State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER U-R-4-84
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: Loader and pump

Fuel Type: Diesel

Engine Family	Engine Displacement (liters)	Useful Life (hours)	Emission Control Systems and Special Features
1JDXL06.8014	4.5 and 6.8	8000	Direct Diesel Injection 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 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 Rating (kw)	Emission Standard Category		Exhaust Emissions (g/kw-hr)					Smoke Opacity (%)		
			HC	NOx	NMHC+NOx	CO	PM	Accel	Lug	Peak
37≤KW<130	Tier 1	Standard	N/A	9.2	N/A	N/A	N/A	20	15	50
		Certification	--	7.2	--	--	--	8	7	18
130≤KW<225	Tier 1	Standard	1.3	9.2	N/A	11.4	0.54	20	15	50
		Certification	0.4	7.2	--	0.9	0.28	8	7	18

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 6th day of February 2001.

R. B. Summerfield, Chief
Mobile Source Operations Division

Return to nplate

Engine Model Summ. Template

Attachment (pg 1 of 4)

1 F LR-4-8

Engine Family	1.Engine Code	2.Engine Model	3.BHP@RPM (SAE Gross)	kW	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 De
1JDXL06.8014	4045TN050	4045T	106@2200	79.5	78@2200	38@2200	291@1400	88@1400	27@1400	DOI
1JDXL06.8014	4045TDW50	4045T	114@2200	86	83@2200	40@2200	328@1400	103@1400	31@1400	DOI T
1JDXL06.8014	4045TF150A	4045T	115@2500	86	77@2500	43@2500	291@1400	91@1400	28@1400	DOI 1
1JDXL06.8014	4045TF250A	4045T	125@2400	94	87@2400	46@2400	328@1400	101@1400	31@1400	
1JDXL06.8014	6068TRW50	6068T	118@2100	88	60@2100	42@2100	384@1300	76@1300	33@1300	
~~1JDXL06.8014~~	~~6068TT050~~	~~6068T~~	~~123@2200~~	~~92~~	~~61@2200~~	~~44@2200~~	~~388@1200~~	~~76@1200~~	~~30@1200~~	
1JDXL06.8014	6068TDW54	6068T	126@2200	95	62@2200	45@2200	400@1200	80@1200	34@1200	
1JDXL06.8014	6068TRW51	6068T	129@2100	97	66@2100	46@2100	419@1300	84@1300	36@1300	
1JDXL06.8014	6068TDW50	6068T	142@2200	107	69@2200	51@2200	449@1400	90@1400	42@1400	
1JDXL06.8014	6068TRW52	6068T	141@2100	106	72@2100	50@2100	458@1300	92@1300	40@1300	
1JDXL06.8014	6068TF150B	6068T	155@2500	116	70@2500	58@2500	425@1200	86@1200	34@1200	
1JDXL06.8014	6068TN051	6068T	157@2200	118	76@2200	55@2200	450@1300	88@1300	39@1300	
1JDXL06.8014	6068TF150A	6068T	170@2500	128	78@2500	65@2500	448@1200	94@1200	41@1200	
~~1JDXL06.8014~~	~~6068TN050~~	~~6068T~~	~~185@2400~~	~~139~~	~~86@2400~~	~~68@2400~~	~~486@1400~~	~~100@1400~~	~~46@1400~~	
1JDXL06.8014	6068TF250B	6068T	185@2400	139	86@2400	68@2400	494@1400	100@1400	46@1400	
1JDXL06.8014	6068TT052	6068T	148@2100	111	76@2100	53@2100	441@1300	90@1300	39@1300	
1JDXL06.8014	6068TE050	6068T	172@2300	129	82@2300	63@2300	482@1400	98@1400	45@1400	
1JDXL06.8014	6068TF150D	6068T	157@2200	118	76@2200	55@2200	450@1300	88@1300	38@1300	
1JDXL06.8014	6068TRW53	6068T	118@2100	88	60@2100	42@2100	384@1300	76@1300	33@1300	
1JDXL06.8014	6068TRW54	6068T	129@2100	97	66@2100	46@2100	419@1300	84@1300	36@1300	
1JDXL06.8014	4045TT061	4045T	78@2100	59	62@2100	29@2100	263@1200	80@1200	21@1200	
1JDXL06.8014	4045TT067	4045T	78@2100	59	62@2100	29@2100	263@1200	80@1200	21@1200	
1JDXL06.8014	4045TT057	4045T	75@2200	56	57@2200	28@2200	242@1000	73@1000	16@1000	
1JDXL06.8014	4045TT058	4045T	80@2200	60	61@2200	30@2200	258@1200	77@1200	20@1200	
1JDXL06.8014	4045TT054	4045T	84@2200	63	64@2200	31@2200	255@1200	76@1200	20@1200	
1JDXL06.8014	4045TT064	4045T	84@2200	63	64@2200	31@2200	255@1200	76@1200	20@1200	
~~1JDXL06.8014~~	~~4045TT056~~	~~4045T~~	~~78@2200~~	~~59~~	~~59@2200~~	~~29@2200~~	~~247@1200~~	~~73@1200~~	~~19@1200~~	
~~1JDXL06.8014~~	~~4045TT050~~	~~4045T~~	~~89@2200~~	~~67~~	~~66@2200~~	~~32@2200~~	~~272@1300~~	~~84@1300~~	~~24@1300~~	

