

Pursuant to the authority vested in California 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-19-095;

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) |
|---|---------------|-----------------------|--|---------------------|
| 2023 | PPKXL07.0BN1 | 7.01 | Diesel | 8000 |
| SPECIAL FEATURES & EMISSION CONTROL SYSTEMS | | | TYPICAL EQUIPMENT APPLICATION | |
| Electronic Direct Injection, Turbocharger, Electronic Control Module, Diesel Oxidation Catalyst, Periodic Trap Oxidizer, Exhaust Gas Recirculation, Charge Air Cooler, Selective Catalytic Reduction – Urea, Ammonia Oxidation Catalyst | | | Crane, Loader, Tractor, Dozer, Pump, Compressor, Generator Set | |

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 non-methane hydrocarbon (NMHC), 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 (%) | | |
|-------------------|----------------------------|-------------|-------------------|------|----------|-----|-------|-------------|-----|------|
| | | | NMHC | NOx | NMHC+NOx | CO | PM | ACCEL | LUG | PEAK |
| 75 ≤ kW ≤ 560 | Tier 4 Final | STD | 0.19 | 0.40 | N/A | 3.5 | 0.02 | N/A | N/A | N/A |
| | | FEL | N/A | N/A | N/A | N/A | 0.01 | N/A | N/A | N/A |
| | | CERT | 0.01 | 0.27 | -- | 1.3 | 0.002 | -- | -- | -- |

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).

BE IT FURTHER RESOLVED: That for the listed engine models which include engines from different power categories in the same engine family, the manufacturer is complying with the more stringent set of standards from the 130 ≤ kW ≤ 560 power category in conformance with the incorporated Section 1039.230 (e) of the "California Exhaust Emission Standards and Test Procedures for New 2011 and Later Tier 4 Off-Road Compression Ignition Engines, Part 1-D" adopted October 20, 2005 and last amended October 25, 2012.

BE IT FURTHER RESOLVED: That the manufacturer has elected to include engine models in this engine family which are identified for "emergency vehicle use only". These "emergency vehicle use only" engines are exempt from requirements imposed pursuant to California law and the regulations adopted pursuant thereto for motor vehicle pollution control devices per California Vehicle Code Section 27156.2. The manufacturer must clearly label these engines for "emergency vehicle use only" on the engines' emission control label.

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 on this 28th day of September 2022.



