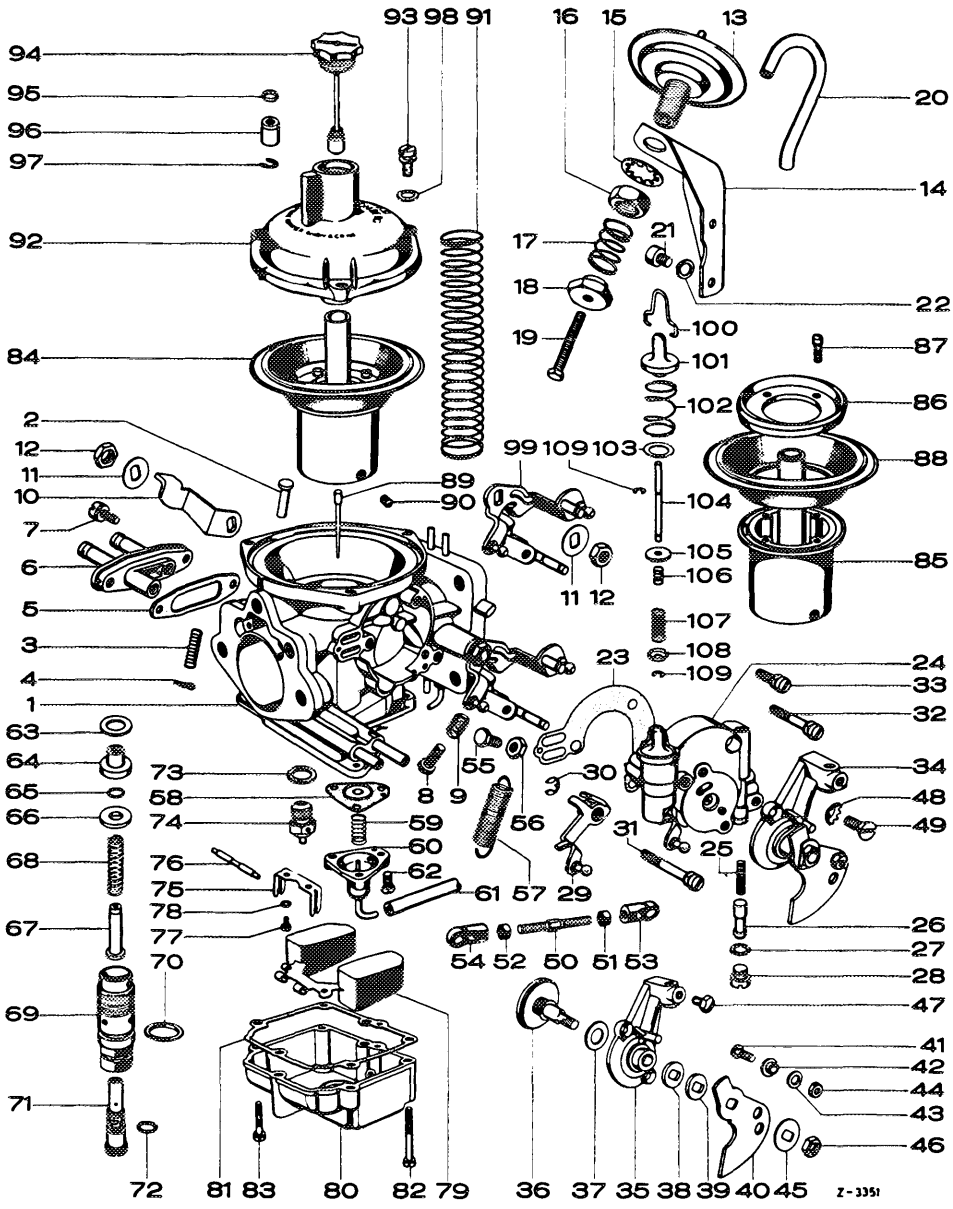
Revision: Revised and automatic starting device added.

