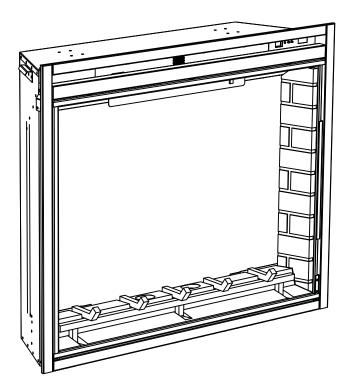


SERVICE MANUAL

CERTIFIED UNDER CANADIAN AND AMERICAN NATIONAL STANDARDS: CSA C22.2 No-46 / UL 2021

BEF33H & BEF40H

ELECTRIC FIREPLACE



SAFETY INFORMATION



If the information in these instructions are not followed exactly, fire or electrical shock may result causing property damage, personal injury or loss of life.

Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.









Wolf Steel Ltd., 24 Napoleon Rd., Barrie, ON, L4M 0G8 Canada / 103 Miller Drive, Crittenden, Kentucky, USA, 41030 Phone (705)721-1212 • Fax (705)722-6031 • www.napoleonfireplaces.com • hearth@napoleonproducts.com

\$10.00 W415-1696 / 10.12.16

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NOTE: Changes, other than editorial, are denoted by a vertical line in the margin.



Instructional videos can be accessed by scanning or clicking QR codes.



NAPOLEON PROFESSIONALS SUPPORT CENTER



Batteries must be disposed of according to the local laws and regulations. Some batteries may be recycled, and may be accepted for disposal at your local recycling center. Check with your municipality for recycling instructions.

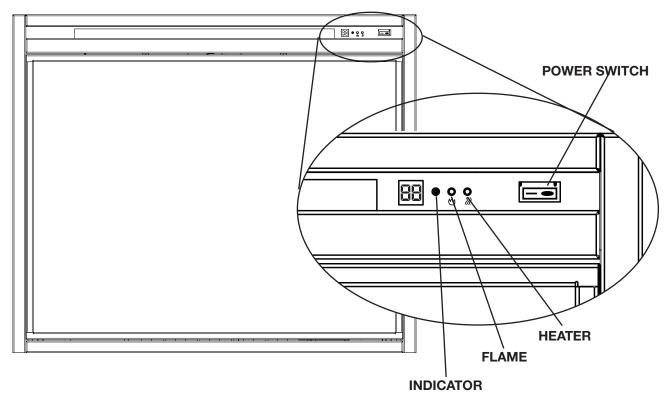
1.0 OPERATING INSTRUCTIONS

Once the appliance has been plugged into a grounded electrical outlet or hardwired to a grounded 120V power supply, it is ready to operate.

NOTE: Ensure the house circuit breakers for the power supply are turned on. In the event of a power failure, when the main power switch of the appliance is in the "I" ON position and the hand held remote control is in the ON position, the flame generation lights will come back on at the high setting, when the power supply returns.

1.1 MAIN POWER SWITCH AND CONTROL PANEL

The main power switch and control panel are located on the top front of the appliance as illustrated.



- A. Turn main power switch ON, the flame will be at the brightest setting and the heater will be OFF. To turn on the heater, push the heater button .
- **B.** To adjust the flame brightness, press the flame button (**). There are three brightness levels to cycle through and then an off setting (F1, F2, F3 and then F0). Every time the flame is initiated it will start at the brightest level.
- C. The default setting temperature display is Fahrenheit. To change to the desired temperature format, press and hold the flame button for 5 seconds, this will change the display from Fahrenheit to Celsius, or vice versa.

NOTE: After the heater button is pushed, there will be an 8 second delay between the blower turning on and the heater turning on. After turning off the heater, the blower will be on for 8 seconds to blow out remaining heat.

INSTRUCTIONAL VIDEO: OPERATING INSTRUCTIONS

1.2 OPERATING BY REMOTE CONTROL

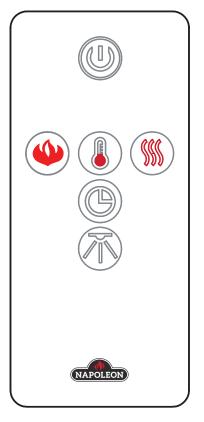
NOTE: When operating the remote control, it must be directed towards the front center of the appliance.

- **A.** Ensure the main power switch is in the ON position on the control board. The appliance will default to the brightest flame setting when main power is initially switched to ON position.
- B. The power button can be used to power up or down the appliance (the main power switch on the appliance must be in the ON position for the remote to operate). Pressing power button (1) activates the power to the appliance. Pressing power button (2) again will turn off the appliance. The ember and log will fade out after 4 seconds.
- C. To adjust the flame brightness, press the flame button . There are three brightness levels to cycle through and an off setting (F1, F2, F3 and then F0). F3 is the brightest level.
- D. To begin the thermostat function, press the thermostat button (a), there are 7 temperature settings (61°F [16°C], 64°F [18°C], 70°F [21°C], 75°F [24°C], 81°F [27°C], 86°F [30°C], and off). Press the thermostat button to cycle through the settings. Once you have selected the desired temperature, the heater will automatically function until that temperature is reached. When the room temperature is a degree lower than the temperature setting, the heater will turn on.
- E. To activate the heater, press the heater button . The blower and heater will turn on. Press the heater button again to turn off the heater, the blower will remain on for 8 seconds.
- F. To activate the timer, press the timer button (a). The icon will illuminate and the time will appear on the LED display. To choose the desired time, continue to press the timer button. There are 6 settings (1h, 2h, 3h, 4h, 5h and off). Each setting represents hours of operation. The fireplace will turn off at the setting time.
- G. To activate the decoration light, press the light button . There are three settings to cycle through and an off setting (d1, d2, d3 and then d0). The d1 setting turns the light to white. The d2 setting cycles the decorative LED in the following order:
 - White to orange
 - Orange to blue
 - Blue to orange & blue
 - Orange & blue to orange & white
 - Orange & white to white & blue

It will take 8.5 seconds to switch from one colour to the next when in d2 setting. The d3 setting will lock to a desired colour from the d2 setting.

H. To turn off the appliance, press the power button once on the remote, or switch the main power to off on the control panel.

NOTE: This hand held remote control has a range of 6 meters or 19 feet from the appliance.



