

## Service Manual

**Model**  
**BLF5051**

**UL Part Number**  
**6909520100**

**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.

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

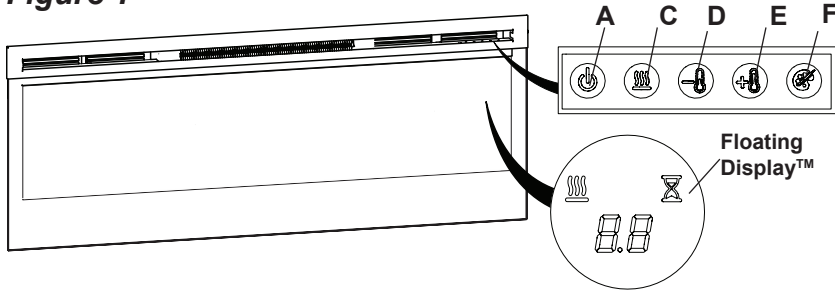
! **NOTE:** Procedures and techniques that are considered important enough to emphasize.

⚠ **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



**⚠ WARNING:** This electric firebox must be properly installed before it is used.

The unit can be controlled by either the manual controls which are located on the upper right of the fireplace or the remote (Figure 1 & 12).

The fireplace is supplied with an IR multifunction remote control.

**! NOTE:** To operate correctly, the remote control must be pointed towards the Floating Display™.

## A. Standby

Turns the unit On and Off.


→ Activated by pressing the Standby button on the remote or the unit.

- The unit will turn on with the same functions that it was set to when it was turned Off and the intake temperature will be indicated on the On Screen Display.

**! NOTE:** When any button is pressed the intake temperature will be displayed on the On Screen Display for 5 seconds.


## B. Flame Effects


Turns the flame effect On and Off.

→ Activated by pressing the  button on the remote.

## C. Heat ON/OFF


Cycles the unit sequentially through the 3 settings: Low Heat, High Heat and Off.

→ Activated by pressing the  button on the unit or the remote.

- Indicated by the  icon and the intake temperature being displayed on the On Screen Display, for 5 seconds before turning off.

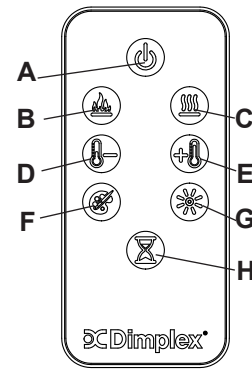
**! NOTE:** After the heater is switched off, there is a 60 second fan delay, where the fan will continue running before turning off.

**! NOTE:** The unit can be operated in **Heat Only Mode**.

When the unit is only running with the heater, the  icon will continuously be displayed on the On Screen Display.



**! 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.

Figure 2





## D & E. Thermostat Controls

Adjusts the temperature set point to your individual requirements. 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. The default temperature setting is 72°F (22°C).



→ Adjusted by pressing the  to decrease the set point and the  to increase the set point on the unit or the remote.



- The On Screen Display will indicate the temperature set point as it is adjusted.

**! NOTE:** Holding the  and the  buttons down for two seconds, on the unit, will change the temperature from °C to °F, or vice versa.

## Disable Heat

If desired, depending on the season, the heater on the unit can be disabled. The unit will operate in the same fashion, with remainder of the controls.

Pressing the  and  buttons on the unit at the same time and holding for 2 seconds will disable and enable the heater.


**! NOTE:** When the heater has been disabled and either the  or the  is pressed the On Screen Display will indicate "--".

## F. Color Themes

Different presets of ambient lighting color combinations contained in the unit.

→ Changed by repeatedly pressing the corresponding button on the remote or the unit.

- Cycles through the different preset ambient lighting settings of the unit, this includes different combinations of colours of the flame base and media lighting.

**! NOTE:** The last theme of the cycle is a prism where the unit cycles through a variety of colours. Pressing the  button stops the cycling and holds the unit on the preferred color, indicated by a "U" - Unfreeze or a "F" - Freeze on the display.


## G. Brightness


Changes the brightness of the lights in the unit.

- Adjusted by repeatedly pressing the corresponding button on the remote.
- Indicated by the second digit on the Floating Display™ changing to show: “H” (high), and “L” (low).

## H. Sleep Timer

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

- To set the timer press the timer button on either the remote or the unit, repeatedly, until the desired time is displayed.
- The On Screen Display will display the different times as it is adjusted. Once the timer has begun, pressing the  button will display the time remaining before the unit turns Off.

**! NOTE:** The Sleep Timer can be cancelled at any time by pressing the  button repeatedly until the sleep timer displays nothing.

## Resetting the Temperature Cutoff Switch

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 unplugging the unit and waiting 5 minutes before plugging the unit back in.

**! CAUTION:** If you need to continuously reset the heater, unplug the unit and call technical support at 1-888-346-7539.

## Remote Control Battery Replacement

To replace the battery:

1. Slide battery cover open on the remote control.
2. Correctly install one 3 Volt (CR2032 [longer life] or CR2025) 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. 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 and allow heater to cool before attempting any maintenance or cleaning to reduce the risk of fire, electric shock or damage to persons.

**! NOTE:** The fireplace should not be operated with an accumulation of dust or dirt on or in the unit, as this can cause a build up of heat and eventual damage. For this reason the heater must be inspected regularly, depending upon conditions and at least at yearly intervals.

### Partially Reflective Glass Cleaning

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

To remove fingerprints or other marks, the partially reflective glass can be cleaned with a damp cloth. The partially reflective glass should be completely dried with a lint free cloth to prevent water spots. To prevent scratching, do not use abrasive cleaners.

