

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-15-157
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 Orders G-45-3 and G-45-4;

IT IS ORDERED AND RESOLVED: That 1989 model-year Nissan Motor Co., Ltd. exhaust emission control systems are certified as described below for gasoline-powered passenger cars:

<u>Engine Family</u>	<u>Displacement Liters (Cubic Inches)</u>	<u>Exhaust Emission Control Systems (Special Features)</u>
KNS1.6V5FAC2	1.6 (97.5)	Air Injection - Valve Exhaust Gas Recirculation Oxygen Sensor Three-Way Catalyst (Central Fuel Injection) (On-Board Diagnostics)

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

The following are the emission standards for this engine family:

<u>Hydrocarbons (Grams per Mile)</u>	<u>Carbon Monoxide (Grams per Mile)</u>	<u>Nitrogen Oxides (Grams per Mile)</u>
0.39	7.0	0.4

The following are the certification emission values for this engine family:

<u>Hydrocarbons (Grams per Mile)</u>	<u>Carbon Monoxide (Grams per Mile)</u>	<u>Nitrogen Oxides (Grams per Mile)</u>
0.14	2.6	0.3

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 Administrative Code, 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 Tune-Up Label Specifications" (Title 13, California Administrative Code, Section 1965) for the aforementioned model year.

BE IT FURTHER RESOLVED: That the vehicle models listed also comply with the "Malfunction and Diagnostic System for 1988 and Subsequent Model Year[s]..." (Title 13, California Administrative Code, 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 regulations (Title 13, California Administrative Code, 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 6th day of September, 1988.


K. D. Drachand, Chief
Mobile Source Division

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Page 1

Manufacturer: NISSAN MOTOR CO., LTD. Engine Family: KNS1.6V5FAC2

Evaporative Family: TBI-6 Engine Type: In-line 4, OHC

Liters (CID): 1.6 (97.5)

ABBREVIATIONS

Ignition System

CA-Centrifugal Advance
ECU-Electronic Control Unit
EI-Electronic Ignition
ESAC-Electronic Spark Advance Control
VA-Vacuum Advance
VR-Vacuum Retard

Fuel System

CFI, SFI, HOS, OS,
DIP, EPFI, MPFI, DID
nV-nVenturi Carburetor
VV-Variable Venturi Carburetor

Exhaust Emission Control System

AIP-Air Injection-Pump
AIV-Air Injection-Valve
DBC-Dual Bed Catalyst
EGR-Exhaust Gas Recirculation
OS-Oxygen Sensor
HOS-Heated Oxygen Sensor
EM-Engine Modification
OC-Oxidation Catalyst
SPL-Smoke Puff Limiter or Throttle Delay
TOC-Trap Oxidizer, Continual
TOP-Trap Oxidizer, Periodical
EIC-Electronic Injection Control (Diesel Only)
TWC-Three-Way Catalyst
WUOC-Warm-Up Oxidation Catalyst
WUTWC-Warm-Up Three-Way Catalyst

Special Features

CCV-Combustion Chamber Valve
CFI-Central Fuel Injection or Throttle Body Injection
DID-Diesel Injection-Direct
DIP-Diesel Injection-Prechamber
IC-Intercooler or Aftercooler
EPFI-Electronic Port Fuel Injection
MPFI-Mechanical Port Fuel Injection
SFI-Sequential Fuel Injection
TC-Turbocharger
SC-Supercharger
OBD-On-Board Diagnostics

VEHICLE MODELS:

<u>Engine Code</u>	<u>Model</u>	<u>Transmission</u>
AG16ICM1	SENTRA STANDARD 2-DOOR SEDAN	4-Speed Manual
BG16ICM1	SENTRA E 2-DOOR SEDAN	5-Speed Manual
AG16ICM1	SENTRA XE 2-DOOR SEDAN	
BG16ICM1	SENTRA E 4-DOOR SEDAN	
BG16ICM1	SENTRA XE 4-DOOR SEDAN	
	SENTRA GXE 4-DOOR SEDAN	

Issue Date : 04/13/88
Revision Date :

