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 new large spark-ignition engines and emission control systems produced by the manufacturer are certified for use in off-road equipment as described below. 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
2023	PDZXB02.9116	2.925	Gasoline, LPG, LPG-Gasoline Dual Fuel
DURABILITY HOURS		IAL FEATURES & CONTROL SYSTEMS	TYPICAL EQUIPMENT USAGE
5000	Three-Way Catalytic Converter, Heated Oxygen Sensors (2), Sequential Fuel Injection (Gasoline), Gaseous Fuel Mixer (LPG)		Forklift, Other
ENGINE MODELS (rated power in kilowatt, kW)		See Attachment	

The following are the hydrocarbon plus oxides of nitrogen (HC+NOx) and carbon monoxide (CO) exhaust certification emission standards (Title 13, California Code of Regulations, (13 CCR) Section 2433(b)(1)) 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 13 CCR Section 2433(b)(3).

	HC+NOx (g/kW-hr)	CO (g/kW-hr)
EXHAUST STANDARD	0.8	20.6
CERTIFICATION LEVEL	0.2	1.4

The following is the evaporative hydrocarbon emission standard (13 CCR Section 2433(b)(4)) and certification emission level for this engine family in grams per gallon of fuel tank capacity (g/gallon).

Evaporative Certification Method	HC Certification Level (g/gallon)	HC Certification Standard (g/gallon)
Design Based	N/A	N/A

**BE IT FURTHER RESOLVED:** That for the listed engines for the aforementioned model-year, the manufacturer has submitted, and the Executive Officer hereby approves, the information and materials to demonstrate certification compliance with 13 CCR Section 2433(c) (certification and test procedures), 13 CCR Section 2434 (emission control labels), and 13 CCR Sections 2435 and 2436 (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 on this <u>5tk</u> day of October 2022.

Polin U. Lang

Robin U. Lang, Chief *U* Emissions Certification and Compliance Division

LSIE Exhaust Model Summary Template (rev. Aug 2021)

Date: \_\_\_9/20/2022\_\_\_\_\_ Engine Family: \_\_\_PDZXB02.9116\_\_\_\_\_

## Model Summary

(Use an asterisk (\*) to identify worst-case engine model used for certification testing.)

S15. Sales Codes (Check all appropriate) CA Only S13. S14. S16. S17. S18. S19. S20. 49-State 50-State Engine Model Engine Code Engine Displacement Rated Power (kW) Rated Speed (RPM) Peak Torque (FT-LB) Peak Torque Speed (RPM) (Liters) G2.9L4 C5AI42DB 2.925 2300 1 42 182 1600 G2.9L4 C5AI52PB ~ 2.925 52 2800 201 1600 G2.9L4 C5AI52AG 2.925 52 2600 209 1600 ~ G2.9L4 C5AI40EL 2.925 40 2200 182 1600 ✓ C5AI46EG 2.925 46 2200 209 1600 G2.9L4  $\checkmark$ G2.9L4 C5AI50AB ~ 2.925 50 2600 201 1600 G2.9L4 C5AI47AG ✓ 2.925 47 2600 187 1600 G2.9L4 C5AI45PL ✓ 2.925 45 2800 182 1600 G2.9L4 C5AI44EL ✓ 2.925 44 2200 202 1600 C5AI47DB √ 2.925 47 2300 201 1600 G2.9L4 1 G2.9L4 C5AI41DL 2.925 41 2300 182 1600 ~ 2800 G2.9L4 C5AI54PG\* 2.925 54 209 1600 G2.9L4 C5AI43DG ~ 2.925 43 2300 187 1600 G2.9L4 C5AI49AL ~ 2.925 49 2600 202 1600 G2.9L4 C5AI46DL ~ 2.925 46 2300 202 1600 C5AI47PB 2.925 47 2800 182 1600 G2.9L4 ✓ 2300 1600 G2.9L4 C5AI48DG 2.925 48 209 ~ G2.9L4 C5AI50PL ✓ 2.925 50 2800 202 1600 G2.9L4 C5AI49PG ✓ 2.925 49 2800 187 1600 G2.9L4 C5AI42EG ✓ 2.925 42 2200 187 1600 G2.9L4 C5AI44AL 2.925 44 2600 182 1600 ✓ G2.9L4 C5AI45EB √ 2.925 45 2200 201 1600 G2.9L4 C5AI45AB ~ 2.925 45 2600 182 1600 G2.9L4 C5AI41EB 1 2.925 41 2200 182 1600

For CARB Use Only Executive Order: U-L-077-0006 Attachment \_\_1\_\_of\_\_1\_\_