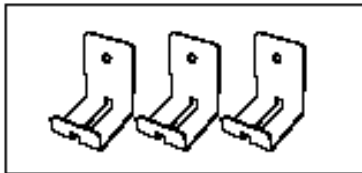


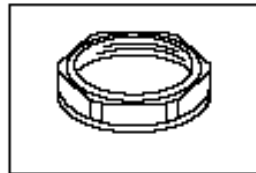
Roland SC-500, SJ-500 and SJ-600 Heater Unit Installation Procedures



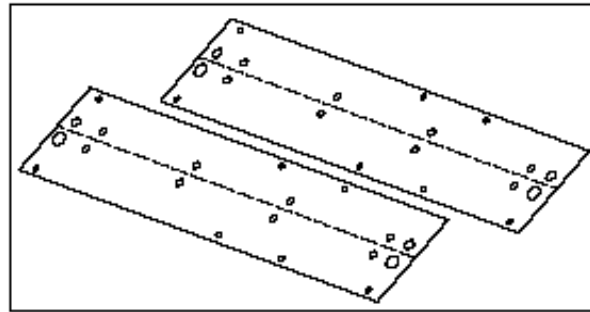
HU-501/500/600 Kit Components



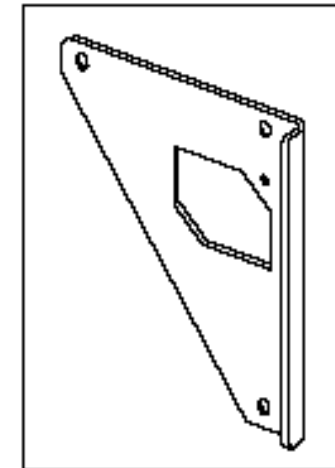
CLAMP, HEATER SLIDER : 3 pcs.



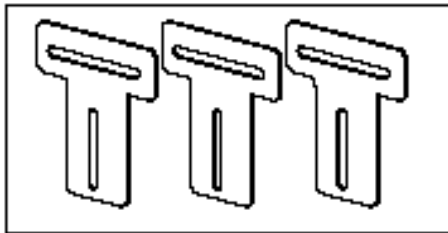
NUT, GMP-GL29BL



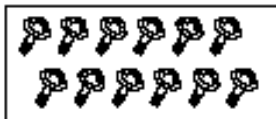
STAY, WIRE SADDLE : 2 pcs.



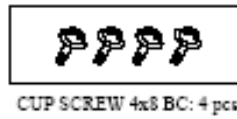
PLATE, CONTROL SC-500
Specific to SC-500



CLAMP, HEATER ARM : 3 pcs.



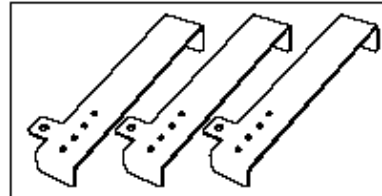
CUP SCREW 3x4 NI: 12 pcs.



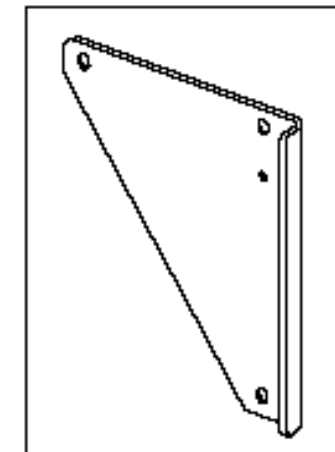
CUP SCREW 4x8 BC: 4 pcs.



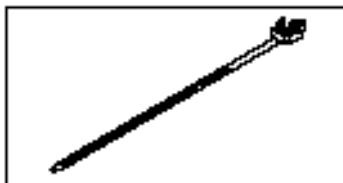
NYLON RIVET : 4 pairs



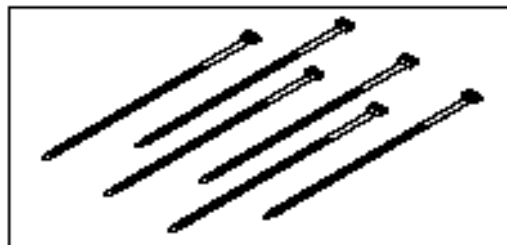
CLAMP, HEATER STAY : 3 pcs.



PLATE, CONTROL SJ-600
Specific to SJ-500600



CLAMP, PUSH MOUNT RT30SSF5



CLAMP, INSULOCK T-18S : 6 pcs.

Pre-installation Checklist.

The following is a checklist that should be followed to ensure that the Heater Upgrade goes without any issues. Failure to follow this process could result in longer install time and possible damage to the unit and or self.

- 1. Run print tests prior to installing the heater kit to ensure that all nozzles are firing and that the unit is functioning up to factory specifications. If the machine has any hardware issues, do not install the heater upgrade until the machine is back to factory specifications.
- 2. Perform the Heater Upgrade using the provided instructions.
- 3. Update the Firmware and System Switch Setting using the provided instructions.
- 4. Perform Ink Conversion and adjustments.
- 5. Configure the Heater Controller.
- 6. *Replace the Pump Assemblies, Wiper Blades and perform associated adjustments (refer to the SC-500, SJ-500/600 Service Notes for installation and adjustment procedures).
 - Check Pump Hours, If under 100 Hours, there is no need to replace them.

NOTE: Although these instructions show SJ-500/600 components, the SC-500 procedures are identical with the exception of certain parts (which are noted).

Installing the Heater Unit

1. Confirm that the voltages which are printed on the backside of the Heater Controller and the label printed on the Front and Rear heater cables match up as shown in Fig.1.

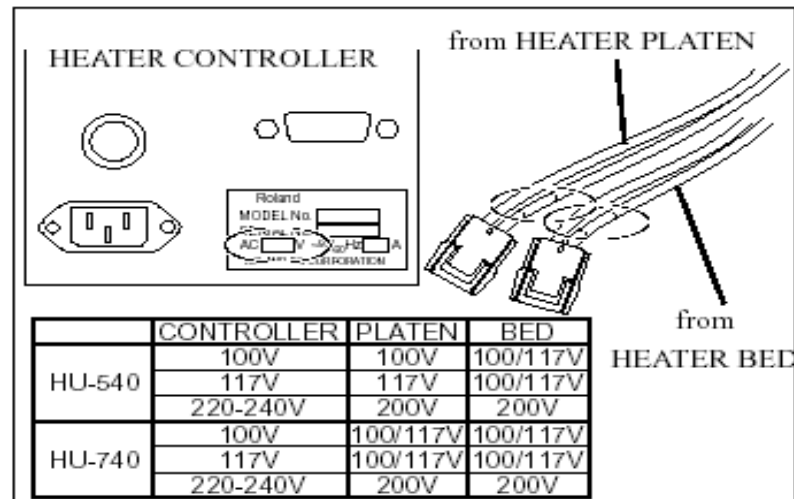
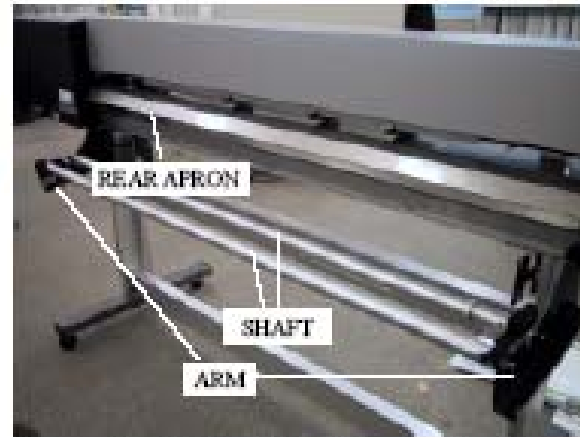


