



TESTED TO  
ULC-S610 — 5th EDITION  
ULC S639  
STANDARDS  
UL 127

installation  
manual

**CAUTION:**  
Read All Instructions  
Carefully Before Starting  
The Installation.

Do Not Use This  
Fireplace in Mobile  
Homes or Trailers.

Save This Manual For  
Future Reference.



Made in Canada

*Ross Boyle*  
○○○  
**EMPRESS**

*Spigh Lewis*  
*LES1 & Co*  
**HEAT CIRCULATING  
FIREPLACE**

**MODELS 736 AND 737**

PLEASE NOTE IMPORTANT CHIMNEY INFORMATION  
ON PAGE 6.

- **Installation**
- **Operation**
- **Repair Parts**

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HEATERS MFG. INC. 1982

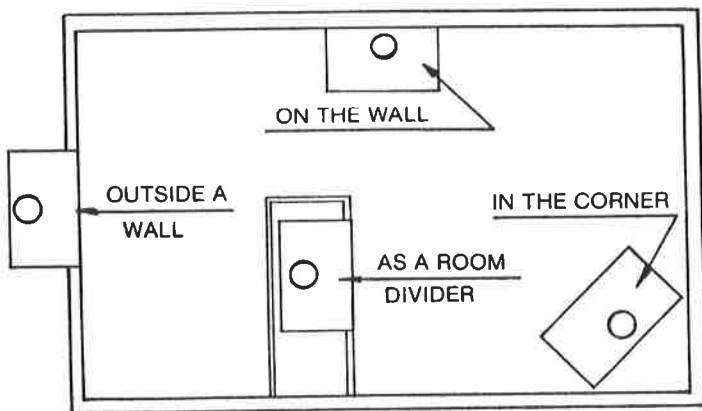
Empress Fireplace Heaters Mfg. Inc., Burlington, Ontario, Canada

# GENERAL RULES FOR SAFE INSTALLATION AND OPERATION

**NOTE: CONSULT YOUR LOCAL AUTHORITY HAVING JURISDICTION BEFORE INSTALLATION TO DETERMINE THE NEED TO OBTAIN A PERMIT IF REQUIRED.**

1. Read these rules and the instructions carefully. Failure to follow them could cause malfunction of the fireplace. This could result in death, serious bodily injury, and/or property damage.
2. Do not install this fireplace in a mobile home or trailer.
3. Always connect this fireplace to a chimney and vent to the outside. Never vent to another room or inside a building.
4. Make sure the chimney is high enough to give a good draft. Keep the chimney clean inside to avoid blockage. Otherwise smoking will result.
5. Provide air for combustion from the outside into the room where the fireplace is located. If the intake is not in the same room, the air must have free access to the room.
6. Keep the ashpit section free of excess ashes. Failure to do so will cause grate warpage and burn out. Never burn coke — salt driftwood — or use fireplace as an incinerator.
7. The chimney should be inspected periodically and cleaned if necessary.
8. To prevent injury do not allow anyone who is unfamiliar with the operation to use the fireplace.
9. The special paint and protective oil used on parts of your fireplace may give off some smoke while it is curing during the first few fires. Open a window and build small fires at first.

**WARNING: BE SURE TO PROVIDE ADEQUATE COMBUSTION AIR TO FIREPLACE TO PREVENT POSSIBLE COMBUSTION AIR STARVATION OF OTHER FUEL BURNING APPLIANCES (SUCH AS FURNACE OR WATER HEATER ETC.)**



**FIG. 1  
LOCATIONS**

## Location of your Fireplace

The fireplace may be installed on any flat, hard surface, combustible or otherwise. It can be located against the wall, through an outside wall, in a corner or out in the room as a room divider. (See Fig. 1).

When choosing your fireplace location, keep in mind such factors as doors and windows, room traffic and furniture arrangements. Also take into consideration the construction above and below the fireplace. Choose a location which will require cutting the least number of joists and rafters. Not only will this simplify the installation, but it will help reduce installation costs.

The fireplace and chimney must be enclosed when installed in or passing through a living area where children may come in contact with it.

# FIREPLACE INSTALLATION

## Clearances and Height Requirements

The fireplace may be placed directly on or against normal construction materials.

### Construction materials:

- framing materials
- plywood
- particle board
- millboard
- dry wall
- panelling
- etc.

Special restrictions apply to the front and facing of the fireplace and nearby walls. (See page 5.)

## Framing

It is possible to build framing in advance. See Fig. 2 for typical layout and dimensions. Framing should be built of 2" X 4" lumber as shown in Fig. 2.

## Installation of the Fireplace

1. Remove fireplace packaging and check to make sure there is no damage. In case of damage, report to your dealer at your earliest convenience.
2. Thoroughly clean fireplace location area.
3. Locate centrepoint where chimney will pass through the ceiling above the fireplace.
4. See appropriate chimney instructions regarding cut-out and framing dimensions at floor-joist areas.
5. Move fireplace into exact location where it is going to be installed.

Lift front of fireplace slightly and slide metal safety strip under fireplace about 50 mm (2"), allowing the remainder to extend out in front of fireplace. See Fig. 3. The safety strip protects flooring from sparks and embers which may escape from fireplace.

