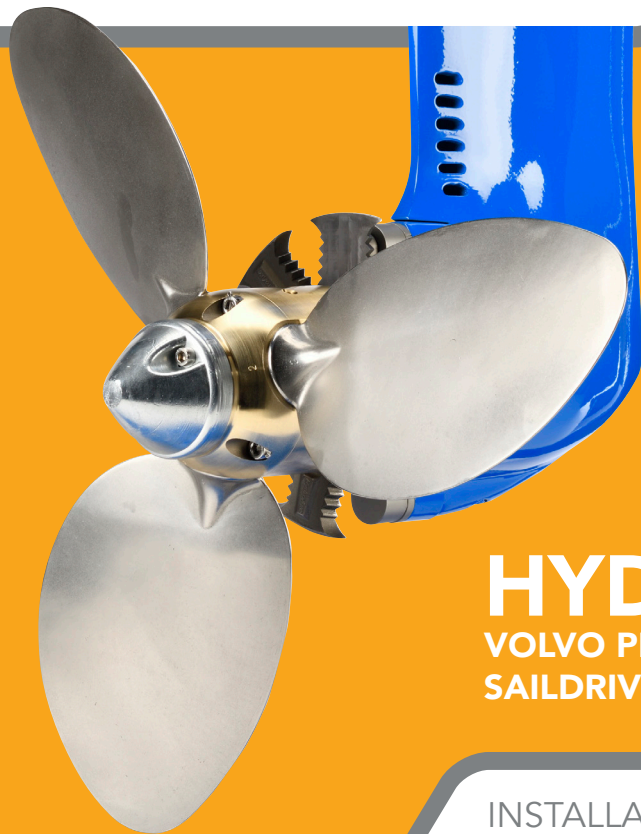


darglow

MARINE ENGINEERS



HydroAxe

Rope cutters

HYDROAXE

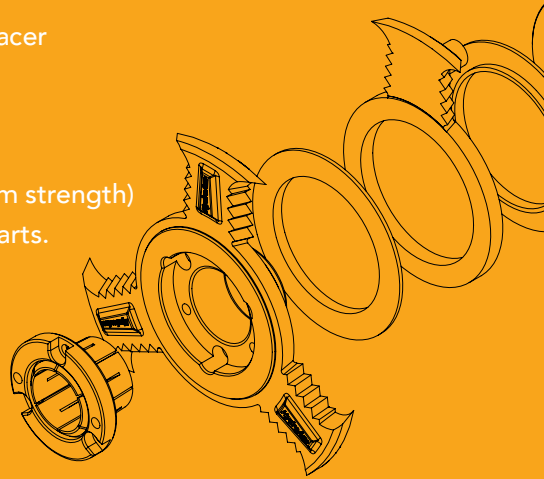
VOLVO PENTA 120S/MS25S
SAILDRIVES

INSTALLATION INSTRUCTIONS

The HydroAxe and new Spacers provided replace the existing standard spacer between propeller and leg. No destructive modifications are needed to install this rope cutter.

Your HydroAxe Kit includes:

- Part #1 - HydroAxe Cutter
- Part #2 - HydroAxe SD Anode and bolts
- Part #3 - Special M8 bolt
- Part #4 - Special Volvo Penta Forward Spacer
- Part #5 - Aft HydroAxe Spacer
- Part #6 - Collett Plate and Bolts (M5x10)
- Part #7 - 2 x Jacking Bolts (M6x20)
- Part #8 - ZAP Z-42 Thread Locker (medium strength)
- Part #9 - New Extended Nut and fixing parts.



HYDROAXE INSTALLATION INSTRUCTIONS

VOLVO PENTA 120S/MS25S

1. // Remove existing propeller.

2. // Remove the existing spacer from splined shaft and clean shaft removing grit/fouling.

3. // Remove existing saildrive Anode.



HYDROAXE INSTALLATION INSTRUCTIONS

VOLVO PENTA 120S/MS25S

- 4.** // Remove top M8 bolt from saildrive leg and replace with special M8 bolt provided using a 19mm Spanner. This bolt is to be fitted with the thread locker provided.



- 5.** // Fit the HydroAxe Saildrive Anode and Plate using the two 12 o'clock and 6 o'clock mounting bolts. Fit bolts using thread locker supplied.



- 6.** // Now remove the right-hand half of the Anode.



HYDROAXE INSTALLATION INSTRUCTIONS

VOLVO PENTA 120S/MS25S

7. //

Slide the new spacer (Part #4) onto the shaft up to shaft end.



8. //

On the HydroAxe cutter, remove the three Collett (Part #6) bolts and re-fit by two turns only.



9. //

Insert jacking bolts (Part #7) and tighten lightly until they bottom out thus lifting the Collett plate.

HYDROAXE INSTALLATION INSTRUCTIONS

VOLVO PENTA 120S/MS25S

10. Slide your HydroAxe on to the shaft. Push home ensuring the cutter pin locates into the Special M8 Bolt (Part #3).



11. Remove jacking bolts using 5mm Allen Key. Push Collett Plate (Part #6) forward hard until stopped by forward spacer. This can be a tight fit to push by hand and so it may be necessary to use a mallet to tap home. This is due to minor variations in Saildrive shaft diameters.



