

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 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)
2019	KH3XL2.22TD3	2.216, 1.662	Diesel	5000
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION	
Electronic Direct Injection, Engine Control Module, Turbocharger, Exhaust Gas Recirculation, Oxidation Catalyst			Tractor, Generator, Other Industrial Equipment	

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 (NO_x), or non-methane hydrocarbon plus oxides of nitrogen (NMHC+NO_x), 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 (%)		
			NMHC	NO _x	NMHC+NO _x	CO	PM	ACCEL	LUG	PEAK
19 ≤ kW < 37	Tier 4 Final	STD	N/A	N/A	4.7	5.5	0.03	N/A	N/A	N/A
		CERT	--	--	4.7	2.5	0.03	--	--	--

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 27 day of August 2018.



Annette Hebert, Chief
 Emissions Compliance, Automotive Regulations and Science Division

ATTACHMENT 1 OF 1

Engine Model Summary Template U-R-026-0513

8/29/2019 RIC

Engine Family	1.Engine Code	2.Engine Model	3.BHP@RPM (SAE Gross)	4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	5.Displacement (l) /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
KH3XL2.22TD3	N4LDI-T	4LT362800	48.8@2800	34.9	2.22/21.9	122@1800	41.4	16.7	DDI,ECM,TC,EGR,
KH3XL2.22TD3	N4LDI-T	4LT301800C	40.2@1800	37.0	2.22/15.0	117@1800	37.0	15.0	DDI,ECM,TC,EGR,
KH3XL2.22TD3	N3LDI-T	4LT362400	48.3@2400	38.7	2.22/20.4	118@1800	38.2	15.1	DDI,ECM,TC,EGR,
KH3XL2.22TD3	N4LDI-T	4T362600-4503	48.8@2800	38.7	2.22/22.1	118@1600	39.9	14.0	DDI,ECM,TC,EGR,
KH3XL2.22TD3	N4LDI-T	4T362600-4504	48.8@2800	38.7	2.22/22.1	118@1600	39.9	14.0	DDI,ECM,TC,EGR,
KH3XL2.22TD3	N3LDI-T	3T272600-4518	36.2 @ 2600	36.9	1.66/15.8	89 @ 1600	37.9	10.0	DDI,ECM,TC,EGR,
KH3XL2.22TD3	N3LDI-T	3T272600-4519	36.2 @ 2600	36.9	1.66/15.8	89 @ 1600	37.9	10.0	DDI,ECM,TC,EGR,
KH3XL2.22TD3	N3LDI-T	3T302600-4509	40.0 @ 2600	39.8	1.66/17.0	89 @ 1600	39	10.3	DDI,ECM,TC,EGR,
KH3XL2.22TD3	N3LDI-T	3T302600-4510	40.0 @ 2600	39.8	1.66/17.0	89 @ 1600	39	10.3	DDI,ECM,TC,EGR,
KH3XL2.22TD3	N4LDI-T	4T362600-4507	48.8 @ 2600	38.7	2.22/22.1	118 @ 1600	39.9	14.0	DDI,ECM,TC,EGR,
KH3XL2.22TD3	N4LDI-T	4T362600-4508	48.8 @ 2600	38.7	2.22/22.1	118 @ 1600	39.9	14.0	DDI,ECM,TC,EGR,
KH3XL2.22TD3	403F-E17T	6494/2600*	36.2 @ 2600	36.9	1.66/15.8	89 @ 1600	37.9	10.3	DDI,ECM,TC,EGR,
KH3XL2.22TD3	403F-E17T	6496/2600*	40.0 @ 2600	39.8	1.66/17.0	89 @ 1600	39	10.3	DDI,ECM,TC,EGR,
KH3XL2.22TD3	404F-E22T	6368/2400*	48.3@2400	38.7	2.22/20.4	118@1800	38.2	15.1	DDI,ECM,TC,EGR,

* add new models.