

SOLEX 34 TBIA 1-BARREL & SOLEX 35 CEEI 2-BARREL

Peugeot 604

DESCRIPTION

The carburetion for the 1980 Peugeot 604 is composed of a 1-barrel primary carburetor (34 TBIA) and a 2-barrel secondary unit (35 CEEI). These carburetors are mounted inline and are both of downdraft design.

The secondary 2-barrel unit is vacuum-controlled, while the primary carburetor operates directly from the throttle linkage. Opening of the secondary carburetor is progressive. With only slight depression of the accelerator pedal, only the 1-barrel carburetor functions, a mechanical stop preventing the secondary carburetor from opening.

As pedal depression increases, stop moves and allows the 2-barrel carburetor to begin operation. Vacuum pick-up for secondary carburetor operation is located at the main venturi of both the carburetors.

The idle system on both carburetors operates continually to ensure smooth transfer of operation when secondary carburetor begins to open. The 34 TBIA unit has an anti-dieseling solenoid cut-off valve. The 35 CEEI has an idle compensating solenoid for vehicles with air conditioning. High altitude models have different internal jets to compensate for differences in air density.

The 34 TBIA features a choke pull-off system, consisting of a cam-lever-link mechanism that is operated by the throttle linkage, intake manifold coolant temperature, engine vacuum, and an expanding type wax element in the choke housing. The choke pull-off offers 2 choke positions during cold engine operation. At idle, choke opening is maintained at a smaller controlled opening; at cold engine acceleration and cruise conditions, a second choke opening provides smooth throttle response and improves fuel economy and emission levels.

The 35 CEEI features a delayed throttle opening to improve cold starting and driveaway performance. It improves fuel economy by avoiding overrich mixtures at idle speed. The system is controlled and actuated by an electro-valve installed in the vacuum feed line to the carburetor's vacuum motor and by a coolant temperature switch, located in the intake manifold passage. The temperature switch is connected to the electro-valve.

When engine temperature is below 104°F (40°C), the vacuum control electro-valve is energized and valve plunger partially closes the vacuum feed line. The vacuum restriction to the vacuum motor produces a delay in throttle plate opening. When temperatures are above 104°F (40°C), the coolant temperature switch cuts off electrical flow to the electro-valve and the plunger returns to the seated position. With full vacuum to the vacuum motor, carburetor throttle plates now open normally in response to both vacuum and mechanical linkage.

Both the 34 TBIA and 35 CEEI carburetors require idle position throttle plate angle adjustment. If the adjustment of the 35 CEEI is incorrect, throttle plate operation and position can be hindered or adversely affected.

CARBURETOR IDENTIFICATION

Carburetor is identified by a metal tag attached to front part of unit on driver's side and is held on by one of the air horn screws.

Application	Carburetor No.	
	Solex 34 TBIA	Solex 35 CEEI
All Models		
Man. Trans.	PEU 262	PEU 264
Auto. Trans.	PEU 263	PEU 264

ADJUSTMENTS

HOT (SLOW) IDLE RPM

See appropriate article in TUNE-UP Service Procedures.

IDLE MIXTURE

See appropriate TUNE-UP SERVICE PROCEDURES article.

THROTTLE CONTROL

- 1) Rotate throttle drum to full open position. Stop should be against washer to opposite side of flat area.
- 2) Loosen lock nuts and turn throttle link to adjust. Clearance of .067" (1.7 mm) should exist between fixed stop and movable stop.
- 3) With engine warmed up, bring release lever against its stop in clockwise direction. Do not allow 1-barrel carburetor throttle plate to open.
- 4) Clearance of .157" (4 mm) should exist between control quadrant stop and return link.

THROTTLE CABLE

- 1) Operate engine until it reaches normal operating temperature. Shut off engine. Press accelerator pedal down completely (wide open throttle).
- 2) Check throttle plate of primary carburetor. Plate should be in wide open throttle position. Adjust throttle cable so cable stop has a .08" (2 mm) clearance when primary carburetor throttle plate is in wide open position.

