

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 |
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