1974-79 TUNE-UP PROCEDURES
Pantera V8

1974 Pantera

ENGINE IDENTIFICATION

Engine is identified by a tag located under ignition coil mounting bolt. Tag has codes which identify model year, calendar year, month of production, and change level number.

ENGINE TAG BREAKDOWN

Code	Application
First Row: 351 C 74 1	
351	351" Engine
C	Plant Code (Cleveland)
74	Model Year
1	Change Level
Second Row: 4 E 623 AG	
4	Year of Production
E	Month of Production
623 AG	Engine Code (351 "C" 4-Bbl.)

MODEL IDENTIFICATION

VEHICLE IDENTIFICATION NUMBER

Vehicle Identification Number is stamped on a metal tag located in upper left hand corner of instrument panel and visible through windshield.

VIN CODE BREAKDOWN

Character	Application
First	Ghia Operations
Second	Assembly Plant
Third & Fourth	Car Model
Fifth & Sixth	Month/Year Built
Seventh & Remaining	Serial Number

COMPRESSION PRESSURE

Check compression with all spark plugs removed and engine warm. Crank engine through at least 5 compression strokes before taking reading. Maximum compression variation should not exceed 25% between highest and lowest cylinders.

VALVE ARRANGEMENT

E-I-E-I-E-I-E-I - Left bank, front-to-rear.
I-E-I-E-I-E-I-E - Right bank, front-to-rear.

SPARK PLUGS

SPARK PLUGS

Application	Specification
Gap	.035"
Torque	15-20 ft. lbs. (20-27 N.m)

SPARK PLUG TYPE

Application	Autolite No.
All Models	ARF-42

DISTRIBUTOR

All models are equipped with Motorcraft dual-point distributors.

DISTRIBUTOR

Application	Specification
Point Gap	.020" (.51 mm)
Cam Angle	[1] 32-35°
Breaker Arm Spring Tension	17-21 ozs. (480-595 g)
Condenser Capacity	.21-.25 mfd.

[1] - Cam angle reading is made with both point sets combined.

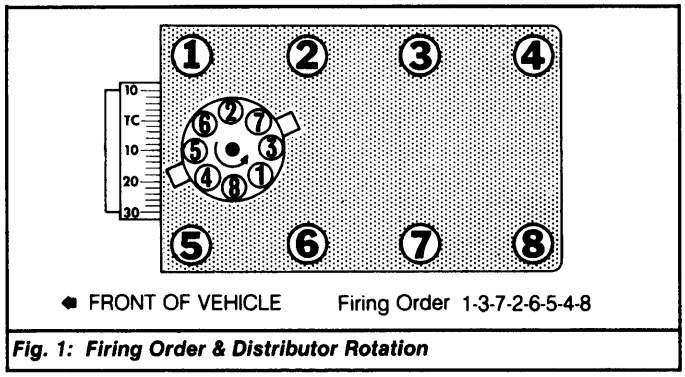

Fig. 1: Firing Order & Distributor Rotation

IGNITION TIMING

Warm engine to normal operating temperature. Set timing with idle speed at 600 RPM and distributor vacuum hose disconnected and plugged.

IGNITION TIMING SPECIFICATIONS

Application	Timing
All Models	20°BTDC

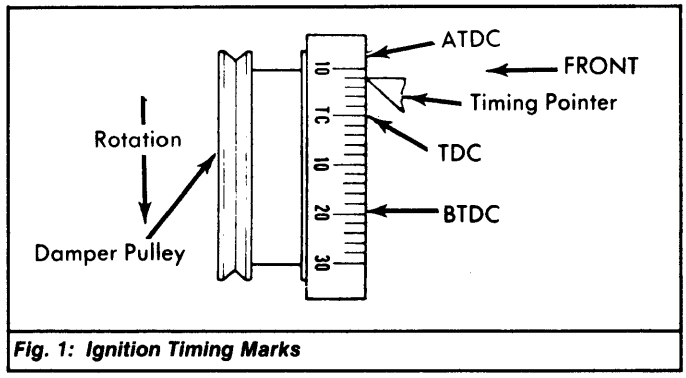

Fig. 1: Ignition Timing Marks

HOT (SLOW) IDLE RPM

1) With engine at normal operating temperature, check timing and distributor vacuum advance and retard. Place transmission in Neutral and turn air conditioning off. With air cleaner installed, disconnect throttle solenoid at bullet connector.
2) Adjust idle speed screw to obtain lower RPM specified. See emission control/tune-up decal for specifications. Reconnect solenoid and extend plunger. Adjust screw on solenoid bracket to obtain higher RPM specified.

IDLE MIXTURE

Warm engine to normal operating temperature. Connect exhaust analyzer to vehicle. Turn idle mixture adjusting screws equally, within range of limiter caps, until correct idle CO% level is obtained. Reset idle speed. If correct CO level cannot be achieved remove idle limiter caps and repeat procedure.

COLD (FAST) IDLE RPM

Warm engine to normal operating temperature. With air cleaner removed and tachometer attached, manually rotate fast idle cam until adjusting screw rests on specified step of cam. Turn adjusting screw in to out until specified idle RPM is obtained.

FAST IDLE SPECIFICATIONS

Application	RPM
All Models	1300-1350

1974-79 TUNE-UP PROCEDURES
Pantera V8 (Cont.)

AUTOMATIC CHOKE

AUTOMATIC CHOKE SETTING

Application	Setting
All Models	Index

FUEL PUMP

FUEL PUMP SPECIFICATIONS

Application	Specification
Pressure	5-7 psi
Volume	1 pint in 20 sec.

EXHAUST EMISSION SYSTEMS

See appropriate articles in EXHAUST EMISSION SYSTEMS section.

IGNITION SYSTEM

All models are equipped with Motorcraft dual-point distributors.

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

IGNITION COIL

Application	Resistance (Ohms)
Primary	1.40-1.54
Secondary	7600-8800

FUEL SYSTEM

CARBURETOR

CARBURETOR

Application	Model
All Models	Motorcraft 4300 4-Bbl.

Other Data & Specifications - See Motorcraft Carburetors in FUEL SYSTEMS section.