

Thermostatic Griddle Field Service Kit Instructions

The following document provides instructions on how to install a Garland Thermostatic Griddle Field Kit and is applicable to *each* 12” section of a Garland G Series or US Range U Series Restaurant Range with a Thermostatic Griddle Top.

WARNING:

IMPROPER INSTALLATION, ADJUSTMENT, ALTERATION, SERVICE, OR MAINTAINANCE
CAN CAUSE PROPERTY DAMAGE, INJURY, OR DEATH.

***INSTALLATION REQUIRES LIFTING OF HEAVY GRIDDLE PLATE. ADEQUATE
RESOURCES SHOULD BE ARRANGED.***

12” Griddle – Approx. 56 lbs
24” Griddle- Approx. 107 lbs
36” Griddle- Approx. 158 lbs
48” Griddle- Approx. 209 lbs
60” Griddle- Approx. 260 lbs

Users are cautioned that maintenance and repairs must be performed by a Garland authorized service agent using genuine Garland replacement parts.

Field Service Kit Parts List:

Note: Each service kit contains parts to reconfigure *a single* 12” section of a thermostatic griddle unit.

12” griddle - 1 kit required
24” griddle – 2 kits required
36” Griddle – 3 kits required
48” Griddle – 4 kits required
60” Griddle – 5 kits required

Part No.	Part Description	Qty
4525570	Thermostatic Griddle Field Service Kit Instructions	1
4525514	Burner Box	1
4525512	Burner Box Front Seal	1
4525515	Burner Box Baffle	2
1014901	Partially Ported Burner	1
4525503	Pilot Bracket	1
4524358	Capillary Shield	1
M8-47 -or- M8-1.3mm	# 47 Injector (Natural Gas) -or- 1.3 mm Injector (Propane)	1
F72N	Short Sheet Metal Screws	10

Required Tools

- 8" long # 2 Robertson Screwdriver
- Standard #2 Philips Screwdriver
- 1/2" Deep Socket Wrench
- 7/16" Socket Wrench
- Jeweler's Flat Head Screwdriver
- 5/32" Allen Key

Instructions – Step 1 -Uninstalling Obsolete Components

1.1 Shut OFF gas supply.

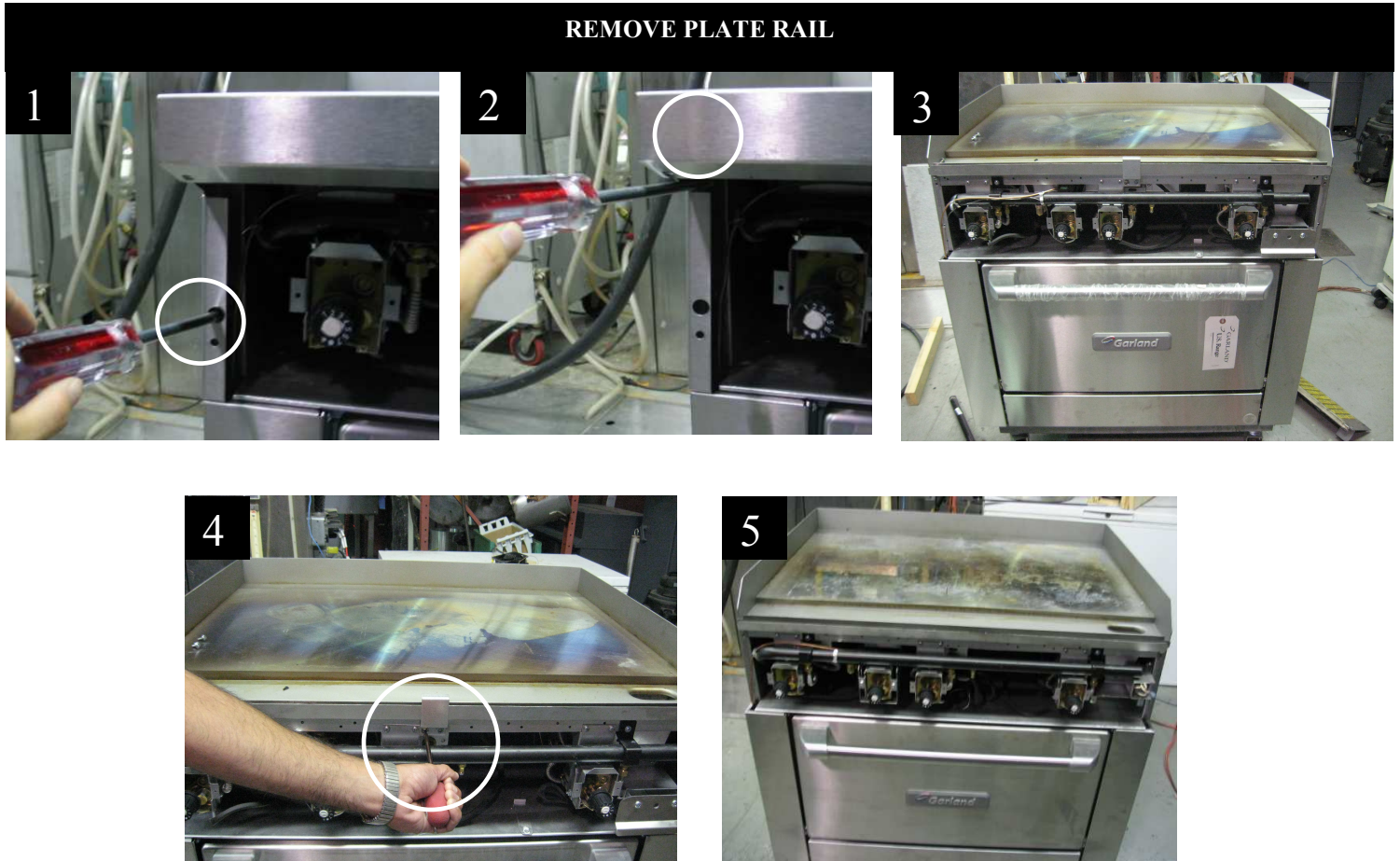
1.2 Remove knobs. Loosen knob setscrews. Rotate the knobs to access the setscrews if necessary. Depending on the setscrew employed, a Jeweler' flat head screwdriver or a 5/32" allen key will be required. Remove all valve panel knobs completely.