2.0 REPLACEMENT PARTS

AWARNING

FAILURE TO POSITION THE PARTS IN ACCORDANCE WITH THIS MANUAL OR FAILURE TO USE ONLY PARTS SPECIFICALLY APPROVED WITH THIS APPLIANCE MAY RESULT IN PROPERTY DAMAGE OR PERSONAL INJURY.

Contact your dealer for questions concerning prices and policies on replacement parts. Normally, all parts can be ordered through your Authorized dealer / distributor.

FOR WARRANTY REPLACEMENT PARTS, A PHOTOCOPY OF THE ORIGINAL INVOICE WILL BE REQUIRED TO HONOUR THE CLAIM.

When ordering replacement parts always give the following information:

- Model & Serial Number of appliance
- · Installation date of appliance
- Part number
- · Description of part
- Finish

PARTS, PART NUMBERS AND AVAILABILITY ARE SUBJECT TO CHANGE WITHOUT NOTICE.

PARTS IDENTIFIED AS STOCKED WILL BE DELIVERED WITHIN 2 TO 5 BUSINESS DAYS FOR MOST DELIVERY DESTINATIONS.

PARTS NOT IDENTIFIED AS STOCKED WILL BE DELIVERED WITHIN A 2 TO 4 WEEK PERIOD, FOR MOST CASES.

PARTS IDENTIFIED AS 'SO' ARE SPECIAL ORDER AND CAN TAKE UP TO 90 DAYS FOR DELIVERY.

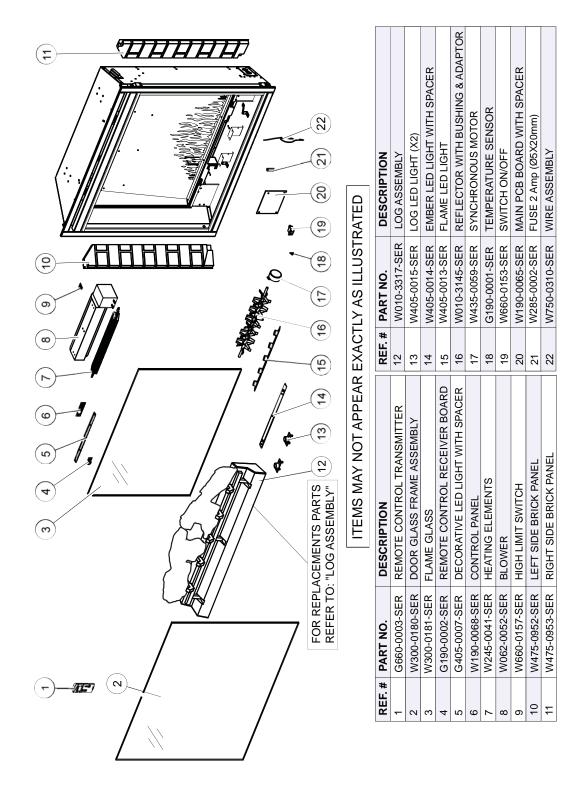
41.1C

For after sales service, please call 1-888-721-8324

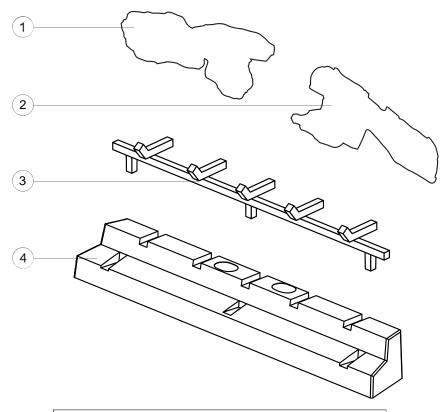
ΕN

2.1 **BEF33H OVERVIEW**

NOTE: Care must be taken when removing and disposing of any broken glass or damaged components. Ensure to vacuum up any broken glass from inside the appliance before operation.



2.2 BEF33H LOG ASSEMBLY

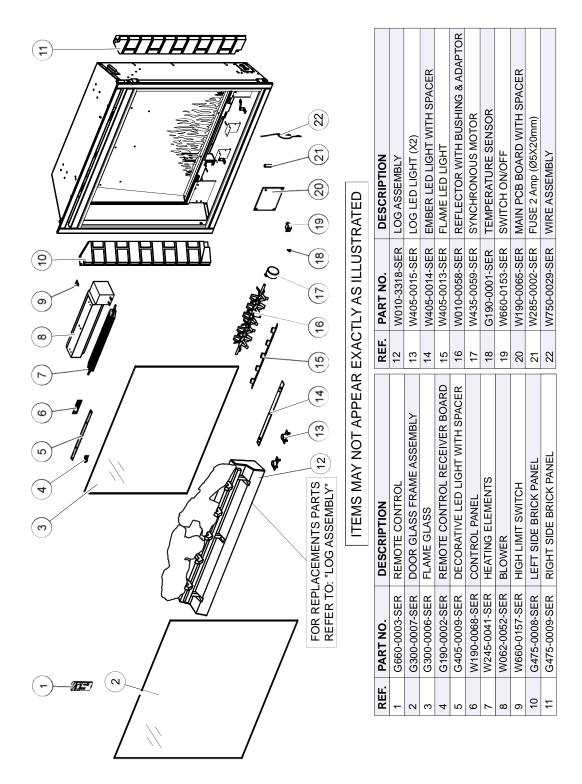


ITEMS MAY NOT APPEAR EXACTLY AS ILLUSTRATED

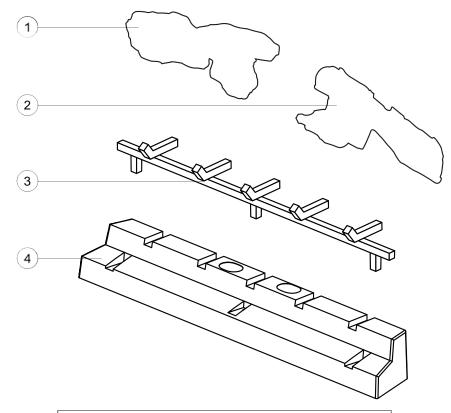
REF.#	PART NO.	DESCRIPTION	STOCKED	REF.#	PART NO.	DESCRIPTION	STOCKED
1	G135-0006-SER	LEFT SIDE LOG		3	W185-0032-SER	GRATE ASSEMBLY	
2	G135-0007-SER	RIGHT SIDE LOG		4	G135-0005-SER	EMBER BED	

2.3 **BEF40H OVERVIEW**

NOTE: Care must be taken when removing and disposing of any broken glass or damaged components. Ensure to vacuum up any broken glass from inside the appliance before operation.



