State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-13-99

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
TCP403DZDARK	6.6	(403)	Turbocharger Engine Control Module Charge Air Cooler

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:

Hydrocarbons	Carbon Monoxide	Nitrogen Oxides	Particulates
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	Hydrocarbons	Carbon Monoxide	Nitrogen Oxides	Particulates
TCP403DZDARK	0.6	1.1	4.8	0.09

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 24th day of October 1995.

R. B. Summerfield
Assistant Division Chief
Mobile Source Division

E.O. # A-13-99

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

Manufacturer: Caterpillar Inc. Engine Family: TCP403DZDARK

Displacement: 6.6 / Liters: 403 / Cubic Inches

Maximum Rated Power: 275 HP @ 2200 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 X HHD ____ 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^3/stroke (lbs/hr)	Fuel Pump & Injector Part No.	ECM/PCM Part No.	EGR Valve Part No.	PTOX / Catalytic Converter Part No.
3116 - 1	275 @ 2200	131 (96.7)	120-8164	126-0237	----	----
3116 - 2	250 @ 2200	118 (87.6)	120-8164	125-6816	----	----
3116 - 3	230 @ 2200	108 (79.8)	120-8164	121-9616	----	----
3116 - 4	215 @ 2200	99 (73.5)	120-8164	125-6814	----	----
3116 - 5	195 @ 2200	96 (71.1)	120-8164	125-6820	----	----
3116 - 6	185 @ 2200	93 (68.8)	120-8164	125-6812	----	----
3116 - 7	170 @ 2200	89 (65.6)	120-8165	125-6810	----	----

ISSUE DATE	08 SEPT 95							
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3116 - 1	275 @ 2200	131 (96.6)	116-6706	**116-4426**	----	----
3116 - 2	250 @ 2200	116 (86.0)	116-6706	**107-7651**	----	----
3116 - 3	230 @ 2200	106 (78.2)	116-6706	**121-9615**	----	----
3116 - 4	215 @ 2200	98 (72.5)	116-6706	**118-0010**	----	----
3116 - 5	195 @ 2200	89 (66.1)	116-6706	**121-9769**	----	----
3116 - 6	185 @ 2200	103 (76.1)	116-6706	**115-1186**	----	----
3116 - 7	170 @ 2200	91 (67.5)	116-2784	**118-0013**	----	----

ISSUE DATE	08 SEPT 95							
REVISION NO.	1	2						
REVISION DATE	16FEB96	08OCT96						

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3116 - 1	275 @ 2200	131 (96.6)	*116-6706*	*128-3718*	----	----
3116 - 2	250 @ 2200	*116 (86.0)*	*116-6706*	*138-3716*	----	----
3116 - 3	230 @ 2200	*106 (78.2)*	*116-6706*	*128-3714*	----	----
3116 - 4	215 @ 2200	*98 (72.5)*	*116-6706*	*128-3712*	----	----
3116 - 5	195 @ 2200	*89 (66.1)*	*116-6706*	*128-3710*	----	----
3116 - 6	185 @ 2200	*103 (76.1)*	*116-6706*	*128-3708*	----	----
3116 - 7	170 @ 2200	*91 (67.5)*	*116-2784*	*128-3706*	----	----

ISSUE DATE	08 SEPT 95							
REVISION NUMBER	*1*							
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