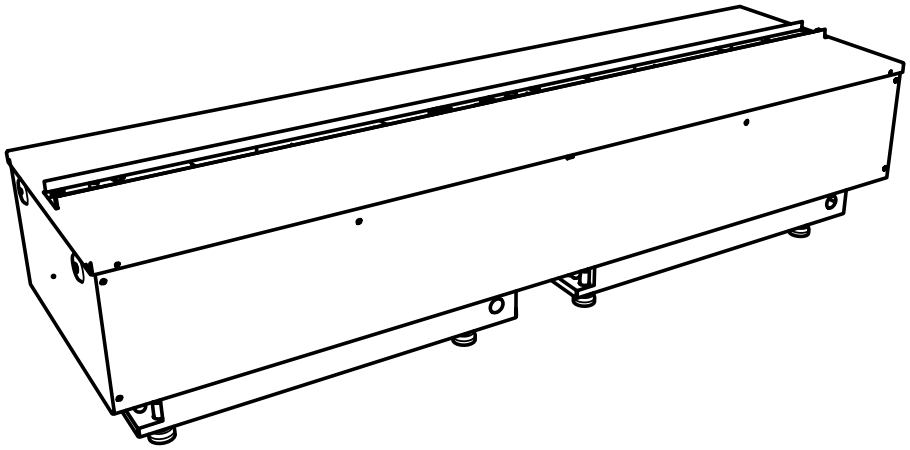
Service Manual

Model	Part Number
CDFI1000P	6909660100
CDFI500P	6909660200



IMPORTANT SAFETY INFORMATION: Always read this manual first before attempting to service this cassette. 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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TABLE OF CONTENTS

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

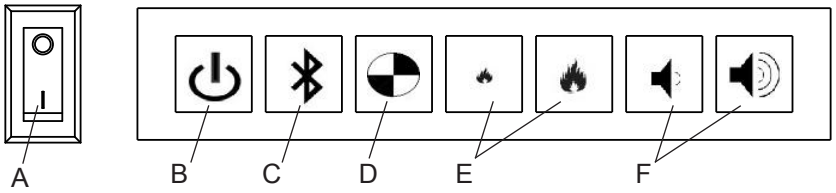
! **NOTE:** Procedures and techniques that are considered important enough to emphasize.

⚠ **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 unit must be properly installed before it is used.

There are three different control options available for the unit: manual (under the media plate), tethered controller (must be connected to the unit) and a remote control.

The CDFI1000P unit has two separate internal modules that are controlled by the settings entered on the left side (primary). Finer adjustment can be done using the controls on the right module to have both modules operating at the same level (secondary).

! **NOTE:** When the unit is used in an environment where background noise is very low, it may be possible to hear a sound which is related to the operation of the flame effect. This is normal and should not be a cause for concern.

! **NOTE:** Always ensure that the appliance is fixed to the framing in a level position.

Controls

A. On/Off Switch

Supplies power to the unit.

! **NOTE:** When the unit is first turned on the lights will come on and mist will appear 45 seconds later.

B. ⏻ Standby

Puts the unit into standby mode where control by the tethered controller or remote is possible.

C. Blue tooth

Required for initializing the remote together, see initialization instructions for more detail.

D. Test Mode

Used for troubleshooting issues - outlined in detail in the service manual which can be found on www.dimplex.com/customer_support.

E. Flame Intensity Control

Adjusts the intensity of the flame and smoke effect when the unit has been activated.

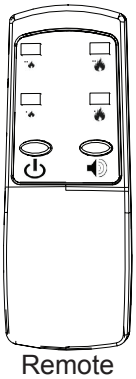
Pressing the will decrease the flame effect and pressing the will increase the flame effect.

! **NOTE:** A few moments will be required between adjustment and a change to the flame effect.

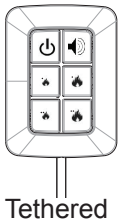
! **NOTE:** During normal operation it is expected to see some condensation of water on the media plate. This will vary depending on ambient conditions and should be considered normal.

! **NOTE:** When the water tank is empty, the flame effect shuts OFF and the LED's will blink.

Figure 2



Remote Control



Tethered Controller

! **NOTE:** The icons with 1 dot indicate controls for the primary and 2 dots indicate controls for the secondary. The secondary controls are not applicable for the CDFI500P.

F. Volume Control

Adjusts the volume of the wood fire sound effects.

On the unit: Pressing the will decrease the volume and pressing the will increase the volume.

On the Remote and Tethered Controller: Pressing the will turn the volume On and Off.

Remote Control

The tethered controller can be used in the same manner as the remote but houses the blue tooth receiver for communication with the remote.

The tethered controller must be connected to the unit and On/Off Switch must be in the 'ON' **(I)** position in order for the remote to operate.

! **NOTE:** To operate correctly the remote control must be initialized with the unit.

Remote Control Initialization/ Reprogram

In order for the remote to communicate with the unit the blue tooth must be setup, as outlined below:

1. Verify that the tethered controller is connected correctly - the red light on the controller will be illuminated.
2. Place the On/Off Switch (Figure 5A) in the ON ("I") position.
3. Press the blue tooth initialization button on the Primary controls (left side).
4. The unit will begin to beep and turn the lights ON and OFF every 2 ½ seconds to indicate that the unit is in synchronization mode.
5. Within 20 seconds of pressing the blue tooth button, press any button on the remote control (Figure 7).

! **NOTE:** You will have only 20 seconds to perform this last step. Failure to do so will result in these steps needing to be followed again.

6. If the synchronization was successful the LED's will blink 5 times and beep 5 times then the unit will go to Standby.

This will synchronize the remote control and the tethered controller.

! **NOTE:** It is possible to synchronize up to 5 units to one remote control.

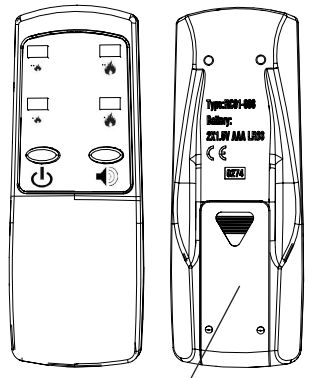
Battery Replacement

To replace the battery:

1. Slide battery cover open on the remote control (Figure 7).
2. Install two 1.5 Volt (AAA) 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.

Figure 3



MAINTENANCE

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

Filling the water tank

When the water tank is empty, the flame effect shuts off and you will hear 2 audible beeps, follow these steps.

⚠ **CAUTION:** Allow at least five minutes for components to cool before disassembling the unit to refill.

1. Gently remove the top tray and place it carefully on the ground.
2. Turn the On/Off switch to the off position **(0)** (Figure 1A)
3. Remove the refill container by lifting upwards and outwards.
4. Refill the container with tap water.

! **NOTE:** Normal tap water can be used in the Optimyst® as long as the tap water is not considered to be hard water. In the event your tap water is hard, you may use softened water or distilled water with ⅛ tsp. of salt (0.5 mL) added to the water reservoir. (The use of additional salt should only be when you notice that the unit is not producing mist as expected.)

