

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER A-108-17

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 1999 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>
XJDXH08.1003 (450CNG)	8.1	494	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	2.5	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	1.8	2.2	0.02

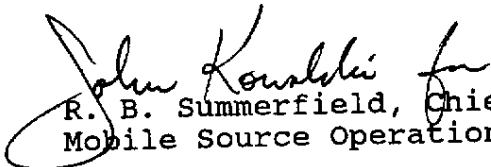
BE IT FURTHER RESOLVED: That for the listed engine models, the manufacturer has submitted the materials to demonstrate certification compliance with the Board's emission control system warranty provisions (Title 13, California Code of Regulations, Section 2035 et seq.).

BE IT FURTHER RESOLVED: That the listed engine models are certified to the optional lower-emission NOx standards pursuant to Title 13, California Code of Regulations, Section 1956.8(a)(1).

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 June 1999.

  
R. B. Summerfield, Chief  
Mobile Source Operations Division

# Engine Model Summary Form

**Manufacturer:** Deere Power Systems Group of Deere & Company  
**Engine category:** On-highway HDDE  
**EPA Engine Family:** XJDXH08.1003  
**Mfr Family Name:** 450CNG  
**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
6081HFN01A		225 @ 2200		84 @ 2200	800 @ 1350		64 @ 1350	ECM, TC, CAP, O2S
6081HFN01B		250 @ 2200		84 @ 2200	745 @ 1350		61 @ 1350	ECM, TC, CAP, O2S

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