

# Disassembly and Reassembly of Carburetor

Job No.

07-3

With a few exceptions the procedures for disassembling and reassembling the carburetors are the same as for the compound downdraft carburetor in Model 190. The same is true of the cleaning and checking procedures for the various carburetor parts (see Workshop Manual Model 190). For this reason only the deviations from the standard procedure for the compound downdraft carburetor are described in the following pages.

## I. Downdraft Carburetor for Models 180, 180 a, and 180 b

The Solex downdraft carburetor Type 32 PICB for Models 180 and 180 a as well as Type 34 PICB for Model 180 b have the same basic design as the compound downdraft carburetor, but the carburetor housing is cast integral. The carburetor cover is fastened to the carburetor housing by three screws (see also Job No. 07-0, I.). Figs. 07-3/1, 07-3/2, and 07-3/3 show the carburetor from both sides and with the carburetor cover removed.

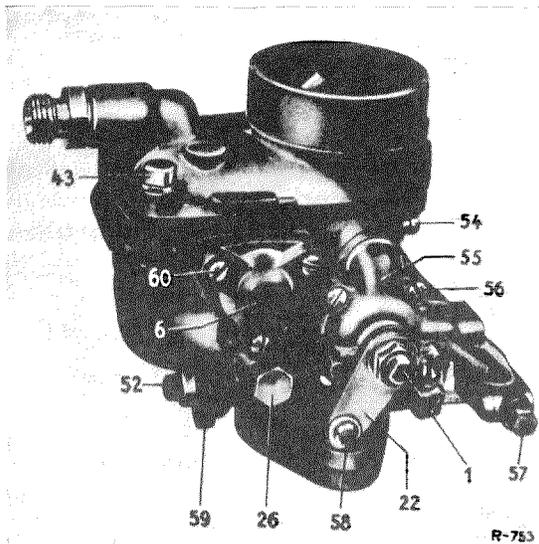


Fig. 07-3/1

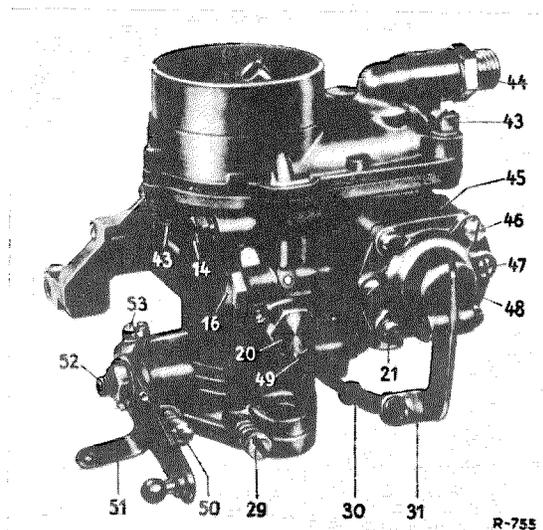


Fig. 07-3/2

- 1 Starter rotary slide valve
- 6 Starter air valve
- 14 Idle fuel jet
- 16 Pump jet
- 20 Main jet plug with main jet
- 21 Ball valve
- 22 Starter lever
- 26 Starter fuel jet
- 29 Idle mixture adjustment screw
- 30 Connecting rod with pressure spring
- 31 Pump arm
- 43 Square screws for fastening of carburetor cover

- 44 Threaded union for connection of fuel line
- 45 Accelerating pump
- 46 Cheese head screws for accelerating pump
- 47 Oval head countersunk screws for pump cover
- 48 Pump cover
- 49 Threaded bore for threaded union of vacuum line to distributor
- 50 Idle adjustment screw
- 51 Throttle valve lever

- 52 Throttle valve shaft
- 53 Aperture limiting screw
- 54 Retaining screw for air horn
- 55 Starter housing
- 56 Oval head countersunk screws for starter mechanism
- 57 Clamping screw for choke control sleeve
- 58 Clamping screw for choke control
- 59 Transmission lever
- 60 Oval head countersunk screws for starter air valve

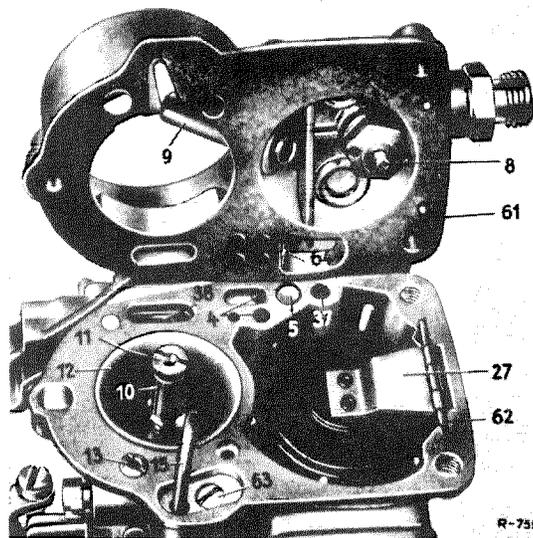


Fig. 07-3/3

- |   |  |
|---|--|
| 4 Fuel canal to starter system  | 27 Float   |
| 5 Air canal from starter air valve to fuel canal (4) (top closed by plug) | 37 Air canal from float chamber to starter air valve |
| 8 Float needle valve  | 38 Starter air canal                                 |
| 9 Float chamber vent tube   | 61 Carburetor cover gasket                           |
| 10 Mixing tube holder with mixing tube                                    | 62 Float shaft                                       |
| 11 Air correction jet   | 63 Oval head countersunk screw for injection tube    |
| 12 Air horn   | 64 Notch in carburetor cover                         |
| 13 Idle air jet   |  |
| 15 Injection tube   |  |

