

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER U-R-4-66  
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>	
YJDXL08.1019 (450HB)	8.1	494	Charge Air Cooler Turbocharger

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	0.5	0.9	6.2	0.2	15	5	24

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 24<sup>th</sup> 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: YJDXL08.1019

Mfr Family Name: 450HB

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
6081HF001D	6081H	335@2200	161@2200	119@2200	1035@1600	196@1600	106@1600	TC, CAC, EM
6081HN003	6081H	325@2200	156@2200	114@2200	1005@1600	187@1600	99@1600	TC, CAC, EM
6081HH005	6081H	325@2200	156@2200	114@2200	1005@1600	187@1600	99@1600	TC, CAC, EM
6081HH010	6081H	282@2200	127.7@2200	93@2200	874@1600	162.1@1600	86@1600	TC, CAC, EM
6081HH009	6081H	245@2200	117@2200	85.1@2200	755@1600	148@1600	78@1600	TC, CAC, EM
6081HH008	6081H	232@2200	108.3@2200	80@2200	720@1600	136.7@1600	74@1600	TC, CAC, EM
6081HH002	6081H	245@2200	117@2200	85@2200	755@1600	148@1600	78@1600	TC, CAC, EM
6081HH001	6081H	227@2200	107@2200	78@2200	694@1600	137@1600	72@1600	TC, CAC, EM
6081HH007	6081H	245@2200	115@2200	84@2200	760@1600	147@1600	78@1600	TC, CAC, EM

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