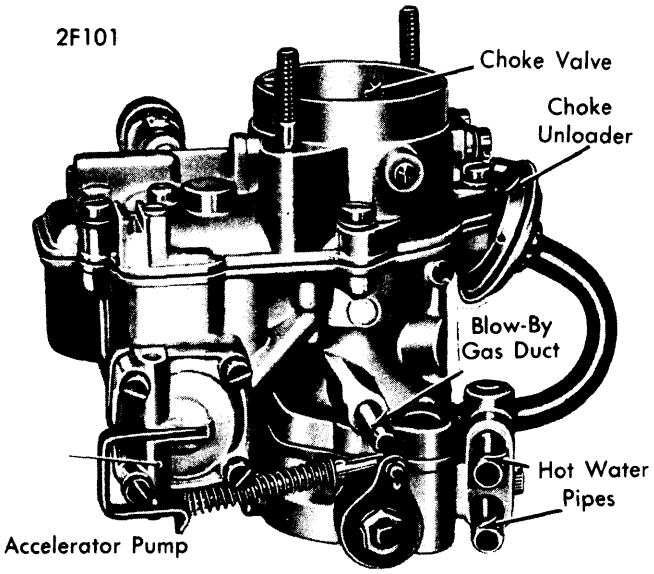
## WEBER 32 ICEV & 32 ICEV 10

**Fiat 128 Sedan (1972)**

### DESCRIPTION

Carburetor is a 1-barrel design. It has a diaphragm type accelerator pump, manually operated choke, and a crankcase ventilation device attached to throttle shaft.




**WEBER ICEV**

### OPERATION

#### NORMAL RUNNING

Fuel from float chamber flows through main jets into emulsion tube well where it mixes with air from air bleed jet. This mixture is ejected into venturi through the spray outlet. Crankcase ventilation device is in normal running position B (see illustration) and blow-by gas, from crankcase is drawn into bottom of carburetor bore.

#### IDLING & PROGRESSION

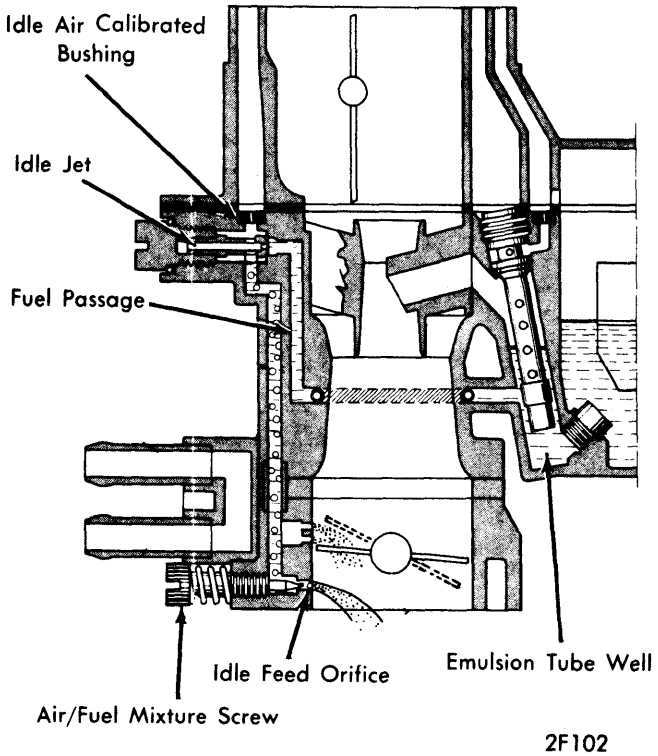
Fuel passes from well to idle jet via passage. It is emulsified with air from calibrated bushing. As throttle is gradually opened from idling position, mixture is also drawn into progression orifice so a steady increase in RPM can be obtained.

