

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-45-9;

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
2002	2HNXS.1631AK	163	4-stroke, 66 - 224 cc Horizontal shaft	Gasoline
DURABILITY HOURS	SPECIAL FEATURES & EMISSION CONTROL SYSTEMS		TYPICAL EQUIPMENT APPLICATION	
500	Engine Modification		Walk-behind lawnmower, compressor, pump, pressure washer, generator set, tiller	
ENGINE MODELS (rated power in horsepower, hp)	See Attachment (2 pages)			

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 brake horsepower-hour (g/bhp-hr). Engines within this engine family shall have closed crankcases in conformance with Section 18.(h) of the "California Exhaust Emission Standards and Test Procedures for 1995 and Later Small Off-Road Engines," last amended March 23, 1999.

(g/bhp-hr)	HC+NOx	CO	PM
STANDARD	12.0	410	N/A
FAMILY EMISSION LEVEL	N/A	N/A	N/A
CERTIFICATION LEVEL	7.7	228	N/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 28th day of June 2001


 R. B. Summerfield, Chief
 Mobile Source Operations Division

Model Year: 2002
 Manufacturer: Honda Motor Co.,Ltd.
 Engine Family: 2HNXS.1631AK

Issued:
 Revised: 6/18/2001
 E.O. Number: 4-4-1-175

Small Off-Road Engine Model Summary Form

Units for Table: hp

	47.	48.	49.	50.	51.	52.	53.	54.	55.	56.
Worst Case?	Model Designation	Sales Code	Displ (cc)	Bore/Stroke	Ignition Timing	Max Power	Rated Speed (RPM)	Rated Torque	Torque Speed (RPM)	Emiss Control Sys
X	2163H1	50-State	163.4	68.0/45.0	25° BTDC	5.5 hp	3600	10.8 N-m	2500	EM
	2163H2	50-State	163.4	68.0/45.0	25° BTDC	5.5 hp	3600	10.8 N-m	2500	EM
	2163H3	50-State	163.4	68.0/45.0	25° BTDC	5.5 hp	3600	10.8 N-m	2500	EM
	2163H4	50-State	163.4	68.0/45.0	25° BTDC	5.5 hp	3600	10.8 N-m	2500	EM
	2163H5	50-State	163.4	68.0/45.0	25° BTDC	5.5 hp	3600	10.8 N-m	2500	EM
	2163H6	50-State	163.4	68.0/45.0	25° BTDC	5.5 hp	3600	10.8 N-m	2500	EM
	2163H7	50-State	163.4	68.0/45.0	25° BTDC	5.5 hp	3600	10.8 N-m	2500	EM
	2163H8	50-State	163.4	68.0/45.0	25° BTDC	5.5 hp	3600	10.8 N-m	2500	EM
	2163H9	50-State	163.4	68.0/45.0	25° BTDC	5.5 hp	3600	10.8 N-m	2500	EM
	2163H10	50-State	163.4	68.0/45.0	25° BTDC	5.5 hp	3600	10.8 N-m	2500	EM
	2163H11	50-State	163.4	68.0/45.0	25° BTDC	5.5 hp	3600	10.8 N-m	2500	EM

Model Year: 2002
 Manufacturer: Honda Motor Co., Ltd.
 Engine Family: 2HNXS.1631AK

Issued: 4/4/2001
 Revised: 4/6/2001
 E.O. Number: u-4-1-175

Small Off-Road Engine Model Summary Form

Units for Table: hp

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
	2163H12	50-State	163.4	68.0/45.0	25° BTDC	5.5 hp	3600	10.8 N-m	2500	EM
	2163H13	50-State	163.4	68.0/45.0	25° BTDC	5.5 hp	3600	10.8 N-m	2500	EM
	2163H14	50-State	163.4	68.0/45.0	25° BTDC	5.5 hp	3600	10.8 N-m	2500	EM
	2163H15	50-State	163.4	68.0/45.0	25° BTDC	5.5 hp	3600	10.8 N-m	2500	EM
	2163H16	50-State	163.4	68.0/45.0	25° BTDC	5.5 hp	3600	10.8 N-m	2500	EM
	2163H17	50-State	163.4	68.0/45.0	25° BTDC	5.5 hp	3600	10.8 N-m	2500	EM
	2163H18	50-State	163.4	68.0/45.0	25° BTDC	5.5 hp	3600	10.8 N-m	2500	EM
	2163H19	50-State	163.4	68.0/45.0	25° BTDC	5.5 hp	3600	10.8 N-m	2500	EM

