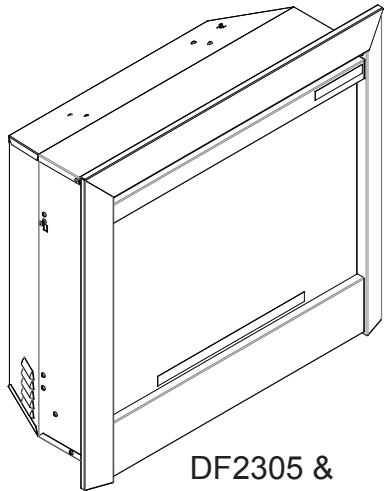
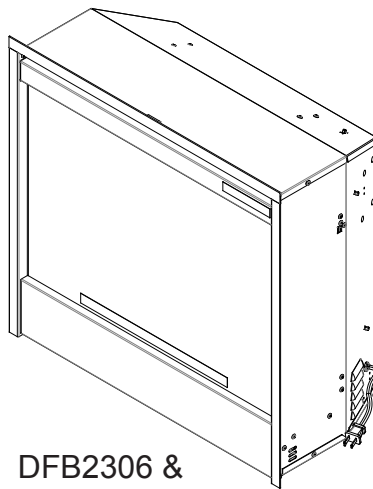




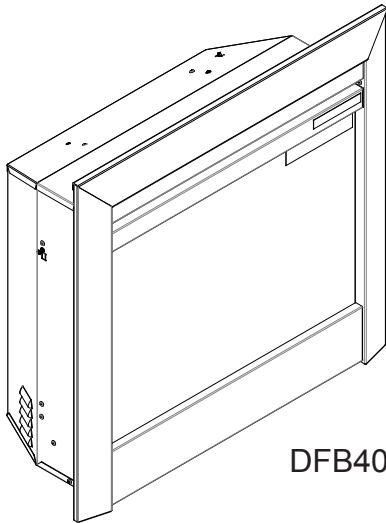
Better solutions through innovation



DF2305 &  
DF2307SS



DFB2306 &  
DFS2308



DFB4047

# 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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1-888-346-7539 • [www.dimplex.com](http://www.dimplex.com)

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

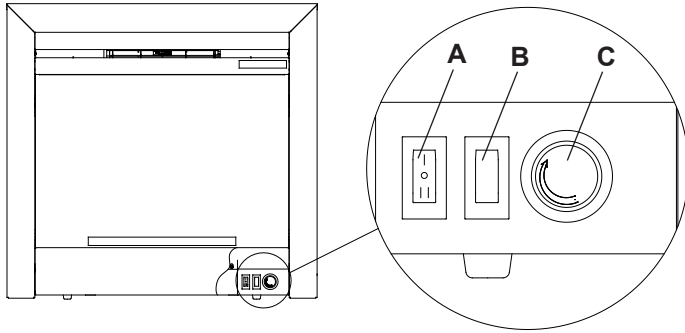
**! NOTE:** Procedures and techniques that are considered important enough to emphasize.

**⚠ 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

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 (“ 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.

**⚠ 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:

1. 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.

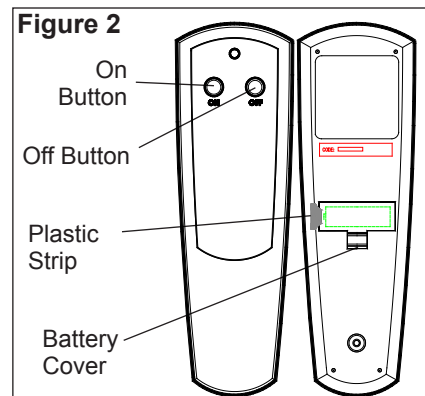
## Battery Replacement

To replace the battery:

1. Slide battery cover open on the remote control (Figure 2).
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 assembly 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.

