



Service Manual



Model
RLG20
RLG25

Part Number
6909740159
6909760159

IMPORTANT SAFETY INFORMATION: Always read this manual first before attempting to service this log grate. 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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In keeping with our policy of continuous product development, we reserve the right to make changes without notice.

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

! 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.

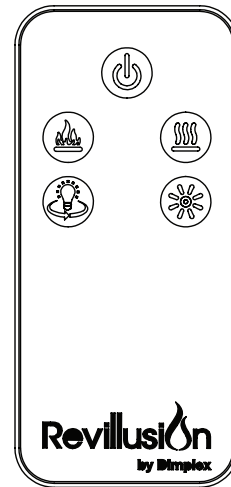
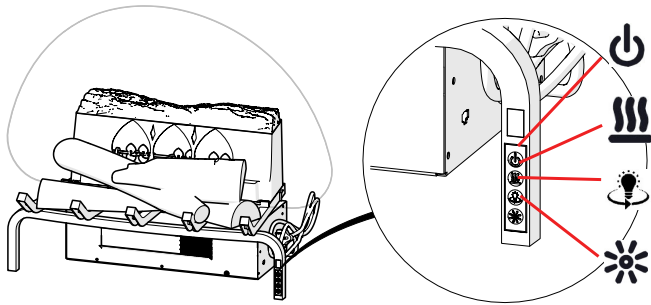
⚠ WARNING: Procedures and techniques which, if not carefully followed, will expose the user to the risk of fire, serious injury, or death.

OPERATION

RLG20

Manual Control

The manual controls for the Revillusion are located on the right-front leg of the log grate.



Power

Press to turn the flame effect on and activate the previous heat setting (Off, Low, or High). Press again to put the unit in standby mode.



Heat

- Heat On
Press to set the heat to Low (indicated by 1 short beep). Press again to set the heat to High (indicated by 2 short beeps).
- Heat Off
Press to turn heat Off (indicated by 1 long beep).

! NOTE: After the heater is switched off, the fan will continue on for 60 seconds before turning off. The log LEDs remain On when the heater is ON and the flame effect is Off.



360° Light

Press multiple times to change the LEDs on the sides and back of the unit from white flickering to white solid to Off. (This feature is active only when the flame effect is On.)



Brightness

Press multiple times to toggle the log set LEDs through its four brightness settings.

Remote Control

The fireplace is supplied with a multi-function remote control.

The remote control has a range of approximately 30 ft (9 m). To operate correctly, the remote control must be pointed toward the front of the unit.



Power

Press to activate the current standby state (On/Off).

• Standby State On

Press to turn everything Off. Press again to active the previous flame effect state.

• Standby State Off

Press to activate the previous flame effect state.

- If the flame effect was On, the previous heat setting will be activated (High, Low, or Off).
- If the flame effect was Off, the previous heat setting will be activated (High or Low).

Press again to turn everything Off.



Flame

Press to light the back log, grate log, and ember mat (optional), and start the flame effect.



Heat

- Heat On
Press to set the heat to Low (indicated by 1 short beep). Press again to set the heat to High (indicated by 2 short beeps).
- Heat Off

Press to turn heat Off (indicated by 1 long beep).

! NOTE: After the heater is switched off, the fan will continue on for 60 seconds before turning off. The log LEDs remain On when the heater is ON and the flame effect is Off.



360° Light

Press multiple times to change the LEDs on the sides and back of the unit from white flickering to white solid to Off. (This feature is active only when the flame effect is On.)



Brightness

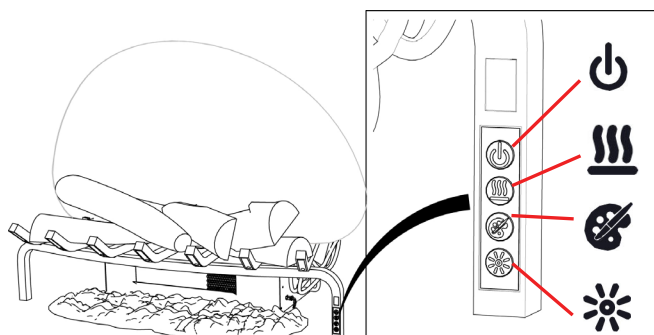
Press multiple times to toggle the log set LEDs

through its four brightness settings.

RLG25

Manual Control

The manual controls for the Revillusion are located on the right-front leg of the log grate.



Power

Press to turn the flame effect on and activate the previous heat setting (Off, Low, or High). Press again to put the unit in standby mode.



Heat

- Heat On
Press to set the heat to Low (indicated by 1 short beep). Press again to set the heat to High (indicated by 2 short beeps).
- Heat Off
Press to turn heat Off (indicated by 1 long beep).

! NOTE: After the heater is switched off, the fan will continue on for 60 seconds before turning off. The log LEDs remain On when the heater is ON and the flame effect is Off.



Color Themes

Press multiple times to change the LED lights from: flame base yellow, flame base blue, flame base yellow with yellow 360 LEDs, flame base blue with 360 LEDs. (Feature is active only when the flame effect is On.)



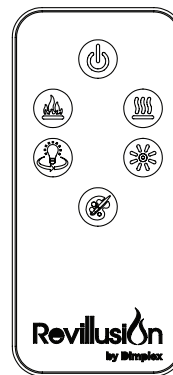
Brightness

Press multiple times to toggle the log set LEDs through its four brightness settings.

Remote Control

The fireplace is supplied with a multi-function remote control.

The remote control has a range of approximately 30ft (9m). To operate correctly, the remote control must be pointed toward the front of the unit.



