

## SEAWATER VALVE REFIT INSTALLATION



PRODUCT SEAKEEPER 5 / 6 / 9 / 10 / 14 / 18 / 40

### BACKGROUND

Seakeeper models with on-demand cooling utilize a dedicated seawater pump powered through a DC relay. This design is intended to provide optimal levels of seawater cooling to the Seakeeper to maintain critical tolerances of internal components.

Through continued field experience across a wide range of vessel configurations and operating conditions, Seakeeper has identified scenarios in which unintended seawater flow may occur downstream to the heat exchanger when the Seakeeper controls do not command cooling.

This condition may be influenced by factors such as seawater inlet pressure, back-pressure, or plumbing configurations outside of Seakeeper's control. Installation of the valve removes the potential for unintended seawater flow, helping ensure that cooling occurs only when commanded by the system, thereby further enhancing overall reliability.

Seakeeper retrofit kits consisting of a motorized ball valve, fittings, and a Y-cable assembly can be ordered for in-warranty models 5/6, 9, 10, 14, and 18. Part number 90970 for the Seakeeper 5/6 and 9. Part number 90971 for the Seakeeper 10, 14, and 18. Part number 90973 can be ordered for the Seakeeper 40, which includes an electronic seawater valve and fittings (the existing electrical harness has a provision for the valve).

### PROCEDURE

1. **TURN OFF** all Seakeeper electrical power breakers.
2. **DISCONNECT** seawater pump cable from seawater pump.
3. Within reach of applicable Y-cable, **INSTALL** Motorized Ball Valve (P/N 20762) on seawater inlet between seacock valve or sea chest and seawater pump (see Figures 1 and 2).

#### NOTE:

The Seakeeper 40 has only one cable (P/N 20619) between the Seakeeper and the pump and valve.

4. **CONNECT** seawater pump and valve Y-cable (P/N 20742 for Seakeeper 5/6 and 9; P/N 20658 for Seakeeper 10, 14, and 18; P/N 20619 for Seakeeper 40) as follows:
  - a. **CONNECT** 2-pin male Deutsch connector to 2-pin female connector of seawater pump cable.
  - b. **CONNECT** 3-inch (75 mm) branch 2-pin female Deutsch connector to seawater pump.
  - c. **CONNECT** 40-inch (1 m) branch 2-pin female connector to electric valve.
5. **TURN ON** all Seakeeper power breakers.
6. **CONFIRM** seawater pump and valve operate simultaneously when commanded by Seakeeper.

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- 7. **UPDATE** Software to latest available for the respective model utilizing the Seakeeper Service Tool.

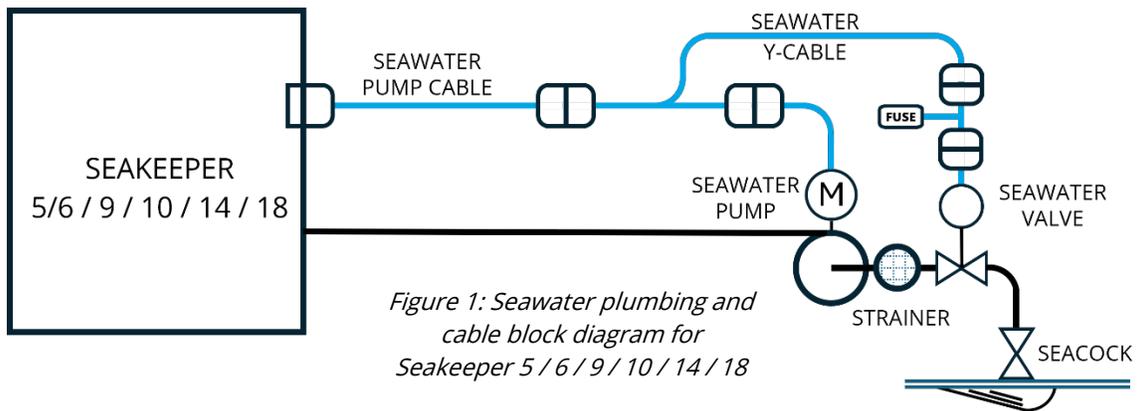


Figure 1: Seawater plumbing and cable block diagram for Seakeeper 5 / 6 / 9 / 10 / 14 / 18

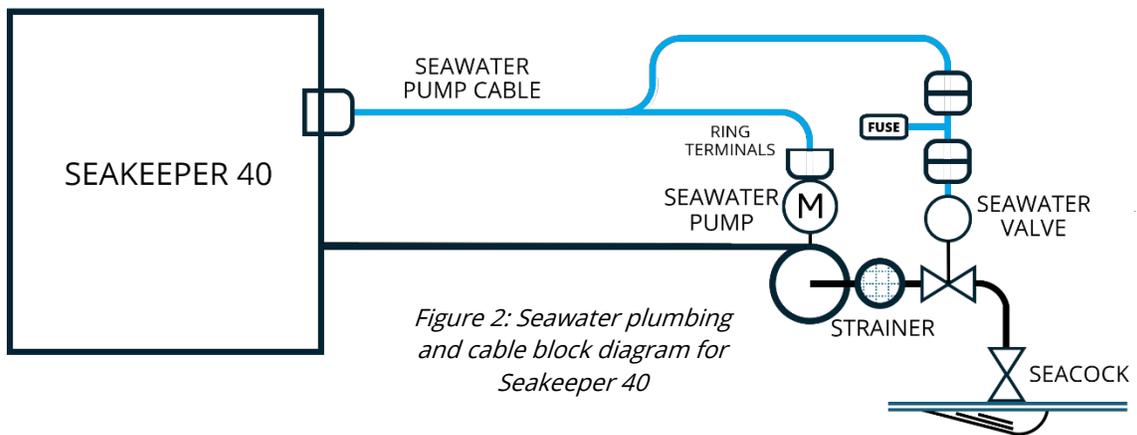


Figure 2: Seawater plumbing and cable block diagram for Seakeeper 40

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