

TUNE-UP

Pickup

ENGINE IDENTIFICATION

Engine serial number is stamped on pad between distributor and cylinder head.

MODEL IDENTIFICATION

VEHICLE IDENTIFICATION NUMBER

Vehicle Identification Number is stamped on a plate attached to driver's door lock pillar.

COMPRESSION PRESSURE

Test compression with engine at normal operating temperature, spark plugs removed, throttle valve wide open and engine at cranking speed. Maximum variation between cylinders should not exceed 8.5 psi (.6 kg/cm²).

Application	Compression Pressure @ 300 RPM	
	Min. Pressure psi (kg/cm ²)	Std. Pressure psi (kg/cm ²)
All Models	120 (8.4)	170 (12)

VALVE CLEARANCE

NOTE — Before adjusting valve tappet clearance, check torque of cylinder head and camshaft bolts. Valves should be adjusted every 15,000 miles.

1) Measure valve clearance between rocker arm and valve stem. Position piston number one on compression stroke at TDC. Adjust intake valves 1 and 2 and exhaust valves 1 and 3.

2) Turn crankshaft one full turn until number four cylinder is at TDC. Adjust intake valves 3 and 4 and exhaust valves 2 and 4.

Valve Tappet Clearance

Application	Clearance (Cold)
Intake	.006" (.015 mm)
Exhaust	.010" (.025 mm)

VALVE ARRANGEMENT

All Models
Right Side — All Intake
Left Side — All Exhaust

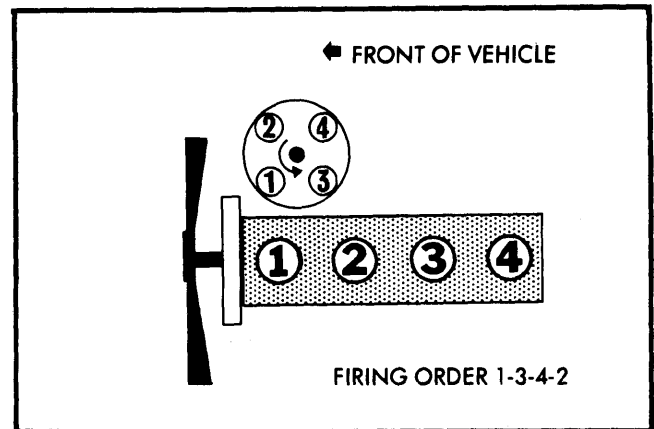


Fig. 1 Firing Order and Distributor Rotation

SPARK PLUGS

Gap030" (.8 mm)
Torque 18-25 ft. lbs. (2.5-3.5 mkg)

Spark Plug Type

Application	AC	NGK
All Models	R44XLS	BPR6ES

HIGH TENSION WIRE RESISTANCE

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

Resistance (Ohms)

Application	Resistance
All Models	25,000-30,000

DISTRIBUTOR

Point Gap016-.020" (.41-.51 mm)
Cam Angle 47-57°
Breaker Arm Spring Tension 14-19 ozs. (400-540 g)
Condenser Capacity20-.24 mfd.

IGNITION TIMING

With engine at normal operating temperature and idle speed set to specification, connect a timing light to No. 1 or No. 4 cylinder. Disconnect distributor vacuum line and plug end. Check timing with marks on crankshaft pulley and rotate distributor to adjust timing.

TUNE-UP (Cont.)

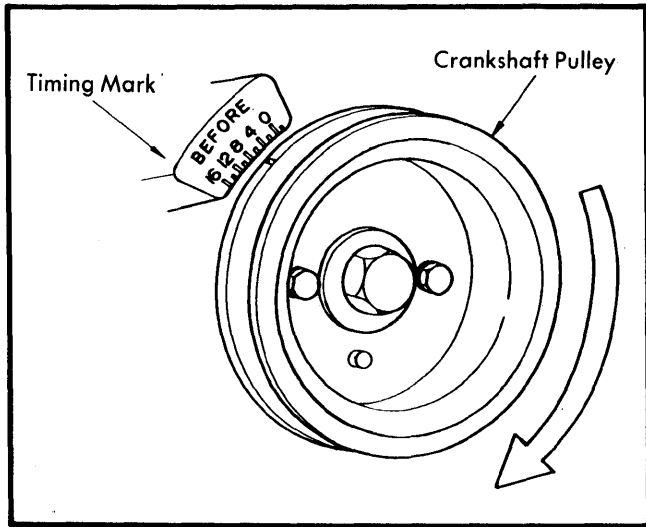


Fig. 2 Ignition Timing Mark Location

Ignition Timing Specifications

Application	Timing
All Models	ⓐ6° BTDC

ⓐ — With distributor vacuum hose disconnected and plugged.

