California Environmental Protection Agency AIR RESOURCES BOARD	Honda Motor Co., Ltd.	EXECUTIVE ORDER U-U-001-0425 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 FAMILY	DISPLACEMENT (cc)	ENGINE CLASS	FUEL TYPE (CNG/LNG=compressed/liquefied natural gas LPG=liquefied petroleum gas)
2009	9HNXS.671A5A	615, 671	4-stroke, ≥ 225 cc	Gasoline

DURABILITY HOURS	SPECIAL FEATURES & EMISSION CONTROL SYSTEMS	TYPICAL EQUIPMENT APPLICATION
500	EM	Walk-Behind Lawnmower, Riding Mower, Compressor, Pressure Washer, Generator Set, Commercial Turf
ENGINE CODES/MODELS (rated power in kilowatt, kW)	SEE ATTACHMENT	

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	8.9	*	*
CERTIFICATION LEVEL	6.9	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 22nd day of December 2008.

Raphael Susnowitz

for Annette Hebert, Chief
Mobile Source Operations Division

Attachment 1 of 9

Model Year: 2009
Manufacturer: Honda Motor Co., Ltd.
Engine Family: 9HNXS.671A5A

Issued: 6/30/2008
Revised:
E.O. Number: U-4-001-0425

Small Off-Road Engine Model Summary Form

Units for Table: kw

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
	92GH0100-B	50-State	614.7	77.0/66.0	20° BTDC	12.4	3600	39.6 N.m	2500	EM
	92GH0200-B	50-State	614.7	77.0/66.0	20° BTDC	12.4	3600	39.6 N.m	2500	EM
X	92GH0300RB	50-State	614.7	77.0/66.0	20° BTDC	12.4	3600	39.6 N.m	2500	EM
	92GH0400-B	50-State	614.7	77.0/66.0	20° BTDC	12.4	3600	39.6 N.m	2500	EM
	92GH0500-B	50-State	614.7	77.0/66.0	20° BTDC	12.4	3600	39.6 N.m	2500	EM
	92GH0600-B	50-State	614.7	77.0/66.0	20° BTDC	12.4	3600	39.6 N.m	2500	EM
	92GH0700RB	50-State	614.7	77.0/66.0	20° BTDC	12.4	3600	39.6 N.m	2500	EM
	92GH0800-B	50-State	614.7	77.0/66.0	20° BTDC	12.4	3600	39.6 N.m	2500	EM
	92GH0900-B	50-State	614.7	77.0/66.0	20° BTDC	12.4	3600	39.6 N.m	2500	EM
	92GH1000-B	50-State	614.7	77.0/66.0	20° BTDC	12.4	3600	39.6 N.m	2500	EM

Attachment 2 of 9

Model Year: 2009
Manufacturer: Honda Motor Co., Ltd.
Engine Family: 9HNXS.671A5A

Issued: 6/30/2008
Revised:
E.O. Number: U-U-001-0425

Small Off-Road Engine Model Summary Form

Units for Table:

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
	92GH1100-B	50-State	614.7	77.0/66.0	20° BTDC	12.4	3600	39.6 N.m	2500	EM
	92GH1200RB	50-State	614.7	77.0/66.0	20° BTDC	12.4	3600	39.6 N.m	2500	EM
	92GH1300RB	50-State	614.7	77.0/66.0	20° BTDC	12.4	3600	39.6 N.m	2500	EM
	92GH1400RB	50-State	614.7	77.0/66.0	20° BTDC	12.4	3600	39.6 N.m	2500	EM
	92GH1500RB	50-State	614.7	77.0/66.0	20° BTDC	12.4	3600	39.6 N.m	2500	EM

Attachment 3 of 9

Model Year: 2009
Manufacturer: Honda Motor Co., Ltd.
Engine Family: 9HNXS.671A5A

Issued: 6/30/2008
Revised:
E.O. Number: U-U-001-0425

Small Off-Road Engine Model Summary Form

Units for Table:

