

# EXHAUST EMISSION DATA SHEET

## MQ POWER GENERATOR SET

Model: DCA180SSJU4F3



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

<b>Manufacturer:</b>	John Deere	<b>Bore:</b>	4.17 in. (106 mm)
<b>Model:</b>	6068HFG05	<b>Stroke:</b>	5.0 in. (127 mm)
<b>Type:</b>	4-Cycle, in-line, 6 Cylinder, Diesel	<b>Displacement:</b>	415 cid (6.8 liters)
<b>Aspiration:</b>	Turbocharger Air Cooler, Electronic Direct Injection ECM, EGR, DOC, SCR	<b>Compression Ratio:</b>	17.2 : 1

### PERFORMANCE DATA

SAE Gross HP @ 1800 RPM (60 Hz)	257
Rated Load Fuel Consumption (gal/Hr)	10.1
Rated Load Exhaust Gas Flow (cfm)	961
Rated Load Exhaust Gas Temperature (°F)	756

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

Limits -

174 ≤ ~ ≤ 751 BHP

Criteria Pollutant	Emission Requirements		Certified Engine Emissions	
NOx (Oxides of Nitrogen as NO <sub>2</sub> )	0.298	gr/bhp-hr	0.044	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)	2.609	gr/bhp-hr	0.007	gr/bhp-hr
PM (Particulate Matter)	0.014	gr/bhp-hr	0.014	gr/bhp-hr
NMHC (Non-Methane Hydrocarbons)	0.141	gr/bhp-hr	0.014	gr/bhp-hr
NMHC + NOx	N/A	gr/bhp-hr	N/A	gr/bhp-hr

EPA Engine Family:	KJDXL06.8312
EPA Certificate of Conformance:	KJDXL06.8312-011
ARB Executive Order:	U-R-004-0580
Effective Date:	Model Year 2019

**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.

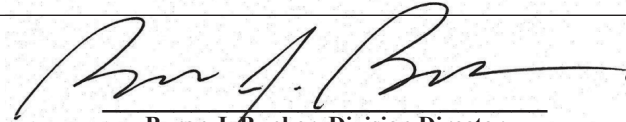


UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
2019 MODEL YEAR  
CERTIFICATE OF CONFORMITY  
WITH THE CLEAN AIR ACT

OFFICE OF TRANSPORTATION  
AND AIR QUALITY  
ANN ARBOR, MICHIGAN 48105

**Certificate Issued To:** Deere & Company  
(U.S. Manufacturer or Importer)  
**Certificate Number:** KJDXL06.8312-011

**Effective Date:**  
08/08/2018  
**Expiration Date:**  
12/31/2019

  
Byron J. Bunker, Division Director  
Compliance Division

**Issue Date:**  
08/08/2018  
**Revision Date:**  
N/A

**Model Year:** 2019  
**Manufacturer Type:** Original Engine Manufacturer  
**Engine Family:** KJDXL06.8312

**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, 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.

The actual engine power may lie outside the limits of the Emissions Power Category shown above. See the certificate application for details.



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	ENGINE FAMILY	DISPLACEMENT (liters)	FUEL TYPE	USEFUL LIFE (hours)
2019	KJDXL06.8312	6.8	Diesel	8000
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION	
Charge Air Cooler, Oxidation Catalyst, Electronic Direct Injection, Electronic Control Module, Exhaust Gas Recirculation, Turbocharger, Selective Catalytic Reduction-Urea, Ammonia Oxidation Catalyst			Pump, Compressor, Generator Set, Other Industrial Equipment	

The engine models and codes are attached.

The following are the exhaust certification standards (STD), or family emission limit(s) (FEL) as applicable, and certification levels (CERT) for hydrocarbon (HC), 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 CLASS	EMISSION STANDARD CATEGORY		EXHAUST (g/kw-hr)					OPACITY (%)		
			NMHC	NOx	NMHC+NOx	CO	PM	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 at El Monte, California on this 10<sup>th</sup> day of December 2018.

Annette Hebert, Chief  
Emissions Compliance, Automotive Regulations and Science Division

FO#: U-R-004-0580  
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22-2018

11-27-2018

## Engine Model Summary Form

Manufacturer:	John Deere Power Systems
Engine category:	Nonroad CI
EPA Engine Family:	KJDXL06.8312
Mfr Family Name:	350HCF
Process Code:	New Submission

1. Engine code	2. Engine Model	3. kW@RPM (SAE Gross)	4. Fuel Rate: mm <sup>3</sup> /stroke@peak kW (for diesel only)	5. Fuel Rate: (kg/hr)@peak kW (for diesels only)	6. Torque (Nm) @RPM (SEA Gross)	7. Fuel Rate: mm <sup>3</sup> /stroke@peak torque	8. Fuel Rate: (kW/hr)@peak torque	9. Emission Control Device Per SAE J1930
6068HFG05A	6068	192@1800	143.5@1800	39.5@1800				EGR OC SCRC NH3OC DFI TC CAC ECM
6068HFG05B	6068	160@1800	119.4@1800	32.9@1800				EGR OC SCRC NH3OC DFI TC CAC ECM
6068HFG05C	6068	165@1500	145.4@1500	33.4@1500				EGR OC SCRC NH3OC DFI TC CAC ECM
6068HFG05D	6068	160@1500	142.3@1500	32.6@1500				EGR OC SCRC NH3OC DFI TC CAC ECM
6068HFG06A	6068	241@1800	180.4@1800	48.7@1800				EGR OC SCRC NH3OC DFI TC CAC ECM
6068HFG08B	6068	216@1800	159.8@1800	44@1800				EGR OC SCRC NH3OC DFI TC CAC ECM
6068HFG08C	6068	197@1500	176.6@1500	40.5@1500				EGR OC SCRC NH3OC DFI TC CAC ECM
6068HPRNT7	6068	248@1800	184.8@1800	50.8@1800				EGR OC SCRC NH3OC DFI TC CAC ECM