

# SERVICE MANUAL Model: SF-TR50, SF-TR65, SF-TR78

- Instructions -



Leave this manual with party responsible for use and operation.

**NOTICE! DO NOT discard this manual.** Important service and maintenance instructions included.

**NOTICE! DO NOT discard any hardware while servicing.** It may be reused.

WARNING! Risk of Personal Injury or Property Damage! Failure to follow instructions below may result in damage to the equipment and / or may expose the user to the risk of fire, serious injury, illness or death.

CAUTION! Risk of Cuts, Abrasions or Flying Debris. Wear protective gloves and safety glasses during installation and service. Sheet metal edges are sharp.

**WARNING!** Risk of Shock! Always turn off the circuit breaker before moving or servicing.

#### Tools and Supplies Needed

Before beginning the installation be sure that the following tools and building supplies are available.

- Needle-nose pliers
- Gloves
- Magnetic Phillips screwdriver
- Safety glasses
- Drill
- Flat blade screwdriver

**CAUTION!** Two adults recommended for the removal or installation of glass. Use caution when handling glass. Failure to do so could result in personal injury or property damage.

#### Glass Replacement

#### Removal

- 1. Remove the two (2) thumb screws and brackets located on the inner upper corners of the appliance opening. See Figure 1.
- 2. Using a suction cup, pull the glass away from the appliance and lift out of the bottom glass channel.

- 3. Set the bottom edge of glass into the glass channel and tip back into the appliance until it rests against the glass stops.
- 4. Reinstall the glass brackets and thumb screws.



Figure 1 Remove Glass

# **Downlight LED Replacement**

# Removal

- 1. Remove glass, See Glass Replacement instruction.
- 2. Support the Downlight and remove the three (3) screws holding it in place. See Figures 2 and 3.
- Gently pull the Downlight LED cable located on the right end of the Downlight LED until the connector is visible. Disconnect the connector and remove LED. See Figure 4.

#### Replacement

- 4. Connect the new Downlight LED to the connector and feed the cable back into the cutout. See Figure 4.
- 5. Reinstall Downlight LED screws.
- 6. Reinstall glass per Glass Replacement.

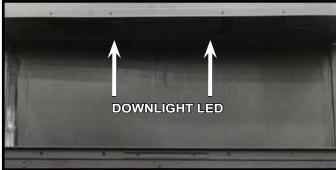


Figure 2 Downlight LED Location



Figure 3 Downlight LED

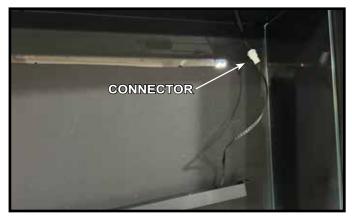


Figure 4 Downlight Connector

# **Heater Assembly Replacement**

#### Removal

- 1. Remove glass, see Glass Replacement instruction.
- 2. Remove Downlight by following the Downlight LED Replacement instructions.
- 3. Support the Heater Assembly and remove 4 screws. See Figure 5.
- 4. Slowly lower Heater Assembly until cable connector is accessible. See Figure 6.
- 5. Disconnect Heater Assembly cable connector.

- 6. Connect replacement Heater Assembly. See Figure 6.
- 7. Reinstall Heater Assembly into appliance, be careful not to pinch any wires.
- 8. Reinstall 4 screws.
- 9. Reinstall Downlight LED.
- 10. Reinstall glass per Glass Replacement instruction.



Figure 5 Heater Assembly



Figure 6 Heater Connector

# **Control Board Replacement**

#### Removal

- 1. Remove glass, see Glass Replacement instruction.
- Remove Downlight by following the Downlight LED Replacement instructions.
- Support the Control Board Assembly and remove 4 screws. See Figure 7.
- 4. Slowly lower Control Board Assembly until cable connectors are accessible. See Figure 8.
- 5. Disconnect the connectors attached to the Control Board Assembly. See Figure 8.

#### Replacement

- Reconnect the seven connectors to the new control board assembly. Reinstall the control board into the appliance. Ensure that no wires are pinched.
- 7. Reinstall 4 screws.
- 8. Reinstall Downlight LED.
- 9. Reinstall glass per Glass Replacement instruction.



Figure 7 Control Board

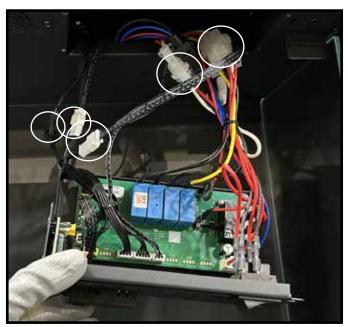


Figure 8 Control Board Removal

# Glass Side Panels Removal / Replacement

#### Removal

- 1. Remove glass, see Glass Replacement instructions.
- 2. Remove media/logs from ember bed.
- 3. Remove Downlight, see Downlight LED Replacement instructions.
- 4. Remove screws (4) and brackets (2) holding each of the side panels. See Figure 9.
- 5. Tilt the top of the side glass panel inward to remove from the appliance.