Figure 3

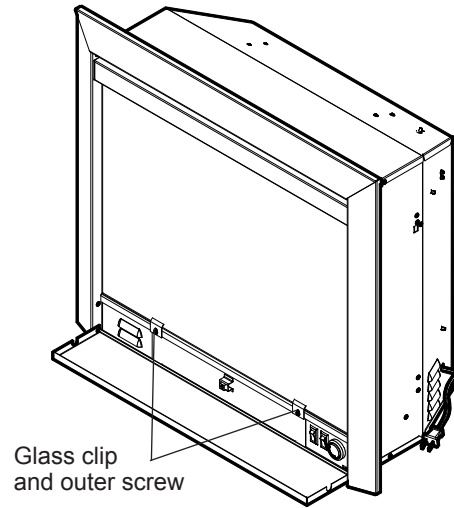


Figure 4

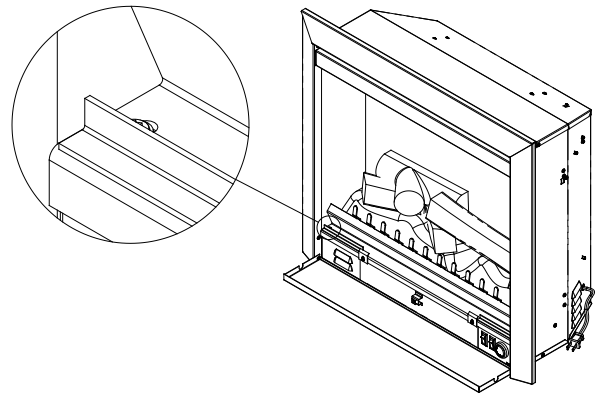
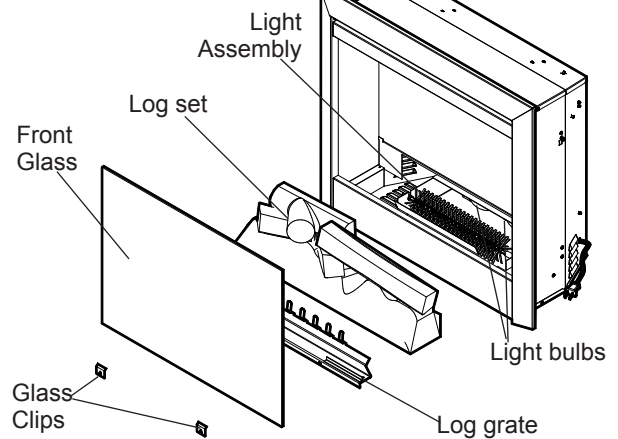
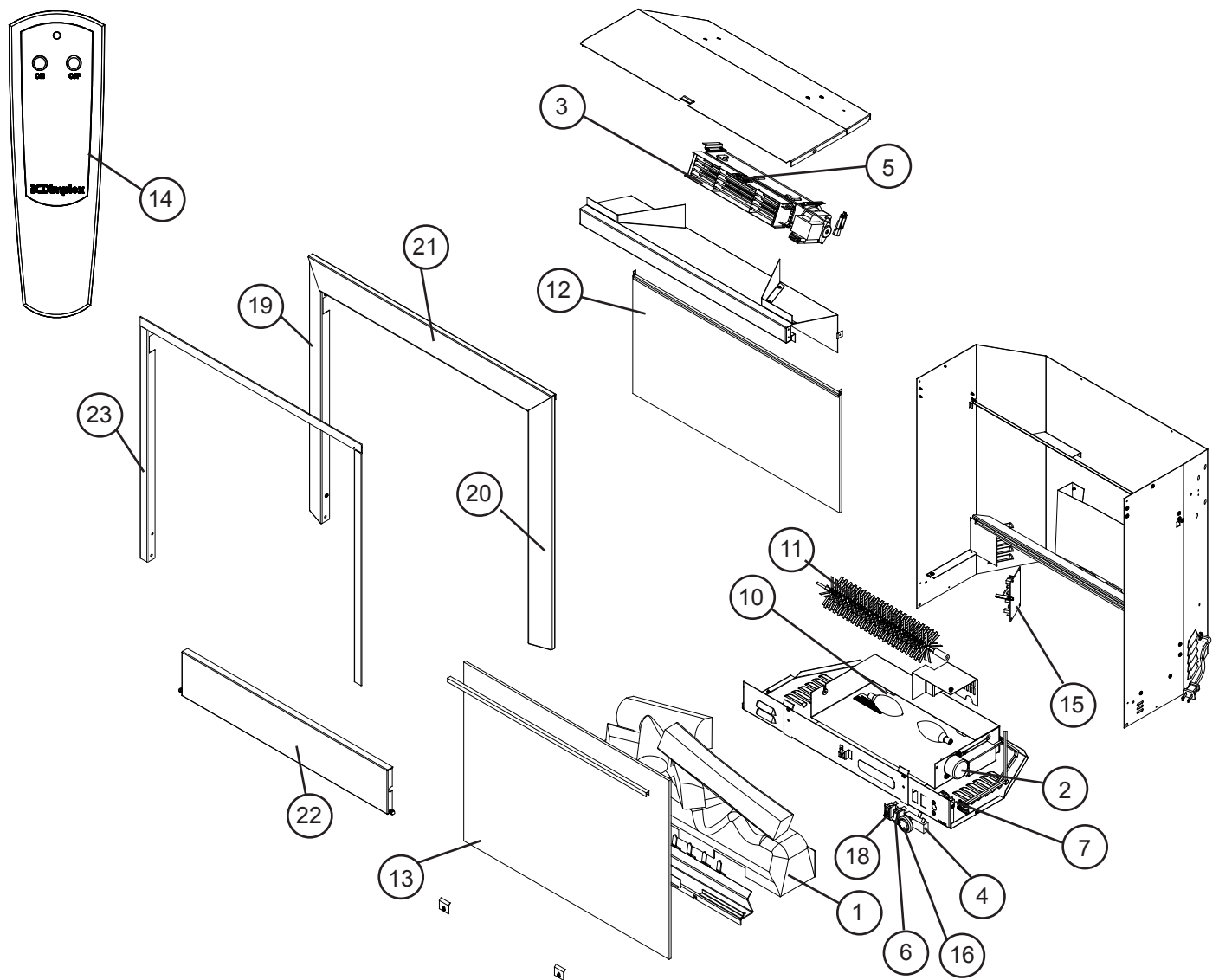


