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:

<u>Fuel Type</u>: Compressed Natural Gas (CNG only)

Engine Family	Liters	(Cubic Inches)	Exhaust Emission Control Systems and Special Features
TJD8.1D9KORA 8.1		(493)	Turbocharger Charge Air Cooler 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 <u>Hydrocarbons</u>			<u>Particulates</u>
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	Non-Methane	Carbon	Nitrogen	<u>Particulates</u>
<u>Family</u>	<u>Hydrocarbons</u>	<u>Monoxide</u>	Oxides	
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 // day of December 1995.

R. B. Summerfield

Assistant Division Chief Mobile Source Division

CARB SUPPLEMENTAL DATA SHEET

E.O. #A-108-10

Page 16 7 7 1996 MODEL YEAR AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET HEAVY-DUTY DIESEL-STANDARD ENGINES

Manufacturer: Deere & Company		Engine	Engine Family: TJD8.1D9K0RA			
Displacement:8	.1 Liters	Ü	, · · · · · · · · · · · · · · · · · · ·			
All Eng Codes i	n Eng Family: CA X 49	S 50S Strokes	Cycle: 4 Valves/Cylinder: 2	<u>,</u>		
Ignition: Comp	ression Cor	mpression with Glov	Plug Spark X			
Fuel Type(s):	Dedicated X Flex-Fu	el Dual Fuel _	Bi-Fuel Diesel CN	G X		
	LNG LPG M	I85 M100	Other (specify)			
Diesel Cert Fuel	: 13 CCR 2282	40 CFR 86.1313-90	40 CFR 86.1313-94 _			
Maximum Rated	i Power: 250 HP @ 220	0 RPM Engine	Configuration: I-6			
Exhaust ECS (e.	g., OC, EGR, PTOX, IFI	, TC, CAC): EM, E	CM,TC,CAC			
		(Use at	obreviations per SAE J1930 S	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.
6081HFN0 1	250@2200	(84)	RE62535	SW00150	N/A	N/A

Date Issued:

Revisions:

Submitted: 14 September 1995 16.03.03 - TJD8.1D9K0RA