

Installation Instructions

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

INSTALLATION OVERVIEW:

The Installation Instructions listed are for the SUN MACHINE 450 Serial C Pep Boys. The unit is shipped as a fully assembled unit with the exception of the items as listed in the PARTS & ACCESSORIES LIST. To insure that the most recent release of operating software is received, the software will be added to the unit before it is shipped to the customer.

PARTS & ACCESSORIES LIST:

PART NUMBER	DESCRIPTION	QTY
0002-0133-15	Test Lead Assembly, Jumper	1
0301-0944-01	Filter Element,75 Micron	1
0507-0025-01	Exhaust Probe, Anti Dilution	1
0528-1088-01	Paper, Printer	1
0552-0043	Adapter, Thexton Gm/Ford Coil Terminal	1
0552-0044	Adapter, Thexton GM HEI External	1
0552-0045	Adapter, Thexton GM Micro-Pak	1
0552-0103-01	Pad, Mouse	1
0552-0120-01	Adapter, Thexton Chry/Jeep/Eagle	1
0552-0130-02	Mouse, 3 Button Black PS/2	1
0647-0170	Tee, Vacuum	1
0669-0623	Hose 1/8"	1
0669-0733	Hose 3/16"	1
0669-0734	Hose 1/4"	1
0672-0035-01	Test Clip, Wire Piercing	1
0682-1049-01	Labels, Stickers	4
0692-1617	Operating Instructions, Isuzu/Honda Adapter	1
0692-1834-01	Quality Control Questionnaire SEL 1403C	1
0692-2291-01	Warranty Registration Form	1
0787-0035	Cap, Exhaust probe	1
1-2385	Cover, Keyboard	1
1747-0101	Test Adapter Assembly, Pat Pickup	1
1747-0102	Test Adapter Assembly, Hei Pickup	1
1747-0103	Test Adapter Assembly, Toyota HEI (11A) Adapter	1
1747-0105	Test Adapter Assembly, Isuzu/Honda Secondary	1
1-8081	Filter Element, 8 Micron	1
3988-0255-01	Test Assembly, Exhaust Hose 3/16"	1
4100-5016-01	Screw, Shoulder, 5/16-18 x 3/8" LG	3

PART NUMBER	DESCRIPTION	QTY
5-04431-240	Hose, Poly, 1/4" Id	24"
6002-0346	Test Lead Assembly, Jumper W/Probe	1
6002-0349	Test Adapter, ALDL Jumper	1
6002-0355	Test Adapter Assembly, Isuzu/Honda Primary	1
6004-0544-02	Test Lead Assembly, Pattern Dual Head	2
6004-0763-02	Test Lead Assembly, Pattern Conventional	1
6004-0775-02	Cable, Secondary "Y" Adapter	1
6004-0819-01	Adapter, Universal Pattern Pickup	1
6005-0171-03	Test Lead Assembly, Current Pickup	1
6005-0182-02	Test Lead Assembly, Universal	1
6006-0003	Test Lead Assembly, Vac Hose	1
6006-0003-02	Test Lead Assembly, Vac Source Hose	1
7009-1374-08	Test Lead Assembly, Timing Light	1
7009-1869-01	Test Assembly, Exhaust Probe Assembly	1
7009-2325-02	Test Lead Assembly, Trigger Pickup	1
8-2663	License Certificate	1
EAK0116L02A	Factory Installed Software	1
EAW0058C00A	Test Lead Assembly, Volt/Ohm Pinpoint	1
EAW0060C00A	Cable, Adapto	1
EERC102A	Remote Control	1
MT2598-PEP	Scanner W/Scan Graf-Fix	1
MT3000-400B	Vacuum Waveform Probe	1
MT3000A440	Low Amps Probe	1
TEEOS108CPB	Installation Instructions	1
ZEE0S140A	Operators Manual	1

REQUIRED TOOLS: _____

- Complete Tool Kit

INSTALLATION INSTRUCTIONS: _____

NOTE: Steps 1 through 6 will require two or more people.

1. Cut and remove the straps. Carefully slide the unit carton off the shipping pallet. Remove the top of the shipping carton.
2. Remove the carton by sliding the carton over top of the unit.
3. Remove foam packing from around the sides of the unit.
4. Lean the Sun Machine 450 so that half of the foam base can be removed.
5. Lean the Sun Machine 450 so that other half of the foam base can be removed.
6. Remove tape from ALL drawers and covers.
7. Remove bubble wrap from Keyboard, located in the keyboard drawer.
8. Inventory all items using the Parts & Accessories List and inspect for damage. The Unit Accessories are located in the bottom drawer of the unit. The Literature Kit is also located in the bottom drawer of the unit.

