

ATTENTION: Installer please leave these Instructions with the homeowner.

Royale Heat Exchanger

For Masonry Fireplaces ONLY!

Installation & Operating Instructions

 **CAUTION:** *Not for use with Vent-Free Gas Logs.*

Installation Instructions

PARTS INCLUDED FOR INSTALLATION:

1 ea. Hardware Kit with brackets and fasteners	1 ea. Roll of Insulation
6 ea. Sheet Metal Screws	1 ea. Power Cord

ATTACHING THE HEAT EXCHANGER TO THE ENCLOSURE:

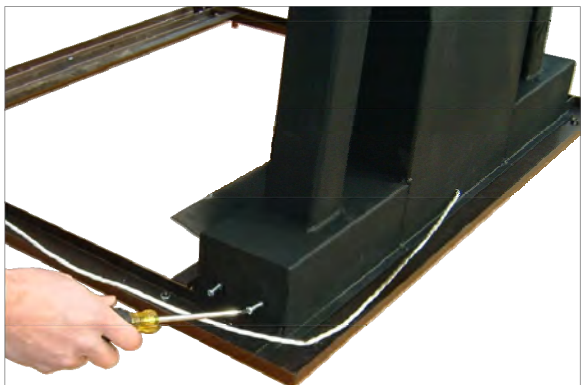


Figure 1

- Carefully remove the glass doors, screen doors, and louver panel from the Fireplace Enclosure. Set them aside in a safe place.
- Place the Enclosure face down on carpeting or other soft material to protect the frame finish.
- Align the Heat Exchanger/Blower Unit with the flanges on the back of the enclosure frame and set between the flanges. **(Figure 1)**
NOTE: The thermal wire must exit on top of the heat exchanger.
- Fasten the Heat Exchanger/Blower Unit with four (4) sheet metal screws through the pre-drilled holes in the flanges. **(Figure 1)**
- Route the Thermal Wire to the right or left side of the enclosure frame as desired and secure the wire in the spring-clips provided.
- A Smoke Guard baffle is included with wood burning Heat Exchangers. The Smoke Guard helps prevent smoke spillage and may improve draft flow. The Smoke Guard attaches to the bottom of the Heat Exchanger with two (2) sheet metal screws provided. **(Figure 2)**
NOTE: Heat Exchangers for gas logs do not require a Smoke Guard.
- Insert the Power Cord through the hole provided at the bottom of the Enclosure frame. The Power Cord can be attached on the left or right side. Use the plug provided to cover the unused hole.
- Connect the Electric Cord to the wiring from the Blower with the plugs provided. Connect the colored wires according to the schematic at right.

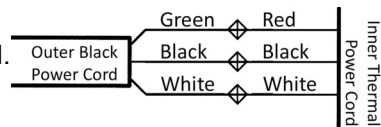


Figure 2

ATTACHING THE ENCLOSURE TO THE FIREPLACE:

- Assemble two Lintel Clamps by threading an adjusting nut, a flat washer, and a Lintel Bracket onto the 6" long threaded bolts. **(Figure 3)**
- Thread the Lintel Clamp bolts into the mounting nuts welded onto the back of the Heat Exchanger Enclosure. Do not over-tighten.
- Cut three pieces of insulation to length and fit them into the top and both sides of the enclosure frame.
- Start the Pressure Screws into the L-Brackets. Use 1/4-20 x 3/8" bolts and washers to secure the L-Brackets to the enclosure. **(Figure 4)**
- Remove any protective plastic film from polished metal finishes.
- Center the Enclosure in the fireplace opening.
⚠ CAUTION: The assembly is now very top heavy.
- Rotate the Lintel Clamps up toward the top of the fireplace to grip the fireplace lintel and snug down the adjusting nuts. **(Figure 3)**
- Slide the bottom L-Brackets out to the sides of the fireplace and tighten the 1/4-20 x 3/8" bolts snugly. Don't over-tighten. **(Figure 4)**
- Tighten the Pressure Screws on each side evenly to hold the bottom of the Fireplace Enclosure securely. Don't over-tighten. **(Figure 4)**
 - Do not force the bottom of the frame to the fireplace. **See Below.**
 - **Alternate Method:** Secure the Bottom Bracket to the fireplace with lag bolts and masonry inserts (not included).
- Reinstall the Glass Doors, Screens & Louver. Discard the shipping hinge screws if used. Use the color-matched permanent hinge pins that are taped to the glass doors if required.

