1974-79 TUNE-UP PROCEDURES
Peugeot 4-Cylinder Diesel

504

ENGINE IDENTIFICATION

Engine number is stamped on left side of engine block, just below cylinder head. All XD 90 engine numbers are 900001 and up, XD 2 engine numbers are 3 500 000 and up.

1977-78 ENGINE CODES

Application	Code
Without A/C	XD4.94 USA
With A/C	XD4.94 USA/AC

1979 ENGINE CODES

Application	Code
Manual Transmission	
Without A/C	XD4.94 USA M4
With A/C	XD4.94 USA M4/AC
Automatic Transmission	
Without A/C	XD4.94 USA A3
With A/C	XD4.94 USA A3/AC

MODEL IDENTIFICATION

VEHICLE IDENTIFICATION NUMBER

Vehicle Identification Number (serial number) is stamped on right inner fender, just behind front strut mounting plate. The first 3 digits indicate vehicle series. The second 3 digits indicate body type and transmission application.

1977-79 VIN CODES

Application	Code
Sedan	
Man. Trans.	AC0
Auto. Trans.	AC5
Station Wagon	
Man. Trans.	DC0
Auto. Trans.	DC5

ENGINE COMPRESSION

With engine at normal operating temperature, remove injectors. Block injection pump stop control in the cut-off position. Install 0-450 psi (0-32 kg/cm²) compression gauge to injector bore of cylinder to be checked. Crank engine for approximately 4 seconds at 300 RPM.

COMPRESSION PRESSURE SPECIFICATIONS

Application	Pressure
1974-78 Models	580-650 psi (40-45 kg/cm²)
1979 Models	362 psi (25.4 kg/cm²)

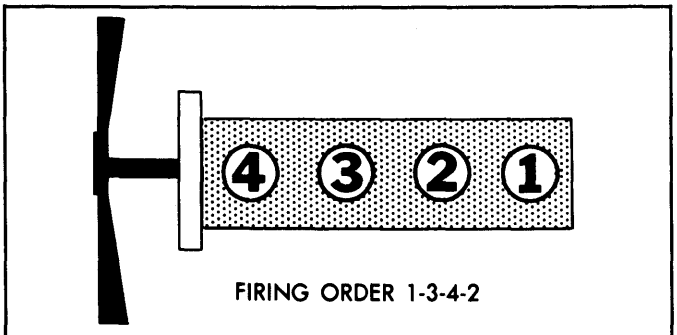

Fig. 1: Diesel Engine Firing Order

VALVE CLEARANCE

Valve clearance must be set with engine cold. To adjust valves, rotate crankshaft until valve listed in first column of VALVE CLEARANCE ADJUSTMENT SEQUENCE table is fully open, then adjust valves listed in second column of table. Valves and cylinders are numbered from REAR to FRONT.

VALVE CLEARANCE ADJUSTMENT SEQUENCE

Exhaust Valve Open	Valves To Adjust
No. 1	No. 3 Intake, No. 4 Exhaust
No. 3	No. 4 Intake, No. 2 Exhaust
No. 4	No. 2 Intake, No. 1 Exhaust
No. 2	No. 1 Intake, No. 3 Exhaust

VALVE CLEARANCE SPECIFICATIONS

Application	Clearance
Intake	.006-.008" (.15-.20 mm)
Exhaust	.010-.012" (.25-.30 mm)

VALVE ARRANGEMENT

I-E-E-I-I-E-E-I - Front-to-rear.

GLOW PLUGS

GLOW PLUG SPECIFICATIONS

Application	Specification
Bosch Type No.	KE/GSA 9/1
Torque	33 ft. lbs. (45 N.m)

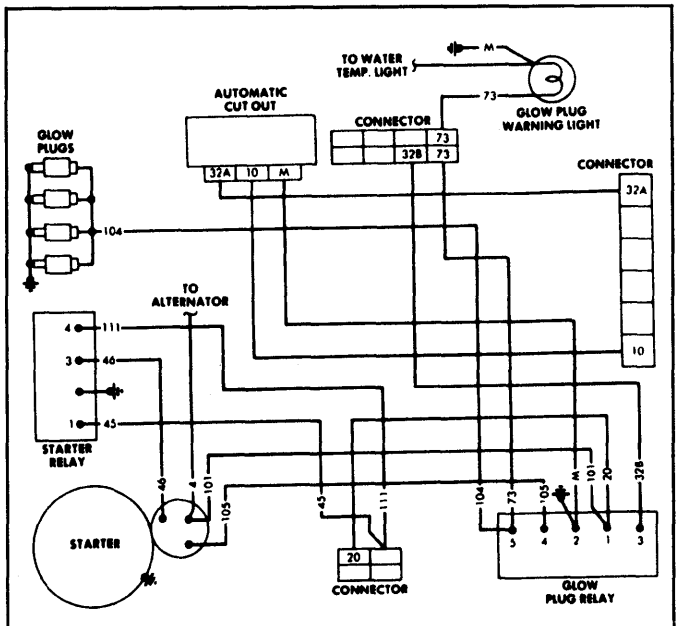

Fig. 2: Schematic of Glow Plug Starting Circuit

ADJUSTMENTS

NOTE: Use Friction Drive Tachometer (Jaegar No. 42.839) and Friction Disc (Jaegar No. 87.645). To read correct idle RPM, it is necessary to divide tachometer reading by 2. Also see Bosch Diesel Fuel Injection article in FUEL SYSTEMS section for additional adjustments.

