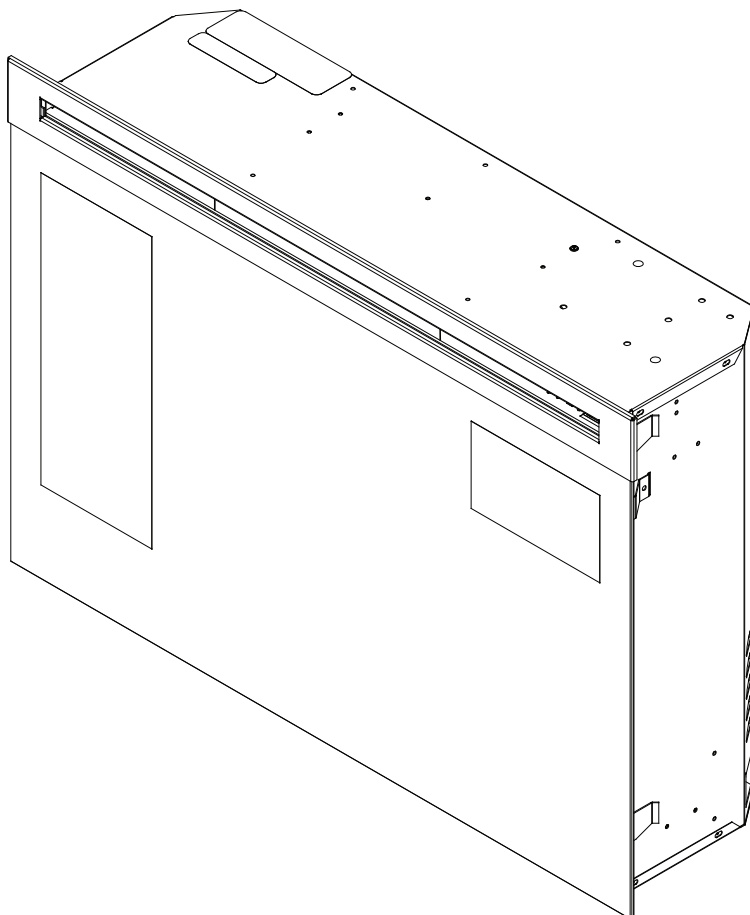


# Service Manual

## 33" Widescreen Fireplace with Full Feature Remote

Model Numbers:

**DF3033ST - MOD / to B**



**Dimplex North America Limited**  
1367 Industrial Road • Cambridge ON Canada N1R 7G8  
1-888-346-7539 • [www.dimplex.com](http://www.dimplex.com)

REV	PCN	DATE
00	11534	Jul 22, 09
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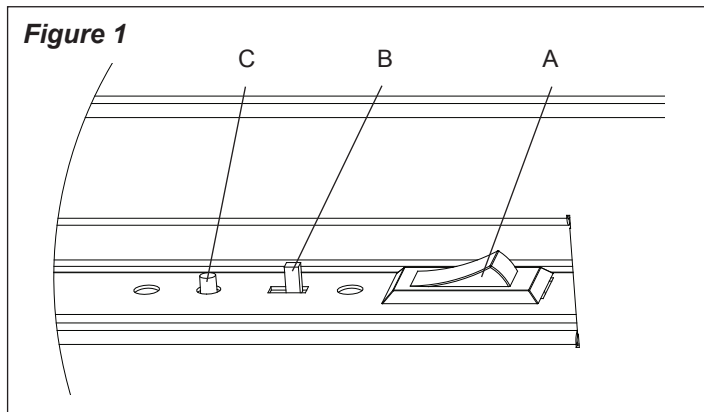
## **Table Of Contents**

Operation. . . . .	<b>Page 3</b>
Exploded Parts Diagram and Parts List. . . . .	<b>Page 5</b>
Wiring Diagram and Schematic. . . . .	<b>Page 6</b>
Light Bulb Replacement . . . . .	<b>Page 7</b>
Mirror Replacement. . . . .	<b>Page 7</b>
3 Position On/Off Switch Replacement . . . . .	<b>Page 7</b>
Heater On/Off Switch Replacement . . . . .	<b>Page 8</b>
Light Dimmer Replacement. . . . .	<b>Page 8</b>
Flame Action Control Replacement. . . . .	<b>Page 9</b>
Flicker Motor/Flicker Rod Replacement . . . . .	<b>Page 9</b>
Thermostat Control Replacement . . . . .	<b>Page 10</b>
Remote Control Board Replacement. . . . .	<b>Page 11</b>
Log Driver Control Board Replacement. . . . .	<b>Page 11</b>
Heater Assembly Replacement. . . . .	<b>Page 12</b>
Power Cord Replacement . . . . .	<b>Page 13</b>

## Operation

### Electric Fireplace Manual Control

The manual controls for the fireplace are located in the upper right hand corner (Figure 1).



#### A. Main On/Off Switch

Supplies power to the 3 position manual control switch.

#### B. 3 Position Manual Control Switch

**Remote (left position):** The unit is operated with the remote control.

**Flame (center position):** The flame effect is turned ON.

**Flame & Heat (right position):** The flame effect and heater are turned ON simultaneously. When the manual control is in the **Flame & Heat** position the heater does not run on the remote operated thermostat.

**! NOTE:** When the manual control switch is in the **Flame** and **Flame & Heat** positions, the fireplace unit will not operate with the remote control.

#### C. Initialization Button

Used to synchronize the remote control.

### Resetting The Temperature Cutoff Switch

Should the heater overheat, an automatic switch will turn the heater off and it will not come back on without being reset. The temperature cutoff switch can be reset by unplugging the unit, waiting five (5) minutes and plugging the unit back in.

**! CAUTION:** If you need to continuously reset the heater, unplug the unit and call Dimplex North America Limited at 1-888-346-7539. Please have your model and serial number ready when calling.

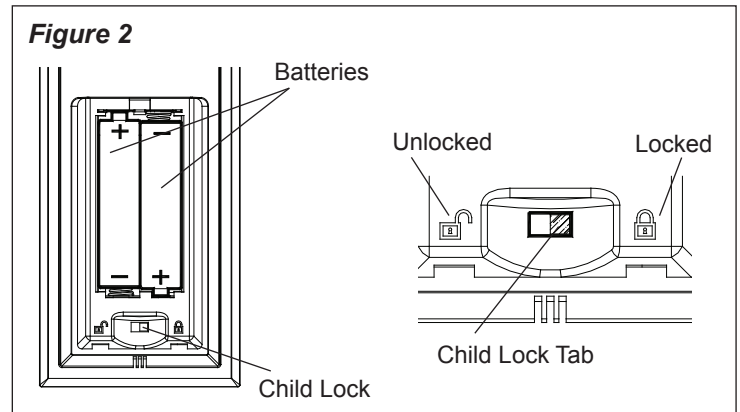
### Remote Control

The 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 243 independent frequencies to prevent

interference with other units.

