

# 1960 Heater Restoration



○ Heater box mounting studs

○ Outer heater box cover attaching screws

Included here are photos taken during the complete restoration of the heater assembly from our 1960. We replaced the blower motor, core, all seals, hoses, defroster box and ducts, and stripped and repainted all the components.

Details for removal and installation are covered well in the ST-12 Manual and the AIM for the 1960.

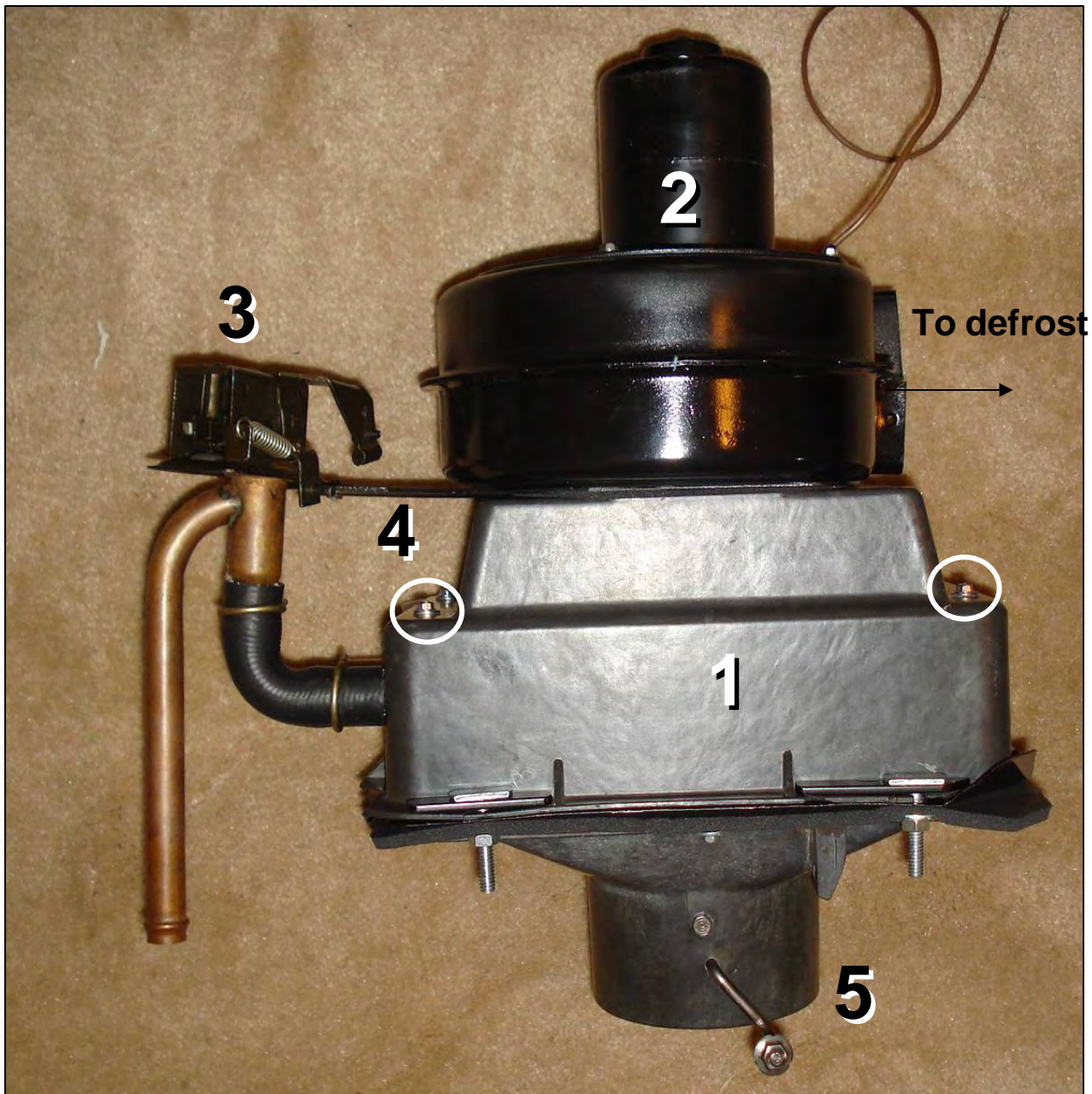
Dave Zuberer

# Heater core removal 1960:

1. Remove heater cover (panel under package tray).
2. Remove package tray. Screws through “L” brackets on each side and three nuts and bolts along the back of the tray.
3. Disconnect heater control cable from temp control valve; retained by push nut on pin and clamp on the valve assembly.
4. Disconnect defroster box from blower unit (3 screws). Be careful, the defroster distributor box is pressed cardboard.
5. Disconnect the defroster control cable from the rear of the defroster box.
6. Disconnect the fresh air cable from the flapper valve in the outer heater cover (firewall side).