[illegible] RIC dated 12/19/00

Return to mplate

Engine Model Summ / Template

Attachment (pg 2 of 4). ~J# U-R-4-

Engine Family	1.Engine Code	2.Engine Model	3.BHP@RPM (SAE Gross)	KW	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	D
1JDXL06.8014	4045TT060	4045T	89@2200	67	66@2200	32@2200	272@1300	84@1300	24@1300	DDI
1JDXL06.8014	4045TT065	4045T	89@2200	67	66@2200	32@2200	272@1300	84@1300	24@1300	
1JDXL06.8014	4045TT062	4045T	89@2100	67	69@2100	32@2100	282@1200	87@1200	23@1200	
1JDXL06.8014	4045TT068	4045T	89@2100	67	69@2100	32@2100	282@1200	87@1200	23@1200	
* ~~1JDXL06.8014~~	~~4045TT053~~	~~4045T~~	~~98@2200~~	~~74~~	~~72@2200~~	~~35@2200~~	~~299@1200~~	~~96@1200~~	~~25@1200~~	
1JDXL06.8014	4045TT066	4045T	98@2200	74	72@2200	35@2200	299@1200	94@1200	25@1200	
1JDXL06.8014	4045TT063	4045T	99@2100	74	77@2100	36@2100	307@1200	98@1200	26@1200	
1JDXL06.8014	4045TT069	4045T	99@2100	74	77@2100	36@2100	307@1200	98@1200	26@1200	
1JDXL06.8014	6068TT055	6068T	123@2200	92	61@2200	44@2200	388@1200	76@1200	30@1200	
1JDXL06.8014	6068TF150G	6068T	129@2100	97	66@2100	46@2100	419@1300	84@1300	36@1300	
1JDXL06.8014	4045TL054	4045T	90@2300	68	66@2300	33@2300	274@1300	85@1300	24@1300	
1JDXL06.8014	4045TL055	4045T	99@2300	74	72@2300	36@2300	303@1400	93@1400	28@1400	
1JDXL06.8014	4045TL056	4045T	109@2300	82	79@2300	39@2300	331@1400	104@1400	32@1400	
1JDXL06.8014	4045TL057	4045T	114@2300	86	82@2300	41@2300	334@1600	102@1600	36@1600	
1JDXL06.8014	4045TL062	4045T	105@2300	79	76@2300	38@2300	319@1300	100@1300	29@1300	
1JDXL06.8014	4045TL063	4045T	84@2300	63	63@2300	31@2300	255@1100	78@1100	19@1100	
1JDXL06.8014	4045TZ250	4045T	107@2200	80	78@2200	39@2200	302@1400	95@1400	47@1400	
1JDXL06.8014	4045TF152	4045T	102@2400	77	72@2400	38@2400	277@1200	87@1200	22@1200	
1JDXL06.8014	4045TF153	4045T	97@2200	73	71@2200	34@2200	280@1400	84@1400	26@1400	
* ~~1JDXL06.8014~~	~~4045TLV50~~	~~4045T~~	~~89@2400~~	~~67~~	~~63@2400~~	~~33@2400~~	~~242@1400~~	~~73@1400~~	~~22@1400~~	
1JDXL06.8014	6068TL053	6068T	117@2300	88	58@2300	44@2300	365@1300	73@1300	31@1300	
1JDXL06.8014	6068TF152	6068T	156@2500	117	70@2500	35@2500	425@1200	86@1200	43@1200	
1JDXL06.8014	6068TP051	6068T	129@2100	97	66@2100	46@2100	419@1300	84.1@1300	36@1300	
1JDXL06.8014	4045TF250C	4045T	114@2200	86	83@2200	40@2200	328@1400	103@1400	32@1400	
1JDXL06.8014	6068TF150E	6068T	148@2100	111	76@2100	53@2100	442@1300	90@1300	39@1300	
1JDXL06.8014	6068TF150F	6068T	126@2200	95	62@2200	45@2200	400@1300	80@1300	34@1300	
1JDXL06.8014	6068TF250D	6068T	172@2300	129	82@2300	63@2300	483@1400	98@1400	45@1400	
1JDXL06.8014	6068TF250E	6068T	142@2200	107	69@2200	51@2200	438@1400	90@1400	42@1400	

