
Delta PG and PG PLUS Burner and Flue Hood Gasket Seal Kit



Kit Part Number: PGRKIT40

Kit Part List:

See Page 2 for Detail Parts List

Required Tools:

- Phillips Screw Driver
- Slotted Screwdriver
- Needle Nose Pliers
- 17 mm or Adjustable Wrench
- 3/32" Drill Bit
- Adjustable Pipe Wrenches
- Tin Snips
- Scrapper / Flat Bladed Putty Knife
- 7/16" Extended Socket

WARNING

Indicates a potentially hazardous situation which, if ignored, can result in serious injury or substantial property damage.

NOTICE

Indicates special instructions on installation, operation or maintenance, which are important to equipment but not related to personal injury hazards.

WARNING

Failure to follow instructions below can result in severe personal injury or damage if ignored.

- Instructions are for a qualified installer/ service technician.
- Read all instructions before proceeding.
- Follow instructions in proper order.

WARNING

For your safety, ensure the unit, vent system and burner are completely cooled before servicing. Failure to do so can cause severe personal injury or death.

WARNING

For your safety, turn off electrical power supply at service panel before proceeding to avoid possible electrical shock hazard. Failure to do so can cause severe personal injury or death.

NOTICE

When installing the new seal gaskets supplied in this kit do not use adhesive on any gasket surfaces.

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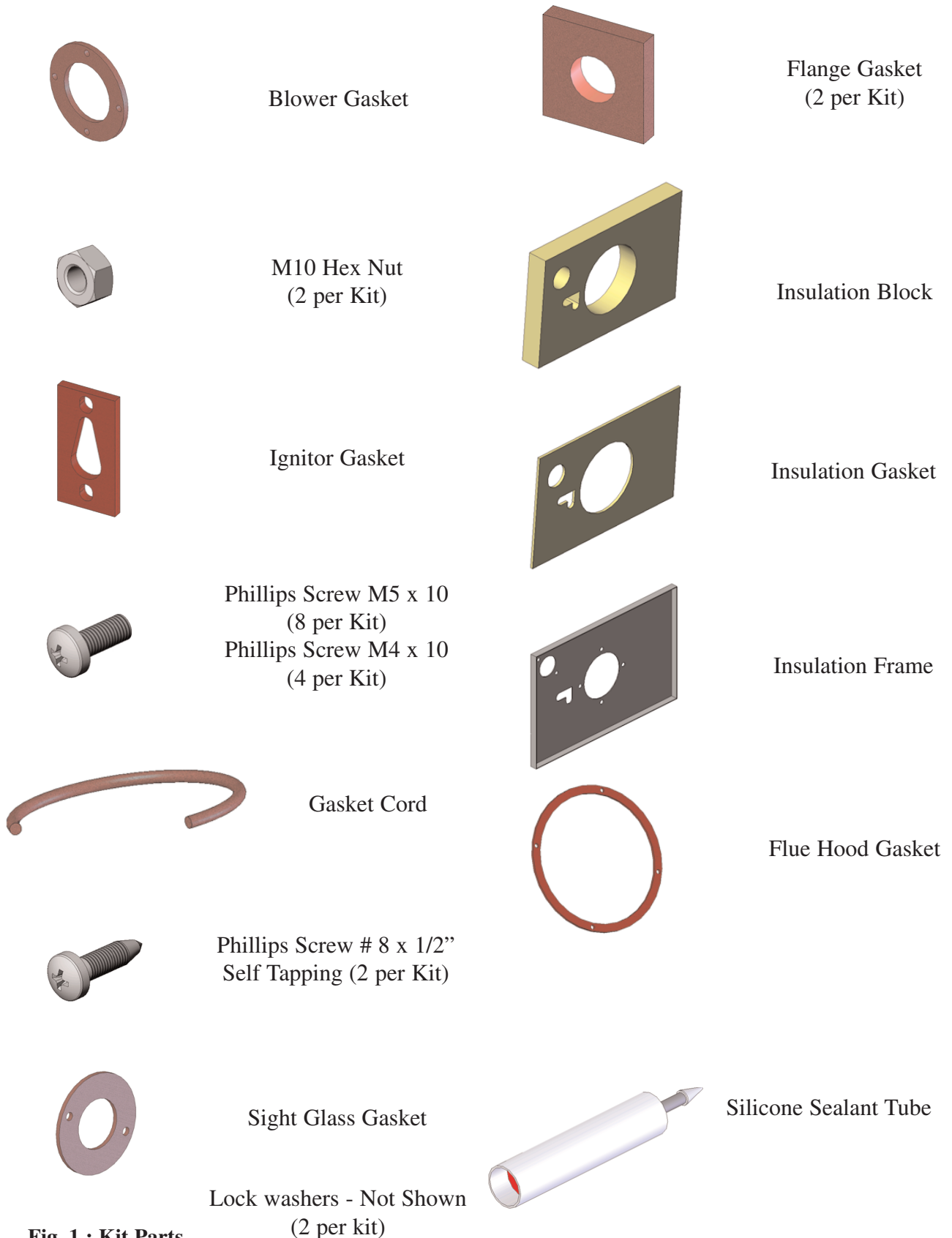


