

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-13-56
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-45-3;

IT IS ORDERED AND RESOLVED: That the following Caterpillar, Inc. 1990 model-year diesel engines are certified for use in motor vehicles with a manufacturer's gross vehicle weight rating (GVWR) over 8,500 pounds:

<u>Engine Family</u>	<u>Displacement</u> <u>Liters (Cubic Inches)</u>		<u>Exhaust Emission Control Systems</u> <u>(Special Features)</u>
LCT0893FZD6	14.6	(893)	(Charge Air Cooler) (Turbocharger) (On-Board Diagnostic System) <i>ECM</i>

Engine models and codes are listed on attachments.

The following are the certification emission standards for this engine family:

<u>Hydrocarbons</u> <u>gm/bhp-hr</u>	<u>Carbon</u> <u>Monoxide</u> <u>gm/bhp-hr</u>	<u>Nitrogen Oxides</u> <u>gm/bhp-hr</u>	<u>Particulates</u> <u>gm/bhp-hr</u>
1.3	15.5	6.0	0.6

The following are the certification emission values for this engine family:

<u>Engine Family</u>	<u>Hydrocarbons</u> <u>gm/bhp-hr</u>	<u>Carbon</u> <u>Monoxide</u> <u>gm/bhp-hr</u>	<u>Nitrogen Oxides</u> <u>gm/bhp-hr</u>	<u>Particulates</u> <u>gm/bhp-hr</u>
LCT0893FZD6	0.2	2.0	5.3	0.3

BE IT FURTHER RESOLVED: That the Executive Officer has been provided all material required to demonstrate certification compliance with the Board's emission control system warranty regulations (Health and Safety Code Section 43205.5 and Title 13, California Code of Regulations, Section 2036).

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

CATERPILLAR, INC.

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The Bureau of Automotive Repair will be notified by copy of this order and attachments.

Executed at El Monte, California this 18th day of December, 1989.



K. D. Drachand, Chief
Mobile Source Division

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1990 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

HEAVY-DUTY DIESEL ENGINES

Manufacturer Caterpillar Inc. Engine Family LCT0893FZD6

Liter (CID) 14.6 L (893) Engine Type 16

Emission Control Sys. and (Special Features) (CAC,TC,OBID)

Engine Model	*Fuel Injection Pump Manufacturer Part Number	Injector Manufacturer Part Number	Maximum Rated hp at rpm	Fuel Rate mm ³ /stroke (lbs/hr)	Maximum Rated Torque at rpm	Fuel Rate mm ³ /stroke (lbs/hr)
3406B PEEC Code A	*Caterpillar 7E1632	Caterpillar 7W7037	460 @ 1900	238 (152.3)	1600 @ 1200	228 (123.0)
			460 @ 1800	250 (151.2)	1600 @ 1200	228 (123.0)

*Basic Fuel Pump 2W3414 (Reference Page No. 16.05.01-0893FZD-1.).

Date of Issue 17 OCT 89 Revisions: Revision No. 1 26 JUN 90