

Corvair 95: Stock was. . .

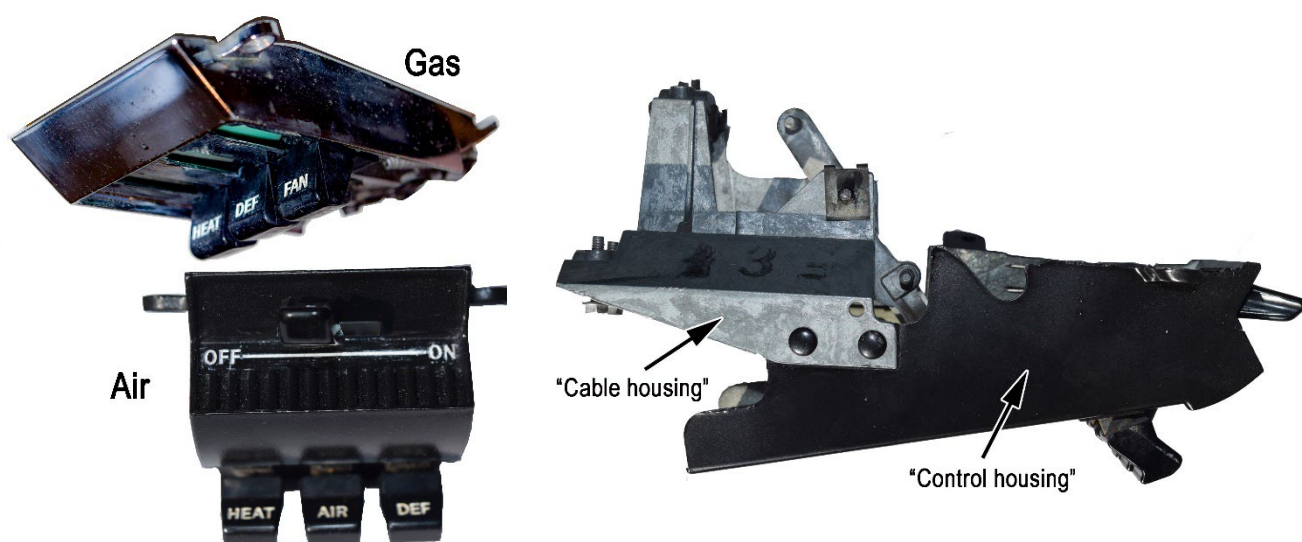
6 - Forced Air Heater

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Heater control

FCs with forced air and gas heaters used different control assemblies. The control unit for the gas heater was chrome and the same as used in the car. Control units for the forced air heater were largely the same for the FC and car through 1964, sometimes sharing the same part numbers.

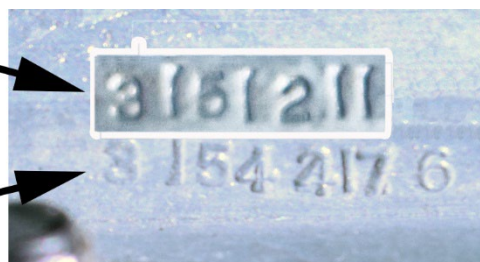


While the gas heater control was essentially unmodified through the years, the forced air heater control was modified a several times. The heater control housing is assembled from two components, which I will refer to as the "control housing" and the "cable housing". The control housing holds the blower ("Fan") switch and the slots along which slide the "Heat", "Air" and "Def" controls. The cable housing is rivetted to the rear of the control housing and is typically unpainted on the left side. The heater control cables extend from the heater box in the rear of the vehicle through the floor of the cab to be secured to the cable housing. The unit was painted black, except early in the '61 model year when it was metallic silver.

