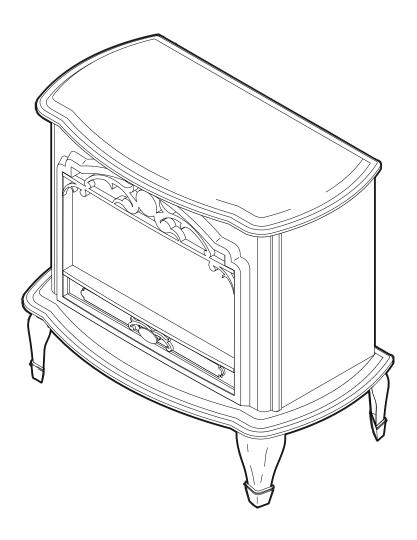
# PARTS AND SERVICE MANUAL

# **FOR**

# DIMPLEX PURIFIRE ELECTRIC STOVE Model TDS8515

# **№ Dimplex**®



7400050000R04

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### **OPERATION**

To access the controls, go to the back of the stove.

#### A. ON/OFF SWITCH

The On/Off switch supplies power to all unit functions (flame, purifire, heater).

#### **B. 3-POSITION SWITCH**

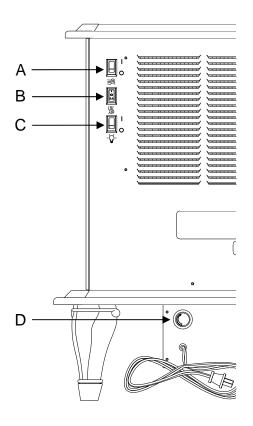
To choose between flame effect setting, flame effect with Purifire<sup>™</sup> setting, and flame effect with Purifire<sup>™</sup> and heat setting.

#### C. INTERIOR LIGHT SWITCH

The interior light switch supplies power to the interior light.

#### D. HEATER 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 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.



# 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 5 minutes before switching the unit back on.

#### **CAUTION**

If you need to continuously reset the heater, unplug the unit and call Dimplex technical support at 1-888-DIMPLEX (1-888-346-7539) Extension 4.

#### NOTE

The heater may emit a slight, harmless odor when first used. This odor is a normal condition caused by initial heating of internal heater parts and will not occur again.

## REMOTE CONTROL USAGE

This stove is supplied with a radio frequency remote control. This remote control has a range of approximately 50 feet (15.25m); it does not have to be pointed at the fireplace and can pass through most obstacles (including walls). It is supplied with one of 243 independent frequencies to prevent interference with other units. The frequency code is indicated on the back of the remote control.

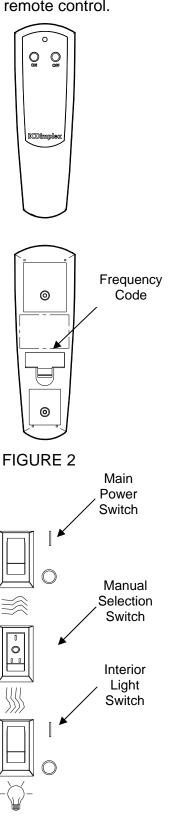


FIGURE 3

#### A. Remote Control Initialization

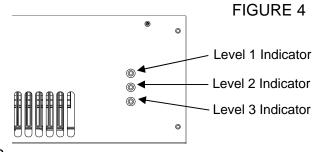
This procedure is required every time there is a loss of power to the remote control in the fireplace. (I.e. power failure, breaker tripped, On/Off switch is turned off)

- 1. Ensure that power is supplied through main service panel.
- 2. Locate manual controls. (refer to FIGURE 3)
- 3. Activate On/Off switch, ("—" position) red indicator light 1 will flash.
- Press and hold the 3-position switch for five seconds ("—" position) UNTIL the second red indictor light flashes.
- 5. Press ON button located on the remote control (FIGURE 2). This will synchronize the remote control and receiver.

