

**Warning**

This replacement kit shall be installed by a qualified service agent in accordance with these instructions and all applicable codes and requirements of the authority having jurisdiction. If the information in these instructions is not followed exactly a fire, an explosion or production of carbon monoxide may result causing property damage, personal injury or loss of life.

The qualified service agency is responsible for the proper installation of this kit. The installation is not proper and complete until the operation is checked as specified in these instructions.

| CBI Control Board - CX | | | | |
|---|---------|----------------------------------|--|----------|
| | Part # | Description | | Quantity |
| | 230-011 | CBI Board | | 1 |
|  | 150-094 | Screw, Pan Head , Zn, 4-40 X 1/4 | | 2 |

When to Install the P-1616 CBI Control Board Replacement Kit

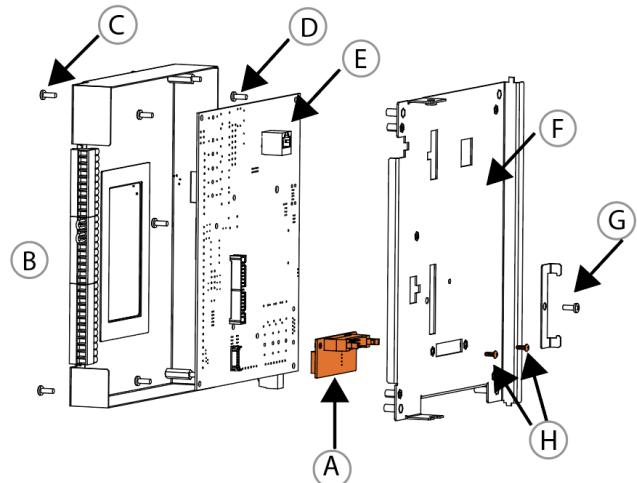
Install the P-1616 kit if you need to replace a failed or damaged CX CBI Control Board

Note

A ladder or step may be required to have a clear vertical view of the work area.

Do not attempt to remove the assemblies without a clear view, as damage to the connectors, screws or refractory may occur.

CX CBI Control Board



| Item Number | Description | Item Number | Description |
|-------------|--|-------------|-------------------------------|
| A | CBI Control Board | E | Controller Module |
| B | Controller Module Front Panel | F | Back Panel |
| C | Controller Front Cover Fasteners (x 4) | G | Retainer bracket and fastener |
| D | Control Module Fasteners (x5) | H | CBI connector fasteners |

Replacement of CBI Control Board

Preparing the Unit for Servicing

1. Remove call(s) for heat.
2. Remove power to the unit at a wall switch or a breaker.
3. Shut off gas supply to the boiler.
4. Allow the boiler to cool down.
5. Remove the front cover.

Removing and Replacing the CX CBI Control Board

1. Open the controller door :
 - a. remove and set aside both the screw and retaining bracket (G) that secures the connector (4) (see Figure 1)
 - b. disconnect the electrical connections from the back of the controller chassis
2. Remove the controller module from the controller enclosure.
3. Remove the two screws (H) that secure the CBI control board (A) from the back of the chassis (F), and set aside.
4. Remove the four screws (C) that secures the controller front cover (B) to the control module (E), and set aside.
5. Remove the four screws (D) that secure the controller to the back chassis, and set the screws aside.

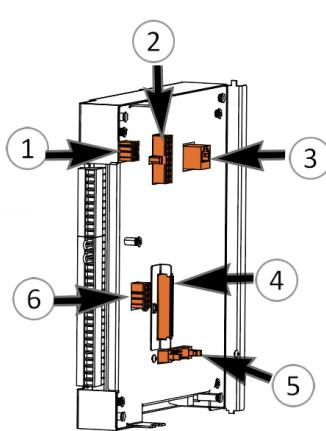


Figure 1: CX Control Board Connections

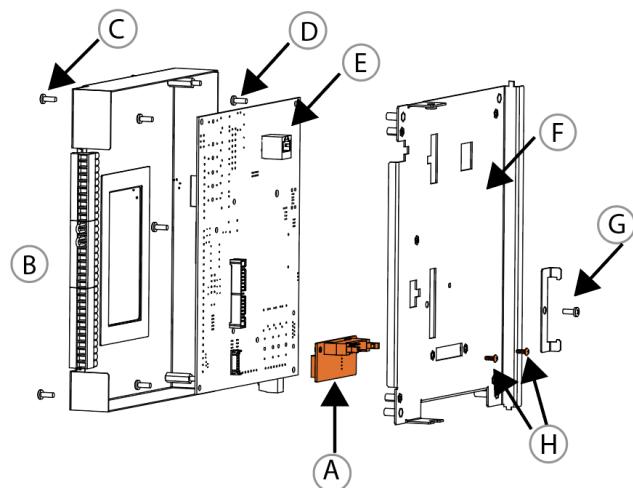


Figure 2: CX Control Module

6. Carefully, disconnect the CBI control board from the controller module.
7. Connect the replacement CBI control board to the controller module, and reassemble in reverse order. Ensure that the connectors and connections are secured in place.

Start-Up

1. Turn on the gas to the boiler.
2. Turn on power to the boiler.
3. Turn on call(s) for heat.
4. Perform a combustion analysis, and test for proper operation.
5. Reinstall the front cover.

Appendix - Internal Wiring Diagram

