

## DEERE POWER SYSTEMS GROUP OF DEERE & COMPANY

EXECUTIVE ORDER U-R-004-0178 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) 8000		
2004	4JDXL06.8072	6.8	Diesel			
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION			
Direct Dies Smok	el Injection, Turbocharg e Puff Limiter, Electronic	er, Charge Air Cooler, c 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		HC	NOx	NMHC+NOx	со	PM	ACCEL	LUG	PEAK
130 ≤ kW < 225	Tier 2	STD	N/A	N/A	6.6	3.5	0.20	20	15	50
		FEL	-	-	5.8	-	0.19	-	-	-
		CERT	-	-	5.5	1.1	0.16	10	1	18

**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 2320

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day of December 2003.

Allen Lyons, Chief

Mobile Source Operations Division

## **Engine Model Summary Form**

Deere Power Systems Group of Deere and Manufacturer:

Nonroad Cl Engine category: EPA Engine Family: 4JDXL06.8072

350HK Mfr Family Name:

1.Engine Code

**New Submission** ess Code:

2.Engine Model

Astachment 1092

4.Fuel Rate: mm/stroke @ peak HP (for diesel only) 3.BHP@RPM (SAE Gross)

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: 9.Emission Control (lbs/hr)@peak torque Device Per SAE J1930

98.11@2400 698,38@1800 6068HH055 . 6068 278.94@2400 121.10@2400 133,4@1800 80.94@1800 EMSPL DOF

## **Engine Model Summary Form**

Manufacturer:

Deere Power Systems Group of Deere and

Engine category: Nonroad CI

EPA Engine Family: 4JDXL06.8072

Mfr Family Name: 350HK

cess Code:

Running Change

Attachment 2062 U-12-004-0178

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
6068HH055								EM EC SPL OOF
6068HH054	6068H	265.53@2400	113.30@2400	91.72@2400	659.30@1800	127.2@1800	77.17@1800	EM EC SPL 0
✓ 6068HH057	6068H	278.94@2400	121.10@2400	98.11@2400	698.38@1800	133.4@1800	80.94@1800	EM EC SPL