#### **B. Remote Control Usage**

The remote control operates the fireplace levels sequentially. The level is increased every time the ON button on the transmitter is pressed. The fireplace can be turned off at any point by pressing the OFF button on the remote control.

- Level 1: The flame effect is turned on and the first red indicator light is activated.
- Level 2: The flame effect remains on, the Purifire™ is activated, and the first and second red indicator lights are activated.
- Level 3: The flame effect and Purifire™ remain on, the heater is activated, and all three red indicator lights are activated.

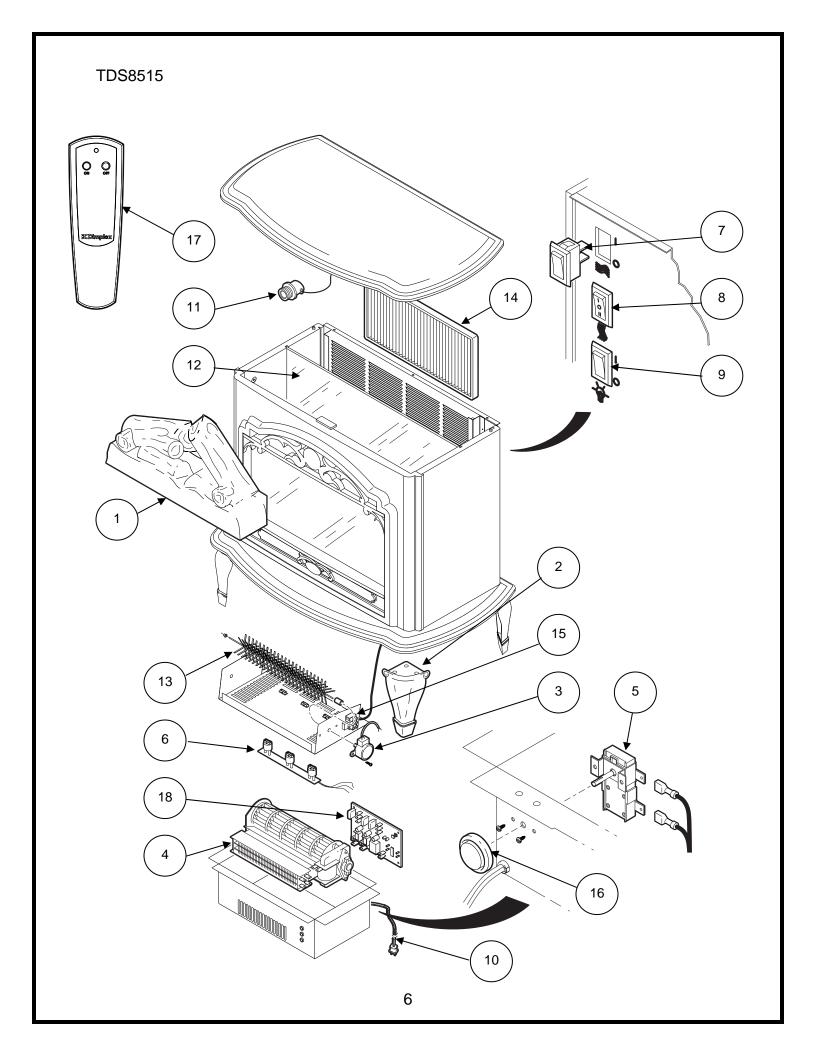


# **3-POSITION SWITCH**

The 3-position switch operates the electric fireplace in the same manner as the remote control. Pressing the switch up (" I " position) has the same effect as the ON button on the remote control and pressing the switch down (" II " position) has the same effect as the OFF button of the remote control. Pressing the switch up once activates Level 1, twice activates Level 2, and three times activates Level 3. Pressing the switch down turns the electric fireplace OFF.

