

Service Manual

Models

North America

EVO50 500002573

EVO60 500002574

EVO74 500002608

EVO100 500002563

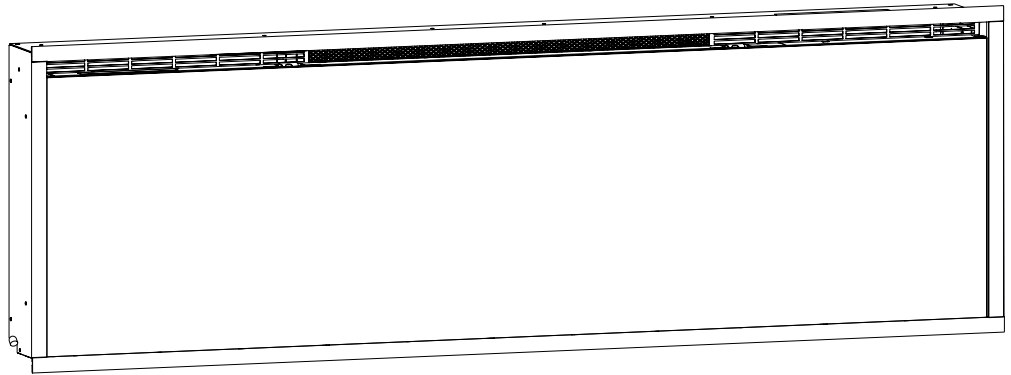
Europe/UK

EVO1200

EVO1500

EVO1800

EVO2500



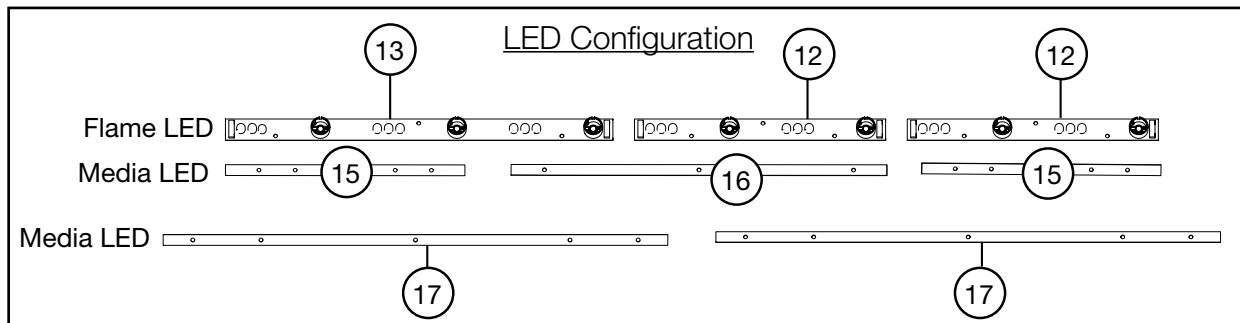
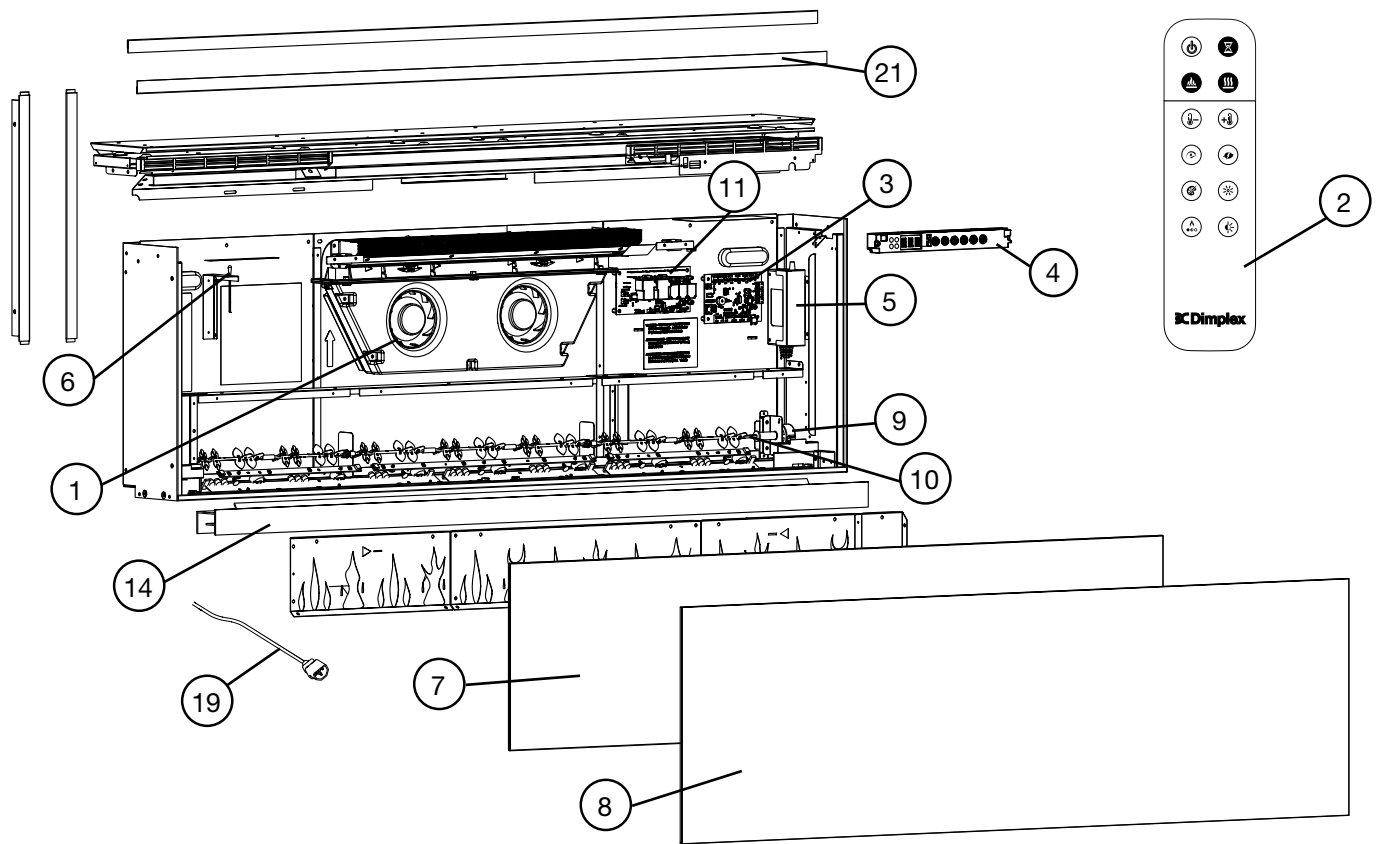
IMPORTANT SAFETY INFORMATION:

Read this manual first before attempting to install or use this electric fireplace. Always comply with the warnings and safety instructions contained in this manual to prevent personal injury or property damage.

Table of Contents

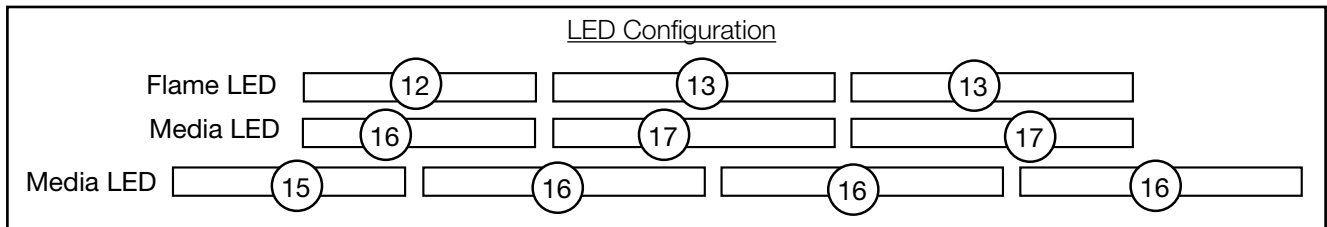
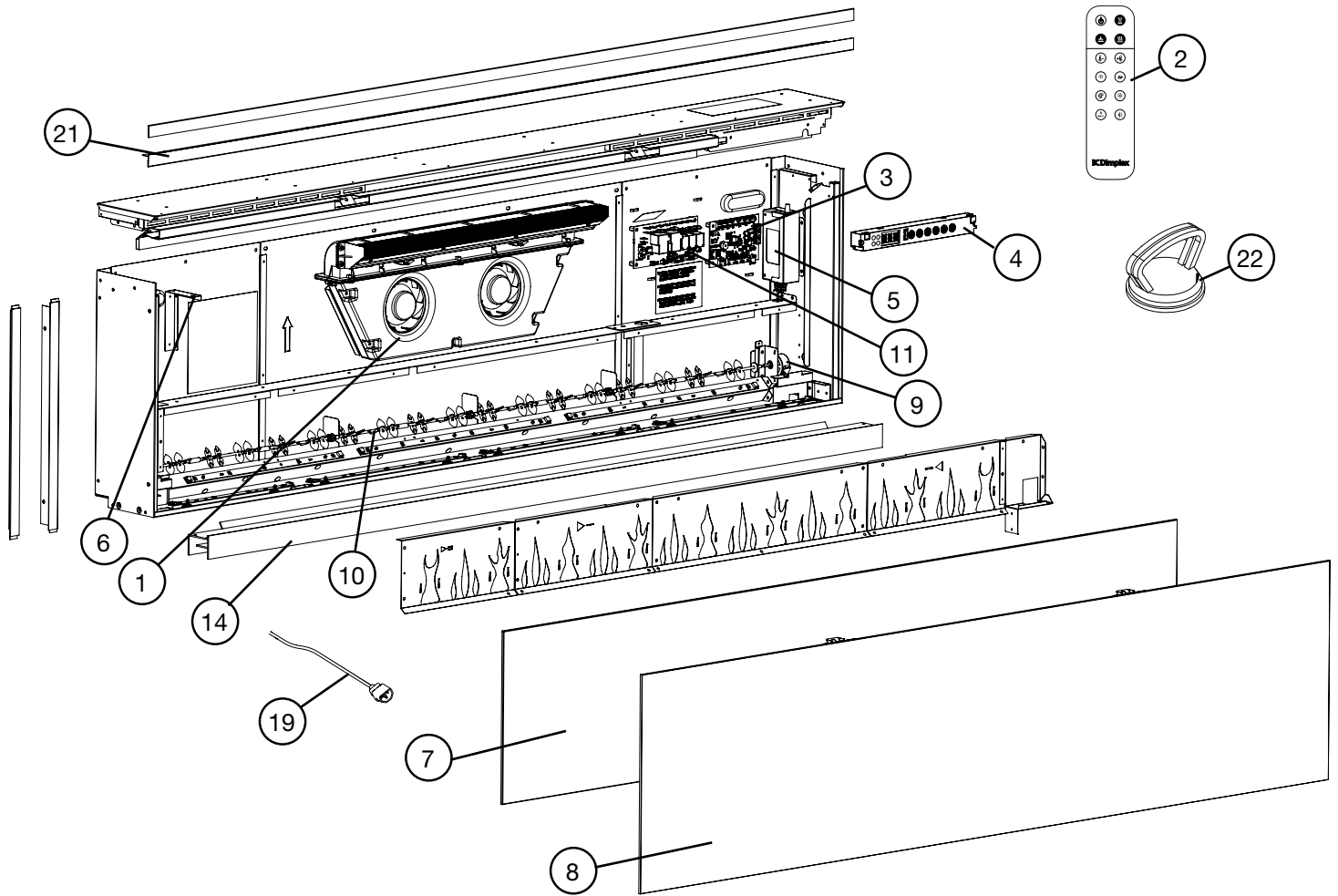
Exploded Parts Diagrams - North America	3
Replacement Parts List - 500002573 (EVO50)	3
Replacement Parts List - 500002574 (EVO60)	4
Replacement Parts List - 500002608 (EVO74)	5
Replacement Parts List - 500002563 (EVO100)	6
Wiring Diagrams - North America	7
500002573 (EVO50)	7
500002574 (EVO60)	7
500002608 (EVO74)	8
500002563 (EVO100)	8
Exploded Parts Diagram - Europe	9
Replacement Parts List - EVO1200	9
Replacement Parts List - EVO1500	10
Replacement Parts List - EVO1800	11
Replacement Parts List - EVO2500	12
Replacement Part Procedures	13
Preparation for Service	13
Control Board Replacement	14
Adapter Board Replacement (Only 500002563)	14
Power Supply Replacement	15
Capacitive Controls and Display Replacement	15
Media LED Light Strips Replacement	16
Flame LED Strips Replacement	16
Flicker Assembly Replacement	17
Flicker Motor Replacement	17
Temperature Sensor (NTC) Replacement	18
Heater Assembly Replacement	18
Troubleshooting	19