7. Drain the radiator and block. (I did not have to drain the block when I changed the core in my car).
8. Carefully disconnect the hose from the heater control valve tube that goes through the firewall into the engine compartment. Slice the hose carefully to avoid mangling the temp-control valve tubing.
9. Remove outer heater cover by removing the 6 screws around the box (see cover page photo).
10. Carefully disconnect the heater hose from the core outlet and catch any coolant that exits the core. **If your carpets are in place protect them with water proof covering.**
11. Remove the nuts from the four heater box studs protruding through the firewall. At this point the heater core box and blower assembly should come out as a unit.



## Heater/blower unit after clean-up



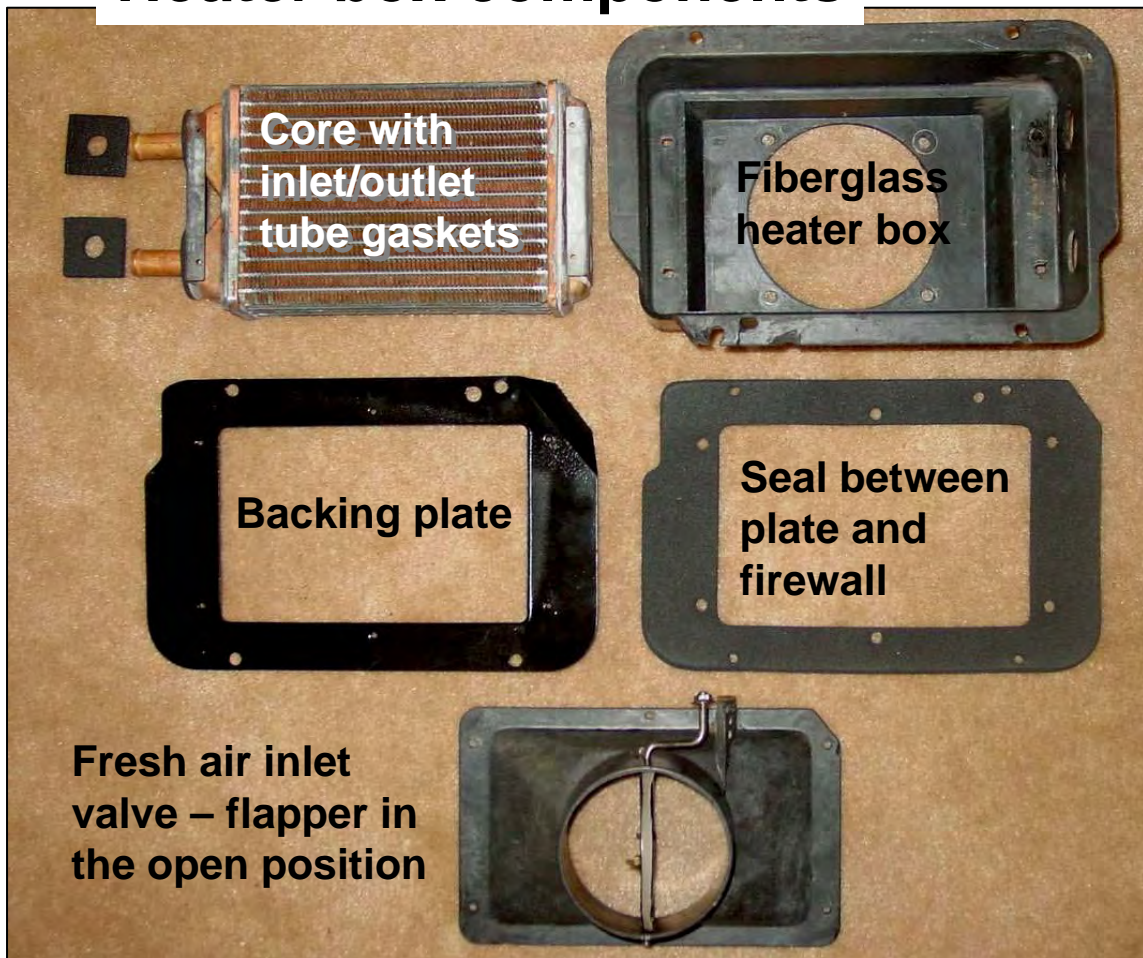
1. Inner heater box. Core is retained by 4 screws (2 are circled above)
2. Blower motor and housing
3. Temp control valve
4. Bracket for mounting temp-control valve to unit.
5. Fresh air inlet valve



