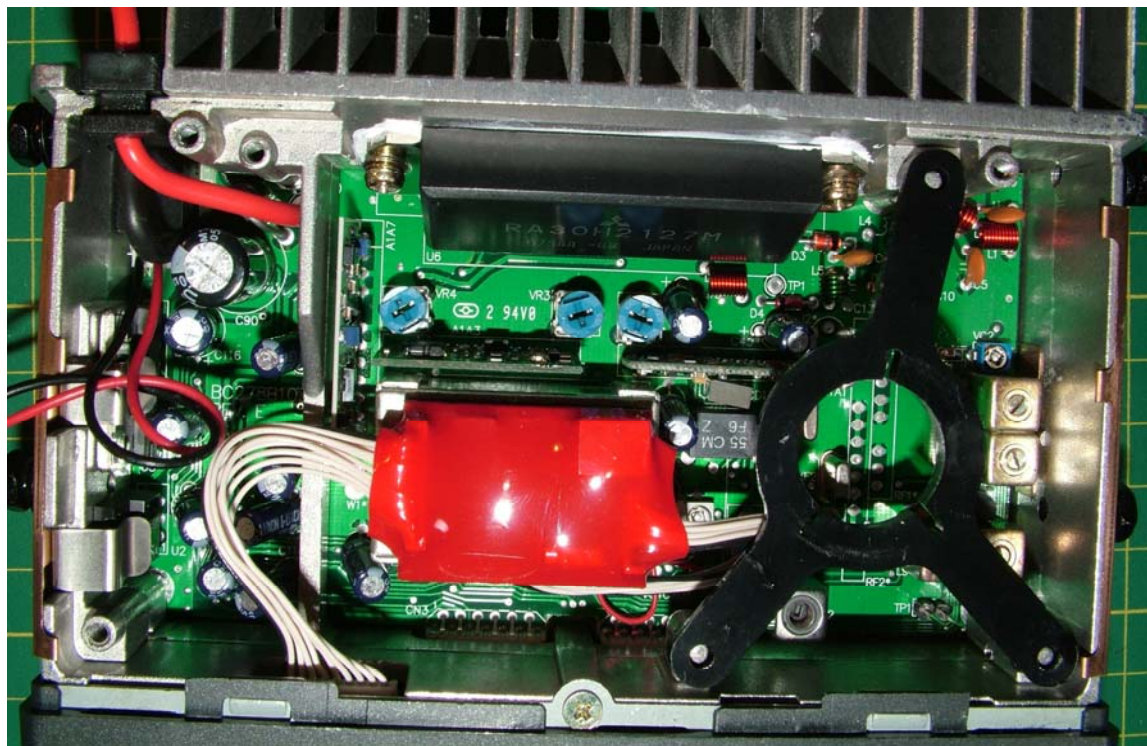


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ADI AR-247 – Replacing RF Power module Don Dorward, VA3DDN



My ADI 247 became intermittent, with the RF output dropping off to zero after a minute of operation at full power. Eventually it would not operate on even medium power without the same thing happening.

I decided to replace the RF power module, U6, shown as a Mitsubishi M68729 on the schematic. (the black block in the above photo)

The actual part in the radio was an RA30H2127M, which is supposed to be an improved mosfet part. I purchased my replacement from the RF Parts Company.

<http://www.rfparts.com/module.html>

Replacement is straightforward, with 4 solder connections on the main board needing to be cleared using a solder-sucker. Then remove the 2 screws holding the power module to the heatsink.

Be careful handling the new module that you keep the soft pins straight. Make sure the module has an even coating of heatsink thermal compound, before replacing it. Fasten the screws before soldering the leads.

Adjust VR2 for 30 watts output, on High, and VR3 for 15 watts output on Medium power. Check that on Low power it is about 7 watts.

If necessary repeat adjustments.