State of California AIR RESOURCES BOARD

EXECUTIVE ORDER A-254-45 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 1997 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: Gasoline

Engine Family: VHY2.0VJG2FK <u>Displacement</u>: 2.0 Liters (121.1 Cubic Inches)

Exhaust Emission Control Systems and Special Features:

Heated Oxygen Sensors (two)
Three Way Catalytic Converter
Sequential Multiport Fuel Injection

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 Car Miles Organic Gas Mono		Nitrogen Oxides	<u>Formaldehyde</u>	Carbon <u>Monoxide (20⁰F)</u>	
50,000	0.125	3.4	0.4	0.015	10.0	
100,000	0.156	4.2	0.6	0.018	n/a	

Reactivity Adjustment Factor (RAF) for NMOG Mass Emission: 0.98

The certification exhaust emission values set forth for non-methane organic gas (NMOG) reflect application of a 0.98 RAF for 1997 model-year TLEVs. The TLEV certification exhaust emission values for this engine family in grams per mile are:

<u>Miles</u>	Non-Methane <u>Organic Gas</u>	Carbon <u>Monoxide</u>	Nitrogen Oxides	<u>Formaldehyde</u>	Carbon <u>Monoxide (20⁰F)</u>	
50,000	0.074	0.6	0.1	0.001	7.0	
100,000	0.079	0.6	0.1	0.001	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 listed vehicle models also comply with the "California Motor Vehicle Emission Control 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 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.).

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."

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 _

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day of June 1996.

R. B/ Summerfield
Assistant Division Chief
Mobile Source Division

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1997 AIR RESOURCES SUPPLEMENTAL DATA SHEET PASSENGER CARS, LIGHT-DUTY TRUCKS AND MEDIUM-DUTY VEHICLES

Manufacturer: HYUNDAI MOTOR CO. Exh Eng Fam: VHY2.0VJG2FK Evap Fam: VHY1092BYM13
All Eng Codes in Eng Fam: CA <u>X</u> 49S <u>50S</u> AB965 <u>AB965</u>
Exh Std : CA Tier-1 TLEV_X LEV ULEV ZEV ; US EPA Tier-1
Evap Std: 50K Useful life with R/L X In-Use Exh Std: Full In Use X Alt In Use
Veh Class(es): PC_XLDT1LDT2MDV1MDV2 MDV3 MDV4 MDV5
Single Cert Std for Multi. Class Eng Fam : N/A (specify : N/A, LDT1, MDV1, MDV2, MDV3)
Fuel Type(s): Dedicated 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 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: <u>I-4</u> Displacement: <u>2.0</u> / Liters <u>121.1</u> / Cubic Inches
Valves Per Cylinder: 4 Rated HP: 136 @ 6,000 RPM
Engine: Front X Mid_ Rear_ Drive: FWD X RWD 4WD-FT 4WD-PT_
Exhaust ECS (e.g., MFI EGR., TC, CAC, : HO2S(2) + TWC+ SFI + OBD II
(use abbreviations per SAE J1930 SEP91)

Eng. Code (also list CA/ 49ST/50ST)	Veh. Models (If coded see Attachment)	(M5-Man,	1	DPA or RLHP	Ignition (ECM/PCM) Part No.	EGR System Part No.	
ACM5-U /CM5-U(CA)	TIBURON (Coupe)	М5	3000	7.4	39110-23910 (9 030 930 020)	N/A	28950-23400 (H4II18)
ACL4-U /CL4-U(CA)	1	L4	1	7.0	ţ	t	•

Issued : 5-1-96

Revised :