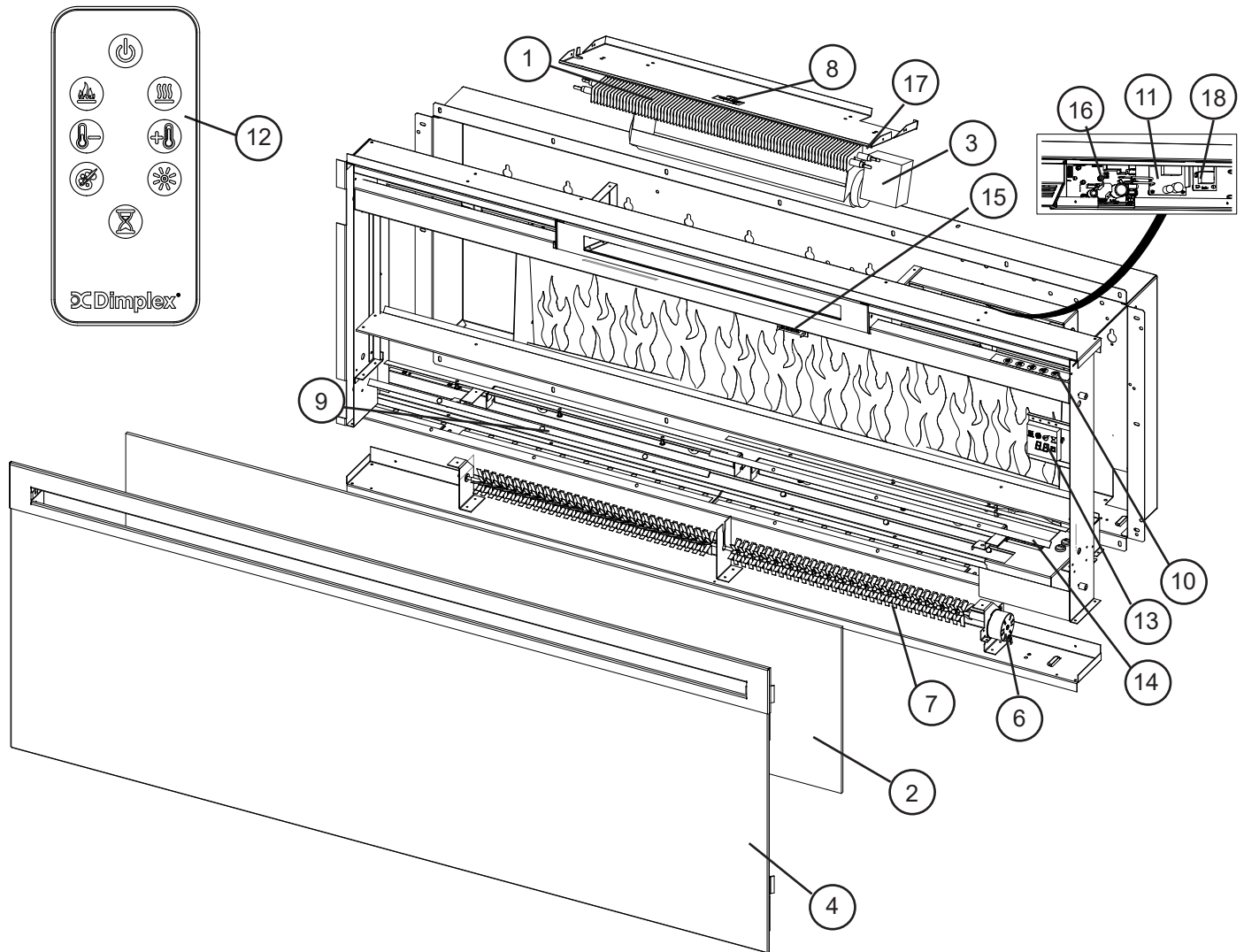
### Fireplace Surface Cleaning

Use only a damp cloth to clean painted surfaces of the fireplace. Do not use abrasive cleaners.

### Servicing

Except for installation and cleaning described in this manual, an authorized service representative should perform any other servicing.

# Exploded Parts Diagram



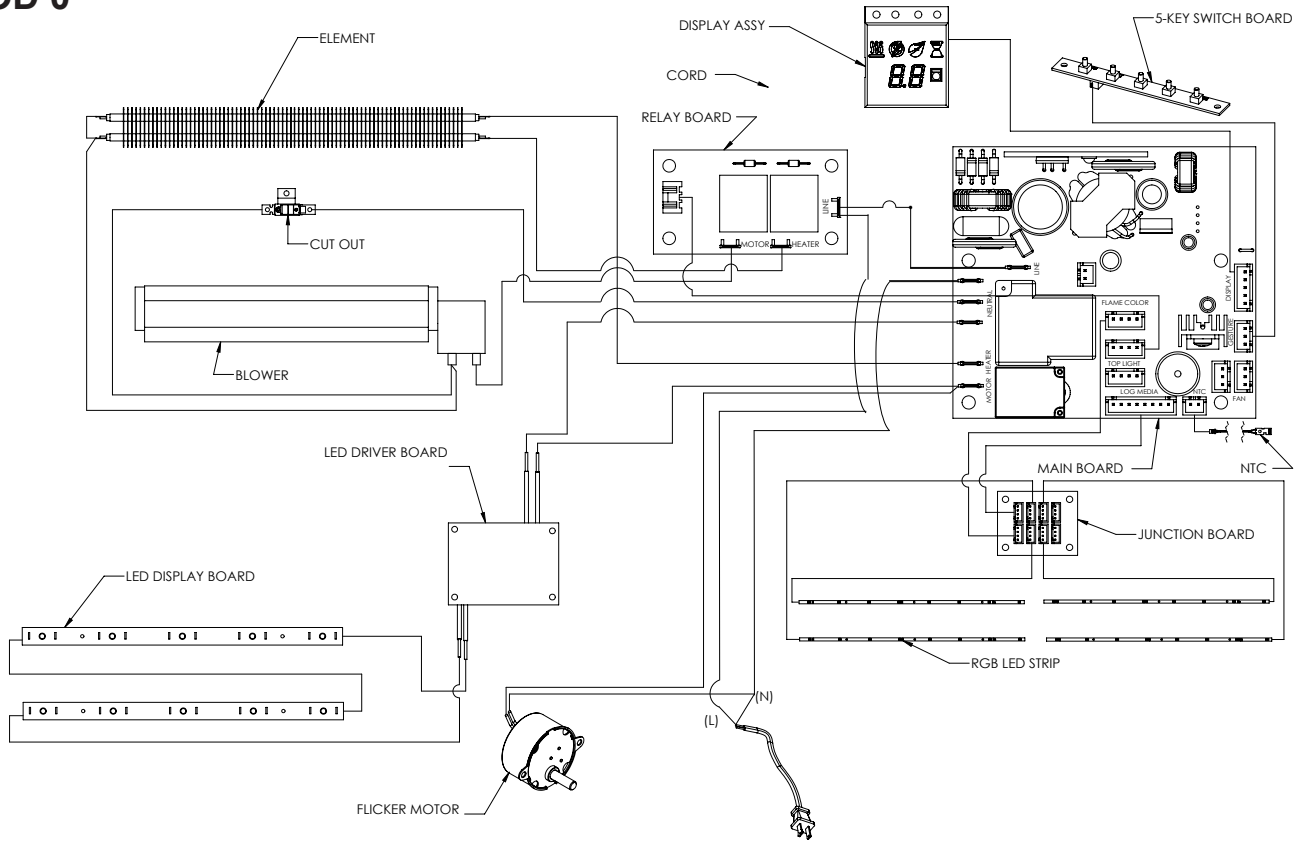
## Replacement Parts List - MOD 0-B

1. Element . . . . .	220510500RP	13. Floating Display™ Assembly . . . . .	3001470100RP
2. Partially Reflective Glass . . . . .	5901920100RP	14. Media LED Light Assembly . . . . .	3001570300RP
3. Blower . . . . .	5300260100RP	15. Electronics Junction Board . . . . .	3001490100RP
4. Front Glass . . . . .	5901930100RP	16. Main Control Board . . . . .	3001260200RP
5. Power Cord Mod 0 . . . . .	4100040900RP	17. Thermistor . . . . .	3001380200RP
Mod A . . . . .	4100190600RP	18. Relay Board . . . . .	3001360100RP
6. Flicker Motor . . . . .	2000500100RP	19. Hardware Kit . . . . .	9600350100RP
7. Flicker Assembly . . . . .	5901910100RP	20. Large Ice Chunk Media . . . . .	1400130200RP
8. Cutout . . . . .	2300201700RP	21. Small Ice Crystal Media . . . . .	1400150100RP
9. LED Light Panel . . . . .	3000830200RP	22. Front Glass Mounting Hardware . . . . .	9600420100RP
10. Switch Board . . . . .	3001480100RP		
11. LED Driver Board . . . . .	3000810100RP	<b>OEM Accessory</b>	
12. Remote Control . . . . .	6700520200RP	River Rocks . . . . .	DFS1314
		Driftwood Accessory Kit . . . . .	LF50DWS-KIT

