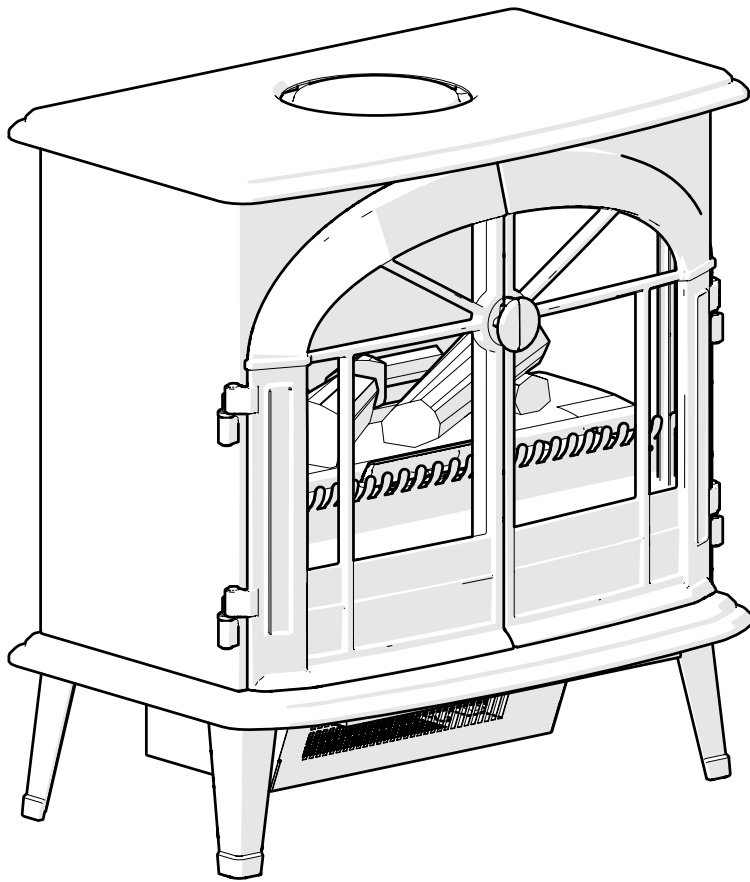




Better solutions through innovation

# Service Manual



**Model**  
**OS2527GB**

**Part Number**  
**6909560100**

**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.

**Dimplex North America Limited**

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1-888-346-7539 • [www.dimplex.com](http://www.dimplex.com)

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 cassette.

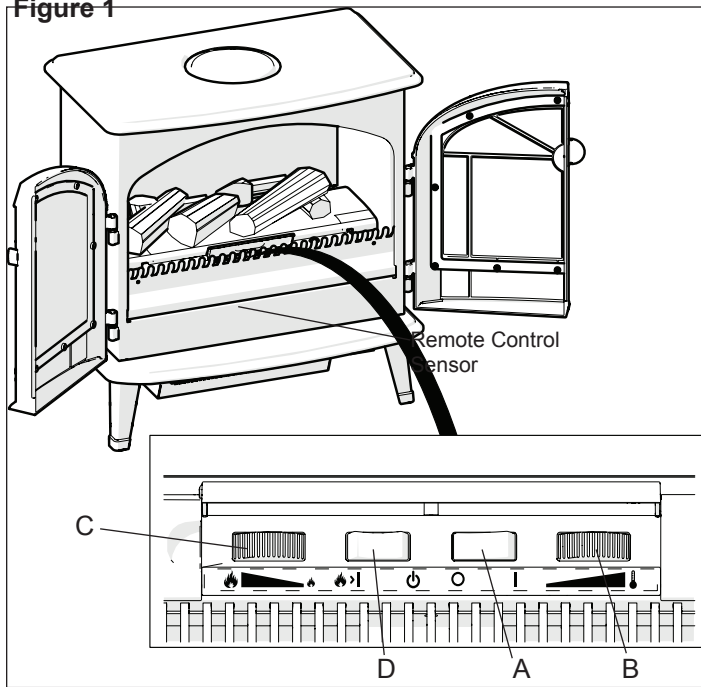
**! NOTE:** Procedures and techniques that are considered important enough to emphasize.

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

**! 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 in a level position.

The manual controls for the unit are located below the control cover in front of the log grate (Figure 1).

## A. On/Off Switch

Supplies power to the unit.

