EXECUTIVE ORDER U-U-001-0832 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	ENGIN	NE FAMILY DISPLACEMENT (cc) ENG		ENGINI	E CLASS	FUEL TYPE (CNG/LNG=compressed/liquefied natural gas LPG=liquefied petroleum gas)			
2018	JHNX	(S.1191AA 119 4-stroke, >80 cc - <225 c			0 cc - <225 cc	Gasoline			
	RABILITY SPECIAL FEATURES & TYPICAL EQUIPMENT APPLICATION HOURS EMISSION CONTROL SYSTEMS					TYPICAL EQUIPMENT APPLICATION			
500	500 EM Walk-Behind Lawnmower, Compressor, Pur Pressure Washer, Generator Set, Tiller				lk-Behind Lawnmower, Compressor, Pump, Pressure Washer, Generator Set, Tiller				
ENGINE CODES/MODELS (rated power in kilowatt, kW)		See Attachment							
EGR≃exhaust	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	12.2	*	*	
CERTIFICATION LEVEL	10.0	328	*	

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

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Model Year: Manufacturer:

Engine Family:

2018

JHNXS.1191AA

Honda Motor Co., Ltd.

Issued:

4/10/2017

Revised:

E.O. Number: U-U-00/7832

Units for Table: kW

Small Off-Road Engine Model Summary Form

Attachment

page 1 of 4

47. 48. 49. 51. 50. 52. 53. 54. 55. 56. Model Sales Displ Bore/ Ignition Max Rated Speed Rated Torque Speed Worst **Emiss** Designation Code Timing (cc) Stroke Power (RPM) Torque (RPM) Control Sys Case? X J1CH01B1-C 50-State 60.0/42.0 20° BTDC 118.8 2.6 3600 2500 7.3 N.m ΕM J1CH02B1-C 50-State 118.8 60.0/42.0 20° BTDC 2.6 3600 7.3 N.m 2500 EΜ J1CH03B1-C 50-State 118.8 60.0/42.0 20° BTDC 2.6 3600 7.3 N.m 2500 ΕM 60.0/42.0 20° BTDC J1CH04B1-C 50-State 118.8 2.6 3600 7.3 N.m 2500 EΜ J1CH05B1-C 50-State 118.8 60.0/42.0 20° BTDC 2.6 3600 7.3 N.m 2500 EΜ J1CH06B1-C 50-State 60.0/42.0 20° BTDC 118.8 2.6 3600 7.3 N.m 2500 EMJ1CH07B1-C 50-State 118.8 60.0/42.0 20° BTDC 2.6 3600 7.3 N.m 2500 ΕM J1CH08B1-C 50-State 118.8 60.0/42.0 20° BTDC 2.6 2500 3600 7.3 N.m EM J1CH09B1-C 50-State 118.8 60.0/42.0 20° BTDC 2.6 3600 7.3 N.m 2500 EΜ J1CH10B1-C 60.0/42.0 20° BTDC 3600 50-State 118.8 2.6 7.3 N.m 2500 ΕM

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Model Year:

2018

Manufacturer: Honda Motor Co., Ltd.

Engine Family: JHNXS.1191AA

Issued: Revised: 4/28/2018

E.O. Number: U-U-00/0832

Small Off-Road Engine Model Summary Form

Attachment Page 20f4

Units for Table: kw

| Worst
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.
Forque Speed
(RPM) | 56.
Emiss
Control Sys |
|----------------|-------------|----------------------|----------------------|------------------------|---------------------------|---------------------|-----------------------------|---------------------|------------------------------|-----------------------------|
| | J1CH11B1-C | 50-State | 118.8 | 60.0/42.0 | 20° BTDC | 2.6 | 3600 | 7.3 N.m | 2500 | EM |
| | J1CH1200-B | 50-State | 118.8 | 60.0/42.0 | 20° BTDC | 2.6 | 3600 | 7.3 N.m | 2500 | EM |
| | J1CH13B1-C | 50-State | 118.8 | 60.0/42.0 | 20° BTDC | 2.6 | 3600 | 7.3 N.m | 2500 | EM |
| | J1CH17B1-C | 50-State | 118.8 | 60.0/42.0 | 20° BTDC | 2.6 | 3600 | 7.3 N.m | 2500 | ΕM |

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Model Year:

2018

Manufacturer:

Honda Motor Co., Ltd.

Engine Family: JH

JHNXS.1191AA

Issued:

4/28/2017

Revised:

E.O. Number:

U-U-00/2832

Small Off-Road Engine Model Summary Form

Attachment page 3 of 4

Units for Table: kw

| Worst
Case? | Docionation | 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 |
|----------------|----------------|----------------------|----------------------|------------------------|---------------------------|---------------------|-----------------------------|------------------------|------------------------------|-----------------------------|
| | J1CH19B1-C | 50-State | 118.8 | 60.0/42.0 | 20° BTDC | 2.6 | 3600 | 7.3 N.m | 2500 | EM |
| | J1CH1900R
B | 50-State | 118.8 | 60.0/42.0 | 20° BTDC | 2.6 | 3600 | 7.3 N.m | 2500 | EM |
| | J1CH20B1-C | 50-State | 118.8 | 60.0/42.0 | 20° BTDC | 2.6 | 3600 | 7.3 N.m | 2500 | EM |
| | J1CH21B1-C | 50-State | 118.8 | 60.0/42.0 | 20° BTDC | 2.6 | 3600 | 7.3 N.m | 2500 | EM |
| | J1CH22B1-C | 50-State | 118.8 | 60.0/42.0 | 20° BTDC | 2.6 | 3600 | 7.3 N.m | 2500 | EM |
| | J1CH23B1-C | 50-State | 118.8 | 60.0/42.0 | 20° BTDC | 2.6 | 3600 | 7.3 N.m | 2500 | EM |
| | J1CH24B1-C | 50-State | 118.8 | 60.0/42.0 | 20° BTDC | 2.6 | 3600 | 7.3 N.m | 2500 | EM |
| • | J1CH2500-B | 50-State | 118.8 | 60.0/42.0 | 20° BTDC | 2.6 | 3600 | 7.3 N.m | 2500 | EM |
| | J1CH2600-B | 50-State | 118.8 | 60.0/42.0 | 20° BTDC | 2.6 | 3600 | 7.3 N.m | 2500 | EM |
| | J1CH2600R
B | 50-State | 118.8 | 60.0/42.0 | 20° BTDC | 2.6 | 3600 | 7.3 N.m | 2500 | EM . |

Model Year:

2018

Manufacturer:

Honda Motor Co., Ltd.

Engine Family: JHNXS.1191AA

Issued:

4/28/2017

Revised:

E.O. Number:

U-U-00/2832

Small Off-Road Engine Model Summary Form

Attachment, page 4 of 4

Units for Table:

| Wors
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 |
|--------------|-------------|----------------------|----------------------|------------------------|---------------------------|---------------------|-----------------------------|------------------------|------------------------------|-----------------------------|
| | J1CH27B1-C | 50-State | 118.8 | 60.0/42.0 | 20° BTDC | 2.6 | 3600 | 7.3 N.m | 2500 | EM |