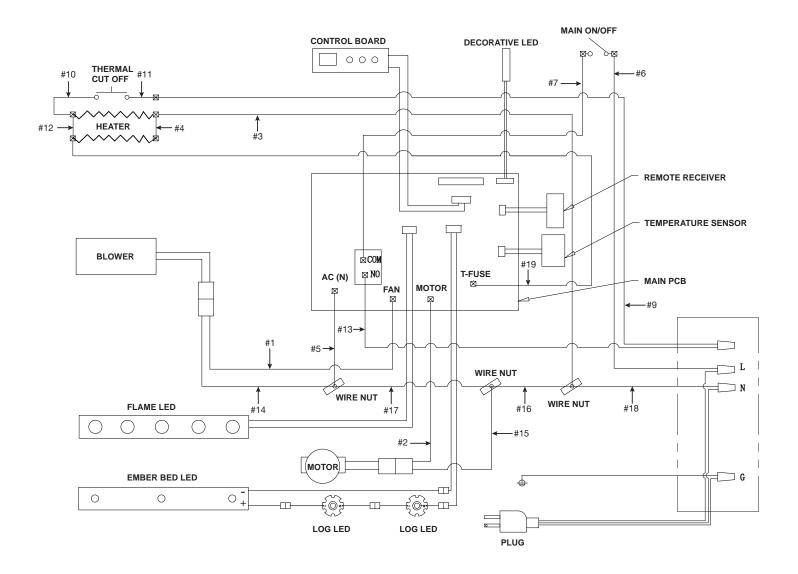
2.4 BEF40H LOG ASSEMBLY



ITEMS MAY NOT APPEAR EXACTLY AS ILLUSTRATED

RE	F. #	PART NO.	DESCRIPTION	STOCKED	REF.#	PART NO.	DESCRIPTION	STOCKED
1		G135-0008-SER	LEFT SIDE LOG		3	W185-0001-SER	GRATE ASSEMBLY	
2		G135-0009-SER	RIGHT SIDE LOG		4	G135-0010-SER	EMBER BED	

3.0 WIRING DIAGRAM



4.0 TROUBLESHOOTING

WARNING

TURN OFF THE APPLIANCE COMPLETELY AND LET THE APPLIANCE COOL DOWN BEFORE SERVICING.

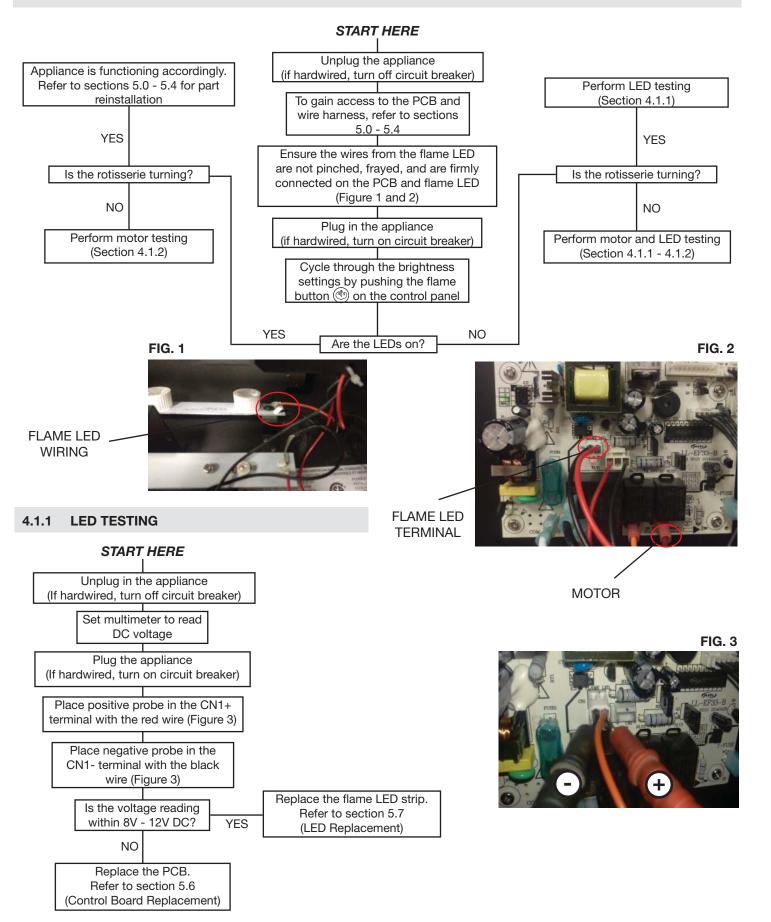
IF YOU ARE EXPERIENCING ANY OF THESE ISSUES, UNPLUG APPLIANCE FROM THE POWER OR TURN OFF CIRCUIT BREAKER FOR 30 SECONDS TO FACTORY RESET THE APPLIANCE.

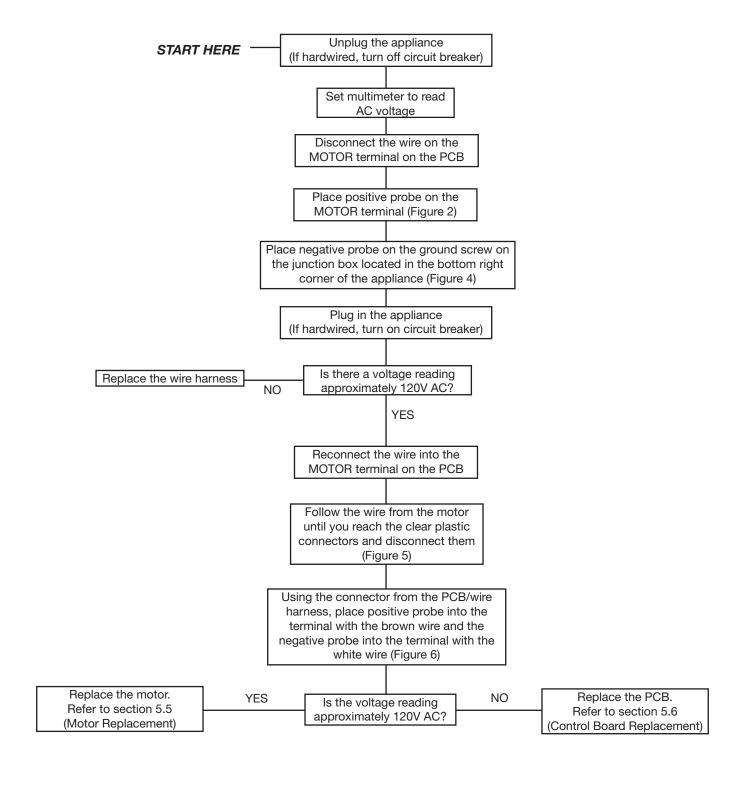
FOR ALL HARDWIRED APPLIANCES, DO A VOLTAGE TEST TO ENSURE THAT THERE IS NO POWER RUNNING THROUGH THE UNIT.

SYMPTOM	PROBLEM		TEST SOLUTION
Dim or no flame	Dim Flame		Press the flame button on the control panel to cycle through brightness levels in order check if the light will get brighter.
		2.	If light is still dim, refer to section 4.1
	No moving flame (LED light on)	1.	Press the flame button on the control panel to cycle through the flame settings (from F1, F2, F3, to F0) as this could restart the rotisserie to animate the flame.
		2.	If flame is still not moving, refer to section 4.1
	No LED light	1.	Press the flame button on the control panel to cycle through
		2.	the brightness levels If the LED light is still off, refer to section 4.1
Ember bed is not glowing or dimming	One log has no light/the ember	1.	If the LED strip has one or more LEDs that does not light up, refer
glowing or dimining	bed light is uneven		to section 4.2
	No light from the ember bed and	1.	Press the flame button on the control panel to cycle through
	logs		the brightness levels as this could restart the ember bed LED strip.
		2.	If the LED light is still off, refer to section 4.2
No warm air is coming	Room temperature is higher than	1.	Set temperature to a higher setting with remote control.
out of the appliance	the set temperature setting	2.	If heater does not turn on, proceed with "LED indicator light is flashing" test solution.
LED indicator light is	Appliance has overheated	1.	Unplug the appliance and wait 15-20 minutes for the appliance
flashing			to cool down
LED flashes 8-10	High limit switch is open / has malfunction	2.	Ensure nothing is blocking the air flow from the exhaust of the
seconds after pushing heater button			appliance
Tiouter button		3.	Plug in the appliance. If problem persists, refer to section 4.3
Heater shuts off and LED flashes after 30 seconds	Blower malfunction		
Heater is on but little to no heat is produced	One or more heating elements has malfunctioned	1.	Refer to section 4.3
Decorative LEDs are not functioning	One or more colours are not visible	1.	Press the decorative light button on the remote control to set the unit to the d2 setting. Wait for 60 seconds.
properply	No LED light	2.	
E1 Error Code	Thermostat failure	1.	,
		2.	and PCB. If appliance is still showing error code E1, replace thermostat. Refer to section 5.8
E2 Error Code	Thermostat or PCB is shorting	1.	Ensure wire connections are firmly connected at the thermostat ar
		2.	PCB. If unit is still showing error code E2, replace thermostat.
			Refer to section 5.8
		3.	If unit is still showing error code E2, replace the PCB.

SYMPTOM	PROBLEM	TEST SOLUTION
Abnormal noise	Motor / rotisserie issue	Ensure parts are free from any obstructions and inspect for loose parts. Refer to section 4.1 for further testing.
coming from the appliance when flame is on	Obstructing object hitting the rotisserie	parts. neter to section 4.1 for further testing.
	Loose motor mount	
	Out of spec motor	
Abnormal noise coming from the blower	Obstructing object hitting the blower	Inspect and/or replace blower.
blower	Unbalanced blower	
	Loose blower mount	
Dead on arrival	Problem with power supply connections	Inspect and/or replace connections
	Defective PCB	Inspect PCB / fuse. If damaged/defective, replace parts.

