72C5	0180-0309	4		CAPACITOR-FXD 4.7UF+-20% 10VDC TA	56289	1500475X0010A2
A72C6	0180-0309	4		CAPACITOR-FXD 4.7UF+-20% 10VDC TA	56289	1500475X0010A2
A72C7	0180-0309	4		CAPACITOR-FXD 4.7UF+-20% 10VDC TA	56289	1500475X0010A2
A72C8	0180-0116	1		CAPACITOR-FXD 6.8UF+-10% 35VDC TA	56289	1500685X9035B2
A72C9	0160-2055	9		CAPACITOR-FXD .01UF +80-20% 100VDC CER	28480	0160-2055
A72C10	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A72C11	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A72C12	0160-3456	6		CAPACITOR-FXD 1000PF +-10% 1KVDC CER	28480	0160-3456
A72C13	0180-0116	1		CAPACITOR-FXD 6.8UF+-10% 35VDC TA	56289	1500685X9035B2
A72C14	0160-3456	6		CAPACITOR-FXD 1000PF +-10% 1KVDC CER	28480	0160-3456
A72CR1	1902-0202	9		DIODE-ZNR 15V 5% 00-15 PD=1W TC=+.057X	28480	1902-0202
A72CR3	1990-0598	1		LED-VISIBLE LUM-INT=800UCD IF=60MA-MAX	28480	5082-0190
A72CR4	1901-0662	3		DIODE-PWR RECT 100V 6A	04713	4R751
A72CR5	1901-0040	1		DIODE-SWITCHING 30V 50MA 2NS 00-35	28480	1901-0040
A72CR6	1990-0597	0		LED-VISIBLE LUM-INT=1MCD IF=60MA-MAX	28480	5082-0190
A72F1	2110-0043	8		FUSE 1.5A 250V FAST-BLD 1.25X.25 UL IEC	28480	2110-0043
A72L1	9140-0243	0	1		28480	9140-0243
A72Q3	1M54-0022	6		TRANSISTOR NPN SI TO-39 PD=700MW	07263	S17843
A72Q4	1M54-0215	1		TRANSISTOR NPN SI PD=350MW FT=300MHZ	04713	2N3904
A72Q5	1M53-0086	2		TRANSISTOR PNP SI PD=310MW FT=40MHZ	27014	2N5087
A72R4	0683-1615	3		RESISTOR 160 5% .25W FC TC=-400/+600	01121	CB1615
A72R5	0683-3915	0		RESISTOR 390 5% .25W FC TC=-400/+600	01121	CB3915
A72R6	0683-1505	0		RESISTOR 15 5% .25W FC TC=-400/+500	01121	CB1505
A72R7	0683-1505	0		RESISTOR 15 5% .25W FC TC=-400/+500	01121	CB1505
A72R8	0683-1505	0		RESISTOR 15 5% .25W FC TC=-400/+500	01121	CB1505

See introduction to this section for ordering information  
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Table 6-3. Replaceable Parts

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
A72R9	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
A72R10	0683-1015	7		RESISTOR 100 5% .25W FC TC=-400/+500	01121	CB1015
A72R11	0683-1505	0		RESISTOR 15 5% .25W FC TC=-400/+500	01121	CB1505
A72R12	0683-1035	1		RESISTOR 10K 5% .25W FC TC=-400/+700	01121	CB1035
A72R13	0683-1035	1		RESISTOR 10K 5% .25W FC TC=-400/+700	01121	CB1035
A72R14	0683-6825	7		RESISTOR 6.8K 5% .25W FC TC=-400/+700	01121	CB6825
A72R15	0683-1015	7		RESISTOR 100 5% .25W FC TC=-400/+500	01121	CB1015
A72R16	0683-1035	1		RESISTOR 10K 5% .25W FC TC=-400/+700	01121	CB1035
A72R17	0683-1035	1		RESISTOR 10K 5% .25W FC TC=-400/+700	01121	CB1035
A72R18	0683-4725	2		RESISTOR 4.7K 5% .25W FC TC=-400/+700	01121	CB4725
A72R19	2100-3273	1		RESISTOR-TRMR 2K 10% C SIDE-ADJ 1-TRN	28480	2100-3273
A72R20*	0757-0459	8	1	RESISTOR 56.2K 1% .125W F TC=0+/-100	24546	C4-1/8-T0-5622-F
A72R21	0683-1505	0		RESISTOR 15 5% .25W FC TC=-400/+500	01121	CB1505
A72R22	0683-1015	7		RESISTOR 100 5% .25W FC TC=-400/+500	01121	CB1015
A72R23	0683-2725	8		RESISTOR 2.7K 5% .25W FC TC=-400/+700	01121	CB2725
A72R24	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
A72R25	0683-2725	8		RESISTOR 2.7K 5% .25W FC TC=-400/+700	01121	CB2725
A72R26	0683-1525	4		RESISTOR 1.5K 5% .25W FC TC=-400/+700	01121	CB1525
A72R27	0683-1035	1		RESISTOR 10K 5% .25W FC TC=-400/+700	01121	CB1035
A72R28	0757-0442	9		RESISTOR 10K 1% .125W F TC=0+/-100	24546	C4-1/8-T0-1002-F
A72R29	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
A72R30	0698-4480	7	1	RESISTOR 15.8K 1% .125W F TC=0+/-100	24546	C4-1/8-T0-1582-F
A72R31	2100-3207	1		RESISTOR-TRMR 5K 10% C SIDE-ADJ 1-TRN	28480	2100-3207
A72R32	0698-4470	5	1	RESISTOR 6.98K 1% .125W F TC=0+/-100	24546	C4-1/8-T0-6981-F
A72R33	0812-0031	0	1	RESISTOR 200 5% .25W PWR TC=-4000+/-400	54294	PC312-1/4=201-J
A72R34	0683-1035	1		RESISTOR 10K 5% .25W FC TC=-400/+700	01121	CB1035
A72R35	0683-3335	8	1	RESISTOR 33K 5% .25W FC TC=-400/+800	01121	CB3335
A72T1	0360-0124	5		CONNECTOR-SGL CONT PIN .04-IN-BSC-5Z RND	28480	0360-0124
A72U1	1826-0026	3		COMPARATOR PRCN TO-99	04713	MLM311G
A72U2	1826-0026	3		COMPARATOR PRCN TO-99	04713	MLM311G
A72U3	1820-1199	1		IC INV TTL LS HEX 1-INP	01295	SN74LS04N
A72U4	1820-1112	8		IC FF TTL LS D-TYPE POS-EDGE-TRIG	01295	SN74LS74N
A72U5	1813-0082	4	1	IC TO-3	12969	PIC646
				A72 MISCELLANEOUS PARTS		
A734	03585-01102	3	1	HEAT SINK	28480	03585-01102
	1251-2551	4		CONNECTOR-SGL CONT 8KT .033-IN-BSC-8Z	28480	1251-2551
	2110-0269	0		FUSEHOLDER-CLIP TYPE .250-FUSE	28480	2110-0269
	4040-0755	2		EXTR-PC HD VID POLYC .062-BD-THKNS	28480	4040-0755
	0590-1054	7		THREADED INSERT-NUT 6-32 .065-LG SST	28480	0590-1054
	1480-0116	8		PIN-GRV .062-IN-DIA .25-IN-LG STL	28480	1480-0116
	2360-0115	4		SCREW-MACH 6-32 .312-IN-LG PAN-HD-POZI	00000	ORDER BY DESCRIPTION
A734	03585-66573	8	1	+18, +12V POWER SUPPLY	28480	03585-66573
A73C1	0180-2687	5		CAPACITOR-FXD 47UF+100-10% 100VDC AL	28480	0180-2687
A73C2	0160-3622	6		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A73C3	0180-2686	4		CAPACITOR-FXD 470UF+100-10% 25VDC AL	28480	0180-2686
A73C4	0160-3456	6		CAPACITOR-FXD 1000PF +-10% 1KVDC CER	28480	0160-3456
A73C5	0180-0116	1		CAPACITOR-FXD 6.8UF+-10% 35VDC TA	56289	1500685X9035B2
A73C6	0180-0309	4		CAPACITOR-FXD 4.7UF+-20% 10VDC TA	56289	1500475X0010A2
A73C7	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A73C8	0180-0309	4		CAPACITOR-FXD 4.7UF+-20% 10VDC TA	56289	1500475X0010A2
A73C9	0160-0300	3		CAPACITOR-FXD 2700PF +-10% 200VDC POLYE	28480	0160-0300
A73C10	0180-0116	1		CAPACITOR-FXD 6.8UF+-10% 35VDC TA	56289	1500685X9035B2
A73C11	0160-2055	9		CAPACITOR-FXD .01UF +80-20% 100VDC CER	28480	0160-2055
A73C12	0160-3456	6		CAPACITOR-FXD 1000PF +-10% 1KVDC CER	28480	0160-3456
A73C13	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A73C14	0160-3456	6		CAPACITOR-FXD 1000PF +-10% 1KVDC CER	28480	0160-3456
A73C15	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A73CR1	1901-0040	1		DICOD-SWITCHING 30V 50MA 2NS DD-35	28480	1901-0040
A73CR2	1902-0202	9		DICOD-ZNR 15V 5X DG-15 PD=1W TC=+.057%	28480	1902-0202
A73CR3	1999-0598	1		LED-VISIBLE LUM-INT=8000UCD IF=60MA-MAX	28480	5082-4190
A73CR4	1901-0026	5		DICOD-PAR RECT 200V 750MA DD-29	28480	1901-0026
A73CR5	1990-0597	0		LED-VISIBLE LUM-INT=1MCD IF=60MA-MAX	28480	5082-4150
A73F1	2110-0043	8		FUSE 1.5A 250V FAST-BLD 1.25X.25 UL IEC	28480	2110-0043
A73L1	9140-0244	1			28480	9140-0244
A73Q1	1853-0086	2		TRANSISTOR PNP SI PD=310MW FT=40MHZ	27014	2N5087
A73Q2	1854-0022	8		TRANSISTOR NPN SI TO-39 PD=700MW	07263	S17843
A73Q3	1854-0215	1		TRANSISTOR NPN SI PD=350MW FT=300MHZ	04713	2N3904
A73Q4	1854-0215	1		TRANSISTOR NPN SI PD=350MW FT=300MHZ	04713	2N3904

See introduction to this section for ordering information  
 \*Indicates factory selected value

Table 6-3. Replaceable Parts

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
A73R1	0811-1826	1		RESISTOR .05 10K 3W PW TC=0+-200	28480	0811-1826
A73R2	0757-0404	3	1	RESISTOR 130 1% .125W F TC=0+-100	24546	C4=1/8-T0-151-F
A73R3	0687-1021	3	2	RESISTOR 1K 10% .5W CC TC=0+647	01121	EB1021
A73R4	0683-1025	9		RESISTOR 1K 5% .25W FC TC=400/+600	01121	CB1025
A73R5	0757-0449	6		RESISTOR 20K 1% .125W F TC=0+-100	24546	C4=1/8-T0-2002-F
A73R7	0683-1505	0		RESISTOR 15 5% .25W FC TC=400/+500	01121	CB1505
A73R8	0683-1505	0		RESISTOR 15 5% .25W FC TC=400/+500	01121	CB1505
A73R9	0683-1505	0		RESISTOR 15 5% .25W FC TC=400/+500	01121	CB1505
A73R10	0683-1505	0		RESISTOR 15 5% .25W FC TC=400/+500	01121	CB1505
A73R11	0683-1025	9		RESISTOR 1K 5% .25W FC TC=400/+600	01121	CB1025
A73R12	0683-1025	9		RESISTOR 1K 5% .25W FC TC=400/+600	01121	CB1025
A73R13	0683-1035	1		RESISTOR 10K 5% .25W FC TC=400/+700	01121	CB1035
A73R14	0683-1035	1		RESISTOR 10K 5% .25W FC TC=400/+700	01121	CB1035
A73R15	0757-0442	9		RESISTOR 10K 1% .125W F TC=0+-100	24546	C4=1/8-T0-1002-F
A73R16	0683-1515	2		RESISTOR 150 5% .25W FC TC=400/+600	01121	CB1515
A73R17	0683-1035	1		RESISTOR 10K 5% .25W FC TC=400/+700	01121	CB1035
A73R18	0683-1035	1		RESISTOR 10K 5% .25W FC TC=400/+700	01121	CB1035
A73R19	0683-1015	7		RESISTOR 100 5% .25W FC TC=400/+500	01121	CB1015
A73R20	0698-6704	2		RESISTOR 24.9K .25% .125W F TC=0+-100	28480	0698-6704
A73R22	0683-6825	7		RESISTOR 6.8K 5% .25W FC TC=400/+700	01121	CB6825
A73R23	0683-1525	4		RESISTOR 1.5K 5% .25W FC TC=400/+700	01121	CB1525
A73R24	0683-4725	2		RESISTOR 4.7K 5% .25W FC TC=400/+700	01121	CB4725
A73R25	0683-1035	1		RESISTOR 10K 5% .25W FC TC=400/+700	01121	CB1035
A73R26	0683-1035	1		RESISTOR 10K 5% .25W FC TC=400/+700	01121	CB1035
A73R27	0683-2725	8		RESISTOR 2.7K 5% .25W FC TC=400/+700	01121	CB2725
A73R28	0683-3915	0		RESISTOR 390 5% .25W FC TC=400/+600	01121	CB3915
A73R29	0683-1025	9		RESISTOR 1K 5% .25W FC TC=400/+600	01121	CB1025
A73R30	0683-2725	8		RESISTOR 2.7K 5% .25W FC TC=400/+700	01121	CB2725
A73R31	0683-4725	2		RESISTOR 4.7K 5% .25W FC TC=400/+700	01121	CB4725
A73R32	0698-3228	9		RESISTOR 49.9K 1% .125W F TC=0+-100	28480	0698-3228
A73TP1	0369-0124	3		CONNECTOR-SGL CONT PIN .04-IN-BSC-S7 RND	28480	0369-0124
A73U1	1813-0083	3	1	IC TO-66	12969	PI6601
A73U2	1826-0026	5		COMPARATOR PRCN TO-99	04713	MLM311G
A73U3	1826-0026	3		COMPARATOR PRCN TO-99	04713	MLM311G
A73U4	1820-1199	1		IC INV TTL LS HEX 1-INP	01295	SN74LS04A
A73U5	1820-1112	8		IC FF TTL LS D-TYPE POS-EDGE-TRIG	01295	SN74LS74N
				473 MISCELLANEOUS PARTS		
	03582-01103	1		HEAT SINK	28480	03582-01103
	1205-0247	4		HEAT SINK TO-66-PKG	28480	1205-0247
	1251-2551	4		CONNECTOR-SGL CONT SKT .033-IN-BSC-S2	28480	1251-2551
	2110-0269	0		FUSEHOLDER-CLIP TYPE .25D-FUSE	28480	2110-0269
	4040-0751	8		EXTR-PC BD ORN POLYIC .062-BD-THKNS	28480	4040-0751
	4040-0755	2		EXTR-PC BD VID POLYIC .062-BD-THKNS	28480	4040-0755
	0590-1054	7		THREADED INSERT-NUT 6-32 .065-LG SST	28480	0590-1054
	1480-0116	8		PIN-GRV .062-IN-DIA .25-IN-LG STL	28480	1480-0116
	2200-0103	2		SCREW-MACH 4-40 .25-IN-LG PAN-HD-POZI	00000	ORDER BY DESCRIPTION
	2360-0117	6		SCREW-MACH 6-32 .375-IN-LG PAN-HD-POZI	00000	ORDER BY DESCRIPTION
	2360-0115	4		SCREW-MACH 6-32 .312-IN-LG PAN-HD-POZI	00000	ORDER BY DESCRIPTION
A74	03585-66574	9	1	POWER SUPPLY, -18V	28480	03585-66574
A74C1	0180-0309	4		CAPACITOR-FXD 4.7UF+-20% 10VDC TA	56289	1500475X0010A2
A74C2	0180-0309	4		CAPACITOR-FXD 4.7UF+-20% 10VDC TA	56289	1500475X0010A2
A74C3	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A74C4	0180-0116	1		CAPACITOR-FXD 6.8UF+-10% 35VDC TA	56289	1500685X9035b2
A74C5	0160-0300	3		CAPACITOR-FXD 2700PF +-10% 200VDC POLYE	28480	0160-0300
A74C6	0160-2204	0		CAPACITOR-FXD 100PF +-5% 300VDC MICA	28480	0160-2204
A74C7	0160-2055	9		CAPACITOR-FXD .01UF +80-20% 100VDC CER	28480	0160-2055
A74C8	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A74C9	0160-3456	6		CAPACITOR-FXD 1000PF +-10% 1KVDC CER	28480	0160-3456
A74C10	0160-3456	6		CAPACITOR-FXD 1000PF +-10% 1KVDC CER	28480	0160-3456
A74C11	0180-0309	4		CAPACITOR-FXD 4.7UF+-20% 10VDC TA	56289	1500475X0010A2
A74C12	0180-2687	5		CAPACITOR-FXD 47UF+100-10% 100VDC AL	28480	0180-2687
A74C13	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A74C14	0180-2686	4		CAPACITOR-FXD 470UF+100-10% 25VDC AL	28480	0180-2686
A74C15	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A74C16	0160-3456	6		CAPACITOR-FXD 1000PF +-10% 1KVDC CER	28480	0160-3456
A74CR1	1990-0597	0		LED-VISIBLE LUM-INT#1MCD IF=60MA-MAX	28480	5082-4150
A74CR2	1901-0040	1		DIODE-SWITCHING 30V 50MA 2NS DO-35	28480	1901-0040
A74CR3	1902-0202	9		DIODE-ZNR 15V 5% DO-15 PD=1W TC=+.057K	28480	1902-0202
A74CR4	1990-0598	1		LED-VISIBLE LUM-INT#800UCD IF=60MA-MAX	28480	5082-4190
A74CR5	1901-0026	3		DIODE-PWR RECT 200V 750MA DO-29	28480	1901-0026

See introduction to this section for ordering information  
 \*Indicates factory selected value



Table 6-3. Replaceable Parts

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
A74F1	2110-0043	8		FUSE 1.5A 250V FAST-BLQ 1.25x.25 UL IEC	28480	2110-0043
A74L1	9140-0244	1			28480	9140-0244
A74Q1	1854-0215	1		TRANSISTOR NPN SI PD=350MW FT=300MHZ	04713	2N3904
A74Q2	1854-0215	1		TRANSISTOR NPN SI PD=350MW FT=300MHZ	04713	2N3904
A74Q3	1853-0210	4	1	TRANSISTOR PNP SI TO=39 PD=1W FT=50MHZ	28480	1853-0210
A74R1	0683-1505	0		RESISTOR 15 5% .25W FC TC=-400/+500	01121	CB1505
A74R2	0683-1505	0		RESISTOR 15 5% .25W FC TC=-400/+500	01121	CB1505
A74R3	0683-1525	4		RESISTOR 1.5K 5% .25W FC TC=-400/+700	01121	CB1525
A74R4	0683-1525	4		RESISTOR 1.5K 5% .25W FC TC=-400/+700	01121	CB1525
A74R5	0683-2725	8		RESISTOR 2.7K 5% .25W FC TC=-400/+700	01121	CB2725
A74R6	0683-3915	0		RESISTOR 390 5% .25W FC TC=-400/+600	01121	CB3915
A74R7	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
A74R8	0683-2725	8		RESISTOR 2.7K 5% .25W FC TC=-400/+700	01121	CB2725
A74R9	0683-1525	4		RESISTOR 1.5K 5% .25W FC TC=-400/+700	01121	CB1525
A74R10	0683-1035	1		RESISTOR 10K 5% .25W FC TC=-400/+700	01121	CB1035
A74R11	0683-1035	1		RESISTOR 10K 5% .25W FC TC=-400/+700	01121	CB1035
A74R12	0683-4725	2		RESISTOR 4.7K 5% .25W FC TC=-400/+700	01121	CB4725
A74R13	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
A74R14	0683-1035	1		RESISTOR 10K 5% .25W FC TC=-400/+700	01121	CB1035
A74R15	0683-1035	1		RESISTOR 10K 5% .25W FC TC=-400/+700	01121	CB1035
A74R16	0683-1025	9		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
A74R17	0683-1015	7		RESISTOR 100 5% .25W FC TC=-400/+500	01121	CB1015
A74R18	0683-1035	1		RESISTOR 10K 5% .25W FC TC=-400/+700	01121	CB1035
A74R19	0683-1015	7		RESISTOR 100 5% .25W FC TC=-400/+500	01121	CB1015
A74R20	0683-1505	0		RESISTOR 15 5% .25W FC TC=-400/+500	01121	CB1505
A74R21	0683-1505	0		RESISTOR 15 5% .25W FC TC=-400/+500	01121	CB1505
A74R22	0683-1035	9		RESISTOR 10K 5% .25W FC TC=-400/+700	01121	CB1035
A74R23	0757-0442	1		RESISTOR 10K 1% .125W F TC=0+100	24546	C4=1/8-T0=1002-F
A74R24	0683-1035	1		RESISTOR 10K 5% .25W FC TC=-400/+700	01121	CB1035
A74R25	0683-0715	0		RESISTOR 470 5% .25W FC TC=-400/+600	01121	CB4715
A74R26	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	CB4705
A74R27	0698-3522	8		RESISTOR 41.2K 1% .125W F TC=0+100	24546	C4=1/8-T0=4122-F
A74R28	0757-0284	7		RESISTOR 150 1% .125W F TC=0+100	24546	C4=1/8-T0=151-F
A74R29	0811-1826	1		RESISTOR .05 10% 3W Pw TC=0+200	28480	0811-1826
A74R30	0687-1021	3		RESISTOR 1K 10% .5W CC TC=0+647	01121	EB1021
A74TP1	0360-0124	3		CONNECTOR-SGL CONT PIN .04-IN-BSC-SZ RND	28480	0360-0124
A74U1	1A20-1199	1		IC INV TTL LS HEX 1-INP	01295	SN74LS04N
A74U2	1A20-1112	8		IC FF TTL LS D-TYPE POS-EDGE-TRIG	01295	SN74LS74N
A74U3	1A26-0026	3		COMPARATOR PRCN TO=99	04713	MLM311G
A74U4	1A26-0026	3		COMPARATOR PRCN TO=99	04713	MLM311G
A74U5	1A13-0084	8	1	IC TO=66	12969	PLC611
				A74 MISCELLANEOUS PARTS		
	03582-01103	1		HEAT SINK	28480	03582-01103
	1205-0247	4		HEAT SINK TO=66-PKG	28480	1205-0247
	1251-2551	4		CONNECTOR-SGL CONT SKT .033-IN-BSC-SZ	28480	1251-2551
	2110-0269	0		FUSEHOLDER-CLIP TYPE,250-FUSE	28480	2110-0269
	4040-0752	9		EXTR-PC RD YEL POLYC .062=RD=THKNS	28480	4040-0752
	4040-0755	2		EXTR-PC RD VIO POLYC .062=RD=THKNS	28480	4040-0755
	2360-0295	1	1	SCREW=MACH 6-32 .312-IN-LG PAN=HD=PHL	28480	2360-0295
	0590-1054	7		THREADED INSERT-NUT 6-32 .065-LG SST	28480	0590-1054
	1480-0116	8		PIN=GRV .062-IN-DIA .25-IN-LG STL	28480	1480-0116
	2360-0117	8		SCREW=MACH 6-32 .375-IN-LG PAN=HD=POZI	00000	ORDER BY DESCRIPTION
	2200-0103	2		SCREW=MACH 4-40 .25-IN-LG PAN=HD=POZI	00000	ORDER BY DESCRIPTION
A75	03585-66575	0	1	POWER SUPPLY CONTROL	28480	03585-66575
A75C1	0180-1748	7	1	CAPACITOR-FXD 45UF+50-10% 250VDC AL	56289	190456F250FL4
A75C2	0180-2216	6	2	CAPACITOR-FXD 350UF+75-10% 16VDC AL	56289	300357G016DH2
A75C3	0180-2216	6		CAPACITOR-FXD 350UF+75-10% 16VDC AL	56289	300357G016DH2
A75C4	0180-0228	6		CAPACITOR-FXD 22UF+-10% 15VDC TA	56289	1500226X9015B2
A75C5	0180-0228	6		CAPACITOR-FXD 22UF+-10% 15VDC TA	56289	1500226X9015B2
A75C6	0180-0141	2		CAPACITOR-FXD 50UF+75-10% 50VDC AL	56289	300506G0500D2
A75C7	0180-0141	2		CAPACITOR-FXD 50UF+75-10% 50VDC AL	56289	300506G0500D2
A75C8	0180-0291	3		CAPACITOR-FXD 1UF+-10% 35VDC TA	56289	1500105X9035A2
A75C9	0180-0228	6		CAPACITOR-FXD 22UF+-10% 15VDC TA	56289	1500226X9015B2
A75C10	0160-2373	4	1	CAPACITOR-FXD 4700PF +-2% 300VDC MICA	28480	0160-2373
A75C11	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	28654	2130Y5V100R104Z
A75CR1	1906-0069	4	2	DIODE-FW BRDG 400V 1A	28480	1906-0069
A75CR2	1906-0069	4		DIODE-FW BRDG 400V 1A	28480	1906-0069
A75CR3	1901-0026	3		DIODE-PWR RECT 200V 750MA DO=29	28480	1901-0026
A75CR4	1901-0026	3		DIODE-PWR RECT 200V 750MA DO=29	28480	1901-0026
A75CR5	1901-0026	3		DIODE-PWR RECT 200V 750MA DO=29	28480	1901-0026

See introduction to this section for ordering information  
 \*Indicates factory selected value

Table 6-3. Replaceable Parts

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
A75CR6	1901-0026	3		DIODE-PWR RECT 200V 750MA DO-29	28480	1901-0026
A75CR7	1902-3073	8	1	DIODE-ZNR 4.32V 5% DO-7 PD=.4W TC=+.035%	28480	1902-3073
A75CR8	1901-0040	1		DIODE-SWITCHING 30V 50MA 2NS DO-35	28480	1901-0040
A75CR9	1901-0026	3		DIODE-PWR RECT 200V 750MA DO-29	28480	1901-0026
A75CR10	1901-0026	3		DIODE-PWR RECT 200V 750MA DO-29	28480	1901-0026
A75CR11	1902-0557	7	2	DIODE-ZNR 24.3V 5% DO-15 PD=1W TC=+.078%	28480	1902-0557
A75CR12	1902-0557	7		DIODE-ZNR 24.3V 5% DO-15 PD=1W TC=+.078%	28480	1902-0557
A75CR13	1901-0040	1		DIODE-SWITCHING 30V 50MA 2NS DO-35	28480	1901-0040
A75CR14	1901-0026	3		DIODE-PWR RECT 200V 750MA DO-29	28480	1901-0026
A75CR15	1901-0026	3		DIODE-PWR RECT 200V 750MA DO-29	28480	1901-0026
A75CR16	1902-0777	3		DIODE-ZNR 1N825 6.2V 5% DO-7 PD=.4W	04713	1N825
A75CR17	1902-3205	8	1	DIODE-ZNR 15V 5% DO-7 PD=.4W TC=+.057%	28480	1902-3205
A75CR18	1901-0040	1		DIODE-SWITCHING 30V 50MA 2NS DO-35	28480	1901-0040
A75CR19	1901-0040	1		DIODE-SWITCHING 30V 50MA 2NS DO-35	28480	1901-0040
A75CR20	1901-0040	1		DIODE-SWITCHING 30V 50MA 2NS DO-35	28480	1901-0040
A75CR21	1884-0052	7	1	THYRISTOR-SCR VRRM=60	01295	TIC45
A75F1	2110-0004	1	1	FUSE .25A 250V FAST-BLO 1.25X.25 UL IEC	28480	2110-0004
A75Q1	1854-0216	2	1	TRANSISTOR NPN 2N3441 SI TO-66 PD=25W	01928	2N3441
A75Q2	1853-0323	0	1	TRANSISTOR PNP 2N4900 SI TO-66 PD=25W	04713	2N4900
A75R1	0683-2035	3		RESISTOR 20K 5% .25W FC TC=+400/+800	01121	C82035
A75R2	0764-0042	0	2	RESISTOR 2.2K 5% 2W MO TC=+200	28480	0764-0042
A75R3	0683-1005	5		RESISTOR 10 5% .25W FC TC=+400/+500	01121	C81005
A75R4	0764-0042	0		RESISTOR 2.2K 5% 2W MO TC=+200	28480	0764-0042
A75R5	0683-1005	5		RESISTOR 10 5% .25W FC TC=+400/+500	01121	C81005
A75R6	0698-4426	1	1	RESISTOR 1.58K 1% .125W F TC=+100	24546	C4=1/8-T0-1581-F
A75R7	0757-0161	9		RESISTOR 604 1% .125W F TC=+100	24546	C4=1/8-T0-604R-F
A75R8	0757-0443	0	1	RESISTOR 11K 1% .125W F TC=+100	24546	C4=1/8-T0-1102-F
A75R9	2100-3109	2		RESISTOR-TRMR 2K 10% C SIDE-ADJ 17-TRN	02111	43P202
A75R10	0698-3279	0		RESISTOR 4.99K 1% .125W F TC=+100	24546	C4=1/8-T0-4991-F
A75R11	0698-6678	9	2	RESISTOR 15K .5% .125W F TC=+50	28480	0698-6678
A75R12	0698-6678	9		RESISTOR 15K .5% .125W F TC=+50	28480	0698-6678
A75R13	0687-1841	5	1	RESISTOR 180K 10% .5W CC TC=+882	01121	E81841
A75R14	0683-1005	5		RESISTOR 10 5% .25W FC TC=+400/+500	01121	C81005
A75R15	2100-3056	8		RESISTOR-TRMR 5K 10% C SIDE-ADJ 17-TRN	02111	43P502
A75R16	0698-4482	9	1	RESISTOR 17.4K 1% .125W F TC=+100	03888	PM55=1/8-T0-1742-F
A75R17	0683-1025	9		RESISTOR 1K 5% .25W FC TC=+400/+600	01121	C81025
A75R18	0757-0455	4	1	RESISTOR 36.5K 1% .125W F TC=+100	24546	C4=1/8-T0-3652-F
A75R19	0757-0464	5	1	RESISTOR 90.9K 1% .125W F TC=+100	24546	C4=1/8-T0-9092-F
A75R20	0757-0409	6		RESISTOR 20K 1% .125W F TC=+100	24546	C4=1/8-T0-2002-F
A75R21	0683-1025	9		RESISTOR 1K 5% .25W FC TC=+400/+600	01121	C81025
A75R22	0683-1025	9		RESISTOR 1K 5% .25W FC TC=+400/+600	01121	C81025
A75R23	0683-1035	1		RESISTOR 10K 5% .25W FC TC=+400/+700	01121	C81035
A75R24	0683-1035	1		RESISTOR 10K 5% .25W FC TC=+400/+700	01121	C81035
A75R25	0683-1035	1		RESISTOR 10K 5% .25W FC TC=+400/+700	01121	C81035
A75R26	0683-4715	0		RESISTOR 470 5% .25W FC TC=+400/+600	01121	C84715
A75R27	0683-1035	1		RESISTOR 10K 5% .25W FC TC=+400/+700	01121	C81035
A75S1	3103-0015	0	1	SWITCH-THRM FXD +75C 6A OPN-ON-RISE	28480	3103-0015
A75TP1-2	0360-0124	3		CONNECTOR-SGL CONT PIN .04-IN-BSC-57 RND	28480	0360-0124
A75U1	1A20-0429	8	1	IC V RGLTR TO-39	18324	LM309M
A75U2	1A26-0220	9	1	IC V RGLTR TO-39	27014	LM320H-05
A75U3	1A20-0203	6	2	OP AMP GP TO-99	01928	CA741CT
A75U4	1A20-0203	6		OP AMP GP TO-99	01928	CA741CT
A75U5	1A26-0026	3		COMPARATOR PRCN TO-99	04713	MLM311G
A75U6	1A20-1201	6		IC GATE TTL LS AND QUAD 2-INP	01295	8474LS08N
A75 MISCELLANEOUS PARTS						
	0340-0162	7	2	INSULATOR-XSTR ALUMINUM	28480	0340-0162
	03585-01103	4	1	HEAT SINK, A75	28480	03585-01103
	1205-0011	0		HEAT SINK TO-5/T0-39-PKG	28480	1205-0011
	2110-0269	0		FUSEHOLDER-CLIP TYPE,250-FUSE	28480	2110-0269
	4040-0753	0		EXTR-PC BD GRN POLYC .062-BD-THKNS	28480	4040-0753
	4040-0755	2		EXTR-PC BD VIG POLYC .062-BD-THKNS	28480	4040-0755
	0590-1054	7		THREADED INSERT-NUT 6-32 .065-LG SST	28480	0590-1054
	1480-0116	8		PIN-GRV .062-IN-DIA .25-IN-LG STL	28480	1480-0116
	2360-0115	4		SCREW-MACH 6-32 .312-IN-LG PAN-RO-POZI	00000	ORDER BY DESCRIPTION
	2420-0003	7	8	NUT-HEX=OBL-CHAM 6-32-THD .094-IN-THK	00000	ORDER BY DESCRIPTION
	2190-0918	4	9	WASHER-LK HLCL NO. 6 .141-IN-ID	28480	2190-0918
	3050-0066	8	6	WASHER-FL MTLCL NO. 6 .147-IN-ID	28480	3050-0066
	8150-0038	1		WIRE 22AWG Y 300V PVC 7X30 BOC	28480	8150-0038

