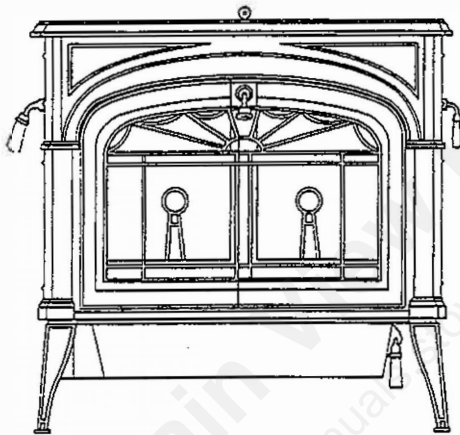


This appliance has been retired.
For current replacement part numbers, please refer to the
individual service parts list located on the brand
websites or contact your local dealer for part availability.

FOR REFERENCE ONLY



SERVICE MANUAL



for the

**VERMONT CASTINGS
1995 DEFIANT ENCORE**

Model 2550

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HISTORY OF CHANGES 1995 DEFIANT ENCORE

Model 2550

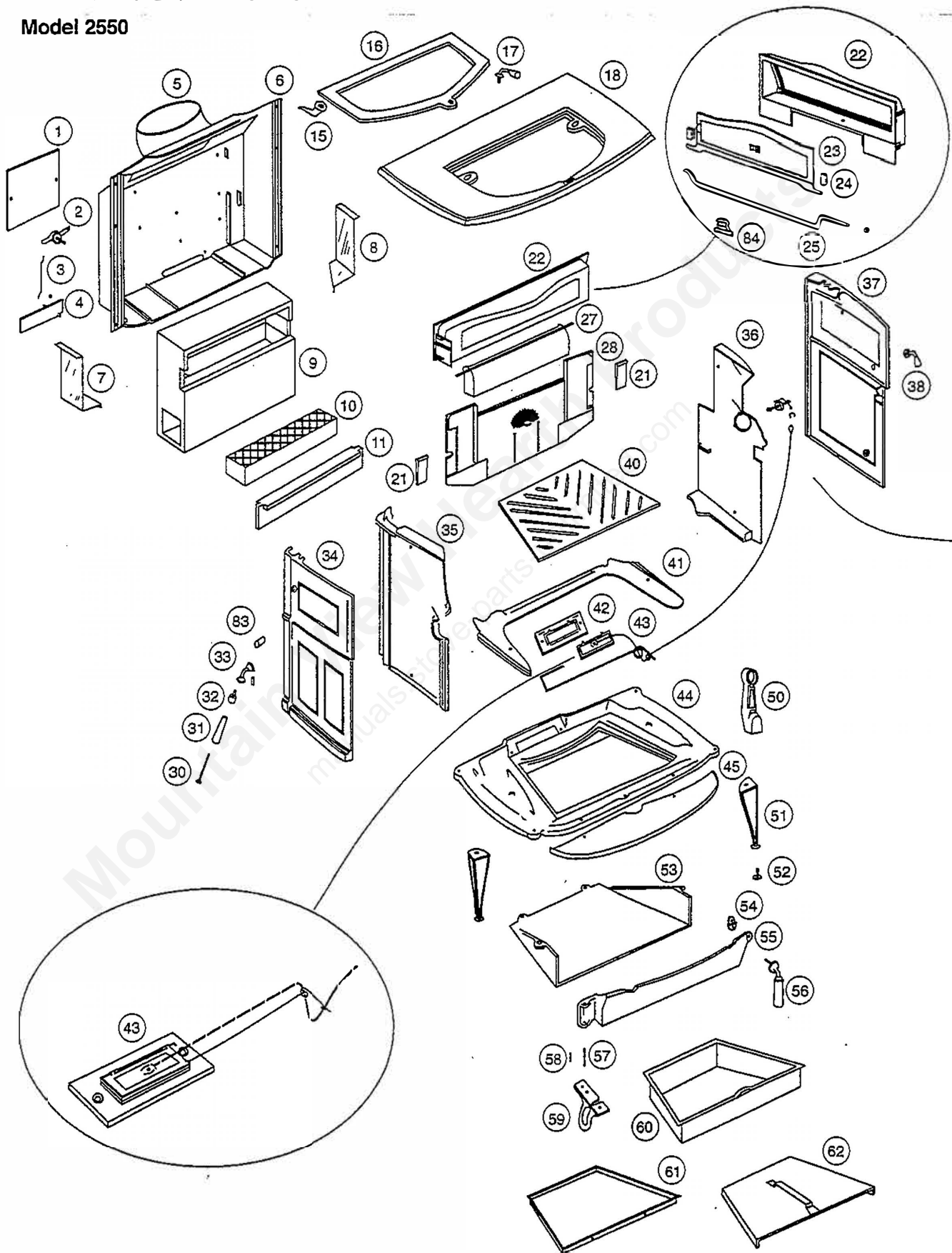
This section covers the Defiant Encore model 2550, built beginning in March, 1995.

In March, 1995, Vermont Castings changed the Defiant Encore stove to simplify assembly and minimize enamel chipping.

- The visible parts of the front doors are now one casting instead of two. This ensures a good enamel color match and minimizes chipping during assembly.
- The front door latch is lower than on earlier models, and catches on a steel fitting bolted to the stove front. This keeps the latch from chipping the enamel lip above the doors.
- The damper handle is relocated toward the back edge of the left stove side. Damper operation is reversed from the previous design; you pull the handle toward the front of the stove (counter-clockwise) to close the damper. The damper now has an adjusting screw, visible through the firebox.

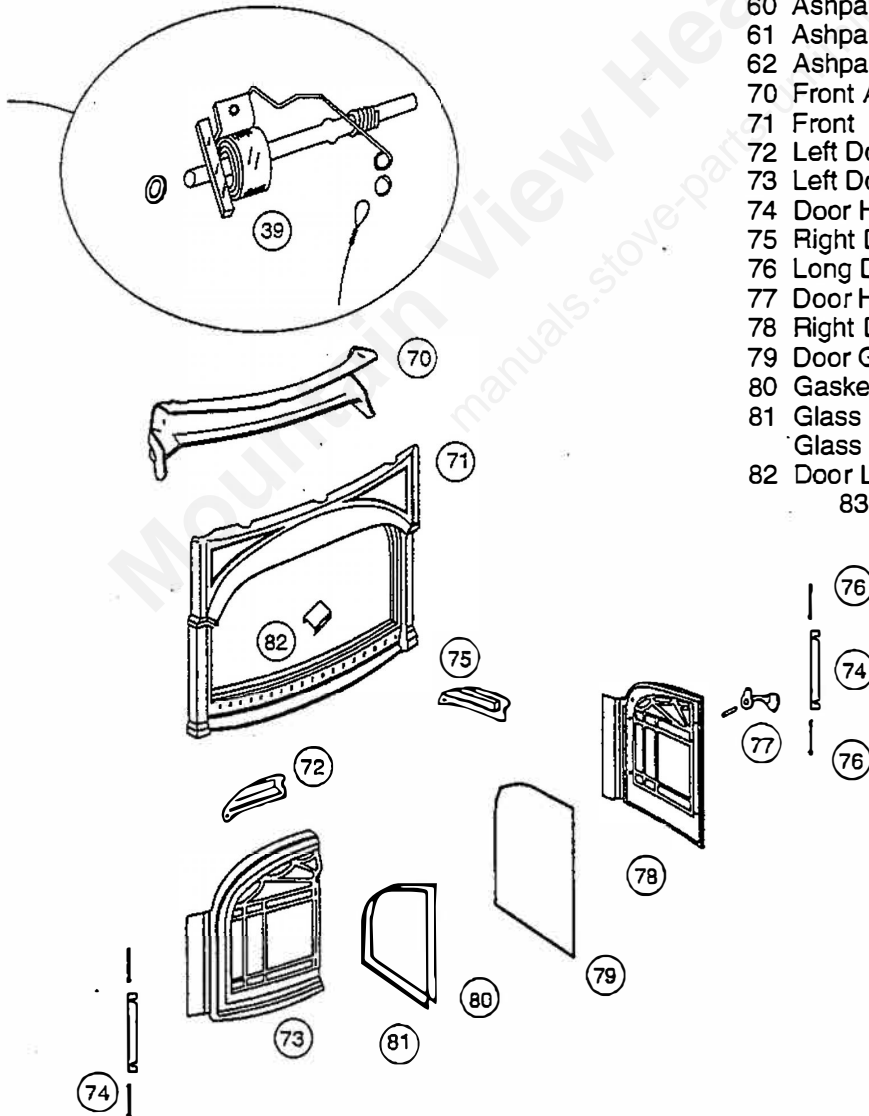
1995 DEFIANT ENCORE X-VIEW AND PARTS LIST