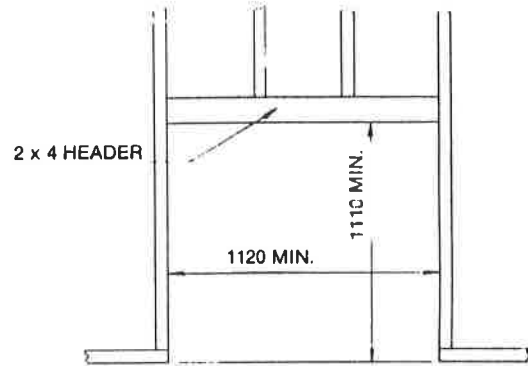
6. Level fireplace and secure to floor. Flatten nailing tabs and use 2 nails on each tab to prevent shifting of fireplace.

## Cold Climate Installation

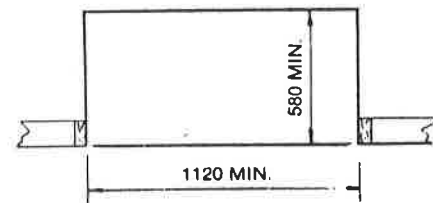
### Recommendation:

When installing fireplaces against exterior walls or outside chases it is important that the fireplace be properly insulated against the cold. Insulate the sides and back of the fireplace only. For best results fiberglass home insulation having an R-12 factor (3 inches thick) should be used. Never use blown-in type of insulation. Always observe necessary clearances to combustible materials as stated on Page 5 Fig. 11 and 12. In areas of extreme cold, it is recommended that the outer walls of the chase around the fireplace should also be properly insulated.

MINIMUM FRAMING ENCLOSURE DIMENSIONS

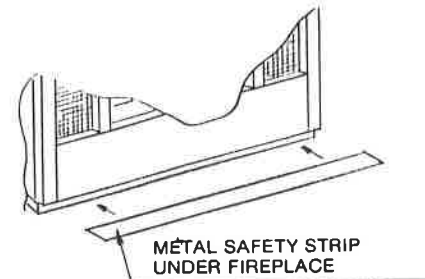


FRONT VIEW



PLAN VIEW

FIG. 2



METAL SAFETY STRIP LOCATION - INSTALLATION

FIG. 3

## Minimum Clearances to Combustible Materials

It is important to observe minimum clearances to unprotected combustibles. See Fig. 4 and 5.

To protect combustible flooring a hearth extension made of non-combustible materials must be constructed. This extension must extend a minimum of 200 mm (8") on either side and 410 mm (16") in front of fireplace opening. See Fig. 4 and 5.

## Minimum Clearance to Combustible Materials around and above Fireplace

1. Fireplace clearances are 0"/0 mm around sides, back and floor. Special restrictions apply for front and facing. See Fig. 11 and 12.
2. The following clearance restrictions apply to the area immediately above the fireplace top and the ceiling above. (See Table I and Figures 6, 7, 8, 9, 10.)

TABLE I

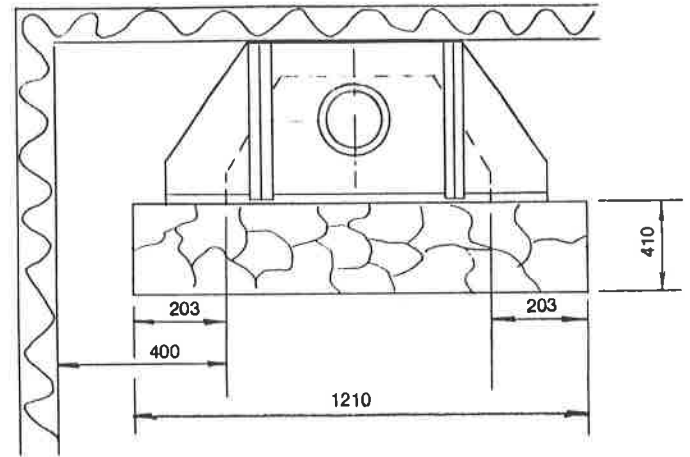
TYPE OF INSTALLATION	CLEARANCE TO COMBUSTIBLE MATERIAL				
	A	B	C	D	E
LEFT OFFSET	2 3/4" 70 mm	2 3/4" 70 mm	5 1/2" 140 mm	2 3/4" 70 mm	16 3/4" 425 mm
RIGHT OFFSET	2 3/4" 70 mm	2 3/4" 70 mm	5 1/2" 140 mm	2 3/4" 70 mm	16 3/4" 425 mm
REAR OFFSET	2 3/4" 70 mm	2 3/4" 70 mm	16 3/4" 425 mm	2 3/4" 70 mm	16 3/4" 425 mm

**WARNING: DO NOT PACK REQUIRED AIRSPACES (SEE SHADED AREAS) WITH BUILDING INSULATION OR OTHER MATERIALS.**

**NOTE: SHADED AREAS INDICATE NECESSARY AIRSPACE TO COMBUSTIBLE FRAMING MATERIALS.**

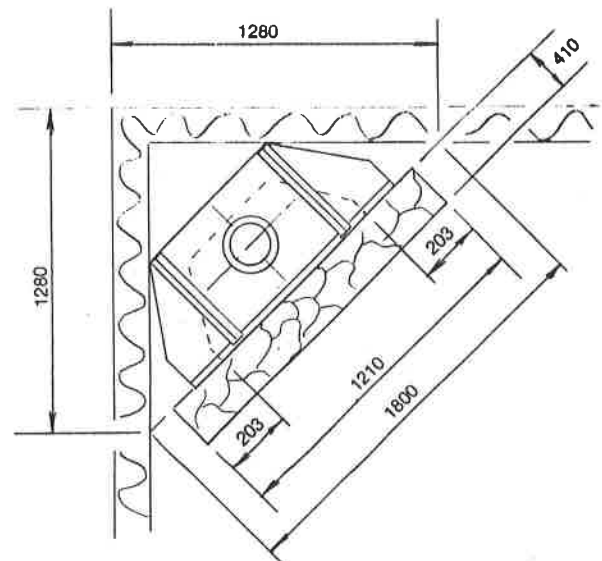
AREAS AT SIDES, FLOOR AND BACK OF FIREPLACE ARE ZERO CLEARANCE TO COMBUSTIBLE MATERIALS.

COMBUSTIBLE FRAMING MATERIALS CANNOT PENETRATE SHADED AREAS.