Power

Press to activate the current standby state (On/Off).

• Standby State On

Press to turn everything Off. Press again to activate the previous flame effect state.

• Standby State Off

Press to activate the previous flame effect state.

- If the flame effect was On, the previous heat setting will be activated (High, Low, or Off).
- If the flame effect was Off, the previous heat setting will be activated (High or Low).

Press again to turn everything Off.



Flame

Press to light the back log, grate log, and ember mat, and start the flame effect.



Heat

Heat On

Press to set the heat to Low (indicated by 1 short beep). Press again to set the heat to High (indicated by 2 short beeps).

• Heat Off

Press to turn heat Off (indicated by 1 long beep).

! NOTE: After the heater is switched off, the fan will continue on for 60 seconds before turning off. The log LEDs remain On when the heater is ON and the flame effect is Off.



360° Light

Press multiple times to change the LEDs on the sides and back of the unit from natural yellow flickering to yellow solid to white flickering to white solid to Off. (Feature is active only when the flame effect is On.)



Brightness

Press multiple times to toggle the log set LEDs through its four brightness settings.



Color Themes

Press multiple times to change the flame base colors from Yellow to Blue to Off. (Feature is active only when the flame effect is On.)

MAINTENANCE

General Maintenance

Inspect the log set regularly, depending upon conditions, and at a minimum yearly intervals. Remove dust and clean the logs, mat, grate, and base as required.

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

⚠ WARNING: Disconnect power and allow heater to cool before attempting any maintenance or cleaning to reduce the risk of fire, electric shock, or injury.

Clean Logs and Base

The log set 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.

Dust and vacuum the log set as needed. Use a damp cloth and a mild detergent to clean painted surfaces of the fireplace. Never use abrasive cleaners.

Clean Mirage™ Flame Panel

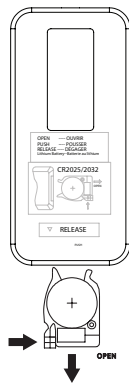
The Mirage™ Flame Panel is cleaned in the factory during the assembly operation. During shipment, installation, handling, etc., the screen may collect dust particles; these can be removed by dusting lightly with a clean dry cloth.

To remove fingerprints or other marks, clean the Mirage™ Flame Panel reflector screen with a damp cloth. Never use abrasive cleaners. Dry the screen completely with a lint free cloth to prevent water spots.

Battery Replacement

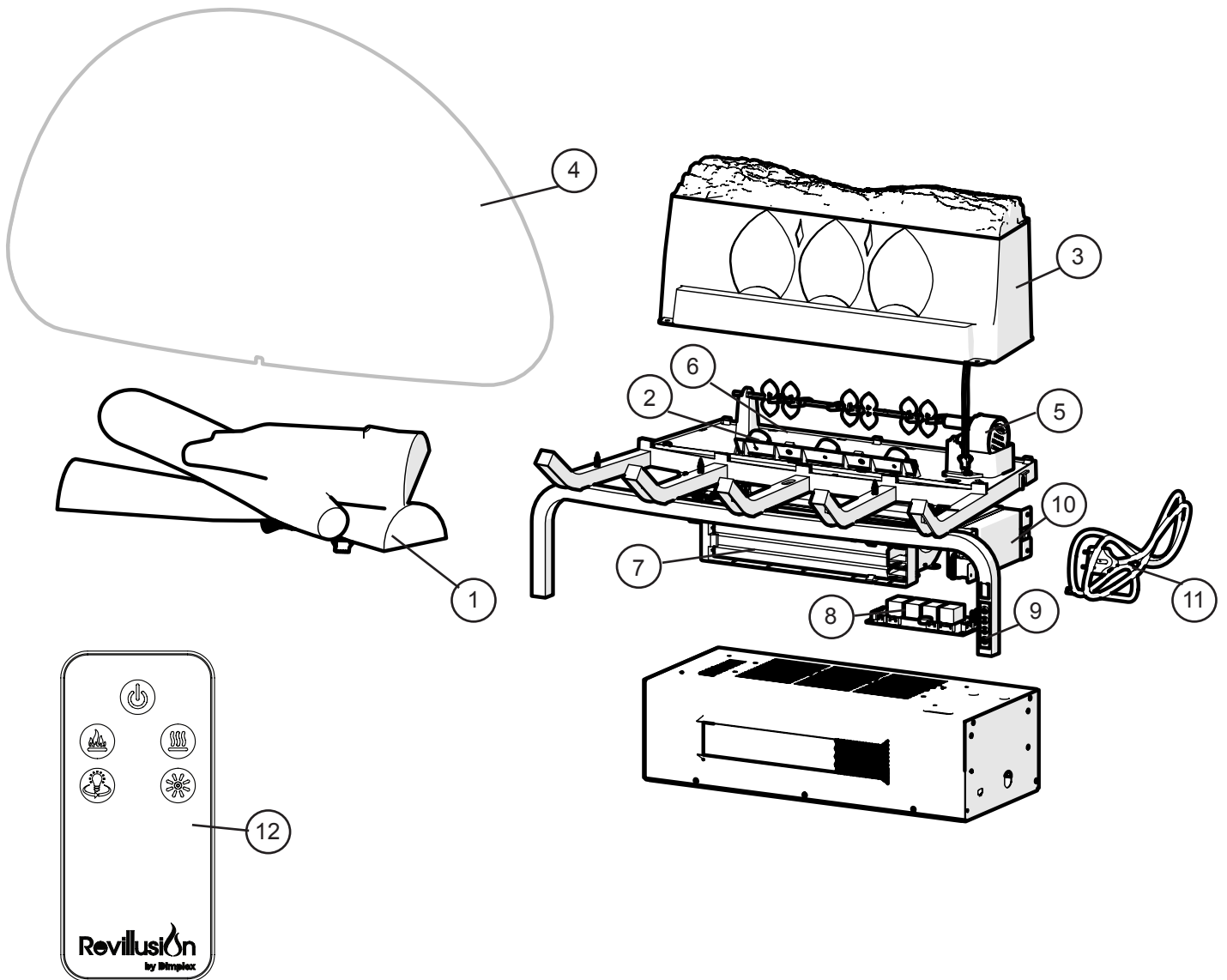
To replace the battery:

1. Push the release tab toward the center and slide the battery cover open.
2. Install 3V Lithium battery in the battery holder. The positive (+) side of the battery faces up.
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.

