Honda Motor Co., Ltd.

EXECUTIVE ORDER U-U-001-0789 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)				
2017	HHN	(S.1871AA	161, 187 4-stroke		ke, >80 cc - <225 cc	Gasoline				
DURAB HOUI			CIAL FEATURES & N CONTROL SYSTE	MS		EMISSION CONTROL SYSTEMS				
250	)	EM Walk-Behind Lawnmower, Compressor, Pump, Pressur Generator Set, Non-Backpack Blower, Tiller, Edger, Other								
ENGI CODES/M (rated po kilowatt	ODELS wer in				See Attachm	nent				
EGR=exhaus	t gas recirc	ulation AIR=seco	ondary air injection PAIR=p	oulsed All	R MFI=multi port fuel injec	warm-up TWC/OC O2S=oxygen sensor HO2S=heated O2S ction 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	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 September 2016.

Annette Hebert, Chief

Emissions Compliance, Automotive Regulations and Science Division

Attachment-page 1 of 5

2017 Model Year:

Manufacturer:

Honda Motor Co., Ltd. Engine Family: HHNXS.1871AA

Issued:

6/21/2016

Page: 9 -1

Revised: E.O. Number: U-Y-001-0789

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

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
Х	H1HH01C1- C	50-State	160.8	64.0/50.0	20° BTDC	3.4	3600	9.4 N.m	2500	EM
	H1HH01D1- C	50-State	160.8	64.0/50.0	20° BTDC	3.4	3600	9.4 N.m	2500	EM
	H1HH02C1- C	50-State	160.8	64.0/50.0	20° BTDC	3.4	3600	9.4 N.m	2500	EM
	H1HH03C1- C	50-State	160.8	64.0/50.0	20° BTDC	3.4	3600	9.4 N.m	2500	EM

Attachment - Page 2 of 5 Issued: 6/21/2016

Page: 9 -2

Model Year:

2017

Engine Family: HHNXS.1871AA

Manufacturer: Honda Motor Co., Ltd.

E.O. Number: 4-4-001-0789

## Small Off-Road Engine Model Summary Form

Worst 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
H1HV01H1- C	50-State	160.8	64.0/50.0	20° BTDC	3.3	3600	9.4 N.m	2500	EM
H1HV02H1- C	50-State	160.8	64.0/50.0	20° BTDC	3.3	3600	9.4 N.m	n 2500	EM
H1HV03H1- C	50-State	160.8	64.0/50.0	20° BTDC	3.3	3600	9.4 N.m	n 2500	EM
H1HV04H1- C	50-State	160.8	64.0/50.0	20° BTDC	3.3	3600	9.4 N.m	2500	EM
H1HV05J2-C	50-State	160.8	64.0/50.0	20° BTDC	3.3	3600	9.4 N.m	2500	EM
H1HV06H2- C	50-State	160.8	64.0/50.0	20° BTDC	3.3	3600	9.4 N.m	2500	EM
H1HV07H3- C	50-State	160.8	64.0/50.0	20° BTDC	3.3	3600	9.4 N.m	n 2500	EM
H1HV08H3- C	50-State	160.8	64.0/50.0	20° BTDC	3.3	3600	9.4 N.m	2500	EM
H1HV09H2- C	50-State	160.8	64.0/50.0	20° BTDC	3.3	3600	9.4 N.m	2500	EM
H1HV10J2-C	50-State	160.8	64.0/50.0	20° BTDC	3.3	3600	9.4 N.m	2500	EM

nttqument - page 3 of 5 Issued:

Page: 9 -3

Model Year: Manufacturer: 2017

Engine Family: HHNXS.1871AA

Honda Motor Co., Ltd.

