# HISTORY OF THE DEFIANT

The defiant was the first stove *Vermont Castings* manufactured back in 1976. The basic combustion design of the first Defiant is no different than the Defiant III's being produced in 1987. There have been, however, construction and interior design changes since the earlier models.

In summary, the Defiant was made in three configurations--Defiant I, II, and III. Defiant I had a one piece fireback and baffle design. When the Defiant II was re-built using the 1A re-build kit; it became a Defiant 1A. When a Defiant 1 or 1A was re-built using the 1A1 re-build kit, it became the Defiant 1A1. Then came the Defiant II and Defiant III

The Defiant I (pre-July 1980), is identified easily by inspecting the internal plates. The fireback and baffle (both now obsolete) are one complete piece. The fireback itself is straight, if viewed from the side loading door. The Defiant I also incorporate a triangular-shaped smoke deflector (now obsolete) which is located in the upper left-hand corner of the side loading door. The smoke deflector is cemented into place on the side of the fireback and is used as an access cover to remove ashes from the secondary chamber behind the fireback.

The secondary air passageway is enclosed by adjoining ribs located on the back plate and the back side of the fireback. A y-shaped mesh screen (#120-6382) is placed on the bottom and top of this now formed "tunnel". A bead of furnace cement is placed on top of both screens to prevent air leaks to the baffle chamber above the primary air intake passageway below.

The thermostat cover (#160-1487) for the D1 and D1A is made of sheet metal similar to the air shutter flap (#000-5800) located below the thermostat assembly.

The bottom plate (#130-3148) and back plate for the D1 are one solid piece on most D1 models. There may be some DI models out in the field that may have a detachable side ash lip (#130-3170) underneath the load door similar to the DII & DIII, but you can refer to the other features of the stove to identify the model's age. Please note that some DI's may have a two-piece back plate also with a Top Exit or Rear Exit insert, same as DII.

The seams of the D1 are visible on the front of the stove as the end plates are considered to be female on both ends and accept the front and back plates. If you come across an end that is both male and female, you have a DII end.

When installing the D1 and D1A, you will find that the crimped end of the pipe will not fit into some of the pre-'78 D1's flue collars due to the flue collar size. The proper way to install this style, or type D1, is to crimp down or cut back & crimp down the current VC oval to round adaptor for an inside fit or ovalize a 22 gauge, welded length of pipe.

The oval griddle of the D1, D1A, D1A1 (#130-3154) should be secured with two L-shaped griddle tabs (000-5838 [2 of #120-1857]). These "tabs" are threaded into the underside of the griddle directly in the grease groove of the griddle. The purpose of the tabs is to prevent logs or severe back puffing from lifting up the griddle. If the griddle does not have these tabs, you should drill and tap the griddle to install the tabs.

## D<sub>1</sub>A

The D1A is a D1 that was repaired using the then current repair kit from 7/80 to 8/84. The D1A is virtually identical to the D1 with the exception of the fireback and the left end. The D1A kit (1980) changed the straight fireback to a two-piece design to allow more flexibility and mobility of the cast plates during expansion and contraction. The baffle (now obsolete) remained one piece. The new left end supplied (#130-3032) was also modified to incorporate the smoke deflector as an actual part of the door opening. The smoke deflector's triangular shape is cast into the door and meets the new angle of the new upper fireback (#130-3040) preventing air from being drawn through this potential opening. The seams, thermostat and cover, and the rest of the stove remain the same.

# The D1A1 Kit (9/84 – present) to Modify the D1 (Kit A) and D1A (Kit B)

The D1A1 model is distinctly identified by having a two-piece baffle, along with a sheet metal thermostat cover. The only difference between the D1A1 and a D1A model is in the baffle and the secondary air tube (#130-3162). The secondary air tube used in the kit is the same piece used as the primary and secondary air tube in the DII and DIII. The baffle design looks identical to the one-piece baffle. However, when inspected, you will notice that the lower "leg" (D1A1 Baffle Support (#130-0115) of the baffle is a separate piece which is bolted to the upper section (#130-0110)). This is the key stove part of the interior disassembly procedure, as the baffle can be removed through the front of the stove, which allows the fireback to be removed internally also.