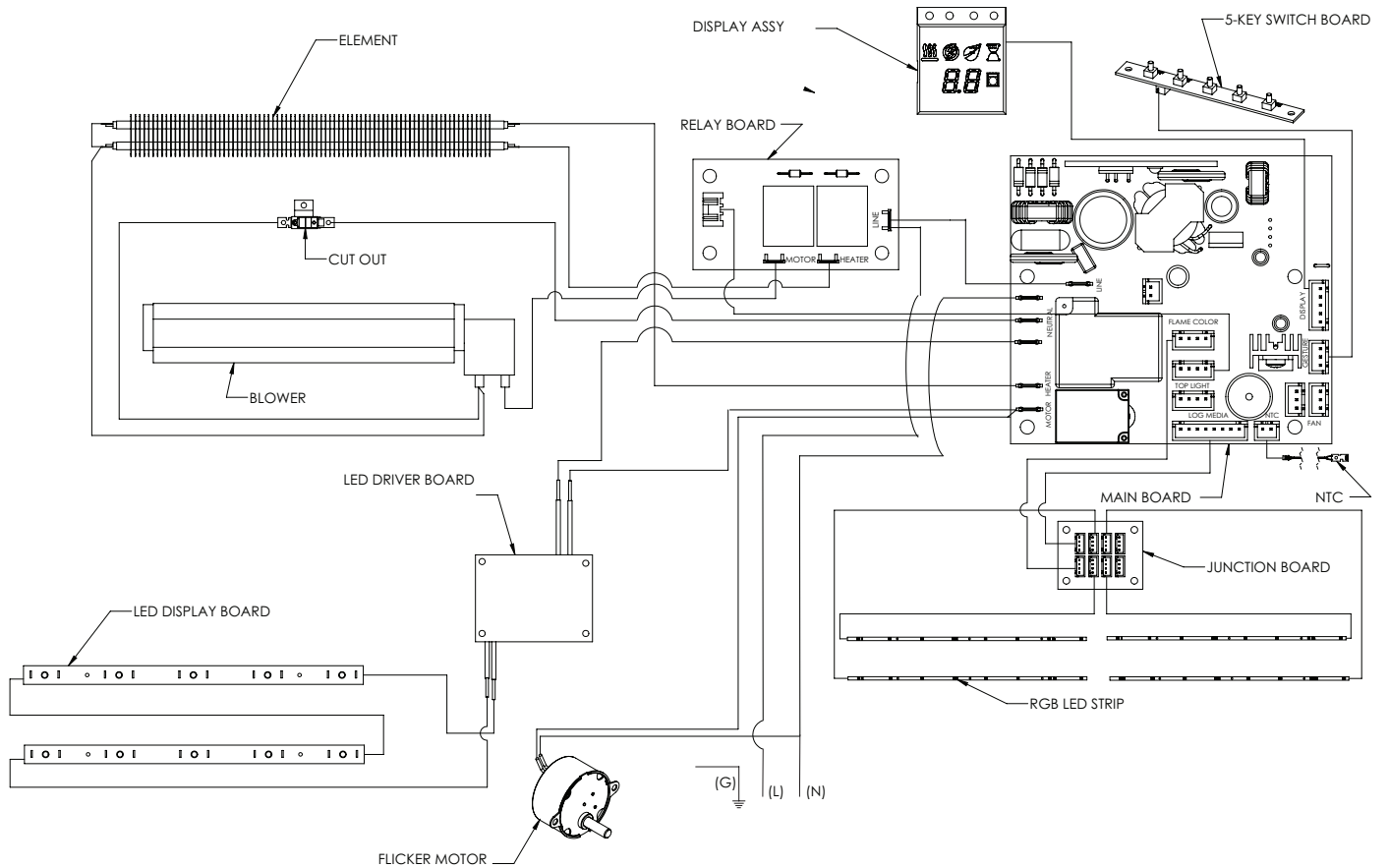


# Wiring Diagram

## MOD 0

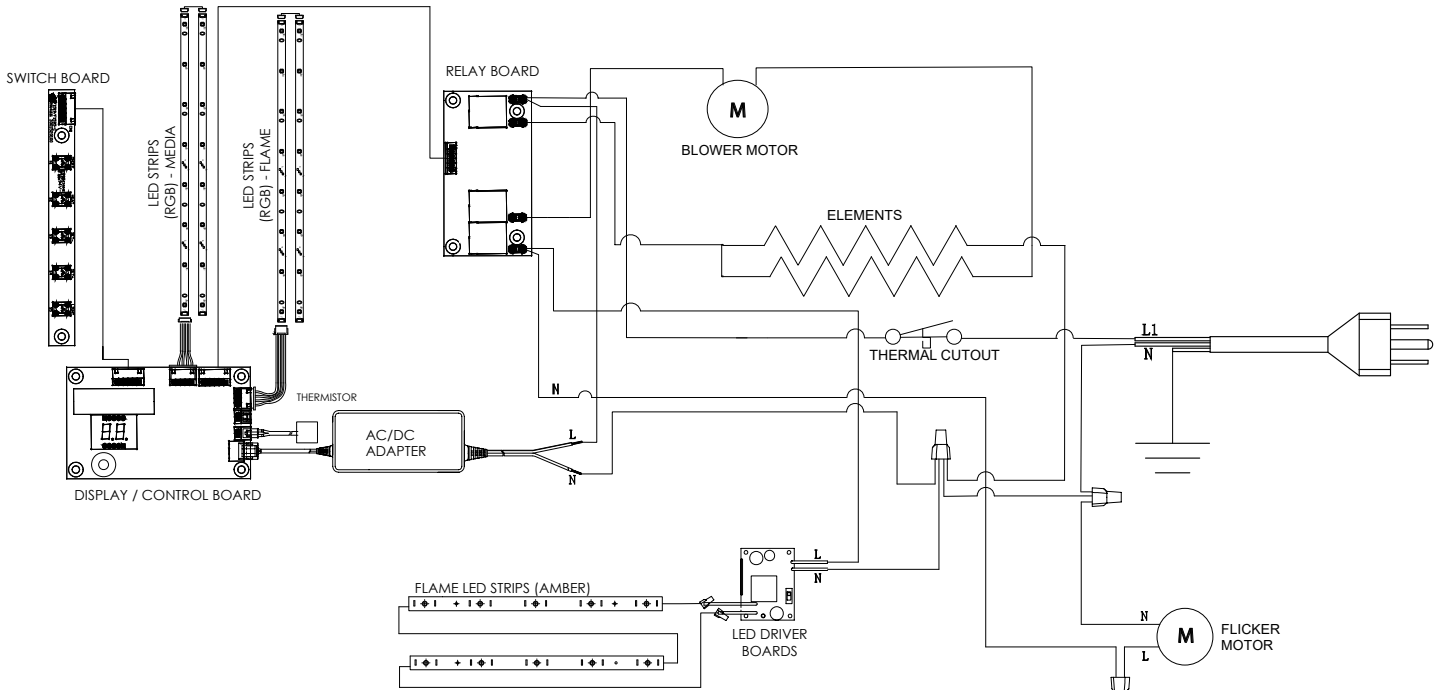


## MOD A-B

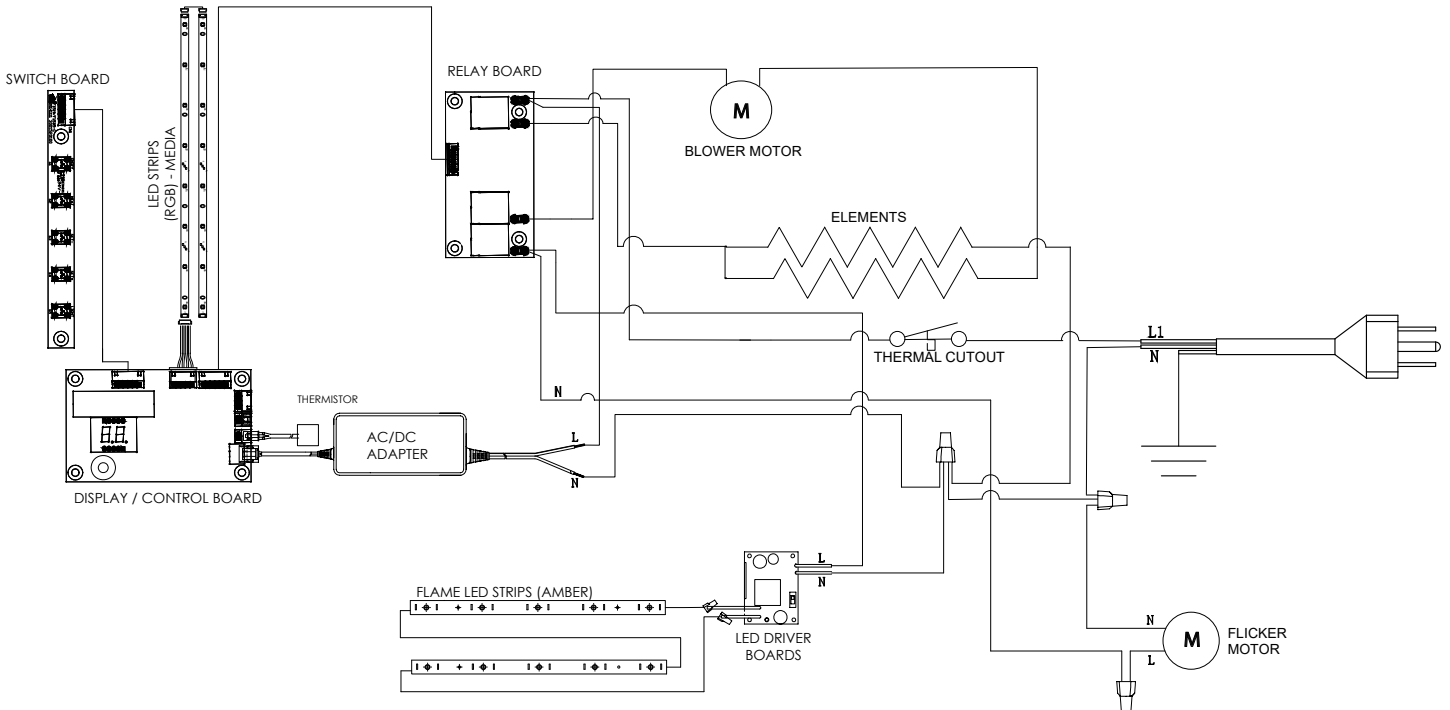


# Wiring Diagram

## MOD C-D



## MOD E





## Preparation for Service

**! NOTE:** All components are replaceable from the front of the fireplace while the unit is mounted on the wall, with the exception of replacement of the power cord.

**! NOTE:** If the power cord needs replacing or if the unit needs to be removed from the wall for any other reason please begin service by following the “PREPARATION FOR SERVICE” instructions, then move on to the section “INSTRUCTIONS FOR REMOVING FROM WALL”.

**Tools Required:** Philips head screwdriver

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

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

1. Disconnect power source.
    - Unplug the fireplace from the outlet.
    - If unit has been hardwired for power or outlet is not accessible from the front, turn the breaker off at the electrical panel.
  2. Remove the front glass assembly by removing the 2 screws (1 on the left and 1 on the right side, located just inside the top front vent opening). These screws secure the front glass panel to the inside of the fireplace. (Figure 4)
  3. Lift the front glass assembly off of the 4 mounts located between the outer and inner casing of the fireplace: 2 on the left and 2 on the right. (Figure 3) Carefully place the glass assembly aside in a safe location.
