

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 engines and emission control systems 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)
2011	BCEXL0409AAC	6.7	Diesel	8000
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION	
Electronic Direct Injection, Turbocharger, Charge Air Cooler, Engine Control Module			Loader, Tractor, Dozer, Dump Truck, 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	1.4	0.21	6	2	13

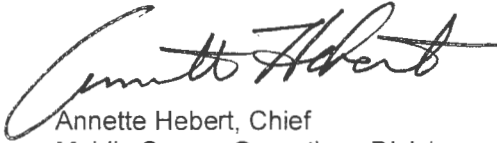
BE IT FURTHER RESOLVED: That for the listed engine models, the manufacturer has submitted the information and materials to demonstrate certification compliance with 13 CCR Section 2424 (emission control labels), and 13 CCR Sections 2425 and 2426 (emission control system warranty).

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.

This Executive Order hereby supersedes Executive Order U-R-002-0567 dated October 26, 2010.

Executed at El Monte, California on this 27 day of September 2011.


 Annette Hebert, Chief
 Mobile Source Operations Division

Engine Model Summary Template

U-R-002-0507-1
Attachment pg 1/3
9/7/2011

Engine Family	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
BCEXL0409AAC	0426;FR91850	QSB6.7	173@1800	105	64	644@1300	136	59.6	ECM TC CAC PDF
BCEXL0409AAC	0426;FR91436	QSB6.7	173@2200	89	66	590@1400	122	57.5	ECM TC CAC
BCEXL0409AAC	0426;FR91645	QSB6.7	170@2000	94	63.5	485@1500	104	52.6	ECM TC CAC
BCEXL0409AAC	0426;FR91426	QSB6.7	160@2500	85	71.5	540@1500	118	59.5	ECM TC CAC
BCEXL0409AAC	0426;FR91437	QSB6.7	160@2200	83	61.6	540@1400	117	55.2	ECM TC CAC
BCEXL0409AAC	0426;FR91994	QSB6.7	167@2000	77	51.7	548@1500	118	59.6	ECM TC CAC
BCEXL0409AAC	0426;FR91432	QSB6.7	160@2300	83	64.2	540@1500	119	60.3	ECM TC CAC
BCEXL0409AAC	0426;FR91447	QSB6.7	160@1800	103	62.3	540@1300	117	51.3	ECM TC CAC
BCEXL0409AAC	0426;FR92219	QSB6.7	155@2300	80	61.8	448@1500	100	50.4	ECM TC CAC
BCEXL0409AAC	0426;FR92220	QSB6.7	155@2500	77	64.9	449@1500	97	49.3	ECM TC CAC
BCEXL0409AAC	0426;FR92339	QSB6.7	173@2200	89	66	550@1500	120	56.5	ECM TC CAC
BCEXL0409AAC	0426;FR92324	QSB6.7	150@2200	78	57.9	548@1400	119	56.2	ECM TC CAC
BCEXL0409AAC	0426;FR92211	QSB6.7	167@2200	88	65.6	485@1400	104	49.3	ECM TC CAC
BCEXL0409AAC	0426;FR92493	QSB6.7	160@2200	85	63.3	473@1500	97	50.4	ECM TC CAC
BCEXL0409AAC	0426;FR92376	QSB6.7	170@2200	85	63.3	498@1400	107	50.4	ECM TC CAC
BCEXL0409AAC	0427;FR91893	QSB6.7	171@2200	88	65.7	563@1400	113	53.3	ECM TC CAC
BCEXL0409AAC	0427;FR91425	QSB6.7	173@2500	92	77.6	590@1500	132	66.7	ECM TC CAC
BCEXL0409AAC	0427;FR92374	QSB6.7	173@2200	89	66	590@1400	122	57.5	ECM TC CAC
BCEXL0409AAC	0427;FR92375	QSB6.7	160@2200	83	61.6	540@1400	117	55.2	ECM TC CAC
BCEXL0409AAC	0427;FR92124	QSB6.7	173@2100	101	71.4	582@1400	125	59	ECM TC CAC
BCEXL0409AAC	0427;FR92125	QSB6.7	145@2100	85	60.1	492@1400	105	49.7	ECM TC CAC
BCEXL0409AAC	8733;FR91626	QSB6.7	155@2000	85	57.2	455@1500	102	51.4	ECM TC CAC
BCEXL0409AAC	8733;FR91636	QSB6.7	133@2200	71	52.8	430@1450	92	45.1	ECM TC CAC
BCEXL0409AAC	8733;FR91993	QSB6.7	140@2000	80	53.7	463@1400	98	46.5	ECM TC CAC
BCEXL0409AAC	0426;FR92970	QSB6.7	145@2200	93	63	432@1400	93	43.7	ECM TC CAC
BCEXL0409AAC	0426;FR92131	QSB6.7	173@1800	103	64	644@1350	136	59.6	ECM TC CAC
BCEXL0409AAC	8725;FR91995	QSB4.5	170@2200	133	65.8	475@1500	145	48.9	DDI TC CAC
BCEXL0409AAC	8725;FR91487	QSB4.5	170@2500	122	68.6	460@1500	140	47.2	DDI TC CAC ✓

