



British Gliding Association Aircraft Inspection

Mandatory

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1

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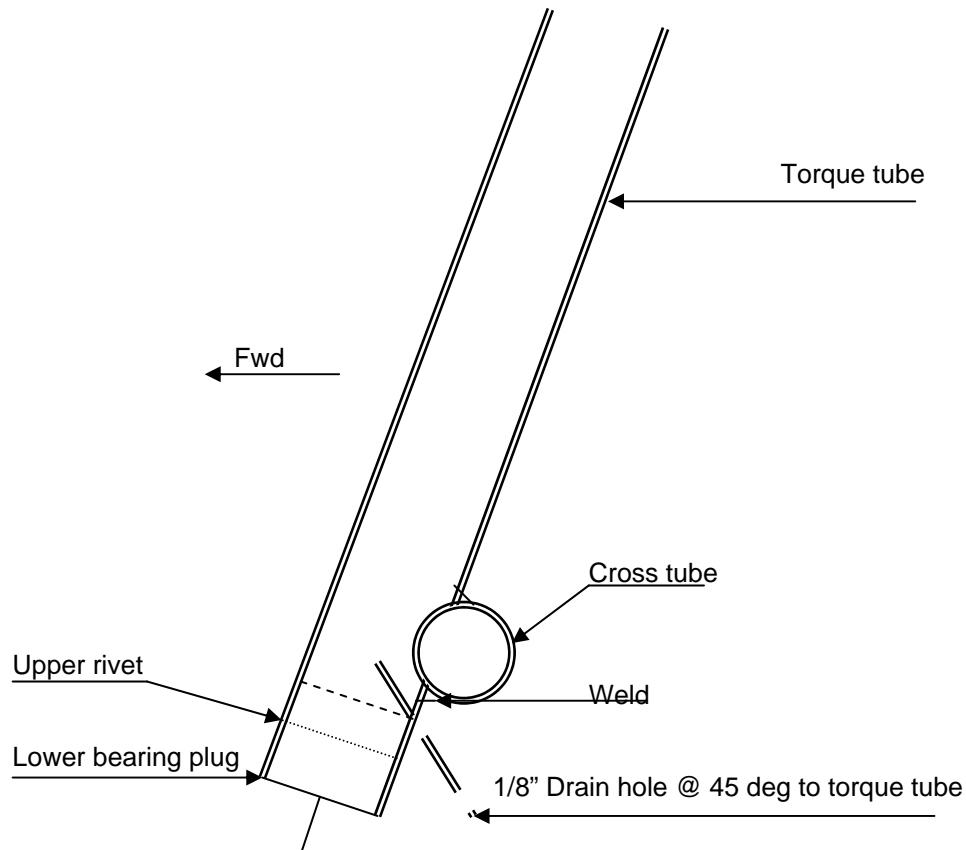
- Subject: Rudder drive torque tube inspection and modification
- Applicability: Slingsby T49 Capstan series
- Accomplishment: Part "A" – As soon as possible or at latest at next C of A inspection
Part "B" – At each C of A inspection
- Reason: One in-flight failure and another with severe corrosion. The failed tube showed no external signs of corrosion through the paint
- Instructions: Part "A"
1. Remove rudder, remove torque tube top plug (if fitted) invert and check for water inside rudder torque tube
 2. Remove paint on lower half of vertical tube and cross tube joint
 3. Inspect stripped area for any signs of corrosion or pin holes
 4. If water is present or corrosion is suspected then the torque tube assy must be removed from the rudder for an internal inspection. **Corrosion or pinholes are not acceptable; if present the part must be replaced.** The internal inspection will require the use of an endoscope or similar inspection equipment
 5. Drill drain hole in accordance with drawing 1
 6. Repaint the tube and internally protect with LPS3 or Waxoyl or similar product
 7. Ensure drain hole is clear after internal protection has dried
 8. Fit top plug to torque tube and seal as necessary. The plug must be fitted even if it was missing at step 1. A wood, plastic or rubber plug may be used provided it forms an effective weather seal.
 9. Refit rudder. Carry out duplicate inspection
- Part "B"
1. Thorough inspection of lower torque tube. If corrosion is suspected, repeat part "A"
 2. Check drain hole is clear
 3. Re-inhibit internally if necessary and recheck the drain hole is clear when dry
 4. Check top plug is weather tight

Approved By
Jim Hammerton, Chief Technical Officer

Issued by - The British Gliding Association Ltd, Kimberley House, Vaughan Way, Leicester, LE1 4SE, U.K.

Note: Mandatory inspections must be recorded in the aircraft log book, unless specified, and certified by an appropriately rated BGA inspector. Optional inspections should be entered into the D.I. book or log book as appropriate. Optional inspections may be certified by a BGA Pilot. Alternative methods of compliance will be considered providing an equal level of safety is accomplished. Contact BGA for authorisation.

Slingsby T49 Capstan Rudder Torque Tube – Drain hole location



Position drain hole at the rear edge of the torque tube above lower bearing plug upper aft retention rivet and below cross tube weld. Angle the drain hole upward at an angle of approximately 45 degrees to clear the top of the lower bearing plug. The drain hole will be close to the upper aft rivet head but should not cut into it.

Drill the drain hole 1/8" or 3mm diameter

Remove all sharp edges and burrs