EXHAUST SYSTEM AND HEATER

Removing and Installing Muffler

10 EN

Removal

If engine is mounted in the car, remove the rear cover plate and tail pipes.

1. Loosen exhaust pipe clamps.

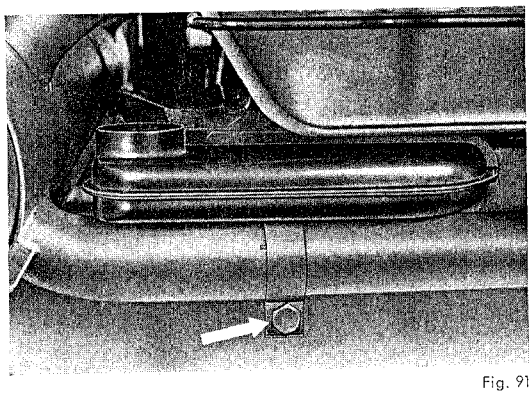

Fig. 91

2. Remove exhaust pipe flange nuts.

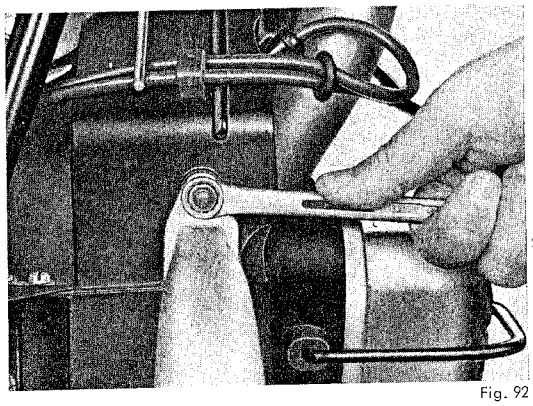

Fig. 92

3. Remove muffler by tapping the exhaust pipe clamps with a rubber mallet while pulling straight back.

Installing

The installation is accomplished in the reverse order of removal observing the following points:

1. Carefully inspect the muffler and pipes for damage and leaks before installing.

2. Straighten dented or bent pipes. Check the welded joint between the muffler and lower pipes for cracks which are easily caused by collisions. Leaking exhaust gasses from such damage can enter the engine compartment and then enter the passenger space through the heater.

3. Install new gaskets.

4. Check fit of pipe joints to front exhaust pipes. If not aligned straighten joints before installing muffler.

5. When the engine is installed in the car exhaust pipes and muffler must not touch the body.

Removing and Installing Junction Box and Exhaust Pipe

11 EN

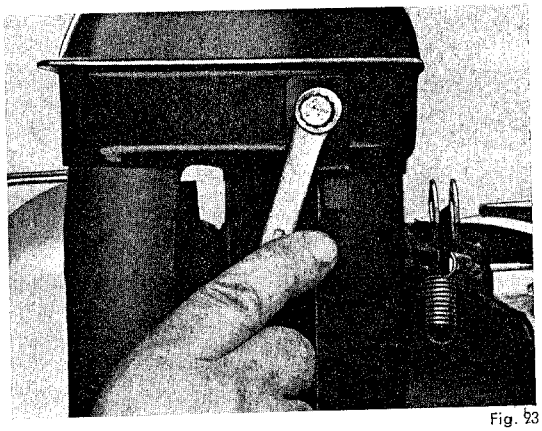

Fig. 93

Removal

(with engine removed from car)

1. Unscrew bolt on junction box (Fig. 93).

2. Unscrew bolts on exhaust flange.

3. Loosen exhaust pipe clamp.

4. Remove junction box and exhaust pipe.

Installation

The installation is carried out in the reverse order of removal observing the following points:

1. Check junction box and exhaust pipe for damage.
2. Exhaust pipe gasket surfaces must be clean and smooth. Repair damaged flanges.
3. Use new gaskets.

12 EN

Removing and Installing Heater Cables

General

The heater cable should be removed only if it needs replacement. When removing the engine from the car the cable ends should be disconnected from the flap levers on the lower air guides.

Removal

1. Disconnect the cable ends from the levers on the lower air guides.
2. Remove floor tunnel cover.
3. Carefully mark the position of the shift lever base to simplify replacing (Fig. 94).

