



## FITTING KIT # HF6010

### 2nd Station/Autopilot when using 3/8" Nylon/Copper tubing

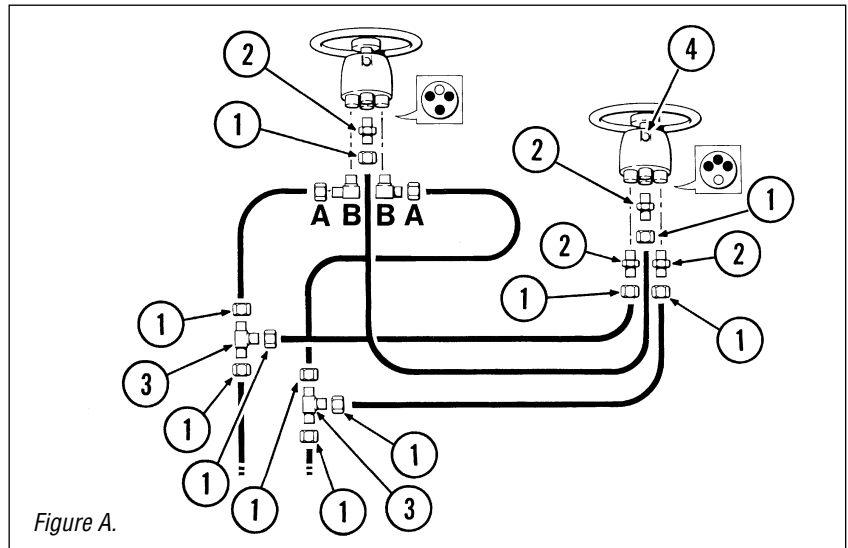
#### 2nd Station Connection

#### ⚠ CAUTION

Kit to be used with -3 ORB helm pumps **ONLY**. -3 Helm pumps are fitted with positionable O-ring style hose fitting ports. **DO NOT** attempt to install an NPT pipe fitting into a -3 helm hose fitting port. Doing so will lead to irreparable damage to the helm. **ONLY** use SeaStar Solutions O-ring style hose fittings (ORB).

#### NOTICE

Typical plumbing layouts shown.



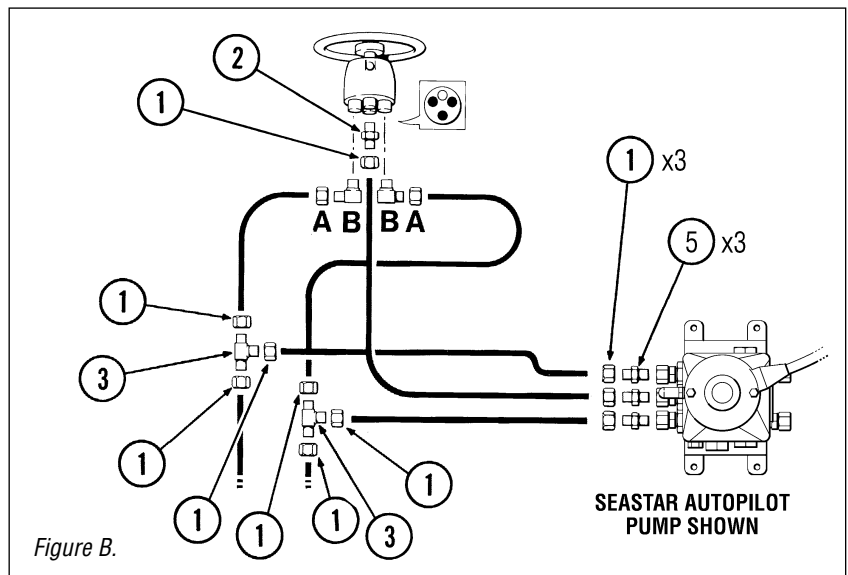
#### Autopilot Powerpack Connection

#### NOTICE

When using a SeaStar Autopilot Pump, **ALWAYS** refer to the Installation Manual shipped with your autopilot pump.

NPT fitting installations **ONLY**:

- Apply a liquid, Teflon based pipe sealant onto the threads going into the pump
- Tighten fitting **HAND-TIGHT**
- Using a wrench, tighten an additional 1.5 turns
- Continue to tighten until desired orientation is met



#### ⚠ CAUTION

**DO NOT** attempt to install NPT pipe fittings into a cylinder and/or helm pump fitted with ORB hose fitting port. Doing so will lead to irreparable damage to the cylinder and/or helm port. **ONLY** use SeaStar ORB hose fittings provided by SeaStar Solutions.

