

E. O.
10/15

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-10-26
Relating to Approval of New Motor Vehicles

FORD MOTOR COMPANY

Pursuant to the authority vested in the Air Resources Board by Sections 39150 and 39151 of the Health and Safety Code; and

Pursuant to the authority vested in the undersigned by Section 39023 of the Health and Safety Code;

IT IS ORDERED AND RESOLVED: That Ford Motor Company exhaust emission control systems for 1974 model year light-duty motor vehicles are approved for the engine family described below:

Engine Family: 400-2V (White)

Engine: 400 CID

Exhaust Emission Control System: Air Injection and Exhaust Gas Recirculation.

Ford (A/T-3)

Custom 500, Galaxie 500 LTD, LTD Brougham

Mercury (A/T-3)

Monterey, Monterey Custom, Marquis, Marquis Brougham

Torino (A/T-3)

Torino, Gran Torino, Gran Torino GT, Gran Torino X,
Gran Torino Brougham
Torino Station Wagon, Gran Torino Station Wagon
Torino Squire Station Wagon
Ranchero 500, Ranchero Squire, Ranchero GT

Montego (A/T-3)

Montego, Montego MX, Montego MX Brougham
Montego MX Station Wagon, Montego Villager Station Wagon

Cougar (A/T-3)

XR-7

Section 39152, Part I, Division 26 of the California Health and Safety Code requires that a decal be affixed to the side window which discloses the highest emissions from the certification fleet for that vehicle for which approval has been granted by the Board.

The following are the recommended values to be listed on the decal:

<u>Engine Family</u>	<u>Hydrocarbons Grams per Mile</u>	<u>Carbon Monoxide Grams per Mile</u>	<u>Nitrogen Oxides Grams per Mile</u>
400-2V	3.0	36	1.6

According to the California Assembly-Line Test Procedure for 1974 Model Light-Duty Gasoline Powered Vehicles, these values shall be in effect during the first calendar quarter of model production and not to exceed 30 days thereafter. Not more than one month after the first and each succeeding calendar quarter of production, the exhaust emissions shown on the window decal shall be the average quality audit values for the engine family of the previous calendar quarter of production.

Section B3 of the above procedure requires the manufacturer to submit to the Executive Officer before the start of the model-year, a list of the engine components and control systems affecting emissions to be functionally checked and the procedure for performing these checks.

In accordance with Section III E. of the California Exhaust Emission Standards and Test Procedures for 1973 through 1976 Models Gasoline-Powered Light-Duty Motor Vehicles, the manufacturer is required to inform the Air Resources Board of any production changes which will affect emissions.

Supplemental information sheets are attached to this order which include tune-up specifications and emission control system data.

The Department of Motor Vehicles, the California Highway Patrol and the Bureau of Automotive Repair of the Department of Consumer Affairs will be notified of this approval by copy of this order and attachment.

Executed at Sacramento, California, this 15 day of October, 1973.

JOHN A. MAGA
Executive Officer

APPLICATIONS: Torino, Torino S.W., Ranchero, Montego, Montego S.W.,
Cougar, Ford, Mercury,
 IW: 4500, 5000 Trans. C-6 and FMX
 axle ratio: 3.00

CARBURETOR: D4AE-9510-HB DISTRIBUTOR: D40E-12127-CA

TIMING: 12° BTC RPM: 500 GEAR: Neutral

IDLE RPM (WO/AC): 625 GEAR: Drive

IDLE RPM (W/AC): 625 GEAR: Drive

DISTRIBUTOR PT. DWELL: Not Applicable - Breakerless

SPARK PLUG GAP: .042-.046 TYPE: ARF-42

CHOKE TYPE: Automatic SETTING: 3NR RECOMM. IDLE CO: 0.4%
 max

RATED HP: Est. 172 @3600 NOMINAL C.R.: 8.0:1

RATED TORQUE: Est. 313 @2000

EMISSION CONTROL DEVICE APPLICATION:

DEVICE

CALIBRATION

Air Cleaner Bi-Metal Sensor

With 16 in. Hg input vacuum and 105°F temperature applied to the sensor the output vacuum must be between 5 and 8 in. Hg.

