California Environmental Protection Agency AIR RESOURCES BOARD	DEERE POWER SYSTEMS GROUP OF DEERE & COMPANY	EXECUTIVE ORDER U-R-004-0135 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)
2003	3JDXL06.8044	6.8, 4.5	Diesel	8000

SPECIAL FEATURES & EMISSION CONTROL SYSTEMS	TYPICAL EQUIPMENT APPLICATION
Electronic Control Module, Direct Diesel Injection, Turbocharger, Charge Air Cooler	Tractor, Compressor, 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
75 ≤ kW < 130	Tier 2	STD	N/A	N/A	6.6	5.0	0.30	20	15	50
		CERT	-	-	6.1	1.0	0.26	11	6	23

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 2nd day of January 2003.

Raphael Susnowitz

for Allen Lyons, Chief
Mobile Source Operations Division

Engine Model Summ y Form

Attachment 1 of 5

Manufacturer: Deere Power Systems Group of Deere &

Engine category: Nonroad CI

EPA Engine Family: 3JDXL06.8044

Mfr Family Name: 350HF

Process Code: New Submission

U-R-004-0135

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
4045HF275A	4045H	139.47@2400	99.70@2400	52.91@2400	405.97@1440	128@1440	41.01@1440	ECM, DDI, TC, CAC
4045HF275C	4045H	139.47@2400	97.80@2400	50.71@2400	367.26@1400	112.1@1400	35.27@1400	
4045HF275D	4045H	124.72@2400	87.90@2400	46.30@2400	344.40@1400	102.7@1400	32.41@1400	
4045HF275E	4045H	124.72@2200	95.00@2200	46.30@2200	367.26@1400	111.6@1400	35.01@1400	
4045HF275F	4045H	115.33@2000	95.00@2000	41.89@2000	367.26@1400	113.6@1400	35.93@1400	
4045HF275G	4045H	144.83@1800	133.70@1800	52.91@1800				
6068HF275M	6068H	172.99@2000	91.00@2000	59.52@2000	545.72@1400	107.6@1400	50.71@1400	
4045HP051	4045H	113.99@2300	83.10@2300	41.89@2300	317.11@1400	94.4@1400	29.76@1400	EM TC CAC, ECM, DDI
4045HZ060	4045H	115.33@2200	88.00@2200	41.89@2200	336.21@1400	106.8@1400	32.41@1400	
4045HTJ75	4045H	115.33@2000	93.80@2000	41.89@2000	367.26@1400	110.3@1400	34.72@1400	
4045HTJ77	4045H	115.33@2000	93.80@2000	41.89@2000	367.26@1400	110.3@1400	34.72@1400	
6068HTJ75	6068H	160.92@2000	84.10@2000	55.11@2000	527.29@1400	104.9@1400	49.56@1400	
4045HL270	4045H	103.26@2300	79.70@2300	39.68@2300	316.00@1500	101.4@1500	33.07@1500	TC CAC EM, ECM, DDI
4045HL271	4045H	112.65@2300	85.40@2300	41.89@2300	348.08@1500	110.7@1500	35.93@1500	TC CAC EM
4045HL273	4045H	115.33@2300	85.20@2300	41.89@2300	350.15@1500	110.9@1500	36.38@1500	TC CAC EM
6068HTJ77	6068H	172.99@2000	91.60@2000	61.73@2000	575.22@1400	109.9@1400	51.81@1400	
6068HTJ76	6068H	172.99@2000	91.60@2000	61.73@2000	575.22@1400	109.9@1400	51.81@1400	
4045HF275H	4045H	156.90@1800	139.30@1800	55.11@1800				
6068HT059	4045H	147.51@2150	75.90@2150	55.11@2150	433.63@1400	89.2@1400	42.11@1400	
6068HDW60	4045H	167.63@2200	83.90@2200	61.73@2200	519.91@1400	100.6@1400	47.51@1400	
4045HL272	4045H	104.60@2300	79.70@2300	39.68@2300	313.79@1500	101.4@1500	33.07@1500	

attachment 2 of 5

Engine Model Summary Form

Manufacturer: **Deere Power Systems Group of Deere &**

Engine category: **Nonroad CI**

EPA Engine Family: **3JDXL06.8044**

Mfr Family Name: **350HF**

Process Code: **Running Change**

U-R-004-0135 K/C

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
4045HRT71	4045H	109.29@2200	83.80@2200	41.45@2200	320.80@1400	97@1400	30.86@1400	
4045HF275J	4045H	139.47@2200	105.40@2200	52.14@2200	398.23@1400	120.3@1400	37.87@1400	
6068HL271	6068H	116.67@2300	61.40@2300	44.53@2300	357.67@1500	81.4@1500	38.58@1500	
4045HF275I	4045H	124.72@2400	87.90@2400	46.96@2400	344.40@1400	102.7@1400	32.41@1400	
6068HDW63	6068h	172.99@2200	87.10@2200	64.59@2200	560.47@1400	105.9@1400	50.00@1400	
added								

Engine Model Summary Form

Attachment 3 of 5

Manufacturer: Deere Power Systems Group of Deere &

Engine category: Nonroad CI

EPA Engine Family: 3JDXL06.8044

Mfr Family Name: 350HF

Process Code: Running Change

U-R-004-0135 R/C

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
6068HRW59B	6068H	119.36@2300	57.20@2300	44.82@2300	362.84@1500	77.4@1500	37.15@1500	EM SPL
6068HRW59A	6068H	129.41@2300	62.20@2300	48.26@2300	393.07@1500	79.5@1500	40.24@1500	EM SPL
6068HRW60B	6068H	139.47@2100	71.30@2100	55.45@2100	463.87@1400	91.6@1400	48.26@1400	EM SPL
6068HRW60A	6068H	154.89@2100	78.30@2100	50.49@2100	516.23@1400	102.9@1400	48.59@1400	EM SPL

Engine Model Summary Form

attachment 4 of 5

u-R-004-0135 R/C

Manufacturer: Deere Power Systems Group of Deere &

Engine Category: Nonroad CI

EPAEngine Family: 3JDXL06.8044

Mfr Family Name: 350HF

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
6068HL276	6068HL	129.41@2300	62.20@2300	48.26@2300	396.07@1500	79.5@1500	40.24@1500	EM SPL
4045HDW62	4045H	120.70@2200	90.80@2200	44.91@2200	383.49@1400	118.3@1400	57.26@1400	EM SPL
6068HDW56	6068H	156.58@2200	77.40@2200	57.46@2200	496.32@1600	98.3@1600	53.05@1600	EM SPL

Attachment I of 5

Engine Model Su nary Form

Manufacturer: Deere Power Systems Group of Deere &

Engine category: Nonroad CI

EPAEngine Family: 3JDXL06.8044

Mfr Family Name: 350HF

Process Code: Running Change

U-R-004-0135 R/C

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
6068HTJ53	6068H	173.00@2000	91.30@2000	61.60@2000	574.49@1400	106.6@1400	50.36@1400	EMSPL