

# INSTALLATION INSTRUCTIONS FBB5-1 BLOWER KIT

## INSTRUCTIONS MUST BE LEFT WITH THE OWNER FOR FUTURE REFERENCE AFTER INSTALLATION.

**ATTENTION:** It is recommended to install the blower assembly before connecting gas inlet supply line.

### WIRING

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All wiring should be done by a qualified electrician and shall be in compliance with all local, city and state building codes. Before making the electrical connection, make sure that main power supply is disconnected. The appliance, when installed, must be electrically grounded in accordance with local codes, with the National Electrical Code ANSI/ NFPA 70 (Latest Edition).

The appliance, when installed, must be electrically grounded in accordance with local codes or, in the absence of local codes, with the *National Electrical Code, ANSI/NFPA 70*, if an external electrical source is utilized. This appliance is equipped with a three-prong [grounding] plug for your protection against shock hazard and should be plugged directly into a properly grounded three-prong receptacle. Do not cut or remove the grounding prong from this plug. For an ungrounded receptacle, an adapter, which has two prongs and a wire for grounding, can be purchased, plugged into the ungrounded receptacle and its wire connected to the receptacle mounting screw. With this wire completing the ground, the appliance cord plug can be plugged into the adapter and be electrically grounded.

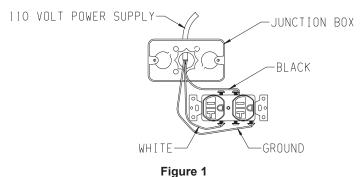
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Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation. Verify proper operation after servicing.

**NOTICE:** The junction box must be pre-wired at time of fireplace installation for use with blower assembly. A standard wall ON/OFF wall switch or optional SCV1 Variable Speed Control Kit should be installed to activate power to the fireplace, and control the operation of the FBB5 Blower assembly. It is recommended that installation of the wiring be performed by a qualified electrician. **See figure 1.** 

- 1. If installed, turn OFF gas supply to firebox/gas log.
- 2. If applicable, turn OFF electric supply to firebox.

## JUNCTION BOX CONNECTIONS



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SECTION

# **STANDARD FIREBOX & VFPA MODELS BLOWER INSTALLATION**

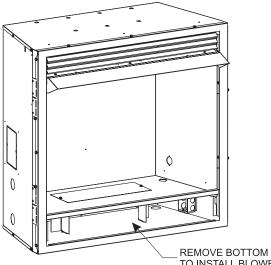
A factory installed junction box is located on the lower right side of the fireplace. Wiring must be fed to the junction box and attached to the receptacle that is provided. From right side of the fireplace, remove the screw securing the junction box assembly. Leave approximately 6 inches of wire in the junction box for connection. Attach black wire to one side of the receptacle and white wire to opposite side of receptacle. The ground wire should be attached to the green (ground) screw.

**ATTENTION:** If installed, do not damage gas inlet supply line when blower assembly is inserted into firebox. In some cases, removal the gas inlet supply line may be necessary.

### FOR VENT FREE FIREBOXES AND VFPA MODELS

1. Determine which type of firebox you have prior to installation. See Figures 2 through 4.

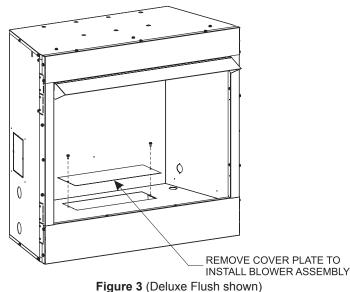
### **Louvered Models**



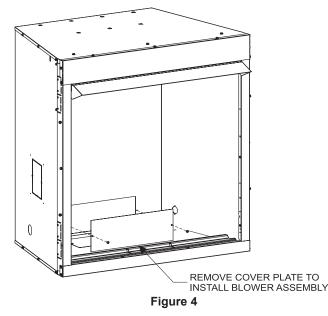
\_ REMOVE BOTTOM LOUVER TO INSTALL BLOWER ASSEMBLY

Figure 2 (Deluxe Louvered shown)

