Testing and adjusting values

Float needle valve	2.25
Sealing ring for float needle valve	1.5 mm
Float level (ball pushed in)	16–17 mm

Oil type/filling capacity

Model 115

Oil for air piston dashpot	Viscosity SAE	Engine oil [1] [2] specified for season
	Filling capacity	approx. 60 cc

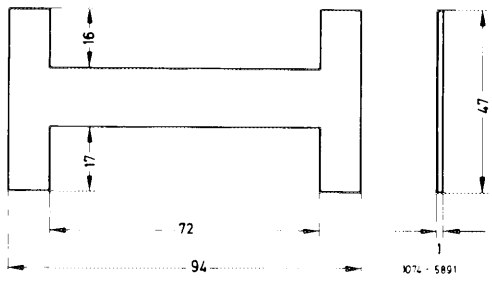
Model 123

Carburetor version		With **red** plug in closing cover	With **yellow** plug in closing cover
Oil for air piston dashpot	Viscosity SAE	Summer operation engine oil [1] Winter operation ATF [3]	Throughout the year ATF [3]
	Filling capacity	approx. 60 cc [3]	

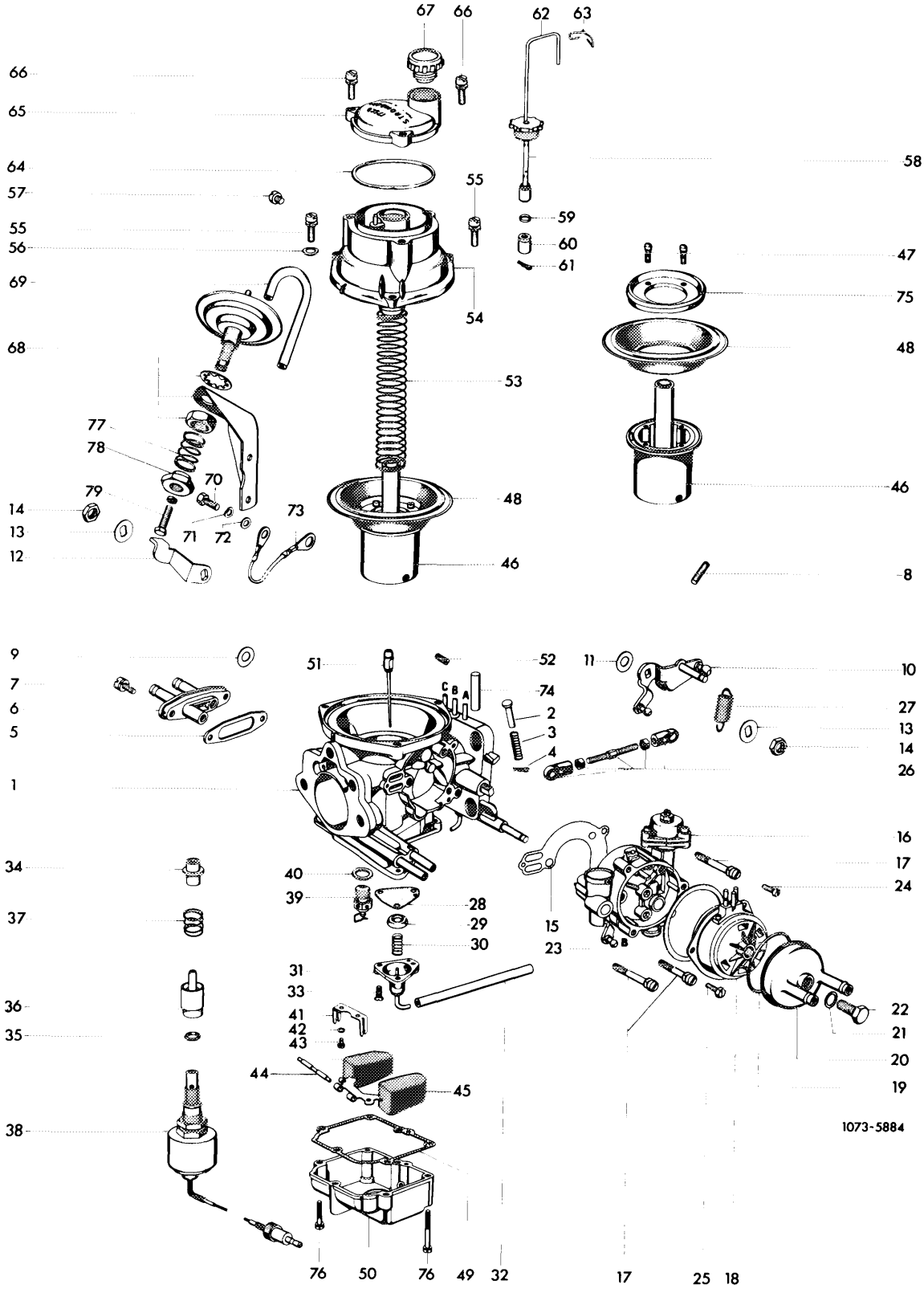
[1] Refer to specifications for service products sheet 224 page 1.
[2] During extended, cold periods below –20 °C ATF (refer to specifications for service products sheet 236.2 and 236.4).
[3] Refer to specifications for service products sheet 236.2 and 236.4.

