



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)
2011	BSIDL08.4H6B	8.4 & 9.8	Diesel	8000
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION	
Electronic Diesel Injection, Turbocharger, Charge Air Cooler, Engine Control Module and Smoke Puff Limiter, Selective Catalytic Reduction-Urea			Tractor	

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
130 ≤ KW ≤ 560	Tier 4 ALT NOx	STD	0.19	2.0	N/A	3.5	0.02	N/A	N/A	N/A
		CERT	0.04	1.7	--	0.2	0.02	--	--	--

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 27 day of January 2011.

Annette Hebert, Chief
Mobile Source Operations Division

Engine Model Summary Template

U-R-050-0029
01/10/2011

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
BSIDL08.4H6B		84AWI.648	335@2100	162	113	1215@1500	213	106.5	ECM,IDI,SPL,TC,CAC,SCPC
BSIDL08.4H6B		84AWI.655	252@2100	122	85.5	911@1500	159.5	80	" " SPL " "
BSIDL08.4H6B		84AWI.656	276@2100	134	94	1000@1500	175	87.5	" " SPL " "
BSIDL08.4H6B		84AWI.657	300@2100	146	102	1077@1500	188	94	" " SPL " "
BSIDL08.4H6B		84AWI.658	330@2100	160	112	1177@1500	206	103	" " SPL " "
BSIDL08.4H6B		84AWI.659	351@2100	170	119	1184@1500	207	103.5	" " SPL " "
BSIDL08.4H6B		98AWI.660	502@2100			1412@1800			" " SPL " "
BSIDL08.4H6B		98AWI.661	502@2100			1412@1800			" " SPL " "
BSIDL08.4H6B		98AWI.662	426@2100			1476@1500			" " SPL " "

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U-R-050-0029

01/10/2011

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BSIDL08.4H6B		84AWI.678	343@2100	166	116.2	1154@1600	204	108.8	ECH,IDI,SPL,TC,CAC,SCRC
BSIDL08.4H6B		84AWI.679	370@2100	179	125.3	1154@1600	204	108.8	" " SPL " "
BSIDL08.4H6B		84AWI.680	370@2100	179	125.3	1154@1600	204	108.8	" " SPL " "
BSIDL08.4H6B		84AWI.687	343@2100	166	116.2	1154@1600	204	108.8	" " SPL " "
BSIDL08.4H6B		84AWI.688	370@2100	179	125.3	1154@1600	204	108.8	" " SPL " "

Engine Model Summary Template

U-R-050-0029

01/10/2011

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
BSIDL08.4H6B		84AWI.576	332@2100	161	112.7	1184@1500	208	104.0	ECM,IDI,SPL,TC,CAC,SOBC
BSIDL08.4H6B		84AWI.577	364@2100	177	123.9	1184@1500	208	104.0	ECM,DDI,SPL,TC,CAC,SOBC