

# AEROTOUGH GF Bushing Maintenance Manual Supplement

## For Bonanza Aircraft MBA-10005 Reference MMS0001

### Introduction

For every AeroTough GF Door Hinge Bushing (Drawing No. MBA-10005), a set of instructions for installation and a MBA Maintenance Manual Supplement (MMS) will be supplied.

### Aircraft Maintenance Manual

The aircraft which AeroTough GF Door Hinge Bushing (Drawing No. MBA-10005) shall be installed are used for general aviation. These kits are designed to be sold to the owners, repair shops and distributors with a simple installation procedure. The installation kit which MBA provides has been made for the purpose of installing the product correctly.

### *Aircraft Information*

a) Aircraft Model: Beechcraft Bonanza, TC3A15 rev.94

The AeroTough GF bushings will be operated during take-off and landing. Otherwise, every other stage of a flight cycle the bushings will be in a static position.

All approved aviation grease and lubrication can be used with AeroTough GF (MBA-10005).

### Maintenance Instructions

#### *Inspection Program*

Inspection of the AeroTough GF bushing (MBA-10005) should be completed on the same schedule stated in the Aircraft Maintenance Manual (AMM) Chapter 5, Section 2, Figure 2-8.

#### *Troubleshooting*

During the installation of the AeroTough GF bushing (MBA-10005), it is recommended to use the MBA installation tool kit to ensure alignment with the holes. The installation tool kit consists of a spacer, pin and a steel jig. If the installation kit is not used, there is a chance that AeroTough GF bushing (MBA-10005) will not be installed correctly and may cause premature cracks. The cracks will appear on the chamfered end of AeroTough GF bushing (MBA-10005). If there are signs of AeroTough GF bushing (MBA-10005) cracks, inform MBA. MBA will then send the customer a new bushing.

<b>Problem</b>	<b>Solution</b>
There is existing corrosion around the hole where the AeroTough GF bushing (MBA-10005), will be installed.	Follow the Structural Inspection and Repair Manual, 58-590001-11, chapter 20. Verify the physical hole size and contact MBA.

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Problem	Solution
The holes are oversized, not standard dimensions, and the AeroTough GF bushing (MBA-10005) will not fit properly.	Contact MBA with the inner diameter of the hole.
The AeroTough GF bushing (MBA-10005), has cracked during installation.	If you are not using the installation kit, you may contact MBA to rent.
The hole is smaller than the AeroTough GF bushing (MBA-10005) outer diameter.	Open up the hole to 0.313".
There is enough damage to the door hinge and the AeroTough GF bushing (MBA-10005) cannot be installed correctly and safely.	Repair the door back to safe operation. Verify the physical hole size and contact MBA.

### Removing/Replacing Part

The following procedure should be used for removing the existing door hinge setup.

1. With the aircraft on jacks first remove the outer gear doors.
2. Note the position of the washers separating the lower rod ends from the gear door brackets.
3. For the inboard doors, partial gear retraction will be required for access.
4. Unscrew the nut from the bolt.
5. Remove the two washers and the bolt.
6. Use an appropriate sized c-clamp to remove the existing steel sleeve and bronze bushing.
7. Clean the door brackets.
8. Refer to I10001 for installation instructions of the aeronautical products.

### Post-Installation Checks

When the AeroTough GF bushing (MBA-10005) has been installed, the gear doors shall be retracted and extended a minimum of five times. During the checking phase, MBA advises the customer to listen, watch and closely inspect the AeroTough GF bushing (MBA-10005) during each cycle. If cracks are present, remove the bushing and MBA will send a new one.

### Primary and Secondary Structures

Primary structures include the main landing gears, wing.

Secondary structures include the spars, ribs and skin which are part of the aircraft wing.

### Airworthiness Limitations

Structural Inspection Interval: As per AMM Chapter 5, Section 2, Figure 2-8.

The Airworthiness Limitations are identical to that found in the latest revision.