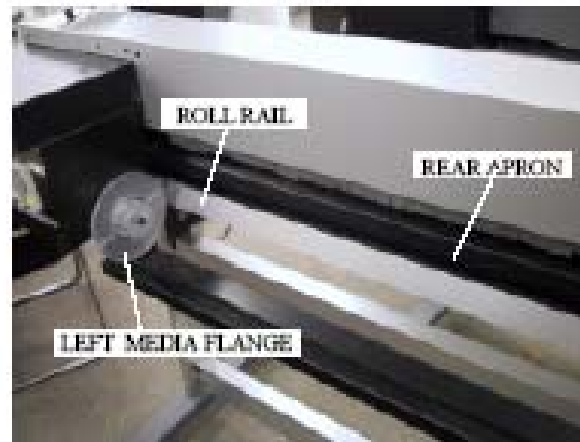
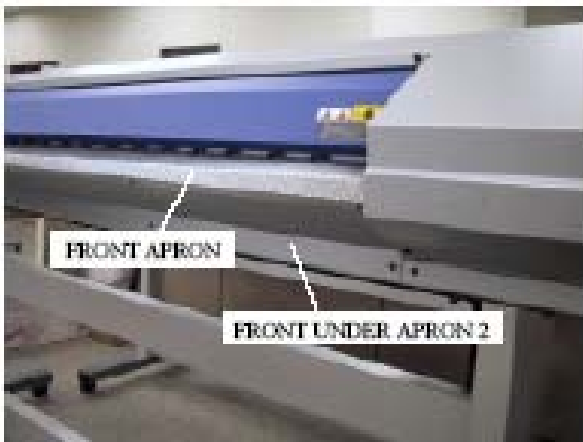
Fig. 1

Installing the Heater Unit, cont.

2. Turn off the Primary Power Switch from the back of the unit and remove the following covers as shown below.



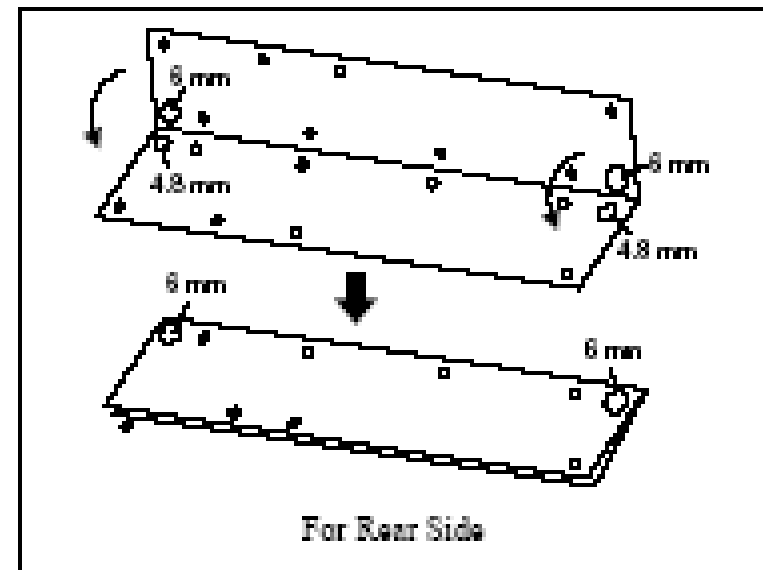
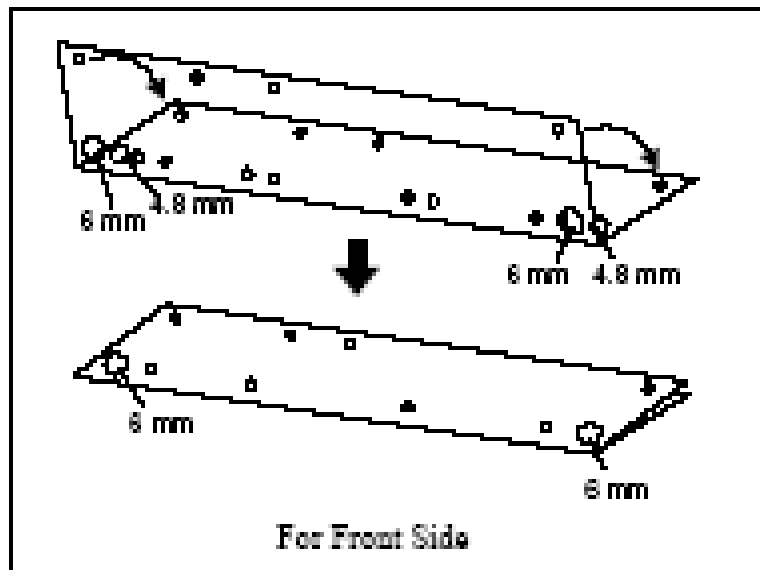
SC-500



SJ-500/600

Installing the Heater Unit, cont.

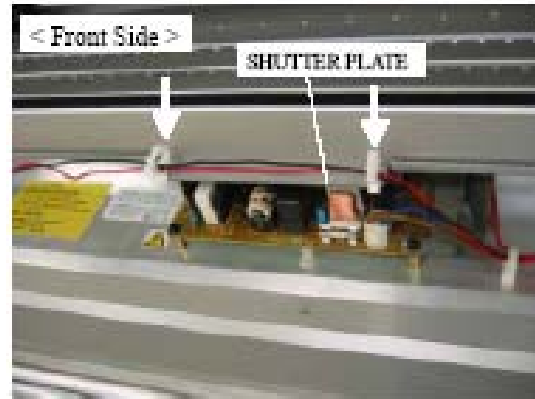
3. Fold the 2 Wire Saddle Stays as shown in the figure below, one for the front and one for the rear.



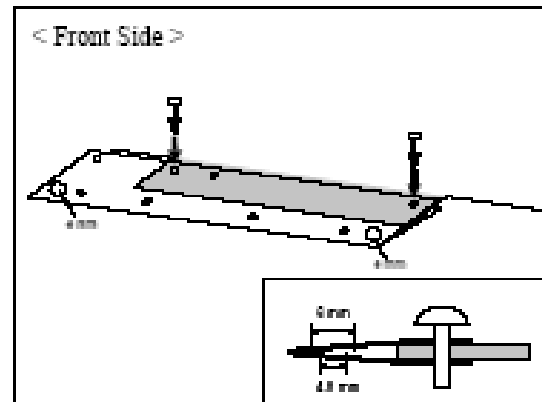
Installing the Heater Unit, cont.

4. Remove the 2 Wire Saddles that are mounted to the Shutter Plate on the front side.

NOTE: Do not break the wire saddles as they will be used later during the installation.

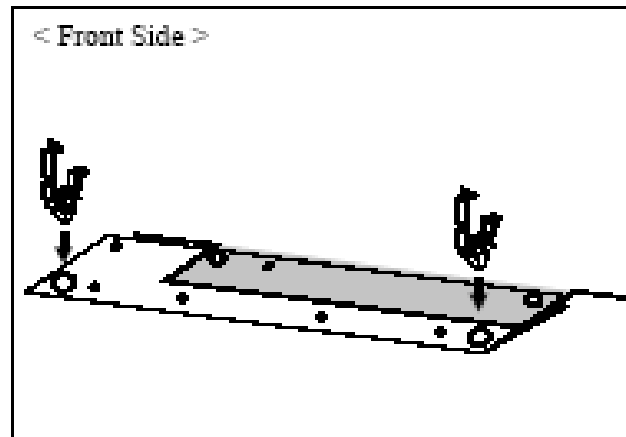


5. Install the Wire Saddle Stay that was folded for the front side to the Shutter Plate with 2 Nylon Rivets. Make sure that the 6mm holes are facing up.



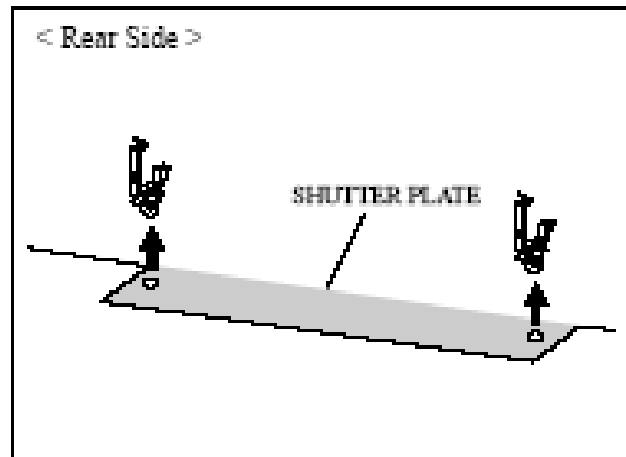
Installing the Heater Unit, cont.

