

II. Double Downdraft Carburetor for Models 220 a and 219

The Solex double downdraft carburetor Type 32 PAATI, which to all intents and purposes consists of two separate carburetors in a single housing, is designed on the same principle as the single downdraft carburetor. Each suction canal of the carburetor has a main carburetion and an idle system. The float chamber, the accelerating pump and the starter mechanism supply both suction canals of the carburetor together. Like the compound downdraft carburetor the double downdraft carburetor has a special choke valve section with a screwed-on grey cast iron flange (see also Job No. 07-0, II.). Figs. 07-3/5, 07-3/6, and 07-3/7 show the carburetor from both sides and also with the carburetor cover removed.

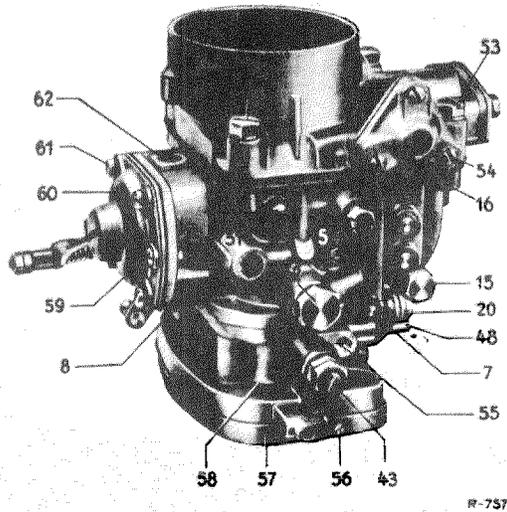


Fig. 07-3/5

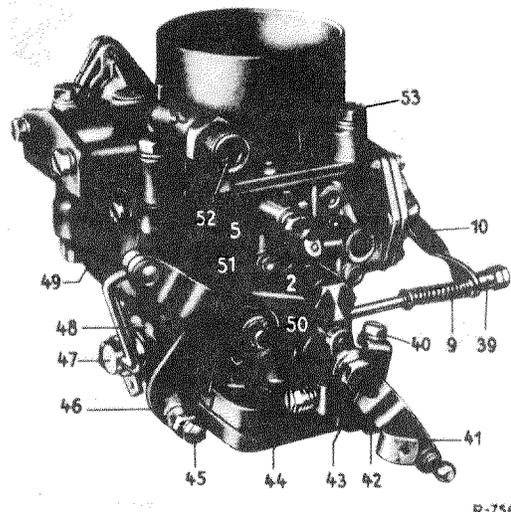


Fig. 07-3/6

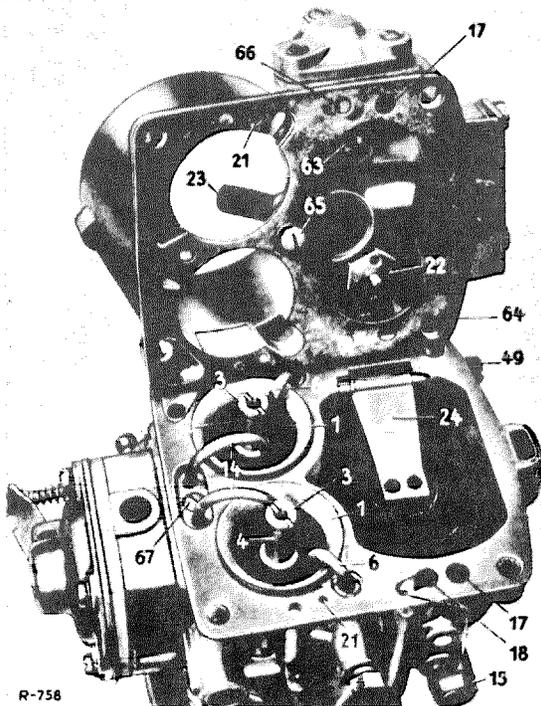


Fig. 07-3/7

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| 1 Air horn | 46 Angle lever |
| 2 Main jet plug with main jet | 47 Starter lever |
| 3 Air correction jet | 48 Starter housing |
| 4 Mixing tube holder with mixing tube | 49 Float shaft |
| 5 Idle fuel jet | 50 Transmission lever |
| 6 Idle intake pipe | 51 Retaining screw for air horn |
| 7 Idle mixture adjustment screw | 52 Threaded union for connection of fuel line |
| 8 Ball valve | 53 Hexagon screws for fastening carburetor cover |
| 9 Connecting rod with pressure spring | 54 Oval head countersunk screws for starter air valve |
| 10 Pump arm | 55 Threaded bore for threaded union of vacuum line to distributor |
| 14 Injection tube | 56 Grub screw for connection of vacuum tester |
| 15 Starter fuel jet | 57 Grey cast iron flange |
| 16 Starter air valve | 58 Throttle valve part |
| 17 Air canal from starter air valve to fuel canal (18) | 59 Oval head countersunk screws for pump cover |
| 18 Fuel canal to starter system | 60 Pump cover |
| 21 Vacuum canal for starter air valve | 61 Cheese head screws for accelerating pump |
| 22 Float needle valve | 62 Accelerating pump |
| 23 Float chamber vent tube | 63 Air canal from float chamber to starter air valve |
| 24 Float | 64 Carburetor cover gasket |
| 39 Adjusting nuts | 65 Bulton-head screw for fastening gasket |
| 40 Aperture limiting screw | 66 Notch in carburetor cover |
| 41 Throttle valve lever | 67 Oval head countersunk screw for injection tubes |
| 42 Clamping screw for choke control sleeve | |
| 43 Throttle valve shaft | |
| 44 Idle adjustment screw | |
| 45 Clamping screw for choke control | |

- Note:** a) Use Special Screw-Driver 187 589 12 61 for tightening and loosening the idle intake pipes. If this tool is not available, a standard screw-driver can be ground to the correct angle.
- b) When the throttle valve part and the grey cast iron flange have been removed from the carburetor housing, the various surfaces should be coated with sealing compound before the parts are screwed on again. The sealing compound coating should be very thin, so that the fine bores cannot be closed by the compound when the parts are fastened together. Tighten the four screws evenly.
- c) When installing the starter mechanism make sure that the opening (34) in the starter rotary slide valve is opposite the starter mixture canal (30) of the starter flange when the starter lever rests against the stop in the cold-start position (see Job No. 07-0, II., Section B).

