

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-21-57
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>	<u>Displacement Liters (Cubic Inches)</u>		<u>Exhaust Emission Control Systems (Special Features)</u>
LCE0855FAA2 (093E)	14	(855)	Direct Injection - Diesel Smoke Puff Limiter (Turbocharger) (Charge Air Cooler)
LCE0855FZA7 (093J)	14	(855)	Direct Injection - Diesel Smoke Puff Limiter (Turbocharger) (Charge Air Cooler)
LCE0611FAA9 (343C)	10	(611)	Direct Injection - Diesel Smoke Puff Limiter (Turbocharger) (Charge Air Cooler)

Engine models and codes are listed on attachments.

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

<u>Hydrocarbons gm/bhp-hr</u>	<u>Carbon Monoxide gm/bhp-hr</u>	<u>Nitrogen Oxides gm/bhp-hr</u>	<u>Particulates gm/bhp-hr</u>
1.3	15.5	6.0	0.60

The following are the certification emission values for these engine families, except that compliance with the carbon monoxide emission standard

has been demonstrated pursuant to the Code of Federal Regulations, Title 40, Part 85, Subpart A, Section 86.088-23(c)(2)(1):

<u>Engine Family</u>	<u>Hydrocarbons gm/bhp-hr</u>	<u>Nitrogen Oxides gm/bhp-hr</u>	<u>Particulates gm/bhp-hr</u>
LCE0855FAA2 (093E)	0.6	5.1	0.49
LCE0855FZA7 (093J)	1.0	4.7	0.52
LCE0611FAA9 (343C)	0.5	5.0	0.37

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).

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 11th day of August, 1989.


K.D. Drachand, Chief
Mobile Source Division

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

Manufacturer Cummins Engine Company, Inc. Engine Family LCE0611FAA9 (343C)
 Liter (CID) 10 (611) Eng. Type Inline 6
 Emission Control Sys. and (Special Features) SPL. DI (TC, IC)

Engine Model	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)
LTA10 CPL 0842	Cummins 3037216 3034873 3034874	Cummins 3053411	300@2100	141 (100)	950@1300	180 (79)
LTA10 CPL 1223	Same	Cummins 3056342 (1)3069759	350@2100	161 (114)	950@1300	176 (77)
LTA10 CPL 1224	Same	Cummins 3056342 (1)3069759	270@1900 270@1800	137 (88) 140 (85)	860@1300 860@1300	160 (70) 160 (70)
LTA10 CPL 1225	Same	Cummins 3056342 (1)3069759	(1)300@2200 285@2200	139(103) 132 (98)	1020@1400 1020@1300	184 (87) 187 (82)
LTA10 CPL 1226	Same	Cummins 3056342 (1)3069759	270@2100 240@2100	130 (92) 117 (83)	860@1300 870@1300	167 (73) 169 (74)
LTA10 CPL 1346	Same	Cummins 3056342 3069759	350@2100	161 (114)	950@1300	176 (77)

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

Manufacturer Cummins Engine Company, Inc. Engine Family LCE0855FZA7 (093J)
 Liter (CID) 14 (855) Eng. Type Inline 6
 Emission Control Sys. and (Special Features) SPL. DI (TC. IC)

Engine Model	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)
NTC-400 CPL0827	Cummins 3037216 3034873 3034874 217795	Cummins 3053765 3059960 3062150	400@2100	201 (142)	1325@1300	251 (110)
NTC-400 CPL1211	Same	Cummins 3065349 3070178 3070729	400@1800 400@2100	221 (134) 201 (142)	1325@1300 1325@1300	251 (110) 251 (110)
NTC-365 CPL1211	Same	Same	365@1800	201 (122)	1325@1300	251 (110)
NTC-444 CPL 1280	Same	Cummins 3068899	444@2100	225 (159)	1400@1500	263 (133)

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

Manufacturer Cummins Engine Company, Inc. Engine Family LCE0855FAA2 (093E)
 Liter (CID) 14 (855) Eng. Type Inline 6
 Emission Control Sys. and (Special Features) SPL. DI (TC. IC)

Engine Model	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)
NTC-350	Cummins	Cummins	350@1800	191 (116)	1200@1300	221 (97)
CPL0840	3037216		350@2100	174 (123)	1200@1300	221 (97)
	3034873	3059424				
	3034874	3069767				
NTC-315	Same	Same	315@1700	181 (104)	1150@1300	210 (92)
CPL0838						
NTC-300	Same	Same	300@1700	173 (99)	1000@1300	185 (81)
CPL0838						
Fleet 300	Cummins	Cummins	300@1700	171 (98)	1150@1100	212 (79)
CPL1352	3070315	3071047				

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