State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-15-180
Relating to Certification of New Motor Vehicles

NISSAN MOTOR COMPANY, 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 1991 model-year Nissan Motor Company, Ltd. exhaust emission control systems are certified as described below for gasoline-powered passenger cars:

Engine Family: MNS1.6V5FAA2 Displacement: 1.6 Liters (98 Cu. In.)

Exhaust Emission Control Systems and Special Features:

Three-Way Catalyst
Oxygen Sensor
Exhaust Gas Recirculation
Sequential Multipoint Electronic Fuel Injection

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) |
|---|---|---|
| 0.24 | 2.7 | 0.2 |

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 requirements of 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 19th day of July, 1990.

R. B. Summerfield
Assistant Division Chief
Mobile Source Division

E.O. # A-15-180

17.11.00 1991 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET



Manufacturer: NISSAN MOTOR CO.,LTD. Engine Family: MNS1.6V5FAA2

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

Eng. Type In-line 4, DDOHC Liter (CID) 1.6 (97.5) Evap. Family FI4-2

Emission Control Sys. (Use SAE Abbrv.) TWC/O2S/EGR/SMPI

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

| Engine Code | Vehicle Models (If Coded see attachment) | Trans. Type | Equiv. Test Weight | RLHP or DPA | Ign. System (ECU) Part No. | EGR Valve Part No | Catalyst **** Part No. |
|---|---|---|---|---|---|---|---|
| AG16DCM1<br>BG16DCM1 | SENTRA 2-DOOR SEDAN STANDARD<br>SENTRA 4-DOOR SEDAN STANDARD | M4 | 2625 | 5.6*<br>6.1** | Control Unit A11-B80 (JECS), JA11 B83 (AUTECS) | | |
| AG16DCM2 | SENTRA 4-DOOR SEDAN STANDARD | M5 | | 5.6*<br>6.1**<br>6.5*** | Control Unit A11-B26 (JECS) JA11 B50 (AUTECS) | EGR Valve AEY77-45 | FxxxG, Axxx1, FxxxJ, FxxxD, FxxxE, |
| | SENTRA 4-DOOR SEDAN XE<br>SENTRA 2-DOOR SEDAN XE | | 2750 2/ | 6.1**<br>6.5** | | | |
| | SENTRA 4-DOOR SEDAN GXE | | 2750 | | | | |

Comments: See page one for abbreviations and evaporative emission family identification. Please refer to manufacturer's HP list for correct dyna test HP settings based on model and equipment. If two test weights are listed, the lower weight will be used for testing.

* with 155R13 tire (GENERAL)
** with 175/70R13 tire (MICHELIN)
*** with 175/70R13 tire (TOYO, B.S., YOKOHAMA, DUNLOP)
**** The figures and numbers in the place of the mark x are variable according to lot number and production date.

1/ The supplimental data sheet is not changed by R/C No. M16V5FAC-01 and M16V5FAC-04 at all.

Issue Date: 03/01/90
Revision Date: 1/ 07/27/90 2/ 08/03/90 2/ With R/C No. M16V5FAC-02

E.O. # A-15-180

17.11.00 1991 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET



Manufacturer: NISSAN MOTOR CO., LDT. Engine Family: MNS1.6V5FAA2

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

Eng. Type In-line 4, DOHC Liter (CID) 1.6 (97.5) Evap.Family FI4-2

Emission Control Sys. (Use SAE Abbrv.) TWC/O2S/EGR/SMPI

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

| Engine Code | Vehicle Models (If Coded see attachment) | Trans. Type | Equiv. Test Weight | RLHP or DPA | Ign. System (ECU) Part No. | EGR Valve Part No | Catalyst ** Part No. |
|---|---|---|---|---|---|---|---|
| AG16DCM2 | NX COUPE XE | M5 | 2750 | 6.2* | Control Unit A11-B26 (JECS), JA11 B50 (AUTECS) | EGR Valve AEY77-45 | FxxxG, Axxx1, FxxxJ, FxxxD, FxxxE |
| | NX COUPE XE (with T-bar roof) | | | | | | |
| | SENTRA 2-DOOR SEDAN SE 2/ | | | 6.1*** 6.5**** | | | |

Comments: See page one for abbreviations and evaporative emission family identification. Please refer to manufacturer's HP list for correct dyna test HP settings based on model and equipment. If two test weights are listed, the lower weight will be used for testing.

