

## Acom 2000A – Memory Battery Replacement

Reference your ACOM 2000A Owner's manual for other details prior to this procedure.

Normally the ACOM 2000A battery lasts about ten years. If it is a newer amplifier, check the battery voltage first.

You will find the battery on the interface board behind the front panel. You can easily remove the battery and solder the new one.

There is only one precaution when soldering a new battery:

The battery negative lead is directly connected to the chassis/ground. If your soldering iron tip is grounded too, it will make a short when touching the positive lead. This can be avoided if the amplifier will be totally disconnected. Remove all cables - the power cord, keying cable from the transceiver, both coax cables, RS-232, grounding and whatever else is connected there. Alternatively you can leave the amplifier connected and only unplug the soldering iron from the line socket while soldering the new battery.

**NOTE:** The amplifier memory will be erased. You will have to tune the amplifier up on all bands and antennas after the change.



Copyright© 2020 - DX Engineering

1200 Southeast Ave. - Tallmadge, OH 44278 USA  
Phone: (800) 777-0703 · Tech Support and International: (330) 572-3200  
Fax: (330) 572-3279 · E-mail: [DXEngineering@DXEngineering.com](mailto:DXEngineering@DXEngineering.com)

## Removing the front panel of ACOM 2000A

=====

### 1. Safety first. **WARNING HIGH VOLTAGE!**

The amplifier works with voltages up to 3000 Vdc, which are **LETHAL!** You must unplug the amplifier from the line (mains) wall outlet and **WAIT AT LEAST 30 minutes** before removing the cover of the amplifier. Do not touch any part inside before you safe proof the amplifier as described below because some residual voltages may still be present.

Please read the whole instruction below before to start. **If you don't feel comfortable with amplifier repairs or you are not sure about your safety, we recommend that you entrust the following operations to your dealer.**

Unplug the amplifier from the line (mains) wall outlet. Disconnect all cables from the amplifier (grounding last).

Wait at least 30 minutes before to continue.

### 2. Removing the top cover and safe proofing the amplifier.

Use a Philips-2 screwdriver. Do not press the screws excessively in order not to push any captive nut out of the chassis. Unscrew 17 flange-button head screws on top and 2 x 6 pcs on each side. Do not unscrew the 8 protective grid screws in the tubes air-exhaust area. Remove the top cover. Check whether the High Voltage Crowbar (located on the middle chassis wall – see fig.1 below) does reliably short-circuit its center screw to the chassis when the top cover is removed. It must keep the HV wiring bypassed to the chassis always when the top cover is missing during all your operations - fig.1:

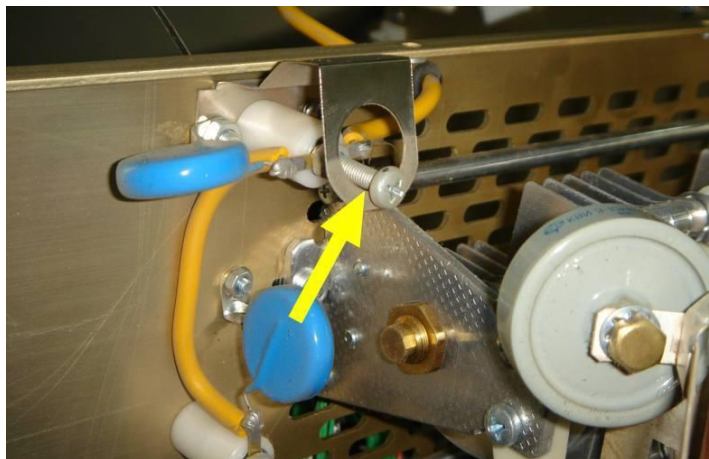


Fig.1 High Voltage Crowbar

**PLEASE DO NOT PROCEED if you don't feel comfortable with handling HIGH VOLTAGE circuits! Contact your nearest dealer for an advice!**

Carry out the following safety procedure of discharging the HV capacitors inside the amplifier immediately after having opened the top cover of the amplifier.

## WARNING HIGH VOLTAGE!

The amplifier works with high voltage up to 3000V which is LETHAL! You should never work alone in the room and you should always have somebody nearby, who is capable of rendering FIRST AID in case of any unfortunate accident!