Exploded Parts Diagram - Europe



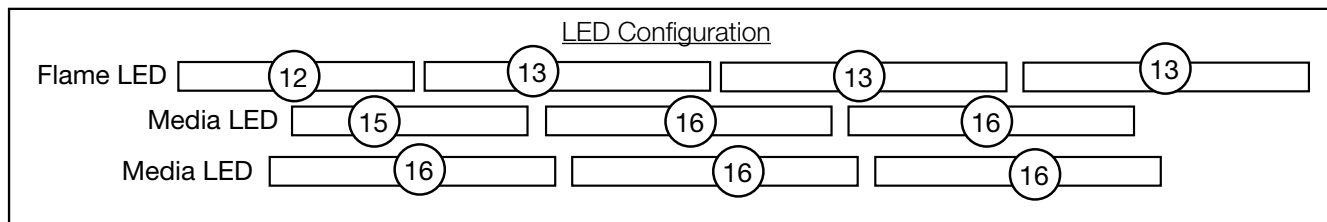
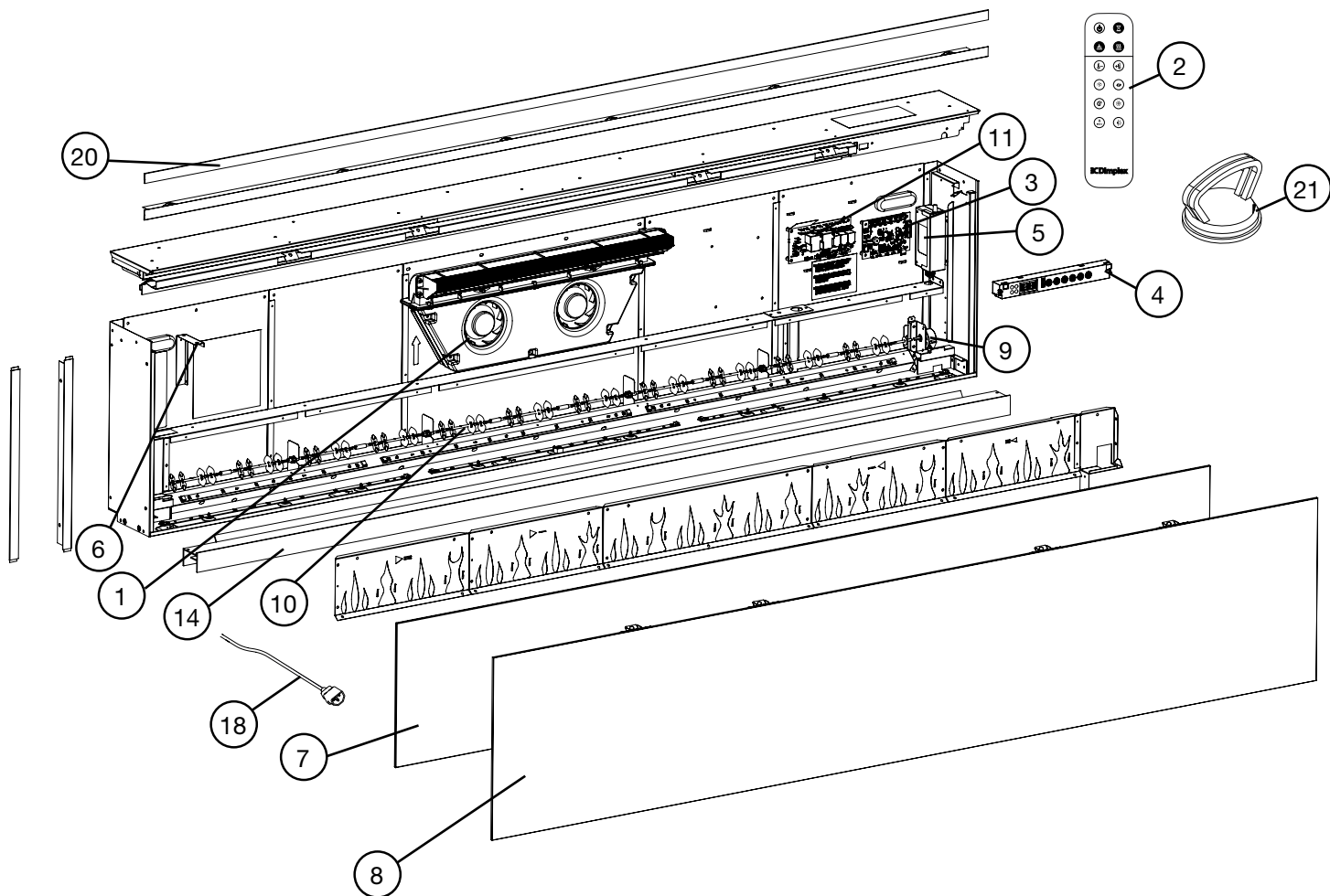
Replacement Parts List - EVO1200