- Level 1: The flame effect is turned on and the first red indicator light flashes momentarily.
- Level 2: The flame effect remains on, the heater is activated to the low heat setting, and the first and second red indicator lights flash momentarily.
- Level 3: The flame effect remains on, the heater is set to the high heat setting, and all three red indicators flash momentarily.

# **WIRING DIAGRAM** Monetary Switch Top Lamp N |-S3 |-L2 |-L2 |-S2 |-S1 |-Flicker Motor ¶ L1 \_Wire of wide blade of plug Wide blade (N) Narrow Blade (L) THERMOSTAT Wire from Cutout-Wire from Cutout,



# **REPLACEMENT PARTS**

STOVE, ELECTRIC 23", PURIFIRE

CATALOGUE NO. TDS8515
PART NO. 69004712\*\*
MADE IN: CHINA

#### REPLACEMENT PART

#### REPLACEMENT PART NO.

0.40004040400	
2. FOOT 0438210104RP	
3. FLICKER MOTOR 2000210200RP	
4. HEATER ASSEMBLY 2000230100RP	
5. THERMOSTAT 2300150100RP	
6. LOWER LIGHT HARNESS 2500280100RP	
7. 3-POSITION SWITCH 2800070500RP	
8. ON/OFF SWITCH 2800070200RP	
9. UPPER LIGHT SWITCH 2800070200RP	
10. CORD SET 4100040300RP	
11. UPPER LIGHT HARNESS 2500150100RP	
12. PARTIALLY REFLECTIVE GLASS 5900060600RP	
13. FLICKER ASSEMBLY 5900080600RP	
14. FILTER 0439060100RP	
15. TERMINAL BLOCK 4000070100RP	
16. KNOB CONTROL 8800000300RP	
17. REMOTE CONTROL 3000370600RP	
18. REMOTE RECEIVER (3-STAGE) Mod 0 - C 3000820600RP WITH 850158010	OORP
Mod D 3000820600RP	

<sup>\*\* =</sup> Colour code

If unit was operating prior to servicing allow at least 10 minutes for light bulbs and heating element to cool off to avoid accidental burning of skin.

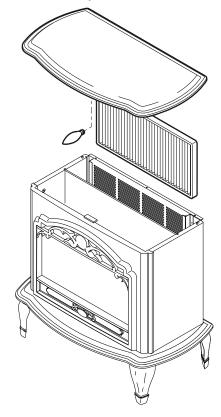
Disconnect power before attempting any maintenance or cleaning to reduce the risk of electric shock or damage to persons.

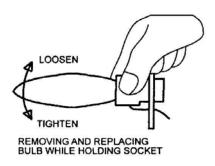
Light bulbs need to be replaced when you notice a dark section of the flame. There are four bulbs under the log set which generate the flames and embers.

It is a good idea to replace all of the light bulbs at one time if they are close to the end of their rated life. Group replacement will reduce the number of times you need to open the unit to replace the light bulbs.

### UPPER LIGHT BULB REPLACEMENT

- 1. Remove the 2 screws at the upper corners of the back panel.
- 2. Lift the back end of the top to clear the brackets and pull back. Lift top carefully and place to the side of the stove.
- 3. Caution should be taken as the top mounting brackets may scratch the finish.
- 4. Hold the socket while unscrewing the bulb.
- 5. Hold the socket while screwing in the new bulb.
- 6. Re-install the top of the stove.





#### LIGHT BULB REQUIREMENTS

Quantity of 1 clear chandelier or candelabra bulbs with an E-12 (small) socket base, 15 watt rating.

If unit was operating prior to servicing allow at least 10 minutes for light bulbs and heating element to cool off to avoid accidental burning of skin.

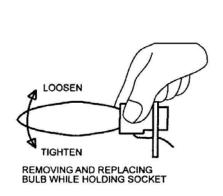
Disconnect power before attempting any maintenance or cleaning to reduce the risk of electric shock or damage to persons.

