California Environmental Protection Agency AIR RESOURCES BOARD	DEERE POWER SYSTEMS GROUP OF DEERE & COMPANY	EXECUTIVE ORDER U-R-004-0130 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)
2002	2JDXL06.8048	6.8	Diesel	8000

SPECIAL FEATURES & EMISSION CONTROL SYSTEMS	TYPICAL EQUIPMENT APPLICATION
Direct Diesel Injection, Electronic Control Module, Turbocharger, Charge Air Cooler	Pump, Compressor, Generator Set, 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 CLASS	EMISSION STANDARD CATEGORY		EXHAUST (g/kw-hr)					OPACITY (%)		
			HC	NOx	NMHC+NOx	CO	PM	ACCEL	LUG	PEAK
75≤ KW <130	Tier 1	STD	N/A	9.2	N/A	N/A	N/A	20	15	50
		FEL	-	6.4	-	-	-	-	-	-
		CERT	-	5.7	-	-	-	8	2	20

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 16TH day of July 2002.

Allen Lyons, Chief
Mobile Source Operations Division

Engine Model Summary Form

ATTACHMENT 1 OF 1

EO# U-R-004-0130

Manufacturer: **Deere Power Systems Group of Deere and**

Engine category: **Nonroad CI**

EPA Engine Family: **2JDXL06.8048**

Mfr Family Name: **350HG**

Process Code: **New Submission**

1.Engine Code	2.Engine Model	(kw)	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
6068HF475A	6068H	129	172.99@2100	83.70@2100	59.26@2100	629.61@1400	120.35@1400	56.81@1400	TC CAC EM DOC, ECM
4045HF475A	4045H		172.99@2400	113.10@2400	61.02@2400	475.66@1400	139.6@1400	43.94@1400	TC CAC EM

EO#4-R-004-0130
Attachment 1 of 1

Return to Template

Engine Model Summary Template

Engine Family	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.I Dev
2JDXL06.8048	6068HF475A	6068H	172.99@2100	83.70@2100	59.26@2100	629.61@1400	120.35@1400	56.81@1400	
2JDXL06.8049	6068HF475B	6068H	274.91@2400	119.70@2400	96.78@2400	843.27@1400	160.86@1400	75.90@1400	
2JDXL06.8049	4045HF475A	4045H	172.99@2400	114.00@2400	61.55@2400	475.66@1400	140.2@1400	45.39@1400	
2JDXL06.8049	6068HF475C	6068H	274.91@2400	117.90@2400	95.46@2400	755.90@1400	145@1400	68.34@1400	
2JDXL06.8049	6068HF475D	6068H	250.77@2200	115.60@2200	85.76@2200	755.90@1400	145.2@1400	68.56@1400	
2JDXL06.8049	4045HF475B	6068H	159.58@2200	113.70@2200	56.26@2200	475.66@1400	139.9@1400	44.05@1400	
2JDXL06.8049	6068HH054	6068H	265.52@2400	113.30@2400	91.71@2400	659.29@1800	127.2@1800	77.16@1800	
2JDXL06.8049	6068HH055	6068H	278.93@2400	121.10@2400	98.10@2400	698.38@1800	133.4@1800	80.93@1800	
2JDXL06.8049	4045HF475C	4045H	191.77@1800	163.60@1800	66.20@1800				
2JDXL06.8049	6068HF475E	6068H	313.80@1800	175.00@1800	106.26@1800				

EOAU-R-004-0130

Return to Template

Part Number Summary Template

Engine Family	Engine Code	Engine Model	Injection Pump	Injector	Turbo Charge	Electronic Control Module	After Treatment Device (Specify)	Smoke Puff Limiter	Sensor Assembl	
									Description	Part N
2JDXL06.8048	6068HF475A	6068H	RE507959	RE507860	RE516963	RE508774			Timing sync	RE
2JDXL06.8049	6068HF475B	6068H	RE507959	RE507860	RE518624	RE508774			Timing sync	RE
2JDXL06.8049	6068HH054	6068H	RE507959	RE507860	RE509910	R516571RE5087			ECS ECT Fuel	RE
2JDXL06.8049	4045HF475A	4045H	RE507959	RE507860	RE517236	R516650RE5087			ECS ECT Fuel	RE
2JDXL06.8049	6068HF475C	6068H	RE507959	RE507860	RE517239	R516469RE5087			ECS ECT Fuel	RE
2JDXL06.8049	6068HF475D	6068H	RE507959	RE507860	RE517239	R516470RE5087			ECS ECT Fuel	RE
2JDXL06.8049	4045HF475B	6068H	RE507959	RE507860	RE517236	R516474RE5087			ECS ECT Fuel	RE
2JDXL06.8049	6068HH055	6068H	RE507959	RE507860	RE509910	R516403RE5087			ECS ECT Fuel	RE
2JDXL06.8049	4045HF475C	4045H	RE507959	RE507860	RE517236	R516475RE5087			ECS ECT Fuel	RE
2JDXL06.8049	6068HF475E	6068H	RE507959	RE507860	RE517239	R516471RE5087			ECS ECT Fuel	RE