## State of California AIR RESOURCES BOARD

## EXECUTIVE ORDER U-R-4-75 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 at Sections 43000.5, 43013, and 43018 of the Health and Safety Code; and

Pursuant to the authority vested in the undersigned at Sections 39515 and 39516 of the Health and Safety Code and Executive Order G-45-9; and

IT IS ORDERED AND RESOLVED: That the following diesel engines and exhaust emission control systems produced by the manufacturer are certified as described below for use in heavy-duty off-road equipment:

Model Year: 2000

Typical Equipment Usage: Loaders, Tractor, Dozer, Pump, Compressor and Generator Set

Engine Power Ratings Range: 175 - 750 horsepower, inclusive

Fuel Type: Diesel

	Displa	cement	Exhaust Emission Control
Engine Family	Liters	<u>Cubic Inches</u>	Systems and Special Features
YJDXL06.8014 (350TA)	6.8/4.5	415/274	Turbocharger

The 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 in grams per brake horsepower-hour (g/bhp-h) for total hydrocarbons (THC), carbon monoxide (CO), nitrogen oxides (NOx), and particulate matter (PM), 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):

<u>Exh</u>	aust Em	<u>issions (</u>	g/bhp-h)		Smoke Opacity (%)							
Standard Certification	<u>THC</u> 1.0 0.3	<u>CO</u> 8.5 0.7	<u>NOx</u> 6.9 5.4	<u>PM</u> 0.4 0.2	<u>Accel</u> 20 8	<u>Lua</u> 15 7	<u>Peak</u> 50 18					

BE IT FURTHER RESOLVED: That the engine models listed on the attachments with engine power ratings less than 175 horsepower are not covered by this Executive Order.

BE IT FURTHER RESOLVED: That the listed engine models comply with "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 "Emission Control Labels—1996 and Later Heavy-Duty Off-Road Diesel-Cycle Engines" (Title 13, California Code of Regulations, Section 2424) for the aforementioned modelyear.

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 et seq.).

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

Executed at El Monte, California this 344 day of January 2000.

hmu

R. B. Summerfield, Chief Mobile Source Operations Division

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Engine Model Sur hary Form

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Manufacturer: Deere Power Systems Group of Deere & Company

qCI	
Nonroa	
Engine category:	

YJDXL06.8014	350TA
EPA Engine Family.	Mfr Family Name:

New Submission	
Process Code:	

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9.Emission Control Device Per SAE J1930	EM, TC	EM, TC	EM, TC	EM. TC	EN TO		EM, IC	EM, TC	EM, TC	EM, TC	EM, TC	EM, TC	EM, TC	EM, TC	EM, TC	EM, TC	EM, TC	EM, TC	EM, TC	EM, TC	EM, TC	EM, TC	EM, TC	EM, TC	EM, TC	EM, TC	EM, TC
8.Fuel Rate: (Ibs/hr)@peak torque	48@1400	26@1400	26@1400	27@1400	01@1100		28@1400	31@1400	33@1300	30@1200	34@1200	34@1200	36@1300	42@1400	40@1300	39@1300	34@1200	39@1300	41@1200	46@1400	46@1400	39@1300	45@1400	38@1300	33@1300	36@1300	21@1200
7.Fuel Rate: mm/stroke@peak torque	104@1400	83@1400	83@1400	88@1400		103@1400	91@1400	101@1400	76@1300	76@1200	80@1200	80@1200	84@1300	90@1400	92@1300	90@1300	86@1200	88@1300	94@1200	100@1400	100@1400	90@1300	98@1400	88@1300	76@1300	84@1300	80@1200
6.Torque @ RPM (SEA Gross)	507@1400	275@1400	275@1400	201 @ 1100	231 @ 1400	328@1400	291@1400	328@1400	384@1300	388@1200	400@1200	400@1200	419@1300	446@1400	458@1300	442@1300	425@1200	450@1300	448@1200	494 @ 1400	494@1400	441@1300	482@1400	450@1300	384@1300	419@1300	263@1200
5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	71@2400	28@0500	00 G 2000 20 M 0500	0000000	38@ZZ00	40@2200	43@2500	46@2400	42@2100	44@2200	45@2200	45@2200	46@2100	51@2200	50@2100	53@2100	58@2500	55@2200	65@2500	68@2400	68@2400	53@2100	63@2300	55@2200	42@2100	46@2100	29@2100
4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	90@2400	CO O DE DO	00000000	09 @ 2000	/8@2200	83@2200	77@2500	87@2400	60@2100	61@2200	62@2200	62@2200	66@2100	69@2200	72@2100	76@2100	70@2500	76@2200	78@2500	86@2400	86@2400	76@2100	R2@2300	76@2200	60@2100	66@2100	62@2100
3.BHP@RPM (SAE Gross)	104@2400		100@2000	1000220001	106@2200	114@2200	115@2500	125@2400	118@2100	123@2200	126@2200	126@2200	129@2100	142@2200	141@2100	148@2100	155@2500	157@2200	170@2500	185@2400	185@2400	148@2100	172@2300	15700000	118@2100	1002100	78@2100
2 Encine Model		00001	40451	4045T	4045T	4045T	4045T	4045T	6068T	6068T	GOGRT	6068T	6068T	6068T	6068T	6068T	6068T	6068T	GORRT	6068T	6068T	GOGRT	PODO PODO	00001 20201	00001 20201	00001 20201	00001 A0A5T
1 Encine Code		60681F250A	4045TE050	4045TF150B	4045TN050	4045TDW50	4045TE150A	ADA5TE250A	EDERTENSO	6068TT050	COCCULTOR COCCULTOR	EDERTDW54	EDERTRW51	EDERT DWFD	ENERTEWIS?	6068TDM/56	GOORTE150B	EDERTN051	COCRTE150A	EDERTNOSO	COCK TESEDR				60681 F 150D		60681 HVV34

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