Self-made tool

Gage for measuring float level



A. Stromberg carburetor 175 CDT in model 115



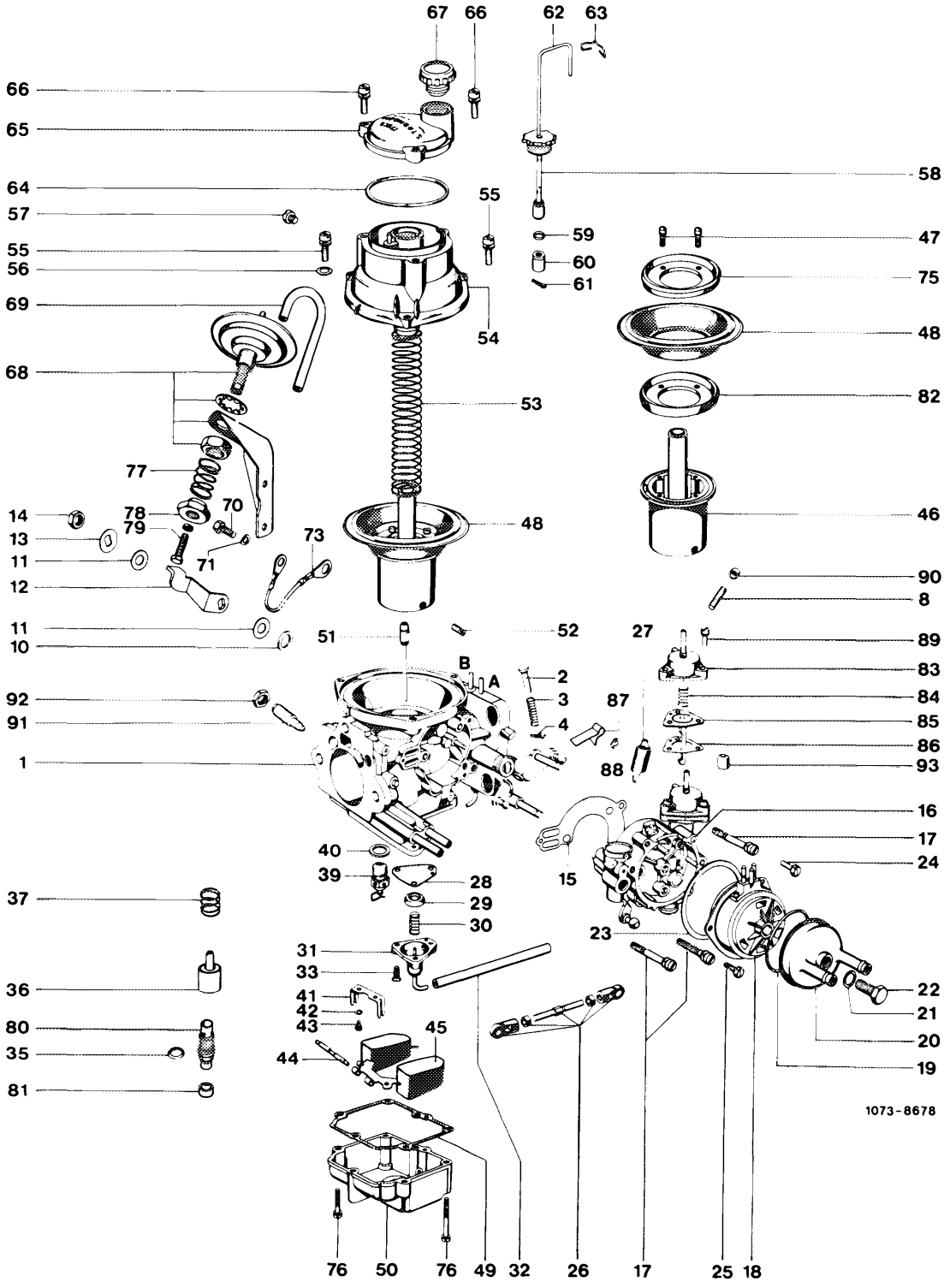
A **Vacuum connection**
for vacuum governor, on USA version for switchover valve:
a Ignition switchover
b Throttle valve lift