IDLE SPEED

1974-78 Models with EP/VM Injection Pump - 1) With engine at normal operating temperature, release accelerator cable. Loosen lock nut on fast idle RPM adjustment screw and loosen screw several turns. *See Fig. 3.*

1974-79 TUNE-UP PROCEDURES
Peugeot 4-Cylinder Diesel (Cont.)

2) Loosen lock nut on idle speed adjustment rod on front of pump. Attach friction tachometer using friction disc to fan drive belt. Adjust idle speed to 730 RPM by turning idle adjustment rod.
3) Unscrew fast idle speed adjusting screw until engine speed increases. Tighten fast idle stop screw one full turn and tighten lock nut. Secure accelerator cable, ensuring pedal travel corresponds to full depression.
4) On instrument panel, turn fast idle control cable to minimum position and connect fast idle control cable by bottoming cable clamp against slide link. DO NOT use fast idle stop screw to adjust idle speed.
1974-78 Models With EP/VAC Injection Pump - Idle speed adjustment is accomplished by adjusting deferred injection device. See DEFERRED INJECTION DEVICE adjustment in this article.

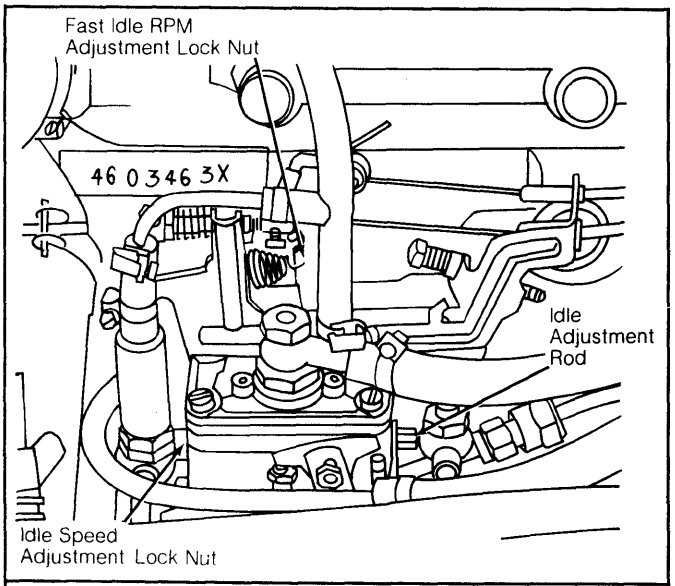

Fig. 3: EP/VM Injection Pump Idle Speed Adjustment

1979 Models - **1)** Warm engine to normal operating temperature. With manual idle control set at minimum position, loosen deceleration screw lock nut (located on front of injection pump cover).
2) Turn deceleration screw counterclockwise until it protrudes 33/64-9/16" (13-14 mm) from front of injection pump cover. Loosen stop screw lock nut and adjust stop screw to obtain specified idle speed.
3) Tighten stop screw lock nut. Turn deceleration screw clockwise until engine speed increases 50 RPM. Turn deceleration screw counterclockwise one full turn and tighten lock nut.
4) Accelerate engine to maximum RPM and release accelerator lever. Repeat this several times and recheck idle speed. If engine stalls when accelerator lever is released, turn deceleration screw 1/4 turn clockwise and tighten lock nut.

DEFERRED INJECTION DEVICE

1974-78 Models With EP/VM Injection Pumps - **1)** Warm engine to normal operating temperature. Turn idle control on instrument panel to minimum position. Disconnect link rod where it connects to deferred injection device accumulator lever.
2) Push accumulator lever to fully open position (minimum engine speed). Adjust idle speed to 730 RPM with a .080" (2.0 mm) throttle lever free travel. *See Fig. 4.*
3) Push accumulator lever back toward accumulator until engine speed just begins to increase. This point is easily ascertained by an appreciable increase in engine noise.
4) Adjust lenght of link rod so that it attaches to accumulator lever at point where engine speed begins to increase. Correct adjustment will be evident by existence of .004" (1.0 mm) clearance between throttle stop and throttle lever.
5) Correct position can also be determined by running characteristics of engine. If link is too long, accumulator is out of circuit and avantanges of accumulator are lost. If link is too short, engine speed is increased at idle, vehicle will have poor acceleration and exhaust will smoke.