Fig. 1 : Kit Parts

Lock washers - Not Shown
(2 per kit)

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Burner Removal Instructions:

1. Turn power to the boiler “OFF” at the service switch and/or circuit breaker.
2. Close the external manual gas shut off valve to the burner. Disconnect gas supply to appliance.

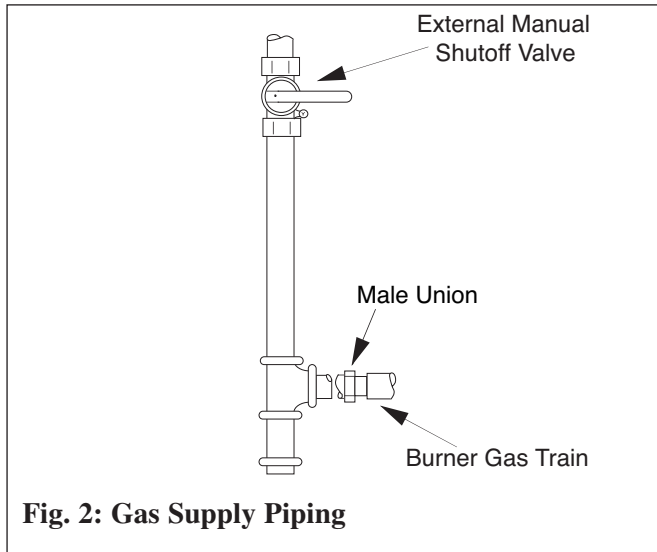


Fig. 2: Gas Supply Piping

3. Remove the burner jacket cover by placing a slotted screwdriver between the burner cover and the side jacket panels and using a twisting motion.

NOTICE

Use extreme care as not to damage or scratch the jacket panels with the screwdriver when removing the burner cover.

4. Remove the black corrugated hose at the air inlet elbow.
5. Disconnect the 6 port snap-set located in the lower left of the burner mounting plate by depressing the snap-set “lock” located in the center of the snap-set.
6. Disconnect electrical connector to ignitor.

7. Remove the two M10 Hex nuts and washers to dismount the burner mounting plate and burner assembly from the unit. Discard old washers.

NOTICE

DO NOT discard the two M10 Hex nuts as it will be reused to remount the burner assembly.

8. Remove the burner mounting plate insulation. If the insulation “sticks” to the mounting plate use a flat bladed putty knife to remove any insulation. Discard the old insulation.

Blower Gasket Seal Instructions

1. With the burner assembly dismounted, loosen and remove the four Phillips head screws securing the blower assembly to the burner mounting plate. Discard the 4 Phillips mounting screws.
2. Remove and discard the existing blower gasket.

