

KUBOTA Corporation

EXECUTIVE ORDER U-R-025-0797 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 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	ENCIME FAMILY		FUEL TYPE USE			
2019 KKBXL03.3E1D 3.331		Diesel	8000			
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION			
Electronic Direct Injection, Turbocharger, Exhaust Gas Recirculation, Electronic Control Module, Periodic Trap Oxidizer, Diesel Oxidation Catalyst			Loader, Tractor, Forklift, Mini Backhoe, Skid-Steer Loader			

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		EXHAUST (g/kw-hr)					OPACITY (%)		
POWER	STANDARD		NMHC	NOx	NMHC+NOx	СО	PM	ACCEL	LUG	PEAK
37 ≤ kW < 56	Tier 4 Final	STD	N/A	N/A	4.7	5.0	0.03	N/A	N/A	N/A
		CERT		-	2.7	0.1	0.000	-		

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 July 2018

Annette Hebert, Chief

Emissions Compliance, Automotive Regulations and Science Division

Engine Model Summary Form

ufacturer:

KUBOTA Corporation

ne category:

Nonroad CI

Engine Family:

KKBXL03.3E1D

amily Name:

N/A

ess Code:

New Submission

Attachment page 1 of 1

EO#U-R-025-0797 Date: 7/9/2018

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
3B-CR-T-EW03	C3.3B-CR-T-EW	73.2@2400	53.0	28.4	192.5@1500	61.0	20.5	EM, DFI, TC, EGR, ECM, PTOX, DOC
3B-CR-T-EW04	C3.3B-CR-T-EW	73.2@2200	55.1	27.1	192.5@1500	61.0	20.5	EM, DFI, TC, EGR, ECM, PTOX, DOC
3H-CR-T-EW02	D3.3H-CR-T-EW	73.2@2600	50.4	29.3	192.5@1500	61.0	20.5	EM, DFI, TC, EGR, ECM, PTOX, DOC
3H-CR-T-EW04	D3.3H-CR-T-EW	73.2@2200	55.1	27.1	192.5@1500	61.0	20.5	EM, DFI, TC, EGR, ECM, PTOX, DOC
# 07-CR-T-EW01	V3307-CR-T-EW	73.2@2600	50.7	29.5	212.2@1500	66.1	22.2	EM, DFI, TC, EGR, ECM, PTOX, DOC
07-CR-T-EW02	V3307-CR-T-EW	73.2@2600	50.4	29.3	192.5@1500	61.0	20.5	EM, DFI, TC, EGR, ECM, PTOX, DOC
07-CR-T-EW03	V3307-CR-T-EW	73.2@2400	53.0	28.4	192.5@1500	61.0	20.5	EM, DFI, TC, EGR, ECM, PTOX, DOC
07-CR-T-EW04	V3307-CR-T-EW	73.2@2200	55.1	27.1	192.5@1500	61.0	20.5	EM, DFI, TC, EGR, ECM, PTOX, DOC
07-CR-T-EW05	V3307-CR-T-EW	65.7@2000	54.8	24.5	194.0@1400	60.8	19.0	EM, DFI, TC, EGR, ECM, PTOX, DOC

* tested engine	DFI = Direct Fuel Inju