EXECUTIVE ORDER U-U-001-0453
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	ENGI	NE FAMILY	DISPLACEMENT (cc)	ENGINE CLASS	FUEL TYPE (CNG/LNG=compressed/liquefied natural gas LPG=liquefied petroleum gas)				
2010	AHN	(S.1871AA	161, 187	4-stroke, >80 cc - <225 cc	Gasoline				
DURABILITY HOURS			SPECIAL FEATURES & EMISSION CONTROL SYSTEMS						
125		EM Walk-Behind Lawnmower, Compressor, Pump, Pressure Washer, Generator Set, Non-Backpack Blower, Tiller, Edger, Other OEM Produc							
ENGINE CODES/MODELS (rated power in kilowatt, kW)				See Attachm	nent				
EGR≂exhaus	t gas recirc	ulation AIR=sec	ondary air injection PAIR=	pulsed AIR MFI=multi port fuel injec	varm-up TWC/OC O2S=oxygen sensor HO2S=heated O2S tion 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 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	10.0	549	*	
FAMILY EMISSION LEVEL	11.2	*	*	
CERTIFICATION LEVEL	9.5	369	*	

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

774 day of December 2009.

Annette Hebert, Chief

Mobile Source Operations Division

FOR AGH

Attachment 1 of 4

issued:

7/31/2009

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Model Year: . Manufacturer: Engine Family:

2010 Honda Motor Co., Ltd. AHNXS.1871AA

Revised:

E.O. Number: U- V-001-0453

## 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 To Torque	55. orque Speed (RPM)	56. Emiss Control Sys
X	A1HH01C1- C	50-State	160.8	64.0/50.0	20° BTDC	3.4	3600	9.4 N.m	2500	EM
	A1HH01D1- C	50-State	160.8	64.0/50.0	20° B1DC	3.4	3600	9.4 N.m	2500	EM
	A1HH0100-D	50-State	160.8	64.0/50.0	20° BTDC.	3.4	3600	9.4 N.m	2500	EM
	A1HH02C1- C	50-State	160.8	64.0/50.0	20° BTDC	3.4	3600	9.4 N.m	2500	EM
	A1HH03C1- C	50-State	160.8	64.0/50.0	20° BTDC	3.4	3600	9.4 N.m	2500	EM

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7/31/2009

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Model Year:

2010

Model Year: 2010 'Manufacturer: Honda Motor Co., Ltd.
Engine Family: AHNXS.1871AA

E.O. Number: 4-4-001-04-53

## Small Off-Road Engine Model Summary Form

Worst Case?	47. <b>M</b> odel 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. rque Speed (RPM)	56. Emiss Control Sys
	A1HV01H1- C	50-State	160.8	64.0/50.0	20° BTDC	3.3	3600	9.4 N.m	2500	EM
	A1HV02H1-	50-State	160.8	64.0/50.0	20° BTDC	3.3	3600	9.4 N.m	2500	EM
	A1HV03H1- C	50-State	160.8	64.0/50.0	20° BTDC	3.3	3600	9.4 N.m	2500	EM
	A1HV04H1- C	50-State	160.8	64.0/50.0	20° BTDC	3.3	3600	9.4 N.m	2500	EM
	A1HV05H1- C	50-State	160.8	64.0/50.0	20° BTDC	3.3	3600	9.4 N.m	2500	EM
	A1HV06H1- C	50-State	160.8	64.0/50.0	20° BTDC	3.3	3600	9.4 N.m	2500	EM
	A1HV07J2-C	50-State	160.8	64.0/50.0	20° BTDC	3.3	3600	9.4 N.m	2500	EM
	A1HV08H2- C	50-State	160.8	64.0/50.0	20° BTDC	3.3	3600	9.4 N.m	2500	EM

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Model Year: Manufacturer:

2010

Engine Family: AHNXS.1871AA

Honda Motor Co., Ltd.

7/31/2009

E.O. Number:

4-4-001-0453

## Small Off-Road Engine Model Summary Form

Worst Case?	47. <b>M</b> odel 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
	A1HV09H1- C	50-State	: 160.8	64.0/50.0	20° BTDC	3.3	3600	9.4 N.m	2500	ЕМ
	A1HV10H1- C	50-State	160.8	64.0/50.0	20° BTDC	3.3	3600	9.4 N.m	2500	EM
	A1HV11H1- C	50-State	160.8	64.0/50.0	20° BTDC	3.3	3600	9.4 N.m	2500	EM
	A1HV12H1- C	50-State	160.8	64.0/50.0	20° BTDC	3.3	3600	9.4 N.m	2500	EM
	A1HV13H2- C	50-State	160.8	64.0/50.0	20° BTDC	3.3	3600	9.4 N.m	2500	EM
	A1HV14J2-C	50-State	160.8	64.0/50:0	20° BTDC	3.3	3600	9.4 N.m	2500	ΕM
	A1HV15J2-C	50-State	160.8	64.0/50.0	20° BTDC	3.3	3600	9.4 N.m	2500	EM
	A1HV16H2- C	50-State	160.8	64.0/50.0	20° BTDC	3.3	3600	9.4 <b>N</b> .m	2500	EM

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Issued:

7/31/2009

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Model Year:

2010 Manufacturer: Honda Motor Co., Ltd.

Engine Family: AHNXS.1871AA

Revised:

E.O. Number: U- 4-001-0453

## Small Off-Road Engine Model Summary Form

Worst Case?	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
	A1HJ01C1-C	50-State	187.0	69.0/50.0	20° BTDC	3.9	3600	11.2 N.m	2500	EM
	A1HJ01D1-C	50-State	187.0	69.0/50.0	20° BTDC	3.9	3600	11.2 N.m	2500	EM
	A1HJ02C1-C	50-State	187.0	69.0/50.0	20° BTDC	3.9	3600	11.2 N.m	2500	EM
	A1HW01H1- C	50-State	187.0	69.0/50.0	20° BTDC	3.8	. 3600	11.3 N.m	2500	EM
	A1HW02H1- C	50-State	187.0	69.0/50.0	20° BTDC	3.8	3600	11.3 N.m	2500	EM
	A1HW03H1- C	50-State	187.0	69.0/50.0	20° BTDC	3.8	3600	11.3 N.m	2500	EM
	A1HW04H1- C	50-State	187.0	69.0/50.0	20° BTDC	3.8	3600	11.3 N.m	2500	EM
	A1HW05H1- C	50-State	187.0	69.0/50.0	20° BTDC	3.8	3600	11.3 N.m	2500	EM
	A1HW06H2- C	50-State	187.0	69.0/50.0	20° BTDC	3.8	3600	11.3 N.m	2500	ЕМ
	A1HW07H1- C	50-State	187.0	69.0/50.0	20° BTDC	3.8	3600	11.3 N.m	2500	EM