

## **ECHO INCOPORATED**

EXECUTIVE ORDER U-U-010-1189-1 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-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	: PNGINE FAMILY		DISPLACEMENT (cc)	ENGINE CLASS		FUEL TYPE (CNG/LNG=compressed/liquefied natural gas LPG=liquefied petroleum gas)		
2020	LEHXS	.0585KC	58	2-stroke, 50-80 cc, inclusive		Gasoline		
DURABILITY HOURS		SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION			
300		TWC			Backpack Blower			
ENGINE CODES/MODELS (rated power in kilowatt, kW)		See Attachment						
EGR=exhau	ist gas recirc	ulation AIR=s	econdary air injection PAI	R=pulsed AIR	MFI=multi port fuel injec	/arm-up TWC/OC O2S=oxygen sensor HO2S=heated O2S tion SFI=sequential MFI TBI=throttle body fuel injection x)=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	72	536	2.0	
FAMILY EMISSION LEVEL	44	536	1.0	
CERTIFICATION LEVEL	43	277	0.7	

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-010-1189 dated November 19, 2019.

Executed at El Monte, California on this \_\_\_\_\_30\_\_day of January 2020.

Allen Lyons, Chief

Emissions Certification and Compliance Division

Date: <u>12/18/2020</u>

Engine Family: MEHXS.0585KC

For CARB Use Only
Executive Order: U-U-010-1189-1
Attachment \_\_1\_\_ of \_\_1\_\_

## **Model Summary**

Model Summar	47.	48.	49.	50.	51.	52.	53.	54.	55.	56.
Worst Case	47. Model	Sales Code	49. Displacement	Bore/Stroke	Ignition Timing	Max Power	Rated Speed (RPM)	Rated Torque	Torque Speed (RPM)	Emission Control System
(Check One)	Designation	Sales Code	(cc)	воге/загоке	ignition riming	(kW)	kated Speed (KPIVI)	Rated Torque	Torque Speed (RPM)	Emission Control System
х	PB-580H	50-State	58.2	46/35	29±2@6600	1.89	6600	2.74 N-m	6600	EM/TWC
	PB-580T	50-State	58.2	46/35	29±2@6600	1.89	6600	2.74 N-m	6600	EM/TWC
	EB600RT	50-State	58.2	46/35	29±2@6600	1.89	6600	2.74 N-m	6600	EM/TWC