

# Weber Carburetors

## WEBER 40 IDT 3-BARREL

Porsche 911T (1970-71)  
Porsche 914/6 (1970-71)

### DESCRIPTION

Carburetors are triple venturi downdraft type. Each barrel of the triple throat assembly is attached to an intake duct. One accelerator pump provides enrichment for the triple throat assembly and two float chambers are incorporated in each assembly. Carburetors do not employ a separate choke system.

### OPERATION

**Normal Running** – Fuel from float chamber flows through main metering jet and port to the emulsion tube well. Air enters through air correction jet and mixes with fuel. The fuel/air mixture flows through a delivery port into the mixing chamber. This chamber consists of a pre-atomizer and the venturi.

**Acceleration** – When throttle valve is closed, a lever allows diaphragm to move and draw fuel from the float chamber. When throttle is opened, the lever moves diaphragm causing fuel to press against diaphragm and disc. As diaphragm moves, it opens delivery ports and allows fuel to flow through check valves and the pump discharge nozzles into each of the carburetor throats.

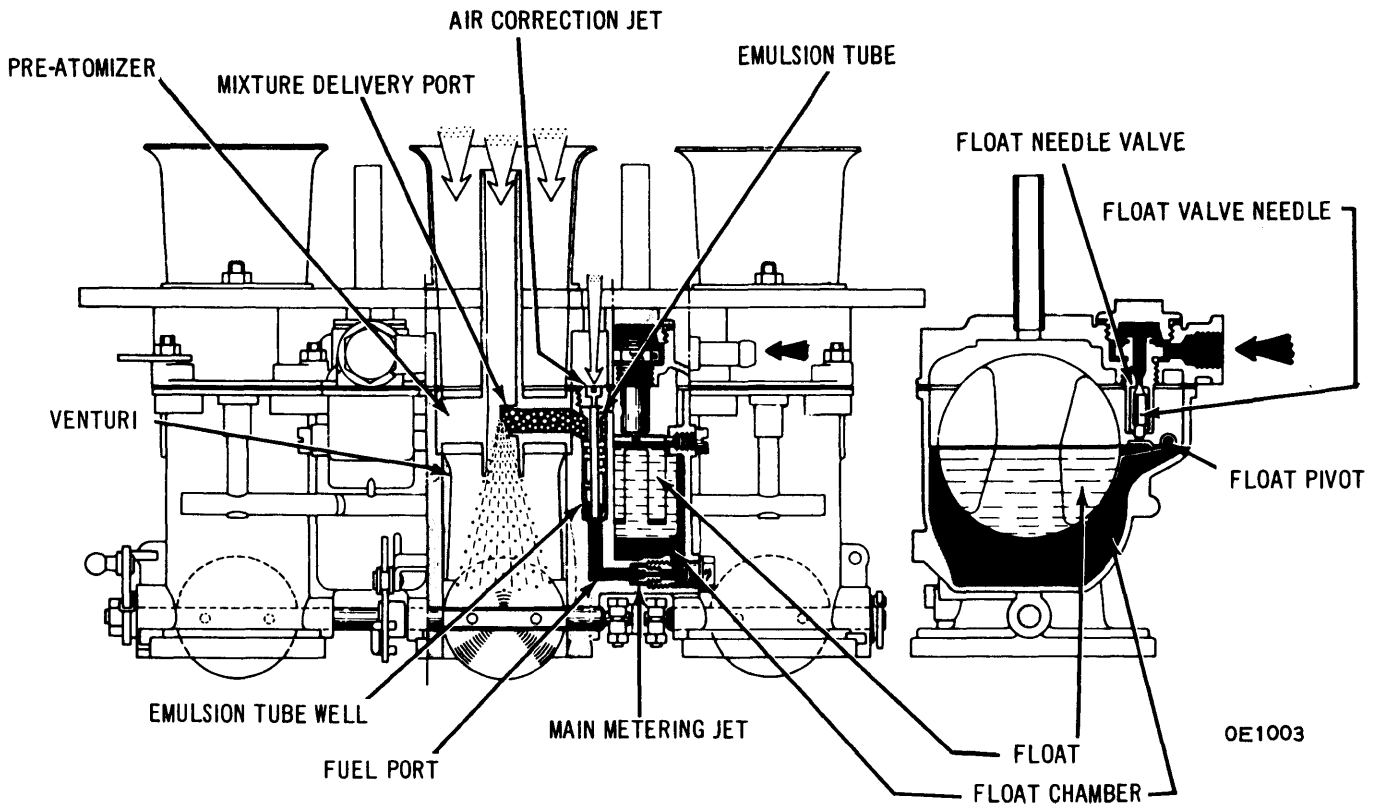
**Idling and Power Transition** – Fuel is drawn from emulsion tube well, through delivery port, to idle jet. At this point air from idle air bleed mixes with fuel and the mixture passes through delivery port to the idle mixture discharge port, downstream of the throttle valves. A tapered mixture screw meters the flow. Just above the throttle valve are two transitional ports which begins to discharge as soon as throttle opens far enough to clear the ports. This provides a smooth transition between idling and higher engine speeds.