### Battery Installation



1. Depress tab on the battery cover on the back of the remote transmitter and remove battery cover (Figure 2).



2. Install two (2) AAA batteries into the remote control (originally included).
3. Ensure child lock is in the “unlocked” position.
4. Replace the battery cover.

**! NOTE:** When the “BAT” symbol is present on the remote control it is recommended to replace the batteries promptly, to maintain full functionality of the remote/fireplace. The remote transmitter has a battery backup time of only several hours.


### Initializing The Remote Control

1. Plug cord into 120 Volt wall outlet.
2. Ensure the Main On/Off switch located in the switch box on the fireplace in the upper right hand corner is in the **ON** position.
3. Set the 3 position manual control to the **Remote** position (left position).
4. Press and hold the Initialization Button on the unit.
5. While holding the Initialization Button, press the Flame/Heat ON/OFF  button on the remote control transmitter.
6. Release the Initialization Button on the unit.
7. Press the Flame/Heat On/Off button  to turn the Flame/Heat function on.

### Frequency Interference

If the fireplace does not respond properly to the remote control, the remote operating frequency may have to be reset. The remote control can send another frequency code to the circuit board to eliminate interference.

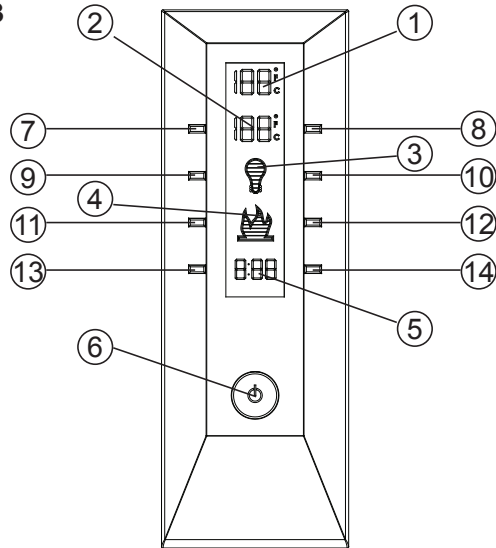
1. Simultaneously press the “**Temperature Down**” button and the “**Flame Speed Down**” button on the remote control.

2. "COD" will appear in place of the sleep timer digits.
3. Release the "Temperature Down" button and the "Flame Speed Down" button.
4. Press the Initialization Button on the unit.
5. Press the  button on the remote.

Your remote will now have a different frequency communicating with the fireplace.

## Remote Control Functions (Figure 3)

Figure 3



- |                        |                      |
|------------------------|----------------------|
| 1. Room Temperature    | 8. Temperature Up    |
| 2. Set Temperature     | 9. Dimmer Down       |
| 3. Dimmer              | 10. Dimmer Up        |
| 4. Flame Speed Control | 11. Flame Speed Down |
| 5. Sleep Timer         | 12. Flame Speed Up   |
| 6. Flame & Heat On/Off | 13. Sleep Timer Down |
| 7. Temperature Down    | 14. Sleep Timer Up   |

### 2. Set Temperature

Press **6. Flame & Heat On/Off** button to turn fireplace on.

Press **8. Temperature Up** to raise thermostat.

Press **7. Temperature Down** to lower thermostat.

Press both **8. Temperature Up** and **7. Temperature Down** to change °F to °C.

### 3. Dimmer

Press the **6. Flame/Heat On/Off** button  to turn the Flame/Heat on.

Repeatedly press the **10. Dimmer Up** or **9. Dimmer Down** button to decrease or increase the brightness of the upper lights.

### 4. Flame Speed

Press the **6. Flame & Heat On/Off** button  to turn the Flame/Heat on.

Press the **12. Flame Speed Up** button to increase the speed of the flame.

Press the **11. Flame Speed Down** to decrease the speed of the flame.

### 5. Sleep Timer

The Sleep Timer automatically shuts off the fireplace after a preset time (from 30 minutes to 8 hours).


Press the **6. Flame & Heat On/Off** button  to turn the fireplace ON.

To set the sleep timer press the **14. Sleep Timer Up** button.

Set the timer from 30 minutes through 8 hours. The fireplace will automatically turn off when the sleep timer reaches zero (0) minutes.

The sleep timer can be cancelled at any time by pressing the **13. Sleep Timer Down** button repeatedly until the sleep timer displays "0".

### 6. Flame & Heat On/Off Button

Press the **6. Flame & Heat On/Off** button  to turn the Flame/Heat function ON. When **2. Set Temperature** is higher than **1. Room Temperature** the heat will come on. To turn the heat off, lower the **2. Set Temperature** so that it's setting is lower than the **1. Room Temperature**. The default temperature setting is 72°F (22°C).

**! NOTE:** When using the remote control the heater runs on a thermostat. Press the **8. Temperature Up** or **7. Temperature Down** buttons to adjust the set temperature. Once the desired set temperature is reached the heater will turn off. The heater will cycle on and off to maintain the desired set temperature.

