

# Service Manual

26" Self Trimming Fireplace

**Model Number:** 

**DF2608** 

**DF2622** 

**NBDF2608** 

**UL Part Number** 6904400359

**IMPORTANT SAFETY INFORMATION**: Always read this manual first before attempting to service this fireplace. For your safety, always comply with all warnings and safety instructions contained in this manual to prevent personal injury or property damage.

### **Dimplex North America Limited**

1367 Industrial Road • Cambridge ON Canada N1R 7G8

1-888-346-7539 • www.dimplex.com

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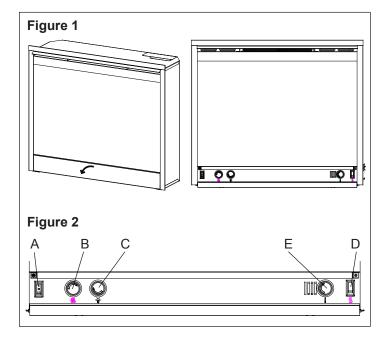
Always use a qualified technician or service agency to repair this fireplace.

- ! NOTE: Procedures and techniques that are considered important enough to emphasize.
- **⚠ CAUTION:** Procedures and techniques which, if not carefully followed, will result in damage to the equipment.
- **WARNING:** Procedures and techniques which, if not carefully followed, will expose the user to the risk of fire, serious injury, or death.

### Operation

This section will explain the function of each convenient control (Figure 2).

To access the controls, flip open the control panel cover towards the bottom of the fireplace (Figure 1).



#### A. 3-Position Switch

The switch has two (2) On positions marked with "I" and "II". The "I" position is for manual operation. In this position the built-in remote control is bypassed. The "II" position is for operating the unit with the provided remote control. When in "II" position the unit is operated with the ON and OFF buttons of the remote control. When the switch is in the center "o" position the unit is off.

#### **B. Flame Speed Control**

Turn the Flame Speed Control knob to adjust the flame speed to the desired level.

### C. Light Dimmer Control

Turn the Light Dimmer Control knob to increase or decrease the brightness of the interior of the fireplace.

#### D. Heater Switch

The Heater Switch supplies power to the heating unit when the 3-Position Switch (A) is on (" I" or " II" positions).

#### E. Thermostat Control

To adjust the temperature to your individual requirements, turn the thermostat control clockwise all the way to turn on the heater. When the room reaches the desired temperature, turn the thermostat knob counter clockwise until you hear a click. Leave in this position to maintain the room temperature at its setting. For additional heat, turn clockwise until you hear the click again and the heater will turn on. To turn the heater off, rotate the knob fully counter clockwise.

! NOTE: The heater may emit a slight, harmless odor

when first used. This odor is a normal condition caused by initial heating of internal heater parts and will not occur again.

### **Resetting The Temperature Cutoff Switch**

This unit is equipped with a thermostat which controls the temperature of the room. It does this by turning the heater on and off. The heater is protected with a safety device to prevent overheating. Should the heater overheat, an automatic cut out will turn the heater off and it will not come back on without being reset. It can be reset by switching the 3-Position Switch to Off (" o ") and waiting five (5) minutes before switching the unit back on.

▲ CAUTION: If you need to continuously reset the heater, unplug the unit and call Technical Support at 1-888-346-7539. Please have your model and serial number ready when calling.

### **Remote Control**

The fireplace is supplied with an integrated on/off remote control.

! NOTE: Ensure that the 3-Position Switch on the fireplace is set to the remote control setting ("II" position).

To operate, push the ON button to turn the fireplace on, push the OFF button to turn the fireplace off.

### **Battery Replacement** (Figure 3)

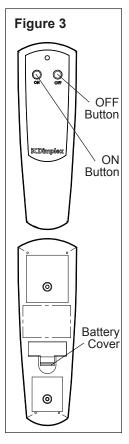
To replace the battery:

- Slide battery cover open on the hand held transmitter.
- Correctly install one (1) 12 Volt (A23) battery in the battery holder.
- Close the battery cover.

### Remote Initialization/Reprogram

Follow these steps for remote control initialization and if required, reinitialization:

- 1. Disconnect power to fireplace.
- Set the 3-Position Switch to the Remote position (Figure 2A).
- 3. Wait a minimum of five (5) seconds and then reacquire power to fireplace.
- 4. Within 10 seconds of reacquiring power, press the ON button located on the remote control.
- ! NOTE: You will have only 10 seconds to perform this last step. Failure to do so will result in these steps needing to be followed again.



### **Maintenance**

♠ WARNING: Disconnect power before attempting any maintenance or cleaning to reduce the risk of fire, electric shock or damage to persons.

### **Light Bulb Replacement**

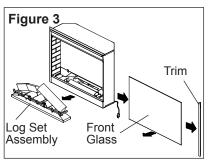
Allow at least five (5) minutes for the light bulbs to cool before touching them to avoid accidental burning of the skin. The light bulbs need to be replaced when you notice a dark section of the flame or when the clarity and detail of the log ember bed exterior reduces. There are three (3) bulbs under the Log Set Assembly, which generate the flames and embers, and two (2) bulbs above that illuminate the log exterior.

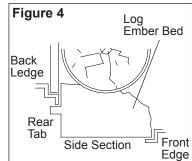
**Lower Light Bulb Requirements:** Quantity of three (3) clear chandelier or candelabra bulbs with an E-12 (small) socket base, 60 Watt rating. Example: GE 60BC or Philips 60CTC.

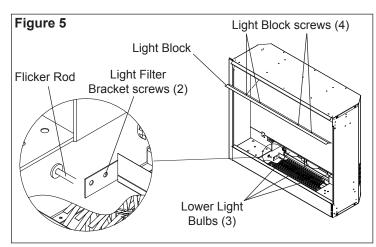
### Do not exceed 60 Watts per bulb.

**Helpful Hints:** It is a good idea to replace all light bulbs at one time if they are close to the end of their rated life. Group replacement will reduce the number of times you need to open the unit to replace light bulbs. Care must be taken when removing the Log set assembly as it contains LED's and wires (DF2608 only).

- 1. Slide fireplace out of mantel.
- 2. Lay unit on it's back for safe removal of front glass.
- Remove three (3) Phillips screws from the right side of trim.
- 4. Remove trim.
- 5. Slide glass to right side of fireplace to remove (Figure 3).
- 6. Pull the front edge of the plastic ember bed or plastic grate up and forward until the rear tab releases from the ledge located at the bottom of the partially reflective glass (Figure 4).
- ! IMPORTANT: Only handle the log set assembly by the ember bed or plastic grate.
- ! NOTE: Log set assembly fits tightly into firebox, some force may be necessary to remove.
- 7. Set log set assembly in front of fireplace.
- Remove flicker rod by pulling rod to the right, towards the flicker motor. Bend the flicker rod enough to clear the bracket on the left, lift out and pull flicker rod off of flicker motor shaft (Figure 5).
- Remove four (4) Phillips screws (two (2) per side) which attach light filter bracket for easier access to light bulbs (Figure 5).
- 10. Unscrew bulbs counter clockwise to remove.







