
SERVICE INSTRUCTION

INSTALLING A REPLACEMENT 79390-XX PC BOARD IN A 79513-XXX 9050 CASCADE CONTROL UNIT

Required Tool List:

- #2 Phillips head screwdriver
- Flathead screwdriver
- Adjustable wrench

1. Determine which software version is currently installed in the control unit.

a. Cycle the power by turning it off then on.

b. Once the power supply is back on, note the version number in the right hand LED display (the μ A display). This number is displayed for only 2-3 seconds after cycling the power.

If the version number is 2.66 or greater, do not replace the PC board. Return the replacement PC board to your distributor.

If the version number is less than 2.66, continue to install the replacement PC board per the instructions on this service instruction.

2. TURN OFF THE CONTROL UNIT AND UNPLUG THE AC LINE CORD.

3. Unplug or remove everything from the back of the control unit.

4. Loosen the four (4) screws on the front face of the control unit using a #2 Phillips head screwdriver. **1. TURN OFF THE CONTROL UNIT AND UNPLUG THE AC LINE CORD.**

NOTE

- ▶ Do not remove the screws entirely; this will make the reassembly process easier.

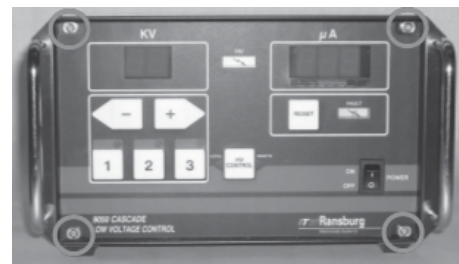


Figure 1: Front Face of Control Unit With Screw Locations Noted

5. Push on the back panel of the control unit chassis, as shown in Figure 2, allowing the chassis assembly to slide out the front of the control unit case.

NOTE

- ▶ Do not force the chassis assembly out. If it does not slide out easily, try to loosen the screws more. Also, you may try to gently wiggle the back panel up and down.

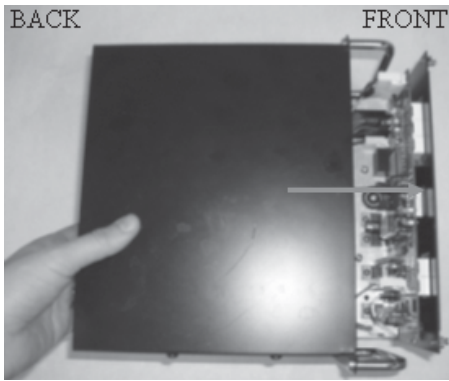


Figure 2: Sliding the Chassis Assembly Out

6. Remove the chassis assembly and place it on a flat surface.
7. Locate the PC board near the front face of the chassis assembly.

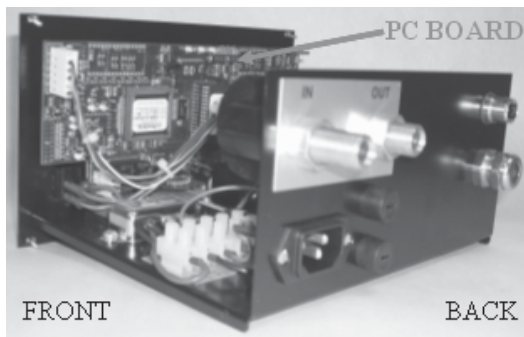


Figure 3: Chassis Assembly Showing Location of PC Board

8. Locate the four (4) wire harness connectors and the one (1) ribbon cable connector attached to the PC board.
 - a. The wire harness connectors have one (1) or more wires connected to one (1) plastic, white connector.
 - b. The ribbon cable is approximately 1" wide and is green plastic with light green stripes on it, and is connected to the PC board with a black plastic connector.

