

**CHEVROLET-CENTRAL OFFICE**  
DIVISION OF GENERAL MOTORS CORPORATION  
DETROIT 2, MICHIGAN

**TECHNICAL SERVICE BULLETIN**  
Service and Mechanical Department

**SUBJECT:** CORVAIR PERFORMANCE -  
ECONOMY - HEATER EFFICIENCY

**BULLETIN NO.** DR # 424

**SECTION** VII (Cross Ref. XV)

**TO:** ALL CHEVROLET DEALERS

December 23, 1959

Effective with the resumption of production, several important changes were made on Corvair models to improve performance, prevent loss of fuel economy due to carburetor icing and to improve choke operation. A heat pipe which supplies warm air to the carburetor air inlet has been added. The choke thermostatic spring has been recalibrated and a choke heat pipe insulator has been added to improve over-all choke operation. The carburetor air horn extension has also been revised to relocate the air inlet to improve air cleaner efficiency.

The formation of ice crystals in the carburetor under certain atmospheric conditions has a very adverse effect on both engine performance and fuel economy. Proper operation of the automatic choke is also essential to provide satisfactory performance and economy.

A Carburetor Heat Control and Thermostat Unit, Part #3781235 is now available in parts stock and should be installed on all Corvair units which do not incorporate these changes.

Installation procedure is as follows:

**CARBURETOR HEAT PIPE**

- A. Remove Air Cleaner Assembly and Hoses.
- B. Remove the two ignition Wire Supports from Engine Upper Shroud. See Figure 1 Page 6 of this bulletin.
- C. Make template by cutting along the heavy black line of Figure 6, (furnished with a kit). With a pencil or suitable pointed instrument, carefully locate and pierce two  $3/32"$  holes as shown on the template.
- D. Place template on left front corner of Engine Upper Shroud and position by inserting the two wire support attaching bolts through the pierced holes threading them into the support attaching holes of the shroud.
- E. Center-punch at the point indicated on template to locate the center for a 2" hole to be cut in the left front corner of the upper shroud.
- F. Drill a  $1/8"$  pilot hole at center punch location then drill through shroud with a 2" diameter hole saw.

- G. Route the Carburetor Heat Pipe Assembly through the 2" hole in the shroud locating the end of the pipe between #4 and 6 cylinders. Mounting flange will fit contour of shroud when pipe is correctly positioned. See Figure 2.
- H. Remove and discard the original straight type Carburetor Air Horn Extension. Install new curved type Air Horn Extension piloting the Heat Pipe into the hole provided in the side of the Extension, as the Extension is being installed on the Air Horn. Tighten clamp screw securely.
- I. Drill two 1/8" holes through the Upper Shroud locating the drill in the center of the existing holes in the Heat Pipe flange. Secure flange to Shroud using the self-tapping screws furnished. Drill a third 1/8" hole 1" forward of the outer Heat Pipe flange attaching screw and install screw to securely retain Heat Pipe to Shroud. Location of third attaching screw shown at "A", Figure 1. View A, Figure 2 shows Heat Pipe and new Air Horn Extension in Position.
- J. Attach Instruction Sticker to the left side of the wheel house inner panel flush to the embossed mounting surface for the engine compartment lid support using a suitable adhesive. Place Heat Valve in "Winter Position" (rotated counter clockwise) as per instruction sticker. See "B", Figure 2.

