

Fig 5-21 Thermal Pad Removal

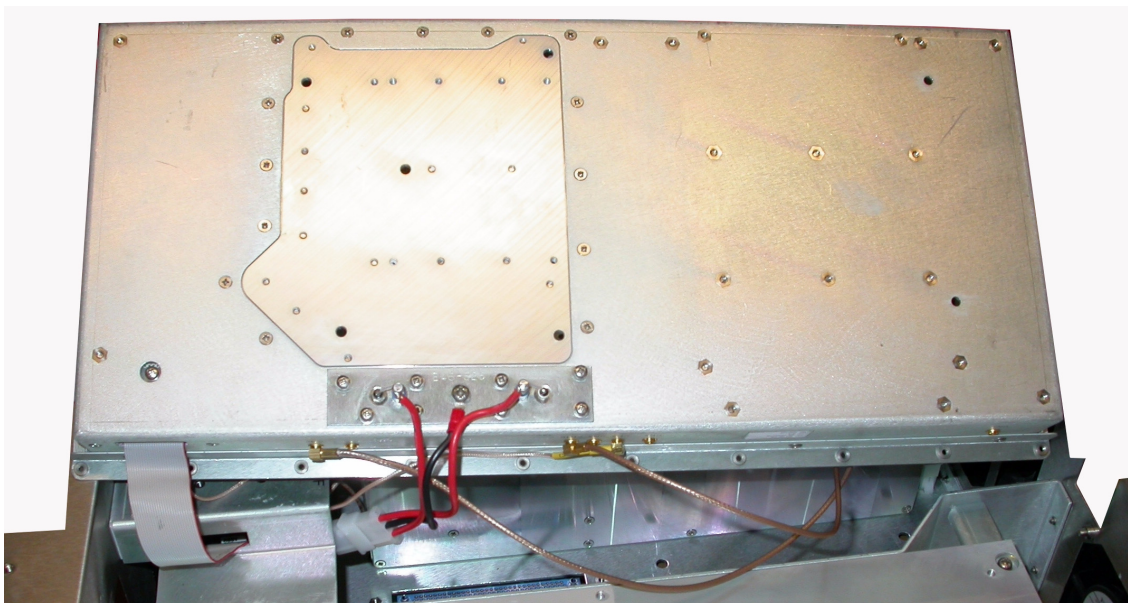


Fig 5-22 RF PA Thermal Pad Position



Refitting the RF PA

To refit the RF PA into the radio:

- (1) After ensuring all surfaces are clean, fit a new thermal pad to the RF PA as shown in [Fig 5-22](#). The thermal pad is naturally adhesive and is supplied with a protective film on both sides. Partially remove the protective film from one end and carefully position the pad before removing the film completely. As the film is being removed, ensure no air bubbles are trapped between the PSU surface and the film.
- (2) After the protective film has been removed from both sides of the thermal pad, carefully place the RF PA in position.
- (3) Using a Torx T15 screwdriver secure the RF PA using seven screws and associated wavy washers as shown in [Fig 5-19](#).
- (4) Looking from the rear of the radio, identify the RF PA 3-way power connector as shown in [Fig 5-20](#). Make the in-line connection.
- (5) Looking from the rear of the radio, identify the ribbon cable that connects from the RF PA module to a chassis mounted connector as shown in [Fig 5-20](#). Connect the ribbon cable from the RF PA to the chassis connector.
- (6) At the RF PA, connect the coaxial cables listed in [Table 5-5](#).
- (7) Identify the RF PA cover, shown in [Fig 5-18](#). Refit the cover using the 26 securing screws (part number 36T46330060).
- (8) Refit the Interface module as detailed on [page 5-26](#).
- (9) Refit the radio's top cover as detailed on [page 5-12](#).
- (10) Connect the radio to a PC using the Lemo to USB cable.
- (11) Reapply input power to the radio.
- (12) Refer to [page 47](#) and complete the procedure 'Setting the Carrier Power Trim'
- (13) Disconnect the Lemo to USB cable and restore the radio ready for operational use.

