## Honda Motor Co., Ltd.

EXECUTIVE ORDER U-U-001-0630 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-02-003;

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 ENGINE I		E FAMILY DISPLACEMENT (cc)		ENGINE CLASS		FUEL TYPE (CNG/LNG=compressed/liquefied natural gas LPG=liquefied petroleum gas)		
2013	DHN	(S.3892AB	389	4-stroke, ≥	225 cc	Gasoline		
DURAB HOU			SPECIAL FEATURES &			TYPICAL EQUIPMENT APPLICATION		
100	1000 EM		EM		Walk-Behind Lawnmower, Riding Mower, Compressor, Pump, Generator Set, Tiller			
ENGINE CODES/MODELS (rated power in kilowatt, kW)				(	See Attach	ment		

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 90.109 of the "California Exhaust Emission Standards and Test Procedures for 2005 and Later Small Off-Road Engines," adopted July 26, 2004.

*=not applicable	HC+NOx (g/kW-hr)	CO (g/kW-hr)	PM (g/kW-hr)
STANDARD	8.0	549	*
FAMILY EMISSION LEVEL	7.8	*	*
CERTIFICATION LEVEL	6.5	389	*

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 December 2012.

Annette Hebert, Chief

Mobile Source Operations Division

Attachment 1 of 3

Issued:

7/9/2012

Manufacturer:

Model Year:

Honda Motor Co., Ltd. Engine Family: DHNXS.3892AB

2013

Revised: E.O. Number:

## Small Off-Road Engine Model Summary Form

Units for Table: kw

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Decignation	48. Sales Code	49. Displ (cc)	50. Bore/ Stroke	51. Ignition Timing	52. Max Power	53. Rated Speed (RPM)	54. Rated 1 Torque	55. Torque Speed (RPM)	56. Emiss Control Sys
D2MH01B2- C	50-State	389	88.0/64.0	10° BTDC	8.7	3600	26.5 N.n	n 2500	EM
D2MH0100- B	50-State	389	88.0/64.0	10° BTDC	8.7	3600	26.5 N.n	n 2500	. EM
D2MH0100R B	50-State	389	88.0/64.0	10° BTDC	8.7	3600	26.5 N.n	n 2500	EM
D2MH02B2- C	50-State	389	88.0/64.0	10° BTDC	8.7	3600	26.5 N.n	n 2500	EM
D2MH03G2- C	50-State	389	88.0/64.0	10° BTDC	8.7	3600	26.5 N.n	n 2500	EM
D2MH04G2- C	50-State	389	88.0/64.0	10° BTDC	8.7	3600	26.5 N.n	n 2500	EM
D2MH0500R B	50-State	389	88.0/64.0	10° BTDC	8.7	3600	26.5 N.n	n 2500	EM
D2MH0600R B	50-State	389	88.0/64.0	10° BTDC	8.7	3600	26.5 N.n	n 2500	EM
D2MH0700R B	50-State.	389	88.0/64.0	10° BTDC	8.7	3600	26.5 N.n	n 2500	EM
D2MH08B2- C	50-State	389	88.0/64.0	10° BTDC	8.7	3600	26.5 N.n	n 2500	EM
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D2MH0700R B D2MH0500R B D2MH05	Model Designation         Sales Code         Displementation         Bore/ (cc)         Ignition Stroke         Max Power         Rated Speed (RPM)         Rated Torque (RPM)           D2MH01B2- C C C C C C C C C C C C C C C C C C C

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Model Year:

2013

Engine Family: DHNXS.3892AB

Manufacturer: Honda Motor Co., Ltd.

Revised:

E.O. Number:

7/9/2012

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

Units for Table: kw

Worst	47. Model Designation	48. Sales Code	49. Displ	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
	D2MH09B2- C	50-State	389	88.0/64.0	10° BTDC	8.7	3600	26.5 N.n	n 2500	EM
	D2MH1000R B	50-State	389	88.0/64.0	10° BTDC	8.7	3600	26.5 N.n	n 2500	EM
	D2MH1100R B	50-State	389	88.0/64.0	10° BTDC	8.7	3600	26.5 N.n	n 2500	EM
	D2MH1200R B	50-State	389	88.0/64.0	10° BTDC	8.7	3600	26.5 N.n	n 2500	EM
	D2MH13B2- C	50-State	389	88.0/64.0	10° BTDC	8.7	3600	26.5 N.n	n 2500	EM
	D2MH1300- B	50-State	389	88.0/64.0	10° BTDC	8.7	3600	26.5 N.m	n 2500	EM
	D2MH1400R B	50-State	389	88.0/64.0	10° BTDC	8.7	3600	26.5 N.m	n 2500	EM
	D2MH1500- B	50-State	389	88.0/64.0	10° BTDC	8.7	3600	26.5 N.m	n 2500	EM
	D2MH1500R B	50-State	389	88.0/64.0	10° BTDC	8.7	3600	26.5 N.n	n 2500	EM
	D2MH16E2- C	50-State	389	88.0/64.0	10° BTDC	8.7	3600	26.5 N.m	n 2500	EM

Attachment 3 of 3 Issued:

7/9/2012

Model Year: Manufacturer: Engine Family: DHNXS.3892AB

2013 Honda Motor Co., Ltd.

E.O. Number:

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

Units for Table: kw

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Worst Case?		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
_	D2MH18B2- C	50-State	389	88.0/64.0	10° BTDC	8.7	3600	26.5 N.m	2500	EM
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