6. Install the Wire Saddle's that were removed previously to the Wire Saddle Stay.



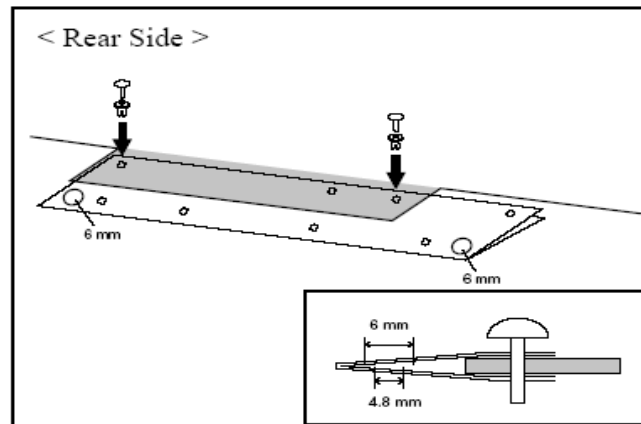
7. Remove the 2 Wire Saddles from the rear Shutter Plate.

NOTE: Do not break the wire saddles as they will be used later during the installation.

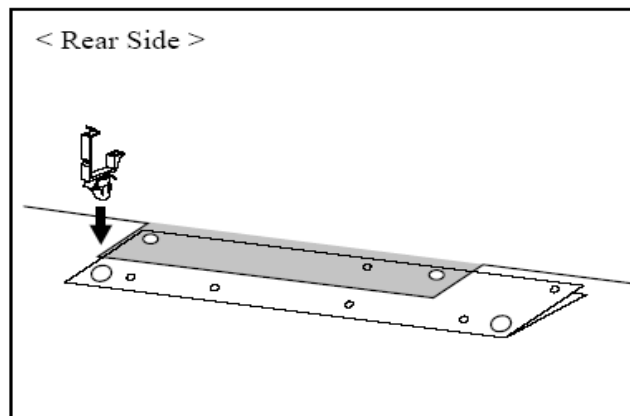


Installing the Heater Unit, cont.

8. Install the WIRE SADDLE STAY which is folded for the Front side to the SHUTTER PLATE with 2 NYLON RIVETS. Make sure to the 6 mm holes are facing up.

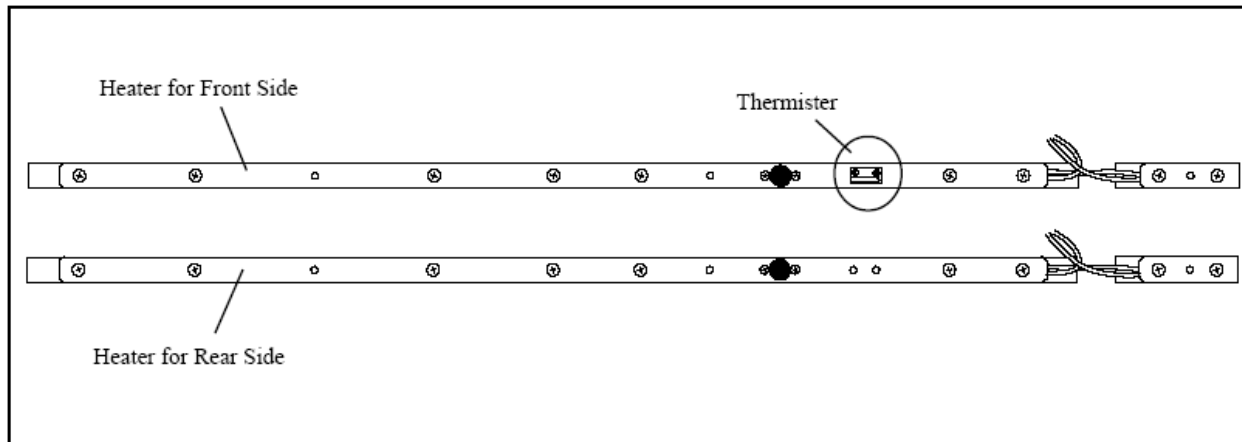


9. Install one of the WIRE SADDLES onto the WIRE SADDLE STAY. The other WIRE SADDLE will be used later.

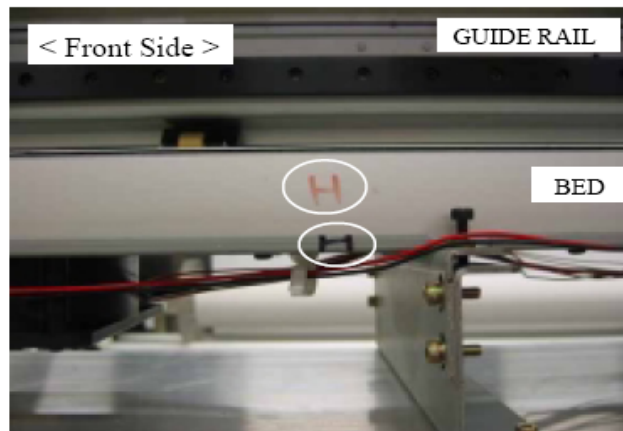


Installing the Heater Unit, cont.

10. Prepare both Heaters for installation. One for the Front side, and one for the Rear side. The one which has a thermistor on it is for the Front side.



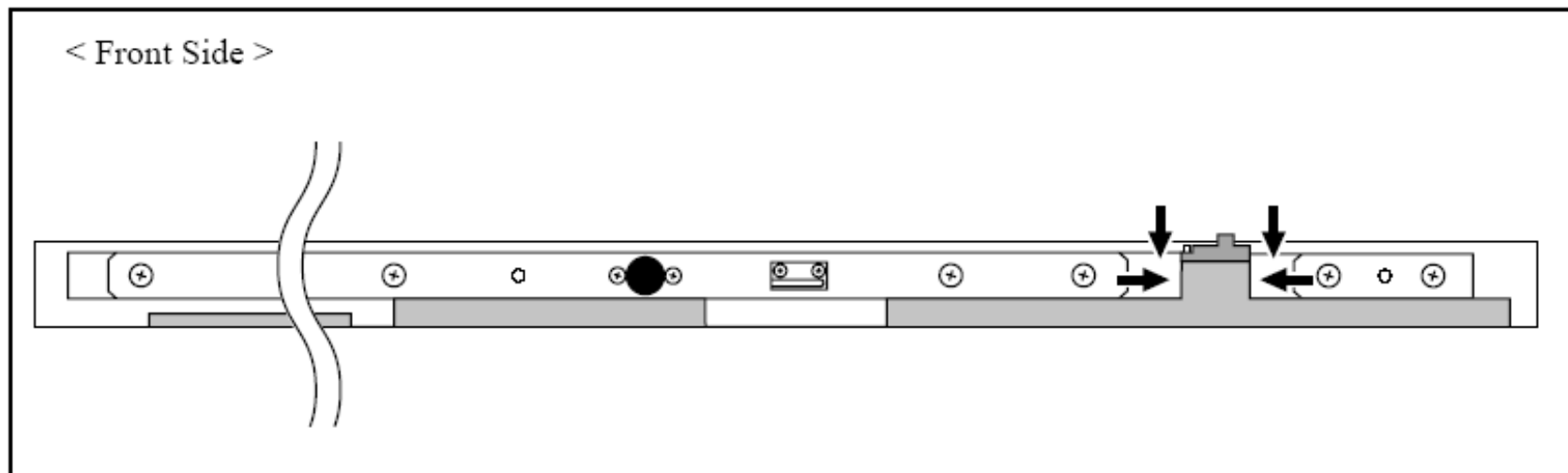
11. Find the "H" mark on the front side of the BED, and put another "H" mark below the original one. The original "H" mark will be hidden when the Heater is attached on the BED. This is not necessary if there is an "H" mark on the GUIDE RAIL already.



Installing the Heater Unit, cont.