FLOAT LEVEL

- 1) Fabricate a float position measurement gauge to dimensions shown in Fig. 1. Position gauge over float, allowing float weight to gently compress needle valve ball. Note position of float gauge and float.
- 2) Float should just contact gauge with gauge feet resting upon fuel bowl cover sealing surface. There should be no gap between float and gauge or between gauge feet and fuel bowl cover. DO NOT apply excessive pressure on float gauge to force gauge feet to contact fuel bowl cover.

SOLEX 34 TBIA 1-BARREL & SOLEX 35 CEEI 2-BARREL (Cont.)

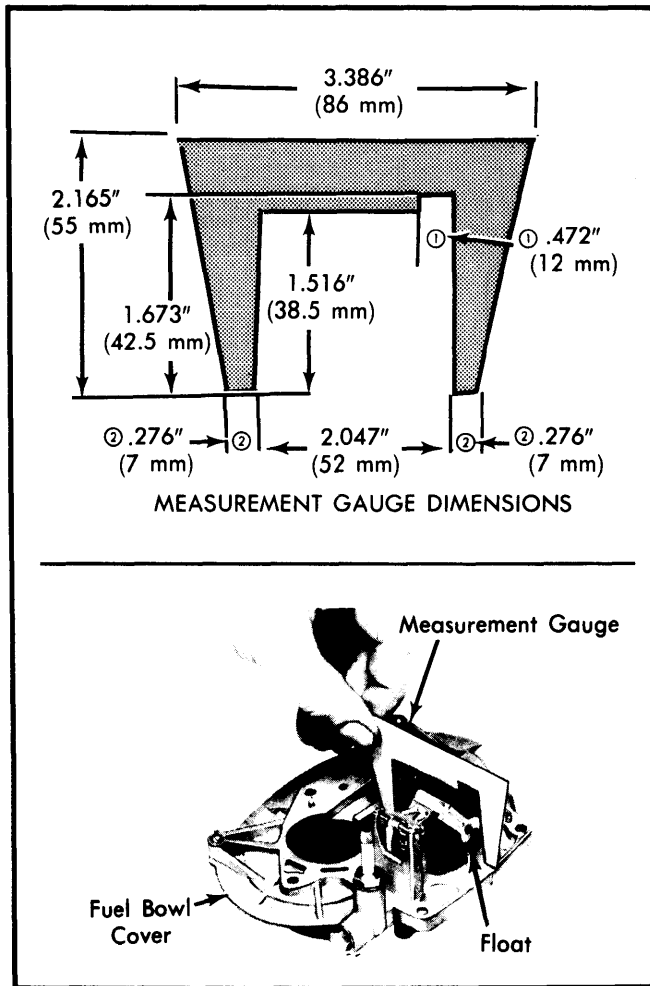


Fig. 1 Float Level Adjustment Showing Fabricated Measurement Gauge

NOTE — Illustration for checking float level shows 35 CEEI carburetor fuel bowl cover as example. Appearance of 34 TBIA is different, but manner in which float level is checked is identical.

3) Adjust float to desired position by bending hinge, using 2 pairs of long-nosed pliers. DO NOT bend at or near float, as this can cause incorrect float alignment in fuel bowl or crack float causing it to leak.

CHOKE PULL-DOWN (34 TBIA ONLY)

1) Remove air cleaner and choke linkage cover plate. Place special tool (Part No. 9763.43) on linkage roller (roller in notch in tool). See Fig. 2. Tool should be against upper housing.

2) With tool in place, insert drill (.295" or 7.5 mm) between choke flap and (flat against) air horn wall. To adjust, loosen lock nut and turn screw. Tighten lock nut when specified clearance is obtained.

