File

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER U-R-4-29

Relating to Certification of New Heavy-Duty Off-Road Equipment Engines

DEERE POWER SYSTEM GROUP OF DEERE & COMPANY

Pursuant to the authority vested in the Air Resources Board by Sections 43000.5, 43013 and 43018 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 Deere Power System Group of Deere & Company 1998 model-year engine, with rated power between 175 and 750 horsepower, and exhaust emission control systems are certified as described below for use in heavy-duty off-road equipment:

Typical Equipment Usage: Loader, Tractor, Dozer, Pump, Compressor, Generator, and OEM Product

Fuel Type: Diesel

Engine Family	Displacements in Liters	Exhaust Emission Control Systems and Special Features
WJDXL06.8014 (350TA)	6.8 / 4.5	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 total hydrocarbons (THC), carbon monoxide (CO), nitrogen oxides (NOx), and particulate matters (PM) certification exhaust emission standards, in grams per brake horsepower-hour (g/bhp-hr), and the opacity of smoke emission standards, in percent (%), during acceleration (Accel), lugging (Lug), and peak (Peak) modes, for this engine family are (Title 13, California Code of Regulations, Section 2423):

Exhaust Emissions (g/bhp-hr)				Smoke Opacity (%)		
THC	CO	NOx	PM	Accel	Lug	Peak
1.0	8.5	6.9	0.4	20	15	50

The THC, CO, NOx and PM exhaust emission certification values, in g/bhp-hr, and the opacity of smoke emission certification values, in percent (%), for this engine family are:

	Exhaust Emission (g/bhp-hr)				Smoke Opacity (%)		
Engine Family	THC	CO	NOx	PM	Accel	Lug	Peak
WJDXL06.8014 (350TA)	0.3	0.7	5.4	0.2	8	7	18

BE IT FURTHER RESOLVED: That the listed engine models comply with the "Exhaust Emission Standards and Test Procedures--Heavy-Duty Off-Road Diesel Cycle Engines" (Title 13, California Code of Regulations, Section 2423) for the aforementioned model year.

BE IT FURTHER RESOLVED: That the listed engine models also comply with the "Emission Control Labels--1996 and Later Heavy-Duty Off-Road Diesel Cycle 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, Section 2425 et seq.).

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

Executed at El Monte, California this 17th day of February 1998.

R. B. Summerfield, Chief
Mobile Source Operations Division

LARGE ENGINE MODEL SUMMARY

11/13/97

Manufacturer: Deere Power Systems Group of Deere & Company

Process Code: **New Submission**

EPA Engine Family: **WJDXL06.8014**

Manufacturer Family Name: **350TA**

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
6068TF250A		194@2400	90@2400	71@2400	507@1400	104@1400	48@1400	EM, TC
4045TF150C		100@1800	88@1800	35@1800	N/A	N/A	N/A	EM, TC
4045TE050		100@2500	69@2500	38@2500	275@1400	83@1400	26@1400	EM, TC
4045TF150B		100@2500	69@2500	38@2500	275@1400	83@1400	26@1400	EM, TC
4045TN050		106@2200	78@2200	38@2200	291@1400	88@1400	27@1400	EM, TC
4045TF250B		113@1800	100@1800	40@1800	N/A	N/A	N/A	EM, TC
4045TDW50		114@2200	83@2200	40@2200	328@1400	103@1400	31@1400	EM, TC
4045TF150A		115@2500	77@2500	43@2200	291@1400	91@1400	28@1400	EM, TC
4045TF250A		125@2400	87@2400	46@2400	328@1400	101@1400	31@1400	EM, TC
6068TRW50		118@2100	60@2100	42@2100	384@1300	76@1300	33@1300	EM, TC
6068TT050		123@2200	61@2200	44@2200	388@1200	76@1200	30.4@1200	EM, TC
6068TDW51		126@2200	62@2200	45@2200	400@1300	80@1300	34@1300	EM, TC
6068TDW54		126@2200	62@2200	45@2200	400@1300	80@1300	34@1300	EM, TC
6068TRW51		129@2100	66@2100	46@2100	419@1300	84@1300	36@1300	EM, TC
6068TDW50		142@2200	69@2200	50.5@2200	446@1400	90@1400	42@1400	EM, TC
6068TRW52		141@2100	72@2100	50@2100	458@1300	92@1300	40@1300	EM, TC
6068TDW56		148@2100	76@2100	53@2100	442@1400	90@1400	39@1400	EM, TC
6068TF150C		150@1800	86@1800	51@1800	N/A	N/A	N/A	EM, TC
6068TF150B		155@2500	70@2500	58@2500	425@1200	86@1200	34@1200	EM, TC
6068TN051		157@2200	76@2200	55@2200	431@1400	86@1400	40@1400	EM, TC
6068TF250C		166@1800	94@1800	56@1800	N/A	N/A	N/A	EM, TC
6068TF150A		170@2500	78@2500	65@2500	448@1300	94@1300	41@1300	EM, TC
6068TN050		185@2400	86@2400	68@2400	483@1400	100@1400	46@1400	EM, TC
6068TF250B		185@2400	86@2400	68@2400	483@1400	100@1400	46@1400	EM, TC
6068TT052		148@2100	76@2100	52.8@2100	441@1300	90@1300	38.5@1300	EM, TC
6068TE050		172@2300	82@2300	62.5@2300	482@1400	98@1400	45.3@1400	EM, TC
6068TF150D		157@2200	76@2200	55@2200	431@1400	86@1400	40@1400	EM,TC
6068TRW53		118@2100	60@2100	42@2100	384@1300	76@1300	33@1300	EM, TC
6068TRW54		129@2100	66@2100	46@2100	419@1300	84@1300	36@1300	EM,TC
4045TL057		114@2300	82@2300	41@2300	334@1600	102@1600	36@1600	EM,TC
4045TL056		109@2300	79@2300	39@2300	331@1400	104@1400	32@1400	EM, TC
6068TL053		117@2300	58@2300	44@2300	365@1300	73@1300	31@1300	EM, TC
4045TL062		105@2300	76@2300	38@2300	319@1300	100@1300	29@1300	EM, TC

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LARGE ENGINE MODEL SUMMARY

11/11/97

Manufacturer: Deere Power Systems Group of Deere and Company

Process Code: **New Sub - continued**

EPA Engine Family: **WJDXL06.8014**

Manufacturer Family Name: **350TA**

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
4045TT062		89@2100	69@2100	32.1@2100	282@1200	87@1200	23.1@1200	EM, TC
4045TT068		89@2100	69@2100	32.1@2100	282@1200	87@1200	23.1@1200	EM, TC
4045TLV50		89@2400	63@2400	33@2400	242@1400	73@1400	22.2@1400	EM, TC
4045TL054		90@2300	66@2300	33.1@2300	274@1300	85@1300	24.1@1300	EM, TC
4045TT053		98@2200	72@2200	35.1@2200	299@1200	94@1200	25@1200	EM, TC
4045TT066		98@2200	72@2200	35.1@2200	299@1200	94@1200	25@1200	EM, TC
4045TT063		99@2100	77@2100	35.5@2100	307@1200	98@1200	25.9@1200	EM, TC
4045TT069		99@2100	77@2100	35.5@2100	307@1200	98@1200	25.9@1200	EM, TC
4045TL055		99@2300	72@2300	36.1@2300	303@1400	93@1400	28.4@1400	EM, TC
4045TF150E		89@2200	66@2200	31.9@2200	272@1300	84@1300	24.1@1300	EM, TC
4045TF150D		98@2200	72@2200	35.1@2200	299@1200	94@1200	24.9@1200	EM, TC

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