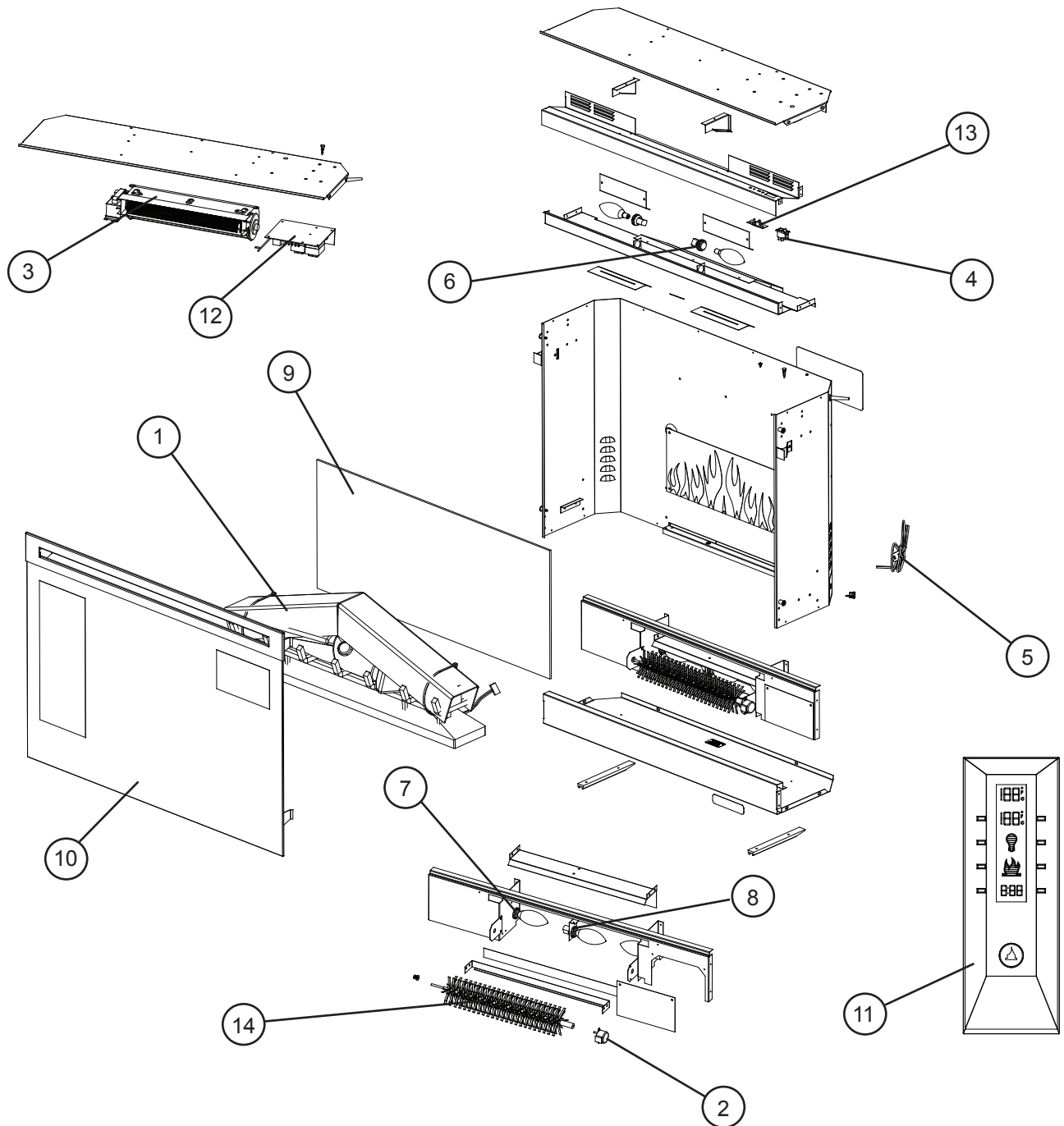
### Child Lock (Figure 2)

1. Depress tab on the battery cover on the back of the remote transmitter and remove the battery cover (Figure 5).
2. Move **Child Lock** tab to the right to lock the remote transmitter.
3. Move **Child Lock** tab back to the left to unlock the remote transmitter.
4. Replace the battery cover.

**! NOTE:** To temporarily unlock the remote transmitter press (in order) **7. Temperature Down** then **8. Temperature Up** then **9. Dimmer Down**.

When the remote transmitter's backlight is illuminated the **Child Lock** is bypassed. When the backlight is off the **Child Lock** is re-activated.

## Exploded Parts Diagram



## Replacement Parts List

### DF3033ST

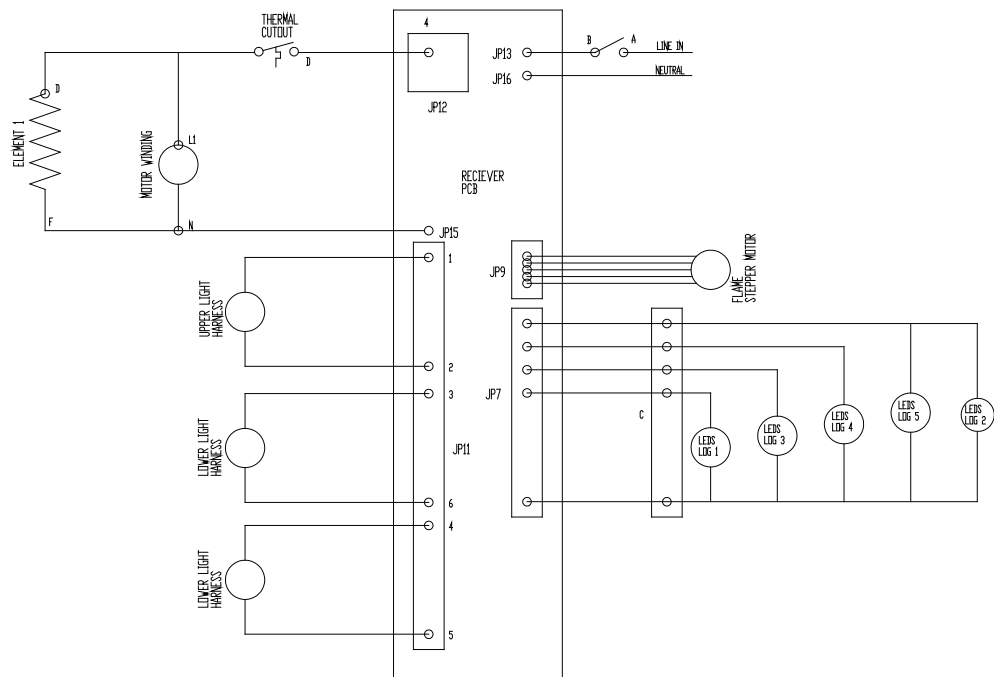
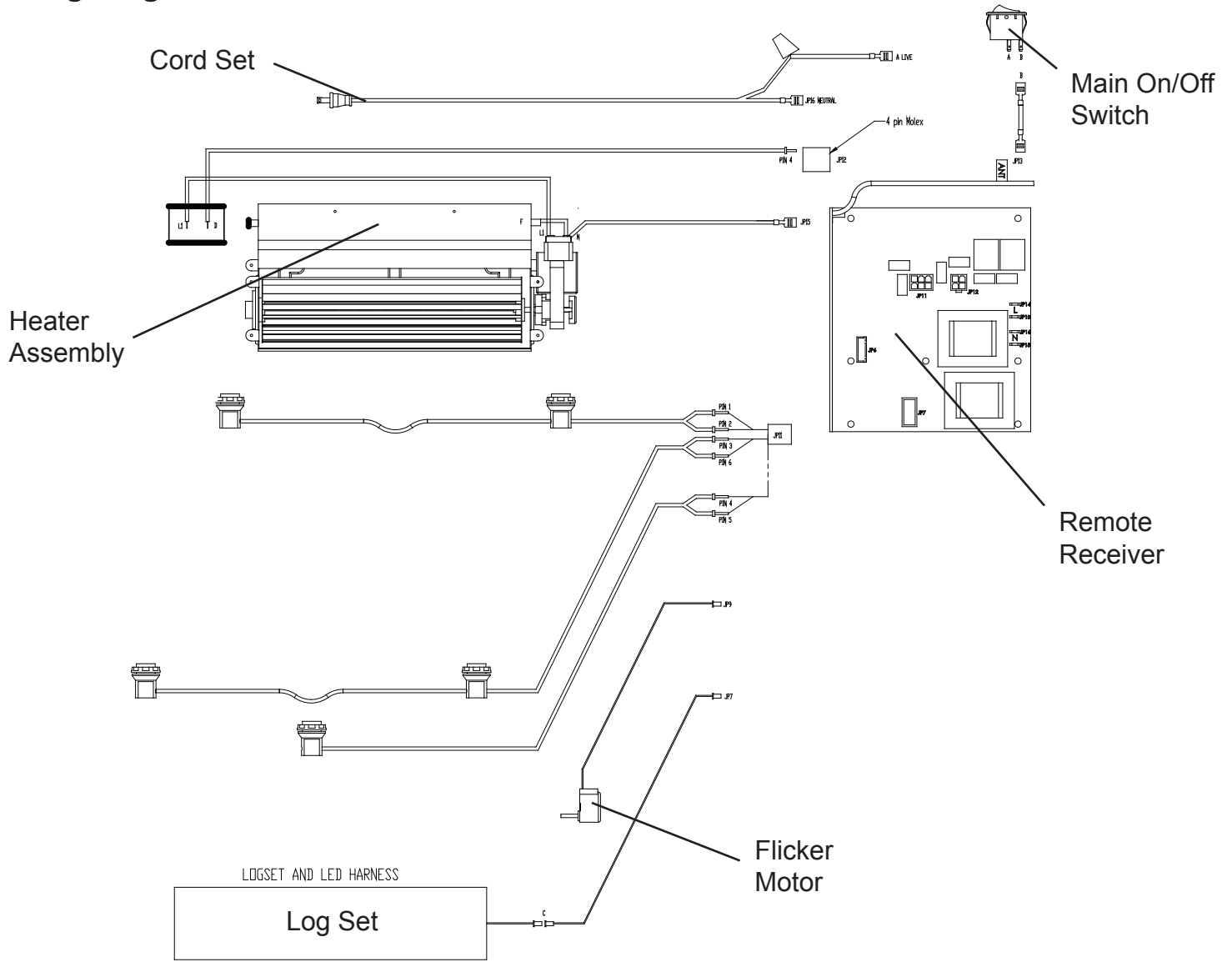
Part Number

