

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-21-7-1
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., 1976 model-year diesel-powered engines in heavy-duty vehicles are certified for the engine families described below:

<u>Engine Family</u>	<u>Engine Size CID</u>	<u>Engine Model</u>	<u>Type</u>
091	855	NH-230-S	Six Cylinder Inline-Natural Aspiration
171	903	V-903-S	V-8 - Natural Aspiration
222	555	VT-555-C	V-8 - Turbocharged

Section 43200, Part I, 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.

This engine is in addition to those previously approved for this engine family.

Vehicles approved 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 26 day of May, 1976.


G. C. Hass, Chief
Division of Vehicle Emissions Control

AIR RESOURCES BOARD
SUPPLEMENTAL INFORMATION
1976 MODEL YEAR
HEAVY-DUTY DIESEL ENGINES

E.O.No. A-21-7-1, May 18, 1976

MANUFACTURER: CUMMINS ENGINE COMPANY, INC.

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Engine Family	Engine Models	Engine CID	Method of Aspiration *	Fuel Pump Mfr. Part No. (1)	Injectors Mfr. Part No.	Tune-Up Specification			Remarks (Emission System)
						Max Rated H.P. and RPM	Initial Injection (2) Timing	Fuel Rate(3)	
091	NH-230	855	N.A.	Cummins	Cummins AR-40031 or 3003943	2200@2100	.029	120	(CPL 0026 Only)
	NHF-240					2300@2300		119	
	NHC-250 (Military)					2400@2100		133	
	NH-230-S					1860@1800		114	

Abbreviations:

- *N.A. - Natural Aspiration
- T.C. - Turbocharged.
- T.C.A. - Turbocharged and After-cooled.
- (1) Fuel pump identified by fuel rate.
- (2) inches @ .2092 inches BDC piston travel.
- (3) cu. in./stroke at rated horsepower

AIR RESOURCES BOARD
SUPPLEMENTAL INFORMATION
1976 MODEL YEAR
HEAVY-DUTY DIESEL ENGINES

R/C # 5-092A-76, Aug. 5, 1976
R7C# 6-092A-76

MANUFACTURER: CUMMINS ENGINE COMPANY, INC.

EXECUTIVE ORDER NO. A-21-7

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Engine Family	Engine Models	Engine CID	Method of Aspiration *	Fuel Pump Mfgr. Part No. (1)	Injectors Mfgr. Part No.	Tune-Up Specification		Fuel Rate (3)	Remarks (Emission System)
						Max Rated H.P. and RPM	Initial Injection (2) Timing		
092A	NTC-290	855	T.C.	Cummins	3004908	270 @ 1800	.059	161	Air/Fuel Control (CPL 0233 ONLY)
						290 @ 1900		167	
						290 @ 2100		158	
						270 @ 1900		156	
						255 @ 1900		148	
						270 @ 2100		147	
						255 @ 2100		140	
						240 @ 1900		140	
						240 @ 2100		134	
						285 @ 1800		170	
						290 @ 1900		167	
						290 @ 2100		158	
						270 @ 1900		156	
270 @ 2100	147								
Power Torque 270	NTC-250-S					270 @ 2100		147	Air/Fuel Control (CPL 0222 ONLY)
						255 @ 2100		140	
						240 @ 2100		134	
NTC-250					3005434	250 @ 1800	.055	147	
						250 @ 1900		142	
						250 @ 2100		134	
						250 @ 1900B		142	
						250 @ 2100B		134	

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- (1) Fuel pump identified by fuel rate.
- (2) inches @ .2092 inches BTDC piston travel.
- (3) cu. mm/stroke at rated horsepower

AIR RESOURCES BOARD
 SUPPLEMENTAL INFORMATION
 1976 MODEL YEAR
 HEAVY-DUTY DIESEL ENGINES

R/C # 3-0936-76, 30 June 1976

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MANUFACTURER: CUMMINS ENGINE COMPANY, INC.

Engine Family	Engine Models	Engine CID	Method of Aspiration *	Fuel Pump Mfr. Part No. (1)	Injectors Mfr. Part No.	Tune-up H.P. and RPM	Specification		Remarks (Emission System)
							Initial Injection Timing	Fuel Rate (3)	
093C	NTA-400	855	T.C.A.	Cummins	Cummins AR-40465 OR 3001005	400@2200	.049	213	Air/Fuel Control (CPL 0205 ONLY)
						370@2200		198	
						335@1950		193	
093D	NTC-350	855	T.C.A.	Cummins	AH-40466, OR 3003975	350@1900 335@1900	.050	204 197	Air/Fuel Control (CPL 0278 ONLY)
						350 @ 2100		196	
						310 @ 1950 320 @ 2100 335@2100 300@2100		192 181 188 169	

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- (1) Fuel pump identified by fuel rate.
- (2) inches @ .2032 inches BTDC piston travel.
- (3) cu. mm/stroke at rated horsepower

**AIR RESOURCES BOARD
SUPPLEMENTAL INFORMATION
1976 MODEL YEAR
HEAVY-DUTY DIESEL ENGINES**

E.O. No. A-21-7-1, May 18, 1976

MANUFACTURER: CUMMINS ENGINE COMPANY, INCORPORATED

EXECUTIVE ORDER NO. A-21-7

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Engine Family	Engine Models	Engine CID	Method of Aspiration *	Fuel Pump		Injectors Mfgr. Part No.	Tune-Up Specification		Fuel Rate	Remarks (Emission System)
				Mfgr. Part No.	Cummins		Max Rated H.P. and RPM	Initial Injection Timing		
171	V-903 V-903-S	903	N.A.	Cummins	3003950	295 @ 2600	.049	101	CPL 0126 ONLY	
						269 @ 2600		92		
						250 @ 2400		89		
						230 @ 2500		80		
						250 @ 2200		96		
172A	VT-350	903	T.C.	Cummins	3003949	350 @ 2600	.066	115	CPL 0136 ONLY	
						325 @ 2400		111		
						300 @ 2600		102		

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- Fuel Rate at Maximum Horsepower
(1) $\frac{\text{mm}^3}{\text{stroke}}$
(2) lbs/hour

**AIR RESOURCES BOARD
SUPPLEMENTAL INFORMATION
1976 MODEL YEAR
HEAVY-DUTY DIESEL ENGINES**

E.O.No. A-21-7-1, May 18, 1976

EXECUTIVE ORDER NO. A-21-7 PAGE NO. 5 of 5.

MANUFACTURER: Cummins Engine Company, Inc.

Engine Family	Engine Models	Engine CID	Method of Aspiration *	Fuel Pump		Injectors		Tune-Up Specification			Remarks (Emission System)
				Mfgr. Part No. (1)	Mfgr. Part No.	Max Rated H.P. and RPM	Initial Injection Timing (2)	Fuel Rate (3)			
221	V-555	555	N.A.	Cummins	3275272	215 @ 3300	.062	59	(CPL 5005 ONLY)		
						202 @ 3000		60			
						190 @ 3000		58			
222	VT-555	555	T.C.	Cummins	3275275	240 @ 3300	.070	65	(CPL 5012 ONLY)		
						225 @ 3000		65			
						240 @ 3300		65			
						240 @ 3300		65			
						240 @ 3300		65			

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- (3) cu. mm/stroke at rated horsepower