State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-254-3
Relating to Certification of New Motor Vehicles

HYUNDAI MOTOR COMPANY

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 1988 model-year Hyundai Motor Company 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)
JHY1.5V2FCB4	1.5 (89.6)	Air Injection - Valve Exhaust Gas Recirculation Three-Way Catalyst Oxygen Sensor (Combustion Chamber Valve)

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
0.41	7.0	0.7

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
0.14	2.0	0.2

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 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 Tune-Up Label Specifications" (Title 13, California Administrative Code, 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 Administrative Code, 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 Administrative Code, Section 2035 et seq.) and with Health and Safety Code Section 43204.

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 3rd day of June, 1987.

K. D. Drachand, Chief
Mobile Source Division

E.O. # A-254-3

1988 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

Manufacturer Hyundai Motor Company
Evaporative Family FC

Engine Family JHY1.5V2FCB4
Engine Type 4 cyl. In-line
Liters (CID) 1.5L (89.6)

ABBREVIATIONS

Ignition System

CA - Centrifugal Advance
EEC - Electronic Engine Control
EI - 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:

Engine: Front X Mid. ____ Rear ____
Drive : FWD X RWD ____ 4WD Full Time ____ 4WD Part Time ____

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1988 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

Passenger Cars X Light-Duty Trucks __ Medium-Duty Vehicles __ Gas X Diesel __

Manufacturer Hyundai Engine Family JHY1.5V2FCB4

Liter (CID) 1.5 (89.6) Eng. Type 4 cyl. In-line

Emission Control Sys. (Special Features) AIV+OS+EGR+TWC (CCV)

Engine Code	Vehicle Model	Trans. Type	Equiv. Test Weight	Ign. System (ECU) Part No.	Fuel System Part No.	EGR Valve Part No.	Catalyst Part No. MCC	Catalyst Part No. UCC
CM4-2	Excel/ Precis	M4	2500	39110 -21420 or 39110 -21460	30-32DIDEF -412	28450 -31370	28533 -21340	28957 -21325 or 28957 -21375
CM5-2		M5	2500	39110 -21420 or 39110 -21460	30-32DIDEF -412	28450 -31370	28533 -21340	28957 -21325 or 28957 -21375
CA-2		A3	2500	39110 -21430 or 39110 -21470	30-32DIDEF -413	28450 -31370	28533 -21340	28957 -21325 or 28957 -21375

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