NOTE: Any software or hardware owners' manuals and pre-loaded software that come with the computer, such as Microsoft® Windows® 98 and the Sun Machine 450 Pep Boys operating Software Package are located in the bottom drawer of the unit.

NOTE: Any REGISTRATION CARDS for the installed software such as Microsoft® Windows® 98 must be filled out and sent in by the customer to ensure compliance with any software licensing agreements.

9. The boom is shipped in the lower position and will need to be raised to proper height.

10. Open the back cover of the unit, locate the boom journal and remove the stop bolt on the boom. Raise the boom approximately 7 inches to expose new stop bolt hole; place the stop bolt into the new hole.
11. Locate the shoulder screws (4100-5016-01); install the shoulder screws in the three holes at the bottom of the boom journal. The shoulder screw heads must be on the inside of the journal.
12. The monitor is shipped separately from the unit. Remove the monitor from the box and inspect the monitor for damage.
13. Remove the swivel base of the monitor if attached.

NOTE: If you are MOUNTING a 15" Sampo monitor, the Back Mounting bracket must be turned around as shown in Figure 1.

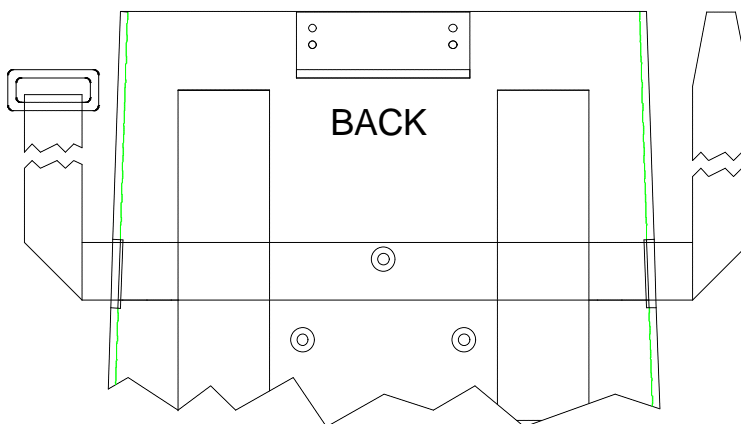


Figure 1, Monitor Base Plate for 15" Sampo Monitor.

14. Place the monitor into the monitor base plate with the back of the monitor pushed snug against the back bracket. Slide the front bracket snug up to the front of the monitor and tighten the nuts of the brackets.
15. Fasten the Velcro straps over the top of the monitor and snug down.
16. Discard the A.C. Cable supplied with the monitor. Use the A.C. Cable found attached to the top of the unit.
17. Connect monitor power, data, mic and audio cables to the unit.
18. Locate the Mouse and install the Mouse cable to the mouse connector of the connector plate on the left side of the unit.
19. Locate the printer paper (0528-1088-01) in the bottom storage drawer. Load printer paper into paper cassette of the Printer (100 Sheets maximum). A portion of the remaining paper can be placed under the Printer.
20. Connect all Test Leads and the Vacuum Hose to the respective connectors located on the boom of the Sun Machine 450. Store any unused leads and accessories in the lower storage drawer.

Starting Windows 98 for the first time

21. Turn on the analyzer. Windows® 98 will boot.
22. When prompted: Enter the shop name and number in the **Name:** field, and the shop name only in the **Company:** field, then select **Next >**.
23. The end-user (customer) must select **I accept the agreement** to accept the **License Agreement**, then select **Next >**.
24. Enter the **Product Key** number from the **Certificate of Authenticity** found on the **Getting Started Microsoft Windows® 98** book that came with the analyzer, then select **Next >**.
25. Select **Finish**.
26. Enter the shop name and number in the **User Name:** field, then select **OK**. **Do Not Enter A Password**.
27. **Date/Time Properties:** Select your time zone, set the date and time, and select **Apply**, then select **OK**.
28. You will be prompted to enter a validation code for the Pep Boys Software. To obtain a validation code, call EquiServ Parts Department at 1-800-225-5786 and select option #2.
29. Enter the **validation code** and select **OK**.
30. You will be prompted to **“Insert the Initial Installation disk into the Floppy Drive”**. Place the **Pep Boys Initial Installation** disk in the floppy drive then select **OK**.
31. You will be prompted to **“Insert the Sun Machine Software Update disk into the Floppy Drive”**. Place the **Pep boys Software Update** disk in the floppy drive then select **OK**.
32. Remove floppy disk from drive, store all floppies and CD-ROM's in a clean dry area.
33. Deselect the **Show this screen each time Windows® 98 starts** box on the **Welcome** window.
34. Close the **Welcome** window by pressing the **X** in the upper right corner of the **Welcome** window.
35. From the toolbar select the icon (Picture of a Monitor) for **Safe Shutdown** to shut down the computer. Answer **“Yes”** to the message box **“Do you really want to shut down this tester”**.
36. When prompted **“It’s now safe to turn off your computer”** press the **reset** button on the front panel of the computer.
37. While the computer is rebooting a Windows® 98 screen will appear and disappear twice, after the second time a **Pep Boys for Windows** logo will appear. The Windows® 98 desktop Icons will appear and disappear, just as they disappear press **”** and **P** at the same time.
38. Enter the **Pep Boys Password** to exit to the Windows® 98 desktop, then select **OK**.

Check Printer Selection

39. Select **Start** ▸ **Settings** ▸ **Printers**. Using Table 1. Printer Setup, is the correct printer selected for the installed printer? If printer is correct go to step 46.
40. Select the **Add Printer Wizard**, select **Next** >.
41. Select the printer **Manufacturer** and **Printer** from the following list then select **Next** >.

Model of Installed Printer	Select Manufacturer from list	Select Printer from list
OkiPage 6E	HP	LaserJet 4 P
OkiPage 10E	HP	LaserJet 4 P

Table 1, Printer Setup

42. Select **LPT1: Printer Port**, from the **Available Ports** window then select **Next** >.
43. Do not change the **“Printer Name”** that is currently listed, select Yes for **“Make this printer your default printer”** then select **Next** >.
44. Select **“Yes”** for print test page, select **Finish**.
45. Wait for printer to print page. If the printer printed the page, select **“Yes”**. If the page did not print select **“No”** and troubleshoot accordingly.

Check Printer Properties

46. Select the **Start** ▸ **Settings** ▸ **Printers**.
47. Press the right mouse button over the printer icon for the installed printer on the Printers page.
48. Select **Properties** on the dialog.
49. Select the **Details** tab.
50. Select the **Port Settings...** button.
51. Verify that there is no check mark on **Spool MS-DOS print jobs**, then select **OK**.
52. Select the **OK** button on the printer properties dialog.
53. Close the **Printers** window by pressing the **X** in the upper right corner of the window.

Check Network Adapter Properties

NOTE: The Network card should have a red X for the Intel 82558-based... card, if not perform the following procedure.

54. Select the **Start** ▸ **Settings** ▸ **Control Panel** ▸ **System**.
55. Select the **Device Manager** Tab from the **System Properties** Window.
56. Select the **plus sign (+)** to the left of **Network Adapters** to expand the list.
57. Highlight **Intel 82558-Based...** adapter then select **Properties** in the **Device Manager** Tab.
58. Under the **General** tab in the **Intel 82558-Based...** dialog box place a check mark in the box next to **Disable in this hardware profile**. Select **OK** ▸ **OK**.

Check CD-ROM Properties

59. Select the **Start** ▾ **Settings** ▾ **Control Panel** ▾ **System**.
60. Select the **Device Manager** Tab from the **System Properties** Window.
61. Select the **plus sign (+)** to the left of **CD-ROM** to expand the list.
62. Select a **CD-ROM** drive.
63. Select **Properties** on the **Device Manager** tab.
64. Select **Settings** on the **CD-ROM** Properties dialog.
65. Verify that there is no check mark on **Auto insert notification** on the **Settings** tab.
66. Select the **OK** button on the **CD-ROM** Properties dialog.
67. Repeat steps 61 through 65 for each CD-ROM installed.
68. Select the **OK** button on the **System Properties** dialog.

Check Power Properties

69. Select **Start** ▾ **Settings** ▾ **Control Panel**.
70. Double-click the **Power Management** icon.
71. Set **Turn off monitor** and **Turn off hard disks** to **Never**.
72. Select the **OK** button on the **Power Management Properties** dialog.
73. Close the **Control Panel** window by pressing the **X** in the upper right corner of the window.
74. Select **Start** ▾ **Shut Down** ▾ **Restart** ▾ **OK**, this will restart the computer so the changes will take effect.

NOTE: *This tester is equipped with a 4-gas analyzer: see the Emissions Chapter of the Sun Machine 450 Service Manual for the calibration and checkout.*

INSTALLATION COMPLETE