



## SERVICE DIRECTIVE BULLETIN

SERVICE DIRECTIVE BULLETIN NO. T-020

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DATE: August 18, 2005

1. SUBJECT: Inspection of Pylon Assembly for Cracks
2. MODEL: TH-28, 480, and 480B
3. EFFECTIVITY: All Serial Numbers
4. BACKGROUND:

During investigation of a 480 accident, a broken pylon tube was found in the area of the left, rear main rotor transmission mount. It has not been determined, at this time, if the failure occurred before the accident or was a result of the accident.

This Service Directive Bulletin (SDB) mandates a one time visual inspection of certain areas of the pylon assembly for cracks.

5. COMPLIANCE:

Within ten (10) hours time in service or at the next 100 hour/annual inspection, which ever occurs first, visually inspect the pylon assembly for cracks in accordance with paragraph 5.1 of this Service Directive Bulletin, and if required, repair the pylon assembly in accordance with paragraph 5.2 of this Service Directive Bulletin.

- 5.1. INSPECTION:

### NOTE

Perform all maintenance IAW the TH-28/480 Series Maintenance Manual.

- A. Open/Remove the engine access panels, aft side cowlings, oil cooler/step access panel, transfer duct access panel, bottom cowl, side access cowlings, and upper plenum/air inlet assembly as required for inspecting the pylon assembly (Refer to Figure 8-1 in the TH-28/480 Series Maintenance Manual).

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- B. Using a suitable light source and an inspection mirror (as required), visually inspect the areas of the pylon assembly shown in Figures 1 through 8 for cracks. If a suspected crack is found, use a dye penetrant inspection to determine if the pylon assembly is cracked.

**NOTE**

Follow the instructions provided with the dye penetrant inspection kit if performing the dye penetrant inspection.

- C. If no cracks are found during the inspection, reinstall/close the access panels and cowlings as required and return the aircraft to service.
- D. If cracks are found during the inspection repair the pylon in accordance with paragraph 5.2 of this Service Directive Bulletin and notify Enstrom Helicopter Corporation.

5.2. REPAIR:

**CAUTION**

Enstrom recommends removing the engine, avionics, and any electrical instrumentation from the aircraft prior to repairing the pylon assembly using the TIG welding method.

- A. Repair cracked pylon assembly tubes in accordance with AC 43.13-1B, Change 1, *Acceptable Methods, Techniques, and Practices - Aircraft Inspection and Repair*. Contact Enstrom Helicopter Corporation for specific repair instructions and repair material requirements if required.

5.3. CONTACT INFORMATION:

Enstrom Helicopter Corporation  
P.O. Box 490  
Menominee, MI 498580490  
Phone: 906-863-1200  
Fax: 906-863-6821 or 6244  
Email: customersupport@enstromhelicopter.com

- 6. SPECIAL TOOLS: None
- 7. MAN-HOURS: 3 Man-hours for the visual inspection.
- 8. WARRANTY: Per Enstrom New Helicopter Warranty policy.

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9. WEIGHT CHANGE: None

10. LOG BOOK ENTRY:

Enter compliance with this SDB in the aircraft maintenance records.

11. REPETITIVE INSPECTIONS:

In accordance with the Periodic Inspection Checklist located in Section 3 of the TH-28/480 Series Maintenance Manual.

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Figure 1. Right, Front Main Rotor Transmission Mount Cluster



