# **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   |       | Kit 2 Blade RH | UP102R   | -     |
| Kit 3 Blade LH | UP103L   |       | Kit 3 Blade RH | UP103R   |       |
| Kit 4 Blade LH | UP104L   |       | Kit 4 Blade RH | UP104R   |       |
| Kit 5 Blade LH | 05-06455 |       | Kit 5 Blade RH | 05-06456 |       |
| Kit 6 Blade LH | 05-06457 |       | Kit 6 Blade RH | 05-06458 |       |

## **ACCESSORIES**

| Description           | Part No. | Price |
|-----------------------|----------|-------|
| Pitch Block Set 13 DG | UP13     |       |
| Bolt Sleeve Set       | UPSLEEVE |       |
| Hardware Pack         | UPHDW    |       |
| Hub half 2 Blade      | UP1072   |       |
| Hub Half 3 Blade      | UP1073   |       |
| Hub Half 4 Blade      | UP1074   |       |

## 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 |       |
| Balancer for Engine Rotax 912, 914      | 15-09450 |       |
| Balancer for Engine Rotax 377, 447, 503 | 15-05261 |       |
| Balancer for Engine Rotax 582, 618      | 15-05260 |       |

## STEEL LEADING EDGE PROP TAPE



Stainless Steel leading edge tape. This part replaces the leading edge tape on the Ivoprop .......P/N 15-06059

### **CONSTANT SPEED ELECTRONIC GOVERNOR**



- Converts In-Flight Adjustable Ivoprop into the constant speed propeller
- Plugs into existing wiring harness Size: 2" x 4" x 1"

P/N 05-00601

### 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 |       |
| Clear  | Spinner Washers Pack of 25 | 05-15422 |       |
| Gray   | Spinner Washers Pack of 25 | 05-15423 |       |