## Weber DCOE Carburettors 38-40-42-45

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## WEBER DCOE CARBURETOR 38-40-42-45



#### APPLICATIONS

Alfa Romeo Giulietta SV - Giulietta GT / Super - DB4 Aston-Martin DB5 - BMW 1800 TI / SA Fiat 2300 S - Lamborghini 350 GT - Lotus Elan - Maserati 3500 - Renault 12 Gordini

#### NORMAL OPERATION



The fuel reached, through the needle valve (1) the tank (4), where the float (3) regulates the opening of the needle (2) so that the fuel level remains constant. Fuel through pipes (6) and the main jet (5), reaches the emulsion tubes (12): mixed with air from the spray air brake (11) it reaches the fuel formed by the centering (8) and broadcasters (9) through conduits (10) and tube ejectors (7).

#### **OPERATION AT IDLE AND PROGRESSION**



From the tank (4), the fuel is conveyed to nozzles calibrated holes idle (14) through conduits (15).

Mixed with air from the ducts (13) through conduits (20) and holes power idle (18), using the adjustable screw (19), it reaches the conduit downstream of the carburetor butterfly (17).

Through the channels (20), the mixture may also led to the carburetor through the holes of progression (16).

## ACCELERATION



By closing the butterflies, the lever (25), through the rod (27), raises the piston (26), the fuel is sucked from the tank (4) in the cylinder of the pump through the suction valve (23).

By opening the butterflies, the rod (27) remains free and the piston (26) is pushed down by the spring (28).

By conduits (22) the fuel is pushed through the valve outlet 21) to the sprinkler pump (24) where it is pumped into the ducts of the carburetor.

The suction valve (23) is fitted with a calibrated hole ensuring a return to the fuel tank charged in excess by an accelerator pump.

#### **STARTER DEVICE**



The fuel in the tank (4) reaches the starter device, through the ducts (32) and jets starter (30).

Mixed with air from the hole (29), it arrives in the cavity of the valve (35) through conduits (31) where he breaststroke final with air sucked through the holes (34) and is thus ferried ducts to the carburetor downstream butterflies through conduits (33). Starting engine cold - device engaged - Position "A".

Turn on the hot engine half - partially activated device - a position "B".

Initiation of the vehicle - during the engine warm, even with the vehicle running, gradually trigger the device.

Normal running of the vehicle - device excluded - set to "C" when the engine has reached a temperature sufficient.



# **INSTRUCTIONS FOR ADJUSTING THE FLOAT LEVEL** (45 DCOE 68-69, Renault 12 G)

To run the level of the float, it is essential to observe the following requirements:



- Ensure that the float (G) is determined by weight (gr. 23), does not bump and can slide freely on the axis.

- Make sure the needle valve (V) is tight in the slot and the ball (Sf) of damper incorporated in the needle (S)

is not blocked.

- Keep the lid of the carburetor (C) in a vertical position as shown in the figure, since the weight of the float (G) lower ball (Sf) mounted on the needle.

- With the lid of the carburetor

(C) on a vertical position and the tab (Lc) float to light touch of the ball (Sf) of the needle (S), the two semi-float (G) must be removed from the surface of cover, with the joint (Gz) on the surface, 5 mm.

- Grading done, make sure the course of the float (G) or 8.5 mm. and if necessary amend the position of the pin (A).

- In the event that the float would not be in its correct position, change the position of the tongue (L) float up to the symbol you want, taking care that the tongue (Luke) does not, on terms of contact, chips that can prevent proper operation of the needle (S).

- Proceed to the reassembly of the carburetor lid while ensuring that the movement of the float can run freely without affecting the walls of the tank.

**Important** - Controlling the level of the float must be executed every time you proceed to replace the float and the needle valve, in which case it is advisable to also replace the gasket while ensuring that the new needle valve is tight in the slot.

## Application RENAULT ALPINE A 110

- Alpine Renault - Manual repair type A 110 - 1300 VA, VB 1300, VC 1300, VB 1600, GS option (extract, 10.1970)

#### Carburettors

	1300 G	1300 S	1600 S	1600 GS
	Weber 40 DCOE 29 and 30 or 23 and 26	Weber 40 DCOE 29 and 30	Weber 45 DCOE 18-19 or 14 or 36-67 or 38-39	Weber 45 DCOE 18-19 or 14 or 36-37 or 38-39
Buse	32	33	34	38
Main jet (Gg)	125	130	125	150
Automaticity	200	200	200	175
Idling jet (g)	45 F8	45 F8 then 50 F8 from MOT of 1635	55 F8	55 F8
Jet pump (GP)	35	35	35	35
Main emulsifier (E)	F15	F15	F15	F15
Float	23 g 26 g on 25/26	23 g	23 g 26 g to 14	23 g 26 g to 14
Float height	5 mm 8.5-mm 25/26	5 mm 8.5-mm 25/26	5 mm 8.5 mm 14	5 mm 8.5 mm 14
<b>Course Float</b>	11.5 mm	11.5 mm	15 mm	15 mm

Thursday between collectors and bases carburetors aluminum 1.2 to 1.3 mm.

