

SERVICE MANUAL Model: SF-BI30-E, SF-BI36-E

- 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 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 includes:

- Glass
- Log/Grate Assembly
- Flame Screen
- Refractory
- LED Lighting
- Blower/Heater Module
- Faux Flame Rod/Motor

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 Electric drill and bits (1/4 in.) Safety glasses Flat blade screwdriver

Replacement Instructions

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

Front Replacement

- If necessary, place a drop cloth or other material on the hearth or flooring to prevent scratching. Grasp front with two hands. Pull straight back to disengage front from appliance.
- 2. Install replacement front by aligning the tabs on its back side with the spring clips on the face of the appliance. Press evenly with two hands to fully engage the front to the appliance.

Glass Front Replacement

- 1. If necessary, place a drop cloth or other material on the hearth or flooring to prevent scratching. Grasp front with two hands. Pull straight back to disengage front from appliance.
- 2. Locate C-channel that retains top edge of glass panel. While supporting the glass, remove the screw located in the C-channel at the top two corners of the glass panel. See Figure 1.
- 3. Pivot glass away from appliance and lift out of bottom retainer channel.
- 4. Install replacement glass into bottom retainer chan nel.
- 5. Install C-channel on top edge of replacement glass.
- Align C-channel with screw holes in appliance. See Figure 1
- 7. While supporting glass, install both screws through top C-channel retainer into appliance
- 8. Install front by aligning the tabs on its back side with the spring clips on the face of the appliance. Press evenly with two hands to fully engage the front to the appliance.

Log/Grate Replacement

- If necessary, place a drop cloth or other material on the hearth or flooring to prevent scratching. Grasp front with two hands. Pull straight back to disengage front from appliance.
- 2. Locate C-channel that retains top edge of glass panel. While supporting the glass, remove the screw located in the C-channel at the top two corners of the glass panel. See Figure 1.
- 3. Pivot glass away from appliance and lift out of bottom retainer channel.
- Locate rubber plugs in each end of the grate. Remove plugs with a small flat screwdriver. Save for later use. See Figure 2.
- 5. Remove Phillips screw from each end of grate. Lift grate from faux ember bed. Take care to retain screws with grate. See Figure 2.
- 6. Grasp log ember bed and lift up and out of opening. Rotate ember bed to expose electrical wiring.
- 7. Disconnect lighting LED power source pin connector from back side of ember bed. See Figure 3.
- 8. Connect lighting LED power source pin connector to back side of replacement ember bed. See Figure 3.
- 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, with the retained screws, with the steel brackets under the ember bed. Ensure that wiring is not pinched between log ember bed and steel bracket.
- 11. Install and tighten the screw in each end of the grate. See Figure 2.
- 12. Install rubber plugs into holes in each end of grate. See Figure 2.
- 13. Install glass into bottom retainer channel.
- 14. Install C-channel on top edge of glass panel. See Figure 1.
- 15. Align C-channel with screw holes in appliance.
- 16. While supporting glass, install both screws through top C-channel retainer into appliance.
- 17. Install front by aligning the tabs on its back side with the spring clips on the face of the appliance. Press evenly with two hands to fully engage the front to the appliance.