- 11. Insert new bulbs and screw in clockwise.
- 12. Replace light filter bracket and flicker rod.
- 13. Install the log set assembly by placing the front, bottom edge of the ember bed in the track behind the control panel. Once in place, push down on the back edge of the ember bed until the rear tab snaps into place under the mirror (Figure 4).
- ! NOTE: Ensure the log set Assembly is installed tightly under the bottom edge of the mirror to prevent light leakage.
- 14. Lay unit on it's back and slide Front Glass back into position and attach trim.

**Upper Light Bulb Requirements:** Quantity of two (2) clear chandelier or candelabra bulbs with an E-12 (small) socket base, 15 Watt rating.

Do not exceed 25 Watts per bulb.

### To access the upper light bulb area:

- 1. Slide fireplace out of mantel.
- 2. Lay unit on it's back for safe removal of front glass.
- 3. Remove three (3) Phillips screws from right side of trim.
- 4. Remove trim.
- 5. Slide glass to the right side of the fireplace to remove (Figure 3).
- 6. Upper bulbs are located in the upper left and upper right corners of fireplace, behind the light block bracket (Figure 5).
- 7. Remove the four (4) Phillips screws that attach the light block to the firebox (Figure 5).
- 8. Unscrew bulbs counter clockwise.
- 9. Insert new bulbs and screw in clockwise.
- 10. Re-attach light block bracket.
- 11. Lay unit on it's back, slide front glass back into position and attach Trim.

#### Glass Cleaning

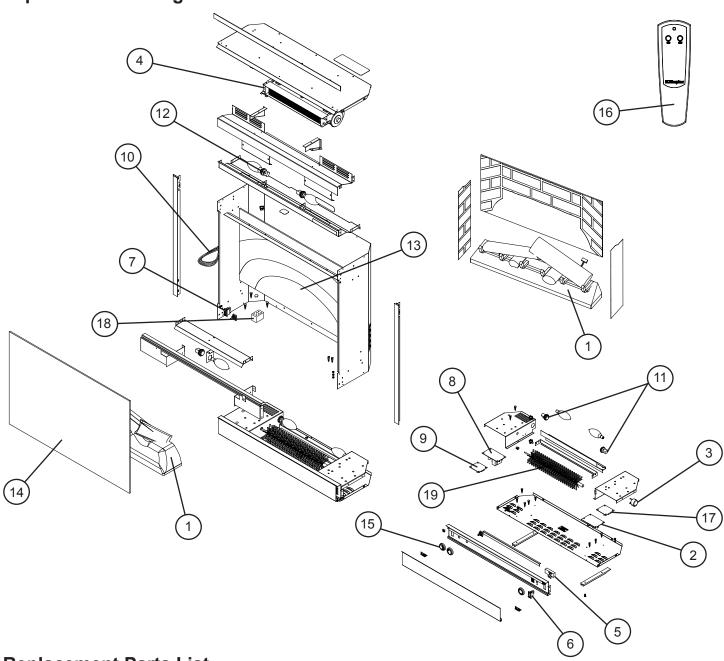
The glass is cleaned in the factory during the assembly operation. During shipment, installation, handling, etc., the clear door may collect dust particles, these can be removed by dusting lightly with a clean dry cloth.

To remove fingerprints or other marks, the clear door can be cleaned with a damp cloth.

### Fireplace Surface Cleaning

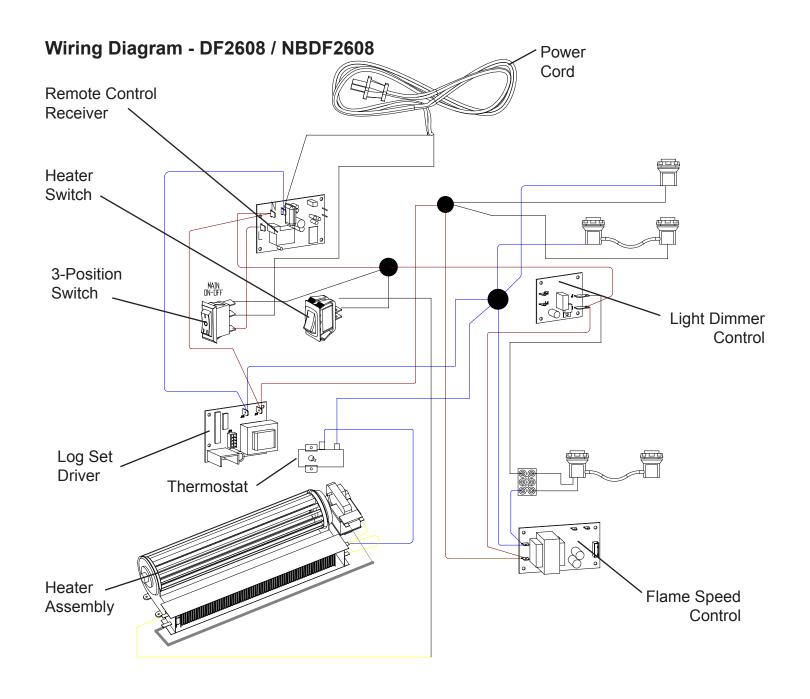
Use a cloth dampened with warm water only to clean painted surfaces of the electric fireplace. Do not use abrasive cleaners.

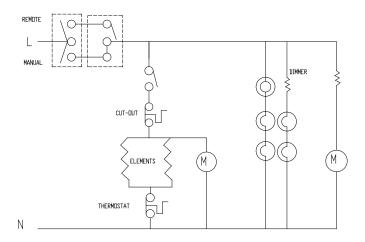
# **Exploded Parts Diagram - DF2608/NBDF2608**