12. Wipe the front side of the BED with alcohol to attach the Front Heater. Remove the backing paper from the Shorter heater and attach it by pressing it to left and downward. Remove the backing paper from the Longer heater and attach it by pressing it to right and downward.

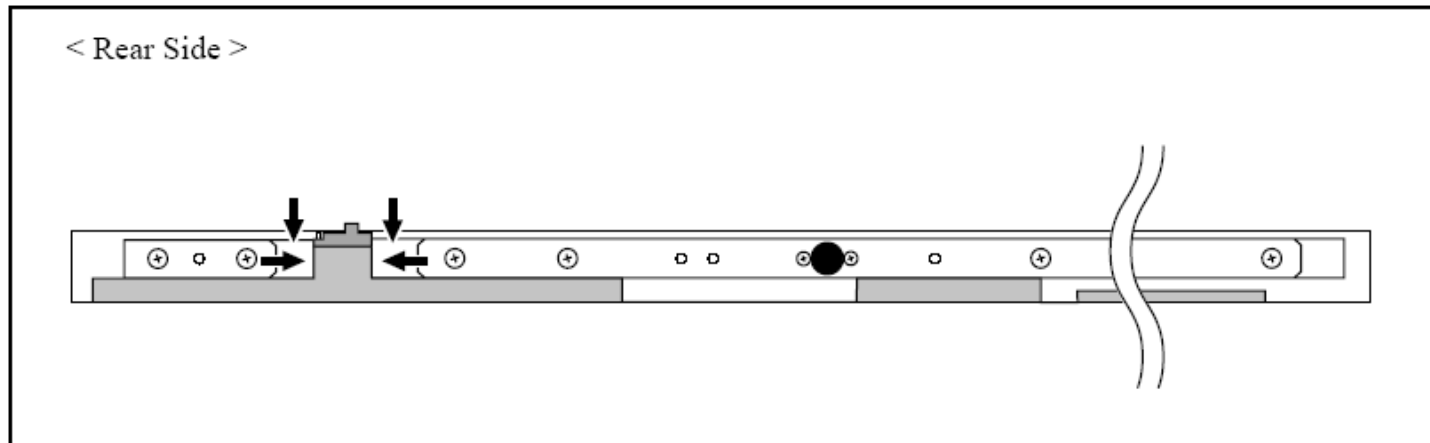
NOTE: Make sure to push the both Heaters against the BED firmly across the whole width. If there is clearance between the Heater and the BED, this will result in insufficient heating of the BED due to poor heat conduction.



Installing the Heater Unit, cont.

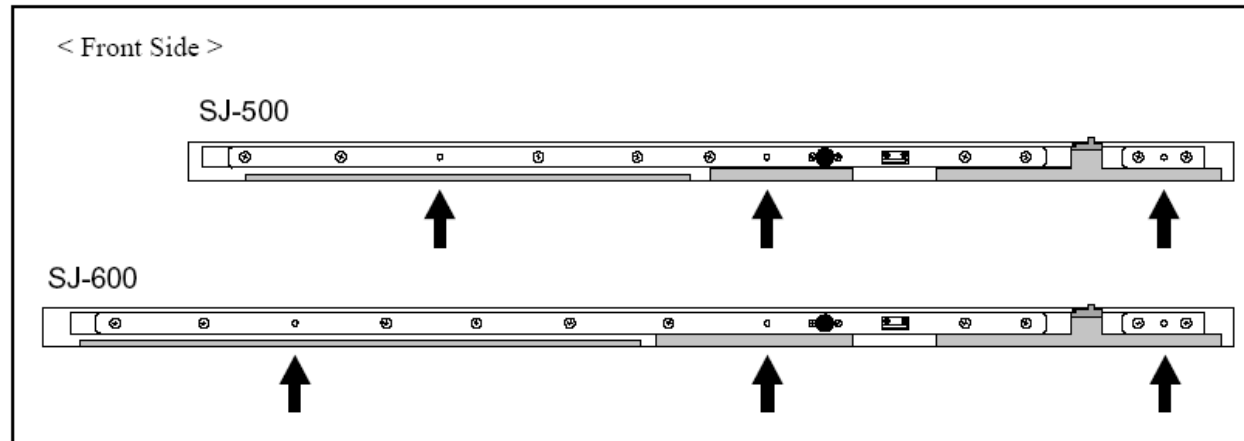
13. Wipe the rear side of the BED with alcohol to attach the Rear Heater. Remove the backing paper from the Shorter heater and attach it by pressing it to right and downward. Remove the backing paper from the Longer heater and attach it by pressing it to left and downward.

NOTE: Make sure to push the both Heaters against the BED firmly across the whole width. If there is clearance between the Heater and the BED, this will result in insufficient heating of the BED due to poor heat conduction.

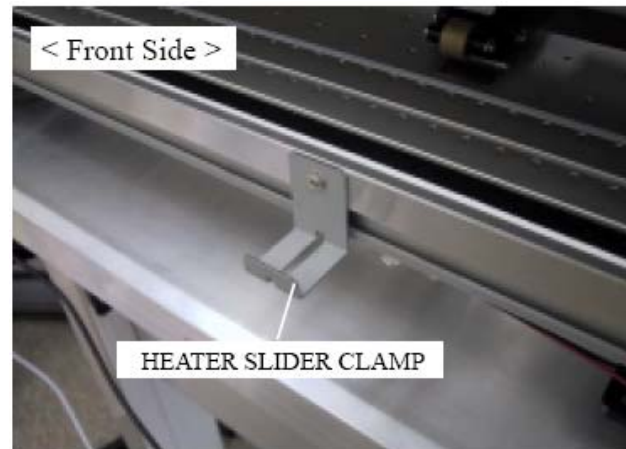


Installing the Heater Unit, cont.

14. Install the Front and Rear heaters with the HEATER STAY CLAMP, HEATER ARM CLAMP and HEATER SLIDER CLAMP. Those parts will be installed at the 3 positions with the open screw holes of the heater.

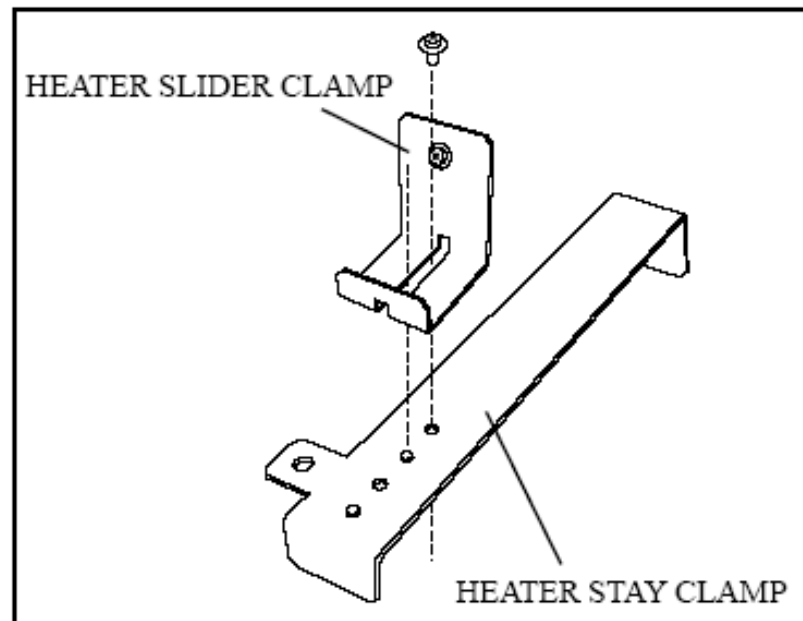


15. Install the HEATER SLIDER CLAMP on the front heater by aligning it leveled. (CUP SCREW 3x4 NI).



Installing the Heater Unit, cont.