#### CHOKE COVER AND THERMOSTAT SPRING AND HEAT PIPE INSULATOR

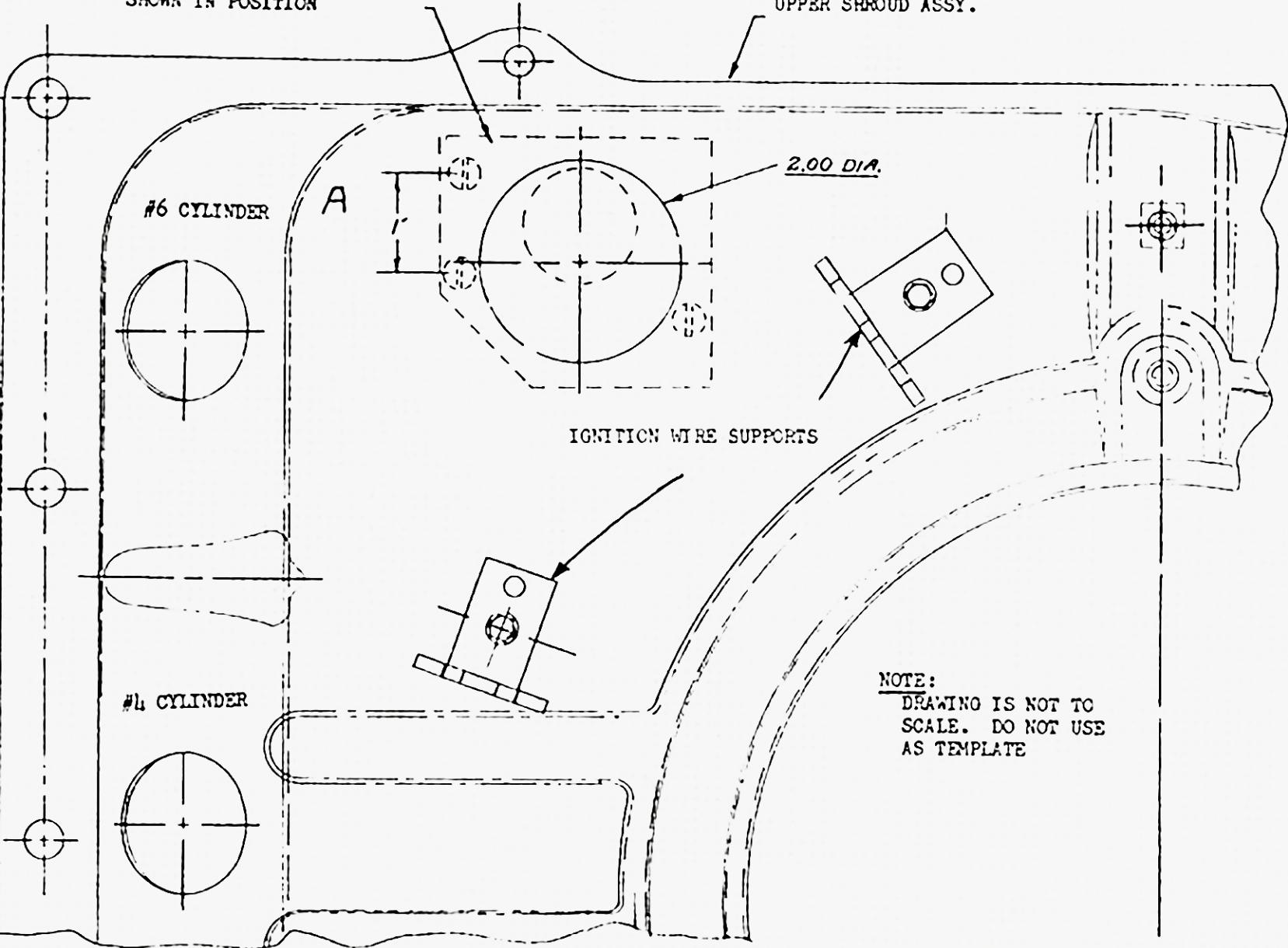
- A. Disconnect Choke Heat Pipe from choke housing and remove pipe from cylinder head.
- B. Slide Heat Pipe Insulator over pipe positioning upper end of insulator against nut and the lower end just above the bead on the pipe. Reinstate Heat Pipe. See Figure 3.
- C. Remove Choke Modifier Lever and Pointer Screw.
- D. Remove the three Choke Cover attaching Screws and Retainers and remove assembly.
- E. Install new Cover and Thermostat Spring Assembly using original gasket, making sure that the tang of the spring will pick up the Choke Shaft Lever when the pointer is rotated clockwise to the index mark. See Figure 4. When performing this operation, the cross shaft must be in the hot idle position - not riding against the fast idle cam.
- F. Reinstall Choke Modifier Lever - partially tighten attaching screw.
- G. Rotate pointer in a clockwise direction until it lines up with the index mark on Choke Cover. Tighten Modifier Lever attaching Screw securely making certain that the lever is positioned properly against pointer and not cocked on the shaft.

