

DAIMLERCHRYSLER AG

EXECUTIVE ORDER U-R-016-0068

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	5`MBXL15.9RJA	15.9	Diesel	8000
SPECIAL	FEATURES & EMISSION		TYPICAL EQUIPMENT	APPLICATION
Direct Dies	el Injection, Turbocharge Engine Control Mo	er, Charge Air Cooler, dule	Crane, Compressor and Inc	dustrial 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				XHAUST (g/kw-l	nr)		OI	PACITY (%	6)
CLASS	CATEGORY		HC	NOx	NMHC+NOx	СО	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

_ day of October 2004

Allen Lyons, Chief

Mobile Source Operations Division

LARGE ENGINE MODEL SUMMARY

	Manufacturer:	Manufacturer: DaimlerChrysler AG	ır AG		Process Code:	Process Code: New Submission	ion	u-K-016-0068	-0068
	FPA Fooine Fag	FPA Finding Family: 5MBXL15.9BJA	.9RJA		Manufacturer Family Name:	⁻ amily Name:	NA		
		4 Engine Code 2 Engine Model	3.BHP@RPM	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 torq	8.Fuel Rate: 9.Emission Control (bs/hr)@peak torque Device Per SAE J1930
	I.Eilgale code	4.E.I.gillo Model	CHARLES AND CHARLE	Expension and improve that the property of the contract of the		**************************************			
È	ROOLA ENGINEERS	COSI A ESIA DA ESIA DA ESIA DA ESIA DE LA COSTA DEL COSTA DEL COSTA DE LA COSTA DEL COSTA DELA COSTA DE LA COSTA DEL COSTA DE LA COSTA DEL COSTA DEL COSTA DEL COSTA DE LA COSTA DE LA COSTA DE LA COSTA DE LA COS	601 @ 1800	270	211.8	1991 @ 1200	292	152.9	DITE, TC, ECM, CAC
	502 LA.L2/1	OM 502 LX	510 @ 1800	226	177.3	1770 @ 1200	256	134.0	TC, ECM, CAC
	502 LA.E2/2	ON 302 LA	443 @ 1800	198	155.3	1585 @ 1200	230	120.4	TC, ECM, CAC
	502 LA.E2/3	OW 502 LA	443 @ 1000	000	163.0	1696 @ 1200	248		TC. ECM. CAC
	502 LA.E2/4	OM 502 LA	470 (4) 1000	607		0001	200		TO ECM OV
:- '	502 LA.E2/5	OM 502 LA	470 @ 2000	197	171.7	1549 @ 1200	577		10, ECIM, CAC
	502 LA E2/6	OM 502 LA	563 @ 1800	252	197.7	1991 @ 1200	292		TC, ECM, CAC
	502 LA.E2/7	OM 502 LA	578 @ 1800	255	199.2	1991 @ 1200	292	152.9	V TC, ECM, CAC