



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-02-003;

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)
2009	9CEXL0275AAG	4.5	Diesel	8000
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION	
Direct Diesel Injection, Turbocharger, Charge Air Cooler, Engine Control Module			Loader, Tractor, Dozer, Pump and Compressor	

The engine models and codes are attached.

The following are the exhaust certification standards (STD) 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
75 ≤ kW < 130	Tier 3	STD	N/A	N/A	4.0	5.0	0.30	20	15	50
		CERT	--	--	3.8	0.9	0.13	1	1	3

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 27th day of November 2008.


Annette Hebert, Chief
Mobile Source Operations Division

Engine Model Summary Template

U-R-002-0475

Engine Family	1 Engine Code	2 Engine Model	3 BHP@RPM (SAE Gross)	4 Fuel Rate mm³/kWh @ peak HP (per gross SHP)	5 Fuel Rate mm³/kWh @ peak HP (Bubbly @ peak HP (per gross SHP))	6 Torque @ RPM (SAE Gross)	7 Fuel Rate mm³/kWh @ peak torque	8 Fuel Rate (Bubbly @ peak torque)	9 Emission Control Device Per SAE J1030
CELA0275AAG	8725 FR91995	Q584.5	170@2500	133	65.6	475@1500	145	48.9	DD1 TC CAC, & N
CELA0275AAG	8725 FR91487	Q584.5	170@2500	122	68.6	460@1500	140	47.2	DD1 TC CAC
CELA0275AAG	8725 FR91485	Q584.5	155@2000	129	69.0	460@1500	140	47.2	DD1 TC CAC
CELA0275AAG	8725 FR91601	Q584.5	160@2100	124	69.9	460@1500	140	47.2	DD1 TC CAC
CELA0275AAG	8725 FR91604	Q584.5	160@2400	122	65.9	460@1500	140	47.2	DD1 TC CAC
CELA0275AAG	8725 FR91605	Q584.5	180@2300	127	65.6	460@1500	140	47.2	DD1 TC CAC
CELA0275AAG	8725 FR91608	Q584.5	160@2200	130	64.2	460@1500	140	47.2	DD1 TC CAC
CELA0275AAG	8755 FR91609	Q584.5	130@2200	104	51.4	437@1500	135	45.5	DD1 TC CAC
CELA0275AAG	8755 FR91694	Q584.5	148@2300	113	58.5	441@1500	134	46.2	DD1 TC CAC
CELA0275AAG	8755 FR91602	Q584.5	130@2500	101	56.5	457@1500	140	47.1	DD1 TC CAC
CELA0275AAG	8755 FR91665	Q584.5	130@2300	104	53.5	376@1500	126	42.4	DD1 TC CAC
CELA0275AAG	8755 FR91486	Q584.5	152@2200	123	60.7	405@1500	136	45.7	DD1 TC CAC
CELA0275AAG	8755 FR91612	Q584.5	139@2000	125	56.2	372@1500	117	39.4	DD1 TC CAC
CELA0275AAG	8755 FR91616	Q584.5	130@2000	117	52.5	457@1400	137	43.0	DD1 TC CAC
CELA0275AAG	8755 FR91614	Q584.5	132@2000	116	52.1	368@1500	129	43.3	DD1 TC CAC
CELA0275AAG	8755 FR91621	Q584.5	130@1600	127	51.6	457@1300	125	36.4	DD1 TC CAC
CELA0275AAG	8755 FR92226	Q584.5	125@2200	109	74.2	395@1400	123	58.1	DD1 TC CAC
CELA0275AAG	8755 FR91613	Q584.5	140@2000	121	54.1	432@1500	135	45.6	DD1 TC CAC
CELA0275AAG	8755 FR91616	Q584.5	129@2000	111	74.7	403@1400	126	39.7	DD1 TC CAC
CELA0275AAG	8755 FR91618	Q584.5	109@2000	96	44.0	339@1500	112	37.9	DD1 TC CAC
CELA0275AAG	8755 FR92115	Q584.5	140@2200	115	56.8	433@1600	126	45.2	DD1 TC CAC
CELA0275AAG	8755 FR92116	Q584.5	128@2200	106	52.2	430@1600	111	39.9	DD1 TC CAC
CELA0275AAG	8755 FR92234	Q584.5	109@2200	93	45.7	338@1500	116	36.1	DD1 TC CAC
CELA0275AAG	8755 FR92205	Q584.5	125@2100	103	48.6	408@1400	129	40.7	DD1 TC CAC
CELA0275AAG	8754 FR91607	Q584.5	110@2500	85	47.5	360@1500	123	41.6	DD1 TC CAC
CELA0275AAG	8754 FR91611	Q584.5	110@2200	80	44.5	360@1500	126	42.4	DD1 TC CAC
CELA0275AAG	8754 FR91622	Q584.5	110@1800	110	44.3	360@1300	113	33.0	DD1 TC CAC

Engine Model Summary Template

U-12-002-0473

Engine Family	1. Engine Code	2. Engine Model	3. BHP@RPM (SAE Gross)	4. Full Rate emissions @ 100% (for diesel only)	5. Fuel Rate (lb/hr @ 100% for diesel only)	6. Torque @ RPM (SIA Gross)	7. Fuel Rate mmBtu/kwh@Peak torque	8. Fuel Rate (lb/hr)@Peak Torque/Device Per. SAE J1929	9. Emission Control
352-ALC-5AAG	8754-FR91666	QSB4.5	121@2200	95	47.0	345@1500	114	38.4	DDI TC CAC, EM
352-ALC-5AAG	1100-FR91664	QSB5-G3	145@1800	133	54.7	NA	NA	NA	DDI TC CAC
H2E-ALU75AAG	1100-FR91664	QSB5-G3	126@1500	140	47.1	NA	NA	NA	DDI TC CAC
H2E-ALU75AAG	1100-FR92203	QSB5-G2	139@1800	122	49.4	NA	NA	NA	DDI TC CAC
H2E-ALU75AAG	1100-FR92203	QSB5-G2	113@1500	127	42.9	NA	NA	NA	DDI TC CAC
ALU-ALU75AAG	1100-FR92202	QSB5-G1	118@1800	116	46.9	NA	NA	NA	DDI TC CAC
ALU-ALU75AAG	1100-FR92202	QSB5-G1	100@1500	119	40.0	NA	NA	NA	DDI TC CAC
ALU-ALU75AAG	8755-FR92807	QSD4.5	120@3899	88.9	50	350@1800	111.2	37.5	DDI TC CAC