Figure 5



# EXPLODED PARTS DIAGRAM



## REPLACEMENT PARTS

1. Log Set Assembly . . . . .	10438200700RP
2. Flicker Motor . . . . .	.2000220100RP
3. Heater Assembly . . . . .	.2200490800RP
4. Thermostat . . . . .	.2300150100RP
5. Cutout . . . . .	.2300270100RP
6. Heater Switch . . . . .	.2800070200RP
7. Capacitor . . . . .	.3200030100RP
8. Terminal Block . . . . .	.4000070100RP
9. Power Cord . . . . .	.4100090101RP
10. Lampholder with leads . . . . .	.4200121000RP
11. Flicker Rod . . . . .	.5900340100RP
12. Partially Reflective Glass . . . . .	.5900350100RP
13. Front Glass . . . . .	.5900380100RP
14. Remote Control . . . . .	.3000370500RP
15. Remote Control Receiver . . . . .	.3000380200RP
16. Control Knob . . . . .	.8800000300RP

17. Fireplace Foot (not shown) . . . . .	.8800090100RP
18. 3 Position Switch . . . . .	.2800071100RP

### DF2305 Trim Parts

19. Left Side Trim . . . . .	.1010660159RP
20. Right Side Trim . . . . .	.1010660259RP
21. Top Trim . . . . .	.1010670159RP
22. Control Cover . . . . .	.1010620159RP