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
	92GJ0100-B	50-State	614.7	77.0/66.0	20° BTDC	13.5	3600	40.6 N.m	2500	EM
	92GJ0200-B	50-State	614.7	77.0/66.0	20° BTDC	13.5	3600	40.6 N.m	2500	EM
	92GJ0300RB	50-State	614.7	77.0/66.0	20° BTDC	13.5	3600	40.6 N.m	2500	EM
	92GJ0400-B	50-State	614.7	77.0/66.0	20° BTDC	13.5	3600	40.6 N.m	2500	EM
	92GJ0500-B	50-State	614.7	77.0/66.0	20° BTDC	13.5	3600	40.6 N.m	2500	EM
	92GJ0600RB	50-State	614.7	77.0/66.0	20° BTDC	13.5	3600	40.6 N.m	2500	EM
	92GJ0700-B	50-State	614.7	77.0/66.0	20° BTDC	13.5	3600	40.6 N.m	2500	EM
	92GJ0800-B	50-State	614.7	77.0/66.0	20° BTDC	13.5	3600	40.6 N.m	2500	EM
	92GJ0900-B	50-State	614.7	77.0/66.0	20° BTDC	13.5	3600	40.6 N.m	2500	EM
	92GJ1000RB	50-State	614.7	77.0/66.0	20° BTDC	13.5	3600	40.6 N.m	2500	EM

Attachment 4 of 9

Model Year: 2009
Manufacturer: Honda Motor Co., Ltd.
Engine Family: 9HNXS.671A5A

Issued: 6/30/2008
Revised:
E.O. Number: U-U-001-0425

Small Off-Road Engine Model Summary Form

Units for Table:

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
	92GJ1100-B	50-State	614.7	77.0/66.0	20° BTDC	13.5	3600	40.6 N.m	2500	EM
	92GJ1200-B	50-State	614.7	77.0/66.0	20° BTDC	13.5	3600	40.6 N.m	2500	EM
	92GJ1300RB	50-State	614.7	77.0/66.0	20° BTDC	13.5	3600	40.6 N.m	2500	EM
	92GJ1400-B	50-State	614.7	77.0/66.0	20° BTDC	13.5	3600	40.6 N.m	2500	EM
	92GJ1500-B	50-State	614.7	77.0/66.0	20° BTDC	13.5	3600	40.6 N.m	2500	EM
	92GJ1600RB	50-State	614.7	77.0/66.0	20° BTDC	13.5	3600	40.6 N.m	2500	EM
	92GJ1700RB	50-State	614.7	77.0/66.0	20° BTDC	13.5	3600	40.6 N.m	2500	EM
	92GJ1800RB	50-State	614.7	77.0/66.0	20° BTDC	13.5	3600	40.6 N.m	2500	EM
	92GJ1900RB	50-State	614.7	77.0/66.0	20° BTDC	13.5	3600	40.6 N.m	2500	EM
	92GJ2000RB	50-State	614.7	77.0/66.0	20° BTDC	13.5	3600	40.6 N.m	2500	EM

Attachment 5 of 9

Model Year: 2009
Manufacturer: Honda Motor Co., Ltd.
Engine Family: 9HNXS.671A5A

Issued: 6/30/2008
Revised:
E.O. Number: U-U-001-0425

Small Off-Road Engine Model Summary Form

Units for Table:

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
	92GJ2100RB	50-State	614.7	77.0/66.0	20° BTDC	13.5	3600	40.6 N.m	2500	EM
	92GJ2200RB	50-State	614.7	77.0/66.0	20° BTDC	13.5	3600	40.6 N.m	2500	EM
	92GJ2300RB	50-State	614.7	77.0/66.0	20° BTDC	13.5	3600	40.6 N.m	2500	EM
	92GJ2400RB	50-State	614.7	77.0/66.0	20° BTDC	13.5	3600	40.6 N.m	2500	EM
	92GJ2500RB	50-State	614.7	77.0/66.0	20° BTDC	13.5	3600	40.6 N.m	2500	EM