  4. Remove the decorative glass ember-bed pieces from the media tray, which lies along the bottom of the interior Partially Reflective Glass. A medium sized container such as a bucket or a box will be needed to keep the glass ember-bed pieces together.
  5. Remove the Partially Reflective Glass by removing the 2 screws on each bracket; (2-brackets in total), located on the left and right side of the Partially Reflective Glass.
  6. With one hand gently supporting the Partially Reflective Glass, carefully pry the Partially Reflective Glass forward from the upper half so that it begins to tilt forward from the top. Grasp the Partially Reflective Glass from the sides and carefully lift it up and out from the front of the fireplace. Set it aside in a safe place.
- ⚠ CAUTION:** Partially Reflective Glass is not tempered. Do not bump or drop the Partially Reflective Glass to avoid breakage and personal injury.
7. Proceed to the instructions within this manual relating to the repair being performed - see Table of Contents for page number.

Figure 3

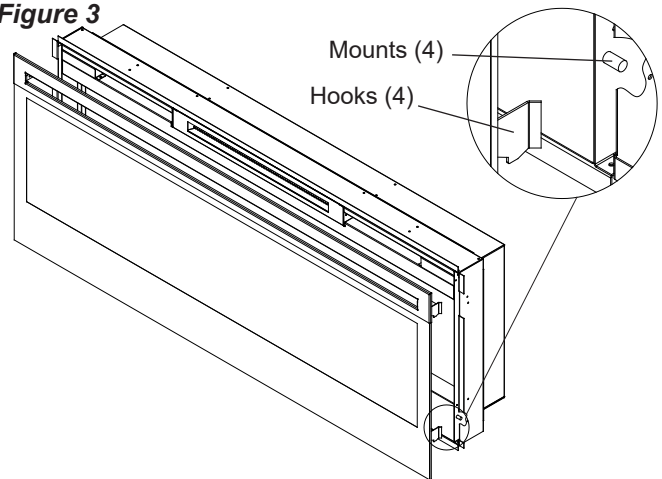
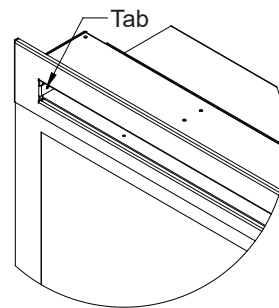


Figure 4



## Instructions for Removing from Wall

**! NOTE:** Only required for replacement of the power cord or removal from service.

**⚠ CAUTION:** Follow “Preparation for Service” instructions before proceeding.

Mounting - The fireplace may be mounted in one of 3 methods:

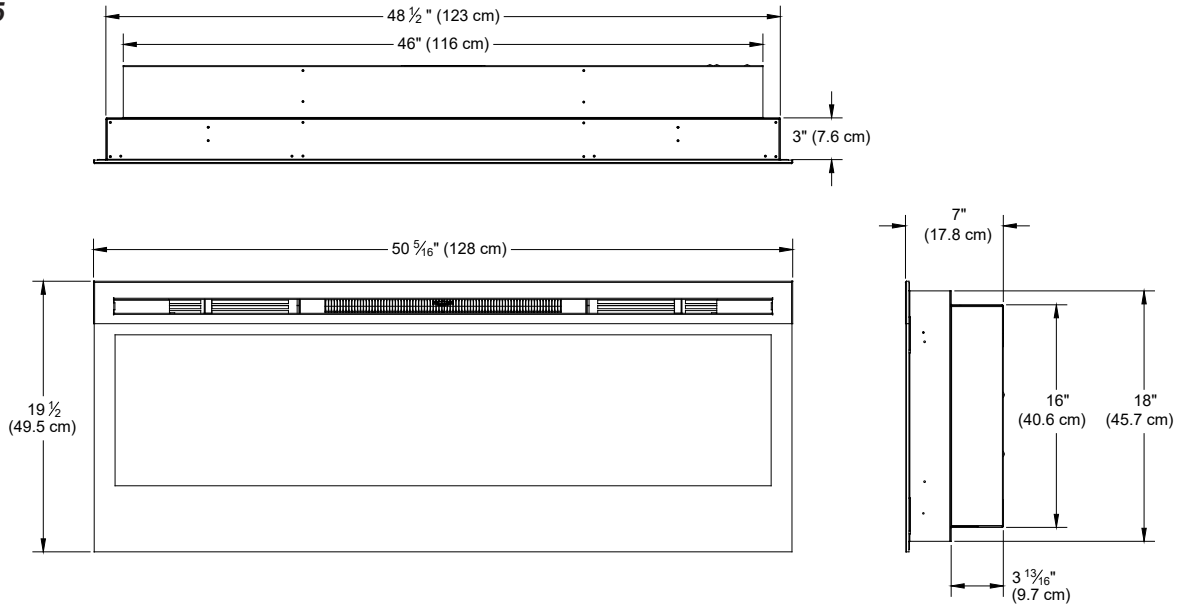
- Surface Mount
- Recess Mount (partially in the wall)
- Flush Mount (completely in the wall)

Identify the type of mounting and follow the appropriate instructions in the following pages. (See Figure 5 for the top and side profile view with measurements of the back panel).

