

MERCURY MARINE

EXECUTIVE ORDER U-W-001-0609New Spark-Ignition Marine Engines

Pursuant to the authority vested in California 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-19-095:

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	EN	IGINE FAMILY	ENGINE TYPE		FUEL TYPE	
2024	RM9XM04.5CAT		4-Stroke		Gasoline	
LEVEL OF CLEANLINESS		EMISSION CONTROL SYSTEMS & SPECIAL FEATURES		EQUIPMENT APPLICATION		
Super Ultra Low Emission ("Four Stars")	Ultra Low Emission Heated Oxyger ("Four Stars") Heated Oxyger Dual Three-way Cata		t Fuel Injection (SFI) n Sensor (HO2S) lytic Converter (2TWC) s-Marine System (OBD)		Sterndrive	

Engines certified by this Executive Order are further described in Attachment.

BE IT ORDERED AND RESOLVED: That the listed engines are certified to a hydrocarbon plus oxides of nitrogen (HC+NOx) family emission limit (FEL) and 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(b). The HC+NOx 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). 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 discharge no crankcase emissions into the ambient atmosphere in conformance with 13 CCR Section 2442(b).

	HC+NOx (g/kW-hr)	CO (g/kW-hr)
STANDARD	5.0	75.0
FAMILY EMISSION LEVEL	4.5	*
CERTIFICATION LEVEL	2.5	42.3

^{*}not applicable

Compliance with the emission standards on a corporate average basis shall be determined pursuant to 13 CCR Section 2442(b) based on the sales-weighted average 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), Section 2444.2 (on-board engine malfunction detection system), 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.

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 on this 9th day of October 2023.

Robin U. Lang, Chief

Emissions Certification and Compliance Division

Holin U. Lang

Date: <u>10/3/2023</u>.

Engine Family: <u>RM9XM04.5CAT</u>.

For CARB Use Only Executive Order: U-W-001-0609 Attachment _1_of_1_

Model Summary

		\$14. Sales Codes (Check all appropriate)							
S12. Engine Model	S13. Engine Code	CA Only	49-State	50-State	S15. Engine Displacement (cc)	S16. Rated Power (kW)	S17. Rated Speed (RPM)	S18. Peak Torque (N-m)	S19. Peak Torque Speed (RPM)
4.5L 250Hp Alpha DTM ECT (g2)				Х	4500	184	5200	407	3751
4.5L 250Hp Bravo DTM ECT (g2)				Х	4500	184	5200	407	3751
4.5L 250Hp Bravo DTS ECT (g2)				Х	4500	184	5200	407	3751
4.5L 200Hp Alpha DTM ECT (g2)				Х	4500	150	4800	363	3500
4.5L 200Hp Bravo DTM ECT (g2)				Х	4500	150	4800	363	3500
4.5L 200Hp Bravo DTS ECT (g2)				Х	4500	150	4800	363	3500