Flame Screen Replacement

- If necessary, place a drop cloth or other material on the hearth or flooring to prevent scratching. Grasp front with two hands. Pull straight back to disengage front from appliance.
- 2. Locate C-channel that retains top edge of glass panel. While supporting the glass, remove the screw located in the C-channel at the top two corners of the glass panel. See Figure 1.
- 3. Pivot glass away from appliance and lift out of bottom retainer channel.
- 4. Remove four thumb screws and metal angle bracket. from upper rear of appliance cavity. See Figure 7.
- Remove four screws from upper face of appliance. Take care to support the Blower/Heater Module while the screws are removed. See Figure 8.
- 6. Remove the Blower/Heater Module by lifting back edge slightly then pulling it straight back from the appliance opening. This will reduce the likelihood of damaging the brick panels.
- 7. Locate the five electrical connectors on the right side of the appliance cavity. Disconnect each of the five connectors. See Figure 9.
- Locate rubber plugs in each end of the grate. Remove plugs with a small flat screwdriver. Save for later use. See Figure 2.
- 9. Remove Phillips screw from each end of grate. Lift grate from faux ember bed. Take care to retain screws with grate. See Figure 2.
- 10. Grasp log ember bed and lift up and out of opening.
- 11. If necessary, unplug LED wire harness from back side of ember bed. See Figure 3.
- 12. Fold sheet metal tabs on each side of opening on front edge of refractory panels. See Figure 10.
- Use hand to carefully pry along front edge of refractory panel to disengage it from the appliance. Pull both refractory panels. See Figure 10.
- 14. Remove the one screw that retains the brick panel in the rear appliance cavity. Remove the brick panel from the cavity. See Figure 12.
- 15. Remove the flame screen panel by removing six screws that attach it to the appliance chassis. See Figure 13.
- 16. Install the replacement flame screen panel and attach with six screws. See Figure 13.
- 17. Install the brick panel into the rear of the cavity. Ensure that it is orientated so that the notch is located in the lower right of the cavity. See Figure 12.

Flame Screen Replacement (continued)

- 18. Install side refractory panels. Align tabs on back edge of the panel with the slots in the rear appliance cavity. Once the tabs are engaged, carefully install the front edge of the appliance cavity. Take care to apply even pressure to prevent damage to the replacement panels. See Figure 10 & 11.
- 19. Reconnect the five connectors from the Blower/ Heater module to the appliance. See Figure 9.
- 20. Carefully align the 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.
- 21. While supporting the Blower/Heater Module, install the four screws across the upper face of the appliance. See Figure 8.
- 22. Install the four thumb screws and metal angle bracket in the upper rear of the appliance cavity. See Figure 7.
- 23. If necessary, plug LED wire connection into back side of ember bed. See Figure 3.
- 24. 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.
- 25. Align the grate, with the retained screws, with the steel brackets under the ember bed. Ensure that wiring is not pinched between log ember bed and steel bracket.
- 26. Install and tighten the screw in each end of the grate. See Figure 2.
- 27. Install rubber plugs into holes in each end of grate. See Figure 2.
- 28. Install glass into bottom retainer channel.
- 29. Install C-channel on top edge of glass panel.
- 30. Align C-channel with screw holes in appliance. See Figure 1.
- 31. While supporting glass, install both screws through top C-channel retainer into appliance
- 32. Install front by aligning the tabs on its back side with the spring clips on the face of the appliance. Press evenly with two hands to fully engage the front to the appliance.

Refractory Replacement

- If necessary, place a drop cloth or other material on the hearth or flooring to prevent scratching. Grasp front with two hands. Pull straight back to disengage front from appliance.
- 2. Locate C-channel that retains top edge of glass panel. While supporting the glass, remove the screw located in the C-channel at the top two corners of the glass panel. See Figure 1.
- 3. Pivot glass away from appliance and lift out of bottom retainer channel.
- 4. Remove four thumb screws and metal angle bracket from upper rear of appliance cavity. See Figure 7.
- Remove four screws from upper face of appliance. Take care to support the Blower/Heater Module while the screws are removed. See Figure 8.
- 6. Remove the Blower/Heater Module by lifting back edge slightly then pulling it straight back from the appliance opening. This will reduce the likelihood of damaging the brick panels.
- 7. Locate the five electrical connections on the right side of the appliance cavity. Disconnect each of the five connectors. See Figure 9.
- Locate rubber plugs in each end of the grate. Remove plugs with a small flat screwdriver. Save for later use. See Figure 2.
- 9. Remove Phillips screw from each end of grate. Lift from faux ember bed. Take care to retain screws with grate. See Figure 2.
- 10. Grasp log ember bed and lift up and out of opening.
- 11. Fold sheet metal tabs on each side of opening on front edge of refractory panels. See Figure 6.10.
- Use hand to carefully pry along front edge of refractory panel to disengage it from the appliance. Remove both refractory panels. See Figure 10.
- 13. Remove the one screw that retains the brick panel in the rear appliance cavity. Remove the brick panel from the cavity. See Figure 12.
- 14. Install the brick panel into the rear of the cavity. Ensure that it is located so that the notch is in the lower right of the cavity. See Figure 12.
- 15. Install replacement refractory panels. Align tabs on back edge of the panel with the slots in the rear appliance cavity. Once the tabs are engaged, carefully install the front edge of the appliance cavity. Take care to apply even pressure to prevent damage to the replacement panels. See Figure 10 & 11.
- 16. Reconnect the five connectors from the Blower/ Heater module to the appliance. See Figure 9.