### DF2307SS (Stainless Steel) Trim Parts

19. Left Side Trim . . . . .	.1010660380RP
20. Right Side Trim . . . . .	.1010660480RP
21. Top Trim . . . . .	.1010670280RP
22. Control Cover . . . . .	.1010620280RP

### 23. DFB2306 Trim Parts . . . . .

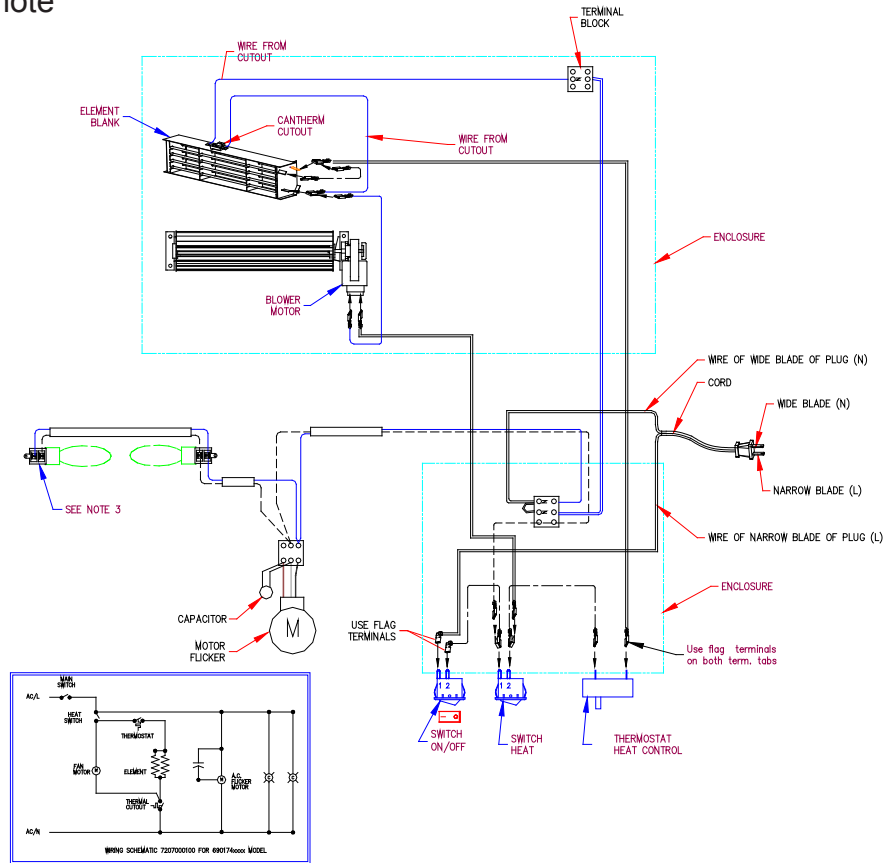
23. DFS2308 (Stainless Steel) Trim . . . . . 9600440180RP