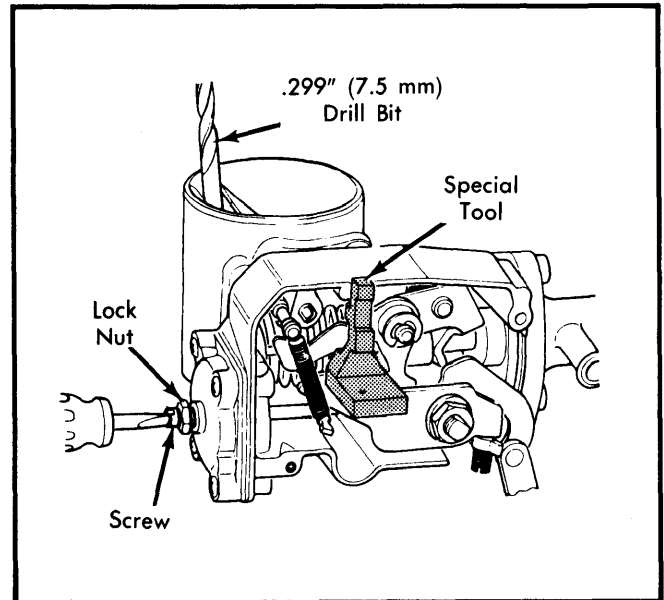


Fig. 2 Installing Special Tool for Choke Pull-Down Adjustment

CHOKE PLATE OPENING POSITION (34 TBIA ONLY)

1) Adjust pivoting roller position by turning adjusting screw to obtain a clearance of .08" (2 mm) between intermediate lever and choke housing. See Fig. 3. Install special tool in reverse position. [See Fig. 5. Turn cam adjusting screw until the roller engages in notch of special tool.

2) Remove special tool and turn cam adjusting screw in one complete additional turn.