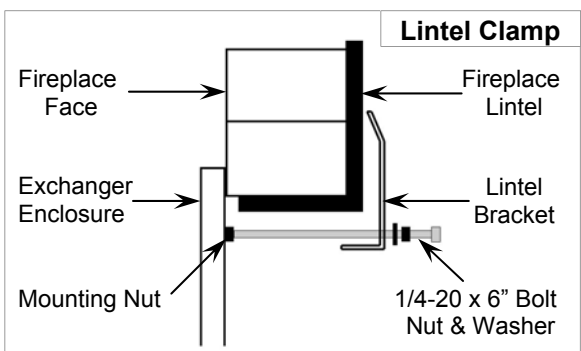


Figure 3

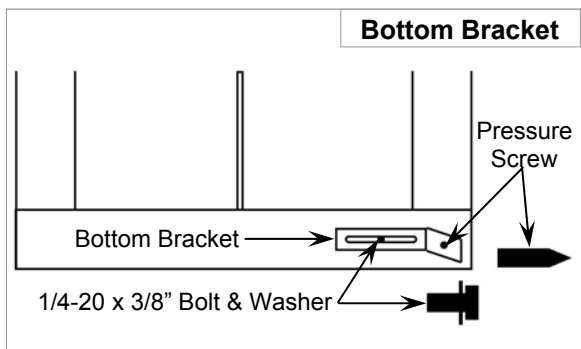


Figure 4

IMPORTANT: If the Heat Exchanger Enclosure glass doors will not stay closed, or do not hang straight, the fireplace face may be out of plumb. Loosen the bottom bracket pressure screw on the side opposite from the glass door that is away from the frame. Pull the lower corner of the frame away from the fireplace face until the doors align properly. Retighten the pressure screw (s).

Operating Instructions

⚠ CAUTION: Do not light a fire until you read and completely understand the Operating Instructions that follow. If you have any questions or concerns, please contact CMC Dealer or Fireplace Doors Online before proceeding.

GENERAL SAFEGUARDS:

- Do not burn trash, construction materials, pressure treated lumber and/or railroad ties in your fireplace. The intense heat that these types of materials can produce can damage the Heat Exchanger Enclosure and the fumes from burning these types of materials can create a serious health hazard. Dry, seasoned hardwood is the recommended fuel.

⚠ CAUTION: CMC uses very high quality tempered glass but tempered glass is breakable like any glass. It is the operator's responsibility to read, understand, and follow the instructions below and to exercise due caution. The most important precaution is to keep the glass doors open when the fire is burning. The tempering process makes the glass stronger and more resistant to heat and impact but not impervious. Avoid striking the glass with logs or fireplace tools. If tempered glass does fail it breaks into small pieces. Glass pieces may fly about the area. Never sit, or allow children or anyone else to sit, close to the glass when the fire is hot. Use a protective hearth rug or other suitable non-flammable protection in front of the fireplace to protect wood floors and/or synthetic carpets. In the event that the glass should break, the resulting small pieces could burn skin or damage flooring.

OPERATION:

⚠ IMPORTANT: The Blower must be running when the fire is burning. If the Blower fails or electrical power is lost, allow the fire to die and discontinue use until the Blower is repaired or power is restored. Leave the glass doors fully open until the fire has burned out. Ignoring this advice can cause damage to the Heat Exchanger and/or the Blower.

