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## Logic Board Replacement - 300 System

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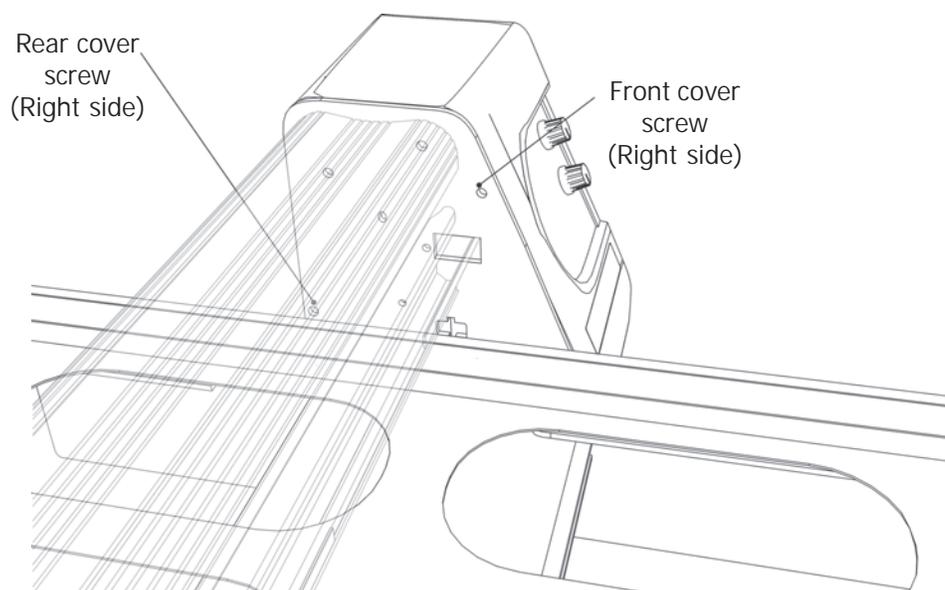
**Procedure Description:** Logic board Replacement for the Ioline 300 System

### General Disassembly Procedures

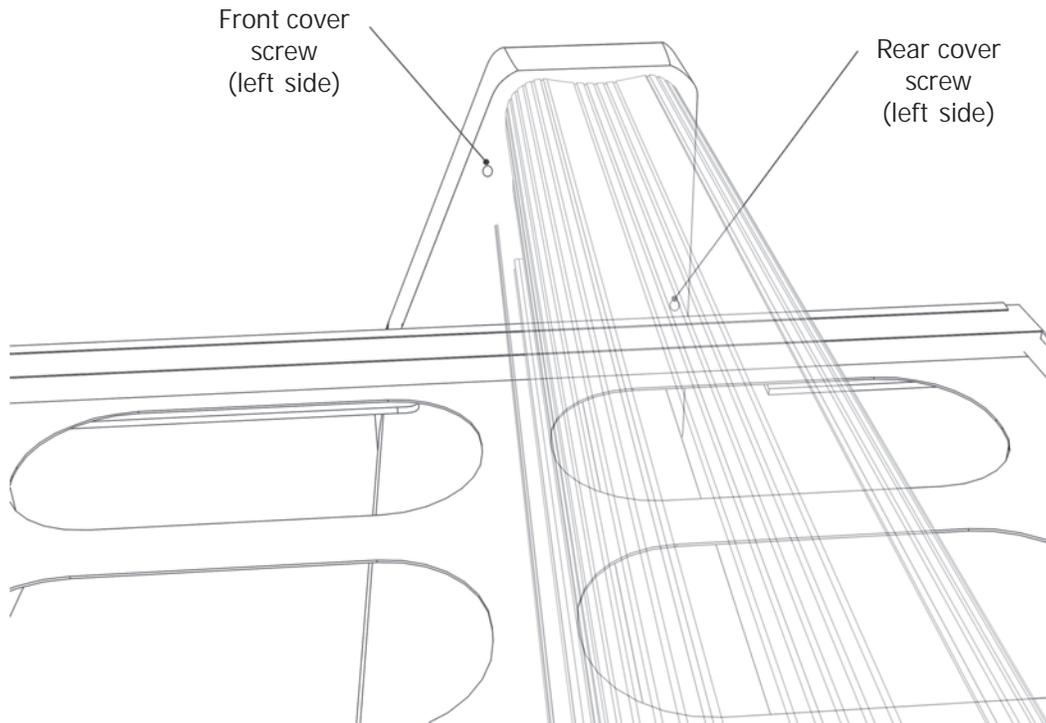
The following procedures describe the basic disassembly of the 300 system cutter to gain access to the keypad, power, and drive components. Please pay close attention to the **Warning** and **Caution** notes.