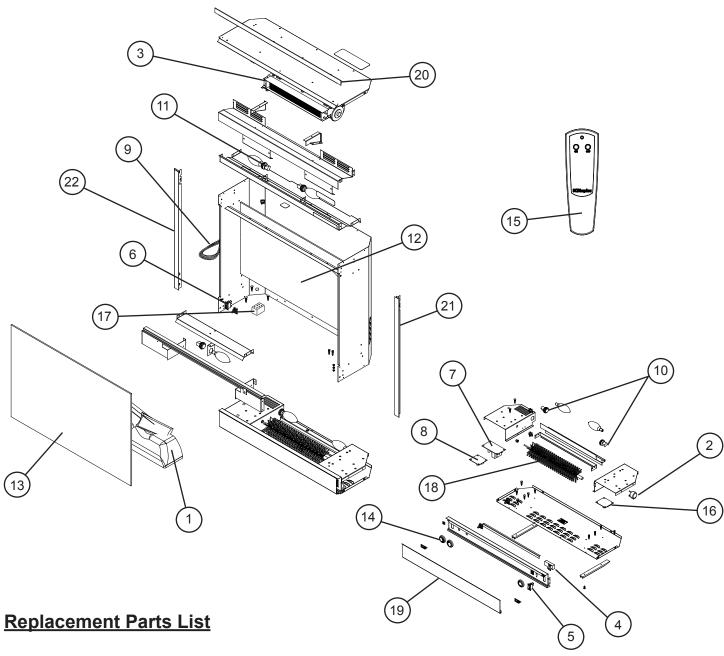
# **Replacement Parts List**

Pa	rt Number	6904400359	
Re	placement Part:		
1.	LED Log Set	. 0439560100RP	10. Power Cord
2.	Log Driver Controller	. 3000390100RP	11. Single Light Holder 2500150300RP
3.	Flicker Motor	. 3000240200KIT	12. Double Light Harness 2500400300RP
4.	Heater Assembly (with cutout)	. 2000330100RP	13. Partially Reflective Glass 5901210200RP
5.	Thermostat	. 2300150100RP*	Partially Reflective Glass (NBDF2608) 5901450100RP
6.	Heater Switch Mod A		14. Front Glass 5901220100RP
	Mod B - E	. 2800070200RP	15. Control Knob (3 on unit) 8800000200RP
7.	3-Position Switch Mod A		16. Remote Control
_	Mod B - E		17. Remote Control Receiver 3000380200RP
	Flame Speed Control w Potentiomete		18. Terminal Block 4000070100RP
9.	Light Dimmer Control w Potentiometer	er 3000250100RP	19. Flicker Rod 5901250100RP

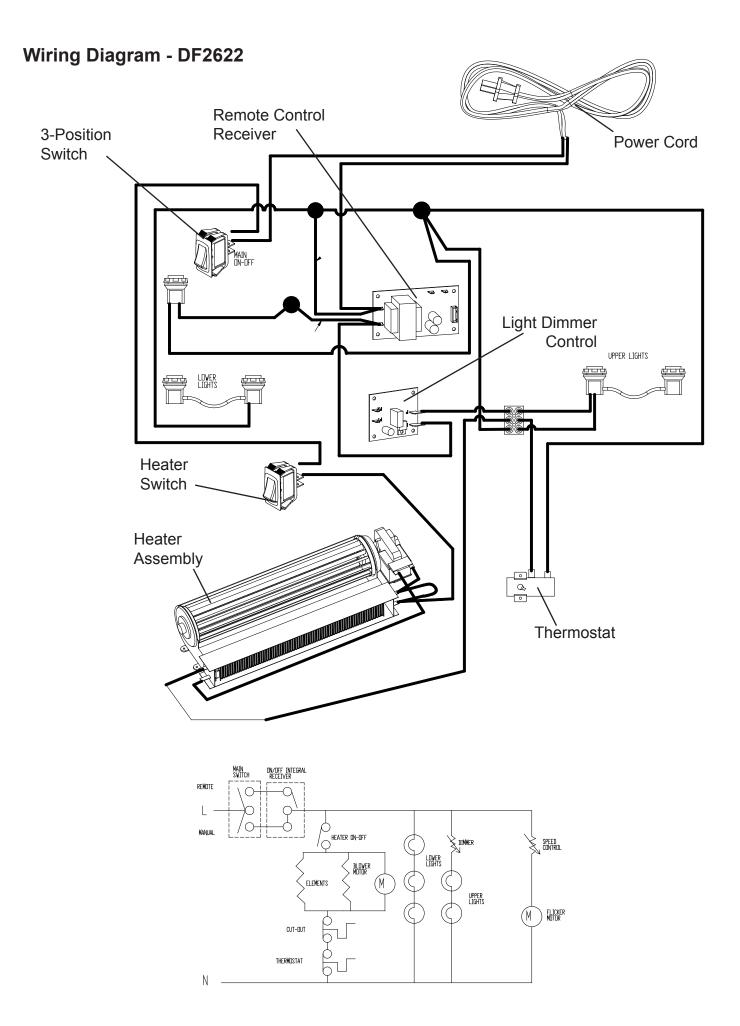




# **Exploded Parts Diagram - DF2622**



Part Number	6904400659	
Replacement Part:		
1. Log Set	. 0439560200RP	13. Front Glass 5901220100RP
2. Flicker Motor	. 3000240200KIT	14. Control Knob (3 on unit) 8800000200RP
3. Heater Assembly (with cutout)	. 2000330100RP	15. Remote Control 3000370500RP
4. Thermostat	. 2300150100RP*	16. Remote Control Receiver 3000380200RP
5. Heater Switch	. 2800210100RP	17. Terminal Block 4000070100RP
6. 3-Position Switch	. 2800210500RP	18. Flicker Rod 5901250100RP
7. Flame Speed Control	. 3000240500RP	Stainless Steel Replacement Parts for DF2622SS
8. Light Dimmer Control	. 3000250100RP	19. Stainless Steel Control Cover 1018760180RP
9. Power Cord	. 4100040200RP	20. Stainless Steel Top Trim 1018830180RP
10. Single Light Holder	. 2500150300RP	21. Stainless Steel Right Side Trim 1018840180RP
11. Double Light Harness	. 2500400300RP	22. Stainless Steel Left Side Trim 1018830280RP
12. Partially Reflective Glass	. 5901450100RP	



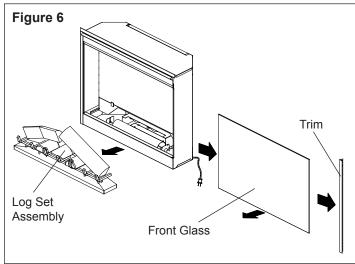
# **Front Glass Replacement**

⚠ CAUTION: If unit was operating prior to servicing allow at least 10 minutes for lights, heating elements and top panel to cool off to avoid accidental burning of skin.

**WARNING:** Disconnect power before attempting any maintenance to reduce the risk of electric shock or damage to persons.

- 1. Slide firebox out of mantel.
- 2. Lay unit on it's back for safe removal of Front Glass.
- 3. Remove three (3) Phillips screws from right side of Trim.
- 4. Remove Trim.
- 5. Slide glass to the right side of the firebox to remove (Figure 6).
- 6. Reassemble using replacement Front Glass in reverse order as described above.

▲ CAUTION: Even though the glass is safety glass it may break if bumped, struck or dropped. Care must be taken when handling the glass.



# **Partially Reflective Glass Replacement**

⚠ CAUTION: If unit was operating prior to servicing allow at least 10 minutes for lights, heating elements and top panel to cool off to avoid accidental burning of skin.

**WARNING:** Disconnect power before attempting any maintenance to reduce the risk of electric shock or damage to persons.