Model 2550



- 1 Secondary Air Cover Plate 160-1492
- 2 Secondary Air Probe Ass'y 160-1489
- 3 Secondary Air Link 160-1486
- 4 Secondary Air Flap 160-1490
- 5 Flue Collar - 8" 130-4280
- 6 Back 130-8620
- 7 Left Heat Deflector 160-8629
- 8 Right Heat Deflector 160-8630
- 9 Refractory Ass'y - Body 160-2512
- 10 Canned Catalyst Block 160-2505
- 11 Refractory Ass'y - Cover 160-2511
- 15 Right Griddle Quad 130-1832
- Left Griddle Quad 130-1807
- 16 Griddle 130-0797
- 17 Griddle Handle Assembly 500-4022
- 18 Top 130-8618
- 21 Wedge (2) 130-1810
- 22 Upper Fireback 130-8630
- 23 Damper 130-8631
- 24 Damper Tabs (3) 160-1488
- 25 Damper Rod 160-0851
- 27 Combustion Throat 130-8625
- 28 Lower Fireback 130-8627
- 30 Damper Handle Screw 120-1294

- 31 Ceramic Handle 160-0620
- 32 Handle Insert 160-0650
- 33 Steel Handle Stub 160-0608
- 34 Left End 130-8629
- 35 Left Air Plate 130-8621
- 36 Right Air Plate 130-8622
- 37 Right End 130-8617
- 38 Thermostat Handle 500-4264
- 39 Thermostat Assembly 500-5470
- 40 Flat Grate 130-7434
- 41 Pri. Air Tube Cover Plate 130-8609
- 42 Primary Air Frame 130-7411
- 43 Pri. Air Regulatory System 500-0337
- 44 Bottom 130-8604
- 45 Ash Lip 130-7406
- 50 Andiron (2) 130-7419
- 51 Leg (4) 130-7427
- 52 Levelling Bolt (4) 120-1745
- 53 Ash Drop 130-8603
- 54 Pawl 130-0515
- 55 Ash Door 130-8607
- 56 Ash Door Handle 160-0663
- 57 Ash Door Hinge Pin 120-8608
- 58 Cotter Pin 120-3029
- 59 Ash Door Hinge 130-8605
- 60 Ashpan 160-1025
- 61 Ashpan Bracket 160-1039
- 62 Ashpan Cover 160-1027
- 70 Front Air Manifold 130-8615
- 71 Front 130-8635
- 72 Left Door Manifold 130-7403
- 73 Left Door 130-8637
- 74 Door Hinge Strip 130-8634
- 75 Right Door Manifold 130-7404
- 76 Long Door Pin 160-0547
- 77 Door Handle Assembly 500-4225
- 78 Right Door 130-8636
- 79 Door Gasket 120-3588
- 80 Gasket for Glass 120-3516
- 81 Glass - Right Door 140-8629
- Glass - Left Door 140-8630
- 82 Door Latch 140-8628
- 83 Spacer 120-1779
- 84 Damper Ramp 130-1811



SERVICE PROCEDURES 1995 DEFIANT ENCORE

Model 2550

This section covers repairs and adjustments to the model 2550 Defiant Encore stoves built since March, 1995. Service procedures for this model are identical to those for the previous model 2190 Defiant Encore, except in three areas: *damper adjustment; the removal, regasketing, and replacement of the upper fireback/damper assembly; and adjustments to the front door.*

Wear gloves, a dust mask and protective eyewear when servicing a stove.

Replacing the Refractory Package

1. Open the damper and remove the handle stub ("faucet").
2. Remove the andirons; one 7/16" hex head bolt each.
3. Remove the throat hood; swing its bottom edge forward and then slide the hood to one side until the trailing end drops from its supports. Take it out of the stove.
4. Remove the two wedges that hold the lower fireback in place.
5. Remove the lower fireback. Simply lift it out of the firebox.
6. Remove the left and right wear plates; two 7/16" hex head bolts each.
7. Remove the upper fireback. Two hex head bolts hold it in place. The heads are on the outside of the stove back. Swing the right end of the upper fireback assembly forward and let it drop into the fireback.
8. Carefully pull the entire refractory package straight forward. Leave the steel heat exchangers in place in the left and right sides of the stove back.
9. Install the new refractory package. Replace the catalyst. Install the access panel.
10. Inspect, clean; or replace the fireback as needed.
11. Re-install the upper fireback assembly; fasten it in place with two 1/4"-20 x 1-1/2" hex bolts.
12. Attach the handle and its 'faucet' to the handle rod with the allen bolt, and test the damper for smooth action.
13. Re-install the left and right wear plates, with their two bolts each.
14. Re-install the lower fireback, and secure it with two wedges.
15. Replace the throat hood.
16. Re-install the andirons.

Replacing the Primary Air Cable

1. Remove throat hood.
2. Remove the right wedge, between the right wear plate and the lower fireback.
3. Remove the right wear plate (bolts at top and bottom, 7/16" heads)
4. Remove the thermostat handle from the thermostat stem with an allen wrench.
5. Pull the thermostat and stem assembly into the firebox. Be sure to hang onto the friction spring on the stem.
6. Remove the primary air frame and valve assembly. Pull the frame away from the stove bottom and to the right gently, to protect the primary air rod.
7. Detach the old cable from both ends. Be sure to keep the small clip that joins the upper end of the cable to the thermostat.
8. Fish the new cable through the primary air opening at the bottom of the right side of the firebox and through the primary air frame opening at the back bottom of the stove.
9. Attach both ends of the cable. Be sure the cable hangs properly from the rod on the thermostat stem, and passes under the stem. Be sure the friction spring is on the thermostat stem; push the stem through its hole in the stove side and re-attach the handle with the allen bolt. Swing the handle back and forth to ensure that there's a bit of tension on the friction spring. If there's not enough tension on the spring to hold the thermostat assembly in place when you release it, loosen the allen bolt on the handle stem and push the stem further out through the stove side, and re-attach the handle.
10. Clean the primary air frame and its mating surface of any old stove cement. Bolt the frame back into position, and test the thermostat action to be sure the valve nearly closes when the handle is swung fully to the rear.
11. Replace the right wear plate, with the two hex bolts, and replace the wedge that held the lower fireback in place.
12. Replace throat hood.

