State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER U-R-4-36

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: Other OEM Products

Fuel Type: Diesel

Engine Family	Displacements in Liters	Exhaust Emission Control Systems and Special Features
WJDXL07.6010 (400HA)	7.6	Turbocharger Charge Air Cooler

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
WJDXL07.6010 (400HA)	0.3	1.2	5.9	0.2	16	10	21

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

11/13/97

LARGE ENGINE MODEL SUMMARY

Manufacturer: Deere Power Systems Group of Deere & Company

Process Code: New Submission

EPA Engine Family: WJDXL07.6010

Manufacturer Family Name: 400HA

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
6076HF030A		287@2200	133@2200	99@2200	881@1400	167@1400	79@1400	TC, CAC, EM
6076HF030B		275@2200	128@2200	95@2200	859@1400	161@1400	76@1400	TC, CAC,EM
6076HF030C		275@2200	128@2200	95@2200	853@1400	161@1400	76@1400	TC, CAC,EM
6076HH034		264@2200	121@2200	90@2200	819@1600	154@1600	83@1600	TC, CAC,EM
6076HH035		219@2200	102@2200	76@2200	687@1600	131@1600	71@1600	TC, CAC,EM
6076HH036		239@2200	110@2200	82@2200	744@1600	141@1600	76@1600	TC, CAC,EM
6076HH033		245@2200	113@2200	38.3@2200	765@1600	145@1600	35.5@1600	TC, CAC,EM
6076HRW32		256@2100	124@2100	88@2100	853@1400	162@1400	76@1400	TC, CAC,EM

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