#### ACCELERATOR PUMP

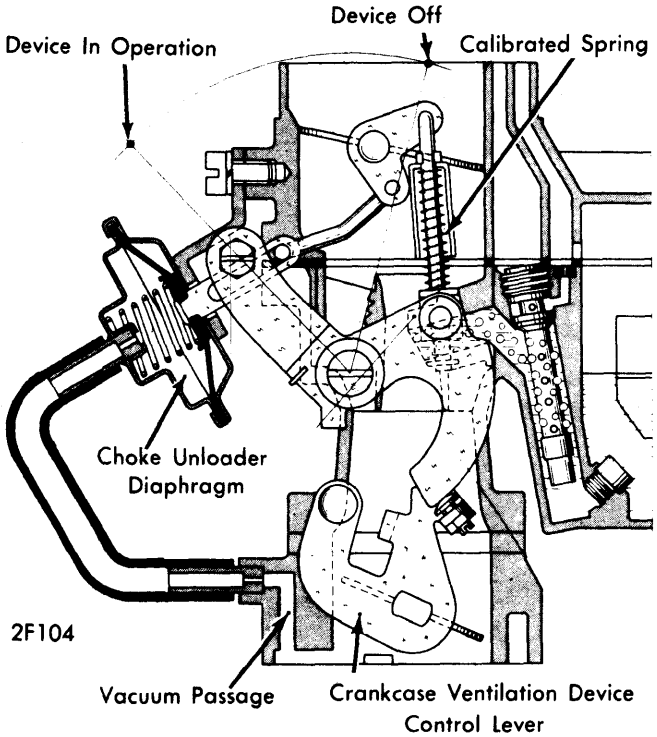
Diaphragm type with ball check valve. Fuel from float chamber is drawn through a ball check valve into pump well. On sudden acceleration, this fuel is forced into carburetor bore via nozzle. This enriches mixture sufficiently to provide smooth acceleration.

#### CHOKE UNLOADER

A diaphragm device for partial release of choke butterfly valve is used to prevent excessive choking. It is operated both by vacuum and mechanical lever and spring. When manual choke is in operated position, butterfly valve is closed to restrict air flow and provide a richer air/fuel mixture. As soon as engine fires, depression partly opens butterfly valve against action of calibrated spring. Depression downstream from throttle valve activates diaphragm device which further weakens mixture and ensures engine will progress smoothly to normal running.




**IDLE & PROGRESSION**

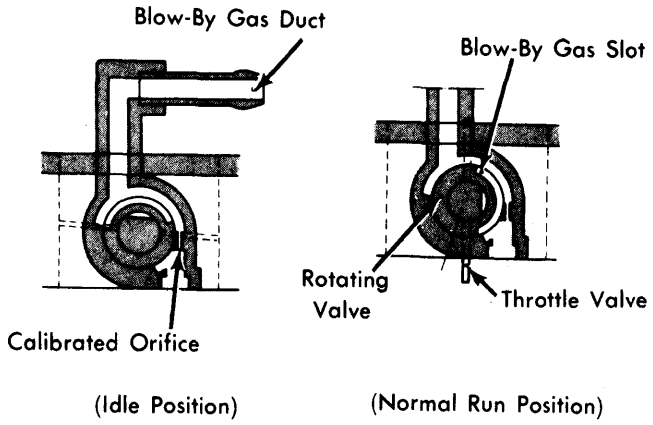



**CHOKE UNLOADER OPERATION**

## WEBER 32 ICEV & 32 ICEV 10 (Cont.)

### CRANKCASE VENTILATION DEVICE

This device consists of a rotating valve interconnected with throttle shaft. At idle, blow-by gas from crankcase is drawn into carburetor through a calibrated orifice. In normal running, valve is rotated to open position and blow-by gases are drawn into carburetor at a much faster rate than idle. Blow-by gases do not interfere with air/fuel mixture because these gases are introduced below throttle shaft. See illustration for operation.

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CRANKCASE VENTILATION DEVICE

## ADJUSTMENTS

### FLOAT LEVEL

1) Remove carburetor body cover and make sure that needle valve is tight. Hold cover vertical so that weight of float does not lower ball in needle valve (see illustration).

2) With float arm just touching ball, float should be specified clearance from cover with gasket in place. If clearance is not correct, bend float arms to obtain correct clearance.

3) Check to make sure that float travel is to specifications, if not, adjust as necessary.

