## State of California AIR RESOURCES BOARD

## EXECUTIVE ORDER A-21-164

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	Liters	(Cubic Inches)	Exhaust Emission Control  Systems and Special Features
TCE611FBCABW (433F)	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	Carbon	Nitrogen	<u>Particulates</u>
<u>Hydrocarbons</u>	<u>Monoxide</u>	<u>Oxides</u>	
1.2	15.5	4.0	0.05

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>	
TCE611FBCABW (433F)	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.).

BE IT FURTHER RESOLVED: That the listed engine models is certified for use in urban buses.

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 27th day of June 1996.

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

Manufacturer Cummins Engine Company, Inc. Engine Family (433F)TCE611FBCABW							
Displacement: _	<u>/ [0</u> ]	Liters		•	/611	Cubic Inches	
Maximum Rated	Power: 300	_HP @ <u>2100</u> _	_RPM	E	ngine Configur	ration: <u>I-6</u>	
Ignition: Compre	ession_	Comp	ression with Glow	Plug_		Spark <u>X</u>	
Fuel Type(s): Dedicated Flex-Fuel			Dual-Fuel_	Diesel_	M100_	M85_	
CNG X LNG X LPG Other (specify)							
Diesel Cert Fuel: 13 CCR 2282 40 CFR 86.1313-90_ 40 CFR 86.1313-94_							
Primary Intended	Service Class: I	LHD_	MHD_		•	rban Bus <u>X</u>	
Exhaust ECS (inc	lude.MFI, TC, C	AC): Pcm,					
			(use abbreviatio	ns per SAE J19	30 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 (2190)	300 @ 2100		N/A	3922724	N/A	3928277	
L10-280G (2190)	280 @ 2100		N/A	3922724	N/A	3928277	
Date Issued:	1		1		· .		