

## POWER SOLUTIONS INTERNATIONAL, INC.

EXECUTIVE ORDER U-L-011-0100

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		
2021	MPSIB04.3GLP	4.3	Gasoline, LPG, CNG, Gasoline-LPG Dual Fuel, NG-LPG Dual Fuel		
DURABILIT HOURS		IAL FEATURES & CONTROL SYSTEMS	TYPICAL EQUIPMENT USAGE		
5000	Heated Seguential	ny Catalytic Converter, Oxygen Sensor (2), Multiport Fuel Injection, seous Fuel Mixer	Forklift, Sweeper, Tractor/Tug, Generator, Compressor, 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).

(g/kW-hr)	HC+NOx	co		
Exhaust Standards	0.8	20.6		
Certification Levels	0.3	2.7		

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).

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 15<sup>114</sup> day of July 2020.

Allen Lyons, Chief

Emissions Certification and Compliance Division

Model Year:	Page:6
Manufacturer Name: _Power Solutions International, Inc	Issued:
Engine Family: MPSIB04.3GLP	Revised:
OFF-ROAD LSI ENGINE SUPPLEMENTAL INFORMATION	EO. #:

**S12. MODEL SUMMARY** (Use an asterisk (\*) to identify worst-case engine model used for certification testing.)

512. MODEL SUMMART (Use an asterisk (*) to identify worst-case engine model used for certification testing.)									
S13.	S14.		S15.		S16.	S17.	S18.	S19.	S20.
Engine Model	Engine Code	Sales Codes (Check ALL appropriate)		ALL	Eng. Displ.	Rated Power	Rated Speed	Peak Torque	Peak Torque
		C ali	49- State	50- State	(Liters)	(kW)	(RPM)	(FT-LB)	Speed (RPM)
4300GAS*	4300GAS*			Х	4.3	99.4	3000	237	2600
4300DFM	4300DFM			Х	4.3	99.4	3000	237	2600
4300LPGM	4300LPGM			Х	4.3	99.2	3000	246	1400
4300DFS	4300DFS			Х	4.3	93	2800	244	1800
4300CNGM	4300CNGM			Х	4.3	91.8	3001	307	1400
4300WHG	4300WHG			Х	4.3	82	2650	309	1800
4300GASCNP	4300GASCNP			Х	4.3	99.4	3000	237	2600
4300DFMCNP	4300DFMCNP			Х	4.3	99.4	3000	237	2600
4300LPGMCNP	4300LPGMCNP			Х	4.3	99.2	3000	246	1400
4300DFSCNP	4300DFSCNP			Х	4.3	93	2800	244	1800
4300CNGMCNP	4300CNGMCNP			Х	4.3	91.8	3001	307	1400
4300WHGCNP	4300WHGCNP			Х	4.3	82	2650	309	1800

4300LPGM (LPG Variable Speed),

4300DFS (LPG and/or NG Constant Speed),

4300DFM (LPG and/or Gasoline Variable Speed),

4300GAS (Gasoline Variable Speed)

4300CNGM (CNG Variable Speed Mobile)

4300WHG

4300LPGMCNP (LPG Variable Speed),

4300DFSCNP (LPG and/or NG Constant Speed),

4300DFMCNP (LPG and/or Gasoline Variable Speed),

4300GASCNP (Gasoline Variable Speed)

4300CNGMCNP (CNG Variable Speed Mobile)

4300WHGCNP