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VEHICLE MODELS:

<u>Engine Code</u>	<u>Model</u>	<u>Transmission</u>
AG16ICM1	SENTRA E 3-DOOR HATCHBACK	5-Speed Manual
	SENTRA XE 3-DOOR HATCHBACK	
BG16ICM1	SENTRA XE HATCHBACK COUPE	
	SENTRA SE HATCHBACK COUPE	
	SENTRA E WAGON	
	SENTRA XE WAGON	
AG16ICA1	SENTRA E 2-DOOR SEDAN	3-Speed Automatic
	SENTRA XE 2-DOOR SEDAN	
	SENTRA E 4-DOOR SEDAN	
	SENTRA XE 4-DOOR SEDAN	
BG16ICA1	SENTRA GXE 4-DOOR SEDAN	
	SENTRA E 3-DOOR HATCHBACK	
	SENTRA XE 3-DOOR HATCHBACK	
	SENTRA XE HATCHBACK COUPE	
	SENTRA SE HATCHBACK COUPE	
	SENTRA E WAGON	
	SENTRA XE WAGON	
AG16ICM2		5-Speed Manual
BG16ICM2	PULSAR NX XE SPORT COUPE	
AG16ICA2		3-Speed Automatic
BG16ICA2	PULSAR NX XE SPORT COUPE	

Engine: Front X Mid. _____ Rear _____

Drive : FWD X RWD _____ 4WD Full Time _____ 4WD Part Time _____

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

Manufacturer: NISSAN MOTOR CO., LTD. Engine Family: KNS1.6V5FAC2
 Liter (CID) : 1.6 (97.5) Eng. Type: In-line 4, OHC
 Emission Control Sys. (Special Features): AIV/EGR/OS/TVC (CFI/OBD)

Engine Code	Vehicle Models (If Coded see attachment) (Dyno Hp)	Trans. Type	Equiv. Test Weight	Ign. System (ECU) Part No.	Fuel System Part No.	EGR Valve Part No.	Catalyst *** Part No.
AG16ICM1 -R3 1/	SENTRA STANDARD 2-DOOR SEDAN (7.3)	H4	2500				
BG16ICM1 -R3 1/	SENTRA STANDARD 2-DOOR SEDAN (7.3)						
AG16ICM1 -R3 1/	SENTRA E 2-DOOR SEDAN (7.3)	H5	2625	Distributor D4P86-05 (HITACHI)	Air Flow Meter A38-000	EGR Valve AEY76-46	Y-xx.xx8 Y-xx.xxC
	SENTRA XE 2-DOOR SEDAN (7.3)			T4T74271 (MITSUBISI)	Control Unit A11-B31 1/		Y-xx.xx7 Y-xx.xx8
	SENTRA E 4-DOOR SEDAN (7.3)			Control Unit A11-B31 1/	Fuel Injector A48-000		
	SENTRA XE 4-DOOR SEDAN (7.3)						
	SENTRA GXE 4-DOOR SEDAN (7.3)						

Comments: See page one for abbreviations and evaporative emission family identification. Please refer to manufacturer's HP list for correct dyno test HP settings based on model and equipment. If two test weights are listed, the lower weight will be used for testing.
 *** The figures and numbers in the place of the mark x are variable according to lot number and production date.

Issue Date: 04/13/88
 Revision Date: 1/ 05/08/89

1/ With R/C No. K16V5FAC-03

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

Manufacturer: NISSAN MOTOR CO., LTD. Engine Family: KNS1.8V5FAC2
 Liter (CID) : 1.8 (97.5) Eng. Type: In-line 4. OHC
 Emission Control Sys. (Special Features): AIV/EGR/OS/TWC (CFI/OBD)

