

SUPPLEMENTAL INSPECTION NUMBER: 55-10-01

1. TITLE:

- Horizontal Stabilizer, Elevators and Attachments Inspection

2. EFFECTIVITY

- 17280001 and On, 172S8001 and On

INSPECTION COMPLIANCE

**ALL
USAGE:**

INITIAL

10,000 Hours or

20 Years
(NOTE)

REPEAT

3,000 Hours or

5 Years
(NOTE)

NOTE: Refer to Note 1, Section 5-14-00.

3. PURPOSE

- To inspect horizontal stabilizer, elevator and attachments for signs of damage, fatigue or deterioration.

4. INSPECTION INSTRUCTIONS

- For airplane serial numbers 17281352 thru 17281544 and 172S10365 thru 172S10895, check the airplane maintenance records to verify that Service Bulletin SB09-55-02 has been complied with. If not, compliance with SB09-55-02 is required with this inspection.
- Remove all stabilizer and elevator access panels, including the stinger and vertical stabilizer to horizontal stabilizer fairings, refer to Figure 1 and the applicable sections of this manual.
- Visually inspect horizontal stabilizer and elevator for condition, cracks and security; hinge bolts, hinge bearings for condition and security; bearings for freedom of rotation; attach fittings for evidence of damage, wear, failed fasteners and security.
 - Clean area before inspecting if grime or debris is present.
- Visually inspect the elevator torque tube for corrosion and rivet security. Pay particular attention to the flange riveted onto the torque tube near the airplane centerline for corrosion.
 - Clean area before inspecting if grime or debris is present.
- Visually inspect forward and aft stabilizer and elevator spars, ribs and attach fittings for cracks, corrosion, loose fasteners, elongated fastener attach holes and deterioration. Pay particular attention to the skins at the location where stringers pass through ribs and at the leading edge skin close to the fuselage. Apply finger pressure at the stringer intersection or the rib to spar juncture to check for free play indicating a broken rib. Visually inspect the forward stabilizer attachment bulkhead for cracks.
 - Clean area before inspecting if grime or debris is present.
- Using a flashlight and inspection mirror, locate the center lightening hole of the forward spar in the horizontal stabilizer. From the aft side of the horizontal forward spar, examine the centerline lightening hole for cracks. Cracks will generally radiate diagonally from the lightening hole.
 - Clean area before inspecting if grime or debris is present.
- If corrosion or a frozen bearing is found, conduct a surface eddy current inspection for cracks of each elevator hinge attach fitting. Refer to Section 5-13-01, Nondestructive Inspection Methods and Requirements, Eddy Current Inspection – Surface Inspection, for additional instructions. The inspection is for the aluminum structure outside of the bearing, so set the instrument for aluminum.
- Visually inspect the trailing edge portion of the elevator for indications of cracks, corrosion or deterioration. Visually inspect the attachment of the trim tab horn to the trim tab.
- Install the items that were removed to accomplish this inspection, refer to the applicable sections of this manual.

5. ACCESS AND DETECTABLE CRACK SIZE

ACCESS/LOCATION		DETECTABLE CRACK SIZE
Horizontal Tail		Not Allowed
6.	INSPECTION METHOD	
	<ul style="list-style-type: none">• Visual with Eddy Current if required.	
7.	REPAIR/MODIFICATION	
	<ul style="list-style-type: none">• Replace damaged bolts and nuts. Replace damaged fittings and small parts. Replace damaged or loose rivets. Hinge bearings are pre-packed with grease, which will eventually oxidize and harden after years of service. Several applications of penetrating oil will help free up a stiff bearing. It is the owner's/ operator's option to replace stiff bearings. Make repairs in accordance with applicable Chapter(s) of the Single Engine Structural Repair Manual. Coordinate any repair not available in Single Engine Structural Repair Manual with Cessna Customer Service prior to beginning the repair.	
8.	COMMENTS	
	<ul style="list-style-type: none">• Coordinate this inspection with SID 55-30-01, Vertical Stabilizer, Rudder and Attachments Inspection.	