4.1 FLAME LED TESTING

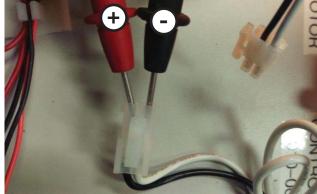




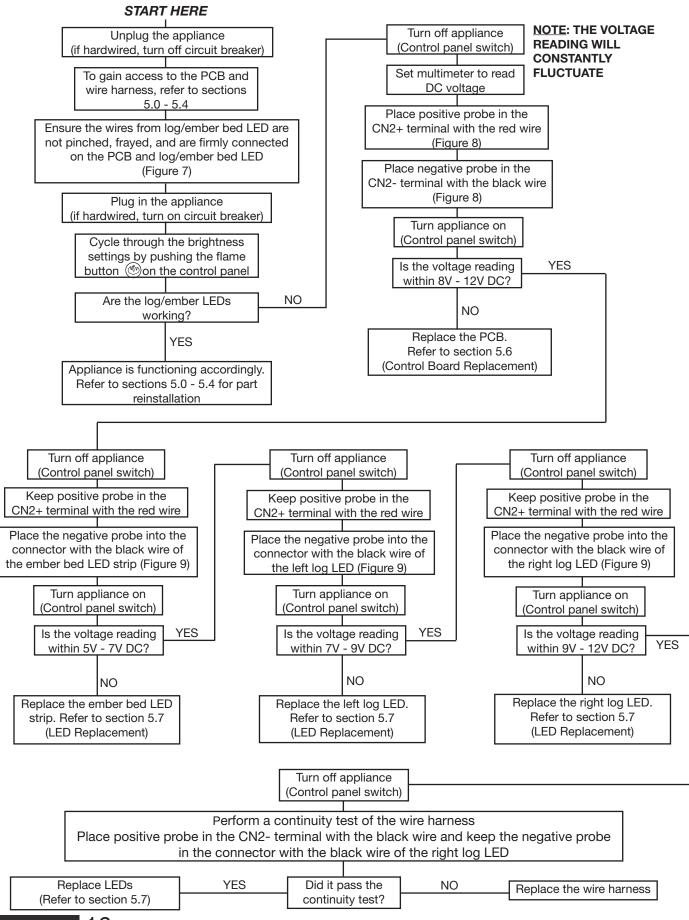








4.2 LOG/EMBER BED LED TESTING



FIGURES



LOG/EMBER BED LED TERMINAL

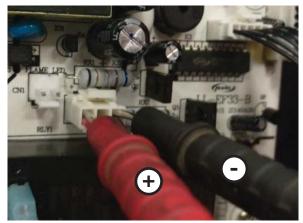


FIG. 8

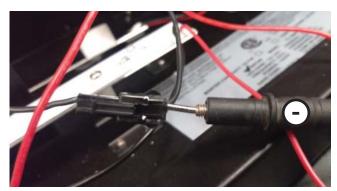
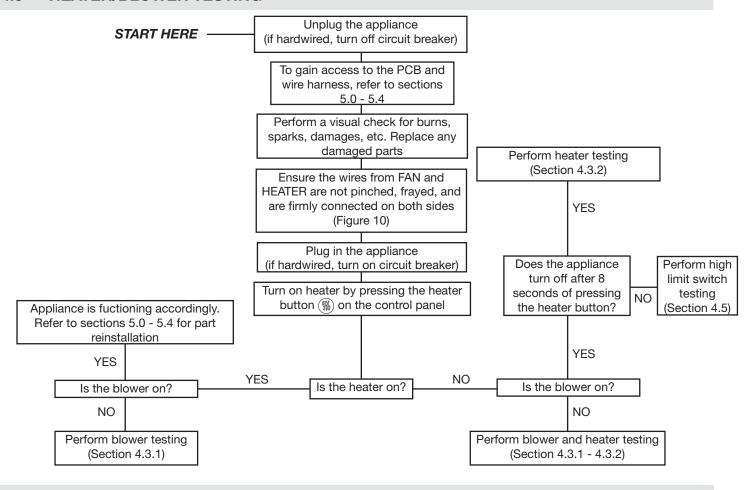
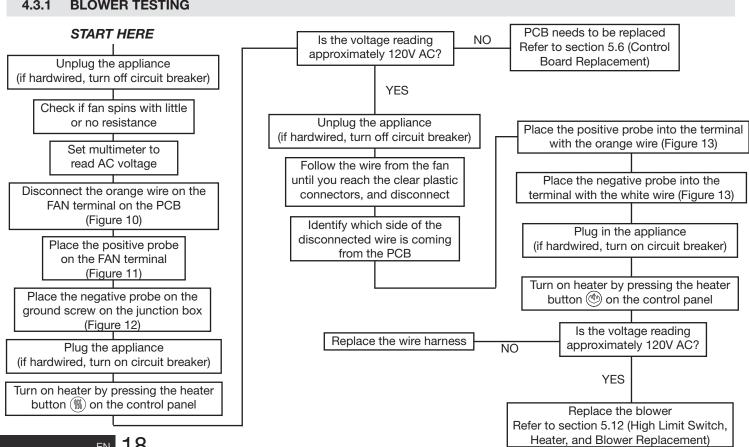


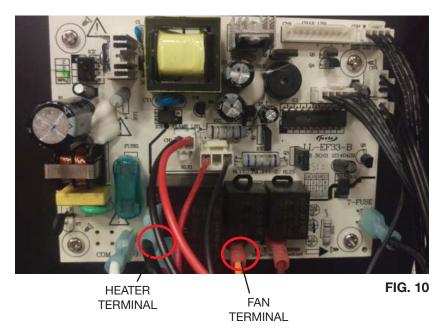
FIG. 9

4.3 HEATER/BLOWER TESTING



BLOWER TESTING 4.3.1





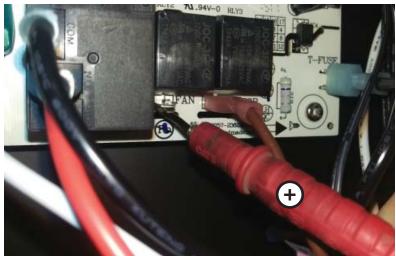




FIG. 11 FIG. 12

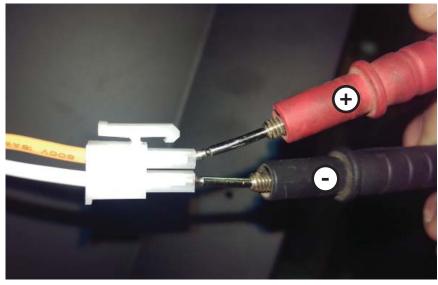
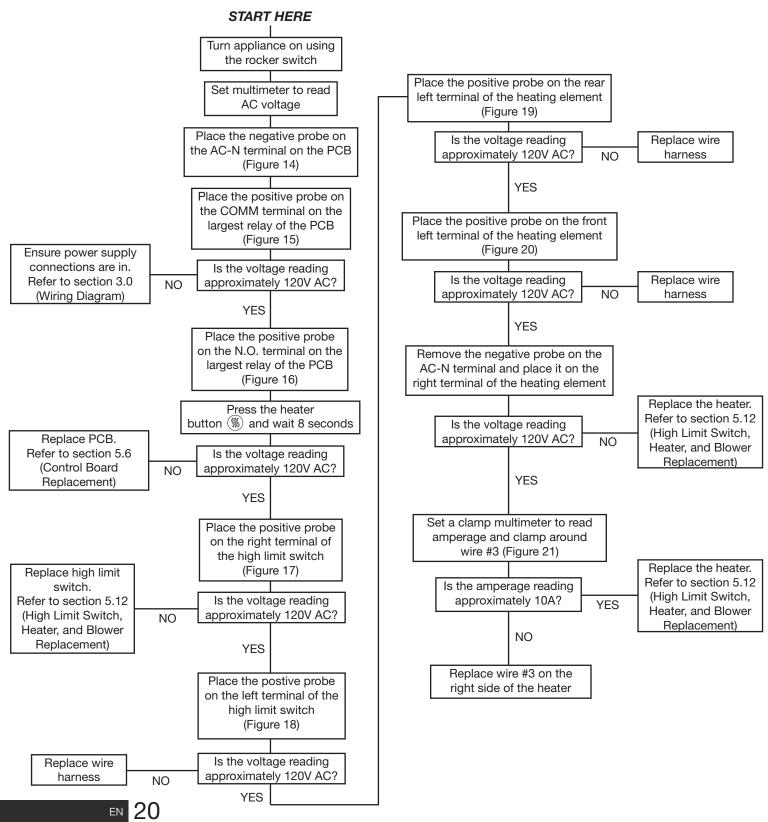


FIG. 13

A WARNING

RISK OF ELECTRICAL SHOCK.

THIS SECTION REQUIRES THE APPLIANCE AND THE HEATER TO STAY TURNED ON. DO NOT UNPLUG ANY CONNECTIONS WHILE PERFORMING THE STEPS OF THIS SECTION.



FIGURES

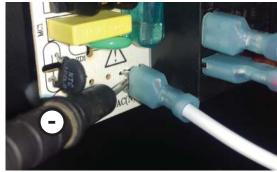




FIG. 15 FIG. 14





FIG. 17 FIG. 16



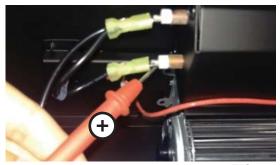


FIG. 19 FIG. 18

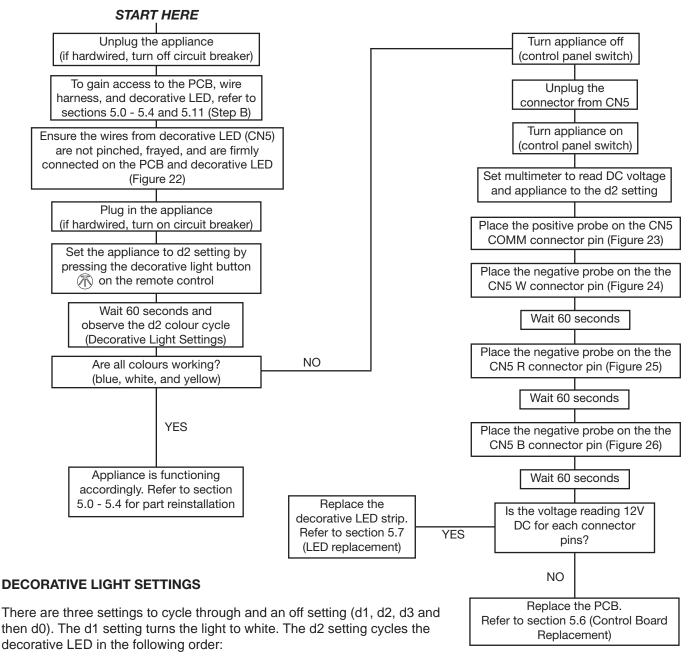




FIG. 21 FIG. 20

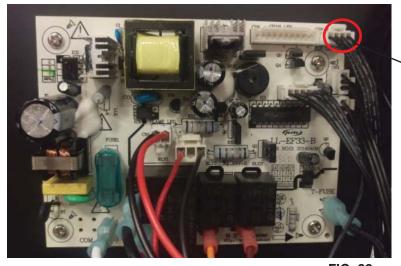
A WARNING

DO NOT LET PROBES TOUCH WHILE TESTING CN5 TERMINAL ON THE PCB. THIS WILL SHORT THE ENTIRE APPLIANCE.



- White to orange
- Orange to blue
- Blue to orange & blue
- Orange & blue to orange & white
- Orange & white to white & blue

It will take 8.5 seconds to switch from one colour to the next when in d2 setting. The d3 setting will lock to a desired colour from the d2 setting.



DECORATIVE LED **TERMINAL**

FIG. 22



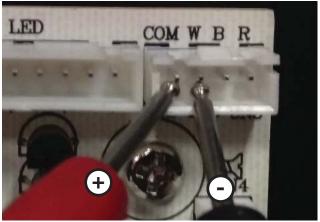


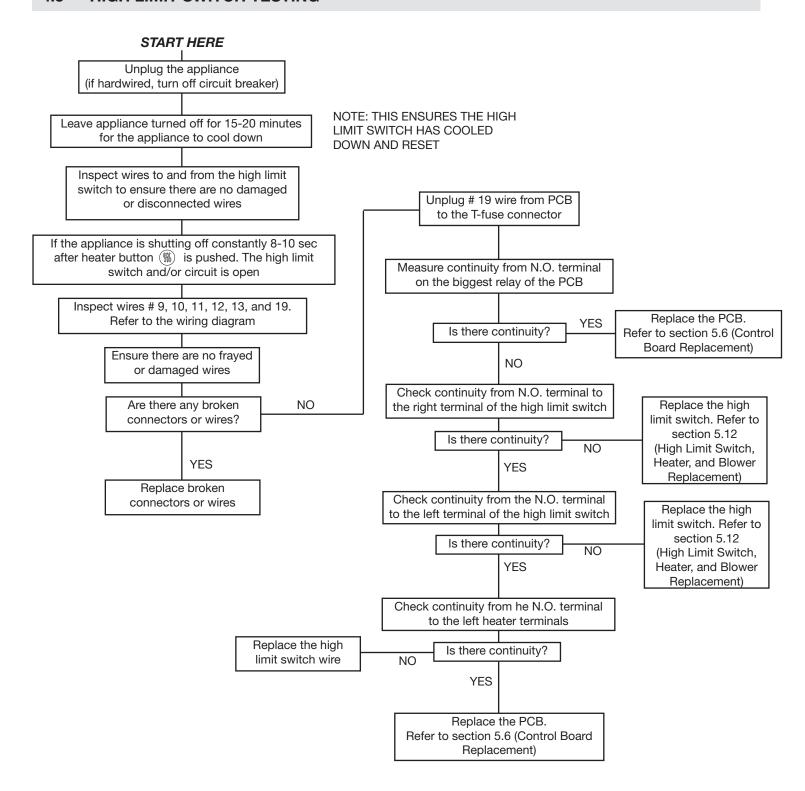
FIG. 23 FIG. 24





FIG. 25 FIG. 26

4.5 HIGH LIMIT SWITCH TESTING



5.0 MAINTENANCE

WARNING

ALWAYS DISCONNECT THE POWER AND ALLOW THE ELECTRIC APPLIANCE TO COOL BEFORE PERFORMING ANY CLEANING, MAINTENANCE, OR RELOCATION OF THIS ELECTRIC APPLIANCE. TURN CONTROLS TO OFF AND REMOVE PLUG FROM OUTLET OR TURN OFF THE HOUSE CIRCUIT BREAKER TO ELECTRIC APPLIANCE RECEPTACLE.

DO NOT INSTALL REPLACEMENT LED LIGHTS THAT EXCEED SPECIFIED MAXIMUM WATTS.

A

NOTE: Only a qualified service technician or service agency should service this electric appliance.