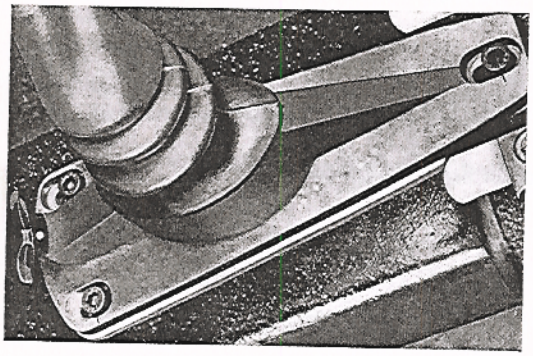

Fig. 94

4. Remove the three mounting screws.
5. Pull lever base aside.
6. Remove lock ring from heater spindle and turn handle until spindle nut is removed.

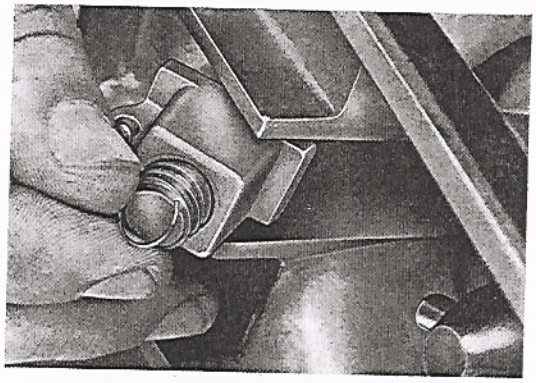

Fig. 95

7. Remove heater cables from the floor tunnel.

Installation

Note
The heater cable, approximately 320 cm (126 in.) long, is bent in half in such a manner that one side is 4 cm ($1^{9}/_{16}$ in.) longer than the other.

