EXHAUST EMISSION DATA SHEET

MQ POWER GENERATOR SET

Model: DCA70SSJU4F

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 DATA

Manufacturer:	JOHN DEERE	**Bore:**	4.17 in. (106 mm)
Model:	4045HFG04	**Stroke:**	5.0 in. (127 mm)
Type:	4-Cycle, In-Line, 4-Cylinder, Diesel	**Displacement:**	275 cid (4.5 liters)
Aspiration:	Turbocharger, ECM, EGR, DOC, SCR Electronic Direct Injection, Charge Air Cooler	**Compression Ratio:**	17.0:1

PERFORMANCE DATA

SAE Gross HP @ 1800 RPM (60 Hz) Rated	107
Load Fuel Consumption (gal/Hr) Rated	4.6
Load Exhaust Gas Flow (cfm) Rated Load	445
Exhaust Gas Temperature (ºF)	752

United States EPA - Mobile Off-Highway Tier 4 Limits - 75 ≤ ~ < 100 BHP

Criteria Pollutant	Emission Requirements	NTE Engine Emissions
NOx (Oxides of Nitrogen as NO2)	0.298 gr/bhp-hr	0.447 gr/bhp-hr
HC (Total Unburned Hydrocarbons)	N/A gr/bhp-hr	N/A gr/bhp-hr
NOx + HC (Combined)	N/A gr/bhp-hr	N/A gr/bhp-hr
CO (Carbon Monoxide)	3.72 gr/bhp-hr	4.62 gr/bhp-hr
PM (Particulate Matter)	0.014 gr/bhp-hr	0.022 gr/bhp-hr
NMHC (Non-Methane Hydrocarbons)	0.141 gr/bhp-hr	0.208 gr/bhp-hr
NMHC + NOx	N/A gr/bhp-hr	N/A gr/bhp-hr

EPA Engine Family:	RJDXL04.5315
EPA Certificate of Conformance:	RJDXL04.5315-019
ARB Executive Order:	U-R-004-0673
Effective Date:	Model Year 2024

Note: Engine operation with excessive air intake or exhaust restriction beyond factory published maximum limits, or with improper service maintenance, may result in higher emission levels.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
2024 MODEL YEAR
CERTIFICATE OF CONFORMITY
WITH THE CLEAN AIR ACT

OFFICE OF TRANSPORTATION AND AIR QUALITY
ANN ARBOR, MICHIGAN 48105

Certificate Issued To: **Deere & Company**
(U.S. Manufacturer or Importer)

Certificate Number: RJDXL04.5315-019

Effective Date:
09/29/2023

Expiration Date:
12/31/2024

Byron J. Bunker, Division Director
Compliance Division

Issue Date:
09/29/2023

Revision Date:
N/A

Model Year: 2024
Manufacturer Type: Original Engine Manufacturer
Engine Family: RJDXL04.5315

Mobile/Stationary Indicator: Both
Emissions Power Category: 56<=kW<130
Fuel Type: Diesel
After Treatment Devices: Diesel Oxidation Catalyst, Ammonia Slip Catalyst, Selective Catalytic Reduction
Non-after Treatment Devices: Electronic Control, Non-standard Non-After Treatment Device Installed, Electronic/Electric EGR - Cooled

Pursuant to Section 111 and Section 213 of the Clean Air Act (42 U.S.C. sections 7411 and 7547) and 40 CFR Parts 60 and 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 Parts 60 and 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 Parts 60 and 1039 and which are produced during the model year stated on this certificate of the said manufacturer, as defined in 40 CFR Parts 60 and 1039.

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 Parts 60 and 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 Parts 60 and 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.

Pursuant to the authority vested in the California Air Resources Board by Health and Safety Code Division 26, Part 5, Chapters 1 and 2; and pursuant to the authority vested in the undersigned by Health and Safety Code Sections 39515 and 39516 and Executive Order G-19-095;

IT IS ORDERED AND RESOLVED: The engines and emission control systems produced by the manufacturer as described below are certified 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	Combustion Cycle	Fuel Operation	Fuel Type(s)	Engine Operation
2024	RJDXL04.5315	Diesel	Dedicated	Diesel	Variable and Constant Speed

Emission Control Systems	Special Features
[1]: Electronic Direct Injection (DDI), Charged Air Cooler (CAC), Exhaust Gas Recirculation (EGR), Electronic Control Module (ECM), Turbocharger (TC), Diesel Oxidation Catalyst (DOC), Selective Catalytic Reduction – Urea (SCR-U), Ammonia Oxidation Catalyst (AMOX)	None

The certified engine models are attached.

The listed engine models comply with the following: 1) emission standard limits (STD) and Not-To-Exceed (NTE) limits, as applicable, for criteria pollutants non-methane hydrocarbons (NMHC), nitrogen oxides (NOx), carbon monoxide (CO), and particulate matter (PM), and for smoke opacity as demonstrated during the Acceleration (ACL) and Lugging (LUG) modes, and the peak value (PEAK) in either mode of the Smoke Opacity cycle, as set forth in 13 CCR 2423 and the applicable California test procedures for off-road compression-ignition engines, and 2) family emission limits (FEL) declared by the manufacturer as allowed by the applicable California test procedures, stated in units of gram per kilowatt-hour (g/kWh-hr) and percent opacity (%opacity), respectively, except as noted, or designated as not applicable (*).