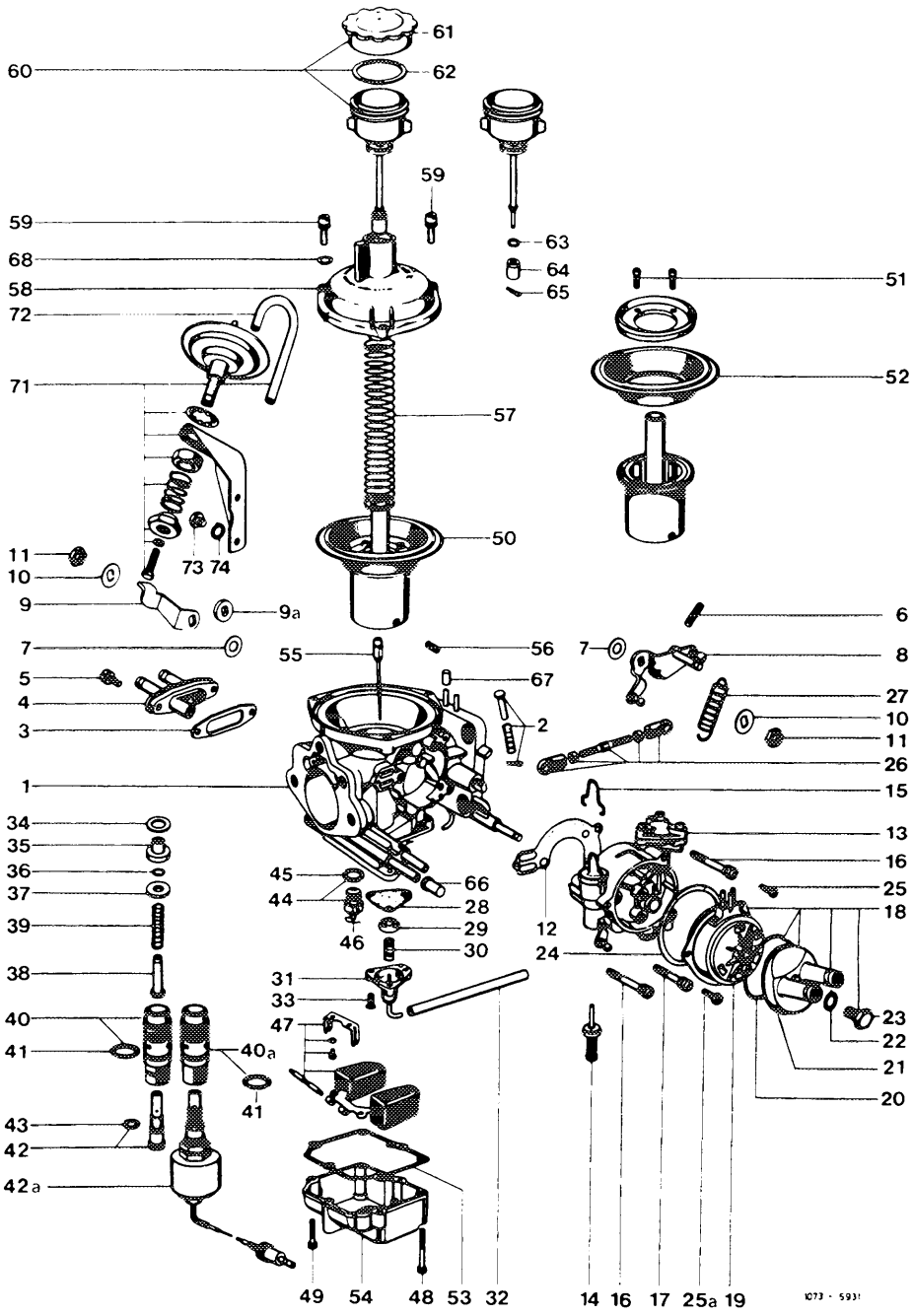
Fig. 07-4/1
Stromberg-carbur
175 CDS



1 Carburetor housing
2 Carburetor tickler
3 Compression spring
4 Locking spring
5 Gasket
6 Connecting cover
7 Cheese head screw
8 Idle adjustment screw
9 Compression spring
10 Control rod
11 Locking plate
12 Hexagon nut
13 Vacuum control
14 Bracket
15 Serrated lock washer
16 Hexagon nut
17 Compression spring
18 Adjustment nut
19 Hexagon screw
20 Vacuum hose
21 Cheese head screw
22 Lock washer
23 Gasket
24 Starter housing
25 Compression spring (not installed)
26 Vacuum piston
27 Sealing ring
28 Screw plug
29 Starter lever
30 Circlip
31 Cheese head screw
32 Cheese head screw
33 Cheese head screw
34 Starter cover, compl.
35 Starter cover
36 Rotary slide valve
37 Gasket
38 Stop member
39 Spacer washer
40 Starter lever
41 Clamping bolt
42 Bushing
43 Washer
44 Hexagon nut
45 Locking plate
46 Hexagon nut
47 Clamping bolt
48 Serrated lock washer
49 Countersunk screw
50 Connecting rod
51 Hexagon nut
52 Hexagon nut
53 Ball cup
54 Ball cup
55 Hexagon screw
56 Hexagon nut
57 Tension spring
58 Vacuum diaphragm
59 Compression spring
60 Valve cover
61 Vacuum hose
62 Countersunk screw
63 Sealing ring
64 Guide tube
65 Rubber ring
66 Washer
67 Needle nozzle
68 Compression spring
69 Lock screw
70 Rubber ring
71 Idle mixture adjustment screw
72 Rubber ring
73 Sealing ring
74 Float needle valve
75 Bracket
76 Float axle
77 Cheese head screw
78 Lock washer
79 Dual float
80 Float chamber cover
81 Gasket
82 Cheese head screw
83 Cheese head screw
84 Air piston with diaphragm
85 Air piston
86 Retaining disk
87 Cheese head screw
88 Diaphragm
89 Nozzle needle
90 Clamping bolt
91 Compression spring
92 Carburetor cover
93 Cheese head screws
94 Damping element
95 Sleeve
96 Piston
97 Circlip
98 Washer
99 Throttle lever
100 Clamping spring
101 Cap
102 Compression spring
103 Washer
104 Rod
105 Valve disk
106 Compression spring
107 Compression spring
108 Spring retainer
109 Circlip

