| California Environmental Protection Agency AIR RESOURCES BOARD | YAMAHA MOTOR CO., LTD. | EXECUTIVE ORDER U-M-004-0176 New Emission-Compliant Off-Highway Recreational Vehicles |
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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:** The engine and exhaust emission control systems produced by the manufacturer are certified as described below for off-highway recreational vehicles. Production vehicles shall be in all material respects the same as those for which certification is granted. **The manufacturer shall ensure that character "C" or "3" is <u>not</u> used in the eighth (8th) position of the vehicle identification number (VIN) of all vehicles in the engine family listed below. Violation of this VIN provision may result in incorrect registration of the vehicles.**

| MODEL YEAR | ENGINE FAMILY | ENGINE DISPLACEMENT (cc) | VEHICLE TYPE | FUEL TYPE | SPECIAL FEATURES & EMISSION CONTROL SYSTEMS |
|---|---|---|---|---|---|
| 2010 | AYMXX.110AAA | 110 | OFMC | Gasoline | EM |

VEHICLE MAKE and MODEL / ENGINE CODE (EIM in "kg" for Certification Chassis Testing, or Rated Power in "kW" or "hp" for Certification Engine Testing)

| MAKE | ENGINE (cc) | VEHICLE MODEL | MAKE | ENGINE (cc) | VEHICLE MODEL |
|---|---|---|---|---|---|
| YAMAHA | 110 | TT-R110E / 5B6 (150 kg) | | | |
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ATV=all-terrain vehicle; OFMC=off-road motorcycle; UV=off-road utility vehicle; SV=off-road sport vehicle; SCAR=sand car; 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; DGI=direct gasoline injection; TC/SC=turbo/super charger; CAC=charge air cooler; EIM=equivalent inertia mass; 2 (prefix)=parallel; (2) (suffix)=in series;

Following are the exhaust emission standards, or designated standard as applicable, and certification levels for this engine family. The designated standard, as applicable, shall beshown on the permanent emission control label. Vehicles within this engine family shall not discharge any crankcase emissionsinto the ambient atmosphere in conformance with Title 13, California Code of Regulations, Section(13 CCR) 2412(i).

| | HC | | | | HC+NOx | | | | CO | |
|---|---|---|---|---|---|---|---|---|---|---|
| | CERT | STD | DSN_STD | CAV_STD | CERT | STD | DSN_STD | CAV_STD | CERT | STD |
| CHASSIS TESTING (g/km) | 0.8 | 1.2 | * | * | * | * | * | * | 9.0 | 15.0 |
| ENGINE TESTING (g/kW-hr) | * | * | * | * | * | * | * | * | * | * |

CAV_STD=corporate average standard; DSN_STD=manufacturer designated standard; STD=direct standard; CERT=certification level; HC=hydrocarbons; NOx=oxides of nitrogen; CO=carbon monoxide; g/km=grams per kilometer; g/kW-hr=grams per kilowatt-hour; g/bhp-hr=grams per brake horsepower-hour; *=not applicable;

**BE IT FURTHER RESOLVED:** For the off-highway recreational vehicles listed above, the manufacturer has submitted materials to demonstrate certification compliance wth the evaporative emission requirements in 13 CCR 2412, as applicable.

**BE IT FURTHER RESOLVED:** Certification to the designated standard listed above, as applicable, is subject to the following terms, limitations and conditions. The designated standard shall be the exhaust limit for this engine family for the model year and cannot be changed by the manufacturer. It serves as the exhaust standard applicable to this engine family for determining engine family compliance, and compliance with the corporate average standard in accordance with 13 CCR 2412(b), 13 CCR 2412(d), and 13 CCR 2414.

**BE IT FURTHER RESOLVED**: The listed vehicles shall comply with 13 CCR 1965 and 13 CCR 2413 (emission control labels). The vehicles shall also be subject to 13 CCR 2414 (enforcement and recall provisions).

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 12th day of June 2009.

**Annette Hebert, Chief**
**Mobile Source Operations Division**