1. Thread the cable into the spindle nut up to the bend in the cable.

2. Push the two ends of the cable into the floor tunnel putting the longer section into the right channel.

3. Install spindle nut on heater control spindle with the cable eye to the front.

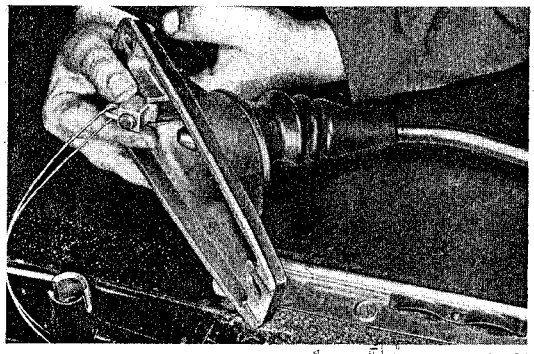

Fig. 96

4. Install lock ring on control spindle.

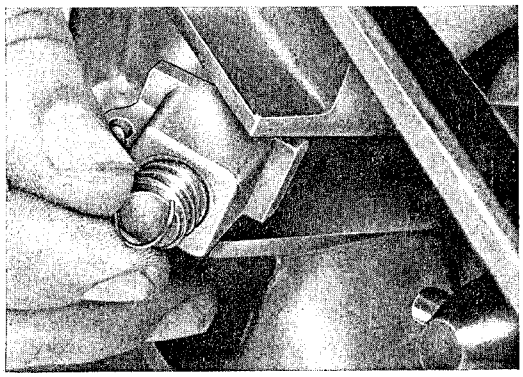

Fig. 97

5. Check that the shift linkage support is centered over the screw threads of the rear gear shift base.

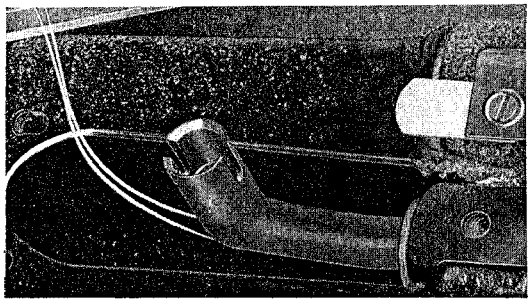

Fig. 98

6. Install gear shift base with three allen screws.

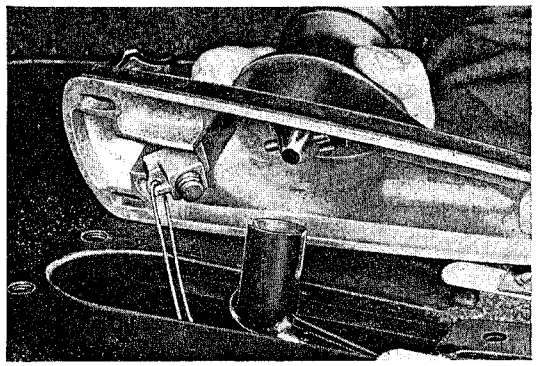

Fig. 99

7. Adjust gear shift base to previously inscribed marks and secure.

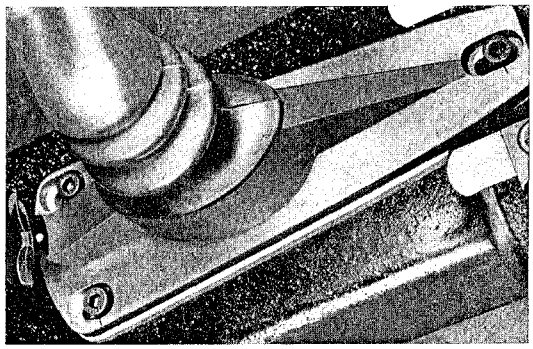

Fig. 100

8. Unwind the heater control knob to the stop.

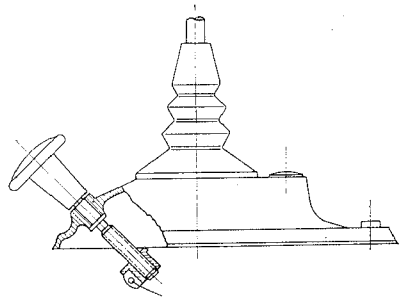

Fig. 101

9. Connect the ends of the control cable to the heater flap levers.

Bottom View

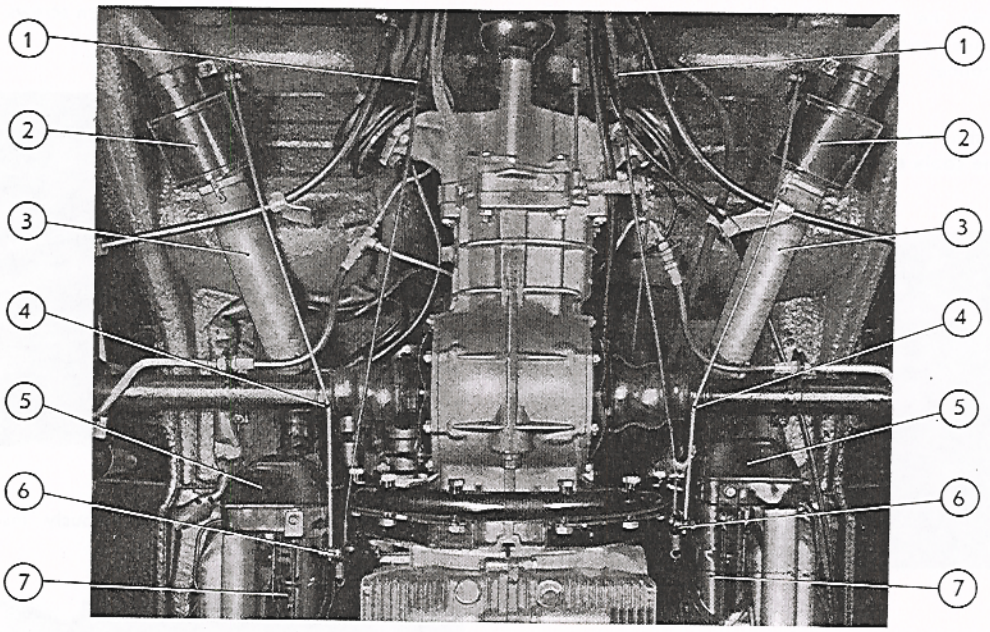

Fig. 102

① Heater cable
② Heater flap
③ Heater
④ Linkage from heater control to heater flaps
⑤ Heater
⑥ Heater lever
⑦ Lower heater duct

