

## TUNE-UP

604

### ENGINE IDENTIFICATION

Engine number is stamped on left side of engine block, directly in front of oil filter. Engine codes are as follows:

#### Engine Code Numbers

Application	Code Number
All Models	
174" (2849 cc) V6	
Manual Transmission .....	151.9 ZM
Automatic Transmission .....	151.9 ZA

### COMPRESSION PRESSURE

With engine at normal operating temperature, disconnect and plug fuel line to carburetor. Lock throttle plate fully open and remove all spark plugs. Crank engine for four seconds on each cylinder to obtain an accurate compression reading. Compression pressure should check approximately as shown in table, with a maximum variation between cylinders of 14.5 psi (1.0 kg/cm<sup>2</sup>).

#### Compression Pressure

Application	Pressure psi (kg/cm <sup>2</sup> )
All Models .....	160 (11.2)

### VALVE CLEARANCE

1) Valves must be set with engine cold. Bring piston of No. 1 cylinder to TDC on ignition stroke. Align distributor rotor with timing mark on distributor housing. Check that slot in crankshaft pulley aligns with "0" mark on timing plate. Adjust the following valves:

#### Adjustment Sequence

Exhaust Valves	Intake Valves
No. 1, No. 3, & No. 6 .....	No. 1, No. 2, & No. 4

2) Bring piston of No. 1 cylinder to TDC at end of exhaust stroke. Rotate crankshaft one full turn. Distributor rotor should now point 180° away from housing timing mark. Slot of crankshaft pulley should again align with "0" mark on timing plate. Adjust valves:

#### Adjustment Sequence

Exhaust Valves	Intake Valves
No. 2, No. 4, & No. 5 .....	No. 3, No. 5 & No. 6

### Valve Clearance Specifications

Valves	Clearance
Intake .....	.004" (.10 mm)
Exhaust .....	.010" (.25 mm)

### VALVE ARRANGEMENT

**Intake Valves** – Center of "V" (Inner Row of Valves in Each Head)

**Exhaust Valves** – Outer Row of Valves in Each Head

### SPARK PLUGS

Application	Gap In. (mm)	Torque Ft. Lbs. (mkg)
All Models .....	.024 (.6)	13 (1.8)

#### Spark Plug Type

Application	Champion No.
All Models .....	BN9Y

### HIGH TENSION WIRE RESISTANCE

Carefully remove high tension wires from spark plugs and distributor cap. Using an ohmmeter, check high tension wire resistance while gently twisting wire. If resistance is not to specification, or fluctuates from infinity to any value, replace wire(s).

#### Resistance (Ohms) Per Wire

Application	Ohms
All Models .....	7000-12,000

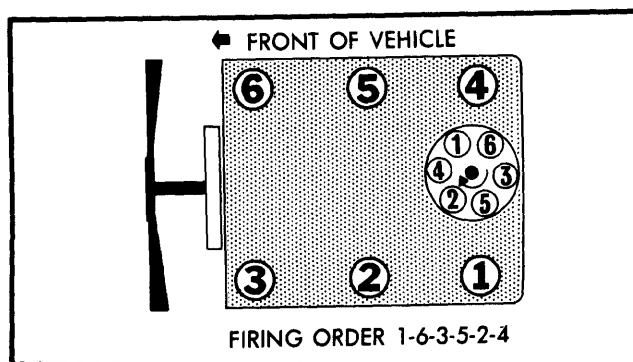


Fig. 1 Firing Order and Distributor Rotation

### DISTRIBUTOR

All models are equipped with breakerless ignition system.

### IGNITION TIMING

1) With engine at normal operating temperature, but not running, connect wires 152 and 152A from air injection electrovalves to ground with jumper wires.

## TUNE-UP (Cont.)

**NOTE** — These electrovalve terminals are connected to the thermostitch, not to the in-line fuse.

2) Be sure idle at this time is within 800-850 RPM. Disconnect and plug advance unit vacuum line. Connect high-voltage sensor of timing light to No. 1 cylinder or No. 6 cylinder.

3) Start engine and adjust timing mark (if necessary) on crankshaft pulley with 10° BTDC mark on timing plate. To adjust, move distributor until marks align. Tighten distributor flange after adjustment.

4) Reconnect line for vacuum advance and remove jumper wire from electro valve leads. Idle speed should now be 900-950 RPM.

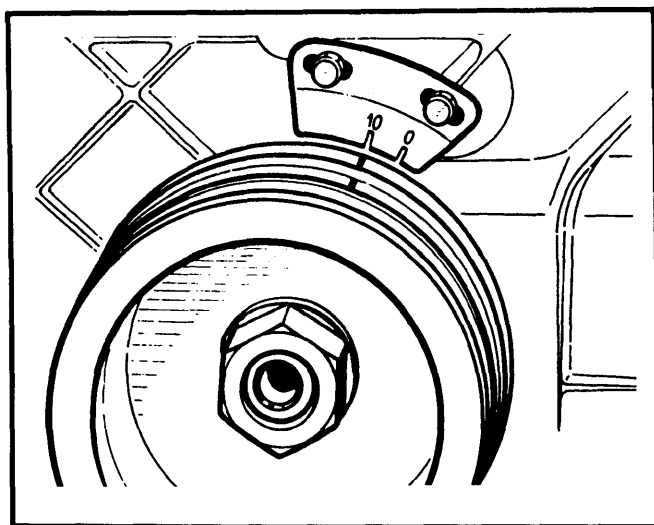


Fig. 2 Timing Mark Location for 604

### Ignition Timing Specifications

Application	Timing
All Models .....	10° BTDC

### IDLE SPEED & MIXTURE

1) Warm engine to normal operating temperature. Connect wires 152 and 152A at air injection system electrovalves to ground with jumper wire. Connect tachometer and insert CO meter probe in tailpipe. Remove air filter and disconnect canister purge hose at valve. Turn air conditioning off.

2) Adjust idle speed to 800-850 RPM with idle speed screw. Adjust idle mixture screw to obtain proper CO%. Repeat procedure as necessary to have both speed and mixture correct.

**NOTE** — Idle adjustments are made using screws on primary carburetor ONLY. DO NOT touch screws on secondary carburetor.

3) Remove ground wire from electrovalves and adjust idle speed if necessary to 900-950 RPM. Reconnect canister purge hose and install air cleaner.

### Idle Speed & CO Level

Application	RPM	CO%
All Models .....	900-950 .....	3.0-4.0

### DECELERATION VALVE

1) Check engine for idle speed of 900-950 RPM with engine at normal operating temperature. Disconnect the vacuum line (with red ring) from the deceleration vacuum unit. Check for 1 mm play between throttle lever and screw.

2) If there is no play present, loosen locknut adjust screw. Then loosen domed nut "1" (See Fig. 3), saving gasket.

3) Disconnect vacuum line (with green ring) from "T" connector leading to deceleration valve. Connect this line to the deceleration vacuum unit where line with red ring was previously removed.

4) Start the engine. Fast idle speed should be within a range of 1450-1500 RPM (1450 RPM preferred). If not within this range, loosen lock nut "2", and adjust screw "3" using a 3 mm Allen wrench.

5) When to specification, tighten locknut "2". Install gasket and domed nut "1". Then remove and reinstall vacuum lines to previous locations (green line to "T" connector of deceleration valve and red line to deceleration vacuum unit).

**NOTE** — Always hold part "6" on deceleration valve whenever tightening or loosening lock nut "4" to prevent damage to valve diaphragm.

6) Loosen lock nut "4" on deceleration valve. Turn threaded rod clockwise until engine speed reaches 1500 RPM. Accelerate engine several times to ensure 1500 RPM speed.