B **Vacuum connection**
for ignition adjustment in direction of **advance** (for USA version closed, if installed)

C **Vacuum connection**
for EGR (USA version only)

1 Carburetor housing
2 Tickler
3 Compression spring
4 Locking spring
5 Gasket
6 Coolant connection cover
7 Fillister head screw
8 Idle speed adjusting screw
9 Spring washer
10 Throttle valve lever (regulation)
11 Spring washer
12 Throttle valve lever (rpm increase)
13 Lockwasher
14 Hex. nut
15 Gasket for choke housing
16 Choke housing
17 Fillister head screw
18 Choke cover
19 Rubber gasket
20 Coolant connection cover
21 Aluminum sealing ring
22 Hex. head screw
23 Insulating gasket
24 Hex. head screw
25 Hex. head screw
26 Choke connecting rod (complete)
27 Draw spring
28 Diaphragm for fuel return valve
29 Spring retainer
30 Compression spring
31 Valve cover
32 Vacuum hose
33 Countersunk screw
34 Guide bushing for fuel nozzle (pressed in)
35 Rubber sealing ring
36 Temperature-controlled compensating element with fuel nozzle
37 Compression spring
38 Idle speed shutoff valve
39 Float needle valve
40 Sealing ring
41 Holder for float shaft
42 Snap ring
43 Fillister head screw
44 Float shaft
45 Float
46 Air piston
47 Fillister head screw
48 Air piston diaphragm
49 Gasket for float chamber
50 Float chamber
51 Nozzle needle
52 Stud for fastening nozzle needle
53 Compression spring
54 Carburetor cover
55 Fillister head screw
56 Washer
57 Cylinder head screw
58 Dashpot for air piston
59 Washer
60 Dashpot piston
61 Locking spring
62 Capillary tube
63 Spring clamp
64 Rubber sealing ring
65 Closing cover
66 Fillister head screw
67 Closing plug
68 Vacuum control unit with fastening elements
69 Vacuum hose
70 Hex. head screw
71 Snap ring
72 Washer
73 Grounding cable
74 Rubber closing cap
75 Holding disk
76 Fillister head screw
77 Compression spring
78 Adjusting nut
79 Pressure screw

B. Stromberg carburetor 175 CDTU in model 123



A **Vacuum connection** for preheating of intake air (blue colored ring)

B **Vacuum connection** for ignition timing in direction of **advance** (red colored ring)

