

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-15-307
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 light-duty trucks:

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

Fuel Type: Gasoline

Engine Family: VNS3.328G2EK Displacement: 3.3 Liters (199.8 Cubic Inches)

Exhaust Emission Control Systems and Special Features:

- Dual Three Way Catalytic Converters
- Dual 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:

| <u>Loaded Vehicle Weight (lbs.)</u> | <u>Miles</u> | <u>NMOG</u> | <u>CO</u> | <u>NOx</u> | <u>HCHO</u> | <u>CO (20°F)</u> |
|-------------------------------------|--------------|-------------|-----------|------------|-------------|------------------|
| 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 1997 model-year TLEVs. The TLEV certification exhaust emission values for this engine family in grams per mile are:

| <u>Loaded Vehicle Weight (lbs.)</u> | <u>Miles</u> | <u>NMOG</u> | <u>CO</u> | <u>NOx</u> | <u>HCHO</u> | <u>CO (20°F)</u> |
|-------------------------------------|--------------|-------------|-----------|------------|-------------|------------------|
| 3751-5750 | 50,000 | 0.111 | 1.2 | 0.2 | 0.002 | 7.7 |
| | 100,000 | 0.115 | 1.3 | 0.3 | 0.002 | 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 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 17th day of July 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 VEHICLESManufacturer: NISSAN MOTOR CO., LTD. Exh Eng Fam: VNS3.328GZEK Evap Fam: VNS1110AYMEAAll Eng Codes in Eng Fam: CA X 49S___ 50S___ AB965___Exh Std: CA Tier-1___ TLEV X LEV___ ULEV___ ZEV___; US EPA Tier-1 XEvap Std: 50K___ Useful Life with R/L X In-Use Exh Std: Full In Use X Alt In Use___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)_____

Emiss Test Fuel(s): Indo___ Pb2 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 ADP___ 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: V6 Displacement: 3.3 Liters 199.8 Cubic InchesValves per Cylinder: 4 Rated HP: 168 @ 4800 RPMEngine: Front X Mid___ Rear___ Drive: FWD___ RWD X 4WD-PT___ 4WD-PT XExhaust ECS (eg., EGR, MFI, TC, CAC): 2TWC/2HO2s(2)/EGR/SFI

(use abbreviations per SAE J1930 SEP91)

2/ Supplemental data sheet is not changed by R/C No.V3328G2E-02 at all.

Issue Date : 04/30/96

Revision Date : 1/ 06/28/96 2/ 10/25/96

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. ECh Eng Fam: VNS1.328G2EK Evap Fam: VNS110AYMEA

| 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. | |
|--|--|----------------------------|----------------------|-------------------|---|---------------------------|------------------------------------|---|
| AV33ECAL | NISSAN PATHFINDER 2WD XE | A4 | 4250 | 14.7 | ECH | AEY77-92 | 0WS | |
| | NISSAN PATHFINDER 2WD LE | | | | MECH -W185 (Before R/C No. V3328G2E -02) | | | |
| | NISSAN PATHFINDER 4WD XE | | 4500 | 16.1 | MECH-W186 (After R/C No. V3328G2E -02 1/ (Before R/C No. V3328G2E -03) | | | |
| | NISSAN PATHFINDER 4WD LE | | | | 16.6 | | | R/C No. V3328G2E -02 1/ (Before R/C No. V3328G2E -03) |
| | NISSAN PATHFINDER 4WD SE | | | | | | | MECH-W187 (After R/C No. V3328G2E -03) 2/ (Before R/C No. V3328G2E -04) |
| BV33ECAL | NISSAN PATHFINDER 2WD XE | 4250 | 4500 | 13.4 | MECH-W188 (After R/C No. V3328G2E -04) 3/ (Before R/C No. V3328G2E -04) | | | |
| | NISSAN PATHFINDER 4WD XE | | | | 14.6 | | | F/F No. V3328G2E -04) |
| | NISSAN PATHFINDER 4WD SE | | | | | | | 15.1 |

1/ With R/C No. V3328G2E-02 2/ With R/C No. V3328G2E-03 3/ With F/F No. V3328G2E-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: VNS1.328G2E Evap Fam: VNS1110AYCEA

| 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. |
|--|--|----------------------------|----------------------|-------------------|---|---------------------------|------------------------------------|
| AV33ECM1 | NISSAN PATHFINDER 2WD XE | M5 | 4000 | 14.7 | ECM MECH -W175 (Before R/C No. V3328G2E -02) | AEY77-92 | OW5 |
| | NISSAN PATHFINDER 4WD XE | | 4500 | 16.0 | MECH-W176 (After R/C No. V3328G2E -02) 1/ | | |
| | NISSAN PATHFINDER 4WD SE | | | 17.4 | MECH-W177 (After R/C No. V3328G2E -03) 2/ (Before R/C No. V3328G2E -03) | | |
| BV33ECM1 | NISSAN PATHFINDER 2WD XE | | 4000 | 13.4 | MECH-W178 (After R/C No. V3328G2E -04) 3/ | | |
| | NISSAN PATHFINDER 4WD XE | | 4500 | 14.5 | V3328G2E -04) 3/ | | |
| | NISSAN PATHFINDER 4WD SE | | | 15.8 | V3328G2E -04) 3/ | | |

1/ With R/C No. V3328G2E-02 2/ With R/C No. V3328G2E-03 3/ With P/F No. V3328G2E-04

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