## B. Thermostat Control

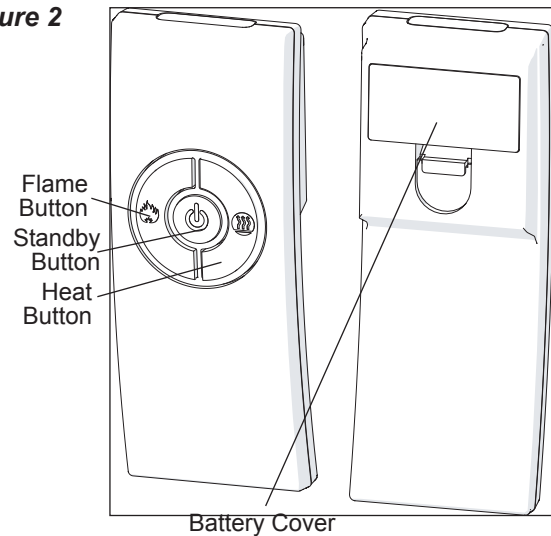
To adjust the temperature to your individual requirements, turn the thermostat control clockwise all the way to turn on the heater. When the room reaches the desired temperature, turn the thermostat knob counter-clockwise until you hear a click. Leave thermostat in this position to maintain the room temperature at this setting. For additional heat, turn clockwise until you hear the click again and the heater will turn on.

## C. Mode Selector Switch

Press once to turn on the flame effect. This will be indicated by an audible “beep”. Although the lights turn on immediately it will take 30 seconds before the flame effect starts.

- Press again to give flame effect and full heat. This will be indicated by two “beeps”.
- Press again to return to flame effect only. This will be indicated by one “beep”.
- Press to put fire in to standby mode. This will be indicated by one “beep”.

Figure 2



## D. Flame Intensity Control

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

Turning the control knob clockwise decreases the intensity of the flame and smoke effect. Turning the control counter-clockwise will increase the flame and smoke effect.

**! NOTE:** Give the flame generator some time to react to changes you may make on the flame control knob.

**! NOTE:** When the water tank is empty the unit will turn off after 30 seconds. See instructions under Maintenance Section for refilling tank. When this procedure is complete, the main lamps will illuminate but it will take 30 seconds before the flames return.

## Resetting the Temperature Cutoff Switch

Should the heater overheat, an automatic cut out will turn the heater off and it will not come back on without being reset. It can be reset by switching the On/ Off Switch to Off and waiting 10 minutes before switching the unit back on.

**⚠ CAUTION:** If you need to continuously reset the heater, unplug the unit and call Dimplex North America Limited at 1-888-346-7539 for technical support. Please have your model and serial number ready when calling.

## Remote Control

The On/Off Switch must be in the ‘ON’ (I) position in order for the remote control to operate (Figure 5A). There are 3 buttons on the remote control. (Figure 2)

**! NOTE:** To operate correctly the remote control must be pointed towards the remote control sensor.

The remote control functions are as follows:

- Press once to turn on Flame effect only. This will be indicated by one beep.
  - Press once to turn on Full heat and Flame effect. This will be indicated by two beeps.
  - Standby - This will be indicated by one beep.
- ! NOTE:** Once the mist has been activated, the unit will have to be turned Off, using either the momentary button,

on the unit, or the Off button on the remote control, then back on to return to Level 1 - Flame Effect

### Battery Replacement

To replace the battery:

1. Slide battery cover open on the remote control (Figure 6).
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.

### Servicing

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

**! NOTE:** When transporting or storing the unit and cord, keep in a dry place, free from excessive vibration and store so as to avoid damage.

### 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. Turn the On/Off switch to the off position (0) (Figure 1)
2. Gently remove the log set and place it carefully on the ground.
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 Opti-myst® 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 1/8 tsp. of salt (0.5 mL) added to the water reservoir. (The addition 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. Gently place the log set back into position.
8. Turn the On/Off switch to the off position (I). (Figure 1)

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.

### Replacing the Light bulbs

If a large amount of the smoke appears grey or colourless it may be that one or more of the light bulbs have burnt out.

**! CAUTION:** Allow at least twenty minutes for light bulbs to cool before touching bulbs to avoid accidental burning of skin.

1. Leaving the flame effect on, remove the log set and water tank and lift out the top cover (Figure 3).
2. View the lamps from a distance in front of the fire and observe which lamp needs to be changed.
3. Turn the unit off, and unplug the unit.
4. Leave the appliance for 20 minutes to allow the lamps to cool down before removing them.
5. Remove the defective bulb, by gently lifting vertically and disengaging the pins from the lamp holder.

**! NOTE:** Replacement light bulbs can be obtained by contacting Dimplex Customer Service at 1-888-346-7539.

6. Carefully insert the two pins of the new bulb into the two holes in the lamp holder. Push lamp firmly in place.
7. Replace the top cover, refill container and log set.

