

DEERE POWER SYSTEMS GROUP OF DEERE & COMPANY

EXECUTIVE ORDER U-R-004-0109 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-45-9;

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)			
2002	2JDXL08.1019	8.1	Diesel	8000			
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION				
Electronic Control Module, Direct Diesel Injection, Turbocharger, Charge Air Cooler			Other OEM 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-ł	OPACITY (%)				
CLASS	CATEGORY		HC	NOx	NMHC+NOx	co	PM	ACCEL	LUG	PEAK
130 ≤ KW < 225	Tier 1	STD	1.3	9.2	N/A	11.4	0.54	20	15	50
·		FEL	N/A	7.8	N/A	N/A	N/A	N/A	N/A	N/A
		CERT	0.5	6.2		0.9	0.23	15	5	24

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 _____2224 day of December 2001.

R. B. Summerfield, Chief

Mobile Source Operations Division

Engine Model S. . 1ry Form

Deere Power Systems Group of Deere and Manufacturer:

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14-R-40109	8.Fuel Rate: 9.Emission Control (lbs/hr)@peak torque Device Per SAE J1930	105.60@1600 7€ 6AG EM →	00 TC CAC EM FZM SHI			100			
	8.Fuel Rate: (lbs/hr)@peak tor	105.60@1	77.60@1600	77.70@1600	73.85@1600	78.48@1600	73.85@1600	9.5	
	7.Fuel Rate: mm/stroke@peak torque	196@1600	147@1600	147@1600	136.7@1600	148@1600	136.7@1600	148@1600	
	6.Torque @ RPM (SEA Gross)	1 034.66@16 00	760.32@1600	760.32@1600	719,91@1600	755.16@1600	719.91@1600	755.16@1600	
4-tachment	5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	+19.05@2200	83.77@2200	83.77@2200	90.39@2200	94,80@2200	90.39@2200	94.80@2200	
	4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	1 61.00@220 0	115.00@2200	115.00@2200	136,70@2200	145.00@2200	136.70@2200	278.93@2200 145.00@2200	
	3.BHP@RPM (SAE Gross)	-335,26@2200-	245.41@2200	245.41@2200	265.52@2200	278.93@2200	265.52@2200	278.93@2200	
Engine category: Nonroad Cl EPA Engine Family. 2JDXL.08.1019 Mfr Family Name: 450HB Process Code: New Submission	1.Engine Code 2.Engine Model	111009	6081H	6081H	6081H	6081H	6081H	6081H	
Engine category: Nonroad CI EPA Engine Family: 2JDXL08.10 Mfr Family Name: 450HB Process Code: New Submi	1.Engine Code	* 6081HF001D	6081HH022	6081HH007	6081HH008	6081HH009	6081HH020	6081HH021	

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