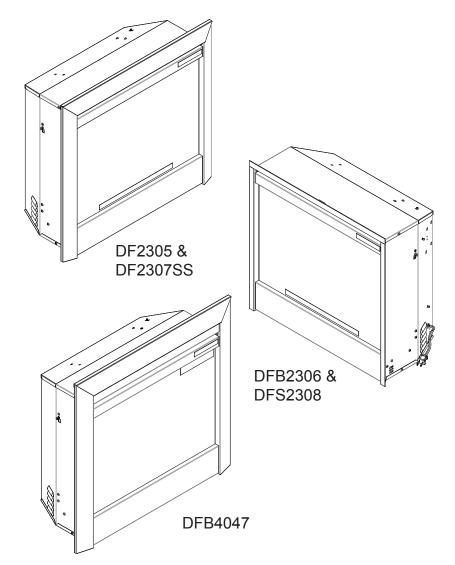


Better solutions through innovation



# Service Manual

23" Compact Fireplace

**Model Number:** 

**DF2305** 

**DF2307SS** 

**DFB4047** 

**DFB2306** 

**DFS2308** 

**UL Part Number** 6901740000

**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** 

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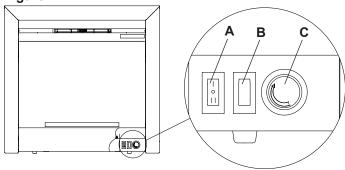
Operation
Maintenance
Exploded Parts Diagram
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Light Harness Replacement
3-Position Switch or Heater Switch Replacement
Thermostat Replacement
Flicker Rod/Motor Replacement
Heater Assembly Replacement
Remote Control Receiver Replacement
Power Cord Replacement
Capacitor and Terminal Block Replacement
Troubleshooting Guide

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**

#### Figure 1



#### A - 3-Position Switch

The power 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 ("  ${\bf O}$  ") position the unit is off.

#### **B** - Heater Switch

The Heater Switch supplies power to the heater fan and the heater element. When the switch is in the On position the heater operates if the thermostat calls for heat.

#### C - Heater 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 this setting. For additional heat, turn clockwise until you hear the click again and the heater will turn on.

## **Resetting the Temperature Cutoff Switch**

The heating assembly is protected with a safety device to prevent overheating. Should the heating assembly 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 and waiting five (5) minutes before switching the unit back on.

**A** CAUTION: If the unit continuously cuts out, unplug the unit and call customer service at 1-800-DIMPLEX.

! NOTE: The heating elements 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.

#### **Remote Control**

The fireplace is supplied with a radio frequency remote control. This remote control has a range of approximately 50 feet (15.25 m), it does not have to be pointed at the fireplace and can pass through most obstacles (including walls). It is supplied with one of hundreds of independent frequencies to prevent interference with other units.

! NOTE: Before attempting any operation with the remote, pull the plastic insulator strip out from between the remote casing and battery cover (Figure 2).

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

! NOTE: Ensure that the fireplace 3-Position switch is set to the remote control setting.

## Remote Control Initialization/Reprogramming

If the hand held transmitter or receiver board has been replaced, follow these steps to initialize the transmitter and receiver:

- Place the 3-Position Switch (Figure 1A) in the OFF ("O") position.
- 2. Wait a minimum of five (5) seconds and set the 3 Position Switch to the Remote position ("II").
- **3. Within** 10 seconds of changing the switch position, press the ON button located on the remote control (Figure 2).

This will synchronize the remote control and the remote control receiver.

! 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.

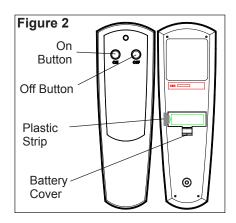
#### **Battery Replacement**

To replace the battery:

- Slide battery cover open on the remote control (Figure 2).
- Install one (1) 12-Volt (A23) battery in the battery holder.
- 3. Close the battery cover



Battery must be recycled or disposed of properly. Check with your Local Authority or Retailer for recycling advice in your area.



### **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**

♠ CAUTION: Allow at least 10 minutes for light bulbs and heater assmebly to cool off before touching bulbs to avoid accidental burning of skin.

Light bulbs need to be replaced when you notice a dark section of the flame. There are two (2) bulbs under the log set which generate the flames and embers.

**Approximate time:** 15 minutes to change the light bulbs. **Light Bulb Requirements** 

Quantity of two (2) clear chandelier or candelabra bulbs with an E-12 (small) socket base, 60 Watt rating. Example: GE 60BC or Philips 60CTC.

Required tools: Phillips screw driver.

