NISSAN MOTOR CO., LTD.

EXECUTIVE ORDER U-L-001-0037 New Off-Road Large Spark-Ignition Engines At & Above 25 Horsepower

Pursuant to the authority vested in the Air Resources Board by the Health and Safety Code, Division 26, Part 5, Chapters 1 and 2; and

Pursuant to the authority vested in the undersigned by Health and Safety Code Sections 39515 and 39516 and Executive Order G-02-003;

IT IS ORDERED AND RESOLVED: That the following new large spark-ignition engines and emission control systems produced by the manufacturer are certified for use in off-road equipment as described below. Production engines shall be in all material respects the same as those for which certification is granted.

MODEL YEAR			ENGINE DISPLACEMENT (liters)	FUEL TYPE Dual Fuel, Gasoline or LPG		
2007	2007 7NSXB04.546C		4.5			
DURABIL	DURABILITY SPECIA		AL FEATURES & CONTROL SYSTEMS	TYPICAL EQUIPMENT USAGE		
5000		Throttle Body li Catalytic Conve	njection (Gas and Dual Fuel), njection (LPG), Three-Way rter, Heated Oxygen Sensor	Forklift		
ENGINE MODELS (rated power in horsepower, hp)		MODELS	See Attached Model Pages			

The following are the hydrocarbon plus oxides of nitrogen (HC+NOx) and carbon monoxide (CO) exhaust certification emission standards (Title 13, California Code of Regulations, (13 CCR) Section 2433(b)(1)) and certification emission levels for this engine family in grams per brake horsepower-hour (g/bhp-hr). Engines within this engine family shall have closed crankcases in conformance with 13 CCR Section 2433(b)(2).

(g/bhp-hr)	HC+NOx	СО		
Exhaust Standards	1.0	15.5		
Certification Levels	0.6	7.1		

The following is the evaporative hydrocarbon emission standard (13 CCR Section 2433(b)(3)) and certification emission level for this engine family in grams per gallon of fuel tank capacity (g/gallon).

Evaporative Certification Method	HC Cert. Level (g/gallon)	HC Cert. Standard (g/gallon)
Design Based	N/A	0.2

BE IT FURTHER RESOLVED: That for the listed engines for the aforementioned model-year, the manufacturer has submitted, and the Executive Officer hereby approves, the information and materials to demonstrate certification compliance with 13 CCR Section 2433(c) (certification and test procedures), 13 CCR Section 2434 (emission control labels), and 13 CCR Sections 2435 and 2436 (emission control system warranty).

BE IT FURTHER RESOLVED: That the listed engine models have been certified to the optional HC+NOx and CO emission standard(s) listed above pursuant to 13 CCR 2433 (b)(1).

BE IT FURTHER RESOLVED: That the listed engines are permitted conditionally upon final approval by the Office of Administrative Law of the amendments to the Regulations For New Emission Standards, Fleet Requirements, And Test Procedures For Forklifts And Other Industrial Equipment (13 CCR Section 2433(c) (certification and test procedures), 13 CCR Section 2434 (emission control labels), and 13 CCR Sections 2435 and 2436 (emission control system warranty)) approved by the Board at the May 25, 2006 public hearing. In the event that the amendments do not become effective, engines in this engine family will be deemed uncertified.

Engines certified under this Executive Order must conform to all applicable California emission regulations.

This Executive Order is only granted to the engine family and model-year listed above. Engines in this family that are produced for any other model-year are not covered by this Executive Order.

Annette Hebert, Chief

Mobile Source Operations Division

ATTACHMENT PG 1 of 1

Model Year: _ 2007	Page:
Manufacturer Name: NISSAN MOTOR CO., LTD	Issued: <u>06/20/2006</u>
Engine Family: 7NSXB04.546C	Revised:
OFF-ROAD LSI ENGINE SUPPLEMENTAL INFORMATION	E.O.#: U-L-001-0037

S13.	S14.		S15.		S16.	S17.	S18.	S19.	S20.
Casina Madal	Facina	Sales Codes (Check ALL		Eng.	Rated	Rated	Peak	Peak	
Engine Model	Engine Code		appropriate)		Displ. (Liters)	Power (HP)	Speed (RPM)	Torque (FT-LB)	Torque Speed
	Code	1 1							
		Calif.	49-	50-					(RPM)
		Only	State	State					
*TB45 MN-1			ţ	V	4.478	84.2	2450	200.4	1600
TB45 MN-2				٧	4.478	86.3	2450	207.7	1470
TB45 MN-3	(Gasoline)			٧	4.478	84.2	2450	200.4	1600
1043 1014-3	(LPG)			V	4.478	86.3	2450	207.7	1470
TB45 K-1			<u> </u>	٧	4.478	83.9	2400	200.5	1600
TB45 K-2				V	4.478	86.0	2400	207.5	1440
TB45 K-3	(Gasoline)			V	4.478	83.9	2400	200.5	1600
1243100	(LPG)			V	4.478	86.0	2400	207.5	1440
TB45 T-1				V	4.478	83.9	2450	200.9	1600
TB45 T-2			<u> </u>	٧	4.478	86.2	2450	208.2	1470
TB45 T-3	(Gasoline)		<u> </u>	V	4.478	83.9	2450	200.9	1600
	(LPG)	<u> </u>		V	4.478	86.2	2450	208.2	1470
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