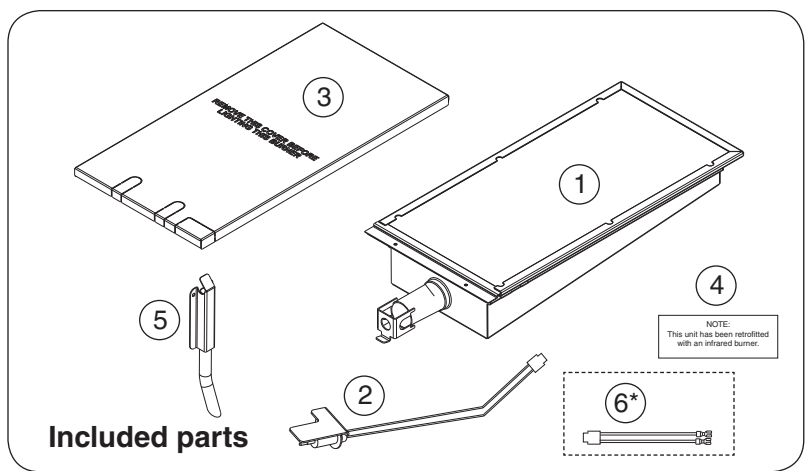




# ECHELON

## INFRARED BURNER KIT INSTRUCTIONS

Model # 3050



### PARTS INCLUDED

1. Infrared burner
2. Electrode assembly
3. Burner cover
4. Label
5. Flash tube
6. Adapter wire\*

Table 1-1	Infrared Orifice Chart
	Models E660, E790, E1060
Natural	3001-45
Propane (L.P.)	3001-55

### TOOLS REQUIRED

- Phillips screwdriver
- Pair of needle-nose pliers
- 1/4 hex nut driver
- 3/8 hex nut driver

\* The adapter wire (item #6) is provided for use with grills that are equipped with ignitor buttons for lighting. (Push to light configurations do not require this adapter.)

## INSTALLATION

### REMOVING THE OLD BURNER

1. Be sure the grill is completely cool and the gas is completely shut off. Open the oven lid.
2. Remove the cooking grid from above the burner by lifting it first from the front and set it aside (see Fig. 1-1).
3. Remove the flavor grid from above the burner and set it aside (see Fig. 1-1). The flavor grid will not be used with the infrared burner.
4. Remove the flash tube by removing the two hex nut screws using the 1/4 inch hex nut driver; pulling it directly away from the grill fire wall and off the mounting pin and the ignitor electrode (see Fig. 1-2). Retain screws for installation.

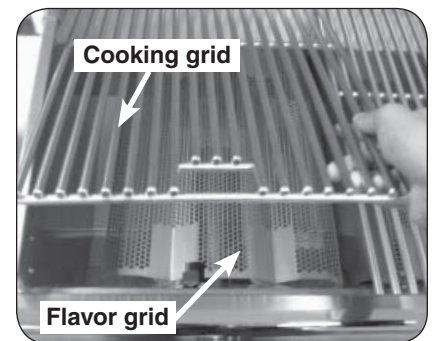


Fig. 1-1 Remove cooking and flavor grid

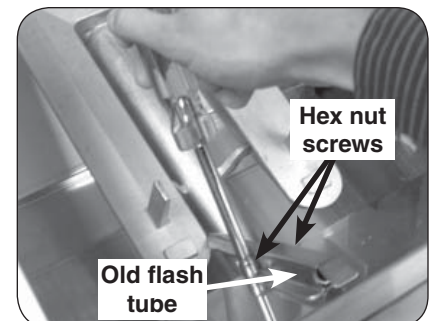


Fig. 1-2 Remove the flash tube

## INSTALLATION (cont.)

- Remove the cotter pin from the right rear burner anchoring peg using needle-nose pliers. Pull it straight out of the cotter pin hole (see Fig. 2-1).