5. Screw the cap back on, ***do not overtighten***.
6. Return the refill container to the sump, with the tank cap facing down and the flat side of the tank facing outward.
7. Turn the On/Off switch to the off position **(I).** (Figure 1A)
8. Gently place the top tray back into position.

If you do not intend on using the unit for longer than 2 weeks, empty and drain the unit of water, and dry all of the water containing components.

Transducer Replacement

After prolonged usage the ability for the unit to produce mist may become reduced. When this occurs the replacement of the transducer may be required. This unit comes with 2 additional transducers, located behind the right module, which can installed when this occurs.

! **NOTE:** There is a small tab that holds the transducer in place, that needs to be released before it can be removed.

Cleaning

It is recommended that the top cover assembly, sump and transducer are cleaned with soap and water on a ***biweekly*** basis.

⚠ **CAUTION:** Do not put plastic components in the dishwasher.

Filter Cleaning

The air filters can be removed and gently rinsed with water to clean and dried on a towel before reinstalling.

! **NOTE:** Replace the filter so that the course black filter is facing the back of the unit.

Surface Cleaning

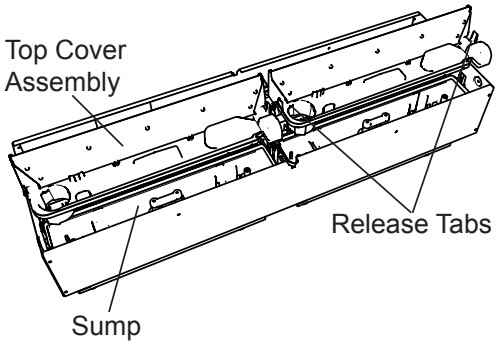
Use a warm damp cloth only to clean surfaces of the unit. Do not use abrasive cleaners.

! **NOTE:** If you need to move the unit ensure that all of the components that contain water have been emptied before relocating.

