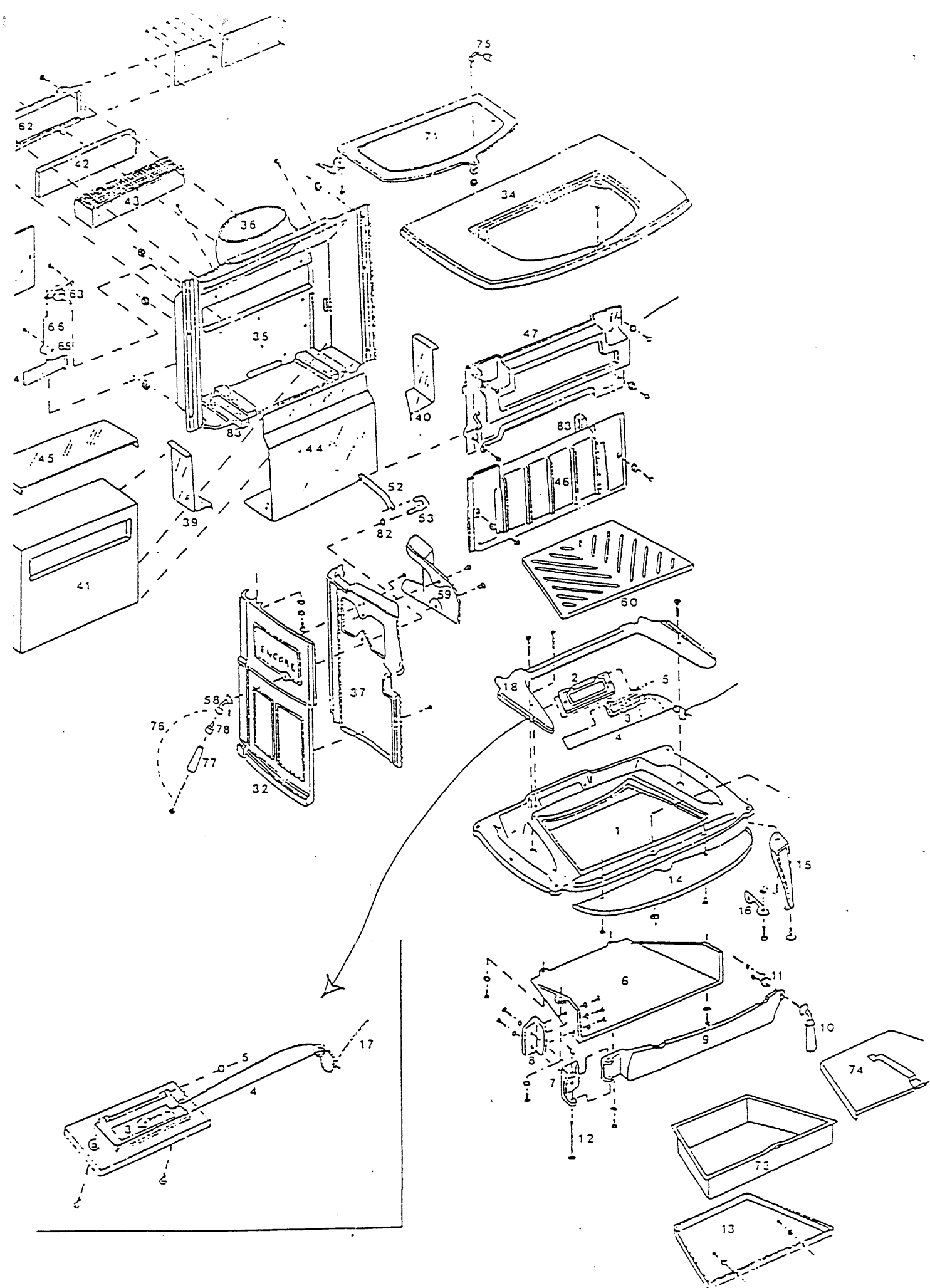


The stove back and catalyst access plate were redesigned in December 1986 to allow ease of servicing the catalyst block, reducing the risk of damaging the catalyst block and/or the refractory access panel when performing maintenance.

A new ash door and ash pan bracket were introduced in January 1987 to provide better operational tolerances and clearances and to accept heavier gasketing. A single ash door hinge pin and a new ash pan and cover were also provided at this time.

In February of 1987 the damper torsion bar was changed from cold rolled steel to stainless steel to improve reliability of damper operation over wide ranges of temperature change.

The thickness of the 3 damper tabs was doubled in March of 1987 to prevent the possibility of bending during assembly and/or operation...



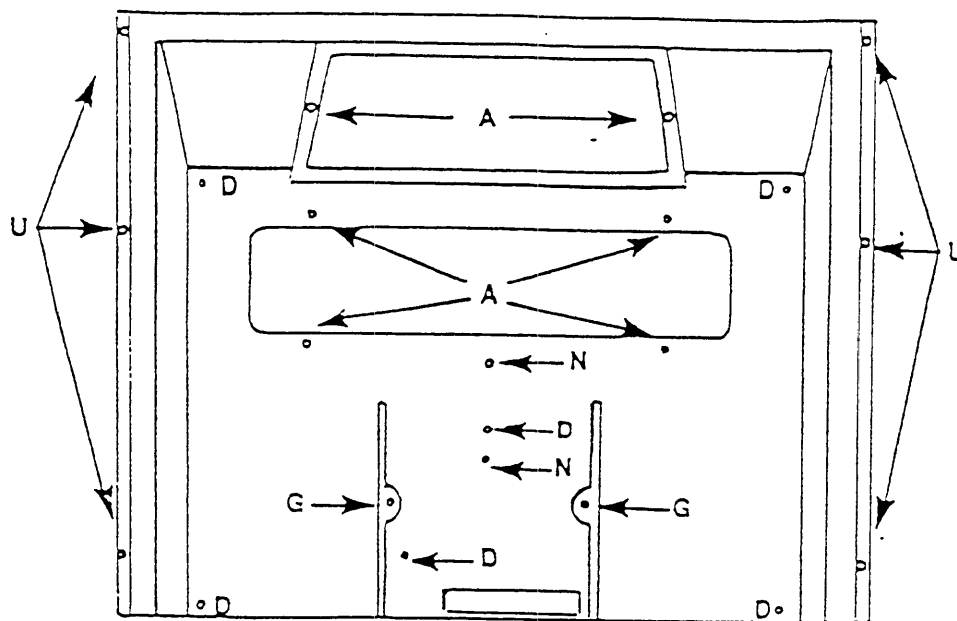
Encore Repair/Replacement Parts List

<u>Item #</u>	<u>Part #</u>	<u>Description</u>
-24	160-0417	Lower Door Pin
-25	120-1985	Jump Ring
-26	130-7403	Left Door Manifold, Cast
-27	130-7401	Right Door, Cast
-28	500-0341	Right Door Hinge Assembly
-29	130-7404	Right Door Manifold, Cast
-30	500-4225	Door Handle Assembly
-31	130-7424	Front Air Manifold, Cast
-32	130-7408	Left End, Cast
-33	130-7409	Right End, Cast
-34	130-7405	Top, Cast
-35	130-7441	Back, Cast
-36	130-4280	Flue Collar, Cast
-37	130-7413	Left Air/Wear Plate, Cast
-38	130-7414	Right Air/Wear Plate, Cast
-39	160-1037	Left Heat Deflector, S.S.
-40	160-1038	Right Heat Deflector, S.S.
-41	500-4600	Refractory Assembly
-42	160-2503	Catalyst Access Panel, Refractory
-43	160-2505	Catalyst Block, Canned
-44	160-2506	Heat Exchanger, S.S.
-45	160-2507	Refractory Cover, S.S.
-46	130-7416	Lower Fireback, Cast

