State of California AIR RESOURCES BOARD

EXECUTIVE ORDER U-R-16-25 Relating to Certification of New Heavy-Duty Off-Road Equipment Engines

DAIMLERCHRYSLER AG

Pursuant to the authority vested in the Air Resources Board at Sections 43000.5, 43013, and 43018 of the Health and Safety Code; and

Pursuant to the authority vested in the undersigned at Sections 39515 and 39516 of the Health and Safety Code and Executive Order G-45-9;

IT IS ORDERED AND RESOLVED: That the following diesel engines and exhaust emission control systems produced by the manufacturer are certified as described below for use in heavy-duty off-road equipment:

Model Year: 2000

Typical Equipment Usage: Crane, Compressor

Engine Power Ratings Range: 175 – 750 horsepower, inclusive

Fuel Type: Diesel

	Disp	olacement	Exhaust Emission Control
Engine Family	<u>Liters</u>	Cubic Inches	Systems and Special Features
YMBXL12.9R6A	10.0	613	Turbocharger
	13.0	798	Charge Air Cooler
			Smoke Puff Limiter

The engine models and codes are listed on attachments. Production engines shall be in all material respects the same as those for which certification is granted.

The exhaust emission certification standards and certification values in grams per brake horsepower-hour (g/bhp-h) for total hydrocarbons (THC), carbon monoxide (CO), nitrogen oxides (NOx), and particulate matter (PM), and the opacity-of-smoke certification standards and certification values in percent (%) during acceleration (Accel), lugging (Lug), and the peak value from either mode (Peak) for this engine family are as follows (Title 13, California Code of Regulations, Section 2423):

Exhaust Emissions (q/bhp-h) Smoke Opacity (%) THC CO NOx PMAccel Lug Peak Standard 1.0 8.5 0.4 6.9 20 15 50 Certification 0.3 0.5 5.7 0.1 8 1 13

BE IT FURTHER RESOLVED: That the listed engine models comply with "Exhaust Emission Standards and Test Procedures—Heavy-Duty Off-Road Diesel-Cycle Engines" (Title 13, California Code of Regulations, Section 2423) for the aforementioned model-year.

BE IT FURTHER RESOLVED: That the listed engine models also comply with "Emission Control Labels—1996 and Later Heavy-Duty Off-Road Diesel-Cycle Engines" (Title 13, California Code of Regulations, Section 2424) for the aforementioned modelyear.

BE IT FURTHER RESOLVED: That for the listed engine models, the manufacturer has submitted the materials to demonstrate certification compliance with the Board's emission control system warranty provisions (Title 13, California Code of Regulations, Sections 2425 et sea.).

Engines certified under this Executive Order must conform to all applicable California emission regulations.

Executed at El Monte, California this _____ day of February 2000.

R. B. Summerfield, Chief

Mobile Source Operations Division

LARGE ENGINE MODEL SUMMARY

EO: 4-R-16-25

Process Code: New Submission

Manyfacturer: DaimlerChrysler AG

	EPA Engine Family:	ily: YMBXL.12.9R6A	.9R6A		Manufacturer Family Name:	-amily Name:	Ϋ́		
	1. Engine Code	2. Engine Model	3.BHP@RPM (SAE Gross)	4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	5.Fuel Rate: (lbs/fut) @ peak HP (for diesels only)	6.Torque @ RPM (SEA Gross)	7.Fuel Rate: mm/stroke@peak torque	8.Fuel Rate: (lbs/hr)@peak torque	8.Fuel Rate: 9.Emission Control (lbs/hr)@peak torque Device Per SAE J1930
i	402 I A E 1/1	ADDIA E 1/1 OM ADDIA	375 @ 2100	147	136.3	1309 @1200	194	102.8	EM, SPL, TC, CAC
	402 LA: LI 1	OM 401 LA	308 @ 2100	163	113.3	988 @1250	191	79.4	EM, SPL,772, CAC
	401 LA: L I/1	OM 401 LA	285 @ 2100	150	103.9	870 @ 1200	170	8.79	EM, SPL,7C, CAC
	401 LA: L. 1/2	OM 401 LA	268 @ 2100	138	95.9	804 @ 1200	160	63.8	EM, SPL, TC, CAC
	4011A F 1/2	OM 401 LA	268 @ 1900	146	100,2	804 @ 1200	160	63.8	EM, SPL,72, CAC