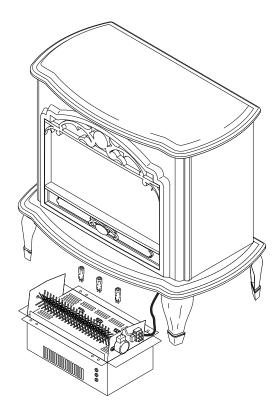
Light bulbs need to be replaced when you notice a dark section of the flame. There are four bulbs under the log set which generate the flames and embers.

It is a good idea to replace all of the light bulbs at one time if they are close to the end of their rated life. Group replacement will reduce the number of times you need to open the unit to replace the light bulbs.

# LOWER LIGHT BULB REPLACEMENT

- 1. Gently place stove on its back on a flat surface.
- 2. Remove the thermostat knob.
- 3. Remove the heater cover retaining screws located on the bottom of the stove and lower heater/light assembly onto the floor.
- 4. Remove the burnt out bulbs by pulling straight out of the socket. If bulbs are difficult to remove from socket, move bulb from side to side while pulling, being careful not to damage the light socket.
- 5. Replace lower light bulbs
- 6. Caution should be taken not to touch the glass portion of the new halogen bulbs. Doing so may lead to shorter bulb life.
- 7. Reassemble in the reverse order as above.





#### LIGHT BULB REQUIREMENTS

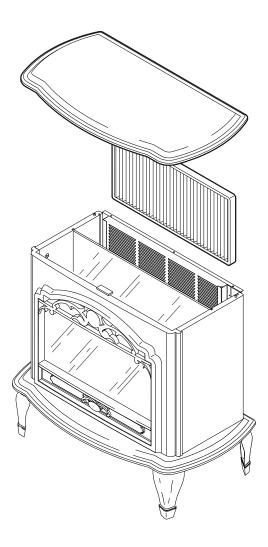
Quantity of 3 -35 watt Halogen Quartz lamps, 120 volt, G9 base

If unit was operating prior to servicing allow at least 10 minutes for light bulbs and heating element to cool off to avoid accidental burning of skin.

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

# TO REPLACE THE FILTER

- 1. Remove the 2 screws at the upper corners of the back panel.
- 2. Lift the back end of the top to clear the brackets and pull back. Lift top carefully and place to the side of the stove.
- 3. Caution should be taken as the top mounting brackets may scratch the finish.
- 4. Remove the old filter and replace with new filter.
- 5. Reassemble in the reverse order as above.



If unit was operating prior to servicing allow at least 10 minutes for light bulbs and heating element to cool off to avoid accidental burning of skin.

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

# TO REPLACE THE UPPER LIGHT HARNESS

- 1. Remove the 2 screws at the upper corners of the back panel.
- 2. Lift the back end of the top to clear the brackets and pull back. Lift top carefully and place to the side of the stove. Caution should be taken as the top mounting brackets may scratch the finish.
- 3. Hold the socket while unscrewing the bulb.
- 4. Remove the retaining ring from the light socket and remove the assembly out of back of the bracket.
- 5. Cut wires that attach the old light socket to the fire box and strip ½" off of the end of the wires that enter the firebox.
- 6. Mount the replacement light socket into the bracket and secure with the retaining ring.
- 7. Using the provided wire connectors, connect the stripped ends that are connected to the firebox to the ends of the new light socket.
- 8. Reinstall the light bulb.
- 9. Reassembly in the reverse order as above.

If unit was operating prior to servicing allow at least 10 minutes for light bulbs and heating element to cool off to avoid accidental burning of skin.

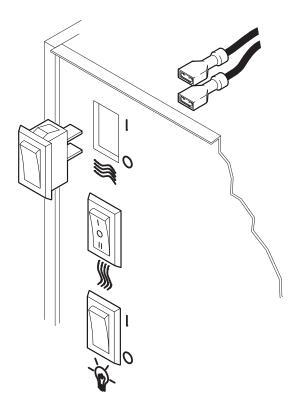
Disconnect power before attempting any maintenance or cleaning to reduce the risk of electric shock or damage to persons.

