

Technical Bulletin # 26

To: Coulometrics Support Personnel

From: Engineering Dept.

Date: 11-18-99

Subject: CM5240 – Installation of software Upgrade in CM5240 instrument

The following is a detailed procedure for installation of a software upgrade for the CM5240 TIC Autosampler.

Supplied with this instruction should be:

1. 1 new 32 pin Firmware chip in an antistatic plastic tube.
2. 1 DIP IC extraction tool.

1. Turn off the CM5240 instrument at the main power switch.

2. Unplug the instrument from the main power connection. AC power is present when the instrument is turned off and is a shock hazard.

3. Remove the Right side panel of the CM5240. (right side panel is referenced to the front of the instrument). This is accomplished by placing the fingers of both hands at the seam of the right panel and pulling out away from the instrument. It will require a bit of force. This will snap the panel out of the two back snap holders. Then simply pull the panel towards the back of the instrument to remove the panel from the front two snap holders and set it aside.

4. Locate the C-programmable Controller. Please look at the drawing on page two of this instruction. It shows the four circuit boards located in the instrument. The Controller is in the lower right hand corner of the panel (highlighted) .

5. Locate the Chip on the Controller Board. Please see page 3 of this instruction sheet. The programmable controller circuit board has the firmware chip labeled and located on a 32 pin dip socket. The chip will be labeled “ Soft xxxxxx” or “CM5240Vxxx”.

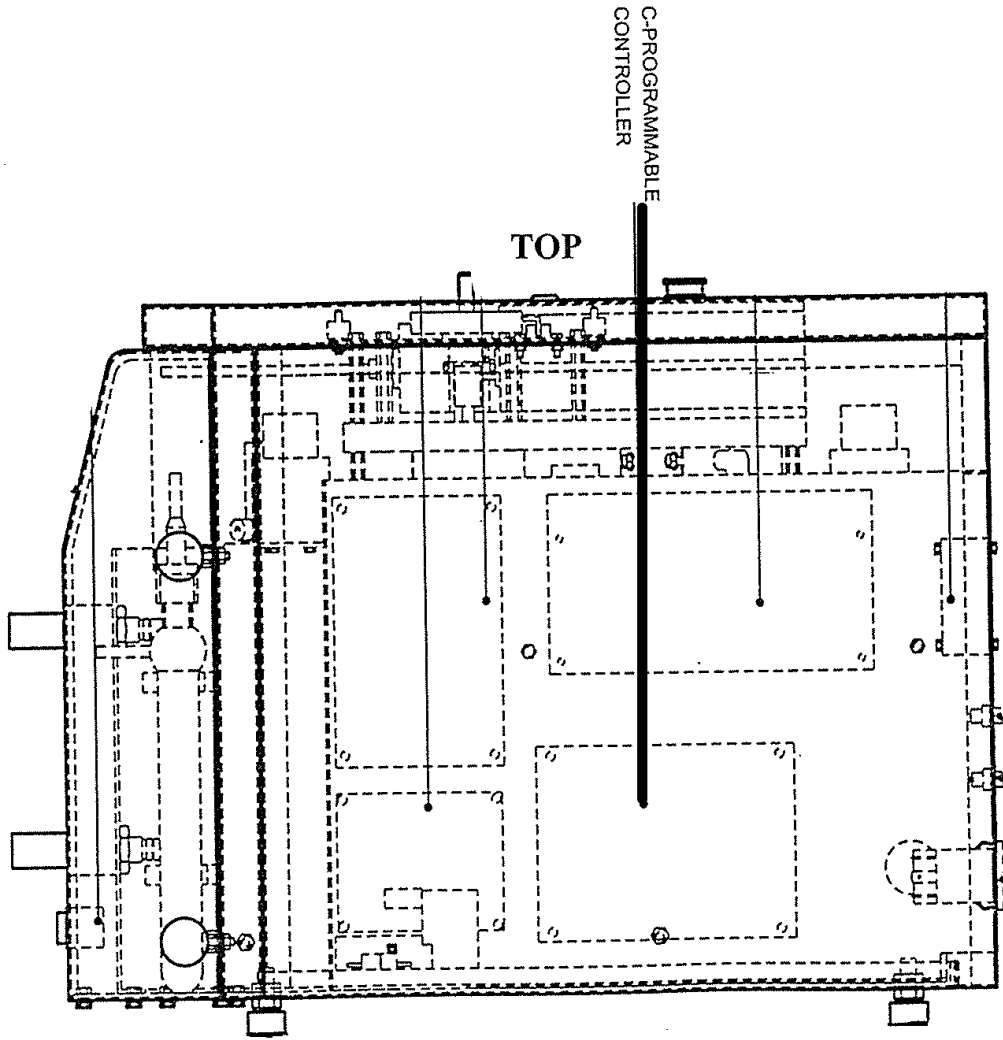
6. Remove the old chip. Note the orientation of the notch of the chip. It is on top of the chip and is pointing towards the top of the instrument. Using the IC Extractor tool provided in this kit, carefully work the ends of the extractor under the Firmware Chip. Pull forward as straight as possible so that the IC pins are not bent. The old chip will unplug from the IC socket.

