

# 1974-79 TUNE-UP PROCEDURES

## Austin 4-Cylinder

### 1974-75 Austin Marina

#### ENGINE IDENTIFICATION

Engine number is stamped on right side of cylinder block, or on metal plate attached to right side of cylinder block.

#### MODEL IDENTIFICATION

#### VEHICLE IDENTIFICATION NUMBER

Vehicle Identification Number is stamped on a plate attached to left hood lock platform.

#### ENGINE COMPRESSION

Check compression with engine at normal operating temperature and all spark plugs removed. Compression pressure should be 170 psi (11.9 kg/cm<sup>2</sup>). Compression variance between highest and lowest cylinder should not exceed 20%.

#### VALVE CLEARANCE

Valves are adjusted with engine off and at normal operating temperature.

#### VALVE CLEARANCE SPECIFICATIONS

Application	Clearance In. (mm)
All Models	.013 (.33)

#### VALVE ARRANGEMENT

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

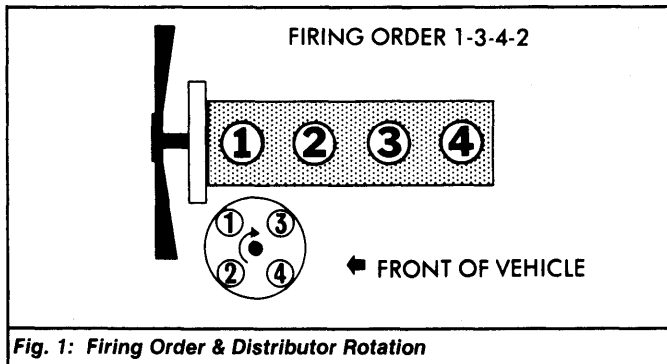


Fig. 1: Firing Order & Distributor Rotation

#### SPARK PLUGS

#### SPARK PLUG SPECIFICATIONS

Application	Specification
Gap	.034-.036" (.8-.9 mm)
Torque	30 ft. lbs. (41 N.m)

#### SPARK PLUG TYPE

Application	Champion No.
All Models	N9Y

#### DISTRIBUTOR

#### DISTRIBUTOR SPECIFICATIONS

Application	Specification
Point Gap	.014-.016" (.35-.40 mm)
Dwell Angle	57-63°
Breaker Arm Spring Tension	20-24 ozs. (567-680 g)
Condenser Capacity	.18-.24 mfd.

#### IGNITION TIMING

Set timing with vacuum advance disconnected and plugged, engine at normal operating temperature, and running at 1500 RPM.

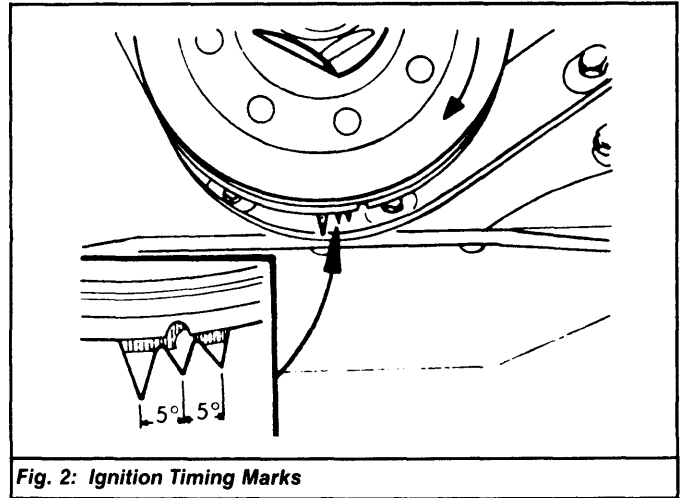


Fig. 2: Ignition Timing Marks

#### IGNITION TIMING SPECIFICATIONS

Application	RPM	Timing
1974 Models	800	6°BTDC
1975-76 Models	900	8°BTDC
1977-79 Models		
Federal	800	8°BTDC
Calif.	900	8°BTDC

#### IDLE SPEED & MIXTURE

**1974 Models** - Warm engine to normal operating temperature. Ensure ignition timing, point gap, and valve clearance are correctly set. Remove air cleaner and check oil in carburetor for proper level. Connect tachometer and exhaust gas analyzer to vehicle. Turn throttle adjusting screw and jet adjusting screw alternately to adjust idle speed and CO% level to specifications.

#### IDLE SPEED & CO% LEVEL SPECIFICATIONS

Application	RPM	CO%
1974 Models	850	2.0 Max.
1975 Models	850	4.5-6.5

#### COLD (FAST) IDLE RPM

**1974 Models** - With engine at normal operating temperature and air cleaner removed, pull choke cable out until arrow on fast idle cam is positioned under fast idle adjusting screw. Turn fast idle adjusting screw to obtain engine speed of 1200-1300 RPM.

**1975 Models** - Adjust throttle stop screw until clearance between fast idle pin and cam is .025" (0.6 mm).

#### DOWNSHIFT LINKAGE ADJUSTMENT

**1974 Models** - 1) With carburetor set at correct idle speed, clearance between crimped stop and outer cable collar should be .063" (1.5 mm). Remove line pressure take-off plug. Install Combination Tachometer and Pressure Gauge (18G677Z).

2) With engine at idle, parking brakes set and transmission in Drive, transmission line pressure should be 50-60 psi (3.5-4.2 kg/cm<sup>2</sup>). Increase engine speed to 1000 RPM. Pressure should increase to 70-80 psi (4.9-5.6 kg/cm<sup>2</sup>).

3) If pressure increase is less than 20 psi (1.4 kg/cm<sup>2</sup>), reset cable adjuster to increase length of outer cable. If pressure increase is greater than 20 psi (1.4 kg/cm<sup>2</sup>), reset adjuster to shorten length of outer cable.

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## Austin 4-Cylinder (Cont.)

### EXHAUST EMISSION SYSTEMS

See appropriate articles in EXHAUST EMISSION SYSTEMS section.

### IGNITION SYSTEM

#### DISTRIBUTOR

All models are equipped with Lucas single-point distributors.

**Other Data & Specifications** - See Lucas Distributors in DISTRIBUTORS & IGNITION SYSTEMS section.

#### IGNITION COIL

##### IGNITION COIL SPECIFICATIONS

Application	Resistance (Ohms)
Primary .....	1.43-1.56
Ballast Resistor (Loom) .....	1.3-1.4

### FUEL SYSTEM

#### CARBURETORS

##### CARBURETOR

Application	Model
1974 Models	
Man. Trans. ....	S.U. HIF6 AUF494 1-Bbl.
Auto. Trans. ....	S.U. HIF6 AUF495 1-Bbl.
1975 Models .....	Zenith-Stromberg 175 Cd5t 1-Bbl.

**Other Data & Specifications** - See appropriate S.U. Carburetor or Zenith-Stromberg Carburetor article in FUEL SYSTEMS section.