

INSTRUCTION MANUAL – MODEL AT588K

Model AT588K is a user-installable kit to add the internal automatic antenna tuner to an existing model 588 Omni-VII transceiver. Instructions, complete with color photos of relevant detail, are included in this manual.

Model AT588K is a “no-solder” kit. You will need the following tools:

#10 Torx wrench (provided with the kit, Ten-Tec part #38313).
Small pair of needle nose pliers.
2 Philips screwdrivers, one small, one large.

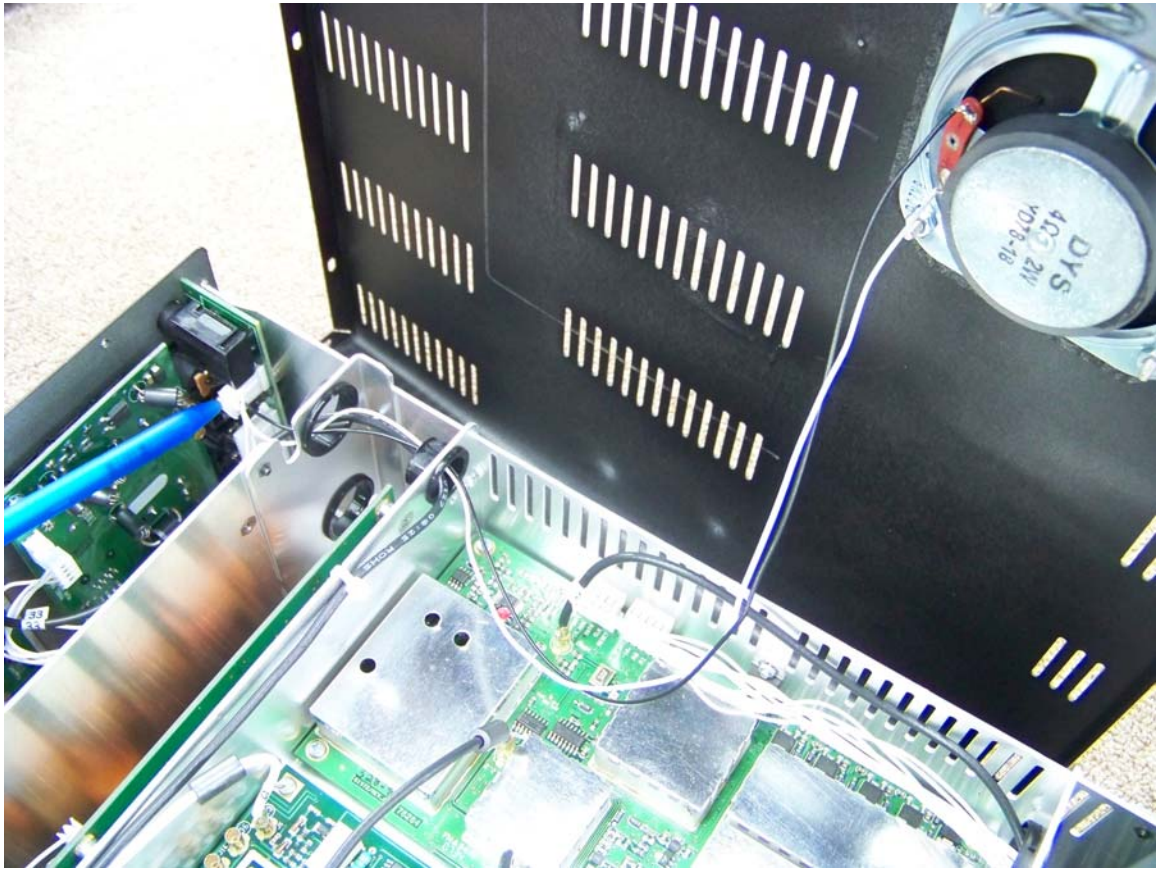
We recommend you read this manual in its entirety before beginning installation of the tuner kit.

Should you have difficulty installing the tuner or need advice, our service department is available to provide technical support from 8 a.m. to 5 p.m. USA Eastern time by calling (865) 428-0364.

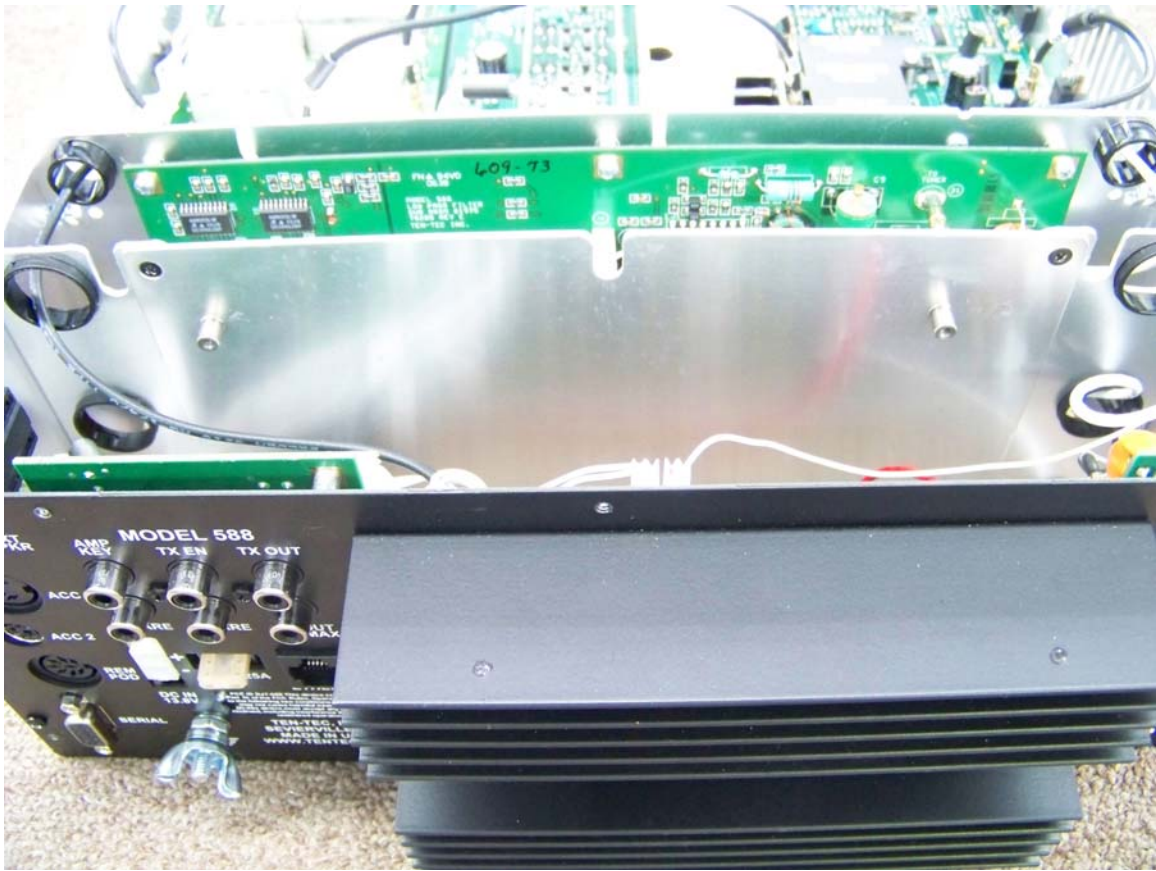
Ten-Tec, Inc., 1185 Dolly Parton Parkway, Sevierville, TN 37862 USA
Sales: (800) 833-7373. General Info and Office: (865) 453-7172.
Service: (865) 428-0364. Visit us on the web at www.tentec.com



