

The adjusting nuts (56) must not be tightened until the pump arm (6) moves away from the diaphragm since in that case injection would not take place immediately the throttle valve is opened. The injection amount of the accelerating pump should be 0.4–0.6 cc/stroke. Adjustment of the injection amount is described in Job No. 01-3, Section H.

Note: a) This version of the neutral accelerating pump has no plate valve as a stop for the diaphragm.

b) In the case of the die-cast carburetor the fuel line to the accelerating pump is calibrated by the ball valve (55) with a diameter of 0.5 mm (installed as a standard part as from Engine End No. 55 01823). In all engines with Engine End Nos between 55 00709 (in which the first die-cast carburetors were installed) and 55 01822 the fuel line to the accelerating pump can be calibrated subsequently by installing the calibrated sleeve Part No. 000 071 03 40 on the ball valve (see also Job No. 01-3, Section I).

c) Sand-cast and die-cast carburetors differ in the arrangement of the canals in the carburetor housing and in the arrangement and design of the injection tube and the pump jet (Figs. 07-0/49 and 07-0/50).

G. Fuel Exhaust Device

When the throttle valves of stages 1 and 2 are suddenly closed at high engine speeds, some fuel may remain in the suction canals of the carburetors.

This would enrich the mixture in stage 2 and would have an undesirable effect both at idling speed and when the throttle valves are opened. For this reason the fuel left in stage 2 is drawn off via the fuel suction line (4) and passes into the suction canals of stage 1 and from there into the mixing chambers of the suction canals.

When the engine is not running, the fuel accumulating in stage 1 of both carburetors runs off through the fuel outlet line (16) and ensures that the engine will start properly when hot. The arrangement of the fuel suction line and the fuel outlet line for the die-cast carburetors is shown in Fig. 07-0/51.

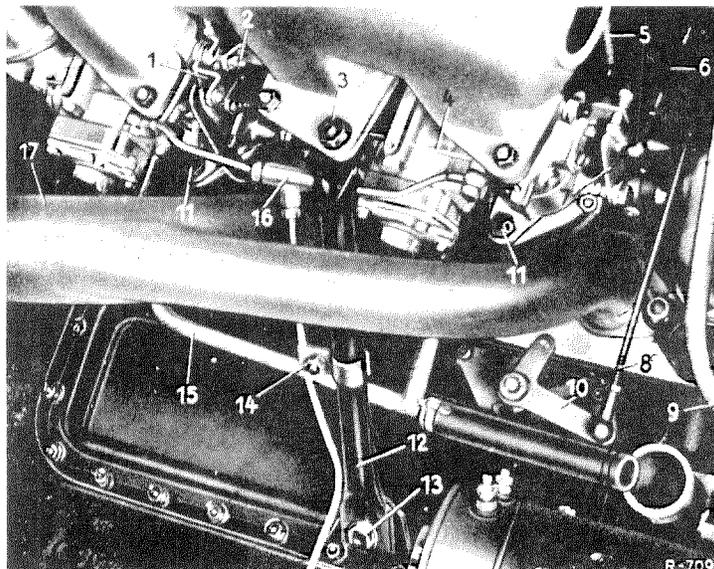


Fig. 07-0/51

- 1 Choke valve-lever of rear carburetor
- 2 Choke valve lever of front carburetor
- 3 Hexagon nut
- 4 Fuel suction line
- 5 Return spring for carburetor linkage
- 6 Push rod from control shaft to throttle valve lever of front carburetor
- 7 Throttle valve lever
- 8 Push rod from angle lever on crankcase to control shaft
- 9 Fuel overflow line
- 10 Angle lever
- 11 Hexagon screw
- 12 Strut for supporting air suction tube
- 13 Hexagon screw
- 14 Pipe clip
- 15 Cooling water return line for pre-heating of intake pipe
- 16 Fuel outlet line
- 17 Exhaust manifold

In the die-cast carburetors the fuel suction line is firmly connected to the carburetor housing, whereas in the sandcast carburetors the line is connected from the outside (Fig. 07-0/52).

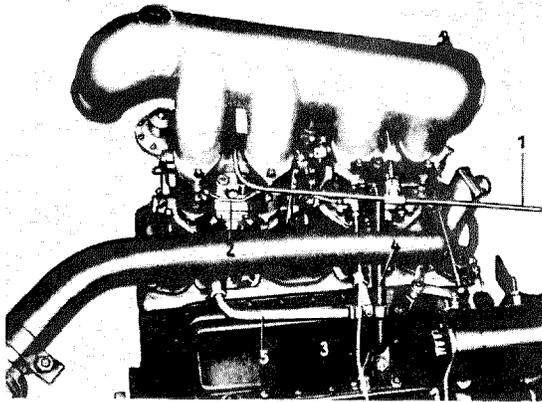


Fig. 07-0/52

- 1 Fuel overflow line
- 2 Fuel suction line
- 3 Fuel outlet line
- 4 Strut for supporting air suction tube
- 5 Cooling water return line for pre-heating of intake pipe

H. Hot-Start Mechanism

In order to ensure that the engine also starts at high outside temperatures a hot-start mechanism is incorporated in the carburetor system; it is operated by a pull knob and bowden cable from the instrument panel. When the hot-start control is pulled, the throttle valves of stage 2 are forced open by the angle levers. This enables the evaporated fuel to be drawn off quickly. As soon as the engine has started, the pull knob should be released quickly. The accelerator pedal must be depressed fully before the hot-start control is pulled since otherwise the throttle valves of stage 1 would be opened via the automatic return mechanism levers of stage 2 and this might result in a distortion of the levers (Figs. 07-0/53 and 07-0/54).

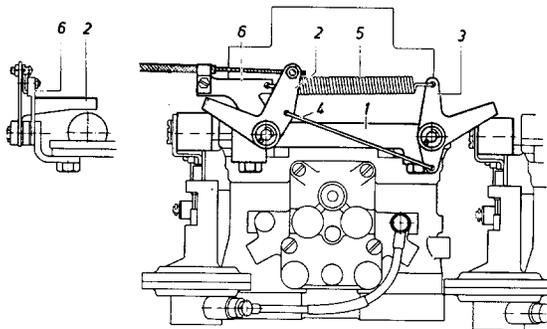


Fig. 07-0/53

- 1 Bearing bracket
- 2 Angle lever for rear carburetor
- 3 Angle lever for front carburetor
- 4 Connecting strap
- 5 Return spring
- 6 Bracket for return spring on bearing bracket

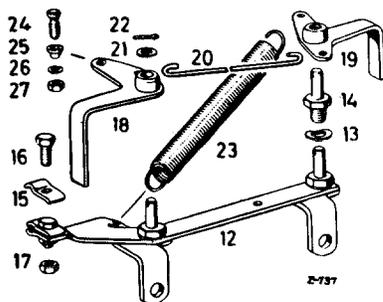


Fig. 07-0/54

- 12 Bearing bracket for hot-start control
- 13 Spring washer
- 14 Pivot pin
- 15 Fixing clip for hot-start control
- 16 Hexagon screw
- 17 Hexagon nut
- 18 Rear angle lever for hot-start control
- 19 Front angle lever for hot-start control
- 20 Connecting strap for angle lever
- 21 Washer
- 22 Cotter pin
- 23 Return spring
- 24 Fixing screw for bowden cable on angle lever
- 25 Bushing
- 26 Washer
- 27 Hexagon nut

Under normal conditions the hot-start mechanism is not required for starting the engine at normal running temperature; fully depress the accelerator pedal as usual.