E4416A-05

S E R V I C E N O T E

Supersedes:
NONE

Agilent E4416A EPM-P Peak & Average Power Meter

Serial Numbers: GB00000000/GB41291202

Replacing A Defective Rivet-Fit Line Module

Parts Required:

P/N	Description	Qty.
E4416-61004	EPM-P Chassis Assembly	1

ADMINISTRATIVE INFORMATION

SERVICE NOTE CLASSIFICATION:

INFORMATION ONLY

AUTHOR: FC PRODUCT LINE: PN

ADDITIONAL INFORMATION:
Units manufactured outwith these serial number ranges are fitted with a push-fit line module (part number E4418-61002). This Service Note provides repair instructions for units that are fitted with a rivet-fit line module.

Agilent Technologies

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Situation:
Agilent does not recommend direct replacement of the rivet-fit line module in the power meter. This is for the following two safety related reasons:

- Metal fragments from the old rivets might not be completely removed.
- Electrical earthing might be compromised if the new rivets are not fitted correctly.

For these reasons, Agilent recommends that, in the event of line module failure, the chassis assembly be replaced. The chassis assembly comes with a push-fit line module, such that the repair method for any future line module issues becomes much simpler.

Solution/Action:
Figure 1 shows the rear panel view of a rivet-fit line module, whilst Figure 2 shows the rear panel view of a push-fit line module.

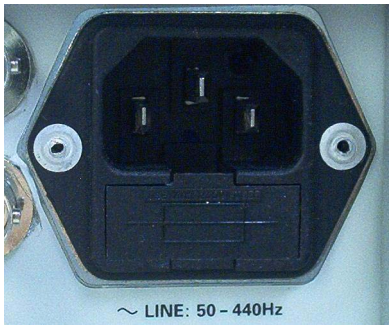

Figure 1

Figure 2

This Service Note only applies to power meters that use rivet-fit line modules. If any of the units listed in the above serial number ranges are received at the service center, and are exhibiting a fault with the rivet-fit module, then perform the following procedure:

1. Ensure the unit is disconnected from the mains supply.
2. Option #K01 units – Remove E9287A Battery.
3. Remove Power Meter Cover.
4. Remove A6 Measurement Assembly.
5. Option #K01 units – Disconnect A1 Power Supply connection from A5 Daughter Assembly.
6. Remove A5 Daughter Assembly.
7. Disconnect A1 Power Supply from the Line Module & A2 Processor Assembly.
8. Disconnect A7 Fan Assembly from A2 Processor Assembly
9. Disconnect Power Reference Cable from A2 Processor Assembly.
10. Standard or Option #002 units - Disconnect Power Ref Cable from Front Panel Assembly.
11. Option #003 units – Disconnect Power Reference Cable from Chassis Assembly (rear panel).
12. Disconnect A3 Front Panel Assembly from A2 Processor Assembly.
13. Remove A2 Processor Assembly.
14. Remove A3 Front Panel Assembly.
15. Disconnect Line Module earth connection from Deck Assembly.
16. Remove Deck Assembly.
17. Remove A4 Comms Assembly.
18. Option #002 or Option #003 units – Remove Rear Panel Power Sensor Cable Assembly.
19. Option #003 units – Remove Rear Panel Power Ref Connector.
20. Remove Recorder Output Assembly.
21. Remove all blanking plugs from the rear panel.
22. Discard Chassis Assembly.
23. Obtain new Chassis Assembly.
24. Re-assemble Power Meter by following steps 2 to 21 in reverse.

More specific information relating to the above procedure is available in the Service Guide (refer to Chapter 5, “Assembly & Disassembly Guidelines”).

Important Note:
Once re-assembly is complete, the unit must be safety-tested in accordance with local guidelines & procedures. This safety-test may take the form of an Earth Continuity Test, Hi-Pot Test, etc.

The unit must now be tested to ensure it is functioning correctly, and is operating within its published specifications. More specific information relating to this procedure is available in the Service Guide (refer to Chapter 2, “Performance Tests, and Chapter 3, “Adjustments”).