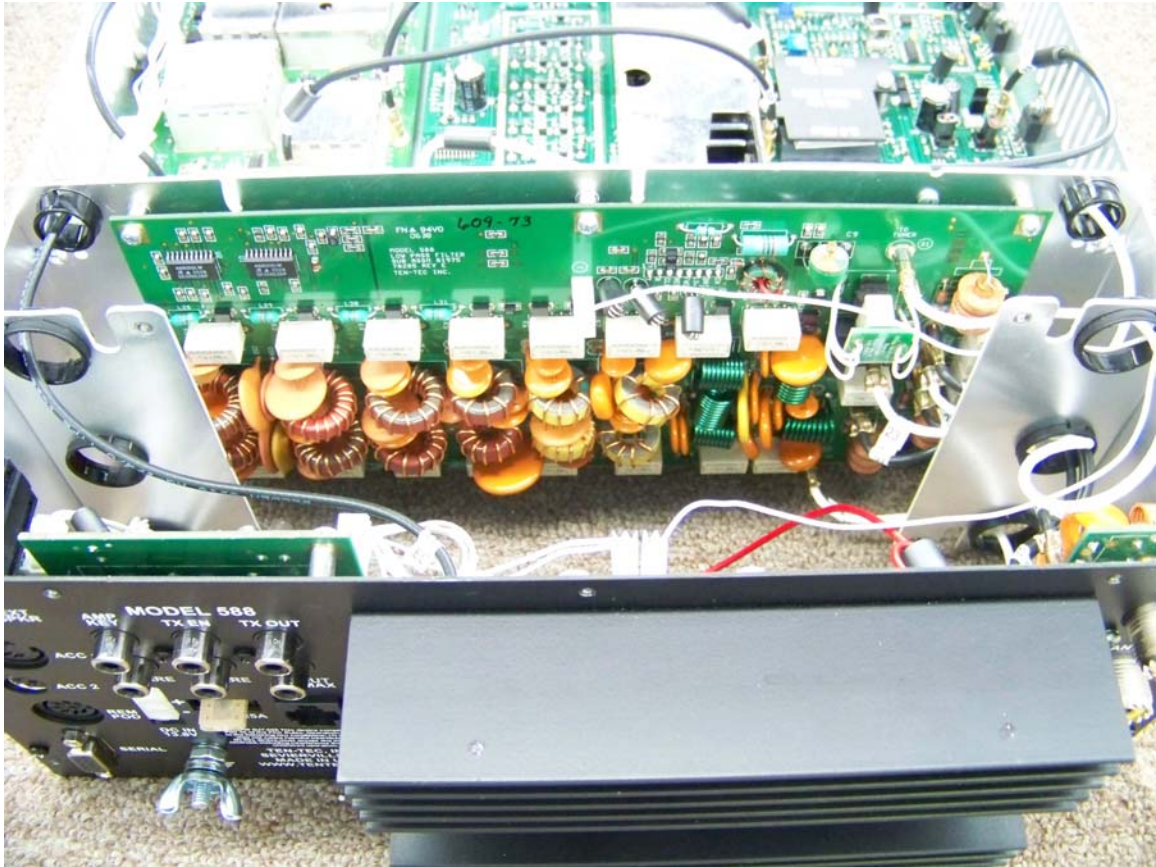
1. Disconnect transceiver power cable from rear. Remove top and bottom cover. There are 2 large black Philips screws on each side of the case. Remove these 4 screws. Around the rear perimeter of the top and bottom covers are #10 Torx screws. Use the provided Torx wrench to remove them.



