State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-108-10

Relating to Certification of New Heavy-Duty Motor Vehicle Engines

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 & Company 1996 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 only)

| Engine Family | Liters | (Cubic Inches) | Exhaust Emission Control Systems and Special Features |
|---|---|---|---|
| TJD8.1D9KORA | 8.1 | (493) | Turbocharger<br>Charge Air Cooler<br>Engine Control Module |

Engine models and codes are listed on attachments.

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

| Non-Methane Hydrocarbons | Carbon Monoxide | Nitrogen Oxides | Particulates |
|---|---|---|---|
| 1.2 | 15.5 | 5.0 | 0.10 |

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

| Engine Family | Non-Methane Hydrocarbons | Carbon Monoxide | Nitrogen Oxides | Particulates |
|---|---|---|---|---|
| TJD8.1D9KORA | 0.3 | 2.4 | 2.2 | 0.06 |

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 11th day of December 1995.

John Kowalski for.
R. B. Summerfield
Assistant Division Chief
Mobile Source Division

CARB SUPPLEMENTAL DATA SHEET

E.O. # A-108-10



# 1996 MODEL YEAR AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET
## HEAVY-DUTY DIESEL-STANDARD ENGINES

Manufacturer: Deere & Company Engine Family: TJD8.1D9K0RA

Displacement:8.1 Liters

All Eng Codes in Eng Family: CA X 49S __ 50S __ Strokes/Cycle: 4 Valves/Cylinder: 2

Ignition: Compression ___ Compression with Glow Plug ___ Spark X

Fuel Type(s): Dedicated X Flex-Fuel ___ Dual Fuel __ Bi-Fuel __ Diesel __ CNG X

LNG ___ LPG ___ M85 ___ M100 ___ Other (specify) _____

Diesel Cert Fuel: 13 CCR 2282 _____ 40 CFR 86.1313-90 ____ 40 CFR 86.1313-94 _____

Maximum Rated Power: 250 HP @ 2200 RPM Engine Configuration: I-6

Exhaust ECS (e.g., OC, EGR, PTOX, IFI, TC, CAC): EM, ECM, TC, CAC

(Use abbreviations per SAE J1930 SEP91)

| Engine Model (Eng Code) | Rated HP @ RPM | Fuel Rate @ Rated HP $mm^3$ / stroke (lbs/hr) | Fuel Pump & Injector Part No. | ECM/PCM Part No. | EGR Valve Part No. | PTOX / Catalytic Converter Part No. |
|---|---|---|---|---|---|---|
| 6081HFN01 | 250@2200 | (84) | RE62535 | SW00150 | N/A | N/A |

Date Issued:

Revisions:

**Submitted: 14 September 1995**