7. Install the New chip. Remove the new chip from the antistatic tube it was shipped in. It is labeled “Soft xxxxxx” or “CM5240Vxxx”. Orient the chip so the notch is on top of the chip and pointing towards the top of the instrument. Note the orientation must be correct and the chip must be installed in the proper orientation or it will not work! Carefully align the chip so that each pin is over socket. The chip legs have been pre formed to fit the socket so no bending is necessary! Carefully press the chip in the socket.

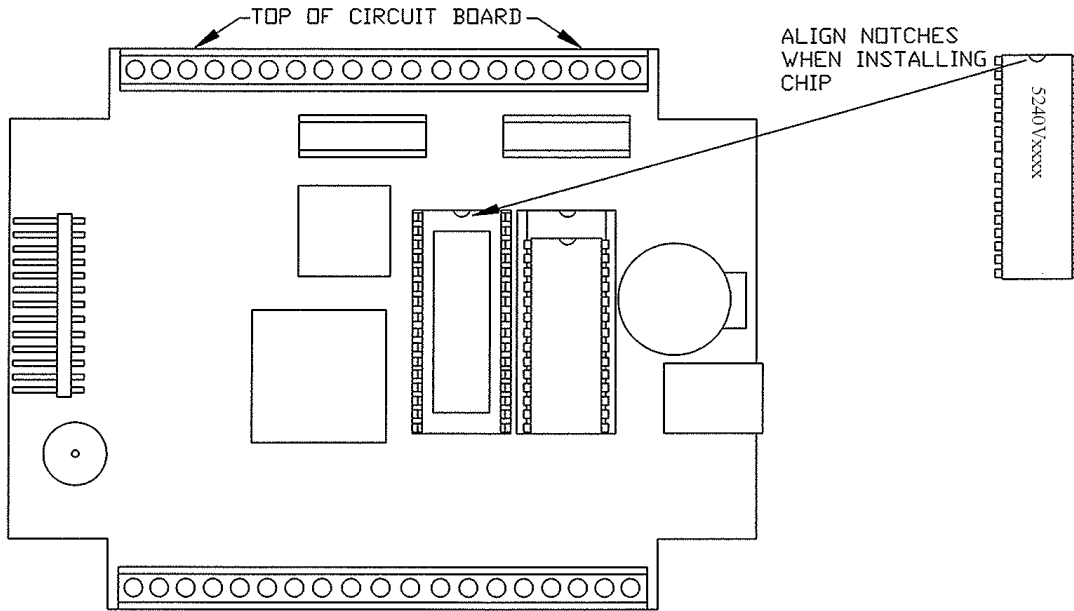
8. Test The installation. With the right panel still off, plug the CM5240 back into the wall outlet. Turn the instrument on and note the response of the instrument. The power switch light will come on. The instrument should beep after about two seconds. The 10 ml Acid light and the load sample light should come on after about 6 seconds. If this does not occur the chip is not properly installed.

9. Reinstall the right panel. Reverse the procedure in step 3.

CM5240 RIGHT SIDE VIEW



C-programmable Controller UIC part# CM110-057



10. Package the old chip. Place the old chip in the antistatic tube. Return it to UIC along with the IC Extraction tool.

For additional assistance and or instruction please contact the UIC service Department.

UIC Inc.
800-342-5842 or 815-727-5431

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