Adjusting the Damper

To adjust the damper to compensate for compression of the gasket, start by removing the griddle. Then:

1. Loosen the lock nut in the center of the damper.
2. Use an allen wrench to turn the pressure screw about one-half turn clockwise.
3. Test the damper's closing action. Do not over-tighten the screw, as this can cause binding when the parts expand under heat.
4. When the damper closes smoothly and snugly, tighten the lock nut and replace the griddle.

(Figure 1).

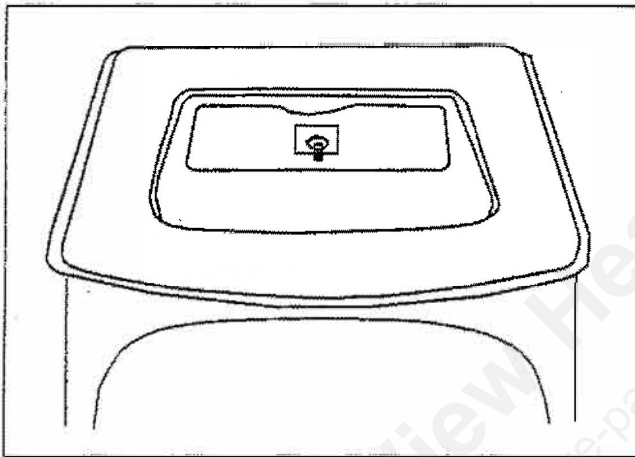


Figure 1. Damper lock nut

Adjusting the Positions of the Front Doors

The doors are factory-set to ensure a good seal between them and the stove front. If necessary you can adjust their position slightly by loosening the bolts that hold them to the hinge strips on their edges. Loosen the bolts only enough to enable you to nudge them up or down; do this with the doors fully open to avoid hitting them against the front of the stove. Reposition the doors as necessary (being sure that the latch engages its catch properly) and then tighten the bolts. Check the fit with a slip of paper, and adjust the latch as needed.

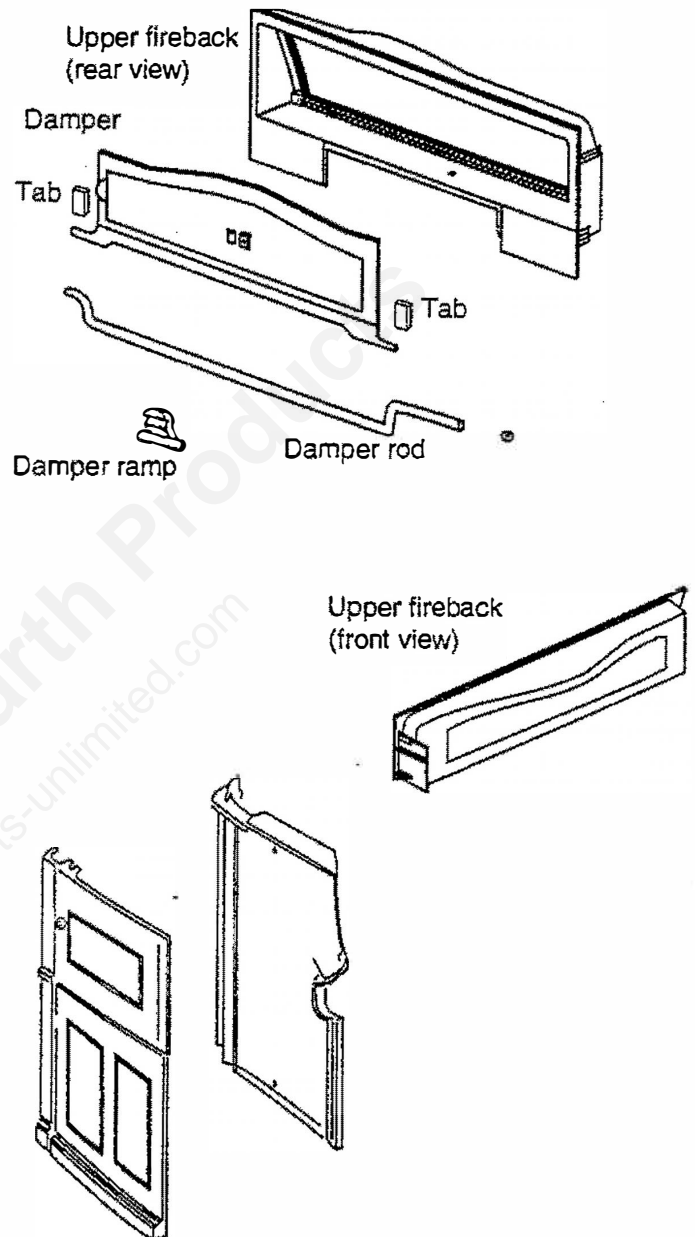


Figure 2. Damper components

DISASSEMBLY AND ASSEMBLY 1995 DEFIANT ENCORE

Model 2550

Disassembly

1. Lift off the griddle and the front doors. Remove the ash pan and dump the ashes. The pan will be a convenient place to store hardware during disassembly.
2. Lift out the grate and loosen the bolts holding the andirons in place. Lift out the andirons.
3. Loosen the allen bolts holding the thermostat and damper handles in place, and remove the handles.
4. Remove the throat hood by pulling its bottom edge forward till it clears the ribs on the lower fireback; then slide it to either side. It will then fall into the firebox. Tap out the wedges holding the lower fireback in place. Let the fireback fall forward and lift it out.
5. Remove the two hex-head bolts holding the left and right inner walls ('wear plates') in place, and remove the wear plates. You may need to pry the forward edges of the plates to get them out of position. Be sure to pad the edges of the enameled stove front if you use a prying tool.
6. Remove the upper fireback assembly. It is held in place with two bolts going inward from the outer stove back. When the bolts are out, pry the right end of the assembly forward, and remove the assembly through the firebox.
7. Remove the flue collar. It is held by bolts and square nuts.
8. Remove the left and right stainless-steel heat deflectors from the back of the stove. Carefully slide the refractory chamber, including the combustor, forward into the firebox, and lift it out. Handle it carefully, as it's fragile.
9. Disconnect the thermostat cable from the thermostat rod, and remove the thermostat assembly by pulling it into the firebox. Be sure to keep the small coil spring that is on the main stem.
10. Remove the stove top. There are nuts on two vertical threaded stems at the left and right rear corners of the firebox, and one counter-sunk Phillips bolt in front, under the griddle handle notch. Since the top traps the stove back in place, either have a helper hold the back up while you remove the top, or put a rope or strap around the stove body before you remove the top. Then remove the back.
11. Remove one side, then the other. They each have one bolt joining them to the stove front, and one bolt joining them to the bottom. When the hardware is out, break the cement seals and lift the parts off.
12. Remove the stove front. It has one bolt going through the middle of its bottom and into the stove bottom. The air manifold will come with the front when you remove it.
13. Remove the air tube cover. It has one bolt at each side, going downward into the stove bottom.
14. Flip the bottom assembly over, and remove the legs. The left front leg bolt head captures the ashdoor hinge pin; first remove the spring clip going through the hinge pin, then the hinge pin. The ashdoor will then come off.
15. Remove the ashlip. It has two bolts going upward into the stove bottom.
16. Remove the ashdrop. It has four hex-head bolts joining it to the stove bottom.
17. Remove the air manifold from the stove front. It has one hex-head bolt at the top.
18. Examine all castings for cracks, chips, or distortion. Repair or replace as needed. Remove all old gasket material. Use a cold chisel or an old screwdriver to remove old stove cement from cement channels and mating surfaces.
19. Remove the damper from the upper fireback, and remove the gasket. Examine the damper tabs and replace as needed.