**Immediately after having removed the top cover**, make sure that no residual DANGEROUS VOLTAGES are present inside. For the purpose, take approximately 1m (3ft) of WELL INSULATED wire (adequate for 3000V). Bare and tin about 10-15mm (1/2") on each cable end. Connect one wire end FIRST to the GROUND STUD (on the rear panel), and AFTERWARDS, holding the wire BY THE INSULATION ONLY, at a distance of minimum 10cm/4", touch with its free end the following points on (be ready to see an electrical discharge spark at each point in case of residual charge presence):

- The spade Fast-On contact labelled "HV OUT" or "+2850V" on the HV Filter PCB (early models) or HV&SG PCB (latest models) – see the pictures below;
- Each lead of the wire-wound resistor R17 (R17F) on the same PCB;
- Each one of the tubes anode cap.

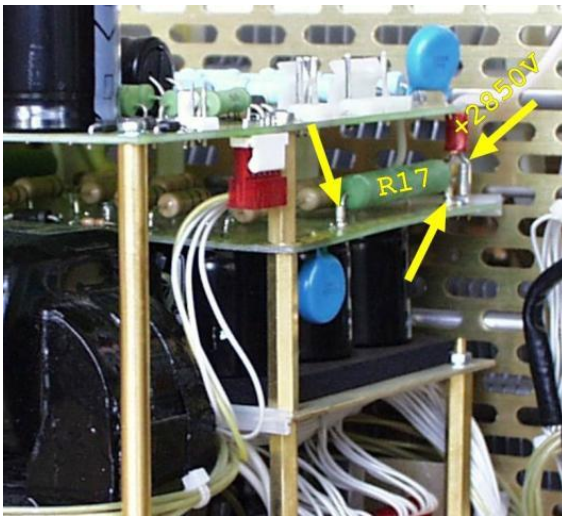


Fig.2 High Voltage Points to discharge on HV Filter or HV&SG PCBs



### 3. Removing the front panel

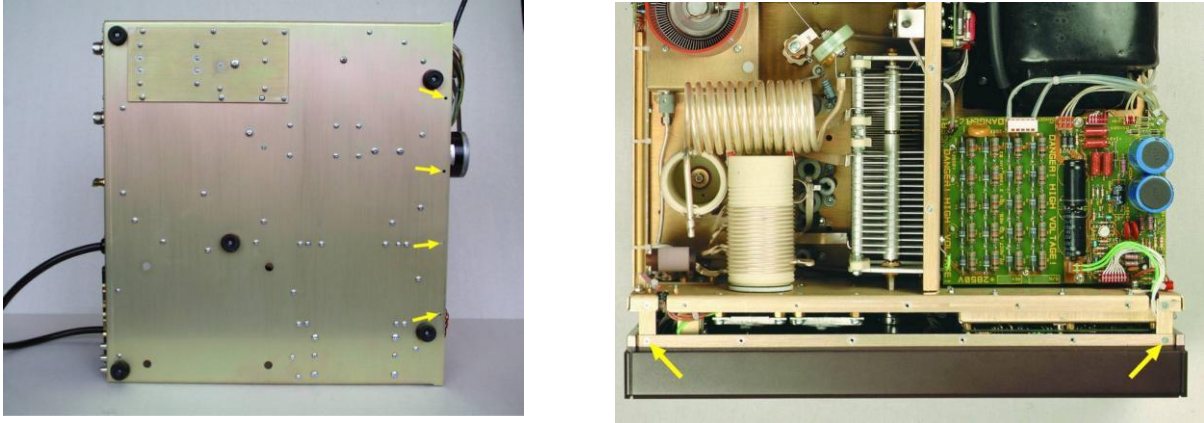


Fig.3 Front panel screws

Four screws on bottom and two more on top hold the front panel. The screws are metric size M3 - 3mm diameter (abt.1/8"). Bottom four screws are with cross- recessed Philips-1 heads while the two top can be with a straight slit (flat screwdriver).

Unscrew the four bottom screws the first and then the two on top while holding the front panel. Then pull the front panel gently towards front until you release it from the chassis. It will remain connected via the mains power switch to the main unit.