- 6. Replace the side glass panel, sliding the side glass panel as far back as possible, and reinstall the brackets, see Figure 9.
- 7. Reinstall Downlight LED.
- 8. Reinstall media/logs.
- 9. Reinstall Glass Front per Glass Replacement.

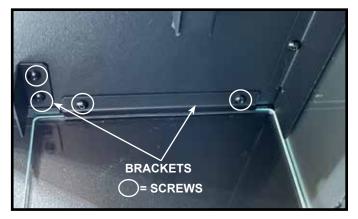


Figure 9 Side Glass Panel Removal

Accessing Internal Components (Receiver, Flame Screen, Rotisserie Assembly, Ember Bed Cover, Glass Screen Panel, Rotisserie Motors, Flame and Ember Bed LEDs)

#### Removal

- 1. Remove glass, see Glass and Glass Side Panel Removal/Replacement instructions.
- Remove Downlight by following the Downlight LED Replacement instructions.
- 3. With the logs/media removed, remove screws holding the plastic ember bed cover down. Lift the cover out of the appliance. See Figure 10.
- 4. While supporting the Flame Screen Glass, remove the screws (4) in the flame glass bracket. See Figure 11
- 5. Tip the top of the glass forward and carefully lift the glass out of the appliance.

#### Replacement

- When replacing glass screen, slide the bottom of the glass into the slot between the two brackets and tip the glass back in place.
- 7. Reinstall flame glass bracket with four screws. See Figure 11.
- 8. Reinstall ember bed cover. See Figure 10.
- 9. Reinstall Downlight LED.
- 10. Reinstall glass per Glass and Glass Side Panel Replacement instructions.

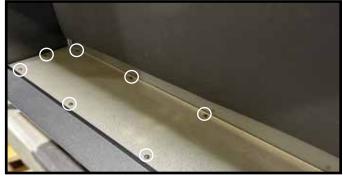


Figure 10 Ember Bed Cover

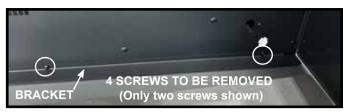


Figure 11 Glass Screen Panel Removal

## Remote Receiver Replacement

#### Removal

- 1. Remove glass, see Glass Front and Glass Side Panel Removal/Replacement instructions.
- 2. Remove Downlight by following the Downlight LED Replacement instructions.
- 3. Access internal components, see Accessing Internal Components instructions.
- 4. Using a pliers, compress each barbed clip while lifting the Remote Receiver Board evenly to disengage it from the clip. See Figure 13.
- 5. Disconnect the receiver cable. See Figures 12 and 13.

- 6. Carefully align the new Remote Receiver Board to the barbed clips and gently push in place. See Figures 12 and 13.
- 7. Securely reconnect the wiring harness to the new remote receiver. See Figure 12.
- Reinstall components removed to access internal components, see Accessing Internal components instructions.
- 9. Reinstall Downlight LED.
- 10. Reinstall glass per Glass and Glass Side Panel Replacement instructions.

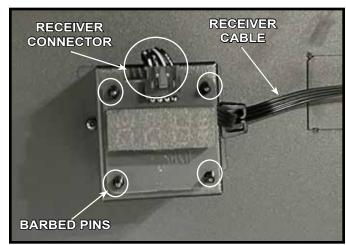


Figure 12 Receiver Location and Cable

# Flame Silhouette Replacement

#### Removal

- Remove glass, see Glass Front and Glass Side Panel Removal/Replacement instructions.
- 2. Remove Downlight by following the Downlight LED Replacement instructions.
- 3. Access internal components, see Accessing Internal Components instructions.
- 4. Remove the screws in the top Flame Screen and retaining bracket. Then remove the screws in the bottom of the Flame Screen and retainer. Remove the Flame Screen. See Figure 13.

- Install the replacement Flame Silhouette by lining up with the holes on top and bottom and attaching with screws. See Figures 13.
- Reinstall components removed to access internal components, see Accessing Internal components instructions.
- 7. Reinstall Downlight LED.
- 8. Reinstall glass per Glass Replacement instructions.