Engine Code	Vehicle Models (If Coded see attachment) (Dyno Hp)	Trans. Type	Equiv. Test Weight	Ign. System (ECU) Part No.	Fuel System Part No.	EGR Valve Part No.	Catalyst *** Part No.
AQ18ICM1 -R3 1/	SENTRA E 3-DOOR HATCHBACK (7.8)	M5	2625	Distributor D4P86-05 (HITACHI) T4T74271 (MITSUBISI) Control Unit A11-B31 1/	Air Flow Meter A38-000 Control Unit A11-B31 1/ Fuel Injector A48-000	EGR Valve AEY76-48	
	SENTRA XE 3-DOOR HATCHBACK (7.8)						Y-xx,xxB
	SENTRA XE 3-DOOR HATCHBACK (7.8)						Y-xx,xxC
	SENTRA XE HATCHBACK COUPE (6.7)						Y-xx,xx7
	SENTRA XE HATCHBACK COUPE (6.7)						Y-xx,xx8
	SENTRA E WAGON (8.1)						
	SENTRA XE WAGON (8.1)						
			2750				

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

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

Manufacturer: NISSAN MOTOR CO., LTD. Engine Family: KNS1.8V5PAC2
 Liter (CID) : 1.8 (97.5) Eng. Type: In-line 4, OHC
 Emission Control Sys. (Special Features): AIV/EGR/OS/TVC (CFI/OBD)

Engine Code	Vehicle Models (If Coded see attachment) (Dyno Hp)	Trans. Type	Equiv. Test Weight	Ign. System (ECU) Part No.	Fuel System Part No.	EGR Valve Part No.	Catalyst *** Part No.
BG16ICM1 -R3 1/	SENTRA E 2-DOOR SEDAN (7.3)	H5	2500	Distributor D4P86-05 (HITACHI)	Air Flow Meter A36-000	EGR Valve AEY78-46	Y-xx.xx8
	SENTRA XE 2-DOOR SEDAN (7.3)			T4T74271 (MITSUBISI)	Control Unit A11-B31 1/	Y-xx.xx7	
	SENTRA E 4-DOOR SEDAN (7.3)			Control Unit A11-B31 1/	Fuel Injector A48-000	Y-xx.xx8	
	SENTRA XE 4-DOOR SEDAN (7.3)		2625				
	SENTRA GXE 4-DOOR SEDAN (7.3)						

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

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

Manufacturer: NISSAN MOTOR CO., LTD. Engine Family: KNS1.6V5FAC2
 Liter (CID) : 1.6 (97.5) Eng. Type: In-line 4, OHC
 Emission Control Sys. (Special Features): AIV/EGR/OS/TVC (CFI/OBD)

Engine Code	Vehicle Models (If Coded see attachment) (Dyno Hp)	Trans. Type	Equiv. Test Weight	Ign. System (ECU) Part No.	Fuel System Part No.	EGR Valve Part No.	Catalyst *** Part No.			
BG16ICM1 -R3 1/	SENTRA E 3-DOOR HATCHBACK (7.8)	M5	2500	Distributor D4P86-05 (HITACHI)	Air Flow Meter A38-000	EGR Valve AEY78-46	Y-xx,xxB			
	SENTRA XE 3-DOOR HATCHBACK (7.8)							T4Y74271 (MITSUBISI)	Control Unit A11-B31 1/	Y-xx,xxC
	SENTRA XE HATCHBACK COUPE (6.7)									
	SENTRA SE HATCHBACK COUPE (6.7)		Y-xx,xx8							
	SENTRA E WAGON (8.1)			Y-xx,xx8						
	SENTRA XE WAGON (8.1)									

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

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

Manufacturer: NISSAN MOTOR CO., LTD. Engine Family: KNS1.6V5PAC2
 Liter (CID) : 1.6 (97.5) Eng. Type: In-line 4, OHC
 Emission Control Sys. (Special Features): AIV/EGR/OS/TVC (CFI/OBD)

Engine Code	Vehicle Models (If Coded see attachment) (Dyno Hp)	Trans. Type	Equiv. Test Weight	Ign. System (ECU) Part No.	Fuel System Part No.	EGR Valve Part No.	Catalyst *** Part No.
AG16ICM2 -R3 <u>1/</u>	PULSAR NX XE SPORT COUPE (6.8)	M5	2750	Distributor D4P86-05 (HITACHI)	Air Flow Meter A36-000		Y-xx,xxB
				T4T74271 (MITSUBISI)	Control Unit A11-B39 <u>1/</u>	EGR Valve AEY76-46	Y-xx,xxC
BG16ICM2 -R3 <u>1/</u>	PULSAR NX XE SPORT COUPE (6.2)			Control Unit A11-B39 <u>1/</u>	Fuel Injector A46-000		Y-xx,xx7 Y-xx,xx8

