File

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-15-316
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 Order G-45-9;

IT IS ORDERED AND RESOLVED: That 1998 model-year Nissan Motor Co., Ltd. exhaust emission control systems are certified as described below for light-duty trucks:

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

Fuel Type: Gasoline

Engine Family: WNSXT02.423B Displacement: 2.4 Liters (145.8 Cubic Inches)

Exhaust Emission Control Systems and Special Features:

Three Way Catalytic Converters(two)
Heated Oxygen Sensors (two)
Exhaust Gas Recirculation
Sequential Multiport Fuel Injection

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

The non-methane organic gas (NMOG), carbon monoxide (CO), oxides of nitrogen (NOx), and formaldehyde (HCHO) TLEV certification exhaust emission standards for this engine family in grams per mile are:

Loaded Vehicle Weight (lbs.)	Miles	NMOG	CO	NOx	HCHO	CO (20°F)
0-3750	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 NMOG reflect application of a 0.98 RAF for 1998 model-year TLEVs. The TLEV certification exhaust emission values for this engine family in grams per mile are:

Loaded Vehicle Weight (lbs.)	Miles	NMOG	CO	NOx	HCHO	CO (20°F)
0-3750	50,000	0.063	0.9	0.1	0.001	6.3
	100,000	0.075	1.1	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 and Smog Index Label Specifications" for the aforementioned model year (Title 13, California Code of Regulations, Section 1965).

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 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 listed vehicle models also comply with the "Malfunction and Diagnostic System Requirements--1994 and Subsequent Model-Year Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles and Engines" (Title 13, California Code of Regulations, Section 1968.1) for the aforementioned model year.

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 8th day of September 1997.

R. B. Summerfield, Chief
Mobile Source Operations Division

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17.11.01 1998 MODEL-YEAR AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET
PASSENGER CARS, LIGHT-DUTY TRUCKS AND MEDIUM-DUTY VEHICLES

Manufacturer:NISSAN MOTOR CO., LTD. Exh Eng Fam:WNSXT02.423B Evap Fam:WNSXE0110MBA

All Eng Codes in Eng Fam: CA X 49S 50S AB965 , ORVR : YES NO X

Exh Std: CA Tier-1 TLEV X LEV ULEV SULEV , US EPA Tier-1

Veh Class(es): PC LDT1 X LDT2 MDV1 MDV2 MDV3 MDV4 MDV5

Single Cert Std for Multi-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)

Evaporative Emission Test Procedure : California Federal X

Exh Emiss Test Fuel(s): Indo CBG X CNG LPG M85 Other (specify)

Service Accum: Std AMA Mod AMA Mfr ADP X Other (specify)

NMOG Test Procedure: N/A Std X Equiv R/L Test Proc: SHED Pt Source X

Engine Configuration: L4 Displacement: 2.4 Litters 145.8 Cubic Inches

Valves per Cylinder: 4 Rated HP: 143 @ 5200 RPM

Engine: Front X Mid Rear Drive: FWD RWD X 4WD-FT 4WD-PT

Exhaust ECS (eg., EGR, MFI, TC, CAC): TWC(2)/HO2S(2)/EGR/SFI

(use abbreviations per SAE J1930 JUN93)

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17.11.01 1998 MODEL-YEAR AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET
PASSENGER CARS, LIGHT-DUTY TRUCKS AND MEDIUM-DUTY VEHICLES
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Manufacturer: NISSAN MOTOR CO., LTD. Exh Eng Fam: WNSXT02.423B Evap Fam: WNSXE0110MBA

Engine Code (also list CA/49ST/50ST)	Vehicle Models (if coded see attachment)	Trans. (M5,A4 etc)	ETW or Test Wt	DPA or RLHP	Ignition (ECM/PCM) Part No.	EGR System Part No.	Catalytic Converter Part No.
AK24ECM1	NISSAN FRONTIER XE REGULAR CAB TRUCK 4 x 2	M5	3375	12.3	ECM MECM-B400	EGR Valve VASA001	FR:3S6 RR:3S5
	NISSAN FRONTIER STD REGULAR CAB TRUCK 4 x 2		3250				
	NISSAN FRONTIER XE KING CAB TRUCK 4 x 2		3500				
	NISSAN FRONTIER SE KING CAB TRUCK 4 x 2						
BK24ECM1	NISSAN FRONTIER XE REGULAR CAB TRUCK 4 x 2		3375	11.2			
	NISSAN FRONTIER STD REGULAR CAB TRUCK 4 x 2		3250				
	NISSAN FRONTIER XE KING CAB TRUCK 4 x 2		3500				
	NISSAN FRONTIER SE KING CAB TRUCK 4 x 2						
AK24ECA1	NISSAN FRONTIER XE REGULAR CAB TRUCK 4 x 2	A4	3375	12.3	ECM MECM-B410 (REG-Cab) ~~MECM-B415~~ (King-Cab)		
	NISSAN FRONTIER XE KING CAB TRUCK 4 x 2						
	NISSAN FRONTIER SE KING CAB TRUCK 4 x 2		3625				
BK24ECA1	NISSAN FRONTIER XE REGULAR CAB TRUCK 4 x 2		3375	11.2			
	NISSAN FRONTIER XE KING CAB TRUCK 4 x 2		3500				
	NISSAN FRONTIER SE KING CAB TRUCK 4 x 2						

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