NOTICE

If the blower gasket “sticks” to the blower and/or burner mounting plate use a flat bladed putty knife to remove any gasket material. Use care not to scratch or score the mating surfaces.

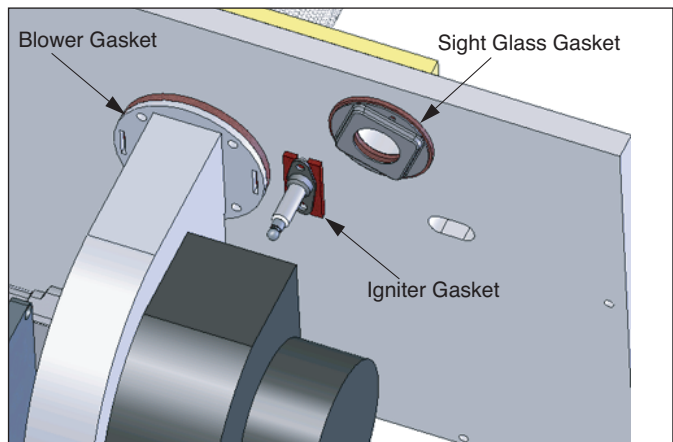


Fig. 3 : Blower, Sight Glass and ignitor Gaskets

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3. Install the new red blower gasket between the blower and the burner mounting plate aligning the punch holes to the mounting holes. See Fig. 3, page 3.
4. Secure the blower to the burner mounting plate using (4) M5 x 10 screws supplied in the kit.

NOTICE

It may be necessary to compress the gasket by pressing the blower into the mounting plate when installing the 4 new mounting screws. Use care not to cross-thread the mounting screws.

Sight Glass Gasket Seal Instructions

1. With the burner assembly dismantled, loosen and remove the two Phillips head screws securing the sight glass frame to the burner mounting plate.
2. Remove and discard the existing fiber gasket.
3. Place the new red sight glass gasket against the burner mounting plate aligning the punch holes with the mounting holes. See Fig. 3, page 3.
4. Place the glass and sight glass frame onto the gasket and secure with the two existing mounting screws.

NOTICE

It may be necessary to compress the gasket by pressing the sight glass frame into the mounting plate when installing the two mounting screws. Use care not to cross-thread the mounting screws or to damage the glass piece.

Burner Insulation Replacement Installation

1. With the burner assembly dismantled remove the two mounting screws securing the ignitor to the burner mounting plate. Do not discard the mounting screws.
2. Dismount the ignitor from the burner mounting plate. Discard the existing gasket. Do not discard the ignitor.

NOTICE

If the ignitor gasket “sticks” to the burner mounting plate use a flat bladed putty knife to remove any gasket material. Use care not to scratch or score the mating surfaces.

3. Loosen and remove the four Phillips head screws that mount the burner head to the burner mounting plate. Discard the existing mounting screws. Do not discard the burner head or gasket.

NOTICE

If the burner head gasket “sticks” to the burner mounting plate use a flat bladed putty knife to carefully remove the gasket. Use care not to scratch, score or damage the gasket or mating surfaces.

4. Prep the Insulation Frame for installation by bending the 6 insulation retaining tabs using needle-nose pliers outward toward the existing bends on the frame.
5. Place the Insulation Gasket against the burner mounting plate. Align the gasket with the ignitor opening and the sight glass. See Fig. 4, page 5
6. Place the Insulation Frame flat surface against the Insulation Gasket aligning the ignitor opening, sight glass and burner head mounting holes to those on the burner plate.