Fig. 07-4/1a

Stromberg-carburetor
175 CDT



1 Carburetor housing
2 Tickler
3 Gasket
4 Connecting cover
5 Cheese head screw
6 Stud
7 Spring washer
8 Throttle lever
9 Stop lever
9a Washer
10 Lock washer
11 Hex. nut
12 Gasket
13 Starter housing complete
14 Venting valve
15 Clamping spring
16 Cheese head screw
17 Cheese head screw
18 Starter cover complete
19 Starter cover
20 Round cord ring
21 Water connection
22 Sealing ring
23 Hex. screw
24 Insulating gasket
25 Cheese head screw
25a Hex screw
26 Connecting rod
27 Draw spring
28 Diaphragm
29 Spring cup
30 Compression spring
31 Valve cover
32 Connecting hose
33 Countersunk oval head screw
34 Sealing ring
35 Guide tube
36 Round cord ring
37 Washer
38 Needle nozzle
39 Compression spring
40 Holding screw
41 Round cord ring
42 Idle-mixture adjustment screw
42a Idle shutoff valve
43 O-ring
44 Float needle valve
45 Sealing ring
46 Float needle valve
47 Float
48 Cheese head screw
49 Cheese head screw
50 Piston
51 Cheese head screw
52 Vacuum diaphragm
53 Float chamber gasket
54 Float chamber
55 Elastic nozzle needle
56 Shank screw
57 Compression spring
58 Cover
59 Cheese head screw
60 Oil supply tank
61 Cover
62 Gasket
63 Washer
64 Damper (dashpot) piston
65 Locking spring
66 Cap
67 Cap
68 Washer
71 Vacuum governor
72 Connecting hose
73 Hex. screw
74 Snap ring

A. Removal and Installation of Air Piston

General Instructions

For this job it is not necessary to remove the carburetor from the car.

Removal

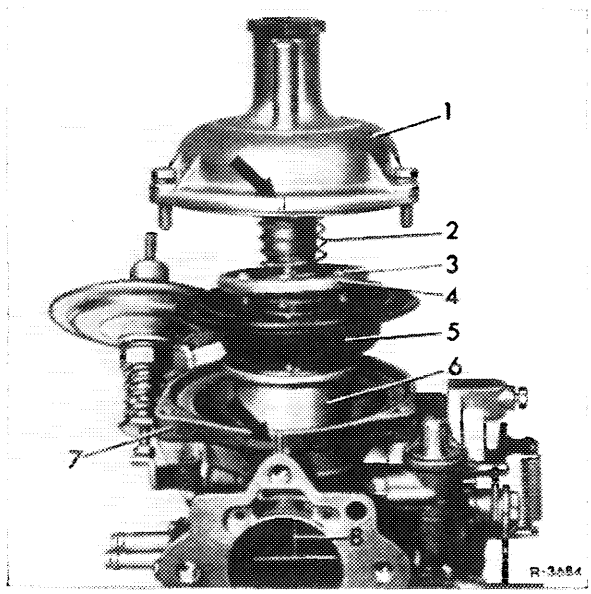


Fig. 07-4/2

1 Carburetor cover
2 Compression spring
3 Cheese head screw
4 Retaining disc
5 Diaphragm
6 Air piston
7 Carburetor housing
8 Nozzle needle

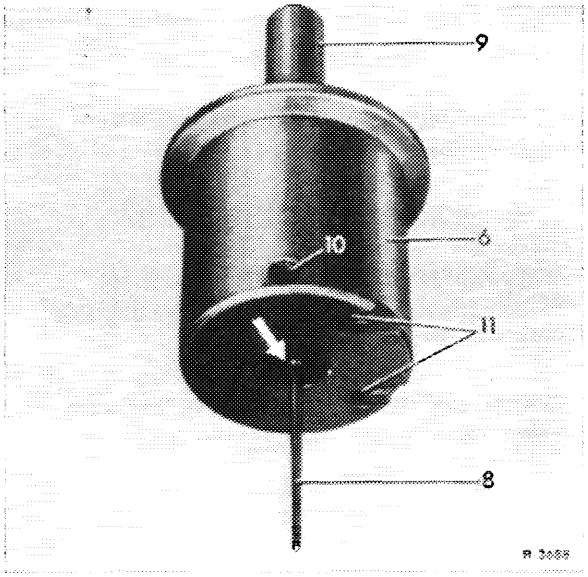


Fig. 07-4/3

6 Air piston
8 Nozzle needle
9 Air piston axle
10 Bore for nozzle needle fixing screw
11 Compensating ports

1 Unscrew carburetor cover (1) and remove cover and compression spring (2).

2 Pull out air piston (6) with nozzle needle and diaphragm from the carburetor housing.

3 Screw out cheese head screws (3). Remove retaining disc (4) and diaphragm (5) (Fig. 07-4/2).

4 Unscrew fixing screw (10) for nozzle needle (8) and pull out nozzle needle (Fig. 07-4/3).

Installation

5 Slide nozzle needle (8) into air piston bore to such an extent that the cylindrical part of the nozzle needle is exactly flush with the air piston bottom (see arrow in Fig. 07-4/3).

