

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER A-15-161

Relating to Certification of New Motor Vehicles

NISSAN MOTOR CO., LTD.

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 Nissan Motor Co., Ltd. exhaust emission control systems are certified as described below for gasoline-powered light-duty trucks:

<u>Engine Family</u>	<u>Displacement</u> <u>Liters (Cubic Inches)</u>		<u>Exhaust Emission Control Systems</u> <u>(Special Features)</u>
LNS2.4T5HAC6	2.4	(145.8)	Exhaust Gas Recirculation Pulsed Secondary Air Injection Oxygen Sensor Three-Way Catalyst with Oxidation Catalyst Throttle Body Electronic Fuel Injection (On-Board Diagnostics)

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>Loaded Vehicle</u> <u>Weight (Pounds)</u>	<u>Hydrocarbons</u> <u>(Grams per Mile)</u>	<u>Carbon Monoxide</u> <u>(Grams per Mile)</u>	<u>Nitrogen Oxides</u> <u>(Grams per Mile)</u>
3,751 - 5,750	0.50	9.0	1.0

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

<u>Hydrocarbons</u> <u>(Grams per Mile)</u>	<u>Carbon Monoxide</u> <u>(Grams per Mile)</u>	<u>Nitrogen Oxides</u> <u>(Grams per Mile)</u>
0.11	2.7	0.8

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 also comply with 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 provisions (California Health and Safety Code Section 43205).

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 20<sup>th</sup> day of January, 1989.



K. D. Drachand, Chief  
Mobile Source Division

#17.12.00-1

E.O. # A-15-161

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Manufacturer: NISSAN MOTOR CO., LTD.

Engine Family: LNS2.4T5HAC6

Evaporative Family: TBI-5

Engine Type: In-line 4, OHC

Liters (CID): 2.4 (145.8)

ABBREVIATIONS

Ignition System

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

Exhaust Emission Control System

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

Special Features

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

Fuel System

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

VEHICLE MODEL:

Engine Code

Model

Transmission

AZ24ICM1 ----- VAN XE ----- 5-speed Manual

AZ24ICA1 ----- VAN XE ----- 4-Speed Automatic  
VAN GXE

Engine: Front X Mid. \_\_\_\_\_ Rear \_\_\_\_\_

Drive : FWD \_\_\_\_\_ RWD X 4WD Full Time \_\_\_\_\_ 4WD Part Time X

Issue Date: 09/22/88

Revision Date:

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

Manufacturer: NISSAN MOTOR CO., LTD. Engine Family: LNS2.4T5HAC6  
 Liter (CID) : 2.4 (145.8) Eng. Type: In-line 4, OHC  
 Emission Control Sys. (Special Features): AIV/DBC/EGR/OS(FI/OBD)

Engine Code	Vehicle Models (If Coded see attachment) (Dyno Hp)	Trans. Type	Equiv. Test Weight	Ign. System (ECU) Part No.	Fuel System Part No.	EGR Valve Part No.	Catalyst *** Part No.
AZ24ICM1	VAN XE	M5	** 3750	Distributor D4P84-04 TOT80771 Control Unit MECS-C330	SPI Body Assembly RGA5J-27 Control Unit MEXS-C330	EGR Valve AEY76-88	D-xx,xJ D-xx,xK D-xx,xE D-xx,xF
AZ24ICA1	VAN XE	L4	** 3875	Distributor D4P84-04	SPI Body Assembly RGA50-28		
	VAN GXE		** 4000	Control Unit MECS-C355	Control Unit MECS-C355		

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.

\*\*EIV of these models are between 4000 - 5999 lbs.

\*\*\*The figures and numbers in the place of the mark x are variable according to lot number and production date.