

MOTORENFABRIK HATZ

EXECUTIVE ORDER U-R-034-0207 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	9HZXL1.38SV2	1.384	Diesel	3000
SPECIAL	FEATURES & EMISSION	CONTROL SYSTEMS	TYPICAL EQUIPMENT	APPLICATION
	Direct Diesel Injec	ction	Pump, Compressor, Other In	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 (%	b)
POWER	STANDARD CATEGORY		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	20	15	50
		CERT			7.3	4.6	0.28	4	3	5

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

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Engine Model Summary Template

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P. 1 of .

Attachment

22.3 pproxity 18.0 2.0 444gendo 18.0 19.0 22.0 pproxity 18.0 2.0 444gendo 20.0 18.0 19.0 2.1 pproxity 18.0 2.0 444gendo 20.0 18.0 19.0 2.1 pproxity 18.0 2.0 444gendo 20.0 19.0 19.0 2.2 pproxity 2.0 2.0 444gendo 20.0 19.0 19.0 2.2 pproxity 2.0 2.0 444gendo 20.0 19.0 19.0 2.2 pproxity	anity 1.Engine	Engan Family 1.Engine Code 2.Engine Model	SAHP@RPM GAEORKI)	Challen. Emctode @ prach? (brdkselosk)	(Exal) @ past HP (Exal) @ past HP (Exaless to H)	6.Tokin @ SPE (SEA Grass)	and toke good	Oc. A Digital Superior Control (Oc. A Digital Digital Design Per SAIE J 1930)	P. Bester in Control extra Per SAE J 1937
MAR. 1970 pt 22 0,000000 15.D 2.0 1.0 1.0 MAR. 1970 pt 2.1 0,00000 15.D 2.9 440,0000 20.D 1.0 MAR. 1970 pt 12.D 2.9 440,0000 20.D 1.0 MAR. 1970 pt 12.D 2.9 440,000 20.D 1.0 MAR. 1970 pt 2.1 12.D 2.0 440,000 20.D 1.0 MAR. 1970 pt 2.1 12.D 1.0 2.0 440,000 20.D 1.0 MAR. 1970 pt 2.1 12.D 1.0 2.0 1.0 1.0 MAR. 1970 pt 2.1 12.D 1.0 2.0 1.0 1.0 1.0 MAR. 1970 pt 2.0 12.D 1.0 2.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	SING NO	A 3W35		0,61	3,0	1	20,0	0,1	700
No. 100.000 2.0 4400 10.0			22,0692950	0,61	3,0	44@1800	20.0	ď,	
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NA 700052 2.1 Aggregoo 19.0 2.9 444698500 20.0 15.0 NIA 70052 2.1 Aggregoo 19.0 2.9 4409800 20.0 15.0 NIA 70052 2.1 Aggregoo 10.0 2.2 4409800 20.0 15.0 NIA 70052 2.0 Aggregoo 10.0 2.2 4469800 20.0 15.0 NIA 70052 2.0 Aggregoo 10.0 2.0 4469800 20.0 15.0 NIA 70052 2.0 Aggregoo 10.0 2.0 4469800 20.0 15.0 NIA 70052 2.0 Aggregoo 10.0 2.4 4469800 20.0 15.0 NIA 70052 1.0 Aggregoo 10.0 2.2 4469800 20.0 15.0 NIA 70052 1.0 Aggregoo 10.0 2.2 4469800 20.0 15.0 NIA 70052 1.0 Aggregoo 10.0 2.2 4469800 20.0 15.0			21.7 @2850	10,0	2,0	44@1800	20,0	0,1	
