

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER A-13-36  
Relating to Certification of New Motor Vehicle Engines

CATERPILLAR TRACTOR CO.

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 Tractor Co. 1984 model-year heavy-duty diesel engines have shown compliance with the optional transient standards and are certified for use in motor vehicles with a manufacturer's gross vehicle weight rating greater than 8500 pounds:

<u>Engine Family</u>	<u>Displacement Cubic Inches (Liters)</u>	<u>Exhaust Emission Control Systems (Special Features)</u>
ECT0893FPA8	893 (14.6)	Engine Modification (Aftercooler) (Air Fuel Ratio Control) (Diesel Injection - Direct) (Turbocharger)

Engine models and codes are listed on attachments.

Section 43200, Part 5, Division 26 of the California Health and Safety Code requires that the engine manufacturer furnish a decal with each engine sold or delivered to a vehicle manufacturer. The decal shall display the applicable model-year heavy-duty engine exhaust emission standards and the following certification emission values:

<u>Engine Family</u>	<u>Hydrocarbons gm/bhp-hr</u>	<u>Carbon Monoxide gm/bhp-hr</u>	<u>Nitrogen Oxides gm/bhp-hr</u>
ECT0893FPA8	0.4	2.4	5.0

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 (Title 13, California Administrative Code, Section 2036).

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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.

Executed at El Monte, California this 27<sup>th</sup> day of September, 1983.



K. D. Drachand, Chief  
Mobile Source Division

1984 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

Manufacturer Caterpillar      Executive Order No. A-13-36      Page 1  
Engine Family ECT0893FPA8      Evaporative Family N/A  
Engine CID (Liters) 893 (14.6)

ABBREVIATIONS

Ignition System

CA-Centrifugal Advance  
 EEC-Electronic Engine Control  
 EI-Electronic Ignition  
 ESAC-Electronic Spark Advance Control  
 VA-Vacuum Advance  
 VR-Vacuum Retard

Fuel System

CFI, CL, DID, DIP, EFI, MFI  
 nV-nVenturi Carburetor  
 VV-Variable Venturi

Exhaust Emissions Control System

AIP-Air Injection-Pump  
 AIV-Air Injection-Valve  
 CL-Closed Loop  
 EGR-Exhaust Gas Recirculation  
 EM-Engine Modification  
 OC-Oxidation Catalyst System  
 TR-Thermal Reactor  
 TWC-Three Way Catalyst System

Special Features

CCV-Combustion Chamber Valve  
 CFI-Central Fuel Injection  
 DID-Diesel Injection-Direct  
 DIP-Diesel Injection-Prechamber  
 MFI-Mechanical Fuel Injection  
 TC-Turbocharged

Engine Family

Engine Model

ECT0893FPA8

3406-Code H  
 3406-Code J

Issued: 09/22/83  
 Revised: 10/20/83

1984 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET  
HEAVY-DUTY DIESEL ENGINES

Manufacturer CATERPILLAR TRACTOR CO. Page 2  
 Engine Family ECT0893FPA8 CID(Liter)-Type 893(14.6) I6  
 ECS (Special Features) EM (TC, AC) (DID) (AFRC)

Engine Model	Fuel Injection Pump Manufacturer Part Number	Injector Manufacturer Part Number	Maximum Rated HP and RPM	Fuel Rate at Maximum HP mm <sup>3</sup> /stroke	Label Identification	
3406 CODE C	CATERPILLAR 9N6102	CATERPILLAR 9L6884	380 @ 2100	210	VECI 4W6769	
			300 @ 2100	166		
			300 @ 1900	177		
			350 @ 1800	214		
CODE H	TURBOCHARGER 9N6301 9N6302 9N2702 9N2703	CATERPILLAR 4W2551	CATERPILLAR 4W7012	300 @ 2100	165	
				300 @ 1800	186	
				280 @ 1600	189	
				TURBOCHARGER 4W4537 4W4538		

Date of Issue - 09/22/83  
Revised - 10/20/83

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HEAVY-DUTY DIESEL ENGINES

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Engine Model	Fuel Injection Pump Manufacturer Part Number	Injector Manufacturer Part Number	Maximum Rated HP and RPM	Fuel Rate at Maximum HP mm <sup>3</sup> /stroke	Label Identification
3406 CODE J	CATERPILLAR 7L0007	CATERPILLAR 4W7012	400 @ 2100	205	VECI 4W6769
			400 @ 1800	238	
			380 @ 1800	221	
			360 @ 1800	210	
			340 @ 1700	211	
	<u>TURBOCHARGER</u> 4W5188 4W5189				

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