* [illegible] per R/C dated [illegible]

Return to Template

Engine Model Summ Template

Attachment (pg 3 of 4) U-R 4-84

Engine Family	1.Engine Code	2.Engine Model	3.BHP@RPM (SAE Gross)	KW	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	De
1JDXL06.8014	4045TF150E	4045T	89@2200	67	66@2200	32@2200	272@1300	84@1300	24@1300	DDI
1JDXL06.8014	4045TF150D	4045T	98@2200	74	72@2200	35@2200	299@1200	94@1200	25@1200	
1JDXL06.8014	6068TF250C	6068T	166@1800	125	94@1800	56@1800	NA	NA	NA	
1JDXL06.8014	4045TF150C	4045T	101@1800	76	88@1800	35@1800	NA	NA	NA	
1JDXL06.8014	4045TF250B	4045T	113@1800	85	100@1800	40@1800	NA	NA	NA	
1JDXL06.8014	6068TF150C	6068T	150@1800	113	86@1800	51@1800	NA	NA	NA	
1JDXL06.8014	6068TF151A	6068T	150@1800	113	86@1800	51@1800	NA	NA	NA	
1JDXL06.8014	4045TF150F	4045T	105@2300	79	74.8@2300	38@2300	295@1300	88.4@1300	26@1300	
1JDXL06.8014	6068TF150H	6068T	156@2400	117	71.5@2400	57@2400	448@1300	88.3@1300	38@1300	
1JDXL06.8014	6068TF150I	6068T	148@2300	111	69.8@2300	53@2300	438@1300	86.6@1300	37@1300	
1JDXL06.8014	4045TT850	4045T	106@2200	80	77@2200	38@2200	291@1400	86@1400	27@1400	
1JDXL06.8014	4045TP052	4045T	84@2200	63	64@2200	31@2200	255@1200	76@1200	20@1200	
1JDXL06.8014	6068TRW70	6068T	141@2100	106	72@2100	50@2100	458@1300	92@1300	40@1300	
1JDXL06.8014	6068TT056	6068T	123@2100	92	63.5@2100	44@2100	388@1200	76@1200	31@1200	
1JDXL06.8014	6068TF159	6068T	129@2100	97	66@2100	46@2100	419@1300	84@1300	35@1300	
1JDXL06.8014	6068TT850	6068T	185@2400	139	86@2400	68@2400	494@1400	100@1400	46@1400	
1JDXL06.8014	6068TRW72	6068T	148@2100	111	74@2100	53@2100	479@1400	95.4@1400	45@1400	
1JDXL06.8014	4045TT083	4045T	102@2200	77	74@2200	37@2200	299@1200	94@1200	25@1200	
1JDXL06.8014	4045TF150G/1	4045T	110@1800	83	94.2@1800	38@1800	NA	NA	NA	
1JDXL06.8014	4045TF250D/2	4045T	122@1800	92	107.6@1800	43@1800	NA	NA	NA	
1JDXL06.8014	6068TF150J/15	6068T	165@1800	124	94.3@1800	57@1800	NA	NA	NA	
1JDXL06.8014	6068TF250F/2	6068T	190@1800	142	109.3@1800	66@1800	NA	NA	NA	
1JDXL06.8014	4045TF151A	4045T	101@1800	76	88@1800	35@1800	NA	NA	NA	
1JDXL06.8014	4045TF151C	4045T	111@2000	83	88@2000	39@2000	NA	NA	NA	
1JDXL06.8014	6068TF151C	6068T	165@2000	124	86@2000	57@2000	NA	NA	NA	
1JDXL06.8014	4045TLV51	4045T	89@2400	67	63@2400	33@2400	242@1400	73@1400	22@1400	
1JDXL06.8014	4045TF161	4045T	98@2200	74	72@2200	35@2200	299@1200	94@1200	25@1200	
1JDXL06.8014	4045TT091	4045T	98@2200	74	72@2200	35@2200	299@1200	94@1200	25@1200	