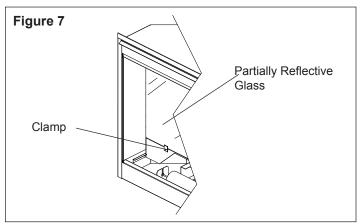
- 1. Slide firebox out of mantel.
- Lay unit on it's back for safe removal of Front Glass.
- 3. Remove three (3) Phillips screws from the right side of Trim.
- 4. Remove Trim.
- 5. Slide glass to right side of fireplace to remove (Figure 6).

**CAUTION:** Even though the glass is safety glass it may break if bumped, struck of dropped. Care must be taken when handling the glass.

6. Pull the front edge of the plastic Ember Bed or plastic grate up and forward until the rear tab releases from the ledge located at the bottom of the Partially

Reflective Glass.

- ! IMPORTANT: Only handle the Log Set Assembly by the Ember Bed or plastic grate.
- ! NOTE: Log Set Assembly fits tightly into firebox, some force may be necessary to remove.
- 7. Loosen but do not remove the two (2) Philips screws that clamp the Partially Reflective Glass in place, and swivel down so that the clamp clears the edge of the Partially Reflective Glass (Figure 7).
- 8. Push the Partially Reflective Glass out from behind to clear the frame and remove.
- Insert replacement Partially Reflective Glass top end first and lay the bottom end gently in the bottom track of the frame.
- 10. Tighten clamps back into place and reassemble firebox in reverse order as described above.



# 3-Position Switch Replacement

⚠ CAUTION: If unit was operating prior to servicing allow at least 10 minutes for lights, heating elements and top panel to cool off to avoid accidental burning of skin.

**WARNING:** Disconnect power before attempting any maintenance to reduce the risk of electric shock or damage to persons.

- 1. Remove the firebox from the mantel.
- 2. Lay unit on its back.
- 3. Remove the 12 Philips screws that fasten the bottom cover to the rest of the firebox. There are: two (2) screws on each side; two (2) screws on the back panel (you may have to tip the bottom of the firebox up if it is laying on its back), four (4) screws in the front directly under the control panel; and two (2) screws on the bottom of the firebox (see Figure 8). The bottom panel is now free to be removed.
- 4. Locate the 3-Position Switch mounted on the control panel on the left side (Figure 9) and disconnect the three (3) wiring clips noting their original locations.

⚠ CAUTION: Internal wire colors may not be the same within the unit being serviced as those shown. To avoid damage to the unit, damage to property or personal injury, ensure wires are reconnected to match their original locations.

5. Depress the two (2) retainer clips on the top and

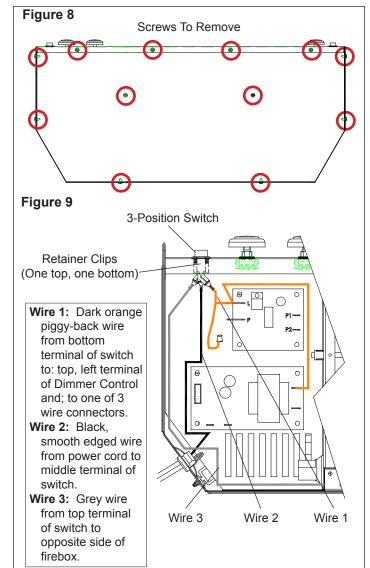
- bottom of the switch and push the switch out the front panel.
- 6. Properly orient the new switch and reconnect all of the wiring clips and connections as before.
- 7. Push the switch through the front control panel until the Retainer Clips snap the switch into place, then reassemble the firebox in reverse order as above.
- ! NOTE: When placing bottom panel back onto unit, position the metal lip from under the control panel between the rubber spacers (attached to the bottom panel) and the sheet metal of the bottom panel.

### **Heater Switch Replacement**

⚠ CAUTION: If unit was operating prior to servicing allow at least 10 minutes for lights, heating elements and top panel to cool off to avoid accidental burning of skin.

**WARNING:** Disconnect power before attempting any maintenance to reduce the risk of electric shock or damage to persons.

- 1. Remove the firebox from the mantel.
- Lay unit on its back.
- 3. Remove the 12 Philips screws that fasten the bottom cover to the rest of the firebox. There are: two (2)



screws on each side; two (2) screws on the back panel (you may have to tip the bottom of the firebox up if it is laying on its back), four (4) screws in the front directly under the control panel; and two (2) screws on the bottom of the firebox (Figure 8). The bottom panel is now free to be removed.

4. Locate the Heater Switch mounted on the control panel on the right side (Figure 10, page 11) and disconnect the two (2) wiring clips noting their original locations.

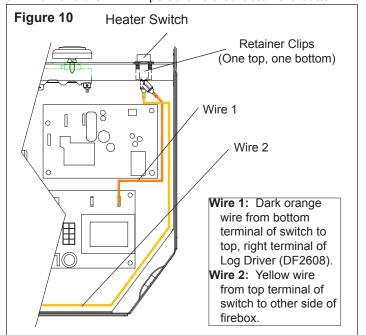
⚠ CAUTION: Internal wire colors may not be the same within the unit being serviced as those shown. To avoid damage to the unit, damage to property or personal injury, ensure wires are reconnected to match their original locations.

- 5. Depress the two (2) retainer clips on the top and bottom of the switch and push the switch out the front of the firebox.
- 6. Properly orient the new switch and reconnect all of the wiring clips and connections as before.
- 7. Push the switch through the front control panel until the Retainer Clips snap the switch into place, then reassemble the firebox in reverse order as above.
- ! NOTE: When placing bottom panel back onto unit, position the metal lip from under the control panel between the rubber spacers (attached to the bottom panel) and the sheet metal of the bottom panel.

### **Light Dimmer Replacement**

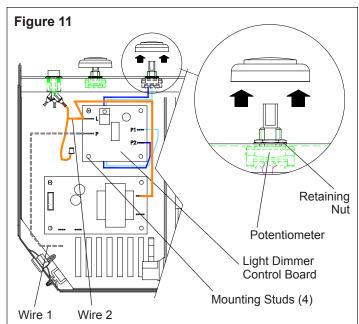
⚠ CAUTION: If unit was operating prior to servicing allow at least 10 minutes for lights, heating elements and top panel to cool off to avoid accidental burning of skin.

- 1. Remove the firebox from the mantel.
- 2. Lay unit on its back.
- 3. Remove the 12 Philips screws that fasten the bottom



cover to the rest of the firebox. There are: two (2) screws on each side; two (2) screws on the back panel (you may have to tip the bottom of the firebox up if it is laying on its back), four (4) screws in the front directly under the control panel; and two (2) screws on the bottom of the firebox (Figure 8). The bottom panel is now free to be removed.

