



TRIM PUMP PART # TP-01 AND TP-03

NOTICE

DO NOT attempt installation before completely reading through this installation sheet.

Mounting the Trim Pump assembly

- Locate a good mounting area for the trim pump assembly, allowing for the minimum dimensions shown in Figure A. Allow for unrestricted connections for the hose fittings.

NOTICE

If you are using more than one cylinder per trim plane (yacht system), you will require a flow junction block. The block should be positioned so that the hose length from the block to each cylinder is nearly equal.

- Remove the small angled bracket from the parts bag and locate it on the desired mounting surface so it is nearly horizontal. Attach the bracket to the mounting surface using the two 1/4" self-tapping screws.
- Place the pump assembly to the angle bracket with the 1/4–20 screws and washers. Torque the screws to approximately 80 in-lb. Secure the lower left corner of the pump mount to the mounting surface with the number 10 screw.

Hydraulic hose installation

- Remove and save the shipping plugs from the pump fittings (these will be used during purging) and run the hydraulic lines from the pump to the trim tab, as shown in Figure B (attached to this email), with the "DOWN" (DN) port from the pump connected to the starboard side fitting of the cylinder bracket. Tighten the fitting securely.

Wiring

- Using a # 10 gauge wire, attach a fused 30 amp, 24 Volt circuit to the wire leads exactly as shown in Figure B with the positive lead (1/4" quick connect) going to the open terminal on the upper relay. Attach Negative lead (#10 ring terminal recommended) to the middle relay mounting screw at the back of the pump mount assembly. Secure the negative terminal with the #10 nylon insert locknut provided on the screw.
- Run two #18 gauge signal wires from the switching location (console area) to the pump locations each side. (various length harnesses are available from SeaStar Solutions)
- Connect the signal wires as shown in Figure B with the "up" lead to the upper relay, and the "down" lead to the lower relay.
- Using a #18 gauge wire, run a fused 5 amp, 24 Volt power lead to the switch, as shown in Figure B.

NOTICE

we recommend that ALL connectors be coated with a marine sealant to ensure corrosion resistance and secure fastening.

NOTICE

If you are installing the optional control indicator please refer to the wiring instructions for the control indicator.



Purging

NOTICE For systems using more than one cylinder per trim plane, the following procedure should be followed with the cylinders disconnected from the trim plane. Where instructions refer to one cylinder, apply the procedure to each cylinder connected to that pump.

- Fill reservoir to the "MAX" line with Dextron II type Automatic Transmission Fluid (ATF). Crack the fitting on the left side (UP) of the pump. Jog the pump motor back and fourth until oil flows from the fitting, then tighten the fitting securely. The pump is now primed.

NOTICE Be sure the reservoir is filled to the "MAX" line before operating the pump at ANY stage during the purging procedure.

- Be sure the cylinder is fully retracted by pushing the rod into the cylinder with both hose fittings on the back of the cylinder loose. Tighten port-side (UP) fitting.
- Next, with the starboard side (DN) hose fitting loose at the back of the trim cylinder, run the pump in the "down" direction until only fluid flows from the fitting. Tighten the hose fitting securely.
- Disconnect the "UP" line from the pump and plug the port using the shipping plugs that were originally installed in the pump. Operate the pump in the "down" direction until the cylinder is fully extended. Reconnect the "UP" fitting at the pump and crack the port "UP" at the trim cylinder. Recheck the reservoir fluid level, and then operate the pump in the "UP" direction until only fluid flows from the cylinder fitting. Tighten the fitting and operate the pump in the "UP" direction until the cylinder is fully retracted.
- Cycle the cylinders up and down several times and the system should be free of air. If any sponginess remains, carefully loosen the hose fittings at the cylinder and release any trapped air, then retighten.

CAUTION

Fluid may be under pressure. Crack fitting SLOWLY when releasing any trapped air.

- Check ALL fittings for leakage.

