

SERVICE MANUAL

SF-ALLE-FSM

Models: SF-ALLE50, SF-ALLE60, SF-ALLE78, SF-ALLE100

- 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.

- Magnetic Phillips screwdriver
- Phillips bit socket and ratchet (for Heater)
- Needle-nose pliers
- Safety glasses
- Gloves

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FRONT SERVICING

Several components on the Allusion Edge can be accessed from the front of the appliance without removing the appliance from the wall. Make sure appliance is disconnected from power before servicing. Hold onto any screws removed during this process for reassembly.

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

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.

Front Glass Replacement

Removal

1. Remove the glass bracket covers.
 2. Remove the ST4x8 screws that attach the front glass to the appliance. See Figure 1.
- NOTE:** Continuously support the front glass to prevent it from tipping out of the appliance.
3. Using suction cups, lift the glass out of the bottom glass channel and pull away from the appliance.

Replacement

4. Set the bottom edge of the replacement front glass into the glass channel, while being aware of the button springs.
 5. Tip the front glass back into the appliance until it rests against the top edge of the appliance.
- NOTE:** Continuously support the glass to prevent it from tipping out of the appliance.
6. Reinstall the ST4x8 screws to attach the glass to the appliance, and reinstall the glass bracket covers.

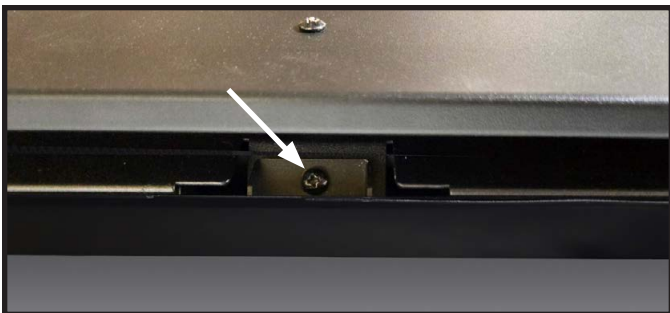


Figure 1 Front Glass Attachment Screw

Side Panel Replacement

Removal

1. Remove the front glass, see the front glass Removal instructions.
2. Remove the two (2) ST4x8 screws on the top of each side panel. See Figure 2.
3. Remove side panels by pulling the top of each panel down towards the center of the appliance to disengage the bottom tabs and remove.

Replacement

4. Install the replacement side panels by engaging the bottom tabs of the side panel into the channel and bring the top into place.
5. Reattach with the ST4x8 screws, two on each side.
6. Reinstall the front glass.



Figure 2 Side Panel Attachment Screws

Logs and Media

Removal

1. Remove the front glass, see the front glass Removal instructions.
2. Remove lighted logs by disconnecting each wire harness from the ember bed.
3. Remove partial logs and all media.

Replacement

4. Refer to the Allusion Edge Owner's manual for log and media installation instructions.

Downlight Replacement

Removal

1. Remove the front glass, see the front glass Removal instructions.
2. Remove the side panels, see the side panel Removal instructions.
3. Support the downlight and remove the ST4x8 screws holding it in place. See Figure 3.
4. Gently pull down on the downlight, if needed, so the wire harness connector is visible.
5. Disconnect the downlight wire harness and remove the downlight. See Figure 4.

Replacement

6. Connect the replacement downlight to the wire harness and feed the cable back into the cutout. See Figure 4.

7. Reinstall the downlight with ST4x8 screws.

NOTE: May require two people after display screen replacement, to press downlight back against the back glass, and to help align screw holes.

8. Reinstall the side panels and the front glass.

NOTE: If connector becomes lodged in the top of the appliance and is not accessible, refer to the Top & Back Servicing section for how to get inside the top of the appliance.



Figure 3 Downlight Assembly Attachment



Figure 4 Downlight Wire Harness

Ember Bed LED Replacement

Removal

1. Remove the front glass, see the front glass Removal instructions.
2. Remove the side panels, see the side panel Removal instructions.
3. Remove logs/media from the appliance, see the log and media Removal instructions.
4. Remove the ST4x6 screws from the ember bed. Remove the ember bed from the appliance and set aside for later.
5. Disconnect the wire harnesses from the left side of the appliance. See Figure 5.

