

SOLEX 30 PIB 4

Fiat 850 (1967-70)

DESCRIPTION & OPERATION

Solex 30 PIB 4 is a single barrel down draft type carburetor with a cable operated choke. Choke is of an enrichment device type not using a flapper valve. This device consists of an enrichment passage this is opened and closed by vacuum. When engine is being cranked the plunger rises to open the passage and supplies a richer mixture. As soon as the engine starts, increased vacuum causes the plunger to drop back into place cutting off the additional fuel. During normal running, mixture feed is obtained thru the main jet and venturi. A correct mixture is assured by the corrector jets. During idle the idle jet provides for extra low speed fuel. The idle mixture screw sets the grade of mixture being supplied.

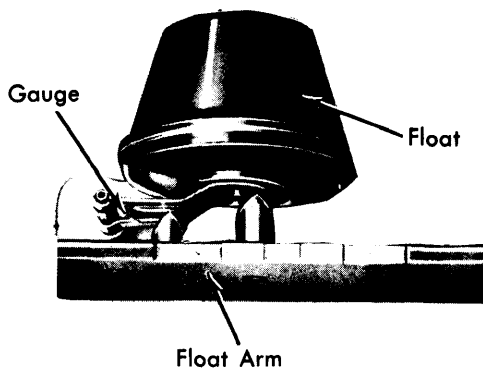
ADJUSTMENT

Idle Adjustment

With engine at operating temperature adjust fast idle screw to a speed where engine does not falter. Now adjust idle mixture to highest and smoothest RPM. Finally adjust fast idle screw for best idle RPM.

Float Level Adjustment

To adjust float level on a Solex 30 PIB 4 a suitable tool (Fiat No. A. 95126) must be used. To set float arm, slide float on gauge. Correct adjustment is indicated when float arm just touches the two upright dowels. If not, carefully



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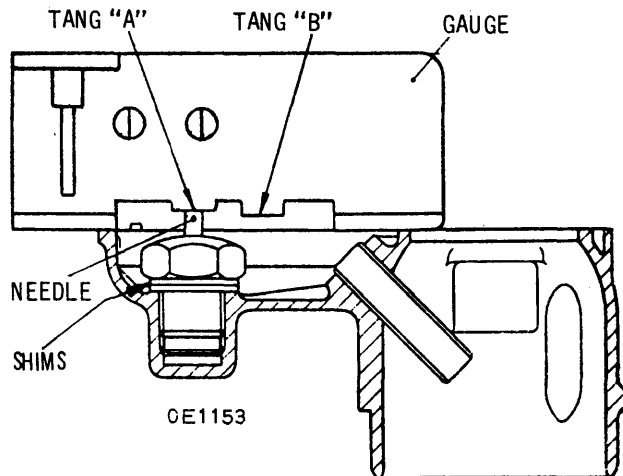
FLOAT ARM ADJUSTMENT

bend the float arm for proper contact. Now place gauge on side (see illustration), place first tang (A) on needle; in this position needle should allow gauge to slide freely. Place second tang (B) at needle; gauge should not slide, but strike needle. If needle does not correspond to these specifications it must be reset by adding thicker or thinner shims.

SPECIFICATIONS 30 PIB 4

| Application | ① Engine 100G.000 | ① Engine 100G.002 |
|----------------------|-------------------|-------------------|
| Throat Bore..... | .181" (30mm) | .181" (30mm) |
| Primary Venturi | .827" (21mm) | .866" (22mm) |
| Main Jet | .042" (1.07mm) | .043" (1.10mm) |
| Idling Jet | .016" (0.40mm) | .016" (0.40mm) |
| Easy Starting | | |
| Device..... | .039" (1.00mm) | .039" (1.00mm) |
| Accelerator Pump | | |
| Jet | .018" (0.45mm) | .020" (0.50mm) |
| Air Bleed Jet | .065" (1.65mm) | .063" (1.60mm) |
| Needle Valve..... | .059" (1.50mm) | .059" (1.50mm) |

① - Engine type is stamped on front on engine block. 100G.000 denotes standard version, while 100G.002 denotes super type.



FLOAT NEEDLE ADJUSTMENT