State of California AIR RESOURCES BOARD

EXECUTIVE ORDER A-13-100

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

Engine Family	Engine Displacement Liters (Cubic Inches)	Exhaust Emission Control Systems and Special Features
TCP729EZDARL	12.0 (729)	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>	Carbon Hydrocarbons Monoxide		<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:

Engine	Carbon		Nitrogen	<u>Particulates</u>
<u>Family</u>	<u>Hydrocarbons</u> <u>Monoxide</u>		<u>Oxides</u>	
TCP729EZDARL	0.1	1.0	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 day of October 1995.

R. B. Summerfield

Assistant Division Chief Mobile Source Division

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

3.6	Caterpillar Inc.		Engine Family	TCP729EZDARL				
Manufacturer	12	/	<u>-</u>	Liters	729	1	Cubi	c Inches
Displacement	12	<u>'</u>	HP @	1800	RPM		Engine Configu	ation: 16
Maximum Rated Power:	42	4		ession with Glow	Plug		Spark	
Ignition: Compression Fuel Type (s): Dedicated	<u> </u>	Flex-Fuel	Compi	Dual-Fuel	Diesel	X	M100	M85
ruei Type (s). Dedicated		CNG	LNG	LPG	Other (spec			
Diesel Cert Fuel:13CCR 228	82	40 CFI	- R 86.131	3-90			CFR 86.1313-94	X
Primary Intended Service C		LHD		MHD	HHD	<u>X</u>	Urban Bus	
Exhaust ECS (incl. MFI,		CAC, EC						
			/I Ind. o	bbraviations per	SAE 11930 SI	ヒピタル]	

(Use abbreviations per SAE J1930 SEP91)

Engine Model (Eng. Code)	Rated HP @ RPM	Fuel Rate @ Rated HP mm³/stroke (lbs/hr)	Fuel Pump & Injector Part No.	ECM/PCM Part No.	EGR Valve Part No.	PTOX / Catalytic Converter Part No.
C-12 - 1	430 @ 1800	227 (137.4)	1372500	1377484		
C-12 - 2	425 @ 1800	226 (136.9)	1165425	1283685		
C-12 - 3	424 @ 1800	226 (136.9)	1165425	1309420		
C-12 - 4	410 @ 1800	220 (133.2)	1165425	1283668		
C-12 - 5	410 @ 1800	220 (133.2)	1165425	1283672		
C-12 - 6	410 @ 1800	208 (125.7)	1372500	1377470		
C-12 - 7	405 @ 1800	213 (128.7)	1165425	1283679		ļ
C-12 - 8	380 @ 1800	197 (119.4)	1165425	1220788		
C-12 - 9	380 @ 1800	192 (116.1)	1372500	1377467		
C-12 - 10	375 @ 1800	194 (117.6)	1165425	1283675		
C-12 - 11	355 @ 1800	183 (110.6)	1165425	1249466		
C-12 - 12	355 @ 1800	183 (110.6)	1165425	1261421		

ISSUE DATE				08 SEPT 95
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1996 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET HEAVY-DUTY DIESEL-STANDARD ENGINES

Manufacturer	erpillar Inc.		Engine Family	TCP729EZDARL				
Displacement	12	1		Liters	729	/	Cubi	c Inches
Maximum Rated Power:	42	24	HP@	1800	RPM		Engine Configu	ration: 16
Ignition: Compression	X	-	Compr	ession with Glow	Plug		Spark	
Fuel Type (s): Dedicated		Flex-Fuel		Dual-Fuel	Diesel	X_	M100	M85
		CNG	LNG	LPG	Other (spec	ify)		
Diesel Cert Fuel: 13CCR 2282		40 CF	- R 86.131	3-90		40	CFR 86.1313-94	X
Primary Intended Service Cla	ass:	 LHD	ı	MHD	HHD	X	Urban Bus	
Exhaust ECS (incl. MFI, TC, CAC)		CAC, ECI	м, тс					

(Use abbreviations per SAE J1930 SEP91)

Engine Model (Eng. Code)	Rated HP @ RPM	Fuel Rate @ Rated HP mm³/stroke (lbs/hr)	Fuel Pump & Injector Part No.	ECM/PCM Part No.	EGR Valve Part No.	PTOX / Catalytic Converter Part No.
C-12 - 1	425 @ 1800	226 (136.9)	1165425	1309421		
C-12 - 2	424 @ 1800	226 (136.9)	1165425	1302177		
C-12 - 3	410 @ 1800	220 (133.2)	1165425	1302183		
C-12 - 3	410 @ 1800	220 (133.2)	1165425	1302175		
C-12 - 4	405 @ 1800	213 (128.7)	1165425	1302181		
C-12 - 5	380 @ 1800	197 (119.4)	1165425	1302171		
C-12 - 5	380 @ 1800	197 (119.4)	1165425	1302175		
C-12 - 6	375 @ 1800	194 (117.6)	1165425	1302179		
C-12 - 7	355 @ 1800	183 (110.6)	1165425	1302169		
C-12 - 7	355 @ 1800	183 (110.6)	1165425	1302173		

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