



Replacing the Interface 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.

To replace the Interface module:

- (1) Remove the radio's top cover as detailed on [page 5-12](#).
- (2) Refer to [Fig 5-14](#) on [page 5-18](#) and identify the Interface module's position (Module F).
- (3) Using a Torx T15 screwdriver, remove and retain the front and rear module securing screws ([Fig 5-16](#) on [page 5-19](#)).
- (4) Carefully lift the module disconnecting it from its socket ([Fig 5-15](#) on [page 5-19](#)).
- (5) Place the replacement module in position and press down to ensure it is fully located in the chassis socket.
- (6) Fit and tighten the front and rear module securing screws ([Fig 5-16](#) on [page 5-19](#)).
- (7) Refit the radio's top cover (see [page 5-12](#)).
- (8) Connect the radio to a PC using the Lemo to USB cable.
- (9) Reapply input power to the radio.
- (10) Download the Interface module software from the Park Air radio software CD. Instructions for downloading software are given under the heading 'Data Loader Application' starting on [page 5-39](#).
- (11) The radio's build state is stored in the Interface module. To restore this information, use the DLA Build State procedure given on [page 5-43](#).

Replacing the RF PA

WARNING



Dangerous Voltage

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

WARNING



Dangerous Voltage

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WARNING



Beryllium Hazard

Four semiconductor devices used in the RF PA contain the toxic material beryllium. Although no procedures in this documentation instruct semiconductor replacement, equipment covers are removed exposing the devices. Users should be aware that there could be a hazard should the output transistors become damaged.

Fig 5-17 shows the RF PA; the four semiconductors containing beryllium are outlined and have the markings PAS1068, PAS1074 or PAS1075.

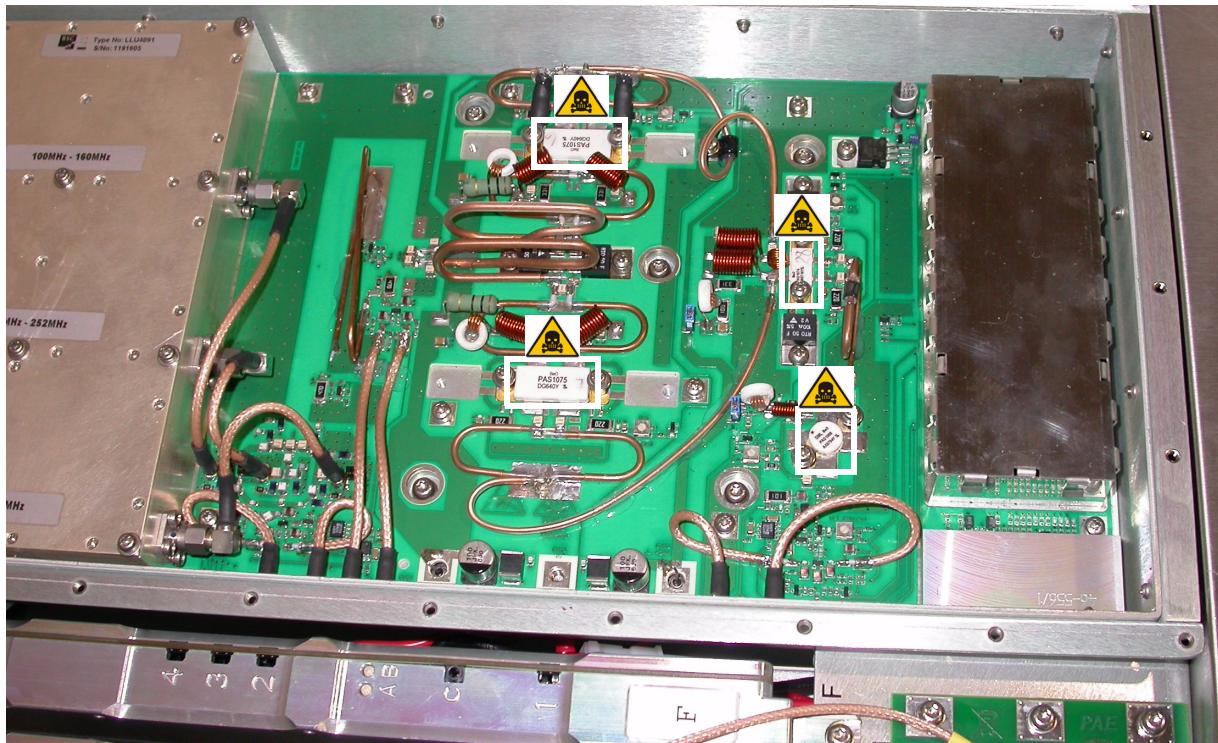


Fig 5-17 Beryllium Hazard Components

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.