DFB4047 Left/Right/Top Trim . . . . . 9600080100RP

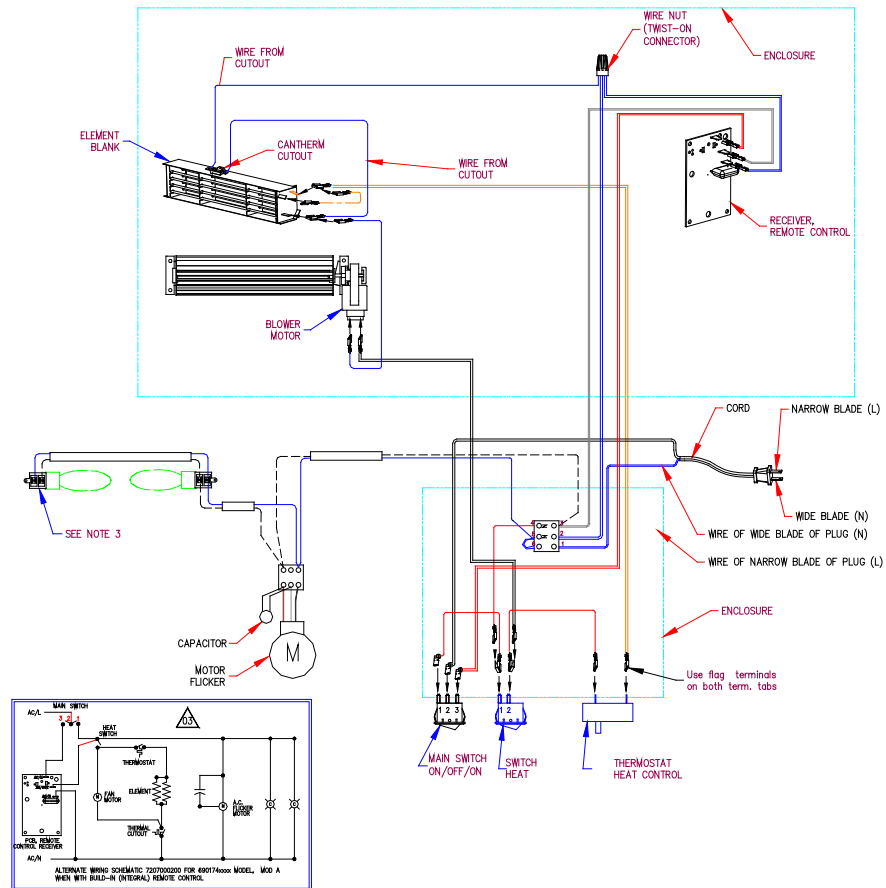
22. Control Cover . . . . . 1010620159RP

# 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.

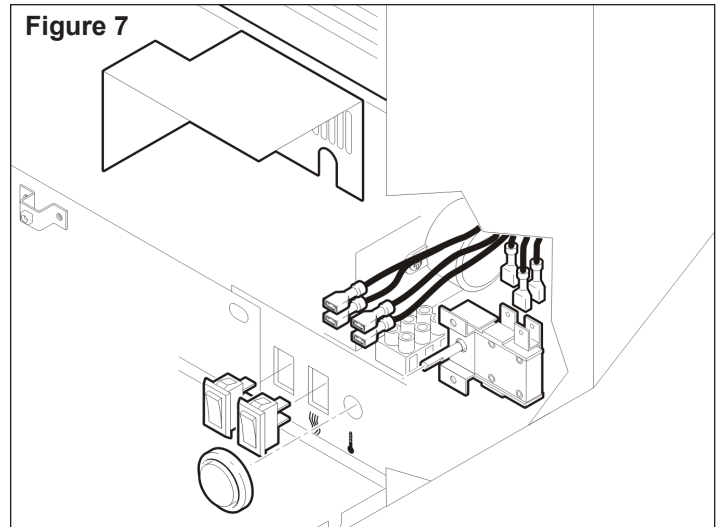
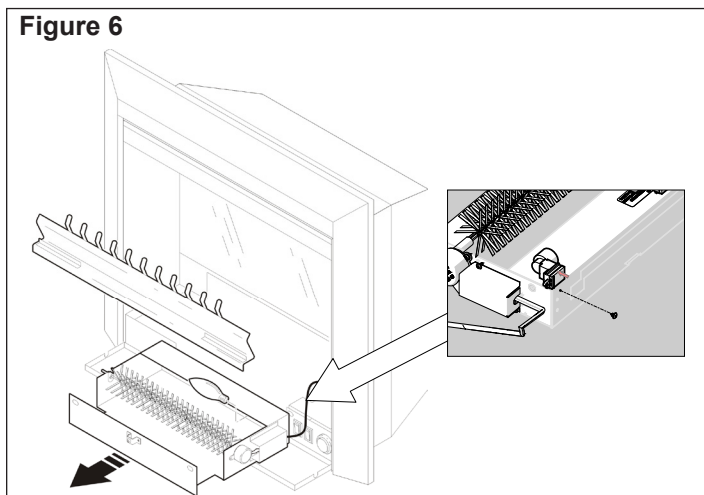
## 3-POSITION SWITCH OR HEATER SWITCH REPLACEMENT

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

**⚠ 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.
  - Remove the 2 mounting screws and replace the old thermostat with the new one.
  - Reassemble in the reverse order as above.

