## POWER SOLUTIONS INTERNATIONAL, INC.

EXECUTIVE ORDER U-L-011-0106 New Off-Road Large Spark-Ignition Engines Above 19 Kilowatts

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		
2022	NPSIB2.40GLP	2.0, 2.4	Gasoline, LPG, CNG, Gasoline-LPG Dual Fuel		
DURABILITY HOURS		IAL FEATURES & I CONTROL SYSTEMS	TYPICAL EQUIPMENT USAGE		
5000	Heated Sequential	ay Catalytic Converter, Oxygen Sensor (2), Multiport Fuel Injection, seous Fuel Mixer	Forklift, Sweeper, Tractor/Tug, Other		
	GINE MODELS wer 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	0.1	1.8		

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	0.2		

**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 10th day of June 2021.

Allen Lyons, Chief

**Emissions Certification and Compliance Division** 

Date: \_\_\_\_1/6/2021\_\_\_ Engine Family: MPSIB2.40GLP For CARB Use Only
Executive Order: U-L-011-0106
Attachment \_\_1\_\_of\_\_1\_\_

## Model Summary

			S15.						
		Sales C	odes (Check all ap	propriate)					
S13. Engine Model	S14. Engine Code	CA Only	49-State	50-State	S16. Engine Displacement (Liters)	S17. Rated Power (kW)	S18. Rated Speed (RPM)	S19. Peak Torque (FT-LB)	S20. Peak Torque Speed (RPM)
2000LPG	2000LPG			Х	2.0	39	2800	100.8	1800
2000GAS	2000GAS			х	2.0	40	2800	102.8	2400
2000DF	2000DF			X	2.0	40	2800	102.8	2400
2400GAS	2400GAS			x	2.4	50	2800	125.2	2400
2400GDR	2400GDR			x	2.4	37	2800	117.4	2800
2400LPG	2400LPG			х	2.4	47	2800	123.9	1600
2400DF	2400DF			X	2.4	50	2800	125.2	2400
2400CNG	2400CNG			x	2.4	53	2800	110.54	2400
24000110	Z400CNG			^	2.4	33	2800	110.34	2400
		-							
		_							