State of California AIR RESOURCES BOARD

EXECUTIVE ORDER A-13-122-3

Relating to Certification of New Heavy-Duty Motor Vehicle Engines

CATERPILLAR, 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 1998 model-year Caterpillar, 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 <u>Liters</u>	Displacement (Cubic Inches)	Exhaust Emission Control Systems and Special Features
WCPXH0629ERK	10.3	(629)	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:

Total	Carbon	Nitrogen	<u>Particulates</u>
Hydrocarbons	<u>Monoxide</u>	<u>Oxides</u>	
1.3	15.5	4.0	0.10

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

Total	Carbon	Nitrogen	<u>Particulates</u>
<u>Hydrocarbons</u>	<u>Monoxide</u>	<u>Oxides</u>	
0.2	1.1	3.7	0.08

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.).

BE IT FURTHER RESOLVED: That the aforementioned engine family has been conditionally certified subject to the following conditions:

- 1. Any engine which employs a defeat device shall not be covered by this Executive Order.
- 2. Within 180 days following the issuance of Executive Order A-13-122, the manufacturer must show cause, to the satisfaction of the Executive Officer or his designee, that the strategy for fuel injection timing, including timing during the fuel economy mode, is not a defeat device.

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.

R. B. Summerfield, Chief

Mobile Source Operations Division

9/24/97

EO: A-13-122-3

Manufacturer: CATERPILLARING.

EPA Engline Family: WCPXHQ629EBK.

4.Fuel Rate: mm/stroke @ peak HP

Manufacturer Family Name:

Process Code: New Submission

S.Fuel Rate; (Ibs/hr) @ peak HP 6.Torque @ RPM

NA

7.Fuel Rate: mm/stroke@peak

6.Fuel Rate: 9.Emission Control (Iba/hr)@peak torque Device Per SAE J1930

0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	S English Model	3.BHP@RPM	mm/stroke @ peak HP (for diesel only)	(lbs/hr) @ peak HP (for diesels only)	6.Torque @ RPM (SEA Gross)	mm/stroke@peak torque	6.Fuel Rate: (lbs/hr)@peak lorque	9.Emission Control Device Per SAE J1930
		,						
			nominal values	Due to product-	lon engine avgs.	these fuel rates	may change.	
Note: Peak HP	and Peak Torque	ruel rates are		247.0	4260 @ 4200	OPC	97.0	EM DI TC ECM.
1 Carl Fnoine	C-10	370 @ 1800	185	117.0	1330 (8) 1400	0,0	200	21 00 00
	0, 7	370 @ 1800	195	117.8	1350 @ 1200	240	0.78	EM, DIPON,
7		365 € 1800	192	116.0	1350 @ 1200	240	97.0	EM, DIP-PC, ECM,
2	2 5	250 @ 1900	182	110.5	1350 @ 1200	240	0.78	EM, DICTO, ECM,
*	2.5	330 (0) 330	107	1110	1250 @ 1200	220	89.0	EM, DICTO, ECM,
9	C-10	350 @ 1800	601	2	0007	000	0 00	EN DICAG FOM
ď	C- 10	335 @ 1800	175	105.8	1250 (@ 1200	077	0.50	1001 0110
0		325 @ 1800	175	105.8	1350 @ 1200	240	97.0	EM, DIY-PO, ECM,
	2 5	250 @ 1800	183	111.0	1250 @ 1200	220	89.0	EM, DICAC, ECM,
œ	C-10	330 @ 1000	476	105 A	1350 @ 1200	240	97.0	EM. DICTO, ECM,
6	C-10	335 @ 1800		0.001	0000	0000	0.08	EM DCAG FCM
7	07.10	335 @ 1800	175	105.8	1250 (B) 120U	770	03.0	
		305 @ 1800	165	100.00	1150@1200	203	82.0	EM, DIYIN, ECM,
11	٥٠٠	205 @ 1800	164	0.66	1050 @ 1200	186	75.0	EM, DICTIC, ECM,
12	C-10	303 (8) 1000	158	95.4	1150 @ 1200	203	82.0	EM, DICTO, ECM,
13	C-10	300 (0) 1000	20.7	100.00	1150 @ 1200	203	82.0	EM, DICTO, ECM,
14	C-10	305 @ 1800	601	20.00	4050 @ 4200	186	75.0	FM DICAG ECM.
15	C-10	305@1800	164	0.00	1020 @ 1200	2000	0 08	EM DICAG FOM
18	C-10 ·	305 @ 1800	158	95.4	1150 @ 1200	507	02.0	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1