- Note:** a) When reassembling the carburetor, make sure that the correct pump diaphragm is used (see Job No. 07-0, I., Section F). After installation check not only the injection amount of the accelerating pump on carburetor Type 32 PICB, but also the enrichment delivery point for the pump system (see Job No. 01-3, Section H).
- b) The position of the cotter pins in the connecting rod for the accelerating pump is shown in Job No. 07-0, I., Section F.
- c) When installing the starter mechanism make sure that the starter air bore in the rotary slide valve is in the center above the starter mixture canal of the starter flange when the starter lever rests against the stop in the cold-start position (see Job No. 07-0, I., Section B).

## List of Component Parts of Solex Downdraft Carburetors Types 32 PICB and 34 PICB

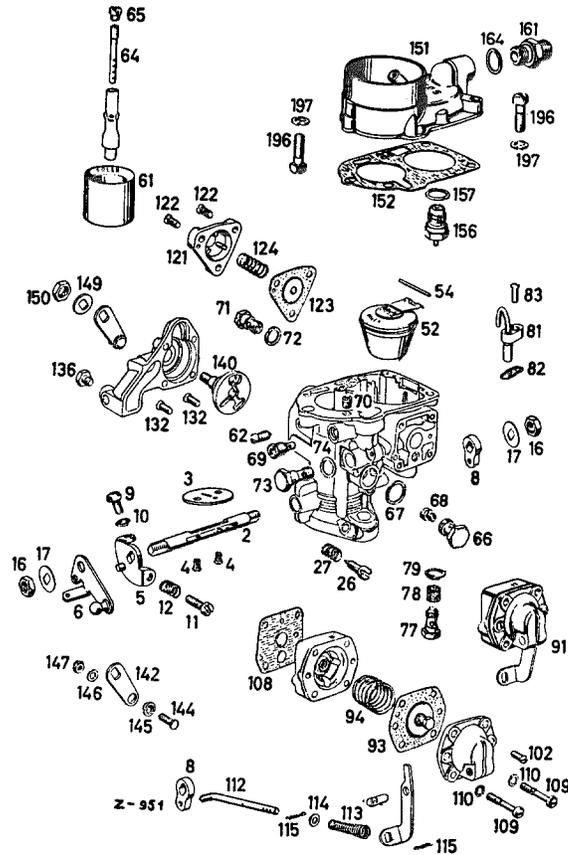


Fig. 07-3/4

- |   |                                 |   |
|---|---------------------------------|---|
| 2 Throttle valve shaft                        | 67 Fiber sealing ring           | 115 Cotter pin                              |
| 3 Throttle valve                              | 68 Main jet                     | 121 Cover for starter air valve             |
| 4 Oval head countersunk screw                 | 69 Idle fuel jet                | 122 Oval head countersunk screw             |
| 5 Abutment                                    | 70 Idle air jet                 | 123 Diaphragm                               |
| 6 Throttle valve lever                        | 71 Starter fuel jet             | 124 Valve spring                            |
| 8 Transmission lever for accelerating pump    | 72 Fiber sealing ring           | 132 Oval head countersunk screw             |
| 9 Aperture limiting screw (button-head screw) | 73 Pump jet                     | 136 Clamping screw for choke control sleeve |
| 10 Lock washer                                | 74 Fiber sealing ring           | 140 Starter rotary slide valve              |
| 11 Idle adjustment screw (cheese head screw)  | 77 Ball valve                   | 142 Starter lever                           |
| 12 Pressure spring                            | 78 Strainer                     | 144 Clamping screw for choke control        |
| 16 Hexagon nut                                | 79 Fiber sealing ring           | 145 Bushing                                 |
| 17 Retaining washer                           | 81 Injection tube               | 146 Washer                                  |
| 26 Idle mixture adjustment screw              | 82 Injection tube gasket        | 147 Hexagon nut                             |
| 27 Pressure spring                            | 83 Oval head countersunk screw  | 149 Washer                                  |
| 52 Float                                      | 91 Accelerating pump (complete) | 150 Hexagon nut                             |
| 54 Shaft for float                            | 93 Diaphragm                    | 151 Carburetor cover                        |
| 61 Air horn                                   | 94 Diaphragm spring             | 152 Carburetor cover gasket                 |
| 62 Retaining screw for air horn               | 102 Oval head countersunk screw | 156 Float needle valve                      |
| 64 Mixing tube                                | 108 Rubberized fabric gasket    | 157 Copper sealing ring                     |
| 65 Air correction jet                         | 109 Cheese head screw           | 161 Threaded union                          |
| 66 Main jet plug                              | 110 Lock washer                 | 164 Fiber sealing ring                      |
|   | 112 Connecting rod              | 196 Square screw                            |
|   | 113 Pressure spring             | 197 Lock washer                             |
|   | 114 Washer                      |   |