

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER A-15-317  
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: WNSXT02.423D 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)
3751-5750	50,000	0.160	4.4	0.7	0.018	12.5
	100,000	0.200	5.5	0.9	0.023	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)
3751-5750	50,000	0.073	1.1	0.1	0.001	8.6
	100,000	0.086	1.3	0.2	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."

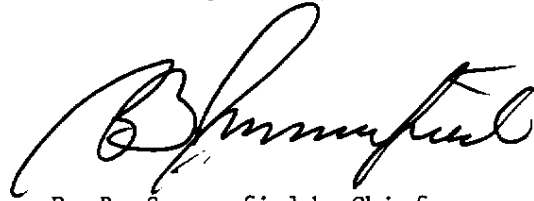
BE IT FURTHER RESOLVED: That for the listed vehicles, the manufacturer has submitted and the Executive Officer hereby approves the materials to demonstrate certification compliance with the Board's emission control system warranty provisions (Title 13, California Code of Regulations, Section 2035 et 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 9<sup>th</sup> day of September 1997.



R. B. Summerfield, Chief  
Mobile Source Operations Division

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: WNSXT02.423D 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 LDT2 X 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)  
 Exh Emiss Test Fuel(s): Indo CBG X CNG LPG M85 Other (specify)  
 Evaporative Emission Test Procedure : California Federal X  
 Service Accum: Std AMA X Mod AMA Mfr ADP 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 4WD-FT 4WD-PT X  
 Exhaust ECS (eg., EGR, MFI, TC, CAC): TWC(2)/HO2S(2)/EGR/SFI  
 (use abbreviations per SAE J1930 JUN93)

Continued on the next page

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

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

Engine Code	Vehicle Models	Trans.	ETW	DPA	Ignition	EGR	Catalytic
(also list CA/49ST/50ST)	(if coded see attachment)	(M5, A4 etc)	Test	RLHP	Part No.	System	Converter
			Wt			Part No.	Part No.
AK24ECM2	NISSAN FRONTIER XE				ECM	EGR Valve	FR:3S6
	REGULAR CAB TRUCK		3875		MECM-B420	VASA001	RR:3S5
	4 x 4						
	NISSAN FRONTIER XE						
	KING CAB TRUCK		15.4				
	4 x 4						
			4000				
	NISSAN FRONTIER SE						
	KING CAB TRUCK						
	4 x 4						
		M5					
	NISSAN FRONTIER XE						
BK24ECM2	REGULAR CAB TRUCK		3875				
	4 x 4						
	NISSAN FRONTIER XE						
	KING CAB TRUCK		4000	14.0			
	4 x 4						
	NISSAN FRONTIER SE						
	KING CAB TRUCK						
	4 x 4						