* with 175/70R13 tire (DUNLOP)
** The figures and numbers in the place of the mark x are variable according to lot number and production date.
*** with 175/70R13 tire (MICHELIN)
**** with 175/70R13 tire (TOYO, B.S., YOKOHAMA, DUNLOP)

1/ The supplimental data sheet is not changed by R/C No. M16V5FAC-01 and M16V5FAC-04 at all.
2/ With R/C No. M16V5FAC-03

Issue Date: 03/01/90
Revision Date: 1/ 07/27/90 2/ 08/03/90

E.O. # A-15-180

17.11.00 1991 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET



Manufacturer: NISSAN MOTOR CO., LTD. Engine Family: MNS1.6V5FAA2

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

Eng.Type In-line 4,DOHC Liter (CID) 1.6 (97.5) Evap. Family FI4-2

Emission Control Sys. (Use SAE Abbrv.) TWC/O2S/EGR/SMPI

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

| Engine Code | Vehicle Models (If Coded see attachment) | Trans. Type | Equiv. Test Weight | RLHP or DPA | Ign. System (ECU) Part No. | EGR Valve Part No | Catalyst ***** Part No. |
|---|---|---|---|---|---|---|---|
| BG16DCM2 | SENTRA 4-DOOR SEDAN STANDARD | M5 | 2625 | 5.6*<br>6.1**<br>6.5*** | Control Unit A11-B36 (JECS), JA11 B50 (AUTECS) | EGR Valve AEY77-45 | FxxxG, Axxx1, FxxxJ, FxxxD, FxxxE |
| | SENTRA 4-DOOR SEDAN XE | | 2750 2/ | | | | |
| | SENTRA 2-DOOR SEDAN XE | | 2625 | 6.1**<br>6.5*** | | | |
| | SENTRA 4-DOOR SEDAN GXE | | 2750 2/ | | | | |
| | NX COUPE XE | | 2625 | 6.2**** | | | |
| | NX COUPE XE (with T-bar roof) | | | | | | |

Comments: See page one for abbreviations and evaporative emission family identification. Please refer to manufacturer's HP list for correct dyna test HP settings based on model and equipment. If two test weights are listed, the lower weight will be used for testing.

* with 155R13 tire (GENERAL)
** with 175/70R13 tire (MICHELIN)
*** with 175/70R13 tire (TOYO, B.S., YOKOHAMA, DUNLOP)
**** with 175/70R13 tire (DUNLOP)
***** The figures and numbers in the place of the mark x are variable according to lot number and production date.

1/ The supplimental data sheet is not changed by R/C No. M16V5FAC-01 and M16V5FAC-04 at all.

Issue Date: 03/01/90
Revision Date: 1/ 07/27/90 2/ 08/03/90 1/ With R/C No. M16V5FAC-02

E.O. # A-15-180

17.11.00 1991 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET



Manufacturer: NISSAN MOTOR CO., LTD. Engine Family: MNS1.6V5FAA2

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

Eng.Type rer: NISSAN MOTOR CO., LTD. Liter (CID) 1.6 (97.5) Evap. Family FI4-2

Emission Control Sys. (Use SAE Abbrv.) TWC/O2S/EGR/SMPI

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

| Engine Code | Vehicle Models (If Coded see attachment) | Trans. Type | Equiv. Test Weight | RLHP or DPA | Ign. System (ECU) Part No. | EGR Valve Part No | Catalyst **** Part No. |
|---|---|---|---|---|---|---|---|
| BG16DCM2 | SENTRA 2-DOOR SEDAN SE 2/ | M5 | 2625 | 6.1** 6.5*** | Control Unit A11-B36 (JECS), JA11 B50 (AUTECS) | | |
| AG16DCA1 | SENTRA 2-DOOR SEDAN STANDARD | L3 | 2625 | 5.6* 6.1** 6.5*** | Control Unit A11-B64 (JECS), JA11 B63 (AUTECS) | EGR Valve AEY77-45 | FxxxG, Fxxx1, FxxxJ, FxxxD, FxxxE |
| | SENTRA 4-DOOR SEDAN STANDARD | | 2750 | | | | |
| BG16DCA1 | SENTRA 2-DOOR SEDAN STANDARD | | 2625 | | | | |
| | SENTRA 4-DOOR SEDAN STANDARD | | 2750 1/ | | | | |

Comments: See page one for abbreviations and evaporative emission family identification. Please refer to manufacturer's HP list for correct dyna test HP settings based on model and equipment. If two test weights are listed, the lower weight will be used for testing.

