

**OH-58-10-AMAM-05  
BORESCOPE INSPECTION  
CABIN ROOF BEAM/PYLON SUPPORT AREA  
OH-58D**

**WARNING**

Any discrepancies that exceed established inspection limits in the applicable Technical Manuals require approval from RDECOM engineering. Contact the supporting LAR and LE to request a Maintenance Engineering Call (MEC).

**NOTE**

This Addendum is required for use in conjunction with  
OH-58-10-AMAM-05.

**References:**

- (a) TM 1-1520-248-23
- (b) TM 1-1520-248-23P
- (c) TM 1-1520-248-PPM
- (d) TB 1-1520-248-50-05
- (e) TM 1-1500-204-23
- (f) TM 9-1240-778-23
- (g) DA Pam 738-751
- (h) BHTI Drawing 406-530-100 Rev G
- (i) BHTI Drawing 406-961-017 Rev P

**Enclosures:** N/A

**Applicable Parts:** N/A

**Special Tools:**

<b>Nomenclature</b>	<b>PN</b>	<b>NSN</b>
Borescope, RF Systems	VJ	NO NSN
Work Aid, Dekoron® Tubing	1300 (1/2" O.D.)	NO NSN

**Procedures:**

**NOTE**

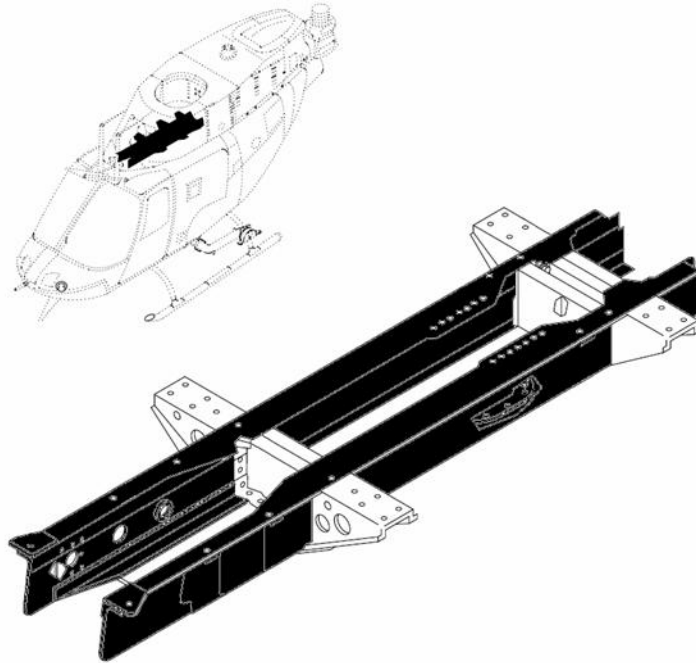
A bore scope inspection will be required following any repairs to the cabin box beam structure.

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The 206-001-020-33 directional control link may be removed to ease access through the box beam interior bulkheads. However, upon re-installation a flight control clearance check should be verified with the aid of the borescope.

Consult TM 9-1240-778-23 for removal of the Mast Mounted Sight (MMS) Processor and Power Supply if installed.

1. Inspect the interior of the cabin box beam structure (Fig. 1) with a video bore scope.



**Figure 1, Cabin Box Beam Area, Sta. 82 to 130**

2. The inspection will be used to search for evidence of working fasteners, debris, and cracks on interior bulkheads and clips contained within the structure.
  - a. Inspect the blind head of MS series blind bolts for grip engagement. Even though the pin shears flush and the lock ring engages, these rivets may not clamp with a sufficient grip. The predominant fastener used in this structure is a MS90354 (Refer to AMAM Addendum for correct fastener callouts). Blind rivet debris should be removed from the beam interior following repairs. MS series blind bolts are ferrous steel and can be retrieved magnetically. (Fig 2)
  - b. Inspect interior bulkheads for cracks. Cracks can originate from fastener holes that have insufficient edge distance (ED) due to oversized rivet selection, or poor hole preparation following repairs. Based on the thin design, the P/N 206-032-200-21, Bulkhead, is easily damaged when replacing fasteners in the P/N 406-530-100-131, Channel. (Fig 3)

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c. Inspect for directional control tube clearance at each bulkhead pass through. Bulkhead replacement or repair can cause chafing. Additionally, inspect for damage caused by errant drill bit engagement following repairs. (Fig 4)

