

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER A-13-97

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 1996 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

<u>Engine Family</u>	<u>Engine Displacement Liters (Cubic Inches)</u>	<u>Exhaust Emission Control Systems and Special Features</u>
TCP629EZDARM	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:

<u>Hydrocarbons</u>	<u>Carbon Monoxide</u>	<u>Nitrogen Oxides</u>	<u>Particulates</u>
1.3	15.5	5.0	0.10

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

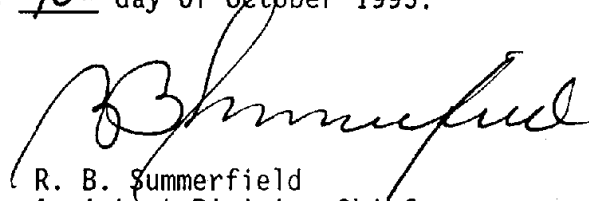
<u>Engine Family</u>	<u>Hydrocarbons</u>	<u>Carbon Monoxide</u>	<u>Nitrogen Oxides</u>	<u>Particulates</u>
TCP629EZDARM	0.1	1.2	4.3	0.07

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.).

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.

Executed at El Monte, California this 12<sup>th</sup> day of October 1995.



R. B. Summerfield  
Assistant Division Chief  
Mobile Source Division

**1996 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET  
HEAVY-DUTY DIESEL-STANDARD ENGINES**

**Manufacturer** Caterpillar Inc. **Engine Family** TCP629EZDARM  
**Displacement** 10.3 / **Liters** 629 / **Cubic Inches**  
**Maximum Rated Power:** 370 **HP @** 1800 **RPM** **Engine Configuration:** I6  
**Ignition: Compression** X **Compression with Glow Plug** \_\_\_\_\_ **Spark** \_\_\_\_\_  
**Fuel Type (s): Dedicated** \_\_\_\_\_ **Flex-Fuel** \_\_\_\_\_ **Dual-Fuel** \_\_\_\_\_ **Diesel** X **M100** \_\_\_\_\_ **M85** \_\_\_\_\_  
**CNG** \_\_\_\_\_ **LNG** \_\_\_\_\_ **LPG** \_\_\_\_\_ **Other (specify)** \_\_\_\_\_  
**Diesel Cert Fuel:** 13CCR 2282 **40 CFR 86.1313-90** \_\_\_\_\_ **40 CFR 86.1313-94** X  
**Primary Intended Service Class:** **LHD** \_\_\_\_\_ **MHD** \_\_\_\_\_ **HHD** X **Urban Bus** \_\_\_\_\_  
**Exhaust ECS (incl. MFI, TC, CAC)** CAC, ECM, TC

(Use abbreviations per SAE J1930 SEP91)

Engine Model (Eng. Code)	Rated HP @ RPM	Fuel Rate @ Rated HP mm <sup>3</sup> /stroke (lbs/hr)	Fuel Pump & Injector Part No.	ECM/PCM Part No.	EGR Valve Part No.	PTOX / Catalytic Converter Part No.
C-10 - 1	370 @ 1800	201 (121.6)	1165414	1193718	---	---
C-10 - 2	370 @ 1800	201 (121.6)	1165414	1261414		
C-10 - 3	370 @ 1800	196 (118.8)	137-3497	137-7462		
C-10 - 4	350 @ 1800	188 (113.8)	1165414	1727161		
C-10 - 5	340 @ 1800	182 (110.1)	1165414	1283660		
C-10 - 6	335 @ 1800	179 (108.3)	1165414	1193717		
C-10 - 7	335 @ 1800	175 (105.8)	137-3497	133-0637		
C-10 - 8	325 @ 1800	171 (103.4)	1165424	1283632		
C-10 - 9	320 @ 1800	170 (102.9)	1165414	1283657		
C-10 - 10	305 @ 1800	161 (97.4)	1165424	1283629		
C-10 - 11	295 @ 1800	156 (94.4)	1165414	1283654		
C-10 - 12	280 @ 1800	147 (89.0)	1165424	1283626		

ISSUE DATE	08 SEPT 95						
REVISION NUMBER	1	2					
REVISION DATE	02 AUG 96	03 SEP 96					

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HEAVY-DUTY DIESEL-STANDARD ENGINES**