ASSEMBLY

Gasketing

If new parts need to be gasketed, or old parts re-gasketed, **do all of the gasketing before starting to assemble the stove.**

Parts which need to be gasketed include:

Part	Gasket Size	Gasket Part No.
Left front door	5/16" x 58"	#120-3588
Right front door	5/16" x 42"	#120-3588
Front doors (glass)	3/16" x 36"	#120-3556
Ashdoor	5/16" x 42"	#120-3588
Griddle	5/16" x 44"	#120-3668
Flue collar	5/16" x 30"	#120-3591
Upper fireback (damper opening)	5/16" x 42"	#120-3588
Left wear plate	3/8" x 24"	#120-3589
Right wear plate	3/8" x 24"	#120-3589
Primary air valve	1/8" x 12"	#120-3518
Lower fireback	5/16" x 36"	#120-3588

Instructions and illustrations are given at the end of this section of the manual.

Cementing

Prepare parts which will need to be cemented before starting to assemble the stove, but **do not apply cement until just before installing the parts.**

Cementing instructions are given below. Illustrations showing where to apply cement are given as needed in the assembly instructions.

Prepare parts carefully so that new cement makes a tight seal between the parts to be joined. The channels and edges to be cemented must be free of old cement and dust.

Use a high quality stove cement.

New cement hardens quickly when exposed to air.

- * Clean and prepare parts ahead of time.
- * Apply cement just before putting the parts in place.

Work in an area where there is plenty of light, and a level work surface. Wear gloves and protective eyewear.

If the parts to be cemented are new, start with step 2. If old parts are to be re-cemented, they will need to be cleaned. Start with step 1.

1. Clean old cement from the channels and edges to be joined. Use a hammer and cold chisel, or screwdriver to remove old cement. Use a wire brush to finish cleaning the channels and edges. Vacuum the channels to remove dust.

2. Wipe the surfaces to be cemented with a damp cloth. Apply a generous bead of cement in the channel. Excess cement may squeeze out of the joint.

Excess cement which shows on the outside of the unit may be removed with a damp sponge. Clean up the excess promptly.

Excess cement on the inside of the unit will not usually be a problem. If clean-up is necessary, instructions will be given.

3. Join the two parts. Move the parts as little as possible after they have been put together.

ASSEMBLY

You will need at least 6 tubes of stove cement to re-assemble a Defiant Encore. Cut the tips of the tubes so you can apply an unbroken bead of cement to the cement channels and mating surfaces.

1. Place the stove bottom upside down. Put a generous bead of cement around the top edge of the ashdrop. (**Figure 3**). Attach the ashdrop to the bottom with four hex bolts.

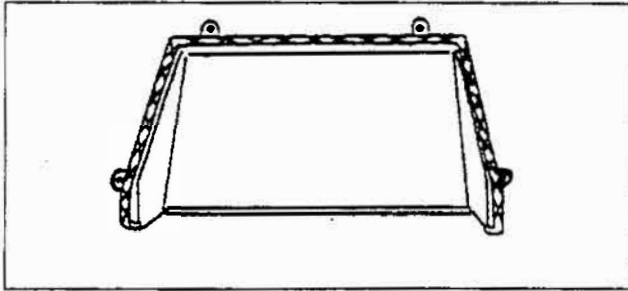


Figure 3. Ash Drop

Thread a leg leveler into each leg, and install the legs. Put the handle holder on the right front leg. Use an allen bolt to secure the left front leg, to accept the ashdoor hinge.

2. Attach the ashdoor bottom hinge to the bottom of the ashdrop. Attach the ashlip to the bottom with two countersunk bolts. Attach the ashdoor by running its hinge pin through the left end of the ashdoor and into the socket head of the left front leg's allen bolt. Run the cotter pin through the hinge pin to hold it in place.

3. Assemble the primary air valve assembly. Put the air frame face down with the drilled bosses up. Thread the primary air rod through the hole in the bottom of the air valve and just start it into the left top (hinge) hole of the frame. Put the valve and rod in the frame so that the air rod hinge holes align. Push the air rod from left to right through the aligned holes and secure the rod in the frame with the 1/8" friction clip. (**Figure 4**). Turn the assembly over and install the socket head cap (adjusting) screw, 1/4-20 x 3/16", in the center of the air valve, finger tight.

4. Install the primary air valve assembly on the stove bottom with the hinged side down. (**Figure 5**). Secure the assembly with two Phillips round head bolts, 1/4-20 x 5/8".

Turn the stove bottom over onto its legs. Thread the running end of the thermostat cable down through the small hole and up through the large hole in the air rod.

Pull the running end of the cable over to the valve and thread it through the small hole in the center of the valve. Pull 6" of cable outside the valve. Tighten the set screw finger tight. (**Figure 4&5**).

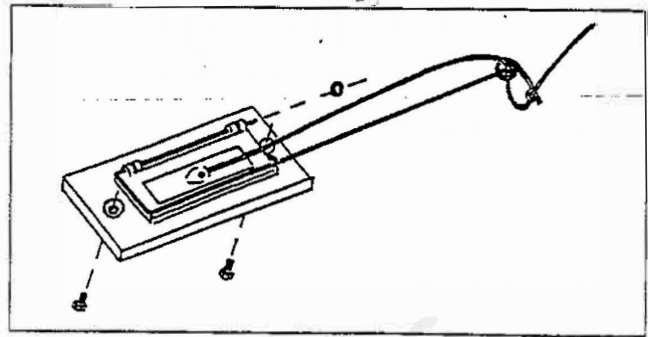


Figure 4. Primary air valve assembly

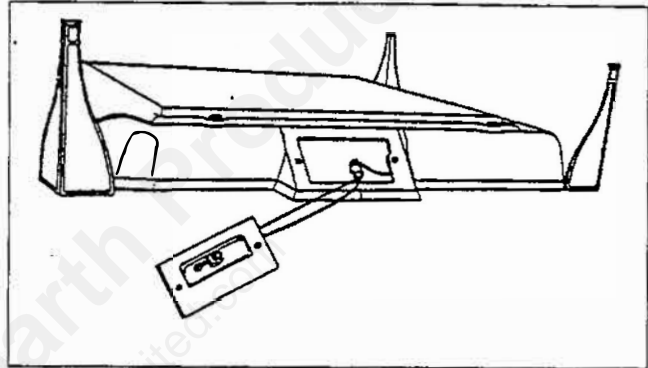


Figure 5. Primary air valve attachment

Pass the thermostat cable through the right-hand gap between the air cover and the stove bottom. Bolt the primary air cover to the stove bottom.