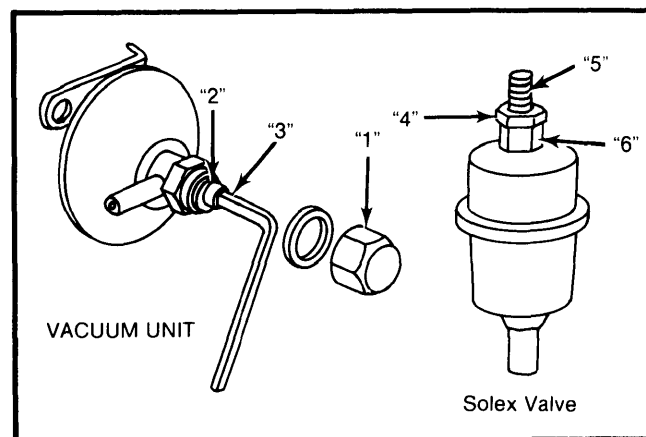


Fig. 3 Adjusting Fast Idle at Deceleration Vacuum Unit and Valve

7) Increase engine speed to 3000 RPM and allow it to decrease. Unscrew threaded rod "5" one-half turn at a time until idle speed returns to 900-950 RPM (900 preferred). Then, turn threaded rod one additional half turn. Tighten lock nut "4".

# 1980 Peugeot V6 Tune-Up

## TUNE-UP (Cont.)

### FUEL PUMP PRESSURE

Pressure ..... 3.6 psi (.25 kg/cm<sup>2</sup>)

### EXHAUST EMISSION SYSTEMS

See EXHAUST EMISSION SYSTEMS section.

## GENERAL SERVICING

### IGNITION

#### DISTRIBUTOR

The 604 SL is equipped with a Bosch breakerless distributor, electronic module and coil.

**Other Data & Specifications** - See Tune-Up article and appropriate article in DISTRIBUTORS & IGNITION SYSTEMS section.

#### IGNITION COIL

Coil Resistance (Ohms@68° F)

Application	Primary	Secondary
All Models .....	33-46 .....	7000-12,000

### FUEL SYSTEMS

#### CARBURETORS

Application	Model
All Models	
Manual Transmission	
Primary Carburetor .....	Solex 34 TBIA PEU 262
Secondary Carburetor .....	Solex 35 CEEI PEU 264
Automatic Transmission	
Primary Carburetor .....	Solex 34 TBIA PEU 263
Secondary Carburetor .....	Solex 35 CEEI PEU 264

**Other Data & Specifications** - See Tune-Up & Solex Carburetors in FUEL SYSTEMS Section.

### ELECTRICAL

#### BATTERY

Application	Amp. Hour Capacity
All Models .....	60

**Battery Location** - Left side of engine compartment.

#### STARTER

All models are equipped with a Ducellier or Paris Rhone starter.

#### ALTERNATOR

All models are equipped with Motorola alternators.

Application	Rated Amp. Output
All Models .....	55

#### ALTERNATOR REGULATOR

All models are equipped with Motorola integral alternator regulators.

### FILTER & CLEANERS

Filter or Cleaner	Service Interval (Miles)
Oil Filter .....	① Replace every 4,500
Air Filter .....	Replace every 12,500
Fuel Filter .....	Replace every 12,500

① - Replace at 1,000 miles, 3,500 miles and then every 4,500 miles.

### BELT ADJUSTMENT

When installing or replacing belt, make two marks on belt 3.93" (100 mm) apart. Then tighten belt until marks are 3.99" (101.5 mm) apart for a used belt or 4.01-4.04" (102-102.5 mm) apart for new belts.

### CAPACITIES

Application	Quantity
Crankcase (Includes Filter) .....	6.3 qts.
Cooling System .....	11.0 qts.
Man. Trans. (SAE 10W-40) .....	3.9 pts.
Auto. Trans. (Dexron) .....	6.1 qts.
Rear Axle (SAE 80) .....	3.2 pts.
Fuel Tank .....	18.5 gals.