

File

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER U-R-4-87  
Relating to Certification of New Off-Road Compression-Ignition Engines

DEERE POWER SYSTEMS GROUP OF DEERE & COMPANY

Pursuant to the authority vested in the Air Resources Board by Sections 43013, 43018, 43101, 43102, 43104 and 43105 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 compression-ignition engine and emission control system produced by the manufacturer are certified as described below for use in off-road equipment:

Model Year: 2001

Typical Equipment Usage: Loader, tractor and generator set

Fuel Type: Diesel

	Engine		
	Displacement	Useful Life	Emission Control Systems
<u>Engine Family</u>	<u>(liters)</u>	<u>(hours)</u>	<u>and Special Features</u>
1JDXL08.1007	8.1	8000	Direct Diesel Injection 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 exhaust emission certification standards and certification values for hydrocarbons (HC), oxides of nitrogen (NOx), or non-methane hydrocarbons plus oxides of nitrogen (NMHC+NOx), carbon monoxide (CO), and particulate matter (PM) (units are expressed in grams per kilowatt-hour (g/kw-hr)), 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):

Engine Power Rating (kw)	Emission Standard Category		Exhaust Emissions (g/kw-hr)					Smoke Opacity (%)		
			HC	NOx	NMHC+NOx	CO	PM	Accel	Lug	Peak
130≤KW<225	Tier 1	Standard	1.3	9.2	N/A	11.4	0.54	20	15	50
		Certification	0.5	8.0	--	1.3	0.20	12	4	18

BE IT FURTHER RESOLVED: That the listed engine models also comply with "Emission Control Labels— 1996 and Later Off-Road Compression-Ignition 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 and 2426).

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

Executed at El Monte, California this 6<sup>th</sup> day of February 2001.

  
R. B. Summerfield, Chief  
Mobile Source Operations Division

ATTACHMENT

Engine Model Summary Form

(pg 1 of 2)

EQ# U-R-4-87

Manufacturer: Deere Power Systems Group of Deere & Company

Engine category: Nonroad CI

EPA Engine Family: 1JDXL08.1007

Mfr Family Name: 450HA

Process Code: New Submission

130 ≤ kW ≤ 225

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
6081HF001A	6081H	300@2200	139@2200	103@2200	1024@1200	191@1200	77@1200	DDE, TC, CAC, EM
6081HDW01	6081H	217@2190	113.3@2190	84@2190	885@900	180.1@900	54@900	
6081HDW04	6081H	182@2200	94@2200	69@2200	841@1000	164@100	55@1000	
6081HDW05	6081H	198@2200	102@2200	75@2200	786@1400	144.5@1400	67@1400	
6081HDW06	6081H	231@2200	116.5@2200	85@2200	789@1400	146@1400	68@1400	
6081HF001C	6081H	300@2200	139@2200	103@2200	959@1400	172@1400	81@1400	
6081HRW01	6081H	268@2200	122@2200	90@2200	871@1200	170@1200	69@1200	
6081HRW03	6081H	275@2200	125@2200	93@2200	892@1200	175@1200	71@1200	
6081HRW05	6081H	266@2100	130@2100	90@2100	900@1200	181@1200	72@1200	
6081HRW17	6081H	283@2200	134@2200	99@2200	932@1400	173.2@1400	82@1400	
6081HRW18	6081H	283@2200	134@2200	99@2200	932@1400	173.2@1400	82@1400	
6081HT001	6081H	249@2000	136.5@2000	90@2000	950@1200	181@1200	72@1200	

EPA cert No: 4JDX-NR7-01-03

# Engine Model Summary Form

Attachment (pg 2 of 2)

ED# U-R-4-87

Manufacturer: Deere Power Systems Group of Deere & Company  
 Engine category: Nonroad CI  
 EPA Engine Family: 1JDXL08.1007  
 Mfr Family Name: 450HA  
 Process Code: Running Change

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
6081HRW40	6081H	283@2200	211 134@2200	99@2200	932@1400	173.2@1400	82@1400	DDC TC, CAC, EM

Add per R/C dated 12/19/00