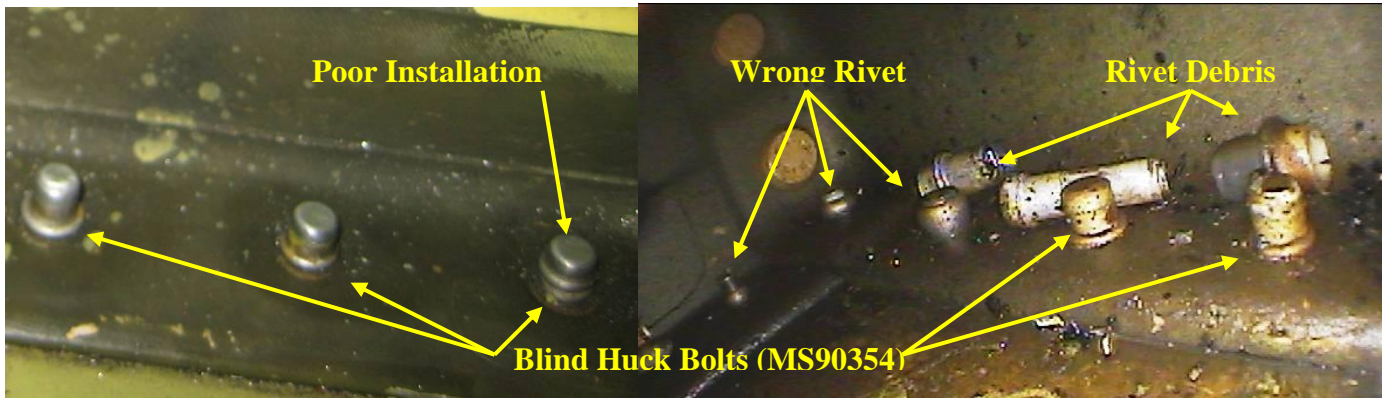


Figure 2, Fastener Examples



Figure 3, Damaged P/N 206-032-200-21, Thin Bulkhead



Figure 4, Chafing, P/N 206-001-020-33, Connecting Link

3. Interior bulkheads within the cabin beams will require a compartmentalized inspection, and insertion of the bore scope probe from several flight station (FS) access points. (Fig 5)

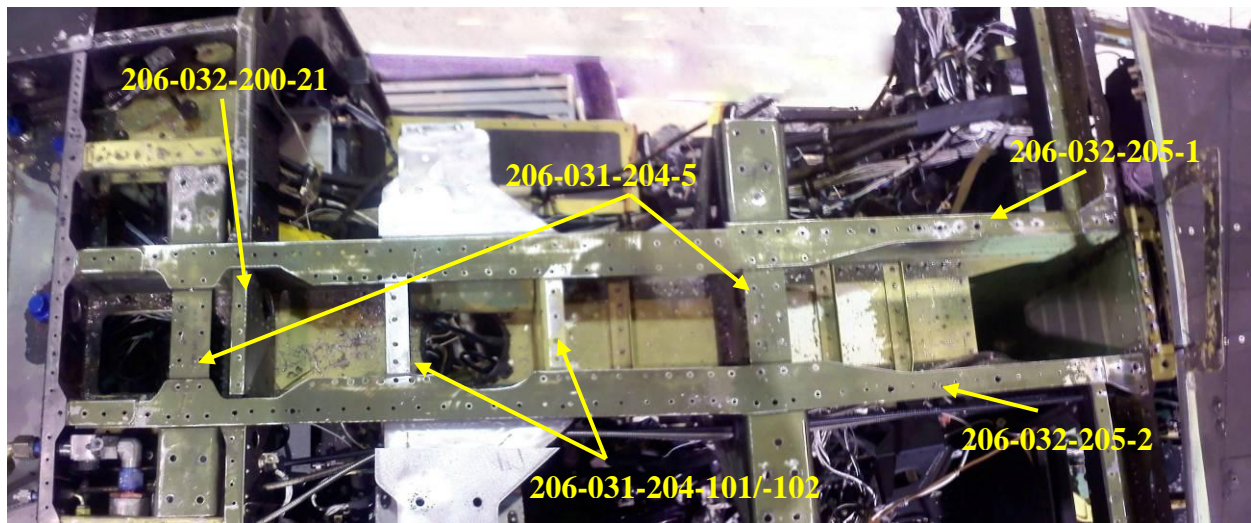


Figure 5, Cabin Box Beam Area (Cut-away), Sta. 82 to 130

4. To inspect the forward two compartments of the structure, FS 82 – 108 (Fig 6), access will be obtained through the throttle cable access cut-out located on the R/H cabin beam, P/N 206-032-205-2, at approximately FS 92 (Fig 7).