Engine Model Summary Template

UTL-002-0367-1
Attachment pg 2/3
9/7/2011

Engine Family	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
BCEXL0409AAC	8725;FR91485	QSB4.5	155@2000	129	58.0	460@1500	140	47.2	DDI TC CAC <i>DOT</i>
BCEXL0409AAC	8725;FR91601	QSB4.5	160@2500	124	69.9	460@ 500	140	47.2	DDI TC CAC
BCEXL0409AAC	8725;FR91604	QSB4.5	160@2400	122	65.9	460@1500	140	47.2	DDI TC CAC
BCEXL0409AAC	8725;FR91605	QSB4.5	160@2300	127	65.6	460@1500	140	47.2	DDI TC CAC
BCEXL0409AAC	8725;FR91608	QSB4.5	160@2200	130	64.2	460@1500	140	47.2	DDI TC CAC
BCEXL0409AAC	8755;FR91609	QSB4.5	130@2200	104	51.4	457@1500	135	45.5	DDI TC CAC
BCEXL0409AAC	8755;FR91664	QSB4.5	148@2300	113	58.5	441@1500	134	45.2	DDI TC CAC
BCEXL0409AAC	8755;FR91602	QSB4.5	130@2500	101	56.5	457@1500	140	47.1	DDI TC CAC
BCEXL0409AAC	8755;FR91665	QSB4.5	130@2300	104	53.5	376@1500	126	42.4	DDI TC CAC
BCEXL0409AAC	8755;FR91486	QSB4.5	152@2200	123	60.7	405@1500	136	45.7	DDI TC CAC
BCEXL0409AAC	8755;FR91612	QSB4.5	139@2000	125	56.2	372@1500	117	39.4	DDI TC CAC
BCEXL0409AAC	8755;FR91614	QSB4.5	132@2000	116	52.1	368@1500	129	43.3	DDI TC CAC
BCEXL0409AAC	8755;FR92326	QSB4.5	125@2200	100	74.2	395@1400	123	58.1	DDI TC CAC
BCEXL0409AAC	8756;FR91613	QSB4.5	140@2000	121	54.1	432@1500	135	45.6	DDI TC CAC
BCEXL0409AAC	8756;FR91615	QSB4.5	128@2000	111	74.7	403@1400	126	39.7	DDI TC CAC
BCEXL0409AAC	8756;FR91618	QSB4.5	109@2000	98	44.0	338@1500	112	37.9	DDI TC CAC
BCEXL0409AAC	8756;FR92115	QSB4.5	140@2200	115	56.8	433@1600	126	45.2	DDI TC CAC
BCEXL0409AAC	8756;FR92116	QSB4.5	128@2200	106	52.2	430@1600	111	39.9	DDI TC CAC
BCEXL0409AAC	8756;FR92117	QSB4.5	109@2200	93	45.7	338@1500	116	39.1	DDI TC CAC
BCEXL0409AAC	8756;FR92234	QSB4.5	125@2100	103	48.6	408@1400	129	40.7	DDI TC CAC
BCEXL0409AAC	8756;FR92205	QSB4.5	130@2200	97	47.3	382@1500	129	43.7	DDI TC CAC
BCEXL0409AAC	8754;FR91603	QSB4.5	110@2500	85	47.5	360@1500	123	41.6	DDI TC CAC
BCEXL0409AAC	8754;FR91611	QSB4.5	110@2200	90	44.5	360@1500	126	42.4	DDI TC CAC
BCEXL0409AAC	8754;FR91622	QSB4.5	110@1800	110	44.3	360@1300	113	33.0	DDI TC CAC
BCEXL0409AAC	8754;FR91666	QSB4.5	121@2200	95	47.0	346@1500	114	38.4	DDI TC CAC
BCEXL0409AAC	1100;FR91964	QSB5-G3	145@1800	135	54.7	NA	NA	NA	DDI TC CAC
BCEXL0409AAC	1100;FR91964	QSB5-G3	126@1500	140	47.1	NA	NA	NA	DDI TC CAC
BCEXL0409AAC	1100;FR92203	QSB5-G2	129@1800	122	49.4	NA	NA	NA	DDI TC CAC ✓

Engine Model Summary Template

U-11-002-00011
Attached pg 3/3
9/7/2011

Engine Family	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
BCEXL0409AAC	1100;FR92203	QSB5-G2	113@1500	127	42.9	NA	NA	NA	DDI TC CAC <i>DDI</i>
BCEXL0409AAC	1100;FR92202	QSB5-G1	118@1800	116	46.9	NA	NA	NA	DDI TC CAC
BCEXL0409AAC	1100;FR92202	QSB5-G1	100@1500	119	40.0	NA	NA	NA	DDI TC CAC
BCEXL0409AAC	8755;FR92807	QSB4.5	120@2500	88.9	50	350@1500	111.2	37.5	DDI TC CAC
BCEXL0409AAC	8755;FR91616	QSB4.5	130@2000	117	52.5	457@1500	137	43.0	DDI TC CAC
BCEXL0409AAC	8755;FR91621	QSB4.5	130@1800	127	51.6	457@1400	125	36.4	DDI TC CAC
BCEXL0409AAC	2743;FR92383	QSB5-G4	160@1800	123	49.9	NA	NA	NA	DDI,TC,CAC
BCEXL0409AAC	2743;FR92383	QSB5-G4	138@1500	130	43.8	NA	NA	NA	DDI,TC,CAC
BCEXL0409AAC	FR30230	QSB3.3	110@2400	82	43	304@1600	101	35	EM,TC,CAC,