Mount movable nozzle needle (8), if applied, with milled surface facing fastening screw hole (10) and plastic plate (12) just flush with bottom of air piston (Fig. 07-4/3a)

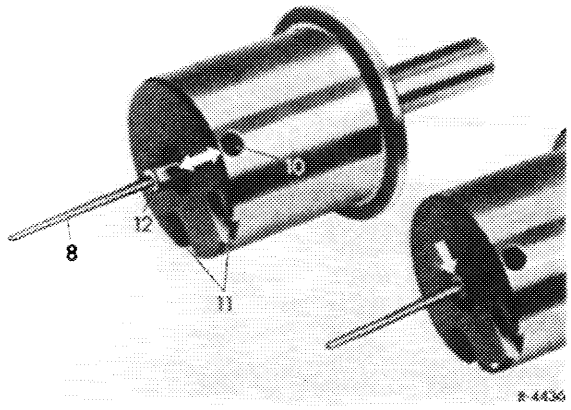


Fig. 07-4/3a

8 Nozzle needle
10 Fastening screw hole
11 Vacuum bores
12 Plastic plates

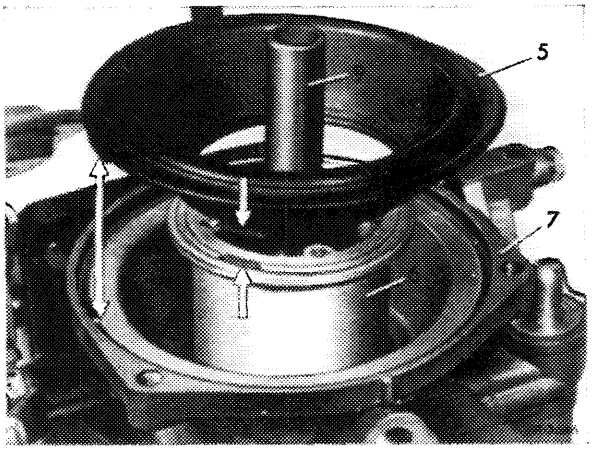


Fig. 07-4/4

5 Diaphragm
6 Air piston
7 Carburetor housing
8 Air piston axle

6 Place diaphragm (5) on the air piston in such a way that the bead fits into the groove and the locating lug into the recess of the air piston (see arrows in Fig. 07-4/4).

Check whether venting duct for diaphragm has already been modified. Susequently install rubber slide piece part No. 000 071 01 87, if required (Job No. 07-6 section B).

7 Slide on retaining disc (4) and tighten cheese head screws (3) (see Fig. 07-4/2).

8 Insert diaphragm with air piston into the carburetor housing in such a way that the outer bead fits into the groove and the locating lug into the recess of the carburetor housing in a perfect way (see arrow in Fig. 07-4/4).

Note: The compensating ports (11) in the air piston must point to the throttle valve when the piston is being installed (Fig. 07-4/3).

9 Insert compression spring (2) and install carburetor cover in such a way that cover and housing locating marks coincide (see arrows in Fig. 07-4/2).

Caution: When assembling, the carburetor cover must not be turned on the diaphragm.

10 Evenly tighten cheese head screws on the carburetor cover.

11 Center needle nozzle (see Section D).

B. Removal and Installation of Needle Nozzle

Carburetor removed

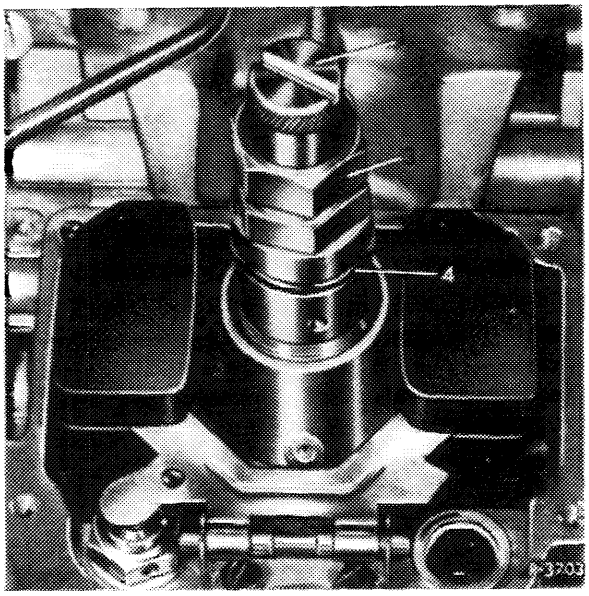


Fig. 07-4/5

1 Idle mixture adjustment screw
3 Lock screw
4 Rubber ring

Removal

1 Unscrew float chamber cover.

2 Unscrew idle-mixture adjustment screw (1) or fuel shutoff valve.

3 Screw out lock screw (3) (Fig. 07-4/5).

4 Pull out needle nozzle with guide tube (9) from the carburetor housing; take out sealing ring (10) (Fig. 07-4/7).

5 Remove guide tube (9), washer (7), and spring (6) from needle nozzle (5) (Fig. 07-4/6).

6 Insert rubber ring (8) into guide tube (9). Slip compression spring (6) and washer (7) on needle nozzle (5) and force needle nozzle into guide tube (9) (Fig. 07-4/6).

