



050-2388-00

M66418

U521 REPLACEMENT

For TEKTRONIX[®] instruments:

11A33 Differential Comparator B010100 - B020508

This kit contains parts and instructions to install U521, microcircuit, EPROM, pn 160-4227-04. The new microcircuit incorporates firmware version 2.4.

KIT PARTS LIST:

Ckt. Number	Quantity	Part Number	Description
A1U521	1 ea	160-4227-04	Microckt. dgtl: HMOS. EPROM. ver 2.4
	1 ea	-----	Label: 050-2388-00Kit

INSTRUCTIONS:

WARNING

Dangerous shock hazards may be exposed when the instrument covers are removed. Before proceeding, ensure the mainframe power switch is in the off position. Then, remove the plug-in from the instrument. Disassembly should only be attempted by qualified service personnel.

CAUTION

Many components within the 11A33 Differential Comparator plug-in's are extremely susceptible to static-discharge damage. Service the instrument only in a static-free environment. Observe standard handling precautions for static-sensitive devices while installing this kit. Always wear a grounded wrist strap.

The Following Instructions Are Divided Into Two Sections:

Section A. EPROM microcircuit replacement.

Section B. Programming The Unit Identification.

CAUTION

Do not remove the label affixed to the top of the EPROMs. Removing this label will allow light into the chip, and may cause partial erasure of its data.

When installing the new EPROM microcircuit be certain pin 1 is position correctly and all component pins are properly seated. Avoid touching the microcircuits pins or socket contacts. Finger oils can reduce contact reliability.

Section A. EPROM microcircuit replacement.

- () 1. Remove U521, EPROM microcircuit, using an Insertion - Extraction Pliers (such as General Tool's pn U505BG, a 28-pin type). Refer to Figure 1, for component location.
- () 2. Position the pliers around the outside of the EPROM microcircuit. Squeeze the handles to grasp the EPROM and slowly pull it from the socket.
- () 3. Install the new EPROM microcircuit into the socket, using the same tool used in step 2. Check that all the microcircuit pins are straight and evenly spaced to ensure proper installation.

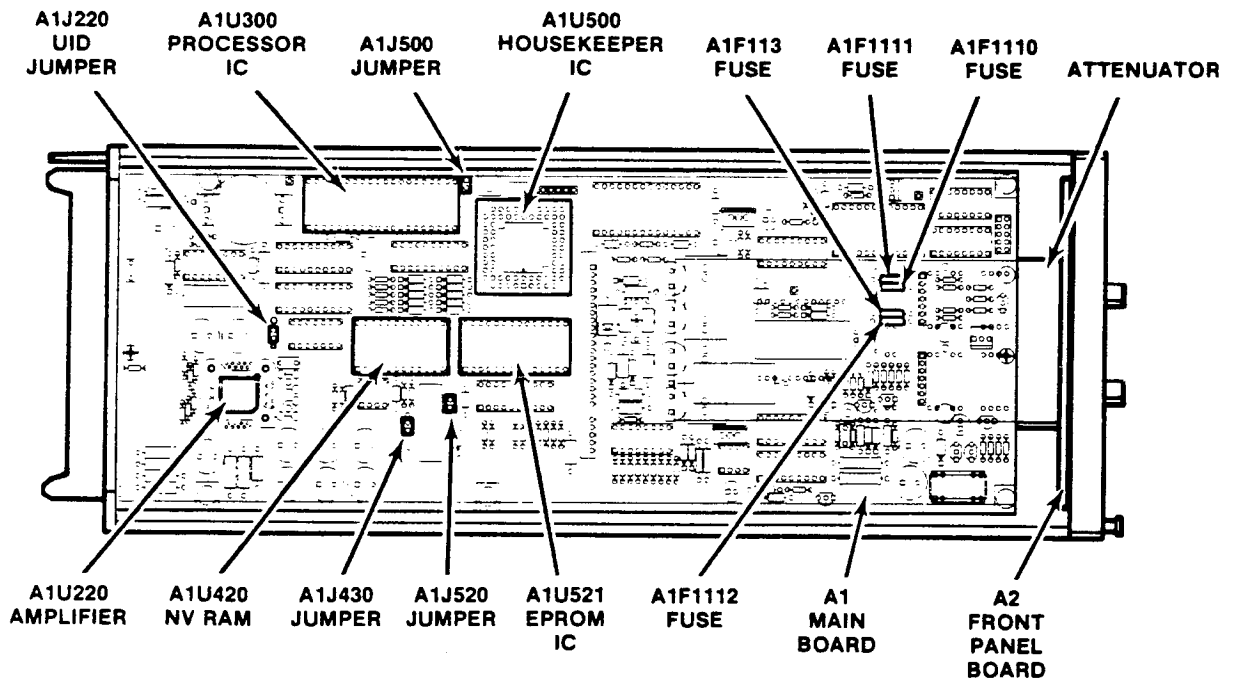


Figure 1. Main circuit board A1.