Replacing the PSU Module



WARNING

Dangerous Voltage

Ensure the input ac and dc supplies to the radio are disconnected before removing the top cover.



WARNING

Dangerous Voltage

Do not remove the radio's top cover for at least one minute after switching off the radio.



Caution

ESDs

This equipment contains devices sensitive to electrostatic discharge. Precautions applicable to handling such equipment, including wearing a static protection wrist strap connected to earth, should always be taken.

PSU Module

The PSU module, shown in Fig 5-23, is supplied complete with three cables attached. A thermal pad is also supplied with the module.

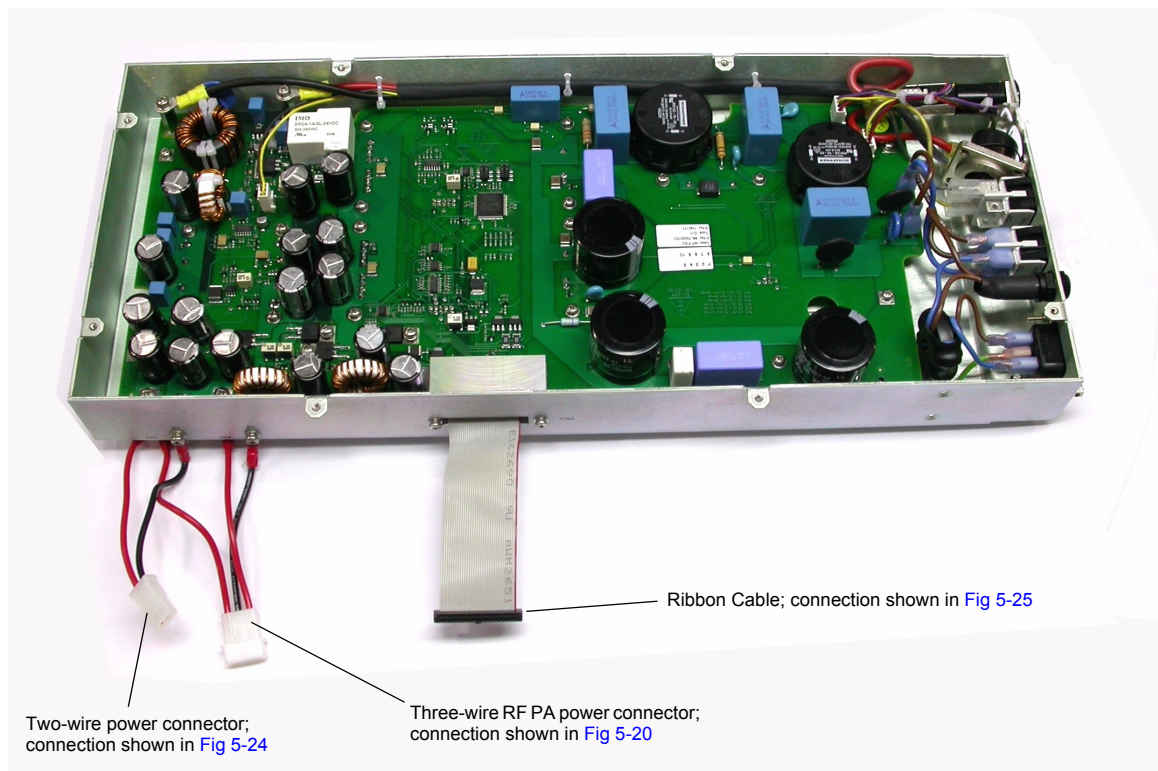


Fig 5-23 PSU Module

Removing the PSU Module

To remove the PSU:

- (1) Remove the radio's top cover as detailed on [page 5-12](#).
- (2) Remove the Interface module as detailed on [page 5-26](#).
- (3) Refer to [Fig 5-20](#) and identify the RF PA In-Line power connector. Separate the in-line connection.
- (4) Refer to Fig 5-24 and identify the two-wire power connector. Disconnect the free socket from the chassis plug.

