

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER U-R-4-86  
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: Other Industrial Equipment

Fuel Type: Diesel

	Engine		
<u>Engine Family</u>	Displacement <u>(liters)</u>	Useful Life <u>(hours)</u>	Emission Control Systems and Special Features
1JDXL06.8016	6.8	8000	Direct Diesel Injection

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 (%)		
			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	20	15	50
		Certification	--	7.6	--	--	--	2	3	5

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 Model Primary Form

ED# U-R-4-86

Manufacturer: **Deere Power Systems Group of Deere & Company**  
 Engine category: **Nonroad CI**  
 EPA Engine Family: **1JDXL06.8016**  
 Mfr Family Name: **350DA**  
 Process Code: **New Submission**

## ATTACHMENT

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
6068DF150A	6068D	133@2500 91	60@2500	50@2500	342@1100	73@1100	27@1100	DI EM
6068DF150B	6068D	125@2500 93	56@2500	47@2500	330@1200	66@1200	26@1200	EM
4045DT053	4045D	78@2200 58	60@2200	29@2200	223@1200	72@1200	19@1200	EM
4045DF153	4045D	83@2400 62	60@2400	31@2400	223@1100	71@1100	17@1100	EM
*4045DLV50	4045D	<del>81@2400</del> 60	<del>58@2400</del>	<del>31@2400</del>	<del>223@1100</del>	<del>71@1100</del>	<del>17@1100</del>	<del>EM</del>
4045DKV50	4045D	81@2400 60	58@2400	31@2400	223@1100	71@1100	17@1100	EM
4045DF150C	4045D	78@2200 58	60@2200	29@2200	230@1200	72@1200	19@1200	EM
4045DF150B	4045D	80@2500 60	55@2500	30@2500	218@1200	68@1200	18@1200	EM
4045DF150A	4045D	84@2500 63	58@2500	32@2500	229@1200	70@1200	19@1200	EM
4045DF150E	4045D	81@2400 60	58@2400	30@2400	223@1100	71@1100	17@1100	EM
4045DF150D/158	4045D	71@1800 53	67@1800	27@1800	NA	NA	NA	EM
4045DF150F	4045D	48@2250 36	37.4@2250	19@2250	214@1000	65@1000	15@1000	EM
4045DF150G	4045D	70@2500 52	48.2@2500	27@2500	207@1000	62.9@1000	14@1000	EM
6068DT850	6068D	125@2500 93	56@2500	47@2500	330@1200	66@1200	26@1200	EM
4045DKV51	4045D	81@2400 60	58@2400	31@2400	223@1100	71@1100	17@1100	EM
4045DFG50	4045D	80@2300 60	62.3@2300	31@2300	222@1200	69.3@1200	18@1200	EM

EPA cert No: 1JDXL06.8016

\* removed for P/C 12/19/00

# Engine Model Summary Form

ED# U-R-4-86

Manufacturer: Deere Power Systems Group of Deere & Company

Engine category: Nonroad CI

EPA Engine Family: 1JDXL06.8016

Mfr Family Name: 350DA

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
4045DL070	4045D	78 @ 2300	60 @ 2300	30 @ 2300	221 @ 1400	68.3 @ 1400	21 @ 1400	EM
6068DL070	6068D	115 @ 2300	55.1 @ 2300	41 @ 2300	319 @ 1400	63.8 @ 1400	29 @ 1400	EM