~~P.O. Book~~

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-21-11-1
Relating to Certification of New Motor Vehicle Engines

CUMMINS ENGINE COMPANY, INC.

Pursuant to the authority vested in the Air Resources Board by Sections 43100 and 43102 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 Cummins Engine Company, Inc., 1977 model-year diesel-powered engines in heavy-duty motor vehicles are certified for the engine family described below:

Engine Family	Engine Size (CID)	Engine Model	Type
093E	855	NTCC-290 NHHTCC-290	Six Cylinder Inline-Turbocharged and Aftercooled

This is an additional engine model to Engine Family 093E.

Section 43200, Part 5, Division 26 of the California Health and Safety Code requires that the manufacturer affix a decal to the side window to the rear of the driver or, if there is no such window on the driver's side, to the windshield of the motor vehicle.

The decal shall display the applicable model year heavy-duty engine exhaust emission standards and the following recommended values:

Engine Family	HC + NOx gm/bhp-hr	CO gm/bhp-hr	HC gm/bhp-hr	NOx gm/bhp-hr
093E	Not Applicable	2.7	0.2	6.8

Engines certified under this Executive Order must conform to all applicable California emission regulations.

The Department of Motor Vehicles, the California Highway Patrol, and the Bureau of Automotive Repair will be notified by copy of this order and attachment.

Executed at El Monte, California, this 3rd day of May, 1977.

G C Hass by F.D. Drachmer

G. C. Hass, Chief
Vehicle Emissions Control Division

1977 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET HEAVY-DUTY DIESEL ENGINES

Manufacturer CUMMINS ENGINE COMPANY, INC. Executive Order No. A-21-11

Engine Family 092 Engine (CID) 855

Emission Control Systems Air Fuel Control Type TC

Critical Parts List (CPL)	Engine Model	Fuel Pump Mfgr. Part Number	Injector Mfg. Part Number	Maximum Rated HP and RPM	Fuel Rate at Maximum HP, MM^2/S	Basic Initial Timing
0270	NTCC-230-S	Cummins	Cummins 3003945 *AR-40117	230 @ 1800	138	19 BTDC @ .2032 inch piston travel & @ .052 inch injector push tube travel
	NTCC-230			230 @ 1900	133	
				230 @ 2100	126	
				230 @ 2100B	126	

Comments
*Correction to 092 Family

Date of Issue : 27 December 1976

Abbreviation
Type
NA - Natural Aspiration
TC - Turbocharged
TCA- Turbocharged and Aftercooled

1977 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET HEAVY-DUTY DIESEL ENGINES

Manufacturer CUMMINS ENGINE COMPANY, INC. Executive Order No. A-21-11

Engine Family 092B Engine (CID) 855

Emission Control Systems Air Fuel Control Type TC

Critical Parts List (CPL)	Engine Model	Fuel Pump Mfgr. Part Number	Injector Mfg. Part Number	Maximum Rated HP and RPM	Fuel Rate at Maximum HP, MM^2/S	Basic Initial Timing
0249	NTCC-290	Cummins	Cummins 3007168	290 @ 1900	173	19 BTDC @ .2032 inch piston travel & @ .110 inch injector push tube travel
				290 @ 2100	162	
				270 @ 1900	159	
				270 @ 2100	153	
				255 @ 1900	151	
				255 @ 2100	145	
				240 @ 1900	144	
				240 @ 2100	137	
	NHHTC-290			290 @ 1900	173	
				290 @ 2100	162	
				270 @ 1900	159	
				270 @ 2100	153	
	Power Torque 270			270 @ 2100	153	
				255 @ 2100	145	
				240 @ 2100	137	
0277	NTCC-250-S		Cummins 3007169	250 @ 1800	150	19 BTDC @ .2032 inch piston travel & @ .105 inch injector push tube travel
	NTCC-250			250 @ 1900	145	
				250 @ 1900B	145	
				250 @ 2100	138	
				250 @ 2100B	138	

Comments

Date of Issue : 27 December 1976

Abbreviation

Type

NA - Natural Aspiration

TC - Turbocharged

TCA- Turbocharged and Aftercooled

1977 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET HEAVY-DUTY DIESEL ENGINES

Manufacturer CUMMINS ENGINE COMPANY, INC. Executive Order No. A-21-11 Page 3 of 3

Engine Family 093E Engine (CID) 855

Emission Control Systems Air Fuel Control Type TCA

Critical Parts List (CPL)	Engine Model	Fuel Pump Mfgr. Part Number	Injector Mfg. Part Number	Maximum Rated HP and RPM	Fuel Rate at Maximum HP, MM^2/S	Basic Initial Timing
0294 #0308	NTCC-350	Cummins	Cummins 3010953, or 3011071	350 @ 1900	200	19 BTDC @ .2032 inch piston travel & @ .072 inch injector push tube travel
				335 @ 1900	194	
				350 @ 2100	189	
				320 @ 1900	184	
				335 @ 2100	182	
				300 @ 1900	175	
				320 @ 2100	175	
				300 @ 2100	164	
*0306	NTCC-290			290@1900 290@2100 270@1900 270@2100	169 160 159 150	19 BTDC @ .2032 inch Piston travel &@ .065 inch injector push tube travel
	NHHTCC-290			290@1900 290@2100 270@1900 270@2100	169 160 159 150	

Comments

*A-21-11-1 EO, add derated 290 HP engine.
R/C 6-093E-77

Date of Issue : 27 December 1976

Abbreviation

Type

NA - Natural Aspiration
TC - Turbocharged
TCA- Turbocharged and Aftercooled