

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER U-R-4-72
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: Tractor and Generator Set

Engine Power Ratings Range: 175 – 750 horsepower, inclusive

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>	
YJDXL08.1009 (450TA)	8.1	494	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>Exhaust Emissions (g/bhp-h)</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>
Standard	1.0	8.5	6.9	0.4	20	15	50
Certification	0.6	1.6	6.2	0.2	12	11	17

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 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 et seq.).

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

Executed at El Monte, California this 24th day of January 2000.



R. B. Summerfield, Chief
Mobile Source Operations Division

Engine Model Summary Form

u-R-4-72

Manufacturer: Deere Power Systems Group of Deere & Company
Engine category: Nonroad CI
EPA Engine Family: YJDXL08.1009
Mfr Family Name: 450TA
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
6081TF001A	6081T	217@2200	109@2200	80@2200	678@1200	147@1200	59@1200	EM, TC
6081TF001B	6081T	200@2200	101@2200	74@2200	623@1300	130@1300	56@1300	EM, TC
6081TRW01	6081T	161@2100	84@2100	58@2100	563@1400	114@1400	52@1400	EM, TC
6081TRW02	6081T	181@2100	95@2100	65@2100	637@1400	125@1400	57@1400	EM, TC
6081TDW01	6081T	172@2200	88@2200	64@2200	573@1400	116@1400	54@1400	EM, TC
6081TF001D	6081T	172@2200	88@2200	64@2200	573@1400	116@1400	54@1400	EM, TC
6081TRW01B	6081T	161@2100	84@2100	58@2100	576@1300	116@1300	52@1300	EM, TC
6081TRW02B	6081T	181@2100	94@2100	65@2100	656@1300	134@1300	57@1300	EM, TC
6081TF001C	6081T	211@1800	127@1800	76@1800	N/A	N/A	N/A	EM, TC
6081TRW03	6081T	166@2100	86.8@2100	62@2100	603@1400	120.6@1400	57@1400	EM, TC
6081TRW04	6081T	181@2100	94@2100	67@2100	656@1400	132.7@1400	63@1400	EM, TC
6081TRW09	6081T	166@2100	86@2100	60@2100	603@1300	121.4@1300	52@1300	EM, TC
6081TRW10	6081T	181@2100	91.6@2100	65@2100	656@1300	132.7@1300	57@1300	EM, TC