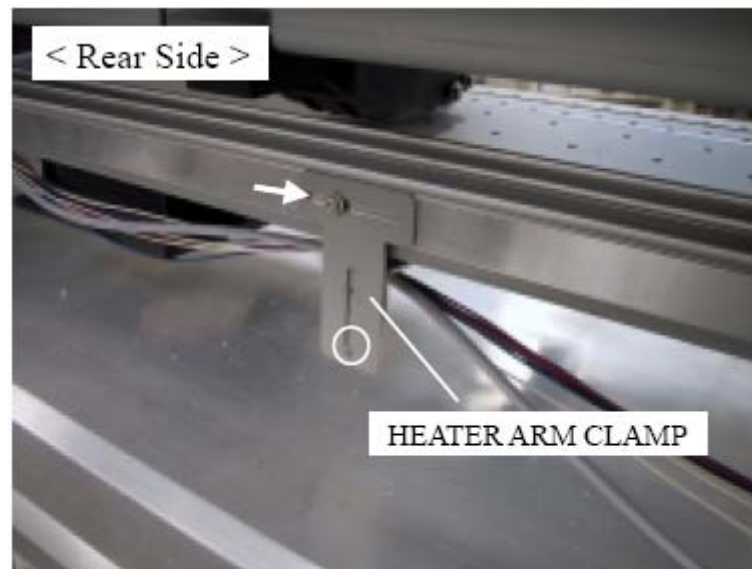
16. Fix the HEATER STAY CLAMP to the HEATER SLIDER CLAMP loosely by using the screw hole of the far side. (CUP SCREW 3x4 NI).



Installing the Heater Unit, cont.

17. From the Rear side of the machine, install the HEATER ARM CLAMP at its “wide” screw hole with the half piece of HEATER STAY CLAMP installed in the “vertically long” screw hole (CUP SCREW 3x4 NI).

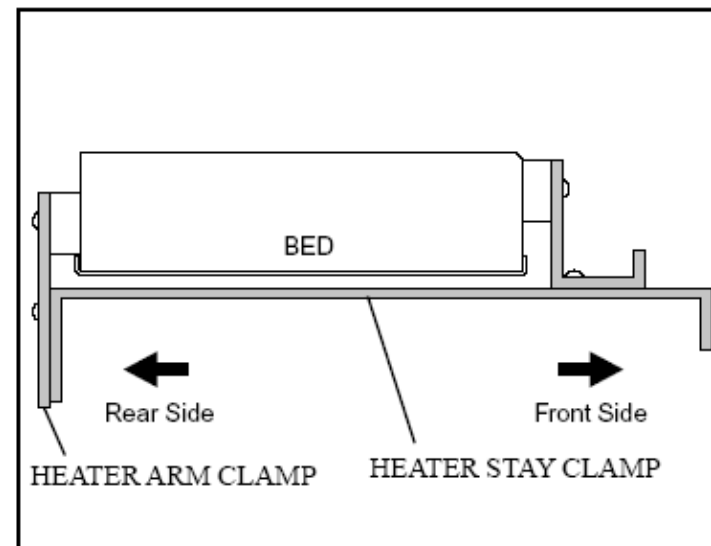
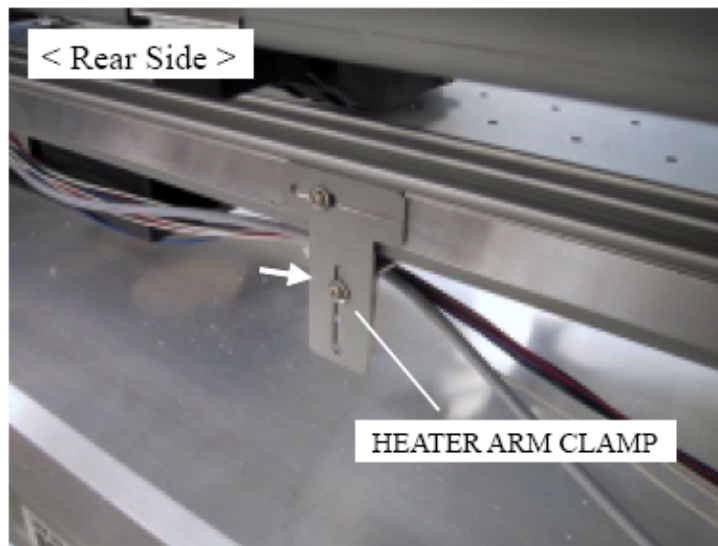
NOTE: The screw doesn't need to be fixed at the center of the wide screw hole. Also, make sure to have the cables below the HEATER STAY CLAMP.



Installing the Heater Unit, cont.

18. Install the HEATER ARM CLAMP to the HEATER STAY CLAMP. (CUP SCREW 3x4 NI)

NOTE: Make sure to install it keeping the HEATER STAY CLAMP leveled.



Installing the Heater Unit, cont.

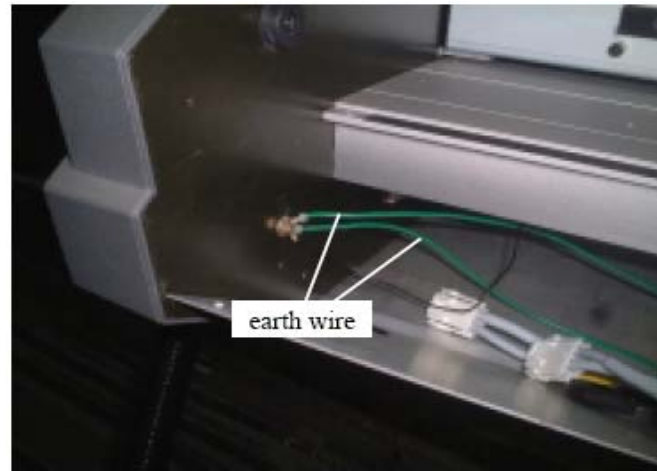
19. From the Front side of the machine, tighten up the screw by pushing the HEATER SLIDER CLAMP and pulling the HEATER STAY CLAMP.



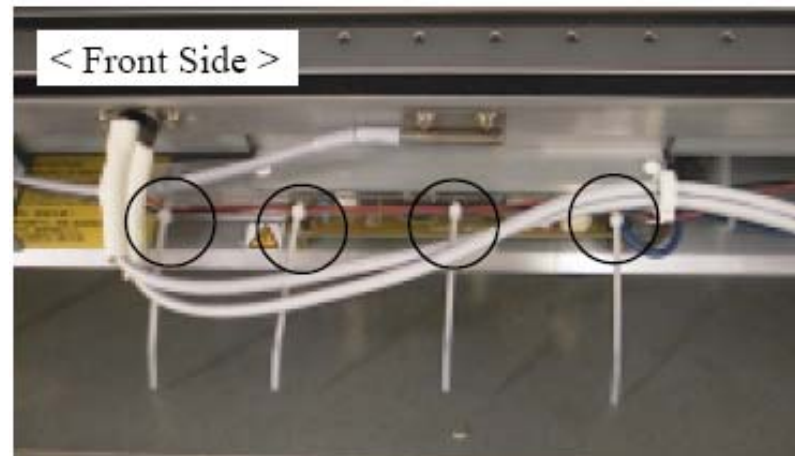
20. Repeat the steps from 15 to 19 and do the same thing at the 2 other positions.

Installing the Heater Unit, cont.

21. Remove the screw fixing the earth wire at the left frame, and re-fix it together with the 2 earth wires from the Front heater and the Rear heater.

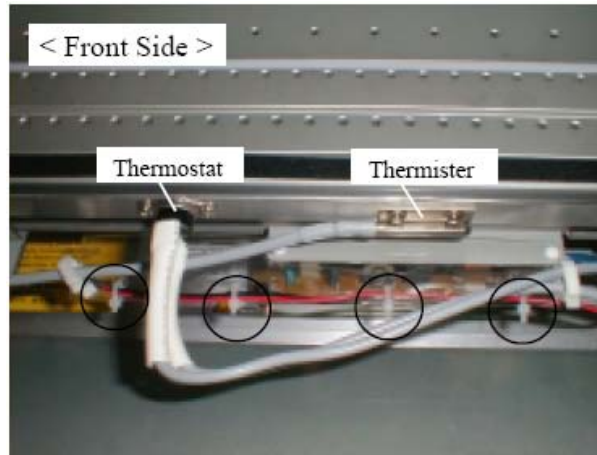


22. Insert 4 INSULOCK TIES at the 4 holes of the WIRE SADDLE STAY that was installed on the Front side.

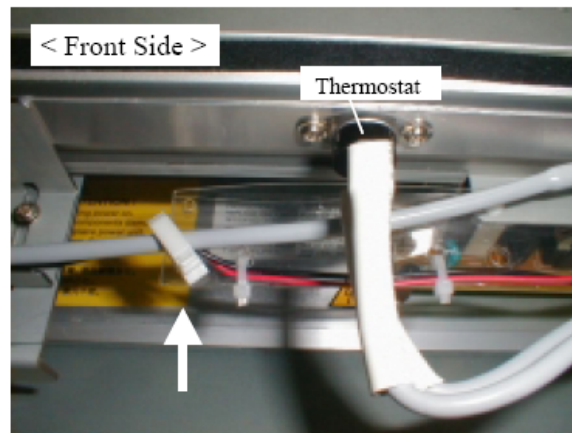


Installing the Heater Unit, cont.

