Models: #Z-42 #Z-42-CD

ZERO CLEARANCE FACTORY BUILT FIREPLACE

WARNING: READ INSTRUCTIONS CAREFULLY BEFORE INSTALLATION. FAILURE TO INSTALL THIS FIREPLACE CORRECTLY CAN CAUSE SERIOUS STRUCTURAL AND FIRE HAZARDS AND MAY VOID YOUR WARRANTY.
CONGRATULATIONS!

We welcome you as a new owner of a Kozy Heat wood burning fireplace. Kozy Heat products are designed with superior components and materials and assembled by trained craftsmen who take pride in their work. Our commitment to quality and customer satisfaction have remained the same for over 30 years. We offer a complete line of gas and wood fireplaces, unique cabinets and stylish accessories to compliment any décor. Adding a fireplace is one of the best ways to increase the value of your home and we are proud to offer a network of dealers throughout the country to help make your experience everything you imagine. We pride ourselves in being dedicated to not only function and reliability, but customer safety as well. We offer our continual support and guidance to help you achieve the maximum benefit and enjoyment from your Kozy Heat gas fireplace.

Jim Hussong
Dudley Hussong

Homeowner Reference Information
We recommend that you record the following information about your fireplace.

Model Name:______________________________ Date purchased/installed:___________
Serial Number:____________________________ Location on fireplace:_______________
Dealership purchased from:__________________ Dealer Phone:_____________________
Notes:_____________________________________________________________________
__________________________________________________________________________
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SAFETY INFORMATION

This fireplace has been tested and listed by Intertek Testing Services (Warnock Hersey) to UL 127-2008, CAN/ULC S610-M98 Safety Standards for U.S. and Canadian installations. This fireplace installation must conform with local building codes, or in the absence of local codes, with the NFPA 211 Standard for Chimneys, Fireplaces, and Vents.

IMPORTANT: BEFORE INSTALLING THIS FIREPLACE, THE AUTHORITY HAVING JURISDICTION SHOULD BE CONSULTED TO DETERMINE IF A PERMIT IS REQUIRED. INSTALLATION AND REPAIR SHOULD BE PERFORMED ONLY BY A QUALIFIED INSTALLER.

WARNING: THIS FIREPLACE HAS NOT BEEN TESTED WITH ANY GAS COMPONENT. TO REDUCE THE RISK OF FIRE OR INJURY, DO NOT INSTALL ANY GAS COMPONENT, INCLUDING AN UNVENTED GAS LOG SET INTO THIS FIREPLACE. DO NOT CONNECT THIS FIREPLACE TO A CHIMNEY FLUE SERVING ANOTHER APPLIANCE.

MOBILE HOME INSTALLATIONS:

WARNING: DO NOT INSTALL IN A SLEEPING ROOM.

CAUTION: THE STRUCTURAL INTEGRITY OF THE MOBILE HOME FLOOR, WALL, AND CEILING / ROOF MUST BE MAINTAINED.

♦ If this appliance is installed directly on carpeting, tile or other combustible material other than wood flooring, the appliance shall be installed on a metal or wood panel extending the full width and depth of the appliance.

♦ Combustible flooring 16” (406 mm) in front of and 8” (203 mm) to each side of the fuel opening must be insulated with non-combustible floor protection with a minimum insulation R-value of 0.8.

♦ Do not store clothing, furniture or combustibles within 36” (914 mm) of the fireplace.

♦ The chimney should be inspected monthly during the heating season to determine if a creosote buildup has occurred. If creosote has accumulated, it should be removed to reduce the risk of a chimney fire. We recommend a professional chimney cleaner inspect and clean the chimney at least once annually.

♦ Children and adults should be alerted to the hazards of high surface temperatures and should stay away to avoid burns or clothing ignition.

♦ Young children should be carefully supervised when they are in the same room as the appliance.

♦ The glass front or any part removed for servicing the appliance must be replaced prior to operating the appliance. Work should be done by a qualified service technician.

♦ Clean glass only when cool and only with non-abrasive cleansers.

♦ Do not operate this appliance with the glass/frame assembly removed, cracked or broken. The glass assembly, shall only be replaced as supplied by Hussong Mfg. Co., Inc. Replacement of the glass assembly must only be performed by a licensed or qualified service person. DO NOT SUBSTITUTE MATERIALS.

♦ Do not strike or slam glass assembly.

♦ Do not burn waste paper.

♦ Except when loading, the fireplace must be operated with the door / doors closed.

♦ Do not obstruct room air inlet and outlet grills. This may cause the fireplace to overheat.

♦ Burn only dry seasoned wood. Extremely hard woods, such as oak or ash can require up to two years of drying time to be sufficiently dry.

♦ It is recommended that smoke detectors be installed in your home as required by local building codes or the authority having jurisdiction.

♦ Some fuels, such as charcoal, may generate carbon monoxide, a dangerous, odorless gas. Exposure to carbon monoxide may cause serious illness or death.

♦ For further information on using your fireplace safely, obtain a copy of the National Fire Protection Association publication “Using coal & Wood Stoves Safely.” NFPA No. HS-10
FEATURES

STANDARD FEATURES

- EPA/WA Certified/Non-Catalytic (EPA emissions rate 3.34 g / hr.)
- High quality lifetime glass
- Arched glass valance (Z42)
- Large burning area
- Air-seal 10 ga. steel door (Z42)
- Twin air-seal cast iron doors (Z42-CD)
- Zero Clearance to stand-offs
- Air-wash system (keeps viewing area cleaner)
- (2) heat duct knock-outs for optional ducting (#970 kit required)

SAFETY FEATURES

- Tested by Intertek Testing Services (formerly Warnock Hersey)
- Sealed combustion chamber
- EPA certified
- Non-catalytic
- Uses 100% outside air for combustion
- U.S. and Canadian approved

OPTIONAL FEATURES

- Decorative grills in various styles and finishes
- Decorative screen doors in various styles and finishes (Z42 only)
- Automatic fan kit with variable speed control (2) 100 CFM
- 44” (1118 mm) lintel iron
- 6” flexible heat duct kit
- 4” non-closure air vent
- Finish material trim kits

WEIGHT

- Fireplace Weight (as packaged for shipment)
  - Z42: 515 lbs. (233.6 kg)
  - Z42-CD: 534 lbs. (242.2 kg)

