California Environmental Protection Agency AIR RESOURCES BOARD	NISSAN MOTOR CO., LTD.	EXECUTIVE ORDER U-L-001-0017 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 FAMILY NAME	ENGINE DISPLACEMENT (liters)	FUEL TYPE
2003	3NSXB02.041B	2.0	Dual Fuel, Gasoline or LPG

DURABILITY HOURS	SPECIAL FEATURES & EMISSION CONTROL SYSTEMS	TYPICAL EQUIPMENT USAGE
N/A	Throttle Body Injection, Heated Oxygen Sensor, Three-Way Catalytic Converter	Forklift

ENGINE MODELS (rated power in horsepower, hp)	See Attachment

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	CO
Standards	3.0	37.0
Certification Levels	0.4	6.6

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).

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.

Executed at El Monte, California on this 22nd day of July 2002.

Allen Lyons, Chief
Mobile Source Operations Division

ATTACHMENT Pg 1 of 1

Model Year: 2003
Manufacturer Name: NISSAN MOTOR CO., LTD
Engine Family: 3NSXB02.041B
OFF-ROAD LSI ENGINE SUPPLEMENTAL INFORMATION

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S12. MODEL SUMMARY (Use an asterisk (*) to identify worst-case engine model used for certification testing.)

S13. Engine Model	S14. Engine Code	S15. Sales Codes (Check ALL appropriate)			S16. Eng. Displ. (Liters)	S17. Rated Power (HP)	S18. Rated Speed (RPM)	S19. Peak Torque (FT-LB)	S20. Peak Torque Speed (RPM)
		Calif. Only	49-State	50-State					
H20 NISSAN-1				V	1.982	41.7	2600	96.2	1600
H20 TCM-1				V	1.982	38.6	2300	95.5	1600
H20 KOMATSU-1				V	1.982	40.5	2450	94.8	1600
H20 NISSAN-2				V	1.982	38.7	2600	91.9	1600
H20 TCM-2				V	1.982	36.5	2300	91.1	1600
H20 KOMATSU-2				V	1.982	37.7	2450	91.1	1600
H20 NISSAN-3				V	1.982	47.8	3150	91.1	1890
H20 NISSAN-4				V	1.982	46.1	3150	90.6	1890
H20 NISSAN-5	(Gasoline)			V	1.982	47.8	3150	91.1	1890
	(LPG)			V	1.982	45.8	3150	87.4	1890