

EXECUTIVE ORDER A-021-0316-2 New On-Road Heavy-Duty Engines

Pursuant to the authority vested in the Air Resources Board by Health and Safety Code (HSC) Division 26, Part 5, Chapter 2; and pursuant to the authority vested in the undersigned by HSC Sections 39515 and 39516 and

Pursuant to the December 15, 1998 Settlement Agreement between the Air Resources Board and the manufacturer, and any modifications thereof to the Settlement Agreement;

IT IS ORDERED AND RESOLVED: That the engine and emission control systems produced by the manufacturer are certified as described below for use in on-road motor vehicles with a manufacturer's gross vehicle weight rating (GVWR) over 14,000 pounds. Production engines shall be in all material respects the same as those for which certification is granted.

MODEL YEAR ENGINE FAMILY		ENGINE SIZE (liter)	FUEL TYPE (CNG/LNG=compressed/liquefled natural gas; LPG=liquefled petroleum gas)		INTENDED SERVICE CLASS (L/WH HDD=light/medium/heavy heavy-du				
2002	2CEXH0505CBH	8.3	CNG / LNG	PROCEDURE	[HD] diesel; UB=urban bus; HDO=HD Otto)				
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS		ENGINE MODELS / CODES (rated power in horsepower, hp)							
OC, HO2S, TC, CAC, PCM, TBI		C+8.3-280G / CPL8013 (280 hp), C+8.3-275G / CPL8010 (275 hp), C+8.3-250G / CPL8007 (250 hp), C+8.3-250G / CPL8004 (250 hp), CG-280 / CPL8013 (280 hp), CG-275 / CPL8010 (275 hp), CG-250 / CPL8007 (250 hp), CG-250 / CPL8004 (250 hp)							
TWC/OC≖thr SFI≖sequenti	ee-way/oxidizing catalyst aiMFI DDI/IDI=direct /ind	WU (prefix) =w	varm-up cat. O2S=oxygen sensor HO2S=heated	O2C TRI-45					

The following are the exhaust emission standards (STD), or family emission limit(s) (FEL) as applicable, and certification levels (CERT) in grams per brake horsepower-hour (g/bhp-hr) for this engine family for hydrocarbon (HC) or non-methane HC (NMHC), oxides of nitrogen (NOx), or NMHC+NOx, carbon monoxide (CO) [except that "diesel" CO certification compliance may have been demonstrated pursuant to Code of Federal Regulations, Title 40, Part 86, Subpart A, Section 86.091-23(c)(2)(i) in lieu of testingly, particulate matter (PM), and formaldehyde (HCHO) under the "Federal Test Procedure" (FTP) (Title 13, California Code of Regulations, (13 CCR) Section 1956.1 (urban bus) or 1956.8 (other than urban bus)), and under the "Euro III Test Procedure" (EURO) in the Settlement Agreement, including a EURO's "Not-to-Exceed" NOx standard: (For flexible- and dual-fueled engines, the CEDT values in brackets I are those when tested on conventional test finel. For multi-fueled engines, the the CERT values in brackets [] are those when tested on conventional test fuel. For multi-fueled engines, the STD and CERT values for default operation permitted in 13 CCR Section 1956.1 or 1956.8 are in parentheses.)

* ≖ not applicable	HC		NMHC NOV			EURO'S NOT-TO-EXCEED NOx STD								
			 		NOx		NMHC+NOx		CO		PM		нсно	
	FIF	EURO	FTP	EURO	FTP	EURO	FTP	EURO	FTP	EURO	FTP	EURO		
(DIRECT) STD	•	•	1.2		2.0			1		12010		EURU	FTP	EURO
AVERAGE STD	•	·		 		 	·		15.5		0.10	•	*	*
						•	*	•	*		*	•	•	*
FEL	L*	*	•		•	•	*		•			 		
CERT	*	*	0.2	 	4.			 				_ •	•	
	L	<u> </u>	0.2		1.5		*	1 * 1	1.3	•	0.01	•		•

BE IT FURTHER RESOLVED: That certification to the FEL(s) listed above, as applicable, is subject to the following terms, limitations and conditions. The FEL(s) is the emission level declared by the manufacturer and serves in lieu of an emission standard for certification purposes in any averaging, banking, or trading (ABT) programs. It will be used for determining compliance of any engine in this family and compliance with such ABT programs.

BE IT FURTHER RESOLVED: That the listed engine models have been certified to the FTP optional NOx, or NMHC+NOx as applicable, emission standard listed above pursuant to 13 CCR Section 1956.1 or 1956.8.

BE IT FURTHER RESOLVED: That for the listed engine models, the manufacturer has submitted the materials to demonstrate certification compliance with 13 CCR Sections 1965 (emission control labels), and 2035 et seq.

BE IT FURTHER RESOLVED: That the listed engine models are conditionally certified subject to the following conditions: (1) The Settlement Agreement is in effect; and, (2) The manufacturer is in compliance with all applicable certification requirements of the Settlement Agreement and any modifications thereof.

Engines certified under this Executive Order shall conform to all applicable California emission regulations and all requirements under the Settlement Agreement and any modifications thereof.

The Bureau of Automotive Repair will be notified by copy of this Executive Order. This Executive Order hereby supersedes Executive Order A-021-0316-1 dated November 7, 2001. This Executive Order is not valid for engines produced on or after October 1, 2002.

Executed at El Monte, California on this day of March 2002.

Allen Lyons, Chief

New Vehicle / Engine Programs Branch

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