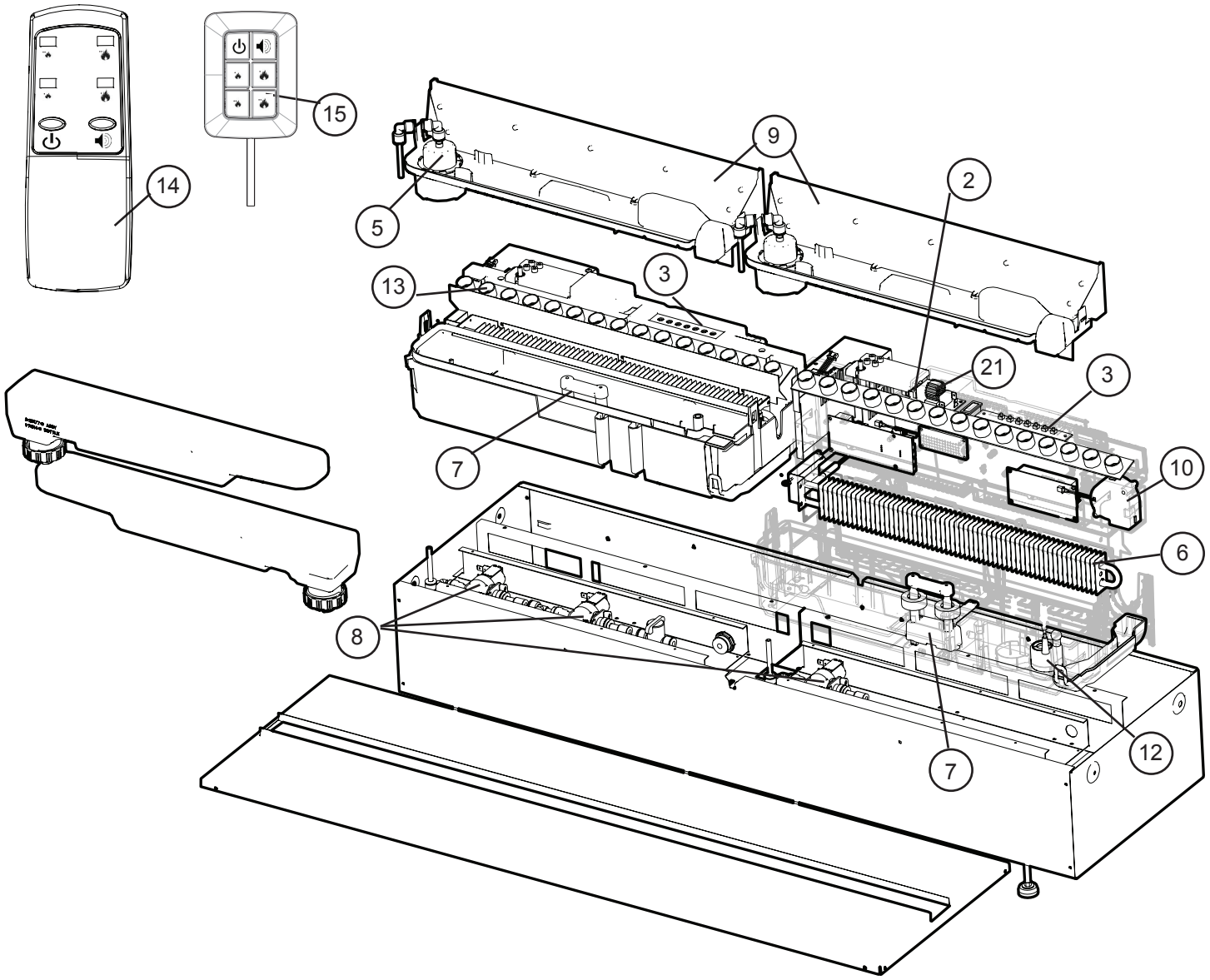
Servicing

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

Figure 4



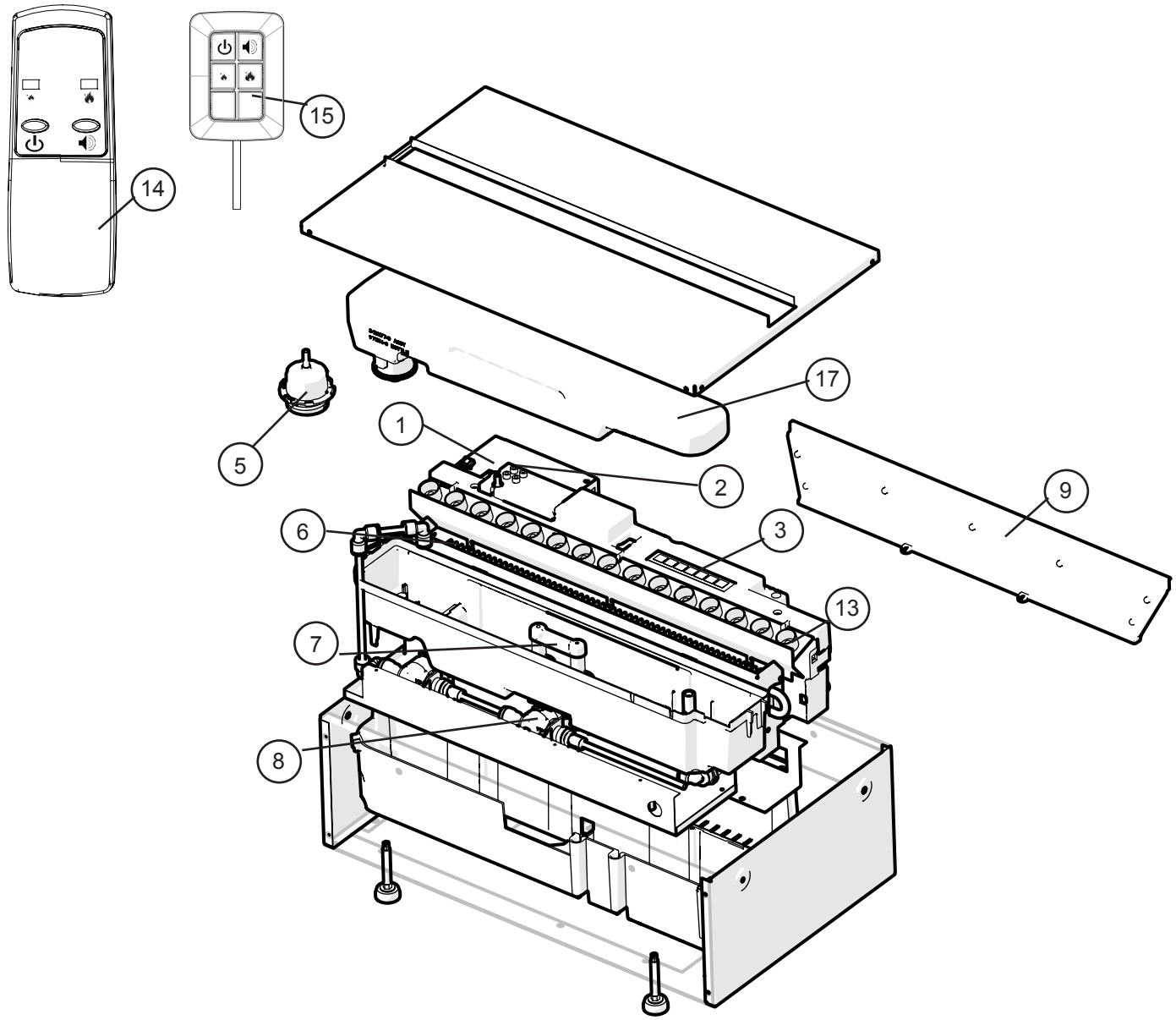
EXPLODED PARTS DIAGRAM - CDFI1000



REPLACEMENT PARTS LIST - CDFI1000

1. Main Control Board 9601270100RP
2. Terminal Block. 9601260100RP
3. Switch Board. 9601290100RP
4. Power Supply 9601300100RP
5. Fill Cap Assembly 9601230100RP
6. Heating Element 9601240100RP
7. Level Sensor Assembly. 9601320100RP
8. Solenoid Valve 9601330100RP
9. Top Cover Assembly 9601220100RP
10. Fan Assembly 9601310100RP
11. Fan Filter. 8600300100RP
12. Transducer 9601210100RP
13. LED Light Assembly 9601250100RP
14. Remote Control. 9601110100RP
15. Tethered Controller / Receiver 9601120100RP
16. Fused Wire harness 9601340100RP
17. Removable Refill Container with Cap . .9601350100RP
18. Log set Assembly . . . . . .CDFILOG-KIT
19. Plumbing Piercing Kit . . . . . CDFIPLUMB-KIT
20. Ball Valve 9601360100RP
21. Electronic Choke. 9601380100RP

