1974-79 TUNE-UP PROCEDURES
Ford Motor Co. 4-Cylinder

1974-78 Capri, Capri II

ENGINE IDENTIFICATION

Engine code is located on bottom line of vehicle identification plate, which is riveted to top of right fender apron.

ENGINE CODES

Application	Code
1974 Models	NA
1975-78 Models	YA

MODEL IDENTIFICATION

VEHICLE IDENTIFICATION NUMBER

Vehicle Identification Number is located on vehicle identification plate, which is riveted to top of right fender apron. Number is also stamped on driver's side windshield pillar and can be seen through windshield.

ENGINE COMPRESSION

Check compression pressure with battery fully charged and engine at normal operating temperature. Remove all spark plugs and set carburetor throttle plates in wide open position. Crank engine at least 5 compression strokes and note highest reading cylinder. Lowest reading cylinder must be at least 75% of highest reading cylinder.

VALVE & HYDRAULIC LIFTER CLEARANCE

NOTE: Hydraulic lifter adjustment is not a part of regular maintenance, but should be performed after cylinder head overhaul.

1974 Models - Check or adjust valve clearance with engine cold. Turn crankshaft clockwise until high point of camshaft is up for valve to be checked. Insert feeler gauge from valve side.

1975-78 Models - 1) Rotate camshaft until cam lobe of valve to be checked is up. Position Valve Spring Compressor (T74P-6565-B) under camshaft and over rocker arm end of hydraulic lash adjuster. **2)** Compress hydraulic lifter to fully collapsed position and insert feeler gauge (from valve side) between cam lobe and rocker arm. If clearance is not within specifications, inspect rocker arm, valve spring, camshaft and hydraulic lifter for wear and replace worn part(s).

VALVE CLEARANCE

Application	Clearance In. (mm)
1974 Models	
Intake	.008" (.20)
Exhaust	.010" (.25)
1975-78 Models	
Base of Lobe-to-Rocker Arm	.035-.055 (.09-1.4)
Leak-Down Rate	2-8 Seconds

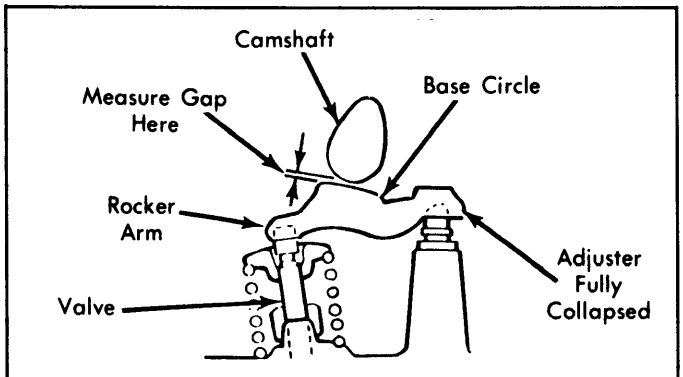

Fig. 1: Checking Hydraulic Lifter Clearance

VALVE ARRANGEMENT

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

SPARK PLUGS

SPARK PLUG SPECIFICATIONS

Application	Specification
Gap	.034" (.86 mm)
Torque	10-15 ft. lbs. (14-20 N.m)

SPARK PLUG TYPE

Application	Autolite No.
1974-77 Models	AGRF-42
1978 Models	AWRF-42

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 wires. If resistance is not to specifications, or fluctuates from infinity to any value, replace high tension wire(s).

HIGH TENSION WIRE RESISTANCE

Application	Resistance (Ohms)
All Models	25,000-30,000

DISTRIBUTOR

Models are equipped with Bosch single-point distributors or Bosch electronic ignition system.

DISTRIBUTOR SPECIFICATIONS

Application	Specification
Point Gap	.025-.027" (.58-.69 mm)
Dwell Angle	37-41°
Breaker Arm Spring Tension	17-21 ozs. (525-650 g)
Condenser Capacity	.18-.26 mfd.

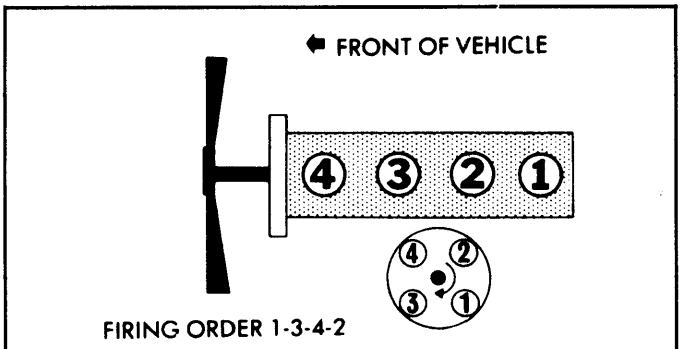

Fig. 2: Firing Order & Distributor Rotation

IGNITION TIMING

Check or adjust ignition timing with engine at normal operating temperature, idle speed reduced to 600 RPM, and distributor vacuum hose(s) disconnected and plugged.