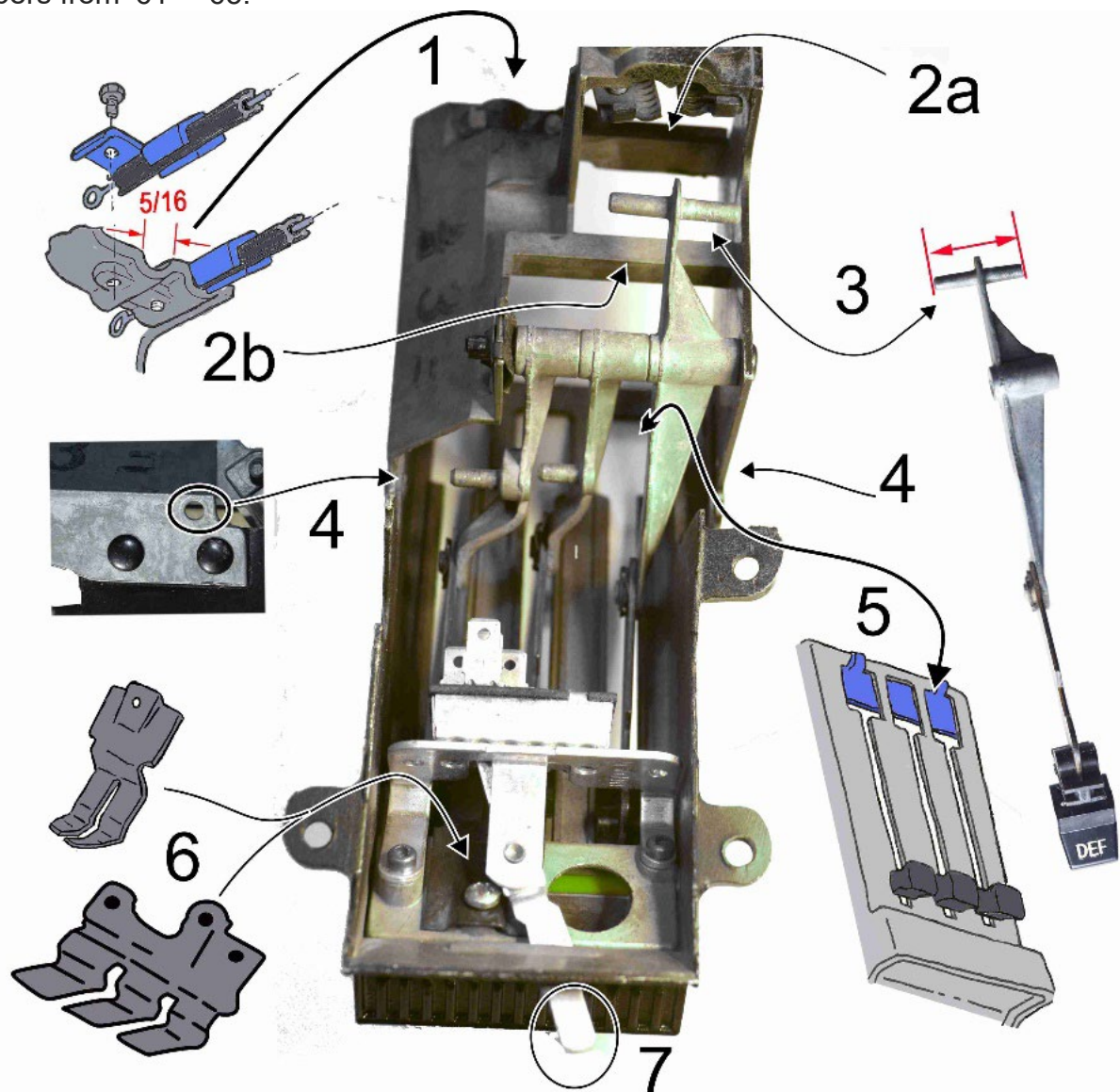
The control housing was part #3151172 and did not change over the years. The cable housing of the '61 silver control unit was part #3151211 and became #3154476 in black units when later modified. Oddly,

Original

With "4476"
over-strike



renumbering of the new cable housing seemed to be an oversight - the "4476" of the new number was embossed over top of the "1211" of the original number. GM assigned numbers to the complete housing assemblies, which passed through 5 different part numbers from '61 - '65.



