



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)
2010	AY9XL11.7BBA	11.7, 8.9	Diesel	8000
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION	
Direct Diesel Injection, Turbocharger, Charge Air Cooler and Engine Control Module			Generator	

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
225 ≤ KW < 450	Tier 3	STD	N/A	N/A	4.0	3.5	0.20	N/A	N/A	N/A
		CERT	--	--	3.7	0.9	0.17	--	--	--

**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 4 day of November 2010.

Annette Hebert, Chief  
Mobile Source Operations Division

**Engine Model Summary Template**

U-R-024-0010

10/25/10

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
AY9XL11.7BBA	DC9 62A	1746487	302@1800	222.1	111.0	n a	n a	n a	DDI, IC n a, CAP, ECM
AY9XL11.7BBA	DC9 62A	1746488	331@1800	240.7	120.4	n a	n a	n a	" n a "
AY9XL11.7BBA	DC9 62A	1746489	331@1800	240.7	120.4	n a	n a	n a	" n a "
AY9XL11.7BBA	DC9 62A	1746490	365@1800	261.4	130.7	n a	n a	n a	" n a "
AY9XL11.7BBA	DC12 56A	1746461	366@1800	215.7	129.4	n a	n a	n a	" n a "
AY9XL11.7BBA	DC12 56A	1746462	402@1800	233.7	140.2	n a	n a	n a	" n a "
AY9XL11.7BBA	DC12 56A	1746463	424@1800	242.7	145.6	n a	n a	n a	" n a "
AY9XL11.7BBA	DC12 56A	1746464	452@1800	252.6	151.6	n a	n a	n a	" n a "
AY9XL11.7BBA	DC12 56A	1746465	481@1800	269.1	161.5	n a	n a	n a	" n a "
AY9XL11.7BBA	DC12 56A	1746466	511@1800	287.0	172.2	n a	n a	n a	" n a "
AY9XL11.7BBA	DC12 56A	1746467	402@1800	233.7	140.2	n a	n a	n a	" n a "
AY9XL11.7BBA	DC12 56A	1746468	424@1800	242.7	145.6	n a	n a	n a	" n a "
AY9XL11.7BBA	DC12 56A	1746469	452@1800	252.6	151.6	n a	n a	n a	" n a "
AY9XL11.7BBA	DC12 56A	1746470	481@1800	269.1	161.5	n a	n a	n a	" n a "
AY9XL11.7BBA	DC12 56A	1746471	511@1800	287.0	172.2	n a	n a	n a	" n a "
AY9XL11.7BBA	DC12 56A	1746472	540@1800	306.5	183.9	n a	n a	n a	" n a "