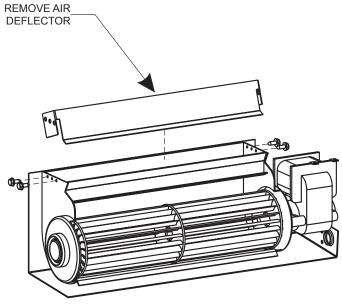




Select Firebox Models



2. Remove air deflector by removing the four screws securing it to the blower assembly, and discard. **See Figure 5.** 



#### Figure 5

- 3. Insert blower assembly into interior, bottom of firebox for Deluxe and Premium models and rear for Select models. Position blower assembly so that you align the notch on back of blower assembly with the center screw on firebox back, then push the blower assembly against firebox back. The blower wheel must be centered with the back wall of the firebox. The magnets on the back and bottom of blower assembly will sufficiently hold blower assembly in place.
- 4. Once the blower assembly is in position, use a screwdriver to bend the upper right tab on the firebox away.
- Next, find the fan control switch and wire assembly. Feed the wires through the hole at the top of the firebox, and secure the fan control switch with the two screws provided. See Figure 6.

## STANDARD FIREBOX BLOWER INSTALLATION

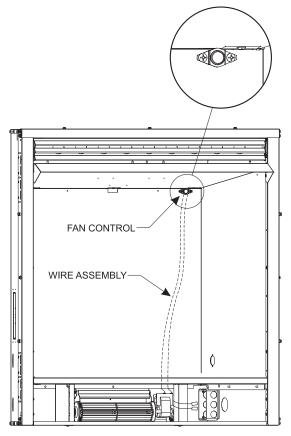
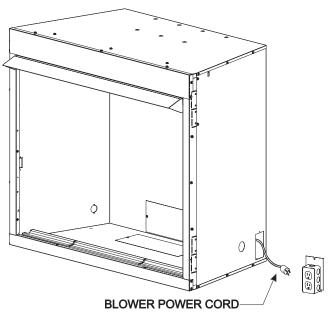


Figure 6

- 6. The fan control wires will slide down between the firebox and outer wrap near the blower assembly. **See Figure 6.**
- One fan control wire will have a 1/4 inch female terminal that must be attached to the open terminal on the blower motor. See Figure 22, Connection A.
- The other fan control wire has a 1/4 inch male terminal. Attach this terminal to the open terminal on the blower power cord. See Figure 22, Connection B.
- Locate the ground wire attached to the blower base. Secure the opposite end with the ring tongue terminal to the outer bottom of the fireplace using using the self drilling screw located in the hardware pack.
- Route the wires away from moving parts of the blower assembly and retain wires together near the blower motor using the plastic purse clip provided.
- To complete the installation, plug the power cord into the junction box receptacle at the right rear corner of the firebox outer wrap. See Figure 7.



### Figure 7

- 12. If room permits, the power cord can be located from the outside of the unit looking through the junction box access hole (with the junction box removed), then plug up the power cord before reinstalling the pre-wired junction box.
- 13. Once all electrical connections are made test the blower fan control operation by turning on power to the blower. Apply heat to the fan control switch inside the firebox with a lighter or match until blower is activated. Once blower is activated, check for proper operation.

### **A** WARNING

Do not place hands near blower assembly or other wiring while power is on.

- 14. Replace blower access plate.
- 15. This completes the installation of the optional FBB5 Blower kit accessory.

**NOTICE:** This blower is equipped with a heat activated fan control switch. Blower will operate when the fireplace warms up, and will turn off automatically when the firebox cools down.

# **VFP(SB,PB) FIREBOX BLOWER INSTALLATION**

To install the blower kit, access the junction box, or install a light kit, remove the access cover plate and/or lower louvers or flush panels as illustrated by **Figures 8 and 9**.

A factory included junction box is located on the lower right side of the firebox. Wiring must be fed through the 7/8 inch diameter hole provided on the lower side of the firebox, and secured to the outer wrap with the clamp provided.

Leave approximately 6 inches of wire in the junction box for connection.

**NOTE:** Depending on the unit, the Junction box may be installed on the outer side.

Attach black wire to the brass screw on the receptacle and attach the white wire to the silver screw. Attach ground wire (bare) to the green (ground) screw.

Install the receptacle into the junction box as illustrated. Attach cover plate. Place Junction Box so that it is approximately 8 to 12 inches away from the outer wrap wall. Secure wiring at outer wrap of fireplace with wire clamp provided.

**ATTENTION:** If installed, do not damage gas inlet supply line when blower assembly is inserted into firebox. In some cases, removal of the gas inlet supply line may be necessary.