#### Removing the End Covers

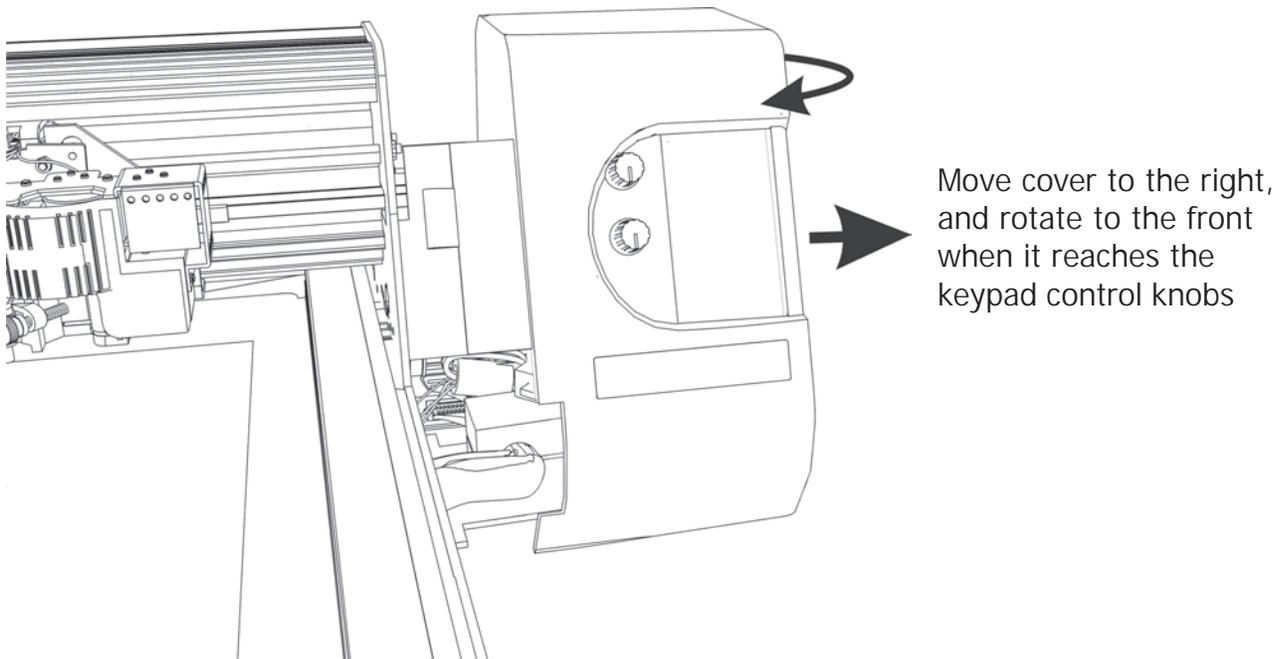
1. Turn off the 300 and unplug the computer data, and power cables.
2. Remove the two black phillips head screws, and the single silver phillips head screw on the bottom of the cover, then remove the right cover. To access the rear black screw, you may have to move the tray forward. *See figure 1 below.*
3. Remove the two black phillips head screws, and remove the left cover. *See figure 2 on the next page.*



**Fig. 1** Right side cover screws (Black Phillips head)



**Fig. 2** Left side cover screws (Black Phillips head)



**Fig. 3** Removing the right side cover  
2.

## **Removing the Bottom Cover for Internal Access**

### **WARNING**

- *The 300 system cutter is very heavy and could cause an injury if it falls. Make sure that another person assists with moving the cutter.*
- *When the bottom cover of the 300 is removed and the power is on there is an electric shock hazard. These diagnostic procedures should only be performed by qualified technical personnel or individuals that are aware of safe practices with 110 VAC and 220 VAC devices.*



