

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-21-82

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. 1993 model diesel engines are certified for use in motor vehicles with a manufacturer's gross vehicle weight rating (GVWR) over 8,500 pounds:

Fuel Type: Diesel

<u>Engine Family</u>	<u>Liters (Cubic Inches)</u>		<u>Exhaust Emission Control Systems and Special Features</u>
PCE0855FZA3 (093M)	14.0	(855)	Powertrain Control Module Turbocharger Charge Air Cooler
PCE0855FZB4 (093N)	14.0	(855)	Smoke Puff Limiter Turbocharger Charge Air Cooler
PCE0855FZC5 (093P)	14.0	(855)	Powertrain Control Module Turbocharger Charge Air Cooler
PCE0855FZD6 (093Q)	14.0	(855)	Smoke Puff Limiter Turbocharger Charge Air Cooler
PCE0855FZF8 (093S)	14.0	(855)	Smoke Puff Limiter Turbocharger Charge Air Cooler
PCE0855FZG9 (093T)	14.0	(855)	Smoke Puff Limiter Turbocharger Charge Air Cooler

Engine models and codes are listed on attachments.

The certification emission standards for these engine families in grams per brake-horsepower-hour are as follows:

<u>Total Hydrocarbons</u>	<u>Carbon Monoxide</u>	<u>Nitrogen Oxides</u>	<u>Particulates</u>
1.3	15.6	6.0	0.25

The certification emission values for these engine families in grams per brake-horsepower-hour are as follows:

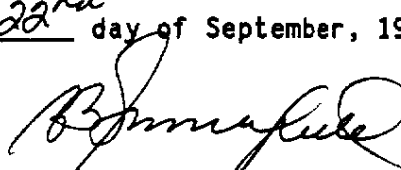
<u>Engine Family</u>	<u>Total Hydrocarbons</u>	<u>Carbon Monoxide</u>	<u>Nitrogen Oxides</u>	<u>Particulates</u>
PCE0855FZA3 (093M)	0.3	3.0	4.7	0.20
PCE0855FZB4 (093N)	0.5	1.9	4.7	0.22
PCE0855FZC5 (093P)	0.4	2.3	4.9	0.21
PCE0855FZD6 (093Q)	0.6	2.3	4.5	0.21
PCE0855FZF8 (093S)	0.6	1.8	4.2	0.22
PCE0855FZG9 (093T)	0.6	2.2	4.1	0.25

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 22nd day of September, 1992.


R. B. Summerfield
Assistant Division Chief
Mobile Source Division

1993 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET
 HEAVY-DUTY DIESEL ENGINES

Manufacturer Cummins Engine Company, Inc. Engine Family 093M PCE0855FZA3

Liter (CID) 14 (855) Fuel Type Diesel Engine Config. I-6

Exhaust ECS & Special Features (ECM/PCM, PTOX, IFI, etc.) PCM (TC, CAC)
 (Use abbreviations per SAE J1930 May91)

Engine Model (Eng. Code)	Rated HP @ RPM	Fuel Rate @ Rated HP mm ³ /stroke (lbs/hr)	Fuel Pump & Injector P/N	ECM/PCM P/N	Part.Trap/ Catalyst P/N
N14-460E (1572)	460 @ 1700	276 (158)	3073995	3618046 3619037	NA
N14-460E (1580)	460 @ 1700	276 (158)	SAME	SAME	NA
N14-430E (1580)	430 @ 1700	251 (144)	SAME	SAME	NA
N14-430E (1573)	430 @ 1700	251 (144)	SAME	SAME	NA
N14-410E (1573)	410 @ 1600	247 (133)	SAME	SAME	NA
N14-370E (1573)	370 @ 1600	221 (119)	SAME	SAME	NA

Revisions:

1993 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET
 HEAVY-DUTY DIESEL ENGINES

Manufacturer Cummins Engine Company, Inc. Engine Family 093N PCE0855FZB4

Liter (CID) 14 (855) Fuel Type Diesel Engine Config. I-6

Exhaust ECS & Special Features (ECM/PCM, PTOX, IFI, etc.) SPL (TC, CAC)
 (Use abbreviations per SAE J1930 May91)