NAM PRINTS 27 (Aggrego 6.0 4.0 Angelesco 20.0 1.9 NAM NAME 2.1 (Aggrego 16.0 2.7 44467800 20.0 1.9 NAM 20076 2.1 (Aggrego 19.0 2.7 44467800 20.0 1.9 NAM 20076 2.0 (Aggrego) 19.0 2.7 44467800 20.0 1.9 NAM 20076 2.0 (Aggrego) 19.0 2.2 44667800 20.0 1.9 NAM 20076 1.0 (Aggrego) 19.0 2.4 44667800 20.0 1.9 NAM 20076 1.0 (Aggrego) 19.0 2.4 44667800 20.0 1.9 NAM 20076 1.0 (Aggrego) 19.0 2.2 44667800 20.0 1.9 NAM 20076 1.0 (Aggrego) 19.0 2.2 44667800 20.0 1.9 NAM 20076 1.0 (Aggrego) 10.0 2.1 44667800 20.0 1.9 <td>!</td> <td></td> <td>21,5@2800</td> <td>0,61</td> <td>2,8</td> <td>44@1800</td> <td>20,0</td> <td>1,0</td> <td>-</td>	!		21,5@2800	0,61	2,8	44@1800	20,0	1,0	-
NAME STATES 2.1 (BPTOM 64.0 2.2 446(BRDOM 1.9 10.44 20.05 2.0 (BBDOM 1.0 1.9 1.9 10.44 20.05 2.0 (BBDOM 1.0 1.9 1.9 10.45 20.0 (BBDOM 1.0 1.0 1.0 1.9 10.45 20.0 (BBDOM 1.0 2.0 440 1.0 1.0 10.44 20.05 1.0 2.0 440 1.0 1.0 1.0 10.45 20.05 1.0 2.0 440 2.0 1.0 1.0 10.45 20.05 1.0 2.0 440 2.0 1.0 1.0 10.45 20.05 1.0 2.0 440 2.0 1.0 1.0 10.45 20.05 1.0 2.0 440 2.0 1.0 1.0 10.45 20.05 1.0 2.0 440 2.0 1.0 1.0 1.0 10.45 20.05<			21,2@2750	19.0	2.8	44@1800	20,0	0,	
NA			21,1@2700	19,0	2,7	44@1800	20,0	0	
No. 19/05 20.0 gaggero 19.0 19.0 No. No. 20.0 gaggero 19.0 19.0 No. 20.0 gaggero 19.0 2.6 448/9800 20.0 19.0 No. 20.0 gaggero 19.0 2.6 448/9800 20.0 19.0 No. 20.0 gaggero 19.0 2.6 448/9800 20.0 19.0 No. 20.0 gaggero 19.0 2.4 448/9800 20.0 19.0 No. 20.0 gaggero 19.0 2.5 448/9800 20.0 19.0 No. 20.0 gaggero 20.0 44.0 No. 20.0 gaggero 20.0 20.0 No.			20,8@2650	19.0	2,7	44@1800	20.0	6,1	-
No. 1975 20.2 general 2.0 44 general 2.0 45 general 2.	. ~		20,5@2600	19.0	2,8	44@1800	20,0	o,	-
MAR. 2016/25 CORRESSION 14.0 14.0 14.0 MAR. 2016/25 20.0 4.0 14.0 14.0 14.0 MAR. 2016/25 10.0 2.0 4.00 10.0 1.0 MAR. 2016/25 10.0 2.0 4.00 10.0 1.0 MAR. 2016/25 10.0 2.0 4.00 1.0 1.0 MAR. 2016/25 10.0 2.0 4.0 1.0 1.0 1.0 MAR. 2016/25 10.0 2.0 4.0 1.0 1.0 1.0 MAR. 2016/25 10.0 2.0 4.0 1.0 <t< td=""><td></td><td></td><td>20,2@2550</td><td>19,0</td><td>2.6</td><td>44@1800</td><td>20,0</td><td>0,1</td><td>-</td></t<>			20,2@2550	19,0	2.6	44@1800	20,0	0,1	-
NAME ORIGINARY 0.0 2.5 -0.0 1.0 1.0 NAME PRINCE 10.20000000 10.2 2.4 -0.0 1.0 1.0 NAME PRINCE 10.20000000 10.2 2.4 -0.0 1.0 1.0 NAME PRINCE 10.0 10.0 2.2 -0.0 1.0 1.0 NAME PRINCE 10.0 10.0 <td< td=""><td></td><td></td><td>19,8@2500</td><td>0,01</td><td>2.6</td><td>44@1800</td><td>20,0</td><td>1,0</td><td></td></td<>			19,8@2500	0,01	2.6	44@1800	20,0	1,0	