NOTE: Cut the zip tie connecting the two wire harnesses to each other.

6. Carefully pull up to remove the LED strips from the bottom of the appliance, separating each from the clips along the way.

NOTE: The LED strips have adhesive backs that hold them to the bottom of the appliance.

Replacement

7. Connect the replacement LED strips to the wire harnesses on the left side of the appliance.
8. Remove the adhesive backing from the LED strips, while carefully placing them down, reconnecting them into the clips along the way.
9. Reinstall the ember bed with ST4x6 screws, verifying that the ember bed is installed correctly with the back edge being between the back ledge and back tabs, and that the log connectors line up with the cutouts.
10. Reinstall the logs and media.
11. Reinstall the side panels and the front glass.



Figure 5 Ember Bed LED Wire Harnesses

Buttons & Settings Display Replacement

Removal

1. Remove the front glass, see the front glass Removal instructions.
2. Remove the side panels, see the side panel Removal instructions.
3. Remove logs/media from the appliance, see the log and media Removal instructions.
4. Remove the ember bed, see the ember bed Removal instructions.
5. Remove the two (2) ST3x10 screws from the front sides of the buttons and settings display, each screw has a nut on the back. See Figures 6 and 7.
6. After the screws are removed, from inside the appliance carefully grip the button assembly and pull back into the appliance to remove.
7. Disconnect wire harness from the back of the assembly and remove from the appliance.

Replacement

8. Connect the replacement buttons and settings display assembly to the wire harness and carefully install into the appliance.

NOTE: Be careful not to get the springs of the buttons caught.

9. Reinstall the two (2) ST3x10 screws with nuts.
10. Reinstall the ember bed.
11. Reinstall the logs and media.
12. Reinstall the side panels and the front glass.



Figure 6 Buttons & Settings Display Assembly Attachment



Figure 7 Buttons & Settings Display Assembly Back

Back Glass Replacement

Removal

1. Remove the front glass, see the front glass Removal instructions.
 2. Remove the side panels, see the side panel Removal instructions.
 3. Remove logs/media from the appliance, see the log and media Removal instructions.
 4. Remove the downlight, see the downlight Removal instructions.
 5. Remove the ember bed, see the ember bed Removal instructions.
 6. Remove the back bracket holding the bottom of the back glass by removing the ST4x8 screws. See Figure 8.
- NOTE:** Continuously support the glass to prevent it from tipping forward and apply suction cups before removing the back bracket.
7. Use suction cups to carefully remove back glass out of the appliance.

Replacement

8. Reinstall the replacement back glass against the displays using suction cups.

NOTE: Continuously support the glass to prevent it from tipping forward.

9. Reinstall the back bracket at the bottom of the back glass with the ST4x8 screws.

NOTE: May require two people after display screen replacement, to press glass back against the display screens, and to help align screw holes.

10. Reinstall the downlight and the ember bed.
11. Reinstall the logs and media.
12. Reinstall the side panels and the front glass.

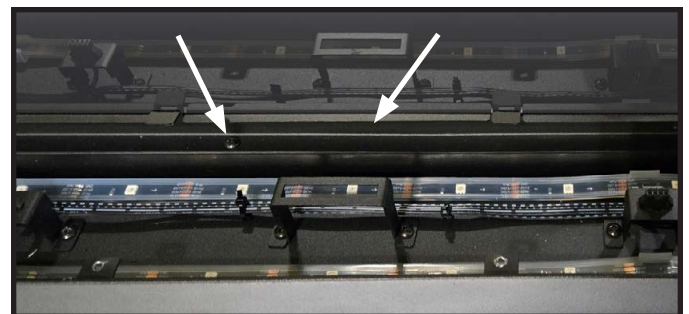


Figure 8 Back Glass Back Bracket

Display Screen Replacement

Removal

1. Remove the front glass, see the front glass Removal instructions.
 2. Remove the side panels, see the side panel Removal instructions.
 3. Remove logs/media from the appliance, see the log and media Removal instructions.
 4. Remove the downlight, see the downlight Removal instructions.
 5. Remove the ember bed, see the ember bed Removal instructions.
 6. Remove back glass, see the back glass Removal instructions.
 7. Start from one of the outside display screens, grabbing onto the side. Give a light tug to dislodge the display, tipping it forward slowly. See Figure 9.
 8. Carefully remove tape from the back of the display screen and disconnect the two (2) wire harnesses connected to the display. See Figure 10.
- NOTE:** Save tape for reattaching the wire harnesses to the replacement display screen.
9. Remove display from the appliance.



