

# 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.

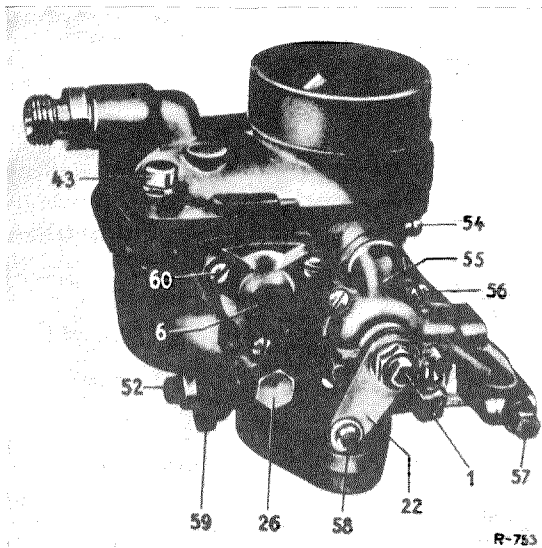


Fig. 07-3/1

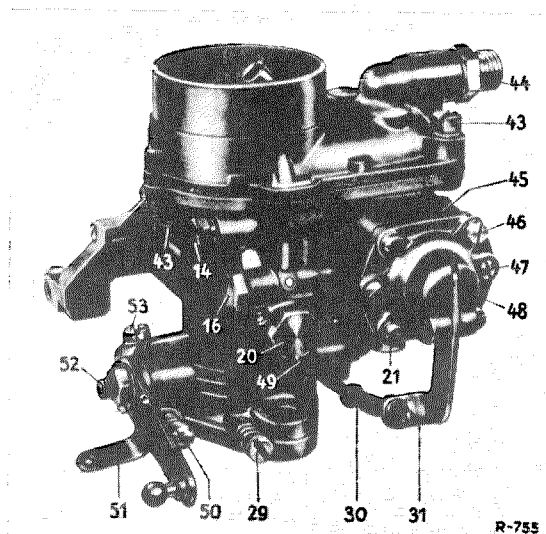


Fig. 07-3/2

- 1 Starter rotary slide valve
- 6 Starter air valve
- 14 Idle fuel jet
- 16 Pump jet
- 20 Main jet plug with main jet
- 22 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

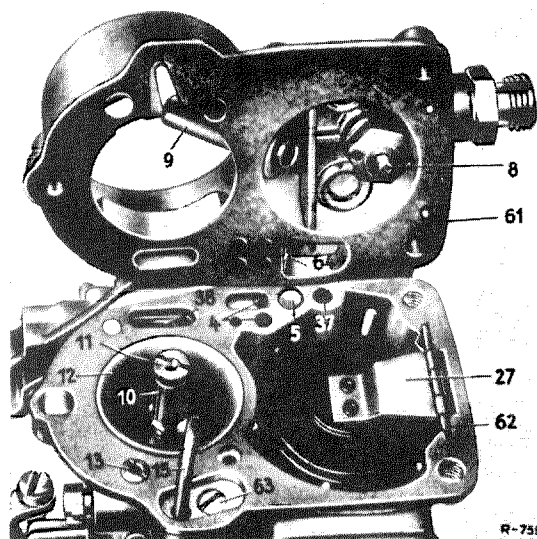


Fig. 07-3/3

- |   |  |
|---|--|
| 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

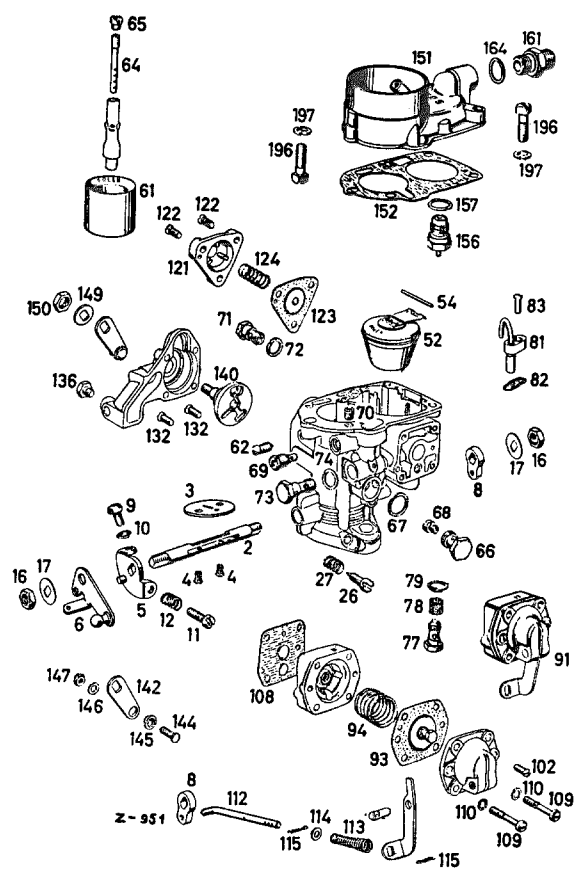


Fig. 07-3/4

- |   |                                 |   |
|---|---------------------------------|---|
| 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                             |
| 52 Float                                      | 83 Oval head countersunk screw  | 149 Washer                                  |
| 54 Shaft for float                            | 91 Accelerating pump (complete) | 150 Hexagon nut                             |
| 61 Air horn                                   | 93 Diaphragm                    | 151 Carburetor cover                        |
| 62 Retaining screw for air horn               | 94 Diaphragm spring             | 152 Carburetor cover gasket                 |
| 64 Mixing tube                                | 102 Oval head countersunk screw | 156 Float needle valve                      |
| 65 Air correction jet                         | 108 Rubberized fabric gasket    | 157 Copper sealing ring                     |
| 66 Main jet plug                              | 109 Cheese head screw           | 161 Threaded union                          |
|   | 110 Lock washer                 | 164 Fiber sealing ring                      |
|   | 112 Connecting rod              | 196 Square screw                            |
|   | 113 Pressure spring             | 197 Lock washer                             |
|   | 114 Washer                      |   |