List of Component Parts of Solex Double Downdraft Carburetor Type 32 PAATI

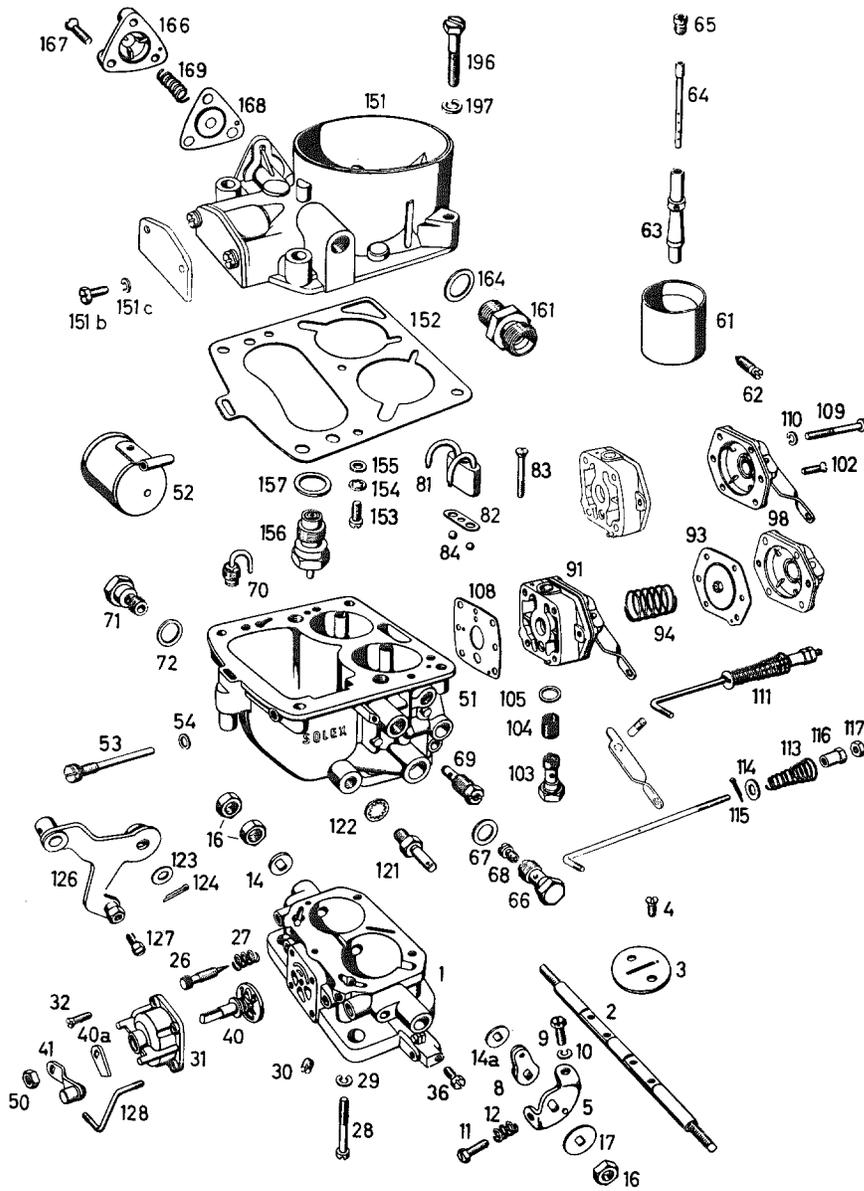


Fig. 07-3/8

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|--|--|--------------------------------------|
| 1 Throttle valve part | 26 Idle mixture adjustment screw | 52 Float |
| 2 Throttle valve shaft | 27 Pressure spring | 53 Float shaft |
| 3 Throttle valve | 28 Cheese head screw | 54 Fiber sealing ring |
| 4 Oval head countersunk screw | 29 Lock washer | 61 Air horn |
| 5 Abutment | 30 Grub screw | 62 Retaining screw for air horn |
| 8 Transmission lever for accelerating pump | 31 Starter housing | 63 Mixing tube holder |
| 9 Aperture limiting screw | 32 Oval head countersunk screw | 64 Mixing tube |
| 10 Lock washer | 36 Clamping screw for choke control sleeve | 65 Air correction jet |
| 11 Idle adjustment screw | 40 Starter rotary slide valve | 66 Main jet plug |
| 12 Pressure spring | 40a Stop plate | 67 Fiber sealing ring |
| 14 Washer | 41 Starter lever | 68 Main jet |
| 14a Washer | 50 Hexagon nut | 69 Idle fuel jet |
| 16 Hexagon nut | 51 Carburetor housing | 70 Idle intake pipe |
| 17 Retaining washer | | 71 Starter fuel jet |
| | | 72 Fiber sealing ring |
| | | 81 Injection tubes |
| | | 82 Gasket for injection tubes |