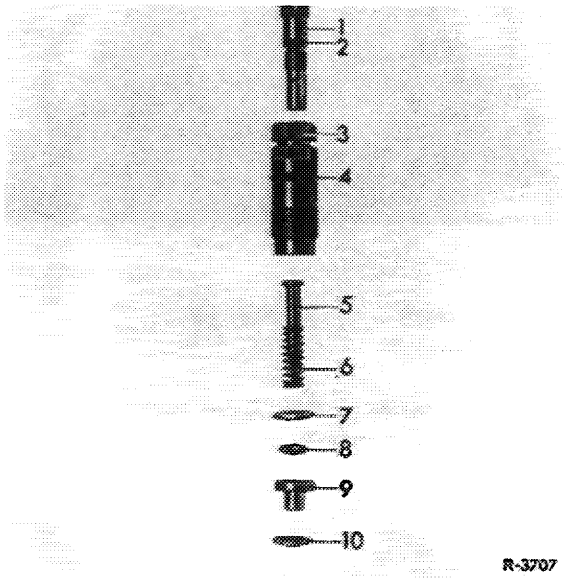


Fig. 07-4/6

1 Idle mixture adjustment screw
2 Rubber ring
3 Holding screws
4 Rubber ring
5 Needle nozzle
6 Compression spring
7 Washer
8 Rubber ring
9 Guide tube
10 Sealing ring

7 Insert sealing ring (10) into carburetor housing (Fig. 07-4/7).

8 Insert needle nozzle with guide tube into carburetor housing (Fig. 07-4/7).

9 Screw holding screw (3) into carburetor housing and tighten slightly (Fig. 07-4/8).

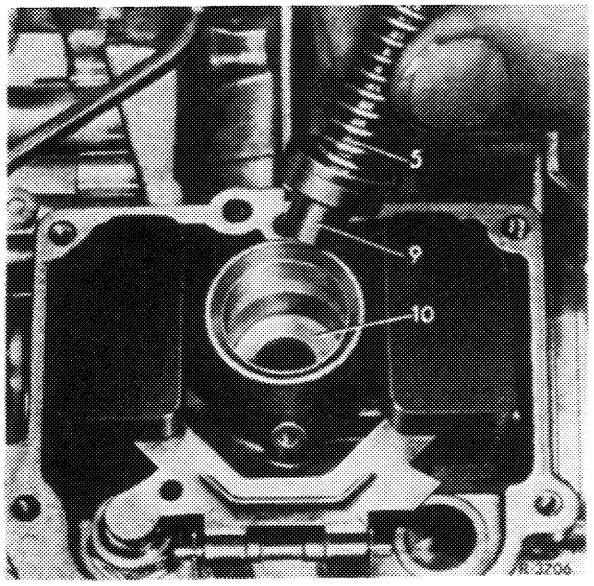


Fig. 07-4/7

5 Needle nozzle
9 Guide tube
10 Sealing ring

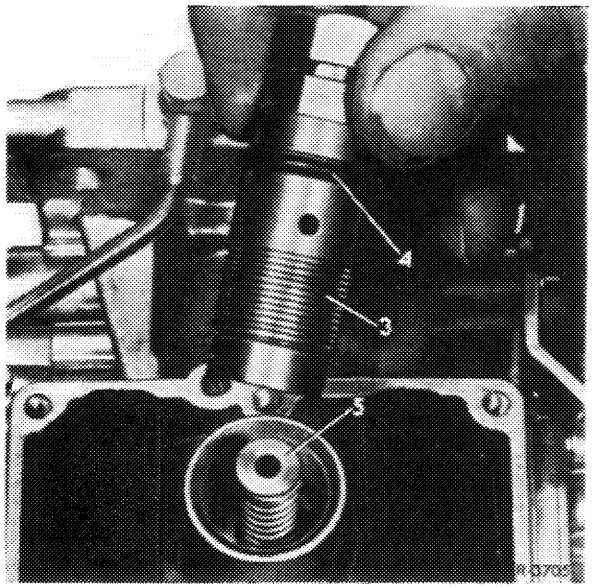


Fig. 07-4/8

3 Holding screw
4 Rubber ring
5 Needle nozzle

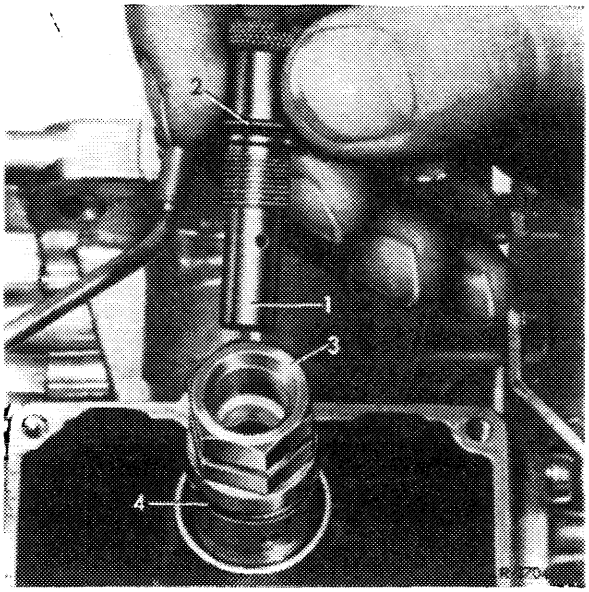


Fig. 07-4/9

1 Idle mixture adjustment screw
2 Rubber ring
3 Holding screw
4 Rubber ring

10 Check rubber ring (2) on idle mixture adjustment screw (1) for damage and renew, if required. Then screw control screw into holding screw (3) (Fig. 07-4/9).