## 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.

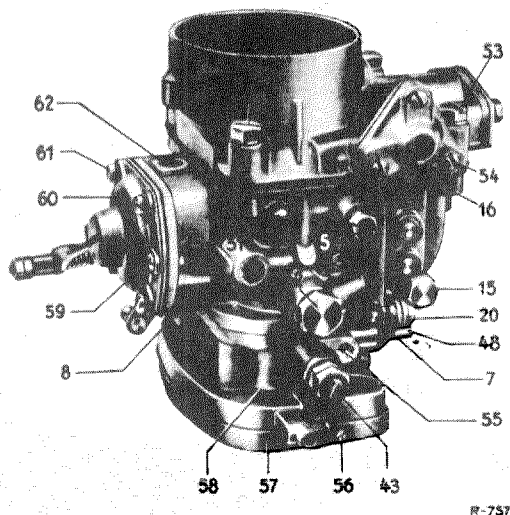


Fig. 07-3/5

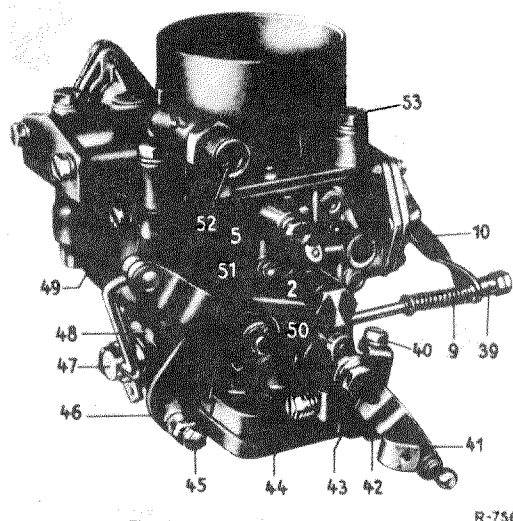


Fig. 07-3/6

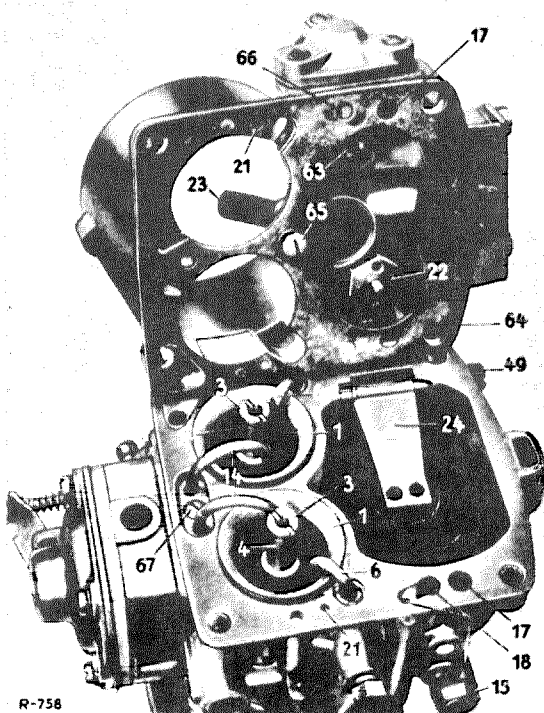


Fig. 07-3/7

- |  |   |
|--|---|
| 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 Button-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

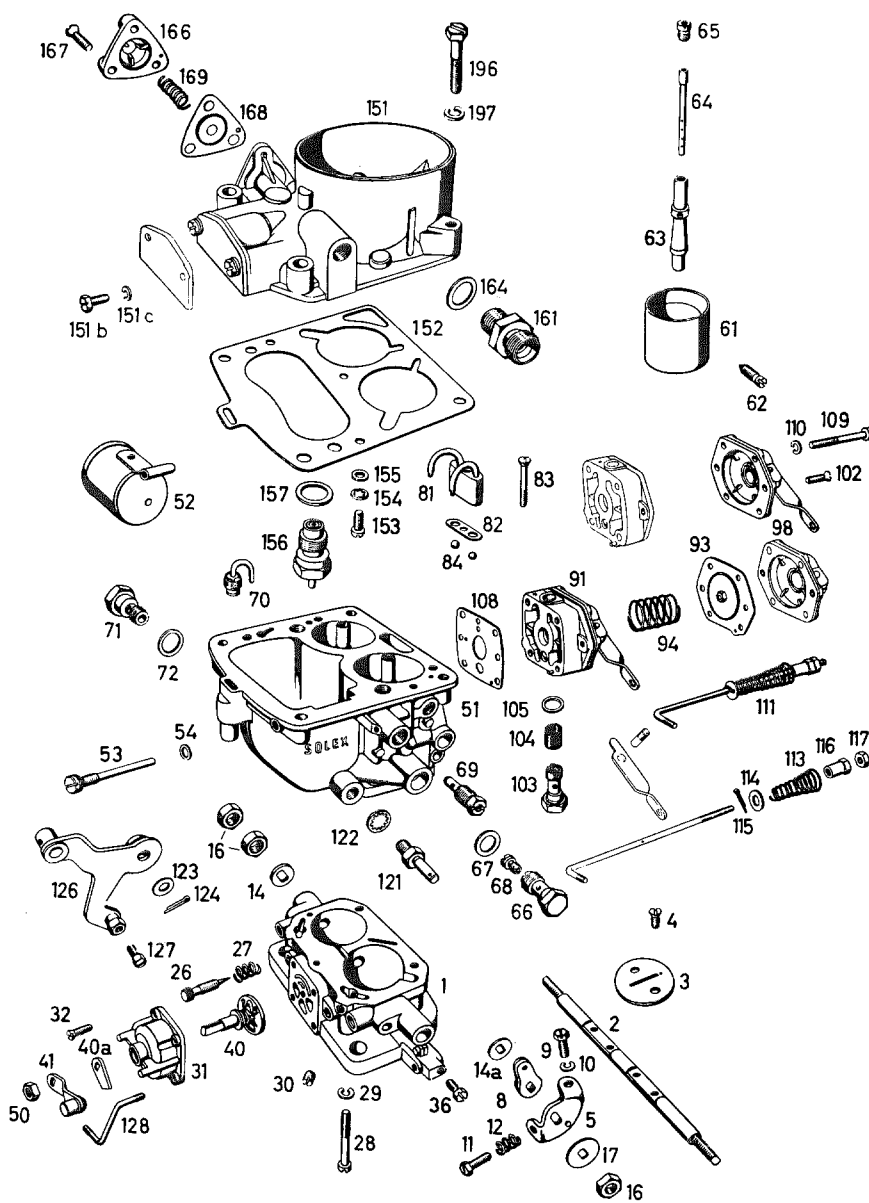


Fig. 07-3/8

- 1 Throttle valve part
- 2 Throttle valve shaft
- 3 Throttle valve
- 4 Oval head countersunk screw
- 5 Abutment
- 8 Transmission lever for accelerating pump
- 9 Aperture limiting screw
- 10 Lock washer
- 11 Idle adjustment screw
- 12 Pressure spring
- 14 Washer
- 14a Washer
- 16 Hexagon nut
- 17 Retaining washer

- 26 Idle mixture adjustment screw
- 27 Pressure spring
- 28 Cheese head screw
- 29 Lock washer
- 30 Grub screw
- 31 Starter housing
- 32 Oval head countersunk screw
- 36 Clamping screw for choke control sleeve
- 40 Starter rotary slide valve
- 40a Stop plate
- 41 Starter lever
- 50 Hexagon nut
- 51 Carburetor housing

- 52 Float
- 53 Float shaft
- 54 Fiber sealing ring
- 61 Air horn
- 62 Retaining screw for air horn
- 63 Mixing tube holder
- 64 Mixing tube
- 65 Air correction jet
- 66 Main jet plug
- 67 Fiber sealing ring
- 68 Main jet
- 69 Idle fuel jet
- 70 Idle intake pipe
- 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

### III. Compound Downdraft Carburetor for Model 220 S

The two Solex carburetors Type 32 PAITA used in Model 220 S are the same as the carburetor in Model 190 (see Workshop Manual Model 190), with the following differences:

1. Details of the carburetor jets etc. (see Job No. 07-0, III, Section E).
2. As compared with the carburetor for Model 190 the vent tube for the float chamber which is cast into the carburetor cover is not calibrated by a plug.
3. The bracket for the choke control (137) and the angle lever (142a) for the starter mechanism of the front carburetor differ from those of the rear carburetor and those of the carburetor for Model 190. The starter mechanism of the front carburetor is operated by the angle lever of the rear carburetor via the connecting rod (209) (Fig. 07-3/9).