- 1. Remove the front glass by removing the two (2) outer screws holding the glass clips (Figure 3).
- 2. Remove the log grate by removing the two (2) mounting screws (Figure 4).
- 3. Remove the log set by lifting straight up (Figure 5).
- 4. Slide the light assembly slightly out of the insert approximately one (1) inch.
- 5. Examine the bulb(s) to determine which bulb(s) require replacement.
- 6. Unscrew the bulbs counter clockwise.
- 7. Insert new bulbs.
- 8. Slide the light assembly back into the insert.
- 9. Replace the log set into the insert.
- 10. Reinstall the log grate.
- 11. Reinstall the front glass.

#### **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.

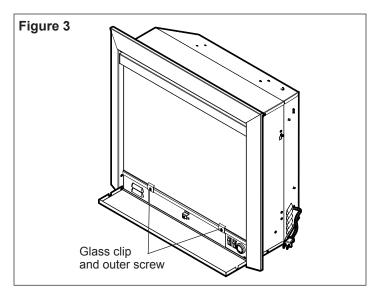
To remove fingerprints or other marks, the clear door can be cleaned with a damp cloth. The clear door should be completely dried with a lint free cloth to prevent water spots. To prevent scratching, do not use abrasive cleaners or spray liquids on the clear door surface.

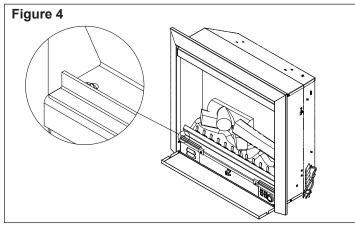
#### Fireplace Surface Cleaning

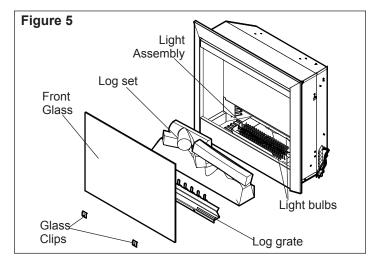
Use warm water only to clean painted surfaces. Do not use abrasive cleaners on glass surface or spray liquids directly onto any surface.

#### **Unit Storage**

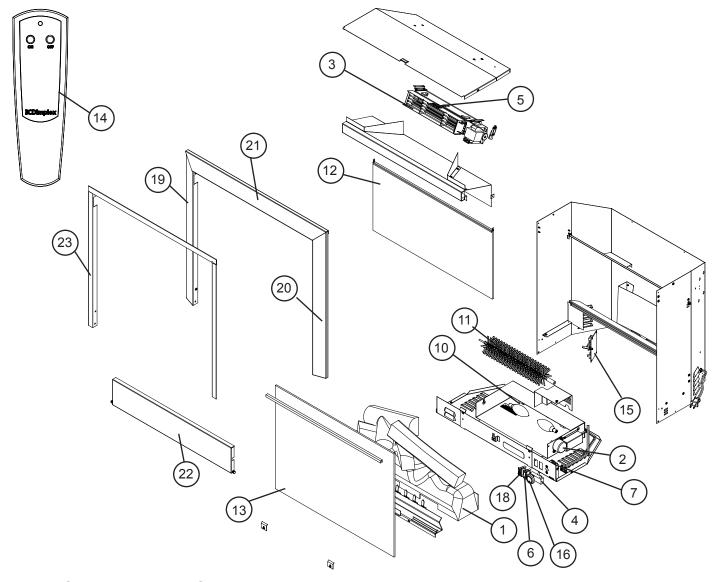
Store the unit when not in use in a dry, dust free location with the power cord properly secured.