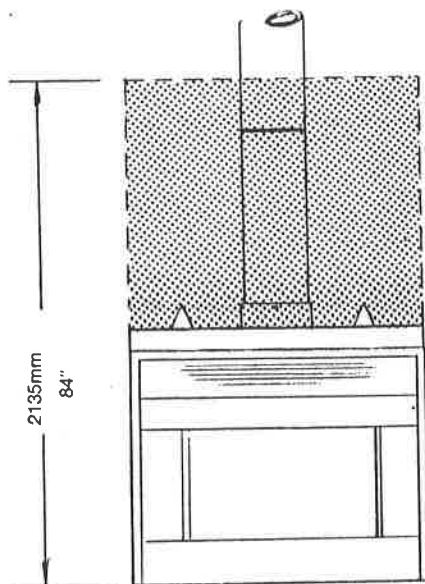
WALL INSTALLATION

FIG. 4



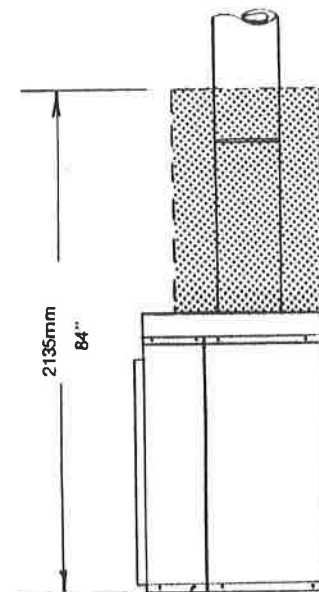
CORNER INSTALLATION

FIG. 5



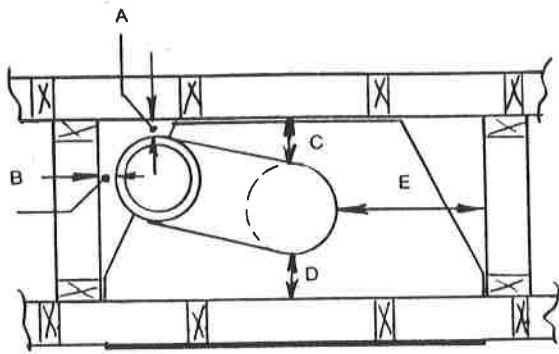
FRONT VIEW

FIG. 6

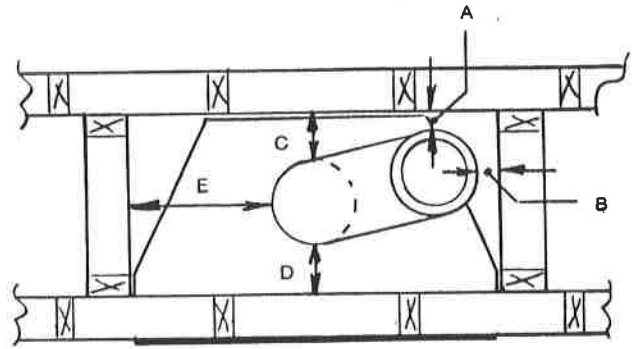


SIDE VIEW

FIG. 7



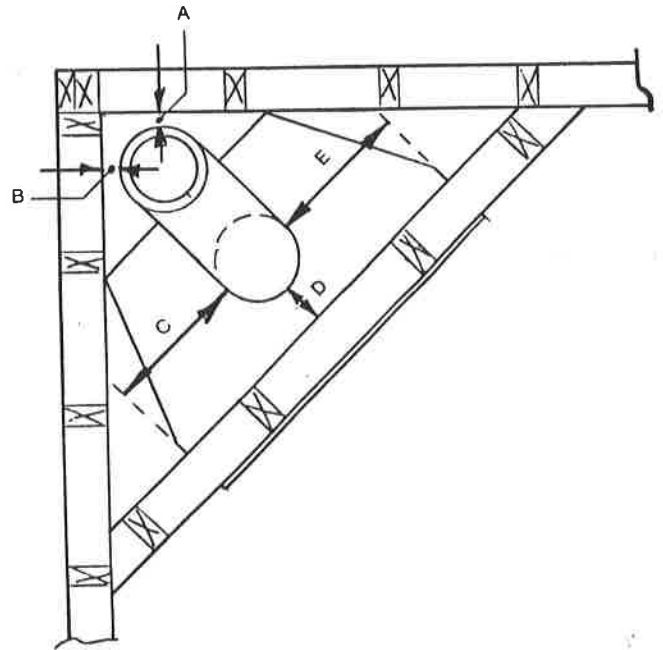
LEFT OFFSET INSTALLATION  
FIG. 8



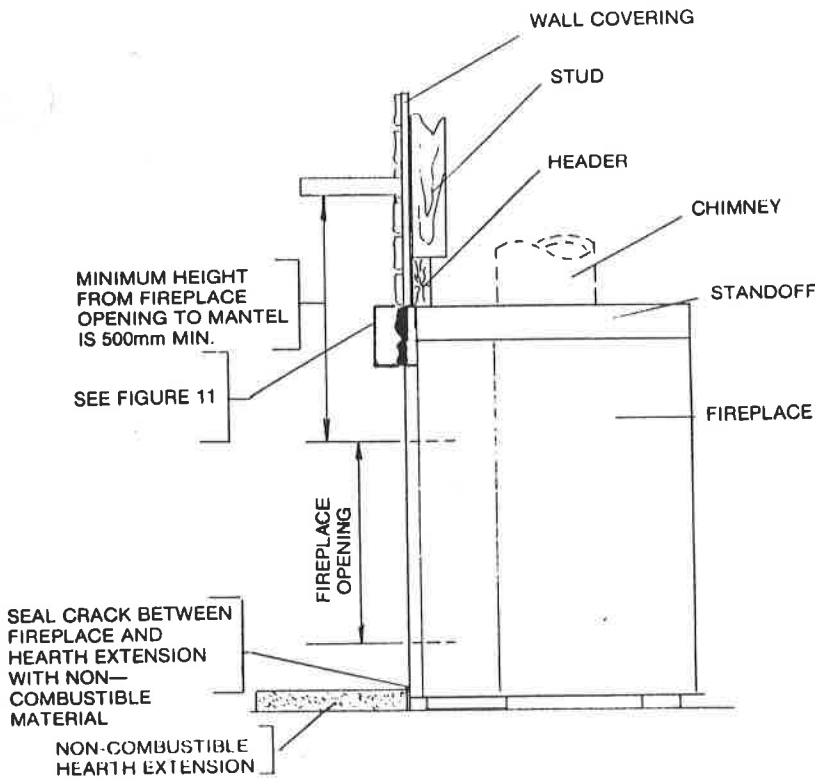
RIGHT OFFSET INSTALLATION  
FIG. 9

### Finishing

Cross sectional side view of application of finishing wall around fireplace. Combustible material cannot be used within 25 mm (1 inch) above the top of the fireplace facing. See Fig. 11 and 12.



REAR OFFSET CORNER INSTALLATION  
FIG. 10



WALL COVERING AND SEALING DETAILS  
FIG. 12

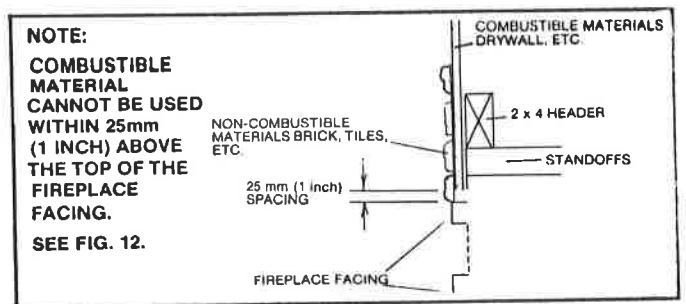


FIG. 11

# IMPORTANT CHIMNEY INFORMATION

Empress Models 736 and 737 Fireplaces have been tested in accordance to standards — ULC-S610/5th Edition, UL 127 and ULC-S639 and are listed to be installed with the following chimneys:

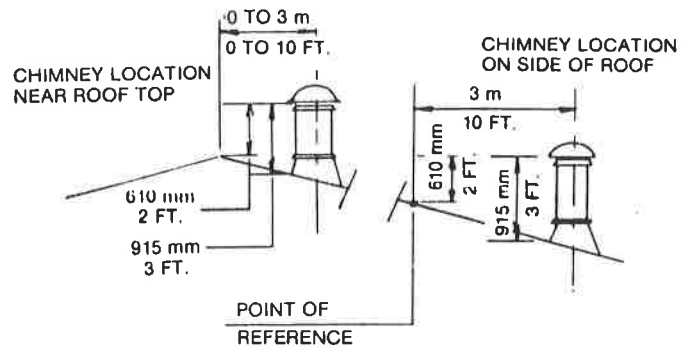
**For Canada: (ULC S610/5th Edition)**

- Empress Model — EFC 7" (178 mm) Dia.
- GSW Models — FC 7" Dia.
- Security Model — ASHT 7" (178 mm) Dia.

**For the United States: (UL 127)**

- Empress Model — EFC 7" Dia.
- GSW Model — FC 7" (178 mm) Dia.
- Oliver-MacLeod Model — Projet SSG 7" Dia.
- Selkirk-Metalbestos Model — SS 7" Dia.
- Security Models — ASHT and AS 7" Dia.

In addition Models 736 and 737 Fireplaces in compliance with ULC-S639 can also be installed with a masonry flue lined chimney — size 8" x 12" (300 mm x 200 mm). Special conditions apply — see instructions for masonry chimney installation.

