

CHONGQING AM PRIDE POWER & MACHINERY CO.,LTD

EXECUTIVE ORDER U-U-164-0166-1

New Off-Road Small Spark-Ignition Engines at or Below 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 engine and emission control systems produced by the manufacturer are certified for use in small off-road equipment. Production engines shall be in all material respects the same as those for which certification is granted.

MODEL YEAR	- I ENGINE FAMILY		DISPLACEMENT (cc)	ENGINE CLASS		FUEL TYPE (CNG/LNG=compressed/liquefied natural gas LPG=liquefied petroleum gas)		
2023	PCPF	S.2231GA	196, 208, 209, 212, 223	4-stroke, > 80 cc - < 225 cc		Gasoline, Gasoline-LPG dual-fuel, Gasoline-LPG-CNG tri-fuel		
DURABILITY HOURS		SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION			
125		EM			Compressor, Pump, Pressure Washer, Generator Set, Tiller, Other			
ENGINE CODES/MODELS (rated power in kilowatt, kW)					See Attachme	ent		

ABBREVIATIONS: EM=engine modification TWC/OC=three-way/oxidizing catalyst WUTWC/WUOC=warm-up TWC/OC O2S=oxygen sensor HO2S=heated O2S EGR=exhaust gas recirculation AIR=secondary air injection PRI=multip torf fuel injection PFI=sequential MFI TBI=throttle body fuel injection DFI=direct fuel injection TC/SC=turbo/super charger CAC=charge air cooler 2(prefix)=parallel (2)(suffix)=in series ECM=engine control module

The following are the hydrocarbon plus oxides of nitrogen (HC+NOx), carbon monoxide (CO), and particulate matter (PM) emission standards (Title 13, California Code of Regulations, (13 CCR) Section 2403(b)), 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 Section 1054.115(a) of the "California Exhaust Emission Standards and Test Procedures for New 2013 and Later Small Off-Road Engines," amended January 1, 2023.

*=not applicable	HC+NOx (g/kW-hr)	CO (g/kW-hr)	PM (g/kW-hr)	
STANDARD	10.0	549	*	
FAMILY EMISSION LIMIT	*	*	*	
CERTIFICATION LEVEL	9.3	428	*	

BE IT FURTHER RESOLVED: That the family emission limit(s) (FELs), as applicable, is an emission level that is declared by the manufacturer to serve for the averaging, banking and trading program and in lieu of an emission standard for certification. It serves as the applicable emission standard for determining compliance of any engine within this engine family under 13 CCR Sections 2403(e)(1) and 2407(a).

BE IT FURTHER RESOLVED: That for the listed engines, the manufacturer has submitted, and the Executive Officer hereby approves, the information and materials to demonstrate certification compliance with 13 CCR Section 2404 (emission control labels) and 13 CCR Sections 2405 and 2406 (emission control system warranty).

Engines certified under this Executive Order must conform to all applicable California emission regulations.

Quarterly reports of engines produced in this engine family for sale in California shall be submitted to the Executive Officer no later than 45 days after the end of each calendar quarter.

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.

This Executive Order hereby supersedes Executive Order U-U-164-0166 dated June 13, 2022.

Executed on this <u>23rd</u> day of June 2023.

Robin U. Lang Robin U. Lang, Chief

Emissions Certification and Compliance Division

Date: 4/13/2023

Engine Family: PCPPS.2231GA

For CARB Use Only
Executive Order: U-U-164-0166-1
Attachment __1_ of __1__

Model Summary

Model Summa	47.	48.	49.	50.	51.	52.	53.	54.	55.	56.
Worst Case (Check One)	Model Designation	Sales Code	Displacement (cc)	Bore/Stroke	Ignition Timing	Max Power	Rated Speed (RPM)	Rated Torque		Emission Control System
	AP170FB(Gasoline)	50-State	223	70/58	21±2BTDC	4.8kW	3600	12.7N.m	2500	EM
	SC230(Gasoline)	50-State	223	70/58	21±2BTDC	4.8kW	3600	12.7N.m	2500	EM
	AP170F(Gasoline)	50-State	208	70/54	21±2BTDC	4.4kW	3600	11.7N.m	2500	EM
	AP168FB(Gasoline)	50-State	196	68/54	21±2BTDC	4.0kW	3600	11N.m	2500	EM
	SC200(Gasoline)	50-State	196	68/54	21±2BTDC	4.0kW	3600	11N.m	2500	EM
	SC212(Gasoline)	50-State	212	70/55	21±2BTDC	4.5kW	3600	12N.m	2500	EM
	SV200(Gasoline)	50-State	196	68/54	21±2BTDC	4.2kW	3600	11.5N.m	2500	EM
	SV230(Gasoline)	50-State	223	70/58	21±2BTDC	5.0kW	3600	13.2N.m	2500	EM
	SV212(Gasoline)	50-State	212	70/55	21±2BTDC	4.7kW	3600	12.5N.m	2500	EM
	SC230L(Gasoline-LPG dual-fuel)	50-State	223	70/58	21±2BTDC	4.5kW(Gasoline)/ 4.0kW(LPG)	3600	14.5N.m	2800	EM
(SV230L(Gasoline-LPG dual-fuel)	50-State	223	70/58	21±2BTDC	4.8kW(Gasoline)/ 4.3kW(LPG)	3600	14.8N.m	2600	EM
	SV210(Gasoline)	50-State	209	74.5/48	25BTDC	4.0kW	3600	12.5N.m	3000	EM
	SC230T(Gasoline-LPG- CNG tri-fuel)	50-State	223	70/58	25±2BTDC	4.6kW(Gasoline)/ 4.1kW(LPG)/ 3.45(CNG)	3600	12.5N.m	2800	EM