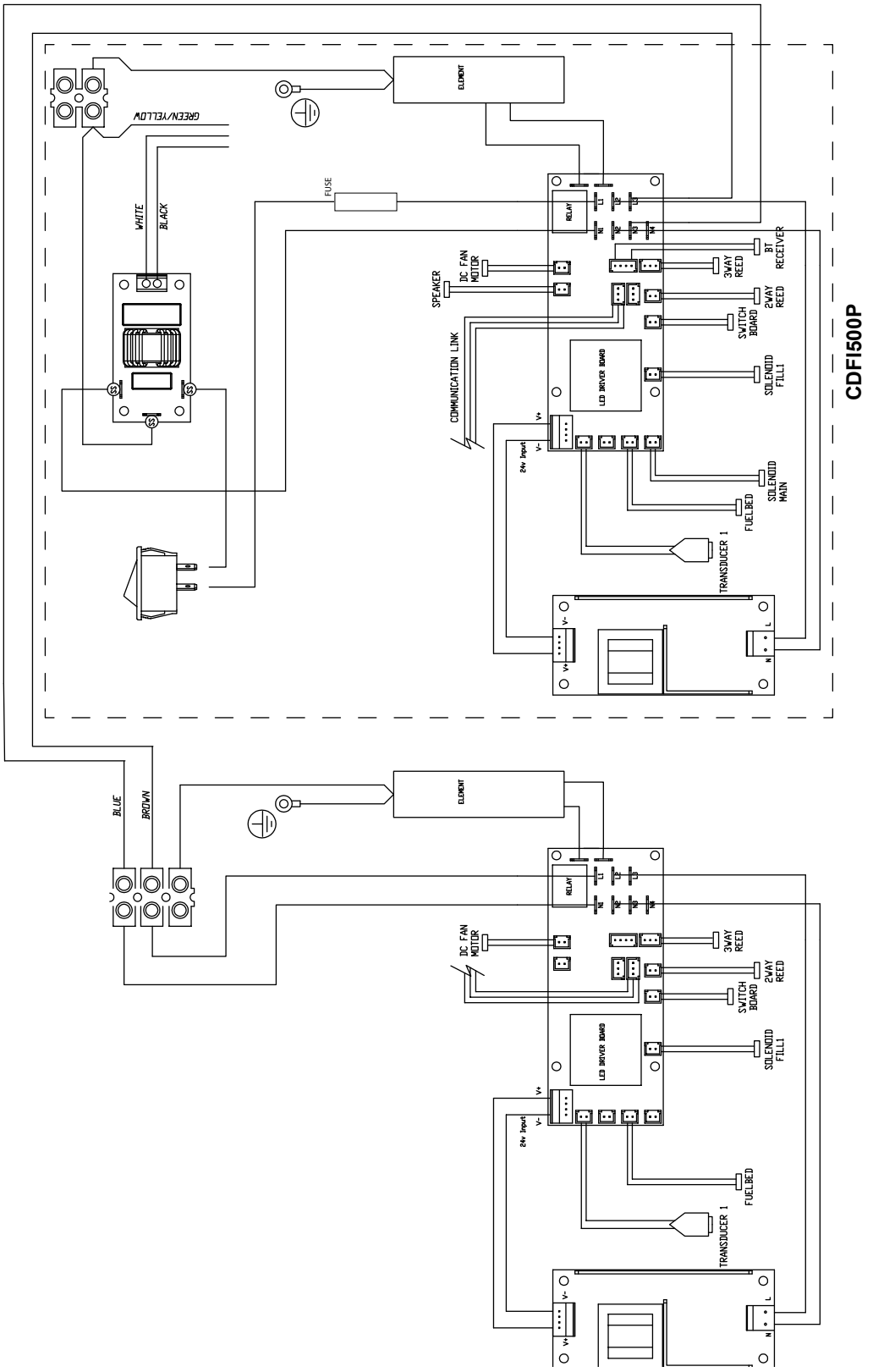
EXPLODED PARTS DIAGRAM - CDFI500



REPLACEMENT PARTS LIST - CDFI500

1. Main Control Board 9601270100RP
2. Terminal Block. 9601260100RP
3. Switch Board. 9601290100RP
4. Power Supply 9601300100RP
5. Fill Cap Assembly 9601230100RP
6. Heating Element 9601240100RP
7. Level Sensor Assembly. 9601320100RP
8. Solenoid Valve 9601330100RP
9. Top Cover Assembly 9601220100RP
10. Fan Assembly 9601310100RP
11. Fan Filter. 8600300100RP
12. Transducer 9601210100RP
13. LED Light Assembly 9601250100RP
14. Remote Control. 9601110200RP
15. Tethered Controller / Receiver 9601120200RP
16. Fused Wire harness 9601340100RP
17. Removable Refill Container with Cap . .9601350100RP
18. Log set Assembly . . . . . CDFILOG
19. Plumbing Piercing Kit . . . . . CDFIPLUMB-KIT
20. Ball Valve 9601360100RP
21. Electronic Choke. 9601380100RP

WIRING DIAGRAM



SWITCH BOARD REPLACEMENT

Tools Required: Phillips head screwdriver

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

NOTE: Ensure that all of the components that contain water have been emptied and source water has been turned off before performing any maintenance.

1. Disconnect and remove the media tray or log set from the unit and put them in a safe place.
2. On the side the replacement is required, remove the securing screws and metal wire cover.
3. Remove the 4 screws and the electronics cover from the unit. (Figure 4)

NOTE: Use caution when removing the electronics cover, to prevent strain on the connector wire attached to it.

4. Locate the switch board to be replaced.
5. Gently lift the switch board off of the mounting stands.
6. Disconnect the wire connection from the back of the board.
7. Attach the wire connection to the new board and place on the mounting stands.
8. Re-assemble the remainder of the cassette in reverse order from the instructions above.

TERMINAL BLOCK REPLACEMENT

Tools Required: Phillips head screwdriver

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

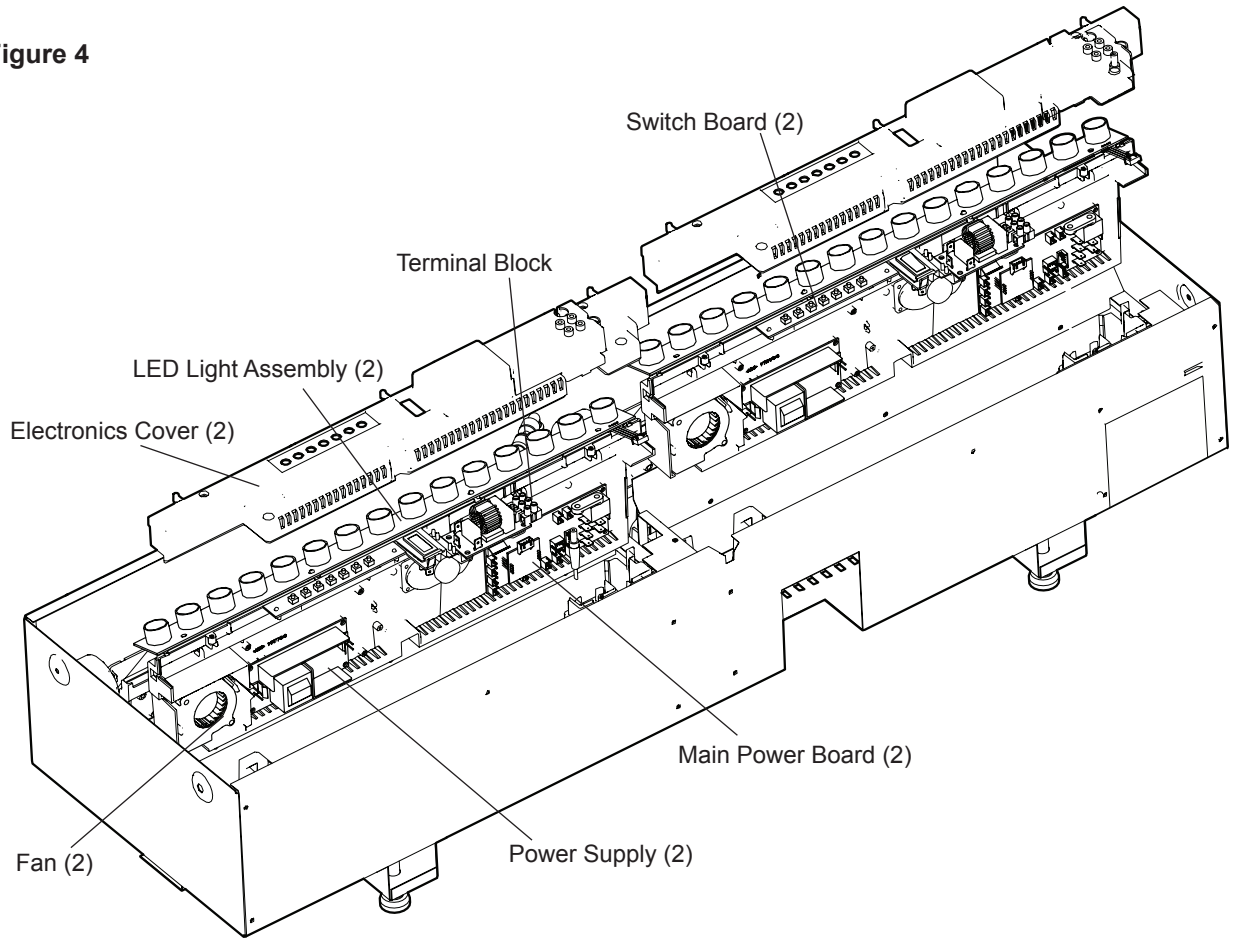
NOTE: Ensure that all of the components that contain water have been emptied and source water has been turned off before performing any maintenance.

