California Environmental Protection Agency AIR RESOURCES BOARD	DEERE POWER SYSTEMS GROUP OF DEERE & COMPANY	EXECUTIVE ORDER U-R-004-0267 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)
2006	6JDXL13.5103	13.5	Diesel	8000

SPECIAL FEATURES & EMISSION CONTROL SYSTEMS	TYPICAL EQUIPMENT APPLICATION
Direct Diesel Injection, Turbocharger, Charge Air Cooler, Electronic Control Module, Exhaust-Gas Recirculation	Pump, Compressor, Generator Set, Other Industrial Equipment

The engine models and codes are attached.

The following are the exhaust certification standards (STD), or family emission limit(s) (FEL) as applicable, 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
450 ≤ kW ≤ 560	Tier 3	STD	N/A	N/A	4.0	3.5	0.20	20	15	50
		CERT	-	-	3.6	0.9	0.14	19	5	44

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 10th day of February 2006.

J. Lawrence

Allen Lyons, Chief
Mobile Source Operations Division

Engine Model Summary Form

Manufacturer: **John Deere Power Systems of Deere and**

Engine category: **Nonroad CI**

EPA Engine Family: **6JDXL13.5103**

Mfr Family Name: **650HAA**

F ; Code: **New Submission**

Attachment
4-R-004-0267

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
6135HF485A	6135H 970	630.29@2100	311.00@2100	218.30@2100	2025.08@1575	393@1575	206.31@1575	EM,EGR,ECM,TC CAC,DDI

Engine Model Summary Form

Manufacturer: **John Deere Power Systems of Deere and**

Engine category: **Nonroad CI**

EPA Engine Family: **6JDXL13.5103**

Mfr Family Name: **650HAA**

P Code: **Running Change**

Attachment 2 of 3
U-R-004-0267

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
6135HF485I	6135H	450.59@2100	221.80@2100	157.04@2100	1521.39@1400	305.2@1400	144.05@1400	EM EGR EC
6135HF485J	6135H	450.59@2100	221.80@2100	157.04@2100	1521.39@1400	305.2@1400	144.05@1400	EM EGR EC
6135HF485K	6135H	450.59@1900	241.70@1900	154.81@1900	1688.80@1400	334.1@1400	157.65@1400	EM EGR EC
6135HF485L	6135H	425.11@2100	210.10@2100	148.73@2100	1521.39@1400	308.2@1400	145.46@1400	EM EGR EC
6135HF485M	6135H	399.63@2100	197.80@2100	140.02@2100	1352.51@1400	280.6@1400	132.41@1400	EM EGR EC
6135HF485N	6135H	399.63@2100	197.80@2100	140.02@2100	1352.51@1400	280.6@1400	132.41@1400	EM EGR EC
6135HF485O	6135H	399.63@1900	215.50@1900	138.01@1900	1521.39@1400	308.4@1400	145.53@1400	EM EGR EC
6135HF485P	6135H	350.01@2100	177.00@2100	125.31@2100	1181.42@1400	258.4@1400	121.94@1400	EM EGR EC
6135HF485Q	6135H	350.01@2100	177.00@2100	125.31@2100	1181.42@1400	258.4@1400	121.94@1400	EM EGR EC
6135HF485R	6135H	350.01@1900	191.00@1900	122.34@1900	1352.51@1400	285.4@1400	134.71@1400	EM EGR EC
6135HF485U	6135H	462.66@1800	255.90@1800	155.23@1800				EM EGR EC

Engine Model Summary Form

Manufacturer: **John Deere Power Systems of Deere and**

Engine category: **Nonroad CI**

EPA Engine Family: **6JDXL13.5103**

Mfr Family Name: **650HAA**

Process Code: **Running Change**

Attachment 3 of 3
U-R-004-0267

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
6135HF485B	6135H	600.78@2100	296.30@2100	209.73@2100	1880.54@1575	354.5@1575	188.19@1575	EM EGR EC
6135HF485C	6135H	549.82@2100	274.60@2100	194.41@2100	1792.04@1400	356.6@1400	168.28@1400	EM EGR EC
6135HF485D	6135H	549.82@2100	274.60@2100	194.41@2100	1792.04@1400	356.6@1400	168.28@1400	EM EGR EC
6135HF485E	6135H	525.69@2100	265.70@2100	188.08@2100	1792.04@1400	357.6@1400	168.79@1400	EM EGR EC
6135HF485F	6135H	500.21@2100	251.80@2100	178.20@2100	1688.80@1400	332.1@1400	156.71@1400	EM EGR EC
6135HF485G	6135H	500.21@2100	251.80@2100	178.20@2100	1688.80@1400	332.1@1400	156.71@1400	EM EGR EC
6135HF485H	6135H	500.21@1900	272.70@1900	174.63@1900	1792.04@1400	359.9@1400	169.87@1400	EM EGR EC
6135HF485T	6135H	537.75@1800	308.90@1800	187.44@1800				EM EGR EC
6135HF485S	6135H	616.88@1800	347.80@1800	210.98@1800				EM EGR EC