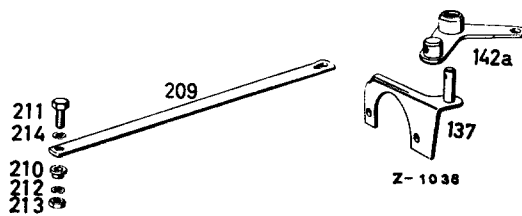


Fig. 07-3/9

- 137 Bracket for choke control on front carburetor
- 142a Angle lever for choke control on front carburetor
- 210 Bushing
- 211 Hexagon screw
- 212 Lock washer
- 213 Hexagon nut
- 214 Washer

4. The height of the carburetor cover measured from the separating surface to the upper edge of the air inlet branch is 33 mm on the carburetor for Model 220 S and 43 mm on the carburetor for Model 190.
5. On cars with a scavenging device for the fuel system the front carburetor is equipped with a fuel return valve and a longer pump arm (see also Job No. 07-0, III, Section D).

#### IV. Compound Cross-Draft Carburetor for Model 190 SL

The design of the Solex compound cross-draft carburetor Type 44 PHH differs considerably from that of the compound downdraft carburetor. The arrangement of the jets is shown in Figs. 07-3/10, 07-3/11, and 07-3/12 for the die-cast carburetor and in Fig. 07-3/13 for the sand-cast carburetor.

Die-cast carburetor

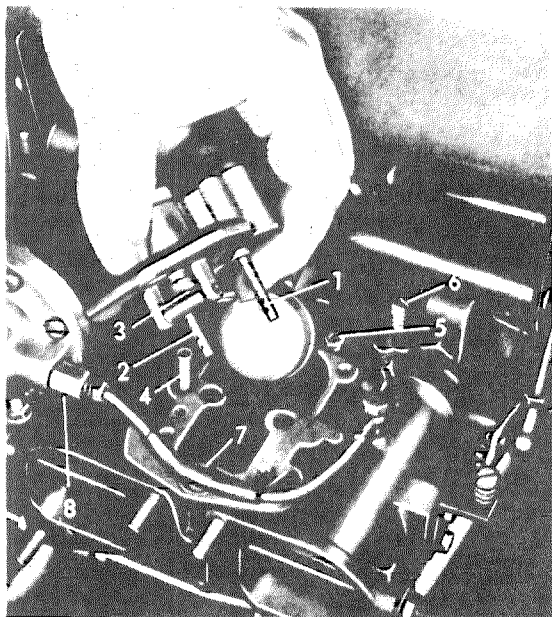


Fig. 07-3/10

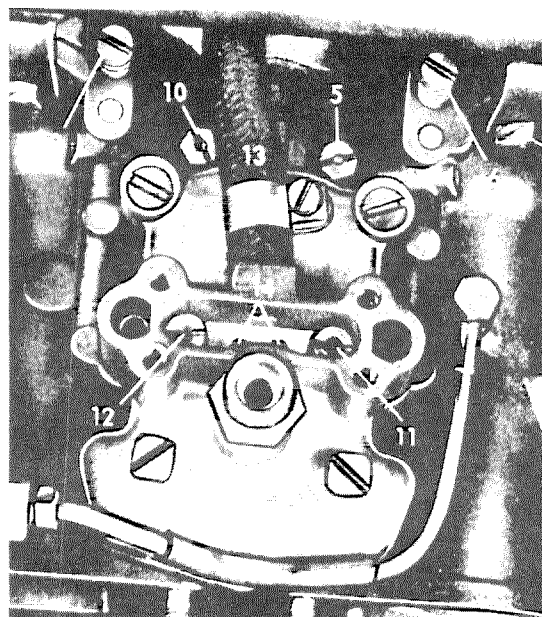


Fig. 07-3/11

- 1 Mixing tube of stage 1
- 2 Mixing tube of stage 2
- 3 Float needle valve
- 4 Overflow control tube
- 5 Idle fuel jet of stage 1
- 6 Idle mixture adjustment screw of stage 1
- 7 Pump jet with injection tube
- 8 Ball valve (delay valve on vacuum side)
- 9 Idle mixture adjustment screw of stage 2

- 10 Idle fuel jet of stage 2
- 11 Air correction jet of stage 1
- 12 Air correction jet of stage 2
- 13 Fuel overflow line
- 14 Float chamber vent bores
- 15 Main jet plug with main jet of stage 2
- 16 Main jet plug with main jet of stage 1
- 18 Fuel outlet line of stage 1

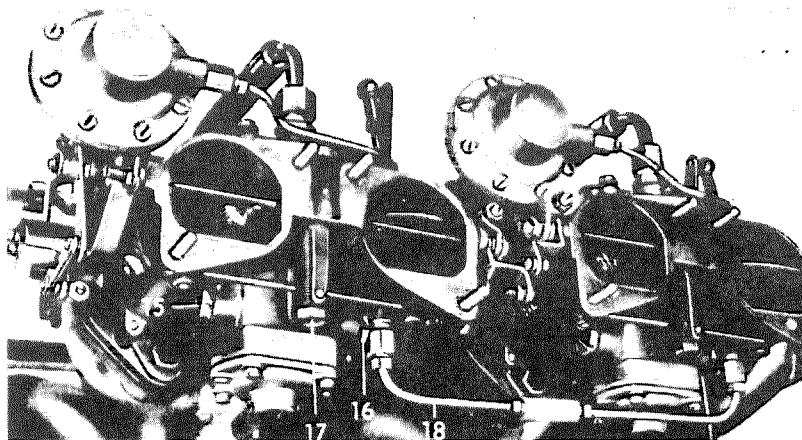


Fig. 07-3/12



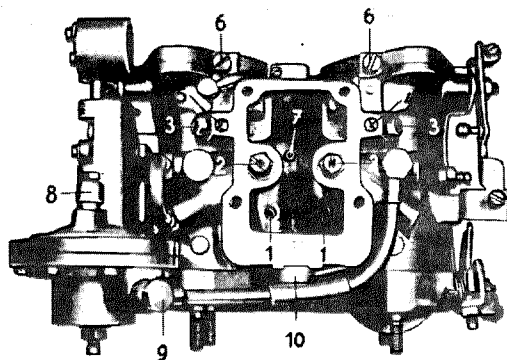


Fig. 07-3/13

Sand-cast carburetor

- 1 Main jet plug with main jet
- 2 Air correction jet with mixing tube
- 3 Idle fuel jet
- 4 Idle air jet of stage 1
- 5 Grub screw
- 6 Idle mixture adjustment screw
- 7 Ball valve for accelerating pump
- 8 Ball valve (delay valve on atmosphere side)
- 9 Ball valve (delay valve on vacuum side)
- 10 Pump jet with injection tube

Figs. 07-3/14, 07-3/15, 07-3/16, and 07-3/17 show the arrangement of the levers for operating stage 2, the starter mechanism, the carburetor cover and the accelerating pump for the die-cast carburetor.

