State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-15-160

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 passenger cars:

Engine Family	Displacement Liters (Cubic Inches)		Exhaust Emission Control Systems (Special Features)
LNS2.4V5FBC1	2.4	(145.8)	Exhaust Gas Recirculation Pulsed Secondary Air Injection Oxygen Sensor Three-Way Catalyst Sequential Multipoint 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:

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)
0.22	3.2	0.3

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 20th day of January, 1989.

K. D. Drachand, Chief
Mobile Source Division

E.O. # A-15-160

17.12.00 1990 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

Manufacturer: NISSAN MOTOR CO., LTD. Engine Family: LNS2.4V5FBC1

Evaporative Family: FI4-2 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

Fuel System

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

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

VEHICLE MODEL:

Engine Code		Model	Transmission	
AK24ECM2	____	AXXESS FWD XE	5-speed Manual	1/
		AXXESS FWD SE		1/
BK24ECM2	____	AXXESS FWD XE		1/
		AXXESS FWD SE		1/
AK24ECA2	____	AXXESS FWD XE	4-speed Automatic	1/
		AXXESS FWD SE		1/
BK24ECA2	____	AXXESS FWD XE		1/
		AXXESS FWD SE		1/

Engine: Front X Mid. ____ Rear ____

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

Issue Date: 09/23/88
Revision Date: 1/.03/31/89

1/ With R/C No. L24V5FBC-02

17.12.00 1990 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET E.O. # A-15-160

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

Manufacturer: NISSAN MOTOR CO., LTD. Engine Family: LNS2.4V5FBC1
Liter (CID) : 2.4 (145.8) Eng. Type: In-line 4, OHC
Emission Control Sys. (Special Features): AIV/EGR/OS/TWC(SFI/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.	
AK24ECA2	AXXESS FWD XE (9.2)	L4	3375	Distributor D4P87-04 (HITACHI) T2T42271 (MITSUBISI) Control Unit L4 A11-A81 M5 A11-A80	Control Unit L4 A11-A81 M5 A11-A80 Fuel Injection A46-000 (JECS) A46-00000 (DKKC) Air Flow Meter AFH50	EGR Valve AEY77-40	Xxx,xxE Xxx,xxF Xxx,xxG Xxx,xxH	1/
	AXXESS FWD SE (9.2)							1/
BK24ECA2	AXXESS FWD XE (8.4)							1/
	AXXESS FWD SE (8.4)							1/
AK24ECM2	AXXESS FWD XE (9.2)	M5	3375					1/
	AXXESS FWD SE (9.2)							1/
BK24ECM2	AXXESS FWD XE (8.4)		3250					1/
	AXXESS FWD SE (8.4)							1/

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.

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

Issue Date: 09/23/88
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Evaporative Family: FI4-2 Engine Type: In-line 4, OHC

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ABBREVIATIONS

Ignition System

CA-Centrifugal Advance
ECU-Electronic Control Unit
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ESAC-Electronic Spark Advance Control
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Fuel System

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

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

VEHICLE MODEL:

Engine Code		Model	Transmission	
AK24ECM3	____	AXXESS AWD XE	5-speed Manual	1/ 3/
		AXXESS AWD SE		3/
BK24ECM3	____	AXXESS AWD XE		1/ 3/
		AXXESS AWD SE		3/
AK24ECA3	____	AXXESS AWD XE	4-speed Automatic	1/ 3/
		AXXESS AWD SE		3/
BK24ECA3	____	AXXESS AWD XE		1/ 3/
		AXXESS AWD SE		3/

Engine: Front X Mid. ____ Rear ____

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

The supplemantal sheet is not changed by R/C No.L24V5FBC-01. 2/

Issue Date: 09/23/88
Revision Date: 1/ 11/21/88 2/ 02/28/89 3/03/31/89 3/ With R/C No. L24V5FBC-02

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E.O. # A-15-160

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

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Liter (CID) : 2.4 (145.8) Eng. Type: In-line 4, OHC
Emission Control Sys. (Special Features): AIV/EGR/OS/TWC(SFI/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.	
AK24ECA3	AXXESS AWD XE (11.0)	L4	3625	Distributor D4P87-04 (HITACHI) T2T42271 (MITSUBISI) Control Unit L4 A11-A81 M5 A11-A93	Control Unit L4 A11-A81 M5 A11-A93 Fuel Injection A46-000 (JECS) A46-00000 (DKKC) Air Flow Meter AFH50	EGR Valve AEY77-40	Xxx,xxE Xxx,xxF Xxx,xxG Xxx,xxH	1/
	AXXESS AWD SE (11.0)							2/
BK24ECA3	AXXESS AWD XE (11.0)							1/
	AXXESS AWD SE (11.0)							2/
AK24ECM3	AXXESS AWD XE (11.0)	M5	3625					1/
	AXXESS AWD SE (11.0)		3500					2/
BK24ECM3	AXXESS AWD XE (11.0)		3625					1/
	AXXESS AWD SE (11.0)		3500					2/

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.

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Revision Date: 1/ 11/21/88 2/ 03/31/89

2/ With R/C No. L24V5FBC-02