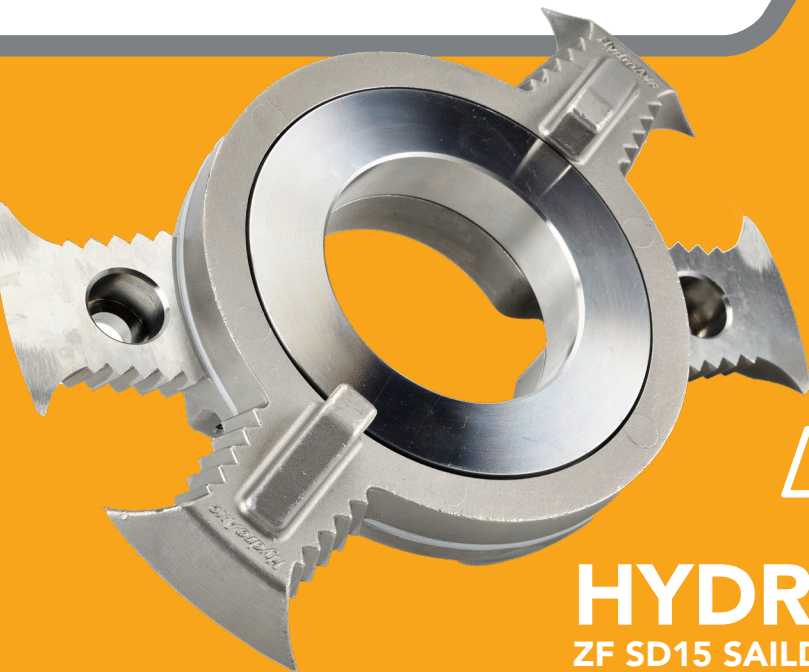


darglow

MARINE ENGINEERS



HydroAxe

Rope cutters

HYDROAXE
ZF SD15 SAILDRIVES

INSTALLATION INSTRUCTIONS

The HydroAxe and new spacer 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 and bolts (2 x M12x65 with 2 x nordlock washers)

Part #2 – HydroAxe SD Aluminium anode and bolts (4 x M6x20)

Part #3 – HydroAxe chamfered spacer

Part #4 – Flexofold collar and bolt (M8x20)

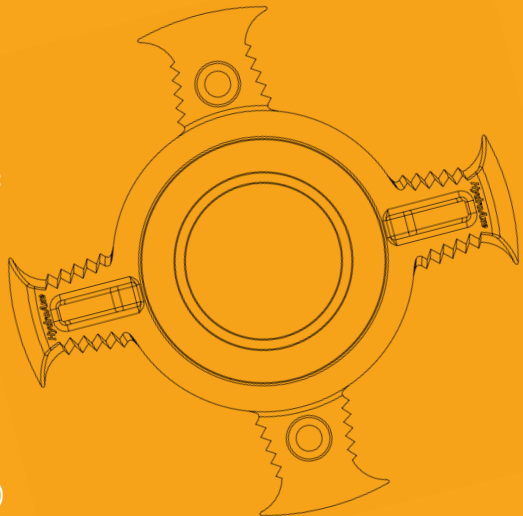
Part #5 – HydroAxe nut (M20x2)

Part #6 – Nut securing bolt (M8x38)

Part #7 – Split pin

Tools you will need for HydroAxe fitting:

- Torque wrench
- Torque wrench extension bar
- Breaker bar or socket wrench
- Flat headed screwdriver
- Small nosed pliers
- 5mm allen key
- 6mm allen key
- 10mm socket hex bit (or 10mm allen key)

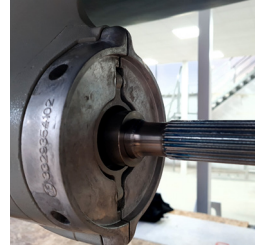


HYDROAXE INSTALLATION INSTRUCTIONS

ZF SD15 SAILDRIVES

1. //

Remove propeller nut fittings and slide propeller off to remove from shaft.



2. //

Remove existing OEM spacer from splined shaft and clean shaft splines/thread.



3. //

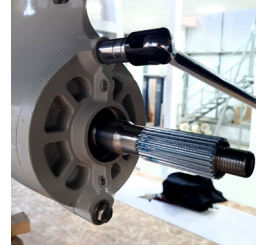
Remove existing saildrive anode (using 5mm allen key).



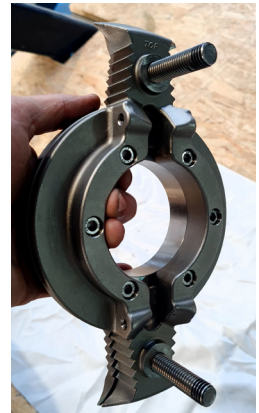
HYDROAXE INSTALLATION INSTRUCTIONS

ZF SD15 SAILDRIVES

- 4.** // Unscrew and remove top and bottom saildrive bolt and washers (using 18mm socket).



- 5.** // Offer HydroAxe fixing bolts and nordlock washers into position on the HydroAxe rope cutter.