6905060159

#### Replacement Part:

1. 30" Urethane Log Set	0439070100RP	8. Lower Light Socket (center)	2500150200RP
2. Flicker Motor	3000240200KIT	9. Mirror - Silvered	5900910100RP
3. Heater Assembly (w/cutout)	2000330200RP	10. Front Glass	1015270159RP
4. Main On/Off Switch	2800070200RP	11. Remote Transmitter	3000350100RP
5. Cord Set	4100040300RP	12. Remote Receiver	3000300200RP
6. Upper Light Harness	2500400200RP	13. Manual/Remote Switch Board	3000300300RP
7. Lower Light Harness (outer pair)	2500400100RP	14. Flicker Rod	5901250100RP

# Wiring Diagram



## Light Bulb Replacement

Allow at least five (5) minutes for light bulbs to cool before touching bulbs to avoid accidental burning of skin.

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 disappears. There are three (3) bulbs under the Log Set, which generate the flames and embers, and two (2) bulbs above the log 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 60 CTC.

### Do not exceed 60 Watts per bulb

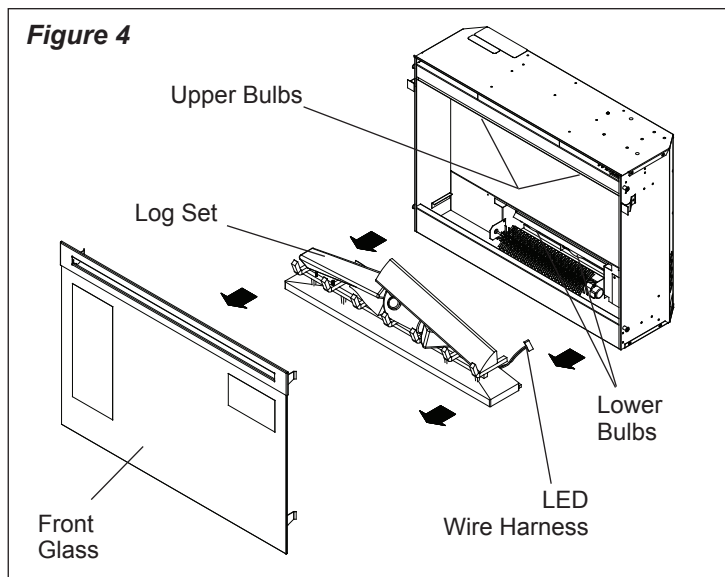
### Helpful Hints

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 as the Log Set contains LED's and wires.

### To access the lower light bulb area (Figure 4):

1. Slide fireplace out from mantel.
2. Remove front glass assembly (glass lifts off).

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



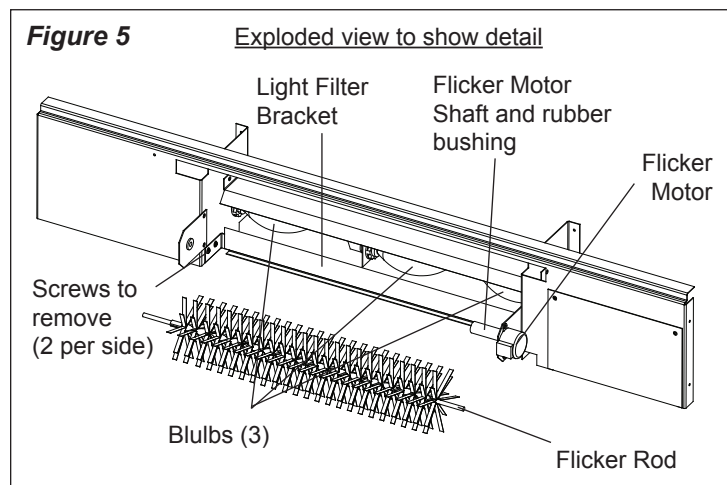
3. Pull the front edge of the plastic Ember Bed or plastic grate up and forward until the rear tab releases from the ledge located at the bottom of the mirror.

**IMPORTANT:** Only handle the Log Set by the Ember Bed.

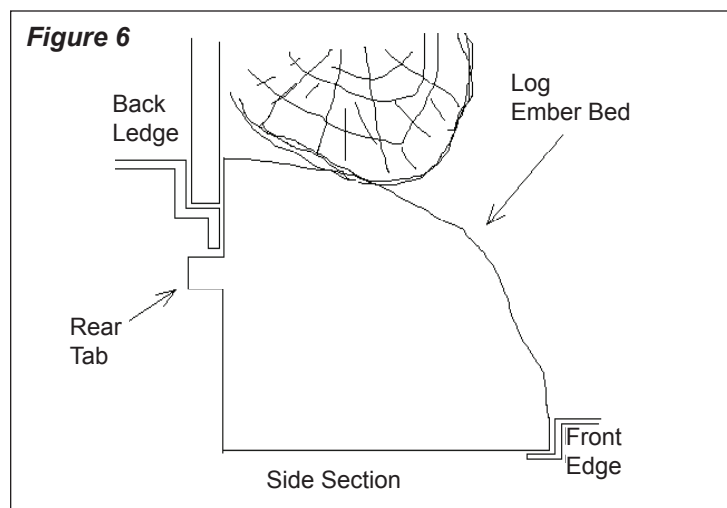
**NOTE:** Log Set fits tightly into firebox, some force may

be necessary to remove.