| | | 83 Oval head countersunk screw |
| | | 84 Balls |
| | | 91 Accelerating pump (complete) |
| | | 93 Diaphragm |
| | | 94 Diaphragm spring |
| | | 98 Cover with pump arm |
| | | 102 Oval head countersunk screw |
| | | 103 Ball valve |
| | | 104 Strainer |
| | | 105 Fiber sealing ring |
| | | 108 Rubberized fabric gasket |
| | | 109 Cheese head screw |
| | | 110 Lock washer |
| | | 111 Connecting rod (complete) |
| | | 113 Pressure spring |
| | | 114 Washer |
| | | 115 Cotter pin |
| | | 116 Shoulder nut (adjusting nut) |
| | | 117 Hexagon nut (lock nut) |
| | | 121 Pivot pin |
| | | 122 Toothed washer |
| | | 123 Washer |
| | | 124 Cotter pin |
| | | 126 Angle lever |
| | | 127 Clamping screw for choke control |
| | | 128 Connecting rod |
| | | 151 Carburetor cover (complete) |
| | | 151b Hexagon screw |
| | | 151c Lock washer |
| | | 152 Carburetor cover gasket |
| | | 153 Button-head screw |
| | | 154 Toothed washer |
| | | 155 Washer |
| | | 156 Float needle valve |
| | | 157 Copper sealing ring |
| | | 161 Threaded union |
| | | 164 Fiber sealing ring |
| | | 166 Starter air valve cover |
| | | 167 Oval head countersunk screw |
| | | 168 Diaphragm |
| | | 169 Valve spring |
| | | 196 Hexagon screw |
| | | 197 Lock washer |