HMG Delta CLASSIC Replacement Kit
Electronic Spark Ignition

Kit Part Numbers: PGRKIT25

Parts List

1- Series 1 Pilot Hood/Bracket Assembly
2- Series 2 Pilot Hood Assembly
3- Ground Rod
4- Ground Rod Sleeve
5- Ground Rod Sleeve Retainer Nut
6- Electrode
7- Pilot Orifice
8- 3/4” Spacer
9- Machine Screw
10- Nut
11- 3/8” Spacer
12- Lock Washer
13- L-Key Wrench
14- Retaining Screw

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, 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.
Identifying Pilot Assembly Series

If the pilot assembly is mounted on a vertical bracket which is attached to the burner neck, refer to Series 1 Conversion instructions.

If the pilot assembly is mounted on a horizontal bracket which is attached to the burner neck, refer to Series 2 Conversion instructions.

Series 1 Pilot Assembly Instructions

Removal of the Burner and Existing Pilot Assembly

1. Ensure power to the unit has been disconnected prior to removal of the burner assembly.

2. Disconnect the snap-set plug located on the bottom right side of the windbox. Depress the tab and grip the body of the snap-set to prevent damage to the incoming wire leads when disconnecting.

3. Lift and remove the air inlet tube from the blower housing flange. If necessary, disconnect any air inlet piping connected to the unit prior to removing the air inlet tube.

4. Remove silicon tubing from the “v” (vacuum) side of the pressure switch.

5. Disconnect the 24V supply to the control module at the male to female connector located on the wires near the gas valve.

6. Turn the main manual gas shut-off valve at the unit to the OFF position.

7. Disconnect the gas supply piping at the inlet of the gas valve.

WARNING

Failure to disconnect electrical supply and close the gas shut-off valve can cause severe personal injury, death or substantial property damage.

8. Dismount and remove the burner assembly from the unit by removing the (2) 17mm mounting nuts located to the left and right side of the windbox.

WARNING

Care must be taken when removing the burner assembly from the unit as not to damage the mounting plate insulation or the pilot assembly and pilot tube.

NOTICE

The service technician may need to remove the burner control module from the top of the windbox to allow ease of removing the burner assembly from the combustion chamber.

9. Disconnect the ignition cable from the pilot / electrode assembly. Inspect the cable for any damage, replace as needed.

8. Disconnect the pilot gas tubing from the pilot assembly by loosening the compression fitting. Use care not to damage the tubing, replace as needed.

9. Remove the pilot assembly and bracket from the vertical bracket by removing the (2) mounting screws and nuts from the vertical support bracket.

Installation of New Pilot Assembly Components

1. Mount the new pilot hood / bracket assembly to the vertical support on the burner neck using (2) machine screws with lock washers and nuts.
2. Insert the pilot orifice into the pilot hood and tighten with a wrench. No thread sealant is necessary for the connection.

3. Insert the Grounding Rod through the bottom of the Pilot Hood / Bracket Assembly. Attach the rod clip onto the pilot hood / orifice to secure the rod.

4. Place the (3) 3/8” spacers over the Grounding Rod.

5. Insert the Electrode through the Pilot Hood / Bracket assembly and over the Grounding Rod. Place the 3/4” spacer between the bracket assembly and the ceramic body of the Electrode.

6. To secure the Electrode into place tighten the set screws onto the Grounding Rod using the L-key supplied with the kit.

7. Reconnect the ignition cable to the pilot / electrode assembly.

8. Reconnect the pilot gas tubing to the pilot orifice. Ensure the pilot tubing is tight and secure.

9. Check the insulation gasket on the burner mounting plate. Replace if damaged.

10. Remount the burner assembly into the combustion chamber. Use care not to damage the burner mounting plate insulation, pilot gas tubing or the spark ignition cable when inserting the burner assembly into the combustion chamber.

11. Secure the burner assembly using the (2) 17mm mounting nuts located to the left and right side of the windbox.

12. Reconnect the gas supply piping to the gas valve.

13. Re-seat the combustion air inlet tube onto the blower flange. Reconnect the air inlet piping to the unit as needed.

14. Reconnect the snap-set on the right side of the windbox.

15. Open the main gas valve shut-off valve and perform a leak test at all gas piping connections near the unit.

**WARNING**

Inspect and ensure the ignition cable is free of damage. Replace as needed.

**WARNING**

Inspect and ensure the pilot gas tubing is free of damage, breaks or kinks. Replace as needed.