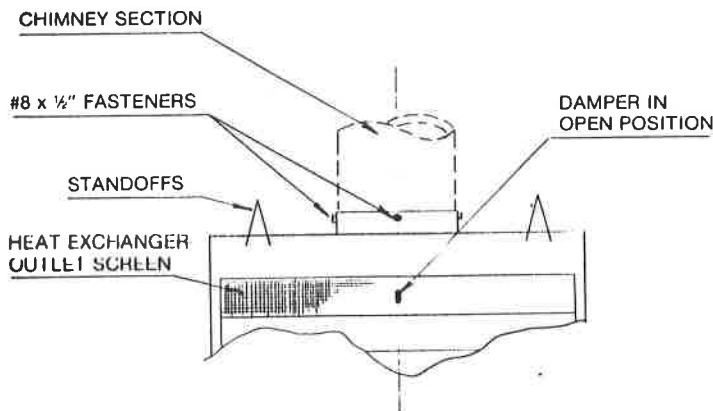


**BASIC RULE FOR CHIMNEY  
TERMINATION HEIGHTS ABOVE ROOF**

**FIG. 14**

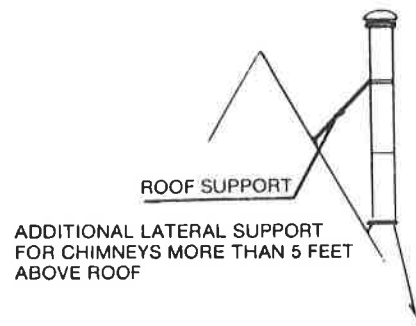
## INSTALLATION INFORMATION

1. Install chimney in accordance to chimney manufacturer's installation instructions.
2. Chimney take off from fireplace.  
Place first chimney section on top of fireplace. Push section firmly down over flue collar. Use four (4) No. 8 x 1/2" long sheet metal screws to secure section to universal connector's ring. See Fig. 13.  
**NOTE: MINIMUM LENGTH OF FIRST CHIMNEY SECTION MUST BE 12 INCHES/305 MM. (FOR OFFSET INSTALLATIONS).**
3. Minimum fireplace/chimney system height is 4.6 m/15 ft.



**CHIMNEY INSTALLATION**

**FIG. 13**



**ROOF SUPPORT SYSTEM**

**FIG. 15**

## OPERATION:

1. Clean out ashes.
2. Open damper fully—turn counterclockwise until handle is in vertical position (up-down).
3. Open air intake (if equipped with optional outside air kit).
4. Place paper and kindling on to grate.
5. **Always** prime the chimney. To do so, take some paper, roll it and light one end. Then hold the lit end up into the area of the damper until you observe a definite up draft.
6. Now start the fire and wait until the kindling has burned for 6 to 8 minutes.
7. Place three logs to maintain a proper fire. For best results, logs should be hardwood and split to 6" cross sections (maximum length 16"). Care must be taken that they do not hang over the log rest brackets so as to prevent a possible rolling out. A flaming log against the back of the optional doors could result in glass breakage due to the thermal shock the glass will be subjected to.

**FUELS:** For best results, use split hardwood about 16" long. **DO NOT** use driftwood, **MANUFACTURED LOGS OF ANY TYPE**, cannel coal, coal dust, plywood and particle board scraps, laminated scrap wood, railroad ties or wood which has been treated with preservatives of any kind.

## FIREPLACES EQUIPPED WITH OPTIONAL BI FOLD DOORS\*

**WARNING: OPERATE FIREPLACE ONLY WITH DOORS FULLY OPEN OR FULLY CLOSED. BI FOLD DOORS IF LEFT PARTIALLY OPEN MAY DRAW GAS AND FLAME OUT OF THE FIREPLACE OPENING CREATING BOTH HEAT AND SMOKE HAZARDS.**

**WHEN BURNING WITH DOORS OPEN, SPARK SCREEN MUST BE PULLED CLOSED TO PREVENT POSSIBLE SPILLAGE OF EMBERS AND SPARKS. WHEN BURNING WITH DOORS CLOSED, OPEN SPARK SCREEN SO AS TO PROTECT IT FROM EXCESSIVE HEAT.**

**WARNING:** Use only Empress Models GET and GEC Doors.

## DISPOSAL OF ASHES

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 soil or otherwise locally dispersed, they should be retained in the closed container until all cinders have thoroughly cooled.

**NEVER** use gasoline, gasoline-type lantern fuel, kerosene, charcoal lighter fluid, or similar liquids to start or "freshen up" a fire in this heater. Keep all such liquids well away from the heater while it is in use.

## CREOSOTE

Formation and Need for Removal:

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 connector and chimney should be inspected at least twice 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.

## INSPECTION, MAINTENANCE AND CLEANING

For best results establish a routine for the fuel, wood burner and firing technique. Check daily for creosote buildup until experience shows how often you need to clean to be safe. Be aware that the hotter the fire the less creosote is deposited,

and weekly cleanings may be necessary in mild weather even though monthly cleanings may be enough in the coldest months. Contact your local municipal or provincial fire authority for information on how to handle a chimney fire. Have a clearly understood plan to handle a chimney fire.

## INSTALLATION OF DECORATIVE GAS APPLIANCE

1. Your fireplace has provisions to accept a ½" gas pipeline for an approved gas appliance. The pipe may enter from either side of the Fireplace.
2. Punch out ceramic knockout on inside of fireplace.
3. Insert gas pipe and connect to appliance with union. (See instructions provided with appliance).
4. Seal hole around gas line where it penetrated through the refractory with fiberglass or furnace cement. It is important that the seal is absolutely tight.

