Pursuant to the authority vested in California Air Resources Board by the Health and Safety Code, Division 26, Part 5, Chapters 1 and 2; and

Pursuant to the authority vested in the undersigned by Health and Safety Code Sections 39515 and 39516 and Executive Order G-19-095;

**IT IS ORDERED AND RESOLVED:** That the following engine and emission control systems produced by the manufacturer are certified for use in small off-road equipment. Production engines shall be in all material respects the same as those for which certification is granted.

| 2021 MCGPS.1961GR 196 4-stroke, >80 cc - <225 cc  | MODEL<br>YEAR ENGIN             |      | NE FAMILY DISPLACEMENT (cc) |     | ENGINE CLASS               |  | FUEL TYPE<br>(CNG/LNG=compressed/liquefied natural gas LPG=liquefied<br>petroleum gas) |  |  |
|---|---------------------------------|------|-----------------------------|-----|----------------------------|--|--|--|--|
| HOURS     EMISSION CONTROL SYSTEMS     TYPICAL EQUIPMENT APPLICATION       125     EM     Compressor, Pump, Pressure Washer,<br>Stump Beater, Generator Set, Leaf Blower/Vacuum,<br>Tiller, Edger, Brushcutter, Other       ENGINE     EM     Compressor, Pump, Pressure Washer,<br>Stump Beater, Generator Set, Leaf Blower/Vacuum,<br>Tiller, Edger, Brushcutter, Other | 2021                            | MCGF | PS.1961GR                   | 196 | 4-stroke, >80 cc - <225 cc |  | Gasoline   |  |  |
| 125 EM Stump Beater, Generator Set, Leaf Blower/Vacuum,<br>Tiller, Edger, Brushcutter, Other   ENGINE Endle   |                                 |      |                             |     |                            | TYPICAL EQUIPMENT APPLICATION                    |  |  |  |
|   | 125                             |      | EM                          |     |                            | Stump Beater, Generator Set, Leaf Blower/Vacuum, |  |  |  |
| CODES/MODELS See Attachment   (rated power in kilowatt, kW) See Attachment  | CODES/MODELS<br>(rated power in |      | See Attachment              |     |                            |  |  |  |  |

EGR-exhaust gas recirculation AIR-secondary air injection PAIR-pulsed AIR MFI-multi port fuel injection SFI-sequential MFI TBI=throttle body fuel injection DFI-direct fuel injection TC/SC=turbo/super charger CAC=charge air cooler 2(prefix)=parallel (2)(suffix)=in series ECM=engine control module

The following are the hydrocarbon plus oxides of nitrogen (HC+NOx), carbon monoxide (CO), and particulate matter (PM) emission standards (Title 13, California Code of Regulations, (13 CCR) Section 2403(b)), and certification emission levels for this engine family in grams per kilowatt-hour (g/kW-hr). Engines within this engine family shall have closed crankcases in conformance with Section 1054.115(a) of the "California Exhaust Emission Standards and Test Procedures for New 2013 and Later Small Off-Road Engines," adopted October 25, 2012.

| *=not applicable      | HC+NOx (g/kW-hr) | CO (g/kW-hr) | PM (g/kW-hr) |  |
|-----------------------|------------------|--------------|--------------|--|
| STANDARD              | 10.0             | 549          | *            |  |
| FAMILY EMISSION LEVEL | *                | *            | *            |  |
| CERTIFICATION LEVEL   | 8.2              | 386          | *            |  |

**BE IT FURTHER RESOLVED:** That the family emission level(s) (FELs), as applicable, is an emission limit declared by the manufacturer for use in the 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 2403(e)(1) and 2407(a).

**BE IT FURTHER RESOLVED:** That for the listed engines, the manufacturer has submitted, and the Executive Officer hereby approves, the information and materials to demonstrate certification compliance with 13 CCR Section 2404 (emission control labels) and 13 CCR Sections 2405 and 2406 (emission control system warranty).

Engines certified under this Executive Order must conform to all applicable California emission regulations.

Quarterly reports of engines produced in this engine family for sale in California shall be submitted to the Executive Officer no later than 45 days after the end of each calendar quarter.

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  $\frac{7th}{2}$  day of July 2021.