If the stove is still a D1 with a single piece fireback, you need to order two items:

- 1. The D1A1 Fireback Kit B (#000-5832), which includes a two-piece fireback, two-piece baffle and new secondary air tube; tie rods, hardware, etc. and,
- 2. The Left End With Door (#500-0199) which includes a new design left end with door.

This requires at least partial teardown of the exterior castings.

If the original D1 has already been re-built and is now a D1A and has a two-piece fireback and one-piece baffle, then all that is needed for a full interior re-build is the Fireback Kit B (#000-5832), which includes a two-piece fireback, two-piece baffle and

new secondary air tube; tie rods, hardware, etc. You do not have to replace the right end as it has already been replaced when the stove was converted from a D1 to a D1A. This does require at least a partial teardown of the exterior castings.

If the original D1 has been re-built with a two-piece baffle, it is a D1A1 and the interior components can be replaced from the inside without any exterior teardown; order components as needed.

Due to design limitations, the D1, D1A, and D1A1 models cannot accept the following enhancements:

- 1. Domestic lot water kits
- 2. Warming shelves
- 3. Glass doors
- 4. Energy Ectender
- 5. Coal conversion

# DII (After July 1980)

The DII represented several changes in both the internal and external design. Externally, the front panel (#130-3062) seams are visible from the sides and not the front. The handles are now removable to comply with U.L. regulations. The nickel handle assembly has been replaced with a faucet stub and a ceramic shaft screwed into the stub. The thermostat cover (#130-3084) is now made of cast iron instead of sheet metal. The side ash lip (#130-3170) is a separate component and is bolted to the bottom plate (#130-3148). There will be a visible bolt (#130-6440) underneath the left loading door (#130-3000) which secures the primary air tube (#130-3162) to the inside of the left end.

Another favourable feature of all DII's is the ability to change the back plate (#130-3070) to either vent the stove from the top or the rear. The top plate must still be changed for either top venting (#130-3132) or rear venting (#130-3140). The back plate can either accept a rear-exit insert (#130-3192) with a built-in flue collar, or a top-exit insert (#130-3200) which is solid to direct exiting smoke upwards. The top plate of the DII is drilled differently than the previous model and cannot be retro-fitted to any other model Defiant. The tie rod holes are drilled in different areas due to the change in the interior design of the stove. The proper top plate can be identified by looking at the inside of the top plate. There will be a "dimple" and a tie rod hole drilled in ach corner. Next to the dimple and tie rod will be an accompanying number which will either be (1) or (2). Whichever numbered dimple is drilled (tie rod hole), that will be a top plate model. Number (1) would be a D1 and number (2) would be a DII plate. The DII thermostat (#4327) coil is different from the D1 (#4320) as it is smaller in diameter with fewer "rings" in the bimetallic coil.

The interior plates of the DII were also modified. The DII fireback is a two-piece, but the curvature of the upper fireback (#130-3078) sets itself apart from the straight upper

fireback of the D1A and D1A1. The lower fireback (#130-3092) was re-designed to raise the air inlets for less frequent ash removal. The secondary air chamber no longer uses the secondary air screen, but instead is formed by mating the lower fireback to the back plate. The lower fireback has two ribs separately spaced which run horizontally the length of the fireback. Between the ribs is the secondary air chamber.

The D1A baffle "leg" is no longer used as a baffle support, but instead uses a 2½" x 11" rectangular-shaped baffle support (#130-3100). The baffle is held up on one end by the lower fireback and a flathead machine screw (#120-6423) placed through a flange off of the front plate (#130-3062) secured by a square nut (#120-3344). The smoke shelf (#130-3184) for the DII has a curved section in the middle of the shelf as opposed to the D1, D1A, and D1A1--which incorporate a flat smoke shelf (#130-0055). The griddle (#130-3154) for the DII comes complete with griddle tabs already in place.

