

PRODUCT ALL SEAKEEPER MODELS

PURPOSE AND SCOPE

This procedure describes placing a Seakeeper series seawater cooling system in winter lay-up. It is intended for boats in colder climates that are susceptible to freezing.

BACKGROUND

Boats kept in cold climates that will not be heated throughout the winter are susceptible to freezing. Use this procedure as a guide for winterizing the Seakeeper's lay-up when winterizing all other water systems onboard.

PRECAUTIONS AND LIMITATIONS

1. FLOODING POTENTIAL EXISTS when opening seawater cooling systems.

PREREQUISITES

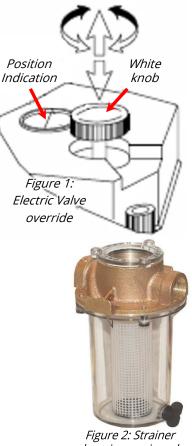
- 1. **IF** seawater configuration in procedure is different from vessel serviced, **THEN ADAPT** this procedure for the vessel.
- 2. **OBTAIN** following tools and equipment:
 - Non-toxic, Propylene glycol marine winterization antifreeze, 2 to 4 gal (depending on model and seawater hose lengths), rated for -50°F (-45°C) or colder
 - Funnel, 16 fl. oz., plastic
 - 2-foot (60 cm) length of 3/8 in. (10 mm) OD tubing
 - Bucket or heavy mil bag, 5 US Gallon (20 L) capacity (for capturing drained water)
 - Nut driver, ¼" size
- 3. **ENSURE** following:
 - a. Flywheel stationary at zero RPM per display or MFD app
 - b. Control and DC Seawater Pump power aligned
 - c. AC power aligned for AC-powered seawater pumps



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PROCEDURE

- 1. **CLOSE** seawater intake seacock supplying Seakeeper cooling system.
- <u>IF</u> Seakeeper 40 with 1 inch electric valve in seawater pump suction, <u>THEN</u> MANUALLY OPEN electric valve as follows (Fig. 1):
 - a. **LIFT** white knurled knob on valve operator.
 - b. **TURN** knob left or right until position indication line parallel to seawater hose.
 - c. **PRESS DOWN** on knob.
- 3. **IF** seawater strainer equipped with draincock (Figure 2), **THEN:**
 - a. **PLACE** 5 US Gal. container below draincock.
 - b. **OPEN** draincock to drain water from strainer.
 - c. <u>WHEN</u> seawater drained, <u>THEN</u> SHUT draincock.
- 4. **OPEN** seawater strainer service cap.
- 5. **REMOVE** strainer filter screen.
- 6. **CLEAN** screen and filter housing of any debris.
- 7. **ENSURE** all water removed from strainer housing.
- 8. **IF** heat exchanger equipped with zinc anodes, **THEN INSPECT** zinc anodes.
 - a. <u>IF</u> zinc anodes depleted, <u>THEN</u> **REPLACE** zinc anodes.



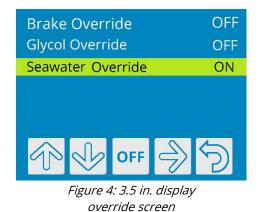
housing equipped with draincock

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- 9. **ADD** propylene glycol antifreeze to system:
 - a. **IF** strainer opens from top, THEN FILL strainer with propylene glycol antifreeze.
 - b. IF strainer opens by removal of screen housing below inlet and outlet (Figure 3), THEN:
 - **DISCONNECT** strainer outlet fitting. i.
 - ii. **INSERT** funnel and 2 ft (60 cm) length of tubing into strainer outlet hose.
 - FILL line with antifreeze. iii.
- 10. **ACIVATE** seawater override as follows:
 - a. IF 3.5 inch display, THEN:
 - **PRESS** gear icon button **1**. i.
 - **PRESS** service icon button ii.
 - **PRESS** right arrow button iii.
 - ENTER 4442 into PIN. iv.
 - PRESS return icon button v.
 - **PRESS** right arrow button Duntil override screen shown. vi.
 - **SELECT** Seawater Override through up and down arrow buttons 🗠 🐏. vii.
 - viii. WHEN Seawater Override highlighted, THEN PRESS return icon button.



Figure 3: Cup-style strainer housing











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Step 10 continued

- b. <u>IF</u> 5 inch display or MFD app, <u>THEN</u>:
 - i. **PRESS** wrench icon
 - ii. **PRESS** <u>AND</u> HOLD wrench icon until override screen appears.
 - iii. **PRESS** square beside Seawater Override.

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Figure 5: 5 in. display override screen

- 11. **MAINTAIN LEVEL** in strainer or funnel with remaining antifreeze.
- 12. <u>WHEN</u> steady stream of antifreeze discharged at Seakeeper seawater overboard, <u>THEN</u>:
 - a. **DEACTIVATE** Seawater Override.
 - b. **STOP** antifreeze fill.
- 13. <u>IF</u> strainer opens from top, <u>THEN</u>:
 - a. **INSTALL** filter screen.
 - b. **INSTALL** strainer top.
- 14. **IF** Strainer opens from below filter screen, **THEN:**
 - a. **REMOVE** tubing and funnel.
 - b. **RECONNECT** strainer outlet line.
 - c. **INSTALL** strainer screen.
 - d. **INSTALL** strainer housing.



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- 15. <u>WHEN</u> ready to restore seawater cooling system to operation, <u>THEN</u>:
 - a. **OPEN** seawater intake seacock supplying Seakeeper cooling.
 - b. <u>IF</u> Seakeeper 40 with 1 inch electric valve in seawater pump suction, <u>THEN</u> ENSURE white knob on valve operator is pushed down to allow automatic operation.

REVISION HISTORY

REVISION	DESCRIPTION	APPROVAL	DATE
3	Added steps for accessing override screens	A Patricio	21DEC2022
4	Added Seakeeper 40 electric valve operation. Minor edits of text and format.	A Patricio	08OCT2024