

Eggenfellner Aircraft Inc.
735 Airpark Road, Hangar A5
Edgewater, Florida, 32132
(386) 566-2616

February-2008

Service Bulletin – Quinti Brush Block for G3 Gearbox

Description

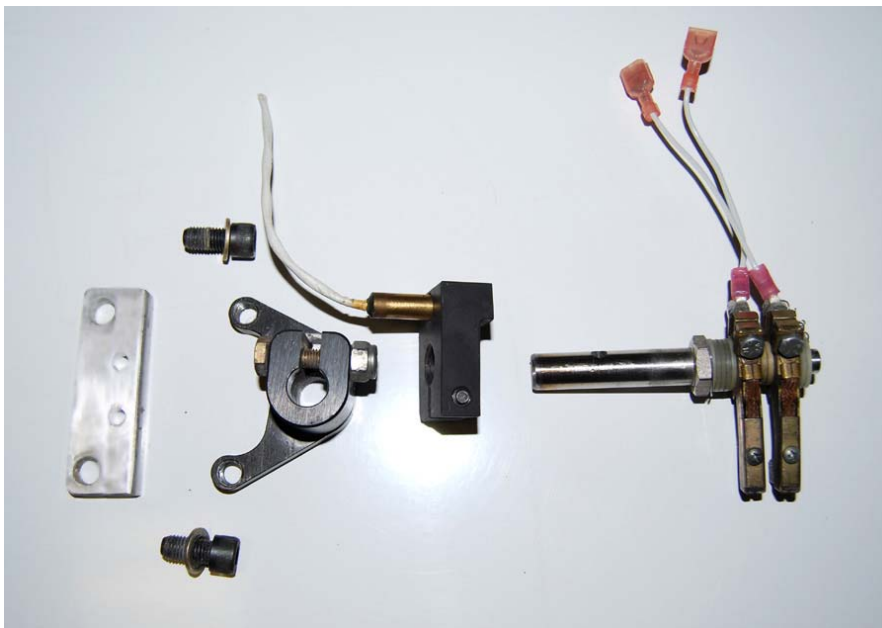
This document provides general guidelines for adapting early Quinti Avio Inc. propeller brush block assemblies to the Eggenfellner Aircraft Inc. G3 Gearbox. These earlier propellers used Warp-Drive blades and scissors-type brush assemblies. Newer models of propellers with Sensenich blades in Quinti hubs will use a simpler bracket available for sale.

Applicability

Users of Quinti Avio Inc. props with Warp-Drive blades with a G3 gearbox.

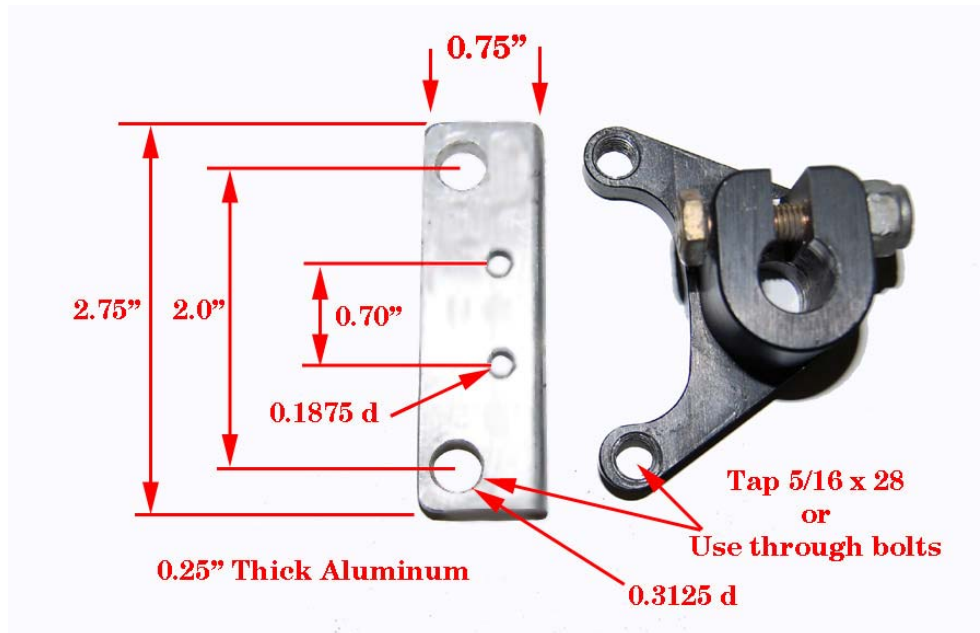
REQUIRED TOOLS & MATERIALS:

- 5/16" and 3/16" drill bits
- Optional 5/16" x 28 Tap and appropriate drill bit
- Saw and sander to cut aluminum parts.
- Metric and SAE allen wrenches
- Aluminum bar stock 0.25" x 0.75" x 2.75"
- AN3 x 3/4" and AN5 x 1" bolts



PROCEDURE:

1. Fabricate an aluminum bracket to adapt the existing Quinti brush block base to the brush block mounting tab of the G3 Gearbox as shown below. You may either tap the bolt holes or use through-bolts with nuts. If you choose to tap the part, use 5/16" x 28 (fine thread) x 0.5" long Allen screws. If you use through-bolts use appropriate AN bolts and locknuts.