12. Using the 4mm Allen Key tighten Collett bolts half a turn at a time. This will start to pull cutter aft over collette causing it to grip shaft. Collett bolts to be fitted with thread locker supplied and tightened to 6Nm (or tighten firmly with Allen Key if no torque wrench available). Check Collett is hard up against spacer. Now refer to installation checks on page 8 before continuing.



13. //

Slide on aft Spacer (Part #5).



14. //

Now Shaft is ready to accept propeller. Be sure to align propeller blades with cutter blades, we can guide you on positioning depending on what type of propeller you are fitting.



15. //

Fit the remaining half of the HydroAxe Saildrive Anode. All four Anode bolts are to be fitted with thread locker provided.



16. //

Fit new replacement extended nut with central locking bolt and fixing system specific to propeller type.



HYDROAXE INSTALLATION INSTRUCTIONS

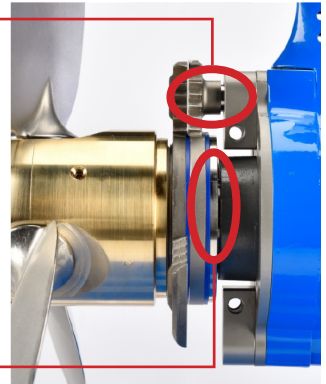
VOLVO PENTA 120S/MS25S

INSTALLATION CHECKS

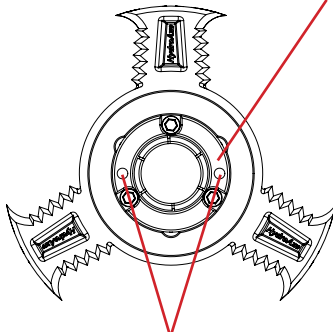
The pin found on the forward cutter blade should mate nicely with the Anode plate as per image (right). There should be a clear gap between pin shoulder and plate. Forward most part of cutter (Collett) should contact forward spacer so as not to leave any gaps.

Clear gap between pin shoulder and plate

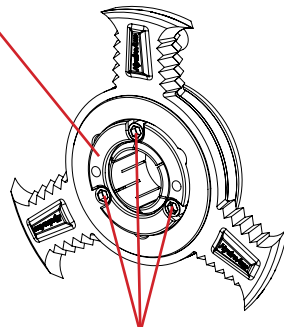
Collett should contact forward spacer so as not to leave any gaps



COLLETT PLATE



2X JACKING HOLES



3X COLLETT BOLTS

HYDROAXE

SERVICE INSTRUCTIONS

Your HydroAxe Rope Cutter requires little maintenance and bearings will function for several years, but it is advised that bearing tolerances are checked annually. A service kit can be purchased separately.

Your HydroAxe Service Kit includes:

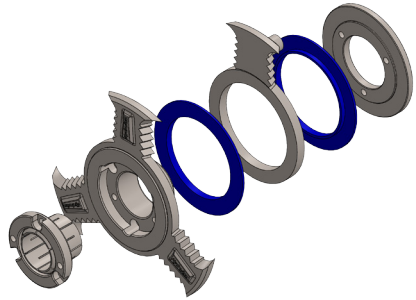
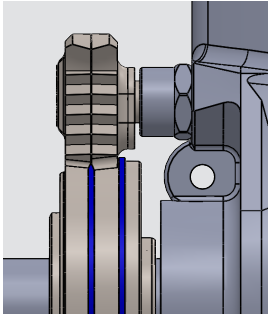
- 2 x Acetyl Bearings/bushes
- 6 x M5x10 Bolts
- 2 x M6x20 Jacking Bolts
- ZAP Z-42 Thread Locker (medium strength)



HydroAxe

Rope cutters

HYDROAXE SERVICE INSTRUCTIONS



Gap between blades must be no less than 0.004 inches (0.1mm) - check with feeler gauge.

REMOVING YOUR HYDROAXE

1. Remove Propeller, Nut and Spacer.
2. On the HydroAxe cutter, remove the three M5 Collett Bolts and re-fit by two turns only.
3. Insert M6 Jacking Bolts and tighten until they bottom out. Then using half a turn at a time tighten thus lifting the Collett plate and separating from the shaft. This should loosen cutter for removal.
4. Slide HydroAxe off shaft. Leave Sail Drive specific Spacer in place (between cutter and Sail Drive)
5. Remove M6 Jacking and M5 Collett Bolts. Now push Collett Plate/Collett out of the cutter to reveal Cutter Blade bolts and remove bolts as per image.





6. Separate the HydroAxe and lay parts flat in the way it was separated as per image above.
7. Dispose of old bearings and replace with new bearings.
8. Clean cutter components.
9. Assemble the HydroAxe using Loctite on M5 Bolts and fully tighten.

Refer to your Saildrive model fitting instructions.

**IF YOU REQUIRE ANY ASSISTANCE, PLEASE DO NOT
HESITATE TO CONTACT THE DARGLOW TEAM**



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