1.3 Remove Valve Panel. The valve panel is mounted via two screws; one on either end of the panel and possibly one hidden screw accessible through a clearance hole located on the valve panel to the left of the grease drawer.



1.3 Remove Plate Rail and Valve Panel End Caps. Each End Cap is mounted via two screws located at the top and bottom of the rear flange. Uninstalling the Valve Panel End Caps first will allow the end caps and the Plate Rail to be removed in one step. Remove plate rail support located beneath the plate rail.

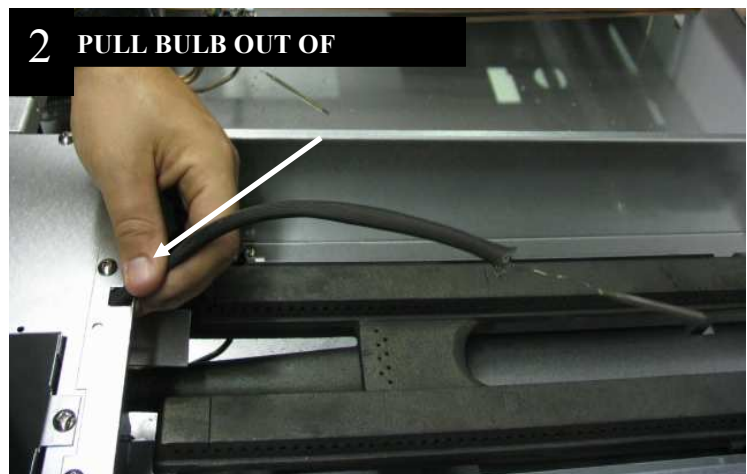


1.4 Lift front portion of Griddle Plate. *Caution Thermostat Bulbs are mounted to the bottom of plate. Removal of Griddle Plate will cause permanent Thermostat damage if bulbs are not loosened and removed.*

Raise the front edge of the griddle approximately 12" (30cm) and support it before working underneath the griddle.



1.5 Remove Griddle Bulbs. A 7/16" socket driver or wrench will be required. Each 12" Griddle section is equipped with a thermostat bulb which is secured to the bottom of the plate via a two-piece bulb clamp and shield. Loosening the clamp by loosening the shield nuts will allow the bulbs to be removed. Once the clamp is loosened, gently pull the thermostat bulb out of the clamps and out of the burner box. If there is resistance, then loosen the shield nuts and attempt again.



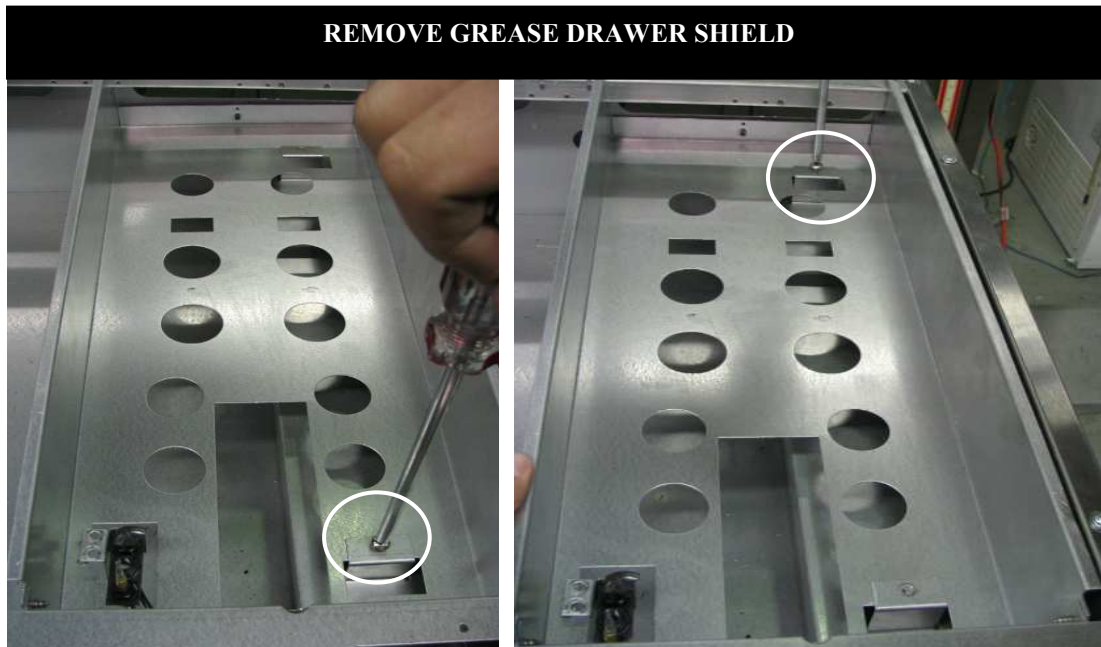
1.6 Remove Griddle Plate from the unit. Support the griddle plate on standoff to prevent damaging the bulb shields.