### Cleaning

It is recommended that all of the components that contain water are cleaned with soap and water on a **biweekly** basis. A small brush has been included to assist in cleaning difficult items/areas, i.e. the transducer.

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

### Filter Cleaning

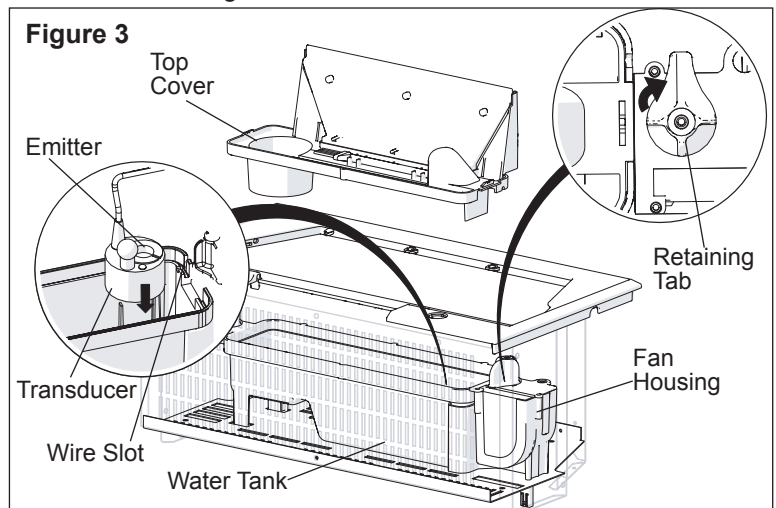
The air filter can be removed and gently rinsed with water to clean and dried on a towel before reinstalling.

**! NOTE:** Replace the filter so that the coarse black filter is facing the front of the unit.

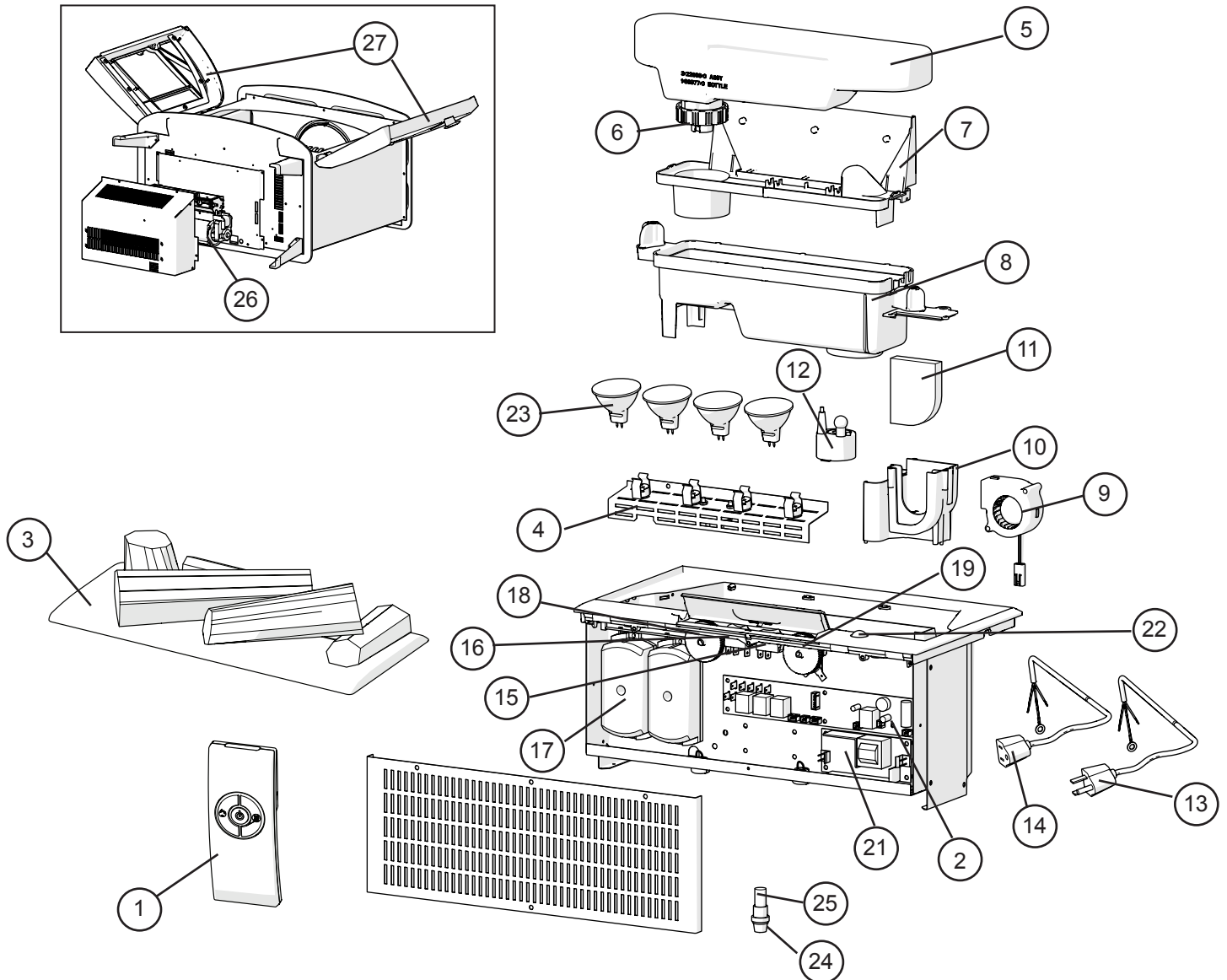
### Surface Cleaning

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.



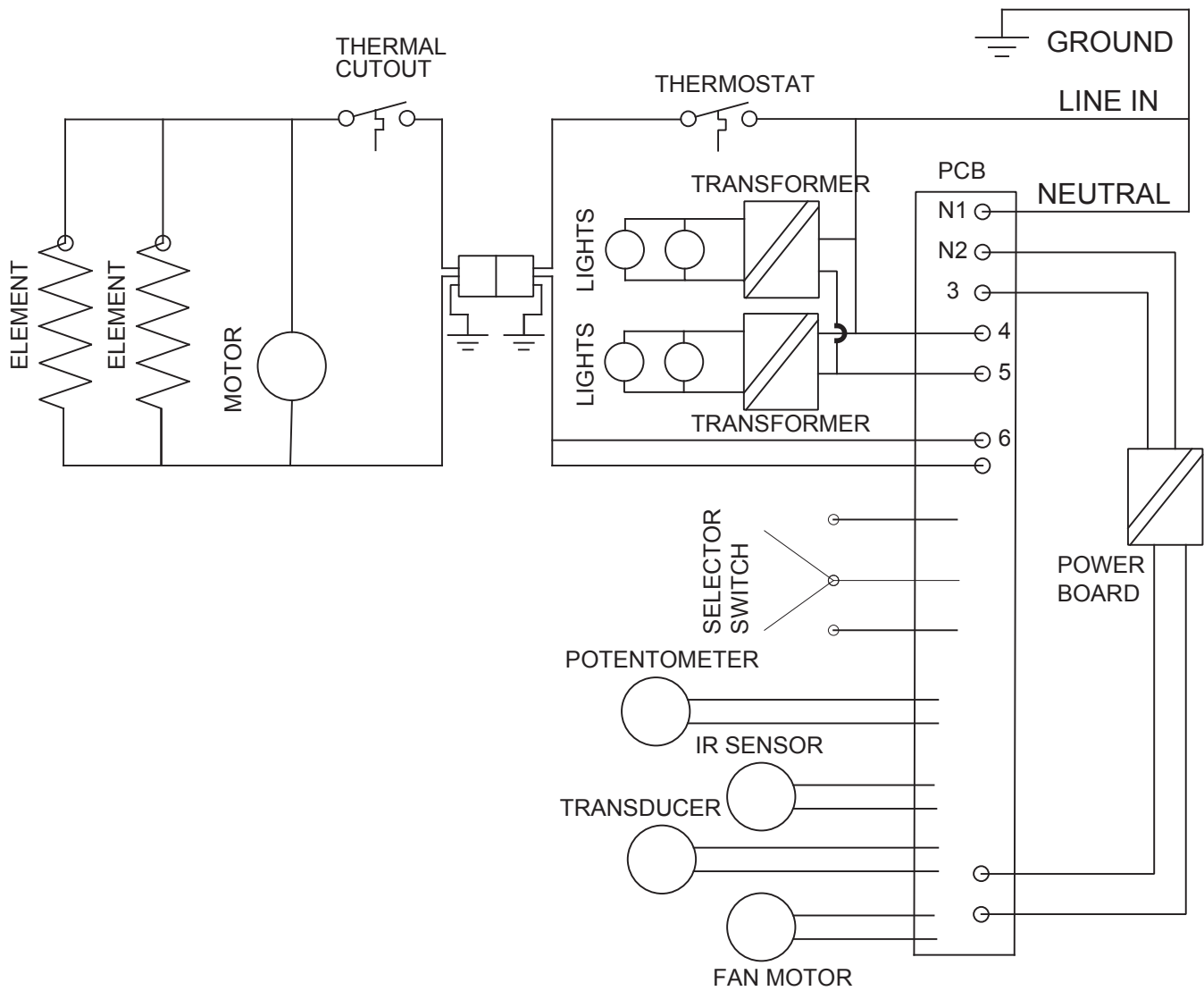
# EXPLODED PARTS DIAGRAM



## REPLACEMENT PARTS LIST

1. Remote Control . . . . .	9600385600RP	15. On/Off Switch . . . . .	9600383500RP
2. Remote Control Receiver . . . . .	9600580100RP	16. 3-Position Switch . . . . .	9600383600RP
3. Log Set Assembly - DFI400LH . . . . .	9600720100RP	17. Transformers. . . . .	9600690100RP
4. Light Holder Assembly . . . . .	9600610200RP	18. Potentiometer . . . . .	9600640100RP
5. Removable Refill Container with Cap	0441440100RP	19. Thermostat Assembly . . . . .	9600620100RP
6. Cap for Refill Container. . . . .	0441440300RP	20. Control Knob . . . . .	9600630200RP
7. Top Cover Assembly . . . . .	9600670100RP	21. Power Board . . . . .	9600590100RP
8. Water Tank . . . . .	0441380100RP	22. IR Receiver with Lens. . . . .	9600600200RP
9. Fan Assembly . . . . .	5300300100RP	23. Light Bulbs (Package of 4) . . . . .	RB400
10. Fan Housing Assembly . . . . .	9600540100RP	24. Fuse Holder . . . . .	9600790100RP
11. Fan Filter. . . . .	8600300100RP	25. Fuse . . . . .	9600790200RP
12. Transducer . . . . .	3800040100RP	26. Heater Assembly . . . . .	2200490900RP
13. Power Cord. . . . .	9600740100RP	27. Stove Doors . . . . .	9601470100RP
14. Receptacle Cord . . . . .	9600780100RP		

# WIRING DIAGRAM



## REMOTE CONTROL RECEIVER REPLACEMENT

**Tools Required:** Phillips head screwdriver  
Flat 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 before performing any maintenance.

1. Disconnect and remove the log set from the unit and put it in a safe place.
2. From the front of the unit, remove the top cover and the water tank from the inside of the unit. (Figure 3)
3. Inside of the unit remove the two screws that secure the cassette assembly to the chassis.
4. Lift the cassette assembly out of the unit.
5. Remove the 4 screws that secure the front grill to the cassette housing. (Figure 4)
6. Remove the 4 screws around the remote control receiver attaching it to the unit.
7. 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.

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

## POWER BOARD REPLACEMENT

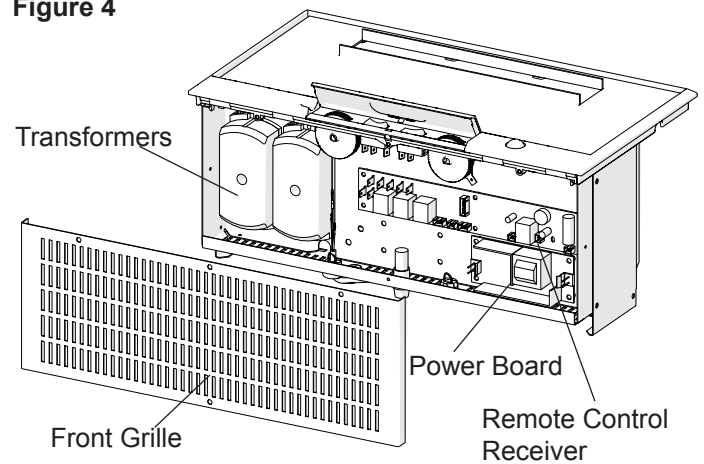
**Tools Required:** Phillips head screwdriver  
Flat Head Screwdriver

**⚠ 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 before performing any maintenance.

1. Disconnect and remove the log set from the unit and put it in a safe place.
2. From the front of the unit, remove the top cover and the water tank from the inside of the unit. (Figure 3)
3. Inside of the unit remove the two screws that secure the cassette assembly to the chassis.
4. Lift the cassette assembly out of the unit.
5. Remove the 4 screws that secure the front grill to the cassette housing. (Figure 4)
6. Remove the 4 screws around the power board attaching it to the unit.
7. Transfer the wire connectors from the terminals on the original board to the same location on the replacement board.

Figure 4



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

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

## TRANSFORMER REPLACEMENT

**Tools Required:** Phillips head screwdriver  
Flat 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 before performing any maintenance.