Return to mplate

Engine Model Summ y Template

Attachment (pg 4 of 4) 2-4-84

Engine Family	1.Engine Code	2.Engine Model	3.BHP@RPM (SAE Gross)	KW	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
1JDXL06.8014	4045TT080	4045T	78@2200	58	59@2200	29@2200	247@1200	73@1200	19@1200
1JDXL06.8014	4045TT081	4045T	89@2200	67	66@2200	32@2200	272@1300	84@1300	24@1300
1JDXL06.8014	4045TT082	4045T	98@2200	74	72@2200	35@2200	299@1200	94@1200	25@1200
1JDXL06.8014	4045TKV50	4045T	89@2400	67	63@2400	33@2400	242@1400	73@1400	22@1400
1JDXL06.8014	4045TKV51	4045T	89@2400	67	63@2400	33@2400	242@1400	73@1400	22@1400
1JDXL06.8014	6068TT851	6068T	185@2400	139	86@2400	68@2400	494@1400	100@1400	46@1400
1JDXL06.8014	4045TE051	4045T	115@2500	86	77@2500	43@2500	291@1400	91@1400	28@1400
1JDXL06.8014	6068TF250A	6068T	194@2400	146	90@2400	71@2400	507@1400	104@1400	48@1400
1JDXL06.8014	4045TE050	4045T	100@2500	75	69@2500	38@2500	275@1400	83@1400	26@1400
1JDXL06.8014	4045TF150B	4045T	100@2500	75	69@2500	38@2500	275@1400	83@1400	26@1400

Engine Model Sur ary Form

EOH 4-K-4-04

Manufacturer: Deere Power Systems Group of Deere & Company

Engine category: Nonroad CI

EPA Engine Family: 1JDXL06.8014

Mfr Family Name: 350TA

Process Code: Running Change

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
6068TP054	6068T	109@2100	55.6@2100	39@2100	346@1400	66.4@1400	31@1400	EM, TC
4045TP060	4045T	97@2100	72.9@2100	34@2100	308@1400	93.9@1400	30@1400	EM, TC
4045TL070	4045T	84@2300	62.1@2300	31@2300	257@1500	76.7@1500	25@1500	EM, TC
4045TL071	4045T	93@2300	67.3@2300	34@2300	281@1500	84.2@1500	28@1500	EM, TC
4045TL073	4045T	703@2300	74.4@2300	37@2300	313@1400	97.1@1400	29@1400	EM, TC
4045TL075	4045T	105@2300	76@2300	38@2300	319@1300	99.2@1300	29@1300	EM, TC
6068TL071	6068T	117@2300	156.7@2300	42@2300	322@1500	64.4@1500	31@1500	EM, TC

Engine Model Summary Form

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

Engine category: **Nonroad CI**

EPA Engine Family: **1JDXL06.8014**

Mfr Family Name: **350TA**

Process Code: **Running Change**

EO# 4-R-4-84

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
6068TE051	6068T	182@2300	83.5@2300	65@2300	486@1400	100@1400	46@1400	EM, TC
4045TF250E	4045T	134@1800	120@1800	49@1800				EM