California Environmental Protection Agency AIR RESOURCES BOARD	DEERE POWER SYSTEMS GROUP OF DEERE & COMPANY	EXECUTIVE ORDER U-R-004-0225 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)
2005	5JDXL12.5035	12.5	Diesel	8000

SPECIAL FEATURES & EMISSION CONTROL SYSTEMS	TYPICAL EQUIPMENT APPLICATION
Direct Diesel Injection, Turbocharger, Charge Air Cooler, Smoke Puff Limiter, Electronic Control Module	Tractor, 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
450 ≤ kW ≤ 560	Tier 2	STD	N/A	N/A	6.4	3.5	0.20	20	15	50
		CERT	-	-	6.2	0.7	0.15	12	2	24

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 18TH day of August 2004.

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: **5JDXL12.5035**
Mfr Family Name: **650HD**
ess Code: **New Submission**

Attachment 1 of 2
U-R-004-0225

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
6125HF070A	6125H	504.23@2100	247.00@2100	174.17@2100	1843.66@1575	369@1575	195.99@1575	EM EC SPL DOF, TC, CAC
6125HF070K	6125H	442.54@1800	242.00@1800	145.51@1800				EM EC SPL
6125HF070L	6125H	482.77@1800	268.00@1800	160.94@1800				EM EC SPL
6125HF070M	6125H	563.23@1800	328.00@1800	198.42@1800				EM EC SPL
6125HF070N	6125H	616.88@1800	376.00@1800	227.08@1800				EM EC SPL
6125HZ004	6125H	488.14@2200	218.00@2200	160.94@2200	1410.03@1600	225@1600	149.03@1600	EM EC SPL
6125HF070F	6125H	399.63@2100	189.00@2100	132.28@2100	1348.83@1500	265@1500	134.04@1500	EM EC SPL
6125HF070G	6125H	425.11@2100	200.00@2100	132.28@2100	1328.91@1500	281@1500	134.04@1500	EM EC SPL
6125HF070H	6125H	450.59@2100	212.00@2100	149.92@2100	1520.65@1500	303@1500	153.44@1500	EM EC SPL
6125HF070I	6125H	474.73@2100	224.00@2100	156.53@2100	1603.25@1500	321@1500	162.48@1500	EM EC SPL
6125HF070J	6125H	500.21@2100	236.00@2100	165.35@2100	1688.80@1500	341@1500	172.62@1500	EM EC SPL
6125HF070B	6125H	300.39@2100	150.00@2100	105.83@2100	1014.02@1500	202@1500	102.08@1500	EM EC SPL
6125HF070C	6125H	324.53@2100	152.00@2100	105.83@2100	1098.09@1500	218@1500	110.45@1500	EM EC SPL
6125HF070D	6125H	350.01@2100	164.00@2100	114.64@2100	1180.68@1500	233@1500	117.73@1500	EM EC SPL
6125HF070E	6125H	375.49@2100	176.00@2100	123.46@2100	1267.70@1500	249@1500	125.89@1500	EM EC SPL
6125HDW01B	6125H	295.03@2000	150.00@2000	100.98@2000	1132.01@1500	219.6@1500	111.12@1500	EM EC SPL
6125HDW01A	6125H	288.32@2000	148.00@2000	99.87@2000	1021.39@1500	202@1500	102.30@1500	EM EC SPL
6125HF070U	6125H	600.78@2100	296.00@2100	209.44@2100	1877.59@1500	366@1500	184.75@1500	EM EC SPL
6125HF070T	6125H	549.82@2100	269.00@2100	190.26@2100	1856.20@1500	361@1500	182.54@1500	EM EC SPL
6125HF070S	6125H	525.69@2100	257.00@2100	182.10@2100	1774.34@1500	343@1500	173.29@1500	EM EC SPL
6125HF070R	6125H	500.21@2100	244.00@2100	172.40@2100	1690.27@1500	324@1500	163.81@1500	EM EC SPL
6125HT004	6125H	348.67@2000	180.00@2000	121.48@2000	1255.17@1500	256@1500	129.63@1500	EM EC SPL
[illegible]5HDW02A	6125H	288.32@2000	148.00@2000	99.21@2000	1021.39@1500	202@1500	102.30@1500	EM EC SPL
[illegible]5HDW02B	6125H	295.03@2000	150.00@2000	99.21@2000	1132.01@1500	219.6@1500	111.12@1500	EM EC SPL
6125HRW18	6125H	525.69@2100	258.00@2100	182.54@2100	1846.61@1575	360@1575	191.58@1575	EM EC SPL

Engine Model Summary Form

Attachment 2 of 2
U-K-004-0225

lanufacturer: **Deere Power Systems Group of Deere and**
ngine category: **Nonroad CI**
PA Engine Family: **5JDXL12.5035**
Mfr Family Name: **650HD**
.s 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
✓6125HDW03	6125H	399.63@2100	189.00@2100	132.28@2100	1348.83@1500	265@1500	134.04@1500	EM EC SPL, DPF, TC CAC

Engine Model Summary Form

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UR-004-0225

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

Engine category: **Nonroad CI**

EPA Engine Family: **5JDXL12.5035**

M' Family Name: **650HD**

ss 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
6125HZ015	6125H	402.31@2100	190.00@2100	133.16@2100	1348.83@1500	265@1500	134.04@1500	EM EC SPL DOT, TC
6125HH006A	6125H	498.87@2200	231.00@2200	171.30@2200	1444.70@1600	292@1600	157.63@1600	EM EC SPL
6125HH006B	6125H	466.68@2200	216.00@2200	160.06@2200	1444.70@1600	292@1600	157.63@1600	EM EC SPL
6125HH006C	6125H	431.81@2200	201.00@2200	149.26@2200	1444.70@1600	292@1600	157.63@1600	EM EC SPL

Added