

DAIMLERCHRYSLER AG

EXECUTIVE ORDER U-R-016-0057 New Off-Road

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)
2003	3MBXL15.9RJA	15.9	Diesel	8000
SPECIAL	FEATURES & EMISSION		TYPICAL EQUIPMENT API	PLICATION
Direct Dies	sel Injection, Turbocharg Engine Control Mo	er, Charge Air Cooler, odule	Crane, Compressor and Indus	strial 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 (%	a)
POWER CLASS	STANDARD CATEGORY		HC	NOx	NMHC+NOx	co	PM	ACCEL	LUG	PEAK
225 <u><</u> KW<450	Tier 2	STD	N/A	N/A	6.4	3.5	0.20	20	15	50
		CERT			5.8	0.3	0.06	5	1	11

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 2002.

Allen Lyons, Chief

Mobile Source Operations Division

U-R-016-0057

LARGE ENGINE MOLLL SUMMARY

Manufacturer.	Manufacturer. DaimlerChrysler AG	r AG		Process Code:	Process Code: New Submission	ion	3	
FPA Fnoine Family:	niv: 3MBXL15.9RJA	9RJA		Manufacturer Family Name:	amily Name:	ΑΝ		
i i			4.Fuel Rate:	5.Fuel Rate:	HOO @ COURT	7.Fuel Rate:	8 Firel Rate:	0 Emission Control
1.Engine Code	1.Engine Code 2.Engine Model	3.BHP@RPM (SAE Gross)	mm/stroke @ peak nr (for diesel only)	(lbs/hr) @ peak HP (for diesels only)	SEA Gross)	mm/stroke@peak torque	(lbs/hr)@peak torqu	(lbs/hr)@peak torque Device Per SAE J1930
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502 I A E2/1	OM 502 LA	601 @ 1800 448KW 270	148KW 270	211.8	1991 @ 1200	292	152.9	TC, ECM, CAC
727.77.200	V 1 000 MO	510 @ 1800	226	177.3	1770 @ 1200	256	134.0	TC, ECM, CAC
50Z LA.EZ/Z	OW SUZ LA	oner more	25.0)			000	
502 I A E2/3	OM 502 LA	443 @ 1800 330 KW 198	30 KW 198	155.3	1585 @ 1200	230	120.4	IC, ECM, CAC
5/2 L . CO2	OM 502 LA	470 @ 1800	209	163.9	1696 @ 1200	248	129.9	DITITIC, ECM, CAC
505 LA:L2/4	200 IND	0000	403	1717	15/9 @ 1200	224	117.3	TC. ECM. CAC
502 LA.E2/5	OM 502 LA	4/0 (0) 7000	161	7:1.7	1043 (8) 1200			0 40 1401 01
502 LA.E2/6	OM 502 LA	563 @ 1800	252	197.7	1991 @ 1200	.292	152.9	C, ECM, CAC