State of California AIR RESOURCES BOARD

EXECUTIVE ORDER U-R-11-2

Relating to Certification of New Heavy-Duty Off-Road Equipment Engines

CASE CORPORATION

Pursuant to the authority vested in the Air Resources Board by Sections 43000.5, 43013 and 43018 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 Case Corporation 1996 modelyear engine, with rated power between 175 and 750 horsepower, and exhaust emission control systems are certified as described below for use in heavyduty off-road equipment:

<u>Typical Equipment Usage</u>: Construction/Mining Trucks, Snow Groomers, Agricultural Tractors, Logging Equipment

<u>Fuel Type</u>: Diesel

Engine Family	<u>Liters</u>	(Cubic Inches)	Exhaust Emission Control Systems and Special Features
TX9505R6DTRB (A413)	8.3	(.505)	Turbocharger Charge Air Cooler

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

Exhaust Emissions (g/bhp-hr)			Smoke Opacity (%)			
<u>THC</u>	<u>co</u>	<u>NOx</u>	<u>PM</u> _	<u>Accel</u>	<u>Lug</u>	<u>Peak</u>
1.0	8.5	6.9	0.4	20	15	50

The THC, CO, NOx and PM exhaust emission certification values, in g/bhp-hr, and the opacity of smoke emission certification values, in percent (%), for this engine family are:

	Exhaust Emission (g/bhp-hr)			Smoke Opacity (%)			
Engine Family	<u>THC</u>	<u>co</u>	<u>NOx</u>	<u>PM</u>	<u>Accel</u>	<u>Lug</u>	<u>Peak</u>
TX9505R6DTRB (A413)	0.4	0.7	5.8	0.2	10	3	25

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

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 2425 et seq.).

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

Executed at El Monte, California this about day of December 1995.

R. B. Summerfield Assistant Division Chief

Mobile Source Division

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1996 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET HEAVY-DUTY OFF-ROAD DIESEL ENGINES CASE CORPORATION

Displacement: 505	Manufacturer	CASE CORPOR	ATION	Engine F	'amily A^4	13) TX9505R6I	OTRB
Engine Model (Eng Code) Rated HP (Insance) Rate (In	Displacement: All Codes in Ender Valves/Ports possible Maximum Rated Ignition: Computed Type(s): Diesel Cert Furnary Service Tractors	505 / ng Fam: CA er Cylinder Power: 2 pression Dedicated CNG iel: 40 CFR 89 e Equipment:	8.3 L 49S 50S 2 60 HP Compressi Flex-Fuel LNG LPG 3.330-96 Construction/M	Cert Tes Strokes (194 On with Glow Plug [Dual Fue Other (specify Other (specify ining Trucks, Snow	Eng Conf st Procedures: per Combustion KW) @ 	ig: I ARB EPA Cycle 4 2200 Spar 1 M100	RPM RPM M85
Engine Model (Eng Code)	Exhaust ECS (e	.g., MFI, TC,	CAC):			-1020 TIM02)	
C8.3-C 260 @ 2200 135.2(98.8) FP 3926776 IN 3926787 N/A N/A N/A N/A C8.3-C 260 @ 2200 135.2(98.8) FP 3926887 N/A N/A N/A N/A 2054 C8.3-C 250 @ 2200 133.7(97.6) FP 3926886 N/A N/A N/A N/A Ate Issued: Revisions: SIRMITTED	-		@ Rated HP mm³ / stroke	Fuel Pump & Injector	ECM/PCM	EGR Valve	Catalytic Converter
C8.3-C 260 @ 2200	1845						
2054 C8.3-C 250 @ 2200 133.7(97.6) FP 3926886 N/A N/A N/A N/A Ate Issued: Revisions: SIRMITTED	C8.3-C	260 @ 2200	135.2(98.8)		N/A	N/A	N/A
C8.3-C 250 @ 2200 133.7(97.6) FP 3926886 N/A N/A N/A N/A ate Issued: Revisions: SIRMITTED	C8.3-C	260 @ 2200	135.2(98.8)		N/A	N/A	N/A
ate Issued: Revisions: SIRMITTED	2054						
Revisions:	C8.3-C	250 @ 2200	133.7(97.6)	1	N/A	N/A	N/A
Revisions:	Jate Issued:	ı			· 1		CHRAITTEO
	Revisions:			<u> </u>			