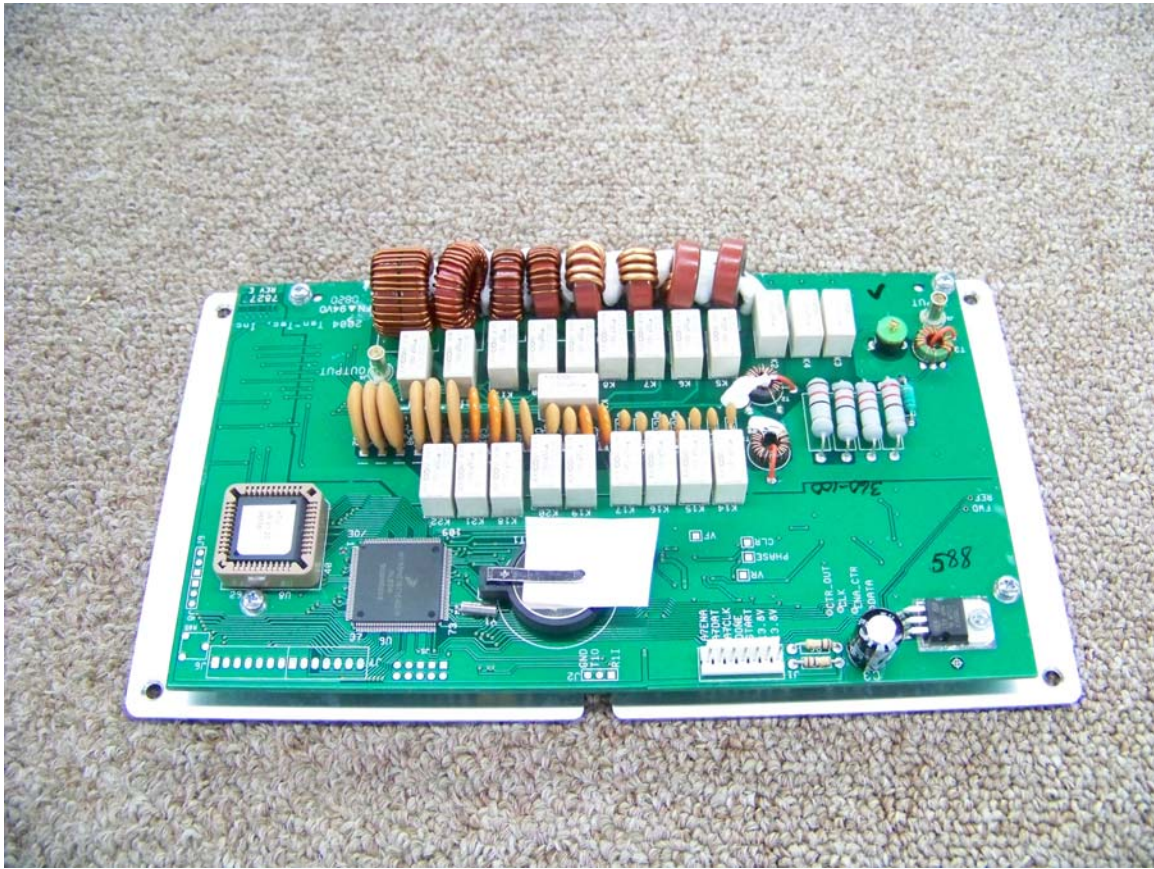
2. Use caution when removing the top cover from the chassis. The internal speaker connection wire can be broken off easily if care is not exercised. The speaker wire is connected to connector 9B just under the external speaker jack as pointed out in the above photo. Pull the socket off the connector and pull the wire out from the black grommets. Set top cover with speaker intact aside.



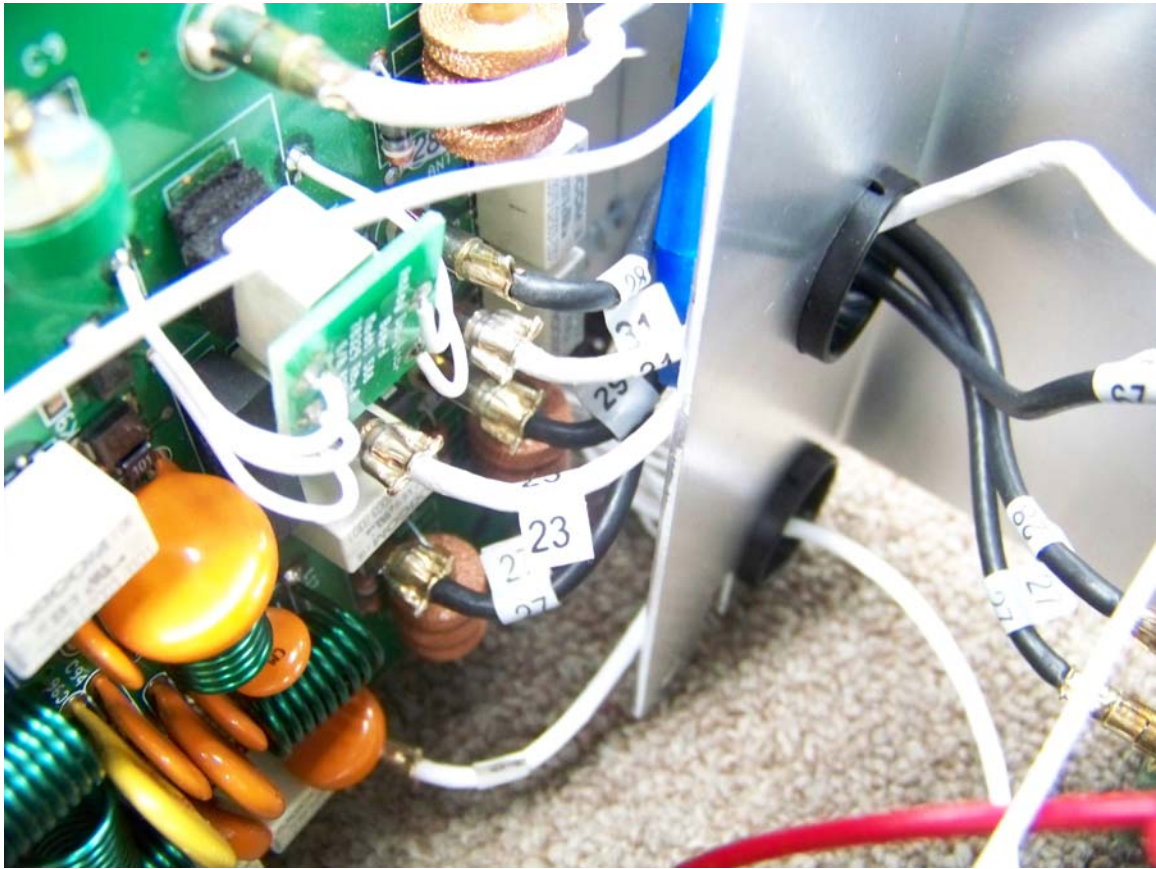
3. This is the rear tuner shield, with standoffs already installed to mount the tuner. There are 4 small black Philips screws holding the plate in place. Remove the first two shown in each corner here, then turn the radio upside down and remove the remaining two. Turn the radio right side up after the bottom two are removed.



