SLEIPNER
Ocean born. Tech bred.

Product Guide

For Q-PROP™ Propeller Upgrade Kit

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Sleipner's unique 5 blade Q-PROP™ propellers refine what we know about propulsion technology—redesigned to reduce the noise while producing exceptional propulsion efficiency.

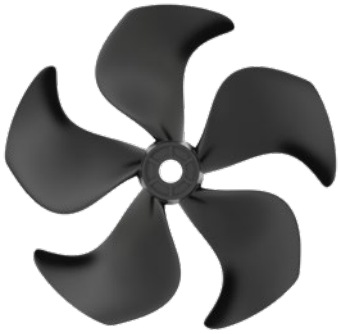
The Result:

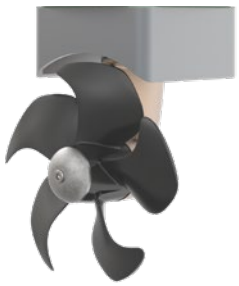
- Noise reductions of up to 75% measured in controlled environments*

A normalised expected and tested noise reduction in average installations and uncontrolled environments of 20 to 40%

- Increased thrust kg capacity delivering more power to manoeuvre your vessel.

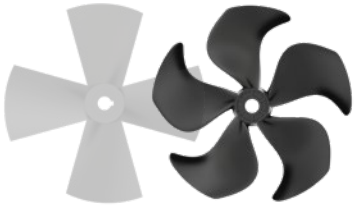
To provide this improvement to our customers we have developed upgrade kits are available for selected older "SP" series thrusters with use of special adaptors.





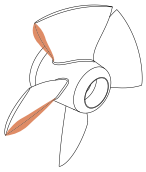
How did we do it?

Generally, increasing blades on a propeller allows the pressure peaks (Resulting in noise generation) to spread collectively less over each blade. However, traditionally, increasing the number of blades on a propeller decreases efficiency as each additional blade disturbs the water flow and force of the next blade and increases friction.



To counter this Sleipner Q-PROP™ blades are uniquely skewed to gradually slice through water over the blade edge rather than striking the water simultaneously with a common straight edge blade.

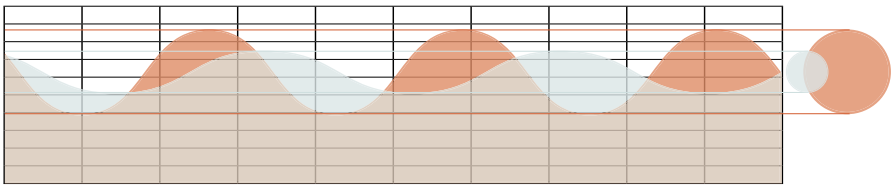
Q-PROP™ blades extend the length of the slice edge of the propeller



Traditional blades use a much shorter edge length

Additionally, vibration generated from the thruster travels through the structural hull of the vessel producing noise—commonly termed 'structural borne noise' by extending the initial impact edge of the blade through the water, vibration from the motor is reduced.

Finished with high-tech composite material, allowing for a thinner blade to reduce water surface friction, Sleipner Q-PROP™ propellers produce a smoother noise picture, lowering the "peaks" in the frequency and vibration analysis tests.



