#### Honda Motor Co., Ltd.

EXECUTIVE ORDER U-U-001-0461
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	FNGINF FAMILY		DISPLACEMENT (cc)	ENGINE CLASS		FUEL TYPE (CNG/LNG=compressed/liquefied natural gas LPG=liquefied petroleum gas)				
2010	AHN	(S.2702AA	243, 270	4-stroke, ≥	225 <b>c</b> c	Gasoline				
	URABILITY SPECIAL FEATURES & TYPICAL EQUIPMENT APPLICATION EMISSION CONTROL SYSTEMS				TYPICAL EQUIPMENT APPLICATION					
500	500		EM	Walk-Behind Lawnmower, Riding Mower, Compressor, Pump, Generator Set, Tiller						
ENGINE CODES/MODELS (rated power in kilowatt, kW)				<u>-</u>	See Attachr	ment				
EGR=exhaus	st gas recirc	ulation AIR=sec	ondary air injection PAIR≕p	ouised AIR MFI=mu	lti port fuel inje	warm-up TWC/OC O2S=oxygen sensor HO2S=heated O2S ction SFI=sequential MFI TBI=throttle body fuel injection fix)=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	11.9	*	•
CERTIFICATION LEVEL	8.0	354	•

**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

III SILITATO

Annette Hebert, Chief

Mobile Source Operations Division

Model Year: Manufacturer:

Engine Family:

2010

Honda Motor Co., Ltd.

AHNXS.2702AA

8/7/2009

Revised:

E.O. Number: U-U-001-0461

### 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 T Torque	55. orque Speed (RPM)	56. Emiss Control Sys
	A2AH01A1-C	50-State	270.1	73.0/58.0	20° BTDC	5.3	3600	15.3 N.m	2500	EM
	A2AH02A1-C	50-State	242.8	73.0/58.0	20° BTDC	5.3	3600	15.3 N.m	2500	EM
X	A2AH0300-D	50-State	242.8	73.0/58.0	20° BTDC	5.3	3600	15.3 N.m	2500	EM
	A2AH04A1-C	50-State	242.8	73.0/58.0	20° BTDC	5.3	3600	15.3 N.m	2500	EM
	A2AH05A1-C	50-State	242.8	73.0/58.0	20° BTDC	5.3	3600	15.3 N.m	2500	EM
	A2AH07A1-C	50-State	242.8	73.0/58.0	20° BTDC	5.3	3600	15.3 N.m	2500	EM
	A2AH08A1-C	50-State	242.8	73.0/58.0	20° BTDC	5.3	3600	15.3 N.m	2500	EM
	A2AH09A1-C	50-State	242.8	73.0/58.0	20° BTDC	5.3	3600	15.3 N.m	2500	EM .
	A2AH10A1-C	50-State	242.8	73.0/58.0	20° BTDC	5.3	3600	15.3 N.m	2500	EM

Model Year: Manufacturer:

2010

Engine Family: AHNXS.2702AA

Honda Motor Co., Ltd.

Revised:

E.O. Number: 4-4-001-04-61

8/7/2009

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. rque Speed (RPM)	56. Emiss Control Sys
	A2AH11A1-C	50-State	242.8	73.0/58.0	20° BTDC	5.3	3600	15.3 N.m	2500	EM
	A2AH12A1-C	50-State	242.8	73.0/58.0	20° BTDC	5.3	3600	15.3 N.m	2500	EM
	A2AH13A1-A	50-State	242.8	73.0/58.0	20° BTDC	5.3	3600	15.3 N.m	2500	EM
	A2AH14A1-C	50-State	242.8	73.0/58.0	20° BTDC	5.3	3600	15.3 N.m	2500	EM
	A2AH16F1-C	50-State	242.8	73.0/58.0	20° BTDC	5.3	3600	15.3 N.m	2500	EM
	A2AH1700R D	50-State	242.8	73.0/58.0	20° BTDC	5.3	3600	15.3 N.m	2500	EM
	A2AH1800R D	50-State	242.8	73.0/58.0	20° BTDC	5.3	3600	15.3 N.m	2500	EM
	A2AH1900R D	50-State	242.8	73.0/58.0	20° BTDC	5.3	3600	15.3 N.m	2500	EM
	A2AH2000R D	50-State	242.8	73.0/58.0	20° BTDC	5.3	3600	15.3 N.m	2500	EM

Model Year: Manufacturer:

Engine Family:

2010

Honda Motor Co., Ltd.