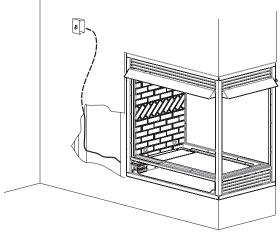


Figure 8 - Flush Or Louvered Models

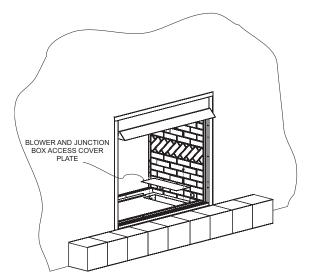
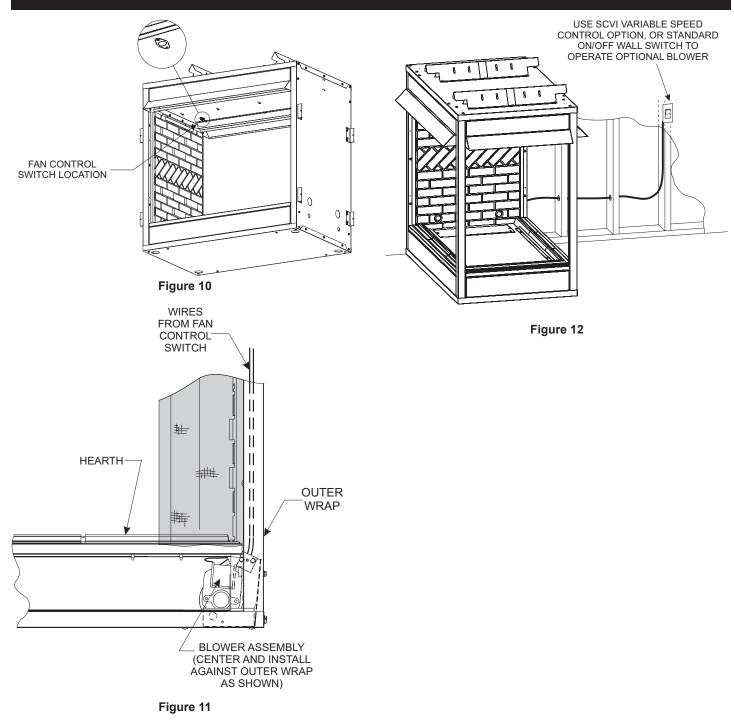


Figure 9 - Flush Face Models With Raised Hearth Extensions

- Insert blower assembly into interior, bottom of firebox. Position blower assembly so that you align the notch on back of blower assembly with the center screw on side/end panel, then push the blower assembly against firebox outer panel. The blower wheel must be centered with the side/end wall of the firebox. The magnets on the back and bottom of blower assembly will sufficiently hold blower assembly in place. See Figure 11.
- 2. Once the blower assembly is in position, locate the plug button in the top corner of the firebox. Remove the plug with a standard screwdriver and discard plug.
- 3. Next, find the fan control switch and wire assembly. Feed the wires through the hole at the top of the firebox. Feed the wires over the firebox top and down between the firebox side and outer wrap then, secure the fan control switch with (2) #6 screws provided. **See Figure 10.**
- 4. The fan control wires will slide down between the firebox and outer wrap near the blower assembly. **See Figure 11**.
- One fan control wire will have a 1/4 inch female terminal that must be attached to the open terminal on the blower motor. See Figure 22, Connection A.
- The other fan control wire has a 1/4 inch male terminal. Attach this terminal to the open terminal on the blower power cord. See Figure 22, Connection B
- 7. Locate the ground wire attached to the blower base. Secure the opposite end with the ring tongue terminal to the outer bottom of the fireplace using using the self drilling screw located in the hardware pack.
- 8. Route the wires away from moving parts of the blower assembly and retain wires together near the blower motor using the plastic purse clip provided.
- 9. To complete the installation, plug the power cord into the junction box receptacle previously installed in the bottom of the firebox. **See Figure 11.**
- 10. Once all connections are made electrically, it is recommended that you test the blower fan control operation by turning on power to the blower (CAUTION: 110 Volt). Then apply heat to the fan control switch inside the firebox with a lighter or match until blower is activated. Once blower is activated, check for proper operation. Do not place hands near blower assembly or other wiring while power is on.
- 11. Replace blower access plate and louvers or flush panels. See Figures 8 and 9.
- 12. This completes the installation of the optional FBB5 Blower kit accessory.

**NOTE:** This blower is equipped with a heat activated fan control switch. Blower will operate when the firebox warms up, and will turn off automatically when the firebox cools down. The time will vary for the activation of the fan control switch depending on several factors including firebox/log set sizing, BTU input variables, and log set positioning. Generally, it may take from 5 to 20 minutes to activate blower/fan control from a cold start.

