

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER A-108-13

Relating to Certification of New Heavy-Duty Motor Vehicle Engines

DEERE POWER SYSTEMS GROUP OF DEERE & COMPANY

Pursuant to the authority vested in the Air Resources Board by Sections 43100, 43102 and 43103 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 1998 model diesel engines are certified for use in motor vehicles with a manufacturer's gross vehicle weight rating (GVWR) over 14,000 pounds:

Fuel Type: Compressed Natural Gas (CNG)

<u>Engine Family</u>	<u>Liters (Cubic Inches)</u>		<u>Exhaust Emission Control Systems and Special Features</u>
WJDXH08.1001 (450CNG)	8.1	497	Engine Control Module Turbocharger Charge Air Cooler Oxygen Sensor

Engine models and codes are listed on attachments.

The following are the certification exhaust emission standards for this engine family in grams per brake-horsepower-hour:

<u>Non-Methane Hydrocarbons</u>	<u>Carbon Monoxide</u>	<u>Nitrogen Oxides</u>	<u>Particulates</u>
1.2	15.5	4.0	0.10

The following are the certification exhaust emission values for this engine family in grams per brake-horsepower-hour:

<u>Non-Methane Hydrocarbons</u>	<u>Carbon Monoxide</u>	<u>Nitrogen Oxides</u>	<u>Particulates</u>
0.4	2.2	2.6	0.05

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 2035 et seq.).

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

The Bureau of Automotive Repair will be notified by copy of this order and attachments.

Executed at El Monte, California this 17<sup>th</sup> day of February 1998.



R. B. Summerfield, Chief  
Mobile Source Operations Division

# LARGE ENGINE MOD SUMMARY

Process Code: New Submission

Manufacturer: Deere Power Systems Group of Deere & Company

Manufacturer Family Name: 450CNG

EPA Engine Family: WJDXH08.1001

8. Fuel Rate: (lbs/hr) @ peak torque  
9. Emission Control Device Per SAE J1930

7. Fuel Rate: mm/stroke @ peak torque

6. Torque @ RPM (SEA Gross)

5. Fuel Rate: (lbs/hr) @ peak HP (for diesels only)

4. Fuel Rate: mm/stroke @ peak HP (for diesel only)

3. BHP @ RPM (SAE Gross)

ECM, TC, CAC, RDS

64 @ 1350  
61 @ 1350

800 @ 1350  
745 @ 1350

84 @ 2200  
84 @ 2200

250 @ 2200  
250 @ 2200

1. Engine Code 2. Engine Model

6081HFN01A  
6081HFN01B