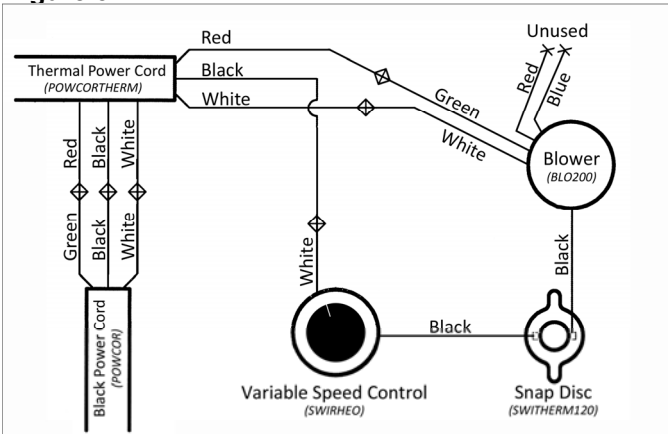
- **GLASS DOORS & SCREENS:** Heat Exchanger Enclosures are designed to be used with the glass doors open and the screens closed when a wood fire is burning. You will get the maximum heat from your fireplace with the glass doors open. The screens must be kept closed at all times when a wood fire is burning except when loading or maintaining the fire. If wood smoke is noticeable in the room make sure that the Smoke Guard baffle is installed and the blower speed is not set too high. Call your CMC Dealer for advice.
- **BURNING:** Build and maintain small to moderate wood fires. Fireplace grates and/or andirons must be properly sized to allow at least 5 inches of clearance between the fire and the enclosure.
 - Never leave the room with both the glass doors and screens open. Upon retiring for the evening, or leaving the room for an extended period, the glass doors can be closed to provide maximum spark protection. Before closing the glass doors ensure that the wood fire is under control and of moderate size or smaller. The fireplace flue damper should be left fully open. Once the fire is completely extinguished, close the fireplace flue damper and close the glass doors to minimize heat loss up the chimney.
 - Excessive heat can cause damage to the Heat Exchanger Enclosure and/or loss of temper in glass resulting in glass breakage. A very hot wood or gas fire, hot coals, embers, ashes, and/or logs coming in contact with the back of the enclosure can cause discoloration or more serious damage to the enclosure finishes. This type of damage, caused by over-heating, is considered abuse and is not covered under warranty.
- **BLOWER:** The Blower is equipped with a temperature activated switch (Snap Disk) and a Variable Speed Switch.
 - The thermal Snap Disk will turn the Blower on when the switch heats to 120°F and off when it cools to 100°F.
 - The Variable Speed Switch regulates the speed of the blower and therefore the volume of warm air it delivers.
 - If the air coming from the air vent is too cool the blower speed is set too high relative to the fire.
 - The Variable Speed Switch has an OFF position. **Do not use** the OFF function unless the Snap Disk fails. If the Snap Disk fails have it replaced immediately by your CMC Dealer.
- **GAS LOGS:** For fireplaces fitted with gas logs use the Heat Exchanger Enclosure designed for this purpose. Gas Log Heat Exchanger Enclosures are intended for use with vented gas logs only. **Do not use with Vent-Free gas logs.** Gas Log Heat Exchanger Enclosures are fitted with an oversize damper and are designed for heat transfer suitable to the constant heat provided by gas logs. Heat Exchanger Enclosures used in combination with Gas Logs must have the glass doors open when the Gas Logs are in operation to ensure adequate air flow to the Gas Logs. The Gas Logs must be properly sized to allow at least 5 inches of clearance between the fire and the enclosure. Unlike a wood fire that modulates heat output, gas logs can produce a lot of heat constantly over an indefinite period of time. Burning Gas Logs with the glass doors closed can overheat the enclosure, the Gas Logs, the fireplace and cause damage to any or all components. Read and follow all instructions provided by the Gas Log manufacturer.

MAINTENANCE:

⚠ CAUTION: The Heat Exchanger Enclosure and glass doors must be at room temperature before cleaning.

