

Pursuant to the authority vested in the Air Resources Board by Health and Safety Code Sections 43013, 43018, 43101, 43102 and 43104; 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 new spark-ignition marine engine and emission control systems (ECS) produced by the manufacturer are certified as described below. Production engines shall be in all material respects the same as those for which certification is granted.

MODEL YEAR	ENGINE FAMILY	FUEL TYPE	DISPLACEMENT (cc)	LEVEL OF CLEANLINESS
2010	AYMXM1.602GC	Gasoline	1596	Ultra Low Emission ("Three Stars")
EQUIPMENT APPLICATION		ECS & SPECIAL FEATURES		ENGINE TYPE
Outboard		Multiport Fuel Injection		4-Stroke
<b>ENGINE MODELS</b> (rated power in kilowatts, kW)	See Attachment			

**BE IT ORDERED AND RESOLVED:** That the listed engines are certified to a hydrocarbon plus oxides of nitrogen (HC+NO<sub>x</sub>) family emission limit (FEL) and a carbon monoxide (CO) direct standard in accordance with a plan submitted by the manufacturer to, and approved by, the Executive Officer for compliance with the exhaust emission standards on a corporate average basis pursuant to Title 13, California Code of Regulations, (13 CCR) Section 2442(a). The HC+NO<sub>x</sub> FEL and the CO standard shall be the applicable emission standards for this engine family for determining compliance of any engine within this engine family pursuant to 13 CCR Sections 2444.1 (in-use compliance) and 2446 (audit testing). The standards and certification emission levels in grams per kilowatt-hour (g/kW-hr) for this engine family are as follows. Engines in this engine family shall have closed crankcases in conformance with Part I, Section 18(h) of the "California Exhaust Emission Standards and Test Procedures for 2001 Model-Year and Later Spark-Ignition Marine Engines."

*=not applicable	HC+NO <sub>x</sub> (g/kW-hr)	CO (g/kW-hr)
STANDARD	*	300.0
FAMILY EMISSION LEVEL	16.80	*
CERTIFICATION LEVEL	12.89	207.3

Compliance with the emission standards on a corporate average basis shall be determined pursuant to 13 CCR Section 2442(a) based on the sales-weighted average power of all engines produced for sale in California that are included in the approved corporate average compliance plan for the model-year.

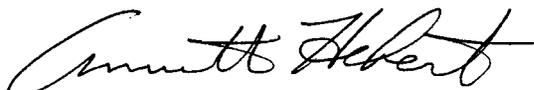
**BE IT FURTHER RESOLVED:** That for the listed engines, the manufacturer has submitted, and the Executive Officer hereby approves, the information and materials to demonstrate certification compliance with 13 CCR Sections 2443.1, 2443.2 and 2443.3 (emission control, consumer, and environmental labels), and Sections 2445.1 and 2445.2 (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 pursuant to 13 CCR Sections 2442(a)(2)(B) and 2446.

**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 26 day of March 2010.



Annette Hebert, Chief  
 Mobile Source Operations Division

Model Year: 2010  
 Manufacturer Name: Yamaha Motor Co., Ltd.  
 Engine Family: AYMXM1.602GC  
 SI MARINE ENGINE SUPPLEMENTAL INFORMATION

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 Issued: 2009/09/11  
 Revised: 2010/01/29  
 E.O.#: U-W-003-018.3

**S11. MODEL SUMMARY** (Use an asterisk (\*) to identify worst-case engine model used for certification testing.)

S12 Engine Model	S13 Engine Code	S14 Sales Codes (Check All appropriate)			S15 Eng. Displ. (cc)	S16 Rated Power (kW)	S17 Rated Speed (RPM)	S18 Peak Torque (N-m)	S19 Peak Torque Speed (RPM)
		Calif. Only	49- State	50- State					
F75TLR/ F75L/F75BETL	N/A			*	1596	57	5500	122.7	4000
* F90TLR/ F90L/F90BETL	N/A			*	1596	68	5500	126.9	4500
F90TXR/ F90X/F90BETX	N/A			*	1596	68	5500	126.9	4500
F90TJR/ F90J	N/A			*	1596	68	5500	126.9	4500