Z-42
ARCHED DOOR MODEL

Z-42 CD
CAST IRON DOOR MODEL

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## SPECIFICATIONS

### FIREPLACE DIMENSIONS

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### CLEARANCE TO COMBUSTIBLES

**WITHIN ENCLOSURE AREA**
- Fireplace to back wall.................................0” (0 mm)
- Fireplace to sidewalls........................................0” (0 mm)
- Duct boots to framing.................................0” (0 mm)
- Top stand-off to header.................................0” (0 mm)
- Fireplace bottom to inside top of enclosure........72” (1.83 m)

**EXPOSED AREA**
- Wallboard to faceplate top edge/ sides.........................0” (0 mm)
- Fuel door opening to sidewall............................8” (203 mm)
- Fireplace face top to 8” (203 mm) mantel........12” (305 mm)
- Front of fireplace..............................................36” (914 mm)
- Air duct vent to ceiling.................................2” (51 mm)

**NOTE:** Even though the minimum clearance from the back and side walls is 0”, 1/4” (6 mm) space is recommended for heat expansion.
1. If masonry (optional) will be used, prepare foundation for the masonry load. A lintel is required to support the added weight above the fireplace.

2. Frame an opening for the fireplace, allowing for vent installation and type of installation (corner, flat wall application).

3. Install optional hearth.

4. Install optional heat duct venting.

5. Install any electrical wiring.

6. Install fireplace into framing.

7. Attach combustion air pipe.

8. Install chimney.

9. Install desired facing material.

10. Install mantel.

11. Install optional fan.

12. Install firebrick.

13. Install door components and grills.


**NOTE: The qualified installer should follow the procedure best suited for the installation.**

**PLACEMENT CLEARANCE REQUIREMENTS**

- Location of doors and windows on all floors of the home in relation to the fireplace and chimney must be considered and be in compliance with applicable codes, if any.

- This fireplace must be installed on a level surface capable of supporting the fireplace and venting.

- Fireplace must be placed directly on wood or non-combustible surface (not linoleum or carpet) extending the entire depth and width of fireplace.

**IMPORTANT: Combustible flooring 16\" (406 mm) in front of and 8\" (203 mm) to each side of the fuel opening must be insulated with non-combustible floor protection with a minimum insulation R-value of 0.8.**

Manufactured hearth materials will usually have a published R value (resistance to heat) or k value (conductivity of heat). Use the following formula to convert a k value to an R value.

\[
R = \frac{1}{k} \times \text{inches of thickness}
\]

See complete formula on page 28.

- Metal sealing strips must be used under fireplace and hearth extension.

- The height of the enclosure must be a minimum of 72\" (1.83 m). This measurement is from the fireplace bottom to the inside top of enclosure.

- Due to high surface temperatures, fireplace should be located out of traffic and away from furniture and draperies.

- Please be aware of the large amount of heat this fireplace will produce when determining a location.

See illustration on following page.
PLACEMENT CLEARANCE REQUIREMENTS

DO NOT FILL THE SPACE DIRECTLY ABOVE FIREPLACE WITH ANY MATERIAL (EXCEPT WOOD FRAMING).
Do not install shelving or cupboards into this area.

- Minimum enclosure height: 72” (1.83 m)
- Minimum width: 48” (1219 mm)
- Minimum depth: 16” (406 mm)
- Metal sealing strips
- Fuel door opening to adjacent side wall 8” (203 mm) minimum
- Non-combustible floor protection with minimum insulation R-value of .08
- Fireplace face top to 8” (203 mm) mantel 12” (305 mm) minimum

WARNING: FOLLOW ALL INSTRUCTIONS AND CLEARANCES AS OUTLINED THROUGHOUT THIS MANUAL.

Do not install shelving or cupboards into this area.
IMPORTANT: If this fireplace is installed on an exterior wall, it must be insulated the same as any other exterior wall to prevent cold air from entering the home.

Combustion air pipes must be secured with screws to prevent separation and cold air transfer.

NOTE: All dimensions include 1/4" (6mm) side and back expansion space and 1/2" (13 mm) sheathing. Sheathing is flush with fireplace front. Dimensions must be adjusted if sheathing is more than 1/2" (13 mm) thick.
FRAMING

WALL ENCLOSURE ROUGH OPENING

Frame an opening to fit the fireplace. All required clearances must be maintained.

MINIMUM WALL ENCLOSURE DIMENSIONS: 42-1/2” (1080 mm) wide x 38-1/4” (792 mm) high x 26-1/4” (667 mm) deep.

IMPORTANT: Allow a minimum of 6” (152 mm) in framing width dimension for the combustion air pipe which will be installed after fireplace has been inserted into framing. Please refer to illustration on previous page.

THE ENCLOSURE MUST BE A MINIMUM OF 72” (1.83 m) HIGH FROM THE BOTTOM OF FIREPLACE TO THE INSIDE TOP OF ENCLOSURE.

HEARTH EXTENSION

APPLIES TO BOTH RAISED AND NON-RAISED HEARTHS: Combustible flooring 16” (406 mm) in front of and 8” (203 mm) to each side of the fuel door opening must be insulated with non-combustible floor protection with a minimum insulation R-value of 0.8.

Manufactured hearth materials will usually have a published R value (resistance to heat) or k value (conductivity of heat). Use the following formula to convert a k value to an R value.

\[ R = \frac{1}{k} \times \text{inches of thickness} \]

See complete formula on page 28.

IMPORTANT: Metal sealing strip (included with fireplace) must be used. Install sealing strip so it is centered under fireplace and hearth extension the full width of fireplace. A sand-cement grout may also be used between the hearth and an on-site constructed hearth extension.

CAUTION: The lower grill must be allowed to open completely. Do not place the fireplace in such a manner that would obstruct this grill.

If installing optional #600-1 Fan Kit, run electrical wiring at this time.
If installing optional #970 Heat Duct Kit, please refer instructions included with kit at this time.

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This fireplace requires outside air for combustion and is manufactured with a collar protruding approximately 1/4" (6 mm) from the right side of fireplace. An outside air pipe adaptor (4" (102 mm) diameter and 3" (76 mm) in length), is included with fireplace to properly connect the outside air pipe to fireplace.

