EXECUTIVE ORDER U-R-006-0405 New Off-Road Compression-Ignition Engines

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-14-012;

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)
2015	FSZXL09.8QXA	9.8	Diesel	8000
77.7	L FEATURES & EMISSION C		TYPICAL EQUIPMENT APPLIC	ATION
Coole Recirculati	nic Control Module, Turboc er, Electronic Direct Injecti on, Diesel Oxidation Catal uction- Urea, Ammonia Ox	on, Ēxhaust Gas yst, Selective Catalyst	Excavator, Crane, Loader,	Lift

The engine models and codes are attached.

The following are the exhaust certification standards (STD) and certification levels (CERT) for non-methane hydrocarbon (NMHC), 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			E	XHAUST (g/kw-hr	•)		OF	PACITY (%)
POWER CLASS	STANDARD CATEGORY		NMHC	NOx	NMHC+NOx	со	PM	ACCEL	LUG	PEAK
130 ≤ kW ≤ 560	Tier 4 Final	STD	0.19	0.40	N/A	3.5	0.02	N/A	N/A	N/A
		CERT	0.002	0.35		0.1	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

_ day of February 2015.

Annette Hebert, Chief

Emissions Compliance, Automotive Regulations and Science Division

CARB EO. U-R-006- O+O5 DATE: 12/17/14

Engine Model Summary Template ATTACHMENT

ECM, TC, CAC, DFI, EGR, DOC, SCR-U, AMOX	6.66	199.6	1058@1500	125	187.3	AQ-6UZ1X 362.1@2000	AQ-6UZ1X	6UZ1XDQAA -01	FSZXL09.8QXA
Emission Control Device Per SAE J1930	Fuel Rate: lbs/hr @peak torque	Fuel Rate: mm/stroke @peak torque	Torque @ RPM (SEA Gross)	ruel Kate. mm/stroke lbs/hr @ peak HP @ peak HP Torque @ RPM (for diesel only) (for diesels only) (SEA Gross)	Fuel Kate: mm/stroke @ peak HP (for diesel only)	BHP@RPM (SAE Gross)	Engine Model	Engine Code	Engine Family
				Fuel Rate:	Fuel Rate:				