NOTE: If under certain climatic conditions, a lean condition on acceleration is noted after a cold start, the choke pointer should be set four notches rich (four notches clockwise from index mark).

Figure 1

CARBURETOR HEAT PIPE ASSY  
SHOWN IN POSITION

UPPER SRROUD ASSY.



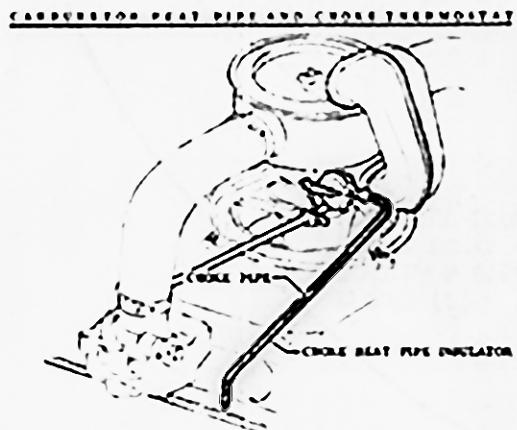
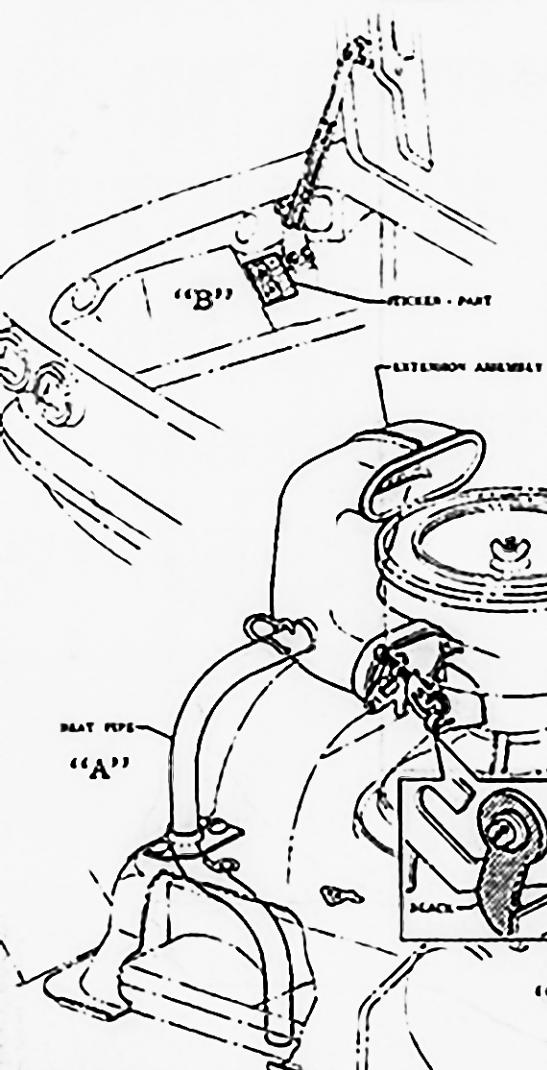


Figure 3

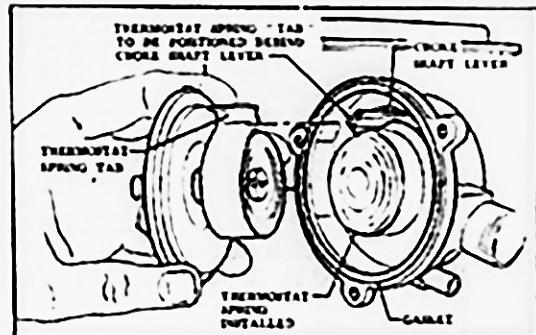


Figure 4

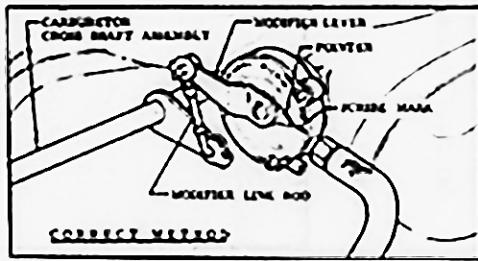


Figure 5

FIGURE A6