4. Set Log Set in front of fireplace.
  5. Disconnect the Log Set LED wire harness from unit.
  6. Gently pull the Flicker Rod to the right as far as possible into the rubber bushing on the Flicker Motor shaft (Figure 5).
- NOTE:** When removing the Flicker Rod, damage may occur if bent excessively. If the Flicker Rod is damaged, replace to insure proper operation.
7. Cautiously bend the Flicker Rod enough so that the remaining end of the Flicker Rod clears the plastic bushing on the left (Figure 5).



8. Remove the Light Filter Bracket by unscrewing four (4) Philips screws as shown in Figure 5.
9. Replace bulb(s) as needed.
10. Reinstall the Light Filter Bracket and Flicker Rod.
11. Reconnect the Log Set LED wire harness.
12. Replace the Log Set by inserting the front edge of the fireplace and push down on the rear edge of the Ember Bed until it snaps into place (Figure 6).



**! NOTE:** Ensure the Log Set is installed tightly under the back ledge to prevent light leakage.

### 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 15 Watts per bulb**

**To access the upper light bulb area (Figure 4):**

1. Remove front glass assembly (glass lifts off).

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

2. Upper bulbs are located in the upper left and upper right corners of fireplace (Figure 4).
3. Remove the upper light cover for each bulb (two (2) Philips screws each).
4. Unscrew bulbs counter clockwise.
5. Insert new bulbs.
6. Re-install upper light bracket.
7. Replace glass assembly.

### Mirror Replacement

If the fireplace was operating prior to servicing allow at least 10 minutes for light bulbs and heating element to cool off to avoid accidental burning of skin.

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

### Replacement Procedure

1. Slide fireplace out from mantel.
2. Remove front glass assembly (glass lifts off).

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

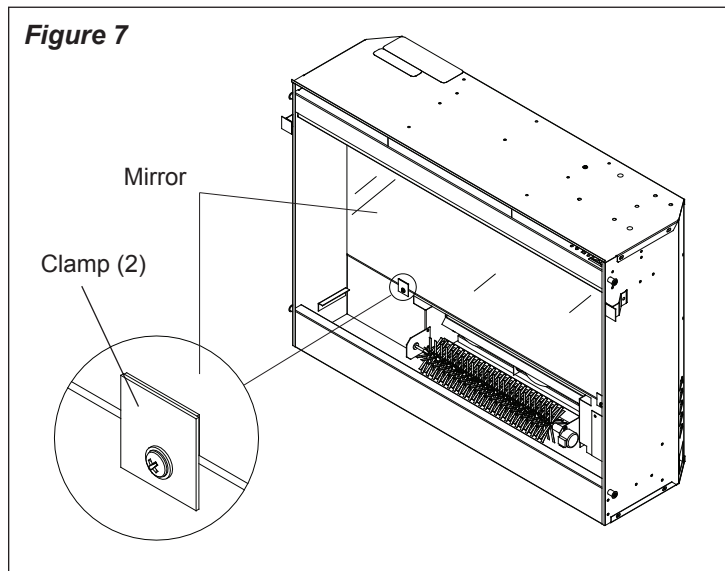
3. Pull the front edge of the plastic Ember Bed or plastic grate up and forward until the rear tab releases from the ledge located at the bottom of the mirror.

**! IMPORTANT:** Only handle the Log Set by the Ember Bed.

**! NOTE:** Log Set fits tightly into firebox, some force may be necessary to remove.

4. Set Log Set in front of fireplace.
5. Disconnect the Log Set LED wire harness from unit (Figure 4, Page 7).
6. Loosen but do not remove the two (2) Philips screws that clamp the mirror in place, and swivel down so that

**Figure 7**



the clamp clears the edge of the mirror (Figure 7).

7. Push the mirror out from behind to clear the frame and remove.
8. Insert replacement mirror top end first and lay the bottom end gently in the bottom track of the frame.
9. Swivel the clamps back into place. Tighten clamps and reassemble fireplace in reverse order as described above.

### Main On/Off Switch Replacement

If the fireplace was operating prior to servicing allow at least 10 minutes for light bulbs and heating element to cool off to avoid accidental burning of skin.

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

### Main On/Off Switch Replacement Procedure:

1. Remove the firebox from the mantel.
2. Remove front glass assembly (glass lifts off).

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

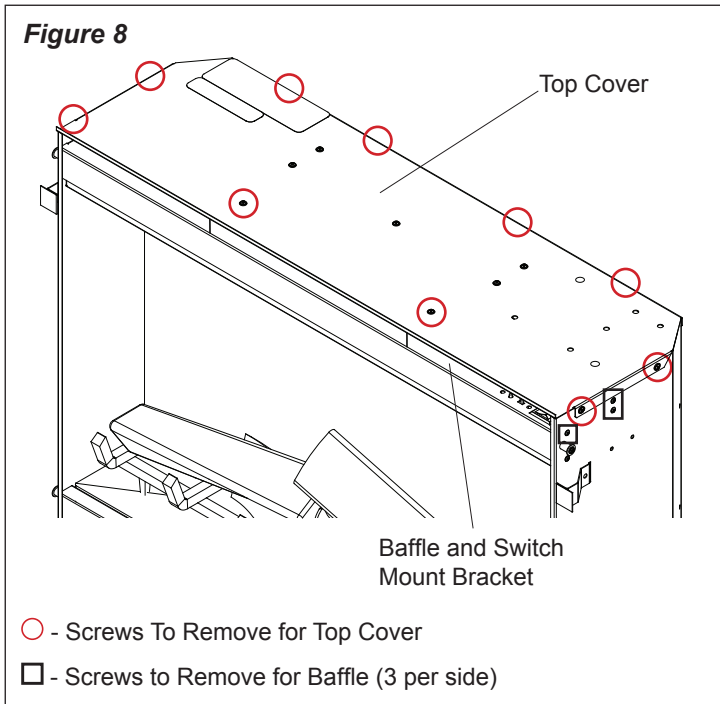
3. Remove the 10 Philips screws that fasten the top cover to the rest of the firebox. There are: two (2) screws on each side along the top edge; four (4) screws on the back along the top edge, and two (2) screws on the top of the fireplace (see Figure 8, Page 9).
4. Flip the top panel over and rest it on the top of the fireplace, across the rear half of the unit.

**⚠ CAUTION:** Use caution when flipping top panel over as there are components attached to the top panel which are wired to the internal cavity of the fireplace.