AHNXS.2702AA

Revised:

8/7/2009

E.O. Number: U-4-001-0461

## **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. ted Speed (RPM)	54. Rated 1 Torque	55. <sup>*</sup> Forque Speed (RPM)	56. Emiss Control Sys
	A2AJ0100R D	50-State	270.1	77.0/58.0	20° BTDC	6.0	:	3600	17.7 N.m	2500	ЕМ
	A2AJ0200R D	50-State	270.1	77.0/58.0	20° BTDC	6.0	· ·	3600	17.7 N.m	2500	EM
	A2AJ0300R D	50-State	270.1	77.0/58.0	20° BTDC	6.0		3600	17.7 N.m	2500	EM
	A2AJ0400R D	50-State	270.1	77.0/58.0	20° BTDC	6.0		3600	17.7 N.m	2500	EM
	A2AJ05A1-C	50-State	270.1	77.0/58.0	20° BTDC	6.0		3600	17.7 N.m	2500	ЕМ
	A2AJ06A1-C	50-State	270.1	77.0/58.0	20° BTDC	6.0	,	3600	17.7 N.m	n 2500	EM
	A2AJ07A1-C	50-State	270.1	77.0/58.0	20° BTDC	6.0		3600	17.7 N.m	2500	ЕМ
	A2AJ08A1-C	50-State	270.1	77.0/58.0	20° BTDC	6.0		3600	17.7 N.m	n 2500	EM
	A2AJ09A1-C	50-State	270.1	77.0/58.0	20° BTDC	6.0		3600	17.7 N.m	2500	ЕМ
	A2AJ1000-D	50-State	270.1	77.0/58.0	20° BTDC	6.0		3600	17.7 N.m	2500	EM

Model Year:

Manufacturer:

2010

Honda Motor Co., Ltd.

Engine Family: AHNXS.2702AA

Revised:

8/7/2009

E.O. Number: U-U-00[-0 46]

# 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 Too Torque	55. rque Speed (RPM)	56. Emiss Control Sys
	A2AJ1100-D	50-State	242.8	77.0/58.0	20° BTDC	6.0	3600	17.7 N.m	2500	EM
	A2AJ1200-D	50-State	242.8	77.0/58.0	20° BTDC	6.0	3600	17.7 <b>N</b> .m	2500	EM
•	A2AJ1300-D	50-State	242.8	77.0/58.0	20° BTDC	6.0	3600	17.7 N.m	2500	EM
	A2AJ14A1-C	50-State	242.8	77.0/58.0	20° BTDC	6.0	3600	17.7 N.m	2500	EM .
	A2AJ15A1-C	50-State	242.8	77.0/58.0	20° BTDC	6.0	3600	17.7 <b>N</b> .m	2500	EM
	A2AJ16A1-C	50-State	242.8	77.0/58.0	20° BTDC	6.0	3600	17.7 N.m	2500	EM
•	A2AJ17A1-C	50-State	270.1	77.0/58.0	20° BTDC	6.0	3600	17.7 N.m	2500	EM
•	A2AJ1800R D	50-State	270.1	77.0/58.0	20° BTDC	6.0	3600	17.7 N.m	2500	EM
	A2AJ19A1-C	50-State	270.1	77.0/58.0	20° BTDC	6.0	3600	17.7 N.m	2500	EM
	A2AJ20A1-C	50-State	270.1	77.0/58.0	20° BTDC	6.0	3600	17.7 N.m	2500	EM

Model Year.

Attachment 5 of 5

Issued:

8/7/2009

Manufacturer: Honda Motor Co., Ltd. AHNXS.2702AA Engine Family:

Revised:

E.O. Number: U-U-001-046/

#### 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 T Torque	55. orque Speed (RPM)	56. Emiss Control Sys
	A2AJ21A1-C.	50-State	242.8	77.0/58.0	20° BTDC	6.0	3600	17.7 N.m	2500	EM
	A2AJ22A1-C	50-State	242.8	77.0/58.0	20° BTDC	6.0	3600	17.7 N.m	2500	EM
,	A2AJ23A1-C	50-State	242.8	77.0/58.0	20° BTDC	6.0	3600	17.7 N.m	2500	EM
	A2AJ2300-D	50-State	242.8	77.0/58.0	20° BTDC	6.0	3600	17.7 N.m	2500	EM
	A2AJ24A1-C	50-State	242.8	77.0/58.0	20° BTDC	6.0	3600	17.7 N.m	2500	EM
	A2AJ2400-D	50-State	242.8	77.0/58.0	20° BTDC	. 6.0	3600	17.7 N.m	2500	EM
•	A2AJ25A1-C	50-State	270.1	77.0/58.0	20° BTDC	6.0	3600	17.7 N.m	2500	EM
	A2AJ2500-D	50-State	270.1	77.0/58.0	20° BTDC	6.0	3600	17.7 N.m	2500	EM
	A2AJ26A1R C	50-State	270.1	77.0/58.0	20° BTDC	6.0	3600	17.7 N.m	2500	ЕМ
	A2AJ2700R D	50-State	270.1	77.0/58.0	20° BTDC	6.0	3600	17.7 <b>N</b> .m	2500	EM