

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-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)
2015	FJDXL06.8302	4.5, 6.8	Diesel	8000
<b>SPECIAL FEATURES &amp; EMISSION CONTROL SYSTEMS</b>			<b>TYPICAL EQUIPMENT APPLICATION</b>	
Charge Air Cooler, Oxidation Catalyst, Electronic Direct Injection, Electronic Control Module, Exhaust Gas Recirculation, Periodic Trap Oxidizer, Turbocharger, Selective Catalytic Reduction-Urea, Ammonia Oxidation Catalyst			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 (%)		
			NMHC	NOx	NMHC+NOx	CO	PM	ACCEL	LUG	PEAK
75 ≤ kW ≤ 560	Tier 4 Final	STD	0.19	0.40	N/A	3.5	0.02	N/A	N/A	N/A
		FEL	--	--	--	--	0.01	--	--	--
		CERT	0.03	0.16	--	0.03	0.003	--	--	--

**BE IT FURTHER RESOLVED:** That for the listed engine models, the manufacturer has complied with the more stringent set of standards from the various power categories in conformance with Section 1039.230 (e) of the "California Exhaust Emission Standards and Test Procedures for 2008 and Later Tier 4 Off-Road Compression Ignition Engines, Part 1-C" adopted October 20, 2005 and last amended October 25, 2012.

**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 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.**

This Executive Order hereby supersedes Executive Order U-R-004-0496 dated October 22, 2014.

Executed at El Monte, California on this 10 day of August 2015.



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

R/c

12/21/2015

EO#: CR-004-04961

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Engine Model Summary Form

Manufacturer: John Deere Power Systems
Engine category: Nonroad CI
EPA Engine Family: FJDXL06.8302
Mfr Family Name: 350HCA
Process Code: Running Change

Table with 9 columns: 1. Engine code, 2. Engine Model, 3. kW@RPM (SAE Gross), 4. Fuel Rate (mm/stroke@peak kW), 5. Fuel Rate (kg/hr@peak kW), 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. Rows list various engine models like 4045HDW57, 4045HE052, etc.

\* \* \*

\* New Ratings added per R/c

R/c

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Engine Model Summary Form

Manufacturer: John Deere Power Systems
Engine category: Nonroad CI
EPA Engine Family: FJDXL06.8302
Mfr Family Name: 350HCA
Process Code: Running Change

Table with 9 columns: 1. Engine code, 2. Engine Model, 3. kW@RPM, 4. Fuel Rate, 5. Fuel Rate, 6. Torque (Nm), 7. Fuel Rate, 8. Fuel Rate, 9. Emission Control. Rows list various engine models like 4045HRT09A, 6068HFC08A, etc.

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Engine Model Summary Form

Manufacturer: John Deere Power Systems
Engine category: Nonroad CI
EPA Engine Family: FJDXL06.8302
Mfr Family Name: 350HCA
Process Code: Running Change

Table with 9 columns: 1. Engine code, 2. Engine Model, 3. kW@RPM (SAE Gross), 4. Fuel Rate (mm/stroke@peak kW), 5. Fuel Rate (kg/hr@peak kW), 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. Rows list various engine models like 6068HFC09B, 6068HL498, etc.

R/c

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Engine Model Summary Form

Manufacturer: John Deere Power Systems  
Engine category: Nonroad CI  
EPA Engine Family: FJDXL06.8302  
Mfr Family Name: 350HCA  
Process Code: Running Change

1. Engine code	2. Engine Model	4. Fuel Rate:		5. Fuel Rate:		7. Fuel Rate:		9. Emission Control Device Per SAE J1930
		3. kW@RPM (SAE Gross)	mm/stroke@peak kW (for diesel only)	(kg/hr)@peak kW (for diesel only)	6. Torque (Nm) @RPM (SEA Gross)	mm/stroke@peak torque	8. Fuel Rate: (kW/hr)@peak torque	
6068RW423	6068	190@2100	122.3@2100	39.3@2100	1000@1600	140.4@1600	34.3@1600	EGR EC PTOX OC SCRC NH3OC DFI TC CAC
6068RW424	6068	190@2100	123.9@2100	39.8@2100	1025@1600	145@1600	35.5@1600	EGR EC PTOX OC SCRC NH3OC DFI TC CAC
6068RW425	6068	224@2100	143.0@2100	45.8@2100	1245@1600	174@1600	42.6@1600	EGR EC PTOX OC SCRC NH3OC DFI TC CAC
6068RW426	6068	224@2100	143.0@2100	45.8@2100	1245@1600	174@1600	42.6@1600	EGR EC PTOX OC SCRC NH3OC DFI TC CAC
6068RW427	6068	190@2100	123.0@2100	39.5@2100	1025@1600	142.3@1600	34.8@1600	EGR EC PTOX OC SCRC NH3OC DFI TC CAC
6068RW428	6068	190@2100	123.0@2100	39.5@2100	1025@1600	142.3@1600	34.8@1600	EGR EC PTOX OC SCRC NH3OC DFI TC CAC
6068RW429	6068	154@2100	104.0@2100	33.3@2100	842@1600	122@1600	29.7@1600	EGR EC PTOX OC SCRC NH3OC DFI TC CAC

2015