

# PROP EXTENSIONS – DUC PROPELLERS

## CRUSH PLATES FOR WOOD PROPS

OD	Thickness	Bolt Circle	Bolt Dia.	Part No.	Price
6"	3/8"	SAE 1 (4.375")	3/8"	05-02464	<b>\$64.85</b>
6"	3/8"	SAE 2 (4.75")	3/8"	05-02465	<b>\$64.85</b>
7"	3/8"	SAE 2	3/8"	05-02466	<b>\$76.75</b>
7"	3/8"	SAE 2	7/16"	05-02467	<b>\$88.75</b>
7"	3/8"	SAE 2	1/2"	05-02468	<b>\$79.75</b>
7"	1/2"	SAE 2	3/8"	05-02469	<b>\$89.75</b>
7"	1/2"	SAE 2	7/16"	05-02470	<b>\$89.75</b>
7"	1/2"	SAE	1/2"	05-02471	<b>\$89.75</b>

## PROP SPACERS



Solid Prop Spacers, 6 thru holes. The prop bolt goes thru the prop and spacer and threads into the engine.

Bolt Diameter	Part No.	Price
Prop Spacer 1.5"x5" Rotax	05-02472	<b>\$340.95</b>
Prop Spacer 2"x5" Rotax	05-02473	<b>\$407.00</b>
Prop Spacer 2.25"x5" Rotax	05-02474	<b>\$340.95</b>
Prop Spacer 3"x5" Rotax (Spool)	05-02475	<b>\$361.00</b>
Prop Spacer 4"x5" Rotax (Spool)	05-04418	<b>\$361.00</b>



## DRIVE LUGS FOR EXTENSIONS

Part No.	Type	O.D.	I.D.	Thread	Price Ea.
05-28310	Threaded	5/8	---	3/8-24	<b>\$31.65</b>
05-04417	Threaded	5/8"	---	7/16-20	<b>\$32.75</b>
05-28410	Threaded	3/4	---	1/2-20	<b>\$33.25</b>

## DUC SWIRL PROPELLERS



The aerodynamic design of this propeller has been designed to have a "constant speed" effect.

The blades that are made from unidirectional layers of carbon fiber prepreg epoxy and their structure has been defined in order to obtain the maximum stresses in torsion and bending. Therefore the effect of "constant speed" is not related to the deformation of the blade but its geometry and its particular

profile.

Because of the extra flat profile and low chord, excellent performance is obtained in both: Aerodynamic and acoustic performance, but also in fuel consumption.

Thanks to the "constant speed" effect, there is very small engine speed difference between the aircraft on ground and in flight.

This propeller allows for excellent performance throughout the flight envelope including:

- Improved efficiency at takeoff and climb rate due to higher engine speed
- Many cruise extension
- A high user comfort

Propeller is available in Two-Blade and Three-Blade.

For engines with high power, its structure can be reinforced (SWIRL-R). The Inconel SWIRL blade is protected with Inconel metallic reinforcement. It increases the life of the propeller and also its performance due to a change in its inertial behavior.

## DUC SPINNERS



The DUC spinners are carried out in preimpregnated carbon fiber materials with on the surface woven carbon fabric.

The mounting plate, entirely out of carbon, thickness 0.12" (3mm), is produced with the Carbon Forge® process, also used for the manufacture of the DUC propeller hubs.

This patented process makes it possible to increase considerably the mechanical characteristics of the composite parts.



## PROP EXTENSIONS

Precision machined prop shaft extensions are available from Aircraft Spruce & Specialty Co. Don't settle for lesser quality at advertised "savings". Prop extensions are machined from solid 2024 T-351 aluminum bar, and are supplied with clear anodized finish and stainless steel drive lugs (installed). 7" diameter prop side is recommended for 0-320 engines running wood props, and is required for 0-360 engines (or larger) running wood props. For Cont. 0-200, you may choose 5.5" diam on engine side. If prop is metal, please measure depth of drilled counterbore at all 6 bolt hole positions.

Flange Engine	SAE No.	Bolt Circle	Lug Diameter	Eng. Bolt Dia.
Cont. A-65, A-75,	SAE 1	4-3/8	5/8"	3/8"
C-85, C-90, 0-200				
Lycoming 0-235	SAE 1 or 2		5/8"	3/8"
Lycoming 0-290	SAE 2	4-3/4"	5/8"	3/8"
Lycoming 0-320	SAE 2	4-3/4"	5/8"	3/8 or 7/16
Lycoming 0-360	SAE 2	4-3/4"	3/4"	1/2"
Lycoming 0-540	SAE 2	4-3/4"	3/4"	1/2"

### PLEASE ORDER USING THE FOLLOWING PART NO.

**X** - length  
**E** - prop bolt side (6 or 7)  
**P** - prop bolt (3/8 or 7/16 or 1/2)  
**SAE** - thr or non threaded lugs installed in extension  
**ENGINE** - 1 or 2  
**PROP** - HUB (wood or composite or metal)  
**PROP** - TYPE (Fixed Pitch or constant speed)

**Example: 4 X 7 - 7/16 E - 3/8P thr - S2 - Lyc 0320 - wood - wood**

## 12 HOLE SOLID PROP EXTENSION WITH THREADED DRIVE LUGS

Length x Dia.	Length x Dia.
1.25"x6"	1.25"x7"
2.25"x6"	2.25"x7"
3"x6"	4"x7"
4"x6"	6"x7"
6"x6"	8"x7"
8"x6"	

**PRICES ON PROP EXTENSIONS CAN VARY PER APPLICATION PLEASE CALL AND REQUEST A QUOTE FOR YOUR APPLICATION.**

## PROP HUB FRONT PLATES



Required for wooden propellers. Flange equivalent to Cont. P/N 3991. For use with A-65, C-85 installations or Lyc. 0-235 with SAE1 (43/8") bolt pattern.  
 P/N 10351 Cont..... **\$34.75**

Flange equivalent to Lyc. P/N 45688, for use with Lyc. 0-235 thru 0-360 engines with SAE2 Bolt Pattern engines.  
 P/N 10352 Lyc..... **\$36.75**

## DUC FC WINDSPOON PROPELLERS



The FC WINDSPOON propeller, with its revolutionary shape called WINDSPOON, offers unrivalled performance. Its technical innovations have several consequences:

- Better performance.
- Lower fuel consumption
- Less Noise

The very special profile of the FC WINDSPOON blade has been calculated to optimize the airflow over the whole surface of the WINDSPOON.

The offset of the twisting results in better reduction of friction and a longer life.

The FC WINDSPOON propellers are produced in accordance with the strictest standards of the industry, with unique equipment specially made to ensure the highest quality.

Propeller is available in Two-Blade and Three-Blade.

For engines with high power, its structure can be reinforced (FC-R WINDSPOON).

The Inconel FC WINDSPOON blade is protected with Inconel metallic reinforcement. It increases the life of the propeller and also its performance due to a change in its inertial behavior.

Available Diameter: 068"

**SEE WWW.AIRCRAFTSPRUCE.COM FOR COMPLETE DISCRPTIONS & PRICING ON ALL DUC PROPELLERS, SPINNERS, AND ACCESSORIES.**