EQUIPMENT SERVICE ON SITE

EquiServ®

*Providing Factory Service For
Automotive Service Equipment*

Installation Instructions

INSTALLATION MUST BE PERFORMED BY QUALIFIED EQUISERV PERSONNEL ONLY

INSTALLATION OVERVIEW: _____

The Installation Instructions listed are for the SUN MACHINE 450 EL $^W/_O$ Four Gas. 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.

NOTE: *There are several upgrade kits that are available for the Sun Machine 450 EL $^W/_O$ Four Gas. The Sun Machine 450 EL $^W/_O$ Four Gas must be completely setup and verified for proper operation before installing any of these kits. Install the kits one at a time verifying proper operation of the unit and upgrade prior to installing the next upgrade kit.*

PARTS & ACCESSORIES LIST: _____

PART NUMBER	DESCRIPTION	QTY
0002-0133-15	Test Lead Assembly, Jumper	1
0528-1088-01	Paper, Printer	1
0552-0043	Adapter, Thexton Gm/Ford Coil Terminal	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
0672-0035-01	Test Clip, Wire Piercing	1
0682-1049-01	Labels, Stickers	4
0692-1834-01	Quality Control Questionnaire SEL 1403C	1
0692-2291-01	Warranty Registration Form	1
1-2385	Cover, Keyboard	1
1747-0101	Test Adapter Assembly, Pat Pickup	1
1747-0102	Test Adapter Assembly, Hei Pickup	1
4100-5016-01	Screw, Shoulder, 5/16-18 x 3/8" LG	3
6002-0346	Test Lead Assembly, Jumper W/Probe	1
6004-0544-02	Test Lead Assembly, Pattern Dual Hd	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
7009-2325-02	Test Lead Assembly, Trigger Pickup	1
EAW0058C00A	Test Lead Assembly, Volt/Ohm Pinpoint	1
EAW0060C00A	Cable, Adapto	1

PART NUMBER	DESCRIPTION	QTY
SS1495	POP (Point Of Purchase) Kit	1
TEEOS131A	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 EL so that half of the foam base can be removed.

5. Lean the Sun Machine 450 EL 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 and Literature Kit using the Parts & Accessories List and inspect for damage. The Unit Accessories are 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 EL operating Software Package is 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.*
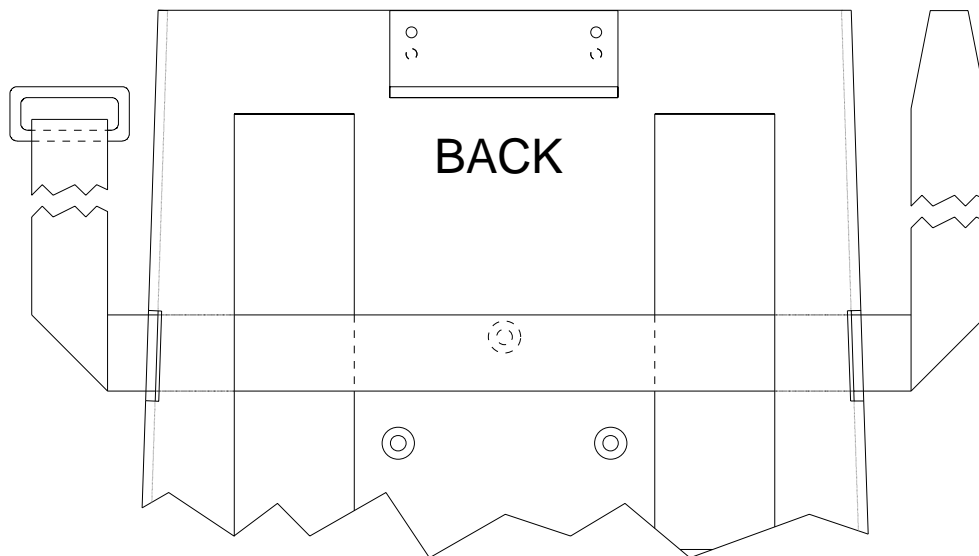

Figure 1, Monitor Base Plate for 15" Sampo Monitor.