**IMPORTANT: DO NOT CONNECT OUTSIDE AIR ADAPTOR UNTIL AFTER FIREPLACE HAS BEEN INSERTED INTO FRAMING.**

1. Insert the combustion air intake adaptor into collar on right side of fireplace. Secure with screws.

2. Connect a 4" (102 mm) galvanized or heavier pipe to adaptor and run to nearest outside wall. Secure with screws. See venting configuration on following page. Aluminum flex duct pipe approved for outside combustion air may also be used. Do not crush or tear the aluminum flex duct pipe.

**WARNING: DO NOT USE PLASTIC FLEX PIPE, SUCH AS DRYER VENT PIPE FOR THE COMBUSTION AIR PIPE VENTING.**

3. Avoid running the combustion air an excessive length. Follow the shortest distance possible to terminate to the outside.

**WARNING: DO NOT TERMINATE INTO ATTIC OR GARAGE. TERMINATION MUST BE TO THE OUTSIDE OF HOME.**

If ducting beside chimney chase, terminate the intake air at least 3 ft. (914 m) below the termination level of chimney. The air pipe may also be ducted below the floor level of fireplace providing it is ducted to the outside.

**NOTE: If the combustion air pipe runs for any distance outside the enclosure, but inside the house, wrap with insulation to eliminate condensation or frost build-up.**

4. Mount a standard metal vent cover designed for 4" (102 mm) pipe on the outside exterior wall with the louvers pointing downward.
Do not place combustible material below stand-offs.

Hearth Extension

Metal sealing strip centered under fireplace and hearth the entire width of fireplace.
**CHIMNEY LOCATION**

- **Recommended Location**: Above peak
- **Recommended Location**: Inside heated space
- **Marginal Location**: Below peak
- **Marginal Location**: Wind loading possible

**Wind Direction**

- **Recommended Location**: Above peak
- **Not Recommended**: Not the highest point of roof
- **Marginal Location**: Wind loading possible

**Not Recommende**

- **Too close to tree**
- **Below adjacent structure**
- **Lower roof line**
- **Avoid outside wall**

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**Slanted Roofs**

- Chimney must extend 3 ft. (914 m) above the roof
- Chimney must extend 2 ft. (610 mm) above any portion of the roof or adjacent structures within 10 ft. (3.05 m) of the chimney.

**Flat Roofs**

- Chimney must extend 3 ft. (914 m) above the roof
- Chimney must extend 2 ft. (610 mm) above any portion of the roof or adjacent structures within 10 ft. (3.05 m) of the chimney.
CHIMNEY INSTALLATION

CHIMNEY REQUIREMENTS

MINIMUM CHIMNEY HEIGHT: 12 ft. (3.66 m)

Chimney must extend a minimum of 3 ft. (914 mm) above the highest point where it passes through the roof and at least 2 ft. (610 mm) higher than any portion of a building within 10 ft. (3.05 m). See illustrations on previous page.

MAXIMUM CHIMNEY HEIGHT: 50 ft. (15.24 m)

ELBOWS: A maximum of (4) 30˚ elbows may be used (2 sets offsets).

MAXIMUM OFFSET: 4 ft. (1219 mm)

If (2) 30˚ elbows are used, the chimney height must be a minimum of 14 ft. (4.27 m).
If (4) 30˚ elbows are used, the chimney height must be a minimum of 25 ft. (7.62 m).

Do not connect this fireplace to a chimney flue serving another appliance.

APPROVED CHIMNEY SYSTEMS

Selkirk Metalbestos: UL (Ultra Temp)
Simpson Dura-Vent: Dura-Plus
Simpson Dura-Vent: Dura-Tech
American Metal Products: Amer-Tech
SuperPro / SuperVent
ICC / Excel

Alternate listed 6” diameter HT-type UL 103 All-Fuel Chimney Systems, including CAN-05629 listed chimneys may be used.

Follow chimney manufacturer’s instructions for proper chimney installation, clearance to combustibles and support bracket requirements.

CAUTION: DO NOT FILL REQUIRED CLEARANCES BETWEEN CHIMNEY AND COMBUSTIBLES WITH INSULATION!

ANCHOR PLATE INSTALLATION

IMPORTANT: The appropriate anchor plate must be purchased with the chimney system you are installing. Sealant and screws for attaching the anchor plate to fireplace are included.

Place a bead of sealant under chimney anchor plate. Push plate collar into the fireplace flue. Secure with (4) screws.

IMPORTANT: The anchor plate must fit into the flue collar on fireplace to prevent creosote leakage.
CHIMNEY INSTALLATION

1. After anchor plate installation, connect first chimney section per manufacturer’s installation instructions.

2. Cut and frame the required holes in floor, ceiling, and roof where chimney will pass through.

**WARNING:** REFER TO CHIMNEY MANUFACTURER’S INSTRUCTIONS FOR PROPER FRAMING SIZE, CLEARANCE TO COMBUSTIBLES AND SUPPORT BRACKET REQUIREMENTS.

**WARNING:** CLEARANCE BETWEEN CHIMNEY AND COMBUSTIBLES SHOULD NEVER BE LESS THAN 2” (51 mm). DO NOT FILL THIS REQUIRED AIR SPACE WITH INSULATION OR OTHER MATERIALS.

**FIRESTOP:** A firestop must be installed where the chimney passes through each floor level. Refer to chimney manufacturer’s instructions for part numbers and installation procedures.

**ATTIC INSULATION SHIELD:** An attic insulation shield is required by the chimney manufacturer for protection where the chimney passes into attic space. This will prevent debris and insulation from coming into contact with the chimney. Refer to chimney manufacturer requirements.

3. Install chimney sections, firestops, attic insulation shields, etc., following chimney manufacturer’s instructions and requirements, along with following the chimney minimum / maximum height requirements as outlined in this installation manual.

4. Install the flashing, storm collar and chimney cap following chimney manufacturer’s instructions.

5. Refer to chimney manufacturer’s requirements concerning supports, bracing, anchors, etc.

**WARNING:** THE CEILING / ROOF THIMBLE MUST EXTEND COMPLETELY THROUGH THE CAVITY TO THE OUTERMOST PLANE OF THE ROOF.
OPTIONAL FAN INSTALLATION

INSTALLATION OF THIS FAN SHOULD BE DONE ONLY BY A QUALIFIED INSTALLER

WARNING: MAKE SURE HOUSEHOLD BREAKER IS SHUT OFF PRIOR TO WORKING ON ANY ELECTRICAL LINES.

