EXECUTIVE ORDER U-U-001-0836 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	ENGI	NE FAMILY	DISPLACEMENT (cc)	ENGINE CLASS		FUEL TYPE (CNG/LNG=compressed/liquefied natural gas LPG=liquefied petroleum gas)			
2018	JHNX	(S.1871AA	871AA 161, 187 4-st		4-stroke, >80 cc - <225 cc Gasoline				
DURABI HOUF		• • •	CIAL FEATURES & N CONTROL SYSTE	EMISSION CONTROL SYSTEMS					
250			EM		Walk-Behind Lawnmower, Compressor, Pump, Pressure Washer, Generator Set, Non-Backpack Blower, Tiller, Edger, Other OEM Product				
CODES/Me (rated po	ENGINE CODES/MODELS (rated power in kilowatt, kW)					pent			
EGR≃exhaus	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	9.9	*	*
CERTIFICATION LEVEL	8.5	334	*

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 \_

day of August 2017

Annette Hebert, Chief

Emissions Compliance, Automotive Regulations and Science Division

Model Year:

2018

Manufacturer: Honda Motor Co., Ltd.

Engine Family: JHNXS.1871AA

Issued: Revised:

E.O. Number:

4/10/2017

u-u-001-0136

Small Off-Road Engine Model Summary Form

Attachment page 1 of 5

Units for Table: kW

Worst Case?	Decignation	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
X	J1HH01C1-C	50-State	160.8	64.0/50.0	20° BTDC	<b>3.4</b>	3600	9.4 N.m	2500	EM
	J1HH01D1-C	50-State	160.8	64.0/50.0	20° BTDC	3.4	3600	9.4 N.m	2500	EM
	J1HH02C1-C	50-State	160.8	64.0/50.0	20° BTDC	3.4	3600	9.4 N.m	2500	EM
	J1HH03C1-C	50-State	160.8	64.0/50.0	20° BTDC	3.4	3600	9.4 N.m	2500	EM

ΕM

Model Year:

Engine Family:

2018

J1HV10J2-C 50-State

Honda Motor Co., Ltd. Manufacturer:

JHNXS.1871AA

Issued: Revised: 6/21/2016

E.O. Number: U - U - OO/ - OF 36

## 3mall Off-Road Engine Model Summary Form

160.8 64.0/50.0 20° BTDC

Attachment page 2 of 5 Units for Table: kw

						U				
Wors Case	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
	J1HV01H1-C	50-State	160.8	64.0/50.0	20° BTDC	3.3	3600	9.4 N.m	2500	EM
	J1HV02H1-C	50-State	160.8	64.0/50.0	20° BTDC	3.3	3600	9.4 N.m	2500	EM
	J1HV03H1-C	50-State	160.8	64.0/50.0	20° BTDC	3.3	3600	9.4 N.m	2500	EM
	J1HV04H1-C	50-State	160.8	64.0/50.0	20° BTDC	3.3	3600	9.4 N.m	2500	EM
	J1HV05J2-C	50-State	160.8	64.0/50.0	20° BTDC	3.3	3600	9.4 N.m	2500	EM
	J1HV06H2-C	50-State	160.8	64.0/50.0	20° BTDC	3.3	3600	9.4 N.m	2500	EM
	J1HV07H3-C	50-State	160.8	64.0/50.0	20° BTDC	3.3	3600	9.4 N.m	2500	EM
	J1HV08H3-C	50-State	160.8	64.0/50.0	20° BTDC	3.3	3600	9.4 N.m	2500	EM
	J1HV09H2-C	50-State	160.8	64.0/50.0	20° BTDC	3.3	3600	9.4 N.m	2500	EM

3.3

3600

9.4 N.m

2500

Model Year:

2018

Manufacturer: Engine Family:

inufacturer: Honda Motor Co., Ltd.