See introduction to this section for ordering information  
 \*Indicates factory selected value

Table 6-3. Replaceable Parts

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
A76	03585-66576	1	1	POWER DISTRIBUTION BOARD	28480	03585-66576
A76C1	0180-0291	3		CAPACITOR-FXD 1UF++10% 35VDC TA	56289	1500105X9035A2
A76C2	0180-0291	3		CAPACITOR-FXD 1UF++10% 35VDC TA	56289	1500105X9035A2
A76C3	0180-0049	9	1	CAPACITOR-FXD 20UF+75-10% 50VDC AL	56289	3002060500CC2
A76C4	0180-0291	3		CAPACITOR-FXD 1UF++10% 35VDC TA	56289	1500105X9035A2
A76C5	0180-0291	3		CAPACITOR-FXD 1UF++10% 35VDC TA	56289	1500105X9035A2
A76C6	0180-0291	3		CAPACITOR-FXD 1UF++10% 35VDC TA	56289	1500105X9035A2
A76C7	0180-0291	3		CAPACITOR-FXD 1UF++10% 35VDC TA	56289	1500105X9035A2
A76CR1	1901-0026	3		DIODE-PWR RECT 200V 750MA DO-29	28480	1901-0026
A76CR2	1901-0026	3		DIODE-PWR RECT 200V 750MA DO-29	28480	1901-0026
A76CR3	1901-0026	3		DIODE-PWR RECT 200V 750MA DO-29	28480	1901-0026
A76CR4	1901-0662	3		DIODE-PWR RECT 100V 6A	04713	MR751
A76CR6	1902-0909	3	1	DIODE-ZNR 1N2972A 8,2V 10% DO-4 PD=10W	04713	1N2972A
A76J1	1251-3196	5	1	CONNECTOR 8-PIN M POST TYPE	28480	1251-3196
A76J2	1251-3475	3		CONNECTOR 10-PIN M POST TYPE	28480	1251-3475
A76J3	1251-3276	2		CONNECTOR 6-PIN M POST TYPE	28480	1251-3276
A76J4	1251-3981	6	1	CONNECTOR 9-PIN M POST TYPE	28480	1251-3981
A76J5	1251-3618	6		CONNECTOR 2-PIN M POST TYPE	28480	1251-3618
A76J6	1251-4659	7		CONNECTOR 14-PIN M POST TYPE	28480	1251-4659
A76J7	1251-3618	6		CONNECTOR 2-PIN M POST TYPE	28480	1251-3618
A76J9	1251-3192	1	1	CONNECTOR 3-PIN M POST TYPE	28480	1251-3192
A76J10	1251-3195	4	1	CONNECTOR 4-PIN M POST TYPE	28480	1251-3195
A76L1	9140-0270	3	1	INDUCTOR FAN	28480	9140-0270
A76R1	0683-4705	8		RESISTOR 47 5% .25W FC TC=+400/+500	01121	CB4705
A76T1	9100-4031	8	1	BALUM TRANSFORMER	28480	9100-4031
A76T2	9100-3454	7	1	TRANSFORMER, GROUND ISOLATOR	28480	9100-3454
A76U1	1826-0403	0		IC V RGLTR T0-3	80103	LAG-1815
A76 MISCELLANEOUS PARTS						
	03585-01212	6	1	BRACKET, HEAT SINK	28480	03585-01212
	0590-0526	6		THREADED INSERT-NUT 4-40 .065-LG SST	28480	0590-0526
	0590-1136	6		THREADED INSERT-NUT 10-32 .125-LG	28480	0590-1136
	1200-0452	3	1	SOCKET-XSTR 2-CONT T0-3 SLDR-EYE	28480	1200-0452
	0590-1054	7		THREADED INSERT-NUT 6-32 .065-LG SST	28480	0590-1054
	0380-0046	0	6	SPACER-RVT-ON .375-IN-LG .152-IN-ID	00000	ORDER BY DESCRIPTION
	1251-0600	0		CONNECTOR-SGL CONT PIN 1,14MM-BSC-S2 80	28480	1251-0600
	2200-0169	0	2	SCREW-MACH 4-40 .5-IN-LG 82 DEG	00000	ORDER BY DESCRIPTION
	3050-0066	8		WASHER-FL MTLN NO. 6 .147-IN-ID	28480	3050-0066
	2190-0913	9	2	WASHER-LK MCLL NO. 4 .115-IN-ID	28480	2190-0913
	2280-0002	6	2	NUT-HEX-DBL-CHAM 4-40-THD .062-IN-THK	00000	ORDER BY DESCRIPTION
	2360-0115	4		SCREW-MACH 6-32 .312-IN-LG PAN-HD-POZI	00000	ORDER BY DESCRIPTION
	2360-0195	0	2	SCREW-MACH 6-32 .312-IN-LG PAN-HD-POZI	00000	ORDER BY DESCRIPTION
	0340-0580	3		INSULATOR-XSTR RUBBER RED	28480	0340-0580
	2360-0117	6		SCREW-MACH 6-32 .375-IN-LG PAN-HD-POZI	00000	ORDER BY DESCRIPTION
	3050-0716	5		WASHER-FL MTLN NO. 5 .128-IN-ID	28480	3050-0716
	0360-0053	7	1	TERMINAL-SLDR LUG LK-MTG FOR=10-SCR	28480	0360-0053
	2190-0918	4		WASHER-LK MCLL NO. 6 .141-IN-ID	28480	2190-0918
A77	03585-66577	2	1	AC PROTECT BOARD	28480	03585-66577
A77C1	0160-2055	9		CAPACITOR-FXD .01UF +80-20% 100VDC CER	28480	0160-2055
A77C2	0160-4603	7	2	CAPACITOR-FXD 1UF ++20% 200VDC MET-POLYP	28480	0160-4603
A77Q1	1884-0272	3	1	THYRISTOR-DIAC TRIG IPK=2A VRCA D=3202Y	0192B	D3202Y
A77Q2	1884-0270	1	1	THYRISTOR-TRIAC 2N5569	0192B	2N5569
A77R1	0698-3228	9		RESISTOR 49.9K 1% .125W F TC=0+-100	28480	0698-3228
A77R2	0757-0454	3		RESISTOR 33.2K 1% .125W F TC=0+-100	24546	C4-1/8-T0-3322-F
A77R3	0757-0454	3		RESISTOR 33.2K 1% .125W F TC=0+-100	24546	C4-1/8-T0-3322-F
A77 MISCELLANEOUS PARTS						
	2950-0134	8	1	NUT-HEX-DBL-CHAM 1/4-28-THD .125-IN-THK	00000	ORDER BY DESCRIPTION
	0380-0046	0		SPACER-RVT-ON .375-IN-LG .152-IN-ID	00000	ORDER BY DESCRIPTION
	2190-0027	6	1	WASHER-LK INTL T 1/4 IN .256-IN-ID	28480	2190-0027
AR1	03585-66581	8	1	OSCILLATOR BOARD (STD)	28480	03585-66581
AR1C1	0160-1794	3		CAPACITOR-FXD 22UF++10% 35VDC TA	56289	1500226X9035R2
AR1C2	0160-3847	9		CAPACITOR-FXD .01UF +100-0% 50VDC CER	28480	0160-3847
AR1C3	0160-2222	2	2	CAPACITOR-FXD 1500PF ++5% 300VDC MICA	28480	0160-2222
AR1C4	0160-2222	2		CAPACITOR-FXD 1500PF ++5% 300VDC MICA	28480	0160-2222

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Table 6-3. Replaceable Parts

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
AB1J1	1250-1368	7		CONNECTOR-RF SMD M PC 50-OHM	28480	1250-1368
AB1J2	1251-4795	2		CONNECTOR 2-PIN M POST TYPE	28480	1251-4795
AB1L1	9100-1618	1		COIL-MLD 5.6UH 10% Q=45 .155DX.375LG-NOM	28480	9100-1618
AB1L2	9100-2486	3		COIL-MLD 330NH 5% Q=45 .156DX.375LG-NOM	28480	9100-2486
AB1Q1	1853-0020	4		TRANSISTOR PNP SI PD=300MW FT=150MHZ	28480	1853-0020
AB1R1	0757-0442	9		RESISTOR 10K 1% .125W F TC=0+-100	24546	C4-1/8-T0-1002-F
AB1R2	2100-3207	1		RESISTOR-TRMR 5K 10% C SIDE-ADJ 1-TRN	28480	2100-3207
AB1R3	0683-2225	3		RESISTOR 2.2K 5% .25W FC TC=-400/+700	01121	CB2225
AB1R4	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	CB4705
AB1R5	0690-6811	6		RESISTOR 680 10% 1W CC TC=0+529	01121	GB6811
AB1R6	0683-4705	8		RESISTOR 47 5% .25W FC TC=-400/+500	01121	CB4705
AB1R7	0698-3279	0		RESISTOR 4.99K 1% .125W F TC=0+-100	24546	C4-1/8-T0-4991-F
AB1R8	0757-0449	6		RESISTOR 20K 1% .125W F TC=0+-100	24546	C4-1/8-T0-2002-F
AB1R9	2100-3351	6		RESISTOR-TRMR 500 10% C SIDE-ADJ 1-TRN	28480	2100-3351
AB1R10	0698-4442	1		RESISTOR 0.42K 1% .125W F TC=0+-100	24546	C4-1/8-T0-4421-F
AB1R11	0757-0449	6		RESISTOR 20K 1% .125W F TC=0+-100	24546	C4-1/8-T0-2002-F
AB1R12	0683-1055	5		RESISTOR 1M 5% .25W FC TC=-800/+900	01121	CB1055
AB1U1	0960-0465	7		OSCILATOR, HIGH STANDBY	28480	0960-0465
AB1U2	1826-0026	3		COMPARATOR PRCN TC=99	04713	MLM311G
				AB1 MISCELLANEOUS PARTS		
	03585-04132	5	1	INSULATOR, OVEN	28480	03585-04132

See introduction to this section for ordering information  
 \*Indicates factory selected value

Table 6-3. Replaceable Parts

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
HARDWARE LIST						
	0380-0640	0	2	STANDOFF-RND .5-IN-LG 6-32TMD .25-IN-OD	00000	ORDER BY DESCRIPTION
	0400-0018	0		GROMMET-CHAN NCH .052-IN-TMK-PNL	28480	0400-0018
	0590-1059	2	30	THREADED INSERT-STDF 4-40 .188-LG	28480	0590-1059
	0890-0025	6		SPIRAL WRAP .188-2-DIA POLYETH	28480	0890-0025
	0510-0015	0	2	RETAINER-RING E-WR EXT .125-IN-DIA STL	28480	0510-0015
	2260-0009	3		NUT-HEX-W/LKWR 4-40-TMD .094-IN-TMK	00000	ORDER BY DESCRIPTION
	2190-0016	3	2	WASHER-LK INTL T 1/8 IN .377-IN-ID	28480	2190-0016
	3050-0067	9	1	WASHER-FL MTLC 5/16 IN .375-IN-ID	28480	3050-0067
	2950-0043	8	2	NUT-HEX-DBL-CHAM 3/8-32-TMD .094-IN-TMK	00000	ORDER BY DESCRIPTION
	0400-0009	9	4	GROMMET-RND .125-IN-ID .25-IN-GRV-OD	28480	0400-0009
	2200-0101	0		SCREW-MACH 4-40 .188-IN-LG PAN-HD-POZI	00000	ORDER BY DESCRIPTION
	2190-0060	7	5	WASHER-LK INTL T 1/4 IN .256-IN-ID	28480	2190-0060
	2950-0072	3	5	NUT-HEX-DBL-CHAM 1/4-32-TMD .062-IN-TMK	00000	ORDER BY DESCRIPTION
	2190-0068	5	2	WASHER-LK INTL T 1/2 IN .505-IN-ID	28480	2190-0068
	2950-0054	1	3	NUT-HEX-DBL-CHAM 1/2-28-TMD .125-IN-TMK	00000	ORDER BY DESCRIPTION
	2190-0014	1	2	WASHER-LK INTL T NO. 2 .089-IN-ID	28480	2190-0014
	0610-0001	6	2	NUT-HEX-DBL-CHAM 2-56-TMD .062-IN-TMK	00000	ORDER BY DESCRIPTION
	0360-0042	4	1	TERMINAL-SLDR LUG PL-MTG FOR-#6-SCR	28480	0360-0042
	1400-0090	9	1	WASHER-RUBBER 5/8" OD	00000	080
	2190-0037	8	1	WASHER-LK INTL T 1/2 IN .512-IN-ID	28480	2190-0037
	2360-0139	2	4	SCREW-MACH 6-32 2-IN-LG PAN-HD-POZI	00000	ORDER BY DESCRIPTION
	2420-0001	5	4	NUT-HEX-W/LKWR 6-32-TMD .109-IN-TMK	00000	ORDER BY DESCRIPTION
	1400-0024	9	1	CLAMP-CABLE .25-DIA .5-AD NYL	28480	1400-0024
	2360-0121	2	9	SCREW-MACH 6-32 .5-IN-LG PAN-HD-POZI	00000	ORDER BY DESCRIPTION
	3050-0066	8		WASHER-FL MTLC NO. 6 .147-IN-ID	28480	3050-0066
	2190-0916	4		WASHER-LK HLCL NO. 6 .141-IN-ID	28480	2190-0916
	2420-0003	7		NUT-HEX-DBL-CHAM 6-32-TMD .094-IN-TMK	00000	ORDER BY DESCRIPTION
	2190-0034	5	4	WASHER-LK HLCL NO. 10 .194-IN-ID	28480	2190-0034
	2360-0113	2	9	SCREW-MACH 6-32 .25-IN-LG PAN-HD-POZI	00000	ORDER BY DESCRIPTION
	2950-0004	6	4	NUT-HEX-DBL-CHAM 8-32-TMD .125-IN-TMK	00000	ORDER BY DESCRIPTION
	2190-0099	2	13	WASHER-LK INTL T 7/16 IN .472-IN-ID	28480	2190-0099
	2950-0035	8	13	NUT-HEX-DBL-CHAM 15/32-32-TMD	00000	ORDER BY DESCRIPTION
	2360-0117	6		SCREW-MACH 6-32 .375-IN-LG PAN-HD-POZI	00000	ORDER BY DESCRIPTION
	2360-0115	4		SCREW-MACH 6-32 .312-IN-LG PAN-HD-POZI	00000	ORDER BY DESCRIPTION
	2360-0207	5	1	SCREW-MACH 6-32 .475-IN-LG PAN-HD-POZI	00000	ORDER BY DESCRIPTION
	2360-0123	4	5	SCREW-MACH 6-32 .625-IN-LG PAN-HD-POZI	00000	ORDER BY DESCRIPTION
	2200-0103	2		SCREW-MACH 4-40 .25-IN-LG PAN-HD-POZI	00000	ORDER BY DESCRIPTION
	2200-0103	2		SCREW-MACH 4-40 .25-IN-LG PAN-HD-POZI	00000	ORDER BY DESCRIPTION
	2360-0197	2	2	SCREW-MACH 6-32 .375-IN-LG PAN-HD-POZI	00000	ORDER BY DESCRIPTION
	3050-0010	2	2	WASHER-FL MTLC NO. 6 .147-IN-ID	28480	3050-0010
	2200-0111	2	16	SCREW-MACH 4-40 .5-IN-LG PAN-HD-POZI	00000	ORDER BY DESCRIPTION
	1400-0290	1	1	BRACKET-RTANG .5-LG X .578-LG .5-AD STL	28480	1400-0290
	2360-0193	9		SCREW-MACH 6-32 .25-IN-LG PAN-HD-POZI	00000	ORDER BY DESCRIPTION
	2360-0116	5	15	SCREW-MACH 6-32 .312-IN-LG 82 DEG	00000	ORDER BY DESCRIPTION
	0520-0127	6	7	SCREW-MACH 2-56 .188-IN-LG PAN-HD-POZI	00000	ORDER BY DESCRIPTION
	0360-0001	5	2	TERMINAL-SLDR LUG LK-MTG FOR-#6-SCR	28480	0360-0001
	2260-0003	7	2	NUT-HEX-PLSTC LKG 4-40-TMD .141-IN-TMK	00000	ORDER BY DESCRIPTION
	2200-0143	0	7	SCREW-MACH 4-40 .375-IN-LG PAN-HD-POZI	00000	ORDER BY DESCRIPTION
	2190-0003	8	2	WASHER-LK HLCL NO. 4 .115-IN-ID	28480	2190-0003
	3050-0016	8	2	WASHER-FL MTLC NO. 6 .147-IN-ID	28480	3050-0016
	2510-0046	9	6	SCREW-MACH 8-32 .375-IN-LG 82 DEG	00000	ORDER BY DESCRIPTION
	3050-0071	5	3	WASHER-FL MTLC NO. 8 .169-IN-ID	28480	3050-0071
	2360-0200	8	3	SCREW-MACH 6-32 .5-IN-LG 100 DEG	00000	ORDER BY DESCRIPTION
	2510-0041	4	23	SCREW-MACH 8-32 .25-IN-LG PAN-HD-POZI	00000	ORDER BY DESCRIPTION
	2510-0045	8	4	SCREW-MACH 8-32 .375-IN-LG PAN-HD-POZI	00000	ORDER BY DESCRIPTION
	2510-0192	6	16	SCREW-MACH 8-32 .25-IN-LG 100 DEG	28480	2510-0192
	0624-0004	8	6	SCREW-TPG 4-24 .375-IN-LG PAN-HD-SLT	00000	ORDER BY DESCRIPTION
	3050-0001	1	2	WASHER-FL MTLC NO. 8 .172-IN-ID	28480	3050-0001
	2260-0107	6	1	SCREW-MACH 4-40 .375-IN-LG PAN-HD-POZI	00000	ORDER BY DESCRIPTION
	2360-0111	0	6	SCREW-MACH 6-32 .188-IN-LG PAN-HD-POZI	00000	ORDER BY DESCRIPTION
	2360-0190	5	2	SCREW-MACH 6-32 .188-IN-LG 100 DEG	00000	ORDER BY DESCRIPTION
	1400-0093	2	1	STRAP-CABLE .438-DIA	28480	1400-0093
	2190-0057	2	4	WASHER-LK INTL T NO. 12 .218-IN-ID	28480	2190-0057
	0360-0368	7	1	TERMINAL-SLDR LUG LK-MTG FOR-#12-SCR	28480	0360-0368
	0520-0128	7	46	SCREW-MACH 2-56 .25-IN-LG PAN-HD-POZI	00000	ORDER BY DESCRIPTION
	2200-0137	2	16	SCREW-MACH 4-40 .188-IN-LG PAN-HD-POZI	00000	ORDER BY DESCRIPTION
	2200-0165	6	13	SCREW-MACH 4-40 .25-IN-LG 82 DEG	00000	ORDER BY DESCRIPTION
	8151-0011	2		WIRE 18AWG 1x18	28480	8151-0011
	8150-0299	6	2	WIRE 24AWG Y 300V PVC 7x32 80C	28480	8150-0299
	8150-0299	6		WIRE 24AWG Y 300V PVC 7x32 80C	28480	8150-0299

See introduction to this section for ordering information  
 \*Indicates factory selected value

Table 6-3. Replaceable Parts

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
	8150-0299	6		WIRE 24AWG Y 300V PVC 7X32 80C	28480	8150-0299
	8150-0301	1	1	WIRE 24AWG R 300V PVC 7X32 80C	28480	8150-0301
	0360-0124	3		CONNECTOR-SGL CONT PIN .04-IN-BSC-SZ RND	28480	0360-0124
	0520-0133	4	2	SCREW-MACH 2-56 .5-IN-LG PAN-HD-PGZI	00000	ORDER BY DESCRIPTION
	0590-0060	3	1	NUT-HEX=OBL-CHAM 12-32-THD .078-IN-THK	00000	ORDER BY DESCRIPTION
	9211-2934	1	1		28480	9211-2934

See introduction to this section for ordering information  
 \*Indicates factory selected value

Table 6-3. Replaceable Parts

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
MISCELLANEOUS PARTS						
	0340-0618	8	2	INSULATOR MYL/VNL	28480	0340-0618
	03582-04104	8	1	GUARD, FAN SWITCH	28480	03582-04104
	03582-22701	9	1	FILTER, GRAY	28480	03582-22701
	03582-60103	5	1	SHIELD	28480	03582-60103
	03585-00101	0	1	DECK, HVPS	28480	03585-00101
	03585-00105	4	1	DECK, MOUNTING HVPS	28480	03585-00105
	03585-00201	1	1	PANEL, FRONT, TOP	28480	03585-00201
	03585-00202	2	1	SUB-PANEL, FRONT	28480	03585-00202
	03585-00203	3	1	PANEL, REAR	28480	03585-00203
	03585-00302	3	1	COVER, INPUT	28480	03585-00302
	03585-00306	7	1	SHIELD, BOTTOM	28480	03585-00306
	03585-00307	8	1	SHIELD, FRONT	28480	03585-00307
	03585-00308	9	1	SHIELD, REAR	28480	03585-00308
	03585-00310	3	2		28480	03585-00310
	03585-00311	4	1	CLAMP, END	28480	03585-00311
	03585-00601	5	1	DIVIDER-DIGITAL	28480	03585-00601
	03585-01201	3	1	BRACKET B	28480	03585-01201
	03585-01203	5	1	BRACKET, PC BOARD	28480	03585-01203
	03585-01205	7	1	CLAMP, CRT SHIELD	28480	03585-01205
	03585-01206	8	1	BRACKET, CAP C	28480	03585-01206
	03585-01207	9	1	BRACKET, CONNECTOR	28480	03585-01207
	03585-01209	1	1	BOARD GUIDE, DIGITAL	28480	03585-01209
	03585-01210	4	1	CLAMP B, DIGITAL	28480	03585-01210
	03585-01211	5	1	BRACKET-T	28480	03585-01211
	03585-01213	7	1	BRACKET-T MOUNT	28480	03585-01213
	03585-01214	8	1	BRACKET, X-Y-Z COVER	28480	03585-01214
	03585-01216	0	1	BRACKET, REAR, HVPS	28480	03585-01216
	03585-01217	1	1	BRACKET, REAR COVER	28480	03585-01217
	03585-01219	3	1	BRACKET, BAR	28480	03585-01219
	03585-01221	7	1	SUPPORT, CONTROL PANEL	28480	03585-01221
	03585-01222	8	1	BRACKET, CRT BEZEL	28480	03585-01222
	03585-04101	8	1	COVER, HVPS	28480	03585-04101
	03585-04102	9	1	COVER, FRONT IF	28480	03585-04102
	03585-04103	0	1	COVER, REAR IF	28480	03585-04103
	03585-04106	3	1	BRACKET, LD MOUNTING	28480	03585-04106
	03585-04111	0	1	COVER, 40	28480	03585-04111
	03585-04112	1	1	COVER, A67	28480	03585-04112
	03585-04113	2	1	COVER, A67B	28480	03585-04113
	03585-04114	3	1	COVER, REAR FRAME	28480	03585-04114
	03585-04115	4	1	COVER, POWER SUPPLY	28480	03585-04115
	03585-04130	3	1	INSULATOR, HVPS	28480	03585-04130
	03585-04131	4	1	COVER, REAR PANEL	28480	03585-04131
	03585-20302	5	1	NUT, SHOULDERED	28480	03585-20302
	03585-20303	6	1	RETAINER, CONNECTOR	28480	03585-20303
	03585-21203	7	1	BAR, ANALOG MOUNTING	28480	03585-21203
	03585-21204	8	1	DIGITAL, CLAMP-A	28480	03585-21204
	03585-21207	1	1	BAR, INPUT MOUNTING	28480	03585-21207
	03585-21209	3	1	EXTRACTOR, FRONT PANEL, LOWER	28480	03585-21209
	03585-21210	6	1	BAR SUPPORT	28480	03585-21210
	03585-21211	7	1	BAR, PS CLAMP	28480	03585-21211
	03585-21212	8	1	BAR, INPUT SUPPORT	28480	03585-21212
	03585-21214	0	1	CLAMP, POWER SUPPLY	28480	03585-21214
	03585-32404	3	1	WIRE FORM, RF	28480	03585-32404
	03585-60201	7	1	LEFT SIDE ASSEMBLY	28480	03585-60201
	03585-60202	8	1	RIGHT SIDE ASSEMBLY	28480	03585-60202
	03585-60204	0	1	IF SECTION ASSEMBLY	28480	03585-60204
	03585-60205	1	1	TRACK GENERATOR ASSEMBLY	28480	03585-60205
	03585-60206	2	1	LD BOX ASSEMBLY	28480	03585-60206
	03585-60301	8	1	COVER ASSEMBLY	28480	03585-60301
	03585-84401	9	1	KIT ACCESSORY	28480	03585-84401
	03585-86501	0	1	THIRD IF KIT	28480	03585-86501
	03585-90001	8	1	SERVICE MANUAL-A	28480	03585-90001
	03585-90002	9	1	MANUAL ASSEMBLY-A	28480	03585-90002
	0370-1005	2	5	KNDB-BASE-PTR 3/8 JGK .125-IN-ID	28480	0370-1005
	0370-1303	3	1	KNDB-BASE 1-1/8 JGK .25-IN-ID	28480	0370-1303
	0380-0643	3	2	STANDOFF-MEX .255-IN-LG 6-32TMD	00000	ORDER BY DESCRIPTION
	0590-0167	1	4	NUT-THUMB 6-32-TMD BRS	28480	0590-0167
	0905-0573	2	1	GASKET RND NRRN-FM 1-TMK 2.9-OD 2.15-ID	28480	0905-0573
	09825-67908	8	1	CONNECTOR, GASKET ASSEMBLY	28480	09825-67908
	1250-0102	5	2	CONNECTOR-RF HNC FEM SGL-HOLE-FR 50-ohm	28480	1250-0102

See introduction to this section for ordering information  
 \*Indicates factory selected value



Table 6-3. Replaceable Parts

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
	1250-1499	5	1	CONNECTOR, BNC	28480	1250-1499
	1251-3982	7	2	CONNECTOR 2-PIN F UTILITY	28480	1251-3982
	1400-0118	2	2	STRAP-CABLE .625-DIA	28480	1400-0118
	1400-0908	8		CLAMP-CABLE .188-DIA .75-WD PVC	08915	KKC-3
	1400-0972	6	1	CLIP-CABLE 0.500 IN CABLE DIA; ADHESIVE	34785	021-0500
	1531-0056	4	1		28480	1531-0056
	2110-0465	8	1	FUSEHOLDER CAP EXTR PST; BAYONET; 20A	28480	2110-0465
	2110-0467	0	1	NUT-HEX 1/2-28 THD 0.688 A/F	75915	903-070
	2110-0470	5	1	FUSEHOLDER BODY EXTR PST; BAYONET; TND	75915	345003-010
	2260-0001	5	5	NUT-HEX-DBL-CHAM 4-40-THD .094-IN-THK	28480	2260-0001
	2520-0037	9	4	SCREW-MACH 8-32 3-IN-LG RD-ND-SLT STL	00000	ORDER BY DESCRIPTION
	3050-0152	3	4	WASHER-SMLDR NO. 8 .172-IN-ID .438-IN-OD	28480	3050-0152
	3150-0218	4	1	FILTER-AIR 32 STD MESH MET SCREEN	28480	3150-0218
	4324-0094	4	8		28480	4324-0094
	5001-0441	2	2		28480	5001-0441
	5020-8807	0	1		28480	5020-8807
	5020-8808	1	1		28480	5020-8808
	5020-8838	7	4		28480	5020-8838
	5040-7201	8	4	FOOT (STANDARD)	28480	5040-7201
	5040-7202	9	1	TRIM, TOP	28480	5040-7202
	5040-7783	1	1	SUPPORT, CRT SHIELD	28480	5040-7783
	5040-8336	2	1	STANDOFF	28480	5040-8336
	5040-8399	7	1	BEZEL, CRT	28480	5040-8399
	5041-0310	8	1	KEY, BLANK	28480	5041-0310
	5041-0319	7	19	KEY, BLACK W/LIGHT	28480	5041-0319
	5041-0352	8	5	KEY, BLACK W/LIGHT	28480	5041-0352
	5041-0668	9	1	KEY, START FREQUENCY	28480	5041-0668
	5041-0669	0	1	KEY, STOP FREQUENCY	28480	5041-0669
	5041-0670	3	1	KEY, 1 REG	28480	5041-0670
	5041-0671	4	1	KEY, 2 REG	28480	5041-0671
	5041-0672	5	1	KEY, 3 REG	28480	5041-0672
	5041-0673	6	1	KEY, CENTER FREQUENCY	28480	5041-0673
	5041-0674	7	1	KEY, FREQUENCY SPAN	28480	5041-0674
	5041-0675	8	1	KEY, REFERENCE LEVEL	28480	5041-0675
	5041-0720	4	1	KEY, INSTRUMENT PRESET	28480	5041-0720
	5041-0731	7	1	KEY, OPS SPAN	28480	5041-0731
	5041-0736	2	1	KEY, DB/DIV	28480	5041-0736
	5041-0737	3	1	KEY, REF LEVEL VOLT	28480	5041-0737
	5041-0739	5	1	KEY, MHZ, DBM, V	28480	5041-0739
	5041-0740	8	1	KEY, KHZ, DBV, MV	28480	5041-0740
	5041-0741	9	1	KEY, HZ, DB, UV	28480	5041-0741
	5041-0742	0	1	KEY, SEC	28480	5041-0742
	5041-0743	1	1	KEY, ENTER OFFSET	28480	5041-0743
	5041-0744	2	1	KEY, RANGE	28480	5041-0744
	5041-0745	3	1	KEY, MKR-OPS STEP	28480	5041-0745
	5041-0746	4	1	KEY, 1	28480	5041-0746
	5041-0749	7	1	KEY, 5	28480	5041-0749
	5041-0750	0	1	KEY, 6	28480	5041-0750
	5041-0754	4	1	KEY, 0	28480	5041-0754
	5041-0755	5	1	KEY, DECIMAL	28480	5041-0755
	5041-0756	6	2	KEY, ARROW	28480	5041-0756
	5041-0772	6	1	KEY, LOCAL	28480	5041-0772
	5041-0773	7	1	KEY, FULL SWEEP	28480	5041-0773
	5041-0776	0	1	KEY, CLEAR	28480	5041-0776
	5041-0777	1	1	KEY, MKR CF	28480	5041-0777
	5041-0778	2	1	KEY, MKR REFERENCE LEVEL	28480	5041-0778
	5041-0779	3	1	KEY, MANUAL	28480	5041-0779
	5041-0780	6	1	KEY, OFF	28480	5041-0780
	5041-0781	7	1	KEY, RES BW	28480	5041-0781
	5041-0782	8	1	KEY, VIDE0 BW	28480	5041-0782
	5041-0783	9	1	KEY, SWEEP TIME	28480	5041-0783
	5041-0923	9	1	SAVE (OFF)	28480	5041-0923
	5041-0924	0	1	RECALL (ON)	28480	5041-0924
	5041-0939	7	1	KEY, STORE A-B	28480	5041-0939
	5041-0940	0	1	KEY, CLEAR A	28480	5041-0940
	5041-0945	5	1	KEY, CF STEP SIZE	28480	5041-0945
	5041-0958	0	1	KEY, 4 (CAL)	28480	5041-0958
	5041-0959	1	1	KEY, 7 (UPPER RIGHT)	28480	5041-0959
	5041-0960	4	1	KEY, 8 (PLOT 1)	28480	5041-0960
	5041-0961	5	1	KEY, 9 (PLOT 2)	28480	5041-0961
	5060-0467	6	1	CONNECTORIAL PROBE	28480	5060-0467
	5060-7474	9	1	BEZEL FRAME	28480	5060-7474
	5060-9836	1	1		28480	5060-9836
	5060-9848	5	1		28480	5060-9848

See introduction to this section for ordering information  
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Table 6-3. Replaceable Parts

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
	5060-9923	7	2	COVER, SIDE	28480	5060-9923
	5061-2034	9	1	CARD HOLDER	28480	5061-2034
	5083-5789	3	1	CRT TUBE	28480	5083-5789
	7120-1254	1	1	NAMEPLATE .312-IN-WD .54-IN-LG AL	28480	7120-1254
	7120-3416	1	1	LABEL, INFO	28480	7120-3416
	7120-3528	6	1	LABEL, CAUTION	28480	7120-3528
	7120-3530	0	1	LABEL, CAUTION	28480	7120-3530
	7120-6957	1	1	LABEL, INFO	28480	7120-6957
	7120-6958	2	1	LABEL, INFO	28480	7120-6958
	7120-6959	3	1	LABEL, INFO	28480	7120-6959
	7120-7183	7	1	FRONT PANEL INSERT	28480	7120-7183
	7122-0058	5	1	PLATE, SERIAL	28480	7122-0058
	8120-1348	5	1	CABLE ASSY 18AWG 3-CNDCT BLK-JKT	28480	8120-1348
	9320-3883	2	1	INSTRUMENT CARD	28480	9320-3883
	9320-3884	3	1	HP-IB INSTRUMENT CARD	28480	9320-3884

See introduction to this section for ordering information  
 \*Indicates factory selected value

Table 6-3. Replaceable Parts

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
CHASSIS PARTS						
A1	03585-66501	2		INPUT ASSEMBLY	28480	03585-66501
A2	03585-66502	3		PC ASSEMBLY, 1ST MIXER	28480	03585-66502
A3	03585-66503	4		100-35 MHZ IF	28480	03585-66503
A4	03585-66504	5		PC ASSEMBLY, 2ND MIXER	28480	03585-66504
A5	03585-66505	6		3RD MIXER	28480	03585-66505
A6A	03585-66506	7		CONNECTOR BOARD	28480	03585-66506
A6B	03585-66506	7		CONNECTOR BOARD	28480	03585-66506
A6C	03585-66506	7		CONNECTOR BOARD	28480	03585-66506
A6D	03585-66506	7		CONNECTOR BOARD	28480	03585-66506
A10	03585-66510	3		ANALOG MOTHER BOARD	28480	03585-66510
A14	03585-66514	7		PC ASSEMBLY, LOG AMPLIFIER	28480	03585-66514
A15	03585-66515	8		VIDEO FILTER & DB BOARD	28480	03585-66515
A16	03585-66516	9		A-DT REGISTER	28480	03585-66516
A21	03585-66521	6		90/10 MHZ/REFERENCE DIVIDER	28480	03585-66521
A22	03585-66522	7		1ST LO VOLTAGE CONTROLLED OSCILLATOR	28480	03585-66522
A23	03585-66523	8		STEP SYN VTO	28480	03585-66523
A24	03585-66524	9		PC ASSEMBLY, BUFFER	28480	03585-66524
A25	03585-66525	0		SM LOOP MIXER	28480	03585-66525
A26	03585-66526	1		STEP PHASE DETECTOR	28480	03585-66526
A27	03585-66527	2		1ST LO VCO CONTROLLER	28480	03585-66527
A28	03585-66528	3		SM LOOP PHASE DETECTOR	28480	03585-66528
A31	03585-66531	8		VTO DIVIDER	28480	03585-66531
A32	03585-66532	9		PC ASSEMBLY, ANALOG	28480	03585-66532
A33	03585-66533	0		PC ASSEMBLY, FFS ACC	28480	03585-66533
A34	03585-66534	1		INTERFACE, REGULATOR	28480	03585-66534
A40	03585-66540	9		DIGITAL MOTHERBOARD	28480	03585-66540
A41	03585-66541	0		PROCESSOR BOARD	28480	03585-66541
A42	03585-66542	1		RAM BOARD	28480	03585-66542
A43	03585-66543	2		ROM BOARD	28480	03585-66543
A44	03585-66544	3		HP-IB INTERFACE	28480	03585-66544
A45	03585-66545	4		I/O BOARD	28480	03585-66545
A46	03585-66546	5		COUNTER	28480	03585-66546
A47	03585-66547	6		ASSEMBLY, KEYBOARD	28480	03585-66547
A50	03585-66550	1		TRACK GENERATOR MOTHERBOARD	28480	03585-66550
A51	03585-66551	2		TRACKING GENERATOR D/A	28480	03585-66551
A52	03585-66552	3		TRACKING GENERATOR OUTPUT	28480	03585-66552
A53	03585-66553	4		TRACKING GENERATOR VCO	28480	03585-66553
A61	03585-66561	4		CLOCK ASSEMBLY	28480	03585-66561
A62	03585-66562	5		X-Y PLOTTER ANALYZER	28480	03585-66562
A63	03585-66563	6		DISPLAY, LOGIC	28480	03585-66563
A64	03585-66564	7		ANALOG DISPLAY	28480	03585-66564
A67	03585-66567	0		X-Y-Z BOARD	28480	03585-66567
A70	03585-66570	5		POWER SUPPLY BOARD	28480	03585-66570
A71	03585-66571	6		+7.7V POWER SUPPLY	28480	03585-66571
A72	03585-66572	7		POWER SUPPLY, +5V	28480	03585-66572
A73A	03585-66573	8		+18, +12V POWER SUPPLY	28480	03585-66573
A73B	03585-66573	8		+18, +12V POWER SUPPLY	28480	03585-66573
A74	03585-66574	9		POWER SUPPLY, -18V	28480	03585-66574
A75	03585-66575	0		POWER SUPPLY CONTROL	28480	03585-66575
A76	03585-66576	1		POWER DISTRIBUTION BOARD	28480	03585-66576
A77	03585-66577	2		AC PROTECT BOARD	28480	03585-66577
A81	03585-66581	8		OSCILLATOR BOARD (STD)	28480	03585-66581
A201	03585-64201	5		HOUSING, H.V.P.S.	28480	03585-64201
C1	0160-0345	6	5	CAPACITOR-FDTHRU 1000PF 6MV 500V CER	01121	FR2R-1024
C2	0160-4603	7		CAPACITOR-FXD 1UF +-20% 200VDC MET-POLYP	28480	0160-4603
CR1	1906-0212	9	1	DIODE-FW BRDG 400V 35A	04713	MOA3504
CR2	1901-0526	8	1	DIODE-FW BRDG 100V 5A	14099	SC4J1
F1	2110-0003	0	1	FUSE 3A 250V FAST-BLO 1.25X.25 UL IEC	75915	312003
L1	01332-66001	6	1	COIL	28480	01332-66001
L2	01701-66001	5	1	COIL	28480	01701-66001
M1	3160-0306	2	1	FAN-TB4X 120-CFM 19-28VDC 1.5-TMX	23936	4124X
R1	2100-2838	2	1	RESISTOR-VAR CONTROL CCP 20K 10% LIN	28480	2100-2838
R2	2100-3169	8	1	RESISTOR-VAR CONTROL CCP 50K 20% LIN	28480	2100-3169
R3	2100-3705	4	1	RESISTOR-VAR W/SW 10K 10% LIN OPST-NO-AC	01121	70LIN04841034/1001 SWITCH
R4	2100-3718	9	1	RESISTOR-VAR CONTROL CP 5K 10% LIN	28480	2100-3718
T1	9100-4060	3	1		28480	9100-4060
J2	1820-0430	1	1	IC 309 V RGLTR TO-3	07263	LM309K
J3	1826-0402	9	1	IC V RGLTR TO-3	80103	LAS-1515
U13	09A25-67907	7	1	HYBRID H-S ASSEMBLY	28480	09A25-67907

See introduction to this section for ordering information.  
 \*Indicates factory selected value

Table 6-3. Replaceable Parts

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
W1	03585-61602	4	34	CABLE ASSEMBLY, RED	28480	03585-61602
	1250-0666	6		CONNECTOR-RF SMB FEM UNMTD 50-OHM	28480	1250-0666
	8120-1107	4		CABLE-COAX 50-OHM 1KV RED	28480	8120-1107
	03585-61602	4		CABLE ASSEMBLY, RED	28480	03585-61602
	1250-0666	6		CONNECTOR-RF SMB FEM UNMTD 50-OHM	28480	1250-0666
	8120-1107	4		CABLE-COAX 50-OHM 1KV RED	28480	8120-1107
	03585-61602	4		CABLE ASSEMBLY, RED	28480	03585-61602
	1250-0666	6		CONNECTOR-RF SMB FEM UNMTD 50-OHM	28480	1250-0666
	8120-1107	4		CABLE-COAX 50-OHM 1KV RED	28480	8120-1107
	03585-61602	4		CABLE ASSEMBLY, RED	28480	03585-61602
	1250-0666	6		CONNECTOR-RF SMB FEM UNMTD 50-OHM	28480	1250-0666
	8120-1107	4		CABLE-COAX 50-OHM 1KV RED	28480	8120-1107
W5	03585-61603	5	9	CABLE ASSEMBLY, ORANGE	28480	03585-61603
	1250-0666	6		CONNECTOR-RF SMB FEM UNMTD 50-OHM	28480	1250-0666
	8120-1108	5		CABLE-COAX 50-OHM 1KV ORN	28480	8120-1108
W6	03585-61603	5	11	CABLE ASSEMBLY, ORANGE	28480	03585-61603
	1250-0666	6		CONNECTOR-RF SMB FEM UNMTD 50-OHM	28480	1250-0666
	8120-1108	5		CABLE-COAX 50-OHM 1KV ORN	28480	8120-1108
W7	03585-61603	5		CABLE ASSEMBLY, ORANGE	28480	03585-61603
	1250-0666	6		CONNECTOR-RF SMB FEM UNMTD 50-OHM	28480	1250-0666
	8120-1108	5		CABLE-COAX 50-OHM 1KV ORN	28480	8120-1108
W8	03585-61603	5		CABLE ASSEMBLY, ORANGE	28480	03585-61603
	1250-0666	6		CONNECTOR-RF SMB FEM UNMTD 50-OHM	28480	1250-0666
	8120-1108	5		CABLE-COAX 50-OHM 1KV ORN	28480	8120-1108
W9	03585-61603	5		CABLE ASSEMBLY, ORANGE	28480	03585-61603
	1250-0666	6		CONNECTOR-RF SMB FEM UNMTD 50-OHM	28480	1250-0666
	8120-1108	5		CABLE-COAX 50-OHM 1KV ORN	28480	8120-1108
W10	03585-61603	5		CABLE ASSEMBLY, ORANGE	28480	03585-61603
	1250-0666	6		CONNECTOR-RF SMB FEM UNMTD 50-OHM	28480	1250-0666
	8120-1108	5		CABLE-COAX 50-OHM 1KV ORN	28480	8120-1108
W11	03585-61603	5		CABLE ASSEMBLY, ORANGE	28480	03585-61603
	1250-0666	6		CONNECTOR-RF SMB FEM UNMTD 50-OHM	28480	1250-0666
	8120-1108	5		CABLE-COAX 50-OHM 1KV ORN	28480	8120-1108
W12	03585-61603	5		CABLE ASSEMBLY, ORANGE	28480	03585-61603
	1250-0666	6		CONNECTOR-RF SMB FEM UNMTD 50-OHM	28480	1250-0666
	8120-1108	5		CABLE-COAX 50-OHM 1KV ORN	28480	8120-1108
W13	03585-61603	5		CABLE ASSEMBLY, ORANGE	28480	03585-61603
	1250-0666	6		CONNECTOR-RF SMB FEM UNMTD 50-OHM	28480	1250-0666
	8120-1108	5		CABLE-COAX 50-OHM 1KV ORN	28480	8120-1108
W14	03585-61604	6	9	CABLE ASSEMBLY, YELLOW	28480	03585-61604
	1250-0666	6		CONNECTOR-RF SMB FEM UNMTD 50-OHM	28480	1250-0666
	8120-1109	6		CABLE-COAX 50-OHM 1KV YEL	28480	8120-1109
W15	03585-61604	6	10	CABLE ASSEMBLY, YELLOW	28480	03585-61604
	1250-0666	6		CONNECTOR-RF SMB FEM UNMTD 50-OHM	28480	1250-0666
	8120-1109	6		CABLE-COAX 50-OHM 1KV YEL	28480	8120-1109
W16	03585-61604	6		CABLE ASSEMBLY, YELLOW	28480	03585-61604
	1250-0666	6		CONNECTOR-RF SMB FEM UNMTD 50-OHM	28480	1250-0666
	8120-1109	6		CABLE-COAX 50-OHM 1KV YEL	28480	8120-1109
W17	03585-61604	6		CABLE ASSEMBLY, YELLOW	28480	03585-61604
	1250-0666	6		CONNECTOR-RF SMB FEM UNMTD 50-OHM	28480	1250-0666
	8120-1109	6		CABLE-COAX 50-OHM 1KV YEL	28480	8120-1109
W18	03585-61604	6		CABLE ASSEMBLY, YELLOW	28480	03585-61604
	1250-0666	6		CONNECTOR-RF SMB FEM UNMTD 50-OHM	28480	1250-0666
	8120-1109	6		CABLE-COAX 50-OHM 1KV YEL	28480	8120-1109
W19	03585-61604	6		CABLE ASSEMBLY, YELLOW	28480	03585-61604
	1250-0666	6		CONNECTOR-RF SMB FEM UNMTD 50-OHM	28480	1250-0666
	8120-1109	6		CABLE-COAX 50-OHM 1KV YEL	28480	8120-1109
W20	03585-61604	6		CABLE ASSEMBLY, YELLOW	28480	03585-61604
	1250-0666	6		CONNECTOR-RF SMB FEM UNMTD 50-OHM	28480	1250-0666
	8120-1109	6		CABLE-COAX 50-OHM 1KV YEL	28480	8120-1109
W21	03585-61604	6		CABLE ASSEMBLY, YELLOW	28480	03585-61604
	1250-0666	6		CONNECTOR-RF SMB FEM UNMTD 50-OHM	28480	1250-0666
	8120-1109	6		CABLE-COAX 50-OHM 1KV YEL	28480	8120-1109
W22	03585-61604	6		CABLE ASSEMBLY, YELLOW	28480	03585-61604
	1250-0666	6		CONNECTOR-RF SMB FEM UNMTD 50-OHM	28480	1250-0666
	8120-1109	6		CABLE-COAX 50-OHM 1KV YEL	28480	8120-1109
W23	03585-61605	7	1	CABLE ASSEMBLY, GREEN	28480	03585-61605
	1250-0666	6		CONNECTOR-RF SMB FEM UNMTD 50-OHM	28480	1250-0666
	8120-0549	6		CABLE-COAX 50-OHM 1KV GRN	28480	8120-0549
W24	03585-61606	6	1	CABLE ASSEMBLY, BLUE	28480	03585-61606
	1250-0666	6		CONNECTOR-RF SMB FEM UNMTD 50-OHM	28480	1250-0666
	8120-1111	0		CABLE-COAX 50-OHM 1KV BLU	28480	8120-1111
W25	03585-61607	9	1	CABLE ASSEMBLY, VIOLET	28480	03585-61607
	1250-0666	6		CONNECTOR-RF SMB FEM UNMTD 50-OHM	28480	1250-0666
	8120-0885	1		CONNECTOR-RF SMB FEM UNMTD 50-OHM	28480	1250-0885
W26	8120-1112	1	2	CABLE-COAX 50-OHM 1KV VID	28480	8120-1112
	03585-61608	0		CABLE ASSEMBLY, RED	28480	03585-61608
	1250-0050	2		NUT-RF CONNECTOR BNC1,562 LI,0421D	02660	31-2125-2
	1250-0051	3		CONTACT-RF COAX SERIES BNC1 FE MALE	02660	31-2109
	1250-0666	6		CONNECTOR-RF SMB FEM UNMTD 50-OHM	28480	1250-0666
	8120-1107	4		CABLE-COAX 50-OHM 1KV RED	28480	8120-1107

See introduction to this section for ordering information  
 \*Indicates factory selected value

Table 6-3. Replaceable Parts

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
*27	03585-61609	1	1	CABLE ASSEMBLY, VIOLET	28480	03585-61609
	1250-0050	2		NUT-RF CONNECTOR BNC1,562 L1,062ID	02660	31-2125-2
	1250-0051	3		CONTACT-RF CONN SERIES BNC1 FEMALE	02660	31-2109
	1250-0252	6	11	CONNECTOR-RF BNC FEM SGL-HOLE-RR 50-OHM	28480	1250-0252
	1250-0666	6		CONNECTOR-RF SMB FEM UNMTD 50-OHM	28480	1250-0666
	8120-1112	1		CABLE-COAX 50-OHM 1KV VIO	28480	8120-1112
*28	03585-61610	4	1	CABLE ASSEMBLY, GREY	28480	03585-61610
	1250-0666	6		CONNECTOR-RF SMB FEM UNMTD 50-OHM	28480	1250-0666
	8120-0789	5	4	CABLE-COAX 50-OHM 1KV JGK	28480	8120-0789
*29	03585-61611	5	1	CABLE ASSEMBLY, GREY	28480	03585-61611
	1250-0050	2		NUT-RF CONNECTOR BNC1,562 L1,062ID	02660	31-2125-2
	1250-0051	3		CONTACT-RF CONN SERIES BNC1 FEMALE	02660	31-2109
	1250-0666	6		CONNECTOR-RF SMB FEM UNMTD 50-OHM	28480	1250-0666
	8120-0789	6		CABLE-COAX 50-OHM 1KV JGK	28480	8120-0789
			6			
*30	03585-61612	6	1	CABLE ASSEMBLY, GREY	28480	03585-61612
	1250-0050	2		NUT-RF CONNECTOR BNC1,562 L1,062ID	02660	31-2125-2
	1250-0051	3		CONTACT-RF CONN SERIES BNC1 FEMALE	02660	31-2109
	1250-0252	6		CONNECTOR-RF BNC FEM SGL-HOLE-RR 50-OHM	28480	1250-0252
	1250-0666	6		CONNECTOR-RF SMB FEM UNMTD 50-OHM	28480	1250-0666
	8120-0789	6		CABLE-COAX 50-OHM 1KV JGK	28480	8120-0789
*31	03585-61613	7	1	CABLE ASSEMBLY, GREEN	28480	03585-61613
	1250-0050	2		NUT-RF CONNECTOR BNC1,562 L1,062ID	02660	31-2125-2
	1250-0051	3		CONTACT-RF CONN SERIES BNC1 FEMALE	02660	31-2109
	1250-0252	6		CONNECTOR-RF BNC FEM SGL-HOLE-RR 50-OHM	28480	1250-0252
	1250-0666	6		CONNECTOR-RF SMB FEM UNMTD 50-OHM	28480	1250-0666
	8120-1110	9	2	CABLE-COAX 50-OHM 1KV GRN	28480	8120-1110
*32	03585-61614	8	1	CABLE ASSEMBLY, WHITE	28480	03585-61614
	1250-0050	2		NUT-RF CONNECTOR BNC1,562 L1,062ID	02660	31-2125-2
	1250-0051	3		CONTACT-RF CONN SERIES BNC1 FEMALE	02660	31-2109
	1250-0252	6		CONNECTOR-RF BNC FEM SGL-HOLE-RR 50-OHM	28480	1250-0252
	1250-0666	6		CONNECTOR-RF SMB FEM UNMTD 50-OHM	28480	1250-0666
	8120-1113	2	2	CABLE-COAX 50-OHM 1KV WHT	28480	8120-1113
*33	03585-61615	9	1	CABLE ASSEMBLY, BLACK	28480	03585-61615
	1250-0050	2		NUT-RF CONNECTOR BNC1,562 L1,062ID	02660	31-2125-2
	1250-0051	3		CONTACT-RF CONN SERIES BNC1 FEMALE	02660	31-2109
	1250-0252	6		CONNECTOR-RF BNC FEM SGL-HOLE-RR 50-OHM	28480	1250-0252
	1250-0666	6		CONNECTOR-RF SMB FEM UNMTD 50-OHM	28480	1250-0666
	8120-1105	2	2	CABLE-COAX 50-OHM 1KV BLK	28480	8120-1105
*34	03585-61617	1	1	CABLE ASSEMBLY, COAX	28480	03585-61617
	1250-0666	6		CONNECTOR-RF SMB FEM UNMTD 50-OHM	28480	1250-0666
	8120-1108	5		CABLE-COAX 50-OHM 1KV DRN	28480	8120-1108
*35	03585-61620	2	1	CABLE ASSEMBLY, BROWN	28480	03585-61620
	1250-0050	2		NUT-RF CONNECTOR BNC1,562 L1,062ID	02660	31-2125-2
	1250-0051	3		CONTACT-RF CONN SERIES BNC1 FEMALE	02660	31-2109
	1250-0252	6		CONNECTOR-RF BNC FEM SGL-HOLE-RR 50-OHM	28480	1250-0252
	1251-3613	1	10	CONNECTOR 2-PIN F POST TYPE	28480	1251-3613
	8120-1106	3	1	CABLE-COAX 50-OHM 1KV BRN	28480	8120-1106
*36	03585-61621	7	1	CABLE ASSEMBLY, RED	28480	03585-61621
	1250-0050	2		NUT-RF CONNECTOR BNC1,562 L1,062ID	02660	31-2125-2
	1250-0051	3		CONTACT-RF CONN SERIES BNC1 FEMALE	02660	31-2109
	1250-0252	6		CONNECTOR-RF BNC FEM SGL-HOLE-RR 50-OHM	28480	1250-0252
	1251-3613	1		CONNECTOR 2-PIN F POST TYPE	28480	1251-3613
	8120-1107	4		CABLE-COAX 50-OHM 1KV RED	28480	8120-1107
*37	03585-61622	8	1	CABLE ASSEMBLY, YELLOW	28480	03585-61622
	1250-0050	2		NUT-RF CONNECTOR BNC1,562 L1,062ID	02660	31-2125-2
	1250-0051	3		CONTACT-RF CONN SERIES BNC1 FEMALE	02660	31-2109
	1250-0252	6		CONNECTOR-RF BNC FEM SGL-HOLE-RR 50-OHM	28480	1250-0252
	1251-3613	1		CONNECTOR 2-PIN F POST TYPE	28480	1251-3613
	8120-1109	5		CABLE-COAX 50-OHM 1KV YEL	28480	8120-1109
*38	03585-61623	9	1	CABLE ASSEMBLY, ORANGE	28480	03585-61623
	1250-0050	2		NUT-RF CONNECTOR BNC1,562 L1,062ID	02660	31-2125-2
	1250-0051	3		CONTACT-RF CONN SERIES BNC1 FEMALE	02660	31-2109
	1250-0252	6		CONNECTOR-RF BNC FEM SGL-HOLE-RR 50-OHM	28480	1250-0252
	1251-3613	1		CONNECTOR 2-PIN F POST TYPE	28480	1251-3613
	8120-1108	5		CABLE-COAX 50-OHM 1KV DRN	28480	8120-1108
*39	03585-61624	0	1	CABLE ASSEMBLY, GREEN	28480	03585-61624
	1250-0050	2		NUT-RF CONNECTOR BNC1,562 L1,062ID	02660	31-2125-2
	1250-0051	3		CONTACT-RF CONN SERIES BNC1 FEMALE	02660	31-2109
	1250-0252	6		CONNECTOR-RF BNC FEM SGL-HOLE-RR 50-OHM	28480	1250-0252
	1251-3613	1		CONNECTOR 2-PIN F POST TYPE	28480	1251-3613
	8120-1110	9		CABLE-COAX 50-OHM 1KV GRN	28480	8120-1110
*40	03585-61625	1	1	CABLE ASSEMBLY, BLUE	28480	03585-61625
	1250-0050	2		NUT-RF CONNECTOR BNC1,562 L1,062ID	02660	31-2125-2
	1250-0051	3		CONTACT-RF CONN SERIES BNC1 FEMALE	02660	31-2109
	1250-0252	6		CONNECTOR-RF BNC FEM SGL-HOLE-RR 50-OHM	28480	1250-0252
	1251-3613	1		CONNECTOR 2-PIN F POST TYPE	28480	1251-3613
	8120-1111	0		CABLE-COAX 50-OHM 1KV BLU	28480	8120-1111

See introduction to this section for ordering information  
 \*Indicates factory selected value

Table 6-3. Replaceable Parts

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
W41	03585-61626	2	1	CABLE ASSEMBLY, WHITE	28480	03585-61626
	1251-3613	1		CONNECTOR 2-PIN F POST TYPE	28480	1251-3613
	8120-1113	2		CABLE-COAX 50-OHM 1KV WHT	28480	8120-1113
W42	03585-61627	3	1	CABLE ASSEMBLY, GREY	28480	03585-61627
	1251-3613	1		CONNECTOR 2-PIN F POST TYPE	28480	1251-3613
	8120-0789	6		CABLE-COAX 50-OHM 1KV JGK	28480	8120-0789
W43	03585-61628	4	1	CABLE ASSEMBLY, BLACK	28480	03585-61628
	1251-3613	1		CONNECTOR 2-PIN F POST TYPE	28480	1251-3613
	8120-1105	2		CABLE-COAX 50-OHM 1KV BLK	28480	8120-1105
W44	03585-61630	8	1	CABLE ASSEMBLY, RPG	28480	03585-61630
	1251-3808	6	4	KEYING PLUG-POST CONN	28480	1251-3808
	1251-4182	1	3	CONNECTOR-SGL CONT SKT .025-IN-BSC-SZ S0	28480	1251-4182
	125105043	9	1		28480	125105043
	5060-0329	9	1		28480	5060-0329
W45	03585-61631	9	1	CABLE ASSEMBLY, 34P LONG	28480	03585-61631
	1251-3511	8	1	CONNECTOR 34-PIN F POST TYPE	28480	1251-3511
	1251-3916	7	2	CONNECTOR-PC EDGE 17-CONT/ROW 2-ROWS	28480	1251-3916
	8120-1727	4	2	CABLE-FL-RBN 28AWG 34-CNDCT UL-2651	28480	8120-1727
W46	03585-61632	0	1	CABLE ASSEMBLY, 34P SHORT	28480	03585-61632
	1251-3916	7		CONNECTOR-PC EDGE 17-CONT/ROW 2-ROWS	28480	1251-3916
W47	8120-1727	4		CABLE-FL-RBN 28AWG 34-CNDCT UL-2651	28480	8120-1727
	03585-61634	2	1	CABLE 16P PDB-A70	28480	03585-61634
W48	1251-0627	1	9	POLARIZING KEY-POST CONN	28480	1251-0627
	1251-5208	4	1	CONNECTOR 16-PIN F POST TYPE	28480	1251-5208
	03585-61635	3	1	CABLE 10P PDB-A10	28480	03585-61635
	1251-0627	1		POLARIZING KEY-POST CONN	28480	1251-0627
	1251-2573	0	1	CONNECTOR-PC EDGE 10-CONT/ROW 1-ROW	28480	1251-2573
W49	1251-3537	8	1	CONNECTOR 10-PIN F POST TYPE	28480	1251-3537
	03585-61636	4	1	CABLE, 8P PDB-A50	28480	03585-61636
W50	1251-0627	1		POLARIZING KEY-POST CONN	28480	1251-0627
	1251-3278	4	2	CONNECTOR 8-PIN F POST TYPE	28480	1251-3278
	03585-61637	5	1	CABLE ASSEMBLY	28480	03585-61637
W51	00140-44702	6	2	SPACER, FOAM	28480	00140-44702
	1251-2039	3	3	CONNECTOR-SGL CONT SKT .041-IN-BSC-SZ	28480	1251-2039
W52	03585-61638	6	1	CABLE ASSEMBLY	28480	03585-61638
	00140-44702	6		SPACER, FOAM	28480	00140-44702
	1251-2039	3		CONNECTOR-SGL CONT SKT .041-IN-BSC-SZ	28480	1251-2039
W53	03585-61639	7	1	CABLE, 12P PDB-A40	28480	03585-61639
	1251-0627	1		POLARIZING KEY-POST CONN	28480	1251-0627
	1251-3279	5	1	CONNECTOR 12-PIN F POST TYPE	28480	1251-3279
W54	03585-61640	0	1	CABLE, 2P PDB-FAB	28480	03585-61640
	1251-3613	1		CONNECTOR 2-PIN F POST TYPE	28480	1251-3613
	03585-61641	1	1	CABLE, PDB-B7-HVPS	28480	03585-61641
	1251-0595	2	1	CONNECTOR-PC EDGE 10-CONT/ROW 2-ROWS	28480	1251-0595
	1251-0627	1		POLARIZING KEY-POST CONN	28480	1251-0627
W55	1251-2496	6	1	CONNECTOR 9-PIN M UTILITY	28480	1251-2496
	1251-3021	5	1	CONTACT-CONN U/X-PC-EDGE FEM CRP	28480	1251-3021
	1251-4886	2	1	CONNECTOR 11-PIN F POST TYPE	28480	1251-4886
	03585-61642	2	1	CABLE ASSEMBLY, POWER	28480	03585-61642
W56	1251-0627	1		POLARIZING KEY-POST CONN	28480	1251-0627
	1251-3275	1	1	CONNECTOR 6-PIN F POST TYPE	28480	1251-3275
	03585-61643	3	1	CABLE, 5P PDB-PROBE	28480	03585-61643
W57	1251-0512	3	1	CONNECTOR 5-PIN F POST TYPE	28480	1251-0512
	1251-0627	1		POLARIZING KEY-POST CONN	28480	1251-0627
W58	03585-61644	4	1	CABLE, 4P PDB-OVEN	28480	03585-61644
	1251-0627	1		POLARIZING KEY-POST CONN	28480	1251-0627
	1251-3277	3	1	CONNECTOR 4-PIN F POST TYPE	28480	1251-3277
	03585-61646	6	1	CABLE ASSEMBLY, FOCUS	28480	03585-61646
	1251-5036	6	1	CONNECTOR 2-PIN M UTILITY	28480	1251-5036
W59	1251-5296	0	1	CONTACT-CONN U/X-UTIL MALE CRP	28480	1251-5296
	2100-0571	6	1	RESISTOR-VAR CONTROL CC 5M LIN	28480	2100-0571
	5040-0453	8	1	COVER,POTENTIOMETER(FOCUS)	28480	5040-0453
	8150-2639	2	1	WIRE 22AWG BK 600V PVC 7X30 105C	28480	8150-2639
	8150-2981	7	1	WIRE 22AWG W 600V PVC 7X30 105C	28480	8150-2981
	03585-61647	7	1	CABLE ASSEMBLY, POWER	28480	03585-61647
W60	03570-02345	1	1	COVER, M/N POWER SWITCH	28480	03570-02345
	03585-01208	0	1	BRACKET, POWER SWITCH	28480	03585-01208
	3101-1656	3	1	SWITCH-TGL BASIC DPDT 3A 125VAC SLDR-LUG	28480	3101-1656
	8120-1425	9	1	CABLE-SHLD 22AWG 4-CNDCT JGK-JKT	28480	8120-1425
W61	03585-61649	9	1	CABLE, 16P 67-CRT	28480	03585-61649
	1251-2039	3		CONNECTOR-SGL CONT SKT .041-IN-BSC-SZ	28480	1251-2039
	1251-3808	6		KEYING PLUG-POST CONN	28480	1251-3808
	1251-3977	0	1	CONNECTOR 2-PIN M UTILITY	28480	1251-3977
	1251-4182	1		CONNECTOR-SGL CONT SKT .025-IN-BSC-SZ S0	28480	1251-4182
W62	1251-5207	3	1	CONNECTOR 16-PIN F POST TYPE	28480	1251-5207
	03585-61650	2	1	CABLE, 67-PTS	28480	03585-61650
	1251-3808	6		KEYING PLUG-POST CONN	28480	1251-3808
	1251-4182	1		CONNECTOR-SGL CONT SKT .025-IN-BSC-SZ S0	28480	1251-4182
W64	1251-5206	2	1	CONNECTOR 11-PIN F POST TYPE	28480	1251-5206
	03585-61652	4	1	CABLE, RP .1 70	28480	03585-61652
	1251-3808	6		KEYING PLUG-POST CONN	28480	1251-3808
	1251-5060	6	1	MINI-PV HOUSING	28480	1251-5060