**⚠ CAUTION:** Two people will be required for removal and re-installation of the fireplace. The unit is approx. 50 5/16”w x 19 1/2”h x 7”d. Weight is approximately 75lbs.

**! NOTE:** If fireplace is hard wired directly to the electrical panel, and there is not enough slack in the wires within the wall to reach your work area, remove the electrical junction box cover located on the bottom right by removing the 1 screw on the front of the cover. Lift the cover off and set aside. Disconnect the 3 wire connectors connected to the power source, taking note of their original configuration.

**Figure 5**



**Surface Mount**

(Figure 6)

**Tools Required:** Philips head screwdriver

**CAUTION:** Follow “Preparation for Service” instructions before proceeding.

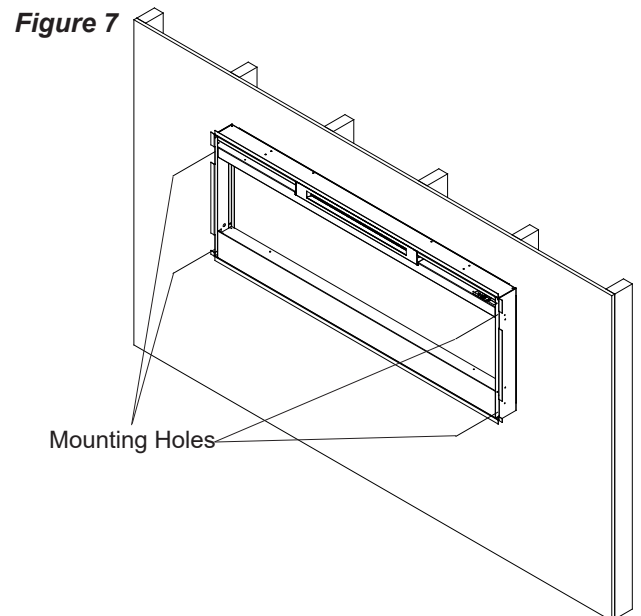
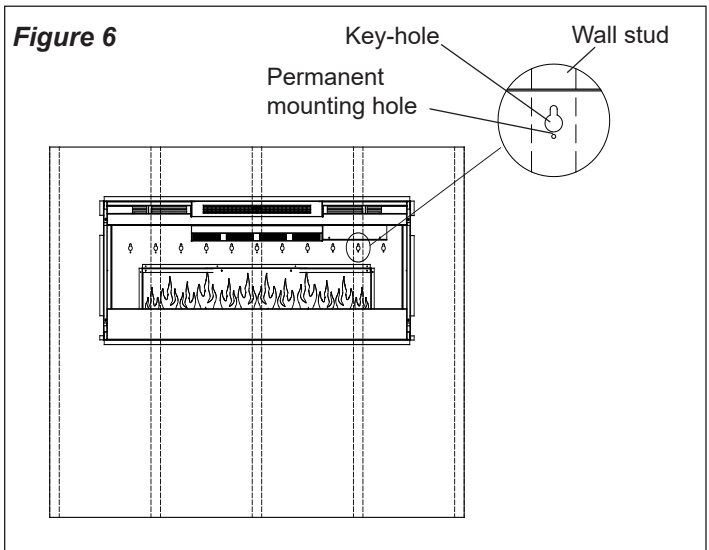
1. Partially unscrew the rear mounting screws that are holding the fireplace to the wall along the back panel of the unit. Support the weight of the fireplace when loosening the screws so unit does not fall off the wall unexpectedly.

**! NOTE:** Be sure to take note of which keyhole mount openings were used for positioning the fireplace so that it can be re-placed in the same location when service is complete. (Figure 6)

2. Take the fireplace off the wall by carefully lifting the fireplace off the mounting screws so they line up to the larger part of the keyhole openings and pull forward. Carefully lay the unit down on a solid flat surface with the front of the unit facing up.

**! NOTE:** If the surface you are using as a work area on is a finished surface that is prone to scratches (i.e. hardwood flooring), it is recommended that a protective barrier be used underneath, (i.e. cloth, cardboard, thick plastic).

3. Proceed to the instructions within this manual relating to the repair being performed - see Table of Contents for page number.
4. Once repair is complete, reassemble in the reverse order as above.



## Recessed Mount - Partial In-wall

(Figure 7)

**Tools Required:** Philips head screwdriver

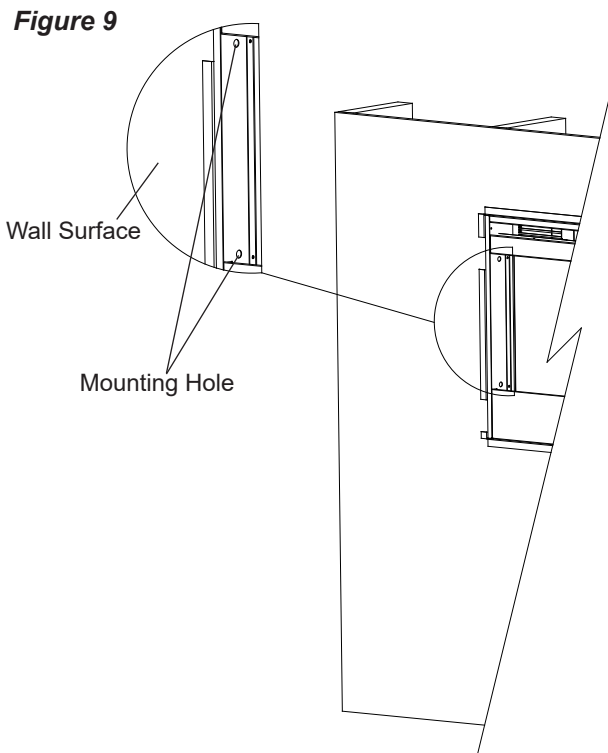
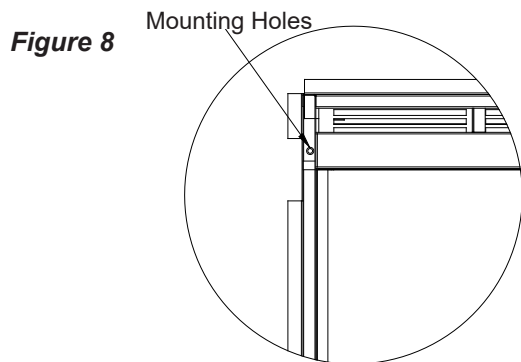
**⚠ CAUTION:** Follow “Preparation for Service” instructions before proceeding.

1. Remove the 4 mounting screws located approximately 3 inches deep in the space between the outer and inner casing on the left and right hand side. There are 2 screws per side, upper and lower going into a stud. (Figure 8)

**⚠ CAUTION:** The fireplace should be supported while removing the screws to prevent the unit from falling.

2. Remove the fireplace out of the opening by slightly lifting and pulling forward.
3. Carefully lay the unit down on a solid flat surface with the front of the unit facing up.

**! NOTE:** If the surface you are using as a work area is a finished surface that is prone to scratches (i.e. hardwood



flooring), it is recommended that a protective barrier be used underneath, (i.e. cloth, cardboard, thick plastic).

4. Proceed to the instructions within this manual relating to the repair being performed - see Table of Contents for page number.
5. Once repair is complete, reassemble in the reverse order as above.