1. Disconnect and remove the media tray or log set from the unit and put them in a safe place.
2. On the secondary side remove the securing screws and metal wire cover.
3. Remove the 4 screws and the electronics cover from the unit. (Figure 4)

NOTE: Use caution when removing the electronics cover, to prevent strain on the connector wire attached to it.

4. Locate the terminal block to be replaced.
5. Disconnect the wire connections from the original block and install it on the new block.
6. Replace the terminal block in the original position - the terminal block is located so that it sits on the moulded pins on the surface below.
7. Re-assemble the remainder of the cassette in reverse order from the instructions above.

Figure 4



FAN ASSEMBLY REPLACEMENT

Tools Required: Phillips head screwdriver

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

NOTE: Ensure that all of the components that contain water have been emptied and source water has been turned off before performing any maintenance.

Primary Side

1. Disconnect and remove the media tray or log set from the unit and put them in a safe place.
2. Remove the securing screws and metal wire cover at the end of both of the electronics covers.
3. Remove the 4 screws and both of the electronics covers from the unit. (Figure 4)

NOTE: Use caution when removing the electronics cover, to prevent strain on the connector wire attached to it.

4. Holding the assembly at either end of the LED light strip, on the primary end, gently lift the electronics assembly out of the unit (Figure 4).

NOTE: There are several wires that run between the two sides, these wires will need to be gently removed through the opening on the secondary side to allow the primary electronics assembly to be lifted out.

5. Locate the fan assembly.
6. Trace the control wires to the main control board and disconnect.
7. Replace with wire from new fan.
8. Run wiring back to location for fan, and install the fan.
9. Reinsert the electronics assembly.

CAUTION: Ensure that the switchboard and terminal block have not moved from their original locations and all wires are contained under the cover before reassembly.

10. Re-assemble the remainder of the cassette in reverse order from the instructions above.

Secondary Side

1. Disconnect and remove the media tray or log set from the unit and put them in a safe place.
2. Remove the 4 screws and the electronics cover from the unit. (Figure 4)

NOTE: Use caution when removing the electronics cover, to prevent strain on the connector wire attached to it.

3. Holding the assembly at either end of the LED light strip, on the primary end, gently lift the electronics assembly out of the unit (Figure 4).
4. Locate the fan assembly.
5. Trace the control wires to the main control board and disconnect.
6. Replace with wire from new fan.
7. Run wiring back to location for fan, and install the fan.
8. Reinsert the electronics assembly.

CAUTION: Ensure that the switchboard and terminal block have not moved from their original locations and all wires are contained under the cover before reassembly.

9. Re-assemble the remainder of the cassette in reverse order from the instructions above.

FUSED WIRE HARNESS REPLACEMENT

Tools Required: Phillips head screwdriver

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

NOTE: Ensure that all of the components that contain water have been emptied and source water has been turned off before performing any maintenance.

Primary Side

1. Disconnect and remove the media tray or log set from the unit and put them in a safe place.
2. Remove the securing screws and metal wire cover at the end of both of the electronics covers.
3. Remove the 4 screws and both of the electronics covers from the unit. (Figure 4)

NOTE: Use caution when removing the electronics cover, to prevent strain on the connector wire attached to it.

4. Remove the cable clamp, to allow for the assembly to be lifted out to better access the components.
5. Holding the assembly at either end of the LED light strip, on the primary end, gently lift the electronics assembly out of the unit (Figure 4).

NOTE: There are several wires that run between the two sides, these wires will need to be gently removed through the opening on the secondary side to allow the primary electronics assembly to be lifted out.

6. Locate the fused wire harness (brown wire from main switch to main control board with in line fuse).
7. Replace current wire harness with new wire harness.

NOTE: A flat head screwdriver can be used to gently pry between the end of the connector and the switch to release the wires.

8. Replace all of the wiring to their original locations and reinsert the electronics assembly.

CAUTION: Ensure that the switchboard and terminal block have not moved from their original locations and all wires are contained under the cover before reassembly.

9. Re-assemble the remainder of the cassette in reverse order from the instructions above.

MAIN CONTROL BOARD REPLACEMENT

Tools Required: Phillips head screwdriver

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

NOTE: Ensure that all of the components that contain water have been emptied and source water has been turned off before performing any maintenance.

Primary Side

1. Disconnect and remove the media tray or log set from the unit and put them in a safe place.
2. Remove the securing screws and metal wire cover at the end of both of the electronics covers.
3. Remove the 4 screws and both of the electronics covers from the unit. (Figure 4)

! NOTE: Use caution when removing the electronics cover, to prevent strain on the connector wire attached to it.

4. Remove the cable clamp, to allow for the assembly to be lifted out to better access the components.
5. Holding the assembly at either end of the LED light strip, on the primary end, gently lift the electronics assembly out of the unit (Figure 4).

! NOTE: There are several wires that run between the two sides, these wires will need to be gently removed through the opening on the secondary side to allow the primary electronics assembly to be lifted out.

6. Locate the main control board.
7. Transfer the wires from the old board to the new board.

! NOTE: A flat head screwdriver can be used to gently pry between the end of the connector and the switch to release the wires.

8. Remove the old board from the unit and replace with the new board.
9. Replace all of the wiring to their original locations and reinsert the electronics assembly.

⚠ CAUTION: Ensure that the switchboard and terminal block have not moved from their original locations and all wires are contained under the cover before reassembly.

10. Re-assemble the remainder of the cassette in reverse order from the instructions above.

Secondary Side

1. Disconnect and remove the media tray or log set from the unit and put them in a safe place.
2. Remove the 4 screws and the electronics cover from the unit. (Figure 4)

! NOTE: Use caution when removing the electronics cover, to prevent strain on the connector wire attached to it.

3. Holding the assembly at either end of the LED light strip, on the primary end, gently lift the electronics assembly out of the unit (Figure 4).
4. Locate the main control board.
5. Transfer the wires from the old board to the new board.

! NOTE: A flat head screwdriver can be used to gently pry between the end of the connector and the switch to release the wires.

6. Remove the old board from the unit and replace with the new board.
7. Replace all of the wiring to their original locations and reinsert the electronics assembly.

⚠ CAUTION: Ensure that the switchboard and terminal block have not moved from their original locations and all wires are contained under the cover before reassembly.

8. Re-assemble the remainder of the cassette in reverse order from the instructions above.

POWER SUPPLY REPLACEMENT

Tools Required: Phillips head screwdriver

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

! NOTE: Ensure that all of the components that contain water have been emptied and source water has been turned off before performing any maintenance.

Primary Side

1. Disconnect and remove the media tray or log set from the unit and put them in a safe place.
2. Remove the securing screws and metal wire cover at the end of both of the electronics covers.
3. Remove the 4 screws and both of the electronics covers from the unit. (Figure 4)

! NOTE: Use caution when removing the electronics cover, to prevent strain on the connector wire attached to it.

4. Remove the cable clamp, to allow for the assembly to be lifted out to better access the components.
5. Holding the assembly at either end of the LED light strip, on the primary end, gently lift the electronics assembly out of the unit (Figure 4).

