



SUN ELECTRIC CORPORATION

Model: MCS-2500-4-P  
UNIT SETUP

Page: 1 of 6

# Installation Instructions

**INSTALLATION MUST BE PERFORMED  
BY  
QUALIFIED SUN PERSONNEL ONLY**

## INSTALLATION OVERVIEW:

The Installation Instructions listed are for the various versions of the MCS-2500-4-P. The unit is shipped as a fully assembled unit except for the items as listed in the Parts List.

## PARTS & ACCESSORIES LIST:

PART NUMBER	DESCRIPTION	QUANTITY
0120-0544	Adapter, Isuzu	1
0119-0381-01	Literature Kit	1
0301-0944-01	Filter Element, 75 microns	1
0301-0945-01	Filter Element, 8 microns	1
0403-1311-06	Screw, 6-32 x 3/8	3
0507-0025-01	Probe Assembly	1
0551-0101*01	CD, Sun Software System	1
0552-0043	Adapter	1
0552-0044	Adapter	1
0552-0045	Adapter	1
0552-0089-01	Mouse, three button	1
0552-0948-01	Disk Caddy	1
0552-0959-06	Document Booklet	1
0552-3006*02	Disk, Program Install	1
0610-0163	Screw, 10AB x 1/2	4
0616-0006	Keys Nuts, #6-32	3
0647-0170	Tee	1
0669-0220	Hose, Poly, 1/4" diameter	1.67ft
0669-0623	Hose, 1/8 x 5/16 x 6	1
0669-0733	Hose, 3/16 x 5/16 x 6	1
0669-0734	Hose, 1/4 x 7/16 x 6	1
0692-1834-01	SEL 1403C Questionnaire	1
0718-0103	Cable Clamp	1
0787-0035	Cap	1
1091-0303-01	Boom Kit	1
1747-0101	Pattern Pickup, Chrome	1
1747-0102	HEI Pickup	1
1747-0103	Adapter, Toyota	1

Note: All parts with an(\*) designates revision levels

PART NUMBER	DESCRIPTION	QUANTITY
3988-0255-01	Exhaust Hose Assembly	1
6002-0346	Lead Assembly	1
6002-0349	Jumper	1
6004-0407	Test Lead, Low Temperature	1
6004-0462	Volt/Ohm Test Lead, Pink	1
6004-0544-02	Pattern, Dual, Assembly, Black	1
6004-0763-02	Pattern Lead Conventional, Blue	1
6004-0768-01	Cable Assembly, VIP	1
6004-0775-02	DIL Y Adapter	1
6005-0171-03	Current Pickup	1
6005-0182-02	Universal Test Lead Assembly	1
6006-0003-02	Vacuum Hose	1
7009-1374-08	Timing Light Assembly	1
7009-1869-01	Exhaust Probe Assembly	1
7009-1921-04	Remote Assembly	1
7009-2325-02	Trigger Pickup and Lead Assy, Red	1
EAA0085C03A	VIP 1/2 Calibrated Assembly	1
EAL0123C00A	Keyboard Overlay	1
EASC060C01A	Top Panel, Shroud	1
EASC060C02A	Left Side Panel, Shroud	1
EASC060C03A	Right Side Panel, Shroud	1
EAW0060C00A	Amps Cable	1
MT3000A440	Low Amps Probe	1

**REQUIRED TOOLS:** \_\_\_\_\_

Complete Tool Kit  
Anti-Static Kit



**NOTE:** *If a step indicates that it is for a particular option and that option is not available for the unit being set up, disregard the step and go on.*

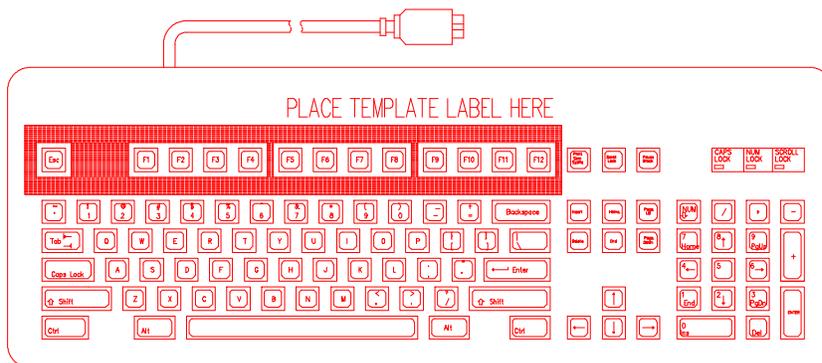
1. Cut Straps and remove the top of the carton.