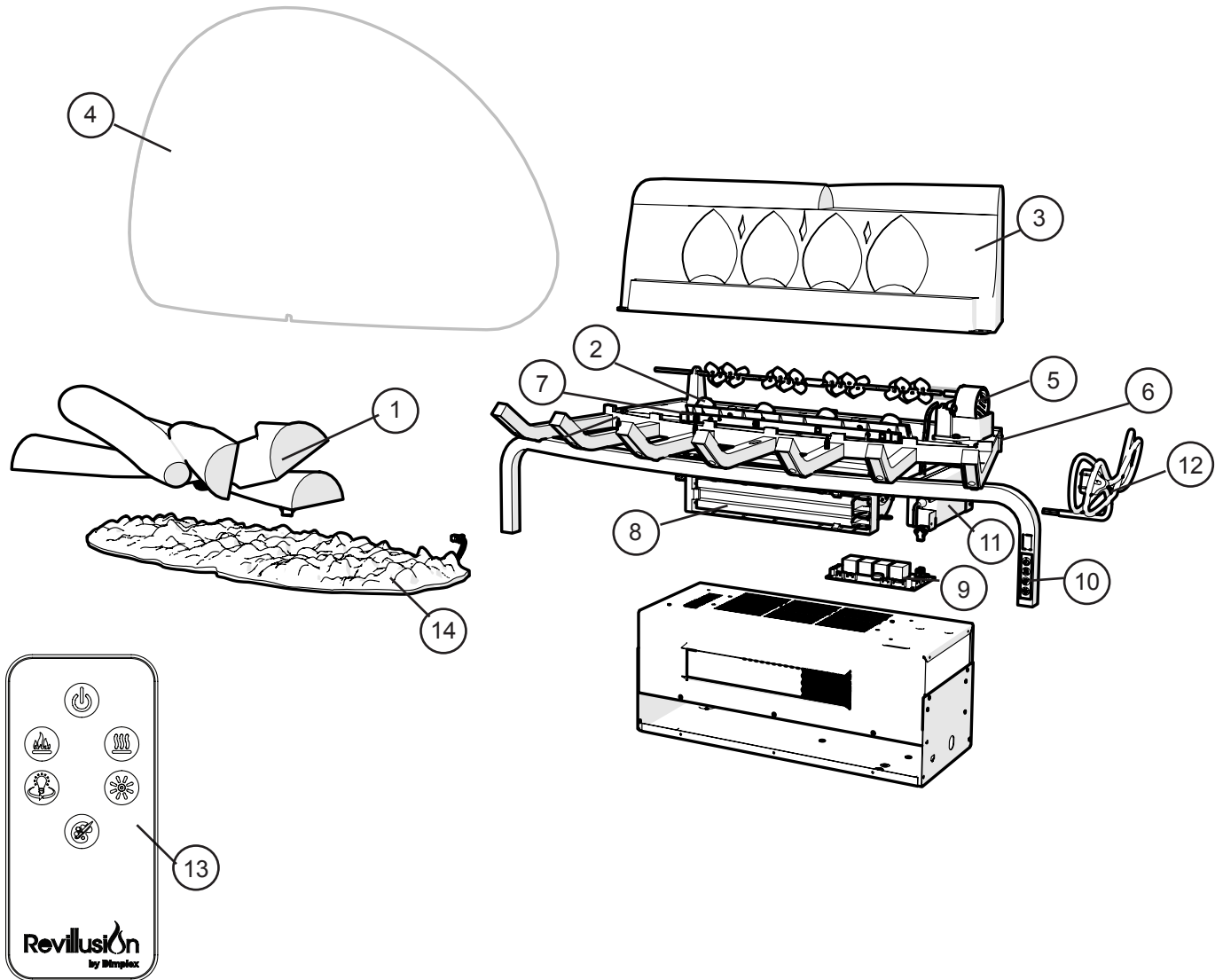
EXPLODED PARTS DIAGRAM - RLG20



REPLACEMENT PARTS LIST - RLG20

1. Logset, 20"	0441910100RP	8. Main Control Board	3001740100RP
2. Flame LED Strip	3001760100RP	9. IR Key Board	3001750100RP
3. Back Log	0441920100RP	10. Power Supply	2100250100RP
4. Mirage™ Flame Panel	5902930100RP	11. Cordset, 3-prong	4100190300RP
5. Flicker Motor.	2000500900RP	12. Remote Control	6700580100RP
6. Back Light Assembly	3001770100RP		
7. Heater-Blower Assy with Cutout.	2203730100RP	Accessory	
		13. Ash Mat	REM-KIT

