

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-10-29
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 (Blue)
- Engine: 400 CID
- Exhaust Emission Control System: Air Injection and Exhaust Gas Recirculation
- Models: Ford (A/T-3)

LTD Wagon, Country Squire Station Wagon,
Ranch Wagon, Country Sedan Wagon

Mercury (A/T-3)

Monterey Station Wagon, Marquis Station Wagon,
Colony Park Station Wagon

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 | 2.0 | 35 | 1.8 |

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 7th day of December, 1973.

JOHN A. MAGA
Executive Officer

CALIFORNIA

ENGINE FAMILY: 400-2V

CALIB. # 4-17T R

TRANS: A/T

APPLICATIONS: Ford S.W., Mercury S.W.; IW: 5500#

Trans. C-6

axle ratio: 3.00

CARBURETOR: D4ME-9510-CA

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: .052-.056

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° temperature applied to the sensor the output vacuum must be between 5 and 8 in. Hg.

EGR Valve

Tapered Stem: Non Take-apart
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).

ENGINE FAMILY 400-2V CALIB.# 4-17T R51
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> |

Spark Delay Valve - #5 White

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