## Flush Mount – Complete In-wall

(Figure 9)

**Tools Required:** Philips head screwdriver

**⚠ CAUTION:** Follow “Preparation for Service” instructions before proceeding.

1. Locate and remove the 4 mounting screws inside the unit located on left and right side towards the front. There are 2 screws per side, going from the side panels out into the side of the wall stud that frames the fireplace. (Figure 9)

**⚠ CAUTION:** The unit should be supported while removing the screws to prevent the unit from falling.

2. Remove the fireplace out of the opening by slightly lifting and pulling forward.
3. Carefully lay the unit down on a solid flat surface with the front of the unit facing up.

**! NOTE:** If the surface you are using as a work area is a finished surface that is prone to scratches (i.e. hardwood flooring), it is recommended that a protective barrier be used underneath, (i.e. cloth, cardboard, thick plastic).

4. Proceed to the instructions within this manual relating to the repair being performed - see Table of Contents for page number.
5. Once repair is complete, reassemble in the reverse order as above.

## LED Light Strips Replacement

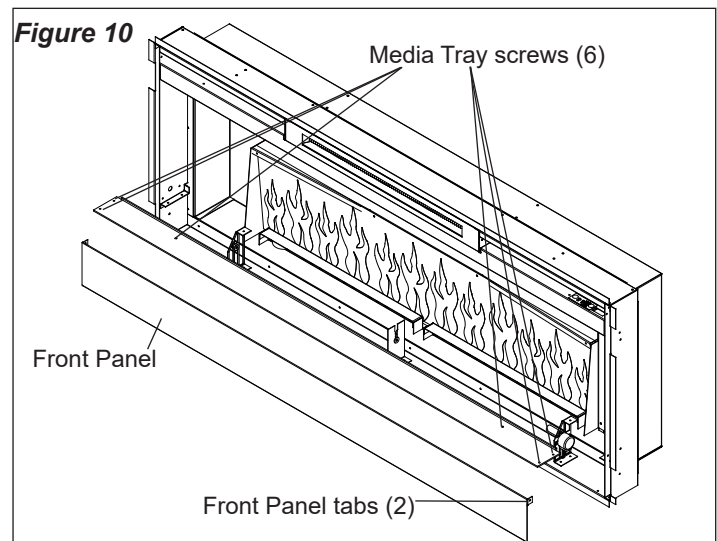
**Tools required:** Phillips head screwdriver

1. Follow "Preparation for Service" instructions before proceeding.
2. Remove the plastic media tray by removing the 6 screws: 3 on the left and 3 on the right of the tray. (Figure 10)
3. Partially release the lower face panel, by removing the screw on the left side and on the right side of the panel, inside the unit. Pull the front panel forward from the topside by approximately 2" inches. There are 3 additional screws located underneath the front face but do not need to be removed. There should be enough "give" to allow the panel to pull slightly forward.
4. The tray has a small lip that goes underneath and slightly up behind the Partially Reflective Glass - from the front edge, pull the tray up and forward to take it out of the fireplace.
5. Remove the 2 screws that secure the media tray support to the unit and lift the tray support out being cautious of the media LED light strip wiring.
6. Gently remove the flicker rod from the unit by holding the rubber grommet on the shaft of the motor and turning the flicker rod to the left, until the rod releases.
7. Remove the LED strips by pushing in the center of the stand-off to release the inner stand. The inner stand can then be removed from the unit and the LED strip can be pulled off of the remaining part.
8. Install the new board onto the unit and reinstall the inner stand into the standoffs to secure the LED strip to the unit.
9. Cut and remove plastic cable ties and protective insulation that hold the wires in place from the LED light to the control board.
10. Transfer the connections from the old board to the new board.
11. Route wires back into control panel area.
12. Reassemble in the reverse order as above.

## LED Media Strips Replacement

**Tools required:** Phillips head screwdriver  
Wire snips

1. Follow "Preparation for Service" instructions before proceeding.
2. Remove the plastic media tray by removing the 6 screws: 3 on the left and 3 on the right of the tray. (Figure 10)
3. Partially release the lower face panel, by removing the screw on the left side and on the right side of the panel, inside the unit. Pull the front panel forward from the topside by approximately 2" inches. There are 3 additional screws located underneath the front face but do not need to be removed. There should be enough "give" to allow the panel to pull slightly forward.
4. The tray has a small lip that goes underneath and slightly up behind the Partially Reflective Glass - from the front edge, pull the tray up and forward to take it out of the fireplace.
5. Locate the LED media strip to be replaced.
6. Remove the LED strips by pushing in the center of the stand-off to release the inner stand. The inner stand can then be removed from the unit and the LED strip can be pulled off of the remaining part.
7. Install the new board onto the unit and reinstall the inner stand into the standoffs to secure the LED strip to the unit.
8. Trace the connector from the board location to the electronics junction board, remove the old connection and replace with the new connector.
9. Ensure that all cords are replaced in the same manner as prior to the service.
10. Reassemble in the reverse order as above.



## Electronics Junction Board Replacement

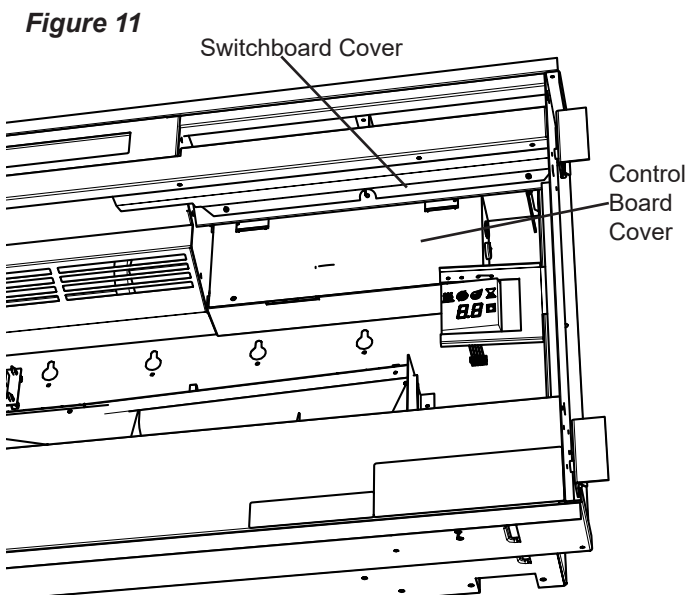
**Tools required:** Phillips head screwdriver  
Wire snips

1. Follow "Preparation for Service" instructions before proceeding.
2. Locate the Electronics Junction board. (Figure 12)
3. Remove the board by pinching the plastic mounting tabs with needle nose pliers. Pull the old board off.
4. Install the new board onto the unit.
5. Transfer the connections from the old board to the new board.
6. Ensure that all cords are replaced in the same manner as prior to the service.
7. Reassemble in the reverse order as above.

## Floating Display Assembly Replacement

**Tools required:** Phillips head screwdriver

1. Follow "Preparation for Service" instructions before proceeding.
2. Locate the floating display assembly. (Figure 12)
3. Remove the 2 screws securing the board to the mounting bracket.
4. Install the new board onto the unit.
5. Trace the connector from the assembly location to the electronics junction board, remove the old connection and replace with the new connector.
6. Ensure that all cords are replaced in the same manner as prior to the service.
7. Reassemble in the reverse order as above.



