



California Environmental Protection Agency

AIR RESOURCES BOARDDEERE POWER SYSTEMS GROUP OF
DEERE & COMPANY

EXECUTIVE ORDER U-R-004-0112

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-45-9;

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)
2002	2JDXL08.1037	8.1	Diesel	8000
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION	
Electronic Control Module, Direct Diesel Injection, Turbocharger, Charge Air Cooler			Loader, Tractor, Generator Set	

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 CLASS	EMISSION STANDARD CATEGORY		EXHAUST (g/kw-hr)					OPACITY (%)		
			HC	NOx	NMHC+NOx	CO	PM	ACCEL	LUG	PEAK
225< KW <450	Tier 2	STD	N/A	N/A	6.4	3.5	0.20	20	15	50
		CERT	--	--	6.1	0.8	0.15	9	3	18

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 27th day of December 2001.

R. B. Summerfield, Chief
Mobile Source Operations Division

Engine Model Summary Form

Manufacturer: Deere Power Systems Group of Deere and
 Engine category: Nonroad CI
 EPA Engine Family: 2JDXL08.1037
 Mfr Family Name: 450HF
 Process Code: New Submission

Attachment

U-R-4-112

1. Engine Code	2. Engine Model	3. BHP @ RPM (SAE Gross)	4. Fuel Rate: mm/stroke @ peak HP (for diesel only)	5. Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	6. Torque @ RPM (SEA Gross)	7. Fuel Rate: mm/stroke@peak torque (lbs/hr) @ peak torque	8. Fuel Rate: (lbs/hr) @ peak torque Device Per SAE J1930	9. Emission Control
6081HF070A	6081H	335.26 @ 2200	160.00 @ 2200	116.84 @ 2200	1126.84 @ 1400	226 @ 1400	108.02 @ 1400	EM EOHCAC
6081HF070C	6081H	324.53 @ 2200	153.10 @ 2200	114.64 @ 2200	1006.64 @ 1600	199.6 @ 1600	108.02 @ 1600	EM EOHCAC
6081HF09	6081H	305.75 @ 2200	143.80 @ 2200	105.82 @ 2200	845.13 @ 1600	166 @ 1600	89.51 @ 1600	EM EOHCAC
6081HZ010	6081H	329.89 @ 2200	155.00 @ 2200	114.64 @ 2200	910.62 @ 1600	182.8 @ 1600	98.54 @ 1600	EM EOHCAC
6081HF070D	6081H	413.03 @ 1800	243.10 @ 1800	147.71 @ 1800	1017.70 @ 1600	204.6 @ 1600	110.45 @ 1600	EM EOHCAC
6081HF070E	6081H	347.32 @ 1800	199.10 @ 1800	119.05 @ 1800	1017.70 @ 1600	199.9 @ 1600	107.80 @ 1600	EM EOHCAC
6081HZ011	6081H	361.41 @ 2200	169.70 @ 2200	125.66 @ 2200	1017.70 @ 1600	199.9 @ 1600	107.80 @ 1600	EM EOHCAC
6081HH017	6081H	320.50 @ 2200	150.20 @ 2200	110.23 @ 2200	890.86 @ 1600	172.3 @ 1600	93.17 @ 1600	EM EOHCAC
6081HH013	6081H	329.89 @ 2200	152.30 @ 2200	112.43 @ 2200	919.62 @ 1600	177.9 @ 1600	96.01 @ 1600	EM EOHCAC
6081HH012	6081H	361.41 @ 2200	171.60 @ 2200	125.66 @ 2200	1017.70 @ 1600	204.6 @ 1600	110.45 @ 1600	EM EOHCAC
6081HZ012	6081H	361.41 @ 2200	169.70 @ 2200	125.66 @ 2200	1017.70 @ 1600	199.9 @ 1600	107.80 @ 1600	EM EOHCAC

Engine Model Summary Form

Running Change
ED # U-R-004-0112

Deere Power Systems Group of Deere and

Engine category: Nonroad CI

EPA Engine Family: 2JDXL08.1037

Mfr Family Name: 450HF

Process Code: Correction

Attachment

1.Engine Code	2.Engine Model	3.BHP @ RPM (SAE Gross)	4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	6.Torque @ RPM (SEA Gross)	7.Fuel Rate: mm/stroke @ peak torque	8.Fuel Rate: (lbs/hr) @ peak torque	9.Emission Control Device Per SAE J1930
6081HH012	6081H	153.00 @ 2200	113.51 @ 2200	201.6 @ 1600	108.77 @ 1600			

Engine Model Summary Form

Deere Power Systems Group of Deere and

Nonroad CI

Nonroad CI

Mir Family Name: 450HF
Process Code: Running Change

EPA Engine Fam

Mir Family Name

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process code:

1 Engine Cact

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6081HF070N

1.Engine Code	2.Engine Model	3.BHP@RPM (SAE Gross)	4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	6.Torque @ RPM (SEA Gross)	7.Fuel Rate: mm/stroke@ peak torque	8.Fuel Rate: (lbs/hr)@ peak torque	9.Emission Control Device Per SAE J1930
6081HF070N	6081H	324.53@2200	155.70@2200	115.54@2200	1044.90@1400	205.2@1400	96.91@1400	EM EC CAC