IDLE SPEED & MIXTURE

Set idle with engine at normal operating temperature, valve clearance correctly set and ignition timing to specifications. Choke should be open, air conditioning off and air cleaner installed. Disconnect and plug vacuum lines for distributor, hot idle compensator, and EGR valve. Then proceed as follows:

- 1) Turn idle mixture adjusting screw fully in, then back out 3 turns (Federal) or 1½ turns (Calif.). Set throttle adjusting screw to obtain specified curb idle.
- 2) Reset idle mixture screw to obtain maximum RPM, then reset throttle adjusting screw to achieve specified curb idle. Turn idle mixture screw clockwise (lean) until speed drops to specified lean drop RPM.

4) On California models only, turn mixture screw out ¼ turn, then reset throttle adjusting screw to obtain curb idle.

5) If equipped with air conditioner, turn on to maximum cooling and high blower. Open throttle slightly to allow solenoid to extend, then close throttle. Adjust solenoid screw to give 900 RPM idle.

Idle Speed & Mixture Adjustment

Application	Idle RPM	Lean Drop RPM
Federal		
Man. Trans.	850	800
Auto. Trans.	950	900
Calif.	900	850

COLD (FAST) IDLE RPM

Automatic choke fast idle is adjusted by opening angle of throttle valve on carburetor, rather than by engine speed. Adjust valve opening at 1st step of fast idle cam to 16-18°.

Disconnect and plug distributor, hot idle compensator and EGR valve vacuum hoses after engine warm-up. Fast idle speed should be as follows:

Fast Idle Specifications

Application	Engine Speed
Man. Trans.	3400 RPM
Auto. Trans.	3200 RPM

AUTOMATIC CHOKE

Automatic choke is correctly set when thickest line on the thermostat housing is aligned with index mark on thermostat cover.

FUEL PUMP PRESSURE

Pressure 2.4-3.3 psi (.17-.23 kg/cm²)

EXHAUST EMISSION SYSTEMS

See EXHAUST EMISSION SYSTEMS section.

GENERAL SERVICING

IGNITION

DISTRIBUTOR

All Models are equipped with a Nippondenso single point distributor.

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	1.13-1.53	10,200-13,800

GENERAL SERVICING (Cont.)

FUEL SYSTEMS

CARBURETORS

Application	Model
All Models	Hitachi 2-Bbl.

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

ELECTRICAL

BATTERY

Application	Amp. Hr. Rating
All Models	50

Battery Location - Engine compartment, left side of engine.

STARTER

Hitachi..... Overrunning Clutch

Starter Specifications

Application	Volts	Amps	Test RPM
All Models	12	60	6000

ALTERNATOR

Application	Rated Amp. Output
All Models	35

ALTERNATOR REGULATOR

All models utilize a Hitachi adjustable alternator regulator with an operating voltage of 13.8-14.8 volts.

BELT ADJUSTMENT

Belt deflection for all drive belts should be .4" (10 mm) with pressure applied midway on belt run.

FILTERS

Filter	Service Interval (Miles)
Oil Filter	① Replace every 15,000
Air Filter	Replace every 30,000
Fuel Filter	Replace every 15,000
PCV Valve	Replace every 15,000

① - Replace at 7500 miles and then every 15,000 miles.

CAPACITIES

Application	Quantity
Crankcase (Includes Filter)	4.2 qts.
Cooling System	6.4 qts.
Auto. Trans. (Dexron II)	
Refill	3.5 qts.
Overhaul	5.0 qts.
Man. Trans. (SAE 30)	
Except 4x4	2.7 pts.
4x4	5.3 pts.
Front Axle (SAE 90)	1.7 pts.
Rear Axle (SAE 90)	2.7 pts.
Fuel Tank	13.2 gals.