## DIII (After 1/85)

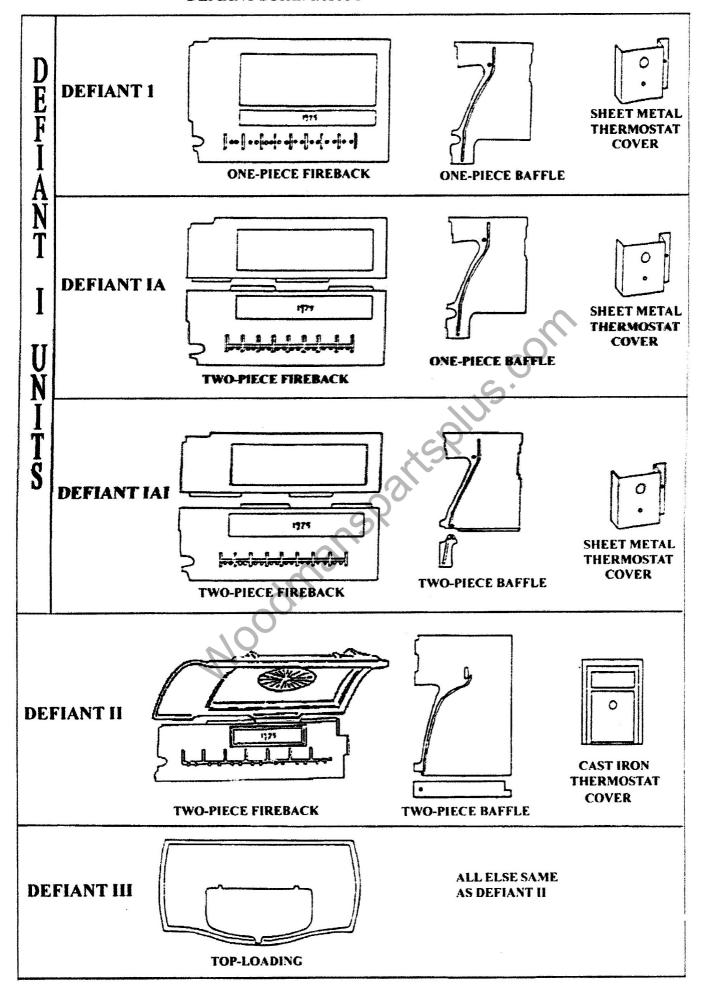
The DIII is the first Defiant that can be top loaded. The major differences that set the DIII apart from the previous models are top plate, front plate, griddle, damper, and the top-exit insert for the back plate.

The top plate (#130-3135 top-exit or #130-3144 rear-exit) is wider at the front curved section to accommodate the new top loading griddle (#500-0671, same griddle as the Vigilante). The front plate (#130-3066) was also changed in order to match up with the top plate. The seams are still the "wrap-around" type, which are only visible from the side. The top-exit insert (#130-3203) for the back plate was modified to accept the new top plate.

The DIII damper is essentially the same as the DII damper, but there are two slots for the griddle quads to pass through when the griddle is closed. The DIII damper item number is the same as a DII damper, so you must specify a DIII damper on your order.

The DIII's interior is the same as the DII with the only exception being the damper. The fireback and damper assembly remain the same.