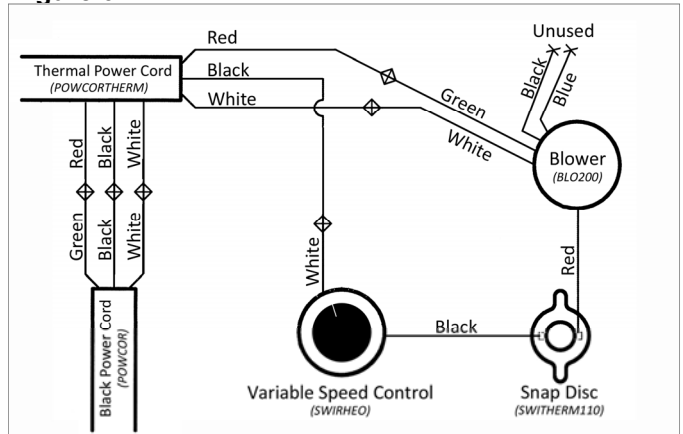
- Smoke residue or soot accumulation on glass can be removed using glass cleaner or a mild household cleaner. Avoid cleaners that contain ammonia. Spray on, let soak for a few minutes, and wipe clean. Repeat as necessary.
- Heavier, long-term build up may require the use of a glass cleaner specifically formulated for removing wood smoke residue. These glass cleaners are available from Fireplace Doors Online. Never use oven cleaner.
- CMC uses high quality, heat resistant, Powder Coat finishes on Heat Exchanger Enclosures. This type of finish requires only an occasional wipe with a damp cloth to maintain the factory finish. A mild household cleaner may be used if necessary. Do not use cleaners that contain ammonia. Do not use harsh, strong, or abrasive cleaners.
- Polished metal parts of the enclosure (brass, copper, etc.) have a clear lacquer finish to prevent tarnishing. Wipe with a damp soft towel or dust cloth only. The use of metal polish or strong cleaners will damage the finish.

Figure 5



Heat Exchanger for Wood Wiring Diagram

Figure 6



Heat Exchanger for Gas Logs Wiring Diagram

Five Year Limited Warranty for Royale Heat Exchanger

Custom Metal Comp. warrants its Royale Heat Exchanger to be free from defects in metal materials and/or workmanship, under normal use and conditions of service, for a period of five (5) years, subject to the limitations outlined below. Glass is warranted to be free from defect in materials, under normal use and conditions of service, for a period of one (1) year, subject to the limitations outlined below. Electrical components are warranted to be free from defect in materials, under normal use and conditions of service, for a period of one (1) year, subject to the limitations outlined below. This warranty is non-transferable and is extended exclusively for the benefit of the original purchaser beginning on the original date of retail sale. Custom Metal Comp. will, at its option, repair or replace any part that fails due to a defect in materials or workmanship at no charge (exclusive of freight) subject to the limitations of this warranty.

This warranty covers repair or replacement of parts only and applies exclusively to products purchased for consumer use. This warranty does not cover damage caused by transportation and/or handling or which results from alteration, accident, misuse, abuse, or improper installation. It also makes no warranty as to maximum temperature and stresses which may cause discoloration of metal finishes, distortion of metal parts, glass breakage, or damage to electrical components.

This warranty constitutes the entire warranty with respect to Custom Metal Comp. and/or its products. Custom Metal Comp. shall not be liable for consequential or indirect damages which are caused by defects in its product, by its repair or replacement. Custom Metal Comp. makes no other warranty, expressed or implied, including any warranty of merchantability, or warranty of fitness for a particular purpose. Implied warranties of merchantability and fitness for a particular purpose which may arise under state law are also limited in duration to five years from the original purchase of this product. Some states do not allow such limitations, in which case this limitation may not apply. The consumer may have other rights that vary from state to state.

If, during the warranty period, a product covered under this warranty proves to be defective in material or workmanship, a claim for warranty service should be made through your authorized Custom Metal Comp. Dealer. Proof of purchase will be required. The authorized dealer will procure replacement parts and/or contact Custom Metal Comp. if additional service is deemed necessary.

If you have questions about your product or the terms of your warranty please contact:

Fireplace Doors Online ~ 21701 RT 6 ~ Warren, PA 16365

When applying for warranty replacement, or ordering replacement parts, always specify the type of product, the color, the height, and width. Describe the damaged or defective part in detail. Please provide digital pictures if possible.