1.7 Remove Burner from Burner Box. Lift the rear end of the burner and extract it out towards the rear of the unit.

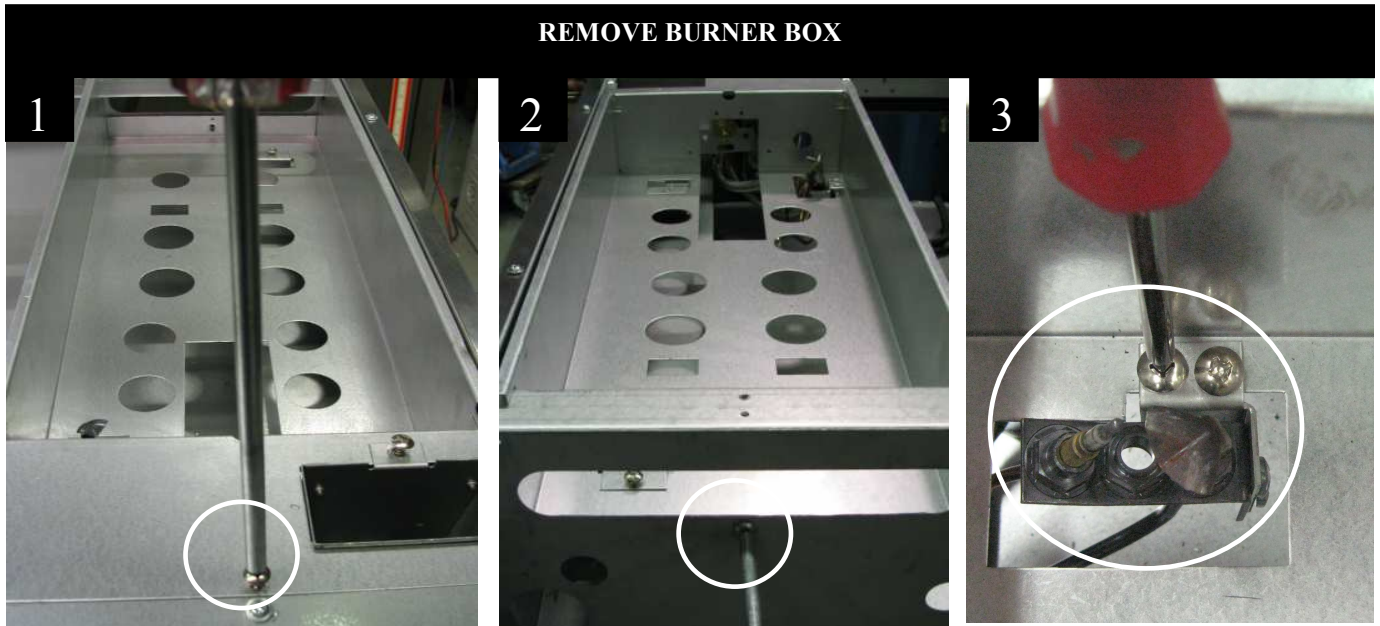
1.8 Remove Grease Chute/Grease Chute Cover. For Griddle plate sections exceeding 12", the grease chute will be located on the right most burner box. The Grease Chute is secured via a single mounting screw. Burner boxes not containing a grease chute will be equipped with Grease Chute covers, which will need to be removed. *Save the Grease Chute and/or Grease Chute Covers for installation on replacement field kit burner boxes.*



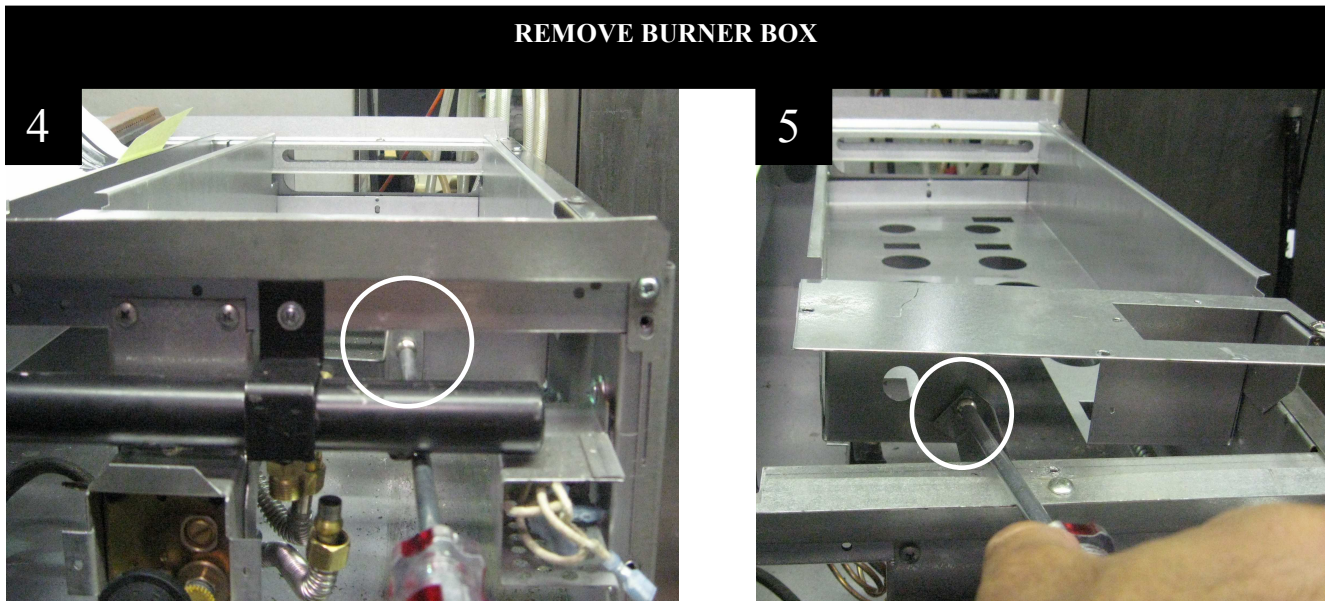
1.9 Remove Grease Drawer Shield. For Griddle plate sections exceeding 12" the grease drawer shield will be located on the right most burner box containing the grease chute. The shield is mounted via two screws. *Save the Grease Drawer Shield for installation on Field Kit burner boxes.*



1.10 Remove Burner Box. The box is secured via two screws, one at the front of the box and one at the rear located near the flue opening. Remove the two mounting screws and unscrew the pilot as shown below.

