California Environmental Protection Agency AIR RESOURCES BOARD	MOTORENFABRIK HATZ GMBH & CO. KG	EXECUTIVE ORDER U-R-034-0124 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 system 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)
2007	7HZXL.267C27	0.267	Diesel	3000

SPECIAL FEATURES & EMISSION CONTROL SYSTEMS	TYPICAL EQUIPMENT APPLICATION
Direct Diesel Injection	Pump, Generator Set

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
kW < 8	Tier 2	STD	N/A	N/A	7.5	8.0	0.80	N/A	N/A	N/A
		CERT	--	--	5.8	3.8	0.42	--	--	--

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 26th day of December 2006.

Raphael Susewitz

for Annette Hebert, Chief
Mobile Source Operations Division

Attachment 1 of 2
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Engine Model Summary Template

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Engine Family	1.Engine Code	2.Engine Model	3.BHP@RPM (SAE Gross)	4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	6.Torque @ RPM (SEA Gross)	7.Fuel Rate: mm/stroke@peak torque	8.Fuel Rate: (lbs/hr)@peak torque
7HZXL.267C27	N/A	1B27	5,1@3600	12,8	2,6	7,5@3600	12,8	2,6
7HZXL.267C27	N/A	1B27	5,1@3550	12,8	2,5	7,6@3550	12,8	2,5
7HZXL.267C27	N/A	1B27	5,1@3500	12,8	2,5	7,7@3500	12,8	2,5
7HZXL.267C27	N/A	1B27	5,1@3450	12,8	2,5	7,8@3450	12,8	2,5
7HZXL.267C27	N/A	1B27	5,1@3400	12,8	2,4	7,9@3400	12,8	2,4
7HZXL.267C27	N/A	1B27	5,0@3350	12,8	2,4	7,8@3350	12,8	2,4
7HZXL.267C27	N/A	1B27	5,0@3300	12,8	2,4	7,9@3300	12,8	2,4
7HZXL.267C27	N/A	1B27	4,8@3250	12,8	2,3	7,8@3250	12,8	2,3
7HZXL.267C27	N/A	1B27	4,8@3200	12,8	2,3	7,9@3200	12,8	2,3
7HZXL.267C27	N/A	1B27	4,8@3150	12,8	2,2	8,1@3150	12,8	2,2
7HZXL.267C27	N/A	1B27	4,8@3100	12,8	2,2	8,2@3100	12,8	2,2
7HZXL.267C27	N/A	1B27	4,8@3050	12,8	2,2	8,3@3050	12,8	2,2
7HZXL.267C27	N/A	1B27	4,7@3000	13,0	2,2	8,2@3000	13,0	2,2
7HZXL.267C27	N/A	1B27	4,7@2950	13,0	2,1	8,1@2950	13,0	2,1
7HZXL.267C27	N/A	1B27	4,6@2900	13,0	2,1	8,3@2900	13,0	2,1
7HZXL.267C27	N/A	1B27	4,6@2850	13,0	2,1	8,4@2850	13,0	2,1
7HZXL.267C27	N/A	1B27	4,4@2800	13,0	2,0	8,6@2800	13,0	2,0
7HZXL.267C27	N/A	1B27	4,4@2750	13,0	2,0	8,5@2750	13,0	2,0
7HZXL.267C27	N/A	1B27	4,4@2700	13,0	2,0	8,6@2700	13,0	2,0
7HZXL.267C27	N/A	1B27	4,3@2650	13,0	1,9	8,3@2650	13,0	1,9
7HZXL.267C27	N/A	1B27	4,3@2600	13,0	1,9	8,4@2600	13,0	1,9
7HZXL.267C27	N/A	1B27	4,2@2550	13,0	1,8	8,3@2550	13,0	1,8
7HZXL.267C27	N/A	1B27	4,2@2500	13,0	1,8	8,5@2500	13,0	1,8
7HZXL.267C27	N/A	1B27	4,0@2450	13,0	1,8	8,4@2450	13,0	1,8
7HZXL.267C27	N/A	1B27	4,0@2400	13,0	1,7	8,5@2400	13,0	1,7
7HZXL.267C27	N/A	1B27	4,0@2350	13,0	1,7	8,4@2350	13,0	1,7
7HZXL.267C27	N/A	1B27	3,8@2300	13,0	1,7	8,6@2300	13,0	1,7
7HZXL.267C27	N/A	1B27	3,8@2250	13,0	1,6	8,5@2250	13,0	1,6

Attachment 2 of 2
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Engine Model Summary Template

Engine Family	1.Engine Code	2.Engine Model	3.BHP@RPM (SAE Gross)	4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	6.Torque @ RPM (SEA Gross)	7.Fuel Rate: mm/stroke@peak torque	8.Fuel Rate: (lbs/hr)@peak torque
7HZXL.267C27	N/A	1B27	3,6@2200	13,0	1,6	8,7@2200	13,0	1,6
7HZXL.267C27	N/A	1B27	3,6@2150	13,0	1,6	8,5@2150	13,0	1,6
7HZXL.267C27	N/A	1B27	3,5@2100	13,0	1,5	8,4@2100	13,0	1,5
7HZXL.267C27	N/A	1B27	3,4@2050	13,0	1,5	8,3@2050	13,0	1,5
7HZXL.267C27	N/A	1B27	3,4@2000	13,0	1,4	8,5@2000	13,0	1,4
7HZXL.267C27	N/A	1B27	2,9@1800	13,0	1,3	8,2@1800	13,0	1,3

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