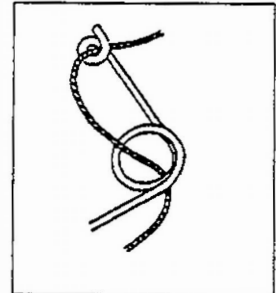


Figure 5. Detail

6. Cement all the channels, flanges and mating surfaces indicated in **Figure 6**. Keep the cement off the thermostat cable.

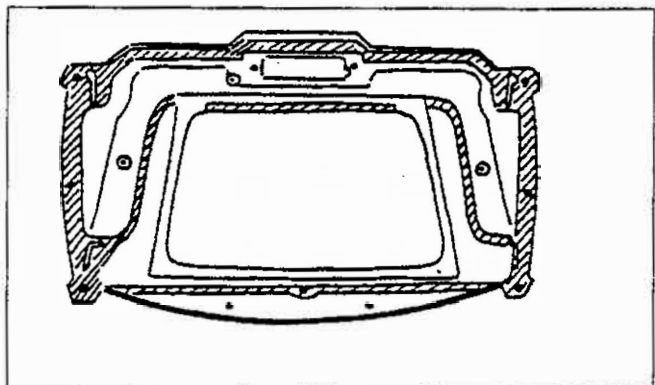


Figure 6. Bottom

7. Put the stove front in its cemented channel on the stove bottom and secure with one 1/4-20 x 1" hex bolt.

8. Install threaded stems in the tapped holes in the left and right back edges of the stove front. Cement all mating surfaces on the stove front as shown in **Figure 7**. Put the air manifold in position on the inside of the stove front and secure with one hex bolt, 1/4-20 x 2" long.

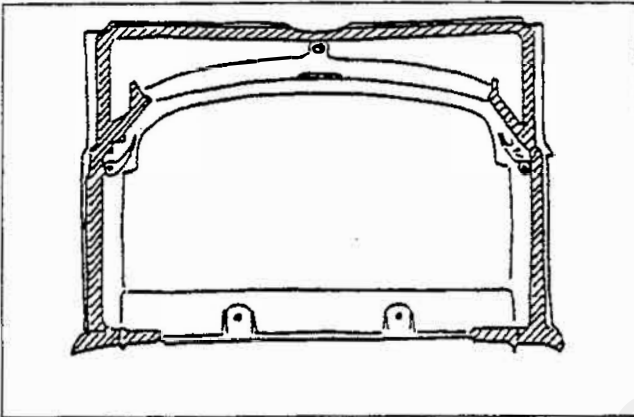


Figure 7. Front

9. Cement the channels and mating surfaces on the left stove end as shown in **Figure 8**. Put the left stove end into its mating channel in the stove front, swing the back of the end onto the stove bottom so that the hole in the inside bottom flange of the end aligns with the tapped hole in the stove bottom. Secure the end to the bottom with a 1/4-20 x 3/4" hex bolt and a washer.

10. Cement the mating surfaces as shown in **Figure 9**. Put the right stove end into its mating channel on the stove front, swing the back of the end onto the stove bottom so that the hole in the inside bottom flange of the end aligns with the tapped hole in the stove bottom. Secure the end to the bottom with a 1/4-20 x 3/4" hex bolt and a washer.

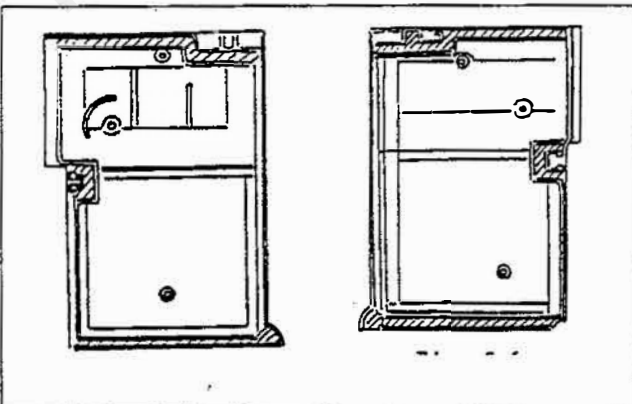


Figure 8. Left end

Figure 9. Right end

11. Mount the front to the stove bottom and to the stove ends. The threaded stems on the back edges of the stove front pass through clevises on the front edges of the stove ends, and are secured with hex nuts and washers. The front attaches to the stove bottom with a 1/4-20 hex bolt and washer.

12. Put 1-1/2" threaded stems into the two holes at the rear corners of the underside of the stove top. Apply stove cement to the grooves around the underside of the stove top, and to the rear edges of the stove sides. (**Figure 10**).

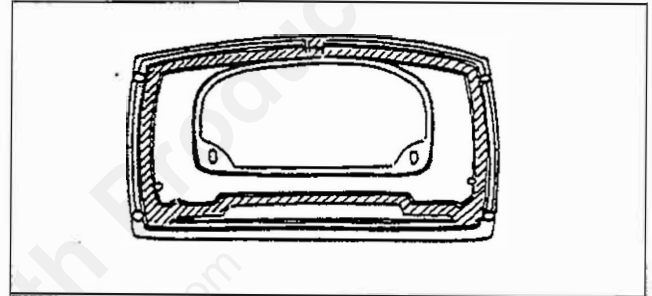


Figure 10. Top (underside)

13. Apply cement to the grooves in the back. **Figure 11**. Put the stove back into position. It will be easiest to have a helper hold it in place temporarily. Install the stove top, which captures the top edge of the back, and secure it with washers and hex nuts on the two threaded stems at the rear corners. Secure the front of the stove top to the stove front with one Phillips-head bolt, 1/4-20 x 1", passing downward through the notch where the griddle handle fits.

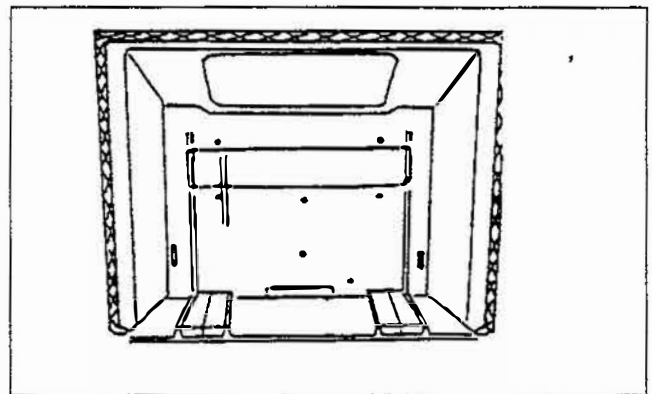


Figure 11. Back (inside view)

14. Install the refractory chamber. It should fit snugly against the outer back of the stove, and downward against ribs on the bottom of the back panel. Install the left and right heat deflectors in the heat-exchange

passages to the left and right of the refractory chamber.

15. Assemble the upper fireback assembly. This will include the damper, the torsion bar, and the upper fireback, along with damper tabs.

