CHONGQING ZONGSHEN GENERAL POWER MACHINE CO., LTD

EXECUTIVE ORDER U-U-082-0237 New Off-Road Small Spark-Ignition Engines at or Below 19 Kilowatts

Pursuant to the authority vested in the 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 ENGINE FAMILY		NGINE FAMILY	DISPLACEMENT (cc) ENGINE		CLASS	FUEL TYPE		
2017	HCZHS.4202HW		420, 383, 357	4-stroke, ≥ 225 cc		Gasoline		
DURABILI HOURS			ECIAL FEATURES & ON CONTROL SYSTE	TYPICAL EQUIPMENT APPLICATION				
250			EM		Snowblower, Ice Auger			
ENGINE MODELS (rated pov in kilowa kW)	S ver	See Attachment						

The following are the 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).

*=not applicable	CO (g/kW-hr)	PM (g/kW-hr)		
STANDARD	549	*		
FAMILY EMISSION LEVEL	*	*		
CERTIFICATION LEVEL	381	*		

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).

BE IT FURTHER RESOLVED: That because the listed engine models shall be used exclusively in wintertime snowblower and/or ice auger products only (13 CCR Section 2403(b)(1)(footnote 5)), the equipment is exempt from complying with 13 CCR, Chapter 15, Article 1 (evaporative emission requirements for off-road equipment).

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

_ day of December 2016.

Annette Hebert, Chief

Emissions Compliance, Automotive Regulations and Science Division

Page: 9

Model Year:

Manufacturer:

2017 Attachment, 1 of 1 Chongqing Zongshen General Power

Issued:

9/28/2016 Revised:

Engine Family: HCZHS.4202HW

E.O. Number: U-U-082-0737

Small Off-Road Engine Model Summary Form

Units for Table: kw

	47.	48.	49.	50.	51.	52.	53.	54.	55.	56.
Worst Case?	Model Designation	Sales Code	Displ (cc)	Bore/ Stroke	Ignition Timing	Max Power	Rated Speed (RPM)	Rated Torque	Torque Speed (RPM)	Emiss Control Sys
	190F_	50-State	420	90/66	24	7.8	3600	23	2750	EM
	183F_	50-State	357	83/66	24	6.8	3600	20	2600	EM
	186F_	50-State	383	86/66	26	7	3600	21	2600	EM
	SN420	50-State	420	90/66	24	7.8	3600	23	2750	EM
	SN360	50-State	357	83/66	24	6.8	3600	20	2600	EM
	SN390	50-State	383	86/66	26	7	3600	21	2600	EM
	490-WH_	50-State	420	90/66	24	7.8	3600	23	2750	EM
	490-WU_	50-State	420	90/66	24	7.8	3600	23	2750	EM
X	490-SU_	50-State	420	90/66	24	7.8	3600	23	2750	EM
	490-SH_	50-State	420	90/66	24	7.8	3600	23	2750	EM
	690-SU_	50-State	420	90/66	24	7.8	3600	23	2750	EM
	690-SH_	50-State	420	90/66	24	7.8	3600	23	2750	EM
	483-SU_	50-State	357	83/66	24	6.8	3600	20	2600	EM
	483-SH_	50-State	357	83/66	24	6.8	3600	20	2600	EM
	683-SU_	50-State	357	83/66	24	6.8	3600	20	2600	EM
	683-SH_	50-State	357	83/66	24	6.8	3600	20	2600	EM
	683-WU_	50-State	357	83/66	24	6.8	3600	20	2600	EM
	683-WH_	50-State	357	83/66	24	6.8	3600	20	2600	EM
	690-WU_	50-State	420	90/66	24	7.8	3600	23	2750	EM
	690-WH	50-State	420	90/66	24	7.8	3600	23	2750	EM