

A. Replacement of Heating Spiral

1. Disconnect the tension spring (1b) and pull the heating spiral (11) off the heater valve shaft (10) (see Fig. 14—5/1).
2. Do not reinstall burned-out heating spirals. They must always be replaced.
3. Fit the new heating spiral on the heater valve shaft so that the slanting end points toward the exhaust manifold side.

Then turn the heating spiral approx. $\frac{1}{2}$ turn so that it is under initial stress and attach the other end to the notched attaching pin (12).

4. Reinstall the tension spring (1b) and check that the heater valve is operating properly, i.e., with engine cold, it is so adjusted that warming of the air-fuel mixture can take place.

B. Replacement of Damper Spring

If the surface of the damper spring (6) is worn, install a new damper spring. When installing the new damper spring, fit it so

that with the heater valve open the spring rests against the notched attaching pin (2) (see Fig. 14—5/1).

C. Replacement of Heater Valve and Shaft

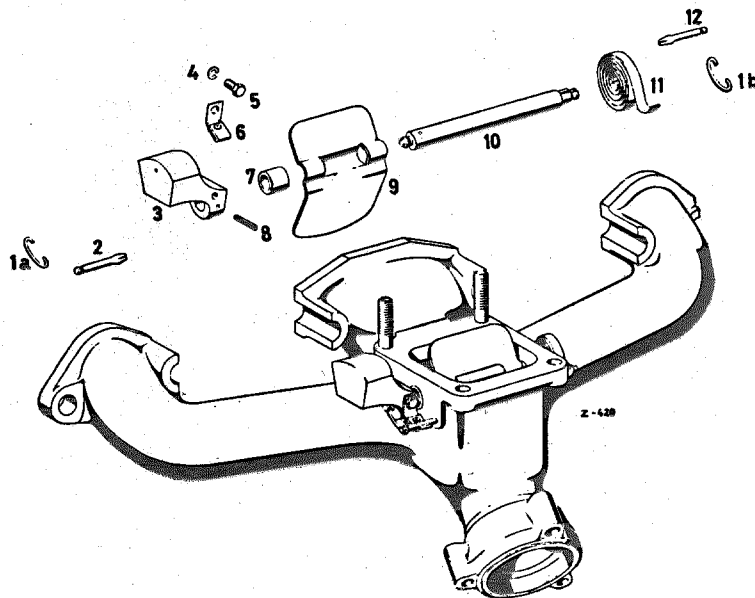


Fig. 14—5/1

- 1a and 1b Tension springs
- 2 Notched attaching pin
- 3 Balancing weight
- 4 Lock washer
- 5 Hexagon screw
- 6 Damper spring
- 7 Bushing
- 8 Dowel pin
- 9 Heater valve
- 10 Heater valve shaft
- 11 Heating spiral
- 12 Notched attaching pin

Removal:

1. Before replacing a jammed heater valve and heater valve shaft, try first to free up the valve by spraying with caramba or crude oil. If this is not successful, install a new heater valve, shaft and bushings.

2. To do this, disconnect the tension springs (1a and 1b) at both sides of the heater valve shaft (10) and remove the heating spiral (11) (Fig. 14—5/1).
3. Use a cutting torch to cut away the heater valve (9). This is necessary because the