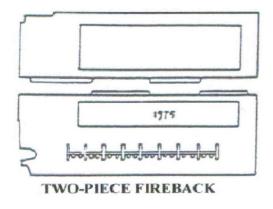
## **DEFIANT SCHEMATICS**



#### DEFIANT SCHEMATICS AND REBUILD KITS

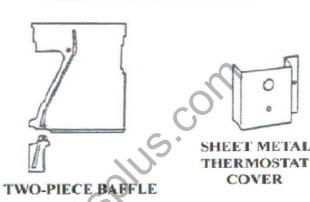
#### **DEFIANT IAI**

Stoves with a two piece fireback, two piece baffle supported by a small, removable baffle support, oval griddle bolted to the top of the stove not used for loading, sheet metal thermostat cover and front casting inserts into sides with seams on the fron casting.



#### WHAT YOU ORDER

For a total rebuild of the internal castings, order Fireback Kit #5832 with componets listed above. For individual parts replacement, order 120-3040 Upper Fireback, 130-3048 Lower Fireback, 130-0110 Upper Baffle or 130-0115 Baffle Support. PARTS MAY BE REPLACED WITHOUT A TOTAL REBUILD



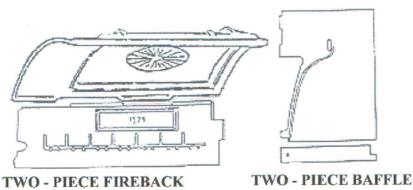
#### **DEFIANT II**

Stoves with a two piece fireback with a curved UFB, two piece baffle where the lower baffle is rectangular in shape with a bolt towards the front of the stove, oval griddle bolted to the top of the stove not used for loading, cast iron thermostat cover and side castings insert into the front leaving seams at the side.

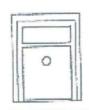
## WHAT YOU ORDER

For a total rebuild of the internal castings, order Fireback and Baffle Kit #5837 with upper fireback, lower fireback, upper baffle, lower baffle, hardware and instructions. Individual parts may also be ordered as needed. PARTS MAY BE REPLACED WITHOUT A

TOTAL REBUILD



WITH CURVED UFB



**CAST IRON THERMOSTAT** COVER

## **DEFIANT III**

Same as the Defiant II but the griddle has quads and swings up and opens for top loading

## WHAT YOU ORDER

Same as Defiant II

PARTS MAY BE REPLACED WITHOUT A

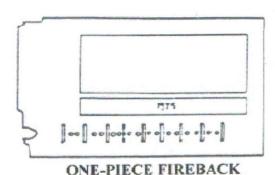
TOTAL REBUILD



# DEFIANT SCHEMATICS AND REBUILD KITS

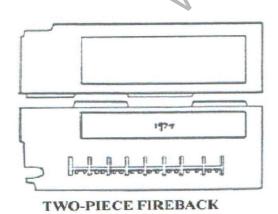
#### **DEFIANT I**

Stoves with a one piece fireback, one piece baffle, oval griddle bolted to the top of the stove not used for loading, sheet metal thermostat cover and front casting inserts into sides.



#### **DEFIANT IA**

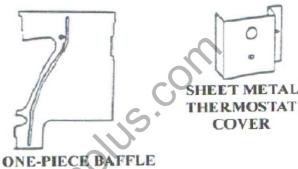
Stoves with a two piece fireback, one piece baffle, oval griddle bolted to the top of the stove not used for loading, sheet metal thermostat cover and front casting inserts into sides.



#### WHAT YOU ORDER

1) Fireback Kit # 5832 made up of box #5825 -upper fireback, lower fireback, tie rods, hardware, screen, cement and instructions and Box #5830 - baffle, baffle support, air tube, paint and hardware. 2) 500-0199 Left End with Door.

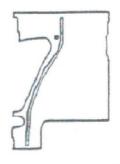
TOTAL REBUILD IS NECESSARY



#### WHAT YOU ORDER

Fireback Kit # 5832 made up of box #5825 upper fireback, lower fireback, tie rods, hardware, screen, cement and instructions and Box #5830 - baffle, baffle support, air tube, paint and hardware. New side with door is not needed as it was replaced in the earlier rebuild

TOTAL REBUILD IS NECESSARY



ONE-PIECE BAFFLE