! NOTE: There are several wires that run between the two sides, these wires will need to be gently removed through the opening on the secondary side to allow the primary electronics assembly to be lifted out.

6. Locate the power supply assembly.
7. Transfer the wires from the old board to the new board.

! NOTE: A flat head screwdriver can be used to gently pry between the end of the connector and the switch to release the wires.

8. Remove the old board from the unit and replace with the new board.
9. Replace all of the wiring to their original locations and reinsert the electronics assembly.

⚠ CAUTION: Ensure that the switchboard and terminal block have not moved from their original locations and all wires are contained under the cover before reassembly.

10. Re-assemble the remainder of the cassette in reverse order from the instructions above.

Secondary Side

1. Disconnect and remove the media tray or log set from the unit and put them in a safe place.
2. Remove the 4 screws and the electronics cover from the unit. (Figure 4)

! NOTE: Use caution when removing the electronics cover, to prevent strain on the connector wire attached to it.

3. Holding the assembly at either end of the LED light

strip, on the primary end, gently lift the electronics assembly out of the unit (Figure 4).

4. Locate the power supply assembly.
5. Transfer the wires from the old board to the new board.

! NOTE: A flat head screwdriver can be used to gently pry between the end of the connector and the switch to release the wires.

6. Remove the old board from the unit and replace with the new board.
7. Replace all of the wiring to their original locations and reinsert the electronics assembly.

⚠ CAUTION: Ensure that the switchboard and terminal block have not moved from their original locations and all wires are contained under the cover before reassembly.

8. Re-assemble the remainder of the cassette in reverse order from the instructions above.

LED LIGHT ASSEMBLY REPLACEMENT

Tools Required: Phillips head screwdriver

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

! NOTE: Ensure that all of the components that contain water have been emptied and source water has been turned off before performing any maintenance.

Primary Side

1. Disconnect and remove the media tray or log set from the unit and put them in a safe place.
2. Remove the securing screws and metal wire cover at the end of both of the electronics covers.
3. Remove the 4 screws and both of the electronics covers from the unit. (Figure 4)

! NOTE: Use caution when removing the electronics cover, to prevent strain on the connector wire attached to it.

4. Remove the cable clamp, to allow for the assembly to be lifted out to better access the components.
5. Holding the assembly at either end of the LED light strip, on the primary end, gently lift the electronics assembly out of the unit (Figure 4).

! NOTE: There are several wires that run between the two sides, these wires will need to be gently removed through the opening on the secondary side to allow the primary electronics assembly to be lifted out.

6. Gently lift the LED light assembly off of the standoffs.
7. Trace the control wire back to the main control board and replace with the wire from the new assembly.
8. Install the new LED light assembly, ensuring that all of the wires are installed in the same location as the previous one.
9. Replace all of the wiring to their original locations and reinsert the electronics assembly.

⚠ CAUTION: Ensure that the switchboard and terminal block have not moved from their original locations and all wires are contained under the cover before reassembly.

10. Re-assemble the remainder of the cassette in reverse order from the instructions above.

Secondary Side

1. Disconnect and remove the media tray or log set from the unit and put them in a safe place.
2. Remove the 4 screws and the electronics cover from the unit. (Figure 4)

! NOTE: Use caution when removing the electronics cover, to prevent strain on the connector wire attached to it.

3. Holding the assembly at either end of the LED light strip, on the primary end, gently lift the electronics assembly out of the unit (Figure 4).
4. Gently lift the LED light assembly off of the standoffs.
5. Trace the control wire back to the main control board and replace with the wire from the new assembly.
6. Install the new LED light assembly, ensuring that all of the wires are installed in the same location as the previous one.
7. Replace all of the wiring to their original locations and reinsert the electronics assembly.

⚠ CAUTION: Ensure that the switchboard and terminal block have not moved from their original locations and all wires are contained under the cover before reassembly.

8. Re-assemble the remainder of the cassette in reverse order from the instructions above.

HEATING ELEMENT REPLACEMENT

Tools Required: Phillips head screwdriver

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

! NOTE: Ensure that all of the components that contain water have been emptied and source water has been turned off before performing any maintenance.

Primary Side

1. Disconnect and remove the media tray or log set from the unit and put them in a safe place.
2. Remove the securing screws and metal wire cover at the end of both of the electronics covers.
3. Remove the 4 screws and both of the electronics covers from the unit. (Figure 4)

! NOTE: Use caution when removing the electronics cover, to prevent strain on the connector wire attached to it.

4. Remove the cable clamp, to allow for the assembly to be lifted out to better access the components.
5. Holding the assembly at either end of the LED light strip, on the primary end, gently lift the electronics assembly out of the unit (Figure 4).

! NOTE: There are several wires that run between the two sides, these wires will need to be gently removed through the opening on the secondary side to allow the primary electronics assembly to be lifted out.

6. Locate the 2 screws that secure the element assembly (element and brackets) to the unit and remove.
7. Lift the element assembly out of the unit.
8. Disconnect the element from the main control board.
9. Remove the element from the mounting bracket and install the new element.
10. Attach the new element to the main control board.
11. Install and secure the element assembly into the unit.
12. Replace all of the wiring to their original locations and reinsert the electronics assembly.

⚠ **CAUTION:** Ensure that the switchboard and terminal block have not moved from their original locations and all wires are contained under the cover before reassembly.

13. Re-assemble the remainder of the cassette in reverse order from the instructions above.

Secondary Side

1. Disconnect and remove the media tray or log set from the unit and put them in a safe place.
2. Remove the 4 screws and the electronics cover from the unit. (Figure 4)

! **NOTE:** Use caution when removing the electronics cover, to prevent strain on the connector wire attached to it.

3. Holding the assembly at either end of the LED light strip, on the primary end, gently lift the electronics assembly out of the unit (Figure 4).
4. Locate the 2 screws that secure the element assembly (element and brackets) to the unit and remove.
5. Lift the element assembly out of the unit.
6. Disconnect the element from the main control board.
7. Remove the element from the mounting bracket and install the new element.
8. Attach the new element to the main control board.
9. Install and secure the element assembly into the unit.
10. Replace all of the wiring to their original locations and reinsert the electronics assembly.

⚠ **CAUTION:** Ensure that the switchboard and terminal block have not moved from their original locations and all wires are contained under the cover before reassembly.

11. Re-assemble the remainder of the cassette in reverse order from the instructions above.

LEVEL SENSOR ASSEMBLY REPLACEMENT

Tools Required: Phillips head screwdriver

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

! **NOTE:** Ensure that all of the components that contain water have been emptied and source water has been turned off before performing any maintenance.