Light bulbs need to be replaced when you notice a dark section of the flame. There are four bulbs under the log set which generate the flames and embers.

It is a good idea to replace all of the light bulbs at one time if they are close to the end of their rated life. Group replacement will reduce the number of times you need to open the unit to replace the light bulbs.

# TO REPLACE ON/OFF, 3-POSITION, AND LIGHT SWITCHES

- 1. Remove the 2 screws at the upper corners of the back panel.
- 2. Lift the back end of the top to clear the brackets and pull back. Lift top carefully and place to the side of the stove.
- 3. Caution should be taken as the top mounting brackets may scratch the finish.
- 4. Locate the switch to be replaced.
- 5. Remove the wiring clips and connection noting their original locations
- 6. Depress the retainer clips on the rear of the switch and push the switch out of the rear of the stove.
- 7. Re-install the top of the stove.

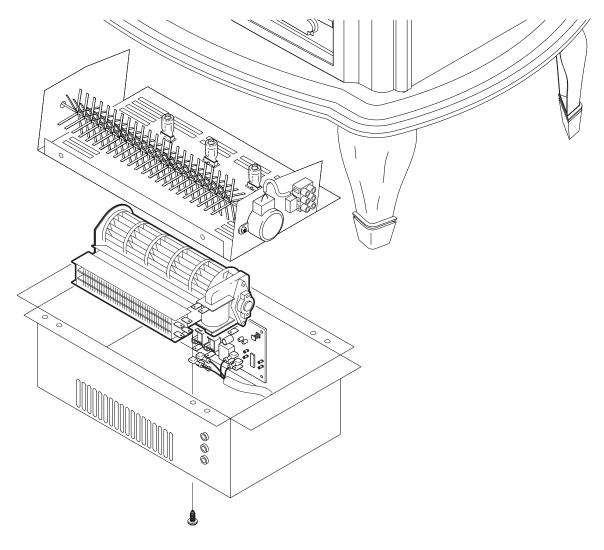


If unit was operating prior to servicing allow at least 10 minutes for light bulbs and heating element to cool off to avoid accidental burning of skin.

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

# TO REPLACE THE HEATER ASSEMBLY

- 1. Gently place stove on its back on a flat surface.
- 2. Remove the thermostat knob.
- 3. Remove the heater cover retaining screws located on the bottom of the stove and lower heater/light assembly onto the floor.
- 4. Remove the reflector rod and motor assembly by removing the screws on the front and rear of the heater cover.
- 5. Remove the heater retaining screws form the bottom of the heater cover.
- 6. Disconnect the wiring clips and connections noting their original locations.
- 7. Reassemble in the reverse order as above.



If unit was operating prior to servicing allow at least 10 minutes for light bulbs and heating element to cool off to avoid accidental burning of skin.

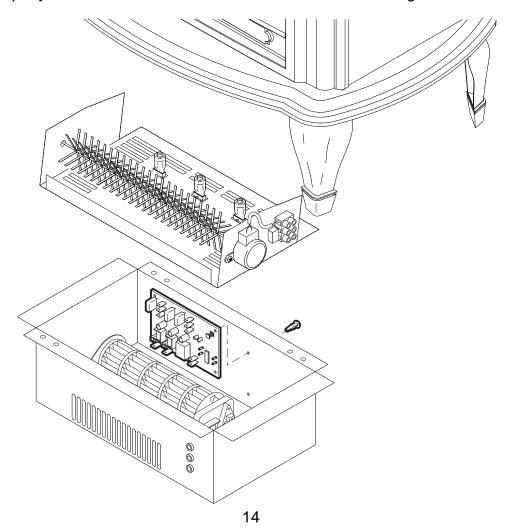
Disconnect power before attempting any maintenance or cleaning to reduce the risk of electric shock or damage to persons.

