EXHAUST EMISSION DATA SHEET

MQ POWER GENERATOR SET

Model: DCA40SSKU4F2



The engine used in this generator set is certified to comply with United States EPA Tier 4 and CARB Mobile Off-Highway emission regulations.

ENGINE D	<u>ATA</u>						
Manufacturer:	KUBOTA			Bore:	3.4	in.	(87 mm)
Model:	V2403			Stroke:	4.0	in.	(102 mm)
Туре:	4-Cycle, In-Line, 4-Cylind		Displacement	:164	cid	(2.4 liters)	
Aspiration:	: Turbocharger, ECM, EGR,DOC Electronic Direct Injection, Charge Air Cooler				Ratio	:	16.0:1
PERFORMA	NCE DATA						
SAE Gross HF	9 @ 1800 RPM (60 Hz)						
Rated Load Fu	el Consumption (gal/Hr)	2.3	3				
Rated Load Ex	khaust Gas Flow (cfm)	15	5				
Rated Load Ex	khaust Gas Temperature	(°F) 91	8				
Un	ited States EPA - M	lobile O	ff-Highway Tier 4	Limits -			25≤ ~ <49 BHP
Crite	eria Pollutant	Emis	sion Requirements	Certifie	d Eng	ine E	missions
NOx (Oxides o	of Nitrogen as NO2)	N/A	gr/bhp-hr	N/A	gr/b	hp-hr	
HC (Total Unb	urned Hydrocarbons)	N/A	gr/bhp-hr	N/A	gr/b	hp-hr	
NOx + HC (Co	mbined)	N/A	gr/bhp-hr	N/A	gr/b	hp-hr	
CO (Carbon M	lonoxide)	4.10	gr/bhp-hr	0.074	gr/b	hp-hr	
PM (Particulat	e Matter)	0.022	gr/bhp-hr	0.007	gr/b	hp-hr	
NMHC (Non-M	ethane Hydrocarbons)	N/A	gr/bhp-hr	N/A	gr/b	hp-hr	
NMHC + NOx		3.50	gr/bhp-hr	2.31	gr/b	hp-hr	
EPA Engine Fa	amily: JKI	3XL02.4E	MC				
EPA Certificat	e of Conformance: JKI	3XL02.4E	MC-030				
ARB Executive	e Order: U-I	R-025-07	76				
Effective Date	: Mo	del Year	2018				
	-						
-	operation with excessive m limits, or with imprope			•			

Structure PROTECTION	2018 MC CERTIFICATE	UNITED STATES ENVIRONMENTAL PROTECTION AGENCY 2018 MODEL YEAR CERTIFICATE OF CONFORMITY WITH THE CLEAN AIR ACT				
Certificate Issued To: Kuk (U.S.) Certificate Number: JKBX	Manufacturer or Importer)	Effective Date: 10/16/2017 Expiration Date: 12/31/2018		r, Division Director nce Division	Issue Date: 10/16/2017 Revision Date: N/A	

Model Year: 2018	Mobile/Stationary Indicator: Mobile
Manufacturer Type: Original Engine Manufacturer	Emissions Power Category: 19<=kW<37
Engine Family: JKBXL02.4EMC	Fuel Type: Diesel
	After Treatment Devices: Diesel Oxidation Catalyst
	Non-after Treatment Devices: Electronic Control, Electronic/Electric EGR - Cooled, Engine Design Modification

Pursuant to Section 213 of the Clean Air Act (42 U.S.C. section 7547) and 40 CFR Part 1039, and subject to the terms and conditions prescribed in those provisions, this certificate of conformity is hereby issued with respect to the test engines which have been found to conform to applicable requirements and which represent the following engines, by engine family, more fully described in the documentation required by 40 CFR Part 1039 and produced in the stated model year.

This certificate of conformity covers only those new compression-ignition engines which conform in all material respects to the design specifications that applied to those engines described in the documentation required by 40 CFR Part 1039 and which are produced during the model year stated on this certificate of the said manufacturer, as defined in 40 CFR Part 1039.

PROTECT

It is a term of this certificate that the manufacturer shall consent to all inspections described in 40 CFR 1068 and authorized in a warrant or court order. Failure to comply with the requirements of such a warrant or court order may lead to revocation or suspension of this certificate for reasons specified in 40 CFR Part 1039. It is also a term of this certificate that this certificate may be revoked or suspended or rendered void *ab initio* for other reasons specified in 40 CFR Part 1039.

This certificate does not cover engines sold, offered for sale, or introduced, or delivered for introduction, into commerce in the U.S. prior to the effective date of the certificate.

California I	Environmental	Protection	Agency	
Ø Ai	Resou	rces B	oard	

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)	
2018	JKBXL02.4EMC	1.826, 2.435	Diesel	5000	
SPECIAL	FEATURES & EMISSION	CONTROL SYSTEMS	TYPICAL EQUIPMENT APPLICATION		
Ele Exhau Electroni	ctronic Direct Injection, ist Gas Recirculation, Cl c Control Module, Diese	Turbocharger, narge Air Cooler, I Oxidation Catalyst	Generator Set, V	Welder	

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 CLASS	STANDARD		NMHC	NOx	NMHC+NOx	со	PM	ACCEL	LUG	PEAK
19 <u><</u> kW < 37	Tier 4 Final	STD	N/A	N/A	4.7	5.5	0.03	N/A	N/A	N/A
		CERT			3.1	0.1	0.01			

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 September 2017.

Engine Model Summary Form

Attachment page 1 of 1

EO#U-R-025-0776 Date: 9/20/2017

Manufacturer:KUBOTA CorporationEngine category:Nonroad ClEPA Engine Family:JKBXL02.4EMCMr Family Name:N/AProcess Code:New Submission

1.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
D1803-CR-TI-BG-EF01 D1803-CR-TI-BG-EF	37.3@1800	46.0	13.9	108.8@1800	46.0	13.9	EM, DFI, TC, EGR, CAC, ECM, DOC
D1803-CR-TI-BG-EF02 D1803-CR-TI-BG-EF	It is a first state of the still of the second still state of the state of the	43.8	13.2	104.1@1800	43.8	13.2	EM, DFI, TC, EGR, CAC, ECM, DOC
V2403-CR-TI-BG-EF01 V2403-CR-TI-BG-EF	And a second	43.4	17.5	140.9@1800	43.4	17.5	EM, DFI, TC, EGR, CAC, ECM, DOC
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