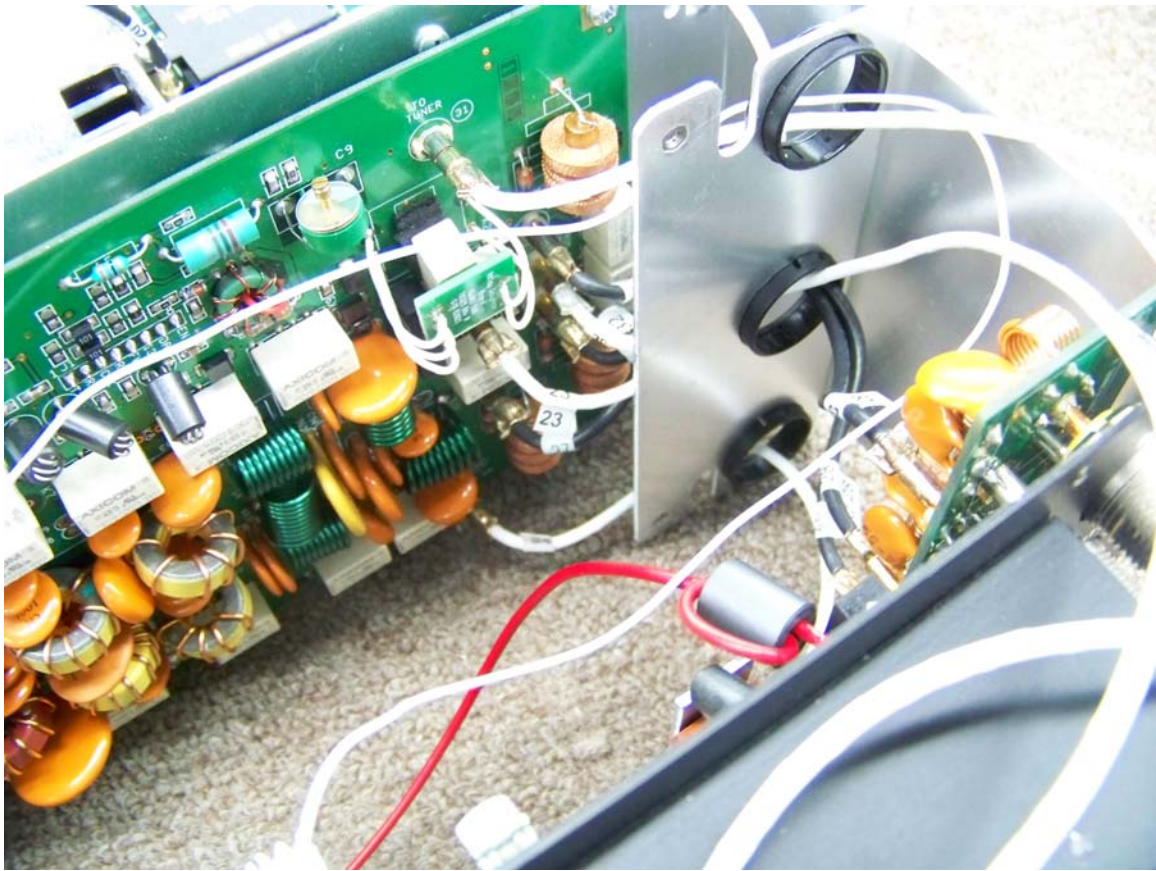
4. This is the view of the rear low pass filter board after the tuner shield has been removed.



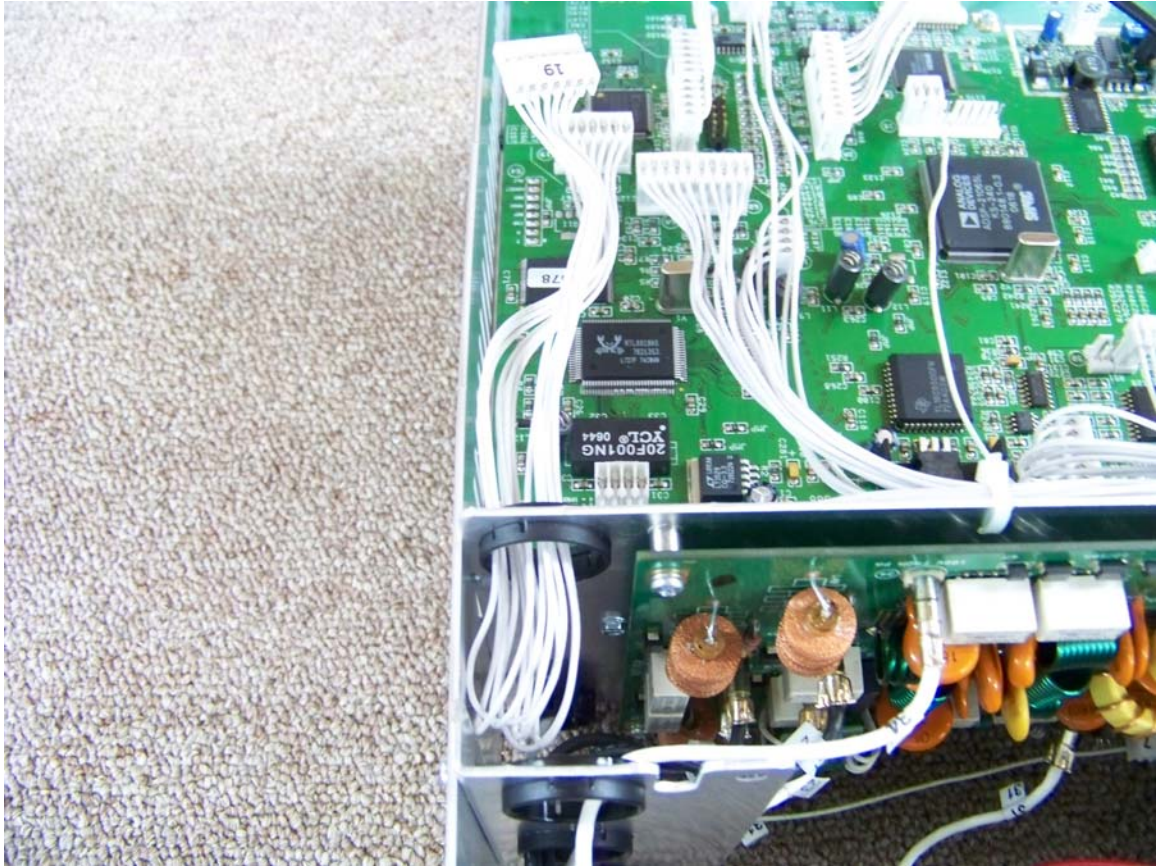
5. Remove the autotuner board from the packing kit and place it onto the tuner shield as shown above. 4 screws, Ten-Tec part #60069 are provided in the packing kit to attach the tuner board to the shield. There is only one possible correct orientation of the board to the shield due to the way the standoffs are set on the board. An incorrect installation will have the circuit board hanging partially off the tuner shield.



