

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-13-44
Relating to Certification of New Motor Vehicle Heavy-Duty Engines

CATERPILLAR TRACTOR COMPANY

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 Company 1986 model-year diesel engines have shown compliance with the optional transient test procedure and 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>
GCT0638FPC8	638 (10.5)	(Diesel Injection-Direct) (Turbocharger) (Aftercooler)

Engine models and codes are listed on attachments.

The following are the certification emission values for these engine families:

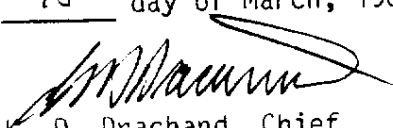
<u>Engine Family</u>	<u>Hydrocarbons gm/bhp-hr</u>	<u>Carbon Monoxide gm/bhp-hr</u>	<u>Nitrogen Oxides gm/bhp-hr</u>
GCT0638FPC8	1.1	4.4	4.8

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).

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 18th day of March, 1986.


K. D. Drachand, Chief
Mobile Source Division

1986 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

Manufacturer Caterpillar Tractor Co. Executive Order No. A-13-44 Page 1
 Engine Family GCT0638FPC8 Evaporative Family N/A
 Engine CID (Liters) 638 (10.5) I6

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
 WV -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
 AC -Aftercooled
 AA/AC-Air-to-Air and Aftercooled

Engine Family

GCT0638FPC8

Engine Model

3306B Code D
 3306B Code E

ISSUED: 032086

1986 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET
HEAVY-DUTY DIESEL ENGINES

Manufacturer CATERPILLAR TRACTOR CO. Page 2
 Engine Family GCT0638FPC8 CID(Liter)-Type 638 (10.5) I6
 ECS (Special Features) (TC, AA/AC, DID)

Engine Model	Fuel Injection Pump Manufacturer Part Number	Injector Manufacturer Part Number	Maximum Rated hp and rpm	Fuel Rate at Maximum hp mm ³ /stroke	Label Identification
3306B CODE D	CATERPILLAR 7W5928 <u>TURBOCHARGER</u> 7C3408	CATERPILLAR 8N7003	300 @ 2000	162	7C09767-2
			285 @ 2000	153	
3306B CODE E	CATERPILLAR 7W5928 <u>TURBOCHARGER</u> 7C3408	CATERPILLAR 8N7003	300 @ 2000	162	
			285 @ 1900	158	
			270 @ 1800	156	

Date of Issue - 0320⁸⁶