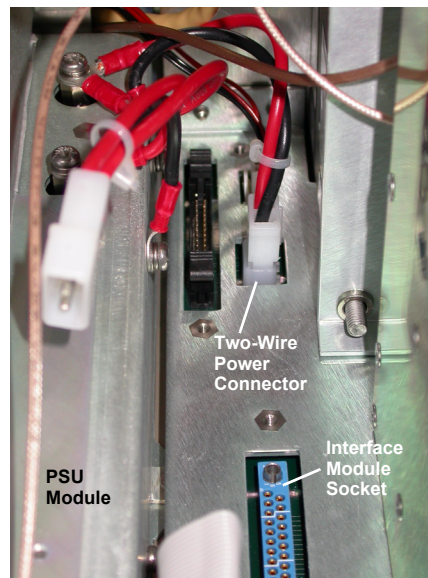


Fig 5-24 Two-Wire Power Connector

- (5) Refer to Fig 5-25 and identify the PSU ribbon cable. Disconnect the cable from the chassis connector.

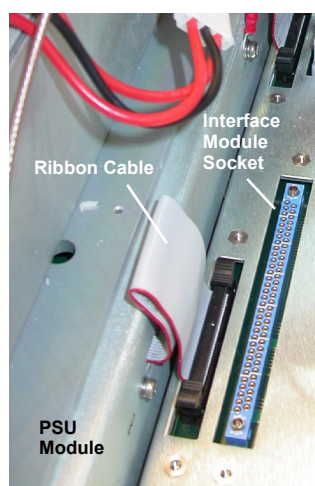


Fig 5-25 PSU Ribbon Cable

- (6) Turn the radio upside down and remove the bottom cover as detailed on [page 5-12](#).



- (7) Using a Torx T10 screwdriver, remove and retain the ten M3 x 6 mm screws (part number 36T46330060) that secure the PSU cover shown in Fig 5-26. Remove the cover.

