State of California AIR RESOURCES BOARD

EXECUTIVE ORDER A-27-66

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-45-3;

IT IS ORDERED AND RESOLVED: That the following 1995 model-year Mack Trucks, 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

Engine Family	Engine Displacement Liters (Cubic Inches)		Exhaust Emission Control <u>Systems and Special Features</u>		
SMK728EJDARA (45)	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:

Carbon Hydrocarbons Monoxide		Nitrogen <u>Oxides</u>	<u>Particulates</u>	
1.3	15.5	5.0 ·	0.10	

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):

Engine Family <u>Hydrocarbons</u>		Nitrogen <u>Oxides</u>	<u>Particulates</u>
SMK728EJDARA	0.0 (0.03)	4.5	0.09

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, Section 2035 et seq.).

MACK TRUCKS, INC.

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 attachments.

Executed at El Monte, California this 17th day of January, 1995.

Assistant Division Chief Mobile Source Division

E.O.# A-27-66

199 5 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET HEAVY-DUTY DIESEL-STANDARD ENGINES

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n	11 9	INCL	iters /40	/		IDIC THOUSE
Displacement:	Power: 454	HP @	1800	RPM Engine	Configura	tion: I-6
Tamitian: Co	maraccian X	Comp	ression with (Slow Plug	_	Spark
Ignition: co Fuel Type/sl:	Dedicated	_ Flex-Fuel	Dual-Fuel_	Diesel	M100_	M85
	CNC IN	C IDC	Other (specif	fv)		
Niesel Cert F	uel: 13 CCR	2282 4	0 CFR 86.1313	-90	10 CFR 86.1	.313-94 <u>X</u>
Primary Inten	ded Service C	lass: LHD	MHD	HHD	Urba	ın Bus
Exhaust ECS (incl. MFI, TC	, CAC):TC	, CAC, ECM, DI	Li CAE	13020 CED	11\
•			(use abbrevia	tions per SAL	J1930 3EP	71)
Engine Model (Eng Code)	Rated HP @ RPM	Fuel Rate @Rated HP mm3 / stroke (lbs/hr)	Fuel Pump & Injector Part No. 313GC/114GC	ECM/PCM Part No. 1MS	EGR Valve Part No.	PTOX / Catalytic Converter Part No.
E7-454	4 54 @ 1 800	249.3 (156.1)	5205-P3/324A P4		N/A	N/A
			5217-P2/324A P6	1		
E7-427	427 @ 1800	230.2 (144.1)	P4	P23	N/A	N/A
			5217 - P2	543-P8		
E7-400	400 @ 1800	214.3 (134.2)	5205-P1/324A P4	P22 541-P7	N/A	N/A
			5217-P1	543-P7		
E7-375	375 @ 1800	198.5 (124.3)	5205-P1/324A P4 5217-P1	536-P10, P21	N/A	N/A
	·		5217-P1	543-P10		
E7-350	350 @ 1800	184.2 (115.3)	P3	536-P6,P17,P2 541-P6	O N/A	N/A
			5217-P1	543-P6		
E7-325	325 @ 1800	169.9 (106.4)	5205-P1/324A P3		N/A	N/A
			5217 - P1	543-P5		
E7-300	300 @ 1800	156.4 (97.9)	5205-P1/324A P5	P19	N/A	N/A
			5217-P1	543-P4		

Revisions: ____

E.O.# A-27-66

1995 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET HEAVY-DUTY DIESEL-STANDARD ENGINES

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Manufacturer	MACK TRUCKS,	INC.	Eng	ine Family <u>4</u>	5 (SMK728E	DARA)
	11 0	, 1	itane 728	}	Ci	ibic inches
Mayimum Rated	Power: 454	/ HP @	1800	_RPM Engin	e Configura	tion: <u>I-6</u>
Idnition: Co	moression X	Comp	ression with (Glow Plug	_	Spark
Fuel Type(s):	Dedicated	Flex-Fuel	_ Dual-Fuel	Diesel <u></u>	M100_	M85
	CNG IN	G I PG	Other (speci	fy)		
Diesel Cert F	uel: 13 CCR	2232 40	O CFR 86.1313	-90	40 CFR 86.]	1313-94 <u>X</u>
Primary Inten	ded Service C	lass: LHD	MHD	HHU <u>^</u>	Urba	in bus
Exhaust ECS (incl. MFI, TC	, CAC): <u>TC</u> ,	CAC, ECM, DI	CIE	31020 CED	31\
			(use abbrevia	tions per SAL	11930 2EL	
Engine Model (Eng Code)	Rated HP @ RPM	Fuel Rate @Rated HP mm3 / stroke (lbs/hr)	l & Injector	ECM/PCM Part No. 1MS	EGR Valve Part No.	PTOX / Catalytic Converter Part No.
EM7-300	300 @ 1750	163.0 (99.2)	5205-P1/324A P5	536-P3,P18 541-P3 543-P3	N/A	N/A
EM7-275	275 @ 1750	149.8 (91.2)	5217-P1 5205-P1/324A	536-P2	N/A	N/A
			P5 5217-P1	543-P2		
EM7-250	250 @ 1750	137.3 (83.6)	5205-P1/324A P5		N/A	N/A
			5217-P1	543-P1		
E7-300	300 @ 1700	164.0 (97.0)	5205-P1/324A P5		N/A	N/A
			5217-P1	543-P14		
			,			
Date Issued:						
Revisions:						