No.			19,5@2450	0,61	2,5	44@1800	20,0	6,1	
NA THOSE READ REPORT NG 2.4.4 Addition 1.9. NA WIND MICHAEL 19.0 2.2.4 Addition 10.9 1.9 NA WIND 19.0 2.2.4 Addition 20.0 1.9 NA WIND 17.7 19.0 2.2 Addition 20.0 1.9 NA WIND 17.7 19.0 2.2 Addition 20.0 1.9 NA WIND 17.0 19.0 2.1 Addition 20.0 1.9 NA WIND 17.0 19.0 2.1 Addition 20.0 1.9 NA 20.0 19.0 2.1 Addition 20.0 1.9 NA 20.0 19.0 2.1 Addition 2.0 1.9 NA 20.0 19.0 1.0 4.0 1.0 1.9 NA 20.0 1.0 1.0 1.0 1.0 1.0 NA			19,2@2400	19.0	2.4	44@1800	20.0	ď.	
NA NA NA NA NA NA NA NA			18,0@2350	19.0	2,4	44@1800	20,0	9,1	
NA			19,5@2300	19,0	2,3	44@1800	20.0	1,0	
NA NAFE 1/2 gazon 14,0 22 44gerson 20.0 1,9 NA NAFO 1/2 Agricon 140 2.2 44gerson 20.0 1,9 NA NAFO 1/2 Agricon 140 2.1 44gerson 20.0 1,9 NA NAFO 1/2 gazono 140 2.1 44gerson 20.0 1,9 NA NAFO 1/2 gazono 140 2.0 44gerson 20.0 1,9 NA NAFO 1/2 gazono 140 1,9 44gerson 20.0 1,9 NA NAFO 1/2 gazono 140 1,9 44gerson 20.0 1,9 NA NAFO 1/2 gazono 1,0 1,9 1,9 1,0 NA NAFO 1/2 gazono 1,0 1,0 1,0 1,0 NA NAFO 1/2 gazono 1,0 1,0 1,0 1,0 NA NAFO 1/2 gazono 1,0 1,0			18,1@2250	19,0	2,3	44@1900	20,0	9,4	
MA 1962 17,482-100 140 2.2 448-100 27.0 1.9			17.7 @2200	19.0	2,2	44@1900	20,0	0,1	
NA			17,4@2150	19,0	2.2	44@1800	20.0	6,1	-
No.			17,0@2100	19,0	2,1	44@1800	20,0	0,1	
NA			19,5@2050	19,0	2.4	44@1800	20,0	0,1	
NA 19707 15 Righteon 15.0 2.0 4-46gresso 20.0 NA 19527 15 Appliation 15.0 4-46gresso 20.0 NA 19527 15 Appliation 15.0 15 4-46gresso 20.0 NA 19527 15 Appliation 15.0 15 4-46gresso 20.0 NA 19552 15 Appliation 15.0 15 4-46gresso 20.0 NA 19552 15 Appliation 15.0 15 15 Appliation 15.0 NA 19552 15 Appliation 15 Appli			16,2@2000	19.0	2.0	44@1800	20,0	4,0	-
NA 76505 144,24 140,24			15,8@1950	0,61	2.0	44@1800	20,0	1,0	
NA 20075 15.0 (0.1950 19.0 1.9 4448/1800 20.D NA 20075 NA			15,4@1900	10,0	o.	44@1800	20,0	0,7	
NIN 20025 (*) 140@1600 190 1,8 44@1600 20.0 RIAN 20045 (*) 70,0 27 28@1600 160 NIN 30045 (*) 70,0 27 28@1600 160	_		15,0@1850	19.0	9,	44@1800	20,0	0,1	
N/A SW25 だべ20.2億2000 17.0 2.7 38億1900 N/A SW26 20.0億2090 17.0 2.7 38億1900			-	10.01	1,8	44@1800	20.0	1,0	-
N/A 3N/SK 20,0@2050 17,0 2,7 38@1800		38/32	20,2@3000	17,0	2,7	38@1800	18,0	4.7	-
The second secon			20,0@2950	0,77	2,7	38@1800	18.0	1,7	•