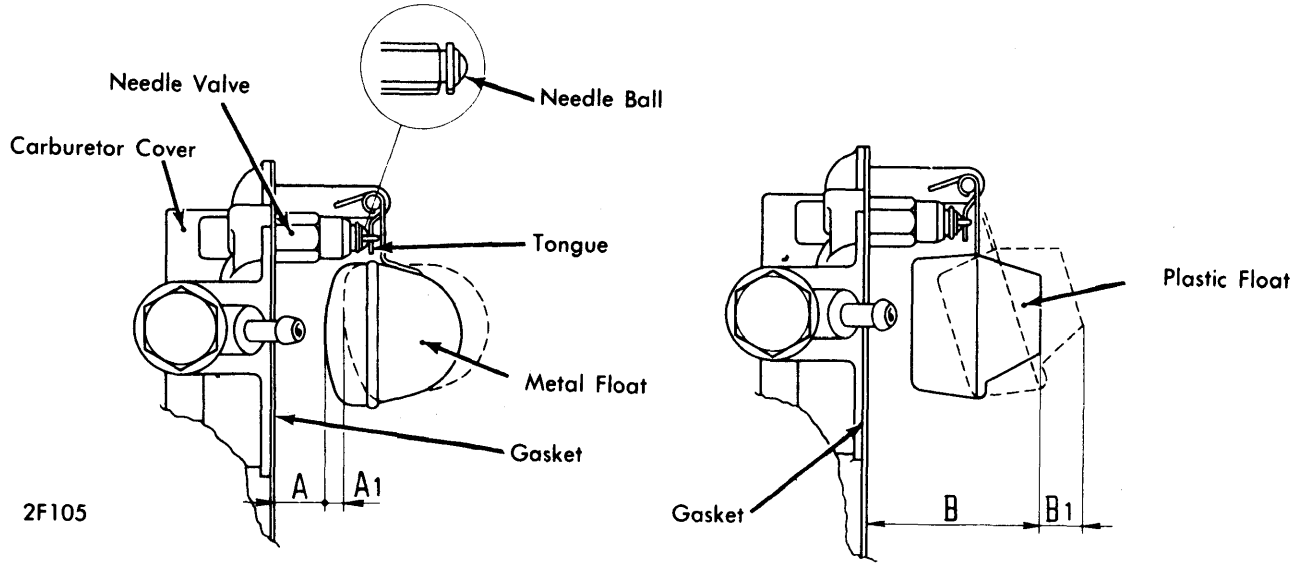
### IDLE

With engine at normal operating temperature, adjust throttle stop screw so that engine runs smoothly. Turn mixture screw to obtain highest RPM. Turn throttle screw to achieve best idle RPM. Repeat procedure with mixture screw and re-set idle RPM to specification with throttle stop screw.

## CARBURETOR SPECIFICATIONS

| DESCRIPTION | 32ICEV | 32ICEV 10 |
|---|---|---|
| Bore | 1.26" (32 mm) | 1.26"(32 mm) |
| Primary Venturi | .945" (24 mm) | .945" (24 mm) |
| Secondary Venturi | .157" (4 mm) | .157" (4 mm) |
| Main Jet | .049" (1.25 mm) | .049" (1.25 mm) |
| Idle Jet | .016" (.40 mm) | .016" (.40 mm) |
| Main Air Jet | .059" (1.5 mm) | .059" (1.5 mm) |
| Idle Air Jet | .063" (1.6 mm) | .063" (1.6 mm) |
| Pump Jet | .016" (.40 mm) | .016" (.40 mm) |
| Power Jet | .043" (1.1 mm) | .042" (1.1 mm) |
| Power Air Jet | .039" (1.0 mm) | .055" (1.40 mm) |
| Power Orifice | .079" (2.0 mm) | .079" (2.0 mm) |
| Needle Valve Seat | .059" (1.5 mm) | .059" (1.5 mm) |
| Emulsion Tube | F48 | F48 |
| Throttle Valve Opening | | .032" (.8 mm) |
| Starting Device Choke Throttle Opening | | .177" (4.5 mm) |
| Float Level① | | |
| Metal Float | .433" (11 mm) | .433" (11 mm) |
| Plastic Float | 1.417" (36 mm) | 1.417" (36 mm) |
| Float Travel | | |
| Metal Float | | .275" (7 mm) |
| Plastic Float | .394" (10 mm) | .334" (8.5 mm) |
| Idle RPM | 800-900 | 800-900 |

① — Distance between cover with gasket and float.

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FLOAT LEVEL ADJUSTMENT