5. Referring to Figure 8, remove the three (3) Philips screws on each side of the fireplace to release the Baffle and Switch Mount Bracket (six (6) screws in total).

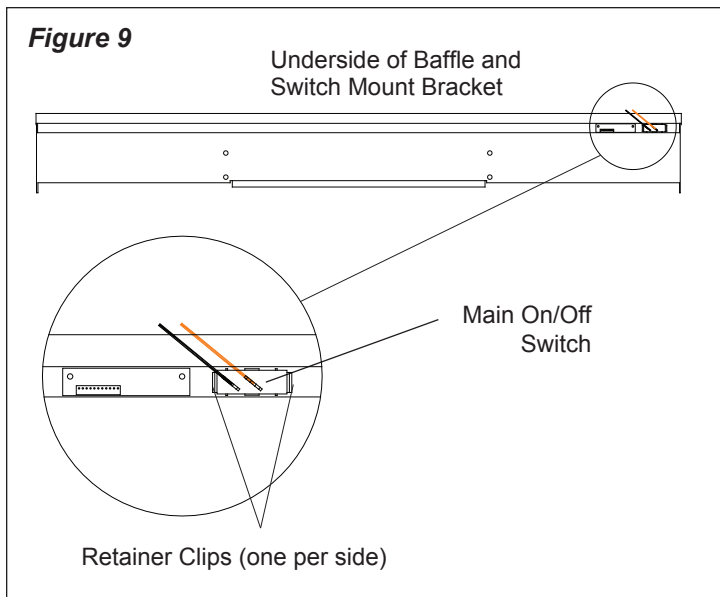


**Figure 8**



6. Flip the Baffle and Switch Mount Bracket over and rest it across the front half of the fireplace.
7. Locate the Main On/Off Switch mounted on the underside of the Baffle panel on the right side (Figure 9) and disconnect the two (2) wiring clips noting their original locations.

**Figure 9**



5. Depress the two (2) retainer clips on the sides of the switch and push the switch out of the bracket.
6. Properly orientate the new switch and the wiring clips as before.
7. Reassemble in the reverse order as above.

## **Switch Board Replacement**

If the fireplace was operating prior to servicing allow at least 10 minutes for light bulbs and heating element to cool off to avoid accidental burning of skin.

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

## **Replacement Procedure**

1. Remove the firebox from the mantel.
2. Remove front glass assembly (glass lifts off).

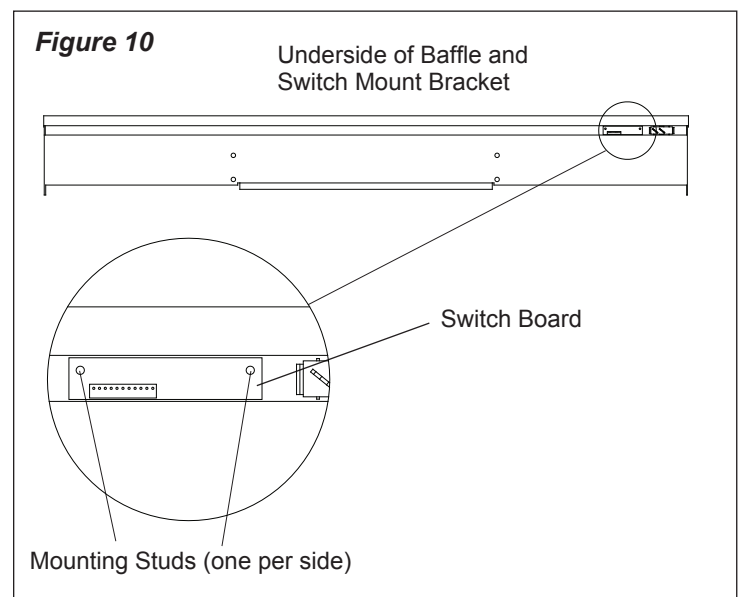
**⚠ CAUTION:** Even though the glass is safety glass it may break if bumped, struck or dropped. Care must be taken when handling the glass.

3. Remove the 10 Philips screws that fasten the top cover to the rest of the firebox. There are: two (2) screws on each side along the top edge; four (4) screws on the back along the top edge, and two (2) screws on the top of the fireplace (see Figure 8, Page 9).
4. Flip the top panel over and rest it on the top of the fireplace, across the rear half of the unit.

**⚠ CAUTION:** Use caution when flipping top panel over as there are components attached to the top panel which are wired to the internal cavity of the fireplace.

5. Referring to Figure 8, remove the three (3) Philips screws on each side of the fireplace to release the Baffle and Switch Mount Bracket (six (6) screws in total).
6. Flip the Baffle and Switch Mount Bracket over and rest it across the front half of the fireplace.
7. Locate the Switch Board mounted on the underside of the Baffle panel on the right side (Figure 10) and disconnect the white wire harness that leads to the main circuit board.
8. The Switch Board is fastened to the underside of the Baffle and Switch Mount Bracket by two (4) mounting studs, one on each side (Figure 10). Squeeze both mounting stud's clasp to release and remove the Switch Board.

**Figure 10**



6. Properly orientate the new Switch Board, snap onto the mounting studs and reconnect the wire harness as before.
7. Reassemble in the reverse order as above.

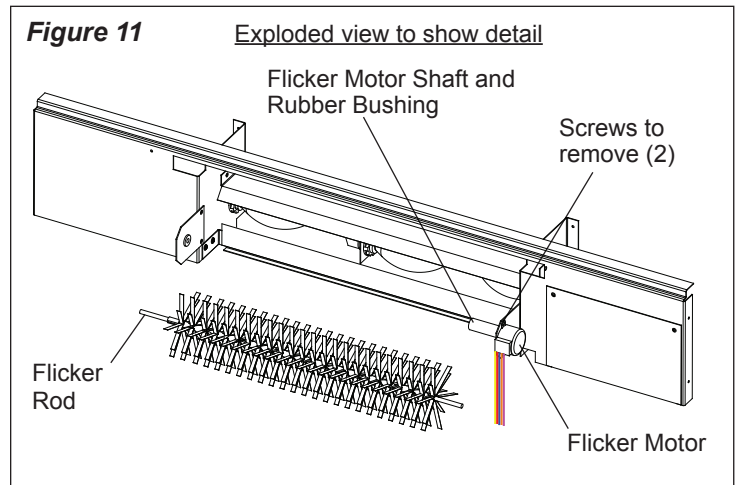
## **Flicker Motor/Flicker Rod Replacement**

If the fireplace was operating prior to servicing allow at least 10 minutes for light bulbs and heating element to cool off to avoid accidental burning of skin.

