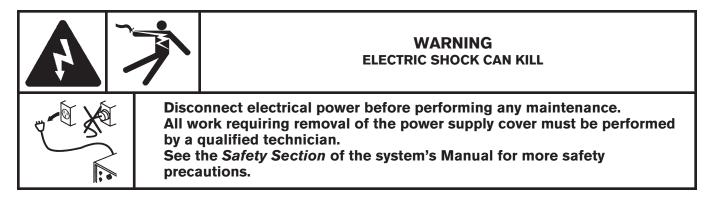
# HPR400XD to HPR800XD Primary and Secondary Power Supply Upgrade

**Field Service Bulletin** 

806620 - Revision 0 - May, 2010





## Introduction

#### Purpose

This field service bulletin provides the instructions necessary to upgrade an HPR400XD power supply for use as a primary or secondary HPR800XD power supply. **The serial number of the HPR400XD power supply must be HPR400-000560 or greater to continue with this installation.** 

#### Kit 228626 contents (primary power supply)

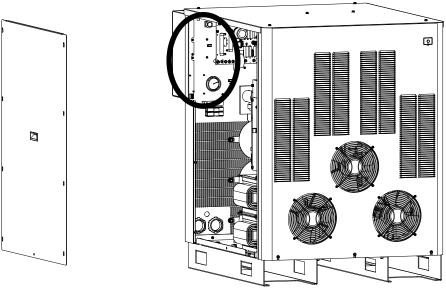
| Part number | Description                           | Quantity |
|-------------|---------------------------------------|----------|
| 075140      | Bolt: 1/2"-13 x 3/4", brass           | 1        |
| 075218      | Flat washer: 1/2", 0.562" x 1.25"     | 1        |
| 075470      | Machine screw: 10-32 x 3/4", pan head | 4        |
| 075491      | Machine screw: 6-32 x 3/8", pan head  | 4        |
| 104495      | Busbar: HPR800XD, DC contactor-PCB    | 1        |
| 104496      | Busbar: HPR800XD, DC contactor-Cable  | 1        |
| 108903      | Standoff: 6-32 x 1/4" x 1"            | 4        |
| 110906      | Decal: HPR800XD primary system        | 1        |
| 229340      | Snubber board assembly: HPR800XD      | 1        |
| 229360      | Contactor assembly: HPR800XD DC       | 2        |

#### Kit 228627 contents (secondary power supply)

| Part number | Description                                    | Quantity |
|-------------|--|----------|
| 075140      | Bolt: 1/2"-13 x 3/4", brass                    | 1        |
| 075218      | Flat washer: 1/2", 0.562" x 1.25"              | 1        |
| 075470      | Machine screw: 10-32 x 3/4", pan head          | 4        |
| 075491      | Machine screw: 6-32 x 3/8", pan head           | 4        |
| 104495      | Busbar: HPR800XD, DC contactor-PCB             | 1        |
| 104496      | Busbar: HPR800XD, DC contactor-Cable           | 1        |
| 108903      | Standoff: 6-32 x 1/4" x 1"                     | 4        |
| 110907      | Decal: HPR800XD secondary system               | 1        |
| 141144      | PCB assembly: HPR800XD secondary control board | 1        |
| 229340      | Snubber board assembly: HPR800XD               | 1        |
| 229360      | Contactor assembly: HPR800XD DC                | 2        |

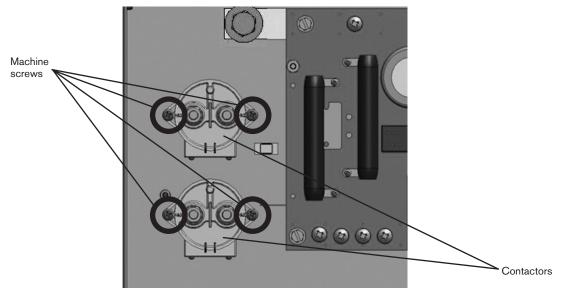
### Primary and secondary power supply upgrades

1. Remove the left side panel on the HPR400XD power supply.

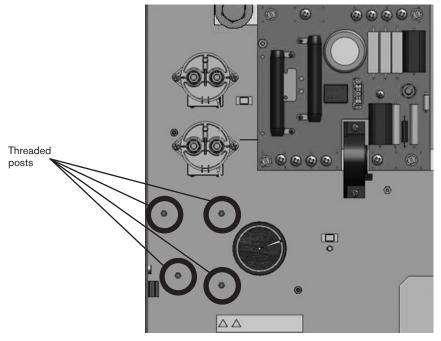


Left side panel removed and installation location shown

2. Orient the contactors as shown below and install them onto the rear wall of the power supply using the 4 machine screws (075470) provided in this kit.



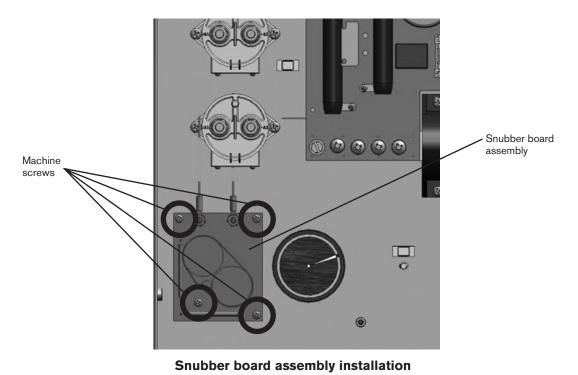
**Contactor installation** 



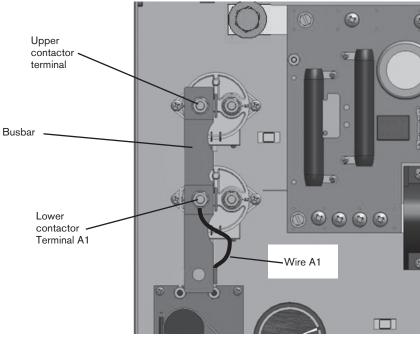
3. Install the 4 standoffs (108903) in this kit by screwing them onto the threaded posts on the rear wall of the power supply as shown below.