Primary Side

1. Disconnect and remove the media tray or log set from the unit and put them in a safe place.
2. Remove the securing screws and metal wire cover at the end of both of the electronics covers.
3. Remove the 4 screws and both of the electronics covers from the unit. (Figure 4)

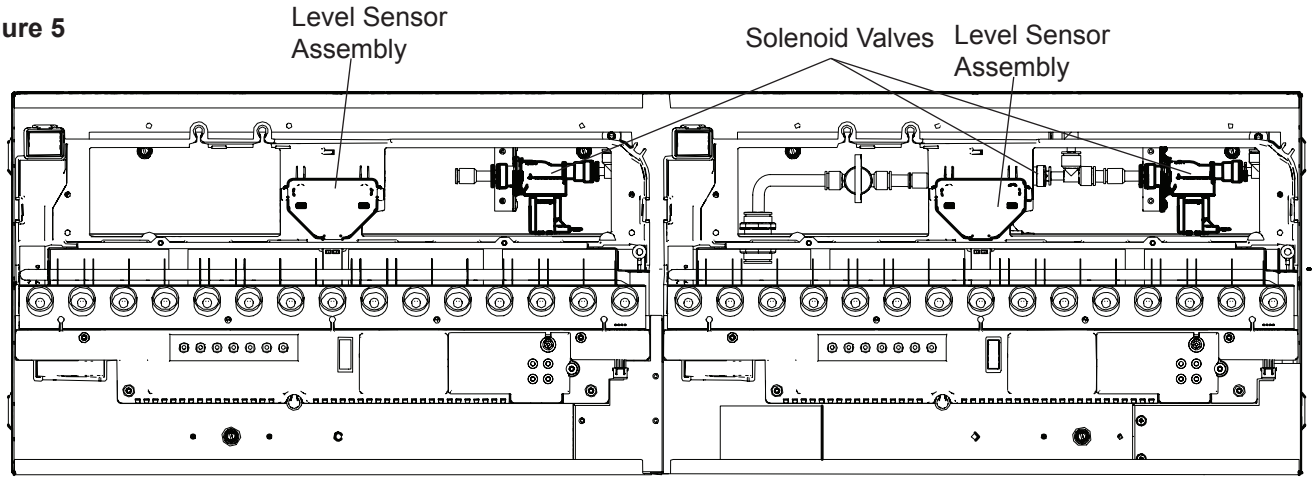
! **NOTE:** Use caution when removing the electronics cover, to prevent strain on the connector wire attached to it.

4. Remove the cable clamp, to allow for the assembly to be lifted out to better access the components.
5. Holding the assembly at either end of the LED light strip, on the primary end, gently lift the electronics assembly out of the unit (Figure 4).

! **NOTE:** There are several wires that run between the two sides, these wires will need to be gently removed through the opening on the secondary side to allow the primary electronics assembly to be lifted out.

6. Remove the refill bottle, top cover, transducer and sump.
7. Locate the level sensor assembly. (Figure 5)
8. Trace and disconnect the control wire for the level sensor assembly back to the main control board.
9. Depress the two tabs along the one side of the assembly and slide the level sensor and wire out.

Figure 5



10. Run new wire through to main control board.
11. Install new level sensor.
12. Reconnect the control wire.

⚠ **CAUTION:** Ensure that the switchboard and terminal block have not moved from their original locations and all wires are contained under the cover before reassembly.

13. Re-assemble the remainder of the cassette in reverse order from the instructions above.

Secondary Side

1. Disconnect and remove the media tray or log set from the unit and put them in a safe place.
2. Remove the 4 screws and the electronics cover from the unit. (Figure 4)

! **NOTE:** Use caution when removing the electronics cover, to prevent strain on the connector wire attached to it.

3. Holding the assembly at either end of the LED light strip, on the primary end, gently lift the electronics assembly out of the unit (Figure 4).
4. Remove the refill bottle, top cover, transducer and sump.
5. Locate the level sensor assembly. (Figure 5)
6. Trace and disconnect the control wire for the level sensor assembly back to the main control board.
7. Depress the two tabs along the one side of the assembly and slide the level sensor and wire out.
8. Run new wire through to main control board.
9. Install new level sensor.
10. Reconnect the control wire.

⚠ **CAUTION:** Ensure that the switchboard and terminal block have not moved from their original locations and all wires are contained under the cover before reassembly.

11. Re-assemble the remainder of the cassette in reverse order from the instructions above.

SOLENOID VALVE REPLACEMENT

Tools Required: Short Phillips head screwdriver

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

! **NOTE:** Ensure that all of the components that contain water have been emptied and source water has been turned off before performing any maintenance.

Primary Side

1. Disconnect and remove the media tray or log set from the unit and put them in a safe place.
2. Remove the securing screws and metal wire cover at the end of both of the electronics covers.
3. Remove the 4 screws and both of the electronics covers from the unit. (Figure 4)

! **NOTE:** Use caution when removing the electronics cover, to prevent strain on the connector wire attached to it.

4. Remove the cable clamp, to allow for the assembly to be lifted out to better access the components.
5. Holding the assembly at either end of the LED light strip, on the primary end, gently lift the electronics assembly out of the unit (Figure 4).

! **NOTE:** There are several wires that run between the two sides, these wires will need to be gently removed through the opening on the secondary side to allow the primary electronics assembly to be lifted out.

6. Remove the refill bottle, top cover, transducer and sump.
7. Locate the solenoid valve to be replaced. (Figure 5)
8. Trace and disconnect the control wire for the solenoid back to the main control board.
9. Remove the two screws from the front face of the bracket to release the valve.
10. Disconnect the plumbing connections and remove the solenoid valve.
11. Run new wire through to main control board.
12. Install new solenoid valve.
13. Reconnect the control wire.

⚠ **CAUTION:** Ensure that the switchboard and terminal block have not moved from their original locations and all wires are contained under the cover before reassembly.

14. Re-assemble the remainder of the cassette in reverse order from the instructions above.

Secondary Side

1. Disconnect and remove the media tray or log set from the unit and put them in a safe place.
2. Remove the 4 screws and the electronics cover from the unit. (Figure 4)

! **NOTE:** Use caution when removing the electronics cover, to prevent strain on the connector wire attached to it.

3. Holding the assembly at either end of the LED light strip, on the primary end, gently lift the electronics assembly out of the unit (Figure 4).
4. Remove the refill bottle, top cover, transducer and sump.
5. Locate the solenoid valve to be replaced. (Figure 5)
6. Trace and disconnect the control wire for the solenoid back to the main control board.
7. Remove the two screws from the front face of the bracket to release the valve.
8. Disconnect the plumbing connections and remove the solenoid valve.
9. Run new wire through to main control board.
10. Install new solenoid valve.
11. Reconnect the control wire..

⚠ **CAUTION:** Ensure that the switchboard and terminal block have not moved from their original locations and all wires are contained under the cover before reassembly.