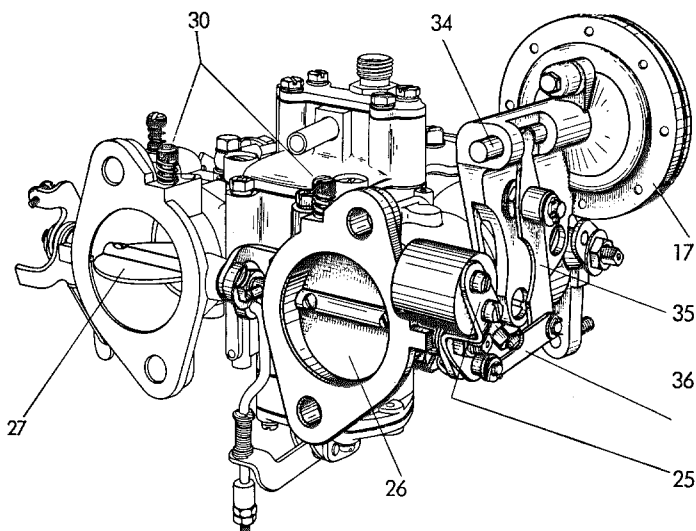


Fig. 07-3/14

Lever arrangement for operating stage 2

- 17 Vacuum box
- 25 Throttle valve lever with counterweight
- 26 Throttle valve of stage 2
- 27 Throttle valve of stage 1
- 30 Idle mixture adjustment screw
- 34 Diaphragm rod
- 35 Relay lever
- 36 Transmission lever

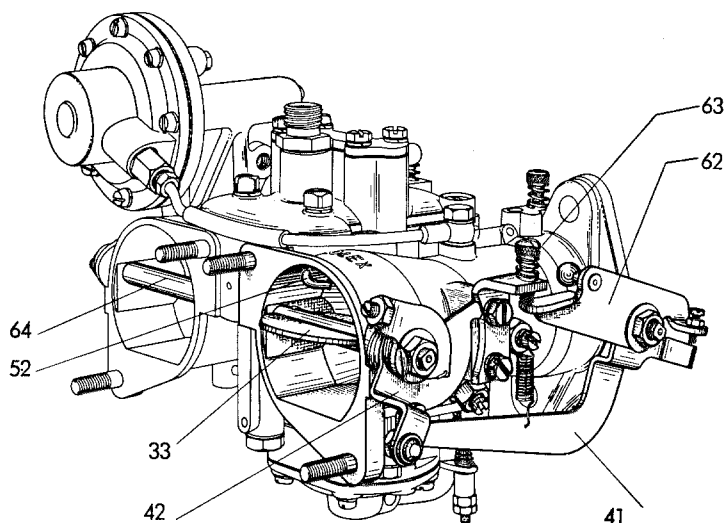


Fig. 07-3/15

Lever arrangement for operating starter mechanism

- 33 Choke valve
- 41 Relay lever
- 42 Choke valve lever with cam plate
- 52 Injection tube
- 62 Throttle valve lever
- 63 Idle adjustment screw
- 64 Choke valve shaft

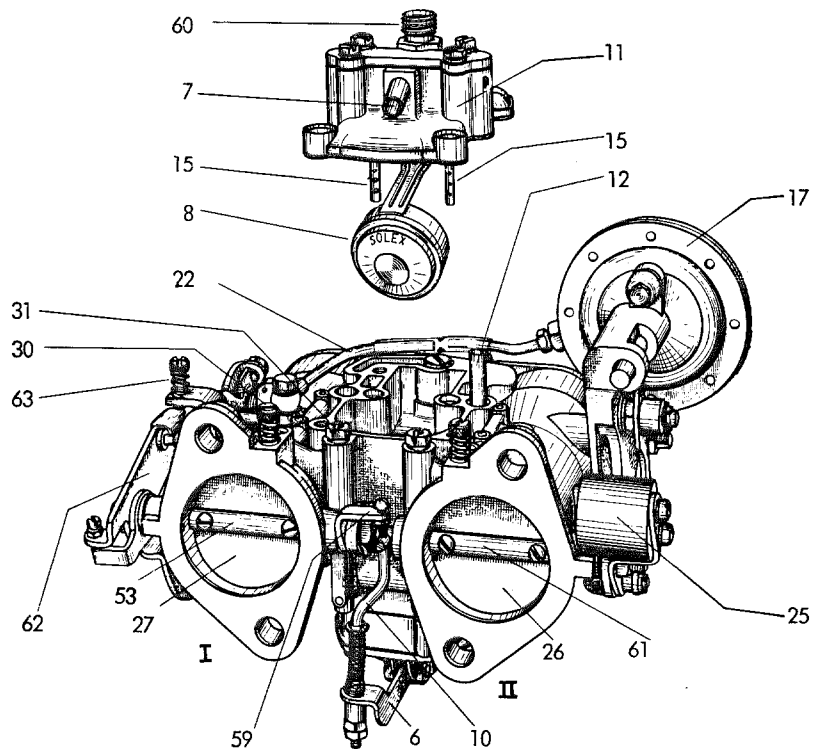


Fig. 07-3/16

#### Carburetor cover arrangement

- |   |  |
|---|--|
| 6 Pump arm  | 26 Throttle valve of stage 2                             |
| 7 Connection for fuel overflow line and float chamber ventilation | 27 Throttle valve of stage 1                             |
| 8 Float   | 30 Idle mixture adjustment screw                         |
| 10 Connecting rod with pressure spring and adjusting nuts         | 31 Idle fuel jet of stage 1                              |
| 11 Carburetor cover   | 53 Throttle valve shaft of stage 1                       |
| 12 Overflow control tube  | 59 Relay lever for automatic return mechanism of stage 2 |
| 15 Mixing tube  | 60 Threaded union for connection of fuel line            |
| 17 Vacuum box   | 61 Throttle valve shaft of stage 2                       |
| 22 Vacuum line  | 62 Throttle valve lever with counterweight               |
| 25 Throttle valve lever with counterweight                        | 63 Idle adjustment screw                                 |

