

V. Carburetor Altitude Adjustment

A. General

At high altitudes the carburetor, with a standard set of jets delivers too rich a mixture, a result of the decrease in atmospheric pressure. Engine performance will drop and fuel consumption will become unnecessarily high; to prevent this it is generally sufficient to provide the carburetor with a smaller main jet to re-establish the correct fuel-to-air mixture in order to attain the highest possible performance at the prevailing atmospheric pressure. On the compound carburetors of models 190 190 b, 220 S and 190 SL only the main jets of the 1st stage need be replaced by smaller ones. Basically the main jet for altitude adjustment should be selected as small as possible, though the drop in performance should not be too high. If the main jets installed for altitude driving is too small, or if a main jet, selected for altitude operations is run at full load in normal altitudes, there is the danger that the engine will overheat because the mixture supplied by the carburetor is too lean

B. Selection of Main Jets

For proper selection of main jets for altitude adjustment with regard to the individual models refer to the table below which provides data on size of main jets.

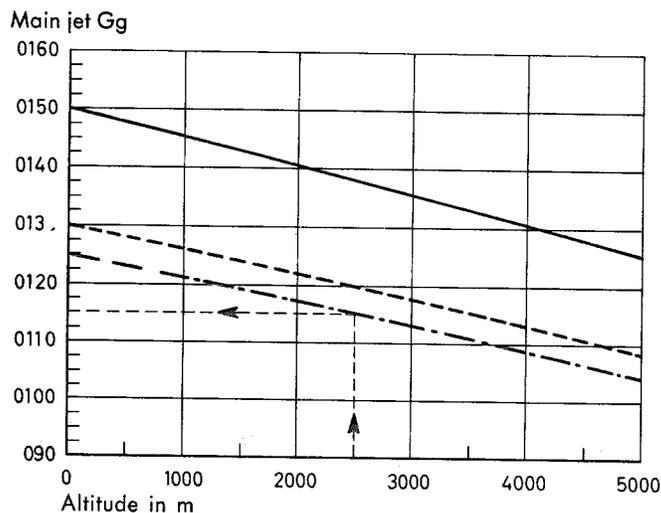


Fig. 07-0/58

- With standard main jet "Gg" 0150: Models 180 a, 180 b
- With standard main jet "Gg" 0130: Models 220a, 219 (up to engine end No. 10-9501618 and 11-9500383). Model 190 SL (with die-cast carburetors)
- . - . With standard main jet "Gg" 0125: Models 180, 190 190 b, 220 S Model 219 (as from engine end No. 10-9501619 and 11-9500384) Model 190 SL (with sand-cast carburetors)

Example: Model 180

Standard main jet: "Gg" 0125
 Main jet at 2500 m altitude: "Gg" 0115

C. Solex Altitude Corrector

Instead of changing to smaller main jets, models 180 a, 180 b, 180 c, 190, 190 b and 220 S may use Solex altitude correctors, together with the standard main jets. By means of the altitude corrector the engine will receive the correct fuel/air mixture for any altitude or any atmospheric pressure. The altitude corrector is particularly recommended for vehicles which drive frequently both at normal and at high altitudes.

The aneroid compensator built into the altitude corrector controls the fuel supplied to the main jet automatically in dependence of the prevailing atmospheric pressure (Fig. 07-0/59).

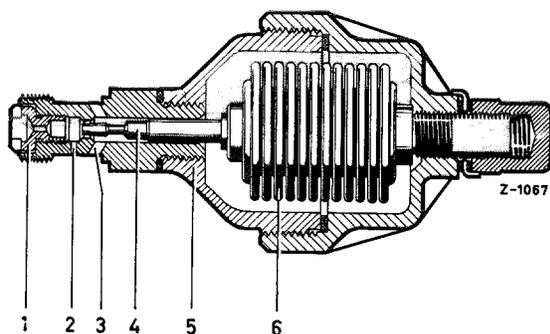


Fig. 07-0/59

- 1 Main jet
- 2 By-pass bore
- 3 Fuel intake bore
- 4 Needle
- 5 Housing
- 6 Capsule pack

There are different altitude correctors for the various models (refer to table).

Model	Altitude Corrector Part No.	By-pass bore mm diameter	Main jet "Gg"
180, 180 a, 180 b	000 072 02 05	1.3	0150
180 c	000 072 04 05		0145
190, 190 b, 220 S	000 072 01 05	1.0	0125

Note: a) For compound downdraft carburetors of models 190, 190 b and 220 S the altitude corrector is used only for the main jet of the 1st stage.

b) On the double downdraft carburetor of models 219, 220 a, and on the compound cross-draft carburetor of model 190 SL the altitude corrector can not be installed for lack of space.