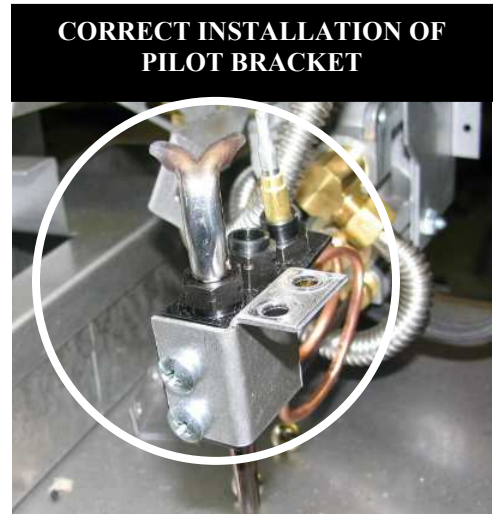


To remove the burner box, unscrew the orifice bracket from the box. The orifice bracket should be accessed with a 8" Robertson #2 screwdriver by gently lifting the front of the burner box once the front and rear mounting screws have been removed and the pilot is unscrewed.

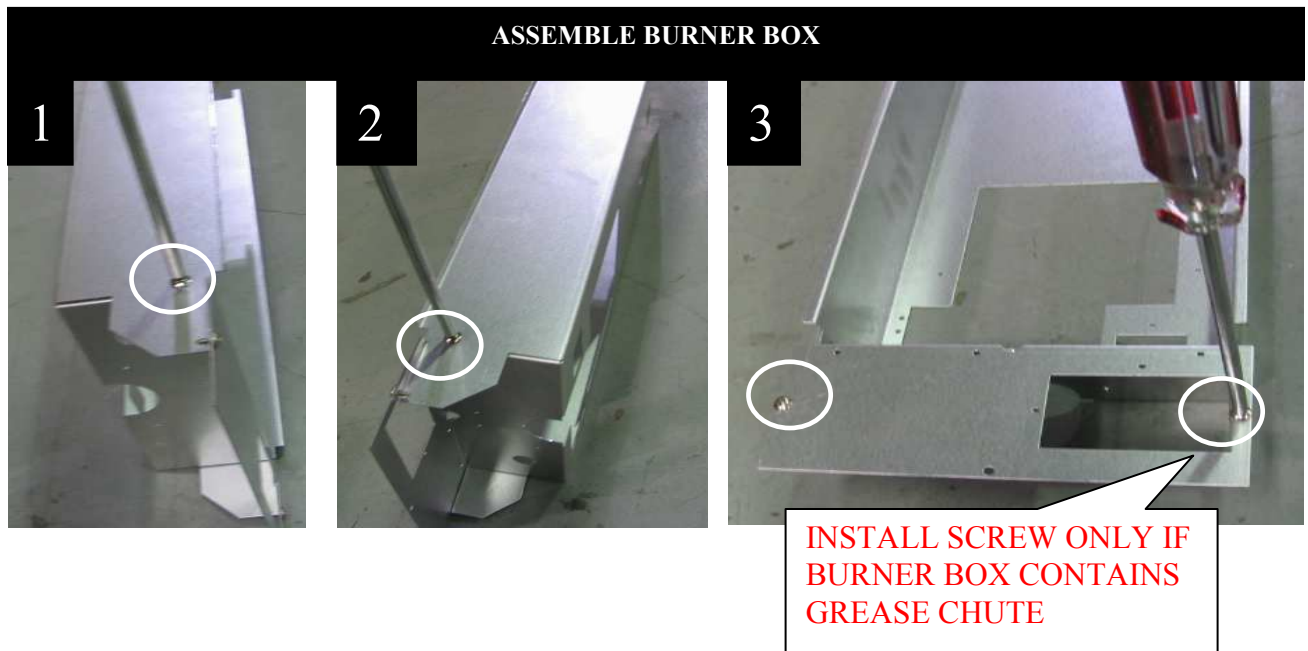


Instructions – Step 2- Installing Field Kit

2.1 Replace Pilot Bracket with new pilot bracket provided in the Field Kit. A Philips #2 screwdriver will be required.

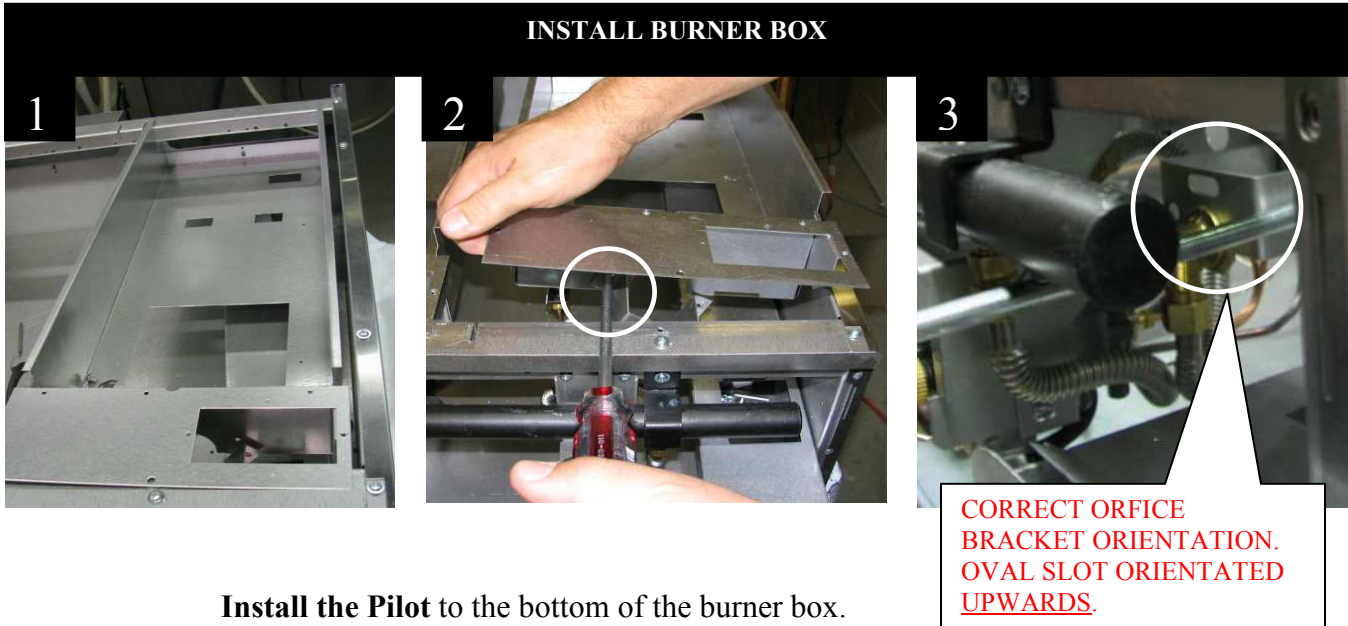


2.2 Assemble Field Kit Burner Box. Each burner box requires two screws to secure the sides of the box to the rest of the assembly. The front lip of the box requires two more screws. If the burner box is equipped with a grease chute cover, omit installing the right most screw on the front lip which will be used to secure the grease chute cover to the burner box.



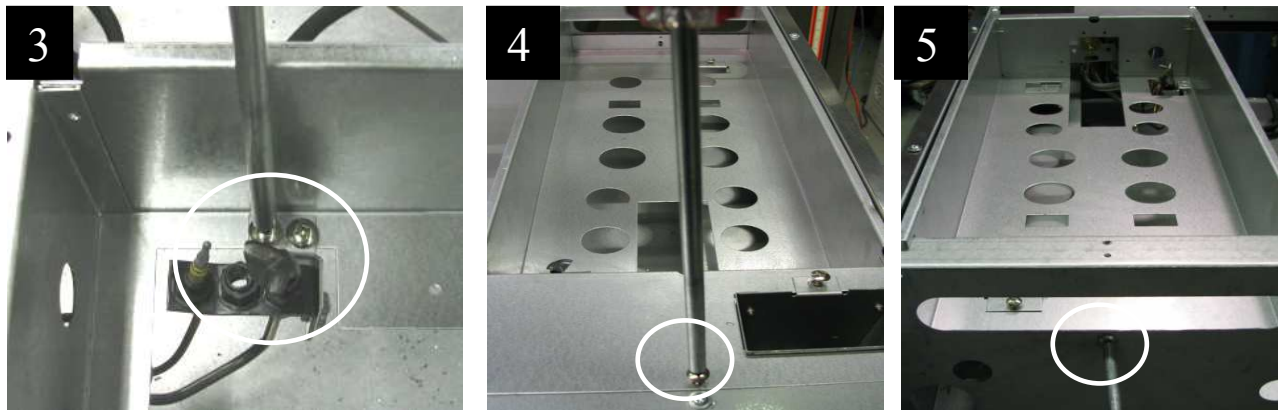
2.3 Install Field Kit Burner Box: Engage cut out located at the rear of the burner box over the unit main rear channel and lower the burner box into place.

Re-install the Orifice Bracket to the front of the Field Kit Burner Box by lifting the front of the box and accessing the left screw of the orifice bracket with the 8" Robertson #2. Lower the box into position and access the right screw of the orifice bracket from below the manifold. *Caution: check for the correct orifice bracket orientation. When installed correctly, the slot of the orifice bracket will be orientated upwards.*

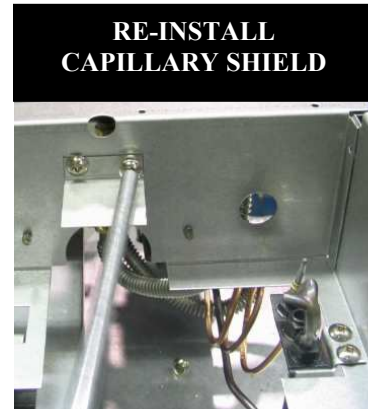


Install the Pilot to the bottom of the burner box.

Install the two Field Kit Burner Box mounting screws; one at the front of the box and one at the rear located near the flue opening.



2.4 Install Field Kit Capillary Shield. Mount the capillary shield saved from step 1.9 to the inside of the field kit burner box.



2.5 Re-install Grease Chute/ Grease Chute Cover. Replace the Grease drawer shield to the original location, and replace the grease chute where required insuring the correct insertion of the chute into the grease drawer shield opening. If a grease chute is not required on the burner box, install the grease chute cover to the front of the box as shown below.



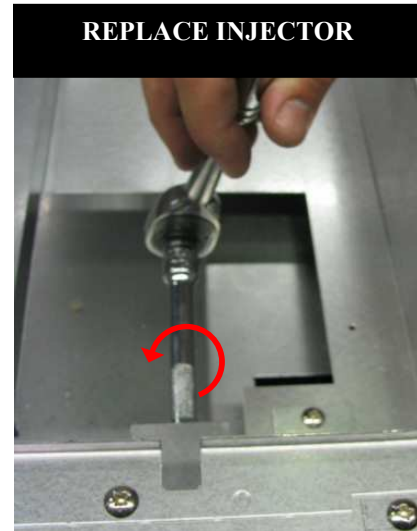
2.6 Install Field Kit Front Seal. Mount the front shield to the front of the burner box via three screws, as shown below.



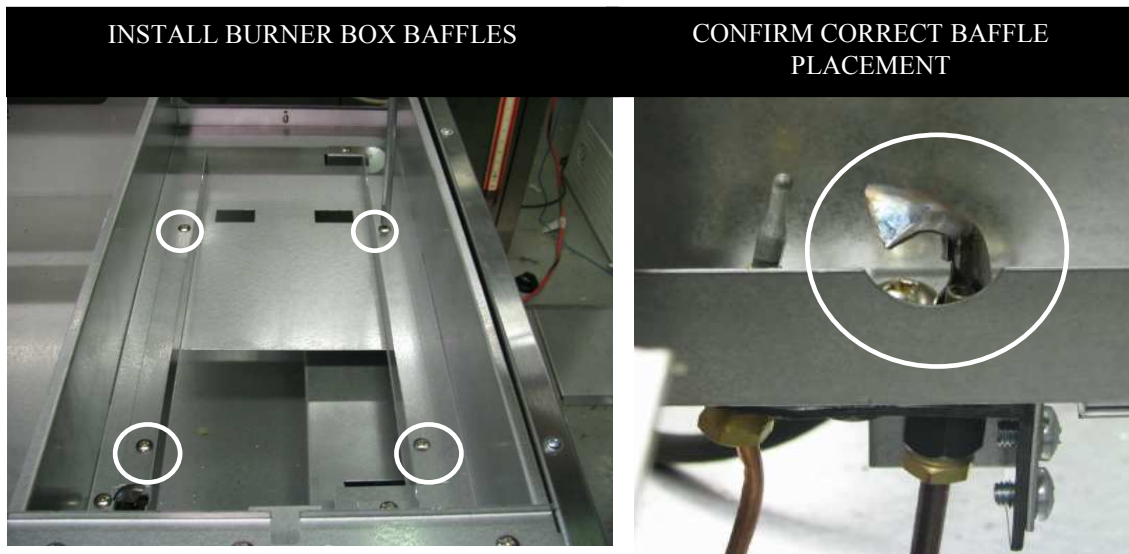
2.7 Replace Injector. A ½” deep socket will be required

For Natural Gas (NG), replace the #44 injector on the gas fitting with a # 47 injector provided in the kit.

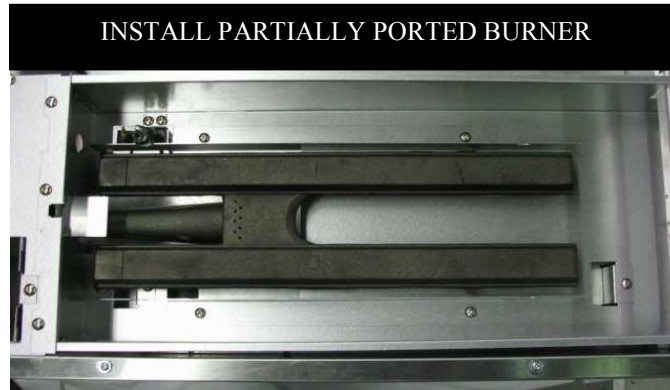
For Propane (LP), replace the #55 injector on the gas fitting with a 1.3 mm injector provided in the kit



2.8 Install Field Kit Baffles. Mount one baffle to *each* side of the burner box via two screws as shown below. When installed correctly, the semi-circular notch on the high flange of the baffle should line up with the pilot to allow the pilot flame access to the main burner.

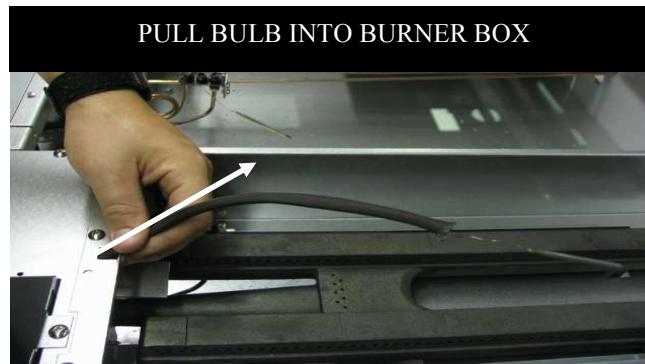


- 2.9 Install Field Kit Partially Ported Burner.** Adjust the air shutter on the burner to 60% or 50% open for NG or LP, respectively. Orient the burner onto the injector and check injector insertion. The injector should be insert such that $\frac{1}{2}$ of the injector length is into the burner support. Adjust the injector position if required.

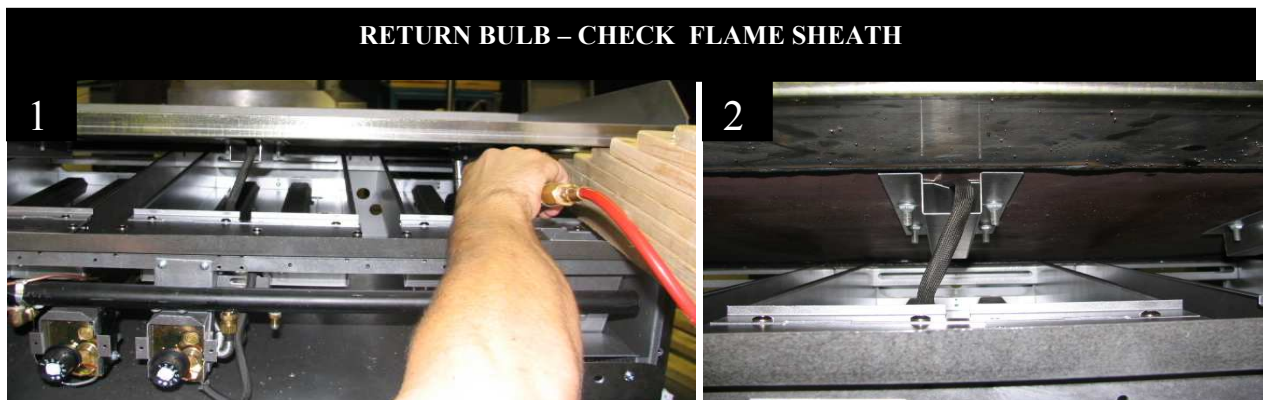


NOTE:
If burner does not sit flat or if air shutter does not line up with injector, check step 2.3 for correct orifice bracket orientation