2. After removing the VIP assemblies from the foam packing, remove the carton sides and the top foam packing.
3. If there is no foam collar around the base of the monitor, there will be a two piece cardboard collar in the packing carton. Insert this collar under and around the base of the monitor to support it during the uncrating process.
4. Slide the MCS-2500-4-P and carton base off the pallet. Split the corners of the base carton.
5. Lean the MCS-2500-4-P so that one half of the foam base can be removed.
6. Lean the MCS-2500-4-P so the other half of the foam base can be removed.
7. Remove the two piece cardboard or foam collar from around the base of the monitor.

**NOTE: It is recommended that this packing be retained in case the unit has to be transported at a later date.**

8. Open the computer door and remove the cardboard inserted behind it.
9. Open the keyboard drawer and remove the bubble wrap taped to the keyboard.
10. Pull the printer drawer out and cut the tie wrap holding the bubble wrap. Remove the bubble wrap.
11. Lift the Printer Cover and cut the tie wrap holding the Print Head.
12. Inventory all items using the appropriate column in the Parts and Accessories Lists and inspect for damage. The parts are located in the accessories bag in the bottom drawer of the unit.
13. Clean the keyboard surface to remove dirt and dust. Peel the backing off the Keyboard Label (EAL0123C00A) and place the label around the Function keys as shown in Figure 1.



**Figure 1 Keyboard Label**

14. Install the Boom Kit (1091-0303-01) following the instructions enclosed in the Boom Kit box. Do not install the three screws in the rear on the bracket at this time and leave off the Boom.
15. Install the Left Side Panel, as viewed from the front (EASC060C02A), using the three screws left out of the Boom. This panel mounts over the Boom bracket. See Figure 2, Page 4.
16. Install the Right Panel, as viewed from the front (EASC060C03A), to the cabinet using the two 6-32 x 3/8 screws (0403-1311-06) and the three #6/32 Keps nuts (0616-0006). The screws are inserted from the inside out and the nuts are on the outside of the cabinet. See Figure 2, Page 4.
17. Attach the Top Panel (EASC060C01A) to the side panels using the four (4) 10AB x 1/2 screws (0610-0163). See Figure 2, Page 4.
18. Install the Boom into the bracket.

## REAR VIEW

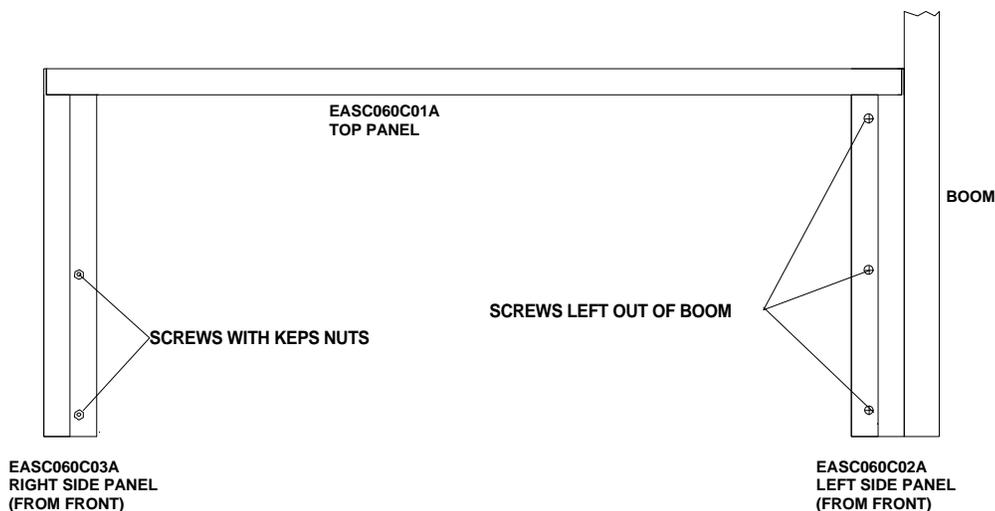


FIGURE 2 SHROUD

19. Install the VIP modules by hooking them onto the end of the boom in the slot provided.
20. Connect the female end of the VIP Cable Assembly (6004-0768-01) to the MCS Interface connector on the VIP 1 Module.
21. Connect the male end of the VIP Cable Assembly (6004-0768-01) to the VIP Interface connector on the rear of the MCS-2500-4-P.
22. Connect the Trigger Pickup and Lead Assembly (7009-2325-02) to the Trigger Connector on the VIP 1 Module.
23. Connect the Conventional, Blue Pattern Lead (6004-0763-02) to the Secondary Connector on the VIP 1 Module.
24. Connect the Volt/Ohm Test Lead (6004-0462) to the Volt/Ohm Connector on the VIP 1 Module.
25. Connect the Timing Light Assembly (7009-1374-08) to the Timing Connector on the VIP 2 Module.
26. Connect the Vacuum Hose (6006-0003-02) to the vacuum port on the VIP 2 Module.
27. Connect the Low Temperature Test Lead (6004-0407) to the Temperature Connector on the VIP-2 Module.
28. Connect the Amp Probe Assembly (6005-0171-03) to the Amps Connector of the VIP 2 Module.
29. Connect the Remote Control Assembly (7009-1921-04) to the Remote Connector on the rear of the unit.
30. Place the remaining accessories in the storage drawer of the MCS-2500-4-P.

**SOFTWARE INSTALLATION:** \_\_\_\_\_

1. Plug unit in and turn on power. The DOS PROMPT should appear.
2. Insert the Program Installation Disk (0552-3006\*02) into the Disk Drive, then insert the Sun Software System CD into the CD ROM Drive.
3. Type **A:\INSTALL** at the **C:\** prompt and press **<ENTER>**.
4. After a delay the screen will display **Verifying Disk**. The monitor will then display a code number and prompt you to call Sun Electric Corporation at 1-(800) CALL SUN, Select 2 for the Parts Department.
5. Parts will ask you for the Code Number that is displayed on the monitor.

6. A registration number will be given to you.
7. Once the Registration Number is entered, the software will continue to install.
8. After the system displays the Pep Boys Software Installation page; press **<ENTER>**
9. After the system displays the Installation Instruction; press **<ENTER>**.
10. Select **Install Pep Boys Software, Install Mouse Drivers** and **Install Quicklink** from the Installation Menu. You will be prompted to insert the Mouse Driver disk and Quicklink disk, which are shipped with the tester. Follow the prompts on the Monitor to complete the installation. **NOTE:** If Disk does not load, see Troubleshooting Section on this page.
11. When Software Installation is complete, turn unit off and Remove Floppy Disk from Drive. Wait 20 seconds and power up unit.

**CALIBRATION:** \_\_\_\_\_

1. From the MCS menu select #1 VIP.
2. Allow unit to warm-up and verify that all items on the calibration page are all green. If not go to Troubleshooting
3. Follow the procedure in chapter 15 of the MCS-2500 Service Manual, perform a full hardware and software calibration of the IR Bench.
4. Exit to the Main Menu.

**TROUBLESHOOTING SECTION:** \_\_\_\_\_

COMPLAINT	CORRECTIVE ACTION
<b>I. Program disk will not load.</b>	Defective program disk; call Sun Electric Parts Department for replacement diskette at 1-800 CALL SUN and select 2 for Parts.
<b>II. Will Not Accept Validation Code Number.</b>	Defective program disk; call Sun Electric Parts Department for replacement diskette at 1-800 CALL SUN and select 2 for Parts.
<b>III. Write protect error cannot write to drive A. Abort, Retry, Ignore, Fail</b>	<p>Check Diskette write protect tab; it should be in the closed position (write enabled).</p> <ul style="list-style-type: none"> <li>• If not, close write protect tab; reinsert disk into Disk Drive A and Press <b>&lt;R&gt;</b> for Retry. Once write protect error is corrected, if unit returns to the <b>A</b> prompt, type <b>Install</b>.</li> </ul>
<b>IV. Amps, Vacuum and Oil Temperature are Black</b>	<ol style="list-style-type: none"> <li>1. Vip 2 may not be installed. Press <b>&lt;Continue&gt;</b>, from the Calibration page.</li> <li>2. Select number <b>6 (utils)</b> from the Menu.</li> <li>3. Select number <b>7 (Options)</b>.</li> <li>4. Verify that the VIP2 is installed. The button should be White. If it is not then select <b>&lt;VIP2 INSTALLED&gt;</b>.</li> <li>5. Press <b>&lt;CONTINUE&gt;</b> choose <b>Status</b> from the menu then <b>Calibration</b> to make sure that Amps, Vacuum and Oil Temperature calibrate.</li> </ol>

**INSTALLATION COMPLETE**

**PLACE THESE INSTALLATION INSTRUCTIONS IN THE SERVICE MANUAL FOR THE MCS-2500**