

Leading Edge Tape Instructions

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Please Read

Warp Drive propellers are very strong and durable without any leading-edge protection. Due to the fact that the unprotected leading-edge will handle most minor impacts with little or no need for repair, the 3M Stoneguard® protective tape is not installed at the factory. However, the leading-edge protective tape is included should you wish to apply it.

The 3M Stoneguard® protective leading-edge strips have been provided for those customers whose applications may require additional protection. If propeller operating conditions include possible rain/water, sand/fine soil, tall grass/plants, etc, the protective tape will reduce the abrasion seen by the propeller. The leading-edge strips go on smoothly but the disturbances they create may effect cruise and/or top-speed performance. This performance change will be more noticable on higher speed aircraft.

The most durable leading-edge option is the Inlaid Nickel Leading-Edge. Warp Drive's nickel leading-edge has set the standard as the toughest leading-edge protection on the market. The nickel is completely embedded in the propeller blade profile so there is no loss in performance. The nickel leading-edge is recommended for all amphibious aircraft, any aircraft flying in rain, and all airboats.

The Inlaid Nickel-Leading Edge protection is guaranteed against water damage for as long as you own the propeller.

Frequently the application for a propeller will change. For example, a customer buys a propeller without the nickel leading-edge protection and uses it on an aircraft strictly on wheels. At some point the customer switches to floats or finds him/herself flying longer cross-country flights and flying into rain more frequently. The Inlaid Nickel Leading-Edge can be applied at any time.

For some applications such as airboats or amphibious aircraft it may be advantageous to use the nickel leading-edge and the protective tape. The 3M Stoneguard® protective tape comes in 12" strips, we recommend cutting a strip in half and putting the 6" pieces inboard of the nickel leading-edge. Save the other 6" piece so that you can replace the first piece if it becomes worn. There is no reason to put the protective tape over the nickel.

If you have any questions on the use or installation of the 3M Stoneguard® protective tape please contact us using one of the methods listed in the top-right corner of this page or e-mail us at contact@warpdriveinc.com

Installing 3M Stoneguard® Protective Tape

Equipment Needed:

- 3M Stoneguard® Protective Tape*
 - Roller*
 - Rags
 - Denatured/Isopropyl Alcohol
- * = supplied by with propeller

1. Clean the leading-edge of the propeller blade with a rag and denatured/isopropyl alcohol. Prevent touching the area after it has been cleaned.
2. Remove the paper backing from the 3M Stoneguard Protective Tape.
3. Carefully position the tape on the flat side of the blade, starting about 1/16" from the tip and about 1/2" back from the leading-edge (half of the tape width).
4. With the roller, slowly press down and smooth the tape onto the flat side of the blade moving from the leading-edge to the trailing-edge. Avoid wrinkles and air bubbles under the tape.
5. Roll the tape over the leading-edge onto the curved side of the blade, again, moving from the leading-edge to the trailing-edge.

Replacing 3M Stoneguard® Protective Tape

1. Lift a corner of the tape. It may be necessary to use a razor blade or similar tool to do this.
2. Remove the tape and all adhesive that has been left behind. Denatured/isopropyl alcohol may help.
3. Repair any damage. If there is damage to the blade, fill the depression with a two-part repair epoxy and sand the area smooth.
4. If repainting is required, the blades must stay balanced. Use Flat Black Lacquer type paint. A spray can works fine.
5. Install a new piece of 3M Stoneguard Protective Tape.