

CHONGQING ZONGSHEN GENERAL **POWER MACHINE CO., LTD**

EXECUTIVE ORDER U-U-082-0050 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-02-003;

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	EN	IGINE FAMILY	DISPLACEMENT (cc)	ENGIN	CLASS	FUEL TYPE	
2011	ВС	ZHS.2081HW	179, 208	4-stroke, >80 cc - <225 cc		Gasoline	
DURABILITY HOURS 125. ENGINE MODELS (rated power in kilowatt, kW)		SPECIAL FEATURES & EMISSION CONTROL SYSTEMS				QUIPMENT APPLICATION	
		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	455	*			

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

Annette Hebert, Chief

Mobile Source Operations Division

day of December 2010.

FOR AGH

Attachment, 1 of 2 Issued:

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Model Year: 2011
Manufacturer: Chongqing Zongshen General Power
Engine Family: BCZHS.2081HW

Revised:

9/19/2010

E.O. Number: 11-14-082-0050

Small Off-Road Engine Model Summary Form

Units for Table: kW

	47.	48.	49.	50.	51.	52.	53.	54.	55.	56.
Worst	Model	Sales	Displ	Bore/	Ignition	Max	Rated Speed	Rated	Torque Speed	Emiss
Case?	Designation	Code	(cc)	Stroke	Timing	Power	(RPM)	Torque	(RPM)	Control Sys
	170F_	50-State	208	70/54	27	3.8	3600	11	2600	EM
	170-SU_	50-State	208	70/54	27	3.8	3600	11	2600	EM
X	370-SU_	50-State	208	70/54	27	3.8	3600	11	2600	EM
	165F_	50-State	179	65/54	27	3.5	3600	9	2600	EM
	165-SU_	50-State	179	65/54	27	3.5	3600	9	2600	EM
	365-SU_	50-State	179	65/54	27	3.5	3600	9	2600	EM
	365-JH_	50-State	179	65/54	27	3.5	3600	9	2600	EM
	365-SH_	50-State	179	65/54	27	3.5	3600	9	2600	EM
	365-JU_	50-State	179	65/54	27	3.5	3600	9	2600	EM
	265-SH_	50-State	179	65/54	27	3.5	3600	9	2600	ΕM
	265-SU_	50-State	179	65/54	27	3.5	3600	9	2600	EM
	270-JU_	50-State	208	70/54	27	3.8	3600	11	2600	EM
	270-JH_	50-State	208	70/54	27	3.8	3600	11	2600	EM

Attachment, 2 of 2

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Model Year: Manufacturer: Engine Family: Issued: Revised:

9/19/2010

E.O. Number: U - V - 082 - 0050

Small Off-Road Engine Model Summary Form

Units for Table:

	47.	48.	49.	50.	51.	52.	53.	54.	55 <i>.</i>	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	
	170-SH_	50-State	208	70/54	27	3.8	3600	11	2600	EM	
	370-SH_	50-State	208	70/54	27	3.8	3600	11	2600	EM	
	270-SU_	50-State	208	70/54	27	3.8	3600	11	2600	EM	
	270-SH_	50-State	208	70/54	27	3.8	3600	11	2600	EM	
	370-JU_	50-State	208	70/54	27	3.8	3600	11	2600	EM	
	370-JH_	50-State	208	70/54	27	3.8	3600	11	2600	EM	
	165-SH_	50-State	179	65/54	27	3.5	3600	9	2600	EM	
	265-JU_	50-State	179	65/54	27	3.5	3600	9	2600	EM	
	265-JH_	50-State	179	65/54	27	3.5	3600	9	2600	EM	
	SN180_	50-State	179	65/54	27	3.5	3600	9	2600	EM	
	SN210_	50-State	208	70/54	27	3.8	3600	11	2600	EM	