

S E R V I C E N O T E

SUPERSEDES: None

**1158A/57A/56A Active Probes**

**Serial Numbers:** 0000A00000 / 9999Z99999 means all units.

**Performance Testing Active Probes w/ Infiniium's Auto Probe Interface Externally powering the probe.**

**To Be Performed By:** Agilent-Qualified Personnel

Parts Required:

P/N	Description	Quantity
8665A	Signal Generator	1
E4419B	Power Meter	1
ET36262	ET External power	1
1143A	Power Supply	1
8482A	Power Sensor	2
E2649A	50 Ohm through Board	1
6114A	Power Supply	1
3458A	DMM	1

*Continued*

DATE: November 2001

ADMINISTRATIVE INFORMATION

SERVICE NOTE CLASSIFICATION:		
<b>INFORMATION ONLY</b>		
AUTHOR:	ENTITY:	ADDITIONAL INFORMATION:
QV	0800	



**Situation:**

Because there is no productized external power supply to work with probes with the Auto Probe interface we were unable to list these performance tests in the service manual.

**Solution / Action:**

The field should have the E36262 Fixture from the release of the 1152A Active probe to complete the following tests.

**Bandwidth Performance**

1. Zero and calibrate the power meters with the power sensors.
2. Connect 8665A to one end of the 50 Ohm through Board.
3. Connect the other end of the 50 Ohm through Board to one 8482A.
4. Connect the other end of the 8482A to CH1 of the E4419B.
5. Attach the External supply ET36262 to the 1143A power supply.
6. Attach the UUT to the ET36262 external power pad.
7. Set probe offset to zero using the 1143A.
8. Attach the other 8482A to CH2 of the E4419B and the output BNC on the ET36262.
9. Connect the UUT probe tip to the 50 Ohm through Board socket. NOTE: Use the green 110 Ohm resistor input pins shipped with the 50 Ohm through fixture for best results.
10. Set the signal gen. To 50 MHz at 0.0 dBm.
11. Set the power meter calibration factors to the 50 MHz value on the power sensors.
12. Adjust Signal Gen. For -6.0 dBm as read on CH1 of power meter.
13. Note power level reading on CH2 of the power meter. 14. Adjust Signal Gen. To 4 GHz for 1158A; 2.5 GHz for 1157A; 1.5 GHz for the 1156A.
15. Re level power level reading on ch1 to -6.0 dBm.
16. Note the power level reading on ch2. 17. Subtract answer from step 13 from step 17.
18. The difference should be or = to 3.0 dB.