

CHONGQING ZONGSHEN GENERAL POWER MACHINE CO., LTD.

EXECUTIVE ORDER U-U-082-0385New 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	ENGIN	ENGINE FAMILY DISPLACEMENT (cc) ENGINE		ENGINE C	CLASS	FUEL TYPE (CNG/LNG=compressed/liquefied natural gas LPG=liquefied petroleum gas)		
2020	LCZH	lS.1591 V 1	159, 141	4-stroke, >80 c	c - <225 cc	Gasoline		
DURABI			SPECIAL FEATURES	. •	TYPICAL EQUIPMENT APPLICATION			
125			EM		Walk-Behind Lawnmower, Compressor, Pump, Pressure Washer, Stump Beater, Non-Backpack Blower, Tiller, Edger, Other			
ENGINE CODES/MODELS (rated power in kilowatt, kW)					See Attachm	ent ±		

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	10.0	549	*
FAMILY EMISSION LEVEL	*	*	*
CERTIFICATION LEVEL	7.8	393	*

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 2914 day of July 2019.

Allen Lyons, Chief

Emissions Certification and Compliance Division

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Model Year: 2020 Issued:

Manufacturer: Chongqing Zongshen General Power Revised: 4/18/2019

Engine Family: LCZHS.1591V1 E.O. Number:

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
	1T65TU_	50-State	141	65/43	20	2.2	3600	6.5	3000	EM
	1T65NU_	50-State	141	65/43	20	2.2	3600	6.5	3000	EM
	1T65RU_	50-State	141	65/43	20	2.2	3600	6.5	3000	EM
	1T65RW_	50-State	141	65/43	20	2.2	3600	6.5	3000	EM
	1X65MU_	50-State	159	65/48	20	2.6	3600	7.0	3000	EM
	1X65TU_	50-State	159	65/48	20	2.6	3600	7.0	3000	EM
	1X65CU_	50-State	159	65/48	20	2.6	3600	7.0	3000	EM
	1X65HU_	50-State	159	65/48	20	2.6	3600	7.0	3000	EM
X	5X65MU_	50-State	159	65/48	20	2.6	3600	7.0	3000	EM
	5X65QU_	50-State	159	65/48	20	2.6	3600	7.0	3000	EM
	6X65MU_	50-State	159	65/48	20	2.6	3600	7.0	3000	EM
	6X65QU_	50-State	159	65/48	20	2.6	3600	7.0	3000	EM
	8X65MU_	50-State	159	65/48	20	2.6	3600	7.0	3000	EM
	AX65MU_	50-State	159	65/48	20	2.6	3600	7.0	3000	EM
	BX65MU_	50-State	159	65/48	20	2.6	3600	7.0	3000	EM
	5X65RW_	50-State	159	65/48	20	2.6	3600	7.0	3000	EM
	5X65VU_	50-State	159	65/48	20	2.6	3600	7.0	3000	EM
	6X65RW_	50-State	159	65/48	20	2.6	3600	7.0	3000	EM
	1X65VU_	50-State	159	65/48	20	2.6	3600	7.0	3000	EM
	5T65RU_	50-State	141	65/43	20	2.2	3600	6.5	3000	EM

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Model Year: 2020 Issued:

Manufacturer: Chongqing Zongshen General Power Revised: 3/26/2020

Engine Family: LCZHS.1591V1 E.O. Number:

Small Off-Road Engine Model Summary Form

Units for Table:

NAI - I								55.	56.
Model Designation	Sales Code	Displ (cc)	Bore/ Stroke	Ignition Timing	Max Power	Rated Speed (RPM)	Rated Torque	Torque Speed (RPM)	Emiss Control Sys
5T65VU_	50-State	141	65/43	20	2.2	3600	6.5	3000	EM
1X65LU_	50-State	159	65/48	20	2.6	3600	7.0	3000	EM
5T65RW_	50-State	141	65/43	20	2.2	3600	6.5	3000	EM
1T65VU_	50-State	141	65/43	20	2.2	3600	6.5	3000	EM
1T65HU_	50-State	141	65/43	20	2.2	3600	6.5	3000	EM
6X65RU_	50-State	159	65/48	20	2.6	3600	7.0	3000	EM
5X65RU_	50-State	159	65/48	20	2.6	3600	7.0	3000	EM
1X65RU_	50-State	159	65/48	20	2.6	3600	7.0	3000	EM
1X65RW_	50-State	159	65/48	20	2.6	3600	7.0	3000	EM
6X65VU_	50-State	159	65/48	20	2.6	3600	7.0	3000	EM
8X65QU_	50-State	159	65/48	20	2.6	3600	7.0	3000	EM
1X65QU_	50-State	159	65/48	20	2.6	3600	7.0	3000	EM
8X65HU_	50-State	159	65/48	20	2.6	3600	7.0	3000	EM
6X65HU_	50-State	159	65/48	20	2.6	3600	7.0	3000	EM
5X65HU_	50-State	159	65/48	20	2.6	3600	7.0	3000	EM
BX65QU_	50-State	159	65/48	20	2.6	3600	7.0	3000	EM
AX65QU_	50-State	159	65/48	20	2.6	3600	7.0	3000	EM
1X65VW_	50-State	159	65/48	20	2.6	3600	7.0	3000	EM
5X65YU_	50-State	159	65/48	20	2.6	3600	7.0	3000	EM
	Designation 5T65VU_ 1X65LU_ 5T65RW_ 1T65VU_ 1T65HU_ 6X65RU_ 5X65RU_ 1X65RU_ 1X65RU_ 1X65RU_ 8X65QU_ 1X65QU_ 8X65HU_ 6X65HU_ 5X65HU_ 5X65HU_ AX65QU_ AX65QU_ 1X65QU_ AX65QU_ 1X65QU_	Designation Code 5T65VU_ 50-State 1X65LU_ 50-State 5T65RW_ 50-State 1T65VU_ 50-State 1T65HU_ 50-State 6X65RU_ 50-State 5X65RU_ 50-State 1X65RW_ 50-State 1X65RW_ 50-State 8X65VU_ 50-State 1X65QU_ 50-State 8X65HU_ 50-State 6X65HU_ 50-State 5X65HU_ 50-State 5X65HU_ 50-State 5X65QU_ 50-State 5X65QU_ 50-State 5X65QU_ 50-State 5X65QU_ 50-State 5X65QU_ 50-State	Designation Code (cc) 5T65VU_ 50-State 141 1X65LU_ 50-State 159 5T65RW_ 50-State 141 1T65VU_ 50-State 141 1T65HU_ 50-State 159 5X65RU_ 50-State 159 1X65RU_ 50-State 159 1X65RW_ 50-State 159 8X65VU_ 50-State 159 8X65QU_ 50-State 159 8X65HU_ 50-State 159 6X65HU_ 50-State 159 5X65HU_ 50-State 159 8X65QU_ 50-State 159	Designation Code (cc) Stroke 5T65VU_ 50-State 141 65/43 1X65LU_ 50-State 159 65/48 5T65RW_ 50-State 141 65/43 1T65VU_ 50-State 141 65/43 1T65HU_ 50-State 141 65/43 6X65RU_ 50-State 159 65/48 5X65RU_ 50-State 159 65/48 1X65RW_ 50-State 159 65/48 6X65VU_ 50-State 159 65/48 8X65QU_ 50-State 159 65/48 8X65QU_ 50-State 159 65/48 6X65HU_ 50-State 159 65/48 6X65QU_ 50-State 159 65/48	Designation Code (cc) Stroke Timing 5T65VU_ 50-State 141 65/43 20 1X65LU_ 50-State 159 65/48 20 5T65RW_ 50-State 141 65/43 20 1T65VU_ 50-State 141 65/43 20 1T65HU_ 50-State 141 65/43 20 6X65RU_ 50-State 159 65/48 20 5X65RU_ 50-State 159 65/48 20 1X65RU_ 50-State 159 65/48 20 1X65RW_ 50-State 159 65/48 20 8X65VU_ 50-State 159 65/48 20 8X65QU_ 50-State 159 65/48 20 8X65HU_ 50-State 159 65/48 20 6X65HU_ 50-State 159 65/48 20 6X65HU_ 50-State 159 65/48 20 6X65HU_	Designation Code (cc) Stroke Timing Power 5T65VU_ 50-State 141 65/43 20 2.2 1X65LU_ 50-State 159 65/48 20 2.6 5T65RW_ 50-State 141 65/43 20 2.2 1T65VU_ 50-State 141 65/43 20 2.2 1T65HU_ 50-State 141 65/43 20 2.2 6X65RU_ 50-State 159 65/48 20 2.6 5X65RU_ 50-State 159 65/48 20 2.6 1X65RW_ 50-State 159 65/48 20 2.6 1X65RW_ 50-State 159 65/48 20 2.6 8X65VU_ 50-State 159 65/48 20 2.6 8X65QU_ 50-State 159 65/48 20 2.6 8X65HU_ 50-State 159 65/48 20 2.6	Designation Code (cc) Stroke Timing Power (RPM) 5T65VU_ 50-State 141 65/43 20 2.2 3600 1X65LU_ 50-State 159 65/48 20 2.6 3600 5T65RW_ 50-State 141 65/43 20 2.2 3600 1T65VU_ 50-State 141 65/43 20 2.2 3600 1T65HU_ 50-State 141 65/43 20 2.2 3600 6X65RU_ 50-State 159 65/48 20 2.6 3600 5X65RU_ 50-State 159 65/48 20 2.6 3600 1X65RW_ 50-State 159 65/48 20 2.6 3600 1X65RW_ 50-State 159 65/48 20 2.6 3600 8X65QU_ 50-State 159 65/48 20 2.6 3600 8X65HU_ 50-State 159	Designation Code (cc) Stroke Timing Power (RPM) Torque 5T65VU_ 50-State 141 65/43 20 2.2 3600 6.5 1X65LU_ 50-State 159 65/48 20 2.6 3600 7.0 5T65RW_ 50-State 141 65/43 20 2.2 3600 6.5 1T65VU_ 50-State 141 65/43 20 2.2 3600 6.5 1T65HU_ 50-State 141 65/43 20 2.2 3600 6.5 6X65RU_ 50-State 159 65/48 20 2.6 3600 7.0 1X65RU_ 50-State 159 65/48 20 2.6 3600 7.0 1X65RW_ 50-State 159 65/48 20 2.6 3600 7.0 8X65RU_ 50-State 159 65/48 20 2.6 3600 7.0 8X65QU_ 50-Sta	Designation Code (cc) Stroke Timing Power (RPM) Torque (RPM) 5T65VU_ 50-State 141 65/43 20 2.2 3600 6.5 3000 1X65LU_ 50-State 159 65/48 20 2.6 3600 7.0 3000 5T65RW_ 50-State 141 65/43 20 2.2 3600 6.5 3000 1T65VU_ 50-State 141 65/43 20 2.2 3600 6.5 3000 1T65HU_ 50-State 141 65/43 20 2.2 3600 6.5 3000 6X65RU_ 50-State 159 65/48 20 2.6 3600 7.0 3000 1X65RU_ 50-State 159 65/48 20 2.6 3600 7.0 3000 1X65RW_ 50-State 159 65/48 20 2.6 3600 7.0 3000 8X65QU_ 50-St