1. Heater Assembly	500004545	13. Flame LED 6-Light Assembly	500004576
2. Remote Control	500004546	14. Fuel Bed Tray	500002252
3. Control Board	500004547	15. Media LED 4-Light Assembly (2)	500004577
4. Display Panel	500004549	16. Media LED 6-Light Assembly	500004382
5. Power Supply (5 Amp)	500004402	17. Media LED 8-Light Assembly (2)	500004383
6. Temperature Sensor (NTC)	500004563	18. Installation Hardware Kit	500004586
7. Mirrored Glass	500004564	19. Power Cord Supply	500000473
8. Front Glass	500004567	20. Power Cord UK	500001328
9. Flicker Motor	500004387	21. 4-piece Trim	500004587
10. Flicker Assembly	500004570	22. Tumbled Glass Embers	500004581
11. Relay Board	500004403	23. Driftwood Logset	500004582
12. Flame LED 4-Light Assembly (2)	500004574		



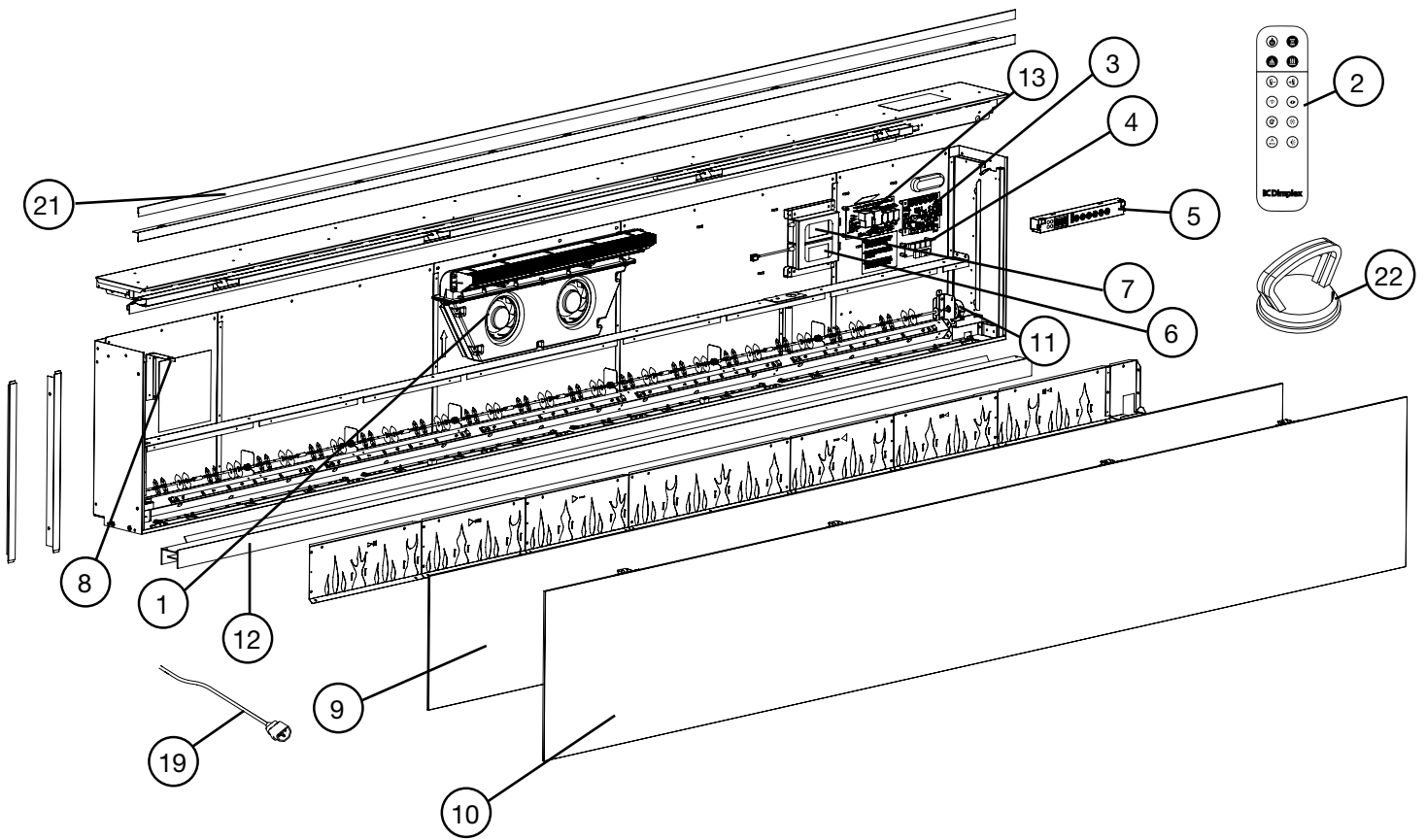
Replacement Parts List - EVO1500

1. Heater Assembly..... 500004545	13. 6-Light LED Flame (2)..... 500004576
2. Remote Control..... 500004546	14. Fuel Bed Tray 500004579
3. Control Board 500004547	15. 4-Light RGBW Media LED 500004577
4. Display Panel 500004550	16. 5-Light RGBW Media LED (4)..... 500004578
5. Power Supply (5 Amp) 500004402	17. 6-Light RGBW Media LED (2)..... 500004382
6. Temperature Sensor (NTC) 500004563	18. Installation Hardware Kit..... 500004586
7. Mirrored Glass 500004565	19. Power Cord Supply..... 500000473
8. Front Glass 500004568	20. Power Cord UK..... 500001328
9. Flicker Motor..... 500004387	21. 4-piece Trim 500004588
10. Flicker Assembly 500004571	22. Suction Cup 500000454
11. Relay Board 500004403	23. Tumbled Glass Embers..... 500004581
12. 5-Light LED Flame 500004575	24. Driftwood Logset 500004583

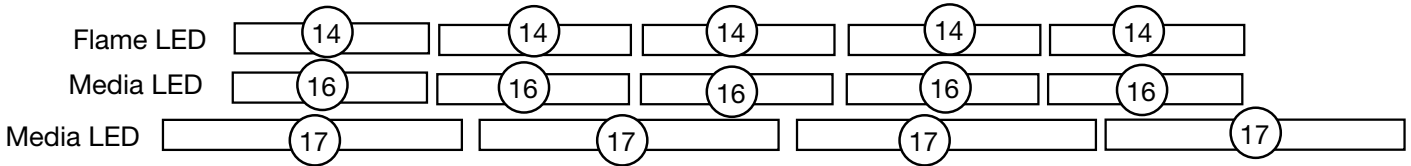


Replacement Parts List - EVO1800

1. Heater Assembly	500004545	12. 4-Light LED Flame	500004574
2. Remote Control	500004546	13. 6-Light LED Flame (3)	500004576
3. Control Board	500004547	14. Fuel Bed Tray	500004580
4. Display Panel	500004551	15. 6-Light RGBW Media LED	500004382
5. Power Supply (5 Amp)	500004402	16. 8-Light RGBW Media LED (5)	500004383
6. Temperature Sensor (NTC)	500004563	17. Installation Hardware Kit	500004586
7. Mirrored Glass	500004566	18. Power Cord Supply	500000473
8. Front Glass	500004569	19. Power Cord UK	500001328
9. Flicker Motor	500004387	20. 4-piece Trim	500004555
10. Flicker Assembly	500004572	21. Suction Cup	500000454
11. Relay Board	500004403	22. Tumbled Glass Embers	500004581