23. Tie up the FAN cable (Black & Red cable) with the INSULOCK TIES.

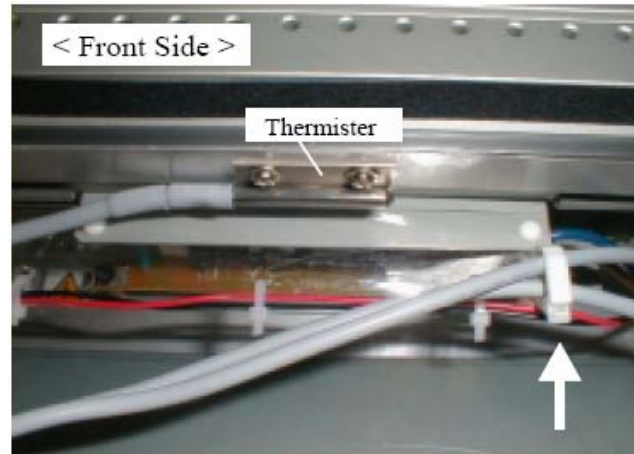


24. Install the Thermistor, Thermistat cable and the Fan cable with the WIRE SADDLE installed at the left side of the WIRE SADDLE STAY. ** There is no Thermostat cable to be installed here for the 200v Heater. This figure is of the 200v Heater.



Installing the Heater Unit, cont.

25. Install the Thermostat cables and Fan cable with the WIRE SADDLE installed at the right side of WIRE SADDLE STAY.

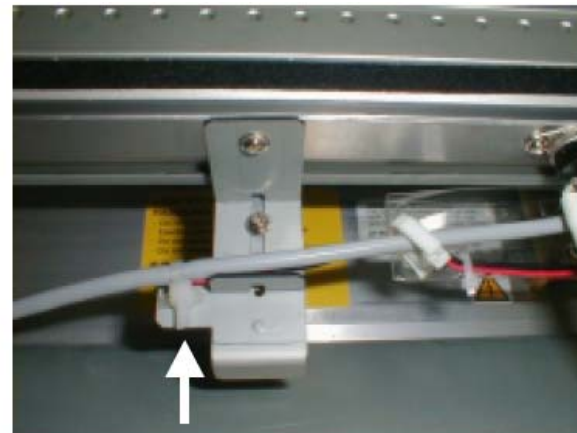


26. Install the PUSH MOUNT TIE at the middle HEATER CLAMP. Tie up the Thermistor cable, the Thermostat cable and the Fan cable with the PUSH MOUNT TIE.

** There is not a Thermostat cable to be fixed here for the 200v Heater. These are figures of the

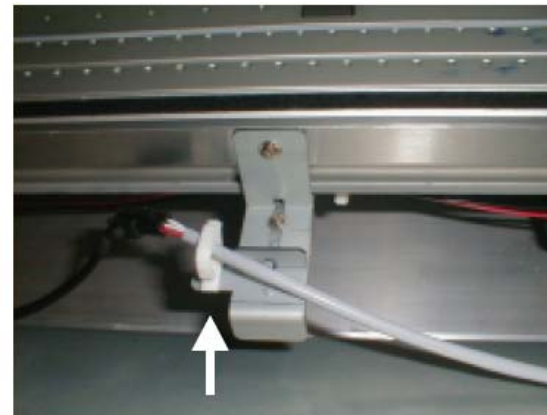


< Front Side >

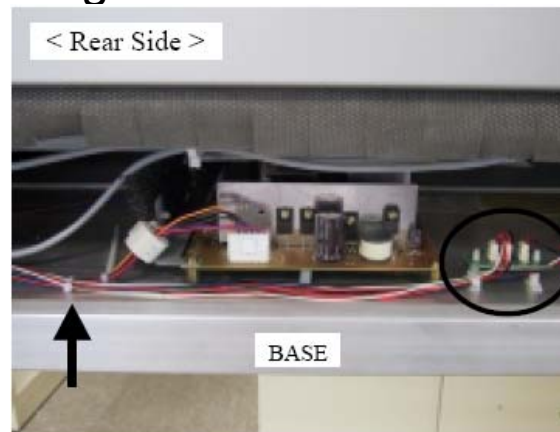


Installing the Heater Unit, cont.

27. Install the WIRE SADDLE that was removed earlier to the left HEATER CLAMP. Fix the Thermistor cable, the Thermostat cable and the Fan cable with the WIRE SADDLE. ** There is not a Thermostat cable to be fixed here for the 200v Heater. These are figures of the 200v Heater

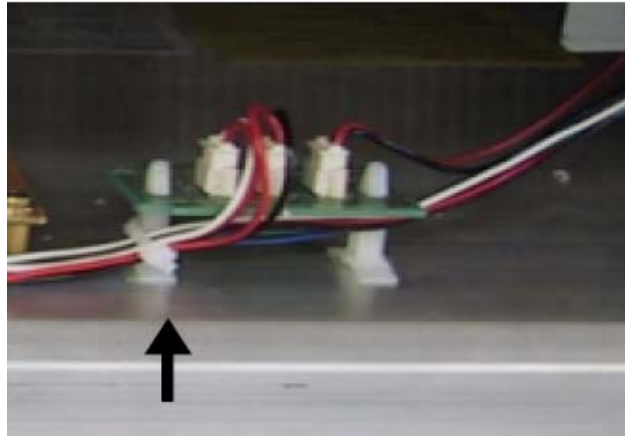


28. Tie the cables that were originally fixed with the WIRE SADDLE on the SHUTTER PLATE with a INSULOCK TIE together with other cables on the BASE.

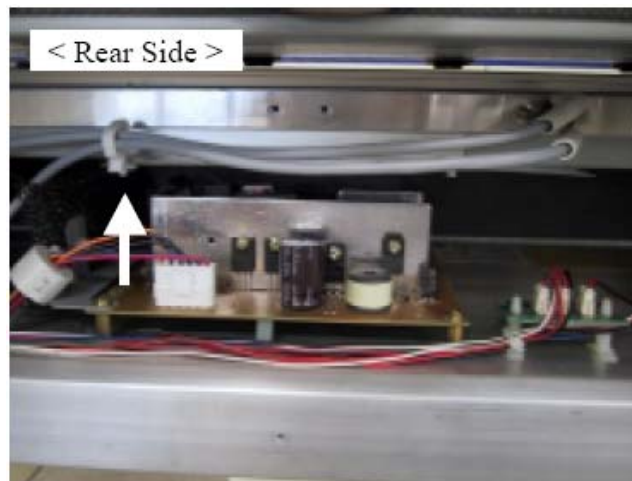


Installing the Heater Unit, cont.

29. Tie the cables to the left support of the JUNCTION BOARD with INSULOCK TIE.

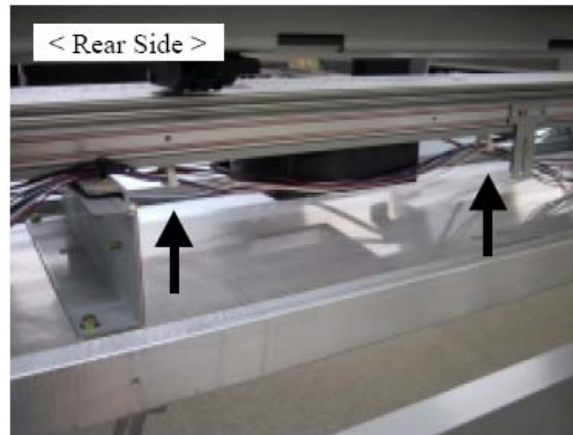


30. Install the 2 Thermostat cables with the WIRE SADDLE fixed on the right side of WIRE SADDLE STAY.



Installing the Heater Unit, cont.

31. Install the Thermostat cable with 2 WIRE SADDLES originally installed on the bottom side of the BASE. ** There is not a Thermostat cable to be fixed here for the 200v Heater. This is a figure of 200v Heater.

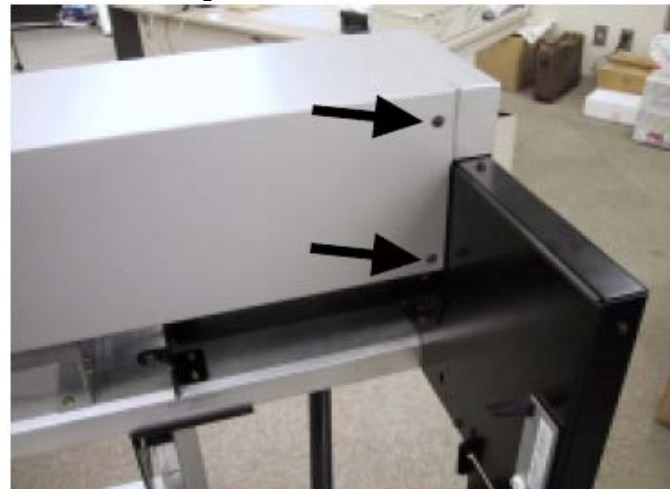


Installing the Heater Unit, cont.

32. Install the FRONT UNDER APRON 2.



33. Remove the 2 screws connected to the RAIL COVER at its Rear Right side. The 2 removed screws will not be used anymore.



Installing the Heater Unit, cont.

34. Install the CONTROL PLATE to RAIL COVER with 2 screws in the order as shown in the figure. (CUP SCREW 4x8 BC)

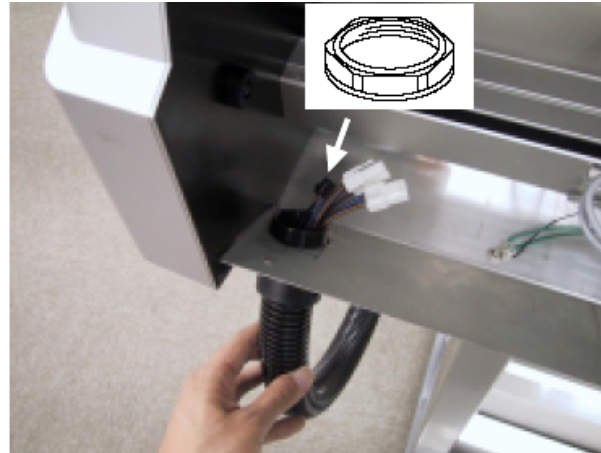


35. Put CONTROLLER on RAIL COVER, and install it with 2 screws. (CUP SCREW 4x8 BC). Then, put the hose straight down.



Installing the Heater Unit, cont.

36. Bring the hose to the front side, and insert it into the hole of FRONT UNDER APRON 2. Then, install it with the provided NUT.



37. Connect the cables from CONTROLLER to the cables from the Front and Rear Heaters.



Installing the Heater Unit, cont.

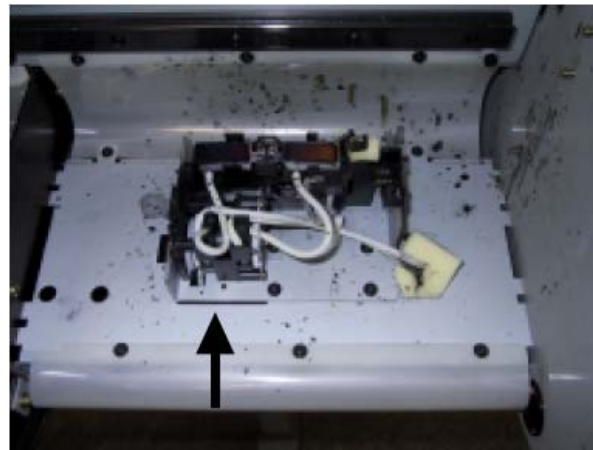
38. Put back all the covers to the machine and pack the removed FRONT UNDER APRON in step 2 with the packing materials that were used for FRONT UNDER APRON 2.

Pump Unit Replacement

1. Remove the MAINTENANCE COVER, and move the Head Carriage out of the capping position.

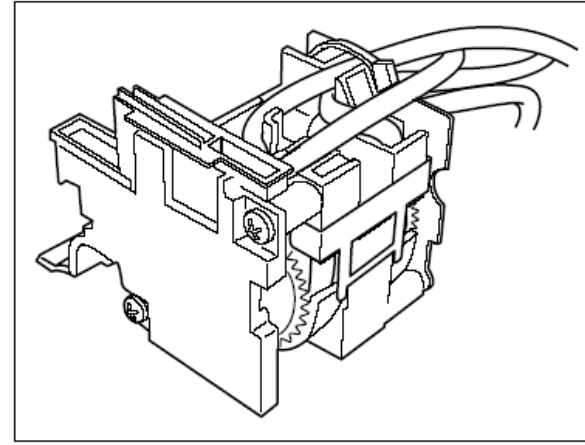
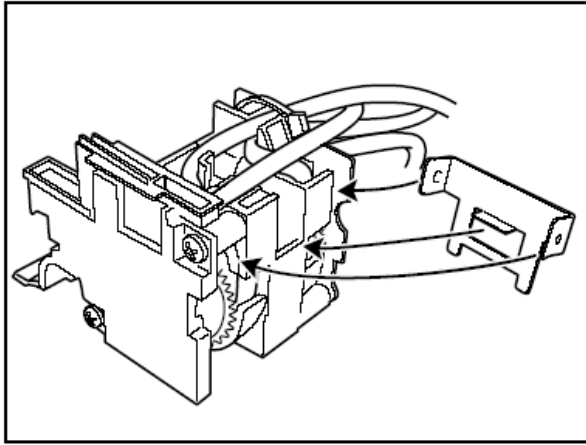


2. Remove the PUMP UNIT. Fix 2 PUMP CLAMPs to a new PUMP UNIT with the following procedure.

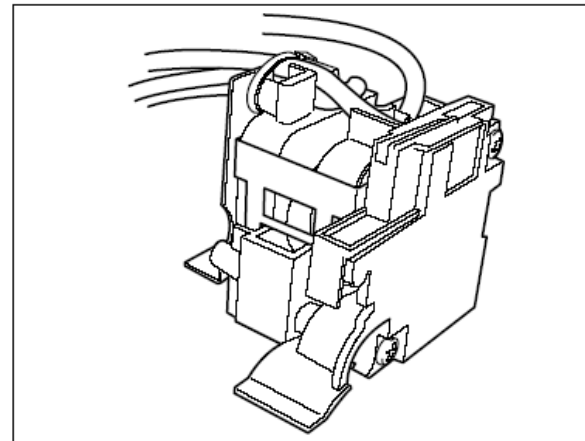
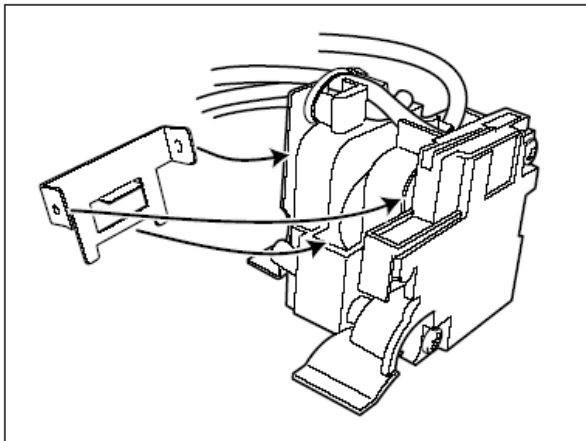


Pump Unit Replacement, cont.