- 4. Locate the Light Dimmer Control Board and Potentiometer mounted on the left side (Figure 11).
- Pull off the Light Dimmer Control knob and unscrew the retaining nut (Figure 11). The Potentiometer can now be removed from the panel by pushing the potentiometer through the front panel and removed from inside the firebox.
- The Light Dimmer Control board is fastened to the underside of the Ember Bed support by four (4) mounting studs, one in each corner (Figure 11). Squeeze each mounting stud's clasp to release the circuit board from the firebox.
- ! NOTE: If mounting studs are damaged, replacement mounting studs will need to be inserted from underneath Log Set Assembly. Follow steps 1 6 of Partially Reflective Glass Replacement procedure on page 9 to do this. It is recommended to attempt to release the control board without cutting mounting studs.
- Properly orient the replacement Light Dimmer Control board and push it onto the four (4) mounting studs (running the connecting Potentiometer wires under the board) until the clasps of the mounting studs snap the control board into place.
- Properly orient the Potentiometer attached to the replacement control board, push it through the front control panel and anchor it in place using the retaining



**Wire 1:** White wire from bottom, left terminal of board to cable sheath leading to upper firebox area.

**Wire 2:** Dark orange piggy-back wire from top, left terminal of board to: top, right terminal of Flame Speed Control board and; bottom terminal of 3-Position Switch.

- nut removed in step 5.
- Disconnect one of the two (2) wire leads from the original control board (which are still connected to parts within the firebox) and immediately connect it to the new control board's terminal, matching its position. Continue with the remaining wire using the same procedure.

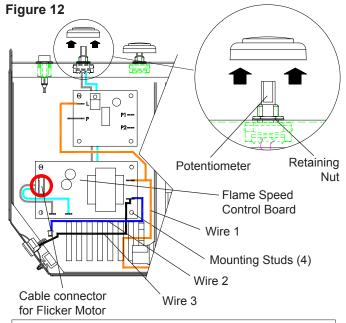
▲ CAUTION: Internal wiring and colors may not be the same within the unit being serviced as those shown. To avoid damage to the unit, damage to property or personal injury, ensure wires are reconnected to match their original locations.

- 10. Follow steps 1 through 3 in reverse order to reassemble the firebox.
- ! NOTE: When placing bottom panel back onto unit, position the metal lip from under the control panel between the rubber spacers (attached to the bottom panel) and the sheet metal of the bottom panel.

## Flame Speed Control Replacement

⚠ CAUTION: If unit was operating prior to servicing allow at least 10 minutes for lights, heating elements and top panel to cool off to avoid accidental burning of skin.

- 1. Remove the firebox from the mantel.
- 2. Lay unit on its back.
- 3. Remove the 12 Philips screws that fasten the bottom cover to the rest of the firebox. There are: two (2) screws on each side; two (2) screws on the back panel (you may have to tip the bottom of the firebox up if it is laying on its back), four (4) screws in the front directly under the control panel; and two (2) screws on the bottom of the firebox (Figure 8). The bottom panel is now free to be removed.
- 4. Locate the Flame Speed Control and Potentiometer mounted on the left hand side (Figure 12).
- 5. Pull off the Flame Speed Control knob and unscrew the retaining nut (Figure 12). The Potentiometer can now be removed from the panel by pushing the Potentiometer through the front panel and remove from inside the firebox.
- The Flame Speed Control board is fastened to the underside of the Ember Bed support by four (4) mounting studs, one in each corner (Figure 12). Squeeze each mounting stud's clasp to release the circuit board from the firebox.
- ! NOTE: If mounting studs are damaged, replacement mounting studs will need to be inserted from underneath Log Set Assembly. Follow steps 1 6 of Partially Reflective Glass Replacement procedure to do this. It is recommended to attempt to release the control board without cutting mounting studs.
- 7. Properly orient the replacement Flame Speed Control board and push it onto the four (4) mounting studs (running the connecting Potentiometer wires under the



Wire 1: Dark orange piggy-back wire from top, right terminal of Flame Speed Control board to: top, right terminal of Light Dimmer board and; other side of firebox.
Wire 2: Blue wire from bottom, right terminal of Flame Speed Control board to one of 3 wire connectors.
Wire 3: Black wire from bottom, right terminal of Flame Speed Control board to power cord.

board where possible) until the clasps of the mounting studs snap the control board into place.

- 8. Properly orient the Potentiometer attached to the replacement control board, push it through the front control panel and anchor it in place using the retaining nut removed in step 5.
- 9. Disconnect one of the wire leads from the original control board (which are still connected to parts within the firebox) and immediately connect it to the new control board's terminal, matching its position. Continue with the remaining wires (there are four (4) wires which are piggy-backed together in pairs, and the cable connector which leads to the Flicker Motor) using the same procedure.

**CAUTION:** Internal wiring and colors may not be the same within the unit being serviced as those shown. To avoid damage to the unit, damage to property or personal injury, ensure wires are reconnected to match their original locations.

- 10. Follow steps 1 through 3 in reverse order to reassemble the firebox.
- ! NOTE: When placing bottom panel back onto unit, position the metal lip from under the control panel between the rubber spacers (attached to the bottom panel) and the sheet metal of the bottom panel.

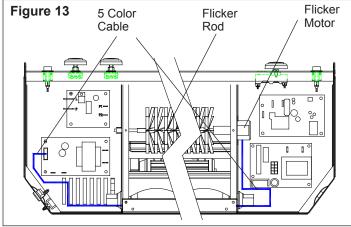
# Flicker Motor/Flicker Rod Replacement

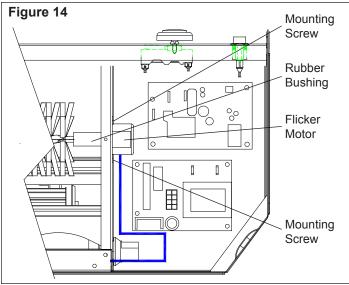
⚠ CAUTION: If unit was operating prior to servicing allow at least 10 minutes for lights, heating elements and top panel to cool off to avoid accidental burning of skin.

**WARNING:** Disconnect power before attempting any

maintenance to reduce the risk of electric shock or damage to persons.