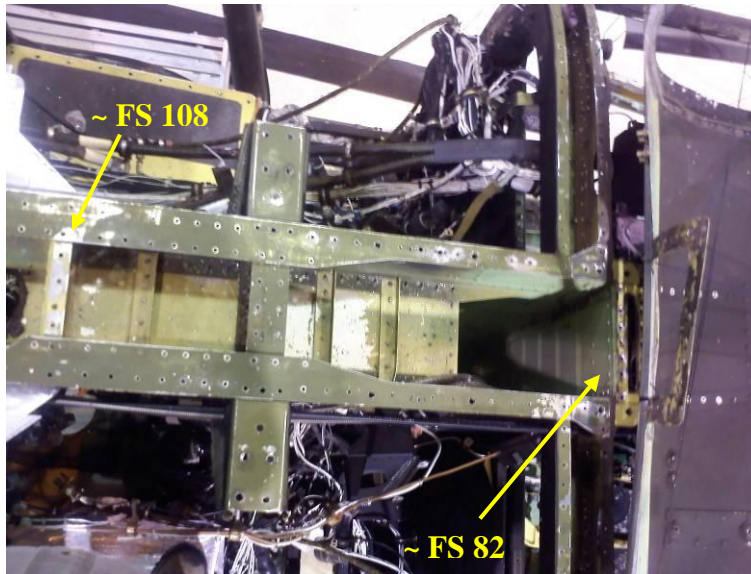


Figure 6, Cabin Beam Enclosure (Cut-away), FS 82 – 108



Figure 7, FS 92, R/H Cabin Beam Access

5. Carefully insert the bore scope probe into the access and inspect the cavity forward of the P/N 206-031-204-5, Bulkhead (Fig 8). Visually inspect for the correct installation of blind fasteners securing the forward pylon straps, in addition to the condition and security of the remaining structure.

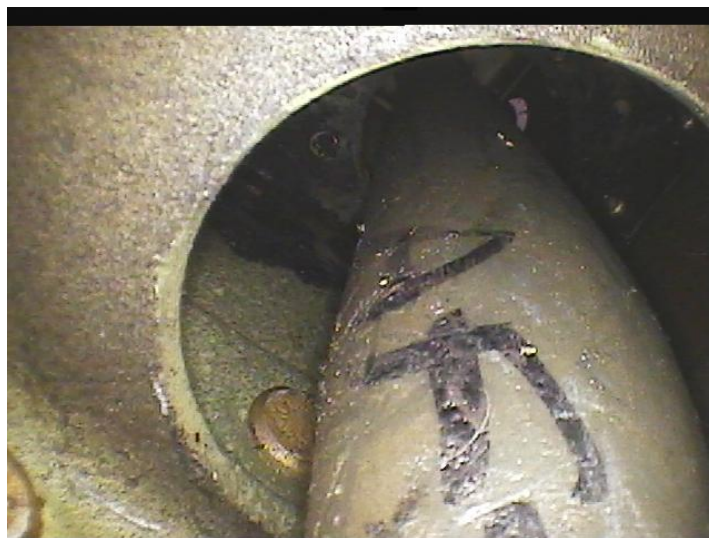


**Figure 8, P/N 206-031-204-5, Bulkhead (Cut-away)**

6. Using Dekoron Tubing as a workaid, fish the borescope probe through the P/N 206-032-204-5, Bulkhead, to access the compartment extending to the P/N 206-031-204-101, Bulkhead, at FS 108 (Fig 9). The bore scope probe may also be inserted through the lightening hole in P/N 206-031-204-101, Bulkhead. Access will be from FS 111 (Fig 11). Visually inspect for condition and security in addition to correct blind fastener installation.

**NOTE**

Use care not to nick or gouge the connecting link during probe insertion. If connecting link is damaged refer to TM 1-1520-248-23 for inspection and repair limits.



