



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)
2004	4JDXL08:1037	8.1	Diesel	8000
<b>SPECIAL FEATURES &amp; EMISSION CONTROL SYSTEMS</b>			<b>TYPICAL EQUIPMENT APPLICATION</b>	
Direct Diesel Injection, Turbocharger, Charge Air Cooler, Smoke Puff Limiter, Electronic Control Module			Loader, Tractor, 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 CLASS	EMISSION STANDARD CATEGORY		EXHAUST (g/kW-hr)					OPACITY (%)		
			HC	NOx	NMHC+NOx	CO	PM	ACCEL	LUG	PEAK
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	-	-	6.1	1.6	0.15	10	10	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 23<sup>RD</sup> day of December 2003.

Allen Lyons, Chief  
Mobile Source Operations Division

Engine model summary form

Manufacturer: Deere Power Systems Group of Deere and  
 Engine category: Nonroad CI  
 EPA Engine Family: 4JDXL08.1037  
 Family Name: 450HF  
 Process Code: New Submission

Attachment 1 of 5  
 11/10/04 08:17

1.Engine Code	2.Engine Model	3.BHP@RPM (SAE Gross)	4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	5.Fuel Rate: (lb/hr) @ peak HP (for diesel only)	6.Torque @ RPM (SEA Gross)	7.Fuel Rate: mm/stroke@peak torque	8.Fuel Rate: (lb/hr)@peak torque	9.Emission Control Device Per SAE J1930
6081HZ008	6081H	265.53@2200	128.00@2200	94.30@2200	761.80@1600	152.2@1600	82.24@1600	EM EC 0
6081HRW31A	6081H	207.86@2200	99.10@2200	73.57@2200	694.70@1400	138.2@1400	65.28@1400	EM EC 0
6081HRW31B	6081H	230.66@2200	108.70@2200	80.65@2200	770.65@1400	150.2@1400	70.95@1400	EM EC 0
6081HRW32A	6081H	207.86@2200	99.10@2200	73.57@2200	694.70@1400	138.2@1400	65.28@1400	EM EC 0
6081HRW32B	6081H	230.66@2200	108.70@2200	80.65@2200	770.65@1400	150.2@1400	70.95@1400	EM EC 0
6081HRW33	6081H	258.82@2200	121.30@2200	89.95@2200	865.05@1400	161.2@1400	76.04@1400	EM EC 0
6081HTJ02	6081H	214.57@2000	117.90@2000	79.52@2000	803.84@1400	159.7@1400	75.42@1400	EM EC 0
6081HT002	6081H	261.50@2000	138.40@2000	93.35@2000	998.53@1500	196@1500	99.17@1500	EM EC 0
6081HF070G	6081H	250.78@2200	120.90@2200	89.31@2200	807.53@1400	150.5@1400	70.99@1400	EM EC 0
6081HF070H	6081H	300.39@2200	142.40@2200	105.69@2200	967.56@1400	178.7@1400	84.40@1400	EM EC 0
6081HRW30	6081H	285.64@2100	136.50@2100	96.70@2100	1000.00@1400	188.6@1400	89.05@1400	EM EC 0
6081HRW23A	6081H	207.86@2200	99.10@2200	73.57@2200	694.70@1400	138.2@1400	65.28@1400	EM EC 0
6081HRW23B	6081H	230.66@2200	108.70@2200	80.65@2200	770.65@1400	150.2@1400	70.95@1400	EM EC 0
6081HRW25	6081H	258.82@2200	121.30@2200	89.95@2200	865.05@1400	161.2@1400	76.04@1400	EM EC 0
6081HRW27	6081H	282.96@2200	131.90@2200	97.91@2200	945.43@1400	175.7@1400	82.94@1400	EM EC 0
6081HRW28	6081H	300.39@2200	140.50@2200	104.28@2200	1003.69@1400	193.2@1400	91.05@1400	EM EC 0
6081HRW34	6081H	258.82@2200	121.30@2200	89.95@2200	865.05@1400	161.2@1400	76.04@1400	EM EC 0
6081HRW35	6081H	282.96@2200	131.90@2200	97.91@2200	945.43@1400	175.7@1400	82.94@1400	EM EC 0
6081HRW36	6081H	282.96@2200	131.90@2200	97.91@2200	945.43@1400	175.7@1400	82.94@1400	EM EC 0
6081HRW37	6081H	300.39@2200	140.50@2200	104.28@2200	1003.69@1400	193.2@1400	91.05@1400	EM EC 0
6081HRW38	6081H	300.39@2200	140.50@2200	104.28@2200	1003.69@1400	193.2@1400	91.05@1400	EM EC 0
6081HTJ05	6081H	254.80@2000	129.40@2000	87.26@2000	921.83@1400	178.1@1400	84.11@1400	EM EC 0
6081HTJ03	6081H	214.57@2000	111.60@2000	75.27@2000	803.84@1400	149.2@1400	70.44@1400	EM EC 0
6081HTJ04	6081H	241.39@2000	123.60@2000	83.40@2000	907.08@1400	166.1@1400	78.44@1400	EM EC 0
6081HF070A	6081H	335.26@2200	160.00@2200	116.85@2200	1126.85@1400	226@1400	108.03@1400	EM EC 0
6081HF070C	6081H	324.53@2200	151.00@2200	112.02@2200	1044.99@1400	197.3@1400	93.10@1400	EM EC 0
6081HZ009	6081H	305.76@2200	140.70@2200	104.28@2200	945.14@1600	161.1@1600	86.87@1600	EM EC 0
6081HZ010	6081H	329.90@2200	150.70@2200	111.78@2200	919.62@1600	177.5@1600	95.82@1600	EM EC 0
6081HZ011	6081H	361.41@2200	167.10@2200	123.90@2200	1017.70@1600	149.5@1600	110.90@1600	EM EC 0
6081HH017	6081H	327.21@2200	151.40@2200	112.37@2200	910.77@1600	181.3@1600	97.87@1600	EM EC 0
6081HH013	6081H	347.33@2200	162.70@2200	120.71@2200	974.93@1600	195.7@1600	105.63@1600	EM EC 0
6081HH012	6081H	383.54@2200	181.20@2200	134.42@2200	1087.03@1600	219@1600	118.17@1600	EM EC 0
6081HZ012	6081H	361.41@2200	166.20@2200	123.24@2200	1017.70@1600	149.5@1600	110.90@1600	EM EC 0
6081HF070I	6081H	199.82@2200	99.20@2200	73.55@2200	645.14@1400	123.8@1400	58.47@1400	EM EC 0
6081HF070J	6081H	225.30@2200	108.50@2200	80.54@2200	725.52@1400	136.6@1400	64.56@1400	EM EC 0
6081HF070L	6081H	274.91@2200	131.70@2200	97.80@2200	884.96@1400	163.7@1400	77.25@1400	EM EC 0
6081HT801	6081H	320.51@2200	147.00@2200	109.07@2200	994.84@1600	195.1@1600	105.32@1600	EM EC 0
6081HZ016	6081H	303.08@2100	120.30@2100	102.52@2100	976.41@1500	159.5@1500	95.24@1500	EM EC 0
6081HTJ06	6081H	187.75@2200	92.30@2200	68.48@2200	584.96@1400	116.1@1400	54.81@1400	EM EC 0
6081HT005A	6081H	261.50@2400	118.30@2400	95.75@2400	811.21@1440	149.4@1440	72.58@1440	EM EC 0
6081HT005B	6081H	286.98@2400	130.10@2400	105.25@2400	811.21@1440	149.2@1440	72.47@1440	EM EC 0
6081HDW08	6081H	199.28@2200	102.60@2200	76.13@2200	781.72@1500	151.5@1500	76.66@1500	EM EC 0
6081HDW09	6081H	232.00@2200	117.10@2200	86.98@2200	781.72@1500	150@1500	75.86@1500	EM EC 0
6081HTJ07	6081H	181.04@2000	96.20@2000	64.89@2000	678.47@1400	135.3@1400	63.89@1400	EM EC 0
6081HTJ08	6081H	241.39@2000	123.00@2000	83.01@2000	907.08@1400	172.5@1400	81.44@1400	EM EC 0
6081HF070P	6081H	350.01@2200	163.30@2200	121.30@2200	1044.99@1600	206.7@1600	111.71@1600	EM EC 0
6081HN005	6081H	300.39@2200	140.50@2200	104.28@2200	1003.69@1400	193.2@1400	91.23@1400	EM EC 0
6081HRW41B	6081H	206.52@2100	102.90@2100	72.91@2100	680.68@1400	134.5@1400	63.52@1400	EM EC 0
6081HRW42B	6081H	206.52@2100	102.90@2100	72.91@2100	680.68@1400	134.5@1400	63.52@1400	EM EC 0
6081HRW41A	6081H	225.30@2100	111.50@2100	79.00@2100	738.94@1400	146.1@1400	68.99@1400	EM EC 0
6081HRW42A	6081H	225.30@2100	111.50@2100	79.00@2100	738.94@1400	146.1@1400	68.99@1400	EM EC 0
6081HF070Q	6081H	309.78@1800	171.00@1800	103.62@1800				EM EC 0
6081HF070R	6081H	348.67@1800	191.00@1800	115.75@1800				EM EC 0
6081HF070S	6081H	387.58@1800	214.00@1800	129.86@1800				EM EC 0
6081HF070T	6081H	426.45@1800	234.00@1800	142.42@1800				EM EC 0
6081HRW44A	6081H	207.86@2200	99.10@2200	73.57@2200	694.70@1400	138.2@1400	65.28@1400	EM EC 0
6081HRW44B	6081H	230.66@2200	108.70@2200	80.65@2200	770.65@1400	150.2@1400	70.95@1400	EM EC 0

