| California Environmental Protection Agency AIR RESOURCES BOARD | DEERE POWER SYSTEMS GROUP OF DEERE & COMPANY | EXECUTIVE ORDER U-R-004-0098 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 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) |
|---|---|---|---|---|
| 2001 | 1JDXL06.8038 | 6.8 | Diesel | 8000 |

| SPECIAL FEATURES & EMISSION CONTROL SYSTEMS | TYPICAL EQUIPMENT APPLICATION |
|---|---|
| Direct Diesel Injection, Turbocharger, Charge Air Cooler, Smoke Puff Limiter, Engine Control Module | Tractor, Compressor, Generator Set, Other Industrial Equipment |

| | |
|---|---|
| ENGINE MODELS (rated power in kilowatts, kw) | 6068H, Engine Code 6068HF275A (187 kw)<br>6068H, Engine Code 6068HF275C (169 kw)<br>6068H, Engine Code 6068HF275D (150 kw)<br>6068H, Engine Code 6068HF275E (150 kw)<br>6068H, Engine Code 6068HF275F (139 kw) |

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 |
| 130 ≤ KW < 225 | Tier 1 | STD | 1.3 | 9.2 | N/A | 11.4 | 0.54 | 20 | 15 | 50 |
| | | FEL | N/A | 6.4 | N/A | N/A | N/A | N/A | N/A | N/A |
| | | CERT | 0.2 | 5.6 | -- | 0.6 | 0.17 | 14 | 4 | 39 |

**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 9th day of August 2001.

R. B. Summerfield, Chief
Mobile Source Operations Division