## State of California AIR RESOURCES BOARD

## EXECUTIVE ORDER A-27-72

Relating to Certification of New Heavy-Duty Motor Vehicle Engines

MACK TRUCKS, INC.

Pursuant to the authority vested in the Air Resources Board by Sections 43100, 43102 and 43103 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-45-9;

IT IS ORDERED AND RESOLVED: That the following 1997 model-year Mack Truck, Inc. diesel-cycle engines are certified for use in motor vehicles with a manufacturer's gross vehicle weight rating (GVWR) over 14,000 pounds:

Fuel Type: Diesel

Fuer Type. Bress	Engine [	Displacement (Cubic Inches)	Exhaust Emission Control Systems and Special Features
Engine Family VMK728EJDAYW	11.9	(728)	Turbocharger Charge Air Cooler Engine Control Module

Engine models and codes are listed on attachments.

The following are the certification exhaust emission standards for this engine family in grams per brake horsepower-hour:

Land	Carbon Monoxide	Nitrogen <u>Oxides</u>	<u>Particulates</u>	
<u>Hydrocarbons</u>	15.5	5.0	0.10	
1.3	13.3		- r	

The following are the certification exhaust emission values for this engine family in grams per brake horsepower-hour, except that compliance with the carbon monoxide exhaust emission standard has been demonstrated pursuant to title 40, Code of Federal Regulations, Part 86, Subpart A, Section 86.091- 23(c)(2)(i):

23(0)(2)(1)		11: 1	
Engine	Hydrocarbons	Nitrogen <u>Oxides</u>	<u>Particulates</u>
<u>Family</u>	<u></u>	۸ (	0.08
VMK728EJDAYW	0.1	4.6	

BE IT FURTHER RESOLVED: That for the listed engine models, the manufacturer has substituted the materials to demonstrate certification compliance with the Board's emission control system warranty provisions (Title 13, California Code of Regulations, Section 2035 et seq.).

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

The Bureau of Automotive Repair will be notified by copy of this order and Executed at El Monte, California this day of January 1997.

R. B. Summerfield, Chief Mobile Source Operations Division

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## LARGE ENGINE MODEL SUMMARY

ED# A-27-72

		1	A TO			
	Fuel Rate:	(lbs/hi/@max rated torque	98,2	40.7		-
	Fire! Rate:	mnystroke@ max rated torque	301.4	256.2		
,	124 48	Torque @ KPM (SEA Gross)	16540,1200	1425@1020		
	ly Name: Fam Puel Rate:	(lbs/hr) @ rated speed (for chesels only)	154.4	99.3	-	
	Manufacturer Family Name: Famzex 49	ninystrake @ raled speed (for diesel only)	246.6	1.69.1		
		EMP@RPM	4540 1800	350 @ 1750		
Manufacturer: MAGK TRUCKS, INC.	EPA Engine Family: YMKTZBEJDAYW		E7-454	E7-350		
Manufacturer:	El'A Engine Famil		Engine Codes A. 50 State Codes	N/A E7-350 350 8.1350 N/A EM7-300		