State of California AIR RESOURCES BOARD

EXECUTIVE ORDER A-27-63

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 Mack Trucks, Inc. 1993 model diesel engines are certified for use in motor vehicles with a manufacturer's gross vehicle weight rating (GVWR) over 8,500 pounds:

Fuel Type: Diesel

Engine Family		cement Cubic Inches)	Exhaust Emission Control Systems and Special Features
PMT0728FAB5 (19)	11.9	(728)	Turbocharger Charge Air Cooler Smoke Puff Limiter
PMT0728FAC6 (20)	11.9	(728)	Turbocharger Charge Air Cooler Smoke Puff Limiter Engine Control Module
PMT0728FAD7 (24)	11.9	(728)	Turbocharger Charge Air Cooler Smoke Puff Limiter
PMT0728FAE8 (26)	11.9	(728)	Turbocharger Charge Air Cooler Smoke Puff Limiter Engine Control Module
PMT0728FAF9 (29)	11.9	(728)	Turbocharger Charge Air Cooler Smoke Puff Limiter
PMT0728FAGX (31)	11.9	(728)	Turbocharger Charge Air Cooler Smoke Puff Limiter Engine Control Module
PMT0728FAH0 (33)	11.9	(728)	Turbocharger Charge Air Cooler Smoke Puff Limiter Engine Control Module

Engine Family	Displace <u>Liters (</u>	ment <u>Cubic Inches)</u>	Exhaust Emission Control Systems and Special Featurs
PMT0728FAJ4 (34)	11.9	(728)	Turbocharger Charge Air Cooler Smoke Puff Limiter
PMT0728FAL6 (36)	11.9	(728)	Turbocharger Charge Air Cooler Smoke Puff Limiter Engine Control Module

Engine models and codes are listed on attachments.

The following are the certification emission standards for these engine families in grams per brake horsepower-hour:

Hydrocarbons	Carbon <u>Monoxide</u>	Nitrogen <u>Oxides</u>	<u>Particulates</u>
1.3	15.5	5.0	0.25

The following are the certification emission values for trese engine families in grams per brake horsepower-hour, except that compliance with the carbon monoxide 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 Oxides	<u>Particulates</u>
PMT0728FAB5	0.1	4.6	0.19
PMT0728FAC6	0.1	4.3	0.15
PMT0728FAD7	0.1	4.6	0.19
PMT0728FAE8	0.1	4.8	0.16
PMT0728FAF9	0.1	4.0	0.16
PMT0728FAGX	0.1	4.5	0.13
PMT0728FAH0	0.1	4.6	0.13
PMT0728FAJ4	0.1	4.5	0.17
PMT0728FAL6	0.1	4.4	0.12

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.).

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 $\frac{27}{2}$

day of January, 1993.

R. B. Summerfield

Assistant Division Chief Mobile Source Division

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Liters (CID)	MACK TRUCK 11.9 (728) Fuel Type	DIESEL	Engine Confi	PMT0128FAB5
Exhaust ECS & (Use abbrevia	Special Featur tions per SAE J	es(ECM/PCM, PT 1930 MAY91)	OX, IFI, etc.), TC	
Engine Model (Eng. Code)	Rated HP @ RPM 	Fuel Rate @ Rated HP mm^3 / stroke (]bs/hr)	Fuel Pump & Injector P/N 	ECM/PCM P/N	Part. Trap/ Catalyst P/N
E 7-300	300@1950		3134C51887 114GC325		N/A
E7-250	250 © 1950	150.8 (102.3)	313645788-1 11464325-		N/A

NA

1993 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET HEAVY-DUTY DIESEL ENGINES

Engine Family 20 (PMTC728FAC6) Manufacturer MACK TRUCKS INC Liters (CID) 11.9 (728) Fuel Type Diesel 25% Engine Config. I-6 Exhaust ECS & Special Features (ECM/PCM, PTOX, IFI, etc.) ____, ECM TC, SPL, CAC (Use abbreviations per SAE J1930 MAY91) ECM/PCM | Fuel Pump | Part. Trap/ Engine Model Rated HP Fuel Rate @ Rated HP & Injector P/N Catalyst @ RPM (Eng. Code) P/N mm^3 / strokel P/N (lbs/hr) NIA 313005204 PI 1M5532 PZ 156.2 21561750 EM7-275 (951) 114GC325-P3

143.3

250 6/250

EM7-250

3136C5204-P1 /MS532-P1

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Manufacturer_	MACK TRUCK	S, INC			MTC728FADT)
Liters (CID)	11.9 (728		e <u> D<i>ESEL</i> '25%</u> E	Ingine Conf	ig. <u>T-6</u>
Exhaust ECS & (Use abbrevia	L Special Featur ations per SAE	es(ECM/PCM, P 11930 MAY91)	TOX, IFI, etc.)	, <u>TC</u>	SPL, CAC
Engine Model (Eng. Code)	Rated HP @ RPM 	Fuel Rate @ Rated HP mm^3 / strok (lbs/hr)	Fuel Pump & Injector el P/N	ECM/PCM P/N	Part. Trap/ Catalyst P/N
EM7-275	275C 1750	175.3	313CC5188-P4 114CC325-P3	NA	NA
EM7-250	25° & 175°C	161.0 3 (98.0)	3/3005/98-PZ 11460325-P3	NA	NA