# TO REPLACE THE REMOTE CONTROL RECEIVER

- 1. Gently place stove on its back on a flat surface.
- 2. Remove the thermostat knob.
- 3. Remove the heater cover retaining screws located on the bottom of the stove and lower heater/light assembly onto the floor.
- 4. Remove the reflector rod and motor assembly by removing the screws on the front and rear of the heater cover.
- 5. Disconnect the wiring clips and connections from the remote control receiver, noting their original locations.
- 6. From inside the fireplace, break off the six mounting studs on the receiver by grasping with pliers and twisting on the protruding part of the stud, push the remainder of the studs out through the top panel.

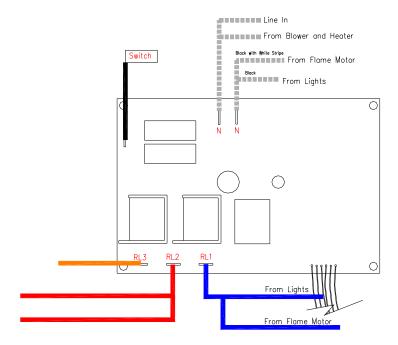
**NOTE:** New mounting studs are supplied with the replacement remote control receiver.

7. Properly orient the new receiver and connect all of the wiring connections

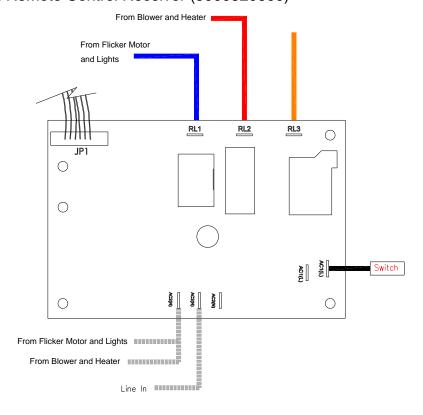


If the unit that you are replacing the remote control receiver is a MOD 0-C you will have received and updated remote control receiver which has different labelling. See below for new locations for the different connections.

#### Original Remote Control Receiver (3000431100RP)



#### Updated Remote Control Receiver (3000820600)

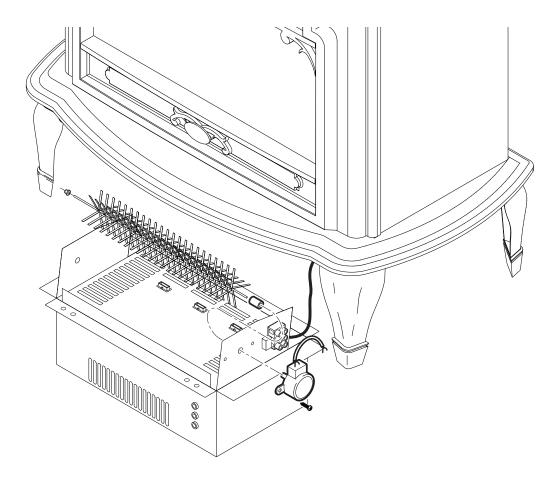


If unit was operating prior to servicing allow at least 10 minutes for light bulbs and heating element to cool off to avoid accidental burning of skin.

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

## TO REPLACE FLICKET MOTOR/FLICKER ROD

- 1. Gently place stove on its back on a flat surface.
- 2. Remove the thermostat knob.
- 3. Remove the heater cover retaining screws located on the bottom of the stove and lower heater/light assembly onto the floor.
- 4. Remove the reflector rod from the flicker motor by pulling the end of the rod to the left and separating it from the rubber sleeve.
- 5. Remove the rubber sleeve from the motor shaft.
- 6. Remove the 2 motor mounting screws and remove the flicker motor.
- 7. Discard the old flicker motor.
- 8. Lay the stove on its back with the front window facing upward.
- 9. Remove the bottom heater assembly cover being careful not to damage any of the wiring and lay it on the floor.
- 10. Loosen the flicker motor connections on the terminal block and remove the wires noting their original locations.
- 11. Reassemble in the reverse order.



