

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)
2003	3JDXL08.1037	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, 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	0.8	0.15	10	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 2<sup>nd</sup> day of January 2003.

  
 Allen Lyons, Chief  
 Mobile Source Operations Division

Attachment 1 of 2

# Engine Model Summary Form

U-K-004-0151 RJC

Manufacturer: Deere Power Systems Group of Deere and  
 Engine category: Nonroad CI  
 EPA Engine Family: 3JDXL08.1037  
 Mfr Family Name: 450HF  
 Process Code: Running Change

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
6081HRW31A	6081H	99.10@2200	99.10@2200	73.57@2200	694.69@1400	138.2@1400	65.28@1400	
6081HRW31B	6081H	108.70@2200	108.70@2200	80.64@2200	770.65@1400	150.2@1400	70.94@1400	
6081HRW32A	6081H	99.10@2200	99.10@2200	73.57@2200	694.69@1400	138.2@1400	65.28@1400	
6081HRW32B	6081H	108.70@2200	108.70@2200	80.64@2200	770.65@1400	150.2@1400	70.94@1400	
6081HRW33	6081H	121.30@2200	121.30@2200	89.95@2200		161.2@1400	76.04@1400	
6081HTJ02	6081H	117.90@2000	117.90@2000	79.52@2000		159.7@1400	75.42@1400	
6081HT002	6081H	138.40@2000	138.40@2000	93.34@2000		196@1500	99.16@1500	
6081HF070G	6081H	120.30@2200	120.30@2200	89.31@2200		150.5@1400	70.99@1400	
6081HRW30	6081H	136.50@2100	136.50@2100	96.69@2100		188.6@1400	89.04@1400	
6081HRW23A	6081H	99.10@2200	99.10@2200	73.57@2200	694.69@1400	138.2@1400	65.28@1400	
6081HRW23B	6081H	108.70@2200	108.70@2200	80.64@2200	770.65@1400	150.2@1400	70.94@1400	
6081HRW25	6081H	121.30@2200	121.30@2200	89.95@2200		161.2@1400	76.04@1400	
6081HRW27	6081H	131.90@2200	131.90@2200	97.91@2200	945.43@1400	175.7@1400	82.94@1400	
6081HRW28	6081H	140.50@2200	140.50@2200	104.28@2200		193.2@1400	91.05@1400	
6081HRW34	6081H	121.30@2200	121.30@2200	89.95@2200		161.2@1400	76.04@1400	
6081HRW35	6081H	131.90@2200	131.90@2200	97.91@2200	945.43@1400	175.7@1400	82.94@1400	
6081HRW36	6081H	131.90@2200	131.90@2200	97.91@2200	945.43@1400	175.7@1400	82.94@1400	
6081HRW37	6081H	140.50@2200	140.50@2200	104.28@2200		193.2@1400	91.05@1400	
6081HRW38	6081H	140.50@2200	140.50@2200	104.28@2200		193.2@1400	91.05@1400	
6081HTJ05	6081H	129.40@2000	129.40@2000	87.26@2000		178.1@1400	84.10@1400	
6081HTJ03	6081H	111.60@2000	111.60@2000	75.26@2000		149.2@1400	70.44@1400	
6081HTJ04	6081H	123.60@2000	123.60@2000	83.40@2000		166.1@1400	78.44@1400	
6081HF070C	6081H	151.00@2200	151.00@2200	112.01@2200		197.3@1400	93.10@1400	
6081HZ010	6081H	150.70@2200	150.70@2200	111.77@2200		177.5@1600	95.81@1600	
6081HF070J	6081H	108.50@2200	108.50@2200	80.53@2200		136.6@1400	64.55@1400	
6081HF070L	6081H	131.70@2200	131.70@2200	97.80@2200		163.7@1400	77.25@1400	
6081HT801	6081H	147.00@2200	147.00@2200	109.06@2200	994.84@1600	195.1@1600	105.31@1600	
6081HTJ06	6081H	92.30@2200	92.30@2200	68.47@2200	584.96@1400	116.1@1400	54.81@1400	
6081F 17	6081H	181.04@2000	96.20@2000	64.88 000	678.47@1400	135.3@1400	63.89@1400	EM E 7AC
6081H 1108		241.38@2000	123.00@2000	83.00@2000	907.08@1400	172.5@1400	81.44@1400	

60.	7070H	6081H	142.40@2200	1.	1@2200		84.39@1400
608.	0701	6081H	99.20@2200	75.	1@2200	645.13@1400	
6081HRW43B		6081H	182.92@2100	66.14	@2100	603.02@1400	123.6@1400
6081HRW43A		6081H	199.14@2100	71.32	@2100	656.34@1400	58.38@1400
6081HF070P		6081H	350.01@2200	121.30	@2200	1044.99@1600	63.36@1400
							206.7@1600
							111.71@1600
							EM EC CAC
							EM EC CAC
							EM EC CAC

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DEERE 6081H CAC

# Engine Model Summary Form

Manufacturer: **Deere Power Systems Group of Deere and**  
 Engine category: **Nonroad CI**  
 EPA Engine Family: **3JDXL08.1037**  
 Mfr Family Name: **450HF**  
 Process Code: **Running Change**