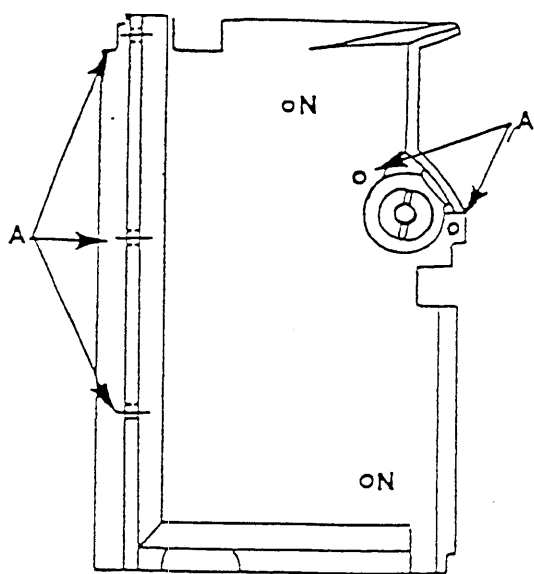
Encore Repair/Replacement Parts List

<u>Item #</u>	<u>Part #</u>	<u>Description</u>
-70	130-7419	Andiron, Cast
-71	130-0795	Griddle, Cast
-72	130-0809	Griddle Quadrant, Cast
-73	160-1028	Ash Pan
-74	160-1029	Ash Pan Cover
-75	500-4022	Griddle Handle Assembly
-76	500-4282	Ceramic Handle w/Insert
-77	160-0620	Ceramic Handle
-78	160-0642	Steel Handle Insert
-79	200-0913	U.S. Operation Manual
-80	500-5820	Sparkscreen Assembly
-81	120-2471	Flat Washer, 1/4" S.S.
-82	120-2560	Flat Washer, 3/8", narrow
-83	120-6115	Kaowool 3/4"x3/4", per ft.

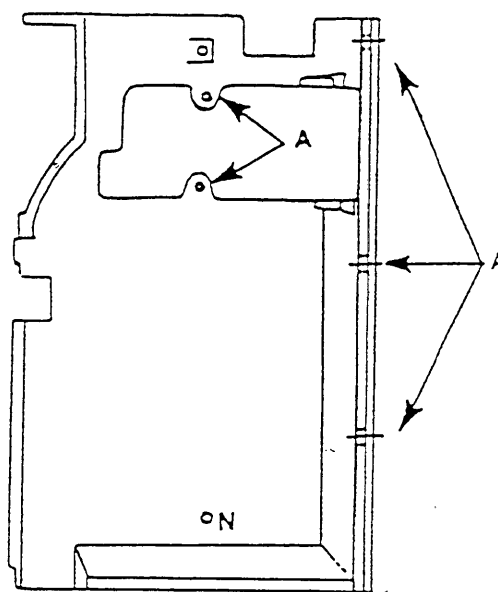
<u>Part No.</u>	<u>Description</u>
120-1833	Roll Pin 3/16"x1"
120-0334	Socket Set Screw 7/16"-20x1"
120-1392	Hex Head Cap Screw 1/4-20x2" z.
120-1326	Hex Head Cap Screw 1/4-20x1" z.
120-0881	Phillips Flat Hd. Mach. Screw 1/4-20x3/4" Black
120-2473	Flat Washer 1/4" Black Ox.
120-0998	Phillips Truss Hd. Mach. Screw 10-24x1/2" z.
120-0907	Phillips Round Hd. Mach. Screw 1/4-20x1"
120-1345	Hex Head Cap Screw 1/4-20x1/2" z.
120-0563	Socket Set Screw 5/16-18x5/16"
120-1243	Slot. Round Hd. Mach. Screw 8-32x2" Nickel Plt.
120-1771	Round Hd. Drive Screw #6x1/4"
120-0980	Phillips Pan Hd. Mach. Screw 10-24x1/4" z.
120-0993	Phillips Pan Hd. Mach. Screw 1/4-20x3/8" Black Ox.
120-1340	Hex Head Cap Screw 1/4-20x1/2" S.S.
120-2058	Phillips Pan Hd. Sheetmetal Scr. #10x1/2" Blk.
120-1308	Slot Pan Head Mach. Screw 8-32x1" Nickel Plt.



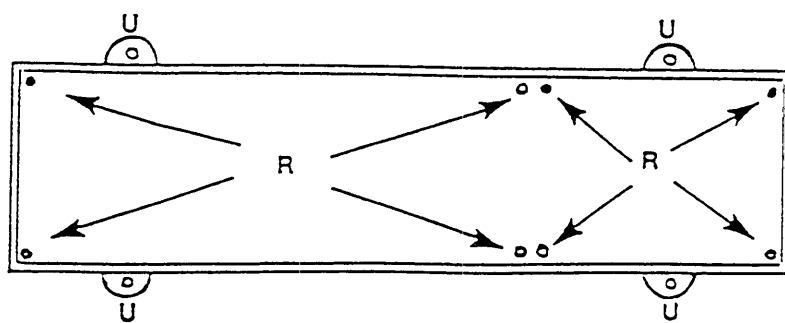
Stove Back (outside view)



Right Air/Wear Plate

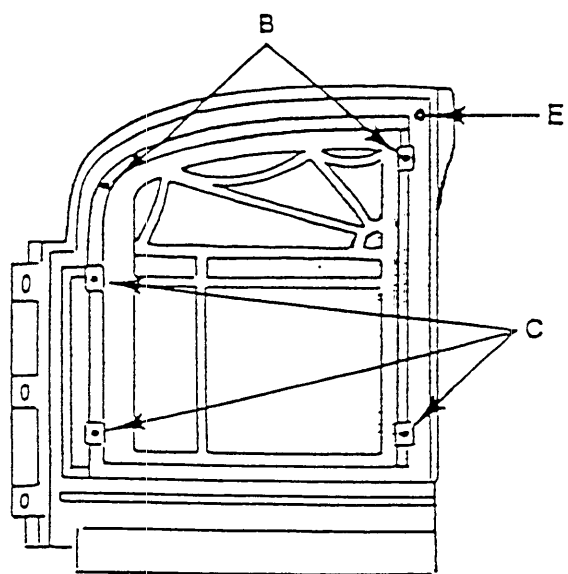


Left Air/Wear Plate

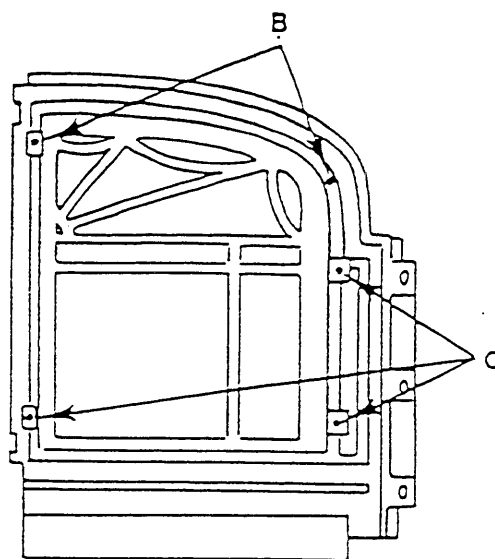


Catalyst Access Plate (outside view)