Attachment 6 of 9

Model Year: 2009
Manufacturer: Honda Motor Co., Ltd.
Engine Family: 9HNXS.671A5A

Issued: 6/30/2008
Revised:
E.O. Number: U-U-001-0425

Small Off-Road Engine Model Summary Form

Units for Table:

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
	92GK0100-B	50-State	670.6	77.0/72.0	20° BTDC	15.3	3600	46.0 N.m	2500	EM
	92GK0200R B	50-State	670.6	77.0/72.0	20° BTDC	15.3	3600	46.0 N.m	2500	EM
	92GK0300-B	50-State	670.6	77.0/72.0	20° BTDC	15.3	3600	46.0 N.m	2500	EM
	92GK0400R B	50-State	670.6	77.0/72.0	20° BTDC	15.3	3600	46.0 N.m	2500	EM
	92GK0500-B	50-State	670.6	77.0/72.0	20° BTDC	15.3	3600	46.0 N.m	2500	EM
	92GK0600R B	50-State	670.6	77.0/72.0	20° BTDC	15.3	3600	46.0 N.m	2500	EM
	92GK0700R B	50-State	670.6	77.0/72.0	20° BTDC	15.3	3600	46.0 N.m	2500	EM
	92GK0800R B	50-State	670.6	77.0/72.0	20° BTDC	15.3	3600	46.0 N.m	2500	EM

Attachment 7 of 9

Model Year: 2009
Manufacturer: Honda Motor Co., Ltd.
Engine Family: 9HNXS.671A5A

Issued: 6/30/2008
Revised:
E.O. Number: U-U-001-0425

Small Off-Road Engine Model Summary Form

Units for Table:

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
	92GV0100-B	50-State	614.7	77.0/66.0	20° BTDC	12.1	3600	39.4 N.m	2500	EM
	92GV0200RB	50-State	614.7	77.0/66.0	20° BTDC	12.1	3600	39.4 N.m	2500	EM

Attachment 8 of 9

Model Year: 2009
Manufacturer: Honda Motor Co., Ltd.
Engine Family: 9HNXS.671A5A

Issued: 6/30/2008
Revised:
E.O. Number: U-U-001-0425

Small Off-Road Engine Model Summary Form

Units for Table:

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
	92GW0100-B	50-State	614.7	77.0/66.0	20° BTDC	13.3	3600	41.1 N.m	2500	EM
	92GW0200RB	50-State	614.7	77.0/66.0	20° BTDC	13.3	3600	41.1 N.m	2500	EM
	92GW0300RB	50-State	614.7	77.0/66.0	20° BTDC	13.3	3600	41.1 N.m	2500	EM
	92GW0400RB	50-State	614.7	77.0/66.0	20° BTDC	13.3	3600	41.1 N.m	2500	EM

Attachment 9 of 9

Model Year: 2009
Manufacturer: Honda Motor Co., Ltd.
Engine Family: 9HNXS.671A5A

Issued: 6/30/2008
Revised:
E.O. Number: U-4-001-0425

Small Off-Road Engine Model Summary Form

Units for Table:

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
	92GX0100RB	50-State	670.6	77.0/72.0	20° BTDC	15.5	3600	44.4 N.m	2500	EM
	92GX0200RB	50-State	670.6	77.0/72.0	20° BTDC	15.5	3600	44.4 N.m	2500	EM
	92GX0300RB	50-State	670.6	77.0/72.0	20° BTDC	15.5	3600	44.4 N.m	2500	EM
	92GX0400RB	50-State	670.6	77.0/72.0	20° BTDC	15.5	3600	44.4 N.m	2500	EM
	92GX0500RB	50-State	670.6	77.0/72.0	20° BTDC	15.5	3600	44.4 N.m	2500	EM