California Environmental Protection Agency AIR RESOURCES BOARD	John Deere Power Systems	EXECUTIVE ORDER U-R-004-0361 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)
2009	9JDXL06.8101	4.5, 6.8	Diesel	8000

SPECIAL FEATURES & EMISSION CONTROL SYSTEMS	TYPICAL EQUIPMENT APPLICATION
Direct Diesel Injection, Turbocharger, Charge Air Cooler, Electronic Control Module, Smoke Puff Limiter, Exhaust Gas Recirculation	Loaders, Tractor, Pump, Compressor, Generator Set, Other 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
75 ≤ kW < 130	Tier 3	STD	N/A	N/A	4.0	5.0	0.30	20	15	50
130 ≤ kW < 450	Tier 3	STD	N/A	N/A	4.0	3.5	0.20	20	15	50
		CERT	--	--	3.4	0.6	0.11	8	1	14

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 12th day of December 2008.

J. Lourenco

Annette Hebert, Chief
Mobile Source Operations Division

U-R-004-0361

Engine Model Summary Form

Manufacturer: **John Deere Power Systems**

Engine category: **Nonroad CI**

EPA Engine Family: **9JDXL06.8101**

Mfr Family Name: **350HAA**

Process Code: **New Submission**

Attachment

P. 1 of 3

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
6068HF485A	6068H	278.94@2400	126.80@2400	102.74@2400	854.72@1400	170.1@1400	80.47@1400	EM EGR EC SPL TC
6068HF485B	6068H	199.82@2200	93.30@2200	69.21@2200	688.06@1400	138.7@1400	65.48@1400	EM EGR EC CAC, DDI
6068HT480	6068H	193.11@2000	98.10@2000	66.19@2000	688.06@1400	138.9@1400	65.61@1400	EM EGR EC
6068HDW71	6068H	199.82@2200	93.30@2200	69.21@2200	688.06@1400	138.7@1400	65.48@1400	EM EGR EC
6068HDW66	6068H	199.82@2200	93.30@2200	69.21@2200	688.06@1400	138.7@1400	65.48@1400	EM EGR EC
6068HL482	6068H	213.23@2100	107.60@2100	72.85@2100	625.37@1600	135.093@1600	69.65@1600	EM EGR EC
6068HRW77	6068H	213.23@2100	107.60@2100	72.85@2100	625.37@1600	135.093@1600	69.66@1600	EM EGR EC
6068HL481	6068H	193.11@2100	98.80@2100	66.87@2100	561.95@1600	121.91@1600	63.08@1600	EM EGR EC
6068HRW75	6068H	193.11@2100	98.80@2100	66.87@2100	561.95@1600	121.91@1600	63.06@1600	EM EGR EC
6068HCQ81	6068H	278.94@2400	120.40@2400	97.49@2400	698.38@1800	144.1@1800	87.53@1800	EM EGR EC
6068HL480	6068H	159.59@2300	78.10@2300	57.81@2300	425.52@1700	94.74@1700	51.89@1700	EM EGR EC
6068HRW73	6068H	159.59@2300	78.10@2300	57.81@2300	425.52@1700	94.74@1700	51.89@1700	EM EGR EC