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

### **Replacement Procedure:**

1. Slide fireplace out from mantel.
  2. Remove front glass assembly (glass lifts off).
- ⚠ CAUTION:** Even though the glass is safety glass it may break if bumped, struck or dropped. Care must be taken when handling the glass.
3. 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 mirror.
- ! IMPORTANT:** Only handle the Log Set by the Ember Bed.
- ! NOTE:** Log Set fits tightly into firebox, some force may be necessary to remove.
4. Set Log Set in front of fireplace.
  5. Disconnect the Log Set LED wire harness from unit (Figure 4, Page 7).
- ! NOTE:** When removing the Flicker Rod, damage may occur if bent excessively. If the Flicker Rod is damaged, replace to insure proper operation.
6. Gently pull the Flicker Rod to the right as far as possible into the rubber bushing on the Flicker Motor shaft (Figure 11).
- ! NOTE:** When removing the Flicker Rod, damage may occur if bent excessively. If the Flicker Rod is damaged, replace to insure proper operation.
7. Cautiously bend the Flicker Rod enough so that the remaining end of the Flicker Rod clears the plastic bushing on the left (Figure 11).
  8. Remove Flicker Rod (replace and reassemble if Flicker Motor does not need to be changed at this point).
  9. Before removing the Flicker Motor, cut the Flicker Motor wires (five (5) in total) close to the Flicker Motor end with wire cutters.
  10. 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.
11. Remove the motor by unscrewing the two (2) Philips screws that attach the motor to the mounting bracket (Figure 11).
  11. Discard old Flicker Motor.
  12. Pick up new Flicker Motor and cut wire leads to 3 1/2 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 9 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.
  16. Repeat the process for the four (4) remaining wires. ENSURE THAT ALL WIRES ARE PAIRED BY COLOUR IN EACH CONNECTOR.
  17. Properly orientate and secure the replacement Flicker Motor to the bracket with screws removed in step 9.
  18. Replace rubber bushing on motor shaft.
  19. Replace Flicker Rod.
  20. Reassemble firebox in reverse order as above and replace in mantel.

## **Remote Control Replacement**

Remote Control hand held transmitters require no replacement procedure however, a reinitialization procedure may need to be followed. Refer to Page 3 for the Remote Initialization procedure.

If the fireplace was operating prior to servicing allow at least 10 minutes for light bulbs and heating element to cool off to avoid accidental burning of skin.

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

### **Receiver Replacement Procedure:**

1. Remove the firebox from the mantel.
2. Remove front glass assembly (glass lifts off).

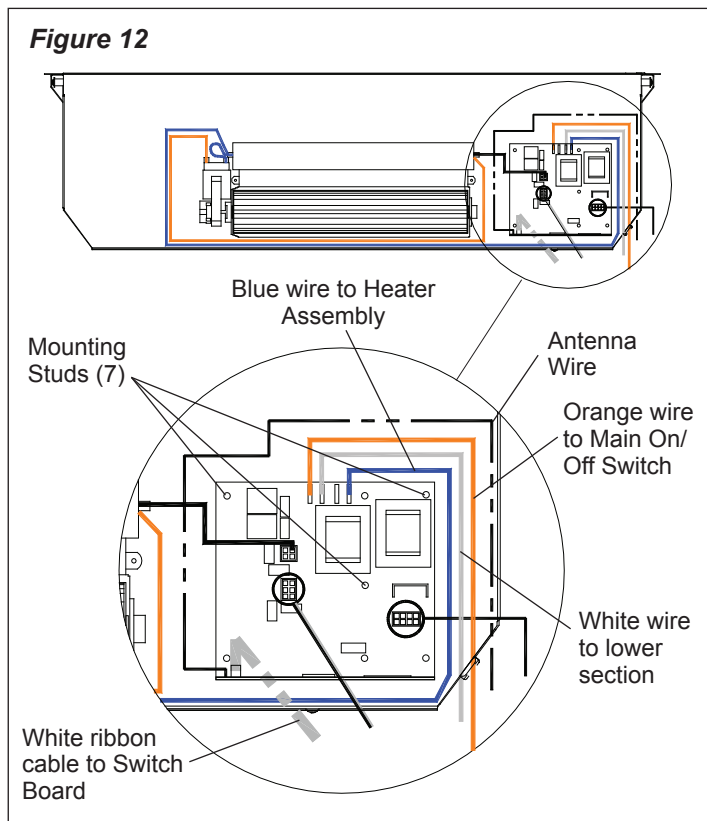
**⚠ CAUTION:** Even though the glass is safety glass it may break if bumped, struck or dropped. Care must be taken when handling the glass.

3. Remove the 10 Philips screws that fasten the top cover to the rest of the firebox. There are: two (2) screws on each side along the top edge; four (4) screws on the back along the top edge, and two (2) screws on the top of the fireplace (see Figure 8, Page 9).

4. Flip the top panel over and rest it on the top of the fireplace.

**⚠ CAUTION:** Use caution when flipping top panel over as there are components attached to the top panel which are wired to the internal cavity of the fireplace.

5. Locate the Remote Control Receiver on the right side of the upturned top panel (Figure 12).



6. Remove the one (1) blue, one (1) orange, one (1) white wire leads and three (3) cable connectors from the Remote Control Receiver Board as shown in Figure 15, noting their original locations.

**! NOTE:** The Antenna Wire is permanently attached to the fixed daughter card of the Remote Control Receiver Board (Figure 12). Do not attempt to remove.

7. The Remote Control Receiver Board is fastened to the underside of the top panel by seven (7) Mounting Studs, one (1) in each corner, and three (3) down off center as shown in Figure 12. Either squeeze each mounting stud's clasp to release, or use side cutters to cut and remove each of the Mounting Studs on the board.

**! NOTE:** If mounting studs are cut, replacement mounting studs will need to be inserted through the top panel. Replacement Mounting Studs are supplied.

8. Clear both ends of each cut Mounting Stud from the control board and the top panel.
9. Properly orientate the new Remote Control Receiver Board and re-connect all of the wiring connections (refer to notes taken in step 6 and Figure 12).
10. Reassemble in the reverse order as above.

## Heater Assembly Replacement

If the fireplace was operating prior to servicing allow at least 10 minutes for light bulbs and heating element to cool off to avoid accidental burning of skin.