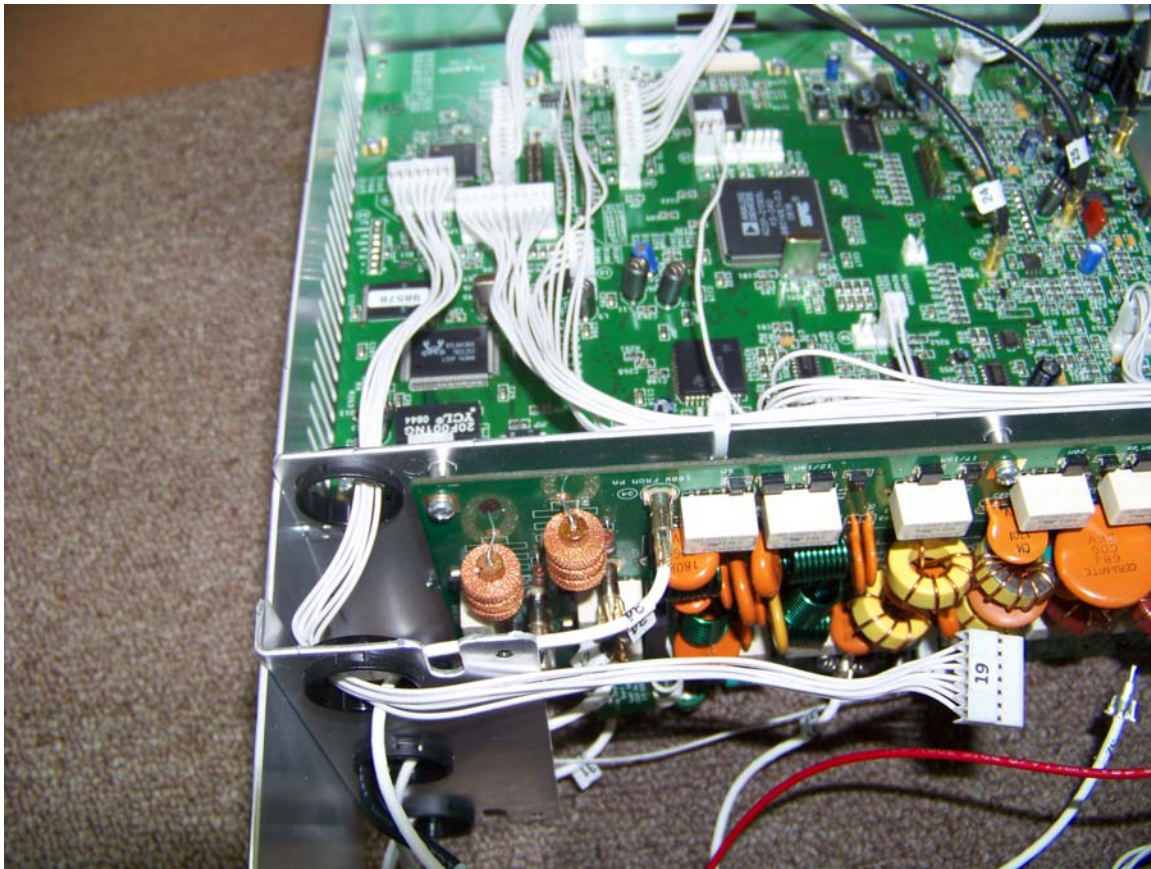
6. Locate cable #31. This cable is labeled #31 at both ends. One end will be unplugged by you in this step. The end to be unplugged is shown here, a white cable labeled 31, just to the right of cable #23 and just above cable #29. With the radio right side up, these cable ends are located in the middle of the right side of the low pass filter board that was exposed after the tuner shield was removed in step 3. After unplugging the cable, pull the unplugged end out from inside of the plastic grommet closest to the socket (shown here with three additional black cables routed through the same grommet). This cable will be plugged into the autotuner board in a later step.