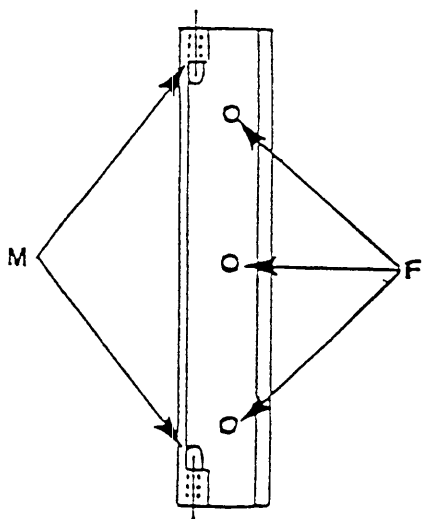
REFIANT ENCORE DRILL & TAP ILLUSTRATIONS



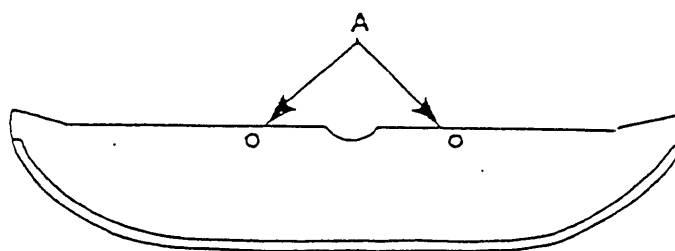
Right Door (inside view)



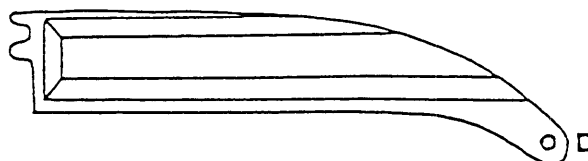
Left Door (inside view)



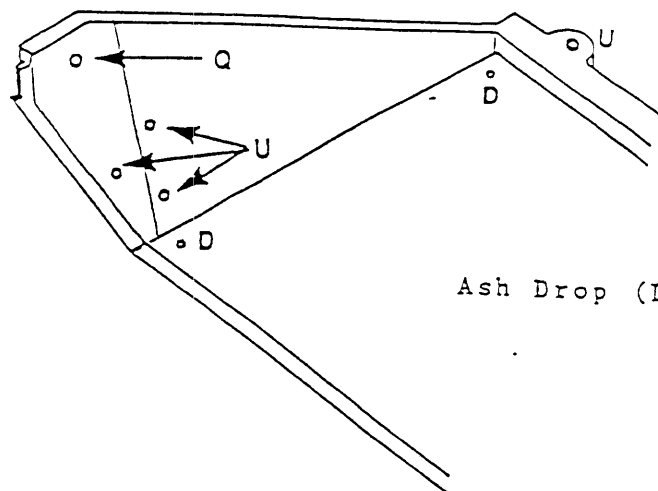
Hinge Boss (inside view)



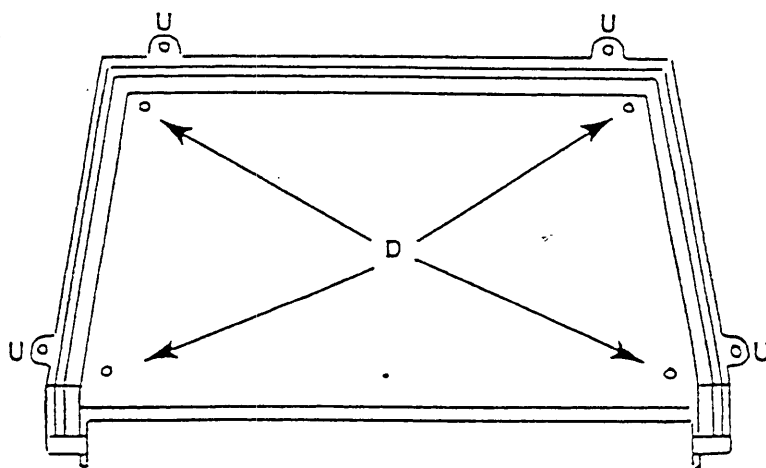
Ash Lip (bottom view)



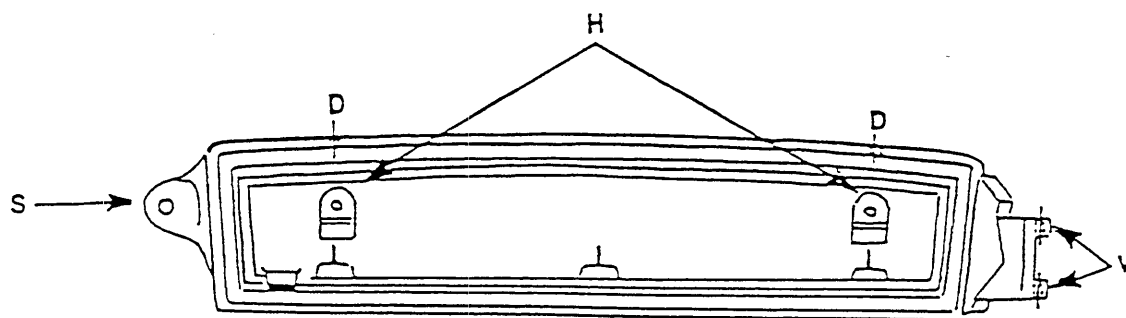
Door Manifold Inside view)



Ash Drop (Left inside view)

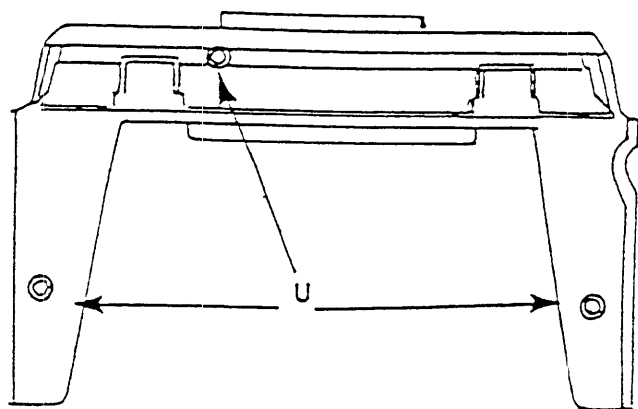


Ash Drop (bottom view)

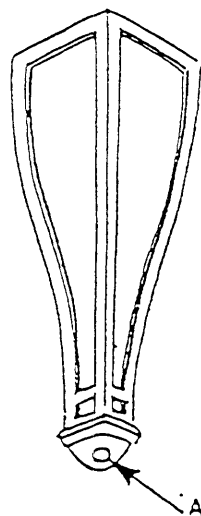


Ash Door (inside view)