Figure 13 Flame Screen

# Rotisserie Assembly and Rotisserie Motor Replacement

#### Removal

- 1. Remove glass, see Glass Front and Glass Side Panel replacement instructions.
- Remove Downlight by following the Downlight LED Replacement instructions.
- 3. Access internal components, see Accessing Internal Components instructions.
- 4. Remove the Flame Silhouette see Flame Silhouette Replacement instruction.
- 5. Remove two screws from the rotisserie center supports. See Figure 14.
- 6. Disengage rotisserie rod from motor located in right side of cavity. Use hand to shift the rotisserie rod to the left until the rubber coupler on the right end disengages from the motor shaft and lift out of the appliance. See Figure 15. If not replacing motor skip to step 14.
- 7. Remove motor bracket by removing three screws. See Figure 15.
- Disconnect the electrical connector to the motor. See Figure 16.
- 9. Remove the motor.

- 12. Connect the new motor to the electrical connectors.
- 13. Reinstall the motor and bracket with three screws. See Figure 16.
- 14. Install the replacement (or existing) rotisserie rod. Align the rubber coupler with the motor shaft. Shift the rod to the right until the rubber coupler fully engages the motor shaft on the right side. See Figure 16. Replace the two screws for the rotisserie center support. See Figure 16.
- 15. Reinstall components removed to access internal components, see Accessing Internal components instruction.
- 16. Reinstall Downlight LED.
- 17. Reinstall glass per Glass Replacement Instructions.



Figure 14 Rotisserie Center Support

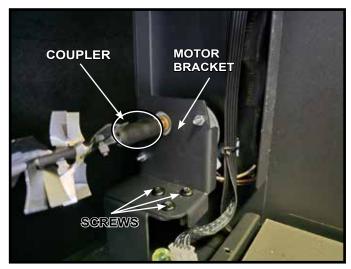


Figure 15



Figure 16

# **Speaker Replacement**

# Removal

- 1. Remove glass, see Glass Front and Glass Side Panel Removal/Replacement instructions.
- 2. Remove the two (2) screws from the speaker. Continue to hold the speaker so it does not fall out of the appliance. See Figure 17.
- 3. Pull the speaker down until the connector is visible. Disconnect the speaker. See Figure 18.

- 4. Connect the replacement speaker.
- 5. Carefully put the speaker back into its cutout. Ensure that no wires are pinched in this process.
- 6. Attach with the two (2) screws.
- 7. Reinstall glass per Glass Replacement instructions.



Figure 17



Figure 18

# **LED Assembly Replacement**

#### Removal

- 1. Remove glass, see Glass Front and Glass Side Panel Removal/Replacement.
- 2. Remove Downlight by following the Downlight LED Replacement instructions.
- 3. Access internal components, see Accessing Internal components instructions.
- Only when replacing back LEDs: Refer to the Flame Silhouette Replacement instructions to gain access to the rotisserie LED's.
- Locate Lighting LED circuit input power source connectors in rear of opening, unplug the two connectors. Unplug the connectors between the LED circuit boards. See Figure 19.
- 6. Using a pliers, compress each barbed clip along the front base circuit boards while lifting the boards evenly to disengage them from the barbs. Use pliers to open/spread clips along rear LED strip while lifting to disengage it from the clips. The clips have adhesive on them, so use the pliers to work the adhesive loose. See Figure 20. Remove all LED circuit boards.

# = CONNECTORS BARBED PINS

Figure 19 LED Connectors and Barbed Pins

- 9. Install the new LED circuit boards by securing them in the clips or barbs. See Figure 20.
- 10. Connect all lighting LED power source connectors to the LED circuit boards. See Figure 19.
- 11. If removed, reinstall the Rotisserie Rod Assembly per Rotisserie Assembly and Rotisserie Motor Replacement..
- 14. Reinstall Flame Silhouette. See Flame Silhouette Replacement instruction.
- 15. Reinstall components removed to access internal components, see Accessing Internal components instruction.
- 16. Reinstall Downlight LED.
- 17. Reinstall Glass. Per Glass Replacement instructions.