EGR Valve

Poppet Type:

Non Take-Apart

With a 14 in. Hg vacuum applied to the valve chamber, the valve starts to open with approximately 2.9 in. Hg signal vacuum and attains a flow of approximately 22.6 CFM at E2 in. Hg signal vacuum.

EGR Vacuum Control Valve

Two Port PVS:

Starts to open 92 to 98°F.
 Full open 105°F max.

Covac System

Used in conjunction with EGR vacuum control valve (EGR PVS).

Distributor Vacuum Control Valve (Cooling PVS)*

Starts to open 222 to 228°F. Full open 235°F Max.

* Not on Ford and Mercury

ENGINE FAMILY 400-2V CALIB.# 4-17T R12
TRANS. A/T

Thermactor By-Pass Valve

With no vacuum signal applied to the valve, the valve outlet blocked, and 10 CFM flowing in the valve inlet, the pressure at the outlet must be 11.3 in.-Hg.

Choke

Hot Air Heated, Electrically Assisted Choke
Thermostatic coil deflection:
1.17 to 1.23 angular degrees
per °F.

Positive Crankcase Ventilation
(PCV) Valve

Flow Check Points

	Vacuum (in. Hg)	CFM	
		Max.	Min.
1.	<u>3</u>	<u>4.65</u>	<u>3.35</u>
2.	<u>5</u>	<u>3.15</u>	<u>2.35</u>
3.	<u>10</u>	<u>2.90</u>	<u>2.40</u>

CALIBRATION DESCRIPTION

CALIFORNIA

ENGINE FAMILY: 400-2V

CALIB. # 4-17T R19

TRANS: A/T

APPLICATIONS: Torino, Torino, S.W., Ranchero, Montego, Montego S.W., Cougar, Ford, Mercury, I.W. 4500, 5000; Trans: C-6 axle ratio: 3.00

CARBURETOR: D4ME-9510-BA

DISTRIBUTOR: D40E-12127-CA

TIMING: 12° BTC

RPM: 500

GEAR: Neutral

IDLE RPM (WO/AC): 625

GEAR: Drive

IDLE RPM (W/AC): 625

GEAR: Drive

DISTRIBUTOR PT. DWELL: Not Applicable - Breakerless

SPARK PLUG GAP: .042-.046

TYPE: ARF-42

CHOKE TYPE: Automatic

SETTING: 3NR

RECOMM. IDLE CO: 0.4%

RATED HP: TBD

NOMINAL C.R.: 8.0:1

RATED TORQUE: TBD

EMISSION CONTROL DEVICE APPLICATION:

DEVICE

CALIBRATION

Air Cleaner Bi-Metal Sensor

With 16 in. Hg input vacuum and 105°F temperature applied to the sensor the output vacuum must be between 5 and 8 in. Hg.

EGR Valve

Tapered Stem: With a 14 in. Hg vacuum applied to the valve chamber, the valve starts to open with approximately 2.5 in. Hg signal vacuum and attains a flow of approximately 22.4 CFM at 12 in. Hg signal vacuum.

EGR Vacuum Control Valve

Two Port PVS:
Starts to open 92 to 98°F.
Full open 105°F max.

COVAC System

Used in conjunction with EGR vacuum control valve (EGR PVS).

Distributor Vacuum Control Valve (Cooling PVS)*

Starts to open 222 to 228°F.
Full open 235°F max.

* Not on Ford and Mercury

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ENGINE FAMILY 100-2V

CALIB. # 4-17T R19
TRANS: A/T

Thermactor By-Pass Valve

With no vacuum signal applied to the valve, the valve outlet blocked, and 10 CFM flowing in the valve inlet, the pressure at the outlet must be 11.3 in. Hg.

Choke

Hot Air Heated, Electrically Assisted
Thermostatic coil deflection:
1.17 to 1.23 angular degrees per °F.

Positive Crankcase Ventilation
(PCV) Valve

Flow Check Points

	Vacuum (in. Hg)	CFM	
		Max.	Min.
1.	<u>3</u>	<u>4.65</u>	<u>3.35</u>
2.	<u>5</u>	<u>3.15</u>	<u>2.35</u>
3.	<u>10</u>	<u>2.90</u>	<u>2.40</u>

Spark Delay Valve # 5

63.5 + 13.5 seconds required for vacuum to drop in a 22.75 cu. in. vacuum tank from 16 in. Hg to 8 in. Hg.