State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-16-103
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 1990 model-year Mazda Motor Corporation emission control systems are certified as described below for gasoline-powered passenger cars:

| Engine Family | Displacement Liters (Cubic Inches) | Exhaust Emission Control Systems (Special Features) |
|---|---|---|
| LTK1.6V5FCS8 | 1.6 (97.5) | Oxygen Sensor<br>Three-Way Catalyst<br>(Electronic Port Fuel Injection)<br>On-Board Diagnostics (Exempted) |

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

The following are the emission standards for this engine family:

| Hydrocarbons (Grams per Mile) | Carbon Monoxide (Grams per Mile) | Nitrogen Oxides (Grams per Mile) |
|---|---|---|
| 0.39 | 7.0 | 0.4 |

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

| Hydrocarbons (Grams per Mile) | Carbon Monoxide (Grams per Mile) | Nitrogen Oxides (Grams per Mile) |
|---|---|---|
| 0.16 | 1.8 | 0.2 |

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 Code of Regulations, 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 1988 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 Emission Control Label Specifications" (Title 13, California Code of Regulations, Section 1965) for the aforementioned model year.

BE IT FURTHER RESOLVED: That the vehicle models listed have been granted an exemption from compliance with the requirements of the "Malfunction and Diagnostic System for 1988 and Subsequent Model Year[s]..." (Title 13, California Code of Regulations, Section 1968) 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 Code of Regualtions, 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 23rd day of March, 1989.

Norman Kaye for
K. D. Drachand, Chief
Mobile Source Division

E.O. # A-16-103

# 1990 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET



Manufacturer: Mazda Motor Corporation
Engine Family: LTK1.6V5FCS8
Evaporative Family: S
Engine Type: I-4
Liters (CID): 1.6 (97.5 CID)

## ABBREVIATIONS

### Ignition System

CA-Centrifugal Advance
ECU-Electronic Control Unit
EI-Electronic Ignition
ESAC-Electronic Spark Advance Control
VA-Vacuum Advance
VR-Vacuum Retard

### Fuel System

CFI, EPFI, MPFI, SFI,
DID, DIP, HOS, OS
nV-nVenturi Carburetor
VV-Variable Venturi Carburetor

### Exhaust Emissions Control System

AIP-Air Injection - Pump
AIV-Air Injection - Valve
EGR-Exhaust Gas Recirculation
EIC-Electronic Injection Control (Diesel Only)
EM-Engine Modification
SPL-Smoke Puff Limiter or Throttle Delay
TOC-Trap Oxidizer, Continual
TOP-Trap Oxidizer, Periodical
DBC-Dual Bed Catalyst
OC-Oxidation Catalyst
TWC-Three-Way Catalyst
WUOC-Warm-Up Oxidation Catalyst
WUTWC-Warm-Up Three-Way Catalyst
OS-Oxygen Sensor
HOS-Heated Oxygen Sensor

### Special Features

CFI-Central Fuel Injection or Throttle Body Injection
EPFI-Electronic Port Fuel Injection
MPFI-Mechanical Port Fuel Injection
SFI-Sequential Fuel Injection
DID-Diesel Injection-Direct
DIP-Diesel Injection-Prechamber
TC-Turbocharger
SC-Supercharger
IC-Intercooler or Aftercooler
CCV-Combustion Chamber Valve
OBD-On-Board Diagnostics

VEHICLE MODELS: Mazda MX-5 MIATA

Engine: Front X Mid. ____ Rear ____

Drive: FWD ____ RWD X 4WD Full Time ____ 4WD Part Time ____

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Manufacturer Mazda Motor Corporation Eng. Family LTK1.6V5FCS8

Pass Cars X Lt-Duty Trucks___ Med-Duty Vehicles___ Gas X Diesel___

Eng. Type I-4 Liter (CID) 97.5 Evap. Family S

Emission Control Sys. (Use SAE Abbrv.) TWC, OS, EPFI, OBD

Engine: Front X Mid.___ Rear___ Drive: FWD___ RWD X 4WD-FT___ 4WD-PT___

| Eng. Code/ (Cert Std.) | Veh. Models (If Coded see Attachmt.) | Trans. Type: A-Auto M-Man. | Equiv. Test Weight | RLHP or DPA | Ign. Sys. (ECU/PROM) Part No. | EGR Syst. Part No. | Catalyst Part No. |
|---|---|---|---|---|---|---|---|
| CB6D-M (Std.: *) | Mazda MX-5 MIATA | M-5 | 2500 | 8.0 | Crank Angle Sensor B61P | --- | B61P |
| CB6D-MC (Std.: *) | | | | 8.8 | ECU B61P | | |

*: Certification Standard;
Non-methane HC: 0.39
CO : 7.0
NOx: 0.4
Evap: 2.0

Date of Issue:_____ Revisions: