

1974-79 TUNE-UP PROCEDURES

Lancia 4-Cylinder

1-55

1976-78 Beta

ENGINE IDENTIFICATION

Engine identification number is found on top edge of firewall, in engine compartment.

ENGINE CODES

Application	Code
1800 cc	
Federal	828 A1.040.6
California	828 A1.031.6

MODEL IDENTIFICATION

VEHICLE IDENTIFICATION NUMBER

Vehicle Identification Number appears on left side of instrument panel, and visible through windshield. Chassis number also appears on trailing edge of left door.

VIN CODES

Application	Code
Coupe	828 AC.1
Sedan	828 CB.6
HPE	828 AF.1

ENGINE COMPRESSION

With engine at normal operating temperature, remove spark plugs and disconnect lead from ignition coil. Starting with cylinder No. 1 (front of engine), check compression by cranking engine with accelerator pedal fully depressed. Maximum allowable variation between cylinders not to exceed 10%.

COMPRESSION PRESSURE SPECIFICATIONS

Application	psi (kg/cm ²)
All Models	114 (8.0)

VALVE CLEARANCE

1) Remove air cleaner, choke control valve, spark plug wires, and intermediate tubing and EGR valve. Remove both valve tappet covers. Turn crankshaft to bring cylinder No. 1 to TDC of compression stroke (camshaft lobes pointing upward).

2) Use feeler gauge to check and note clearance at intake and exhaust valves. Adjustment are made through the use of shims. Recheck clearance after adjustment. Repeat procedure for each cylinder.

VALVE CLEARANCE SPECIFICATIONS

Application	Intake In. (mm)	Exhaust In. (mm)
All Models016-.019 (.41-.48)	.018-.021 (.45-.51)

VALVE ARRANGEMENT

Left Side - All Intake.
Right Side - All Exhaust.

SPARK PLUGS

SPARK PLUG SPECIFICATIONS

Application	Specification
Gap023-.027" (.58-.68 mm)

SPARK PLUG TYPE

Application	Champion No.
All Models	N9Y

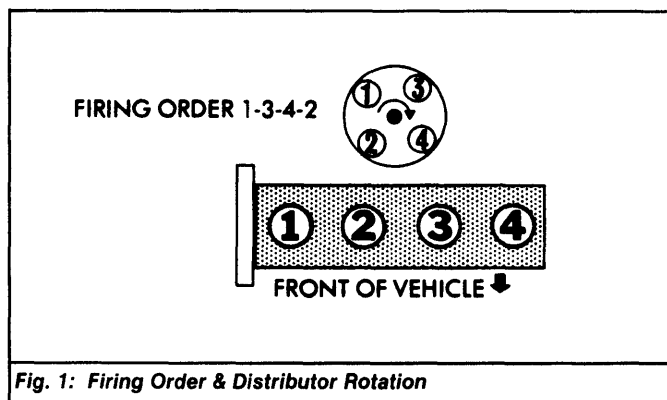


Fig. 1: Firing Order & Distributor Rotation

DISTRIBUTOR

Models are equipped with Marelli single-point distributors.

DISTRIBUTOR SPECIFICATIONS

Application	Specification
Point Gap	
Exc. Calif.012-.019" (.30-.48 mm)
Calif.015-.017" (.38-.43 mm)
Dwell Angle	52-58°

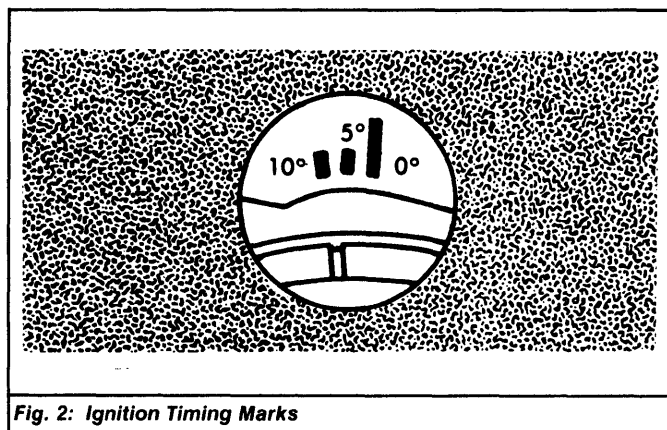


Fig. 2: Ignition Timing Marks

IGNITION TIMING

1) Turn front wheels fully right to gain access to right wheelwell. Remove rubber plug from inner fender panel. Connect timing light and warm engine to normal operating temperature.

2) Set engine at 850 RPM and check idle setting. Increase engine to 3600 RPM and check advance setting. Adjust distributor position as necessary to attain settings. Recheck timing after adjustment.

IGNITION TIMING SPECIFICATIONS

Application	Idle	Advance
Calif.	10°BTDC	28°BTDC
Exc. Calif.	TDC	36°BTDC

IDLE SPEED & MIXTURE

1) Warm engine until normal operating temperature is reached (cooling fan cuts in). With air cleaner and cover installed, set air cleaner to summer position (reset to appropriate season after adjustment).

2) Using pliers, pinch off air injection hose to exhaust manifold (between diverter valve and non-return valves). After cooling fan cuts out, turn idle speed adjusting screw to obtain smoothest engine operation at specified RPM.

3) Insert exhaust gas analyzer probe into tail pipe. If CO% level is not to specification, use idle adjusting screw to bring it within range.

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Lancia 4-Cylinder (Cont.)

Recheck idle speed. It should remain within specifications. Remove pliers from air injection hose. Engine speed should increase 50 RPM.

IDLE SPEED & CO% LEVEL SPECIFICATIONS

Application	RPM	CO%
All Models	800-850	1.5-2.5

COLD (FAST) IDLE RPM

After setting curb idle, depress fast idle checking button (located near right front suspension mounting in engine compartment). Hold button down while opening and closing throttle. Fast idle should register with specifications. If necessary, adjust fast idle RPM with fast idle screw.

COLD (FAST) IDLE SPECIFICATION

Application	RPM
All Models	1550-1650

FUEL PUMP

Electric fuel pump is located under floor panel on right-hand rear side of car.

EXHAUST EMISSION SYSTEMS

See appropriate articles in EXHAUST EMISSION SYSTEMS section.

IGNITION SYSTEM

DISTRIBUTOR

Models are equipped with Marelli single-point distributors.

Other Data & Specifications - See Marelli Distributor article in DISTRIBUTORS & IGNITION SYSTEMS section.

FUEL SYSTEM

CARBURETORS

CARBURETORS

Application	Model
All Models	Weber 32 DATRA

Other Data & Specifications - See appropriate Weber Carburetor article in FUEL SYSTEMS section.