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 (0552-0130-02) 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 to the respective connectors located on the boom of the Sun Machine 450 EL. Store any unused leads and accessories in the lower storage drawer.

Starting Windows 98 for the first time

21. Turn on the analyzer. Windows will boot.

22. When prompted: Enter the shop owner's name in the **Name:** field, and the shop name 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 owner's name 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, select **Apply**, then select **OK.**

28. You will be prompted to enter validation code for the Sun Machine software. Call EquiServ Parts Department at 1-800-225-5786 to attain a validation code.

29. Enter the **validation code** and select **OK**.

30. You will be prompted to insert the Initial Install Floppy disk into the unit. Place the **Sun Machine Initial Installation** disk in the floppy drive then select **OK**.

31. You will be prompted to insert the Software Installation Floppy disk into the unit. Place the **Sun Machine Software Installation** disk in the floppy drive then select **OK**.

32. Deselect the **Show this screen each time Windows starts** box on the **Welcome** window.

33. Close the **Welcome** window by pressing the **X** in the upper right corner of the **Welcome** window.

Configure the Modem

34. Double-click the **RapidComm Voice** desktop icon.

35. Select **Next >** on the **RapidComm Voice Setup Wizard** window.

36. Select **I Agree** on the **RapidComm Voice Setup Wizard** window.

37. Complete the requested information and select **Next >** on the next two **RapidComm Voice Setup Wizard** windows.

38. Complete the requested information and select **Close** on the **Location Information** window.

39. Select **Next >** on the **RapidComm Voice Setup Wizard** window.

40. Select **Finish** on the **RapidComm Voice Setup Wizard** window.

41. Select **View** on the **RapidComm Voice window**.

42. Select **Speakerphone** on the drop-down menu.

43. Select **View** on the **RapidComm Voice** window.

44. Select **Speed Dial** on the drop-down menu.

45. Set the **Speaker Volume** to maximum using the slide bar.

46. Set the **Microphone Volume** to about one third maximum using the slide bar.

47. Close the **RapidComm Voice** window by pressing the **X** in the upper right corner of the window.

Monitor Display Position Adjustment (DOS Mode)

When entering or leaving the Sun Machine program, if the monitor screen jumps to the right or left, perform steps 48 through 57 to correct.

48. Perform the following steps only while in the Sun Machine program.

49. Using the front buttons on the monitor, select the **OSD** button. This will bring up a monitor adjustment window.

50. Using the **Select "+" or "–"** buttons on the front of the monitor, highlight **Horizontal Position** symbol, as shown in figure 2 below.

51. Using the **Adjust "+" or "–"** buttons on the front of the monitor, adjust the horizontal position to the center of the monitor screen.

52. Using the **Select "+" or "–"** buttons on the front of the monitor, highlight **Horizontal Sizing** symbol, as shown in figure 1 below.

53. Using the **Adjust "+" or "–"** buttons on the front of the monitor, adjust the horizontal size to the desired size on the monitor screen.

54. Using the **Select "+" or "–"** buttons on the front of the monitor, highlight **Vertical Position** symbol, as shown in figure 1 below.

55. Using the **Adjust "+" or "–"** buttons on the front of the monitor, adjust the vertical position to the center of the monitor screen.

56. Using the **Select "+" or "–"** buttons on the front of the monitor, highlight **Vertical Sizing** symbol, as shown in figure 1 below.

57. Using the **Adjust "+" or "–"** buttons on the front of the monitor, adjust the vertical to the desired size on the monitor screen.