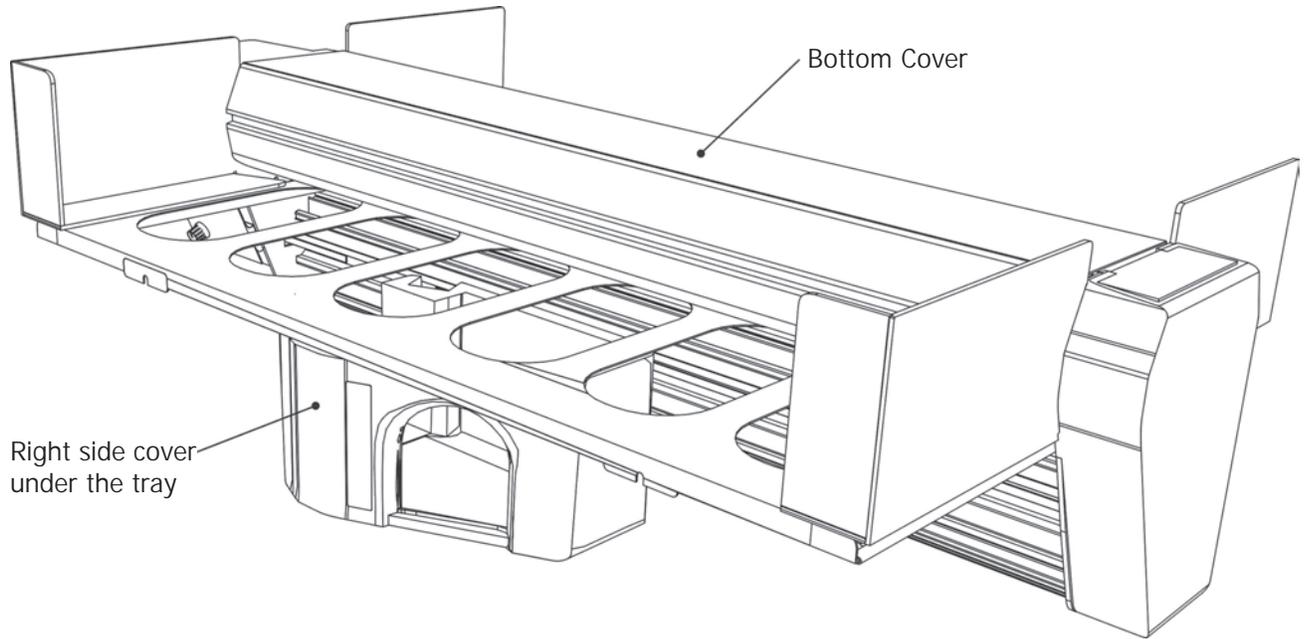
*Do not lift the 300 by its top dust cover, or the tray assembly. Use the bottom surfaces of the end plates for lifting and moving the plotter.*

