

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER U-R-4-50

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 by Sections 43000.5, 43013 and 43018 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-45-9;

IT IS ORDERED AND RESOLVED: That the following Deere Power Systems Group of Deere & Company 1999 model-year engine, with rated power between 175 and 750 horsepower, and exhaust emission control systems are certified as described below for use in heavy-duty off-road equipment:

Typical Equipment Usage: Other OEM Products

Fuel Type: Diesel

<u>Engine Family</u>	<u>Displacement</u> <u>Liters Cubic Inches</u>		<u>Exhaust Emission Control</u> <u>Systems and Special Features</u>
XJDXL06.8013 (350HB)	6.8	415	Turbocharger Charge Air Cooler

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

<u>Exhaust Emissions (g/bhp-hr)</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>
1.0	8.5	6.9	0.4	20	15	50

The THC, CO, NOx and PM exhaust emission certification values, in g/bhp-hr, and the opacity of smoke emission certification values, in percent (%), for this engine family are:

<u>Engine Family</u>	<u>Exhaust Emission (g/bhp-hr)</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>
XJDXL06.8013 (350HB)	0.2	0.6	5.5	0.2	8	6	14

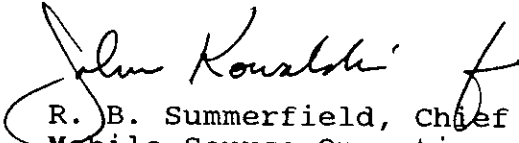
BE IT FURTHER RESOLVED: That the listed engine models comply with the "Exhaust Emission Standards and Test Procedures--Heavy-Duty Off-Road Diesel Cycle Engines" (Title 13, California Code of Regulations, Section 2423) for the aforementioned model year.

BE IT FURTHER RESOLVED: That the listed engine models also comply with the "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, Section 2425 et seq.).

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

Executed at El Monte, California this 11<sup>th</sup> day of January 1999.

  
R. B. Summerfield, Chief  
Mobile Source Operations Division

# Engine Model Summary Form

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

Engine category: **Nonroad Over 50 Hp**

EPA Engine Family: **XJDXL06.8013**

Mfr Family Name: **350HB**

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
6068HF250A	6068H	225@2400	110@2400	88@2400	681@1400	130@1400	60@1400	EM, TC, CAC
6068HF250B	6068H	170@2400	101@2400	80@2400	621@1400	119@1400	55@1400	EM, TC, CAC
6068HDW50	6068H	170@2200	83@2200	61@2200	590@1400	113@1400	48.5@1400	EM, TC, CAC
6068HT051	6068H	188@2100	89@2100	62@2100	539@1400	106@1400	49@1400	EM, TC, CAC
6068HT050	6068H	189@2200	90@2200	66@2200	583@1400	114@1400	52@1400	EM, TC, CAC
6068HT052	6068H	150@2150	93@2150	66@2150	554@1400	109@1400	50@1400	EM, TC, CAC
6068HDW53	6068H	170@2000	81@2000	54@2000	525@1100	101@1100	37@1100	EM, TC, CAC
6068HDW55	6068H	170@2000	95@2000	62.9@2000	582@1000	117@1000	38.7@1000	EM, TC, CAC
6068HF250C	6068H	198@1800	113@1800	67@1800	N/A	N/A	N/A	EM, TC, CAC

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