Robin U. Lang, Chief
Emissions Certification and Compliance Division

| Model | Code | Trim | Config | Displacement | Displacement - Units | Peak Power | Peak Power - Units | Peak Power - Speed (rpm) | Peak Power - Fueling | Peak Power - Fuel Units | Peak Torque | Peak Torque - Units | Peak Torque - Speed (rpm) | Peak Torque - Fuel | Peak Torque - Fuel Units | OBD | GHG | Special | Notes |
|-----------|--------------|------|--------|--------------|----------------------|------------|--------------------|--------------------------|----------------------|-------------------------|-------------|---------------------|---------------------------|--------------------|--------------------------|-----|-----|---------|-----------|
| 3924/2200 | Cert Test 1 | N/A | I6 | 7.01 | Liters | 275 | horsepower | 2200 | 104 | lb/hr | 927 | lb-ft | 1400 | 86 | lb/hr | N/A | N/A | N/A | N/A |
| 3960/2200 | 2 | N/A | I6 | 7.01 | Liters | 269 | horsepower | 2200 | 101 | lb/hr | 918 | lb-ft | 1400 | 85 | lb/hr | N/A | N/A | N/A | N/A |
| 3926/2200 | 3 | N/A | I6 | 7.01 | Liters | 250 | horsepower | 2200 | 93 | lb/hr | 895 | lb-ft | 1400 | 82 | lb/hr | N/A | N/A | N/A | N/A |
| 4038/2200 | 4 | N/A | I6 | 7.01 | Liters | 250 | horsepower | 2200 | 93 | lb/hr | 895 | lb-ft | 1400 | 82 | lb/hr | N/A | N/A | N/A | N/A |
| 3962/2200 | 5 | N/A | I6 | 7.01 | Liters | 248 | horsepower | 2200 | 92 | lb/hr | 908 | lb-ft | 1300 | 78 | lb/hr | N/A | N/A | N/A | N/A |
| 3976/1800 | 6 | N/A | I6 | 7.01 | Liters | 239 | horsepower | 1800 | 83 | lb/hr | 766 | lb-ft | 1400 | 70 | lb/hr | N/A | N/A | N/A | N/A |
| 3928/2200 | 7 | N/A | I6 | 7.01 | Liters | 225 | horsepower | 2200 | 83 | lb/hr | 805 | lb-ft | 1400 | 74 | lb/hr | N/A | N/A | N/A | N/A |
| 4036/2200 | 8 | N/A | I6 | 7.01 | Liters | 225 | horsepower | 2200 | 83 | lb/hr | 805 | lb-ft | 1400 | 74 | lb/hr | N/A | N/A | N/A | N/A |
| 3966/2200 | 9 | N/A | I6 | 7.01 | Liters | 215 | horsepower | 2200 | 79 | lb/hr | 735 | lb-ft | 1400 | 64 | lb/hr | N/A | N/A | N/A | N/A |
| 3930/2200 | 10 | N/A | I6 | 7.01 | Liters | 202 | horsepower | 2200 | 75 | lb/hr | 725 | lb-ft | 1400 | 64 | lb/hr | N/A | N/A | N/A | N/A |
| 4034/2200 | 11 | N/A | I6 | 7.01 | Liters | 202 | horsepower | 2200 | 75 | lb/hr | 725 | lb-ft | 1400 | 64 | lb/hr | N/A | N/A | N/A | N/A |
| 3978/1800 | 12 | N/A | I6 | 7.01 | Liters | 204 | horsepower | 1800 | 72 | lb/hr | 642 | lb-ft | 1400 | 57 | lb/hr | N/A | N/A | N/A | N/A |
| 3932/2200 | 13 | N/A | I6 | 7.01 | Liters | 202 | horsepower | 2200 | 75 | lb/hr | 642 | lb-ft | 1400 | 57 | lb/hr | N/A | N/A | N/A | N/A |
| 4052/1800 | 14 | N/A | I6 | 7.01 | Liters | 188 | horsepower | 1800 | 65 | lb/hr | 642 | lb-ft | 1400 | 57 | lb/hr | N/A | N/A | N/A | N/A |
| 4054/2000 | 15 | N/A | I6 | 7.01 | Liters | 176 | horsepower | 2000 | 62 | lb/hr | 637 | lb-ft | 1400 | 56 | lb/hr | N/A | N/A | N/A | N/A |
| 3934/2200 | 16 | N/A | I6 | 7.01 | Liters | 174 | horsepower | 2200 | 64 | lb/hr | 621 | lb-ft | 1400 | 55 | lb/hr | N/A | N/A | N/A | N/A |
| 4028/2200 | 17 | N/A | I6 | 7.01 | Liters | 147 | horsepower | 2200 | 64 | lb/hr | 621 | lb-ft | 1400 | 55 | lb/hr | N/A | N/A | N/A | N/A |
| 4032/2200 | 18 | N/A | I6 | 7.01 | Liters | 173 | horsepower | 2200 | 64 | lb/hr | 642 | lb-ft | 1400 | 57 | lb/hr | N/A | N/A | N/A | N/A |
| 4064/1800 | 19 | N/A | I6 | 7.01 | Liters | 164 | horsepower | 1800 | 57 | lb/hr | 586 | lb-ft | 1400 | 52 | lb/hr | N/A | N/A | N/A | N/A |
| 3990/1800 | 20 | N/A | I6 | 7.01 | Liters | 164 | horsepower | 1800 | 57 | lb/hr | 547 | lb-ft | 1400 | 49 | lb/hr | N/A | N/A | N/A | N/A |
| 3936/2200 | 21 | N/A | I6 | 7.01 | Liters | 156 | horsepower | 2200 | 59 | lb/hr | 557 | lb-ft | 1400 | 50 | lb/hr | N/A | N/A | N/A | N/A |
| 4050/2200 | 22 | N/A | I6 | 7.01 | Liters | 156 | horsepower | 2200 | 59 | lb/hr | 557 | lb-ft | 1400 | 50 | lb/hr | N/A | N/A | N/A | N/A |
| 4060/1800 | 23 | N/A | I6 | 7.01 | Liters | 153 | horsepower | 1800 | 53 | lb/hr | 532 | lb-ft | 1400 | 48 | lb/hr | N/A | N/A | N/A | N/A |
| 4354/2200 | 24 | N/A | I6 | 7.01 | Liters | 273 | horsepower | 2200 | 103 | lb/hr | 927 | lb-ft | 1400 | 86 | lb/hr | N/A | N/A | N/A | N/A |
| 4356/2200 | 25 | N/A | I6 | 7.01 | Liters | 250 | horsepower | 2200 | 93 | lb/hr | 895 | lb-ft | 1400 | 82 | lb/hr | N/A | N/A | N/A | N/A |
| 4358/2200 | 26 | N/A | I6 | 7.01 | Liters | 225 | horsepower | 2200 | 83 | lb/hr | 805 | lb-ft | 1400 | 74 | lb/hr | N/A | N/A | N/A | N/A |
| 4360/2200 | 27 | N/A | I6 | 7.01 | Liters | 202 | horsepower | 2200 | 75 | lb/hr | 725 | lb-ft | 1400 | 64 | lb/hr | N/A | N/A | N/A | N/A |
| 4346/2200 | Cert Test 28 | N/A | I6 | 7.01 | Liters | 302 | horsepower | 2200 | 113 | lb/hr | 946 | lb-ft | 1400 | 86 | lb/hr | N/A | N/A | N/A | N/A |
| 4346/2200 | 28 | N/A | I6 | 7.01 | Liters | 302 | horsepower | 2200 | 113 | lb/hr | 946 | lb-ft | 1400 | 86 | lb/hr | N/A | N/A | N/A | N/A |
| 4348/2200 | 29 | N/A | I6 | 7.01 | Liters | 302 | horsepower | 2200 | 113 | lb/hr | 940 | lb-ft | 1400 | 82 | lb/hr | N/A | N/A | N/A | N/A |
| 4350/1800 | Cert Test 30 | N/A | I6 | 7.01 | Liters | 321 | horsepower | 1800 | 117 | lb/hr | 935 | lb-ft | 1800 | 117 | lb/hr | N/A | N/A | N/A | N/A |
| 4350/1800 | 30 | N/A | I6 | 7.01 | Liters | 321 | horsepower | 1800 | 115 | lb/hr | 935 | lb-ft | 1800 | 115 | lb/hr | N/A | N/A | N/A | N/A |
| 4352/1800 | 31 | N/A | I6 | 7.01 | Liters | 247 | horsepower | 1800 | 83 | lb/hr | 720 | lb-ft | 1800 | 83 | lb/hr | N/A | N/A | N/A | N/A |
| 4460/2200 | 32 | N/A | I6 | 7.01 | Liters | 227 | horsepower | 2200 | 83 | lb/hr | 805 | lb-ft | 1400 | 75 | lb/hr | N/A | N/A | N/A | N/A |
| 4530/2200 | 33 | N/A | I6 | 7.01 | Liters | 178 | horsepower | 2200 | 67 | lb/hr | 642 | lb-ft | 1400 | 57 | lb/hr | N/A | N/A | N/A | N/A |
| 4530/2200 | 34 | N/A | I6 | 7.01 | Liters | 178 | horsepower | 2200 | 67 | lb/hr | 642 | lb-ft | 1400 | 57 | lb/hr | N/A | N/A | N/A | Emergency |
| 6264/1800 | 35 | N/A | I6 | 7.01 | Liters | 163 | horsepower | 1800 | 67 | lb/hr | 795 | lb-ft | 1400 | 52 | lb/hr | N/A | N/A | N/A | N/A |