### ADJUSTMENT

**Float Level** – Remove stopper screw located on each float chamber. Insert float level gauge Tool P226. Test to be performed on level ground with engine idling. Fuel must register between the two inspection marks on the gauge. If float level is incorrect, remove air cleaners and connecting ducts. The float needle valve may be removed after removal of plug screw. To raise fuel level, insert thicker gasket under float needle valve. To lower fuel level, insert thinner gasket. If unable to achieve correct float level in this manner, further adjustment can be made by bending float anchoring toggle.

**NOTE:** Before adjusting idle, allow engine to reach normal operating temperature. Make sure that point gap, cam angle, and ignition timing are correct before setting idle speed.

**Idle Adjustment** – 1) Make sure that ball joints of carburetor linkage are properly seated and detach connecting links from bellcrank shaft.



WEBER ID 3-BBL. NORMAL RUNNING SYSTEM

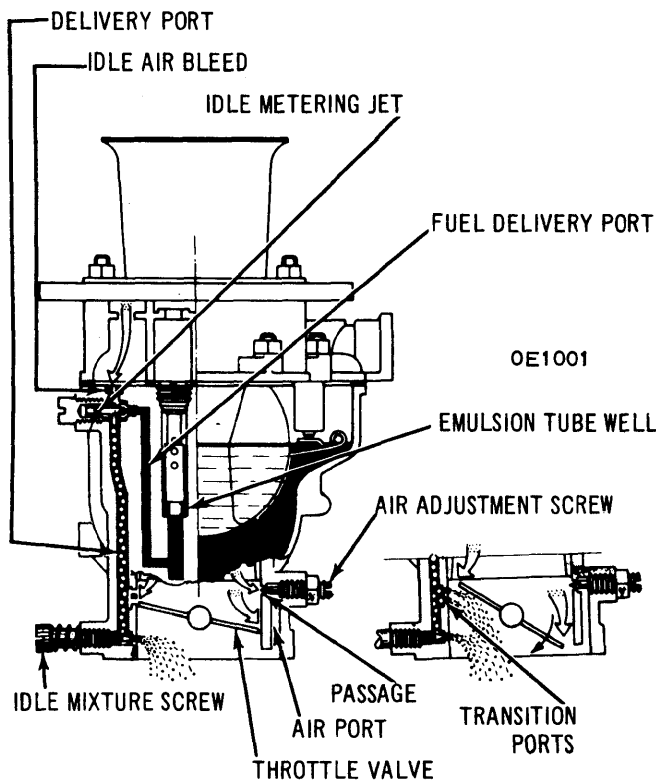
## WEBER 40 IDT 3-BARREL (Cont.)

2) Using suitable air flow gauge, synchronize throttle valves of all throats of carburetors. Perform synchronization at 1200-1400 RPM.

