

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) 3,000		
2010	AYDXL0.78Y3N	0.784	Diesel			
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION			
Indirect Diesel Injection			Generator Set			

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	EMISSION		EXHAUST (g/kW-hr)				OPACITY (%)			
POWER CLASS	STANDARD CATEGORY		нс	NOx	NMHC+NOx	co	PM	ACCEL	LUG	PEAK
0 ≤ kW < 19	Tier 4	OPTIONAL STD	N/A	N/A	7.5	6.6	0.40	N/A	N/A	N/A
		CERT			5.6	2.7	0.23			

BE IT FURTHER RESOLVED: That for the listed engine models, the manufacturer has complied with the more stringent set of standards from the various power categories in conformance with Section 1039.230 (e) of the "California Exhaust Emission Standards and Test Procedures for 2008 and Later Tier 4 Off-Road Compression-Ignition Engines, Part I-C" adopted October 20, 2005.

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 ______ day of November 2009.

Annette Hebert, Chief

Mobile Source Operations Division

U-R-028-0464 11/2109

Engine Model Summary Template

ATTACHMENT

8.Fuel Rate: 9.Emission Control (bs/hr)@peak torqueDevize Per SAE 11930	EM IEI		EM IF
8.Fuel Rate: (lbs/hr)@peak torque	N/A	Ϋ́ A	N/N
7.Fuel Rate: 6.Torque @ RPM mm/stroke@peak (SEA Gross) torque		N/A	N/A
6.Torque @ RPM (SEA Gross)	N/A	N/A	N/A
5.Fuel Rate: (lbs/hr) @ peak HP (for dlesels only)	9.4	9.1	4.1
4.Fuel Rate: 5.Fuel Rate: mm/stroke @ peak HP(lbs/hr) @ peak HP(for diesel only) (for diesels only)	15.8	15.3	13.8
3.BHP@RPM (SAE Gross)	21.1/3600	20.1/3600	9.8/1800
з.внр@крм Engine Family 1.Engine Code 2.Engine Model (SAE Gross)	3TNM68-CHCL1 21.1/3600	3TNM68-H	3TNM68-G
1.Engine Code	V.V	N/A	N/A
Engine Family	AYDXL0.78Y3N	AYDXL0.78Y3N	AYDXL0.78Y3N