IMPORTANT: Wiring must be done before enclosing fireplace sides. An electrical box and romex connector are pre-installed on a removable panel on the right side of fireplace. A receptacle / speed control assembly and (3) wire nuts are included in the fireplace components packet.

The optional fan kit includes:
- (2) 110 CFM fan with temperature control switch and 4 ft. (1219 mm) fan cord
- (4) 1/4” nuts

NOTE: Code approved line voltage wiring 14 gauge or better must be used when wiring this assembly. Refer local electrical codes for specific requirements.

WARNING: THIS APPLIANCE IS EQUIPPED WITH A THREE-PRONG (GROUNDING) PLUG FOR 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.

NOTE: Fan Shields, Speed control / receptacle assembly & (3) wire nuts are included in the fireplace components packet.

FAN SHIELD INSTALLATION

Two fan shields are included in the fireplace components packet. These shields divert more air circulating through the fans upward, which increases volume exiting through the upper grill. Install shields onto fans before installing fans in fireplace.

Slide one corner of a fan shield onto the front chute on each fan, making sure ‘V’ portion of shield is inside chute.

Slide fan shield down onto the chute.
The lower grill must be removed from the fireplace prior to installation of this fan. Refer to page 18 of this installation manual for assistance if necessary.

1. Insert fans through the lower grill opening, push to the back. Align mounting slots in fan brackets onto the mounting studs. Secure with nuts.

2. Connect fan wiring by attaching connectors on right fan onto terminals on left fan.

3. From inside the lower right grill opening, loosen screws securing removable access panel (with electrical box & romex connector installed). Remove panel.

4. Insert 110V - 120V wiring (with ground) through romex connector and wire to the speed control / receptacle assembly, matching the black (hot), white (neutral), and green (ground) wires to the corresponding wires on the speed control / receptacle assembly.

5. Secure speed control / receptacle assembly to the electrical box with (2) screws provided.

6. Re-install electrical access panel. Tighten screws.

7. Attach the temperature control switch to the bottom of firebox.

8. Plug cord into the electrical box receptacle.

9. Turn speed control counter-clockwise until it ‘clicks’. This is the ‘OFF’ position.

10. Turn speed control ‘ON’ by turning knob clockwise past the ‘click’ - this is the highest setting.

11. Re-install lower grill. Refer to page 18 of this installation manual if necessary.

NOTE: This appliance must be electrically grounded and connected in accordance with local codes, or in the absence of local codes, with the National Electrical Code, ANSI/NFPA 70 Current Edition, or the Canadian electrical Code CSA C22.1.

NOTE: This fan will not operate unless the speed control has been turned ‘ON’ and sufficient heat has been applied to the temperature control switch. The fan will turn ‘ON’ and ‘OFF’ automatically as the fireplace heats and cools. Adjust fan to desired speed while it is running.

TEMPERATURE CONTROL SWITCH POSITION

Before adjusting the temperature control switch, unplug the 3-prong plug on the fan cord from the receptacle. Adjust position of the temperature control switch to a warmer location under the firebox to turn the fan ‘ON’ sooner or move it to a cooler location under firebox to turn the fan ‘ON’ later. The fan will turn on when the sensor in the temperature control switch reaches 110° F and will turn ‘OFF’ when the sensor reaches 90° F. After adjustment, plug the 3-prong plug on fan cord into the receptacle.
FIREBRICK INSTALLATION

The following firebrick are included with this fireplace:

7- 4-1/2” x 9” (114 mm x 229 mm)
6- 4-1/2” x 10-3/4” (114 mm x 273 mm)
1- 4-1/2” x 4-1/2” (114 mm x 114 mm)

10- 4-1/2” x 13-1/2” (114 mm x 343 mm)
2- 2-1/2” x 13-1/2” (64 mm x 343 mm)
1- Firebrick retainer

Firebrick refractory panel in located on top of pipes. DO NOT DISCARD.

1. Position (5) 4-1/2” x 13-1/2” (114 mm x 343 mm) and (1) 2-1/2” x 13-1/2” (64 mm x 343 mm) firebrick along back wall of firebox.

2. Starting at the back, position (3) 4-1/2” x 10-3/4” (114 mm x 273 mm) under the firebrick brackets along each side of firebox.

3. Place (7) 4-1/2” x 9” (114 mm x 229 mm) and (1) 4-1/2” x 4-1/2” (114 mm x 114 mm) firebrick at the center back.

4. Lay (5) 4-1/2” x 13-1/2” (114 mm x 343 mm) and (1) 2-1/2” x 13-1/2” (64 mm x 343 mm) firebrick over the firebrick refractory panel resting on the (4) stainless steel pipes at top of firebox.

5. With the 45˚ flange down, slide the firebrick retainer between the top of the first pipe & firebrick. Push retainer back until it is against the front of the firebrick and under the refractory panel. Set retainer down on top of pipe. The 45˚ flange on the firebrick retainer should now be behind the first pipe.
Frame in the fireplace. Maintain the necessary clearances to combustibles. The framing materials should not come in actual contact with the fireplace. If installing a mantel, (combustible material may be used) follow the mantel projection chart below.

**NOTE:** A non-combustible material such as brick, tile, marble, or stone may be placed over the top and side face sections. This material **MUST NOT** come in direct contact with the fireplace or cracking of face materials will occur. Facing material should overlap the side framing members approximately 1/4” - 3/8” (6 mm - 10 mm).

**CAUTION:** If using “thin” brick, a non-combustible facing material such as rock board or metal must be used. Do not attach directly to fireplace face.

**COMPLETE THE INSTALLATION**

**UPPER GRILL INSTALLATION**
1. Line rods of upper grill up with the holes located at top of upper grill opening.
2. Push up into holes until bottom of rods clear the glass frame. Place bottom of rods into lower holes and release.

**UPPER GRILL REMOVAL**
1. Lift grill up far enough to clear the bottom holes. Pull bottom out.

**LOWER GRILL INSTALLATION**
1. Remove 1/4” nuts from lower grill assembly.
2. Insert bolts through hinges on lower grill opening.
3. Re-attach nuts.

**LOWER GRILL REMOVAL**
1. Remove 1/4” nuts from lower grill assembly.
2. Pull grill assembly out of hinges.
3. Re-attach nuts to grill assembly.

