

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER U-R-4-89
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: 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>
1JDXL08.1009	8.1	8000	Direct Diesel Injection Turbocharger

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):

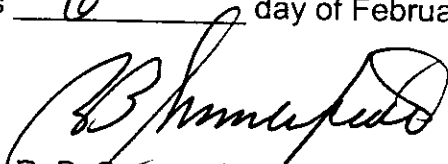
Engine Power <u>Rating (kw)</u>	Emission Standard <u>Category</u>		Exhaust Emissions (g/kw-hr)					Smoke Opacity (%)		
			<u>HC</u>	<u>NOx</u>	<u>NMHC+NOx</u>	<u>CO</u>	<u>PM</u>	<u>Accel</u>	<u>Lug</u>	<u>Peak</u>
37≤KW<130	Tier 1	Standard	N/A	9.2	N/A	N/A	N/A	20	15	50
		Certification	--	8.3	--	--	--	12	11	17
130≤KW<225	Tier 1	Standard	1.3	9.2	N/A	11.4	0.54	20	15	50
		Certification	0.8	8.3	--	2.1	0.27	12	11	17

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 6th day of February 2001.



R. B. Summerfield, Chief
Mobile Source Operations Division

Engine Model Summary Form

ED# U-R-L-89

Manufacturer: **Deere Power Systems Group of Deere & Company**
 Engine category: **Nonroad CI**
 EPA Engine Family: **1JDXL08.1009**
 Mfr Family Name: **450TA**
 Process Code: **New Submission**

ATTACHMENT

(pgs 1 of 2)

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
6081TF001A	6081T	217@2200	109@2200	80@2200	678@1200	147@1200	59@1200	EM, TC, DD1
6081TF001B	6081T	200@2200	101@2200	74@2200	623@1300	130@1300	56@1300	EM, TC, DD1
6081TRW01	6081T	161@2100	84@2100	58@2100	563@1400	114@1400	52@1400	EM, TC, DD1
6081TRW02	6081T	181@2100	95@2100	65@2100	637@1400	125@1400	57@1400	EM, TC, DD1
6081TDW01	6081T	172@2200	88@2200	64@2200	573@1400	116@1400	54@1400	EM, TC, DD1
6081TF001D	6081T	172@2200	88@2200	64@2200	573@1400	116@1400	54@1400	EM, TC, DD1
6081TF001C	6081T	211@1800	127@1800	76@1800	NA	NA	NA	EM, TC, DD1
6081TRW03/12	6081T	166@2100	86.8@2100	62@2100	603@1400	120.6@1400	57@1400	EM, TC, DD1
6081TRW04/12	6081T	181@2100	94@2100	67@2100	656@1400	132.7@1400	63@1400	EM, TC, DD1
6081TRW09	6081T	166@2100	86@2100	60@2100	603@1300	121.4@1300	52@1300	EM, TC, DD1
6081TRW10	6081T	181@2100	91.6@2100	65@2100	656@1300	132.7@1300	57@1300	EM, TC, DD1
6081TF001E	6081T	260@1800	152.8@1800	93@1800	NA	NA	NA	EM, TC, DD1
6081TRW05	6081T	183@2100	96.7@2100	62@2100	603@1400	123.8@1400	57@1400	EM, TC, DD1
6081TRW06	6081T	200@2100	104.9@2100	67@2100	656@1400	135.7@1400	63@1400	EM, TC, DD1
6081TRW07	6081T	183@2100	96.7@2100	62@2100	603@1400	123.8@1400	57@1400	EM, TC, DD1
6081TRW08	6081T	200@2100	104.9@2100	67@2100	656@1400	135.7@1400	63@1400	EM, TC, DD1
6081TRW12A	6081T	166@2100	86.8@2100	62@2100	603@1400	120.6@1400	57@1400	EM, TC, DD1
6081TRW12B	6081T	181@2100	94@2100	67@2100	656@1400	132.7@1400	63@1400	EM, TC, DD1
6081TRW12C	6081T	183@2100	96.7@2100	62@2100	603@1400	123.8@1400	57@1400	EM, TC, DD1
6081TRW12D	6081T	200@2100	104.9@2100	67@2100	656@1400	135.7@1400	63@1400	EM, TC, DD1
6081TF001F	6081T	200@2200	98@2200	72@2200	633@1400	122@1400	58@1400	EM, TC, DD1

EPA cert NO: JDX-NRB-01-07

Engine Model Summary Form

Manufacturer: **Deere Power Systems Group of Deere & Company**
 Engine category: **Nonroad CI**
 EPA Engine Family: **1JDXL08.1009**
 Mfr Family Name: **450TA**
 Process Code: **Running Change**

Attachment (2 of 2.)

ED# U-R-4-89

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
6081TRW11	6081T	181@2100	135 91.6@2100	65@2100	656@1300	132.7@1300	57@1300	EM, TC

Added per MC 12/19/00