



***Unitary Products
Technical Services
Service Letter***

Letter: **YS-17-2016**

Date: December 8, 2016

To: All Unitary Products Branch Service, Sales, and Training Managers
All Unitary Products Distribution Service, Sales, and Training Managers

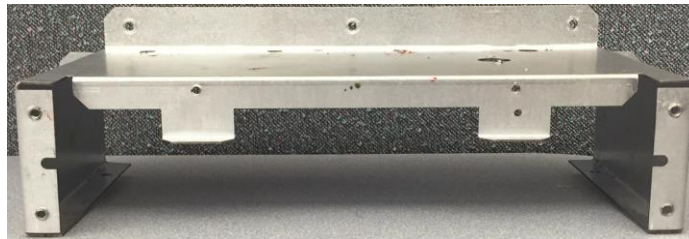
Subject: LX Series Packaged Units Burner Ignition

Product: PCG4 / PHG4 Residential Package Units

Summary: This letter is to address the resolution of intermittent ignition issues on the above referenced products.

We have received several isolated reports of units failing to ignite. In some instances there was no ignition and in some not all burners would ignite.

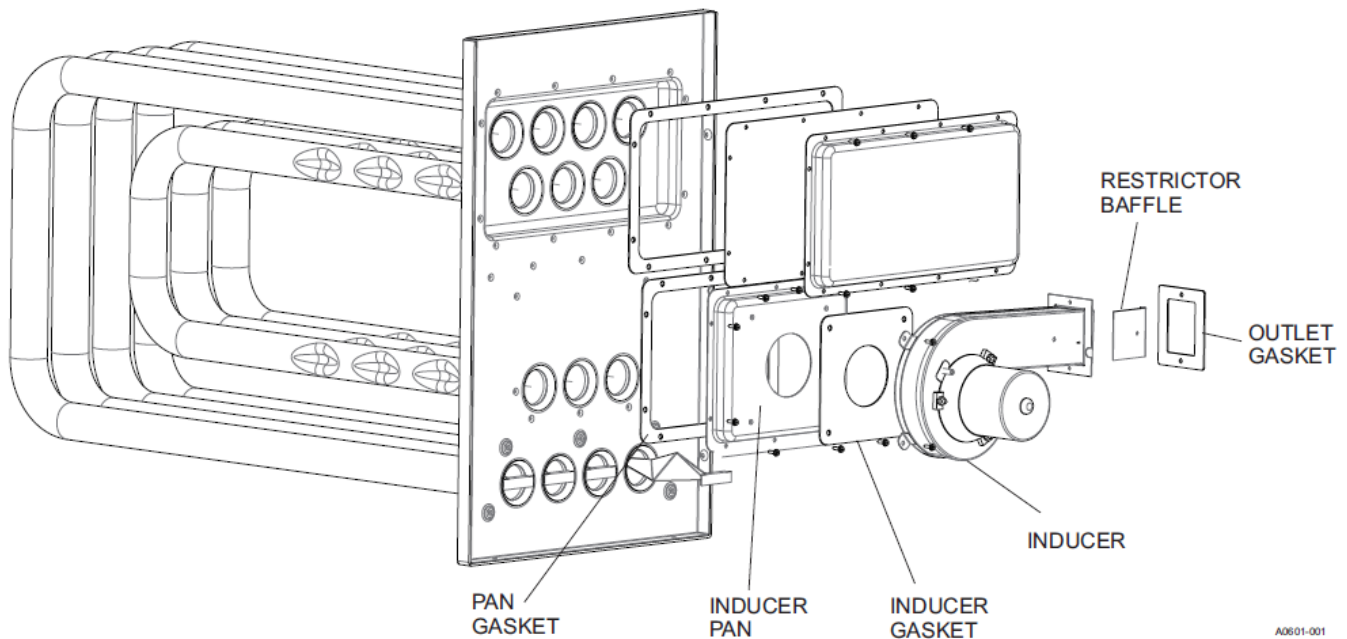
During our investigation it was discovered that more reliable ignition would occur with the burner door in place. This is due to the pattern of air flow used for combustion air during burner operation. The equipment is designed for combustion air to enter the combustion air entrance on the side of the unit, travel behind the unit compressor start components, ignition control board and down into the burner compartment. Primary and secondary air enters the front of the burner box. See image below of original burner box.



A new style of burner box was designed that allows more of the secondary air to enter between the heat exchanger vestibule and the burner box. The new burner box is easily identifiable as it has tabs for mounting to the vestibule in lieu of a continuous flange. All LX series package units manufactured prior to August 2016 have the original style burner box installed. All units manufactured starting in August 2016 are built with the updated burner box design (see image below of a current production burner box).



If you have PCG4 or PHG4 model package units experiencing no or partial ignition conditions check for cleanliness of burners, proper burner alignment, gas inlet and manifold pressures. If conditions are correct but you still experience these problems, we recommend to order kit number S1-37339456001 and install on the package unit. The kit will consist of a new replacement burner box, a new replacement inducer pan, and a new replacement flue restrictor baffle. See image below of heat section parts. A copy of the installation instructions for this kit are attached to this letter for your review.



This service letter provides a fix on fail basis for installation of the kit and 1 hour labor. Make sure you reference this service letter number when filing warranty claims for this issue.

Casey McConnaughy
Field Service Supervisor
Johnson Controls Unitary Products

Robert Cabrera
Director of Engineering
Johnson Controls Unitary Products

FIELD KIT INSTALLATION MANUAL

BURNER BOX KIT S1-37339456001

FOR USE WITH MODELS: PCG4 & PHG4

INSTALLATION

1. Turn off electrical power.
2. Shut off gas supply at shutoff valve upstream of the furnace or at meter as required.
3. Remove the burner access door.
4. Disconnect gas supply piping from gas valve at furnace.
5. Carefully label and remove the wires from the gas valve and rollout(s) and note their location so they may be properly replaced.
6. Remove the screws that hold the manifold assembly to the burner box and slide the manifold off the burners.
7. Carefully remove the flame sensor wire and unplug the igniter connector.
8. Remove the burner box from the unit by taking out the screws that secure it to the vestibule panel.
9. Switch flame sensor, rollout(s), and igniter burner rack and burners from old to new burner box.
10. Disconnect the wires going to the inducer motor, making sure to identify them so they can be reconnected later.
11. Remove the screws holding the inducer motor in place, so that it can be removed from the unit, taking care not to damage the fiber gasket between the inducer and the inducer pan.
12. With the inducer removed, remove and install the correct restrictor baffle in the outlet of the inducer.
13. Remove the screws holding the inducer pan in place, and remove the inducer pan from the unit.
14. Clean any loose gasket material from the vestibule panel.
15. Position the included fiber gasket in line with the new inducer pan and secure to the vestibule panel with the screws removed in step 13.
16. Reinstall the inducer assembly and reconnect the wires.
17. Ensure Low NOx screens are pushed into the stops.
18. Install the new burner box by reversing the process in step 8.
19. Reconnect both the flame sensor wire and the igniter plug.
20. Reinstall the manifold assembly by reversing the removal process.
21. Reconnect the wires to the gas valve and rollout(s).
22. Reconnect the gas supply piping to the gas valve and insure the all gas connections are tight.
23. Turn on gas supply to furnace and check all gas connections with suitable leak detector.
24. Replace the burner access door.
25. Apply power and check furnace operation.