- 6.** // Apply medium strength thread locker to HydroAxe fixing bolt threads (supplied in kit).

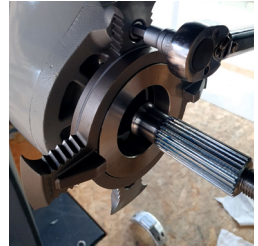
HYDROAXE INSTALLATION INSTRUCTIONS

ZF SD15 SAILDRIVES

7. // Ensure HydroAxe orientation is correct. Top blade has 'top' cast on back face.



8. // Offer HydroAxe into position on saildrive and tighten bolts to 72Nm (using 10mm hex socket bit). Make sure the nordlock washers are present before fitting.



9. // Once torqued spin rotating part of cutter to ensure movement is free. Careful blades are sharp!

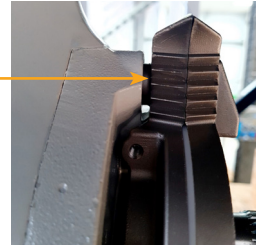


HYDROAXE INSTALLATION INSTRUCTIONS

ZF SD15 SAILDRIVES

10. //

Check that there is a clear gap between forward face of fixed cutter blade and saildrive.



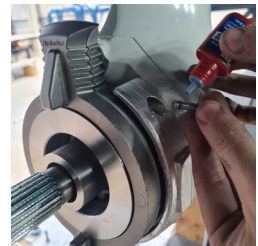
11. //

Fit HydroAxe spacer. Chamfer end forwards to mate with shaft chamfer.



12. //

Anode can now be fitted and bolts to be fitted with medium strength thread locker supplied (using 5mm allen key).



13. // Make sure forward end of Flexofold (where collar will be fitted) is clean with no antifoul or marine fouling. You can use scotchbrite or emery cloth to clean this area. It is important that this area is clean!



14. // Remove screw from Flexofold HydroAxe collar (using 6mm allen key).



15. // Fit collar to forward end of Flexofold. You may need to prise collar open with flat headed screwdriver as this is 'sprung'.



HYDROAXE INSTALLATION INSTRUCTIONS

ZF SD15 SAILDRIVES

16. \\

Align Flexofold collar slot with propeller blade and slot must face the cutter.



17. \\

Ensure Flexofold collar is level/flush with forward end of Flexofold hub.



18. \\

Fit collar bolt and tighten very hard (using 6mm allen key).



19. //

Fit Flexofold hub with collar in place onto shaft. Seat up to HydroAxe spacer ensuring cutter drive pin mates with collar slot. There should be circa 2mm of rotational play when in the collar slot.



20. //

Tighten HydroAxe nut to 90nm (using 24mm socket).



21. //

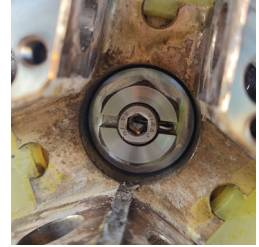
Tighten centre fixing bolt (using 6mm allen key). Be sure to align hole in perforated bolt head with nut slot.

HYDROAXE INSTALLATION INSTRUCTIONS

ZF SD15 SAILDRIVES

22. //

Cut split pin to required length to allow ends to splay/separate in bolt head. Bend split pin prior to fitting to help alignment through holes. Use a pair of small nosed pliers to help guide pin into hole. Insert split pin and splay/separate ends inside bolt head.



23. //

Fit remaining propeller parts as per the Flexofold fitting instructions.

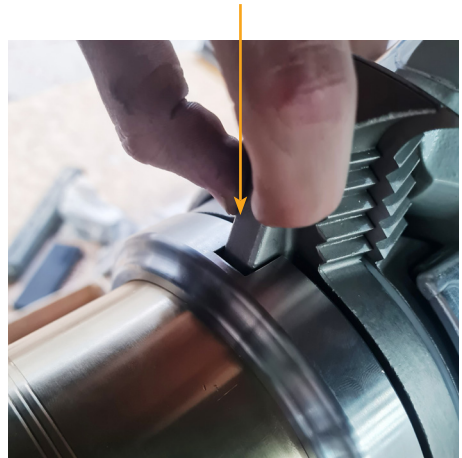


INSTALLATION CHECKS

Ensure HydroAxe orientation is correct with the top blade reading 'TOP' in the casting.



The drive pin found on the aft cutter blade should mate nicely with the drive pin slot of the Flexofold collar. This should have circa 2mm of rotational play.

