

**F. Technical Specifications of Solex Downdraft Carburetor
Type 32 PJCB**

Carburetor	Model 180	Model 180a
Air horn "K"	25	26
Main jet "Gg"	0125	0150
Air correction jet "a"	200	205
Mixing tube "s"	10	1
Mixing tube holder (reserve)	5.5	5.3
Idle fuel jet "g"	55	50
Idle air jet "u"	1.5	1.5
Acceleration pump	No. 73 (enriching)	
Injection amount cc/stroke	0.7–1.0	0.9–1.2
Pump jet "Gp"	50	60
Injection tube	low (not graded)	high (0.5 graded)
Beginning of mixture enrichment via pump system	Throttle valve angle 27°–33°	
Pump diaphragm	Bolt length mm 21.0 ^{+0.75} _{–0.3}	36°–40° 20.5 ± 0.1
	Plate dia mm	22
Starter fuel jet "Gs"	180	
Starter air bore in rotary slide valve of starter, mm ϕ	5.5	
Float needle valve	1.5	2.0
Float weight (Float of nylon) g	5.7	
Fuel level mm	16–20	
Angle of inclination of throttle flap	8°	
Bore in throttle valve, mm ϕ	—	2.5
By-pass bores, mm ϕ	1.1/1.1	1.2/1.0

Note: Carburetor for Models 180 and 180 a

- a) The length of the pump diaphragm bolt is measured from the dome against which the pump arm rests to the tip of the pin actuating the ball valve in the accelerating pump (Fig. 07-0/10 a).

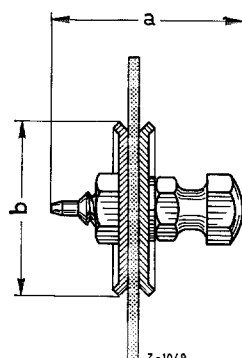


Fig. 07-0/10 a

- a) Bolt length
b) Plate diameter

- b) Position of cotter pins in connecting rod.

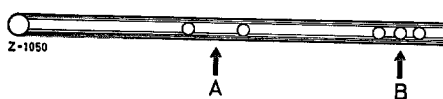


Fig. 07-0/10 b

- A Cotter pin at pressure spring
B Cotter pin at pump arm

	Pump diaphragm installed			
	Bolt length 21 mm Diaphragm plate ϕ 22 mm	Bolt length 19.0 mm Diaphragm plate ϕ 16 mm	Bolt length 20.5 mm Diaphragm plate ϕ 16 mm	Bolt length 20.5 mm Diaphragm plate ϕ 22 mm
Cotter pin A	left cotter-pin hole	right cotter-pin hole	left cotter-pin hole	
Cotter pin B	center cotter-pin hole			
Shim between pump arm and cotter pin B	—		1 mm	—

- c) The injection amount of the accelerating pump is measured with the throttle valve in the **idle position**, whereas the enrichment delivery point is checked with the throttle valve **completely closed**.

Carburetor for Model 180 a

- d) Up to Engine End No. 85 14427 the carburetor was equipped with a mixing tube holder (reserve) 5.5 and an air correction jet "a" 230.

As from Engine End No. 8514428 a mixing tube holder (reserve) 5.3 and an air correction jet "a" 220 have been installed.

- e) Up to Engine End No. 8515851 the carburetor was equipped with an air correction jet "a" 220 (see "d" as from Engine End No. 8514428), a pump jet "Gp" 70, an injection tube "low" (0.5 graded) and a pump diaphragm with a bolt length of 19.0 ± 0.1 mm and a plate diameter of 16 mm. In the case of carburetors with this type of pump diaphragm the enrichment begins at a throttle valve angle of 55° – 60° . As from Engine End No. 8515852 an air correction jet "a" 210, a pump jet "Gp" 60, an injection tube "high" and a pump diaphragm with a bolt length of 20.5 ± 0.1 mm have been installed (enrichment delivery point at 40° – 44° throttle valve angle).
- f) From Engine End No. 8515852 to Engine End No. 8516090 the carburetor was equipped with an air correction jet "a" 210. As from Engine End No. 8516091 an air correction jet "a" 205 has been installed.
- g) As from Engine End No. 9504458 (as from Carburetor No. 1398 489) the plate of the pump diaphragm has been enlarged from 16 mm diameter to 22 mm diameter and the enrichment delivery point has been changed from 40° – 44° to 36° – 40° throttle valve angle.
- h) If complaints are received about jerky running of the car under partial load or about uneven speed build-up, the carburetor can be modernized subsequently provided, however, that it has a mixing tube holder (reserve) 5.3. The mixing tube holder should only be replaced under very special circumstances and only by an experienced mechanic. A suitable sleeve, together with a stud bolt M 6, a hexagon nut and a washer should be used to press off the mixing tube holder. When fitting the new mixing tube holder make sure that it is properly seated and fits tightly in the carburetor housing. When installing a new pump diaphragm, check the injection amount of the accelerating pump and the enrichment delivery point (see Job No. 01–3, Section H).
- i) The mixing tube holder (reserve) 5.3 (installed as a standard part as from Engine End No. 8514428) is marked with the number 5.3 stamped in the side.

Carburetor for Model 180

- k) Up to Engine End No. 3504026 a brass float weighing 12.5 g was fitted. A nylon float has been installed as a standard part as from Engine End No. 3504027.