

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 engine and emission control system 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	2JDXL02.9017	2.9	Diesel	8000
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION	
Direct Diesel Injection			Loader, Industrial Equipment	

The engine models and codes are attached.

The following are the exhaust certification standards (STD) 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 CLASS	EMISSION STANDARD CATEGORY		EXHAUST (g/kw-hr)					OPACITY (%)		
			HC	NOx	NMHC+NOx	CO	PM	ACCEL	LUG	PEAK
37 ≤ KW < 75	Tier 1	STD	N/A	9.2	N/A	N/A	N/A	20	15	50
		CERT	-	8.0	-	-	-	5	11	12

**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 27<sup>th</sup> day of December 2001.



R. B. Summerfield, Chief  
 Mobile Source Operations Division

Engine Model Summary Form

Manufacturer: Deere Power Systems Group of Deere and

Engine category: Nonroad CI

EPA Engine Family: 2JDXL02.9017

Mfr Family Name: 320DA

Process Code: New Submission

EQ# U-A-4-124

ATTACHMENT 1081

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
3029DF180A	3029D	45.0 60.35 @ 2500	58.00 @ 2500	22.05 @ 2500	147.49 @ 1600	68 @ 1600	17.64 @ 1600	EM DDF, E
3029DF150A	3029D	43.0 57.66 @ 2500	56.00 @ 2500	22.05 @ 2500	146.02 @ 1500	67 @ 1500	15.87 @ 1500	EM
3029DF180C	3029D	57.66 @ 2500	45.00 @ 2500	17.64 @ 2500	139.38 @ 1000	60 @ 1000	10.14 @ 1000	EM
3029DF150B	3029D	57.66 @ 2500	56.00 @ 2500	22.05 @ 2500	146.02 @ 1500	63 @ 1500	15.21 @ 1500	EM
3029DF151	3029D	57.66 @ 2500	56.00 @ 2500	22.05 @ 2500	121.68 @ 1500	63 @ 1500	15.65 @ 1500	EM
3029DF150C	3029D	36.0 48.28 @ 2500	45.00 @ 2500	17.64 @ 2500	139.38 @ 1000	60 @ 1000	10.14 @ 1000	EM
3029DFG51	3029D	57.66 @ 2500	56.00 @ 2500	22.05 @ 2500	121.68 @ 1500	63 @ 1500	15.43 @ 1500	EM
3029DF152	3029D	57.66 @ 2500	56.00 @ 2500	22.05 @ 2500	121.68 @ 1500	63 @ 1500	15.43 @ 1500	EM
3029DAT50	3029D	39.5 52.97 @ 2300	54.40 @ 2300	19.84 @ 2300	140.86 @ 1600	62.7 @ 1600	14.77 @ 1600	EM
3029DFG50	3029D	52.97 @ 2300	54.40 @ 2300	19.84 @ 2300	140.86 @ 1600	62.7 @ 1600	14.77 @ 1600	EM

EPA: NR4-02-13