

TUNE-UP

DL
GL
GT

ENGINE IDENTIFICATION

B21F engine identification number is stamped on left side of engine block.

Application	Code
Man. Trans.	498-848
Auto. Trans.	498-849

COMPRESSION PRESSURE

With engine at normal operating temperature, spark plugs removed, throttle valve wide open and cranking speed at 250-300 RPM, compression should be as follows:

Application	Pressure psi (kg/cm ²)
All Models	128-156 (9-11)

VALVE CLEARANCE

- 1) Valve clearance is adjusted with engine shut off and either warm or cold. Remove valve cover. Turn crankshaft center bolt until camshaft is in position for firing No. 1 cylinder. Both cam lobes should point up at equally large angles. Pulley timing mark should be at 0°.
- 2) Check valve clearance of No. 1 cylinder, using a feeler gauge between camshaft lobe and adjusting discs. Intake and exhaust valves have same clearances.
- 3) If clearances are incorrect adjust by changing thickness of discs, which are available in .05 mm increments from 3.30 to 4.50 mm. Use tools 5022 and 5026 to depress and remove discs.
- 4) After valves for No. 1 cylinder are properly adjusted, rotate crankshaft to firing position for No. 3, No. 4, and No. 2 cylinders in sequence and complete adjustment.

Valve Clearance Specifications

Application	Cold In. (mm)	Hot In. (mm)
Intake and Exhaust		
Checking010-.018 (.25-.45)	.012-.020 (.30-.50)
Setting014-.016 (.35-.40)	.016-.018 (.40-.45)

VALVE ARRANGEMENT

E-I-E-I-E-I-E-I (front to rear).

SPARK PLUGS

Application	Gap In. (mm)	Torque Ft. Lbs. (mkg)
All Models028 (.7)	15 (2.0)

Spark Plug Type

Application	Bosch No.
All Models	WR7DS

DISTRIBUTOR

All models are equipped with Breakerless Electronic Ignition System and no adjustments are required.

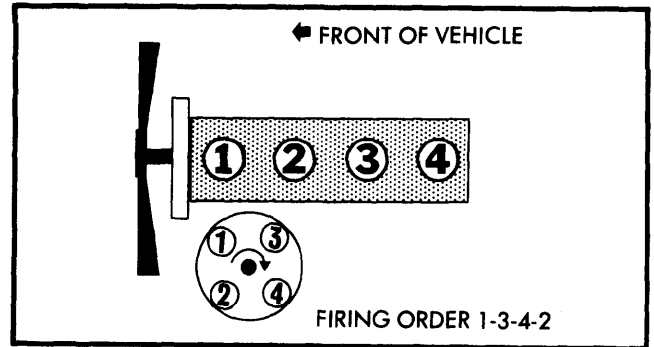


Fig. 1 Firing Order and Distributor Rotation

IGNITION TIMING

Connect timing light and tachometer. Disconnect and plug vacuum hose at distributor. Use idle air adjusting screw to set idle speed to specified timing RPM. Rotate distributor to set timing, then reconnect vacuum hose and reset idle.

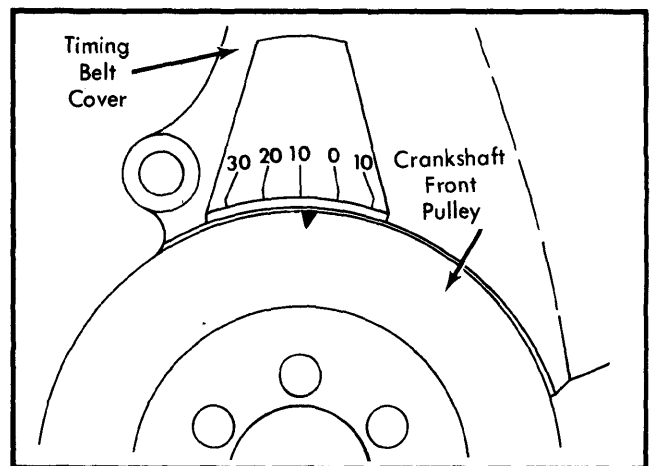


Fig. 2 Timing Mark Location

Ignition Timing Specifications

Application	RPM	Timing
All	700-800	⊙8° BTDC

⊙ — With distributor vacuum hose disconnected and plugged.

IDLE SPEED & MIXTURE

1) Disconnect oxygen sensor wire at connector. Attach CO meter at fitting on exhaust pipe before catalytic converter. Adjust idle with knob on throttle body.

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TUNE-UP (Cont.)

2) Check CO level. If necessary, adjust with Allen wrench through hole in fuel distributor. Reconnect oxygen sensor wire and check that CO level drops below 1%. Readjust idle speed if necessary, then remove test equipment.

Idle Speed & CO Level

Application	RPM	CO%
All Models	900-1000	①1.5-3.0

① — With sensor disconnected. With sensor connected, level should be below 1%.

FUEL PUMP PRESSURE

Pressure 64-74 psi (4.5-5.2 kg/cm²)

EXHAUST EMISSION SYSTEMS

See EXHAUST EMISSION SYSTEMS section.

GENERAL SERVICING

DISTRIBUTOR

All models are equipped with Bosch Electronic Ignition System.
Other Data & Specifications - See Tune-Up article and appropriate article in DISTRIBUTORS & IGNITION SYSTEMS section.

FUEL SYSTEM

FUEL INJECTION

All models are equipped with Bosch Lambda CIS fuel injection with oxygen sensor.

Other Data & Specifications - See Tune-Up and Bosch Lambda CIS Fuel Injection in FUEL SYSTEMS Section.

ELECTRICAL

BATTERY

Application	Amp. Hour Rating
All Models	70

STARTER

Bosch..... Overrunning Clutch

Starter Specifications

Application	Volts	Amps	Test RPM
All Models	11.5	30-50	5500-7500

ALTERNATOR

All models are equipped with Bosch alternators.

Application	Rated Amp. Output
All Models	55

ALTERNATOR REGULATOR

All models are equipped with Bosch alternator regulators with an operating voltage of 13.0-15.0 volts.

BELT ADJUSTMENT

Application	①Deflection
All Belts2-.4" (5-10 mm)

① — Deflection is with thumb pressure applied midway on longest belt run.

FILTERS

Filter	Service Interval (Miles)
Oil Filter	Replace every 7500
Air Filter	Replace every 30,000
Fuel Filter	Replace every 15,000
Fuel Tank Filter	Replace every 30,000

CAPACITIES

Application	Quantity
Crankcase	4.0 qts.
Cooling System (Includes Heater)	10.0 qts.
Man. Trans. (ATF Type F)	
With Overdrive	2.4 qts.
Without Overdrive	1.6 pts.
Auto. Trans. (ATF Type F)	7.3 qts.
Rear Axle (SAE 90)	3.4 pts.
Fuel Tank	15.8 gals.