

# SERVICE MANUAL

## Model: SF-INS25, SF-INS30, SF-INS35

- Instructions -

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

This manual will assist a qualified service technician in the replacement of parts. Contact your dealer to arrange a service call by a qualified service technician.

Replacement parts include:	
Description	Part Number(s)
Front	STFRONT-INS** FT-MISSION-**
Glass	GLAS-INS**
Interior Side Panels	PANEL-INS**
Log/Grate Assembly	LOG-INS**
Flame Screen	FLAM-INS**
Remote	REMOTE-INS30
LED Lighting	LED-INS**
Heater/Control Board Assembly	HEAT-INS**
Rotisserie Motor and Rod	ROTISS-INS**
Remote Receiver	RECEIVER-ELECT
Hardware	HRDW-BI

 **WARNING: If the information in these instructions is not followed exactly it may result in personal injury and/or property damage.**

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

### Tools and Supplies Needed

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

- Pliers
- Phillips screwdriver
- Safety glasses
- Flat blade screwdriver

### Replacement Instructions

 **WARNING! Risk of Shock! Always disconnect power before disassembly or servicing.**

#### Front Replacement (STFRONT-INS\*\* / FT-MISSION-\*\*)

1. If necessary, place a drop cloth or other material on the hearth or flooring to prevent scratching.
2. Grasp front with two hands. Lift up and off of the appliance.
3. Install replacement front by aligning the hooks on the back side of the door to the slots in the appliance. Press evenly down with two hands to fully engage the front to the appliance.

### Glass Replacement (GLAS-INS\*\*)

1. If necessary, place a drop cloth or other material on the hearth or flooring to prevent scratching.
2. Remove front. Refer to Front Replacement section for details.
3. Remove four (4) screws from two glass retaining brackets. Hold glass from tipping forward. See Figure 1.
4. Pivot glass away from appliance and lift out of bottom retainer channel.
5. Install replacement glass into bottom retainer channel. Take care to properly align the glass with the rubber seal inside the bottom retainers.
6. While supporting glass, install two glass retainer brackets with four (4) screws. Do not over tighten screws.
7. Re-install front.



Figure 1 Top Glass Retainer Screw Location

### Interior Side Panel Replacement (PANEL-INS\*\*)

1. If necessary, place a drop cloth or other material on the hearth or flooring to prevent scratching.
2. Remove front. Refer to Front Replacement section for details.
3. Remove glass. Refer to Glass Replacement section for details.
4. Grasp the INTERIOR Side Panel and pull it away from the appliance side wall, releasing the magnets. See Figure 2.
5. Gently bend the panel out of position from beside the logs and remove from the appliance.
6. Repeat for both sides.
7. Install replacement panels in the same manner as removal.
8. Re-install glass.
9. Re-install front.



Figure 2 Interior Side Panel

## Log/Grate Assembly Replacement

### (LOG-INS\*\*)

1. If necessary, place a drop cloth or other material on the hearth or flooring to prevent scratching.
2. Remove front. Refer to Front Replacement section for details.
3. Remove glass. Refer to Glass Replacement section for details.
4. Locate rubber plugs in each end of the grate. Remove plugs with a small flat screwdriver. Save for later use. See Figure 3.
5. Remove Phillips screw from each end of grate. Lift grate from faux ember bed. Take care to retain screws for grate. See Figure 3.
6. Grasp log ember bed and gently slide, tip and rotate forward up and out of opening; do not pull too far as to damage the wiring. Rotate ember bed to expose electrical wiring.
7. Disconnect lighting LED power source pin connector from back side of ember bed by gently pulling on connector. Do not pull on wires. See Figure 4.
8. Reconnect lighting LED power source pin connector to back side of replacement ember bed. Position the log assembly. See Figure 4.
9. Rotate log ember bed and align with floor of opening. Engage back side of ember bed into the opening. Pivot the front of the ember bed into position flat on the floor of the opening. Take care not to pinch wiring under log ember bed.
10. Align the grate over the steel brackets under the ember bed. Ensure that wiring is not pinched between log ember bed and steel bracket. See Figure 3.
11. Install and tighten the screw in each end of the grate. See Figure 3.
12. Install rubber plugs into holes in each end of grate. See Figure 3.
13. Re-install glass.
14. Re-install front.



