File

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-254-58
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 Order G-45-9;

IT IS ORDERED AND RESOLVED: That 1999 model-year Hyundai Motor Company exhaust emission control systems are certified as described below for passenger cars:

Emission Standard Category: Transitional Low-Emission Vehicle (TLEV)

Fuel Type (Certification Fuel): Gasoline (Indolene)

Engine Family: XHYXV02.52ES Displacement: 2.5 Liters (152.1 Cubic Inches)

Exhaust Emission Control Systems & Special Features:

Three Way Catalytic Converter
Dual Heated Oxygen Sensors (two)
Sequential Multiport Fuel Injection
Dual Warm Up Three Way Catalytic Converters

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

The TLEV certification exhaust emission standards for this engine family in grams per mile are:

Miles	Non-Methane Organic Gases	Carbon Monoxide	Nitrogen Oxides	Formaldehyde	Carbon Monoxide (20°F)
50,000	0.125	3.4	0.4	0.015	10.0
100,000	0.156	4.2	0.6	0.018	n/a

The TLEV certification exhaust emission values for this engire family in grams per mile are:

Miles	Non-Methane Organic Gases	Carbon Monoxide	Nitrogen Oxides	Formaldehyde	Carbon Monoxide (20°F)
50,000	0.044	0.5	0.1	0.001	6.8
100,000	0.054	0.6	0.1	0.002	n/a

BE IT FURTHER RESOLVED: That the vehicle manufacturer is certifying the listed vehicle models to the aforementioned exhaust emission standards based on its submitted plan to comply with the fleet average NMOG exhaust mass emission requirements as set forth 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 under the submitted NMOG fleet average compliance plan, if the manufacturer incurs a NMOG debit for the aforementioned model year based on the projected NMOG fleet average exceeding the value required by the above-referenced standards and test procedures, all incurred NMOG debits by the manufacturer shall be equalized as required by the standards and test procedures.

BE IT FURTHER RESOLVED: That the vehicle manufacturer is certifying the listed vehicle models to the running loss and useful life standards applicable to 1995 and subsequent model-year vehicles in the "California Evaporative Emission Standards and Test Procedures for 1978 and Subsequent Model Motor Vehicles," and the listed vehicle models comply with those standards.

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" for the aforementioned model year (Title 13, California Code of Regulations, Section 2235).

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the Board's high-altitude requirements and highway emission standards, and with the California Inspection and Maintenance emission standards in place at the time of certification, 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 vehicle manufacturer has demonstrated compliance with the exhaust emission standards at 50 degrees Fahrenheit 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 and Smog Index Label Specifications" for the aforementioned model year (Title 13, California Code of Regulations, Section 1965).

BE IT FURTHER RESOLVED: That the manufacturer is certifying the listed vehicle models with a partially complying on-board diagnostic system for the aforementioned model year pursuant to Title 13, California Code of Regulations, Section 1968.1(m)(6.2) ("Malfunction and Diagnostic System Requirements--1994 and Subsequent Model-Year Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles and Engines").

BE IT FURTHER RESOLVED: That the vehicle manufacturer is certifying the listed vehicle models to the "California Refueling Emission Standards and Test Procedures for 1998 and Subsequent Model Motor Vehicles," Title 13, California Code of Regulations, Section 1978, and the listed vehicle models comply with those standards.

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 provisions (Title 13, California Code of Regulations, 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 6th day of July 1998.

R. B. Summerfield, Chief
Mobile Source Operations Division

1999 MODEL-YEAR AIR RESOURCES SUPPLEMENTAL DATA SHEET
PASSENGER CARS, LIGHT-DUTY TRUCKS AND MEDIUM-DUTY VEHICLES

Manufacturer : HYUNDAI MOTOR CO. Exh Eng Fam : XHYXV02.52ES Evap Fam : XHYXR0150PEE
All Eng Codes in Eng Fam : CA __ 49S __ 50S X AB965 ORVR : YES X NO__
Exh Std : CA Tier-1__ TLEV X LEV__ ULEV__ ZEV__ ; US EPA Tier-1 __
Evap Std : 100K X Useful life with R/L X In-Use Exh Std : Full In Use X Alt In Use__
Veh Class(es) : PC X LDT1__ LDT2__ MDV1__ MDV2__ MDV3__ MDV4__ MDV5__
Single Cert Std for Muli-Class Eng Fam : N/A (specify: N/A, LDT1, MDV1, MDV2, MDV3, MDV4)
Fuel Type(s) : Dedicated X Flex-Fuel__ Dual-Fuel__ Bi-Fuel__ Gasoline X Diesel__
CNG__ LNG__ LPG__ M85__ Other (specify) _____
Emiss Test Fuel(s) : Indo X PH2__ CNG__ LPG__ M85__ Other (specify) _____
Diesel : 13 CCR 2282__ 40 CFR 86.113-90__ 40 CFR 86.113-94__
Evaporative Emission Test Procedure : California _____ Federal X
Service Accum : Std AMA X Mod AMA__ Mfr ADV__ OTHER (SPECIFY)_____
NMOG Test procedure : N/A__ Std X Equiv__ R/L Test Proc : SHED X Pt Source__
Hybrid : Type A__ B__ C__, APU Cycle (e.g., Otto, Diesel, Turbine) _____
Engine Configuration : V-6 Displacement : 2.5 / Liters 152.1 / Cubic Inches
Valves Per Cylinder : 4 Rated HP : 163 @ 6,000 RPM
Engine : Front X Mid__ Rear__ Drive : FWD X RWD__ 4WD-FT__ 4WD-PT__
Exhaust ECS (e.g., MFI EGR., TC, CAC, : 2HO2S(2) + 2WU-TWC + TWC + SFI + OBD II
(use abbreviations per SAE J1930 JUN 93)

Eng. Code (list CA/ 49ST/50ST)	Veh. Models (If Coded see Attachment)	Trans. Type : L-Auto. M-Man.	Equiv. Test Weight	DPA or RLHP	Ign. Sys. (ECM/PCM) part No.	EGR System Part No.	Catalyst Part No.
ASM5-F /SM5-F (50ST)	SONATA	M5	3375	6.5	39109-37000 39109-37010 39109-37020 39109-37030	N/A	28510-37152(Frt) 28510-37162(Frt) 28950-38750(Rr)
ASL4-E /SL4-E (50ST)		L4	↑	7.3	↑	↑	↑

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