

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	9HZXL997V40	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 (NO_x), or non-methane hydrocarbon plus oxides of nitrogen (NMHC+NO_x), 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):

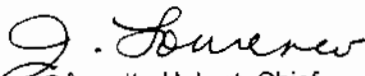
RATED POWER CLASS	EMISSION STANDARD CATEGORY		EXHAUST (g/kw-hr)					OPACITY (%)		
			HC	NO _x	NMHC+NO _x	CO	PM	ACCEL	LUG	PEAK
8 ≤ kW < 19	Tier 4	STD	N/A	N/A	7.5	6.6	0.40	20	15	50
		CERT	--	--	7.1	3.4	0.23	15	10	28

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

Motorfabrik Hatz
Konrod CI

Engine Model Summary Template

Attachment P. 2 of 2

U-R-034-0202

Location (3000)	1 Engine Code	2 Engine Model	3 Max RPM	4 Max Capacity	5 Torque Weighting	6 Stroke Volume	7 Max RPM Capacity	8 Torque Weighting	9 Stroke Volume	10 Max RPM Capacity	11 Torque Weighting	12 Stroke Volume
91C2...L1671-00	NA	2540/2540H	17.4@2560	24	3.4	36.2@2000	25	2.6	DDI			
91C2...L1671-00	NA	2540/2540H	17.4@2560	24	3.3	36.5@2000	24.5	2.7				
91C2...L1671-00	NA	2540/2540H	17.6@2460	24	3.3	36.5@2000	24.5	2.7				
91C2...L1671-00	NA	2540/2540H	18.0@2460	24	3.2	36.5@2000	24.5	2.7				
91C2...L1671-00	NA	2540/2540H	18.5@2360	24	3.1	37.0@2000	24	2.7				
91C2...L1671-00	NA	2540/2540H	18.1@2300	24	3.1	37.0@2000	24	2.7				
91C2...L1671-00	NA	2540/2540H	15.7@2250	24	3.0	37.0@2000	24	2.7				
91C2...L1671-00	NA	2540/2540H	15.4@2200	24	2.8	37.0@2000	24	2.7				
91C2...L1671-00	NA	2540/2540H	15.1@2150	24	2.8	37.0@2000	24	2.7				
91C2...L1671-00	NA	2540/2540H	14.7@2100	24	2.7	37.0@2000	24	2.7				
91C2...L1671-00	NA	2540/2540H	14.4@2050	24	2.7	37.0@2000	24	2.7				
91C2...L1671-00	NA	2540/2540H	14.1@2000	22	3.7	37.0@2000	24	2.7				
91C2...L1671-00	NA	2540/2540H	19.2@2000	22	3.6	37.0@2000	24	2.7				
91C2...L1671-00	NA	2540/2540H	18.1@2000	22	3.5	37.0@2000	24	2.7				
91C2...L1671-00	NA	2540/2540H	17.6@2000	22	3.4	37.0@2000	24	2.7				
91C2...L1671-00	NA	2540/2540H	17.3@2000	22	3.4	37.0@2000	24	2.7				
91C2...L1671-00	NA	2540/2540H	17.3@2000	22	3.2	37.0@2000	23.5	2.6				
91C2...L1671-00	NA	2540/2540H	16.8@2000	22	3.2	36.5@2000	23	2.6				
91C2...L1671-00	NA	2540/2540H	16.8@2000	22	3.2	36.5@2000	23	2.6				
91C2...L1671-00	NA	2540/2540H	16.7@2000	22	3.1	36.5@2000	22.5	2.6				
91C2...L1671-00	NA	2540/2540H	16.5@2000	22	3.1	36.5@2000	22.5	2.6				