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State of California AIR RESOURCES BOARD

EXECUTIVE ORDER A-21-59 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-45-3;

IT IS ORDERED AND RESOLVED: That the following Cummins Engine Company, Inc. 1990 model-year diesel engines are certified for use in motor vehicles with a manufacturer's gross vehicle weight rating (GVWR) over 8,500 pounds:

<u>Engine Family</u>		cement bic Inches)	Exhaust Emission Control Systems (Special Features)
LCE0611FZB4 (343E)) 10	(611)	(Turbocharger) (Charge Air Cooler)
LCE0611FZA3 (343D)) 10	(611)	Powertrain Control Module (Turbocharger) (Charge Air Cooler)

Engine models and codes are listed on attachments.

The following are the certification emission standards for these engine families:

Carbon Hydrocarbons Monoxide .gm/bhp-hr gm/bhp-hr		Nitrogen Oxides gm/bhp-hr	Particulates gm/bhp-hr
1.3	15.5	6.0	0.6

The following are the certification emission values for these engine families:

Engine Family	Hydrocarbons _gm/bhp-hr	Carbon Monoxide gm/bhp-hr	Nitrogen Oxides gm/bhp-hr	Particulates gm/bhp-hr
LCE0611FZB4 (34	43E) 0.5	1.9	5.0	0.3
LCE0611FZA3 (34	I3D) 0.2	3.1	4.6	0.2

BE IT FURTHER RESOLVED: That the Executive Officer has been provided all material required to demonstrate certification compliance with the Board's emission control system warranty regulations (Title 13, California Administrative Code, Section 2036.)

CUMMINS ENGINE COMPANY, INC.

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EXECUTIVE ORDER A-21-59 (Page 2 of 2)

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 $\frac{24}{2}$ day of January, 1990.

K. D. Drachand, Chief Mobile Source Division

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1990 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET HEAVY-DUTY DIESEL ENGINES

 Manufacturer
 Cummins Engine Company_Inc.
 Engine Family
 LCE0611FZA3 (343D)

 Liter (CID)
 10 (611)
 Eng. Type
 Inline 6

 Emission Control Sys. and (Special Features)
 PCME (TC. CAC)

Electronic Control Module Mfr. Part Number	Injector Mfr. Part Number	Maximum Rated HP at RPM	Fuel Rate mm ³ /stroke (lbs/Hr)	Maximum Rated Torque at RPM	Fuel Rate mm ³ /stroke (lbs/Hr)
. <u> </u>					
E Cummins		330@1600	196(106)	1250@1200	235(95)
	3068357				
3654040					
E Cummins	Cummins	310@1600	189(102)	1150@1200	215(87)
3654040	3070551				• •
E Cummins	Cummins	310@1600	189(102)	1150@1200	217(88)
3618046	3071534				
E Cummins	Cummins	330@1600	198(107)	1250@1200	234(95)
	Control Module Mfr. Part Number Cummins 3615336 3654040 Cummins 3654040 Cummins 3618046	Control Module Injector Mfr. Mfr. Part Number Part Number Cummins Cummins 3615336 3068357 3654040 3070551 Cummins Cummins 3618046 3071534 Cummins Cummins	Control ModuleInjector Mfr.Maximum Rated HP Part NumberPart NumberPart NumberRated HP at RPMECummins 3615336 3654040Cummins 3068357330@1600ECummins 3654040Cummins 3070551310@1600 310@1600 3618046ECummins 3618046Cummins 3071534310@1600 30@1600	Control Module Injector Maximum Fuel Rate Mfr. Mfr. Rated HP mm ³ /stroke Part Number Part Number at RPM (lbs/Hr) E Cummins Cummins 330@1600 196(106) 3615336 3068357 330@1600 196(106) 3654040 Stroke 310@1600 189(102) E Cummins Cummins 310@1600 189(102) 3618046 3071534 310@1600 189(102) E Cummins Cummins 310@1600 189(102)	Control Maximum Maximum Maximum Maximum Maximum Maximum Maximum Rated Rated Rated Rated Maximum Rated Rated Rated Rated Rated Maximum Rated Ra

Date of Issue _____ Revisions:

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1990 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET HEAVY-DUTY DIESEL ENGINES

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Manufacturer	Cummins Engine Company.	<u>Inc.</u> Engine	e Family <u>LCE0611FZB4 (343E</u>	<u>)</u>
Liter (CID) _	10 (611)	Eng. Type	Inline 6	
Emission Cont	rol Sys. and (Special Fe	atures)	(TC, CAC)	

Engine	Fuel Injection Pump Mfr. Part Number	Injector Mfr. Part Number	Maximum Rated HP at RPM	Fuel Rate mm ³ /stroke (lbs/Hr)	Maximum Rated Torque at RPM	Fuel Rate mm ³ /stroke (lbs/Hr)
L10-310 CPL1241	Cummins 3883141	Cummins 3068086	310@1600	189(102)	1150@1200	217(88)
(1)L10-310 CPL1349	Cummins 3883548 3883542 3883550 3883546	Cummins 3070422 3072029(3)	310@1600	187(101)	1150@1200	217(88)
(1)L10-300 CPL1349	SAME	SAME	300@1700	173(99)	1150@1200	217(88)
(2)L10-280 CPL1362	Cummins 3883819 3883918 3883902 3883914	Cummins 3071565 3072030(3)	2 80@16 00	171(92)	1050@1200) 195(79)
(2)L10-280 CPL1362	SAME	SAME	280@1700	164(94)	1050@1200) 195(79)
(4)L10-260 CPL1373	Cummins 3892211 3892212 3892213 3892214	Cummins 3072030	260@1600	158(85)	975@1200	0 183(74)
(4)L10-260 CPL1373	Cummins 3892215 3892216 3892217 3892218	SAME	260@1700		975@1200) 183(74)
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