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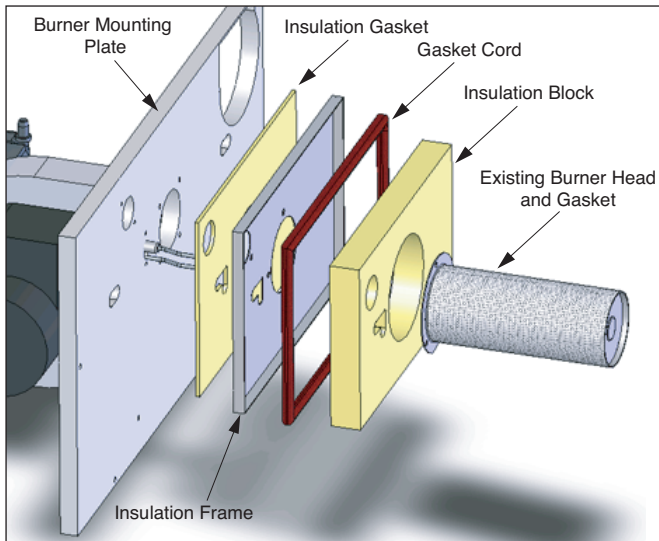


Fig. 4 : Burner Plate Insulation Assembly

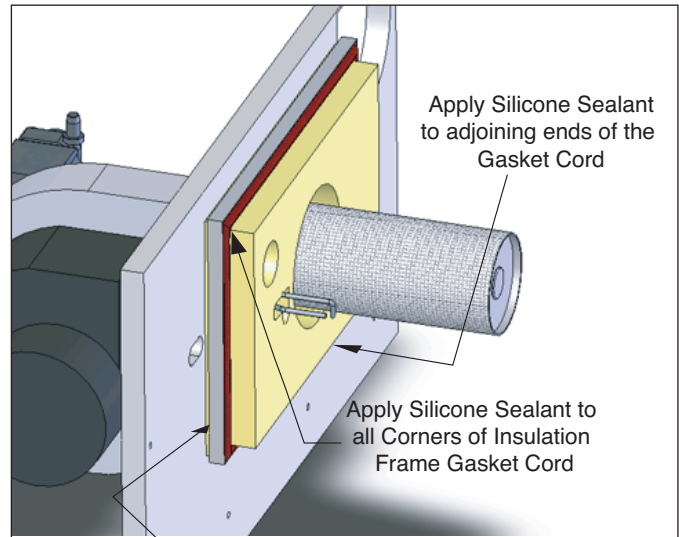


Fig. 5 : Flange Gasket Assembly

7. Re-install the burner head and gasket using 4 Phillips M5 x 10 screws (PG or PG PLUS-25/30/35) or 4 M4 x 10 screws (PG or PG PLUS-40/45) supplied with the kit. Ensure the Insulation Gasket is aligned with the Insulation Plate.
8. Place the Insulation Block over the burner head and orient the Insulation Block with the ignitor and sight glass. Press the Insulation Block firmly onto the Insulation Frame.
9. To secure the Insulation Block onto the Insulation Frame bend the 6 retaining tabs into the Insulation Block to a depth of approximately 1/4".

NOTICE

When installed there should be approximately 1/4" gap around the Insulation Block to the Insulation Frame.

10. Starting at the midpoint on the bottom of the Insulation Block place the Gasket Cord in the gap between the frame and the block of insulation. Cut the cord to length to ensure both ends of the cord meet. Ensure cord is pressed firmly against the Insulation Frame. See Fig. 5.

11. To firmly seal the Gasket Cord ends apply a bead of Silicone along the joint where both ends of the cord meet. Also apply a bead of silicone in the corners to ensure the cord is completely sealed to the frame. See Fig. 5.
12. Apply a 1/4" wide bead of Silicone along the frame outside edge sealing the gap created by the Insulation Gasket.

NOTICE

Ensure all beads of Silicone is applied evenly and smoothed to ensure a complete seal.

13. Re-install the ignitor onto the burner mounting plate. Insert the new red ignitor gasket between the ignitor and the burner mounting plate. See Fig. 3, page 3.
14. Mount and secure the ignitor using the two existing Phillips screws. Tighten screws while squeezing center of gasket toward the ignitor.

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NOTICE

It may be necessary to compress the gasket by pressing the ignitor into the mounting plate when installing the two mounting screws. Use care not to cross-thread the mounting screws.

WARNING

Allow silicone sealant approximately 20 minutes to dry before firing. Failure to comply may compromise the joint seal resulting in flue gas leakage.

Flange Gaskets Instructions

1. Prior to re-mounting the burner assembly remove and dispose of any jam (half) nuts that may be installed on the burner mounting studs located on the left and right sides of the combustion chamber frame.
2. Install a full M10 hex nut on each side of the mounting studs. Ensure the hex nuts are fully threaded onto the studs.

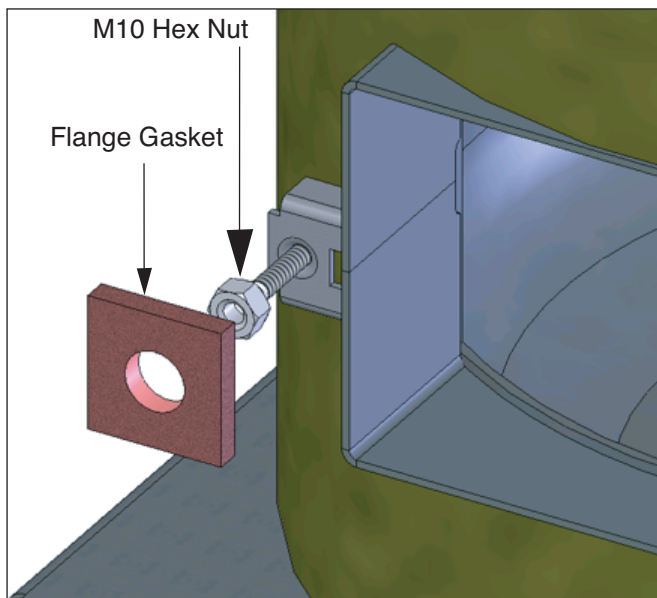


Fig. 6 : Flange Gasket Assembly

3. Place a Flange Gasket onto each stud. Ensure the edge of the gasket is aligned with the combustion chamber frame. Also ensure the gasket is fitted around the hex nut. See Fig. 6 and 7.

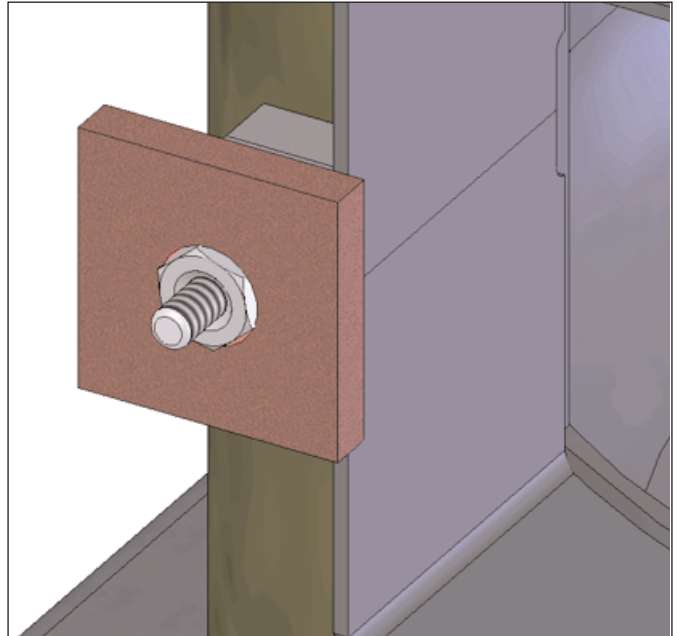


Fig. 7 : Alignment of Flange Gasket Assembly

Burner Mounting Instructions

1. Re-mount the burner assembly onto the unit by aligning the burner mounting plate with the 2 mounting studs.
2. Secure the burner assembly using two lock washers supplied in the kit and two M10 Hex nuts removed earlier onto the two mounting studs of the unit. Ensure the mounting nuts are properly tightened.
3. Reconnect the 6 port snap-set connection located to the lower left of the burner plate.
4. Reconnect electrical connection to ignitor.
5. Reattach the black corrugated hose to the air inlet elbow.