Engine Model (Eng. Code)	Adv. HP @ RPM	Fuel Rate @ Adv. HP mm ³ /stroke (lbs/hr)	Fuel Injector P/N	ECM/PCM P/N	Part.Trap/ Catalyst P/N
(1)N14-430 (1652)	430 @ 1600	267 (144)	3078195	NA	NA
N14-410 (1405)	410 @ 1600	254 (137)	3073574 3078195	NA	NA

Revisions:

(1) RC 1-093N-93

SUBMITTED

SEP 04 1992

1993 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET
HEAVY-DUTY DIESEL ENGINES

Manufacturer Cummins Engine Company, Inc. Engine Family 093P PCE0855FZC5

Liter (CID) 14 (855) Fuel Type Diesel Engine Config. I-6

Exhaust ECS & Special Features (ECM/PCM, PTOX, IFI, etc.) PCM (TC, CAC)
(Use abbreviations per SAE J1930 May91)

Engine Model (Eng. Code)	Rated HP @ RPM	Fuel Rate @ Rated HP mm ³ /stroke (lbs/hr)	Fuel Pump & Injector P/N	ECM/PCM P/N	Part.Trap/ Catalyst P/N
N14-350E (1574)	350 @ 1600	208 (112)	3073995 (1)3081315	3618046 3619037	NA
N14-330E N14-330ESP (2) (1574)	330 @ 1600	196 (106)	SAME	SAME	NA
N14-310E N14-310ESP (1) (1574)	310 @ 1600	184 (99)	SAME	SAME	NA
N14-310E (1574)	310 @ 1600	185 (100)	SAME	SAME	NA

Revisions:

(2) RC 4-093P-93

REVISED

APR 30 1993

1993 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET
HEAVY-DUTY DIESEL ENGINES

Manufacturer Cummins Engine Company, Inc. Engine Family 0930 PCE0855FZD6

Liter (CID) 14 (855) Fuel Type Diesel Engine Config. I-6

Exhaust ECS & Special Features (ECM/PCM, PTOX, IFI, etc.) SPL (TC, CAG)
(Use abbreviations per SAE J1930 May91)

Engine Model (Eng. Code)	Rated HP @ RPM	Fuel Rate @ Rated HP mm ³ /stroke (lbs/hr)	Fuel Pump & Injector P/N	ECM/PCM P/N	Part.Trap/ Catalyst P/N
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N14-350P (1380)	350 @ 1600	222 (120)	3073571 3078197	NA	NA
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N14-330 (1380)	330 @ 1600	211 (114)	SAME	NA	NA
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Revisions:

1993 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET
 HEAVY-DUTY DIESEL ENGINES

Manufacturer Cummins Engine Company, Inc. Engine Family 093S PCE0855FZF8

Liter (CID) 14 (855) Fuel Type Diesel Engine Config. I-6

Exhaust ECS & Special Features (ECM/PCM, PTOX, IFI, etc.) SPL (TC, CAC)
 (Use abbreviations per SAE J1930 May91)

Engine Model (Eng. Code)	Rated HP @ RPM	Fuel Rate @ Rated HP mm ³ /stroke (lbs/hr)	Fuel Pump & Injector P/N	ECM/PCM P/N	Part.Trap/ Catalyst P/N
N14-370 (1374)	370 @ 1600	232 (125)	3073572 3078194	NA	NA
N14-350 (1374)	370 @ 1600	215 (116)	SAME	NA	NA

Revisions: _____

1993 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET
HEAVY-DUTY DIESEL ENGINES

Manufacturer Cummins Engine Company, Inc. Engine Family 093T PCE0855FZG9
Liter (CID) 14 (855) Fuel Type Diesel Engine Config. I-6
Exhaust ECS & Special Features (ECM/PCM, PTOX, IFI, etc.) SPL (TC, CAC)
(Use abbreviations per SAE J1930 May91)

Engine Model (Eng. Code)	Rated HP @ RPM	Fuel Rate @ Rated HP mm ³ /stroke (lbs/hr)	Fuel Pump & Injector P/N	ECM/PCM P/N	Part.Trap/ Catalyst P/N
N14-330P (1395)	330 @ 1600	211 (114)	3073569 3078196	NA	NA
N14-310P (1395)	310 @ 1600	198 (107)	SAME	NA	NA

Revisions: