PACKAGED UNITS - KITS

508091-01
8/2020

BURNER BOX LINER REPLACEMENT KIT

INSTALLATION INSTRUCTIONS FOR BURNER BOX LINER REPLACEMENT KIT
USED WITH LG 036H, 048H, 060H ULNOx UNITS

Shipping and Packing List

Package 1 of 1 contains:
1- Burner box liner
2- Gaskets
14- Screws

WARNING
Improper installation, adjustment, alteration, service or maintenance can cause property damage, personal injury or loss of life. Installation and service must be performed by a licensed professional HVAC installer or equivalent, service agency, or the gas supplier.

CAUTION
As with any mechanical equipment, contact with sharp sheet metal edges can result in personal injury. Take care while handling this equipment and wear gloves and protective clothing.

Application

Use this instruction to replace the burner box liner in LGH036H, 048H, and 060H ultra-low NOx units. See table 1 for application.

TABLE 1

<table>
<thead>
<tr>
<th>Cat. No.</th>
<th>Print</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>21A46</td>
<td>620602-05</td>
<td>036</td>
</tr>
<tr>
<td>21A47</td>
<td>620602-06</td>
<td>048</td>
</tr>
<tr>
<td>21A48</td>
<td>620602-07</td>
<td>060</td>
</tr>
</tbody>
</table>

Installation

See figure 1.

1- Turn off both electrical and gas power supplies to unit.

2- Open heat access panel and label the wires from gas valve, thermal switch, primary limit switch and disconnect them.

3- Disconnect gas supply piping. Remove the air / gas elbow, gas manifold, and gas valve from the plenum box as one component.

4- Remove the 14 screws securing the air / gas plenum box. Discard screws.

5- Remove the air / gas plenum box, burner premix plate, and burner box liner. Discard the gaskets on both sides of the burner premix plate.

6- Remove and discard the burner box liner.

7- Install the provided burner box liner.

8- Reinstall the burner premix plate with the 14 provided screws.

9- Reinstall the air / gas plenum with the 14 provided screws. Make note of the numbered sequence when installing the air / gas plenum. Follow the sequence as shown in Figure 1. Torque screws to a maximum of 100 + 5 in - lbs. and a minimum 60 in - lbs. Re-torque the screws using the same procedure, then repeat once again.

10- Replace the air / gas elbow, gas manifold, and gas valve assembly onto the air / gas plenum.

11- Reconnect gas valve, thermal switch, and primary limit.

12- Reconnect gas supply piping.

13- Turn on power and gas supply to unit.

14- Set thermostat and check for proper operation.

15- Check all piping connections, factory and field, for gas leaks. Use a leak detecting solution or other preferred means.

16- Once furnace is leak free turn off unit and prepare to check manifold pressure. Follow the steps below.
   a - Remove the threaded plug from the outlet side of the gas valve and install a field-provided barbed fitting. Connect measuring device “+” connection to barbed fitting to measure manifold pressure.
   b - Start unit (two-stage units in low fire) and allow 15 minutes for unit to reach steady state.
   c - After allowing unit to stabilize for 15 minutes (two-stage units in low fire), record manifold pressure and compare to value given in Table 2. Make manifold adjustment if necessary (two-stage units make adjustment in low fire).
   d - Shut unit off and remove manometer as soon as an accurate reading has been obtained.

17- Close access panel.
**CAUTION**

Can cause personal injury. Burner and all gas air mixing components remain HOT immediately after burner shutdown. DO NOT handle burner or components until adequate time period has passed.

### TABLE 2

<table>
<thead>
<tr>
<th>Unit</th>
<th>High Fire or Single Stage</th>
<th>Low Fire</th>
</tr>
</thead>
<tbody>
<tr>
<td>060KBtuh</td>
<td>3.2-3.6 in. w.c.</td>
<td>1.7-2.1 in. w.c.</td>
</tr>
<tr>
<td>100KBtuh</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### FIGURE 1

ULNOx HEAT SECTION

- INSTALL KIT SCREWS IN THE NUMBERED ORDER SHOWN
- REPLACE GASKET
- BURNER PREMIX PLATE
- REPLACE GASKET
- REPLACE BURNER BOX LINER (3 BURNER TUBE SLEEVES INCLUDED)
- BURNER BOX / HEAT VESTIBULE / HEAT EXCHANGER ASSEMBLY
- COLLECTOR BOX (COMBUSTION AIR INDUCER REMOVED FOR CLARITY)