16. Install the upper fireback assembly. Put the left end into position first, then lift the right end and swing it out to meet the back of the stove. Secure it with washers and two 1/4-20 x 1-1/2" hex bolts going in from the outside.

17. Attach the damper 'faucet' to the damper rod and tighten the set screw.

18. Install the Left Inner Side; it secures with two 1/4-20 bolts. Re-test the damper system for smooth operation.

19. Install the thermostat. Be sure that the friction spring is on the stem, between the outer end and 'ears' pressed onto the stem, and that the wire stem coming off the bimetal coil passes over the stem and toward the front of the stove. Loosely attach the thermostat handle to the stem, on the outside of the stove. Attach the thermostat cable to the end of the wire stem, and check the system for smooth operation. The primary air valve should close to within 1/4" of the valve frame with the thermostat cable swung fully to the rear. Be sure that the friction spring provides enough friction to keep the valve open when the handle is positioned fully forward.

20. When the thermostat is working well, install the right inner side. It secures with two 1/4-20 hex bolts and washers.

21. Put the catalytic combustor into the refractory package, ensuring that it is fully to the rear. Install the refractory access cover.

22. Install the lower fireback. Ribs on its back side channel secondary air to the combustor. Be sure the panel is fully down in its bottom channel. Secure it with a wedge on each end. Install the throat hood; put one of its end pins on a support on the lower edge of the upper fireback, and slide the hood toward that side until the other end pin is within the other support, then slide it back until it is centered on the

lower fireback. Let the lower edge of the hood rest against the lower fireback.

23. Install the slotted grate. It simply rests in place, with the wider side of the slots downward, toward the ashdrop. Bolt the andirons into place.

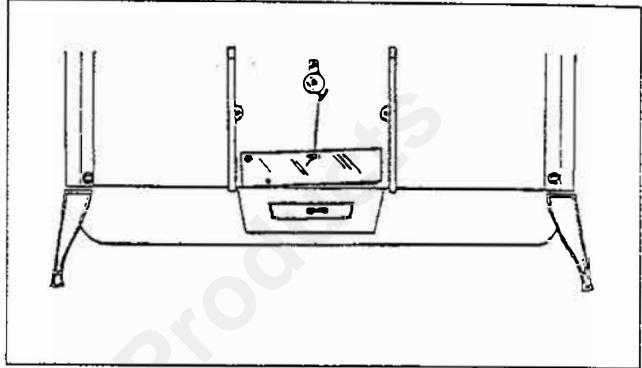


Figure 12. *Secondary air probe installation*

24. Install the secondary probe assembly. **Figure 12** for positioning guidance.

If necessary, loosen the lock nuts on the probe shaft and adjust the position of the tab on the thermostat coil so that it is at '4 o'clock' as you face it from the rear, with the mounting tab at '12 o'clock'. Insert the double-bent end of the secondary air link through the hole in the tab end of the thermostat coil. Insert the single-bent end through the hole in the tab on the secondary air flap. Insert the probe through the hole in the stove back and secure it with a Phillips pan-head bolt, #10-24 x 1/4". Secure the secondary air

flap to the stove back with a similar bolt and a shim ring. Tighten the bolt holding the air flap until it is snug, then back it off 1/4 turn. Insure that the flap moves freely up and down and that the flap rests at or near the closed position.

25. Install the secondary air cover plate. Secure it with two Phillips pan-head bolts, 1/4-20 x 3/8".

26. Assemble and install the ashdoor. Screw the socket, button head bolt into the stepped side of the latch pawl. **(Figure 13)**. Thread the hex nut onto the end of the bolt and tighten it finger tight against the flat side of the pawl. Screw the socket set screw into the handle shaft hole of the pawl. Slide the ashdoor handle shaft through its hole in the ashdoor. Slide the pawl onto the shaft so that the pawl offset is opposite the handle curve. Ensure that the pawl is against the ashdoor and that the handle turns without binding. Tighten the set screw in the pawl. Thread the jam nut onto the handle shaft and tighten it against the pawl. Position the ashdoor between the bottom hinge panel and the bottom of the stove; slide the ashdoor hinge pin upward through the bottom hinge, through the ashdoor, and into the socket of the allen bolt holding the left leg to the

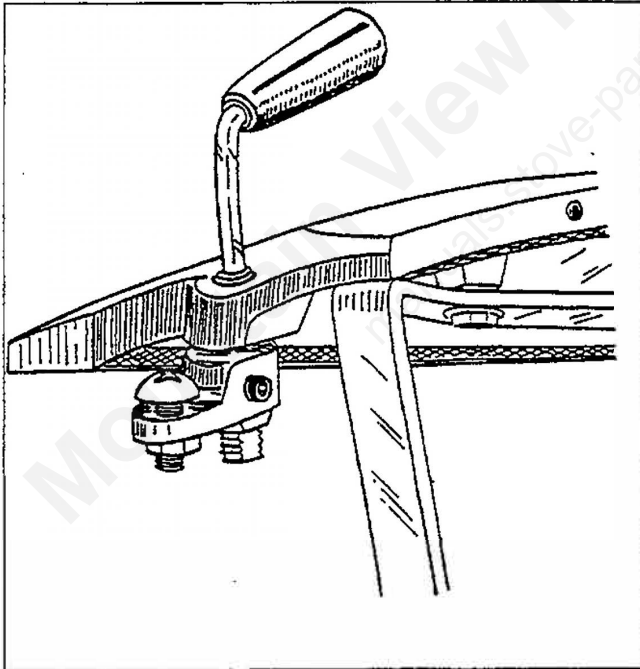


Figure 13. Ashdoor handle assembly

stove bottom. Secure the hinge pin with a clevis pin just above the bottom hinge.

27. Test the door seal with a 'paper test', closing the door on a slip of paper and latching the door. The easier it is to pull the paper out, the looser the seal is at that spot. Adjust the latch as needed to ensure a good seal all around the door. If latch adjustments don't provide a good seal, replace the gasket with a thicker one, or remove it and apply a thin bead of stove cement to the bottom of the channel. Let this bead dry before you replace the gasket, as fresh cement will soak into the gasket before it hardens, resulting in a poor seal.

28. Install the ashpan bracket on the ashdoor. Secure it with two 1/4-20 x 1/2" hex bolts and washers. Close and open the ashdoor. If the bracket hits the ashlip, adjust it as needed by tapping the bracket or twisting it. Insert the ashpan and re-test the ashdoor operation to ensure that there's no impact between the pan and anything else.

29. Paint the front doors, then assemble them. Mask the gasket channels to avoid overspray. Re-gasket them if necessary. Put them face down on a flat surface, and install the glass. Check the edges of the glass for markings indicating the coated side of the panes; the coated sides go outward, away from the fire. Install the air manifolds.

30. Install the flue collar. It mounts with two Phillips round-head bolts, and nuts inside the stove.

31. Prepare the stove for painting. Clean up any excess cement with a putty knife, and mask the handles, the secondary air cover, and the safety plate. It's better to apply two light coats of paint than one heavy coat.

32. Install and adjust the front doors. The latch assembly adjusts with one turn of the handle faucet. Remove the small allen socket-head bolt from the right door to allow the faucet to spin fully. Use the paper test here to ensure that the doors provide a snug seal all around, including where the right door overlaps the left door.

