

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)
2010	AVEXL06.7SCA	6.7	Diesel	8000
<b>SPECIAL FEATURES &amp; EMISSION CONTROL SYSTEMS</b>			<b>TYPICAL EQUIPMENT APPLICATION</b>	
Direct Diesel Injection, Turbocharger, Charge Air Cooler, Electronic Control Module, and Selective Catalytic Reduction-Urea			Loader, Tractor, and Dozer	

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 < 225	Tier 4 Phase Out	STD	N/A	N/A	4.0	3.5	0.02	N/A	N/A	N/A
		CERT	--	--	1.8	0.5	0.01	--	--	--

**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).

**BE IT FURTHER RESOLVED:** That for the listed engine models, the manufacturer has elected to certify all engine models to the Tier 4 Phase Out standards listed in Table 1b of 13 CCR Section 2423(b)(1)(B). In addition, all engine models will adhere to the single set of standards listed above which correspond to the more stringent power category contained in the rated power class listed above.

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-015-0175 dated September 1, 2010.

Executed at El Monte, California on this 27<sup>th</sup> day of December 2010.

*M. Hebert FOR AGM*

Annette Hebert, Chief  
Mobile Source Operations Division

# Engine Model Summary Template

U-12-015-0175-1  
Attachment  
14/10/2010

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
AVEXL06.7SCA	F4HFE613T*A	F4HFE613T*A	268 @ 2100	128	N/A	863 @ 1800	165	N/A	EM ECM TC CAC SCR
AVEXL06.7SCA	F4HFE613G*A	F4HFE613G*A	252 @ 2200	117	N/A	845 @ 1500	163	N/A	EM ECM TC CAC SCR
AVEXL06.7SCA	F4DFE613G*A	F4DFE613G*A	252 @ 2200	117	N/A	845 @ 1500	163	N/A	EM ECM TC CAC SCR
AVEXL06.7SCA	F4HFE6131*A	F4HFE6131*A	245 @ 2000	126	N/A	800 @ 1500	154	N/A	EM ECM TC CAC SCR
AVEXL06.7SCA	F4HFE613H*A	F4HFE613H*A	243 @ 2200	113	N/A	826 @ 1500	159	N/A	EM ECM TC CAC SCR
AVEXL06.7SCA	F4DFE613H*A	F4DFE613H*A	243 @ 2200	113	N/A	826 @ 1500	159	N/A	EM ECM TC CAC SCR
AVEXL06.7SCA	F4HFE613U*A	F4HFE613U*A	235 @ 2100	115.5	N/A	778 @ 1500	149.17	N/A	EM ECM TC CAC SCR
AVEXL06.7SCA	F4HFE613J*A	F4HFE613J*A	232 @ 2200	109	N/A	798 @ 1500	152.99	N/A	EM ECM TC CAC SCR
AVEXL06.7SCA	F4DFE613J*A	F4DFE613J*A	232 @ 2200	109	N/A	798 @ 1500	152.99	N/A	EM ECM TC CAC SCR
AVEXL06.7SCA	F4HFE613X*A	F4HFE613X*A	227 @ 2000	115.5	N/A	739 @ 1500	141.67	N/A	EM ECM TC CAC SCR
AVEXL06.7SCA	F4HFE613K*A	F4HFE613K*A	217 @ 2200	103.5	N/A	752 @ 1500	144.08	N/A	EM ECM TC CAC SCR
AVEXL06.7SCA	F4DFE613K*A	F4DFE613K*A	217 @ 2200	103.5	N/A	752 @ 1500	144.08	N/A	EM ECM TC CAC SCR
AVEXL06.7SCA	F4HFE613W*A	F4HFE613W*A	211 @ 2000	108	N/A	702 @ 1400	135	N/A	EM ECM TC CAC SCR
AVEXL06.7SCA	F4HFE613V*A	F4HFE613V*A	208 @ 2100	102	N/A	682 @ 1500	130	N/A	EM ECM TC CAC SCR
AVEXL06.7SCA	F4HFE613P*A	F4HFE613P*A	204 @ 2100	100	N/A	673 @ 1400	129	N/A	EM ECM TC CAC SCR
AVEXL06.7SCA	F4DFE613L*A	F4DFE613L*A	202 @ 2200	97	N/A	701 @ 1500	134.5	N/A	EM ECM TC CAC SCR
AVEXL06.7SCA	F4DFE613B*A	F4DFE613B*A	197 @ 2200	94	N/A	618 @ 1500	118.5	N/A	EM ECM TC CAC SCR
AVEXL06.7SCA	F4HFE613Y*A	F4HFE613Y*A	194 @ 2000	100	N/A	637 @ 1400	122	N/A	EM ECM TC CAC SCR
AVEXL06.7SCA	F4HFE613R*A	F4HFE613R*A	190 @ 2100	94	N/A	627 @ 1400	120	N/A	EM ECM TC CAC SCR
AVEXL06.7SCA	F4DFE613A*A	F4DFE613A*A	188 @ 2200	90	N/A	608 @ 1500	117	N/A	EM ECM TC CAC SCR
AVEXL06.7SCA	F4DFE613C*A	F4DFE613C*A	173 @ 2200	83	N/A	576 @ 1500	110.5	N/A	EM ECM TC CAC SCR

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