State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-21-212

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-45-9;

IT IS ORDERED AND RESOLVED: That the following Cummins Engine Company, Inc. 1998 model diesel engines are certified for use in motor vehicles with a manufacturer's gross vehicle weight rating (GVWR) over 14,000 pounds:

Fuel Type: Diesel

Engine Family	Liters	(Cubic Inches)	Exhaust Emission Control Systems and Special Features
WCEXH0661MAA (353J)	10.8	661	Charge Air Cooler Turbocharger Powertrain Control Module

Engine models and codes are listed on attachments.

The following are the certification exhaust emission standards for this engine family in grams per brake-horsepower-hour:

Non-Methane Hydrocarbons	Carbon Monoxide	Nitrogen Oxides	Particulates
1.3	15.5	4.0	0.10

The following are the certification exhaust emission values for this engine family in grams per brake-horsepower-hour:

Non-Methane Hydrocarbons	Carbon Monoxide	Nitrogen Oxides	Particulates
0.2	0.6	3.7	0.07

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.).

BE IT FURTHER RESOLVED: That the aforementioned engine family has been conditionally certified subject to the following conditions:

1. Any engine which employs a defeat device shall not be covered by this Executive Order.

2. Within 90 days following the issuance of this Executive Order, the manufacturer must show cause, to the satisfaction of the Executive Officer or his designee, that the strategy for fuel injection timing, including timing during the fuel economy mode, is not a defeat device.

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 30th day of April 1998.

R. B. Summerfield, Chief
Mobile Source Operations Division

LARGE ENGINE MODEL SUMMARY

8/29/97

Manufacturer: **Cummins Engine Company, Inc.**

Process Code: **New Submission**

EPA Engine Family: **WCEXH0661MAA**

Manufacturer Family Name: **353J**

1.Engine Code	2.Engine Model	3.BHP@RPM (SAE Gross)	4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	6.Torque @ RPM (SEA Gross)	7.Fuel Rate: mm/stroke@peak torque	8.Fuel Rate: (lbs/hr)@peak torque	9.Emission Control Device Per SAE J1930
CPL2371								
FR2561	M11-450E+	450@1800	236	143	1450@1200	255	103	PCM, TC, CAC
FR2555	M11-450E+	450@1800	236	143	1450@1200	255	103	PCM, TC, CAC
FR2549	M11-400E+	400@1800	209	127	1450@1200	255	103	PCM, TC, CAC
FR2530	M11-400E+	400@1800	209	127	1450@1200	255	103	PCM, TC, CAC
FR2550	M11-400E+	400@1800	209	127	1450@1200	255	103	PCM, TC, CAC
FR2548	M11-370E+	385@1800	199	121	1350@1200	237	96	PCM, TC, CAC
FR2562	M11-370E+	370@1800	191	116	1350@1200	237	96	PCM, TC, CAC
FR2547	M11-370E+	370@1800	191	116	1350@1200	237	96	PCM, TC, CAC
FR2562	M11-370 ESP+	370@1800	191	116	1350@1200	237	96	PCM, TC, CAC
FR2551	M11-370E+	385@1800	199	121	1350@1200	237	96	PCM, TC, CAC
FR2563	M11-370E+	370@1800	191	116	1450@1200	255	103	PCM, TC, CAC
FR2564	M11-370E+	385@1800	199	121	1450@1200	255	103	PCM, TC, CAC
FR2546	M11-350E+	365@1800	188	114	1350@1200	237	96	PCM, TC, CAC
FR2536	M11-350E+	350@1800	180	109	1350@1200	237	96	PCM, TC, CAC
FR2545	M11-350E+	350@1800	180	109	1350@1200	237	96	PCM, TC, CAC
FR2552	M11-350E+	365@1800	188	114	1350@1200	237	96	PCM, TC, CAC
FR2537	M11-350 ESP+	350@1800	180	109	1350@1200	237	96	PCM, TC, CAC
FR2566	M11-335V	350@1800	180	109	1450@1200	255	103	PCM, TC, CAC
FR2567	M11-335V	350@1800	180	109	1350@1200	237	96	PCM, TC, CAC
FR2544	M11-330E+	340@1800	173	105	1350@1200	237	96	PCM, TC, CAC
FR2531	M11-330E+	330@1800	170	103	1350@1200	237	96	PCM, TC, CAC
FR2543	M11-330E+	330@1800	170	103	1350@1200	237	96	PCM, TC, CAC
FR2553	M11-330E+	340@1800	173	105	1350@1200	237	96	PCM, TC, CAC

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