

# Solex Carburetors

## SOLEX C 32 PHH/6 2-BARREL

### FIAT

1100R (1966-67) .....	C. 32 PHH/6
124 Sedan (1966-67) .....	C. 32 PHH/6

### Solex No.

### ADJUSTMENT

#### Float Level Adjustment

*NOTE: It is necessary to use Solex Float Level Adjustment Tool Gauge A. 95128 to perform float level adjustments.*

1) Remove float chamber cover and floats. Make sure that float and needle valve are not damaged during removal.

2) Place float on Gauge A. 95128 with eye of float arm installed on pin on gauge. Floats should seat correctly on the three points on the gauge. If the float does not seat properly, adjust position by bending float arm.

3) To check the height of the needle in its seat, there are two notches on one side of the gauge. Place that side of the gauge on the underside of the float chamber cover. One of the notches corresponds to the maximum needle height, the other notch corresponds to minimum needle height. The height of the needle should be between these two points. If height is not correct, add or remove shims between valve body and carburetor body.

### DESCRIPTION

Two barrel downdraft type carburetor of twin body design. Carburetor employs a disc type choke enrichment device for cold starting. The starting system is progressive in action and does not utilize butterfly type choke valves. Carburetor employs a diaphragm type accelerator pump to provide extra enrichment at acceleration. Each barrel of the carburetor has an idling and main jet system. The two barrels share one float chamber.

### OPERATION

**Normal Running** – Fuel from float bowl passes through main jet to an emulsifier tube, and then through a discharge tube to the auxiliary and primary venturis. Air flows to auxiliary venturi and mixes with fuel from discharge tube. The mixture passes through the primary venturi and then into the engine through the throttle valves.

**Idle System** – When throttle valves are closed, vacuum from engine draws fuel from emulsion tube and the fuel mixes with air from the metering jet. The mixture flows into the carburetor barrel downstream of the throttle valves by way of an opening between the orifice and tapered end of mixture screw. Upstream of the throttle valves, two orifices called "Progression Holes", supply fuel to provide mixture when throttle valve is opened. When throttle valve opens, vacuum by the idle port decreases and is insufficient to draw enough mixture for proper operation. The "Progression Holes" supply this mixture before the main jet system comes into operation.

**Accelerator Pump** – When throttle valves are in the closed or idle position, a spring on the accelerator pump diaphragm allows a reserve of fuel to be held above the diaphragm. The diaphragm is connected to the accelerator by a lever linked to throttle spindle. When throttle is opened, diaphragm moves and reserve fuel is delivered to a discharge nozzle that opens into the primary venturi.

**Choke & Starting System** – When choke control is pulled out, choke lever causes a disc to rotate on the carburetor. Drilled holes in the disc are rotated into position to allow additional fuel to flow to the venturis. This provides the needed extra enrichment for cold starting. As Choke control is pushed in, less fuel is allowed to flow through the disc and the mixture becomes less rich.

### CARBURETOR SPECIFICATIONS

Body Diameter .....	1.260 in. (32 mm)
Venturi Diameter .....	.9055 in. (23 mm)
Main Jet Diameter .....	.0452 in. (1.10 mm)
Idle Jet Diameter .....	.0177 in. (.45 mm)
Starting Jet Diameter .....	.0452 in. (1.15 mm)
Main Air Jet Diameter .....	.0748 in. (1.90 mm)
Accel. Pump Discharge Nozzle .....	.0236 in. (60 mm)
Needle Valve Seat Diameter.....	.0629 in. (1.60 mm)
Weight of Float .....	.32 Oz. (9 g)
Fuel Level .....	①

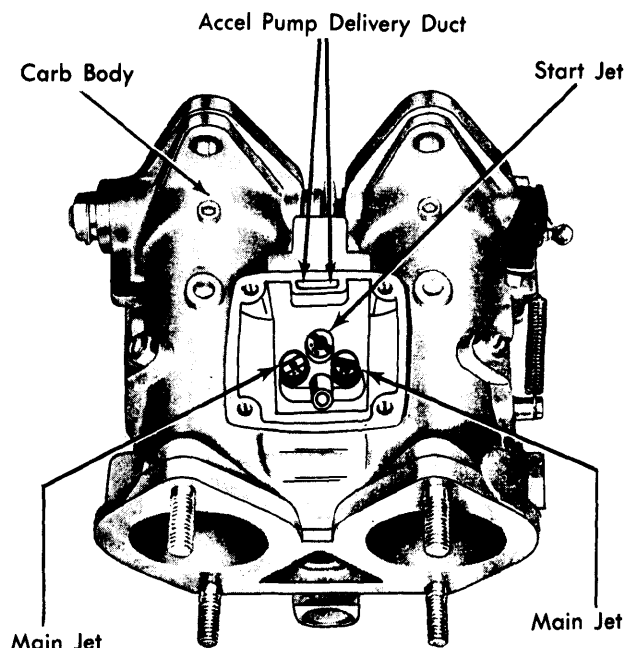
① – Use Gauge No. A. 95128

#### Idle Adjustment

Engine must be at normal operating temperature before idle adjustments are made. 1) Turn throttle stop screw so that engine runs smoothly. Then turn mixture screw to give fastest and smoothest idle.

2) Turn throttle stop screw again to correct idle speed. Continue repeating procedure until smooth running is achieved at the lowest reasonable speed.

OE1029



### JET LOCATIONS