* with 155R13 tire (GENERAL)
** with 175/70R13 tire (MICHELIN)
*** with 175/70R13 tire (TOYO, B.S., YOKOHAMA, DUNLOP)
**** The figures and numbers in the place of the mark x are variable according to [illegible]

Issue Date: 03/01/90 1/ With R/C No. M16V5FAC-04
Revision Date: 1/ 07/27/90 2/ 08/03/90 2/ With R/C No. M16V5FAC-03

E.O. # A-15-180

17.11.00 1991 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET



Manufacturer: NISSAN MOTOR CO., LTD. Engine Family: MNS1.6V5FAA2

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

Eng. Type In-line 4, DOHC Liter (CID) 1.6 (97.5) Evap. Family FI4-2

Emission Control Sys. (Use SAE Abbrv.) TWC/O2S/EGR/SMPI

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

| Engine Code | Vehicle Models (If Coded see attachment) | Trans. Type | Equiv. Test Weight | RLHP or DPA | Ign. System (ECU) Part No. | EGR Valve Part No | Catalyst **** Part No. |
|---|---|---|---|---|---|---|---|
| AG16DCA2 | SENTRA 4-DOOR SEDAN XE<br>SENTRA 2-DOOR SEDAN XE<br>SENTRA 2-DOOR SEDAN SE 2/<br>SENTRA 4-DOOR SEDAN GXE | L4 | 2750 | 6.1*<br>6.5** | Control Unit A11-B32 (JECS), JA11 B51 (AUTECS) | EGR Valve AEY77-45 | FxxxG, Axxx1, FxxxJ, FxxxD, FxxxE |
| | NX COUPE XE<br>NX COUPE XE (with T-bar roof | | | 6.2*** | A11-B81 (JECS) | | |

Comments: See page one for abbreviations and evaporative emission family identification. Please refer to manufacturer's HP list for correct dyna test HP settings based on model and equipment. If two test weights are listed, the lower weight will be used for testing.

* with 175/70R13 tire (MICHELIN)
** with 175/70R13 tire (TOYO, B.S., YOKOHAMA, DUNLOP)
*** with 175/70R13 tire (DUNLOP)
**** The figures and numbers in the place of the mark x are variable according to lot number and production date.

1/ The supplimental data sheet is not changed by R/C No. M16V5FAC-01 and M16V5FAC-04 at all.

Issue Date: 03/01/90
Revision Date: 1/ 07/27/90 2/ 08/03/90 2/ With R/C No. M16V5FAC-03

E.O. # A-15-180

17.11.00 1991 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET



Manufacturer: NISSAN MOTOR CO., LTD. Engine Family: MNS1.6V5FAA2

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

Eng.Type In-line 4, DOHC Liter (CID) 1.6 (97.5) Evap. Family FI4-2

Emission Control Sys. (Use SAE Abbrv.) TWC/O2S/EGR/SMPI

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

| Engine Code | Vehicle Models (If Coded see attachment) | Trans. Type | Equiv. Test Weight | RLHP or DPA | Ign. System (ECU) Part No. | EGR Valve Part No | Catalyst **** Part No. |
|---|---|---|---|---|---|---|---|
| BG16DCA2 | SENTRA 4-DOOR SEDAN XE<br>SENTRA 2-DOOR SEDAN XE<br>SENTRA 2-DOOR SEDAN SE<br>SENTRA 4-DOOR SEDAN GXE | L4 | 2750 | 6.1*<br>6.5** | Control Unit A11-B87 (JECS), JA11 B51 (AUTECS) | EGR Valve AEY77-45 | FxxxG, Fxxx1, FxxxJ, FxxxD FxxxE |
| | NX COUPE XE<br>NX COUPE XE (with T-bar roof) | | | 6.2*** | A11-B81 (JECS) | | |

Comments: See page one for abbreviations and evaporative emission family identification. Please refer to manufacturer's HP list for correct dyna test HP settings based on model and equipment. If two test weights are listed, the lower weight will be used for testing.

* with 175/70R13 tire (MICHELIN)
** with 175/70R13 tire (TOYO, B.S., YOKOHAMA, DUNLOP)
*** with 175/70R13 tire (DUNLOP)
**** The figures and numbers in the place of the mark x are variable according to lot number and production date.

1/ The supplimental data sheet is not changed by R/C No. M16V5FAC-01 and M16V5FAC-04 at all.

Issue Date: 03/01/90
Revision Date: 1/ 07/27/90 2/ 08/03/90 2/ With R/C No. M16V5FAC-03