**CAUTION:** The burner is heavy.

- Remove the existing main burner by lifting the pegs extending from under the back end of the burner out of the two (2) holes on the bottom of the oven. After the pegs have been freed, move the whole burner toward the back of the grill so that the burner gas intake pulls away from the gas orifice at the front fire wall of the grill (see Fig. 2-2). Then carefully lift the burner out and set it aside. Retain the clip with the burner so that they can be re-installed in the future if desired.
- The grill is equipped with a heatshield kit for each main burner. This kit is only functional with the standard main burner, and must be removed for proper infrared burner operation. Use pliers to remove the diverter tube by bending in each side and pulling it outwards (see Fig. 2-3), then reach in and remove the silicone gasket (see Fig. 2-4).

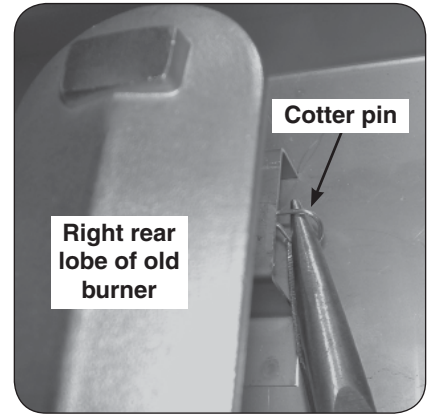


Fig. 2-1 Remove the cotter pin

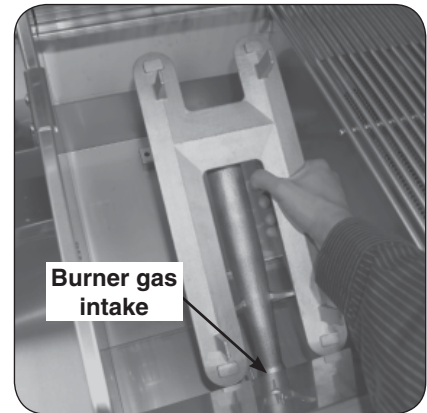


Fig. 2-2 Remove the burner

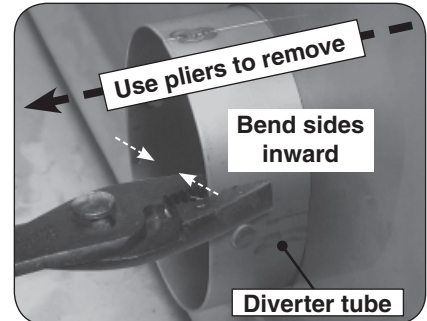


Fig. 2-3 Remove diverter tube

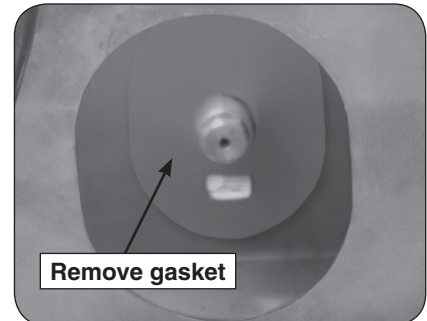


Fig. 2-4 Remove silicone gasket

## INSTALLATION (cont.)

### INSTALLING THE NEW INFRARED BURNER

1. Use the  $\frac{3}{8}$  inch hex nut driver to remove the exposed gas orifice and replace it with the correct orifice for the new infrared burner included with your kit (See Table see 1-1. See also Fig. 3-1, 3-2 and 3-3).