Figure 3 Grate and Log Screw Location

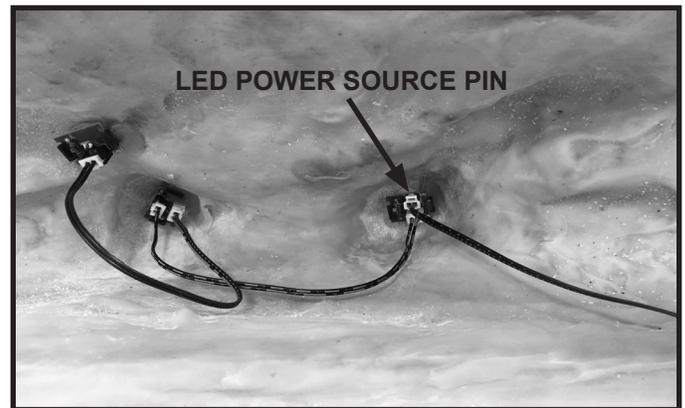


Figure 4 Light LED Connection on Bottom of Log Ember Bed

## Flame Screen Replacement

**(FLAM-INS\*\*)** **Note:** Kit includes Plastic Flame Screen Diffuser and Metal Flame Silhouette Panel)

1. If necessary, place a drop cloth or other material on the hearth or flooring to prevent scratching.
2. Remove front. Refer to Front Replacement section for details.
3. Remove glass. Refer to Glass Replacement section for details.
4. Remove log/grate assembly. Refer to Log/Grate Assembly Replacement section for details.
5. Remove two (2) thumb screws holding the plastic diffuser brackets and panel in place. See Figure 5.
6. If not replacing the Metal Flame Silhouette panel proceed to step 10.
7. Remove the eleven (11) screws attaching the Flame silhouette panel. See Figure 6.
8. Install the new flame silhouette panel, securing it with the eleven (11) screws removed in step 7.
9. Re-install plastic diffuser panel and panel brackets and two (2) thumb screws. See Figure 5.
10. Re-install log/grate assembly.
11. Re-install glass.
12. Re-install front.

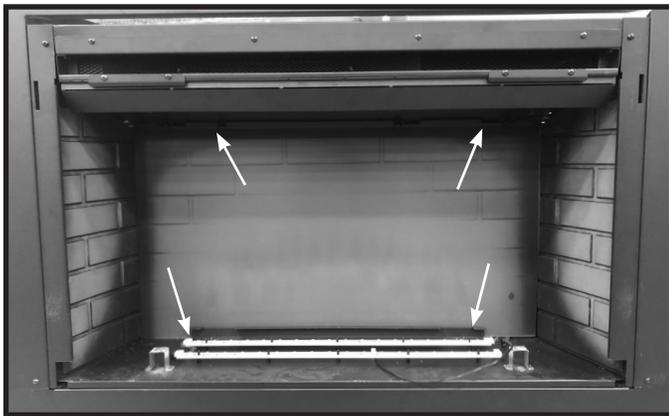


Figure 5 Removal installation of Plastic Diffuser Panel



Figure 6 Flame Silhouette Panel.

## LED Lighting Replacement (LED-INS\*\*)

**Note:** Kit includes all three LED light strip assemblies.

1. If necessary, place a drop cloth or other material on the hearth or flooring to prevent scratching.
2. Remove front. Refer to Front Replacement section for details.
3. Remove glass. Refer to Glass Replacement section for details.
4. Remove log/grate assembly. Refer to Log/Grate Assembly Replacement section for details.
5. Remove Flame Screen. Refer to Flame Screen Replacement section for details. Remove metal flame panel with eleven (11) screws.
6. Remove the two metal brackets in front of rear LED strip. Remove three (3) screws to remove metal parts. See Figure 7.
7. Locate Lighting LED circuit input power source connectors in rear of opening. Unplug the two connectors and jumper wire from the three circuit boards. See Figure 8. If epoxy will not allow separation of the two connectors, slide the pair of connectors off the pins of the LED circuit board.
8. Using a pliers, compress each barbed clip along the two base LED circuit boards while lifting the boards evenly to disengage them from the clips. See Figure 8. Use pliers to open clips along rear LED strip while lifting to disengage it from the clips. See Figure 9.
9. Remove all three lighting LED circuit boards.
10. Install replacement lighting LED circuit boards into the appliance. Fully engage all clips. See Figure 8 and 9.
11. Connect the two lighting LED power source connectors and the jumper wire to the three LED circuit boards. See Figure 8.
12. Install metal brackets by attaching with three (3) screws. See Figure 7. Install metal flame panel with eleven (11) screws.
13. Re-install Flame Screen.
14. Re-install log/grate assembly.
15. Re-install glass.
16. Re-install front.