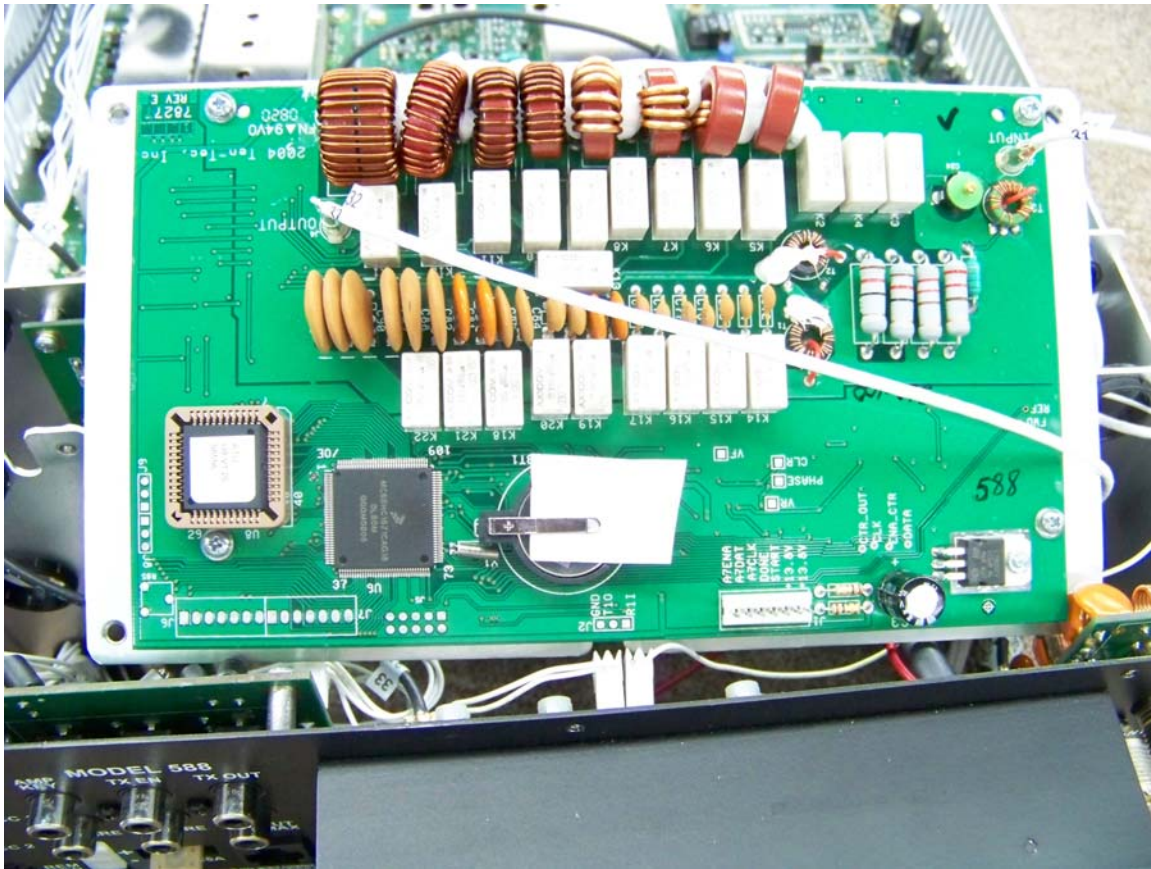
7. Provided in the packing kit with the tuner board is a cable labeled #32. Route one end of this cable through the middle grommet as shown above, and plug one end into the socket that you removed cable #31 from in step 6. Leave the other end unplugged. It will be plugged into the autotuner board in a later step. Note that the space available to reach in with your fingers to plug this cable in is limited. We recommend grasping the connector end with a small pair of needle nose pliers to insert the #32 cable end into the socket. Picture shown here is with the #32 cable successfully in place of #31.



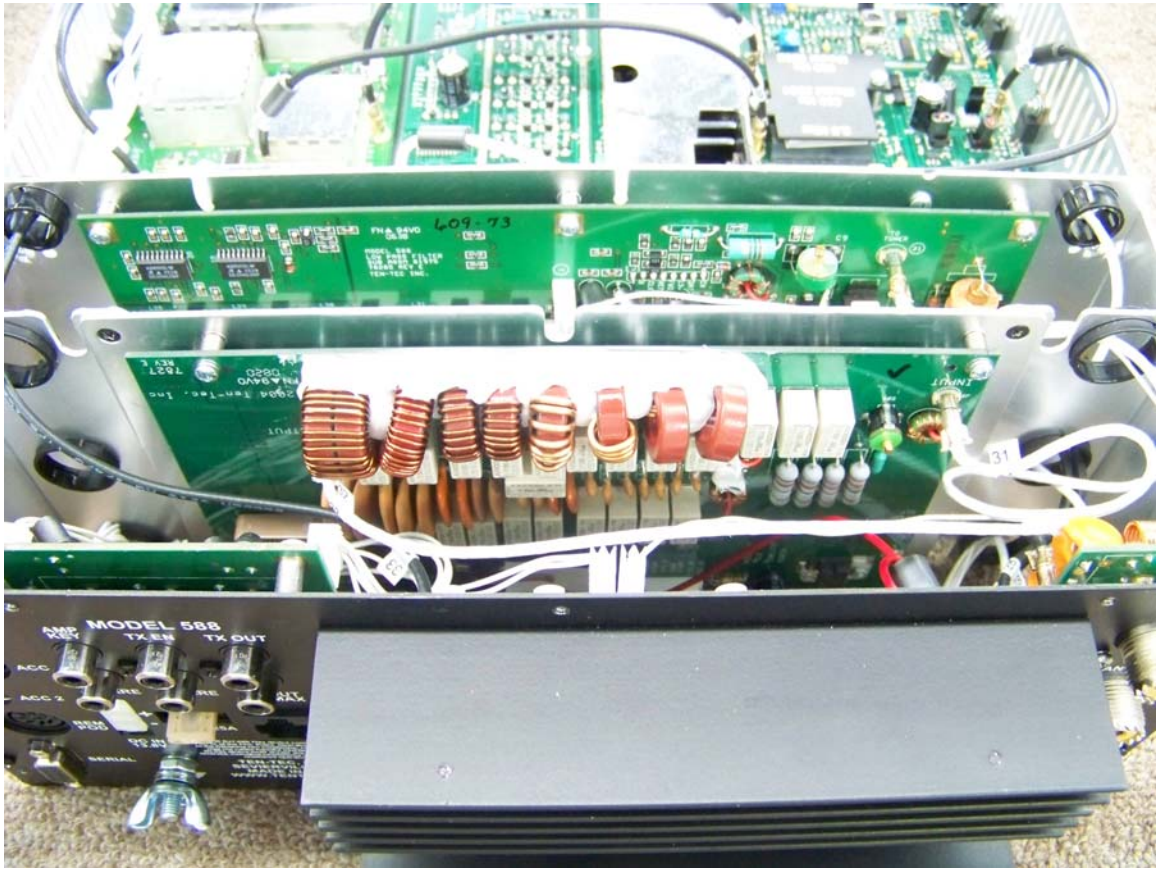
8. Turn the radio upside down. Along the left side of the radio is a multi-wire cable bundle with an unplugged connector marked 19 on one end that is partially tucked inside a plastic grommet.