**HANDLE INSTALLATION - ARCHED DOOR MODELS**
Thread black spring handle (included in fireplace components packet) into nut located in the mounting hole at the top right of door front.

**HANDLE INSTALLATION - CAST IRON DOOR MODELS**
Thread black spring handles (included in fireplace components packet) onto door handles.
DOOR SEAL ALIGNMENT & ADJUSTMENT (Arched Door Model)

Every effort has been made at the factory to ensure a proper door seal prior to shipment. Misalignment, however, may still occur during shipment, mishandling and/or installation.

The following procedures will help you determine if the door is sealing properly, and how to achieve a proper seal.

CHECKING THE SEAL

1. Close and latch door.

2. Check seal by pushing against corners of glass.
   - No movement indicates proper seal.
   - Any movement between the glass and firebox face at any corner indicates an inadequate seal. This will create creosote build-up on glass and cause the fire to burn faster.

HINGE ADJUSTMENT

1. Close and latch door.

2. Place wooden shim (included) between the bottom of door and the face on the latch side. This is necessary to ‘hold’ the door in horizontal alignment.

3. Determine if the upper, lower, or both hinges need adjustment.

IMPORTANT: DO NOT LOOSEN NUTS SECURING THE DOOR HINGES AT THE TOP AND BOTTOM OF DOOR.

UPPER FACE HINGE: Remove upper grill. Locate the two nuts securing upper face hinge.

LOWER FACE HINGE: Open lower grill and locate the two nuts securing the lower face hinge inside the lower grill opening (similar to the upper grill hinge).

4. Using a 7/16 wrench or nut driver, LOOSEN BUT DO NOT REMOVE the two nuts. Push the door in slightly, (either top or bottom, depending on adjustment needed) to achieve a tighter door seal. Retighten nuts.

5. Remove shim. Repeat steps #1 & #2 in the ‘CHECKING THE SEAL’ section above.

6. Repeat steps #1 - #5 of this section until proper door seal is achieved.

NOTE: The door may need to be ‘pulled out’ if it is binding at either the top or bottom right corners.
LATCH ADJUSTMENT

1. Open door and locate the ‘latch dog’ secured to firebox face.

2. Determine whether the upper, lower, or both corners of the door seal need adjustment.

3. Remove and save the acorn nuts securing the latch dog. Remove and save latch dog.

4. Place a washer (included in parts packet) onto the top and / or bottom mounting bolt on the latch dog. Re-install onto firebox face.

   **NOTE:** A washer has been installed on each mounting bracket at the factory.
   You may only need to place a washer at top or bottom mounting bolt, depending on where the seal needs adjustment.

5. Re-install acorn nuts.

6. Re-check door seal as instructed in the ‘CHECKING THE SEAL’ section on previous page.

---

NOTICE TO INSTALLER / HOMEOWNER

Achieving the proper seal and door alignment is a trial and error adjustment. You may need to make additional minor adjustments after the first few initial burn periods. Deposits which collect on the glass at any corner while the fireplace is in operation indicates an improper seal and the door should be adjusted as instructed above.
DOOR SEAL ADJUSTMENT (Cast Door Model)

CHECKING THE SEAL

1. Open doors, place a piece of paper between the door and the face frame. Close and latch doors.

2. Pull gently on the piece of paper. If it slips out with little or no force, the door seal needs adjustment. Follow directions below for seal adjustment.

3. Perform the paper test on all outside edges of doors.

SEAL ADJUSTMENT

Tools needed: (2) 1/2" wrenches
(1) 5/64 allen wrench

1. Note orientation of latch and door handle.

2. Place one 1/2" wrench on the 5/16 nut located farthest away from door frame and the other on the door latch and loosen nut.

3. Loosen the allen screw just far enough to allow you to rotate the latch.

4. The latch must be rotated one full turn in either direction, depending on whether the door seal needs tightening or loosening. The latch and door handle should line up with each other when completed.

5. Tighten allen screw.

6. Re-tighten nut.

IMPORTANT: Do not tighten doors to the point that the paper cannot be removed. This will cause the gasketing to compress and prematurely fail.

Eventually the gasketing material will need to be replaced. When no amount of door seal adjustment creates a seal, the door gasketing must be replaced.

When replacing the gasketing, remember to first reverse the door latch several rounds to accommodate the thicker material. Adjust as needed.
FIREPLACE OPERATION

This fireplace system uses outside air for combustion. Air is drawn into the fireplace from outside your home, thus eliminating valuable oxygen from being pulled from inside the home where it is needed for other fuel burning appliances.

Kozy Heat’s air seal door system seals the fireplace, which eliminates heat loss, allowing you to completely control your fire. This gives you maximum heat potential using a minimum amount of firewood.

The Kozy Heat fireplace heating system creates heat by a convection air flow through the heat chamber surrounding the fireplace. Room air is drawn into the lower grill, is heated as it circulates up through the chamber, and exits through the upper grill. Optional Fan Kit #600-1 increases the circulating air flow. This heated air can also be ducted to other rooms through the use of the #970 Heat Duct Kit.

**WARNING:** FOR USE WITH SOLID FUEL ONLY. Use solid wood, or processed solid fuel firelogs only. If processed solid fuel firelogs are used, do not poke or stir logs while they are burning. Use only firelogs that have been approved for use in a fireplace, and refer to firelog warnings and caution markings on packaging prior to use.

**WARNING:** DO NOT INSTALL A FIREPLACE INSERT OR ANY OTHER PRODUCT NOT SPECIFIED FOR USE WITH THIS FIREPLACE.

**WARNING:** THIS FIREPLACE HAS NOT BEEN TESTED WITH ANY GAS COMPONENT OR ACCESSORY. DO NOT INSTALL A GAS COMPONENT, INCLUDING A GAS LOG SET INTO THIS FIREPLACE.

**HOW TO OPERATE YOUR Z-42**

1. Open intake damper by putting it in the ‘O’ (down) position.
2. Build fire directly on top of firebrick, no closer than 6" (152 mm) from front of firebox. Do not elevate fire or use a grate. Build base with kindling and crumpled newspaper. Lay larger kindling or small logs diagonally over kindling base.
3. Light fire with matches. **NEVER USE GASOLINE, GASOLINE-TYPE LANTERN FUEL, KEROSENE, CHARCOAL LIGHTER FLUID OR SIMILAR LIQUIDS TO START OR FRESHEN UP A FIRE. KEEP ALL SUCH LIQUIDS AWAY FROM FIREPLACE WHILE IT IS IN USE.**
5. When fire is burning well on kindling, open intake damper, wait 1 minute, open door and add larger wood. Slowly load firebox with average sized wood over a period of 30 minutes. **DO NOT OVERFIRE,** this could damage the fireplace and void the warranty.

