EXHAUST EMISSION DATA SHEET

MQ POWER GENERATOR SET





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 4.17 (106 mm) Bore: Model: 6068HFG05 Stroke: 5.0 in. (127 mm) Type: 4-Cycle, In-Line, 6-Cylinder, Diesel Displacement: 415 (6.8) liters) cid

Aspiration: Turbocharger, ECM, EGR, DOC, SCR Electronic Direct Compression Ratio: 17.2:1

Injection, Charge Air Cooler

PERFORMANCE DATA

SAE Gross HP @ 1800 RPM (60 Hz) Rated 215
Load Fuel Consumption (gal/Hr) Rated 8.9
Load Exhaust Gas Flow (cfm) Rated Load 812
Exhaust Gas Temperature (°F) 685

United States EPA - Mobile Off-Highway Tier 4 Limits -

174 ≤ ~ < 751 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)	2.60 gr/bhp-hr	3.28 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: RJDXL06.8312
EPA Certificate of Conformance: RJDXL06.8312-014
ARB Executive Order: U-R-004-0665
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.

Date: 5/28/2024



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: RJDXL06.8312-014

Effective Date: 09/29/2023

Expiration Date: 12/31/2024

4.12

09/29/2023

Revision Date:

Issue Date:

N/A

Byron J. Bunker, Division Director Compliance Division

Model Year: 2024

Manufacturer Type: Original Engine Manufacturer

Engine Family: RJDXL06.8312

Mobile/Stationary Indicator: Both

Emissions Power Category: 130<=kW<=560

Fuel Type: Diesel

After Treatment Devices: Diesel Oxidation Catalyst, Ammonia Slip Catalyst, Selective Catalytic

Reduction

Non-after Treatment Devices: Electronic Control, Electronic/Electric EGR - Cooled, Non-standard

Non-After Treatment Device Installed

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.



DEERE & COMPANY

EXECUTIVE ORDER: U-R-004-0665 New Off-Road Compression-Ignition Engines Page 1 of 1

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.

Mod Yea		Combustion Cycle	Fuel Operation	Fuel Type(s)	Engine Operation				
202	RJDXL06.8312	Diesel	Dedicated	Diesel	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),	None
Ammonia Oxidation Catalyst (AMÓX)	

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 (*).

		Crit	eria	Smoke Opacity				
Applicable Standard	NMHC	NOx	СО	PM	ACL	LUG	PEAK	
	STD	0.19	0.40	3.5	0.02	*	*	*
Tier 4 Final 130 ≤ kW ≤ 560	FEL	*	*	*	*	*	*	*
100 = KVV = 000	NTE	0.28	0.60	4.4	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: 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, Chief

Emissions Certification and Compliance Division

ATTACHMENT: ENGINE MODELS

Family: RJDXL06.8312 EO Number: U-R-004-0665 Date Applicable: 07/28/2023

					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	-	-	-
6068	6068HFG05A		I-6	6.8	192	1800	143.5	1019	1800	143.5	1	N/A	
6068	6068HFG05B		I-6	6.8	160	1800	119.4	849	1800	119.4	1	N/A	
6068	6068HFG05C		I-6	6.8	165	1500	145.4	1050	1500	145.4	1	N/A	
6068	6068HFG05D		I-6	6.8	160	1500	142.3	1019	1500	142.3	1	N/A	
6068	6068HFG06A		I-6	6.8	241	1800	180.4	1279	1800	180.4	1	N/A	
6068	6068HFG06B		I-6	6.8	216	1800	159.8	1146	1800	159.8	1	N/A	
6068	6068HFG06C		I-6	6.8	197	1500	176.6	1254	1500	176.6	1	N/A	
6068	6068HPRNT7		I-6	6.8	248	1800	184.6	1316	1800	184.6	1	N/A	