Revised:

6/21/2016

E.O. Number: U-U-ODI-0789

## Small Off-Road Engine Model Summary Form

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
	H1HV11H2- C	50-State	160.8	64.0/50.0	20° BTDC	3.3	3600	9.4 N.m	2500	EM
	H1HV12H1- C	50-State	160.8	64.0/50.0	20° BTDC	3.3	3600	9.4 N.m	2500	EM
	H1HV13H1- C	50-State	160.8	64.0/50.0	20° BTDC	3.3	3600	9.4 N.m	2500	EM
	H1HV14H1- C	50-State	160.8	64.0/50.0	20° BTDC	3.3	3600	9.4 N.m	2500	EM
	H1HV15H1- C	50-State	160.8	64.0/50.0	20° BTDC	3.3	3600	9.4 N.m	2500	EM
	H1HV16H2- C	50-State	160.8	64.0/50.0	20° BTDC	3.3	3600	9.4 N.m	2500	EM
	H1HV17H3- C	50-State	160.8	64.0/50.0	20° BTDC	3.3	3600	9.4 N.m	2500	EM
	H1HV18H2- C	50-State	160.8	64.0/50.0	20° BTDC	3.3	3600	9.4 N.m	2500	EM
	H1HV19H1- C	50-State	160.8	64.0/50.0	20° BTDC	3.3	3600	9.4 N.n	n 2500	EM
	H1HV20H2- C	50-State	160.8	64.0/50.0	20° BTDC	3.3	3600	9.4 N.n	n 2500	EM

Attachment - page 4 of 5

Page: 9 -4

Model Year:

2017

Honda Motor Co., Ltd. Manufacturer:

Engine Family: HHNXS.1871AA

6/21/2016

Revised:

E.O. Number: U- U- 001-0789

## Small Off-Road Engine Model Summary Form

Worst 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
H1HJ01C1-C	50-State	187.0	69.0/50.0	20° BTDC	3.9	3600	11.2 N.n	n 2500	EM
H1HJ01D1-C	50-State	187.0	69.0/50.0	20° BTDC	3.9	3600	11.2 N.n	n 2500	EM
H1HJ02C1-C	50-State	187.0	69.0/50.0	20° BTDC	3.9	3600	11.2 N.n	n 2500	EM
H1HJ0300-B	50-State	187.0	69.0/50.0	20° BTDC	3.9	3600	11.2 N.n	n 2500	EM
H1HW01H1- C	50-State	187.0	69.0/50.0	20° BTDC	3.8	3600	11.3 N.n	n 2500	EM
H1HW02H1- C	50-State	187.0	69.0/50.0	20° BTDC	3.8	3600	11.3 N.n	n 2500	EM
H1HW03H2- C	50-State	187.0	69.0/50.0	20° BTDC	3.8	3600	11.3 N.n	n 2500	EM
H1HW04H3- C	50-State	187.0	69.0/50.0	20° BTDC	3.8	3600	11.3 N.n	n 2500	EM
H1HW05H1- C	50-State	187.0	69.0/50.0	20° BTDC	3.8	3600	11.3 N.n	n 2500	EM
H1HW05H2- C	50-State	187.0	69.0/50.0	20° BTDC	3.8	3600	11.3 N.n	n 2500	EM

Attachment - page 5 of 5

Model Year: Manufacturer:

2017

Engine Family: HHNXS.1871AA

Honda Motor Co., Ltd.

Revised:

6/21/2016

E.O. Number: U-U-001-0789

## Small Off-Road Engine Model Summary Form

Units for Table: kW

Page: 9 -5

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 T Torque	55. orque Speed (RPM)	56. Emiss Control Sys
	H1HW06H3- C	50-State	187.0	69.0/50.0	20° BTDC	3.8	3600	11.3 N.m	2500	EM
	H1HW07H3-	50-State	187.0	69.0/50.0	20° BTDC	3.8	3600	11.3 N.m	2500	EM
	H1HW08H1- C	50-State	187.0	69.0/50.0	20° BTDC	3.8	3600	11.3 N.m	2500	EM
	H1HW09H2- C	50-State	187.0	69.0/50.0	20° BTDC	3.8	3600	11.3 N.m	2500	EM
	H1HW09H3- C	50-State	187.0	69.0/50.0	20° BTDC	3.8	3600	11.3 N.m	2500	EM
	H1HW10H1- C	50-State	187.0	69.0/50.0	20° BTDC	3.8	3600	11.3 N.m	2500	EM
	H1HW10H2- C	50-State	187.0	69.0/50.0	20° BTDC	3.8	3600	11.3 N.m	2500	EM
	H1HJ04M1- C	50-State	187.0	69.0/50.0	20° BTDC	3.8	3600	11.3 N.m	2500	EM
	H1HJ0400-B	50-State	187.0	69.0/50.0	20° BTDC	3.8	3600	11.3 N.m	2500	EM