Dealers were notified of changes to the heater unit in Technical Service Bulletin DR552 (late 1962), which included changes to the control cables. Vehicles S110430 and F109386 were the first to receive control cables with wires cadmium coated to prevent corrosion and seizing within the housings. And now, instead of using small compression clamps, metal clips (#1 in the figure) were attached directly to the "air" and "heat" cables to better secure them to the control housing. To accommodate the new clips, the guides of the control housing into which the cables are secured were enlarged from a 3/16" to 5/16" diameter.

Later units have two pin holes (#4 in picture) on opposite sides of the housing through which a metal rod could be inserted to help align of the levers. The control housing was reinforced with cross bars (#2a & 2b in the picture), and because the bar

labeled “2b” also limited the downward throw of the levers, the metal retainer (#5) previously serving that purpose was discontinued.

Other changes also improved functioning of the heater control levers. The levers have a short pin around which the control cable wires connect. The pair of pins on the “Def” lever were lengthened from $\frac{3}{4}$ ” to 1” (#3 in the picture), and the pins of the “Air” and “Heat” levers were structurally reinforced. (The extra pin of the Def lever allowed connection of left- and right- side defroster control cable in cars.) At the front of the unit, the blower motor switch (#7) was modified such that the knob attached without need for a metal retainer. Below that lever in the heater lamp housing, a green lens was added in early ‘61.

Due to a proclivity of the control levers to slide unprovoked into “on” positions, a detent spring (#3830794; #6 in picture) was added to hold the air and heat levers in their off position. TSB DR552 shows this spring first appearing in August ‘62. However, later in the ‘63 model year GM decided to install a larger spring (#3832817; as shown in the 1963 assembly manual) that also serviced the “Def” lever. But this too would not stand, for we see this replaced in the ‘64 Assembly Manual by a different two-lever detent spring (#3734406), again for only the “Air” and “Heat” levers.

When and for how long the three-detent spring was used is unclear, and a survey of several dozen ‘63 and ‘64 FCs suggests a very short run. So far I have found the three-detent spring on only two ‘64 FCs, Flint serial numbers F101619 and F102096. A few St Louis FCs assembled around that same time that I examined had the two-detent spring. I speculate that the detent for the defroster lever was quickly discontinued because it was too difficult to snap it into position.

Air ducts and distributors

Drivers in the temperate zone knew that warm air seemed to get lost on the way to the cab, and passengers in the cab were really left out in the cold! Resolving the latter problem necessitated a redesign of the front heater distributor (see picture) early in ‘61 model run. Although the part number appeared not to change, the engineering drawing for # 3786367 records changes between 7/2/60 and 2/9/61 in the size and number of the slots and the addition of an off-center partition to improve distribution of hot air in the cab. But the forced air heater ducting system that brought the air up from the rear was the archtype leaky pipeline.