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
6081HDW08	6081H	102.60 @ 2200	76.12 @ 2200	72.91 @ 2100	680.68 @ 1400	151.5 @ 1500	76.65 @ 1500	EM EC CAC
6081HRW41B	6081H	206.52 @ 2100	102.90 @ 2100	72.91 @ 2100	680.68 @ 1400	134.5 @ 1400	63.51 @ 1400	EM EC CAC
6081HRW41A	6081H	225.29 @ 2100	111.50 @ 2100	78.99 @ 2100	738.94 @ 1400	146.1 @ 1400	68.98 @ 1400	EM EC CAC
6081HRW42A	6081H	225.29 @ 2100	111.50 @ 2100	78.99 @ 2100	738.94 @ 1400	146.1 @ 1400	68.98 @ 1400	EM EC CAC
6081HF070Q	6081H	309.78 @ 1800	171.00 @ 1800	103.62 @ 1800				EM EC CAC
6081HF070R	6081H	348.67 @ 1800	191.00 @ 1800	115.74 @ 1800				EM EC CAC
6081HF070S	6081H	387.56 @ 1800	214.00 @ 1800	129.85 @ 1800				EM EC CAC
6081HF070T	6081H	426.44 @ 1800	234.00 @ 1800	142.42 @ 1800				EM EC CAC
6081HRW42B	6081H	206.52 @ 2100	102.90 @ 2100	72.91 @ 2100	680.68 @ 1400	134.5 @ 1400	63.51 @ 1400	EM EC CAC

4/24/08

# Engine Model Summary Form

2.0116.02.004.0.15.1

Attachment 4 of 7

Manufacturer: **Deere Power Systems Group of Deere and**  
 Engine category: **Nonroad CI**  
 EPA Engine Family: **3JDXL08.1037**  
 Mir Family Name: **450HF**  
 Process Code: **Running Change**

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
6081HH017	6081H	327.21 @ 2200	151.40 @ 2200	112.37 @ 2200	910.77 @ 1600	181.3 @ 1600	97.86 @ 1600	EM EC CAC
6081HH013	6081H	347.32 @ 2200	159.40 @ 2200	118.25 @ 2200	974.93 @ 1600	192.4 @ 1600	103.84 @ 1600	EM EC CAC
6081HH012	6081H	383.53 @ 2200	176.30 @ 2200	130.84 @ 2200	1087.02 @ 1600	213 @ 1600	114.93 @ 1600	EM EC CAC
X 6081HN005	6081H	300.39 @ 2200	140.50 @ 2200	104.28 @ 2200	1003.69 @ 1400	193.2 @ 1400	91.23 @ 1400	EM EC CAC

\* added

Engine Model Summary Form

U-1-004-0151 RIC

Manufacturer: Deere Power Systems Group of Deere and  
 Engine category: Nonroad CI  
 EPA Engine Family: 3-JDXL08.1037  
 Mfr Family Name: 450HF  
 Process Code: Running Change

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
6081HDW13	6081H	266.87 @ 2100	138.90 @ 2100	98.33 @ 2100	944.70 @ 1260	174.7 @ 1260	74.30 @ 1260	EM SPL
6081HRW44A				73.57 @ 2200				
6081HRW44B				80.65 @ 2200				
6081HRW45				89.95 @ 2200				
6081HRW46				97.91 @ 2200				
6081HRW47				104.28 @ 2200				
6081HH019				101.72 @ 2200				

# Engine Model Summary Form

**Manufacturer:** Deere Power Systems Group of Deere and  
**Engine category:** Nonroad CI  
**EPA Engine Family:** 3JDXL08.1037  
**Mfr Family Name:** 450HF  
**Process Code:** Running Change

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
6081HH013	6081H		162.70 @ 2200	120.71 @ 2200		195.7 @ 1600	105.63 @ 1600	
6081HZ017	6081H	327.21 @ 2200	151.60 @ 2200	112.53 @ 2200	910.77 @ 1600	181.6 @ 1600	98.02 @ 1600	EM SPL 0
6081HZ018	6081H	347.33 @ 2200	161.60 @ 2200	119.96 @ 2200	974.93 @ 1600	195.3 @ 1600	105.41 @ 1600	EM SPL 0
6081HZ019	6081H	378.17 @ 2200	173.00 @ 2200	128.36 @ 2200	1070.80 @ 1600	212.5 @ 1600	114.67 @ 1600	EM SPL 0

Attachment 7 of 7

# Engine Model Summary Form

U-X-00Y-0151

Manufacturer: Deere Power Systems Group of Deere and  
 Engine category: Nonroad CI  
 EPA Engine Family: 3JDXL08.1037  
 Mir 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
6081HH012	6081H	18170 @ 2200	134.42 @ 2200	134.42 @ 2200	672.57 @ 1500	219 @ 1600	118.17 @ 1600	EMISPL0
6081HT006A	6081H	19915 @ 2100	99.60 @ 2100	70.55 @ 2100	672.57 @ 1500	132 @ 1500	66.80 @ 1500	EMISPL0
6081HT006B	6081H	21725 @ 2100	107.80 @ 2100	76.42 @ 2100	783.78 @ 1500	145.8 @ 1500	73.48 @ 1500	EMISPL0