



SEASTAR™

Hose Removal Options

Option 1 Replacing Hoses using the HA1209 Fitting Kit

1. Remove the hoses using the HA1209 kit procedure as outlined in Installation Instructions PID# 120726, Rev. A.

Option 2 Remove hoses by draining and cutting existing hoses to facilitate replacement

TECH TIP

If available, a small amount of compressed air can be used to thoroughly clear out the hoses. Make sure the hoses are secure and the air pressure is low.

1. Trim the engine(s) down and center so that engines won't move once the hoses are removed .
2. Disconnect hoses from the cylinder and place the hose ends into a clean container to collect any fluid you may want to re-use.
3. Remove the helm fill port plug and put it in a safe place for re-installation in step 6.
4. Turn the helm to starboard until fluid stops coming out of the starboard hose.
5. Turn the helm to port until fluid stops coming out of the port hose.
6. Reinstall the helm fill port plug.
7. Disconnect the hoses from the back of the helm.
8. If needed, cut hoses and pull them out of the boat from the most appropriate location.
9. install replacement hoses and purge the entire system (be sure to follow the procedure outlined in your cylinder or helm installation manual).



NOTE

The oil may stain your clothing and the boat's interior surface's. Take precautions and correctly dispose of oil soaked materials.



NOTE

This procedure works best on single helm station systems that do not have a compensating line connected to an autopilot, SeaStar Power Assist or second station helm. Systems containing a compensating line will need to be drained manually.



SEASTAR™

Hose Fitting Kit HA1209

This kit is used to aid in the replacement of a SeaStar hose in a vessel with the least amount of mess. It will also allow you to return one pair of hoses in a safe sealed manor.



NOTE

The oil may stain your clothing and the boat's interior surface's. Take precautions and correctly dispose of oil soaked materials.

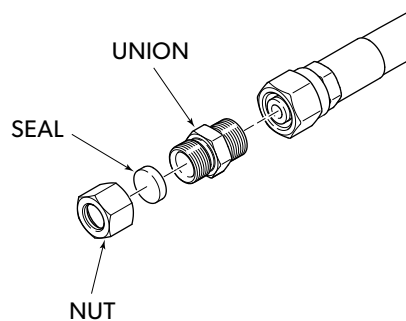


Figure A. Hose fitting/cap.

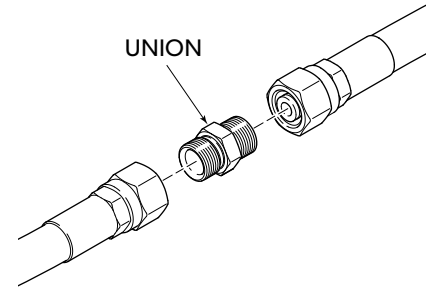


Figure B. Union.

STEP 1

Ensure your engine/drive is trimmed all the way down, then disconnect the hoses from either the helm or the cylinder and use the provided seal/nut to limit excess fluid loss. See figure A.

STEP 2

Disconnect the other end of the hose, and using the provided union connect the new hose to the old hose. See figure B.

STEP 3

Ensure hoses are free to be removed from the boat. If needed, use the old hose and gently pull the new hose through the vessel.

STEP 4

Reconnect the new hose to each steering component and refer to your manual for specific bleeding instructions. These can also be found here; <http://www.seastarsolutions.com/support-2/installation-manuals-controls-cables/installation-manuals/seastar-installation-manuals/>

STEP 5

Perform a System Check



WARNING!

The system check **MUST** be completed after installation. Doing so will ensure the safe operation of your steering system and will any fault/leak will show at this time. Failure to adhere to this warning/check may result in the loss of steering control leading to ejection from the vessel, or, collision with an obstacle resulting in property damage, personal injury and/or death.



- Turn steering wheel hard over to hard over to confirm unrestricted movement of the steering system and hoses. Repeat this procedure in ALL trim/tilt positions of the engine(s). If interference occurs, or, hoses are being stretched this **MUST** be removed prior to operating your boat.
- Confirm that engine(s) are deflecting to the proper direction when steering wheel is turned.
- If no interference is noticed, or, any interference is corrected, go to next step.
- Take steering wheel hard over to starboard (any helm can be used on a multi-station boat). Once the wheel reaches its stop point (cylinder is fully stroked out), continue to force the wheel one (1) full turn past stop. Leave wheel in this position while you check all PORT side connections, fittings, seals and hoses for leaks.
- If leaks are noticed they **MUST** be repaired prior to operating boat. After repair repeat bleeding procedures as outlined in this manual
- Repeat to the Port direction and inspect ALL starboard side connections, fittings, seals and hoses for leaks.

**NOTICE!**

This step will NOT harm the system and any noise made during this step should not be considered a fault in the steering system.

- If leaks are noticed they **MUST** be repaired prior to operating boat. After repair repeat bleeding procedures as outlined in the manual.

**WARNING!**

Failure to complete the above noted step or, failure to correct a problem may result in loss of steering control leading to ejection from the vessel or collision with an obstacle resulting in property damage, personal injury and/or death.

STEP 6

Referring to figure A, install the seal/nut and union onto each end of the old hose and place in the new hose packaging ready for return.