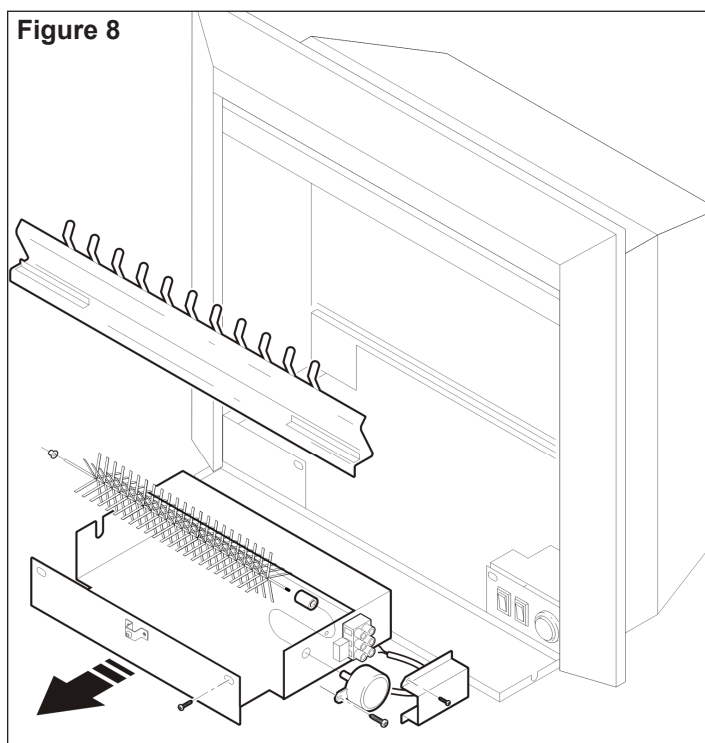
## FLICKER ROD/MOTOR REPLACEMENT

**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.

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



- Remove the 2 motor mounting screws and remove the flicker motor.
- Discard the old flicker motor.
- 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.

- Remove the 4 retaining screws and lift the top cover off of the insert being careful not to damage the wiring.
- Remove the 4 heater mounting screws from the top of the top cover to separate the heater assembly.
- Remove the 2 heater mounting brackets from the heater assembly.
- Disconnect the 2 heater switch leads from the heater noting their original locations.
- Disconnect the thermal cut-out wire from the wire nut.
- 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.

- Remove the 4 retaining screws and lift the top cover off of the insert being careful not to damage the wiring. (Figure 9)
- 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.

- Properly orient the new circuit board and reconnect all of the wiring connections.

## POWER CORD 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. 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)
7. 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.