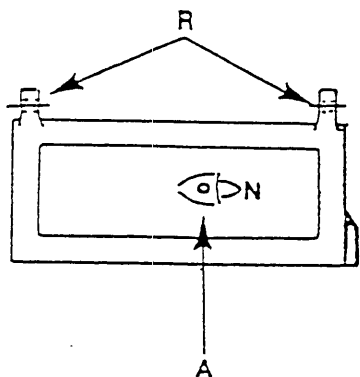
FIANT ENCORE DRILL & TAP ILLUSTRATIONS



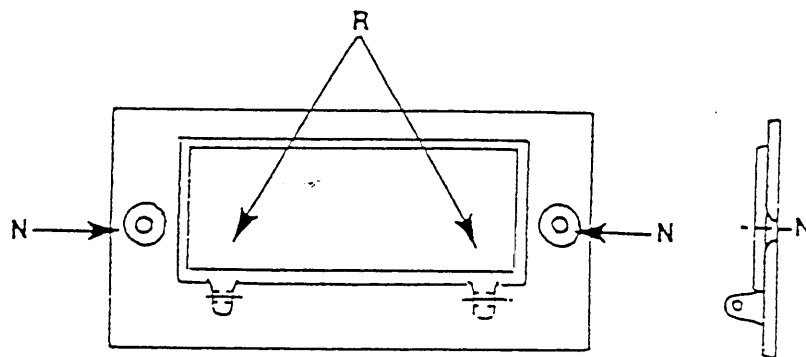
Primary Air Tube Cover Plate



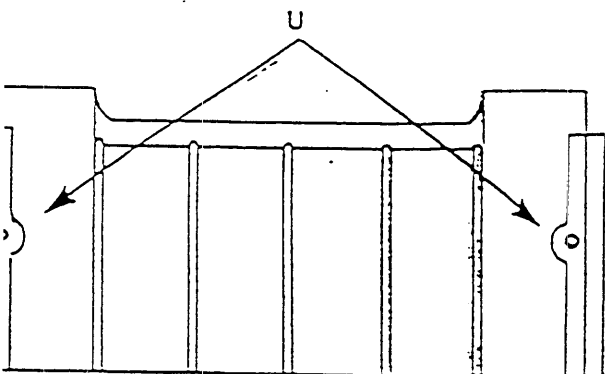
Leg



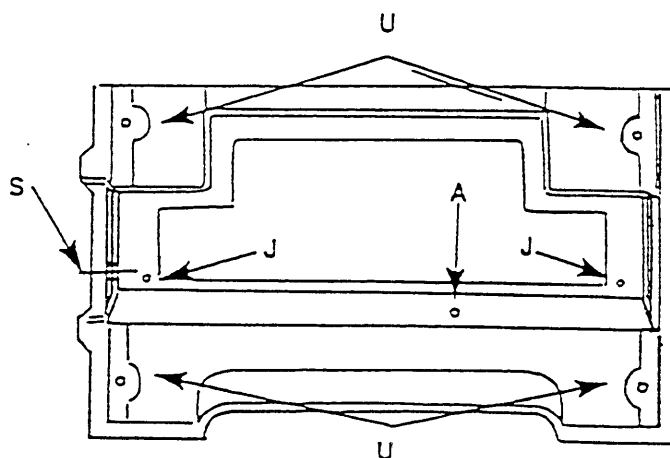
Primary Air Valve



Primary Air Frame



Lower Fireback



Upper Fireback

GENERAL: The manner in which to proceed with most repairs to this stove will be obvious to a competent mechanic. Individual parts replacement and adjustment procedures are covered in the Disassembly and Assembly sections of this manual. Cleaning, regasketing and/or cementing procedures are covered in the Cementing and Regasketing sections of this manual. There are, however, certain techniques and procedures outlined below and on the following pages which will save the mechanic both time and effort.

CAUTION: When reassembling a part requiring gasketing or cementing, both the part being replaced or reassembled and the entire mating surface to which it is attached must be thoroughly cleaned to bare metal of old furnace and/or gasket cement before recementing or regasketing. If the cleaning process is not thorough, proper alignment and a complete seal will be impossible to achieve.

REPLACING THE PRIMARY AIR VALVE TO THERMOSTAT CABLE

TOOLS REQUIRED: 7/16" Combination Wrench(box & open end).
Phillips Screw Driver, #2 tip
Needle Nose Pliers, 6"
Cold Chisel, 1/2"
Hammer, Ball Peen, 12 oz.
Drop Light or Flash Light
1/16" diameter Gas Welding Rod, 36"
Caulking Gun, Frame Type
Allen Wrench, 1/8"
Thermocement, 11 oz. tube
Safety Goggles

- Step# 7. Remove the stove griddle and the first section of stove pipe above the flue collar.
- Step# 8. Insert the cable fishing tool into the primary air frame opening from right to left with the 2" bend at between 1 and 2 O'clock. Force the fishing tool by pushing and twisting it slightly around the inside of the primary air tube and up between the right stove end and the right air/wear plate. While pushing the fishing tool, look into the griddle opening and watch for the end of the fishing tool to pass the thermostat pocket. When the end of the cable fishing tool becomes visible, stop moving the tool and reach through the thermostat pocket with the needle nose pliers and pull about 2" - 4" of the fishing tool inside the firebox. If you do not succeed on the first attempt, remove the fishing tool from the stove, straighten it, maintaining the 2", 150 degree bend and try again.
- Step# 9. Slip the looped end of the new primary thermostat cable over the looped end of the fishing tool and close the loop with your pliers. Reach inside the stove and pull the fishing tool until the new cable comes through the thermostat pocket.
- Step# 10. Clean the primary air frame, thermostat access cup and their mating surfaces of all old furnace cement. Apply new furnace cement to the thermostat access cup and the primary air frame and proceed to steps 20 thru 22 of the assembly section of this manual.

Step# 5. Service and/or replace the damper handle rod, actuator link and the 3/8" flat washer.

Step# 6. Clean the cement groove of the damper linkage access panel and its mating surface on the left air/wear plate and upper fireback of all old furnace cement. Proceed to step 26 thru 28 of the assembly section of this manual.

REPLACING OR SERVICING THE UPPER FIREBACK AND DAMPER ASSEMBLY

TOOLS REQUIRED. Ratchet Handle, 3/8" drive
 7/16" Deepwell socket, 3/8" drive
 Rolling head pry bar, 6" - 10"
 Allen Wrench, 5/32"
 Caulking Gun Frame
 Thermocement, 11 oz. tube
 Cold Chisel, 1/2"
 Hammer, Ball Peen, 12 oz.
 Safety Goggles

Perform steps 1 thru 5 of the damper linkage repair section.

Step# 1. Remove the 4 cap screws that secure the upper fireback to the right and left air/wear plates.

- Step# 2. Place the chisel end of the rolling head pry bar in the seam between the upper and lower firebacks about 2" in from the right or left air/wear plate. Tap the chisel end of the pry bar with the ball peen hammer until the upper fireback starts to separate from the lower fireback. Pull down on the pry bar until the cement holding the upper fireback to the stove top loosens. Remove the upper fireback and damper assembly.
- Step# 3. Service and/or replace the upper fireback, damper, torsion bar, damper tabs and torsion bar clips.
- Step# 4. Regasket the damper and the upper fireback. Refer to the gasketing section of this manual.
- Step# 5. Clean the upper fireback of all old furnace cement. Clean the cement channel for the upper fireback in the underside of the stove top thoroughly, paying particular attention to the right and left corners.
- Step# 6. Cement the upper fireback channel in the underside of the stove top and proceed to steps 24 thru 28 of the assembly section of this manual.

Step# 6. Inspect the kaowool strips in the lower fireback and the bottom of the stove back. If the kaowool strips are compressed below the top edge of the inside ribs of either the lower fireback or the stove back, replace them. The kaowool strips when in place must provide a complete seal as well as a cushion for the refractory package.

Step# 7. Clean all old furnace cement from the bottom flange of the stove back and the stove back cement channel in the stove bottom.

Step# 8. Regasket the stove back. Refer to the gasketing section of this manual for instructions. Fill the stove back cement channel in the stove bottom with thermocement.

Step# 9. Place the refractory package into the stove back. Place the right and left heat deflectors into their proper positions in the stove back.

Step# 10. Install the stove back.

