

POWER SOLUTIONS INTERNATIONAL, INC.

EXECUTIVE ORDER U-L-011-0096 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 NAME	ENGINE DISPLACEMENT (liters)	FUEL TYPE Gasoline, LPG-CNG Dual Fuel		
2020	LPSIB8.80NGP	8.8			
HOURS EMISSIC Three-Wi 5000 Heate Gi Sequent		IAL FEATURES & CONTROL SYSTEMS	TYPICAL EQUIPMENT USAGE		
		Catalytic Converter (2), Oxygen Sensor (2), eous Fuel Mixer, Multiport Fuel Injection	Generator, Pump, Compressor, Tractor/Tug		
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).

(g/kW-hr)	HC+NOx	со
Exhaust Standards	0.8	20.6
Certification Levels	0.2	1.7

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).

ĺ	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 at El Monte, California on this 674 day of January 2020.

Allen Lyons, Chief

Emissions Certification and Compliance Division

Attachment 1 of 1

Model Year: 2020	Page:6
Manufacturer Name: Power Solutions International, Inc.	Issued: <u>03/26/2019</u>
Engine Family: LPSIB8.80NGP	Revised:
OFF-ROAD LSI ENGINE SUPPLEMENTAL INFORMATION	EO. #: 11-1-011-00016

\$12. MODEL SUMMARY (Use an asterisk (*) to identify worst-case engine model used for certification testing.)

Engine Model Engine Code Sales Codes (Check ALL appropriate) Eng. Displ. (Liters) Rated Power (kW) Rated Speed (RPM) Peak Torque (FT-LB) Peak Torque (FT-LB) 4G 8800 NA* 4G 8800 NA* X 8.8 183 3000 515.5 1800		VIMARY (Use an a	isterisk (*							
Engine Model Engine Code (Check ALL appropriate) Eng. Displ. (Liters) Rated Power (kW) Rated Speed (RPM) Peak Torque (FT-LB) Peak Torque (FT-LB) Peak Torque (RPM) 4G 8800 NA* 4G 8800 NA* X 8.8 183 3000 515.5 1800	S13.	S14.				S16.	S17.	S18.	S19.	S20.
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Calif. 49- 50- State State 48800 NA* 4G 8800 NA* X 8.8 183 3000 515.5 1800	Model	Code				l I				
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										(RPM)
8800 CSGAS	4G 8800 NA*	4G 8800 NA*			Х	8.8	183	3000	515.5	1800
	8800 CSGAS	8800 CSGAS			Х	8.8	184	2600	499	2600
										
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4G 8800 NA (Constant speed, mobile LPG and/or NG) 8800 CSGAS (Constant speed, mobile, gasoline)