- 17. Carefully align the 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.
- While supporting the Blower/Heater Module, install the four screws across the upper face of the appliance. See Figure 8.
- Install the four thumb screws and metal angle bracket in the upper rear of the appliance cavity. See Figure 7.
- 20. 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.
- 21. Align the grate, with the retained screws, with the steel brackets under the ember bed. Ensure that wiring is not pinched between log ember bed and steel bracket.
- 22. Install and tighten the screw in each end of the grate. See Figure 2.
- 23. Install rubber plugs into holes in each end of grate. See Figure 2.
- 24. Install glass into bottom retainer channel.
- 25. Install C-channel on top edge of glass panel.
- 26. Align C-channel with screw holes in appliance. See Figure 1.
- 27. While supporting glass, install both screws through top C-channel retainer into appliance
- 28. Install front by aligning the tabs on its back side with the spring clips on the face of the appliance. Press evenly with two hands to fully engage the front to the appliance.

Lighting LED Replacement

Note: Kit includes all three LED light strip assembly.

- If necessary, place a drop cloth or other material on the hearth or flooring to prevent scratching. Grasp front with two hands. Pull straight back to disengage front from appliance.
- 2. Locate C-channel that retains top edge of glass panel. While supporting the glass, remove the screw located in the C-channel at the top two corners of the glass panel. See Figure 1.
- 3. Pivot glass away from appliance and lift out of bottom retainer channel.
- 4. Remove four thumb screws and metal angle bracket from upper rear of appliance cavity. See Figure 7.
- 5. Remove four screws from upper face of appliance. Take care to support the Blower/Heater Module while the screws are removed. See Figure 8.
- 6. Remove the Blower/Heater Module by lifting back edge slightly then pulling it straight back from the appliance opening. This will reduce the likelihood of damaging the brick panels.
- 7. Locate the five electrical connections on the right side of the appliance cavity. Disconnect each of the five connectors. See Figure 9.
- Locate rubber plugs in each end of the grate. Remove plugs with a small flat screwdriver. Save for later use. See Figure 2.
- 9. Remove Phillips screw from each end of grate. Lift from faux ember bed. Take care to retain screws with grate. See Figure 2.
- 10. Grasp log ember bed and lift up and out of opening.
- 11. Fold sheet metal tabs on each side of opening on front edge of refractory panels. See Figure 10.
- Use hand to carefully pry along front edge of refractory panel to disengage it from the appliance. Remove both refractory panels. See Figure 10.
- 13. Remove the one screw that retains the brick panel in the rear appliance cavity. Remove the brick panel from the cavity. See Figure 12.
- 14. Remove metal bracket in front of rear LED strip. Remove four screws to remove metal parts. See Figure 4.
- Locate Lighting LED circuit input power source connectors in rear of opening. Unplug all three connectors from the three circuit boards. See Figure
 If expoxy will not allow separation of the two connectors, slide the pair of connectors off the pins of the LED circuit board.
- Using a pliers, compress each barbed clip along the circuit board while lifting the board evenly to disengage it from the clip. See Figure 5.