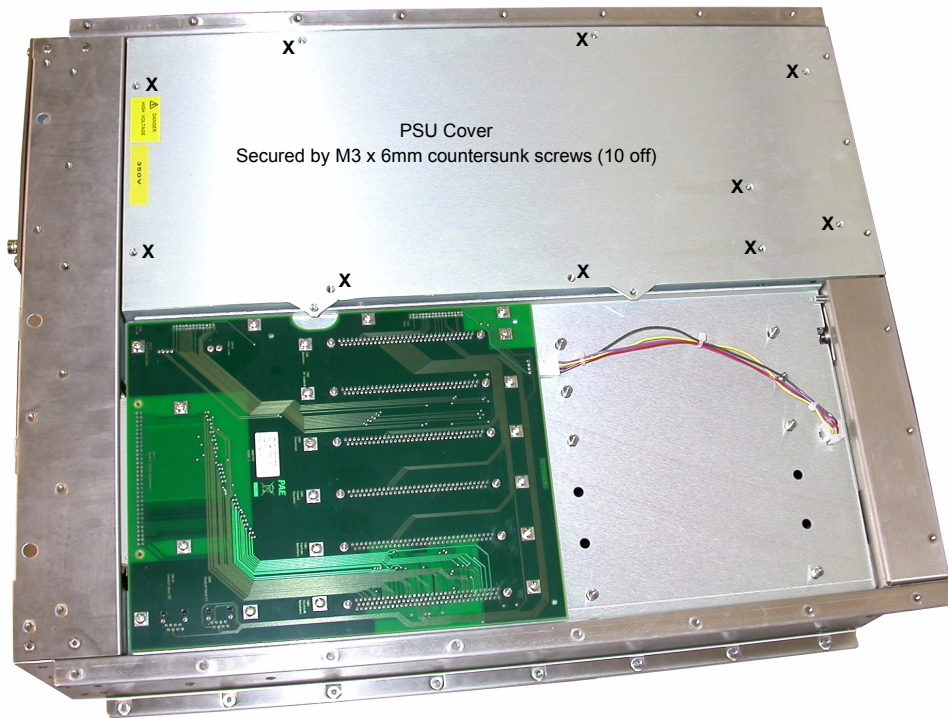
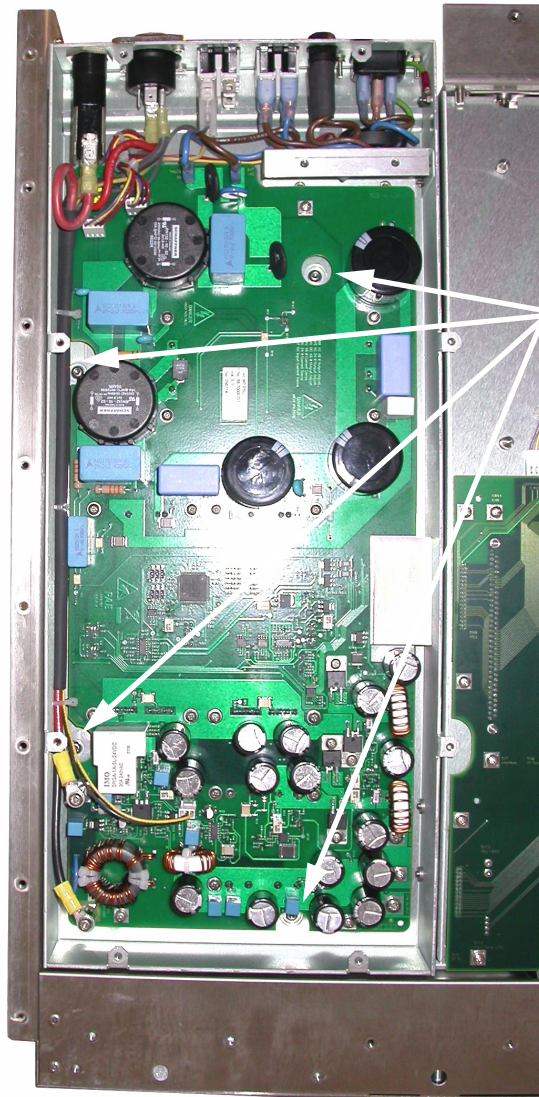


Fig 5-26 PSU Module Cover

- (8) Using a Torx T15 screwdriver, remove and retain the four M4 x 6 mm screws (shown in [Fig 5-27](#)) that secure the PSU module to the chassis.
- (9) Remove the PSU from the radio as follows:
- Standing at the front of the radio, pivot the front of the PSU module upwards until the two fan connections (at the rear of the radio) can be seen and accessed
 - Disconnect the two fan leads from the module
 - Remove the PSU module from the radio.
- (10) A thermal pad is fitted between the PSU module and the chassis (which is a heatsink). The old thermal pad should now be removed by peeling it off (see Fig 5-21).



PSU module is secured by four M4 x 6 mm screws located as shown by the arrows.

Fig 5-27 PSU Module Showing Securing Screws

Refitting the PSU Module

To refit the PSU module into the radio:

- (1) After ensuring all surfaces are clean, fit a new thermal pad to the PSU as shown in [Fig 5-28](#). The thermal pad is naturally adhesive and is supplied with a protective film on both sides. Partially remove the protective film from one end and carefully position the pad before removing the film completely. As the film is being removed, ensure no air bubbles are trapped between the PSU surface and the film.
- (2) Being careful not to damage the thermal pad, hold the PSU module so that the leads from the two rear panel fans can be connected.
- (3) Connect the two fans and then place the PSU module in position and, using a Torx T15 screwdriver, secure with four M4 x 6 mm screws ([Fig 5-27](#)).
- (4) Fit the PSU cover and secure using ten M3 x 6 mm screws ([Fig 5-26](#)).
- (5) Refer to page 5-12 and refit the radio's bottom cover.