**Note:** You may need to lean over the oven and look back toward the inside front of the grill to see the orifice.

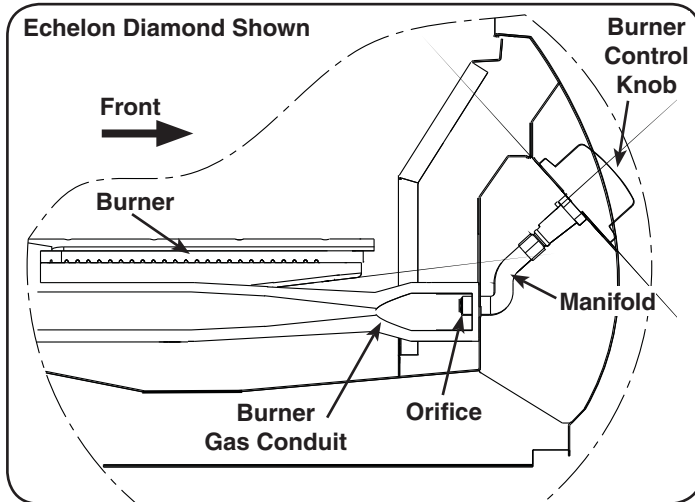


Fig. 3-3 Orifice location cut away side view

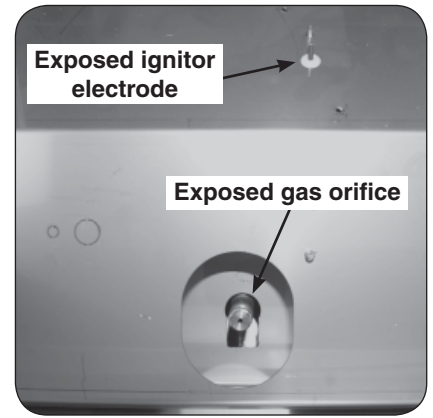


Fig. 3-1 Locate the gas orifice



Fig. 3-2 Replace the gas orifice

## INSTALLATION (cont.)

2. Pull out and completely remove the drip tray from the grill.
3. With the burner valves in the OFF position, pull the valve knobs from their stems. Use a Phillips screwdriver to remove the fastener screws on the control panel (see Fig. 4-1). To protect the wiring harness, carefully lift the control panel slightly up then away from the frame and let it rest on the attached chain (if equipped). Make sure to retain the screws and finish washers for re-attaching the control panel.
4. Disconnect the existing electrode wires from the wires attached to the ignitor module. Leave the electrode attached to the oven firewall.
5. To remove the heat shield, first cut the zip ties. Then lift the heat shield up and inward slightly to clear the diagonal slots hooked over the oven fire wall then pull away from the manifold (see Fig. 4-2).
6. Install the infrared burner by first sliding it over the orifice, then line up the two tabs in back of the burner with the two slots in the back of the grill and lower them carefully into place (see Fig. 4-3).

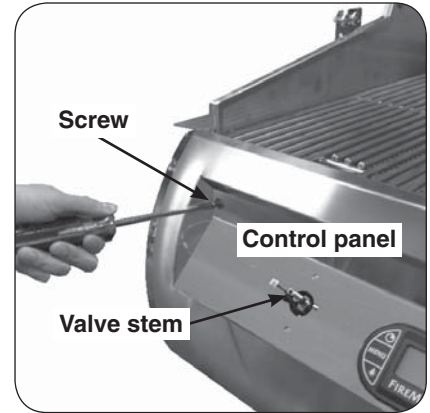


Fig. 4-1 Remove the control panel

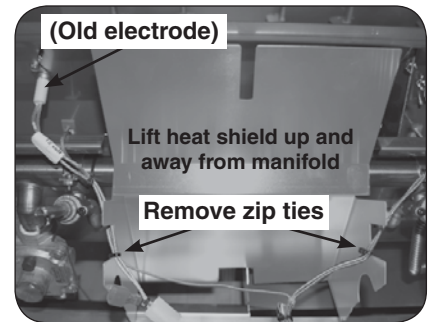


Fig. 4-2 Remove heat shield



Fig. 4-3 Install new burner

## INSTALLATION (cont.)

7. Carefully remove the punch-outs located in the forward firewall (see Fig. 5-1).
8. Slide the infrared electrode wire into the large punch-out hole. Secure in place through the small punch-out with the screw and nut provided (see Fig. 5-2 and see 5-3).
9. Feed the infrared electrode wires through the hole in the manifold firewall and heat shield, then connect them to the ignitor module wires that used to be connected to the old electrode (Fig. 5-3). Test the ignitor by pressing the corresponding ignitor button and observing that the tip of the ignitor glows orange.
10. Apply the conversion label supplied with this kit to the inside of the fire wall behind the control panel so that it does not obscure any other labels.
11. Reposition the heat shield by hooking the diagonal slots back over the sheet metal of the manifold fire wall.
12. Replace the flash tube with the one provided in your installation kit by carefully lining up the two holes in the back of the tube with the two pins sticking out of the inside front of the grill fire wall. Then use the 1/4 inch hex nut driver to lightly tighten both hex nut screws (see Fig. 5-4).
13. Remove the appropriate punch-outs (on the protective cover) for your burner and location. Place the cover on the infrared burner. (See Fig. 6-1.)
14. Replace the control panel taking care that all of the wires are safely within the enclosure and that the lid-closed sensor on the top right of the control panel moves freely up and down in the hole provided for it. Fasten the control panel in place with the screws from step 3. Replace the control knobs and drip tray.
15. Replace the cooking grid so that the cut-out section of the grid is in front.