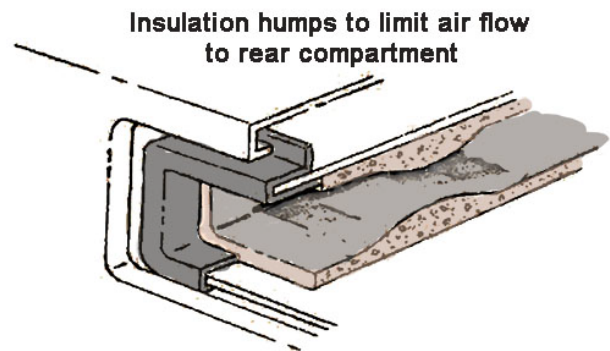
Early ‘61



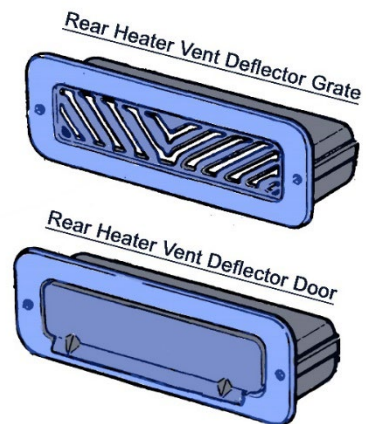
Late '61



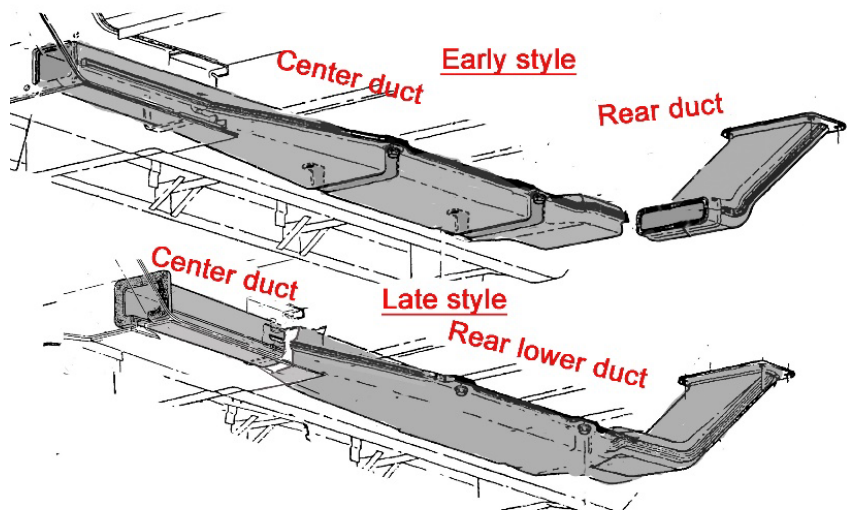
Conducting warm air from aft to fore of an FC was a persistent engineering challenge. Technical Service Bulletin DR 470 (March '61) offered an assortment of field repairs and production changes intended to improve air flow to the cab. One of the problems was the rear heater duct, which is sealed in pickups and Corvans, that directs air flow to the rear passenger of Greenbriers, alas, disproportionately so. An early mitigation were humps added to the insulation of the rear heater duct that constricted the air flow to the rear compartment.



In February, 1961, a manual shut-off door for the rear heater duct (#3796164) was introduced. A small scale survey found that it was typically installed only in FCs with deluxe trim (RPO 431/Z60), which is surprising since the vent door is not among the features advertised for the deluxe trim package.



The conglomerated system of ducts that route air to the cab was a rather messy affair prone to leakage. In response to complaints, during the 1962 production run changes were made to several ducts and/or their seals. Most noticeably, the Rear (#3781789) and Center (#3781790) Duct assemblies were combined as the "Rear Lower Duct Assembly" (#3814135), and a newly designated "Center Duct" was created - a short metal sleeve that passes through the undercarriage outrigger and sill to the right front wheel well. Interestingly, in 1963, the metal straps that helped support the rear lower duct assembly were deleted in favor of direct bolting of the duct to the undercarriage, possibly another cost-savings measure.



FCs that lacked a heater had filler plates that covered the holes where heater ducts would have been located. All FCs would have covers for the holes under the front seat (#3782110), the cab floor where the defroster ducting was installed (#3786141), and in the engine compartment where ducting brings air from the top shroud (filler plate #3787443) to the heater fresh air inlet (#3786076) on the firewall. Only Greenbriers received a plate (#3785002) for the heater duct in the cargo area; the hole for this duct was not present in Corvans and pickups.



Filler plate #3786141



Filler plate #3782110



Filler Plate #3786076 (Firewall right side)



1Plate #3787443 (Front of top shroud)