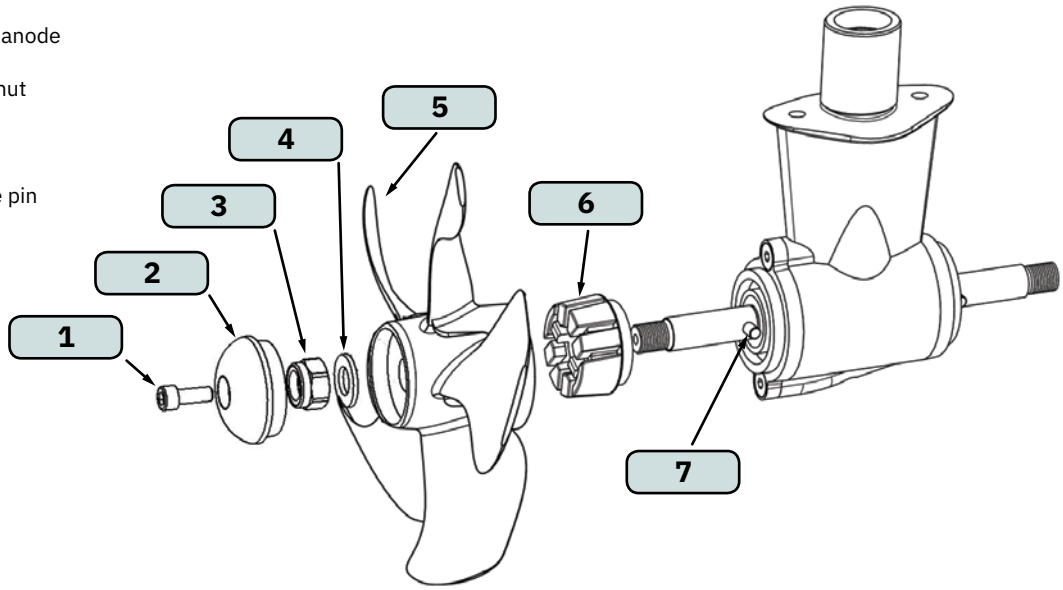
4 bladed kaplan propeller return higher and lower peaks in frequency.

5 bladed Q-PROP™ propellers return a smoother reduced frequency band.

KIT #4 9999 (SP55) and #7 9999 (SP75/ SP95)

Parts:

1: Screw for zinc anode
2: Zinc anode
3: Propeller locknut
4: Washer
5: Q-PROP™
6: Adapter
7: Propeller drive pin



Removing old propeller(s)

1. Loosen and remove screw for zinc anode (1), zinc anode (2), locknut (3) and washer (4)
2. Remove the old 4-blade propeller from shaft. If the propeller sits firmly on the shaft, use a piece of wood and tap on the propeller from behind.
3. Clean shaft and check drive pin for wear.

Fit new propeller(s)

1. Push the adapter (6) into the propeller until it locks in place.
2. Apply waterproof grease to the shaft.
3. Push the propeller onto the shaft and carefully rotate the propeller until the drive pin aligns and moves into the slot/ grove in the propeller hub. ***(NB: There should be almost no gap (approximately 1mm) between the propeller hub and the gear house.)***
4. Place the washer (4) on the propeller shaft and then tighten the lock-nut (3) on the propeller shaft.
5. Apply thread glue (Locktite or similar) to ensure that the zinc anodes holding screw do not unscrew during thruster use. Place the zinc anode (2) in its designated position and tighten the zinc anode's holding screw (1).

Propeller Checklist

☐ The propeller is fastened correctly to the shaft.

☐ The propeller turns freely in the tunnel.

☐ The zinc-anode holding screw is tightened with thread glue.

☐ Anti-fouling has been applied to the gear house and propeller but NOT on the zinc anode or the gear house lid where the propeller is fastened.

Delivered Parts list

4 9999 (SP55)			
Item Number	**Sleipner number**	**Description**	**Amount**
1 & 2	7 1190	Zinc anode	x 1
3	4 1260	Lock nut	x 1
4	7 1181	Propeller washer	x 1
5	4 1261	185mm Q-PROP™	x 1
6	7 1249	Adapter	x 1
7	6 1241	Propeller drive pin	x 1

7 9999 (SP75/ SP95)			
Item Number	**Sleipner number**	**Description**	**Amount**
1 & 2	7 1190	Zinc anode	x 2
3	4 1260	Lock nut	x 2
4	7 1181	Propeller washer	x 2
5	4 1261	185mm Q-PROP™	x 2
6	7 1249	Adapter	x 2
7	6 1241	Propeller drive pin	x 2

KIT #9 9999 (SP125) and #10 9999 (SP155/ SP200)

