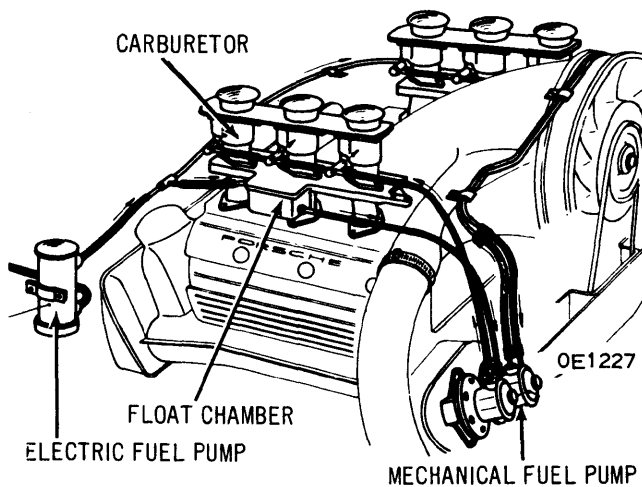


SOLEX 40 PI 1-BARREL

PORSCHE 6 CYL.
911 (1965-67)

DESCRIPTION

Solex 40 PI is a single barrel downdraft type. The float chamber is separate from carburetor and is positioned adjacent to and below the fuel line of the carburetors. One float chamber serves 3 carburetors. All jets are clustered into one assembly located in a separate compartment within the carburetor body. Jet cluster is easily accessible and can be removed for servicing. Accelerator pump is a diaphragm type.



FUEL SYSTEM

ADJUSTMENT

Idle Speed Adjustment

With engine at operating temperature and air cleaner removed, detach actuating shaft connecting links from bellcrank shaft. Using a suitable balance meter, synchronize the throttle valves of all carburetors with engine running at 1200 to 1400 RPM. Be sure adjustment disc on meter is fully opened to ensure that air flow conditions are changed as little as possible. To synchronize throttle valves turn the knurled thumb wheel on each throttle valve rod. Adjust idle mixture screw on each carburetor until a smooth idle is obtained. Using actuating shaft stop screw bring the idle speed down to 900 RPM. When reconnecting actuating shaft connecting link be sure no preload is exerted on linkage.

Accelerator Pump Adjustment

1) Remove air cleaner. Detach actuating shaft connecting links from bellcrank shaft. Connect an auxiliary electric fuel pump in place of mechanical pump to provide an adequate fuel supply.

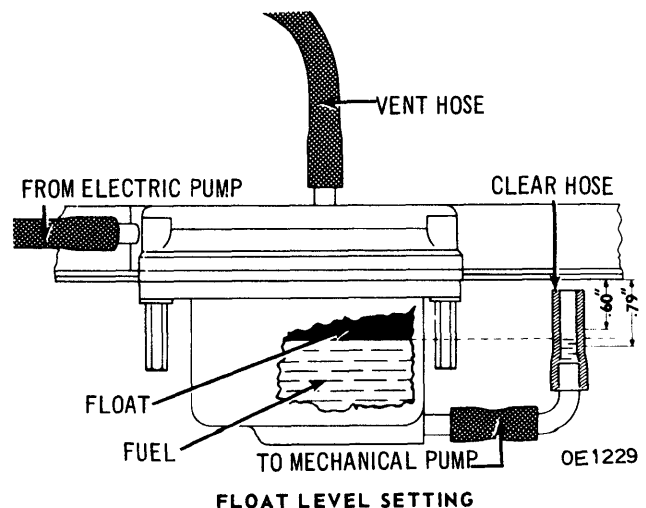
2) Mount electric fuel pump on blower housing to ensure proper ground. Remove float bowl-to-mechanical fuel pump hose at fuel pump and attach to outlet fitting of electric fuel pump.

3) Disconnect mechanical fuel pump-to-carburetor fuel hose at fuel pump and attach to outlet fitting of other electric fuel pump. Connect positive wire of fuel pump to ignition side of coil.

4) Turn on ignition and check operation of both fuel pumps. Hold a small graduated container at injection nozzle of carburetor. Move throttle linkage twice from stop to stop. Check each carburetor. Proper quantity for summer is .40-.50 cc, for winter it is .55-.65 cc. Adjust by turning adjusting nuts on accelerator pump rod.

Float Level Check

Remove fuel hose that connects float bowl and mechanical fuel pump, at float fitting. Be sure to collect the out-flowing fuel. Attach a transparent hose to float bowl (see illustration). Switch on ignition, when fuel level has steadied measure distance between the fuel level and milled underside of intake manifold. Fuel level must be .60-.79" (15-20 mm). If fuel level is above the .60" (15 mm) mark, it will be necessary to replace the float.



SOLEX 40 PI 1-BARREL (Cont.)

OVERHAUL

Disassembly

1) Remove retaining screws and withdraw carburetor cover. Remove two jet carrier assembly screws and remove entire assembly. Remove idle air bleed, idle metering jet, air correction jet, emulsion tube, main jet, from carrier assembly.

2) Remove idle mixture adjusting screw and spring. Loosen lock nut on venturi retaining pin, back off pin and pull venturi straight up. Remove pump rod adjusting nuts, cover retaining screws, and cover. Remove pump diaphragm and spring.

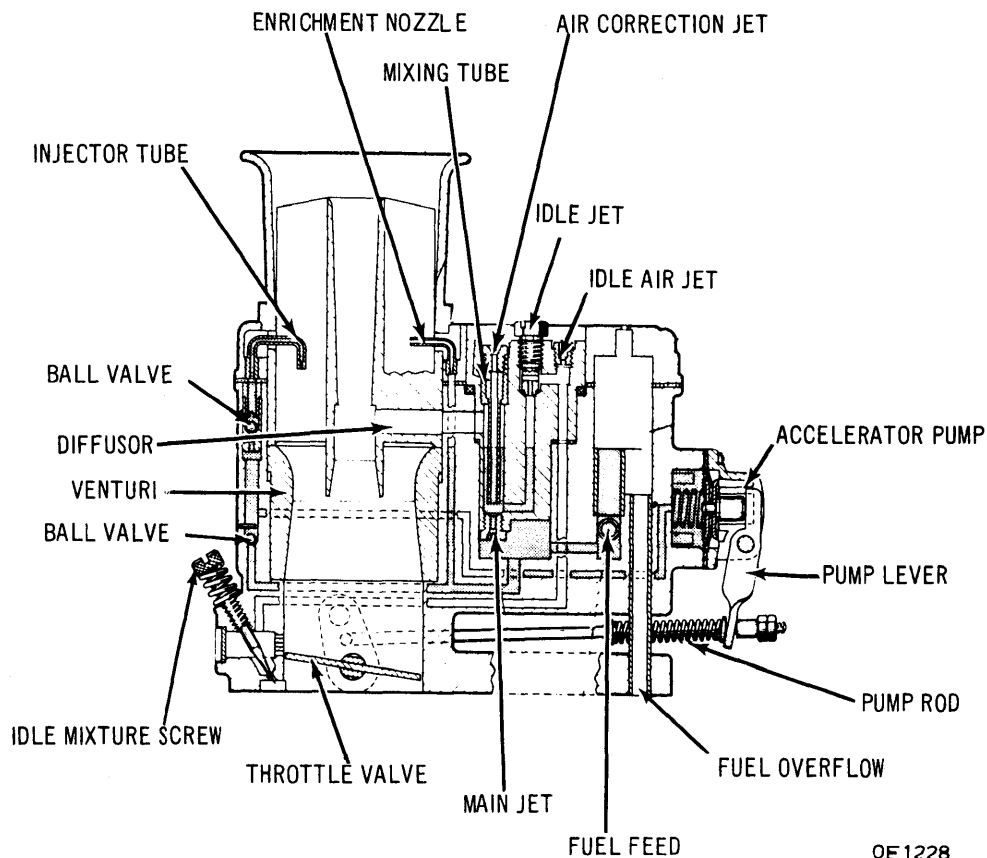
3) Clean all parts in gasoline. Blow out all passages and jets with compressed air. Do not use needles or wires.

Reassembly

Reassembly is in reverse order of disassembly. Observe the following points: inspect throttle shafts for excessive wear that would allow for air passage. Inspect throttle valves for a light-tight closing. Accelerator pump diaphragm rivet must be tight, replacement is necessary if joint is loose. When replacing or installing main jets be sure they have an "X" prefix.

NOTE - In cases of complaints regarding poor power transition in engines equipped with carburetor covers of older design, the X 130 main jet can be replaced with the X 125 main jet. The driving response resulting from the X 125 main jet must be tested.

Venturi	30
Main Jet	125
Air Correction Jet	180
Idle Metering Jet	55
Idle Air Bleed	1.0
Accelerating Pump Nozzle	0.8 mm
Pump Jet	0.5 mm
Emulsion Tube	8
Float Needle Valve	2.0
Float Weight	7 Grams



OE1228

SOLEX 40 PI COMPONENTS