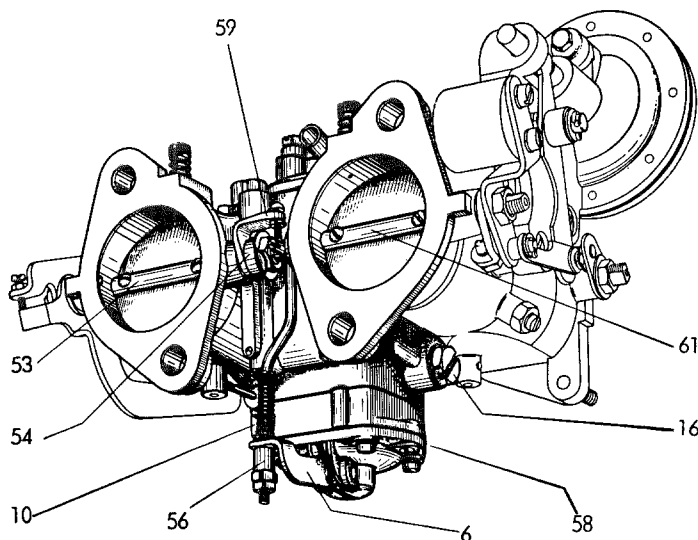


Fig. 07-3/17

#### Accelerating pump arrangement

- |  |
|--|
| 6 Pump arm   |
| 10 Connecting rod with pressure spring                   |
| 16 Main jet  |
| 53 Throttle valve shaft of stage 1                       |
| 54 Relay lever   |
| 56 Adjusting nuts  |
| 58 Accelerating pump                                     |
| 59 Relay lever for automatic return mechanism of stage 2 |
| 61 Throttle valve shaft of stage 2                       |

**Note:** a) When disassembling the carburetor remember that the gasket for the carburetor cover can only be removed after the float shaft has been pushed out. The float shaft must be pushed out very carefully, so that the float mounting in the carburetor cover is not damaged.

b) Replace the gaskets for the carburetor cover and the cover plate as well as the gaskets for the needle valve (in the sand-cast carburetor).

c) Check whether the diaphragm of the vacuum box is still serviceable and replace if necessary. Check whether the ball valve (delay valve on the atmosphere side) in the vacuum box is properly seated. Carefully clean and check the threaded union and ball valve (delay valve on the vacuum side in the die-cast carburetor) and the hollow screw and ball valve (in the sand-cast carburetor). If necessary, replace the ball valves and the connecting hose for the vacuum line.

d) The strainers for the compensating air (in the sand-cast carburetor) must be cleaned.

When reassembling the carburetor watch the following points carefully: The diffusers for stages 1 and 2 must be parallel to the axis of the suction canals. The retaining screws of the diffusers and the air horn of stage 1 should be well tightened and locked.

e) When reassembling the vacuum box, coat the two separating surfaces and the push rod with grease. When attaching the vacuum box, coat the thread of the fixing screws with sealing compound. Use only hexagon socket screws M 6×15 DIN 912-8 G instead of the cheese head screws used previously.

Grease the lever linkage for stage 2 at the diaphragm rod of the vacuum box, at the relay arm (see Fig. 07-3/14).

f) It is advisable to use grease to retain the gaskets in place when screwing on the choke valve section of the sand-cast carburetor.

After reassembling the carburetor, check the starter mechanism and all levers for correct position and ease of movement (see Figs. 07-3/14 and 07-3/15).

g) In the die-cast carburetor as from Engine End No. 015676 (Solex Carburetor No. 39 465) the throttle valve shaft of stage 2 is carried in bronze bushings and is sealed on the outside by plastic rings.