5.1 GLASS DOOR REMOVAL AND INSTALLATION

AWARNING

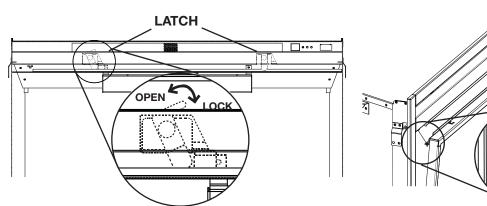
THE DOOR LATCHES ARE PART OF A SAFETY SYSTEM AND MUST BE PROPERLY ENGAGED. DO NOT OPERATE THE APPLIANCE WITH LATCHES DISENGAGED.

FACING AND/OR FINISHING MATERIALS MUST NOT INTERFERE WITH AIR FLOW THROUGH AIR OPENINGS, LOUVRE OPENINGS, OPERATION OF LOUVRES OR DOORS OR ACCESS FOR SERVICE. OBSERVE ALL CLEARANCES WHEN APPLYING COMBUSTIBLE MATERIALS.

BEFORE DOOR IS REMOVED TURN THE APPLIANCE OFF AND WAIT UNTIL APPLIANCE IS COOL TO THE TOUCH. DOORS ARE HEAVY AND FRAGILE SO HANDLE WITH CARE.

75.1

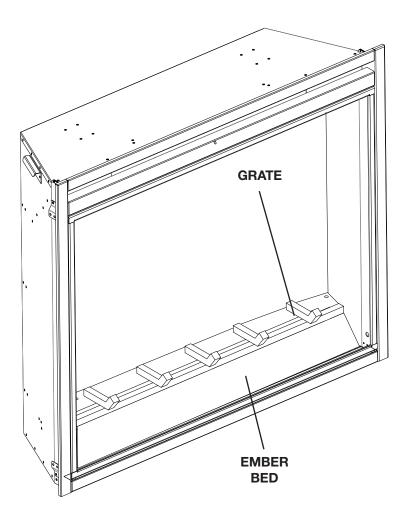
- A. To remove the glass door, swing the top two latches to release the door. The door will hang slightly on the safety catch wire. **NOTE: Pushing in the door, will make the latch swing easier.**
- **B.** Place one hand on the glass door while removing the screw from the catch wire. Allow the door to pivot slightly, hold the sides with both hands while lifting the door out of the appliance.
- C. To install the glass door, simply place the door on the holding pins on the bottom frame of the appliance. Install the screw into the safety catch wire, slightly push the glass door into the frame and latch it secure with the two top latches.





5.2 LOG, GRATE AND EMBER BED ASSEMBLY REMOVAL

- **A.** Remove the card board holding the logs, grate and ember bed assembly to the appliance.
- **B.** Pinch the back of the assembly and lift it up from the appliance.

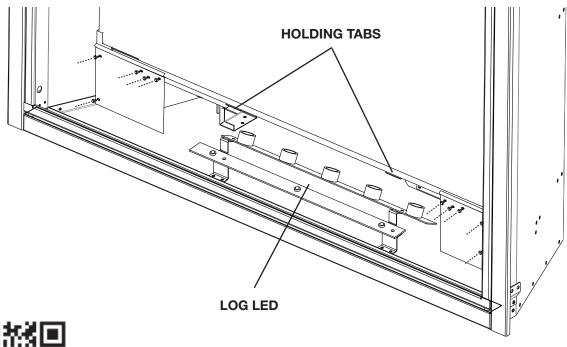


* ILLUSTRATED WITH LOGS NOT SHOWN

5.3 FLAME GLASS REMOVAL

- A. Place a hand on the glass to hold it in place while removing the 10 screws on the bottom of the glass. The glass will fall down to 2 holding tabs.
- **B.** Tilt the glass forward on the bottom with both hands, lift the glass up and out of the appliance.
- **C.** Place the glass on a soft, non-abrasive surface.

NOTE: The flame glass is made out of tempered glass.





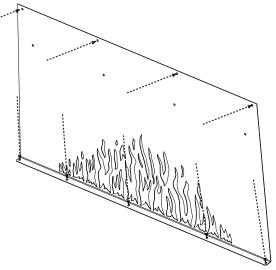
INSTRUCTIONAL VIDEO: HOW TO REMOVE FLAME GLASS

5.4 FLAME BOARD REMOVAL

- A. Remove the 5 screws on the bottom and 4 screws on top of the flame board.
- **B.** Lift the flame board out of the appliance.

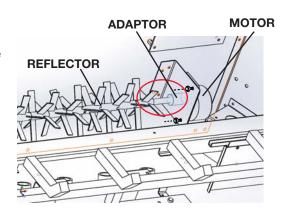


INSTRUCTIONAL VIDEO: HOW TO REMOVE FLAME BOARD



5.5 MOTOR REPLACEMENT

- **A.** To gain access to the motor, see sections 5.0 5.4.
- **B.** To remove the reflector, pull the reflector away from the motor for it to release.
- **C.** Remove the rubber adaptor from the motor.
- **D.** Unplug the quick connect motor wire from the wire harness.
- **E.** Unscrew the 2 screws holding the motor and take the motor out of the appliance.
- **F.** Install the new motor.
- **G.** Reinstall the screws, rubber adaptor, and reflector.

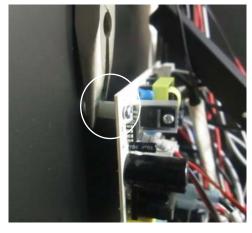




INSTRUCTIONAL VIDEO: HOW TO REPLACE MOTOR

5.6 CONTROL BOARD REPLACEMENT

- **A.** To gain access to the PCB, see sections 5.0 5.4.
- B. Unplug all the wires connected to the control board.
 <u>NOTE:</u> For ease of wire disconnection, use a pair of needle-nose pliers.
- C. Remove control board from appliance.
 NOTE: To prevent stripping of the plastic plugs on the back of the control board, hold the plugs with pliers while removing each of the 4 screws.
- **D.** Screw the new board into the plugs in the same orientation as before.
- **E.** Connect all of the wires to the board. See 5.8 figure 1 for reference.