## Blower housing components

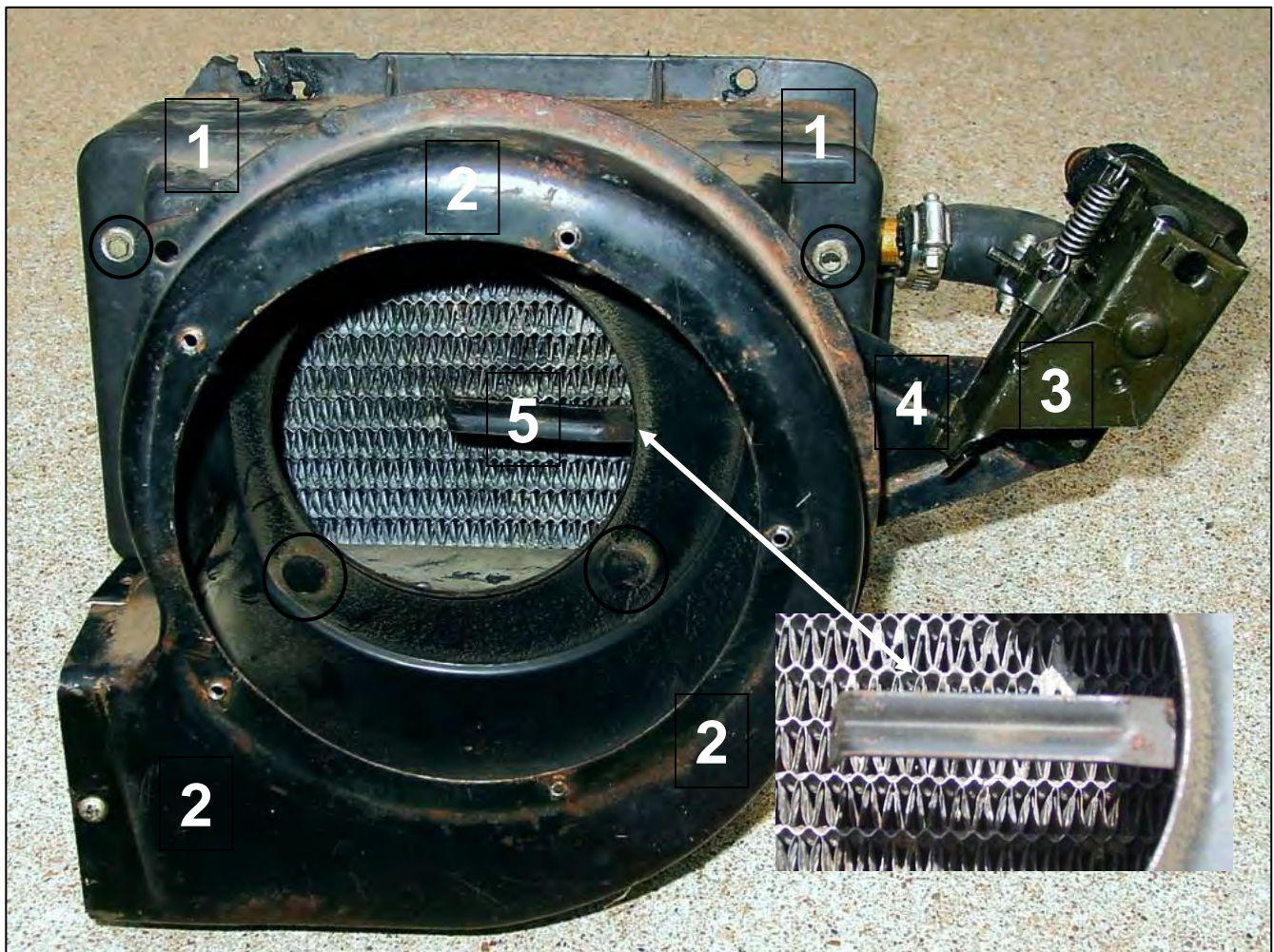


## Heater box components



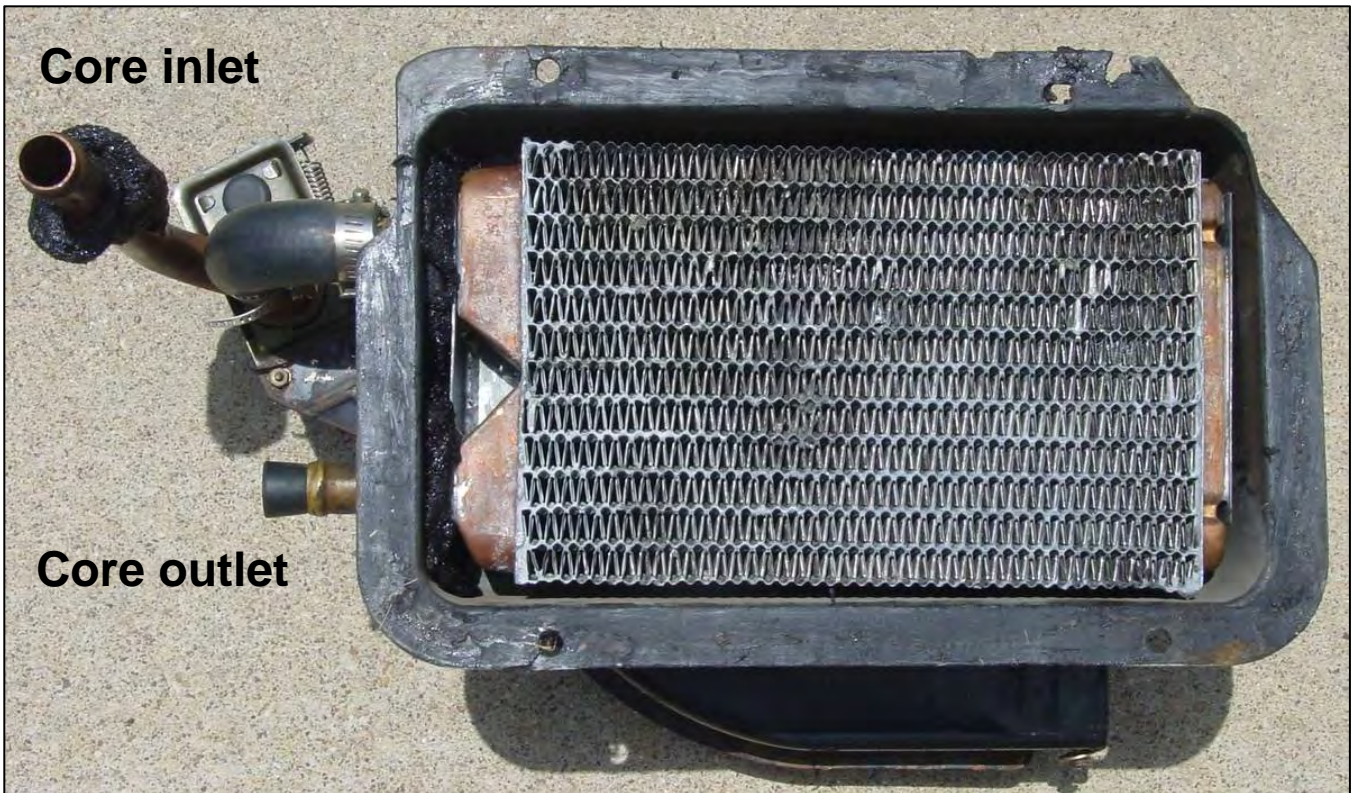


# Heater/blower unit (1960): cockpit view



1. Inner heater box (fiberglass). Contains the heater core held in by 4 short hex head sheet metal screws (2 shown in white circles above).
2. Blower (squirrel cage) housing (steel). Attaches to heater core box via 4 studs (2 shown in yellow circles) and nuts and washers inside the heater core box (see next page)
3. Heater control valve attached to metal bracket (#4) mounted between the core box and the blower housing.
4. Metal bracket between core and blower housings. Contains the bracket (#5) for holding the capillary tube of original heater valves. Replacement valves do not have the tube.