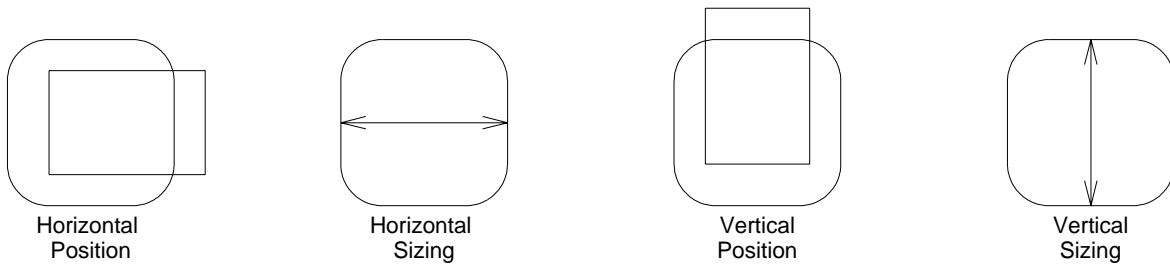| Horizontal Position | Horizontal Sizing | Vertical Position | Vertical Sizing |

Figure 2, Monitor Adjustment Symbols

Check Printer Selection

58. 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 65.

59. Select the **Add Printer Wizard**, select **Next >.**

60. 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
Okidata OL600E	HP	LaserJet II P
OkiPage 6E	HP	LaserJet 4 P

Table 1, Printer Setup

61. Select **LPT1: Printer Port**, from the **Available Ports** window then select **Next >**.

62. Do not change the **"Printer Name"** that is currently listed, select Yes for **"Make this printer your default printer"** then select **Next >**.

63. Select **"Yes"** for print test page, select **Finish**.

64. 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.

Setting Printer Properties

65. Select the **Start** ⇒ **Settings** ⇒ **Printers**.

66. Press the right mouse button over the printer icon for the installed printer on the Printers page.

67. Select **Properties** on the dialog.

68. Select the **Details** tab.

69. Select the **Port Settings…** button.

70. Verify that there is no check mark on **Spool MS-DOS print jobs**, then select **OK**.

71. Select the **OK** button on the printer properties dialog.

72. Close the **Printers** window by pressing the **X** in the upper right corner of the window.

Setting Network Adapter Properties

NOTE: *Perform this procedure only if this unit is not being attached to a network.*

73. Select the **Start** ⇒ **Settings** ⇒ **Control Panel** ⇒**System**.

74. Select the **Device Manager** Tab from the **System Properties** Window.

75. Select the **plus sign (+)** to the left of **Network Adapters** to expand the list.

76. Highlight **Intel 82558-Based…** adapter then select **Properties** in the **Device Manager** Tab.

77. 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**.

78. Select **Start** ⇒ **Shut Down** ⇒ **Restart** ⇒ **OK**, this will restart the computer so the changes will take effect.

Check CD-ROM Properties

79. Select the **Start** ⇒ **Settings** ⇒ **Control Panel** ⇒**System**.

80. Select the **Device Manager** Tab from the **System Properties** Window.

81. Select the **plus sign (+)** to the left of **CD-ROM** to expand the list.

82. Select a **CD-ROM** drive.

83. Select **Properties** on the **Device Manager** tab.

84. Select **Settings** on the **CD-ROM** Properties dialog.

85. Verify that there is no check mark on **Auto insert notification** on the **Settings** tab.

86. Select the **OK** button on the **CD-ROM** Properties dialog.

87. Repeat steps 82 through 86 for each CD-ROM installed.

88. Select the **OK** button on the **System Properties** dialog.

Check Power Properties

89. Select **Start** ⇒ **Settings** ⇒ **Control Panel**.

90. Double-click the **Power Management** icon.

91. Set **Turn off monitor** and **Turn off hard disks** to **Never**.

92. Select the **OK** button on the **Power Management Properties** dialog.

93. Close the **Control Panel** window by pressing the **X** in the upper right corner of the window.

INSTALLATION COMPLETE