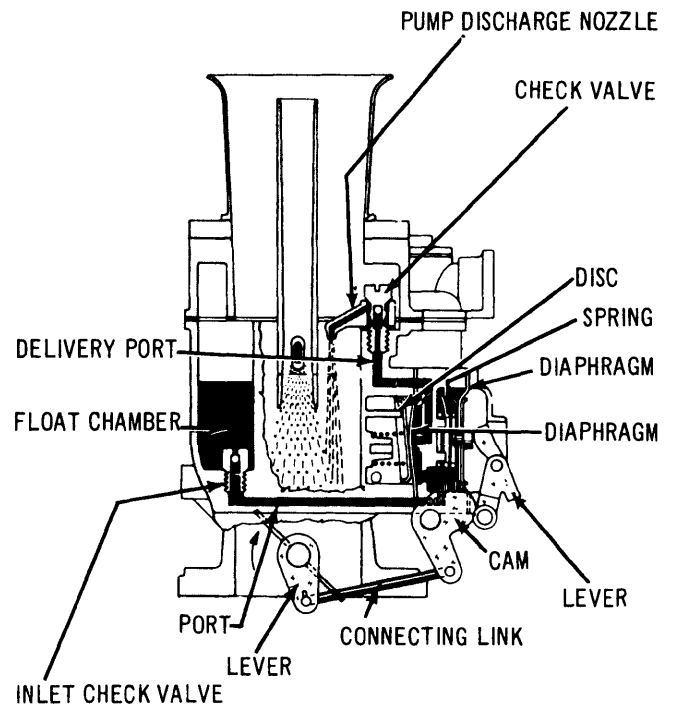
3) Adjust idle mixture screws so that engine runs smoothly and then adjust throttle stop screws to bring idle RPM to approximately 900 RPM.

4) Re-check throttle synchronization, readjust mixture screws, re-check idle speed. Re-connect links with bell-crank shaft.