ELIMINATING AIR LEAKS AT THE FIRE DOORS

TOOLS REQUIRED: 7/16" Combination Wrench(box & open)
 9/16" Combination Wrench(box & open)
 Flat File, medium cut.
 Wire Brush
 Rubber Mallet, 4 lb. dead blow
 7/32" Allen Wrench
 Gasket Cement, 3 oz. tube

Refer to step 41 of the assembly section of this manual. If a good door seal cannot be achieved, remove the doors and regasket them following the instructions in the gasketing section of this manual. If the right fire door seals and the left does not, remove the left door. Strip the old gasket from its groove and clean the groove thoroughly with the wire brush. Apply an unbroken bead of gasket cement in the bottom of the groove. Cut a 4' length of 1/8" thermocord gasket and place it in the bottom of the groove. Press the gasket into the groove evenly and trim off the excess. Apply an unbroken bead of gasket cement onto the 1/8" thermocord gasket and the sides of the gasket groove. Cut a 4' length of 5/16" thermocord gasket and place it in the groove on top of the 1/8" gasket. Press the gasket into the groove evenly all the way around and trim off the excess. Install the left door and proceed with the door adjustment outlined in step 41 of the assembly section of this manual.

Tool Requirements (cont'd).:

- 1 Rubber mallet 4 lb. dead blow
- 1 cold chisel, 1/2"
- 1 cold chisel, 3/8"
- 1 cold chisel, 5/8"
- 1 Punch/drive pin, 1/8"
- 1 Punch/drive pin, 1/4"
- 1 Punch/drive pin, 3/8"
- 1 Caulking gun frame
- 1 Rolling head pry bar, 1/2"x15"
- 1 pinch bar, 1/2"x15"
- 1 Water pail, 2 gallon or larger
- 1 Sponge or water absorbent cloth
- 1 Tape measure, 6"
- 1 Machinists rule, 6"
- 1 Pair cutting shears, 6"-8"
- Clean rags
- 1 Kitchen Knife, serrated, 6"- 7"blade

- Step #8. Remove the damper link access panel. 2 each 1/4"-20x1/2" socket flat head machine screws. Use the cold chisel in the cement seams and a ball peen hammer to loosen.
- Step #9. Remove the damper handle rod from its drilling in the left stove end and the forward drilling in the damper actuator link. Do not allow the 3/8" flat washer or the damper actuator link to fall between the left stove end and the left air/wear plate.
- Step #10. Remove the upper fireback and damper assembly. 4 each, 1/4"-20x1" hex head cap screws and 4 each, 1/4" flat washers. Do not allow the damper actuator link to fall into the opening between the wear plate and the stove end.
- Step #11. Remove the lower fireback. 2 each, 1/4"-20x1" hex head cap screws and 2 each, 1/4" flat washers. Pry the fireback loose with a pinch bar from its bottom cement channel.
- Step #12. Remove the stove back. 6 each, 1/4"-20x3/4" hex head cap screws and 6, each 1/4" flat washers. Strike the stove back joint areas with a rubber mallet to loosen the cement.
- Step #13. Remove the combustion package assembly and the right and left heat deflectors from the stove back. Handle the combustion package assembly gently and place it in a safe area until you are ready to examine and clean it.

Step #17. Remove the stove front. 1 each 1/4"-20x3/4" hex head cap screw and 1 each 1/4" flat washer holding the front to the left end. 1 each, 1/4"-20x3/4" hex head cap screw and 1 each, 1/4" flat washer holding the front to the right end. 1 each, 1/4"-20x1" hex head cap screw and 1 each, 1/4"-20 hex nut holding the front to the bottom. Strike the air manifold with a rubber mallet sharply at the right and left joints and remove the front with the air manifold and andirons attached.

Step #18. Remove the right end. 1 each, 1/4"-20x3/4" hex head cap screw and 1 each, 1/4" flat washer located at the center of the inside bottom flange. Rock the end loose and remove.

Step #19. Remove the left end, 1 each, 1/4"-20x3/4" hex head cap screw and 1 each, 1/4" flat washer located at the center of the inside bottom flange. Rock the end loose and remove.

Step #20. Remove the primary air tube cover plate. 3 each, 1/4"-20x2" Phillips flat head machine screws. To loosen the screws, place a #3 Phillips screwdriver tip into the screw and strike the screwdriver handle sharply with a ball peen hammer. Chip the furnace cement loose from the seams and gently pry the cover plate loose.

Step #21. Remove the primary air regulator system. 2 each, 1/4"-20x5/8" Phillips round head machine screws. Tap the air frame gently at the seams and remove.

Step #33. Place the doors with their outside faces down on a clean flat surface. Remove the door manifold. 2 each, 10-24x3/4" Phillips pan head machine screws and 1 each, 1/2"x3/4" glass clip. Remove 3 each, 10-24x1/4" Phillips pan head machine screws and 3 each, glass clips. Reach under-neath the door and push the glass and gaskets upward and out of the frame. Scrape the frame with a putty knife, removing all dry cement and old gasket material. Inspect and clean the glass. Replace any broken or cracked glass. Check the condition of the formed gasket which separates the glass panes. Replace it if it is broken, crushed or badly deformed. Remove the hinge boss from the door frame. 3 each, 1/4"-20x1/2" hex head leveler bolts and 3 each, 1/4" flat washers. Inspect the hinge pins. If the pins are broken or severely bent, drive them out of the hinge boss with a 1/8" punch/drive pin and ball peen hammer. Remove the gasketing from around the door frame. Clean the gasket channels. Unscrew the door handle and tab assembly. Inspect the 7/16"20x3/4" socket set screw for looseness in the door and/or damaged threads. If defective, remove with a 7/32" Allen wrench. After thoroughly cleaning, paint the outside surface of the doors and hinge bosses at this time. Use Vermont Castings High Temperature Stove Paint (black), part number 000-0086 (9 3/4 oz.) and follow directions on the can.

Gasketing

Step 7. If possible, place the gasketed part firmly against its normal mating surface in order to seat the gasket evenly in its cemented channel or groove. Use a 1"x4"x18" long, wooden straight edge where required. Remove gasketed part and clean any excess gasket cement that has squeezed out around the gasket before placing aside to dry.

Defiant Encore gasket requirements. Refer to the Gasket Illustration figure numbers.

Top (Fig.1) Griddle opening, one piece, 4' - Armaseal 5/16" diameter, cored, part number 120-3588.

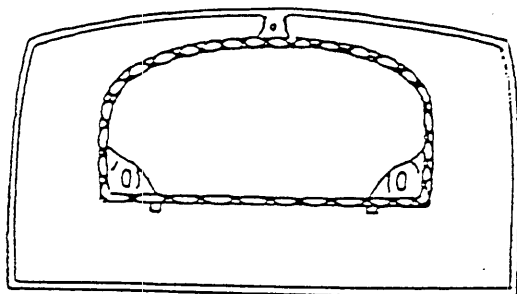


Fig. 1
Top (Griddle)

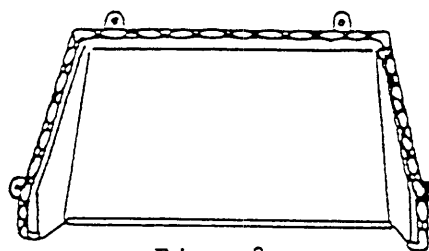


Fig. 2
Ash Drop

Ash Drop (Fig.2) Ash drop to bottom seal, one piece, both sides and back.
4' Thermocord 5/16" diameter, 6 needle, part number 120-3588.

Lower Fireback (Fig.3) Both sides to wear plates seal, two pieces, 8" each, thermocord, 5/16" diameter, 6 needle, part number 120-3588.

Gasketing

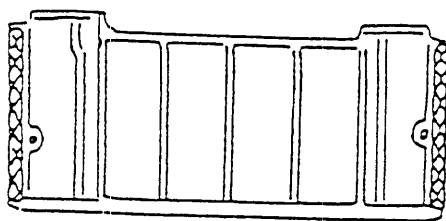


Fig. 3
Lower Fireback

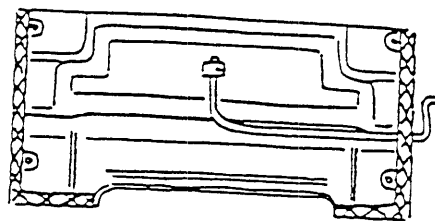


Fig. 4
Upper Fireback

Upper Fireback (Fig.4) Both sides to wear plates and lower fireback seal, two pieces, 15" each, thermocord, 5/16" diameter, 6 needle, part number 120-3588.