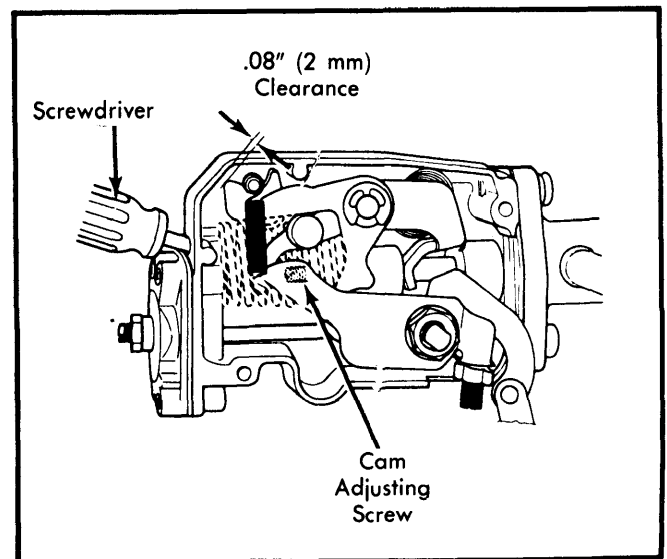


Fig. 3 Adjusting Choke Pivoting Roller Position

1980 Solex Carburetors

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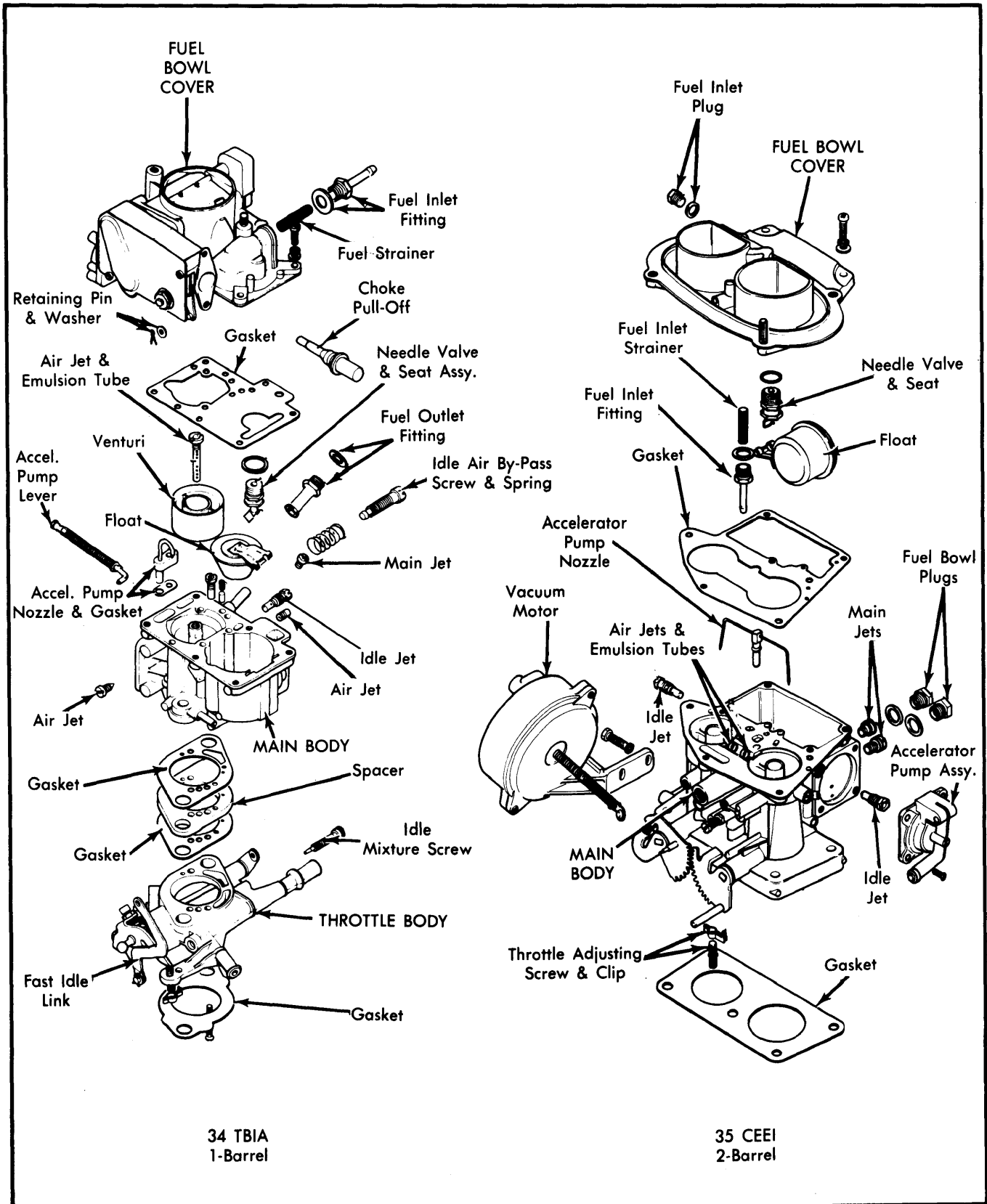


Fig. 4 | Exploded View of Solex Models 34 TBIA and 35 CEEI Carburetors

SOLEX 34 TBIA 1-BARREL & SOLEX 35 CEEI 2-BARREL (Cont.)

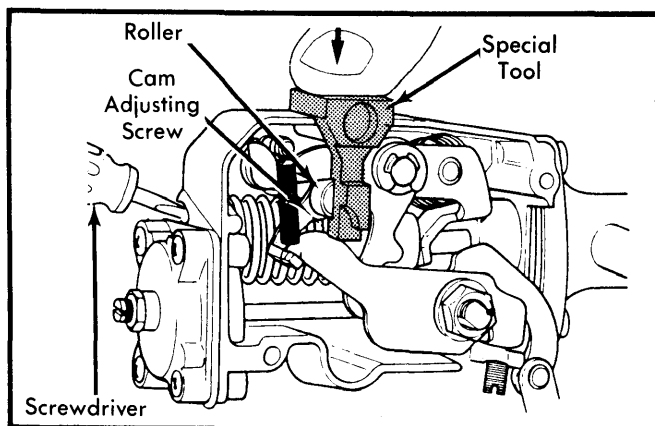


Fig. 5 Adjusting Choke Plate Opening Position

COLD (FAST) IDLE

- 1) Disconnect spring and push lever downward, but do not force. See Fig. 6.
- 2) Start engine and check speed (at normal operating temperature). Adjust to 3100-3200 RPM by turning screw on linkage at bottom of carburetor. Replace choke linkage cover.