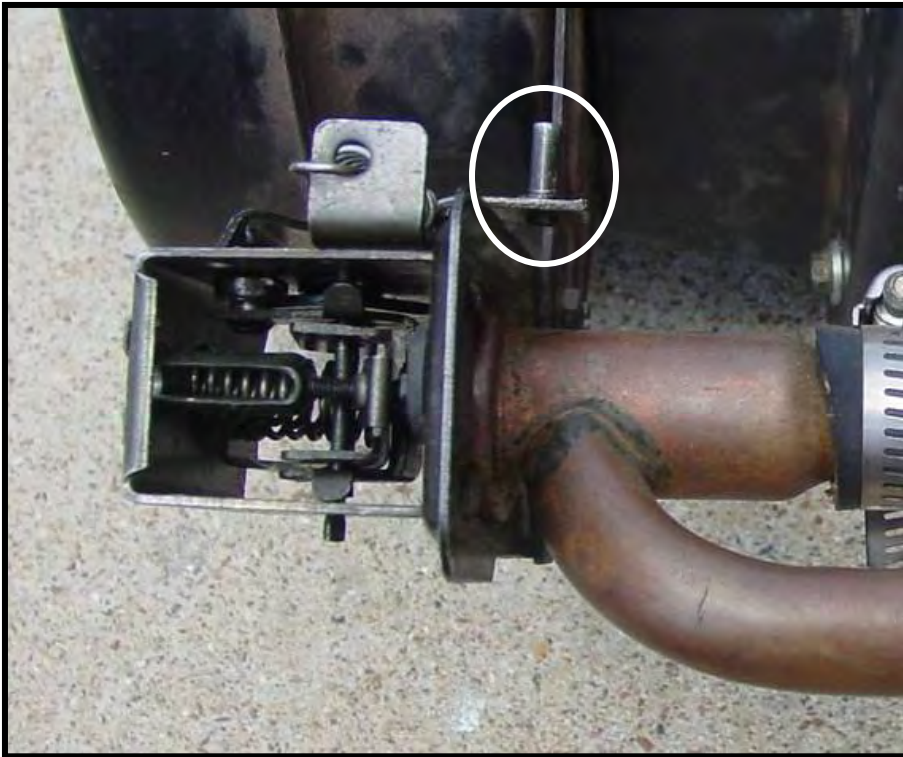


**Heater box with core installed “firewall view”.**

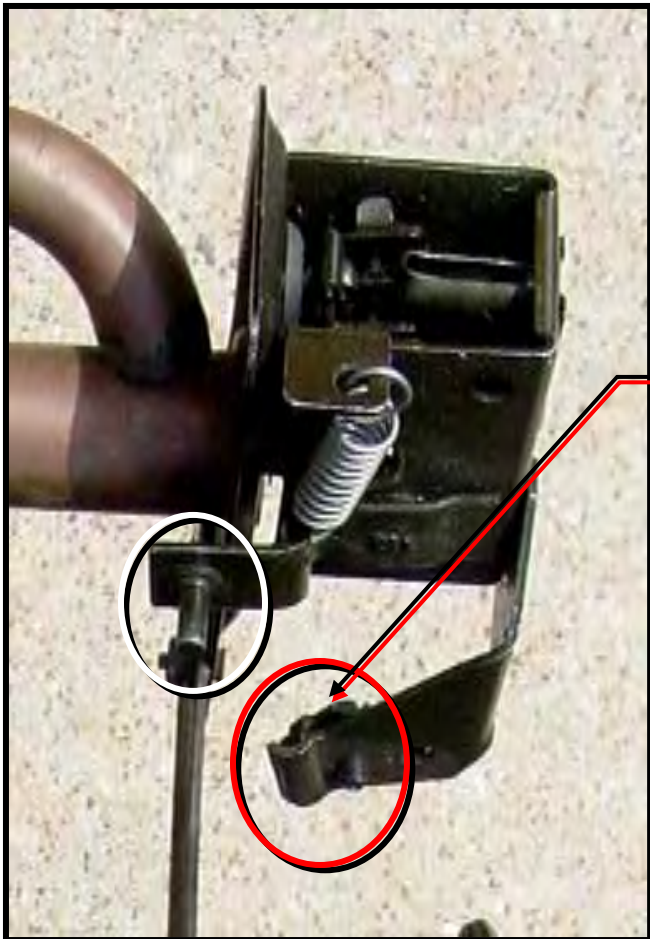


**Heater box with core removed. The four nuts and washers retain the studs on the blower housing. The bracket in the center holds the capillary tube.**

