State of California AIR RESOURCES BOARD

EXECUTIVE ORDER U-R-4-74 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

Engine Family	Displa	acement	Exhaust Emission Control
	<u>Liters</u>	<u>Cubic Inches</u>	Systems and Special Features
YJDXL06.8013 (350HB)	6.8	415	Turbocharger Charge Air Cooler

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>Exh</u>	naust Em	issions (g/bhp-h)		<u>Smo</u>	ke Opacit	<u>y (%)</u>
	THC	<u>co</u>	<u>NOx</u>	<u>PM</u>	Accel	Lug	<u>Peak</u>
Standard	1.0	8.5	6.9	0.4	20	15	50
Certification	0.2	0.6	5.5	0.2	8	6	14

BE IT FURTHER RESOLVED: That the engine models listed on the attachments with engine power ratings less than 175 horsepower are not covered by this Executive Order.

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 modelyear.

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 _

_ day of January 2000.

R. B. Summerfield, Chief

Mobile Source Operations Division

Engine Model Sunary Form

Deere Power Systems Group of Deere & Company Manufacturer:

Engine category: Nonroad CI
EPA Engine Family: YJDXL06.8013

Mfr Family Name: 350HB

New Submission Process Code:

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9.Emission Control Device Per SAE J1930	EM, TC, CAC	EM, TC, CAC	EM, TC, CAC	EM, TC, CAC	EM, TC, CAC	EM, TC, CAC	EM, TC, CAC	EM, TC, CAC	EM, TC, CAC	
8.Fuel Rate: (lbs/hr)@peak torque I	60@1400	55@1400	49@1400	49@1400	52@1400	50@1400	37@1100	39@1000	N/A	
r.ruer hate. mm/stroke@peak torque	130@1400	119@1400	113@1400	106@1400	114@1400	109@1400	101@1100	117@1000	N/A	
6.Torque @ RPM (SEA Gross)	681@1400	621@1400	590@1400	539@1400	583@1400	554@1400	525@1100	568@1000	N/A	
5.Fuel Hate: (lbs/hr) @ peak HP (for diesels only)	88@2400	80@2400	61@2200	62@2100	66@2200	66@2150	54@2000	63@2000	67@1800	
4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	110@2400	101@2400	83@2200	89@2100	90@2200	93@2150	81@2000	95@2000	113@1800	
3.BHP@RPM (SAE Gross)	235@2400	225@2400	170@2200	180@2100	188@2200	189@2150	150@2000	170@2000	198@1800	
2.Enaine Model	6068H	6068H	6068H	6068H	6068H	6068H	6068H	H8909	H8909	
1 Fnaine Code	6068HF250A	GOGSHI ESCIT.	6068HDW50	6068HT051	6068HT050	6068HT052	6068HDW53	6068HDW55	6068HF250C	