

 AIR RESOURCES BOARD	MOTORENFABRIK HATZ	EXECUTIVE ORDER U-R-034-0201
		New Off-Road Compression-Ignition Engines

Pursuant to the authority vested in the Air Resources Board by Sections 43013, 43018, 43101, 43102, 43104 and 43105 of the Health and Safety Code; and

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

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

MODEL YEAR	ENGINE FAMILY	DISPLACEMENT (liters)	FUEL TYPE	USEFUL LIFE (hours)
2009	9HZXL997C40	0.997	Diesel	3000
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION	
Direct Diesel Injection			Pump, Generator Set, Other Industrial Equipment	

The engine models and codes are attached.

The following are the exhaust certification standards (STD) and certification levels (CERT) for hydrocarbon (HC), oxides of nitrogen (NOx), or non-methane hydrocarbon plus oxides of nitrogen (NMHC+NOx), carbon monoxide (CO), and particulate matter (PM) in grams per kilowatt-hour (g/kw-hr), and the opacity-of-smoke certification standards and certification levels in percent (%) during acceleration (Accel), lugging (Lug), and the peak value from either mode (Peak) for this engine family (Title 13, California Code of Regulations, (13 CCR) Section 2423):

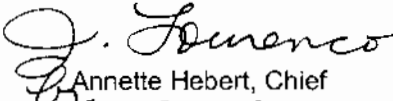
RATED POWER CLASS	EMISSION STANDARD CATEGORY		EXHAUST (g/kw-hr)					OPACITY (%)		
			HC	NOx	NMHC+NOx	CO	PM	ACCEL	LUG	PEAK
8 ≤ kW < 19	Tier 4	STD	N/A	N/A	7.5	6.6	0.40	N/A	N/A	N/A
		CERT	--	--	7.2	3.4	0.21	--	--	--

BE IT FURTHER RESOLVED: That for the listed engine models, the manufacturer has submitted the information and materials to demonstrate certification compliance with 13 CCR Section 2424 (emission control labels), and 13 CCR Sections 2425 and 2426 (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 12th day of December 2008.


 Annette Hebert, Chief
 Mobile Source Operations Division

Motorienfabrik Hatz
Nonroad CI

Attachment

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Engine Model Summary Template

Engine Model	1.141 Part Number	1.141 Part Description	1.141 Part Quantity	1.141 Part Unit Cost	1.141 Part Total Cost	1.141 Part Material Cost	1.141 Part Labor Cost	1.141 Part Overhead Cost	1.141 Part Profit	1.141 Part Total Price	1.141 Part Material Price	1.141 Part Labor Price	1.141 Part Overhead Price	1.141 Part Profit Price	1.141 Part Total Price
31C2.L.1071.0	NA	2540/2540H	17.82050	24	3.4	35.62050	24	3.4		39.02050	35.62050	24	3.4		39.02050
31C2.L.1071.0	NA	2540/2540H	17.82050	24	3.2	35.62050	24	3.2		38.82050	35.62050	24	3.2		38.82050
31C2.L.1071.0	NA	2540/2540H	17.82050	24	3.2	35.62050	24	3.2		38.82050	35.62050	24	3.2		38.82050
31C2.L.1071.0	NA	2540/2540H	17.82050	24	3.1	37.82050	24	3.1		40.92050	37.82050	24	3.1		40.92050
31C2.L.1071.0	NA	2540/2540H	15.82050	24	3.0	39.82050	24	3.0		42.82050	39.82050	24	3.0		42.82050
31C2.L.1071.0	NA	2540/2540H	15.82050	24	2.8	37.82050	24	2.8		40.62050	37.82050	24	2.8		40.62050
31C2.L.1071.0	NA	2540/2540H	15.82050	24	2.8	37.82050	24	2.8		40.62050	37.82050	24	2.8		40.62050
31C2.L.1071.0	NA	2540/2540H	15.82050	24	2.7	37.82050	24	2.7		40.42050	37.82050	24	2.7		40.42050
31C2.L.1071.0	NA	2540/2540H	15.82050	22	3.7	32.82050	22	3.7		36.52050	32.82050	22	3.7		36.52050
31C2.L.1071.0	NA	2540/2540H	16.82050	22	3.6	32.82050	22	3.6		36.42050	32.82050	22	3.6		36.42050
31C2.L.1071.0	NA	2540/2540H	17.82050	22	3.5	33.82050	22	3.5		37.32050	33.82050	22	3.5		37.32050
31C2.L.1071.0	NA	2540/2540H	17.82050	22	3.4	33.82050	22	3.4		37.22050	33.82050	22	3.4		37.22050
31C2.L.1071.0	NA	2540/2540H	17.82050	22	3.4	33.82050	22	3.4		37.22050	33.82050	22	3.4		37.22050
31C2.L.1071.0	NA	2540/2540H	17.82050	22	3.2	34.82050	22	3.2		38.02050	34.82050	22	3.2		38.02050
31C2.L.1071.0	NA	2540/2540H	16.82050	22	3.1	34.82050	22	3.1		37.92050	34.82050	22	3.1		37.92050
31C2.L.1071.0	NA	2540/2540H	16.82050	22	3.1	34.82050	22	3.1		37.92050	34.82050	22	3.1		37.92050



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