### **Tools Required:**

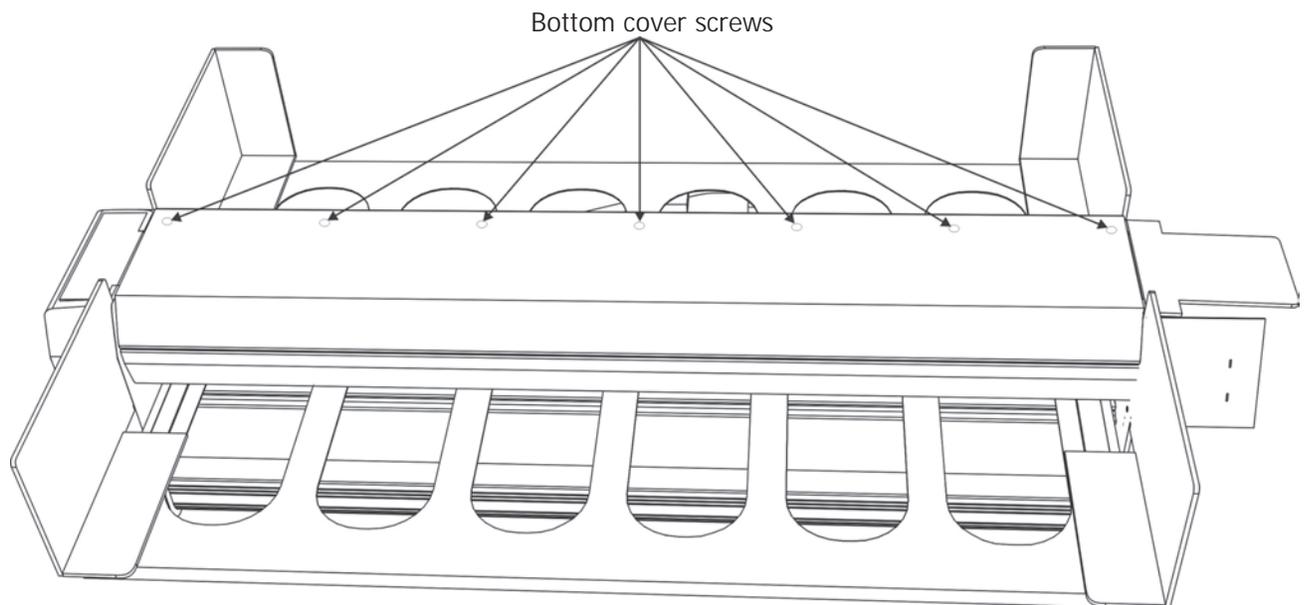
- Phillips head screw driver.
- Two people capable of lifting 50 pounds each.
- Grounding strap (optional).

### *Perform the Following Disassembly:*

1. Turn the power off, and disconnect the computer data, and power cables.
2. Move the carriage assembly to the right side of the cutter.
3. Remove the right side cover. *See Removing the covers earlier in this procedure.*
4. Use your assistant to help you flip the 300 cutter over onto its top dust cover. Use the right side cover to place under the tray so it doesn't fall over while it's on its top. See figure 4.
5. Remove the phillips screws along the bottom cover's edge. See figure 5.
6. While removing the bottom cover, take care in unplugging the fan wire from the logic board



**Fig. 4** Turn 300 over, and place right side cover under tray



**Fig. 5** Bottom cover screws



## Main Logic Board Replacement



*Electrostatic discharge preventative measures must be adhered to during all assembly replacement procedures.*

1. Shut off the plotter and remove the power and computer data cable.
2. Perform the procedures in *Removing the Bottom Cover for Internal Access* above.
3. Mark all of the main logic board connectors with a felt tip pen before disconnecting them. This will make it easier to correctly install the connectors after inserting the new logic board.
4. Discharge any static electricity that has accumulated and remove all of the plugs and connections on the logic board. Use the *Interconnect Diagram* in the *Appendix* section as a location guide.
5. Remove the logic board by loosening the four phillips head screws and pulling the unit out of the track in the platen.
6. Replace the new logic board making sure to insert the top edge into the support track in the platen. Insert and tighten the four phillips screws from above. The fasteners only need to be snug and can damage the logic board if over tightened.
7. Connect all of the plugs on the logic board. Use the *Interconnect Diagram* in the *Appendix* section of the *300 Service Manual* and the notes from step 4 as a guide.
8. Plug the power cord into the 300 and into a wall outlet. Power the machine on using the resetting procedure below. Test all of the functions of the keypad.
9. Reconnect the serial cable and perform test plots. Reassemble the 300 in the reverse order that it was disassembled. See *General Disassembly Procedures* earlier in the procedure.
10. If problems arise contact Ioline customer service.

## Resetting the Factory Defaults

If you have replaced the logic board, or the 300 System is acting wierd, the machine should be reset to factory defaults. There are two ways to restore the factory default system parameters.

Default Reset Functions	Result
Hold down the Start/Stop key while turning on the power	Resets all factory parameter defaults but keeps the X/Y calibration values.
Hold down the Up Arrow key while turning on the power	Resets all factory parameter defaults and clears the X/Y calibration values. This option should only be used when replacing a ROM chip.