After having uninstalled the front panel, you may place it laying near the amplifier, without disconnecting the power switch. Be very careful not to mixup the switch wires if you would prefer to disconnect it - the wires are labelled with numbers corresponding to the switch-body contacts imprint.

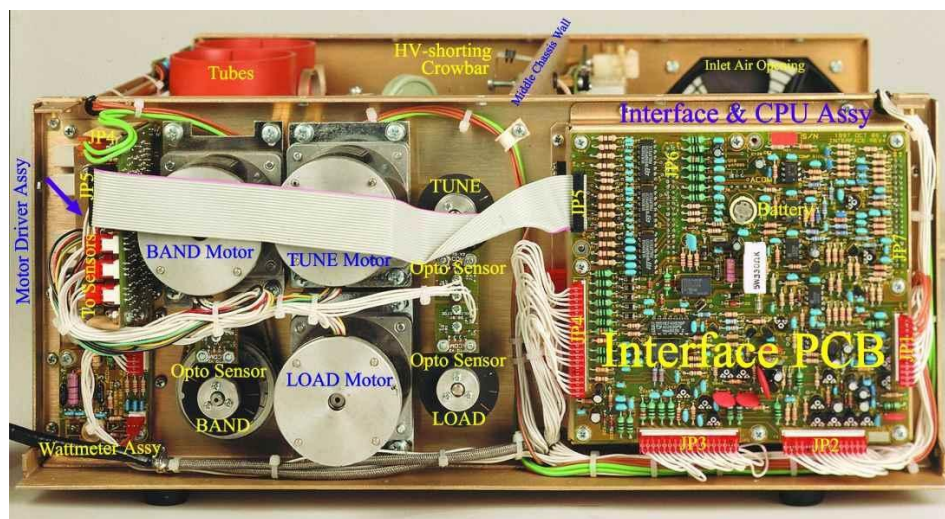


Fig.4 Behind the front panel

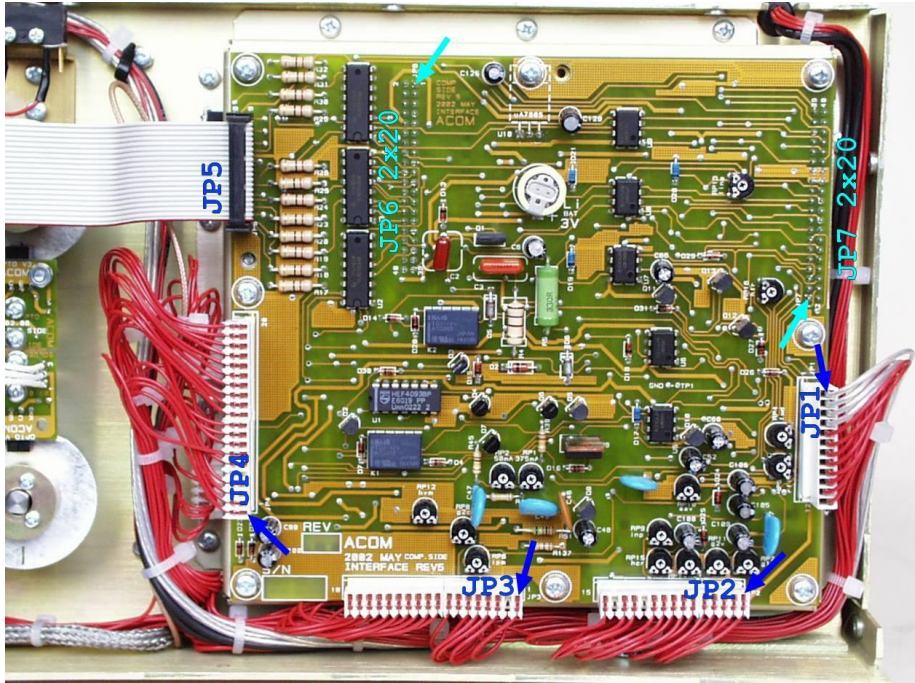


Fig.5 Interface and CPU assembly

Reassemble is to be done in the reverse order.

### Battery Location Photos

=====