**Figure 9, P/N 206-032-204-5, Bulkhead, Probe access**

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7. Access to the cavity between P/N 206-031-204-102, Bulkhead, and P/N 206-032-200-21, Thin Bulkhead, by inserting the borescope probe through the standpipe access at FS 111 (Fig 10 & 11). Feed the probe aft through the P/N 206-031-204-102, Bulkhead, lightening hole (Fig 12). Inspect cavity for condition and security. Inspect for correct blind fastener installation (Fig 2), and presence of cracks in the 206-032-200-21 (Fig 3), Thin Bulkhead. Additionally, inspect for evidence of chaffing along the P/N 206-001-020-33, Connecting Link, at the bulkhead pass through (Fig 4).

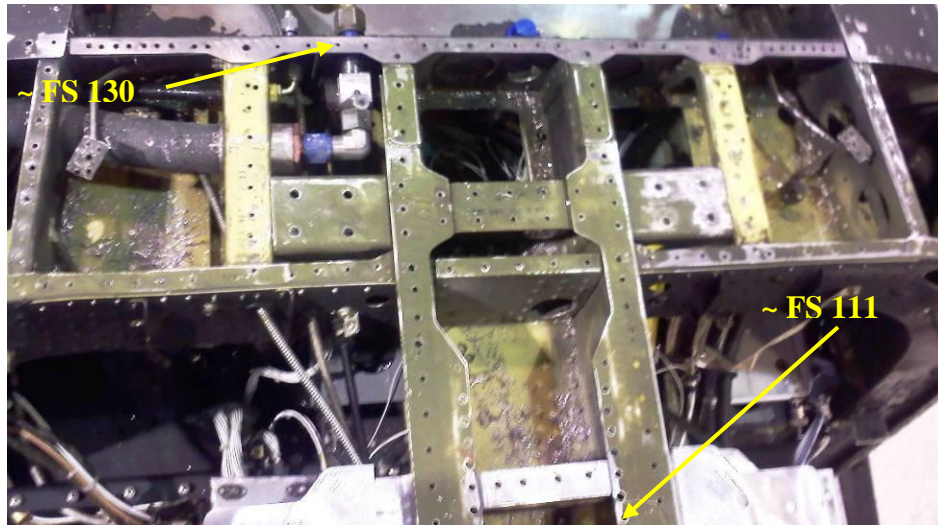


Figure 10, Cabin Beam Enclosure (Cut-away), FS 111-130



Figure 11, FS 111, Standpipe Access



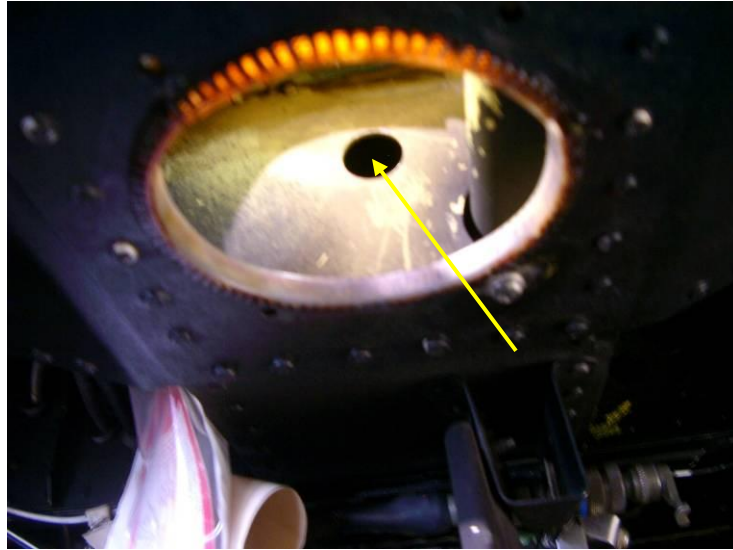


Figure 12, P/N 206-031-204-102, Bulkhead

8. Insert probe forward of the P/N 206-001-734-103, Directional Control Bellcrank Support, and fish through the P/N 206-032-204-5, Bulkhead, at FS 123 (Fig 13). Inspect cavity forward to P/N 206-032-200-21, Thin Bulkhead, FS 120 for condition and security (Fig 10). Pay particular attention to the condition of the lower bulkhead flange (Fig 3). Inspect for the presents of cracks and correct blind fastener installation. Additionally, ensure the P/N 206-001-020-33, Connecting Link, does not bind at the bulkhead pass through (Fig 4).