Ash Door (Fig.5) Complete door to ash drop seal, one piece, 4' thermocord, 3/8" diameter, 4 needle, part number - 120-3589.

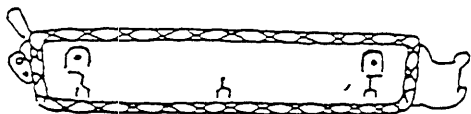


Fig. 5
Ash Door

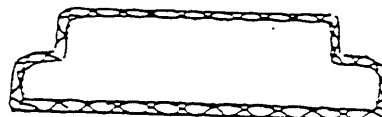


Fig. 6
Damper

Damper (Fig.6) Complete damper to upper fireback seal, one piece, 3'6" thermocord, 5/16" diameter, 6 needle, part number 120-3588.

Back (Fig.7) Stove back to ends and top seal. 1 piece, 5' thermocord, 5/16" diameter, 6 needle, part number 120-3588.

Step #26. Remove the ash pan bracket from the ash door. 2 each, 1/4"-20x1/2" hex head cap screws and 2 each, 1/4" flat washers. Remove the handle from the ash door. 1 each, 3/8"-16 hex toplock jam nut on the pawl. Loosen the 1/4"-20x1/4" socket set screw on the pawl. Remove the pawl and pull the handle out.

Step #27. Remove the damper from the upper fireback. 3 each, 1/4"-20x1/2" hex head cap screws and 3 each, flat damper tabs. Lift out the damper. Remove the torsion bar. 1 each, 1/4"-20x1/2" hex head cap screw and 1 each, torsion bar clip. Pull the torsion bar from the upper fireback.

Step #28. Remove the primary air valve from the primary air frame. Pry the air rod clip from the end of the rod. Push the air rod through its drillings and remove the valve and rod from the frame.

Step #29. Examine the combustion package assembly. Check the heat exchanger for distortion, loose spot welds, etc. Check the right and left heat deflectors for distortion. Check the refractory stainless steel cover for distortion. Replace any defective parts. Check the catalyst block for general deterioration. Check the refractory chamber and the catalyst block access panel for breaks, chips, separations, etc. If the catalyst block, refractory chamber and refractory access panel are in good condition, clean them with low pressure air from your vacuum cleaner.

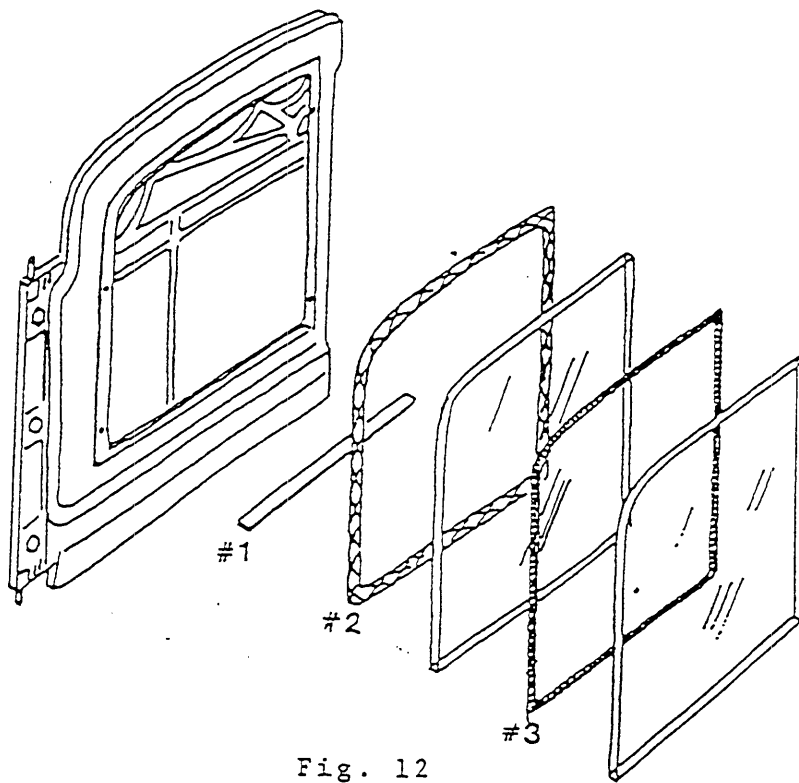


Fig. 12
Door Glass

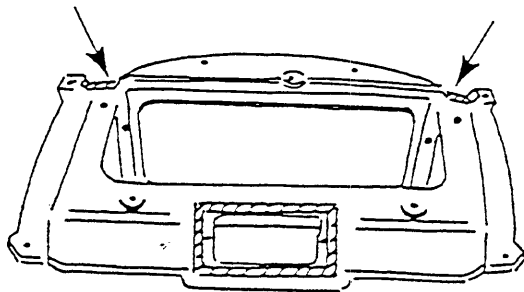
Gasket #3 provides cushioning and separates the inner and outer glass panes. This gasket is pre-formed and comes ready-made, part number 500-2798. This gasket does not require glue or cement.

Note - Both doors require the same door glass gasketing.

Step #2. drop, clevis facing the door opening with 3 each, hex head cap screws(1/4"-20x3/4") and 3 each, standard flat washers (1/4") finger tight.

Step #3. Cement the stove bottom at points indicated in Figure C-1.* Place the ash drop on the stove bottom and secure with 4 hex head cap screws (1/4"-20x3/4") and 4 each, standard flat washers(1/4").

Fig. C-1
Bottom (bottom view)



Step #4. Place the ash lip on the stove bottom and secure with 2 each, socket flat head machine screws(1/4"-20x1/2").

Step #5. Assemble the primary air regulator system. Place the primary air frame face down on a flat surface(drilled bosses up). Thread the primary air rod through the drilling in the bottom of the air valve and just start it into the left top (hinge) drilling of the frame. Place the air valve and rod in the frame so that the air rod hinge drillings are in alignment. Push the air rod from left to right through the aligned drillings and secure the air rod in the air frame with the 1/8" friction clip (see Fig. A-1). Turn the assembly over and

Step #8. Cement all channels, flanges and mating surfaces indicated in Figure C-2. Do not allow any cement to contact the thermostat cable. Place the primary air tube cover plate in position on the stove bottom and secure with 3 each, Phillips flat head machine screws $(1/4"-20 \times 2")$.

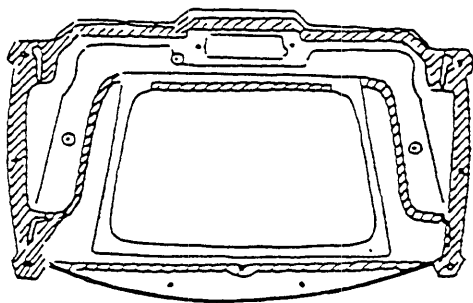


Fig. C-2
Bottom (top view)

Step #9. Place the stove front in its cemented channel on the stove bottom (Figure C-3) and secure with 1 each, hex head cap screw $(1/4"-20 \times 1")$ and 1 each, hex lock nut $(1/4"-20)$ center bottom of the stove front.