33. Install the griddle. Gently tap the perimeter of the griddle to seat it against the gasket.

34. If you have replaced any major iron panels, tell the customer to re-cure the stove with a series of four small fires, each hotter and longer than the last, to acclimate the iron to the stresses of heat.

GASKETING

If you are replacing gaskets as part of standard maintenance, refer to the Maintenance Section of the Owner's Guide.

If you are replacing all gaskets as while rebuilding a firebox, follow the instructions given below. Prepare parts carefully. Channels must be free of old gasketing, cement and paint, and free of dust.

Use a high quality gasket cement.

Work in an area where there is plenty of light and a level work surface. Wear gloves and protective eyewear.

If you will install gaskets on clean, new parts, start with step 3. If you are going to re-gasket old parts, they will need to be cleaned. Start with step 1.

1. Remove old gaskets. If the ends of the gasket meet, note where the joint is.
2. Clean the channels. Use a hammer and cold chisel or screwdriver to remove old cement. Use a wire brush to finish cleaning the channel. Vacuum the channel to remove dust.
3. Choose the correct size gasket. Cut it to the right length, allowing an inch extra for trimming.
4. Wipe the channel to be gasketed with a damp cloth. Place an unbroken 1/8" bead of cement in the channel. Avoid using too much cement. The cement should not saturate the gasket, just hold it in place.
5. Starting with one end, lightly press the gasket into the cemented channel. Trim excess gasket with shears or side cutting pliers. Do not leave any ragged ends. If the ends of the gasket meet, there should be no gaps or overlaps. Do not stretch the gasket as this will make it too thin. A thin gasket may not make a good seal.
6. If possible, place the gasketed part against the surface it will meet. This will seat the gasket evenly.
7. Clean any excess cement that has squeezed out around the gasket.
8. After installing new gaskets, it may be necessary to make adjustments on the damper or load door. Refer to your Owner's Guide.

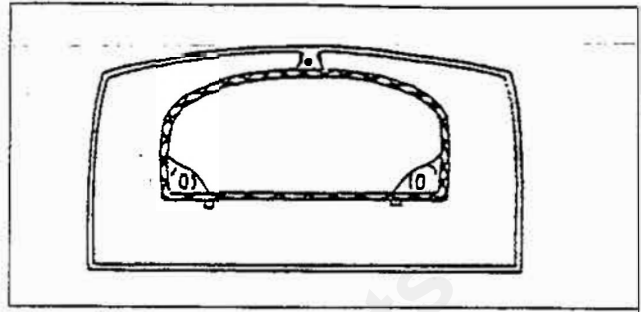


Figure 14. Top
5/16" x 44" wire with fiberglass core for Griddle

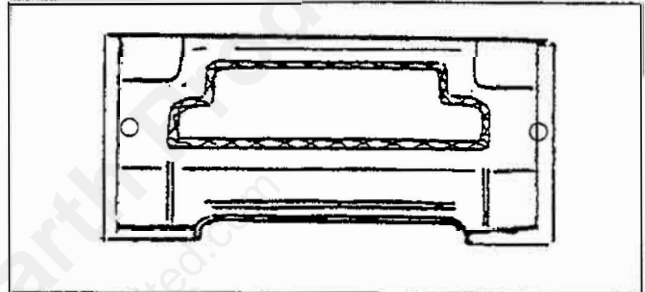


Figure 15. Upper fireback
5/16" x 42" fiberglass for damper opening.

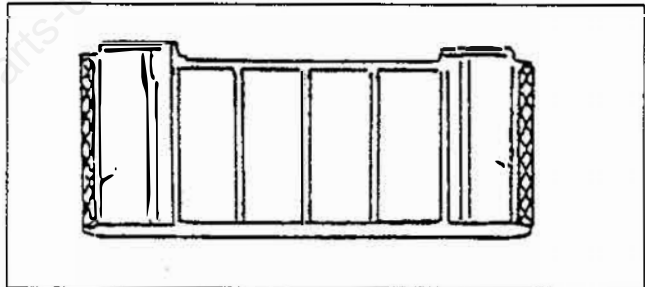


Figure 16. Lower fireback
5/16" x 36" fiberglass

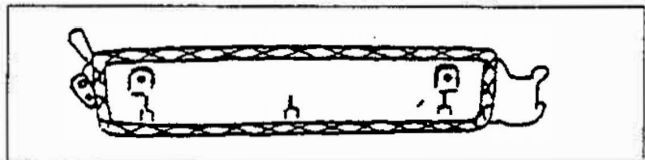


Figure 17. Ashdoor
5/16" x 42" fiberglass

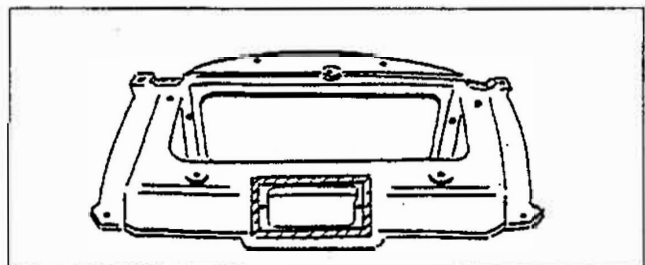


Figure 18. Bottom
1/8" x 12" fiberglass to seal Primary Air Valve to stove bottom.

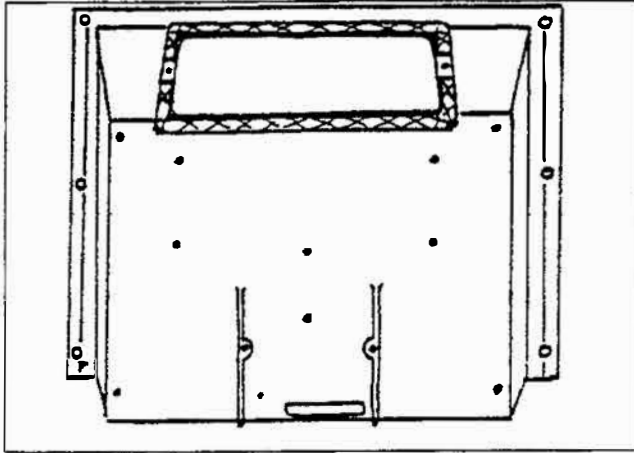


Figure 19. Back
 5/16" x 30" adhesive backed fiberglass to seal Flue Collar to back of stove.

