State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER U-R-4-61
Relating to Certification of New Heavy-Duty Off-Road Equipment Engines

DEERE POWER SYSTEMS GROUP OF DEERE & COMPANY

Pursuant to the authority vested in the Air Resources Board at Sections 43000.5, 43013, and 43018 of the Health and Safety Code; and

Pursuant to the authority vested in the undersigned at Sections 39515 and 39516 of the Health and Safety Code and Executive Order G-45-9; and

IT IS ORDERED AND RESOLVED: That the following diesel engines and exhaust emission control systems produced by the manufacturer are certified as described below for use in heavy-duty off-road equipment:

Model Year: 2000

Typical Equipment Usage: Tractor

Engine Power Ratings Range: 175 – 750 horsepower, inclusive

Fuel Type: Diesel

Engine Family	Displacement Liters	Displacement Cubic Inches	Exhaust Emission Control Systems and Special Features
YJDXL12.5001 (650HA)	12.5	763	Charge Air Cooler Turbocharger Electronic Control Module

The engine models and codes are listed on attachments. Production engines shall be in all material respects the same as those for which certification is granted.

The exhaust emission certification standards and certification values in grams per brake horsepower-hour (g/bhp-h) for total hydrocarbons (THC), carbon monoxide (CO), nitrogen oxides (NOx), and particulate matter (PM), and the opacity-of-smoke certification standards and certification values in percent (%) during acceleration (Accel), lugging (Lug), and the peak value from either mode (Peak) for this engine family are as follows (Title 13, California Code of Regulations, Section 2423):

	Exhaust Emissions (g/bhp-h)				Smoke Opacity (%)		
	THC	CO	NOx	PM	Accel	Lug	Peak
Standard	1.0	8.5	6.9	0.4	20	15	50
Certification	0.2	0.4	5.7	0.1	13	1	28

BE IT FURTHER RESOLVED: That the listed engine models comply with "Exhaust Emission Standards and Test Procedures—Heavy-Duty Off-Road Diesel-Cycle Engines" (Title 13, California Code of Regulations, Section 2423) for the aforementioned model-year.

BE IT FURTHER RESOLVED: That the listed engine models also comply with "Emission Control Labels—1996 and Later Heavy-Duty Off-Road Diesel-Cycle Engines" (Title 13, California Code of Regulations, Section 2424) for the aforementioned model-year.

BE IT FURTHER RESOLVED: That for the listed engine models, the manufacturer has submitted the materials to demonstrate certification compliance with the Board's emission control system warranty provisions (Title 13, California Code of Regulations, Sections 2425 *et seq.*).

Engines certified under this Executive Order must conform to all applicable California emission regulations.

Executed at El Monte, California this 24th day of January 2000.

R. B. Summerfield, Chief
Mobile Source Operations Division

Engine Model Sur nary Form

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

Engine category: **Nonroad CI**

EPA Engine Fam y: **YJDXL12.5001**

Mfr Family Name: **650HA**

Process Code: **New Submission**

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
6125HF001A	6125H	510@2100	246@2100	175@2100	1729@1400	320@1400	151@1400	EM, EC, CAC, TC
6125HF001B	6125H	425@2100	206@2100	146@2100	1329@1400	251@1400	116@1400	EM, EC, CAC, TC
6125HF001C	6125H	425@2100	206@2100	146@2100	1435@1400	271@1400	126@1400	EM, EC, CAC, TC
6125HF001D	6125H	451@2100	219@2100	155@2100	1521@1400	287@1400	133@1400	EM, EC, CAC, TC
6125HF001E	6125H	475@2100	231@2100	164@2100	1603@1400	303@1400	140@1400	EM, EC, CAC, TC
6125HF001F	6125H	500@2100	243@2100	173@2100	1689@1400	319@1400	148@1400	EM, EC, CAC, TC
6125HF001G	6125H	563@1800	294@1800	178@1800	N/A	N/A	N/A	EM, EC, CAC, TC
6125HF001H	6125H	483@1800	237@1800	144@1800	N/A	N/A	N/A	EM, EC, CAC, TC

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