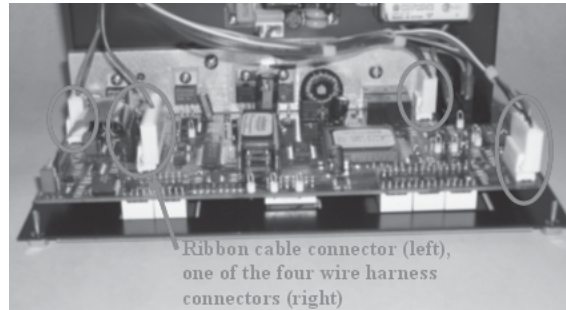


Figure 4: PC Board Noting Location of the Four (4) Wire Harness Connectors, and the One (1) Ribbon Cable Connector

9. GENTLY pull on the ribbon cable connector to disconnect it from the PC board.
10. GENTLY pull on each individual wire harness connector to remove it from the PC board.

 CAUTION
<p>► DO NOT BREAK THE TABS OF THE WIRE HARNESS CONNECTORS.</p>

NOTE

- If the wire harness connectors cannot easily be removed from the PC board, use a flathead screwdriver to GENTLY push the wire harness connectors from the board. This can be done by placing the flathead screwdriver underneath the wire harness connector and pushing upwards with the screwdriver, while moving from the edge towards the center of the connector. Be careful not to damage the board with the screwdriver by applying too much downward force.



Figure 5: Depicting the Proper Way To Remove Wire Harness Connectors Using a Flathead Screwdriver

11. Use a flathead screwdriver to remove the three (3) screws and washers holding the PC board in place. These screws are located on the aluminum plate at the base of the PC board.

NOTE

- ▶ Do not misplace the three (3) screws and washers that held the PC board in place.

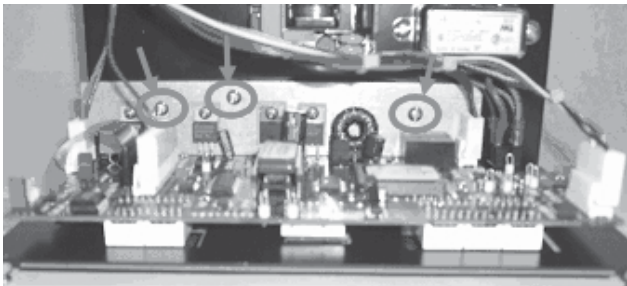


Figure 6: Depicts Location of Screws and Washers Holding the PC board In Place

12. Remove the PC board from the chassis assembly.

13. There may be two ½” square rubber cushions on the back of the front panel of the chassis assembly (behind the PC board).

- a. If there is, use a flathead screwdriver to pry them off.
- b. If there is not, continue on to step 14.

14. Place the new replacement PC board in the same location as the old one that was just removed.

NOTE

- ▶ The software version number on the E-Prom of the new replacement PC board will be 2.66 or greater.

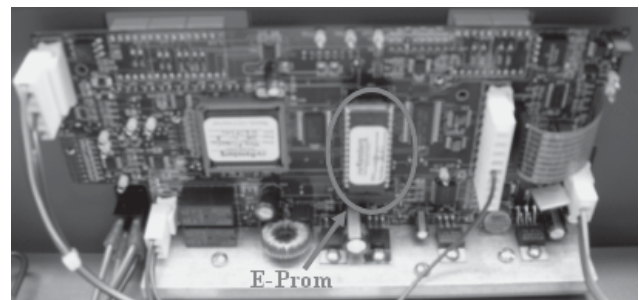


Figure 7: Depicts Location of the E-Prom Which Displays the Software Version Number

15. Use a flathead screwdriver to re-install the three (3) screws and washers into the aluminum plate at the base of the new PC board.

16. Attach the ribbon cable connector to the new PC board.

- a. The location of the connector on the new PC board is in the same place as the location of the connector on the old PC board (see Figure 4).
- b. The connector is a thin black piece of plastic with eight (8) gold metal prongs sticking up from it.

NOTE

- ▶ **Be sure to line up the ribbon cable connector with the prongs of the connector on the PC board (it is possible to install the ribbon cable connector misaligned).**
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17. Attach each individual cable harness connector to the proper spot on the new PC board.