1. Disconnect and remove the log set from the unit and put it in a safe place.
2. From the front of the unit, remove the top cover and the water tank from the inside of the unit. (Figure 3)
3. Inside of the unit remove the two screws that secure the cassette assembly to the chassis.
4. Lift the cassette assembly out of the unit.
5. Remove the 4 screws that secure the front grill to the cassette housing. (Figure 4)
6. Remove the screws that secure the transformer to the unit.
7. 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.

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

## SWITCH REPLACEMENT

**Tools Required:** Phillips head screwdriver  
Flat 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 before performing any maintenance.

1. Disconnect and remove the log set from the unit and put it in a safe place.
2. Remove the 4 screws that secure the front grill to the cassette housing. (Figure 4)
3. Locate the defective switch and disconnect the wiring connections noting their original locations.

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

4. Depress the retainer clips on the rear of the switch and push the switch out through the opening.
5. Properly orient and insert the new switch and connect all of the wiring.
6. Re-assemble the remainder of the cassette in reverse order from the instructions above.

## THERMOSTAT REPLACEMENT

**Tools Required:** Phillips head screwdriver  
Flat 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 before performing any maintenance.

1. Disconnect and remove the log set from the unit and put it in a safe place.
2. From the front of the unit, remove the top cover and the water tank from the inside of the unit. (Figure 3)
3. Inside of the unit remove the two screws that secure the cassette assembly to the chassis.
4. Lift the cassette assembly out of the unit.
5. Remove the 4 screws that secure the front grill to the cassette housing. (Figure 4)
6. Remove the knob off of the thermostat, by gently lifting the bottom forward and pulling down.
7. Depress the retainer clips on either side of the thermostat to slide it out of the assembly.
8. Disconnect the wiring connections noting their original locations.

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

9. Install the knob onto the new thermostat and slide the thermostat back into the assembly ensuring that it has "clicked" into place.
10. Re-assemble the remainder of the cassette in reverse order from the instructions above.

## POTENTIOMETER REPLACEMENT

**Tools Required:** Phillips head screwdriver  
Flat Head Screwdriver  
3/8" (10mm) Wrench

**⚠ 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 before performing any maintenance.

1. Disconnect and remove the log set from the unit and put it in a safe place.
2. From the front of the unit, remove the top cover and the water tank from the inside of the unit. (Figure 3)
3. Inside of the unit remove the two screws that secure the cassette assembly to the chassis.
4. Lift the cassette assembly out of the unit.
5. Remove the 4 screws that secure the front grill to the cassette housing. (Figure 4)
6. Turn the unit so that the underside of the potentiometer can be seen.
7. Loosen the securing nut, to allow the potentiometers slide out.
8. Disconnect the wiring connections noting their original locations.

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

9. Slide the potentiometer back into the assembly and tighten the securing nut.
10. Re-assemble the remainder of the cassette in reverse order from the instructions above.

## POWER CORD / RECEPTACLE REPLACEMENT

**Tools Required:** Phillips head screwdriver  
Flat 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 before performing any maintenance.

1. Disconnect and remove the log set from the unit and put it in a safe place.
2. Remove the back panel off of the unit, there are 9 screws around the outside and 2 near the bottom middle.
3. From the front of the unit, remove the top cover and the water tank from the inside of the unit. (Figure 3)
4. Inside of the unit remove the two screws that secure the cassette assembly to the chassis.
5. Lift the cassette assembly out of the unit.



6. Remove the 4 screws that secure the front grill to the cassette housing. (Figure 4)
7. Locate the cord and disconnect the wiring connections noting their original locations.
  - ! **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 two screws that attach the cord strain relief grommet from inside the back of the bottom panel and release the cord.
9. Install the new cord.
10. Reassemble in the reverse order as above.

## FUSE / FUSE ASSEMBLY REPLACEMENT

**Tools Required:** Flat 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 before performing any maintenance.

1. Disconnect and remove the log set from the unit and put it in a safe place.
2. From the front of the unit, remove the top cover and the water tank from the inside of the unit. (Figure 3)
3. Inside of the unit remove the two screws that secure the cassette assembly to the chassis.
4. Lift the cassette assembly out of the unit.
5. Remove the 4 screws that secure the front grill to the cassette housing. (Figure 4)
6. Remove the 4 screws that secure the front grill to the cassette housing. (Figure 4)
7. Locate the fuse assembly located on the bottom the unit and using the flat head screwdriver remove the assembly.
8. Replace the fuse and the fuse assembly.
  - ! **NOTE:** The unit will not need to be disassembled to replace the fuse only.
9. Reassemble in the reverse order as above.

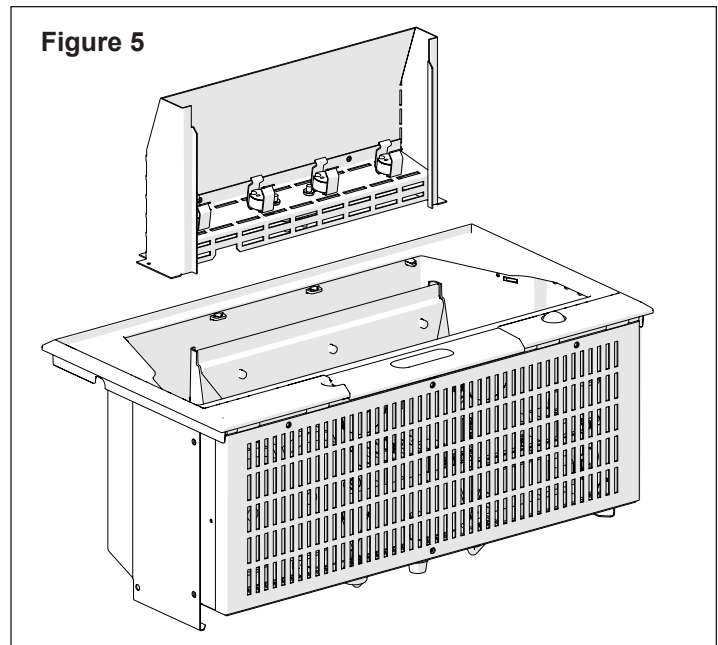
## LIGHT ASSEMBLY REPLACEMENT

**Tools Required:** Phillips head screwdriver  
Flat 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 before performing any maintenance.

1. Disconnect and remove the log set from the unit and put it in a safe place.
2. From the front of the unit, remove the top cover and the water tank from the inside of the unit. (Figure 3)



3. Inside of the unit remove the two screws that secure the cassette assembly to the chassis.
4. Lift the cassette assembly out of the unit.
5. Turn the unit turned upside down, remove the 2 screws that hold the light assembly to the unit. (Figure 5)
6. Remove the light assembly and replace with the new light assembly.
7. Reattach the wire onto the new light assembly.
8. Re-assemble the remainder of the cassette in reverse order from the instructions above.

## FAN ASSEMBLY REPLACEMENT

### *Fan Motor and Fan Housing*

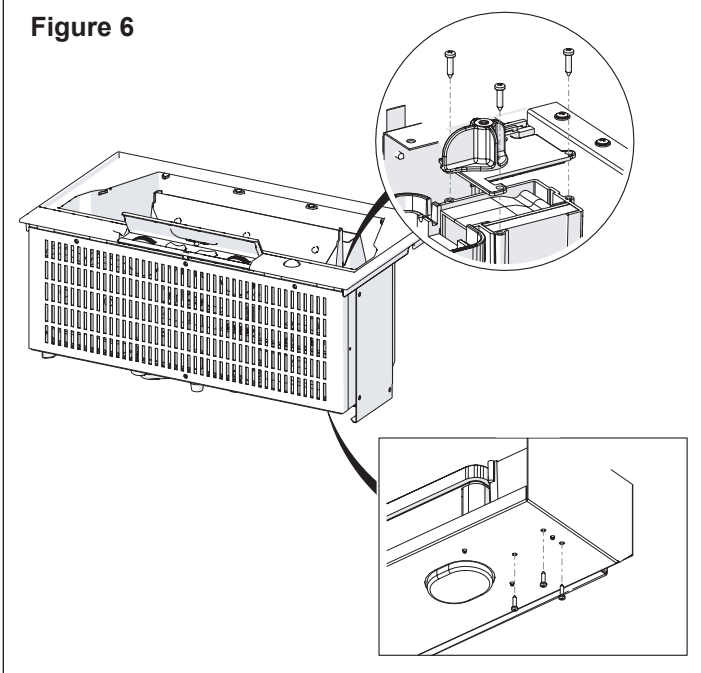
**Tools Required:** Phillips head screwdriver  
Flat Head Screwdriver

**⚠ 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 before performing any maintenance.

1. Disconnect and remove the log set from the unit and put it in a safe place.
2. From the front of the unit, remove the top cover and the water tank from the inside of the unit. (Figure 3)
3. Inside of the unit remove the two screws that secure the cassette assembly to the chassis.
4. Lift the cassette assembly out of the unit.
5. Remove the 3 screws that hold the cover onto the fan housing. (Figure 6)
6. Remove the fan motor out of the housing and disconnect the wiring connection located near the bottom of the housing.
7. If replacing only the motor, attach new motor and reas-

Figure 6



semble the remainder of the cassette in reverse order from the instructions above.