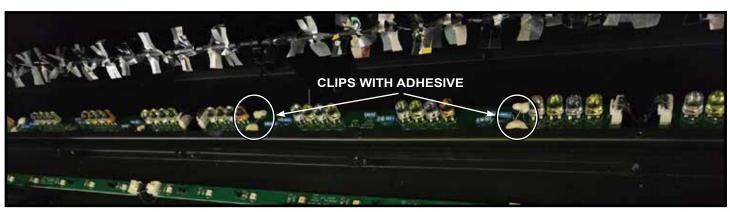


Figure 20 Clips Holding Rear LED's

# SimpliFire Troubleshooting Guide

Symptom	Possible Cause	Corrective Action
Circuit breaker trips or fuse blows when appliance is turned on	Exceeding current rating of the circuit breaker or fuse, perhaps from operating other appliances on the same circuit as the fireplace	Install appliance onto a dedicated 15 amp circuit.
Lights in room dim while the appliance is on	Appliance is drawing close to circuit current rating	Install appliance onto a dedicated 15 amp circuit.
Fireplace will not come on when using the manual controls on the appliance	Appliance is not plugged into an electrical outlet, if applicable	Ensure plug is connected to a working outlet.
	Hard-wire connections not correct	Review wiring instructions to ensure correct connection.
	No incoming power from the electrical outlet or electrical box	Check fuse/breaker panel.
	Defect in control board (PCB)	Replace the control board (PCB).
Remote control does not work	Low/dead batteries	Replace batteries in the remote.
	Remote receiver is blocked	Ensure receiver is not blocked. Move closer to the appliance.
	Appliance power switch is in the off "O" position (if equipped)	Turn the power switch on, to the "I" position (if equipped).
	Control board (PCB) malfunction	Replace control board (PCB).
Heater will not turn on, but flame is functioning	Remote is in thermostat mode and room temperature (temperature at appliance thermistor) is higher than the set point on the remote	Increase thermostat set point on the remote, or exit thermostat mode (press the thermostat button until no temperature set point is displayed on the remote). See "Room Temperature and Thermostat Function" section of the manual.
	Appliance has overheated and safety thermal switch has tripped	Unplug or turn off power at circuit breaker and allow it to cool for 30 minutes. Then plug in the appliance or turn power back on at circuit breaker and turn appliance back on.
	Heater Toggle Switch not set correctly	Verify the toggle switch is set to 120V or 240V depending on how the appliance is wired. If wired for 120V and switch is set to 240V, heater will not function.
	Defective main control board	Replace control board (PCB).
	Defective heater assembly	Replace heater assembly.
Heater shuts off automatically or won't stay on	Room temperature (temperature at the appliance thermistor) is higher than the set point on the remote	Increase thermostat set point on the remote, or exit thermostat mode (press the thermostat button until no temperature set point is displayed on the remote). See "Room Temperature and Thermostat Function" section of the manual.
	Appliance has overheated and safety thermal switch has tripped	Unplug or turn off power at circuit breaker and allow it to cool for 15 minutes. Then plug in the appliance or turn power back on at circuit breaker and turn appliance back on.
Heater emits an odor	Normal operation	It is normal for the heater to emit an odor for a brief amount of time after turning on. It is burning off dust that has accumulated on the heater.
Flame does not move at all	Flame rotisserie motor is stalled or malfunctioning	Cycle appliance on or off. If problem persists inspect rotisserie and motor for blockage or interference. If no interference, replace the control board (PCB) and rotisserie motor.
Portion of the flame not moving or deformed flame effect	Flame LEDs out of place or dislodged from the LED mounting bracket	Properly reposition flame LEDs into their mounting bracket. See service manual for how to access flame LEDs.
Visible ghosting on the flame screen that does not move with the flame	Downward LED accent lighting (if equipped) is shining on the flame screen instead of directly down on the ember bed	Inspect downward accent lighting and reposition so no light is projecting back onto the flame screen.

# SimpliFire Troubleshooting Guide (continued)

Symptom	Possible Cause	Corrective Action
Flame shudder	Flame rotisserie contacting other internal components when spinning	Ensure rod is straight and mounted properly and is spinning freely without spindles hitting other components.
	Defective flame rotisserie motor	Replace rotisserie motor.
Ember bed does not light up	Ember bed is turned off	Refer to Operation section of the user manual.
	Loose wiring	Check wiring to ember bed LEDs.
	Defective control board (PCB)	Replace control board (PCB).
	Defective LED lights	Replace ember bed LED lights.
Fireplace turns on by itself	Defective control board (PCB)	Replace control board (PCB.)
	Similar infrared signal from another remote causing appliance to turn on	Some TV remotes may cause the fireplace to turn on for appliances manufactured before 2019. Replace control board (PCB).
Excessive noise with heater on	Interference with fan blade	Inspect heater assembly and fan for obstructions or interference.
	Defective blower motor	Replace heater assembly.
Grinding or rubbing noise (when heater is off)	Rotisserie hitting or rubbing against internal components	Ensure rotisserie rod is straight and mounted properly and is spinning freely without spindles hitting other components. If sound is coming from friction with the rotisserie bracket, apply grease to contact point.
Sound not working	Bad connection to speaker	Replace PCB.
	Defective speaker	Replace speaker.

SimpliFire, a brand of Hearth & Home Technologies 7571 215<sup>th</sup> Street West, Lakeville, MN 55044 www.hearthnhome.com