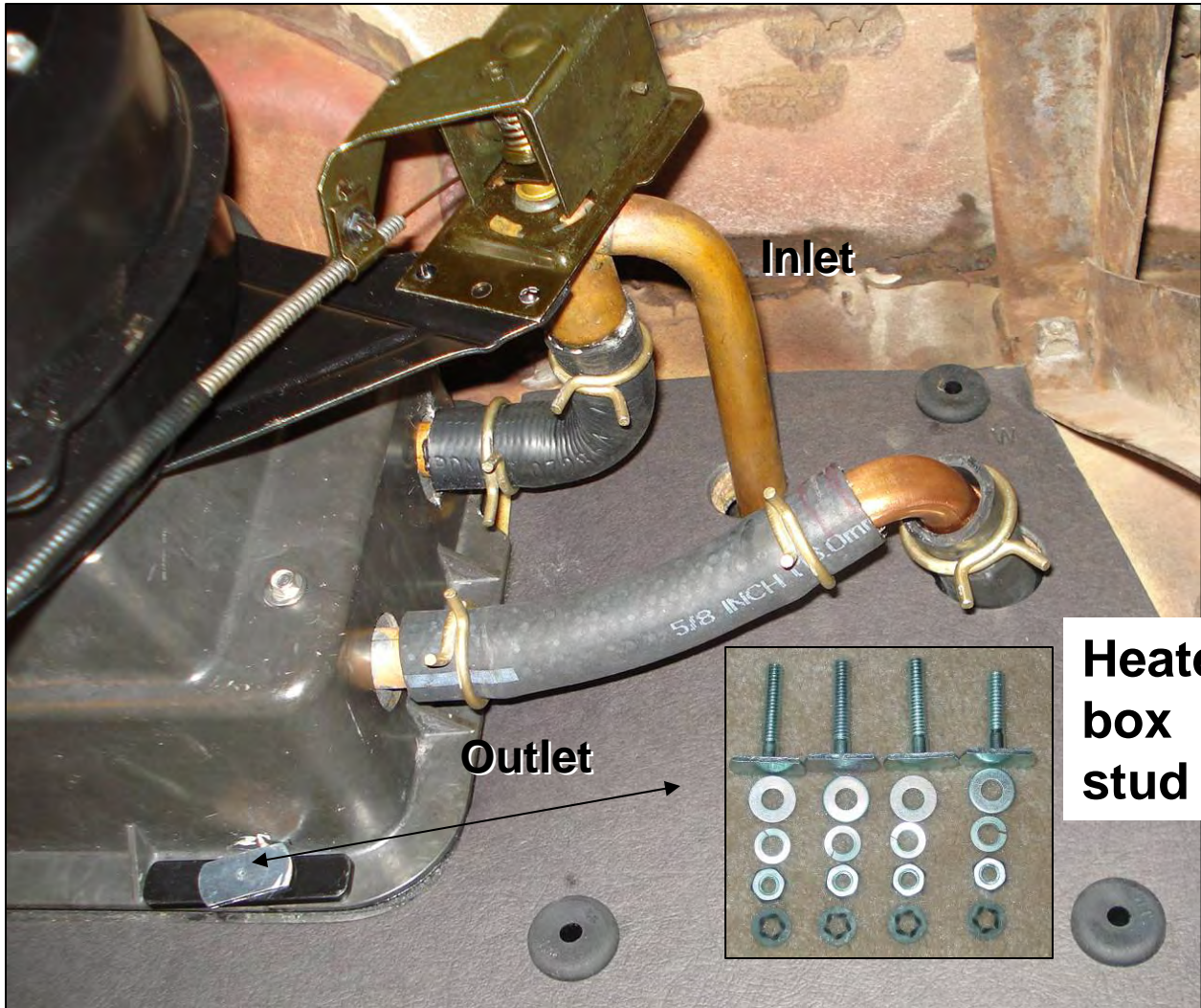




Heater control valve mounted to blower housing. The temp control cable slips over the circled post and is retained by a push nut.