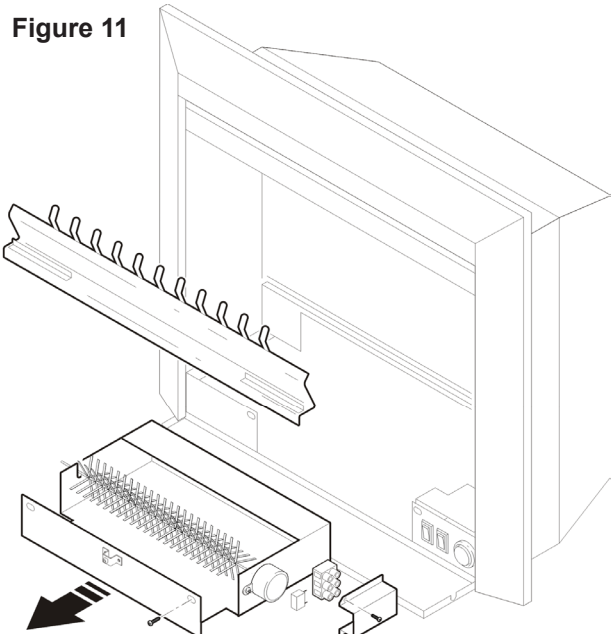
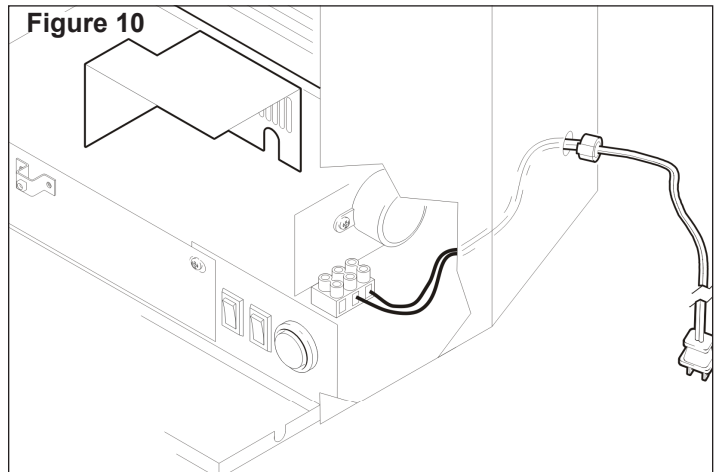
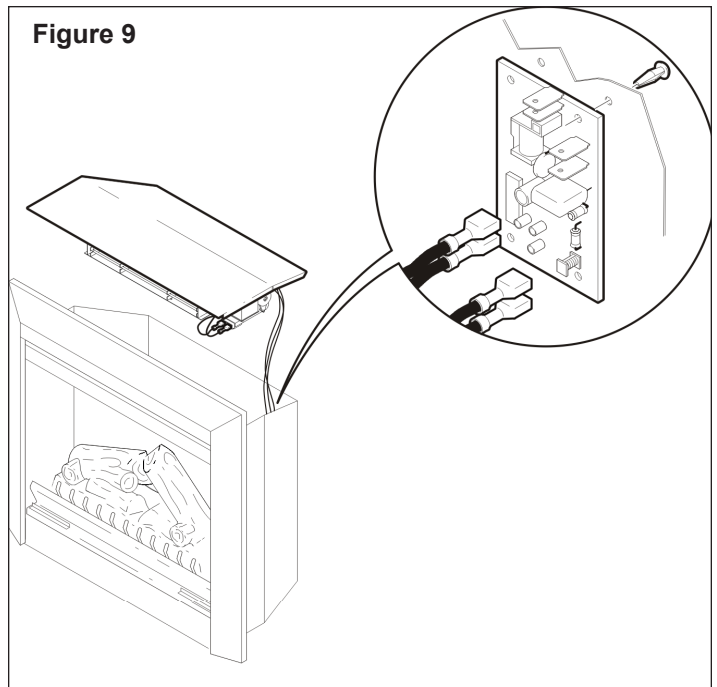
## CAPACITOR AND TERMINAL BLOCK REPLACEMENT

**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 block from the light assembly.
10. Reassemble in the reverse order as above



# TROUBLESHOOTING GUIDE

PROBLEM	CAUSE	SOLUTION
<b>General</b>		
Circuit breaker trips or fuse blows when unit is turned on	Short in unit wiring.	Trace wiring in unit.
	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.
<b>Appearance</b>		
Fireplace does not turn on Manually	Improper operation	Refer to Operation Section
	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. Initialize 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

PROBLEM	CAUSE	SOLUTION
<b>Heater</b>		
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, but flame effect is still functioning	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 lacks heat	Improper operation	Refer to Operation Section
	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.
Heater fan runs continuously	Loose wiring	Trace wiring in unit
	Defective Heater Switch	Replace Heater Switch
	Defective Thermostat	Replace Thermostat
	Defective Heater Assembly	Replace Heater Assembly
<b>Noise</b>		
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