**Manufacturer** Caterpillar Inc.      **Engine Family** TCP629EZDARM  
**Displacement** 10.3 /      **Liters** 629 /      **Cubic Inches**  
**Maximum Rated Power:** 370      **HP @** 1800      **RPM**      **Engine Configuration:** I6  
**Ignition: Compression** X      **Compression with Glow Plug** \_\_\_\_\_      **Spark** \_\_\_\_\_  
**Fuel Type (s):** Dedicated      Flex-Fuel      Dual-Fuel      Diesel X      M100      M85  
    CNG      LNG      LPG      **Other (specify)** \_\_\_\_\_  
**Diesel Cert Fuel:** 13CCR 2282      40 CFR 86.1313-90      40 CFR 86.1313-94      X  
**Primary Intended Service Class:**      LHD      MHD      HHD X      Urban Bus  
**Exhaust ECS (incl. MFI, TC, CAC)** CAC, ECM, TC

(Use abbreviations per SAE J1930 SEP91)

Engine Model (Eng. Code)	Rated HP @ RPM	Fuel Rate @ Rated HP mm <sup>3</sup> /stroke (lbs/hr)	Fuel Pump & Injector Part No.	ECM/PCM Part No.	EGR Valve Part No.	PTOX / Catalytic Converter Part No.
C-10 - 1	370 @ 1800	201 (121.6)	1165414	1193718	---	---
C-10 - 1	370 @ 1800	201 (121.6)	1165414	1261414		
C-10 - 2	350 @ 1800	188 (113.8)	1165414	1172761		
C-10 - 3	340 @ 1800	182 (110.1)	1165414	1283660		
C-10 - 4	335 @ 1800	179 (108.3)	1165414	1193717		
C-10 - 5	325 @ 1800	171 (103.4)	1165424	1283632		
C-10 - 6	320 @ 1800	170 (102.9)	1165414	1283657		
C-10 - 7	305 @ 1800	161 (97.4)	1165424	1283629		
C-10 - 8	295 @ 1800	156 (94.4)	1165414	1283654		
C-10 - 9	280 @ 1800	147 (89.0)	1165424	1283626		

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HEAVY-DUTY DIESEL-STANDARD ENGINES**

Manufacturer	<u>Caterpillar Inc.</u>	Engine Family	<u>TCP629EZDARM</u>		
Displacement	<u>10.3</u> /	Liters	<u>629</u> /	Cubic Inches	
Maximum Rated Power:	<u>370</u>	HP @	<u>1800</u>	RPM	Engine Configuration: <u>16</u>
Ignition: Compression	<u>X</u>	Compression with Glow Plug			Spark
Fuel Type (s):	Dedicated	Flex-Fuel	Dual-Fuel	Diesel <u>X</u>	M100 M85
		CNG	LNG	LPG	Other (specify)
Diesel Cert Fuel:	<u>13CCR 2282</u>	<u>40 CFR 86.1313-90</u>		<u>40 CFR 86.1313-94</u>	<u>X</u>
Primary Intended Service Class:	<u>LHD</u>	MHD	HHD <u>X</u>	Urban Bus	
Exhaust ECS (incl. MFI, TC, CAC)	<u>CAC, ECM, TC</u>				

(Use abbreviations per SAE J1930 SEP91)

Engine Model (Eng. Code)	Rated HP @ RPM	Fuel Rate @ Rated HP mm <sup>3</sup> /stroke (lbs/hr)	Fuel Pump & Injector Part No.	ECM/PCM Part No.	EGR Valve Part No.	PTOX / Catalytic Converter Part No.
C-10 - 1	370 @ 1800	201 (121.6)	1165414	1302157	---	---
C-10 - 1	370 @ 1800	201 (121.6)	1165414	1302159		
C-10 - 2	350 @ 1800	188 (113.8)	1165414	1302167		
C-10 - 3	340 @ 1800	182 (110.1)	1165414	1302165		
C-10 - 4	335 @ 1800	179 (108.3)	1165414	1302154		
C-10 - 4	335 @ 1800	179 (108.3)	1165414	1302159		
C-10 - 5	325 @ 1800	171 (103.4)	1165424	1283633		
C-10 - 6	320 @ 1800	170 (102.9)	1165414	1302163		
C-10 - 7	305 @ 1800	161 (97.4)	1165424	1283630		
C-10 - 8	295 @ 1800	156 (94.4)	1165414	1302161		
C-10 - 9	280 @ 1800	147 (89.0)	1165424	1283627		

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