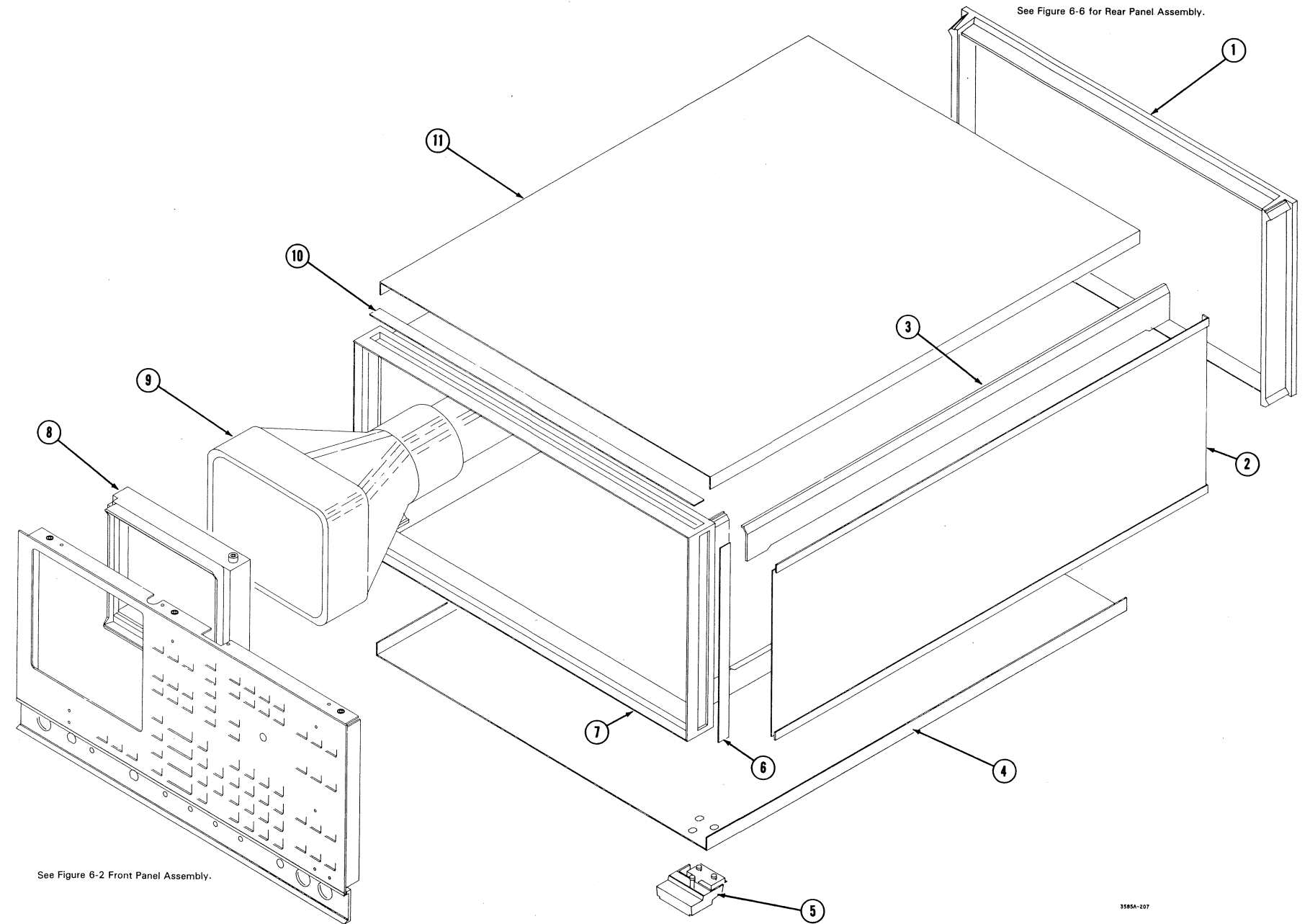
See introduction to this section for ordering information  
 \*Indicates factory selected value

Table 6-3. Replaceable Parts

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
*65	03585-61653	5	1	CABLE, 8P 70-8P	28480	03585-61653
	1251-0627	1		POLARIZING KEY-POST CONN	28480	1251-0627
	1251-3278	4		CONNECTOR 8-PIN F POST TYPE	28480	1251-3278
*67	03585-61667	1	3	JUMPER COAXIAL	28480	03585-61667
	03585-20301	4	2	BUSHING, JUMPER	28480	03585-20301
	8120-1220	2	2		28480	8120-1220
*68	03585-61667	1		JUMPER COAXIAL	28480	03585-61667
*69	03585-61667	1		JUMPER COAXIAL	28480	03585-61667
*70	8120-2616	2	1	CABLE, HP-18	28480	8120-2616
*71	03330-61603	8	1	CABLE ASSEMBLY, FLAT	28480	03330-61603
	1251-2499	9	4	CONNECTOR 14-PIN M RECTANGULAR	28480	1251-2499
	8120-1458	8	2	CABLE, RIBBON	28480	8120-1458
*72	03330-61602	7	1	CABLE ASSEMBLY, FLAT	28480	03330-61602
	1251-2499	9		CONNECTOR 14-PIN M RECTANGULAR	28480	1251-2499
	8120-1458	8		CABLE, RIBBON	28480	8120-1458

See introduction to this section for ordering information  
 \*Indicates factory selected value

Designator	Qty	Part Number	Description
1	1	5020-8808	FRAME, REAR
2	2	5060-9923	COVER, SIDE
3	4	5020-8838	RAILS, SIDE
4	1	5060-9848	COVER, BOTTOM
5	4	5040-7201	FOOT, PLASTIC
6	1	5001-0441	TRIM, SIDE
7	1	5020-8807	FRAME, FRONT
8	1	5040-8399	BEZEL, CRT
9	1	03582-60103	SHIELD, CRT
10	1	5040-7202	TRIM, TOP
11	1	5060-9836	COVER, TOP



3585A-207

Figure 6-1. External Covers.  
6-97/6-98



Designator	Qty	Part Number	Description
1	1	03585-61630	POTENTIOMETER, RPG
2	1	03585-66547	KEYBOARD PRINTED CIRCUIT ASSEMBLY, A47
3	1	03585-00202	SUB-PANEL, FRONT
4	1	03585-00201	PANEL, FRONT
5	1	03585-21209	EXTR-FRT PNL-LWR
6	1	7120-7183	INSERT, FRONT PANEL
7	1	5060-0467	CONNECTOR, MALE PROBE
8	2	2190-0016	WASHER-LK 3/8 IN .377-IN-ID
9	2	2950-0043	NUT HEX, DBL-CHAM 3/8-32-THD .094-IN-THK
10	5	0370-1005	KNOB-BASE-PTS 3/8 JGK .125-IN-ID
11	5	2950-0072	NUT HEX, DBL CHAM 1/4-32-THD .062-IN-THK
12	5	2190-0060	WASHER-LK INTL 1/4 IN .256-IN-ID
13	1	2100-2838	RESISTOR-VAR
14	1	2100-3189	RESISTOR-VAR
15	1	03585-61646	CBL-ASSY-FOCUS
16	1	2100-3705	POT 10K 1001SW
17	1	2950-0054	NUT HEX, DBL CHAM 1/2-28-THD .125-IN-THK
18	1	2190-0029	WASHER-LK HLCL 1/4 IN .26-IN-ID
19	2	1250-0102	CONNECTOR-RF BNC FEM SGL-HOLE-FR 50-OHM
20	1	2100-3718	RESISTOR-VAR
21	1	0370-1303	KNOB-BASE 1-1/8 JGK .25-IN-ID
22	1	2950-0043	NUT HEX
23	1	3050-0067	WASHER-FLAT
24	1	03585-01208	BRKT-PWR SW
25	1	3101-1656	SW TOGGLE
26	1	03570-02345	COVER-MN PWR SW
27	1	2190-0016	WSHR-LK INTL T
			FRONT PANEL KEYCAPS
1		5041-0310	KEY, BLANK
19		5041-0319	KEY, BLANK W/LIGHT
5		5041-0352	KEY, BLACK W/LIGHT
1		5041-0668	KEY, START FREQUENCY
1		5041-0669	KEY, STOP FREQUENCY
1		5041-0670	KEY, 1 REG
1		5041-0671	KEY, 2 REG
1		5041-0672	KEY, 3 REG
1		5041-0673	KEY, CENTER FREQUENCY
1		5041-0674	KEY, FREQUENCY SPAN
1		5041-0675	KEY, REFERENCE LEVEL
1		5041-0720	KEY, INSTRUMENT PRESET
1		5041-0731	KEY, OFS SPAN
1		5041-0736	KEY, DB/DIV
1		5041-0737	KEY, REF LEVEL VOLT
1		5041-0739	KEY, MHz, DBM, V
1		5041-0740	KEY, kHz, DBV, MV
1		5041-0741	KEY, Hz, DB, UV
1		5041-0742	KEY, SEC
1		5041-0743	KEY, ENTER OFFSET
1		5041-0744	KEY, RANGE
1		5041-0745	KEY MKR-OFS STEP
1		5041-0746	KEY
1		5041-0749	KEY, 5
1		5041-0750	KEY, 6
1		5041-0754	KEY, 0
1		5041-0755	KEY, DECIMAL
2		5041-0756	KEY, ARROW
1		5041-0772	KEY, LOCAL
1		5041-0773	KEY, FULL SWEEP
1		5041-0776	KEY, CLEAR
1		5041-0777	KEY, MKR CF
1		5041-0778	KEY, MRK REFERENCE
1		5041-0779	KEY, MANUAL
1		5041-0780	KEY, OFF
1		5041-0781	KEY, RES BW
1		5041-0782	KEY, VIDEO BW
1		5041-0783	KEY, SWEEP TIME
1		5041-0923	KEY, SAVE (OFF)
1		5041-0924	KEY, RECALL (ON)
1		5041-0939	KEY, STORE A-B
1		5041-0940	KEY, CLEAR A
1		5041-0945	KEY, CF STEP SIZE
1		5041-0958	KEY, 4 (CAL)
1		5041-0959	KEY, 7 (UPPER RIGHT)
1		5041-0960	KEY, 8 (PLOT 1)
1		5041-0961	KEY, 9 (PLOT 2)

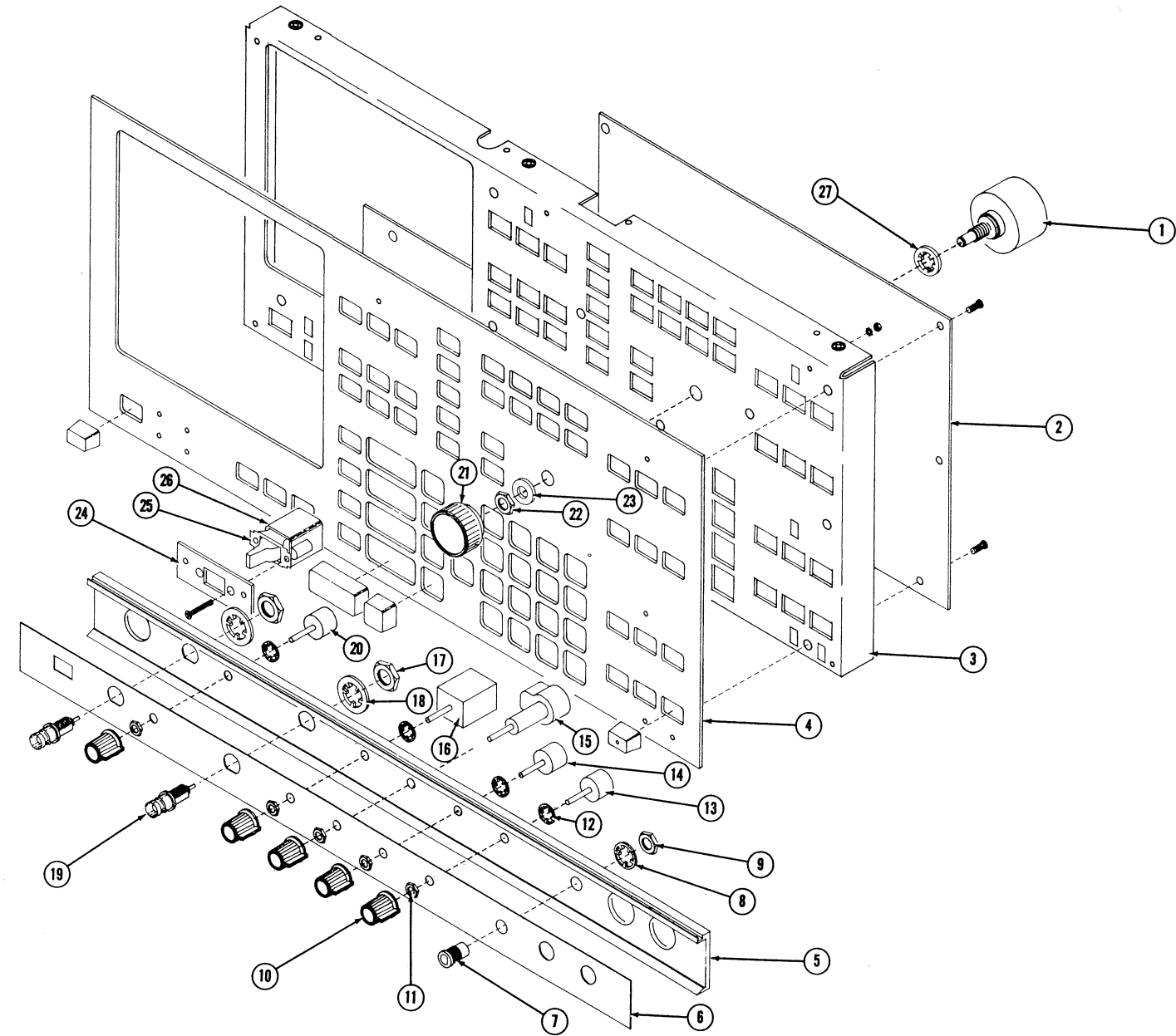


Figure 6-2. Front Panel Assembly.  
6-99/6-100



Designator	Qty	Part Number	Description
1	1	03585-60201	LEFT SIDE ASSY
2	1	03585-21207	BAR-INP MTG
3	1	03585-21203	BAR-ANALOG MTG
4	1	03585-04106	BRKT-LO MTG
5	1	03585-04101	CVR-HVPS
6	1	03585-64201	HSG-HVPS
7	1	03585-00105	DECK-MTG HVPS
8	1	03585-00101	DECK-HVPS
9	1	03585-01221	SPRT-CTR PNL
10	1	1400-0908	CLAMP
11	1	03585-01204	BRKT-SYZ CVR
12	1	03585-01205	CLAMP-CRT SHLD
13	1	5040-7783	SUPPORT-CRT SH
14	1	03585-21210	BAR SUPPORT
15	1	03585-04112	COVER-67
16	1	03585-01216	BRKT-REAR HVPS
17	1	03585-00601	DIVIDER-DIGITAL
18	1	03585-01209	BD GUIDE DIGITAL
19	1	03585-21204	DIGITAL CLAMP-A
20	1	03585-01210	CLAMP-B DIGITAL
21	1	03585-04113	CUR-67B
22	1	03585-01207	BRKT-CONN
23	1	03585-61641	CBL PDB-67-HVPS

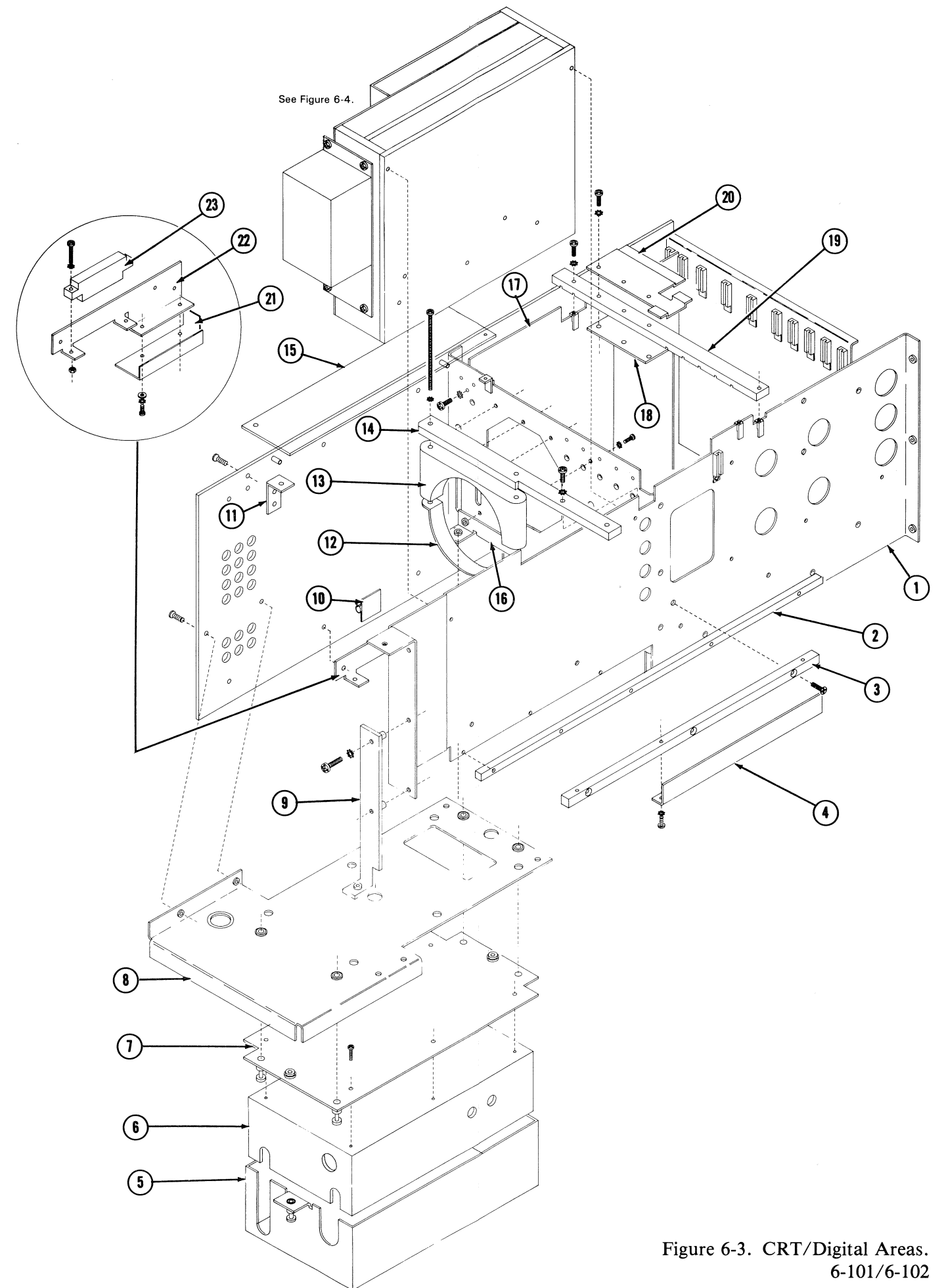


Figure 6-3. CRT/Digital Areas.  
6-101/6-102

Designator	Qty	Part Number	Description
1	1	03585-01220	BRKT-TR&R
2		03585-25106	TG&R PLATE-6
3	1	03585-25104	TG&R PLATE-4
4	1	03585-66581	OSC BRD STD
5		03585-25105	TG&R PLATE-5
6		03585-25103	TG&R PLATE-3
7		03585-05101	TG REAR-PLT-1
8		03585-05102	TG REAR-PLT-2

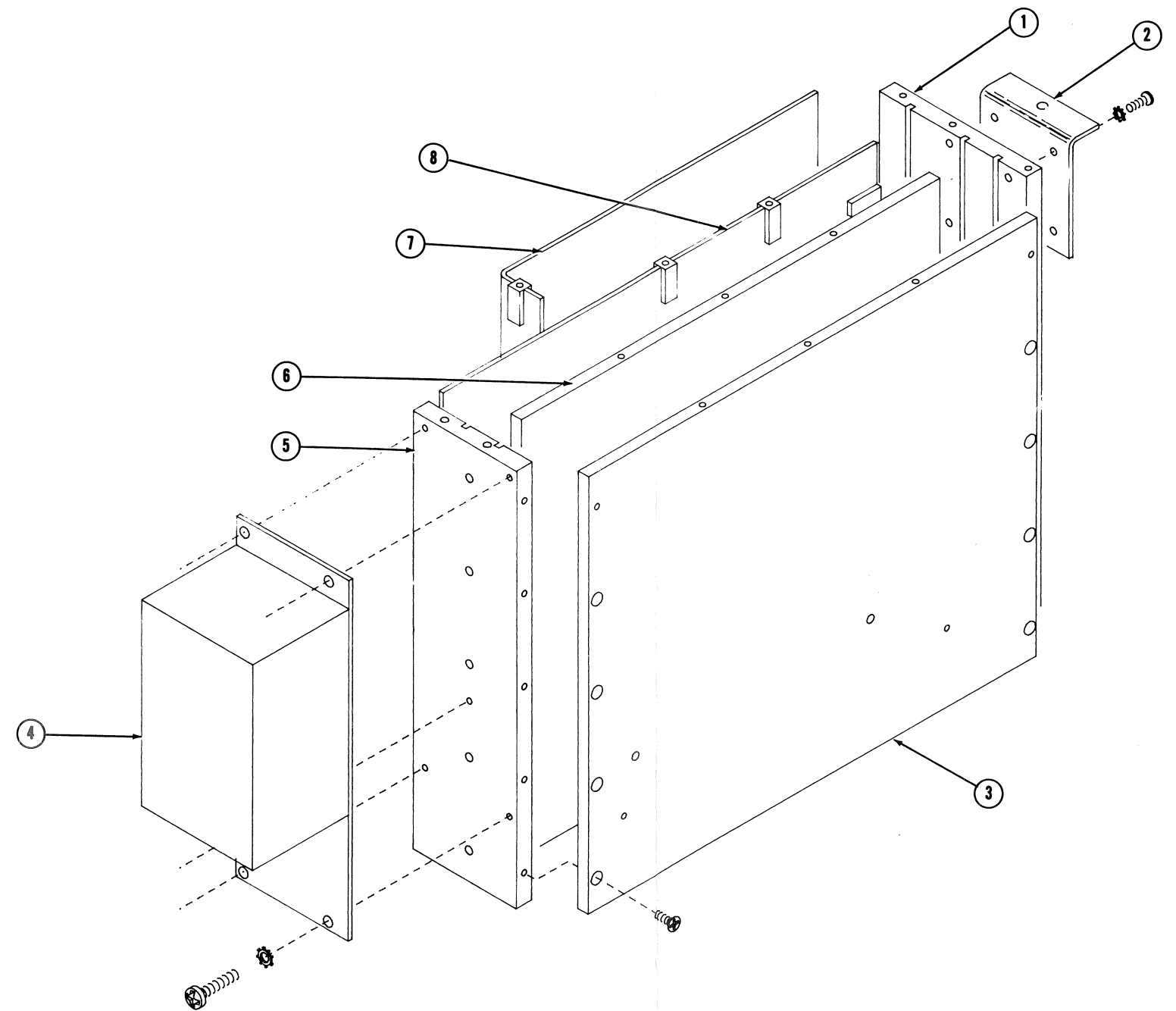


Figure 6-4. Tracking Generator/Oscillator Assembly.  
6-103/6-104

Designator	Qty	Part Number	Description
1	1	03585-21211	BAR PS CLAMP
2		03585-60202	RIGHT SIDE ASSY
3		03585-60301	COVER ASSY
4		1400-0015	CLAMP-CABLE
5		03585-00311	CLAMP END
6		03585-21002	RF-INPUT/CONV BX
7		03585-00302	CUR-INP
8		03585-00308	SHLD-REAR
9		03585-00310	CLAMP-LONG
10		03585-00306	SHLF-BTM
11		03585-00307	SHLD-FRT
12		03585-60204	IF SEC ASSY
13		03585-60206	LO BOX ASSY
14		03585-01219	BRKT-BAR
15		03585-21214	CAMP-PS
16		5040-8336	STANDOFF

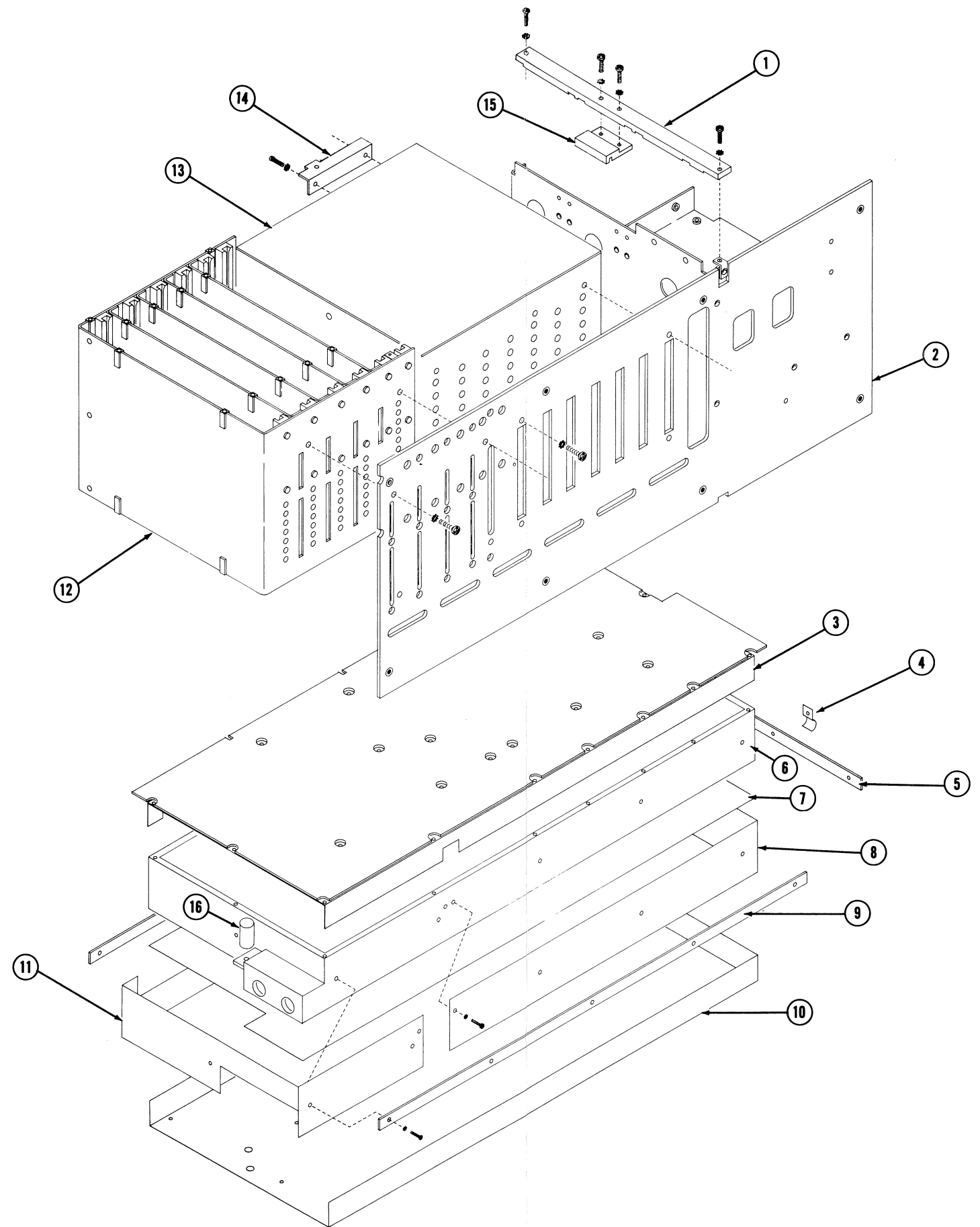


Figure 6-5. RF/IF Assembly.  
6-105/6-106

Designator	Qty	Part Number	Description
1	1	5020-8808	FRAME, REAR
2	11	1250-0252	BODY
3	1	2110-0467	NUT-HEX 1/2-28
4	1	2190-0037	WSHR-LK INTL T
5	11	2190-0090	WSHR-LK INTL T
6	11	2950-0035	NUT-HEX-DBL CHAM
7	1	1400-0090	WASHER
8	1	2110-0470	FUSE HOLDER
9	1	2110-0465	CAP, FUSE HOLDER
10	2	0380-0643	STDF-STUD MT
11	2	2190-0009	WSHR-LK INTL T
12	1	8120-2616	CABLE-HPIB
13	4	0590-0167	NUT-THUMB
14	4	2190-0009	WASHER-LK INTL T
15	1	3150-0218	FILTER, FAN
16	1	03585-04131	COVER REAR PNL
17	1	03582-04104	SCREEN FAN
18	1	3160-0306	FAN
19(U2)	1	1820-0430	LIN REG 5V LM309K
20	1	1901-0526	D10 ASSY-S1
21	1	1906-0212	RECT MDA3504
22(U3)	1	1826-0402	PWR V REG +15V
23	1	03585-66577	AC PROTECT BRD
24	1	03585-01217	BRKT-REAR CVR
25	1	03585-00203	PANEL, REAR
26	1	9100-4060	XFMR-PWR
27	1	03585-01213	BRKT-T MOUNT
28	1	03585-01211	BRKT-T

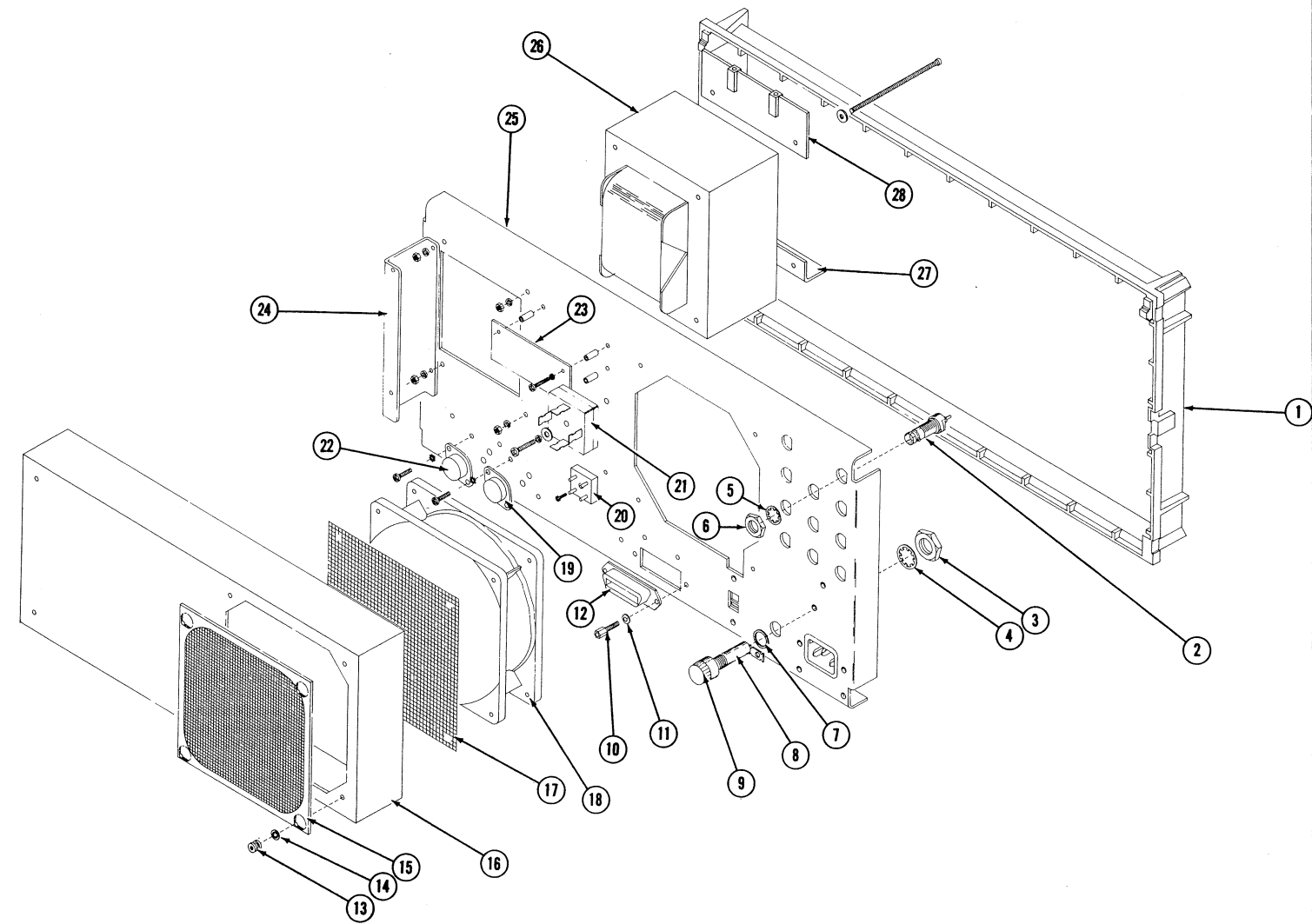


Figure 6-6. Rear Panel Assembly.  
6-107/6-108

## SECTION VII

# BACKDATING

### 7-1. INTRODUCTION.

7-2. This manual section contains information on instruments which are older than the instruments documented in other manual sections. These backdating changes are referenced throughout the manual by a numbered delta ( $\Delta$ #). The number indicates the number of the corresponding backdating change.

