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Joystick Piloting for Inboard: New Product Introduction

Models Affected

Models Covered	Serial Number Or Year
All DTS MerCruiser Inboard Models—Gas or Diesel	–

Scope

Worldwide

Situation

MerCruiser is announcing the release of a new Joystick Piloting system for single and dual engine inboard powered boats. This system incorporates electric thruster motor operation with main engine operation in a single joystick. For the single engine Joystick Piloting for Inboard (JPI) system, a stern and a bow thruster are required. For the dual engine Joystick Piloting for Inboard (JPI) system, two options exist: a single bow thruster or a bow and stern thruster. Details and features of each system are outlined in this document.

For detailed instructions on installations and functions, refer to the appropriate installation manual.

Operation

The joystick provides a single interface to maneuver the vessel. Operating the vessel with the joystick is well suited for close quarter operations and when docking. The joystick system controls thrust to move or rotate the boat in a desired direction.

The joystick provides for three axes of input to maneuver the boat: fore/aft, port/starboard, and rotational, or any combination thereof. For example, moving the joystick to the forward quadrant results in the boat moving forward. Joystick movement diagonally results in a diagonal motion of the boat. Rotating the joystick causes the boat to rotate around its center. You can move and rotate the joystick at the same time, allowing for intricate movements for maneuvering in tight quarters.

Thruster Only Operation

The dual engine JPI system, when placed in thruster only mode, allows the user to operate the thrusters using the joystick independent of the engines. This provides the operator with ability to reposition the vessel while maneuvering at slow speed. To engage thrusters only, press the **Thruster Only** button when the engines are running. The **Thruster Only** button light will illuminate to indicate that this mode is active. Press the button again to deactivate.

Light Ring

The joystick has a light ring that illuminates when the joystick is activated. The light ring has two colors:

- Green—indicates that the joystick is available for use. The light ring will turn green when in neutral—ready state.
- Amber—indicates that the joystick is in use or that the system has a fault.
 - When the joystick is in use, the ring will light in segments to indicate the direction of joystick motion. The light will rotate when yaw is applied.
 - When the system has a fault that is preventing use of the joystick, the entire ring will flash amber while the joystick is deflected or rotated. If the fault persists, service is required.

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IMPORTANT: A flashing amber light ring may indicate low thruster batteries. For dual engine applications, running the generator when the thrusters are in use will prevent depletion of the thruster batteries. For single engine applications, avoid battery depletion by limiting the duration of thruster usage and allowing the engine to run and replenish the battery charge between thruster usage.



Single engine joystick with green light ring illuminated for illustration



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Dual engine joystick with amber light ring illuminated for illustration

Thruster Integration

Thrusters for JPI are not sold by Mercury Marine. Currently, there are two manufacturer's products that are approved by Mercury Marine for use in JPI vessels.

- Vetus®
- Side-Power®

Side-Power thrusters require an adapter for connection to the JPI system. For other thruster types or brands, contact your product application engineer for assistance.

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