## **MERCURY MARINE**

EXECUTIVE ORDER U-W-001-0079-1 New Spark-Ignition Marine Engines

Pursuant to the authority vested in the Air Resources Board by Health and Safety Code Sections 43013, 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 eagines 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		
2004	4M9XM05.7GME	Gasoline	5700	Ultra Low Emission ("Three Stars")		
EQUIPME	NT APPLICATION		CIAL FEATURES	ENGINE TYPE		
Inboard & Sterndrive			Fuel Injection	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) in accordance with a plan submitted by the manufacturer to, and approved by, the Executive Officer for compliance with the exhaust emission standard on a corporate average basis pursuant to Title 13, California Code of Regulations, (13 CCR) Section 2442(b). The FEL shall be the applicable emission standard 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 FEL and certification emission level 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."

	FAMILY EMISSION LIMIT (g/kW-hr)	CERTIFICATION LEVEL (g/kW-hr)
HC+NOx	16.0	11.9

Compliance with the emission standard 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), 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.

This Executive Order hereby supersedes Executive Order U-W-001-0079 dated December 10, 2003.

Executed at El Monte, California on this \_\_\_\_\_\_ day of December 2004.

Allen Lyons, Chief

Mobile Source Operations Division

## IACHMENT

Model	Year:	20	04

Manufacturer Name: Mercury MerCruiser
Engine Family: 4M9XM05.7GME

Engine Family: \_\_\_\_ SI MARINE ENGINE SUPPLEMENTAL INFORMATION. Page:

Issued: 12/10/03

Revised: 12/9/04 E.O.#: U-W-001-0079-1

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

S12 <sub>j</sub> / Engine Model	S13 Engine Code			S15 Eng. Disp. (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					
4444126RRS				X	5700	223.7	5000	486.8	3600
4444126LRS		-	-	X	5700	223.7	5000	486.8	3600
4444126NRS				Χ	5700	223.7	5000	486.8	3600
4444127LRS				X	5700	223.7	5000	486.8	3600
4444127NRS				Х	5700	223.7	5000	486.8	3600
44442267RS				X	5700	223.7	5000	486.8	3600
44442269RS				X	5700	223.7	5000	486.8	3600
4444226RRS				X	5700	223.7	5000	486.8	3600
4444226LRS				X	5700	223.7	5000	486.8	3600
4444226NRS				X	5700	223.7	5000	486.8	3600
44442277RS				Х	5700	223.7	5000	486.8	3600
44442279RS				X	5700	223.7	5000	486.8	3600
4444227RRS	1			Х	5700	223.7	5000	486.8	3600
4444227LRS				X	5700	223.7	5000	486.8	3600
4444227NRS				X	5700	223.7	5000	486.8	3600
44442287RS				X	5700	223.7	5000	486.8	3600
4444228LRS				Х	5700	223.7	5000	486.8	3600
4444226HRS				X	5700	223.7	5000	486.8	3600
4444227HRS				X	5700	223.7	5000	486.8	3600
443500001S				X	5700	223.7	5000	486.8	3600
4444128LRS	<u> </u>			Х	5700	223.7	5000	486.8	3600
443500003S				X	5700	223.7	5000	486.8	3600
44442279RS				X	5700	223.7	5000	486.8	3600
44442289RS		-		Х	5700	223.7	5000	486.8	3600
4444228LRS				Х	5700	223.7	5000	486.8	3600
444228NRS				X	5700	223.7	5000	486.8	3600
443500005S				X	5700	223.7	5000	486.8	3600
4444228HRS	<del>                                     </del>			X	5700	223.7	5000	486.8	3600

TTACHMENT

Model Year: \_\_\_2004

Manufacturer Name:

\_\_Mercury MerCruiser\_

Engine Family: \_

\_4M9XM05.7GME\_

SI MARINE ENGINE SUPPLEMENTAL INFORMATION.

Page:

Issued: 12/10/03
Revised: 12/0/04

E.O.#: 1) - W - 001 - 00 79 - 1

S12 Engine Model	S13 Engine Code	S14 Sales Codes (Check all appropriate codes)		S15 Eng. Disp. (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	:				
333500086S				Х	5700	223.7	4800	486.8	3600
333500074S	1			X	5700	223.7	4800	486.8	3600
333500112S				Х	5700	223.7	4800	486.8	3600
333500101S		-	-	X	5700	223.7	4800	486.8	3600
333500106S				X	5700	223.7	4800	486.8	3600
333500099S				X	5700	223.7	4800	486.8	3600
33350011 <b>5</b> S				X	5700	223.7	4800	486.8	3600
333500107S				X	5700	223.7	4800	486.8	3600
333500104S				X	5700	223.7	4800	486.8	3600
333500045S				X	5700	223.7	4800	486.8	3600
333500116S	1			X	5700	223.7	4800	486.8	3600
333500119S				Х	5700	223.7	4800	486.8	3600
333500103S			·	Х	5700	223.7	4800	486.8	3600
333500121S				X	5700	223.7	4800	486.8	3600
333500095S				X	5700	223.7	4800	486.8	3600
333500113S				X	5700	223.7	4800	486.8	3600
333500064S				X	5700	223.7	4800	486.8	3600
333500094S				Х	5700	223.7	4800	486.8	3600
33500199S				X	5700	246	5200	462.4	3900
*33500200S				X	5700	246	5200	462.4	3900
3335000042S				X	5700	235	5000	486.8	3900
333500066S				X	5700	235	5000	486.8	3900
333500185S				X	5700	246	5200	462.4	3900
333500205S				X	5700	223.7	4800	486.8	3600
333500130S				X	5700	223.7	4800	486.8	3600
333500229S				X	5700	223.7	4800	486.8	3600
333500170S				X	5700	223.7	4800	486.8	3600
333500195S				X	5700	223.7	4800	486.8	3600
333500181S				X	5700	223.7	4800	486.8	3600
333500230S			-	Х	5700	223.7	4800	486.8	3600
333500129S				X	5700	223.7	4800	486.8	3600
333500218S		i		X	5700	223.7	4800	486.8	3600

TACHMENT 3 OF2

Model	Year:	2004	
111000		4007	

Manufacturer Name: \_\_\_\_\_\_4

Mercury MerCruiser\_ 4M9XM05.7GME\_ SI MARINE ENGINE SUPPLEMENTAL INFORMATION.

Issued: 12/10/03

Revised: 12/9/04 E.O.#: U\_W-001

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

S12 // Engine Model	S13 Engine Code	S14 Sales Codes (Check all appropriate codes)		S15 Eng. Disp. (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				٠.	
* 350 Mag MPI Bravo &			-	х	5700	224	5000	487	3600
350 Mag MPI Alpha				х	5700	224	5000	487	3600
350 Mag MPI Inboard &		<u> </u>		х	5700	224	4800	487	3600
350 Mag MPI Tow Sport				х	5700	235	5000	487	3600
350 Mag MPI Tow Sport Black Scorpion		,		х	5700	246	5200	485	3800