# **EXPLODED PARTS DIAGRAM**

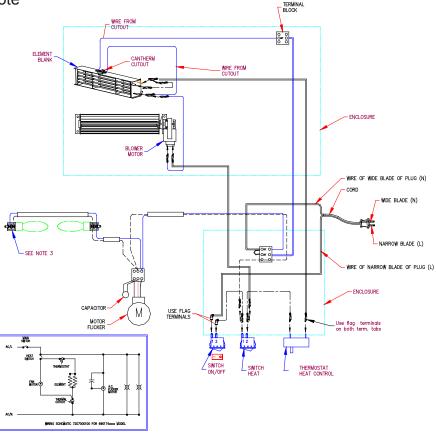


# **REPLACEMENT PARTS**

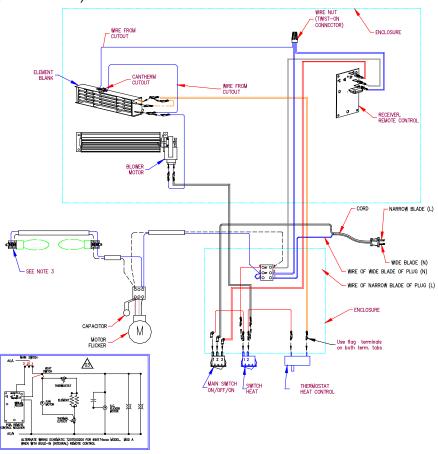
1. Log Set Assembly       .0438200700RP         2. Flicker Motor       .2000220100RP         3. Heater Assembly       .2200490800RP	17. Fireplace Foot (not shown)
4. Thermostat	19. Left Side Trim
5. Cutout	20. Right Side Trim1010660259RP
6. Heater Switch	21. Top Trim
7. Capacitor3200030100RP	22. Control Cover
8. Terminal Block	DF2307SS (Stainless Steel) Trim Parts
9. Power Cord	19. Left Side Trim
10. Lampholder with leads	20. Right Side Trim
11. Flicker Rod	21. Top Trim
12. Partially Reflective Glass 5900350100RP	22. Control Cover
13. Front Glass	<b>23. DFB2306 Trim Parts</b> 9600440159RP
14. Remote Control3000370500RP	<b>23. DFS2308 (Stainless Steel) Trim</b> 9600440180RP
15. Remote Control Receiver	<b>DFB4047</b> Left/Right/Top Trim 9600080100RP
16. Control Knob	22. Control Cover

# **WIRING DIAGRAM**

MOD 0 - No Remote



MOD A & B (Integral Remote)



## LIGHT HARNESS REPLACEMENT

Tools Required: Phillips Head Screwdriver

⚠ 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. Open the front control cover.
- 2. Remove front glass by removing the 2 outer screws holding the glass clips. (Figure 3)
- 3. Remove the log grate by removing the 4 mounting screws. (Figure 4)
- 4. Remove the log set by lifting straight up.
- 5. Slide the light assembly slightly out of the insert.
- 6. Remove the light bulbs. Hold the socket while unscrewing the old bulb.
- 7. Remove the screws at the back holding the light sockets to the assembly. (Figure 6)
- 8. Pull the light sockets out towards the front of the unit.
- 9. Disconnect the socket wires from the terminal block noting the original locations.
- 10. Install the new light sockets, securing them with the removed screws at the back of the assembly.
- 11. Reinstall the wires into the original locations.
- 12. Hold the socket while screwing in the new bulb.
- 13. Reassemble in the reverse order as above.

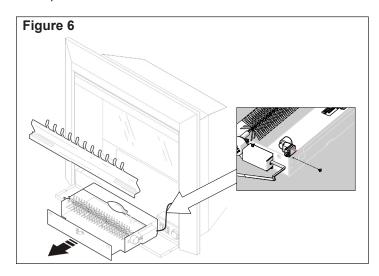
# 3-POSITION SWITCH OR HEATER SWITCH REPLACEMENT

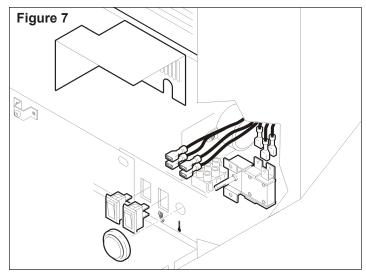
**Tools Required:** Phillips Head Screwdriver
Flat Head Screwdriver

**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. Open the front control cover.





- 2. Remove front glass by removing the 2 outer screws holding the glass clips. (Figure 3)
- 3. Remove the log grate by removing the 4 mounting screws. (Figure 4)
- 4. Remove the log set by lifting straight up.
- 5. Lay the insert on its back and remove the 2 screws securing the switch control cover, which are located on the bottom of the insert.
- 6. Locate the switch to be replaced and disconnect the wiring clips and connections noting their original locations. (Figure 7)
- ! NOTE: A flat head screwdriver can be used to gently pry between the end of the connector and the switch to release the wires.
- 7. Depress the retainer clips on the rear of the switch and push the switch out of the rear of the cover.
- 8. Reassemble in the reverse order as above.

# THERMOSTAT REPLACEMENT

**Tools Required:** Phillips Head Screwdriver Flat Head Screwdriver

♠ 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. Open the front control cover.
- 2. Remove front glass by removing the 2 outer screws holding the glass clips. (Figure 3)
- 3. Remove the log grate by removing the 4 mounting screws. (Figure 4)
- 4. Remove the log set by lifting straight up.
- 5. Lay the insert on its back and remove the 2 screws securing the switch control cover, which are located on the bottom of the insert.
- 6. Locate the thermostat control and disconnect the wiring clips and connections noting their original locations. (Figure 7)

- ! NOTE: A flat head screwdriver can be used to gently pry between the end of the connector and the switch to release the wires.
- Remove the thermostat control knob by pulling straight out.
- 8. Remove the 2 mounting screws and replace the old thermostat with the new one.
- Reassemble in the reverse order as above.