Position of control lever and heater flaps in open position

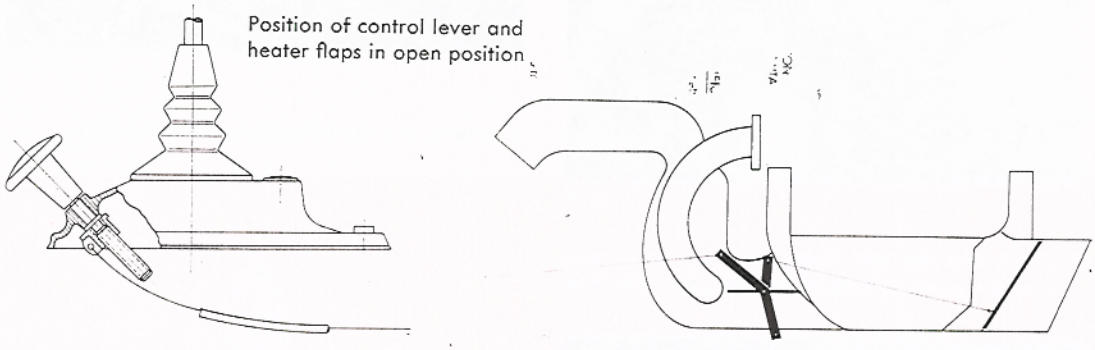

Fig. 103

Position of control lever and heater flaps in closed position

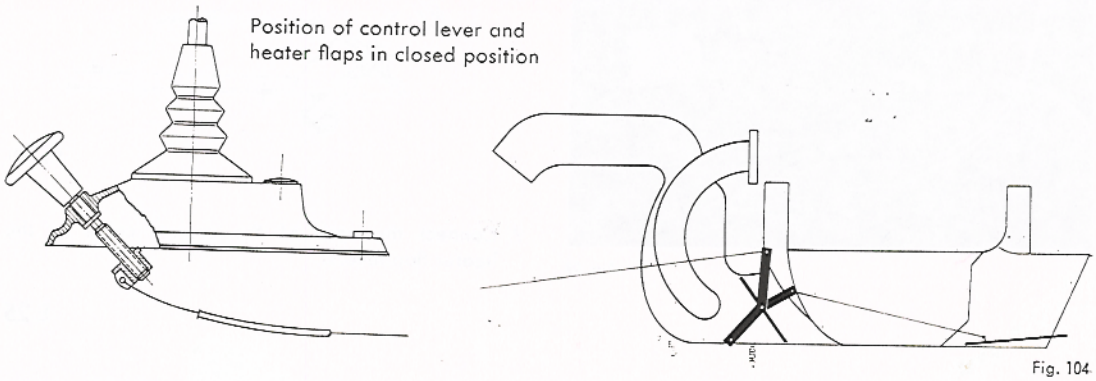

Fig. 104

Adjusting Engine Compartment Heater

13 EN

General

The engine compartment heater controls the temperature of the induction air in the engine compartment. The air is supplied by two connecting channels from the heater duct to the engine compartment. A bellows thermostat controls the amount of air supplied by this heater to the carburetors.

The proper functioning of this system depends on correct adjustment. An improperly adjusted thermostat can cause overheating during warm weather and result in power loss. In cold weather it can cause carburetor icing.

A simple gauge, as shown in fig. 106 can easily be fabricated for adjusting the thermostat. The bellows begins to open at 23° ± 2° C (13° ± 3.6° F) and is fully extended (approx. 12 mm, 4.7 in.) at 31° to 34° C (90° to 93° F).

The temperature range 23° to 34° C is marked on the top of the bellows.

Adjustment

1. Loosen clamp and disconnect ball joint.
2. Check that both flaps open and close together.
3. Insert gauge and mount bellows (Fig. 105) pulling on operating rod until gauge fits snug and hold.
4. Adjust end link at the clamp or ball joint so that flaps are fully closed.
5. Tighten clamp screw and lock nut on ball joint.
6. Remove gauge.
7. Check linkage for free movement through the fan housing and align if necessary.

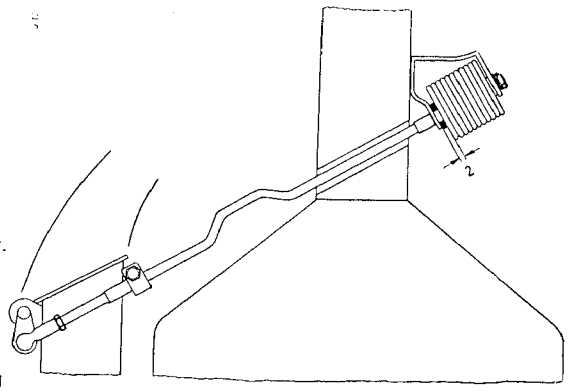

Fig. 105

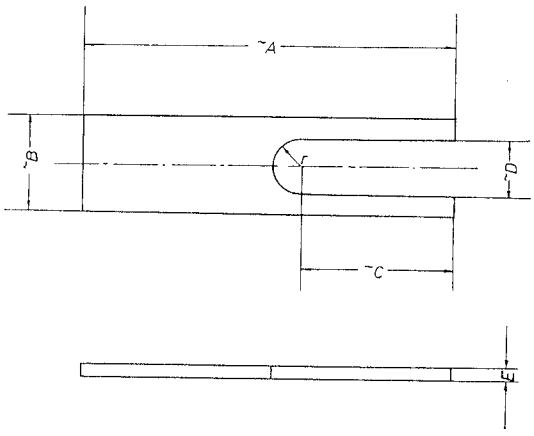

Fig. 106

A = 60 mm (2 3/8 in.)
B = 16 mm (5/8 in.)
C = 25 mm (1 in.)
D = 9 mm (7/16 in.)
E = 2 mm (1/8 in.)