11 Check rubber ring (4) on holding screw (3) for damage and renew, if required (Fig. 07-4/8).

12 Mount float chamber cover with new gasket. Tighten cheese head screws uniformly crosswise.

13 Center needle nozzle (refer to section D).

USA-Version Model Year 1973

Removal

14 Loosen hex. nut (83) on idle speed shutoff valve (38) and unscrew shutoff valve (Fig. 07-4/9a).

15 Unscrew cheese head screws from float chamber and remove float chamber.

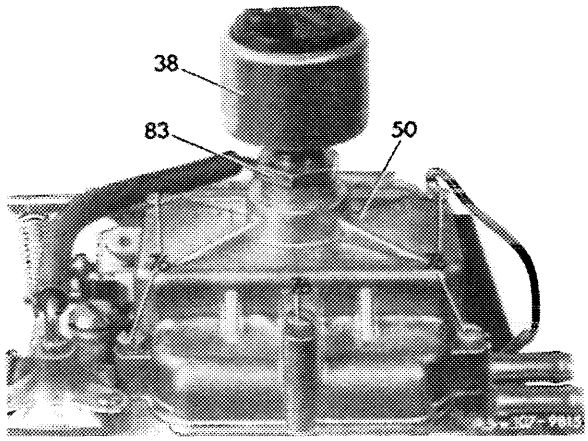


Fig. 07-4/9a

38 Shutoff valve
83 Hex. nut
50 Float chamber

16 Pull out needle nozzle (4) and compression spring (3) (Fig. 07-4/9 b).

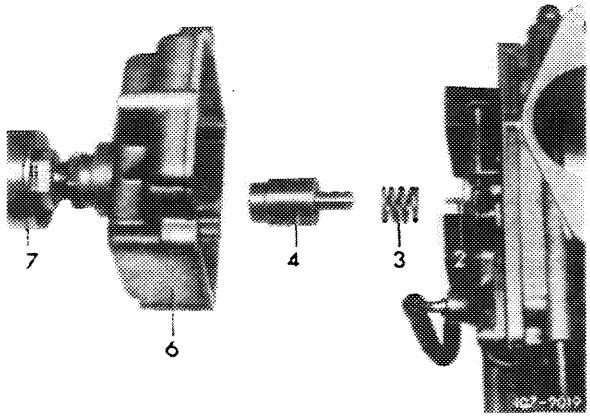


Fig. 07-4/9b

4 Needle nozzle
3 Compression spring

Installation

17 For installation proceed vice versa using new seals and gaskets.

Rubber seal ring in needle nozzle is contained in complete set of seals only.

Prior to mounting float chamber, check float level and adjust, if required (refer to section C).

C. Checking and Adjusting of Float Level

1 Measure distance between parting surface of carburetor housing and upper edge of float on both floats (Fig. 07-4/10).

Nominal = 16-17 mm.

2 If the distance must be corrected, bend float arm at nominal bending point (arrow in Fig. 07-4/11).

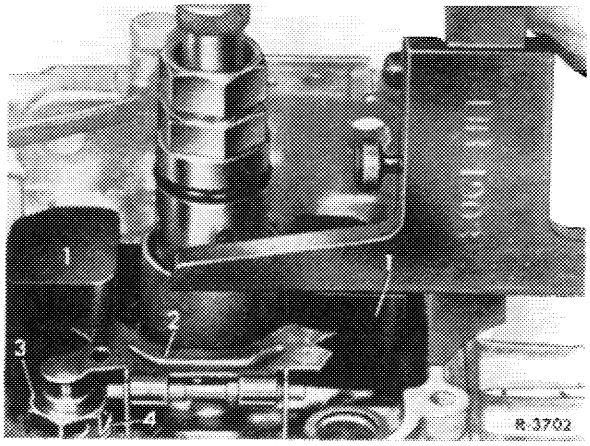


Fig. 07-4/10

1 Float
2 Float arm
3 Float needle valve
4 Sealing ring

Caution! When bending float arm, make sure that float arm is not twisted or deformed. Make sure that float arm presses vertically on float needle.

3 Check rubber ring (1) for damage and renew, if required. Mount float chamber cover (6) with new gasket (5), tighten cheese head screws crosswise.

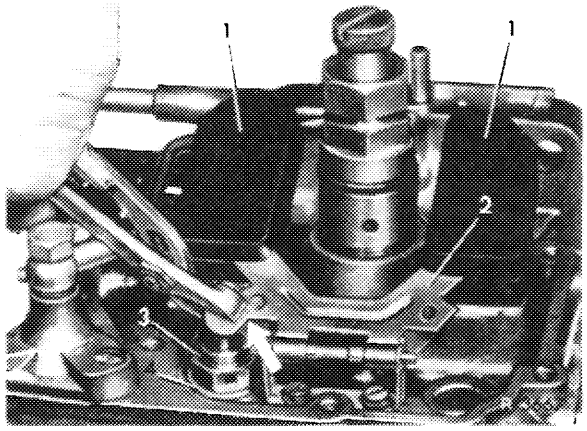


Fig. 07-4/11

1 Float
2 Float arm
3 Float needle valve
4 Sealing ring

D. Centering of Needle Nozzle

Note

On carburetors with movable nozzle needle the needle nozzle need not be centered.