3. Put PUMP CLAMP to the PUMP UNIT for one side.



4. Put PUMP CLAMP to the PUMP UNIT for the other side.



Firmware Update and System Switch Change

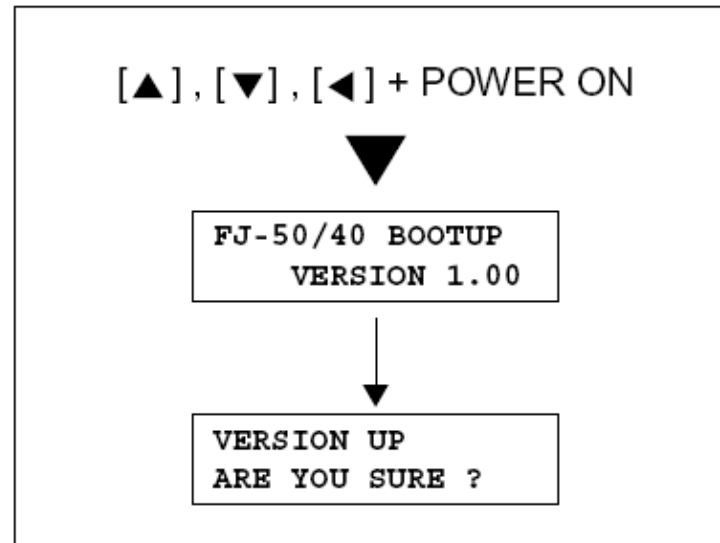
1. Connect the PC and SJ-600/500 with a PARALLEL CABLE.

Note: SC-500 requires F/W version 4.00 or above, SJ-500/600 requires F/W version 5.00 or above.

It is necessary to prepare the followings to upgrade the FIRMWARE.

1. Firmware Disk (ver.5.00 and above)
2. Windows PC
3. Parallel Cable

2. Turn on the SUB POWER SW while pressing the [▲], [▼] and [◀] keys. Then, press the [ENTER] key.



Firmware Update and System Switch Change

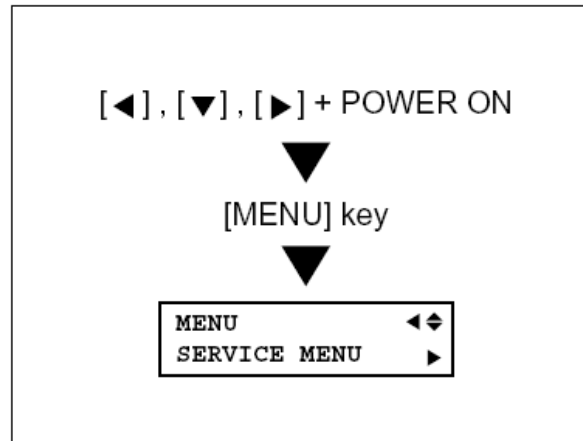
3. Open the download.bat from MS-DOS Prompt (Command Prompt). PC starts to send the Firmware to the machine. Turn off the SUB POWER SW when the upgrade is completed.

```
Microsoft Windows 2000 [Version 5.00.2195]
(C) Copyright 1985-2000 Microsoft Corp.

C:/> a:

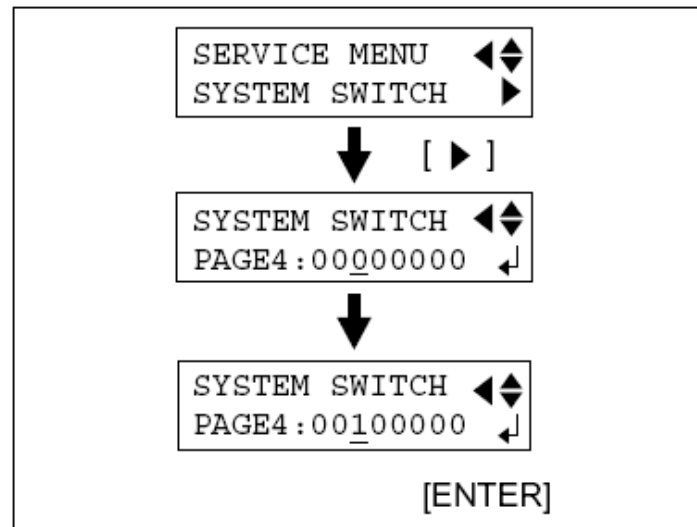
A:/> download
```

4. Turn on the SUB POWER SW while pressing [\blacktriangleleft], [\blacktriangledown] and [\blacktriangleright] keys to enter the SERVICE MODE.



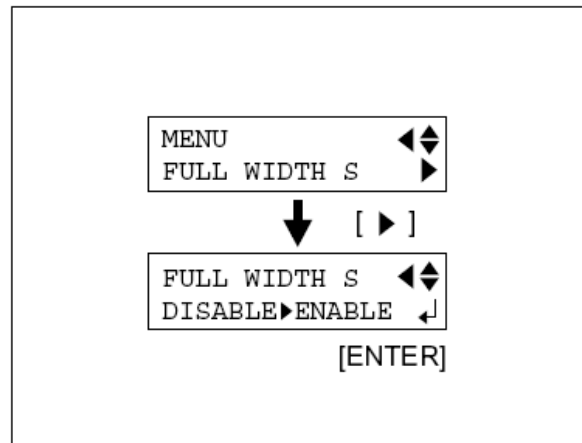
Firmware Update and System Switch Change

5. Enter [SYSTEM SWITCH] menu and select [PAGE 4]. Change bit #6 into 1 in order to support the Heater. And then, turn off the SUB POWER SW.

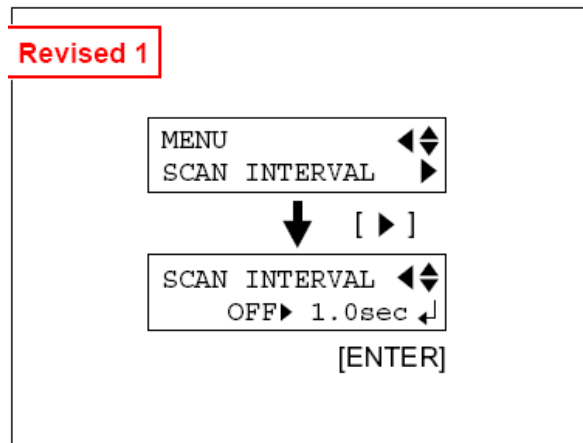


Settings and Ink Conversion

1. Enter [FULL WIDTH S] menu which is not in SERVICE MENU and set it ENABLE.

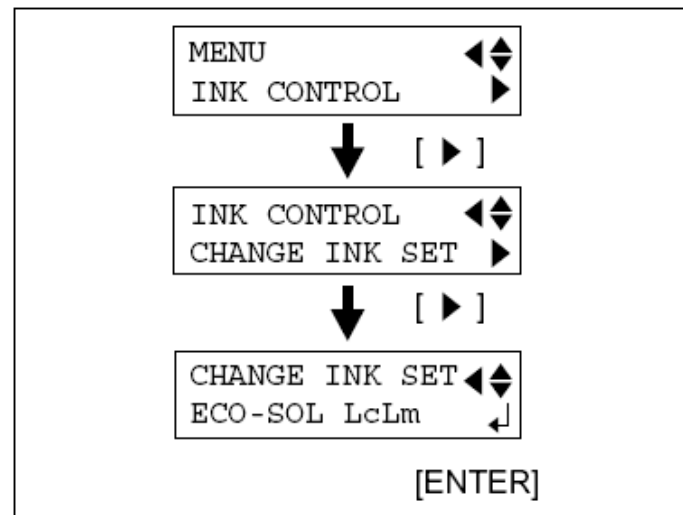


2. Enter [SCAN INTERVAL] menu and set it to 1.0 sec.



Settings and Ink Conversion

3. Enter [INK CONTROL] menu and select [CHANGE INK SET]. Select [ECO-SOL LcLm] and press the ENTER key. Then, follow the instructions displayed on the LCD.



*Thank you on behalf
of Roland University*