		23. Driftwood Logset	500004584



LED Configuration



Replacement Parts List - EVO2500

1. Heater Assembly.....	500004545	15. Fuel Bed Tray	500002245
2. Remote Control.....	500004546	16. 6-Light RGBW Media LED (5)	500004382
3. Control Board	500004547	17. 8-Light RGBW Media LED (4)	500004383
4. Adapter Board	500004548	18. Installation Hardware Kit.....	500004586
5. Display Panel	500004552	19. Power Cord Supply.....	500000473
6. Power Supply (5 Amp)	500004402	20. Power Cord UK.....	500001328
7. Power Supply (3 Amp)	500004509	21. 4-piece Trim	500004556
8. Temperature Sensor (NTC)	500004563	22. Suction Cup	500000454
9. Mirrored Glass	500004553	23. Tumbled Glass Embers.....	500004581
10. Front Glass	500004554	24. Driftwood Logset	500004585
11. Flicker Motor.....	500004387		
12. Flicker Assembly	500004573		
13. Relay Board	500004403		
14. 6-Light LED Flame (5)	500004576		

Replacement Part Procedures

Preparation for Service

⚠ 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.

Tools Required: Philips head screwdriver and 2.5 mm hex key.

! NOTE: All components are replaceable from the front of the fireplace while the unit is mounted in the wall.

! NOTE: Be careful to not damage the springs behind the capacitive controls and display board at the top right hand side of the unit when performing service.

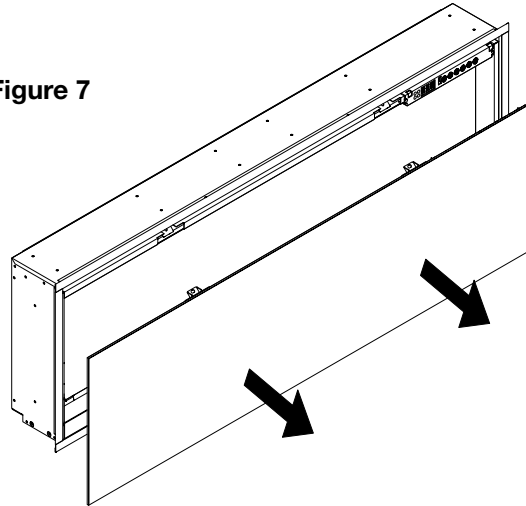
1. Turn the breaker off at the electrical panel.
2. Remove the front glass assembly by removing all screws (located just inside the top front vent opening). These screws secure the front glass panel to the inside of the fireplace.
3. Lift the front glass assembly out of the unit and carefully place the glass assembly aside in a safe location.
4. Remove the decorative media 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 decorative media together.
5. Attach the suction cup to the partially reflective glass to assist with removal (500002608 & 500002563.)
6. Remove the screws from the glass retaining bracket, starting on either end and working your way to the middle, along the top of the opening, ensuring that neither the bracket nor the partially reflective glass falls out of the unit.
7. Gently lift the partially reflective glass out of the unit and set it aside in a safe place. (Figure 7)

⚠ CAUTION: The mirror is fragile and should not be bumped or dropped.

