

## **HONDA MOTOR CO., LTD**

**EXECUTIVE ORDER U-U-001-0982** 

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.

2021     MHNXS.3892BB     389     4-stroke, ≥ 225 cc     Gasoline       DURABILITY HOURS     SPECIAL FEATURES & TYPICAL EQUIPMENT APPLICATION       1000     EM     Walk-Behind Lawnmower, Riding Mower, Compressor, Pump, Generator Set, Tiller       ENGINE CODES/MODELS     See Attachment	MODEL YEAR ENGII		NE FAMILY	DISPLACEMENT (cc)	ENGINE CLASS		FUEL TYPE (CNG/LNG=compressed/liquefied natural gas LPG=liquefied petroleum gas)		
HOURS  EMISSION CONTROL SYSTEMS  TYPICAL EQUIPMENT APPLICATION  Walk-Behind Lawnmower, Riding Mower, Compressor, Pump, Generator Set, Tiller  ENGINE CODES/MODELS	2021	MHN	(S.3892BB	389	4-stroke, <u>&gt;</u> 225 cc		Gasoline		
Compressor, Pump, Generator Set, Tiller  ENGINE CODES/MODELS			01 - 1			TYPICAL EQUIPMENT APPLICATION			
CODES/MODELS	1000			EM		, ,			
(rated power in kilowatt, kW)	CODES/MODELS (rated power in		See Attachment						

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.

DFI-direct fuel injection TC/SC=turbo/super charger CAC=charge air cooler 2(prefix)=parallel (2)(suffix)=in series ECM=engine control module

*=not applicable	HC+NOx (g/kW-hr)	CO (g/kW-hr)	PM (g/kW-hr)	
STANDARD	8.0	549	*	
FAMILY EMISSION LEVEL	7.2	*	*	
CERTIFICATION LEVEL	6.6	424	*	

**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 on this 8th day of October 2020.

Aller Lyons, Chief

**Emissions Certification and Compliance Division** 

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Model Year: 2021 Issued: 6/26/2020

Manufacturer:Honda Motor Co., Ltd.Revised:Engine Family:MHNXS.3892BBE.O. Number:

## **Small Off-Road Engine Model Summary Form**

Units for Table: kW

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 1 Torque	55. Forque Speed (RPM)	56. Emiss Control Sys
	2SJ01R	50-State	389	88/64 mm	10° BTDC	8.7 kW	3600	26.5 N.m	2500	EM
X	2SJ02R	50-State	389	88/64 mm	10° BTDC	8.7 kW	3600	26.5 N.m	2500	EM
	2SJ03R	50-State	389	88/64 mm	10° BTDC	8.7 kW	3600	26.5 N.m	2500	EM
	2SJ03A	50-State	389	88/64 mm	10° BTDC	8.7 kW	3600	26.5 N.m	2500	EM
	2SJ04A	50-State	389	88/64 mm	10° BTDC	8.7 kW	3600	26.5 N.m	2500	EM
	2SJ06A	50-State	389	88/64 mm	10° BTDC	8.7 kW	3600	26.5 N.m	2500	EM
	2SJ07A	50-State	389	88/64 mm	10° BTDC	8.7 kW	3600	26.5 N.m	2500	EM
	2SJ08A	50-State	389	88/64 mm	10° BTDC	8.7 kW	3600	26.5 N.m	2500	EM
	2SJ09A	50-State	389	88/64 mm	10° BTDC	8.7 kW	3600	26.5 N.m	2500	EM
	2SJ04R	50-State	389	88/64 mm	10° BTDC	8.7 kW	3600	26.5 N.m	2500	EM