**NOTE:** This fireplace should be operated only with the door / doors closed and latched. Operating fireplace with door / doors open causes flames to be drawn out into the living space, creating a smoke and fire risk.

6. Adjust intake damper to desired heat output position. See illustration below. **HELPFUL HINT:** To keep glass cleaner, never completely close the intake damper.

---

**INTAKE AIR DAMPER CONTROL**

- **LOW:** CLOSED
- **MED. LOW:** 1/8" (3 mm) OPEN
- **MED. HIGH:** 3/8" (10 mm) OPEN
- **HIGH:** 100% OPEN

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**ASH DISPOSAL**

Ashes should be placed in a metal container with a tight fitting lid. The closed container of ashes should be placed on a non-combustible floor or on the ground, well away from all combustible materials, pending final disposal. If the ashes are disposed of by burial in the soil or otherwise locally dispersed, they must be retained in the closed container until all cinders have thoroughly cooled.
MAINTENANCE REQUIREMENTS

CREOSOTE INFORMATION

When wood is burned slowly, it produces tar and other organic vapors, which combine with expelled moisture to form creosote. The creosote vapors condense in the relatively cool chimney flue of a slow burning fire. As a result, creosote residue accumulates on the flue lining. When ignited, this creosote makes an extremely hot fire. The chimney should be inspected monthly during the heating season to determine if a creosote buildup has occurred. If a significant layer of creosote has accumulated (1/8” (3 mm) or more) it should be removed to reduce the risk of a chimney fire.

Inspection can be accomplished from the top of the chimney cap or from inside the stove by removing the upper firebrick. We recommend a professional chimney cleaner inspect and clean the chimney at least once annually.

GLASS INFORMATION

Clean glass on a regular basis. Should glass become discolored with creosote, follow this procedure for easy removal. Burn fireplace with the outside air damper completely open for 30-45 minutes. This will normally clean the glass and also minimize ashes in the firebox. Oven cleaner or a cleaner specifically designed for fireplace may also be used. DO NOT use abrasive cleaners. Clean only when glass is cooled.

Do not slam doors. This may cause glass damage.

In the event of glass breakage, let fireplace cool completely. DO NOT USE THIS FIREPLACE WITH BROKEN OR CRACKED GLASS. Replace only with Kozy Heat part #150380 for Model #Z-42 and part #150250 for Model Z-42-CD. Do not substitute materials.

BROKEN GLASS REMOVAL

ARCHED DOOR MODEL:

1. Open door until it is at a 45˚ angle from the face.
2. Remove bottom hinge pin.
3. Lift door up off hinges far enough to release the upper hinge pin.
4. Remove door and lay face side down on a flat protected surface.
5. Remove and save screws and glass clips. Carefully remove broken glass.
6. Place new glass with gasket inside door frame (the gasket with second layer should be facing you).
7. Secure glass with glass clips and screws previously removed. (Glass clips are placed between the first and second layers of the gasket).
8. Re-install door and hinge pins.

CAST IRON DOOR MODEL:

1. Remove door /doors from fireplace by lifting ‘up’ off hinges. Lay face down on a flat protected surface.
2. Remove and save screws and glass clips. Carefully remove broken glass. Inspect glass gasket on inside frame of door / doors. Replace if necessary.
3. Place new glass with gasket inside door frame, secure with glass clips and screws previously removed.
4. Re-install door and hinge pins, making sure pins are properly seated before closing door / doors.
OPTIONAL #970 HEAT DUCT KIT - INSTALLATION INSTRUCTIONS

CAUTION: READ & FOLLOW INSTRUCTIONS CAREFULLY PRIOR TO & DURING INSTALLATION OF THIS OPTIONAL HEAT DUCT KIT.

COMPONENTS INCLUDED WITH THIS KIT:

- (1) 6” DIAMETER FLEXIBLE HEAT DUCT PIPE, EXPANDABLE TO 20 FT.
- (1) REGISTER MOUNTING FRAME W/ COLLAR
- (1) REGISTER COVER W/ SCREWS
- (1) DUCT COLLAR
- (1) FAN ASSEMBLY
- (1) FAN HOUSING COVER PLATE
- (1) 6” DIAMETER FLEXIBLE HEAT DUCT PIPE, EXPANDABLE TO 20 FT.
- (1) REGISTER MOUNTING FRAME W/ COLLAR
- (1) REGISTER COVER W/ SCREWS
- (1) DUCT COLLAR
- (1) FAN ASSEMBLY
- (1) FAN HOUSING COVER PLATE

HARDWARE PKG.:

- (1) FAN SPEED CONTROL
- (1) SPEED CONTROL MOUNTING BRACKET
- (2) MOUNTING BRACKET SCREWS
- (11) SHEET METAL SCREWS
- (4) SHEETROCK SCREWS
- (3) FLANGE NUTS
- (1) STRAPPING CORD
- (2) WIRE NUTS
- (2) FAN WIRES W/ CONNECTORS

NOTE: A JUNCTION BOX, COVER & HARDWARE MUST BE PURCHASED TO MOUNT THE SPEED CONTROL.

WARNING: DO NOT SUBSTITUTE THE FLEXIBLE HEAT DUCT PIPE WITH PLASTIC VENT PIPE!

SPECIFICATIONS:

- THIS HEAT DUCT KIT MAY BE USED ON KOZY HEAT FIREPLACE MODELS: #932 DV, #936 DV, #942 DV, #961 DV & #Z-42.
- CLEARANCE TO COMBUSTIBLES: 0” CLEARANCE FROM AIR DUCT TO CEILING: 2”
- MINIMUM VENT RUN: 2 FT.
- MAXIMUM VENT RUN: 20 FT. IN ANY DIRECTION INCLUDING DOWNWARD.

THE FIREPLACE IS MANUFACTURED WITH TWO HEAT DUCT KNOCK-OUTS. ONE OR BOTH HEAT DUCTS MAY BE UTILIZED, AS DESIRED.