8. Proceed to the instructions within this manual relating to the repair being performed - see Table of Contents for page number.

! NOTE: Before disassembling the defective part, it is highly recommended to take a clear photo of it, including any wiring or connections. This will serve as a reference in case you need to verify the original configuration during reassembly.

Figure 7

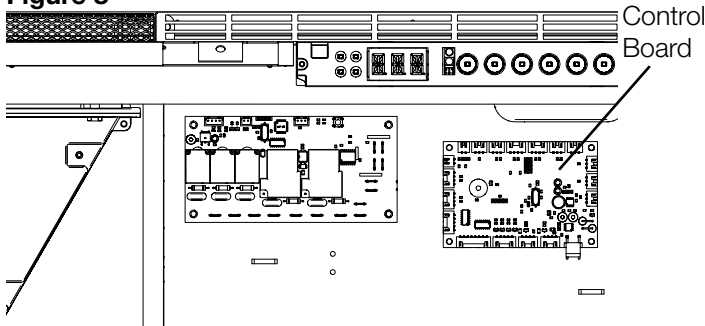


Control Board Replacement

Tools required: Phillips head screwdriver

1. Follow "Preparation for Service" instructions before proceeding.
2. Locate the control board. (Figure 8)
3. Transfer the connections from the old board to the new board.
4. Remove the board, by removing the screw on each corner.
5. Install the new board onto the unit.
6. Ensure that all wires are replaced in the same manner as prior to the service.
7. Reassemble in the reverse order as above.

Figure 8

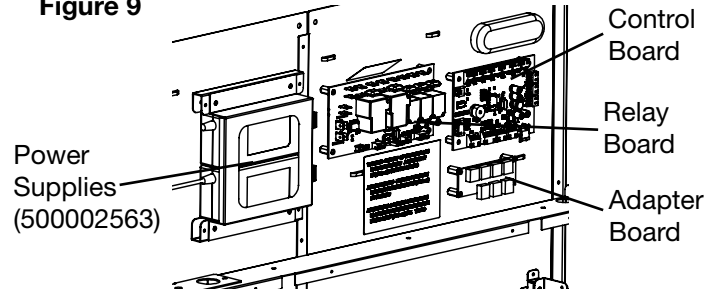


Adapter Board Replacement (Only 500002563)

Tools required: Phillips head screwdriver

1. Follow "Preparation for Service" instructions before proceeding.
2. Locate the adapter board. (Figure 9)
3. Transfer the connections from the old board to the new board.
4. Remove the board, by removing the screw on each end.
5. Install the new board onto the unit.
6. Ensure that all wires are replaced in the same manner as prior to the service.
7. Reassemble in the reverse order as above.

Figure 9

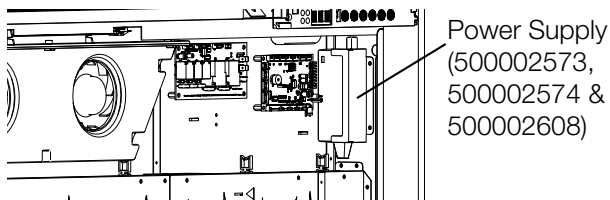


Power Supply Replacement

Tools required: Phillips head screwdriver

1. Follow “Preparation for Service” instructions before proceeding.
2. Locate the power supply(s). (Figure 9 & 10)
3. Remove the screws that secure the holding bracket and power supply to the unit.
4. Trace the wires to the control board and disconnect.
5. Run the wiring from the new power supply to the control board .
6. Reinstall the bracket.
7. Ensure that all wires are replaced in the same manner as prior to the service.
8. Reassemble in the reverse order as above.

Figure 10

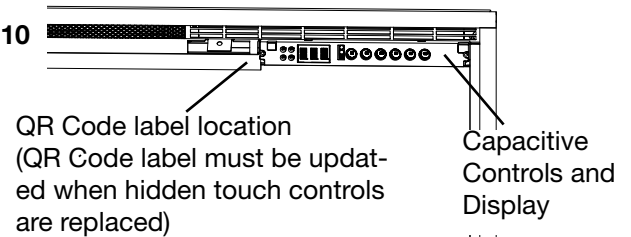


Capacitive Controls and Display Replacement

Tools required: Phillips head screwdriver

1. Follow “Preparation for Service” instructions before proceeding.
2. Locate the controls and display assembly and remove the 2 securing screws. (Figure 10)
3. Gently remove the assembly from the unit by pulling it forward.
4. Disconnect the wire from the old assembly and install it on the new assembly.
5. Reinstall the new assembly onto the unit.
6. Ensure that all wires are replaced in the same manner as prior to the service.
7. Reassemble in the reverse order as above.
8. Place the new QR code stickers over the label on the fireplace, and on the back of the Owner’s Manual.
9. Relink your fireplace to the Flame Connect App if desired. Visit dimplex.com/fcapp for more information.

