TOHATSU CORPORATION

EXECUTIVE ORDER U-W-004-0048
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-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 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				
2007	71TXM.08622A	Gasoline	86	Ultra Low Emission ("Three Stars")				
	NT APPLICATION		CIAL FEATURES	ENGINE TYPE				
Outboard			Modification	4-Stroke				
ENGINE MODELS (rated power in kilowatts, kW)	See Attachment							

The following are the hydrocarbon plus oxides of nitrogen (HC+NOx) exhaust emission standard (Title 13, California Code of Regulations, (13 CCR) Section 2442(a)(1)) and certification emission level in grams per kilowatt-hour (g/kW-hr) for this engine family. 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."

	STANDARD (g/kW-hr) (estimated)	CERTIFICATION LEVEL (g/kW-hr)				
HC+NOx	30.00	27.66				

Compliance with the standard under 13 CCR Section 2442(a)(2) shall be determined based on the sales-weighted average power of the engine family based on engines produced in this family for sale in California. This engine family shall not be used to determine compliance through corporate averaging.

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 Section 2442(a)(2)(B).

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.

Annette Hebert, Chief

Mobile Source Operations Division

ATTACHMENT

Model Year: 2007

Manufacturer Name: TOHATSU CORPORATION
Engine Family: 71TXM.08622A
SI MARINE ENGINE SUPPLEMENTAL INFORMATION

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

S12. Engine Model	S13.	S14. Sales Codes (Check ALL appropriate)		S15. Eng. Displ.	S16. Rated Power	S17. Rated Speed	S18. Peak Torque	S19. Peak Torque	
Nodel	Code	Calif. Only	49- State	50- State	(cc)	(kW)	(RPM)	(N-m)	Speed (RPM)
(*)MFS2A NSF2A				x	86	1.47	5000	4.27	3000
1F02201HN 1F02201HN 7F02201ZN	и			x	86	1.84	5000	4.46	3500
MFS3.5A NSF3.5A 1F03200H 1F03201H 1F03211H 1F03211H 7F03201Z 7F03201Z 7F03211Z	<			×	86	2.57	5500	4.71	5000
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