**NOTE:** THE GAS PIPE INSTALLATION IS INTENDED FOR DECORATIVE GAS APPLIANCES ONLY IN ACCORDANCE WITH CAN 1-B149 1-M80.

**CAUTION: WHEN USING DECORATIVE GAS APPLIANCE THE FLUE DAMPER MUST BE SET IN FULLY OPEN POSITION.**

## GENERAL SERVICE HINTS

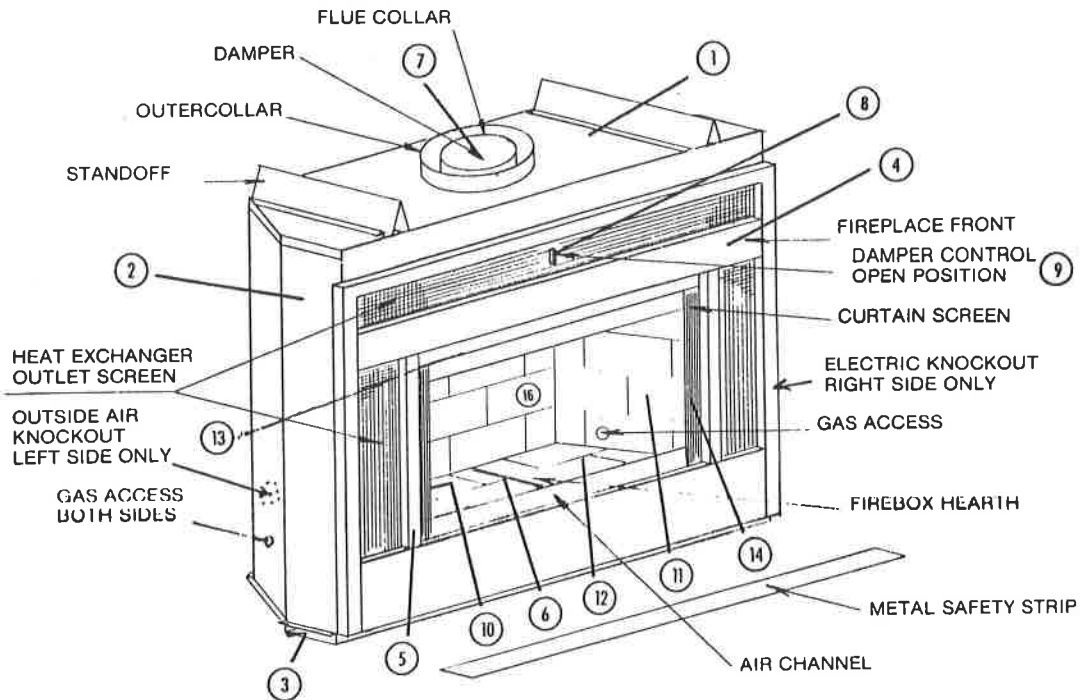
1. Do not expect a fireplace to draw. It is the chimney that creates the draft.  
CREOSOTE is caused from the condensation of the vapour that exists within the escaping smoke.  
The hotter the escaping gases in the chimney, the less creosote formation you will have. From this you can see why a well constructed chimney with smooth liners and a flue that is well insulated from the cooler air is desirable.  
The formation of creosote could also be caused by a severe downdraft condition caused from taller objects surrounding the chimney such as a hill, trees, other buildings, or chimneys of poor construction.
2. If the fire burns well but sometimes smokes or burns slowly it may be caused by the chimney top being lower than another part of the house or a nearby tree. The wind blowing over a house or a tree, falls on top of the chimney like water over a dam, beating down the smoke. The top of the chimney should be at least 3 feet above the roof and be at least 2 feet higher than any point of the roof within 10 feet. (Fig. 5)  
It is important that you inspect the chimney flues every 3 to 6 months.
3. Caring for brass plated facing: it is best to simply polish with lemon oil cloth when unit is cold, ie. not in operation.  
**CAUTION: DAMAGE OR DISCOLOURATION OF FACING, IE. DOORS AND TRIM ARE USUALLY AN INDICATION THAT THE UNIT HAS BEEN OVER HEATED BY TOO LARGE OR HOT A FIRE.**
4. Caring of glass: Depending on the type of wood used, a slight smoky film may deposit on the inside of the glass. This is easily removed by simply wiping it clean with the newspaper you are using to start the kindling fire. Periodically, it will be necessary to wet-clean glass. It is recommended that you use warm water and a 3M Scotch Clean or similar non-abrasive product.

## REFRACTORY LINERS

Occasionally a hairline crack may appear in the liners at the back or sides due to expansion and contraction during usage of fireplace. This is not a cause for concern since these liners are heavily reinforced with steel fibers. In addition the combustion chamber behind the refractory is completely sealed for total safety. (See warranty)

\* See Installation Manual supplied with the doors.

# Identification of Component Parts ZERO — CLEARANCE APPLICATION WITH FACTORY BUILT CHIMNEYS



**PARTS IDENTIFICATION FIREPLACE MODEL 736**

## Repair Parts List

### TO ORDER REPAIR PARTS

This manual will help you to obtain efficient, dependable service from the heater, and enable you to order repair parts correctly. Keep In a Safe Place For Future Reference.

When writing, always give the full model number which is on the identification plate attached to the heater. When ordering repair parts, always give the following information:

1. The PART NUMBER (Not Key No.)
2. The PART DESCRIPTION
3. The MODEL NUMBER
4. Number of Parts required.

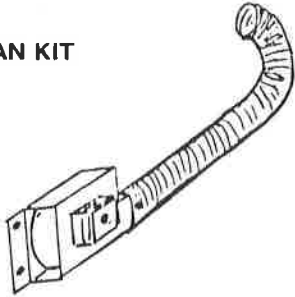
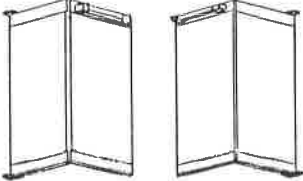
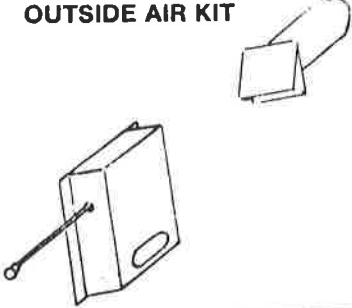
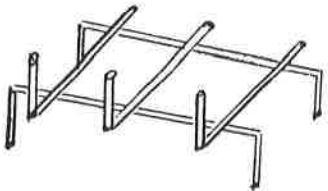
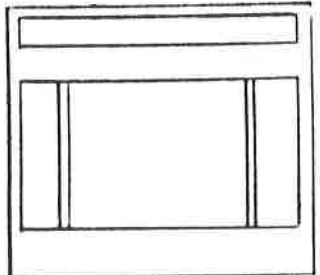
**Please Note:** Should there be a component failure original parts or equivalent must be used for replacement. In the event of glass failure use only the same or equivalent glass.

KEY #	PART #	DESCRIPTION
1	A 450	Top with Standoffs
2	A 451	Outside Body
3	A 452	Outside Floor
4	A 466	Front Facing with Top
5	A 467	Left or Right Front Facing
6	A 455	Fire Box
7	A 456	Damper — Not Shown
8	A 468	Damper Rod — Not Shown
9	P 470	Damper Knob
10	A 459	Left Refractory Side
11	A 460	Right Refractory Side
12	A 461	Refractory Floor
13	A 462	Left or Right Screen Rod — Not Shown
14	A 463	Left or Right Screen
15	A 464	Insulation — Not Shown
16	A 471	Refractory Back