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EM EC 0 PPSPL

6081HRW46	6081H	282.96@2200	131.90@2200	97.91@2200	945.43@1400	175.7@1400	82.94@1400	EM EC 0
6081HRW47	6081H	300.39@2200	140.50@2200	104.28@2200	1003.69@1400	193.2@1400	91.05@1400	EM EC 0
6081HH019	6081H	300.39@2200	137.10@2200	101.72@2200	840.71@1800	165.3@1800	89.22@1800	EM EC 0
6081HDW13	6081H	288.87@2100	138.90@2100	98.33@2100	944.70@1250	174.7@1250	74.30@1250	EM EC 0
6081HZ017	6081H	327.21@2200	151.60@2200	112.53@2200	910.77@1800	181.6@1800	98.02@1800	EM EC 0
6081HZ018	6081H	347.33@2200	161.60@2200	119.96@2200	974.93@1800	195.3@1800	105.41@1800	EM EC 0
6081HZ019	6081H	378.17@2200	173.00@2200	128.36@2200	1070.80@1600	212.5@1800	114.67@1800	EM EC 0
6081HT006A	6081H	189.15@2100	99.60@2100	70.55@2100	672.57@1500	132@1500	66.80@1500	EM EC 0
6081HT006B	6081H	217.25@2100	107.80@2100	76.42@2100	733.78@1500	145.3@1500	73.42@1500	EM EC 0

U-R-004-0107

# Engine Model Summary Form

Attachment 3 of 5  
U-R-004-0187

Manufacturer: Deere Power Systems Group of Deere and

Category: Nonroad CI

Engine Family: 4JDXL08.1037

Family Name: 450HF

Class Code: Running Change

1. Engine Code	2. Engine Model	3. BHP @ RPM (SAE Gross)	4. Fuel Rate: mm <sup>3</sup> /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 <sup>3</sup> /stroke @ peak torque	8. Fuel Rate: (lbs/hr) @ peak torque	9. Emission Control Device Per SAE J1930
6081HN006	6081H	383.54 @ 2200	181.20 @ 2200	134.42 @ 2200	1087.03 @ 1600	219 @ 1600	118.17 @ 1600	EM EGR SPL 0

✓ Added

# Engine Model Summary Form

Attachment 4585

U-R-004-0187

Manufacturer: Deere Power Systems Group of Deere and  
Engine category: Nonroad CI  
PA Engine Family: 4JDXL08.1037  
Tr Family Name: 450HF  
Class Code: Running Change

1. Engine Code	2. Engine Model	3. BHP @ RPM (SAE Gross)	4. Fuel Rate: mm <sup>3</sup> /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 <sup>3</sup> /stroke @ peak torque	8. Fuel Rate: (lbs/hr) @ peak torque	9. Emission Control Device Per SAE J1930
6081HZ018	6081H		162.00 @ 2200	120.22 @ 2200		195.5 @ 1600	105.49 @ 1600	DDF, TC, CAC, SPL, ECM

Added

# Engine Model Summary Form

*Attachment 5 of 5  
61 R-001-0127*

Manufacturer: **John Deere Power Systems Group of Deere &**  
 Engine category: **Nonroad CI**  
 EPA Engine Family: **5JDXL08.1037**  
 Mfr Family Name: **450HF**  
 Process Code: **Running Change**

1.Engine Code	2.Engine Model	3.BHP@RPM (SAE Gross)	4.Fuel Rate: mm <sup>3</sup> /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 <sup>3</sup> /stroke@peak torque	8.Fuel Rate: (lbs/hr)@peak torque	9.Emission Control Device Per SAE J1930
6081HT008	6081H	261.50@2000	138.40@2000	93.30@2000	998.53@1500	196@1500	99.17@1500	EM EC SPL
6081HTJ09	6081H	274.91@2200	131.70@2200	97.80@2200	884.96@1400	163.7@1400	77.25@1400	EM EC SPL

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