

File

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER U-R-4-44

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

DEERE POWER SYSTEMS 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 Systems Group of Deere & Company 1999 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: Loaders, Tractor, Dozer, Pump, Compressor, Generator Set, and OEM Product

Fuel Type: Diesel

<u>Engine Family</u>	<u>Displacement</u>		<u>Exhaust Emission Control Systems and Special Features</u>
	<u>Liters</u>	<u>Cubic Inches</u>	
XJDXL06.8014 (350TA)	6.8/4.5	415/275	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):

<u>Exhaust Emissions (g/bhp-hr)</u>				<u>Smoke Opacity (%)</u>		
<u>THC</u>	<u>CO</u>	<u>NOx</u>	<u>PM</u>	<u>Accel</u>	<u>Lug</u>	<u>Peak</u>
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:

<u>Engine Family</u>	<u>Exhaust Emission (g/bhp-hr)</u>				<u>Smoke Opacity (%)</u>		
	<u>THC</u>	<u>CO</u>	<u>NOx</u>	<u>PM</u>	<u>Accel</u>	<u>Lug</u>	<u>Peak</u>
XJDXL06.8014 (350TA)	0.3	0.7	5.4	0.2	8	7	18

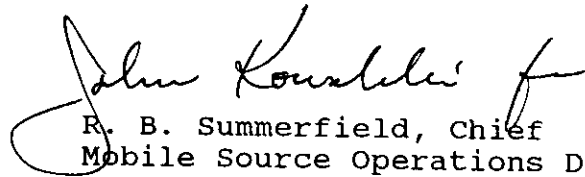
BE IT FURTHER RESOLVED: That the listed engine models comply with the "Exhaust Emission Standards and Test Procedures--Heavy-Duty Off-Road Diesel Cycle Engines" (Title 13, California Code of Regulations, Section 2423) for the aforementioned model year.

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 11th day of January 1999.


R. B. Summerfield, Chief
Mobile Source Operations Division

Engine Model Summary Form

Manufacturer: **Deere Power Systems Group of Deere & Company**

Engine category: **Nonroad Over 50 Hp**

EPA Engine Family: **XJDXL06.8014**

Mfr Family Name: **350TA**

Process Code: **New Submission**

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	6068T	194@2400	90@2400	117@2400	507@1400	104@1400	79@1400	EM, TC
4045TE050	4045T	100@2500	69@2500	62@2500	275@1400	83@1400	43@1400	EM, TC
4045TF150B	4045T	100@2500	69@2500	62@2500	275@1400	83@1400	43@1400	EM, TC
4045TN050	4045T	106@2200	78@2200	62@2200	291@1400	88@1400	44@1400	EM, TC
4045TDW50	4045T	114@2200	83@2200	66@2200	328@1400	103@1400	51@1400	EM, TC
4045TF150A	4045T	115@2500	77@2500	71@2500	291@1400	91@1400	46@1400	EM, TC
4045TF250A	4045T	125@2400	87@2400	76@2400	328@1400	101@1400	51@1400	EM, TC
6068TRW50	6068T	118@2100	60@2100	69@2100	384@1300	76@1300	54@1300	EM, TC
6068TT050	6068T	123@2200	61@2200	72@2200	388@1200	76@1200	50@1200	EM, TC
6068TDW51	6068T	126@2200	62@2200	74@2200	400@1300	80@1300	56@1300	EM, TC
6068TDW54	6068T	126@2200	62@2200	74@2200	400@1300	80@1300	56@1300	EM, TC
6068TRW51	6068T	129@2100	66@2100	76@2100	419@1300	84@1300	59@1300	EM, TC
6068TDW50	6068T	142@2100	69@2100	83@2100	446@1400	90@1400	69@1400	EM, TC
6068TRW52	6068T	141@2100	72@2100	82@2100	458@1300	92@1300	66@1300	EM, TC
6068TDW56	6068T	148@2100	76@2100	87@2100	442@1400	90@1400	64@1400	EM, TC
6068TF150B	6068T	155@2500	70@2500	95@2500	425@1200	86@1200	56@1200	EM, TC
6068TN051	6068T	157@2200	76@2200	91@2200	450@1300	88@1300	38@1300	EM, TC
6068TF150A	6068T	170@2500	78@2500	107@2500	448@1200	94@1200	67@1200	EM, TC
6068TN050	6068T	185@2400	86@2400	112@2400	494@1400	100@1400	76@1400	EM, TC
6068TF250B	6068T	185@2400	86@2400	112@2400	494@1400	100@1400	76@1400	EM, TC
6068TT052	6068T	148@2100	76@2100	87@2100	441@1300	90@1300	63@1300	EM, TC
6068TE050	6068T	172@2300	82@2300	103@2300	482@1400	98@1400	74@1400	EM, TC
6068TF150D	6068T	157@2200	76@2200	90@2200	450@1300	88@1300	38@1300	EM, TC
6068TRW53	6068T	118@2100	60@2100	69@2100	384@1300	76@1300	54@1300	EM, TC
6068TRW54	6068T	129@2100	66@2100	76@2100	419@1300	84@1300	59@1300	EM, TC
4045TT061	4045T	78@2100	62@2100	47@2100	263@1200	80@1200	35@1200	EM, TC

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