Allen Lyons, Chief Emissions Certification and Compliance Division

\_\_\_\_

## Date: \_\_\_\_5/25/2021\_\_\_\_\_

Engine Family: \_\_MCGPS.1961GR\_\_\_\_

## Model Summary

| Worst Case  | 47.<br>Model | 48.<br>Sales Code | 49.<br>Displacement | 50.<br>Bore/Stroke | 51.<br>Ignition Timing | 52.<br>Max Power | 53.<br>Rated Speed (RPM) | 54.<br>Rated Torque | 55.                  | 56.<br>Emission Control System |
|-------------|--------------|-------------------|---------------------|--------------------|------------------------|------------------|--------------------------|---------------------|----------------------|--------------------------------|
| (Check One) | Designation  | Sales Coue        | (cc)                | DUIE/SLIDKE        |                        | Wax Power        | Nateu Speeu (NFM)        | Nateu Torque        | Torque Speen (Krivi) | Emission control system        |
| Х           | H200         | 50-State          | 196                 | 74.5/45mm          | BTDC25                 | 4.1 kW           | 3600                     | 11.5 N.m            | 3000                 | EM                             |
|             | G200F/G200FD | 50-State          | 196                 | 68/54mm            | BTDC25                 | 4.1 kW           | 3600                     | 12.4 N.m            | 2500                 | EM                             |
|             |              |                   |                     |                    |                        |                  |                          |                     |                      |                                |
|             |              |                   |                     |                    |                        |                  |                          |                     |                      |                                |
|             |              |                   |                     |                    |                        |                  |                          |                     |                      |                                |
|             |              |                   |                     |                    |                        |                  |                          |                     |                      |                                |
|             |              |                   |                     |                    |                        |                  |                          |                     |                      |                                |
|             |              |                   |                     |                    |                        |                  |                          |                     |                      |                                |
|             |              |                   |                     |                    |                        |                  |                          |                     |                      |                                |
|             |              |                   |                     |                    |                        |                  |                          |                     |                      |                                |
|             |              |                   |                     |                    |                        |                  |                          |                     |                      |                                |
|             |              |                   |                     |                    |                        |                  |                          |                     |                      |                                |
|             |              |                   |                     |                    |                        |                  |                          |                     |                      |                                |
|             |              |                   |                     |                    |                        |                  |                          |                     |                      |                                |
|             |              |                   |                     |                    |                        |                  |                          |                     |                      |                                |
|             |              |                   |                     |                    |                        |                  |                          |                     |                      |                                |
|             |              |                   |                     |                    |                        |                  |                          |                     |                      |                                |
|             |              |                   |                     |                    |                        |                  |                          |                     |                      |                                |
|             |              |                   |                     |                    |                        |                  |                          |                     |                      |                                |
|             |              |                   |                     |                    |                        |                  |                          |                     |                      |                                |
|             |              |                   |                     |                    |                        |                  |                          |                     |                      |                                |
|             |              |                   |                     |                    |                        |                  |                          |                     |                      |                                |
|             |              |                   |                     |                    |                        |                  |                          |                     |                      |                                |
|             |              |                   |                     |                    |                        |                  |                          |                     |                      |                                |
|             |              |                   |                     |                    |                        |                  |                          |                     |                      |                                |
|             |              |                   |                     |                    |                        |                  |                          |                     |                      |                                |
|             |              |                   |                     |                    |                        |                  |                          |                     |                      |                                |
|             |              |                   |                     |                    |                        |                  |                          |                     |                      |                                |
|             |              |                   |                     |                    |                        |                  |                          |                     |                      |                                |
|             |              |                   |                     |                    |                        |                  |                          |                     |                      |                                |
|             |              |                   |                     |                    |                        |                  |                          |                     |                      |                                |
|             |              |                   |                     |                    |                        |                  |                          |                     |                      |                                |
|             |              |                   |                     |                    |                        |                  |                          |                     |                      |                                |
|             |              |                   |                     |                    |                        |                  |                          |                     |                      |                                |
|             |              |                   |                     |                    |                        |                  |                          |                     |                      |                                |
|             |              |                   |                     |                    |                        |                  |                          |                     |                      |                                |

For CARB Use Only Executive Order: U-U-145-0509 Attachment \_\_1\_\_\_ of \_\_1\_\_\_