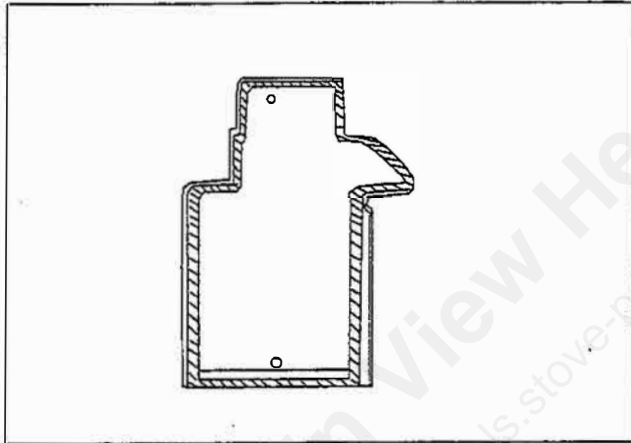


Figure 20. Left inner side (outside view)
 3/8" x 24" fiberglass

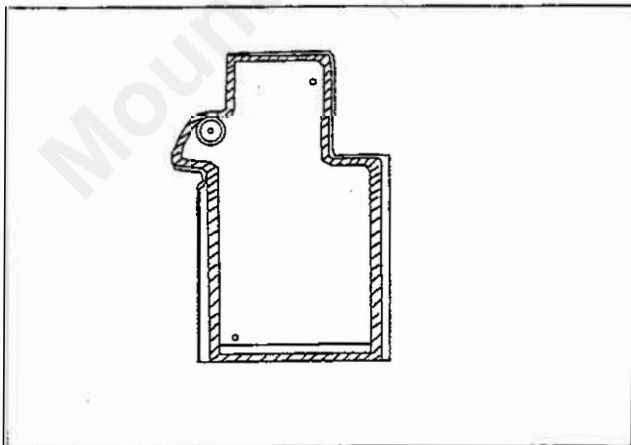


Figure 21. Right inner side (outside view)
 3/8" x 24" fiberglass

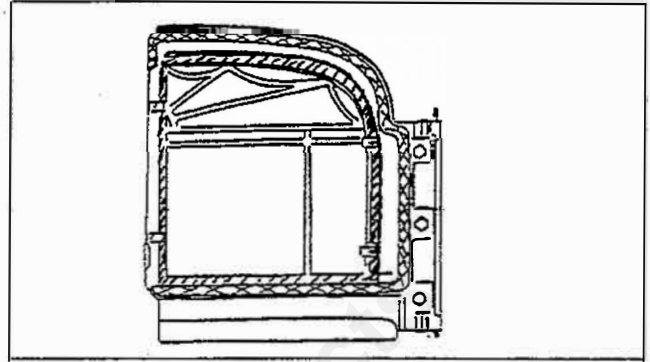


Figure 22. Left door (inside view)
 3/16" x 36" fiberglass to seal glass to door
 5/16" x 58" fiberglass to seal door to front

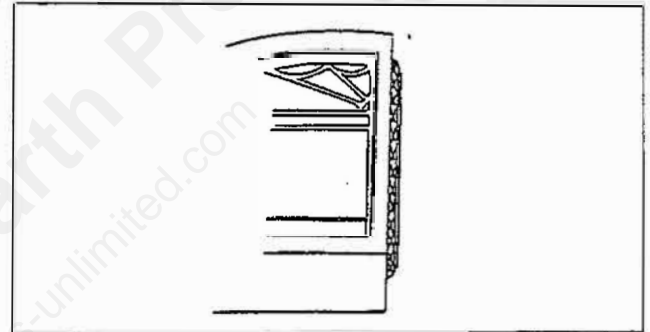


Figure 23. Left door (outside view)
 The gasket which seals the left door to the front continues down the center seam on the outside of the door. This provides the seal where the doors meet

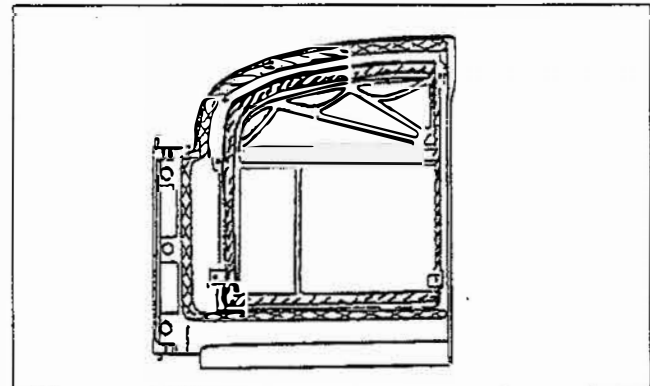


Figure 24. Right door (inside view)
 3/16" x 36" fiberglass to seal glass to door
 5/16" x 42" fiberglass to seal door to front

Gasketing the Damper/Upper Fireback

1. Remove the throat hood from the fireback by swinging it upward and then sliding it to either side. (Figure 26).

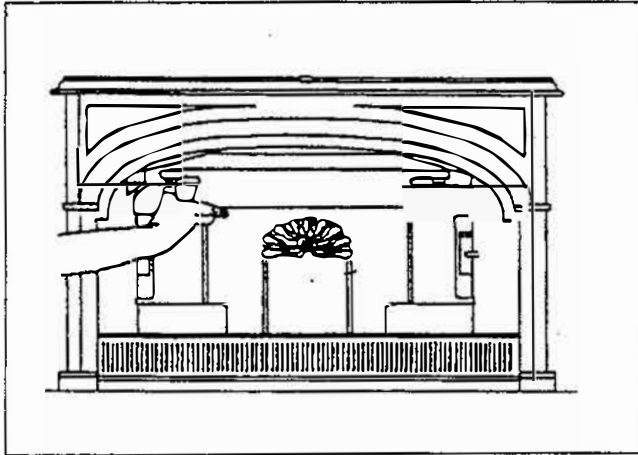


Figure 26. Removing the throat hood

2. Remove the left and right wedges that hold the lower fireback in place, and remove the lower fireback.

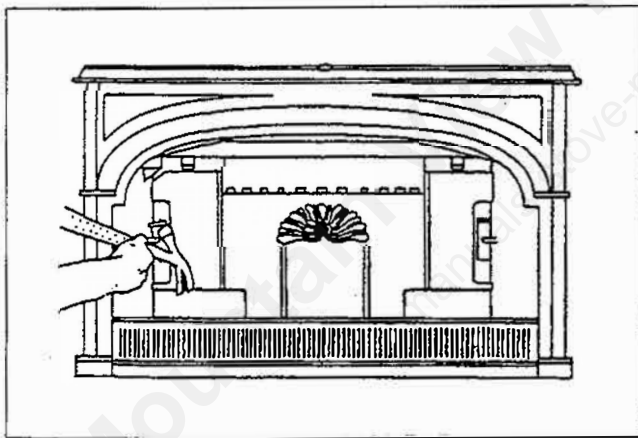


Figure 26. Removing the wedges

3. Remove the left and right inner walls - each has a hex-head bolt at top and bottom. These inner walls are gasketed so you're not breaking a cement seal here. You may need to pry these walls out with a screwdriver going into notches at their forward edges - if the stove is enamelled, protect the surfaces near the notch.

4. Remove the allen bolt from the damper handle, and slide the handle off.

5. Remove a hex-head bolt from each side of the stove's outer back, near the top.

6. Remove the upper fireback assembly through the firebox. You may need to use a large screwdriver to

pry it loose from the stove back. As you face the stove, remove the right-hand end first.

7. Remove the damper from the upper fireback by removing bolted tabs at each end.

8. Remove the original gasketing by pulling it out of its channel, and then clean the channel with a wire brush.

9. Apply a narrow bead of stove cement to the bottom of the gasket groove, and lay the gasketing into the channel. Do not stretch or bunch the gasket unless you need to compensate for parts that have changed shape slightly. Close the damper and lock it closed; check the seal with a slip of paper to ensure tightness. Leave the damper closed for a few hours if you can, to ensure that the cement sets up well.

10. Work in reverse order to re-install the upper fireback; apply cement to the backs of the ends of the upper fireback before re-installing.