DAIMLERCHRYSLER AG

EXECUTIVE ORDER U-R-016-0056 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	3MBXL12.0RJC	12.0	Diesel	8000		
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION			
Direct Dies	el Injection, Turbocharg Engine Control Mo	er, Charge Air Cooler, odule	Loader, Tractor and 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 (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	EXHAUST (g/kw-hr)			OPACITY (%)					
POWER CLASS	STANDARD CATEGORY		нс	NOx	NMHC+NOx	co	РМ	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			5.7	0.5	0.08	12	1	18

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.

Aller Lyons, Chief

Mobile Source Operations Division

Manufacturer: DaimlerChrysler AG

4-R-016-0056

Process Code: New Submission

LARGE ENGINE MOLLL SUMMARY

	8.Fuel Rate: 9.Emission Control (Ibs/hr)@peak torque Device Per SAE J1930	DDT TO FOM CAC	1) 1 () 1 () ()	TC, ECM, CAC	TC, ECM, CAC	🗸 TC, ECM, CAC
	8.Fuel Rate: (lbs/hr)@peak torque	10 080		94.8	86.6	76.7
A Z	7.Fuel Rate: mm/stroke@peak torque	288		258	243	216
amily Name:	6.Torque @ RPM (SEA Gross)	1475 @ 1080	000	1364 @ 1080	1276 @ 1080	1128 @ 1080
Manufacturer Family Name:	5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	145.2	1	133.2	118.8	106.6
	4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	176. J. 245	217	225	207	230KW 179
.0RJC	3.BHP@RPM (SAE Gross)	700 @ 1800 21562 205	7 COOL (1) 771	389 @ 1800	349 @ 1800	308 @ 1800 2 30 KW 179
ly: 3MBXL12.0RJC	2.Engine Model	ORA EDAL A	S S S S S S S S S S S S S S S S S S S	OM 501LA	OM 501LA	OM 501LA
EPA Engine Family:	1.Engine Code 2.Engine Model	E0.45 A F.5.14	30 FA.EZ/ I	501LA.E2/2	501LA.E2/3	501LA.E2/4