

# PROPELLERS

## ULTRA-PROP



Select 2, 3, or 4 blade props. Each blade is moulded from a high strength glass-reinforced composite. High efficiency airfoil design means high thrust from a 59" diameter prop. One set of pitch blocks included, additional blocks available in 1° increments. Universal hubs made from high strength composite. Accommodates most popular bolt-mounting patterns. Each prop comes complete with all assembly and mounting hardware, and complete instructions. Black blades and hub are beautifully complemented by high impact polyester spinner. Blades can be trimmed to length, allowing custom prop diameters as small as 48".

Description	Part No.	Price	Description	Part No.	Price
Kit 2 Blade LH	UP102L	\$235.00	Kit 2 Blade RH	UP102R	\$235.00
Kit 3 Blade LH	UP103L	\$285.00	Kit 3 Blade RH	UP103R	\$285.00
Kit 4 Blade LH	UP104L	\$339.00	Kit 4 Blade RH	UP104R	\$340.00
Kit 5 Blade LH	05-06455	\$450.00	Kit 5 Blade RH	05-06456	\$453.00
Kit 6 Blade LH	05-06457	\$557.00	Kit 6 Blade RH	05-06458	\$557.00

### ACCESSORIES

Description	Part No.	Price	Description	Part No.	Price
Pitch Block Set 9 DG	UP9	\$8.50	Pitch Block Set 10 DG	UP10	\$8.50
Pitch Block Set 11 DG	UP11	\$8.50	Pitch Block Set 12 DG	UP12	\$8.50
Pitch Block Set 13 DG	UP13	\$9.50	Pitch Block Set 14 DG	UP14	\$8.50
Pitch Block Set 15 DG	UP15	\$8.50	Pitch Block Set 16 DG	UP16	\$8.50
Pitch Block Set 17 DG	UP17	\$8.50	Pitch Block Set 18 DG	UP18	\$8.50
Bolt Sleeve Set	UPSLEEVE	\$3.85	Hardware Pack	UPHDW	\$4.00
Replace LH Blade	UP105P	\$73.50	Replace Blade RH	UP105T	\$73.50
Hub half 2 Blade	UP1072	\$35.00	Hub Half 3 Blade	UP1073	\$35.00
Hub Half 4 Blade	UP1074	\$35.00			

**ULTRA-PROP SPINNER** - Kit includes white polyester spinner, mounting bracket, and all extra hardware for installation. Specify Quicksilver MX belt drive type with 1/4 inch mounting hardware or Rotax gear drive with 5/16 or 8 mm mounting hardware. Note: Designed for use on Ultra-Prop only.

1/4" MX ..... P/N 05-04958 ..... \$59.95  
 5/16" Rotax ..... P/N 05-04959 ..... \$59.95

### POLYMER SPINNER WASHERS

Propeller spinner washers are typically made from thin nylon. They are usually replaced every time the spinner is removed because the screw pressure against the spinner curvature causes the nylon washers to fail. Instead of nylon, these washers are machined from an extruded billet of a, very tough polymer material – the toughest we make – so they won't crack or extrude. The washers easily conform to the spinner's curved surface and will serve without replacement for a very long time. In fact, they may never need replacement! Fits a # 10 screw, with a diameter and thickness to suit the round head stainless steel screw usually used for prop spinners.

**SCREWS NOT INCLUDED PACKAGED IN BAGS OF 25**

Color	Description	Part No.	Price
Yellow	Spinner Washers Pack of 25	05-12883	\$71.75
Clear	Spinner Washers Pack of 25	05-15422	\$71.75
Gray	Spinner Washers Pack of 25	05-15423	\$71.75

## ULTRA-PROP II



Select 2, 3, 4, 5, or 6 blade props.

The Ultra-Prop II uses the same patented blade, hub and pitch block system as the original Ultra-Prop, which has been in continuous production since 1984 and will remain available. The totally new component is the blade. When assembled it makes a prop 66 inches diameter and like the original, can be cut to any lesser diameter without need for any tip finishing or balancing. This blade has a more conventional plan form, appropriate twist and a highly efficient airfoil. The engineering thermoplastic used is carbon fiber reinforced for high strength and low weight.

The Ultra-Prop II is available with two to six blades and can be used on many engines from 20 to over 100 HP. Each blade can handle at least 25 HP at 2500 RPM. The maximum operating RPM is 2900.

The hubs are identical to the original and incorporate a high strength steel plate overlaid with an engineering thermoplastic. The pitch blocks are made in the same original mold, but use a higher strength thermoplastic. They are identified by a white ink mark or "CA" stamp mark on the wide end of each block. Alternatively, new pitch blocks may be "solid"; molded without the original "webbed" structure. A special, high strength steel aircraft bolt was manufactured so it could retain the 1/4" holes in the hubs and pitch blocks. The bolt heads have a "dimple" in the center and marked with a "CA" and "AFC" around the dimple. Larger diameter and stronger MS washers are also used. Bolt torque values remain the same. The original spinner will fit the Ultra-Prop II.

Description	Part No	Price
3 Blade LH	05-15268	\$425.00
4 Blade LH	05-15270	\$500.00
5 Blade LH	05-15272	\$575.00
6 Blade LH	05-15274	\$650.00
Single Blade RH	05-15275	\$125.00
2 Blade RH	05-15265	\$350.00
3 Blade RH	05-15267	\$425.00
4 Blade RH	05-15269	\$500.00

### PROPELLER ENGINE BALANCE MASTER



Balance Masters® are PATENTED, DESIGNED, MANUFACTURED AND DISTRIBUTED IN THE U.S.A. and are easy-to-install devices for propellers and Rotax engines. These devices cut the vibration factor on ultralight aircrafts by as much as 50 percent when both balancers are installed.

Balance Masters® are weighted with a high density liquid mass (Mercury). The physical principles of centrifugal and gyroscopic forces explain the action of the Balance Masters®.

With the Balance Masters installed, the weighted liquid mass (Mercury) in the apparatus shifts during spinning, and adjusts to compensate for imbalances due to such factors as changes in flying conditions or warpage in the propeller, from nicks and rocks during takeoffs and landings. The Propeller Balance Masters® mounts on the propeller shaft or gear box in conjunction with the propeller. It is less than 7 inches in diameter.

The Engine Balance Master is made to fit most Rotax engines and bolts under the Starter Pulley on the Fly Wheel side of the engine. It is less than 5 inches in diameter. Each device weighs about 4 oz. Installation will take about 25-30 minutes using ordinary hand tools for each device. Balance Master is designed to fit most propeller bolt patterns and Rotax engines from 277FA through 582. We will need to know the manufacturer of your propeller and engine model to determine the right configuration.

Description	Part No.	Price
Off-Set Prop Balancer	15-05828	\$138.50
Balancer for Engine Rotax 912, 914	15-09450	\$168.00
Balancer for Engine Rotax 377, 447, 503	15-05261	\$149.95
Balancer for Engine Rotax 582, 618	15-05260	\$149.95