Removing the RF PA

To remove the RF PA:

- (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) Identify the RF PA cover, shown in Fig 5-18, and using a Torx T10 screwdriver, remove and retain the 26 securing screws (part number 36T46330060). Remove and retain the RF PA cover.

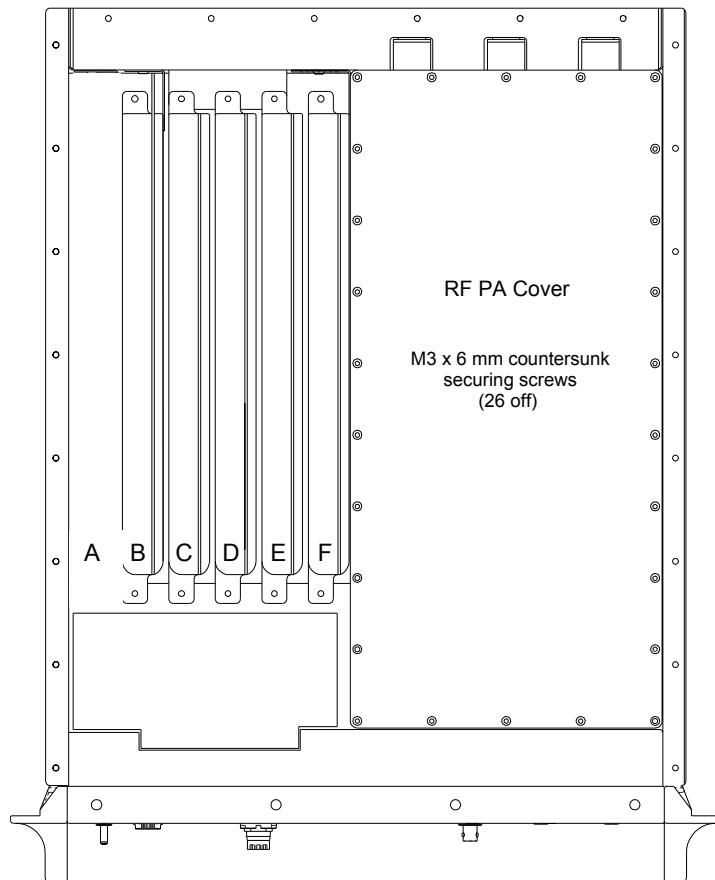


Fig 5-18 RF PA Cover Securing Screws

- (4) Identify the seven M4 x 8mm pan head screws (Fig 5-19) that secure the module to the radio's chassis. Using a Torx T15 screwdriver, remove and retain the seven screws (part number 36T63340080) and associated wavy washers.

