

File

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER A-15-299  
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 1997 model-year Nissan Motor Co., Ltd. exhaust emission control systems are certified as described below for passenger cars:

Emission Standard Category: Low Emission Vehicle (LEV)

Fuel Type: Gasoline

Engine Family: VNS1.6VJG3EK Displacement: 1.6 Liters (97.5 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 LEV certification exhaust emission standards for this engine family in grams per mile are:

<u>Miles</u>	<u>Non-Methane Organic Gas</u>	<u>Carbon Monoxide</u>	<u>Nitrogen Oxides</u>	<u>Formaldehyde</u>	<u>Carbon Monoxide (20°F)</u>
50,000	0.075	3.4	0.2	0.015	10.0
100,000	0.090	4.2	0.3	0.018	n/a

Reactivity Adjustment Factor (RAF) for NMOG Mass Emission: 0.94

The certification exhaust emission values set forth for non-methane organic gas (NMOG) reflect application of a 0.94 RAF for 1997 model-year LEVs. The LEV certification exhaust emission values for this engine family in grams per mile are:

<u>Miles</u>	<u>Non-Methane Organic Gas</u>	<u>Carbon Monoxide</u>	<u>Nitrogen Oxides</u>	<u>Formaldehyde</u>	<u>Carbon Monoxide (20°F)</u>
50,000	0.042	0.5	0.1	0.001	3.4
100,000	0.043	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 non-methane organic gas (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 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 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 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 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 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.

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.).

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 27<sup>th</sup> day of June 1996.



R. B. Summerfield  
Assistant Division Chief  
Mobile Source Division

## 17.11.00 Supplemental Data Sheet

.01 1997 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: VNS1.6VJG3EK Evap Fam: VNS1075AYMEA

All Eng Codes in Eng Fam: CA X 495 5GS AB965

Exh Std: CA Tier-1 TLEV LEV X ULEV ZEV ; US EPA Tier-1

Evap Std: 50K Useful Life with R/L X In-Use Exh Std: Full In Use Alt In Use X

Veh Class(es): PC X LDT1 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 1/

CNG LNG LPG M85 Other (specify)

Emiss Test Fuel(s): Indo Ph2 X 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 ADF Other (specify)

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

Hybrid: Type A B C , APU Cycle (e.g., Otto, Diesel, Turbine)

Engine Configuration: L4 Displacement: 1.6 Liters 97.5 Cubic Inches

Valves per Cylinder: 4 Rated HP: 115 @ 6000 RPM

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

Exhaust ECS (eg., EGR, MFI, TC, CAC): TWC(2)/HC2S(2)/EGR/SFI

(use abbreviations per SAE J1930 SEP91)

2/ Supplemental data sheet is not changed by R/C No.V16VJG3E-03

3/ Supplemental data sheet is not changed by R/C No.V16VJG3E-04

17.11.01 1997 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: VNS1.6VJG3EK Evap Fam: VNS1075AYMEA

Engine Code (also list CA/49ST/50ST)	Vehicle Models (if coded see attachment)	Trans. (M5, A4 etc.)	ETW Test Wt:	DPA RLHP	Ignition (ECM/PCM)	EGR System	Catalytic Converter
AG16DCM1 (CA)	NISSAN SENTRA 4-DOOR	M5	2750	6.7 (A)	ECM JA18F05	AEY77-95	Fr:1M5 Rr:Axccc4
				7.0 (B)	(Before R/C No.		
	NISSAN SENTRA XE 4-DOOR			7.0	V16VJG3E -02)		
	NISSAN SENTRA GXE 4-DOOR				JA18G91 (After R/C No.		
	NISSAN SENTRA GLE 4-DOOR				V16VJG3E		
	NISSAN 200SX			6.9	-02) 1/		
					(Before R/C No.		
	NISSAN 200SX SE			6.9 (B)	R/C No. V16VJG3E		
				7.0 (C)	-03)		
					JA18G95		
BG16DCM1	NISSAN SENTRA 4-DOOR		2625	6.1 (A)	(After R/C No.		
				6.4 (B)	V16VJG3E -03) 2/		
	NISSAN SENTRA XE 4-DOOR			6.4			
	NISSAN SENTRA GXE 4-DOOR		2750				
	NISSAN SENTRA GLE 4-DOOR						
	NISSAN 200SX		2625	6.3			
	NISSAN 200SX SE		2750	6.3 (B)			
				6.4 (C)			

A:155R13, B:175/70R13, C:175/70R14

1/ With R/C No. V16VJG3E-02  
 2/ With R/C No. V16VJG3E-03

17.11.01 1997 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: VNS1 6VJG3EX Evap Fam: VNS1075AYMEA

Engine Code (also list CA/49ST/50ST)	Vehicle Models (if coded see attachment)	Trans. (M5, M4 etc.)	ETW or Test Wt:	DPA or RLHP	Ignition (ECM/PCM) Part No.	EGR System Part No.	Catalytic Converter Part No.
AG16DCA1 (CA)	NISSAN SENTRA 4-DOOR	A4	2750	6.7	ECM JA18F06	AEY77-95	Fr:1M5 Rr:AXXX4
	NISSAN SENTRA XE 4-DOOR				(Before R/C No. V16VJG3E		
	NISSAN SENTRA GXE 4-DOOR				-02)		
	NISSAN SENTRA GLE 4-DOOR				JA18G92		
	NISSAN 2005X				(After R/C No. V16VJG3E		
	NISSAN 2005X SE				-02) 1/		
					6.7(B): (Before R/C No.		
					6.7(C): V16VJG3E		
					-03)		
BG16DCA1	NISSAN SENTRA 4-DOOR			6.1	JA18G96		
	NISSAN SENTRA XE 4-DOOR				(After R/C No. V16VJG3E		
	NISSAN SENTRA GXE 4-DOOR				-03) 2/		
	NISSAN SENTRA GLE 4-DOOR				(Before R/C No. V16VJG3E		
	NISSAN 2005X				-04)		
	NISSAN 2005X SE				JA18H25		
					(After R/C No. V16VJG3E		
					6.1(B): R/C No. V16VJG3E		
					6.1(C): -04) 3/		

B:175/70R13, C:175/70R14

- 1/ With R/C No. V16VJG3E-02
- 2/ With R/C No. V16VJG3E-03
- 3/ With R/C No. V16VJG3E-04