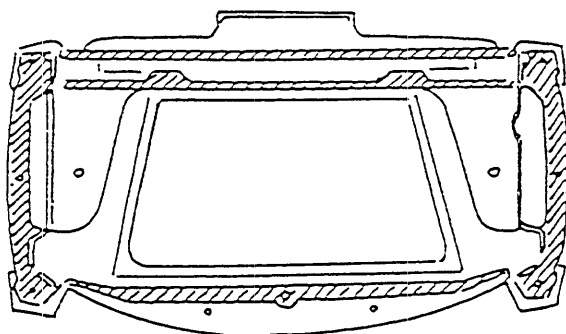


Fig. C-3
Bottom with Air Tube Cover
Plate in Place

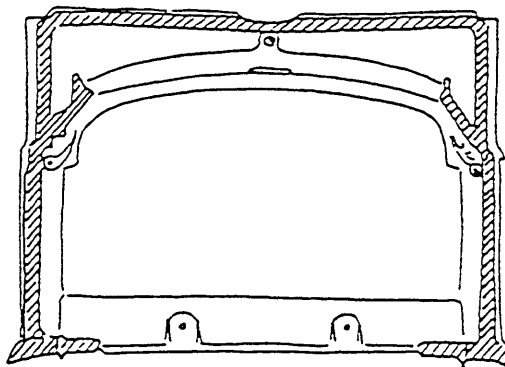


Fig. C-4
Front

Step #10. Cement all mating surfaces on the stove front as indicated in Figure C-4. Place the front air manifold in position on the inside of the stove front and secure with 1 each, hex head cap screw $(1/4"-20 \times 2")$.

Step #13. Place the stove back onto its cemented channel in the stove bottom, push the back against its mating surfaces on the right and left stove ends aligning drillings in the stove back with their corresponding tapped holes in the stove ends. If alignment cannot be achieved, loosen the cap screws securing the stove ends to the bottom and the ends to the front and tap the entire assembly into proper alignment with the rubber mallet. When alignment is achieved, secure the back to the stove ends with 6 each, hex head cap screws (1/4"-20x3/4") and 6 each, standard flat washers (1/4"). Retighten the cap screws securing the ends to the bottom and the ends to the stove front.

Step #14. Cement channels and mating surfaces on the underside of the stove top as indicated in Figure C-8. Place the top in position on the stove front, ends, and back insuring that a good all around seal is

achieved. Use the rubber mallet as necessary. Secure the top to the stove front with 1 each,

Phillips flat head machine screw (1/4"-20x3/4"). Secure the top to the rear of the stove ends with 2 each, hex head cap screws (1/4"-20x3/4") and 4 each, standard flat washers (1/4") 2 per cap screw.

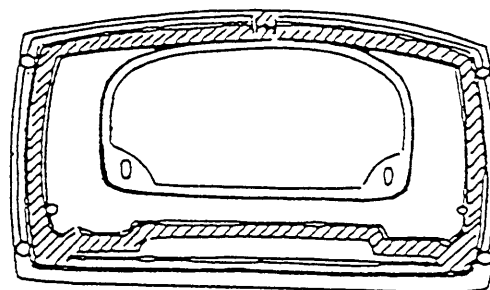


Fig. C-8
Top

Step #16 through the hole in the center of the thermostat pocket of the wear plate (see figure A-3)

Insert the front mating surface of the right air/wear plate against the right end of the front air manifold and the front of the right stove end at a 30 degree angle. Holding the wear plate as close to the stove top as possible, swing the back of the wear plate against its mating surface(back of the right stove end). Tap into proper position with the rubber mallet so that the top and bottom drillings in the wear plate align with the tapped holes in the right stove end. Secure with 2 each, hex head cap screws(1/4"-20x1").

Step #17. Insert the right and left heat deflectors in the right and left bottom corners of the stove back. Cut 4 each, 5" strips of 3/4" square kaowool. Place 2 each kaowool strips side by side between the left and right pair of ribs in the bottom of the stove back.(see fig. A-4).

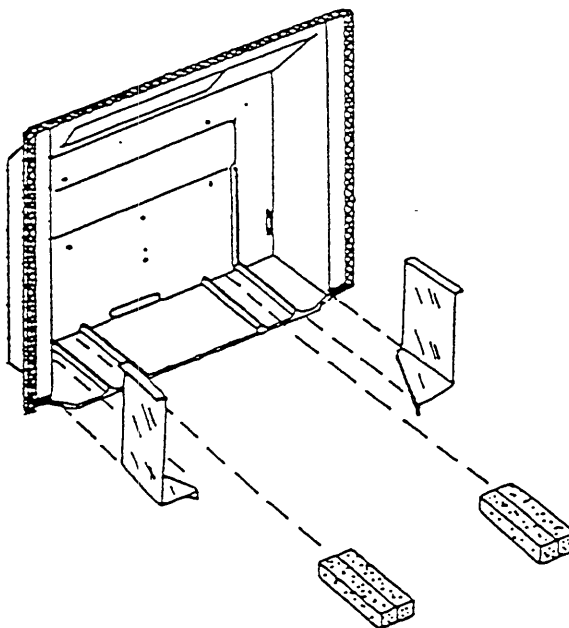
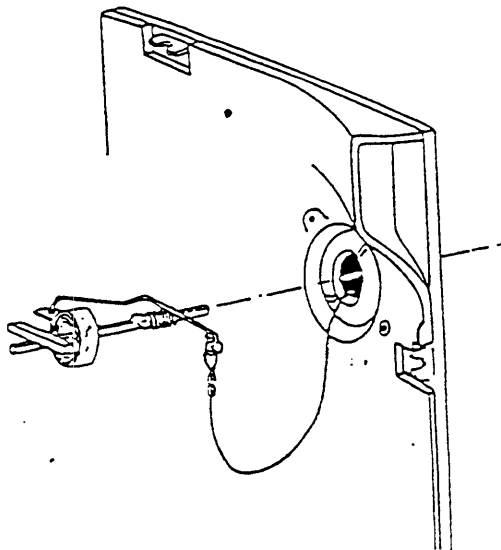


Fig. A-4 Kaowool & Heat Deflector Placement in Stoveback

Step #20 the jump ring completely closed with pliers. Holding the
(cont) thermostat assembly so that the limiter bar is on top of the
rod, swing the cable actuator rod over the top of the
thermostat shaft as shown in figure A-5. Place the friction
spring on the thermostat shaft and slide the spring up to the
shaft stops. Holding the thermostat assembly in the left hand
and insuring that the limiter bar is on top of the shaft and
parallel with the stove top, Insert the end of the shaft, cable
and actuator rod through the hole in the center of the
thermostat pocket of the right air/wear plate. Loosen the set
screw on the primary air valve and gently pull the slack out of
the cable while maintaining your grip on the thermostat shaft
protruding out of the right stove end.

When the slack is out of the cable, tighten the set screw on
the air valve. Push the thermostat shaft from inside the stove
until stiff resistance is felt from the friction spring, slip
the thermostat handle stub on the end of the shaft and push the
handle stub tight against the outside of the right stove end.
tighten the set screw in the handle stub against the flat side
of the shaft. Cement the mating surface of the thermostat
access cup (Fig. C-11). Place the 1/4" stainless steel flat
washer on the thermostat shaft and slide it against the limiter
bar.



Step #22. will not interfere with the closing of the primary air valve.

(cont) Crimp the copper sleeve with pliers and cut off the excess cable.