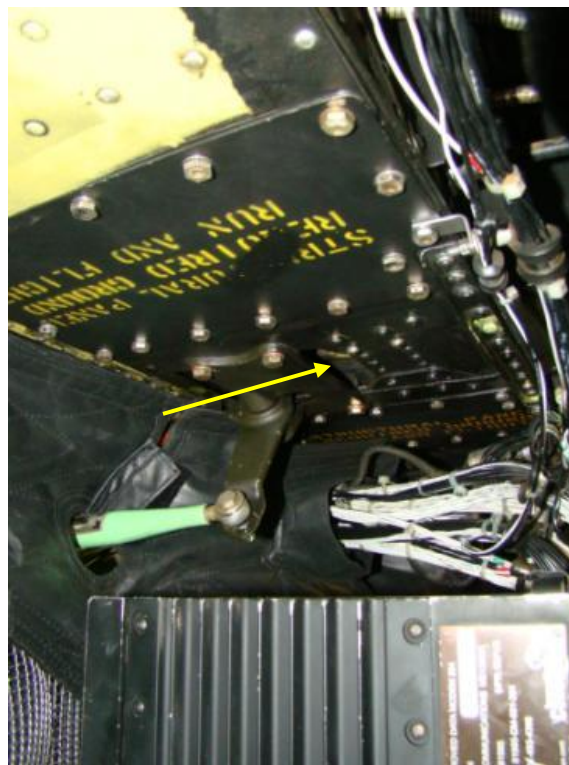


Figure 13, FS 123, Bulkhead Access



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9. Remove the L/H directional servo access panel, P/N 406-961-037-119, IAW TM 1-1520-248-23 (Fig 14).

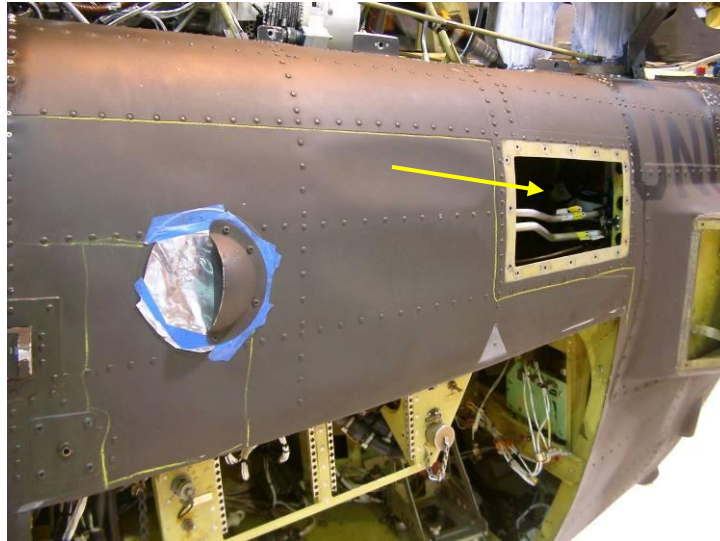


Figure 14, P/N 406-961-037-119, Access Panel

10. Insert bore scope probe from access panel forward through lightening hole in the P/N 206-032-303-1, Frame, at FS 142. In addition to condition and security of the FS 130 Bulkhead, inspect the P/N 406-032-302-51, Splice, for cracks and loose rivets.

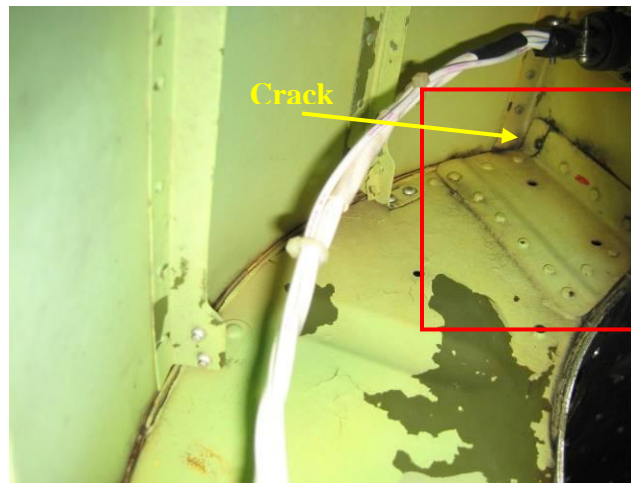


Figure #, P/N 406-032-302-51, Splice, FS 130

11. Re-install the L/H directional servo access panel, P/N 406-961-037-119, IAW TM 1-1520-248-23 (Fig 14).

12. Annotate inspection discrepancies IAW DA Pam 738-751.

**End of Task**