**CAUTION** - Adjust connecting links so that no pre-load is exerted at connections.



WEBER ID IDLING SYSTEM



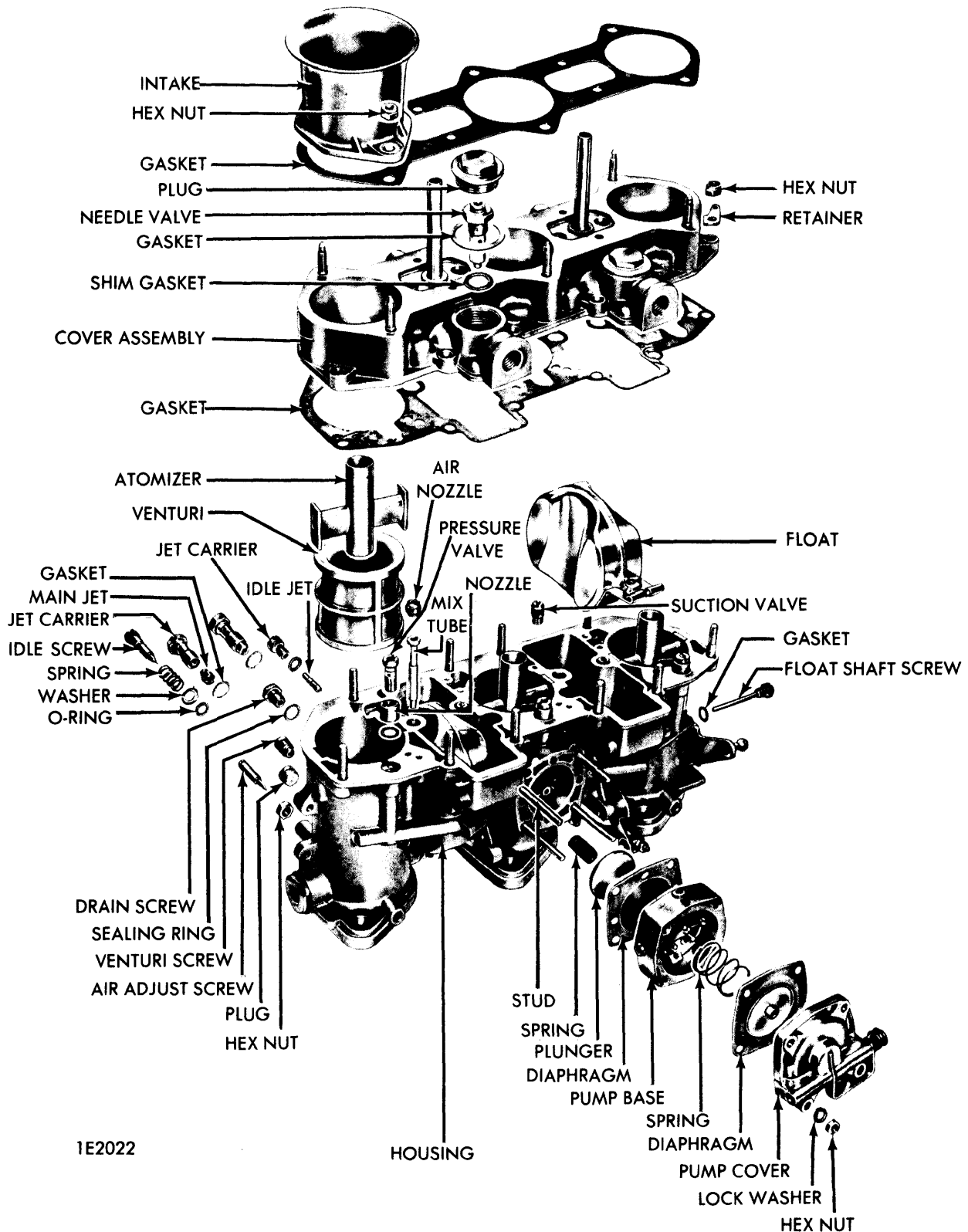
WEBER ID ACCELERATION SYSTEM

### CARBURETOR ADJUSTMENT SPECIFICATIONS

Weber Carb. No.	Idle RPM	Initial Idle Setting	Float Level Setting		Accel. Pump Volume (cc/stroke)
			mm.	in.	
40 IDT 3C	800 - 1000	2	12.5-13.0	.49-.51	.5 ± .1
40 IDT 3CI	800 - 1000	2	12.5-13.0	.49-.51	.5 ± .1

# Weber Carburetors

## WEBER 40 IDT 3-BARREL (Cont.)



1E2022

### WEBER IDT 3-BARREL

## WEBER 40 IDT 3-BARREL (Cont.)

### OVERHAUL

**Carburetor Removal** – 1) Detach pre-heating hose from air cleaner, unsnap fasteners, remove air cleaner element. Remove oil breather hose from oil filler tube, remove condensation hose from bottom of air cleaner housing. Unsnap fasteners at carburetor and remove air cleaner assembly.

2) Remove fuel hoses and unfasten control links from throttle levers. Remove nuts holding carburetor to intake manifold and remove carburetor. Cover engine intake.

*NOTE: Make sure that spring washers do not fall into engine intake.*

3) To install, reverse removal procedure. Clean all sealing surfaces and install new intake gaskets.

**Carburetor Cleaning** – 1) Remove carburetors. Remove air cleaner lower assembly and carburetor top.

2) Remove and clean main jet, air jet, emulsion tube, idle jet, and idle air bleed. Clear all passages with compressed air.

*NOTE: Do not use wires or needles to clean calibrated orifices.*

**Carburetor Disassembly** – 1) Remove carburetors, air cleaner lower assembly, carburetor top, filter body retaining screws and filter body.

2) Remove plug screw and float needle valve. Remove main jet holder, main jet, air adjustment screw, stopper screw, and idle jet. Remove venturi set screws and throttle stop screw.

3) Unscrew air jet and shake out emulsion tube. Remove check valve and pump nozzle. Pull out pre-atomizer and remove venturi.

4) Remove float pin, remove float. Unscrew pump cover retaining nuts and remove cover. Remove diaphragms, lower pump assembly, springs and valve.

5) To reassemble, reverse disassembly procedure. Check radial play of throttle shafts for excessive play. Check diaphragms and replace if necessary. Check all parts for damage. Check jets for proper size.