JHNXS.1871AA

Issued: Revised: 6/21/2016

E.O. Number: U - U - OOI - of 36

## Small Off-Road Engine Model Summary Form

Attachment, page 3 of 5

Units for Table: kw

Worst Case?	Decianation	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
	J1HV11H2-C	50-State	160.8	64.0/50.0	20° BTDC	3.3	3600	9.4 N.n	n 2500	EM
	J1HV12H1-C	50-State	160.8	64.0/50.0	20° BTDC	3.3	3600	9.4 N.n	n 2500	EM
	J1HV13H1-C	50-State	160.8	64.0/50.0	20° BTDC	3.3	3600	9.4 N.n	n 2500	EM
	J1HV14H1-C	50-State	160.8	64.0/50.0	20° BTDC	3.3	3600	9.4 N.n	n 2500	EM
	J1HV15H1-C	50-State	160.8	64.0/50.0	20° BTDC	3.3	3600	9.4 N.n	n 2500	EM
	J1HV16H2-C	50-State	160.8	64.0/50.0	20° BTDC	3.3	3600	9.4 N.n	n 2500	EM
	J1HV17H3-C	50-State	160.8	64.0/50.0	20° BTDC	3.3	3600	9.4 N.n	n 2500	EM
	J1HV18H2-C	50-State	160.8	64.0/50.0	20° BTDC	3.3	3600	9.4 N.n	n 2500	EM
	J1HV19H1-C	50-State	160.8	64.0/50.0	20° BTDC	3.3	3600	. 9.4 N.n	n 2500	EM
	J1HV20H2-C	50-State	160.8	64.0/50.0	20° BTDC	3.3	3600	9. <b>4</b> N.r	n 2500	EM .

Model Year:

2018

Manufacturer: Honda Motor Co., Ltd.

Engine Family: JHNXS.1871AA

Issued:

Revised:

6/21/2016

E.O. Number: U-U-00/-0836

## Small Off-Road Engine Model Summary Form

Attachment page 4 of 5 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 To Torque	55. orque Speed (RPM)	56. Emiss Control Sys
	J1HJ01C1-C	50-State	187.0	69.0/50.0	20° BTDC	3.9	3600	11.2 N.m	2500	EM
	J1HJ01D1-C	50-State	187.0	69.0/50.0	20° BTDC	3.9	3600	11.2 N.m	2500	EM
	J1HJ02C1-C	50-State	187.0	69.0/50.0	20° BTDC	3.9	3600	11.2 N.m	2500	EM
	J1HJ0300-B	50-State	187.0	69.0/50.0	20° BTDC	3.9	3600	11.2 N.m	2500	EM
	J1HW01H1- C	50-State	187.0	69.0/50.0	20° BTDC	3.8	3600	11.3 N.m	2500	EM
	J1HW02H1- C	50-State	187.0	69.0/50.0	20° BTDC	3.8	3600	11.3 N.m	2500	EM
	J1HW03H2- C	50-State	187.0	69.0/50.0	20° BTDC	3.8	3600	11.3 N.m	2500	EM
	J1HW04H3- C	50-State	187.0	69.0/50.0	20° BTDC	3.8	3600	11.3 N.m	2500	EM
	J1HW05H1-	50-State	187.0	69.0/50.0	20° BTDC	3.8	3600	11.3 N.m	2500	EM
	J1HW05H2- C	50-State	187.0	69.0/50.0	20° BTDC	3.8	3600	11.3 N.m	2500	EM

Model Year:

2018

Manufacturer: Honda Motor Co., Ltd.

Engine Family: JHNXS.1871AA

Issued:

6/21/2016

Revised:

E.O. Number: U-U-OOI-OF36

## Small Off-Road Engine Model Summary Form

Attachment, page 5 of 5 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 Torque	55. Torque Speed (RPM)	56. Emiss Control Sys
	J1HW06H3- C	50-State	187.0	69.0/50.0	20° BTDC	3.8	3600	11.3 N.n	n 2500	EM
	J1HW07H3- C	50-State	187.0	69.0/50.0	20° BTDC	3.8	3600	11.3 N.n	n 2500	EM
	J1HW08H1- C	50-State	187.0	69.0/50.0	20° BTDC	3.8	3600	11.3 N.r	n 2500	EM
	J1HW09H2- C	50-State	187.0	69.0/50.0	20° BTDC	3.8	3600	11.3 N.r	n 2500	EM
	J1HW09H3- C	50-State	187.0	69.0/50.0	20° BTDC	3.8	3600	11.3 N.r	n 2500	EM
	J1HW10H1- C	50-State	187.0	69.0/50.0	20° BTDC	3.8	3600	11.3 N.r	n 2500	EM
	J1HW10H2- C	50-State	187.0	69.0/50.0	20° BTDC	3.8	3600	11.3 N.r	n 2500	EM
	J1HJ04M1-C	50-State	187.0	69.0/50.0	20° BTDC	3.8	3600	11.3 N.r	n 2500	EM
	J1HJ0400-B	50-State	187.0	69.0/50.0	20° BTDC	3.8	3600	11.3 N.r	n 2500	EM