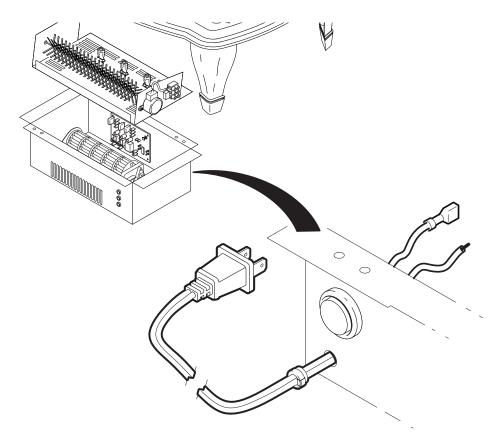
**TDS8515** 

If unit was operating prior to servicing allow at least 10 minutes for light bulbs and heating element to cool off to avoid accidental burning of skin.

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

#### TO REPLACE THE POWER CORD

- 1. Gently place stove on its back on a flat surface.
- 2. Remove the thermostat knob.
- 3. Remove the heater cover retaining screws located on the bottom of the stove and lower heater/light assembly onto the floor.
- 4. Remove the reflector rod and motor assembly by removing the screws on the front and rear of the heater cover.
- 5. Located and disconnect the power cord wiring connections from the on/off switch and the wire connector noting their original locations.
- 6. With needle nose pliers grasp the power cord strain relief grommet from inside the rear panel and push while twisting to remove.
- 7. Pull the power cord out through the hole in the rear cover.
- 8. Install the new cord set through the hole in the rear cover by placing the strain relief over the cord, hold the strain relief with pliers and slide into mounting hole.
- 9. Connect all of the wiring connections in their original locations.
- 10. Reassemble in the reverse order as above.

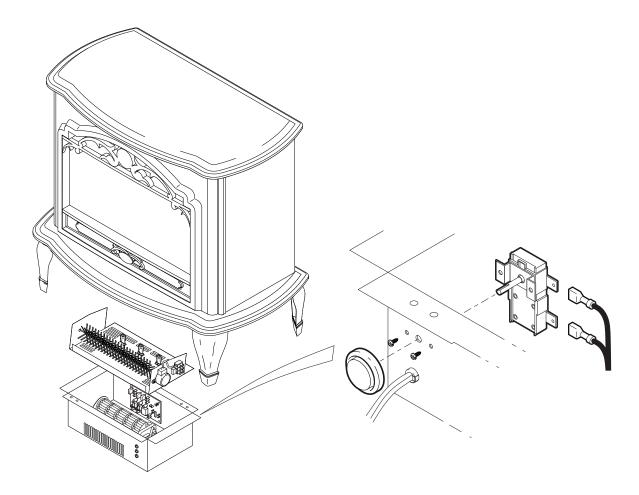


If unit was operating prior to servicing allow at least 10 minutes for light bulbs and heating element to cool off to avoid accidental burning of skin.

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

## TO REPLACE THE THERMOSTAT

- 1. Gently place stove on its back on a flat surface.
- Remove the thermostat knob.
- 3. Remove the heater cover retaining screws located on the bottom of the stove and lower heater/light assembly onto the floor.
- 4. Remove the reflector rod and motor assembly by removing the screws on the front and rear of the heater cover.
- 5. Disconnect the wiring clips from the thermostat.
- 6. Remove the 2 thermostat mounting screws and remove the thermostat.
- 7. Connect all of the wiring connections to the new thermostat.
- 8. Reassemble in the reverse order as above.