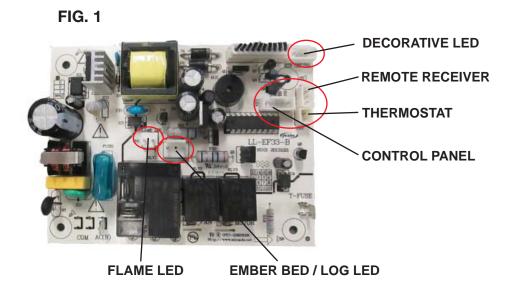
INSTRUCTIONAL VIDEO:
HOW TO REPLACE CONTROL BOARD

5.7 LED REPLACEMENT

- **A.** Find the connector on the PCB for the LED you want to replace and unplug it (Section 5.8 Figure 1).
- **B.** Cut the cable tie.
- **C.** Unscrew the LED strip from the appliance. If unscrewing the log LEDs, use a pair of needle nose pliers to hold the plastic plugs in place.
- **D.** Screw in the new LED strip onto the appliance and connect the wires to the designated quick connect plugs.
- **E.** Using a cable tie, secure the wires.

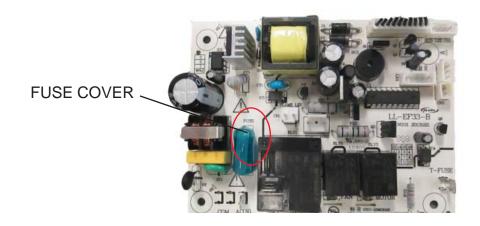
5.8 REMOTE RECEIVER / THERMOSTAT REPLACEMENT

- A. To gain access to the remote receiver or thermostat, see sections 5.0 5.4 and 5.11 (Step B).
- **B.** Find the connector on the PCB for the component you want to replace and uplug it (Figure 1).
- C. Cut the cable tie.
- **D.** Unscrew the component from the appliance.
- **E.** Screw the new component and connect the wires to the designated quick connect plugs.
- **F.** Using a cable tie, secure the wires.



5.9 FUSE REPLACEMENT

- **A.** To gain access to the fuse on the PCB refer to sections 5.0 5.4.
- **B.** Remove the plastic cover from the fuse.
- **C.** Pull the fuse (2Amp) out from the control board.
- **D.** Install the replacement fuse and plastic cover.



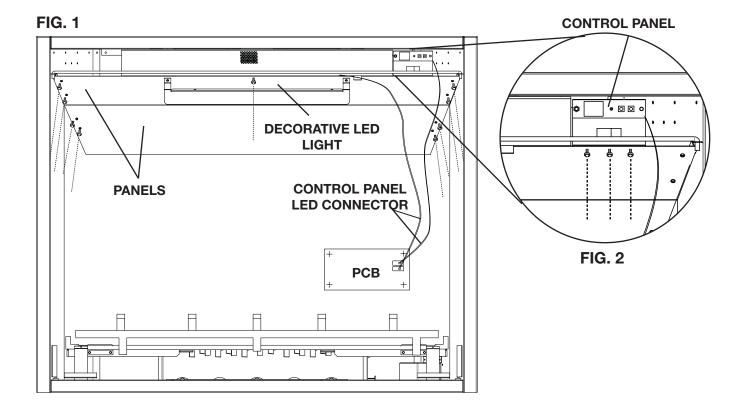
5.10 REMOTE BATTERY REPLACEMENT

- **A.** Turn over the remote with rear side facing up. Slide the battery cover off the remote.
- B. Remove old battery and replace the type CR 2032 battery into the remote and reinstall the battery cover by sliding it into position, as shown. **NOTE:** For ease of installation, hold the batter while sliding the cover onto the remote.
- **C.** Battery cover is secure onto the remote control when a "CLICKING" noise is heard.



5.11 CONTROL PANEL REPLACEMENT

- **A.** Disconnect the control panel remote receiver and decorative LED, quick connect plugs from the printed control board (PCB).
- **B.** Place one hand on the top rear panel and remove the 4 screws. Repeat the same process to remove the 5 screws for the top front panel.
- C. Unscrew the 3 middle screws holding the control panel bracket on the front edge of the appliance, remove the control panel bracket from the appliance (Figure 2).
- **D.** Remove the 2 screws holding the control panel to the bracket.
- **E.** Replace the new control panel, plug control panel, remote receiver and decorative LED to the control board.



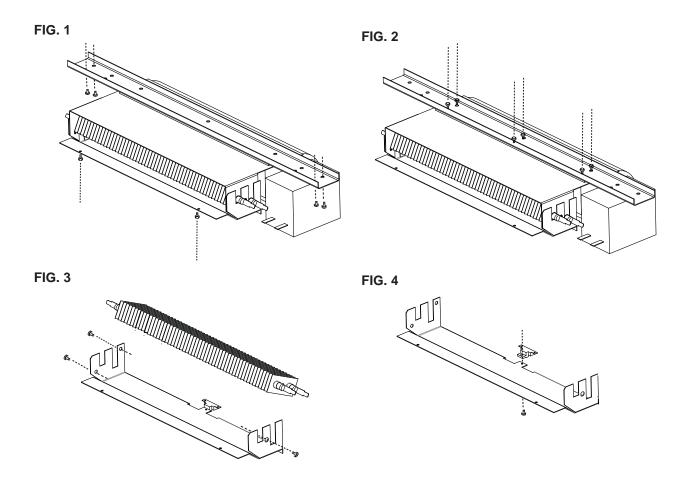


INSTRUCTIONAL VIDEO: HOW TO REPLACE CONTROL PANEL

ΕN

5.12 HIGH LIMIT SWITCH, HEATER, AND BLOWER REPLACEMENT

- A. Remove the top front and top rear panels. Refer to section 5.11 (Step B).
- Unplug the wires connected to the heater and blower. **NOTE**: Use pliers to pinch the connector B. free from the heater tabs for easier removal.
- C. Remove the 6 screws that secure the heater and blower assembly to the appliance (Figure 1).
- D. Take the blower and heater assembly out of the appliance.
- E. Remove the 6 screws that secure the blower to the bracket (Figure 2).
- F. Remove the 3 screws located on the sides of the heater housing then remove the heater by sliding it up and out of the housing (Figure 3).
- G. Remove the wires by removing the single screw from the back of the heater housing, then bend the two tabs upwards that secure the wires in place (Figure 4).





INSTRUCTIONAL VIDEO: HOW TO REPLACE HIGH LIMIT SWITCH, HEATER, AND BLOWER

6.0 NOTES



Fireplace Inserts • Charcoal Grills • Gas Fireplaces • Waterfalls • Wood Stoves Heating & Cooling • Electric Fireplaces • Outdoor Fireplaces • Gas Grills



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