EXPLODED PARTS DIAGRAM - RLG25

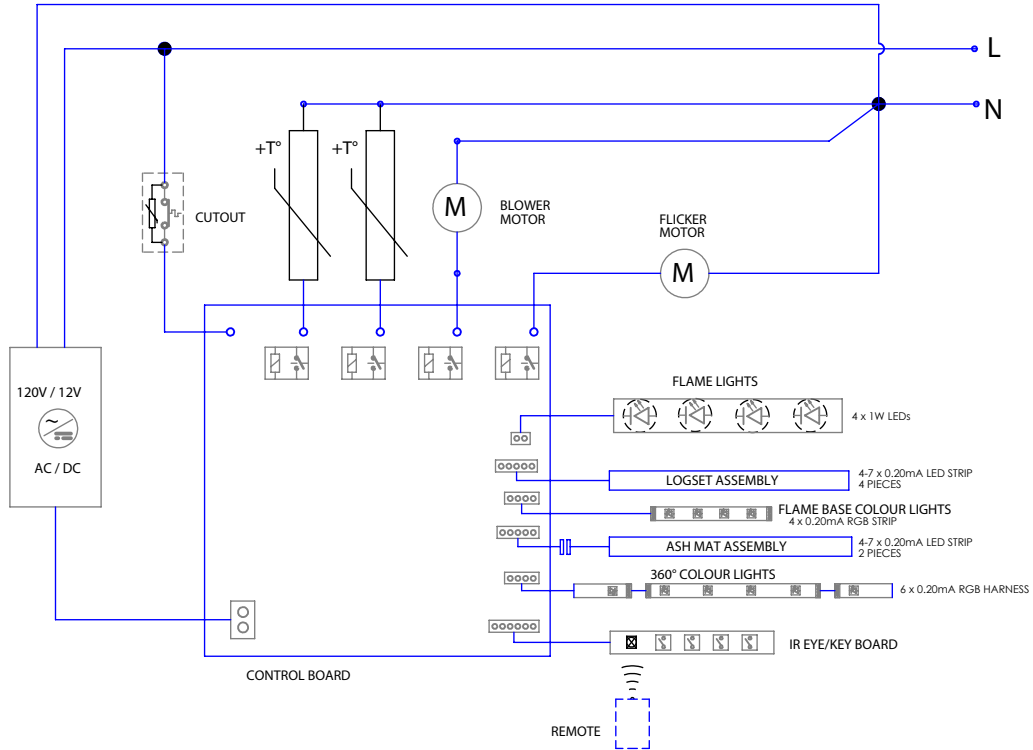


REPLACEMENT PARTS LIST - RLG25

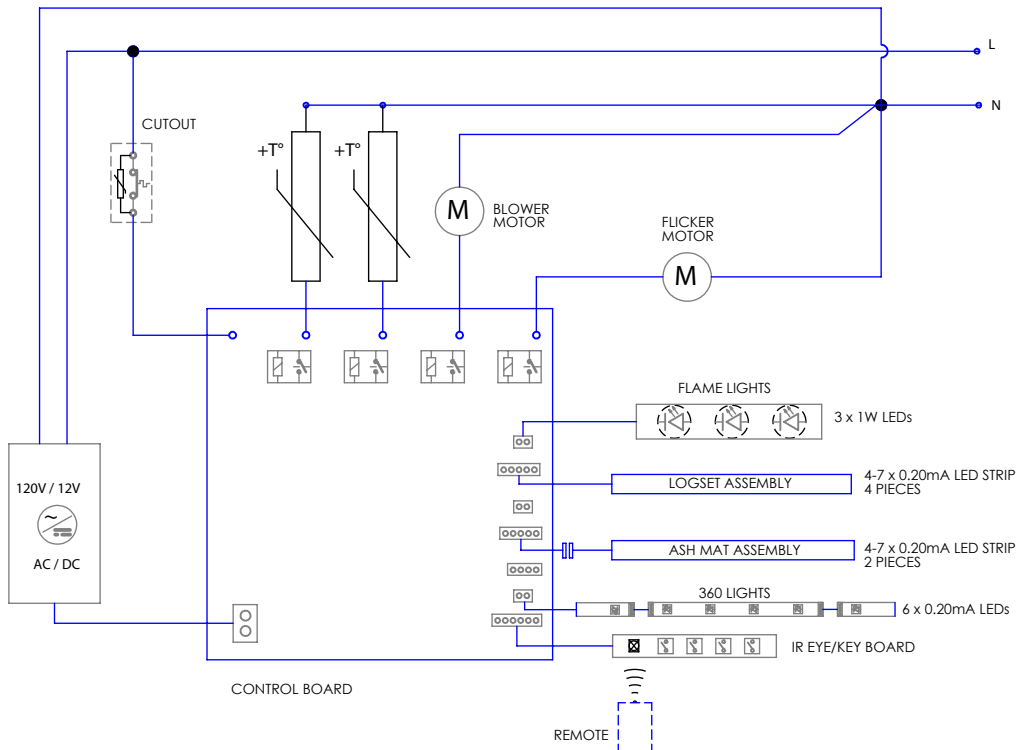
1. Logset, 25"	0441940100RP	8. Heater-Blower Assy with Cutout.	2203730100RP
2. Flame LEDs, 4x1W	3001760200RP	9. Main Control Board	3001740200RP
3. Back Log, 25"	0441950100RP	10. IR Key Board	3001750100RP
4. Mirage™ Flame Panel	5902880100RP	11. Power Supply	2100250100RP
5. Flicker Motor, 18RPM, CCW	2000500900RP	12. Cordset, 3-prong	4100190300RP
6. Back Light Assembly	3001780100RP	13. Remote Control	6700580200RP
7. Coloured Light Assembly	3001570400RP	14. Ash Mat	REM-KIT

WIRING DIAGRAM

RLG25



RLG20



BACK LOG REPLACEMENT

Tools Required: Philips head screwdriver

⚠ WARNING: If the log grate was operating prior to servicing, allow at least 10 minutes for the heating elements to cool off to avoid accidental burning of skin.

