

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-21-67
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. 1991 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 and Special Features</u>
MCE0611FZB3 (343E)	10	(611)	Smoke Puff Limiter Charge Air Cooler Turbocharger
MCE0855FZC8 (093N)	14	(855)	Smoke Puff Limiter Charge Air Cooler Turbocharger
MCE0855FZB7 (093P)	14	(855)	Powertrain Control Module Charge Air Cooler Turbocharger
MCE0855FZD9 (093Q)	14	(855)	Smoke Puff Limiter Charge Air Cooler Turbocharger

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>Average Particulates gm/bhp-hr</u>
1.3	15.5	5.0	0.25

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

Engine Family	Hydrocarbons gm/bhp-hr	Carbon		Particulates	
		Monoxide gm/bhp-hr	Nitrogen Oxides gm/bhp-hr	Designated gm/bhp-hr	Certification gm/bhp-hr
MCE0611FZB3 (343E)	0.5	1.7	4.9	0.33	0.20
MCE0855FZC8 (093N)	0.5	1.9	4.7	0.23	0.22
MCE0855FZB7 (093P)	0.4	1.9	4.8	0.26	0.26
MCE0855FZD9 (093Q)	0.6	2.2	4.5	0.23	0.21

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.)

BE IT FURTHER RESOLVED: That these engines are included in a diesel heavy-duty particulate averaging program as permitted in "California Exhaust Emission Standards for 1985 Subsequent Model Heavy-Duty Diesel Engines and Vehicles, Amended May 15, 1990", referenced section 86.091-11(a)(1)(iv)(C).

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 13th day of December, 1990.


R. B. Summerfield
Assistant Division Chief
Mobile Source Division

1991 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET
HEAVY-DUTY DIESEL ENGINESPage 1Manufacturer Cummins Engine Company, Inc. Engine Family (343E) MCE0611FZB3Liter (CID) 10 (611) Eng. Type I-6Emission Control Sys. & Special Features SPL (TC, CAC)
(Use abbreviations per SAE J1930 Jun88)

Engine Model (Eng. Code)	Fuel Injection Pump Mfr. Part Number	Injector Mfr. Part Number	Maximum Rated HP and RPM	Fuel Rate at Maximum HP mm ³ /stroke	Particulate Trap Mfr. Part Number
L10-310 (1241)	Cummins	Cummins 3068086	310@1600	189	NA
L10-310 (1349)	Cummins	Cummins 3070422 3072029	310@1600	187	NA
L10-300 (1349)	Cummins	Cummins 3070422 3072029	310@1700	173	NA
L10-280 (1362)	Cummins	Cummins 3071565 3072030	280@1600 280@1700	171 164	NA NA
L10-260 (1373)	Cummins	Cummins 3072030	260@1600 260@1700	158 150	NA NA

Revisions:
031390
030186

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1991 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET
HEAVY-DUTY DIESEL ENGINESPage 1Manufacturer Cummins Engine Company, Inc. Engine Family (093N) MCE0855FZC8Liter (CID) 14 (855) Eng. Type I-6Emission Control Sys. & Special Features SPL (TC, CAC)
(Use abbreviations per SAE J1930 Jun88)

Engine Model (Eng. Code)	Fuel Injection Pump Mfr. Part Number	Injector Mfr. Part Number	Maximum Rated HP and RPM	Fuel Rate at Maximum HP mm ³ /stroke	Particulate Trap Mfr. Part Number
N14-410 (1405)	Cummins	Cummins 3073574	410@1600	(1)254	NA
N14-370 (1374)	Cummins	Cummins 3073572	370@1600	(1)232	NA

Revisions: (1) Running Change 1-093N-91
031390
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HEAVY-DUTY DIESEL ENGINESPage 1Manufacturer Cummins Engine Company, Inc. Engine Family (093P) MCE0855FZB7Liter (CID) 14 (855) Eng. Type I-6Emission Control Sys. & Special Features PCME (TC, CAC)
(Use abbreviations per SAE J1930 Jun88)

Engine Model (Eng. Code)	Fuel Injection Pump Mfr. Part Number	Injector Mfr. Part Number	Maximum Rated HP and RPM	Fuel Rate at Maximum HP mm ³ /stroke	Particulate Trap Mfr. Part Number
N14-350E (1391)	Cummins	Cummins 3070739	350@1600	212	NA
N14-330E (1392)	Cummins	Cummins 3070739	330@1600	198	NA
N14-330E (1393)	Cummins	Cummins 3070739	330@1600	198	NA
N14-310E (1394)	Cummins	Cummins 3070739	330@1600	187	NA

Revisions:
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1991 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET
HEAVY-DUTY DIESEL ENGINES

Page 1Manufacturer Cummins Engine Company, Inc. Engine Family (093Q) MCE0855FZD9Liter (CID) 14 (855) Eng. Type I-6Emission Control Sys. & Special Features SPL (TC,CAC)
(Use abbreviations per SAE J1930 Jun88)

Engine Model (Eng. Code)	Fuel Injection Pump Mfr. Part Number	Injector Mfr. Part Number	Maximum Rated HP and RPM	Fuel Rate at Maximum HP mm ³ /stroke	Particulate Trap Mfr. Part Number
N14-350P (1380)	Cummins	Cummins 3073571	350@1600	(1)221	NA
N14-330 (1380)	Cummins	Cummins 3073571	330@1600	(1)211	NA
N14-330P (1395)	Cummins	Cummins 3073569	330@1600	(1)209	NA
N14-310P (1395)	Cummins	Cummins 3073569	310@1600	(1)196	NA

Revisions: (1) Running Change 1-093Q-91
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