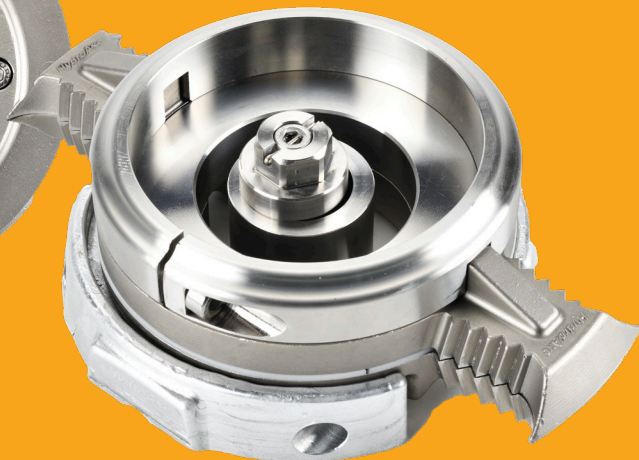


HYDROAXE

SERVICE INSTRUCTIONS



HydroAxe
Rope cutters



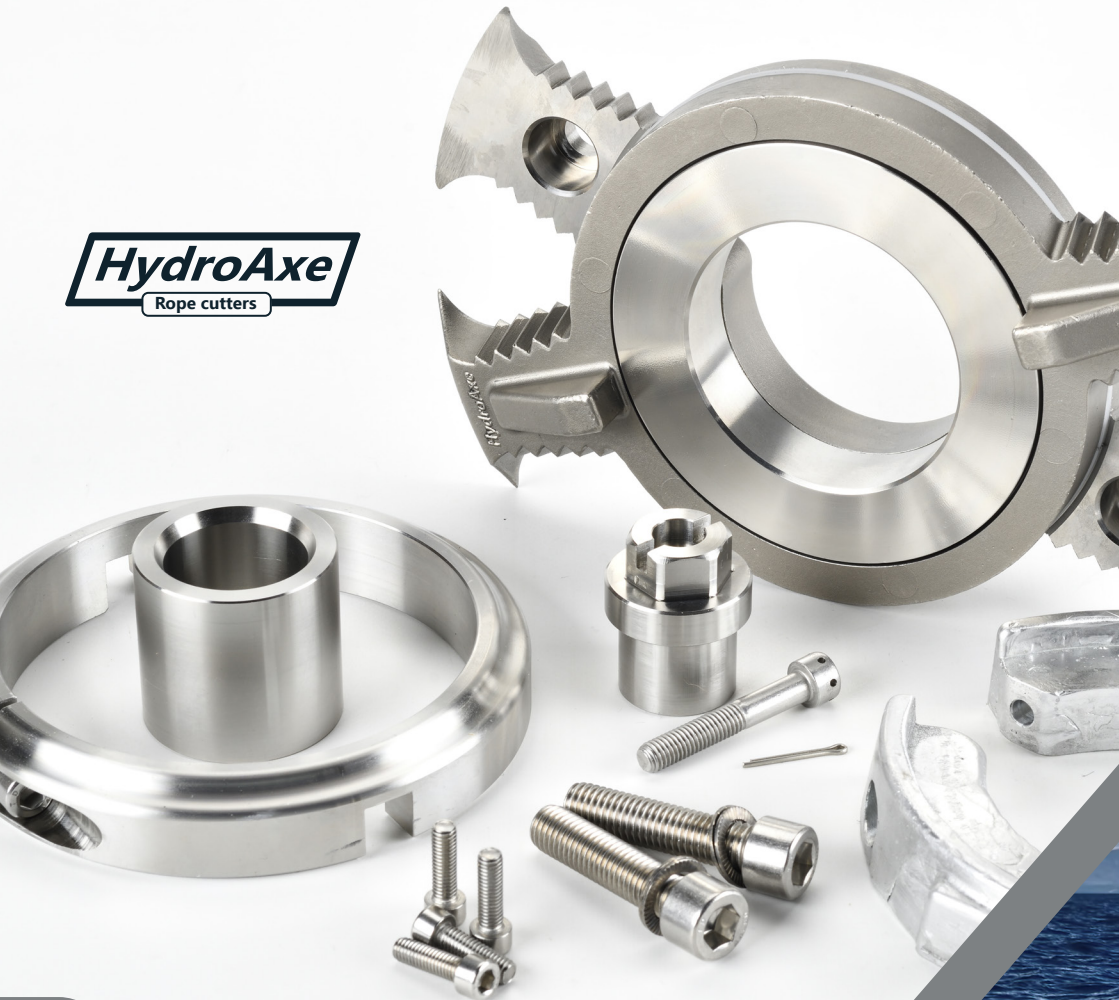
REMOVING YOUR HYDROAXE

1. Remove propeller and fittings
2. Remove top and bottom HydroAxe bolts using 10mm hex socket bit or allen key (2 x M12x65 bolts). These are tight so you may need to use a socket wrench or breaker bar.
3. Remove 6 x M6x25 bolts using a 5mm allen key. Bolts are fastened with thread locker so you may need to use a heat gun on the bolts to soften helping with removal.
4. Separate the HydroAxe and lay parts flat in the way it was separated.
5. Dispose of old bearing and replace the new bearing in the correct orientation.
6. Be sure to clean cutter components before reassembly.
7. Use medium strength thread locker on all bolts and tighten firmly.
8. Once fitted together make sure cutter blades are smooth by spinning blades.
9. Refer to original fitting instructions to fit to saildrive.

If you require any assistance, please do not hesitate to contact the darglow team.

HydroAxe

Rope cutters







darglow

MARINE ENGINEERS

Tel: +44 (0) 1929 556512

mail@darglow.co.uk

darglow.com