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

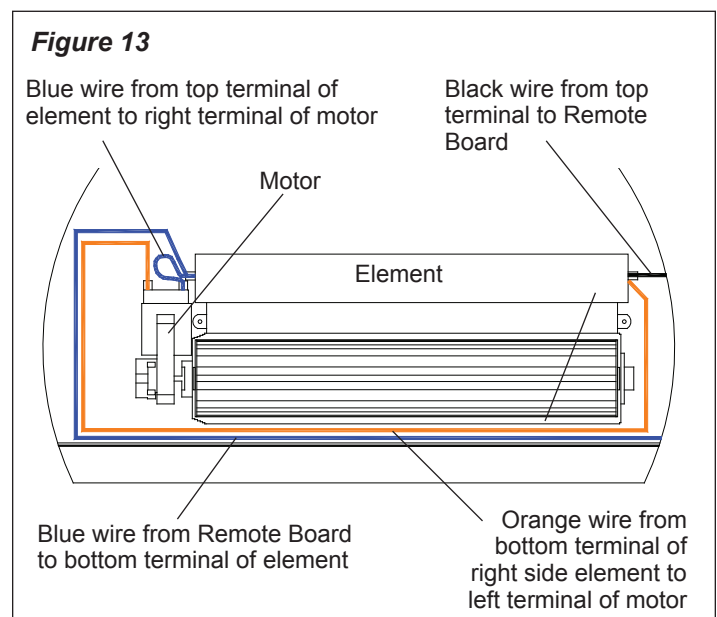
## Replacement Procedure

1. Remove the firebox from the mantel.
2. Remove front glass assembly (glass lifts off).

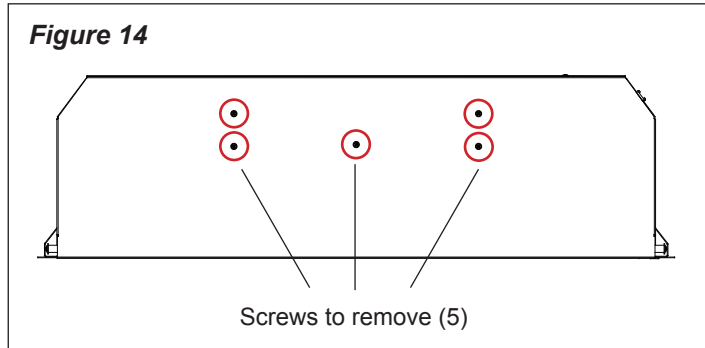
**⚠ CAUTION:** Even though the glass is safety glass it may break if bumped, struck or dropped. Care must be taken when handling the glass.

3. Remove the 10 Philips screws that fasten the top cover to the rest of the firebox. There are: two (2) screws on each side along the top edge; four (4) screws on the back along the top edge, and two (2) screws on the top of the fireplace (see Figure 8, Page 9).
4. Flip the top panel over and rest it on the top of the fireplace.

**⚠ CAUTION:** Use caution when flipping top panel over as there are components attached to the top panel which are wired to the internal cavity of the fireplace.



5. Locate the Heater Assembly in the center of the upturned top panel (Figure 13).
6. Disconnect all six (6) wire connections on the Heater Assembly, noting all of their original positions.
6. Turn the top panel over and while supporting the Heater Assembly and panel in one hand, remove the five (5) heater mounting screws, noting the center screw is of a larger diameter (Figure 14).



7. Separate the Heater Assembly from the top panel.
8. Properly orientate the new Heater Assembly and re-connect all of the wiring connections (use Figure 13 as reference).
9. Reassemble in the reverse order as above.

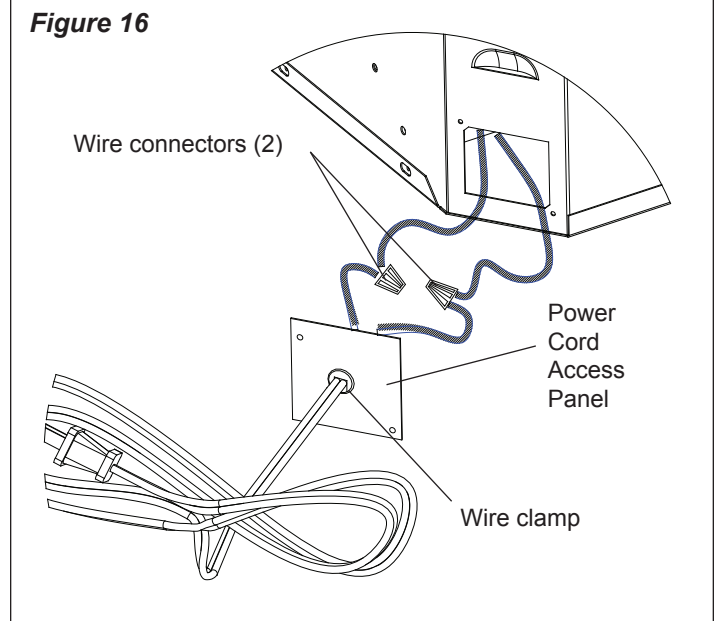
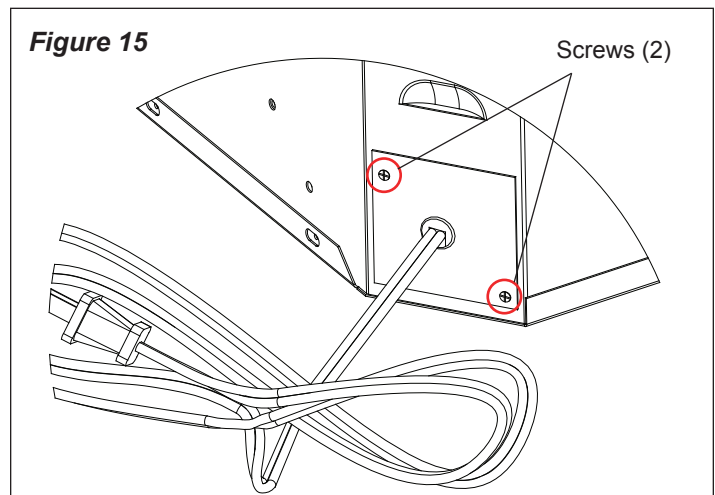
## **Power Cord Replacement**

If the fireplace was operating prior to servicing allow at least 10 minutes for light bulbs and heating element to cool off to avoid accidental burning of skin.

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

### **Replacement Procedure:**

1. Remove the firebox from the mantel.
2. Turn unit so that the right, rear corner of the fireplace is most accessible.
3. Remove the two (2) Philips screws that fasten the Power Cord Access Panel to the rest of the firebox (Figure 15).
5. Pull the access panel away from the firebox and pull enough slack of power cord from within the firebox to work with. Use caution as the power cord is connected to internal components (Figure 16).
6. Using pliers, squeeze the sides of the plastic wire clamp on the inside of the Access Panel and push it through the panel.
7. Release clamp from power cord.
8. Unscrew the two (2) wire connectors as shown in Figure 16. The power cord is now able to be fed through the access panel and set aside.
9. Feed replacement power cord through opening in the access panel and secure with clamp.
10. The wide blade of the power plug is designed to be live and is connected to the cord side with ridges in the rubber of the cord. Use one of the wire connectors from



step 8 to connect this side of the Power Cord with the white live line from the firebox.

The other side of the Power Cord will have stamped writing in the rubber sheath. Use the second wire connector from step 8 to connect this side of the Power Cord with the black neutral line from the firebox.

11. Place cord slack back into the firebox chassis and reattach the Power Cord Access Panel with the two (2) Philips screws removed in step 3.
12. Replace firebox back into mantel and plug in.