- 2.10 Pull bulbs into Burner Box:** Pull bulbs back into the burner box through the bulb opening located at the top front edge of the box.

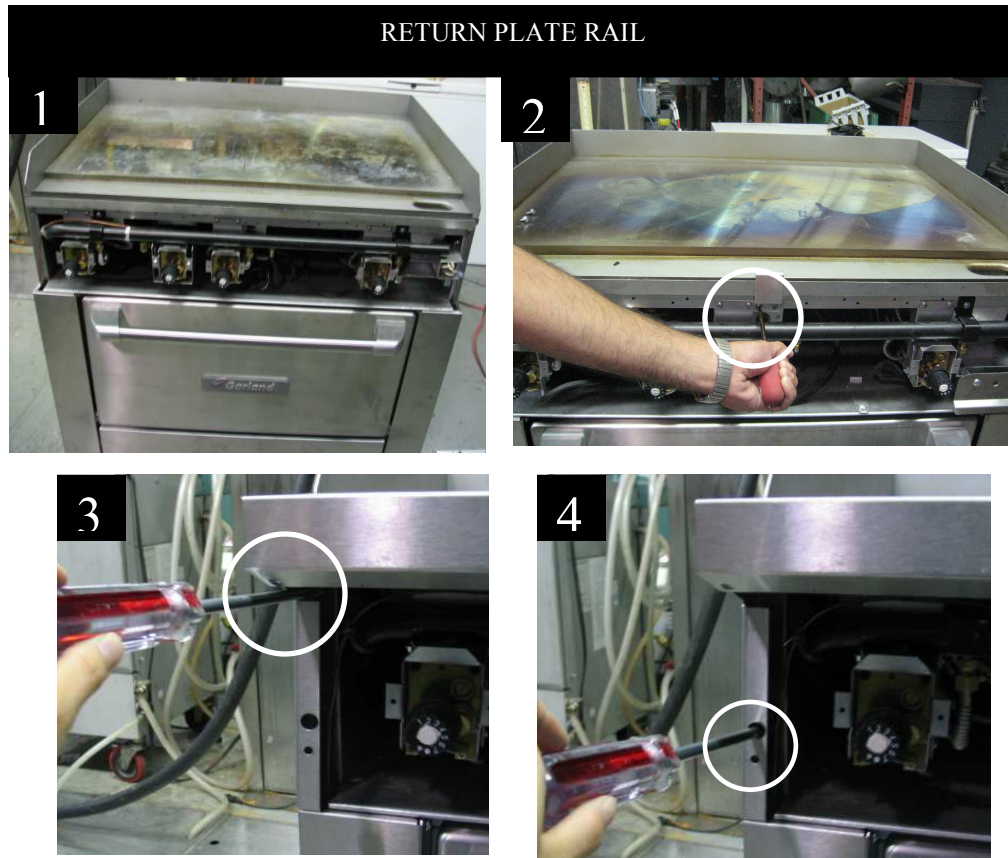


- 2.11 Return Griddle Plate:** Position the griddle on the unit to allow for access to the bulb shield. Reinsert the thermostat bulbs into the shields and tighten down the shield nuts. Insure that the bulbs are inserted completely to the stop post located in the shield's channel.

