California Environmental Protection Agency AIR RESOURCES BOARD	DEERE POWER SYSTEMS GROUP OF DEERE & COMPANY	EXECUTIVE ORDER U-R-004-0121 New Off-Road Compression-Ignition Engines

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. Production engines shall be in all material respects the same as those for which certification is granted.

MODEL YEAR	ENGINE FAMILY	DISPLACEMENT (liters)	FUEL TYPE	USEFUL LIFE (hours)
2002	2JDXL06.8016	6.8, 4.5	Diesel	8000

SPECIAL FEATURES & EMISSION CONTROL SYSTEMS	TYPICAL EQUIPMENT APPLICATION
Turbocharger (some models), Direct Diesel Injection	Loaders, Tractor, Dozer, Generator Set, Industrial Equipment

The engine models and codes are attached.

The following are the exhaust certification standards (STD) and certification levels (CERT) for hydrocarbon (HC), oxides of nitrogen (NOx), or non-methane hydrocarbon plus oxides of nitrogen (NMHC+NOx), carbon monoxide (CO), and particulate matter (PM) in grams per kilowatt-hour (g/kw-hr), and the opacity-of-smoke certification standards and certification levels in percent (%) during acceleration (Accel), lugging (Lug), and the peak value from either mode (Peak) for this engine family (Title 13, California Code of Regulations, (13 CCR) Section 2423):

RATED POWER CLASS	EMISSION STANDARD CATEGORY		EXHAUST (g/kw-hr)					OPACITY (%)		
			HC	NOx	NMHC+NOx	CO	PM	ACCEL	LUG	PEAK
37≤ KW <75	Tier 1	STD	N/A	9.2	N/A	N/A	N/A	20	15	50
75≤ KW <130	Tier 1	STD	N/A	9.2	N/A	N/A	N/A	20	15	50
		CERT	--	7.6	--	--	--	2	3	5

BE IT FURTHER RESOLVED: That for the listed engine models, the manufacturer has submitted the information and materials to demonstrate certification compliance with 13 CCR Section 2424 (emission control labels), and 13 CCR Sections 2425 and 2426 (emission control system warranty).

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

This Executive Order is only granted to the engine family and model-year listed above. Engines in this family that are produced for any other model-year are not covered by this Executive Order.

Executed at El Monte, California on this 27th day of December 2001.

R. B. Summerfield, Chief
Mobile Source Operations Division

Engine Model S[illegible]ary Form

EOC# U-R-4-121

Manufacturer: **Deere Power Systems Group of Deere and**

Engine category: **Nonroad CI**

EPA Engine Family: **2JDXL06.8016**

Mfr Family Name: **350DA**

Process Code: **New Submission**

ATTACHMENT 1 of 1

1.Engine Code	2.Engine Model	(KW)	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
* 6068DF150A	6068D	99.1	132.76@2500	60.00@2500	50.71@2500	342.18@1100	73@1100	26.46@1100	EM DDI
4045DF150F	4045D	36.0	48.28@2250	37.40@2250	17.64@2250	213.86@1000	65@1000	14.55@1000	EM
4045DF150G	4045D	52.0	69.73@2500	48.20@2500	26.46@2500	207.23@1000	62.9@1000	14.11@1000	EM
6068DT850	6068D	93.1	124.72@2500	56.00@2500	46.30@2500	329.65@1200	66@1200	26.46@1200	EM
6068DL050	6068D	81.1	108.62@2300	54.20@2300	39.68@2300	329.65@1400	67.6@1400	33.36@1400	EM
4045DF150B	4045D	60.0	80.46@2500	55.00@2500	30.86@2500	217.55@1200	68@1200	17.64@1200	EM
4045DF150A	4045D	63.0	84.48@2500	58.00@2500	33.07@2500	228.61@1200	70@1200	17.64@1200	EM
4045DF150E	4045D	60.5	81.13@2400	58.00@2400	30.86@2400	223.45@1100	71@1100	17.64@1100	EM
4045DF150D/1	4045D	53.0	71.07@1800	67.00@1800	26.46@1800				EM
4045DRT50	4045D	52.0	69.73@2350	51.80@2350	26.46@2350	193.22@1000	64.5@1000	14.11@1000	EM TC
4045DRT51	4045D	60.0	80.46@2350	60.40@2350	30.86@2350	219.76@1200	70.4@1200	18.52@1200	EM TC
6068DRT50	6068D	81.6	109.29@2200	56.20@2200	39.68@2200	331.86@1300	71.5@1300	30.42@1300	EM TC
4045DFG50	4045D	60.0	80.46@2300	62.30@2300	30.86@2300	221.98@1200	69.3@1200	17.64@1200	EM
4045DL070	4045D	58.0	77.78@2300	60.00@2300	28.66@2300	220.50@1400	68.3@1400	20.75@1400	EM
6068DL070	6068D	85.6	114.66@2300	55.10@2300	39.68@2300	318.58@1400	63.8@1400	29.10@1400	EM
6068DF150B	6068D	93.1	124.72@2500	56.00@2500	46.30@2500	329.65@1200	66@1200	26.46@1200	EM
4045DT053	4045D	58.0	77.78@2200	60.00@2200	28.66@2200	222.71@1200	72@1200	19.84@1200	EM
4045DF153	4045D	62.0	83.14@2400	60.00@2400	30.86@2400	222.71@1100	71@1100	17.64@1100	EM
4045DF150C	4045D	58.0	77.78@2200	60.00@2200	28.66@2200	230.09@1200	72@1200	19.84@1200	EM