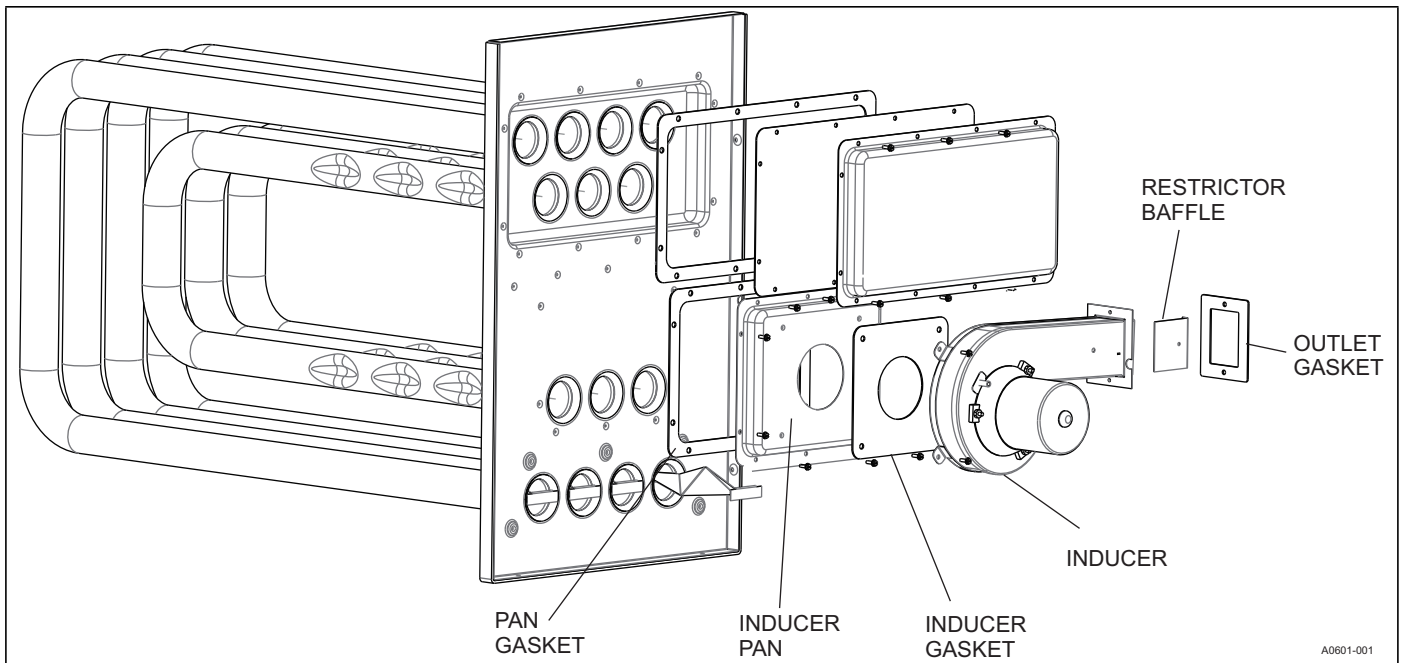


FIGURE 1: Burner Box Assembly

TABLE 1: Baffle Usage

Restrictor Baffle Part Number	Where Used
1171967	PCG4A240502X1
	PCG4A300502X1
	PCG4A360502X1
	PCG4A360503X1
	PHG4A240502X1
	PHG4A300502X1
	PCG4A240752X1
	PCG4A300752X1
	PCG4A360752X1
	PCG4A360753X1
	PCG4A420752X1
	PCG4A420753X1
	PHG4A240752X1
	PHG4A300752X1
	PCG4A360504X1
	PCG4A360754X1
1171966	PCG4A361002X1 A
	PCG4A361003X1 A
	PCG4A421002X1 A
	PCG4A421003X1 A
	PCG4B480652X1 A
	PCG4B480653X1 A
	PCG4B600652X1 A
	PCG4B600653X1 A
	PHG4B360652X1 A
	PHG4B420652X1 A
	PHG4B480652X1 A
	PHG4B600652X1 A
	PCG4A361004X1 A
	PCG4B480654X1 A
	PCG4B600654X1 A

TABLE 1: Baffle Usage

Restrictor Baffle Part Number	Where Used
1171965	PCG4B481002X1
	PCG4B481003X1
	PCG4B601002X1
	PCG4B601003X1
	PHG4B361002X1
	PHG4B421002X1
	PHG4B481002X1
	PHG4B601002X1
	PCG4B481004X1
	PCG4B601004X1
1171963	PCG4B481252X1
	PCG4B481253X1
	PCG4B601252X1
	PCG4B601253X1
	PHG4B481252X1
	PHG4B601252X1
	PCG4B481254X1
	PCG4B601254X1