# **VFP(SB,PB) FIREBOX BLOWER INSTALLATION**



# **VFP(SP,PP) FIREPLACE BLOWER INSTALLATION**

To install the blower kit, access the junction box, or install a light kit, remove lower louver as illustrated by **Figure 13**.

A factory included junction box is located on the lower right side of the fireplace. Wiring must be fed through the 7/8 inch diameter hole provided on the lower side of the fireplace, and secured to the outer wrap with the clamp provided. Leave approximately 6 inches of wire in the junction box for connection.

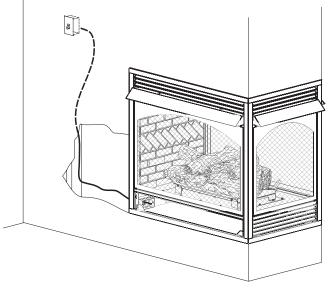
Attach black wire to the brass screw on the receptacle and attach white wire to the silver screw. Attach ground wire (bare) to the green (ground) screw.

Install the receptacle into the junction box as illustrated. Attach cover plate.

Place Junction Box so that it is approximately 8 to 12 inches away from the outer wrap wall. Secure wiring at outer wrap of fireplace with wire clamp provided.

**NOTE:** Depending on the unit, the Junction box may be installed on the outer side.

**ATTENTION:** If installed, do not damage gas inlet supply line when blower assembly is inserted into fireplace. In some cases, removal of the gas inlet supply line may be necessary.





- Insert blower assembly into interior, bottom of firebox. *NOTICE:* On peninsula models, the blower must be installed at the end which has the brick panel installed. Position blower assembly so that you align the notch on back of blower assembly with the center screw on side/end panel, then push the blower assembly against firebox outer panel. The blower wheel must be centered with the side/end wall of the firebox. The magnets on the back and bottom of blower assembly will sufficiently hold blower assembly in place. See Figure 15.
- Once the blower assembly is in position, locate the plug button in the top corner of the firebox. Remove the plug with a standard screwdriver and discard plug.
- 3. Next, find the fan control switch and wire assembly. Feed the wires through the hole at the top of the firebox, and secure the fan control switch with two (2) #6 screws (provided). The fan control wires will slide down between the firebox and outer wrap near the blower assembly. **See Figure 14.**

- 4. Locate the ground wire attached to the blower base. Secure the opposite end with the ring tongue terminal to the outer bottom of the fireplace using using the self drilling screw located in the hardware pack.
- 5. Route the wires away from moving parts of the blower assembly and retain wires together near the blower motor using the plastic purse clip provided.

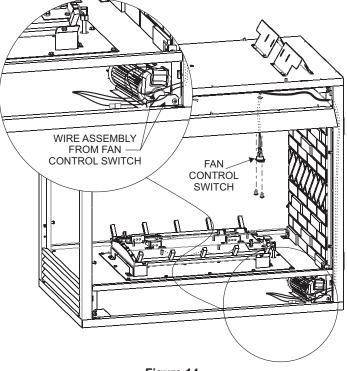


Figure 14

- 6. To complete the installation, plug the power cord into the junction box receptacle previously installed in the bottom of the fireplace. **See Figure 15.**
- 7. Once all connections are made electrically, it is recommended that you test the blower fan control operation by turning on power to the blower (CAUTION: 110 Volt). Turn the fireplace on and let run until blower is activated. This should take approximately 10 to 20 minutes from a cold start. Once blower is activated, check for proper operation. Do not place hands near blower assembly or other wiring while power is on.
- 8. Replace louver(s).
- 9. This completes the installation of the optional FBB5 Blower kit accessory.

**NOTICE:** This blower is equipped with a heat activated fan control switch. Blower will operate when the fireplace warms up, and will turn off automatically when the fireplace cools down. The time will vary for the activation of the fan control switch depending on several factors including fireplace type, BTU input variables, and log set style. Generally, it may take from 10 to 20 minutes to activate blower/fan control from a cold start.