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

RLG20

1. Lift the flame panel from the unit and put it aside in a safe place.
2. Remove the ember mat by disconnecting it from the right side of the unit (if applicable).
3. Remove the two screws at the front of the back log. (Figure 3)
4. Install the replacement log and secure with the two screws that were previously removed.
5. Reinstall the flame panel.

RLG25

1. Lift the flame panel from the unit and put it aside in a safe place.
2. Remove the ember mat by disconnecting it from the right side of the unit.
3. Remove the two screws at the front of the back log. (Figure 3)
4. Remove the 3 screws along the bottom of the front and back of the bottom assembly and the four screws from each corner on both ends. (Figure 4)
5. Gently tilt the unit onto the back and lower the bottom assembly so that the electrical can be easily accessed.
6. Trace the wire from the back log to the main control board and disconnect the wire, noting the location on the board.
7. Run the wire from the new back log, following the same path as the wire that was removed. Attach the new wire to the board.

Figure 3

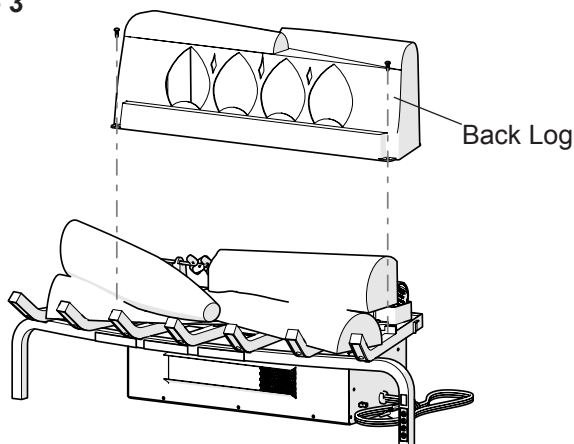


Figure 4

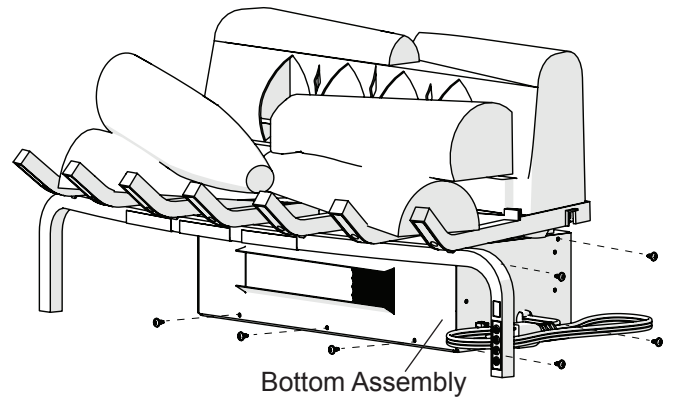
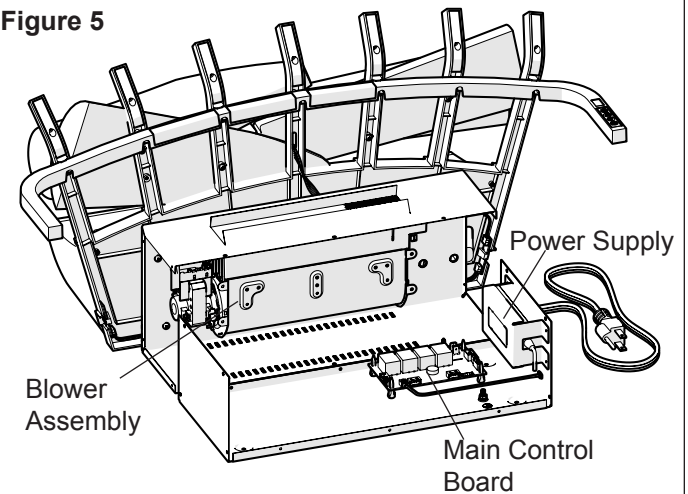


Figure 5



8. Install the replacement log and secure with the two screws that were previously removed.
9. Re-assemble the remainder of the log grate in reverse order from the instructions above.

⚠ WARNING: Ensure wires do not come in contact with moving parts by securing wires in wiring tie wraps.

LOG SET REPLACEMENT

Tools Required: Philips head screwdriver

⚠ WARNING: If the log grate was operating prior to servicing, allow at least 10 minutes for the heating elements to cool off to avoid accidental burning of skin.

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

1. Lift the flame panel from the unit and put it aside in a safe place.
2. Remove the ember mat by disconnecting it from the right side of the unit.
3. Remove the 3 screws along the bottom of the front and back of the bottom assembly and the four screws from each corner on both ends. (Figure 4)
4. Gently tilt the unit onto the back and lower the bottom assembly so that the electrical can be easily accessed.

5. Remove the two screws in the bottom of the second and fourth prongs of the grate to release the logs.
6. Trace the wire from the logs to the main control board and disconnect the wire, noting the location on the board.
7. Run the wire from the new logs, following the same path as the wire that was removed. Attach the new wire to the board.
8. Install the replacement logs and secure with the two screws that were previously removed.
9. Re-assemble the remainder of the log grate in reverse order from the instructions above.

⚠ WARNING: Ensure wires do not come in contact with moving parts by securing wires in wiring tie wraps.