THE REGISTER MOUNTING FRAME IS DESIGNED TO FIT BETWEEN 2” X 4” STUD WALLS, 16” O.C.

OVAL DUCT PIPE (EQUIVALENT TO 6” ROUND) MAY BE USED IN CONJUNCTION WITH THE 6” DIAMETER FLEXIBLE HEAT DUCT PIPE INCLUDED WITH THIS KIT. IT MUST BE PURCHASED FROM A HVAC SUPPLIER.

INSTALLATION OF THIS DUCT KIT & ELECTRICAL WIRING MUST BE PERFORMED BY A QUALIFIED SERVICE PERSON AND IN ACCORDANCE WITH LOCAL CODES, IF ANY, AND WITH THE NATIONAL ELECTRICAL CODE, ANSI/NFPA 70, CURRENT EDITION.

CAREFULLY PLAN THE LOCATION OF THE DUCT PIPE RUN(S) AND REGISTER IN RELATION TO THE DESIRED LOCATION OF THE FIREPLACE. REFER TO DIAGRAM FOR POSSIBLE APPLICATIONS.
PREPARE THE FIREPLACE: (NOTE: A KOZY HEAT GAS BURNING MODEL IS SHOWN IN FIGURES 1 - 5.)

Remove one of the 6” diameter knock-outs located at the top of the fireplace. If both heat ducts will be used, remove both knock-outs. REFER TO FIGURE 1.

Figure 1

For each 6” knock-out removed in step #1, remove the second knock-out located directly below the 6” opening in the heat shield. REFER TO FIGURE 2 BELOW.

MODEL Z-42: Remove the third knock-out directly below the one removed above.

A. Bend the 3 tabs up & out far enough to allow duct collar & duct pipe installation. FIG. 2

Figure 2

Slide the duct collar, with the circulation holes ‘down’, into the 6” knock-out until it rests on top of the heat shield. FIGURES 3 & 4.

Figure 3

ATTACH THE DUCT PIPE TO THE FIREPLACE:

1. Slide the 6” duct pipe over the collar until it rests on top of the fireplace.

2. Bend the tabs up and over the duct pipe.
   A. Secure the collar & duct pipe by placing a screw thru the hole in the tab & through both the duct pipe & collar.

3. Repeat steps #1 & #2 for remaining knock-out, if used.

4. Position the fireplace in the desired location.
INSTALL THE REGISTER MOUNTING FRAME, JUNCTION BOX & RUN THE FAN WIRING:

NOTE: THE REGISTER MOUNTING FRAME & FAN HOUSING IS DESIGNED TO FIT BETWEEN 2" X 4" STUD WALLS, 16" O.C.. ADDITIONAL FRAMING WILL BE NECESSARY IF A LARGER OPENING EXISTS.

NOTE: THE FAN MOTOR ON YOUR HEAT DUCT KIT MAY BE ON THE OPPOSITE SIDE OF THE FAN FROM WHAT IS SHOWN IN THE FOLLOWING FIGURES. A ROMEX CONNECTOR & GROUNDING SCREW ARE LOCATED ON THE MOTOR SIDE OF THE BRACKET.

REFER TO FIGURE 6 FOR THE FOLLOWING STEPS.

1. Locate & mark position of the register.
2. Place the register mounting bracket into the opening.

   A. Level & adjust mounting bracket. The sides of the mounting bracket should be flush with the front of the studs and the front of the mounting bracket should protrude ½" in front of the studs. (This will allow enough room for ½" sheet rock to be installed.

   B. Secure the mounting bracket to framing with the (4) sheet rock screws provided. (2 each side as shown in Figure 6.)

3. Install a junction box for the fan speed control on the wall in desired location. The speed control is used to operate the fan and adjust its speed.

INSTALL & WIRE THE FAN ASSEMBLY: (REFER TO FIGURE 7)

1. Place the flange nuts onto the studs at the back of the register mounting bracket.

2. Align the (3) slots on the fan assembly to the studs and slide into position.

   A. Tighten the flange nuts to secure.

3. Slide the connectors on the fan wires included with this kit onto the fan terminals.

4. Properly wire the 110 VAC wire to the hot & neutral fan wires and speed control wires with the wire nuts provided.

   IMPORTANT: THE FAN MUST BE PROPERLY GROUNDED. A GROUNDING SCREW HAS BEEN PROVIDED TO SECURE THE GROUNDING WIRE TO THE REGISTER MOUNTING BRACKET. REFER TO FIGURE 6.

Refer to wiring diagram on page #26.
RUN THE DUCT PIPE AND SECURE TO THE REGISTER MOUNTING BRACKET

1. Run the duct pipe to register location. If oval pipe will be used in conjunction with the 6" round duct pipe, shape the round duct pipe to fit outside the oval duct pipe.

A. Secure with sheet metal screws provided.

2. If oval duct pipe has not been used, shape the 6" round duct pipe so it will fit outside the oval collar on the register mounting bracket.

REFER TO FIGURE 8:

A. Slide the pipe over the oval collar until it touches the register mounting bracket.

B. Secure the duct pipe to the oval collar by placing the locking strap around the pipe positioning it above the bead on the lower end of the collar. This will prevent the pipe & locking strap from sliding off the collar.

C. Pull the locking strap tight enough to firmly secure the duct pipe.

OPTIONAL: THE DUCT PIPE MAY BE SECURED WITH ADDITIONAL SCREWS (PROVIDED).

3. If oval duct pipe has been used, slide the duct pipe over the oval collar on the register mounting bracket & secure with the sheet metal screws provided.

COMPLETE THE INSTALLATION:

1. Install sheet rock or wall finish material as desired before attaching register cover & the fan housing cover plate.

2. With the cut out portion over the fan chute, align the holes in the fan housing cover plate to the corresponding holes in the register mounting plate & fan assembly & secure with the (4) screws provided. FIGURE 9.

3. Slide the speed control through the mounting bracket and secure with the mounting nut. FIGURE 9.

4. Secure the mounting bracket to the junction box with the (2) screws provided. FIGURE 9.
5. Install register cover by centering it over the fan housing cover plate. Secure to the stud wall with the white mounting screws (provided). FIG. 10.

