

Zenith Carburetors

ZENITH 34 VNN 1-BARREL

Saab 95 & 96 (1965-68)

DESCRIPTION

Carburetor is single barrel downdraft type featuring a strangler flap type choke system. The idle system contains an air jet, fuel jet, and mixture control screw. The high speed system contains a main jet, an emulsion jet and emulsion tube. The design of the carburetor permits access to all jets except idle air jet, without disassembling the carburetor. No separate acceleration system is included.

OPERATION

At cold start, choke control closes the spring loaded choke valve. At the same time, a linkage rod opens the throttle flap, ensuring sufficient idle speed. At idle, fuel passes through idle jet and duct to orifice of air mixture screw. Air/Fuel mixture is then introduced to the intake manifold. During high speed operation, throttle valve is opened and from main jet fuel passes through metering block into the throat of carburetor. There it is vaporized and drawn into the intake manifold.

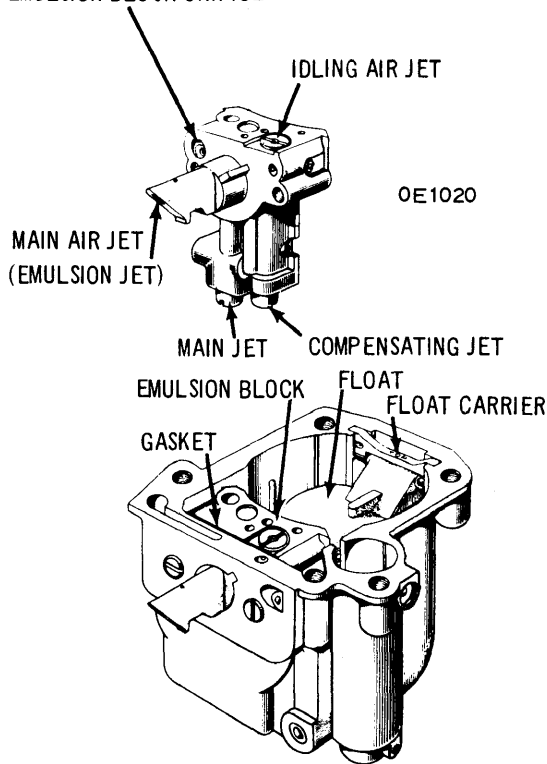
ADJUSTMENT

Float Level Adjustment

Float level is determined by washer under needle valve. Correct level should be obtained by using a washer with a thickness of .12 in. (3 mm). To check level, proceed as follows:..

- 1) Allow engine to idle, switch off ignition. **DO NOT TOUCH ACCELERATOR OR THROTTLE LINKAGE.**
- 2) Remove fuel line to prevent flooding and remove air filter. Remove screws, remove float chamber. Use care not to spill any fuel.
- 3) Measure the distance from upper edge of chamber to fuel level. This distance should be 1" (25.5 mm) with float in place and 1.18 in. (30 mm) without float.
- 4) To lower fuel level, fit additional gaskets under float valve. To raise fuel level, file down existing gasket.
- 5) After adjustments are completed, re-check float level as outlined above.

EMULSION BLOCK ORIFICE

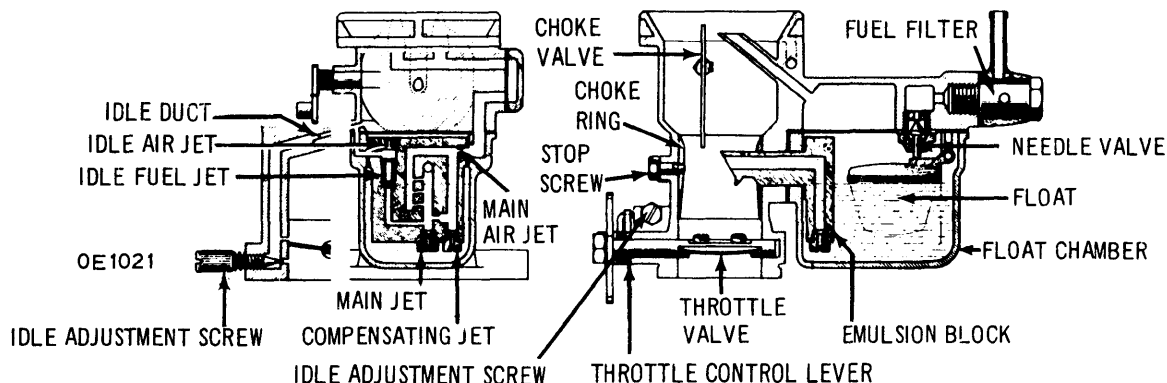


FLOAT CHAMBER & EMULSION BLOCK

Idle Speed & Mixture Adjustment

NOTE: Before adjusting idle, engine must be at normal operating temperature and ignition timing and cam angle must be properly set.

- 1) Adjust idle speed screw to give 600-700 RPM.
- 2) Re-adjust idle speed screw to specified idle RPM and re-check position of mixture screw. Repeat procedure until the correct idle speed is obtained.

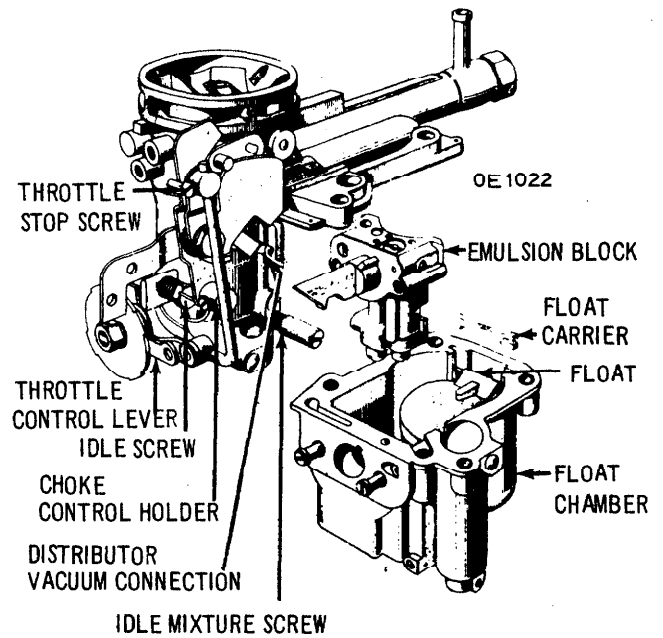


SECTIONAL VIEW OF ZENITH 34 VNN

ZENITH 34 VNN 1-BARREL (Cont.)

OVERHAUL

- 1) Remove air cleaner, fuel hoses, choke control and remove rubber boot from throttle spindle plate.
- 2) Remove nuts retaining carburetor to manifold and remove carburetor. Clean the outside of the carburetor.
- 3) Remove the four bolts retaining float chamber and remove chamber. Before lowering float chamber, pull it out sideways a bit to free the emulsion orifice.
- 4) Check the condition of the needle valve and gasket. Examine float lever and spindle. Weigh float to check for damage or leaks.
- 5) Remove two screws retaining emulsion block and remove block. Remove all jets, choke valve and choke valve spindle.
- 6) Loosen throttle stop screw and remove choke tube. Check all gaskets for proper condition and blow all passages clean with compressed air.
- 7) Reassemble carburetor, using new parts where necessary, by reversing procedure. Reinstall carburetor and re-adjust idling speed.



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