Standoff installation

4. Orient the snubber board assembly as shown below and install it onto the standoffs from step 3, using the 4 machine screws (075491) provided in this kit.

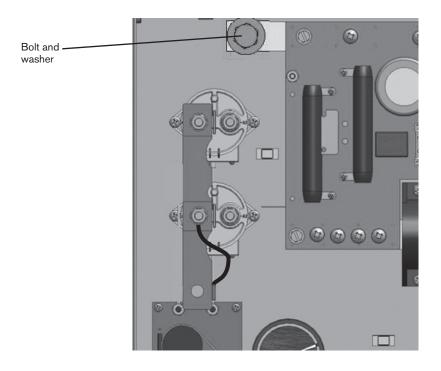


5. Orient the busbar (104496) as shown below. Use the nuts and washers that came with the contactors to secure the busbar to the upper contactor terminal, and to secure wire A1 to terminal A1.



104496 Busbar and wire A1 installation

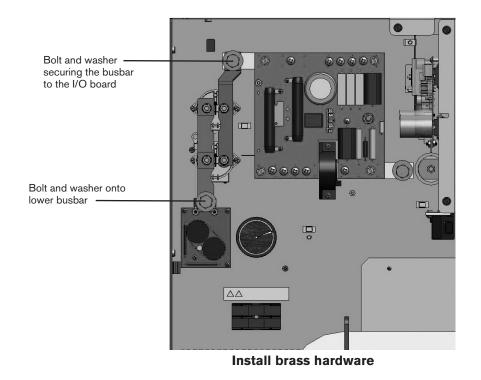
6a. Remove and save the bolt and washer from the I/O board as shown below. It will be reinstalled later.



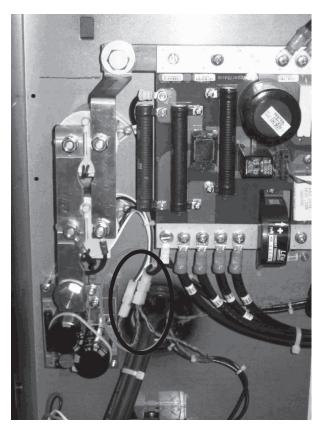
- Upper contactor terminal Lower contactor Terminal A2 Wire A2
- 6b. Orient the busbar (104495) as shown below. Use the nuts and washers that came with the contactors to secure the busbar to the upper contactor terminal. Route wire A2 under the busbar to terminal A2.

104495 Busbar and wire A2 installation

7. Secure the busbar to the I/O board with the bolt and washer that were removed in step 6a, and install the bolt and washer provided in this kit onto the lower busbar.



8. Connect the contactors to the wire harness connections J20 and J21 as shown below.



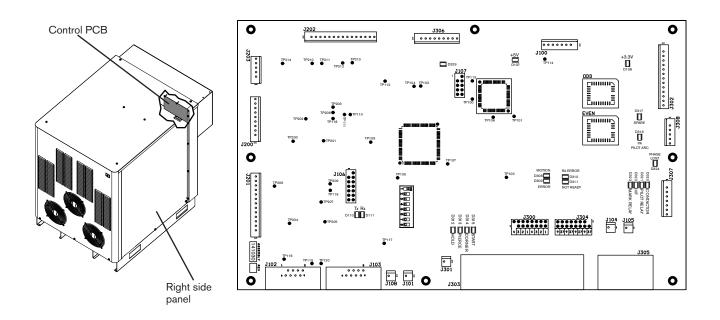
Wire harness connections

- 9. Continue to "install the identification label" at the end of this document to complete the upgrade for a primary power supply. Continue to the next section to complete the upgrade for a secondary power supply.
  - Note: Refer to the HPR800XD Instruction Manuals (806490 manual gas and 805000 Auto gas) for more detailed information on system connections and operation parameters.

## Secondary power supply upgrades only

The control PCB in kit 228627 must be installed to update an HPR400XD power supply to an HPR800XD secondary power supply.

- 1. Turn OFF all power to the system.
- 2. Remove the right side panel from the power supply to access the control PCB. See figure below.

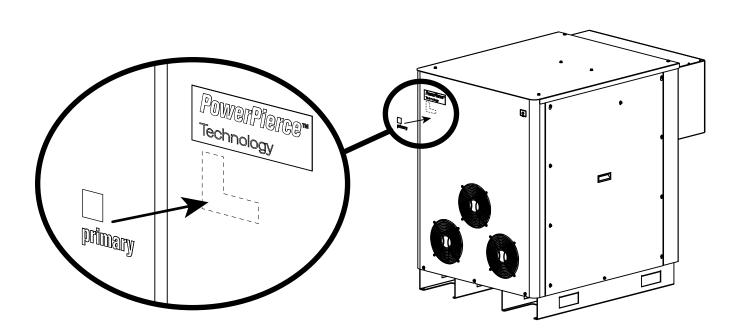


- 3. Unplug all the connectors from the control board.
- 4. Remove the old control board from the power supply.
- 5. Install the new control board in the power supply, and plug in all the connectors.
- 6. Install the right side panel and the installation is complete.

## Install the identification label

Installing the label that is included in the upgrade kit is important for identification. If technical assistance is needed in the future, you will need a fast and easy way to identify the power supply as a primary or secondary unit for the technical service associate.

Place the label as shown below. Only the primary label is shown, but the secondary label should be placed in the same location.



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