Figure 10

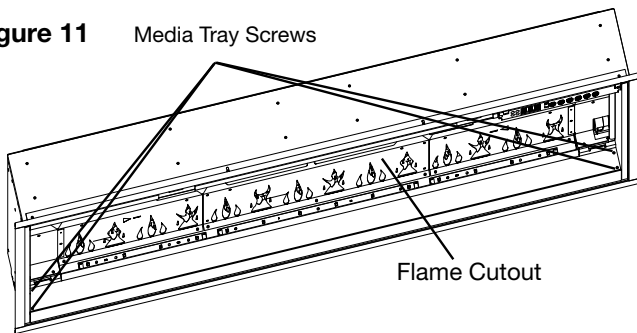


Media LED Light Strips Replacement

Tools required: Phillips head screwdriver
Needle nose pliers

1. Follow “Preparation for Service” instructions before proceeding.
 2. Remove the plastic media tray by removing all screws. (Figure 11)
 3. Lift the plastic media tray out of the unit.
 4. Locate the LED assembly that needs to be removed.
 5. Disconnect the wiring connections at either end.
 6. Remove the assembly by pinching the plastic mounting tabs with needle nose pliers and lifting off.
 7. Connect the new LED strips, ensuring J1 (in) is toward the right and J2 (out) is toward the left.
- ! NOTE:** When replacing the LED strip furthest to the left, the jumper connector must be transferred to the new LED strip. (Figure 12)
8. Secure the LED strip on the mounting tabs.
 9. Ensure that all wires are replaced in the same manner as prior to the service.
 10. Reassemble in the reverse order as above.

Figure 11 Media Tray Screws

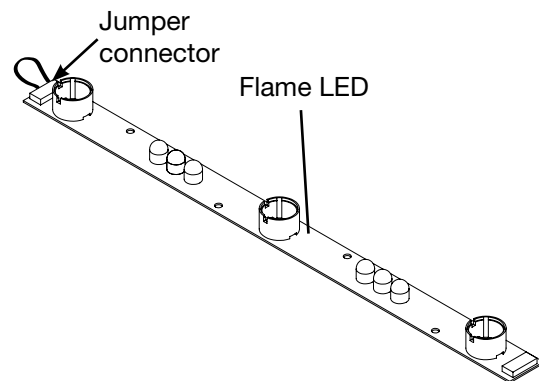


Flame LED Strips Replacement

Tools required: Phillips head screwdriver
Wire cutters

1. Follow “Preparation for Service” instructions before proceeding.
 2. Remove the plastic media tray by removing all the screws on both ends. (Figure 11)
 3. Lift the plastic media tray out of the unit.
 4. Remove the upper access panel by removing all the screws. (Figure 14, page 15)
 5. Remove the screws along the top of the flame cutout and gently remove. (Figure 11)
 6. Locate the LED strip that needs to be removed.
 7. Disconnect the wiring connections at either end.
 8. Remove the LED strip by pinching the plastic mounting tabs with needle nose pliers and lifting off.
 9. Connect the new LED strips, ensuring J1 (in) is toward the right and J2 (out) is toward the left.
- ! NOTE:** When replacing the LED strip furthest to the left, the jumper connector must be transferred to the new LED strip. (Figure 12)
10. Secure the LED strip on the mounting tabs.
 11. Ensure that all wires are replaced in the same manner as prior to the service.
 12. Reassemble in the reverse order as above.

Figure 12

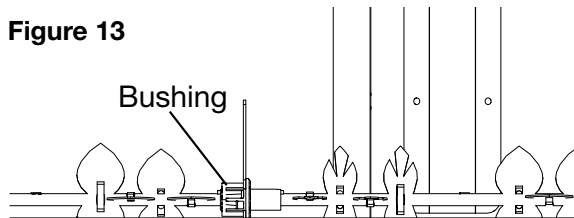


Flicker Assembly Replacement

Tools required: Phillips head screwdriver

1. Follow "Preparation for Service" instructions before proceeding.
 2. Remove the plastic media tray by removing all the screws on both ends. (Figure 11)
 3. Lift the plastic media tray out of the unit.
 4. Remove the screws along the flame cutout.
 5. Remove the upper access panel by removing all the screws. (Figure 14, page 15)
 6. Squeeze the bushing and push it to the right to release it from the bracket. Now pull the bushings off once you reach the thinnest part of the rod. (Figure 13, Page 15)
- ! NOTE:** Save these bushings for the new flicker rod.
7. Gently pull the motor away from the flicker rod.
- ⚠ CAUTION:** When removing and replacing the flicker assembly try to keep any slight bending of the flicker rod minimal to avoid any possible damage. If the flicker assembly is damaged, it should be replaced to ensure proper operation.
8. Ensure that all wires are replaced in the same manner as prior to the service.
 9. Reassemble in the reverse order as above.

Figure 13

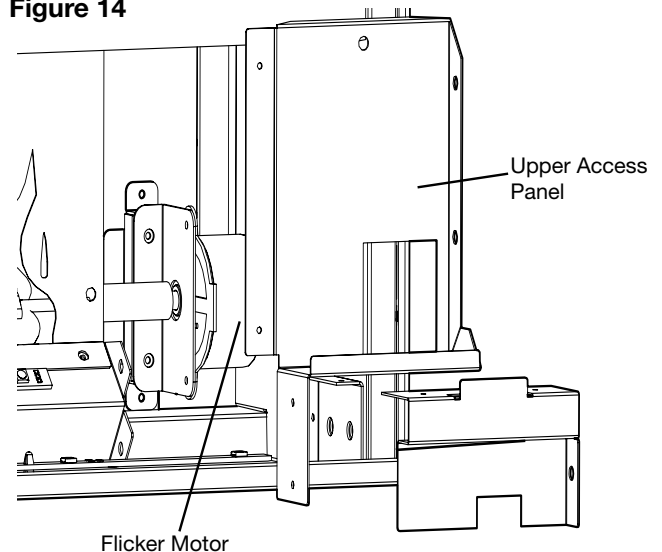


Flicker Motor Replacement

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 4 screws: 2 on the left and 2 on the right of the tray.
 3. Lift the plastic media tray out of the unit.
 4. Remove the upper access panel located on the bottom right hand side by removing the screws securing it to the unit. (Figure 14)
 5. Remove the flicker motor mounting bracket from the unit.
 6. Remove the 2 screws holding the flicker motor to the mounting bracket. Gently pull the motor away from the flicker rod.
 7. Trace the wiring up to the control board and replace with new wires.
 8. Properly orient the new flicker motor onto the motor bracket and re-attach with the 2 mounting screws.
- ⚠ 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.
9. Reassemble in the reverse order as above.