Figure 9 Outside Display Screen

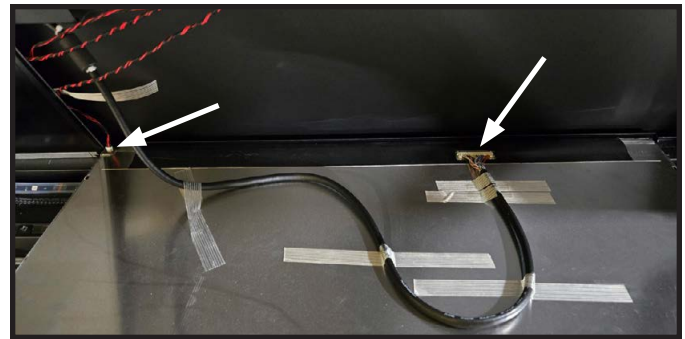


Figure 10 Display Screen Wire Harnesses and Tape

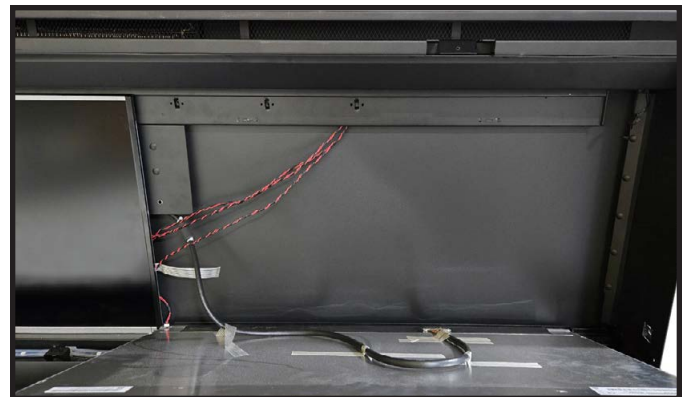


Figure 11 Display Screen Tilted Out of Appliance

Replacement

10. Place the bottom of the replacement display screen into the appliance with the front tilted down and supported so the screen is protected. See Figure 11.
 11. Connect the two (2) wire harnesses to the bottom of the display screen and attempt to reattach the tape to the back of the display to hold the wire harnesses in place.
 12. Rotate display screen up and into place, avoiding putting pressure on the screen.
- NOTE:** May require two people, one to support the displays to prevent them from tipping forward, while the other positions the back glass into place.
13. Reinstall the back glass.
 14. Reinstall the downlight and the ember bed.
 15. Reinstall the logs and media.
 16. Reinstall the side panels and the front glass.

TOP & BACK SERVICING

Internal components on the Allusion Edge need to be accessed from the top and the back of the appliance. Make sure appliance is disconnected from power before servicing. Hold onto any screws removed during this process for reassembly and reinstallation.

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

CAUTION! Two adults recommended for the removal or installation of the appliance. Failure to do so could result in personal injury or property damage.

NOTE: Be aware of wires and connectors when replacing and re-assembling the appliance.

Appliance and Front Trim Removal

1. Verify breaker is off.
2. Remove the front glass, see the front glass Removal instructions.
3. Remove logs/media from the appliance, see the log and media Removal instructions.
4. Remove the side panels, see the side panel Removal instructions.
5. Remove mounting screws from the sides of the appliance and remove the appliance from the wall.

IMPORTANT: Unplug the J-Block quick connect if wiring isn't long enough to safely remove and set down the appliance.

6. Place appliance on its back.

NOTE: Place down a blanket/towel to set the appliance on to avoid scratches or damage.

7. Remove the front trim by removing the ST4x8 screws connecting the trim to the appliance on all four sides. See Figure 12.

