

## DEERE POWER SYSTEMS GROUP OF DEERE & COMPANY

EXECUTIVE ORDER U-R-004-0223 New Off-Road Compression-Ignition Engines

Pursuant to the authority vested in the Air Resources Board by Sections 43013, 43018, 43101, 43102, 43104 and 43105 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-02-003;

IT IS ORDERED AND RESOLVED: That the following compression-ignition engines and emission control systems produced by the manufacturer are certified as described below for use in off-road equipment. Production engines shall be in all material respects the same as those for which certification is granted.

MODEL YEAR	ENGINE FAMILY	DISPLACEMENT (liters)	FUEL TYPE	USEFUL LIFE (hours)		
2005	5JDXL08.1045	8.1	Diesel	8000		
SPECIAL	FEATURES & EMISSION	CONTROL SYSTEMS	TYPICAL EQUIPMENT APPLICATION			
Direct Diese Smoke	el Injection, Turbocharg e Puff Limiter, Electronic	er, Charge Air Cooler, Control Module	Compressor, Industrial Equipment			

The engine models and codes are attached.

The following are the exhaust certification standards (STD), or family emission limit(s) (FEL) as applicable, and certification levels (CERT) for hydrocarbon (HC), oxides of nitrogen (NOx), or non-methane hydrocarbon plus oxides of nitrogen (NMHC+NOx), carbon monoxide (CO), and particulate matter (PM) in grams per kilowatt-hour (g/kW-hr), and the opacity-of-smoke certification standards and certification levels in percent (%) during acceleration (Accel), lugging (Lug), and the peak value from either mode (Peak) for this engine family (Title 13, California Code of Regulations, (13 CCR) Section 2423):

RATED POWER	EMISSION STANDARD		EXHAUST (g/kW-hr)					OPACITY (%)		
CLASS	CATEGORY		нс	NOx	NMHC+NOx	CO	PM	ACCEL	LUG	PEAK
225 ≤ kW < 450	Tier 2	STD	N/A	N/A	6.4	3.5	0.20	20	15	50
		FEL	-	-	7.2	-	0.26	-	-	
		CERT	-	-	6.7	1.0	0.24	16	5	27

**BE IT FURTHER RESOLVED:** That the family emission limit(s) (FEL) is an emission level declared by the manufacturer for use in any averaging, banking and trading program and in lieu of an emission standard for certification. It serves as the applicable emission standard for determining compliance of any engine within this engine family under 13 CCR Sections 2423 and 2427.

BE IT FURTHER RESOLVED: That for the listed engine models, the manufacturer has submitted the information and materials to demonstrate certification compliance with 13 CCR Section 2424 (emission control labels), and 13 CCR Sections 2425 and 2426 (emission control system warranty).

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

This Executive Order is only granted to the engine family and model-year listed above. Engines in this family that are produced for any other model-year are not covered by this Executive Order.

Executed at El Monte, California on this

\_day of August 2004.

Allen Jons, Chief

Mobile Source Operations Division

## **Engine Model Summary Form**

Manufacturer:

Deere Power Systems Group of Deere and

Engine category:

Nonroad CI

EPA Engine Family: 5JDXL08.1045

Mfr Family Name: 450HG

.ess Code: New Submission Attachment 1061 U-R-004-0223

1.Engine Code	2.Engine Model	3.BHP@RPM (SAE Gross)	4.Fuel Rate: mm/stroke @ peak HP (tor diesel only)	5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	6.Torque @ RPM (SEA Gross)	7.Fuel Rate: mm/stroke@peak torque	6.Fuel Rate: (lbs/hr)@peak torque	9.Emission Control Device Per SAE J1930
6081HF001D	6081H	335.26@2200	161.00@2200	119.05@2200	1034.67@1600	196@1600	105.60@1600	EM EC SPL BOLATC
6081HN003A	6081H 7	350.68@2200	169.50@2200	122.58@2200	1017.70@1600	188.9@1600	100.20@1600	EM EC SPL 0