6068HDW67	6068H	173.00@2250	81.20@2250	61.95@2250	619.47@1400	127.1@1400	59.97@1400	EM EGR EC
6068HDW69	6068H	225.30@2200	105.90@2200	78.58@2200	755.90@1400	157@1400	74.21@1400	EM EGR EC
4045HL480	4045H	139.47@2300	99.80@2300	49.30@2300	395.29@1700	124.20@1700	45.29@1700	EM EGR EC
4045HRT80A	4045H	85 kw 113.99@2200	89.70@2200	42.22@2200	351.04@1650	111.5@1650	39.25@1650	EM EGR EC
4045HRT80B	4045H	125.39@2200	95.60@2200	44.98@2200	386.44@1650	118.6@1650	40.57@1650	EM EGR EC
4045HRT80C	4045H	130.08@2200	96.60@2200	45.42@2200	400.45@1650	122.5@1650	43.21@1650	EM EGR EC
4045HRT81	4045H	154.22@2200	115.20@2200	54.46@2200	455.02@1650	139@1650	49.17@1650	EM EGR EC
4045HF485A	4045H	173.00@2400	115.60@2400	63.06@2400	475.67@1500	150.7@1500	50.71@1500	EM EGR EC
4045HF485B	4045H	154.22@2400	106.60@2400	56.88@2400	424.05@1500	133.0@1500	45.64@1500	EM EGR EC
4045HF485C	4045H	154.22@2200	113.30@2200	56.66@2200	475.67@1500	149.5@1500	50.93@1500	EM EGR EC
4045HF485D	4045H	148.86@2000	117.00@2000	52.89@2000	475.67@1500	148.8@1500	50.71@1500	EM EGR EC
4045HF485E	4045H	197.14@1800	170.20@1800	69.85@1800	N/A	N/A	N/A	EM EGR EC
4045HTJ85	4045H	115.33@2000	94.30@2000	41.01@2000	379.80@1400	117.9@1400	35.72@1400	EM EGR EC
8HF485U	6068H	284.30@1800	135.50@1800	96.92@1800	N/A	N/A	N/A	EM EGR EC
JBHFS89	6068H	315.15@1800	178.40@1800	108.32@1800	N/A	N/A	N/A	EM EGR EC
6068HN053	6068H	300.39@2400	132.30@2400	108.03@2400	770.65@1800	149.2@1800	91.05@1800	EM EGR EC
6068HT070B	6068H	202.50@2100	97.90@2100	69.36@2100	618.00@1400	126.2@1400	59.59@1400	EM EGR EC
6068HZ482	6068H	300.39@2400	132.30@2400	107.37@2400	770.65@1800	149.3@1800	90.61@1800	EM EGR EC
6068HRT80D	6068H	201.16@2200	98.10@2200	69.89@2200	600.30@1600	123.9@1600	63.94@1600	EM EGR EC
6068HRT81D	6068H	221.27@2200	106.30@2200	76.06@2200	660.03@1600	136.7@1600	70.99@1600	EM EGR EC
6068HZ480C	6068H	264.19@2400	116.50@2400	94.32@2400	667.41@1800	136.4@1800	82.79@1800	EM EGR EC
6068HH061	6068H	300.39@2400	132.30@2400	107.37@2400	770.65@1800	149.3@1800	90.61@1800	EM EGR EC
4045HFJ85	4045H	173.00@2400	115.60@2400	63.06@2400	475.67@1500	150.7@1500	50.71@1500	EM EGR EC
6068HTJ89A	6068H	194.45@2000	109.40@2000	70.77@2000	689.53@1400	141@1400	63.94@1400	EM EGR EC