IGNITION TIMING SPECIFICATIONS

Application	Timing
1974-77 Models	[1]
1978 Models	
Man. Trans.	6°BTDC
Auto. Trans.	20°BTDC

[1] - See emission control/tune-up decal for specifications.

1974-79 TUNE-UP PROCEDURES
Ford Motor Co. 4-Cylinder (Cont.)

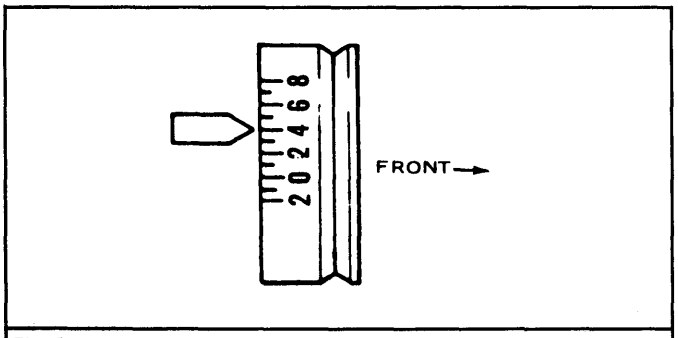

Fig. 3: Ignition Timing Marks

HOT (SLOW) IDLE RPM

1974 Models - 1) Warm engine to normal operating temperature. Check or adjust ignition timing. Disconnect carburetor decel valve hose and plug end of decel valve fitting.
2) Place manual transmission in Neutral (automatic transmission in Drive). With air cleaner installed, adjust idle speed to specifications by turning idle adjusting screw.
3) Place heater in maximum heat position and reconnect all vacuum hoses. Disconnect air injection supply hose at check valve and disconnect evaporative canister purge line from air cleaner.
4) Check idle CO% level and, if necessary, adjust to specifications. If necessary, repeat adjustment procedure until both idle speed and CO% level are correct.
1975-78 Models - 1) With air cleaner removed and vacuum hoses plugged, check timing and adjust if necessary. Reconnect distributor vacuum advance hose. Disconnect and plug EGR valve vacuum hose.
2) Remove spark delay valve, if equipped, and route primary vacuum hose directly to distributor vacuum advance. Leave distributor retard connected (if equipped).
3) Turn A/C off and place manual transmission in Neutral (automatic transmission in Drive). On models without throttle stop solenoid, adjust curb idle screw in or out to obtain specified idle RPM. See IDLE SPEED SPECIFICATIONS table.
4) On models with throttle stop solenoid, energize solenoid to extend solenoid plunger. Adjust solenoid plunger contact screw to obtain higher specified RPM. De-energize solenoid and hold plunger into solenoid and adjust idle RPM using screw located on throttle body. Open throttle and allow plunger to extend.

IDLE SPEED SPECIFICATIONS

Application	RPM
1974-77 Models	[1]
1978 Models	
Man. Trans.	850
Auto. Trans.	750

[1] - See emission control/tune-up decal for specifications.

IDLE MIXTURE

NOTE: When taking readings, air cleaner must be in place. Each time idle speed is adjusted, Thermactor air injection system must be connected.

1974 Models - See HOT (SLOW) IDLE RPM adjustment procedure in this article.
1975-78 Models - 1) With engine at normal operating temperature and idle speed correct, disconnect air cleaner-to-vapor canister hose. If applicable, disconnect PCV-to-air cleaner hose and cap air cleaner connection. Disconnect Thermactor by-pass valve air hose at check valve.
2) Using Adapter (T75L-9600-A), attach propane gas bottle to air cleaner at vapor canister hose nipple. Place manual transmission in Neutral (automatic transmission in Drive).
3) With engine at idle speed, richen mixture (using bottled gas) to obtain maximum RPM. Continue to richen mixture until RPM drops. If speed does not drop with valve fully open, check propane gas bottle supply.
4) If RPM gain is within specification given on emission control/tune-up decal, remove propane adapter and reconnect all hoses. Recheck idle speed and mixture settings.
5) If RPM gain was HIGHER than specified, richen mixture screw (without injecting gas) until RPM increase is equal to the excess increase. Remove limiter cap if necessary to obtain excess RPM. Readjust idle speed after each mixture screw adjustment.

NOTE: If increase was 80 RPM and desired increase was 50 RPM, adjust mixture screw rich for 30 RPM increase.