### 7-3. $\Delta 1$ —90MHz FILTER CIRCUIT.

### 7-4. Applicable Serial Numbers.

- Conversion Section Adjustments, Paragraph 5-43 tt/xx.
  - 1750A 00230 and below.
- ### 7-5. Affected Serial Numbers.
- SG A2—Conversion Section, Schematic A-2.
  - Replaceable Parts, Table 6-3.

### 7-6. Description of Change.

7-7. Models with serial numbers listed above have no adjustments for the 2nd Mixer Board (A-4), 90MHz Filter Circuit. Schematic Drawing 7-1 and Replaceable Parts Table 7-1 show the circuit and part differences respectively. Schematics and parts tables are located at the end of this manual section.

### 7-8. $\Delta 2$ —IF FILTER CIRCUITS.

### 7-9. Applicable Serial Numbers.

- Information not available at this time.

### 7-10. Affected Manual Areas.

- IF Filter Adjustments, Paragraphs 5-29/5-40.
- 16 dB Amplifier Adjustments, Paragraph 5-41.
- SG A3—Final IF Section, Schematics A-3a/b/c.
- Replaceable Parts, Table 6-3.

### 7-11. Description of Change.

7-12. Models with serial numbers listed above use an A-11, A-12, and A-13 Board as the IF circuit instead of the A-17, A-18, and A-19 Boards. The differences in these boards do not affect the IF adjustment principles; however, some of the adjusting components have changed. Schematic Drawings 7-2a/b/c and Replaceable Parts Table 7-2 show the circuit and part differences respectively. Schematics and parts tables are located at the end of this manual section.

**7-13. Procedures.**

7-14. For the serial numbers listed, these IF Adjustment procedures should be followed.

**NOTE**

*Before performing these adjustments, check that the IF Input Level adjustment (A11R105) is properly set. See Paragraphs 5-26i/1.*

**7-15. Preliminary IF Filter Adjustment.**

7-16. These procedures establish a reference that must be used for the IF Filter Adjustments. The reference signal will be stored in Display Register B.

**Note**

*Do NOT turn the instrument power off during IF Filter Adjustment procedures. To do so will cause the adjustment reference to be lost.*

7-17. The preliminary procedures must be performed prior to adjusting any IF stage.

a. Turn the -hp- 3585A power off and remove the A-11, A-12, and A-13 aluminum cover. Place the A-13 Board on a PC Extender.

b. Turn the -hp- 3585A power on.

c. Place jumper A13J1 to the "T" position.

**NOTE**

*Component locators for the IF Filter Boards (A-11/A-13) are in Drawings 7-2a/b/c.*


d. Set the synthesizer to:

FREQUENCY ..... 350kHz  
AMPLITUDE ..... -2.0dBm

e. Disconnect the cable connector from A11J1.

f. Connect the synthesizer output through a 50Ω termination to A11J1.

g. Set the -hp- 3585A to:

RECALL 609  
INSTRUMENT PRESET  
CENTER FREQUENCY..... 350kHz  
CF STEP SIZE..... 1.3Hz  
RES BW.....  3Hz  
RES BW..... 3Hz  
dB/DIV ..... 1dB  
MANUAL SWEEP..... on  
CLEAR A

h. Adjust A13C39 for a maximum marker amplitude. If necessary, set the REF LEVEL so that the marker remains within the graticule area.

i. Press the STOR A → B key.

j. Disconnect the synthesizer.

k. Connect the Tracking Generator output through a 50Ω termination to A11J1.

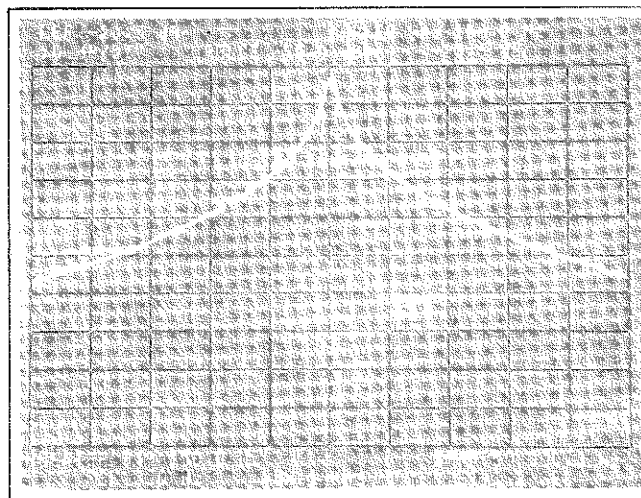
l. Set the -hp- 3585A to:

```

FREQUENCY SPAN.....50kHz
RES BW.....300Hz
SWEEP.....cont
dB/DIV.....10dB
B TRACE.....off
    
```

m. Move the marker to the peak of the trace and press MKR → CF.

n. Adjust A13C41 so that the trace is symmetrical about the marker.



**Figure 7-1. Symmetry Adjustment, A13C41.**

o. Narrow the FREQUENCY SPAN to 10Hz by using the STEP keys. As you narrow the span, the peak of the trace will move to the left or right. When this occurs, move the marker to the peak of the trace and press the MKR CF key.

p. Set the -hp- 3585A to:

```

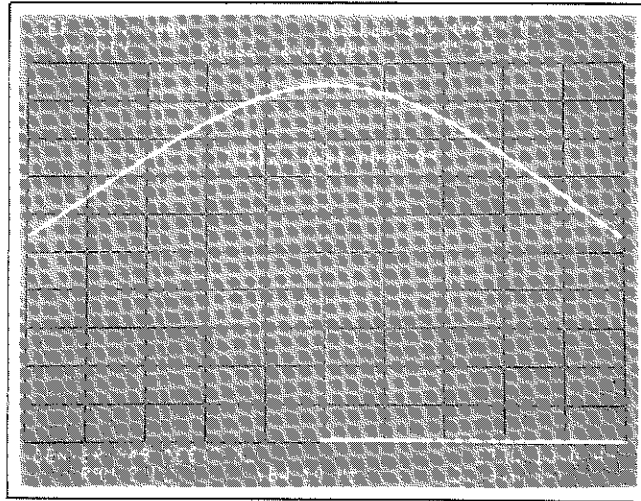
dB/DIV.....1dB
SWEEP TIME.....9.6 sec
B TRACE.....on
    
```

q. Move the marker to the peak of the trace and press MKR → CF.

r. Adjust the Tracking Generator amplitude control so that the peak of the A trace and peak of the B trace are equal in amplitude.



s. Repeat steps 'q' and 'r' until the A trace is symmetrical and equal to the amplitude of the B trace.



**Figure 7-2. Preliminary Adjustment.**

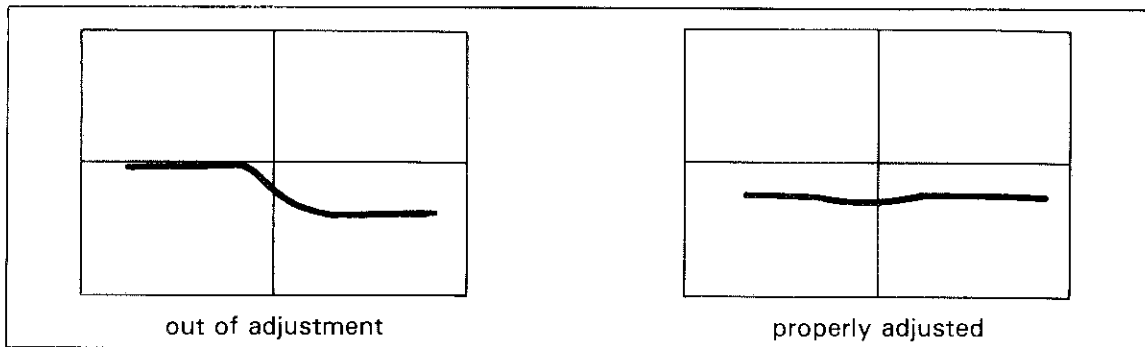
t. Press the STORE A → B key.

**NOTE**

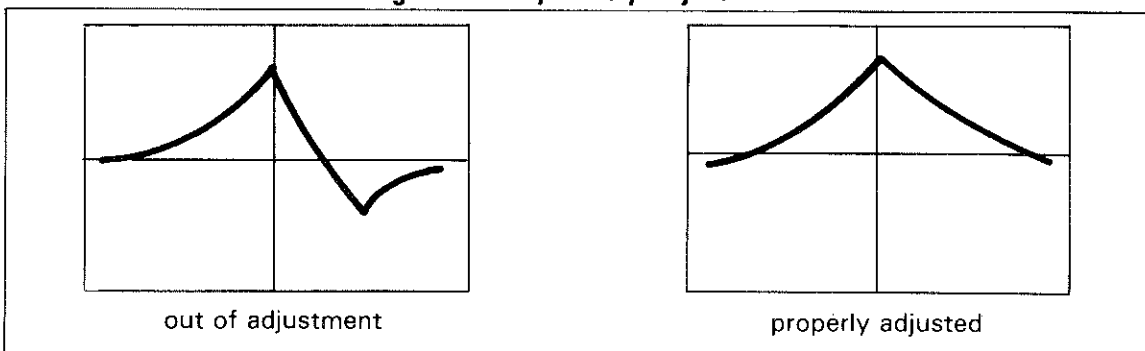
*The stored trace in B serves as a reference for the remaining IF Filter Adjustments. Do NOT turn the -hp- 3585A power off unless told to do so.*

**NOTE**

*Figures 7-3 and 7-4 will be referred to throughout the remaining IF Adjustment procedures.*



**Figure 7-3. Symmetry Adjustment.**



**Figure 7-4. Symmetry Adjustment.**



**7-18. Fifth Crystal State Adjustment (A-13: L7 and C41).**

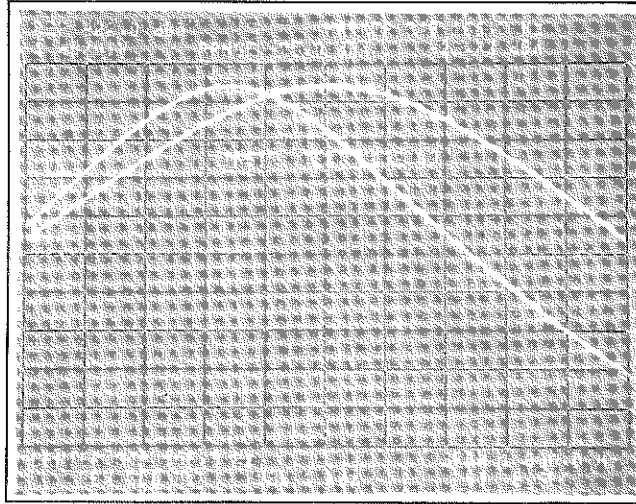
a. Set the -hp- 3585A to:

```

RES BW.....300Hz
RES BW HOLD.....on
FREQUENCY SPAN.....1kHz
REF LVL.....on

```

b. Adjust the reference level, using the Continuous Entry Control, until the A trace peak is equal in amplitude to the B trace peak.



**Figure 7-5. Reference Level Set-up.**

c. Set the -hp- 3585A to:

```

B TRACE.....off
MARKER.....on
A-B.....on
SWEEP.....cont
dB/DIV.....1dB

```

d. Adjust A13L7 so that the trace approximates a straight, horizontal line. (See Figure 7-3.)

e. Set the -hp- 3585A to:

```

A-B.....off
FREQUENCY.....50kHz
dB/DIV.....10dB

```

f. Adjust A13C41 so that the trace is symmetrical about the marker. (See Figure 7-4.)

g. Place jumper A13J1 to the "OP" position.

**7-19. Fourth Crystal Stage Adjustment (A-13: L6 and C30).**

a. Place jumper A13J2 to the "T" position.

- b. Set the -hp- 3585A to:

```
FREQUENCY SPAN.....1kHz
RES BW.....300Hz
dB/DIV.....1dB
A-B.....on
```

- c. Adjust A13L6 so that the trace approximates a straight, horizontal line. (See Figure 7-3.)

- d. Set the -hp- 3585A to:

```
A-B.....off
FREQUENCY SPAN.....50kHz
dB/DIV.....10dB
```

- e. Adjust A13C30 so that the trace is symmetrical about the marker. (See Figure 7-4.)

- f. Place jumper A13J2 to the “OP” position.

**7-20. Fifth LC Stage Adjustment (A13: L5 and R28).**

- a. Place jumper A13J3 to the “T” position.

- b. Set the -hp- 3585A to:

```
RES BW.....1kHz
FREQUENCY SPAN.....3.3kHz
dB/DIV.....1dB
A-B.....on
```

- c. Adjust A13L5 so that the trace approximates a straight, horizontal line. (See Figure 7-3.)

- d. Set the -hp- 3585A to:

```
A-B.....off
RES BW.....30kHz
OFFSET.....on
```

(allow one complete sweep)

```
ENTER OFFSET
RES BW.....1kHz
```

- e. Adjust A13R28 for a .00dB marker amplitude.

- f. Place jumper A13J3 to the “OP” position.

**7-21. Fourth LC Stage Adjustment (A13: L4 and R20).**

- a. Place jumper A13J4 to the “T” position.

b. Set the -hp- 3585A to:

```

OFFSET ..... off
FREQUENCY SPAN.....3.3kHz
dB/DIV ..... 1dB
A-B ..... on

```

c. Adjust A13L4 so that the trace approximates a straight, horizontal line. (See Figure 7-3.)

d. Set the -hp- 3585A to:

```

A-B .....off
RES BW .....30kHz
OFFSET ..... on

```

(allow one complete sweep)

```

ENTER OFFSET
RES BW .....1kHz

```

e. Adjust A13R20 for a .00dB marker amplitude.

f. Place jumper A13J4 to the "OP" position.

g. DO NOT TURN POWER OFF. Remove the A-13 Board and the PC Extender. Install the A-13 Board into the card nest.

**7-22. Third Crystal Stage Adjustment (A-12; L6, L4, and C24).**

a. DO NOT TURN POWER OFF. Place th A-12 board on PC Extender.

**NOTE**

*If the B trace has been lost or altered, repeat the Preliminary Adjustment procedures to re-establish the reference trace.*

b. Check that the B trace is still intact.

c. Set the -hp- 3585A to:

```

OFFSET ..... off
CF STEP SIZE.....1.2Hz
RES BW ..... 300
RES BW .....300Hz
FREQUENCY SPAN.....1kHz
dB/DIV ..... 1dB

```

d. Adjust A12L6 for a maximum marker amplitude.

e. Set the -hp- 3585A to:

```

A-B ..... on

```

f. Adjust A12L4 so that the trace approximates a straight, horizontal line. (Figure 7-3.)

g. Set the -hp- 3585A to:

```
A-B.....off
FREQUENCY SPAN.....50kHz
dB/DIV.....10dB
```

h. Adjust A12C24 so that the trace is symmetrical about the marker. (See Figure 7-4.)

**7-23. Third LC Stage Adjustment (A12: L5 and R15).**

a. Set the -hp- 3585A to:

```
SWEEP.....Cont
RES BW.....1kHz
FREQUENCY SPAN.....3.3kHz
dB/DIV.....1dB
A-B.....on
```

b. Adjust A12L5 so that the trace approximates a straight, horizontal line. (See Figure 7-3.)

c. Set the -hp- 3585A to:

```
A-B.....off
RES BW.....30kHz
OFFSET.....on
```

(allow one complete sweep)

```
ENTER OFFSET
RES BW.....1kHz
```

d. Adjust A12R15 for a .00dB marker amplitude.

e. DO NOT TURN POWER OFF. Remove the A-12 Board and PC Extender. Install the A-12 board into the card nest.

**7-24. Second Crystal Stage Adjustment (A-11: L7, C39, and L8).**

a. DO NOT TURN POWER OFF. Place the A-11 Board on a PC Extender.

b. Place jumper A11J4 to the “T” position.

**NOTE**

*If the B trace has been lost or altered, repeat the Preliminary Adjustment procedures to re-establish the reference trace.*

c. Check that the B trace is still intact.

d. Set the -hp- 3585A to:

```

OFFSET ..... off
CF STEP SIZE ..... 1.1Hz
RES BW ..... ↑ ↓
RES BW ..... 300Hz
FREQUENCY SPAN ..... 1kHz
dB/DIV ..... 1dB
A-B ..... on
    
```

e. Adjust A11L7 so that the trace approximates a straight, horizontal line. (See Figure 7-3.)

f. Set the -hp- 3585A to:

```

A-B ..... off
FREQUENCY SPAN ..... 50kHz
dB/DIV ..... 10dB
    
```

g. Adjust A11C39 so that the trace is symmetrical about the marker. (See Figure 7-4.)

h. Set the -hp- 3585A to:

```

dB/DIV ..... 1dB
FREQUENCY SPAN ..... 1kHz
    
```

i. Adjust A11L8 for a maximum marker amplitude.

j. Place jumper A11J4 to the "OP" position.

**7-25. First Crystal Stage Adjustment (A-11: L6 and C29).**

a. DO NOT TURN POWER OFF. Place jumper A11J5 to the "T" position.

b. Set the -hp- 3585A to:

```

FREQUENCY SPAN ..... 1kHz
dB/DIV ..... 1dB
A-B ..... on
    
```

c. Adjust A11L6 so that the trace approximates a straight, horizontal line. (See Figure 7-3.)

d. Set the -hp- 3585A to:

```

A-B ..... off
FREQUENCY SPAN ..... 50kHz
dB/DIV ..... 10dB
    
```

e. Adjust A11C29 so that the trace is symmetrical about the marker. (See Figure 7-4.)

f. Place jumper A11J5 to the "OP" position.

**7-26. Second LC Stage Adjustment (A-11: L5 and R20).**

a. Place jumper A11J2 to the "T" position.

b. Set the -hp- 3585A to:

```

RES BW.....1kHz
FREQUENCY SPAN.....3.3kHz
dB/DIV.....1dB
A-B.....on

```

c. Adjust A11L5 so that the trace approximates a straight, horizontal line. (See Figure 7-3.)

d. Set the -hp- 3585A to:

```

A-B.....off
RES BW.....30kHz
OFFSET.....on

```

(allow one complete sweep)

```

ENTER OFFSET
RES BW.....1kHz

```

e. Adjust A11R20 for a .00dB marker amplitude.

f. Place jumper A11J2 to the "OP" position.

**7-27. First LC Stage Adjustment (A-11: L4 and R12).**

a. Place jumper A11J3 to the "T" position.

b. Set the -hp- 3585A to:

```

OFFSET.....off
FREQUENCY SPAN.....3.3kHz
dB/DIV.....1dB
A-B.....on

```

c. Adjust A11J4 so that the trace approximates a straight, horizontal line. (See Figure 7-3.)

d. Set the -hp- 3585A to:

```

A-B.....off
RES BW.....30kHz
OFFSET.....on

```

(allow one complete sweep)

```

ENTER OFFSET
RES BW.....1kHz

```

- e. Adjust A11R12 for a .00dB marker amplitude.
- f. Place jumper A11J3 to the "OP" position.
- g. Turn the -hp- 3585A power off. Remove the A-11 Board and the PC Extender. Re-install the A-11 Board into the card nest.

**7-28. Final IF Filter Adjustments.**

- a. Ensure that all jumpers on the A-11, A-12, and A-13 Boards are in the "OP" position.
- b. Install the metal cover over the IF Boards (A-11/A-13).
- c. Set the synthesizer to:

```

FREQUENCY ..... 350kHz
AMPLITUDE ..... -2.0dBm

```

- d. Connect the synthesizer output through a 50Ω termination to A11J1.

**NOTE**

*Disregard any calibration error messages.*

- e. Turn the -hp- 3585A power on.
- f. Set the -hp- 3585A to:

```

RECALL 609
INSTRUMENT PRESET
CF STEP SIZE ..... 1.1Hz
RES BW ..... 3Hz
MANUAL SWEEP ..... on
dB/DIV ..... 1dB
REF LEVEL ..... -35dBm
CLEAR A


```

g. Adjust A11C27 for a maximum marker amplitude. If necessary, set the REF LEVEL so that the marker remains within the graticule area.

- h. Adjust A11C37 for a maximum marker amplitude.

- i. Set the -hp- 3585A to:

```


CF STEP SIZE ..... 1.2Hz
RES BW ..... 

```

- j. Adjust A12C22 for a maximum marker amplitude.

- k. Set the -hp- 3585A to:

```

CF STEP SIZE ..... 1.3Hz
RES BW ..... 

```

- l. Adjust A13C28 for a maximum marker amplitude.
- m. Adjust A13C39 for a maximum marker amplitude.
- n. Set the -hp- 3585A to:

```

RECALL 601
INSTRUMENT PRESET
MANUAL SWEEP.....on
dB/DIV ..... 1dB
CLEAR A
OFFSET.....on
ENTER OFFSET
RES BW..... 300Hz

```

- o. Adjust the REF LEVEL as necessary to keep the marker within the graticule area.
- p. Adjust A11R26 for a .00dB marker reading.
- q. Set the -hp- 3585A to:


```

RES BW..... 

```

- r. Adjust A11R28 for a .00dB marker reading.
- s. Set the -hp- 3585A to:

```

RES BW..... 

```

- t. Adjust A11R30 for a .00dB marker reading.
- u. Set the -hp- 3585A to:

```

RES BW..... 

```

- v. Adjust A11R32 for a .00dB marker reading.
- w. Set the -hp- 3585A to:

```

RES BW..... 

```

- x. Adjust A11R34 for a .00dB marker reading.
- y. Disconnect the synthesizer from connector A11J1.

**7-29. 16dB Amplifier Adjustment.**

a. Connect the Tracking Generator output to a 10dB/step attenuator. Connect the 10dB/step attenuator to a 1dB/step attenuator and place a 50 ohm termination on the output of the 1dB/step attenuator. Connect the output of the 50 ohm termination to -hp-3585A connector A11J1.



**NOTE**

*Disregard any calibration error messages.*

- b. Set the -hp- 3585A to:

```

INSTRUMENT PRESET
CENTER FREQUENCY.....350kHz
FREQUENCY SPAN.....10kHz
RES BW.....10kHz
dB/DIV.....2dB
MANUAL SWEEP.....on
RANGE.....-25dBm
REFERENCE LEVEL.....-28dBm
CLEAR A
    
```

- c. Adjust the Tracking Generator amplitude for a -28.00dBm marker amplitude.

- d. Set the -hp- 3585A to:

```

OFFSET.....on
ENTER OFFSET
    
```

- e. Set the external attenuators for 16dB of attenuation.

- f. Set the -hp- 3585A to:

```

REFERENCE LEVEL.....-44dBm
    
```

- g. Adjust A12R77 for an offset marker amplitude of -16.00dBm.

- h. Set the external attenuators for 32dB of attenuations.

- i. Set the -hp- 3585A to:

```

REFERENCE LEVEL.....-60dBm
    
```

- j. Adjust A12R71 for an offset marker amplitude of -32.00dBm.

- k. Set the external attenuators for 48dB of attenuation.

- l. Set the -hp- 3585A to:

```

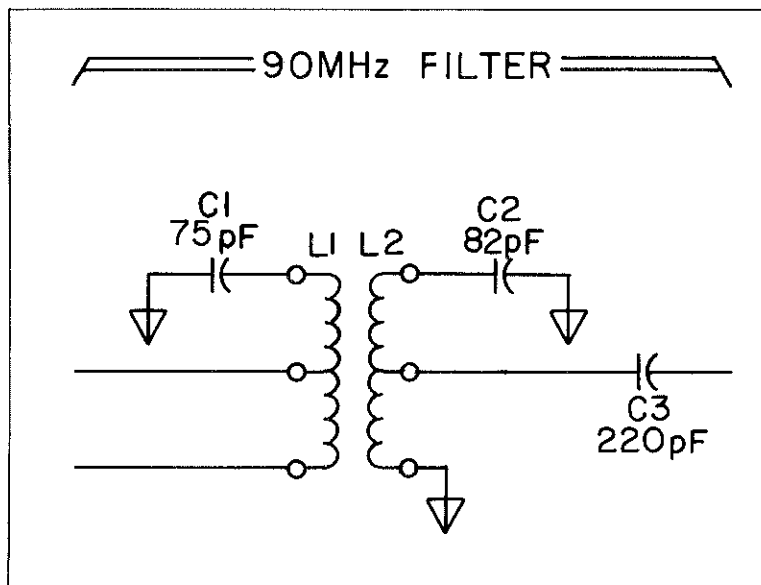
REFERENCE LEVEL.....-76dBm
    
```

- m. Adjust A12R65 for an offset marker amplitude of -48.00dBm.

- n. Disconnect the Tracking Generator from A11J1 and reconnect the cable from A6CJ1 to A11J1.

**Table 7-1. Δ1 Replaceable Parts, 90MHz Filter.**

Reference Designator	hp- Part Number	Qty	Description	Mfr Code	Mfr Part Number
A4C1	0160-3691	1	C:FXD 75 pF 100V		
A4C2	0160-0145	1	C:FXD 82 pF 100V		
A4C3	0160-0952	1	C:FXD 220 pF 300V		
A4L1	none		trace on circuit board		
A4L2	none		trace on circuit board		



Drawing 7-1. Δ1 90MHz Filter, p/o Schematic A-2

**NOTE**

*Disregard any calibration error messages.*

b. Set the -hp- 3585A to:

```

INSTRUMENT PRESET
CENTER FREQUENCY.....350kHz
FREQUENCY SPAN.....10kHz
RES BW.....10kHz
dB/DIV.....2dB
MANUAL SWEEP.....on
RANGE.....-25dBm
REFERENCE LEVEL.....-28dBm
CLEAR A

```

c. Adjust the Tracking Generator amplitude for a -28.00dBm marker amplitude.

d. Set the -hp- 3585A to:

```

OFFSET.....on
ENTER OFFSET

```

e. Set the external attenuators for 16dB of attenuation.

f. Set the -hp- 3585A to:

```

REFERENCE LEVEL.....-44dBm

```

g. Adjust A12R77 for an offset marker amplitude of -16.00dBm.

h. Set the external attenuators for 32dB of attenuations.

i. Set the -hp- 3585A to:

```

REFERENCE LEVEL.....-60dBm

```

j. Adjust A12R71 for an offset marker amplitude of -32.00dBm.

k. Set the external attenuators for 48dB of attenuation.

l. Set the -hp- 3585A to:

```

REFERENCE LEVEL.....-76dBm

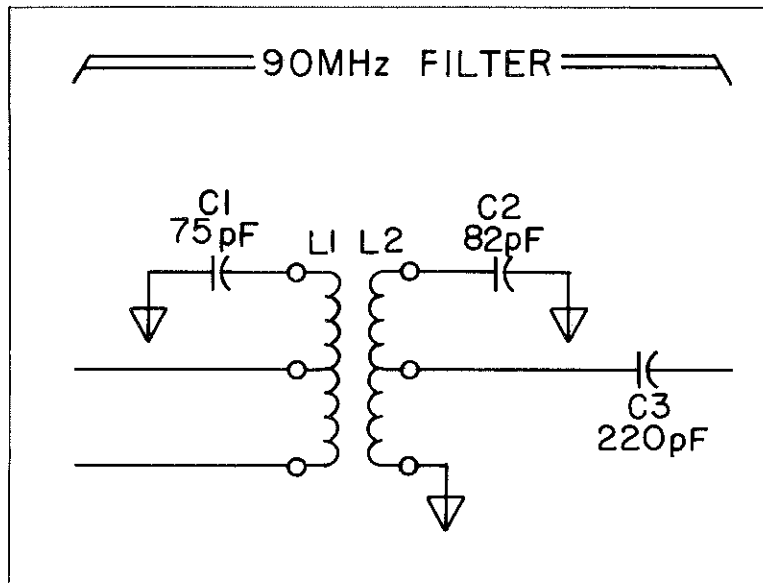
```

m. Adjust A12R65 for an offset marker amplitude of -48.00dBm.

n. Disconnect the Tracking Generator from A11J1 and reconnect the cable from A6CJ1 to A11J1.

**Table 7-1. Δ1 Replaceable Parts, 90MHz Filter.**

Reference Designator	-hp- Part Number	Qty	Description	Mfr Code	Mfr Part Number
A4C1	0160-3691	1	C:FXD 75 pF 100V		
A4C2	0160-0145	1	C:FXD 82 pF 100V		
A4C3	0160-0952	1	C:FXD 220 pF 300V		
A4L1	none		trace on circuit board		
A4L2	none		trace on circuit board		



Drawing 7-1. Δ1 90MHz Filter, p/o Schematic A-2

Table 7-2. Δ2 Replaceable Parts, IF Filter Circuits.