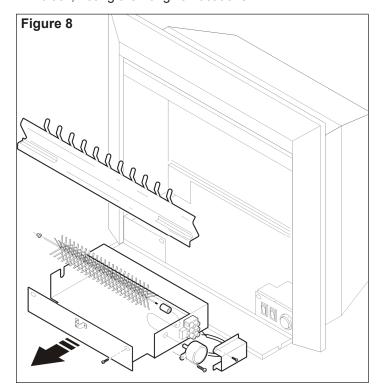
## FLICKER ROD/MOTOR REPLACEMENT

**Tools Required:** Phillips Head Screwdriver Flat Head Screwdriver

⚠ 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. Open the front control cover.
- 2. Remove front glass by removing the 2 outer screws holding the glass clips. (Figure 3)
- 3. Remove the log grate by removing the 4 mounting screws. (Figure 5)
- 4. Remove the log set by lifting straight up.
- 5. Slide the light assembly slightly and lift out of the insert being careful not to damage any of the wiring. (Figure 8)
- 6. Remove the reflector rod from the flicker motor by pulling the end of the rod to the left and separating it from the rubber sleeve.
- 7. Remove the rubber sleeve from the motor shaft.
- 8. Disconnect the flicker motor wire from the terminal block, noting their original locations



- Remove the 2 motor mounting screws and remove the flicker motor.
- 10. Discard the old flicker motor.
- 11. Reassemble in the reverse order as above

### HEATER ASSEMBLY REPLACEMENT

Tools Required: Phillips Head Screwdriver

⚠ 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 4 retaining screws and lift the top cover off of the insert being careful not to damage the wiring.
- 2. Remove the 4 heater mounting screws from the top of the top cover to separate the heater assembly.
- 3. Remove the 2 heater mounting brackets from the heater assembly.
- 4. Disconnect the 2 heater switch leads from the heater noting their original locations.
- 5. Disconnect the thermal cut-out wire from the wire nut.
- 6. Reassemble in the reverse order as above, with the new component.

# REMOTE CONTROL RECEIVER REPLACEMENT

**Tools Required:** Phillips Head Screwdriver Flat Head Screwdriver

**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 4 retaining screws and lift the top cover off of the insert being careful not to damage the wiring. (Figure 9)
- 2. Disconnect the wire connections from the circuit board noting their original locations.
- ! NOTE: A flat head screwdriver can be used to gently pry between the end of the connector and the receiver board to release the wires.
- From inside the insert, break off the six mounting studs on the circuit board by grasping with pliers and twisting on the protruding part of the stud, push the remainder of the studs out through the top panel.
- ! NOTE: New mounting studs are supplied with the replacement circuit board.
- 4. Properly orient the new circuit board and reconnect all of the wiring connections.

### POWER CORD REPLACEMENT

Tools Required: Phillips Head Screwdriver

**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. Open the front control cover.
- 2. Remove front glass by removing the 2 outer screws holding the glass clips. (Figure 3)
- 3. Remove the log grate by removing the 4 mounting screws. (Figure 5)
- 4. Remove the log set by lifting straight up.
- 5. Lay the insert on its back and remove the 2 screws securing the switch control cover, which are located on the bottom of the insert.
- 6. Disconnect the power cord wires from the terminal block. (Figure 10)
- With needle nose pliers grasp the power cord strain relief grommet from inside the rear panel and push while twisting to remove.
- 8. Pull the power cord out through the hole in the rear cover.
- 9. Install the new cord set through the hole in the rear cover by placing the strain relief over the cord, hold the strain relief with pliers and slide into mounting hole.
- 10. Connect all of the wiring connections in their original locations on the terminal block.
- 11. Reassemble in the reverse order as above.

