California Environmental Protection Agency Air Resources Board

MERCURY MARINE

EXECUTIVE ORDER U-W-001-0427-1 New Spark-Ignition Marine Engines

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-14-012;

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		
2016	GM9XM.9952GE	Gasoline	995	Ultra Low Emission ("Three Stars")		
EQUIPMENT APPLICATION Outboard		ECS & SPE	CIAL FEATURES	ENGINE TYPE		
			Fuel Injection	4-Stroke		
ENGINE MODELS (rated power in kilowatts, kW)	N. 18 1004 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		ttachment			

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	14.90	*
CERTIFICATION LEVEL	14.34	225.2

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.

This Executive Order hereby supersedes Executive Order U-W-001-0427 dated September 17, 2015.

Executed at El Monte, California on this _____day of June 2016.

Annette Hebert, Chief

Emissions Compliance, Automotive Regulations and Science Division

Model Year:2016	Page:3	ATTACHMENT PIOFZ
Manufacturer Name:Mercury Marine	Issued:	•
Engine Family: GM9XM 9952GE	Revised: 4-18-2016	

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

SI MARINE ENGINE SUPPLEMENT INFORMATION

S11 Model Designation	Model Engine		S13 Sales Codes (Check all appropriate codes)		S14 Eng. Disp. (cc)	S15 Rated Power	S16 Rated Speed	S17 Peak Torque	S18 Peak Torque
		Calif. Only	49 State	50- State		(kW)	(RPM)	(N-m)	Speed (RPM)
7A60453VZ				Х	995	44.13	5750	76.5	3000
7A60413VZ				Х	995	44.13	5750	76.5	3000
1960403KZ				Х	995	44.13	5750	76.5	3000
1A60351KZ				Х	995	44.13	5750	76.5	3000
1A60453BZ				Х	995	44.13	5750	76.5	3000
1A6045TBZ				Х	995	44.13	5750	76.5	3000
1A60413BZ				Х	995	44.13	5750	76.5	3000
1A60411BZ				Х	995	44.13	5750	76.5	3000
*1A51453BZ				Х	995	36.78	5750	68	5000
1A5145TBZ				Х	995	36.78	5750	68	5000
1A51413BZ				Х	995	36.78	5750	68	5000
1A51411BZ				Х	995	36.78	5750	68	5000
1A41453BZ				Х	995	29.42	5750	66.1	2750
1A60473BZ				Х	995	44.13	5750	76.5	3000
1A60463BZ				Х	995	44.13	5750	76.5	3000
1A60351BZ				Х	995	44.13	5750	76.5	3000
1A6035TBZ				Х	995	44.13	5750	76.5	3000
7F60413BZ				х	995	44.13	5750	76.5	3000
7F60453BZ				X	995	44.13	5750	76.5	3000
1F41453LZ				х	995	29.42	5750	66.1	2750
1F60473LZ				х	995	44.13	5750	76.5	3000
1F51411LZ				х	995	36.78	5750	68	5000

Model Year: ____2016___ Manufacturer Name: ____Mercury Marine___ Engine Family: ____GM9XM.9952GE

SI MARINE ENGINE SUPPLEMENT INFORMATION

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1F51413LZ	Х	995	36.78	5750	68	5000
1F51453LZ	x	995	36.78	5750	68	5000
1F60411LZ	x	995	44.13	5750	76.5	3000
1F60351LZ	Х	995	44.13	5750	76.5	3000
1960403LZ	х	995	44.13	5750	76.5	3000
1F5145TLZ	х	995	36.78	5750	68	5000
1F60453LZ	Х	995	44.13	5750	76.5	3000
1F6035TLZ	X	995	44.13	5750	76.5	3000
1F6045TLZ	х	995	44.13	5750	76.5	3000
1F60413LZ	x	995	44.13	5750	76.5	3000
1F60463LZ	X	995	44.13	5750	76.5	3000
1F4135T1Z	х	995	31.24	5500	67.2	2000
1F4134T1Z	х	995	31.24	5500	67.2	2000
1F4136T1Z	х	995	31.24	5500	67.2	2000
1F414571Z	X	995	31.24	5500	67.2	2000
1F4145T1Z	х	995	31.24	5500	67.2	2000
1F414471Z	X	995	31.24	5500	67.2	2000
1F4144T1Z	X	995	31.24	5500	67.2	2000
1F414671Z	X	995	31.24	5500	67.2	2000
1F4146T1Z	X	995	31.24	5500	67.2	2000
1F6035T1Z	X	995	41.85	5500	73.9	5000
1F6034T1Z	X	995	41.85	5500	73.9	5000
1F6036T1Z	X	995	41.85	5500	73.9	5000
1F604571Z	Х	995	41.85	5500	73.9	5000
1F6045T1Z	X	995	41.85	5500	73.9	5000
1F604471Z	X	995	41.85	5500	73.9	5000
1F6044T1Z	X	995	41.85	5500	73.9	5000
1F604671Z	X	995	41.85	5500	73.9	5000

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