

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER U-R-4-79  
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 pump

Fuel Type: Diesel

	Engine		
<u>Engine Family</u>	Displacement <u>(liters)</u>	Useful Life <u>(hours)</u>	Emission Control Systems and Special Features
1JDXL02.9018	2.9	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):

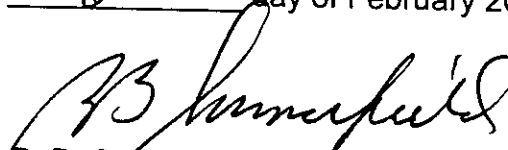
Engine Power Rating (kw)	Emission Standard Category		Exhaust Emissions (g/kw-hr)					Smoke Opacity (%)		
			HC	NOx	NMHC+NOx	CO	PM	Accel	Lug	Peak
37≤KW<130	Tier 1	Standard	N/A	9.2	N/A	N/A	N/A			
		Certification	--	7.6	--	--	--	20	15	50
								10	4	22

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

# Engine Mode Summary Form

ED# U-R-4-79

Manufacturer: Deere Power Systems Group of Deere & Company  
 Engine category: Nonroad CI  
 EPA Engine Family: 1JDXL02.9018  
 Mfr Family Name: 320TA  
 Process Code: New Submission

ATTACHMENT

37 ≤ kW ≤ 130

1. Engine Code	2. Engine Model	3. BHP@RPM (SAE Gross) kW	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
3029TF180A	3029T	84@2500 63	81@2500	33@2500	218@1600	93@1600	24@1600	EM, TC, DD1
3029TKV50	3029T	64@2400 48	64@2400	25@2400	176@1500	74@1500	18@1500	EM, TC, DD1
3029TKV51	3029T	64@2400 48	64@2400	25@2400	176@1500	74@1500	18@1500	EM, TC, DD1
3029TKV52	3029T	72@2400 54	70.7@2400	28@2400	192@1400	81.8@1400	20@1400	EM, TC, DD1
3029TKV53	3029T	72@2400 54	70.7@2400	28@2400	192@1400	81.8@1400	20@1400	EM, TC, DD1
3029TF150B	3029T	70@2500 52	68@2500	28@2500	184@1600	78.7@1600	18@1600	EM, TC, DD1
3029TF180C	3029T	70@2500 52	68@2500	28@2500	184@1600	78.7@1600	18@1600	EM, TC, DD1
3029TF152	3029T	79@2500 59	74.8@2500	31@2500	203@1500	88.3@1500	22@1500	EM, TC, DD1
3029TF150C	3029T	79@2500 59	76@2500	31@2500	203@1500	90.7@1500	22@1500	EM, TC, DD1
3029TF180D	3029T	79@2500 59	76@2500	31@2500	203@1500	90.7@1500	22@1500	EM, TC, DD1
3029TFG51	3029T	70@2500 52	68@2500	23@2500	184@1600	78.7@1600	21@1600	EM, TC, DD1
3029TLV52	3029T	64@2400 48	64@2400	25@2400	176@1500	74@1500	18@1500	EM, TC, DD1
3029TF150D	3029T	64@1800 48	77.5@1800	23@1800	NA	NA	NA	EM

EPA cert No:

JDX-NR4-a-14

# Engine Model Summary Form

Manufacturer: Deere Power Systems Group of Deere & Company

Engine category: Nonroad CI

EPA Engine Family: 1JDXL02.9018

Mfr Family Name: 320TA

Process Code: Running Change

*ED# 4-R-4-79*

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
3029TAT50	3029T	71@2300	71.7@2300	27@2300	195@1500	88.2@1500	20@1500	EM, TC
3029TFG50	3029T	71@2300	71.7@2300	27@2300	195@1500	88.2@1500	20@1500	EM, TC