

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)
2013	DJDXL06.8115	6.8	Diesel	8000
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION	
Charge Air Cooler, Direct Diesel Injection, Electronic Control Module, Smoke Puff Limiter, Turbocharger, Exhaust Gas Recirculation			Loaders, Tractor, Dozer, Pump, 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	Interim Tier 4 / ALT 20% NOx and PM	STD	0.19	2.0	N/A	3.5	0.02	20	15	50
		FEL	--	3.6	--	--	0.18	--	--	--
		CERT	0.07	3.3	--	0.6	0.12	7	2	14

BE IT FURTHER RESOLVED: That the family emission limit(s) (FEL) is an emission level declared by the manufacturer for use in any averaging, banking and trading program and in lieu of an emission standard for certification. It serves as the applicable emission standard for determining compliance of any engine within this engine family under 13 CCR Sections 2423 and 2427.

BE IT FURTHER RESOLVED: That the listed engines are conditionally certified to the Interim Tier 4 ALT NOx standards based on the amendments to 13 CCR Section 2423, table 1b adopted by the Board on December 16, 2011. This determination is conditional on the amendments being approved by the Office of Administrative Law. If the amendments do not become effective, the manufacturer shall be required to certify this engine family pursuant to table 1b of 13 CCR Section 2423, as that table existed on December 16, 2011 within 45 days after notification by ARB or this Executive Order may be revoked and voided ab initio.

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 20 day of November 2012.


 Annette Hebert, Chief
 Mobile Source Operations Division

Engine Model Summary Form

11-8-12

Manufacturer: **John Deere Power Systems**
 Engine category: **Nonroad CI**
 EPA Engine Family: **DJDXL06.8115**
 Mfr Family Name: **350HAF**
 Process Code: **New Submission**

FO#: U-R-004-0464

1. Engine code	2. Engine Model	3. kW@RPM (SAE Gross)	4. Fuel Rate: mm/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/stroke@peak torque	8. Fuel Rate: (kW/hr)@peak torque	9. Emission Control Device Per SAE J1930
6068HT077	6068H	184.0@1900	136@1900	39.54@1900	1025@1400	147@1400	31.49@1400	EC EGR EM SPL
6068HRW83	6068H	159.0@2100	104.1@2100	33.45@2100	845.5@1600	120.9@1600	29.6@1600	EC EGR EM SPL
6068HDW66	6068H	149.0@2200	93.3@2200	31.41@2200	933@1400	138.7@1400	29.71@1400	EC EGR EM SPL
6068HPRNT2	6068H	208.0@2400	126.8@2400	46.56@2400	1159@1400	170.1@1400	36.44@1400	EC EGR EM SPL
6068HDW71	6068H	149.0@2200	93.3@2200	31.41@2200	933@1400	138.7@1400	29.71@1400	EC EGR EM SPL
6068HDW65	6068H	128.0@2200	82.3@2200	27.7@2200	767@1400	113.4@1400	24.29@1400	EC EGR EM SPL
6068HDW64	6068H	138.0@2200	87@2200	29.28@2200	838@1400	124.1@1400	26.58@1400	EC EGR EM SPL

DDI, TC, CAC
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