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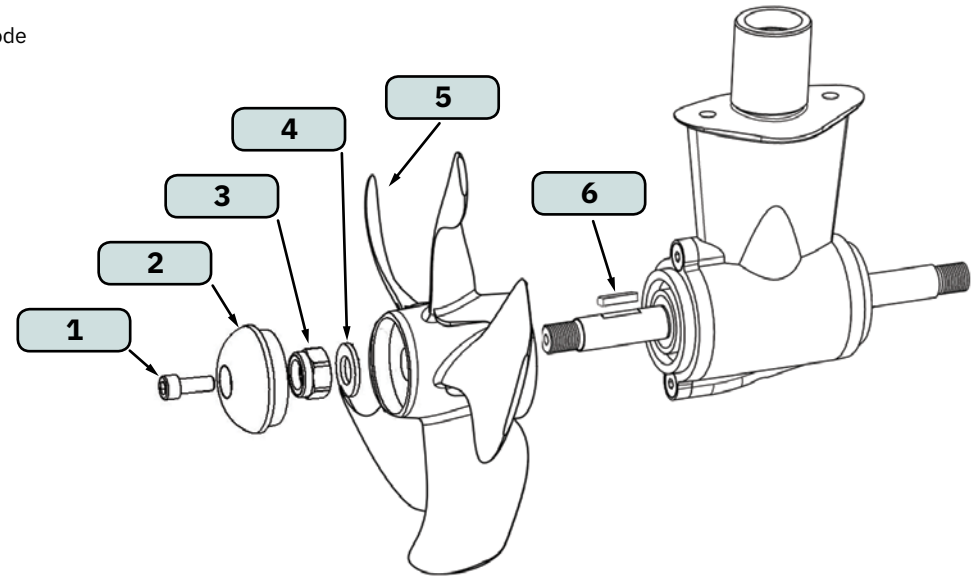
Parts:
1: Screw for zinc anode
2: Zinc anode
3: Propeller locknut
4: Washer
5: Q-PROP™
6: Axle key



Removing old propeller(s)

1. Loosen and remove screw for zinc anode (1), zinc anode (2), locknut (3) and washer (4)
2. Remove the old 4-blade propeller from shaft. If the propeller sits firmly on the shaft, use a piece of wood and tap on the propeller from behind.
3. Clean shaft and check drive pin for wear.

Fit new propeller(s)

1. Replace old key with new key from kit (6).
2. Apply waterproof grease to the shaft.
3. Push the propeller onto the shaft and carefully rotate the propeller until the drive pin aligns and moves into the slot/ grove in the propeller hub. ***(NB: There should be almost no gap (approximately 1mm) between the propeller hub and the gear house. On thrusters with counter rotating propellers (SP155/SP200), fit propeller marked LH on port side, propeller marked RH on starboard side.)***
4. Place the washer(4) on the propeller shaft and then tighten the lock-nut(3) on the propeller shaft.
5. Apply thread glue (Locktite or similar) to ensure that the zinc anodes holding screw do not unscrew during thruster use. Place the zinc anode(2) in its designated position and tighten the zinc anode's holding screw(1).

Propeller Checklist

☐ The propeller is fastened correctly to the shaft.

☐ The propeller turns freely in the tunnel.

☐ The zinc-anode holding screw is tightened with thread glue.

☐ Anti-fouling has been applied to the gear house and propeller but NOT on the zinc anode or the gear house lid where the propeller is fastened.

Delivered Parts list

9 9999 (SP125)			
Item Number	**Sleipner number**	**Description**	**Amount**
1 & 2	20 1180	Zinc anode	x 2
3	10 1260	Lock nut	x 2
4	20 1181	Propeller washer	x 2
5	10 1272	250mm Q-PROP™	x 2
6	10 1241	Propeller key	x 2

10 9999 (SP155/ SP200)			
Item Number	**Sleipner number**	**Description**	**Amount**
1 & 2	20 1180	Zinc anode	x 2
3	10 1260	Lock nut	x 2
4	20 1181	Propeller washer	x 2
5	10 1272RH	250mm Q-PROP™ RH	x 1
5	10 1272LH	250mm Q-PROP™ LH	x 1
6	10 1241	Propeller drive pin	x 2

For **Thruster** maintenance please refer to your supplied user manual

Learn more about our products at www.sleipnergroup.com

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