- 1. Remove the firebox from the mantel.
- 2. Lay unit on its back.
- 3. Remove the 12 Philips screws that fasten the bottom cover to the rest of the firebox. There are: two (2) screws on each side; two (2) screws on the back panel (you may have to tip the bottom of the firebox up if it is laying on its back), four (4) screws in the front directly under the control panel; and two (2) screws on the bottom of the firebox (Figure 8). The bottom panel is now free to be removed.
- 4. Locate Flicker Rod and Flicker Motor in the base assembly (Figure 13).
- 5. Gently pull the Flicker Rod to the right as far as possible into the rubber bushing (Figure 13).
- ! NOTE: When removing the Flicker Rod, damage may occur if bent excessively. If the Flicker Rod is damaged, replace to insure proper operation.
- 6. Cautiously bend the Flicker Rod enough so that the remaining end of the Flicker Rod clears the plastic bushing on the left (Figure 14).
- 7. Remove the Flicker Rod by pulling it free from the rubber bushing on the motor shaft (Figure 14).
- 8. Before removing the Flicker Motor, cut the Flicker Motor





- wires (five (5) in total) as close to the Flicker Motor as possible.
- 9. Remove the rubber bushing from the motor shaft by applying needle nose pliers to the motor shaft and twist the rubber bushing off of the motor shaft.
- 10. Remove the two (2) motor mounting screws and remove Flicker Motor from the mounting bracket (Figure 14).
- 11. Discard old Flicker Motor.
- 12. Pick up new Flicker Motor and cut wire leads to 3 ½ inch long with wire cutters.
- 13. Using one of the supplied wire connectors from the Replacement Part Kit, place one (1) yellow wire from the new Flicker Motor and the yellow wire cut in step 8 into each terminal.
- 14. Secure the wire connector by crimping the 3M symbol with pliers.
- 15. Pull on end of wires to ensure a strong connection.
- Repeat the process for the four (4) remaining wires.
   Ensure that all wires are paired by color in each connector.
- ! NOTE: In the event that multiple Flicker Motors were already replaced within unit, or if required wiring has been cut too short, it may be necessary to replace Flicker Motor and the attached cable as a whole.

To do so:

- i) Follow steps 1 through 7 and step 9.
- ii) Unplug the cable connector from the Flame Speed Control board on the left side of the firebox (Figure 12, page 12).
- iii) Cut all cable ties that bind the Flicker Motor Cable and other wires together (wires and cable run behind the lower bulbs).
- iv) Follow steps 10 and 11 to remove defective Flicker Motor.
- v) Follow steps 17 through 19 to install new Flicker Motor.
- vi) Run Flicker Motor Cable along channel behind lower bulbs and bind together with other wires using cable ties.
- vii) Plug cable connector into Flame Speed Control board (Figure 12).
- viii) Reassemble firebox and replace in mantel.
- 17. Properly orient and secure the replacement Flicker Motor to the bracket with screws removed in step 10.
- 18. Replace rubber bushing on motor shaft.
- 19. Replace Flicker Rod.
- 20. Reassemble firebox and replace in mantel.
- ! NOTE: When placing bottom panel back onto unit, position the metal lip from under the control panel between the rubber spacers (attached to the bottom panel) and the sheet metal of the bottom panel.

# **Thermostat Control Replacement**

**A** CAUTION: If unit was operating prior to servicing allow

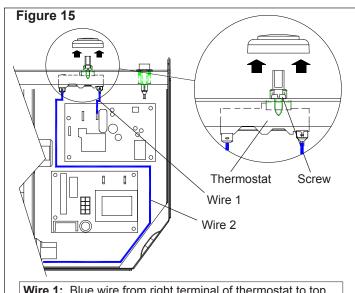
at least 10 minutes for lights, heating elements and top panel to cool off to avoid accidental burning of skin.

**WARNING:** Disconnect power before attempting any maintenance to reduce the risk of electric shock or damage to persons.

- 1. Remove the firebox from the mantel.
- 2. Lay unit on its back.
- 3. Remove the 12 Philips screws that fasten the bottom cover to the rest of the firebox. There are: two (2) screws on each side; two (2) screws on the back panel (you may have to tip the bottom of the firebox up if it is laying on its back), four (4) screws in the front directly under the control panel; and two (2) screws on the bottom of the firebox (Figure 8). The bottom panel is now free to be removed.
- 4. Locate the Thermostat Control mounted on the control panel on the right hand side (Figure 15) and disconnect the two (2) wiring clips noting their original locations.

⚠ CAUTION: Internal wiring and colors may not be the same within the unit being serviced as those shown. To avoid damage to the unit, damage to property or personal injury, ensure wires are reconnected to match their original locations.

- 5. Pull off the thermostat control knob to expose the two (2) Philips mounting screws (Figure 15).
- 6. Remove the mounting screws and remove the thermostat controller from inside the control panel.
- 7. Properly orient the new Thermostat Control and reconnect the wiring connections.
- 8. Reassemble in the reverse order as above.
- ! NOTE: When placing bottom panel back onto unit, position the metal lip from under the control panel between the rubber spacers (attached to the bottom panel) and the sheet metal of the bottom panel.



**Wire 1:** Blue wire from right terminal of thermostat to top, right terminal of Remote Control Receiver.

Wire 2: Blue wire from left terminal of thermostat to opposite side of firebox and up to Heater Assembly.

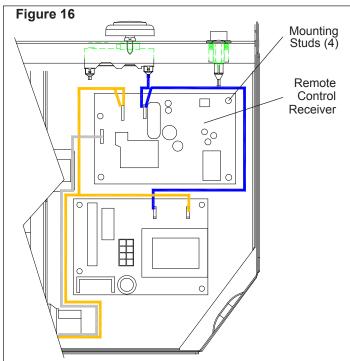
# **Remote Control Replacement**

Remote Control require no replacement procedure however, a reinitialization procedure may need to be followed. Refer to Page 1 for the Remote Initialization/Reprogram procedure.

⚠ CAUTION: If unit was operating prior to servicing allow at least 10 minutes for lights, heating elements and top panel to cool off to avoid accidental burning of skin.

**WARNING:** Disconnect power before attempting any maintenance to reduce the risk of electric shock or damage to persons.

- 1. Remove the firebox from the mantel.
- 2. Lay unit on its back.
- 3. Remove the 12 Philips screws that fasten the bottom cover to the rest of the firebox. There are: two (2) screws on each side; two (2) screws on the back panel (you may have to tip the bottom of the firebox up if it is laying on its back), four (4) screws in the front directly under the control panel; and two (2) screws on the bottom of the firebox (Figure 8). The bottom panel is now free to be removed.
- 4. Locate the Remote Control Receiver mounted on the right hand side (Figure 16).
- 5. The Remote Control Receiver is fastened to the underside of the Ember Bed support by four (4) mounting studs, one in each corner (Figure 15).



- Blue piggy-back: From top, right terminal of Remote Control Receiver to 1) right terminal of thermostat and 1) to left terminal of Log Driver board.
- Orange piggy-back: From top, left terminal of Remote Control Receiver to 1) right terminal of Log Driver board and 1) to opposite side of firebox and to top terminal of Flame Speed Control board.
- Grey: From left side terminal of Remote Control Receiver to opposite side of firebox, leading to Heater Assembly.

- Squeeze each mounting stud's clasp to release the circuit board from the firebox.
- ! NOTE: If mounting studs are damaged, replacement mounting studs will need to be inserted from underneath the Log Set Assembly. Follow steps 1 6 of Partially Reflective Glass Replacement procedure on page 9 to do this. It is recommended to attempt to release the control board without cutting mounting studs.
- Properly orient the replacement Remote Control Receiver board and push it onto the four (4) mounting studs until the clasps of the mounting studs snap the control board into place.
- 7. Disconnect one of the wire leads from the original control board (which are still connected to parts within the firebox) and immediately connect it to the new control board's terminal, matching its position. Continue with the remaining wires (there are four (4) wires which are piggy-backed together in pairs, and a single grey wire) using the same procedure.