Applicable Standard		Criteria				Smoke Opacity		
		NMHC	NOx	CO	PM	ACL	LUG	PEAK
Tier 4 Final 75 ≤ kW < 130	STD	0.19	0.40	5.0	0.02	*	*	*
	FEL	*	*	*	*	*	*	*
	NTE	0.28	0.60	6.2	0.03	*	*	*

BE IT FURTHER RESOLVED: Any declared FEL is the emission limit to which all engines must comply in lieu of the standard limit for certification purposes, subject to the restrictions of averaging, banking, or trading (ABT) programs allowed by the applicable California test procedures.

BE IT FURTHER RESOLVED: That the manufacturer has elected to combine engines from the 56 ≤ kW < 130 power categories into a single engine family. The listed engine models comply with the more stringent set of standards of the 75 ≤ kW < 130 power categories in accordance with Section 1039.230(e) of the applicable California test procedures.

BE IT FURTHER RESOLVED: For the listed engine models, the manufacturer has submitted materials to demonstrate certification compliance with 13 CCR 2424 (emission control labels), and 13 CCR Sections 2425 and 2426 (emission control warranty).

BE IT FURTHER RESOLVED: The listed engine models may only be installed in or on equipment such that engine operation is consistent with off-road compression-ignition engines as defined in 13 CCR 2421(a)(39).

Engines certified under this Executive Order must conform to all applicable California emission regulations.

Executed on this 21st day of August 2023.

Robin U. Lang

Robin U. Lang, Chief
Emissions Certification and Compliance Division

ATTACHMENT: ENGINE MODELS

Family: RJDXL04.5315 EO Number: U-R-004-0673 Date Applicable: 07/31/2023

					Peak Power			Peak Torque					
Model	Code	Trim	Config	Displacement	Power	Speed	Fueling	Torque	Speed	Fueling	ECS Num	GHG	Notes
-	-	-	-	Liters	kilowatt	rpm	mm3/stroke	N-m	rpm	mm3/stroke	-	-	-
4045	4045HFC04A		I-4	4.5	104	2200	100.9	540	1600	113.7	1	N/A	
4045	4045HFC04B		I-4	4.5	104	2200	104.3	540	1600	114.2	1	N/A	
4045	4045HFC04C		I-4	4.5	93	2400	88.6	493	1600	103.1	1	N/A	
4045	4045HFC04D		I-4	4.5	93	2200	90.8	536	1600	112.7	1	N/A	
4045	4045HFC04E		I-4	4.5	86	2400	82.2	461	1600	96.8	1	N/A	
4045	4045HFC04F		I-4	4.5	86	2200	84.6	506	1600	105.8	1	N/A	
4045	4045HFC04G		I-4	4.5	80	2200	80	391	1600	84.2	1	N/A	
4045	4045HFC04H		I-4	4.5	74	2400	70.4	391	1600	84.2	1	N/A	
4045	4045HFC04I		I-4	4.5	80	2000	84.4	427	1600	89.3	1	N/A	
4045	4045HFC04J		I-4	4.5	74	2200	73.5	427	1600	89.3	1	N/A	
4045	4045HFC04K		I-4	4.5	68	2200	69.8	333	1600	72.2	1	N/A	
4045	4045HFC04L		I-4	4.5	63	2400	63.9	333	1600	72.2	1	N/A	
4045	4045HFC04M		I-4	4.5	68	2000	72.8	363	1600	68.4	1	N/A	
4045	4045HFC04N		I-4	4.5	63	2200	64.2	363	1600	68.4	1	N/A	
4045	4045HFC04O		I-4	4.5	110	2200	107.4	540	1600	113.8	1	N/A	
4045	4045HFG04A		I-4	4.5	99	1800	115.1	525	1800	115.1	1	N/A	
4045	4045HFG04B		I-4	4.5	80	1800	92.6	424	1800	92.6	1	N/A	
4045	4045HFG04C		I-4	4.5	67	1800	77.1	355	1800	77.1	1	N/A	
4045	4045HFG04D		I-4	4.5	80	1500	106.7	508	1500	106.7	1	N/A	
4045	4045HFG04E		I-4	4.5	67	1500	90.8	427	1500	90.8	1	N/A	
4045	4045HLV73		I-4	4.5	99	2200	98.2	540	1600	113.2	1	N/A	
4045	4045HLV76		I-4	4.5	94	2200	92.5	519	1600	107.9	1	N/A	
4045	4045HLV78		I-4	4.5	94	2200	93.4	519	1600	107.9	1	N/A	
4045	4045HLV78A		I-4	4.5	99	2200	96.8	540	1600	113.7	1	N/A	
4045	4045HMC05A		I-4	4.5	104	2200	102	540	1600	113	1	N/A	
4045	4045HMC05B		I-4	4.5	90	2000	93.6	480	1600	101	1	N/A	
4045	4045HP075		I-4	4.5	94	2200	93.4	519	1600	107.9	1	N/A	
4045	4045HPRNT11		I-4	4.5	109	2200	99.6	577	1600	123.1	1	N/A	
4045	4045HPRNT14		I-4	4.5	109	2200	107.5	577	1600	123.1	1	N/A	
4045	4045HT096		I-4	4.5	94	2200	93.4	519	1600	107.9	1	N/A	