1 Completely raise air piston (6) (Fig. 07-4/13).

2 Loosen holding screws (3) and tighten again lightly.

3 Screw-in idle mixture adjustment screw (1) until upper edge of needle nozzle (5) projects approx. 1.0 mm above bridge (12) (Fig. 07-4/12 and 13).

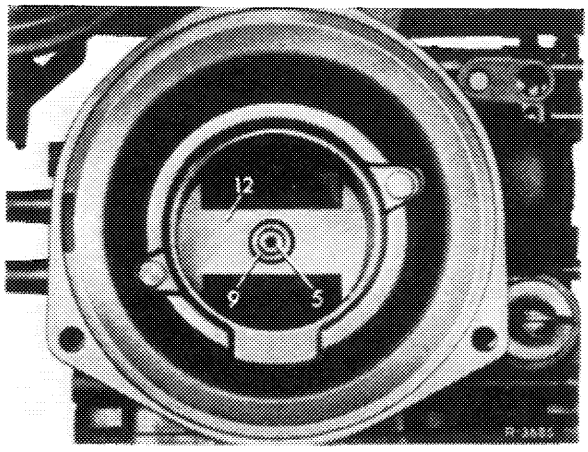


Fig. 07-4/12

5 Needle nozzle
9 Guide tube
12 Bridge

4 Loosen holding screw by approx. 1/2 turn so that guide tube (9) can move freely in housing (Fig. 07-4/12).

5 Now permit air piston to drop freely, which will automatically center needle nozzle.

6 Screw back idle mixture adjustment screw by 1 turn.

7 Slowly tighten holding screw (3) while checking whether nozzle needle (8) remains freely movable in needle nozzle. For this purpose, lift air piston for approx. 2-3 mm and permit to drop. Air piston should hit bridge (12) audibly and without friction (Fig. 07-4/13). If not, repeat centering of nozzle.

8 Adjust idling speed (refer to Job No. 07-3 section B).

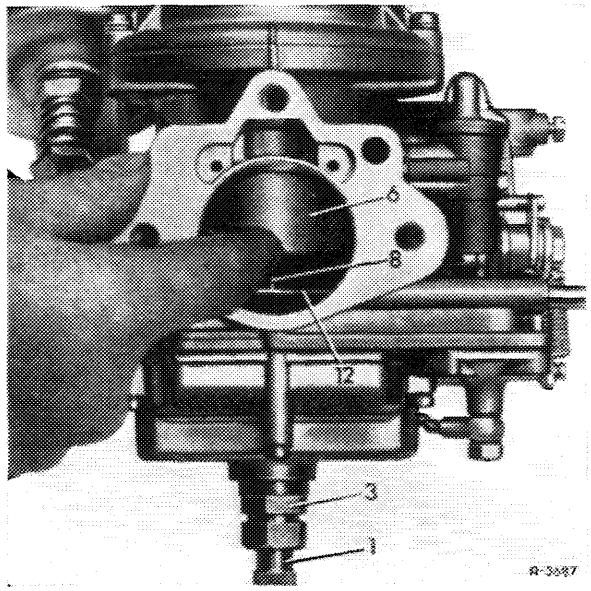


Fig. 07-4/13

1 Idle mixture adjustment screw
3 Holding screw
6 Air piston
8 Nozzle needle
12 Bridge

E. Removal and Installation of Starter Housing

Note

In the event of complaints during warming up periods, convert starting device (Job No. 07-6 section D).