**A** CAUTION: Internal wiring and colors may not be the same within the unit being serviced as those shown. To avoid damage to the unit, damage to property or personal injury, ensure wires are reconnected to match their original locations.

- 8. Follow steps 1 through 3 in reverse order to reassemble the firebox.
- ! NOTE: When placing bottom panel back onto unit, position the metal lip from under the control panel between the rubber spacers (attached to the bottom panel) and the sheet metal of the bottom panel.

# Log Driver Controller Replacement (DF2608 only)

⚠ CAUTION: If unit was operating prior to servicing allow at least 10 minutes for lights, heating elements and top panel to cool off to avoid accidental burning of skin.

- 1. Remove the firebox from the mantel.
- 2. Lay unit on its back.
- 3. Remove the 12 Philips screws that fasten the bottom cover to the rest of the firebox. There are: two (2) screws on each side; two (2) screws on the back panel (you may have to tip the bottom of the firebox up if it is laying on its back), four (4) screws in the front directly under the control panel; and two (2) screws on the bottom of the firebox (Figure 8). The bottom panel is now free to be removed.
- 4. The Log Driver Control Board is fastened to the underside of the Ember Bed support by four (4) mounting studs, one in each corner (Figure 17). Squeeze each mounting stud's clasp to release the circuit board from the firebox.
- ! NOTE: If mounting studs are damaged, replacement mounting studs will need to be inserted from underneath the Log Set Assembly. Follow steps 1 6 of Partially

Reflective Glass Replacement procedure on page 9 to do this. It is recommended to attempt to release the control board without cutting mounting studs.

- 5. Properly orient the replacement Log Driver board and push it onto the four (4) mounting studs until the clasps of the mounting studs snap the control board into place.
- 6. Disconnect one of the wire leads from the original control board (which are still connected to parts within the firebox) and immediately connect it to the new control board's terminal, matching its position. Continue with the remaining wires (there are four (4) wires which are piggy-backed together in pairs, and a single grey wire) using the same procedure.

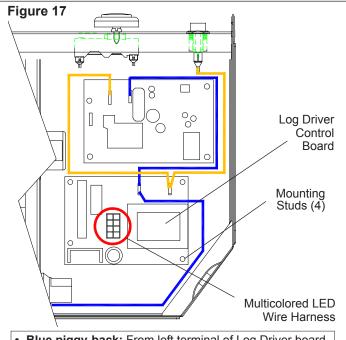
⚠ CAUTION: Internal wiring and colors may not be the same within the unit being serviced as those shown. To avoid damage to the unit, damage to property or personal injury, ensure wires are reconnected to match their original locations.

- 7. Follow steps 1 through 3 in reverse order to reassemble the firebox.
- ! NOTE: When placing bottom panel back onto unit, position the metal lip from under the control panel between the rubber spacers (attached to the bottom panel) and the sheet metal of the bottom panel.

## **Lower Light Harness Replacement**

⚠ CAUTION: If unit was operating prior to servicing allow at least 10 minutes for lights, heating elements and top panel to cool off to avoid accidental burning of skin.

**WARNING:** Disconnect power before attempting any maintenance to reduce the risk of electric shock or damage to persons.



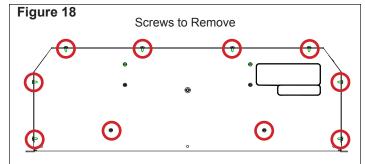
- Blue piggy-back: From left terminal of Log Driver board to 1) right terminal of Remote Receiver board and 1) to other side of firebox and connecting to wire nut.
- Orange piggy-back: From right terminal of Log Driver board to 1) bottom terminal of Heat Switch and 1) left terminal of Remote Receiver board.

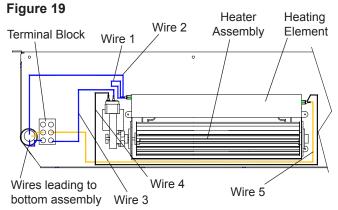
- 1. Remove the firebox from the mantel.
- 2. Lay unit on its back.
- 3. Remove the 12 Philips screws that fasten the bottom cover to the rest of the firebox. There are: two (2) screws on each side; two (2) screws on the back panel (you may have to tip the bottom of the firebox up if it is laying on its back), four (4) screws in the front directly under the control panel; and two (2) screws on the bottom of the firebox (Figure 8). The bottom panel is now free to be removed.
- 4. Locate the three (3) light sockets, in the middle of the firebox.
- 5. Remove the lightbulbs and place in a safe location.
- Trace the light socket wires by cutting the tie wraps and removing the wire covering. Disconnect the wire connectors that are attached to the sockets that are being replaced, noting the associated connection for each wire.
- 7. Remove the retaining ring from the light sockets and replace sockets with new sockets.
- 8. Replace associated wire connectors.
- 9. Follow steps 1 through 6 in reverse order to reassemble the firebox.
- ! NOTE: When placing bottom panel back onto unit, position the metal lip from under the control panel between the rubber spacers (attached to the bottom panel) and the sheet metal of the bottom panel.

## **Heater Assembly Replacement**

⚠ CAUTION: If unit was operating prior to servicing allow at least 10 minutes for lights, heating elements and top panel to cool off to avoid accidental burning of skin.

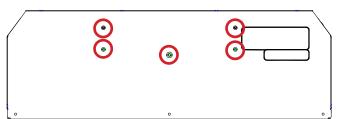
- 1. Remove the firebox from the mantel.
- Remove the 10 Philips screws that fasten the top cover to the rest of the firebox. There are: (four) 4 screws at the back of the firebox, along the top; two (2) screws on each side and at the top of the firebox; and two (2) screws on the top of the firebox (Figure 18).
- 3. Flip the top panel over and place upside down on the top of the unit. You may experience some resistance as the Heater Assembly is mounted to the top panel and may be a snug fit inside the firebox. Orient yourself with the placement of the Heater Assembly and wiring as shown in Figure 19.
- 4. Turn the top panel over and, while supporting the Heater Assembly and panel in one hand, remove the five (5) Phillips heater mounting screws, noting the center screw is of a larger diameter (Figure 20).
- 5. Separate the Heater Assembly from the top panel.
- 6. Properly orient the new Heater Assembly and attach it to the top panel using the screws removed in step 5.
- Disconnect one of the wire leads from the original Heater Assembly (which are still connected to parts





- **Wire 1:** Blue wire connecting top and bottom terminal of Heater Element on left side.
- Wire 2: Blue wire from top, left terminal of Heater Element through to lower part of firebox.
- Wire 3: Blue wire connecting inside terminal of Motor to Terminal Block, matched with blue wire from Terminal Block to lower part of firebox.
- **Wire 4:** Black wire from outside terminal of Motor to bottom terminal of Heater Element on right side.
- Wire 5: Yellow wire from top terminal of Heater Element on right side to Terminal Block, matched to yellow wire leading to lower part of firebox.

