State of California AIR RESOURCES BOARD

EXECUTIVE ORDER A-21-162

Relating to Certification of New Heavy-Duty Motor Vehicle Engines

CUMMINS ENGINE COMPANY, 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 Cummins Engine Company, Inc. 1996 model diesel engines are certified for use in motor vehicles with a manufacturer's gross vehicle weight rating (GVWR) over 14,000 pounds:

Fuel Type: Compressed Natural Gas or Liquid Natural Gas (CNG or LNG)

Engine Family	<u>Liters</u>	(Cubic Inches)	Exhaust Emission Control Systems and Special Features
TCE611EBCAAW (433D)	10	611	Charge Air Cooler Turbocharger Powertrain Control Module Oxidation Catalytic Converter Heated Oxygen Sensor

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:

Non-Methane Hydrocarbons	• •		<u>Particulates</u>	
1.2	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	Non-Methane	Carbon	Nitrogen	<u>Particulates</u>
<u>Family</u>	<u>Hydrocarbons</u>	<u>Monoxide</u>	<u>Oxides</u>	
TCE611EBCAAW (433D)	0.5	5.9	2.4	0.03

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 27 day of June 1996.

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Assistant Division Chief

Mobile Source Division

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

Manufacturer Cur	mmins Engine Co	ompany, Inc. En	gine Family	(433D)TCE611	EBCAAW	
Displacement: / 10 Liters / 611 Cubic Inches						
Maximum Rated I	Power: 300	_HP @2100	RPM	En	gine Configura	tion: <u>I-6</u>
Ignition: Compression Compression with Glow Plug Spark X						
Fuel Type(s): Dedicated_ Flex-Fuel_			Dual-Fuel_	Diesel_ N	/100 <u> </u>	M85_
CNGX LNGX LPG Other (specify)						
Diesel Cert Fuel:	Diesel Cert Fuel: 13 CCR 2282 40 CFR 86.1313-90 40 CFR 86.1313-94					
Primary Intended	Service Class: L	HD	MHD_	HHD	<u>X</u>	Urban Bus_
Exhaust ECS (include.MFI, TC, CAC): HOLS, OC (TC, CAC), PCM (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.
L10-300G (2111)	300@2100		N/A	3922724	N/A	3928277
L10-280G (2111)	280 @ 2100	1	N/A	3922724	N/A	3928277
Date Issued: Revisions:	1					