EXECUTIVE ORDER U-R-004-0386 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)		
2010	AJDXL06.8104	4.5, 6.8	Diesel	8000		
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION			
Electronic Control Module, Direct Diesel Injection, Turbo Charger, Charge Air Cooler, Smoke Puff Limiter			Loaders, Tractor, Pump, Compressor, Generator Set, Othe 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	EMISSION		EXHAUST (g/kw-hr)				OPACITY (%)			
POWER CLASS	STANDARD CATEGORY		нс	NOx	NMHC+NOx	CO	PM	ACCEL	LUG	PEAK
130 ≤ kW < 225	Tier 3	STD	N/A	N/A	4.0	3.5	0.20	20	15	50
		CERT	_		3.6	1.3	0.18	14	3	30

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 December 2009.

Annette Hebert, Chief

Mobile Source Operations Division

Date: 12/08/09

Engine Model Summary Form John Deere Power Systems

Engine category:

Nonroad CI

Mfr Family Name: 350HAB

Process Code: **New Submission**

Attachment 1.f1 E0#: U-R-004-0386

EPA Engine Family: AJDXL06.8104

Engine Code 2	2.Engine Model	3.BHP@RPM (SAE Gross)	4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	5.Fuel Rate: (ibs/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
068HF285A	6068H	214.57@2400	103.10@2400	83.40@2400	622.13@1500	126.8@1500	.64.05@1500	EM EC SPL
068HF285B	6068H	199.82@2400	92.60@2400	74.94@2400	578.91@1500	119.33@1500	60.39@1500	EM EC SPL
068HF285C	6068H	185.97@240.0	86.70@2400	70.18@2400	527,29@1500	107.56@1500	-54.44@1500	EM EC SPL
068HF285D	6068H	185.07@2200	92.90@2200	68.94@2200	578.91@1500	120.2@1500	60.81@1500	EM EC SPL
068HF285K	6088H	237,37@180.0	138.20@1800	83.87 @ 1800	A / /a	$\Delta I I \Delta$	1/1/4	EM EC SPL
068HF285L	6068H	197.14@1800	115.90@1800	70.33@1800			19/17	EM EC SPL
3068HCQ82		209.2002400	101.10@2400		557.53@1700	118.5@1700	68.08@1700	EM EC SPL
6068HFS82	6068H	197.14@1800	115.70@1800	70.22@1800	* 1/A	$\Lambda I/\Lambda$	X	EM EC SPL
8068HFS83	6068H	237.37@180.0	138.10@1800	83.87@1800	-W#=	IN/H-	-NH	EM EC SPL
045HF285K	6068H	197.14@1800	173.80@1800	70.35@1800				EM EC SPL
8068HN055		189.99@2300	80.00@2300		548.68@1500	97.4@1500	57.7 9@ 1500	EM EC SPL
068HFC28A	6068H	237.37@1760	140.80@1760	83.60@1760	$-M/\Delta$	NIA.	NA-	EM EC SPL
068HFC28B	6068H	199.82@2400	95,80@2400		17/1/	14177	14/1	EM EC SPL
068HFC28D	6068H	199.82@2350 197.14@2100	96.60@2350 106.20@2100	76.64@2350 75.27 @ 2100	N/4	- Al /A-	$-M/\mu$	EM EC SPL
068HFC28E	6068H	199.82@2400	94.90@2400	76.88@2400	578.91@1500	120.9@1500	61.18@1500	EM EC SPL
6068HE050	6068H	199.82@2400	92.60@2400	And the first of t	578.91@1500	War Street Control of the Print Print of the Control of the Control	50.39@1500	EM EC SPL
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