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6. Using pipe dope compatible with Propane gas, reconnect the gas supply piping to the burner assembly.
 7. Turn on gas supply to the inlet of the unit at the main manual shutoff valve to the unit.
 8. Before placing the unit back into operation check and test all gas connections for leaks. Repair any leaks if found.
4. Remove Phillips screws securing the flue hood with long Phillips screw driver.

NOTICE

To remove flue hood screw in the front of the unit, insert a long Phillips screw driver between control panel and top of tank.

WARNING

Do not check for gas leaks with an open flame. Use a bubble test. Failure to check for gas leaks can cause severe personal injury, death or substantial property damage.

NOTICE

The following instructions detail with the installation and the repair of the flue hood gasket seal. The instructions are for a Series 1 flue hood and a Series 2 flue hood. A Series 1 flue hood is identified as a flue hood without the flange attachment to the unit. A Series 2 flue hood is attached to the unit with a flange and (4) mounting studs. Identify the flue hood type and proceed to the appropriate instructions.

Series 1 - Flue Hood Removal Instructions

1. Disconnect the vent system from the flue hood.
2. Remove the top jacket panel using an upward force along the edges of the panel.
3. Remove the front jacket panel by placing a slotted screw driver between upper front and side jacket panels and using a twisting motion, lift panel upward to disengage bottom tabs. Use care not to damage jacket.

Control Panel Assembly Removal Instructions

1. Using a long Phillips screwdriver remove the two Phillips screws securing the electrical panel to the intermediate jacket panel located on the top of the tank. These screws are located in the bottom corners of the electrical panel.
2. Remove the four mounting pins from the top and front of the control panel assembly with an adjustable wrench.

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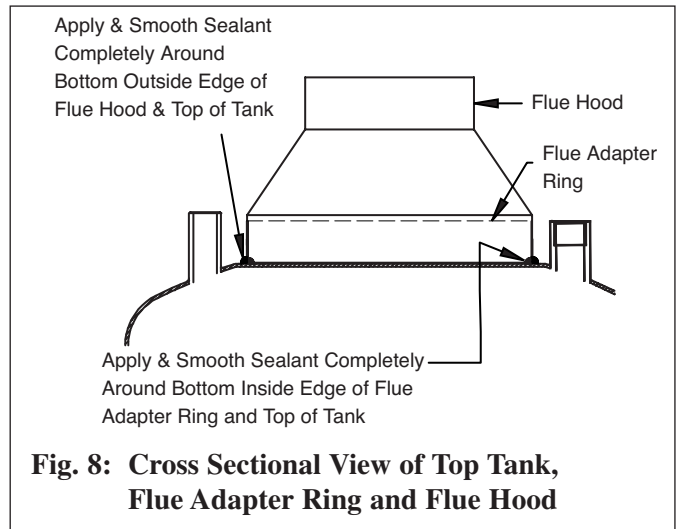
3. Straighten out the copper tubing in the electrical panel located near the rubber bushings and carefully move the control panel out of the way toward the front of the unit.

Intermediate Jacket Panel Removal Instructions

1. Using a long Phillips screwdriver remove the three Phillips screws securing the intermediate jacket panel located on the top of the tank to the rear jacket panel. These screws are located on the top toward the rear of the unit.
2. Using sheet metal snips CAREFULLY remove the intermediate jacket panel and discard.

