

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER A-13-40  
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>
ECT0638FPA8	638 (10.5)	Engine Modification (Aftercooler) (Diesel Injection - Prechamber) (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>
ECT0638FPA8	0.5	1.7	4.6

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 6<sup>th</sup> day of February, 1984.

  
K. D. Drachand, Chief  
Mobile Source Division

1984 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

Manufacturer Caterpillar Tractor Co. Executive Order No. A-13-40 Page 1  
 Engine Family ECT0638FPA8 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  
 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

ECT0638FPA8

3306

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

Manufacturer CATERPILLAR TRACTOR CO. Page 2  
 Engine Family ECT0638FPA8 CID(Liter)-Type 638(10.5) I6  
 ECS (Special Features) EM, (TC, AC, DIP)

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
3306	CATERPILLAR 6N5359	CATERPILLAR 9N2845	270 @ 2200	151	<u>WINDOW DECAL</u> 4W6780
			270 @ 2100	157	<u>FAMILY ENGINE LABEL</u> 4W6775
	245 @ 2200	137	<u>CARB ENGINE LABEL</u> 4W6770		
	<u>TURBOCHARGER</u> 9N1289	9N1287		245 @ 2100	138
	9N1287				

Date of Issue - 02/03/84