TDS8515

# TROUBLESHOOTING GUIDE

# **GENERAL**

Problem	Cause	Solution	Service Manual Reference
Circuit breaker trips or fuse blows when unit is turned on	Improper circuit current rating	Additional appliances may exceed the current rating of the circuit breaker or fuse. Plug unit into another outlet or install unit on a dedicated 15 amp circuit	
Unit turns on or off by itself	Remote control has a similar frequency to other remotes in the area	Replace remote control,	
	Radio frequency disturbance from outside sources	initialize to remote control recevier	
Lights dim in room while the unit is on	Unit is drawing close to circuit current rating	Move the unit to another outlet or install unit on a dedicated 15 amp circuit	
Power cord gets warm	Normal operation	The power cord may get slightly warm to the touch when the heater is on	
	Defective power cord	Replace power cord	Page 15

# **APPEARANCE**

Problem	Cause	Solution	Service Manual Reference
	Improper operation	Refer to User's Guide	
Fireplace does not turn on	Defective On/Off switch	Replace On/Off switch	Page 12
	Defective Remote Control Receiver	Replace Remote Control Receiver	Page 3
	Loose wiring	Check wiring connections	Page 5
	Defective flicker motor	Replace flicker motor	Page 15
Flame frozen	Loose wiring	Check wiring connections	Page 5
	Burnt light bulbs	Replace light bulbs	Pages 8-9
Flame not bright or	Loose wiring	Check wiring connections	Page 5
flame not visible	Defective light harness	Replace light harness	
Log set dim, ember bed not glowing	Burnt light bulbs	Replace light bulbs	Pages 8-9
Flame Shudder	Defective flicker motor	Replace flicker motor	Page 15

# TROUBLESHOOTING GUIDE HEATER

Problem	Cause	Solution	Service Manual Reference
Heater is not turning off	Defective thermostat	Replace thermostat	Page 17
	Improper operation	See Operation Section	Page 2
	Defective Remote Control Receiver	Replace Remote Control Receiver	Page 14
Heater is not	Defective thermostat	Replace thermostat	Page 17
turning on	Defective heater assembly	Replace heater assembly	Page 13
	Improper operation	See Operation Section	Page 2
	Loose wiring	Trace wiring in unit	Page 5
	Defective Remote Control Receiver	Replace Remote Control Receiver	Page 14
Heater emits an odour	Normal operation	Normal operation is when the heater emits an odour 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	Page 13
	Loose wiring	Trace wiring in unit	Page 5
	Improper operation	See Operation Section	Page 2
Heater fan turns on but heater lacks	Defective thermostat	Replace thermostat	Page 17
heat	Loose wiring	Trace wiring in unit	Page 5
	Defective heater assembly	Replace heater assembly	Page 13
Heating element is glowing red	Normal operation	Small glowing sections of the element are considered normal.	
	Defective heater assembly	If larger glowing sections are causing the heater to trip the thermal cut out, unplug unit, discontinue use and replace heater assembly	Page 13

# TROUBLESHOOTING GUIDE

# **HEATER (CONTINUED)**

Problem	Cause	Solution	Service Manual Reference
Heater Turns Off	Build up of dirt in heater assembly	Vacuum/Clean Heater Assembly	
after a few minutes of operation but	Build up of dirt in Purifire Filter	Clean/Replace Filter	Page 10
flame stays On	Defective Heater Assembly	Replace Heater Assembly	Page 13
	Loose wiring	Trace wiring in unit	Page 5
Heater fan runs continuously	Defective thermostat	Replace the thermostat	Page 17
	Defective heater assembly	Replace heater assembly	Page 13

#### **NOISE**

Problem	Cause	Solution	Service Manual Reference
Excessive noise	Dirty blower assembly	Clean blower assembly	
with the heater on	Defective blower assembly	Replace heater assembly	Page 13
Grinding or excessive noise with the heater off	Flicker rod hitting or rubbing against internal components	Flicker rod replacement	Page 15
	Defective flicker motor	Replace flicker motor	Page 15



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