# VFP(SP,PP) FIREPLACE BLOWER INSTALLATION

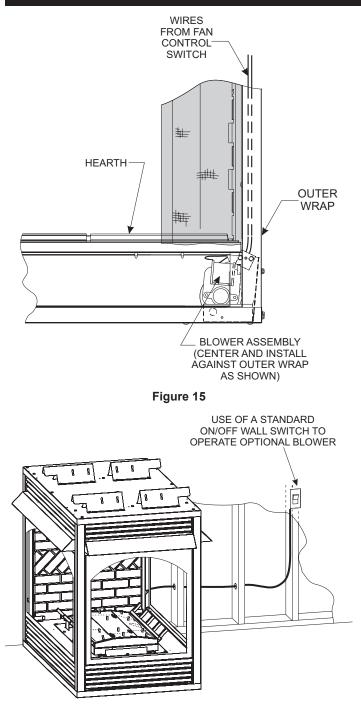


Figure 16

# **DVP(SP,PP) FIREPLACE BLOWER INSTALLATION**

To install the blower kit or access the junction box, remove lower louver as illustrated by **Figure 18.** 

A factory included junction box is located in the lower compartment of the fireplace. Wiring must be fed through the 7/8 inch diameter hole provided on the lower side of the fireplace, and secured to the outer wrap with the clamp provided. Leave approximately 6 inch of wire in the junction box for connection.

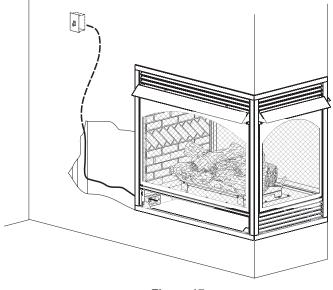
Attach black wire to brass screw on the receptacle and attach white wire to the silver screw. Attach ground wire (bare) to the green (ground) screw.

Install the receptacle into the junction box as illustrated. Attach cover plate.

Place Junction Box so that it is approximately 8 to 12 inches away from the outer wrap wall. Secure wiring at outer wrap of fireplace with wire clamp provided.

**NOTE:** Depending on the unit, the Junction box may be installed on the outer side.

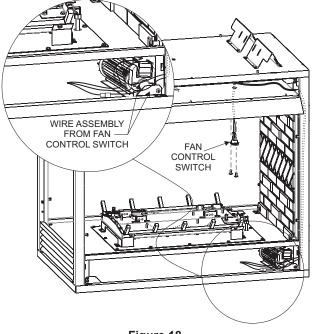
**ATTENTION:** If installed, do not damage gas inlet supply line when blower assembly is inserted into fireplace. In some cases, removal of the gas inlet supply line may be necessary.





- Insert blower assembly into interior, bottom of fireplace. *NOTICE:* On peninsula models, the blower must be installed at the end which has the brick panel installed. Position blower assembly so that you align the notch on back of blower assembly with the center screw on side/end panel, then push the blower assembly against fireplace outer panel. The blower wheel must be centered with the side/end wall of the fireplace. The magnets on the back and bottom of blower assembly will sufficiently hold blower assembly in place. See Figure 18.
- 2. Once the blower assembly is in position, remove the upper louver as shown and locate the switch tab (end of support channel) on top of the firebox. Install the fan control switch by first removing the two pre-installed screws in the tab, then secure the fan control switch to the tab. **See Figure 19.** Once the fan control has been secured, bend the tab forward so that the face of the fan control is pushed down so it contacts the firebox top.

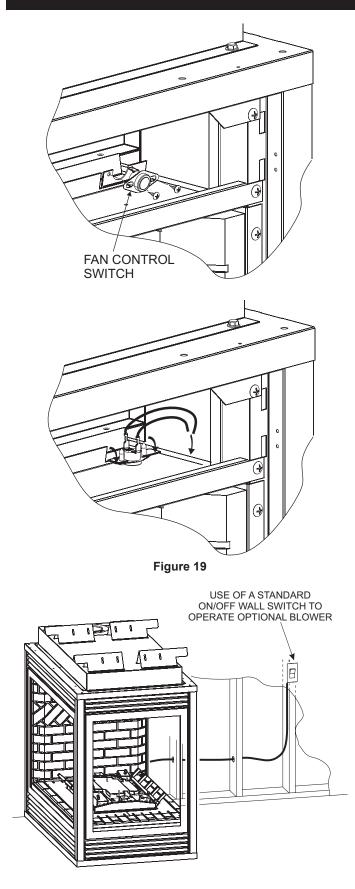
 Next, find the fan control wire assembly. Feed the wires over the top of the firebox. The fan control wires will slide down between the firebox and outer wrap near the blower assembly. See Figure 18. Attach the two 3/16 inch wire terminals to the fan control switch as shown in Figure 19. Attach the wire terminals at the blower as shown by letters "A" and "B" in Figure 19.