6068HTJ87C	6068H	173.00@2000	95.30@2000	61.73@2000	575.23@1400	115.7@1400	52.47@1400	EM EGR EC
6068HTJ88A	6068H	185.07@2000	101.30@2000	65.48@2000	589.98@1400	117.6@1400	53.14@1400	EM EGR EC
6068HRT82E	6068H	241.39@2200	116.70@2200	83.34@2200	702.07@1500	138.9@1500	68.13@1500	EM EGR EC
6068HTJ88B	6068H	173.00@2000	95.30@2000	61.73@2000	575.23@1400	115.7@1400	52.47@1400	EM EGR EC
6068HWZ80	6068H	225.97@2100	112.00@2100	76.72@2100	700.59@1600	144.2@1600	75.40@1600	EM EGR EC
6068HDW73	6068H	173.00@2250	81.20@2250	61.95@2250	619.47@1400	127.1@1400	59.97@1400	EM EGR EC
6068HL483	6068H	225.97@2100	114.40@2100	78.49@2100	700.59@1600	144.2@1600	74.19@1600	EM EGR EC
6068HTJ88C	6068H	166.29@2000	93.50@2000	60.85@2000	530.98@1400	107.7@1400	49.17@1400	EM EGR EC
6068HDW80	6068H	225.30@2200	105.90@2200	78.58@2200	755.90@1400	157@1400	74.21@1400	EM EGR EC
6068HDW79	6068H	173.00@2250	81.20@2250	61.95@2250	619.47@1400	127.1@1400	59.97@1400	EM EGR EC
4045HTJ87	4045H	147.52@2000	121.40@2000	52.47@2000	475.67@1500	145.1@1500	46.96@1500	EM EGR EC
4045HTJ86	4045H	120.70@2000	98.70@2000	42.77@2000	398.24@1500	120.8@1500	39.25@1500	EM EGR EC
6068HT077	6068H	246.75@1900	136.00@1900	87.31@1900	755.90@1400	147@1400	69.43@1400	EM EGR EC
6068HT076	6068H	207.86@1900	116.00@1900	74.08@1900	755.90@1400	147@1400	69.45@1400	EM EGR EC
6068HF485C	6068H	199.82@2200	93.20@2200	69.14@2200	618.00@1400	123.9@1400	58.51@1400	EM EGR EC
6068HF485D	6068H	199.82@2400	90.70@2400	73.42@2400	548.68@1400	111.6@1400	52.69@1400	EM EGR EC
6068HF485E	6068H	193.11@2000	97.90@2000	66.05@2000	618.00@1400	124.9@1400	58.98@1400	EM EGR EC
6068HF485F	6068H	193.11@2000	98.10@2000	66.19@2000	688.06@1400	138.9@1400	65.61@1400	EM EGR EC
6068HF485G	6068H	179.70@2000	90.70@2000	61.18@2000	618.00@1400	124.5@1400	58.80@1400	EM EGR EC
HF485H	6068H	185.07@2200	87.00@2200	64.53@2200	618.00@1400	124.1@1400	58.62@1400	EM EGR EC
6068HF485I	6068H	185.07@2200	87.30@2200	64.78@2200	548.68@1400	109.6@1400	51.75@1400	EM EGR EC
6068HF485J	6068H	185.07@2400	85.00@2400	68.85@2400	516.23@1400	103.5@1400	50.27@1400	EM EGR EC
6068HF485S	6068H	225.30@2200	106.10@2200	78.75@2200	688.06@1400	141.5@1400	66.91@1400	EM EGR EC
6068HF485K	6068H	274.91@2400	119.80@2400	97.05@2400	755.90@1400	149.9@1400	72.80@1400	EM EGR EC