Figure 7 Bracket Removal

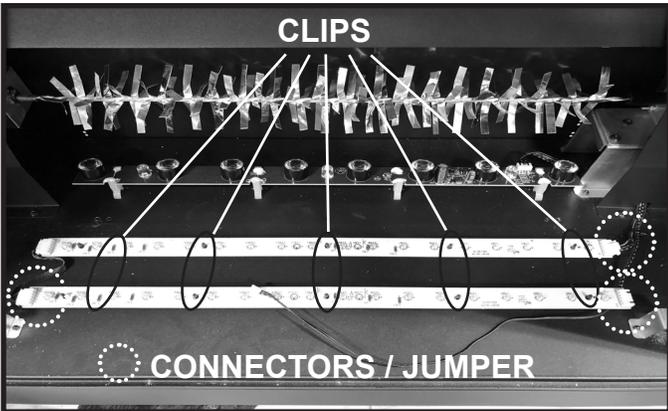


Figure 8 Light LED Replacement



Figure 9 Light LED Replacement

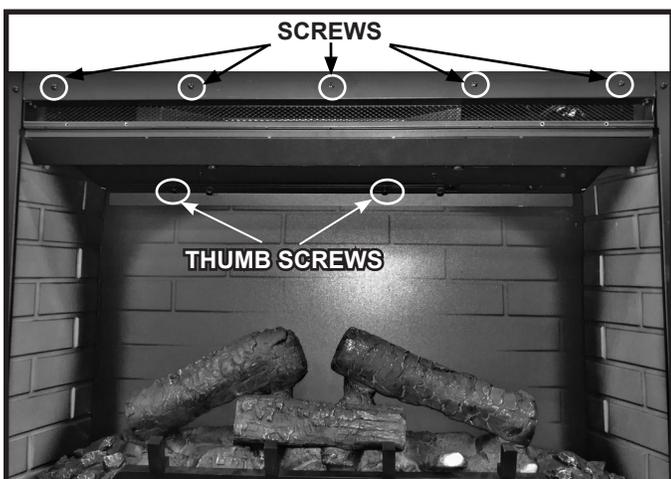


Figure 10 Blower/Heater Module Screws and Two (2) Thumb Screws

## Heater/Control Board Assembly Replacement (HEAT-INS\*\*)

1. If necessary, place a drop cloth or other material on the hearth or flooring to prevent scratching.
2. Remove front. Refer to Front Replacement section for details.
3. Remove glass. Refer to Glass Replacement section for details.
4. Remove two (2) thumb screws from upper rear of appliance cavity. See Figure 10.
5. Remove screws from upper face of appliance. Take care to support the Blower/Heater Module while the screws are removed. See Figure 10.
6. Remove the Blower/Heater Module by lifting back edge slightly then pulling it straight back from the appliance opening.
7. Locate the seven (7) electrical connectors on the right side of the appliance cavity. Disconnect each of the seven connectors. See Figure 11.
8. Reconnect the seven (7) connectors from the replacement Blower/Heater module to the appliance. See Figure 11.
9. Carefully align the replacement Blower/Heater module horizontally with the opening of the appliance. Install it straight into the opening so that the back edge interlocks with the back wall of the appliance.
10. While supporting the Blower/Heater Module, install the four screws across the upper face of the appliance. See Figure 10.
11. Install the two (2) thumb screws in the upper rear of the appliance cavity. See Figure 10.
12. Re-install glass.
13. Re-install front.

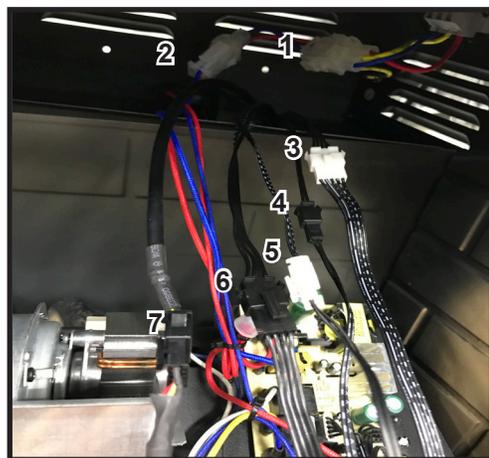


Figure 11 Seven Electrical Connections required for Heater/Blower Module Removal and Installation

## Rotisserie Motor and Rod

### (ROTISS-INS\*\*)

1. If necessary, place a drop cloth or other material on the hearth or flooring to prevent scratching.
2. Remove front. Refer to Front Replacement section for details.
3. Remove glass. Refer to Glass Replacement section for details.
4. Remove log/grate assembly. Refer to Log/Grate Assembly Replacement section for details.
5. Remove Flame Screen. Refer to Flame Screen Replacement section for details. Remove metal flame panel with eleven (11) screws.

