
Agilent 34970A/Option 001 Internal DMM Assembly

Installation Instructions for 34970-80010 Retrofit Kit

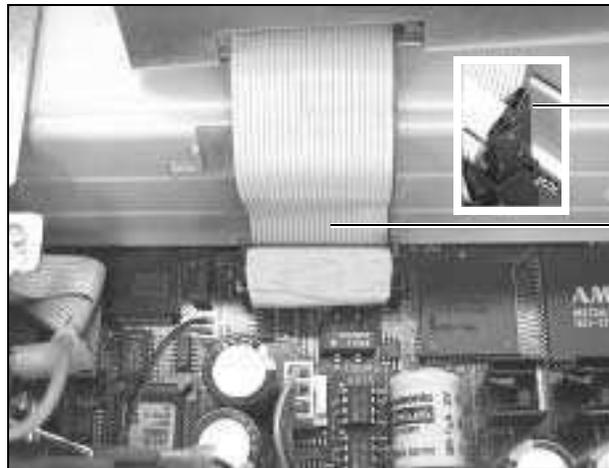
1 Disconnect the power cord.

2 Remove the outer cover from the Agilent 34970A.

To remove the cover from the instrument, follow the procedures shown in chapter 6 of the *34970A Service Guide*.

3 Connect the internal DMM ribbon cable to the main circuit board.

Connect the loose end of the grey ribbon cable to connector **J202** on the 34970A main circuit board (34970-66511). Press down firmly on the ribbon cable connector and secure the cable in place with the locking clips.



Snap the Locking Clips over the top of the connector to secure the Ribbon Cable

Ribbon Cable

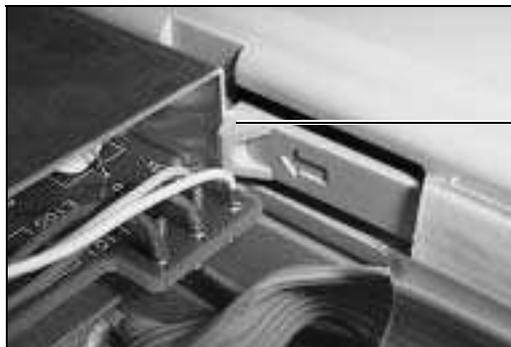
4 Install the internal DMM circuit board into the chassis.

Position the internal DMM circuit board inside the instrument chassis by tilting it at an angle as shown below. Be sure to position the circuit board over the tabs in the chassis as shown. Then, lower the assembly into the chassis until it is parallel with the 34970A circuit board.



5 Lock the internal DMM circuit board in place.

Slide the internal DMM circuit board to the left (toward the rear of the instrument) until it locks in place. You will hear a click when it is properly locked in place.



Make sure that shield is locked in place behind this tab

6 Twist the internal DMM input cable.

Twist the internal DMM input cable (labeled **P101**) at least *one full turn* before plugging it into the backplane connector. If you do not twist the cable as shown, certain specifications will be compromised.



7 Insert the DMM input cable into the backplane connector.

Insert the internal DMM input cable into the backplane connector as shown. Press firmly to ensure a good electrical connection.

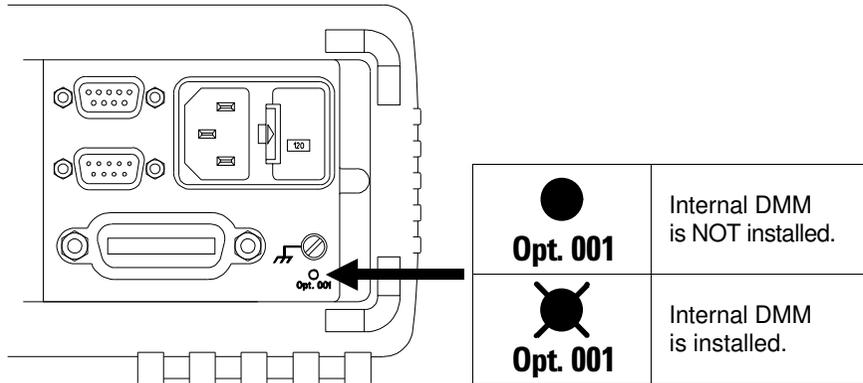


8 Enable the internal DMM.

After installing the internal DMM assembly, you must enable it for operation. From the front-panel, select the DMM ENABLED choice from the *Utility* menu. From the remote interface, use the `INST:DMM` command.

9 Modify the Labeling on the Rear Panel.

If you originally ordered the 34970A *without* the internal DMM, a solid black circle should be visible above the rear-panel “Opt. 001” label. After installing the internal DMM retrofit kit, be sure to draw an “X” through the black circle using a permanent marker as shown below.



10 Replace the outer cover on the Agilent 34970A.

To replace the cover on the instrument, follow the procedures shown in chapter 6 of the *34970A Service Guide*.

Calibration Information

The internal DMM was calibrated before it was shipped from the factory (a calibration certificate is included). However, after installing the internal DMM, you will want to make sure that you run the *Zero Adjustment* procedure as outlined in chapter 4 in the *34970A Service Guide*. The internal DMM is guaranteed to meet the instrument's 1-year accuracy specifications.

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Retrofit Instructions

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