**Note: FLAVOR GRIDS ARE NOT TO BE USED** with infrared burners.

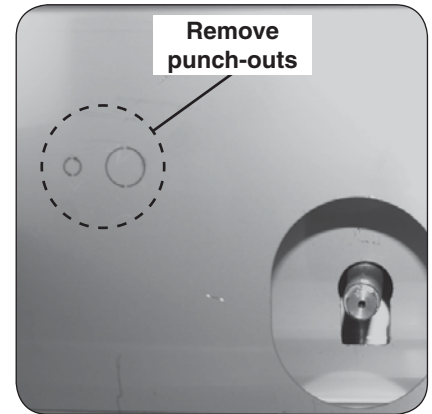


Fig. 5-1 Remove Punch-outs



Fig. 5-2 New electrode

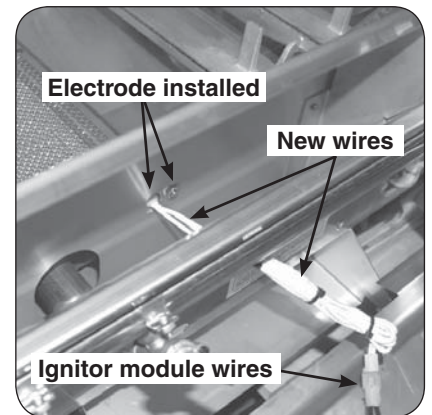


Fig. 5-3 Connect new electrode wires

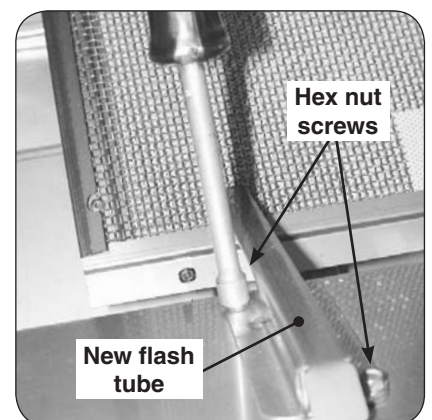
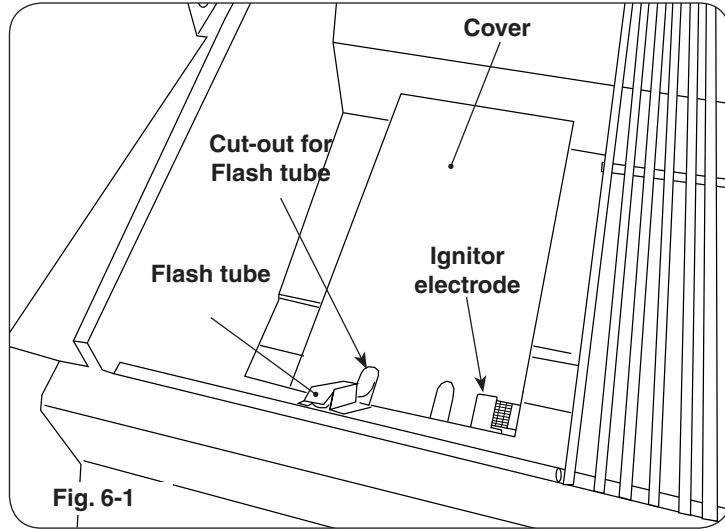


Fig. 5-4 Replace the flash tube

## OPTIONAL INFRARED BURNER OPERATION

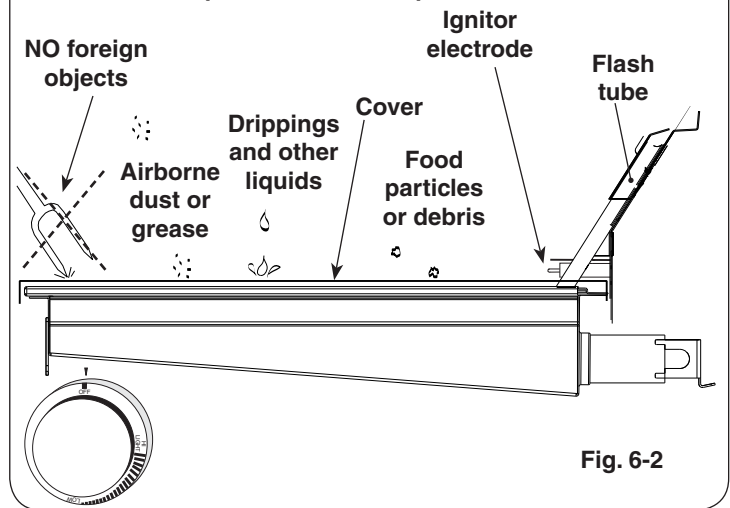
The infrared (IR) searing burner (optional) cooks with a powerful radiant heat.



### WARNING

**Only handle the infrared burner cover when the grill is cold or with a well-insulated long-handled tool or heat resistant gloves.**

#### SIDE VIEW (with cover on)



Light the infrared burner following the LIGHTING INSTRUCTIONS in this manual or printed on the drip tray. Follow these guidelines when operating the Infrared burner:

- **DO NOT place food on the cooking grid until the IR burner glows orange (Fig. 6-3).** Drippings are heated and evaporate instead of sticking to and impairing burner function.
- **For cleaning purposes; always leave your burner on (after cooking) for an additional 5 minutes, to allow for a burnoff period. This is important to keep your burner clean and operating properly. As the burner is self cleaning (at full temperature); avoid the use of cleaners or abrasives.**
- When not in use, **always** cover the infrared burner with the stainless-steel cover. This protects the burner from drippings (from other cooking), airborne particles, and foreign objects (Fig. 6-2).
- Do not strike or scratch the burner ceramic as it may chip, crack, or break (Fig. 6-2).

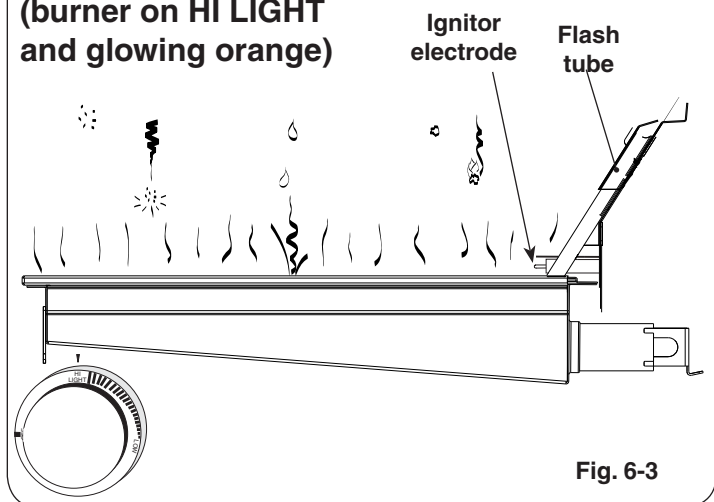
**Note:** Digital thermometer does not give accurate readings for infrared burners.

**Important:** When grilling with the infrared burner, always place a cooking grid above it. The cooking grid must be removed for rotisserie cooking.

**CAUTION:** Never attempt to operate the IR burner with the protective cover in place.

Burner ceramic must be protected with cover when burner is not in use.

#### SIDE VIEW (burner on HI LIGHT and glowing orange)



Drips and particles evaporate before hitting infrared burner when cooking at the maximum setting.