Attachment

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Engine Model Summary Template

the Family 1	Engine Ced	Shorte Fundly 1. Engine Code 2. Engine Model	SAEGINE)	marktoke @ peak HP (Or dieselosk)	(Dr.An) @ peak HP (Cr. diesek only)	6.Tokpre @ RPM (CEA GASE)	mink troke@peak togse	(Dock) @ posit bright	Out highwall bridge Dente Per SAE J1900
2012/C11365V2	AWA	3,4/3,5	19,8,8,2900	17,0	2.5	38@1800	18,0	1,7	100
SHELL SESVE	NA	34035	19,7@2850	17,0	2.5	38@1600	18,0	1.7	7
2420, 1,0342	P.E.A	31435	19,4@2800	0,71	2.5	38@1800	18,0	1.7	
SHEVEL 305 V2	A/N	SONO	19,3 @2750	17,0	2,5	38@1800	18,0	1.7	
PHCD:L1 39542	AWA	3,8/30	19,0@2700	17,0	2,4	38@1800	18,0	1.7	
985-L1 vyp/202	N/A	3,00,36	18,9(\$2560	0,71	2,4	38@1800	18.0	1.7	
MEN SOCIA	NA	314/25	18.6@2500	0,71	2,4	38@1800	18,0	1.7	-
2455/FT 365/65	N/A	33425	18.4@2550	0,71	2,3	38@1800	18,0	1.7	
E7111 WSV2	185	Shitte	18.1.82500	0,71	2,3	38@1800	18,0	1.7	
45 L 36V2	NA	40135 18.3	25.2@2350	0,61	3,2	60(21600	20,02	2,6	
PHENE LIBRORY	N/A	AUKS KIN	24.8(\$2300	o, at	3,1	80@1800	20,0	2,6	
2HZKL1.305 v.1	A/M	49825	24,3@2250	0,81	3,0	60@1800	20,0	2,6	
SHZ7411 30 8 v.Q.	NO.	49635	23.9@2200	19.0	3,0	60@1800	20,0	2.6	
24E_ct.1 29.5V2	N/A	44035	23,3@2150	0,01	2.9	60@1800	20.0	2,8	
THE RELEASE OF	ĕ/N	49935	22.8@2100	0,01	2.8	00@1800	20.0	2,0	
DHZ.<1,285.V2	ψŅ	40435	22,3@2050	19.0	2.8	50@1800	20,0	2.0	
DHZZZJ1 595×2	₩.	4835	21,7@2000	19,0	2.7	00@1800	20,0	2,0	
245.274.383.42	NA	44035	21.2@1950	0,01	2,8	57@1600	0.91	2,4	
3HZ3111 98/91/2	MA	44635	20,7@1900	0,01	2.5	57@1800	19,0	2,4	-
27/ 526 LT (2H6	14/6	410035	20,1@1950	0,61	2.5	57@1900	19,0	2,4	
PICTULI38 SVC	N/AI	4005	19,8@1800	0,01	2.4	57@1800	19,0	2,4	-
987717 283V2	N/A	49035	25,3@2550	17.0	3.2	53@1800	18.0	2,3	
9HZNUS 348YY	N/A	49835	24,9@2500	47,0	3.1	63@1800	18,0	2.3	
9HZ/L1 388V2	4,5	49635	24.5@2550	17.0	3,1	53@1800	18.0	2,3	-
04271.1.3821.0	NYA.	-14/35	24.1@2500	17,0	3,0	53@1800	18,0	2.3	