Section B. Programming The Unit Identification

NOTE

The Unit Identification (UID) is identical to the plug-in's serial number and is stored in NV RAM. It is necessary to enter this number if the Main circuit board A1 or firmware are replaced.

- () 1. **11401 and 11402.** remove the bottom cover of the mainframe and install a Term Conn Link (shorting strap) on the CAL-LOCK terminals located on the Time Base circuit board A6. Refer to Figure 2, for pin locations.

NOTE

No special set-up needed with the 11301/11302 mainframes.

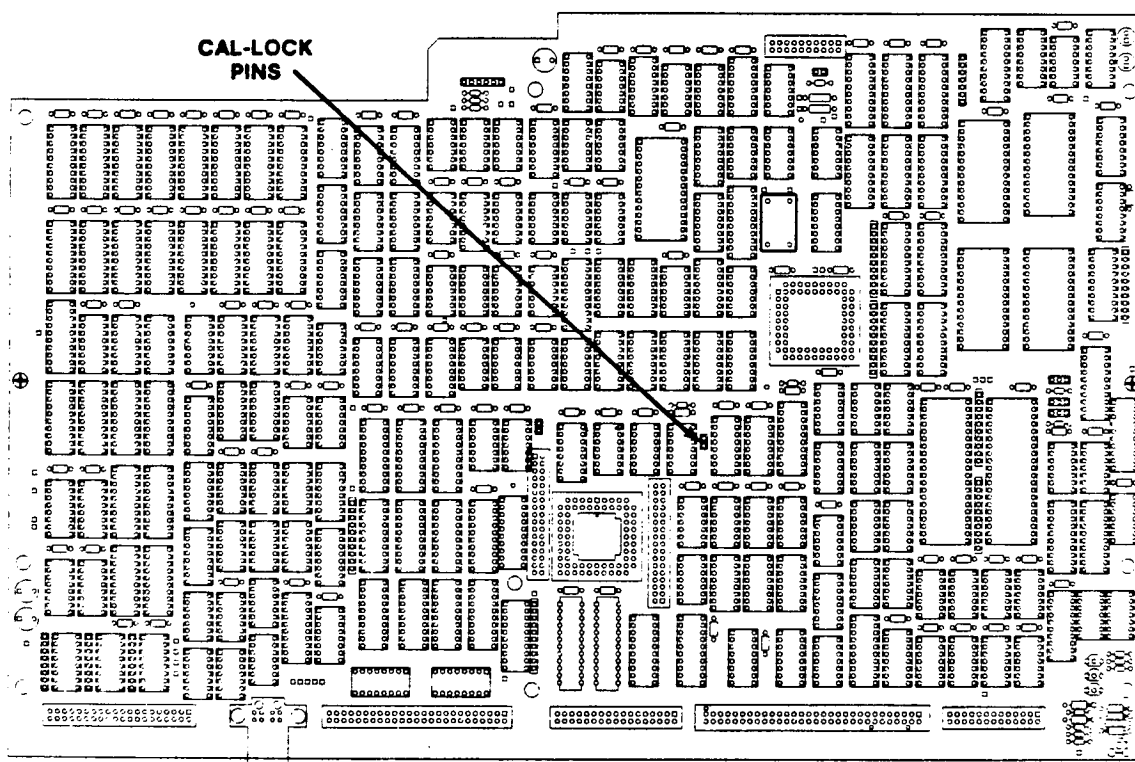


Figure 2. - 11401/11402 Time base ckt bd A6

To Enter the UID, use this procedure:

- () 2. Connect the Terminal to the mainframe's RS-232-C port. (Refer to the mainframe User's Reference Manual for instructions on setting up the RS-232-C parameters).
- () 3. Move the UID Term Conn Link jumper marked SNA on the Main circuit board A1, to the "S" position (two lower pins). Refer to figure 1.
- () 4. Install the plug-in into center compartment. Turn the power on. Wait until Diagnostics checks are completed. **Serial Sum** error messages will be displayed.
- () 5. At the Terminal, type the command:

UID [Center]: "<B0XXXXX>"

- Center refers to the name of the compartment.
- () 6. At the Terminal, type the query:

UID? [Center]

Observe that the correct UID is reported.
- () 7. Push the ENHANCED ACCURACY button on the mainframe front panel.
- () 8. Move the ON/STANDBY switch to STANDBY.
- () 9. Remove the plug-in from the mainframe.
- () 10. Return the jumper on the Main circuit board A1 to the two middle SNA pins.
- () 11. Replace the plug-in's right and left electrical shields.
- () 12. Remove the protective backing from the 050-kit label, included in this kit, and place it on a clean, dry area on the top frame rail. The label indicates installation of the kit for future reference.
- () 13. **11401 and 11402**, Remove the Term Conn Link (shorting strap) on the CAL-LOCK terminals located on the Time Base circuit board A6. Replace the bottom cover on the mainframe.