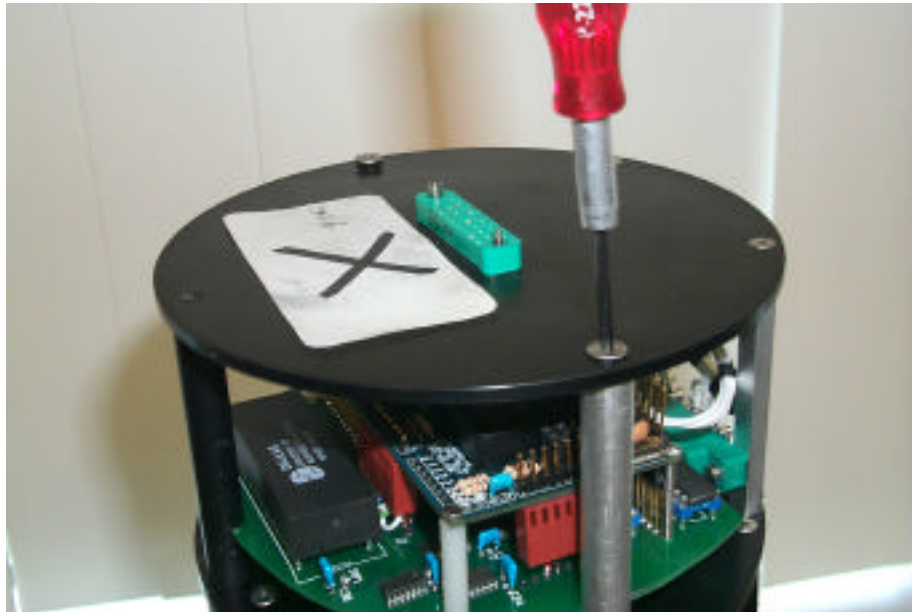


From time to time we may send you a new EPROM to upgrade the operating program in your TAPS. Anybody can install one! Here's how...

1. Open TAPS and remove the electronics/transducer assembly (E/T). You already know how to do this from the TAPS-6 manual.
2. Stand the E/T on the transducer end. Loosen the two allen screws on the top on each side of the connector about 2-3 turns using a 5/64" allen wrench. Do not remove these screws.

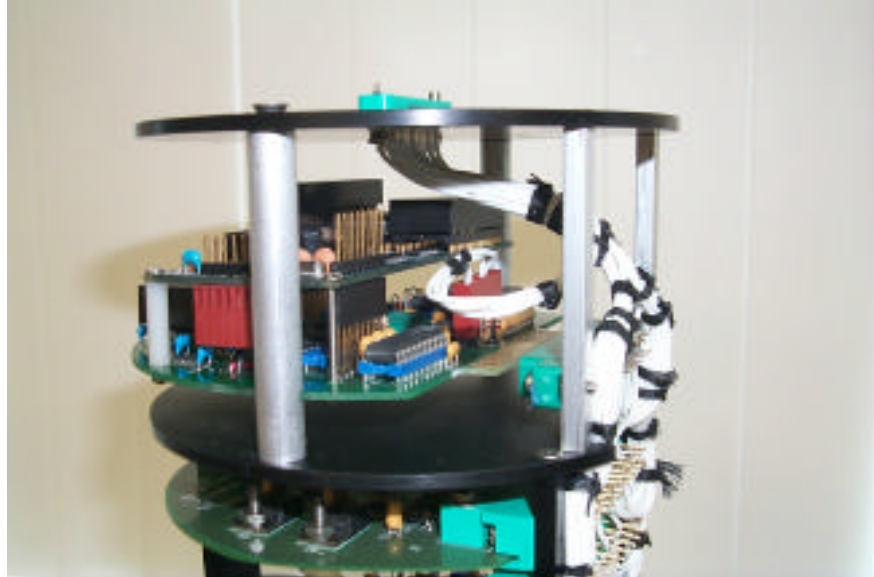


3. Remove the black delrin PCB (printed circuit board) retainer by lifting the top plate slightly (this is why you loosened the screws) and pulling the top of the rod out.



You may have to lift the rear edge of the PCB slightly to get the bottom peg out of it's hole.

4. Pull the PCB back by holding the sides of the PCB behind the two vertical guide posts and pulling straight back. Do not remove the PCB entirely yet.



Note the bundle of white wires running to a connector on the PCB. Reach in and lift this connector off the pins.

5. Remove the PCB. Note the large IC (integrated circuit) with a white paper label. Remove this IC by gently prying up under the end with the small notch with a small screwdriver. As the IC lifts, try reaching in farther with the screwdriver to lever it up more-or-less evenly.



6. Install the new EPROM in this socket. One method for doing this is to place the IC over the socket and align the nearest row of pins with the mating jacks in the socket. Push these pins into the jacks slightly—just so they are located. Holding the IC at the ends, pull the entire IC back towards you while rotating the other row of pins towards the socket. When the pins appear to be aligned, push the IC firmly into the socket.

The notch on the new IC goes in the same direction as the old one—toward the middle of the PCB, facing the square socket and IC.

After the EPROM is installed, inspect the IC and socket carefully. It is incredibly easy to install an IC with one pin bent under or out of the socket.

7. Installation is the reverse of the steps above. Everything should go together with minimal force; if something will not go, stop and find out why before applying more pressure. Check that the connector on the top of the PCB is installed correctly. It is fairly easy to install it one pin off (and then TAPS will not work).
8. Before assembling TAPS into its case, it would be prudent to connect the battery endcap to the E/T assembly for a quick test. Besides, you will want to check the setup of TAPS before you start taking data.

Hook TAPS up to a computer and start a terminal program. Install the shorting plug and verify that TAPS is operational. You may have to press S to see the Status display. Check, for example, that the time and date are correct and the mode is the same as previously programmed.

Go through the following screens to ensure TAPS is setup properly:

PROGRAMMING (CTRL-P) -- setup the mode you want to use and the operating parameters for that mode.

FACTORY (CTRL-F) -- you should see a reasonable serial number and a battery voltage scaling factor around 0.00065 or so.

CONSTANTS (CTRL-Z) -- if the cal constants were ok on the status screen, just hit return at each line for these values. Enter the depth sensor rating (probably 300 psia). Check that the depth scale factor is around 1-1.3 and the temperature offset is around 0.

9. Turn TAPS off and reassemble into the pressure case. It would be wise to check operations one more time before installing TAPS.