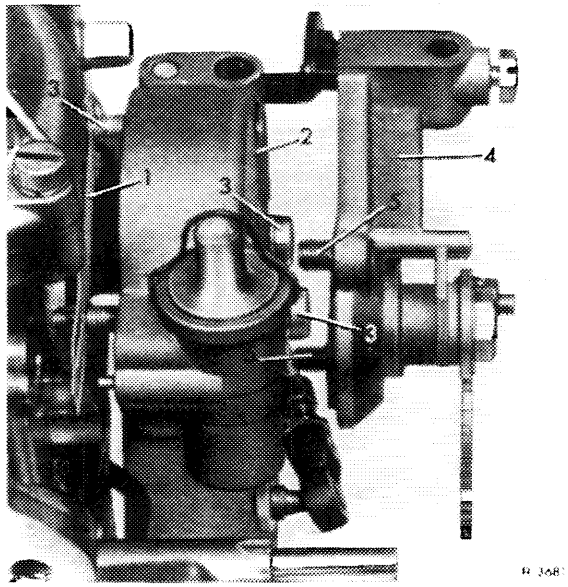


Fig. 07-4/14

1 Gasket
2 Starter housing
3 Cheese head screws
4 Starter cover
5 Countersunk screws

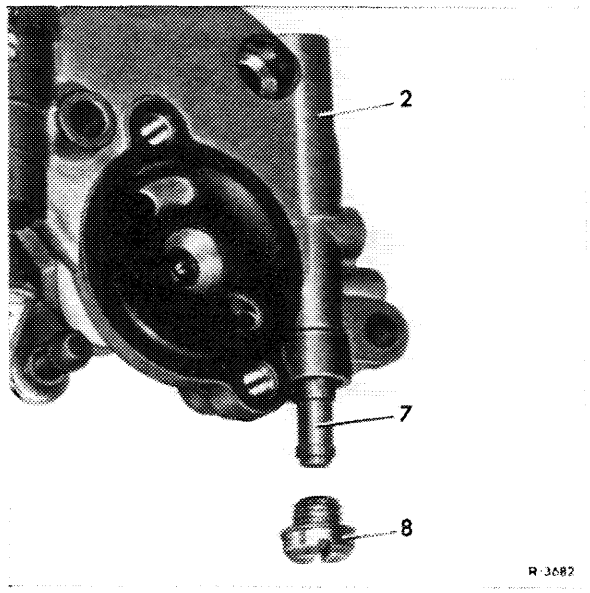


Fig. 07-4/15

2 Starter housing
7 Vacuum piston
8 Closing plug

Removal

1 Disconnect connecting rod.

2 Unscrew countersunk screws (5) and remove starter cover (4).

3 Unscrew starter housing (2) with 3 cheese head screws (3) (Fig. 07-4/14).

4 Unscrew closing plug (8). Remove vacuum piston (7) (Fig. 07-4/15).

Installation

5 Blow out starter ducts with compressed air.

6 Insert vacuum piston according to Fig. 07-4/15. Mount closing plug (8).

7 Place new gasket (1) on starter housing, mount starter housing and starter cover (Fig. 07-4/14).

F. Removal and Installation of Automatic Starting Device

Note

The electric connection for the automatic starting device is designed as a single-pole connection and as a two-pole plug connection. When installing a new carburetor or a new starter cover with two-pole plug connection, connect connection cable (+) of starter cover together with grounding cable (-) to a two-pole coupling. Make sure that the plus and minus (positive and negative) line is correctly mounted in coupling. Plus connection is identified on plug connection.

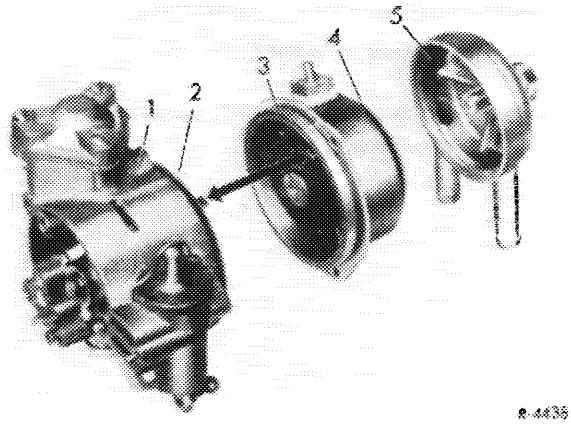


Fig. 07-4/16

1 Starter housing
2 Gasket
3 Starter cover
4 Gasket

Removal

1 Disconnect cooling water hoses and electric connection.

2 Unscrew fastening screws and remove starter cover.

Installation

3 Check gaskets (2) and (4) for perfect seat.

4 Mount starter cover (3) to starter housing (1). Make sure that bimetallic spring enters drive lever (refer to arrow in Fig. 07-4/16).

5 Turn starter cover until marks of starter cover and starter housing are in alignment (refer to Job No. 07-6 section G item 7).

6 Fasten starter cover with fastening screws, also connect water hoses and electrical connection.

G. Disassembly and Assembly of Float Chamber-Venting Valve

Disassembly

1 Unscrew starter housing (refer to section E).

2 Remove clamping spring (11).

3 Remove closing cap (1), compression spring (2) and washer (3).

4 Pull-off lock washer (10), remove spring plate (9) and compression spring (7).

5 Pull rod (8) with spring (6) and valve plate (5) out of housing.

Assembly

6 Clean valve seat in housing

7 Mount venting valve with new valve plates (5) in vice versa sequence.

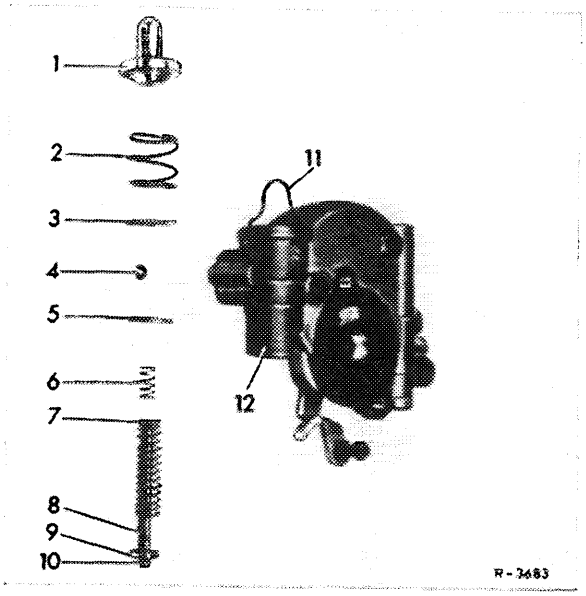


Fig. 07-4/17

1 Closing cap
2 Compression spring
3 Washer
4 Lock washer
5 Valve plate
6 Compression spring
7 Compression spring
8 Rod
9 Spring cup
10 Lock washer
11 Clamping spring
12 Housing