## Less noise - More thrust! Thruster Upgrade Kits

Seeing the impact of the new Centennial series thrusters, we at Side-Power want to give owners of older Side-Power thusters the opportunity to benefit from our latest research and development. The most distinct and noticeable feature of the Centennial series is the Q-prop, and owners of thrusters in the SP-range (produced after 1998) will be able to fit the Q-prop using special adapters. Side-Power now introduces complete kits, containing Q-props, adapters and additional hardware/spare parts.

Complete kit for SP55, containing:

•	1 Q-prop	4 1261
•	1 Adapter	7 1249
•	1 Zink anode w/bolt	7 1190
•	1 Propeller drivepin	6 1241
•	1 Propeller lock nut	4 1260
•	1 Propeller washer	7 1181
•	1 Shearpin for shaft	4 2050

Complete kit for SP75 and SP95, containing:

-	simplece kit for Si 73 and Si	55,	Concann
•	2 Q-prop	7	1261
٠	2 Adapters	7	1249
•	2 Zink anodes w/bolts	7	1190
•	2 Propeller drivepins	6	1241
•	2 Propeller lock nuts	4	1260
•	2 Propeller washers	7	1181

Complete kit for SP125, containing:

•	2 Q-prop	10 1272
	2 Zink anode w/bolt	10 1260
•	2 Propeller key	10 1241
•	2 Propeller lock nut	10 1260
	2 Propeller washer	20 1181

Complete kit for SP155 and SP200, containing:

•	1 Q-prop, RH	10 1272RH
•	1 Q-prop, LH	10 1272LH
•	2 Zink anode w/bolt	10 1260
•	2 Propeller key	10 1241
•	2 Propeller lock nut	10 1260
•	2 Propeller washer	20 1181

Kit fits all SidePower Thrusters with the SP-designation (4-blade propellers w/locknut, not set-screw)

Remember that SP30S2i and SP40S2i model thusters can be fitted with a Q-prop without any adapter - for a easy upgrade to Centennial series specifications!

When ordering, please use the following item codes:

Q-Prop, for SP30S2i/SP40S2i

Item Code: 3 1261

Thruster upgrade kit, SP55

Item Code: 4 9999

Thruster upgrade kit, SP75/SP95

Item Code: 7 9999

Thruster upgrade kit, SP125

Item Code: 9 9999

Thruster upgrade kit, SP155/SP200

Item Code: 10 9999









## Q-prop



The new 5 blade special skew propellers is the result of over 2 years of development work and thousands of tests. They have been designed to reduce the noise level, while maintaining the exceptional efficiency of the old 4 blade Sidepower propellers. This goal was achieved, and we even chose to make a little bit more aggressive on some models, increasing the thrust on most thrusters. Please see individual information on each new thruster for more details.

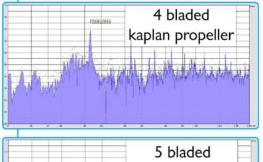


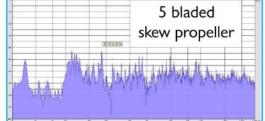


## Details:

- Noise reductions of up to 75% measured in controlled environments\*
- The expected and tested normal noise reduction in "average installations" 20-40%
- Upgrade kits are available for most "SP" series thrusters with special adaptors
  - \* Actual noise reduction wil vary with boat type and thruster installation.







## NOISE AND EFFICIENCY

Principally, more blades on a propeller means that you spread the load more so that the pressure peaks (heard as noise) are individually lower. Another factor is that the majority of noise you hear in a boat from a thruster is what is called structural borne noise, that travels through the boats structure. Principally, a higher frequency will travel a shorter distance. However, there is a "cost" also to add more propeller blades. Principally you loose efficiency because more blades means that they are closer together and thereby will disturb the water for the "next blade". More blades also means more friction. The skew shape of the blades "slice" through the water "gradually" instead of hitting the water all at the same time with a straight edge. This makes for a smoother noise picture, again reducing the level of the "peaks" as seen in the frequency analysis. But also skew must be used carefully as it increases the edge length of the propeller and thereby the friction in the water, reducing the propellers efficiency.

The key is obviously to find the best compromise between noise and efficiency, and we have made our choice based on thousands of carefully documented tests. We have accomplished maintaining the exceptional efficiency of our old propellers by sculpting the new propellers very perfectly and changing to a new high-tech composite material allowing a thinner blade to reduce friction.

