## SCANIA CV AB

EXECUTIVE ORDER U-R-024-0035 New Off-Road Compression-Ignition Engines

Pursuant to the authority vested in California 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 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)		
2018	JY9XL16.4DAA	16.4	Diesel	8000		
SPECIAL	FEATURES & EMISSION	CONTROL SYSTEMS	TYPICAL EQUIPMENT APPLICATION			
Cooler, E Selective C	c Direct Injection, Turbo Engine Control Module, S Catalytic Reduction-Urea Catalyst, Exhaust Gas R	Smoke Puff Limiter, , Ammonia Oxidation	Crane, Loader, Tractor, Dozer, Pump, Compressor, Generate			

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 POWER	EMISSION		EXHAUST (g/kw-hr)					OPACITY (%)		
CLASS	STANDARD CATEGORY	STD	<b>NMHC</b> 0.19	NOx	NMHC+NOx	СО	PM 0.02	ACCEL N/A	LUG N/A	PEAK N/A
130 ≤ KW ≤ 560	Tier 4 Final			0.40	N/A	3.5				
		CERT	0.14	0.31		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).

BE IT FURTHER RESOLVED: That the manufacturer has elected to include engine models in this engine family which are identified for "emergency vehicle use only". These "emergency vehicle use only" engines are exempt from requirements imposed pursuant to California law and the regulations adopted pursuant thereto for motor vehicle pollution control devices per California Vehicle Code Section 27156.2. The manufacturer must clearly label these engines for "emergency vehicle use only" on the engines' emission control label.

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 2018.

Annette Hebert, Chief

Emissions Compliance, Automotive Regulations and Science Division

## ATTACHMENT I OF I

## Engine ModelsEZ

## U-R-024-0035

Engine Family	1.Engine Code	2.Engine Model	3.Dis- placement		ower kW	5.Fuel Rate: mm/stroke @ peak HP		7.Torque Nm @ RPM	8.Fuel Rate: mm/stroke@ peak torque	9.Fuel Rate: (lbs/hr)@peak torque	10. Emission Control Device
JY9XL16.4DAA	DC16 084A	2257384	16.4	405	@ 2100	217	205	2828 @ 1300	285	166	DDI, ECM, TC, CAC, EGR, SPL, SCR, AMOX
Y9XL16.4DAA	DC16 084A	2257385	16.4	478	@ 2100	249	235	3138 @ 1400	323	203	DDI, ECM, TC, CAC, EGR, SPL, SCR, AMOX
Y9XL16.4DAA	DC16 084A	2257386	16.4	493	@ 2100	259	244	3233 @ 1400	334	210	DDI, ECM, TC, CAC, EGR, SPL, SCR, AMOX .
mergency:					0			@			
Y9XL16.4DAA	DC16 091A	2542927	16.4	405	@ 2100	217	205	2828 @ 1300	285	166	DDI, ECM, TC, CAC, EGR, SPL, SCR, AMOX
Y9XL16.4DAA	DC16 091A	2542928	16.4	493	@ 2100	259	244	3233 @ 1400	* 334	210	DDI, ECM, TC, CAC, EGR, SPL, SCR, AMOX
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