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
A11	03585-66511	4	1	FILTER BOARD NO. 1	28480	03585-66511
A11C1	0180-0116	1	2	CAPACITOR-FXD 6.8UF±10% 35VDC TA	56289	1500685X9035B2
A11C2	0180-0116	1	2	CAPACITOR-FXD 6.8UF±10% 35VDC TA	56289	1500685X9035B2
A11C3	0180-0229	7	3	CAPACITOR-FXD 330F±10% 10VDC TA	56289	1500336X9010B2
A11C4	0160-3622	8	174	CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A11C5	0160-3622	8	174	CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A11C6	0160-2257	3	1	CAPACITOR-FXD 10PF ±5% 500VDC CER Δ+60	28480	0160-2257
A11C7	0160-3622	8	1	CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A11C8	0160-3622	8	1	CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A11C9	0140-0184	9	5	CAPACITOR-FXD 2200PF ±1% 100VDC MICA	72136	DM20F822F0100AV1CR
A11C10	0160-3622	8	5	CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A11C11	0160-3622	8	1	CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A11C12	0160-3622	8	1	CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A11C13	0140-0184	9	1	CAPACITOR-FXD 2200PF ±1% 100VDC MICA	72136	DM20F822F0100AV1CR
A11C14	0160-3622	8	1	CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A11C15	0160-3622	8	1	CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A11C16	0160-3622	8	1	CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A11C17	0160-3622	8	1	CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A11C18	0160-3622	8	1	CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A11C19	0160-3622	8	1	CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A11C20	0160-3622	8	1	CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A11C21	0160-3622	8	1	CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A11C22	0160-3622	8	1	CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A11C23	0160-3622	8	1	CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A11C24	0160-3622	8	1	CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A11C25	0160-3622	8	1	CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A11C26	0140-0196	3	4	CAPACITOR-FXD 150PF ±5% 300VDC MICA	72136	DM15F151J0300AV1CR
A11C27	0121-0102	9	5	CAPACITOR-V TRMR-MICA 16-150PF 175V	72136	751417-5 REV. B
A11C28	0160-0376	3	5	CAPACITOR-FXD 68PF ±5% 500VDC MICA	28480	0160-0376
A11C29	0121-0131	6	3	CAPACITOR-V TRMR-AIR 1,2-4,2PF 350V	74970	189-0501-005
A11C30	0160-3622	8	5	CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A11C31	0160-3622	8	1	CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A11C32	0160-3622	8	1	CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A11C33	0160-3622	8	1	CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A11C34	0160-3622	8	1	CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A11C35	0160-3622	8	1	CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A11C36	0140-0217	9	1	CAPACITOR-FXD 140PF ±2% 300VDC MICA	72136	DM15F141J0300AV1CR
A11C37	0121-0102	9	1	CAPACITOR-V TRMR-MICA 16-150PF 175V	72136	751417-5 REV. B
A11C38	0160-0376	3	3	CAPACITOR-FXD 68PF ±5% 500VDC MICA	28480	0160-0376
A11C39	0121-0131	6	3	CAPACITOR-V TRMR-AIR 1,2-4,2PF 350V	74970	189-0501-005
A11C40	0160-3622	8	3	CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A11C41	0160-3622	8	1	CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A11C42	0160-3622	8	1	CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A11C43	0160-3622	8	1	CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A11C44	0140-0198	5	2	CAPACITOR-FXD 200PF ±5% 300VDC MICA	72136	DM15F201J0300AV1CR
A11C45	0160-3622	8	2	CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A11C46	0160-3622	8	1	CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A11C47	0160-3622	8	1	CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A11C48	0160-3622	8	1	CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A11C49	0160-3622	8	1	CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A11C50	0160-3622	8	1	CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A11C51	0160-3622	8	1	CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A11C52	0160-3622	8	1	CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A11C53	0160-3622	8	1	CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A11C54	0160-3622	8	1	CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A11C55	0160-3622	8	1	CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A11C56	0160-3622	8	1	CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A11C57	0160-3622	8	1	CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A11C58	0160-3622	8	1	CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A11C59	0160-3622	8	1	CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A11C60	0160-3622	8	1	CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A11C61	0160-3622	8	1	CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A11C62	0160-3622	8	1	CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A11C63	0160-3622	8	1	CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A11C64	0160-3622	8	1	CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A11C65	0160-3622	8	1	CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A11C66	0160-3622	8	1	CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A11C67	0160-3622	8	1	CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A11C68	0160-3622	8	1	CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A11C69	0160-3622	8	1	CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A11C70*	0160-2247	1	4	CAPACITOR-FXD 3.9PF ±.25PF 500VDC CER	28480	0160-2247
A11C70*	0160-2250	6	5	CAPACITOR-FXD 5.1PF ±.25PF 500VDC CER	28480	0160-2250

See Section VI for ordering information

\*Indicates factory selected value

Table 7-2. Δ2 Replaceable Parts, IF Filter Circuits (Cont'd).

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
A11C71*	0160-2250	6		CAPACITOR-FXD 5.1PF +- .25PF 500VDC CER	28480	0160-2250
A11C71*	0160-2252	8	1	CAPACITOR-FXD 6.2PF +- .25PF 500VDC CER	28480	0160-2252
A11C71*	0160-2254	8	1	CAPACITOR-FXD 7.5PF +- .25PF 500VDC CER	28480	0160-2254
A11CR1	1901-0376	6	33	DIODE-GEN PRP 35V 50MA DO-35	28480	1901-0376
A11CR2	1901-0376	6		DIODE-GEN PRP 35V 50MA DO-35	28480	1901-0376
A11CR3	1901-0376	6		DIODE-GEN PRP 35V 50MA DO-35	28480	1901-0376
A11CR4	1901-0376	6		DIODE-GEN PRP 35V 50MA DO-35	28480	1901-0376
A11CR5	1901-0376	6		DIODE-GEN PRP 35V 50MA DO-35	28480	1901-0376
A11CR6	1901-0376	6		DIODE-GEN PRP 35V 50MA DO-35	28480	1901-0376
A11CR7	1901-0376	6		DIODE-GEN PRP 35V 50MA DO-35	28480	1901-0376
A11CR8	1901-0376	6		DIODE-GEN PRP 35V 50MA DO-35	28480	1901-0376
A11CR9	1901-0376	6		DIODE-GEN PRP 35V 50MA DO-35	28480	1901-0376
A11CR10	1901-0376	6		DIODE-GEN PRP 35V 50MA DO-35	28480	1901-0376
A11CR11	1901-0376	6		DIODE-GEN PRP 35V 50MA DO-35	28480	1901-0376
A11CR12	1901-0376	6		DIODE-GEN PRP 35V 50MA DO-35	28480	1901-0376
A11CR13	1902-3149	8	3	DIODE-ZNR 9.09V 5% DO-7 PDS.4W TC=+.057X	28480	1902-3149
A11CR14	1901-0518	8	6	DIODE-SCHOTTKY	28480	1901-0518
A11CR15	1901-0518	8	6	DIODE-SCHOTTKY	28480	1901-0518
A11J1	1250-136A	7	1	CONNECTOR-RF SMB M PC 50-OHM	28480	1250-136A
A11J2	1251-4822	8	10	CONNECTOR 3-PIN M POST TYPE	28480	1251-4822
A11J3	125A-0141	8		CONNECTOR 3-PIN M POST TYPE	28480	125A-0141
A11J3	1251-4822	8		CONNECTOR 3-PIN M POST TYPE	28480	1251-4822
A11J3	125A-0141	8		CONNECTOR 3-PIN M POST TYPE	28480	125A-0141
A11J4	1251-4822	8		CONNECTOR 3-PIN M POST TYPE	28480	1251-4822
A11J4	125A-0141	8		CONNECTOR 3-PIN M POST TYPE	28480	125A-0141
A11J5	1251-4822	8		CONNECTOR 3-PIN M POST TYPE	28480	1251-4822
A11J5	125A-0141	8		CONNECTOR 3-PIN M POST TYPE	28480	125A-0141
A11L1	9140-0210	1	2	COIL-MLD 100UH 5% Q=50 .155DX.375LG-NOM	28480	9140-0210
A11L2	9140-0210	1		COIL-MLD 100UH 5% Q=50 .155DX.375LG-NOM	28480	9140-0210
A11L3	9100-1618	1	1	COIL-MLD 5.6UH 10% Q=45 .155DX.375LG-NOM	28480	9100-1618
A11L4	9140-0289	4	5	COIL-VAR 23UH-27UH Q=200 PC-MTG	28480	9140-0289
A11L5	9140-0289	4		COIL-VAR 23UH-27UH Q=200 PC-MTG	28480	9140-0289
A11L6	9140-028A	3	1	COIL-VAR 920UH-1.08MH Q=500 PC-MTG	28480	9140-028A
A11L7	9140-0287	2	4	COIL-VAR 920UH-1.08MH Q=300 PC-MTG	28480	9140-0287
A11L8	9100-0543	9	2	COIL-VAR 900UH-1.1MH Q=112 PC-MTG	28480	9100-0543
A11O1	1854-0071	1	3	TRANSISTOR NPN SI PD=350MW FT=200MHZ	04713	2N3904
A11O2	1853-00A9	5	1	TRANSISTOR PNP 2N4917 SI PD=200MA	07263	2N4917
A11O3	1854-0351	6	1	TRANSISTOR NPN SI TO-18 PD=360MW	28480	1854-0351
A11O4	1854-0071	7	17	TRANSISTOR NPN SI PD=300MW FT=200MHZ	28480	1854-0071
A11O5	1854-0071	7		TRANSISTOR NPN SI PD=300MW FT=200MHZ	28480	1854-0071
A11O6	1854-0071	7		TRANSISTOR NPN SI PD=300MW FT=200MHZ	28480	1854-0071
A11O7	1853-0010	2	3	TRANSISTOR PNP SI TO-18 PD=360MW	28480	1853-0010
A11O8	1854-0215	1		TRANSISTOR NPN SI PD=350MW FT=300MHZ	04713	2N3904
A11O9	1854-0215	1		TRANSISTOR NPN SI PD=350MW FT=300MHZ	04713	2N3904
A11O10	1854-0071	7		TRANSISTOR NPN SI PD=300MW FT=200MHZ	28480	1854-0071
A11R1	0683-3925	2	1	RESISTOR 3.9K 5% .25W FC TC=400/+700	01121	CR3925
A11R2	0683-2205	9	1	RESISTOR 22 5% .25W FC TC=400/+500	01121	CR2205
A11R3	0683-1525	4	2	RESISTOR 1.5K 5% .25W FC TC=400/+700	01121	CR1525
A11R4	0683-2215	1	1	RESISTOR 220 5% .25W FC TC=400/+600	01121	CR2215
A11R5	0683-1015	7	7	RESISTOR 100 5% .25W FC TC=400/+500	01121	CR1015
A11R6	0683-1015	7		RESISTOR 100 5% .25W FC TC=400/+500	01121	CR1015
A11R7	0683-2035	3	15	RESISTOR 20K 5% .25W FC TC=400/+800	01121	CR2035
A11R8	0683-2035	3		RESISTOR 20K 5% .25W FC TC=400/+800	01121	CR2035
A11R9	069A-3518	0	5	RESISTOR 7.32K 1% .125W F TC=0/+100	24546	C4-1/8-T0-7321-F
A11R10	0757-0279	0	3	RESISTOR 3.16K 1% .125W F TC=0/+100	24546	C4-1/8-T0-3161-F
A11R11	069A-4451	2	3	RESISTOR 340 1% .125W F TC=0/+100	24546	C4-1/8-T0-340R-F
A11R12	2100-2497	9	5	RESISTOR-TRMR 2K 10% C TOP-ADJ 1-TRN	73138	82PR2K
A11R13	0757-0283	6		RESISTOR 2K 1% .125W F TC=0/+100	24546	C4-1/8-T0-2001-F
A11R14	0683-1015	7		RESISTOR 100 5% .25W FC TC=400/+500	01121	CR1015
A11R15	0683-3325	6	5	RESISTOR 3.3K 5% .25W FC TC=400/+700	01121	CR3325
A11R16	0683-1015	7		RESISTOR 100 5% .25W FC TC=400/+500	01121	CR1015
A11R17	069A-3518	0		RESISTOR 7.32K 1% .125W F TC=0/+100	24546	C4-1/8-T0-7321-F
A11R18	069A-3496	3	2	RESISTOR 3.57K 1% .125W F TC=0/+100	24546	C4-1/8-T0-357R-F
A11R19	0757-0416	7		RESISTOR 511 1% .125W F TC=0/+100	24546	C4-1/8-T0-511R-F
A11R20	2100-2497	9		RESISTOR-TRMR 2K 10% C TOP-ADJ 1-TRN	73138	82PR2K
A11R21	0757-0283	6		RESISTOR 2K 1% .125W F TC=0/+100	24546	C4-1/8-T0-2001-F
A11R22	0683-1015	7		RESISTOR 100 5% .25W FC TC=400/+500	01121	CR1015
A11R23	0683-3325	6		RESISTOR 3.3K 5% .25W FC TC=400/+700	01121	CR3325
A11R24	0683-2035	3		RESISTOR 20K 5% .25W FC TC=400/+800	01121	CR2035
A11R25	0757-0442	9	2	RESISTOR 10K 1% .125W F TC=0/+100	24546	C4-1/8-T0-1002-F
A11R26	2100-3274	2	1	RESISTOR-TRMP 10K 10% C SIDE-ADJ 1-TRN	28480	2100-3274
A11R27	0757-0200	7	3	RESISTOR 5.62K 1% .125W F TC=0/+100	24546	C4-1/8-T0-5621-F
A11R28	2100-3207	1	2	RESISTOR-TRMR 5K 10% C SIDE-ADJ 1-TRN	28480	2100-3207
A11R29	0757-0283	6		RESISTOR 2K 1% .125W F TC=0/+100	24546	C4-1/8-T0-2001-F
A11R30	2100-3273	1	3	RESISTOR-TRMR 2K 10% C SIDE-ADJ 1-TRN	28480	2100-3273

See Section VI for ordering information

\*Indicates factory selected value

Table 7-2. Δ2 Replaceable Parts, IF Filter Circuits (Cont'd).

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
A11R31	0757-0428	1	2	RESISTOR 1.62K 1% .125W F TC=0/+100	24546	C4-1/8-T0-1621-F
A11R32	2100-3273	1		RESISTOR-TRMR 2K 10% C S10E-A0J 1-TRN	28480	P100-3273
A11R33	0757-0426	9	2	RESISTOR 1.3K 1% .125W F TC=0/+100	24546	C4-1/8-T0-1301-F
A11R34	2100-3273	1		RESISTOR-TRMR 2K 10% C S10E-A0J 1-TRN	28480	2100-3273
A11R35	0683-1025	9	39	RESISTOR 1K 5% .25W FC TC=400/+600	01121	CB1025
A11R36	0683-1015	7		RESISTOR 100 5% .25W FC TC=400/+500	01121	CB1015
A11R37	0683-1015	7		RESISTOR 100 5% .25W FC TC=400/+500	01121	CB1015
A11R38	0683-1015	7		RESISTOR 100 5% .25W FC TC=400/+500	01121	CB1015
A11R39	0683-2225	3		RESISTOR 2.2K 5% .25W FC TC=400/+600	01121	CB2225
A11R40	0683-3315	4	1	RESISTOR 330 5% .25W FC TC=400/+600	01121	CB3315
A11R41	0683-1015	7		RESISTOR 100 5% .25W FC TC=400/+500	01121	CB1015
A11R42	0683-3025	3	6	RESISTOR 3K 5% .25W FC TC=400/+700	01121	CB3025
A11R43	0683-1235	3	4	RESISTOR 12K 5% .25W FC TC=400/+800	01121	CB1235
A11R44*	0698-3158	4	1	RESISTOR 23.7K 1% .125W F TC=0/+100	24546	C4-1/8-T0-2377-F
A11R44*	0757-0199	3	1	RESISTOR 21.5K 1% .125W F TC=0/+100	24546	C4-1/8-T0-2152-F
A11R44*	0757-0349	5	1	RESISTOR 22.6K 1% .125W F TC=0/+100	24546	C4-1/8-T0-2262-F
A11R45*	0698-4473	8	1	RESISTOR 8.06K 1% .125W F TC=0/+100	24546	C4-1/8-T0-8061-F
A11R45*	0698-4476	1	1	RESISTOR 10.2K 1% .125W F TC=0/+100	24546	C4-1/8-T0-1022-F
A11R45*	0757-0268	1	1	RESISTOR 9.09K 1% .125W F TC=0/+100	19701	MF401/8-T0-9091-F
A11R46*	0698-3202	9	1	RESISTOR 1.74K 1% .125W F TC=0/+100	24546	C4-1/8-T0-1741-F
A11R46*	0698-4429	4	1	RESISTOR 1.87K 1% .125W F TC=0/+100	24546	C4-1/8-T0-1871-F
A11R46*	0698-4431	8	1	RESISTOR 2.05K 1% .125W F TC=0/+100	24546	C4-1/8-T0-2051-F
A11R47*	0698-4123	5	1	RESISTOR 499 1% .125W F TC=0/+100	24546	C4-1/8-T0-499R-F
A11R47*	0698-4455	6	1	RESISTOR 536 1% .125W F TC=0/+100	24546	C4-1/8-T0-536R-F
A11R47*	0698-4457	8	1	RESISTOR 576 1% .125W F TC=0/+100	28480	0698-4457
A11R48*	0698-0088	3	2	RESISTOR 215 1% .25W F TC=0/+100	24546	C5-1/4-T0-2150-F
A11R48*	0698-3178	8	3	RESISTOR 487 1% .125W F TC=0/+100	24546	C4-1/8-T0-487R-F
A11R48*	0698-3447	4	5	RESISTOR 422 1% .125W F TC=0/+100	24546	C4-1/8-T0-422R-F
A11R48*	0698-3448	5	1		28480	0698-3448
A11R48*	0698-4453	4	5	RESISTOR 402 1% .125W F TC=0/+100	24546	C4-1/8-T0-402R-F
A11R48*	0757-0416	7	4	RESISTOR 511 1% .125W F TC=0/+100	24546	C4-1/8-T0-511R-F
A11R49	0683-2025	1		RESISTOR 2K 5% .25W FC TC=400/+700	01121	CB2025
A11R50	0683-2025	1		RESISTOR 2K 5% .25W FC TC=400/+700	01121	CB2025
A11R51	0683-2025	1		RESISTOR 2K 5% .25W FC TC=400/+700	01121	CB2025
A11R52	0683-2025	1		RESISTOR 2K 5% .25W FC TC=400/+700	01121	CB2025
A11R53	0683-1045	3	15	RESISTOR 100K 5% .25W FC TC=400/+800	01121	CB1045
A11R54	0683-1045	3		RESISTOR 100K 5% .25W FC TC=400/+800	01121	CB1045
A11R55	0683-1045	3		RESISTOR 100K 5% .25W FC TC=400/+800	01121	CB1045
A11R56	0683-1045	3		RESISTOR 100K 5% .25W FC TC=400/+800	01121	CB1045
A11R57	0683-1225	1	2	RESISTOR 1.2K 5% .25W FC TC=400/+700	01121	CB1225
A11R58	0683-1015	7		RESISTOR 100 5% .25W FC TC=400/+500	01121	CB1015
A11R59	0683-3025	3		RESISTOR 3K 5% .25W FC TC=400/+700	01121	CB3025
A11R60	0683-1235	3		RESISTOR 12K 5% .25W FC TC=400/+800	01121	CB1235
A11R61*	0698-4511	5	4	RESISTOR 86.6K 1% .125W F TC=0/+100	24546	C4-1/8-T0-8662-F
A11R61*	0757-0464	5	4	RESISTOR 90.9K 1% .125W F TC=0/+100	24546	C4-1/8-T0-9092-F
A11R61*	0757-0978	6	4	RESISTOR 95.3K 1% .125W F TC=0/+100	24546	C4-1/8-T0-9532-F
A11R62*	0698-3161	9	4	RESISTOR 3A.3K 1% .125W F TC=0/+100	24546	C4-1/8-T0-3832-F
A11R62*	0698-4492	1	4	RESISTOR 32.4K 1% .125W F TC=0/+100	24546	C4-1/8-T0-3242-F
A11R62*	0698-4493	2	4	RESISTOR 34K 1% .125W F TC=0/+100	24546	C4-1/8-T0-3402-F
A11R62*	0757-0455	4	4	RESISTOR 36.5K 1% .125W F TC=0/+100	24546	C4-1/8-T0-3652-F
A11R63*	0698-4470	5	4	RESISTOR 6.98K 1% .125W F TC=0/+100	24546	C4-1/8-T0-6981-F
A11R63*	0757-0440	7	0	RESISTOR 7.5K 1% .125W F TC=0/+100	24546	C4-1/8-T0-7501-F
A11R63*	0757-0441	8	0	RESISTOR 8.25K 1% .125W F TC=0/+100	24546	C4-1/8-T0-8251-F
A11R64*	0698-4432	9	4	RESISTOR 2.1K 1% .125W F TC=0/+100	24546	C4-1/8-T0-2101-F
A11R64*	0698-4433	6	4	RESISTOR 2.26K 1% .125W F TC=0/+100	24546	C4-1/8-T0-2261-F
A11R64*	0757-0283	6	11	RESISTOR 2K 1% .125W F TC=0/+100	24546	C4-1/8-T0-2001-F
A11R64*	0757-0431	6	4	RESISTOR 2.43K 1% .125W F TC=0/+100	24546	C4-1/8-T0-2431-F
A11R65*	0698-0088	8		RESISTOR 215 1% .25W F TC=0/+100	24546	C5-1/4-T0-2150-F
A11R65*	0698-3178	8		RESISTOR 487 1% .125W F TC=0/+100	24546	C4-1/8-T0-487R-F
A11R65*	0698-3447	4		RESISTOR 422 1% .125W F TC=0/+100	24546	C4-1/8-T0-422R-F
A11R65*	0698-3488	3	4	RESISTOR 442 1% .125W F TC=0/+100	24546	C4-1/8-T0-442R-F
A11R65*	0698-4453	4		RESISTOR 402 1% .125W F TC=0/+100	24546	C4-1/8-T0-402R-F
A11R65*	0757-0416	7		RESISTOR 511 1% .125W F TC=0/+100	24546	C4-1/8-T0-511R-F
A11R66	0683-2025	1		RESISTOR 2K 5% .25W FC TC=400/+700	01121	CB2025
A11R67	0683-2025	1		RESISTOR 2K 5% .25W FC TC=400/+700	01121	CB2025
A11R68	0683-2025	1		RESISTOR 2K 5% .25W FC TC=400/+700	01121	CB2025
A11R68	0683-2025	1	1A	RESISTOR 2K 5% .25W FC TC=400/+700	01121	CB2025
A11R68	0683-2025	1		RESISTOR 2K 5% .25W FC TC=400/+700	01121	CB2025
A11R71	0683-7525	6	2	RESISTOR 7.5K 5% .25W FC TC=400/+700	01121	CB7525
A11R72	0683-4705	8	0	RESISTOR 47 5% .25W FC TC=400/+500	01121	CB4705
A11R73	0683-1015	7		RESISTOR 100 5% .25W FC TC=400/+500	01121	CB1015
A11R74	0683-1015	7		RESISTOR 100 5% .25W FC TC=400/+500	01121	CB1015
A11R75	0683-1015	7		RESISTOR 100 5% .25W FC TC=400/+500	01121	CB1015
A11R76	0698-4500	2	1	RESISTOR 57.6K 1% .125W F TC=0/+100	24546	C4-1/8-T0-5762-F
A11R77	0757-0200	7		RESISTOR 5.62K 1% .125W F TC=0/+100	24546	C4-1/8-T0-5621-F
A11R78	0757-0200	7		RESISTOR 5.62K 1% .125W F TC=0/+100	24546	C4-1/8-T0-5621-F
A11R79	0698-3382	6	1	RESISTOR 5.49K 1% .125W F TC=0/+100	24546	C4-1/8-T0-5491-F
A11R80	0683-1045	3		RESISTOR 100K 5% .25W FC TC=400/+800	01121	CB1045

See Section VI for ordering information  
 \*Indicates factory selected value

Table 7-2. Δ2 Replaceable Parts, IF Filter Circuits (Cont'd).

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
A11R81	0683-1015	7	5	RESISTOR 100 5% .25W FC TC=400/+500	01121	CB1015
A11R82	0683-5125	8		RESISTOR 5.1K 5% .25W FC TC=400/+700	01121	CB5125
A11R83	0683-1015	7		RESISTOR 100 5% .25W FC TC=400/+500	01121	CB1015
A11R84	0683-2025	1		RESISTOR 2K 5% .25W FC TC=400/+700	01121	CB2025
A11R85	0683-1035	1		RESISTOR 10K 5% .25W FC TC=400/+700	01121	CB1035
A11R86	0683-1025	9	9	RESISTOR 1K 5% .25W FC TC=400/+600	01121	CB1025
A11R87	0683-1025	9		RESISTOR 1K 5% .25W FC TC=400/+600	01121	CB1025
A11R88	0683-1025	9		RESISTOR 1K 5% .25W FC TC=400/+600	01121	CB1025
A11R89	0683-1025	9		RESISTOR 1K 5% .25W FC TC=400/+600	01121	CB1025
A11R90	0683-1025	9		RESISTOR 1K 5% .25W FC TC=400/+600	01121	CB1025
A11R91	0683-1025	9	9	RESISTOR 1K 5% .25W FC TC=400/+600	01121	CB1025
A11R92	0683-1025	9		RESISTOR 1K 5% .25W FC TC=400/+600	01121	CB1025
A11R93	0683-1025	9		RESISTOR 1K 5% .25W FC TC=400/+600	01121	CB1025
A11R94	0683-1025	9		RESISTOR 1K 5% .25W FC TC=400/+600	01121	CB1025
A11R95	0683-4705	8		RESISTOR 47 5% .25W FC TC=400/+500	01121	CB4705
A11R96*	0698-3262	1	5	RESISTOR 40.2 1% .125W F TC=0/+100	24546	C4=1/8-T0-4022-F
A11R96*	0698-4387	3		RESISTOR 60.4 1% .125W F TC=0/+100	24546	C4=1/8-T0-60R4-F
A11R96*	0757-0277	A		RESISTOR 49.9 1% .125W F TC=0/+100	24546	C4=1/8-T0-4992-F
A11R96*	0757-0346	2		RESISTOR 10 1% .125W F TC=0/+100	24546	C4=1/8-T0-10R0-F
A11R96*	0757-0384	2		RESISTOR 20 1% .125W F TC=0/+100	19701	MF4C1/8-T0-20R0-F
A11R96*	0757-0388	2	RESISTOR 30.1 1% .125W F TC=0/+100	24546	C4=1/8-T0-30R1-F	
A11R97*	0698-3262	1	3	RESISTOR 40.2 1% .125W F TC=0/+100	24546	C4=1/8-T0-4022-F
A11R97*	0698-4387	3		RESISTOR 60.4 1% .125W F TC=0/+100	24546	C4=1/8-T0-60R4-F
A11R97*	0757-0277	8		RESISTOR 49.9 1% .125W F TC=0/+100	24546	C4=1/8-T0-4992-F
A11R97*	0757-0346	2		RESISTOR 10 1% .125W F TC=0/+100	24546	C4=1/8-T0-10R0-F
A11R97*	0757-0384	A		RESISTOR 20 1% .125W F TC=0/+100	19701	MF4C1/8-T0-20R0-F
A11R97*	0757-0388	2	RESISTOR 30.1 1% .125W F TC=0/+100	24546	C4=1/8-T0-30R1-F	
A11R98	0698-4467	0	1	RESISTOR 1.05K 1% .125W F TC=0/+100	24546	C4=1/8-T0-1051-F
A11R99	0698-4471	6		RESISTOR 7.15K 1% .125W F TC=0/+100	24546	C4=1/8-T0-7151-F
A11R100	0683-4705	8		RESISTOR 47 5% .25W FC TC=400/+500	01121	CB4705
A11R101	0757-0283	6		RESISTOR 2K 1% .125W F TC=0/+100	24546	C4=1/8-T0-2001-F
A11R102	0683-5125	A		RESISTOR 5.1K 5% .25W FC TC=400/+700	01121	CB5125
A11R103	0683-3025	3	2	RESISTOR 3K 5% .25W FC TC=400/+700	01121	CB3025
A11R104	0683-1525	1		RESISTOR 1.5K 5% .25W FC TC=400/+700	01121	CB1525
A11R105	2100-3207	4		RESISTOR-TMR 5K 10% C SIDE=ADJ 1=TRN	28480	2100-3207
A11R106	0757-0439	A		RESISTOR 6.81K 1% .125W F TC=0/+100	24546	C4=1/8-T0-6811-F
A11R107	0683-4705	8		RESISTOR 47 5% .25W FC TC=400/+500	01121	CB4705
A11R108	0683-1015	7	7	RESISTOR 100 5% .25W FC TC=400/+500	01121	CB1015
A11R109	0683-4705	A		RESISTOR 47 5% .25W FC TC=400/+500	01121	CB4705
A11R110	0683-1015	7		RESISTOR 100 5% .25W FC TC=400/+500	01121	CB1015
A11R111	0683-1015	7		RESISTOR 100 5% .25W FC TC=400/+500	01121	CB1015
A11R112	0683-1015	7		RESISTOR 100 5% .25W FC TC=400/+500	01121	CB1015
A11R113	0683-1025	9	1	RESISTOR 1K 5% .25W FC TC=400/+600	01121	CB1025
A11R114	0757-0406	3		RESISTOR 15K 1% .125W F TC=0/+100	24546	C4=1/8-T0-1502-F
A11RT1	0837-0086	7	7	THERMISTOR DISC 200-OHM TC=-.4%/C-DEG	28480	0837-0086
A11RT2	0837-0086	6		THERMISTOR DISC 200-OHM TC=-.4%/C-DEG	28480	0837-0086
A11RT3	0837-0085	1		THERMISTOR ROD 600-OHM TC=+.7%/C-DEG	28480	0837-0085
A11RT4	0837-0119	7		THERMISTOR ROD 5K-OHM TC=+.7%/C-DEG	28480	0837-0119
A11T1	9100-3262	5	5	TRANSFORMER TRANSFORMER; TOROIDAL PULSE	28480	9100-3262
A11T2	9100-3262	5		TRANSFORMER TRANSFORMER; TOROIDAL PULSE	28480	9100-3262
A11U1	1820-1196	A	9	IC FF TTL LS D-TYPE POS-EDGE-TRIG COM	01295	8N74LS174N
A11U2	1826-0510	0		IC SWITCH ANLG QUAD 16-DIP-P	27014	LF13332N
A11U3	1826-0510	0		IC SWITCH ANLG QUAD 16-DIP-P	27014	LF13332N
A11U4	1826-0510	0		IC SWITCH ANLG QUAD 16-DIP-P	27014	LF13332N
A11U5	1826-0510	0		IC SWITCH ANLG QUAD 16-DIP-P	27014	LF13332N
A11U6	1826-0510	0	3	IC SWITCH ANLG QUAD 16-DIP-P	27014	LF13332N
A11U7	1820-1216	3		IC DCDP TTL LS 3-T0-R-LINE 3-INP	01295	8N74LS138N
A11U8	1820-1195	7		IC FF TTL LS D-TYPE POS-EDGE-TRIG COM	01295	8N74LS175N
A11U9	1820-1196	R		IC FF TTL LS D-TYPE POS-EDGE-TRIG COM	01295	8N74LS174N
A11Y1			1	PART OF MATCHED SET		
A11Y2				PART OF MATCHED SET		
A11Y1-5	03585-82501	6		CRYSTALS, IF FILTER (MATCHED SET OF 5)	28480	03585-82501
				A11 MISCELLANEOUS PARTS		
	1400-0249	0		5	CARLE TIE .062-.625-DIA .091-WD NYL	28480
	1480-0116	9	6	PIN-GRV .062-IN-DIA .25-IN-LG STL	28480	1480-0116
	0403-0211	1	8	EXTR-PC BD BRN POLYC .062-BD-TMKN8	28480	0403-0211
	0360-1653	5	20	CONNECTOR-SGL CONT PIN .045-IN-BSC-SZ 50	28480	0360-1653
A12	03585-66512	5	1	IF GAIN BOARD	28480	03585-66512
A12C1	0180-1974	1	4	CAPACITOR-FXD 100F+/-10% 35VDC TA	56289	150D106X9035R2
A12C2	0180-1974	1		CAPACITOR-FXD 100F+/-10% 35VDC TA	56289	150D106X9035R2
A12C3	0180-0229	7		CAPACITOR-FXD 33UF+/-10% 10VDC TA	56289	150D336X9010R2
A12C4	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A12C5	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z

See Section VI for ordering information  
 \*Indicates factory selected value



Table 7-2. Δ2 Replaceable Parts, IF Filter Circuits (Cont'd).

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
A12C6	0160-3622	B		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A12C7	0160-3622	B		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A12C8	0140-0184	9		CAPACITOR-FXD 8200PF +1% 100VDC MICA	72136	DM20F822F0100AV1CR
A12C9	0160-3622	B		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A12C10	0160-3622	B		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A12C11	0160-3622	B		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A12C12	0160-3622	B		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A12C13	0160-3622	B		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A12C14	0160-3622	B		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A12C15	0160-3622	B		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A12C16	0160-3622	B		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A12C17	0160-3622	B		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A12C18	0160-3622	B		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A12C19	0160-3622	B		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A12C20	0160-3622	B		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A12C21	0140-0196	3		CAPACITOR-FXD 150PF +5% 300VDC MICA	72136	DM15F151J0300AV1CR
A12C22	0121-0142	3		CAPACITOR-V TRMR-MICA 16-150PF 175V	72136	Y1417-5 REV. B
A12C23	0160-0376	3		CAPACITOR-FXD 68PF +5% 500VDC MICA	28480	0160-0376
A12C24	0121-0131	6		CAPACITOR-V TRMR-AIR 1.2-4.2PF 350V	74970	189-0501-005
A12C25	0160-3622	B		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A12C26	0160-3622	B		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A12C27	0160-3622	B		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A12C28	0160-3622	B		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A12C29	0160-0127	2		CAPACITOR-FXD .1UF +20% 25VDC CER	28480	0160-0127
A12C30	0160-3622	B		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A12C31	0160-3622	B		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A12C32	0160-3622	B		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A12C33	0160-3622	B		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A12C34	0160-3622	B		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A12C36	0160-3622	B		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A12C37	0160-3622	B		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A12C38	0160-3622	B		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A12C39	0160-3622	B		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A12C41	0160-3622	B		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A12C42	0160-3622	B		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A12C43	0160-3622	B		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A12C44	0140-0194	5		CAPACITOR-FXD 200PF +5% 300VDC MICA	72136	DM15F201J0300AV1CR
A12C46	0160-3622	B		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A12C47	0160-3622	B		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A12C48	0160-3622	B		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A12C49	0160-3622	B		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A12C50	0160-3622	B		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A12C51	0160-3622	B		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A12C52	0160-3622	B		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A12C53	0160-3622	B		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A12C54	0160-3622	B		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A12C55	0160-2253	9		CAPACITOR-FXD 6.8PF +-.25PF 500VDC CER	28480	0160-2253
A12C56	0160-3622	B		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A12C57	0160-3622	B		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A12C58	0160-3622	B		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A12C59	0160-3622	B		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A12C60	0160-3622	B		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A12C61	0160-3622	B		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A12C62	0160-3622	B		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A12C63	0160-3622	B		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A12C64	0160-3622	B		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A12C65	0160-3622	B		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A12C66	0160-3622	B		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A12C67	0160-3622	B		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A12C68	0160-3622	B		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A12C69	0160-3622	B		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A12C70	0160-3622	B		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A12C71	0160-3622	B		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A12C72	0160-3622	B		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A12C73	0160-3622	B		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A12C74	0160-3622	B		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A12C75	0160-3622	B		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A12C76	0160-3622	B		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A12C77	0160-3622	B		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A12C78	0160-3622	B		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A12C79	0160-3622	B		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A12C80	0160-3622	B		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A12C81	0160-3622	B		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A12C82	0160-3622	B		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A12C83*	0160-2247	1		CAPACITOR-FXD 3.9PF +-.25PF 500VDC CER	28480	0160-2247
A12C83*	0160-2250	6		CAPACITOR-FXD 5.1PF +-.25PF 500VDC CER	28480	0160-2250

See Section VI for ordering information

\*Indicates factory selected value

Table 7-2.  $\Delta 2$  Replaceable Parts, IF Filter Circuits (Cont'd).

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
A12C84	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A12CR1	1901-0376	6		DIODE-GEN PRP 35V 50MA DO-35	28480	1901-0376
A12CR2	1901-0376	6		DIODE-GEN PRP 35V 50MA DO-35	28480	1901-0376
A12CR3	1901-0376	6		DIODE-GEN PRP 35V 50MA DO-35	28480	1901-0376
A12CR4	1901-0376	6		DIODE-GEN PRP 35V 50MA DO-35	28480	1901-0376
A12CR5	1901-0376	6		DIODE-GEN PRP 35V 50MA DO-35	28480	1901-0376
A12CR6	1901-0376	6		DIODE-GEN PRP 35V 50MA DO-35	28480	1901-0376
A12CR7	1901-0376	6		DIODE-GEN PRP 35V 50MA DO-35	28480	1901-0376
A12CR8	1902-3149	9		DIODE-GEN PRP 9.09V 5% DO-7 PD=.4W TC=+.057X	28480	1902-3149
A12CR9	1901-0518	8		DIODE-SCHOTTKY	28480	1901-0518
A12CR10	1901-0518	8		DIODE-SCHOTTKY	28480	1901-0518
A12CR11	1901-0050	3	0	DIODE-SWITCHING RAV 200MA 2NS DO-35	28480	1901-0050
A12CR12	1901-0050	3	0	DIODE-SWITCHING RAV 200MA 2NS DO-35	28480	1901-0050
A12CR13	1901-0050	3	0	DIODE-SWITCHING RAV 200MA 2NS DO-35	28480	1901-0050
A12CR14	1901-0050	3	0	DIODE-SWITCHING RAV 200MA 2NS DO-35	28480	1901-0050
A12HU2	1205-0011	0	4	HEAT SINK TO-5/T0-39-CS	28480	1205-0011
A12HU7	1205-0011	0	0	HEAT SINK TO-5/T0-39-CS	28480	1205-0011
A12HUA	1205-0011	0	0	HEAT SINK TO-5/T0-39-CS	28480	1205-0011
A12HUB	1205-0011	0	0	HEAT SINK TO-5/T0-39-CS	28480	1205-0011
A12J1	1251-4822	6		CONNECTOR 3-PIN M POST TYPE	28480	1251-4822
A12J2	1251-4822	6	10	CONNECTOR 3-PIN M POST TYPE	28480	1251-4822
A12L1	9100-0541	7	6	COIL-MLO 250UH 10% Q#3 .25DX,5LG-NOM	28480	9100-0541
A12L2	9100-0541	7	6	COIL-MLO 250UH 10% Q#3 .25DX,5LG-NOM	28480	9100-0541
A12L3	9100-0541	7	6	COIL-MLO 250UH 10% Q#3 .25DX,5LG-NOM	28480	9100-0541
A12L4	9140-0287	2		COIL-VAR 920UH-1.08MH Q#300 PC-MTG	28480	9140-0287
A12L5	9140-0289	4		COIL-VAR 23UH-27UH Q#200 PC-MTG	28480	9140-0289
A12L6	9100-0543	9		COIL-VAR 900UH-1.1MH Q#112 PC-MTG	28480	9100-0543
A12Q1	1854-0071	7		TRANSISTOR NPN SI PD=300MW FT=200MHZ	28480	1854-0071
A12Q2	1853-0010	2		TRANSISTOR PNP SI TO-18 PD=300MW	28480	1853-0010
A12Q3	1854-0071	7		TRANSISTOR NPN SI PD=300MW FT=200MHZ	28480	1854-0071
A12Q4	1854-0071	7		TRANSISTOR NPN SI PD=300MW FT=200MHZ	28480	1854-0071
A12Q5	1854-0071	7		TRANSISTOR NPN SI PD=300MW FT=200MHZ	28480	1854-0071
A12Q6	1854-0071	7		TRANSISTOR NPN SI PD=300MW FT=200MHZ	28480	1854-0071
A12R1	0699-0164	8	2	RESISTOR 738.5 1% .125W F TC=0+25	28480	0699-0164
A12R2	0699-0163	2	2	RESISTOR 466 1% .125W F TC=0+25	28480	0699-0163
A12R3	0698-4499	6	2	RESISTOR 294 1% .125W F TC=0+25	28480	0698-4499
A12R4	0699-0162	6	2	RESISTOR 502.7 1% .125W F TC=0+25	28480	0699-0162
A12R5	0757-0421	4	1	RESISTOR 825 1% .125W F TC=0+100	24546	C4-1/8-T0-825R-F
A12R7	0757-0426	9		RESISTOR 1.3K 1% .125W F TC=0+100	24546	C4-1/8-T0-1301-F
A12R8	0683-1015	7		RESISTOR 100 5% .25W FC TC=400/+500	01121	CR1015
A12R9	0683-1015	7		RESISTOR 100 5% .25W FC TC=400/+500	01121	CR1015
A12R10	0683-2035	3		RESISTOR 20K 5% .25W FC TC=400/+800	01121	CR2035
A12R11	0683-2035	3		RESISTOR 20K 5% .25W FC TC=400/+800	01121	CR2035
A12R12	0698-3518	0		RESISTOR 7.32K 1% .125W F TC=0+100	24546	C4-1/8-T0-7321-F
A12R13	0757-0279	0		RESISTOR 3.16K 1% .125W F TC=0+100	24546	C4-1/8-T0-3161-F
A12R14	0698-4451	2		RESISTOR 340 1% .125W F TC=0+100	24546	C4-1/8-T0-340R-F
A12R15	2100-2497	9		RESISTOR-TRM 2K 10% C TOP-ADJ 1-TRN	73138	R2PR2K
A12R16	0757-0293	6		RESISTOR 2K 1% .125W F TC=0+100	24546	C4-1/8-T0-2001-F
A12R17	0683-3325	6		RESISTOR 3.3K 5% .25W FC TC=400/+700	01121	CR3325
A12R18	0683-1015	7		RESISTOR 100 5% .25W FC TC=400/+500	01121	CR1015
A12R19	0683-1015	7		RESISTOR 100 5% .25W FC TC=400/+500	01121	CR1015
A12R20	0698-4393	1	1	RESISTOR 73.2 1% .125W F TC=0+100	24546	C4-1/8-T0-73R2-F
A12R21	0698-3439	4	1	RESISTOR 178 1% .125W F TC=0+100	24546	C4-1/8-T0-178R-F
A12R24	0757-0402	9		RESISTOR 10K 1% .125W F TC=0+100	24546	C4-1/8-T0-1002-F
A12R25	0757-0281	4	1	RESISTOR 2.74K 1% .125W F TC=0+100	24546	C4-1/8-T0-2741-F
A12R26	0698-3150	6	1	RESISTOR 2.37K 1% .125W F TC=0+100	24546	C4-1/8-T0-2371-F
A12R27	0757-0428	1		RESISTOR 1.62K 1% .125W F TC=0+100	24546	C4-1/8-T0-1621-F
A12R28	0683-1335	4	1	RESISTOR 13K 5% .25W FC TC=400/+800	01121	CR1335
A12R29	0683-4325	8	2	RESISTOR 4.3K 5% .25W FC TC=400/+700	01121	CR4325
A12R30	0683-2425	5	3	RESISTOR 2.4K 5% .25W FC TC=400/+700	01121	CR2425
A12R31	0683-2425	5	3	RESISTOR 2.4K 5% .25W FC TC=400/+700	01121	CR2425
A12R32	0683-2035	3		RESISTOR 20K 5% .25W FC TC=400/+800	01121	CR2035
A12R33	0683-4325	8		RESISTOR 4.3K 5% .25W FC TC=400/+700	01121	CR4325
A12R34	0683-1225	1		RESISTOR 1.2K 5% .25W FC TC=400/+700	01121	CR1225
A12R35	0683-3025	3		RESISTOR 3K 5% .25W FC TC=400/+700	01121	CR3025
A12R36	0683-1015	7		RESISTOR 100 5% .25W FC TC=400/+500	01121	CR1015
A12R37	0683-1235	3		RESISTOR 12K 5% .25W FC TC=400/+800	01121	CR1235
A12R38*	0698-4451	5		RESISTOR 86.6K 1% .125W F TC=0+100	24546	C4-1/8-T0-8662-F
A12R38*	0757-0464	5		RESISTOR 90.9K 1% .125W F TC=0+100	24546	C4-1/8-T0-9092-F
A12R38*	0757-0978	6		RESISTOR 95.3K 1% .125W F TC=0+100	24546	C4-1/8-T0-9532-F

See Section VI for ordering information  
 \*Indicates factory selected value

Table 7-2.  $\Delta 2$  Replaceable Parts, IF Filter Circuits (Cont'd).

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
A12R39*	0698-3161	9	1	RESISTOR 38.3K 1% .125W F TC=0/+100	24546	C4-1/8-T0-3832-F
A12R39*	0698-0492	1	1	RESISTOR 32.4K 1% .125W F TC=0/+100	24546	C4-1/8-T0-3242-F
A12R39*	0698-4493	7	1	RESISTOR 34K 1% .125W F TC=0/+100	24546	C4-1/8-T0-3402-F
A12R40*	0757-0455	4	1	RESISTOR 36.5K 1% .125W F TC=0/+100	24546	C4-1/8-T0-3652-F
A12R40*	0698-4470	5	1	RESISTOR 6.98K 1% .125W F TC=0/+100	24546	C4-1/8-T0-6981-F
A12R40*	0757-0460	7	1	RESISTOR 7.5K 1% .125W F TC=0/+100	24546	C4-1/8-T0-7501-F
A12R40*	0757-0491	8	1	RESISTOR 8.25K 1% .125W F TC=0/+100	24546	C4-1/8-T0-8251-F
A12R41*	0698-4432	9	1	RESISTOR 2.1K 1% .125W F TC=0/+100	24546	C4-1/8-T0-2101-F
A12R41*	0698-4433	0	1	RESISTOR 2.26K 1% .125W F TC=0/+100	24546	C4-1/8-T0-2261-F
A12R41*	0757-0293	6	1	RESISTOR 2K 1% .125W F TC=0/+100	24546	C4-1/8-T0-2001-F
A12R41*	0757-0431	6	1	RESISTOR 2.43K 1% .125W F TC=0/+100	24546	C4-1/8-T0-2431-F
A12R42*	0698-0082	7	1	RESISTOR 464 1% .125W F TC=0/+100	24546	C4-1/8-T0-4640-F
A12R42*	0698-3178	8	1	RESISTOR 487 1% .125W F TC=0/+100	24546	C4-1/8-T0-487R-F
A12R42*	0698-3447	4	1	RESISTOR 422 1% .125W F TC=0/+100	24546	C4-1/8-T0-422R-F
A12R42*	0698-3488	3	1	RESISTOR 402 1% .125W F TC=0/+100	24546	C4-1/8-T0-402R-F
A12R42*	0698-4453	4	1	RESISTOR 402 1% .125W F TC=0/+100	24546	C4-1/8-T0-402R-F
A12R43	0693-2025	1	1	RESISTOR 2K 5% .25W FC TC=400/+700	01121	CB2025
A12R44	0693-2025	1	1	RESISTOR 2K 5% .25W FC TC=400/+700	01121	CB2025
A12R45	0693-3625	1	3	RESISTOR 3.6K 5% .25W FC TC=400/+700	01121	CB3625
A12R46	0693-0225	1	3	RESISTOR 6.2K 5% .25W FC TC=400/+700	01121	CB6225
A12R47	0693-1045	3	3	RESISTOR 100K 5% .25W FC TC=400/+800	01121	CB1045
A12R48	0693-1045	3	3	RESISTOR 100K 5% .25W FC TC=400/+800	01121	CB1045
A12R49	0693-1045	3	3	RESISTOR 100K 5% .25W FC TC=400/+800	01121	CB1045
A12R50	0693-1045	3	3	RESISTOR 100K 5% .25W FC TC=400/+800	01121	CB1045
A12R51	0693-1015	7	1	RESISTOR 100 5% .25W FC TC=400/+500	01121	CB1015
A12R52*	0698-3262	1	1	RESISTOR 40.2 1% .125W F TC=0/+100	24546	C4-1/8-T0-4022-F
A12R52*	0698-4387	3	1	RESISTOR 60.4 1% .125W F TC=0/+100	24546	C4-1/8-T0-604R-F
A12R52*	0757-0277	2	1	RESISTOR 49.9 1% .125W F TC=0/+100	24546	C4-1/8-T0-4992-F
A12R52*	0757-0346	8	1	RESISTOR 10 1% .125W F TC=0/+100	24546	C4-1/8-T0-10R-F
A12R52*	0757-0384	8	1	RESISTOR 20 1% .125W F TC=0/+100	19701	MF4C1/8-T0-20R-F
A12R52*	0757-0388	2	1	RESISTOR 30.1 1% .125W F TC=0/+100	24546	C4-1/8-T0-301R-F
A12R53	0693-2035	3	1	RESISTOR 20K 5% .25W FC TC=400/+800	01121	CB2035
A12R54	0693-0705	8	1	RESISTOR 47 5% .25W FC TC=400/+500	01121	CB4705
A12R55	0693-1035	1	1	RESISTOR 10K 5% .25W FC TC=400/+700	01121	CB1035
A12R56	0693-1015	7	1	RESISTOR 100 5% .25W FC TC=400/+500	01121	CB1015
A12R57	0693-1015	7	1	RESISTOR 100 5% .25W FC TC=400/+500	01121	CB1015
A12R58	0693-1015	7	1	RESISTOR 100 5% .25W FC TC=400/+500	01121	CB1015
A12R59	0698-3492	9	1	RESISTOR 2.67K 1% .125W F TC=0/+100	24546	C4-1/8-T0-2671-F
A12R60	0693-1045	3	1	RESISTOR 100K 5% .25W FC TC=400/+800	01121	CB1045
A12R61	0693-5125	8	1	RESISTOR 5.1K 5% .25W FC TC=400/+700	01121	CB5125
A12R62	0693-1015	7	1	RESISTOR 100 5% .25W FC TC=400/+500	01121	CB1015
A12R63	0693-1015	5	1	RESISTOR 100 5% .25W FC TC=400/+500	01121	CB1015
A12R64	0698-4446	7	3	RESISTOR 267 1% .125W F TC=0/+100	24546	C4-1/8-T0-267R-F
A12R65	2100-3349	2	3	RESISTOR TRMP 100 10% C SIDE=ADJ 1-TRN	28480	2100-3349
A12R66	0698-4427	2	3	RESISTOR 1.65K 1% .125W F TC=0/+100	24546	C4-1/8-T0-1651-F
A12R67	0693-2035	3	3	RESISTOR 20K 5% .25W FC TC=400/+800	01121	CB2035
A12R68	0693-1015	7	1	RESISTOR 100 5% .25W FC TC=400/+500	01121	CB1015
A12R69	0693-1015	7	1	RESISTOR 100 5% .25W FC TC=400/+500	01121	CB1015
A12R70	0698-4446	5	1	RESISTOR 267 1% .125W F TC=0/+100	24546	C4-1/8-T0-267R-F
A12R71	2100-3349	2	1	RESISTOR TRMP 100 10% C SIDE=ADJ 1-TRN	28480	2100-3349
A12R72	0698-4427	2	1	RESISTOR 1.65K 1% .125W F TC=0/+100	24546	C4-1/8-T0-1651-F
A12R73	0693-2035	3	1	RESISTOR 20K 5% .25W FC TC=400/+800	01121	CB2035
A12R74	0693-1015	7	1	RESISTOR 100 5% .25W FC TC=400/+500	01121	CB1015
A12R75	0693-1015	7	1	RESISTOR 100 5% .25W FC TC=400/+500	01121	CB1015
A12R76	0698-4446	5	1	RESISTOR 267 1% .125W F TC=0/+100	24546	C4-1/8-T0-267R-F
A12R77	2100-3349	2	1	RESISTOR TRMP 100 10% C SIDE=ADJ 1-TRN	28480	2100-3349
A12R78	0698-4427	2	1	RESISTOR 1.65K 1% .125W F TC=0/+100	24546	C4-1/8-T0-1651-F
A12R79	0693-2035	3	1	RESISTOR 20K 5% .25W FC TC=400/+800	01121	CB2035
A12R80	0693-1015	7	1	RESISTOR 100 5% .25W FC TC=400/+500	01121	CB1015
A12R81	0693-1015	7	1	RESISTOR 100 5% .25W FC TC=400/+500	01121	CB1015
A12R82	0693-2035	3	1	RESISTOR 20K 5% .25W FC TC=400/+800	01121	CB2035
A12R83	0693-2025	1	1	RESISTOR 2K 5% .25W FC TC=400/+700	01121	CB2025
A12R84	0693-1025	9	1	RESISTOR 1K 5% .25W FC TC=400/+600	01121	CB1025
A12R85	0698-4480	1	1	RESISTOR 19.1K 1% .125W F TC=0/+100	24546	C4-1/8-T0-1912-F
A12R86	0693-1025	9	1	RESISTOR 1K 5% .25W FC TC=400/+600	01121	CB1025
A12R87	0693-1025	9	1	RESISTOR 1K 5% .25W FC TC=400/+600	01121	CB1025
A12R88	0693-1025	9	1	RESISTOR 1K 5% .25W FC TC=400/+600	01121	CB1025
A12R89	0693-1025	9	1	RESISTOR 1K 5% .25W FC TC=400/+600	01121	CB1025
A12R90	0693-1025	9	1	RESISTOR 1K 5% .25W FC TC=400/+600	01121	CB1025
A12R91	0693-1025	9	1	RESISTOR 1K 5% .25W FC TC=400/+600	01121	CB1025
A12R92	0693-1025	9	1	RESISTOR 1K 5% .25W FC TC=400/+600	01121	CB1025
A12R93	0693-1025	9	1	RESISTOR 1K 5% .25W FC TC=400/+600	01121	CB1025
A12R94	0693-1025	9	1	RESISTOR 1K 5% .25W FC TC=400/+600	01121	CB1025
A12R95	0693-1025	9	1	RESISTOR 1K 5% .25W FC TC=400/+600	01121	CB1025
A12R96	0693-1015	7	1	RESISTOR 100 5% .25W FC TC=400/+500	01121	CB1015
A12R97	0693-1015	7	1	RESISTOR 100 5% .25W FC TC=400/+500	01121	CB1015

See Section VI for ordering information  
 \*Indicates factory selected value

Table 7-2. Δ2 Replaceable Parts, IF Filter Circuits (Cont'd).

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
A12R99	06A3-1045	3		RESISTOR 100K 5% .25W FC TC=400/+800	01121	CB1045
A12R99	06A3-5125	8		RESISTOR 5.1K 5% .25W FC TC=400/+700	01121	CB5125
A12P100	06A3-1015	7		RESISTOR 100 5% .25W FC TC=400/+500	01121	CB1015
A12R101	06A3-1025	9		RESISTOR 1K 5% .25W FC TC=400/+600	01121	CB1025
A12R102	06A3-1025	9		RESISTOR 1K 5% .25W FC TC=400/+600	01121	CB1025
A12R103	06A3-1025	9		RESISTOR 1K 5% .25W FC TC=400/+600	01121	CB1025
A12R104	06A3-1025	9		RESISTOR 1K 5% .25W FC TC=400/+600	01121	CB1025
A12R105	06A3-1025	9		RESISTOR 1K 5% .25W FC TC=400/+600	01121	CB1025
A12R106	06A3-1025	9		RESISTOR 1K 5% .25W FC TC=400/+600	01121	CB1025
A12R107	0757-0415	6	1	RESISTOR 475 1% .125W F TC=0/+100	24546	C4-1/A-T0-475R-F
A12R108	06A3-1035	1		RESISTOR 100 5% .25W FC TC=400/+700	01121	CB1035
A12R109	06A3-1015	7		RESISTOR 100 5% .25W FC TC=400/+500	01121	CB1015
A12R110	06A3-1015	7		RESISTOR 100 5% .25W FC TC=400/+500	01121	CB1015
A12R111	06A3-1015	7		RESISTOR 100 5% .25W FC TC=400/+500	01121	CB1015
A12R112	06A3-1015	7		RESISTOR 100 5% .25W FC TC=400/+500	01121	CB1015
A12R113	06A3-1015	7		RESISTOR 100 5% .25W FC TC=400/+500	01121	CB1015
A12R114	06A3-1015	7		RESISTOR 100 5% .25W FC TC=400/+500	01121	CB1015
A12R115	06A3-1015	7		RESISTOR 100 5% .25W FC TC=400/+500	01121	CB1015
A12R116	06A3-1015	7		RESISTOR 100 5% .25W FC TC=400/+500	01121	CB1015
A12R117	06A3-1015	7		RESISTOR 100 5% .25W FC TC=400/+500	01121	CB1015
A12R118	06A3-1015	7		RESISTOR 100 5% .25W FC TC=400/+500	01121	CB1015
A12R119	06A3-1015	7		RESISTOR 100 5% .25W FC TC=400/+500	01121	CB1015
A12R120	06A3-1015	7		RESISTOR 100 5% .25W FC TC=400/+500	01121	CB1015
A12R121	06A3-1015	7		RESISTOR 100 5% .25W FC TC=400/+500	01121	CB1015
A12R122	06A3-1015	7		RESISTOR 100 5% .25W FC TC=400/+500	01121	CB1015
A12RT1	0837-0086	7		THERMISTOR DISC 200-OHM TC=-0.4%/C-DEG	28480	0837-0086
A12RT2	0837-0086	7		THERMISTOR DISC 200-OHM TC=-0.4%/C-DEG	28480	0837-0086
A12RT3	0837-0086	7		THERMISTOR DISC 200-OHM TC=-0.4%/C-DEG	28480	0837-0086
A12T1	9100-3262	5		TRANSFORMER TRANSFORMER; TOROIDAL PULSE	28480	9100-3262
A12U1	1826-0510	0	1	IC SWITCH ANLG QUAD 16-DIP-P	27014	LF13332N
A12U2	1826-0089	0	8	IC OP AMP WR TR-99	29A32	1322
A12U3	1826-0510	0	8	IC SWITCH ANLG QUAD 16-DIP-P	27014	LF13332N
A12U4	1826-0510	0	0	IC SWITCH ANLG QUAD 16-DIP-P	27014	LF13332N
A12U5	1826-0510	0	0	IC SWITCH ANLG QUAD 16-DIP-P	27014	LF13332N
A12U6	1826-0510	0	3	IC SWITCH ANLG QUAD 16-DIP-P	27014	LF13332N
A12U7	1826-0109	3	3	IC OP AMP WB TR-99	34371	HA2-2625-B0593
A12U8	1826-0109	3	3	IC OP AMP WB TR-99	34371	HA2-2625-B0593
A12U9	1826-0109	3	3	IC OP AMP WR TR-99	34371	HA2-2625-B0593
A12U10	1826-0510	0	0	IC SWITCH ANLG QUAD 16-DIP-P	27014	LF13332N
A12U11	1826-0510	0		IC SWITCH ANLG QUAD 16-DIP-P	27014	LF13332N
A12U12	1820-1196	8		IC FF TTL LS D-TYPE POS-EDGE-TRIG COM	01295	8N74LS174N
A12U13	1820-1196	8		IC FF TTL LS D-TYPE POS-EDGE-TRIG COM	01295	8N74LS174N
A12U14	1820-1196	8		IC FF TTL LS D-TYPE POS-EDGE-TRIG COM	01295	8N74LS174N
A12U15	1820-1196	8		IC FF TTL LS D-TYPE POS-EDGE-TRIG COM	01295	8N74LS174N
A12U16	1820-1195	7		IC FF TTL LS D-TYPE POS-EDGE-TRIG COM	01295	8N74LS175N
A12U17	1820-1216	3		IC DCDR TTL LS 3-TO-A-LINE 3-IMP	01295	8N74LS138N
A12Y1				NOT ASSIGNED		
A12Y2				NOT ASSIGNED		
A12Y3				PART OF MATCHED SET (SEE ALL PARTS LIST)		
				A12 MISCELLANEOUS PARTS		
	1480-0116	8		PIN-GRV .062-IN-DIA .25-IN-LG STL	28480	1480-0116
	0403-0211	1		EXTR-PC RD BRN POLYC .062-80-THKNS	28480	0403-0211
	0403-0212	2	1	EXTR-PC RD RED POLYC .062-80-THKNS	28480	0403-0212
	0360-1653	5		CONNECTOR-SGL CONT PIN .045-IN-BSC-SZ 50	28480	0360-1653
	6960-0080	8	1	PLUG-HOLE FL-HD FOR .185-D-HOLE TFE	28480	6960-0080
	1400-0249	0		CABLE TIE .062-.625-DIA .091-WD NYL	28480	1400-0249
A13	03585-66513	6	1	FILTER BOARD NO. 2	28480	03585-66513
A13C1	0180-1974	1		CAPACITOR-FXD 100F+-10% 35VDC TA	26654	150D106X9035R2
A13C2	0180-1974	1		CAPACITOR-FXD 100F+-10% 35VDC TA	26654	150D106X9035R2
A13C3	0180-0229	7		CAPACITOR-FXD 330F+-10% 10VDC TA	26654	150D336X9010R2
A13C4	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A13C5	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A13C6	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A13C7	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A13C8	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A13C9	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A13C10	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A13C11	0190-0184	9		CAPACITOR-FXD 8200PF +-1% 100VDC MICA	72136	D420F822F0100V1CP
A13C12	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A13C13	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A13C14	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A13C15	0140-0184	9		CAPACITOR-FXD 8200PF +-1% 100VDC MICA	72136	D420F822F0100V1CP
A13C16	0160-3622	8		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z

See Section VI for ordering information  
 \*Indicates factory selected value

Table 7-2.  $\Delta 2$  Replaceable Parts, IF Filter Circuits (Cont'd).

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
A13C17	0160-3622	A		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A13C18	0160-3622	B		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A13C19	0160-3622	A		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A13C20	0160-3622	B		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A13C21	0160-3622	A		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A13C22	0160-3622	A		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A13C23	0160-3622	B		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A13C24	0160-3622	A		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A13C25	0160-3622	B		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A13C26	0160-3622	A		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A13C27	0140-0196	3		CAPACITOR-FXD 150PF +-5% 300VDC MICA	72136	DM15F151J0300AVICR
A13C28	0121-0142	9		CAPACITOR-V TRMR-MICA 16-150PF 175V	72136	T51417-5 REV. B
A13C29	0160-0376	3		CAPACITOR-FXD 68PF +-5% 500VDC MICA	28480	0160-0376
A13C30	0121-0131	6		CAPACITOR-V TRMR-A1R 1,2-4,2PF 350V	74970	189-0501-005
A13C31	0160-3622	B		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A13C32	0160-3622	B		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A13C33	0160-3622	B		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A13C34	0160-3622	A		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A13C35	0160-3622	B		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A13C36	0160-3622	A		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A13C37	0160-3622	B		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A13C38	0140-0196	3		CAPACITOR-FXD 150PF +-5% 300VDC MICA	72136	DM15F151J0300AVICR
A13C39	0121-0142	9		CAPACITOR-V TRMR-MICA 16-150PF 175V	72136	T51417-5 REV. B
A13C40	0160-0376	3		CAPACITOR-FXD 68PF +-5% 500VDC MICA	28480	0160-0376
A13C41	0121-0131	6		CAPACITOR-V TRMR-A1R 1,2-4,2PF 350V	74970	189-0501-005
A13C42	0160-3622	B		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A13C43	0160-3622	B		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A13C44	0160-3622	A		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A13C45	0160-3622	B		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A13C46	0160-3622	A		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A13C47	0160-3622	A		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A13C48	0160-3622	B		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A13C49	0160-3622	B		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A13C50	0160-3622	A		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A13C51	0160-3622	B		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A13C52	0160-3622	B		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A13C53	0160-3622	B		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A13C54	0160-3622	B		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A13C55	0160-3622	B		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A13C56	0160-3622	B		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A13C57	0160-3622	B		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A13C58	0160-3622	B		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A13C59	0160-3622	B		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A13C60	0160-3622	B		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A13C61	0160-3622	A		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A13C62	0160-3622	B		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A13C63	0160-3622	B		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A13C64	0160-3622	B		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A13C65	0160-3622	B		CAPACITOR-FXD .1UF +80-20% 100VDC CER	26654	2130Y5V100R104Z
A13C66*	0160-2247	1		CAPACITOR-FXD 3,9PF +-25PF 500VDC CER	28480	0160-2247
A13C66*	0160-2250	6		CAPACITOR-FXD 5,1PF +-25PF 500VDC CER	28480	0160-2250
A13C67*	0160-2247	1		CAPACITOR-FXD 3,9PF +-25PF 500VDC CER	28480	0160-2247
A13C67*	0160-2250	6		CAPACITOR-FXD 5,1PF +-25PF 500VDC CER	28480	0160-2250
A13CR1	1901-0376	6		DIODE-GEN PRP 35V 50MA DO-35	28480	1901-0376
A13CR2	1901-0376	B		DIODE-GEN PRP 35V 50MA DO-35	28480	1901-0376
A13CR3	1901-0376	6		DIODE-GEN PRP 35V 50MA DO-35	28480	1901-0376
A13CR4	1901-0376	B		DIODE-GEN PRP 35V 50MA DO-35	28480	1901-0376
A13CR5	1901-0376	6		DIODE-GEN PRP 35V 50MA DO-35	28480	1901-0376
A13CR6	1901-0376	6		DIODE-GEN PRP 35V 50MA DO-35	28480	1901-0376
A13CR7	1901-0376	B		DIODE-GEN PRP 35V 50MA DO-35	28480	1901-0376
A13CR8	1901-0376	6		DIODE-GEN PRP 35V 50MA DO-35	28480	1901-0376
A13CR9	1901-0376	6		DIODE-GEN PRP 35V 50MA DO-35	28480	1901-0376
A13CR10	1901-0376	6		DIODE-GEN PRP 35V 50MA DO-35	28480	1901-0376
A13CR11	1902-3149	9		DIODE-ZNR 9,09V 5% DO-7 POW.4W TC+.057K	28480	1902-3149
A13CR12	1901-0376	6		DIODE-GEN PRP 35V 50MA DO-35	28480	1901-0376
A13CR13	1901-0376	6		DIODE-GEN PRP 35V 50MA DO-35	28480	1901-0376
A13CR14	1901-0376	6		DIODE-GEN PRP 35V 50MA DO-35	28480	1901-0376
A13CR15	1901-0376	6		DIODE-GEN PRP 35V 50MA DO-35	28480	1901-0376
A13CR16	1901-0518	8		DIODE-SCHOTTKY	28480	1901-0518
A13CR17	1901-0518	B		DIODE-SCHOTTKY	28480	1901-0518
A13J1	1251-4822	B		CONNECTOR 3-PIN M POST TYPE	28480	1251-4822
	1258-0141	R			28480	1258-0141
A13J2	1251-4822	B		CONNECTOR 3-PIN M POST TYPE	28480	1251-4822
	1258-0141	R			28480	1258-0141
A13J3	1251-4822	B		CONNECTOR 3-PIN M POST TYPE	28480	1251-4822
	1258-0141	R			28480	1258-0141

See Section VI for ordering information  
 \*Indicates factory selected value



Table 7-2.  $\Delta 2$  Replaceable Parts, IF Filter Circuits (Cont'd).