Lighting LED Replacement (continued)

- 17. Remove all three lighting LED circuit boards.
- Install replacement lighting LED circuit boards into the appliance. Fully engage each barbed clip. See Figure 5.
- 19. Connect all three lighting LED power source connectors to the three LED circuit boards. See Figure 6.
- 20. Install metal brackets by attaching with four screws. See Figure 4.
- 21. Install the brick panel into the rear of the cavity. Ensure that it is located so that the notch is in the lower right of the cavity. See Figure 12.
- 22. Install replacement refractory panels. Align tabs on back edge of the panel with the slots in the rear appliance cavity. Once the tabs are engaged, carefully install the front edge of the appliance cavity. Take care to apply even pressure to prevent damage to the replacement panels. See Figure 10 & 11.
- 23. Reconnect the five connectors from the Blower/ Heater module to the appliance. See Figure 9.
- 24. Carefully align the 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.
- 25. While supporting the Blower/Heater Module, install the four screws across the upper face of the appliance. See Figure 8.
- 26. Install the four thumb screws and metal angle bracket in the upper rear of the appliance cavity. See Figure 7.
- 27. 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.
- 28. Align the grate, with the retained screws, with the steel brackets under the ember bed. Ensure that wiring is not pinched between log ember bed and steel bracket.
- 29. Install and tighten the screw in each end of the grate. See Figure 2.
- 30. Install rubber plugs into holes in each end of grate. See Figure 2.
- 31. Install glass into bottom retainer channel.
- 32. Install C-channel on top edge of glass panel.
- Align C-channel with screw holes in appliance. See Figure 1.
- 34. While supporting glass, install both screws through top C-channel retainer into appliance.

35. Install front by aligning the tabs on its back side with the spring clips on the face of the appliance. Press evenly with two hands to fully engage the front to the appliance.

Blower/Heating Module Replacement

- If necessary, place a drop cloth or other material on the hearth or flooring to prevent scratching. Grasp front with two hands. Pull straight back to disengage front from appliance.
- 2. Locate C-channel that retains top edge of glass panel. While supporting the glass, remove the screw located in the C-channel at the top two corners of the glass panel. See Figure 1.
- 3. Pivot glass away from appliance and lift out of bottom retainer channel.
- 4. Remove four thumb screws and metal angle bracket from upper rear of appliance cavity. See Figure 7.
- 5. Remove four screws from upper face of appliance. Take care to support the Blower/Heater Module while the screws are removed. See Figure 8.
- 6. Remove the Blower/Heater Module by lifting back edge slightly then pulling it straight back from the appliance opening. This will reduce the likelihood of damaging the brick panels.
- 7. Locate the five electrical connectors on the right side of the appliance cavity. Disconnect each of the five connectors. See Figure 9.
- Reconnect the five connectors from the replacement Blower/Heater module to the appliance. See Figure 9.
- 9. Carefully align the 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 8.
- 11. Install the four thumb screws and angle metal bracket in the upper rear of the appliance cavity. See Figure 7.
- 12. Install glass into bottom retainer channel.
- 13. Install C-channel on top edge of glass panel.
- 14. Align C-channel with screw holes in appliance.
- While supporting glass, install both screws through top C-channel retainer into appliance. See Figure 1.
- 16. Install front by aligning the tabs on its back side with the spring clips on the face of the appliance. Press evenly with two hands to fully engage the front to the appliance.