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Manufacturer_	MACK TRUC	E) Fuel Type			MTC125FNES)
		ures(ECM/PCM, Pl			
(Use abbrevia	itions per SAE	J1930 MAY91)		, , ,	
Engine Model	Rated HP	Fuel Rate	Fuel Pump	ECM/PCM	Part. Trap/
(Eng. Code)	@ RPM 	mm^3 / stroke	1 1	P/N	Catalyst P/N
E7-400	400@1800	226.8 (142.0)	313655204-P1 1/46C 325	1MS532-P1	16 N/A

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Manufacturer_	MAUK TRUC	KS, INC	Engine Fa	mily <u>29(F</u>	MTO728FAF9)
Liters (CID)	11.9 (728	<u>e</u>) Fuel Type	Diesel'ds% E	ngine Conf	ig. <u>T-6</u>
Exhaust ECS & (Use abbrevia	Special Featu Itions per SAE	res(ECM/PCM, P J1930 MAY91)	TOX, IFI, etc.)	, tc	SPL, CAC
Engine Model (Eng. Code)	Rated HP @ RPM 	Fuel Rate @ Rated HP mm^3 / stroke (lbs/hr)	& Injector	ECM/PCM P/N	Part. Trap/ Catalyst P/N
E7-350	3.50@ /800	221.4 (138.6)	313CC5188 P11 114 GC 3 25	2 N/A	NA

Manufacturer.	MACK TRUC	iks, Inc	Engine F	amily <u>31/p</u> m	TOTESFAGX)
Liters (CID)	11.9 (72	<u>e</u>) Fuel Type	DIESEL'25/6	3 Engine Confi	g. <u>T</u> -6
Exhaust ECS (Use abbrevia	S Special Feat ations per SAE	ıres(ECM/PCM, P J1930 MAY91)	TOX, IFI, etc.) ECM, , 7	C SPL,CAC
Engine Model (Eng. Code)	Rated HP @ RPM 	Fuel Rate @ Rated HP mm^3 / stroke (lbs/hr)	Fuel Pump & Injector e P/N	ECM/PCM P/N	Part. Trap/ Catalyst P/N
E7-300	300 C 1800	156.4 (97.4)	3134C 5204-P1 114 GC325-P2	/M5532 ·/	913 N/A

Manufacturer_	MACK TRUCK	S INC Engi	ne Family <u>33(PMTC728FAH</u> Þ)
Liters (CID)	11.9 (728) Fuel Type_ <i>DzeseL</i>	25% Engine Config. <u>T-6</u>
Exhaust ECS & (Use abbrevia	Special Featur tions per SAE	res(ECM/PCM, PTOX, IFI, (11930 MAY91)	etc.) <u>, ECM , TC., SPL,cA</u> C
Engine Model (Eng. Code)	Rated HP @ RPM 	Fuel Rate Fuel Pu @ Rated HP & Inject mm^3 / stroke P/N (lbs/hr)	•
EM7-300	300 E 1750		

Manufacturer_	MACK TRUC	iks INC	Engine F	amily <u>34(P/</u>	MTC728FAJ4)
Liters (CID)	11.9 (72	<u>&)</u> Fuel Ty	e Diesel'25%	S Engine Conf	ig. <u>I-6</u>
Exhaust ECS &	Special Feat itions per SAE	ures(ECM/PCM, 1	PTOX, IFI, etc.)TC,	SPL, CAC
Engine Model (Eng. Code)	Rated HP @ RPM 	Fuel Rate @ Rated HP mm^3 / stro (lbs/hr)		ECM/PCM P/N	Part. Trap/ Catalyst P/N
EM 7-300	300 C/750	1937	31345189 F 11460325-P	PIO N/A	NA

199<u>3</u> AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET HEAVY-DUTY DIESEL ENGINES

Manufacturer Liters (CID)	MACK TRUC 11.9 (72	ENGINE Engine Engine Engine Engine		<i>PMFC728FAL</i> 6) ig. <u>T-6</u>
Exhaust ECS & Special Features (ECM/PCM, PTOX, IFI, etc.) FCM TC, SPL,CAC (Use abbreviations per SAE J1930 MAY91)				
Engine Model (Eng. Code)	Rated HP @ RPM 	Fuel Rate Fuel Pump @ Rated HP & Injector mm^3 / stroke P/N (lbs/hr)	ECM/PCM P/N 	Part. Trap/ Catalyst P/N
E1-350	350 @1900	184.2 313CC5204-1 (115.3) 1146C325	PI 1MS532	7.715 N/A

Revisions: