DAIMLERCHRYSLER AG

EXECUTIVE ORDER U-R-016-0070 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 engine 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)
2005	5MBXL21.9R6B	21.9	Diesel	8000
	FEATURES & EMISSION	CONTROL SYSTEMS	TYPICAL EQUIPMENT A	
Direct Dies	el Injection, Turbocharge Smoke Puff Limi	er, Charge Air Cooler, iter	Crane, Compressor and Ind	ustrial 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	EMISSION STANDARD	<u></u>			XHAUST (g/kw-ł	ır)		OF	PACITY (%	6)
CLASS	CATEGORY		HC	NOx	NMHC+NOx	co	PM	ACCEL	LUG	PEAK
450≤KW <u><</u> 560	Tier 2	STD	N/A	N/A	6.4	3.5	0.20	20	15	50
-		CERT			6.0	0.6	0.12	7	4	22

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 October 2004.

Allen Lyens, Chief

Mobile Source Operations Division

LARGE ENGINE MODLL SUMMARY

: :: !	ado be ivening and an analysis and and	900		Manufacturar Family Name	Manufacturar Family Name.	- N	4	
EPA Engine Family. 1.Engine Code 2.En	EPA Engine Family: SIMBALZ I.STOD 3.BHI 1.Engine Code 2.Engine Model (SAE	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)	∑ _	7. Fuel Rate: mm/stroke@peak torque (lbs	8.Fuel Rate: (lbs/hr)@peak torque	8.Fuel Rate: 9.Emission Control lbs/hr)@peak torque Device Per SAE J1930
Ō	OM 444 LA	444 LA. E2/1 OM 444 LA 717 @ 2100 200	200	276	2336 @ 1400	233	214 DOF	214 DOFTSEM, SPL, CAC
ō	OM 444 LA	690 @ 1900	204	255	2336 @ 1400	233	214	EM, SPL, CAC
ō	OM 444 LA	670@ 2100	189	261	2285 @ 1400	222	204	EM, SPL, CAC
ō	OM 444 LA	643@ 1900	193	241	2285 @ 1400	222	204	EM, SPL, CAC
ō	OM 444 LA	610 @ 2100	170	235	2100 @ 1400	205	→ 681	EM, SPL, CAC