Faux Flame Motor/Rod Kit

- If necessary, place a drop cloth or other material on the hearth or flooring to prevent scratching. Grasp front with two hands. Pull straight back to disengage front from appliance.
- 2. Locate C-channel that retains top edge of glass panel. While supporting the glass, remove the screw located in the C-channel at the top two corners of the glass panel. See Figure 1
- 3. Pivot glass away from appliance and lift out of bottom retainer channel.
- 4. Remove four thumb screws and metal angle bracket from upper rear of appliance cavity. See Figure 7.
- 5. Remove four screws from upper face of appliance. Take care to support the Blower/Heater Module while the screws are removed. See Figure 8.
- 6. Remove the Blower/Heater Module by lifting back edge slightly and pulling it straight back from the appliance opening. This will reduce the likelihood of damaging the brick panels.
- 7. Locate the five electrical connectors on the right side of the appliance cavity. Disconnect each of the five connectors. See Figure 9.
- Locate rubber plugs in each end of the grate. Remove plugs with a small flat screwdriver. Save for later use. See Figure 2.
- 9. Remove Phillips screw from each end of grate. Lift grate from faux ember bed. Take care to retain screws with grate. See Figure 2.
- 10. Grasp log ember bed and lift up and out of opening.
- 11. Fold sheet metal tabs on each side of opening on front edge of refractory panels. See Figure 10.
- Use hand to carefully pry along front edge of refractory panel to disengage it from the appliance. Pull both refractory panels. See Figure 10.
- 13. Remove the one screw that retains the brick panel in the rear appliance cavity. Remove the brick panel from the cavity. See Figure 12.
- Remove the flame screen panel by removing six screws that attach it to the appliance chassis. See Figure 13.
- 15. Disengage faux flame rod from motor located in right rear of cavity. Use hand shift the reflector rod to the left until the rubber coupler on the right end disengages from the motor shaft. See Figure 14.
- Remove metal bracket in right side of cavity to allow access to the faux flame motor and wiring connections. Remove two screws to remove panel. See Figure 15.

- 17. Remove three screws that attach motor mount bracket to the appliance chassis. See Figure 16.
- 18. Remove the motor and bracket from the chassis until the electrical connector is visible. See Figure 17.
- 19. Disconnect the electrical connector to the motor. See Figure 17.
- 20. Install the replacement motor on the bracket.
- 21. Reconnect the electrical connector between the motor and the appliance. See Figure 17.
- 22. Install the motor mount bracket to the chassis with three screws. See Figure 16.
- 23. 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 shift. See Figure 14.
- 24. Reinstall metal bracket in front of faux motor. Install two screws to fasten the panel. See Figure 15.
- 25. Install the flame screen panel and attach with six screws. See Figure 13.
- 26. Install the brick panel into the rear of the cavity by attaching with one screw. See Figure 12.
- 27. Install refractory panels. Align tabs on back edge of the panel with the slots in the rear appliance cavity. Once the tabs are engaged, carefully install the front edge of the appliance cavity. Take care to apply even pressure to prevent damage to the replacement panels. Fold sheet metal tabs on each side of front edge of opening to secure front edge of refractory. See Figure 10 & 11.
- 28. Reconnect the five connectors from the Blower/ Heater module to the appliance. See Figure 9.
- 29. Carefully align the 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.
- 30. While supporting the Blower/Heater Module, install the four screws across the upper face of the appliance. See Figure 8.
- Install the four thumb screws and metal angle bracket in the upper rear of the appliance cavity. See Figure 7.
- 32. 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 potion flat on the floor of the opening. Take care not to pinch wiring under log ember bed.
- 33. Align the grate, with the retained screws, with the steel brackets under the ember bed. Ensure that wiring is not pinched between log ember bed and steel bracket.

Faux Flame Motor/Rod Kit (continued)

- 34. Install and tighten the screw in each end of the grate. See Figure 2.
- 35. Install rubber plugs into holes in each end of grate. See Figure 2.
- 36. Install glass into bottom retainer channel.
- 37. Install C-channel on top edge of glass panel.
- Align C-channel with screw holes in appliance. See Figure 1.
- 39. While supporting glass, install both screws through top C-channel retainer into appliance.
- 40. Install front by aligning the tabs on its back side with the spring clips on the face of the appliance. Press evenly with two hands to fully engage the front to the appliance.

Mounting Bracket Replacement

1. Install the mountng brackets (4) by aligning them with the pre-drilled holes located on the side of the appliance. Use two screws (ST4 x 8) per bracket to secure to the appliance. See Figure 18 and 19.