6068HF485L	6068H	250.78@2200	117.10@2200	86.87@2200	755.90@1400	156.2@1400	73.79@1400	EM EGR EC
6068HF485M	6068H	242.73@2000	123.70@2000	83.45@2000	755.90@1400	154.1@1400	72.87@1400	EM EGR EC
6068HF485N	6068H	217.25@2000	111.90@2000	75.49@2000	755.90@1400	148.8@1400	70.38@1400	EM EGR EC
6068HF485O	6068H	250.78@2400	108.30@2400	87.70@2400	688.80@1400	141.3@1400	68.66@1400	EM EGR EC
6068HF485P	6068H	217.25@2000	112.20@2000	75.69@2000	688.80@1400	138.9@1400	65.70@1400	EM EGR EC
6068HF485Q	6068H	225.30@2400	100.00@2400	80.98@2400	618.00@1400	126.6@1400	61.49@1400	EM EGR EC
6068HF485R	6068H	225.30@2200	105.90@2200	78.58@2200	755.90@1400	157@1400	74.21@1400	EM EGR EC
6068HF485T	6068H	315.15@1800	178.40@1800	108.32@1800	N/A	N/A	N/A	EM EGR EC
6068HT062	6068H	202.50@2100	97.90@2100	69.36@2100	618.00@1400	126.2@1400	59.59@1400	EM EGR EC
6068HRT80A	6068H	166.29@2200	81.00@2200	57.77@2200	556.05@1600	116.3@1600	60.19@1600	EM EGR EC
6068HRT80B	6068H	201.16@2200	98.00@2200	69.67@2200	600.30@1600	123.8@1600	64.16@1600	EM EGR EC
6068HRT81A	6068H	221.27@2200	106.30@2200	75.84@2200	660.03@1600	136.8@1600	70.99@1600	EM EGR EC
6068HFC48A	6068H	315.15@1760	176.90@1760	105.08@1760	N/A	N/A	N/A	EM EGR EC
6068HFC48B	6068H 236 kW	316.49@2400	141.50@2400	114.42@2400	799.42@1800	130.2@1800	93.04@1800	EM EGR EC
4045HL480A	4045H	139.47@2300	99.80@2300	49.30@2300	395.29@1700	124.2@1700	45.29@1700	EM EGR EC
6068HL481A	6068H	193.11@2100	98.80@2100	66.87@2100	561.95@1600	121.914@1600	63.08@1600	EM EGR EC
6068HL482A	6068H	213.23@2100	107.60@2100	72.85@2100	625.37@1600	135.093@1600	69.66@1600	EM EGR EC
6068HH060	6068H	274.91@2400	119.80@2400	97.05@2400	755.90@1400	149.9@1400	72.80@1400	EM EGR EC
6068HRT81B	6068H	186.41@2200	90.50@2200	64.60@2200	623.16@1600	130.3@1600	67.69@1600	EM EGR EC
6068HRT82A	6068H	250.78@2200	120.60@2200	86.42@2200	752.22@1500	158.9@1500	77.39@1500	EM EGR EC
6068HRT82B	6068H	234.68@2200	112.80@2200	80.69@2200	700.59@1600	148@1600	76.95@1600	EM EGR EC
6068HRT82C	6068H	199.82@2200	97.00@2200	69.45@2200	667.41@1600	141.1@1600	73.42@1600	EM EGR EC
6068HT061	6068H	189.09@2000	94.50@2000	63.76@2000	593.66@1400	121.3@1400	57.26@1400	EM EGR EC
6068HDW64	6068H	185.07@2200	87.00@2200	64.53@2200	618.00@1400	124.1@1400	58.62@1400	EM EGR EC
6068HDW65	6068H	171.66@2200	82.30@2200	60.98@2200	565.64@1400	113.37@1400	53.49@1400	EM EGR EC
6068HZ480A	6068H	250.78@2400	109.20@2400	88.41@2400	618.00@1800	125.8@1800	76.42@1800	EM EGR EC
6068HZ480B	6068H	278.94@2400	120.40@2400	97.49@2400	698.38@1800	144.1@1800	87.53@1800	EM EGR EC
6068HRW64A	6068H	229.32@2100	111.60@2100	79.06@2100	671.83@1575	139.2@1575	73.99@1575	EM EGR EC
6068HRW64B	6068H	229.32@2100	111.60@2100	79.06@2100	671.83@1575	139.5@1575	74.10@1575	EM EGR EC
6068HRW65A	6068H	253.46@2100	123.00@2100	87.11@2100	755.90@1575	154.2@1575	81.95@1575	EM EGR EC
6068HRW65B	6068H	253.46@2100	122.70@2100	86.87@2100	755.90@1575	153.2@1575	81.35@1575	EM EGR EC
6068HRT83D	6068H	127.40@2200	66.60@2200	46.96@2200	393.07@1650	88@1650	46.46@1650	EM EGR EC
6068HRT83C	6068H	138.13@2200	71.20@2200	50.09@2200	426.26@1650	94.66@1650	49.96@1650	EM EGR EC
6068HRT83B	6068H	151.54@2200	76.70@2200	54.04@2200	467.56@1650	104.53@1650	55.19@1650	EM EGR EC
HRT83A	6068H	173.00@2200	85.40@2200	60.21@2200	527.29@1650	111.44@1650	58.85@1650	EM EGR EC

SpL, TC
CAC, DDI

Attachment p. 2 of 3

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Engine Model Summary Form

U-R-004-0361

Manufacturer: **John Deere Power Systems**
Engine category: **Nonroad CI**
EPA Engine Family: **9JDXL06.8101**
M ily Name: **350HAA**
Process Code: **Running Change**

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
6068HTJ85A	6068H	173.00@2000	96.00@2000	62.39@2000	575.23@1400	113.1@1400	51.59@1400	EM, EGR, ECS, SPL, TC
6068HTJ86A	6068H	173.00@2000	96.00@2000	62.39@2000	575.23@1400	113.1@1400	51.59@1400	CAL, DDI
6068HTJ85B	6068H	160.93@2000	89.00@2000	57.77@2000	527.29@1400	105.9@1400	48.29@1400	↓