Figure 14



Temperature Sensor (NTC) Replacement

Tools required: Phillips head screwdriver

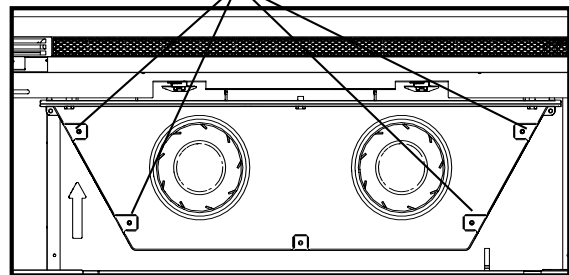
1. Follow "Preparation for Service" instructions before proceeding.
2. Locate the temperature sensor attached to the bracket in the upper left hand side of the unit.
3. Remove the temperature sensor by cutting the tie wrap securing it to the standoff.
4. Follow the cable back to the control board and disconnect the old temperature sensor and connect the new cable.
5. Rerun the temperature sensor back to the bracket ensuring that the wiring is replaced in the original locations.
6. Ensure that all wires are replaced in the same manner as prior to the service.
7. Reassemble in the reverse order as above.

Heater Assembly Replacement





Tools required: Phillips head screwdriver
Needle nosed pliers

1. Follow "Preparation for Service" instructions before proceeding.
 2. Remove all screws that secure the heater assembly retaining bracket to the unit. Remove the bracket and set aside.
 3. Locate and remove the 4 screws that secure the assembly to the unit. (Figure 15)
- ⚠ CAUTION:** When removing the blower assembly mounting screws support the assembly to prevent any damage to the unit.
4. 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.
5. Properly orient the new heater assembly and connect all of the wiring connections.
 6. Secure any excess wire using the provided cable ties.
 7. Reassemble in the reverse order as above.

Figure 15 Heater Mounting Screws



Troubleshooting

Problem	Display	Cause	Solution
Circuit breaker trips or fuse blows when unit is turned on		Improper circuit current rating	Install unit on a dedicated minimum 15 amp circuit.
		Short in unit wiring	Trace wiring in unit
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
Fireplace does not turn on with the manual touch controls		No incoming power	Ensure unit is wired correctly Check main disconnect panel Ensure wall switch is on (if applicable)
		Front glass was installed after unit was powered on	Turn power off (from breaker or outlet), install front glass before turning power back on.
		Loose wiring	Check wiring connections
		Defective hidden touch controls	Replace hidden touch controls
		Defective main control board	Replace main control board
		Defective relay board	Replace relay board
Fireplace does not turn on with the remote control		The batteries in the remote control are dead or installed incorrectly	Replace remote control battery Ensure battery is installed with + facing up.
		Defective remote control	Replace remote control
		Defective IR receiver	Replace hidden touch controls
Error code is displayed	<i>Err 12</i>	Ambient temperature is above 45° C (113°F)	No action required.
	<i>Err 13</i>	Ambient temperature is below 45° C (113°F)	No action required.
	<i>Err 1b</i>	NTC is unplugged or defective.	Replace NTC.
	<i>Err 23</i>	Relay board not detected	Relay board is disconnected. Defective Relay board.
Heater			
Heater does not turn on	---	Heater is disabled	Press and hold  and  at the same time on the hidden touch controls for 3 seconds to disable or enable the heat function.
	<i>H--</i>	Heater has been permanently disabled	If installation with heat is desired, jumper on main board if available or purchase new main board.
		Defective heater assembly	Replace heater assembly
Heater is turning off after a couple of minutes of operation	<i>Err 1</i>	Overhanging objects	Refer to installation requirements.
		Build up of dirt/dust in heater assembly	Ensure that exterior intake louvers and firebox cavity are free of obstruction, dirt, and dust. Clean heater assembly with compressed air.
		Defective heater assembly	Replace heater assembly
Fan turns on, but lacks heat	??	Fan setting is active	Press  repeatedly to cycle through various heat modes
		Defective heater assembly	Replace heater assembly
Heater is on, but there is no heat		Normal operation — There is a 30-second delay before heater starts	No action required.
		Thermostat setting is below ambient temperature	Turn up the thermostat setting to be above ambient temperature

Problem	Display	Cause	Solution
Appearance			
Flame is frozen		Defective flicker motor	Replace flicker motor
		Defective main control board	Replace the main control board
Flame is not visible		Flame effect is off	Ensure flame effect is on
		Defective flame LEDs	Replace defective LED strips
		Defective main control board	Replace main control board
		Defective power supply	Replace power supply
		Defective adapter board (EVO100/2500 only)	Replace adapter board
A portion of the flame is missing		Defective flame LEDs	Replace defective LED strips
Flame shudder		Defective flicker motor	Replace flicker motor
Media bed does not light up		Media bed is turned off	Change media theme
		Defective media LED lights	Replace defective LED strips
		Defective main control board	Replace main control board
A portion of media bed or overhead light is missing		Defective media LED lights	Replace defective LED strips
Noise			
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 and flicker assembly bushings.
Excessive noise with the heater on		Dirty heater assembly	Ensure that exterior louvers are free of dirt/dust. Clean heater assembly with compressed air.
		Defective heater assembly	Replace heater assembly

In keeping with our policy of continuous product improvement, we reserve the right to make changes without notice.