Figure 20



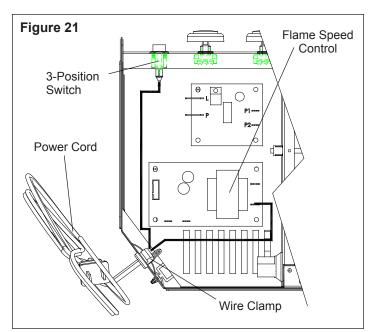
within the firebox) and immediately connect it to the new Heater Assembly's terminal, matching its position. Continue with the remaining wires using the same procedure.

⚠ CAUTION: Internal wiring and colors may not be the same within the unit being serviced as those shown. To avoid damage to the unit, damage to property or personal injury, ensure wires are reconnected to match their original locations.

8. Fit Heater Assembly into top of firebox and re-assemble firebox using screws removed in step 2.

# **Power Cord Replacement**

⚠ CAUTION: If unit was operating prior to servicing allow at least 10 minutes for lights, heating elements and top panel to cool off to avoid accidental burning of skin.



- 1. Remove the firebox from the mantel.
- 2. Lay unit on its back.
- 3. Remove the 12 Philips screws that fasten the bottom cover to the rest of the firebox. There are: two (2) screws on each side; two (2) screws on the back panel (you may have to tip the bottom of the firebox up if it is laying on its back), four (4) screws in the front directly under the control panel; and two (2) screws on the bottom of the firebox (Figure 8). The bottom panel is now free to be removed.
- 4. Locate and disconnect the two (2) power cord wire connections. The smooth edged wire leading from the narrow blade of the power plug connects to the middle of the three (3) terminals on the 3-Position Switch; the side of the power cord leading from the wide blade of the plug, and has ridges along its edge leads to the bottom, right terminal of the Flame Speed Control board (Figure 21).
- Using pliers, squeeze the sides of the plastic wire clamp on the Power Cord from inside the chassis and push it through the sheet metal.
- 6. Release clamp from the Power Cord and remove Power Cord from the firebox.
- Run replacement Power Cord through the firebox as above and connect wire ends as described in step 4.
- 8. Leave two (2) inches of slack in cord and secure in place with clamp.
- 9. Follow steps 1 through 3 in reverse order to reassemble the firebox.

# **Troubleshooting Guide**

PROBLEM	CAUSE	SOLUTION
General		
Circuit breaker trips or fuse	Short in unit wiring.	Trace wiring in unit.
blows when unit is turned on	Improper circuit current rating	Additional appliances may exceed the current rating of the circuit breaker or fuse. Plug unit into another outlet or install unit on a dedicated 15 amp circuit.
Unit turns on or off by itself	Remote Control has a similar frequency to other remotes in the area.	Replace Remote Control. Initialize to Remote Control Receiver.
	Radio frequency disturbance from outside sources.	Replace Remote Control. Initialize Remote Control and Receiver.
	Defective Remote Control Receiver	Replace Remote Control Receiver. Initialize Remote Control and Receiver.
Lights dim in room while the unit is on	Unit is drawing close to circuit current rating	Move the unit to another outlet or install unit on a dedicated 15 amp circuit
Power cord gets warm	Normal Operation	The power cord may get slightly warm to the touch when the heater is on
	Defective Power Cord	Replace Power Cord if cord gets hot to the touch.
Fireplace seems dark	Improper operation	Refer to Operation Section
	Defective Light Dimmer	Replace Light Dimmer Components
Appearance		
Fireplace does not turn on Manu-	Improper operation	Refer to Operation Section
ally	No incoming power from the electrical wall socket	Check fuse/breaker panel
	Defective 3-Position Switch	Replace 3-Position Switch
Fireplace does not turn on using	Improper operation	Refer to Operation Section
the Remote Control	Remote Control not initialized to fireplace	Initialize the Remote Control
	Remote Control not working	Install new battery into the Remote Control. Initialize Remote Control.
		Replace Remote Control Receiver or Remote Control, where necessary. Initialize Remote Control and Remote Control Receiver.
Flame Frozen	Loose wiring	Check wiring connections
	Defective Flicker Motor	Replace Flicker Motor
	Defective Flame Speed Control	Replace Flame Speed Control Components
Flame not bright or flame not	Burnt out light bulbs	Replace light bulbs
visible	Loose wiring	Check wiring connections
	Defective Light Harness	Replace Light Harness
Log set dim, not glowing	Loose wiring	Check wiring connections
(DF2608 Only)	Defective Log Driver Controller	Replace Log Driver Controller
	Defective Log Set	Replace Log Set
Flame Shutter	Defective Flicker Motor	Replace Flicker Motor
Light leaking around the log set	Log set not positioned properly	Check log set for proper fit

PROBLEM	CAUSE	SOLUTION
Heater		
Heater is not turning off	Improper operation	Refer to Operation Section
	Defective Heater Switch	Replace Heater Switch
	Defective Thermostat	Replace Thermostat
Heater is not turning on	Improper operation	Refer to Operation Section
	Loose wiring	Trace wiring in unit
	Defective Heater Switch	Replace Heater Switch
	Defective Thermostat	Replace Thermostat
	Defective Heater Assembly	Replace Heater Assembly
Heater is turning off after a couple of minutes of operation	Build up of dirt/dust in Heater Assembly	Ensure that exterior intake louvers and firebox cavity are free of dirt/dust.
	Defective Heater Assembly	Replace Heater Assembly
Heater emits an odor	Normal Operation	Normal operation is when the heater emits an odor for a brief period after the heater is initially turned on. The heater is burning off any dust accumulated during manufacturing or operation.
	Defective Heater Assembly	Replace Heater Assembly
Heater fan turns on but heater	Improper operation	Refer to Operation Section
lacks heat	Loose wiring	Trace wiring in unit
	Defective Thermostat	Replace Thermostat
	Defective Heater Assembly	Replace Heater Assembly
Heating element is glowing red	Normal Operation	Small glowing sections of the element are considered normal.
	Defective heater assembly	If larger glowing sections are causing the heater to trip the thermal cutout, unplug unit, discontinue use and replace Heater Assembly.
Noise		
Excessive noise with the heater on	Dirty Heater Assembly	Ensure that exterior intake louvers and firebox cavity are free of dirt/dust.
	Defective Heater Assembly	Replace Heater Assembly
Grinding or excessive noise with the heater off	Flicker rod hitting or rubbing against internal components	Ensure rod is straight and mounted properly in the bracket, spinning freely away from other components. Replace if necessary.
	Defective Flicker motor	Replace Flicker motor
Buzzing noise from control panel	Defective Flame Speed Controller	Replace Flame Speed Controller