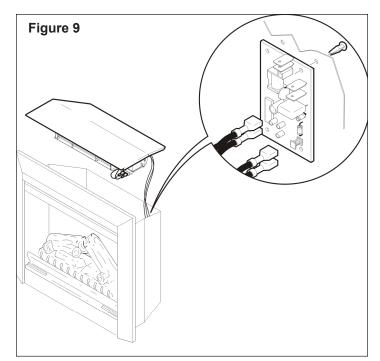
# CAPACITOR AND TERMINAL BLOCK REPLACEMENT

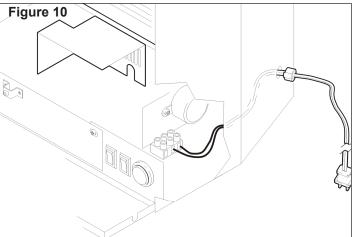
Tools Required: Phillips Head Screwdriver

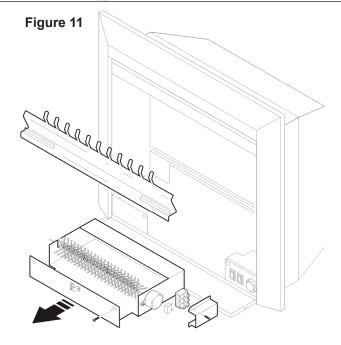
⚠ CAUTION: If unit was operating prior to servicing allow at least 10 minutes for lights, heating elements and top panel to cool off to avoid accidental burning of skin.

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

- 1. Open the front control cover.
- 2. Remove front glass by removing the 2 outer screws holding the glass clips. (Figure 3)
- 3. Remove the log grate by removing the 4 mounting screws. (Figure 5)
- 4. Remove the log set by lifting straight up.
- 5. Slide the light assembly slightly and lift out of the insert being careful not to damage any of the wiring.
- 6. Remove the terminal block cover by removing the 2 retaining screws.
- 7. Disconnect the wiring from the terminal block noting their original locations.
- 8. Disconnect the capacitor from the terminal block.
- 9. Remove the terminal bloc from the light assembly.
- 10. Reassemble in the reverse order as above







# 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 and Remote Control Receiver where necessary. Initialize to Remote Control and Receiver
	Defective Remote Control Receiver	Replace Remote Control Receiver. Initialize to 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.
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
	Defective Remote Control Receiver	Replace Remote Control Receiver. Initialize to Remote Control and Receiver.
Fireplace does not turn on with the Remote Control	Improper operation	Refer to Operation Section
	Remote Control not initialized to fireplace	Initialize the Remote Control
	Remote Control not working	Install new battery into the Remote Control. Initalize remote control, if necessary
		Replace remote control receiver or remote control where necessary. Initialize to Remote Control Receiver
	Loose wiring	Check wiring connections
Flame Frozen	Defective Flicker Motor	Replace Flicker Motor
	Loose wiring	Check wiring connections
Flame not bright or flame not visible	Burnt out light bulbs	Replace light bulbs
	Loose wiring	Check wiring connections
	Defective Light Harness	Replace Light Harness
Log set dim, not glowing	Burnt out light bulbs	Replace light bulbs
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

Defective Heater Switch Replace H Defective Thermostat Replace T Heater is not turning on, but flame effect is still functioning  Loose wiring Defective Heater Switch Defective Heater Switch Replace H Defective Thermostat Replace T Defective Heater Assembly Replace H	peration Section  ng in unit eater Swtich hermostat eater Assembly at exterior intake louvers and firebox cavity
Defective Heater Switch Replace H Defective Thermostat Replace T Heater is not turning on, but flame effect is still functioning  Defective Thermostat Replace T Loose wiring Trace wiring Defective Heater Switch Replace H Defective Thermostat Replace T Defective Heater Assembly Replace H Heater is turning off after a  Build up of dirt/dust in Heater Assembly Ensure that	eater Switch hermostat peration Section ng in unit eater Swtich hermostat eater Assembly at exterior intake louvers and firebox cavity
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	นแขนธโ.
Defective Heater Assembly Replace H	eater Assembly
for a brief The heate	eration is when the heater emits an odor period after the heater is initially turned on. r is burning off any dust accumulated during ring or operation.
Defective Heater Assembly Replace H	eater Assembly
Heater fan turns on but heater Improper operation Refer to O	peration Section
lacks heat Loose wiring Trace wirin	ng in unit.
Defective Thermostat Replace T	hermostat
Defective Heater Assembly Replace H	eater Assembly
Heating element is glowing red Normal Operation Small glow normal.	ring sections of the element are considered
the therma	owing sections are causing the heater to trip all cutout, unplug unit, discontinue use and eater Assembly.
Heater fan runs continuously Loose wiring Trace wirin	ng in unit
Defective Heater Switch Replace H	eater Switch
Defective Thermostat Replace T	hermostat
Defective Heater Assembly Replace H	eater Assembly
Noise	
Excessive noise with the heater on Dirty Heater Assembly Ensure the are free of	at exterior intake louvers and firebox cavity dirt/dust.
Defective Heater Assembly Replace H	eater Assembly
	d is straight and mounted properly in the binning freely away from other components.
Defective Flicker motor Replace F	