# Component Parts of Solex Compound Cross-Draft Carburetor Type 44 PHH (Die-Cast Carburetor)

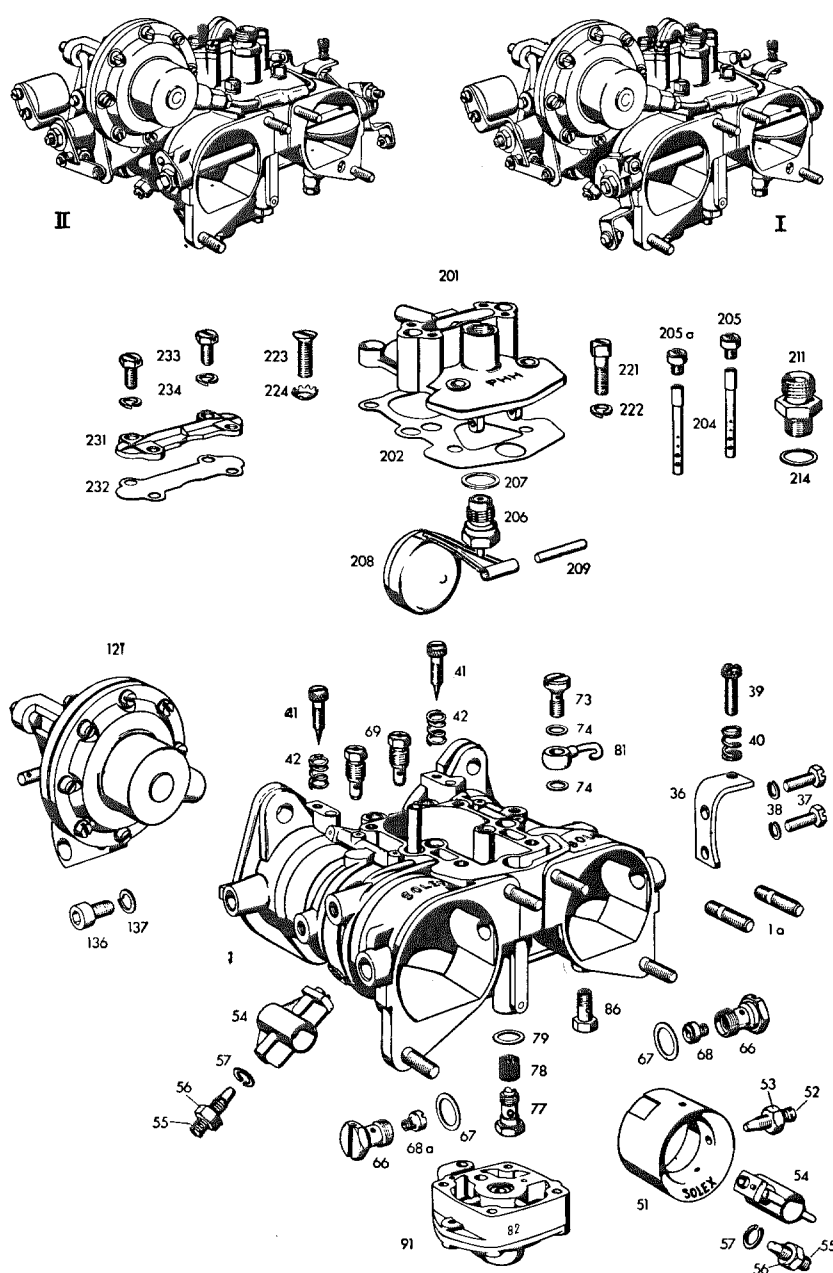


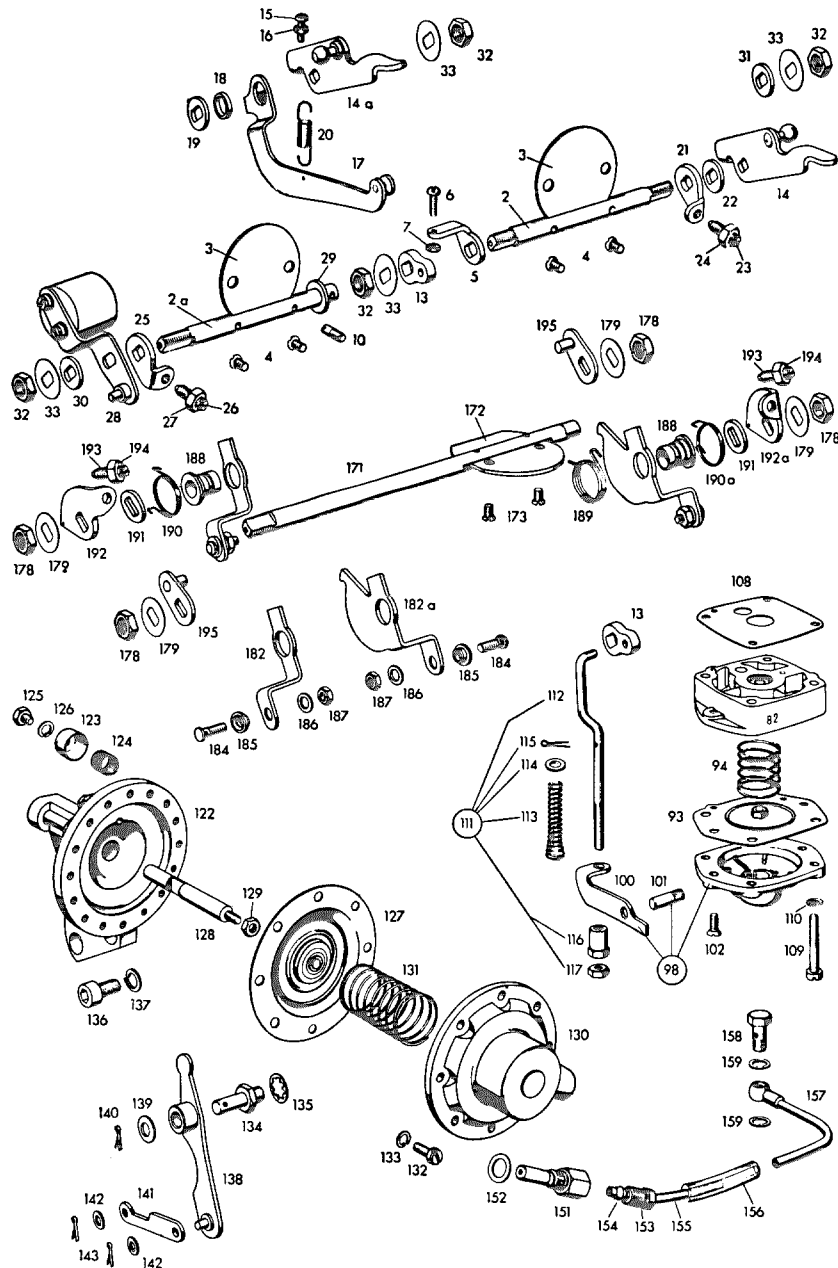
Fig. 07-3/18

- I Front carburetor
- II Rear carburetor
- 1 Carburetor housing
- 1a Stud bolt
- 36 Bracket
- 37 Hexagon screw
- 38 Lock washer
- 39 Idle adjustment screw
- 40 Pressure spring
- 41 Idle mixture adjustment screw
- 42 Pressure spring
- 51 Air horn
- 52 Retaining screw for air horn
- 53 Hexagon nut
- 54 Diffuser
- 55 Retaining screw for diffuser
- 56 Hexagon nut
- 57 Lock washer
- 66 Main jet plug
- 67 Fiber sealing ring
- 68 Main jet
- 68a Main jet
- 69 Idle fuel jet
- 73 Pump jet
- 74 Fiber sealing ring
- 77 Ball valve
- 78 Strainer for ball valve
- 79 Fiber sealing ring
- 81 Injection tube
- 86 Hollow screw
- 91 Accelerating pump
- 121 Vacuum box (complete)
- 201 Carburetor cover
- 202 Carburetor cover gasket
- 204 Mixing tube
- 205 Air correction jet of stage 1
- 205a Air correction jet of stage 2
- 206 Float needle valve
- 207 Copper sealing ring
- 208 Float
- 209 Float shaft
- 211 Threaded union
- 214 Fiber sealing ring
- 221 Square screw
- 222 Lock washer
- 223 Countersunk screw
- 224 Toothed washer
- 231 Cover plate
- 232 Cover plate gasket
- 233 Hexagon screw
- 234 Lock washer

# Component Parts of Solex Compound Cross-Draft Carburetor Type 44 PHH (Die-Cast Carburetor)

Fig. 07-3/19

- 2 Throttle valve shaft of stage 1
- 2a Throttle valve shaft of stage 2
- 3 Throttle valve
- 4 Oval head countersunk screw
- 5 Relay lever for throttle valve shaft of stage 1 (1st Version)
- 5a Relay lever for throttle valve shaft of stage 2 (2nd Version)
- 6 Button-head screw
- 7 Hexagon nut
- 8 Button-head screw (clamping screw)
- 9 Clamping strap
- 10 Abutment screw for throttle valve shaft of stage 2
- 13 Transmission lever
- 14 Throttle valve lever for front carburetor
- 14a Throttle valve lever for rear carburetor
- 15 Cheese head screw
- 16 Hexagon nut
- 17 Relay lever for rear carburetor
- 18 Spacer sleeve for rear carburetor
- 19 Spacer washer
- 20 Tension spring for rear carburetor
- 21 Stop lever for rear carburetor
- 22 Spacer washer
- 23 Aperture limiting screw for throttle valve of stage 2
- 24 Hexagon nut
- 25 Stop lever
- 26 Aperture limiting screw for throttle valve of stage 1
- 27 Hexagon nut
- 28 Lever with counterweight
- 29 Washer
- 30 Washer
- 31 Washer
- 32 Hexagon nut
- 33 Retaining Washer
- 93 Pump Diaphragm
- 94 Diaphragm spring
- 98 Cover and pump arm
- 99 Cover
- 100 Pump arm
- 101 Shaft
- 102 Oval head countersunk screw
- 108 Rubberised fabric gasket
- 109 Cheese head screw
- 110 Lock washer
- 111 Connecting rod (complete)
- 112 Connecting rod
- 113 Pressure spring
- 114 Washer
- 115 Cotter pin
- 116 Shoulder nut (adjusting nut)
- 117 Hexagon nut (lock nut)
- 122 Lower section with ball valve (delay valve on atmosphere side)
- 123 Cap
- 124 Strainer
- 125 Hexagon screw
- 126 Lock washer
- 127 Diaphragm
- 128 Diaphragm rod
- 129 Hexagon nut
- 130 Upper section
- 131 Diaphragm spring
- 132 Hexagon socket cheese-head screw
- 133 Lock washer
- 134 Pivot pin