Figure 2. Left, Front Main Rotor Transmission Mount Cluster

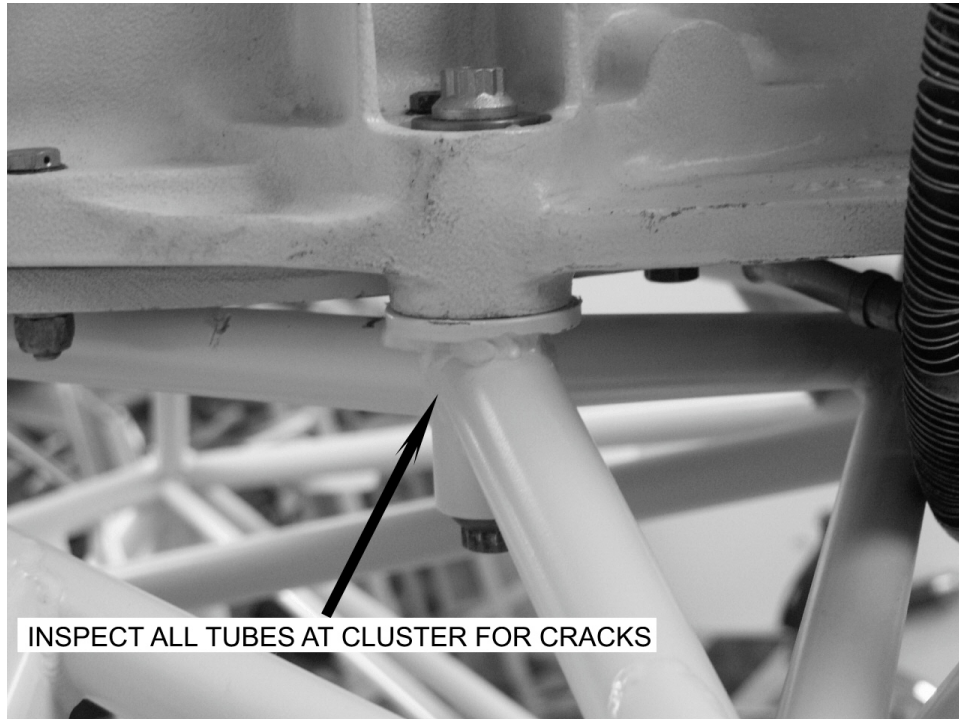


Figure 3. Left, Rear Main Rotor Transmission Mount Cluster



Figure 4. Right, Rear Main Rotor Transmission Mount Cluster



Figure 5. Left, Upper Cluster Located Aft of Transmission Cluster



Figure 6. Right, Upper Cluster Located Aft of Transmission Cluster

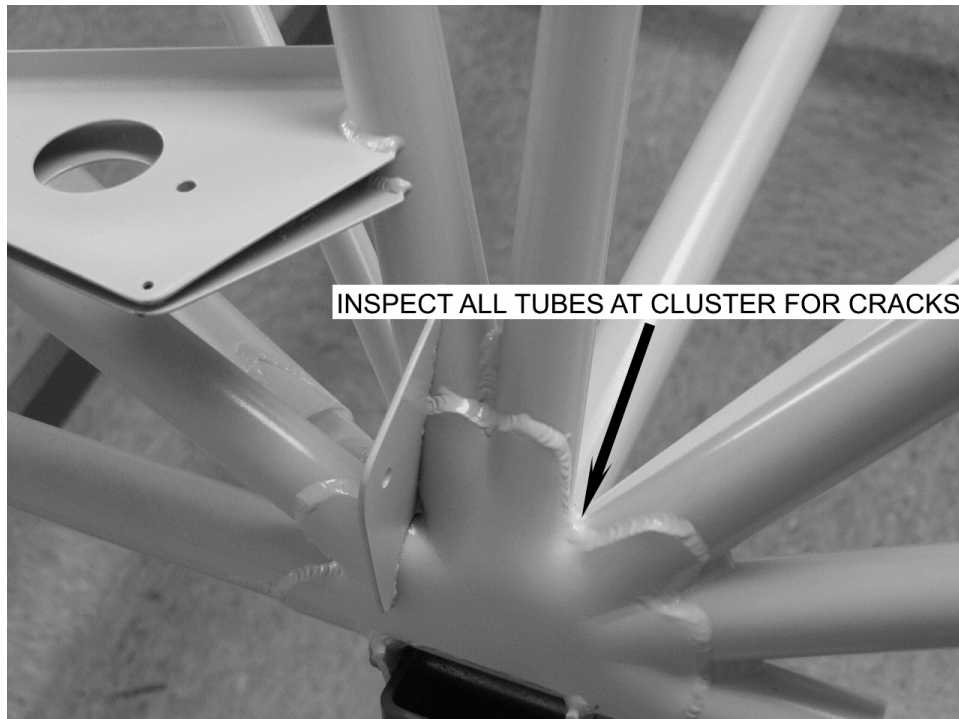


Figure 7. Left, Lower Cluster Located at Aft Crosstube Assembly



Figure 8. Right, Lower Cluster Located at Aft Crosstube Assembly

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