6. Attach a cover plate (not provided) and place the control knob onto the speed control. FIG. 10.

7. Complete fireplace installation by following instructions included with the fireplace.

OPERATING INSTRUCTIONS:

1. Upon complete fireplace installation and after the initial burn period, turn the fireplace burner ‘on’ by following the lighting instructions included with the fireplace.

2. Allow the fireplace to heat up approximately 15 minutes.

3. Put the heat duct fan into operation by turning the wall-mounted speed control counter-clockwise until it ‘clicks’. The fan should turn ‘on’ and will be running at its highest speed.
   
   A. Adjust the speed to desired air flow level by turning the speed control knob counter-clockwise.

MAINTENANCE:

The duct register must be kept clear and unobstructed. Clean & vacuum as necessary to remove dust, lint, etc. which will inhibit proper air flow.

The register cover & fan housing cover plate should be removed at least annually to remove dust, lint, etc. from the fan. More frequent cleaning may be necessary.

The fireplace must be maintained and serviced as outlined in the unit installation & operating instructions.
How to determine if alternate floor protection materials are acceptable.

All floor protection materials must be non-combustible (i.e., metals, brick, stone, mineral fiber boards, etc.). Any organic materials (i.e., plastics, wood, paper products, etc.) are combustible and must not be used. The floor protection specified may include some form of thermal designation such as R-value (thermal resistance), k-factor (thermal conductivity), or C-factor (thermal conductance).

PROCEDURE:

a. Convert specification to R-value:
   
   i. R-value given - no conversion needed.
   ii. k-factor is given with a required thickness (T) in inches: \( R = \frac{1}{k} \times T \)
   iii. C-factor is given: \( R = \frac{1}{C} \)

2. Determine the R-value of the proposed alternate floor protector.
   
   i. Use the formula in step (1) to convert values not expressed as “R”.
   ii. For multiple layers, add R-values of each layer to determine overall R-value.

3. If the overall R-value of the system is greater than the R-value of the specified floor protector, the alternate is acceptable.

EXAMPLE: The specified floor protector should be 3/4 inch thick material with a k-factor of .84. The proposed alternate is 4” brick with a C-factor of 1.25 over 1/8” mineral board with a k-factor of .29.

Step (a): Use formula above to convert specification to R-value. \( R = \frac{1}{k} \times T = \frac{1}{.84} \times .75 = .893 \).

Step (b): Calculate R of proposed system.
   
   4” brick of C = 1.25, therefore \( R_{\text{brick}} = \frac{1}{C} = \frac{1}{1.25} = .80 \)
   1/8” mineral board of k = .29, therefore \( R_{\text{min.bd.}} = \frac{1}{.29} \times .125 = .431 \)
   Total \( R = R_{\text{brick}} + R_{\text{mineral board}} = .8 + .431 = 1.231 \)

Step (c): Compare proposed system of R of 1.231 to specified R of .893. Since proposed system R is greater than required, the system is acceptable.

Definitions:

Thermal conductance = \( C = \frac{W}{(\text{Btu})(\text{hr})(\text{ft}^2)(\text{°F})} \)

Thermal conductivity = \( k = \frac{W}{(\text{Btu})(\text{hr})(\text{ft}^2)(\text{°F})} = \frac{W}{(\text{m})^{2}(\text{°K})} = \frac{\text{Btu}}{(\text{hr})(\text{ft})(\text{°F})} \)

Thermal resistance = \( R = \frac{\text{ft}^2(\text{hr})(\text{°F})}{\text{Btu}} = \frac{(\text{m}^2)(\text{°K})}{W} \)
# TROUBLESHOOTING

<table>
<thead>
<tr>
<th>PROBLEM</th>
<th>CAUSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smoke back through door when opened.</td>
<td>◆ Negative pressure in the home.</td>
</tr>
<tr>
<td>Smoke back when first starting fire.</td>
<td>◆ Chimney not high enough.</td>
</tr>
<tr>
<td>Smoke back when fire dies down.</td>
<td>◆ Cool wind cooling poorly insulated chimney.</td>
</tr>
<tr>
<td>Smokes out of doors or intake pipe when wind is from a certain direction.</td>
<td>◆ Adjacent structures, trees, etc., too close to chimney. Remove or raise chimney.</td>
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<tr>
<td></td>
<td>◆ Screen on chimney top too fine, or plugged.</td>
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<tr>
<td></td>
<td>◆ Restriction within chimney (creosote, mortar, leaves, bird nest, etc.).</td>
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<tr>
<td></td>
<td>◆ Ice buildup on chimney top.</td>
</tr>
<tr>
<td>Firepace won’t generate enough heat.</td>
<td>◆ Wood not seasoned or is wet from snow or rain.</td>
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<tr>
<td></td>
<td>◆ Not enough wood being burned.</td>
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<tr>
<td></td>
<td>◆ Obstructed grill openings.</td>
</tr>
<tr>
<td>There is an odor coming from the fireplace.</td>
<td>◆ New paint. This odor will disappear after several burn periods. Open doors &amp; windows to ventilate during the initial burn period.</td>
</tr>
</tbody>
</table>

## Z-42 / Z-42-CD REPLACEMENT PARTS

Consult your dealer for information on optional accessories available for this fireplace.

<table>
<thead>
<tr>
<th>Z-42 REPLACEMENT PARTS</th>
<th>Z-42-CD REPLACEMENT PARTS</th>
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<tbody>
<tr>
<td>A 150-380 Replacement Glass</td>
<td>A-CD 150-250 Replacement Glass</td>
</tr>
<tr>
<td>B 200-181 Glass Clips (4)</td>
<td>B-CD 200-160 Glass Clips (8)</td>
</tr>
<tr>
<td>C 900-006 Glass Gasket</td>
<td>C-CD 808 Glass Gasket Kit</td>
</tr>
<tr>
<td>D 300-600 Firebrick (specify size)</td>
<td>D 300-600 Firebrick (specify size)</td>
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<tr>
<td>E Z42-900 Refractory Brick Panel</td>
<td>E 242-900 Refractory Brick Panel</td>
</tr>
<tr>
<td>F 500-304Z Black Spring Handle w/ Rod</td>
<td>F-CD 807 Door Gasket Kit</td>
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<td>G-CD 300-405 Banger Rope</td>
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<tr>
<td></td>
<td>H-CD 300-349 Door pins</td>
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<tr>
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<td>I-CD 500-307 5/16&quot; Black spring Handle</td>
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