

## ZENITH POWER PRODUCTS, LLC

EXECUTIVE ORDER U-L-020-0062 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-14-012;

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		
2019	KZPPB01.6H16	1.6	Gasoline, LPG, Gasoline-LPG Dual Fuel		
DURABILITY HOURS			TYPICAL EQUIPMENT USAGE		
5000 Heated		ay Catalytic Converter, Oxygen Sensors (2), Multiport Fuel Injection	Generator, Pump, Compressor, Other Industrial Equipment		
	INE MODELS ver 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	0.4	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).

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 36 day of April 2019

Allen Lyons, Chief

Emissions Compliance, Automotive Regulations and Science Division

Attachment (page 1 of 1)

Model Year: 2019	Page:6
Manufacturer Name: Zenith Power Products, LLC	Issued: 4/8/19
Engine Family: KZPPB01.6H16	Revised:
OFF-ROAD LSI ENGINE SUPPLEMENTAL INFORMAT	TION E.O.#: 11-1-020-006 2

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

S13.	S14.	0.	S15.		S16.	S17.	S18.	S19.	S20.
Engine Model	Engine Engine Code		Sales Codes (Check ALL appropriate)		Eng. Displ. (Liters)	Rated Power (kW)	Rated Speed (RPM)	Peak Torque (FT-LB)	Peak Torque Speed
		Calif. Only	49- State	50- State	(======,		( ,	(* * ==,	(RРМ)
NA416LG1	Gas			X	1.6	35.8	3000	85	2200
NA416LL2	LPG			х	1.6	39.5	3000	92	2200
*NA416LD5	Dual			X	1.6	39.5	3000	92	2200
NAG416LG1	Ģas			X	1.6	34.8	3000	85	2200
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