**CAUTION:** Be careful of sharp edges on rotisserie.

6. Disengage rotisserie rod from motor located in right rear of cavity. Use pliers to shift the reflector rod to the left until the rubber coupler on the right end disengages from the motor shaft. See Figure 12.
7. Remove metal panel on right side of cavity to allow access to the rotisserie motor and wiring connections. Remove screws to remove panel. See Figure 13.
8. Remove three screws that attach motor mount bracket to the appliance chassis and cut the wire tie. See Figure 14.
9. Remove the motor and bracket from the chassis until the electrical connector is visible. See Figure 14.
10. Disconnect the electrical connector to the motor. See Figure 14.
11. Install the replacement motor on the bracket.
12. Reconnect the electrical connector between the motor and the appliance. See Figure 14.
13. Install the motor mount bracket to the chassis with three (3) screws. See Figure 14.
14. Install the replacement reflector rod. Install the left end of the rod into the bushing in the left rear of the cavity. Align the rubber coupler with the motor shaft. Shift the rod to the right until the rubber coupler fully engages the motor shaft. See Figure 12.
15. Reinstall metal bracket in front of motor. Install screws to fasten the panel. See Figure 13.
16. Re-install metal flame panel.
17. Re-install log/grate assembly.
18. Re-install glass.
19. Re-install front.



Figure 12 Rotisserie Rod Removal



Figure 13 Remove Panel

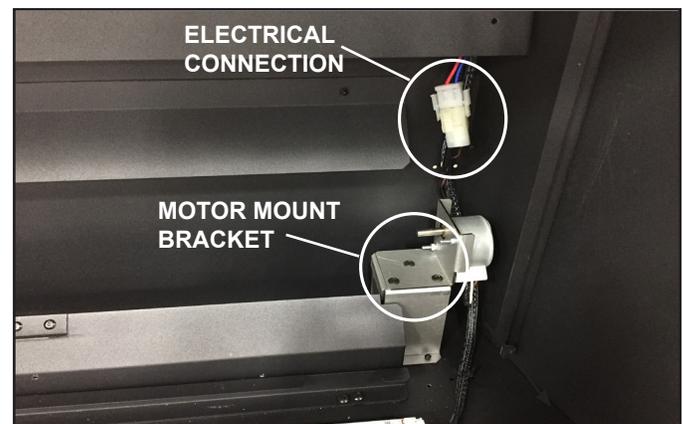


Figure 14 Motor Replacement

## Remote Receiver Replacement

### (RECEIVER-ELECT)

1. If necessary, place a drop cloth or other material on the hearth or flooring to prevent scratching.
2. Remove front. Refer to Front Replacement section for details.
3. Remove glass. Refer to Glass Replacement section for details.
4. Remove log/grate assembly. Refer to Log/Grate Assembly Replacement section for details.
5. Remove screws holding the plastic diffuser brackets and panel in place. See Figure 5.
6. The remote receiver is positioned in the center of the appliance behind the plastic diffuser panel. Using a pliers, compress each barbed clip while lifting the remote receiver board evenly to disengage it from the clip. See Figure 15.
7. Disconnect the wiring harness from the top of the receiver. See Figure 15.
8. Securely reconnect the wiring harness to the new remote receiver. See Figure 15
9. Carefully align the new remote receiver board to the barbed clips and push in place. See Figure 15.
10. Re-install the plastic diffuser brackets and panel.
11. Re-install log/grate assembly.
12. Re-install glass.
13. Re-install front.

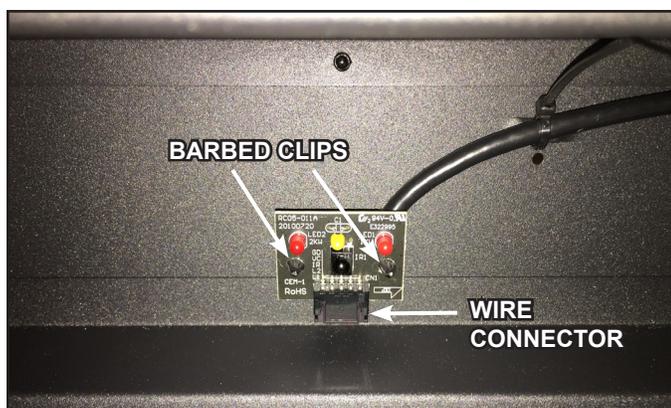


Figure 15 Remote Receiver Replacement

## SimpliFire Troubleshooting Guide

Symptom	Possible Cause	Corrective Action
Circuit breaker trips or fuse blows when unit 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 unit onto a dedicated 15 amp circuit.
Lights in room dim while the unit is on	Unit is drawing close to circuit current rating	Install unit onto a dedicated 15 amp circuit.
Fireplace will not come on when using the manual controls on the unit	Appliance is not plugged into an electrical outlet	Ensure plug is connected to a working outlet.
	Hard-wire connections not correct (if applicable)	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, or remote is not pointed directly at the receiver.	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 15 minutes. Then plug in the unit or turn power back on at circuit breaker and turn unit back on.
	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 unit or turn power back on at circuit breaker and turn unit 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 unit 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.
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.

## SimpliFire Troubleshooting Guide (continued)

Symptom	Possible Cause	Corrective Action
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 unit to turn on (pre-2019 manufactured units only)	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

SimpliFire, a brand of Hearth & Home Technologies  
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