Series 1 - Flue Hood Sealing Instructions

1. Clean and dry the flue hood, flue adapter ring and top surface of the tank. Remove and discard rope gasket.
2. Apply 1/4" bead of silicone sealant, between bottom inside edge of flue adapter ring and top of tank and smooth completely around for a gas tight seal as shown in Fig. 8.
3. Assemble flue hood onto the flue adapter ring until hood is bottomed out against the adapter ring.
4. Secure flue hood using the existing mounting screws.
5. Apply a 1/4" bead of silicone sealant, around the outside bottom edge of the flue hood and top surface of the tank. Smooth sealant completely around for a gas tight seal as shown in Fig.8.



6. Re-attach control panel assembly with four mounting pins.
7. Re-attach top jacket panel.
8. Re-attach vent system to flue hood.
9. Proceed to returning the unit into service instructions on page 9.

WARNING

Allow silicone sealant approximately 20 minutes to dry before firing. Failure to comply may compromise the joint seal resulting in the flue gas leakage.

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Series 2 Flue Hood Removal Instructions

1. Disconnect the vent system from the flue hood.
2. Remove the top jacket panel using an upward force along the edges of the panel.
3. Using an extended socket remove the 4 mounting hex nuts from the flue hood flange and lift the flue hood from the unit.
4. Remove and discard the existing fiber gasket from the flue area.

NOTICE

If the flue hood gasket “sticks” to the flue area of the tank and/or the flue hood use a flat bladed putty knife to remove any gasket material. Use care not to scratch or score the mating surfaces.

Series 2 - Flue Hood Gasket Installation Instructions

1. Place the Flue Hood Gasket onto the flue area of the tank. Align the gasket with the mounting studs.
2. Re-mount the flue hood onto the tank aligning the hood with the mounting studs. Ensure gasket remains flat between the hood and the tank.
3. Use the existing 4 mounting hex nuts to secure the hood to the unit. Ensure the hex nuts are tight and the gasket is compressed.
4. Re-attach top jacket panel.
5. Re-attach the vent system to the flue hood.

Returning the Unit Into Service

1. Re-install all jacket panels that were removed during the repair service.
2. Restore electrical power supply to the unit. Turn power to the unit “ON”. The unit is now ready to be placed back into service.
3. It is recommended that the installer performs a complete combustion test to ensure the following levels are met and the burner is operating at optimum conditions:

	Natural Gas	Propane
O2 Min.	3.00%	3.00%
O2 Max.	4.50%	4.50%
CO2 Min	9.30%	10.80%
CO2 Max	10.00%	11.80%

CO levels should never exceed 100 ppm

NOTICE

Failure to perform a complete combustion test may result in incomplete combustion and the production of CO, which can cause severe personal injury, death or substantial property damage.

4. Complete the attached Service Completion Form on Page 10.

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NOTICE

To maintain warranty records Triangle Tube is requesting the contractor to complete the Service Completion Form below and forward it back to Triangle Tube. The unit model and serial number must be entered onto the form. Upon completion of the work and receipt of this completed form, Triangle Tube will authorize payment to the contractor in the amount of \$150.00. A check will be mailed within 30 days to the contractor's address below.

SERVICE COMPLETION FORM

CUSTOMER:

Customer Name: _____

Address: _____

City, State: _____

Zip Code: _____

Phone Number: _____

Customer's Signature: _____

CONTRACTOR:

Company Name: _____

Address: _____

City, State: _____

Zip Code: _____

Phone Number: _____

Contractor's Name: _____

Contractor's Signature: _____

DELTA UNIT:

PERFORMANCE _____

Model Number: _____

Serial Number: _____

Date of service: _____

SERVICING PERFORMED:

	Yes	No
Burner Gaskets Replacement	<input type="checkbox"/>	<input type="checkbox"/>
Series 1 Flue Hood Seal	<input type="checkbox"/>	<input type="checkbox"/>
Series 2 Flue Hood Gasket Replacement	<input type="checkbox"/>	<input type="checkbox"/>

Mail or Fax the completed form to:

Triangle Tube
1 Triangle Lane
Blackwood, NJ 08012
(856) 228 8881 Phone
(856) 228 35 84 Fax