## **EXHAUST EMISSION DATA SHEET**

MQ POWER GENERATOR SET

Model: DCA180SSJU4F3/B/PB/PD



## 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	ATA							
Manufacturer:	JOHN DEERE			Bore:	4.17	in.	(106	mm)
Model:	6068HFG05			Stroke:	5.0	in.	(127	mm)
Туре:	4-Cycle, In-Line, 6-Cylinde	er, Diesel		Displacement	<b>t:</b> 415	cid	(6.8	liters)
Aspiration:	Turbocharger, ECM, EGR Injection, Charge Air Cool		CR Electronic Direct	Compression	Ratio	:	17.2	2:1
PERFORM	ANCE DATA							
SAE Gross H	P @ 1800 RPM (60 Hz) Ra	<b>ted</b> 21	5					
Load Fuel Co	nsumption (gal/Hr) Rated	8.9	)					
Load Exhaust	t Gas Flow (cfm) Rated Lo	<b>5ad</b> 81	2					
	Temperature (°F)	68	5					
Ur	nited States EPA - M	lobile O	ff-Highway Tier 4	Limits -			174≤	~ ≤751 BHP
Crit	eria Pollutant	Emis	sion Requirements	Certifie	ed Eng	ine E	missio	ons
NOx (Oxides	of Nitrogen as NO2)	0.298	gr/bhp-hr	0.044	gr/b	ohp-hr		
HC (Total Unt	ourned Hydrocarbons)	N/A	gr/bhp-hr	N/A	gr/b	hp-hr		
NOx + HC (Co	ombined)	N/A	gr/bhp-hr	N/A	gr/b	hp-hr		
CO (Carbon M	lonoxide)	2.60	gr/bhp-hr	0.007	gr/b	hp-hr		
PM (Particula	te Matter)	0.014	gr/bhp-hr	0.014	gr/b	hp-hr		
NMHC (Non-N	lethane Hydrocarbons)	0.141	gr/bhp-hr	0.014	gr/b	hp-hr		
NMHC + NOx		N/A	gr/bhp-hr	N/A	gr/b	hp-hr		
EPA Engine F	Family: PJI	DXL06.83 <sup>.</sup>	12					
EPA Certifica	te of Conformance: PJI	DXL06.83	12-018					
ARB Executiv	v <b>e Order:</b> U-F							
Effective Date	e: Mo	2023						
Effective Date	e: Mo	del Year	2023					
-	operation with excessive on limits, or with imprope			•				

States in a states	CERTIFICATE	DEL YEAR	МІТҮ	AND AIR QUA	FICE OF TRANSPORTATION AND AIR QUALITY IN ARBOR, MICHIGAN 48105			
Certificate Issued To: Deere & Company (U.S. Manufacturer or Importer) Certificate Number: PJDXL06.8312-018		Effective Da 09/29/2022 Expiration D 12/31/2023	ate: Byron J/Bunker	r, Division Director nce Division	Issue Date: 09/29/2022 Revision Date: N/A			
Model Year: 2023 Manufacturer Type: Origina Engine Family: PJDXL06.83	-		Mobile/Stationary Indicator: Both Emissions Power Category: 130<=kW Fuel Type: Diesel After Treatment Devices: Diesel Oxid Reduction Non-after Treatment Devices: Electron Non-After Treatment Device Installed	lation Catalyst, Ammonia Slip Cataly				

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.

PAL PROT

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 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-19-095;

**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)					
2023	PJDXL06.8312	6.8	Diesel 8000						
SPECIAL	FEATURES & EMISSION O	CONTROL SYSTEMS	TYPICAL EQUIPMENT APPLICATION						
Direct Inje Gas Reci	Air Cooler, Oxidation C ection, Electronic Contr rculation, Turbocharger tion-Urea, Ammonia O	ol Module, Exhaust , Selective Catalyst	Pump, Compressor, Generator Set, O Industrial Equipment						

The engine models and codes are attached.

CALIFORNIA AIR RESOURCES BOARD

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 POWER	EMISSION				EXHAUST (g/kw-ł	OPACITY (%)				
CLASS	STANDARD CATEGORY		NMHC	NOx	NMHC+NOx	со	РМ	ACCEL	LUG	PEAK
130 ≤ kW ≤ 560	Tier 4 Final	STD	0.19	0.40	N/A	3.5	0.02	N/A	N/A	N/A
		CERT	0.02	0.06		0.01	0.02			

**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 on this  $\underline{/8tk}$  day of October 2022.

Jolin U. Lang

Robin U. Lang, Chief Emissions Certification and Compliance Division

## Attachment: Engine Models

EO #: U-R-004-0646

Family: PJDXL06.8312

Attachment Last Revised: 10/5/2022

							Displacement -		Peak Power -	Peak Power -	Peak Power -	Peak Power - Fue	el .	Peak Torque -	Peak Torque -	Peak Torque - Fuel				
Model	Code	Trim	Config	Displacement	Units	Peak Power	Units	Speed (rpm)	Fueling	Units	Peak Torque	Units	Speed (rpm)	Peak Torque - Fuel Units		OBD	GHG	Special	Notes	
6068	6068HFG05A		I-6	6.8	Liters	192	kilowatt	1800	143.5	mm3/stroke	1019	N-m	1800	143.5	mm3/stroke	N/A	N/A			
6068	6068HFG05B		I-6	6.8	Liters	160	kilowatt	1800	119.4	mm3/stroke	849	N-m	1800	119.4	mm3/stroke	N/A	N/A			
6068	6068HFG05C		1-6	6.8	Liters	165	kilowatt	1500	145.4	mm3/stroke	1050	N-m	1500	145.4	mm3/stroke	N/A	N/A			
6068	6068HFG05D		I-6	6.8	Liters	160	kilowatt	1500	142.3	mm3/stroke	1019	N-m	1500	142.3	mm3/stroke	N/A	N/A			
6068	6068HFG06A		1-6	6.8	Liters	241	kilowatt	1800	180.4	mm3/stroke	1279	N-m	1800	180.4	mm3/stroke	N/A	N/A			
6068	6068HFG06B		1-6	6.8	Liters	216	kilowatt	1800	159.8	mm3/stroke	1146	N-m	1800	159.8	mm3/stroke	N/A	N/A			
5068	6068HFG06C		I-6	6.8	Liters	197	kilowatt	1500	176.6	mm3/stroke	1254	N-m	1500	176.6	mm3/stroke	N/A	N/A			
5068	6068HPRNT7		I-6	6.8	Liters	248	kilowatt	1800	184.6	mm3/stroke	1316	N-m	1800	184.6	mm3/stroke	N/A	N/A			
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