ZHEJIANG YAOFENG POWER TECHNOLOGY CO., LTD.

EXECUTIVE ORDER U-U-220-0038-1 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 FNGINE CLASS (CNG/LNG-comp				FUEL TYPE (CNG/LNG=compressed/liquefied natural gas LPG=liquefied petroleum gas)				
2015	2015 FZYPS.2241GA 196, 224 4-stroke, >80 cc - <225 cc Gaso					Gasoline, LPG, and Gasoline-LPG Dual Fuel			
DURABILITY HOURS		SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION				
250			EM		Pump, Pressure Washer, Generator Set, Other OEM Equipmen				
ENGINE CODES/MODELS (rated power in kilowatt, kW)					See Attachm	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 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	8.5	312	*

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.

This Executive Order hereby supersedes Executive Order U-U-220-0038 dated December 1, 2014.

Executed at El Monte, California on this _______day of March 2015.

Annette Hebert, Chief

Emissions Compliance, Automotive Regulations and Science Division

Page: 9

Model Year:

2015

Zhejiang Yaofeng Power Technology Co.,

Issued: Revised:

3/9/2015

Manufacturer: Engine Family:

FZYPS.2241GA

E.O. Number: U-U-220-0038-1

Small Off-Road Engine Model Summary Form

Attachment Page 1 of 2.

Units for Table: kW 07-17-15

Worst Case?	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
	YF168FD-2-L_G	50-State	196 224	68/54	12BTDC	4.5 3.5	3600 3600	11N.m 11.7N.m	2800 2800	EM
	YF168F-2-221	50-State	196	68/54	12BTDC	4.5	3600	11N.m	2800	EM
	YF168F-2-220	50-State	196	68/54	12BTDC	4.5	3600	11N.m	2800	EM
X	YF168F-2 YF168FD-2	50-State 50-State	196 196	68/54 68/54	12BTDC 12BTDC	4.5 4.5	3600 3600	11N.m 11N.m	2800 2800	EM EM
									-	

Page: 9

Model Year:

2015

Manufacturer:

Engine Family: FZYPS.2241GA

Zhejiang Yaofeng Power Technology Co.,

Issued:

Revised:

7/3/2015

u-u-220-0038-1 E.O. Number:

Small Off-Road Engine Model Summary Form

Attachment Page 2 of 2

Units for Table:

RC3 07-19-15

Worst Case?	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
	YF168FD-2-LPG	50-State	196	68/54	12BTDC	4.5kW	3600	11N.m	2800	EM
	YF172F	50-State	224	72/55	12BTDC	5.1kW	4000	12.6N.m	2800	EM
	YF172F-220	50-State	224	72/55	12BTDC	5.1kW	4000	12.6N.m	2800	EM
	YF172F-221	50-State	224	72/55	12BTDC	5.1kW	4000	12.6N.m	2800	EM
	YF172FD	50-State	224	72/55	12BTDC	5.1kW	4000	12.6N.m	2800	EM
	YF172FD-L_G	50-State	224	72/55	12BTDC	5.1kW	4000	12.6N.m	2800	EM
						4kW	4000	12.6N.m	2800	EM
l.	YF170FD	50-State	192	70/50	21BTDC	4.4kW	4000	12N.m	2500	EM
*	YF172FD-LPG	50-State	224	72/55	12BTDC	4.5kW	4000	12.6N.m	2800	EM
*	Add new	model								