6) If RPM gain was LOWER than specified, lean mixture screw (without injecting gas) until RPM decrease is equal to the RPM lag. Readjust idle speed after each mixture screw adjustment.

NOTE: If increase was zero RPM and desired increase was 20 RPM, adjust mixture screw lean for a 20 RPM loss.

COLD (FAST) IDLE RPM

1974 Models - With engine at normal operating temperature, connect both vacuum hoses to distributor together. Disconnect and plug vacuum line to EGR valve. Manually rotate fast idle cam until fast idle screw rests firmly against shoulder of first cam step. Adjust fast idle screw to obtain specified RPM.
1975-78 Models - 1) Set fast idle with engine at normal operating temperature, ignition timing set to specifications and EGR vacuum hose disconnected and plugged. Remove spark delay valve (if equipped) and route primary vacuum hose directly to distributor vacuum advance.
2) Turn A/C off and place manual transmission in Neutral (automatic transmission in Drive). Set throttle so fast idle adjusting screw contacts kickdown step of choke cam, and adjust screw to obtain specified RPM.

FAST IDLE SPECIFICATIONS

Application	RPM
1974 Models	1900
1975-77 Models	1800
1978 Models	
Federal	
Man. Trans.	1600
Auto. Trans.	1800
Calif.	1800

ACCELERATOR & KICKDOWN LINKAGE ADJUSTMENT

1974-77 Models - 1) Remove air cleaner. Depress and hold accelerator pedal to full throttle position. Turn throttle adjusting nut counterclockwise until carburetor is just in wide open throttle position. Operate accelerator pedal several times to ensure full throttle can be obtained. Install air cleaner.
2) To adjust kickdown cable on vehicles with automatic transmission, depress and hold accelerator pedal in wide open throttle position. Place transmission in full kickdown position.
3) Loosen nut "A" and adjust nut "B" until there is a clearance of .02-.08" (0.5-2.0 mm) between carburetor linkage kickdown lever and throttle operating shaft. *See Fig. 4*. Tighten nuts and operate linkage to ensure that full transmission kickdown can be obtained.

1974-79 TUNE-UP PROCEDURES
Ford Motor Co. 4-Cylinder (Cont.)

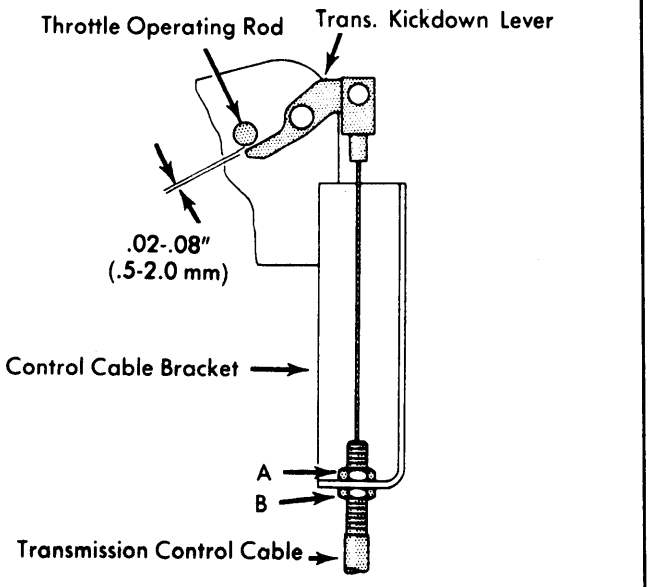

Fig. 4: Kickdown Cable Adjustment

FUEL PUMP

Make all tests at normal operating temperature, at idle speed, and with transmission in Neutral. When making pressure test, pinch off pump-to-tank fuel return line.

FUEL PUMP SPECIFICATIONS

Application	Specification
Pressure	3.5-5.5 psi (.25-.39 kg/cm²)
Volume (Minimum)	1 pt. in 25 sec.

EXHAUST EMISSION SYSTEMS

See appropriate articles in EXHAUST EMISSION SYSTEMS section.

IGNITION SYSTEM

DISTRIBUTOR

Models are equipped with Bosch single-point distributors or Bosch electronic ignition system.

Other Data & Specifications - See appropriate Bosch ignition system article in DISTRIBUTORS & IGNITION SYSTEMS section.

IGNITION COIL

IGNITION COIL SPECIFICATIONS

Application	Resistance (Ohms)
Primary	
1974-76 Models	1.0-2.0
1977-78 Models	1.3-1.6
Secondary	
1974-76 Models	7000-13,000
1977-78 Models	7000-9300

FUEL SYSTEM

CARBURETOR

CARBURETOR

Application	Model
1974-77 Models	Motorcraft 5200 2-Bbl.
1978 Models	Motorcraft 2150 2-Bbl.

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