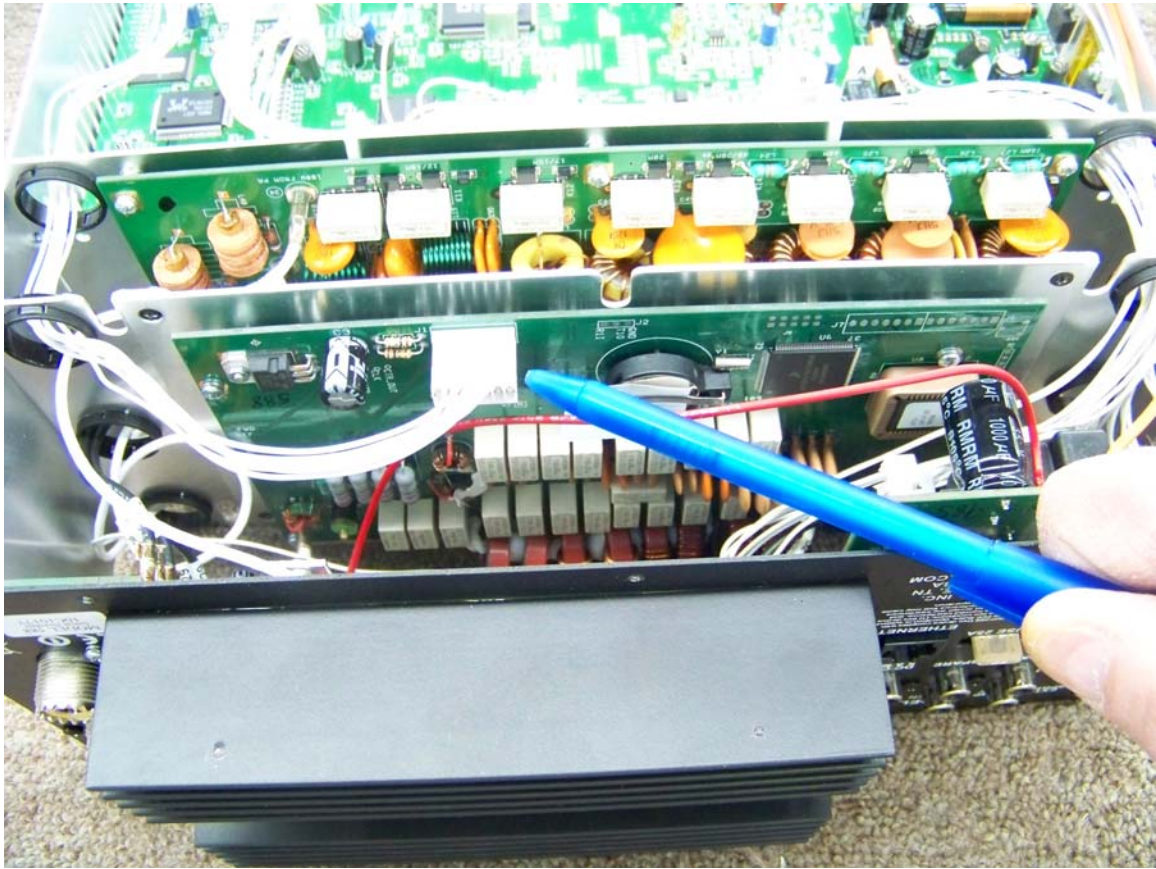
9. Pull the #19 cable out from the grommet that was holding it in place as shown in step 8. Unfurl the cable to its full length, then thread the connector end through the two plastic grommets as shown above. Leave this cable unplugged. It will be plugged into the autotuner board in a later step.



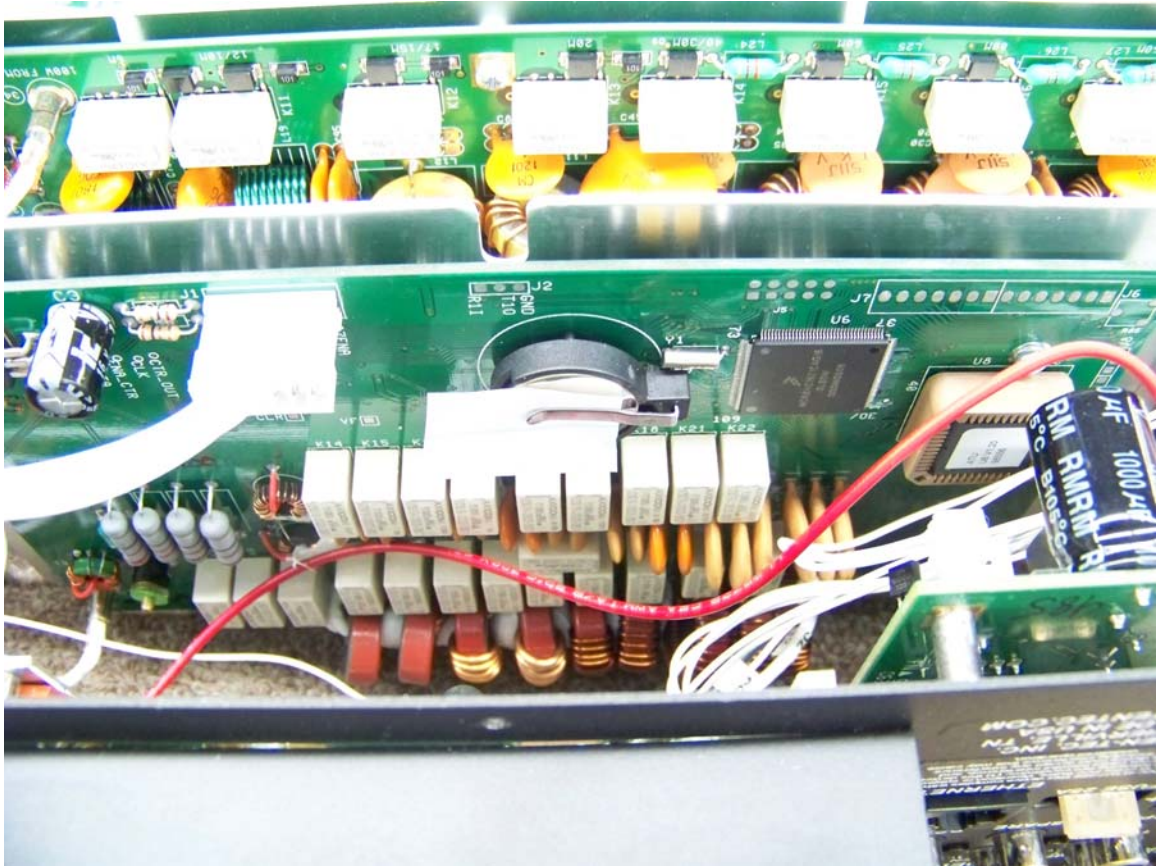
10. With the radio returned to right side up, retrieve the tuner board and shield assembly and turn it correct side up as shown. Plug cable #32 into the connector marked OUTPUT. Plug cable #31 into the connector marked INPUT as shown in the illustration. **Please note with the board correct side up for installation that the printing on the PC board is oriented in the other direction and will be shown upside down (see photo).**



