

11190729 4T -- Replacement of Memory Chips

Rev.: 1.4

Contents of Kit

- 3097: Programmed memory chips (labeled U2 and U5)
- A 5/64th hex driver

Caution Needed When Handling Memory Chips

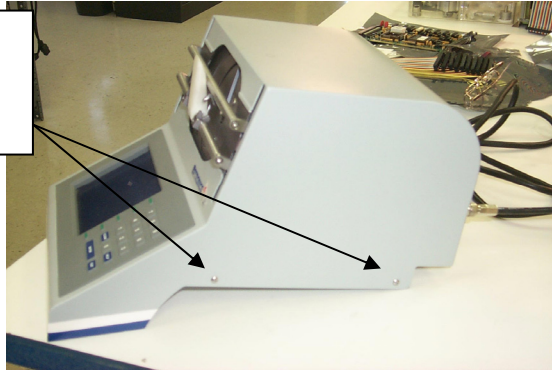
It is important that you ground your body before handling electronic components. Your body can accumulate large amounts of static charge just by walking. You may not feel it, but the charge can be sufficient to damage the memory chips or other components. **Before handling these electronic components, touch a well-grounded surface such as the metal shroud of the 4T power plug where it plugs into the back of the 4T.** This should be done while the 4T power supply is plugged into an AC outlet.

Also, the pins on the bottom of the memory chips are easily bent and damaged. Always handle the chips gently and carefully.

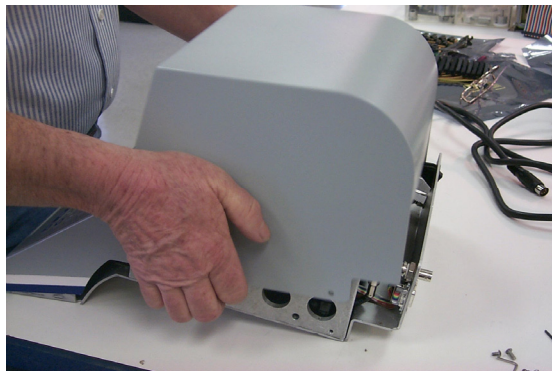
Remove the Case Top

1. Turn off the power to the 4T.
2. Ground yourself as described on the first page.
3. Unplug the power cord.
4. Remove the 8 screws holding the 4T's cover in place using a 5/64th hex driver. There are two on each side, and four in the back.

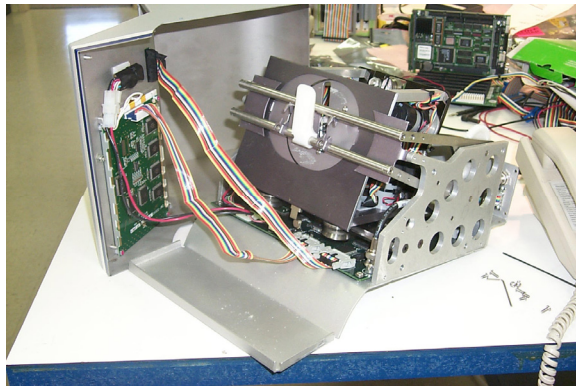
Remove all screws (8 in total) so that you can remove the cover.



5. Remove the cover. The cover will be connected via wires to the processing board, preventing you from completely disconnecting the cover from the base.



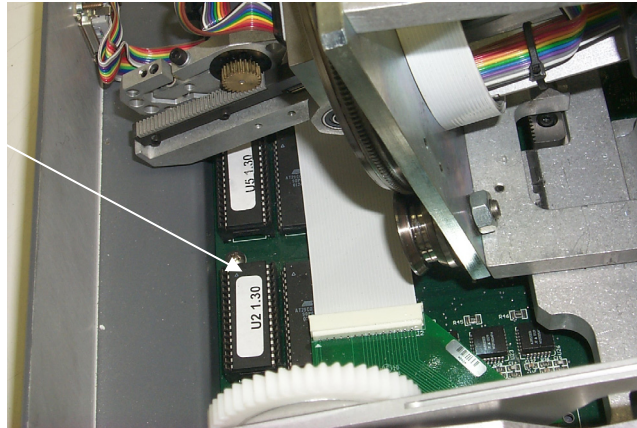
6. Place the 4T cover off to the side so that it is out of the way as shown below:



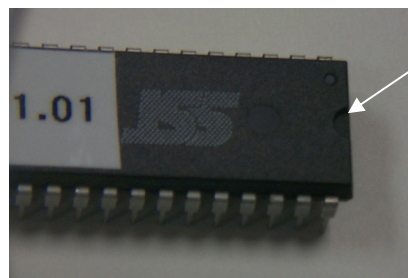
Replace the Memory Chips

1. Move the carriage of the machine to the right most position and rotate the theta mechanism fully counter-clockwise as viewed from the front of the machine.
2. Locate the two memory chips near the rear of the processor board, labeled U2 (x.xx) and U5 (x.xx).

Note the location of a notch on the right side of each chip. The new chips need to be installed in the same orientation.



3. Grip U2 with your thumb and index finger. Gently pull the chip out of the chip socket—you may need to rock the chip back and forth slightly. As you feel the chip start to loosen, be careful that you are pulling the chip *straight up out of the socket*, or you may bend the chip's pins.
4. Move the carriage left and rotate the theta mechanism clockwise by 180°.
5. Remove the U5 chip, applying the same technique used to remove the U2 chip.
6. Install the new chips into the chip sockets from which you removed the old chips—**U2 on the left, U5 on the right**. The notch on the chip (see picture below) must be located to the right-rear location as viewed from the front of the machine. Make sure that all pins are engaged into their respective sockets and then seat the chip by pushing it down into the chip connector. **Don't force the chips. If the pins are aligned, the chip will go in fairly easily.**



Notch on right side of memory chip.

CAUTION

Make sure you are well grounded before handling memory chips.

7. Reattach the power cord and turn the machine on to verify that the new chipset boots up properly and that that the code level displayed on the screen matches the label on the chips.
8. Turn the 4T off again.
9. Reattach the cover and turn the 4T on.