**WARNING**

If the burner plate insulation is damage or show signs of deterioration, replace the insulation gasket. Failure to replace a damage insulation gasket can cause flue gas leakage for the burner assembly, resulting in severe personal injury or death.
Do not check for gas leaks with an open flame. Use a gas detector or a bubble test. Failure to check for gas leaks can cause severe personal injury, death or severe property damage.

16. Reconnect electrical power to the unit returning the unit back into service.

**Series 2 Pilot Assembly Instructions**

**Removal of the Burner and Existing Pilot Assembly**

1. Ensure power to the unit has been disconnected prior to removal of the burner assembly.

2. Disconnect the snap-set plug located on the bottom right side of the windbox. Depress the tab and grip the body of the snap-set to prevent damage to the incoming wire leads when disconnecting.

3. Lift and remove the air inlet tube from the blower housing flange. If necessary, disconnect any air inlet piping connected to the unit prior to removing the air inlet tube.

4. Turn the main manual gas shut-off valve at the unit to the OFF position.

5. Disconnect the gas supply piping at the inlet of the gas valve.

**WARNING**

Failure to disconnect electrical supply and close the gas shut-off valve can cause severe personal injury, death or substantial property damage.

6. Dismount and remove the burner assembly from the unit by removing the (2) 17mm mounting nuts located to the left and right side of the windbox.

**WARNING**

Care must be taken when removing the burner assembly from the unit as not to damage the mounting plate insulation or the pilot assembly and pilot tube.

**NOTICE**

The service technician may need to remove the burner control module from the top of the windbox to allow ease of removing the burner assembly from the combustion chamber.

7. Disconnect the ignition cable from the pilot / electrode assembly. Inspect the cable for any damage, replace as needed.

8. Disconnect the pilot gas tubing from the pilot assembly by loosening the compression fitting. Use care not to damage the tubing.

9. Remove the Electrode from the mounting bracket by loosening the setscrews on the Ground Rod.

10. Remove the Ground Rod from the mounting bracket by unclipping the retaining clip from the Pilot Hood / Orifice.

11. Remove the Pilot Hood from the mounting bracket by removing the retaining screw.

**Installation of New Pilot Assembly Components**

1. Thread the new Pilot Orifice into the new Pilot Hood. No thread sealant is required.

2. Insert the Ground Rod Sleeve into the Pilot Hood Assembly and secure with the Ground Rod Sleeve Retainer Nut.
3. Insert the Ground Rod through the Ground Rod Sleeve. Clip the retaining clip onto the Pilot Hood / Orifice.

4. Place the (2) 3/8” spacers over the Grounding Rod.

5. Insert the Electrode through the Burner bracket and over the Grounding Rod. Place the 3/4” spacer between the bracket assembly and the ceramic body of the Electrode.

6. To secure the Electrode into place tighten the set screws onto the Grounding Rod using the L-key supplied with the kit.

7. Use the retaining screw to secure the Pilot Hood assembly onto the mounting bracket.

8. Reconnect the ignition cable to the pilot / electrode assembly.

9. Reconnect the pilot gas tubing to the pilot orifice. Ensure the pilot tubing is tight and secure.

10. Check the insulation gasket on the burner mounting plate. Replace if damaged.

11. Remount the burner assembly into the combustion chamber. Use care not to damage the burner mounting plate insulation, pilot gas tubing or the spark ignition cable when inserting the burner assembly into the combustion chamber.

12. Secure the burner assembly using the (2) 17mm mounting nuts located to the left and right side of the windbox.

13. Reconnect the gas supply piping to the gas valve.

14. Re-seat the combustion air inlet tube onto the blower flange. Reconnect the air inlet piping to the unit as needed.

15. Reconnect the snap-set on the right side of the windbox.

16. Open the main gas valve shut-off valve and perform a leak test at all gas piping connections near the unit.

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

WARNING

Inspect and ensure the ignition cable is free of damage. Replace as needed.

WARNING

Inspect and ensure the pilot gas tubing is free of damage, breaks or kinks. Replace as needed.

WARNING

If the burner plate insulation is damage or show signs of deterioration, replace the insulation gasket. Failure to replace a damage insulation gasket can cause flue gas leakage for the burner assembly, resulting in severe personal injury or death.
Fig. 1: Series 1 Pilot Assembly
A. Pilot Hood / Bracket Assembly
B. Pilot Orifice
C. Ground Rod
D. 3/8” Spacers (3 required)
E. 3/4” Spacers
F. Electrode

Fig. 2: Series 2 Pilot Assembly
A. Pilot Orifice
B. Pilot Hood Assembly (Series 2)
C. Ground Rod
D. Ground Rod Sleeve Retainer Nut
E. Ground Rod Sleeve
F. 3/8” Spacers (2 required)