

Pursuant to the authority vested in the Air Resources Board by Sections 43013, 43018, 43101, 43102, 43104 and 43105 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 compression-ignition engine and emission control system produced by the manufacturer are certified as described below for use in off-road equipment. Production engines shall be in all material respects the same as those for which certification is granted.

MODEL YEAR	ENGINE FAMILY	DISPLACEMENT (liters)	FUEL TYPE	USEFUL LIFE (hours)
2002	2CEXL0359ABB	5.9	Diesel	8000
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION	
Direct Diesel Injection, Turbocharger, Charge Air Cooler, Powertrain Control Module			Loader, Tractor, Dozer, Pump, Compressor	

The engine models and codes are attached.

The following are the exhaust certification standards (STD), or family emission limit(s) (FEL) as applicable, and certification levels (CERT) for hydrocarbon (HC), oxides of nitrogen (NOx), or non-methane hydrocarbon plus oxides of nitrogen (NMHC+NOx), carbon monoxide (CO), and particulate matter (PM) in grams per kilowatt-hour (g/kw-hr), and the opacity-of-smoke certification standards and certification levels in percent (%) during acceleration (Accel), lugging (Lug), and the peak value from either mode (Peak) for this engine family (Title 13, California Code of Regulations, (13 CCR) Section 2423):


RATED POWER CLASS	EMISSION STANDARD CATEGORY		EXHAUST (g/kw-hr)					OPACITY (%)		
			HC	NOx	NMHC+NOx	CO	PM	ACCEL	LUG	PEAK
130 ≤ KW < 225	Tier 1	STD	1.3	9.2	N/A	11.4	0.54	20	15	50
		FEL	N/A	7.8	N/A	N/A	0.15	N/A	N/A	N/A
		CERT	0.1	6.8	--	0.5	0.10	12	1	33

BE IT FURTHER RESOLVED: That for the listed engine models, the manufacturer has submitted the information and materials to demonstrate certification compliance with 13 CCR Section 2424 (emission control labels), and 13 CCR Sections 2425 and 2426 (emission control system warranty).

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

This Executive Order is only granted to the engine family and model-year listed above. Engines in this family that are produced for any other model-year are not covered by this Executive Order.

Executed at El Monte, California on this 26th day of December 2001.


 for R. B. Summerfield, Chief
 Mobile Source Operations Division

Engine Model Summary Form

ATTACHMENT

U-R-002-0154

Manufacturer: Cummins Inc.
Engine category: Nonroad Over 50 Hp
EPA Engine Family: 2CEXL0359ABB
Mfr Family Name: B403
Process Code: New Submission

1. Engine Code	2. Engine Model	3. BHP@RPM (SAE Gross)	4. Fuel Rate: mm/stroke @ peak IIP (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
2652;FR90626	QSB5.9-C	240@2500	102	86.3	730@1500	142	71.6	DD4 PCM,TC,CAC
2652;FR90679	QSB5.9-C	240@2500	102	86.3	730@1500	142	71.6	PCM,TC,CAC
2652;FR90809	QSB5.9-C	240@2500	102	86.3	730@1500	142	71.6	PCM,TC,CAC
2652;FR90822	QSB5.9-C	240@2500	102	86.3	730@1500	142	71.6	PCM,TC,CAC
2652;FR90823	QSB5.9-C	240@2500	102	86.3	730@1500	142	71.6	PCM,TC,CAC
2652;FR90824	QSB5.9-C	240@2500	102	86.3	730@1500	142	71.6	PCM,TC,CAC
2652;FR90928	QSB5.9-C	240@2500	102	86.3	730@1500	142	71.6	PCM,TC,CAC
2652;FR90929	QSB5.9-C	205@2500	92	77.6	650@1500	122	61.7	PCM,TC,CAC
2965;FR90722	QSB5.9-C	205@2500	92	77.6	650@1500	122	61.7	PCM,TC,CAC
2652;FR90810	QSB5.9-C	205@2500	92	77.6	650@1500	122	61.7	PCM,TC,CAC
2132;FR90680	QSB5.9-C	275@2500	120	101	660@1600	123	66.2	PCM,TC,CAC
2132;FR90684	QSB5.9-C	275@2500	120	101	660@1600	123	66.2	PCM,TC,CAC
2132;FR90689	QSB5.9-C	275@2500	118	99.4	660@1600	123	66.2	PCM,TC,CAC
2132;FR90770	QSB5.9-C	275@2500	120	101	660@1600	123	66.2	PCM,TC,CAC
2132;FR91016	QSB5.9-C	275@2500	120	101	660@1600	123	66.2	PCM,TC,CAC
8041;FR90848	QSB5.9-C	240@2500	105	88.5	730@1500	142	71.6	PCM,TC,CAC
8190;FR91125	QSB5.9-C	275@2500	120	101	660@1600	123	66.1	PCM,TC,CAC
8190;FR91126	QSB5.9-C	270@2200	129	95.8	660@1600	123	66.1	PCM,TC,CAC
8150;FR91127	QSB5.9-C	240@2500	102	86.3	730@1500	142	71.6	PCM,TC,CAC
8150;FR91128	QSB5.9-C	205@2500	92	77.6	650@1500	122	61.7	PCM,TC,CAC