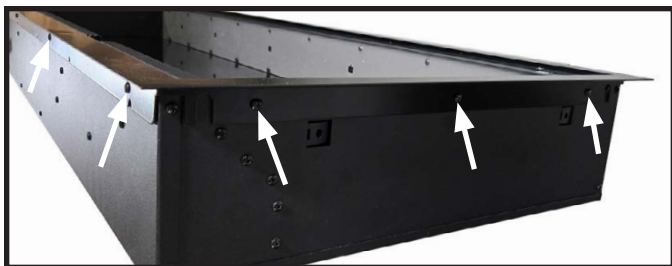


Figure 12 Front Trim Screw Locations

Accessing Internal Components

Once the front trim of the appliance is removed, you can start removal of the top and back panels to access internal components.

1. Place appliance on its bottom, so it is resting vertically, and supported if needed.
2. Remove all of the ST4x8 screws from the top panel of the appliance. There are screws located on the top, sides, and back of the top panel.
3. Carefully remove the top panel and set aside.

NOTE: Heaters are now able to be removed from the top of the appliance, see Heater Replacement instructions, if no additional service is required.

4. With the top panel removed, place appliance carefully on its front face to access the back of the appliance.
5. Remove all of the ST4x8 screws from the back panel of the appliance.
6. Carefully dislodge and remove the back panel and set aside.

Heater Replacement

Removal

1. Remove appliance and front trim, see Appliance and Front Trim Removal instructions.
2. Remove top panel, see Accessing Internal Components instructions.
NOTE: Heater is able to be removed from the top. The back panel does not need to be removed unless additional service is needed that requires it.
3. Remove ST4x8 screws attaching the heaters to the appliance. See Figure 13.
NOTE: The 50" and 60" appliances have the two heaters attached to one metal bracket, while the 78" and 100" appliances have heaters separated, with each heater being attached to a bracket.
4. Pull one side of the heater up at a time to dislodge from the lip towards the front of the appliance
5. Remove heaters from appliance. See Figure 14.
6. Disconnect the quick connects on both heaters.

Replacement

7. Install the replacement heaters. If putting in from the top, carefully insert the front side in and push down the back of heater to slide into place.
8. Reconnect the quick connects and install the ST4x8 screws into each heater.
9. Reinstall the back panel if it was removed, and then the top panel onto the appliance.
10. Reinstall the front trim and then the appliance.

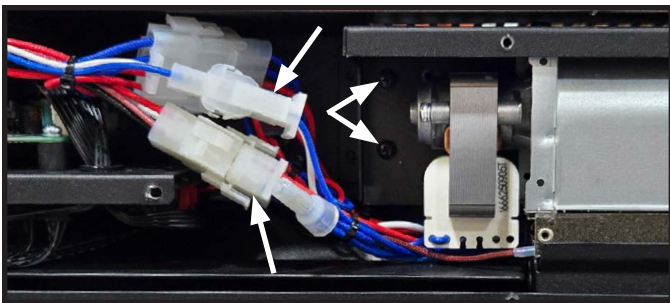


Figure 13 Heater Attachment Screws and Quick Connects



Figure 14 Heater Removal

PCB Assembly Replacement

Removal

1. Remove appliance and front trim, see Appliance and Front Trim Removal instructions.
2. Remove the top panel and the back panel, see Accessing Internal Components instructions.
3. Remove the two (2) ST4x8 screws from the metal plate holding the PCB. See Figure 15.
NOTE: The 78" and 100" appliances have a secondary PCB. Remove the secondary PCB if replacing the PCB on a 78" and 100" appliance.
4. Disconnect all quick connect locations connected to the PCB(s).
NOTE: Take note of where things are connected so they are connected in the proper order when the replacement part is installed.
5. Remove PCB assembly(s) from appliance.

Replacement

6. Reconnect all the quick connects to the replacement PCB assembly (both assemblies, if on the 78" or 100" appliance).
7. Place the replacement PCB assembly(s) into the appliance, lining up the holes on the bottom of the metal plate(s) and installing into the appliance with two (2) ST4x8 screws.
8. Reinstall the back panel and then the top panel onto the appliance.
9. Reinstall the front trim and then the appliance.