- Adjusting the carburetors - Type 45 DCOE (Renault, NT 571, 2.1972)

#### Landmark 38-39

Buse	34		
Main jet	125		
Automaticity	200		
Idling jet	55		
Jet starter	65		
Jet pump	35		
Pump valve	50		
Run pump	10 mm (25/64 ")		
Float	1.5 mm		
Float level	5 mm (13/64 ")		

#### Adjusting the float level



Keep the tank above the vertical so that the weight of the float closes the needle (1)

while not returning the ball (2) inside the latter. Check the symbol (A) between the gasket and the float bowl.

If it is not correct, act on the tongue (3), ensuring that the tab (4)

is perpendicular to the axis of the needle.

Then check the course (B) float B = 8 mm (5 / 16 ").

If it is not correct, act on the tongue (5).

#### - Alpine Renault - Technical Note (Ref. 00112, 4.1972)

To avoid confusion, we believe it useful to look once again at the various fixtures specified.

a) The 1600 S, were used carburettors index 2 holes 38-39 to progression (carburetor number below 1000), 38-39 carburettors index to rise 3 holes (carburetor number above 1000) and carburettors index 3 holes 62-63 to progress.

b) A .310, only 3 holes carburettors progress has been specified, first by then index 38-39 index 62-63.

c) 38-39 numbers below 1000 and 62-63 are characterized by the presence of 2 holes in the housing A (see drawing) used in the operation of the idle F8. F8 sprinklers have a hole on the side and are mounted on a carrier without nozzle hole.

d) Of the 38-39 numbers above 1000, the housing holes are not drilled,

sprinklers are idle F10 without holes and door-east jet with a hole marker 95. If in doubt, control the number of holes progress made by depositing a cap wells progression.

Important: it is imperative to match them not only the spray nozzles and door-idling but also with these sets of body fuels. Just as it is not possible to mount the same engine on two fuels of different indices. Any other mounting can only fuel disorders including defects of progressive and unstable idle.



	1600 S			A 310	
	38-39 No <1000	38-39 No> 1000	62-63	38-39 No> 1000	62-63
Buse	34	34	34	34	34
Main jet (Gg)	125	125	135	135	135
Automaticity	200 or 180	220 or 200	220	220	220
Porte-idling jet	without reference or hole	benchmark 95 with hole	without reference or hole	benchmark 95 with hole	without reference or hole
Idling jet (g)	55 F8 with hole	50 F10 or 40 F10 without hole	55 F8 with hole	50 F10 without hole	55 F8 with hole
Jet pump (GP)	35	35	35	35	35
Pump valve	50 with hole leak	50 with hole leak	60 without hole leak	50 without hole leak	60 without hole leak
Float	1.5	1.5	1.5	1.5	1.5
Main emulsifier (E)	F15	F9	F9	F9	F9
Float	23 g	23 g	23 g	23 g	23 g
Depth of tank	5 mm	5 mm	5 mm	5 mm	5 mm
Jet starter (Gs)	85 F5	85 F5	85 F5	85 F5	85 F5

Initial setting	unscrew	unscrew	unscrew	unscrew	unscrew
approached	1 tour 1 / 2	1 / 4 turn			
Screw wealth	about	about	about	about	about

- Setting the idle (Automoible Revue Technique Renault 12 Gordini, 1st quarter 1974)



- Screw the screws (A) to slightly open the butterflies.

- Tighten the four screws (B) until they come into contact with their headquarters on the body of the carburetor.

#### Do not block the screws do not damage the seats.

- Loosen each screw then a tour of one-quarter (1 1 / 4).

- Turn the engine running, the heat, give some boost to avoid fouling of spark plugs.

- Engine hot, screw or unscrew the screw (A) to obtain a speed of 1 000 rpm. Preferably use a specific e-tours.

- Dealing with the screws (B) for each body to the engine speed is higher.

- Check that each cylinder operates normally by putting candles in succession to the estate.

#### Final adjustment of timing (of 38-39 and identified carburettors 62-65)

If the pressure up on the control rod is not sufficient, throttle before (cylinders 3 and 4) are slightly more open than those in the rear carburetor (cylinders 1 and 2).

The filling of the four-cylinder is not equal.

- It is sufficient to restore the balance between the four cylinders, slightly loosen the screw synchronization (C).

- Reduce the motor speed at 1 000 rpm.

#### Final adjustment of the synchronization (carburettors marked 68-69)

When the above setting is finished, check the synchronization of two bodies of each carburetor.

You can use a dépressiomètre trade or, failing that, to turn the son of candles at the mass.

The fall of regime should be identical for both cylinders powered by the same carburetor.

If necessary, act on the screws by-pass (47) to get this result.