- 135 Toothed washer
- 136 Hexagon socket screw
- 137 Lock washer
- 138 Relay lever
- 139 Washer
- 140 Cotter pin
- 141 Relay arm
- 142 Washer
- 143 Cotter pin
- 151 Threaded union with ball valve (delay valve on vacuum side)
- 152 Fiber sealing ring
- 153 Union nut
- 154 Sealing cone
- 155 Vacuum line
- 156 Connecting hose
- 157 Vacuum line
- 158 Hollow screw

- 159 Fiber sealing ring
- 171 Choke valve shaft for front carburetor
- 171a Choke valve shaft for rear carburetor
- 173 Oval head countersunk screw
- 178 Hexagon nut
- 179 Retaining washer
- 182 Choke valve lever for front carburetor
- 184 Clamping screw
- 185 Bushing
- 186 Washer
- 187 Hexagon nut
- 188 Spacer sleeve
- 190 Torsion return spring for front carburetor
- 191 Washer
- 192 Abutment for front carburetor

# Component Parts of Solex Compound Cross-Draft Carburetor Type 44 PHH (Sand-Cast Carburetor)

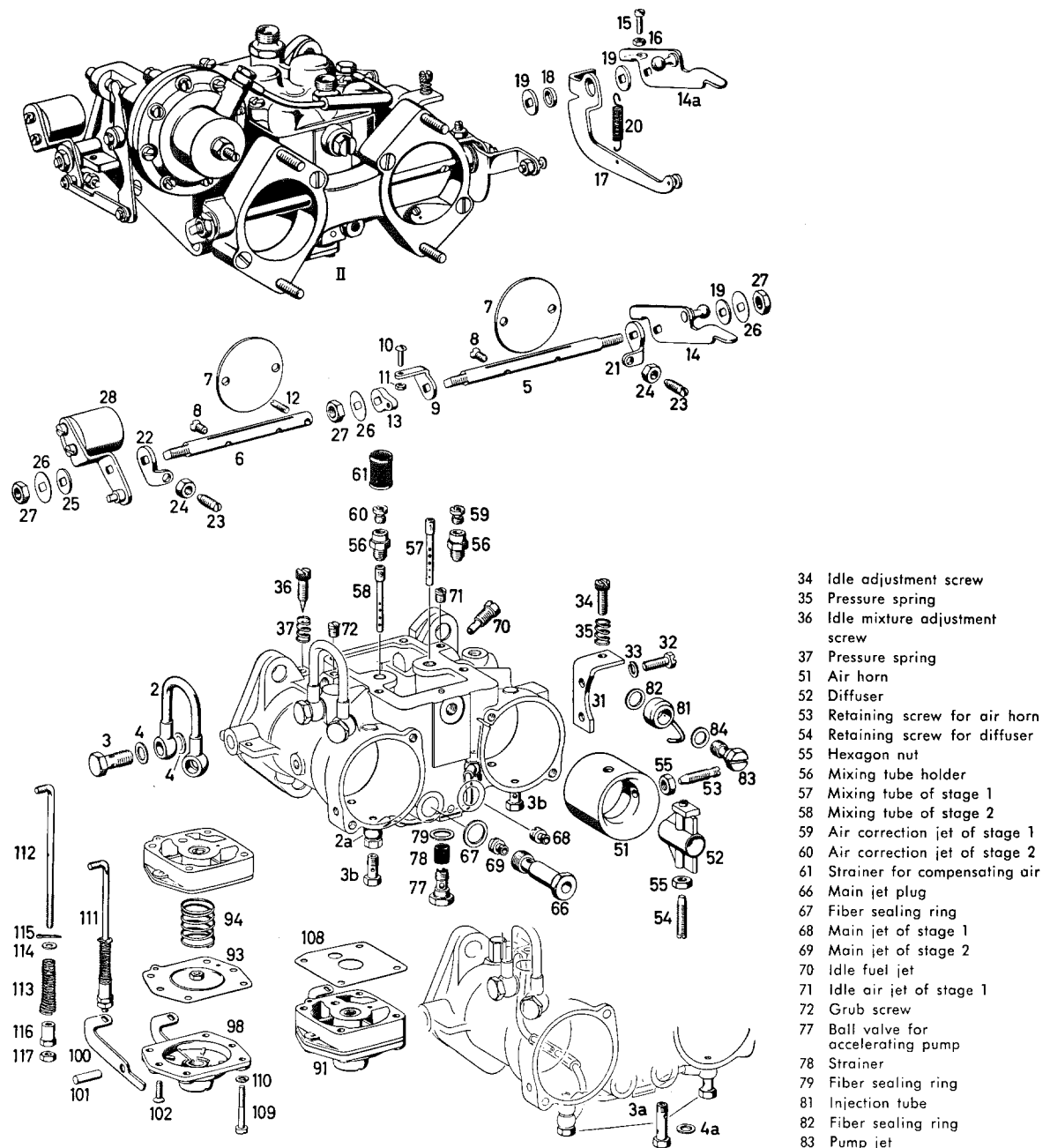


Fig. 07-3/20

I Front carburetor

II Rear carburetor

- 2 Overflow control line
- 2a Fuel suction line
- 3 Hollow screw
- 3a Hollow screw (for 1st version suction line)
- 3b Hollow screw
- 4 Fiber sealing ring
- 4a Fiber sealing ring
- 5 Throttle valve shaft of stage 1
- 6 Throttle valve shaft of stage 2
- 7 Throttle valve

- 8 Oval head countersunk screw
- 9 Relay lever for throttle valve shaft of stage 1
- 10 Button-head screw
- 11 Hexagon nut
- 12 Abutment screw
- 13 Transmission lever
- 14 Throttle valve lever for front carburetor
- 14a Throttle valve lever for rear carburetor
- 15 Adjusting screw
- 16 Hexagon nut
- 17 Relay lever

- 18 Spacer sleeve
- 19 Washer
- 20 Tension spring
- 21 Stop lever
- 22 Stop lever
- 23 Aperture limiting screw
- 24 Hexagon nut
- 25 Washer
- 26 Retaining washer
- 27 Hexagon nut
- 28 Lever with counterweight
- 31 Bracket
- 32 Hexagon screw
- 33 Lock washer