12. Re-assemble the remainder of the cassette in reverse order from the instructions above.

TROUBLESHOOTING GUIDE

***** After the unit has shut down due to an error, a full reset of the unit will be required by turning the unit Off with the On/Off switch for 60 seconds then turning back On.***

PROBLEM	CAUSE	SOLUTION
General		
Unpleasant smell when unit is used.	Dirty or stale water.	Clean the unit as described under maintenance.
Appearance		
Fireplace does not turn on Manually (unit does not beep when switch turned)	Improper operation	Refer to Operation Section
	No incoming voltage from the electrical wall socket	Check Fuse/Breaker Panel
	Defective main control board	Replace main control board
Only one side of the unit is operating	Tethered controller not installed correctly	Ensure that connection has clicked into place
	Put unit in troubleshooting mode to test any of the functions listed	If none of the tests are working, replace the main control board
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
	Tethered controller not installed correctly	Ensure that connection has clicked into place and red light is visible
	Remote not initialized with the unit	Initialize remote to unit. Unit will flash on and off during initialization, completion will be indicated with 5 beeps
	Remote signal is not being received by tethered controller	Ensure that tethered controller is in an open area that can receive signal from remote control
	Defective remote control (blue light on end of remote does not turn on when buttons are pressed)	Replace remote control
	Defective tethered controller	Replace tethered controller
	Defective remote control	Replace remote control
The flame effect has too much smoke or is coming out too fast	Flame effect control is set too high	Adjust the flame height on both the secondary and/or primary controls
	Filter is missing off of Fan Housing	Replace Fan Filter
Mist is not coming out evenly	Condensation building up on the mist outlet	Remove the build up of condensation
	Unit is not level	Adjust the feet under the unit to ensure that the unit has been installed level, front to back and side to side
	Media is blocking air flow	Rearrange media to ensure mist outlet is not being blocked
	The transducer is not operating correctly - put the unit in troubleshooting mode to test the transducer	If the transducer is running, ensure that the emitter is clean and free of calcium deposits or scaling
		If the transducer is not running, replace the transducer with the provided additional transducer
The flame effect is too low	Flame effect control is set too low	Adjust the flame height on both the secondary and/or primary controls
	Verify that the unit is receiving 72 in^2 (460 cm^2) of air	Enlarge area for air to enter unit
	The fan is not operating correctly - put unit in troubleshooting mode to test the fan	If the fan is not running, replace fan assembly
		If the fan is running, ensure that the air filter is clean and dry
	The heating element is not operating correctly - put unit in troubleshooting mode to test the operation of the heating element	Replace the heating element

PROBLEM	CAUSE	SOLUTION
Appearance Continued		
Unit is blinking every 8 seconds and is not operating	Water level in reservoir is too high **	Remove enough water from reservoir so that level is below maximum level
	Water level in reservoir is too low **	Refill the water reservoir so that level is above the minimum level
	The solenoids are not operating correctly - put unit in troubleshooting mode to test the operation of the solenoids	If the solenoids are not working, replace the solenoid
Flame effect will not start - unit being operated with ***refill bottle***	Improper operation	Mist will begin emitting out of the unit after 45 seconds of operation
	Low water level indicator and lights continuously blink twice **	Turn the unit off with the On/Off switch, refill the refill container and turn the unit back on
		Ensure that water bottle is level and positioned so that the water can easily flow to the water reservoir
		Manually fill the reservoir to the maximum line and if issues persists replace the level sensor assembly
	Water in unit is too cold	Allow water to warm to room temperature.
	Cord is located over emitter on transducer	Relocate cord so that mist is free to rise off of transducer.
	Transducer is not installed correctly	Ensure that the connection has clicked into place
	If using distilled or reverse osmosis water, unit will not produce a consistent mist	Add 1/8 tsp of table salt to water reservoir to introduce electrolytes, only repeat when mist is not being produced correctly
	The transducer is not operating correctly - put the unit in troubleshooting mode to test the transducer	If the transducer is running, ensure that the emitter is clean and free of calcium deposits or scaling
		If the transducer is not running, replace the transducer with the provided additional transducer
	The fan is not operating correctly - put unit in troubleshooting mode to test the fan	If the fan is not running, replace fan assembly
		If the fan is running, ensure that the air filter is clean and dry
	The heating element is not operating correctly	Replace the heating element
Flame effect will not start - unit ***hard plumbed*** to water source	Improper operation	Mist will begin emitting out of the unit after 45 seconds of operation
	Transducer is not installed correctly	Ensure that the connection has clicked into place
	Cord is located over emitter on transducer	Relocate cord so that mist is free to rise off of transducer.
	Low water level indicator and lights continuously blink twice **	Turn the unit off with the On/Off switch, remove the top cover assembly, verify that ball valve is open, none of the water connections are leaking and supply water has not been turned off
		Manually fill the reservoir to the maximum line and if issues persists replace the level sensor assembly
	The solenoids are not operating correctly - put unit in troubleshooting mode to test the operation of the solenoids	If the solenoids are not working, replace the solenoid
	The transducer is not operating correctly - put the unit in troubleshooting mode to test the transducer	If the transducer is running, ensure that the emitter is clean and free of calcium deposits or scaling
		If the transducer is not running, replace the transducer with the provided additional transducer
	The fan is not operating correctly - put unit in troubleshooting mode to test the fan	If the fan is not running, replace fan assembly
		If the fan is running, ensure that the air filter is clean and dry

Water is appearing around the unit	During normal operation it is expected to see some condensation of water on the media tray.	If condensation is present ensure that mist outlets are unobstructed
		Certain ambient conditions will cause condensation on the unit and in most cases will only occur on initial start up of the unit
PROBLEM	CAUSE	SOLUTION
Appearance Continued		
Water is appearing beneath unit	Connections are leaking	Ensure that all water connections are tight and fully inserted
	Incoming water pressure is too high (only applicable on hard plumbed units)	Reduce water pressure to below 58 psi (8 bar)
Unit is blinking every 8 seconds and is not operating	Water level in reservoir is too high **	Remove enough water from reservoir so that level is below maximum level
	The solenoids are not operating correctly - put unit in troubleshooting mode to test the operation of the solenoids	If the solenoids are not working, replace the solenoid
LED lights do not come on when unit is turned on	Defective LED light strip - put unit in troubleshooting mode to test the LED lights	Replace LED Light strip

Troubleshooting Mode

The unit has a built-in troubleshooting mode to assist with determination of issues.

To put the unit in troubleshooting mode:

1. Place the unit in standby off (the toggle switch in the On position and everything else Off).
2. Press the troubleshooting button (Figure 1D) on the side that the testing is required, unit will beep.
3. Press the following buttons to test functionality of listed components - press once will turn On and press again to turn off

	Component Test	Expected Functionality
	LED Driver	Lights turn On
	Sound	Crackling sound will turn On
	Fan	Fan will turn On
	Transducer	Transducer will turn On and bubbling will be seen coming out of the transducer
	Solenoids	Solenoids will turn On (the main solenoid coming in and the solenoid on the side being tested)
	Heater Relay	Relays will be activated to turn the heating element on, a quiet clicking noise can be heard
	Fuel Bed	LED's in fuel bed will turn On

4. After 15 seconds of inactivity the unit will beep and then return to regular Standby mode, or the On/Off button can be switched to Off to end the troubleshooting mode.