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		
Engine Family 1JDXL06.8016	Displacement (liters) 6.8	Useful Life (hours) 8000	Emission Control Systems and Special Features 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> 37 <u><</u> KW<130	Emission Standard <u>Category</u> Tier 1	Exhaust Emissions (g/kw-hr) Smoke Opacity							ity (%)
		<u></u>	<u>HC</u> N/A 	<u>NOx</u> 9.2 7.6	NMHC+NOx N/A	<u>CO</u> N/A 	PM N/A	<u>Accel</u> 20 2	<u>Lug</u> 15 3

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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

day of February 2001

R. B. Summerfield, Chief

Mobile Source Operations Division

Engine Model ? nmary Form

ED# 4-8-4-86

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

4045D 4045D 80@2300 62.3@2300 31@2300 222@1200 69.3@1200 18@1200	1.Engine Code 6068DF150A 6068DF150B 4045DF153 ★1045DF153 ★1045DF150C 4045DF150B 4045DF150B 4045DF150E 4045DF150E 4045DF150F 4045DF150G 6068DT850 4045DKV51 4045DFG50	2 Engine Model 6068D 6068D 4045D	(SAE Gross) W 133@2500 99 125@2500 93 78@2200 58 83@2400 60 81@2400 60 78@2200 58 80@2500 60 84@2500 63 81@2400 60 71@1800 53 48@2250 36 70@2500 57 125@2500 93 81@2400 60	4.Fuel Rate: nm/stroke @ peak HP (for diesel only) 60@2500 56@2500 60@2200 60@2400 -58@2400 60@2200 55@2500 58@2400 67@1800 37.4@2250 48.2@2500 58@2400 662500 58@2400	5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only) 50@2500 47@2500 29@2200 31@2400 31@2400 29@2200 30@2500 32@2500 32@2500 32@2500 27@1800 19@2250 27@2500 47@2500 31@2400	6.Torque @ RPM (SEA Gross) 342@1100 330@1200 223@1200 223@1100 223@1100 230@1200 218@1200 229@1200 229@1200 223@1100 NA 214@1000 207@1000 330@1200 223@1100	7.Fuel Rate: mm/stroke@peak torque 73@1100 66@1200 72@1200 71@1100 74@1400 71@1100 72@1200 68@1200 70@1200 71@1100 NA 65@1000 62.9@1000 66@1200 71@1100	8.Fuel Rate: (lbs/hr)@peak torque 27@1100 26@1200 19@1200 17@1100 17@1100 19@1200 18@1200 19@1200 17@1100 NA 15@1000 14@1000 26@1200 17@1100	9.Emission Control Device Per SAE J193 DDT EM E
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EPA cert No: 1 JOX LOG. 8016.

* Removed per P/C 12/19/00

Engine Model Summary Form

Manufacturer: Engine category: Deere Power Systems Group of Deere & Company

Nonroad CI

EPA Engine Family. 1JDXL06.8016

Mfr Family Name: 350DA

Process Code:

Running Change

4.Fuel Rate:

5. Fuel Rate:

6.Torque @ RPM

7.Fuel Rate: mm/stroke@peak

63.8@1400 29@1400

ED#U-P-4-86

9.Emission Control

1.Engine Code 2. Engine Model 3.BHP@RPM (SAE Gross) mm/stroke @ peak HP

(lbs/hr) @ peak HP

torque

8.Fuel Rate:

(for diesel only)

(for diesels only)

41.02300

(SEA Gross)

(lbs/hr)@peak torque

Device Per SAE J1930

6068DL070

115@2300 6068D

£55.1@2300

319@1400