

EXHAUST EMISSION DATA SHEET

MQ POWER GENERATOR SET

Model: DCA-70SSJE2



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

ENGINE DATA

Manufacturer: JOHN DEERE	Bore: 4.17 in. (106 mm)
Model: 4045HFG92	Stroke: 5.0 in. (127 mm)
Type: 4-Cycle, In-Line, 4-cylinder, Diesel	Displacement: 274 cid (4.5 liters)
Aspiration: Turbocharger, Charge Air Cool ECM, EGR, DOC, PTO	Compression Ratio: 16.1:1

PERFORMANCE DATA

SAE Gross HP @ 1800 RPM (60 Hz)	107
Rated Load Fuel Consumption (gal/Hr)	4.3
Rated Load Exhaust Gas Flow (cfm)	399
Rated Load Exhaust Gas Temperature (°F)	835

United States EPA - Mobile Off-Highway Tier 4i Limits - 100.6 ≤ ~ < 174.3 BHP

Criteria Pollutant	Emission Requirements	Certified Engine Emissions
NOx (Oxides of Nitrogen as NO2)	2.53 gr/bhp-hr	1.94 gr/bhp-hr
HC (Total Unburned Hydrocarbons)	0.141 gr/bhp-hr	0.007 gr/bhp-hr
NOx + HC (Combined)	N/A gr/bhp-hr	N/A gr/bhp-hr
CO (Carbon Monoxide)	3.728 gr/bhp-hr	0.074 gr/bhp-hr
PM (Particulate Matter)	0.0149 gr/bhp-hr	0.0007 gr/bhp-hr

EPA Engine Family:	CJDXL04.5211
EPA Certificate of Conformance:	CJDXL04.5211-004
ARB Executive Order:	U-R-004-0441
Effective Date:	Model Year 2012

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
2012 MODEL YEAR
CERTIFICATE OF CONFORMITY
WITH THE CLEAN AIR ACT OF 1990**

**OFFICE OF TRANSPORTATION
AND AIR QUALITY
ANN ARBOR, MICHIGAN 48105**

Certificate Issued To: Deere & Company
(U.S. Manufacturer or Importer)
Certificate Number: CJDXL04.5211-004

Effective Date:
07/06/2011
Expiration Date:
12/31/2012


Karl J. Simon, Director
Compliance and Innovative Strategies Division

Issue Date:
07/06/2011
Revision Date:
N/A

Model Year: 2012
Manufacturer Type: Original Engine Manufacturer
Engine Family: CJDXL04.5211

Mobile/Stationary Indicator: Both
Emissions Power Category: 75<=kW<130
Fuel Type: Diesel
After Treatment Devices: Diesel Oxidation Catalyst, PTOX-DPF-Active
Non-after Treatment Devices: Engine Design Modification, Non-standard Non-After Treatment Device Installed, Electronic/Electric EGR - Cooled, Smoke Puff Limiter, Electronic Control


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.

	JOHN DEERE POWER SYSTEMS	EXECUTIVE ORDER U-R-004-0441 New Off-Road Compression-Ignition Engines
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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-02-003;

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)
2012	CJDXL04.5211	4.5	Diesel	8000
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION	
Charge Air Cooler, Diesel Oxidation Catalyst, Direct Diesel Injection, Electronic Control Module, Exhaust Gas Recirculation, Periodic Trap Oxidizer, Smoke Puff Limiter, Turbocharger			Tractor, Loaders, Dozer, 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 (%)		
			HC	NOx	NMHC+NOx	CO	PM	ACCEL	LUG	PEAK
75 ≤ kW < 130	Tier 4 Interim / ALT NOx	STD	0.19	3.4	N/A	5.0	0.02	N/A	N/A	N/A
		CERT	0.01	2.6	--	0.1	0.001	--	--	--

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 29 day of July 2011.


Annette Hebert, Chief
Mobile Source Operations Division