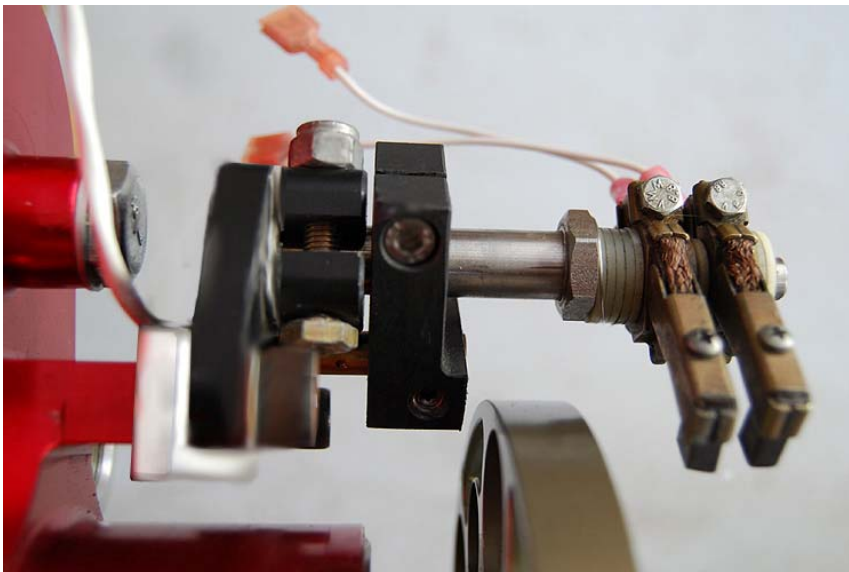
2. Paint the bracket if you choose.
3. Secure the bracket to the brush mounting boss of the G3 gearbox using a pair of 10/32 Allen head screws 3/4" long.
4. Secure the Quinti brush block base to the FRONT side of the bracket using either Allen screws (if you chose to tap the part) or AN5 through-bolts.
5. Modify the Quinti black nylon tachometer mounting block by removing the tachometer pickup element (small brass tube secured by two set screws) and cutting away the portion of the block containing the outermost set-screw as shown below. **DO NOT CUT THE BRASS PICKUP ELEMENT! REMOVE IT FIRST!**

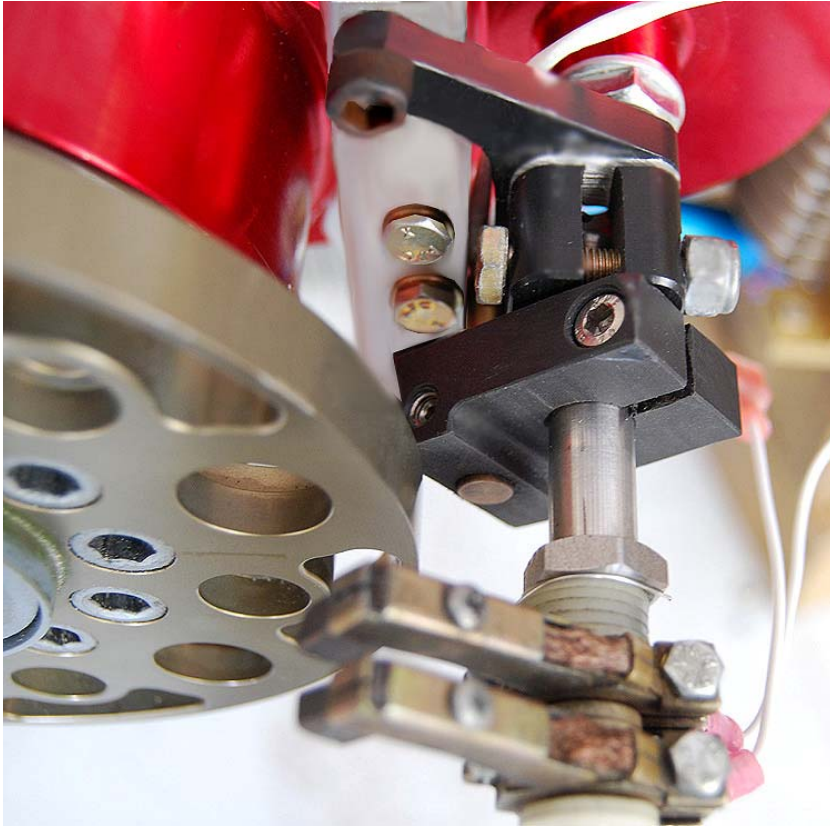


Shorten the Nylon Tachometer Pickup Block

6. Reinstall the brass tachometer pickup element and secure with the remaining set screw. Be sure that the screw falls into the dimple in the brass tube (you can see one of the dimples in the photo above just behind the block).
7. Slide the Quinti brush block assembly through the nylon tachometer mounting block and into the mounting base.

The following photographs show the general alignment of these parts. Final alignment will be done once the propeller has been installed. Be sure that the nylon tachometer mounting block is positioned so that the small pickup magnet that gets installed under a prop hub bolt will pass over the tachometer pickup with a gap of approximately 0.10". When the prop has been installed, rotate or extend the various parts until the brushes are centered and aligned on the slip rings, then secure the shaft by tightening the clamp bolt.





This is only one possible way to adapt the existing Quinti brush block assembly to the G3 gearbox. We are always interested in seeing what our customers come up with, so if you 'build a better mousetrap', please let us know!