The temp-control cable is clamped in at the clip circled in red and the wire loop of the inner cable slips over the post



## Heater core hose connections

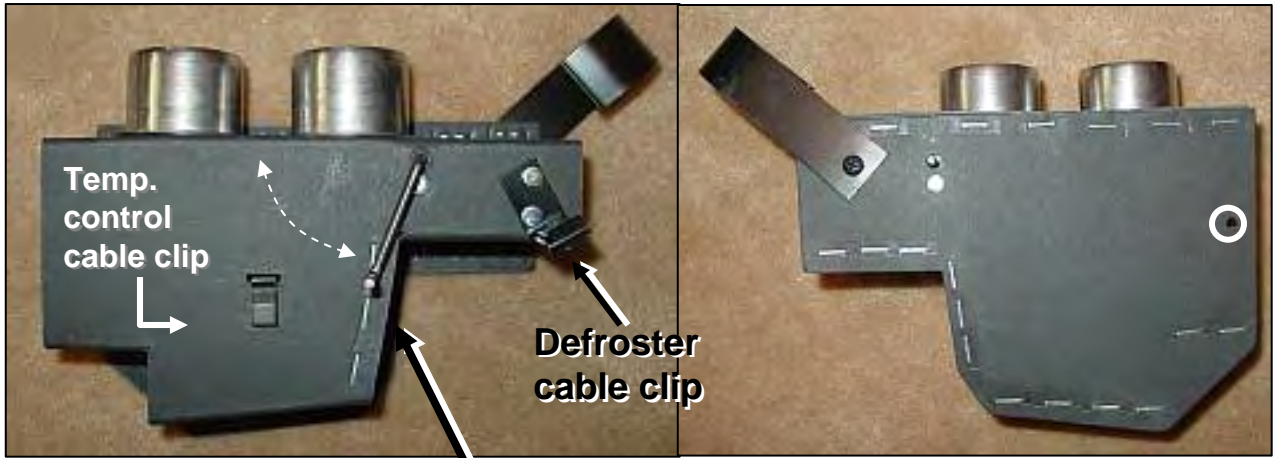


**90° Hose**



**Correct elbow with beads**





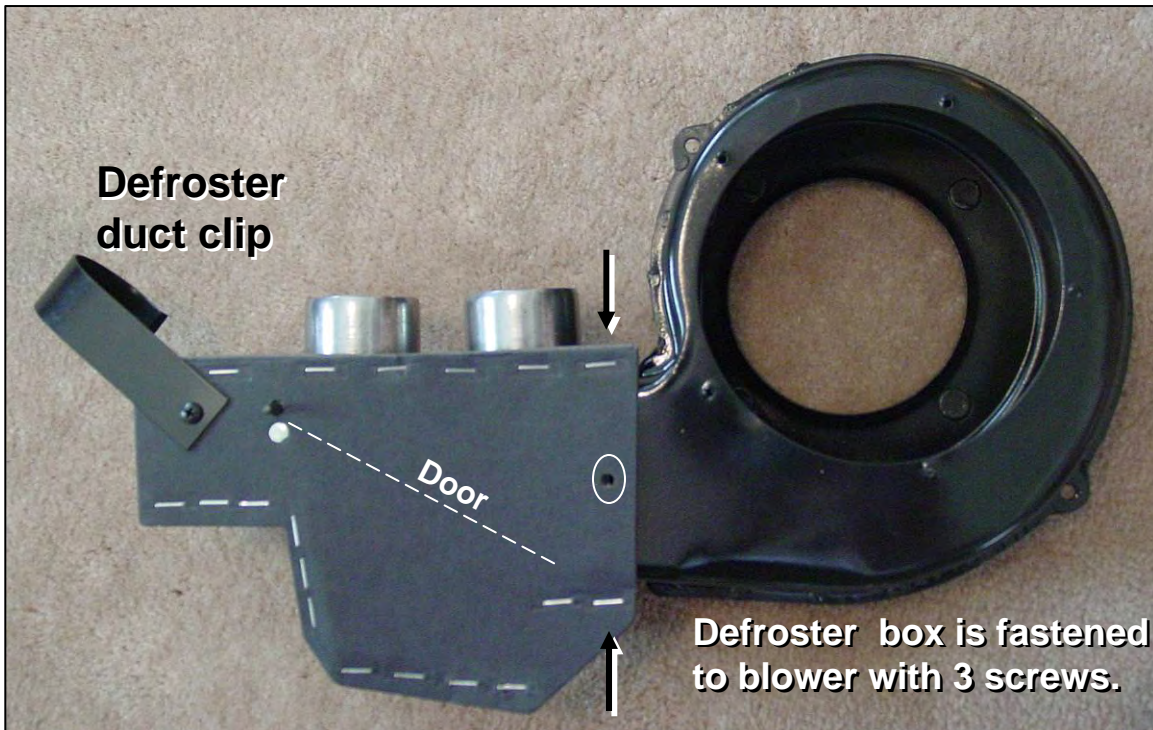
## Defroster box

This rod moves the “door” up and down. In the up position (dash knob pushed in) the defrosters are by-passed. Pulling the knob out pulls the door down and sends all flow to the ducts.



