

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER U-R-4-62
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: Other OEM Products

Engine Power Ratings Range: 175 – 750 horsepower, inclusive

Fuel Type: Diesel

<u>Engine Family</u>	<u>Displacement</u>		<u>Exhaust Emission Control Systems and Special Features</u>
	<u>Liters</u>	<u>Cubic Inches</u>	
YJDXL12.5002 (650AA)	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):

	<u>Exhaust Emissions (g/bhp-h)</u>				<u>Smoke Opacity (%)</u>		
	<u>THC</u>	<u>CO</u>	<u>NOx</u>	<u>PM</u>	<u>Accel</u>	<u>Lug</u>	<u>Peak</u>
Standard	1.0	8.5	6.9	0.4	20	15	50
Certification	0.2	0.5	6.0	0.1	10	1	17

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 Summary Form

Manufacturer: Deere Power Systems Group of Deere & Company
Engine category: Nonroad CI
EPA Engine Family: YJDXL12.5002
Mfr Family Name: 650AA
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
6125AF001A	6125A	408@2100	204@2100	144@2100	1376@1400	265@1400	125@1400	EM, EC, CAC, TC
6125ADW01	6125A	283@2000	144@2000	98@2000	965@1500	190@1500	96@1500	EM, EC, CAC, TC
6125AF001B	6125A	339@2100	168@2100	119@2100	1125@1400	214@1400	101@1400	EM, EC, CAC, TC
6125AF001C	6125A	350@2100	175@2100	124@2100	1181@1400	226@1400	107@1400	EM, EC, CAC, TC
6125AF001D	6125A	375@2100	187@2100	133@2100	1268@1400	244@1400	115@1400	EM, EC, CAC, TC
6125AF001E	6125A	400@2100	199@2100	141@2100	1349@1400	260@1400	123@1400	EM, EC, CAC, TC
6125ADW03	6125A	283@2000	144@2000	98@2000	1002@1500	197@1500	100@1500	EM, EC, CAC, TC
6125AF001F	6125A	325@2100	160@2100	114@2100	1098@1400	214@1400	101@1400	EM, EC, CAC, TC
6125AF001G	6125A	325@2100	160@2100	114@2100	1098@1400	214@1400	101@1400	EM, EC, CAC, TC
6125AT801	6125A	350@2100	175@2100	124@2100	1181@1400	226@1400	107@1400	EM, EC, CAC, TC
6125AF001H	6125A	442@1800	225@1800	137@1800	N/A	N/A	N/A	EM, EC, CAC, TC
6125AF001I	6125A	402@1800	206@1800	125@1800	N/A	N/A	N/A	EM, EC, CAC, TC
6125AF001J	6125A	375@1800	189@1800	115@1800	N/A	N/A	N/A	EM, EC, CAC, TC