- a. The locations of each connector for each of the cable harnesses on the new PC board are in the same place as the location of the connectors on the old PC board (see Figure 4).
- b. The connectors are thin white plastic pieces with three (3) or more silver metal prongs sticking up from them.



CAUTION

- ▶ **DO NOT BREAK THE TABS OF THE WIRE HARNESS CONNECTORS.**

NOTE

- ▶ **Be sure to line up each cable harness connector with the prongs of the connector on the PC board (it is possible to install the cable harness connectors misaligned).** Do not force the cable harness connectors onto the connectors of the PC board. If they do not easily push into place, use a flat-head screwdriver to **GENTLY** pull back on the tab on the PC board connector and then slide the cable harness connector into place.
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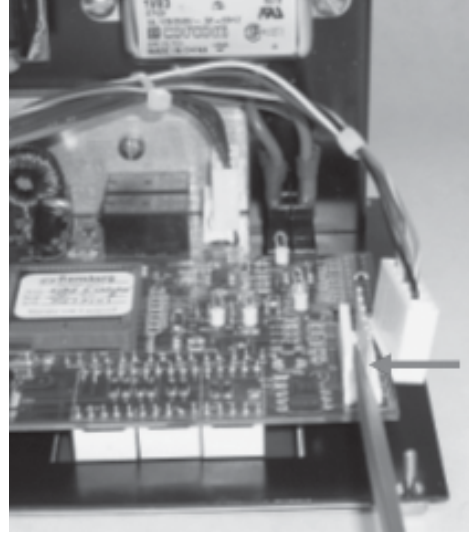


Figure 8: Depicting the Proper Way to Install Wire Harness Connectors Using a Flathead Screwdriver

18. Push the chassis assembly back into the control unit case as shown in Figure 10.

NOTE

- ▶ The chassis assembly should be slid in from the front of the control unit case. Do not force the chassis back into the case. Make sure to line up the sides of the chassis assembly with the white plastic guides on the bottom of the case. It may be necessary to gently wiggle the chassis assembly slightly.
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Figure 9: Highlighting the White Plastic Guides On the Bottom of the Case

19. Tighten the four (4) screws on the front face of the control unit using a #2 Phillips head Screwdriver (see Figure 1).

20. Re-install all connections to the rear of the control unit.

21. Turn the control unit back on. The control unit should display in the right hand LED (μA display), for the first 2-3 seconds after turning it on, that software version 2.66 (or higher) is running.

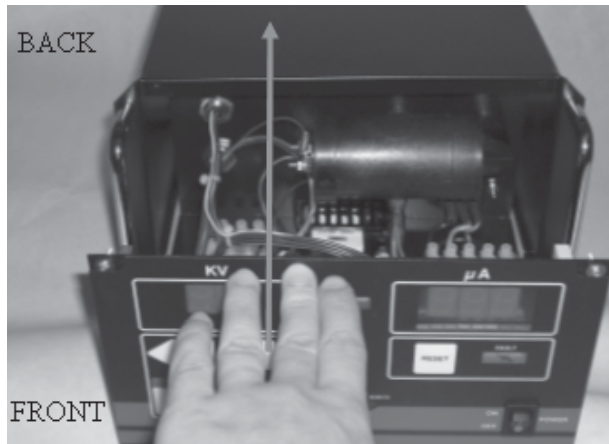


Figure 10: Sliding the Chassis Assembly Back Into the Control Unit Case

Manufacturing
 1910 North Wayne Street
 Angola, Indiana 46703-9100
 Telephone: 260/665-8800
 Fax: 260/665-8516

Technical/Service Assistance
 Automotive Assembly and Tier I
 Industrial Systems
 Ransburg Guns

Telephone: 800/ 626-3565 Fax: 419/ 470-2040
 Telephone: 800/ 233-3366 Fax: 419/ 470-2071
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Technical Support Representative will direct you to the appropriate telephone number for ordering Spare Parts.

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