**DO NOT** use steel fittings with SeaStar Helm Pumps, use brass fittings **ONLY**.

ITEM	PART #	QTY	DESCRIPTION
1	280327	12	Tube Nut – 3/8" Dia.
2	343088	2	Connector Fitting, 3/8" Tube – -5 ORB
3	600605	2	Tee Fitting, 3 Ends – 3/8" Tube
4	HA5432	1	Non-Vented Filler Plug
5	600602	3	Straight fitting, 14" NPT to 3/8" Tube (Not for use in -3 helms)
B*		2	Elbow 3/8" Tube (M) -5 ORB (M) * Supplied with Helm Pump.

## FITTING KIT # HF6010

### Re-Positionable O-Ring Helm Pump Fittings Installation/Realignment

#### ⚠ CAUTION

-3 helm pumps are fitted with positionable O-ring style hose fitting ports (referred throughout this publication as ORB). Do NOT attempt to install an NPT pipe fitting into a -3 helm hose fitting ports. Doing so will lead to irreparable damage to the helm. ONLY use SeaStar Solutions O-ring style hose fittings (ORB).

#### Re-Positionable Pump Fitting Installation

#### ⚠ WARNING

Failure to properly tighten the lock nut (item 1) may lead to loss of steering control. Loss of steering control may result in unpredictable boat behavior, collision with an obstacle and/or ejection from vessel, leading to property damage, personal injury and/or death.

**NOTE: O-ring must be fully on sealing surface and cannot contact any threads. Do not use Teflon tape or any liquid pipe sealant with ORB fittings.**

1. Back off lock nut (item 1), counter-clockwise, until it stops.  
**NOTE: O-ring must be fully on sealing surface and cannot contact any threads.**
2. Thread fitting into helm port until fitting washer (item 2) contacts the face of the helm port. Tighten hand tight.  
**DO NOT USE A WRENCH.**
3. Re-position fitting to desired orientation by turning it counter-clockwise to a MAXIMUM of 1 full turn.
4. While holding the fitting body securely with a wrench, torque the lock nut (item 1) to **18 ft-lbs.**
5. While holding the fitting body securely with a wrench, torque the hose end nut to **15 ft-lbs.**
6. Purge system per applicable instruction manual.

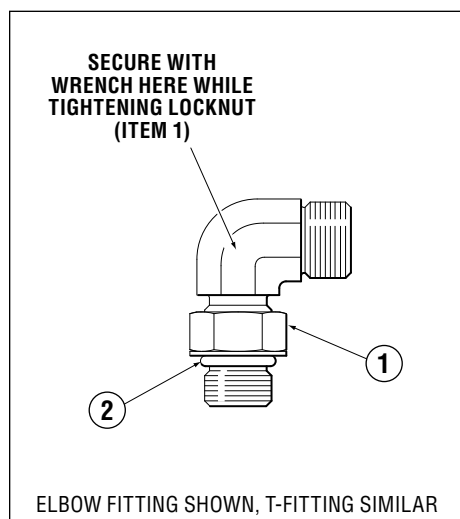


Figure C.

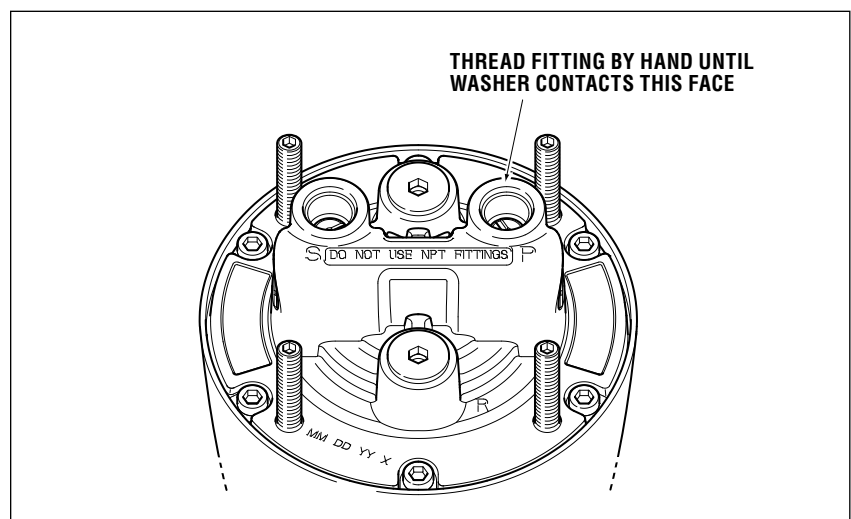


Figure D.

#### ⚠ WARNING

SeaStar Solutions recommends that the hose and hose fittings are checked on a regular basis to ensure the safe operation of the steering system.