

CHONGQING AM PRIDE POWER&MACHINERY CO.,LTD

EXECUTIVE ORDER U-U-164-0076 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-14-012:

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	FNGINE FAMILY		DISPLACEMENT (cc) ENGI		CLASS	FUEL TYPE (CNG/LNG=compressed/liquefied natural gas LPG=liquefied petroleum gas)			
2018	JCPP	S.4572GA	389, 420, 457	4-stroke, ≥ 225 cc		Gasoline			
DURABILITY HOURS		SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION				
250		EM			Compressor, Pump, Pressure Washer, Generator Set				
ENGINE CODES/MODELS (rated power in kilowatt, kW)		See Attachment							

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 PAIR=pulsed AIR MFI=multi port fuel injection SFI=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," adopted October 25, 2012.

*=not applicable	HC+NOx (g/kW-hr)	CO (g/kW-hr)	PM (g/kW-hr)
STANDARD	8.0	549	*
FAMILY EMISSION LEVEL	*	*	*
CERTIFICATION LEVEL	6.8	511	*

BE IT FURTHER RESOLVED: That the family emission level(s) (FELs), as applicable, is an emission limit declared by the manufacturer for use in 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.

Executed at El Monte, California on this 3 day

3 day of February 2018.

Annette Hebert, Chief

Emissions Compliance, Automotive Regulations and Science Division

Attachment, 1 of 1

Model Year:

2018

Revised:

1/29/2018

Manufacturer:

Engine Family: JCPPS.4572GA

CHONGQING AM PRIDE

E.O. Number:

U-11-164-0076

Small Off-Road Engine Model Summary Form

Units for Table: kW

Page: 9

47. Model Designation	48. Sales Code	49. Displ (cc)	50. Bore/ Stroke	51. Ignition Timing	52. Max Power	53. Rated Speed (RPM)	54. Rated Torque	55. Torque Speed (RPM)	56. Emiss Control Sys
AP192FC	50-State	457	92/68.8	21BTDC	9.2	3600	28N.m	2500	EM
AP188F	50-State	389	88/64	21BTDC	8	3600	23N.m	2500	EM
SC390	50-State	389	88/64	21BTDC	8	3600	23N.m	2500	EM
AP190F	50-State	420	90/66	21BTDC	8.4	3600	24.5N.m	2500	EM
SC420	50-State	420	90/66	21BTDC	8.4	3600	24.5N.m	2500	EM
SV390	50-State	389	88/64	21±3 BTDC	8.4	3600	24.5N.m	2500	EM
SV420	50-State	420	90/66	21±3 BTDC	8.8	3600	26 N.m	2500	EM
	Model Designation AP192FC AP188F SC390 AP190F SC420 SV390	Model Sales Designation Code AP192FC 50-State AP188F 50-State SC390 50-State AP190F 50-State SC420 50-State SV390 50-State	Model Designation Sales Code (cc) Displementation AP192FC 50-State 457 AP188F 50-State 389 SC390 50-State 389 AP190F 50-State 420 SC420 50-State 420 SV390 50-State 389	Model Designation Sales Code Displement Displement Bore/Stroke AP192FC 50-State 457 92/68.8 AP188F 50-State 389 88/64 SC390 50-State 389 88/64 AP190F 50-State 420 90/66 SC420 50-State 420 90/66 SV390 50-State 389 88/64	Model Designation Sales Code Displementary Bore/ Stroke Ignition Timing AP192FC 50-State 457 92/68.8 21BTDC AP188F 50-State 389 88/64 21BTDC SC390 50-State 389 88/64 21BTDC AP190F 50-State 420 90/66 21BTDC SC420 50-State 420 90/66 21BTDC SV390 50-State 389 88/64 21±3 BTDC	Model Designation Sales Code Displementary Bore/Stroke Ignition Timing Max Power AP192FC 50-State 457 92/68.8 21BTDC 9.2 AP188F 50-State 389 88/64 21BTDC 8 SC390 50-State 389 88/64 21BTDC 8 AP190F 50-State 420 90/66 21BTDC 8.4 SC420 50-State 420 90/66 21BTDC 8.4 SV390 50-State 389 88/64 21±3 BTDC 8.4	Model Designation Sales Code Displementary Bore/ Stroke Ignition Timing Max Power (RPM) AP192FC 50-State 457 92/68.8 21BTDC 9.2 3600 AP188F 50-State 389 88/64 21BTDC 8 3600 SC390 50-State 389 88/64 21BTDC 8 3600 AP190F 50-State 420 90/66 21BTDC 8.4 3600 SC420 50-State 420 90/66 21BTDC 8.4 3600 SV390 50-State 389 88/64 21±3 BTDC 8.4 3600	Model Designation Sales Code Displementary Bore/ Stroke Ignition Timing Max Power Rated Speed (RPM) Rated Torque AP192FC 50-State 457 92/68.8 21BTDC 9.2 3600 28N.m AP188F 50-State 389 88/64 21BTDC 8 3600 23N.m SC390 50-State 389 88/64 21BTDC 8 3600 23N.m AP190F 50-State 420 90/66 21BTDC 8.4 3600 24.5N.m SC420 50-State 420 90/66 21BTDC 8.4 3600 24.5N.m SV390 50-State 389 88/64 21±3 BTDC 8.4 3600 24.5N.m	Model Designation Sales Code Displementary Bore/ Ignition Max Power Rated Speed (RPM) Rated Torque Speed (RPM) AP192FC 50-State 457 92/68.8 21BTDC 9.2 3600 28N.m 2500 AP188F 50-State 389 88/64 21BTDC 8 3600 23N.m 2500 SC390 50-State 389 88/64 21BTDC 8 3600 23N.m 2500 AP190F 50-State 420 90/66 21BTDC 8.4 3600 24.5N.m 2500 SC420 50-State 420 90/66 21BTDC 8.4 3600 24.5N.m 2500 SV390 50-State 389 88/64 21±3 BTDC 8.4 3600 24.5N.m 2500