FLAME LED STRIP AND COLOURED LED STRIP REPLACEMENT

Tools Required: Philips head screwdriver

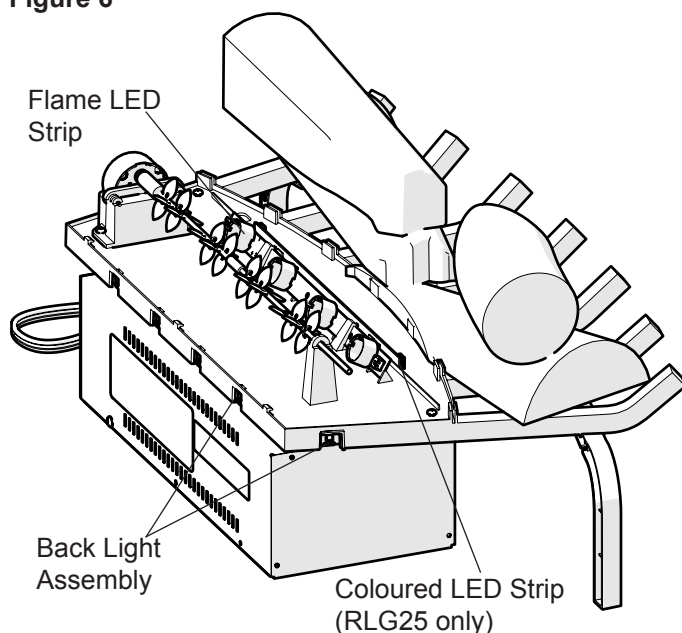
⚠ WARNING: If the log grate was operating prior to servicing, allow at least 10 minutes for the heating elements to cool off to avoid accidental burning of skin.

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RLG20

1. Lift the flame panel from the unit and put it aside in a safe place.
2. Remove the ember mat by disconnecting it from the right side of the unit (if applicable).
3. Remove the two screws at the front of the back log. (Figure 3)
4. Place the back log to the side, trying not to strain the wires (if applicable).

Figure 6



5. Lift the LED strip out of the holder.
6. Gently pull the connector at the end of the strip out of the plug.
7. Connect the new LED strip to the connector and re-install.
8. Re-assemble the remainder of the log grate in reverse order from the instructions above.

⚠ WARNING: Ensure wires do not come in contact with moving parts by securing wires in wiring tie wraps.

BACK LIGHT ASSEMBLY REPLACEMENT

Tools Required: Philips head screwdriver

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

RLG20

1. Lift the flame panel from the unit and put it aside in a safe place.
2. Remove the ember mat by disconnecting it from the right side of the unit (if applicable).
3. Locate the three sections of lights that are located along the bottom edge of the grate. (Figure 6)
4. Depress each of the tabs and gently pull the light strips forward and down to remove them from the unit.
5. Gently pull the connector at the end of the strip out of the plug.
6. Connect the new LED strip to the connector and re-install.
7. Re-assemble the remainder of the log grate in reverse order from the instructions above.

⚠ WARNING: Ensure wires do not come in contact with moving parts by securing wires in wiring tie wraps.

MAIN CONTROL BOARD REPLACEMENT

Tools Required: Philips head screwdriver
Needle-nose pliers
Flat Head Screwdriver

⚠ WARNING: If the log grate was operating prior to servicing, allow at least 10 minutes for the heating elements to cool off to avoid accidental burning of skin.

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

1. Lift the flame panel from the unit and put it aside in a safe place.
2. Remove the ember mat by disconnecting it from the right side of the unit.
3. Remove the 3 screws along the bottom of the front and back of the bottom assembly and the four screws from

each corner on both ends. (Figure 4)

4. Gently tilt the unit onto the back and lower the bottom assembly so that the electrical can be easily accessed.
5. Transfer the wire connectors from the terminals on the original board to the same location on the replacement board.

! NOTE: Use a flat head screwdriver to gently pry between the end of the connector and the remote control receiver to release the wires.

6. Squeeze the mounting tabs located on the corners of the board with the needle-nose pliers, to release the tabs and lift the board off.
7. Position the new board over the tabs and gently press down to engage the tabs.
8. Re-assemble the remainder of the log grate in reverse order from the instructions above.

⚠ WARNING: Ensure wires do not come in contact with moving parts by securing wires in wiring tie wraps.

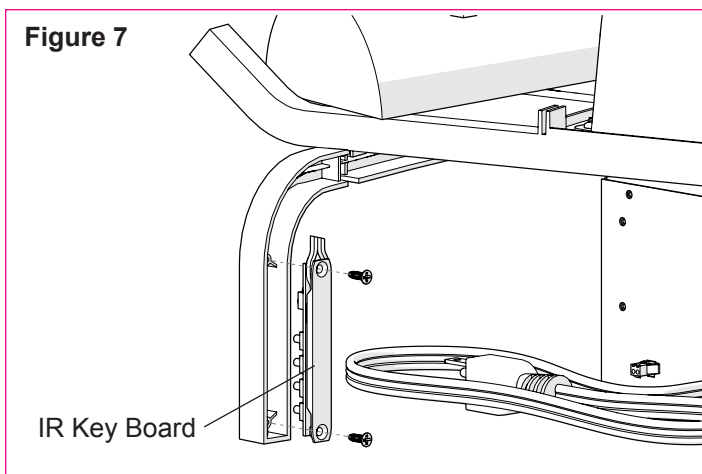
POWER SUPPLY REPLACEMENT

Tools Required: Philips head screwdriver

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

1. Lift the flame panel from the unit and put it aside in a safe place.
2. Remove the ember mat by disconnecting it from the right side of the unit.
3. Remove the 3 screws along the bottom of the front and back of the bottom assembly and the four screws from each corner on both ends. (Figure 4)
4. Gently tilt the unit onto the back and lower the bottom assembly so that the electrical can be easily accessed.
5. Remove the four remaining screws from the right end pane to release the bracket that supports the power supply.



