MERCURY MARINE

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-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	ENGINE FAMILY	FUEL TYPE	DISPLACEMENT (cc)	LEVEL OF CLEANLINESS		
2021	MM9XM04.62RS	Gasoline 4576		Ultra Low Emission ("Three Stars")		
EQUIPMENT	APPLICATION	ECS & SPECIAL FEATURES		ENGINE TYPE		
Outboard		Heated Ox	port Fuel Injection ygen Sensor n Water to Air Cooler	4-Stroke		
ENGINE MODELS (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+NOx) 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+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) 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+NOx (g/kW-hr)	CO (g/kW-hr)		
STANDARD	*	300.0		
FAMILY EMISSION LEVEL	15.90	*		
CERTIFICATION LEVEL	13.88	192.6		

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 on this 27th day of January 2021.

Allen Lyons, Chief

Emissions Certification and Compliance Division

Date: <u>11/17/2020</u>

Engine Family: <u>MM9XM04.62RS</u>

Model Summary

For CARB Use Only Executive Order: U-W-001-0551 Attachment 1 of 2

		S14. Sales Codes (Check all appropriate)							
S12.	S13.	CA Only	49-State	50-State	S15.	S16.	S17.	S18.	S19.
Engine Model	Engine Code				Engine Displacement (cc)	Rated Power (kW)	Rated Speed (RPM)	Peak Torque (N-m)	Peak Torque Speed (RPM)
450R L SM1.6 BL	14500007A			Х	4576	336	6400	577	4000
450R CL SM1.6 BL	14500008A			Х	4576	336	6400	577	4000
450R XL SM1.6 BL	14500009A			Х	4576	336	6400	577	4000
450R CXL SM1.6 BL	14500010A			Х	4576	336	6400	577	4000
450R XXL SM1.6 BL	14500011A			Х	4576	336	6400	577	4000
450R CXXL SM1.6BL	14500012A			Х	4576	336	6400	577	4000
450R L SM1.6 RCBL	14500013A			Х	4576	336	6400	577	4000
450R XL SM1.6RCBL	14500014A			Х	4576	336	6400	577	4000
450R L SM1.6 RTB	14500021A			X	4576	336	6400	577	4000
450R CL SM1.6 RTB	14500022A			X	4576	336	6400	577	4000
450R XL SM1.6 RTB	14500023A			Χ	4576	336	6400	577	4000
450R CXL SM1.6RTB	14500024A			X	4576	336	6400	577	4000
450R L SM1.6RCRTB	14500025A			X	4576	336	6400	577	4000
450RXXLSM1.6RCRTB	14500026A			Χ	4576	336	6400	577	4000
450RC2LSM1.6LCRTB	14500027A			X	4576	336	6400	577	4000
450R L SM1.6 CF	14500034A			Χ	4576	336	6400	577	4000
450R CL SM1.6 CF	14500035A			Χ	4576	336	6400	577	4000
450R XL SM1.6 CF	14500036A			Χ	4576	336	6400	577	4000
450R CXL SM1.6 CF	14500037A			Х	4576	336	6400	577	4000
450R XXL SM1.6 CF	14500038A			Χ	4576	336	6400	577	4000
450R CXXL SM1.6CF	14500039A			Х	4576	336	6400	577	4000
450R L SM1.6 RCCF	14500040A			Х	4576	336	6400	577	4000
450R XL SM1.6RCCF	14500041A			Х	4576	336	6400	577	4000
450R L SM1.6 RTW	14500048A			Х	4576	336	6400	577	4000
450R CL SM1.6 RTW	14500049A			Х	4576	336	6400	577	4000
450R XL SM1.6 RTW	14500050A			Х	4576	336	6400	577	4000
450R CXL SM1.6RTW	14500051A			X	4576	336	6400	577	4000
450R L SM1.6RCRTW	14500052A			X	4576	336	6400	577	4000
450RXXLSM1.6RCRTW	14500053A			X	4576	336	6400	577	4000
450RC2LSM1.6LCRTW	14500054A			X	4576	336	6400	577	4000
450R LHDJ1.6BL	14500055A			X	4576	336	6400	577	4000
450R CLHDJ1.6BL	14500056A			Х	4576	336	6400	577	4000
450R XLHDJ1.6BL	14500057A			X	4576	336	6400	577	4000
450R CXLHDJ1.6BL	14500058A			Х	4576	336	6400	577	4000
450R XXLHDJ1.6BL	14500059A			X	4576	336	6400	577	4000
450R CXXLHDJ1.6BL	14500060A			Х	4576	336	6400	577	4000
450R LHDJ1.6CF	14500061A			Х	4576	336	6400	577	4000
450R CLHDJ1.6CF	14500062A			X	4576	336	6400	577	4000

Date: <u>11/17/2020</u>

Engine Family: MM9XM04.62RS

For CARB Use Only Executive Order: U-W-001-0551 Attachment 2of 2

Model Summary

		S14.							
			odes (Check all ap)						
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)
450R XLHDJ1.6CF	14500063A			Х	4576	336	6400	577	4000
450R CXLHDJ1.6CF	14500064A			Х	4576	336	6400	577	4000
450R XXLHDJ1.6CF	14500065A			X	4576	336	6400	577	4000
450R CXXLHDJ1.6CF	14500066A			X	4576	336	6400	577	4000
450RL HD RC RT BL	14500067A			X	4576	336	6400	577	4000
450RCL HD LC RT B	14500068A			X	4576	336	6400	577	4000
450RL HD RC RTCF	14500069A			Х	4576	336	6400	577	4000
450RCL HD LC RTCF	14500070A			X	4576	336	6400	577	4000
450R LHC1.6BL	14500071A			Х	4576	336	6400	577	4000
450R CLHC1.6BL	14500072A			Х	4576	336	6400	577	4000
450R XLHC1.6BL	14500073A			Х	4576	336	6400	577	4000
450R CXLHC1.6BL	14500074A			Х	4576	336	6400	577	4000
450R XXLHC1.6BL	14500075A			Х	4576	336	6400	577	4000
450R CXXLHC1.6BL	14500076A			Х	4576	336	6400	577	4000
450R LHC1.6CF	14500077A			Х	4576	336	6400	577	4000
450R CLHC1.6CF	14500078A			Х	4576	336	6400	577	4000
450R XLHC1.6CF	14500079A			Х	4576	336	6400	577	4000
450R CXLHC1.6CF	14500080A			Х	4576	336	6400	577	4000
450R XXLHC1.6CF	14500081A			Х	4576	336	6400	577	4000
450R CXXLHC1.6CF	14500082A			Х	4576	336	6400	577	4000
 									