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
A13J4	1251-4A22 1256-0141	6 8		CONNECTOR 3-PIN M POST TYPE	28480 28480	1251-4A22 1256-0141
A13L1	9100-0541	7		COIL-MLD 250UH 10X Q#3 .25DX,5LG-NOM	28480	9100-0541
A13L2	9100-0541	7		COIL-MLD 250UH 10X Q#3 .25DX,5LG-NOM	28480	9100-0541
A13L3	9100-0541	7		COIL-MLD 250UH 10X Q#3 .25DX,5LG-NOM	28480	9100-0541
A13L4	9140-0289	4		COIL-VAR 23UH=27UH Q#200 PC-MTG	28480	9140-0289
A13L5	9140-0289	4		COIL-VAR 23UH=27UH Q#200 PC-MTG	28480	9140-0289
A13L6	9140-0287	2		COIL-VAR 920UH=1.08MH Q#300 PC-MTG	28480	9140-0287
A13L7	9140-0287	2		COIL-VAR 920UH=1.08MH Q#300 PC-MTG	28480	9140-0287
A13Q1	1854-0071	7		TRANSISTOR NPN SI PD#300MA FT#200MHZ	28480	1854-0071
A13Q2	1854-0071	7		TRANSISTOR NPN SI PD#300MA FT#200MHZ	28480	1854-0071
A13Q3	1854-0071	7		TRANSISTOR NPN SI PD#300MA FT#200MHZ	28480	1854-0071
A13Q4	1854-0071	7		TRANSISTOR NPN SI PD#300MA FT#200MHZ	28480	1854-0071
A13Q5	1853-0010	2		TRANSISTOR PNP SI TO-18 PD#360MA	28480	1853-0010
A13Q6	1854-0071	7		TRANSISTOR NPN SI PD#300MA FT#200MHZ	28480	1854-0071
A13Q7	1854-0071	7		TRANSISTOR NPN SI PD#300MA FT#200MHZ	28480	1854-0071
A13Q8	1854-0071	7		TRANSISTOR NPN SI PD#300MA FT#200MHZ	28480	1854-0071
A13Q9	1854-0071	7		TRANSISTOR NPN SI PD#300MA FT#200MHZ	28480	1854-0071
A13Q10	1855-0081	1	1	TRANSISTOR J-FET N-CHAN D-MODE SI	01295	2N5245
A13R1	06A3-1025	9		RESISTOR 1K 5% .25W FC TC#-400/+600	01121	CR1025
A13R2	06A3-1025	9		RESISTOR 1K 5% .25W FC TC#-400/+600	01121	CR1025
A13R3	06A3-1025	9		RESISTOR 1K 5% .25W FC TC#-400/+600	01121	CR1025
A13R4	06A3-1025	9		RESISTOR 1K 5% .25W FC TC#-400/+600	01121	CR1025
A13R5	06A3-5625	3	1	RESISTOR 5.6K 5% .25W FC TC#-400/+700	01121	CR5625
A13R6	0699-0164	8		RESISTOR 738.5 1% .125W F TC#0+-25	28480	0699-0164
A13R7	0699-0163	7		RESISTOR 466.1 1% .125W F TC#0+-25	28480	0699-0163
A13R8	0698-0499	6		RESISTOR 294 1% .125W F TC#0+-25	28480	0698-0499
A13R9	0699-0162	6		RESISTOR 502.7 1% .125W F TC#0+-25	28480	0699-0162
A13R10	06A3-1025	9		RESISTOR 1K 5% .25W FC TC#-400/+600	01121	CR1025
A13R11	0683-4705	8		RESISTOR 47 5% .25W FC TC#-400/+500	01121	CR4705
A13R12	0683-1015	7		RESISTOR 100 5% .25W FC TC#-400/+500	01121	CR1015
A13R13	0757-0439	4		RESISTOR 6.81K 1% .125W F TC#0+-100	24546	C4-1/8-T0-6811-F
A13R14	0683-1015	7		RESISTOR 100 5% .25W FC TC#-400/+500	01121	CR1015
A13R15	0683-2035	3		RESISTOR 20K 5% .25W FC TC#-400/+600	01121	CR2035
A13R16	06A3-2035	3		RESISTOR 20K 5% .25W FC TC#-400/+600	01121	CR2035
A13R17	0698-351A	0		RESISTOR 7.32K 1% .125W F TC#0+-100	24546	C4-1/8-T0-7321-F
A13R18	0757-0279	0		RESISTOR 3.16K 1% .125W F TC#0+-100	24546	C4-1/8-T0-3161-F
A13R19	0698-4451	2		RESISTOR 340 1% .125W F TC#0+-100	24546	C4-1/8-T0-340R-F
A13R20	2100-2497	9		RESISTOR-TRMR 2K 10% C TOP=ADJ 1-TRN	73138	82PR2K
A13R21	0757-0283	6		RESISTOR 2K 1% .125W F TC#0+-100	24546	C4-1/8-T0-2001-F
A13R22	0683-3325	6		RESISTOR 3.3K 5% .25W FC TC#-400/+700	01121	CR3325
A13R23	0683-1015	7		RESISTOR 100 5% .25W FC TC#-400/+500	01121	CR1015
A13R24	0683-1015	7		RESISTOR 100 5% .25W FC TC#-400/+500	01121	CR1015
A13R25	0698-351A	0		RESISTOR 7.32K 1% .125W F TC#0+-100	24546	C4-1/8-T0-7321-F
A13R26	0698-3096	3		RESISTOR 3.57K 1% .125W F TC#0+-100	24546	C4-1/8-T0-357R-F
A13R27	0757-0416	3		RESISTOR 511 1% .125W F TC#0+-100	24546	C4-1/8-T0-511R-F
A13R28	2100-2497	9		RESISTOR-TRMR 2K 10% C TOP=ADJ 1-TRN	73138	82PR2K
A13R29	0757-0283	6		RESISTOR 2K 1% .125W F TC#0+-100	24546	C4-1/8-T0-2001-F
A13R30	0683-3325	6		RESISTOR 3.3K 5% .25W FC TC#-400/+700	01121	CR3325
A13R31	0683-1015	7		RESISTOR 100 5% .25W FC TC#-400/+500	01121	CR1015
A13R32	0698-355A	8	1	RESISTOR 4.02K 1% .125W F TC#0+-100	24546	C4-1/8-T0-4021-F
A13R33	0698-3540	8	1	RESISTOR 15.4K 1% .125W F TC#0+-100	24546	C4-1/8-T0-1542-F
A13R34	0698-4436	3	1	RESISTOR 2.8K 1% .125W F TC#0+-100	24546	C4-1/8-T0-2801-F
A13R35	06A3-3935	4	1	RESISTOR 39K 5% .25W FC TC#-400/+600	01121	CR3935
A13R36	06A3-1345	5	1	RESISTOR 130K 5% .25W FC TC#-800/+900	01121	CR1345
A13R37	0683-2035	6	1	RESISTOR 22K 5% .25W FC TC#-400/+600	01121	CR2235
A13R38	0683-2035	3		RESISTOR 20K 5% .25W FC TC#-400/+600	01121	CR2035
A13R39	0683-7525	6		RESISTOR 7.5K 5% .25W FC TC#-400/+700	01121	CR7525
A13R40	0683-2035	3		RESISTOR 20K 5% .25W FC TC#-400/+600	01121	CR2035
A13R41	06A3-3025	3		RESISTOR 3K 5% .25W FC TC#-400/+700	01121	CR3025
A13R42	0683-1015	7		RESISTOR 100 5% .25W FC TC#-400/+500	01121	CR1015
A13R43	06A3-1235	3		RESISTOR 12K 5% .25W FC TC#-400/+600	01121	CR1235
A13R44*	0698-4511	5		RESISTOR 86.6K 1% .125W F TC#0+-100	24546	C4-1/8-T0-8662-F
A13R44*	0757-0464	5		RESISTOR 90.9K 1% .125W F TC#0+-100	24546	C4-1/8-T0-9092-F
A13R44*	0757-0978	6		RESISTOR 95.3K 1% .125W F TC#0+-100	24546	C4-1/8-T0-9532-F
A13R45*	0698-3161	9		RESISTOR 38.3K 1% .125W F TC#0+-100	24546	C4-1/8-T0-3832-F
A13R45*	0698-4492	1		RESISTOR 32.4K 1% .125W F TC#0+-100	24546	C4-1/8-T0-3242-F
A13R45*	0698-4493	2		RESISTOR 34K 1% .125W F TC#0+-100	24546	C4-1/8-T0-3402-F
A13R45*	0757-0455	4		RESISTOR 36.5K 1% .125W F TC#0+-100	24546	C4-1/8-T0-3652-F
A13R46*	0698-4470	5		RESISTOR 6.98K 1% .125W F TC#0+-100	24546	C4-1/8-T0-6981-F
A13R46*	0757-0440	7		RESISTOR 7.5K 1% .125W F TC#0+-100	24546	C4-1/8-T0-7501-F
A13R46*	0757-0441	8		RESISTOR 8.25K 1% .125W F TC#0+-100	24546	C4-1/8-T0-8251-F
A13R47*	0698-4432	9		RESISTOR 2.1K 1% .125W F TC#0+-100	24546	C4-1/8-T0-2101-F
A13R47*	0698-4433	0		RESISTOR 2.26K 1% .125W F TC#0+-100	24546	C4-1/8-T0-2261-F
A13R47*	0757-0283	6		RESISTOR 2K 1% .125W F TC#0+-100	24546	C4-1/8-T0-2001-F
A13R47*	0757-0431	6		RESISTOR 2.43K 1% .125W F TC#0+-100	24546	C4-1/8-T0-2431-F
A13R48*	0698-3447	4		RESISTOR 422 1% .125W F TC#0+-100	24546	C4-1/8-T0-422R-F
A13R48*	0698-3988	3		RESISTOR 442 1% .125W F TC#0+-100	24546	C4-1/8-T0-442R-F
A13R48*	0698-4453	4		RESISTOR 402 1% .125W F TC#0+-100	24546	C4-1/8-T0-402R-F

See Section VI for ordering information  
 \*Indicates factory selected value

Table 7-2.  $\Delta 2$  Replaceable Parts, IF Filter Circuits (Cont'd).

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
A13R49	06A3-2025	1		RESISTOR 2K 5% .25W FC TC=400/+700	01121	CB2025
A13R50	06A3-2025	1		RESISTOR 2K 5% .25W FC TC=400/+700	01121	CB2025
A13R51	06A3-3625	9		RESISTOR 3.6K 5% .25W FC TC=400/+700	01121	CB3625
A13R52	06A3-6225	1		RESISTOR 6.2K 5% .25W FC TC=400/+700	01121	CB6225
A13R53	06A3-2025	5		RESISTOR 2.4K 5% .25W FC TC=400/+700	01121	CB2425
A13R54	06A3-5125	8		RESISTOR 5.1K 5% .25W FC TC=400/+700	01121	CB5125
A13R55	06A3-1015	1		RESISTOR 100 5% .25W FC TC=400/+500	01121	CB1015
A13R56	06A3-1035	1		RESISTOR 10K 5% .25W FC TC=400/+700	01121	CB1035
A13R57*	0698-4511	5		RESISTOR 86.6K 1% .125W F TC=0/+100	24546	C4-1/8-T0-8662-F
A13R57*	0757-0464	5		RESISTOR 90.9K 1% .125W F TC=0/+100	24546	C4-1/8-T0-9092-F
A13R57*	0757-0978	6		RESISTOR 95.3K 1% .125W F TC=0/+100	24546	C4-1/8-T0-9532-F
A13R58*	0698-3161	9		RESISTOR 38.3K 1% .125W F TC=0/+100	24546	C4-1/8-T0-3832-F
A13R58*	0698-0492	1		RESISTOR 32.4K 1% .125W F TC=0/+100	24546	C4-1/8-T0-3242-F
A13R58*	0698-4493	2		RESISTOR 34K 1% .125W F TC=0/+100	24546	C4-1/8-T0-3402-F
A13R58*	0757-0455	4		RESISTOR 36.5K 1% .125W F TC=0/+100	24546	C4-1/8-T0-3652-F
A13R59*	0698-4470	5		RESISTOR 6.98K 1% .125W F TC=0/+100	24546	C4-1/8-T0-6981-F
A13R59*	0757-0440	7		RESISTOR 7.5K 1% .125W F TC=0/+100	24546	C4-1/8-T0-7501-F
A13R59*	0757-0441	8		RESISTOR 8.25K 1% .125W F TC=0/+100	24546	C4-1/8-T0-8251-F
A13R60*	0698-4432	9		RESISTOR 2.1K 1% .125W F TC=0/+100	24546	C4-1/8-T0-2101-F
A13R60*	0698-4433	0		RESISTOR 2.26K 1% .125W F TC=0/+100	24546	C4-1/8-T0-2261-F
A13R60*	0757-0283	6		RESISTOR 2K 1% .125W F TC=0/+100	24546	C4-1/8-T0-2001-F
A13R60*	0757-0431	1		RESISTOR 2.43K 1% .125W F TC=0/+100	24546	C4-1/8-T0-2431-F
A13R61*	0698-3447	4		RESISTOR 422 1% .125W F TC=0/+100	24546	C4-1/8-T0-422R-F
A13R61*	0698-3448	3		RESISTOR 402 1% .125W F TC=0/+100	24546	C4-1/8-T0-422R-F
A13R61*	0698-4453	4		RESISTOR 402 1% .125W F TC=0/+100	24546	C4-1/8-T0-402R-F
A13R62	06A3-2025	1		RESISTOR 2K 5% .25W FC TC=400/+700	01121	CB2025
A13R63	06A3-2025	1		RESISTOR 2K 5% .25W FC TC=400/+700	01121	CB2025
A13R64	06A3-3625	9		RESISTOR 3.6K 5% .25W FC TC=400/+700	01121	CB3625
A13R65	06A3-6225	1		RESISTOR 6.2K 5% .25W FC TC=400/+700	01121	CB6225
A13R66	06A3-1045	3		RESISTOR 100K 5% .25W FC TC=400/+800	01121	CB1045
A13R67	06A3-1045	3		RESISTOR 100K 5% .25W FC TC=400/+800	01121	CB1045
A13R68	06A3-1045	3		RESISTOR 100K 5% .25W FC TC=400/+800	01121	CB1045
A13R69	06A3-1045	3		RESISTOR 100K 5% .25W FC TC=400/+800	01121	CB1045
A13R70	06A3-1015	7		RESISTOR 100 5% .25W FC TC=400/+500	01121	CB1015
A13R71	0698-4443	2		RESISTOR 4.53K 1% .125W F TC=0/+100	24546	C4-1/8-T0-4531-F
A13R72	06A3-1015	7		RESISTOR 100 5% .25W FC TC=400/+500	01121	CB1015
A13R73	06A3-1015	7		RESISTOR 100 5% .25W FC TC=400/+500	01121	CB1015
A13R74	06A3-1025	9		RESISTOR 1K 5% .25W FC TC=400/+600	01121	CB1025
A13R75	06A3-4745	6		RESISTOR 470K 5% .25W FC TC=400/+900	01121	CB4745
A13R76	06A3-3025	3		RESISTOR 3K 5% .25W FC TC=400/+700	01121	CB3025
A13R77	06A3-4715	0		RESISTOR 470 5% .25W FC TC=400/+600	01121	CB4715
A13R78	0757-0280	3		RESISTOR 1K 1% .125W F TC=0/+100	24546	C4-1/8-T0-1001-F
A13R79	06A3-6A25	7		RESISTOR 6.8K 5% .25W FC TC=400/+700	01121	CB6825
A13R80	06A3-1015	7		RESISTOR 100 5% .25W FC TC=400/+500	01121	CB1015
A13R81	06A3-1015	7		RESISTOR 100 5% .25W FC TC=400/+500	01121	CB1015
A13R82	06A3-2025	1		RESISTOR 2K 5% .25W FC TC=400/+700	01121	CB2025
A13R83	06A3-1835	9		RESISTOR 18K 5% .25W FC TC=400/+800	01121	CB1835
A13R84*	0698-3262	1		RESISTOR 40.2 1% .125W F TC=0/+100	24546	C4-1/8-T0-4022-F
A13R84*	0698-4367	3		RESISTOR 66.4 1% .125W F TC=0/+100	24546	C4-1/8-T0-66R4-F
A13R84*	0757-0277	2		RESISTOR 49.9 1% .125W F TC=0/+100	24546	C4-1/8-T0-4992-F
A13R84*	0757-0346	8		RESISTOR 10 1% .125W F TC=0/+100	24546	C4-1/8-T0-10R0-F
A13R84*	0757-0384	8		RESISTOR 20 1% .125W F TC=0/+100	19701	MF401/8-T0-20R0-F
A13R84*	0757-0388	2		RESISTOR 30.1 1% .125W F TC=0/+100	24546	C4-1/8-T0-30R1-F
A13R85	0698-3510	2		RESISTOR 453 1% .125W F TC=0/+100	24546	C4-1/8-T0-453R-F
A13R86*	0698-3262	1		RESISTOR 40.2 1% .125W F TC=0/+100	24546	C4-1/8-T0-4022-F
A13R86*	0698-4367	3		RESISTOR 66.4 1% .125W F TC=0/+100	24546	C4-1/8-T0-66R4-F
A13R86*	0757-0277	2		RESISTOR 49.9 1% .125W F TC=0/+100	24546	C4-1/8-T0-4992-F
A13R86*	0757-0346	8		RESISTOR 10 1% .125W F TC=0/+100	24546	C4-1/8-T0-10R0-F
A13R86*	0757-0384	2		RESISTOR 20 1% .125W F TC=0/+100	19701	MF401/8-T0-20R0-F
A13R86*	0757-0388	2		RESISTOR 30.1 1% .125W F TC=0/+100	24546	C4-1/8-T0-30R1-F
A13R87	0698-3510	2		RESISTOR 453 1% .125W F TC=0/+100	24546	C4-1/8-T0-453R-F
A13R88	06A3-1025	9		RESISTOR 1K 5% .25W FC TC=400/+600	01121	CB1025
A13R89	06A3-1025	9		RESISTOR 1K 5% .25W FC TC=400/+600	01121	CB1025
A13R90	06A3-1025	9		RESISTOR 1K 5% .25W FC TC=400/+600	01121	CB1025
A13R91	06A3-1025	9		RESISTOR 1K 5% .25W FC TC=400/+600	01121	CB1025
A13R92	06A3-1025	9		RESISTOR 1K 5% .25W FC TC=400/+600	01121	CB1025
A13R93	06A3-4705	8		RESISTOR 47 5% .25W FC TC=400/+500	01121	CB4705
A13R94	06A3-4705	8		RESISTOR 47 5% .25W FC TC=400/+500	01121	CB4705
A13R95	06A3-1015	7		RESISTOR 100 5% .25W FC TC=400/+500	01121	CB1015
A13R96	0757-0436	1		RESISTOR 4.32K 1% .125W F TC=0/+100	24546	C4-1/8-T0-4321-F
A13R97	0698-4464	7		RESISTOR 887 1% .125W F TC=0/+100	24546	C4-1/8-T0-887R-F
A13R98	06A3-1035	1		RESISTOR 10K 5% .25W FC TC=400/+700	01121	CB1035
A13R99	06A3-1015	7		RESISTOR 100 5% .25W FC TC=400/+500	01121	CB1015
A13R100	06A3-1015	7		RESISTOR 100 5% .25W FC TC=400/+500	01121	CB1015
A13R101	06A3-1015	7		RESISTOR 100 5% .25W FC TC=400/+500	01121	CB1015
A13R102	06A3-1015	7		RESISTOR 100 5% .25W FC TC=400/+500	01121	CB1015
A13R103	06A3-1015	7		RESISTOR 100 5% .25W FC TC=400/+500	01121	CB1015

See Section VI for ordering information  
\*Indicates factory selected value

Table 7-2. Δ2 Replaceable Parts, IF Filter Circuits (Cont'd).

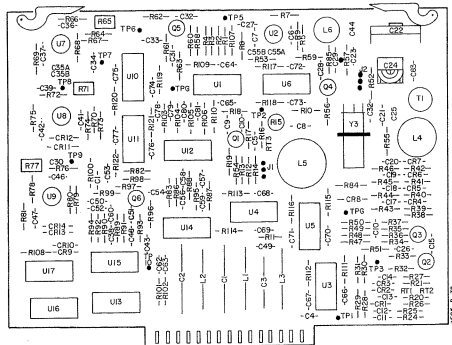
Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
A13R1	0839-0026	9	1	THERMISTOR DISC 10K-OHM TC=-4.4%/C-DEG	28480	0839-0026
A13R2	0837-0050	5	1	THERMISTOR DISC 1K-OHM TC=-4.4%/C-DEG	28480	0837-0050
A13R3	0837-0086	7		THERMISTOR DISC 200-OHM TC=-4.4%/C-DEG	28480	0837-0086
A13R4	0837-0086	7		THERMISTOR DISC 200-OHM TC=-4.4%/C-DEG	28480	0837-0086
A13T1	9100-3262	5		TRANSFORMER TRANSFORMER; TOROIDAL PULSE	28480	9100-3262
A13T2	9100-3262	5		TRANSFORMER TRANSFORMER; TOROIDAL PULSE	28480	9100-3262
A13U1	1820-1196	8		IC FF TTL LS D-TYPE POS-EDGE-TRIG COM	01295	SN74LS174N
A13U2	1820-1196	8		IC FF TTL LS D-TYPE POS-EDGE-TRIG COM	01295	SN74LS174N
A13U3	1820-1196	8		IC FF TTL LS D-TYPE POS-EDGE-TRIG COM	01295	SN74LS174N
A13U4	1820-1216	3		IC DCDR TTL LS 1-TO-A-LINE 3-INP	01295	SN74LS13AN
A13U5	1820-1195	7		IC FF TTL LS D-TYPE POS-EDGE-TRIG COM	01295	SN74LS175N
A13U6	1826-0510	0		IC SWITCH ANLG QUAD 16-DIP-P	27014	LF13332N
A13U7	1826-0510	0		IC SWITCH ANLG QUAD 16-DIP-P	27014	LF13332N
A13U8	1826-0510	0		IC SWITCH ANLG QUAD 16-DIP-P	27014	LF13332N
A13U9	1826-0510	0		IC SWITCH ANLG QUAD 16-DIP-P	27014	LF13332N
A13U10	1820-1971	7	1	IC SWITCH ANLG QUAD 16-DIP-P	17856	DG201CJ
A13Y1-				NOT ASSIGNED		
A13Y3				PART OF MATCHED SET(SEE ALL PARTS LIST)		
A13Y4				PART OF MATCHED SET(SEE ALL PARTS LIST)		
A13Y5				A13 MISCELLANEOUS PARTS		
	1400-0249	0		CABLE TIF .062-.625-DIA .091-WD NYL	28480	1400-0249
	1480-0116	6		PIN-GRV .062-IN-DIA .25-IN-LG STL	28480	1480-0116
	0403-0211	1		EXTR-PC BD BRN POLYC .062-RD-THKNS	28480	0403-0211
	0403-0213	3	1	EXTR-PC ED BRN POLYC .062-RD-THKNS	28480	0403-0213
	1251-0600	0	9	CONNECTOR-SGL CNT PIN 1.14-MW-BSC-SZ SQ	28480	1251-0600

See Section VI for ordering information

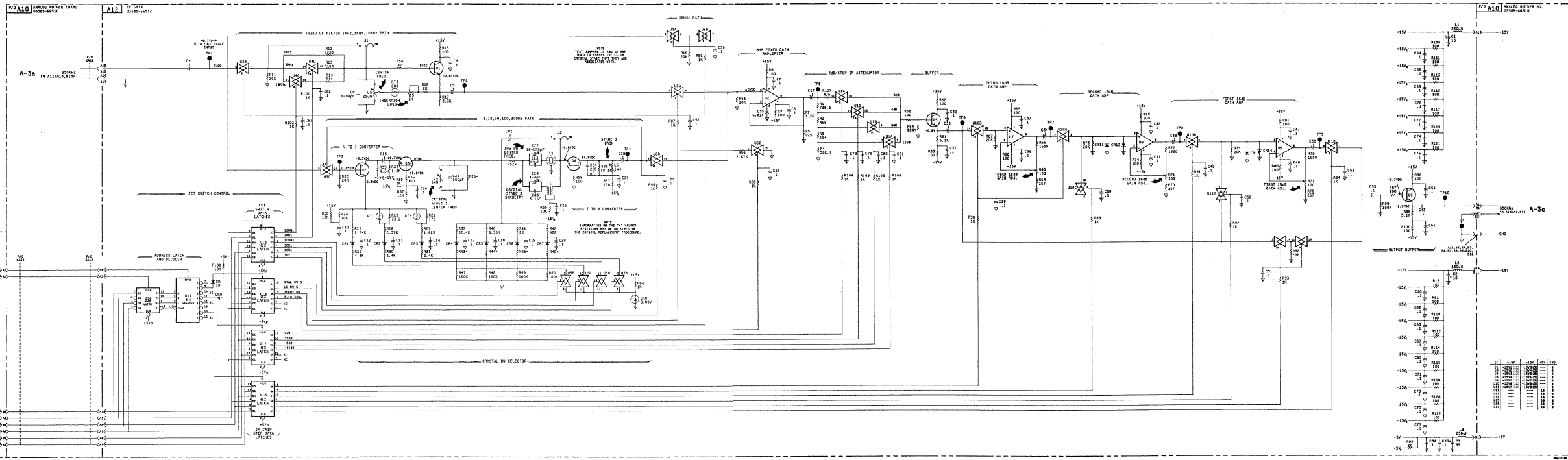
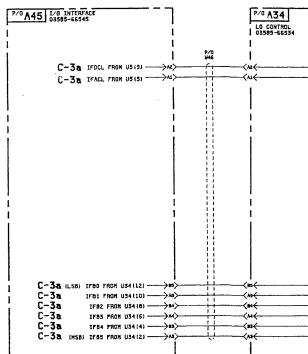
\*Indicates factory selected value



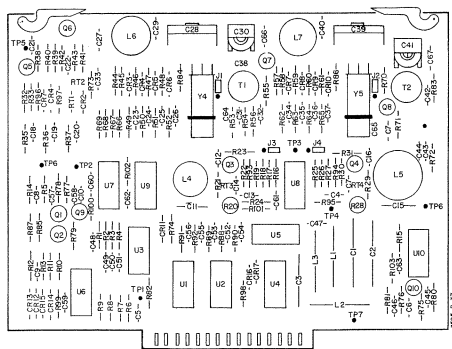




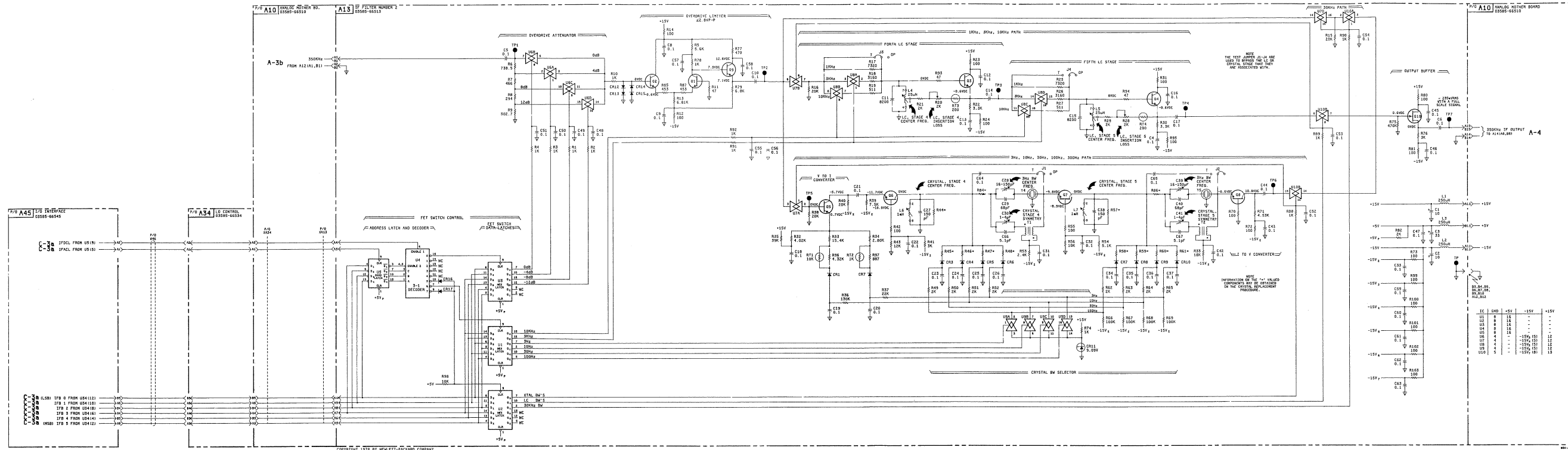
A12



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A13



## CATHODE-RAY TUBE FAILURE REPORT

(This form must accompany all warranty claims and MFR/HEART credit claims.)

Date\_\_\_\_\_

Submitted By (Name)\_\_\_\_\_

Name of Company\_\_\_\_\_

Address\_\_\_\_\_

1. Hewlett-Packard Instrument Model No.\_\_\_\_\_

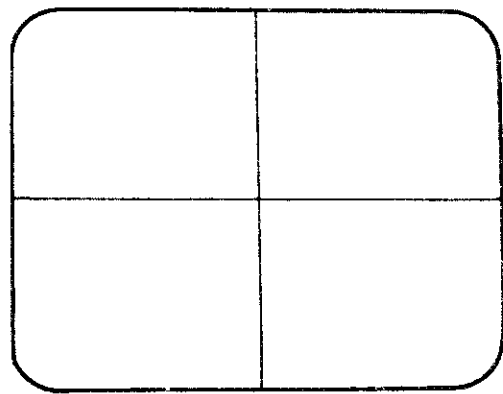
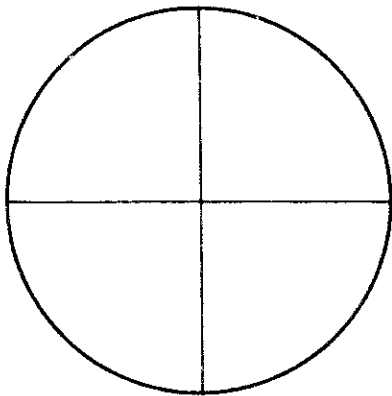
2. Hewlett-Packard Instrument Serial No.\_\_\_\_\_

3. Defective CRT Serial No.\_\_\_\_\_ Part No.\_\_\_\_\_

4. Replacement (New) CRT Serial No.\_\_\_\_\_

5. Please describe the failure and, if possible, show the trouble on the appropriate CRT face below.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



6. Is a warranty claim being made?\_\_\_\_\_

7. Hewlett-Packard Sales/Service Office\_\_\_\_\_

8. MFR, HEART or Customer Service Order Number\_\_\_\_\_



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Telex: 93859

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