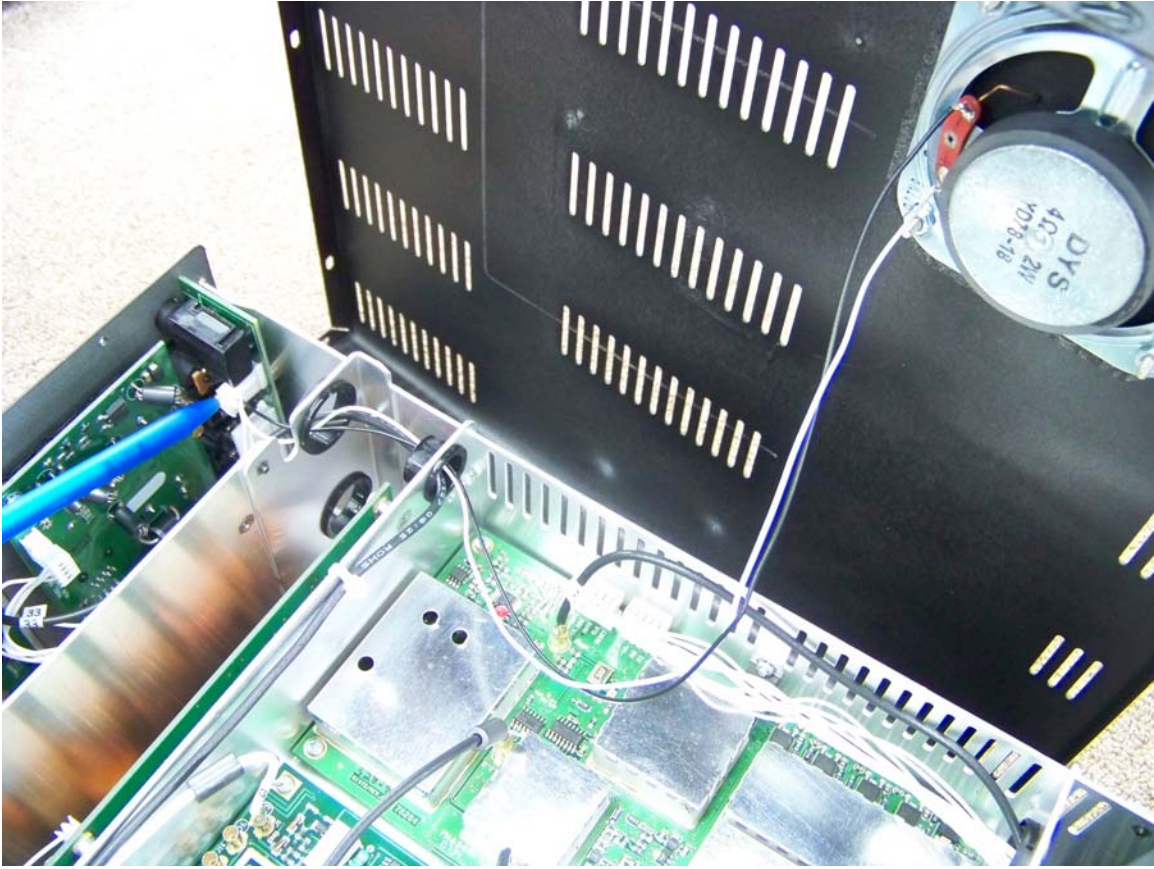
11. Insert tuner board and shield into the radio as shown. Attach the two black screws removed in step 3 into the two corners of the shield.



12. Turn transceiver upside down. Install the remaining two black screws that were removed in step 3. The #19 cable that was routed to the back of the radio in step 9 is now ready to be plugged into connector J1. (Pen used as pointer).



13. There is a small piece of paper inserted between the battery clip and the battery used in the autotuner. Remove this piece of paper. The autotuner installation is now complete.



14. Re-route the internal speaker cable that was removed in step 2 and reconnect to connector 9B, located just under the external speaker jack at the rear of the radio.

15. Replace top and bottom covers and replace 4 Philips case screws and the Torx screws removed from around the rear perimeter of the case.

16. After re-connecting DC power to the transceiver, turn transceiver front panel power switch to ON, and enter the transceiver menu. There is a line item marked AUTOTUNER which must be turned to ON to actuate the tuner. Tuner operation instructions are provided in the Omni-VII owners manual.

