



## **Installation Instructions for Propeller Leading Edge Protector Tape**

Prince Leading Edge Protection Tape provides erosion resistance for propellers used for Experimental Aircraft, Wind Tunnel, Wind Turbine or any propeller operated in an erosion environment. This tape is temporary and will require replacement when damage from impact, worn, or de-bonded from attached surface. It is possible to experience a small amount of de-grade in propeller performance.

### **1. This Kit Includes:**

- a. Prince Leading Edge Tape
- b. Adhesion Promoter
- c. Hard Rubber Spatula
- d. Cotton Swab
- e. Single Edge Razor Blade
- f. Cleaning cloth
- g. Installation Instructions

### **Not supplied but required:**

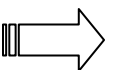
- a. Clean lint free cloth
- b. Scissors
- c. Felt Tip Pen

### **2. Preparation:**

- a. Leading Edge of propeller must be free of nicks or gouges, repair before applying tape.
- b. Clean propeller area well that will be in contact with protector tape. Do not apply over dirt, oil, lint, insect remains, aerosol painted area or contaminates that will prevent a good adhesion.
- c. Wipe propeller surface with Isopropyl Alcohol then dry with clean lint free cloth. Do not touch cleaned area with fingers.

### **3. Application:** *It is suggested to practice with plastic electrician tape prior to actual application.*

- a. Apply when surface temperature is no less than 70 degrees.
- b. Surface must be completely dry from water/moisture.
- c. Cut protector tape to desired length, width or desired shape. Protector tape will not stay adhered to extreme compound curves. Cut protector tape exactly the same for each propeller blade to avoid static or aerodynamic vibration.
- d. Any propeller tape touched with fingers on adhesive side of tape will not permit an acceptable bond. Only handle tape in areas that will not be in contact with the bonding surface.
- e. Mark a center line on the non-adhesive side of the tape to aid in alignment to the propeller leading edge.
- f. Peel the backing off only in the area the tape is being applied. Center the tape onto the leading edge with the previous centering marks and only stick the tape to the leading



edge of the propeller with your finger. Progressively peel the tape backing as the propeller tape is being applied. **DO NOT REMOVE ALL THE TAPE BACKING BEFORE APPLYING...DO NOT PULL OR STRETCH THE TAPE WHILE IT'S BEING APPLIED OR PREMATURE DE-BONDING WILL TAKE PLACE.... DO NOT TRY TO WORK THE TAPE DOWN ON THE ENTIRE SURFACE, ONLY THE CENTER LINE OF THE TAPE SHOULD BE STUCK TO THE PROPELLER LEADING EDGE.**

- g. With Cotton Swab, lightly wipe contact area under the tape with Adhesion Promoter, do not wipe off.
- h. With your finger start rubbing the protector tape at the center of the leading edge for the entire length of the tape. As the tape sticks rub a little lower on each pass on both sides of the propeller. This will slowly remove all wrinkles and conform to the propeller shape. When propeller tape is completely attached to the propeller, use a hard plastic spatula and repeat rubbing from the propeller leading edge center to the tape edges.
- i. Make every attempt to not trap air under propeller tape. If there is a bubble use a pin to pierce the bubble and use spatula to compress the tape to the surface.
- j. Propeller can be used after two hour bonding period.
- k. If trimming on the propeller do not cut into the tape with a slicing action as this will cut the propeller. To trim, use a sharp single edge razor blade and gently rock the razor blade on the area to be trimmed, stopping before the blade passes completely thru the tape, then pull the tape free. Repairs or section replacement can be accomplished in the same manner edge butting new propeller tape to the attached propeller tape. **DO NOT OVERLAP PROPELLER TAPE.**
- l. Remove old tape or section by first heating area with heat gun then use Isopropyl Alcohol to remove protector tape adhesive.

#### 4. **Inspection**

- a. Leading Edge Tape must be inspected prior to each flight for delamination, damage or non-transparent condition.
- b. Any of the above conditions require the removal of Leading Edge Tape prior to flight.
- c. Removal of tape requires heating with hair dryer or heat gun to soften adhesive then pull off.
- d. Any residue adhesive must be removed with Isopropyl Alcohol.