

DEERE POWER SYSTEMS GROUP OF DEERE & COMPANY

EXECUTIVE ORDER U-R-004-0137 New Off-Road Compression-Ignition Engines

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) 8000			
2003	3JDXL06.8049	6.8	Diesel				
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION				
Electror	nic Control Module, Dire Turbocharger, Charge	ct Diesel Injection, Air Cooler	Pump, Compressor, Generator Set, Industrial Equipment				

The engine models and codes are attached.

The following are the exhaust certification standards (STD), 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	EMISSION STANDARD CATEGORY		EXHAUST (g/kw-hr)					OPACITY (%)		
CLASS			HC	NOx	NMHC+NOx	co	PM	ACCEL	LUG	PEAK
75 <u><</u> kW < 130	Tier 2	STD	N/A	N/A	6.6	5.0	0.30	20	15	50
130 ≤ kW < 225	Tier 2	STD	N/A	N/A	6.6	3.5	0.20	20	15	50
225 ≤ kW < 450	Tier 2	STD	N/A	N/A	6.4	3.5	0.20	20	15	50
		CERT	-	-	5.8	0.9	0.13	14	3	34

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 _____ day of January 2003.

Rophael Sunner Burnary

Mobile Source Operations Division

Httachment le(2 Deere Power Systems Group of Deere and Manufacturer:

Nonroad CI Engine category:

3JDXL06.8049 EPA Engine Family.

350HH Mir Family Name:

N-K-004-6137

Process Code:

New Submission

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6. Torque @ RPM mrvstroke @ peak (lbs/hr) @ peak torque @ RPM mrvstroke @ peak (lbs/hr) @ peak torque Device Per SAE J1930 ECW 160.86 @ 1400 75.90 @ 1400 TC CAC EM Exw/pbt 755.90 @ 1400 145.2 @ 1400 TC CAC EM TC CAC
5. Fuel Rate: 7. Fuel Rate: 7. Fuel Rate: 7. Fuel Rate: 9. Emission Control (Ibs/hr) @ peak HP (SEA Gross) 7. Fuel Rate: 9. Emission Control (Ibs/hr) @ peak Liggo 94.80 @ 2400 843.27 @ 1400 160.86 @ 1400 75.90 @ 1400 TC CAC EM (Ibs/hr) @ peak torque Device Per SAE J1930 59.52 @ 2400 475.66 @ 1400 140.2 @ 1400 75.90 @ 1400 TC CAC EM (Ibs/hr) @ peak torque Device Per SAE J1930 94.80 @ 2400 755.90 @ 1400 145.2 @ 1400 68.34 @ 1400 TC CAC EM (Ibs/hr) @ peak torque Device Per SAE J1930 83.77 @ 2200 755.90 @ 1400 145.2 @ 1400 68.34 @ 1400 TC CAC EM (Ibs/hr) @ peak (Ibs/hr) @ peak J1400 TC CAC EM (Ibs/hr) @ peak J1400 90.39 @ 2400 659.29 @ 1800 127.2 @ 1800 77.16 @ 1800 77.16 @ 1800 66.14 @ 1800 127.2 @ 1800 77.16 @ 1800 77.16 @ 1800 66.14 @ 1800 105.82 @ 1800 77.16 @ 1800 77.16 @ 1800
7.Fuel Rate: mm/stroke@peak torque 140.2@1400 145.@1400 145.2@1400 127.2@1800 127.2@1800
6.Torque @ RPM (SEA Gross) 843.27@1400 475.66@1400 755.90@1400 755.90@1400 659.29@1800 659.29@1800
5. Fuel Rate: (lbs/hr) @ peak HP (for diesels only) 54.80@2400 59.52@2400 94.80@2400 83.77@2200 83.77@2200 83.77@2200 83.77@2200 65.11@2200 65.11@2200 66.14@1800 66.14@1800
4-Fuel Rate: mm/stroke @ peak Hp (for diesel only) (for diesel only) 119,70@2400 117.90@2400 115.60@2200 115.60@2200 115.60@2200 115.60@2200 115.60@2200 115.60@2200 117.50@2400 117.500@1800
3.BHP © RPM (SAE Gross) 6068H [274.9] @ 2400 6068H 274.91 @ 2400 6068H 274.91 @ 2200 6068H 250.77 @ 2200 6068H 250.77 @ 2200 6068H 278.93 @ 2200 6068H 1191.77 @ 1800 6068H 1191.77 @ 1800
1.Engine Code 2.Engine Model 6068HF475B F 6068H 11° 6068H 11° 6068H 11° 6068H 11° 6068H 11° 6068H 10° 6068
1.Engine Code 6068HE475B 4045HF475A 6068HF475D 4045HF475B 6068HH054 6068HH055 6068HH055 6068HH055 6068HH055

Engine Model Summary Form

Manufacturer: Deere Power Systems Group of Deere and

Engine category: Nonroad CI

EPAEngine Family: 3JDXL06,8049

Mfr Family Name: 350HH

Process Code: Running Change

8.Fuel Rate: 9.Emission Control (lbs/hr) @peak torque Device Per SAE J1930 EM OPL 005 54.15@1400 mm/stroke@peak 120.9@1400 114.7@1400 7.Fuel Rate: torque 612.10@1400 6.Torque @ RPM (SEA Gross) (lbs/hr) @ peak HP 61.05@2180 61.29@2200 (for diesels only) 5.Fuel Rate: 4.Fuel Rate: mm/stroke @ peak HP 177.02@2200 82.50@2200 (for diesel only) 3.BHP@RPM (SAE Gross) 2.Engine Model H8909 1.Engine Code 6068HDW57

SHIP AND SHIP

4-A-604-0137.