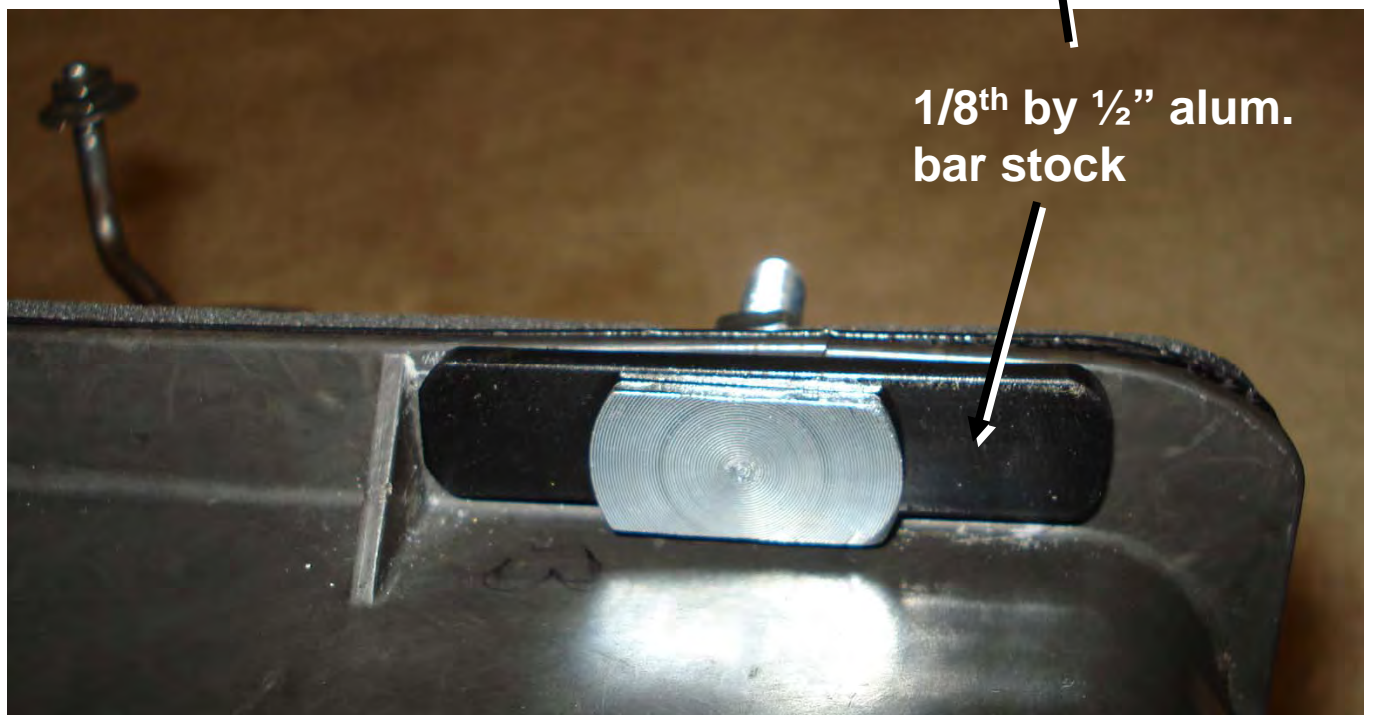
**Defroster door in down position diverts air to defroster ducts**

White circles indicate locations of attaching screws.





## Heater box reinforcements



I made reinforcements for the four positions where the heater-box studs pass through the rim of the box using 1/8<sup>th</sup> by 1/2-inch wide aluminum bar. The box had some minor cracks at these positions and I didn't want to press my luck when re-attaching the assembled unit to the firewall.