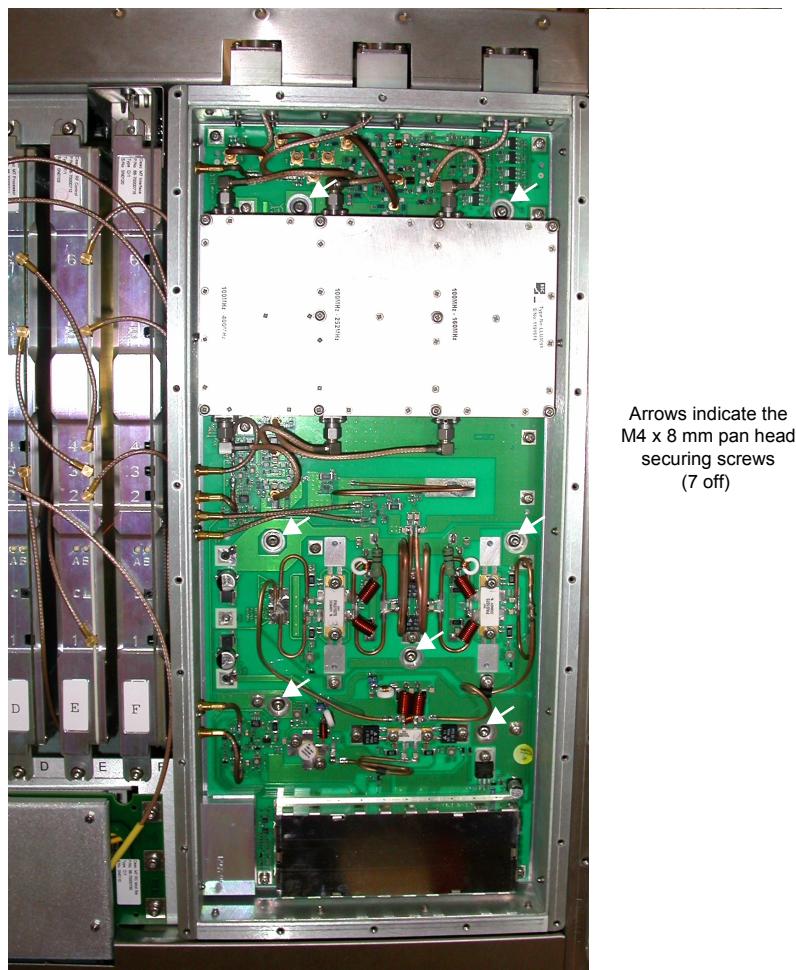


Fig 5-19 RF PA Module Securing Screws

(5) At the RF PA, disconnect the coaxial cables listed in [Table 5-5](#).

Table 5-5 RF PA Coaxial Cables

RF PA Connection	Cable Part Number	Destination
CN4, Transmit drive	17T11700020	CN5, RF Control module
CN5, Linearisation feedback	17T11700021	CN2, RF Control module
CN6, Receive	17T11700022	CN6, RF Control module
CN7, Guard receive	17T11700026	CN6, Guard receiver (if fitted)

- (6) Looking from the rear of the radio, identify the RF PA 3-way power connector as shown in [Fig 5-20](#). Separate the in-line connector.
- (7) 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](#). Disconnect the ribbon cable from the chassis connector.

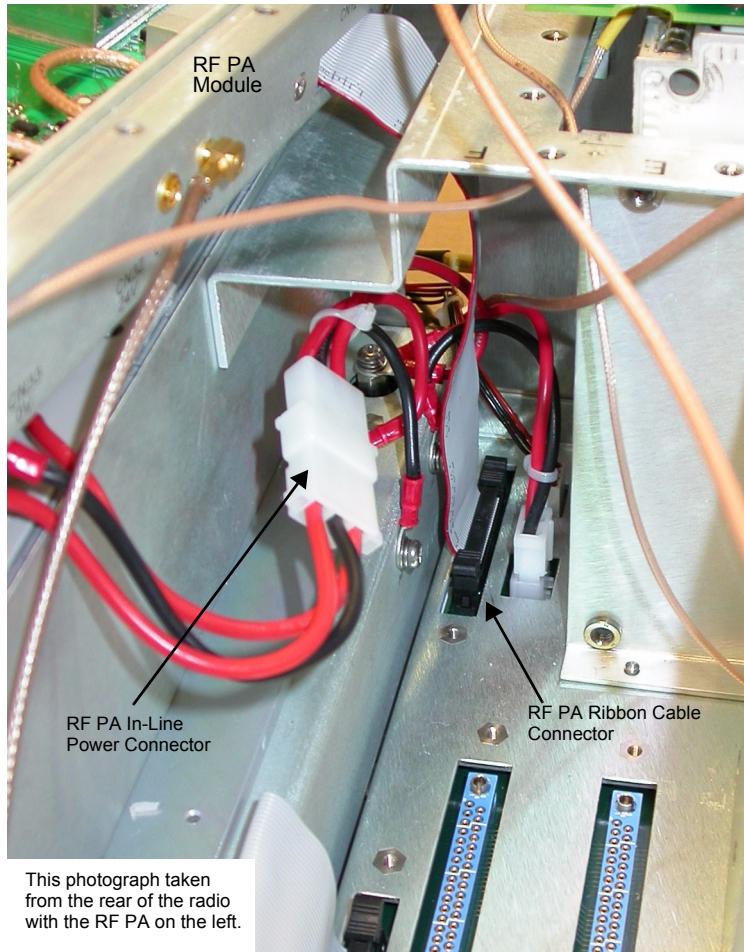


Fig 5-20 RF PA Power and Ribbon Cable Connections

- (8) Remove the RF PA from the chassis.
- (9) A thermal pad is fitted between the RF PA and the chassis (which is a heatsink). The old thermal pad should now be removed by peeling it off (see [Fig 5-21](#)).