

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER A-16-78  
Relating to Certification of New Motor Vehicles

MAZDA MOTOR CORPORATION

Pursuant to the authority vested in the Air Resources Board by the Health and Safety Code, Division 26, Part 5, Chapter 2; and

Pursuant to the authority vested in the undersigned by Health and Safety Code Sections 39515 and 39516 and Executive Orders G-45-3 and G-45-4;

IT IS ORDERED AND RESOLVED: That 1987 model-year Mazda Motor Corporation exhaust emission control systems are certified as described below for gasoline-powered passenger cars:

| <u>Engine Family</u> | <u>Displacement<br/>Cubic Inches (Liters)</u> | <u>Exhaust Emission Control Systems<br/>(Special Features)</u>  |
|----------------------|---|---|
| HTK1.3V5HAB8         | 79 (1.3)                                      | Air Injection - Pump<br>Exhaust Gas Recirculation<br>Three-Way Catalyst with Closed Loop<br>(Electronic Fuel Injection) |

Vehicle models, transmissions, engine codes and evaporative emission control families are listed on attachments.

The following are the emission standards for this engine family:

| <u>Hydrocarbons<br/>Grams per Mile</u> | <u>Carbon Monoxide<br/>Grams per Mile</u> | <u>Nitrogen Oxides<br/>Grams per mile</u> |
|--|---|---|
| 0.39                                   | 7.0                                       | 0.7                                       |

The following are the certification emission values for this engine family:

| <u>Hydrocarbons<br/>Grams per Mile</u> | <u>Carbon Monoxide<br/>Grams per Mile</u> | <u>Nitrogen Oxides<br/>Grams per Mile</u> |
|--|---|---|
| .09                                    | 0.6                                       | 0.4                                       |

BE IT FURTHER RESOLVED: That the listed models were certified to the optional NOx emission standard thereby making the vehicle manufacturer subject to Section 1960.1.5 of Title 13, California Administrative Code which includes recall liability for emission control components up to 7 years or 75,000 miles if found defective by the Executive Officer.

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with "California Evaporative Emission Standards and Test Procedures for 1978 and Subsequent Model Gasoline-Powered Motor Vehicles".

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the Board's "Specifications for Fill Pipes and Openings of Motor Vehicle Fuel Tanks" (Title 13, California Administrative Code, Section 2290) for the aforementioned model-year.

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the Board's high altitude requirements and highway emission standards as stipulated in "California Exhaust Emission Standards and Test Procedures for 1981 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles".

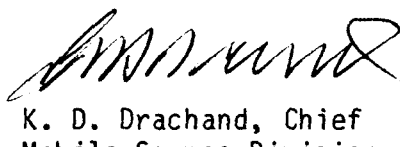
BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the "California Motor Vehicle Tune-Up Label Specifications" (Title 13, California Administrative Code, Section 1965) for the aforementioned model year.

BE IT FURTHER RESOLVED: That for the listed vehicles, the manufacturer has submitted and the Executive Officer hereby approves the materials to demonstrate certification compliance with the Board's emission control system warranty regulations (Title 13, California Administrative Code, Section 2035 et seq.).

Vehicles certified under this Executive Order must conform to all applicable California emission regulations.

The Bureau of Automotive Repair will be notified by copy of this order and attachment.

Executed at El Monte, California this 30<sup>th</sup> day of June, 1986.

  
K. D. Drachand, Chief  
Mobile Source Division

Manufacturer Mazda Motor Corporation Engine Family HTK1.3V5HAB8  
 Evaporative Family B Engine Type R-2  
 Liters (CID) 1.3 (40.0 x 2)

ABBREVIATIONS

Ignition System

CA-Centrifugal Advance  
 EEC-Electronic Engine Control  
 -Electronic Ignition  
 ESAC-Electronic Spark Advance  
 Control  
 VA-Vacuum Advance  
 VR-Vacuum Retard

Exhaust Emissions Control System

AIP-Air Injection-Pump  
 AIV-Air Injection-Valve  
 CL-Closed Loop  
 EGR-Exhaust Gas Recirculation  
 EM-Engine Modification  
 OC-Oxidation Catalyst System  
 SPL-Smoke Puff Limiter or  
 Throttle Delay  
 TOC-Trap Oxidizer, Continual  
 TOP-Trap Oxidizer, Periodical  
 TR-Thermal Reactor  
 TWC-Three-Way Catalyst System

Special Features

CCV-Combustion Chamber Valve  
 CFI-Central Fuel Injection  
 DID-Diesel Injection-Direct  
 DIP-Diesel Injection-Prechamber  
 EFI-Electronic Fuel Injection  
 IC-Intercooler or aftercooler  
 MFI-Mechanical Fuel Injection  
 TC-Turbocharger

Fuel System

CFI, CL, DID, DIP, EFI, MFI  
 nV-nVenturi Carburetor

VEHICLE MODELS: Mazda RX-7

Engine: Front x Mid. \_\_\_\_\_ Rear \_\_\_\_\_  
 Drive: FWD \_\_\_\_\_ RWD x 4WD Full Time \_\_\_\_\_ 4WD Part Time \_\_\_\_\_

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Passenger Cars  Light-Duty Trucks \_\_\_\_\_ Medium-Duty Vehicles \_\_\_\_\_ Gas  Diesel \_\_\_\_\_

Manufacturer Mazda Motor Corporation Engine Family HTK1.3V5HAB8

Liter (CID) 1.3 (40.0 x 2) Eng. Type R-2

Emission Control Sys. (Special Features) AIP/CL/EFI/EGR/ /TWC

| Engine Code         | Vehicle Models<br>(If Coded see attachment)<br><br>(Dyno Hp) | Trans. Type | Equiv. Test Weight | Ign. System (ECU)<br><br>Part No.     | Fuel System<br><br>Part No.  | EGR Valve<br><br>Part No. | Catalyst<br><br>Part No. |
|---------------------|--|-------------|--------------------|---------------------------------------|------------------------------|---------------------------|--------------------------|
| FR13-M<br>(w/o A/C) | *1<br>(6.1)  | M-5         | 3000               | Crank Angle<br>Sensor:<br>029400-0020 | Fuel Injector<br>195500-1350 | X1251-EGV<br>-100A        | N326F<br>N326C<br>N326R  |
|                     | *2<br>(6.4)  |             |                    |                                       |                              |                           |                          |
| FR13-MC<br>(w/ A/C) | *1<br>(6.7)  |             |                    |                                       |                              |                           |                          |
|                     | *2<br>(7.0)  |             |                    |                                       |                              |                           |                          |
| FR13-A<br>(w/o A/C) | *1<br>(6.1)  | A<br>V-4    | 3000               | Crank Angle<br>Sensor:<br>029400-0020 | Fuel Injector<br>195500-1350 | X1251-EGV<br>-100A        | N326F<br>N326C<br>N326R  |
|                     | *2<br>(6.4)  |             |                    |                                       |                              |                           |                          |
| FR13-AC<br>(w/ A/C) | *1<br>(6.7)  |             |                    |                                       |                              |                           |                          |
|                     | *2<br>(7.0)  |             |                    |                                       |                              |                           |                          |

Comments: See page one for abbreviations and evaporative emission family identification. Please refer to manufacturer's HP list for correct dyno test HP settings based on model and equipment. If two test weights are listed, the lower weight will be used for testing.

Effective Date of Issue May 15, 1986

Revisions:

\*1: for 185/70HR14 tire

\*2: for P205/60VR15 tire