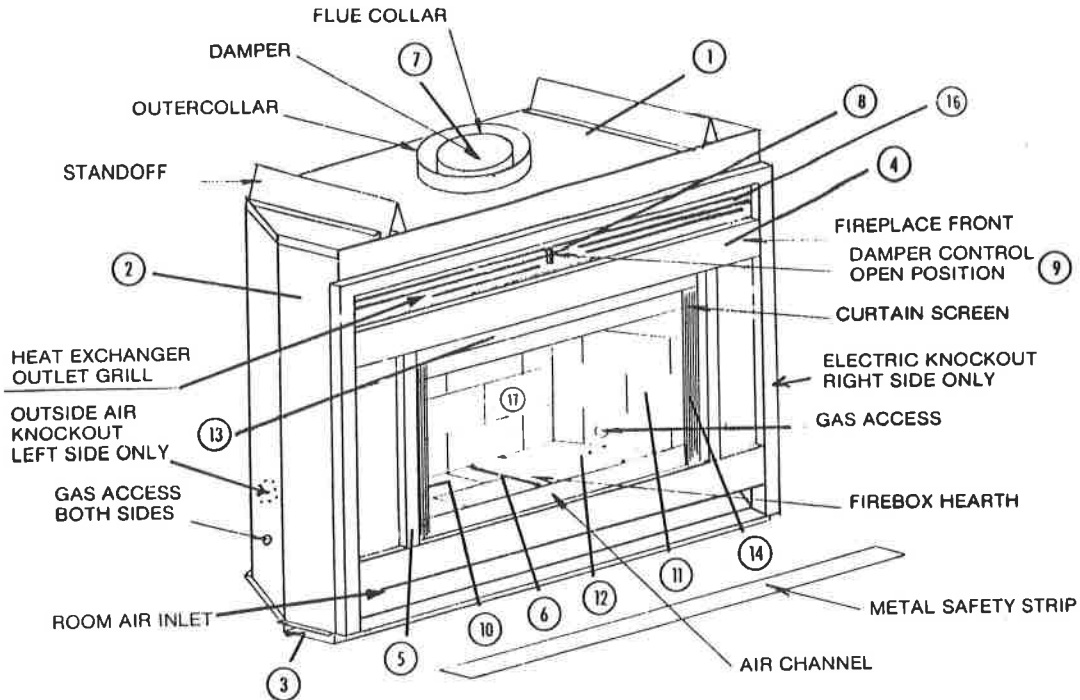


## OPTIONAL ACCESSORY PARTS

ASK YOUR DEALER FOR INFORMATION ON ALL OPTIONAL ACCESSORY PARTS AND EQUIPMENT

ACCESSORY	MODEL NO.	DESCRIPTION
<p><b>FAN KIT</b></p> 	<p><b>FK 736</b></p>	<p>Designed to provide forced air flow over top of heat exchanger. Includes fan, duct and hardware.</p>
<p><b>GLASS ENCLOSURE</b></p> 	<p><b>GET 736</b></p>    <p><b>GEC 736</b></p>	<p>Designed to enclose Fireplace opening. Features tempered glass continuous service temperature 500° F/250° C.</p>    <p>As above except ceramic glass. Continuous service temperature 1480°/790° C.</p>
<p><b>OUTSIDE AIR KIT</b></p> 	<p><b>OAK 736</b></p>	<p>Designed to provide outside air for fuel combustion. Kit must be installed before Fireplace is enclosed.</p>
<p><b>WOOD GRATE</b></p> 	<p><b>SG 736</b></p>	<p>In the firebox used for properly holding firewood during burning.</p>
<p><b>DECORATIVE BRASS OR COPPER FACE KIT</b></p> 	<p><b>BTK 736</b></p> <p><b>CTK 736</b></p>	<p>Brass and Copper Trim Kits are designed to enhance the beauty of your Empress Fireplace. Kit can be installed anytime even after wall has been finished around the Fireplace.</p>

# Identification of Component Parts ZERO — CLEARANCE APPLICATION WITH FACTORY BUILT CHIMNEYS



**PARTS IDENTIFICATION FIREPLACE MODEL 737**

## Repair Parts List

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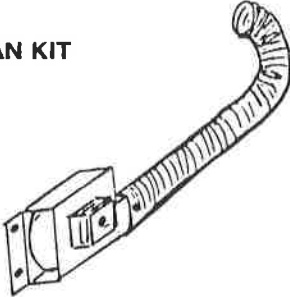
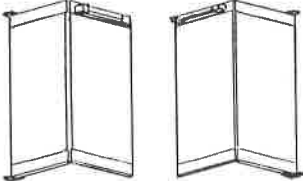
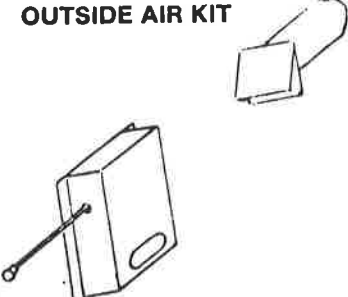
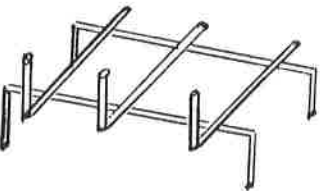
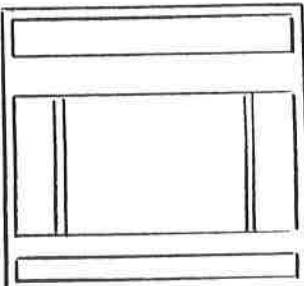
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15	A 464	Insulation — Not Shown
16	A 469	Top Louvres
17	A 471	Refractory Back

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<p><b>DECORATIVE BRASS OR COPPER FACE KIT</b></p> 	<p><b>BTK 737</b> <b>CTK 737</b></p>	<p>Brass and Copper Trim Kits are designed to enhance the beauty of your Empress Fireplace. Kit can be installed anytime even after wall has been finished around the Fireplace.</p>

# EMPRESS

## 25 YEAR LIMITED WARRANTY & OWNER PROTECTION PLAN FOR EMPRESS MODELS 736 AND 737 FIREPLACES

This warranty will become effective only if you — the owner — have completed and mailed the enclosed owner's registration card within sixty (60) days after date of installation.

Subject to conditions set forth herein, Empress Fireplace Heaters Mfg. Inc. extends the following warranty with respect to Models 736 and 737 fireplace only.

Within a period of five (5) years from date of installation Empress warrants said Models 736 and 737 fireplace against all manufacturing defects. If examination should prove to our satisfaction that any portion of the fireplace is defective, Empress shall, at its option, replace or repair such defects in material and workmanship. The refractory firebrick are not included in this warranty in the event of a "cosmetic" (hairline) crack. Should, however, excessive cracking occur which might impair the function of the fireplace, Empress will cover these parts with this warranty.

Empress shall not, however, be responsible for any other **labour or any other costs or expenses, including indirect, incidental or consequential damages.**

After five (5) years through the twenty-fifth (25) year, from date of installation of said fireplace, Empress shall furnish a replacement part or parts at 50% off the published list price F.O.B. factory. Empress shall not be responsible for any **labour, or any other costs or expenses, including indirect, incidental or consequential damages.**

All accessories such as electric fan motors, outside air system, glass enclosures and brass plated decorative front facing are warranted for a period of ninety (90) days from date of installation. Within this period Empress shall furnish replacement part or parts at no charge F.O.B. factory. Empress shall not be responsible for any **labour or any other costs or expenses including indirect, incidental or consequential damages.**

Warranties set forth within this document do **not** apply to chimney components and apply only to the original owner (purchaser) of the said Models 736 and 737 fireplace.

In any event, the Empress Fireplace Heater Mfg. Inc. company may discharge its entire warranty obligation by refunding to the consumer the wholesale price of the product.

This limited warranty shall be void if said fireplace is not installed and operated at all times in accordance with the installation and operating instructions furnished or if it has been tampered with, altered in any way and/or misused.

Empress does not assume responsibility for installation of said fireplace and/or its components and reserves the right to change materials, specifications and models without notice and without incurring obligations of any kind.

Empress Fireplace Heater Mfg. Inc.  
4390 Paletta Court, Burlington,  
Ontario L7L 5R2