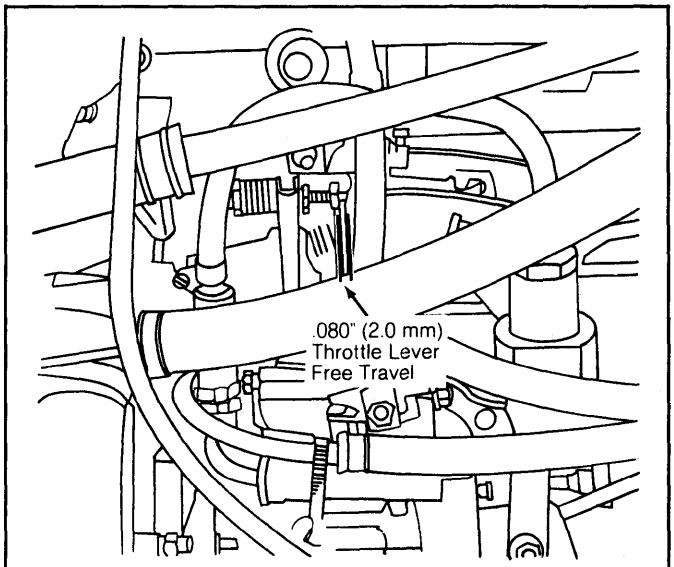

Fig. 4: EP/VM Throttle Stop Adjustment

1974-78 Models With EP/VAC Injection Pumps - **1)** With engine at normal operating temperature, place idle control on instrument panel in minimum position. Loosen lock nuts on accumulator rod and disconnect accumulator rod at accumulator actuating lever.
2) Push accumulator lever to full open position. This position is evident by minimum engine speed. Adjust idle stop screw to obtain proper idle speed of 730 RPM. *See Fig. 5.*
3) Move accumulator actuating lever toward accumulator until engine speed just begins to increase. This position is evident by an increase in engine noise. Mark one side of center nut on adjusting rod.
4) Adjust lenght of rod to allow installation of rod end on accumulator lever without changing position of accumulator actuating lever. Rotate adjusting rod one turn to shorten link by approximately 5/64" (2.0 mm). Hold rod and tighten lock nuts.

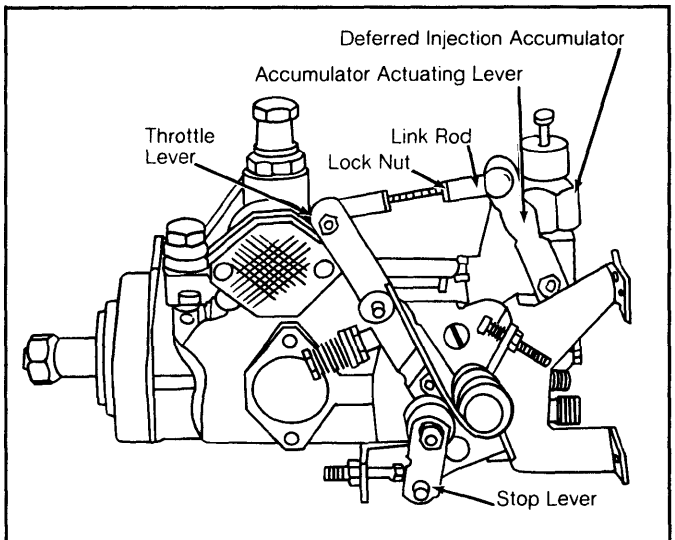

Fig. 5: EP/VAC Injection Pump Deferred Injection Device & Idle Speed Adjustment

1974-79 TUNE-UP PROCEDURES
Peugeot 4-Cylinder Diesel (Cont.)

COLD (FAST) IDLE SPEED

1974-78 Models - Fast idle is properly adjusted when there is a 5/64" (2.0 mm) play between cable pulley and plunger support.

1979 Models - 1) Engine should be at normal operating temperature with acceleration lever resting against idle stop. Adjust cable housing tensioner until a .004" (0.1 mm) feeler gauge can be inserted between idle stop bracket and idle stop nut (position "A"). *See Fig. 6.*

2) With feeler gauge inserted in position "A", adjust cable housing tensioner to obtain a .080" (2.0 mm) clearance between cable clamp and idle stop assembly (position "B"). *See Fig. 6.* Remove feeler gauges.

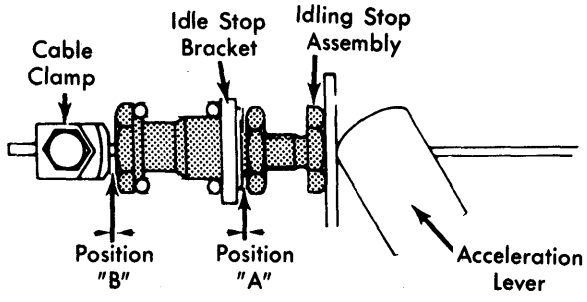

Fig. 6: 1979 Fast Idle Speed Adjustment

FUEL SYSTEM

FUEL INJECTION

1974-78 FUEL INJECTION SPECIFICATIONS

Application	Bosch Type No.
Injection Pump	EP/VM or EP/VAC
Injector Holders	KB.35.SD.593/4
Injectors	DN.OSD 230

1979 FUEL INJECTION SPECIFICATIONS

Application	Roto-Diesel Type No.
Injection Pump	1921.88
Injector Holders	R.KB.35.S.5379
Injectors	RDN.OSDC 6577

Other Data & Specifications - See appropriate Bosch Diesel Fuel Injection article in FUEL SYSTEMS section.