Figure 1 Top Glass Retainer Screw Location



Figure 2 Grate and Log Screw Location

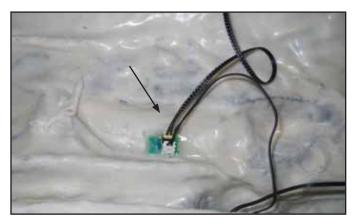


Figure 3 Light LED Connection on Bottom of Log Ember Bed



Figure 4 Removal and installation of LED access panel



Figure 5 Barbed Clip Access during LED Circuit Board Replacement



Figure 6 Light LED Circuit Power Source Connectors

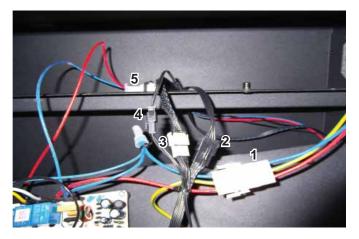


Figure 9 Five Electrical Connections required for Heater/ Blower Module Removal and Installation

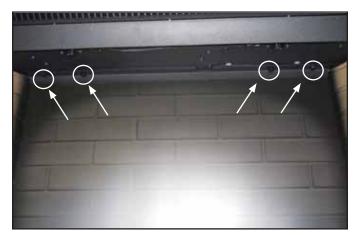


Figure 7 Four Thumb Screws located in Upper Rear of Appliance Cavity

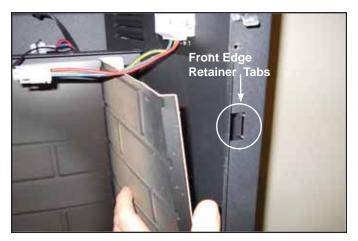


Figure 10 Removal of Front Edge of Refractory from Appliance Cavity



Figure 8 Four Screws that attach Blower/Heater Module to Upper Face of Appliance



Figure 11 Alignment of Tabs in Rear Edge of Refractory with Slots in Appliance



Figure 12 Location of one screw that retain Brick Panel to Rear Wall of Appliance

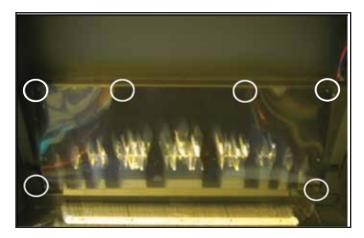


Figure 13 Location of six Screw Fasteners that attach Flame Screen to Chassis



Figure 14 Removal and Installation of Reflector Rod Coupler to Motor Shaft

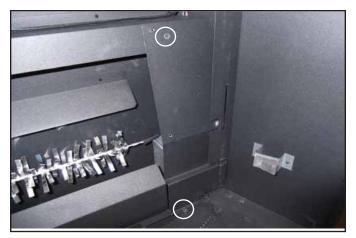


Figure 15 Removal and installation of faux flame access panel.



Figure 16 Location of three Screws that attach Motor Mount Bracket to Appliance



Figure 17 Electrical Connection required for replacement for the Faux Flame Motor.

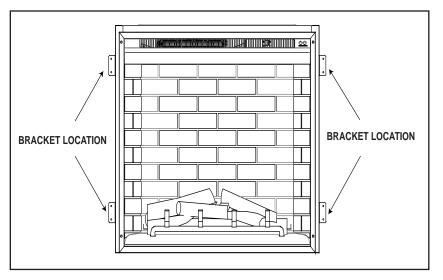


Figure 18 Bracket Locations

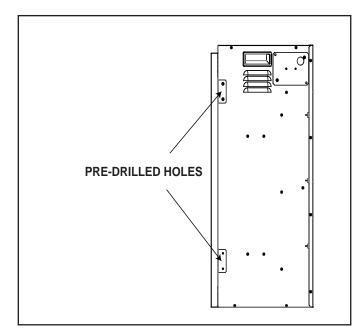


Figure 19 Pre-Drilled Bracket Holes

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Please contact your SimpliFire dealer or customer/technical support (877-320-0730) with any questions or concerns.
For the location of your nearest SimpliFire dealer, please visit www.hearthnhome.com.

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