## LED Driver Board Replacement

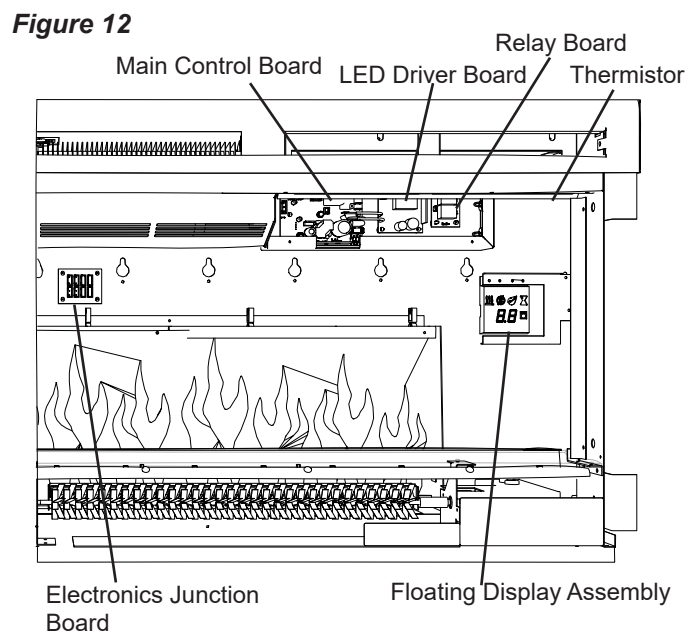
**Tools required:** Phillips head screwdriver

1. Follow "Preparation for Service" instructions before proceeding.
2. In the upper right hand corner of the unit, above the floating display board, locate the control board cover panel and remove the 2 securing screws. (Figure 11)
1. Locate the LED driver board. (Figure 12)
2. Remove the board by pinching the plastic mounting tabs with needle nose pliers. Pull the old board off.
3. Install the new board onto the unit.
4. Transfer the connections from the old board to the new board.
5. Ensure that all cords are replaced in the same manner as prior to the service.
6. Reassemble in the reverse order as above.

## Main Control Board Replacement

**Tools required:** Phillips head screwdriver

1. Follow "Preparation for Service" instructions before proceeding.
2. In the upper right hand corner of the unit, above the floating display board, locate the control board cover panel and remove the 2 securing screws. (Figure 11)
1. Locate the main control board. (Figure 12)
2. Remove the board by pinching the plastic mounting tabs with needle nose pliers. Pull the old board off.
3. Install the new board onto the unit.
4. Transfer the connections from the old board to the new board.
5. Ensure that all cords are replaced in the same manner as prior to the service.
6. Reassemble in the reverse order as above.



## Relay Board Replacement

**Tools required:** Phillips head screwdriver

1. Follow "Preparation for Service" instructions before proceeding.
2. In the upper right hand corner of the unit, above the floating display board, locate the control board cover panel and remove the 2 securing screws. (Figure 11)
  1. Locate the relay board. (Figure 12)
  2. Remove the board by pinching the plastic mounting tabs with needle nose pliers. Pull the old board off.
  3. Install the new board onto the unit.
  4. Transfer the connections from the old board to the new board.
  5. Ensure that all cords are replaced in the same manner as prior to the service.
  6. Reassemble in the reverse order as above.

## Thermistor Replacement

**Tools required:** Phillips head screwdriver

1. Follow "Preparation for Service" instructions before proceeding.
2. In the upper right hand corner of the unit, above the floating display board, locate the control board cover panel and remove the 2 securing screws. (Figure 11)
  1. Locate the thermistor on the outside of the control board housing, to the right. (Figure 12)
  2. Remove the board by pinching the plastic mounting tabs with needle nose pliers. Pull the old board off.
  3. Install the new board onto the unit.
  4. Follow the cable back to the main control board and disconnect the old thermistor and connect the new cable.
  5. Ensure that all cords are replaced in the same manner as prior to the service.
  6. Reassemble in the reverse order as above.

## Switchboard Replacement

**Tools required:** Phillips head screwdriver  
Small adjustable wrench

1. Follow "Preparation for Service" instructions before proceeding.
2. In the upper right hand corner of the unit, above the floating display board, locate the switchboard cover panel and remove the 5 securing screws - 3 along the bottom front edge and 2 on either end. (Figure 11)
  1. Locate the switchboard. (Figure 12)
  2. Remove the 2 small nuts securing the switchboard to the unit, on either end.
  3. Install the new board onto the unit.
  4. Transfer the connection from the old board to the new board.
  5. Ensure that all cords are replaced in the same manner as prior to the service.
  6. Reassemble in the reverse order as above.

## Flicker Motor/Flicker Rod Replacement

**Tools required:** Phillips head screwdriver  
Short handled Phillips head screwdriver

1. Follow "Preparation for Service" instructions before proceeding.
2. Remove the plastic media tray by removing the 6 screws: 3 on the left and 3 on the right of the tray. (Figure 10)
3. Partially release the lower face panel, by removing the screw on the left side and on the right side of the panel, inside the unit. Pull the front panel forward from the top side by approximately 2" inches. There are 3 additional screws located underneath the front face but do not need to be removed. There should be enough "give" to allow the panel to pull slightly forward.
4. The tray has a small lip that goes underneath and slightly up behind the Partially Reflective Glass - from the front edge, pull the tray up and forward to take it out of the fireplace.
5. Remove the 2 screws that secure the media tray support to the unit and lift the tray support out being cautious of the media LED light strip wiring.
6. Remove the electrical junction box cover located on the bottom right hand side by removing the screw on the small mounting-flange on the front face of the junction box cover.
7. Carefully slide the electrical box to the right to release the securing tabs, as wires are fed through the strain reliefs on the cover and are connected within.
8.
  - a) If the new and old flicker motors have 3 wires: disconnect the wiring connections from the terminal block noting their original locations and install the new motor similarly.
  - b) If the old flicker motor has 3 wires and the new flicker motor has 2 wires: disconnect the wiring connections and the capacitor, install the 2 wires in the two holes where the capacitor was installed.
  - c) If the old and new flicker motors both have two wires, cut the wires approximately 1 in (25.4 mm) from the hole that the wires pass to the top of the unit, strip off 1/2 in (12.7 mm) the end of each wire and insert the end of the wire from the flicker motor and the wire from the unit (ensure the colours correspond), into the provided connectors and with pliers squeeze to make the connection.
9. Remove the 2 screws holding the flicker motor to the mounting bracket. Gently pull the motor away from the flicker rod.  
**⚠ CAUTION:** When removing and replacing the flicker motor try to keep any slight bending of the flicker rod minimal so as to not damage it. If flicker rod is damaged, it should be replaced to ensure proper operation.
10. Properly orient the new flicker motor onto the motor bracket and re-attach with the 2 mounting screws.
11. Reassemble in the reverse order as above.

## Element Replacement

**Tools required:** Phillips head screwdriver  
Short handled Phillips head screwdriver  
Needle nosed pliers.  
Wire Snips  
3/8" ratchet or wrench

1. Follow "Preparation for Service" instructions before proceeding.
  2. Remove the 5 screws that secure the angled switch housing cover located just below the Remote Switchboard on the top right. Remove cover and set aside.
  3. Loosen the front panel that spans across the top front fascia. To do so, locate the 4 screws: 2 on the left and 2 right on the angled part behind the fascia. This piece can be removed by turning it 90 degrees and allowing the glass mounting screw slide through the slot in the backside of the panel.
  4. Remove the heating assembly cover in the top center by removing the 6 screws on the side brackets: 3 on the left and 3 on the right (at the front). Wires from the switch housing are connected through this piece, so carefully move it farther down in the body of the unit, to give some room to access the heating assembly housing.
  5. Release the top panel of the heating assembly housing by removing 4 screws on the side brackets. Pull the top panel of the heating assembly housing out from between the brackets.
  6. From the top panel of the heating assembly housing, remove the 4 screws that hold the element cover to the housing panel.
  7. Disconnect wires from the ends of the elements noting their original locations.
    - ! **NOTE:** Using a flat head screwdriver gently pry between the end of the connectors and the element to release the wires.
    - ! **NOTE:** Some of the wires may have a "piggy-back" connector that allows a second wire to connect to the same prong as the first wire. Try and keep the "piggy-back" connection together when pulling the wires off the element.
  8. Using a 3/8" ratchet or wrench remove the hex head screw from both sides of the element. Remove elements from the element housing and replace with the new elements.
  9. Reassemble in the reverse order as above.
- ⚠ CAUTION:** When re-installing covers and panels, be sure the wires are guided and tucked into the proper openings along the right side so they are not pinched and allows enough space to reinstall panel.

