## State of California AIR RESOURCES BOARD

## EXECUTIVE ORDER A-13-86

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-45-3;

IT IS ORDERED AND RESOLVED: That the following 1995 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	Exhaust Emission Control
	<u>Liters</u>	(Cubic Inches)	Systems and Special Features
SCP893EZDARK	14.6	(893)	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:

Hydroca <u>rbons</u>	Carbon <u>Monoxide</u>	Nitrogen <u>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:

Engine Family	<u>Hydrocarbons</u>	Carbon <u>Monoxide</u>	Nitrogen <u>Oxides</u>	<u>Particulates</u>
SCP893EZDARK	0.2	1.2	4.6	0.08

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.).

CATERPILLAR, INC.

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 Executed at El Monte, California this 27 day of September, 1994. attachments.

R. B. Summerfield
Assistant Division Chief Mobile Source Division

## Page 1 of 2 1995 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET HEAVY-DUTY DIESEL-STANDARD ENGINES

Manufacturer Caterpillar		erpillar Inc.		Engine Family	SCP893EZDARK			
Displacement	14.6	1		Liters	893	/	Cub	ic Inches
Maximum Rated Power:	500		HP@	. 1800	RPM		Engine Configu	ration: 16
Ignition: Compression	X		Comp	ression with Glow	Plug		Spark	*****
Fuel Type (s): Dedicated	1	Flex-Fuel		Dual-Fuel	Diesel	X	M100	M85
		CNG	LNG	LPG	Other (spec	ify)		<del></del> -
Diesel Cert Fuel:13CCR	2282	40 CFF	- k 86.131	3-90		40 0	CFR 86.1313-94	Х
Primary Intended Service	Class:	LHD		MHD	HHD	X	Urban Bus	
Exhaust ECS (incl. MF)	, TC, CAC)	CAC, ECN	1, TC		•		-	

Use abbreviations per SAE J1930 SEP91)

Engine Model (Eng. Code)	Rated HP @ RPM	RPM mm³/stroke Part No. Part No. (lbs/hr)		ECM/PCM Part No.	EGR Valve Part No.	PTOX / Catalytic Converter Part No.
A	355 @ 1800	193 (117.1)	1189027	1164227		
				1164223		
				1164280		
				1164284		
В	375 @ 1800	206 (124.8)	1189027	1164289	***	
				1164293		
				1164215		
	}			1164250		
С	435 @ 1800	242 (146.3)	1189030	1164266		***
				1164258		
	.			1164219		
				1164242		
C	435 @ 1800	238 (144.0)	1189030	1164210		
	]			1164238		
				1164231		
				1164246		
				1164254		
	]			1164262		
				1178140		

ISSUE DATE	 22 JUL 94							
REVISION NUMBER								
REVISION DATE								

Page <u>2</u> of <u>2</u>

## 1995 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET HEAVY-DUTY DIESEL-STANDARD ENGINES

Manufacturer	Caterpillar In	ic.		Engine Family	SCP893EZI	ARK	<u> </u>	<u></u>
Displacement	14.6	1		Liters .	893	1	Cubi	ic Inches
Maximum Rated Power:	500		HP@	. 1800	RPM		Engine Configu	ration: 16
Ignition: Compression	Х		- Compi	ression with Glow	v Plug		Spark	
Fuel Type (s): Dedicated		Flex-Fuel		Dual-Fuel	Diesel	<u>x</u> _	M100	M85
** **		CNG	LNG	LPG	Other (spec	ify)		
Diesel Cert Fuel: 13CCR	2282	40 CFF	- R 86.131	3-90		40	CFR 86.1313-94	X
Primary Intended Service	Class:	- LHD		MHD	HHD	X	Urban Bus	.,,,,,,,,
Exhaust ECS (incl. MF)	I, TC, CAC)	CAC, EC	M, TC					
			T7L	Li-ti	AE 11020 CE	0011		

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.
D	475 @ 1800	265 (160.4)	1189030	1164271		
				1164297		
D	475 @ 1800	261 (157.9)	1189030	1164276		
				1164305		
E	455 @ 1800	251 (151.7)	1189030	1164301	<del></del>	
E	455 @ 1800	247 (149.3)	1189030	1164309		
F	410 @ 1800	233 (140.8)	1189027	1164317		
				1164325		
F	410 @ 1800	229 (138.4)	1189027	1164313		
		·		1164321		
G	500 @ 1800	269 (162.8)	1189035	1127028		
		,	1171148	1127032		
Н	310 @ 1800	174 (105.2)	1188700	1164352		
	330 @ 1800	182 (110.4)		1164343		
				1164356		
				1164347		

ISSUE DATE		 22 π	JL 94		
REVISION NUMBER				 	
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