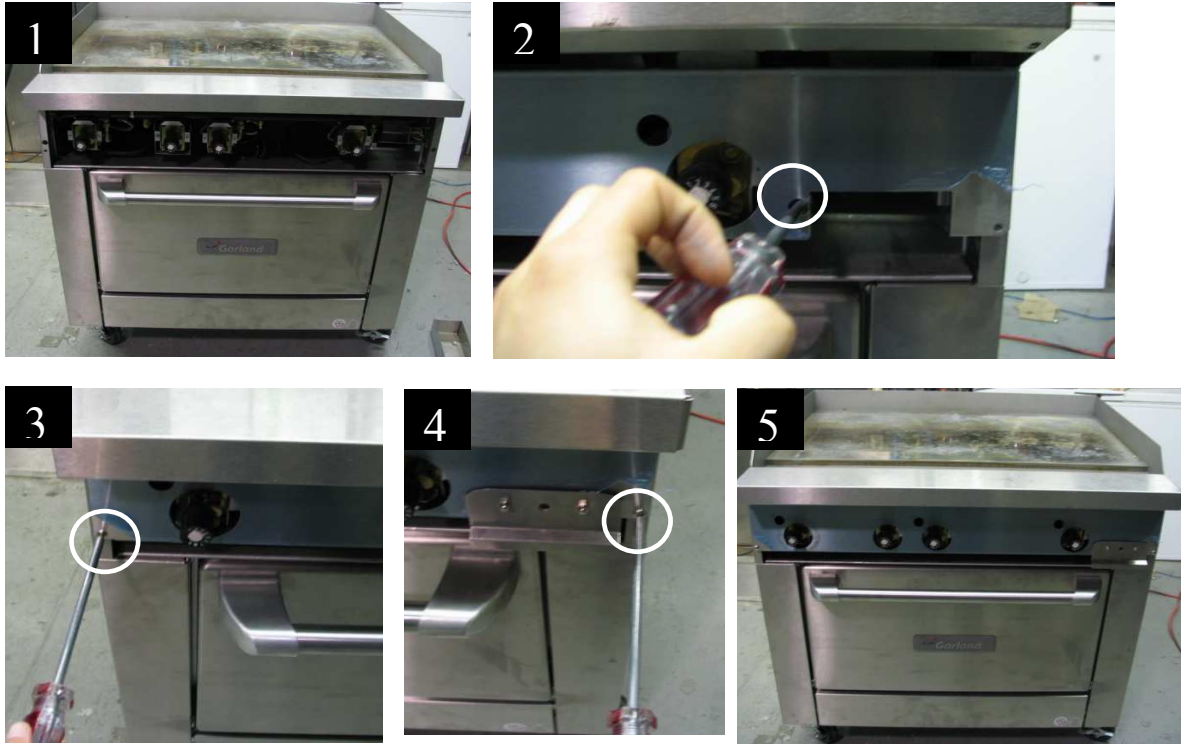


Position flame sheath to cover the thermostat wire length from the bulb shield. As the griddle is lowered into position insure that the excess bulb wire is drawn out of the burner box and into the valve area in order to not get pinched by the griddle. To do this lower the griddle to 1" spacing and draw all excess bulb wire length into the valve area.

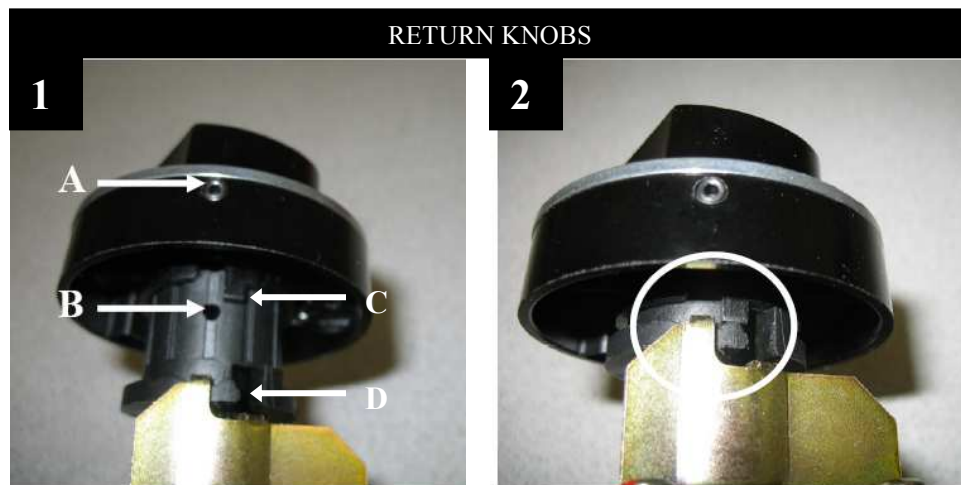
2.12 Return the Plate Rail and Valve Panel End Caps: Return the plate rail support bracket and secure with two screws. Return the Plate Rail and end caps and secure with 2 screws per end cap.



2.13 Return Valve Panel and Grease Drawer.



2.14 Return Knobs. Align the setscrew (A) with the hole on the thermostat hub (B) and push the knob onto the hub. When installed correctly, the knob tab (C) will line up with the hub stop (D) so that the knob cannot be overturned into the area where the pilot can be shut off. Gently tighten the knob setscrews.



2.15 Installation of Field Kit Complete.
 Turn ON gas supply and re-light pilots (Refer to Cold Start Procedure).

Instructions – Step 3 –Initial Start Procedure

3.1 Light Pilot and Burner

- i) Using a gas lighting probe, pass the probe through the front control panel of the range – a pilot lighting hole is provided. Line up the flame with the pilot.
- ii) Turn SIT control to pilot position and press knob in towards the valve panel. Hold the knob depressed wait until the pilot flame comes on. This may take several minutes if the gas line has not been purged.
- iii) Remove the lighting probe and continue to hold the SIT control in for 8 seconds.
- iv) Release the SIT control and confirm that the pilot stays lit for 4 seconds.
- v) Turn the SIT control to the highest setting.
- vi) Verify manifold pressure. The nominal pressure should be as marked on the serial plate:

NG – 4.5” w.c.
LP – 10” w.c
- vii) Leave the burner at setting for approx 5 minutes. The burners will smoke during initial start-up. This is normal and will cease after 10 minutes of use or when manufacturing oils have been completely burned off

After 5 minutes, adjust air shutter if necessary:

- if lifting flame is observed, decrease air shutter opening
 - if floating flame is observed, increase air shutter opening
- iv) Turn OFF burner and repeat steps i-vii for adjacent griddle pilots and burners, if applicable

Instructions – Step 4 –Cold Start Procedure

4.1 Light Pilot and Burner

- i) Using a gas lighting probe, pass the probe through the front control panel of the range – a pilot lighting hole is provided. Line up the flame with the pilot.
- ii) Turn SIT control to pilot position and press knob in towards the valve panel. Hold the knob depressed wait until the pilot flame comes on. This may take several minutes if the gas line has not been purged.
- iii) Remove the lighting probe and continue to hold the SIT control in for 8 seconds.
- iv) Release the SIT control and confirm that the pilot stays lit for 4 seconds.
- v) Repeat steps i-iv for adjacent griddle pilots, if applicable
- vi) Turn ON ***all*** griddle burners to the lowest setting or until you see a low flame. Let burners heat up for at least 5 minutes before placing any load on the griddle surface selecting desired setpoint temperature.