6. Trace the wires to the main control board and the wire nuts and replace the old connections with the new connections.
7. Reinstall the support bracket over the new power supply.
8. Re-assemble the remainder of the log grate in reverse order from the instructions above.

⚠ WARNING: Ensure wires do not come in contact with moving parts by securing wires in wiring tie wraps.

IR KEY BOARD REPLACEMENT

Tools Required: Philips head screwdriver

⚠ WARNING: If the log grate was operating prior to servicing, allow at least 10 minutes for the heating elements to cool off to avoid accidental burning of skin.

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

1. Lift the flame panel from the unit and put it aside in a safe place.
2. Remove the ember mat by disconnecting it from the right side of the unit.
3. Remove the two screws securing the IR key board to the back side of the right leg. (Figure 7)
4. Remove the 3 screws along the bottom of the front and back of the bottom assembly and the four screws from each corner on both ends. (Figure 4)
5. Gently tilt the unit onto the back and lower the bottom assembly so that the electrical can be easily accessed.
6. Trace the wire from the IR key board to the main control board and disconnect the wire, noting the location on the board.
7. Run the wire from the IR key board, following the same path as the wire that was removed. Attach the new wire to the board.
8. Install the replacement key board and secure with the two screws that were previously removed.
9. Re-assemble the remainder of the log grate in reverse order from the instructions above.

⚠ WARNING: Ensure wires do not come in contact with moving parts by securing wires in wiring tie wraps.

POWER CORD REPLACEMENT

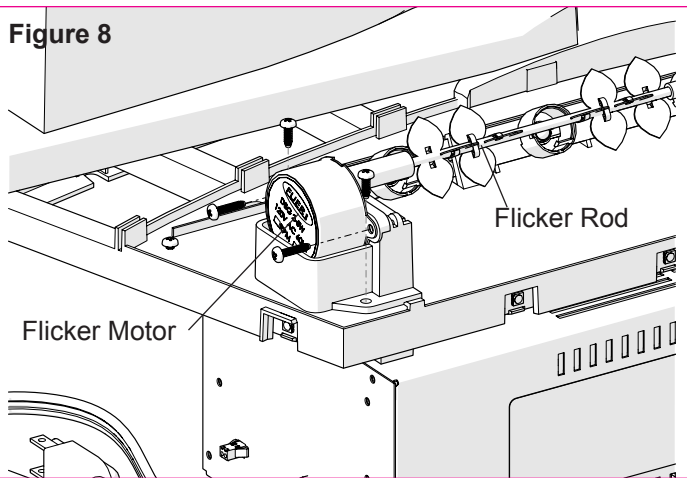
Tools Required: Philips head screwdriver
Needle-nose pliers
Flat Head Screwdriver

⚠ WARNING: If the log grate was operating prior to servicing, allow at least 10 minutes for the heating elements to cool off to avoid accidental burning of skin.

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

1. Lift the flame panel from the unit and put it aside in a

Figure 8



safe place.

2. Remove the ember mat by disconnecting it from the right side of the unit.
3. Remove the 3 screws along the bottom of the front and back of the bottom assembly and the four screws from each corner on both ends. (Figure 4)
4. Gently tilt the unit onto the back and lower the bottom assembly so that the electrical can be easily accessed.
5. Follow the wiring from the power cord to the wire nuts, removing any tie wraps and remove the connections, taking note of the original locations.
6. Disconnect the ground wire from the screw on the bottom pane.
7. With needle nosed pliers, squeeze and push the grommet securing the power cord out of the casing.
8. Insert the new power cord and grommet, reattaching the wire with new tie wraps.
9. Reconnect the wires according in their original configuration.
10. Re-assemble the remainder of the log grate in reverse order from the instructions above.

FLICKER MOTOR REPLACEMENT

Tools Required: Philips head screwdriver

⚠ WARNING: If the log grate was operating prior to servicing, allow at least 10 minutes for the heating elements to cool off to avoid accidental burning of skin.

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

RLG20

1. Lift the flame panel from the unit and put it aside in a safe place.
2. Remove the ember mat by disconnecting it from the right side of the unit (if applicable).
3. Remove the two screws at the front of the back log and set it aside, ensuring that the wires are not strained (if applicable). (Figure 3)

4. Remove the 3 screws along the bottom of the front and back of the bottom assembly and the four screws from each corner on both ends. (Figure 4)
5. Gently tilt the unit onto the back and lower the bottom assembly so that the electrical can be easily accessed.
6. Remove the two screws that secure the motor support to the base of the grate (vertical). (Figure 8)
7. Disconnect the flicker rod and rubber grommet from the flicker motor.
8. Remove the two screws that secure the motor from the motor support (horizontal). (Figure 8)
9. Trace the wires from the motor to the main control board and disconnect the wire, noting the location on the board.
10. Run the wire from the new motor, following the same path as the wire that was removed. Attach the new wire to the board.
11. Re-assemble the remainder of the log grate in reverse order from the instructions above.

⚠ WARNING: Ensure wires do not come in contact with moving parts by securing wires in wiring tie wraps.