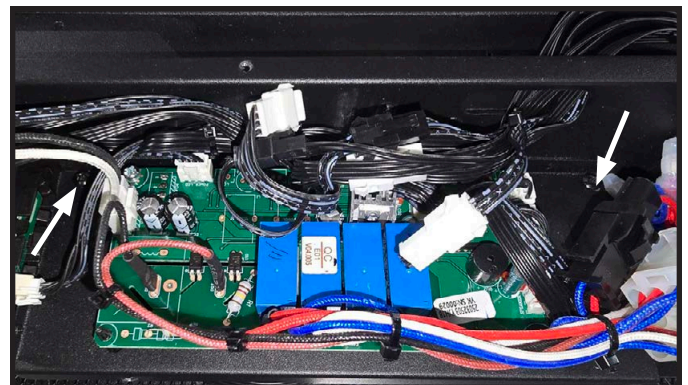


Figure 15 PCB Assembly Attachment Screws

Computer Assembly Replacement

Removal

1. Remove appliance and front trim, see Appliance and Front Trim Removal instructions.
2. Remove the top panel and the back panel, see Accessing Internal Components instructions.
3. Remove the metal shroud surrounding the computer board by removing the ST4x8 screws attaching it to the metal plate. See Figure 16.
4. Remove the two (2) ST4x8 screws connecting the black metal plate with the computer board to the appliance. See Figure 17.
5. Disconnect the four (4) wire harnesses, the USB plug, and remove the grounding wires using a 7mm socket (keep the grounding nut for reinstall).
6. Remove the computer board assembly from the appliance.

Replacement

7. Place the replacement computer board assembly into the appliance, lining up the holes on the bottom of the metal plate and installing the assembly into the appliance with two (2) ST4x8 screws.
8. Reconnect the four (4) wire harnesses, the USB plug, and reinstall the ground wires with the grounding nut and washer.
9. Reinstall the metal shroud with the ST4x8 screws.
10. Reinstall the back panel and then the top panel onto the appliance.
11. Reinstall the front trim and then the appliance.



Figure 16 Computer Board Metal Shroud Removal



Figure 17 Computer Board Assembly Removal

Speaker Replacement

Removal

1. Remove appliance and front trim, see Appliance and Front Trim Removal instructions.
2. Remove the top panel and the back panel, see Accessing Internal Components instructions.
3. Locate speaker on the left side of the appliance.
4. Remove the two (2) ST4x8 screws from the metal plate holding the cream control board and set aside for later (only for the 78" and 100" appliances). See Figure 18.
5. Remove the four (4) M4x12 screws from the speaker and disconnect the quick connect. See Figure 19.
6. Remove the speaker from the appliance.

NOTE: Service part comes assembled with the front plate. The front plate should be removed before installing the replacement speaker.

Replacement

7. Insert and connect the replacement speaker, setting it into place with the wire facing towards the PCB.
8. Reinstall the four (4) M4x12 screws to attach the speaker to the appliance.
9. Reinstall the cream control board using the two (2) ST4x8 screws (only for the 78" and 100" appliances).
10. Reinstall the back panel and then the top panel onto the appliance.
11. Reinstall the front trim and then the appliance.



Figure 18 Cream Control Board Removal



Figure 19 Speaker Removal

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	Confirm amp draw on circuit is not exceeding electrical code requirements.
Lights in room dim while the appliance is on	Appliance is drawing close to circuit current rating	Confirm amp draw on circuit is not exceeding electrical code requirements.
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.
	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 appliance to cool for 30 minutes. Then plug in the appliance or turn power back on at circuit breaker and turn appliance back on.
	Heater enable/disable switch is set to the Off position	If heater functionality is desired, set the heater enable/disable switch to the On position.
	Defective control board (PCB)	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 appliance to cool for 30 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.
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.

SimpliFire Troubleshooting Guide (continued)

Symptom	Possible Cause	Corrective Action
Fireplace turns on by itself	Defective control board (PCB)	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.
Sound not working	Bad connection to speaker	Replace control board (PCB).
	Defective speaker	Replace speaker.
Speaker buzzing	Control board (PCB) issue	Replace control board (PCB).
AFCI / GFCI breaker trips	AFCI / GFCI breaker wired incorrectly	Verify breaker neutral pigtail is correctly wired per the breaker component manufacturer's installation instructions and National Electric Code (NEC). Verify all wiring is correct, consult a qualified electrician, reference the breaker manufacturer's instruction for guidance, reference NEC.
ER2 Code	Heater enable/disable switch issue	Power cycle appliance and verify heater enable/disable switch is in the correct position. Press heater button when power is returned to clear the ER2 code.



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