# **COOLER INSTALLATION**

CAUTION

To adequately cool the hydraulic fluid in the system, the heat exchanger requires a minimum water flow rate of 2.5 GPM. If you are teeing from the existing thru hull engine cooling exchange system, make sure existing thru hull and water pump will provide adequate flow to the system at ALL times. ALL oil coolers, including SeaStar Solutions coolers, must be able to withstand a minimum of 100 psi working pressure, and provide 2.25 kW of cooling for HP5825, and 6.25 kW of cooling for HP5826 and HP5827.

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DO NOT use steel fittings in the Oil Cooler(s), Oil Filter(s) and/or Power Steering Pump(s), ONLY use Brass fittings. Use of steel fittings may cause irreparable damage to the unit.



Figure 15.

Please refer to Appendix E on page 37 for cooler details.

## **Installation Instructions**

### NOTICE

Specific engine connection details by manufacturer and model can be found in your engine owners manual.

- **1** For details on your oil cooler, please refer to page 37 for complete dimensional data.
- 2 Select a suitable location for mounting the cooler which is close to the water pick-up, yet, is accessible for plumbing the hydraulic lines. Note: Be sure that mounting the cooler will not let the hose, or fittings interfere with any other object. It is best to run a parallel circuit on the feed side of the engine to cool the hydraulic fluid most efficiently.

## SEASTAR

### **COOLER INSTALLATION**

#### NOTICE

Ensure oil cooler is drained when winterizing your vessel for storage.

- 3 Before securing the cooler install the fittings for both water and hydraulic lines. Water line ports are 3/8" NPT for 1" models (HP5825), and 1/2" NPT for 2" models (HP5826 and HP5827). It is recommended that a non-collapsible hose is used if you place the cooler on the suction side of the water pump. Otherwise standard water hose may be used.
- **4** ONLY use Brass Fittings. When installing fittings use a crescent wrench to hold the nut while turning in the brass fitting.
- **5** Once ALL fittings are installed secure the cooler to a bulkhead using saddle clamps or copper straps. Be sure NOT to deform the cooler in any way.

If running the cooler in series, ensure that the cooler does not restrict your flow too much. The HP5825 will create a 3.5 PSI pressure drop @ 35 gpm, and the HP5826/HP5827 will create 3.5 psi pressure drop @ 100 gpm.

### NOTICE

Supply water for cooler MUST be raw water, **DO NOT** use Re-circulated water.



Figure 16. HP5825 Installation.



Figure 17. HP5826/27 Installation.