## High Temperature Cutout Replacement

**Tools required:** Phillips head screwdriver  
Needle nosed pliers  
Wire Snips

1. Follow "Preparation for Service" instructions before proceeding.
2. Remove the 5 screws that secure the angled switch housing cover located just below the Remote Switchboard on the top right. Remove cover and set aside.
3. Loosen the front panel that spans across the top front fascia. To do so, locate the 4 screws: 2 on the left and 2 right on the angled part behind the fascia. This piece can be removed by turning it 90 degrees and allowing the glass mounting screw slide through the slot in the backside of the panel.
4. Remove the heating assembly cover in the top center by removing the 6 screws on the side brackets: 3 on the left and 3 on the right (at the front). Wires from the switch housing are connected through this piece, so carefully move it farther down in the body of the unit, to give some room to access the heating assembly housing.
5. Release the top panel of the heating assembly housing by removing 4 screws on the side brackets. Pull the top panel of the heating assembly housing out from between the brackets.
6. Locate the high temperature cutout and remove the mounting screw.
7. Disconnect the wiring connections noting their original locations.
  - ! **NOTE:** Using a flat head screwdriver gently pry between the end of the connectors and the cutout to release the wires.
8. Cut and remove plastic cable tie that hold the wires in place on the top of the panel.
9. Properly orient the new high temperature cutout and connect all of the wiring connections.
10. Reassemble in the reverse order as above.

## Blower/Fan Replacement

**Tools required:** Phillips head screwdriver.  
Needle nosed pliers.

1. Follow "Preparation for Service" instructions before proceeding.
  2. Remove the 5 screws that secure the angled switch housing cover located just below the Remote Switchboard on the top right. Remove cover and set aside.
  3. Loosen the front panel that spans across the top front fascia. To do so, locate the 4 screws: 2 on the left and 2 right on the angled part behind the fascia. This piece can be removed by turning it 90 degrees and allowing the glass mounting screw slide through the slot in the backside of the panel.
  4. Remove the heating assembly cover in the top center by removing the 6 screws on the side brackets: 3 on the left and 3 on the right (at the front). Wires from the switch housing are connected through this piece, so carefully move it farther down in the body of the unit, to give some room to access the heating assembly housing.
  5. Release the top panel of the heating assembly housing by removing 4 screws on the side brackets. Pull the top panel of the heating assembly housing out from between the brackets.
  6. From the top panel of the heating assembly housing, locate and remove the 6 screws that hold the blower/fan assembly to the housing panel. Separate the blower assembly from the housing panel.
- ⚠ CAUTION:** When removing the blower assembly mounting screws support the assembly to prevent any damage to the unit.
7. Disconnect the wiring connections noting their original locations.
- ! NOTE:** Using a flat head screwdriver gently pry between the end of the connectors and the blower/fan to release the wires.
8. Properly orient the new blower/fan assembly and connect all of the wiring connections.
  9. Reassemble in the reverse order as above.

## Power Cord Replacement

**Tools required:** Phillips head screwdriver.  
Needle nosed pliers.  
Wire snips (MOD A)  
Wire strippers (MOD A)

1. Follow "Preparation for Service" instructions before proceeding.
2. Follow "Instructions from Removing from Wall" before proceeding.
3. Locate the power cord and remove the 3 screws that attach the metal bracket to the unit - one on the back of the unit and two on the bottom. (Figure 4)
4. From the front, remove the 2 Philips screws that fasten the front panel tabs, tilt the panel forward and lift off. (Figure 10)
5. Remove the 4 screws that fasten the acrylic media tray and the 2 screws that attach the media tray to the unit. The media tray cannot be removed but will now allow the ability to remove the electrical box.
6. Remove the Phillips screw to release the electrical box cover in the bottom, right corner of the fireplace (Figure 5).
7. Carefully slide the electrical box to the right to release the securing tabs, as wires are fed through the strain reliefs on the cover and are connected within.
8. Unscrew the two wire connectors inside the electrical box and separate the wires (Figure 6).
9. Pull the junction box and power cord out the front of the fireplace.
10. With a pair of needle nose pliers, open the strain relief bushing that holds the power cord in place on the junction box and remove the cord.
11. For MOD A units, cut the connector off the white wire on the new power cord, and strip the end of the wire insulation to leave 1/2" of bare wire.
12. Feed the new power cord through the junction box and squeeze the new strain relief in place on the cord and junction box. Re-connect wires. -(Wide blade on the plug is the neutral side of the power cord).
13. 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.
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 with the manual controls	Improper operation	Refer to Operation Section
	No incoming voltage from the electrical wall socket	Check Fuse/Breaker Panel
	Loose wiring	Check wiring connections
	Defective main control board	Replace the main control board
	Defective switchboard	Replace the switchboard
Fireplace does not turn on with the Remote Control	Improper operation	Refer to Operation Section
	The batteries in the remote control are dead.	Install new battery into the remote control.
	Defective remote control	Replace the remote control
	Defective display/control board assembly	Replace the display/control assembly
Flame Frozen	Loose wiring	Check wiring connections
	Defective flicker motor	Replace flicker motor
	Defective main control board	Replace main control board
Flame is not visible	Loose wiring	Check wiring connections
	Defective LED light assembly	Replace flame LED light assembly
	Defective LED driver board	Replace LED driver board
	Defective main control board	Replace the main control board
Flame Shudder	Defective flicker motor	Replace flicker motor
Media bed does not light up consistently	Build up of static electricity in unit	Unplug the unit for 1 minute then plug the unit back in.
Media bed does not light up	Loose wiring	Check wiring connections
	Defective media LED light assembly	Replace media LED light assembly
	Defective junction board	Replace junction board
	Defective main control board	Replace the main control board
Unit cycles through functions by itself	Defective switchboard	Replace the switchboard

REV	PCN	DATE
00	-	17-JUL-15
01	-	19-SEP-19
02	-	22-SEP-20
03	-	29-APR-21
04	ECO-000337	16-NOV-21

PROBLEM	CAUSE	SOLUTION
<b>Heater</b>		
Heater is not turning on, but flame effect is still functioning	Improper operation	Refer to Operation Section. Ensure heater is not disabled (display indicates --). Ensure set temperature is above room temperature.
	Loose wiring	Trace wiring in unit
	Defective main control board	Replace the main control board
	Defective relay board	Replace the relay board
	Defective blower	Replace the blower
	Defective cutout	Replace the cutout
Heater is turning off after a couple of minutes of operation	Improper operation	Ensure set temperature is above room temperature
	Build up of dirt/dust in Heater Assembly	Ensure that exterior intake louvers and firebox cavity are free of dirt/dust.
	Defective blower	Replace blower
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 heating element	Replace heating element
Heater fan turns On but heater lacks heat	Improper operation	Refer to Operation Section
	Loose wiring	Trace wiring in unit
	Defective relay board	Replace the relay board
	Defective main control board	Replace the main control board
	Defective heating element	Replace the heating element
Heating element is glowing red	Normal operation	Small glowing sections of the element are considered normal.
	Defective blower	If larger glowing sections are causing the heater to trip the thermal cutout, unplug unit, discontinue use and replace the blower
Heater fan runs continuously	Loose wiring	Trace wiring in unit
	Defective main control board	Replace main control board
	Defective relay board	Replace relay board
<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 Blower/Fan	Replace Blower/Fan
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