- 34 Idle adjustment screw
- 35 Pressure spring
- 36 Idle mixture adjustment screw
- 37 Pressure spring
- 51 Air horn
- 52 Diffuser
- 53 Retaining screw for air horn
- 54 Retaining screw for diffuser
- 55 Hexagon nut
- 56 Mixing tube holder
- 57 Mixing tube of stage 1
- 58 Mixing tube of stage 2
- 59 Air correction jet of stage 1
- 60 Air correction jet of stage 2
- 61 Strainer for compensating air
- 66 Main jet plug
- 67 Fiber sealing ring
- 68 Main jet of stage 1
- 69 Main jet of stage 2
- 70 Idle fuel jet
- 71 Idle air jet of stage 1
- 72 Grub screw
- 77 Ball valve for accelerating pump
- 78 Strainer
- 79 Fiber sealing ring
- 81 Injection tube
- 82 Fiber sealing ring
- 83 Pump jet
- 84 Fiber sealing ring
- 91 Accelerating pump
- 93 Pump diaphragm
- 94 Diaphragm spring
- 98 Cover with pump arm
- 100 Pump arm
- 101 Shaft for pump arm
- 102 Oval head countersunk screw
- 108 Rubberised fabric gasket
- 109 Cheese head screw
- 110 Lock washer
- 111 Connecting rod (complete)
- 112 Connecting rod
- 113 Pressure spring
- 114 Washer
- 115 Cotter pin
- 116 Shoulder nut (adjusting nut)
- 117 Hexagon nut (lock nut)

# **Component Parts of Solex Compound Cross-Draft Carburetor Type 44 PHH (Sand-Cast Carburetor)**

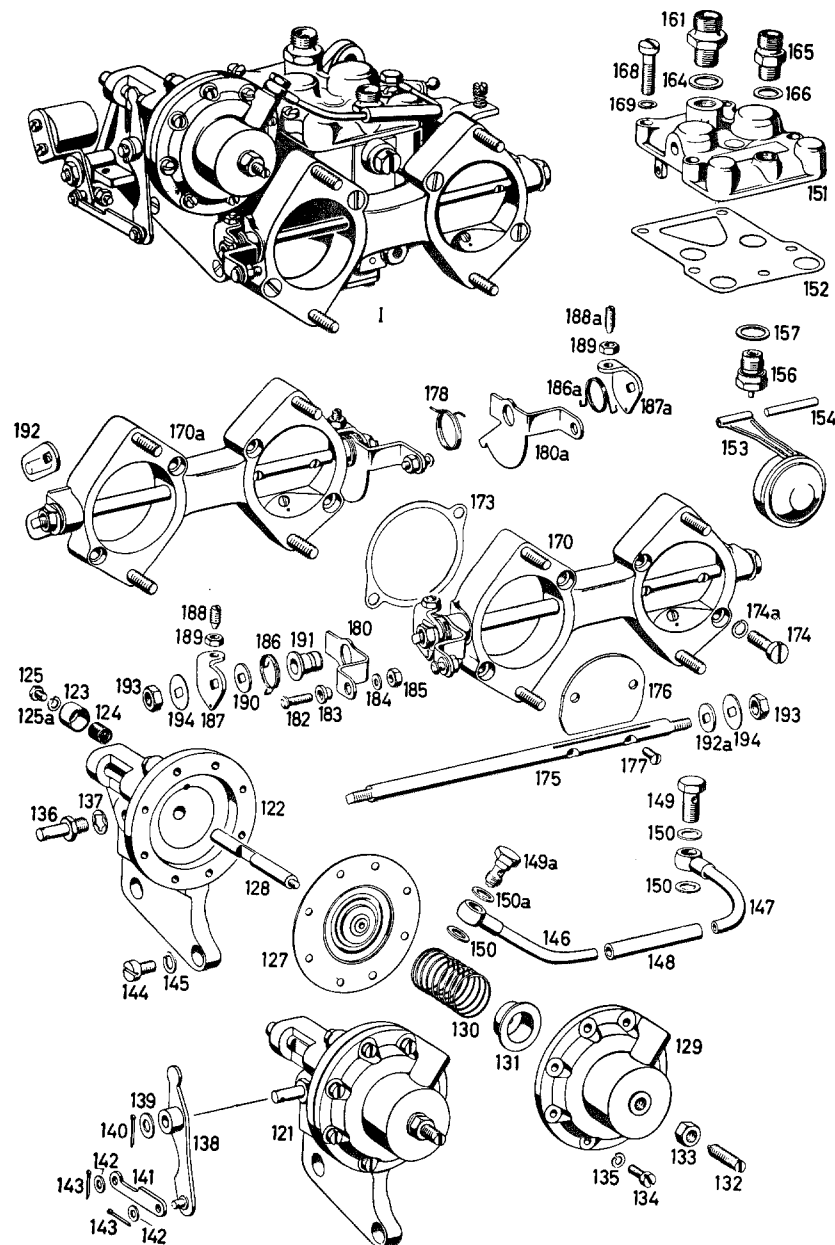


Fig. 07-3/21

- |  |   |  |
|--|---|--|
| 121 Vacuum box (complete)  | 145 Lock Washer                                 | 173 Gasket                                 |
| 122 Lower section with ball valve<br>(delay valve on atmosphere side)                | 146 Vacuum line                                 | 174a Lock washer                           |
| 123 Cap for ball valve   | 147 Vacuum line                                 | 175 Choke valve shaft                      |
| 124 Strainer   | 148 Connecting hose                             | 176 Choke valve                            |
| 125 Hexagon screw  | 149 Hollow screw                                | 177 Oval head countersunk screw            |
| 125a Lock washer   | 149a Ball valve (delay valve on<br>vacuum side) | 178 Torsion return spring                  |
| 127 Diaphragm  | 150 Fiber sealing ring                          | 180 Choke valve lever for front carburetor |
| 128 Diaphragm rod  | 150a Fiber sealing ring                         | 180a Choke valve lever for rear carburetor |
| 129 Upper section  | 151 Carburetor cover                            | 182 Clamping screw                         |
| 130 Diaphragm spring   | 152 Carburetor cover gasket                     | 183 Bushing                                |
| 131 Retainer cap   | 153 Float                                       | 184 Washer                                 |
| 132 Set screw  | 154 Float shaft                                 | 185 Hexagon nut                            |
| 133 Hexagon nut  | 156 Float needle valve                          | 186 Torsion return spring                  |
| 134 Cheese head screw  | 157 Copper sealing ring                         | 186a Torsion return spring                 |
| 135 Lock washer  | 161 Threaded union                              | 187 Abutment for front carburetor          |
| 136 Pivot pin  | 164 Fiber sealing ring                          | 187a Abutment for rear carburetor          |
| 137 Toothed washer   | 165 Threaded union                              | 188 Adjusting screw for front carburetor   |
| 138 Relay lever  | 166 Copper sealing ring                         | 188a Adjusting screw for rear carburetor   |
| 139 Washer   | 168 Cheese head screw                           | 189 Hexagon nut                            |
| 140 Cotter pin   | 169 Lock washer                                 | 190 Washer                                 |
| 141 Transmission lever   | 170 Choke valve section for front<br>carburetor | 191 Spacer sleeve                          |
| 142 Washer   | 170a Choke valve section for rear<br>carburetor | 192 Stop lever                             |
| 143 Cotter pin   |   | 192a Washer                                |
| 144 Cheese head screw<br>(1st version with slot,<br>2nd version with hexagon socket) |   | 193 Hexagon nut                            |
|  |   | 194 Retaining washer                       |