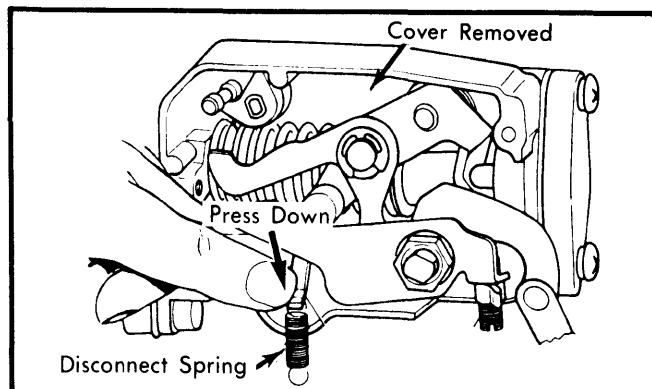


Fig. 6 Fast Idle Adjustment

ACCELERATOR PUMP STROKE

- 1) Back off accelerator pump adjusting rod nut. Turn carburetor upside down and insert a .197" (5 mm) diameter drill bit or gauge between throttle plate and throttle bore wall.
- 2) Adjust accelerator pump adjusting rod nut until nut just contacts accelerator pump arm.

ACCELERATOR PUMP NOZZLE (34 TBIA ONLY)

- 1) Fill carburetor fuel bowl $\frac{1}{2}$ full of gasoline. Operate throttle and note direction of fuel spray from pump nozzle.
- 2) If spray direction was toward base of main well housing, nozzle position is correct. If not, bend nozzle to obtain desired spray direction.

THROTTLE PLATE ANGLE

Adjustment of throttle plate angle, as given by manufacturer, requires purchase of special tools, including a special dial in-

dicator and accessories. Angle should be $3^{\circ} 20'$ for the 34 TBIA or 45° for the 35 CEEI carburetor.

OVERHAUL

DISASSEMBLY

34 TBIA - 1) Remove fuel bowl cover attaching screws. Remove cotter pin attaching fast idle link to throttle and remove fuel bowl cover. Remove screws attaching throttle body to main body and separate assemblies.

2) Remove choke pull-down diaphragm cover, spring and diaphragm. Remove fuel float and fuel inlet valve, seat and gasket. Remove main body gasket, fuel inlet fitting, fuel strainer and inlet fitting gasket.

3) Remove emulsion tube and air jet assembly, and remove main jet from fuel bowl. Remove accelerator pump nozzle, carrier, and gasket. Remove idle shut-off solenoid, idle jet, idle mixture and idle speed control screws, and constant CO idle circuit jet.

4) Disconnect accelerator pump arm at throttle lever rod. Remove pump, spring and diaphragm as an assembly. Remove pump valve and valve holder as an assembly.

5) Remove throttle body from main body. Remove spacer plate, gaskets and idle adjusting screw.

35 CEEI - 1) Remove fuel bowl cover from main body. Remove fuel inlet fitting, gasket and strainer. Remove fuel inlet plug and gasket. Remove hinge pin and float. Remove needle valve, seat assembly and gasket. Set main body gasket.

NOTE - Do not attempt to remove air correction jets or emulsion tube assemblies, as these parts are pressed into the main body to a precise depth.

2) Remove the following parts in order: fuel bowl plugs and gaskets, main jets, idle jets, accelerator pump valve, nozzle carrier, pump housing and diaphragm, throttle motor cover, vacuum diaphragm spring and motor diaphragm, and air conditioning compensating solenoid.

CLEANING & INSPECTION

- Use regular carburetor cleaning solution. Soak components long enough to thoroughly clean all surfaces and passages of foreign matter.
- Do not soak any components containing rubber, leather or plastic materials.
- Remove any residue after cleaning by rinsing components and passages in a suitable solvent.
- Blow out all passages with dry compressed air.

REASSEMBLY

To assemble carburetor, reverse disassembly procedure, using new gaskets and seals. Make sure that all linkage operates smoothly and is not binding or sticking (pay extra attention to full throttle position for sticking or binding). Do not over tighten fuel bowl cover attaching screws.