ISUZU MOTORS LIMITED

EXECUTIVE ORDER U-R-006-0276 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) | |
|---|---------------|-----------------------|---------------------------------------|------------------------|--|
| 2008 | 8SZXL15.7HXA | 15.7 | Diesel | 8000 | |
| SPECIAL FEATURES & EMISSION CONTROL SYSTEMS | | | TYPICAL EQUIPMENT APPLICATION | | |
| Direct Diesel Injection, Turbocharger, Charge Air Cooler, Electronic Control Module, Exhaust Gas Recirculation | | | Excavator, Other 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 | EMISSION | EXHAUST (g/kW-hr) | | | | OPACITY (%) | | | | |
|----------------|----------------------|-------------------|-----|-----|----------|-------------|------|-------|-----|------|
| POWER CLASS | STANDARD CATEGORY | | HC | NOx | NMHC+NOx | co | PM | ACCEL | LUG | PEAK |
| 225 ≤ kW < 450 | Tier 3 | STD | N/A | N/A | 4.0 | 3.5 | 0.20 | 20 | 15 | 50 |
| | | CERT | | | 3.6 | 0.8 | 0.17 | 17 | 8 | 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.

Annette Hebert, Chief

Mobile Source Operations Division

| Template |
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| Summary |
| Model |
| Engine |

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ATTACHMENT

| 9.Emission Control evice Per SAE J193 | ECM,TC,CAC,D FI,EGR | ECM,TC,CAC,D FI,EGR | ECM,TC,CAC,D FI,EGR |
|---|---------------------------------|------------------------|------------------------|
| 8.Fuel Rate: 9.Emission Control (lbs/hr)@peak torqueDevice Per SAE J1931 | 170.3@1500 | 145.8@1500 | 122.9@1500 |
| 7.Fuel Rate: mm/stroke@peak torque (| 340.4@1500 | 291.3@1500 | 245.6@1500 |
| 6.Torque @ RPM (SEA Gross) | 1660@1500 | 1460@1500 | 1165@1500 |
| 5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only) | 182.6@1800 | 161.7@1800 | 123.0@1800 |
| 4.Fuel Rate: 5.Fuel Rate: mm/stroke @ peak HP (lbs/hr) @ peak HP 6.Torque @ RPM (for diesel only) (SEA Gross) | 304.1@1800 | 269.3@1800 | 204.9@1800 |
| 3.BHP@RPM (SAE Gross) | 532.4@1800 | 462.6@1800 | 348.7@1800 |
| 2.Engine Model | AH-6WG1X | AH-6WG1X | AH-6WG1X |
| Engine Family 1.Engine Code 2.Engine Model | XL15.7HXA 6WG1XDHAA-01 AH-6WG1X | 6WG1XDHAA-02 AH-6WG1X | 6WG1XDHAA-03 |
| Engine Family | 8SZXL15.7HXA | 8SZXL15.7HXA 6WG1XDHAA | 8SZXL15.7HXA |