

MERCURY MARINE

EXECUTIVE ORDER U-W-001-0522 New 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	ENGINE FAMILY	FUEL TYPE	DISPLACEMENT (cc)	LEVEL OF CLEANLINESS		
2020	LM9XM3.42GW	Gasoline	3432	Ultra Low Emission ("Three Stars")		
	T APPLICATION		IAL FEATURES	ENGINE TYPE		
Outboard		Heated O	Fuel Injection xygen Sensor	4-Stroke		
ENGINE MODELS (rated power in kilowatts, kW)			tachment			

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	15.00	*
CERTIFICATION LEVEL	12.96	69.6

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).

BE IT FURTHER RESOLVED: That the listed engine models are conditionally certified based on certification levels estimated by extrapolating partial durability test data. The manufacturer is required to demonstrate compliance using full durability test results by January 31, 2020. Failure to adequately demonstrate compliance by the above specified date shall be cause for the Air Resources Board to revoke this Executive Order. Engines introduced into commerce under the revoked Executive Order shall be deemed uncertified, and the manufacturer may be subject to enforcement actions.



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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 24th

day of December 2019.

Allen Lyons, Chief Emissions Certification and Compliance Division

Model Year:2020	Page:3
Manufacturer Name:Mercury Marine	Issued:08/19/2019
Engine Family:LM9XM03.42GW	Revised:
SI MARINE ENGINE SUPPLEMENT INFORMATION	E.O.#: U-W-001-0522

S10. MODEL SUMMARY (Use asterisk to identify worst-case engine model used for certification testing)

S11 Model Designation	S12 Engine Code	S13 Sales Codes (Check all appropriate codes)			S14 Eng. Disp. (cc)	S15 Rated Power (kW)	S16 Rated Speed (RPM)	S17 Peak Torque (N-m)	S18 Peak Torque Speed
		Calif. Only	49 State	50-State					
11750001A				Х	3432	138	4250	312	4000
11750002A				Х	3432	138	4250	312	4000
11750003A				Х	3432	138	4250	312	4000
11750004A				Х	3432	138	4250	312	4000
11750005A				Х	3432	138	4250	312	4000
*11750006A				Х	3432	138	4250	312	4000
12000001A				Х	3432	149	4750	314	4500
12000002A				Х	3432	149	4750	314	4500
12000003A				X	3432	149	4750	314	4500
12000004A				X	3432	149	4750	314	4500
12000005A				Х	3432	149	4750	314	4500
12000006A				X	3432	149	4750	314	4500
12000007A				X	3432	149	4750	314	4500
12000008A				X	3432	149	4750	314	4500
12000009A				Х	3432	149	4750	314	4500
12000010A				Х	3432	149	4750	314	4500
12000011A				Х	3432	149	4750	314	4500
12000012A				Х	3432	149	4750	314	4500
12000013A				Х	3432	149	4750	314	4500
12000014A				Х	3432	149	4750	314	4500
12000015A				Х	3432	149	4750	314	4500
12000016A				Х	3432	149	4750	314	4500
12000017A				Х	3432	149	4750	314	4500
12000018A				Х	3432	149	4750	314	4500
12000019A				Х	3432	149	4750	314	4500
12000020A				X	3432	149	4750	314	4500
12000021A				Х	3432	149	4750	314	4500
12000022A				Х	3432	149	4750	314	4500
12000023A				Х	3432	149	4750	314	4500
12000024A				х	3432	149	4750	314	4500
12000025A				Х	3432	149	4750	314	4500
12000026A				X	3432	149	4750	314	4500
12000029A				X	3432	149	4750	314	4500

Model Year:2020	Page:4
Manufacturer Name:Mercury Marine	Issued:08/19/2019
Engine Family:LM9XM03.42GW	Revised:
SI MARINE ENGINE SUPPLEMENT INFORMATION	E.O.#: 11-W-001-0523

40000000		Γ	Τ	Х	3432	149	4750	314	4500
12000030A			· · · · · · · · · · · · · · · · · · ·						
12000031A				X	3432	149	4750	314	4500
12000032A				X	3432	149	4750	314	4500
12250001A				X	3432	168	6000	314	4500
12250002A			ļ	X	3432	168	6000	314	4500
12250003A			<u> </u>	X	3432	168	6000	314	4500
12250004A				X	3432	168	6000	314	4500
12250005A				X	3432	168	6000	314	4500
12250006A				X	3432	168	6000	314	4500
12250007A				Х	3432	168	6000	314	4500
12250008A				Х	3432	168	6000	314	4500
12250009A				Х	3432	168	6000	314	4500
12250010A				Х	3432	168	6000	314	4500
12250011A				Х	3432	168	6000	314	4500
12250012A				X	3432	168	6000	314	4500
12250013A				X	3432	168	6000	314	4500
12250014A				X	3432	168	6000	314	4500
12250015A				X.	3432	168	6000	314	4500
12250016A				X	3432	168	6000	314	4500
12250017A				X	3432	168	6000	314	4500
12250018A				Х	3432	168	6000	314	4500
12250019A				Х	3432	168	6000	314	4500
12250020A				Х	3432	168	6000	314	4500
12250021A	7			Х	3432	168	6000	314	4500
12250022A				Х	3432	168	6000	314	4500
12250023A				Х	3432	168	6000	314	4500
12250024A		-		Х	3432	168	6000	314	4500
12250025A	. '			Х	3432	168	6000	314	4500
12250026A				Х	3432	168	6000	314	4500
12250027A				Х	3432	168	6000	314	4500
12250028A	-			Х	3432	168	6000	314	4500
12250029A		:		Х	3432	168	6000	314	4500
12250030A				Х	3432	168	6000	314	4500
12250031A				Х	3432	168	6000	314	4500
12250032A				Х	3432	168	6000	314	4500
12250047A				Х	3432	168	6000	314	4500
12250048A				Х	3432	168	6000	314	4500
12250049A				Х	3432	168	6000	314	4500
12250050A				Х	3432	168	6000	314	4500

^{*} worst-case equivalent engine model used for certification testing (175 XL DTS)