- Figure 18
- 4. Locate the ground wire attached to the blower base. Secure the opposite end with the ring tongue terminal to the outer bottom of the fireplace using using the self drilling screw located in the hardware pack.
- 5. Route the wires away from moving parts of the blower assembly and retain wires together near the blower motor using the plastic purse clip provided.
- 6. To complete the installation, plug the power cord into the junction box receptacle previously installed in the bottom of the fireplace. **See Figures 17 and 18.**
- 7. Once all connections are made electrically, it is recommended that you test the blower fan control operation by turning on power to the blower (CAUTION: 110 Volt). Turn the fireplace on and let run until blower is activated. This should take approximately 10 to 20 minutes from a cold start. Once blower is activated, check for proper operation. Do not place hands near blower assembly or other wiring while power is on.
- 8. Replace louver(s).
- 9. This completes the installation of the optional FBB5 Blower kit accessory.

**NOTE:** This blower is equipped with a heat activated fan control switch. Blower will operate when the fireplace warms up, and will turn off automatically when the fireplace cools down. The time will vary for the activation of the fan control switch depending on several factors including fireplace type, BTU input variables, and log set style. Generally, it may take from 10 to 20 minutes to activate blower/fan control from a cold start.

# DVP(PP,SP) FIREPLACE BLOWER INSTALLATION





# **MAINTENANCE & SERVICE PARTS**

### **Blower Motor**

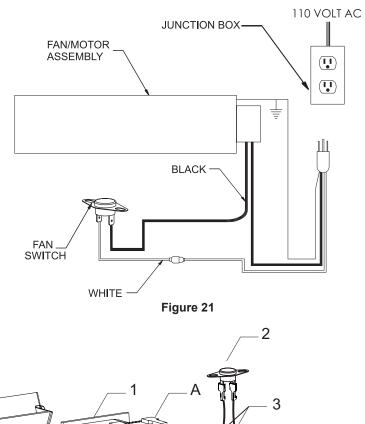
The blower motor does not have oiling holes. Do not attempt to oil the blower motor.

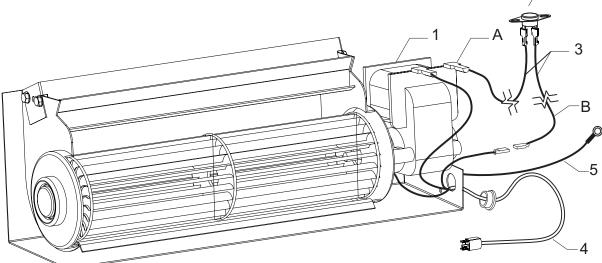
### **Blower Wheels**

The blower wheels will collect lint and could require periodic cleaning. If the air output decreases or the noise level increases, it indicates a dirty blower wheel. Remove fan and clean blower wheels.

### **WARNING**

Unplugging of blower accessory will not stop the heater from cycling. To turn off gas to the heater (millivolt model): push in gas control knob slightly and turn clockwise to "OFF." Do not force. To turn off gas on direct ignition model, turn gas line valve to "OFF."





INDEX NO.	PART NO.	DESCRIPTION
1	R7731	Blower Assembly
2	R9901	Fan Control Switch
3	R8147	Wire Assembly
4	R7615	Cord Set
5	R7891	Wire, Ground

Figure 22

# HOW TO ORDER REPAIR PARTS

### Parts Not Under Warranty

Parts can be ordered through your Service Person, Dealer, or a Master Parts Distributor. See this page for the Master Parts Distributors list. For best results, the **service person or dealer** should order parts through the distributor. Parts can be shipped directly to the **service person/dealer**.

### Warranty Parts

Warranty parts will need a proof of purchase and can be ordered by your Service Person or Dealer. Proof of purchase is **required** for warranty parts.

All parts listed in the Parts List have a Part Number. When ordering parts, first obtain the Model Number and Serial Number from the name plate on your equipment. Then determine the Part Number (**not** the Index Number) and the Description of each part from the following illustration and part list. Be sure to give all this information . . .

Appliance Model Number	Part Description
Appliance Serial Number	Part Number
Type of Gas (Propane or Natural)	

Do not order bolts, screws, washers or nuts. They are standard hardware items and can be purchased at any local hardware store. Shipments contingent upon strikes, fires and all causes beyond our control.



## Empire Comfort Systems Inc. Belleville, IL

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If you have a service or repair question, please contact your dealer.

## www.empirecomfort.com