

## MOTORENFABRIK HATZ

EXECUTIVE ORDER U-R-034-0210

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	9HZXL.722V90	0.722	Diesel	3000
SPECIAL	FEATURES & EMISSION	CONTROL SYSTEMS	TYPICAL EQUIPMENT	APPLICATION
	Direct Diesel Injed	ction	Pump, Compressor, Other Ir	ndustrial 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	EMISSION			E	XHAUST (g/kw-l	nr)		OF	PACITY (%	6)
POWER	STANDARD CATEGORY		нс	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			7.1	4.9	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 \_\_\_\_\_\_\_ day of December 2008.

Annette Hebert, Chief

Mobile Source Operations Division

Motorenfabrik Hatz Nonroad CI

Engine Model Summary Template Return to Template

Harmon   1,000 SCONNM	Elegens Famili	1.Engine Code	1.Engine Code 2 Engine Model	SUMPORPH CARGONIO	C.F. re i Plate: mové tode @ peak HP (thr decs loss)	Cond. @ peak HP (Cond. @ peak HP (Condeses only)	6Toque @ RPM (DEA Gross)	7.5 tel Rate: mail triche@peak trique	(XA) Green Rate:	9. Binke to 1 Costori Device Per SAE J 1900
Hith   1000 1000   11	HC 4 722,680	18/A	1090 SZNAW	14,712,0000	8,14	6.9		42.5	5,4	DDI
NA 1500 SECON 4460R2000 415 0.7  NA 1500 SECON 4460R2000 415 0.0  NA 1500 SECON 4420R2000 415 0.0	05/27/7079	N/A	1090 S/ZVVH	14,6@2950	41.5	8,8	31,8@1800	42.5	6.4	-
NA 1909 (2007) 4445 69 8 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	96.225.40	N/A	1D90 S/Z/VMC	14,5@2900	41.5	6.7	31,8@1800	42.5	4 6	-
NA (190 5/20/ym (4),200900 (415 0.6 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	DW-082785	N/A	10/90 S/20/MI	14,3 (\$2,050	41.5	6.6	31.1@1800	4	2,4	_
	29,722,722,490	A/A	1090 S/ZV/WV	14,2 @2800	6,14	9,6	31,1@1800	42	2,4	
HAA 1100 SCOVIM 13-002700 415 0.2  HIR 100 SCOVIM 13-002700 415 0.1  HIR 100 SCOVIM 13-00200 415 0.1  HIR 100 SCOVIM 13-00200 415 0.0	047454 75	43	10:00 S/Z/V/Nr/	14,1@2750	5,14	4,0	31.1@1800	4	2,5	
HAN (1900 SERVAN 93-980000 415 0.1 0.0 0.1 MAIN (1900 SERVAN 93-980000 415 0.0 0.0 0.0 MAIN (1900 SERVAN 93-98000 415 0.0 0.0 0.0 MAIN (1900 SERVAN 93-98000 415 0.0 0.0 MAIN (1900 SERVAN 93-98000 415 0.0 0.0 MAIN (1900 SERVAN 93-980000 415 0.0 0.0 MAIN (1900 SERVAN 93-980000 415 0.0 0.0 MAIN (1900 SERVAN 93-9800000 415 0.0 0.0 MAIN (1900 SERVAN 93-98000000 415 0.0 0.0 MAIN (1900 SERVAN 93-9800000000000000000000000000000000000	C1 72,140	N/A,	1090 S:27VAN	13,9@2700	41,5	6,2	31.1@1800	45	4,2	
NA 150 000 000 415 0.0  NA 150 000 0000 415 0.0	201,7227000	11/A	1090 S/Z/VM/	13.7 @2550	41.5	6,1	31,1@1500	42	4,2	-
NA 100 02000M 34gebbo 415 59  NA 100 02000M 134gebbo 415 58  NA 100 0200M 1200M 0200M 415 58  NA 100 0200M 1200M 0200M 415 59  NA 100 0200M 1200M 120gebb 415 54  NA 100 0200M 1200M 120gebb 415 54	NL**22/90	N/A	1090 S/Z/VMK	13,5@2500	41.5	0,8	31,1@1800	8	4,2	
HAN 1000 SCHOWN 13-1882000 41.5 5.8 HAN 1000 SCHOWN 13-1882000 41.5 5.7 HAN 1000 SCHOWN 13-2882000 41.5 5.4 HAN 1000 SCHOWN 13-2882000 41.5 5.4 HAN 1000 SCHOWN 13-2882000 41.5 5.4	71.7.2000	N/A	1090 3/25//06	13,4@2550	5,54	6,50	31,1@1800	42	4.2	
NA 109.552/NY 13.08240 41.0 57. 18. 18. 18. 18. 18. 18. 18. 18. 18. 18	047.777.790	NA	1090 S/Z/V/W	13,1602500	5,14	8,5	30,3@1800	4	1,4	
18A 1000 SIZVIN 122@200 415 6.8 18A 1000 SIZVIN 126@200 415 6.4 18A 1000 SIZVIN 1 <sup>2</sup> <sup>2</sup> 22@200 415 6.3	241,722,920	N/A	1000 S/ZV/MK	13.0@2450	5,14	5.7	30,3@1800	14	4	
NA 1090 \$220/46 (12,6,62360 41,5 5.4 NA 1090 \$220/04)	000000000000000000000000000000000000000	N/A	10/00 5/20//9/	12,7@2400	41,5	6,8	30,3@1800	14	1,4	
14/A 1030 SJZNING 9-12.3@2300 41.5 5.3	2000	N/A	1090 S/20/901	12,6@2350	5,14	4.0	30,3@1900	4	4.1	Н
The second secon	GHENOLT TENNO	NO	1 DOOR SUZVINE 9	12,3@2300	8,14	60	30,3 @1800	4	4,	-

U-R-634-02-10

Attachment