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

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Issue Date: 04/13/88
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Passenger Cars X Light-Duty Trucks _____ Medium-Duty Vehicles _____ Gas X Diesel _____

Manufacturer: NISSAN MOTOR CO., LTD. Engine Family: KNS1.6V5PAC2
 Liter (CID) : 1.6 (97.5) Eng. Type: In-line 4, OHC
 Emission Control Sys. (Special Features): AIV/EGR/OS/TVC (CFI/OBD)

Engine Code	Vehicle Models (If Coded see attachment) (Dyno Hp)	Trans. Type	Equiv. Test Weight	Ign. System (ECU) Part No.	Fuel System Part No.	EGR Valve Part No.	Catalyst *** Part No.
AG18ICA1 -R3 1/	SENTRA E 2-DOOR SEDAN (7.3)	L3	2625	Distributor D4P86-05 (HITACHI)	Air Flow Meter A36-000	EGR Valve AEY76-46	Y-xx,xx8 Y-xx,xxC Y-xx,xx7 Y-xx,xx8
	SENTRA XE 2-DOOR SEDAN (7.3)						
	SENTRA E 4-DOOR SEDAN (7.3)						
	SENTRA XE 4-DOOR SEDAN (7.3)						
	SENTRA GXE 4-DOOR SEDAN (7.3)						
	SENTRA E 3-DOOR HATCHBACK (7.8)						

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

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

Manufacturer: NISSAN MOTOR CO., LTD. Engine Family: KNS1.6V5FAC2
 Liter (CID) : 1.6 (97.5) Eng. Type: In-line 4, OHC
 Emission Control Sys. (Special Features): AIV/EGR/OS/TVC (CFI/OBD)

Engine Code	Vehicle Models (If Coded see attachment) (Dyno Hp)	Trans. Type	Equiv. Test Weight	Ign. System (ECU) Part No.	Fuel System Part No.	EGR Valve Part No.	Catalyst *** Part No.
AG18ICAI -R3 1/	SENTRA XE 3-DOOR HATCHBACK (7.8)	L3	2625	Distributor D4P88-05 (HITACHI)	Air Flow Meter A38-000	EGR Valve AEY76-46	Y-xx,xxB
	SENTRA XE HATCHBACK COUPE (6.7)		2750				Control Unit A11-B32 1/
	SENTRA SE HATCHBACK COUPE (6.7)			Y-xx,xx7			
	SENTRA E WAGON (8.1)			Y-xx,xx8			
	SENTRA XE WAGON (8.1)						

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

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1/ With R/C No. K16V5FAC-03

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

Manufacturer: NISSAN MOTOR CO., LTD. Engine Family: KNS1.6V5FAC2
 Liter (CID) : 1.6 (97.5) Eng. Type: In-line 4, OHC
 Emission Control Sys. (Special Features): AIV/EGR/OS/TWC (CPI/OBD)

Engine Code	Vehicle Models (If Coded see attachment) (Dyno Hp)	Trans. Type	Equiv. Test Weight	Ign. System (ECU) Part No.	Fuel System Part No.	EGR Valve Part No.	Catalyst *** Part No.
AG16ICA2 -R3 1/	PULSAR NX XE SPORT COUPE (6.8)			Distributor D4P86-05 (HITACHI)	Air Flow Meter A36-000		
		L3	2750	T4T74271 (MITSUBISI)	Control Unit All-B40 1/	EGR Valve AEY76-46	Y-xx,xxB
BG16ICA2 -R3 1/	PULSAR NX XE SPORT COUPE (6.2)			Control Unit All-B40 1/	Fuel Injector A46-000		Y-xx,xxC Y-xx,xx7 Y-xx,xx8

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

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