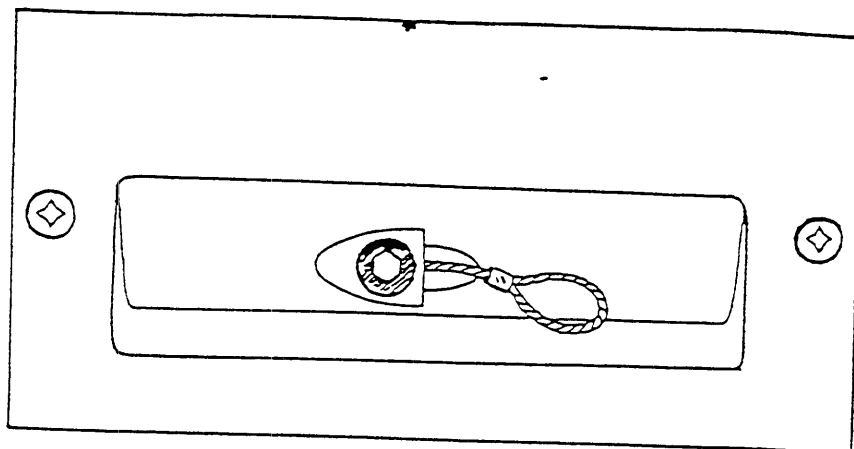


Fig. A-6 Adjusting and sleeving the Primary Air System Cable

Step #23.

Install the lower fireback.
Cut 2 each, 7" strips of 3/4" square kaowool. Place the kaowool strips between the outer ribs of the reverse side of the fireback(left and right) as shown in fig.A-7. Place the lower fireback into position against the combustion package assembly, aligning the drillings in the lower fireback with the tapped holes in the right and left air/wear plates. Secure with 2 each, hex head cap screws (1/4"-20x1") and 2 each, standard flat washers (1/4").

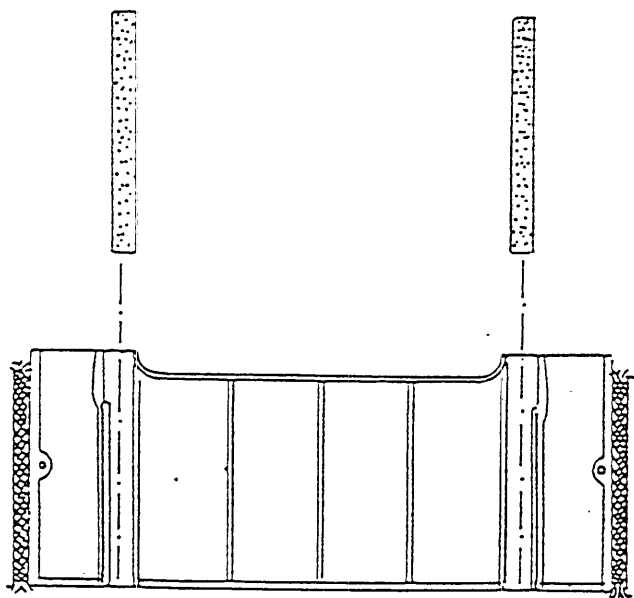


Fig. 7 Kaowool Placement,
Lower Fireback

Step #26 end (pointing towards the stove front and down) onto the end of
(cont) the damper torsion bar. Move the bar behind the ear of the
damper linkage access opening in the left air/wear plate.
Place 1 each, narrow flat washer (3/8") on the long end of the
damper handle rod. Insert the long end of the damper handle
rod through its drilling in the left stove end. Insert the
short end of the damper handle rod through the drilling in the
short curved end of the damper actuator link. Align the
linkage properly and check operation for binding and/or
stoppage.

Step #27. Install the damper handle stub. Place the damper in the
updraft position. While maintaining pressure on the damper
handle rod from inside the stove, slide the damper handle stub
onto the opposite end of the damper handle rod and align the
damper stub with the open or updraft mark on the stove end.
Tighten the set screw in the handle stub with the 5/32" Allen
wrench. Move the damper handle from the full open(updraft)
position to the fully closed and locked (catalytic burn)
position. Linkage should move freely until approaching the
locked position. The damper should seat fully into the
fireback when locked.

If the damper does not move freely, correct by filing or
grinding the suspect parts. Do not bend or force any damper
linkage parts. If the damper does not lock, correct this
deficiency by first insuring tight and proper assembly. If the
deficiency persists, consider replacement of the tabs, clip,
torsion bar, actuator link and/or the damper handle rod.

of the secondary air link through the hole in the tab on the secondary air flap. Insert the secondary air probe through the drilling in the stove back and secure with 1 each, Phillips pan head machine screw (10-24x1/4"). Secure the secondary air flap to the stove back with 1 each, Phillips pan head machine screw (10-24x1/4") and 1 each, shim ring. Tighten the screw securing the air flap until snug and back off 1/4 turn. Insure that the secondary air flap moves up and down freely and that the flap rests at or near the closed position. See figure A-8.

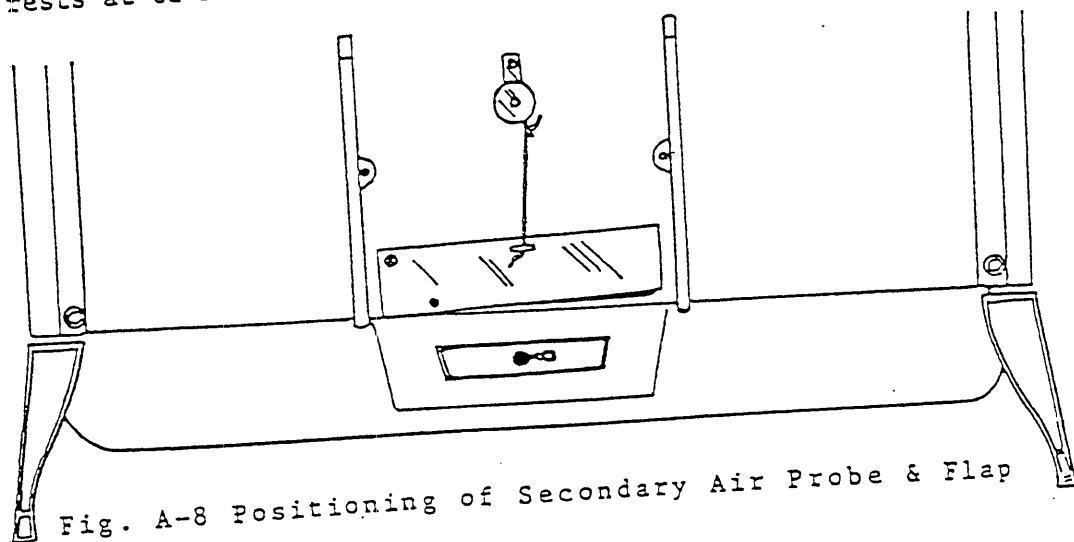


Fig. A-8 Positioning of Secondary Air Probe & Flap

Step #32. Install the secondary air cover plate. Secure with 2 each, Phillips pan head machine head screws (1/4"-20x3/8").

Step #33. Assemble and install the ash door. Screw the socket, button head cap screw into the stepped side of the pawl (see Fig. A-9). Thread the hex nut onto the end of the socket, button head cap screw and tighten finger tight against the flat side of the pawl. Screw the socket set screw into the handle shaft drilling of the pawl. Slide

Step #41 If when latched, the door handle is not in the vertical
(cont) position, remove and replace the split roll pin (3/16"x1") in
the handle tab opening of the stove front. After leveling and
plumbing the doors and adjusting the latching mechanism, check

the seal of both doors by applying the "notepaper test" (see
Fig.A-12). If the doors fail the test, re-adjust the hinge
bosses, latch the doors and retest.

Step #42 Assemble and install the griddle. Place the griddle quadrants
on the underside of the griddle and secure with 2 each, hex
head cap screws (1/4"x20x1/2"). Install the griddle handle
assembly and secure with 1 each, hex nut (10-24) and 1 each #10
washer. Install the griddle on the stove and tap gently around
its perimeter with a rubber mallet to seat the gasket.