HEATER ASSEMBLY REPLACEMENT

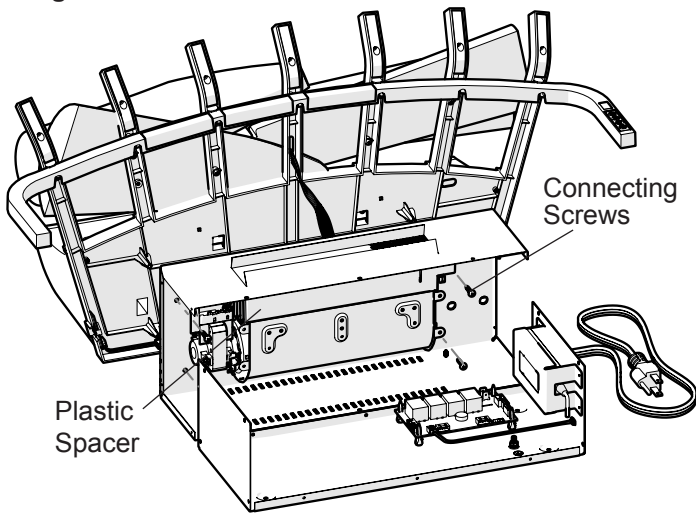
Tools Required: Philips head screwdriver
Flat Head Screwdriver

⚠ WARNING: If the log grate was operating prior to servicing, allow at least 10 minutes for the heating elements to cool off to avoid accidental burning of skin.

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

1. Lift the flame panel from the unit and put it aside in a safe place.
2. Remove the ember mat by disconnecting it from the right side of the unit.
3. Remove the 3 screws along the bottom of the front and back of the bottom assembly and the four screws from each corner on both ends. (Figure 4)
4. Gently tilt the unit onto the back and lower the bottom assembly so that the electrical can be easily accessed.
5. Remove the four screws in the top assembly - two on either end of the heater.
6. Turn the logs and log grate on its side, to the right, to access the four screws that secure the heater assembly to the top assembly.
7. On the heater assembly, there is a plastic spacer that channels the air from the heater assembly out of the unit, remove the two screws on either end that hold the plastic spacer to the heater.
8. Install the plastic spacer to the new heater, transfer the wires from the old heater to the new heater and re-assemble the remainder of the log grate in reverse order from the instructions above.

Figure 9



! NOTE: Use a flat head screwdriver to gently pry between the end of the connector and the heater assembly to release the wires.

⚠ WARNING: Ensure wires do not come in contact with moving parts by securing wires in wiring tie wraps.

TROUBLESHOOTING GUIDE

PROBLEM	CAUSE	SOLUTION
General		
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.
Appearance		
Log grate does not turn on in Manual Mode	Improper operation	Refer to operation section
	No incoming power from the electrical wall socket	Check fuse/breaker panel
	Defective IR key board	Replace IR key board
	Defective main control board	Replace main control board.
Log grate does not turn on in Remote Mode	Improper operation	Refer to Operation Section
	Loose wiring	Check wiring connections
	Remote Control not working	Install new battery into the Remote Control. Reinitialize remote control where necessary
	Defective main control board	Replace main control board.
One or all logs in log set dim, not glowing	Loose connection	Check wiring connections
	Defective log set wiring	Replace log set assembly
Back log dim, not glowing (only applicable for the RLG25)	Loose connection	Check wiring connections
	Defective back log wiring	Replace back log assembly
Flame dim or not appearing	Improper operation	Refer to Operation Section
	Loose connection of flame LEDs	Check wiring connections
	Defective flame LED wiring	Replace flame LED assembly
	Defective main control board	Replace main control board.
Flame Frozen	Loose wiring	Check wiring connections
	Defective Flicker Motor	Replace Flicker Motor
Flame Shudder	Defective Flicker Motor	Replace Flicker Motor
Back lighting dim or not appearing	Improper operation	Refer to Operation Section
	Loose connection of back light LEDs	Check wiring connections
	Defective back light LED wiring	Replace back light LED assembly
	Defective main control board	Replace main control board.
Colour themes dim or not appearing	Improper operation	Refer to Operation Section
	Loose connection of coloured LEDs	Check wiring connections
	Defective coloured LED wiring	Replace coloured LED assembly
	Defective main control board	Replace main control board.

PROBLEM	CAUSE	SOLUTION
Heater		
Heater is not turning Off	Improper operation	Refer to Operation Section
	Defective main control board	Replace main control board.
Heater is not turning On	Improper operation	Refer to Operation Section
	Loose wiring	Check wiring connections
	Defective heater assembly	Replace heater assembly
Heater is turning off after a couple of minutes of operation	Build up of dirt/dust in heater assembly	Ensure that exterior intake louvers and log grate cavity are free of dirt/dust.
	Defective Heater Assembly	Replace Heater Assembly
Heater emits an odor	Normal Operation	Normal operation is when the heater emits an odor for a brief period after the heater is initially turned on. The heater is burning off any dust accumulated during manufacturing or operation.
	Defective heater assembly	Replace heater assembly
Heater fan turns on but heater lacks heat	Improper operation	Refer to Operation Section
	Loose wiring	Trace wiring in unit
	Defective heater assembly	Replace heater assembly
Heating element is glowing red	Normal Operation	Small glowing sections of the element are considered normal.
	Defective heater assembly	If larger glowing sections are causing the heater to trip the thermal cutout, unplug unit, discontinue use and replace heater assembly.
Heater fan runs continuously	Loose wiring	Trace wiring in unit
	Defective heater assembly	Replace heater assembly
Noise		
Excessive noise with the heater on	Dirty heater assembly	Ensure that exterior intake louvers and log grate cavity are free of dirt/dust.
	Defective heater assembly	Replace heater assembly