| California Environmental Protection Agency AIR RESOURCES BOARD | HARLEY-DAVIDSON MOTOR COMPANY | EXECUTIVE ORDER M-005-0109 New On-Road Motorcycles |
|---|---|---|

Pursuant to the authority vested in the Air Resources Board by the Health and Safety Code, Division 26, Part 5, Chapter 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 engine and emission control systems produced by the manufacturer are certified as described below for four-stroke gasoline-powered motorcycles. Production vehicles shall be in all material respects the same as those for which certification is granted.

| MODEL YEAR | ENGINE FAMILY | EVAPORATIVE FAMILY | ENGINE DISPLACEMENT (cc) | CLASS |
|---|---|---|---|---|
| 2004 | 4HDXC01.2CEB | 4HDXE0066CCA | 1199, 883 | III |

| SPECIAL FEATURES & EMISSION CONTROL SYSTEMS | VEHICLE MODELS (equivalent inertia mass in kilograms, kg) | * = not applicable |
|---|---|---|
| OC | XL 1200 (370 kg)<br>XL 1200C (370 kg)<br>XL 1200R (370 kg)<br>XL 883 (370 kg)<br>XL 883C (370 kg) | |

ABBREVIATIONS: EM=engine modification TWC=three-way catalyst OC=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

The following are the exhaust hydrocarbon plus oxides of nitrogen (HC+NOx) and carbon monoxide (CO) standards, or designated HC+NOx standard as applicable, and certification levels in grams per kilometer (g/km), and evaporative standard and certification level in grams per test (g/test) for this engine/evaporative family. The designated HC+NOx standard, as applicable, shall be listed on the permanent tune-up label.

| | | | | EARLY COMPLIANCE CREDIT MULTIPLIER | | | * |
|---|---|---|---|---|---|---|---|
| HC+NOx (g/km) | | | | CO (g/km) | | EVAPORATIVE (g/test) | |
| CORPORATE AVERAGE STANDARD | DESIGNATED STANDARD | (DIRECT) STANDARD | CERTIFICATION LEVEL | STANDARD | CERTIFICATION LEVEL | STANDARD | CERTIFICATION LEVEL |
| 1.4 | 1.6 | * | 1.4 | 12 | 9 | 2.0 | 1.2 |

**BE IT FURTHER RESOLVED:** That certification to the designated HC+NOx standard listed above, as applicable, is subject to the following terms, limitations and conditions:

The designated HC+NOx standard shall be the exhaust emission limit for this engine family and cannot be changed during the model year. It serves as the HC+NOx exhaust standard applicable to this engine family for determining compliance with Title 13, California Code of Regulations, Sections 1958(b) and 2101.

**BE IT FURTHER RESOLVED:** That the listed motorcycles are certified to the aforementioned HC+NOx standard, or designated standard as applicable, prior to the 2008 model year and are hereby granted an early-compliance credit multiplier listed above pursuant to Title 13, California Code of Regulations, Section 1958(g).

**BE IT FURTHER RESOLVED:** That the Executive Officer has been provided all materials required to demonstrate certification compliance with the Board's emission control system warranty regulations (Title 13, California Code of Regulations, Sections 2035 et seq.).

**BE IT FURTHER RESOLVED:** That because the listed motorcycles are certified to 0.2 grams per test or more below the applicable evaporative standard, the vehicles are exempt from complying with the Air Resources Board's "Specifications for Fill Pipes and Openings of Motor Vehicle Fuel Tanks" pursuant to Executive Order G-70-16-E.

Vehicles certified under this Executive Order must conform to all applicable California emission regulations.

**This Executive Order is only granted to the engine family and model-year listed above. Vehicles 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 26th day of August 2003.

Raphael Susnowitz

for Allen Lyons, Chief
Mobile Source Operations Division