1 Carburetor housing
2 Tickler
3 Compression spring
4 Locking spring
8 Idle speed adjusting screw
10 Sealing ring
11 Spring washer
12 Throttle valve lever (rpm increase)
13 Lock washer
14 Hex. nut
15 Gasket for choke housing
16 Choke housing
17 Fillister head screw
18 Choke cover
19 Rubber gasket
20 Coolant connection cover
21 Aluminum sealing ring
22 Hex. head screw
23 Insulating gasket
24 Hex. head screw
25 Hex. head screw
26 Choke connecting rod (complete)
27 Draw spring
28 Diaphragm for fuel return valve
29 Spring retainer
30 Compression spring
31 Valve cover
32 Vacuum hose
33 Countersunk screw
35 Rubber sealing ring
36 Temperature-controlled compensating element with fuel nozzle
37 Compression spring
39 Float needle valve
40 Sealing ring
41 Holder for float shaft
42 Snap ring
43 Fillister head screw
44 Float shaft
45 Float
46 Air piston
47 Fillister head screw
48 Air piston diaphragm
49 Gasket for float chamber
50 Float chamber
51 Nozzle needle
52 Stud for fastening nozzle needle
53 Compression spring
54 Carburetor cover
55 Fillister head screw
56 Washer
57 Fillister head screw
58 Dashpot for air piston
59 Washer
60 Dashpot piston
61 Locking spring
62 Capillary tube
63 Spring clamp
64 Rubber sealing ring
65 Closing cover
66 Fillister head screw
67 Closing plug
68 Vacuum control unit with fastening elements
69 Vacuum hose
70 Hex. head screw
71 Snap ring
73 Grounding cable
75 Holding disk
76 Fillister head screw
77 Compression spring
78 Adjusting nut
79 Compression screw
80 Fuel adjusting screw
81 Protective cap
82 Supporting ring
83 Pulldown cover
84 Compression spring
85 Pulldown diaphragm with rod
86 Gasket
87 Draglever
88 Fuse
89 Fillister head screw
90 Fuse cap
91 Circulating air adjusting screw
92 Counternut
93 Dust sleeve

Cleaning

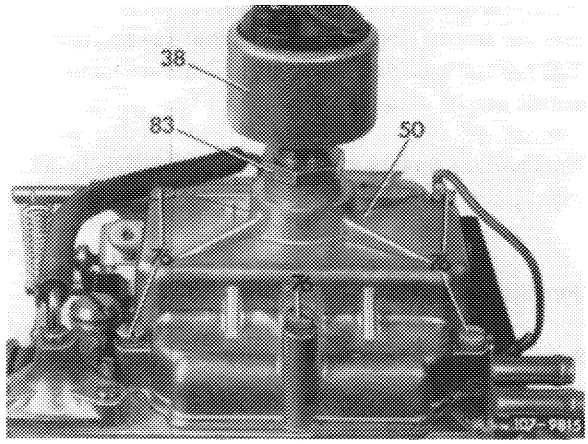
1 Remove carburetor (07.2–194).

2 Clean carburetor well externally.

3 Remove float chamber.

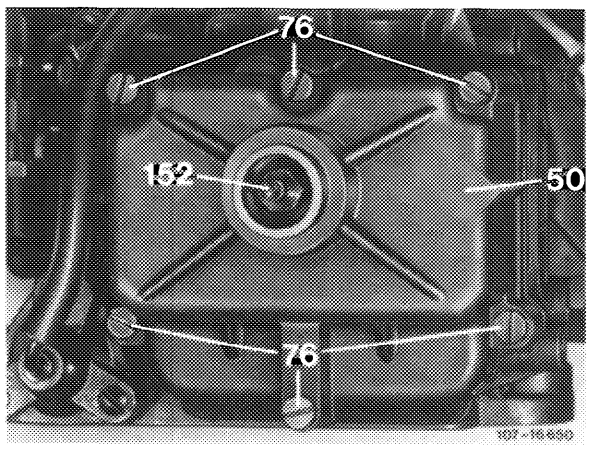
For this purpose, on **model 115**, loosen hex. nut (83) and unscrew idle speed shutoff valve (38).

Unscrew fillister head screws (76) and remove float chamber (50).



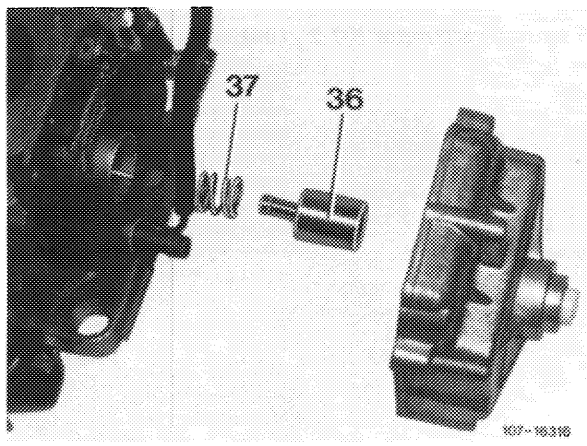
For this purpose, on **model 123**, unscrew fuel adjusting screw (152).

Unscrew fillister head screws (76) and remove float chamber (50).

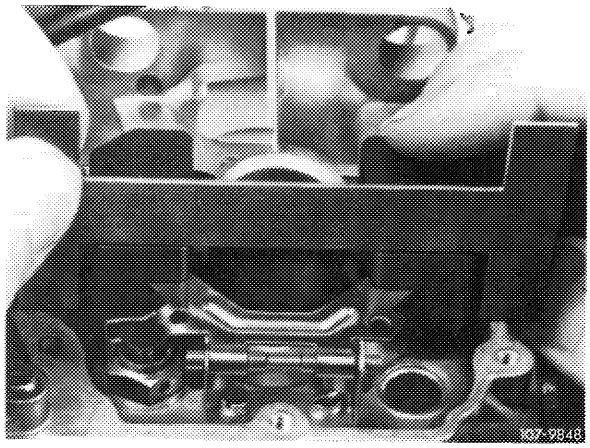


4 Remove temperature-controlled compensating element with fuel jet (36) and compression spring (37).

5 Clean float chamber and temperature-controlled compensating element with fuel jet.



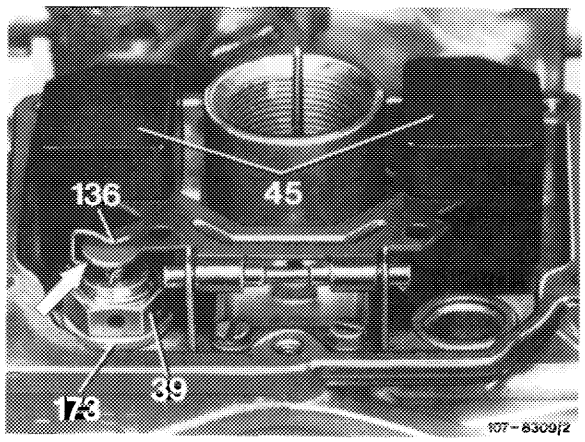
Adjustment



6 Measure float level and adjust, if required.

Carefully push float down until **spring-loaded ball of float needle valve (39) is completely pushed in.**

Check float level with measuring gage or slide gage at highest points of float.



If a correction of float level is required, check first whether sealing ring (173) under float needle valve (39) has the specified thickness of 1.5 mm. Renew sealing ring, if required.

Then correct float level with float removed by bending lug (arrow).

Bending device

Bending toward float needle valve = increasing float level

Bending away from float needle valve = reducing float level

Attention!
When bending lug, make sure that lug pushes **vertically** on float needle. The two solid floats should be **horizontally** in relation to measuring gage. Re-align, if required.

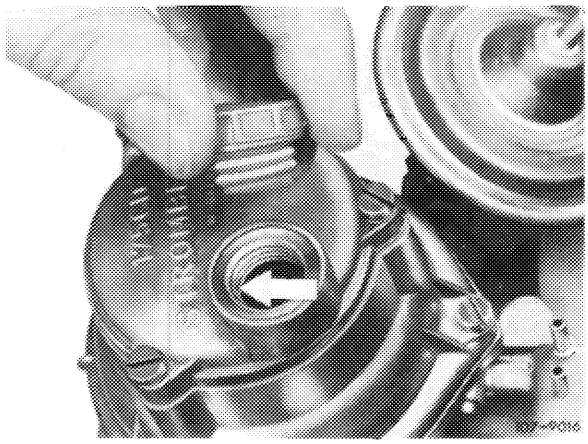
7 Attach float chamber in vice versa sequence of item 3 and 4.

Attention!
During assembly, renew gasket float chamber. Check rubber sealing ring in temperature-controlled compensating element and for idle speed shutoff valve (model 115) as well as in fuel adjusting screw (model 123), renew if required.

8 Install carburetor (07.2–194).

9 Check dashpot oil level in supply tank and correct, if required.

For this purpose, unscrew closing plug. The dashpot oil should reach up to lower threaded edge (arrow) of filler hole.



10 Adjust idle speed (07.2–100), adjust choke (07.2–125).