- If replacing the housing, remove the 3 screws attaching the base to the cassette. (Figure 6)
8. Attach new fan housing base to the cassette.
  9. Transfer the filter from the old housing to the new housing.
  10. Reinstall the fan motor and reconnect the wire.
  11. Re-assemble the remainder of the cassette in reverse order from the instructions above.

## HEATER ASSEMBLY REPLACEMENT

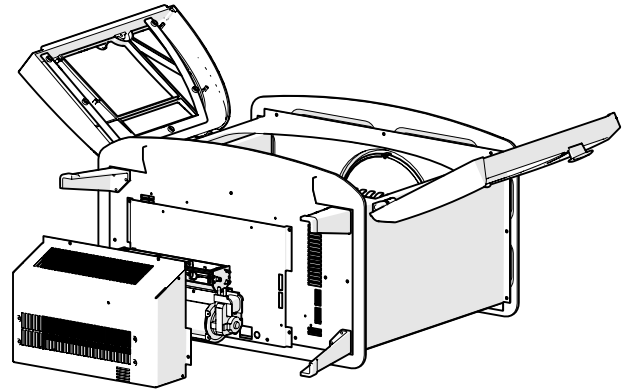
**Tools Required:** Phillips head screwdriver  
Flat head screwdriver

**⚠ 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 before performing any maintenance.

1. Disconnect and remove the log set from the unit and put it in a safe place.
2. Lay the unit on its back to access the heater assembly area.
3. Remove the 4 screws that secure the assembly to the stove. (Figure 7)
4. Allow the assembly to separate from the stove by gently pulling the cord out of the opening in the bottom of the stove.
5. Remove the 2 screws on the top of the assembly, 2 on the bottom on either side and 2 on either side of the heater outlet.
6. Set the top panel up against the bottom of the stove.

Figure 7



7. On the bottom of the heater assembly remove the 4 screws around the inlet of the heater, to release the heater assembly.
8. Slide the heater assembly backwards to remove it out of the assembly.
9. Transfer the wiring connections from the old assembly to the new assembly.  
**! NOTE:** A flat head screwdriver can be used to gently pry between the end of the connector and the switch to release the wires.
10. Slide the heater assembly back into the assembly and re-assemble the remainder of the cassette in reverse order from the instructions above.

# TROUBLESHOOTING GUIDE

PROBLEM	CAUSE	SOLUTION
<b>General</b>		
Unpleasant smell when unit is used.	Dirty or stale water.	Clean the unit as described under maintenance.
<b>Appearance</b>		
Fireplace does not turn on Manually	Improper operation	Refer to Operation Section
	No incoming voltage from the electrical wall socket	Check Fuse/Breaker Panel
	Defective 3 Position Switch	Replace 3 Position switch
Fireplace does not turn on with the Remote Control	Improper operation	Refer to Operation Section
	The batteries in the remote control are dead.	Install new battery into the remote control
	Defective remote control	Replace Remote Control
	Defective remote control receiver	Replace remote control receive
	Defective IR sensor	Replace IR sensor
The flame effect will not start	Switch A is in the 'ON' (I) position, but mode Switch B has not been pressed.	Press Switch B once for flame effect.
	Low water level.	Check the water tank is full and there is water in the sump.
	Water in unit is too cold	Allow water to warm to room temperature.
	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
	Check that the fan is operating correctly	Replace fan assembly
		Ensure that the air filter is clean and dry
	Cord is located over emitter on transducer	Relocate cord so that mist is free to rise off of transducer.
	Defective Transducer	Replace Transducer
The flame effect is too low.	Flame effect control knob is set too low.	Increase level of flame by turning Control knob C to the left slowly.
The flame effect has too much smoke.	Flame effect setting is too high.	Turn the flame effect Control knob "C" to the right until it is at minimum and slowly turn to the left, about ¼ a turn, at a time. Give the flame generator some time to adjust before increasing.
Mist is not coming out and the red light by the transducer is not on	The cord from the power board is not working	Ensure that the cord is not pinched.
		Ensure that the cord is fully inserted into the connection on the power board.
Mist is coming out fast	Filter is missing off of Fan Housing	Replace Fan Filter
Mist does not appear to be coming out evenly	Unit is not level	Level unit
	Media is blocking air flow	Rearrange media
	A light bulb is burnt out	Replace light bulb

PROBLEM	CAUSE	SOLUTION
<b>Heater</b>		
Heater is not turning off	Improper Operation	Refer to Operation Section
	Defective Thermostat	Replace Thermostat
Heater is not turning on	Improper Operation	Refer to Operation Section
	Defective Thermostat	Replace Thermostat
	Heater has blown fuse in cord	Replace Fuse
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 housing 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