Figure 1 : Sheet 1 : Horizontal Stabilizer, Elevators and Attachments Inspection

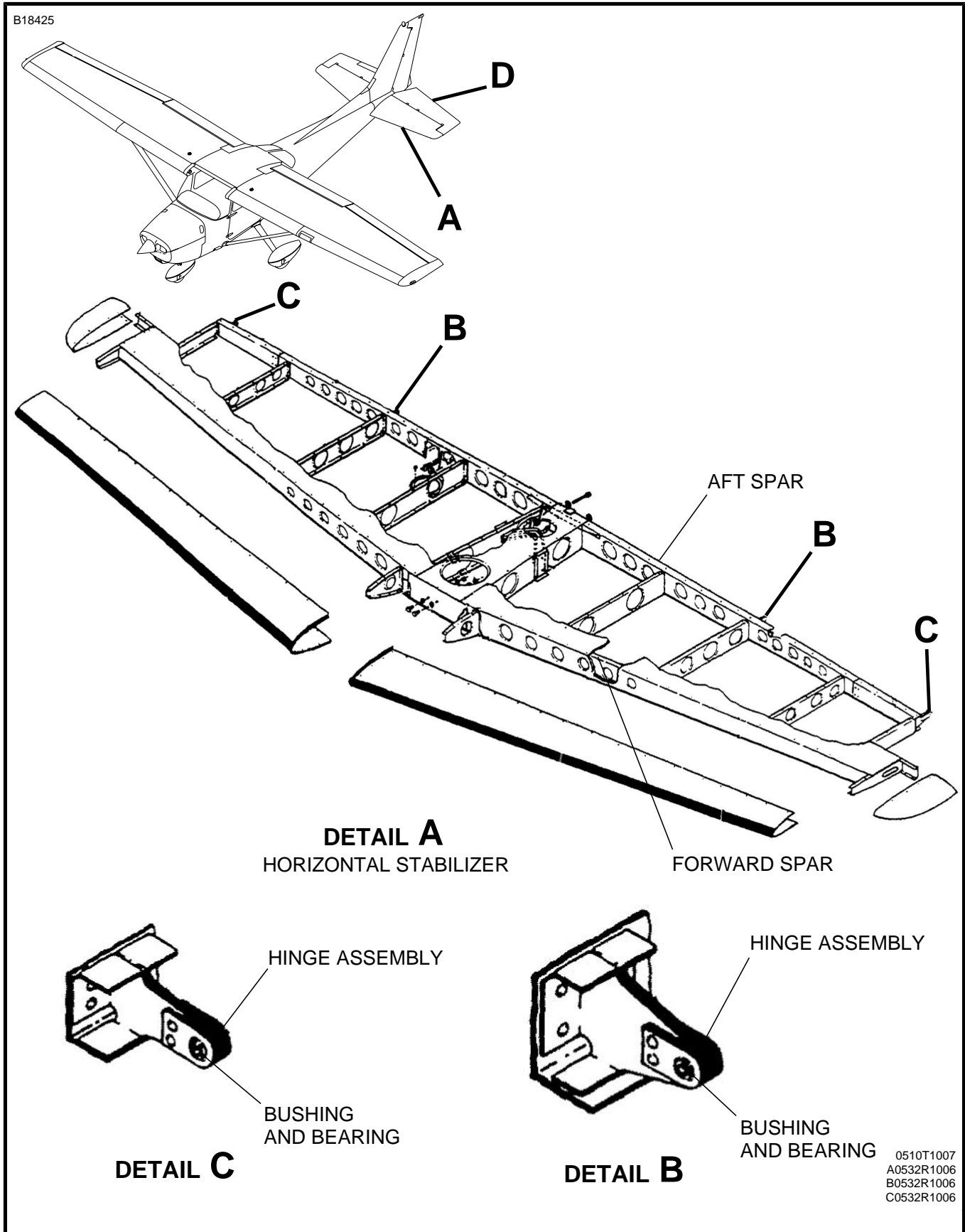
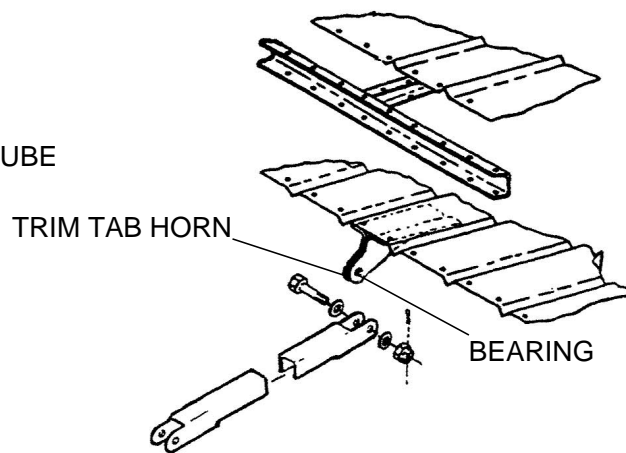
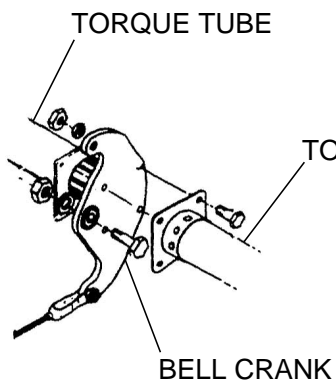
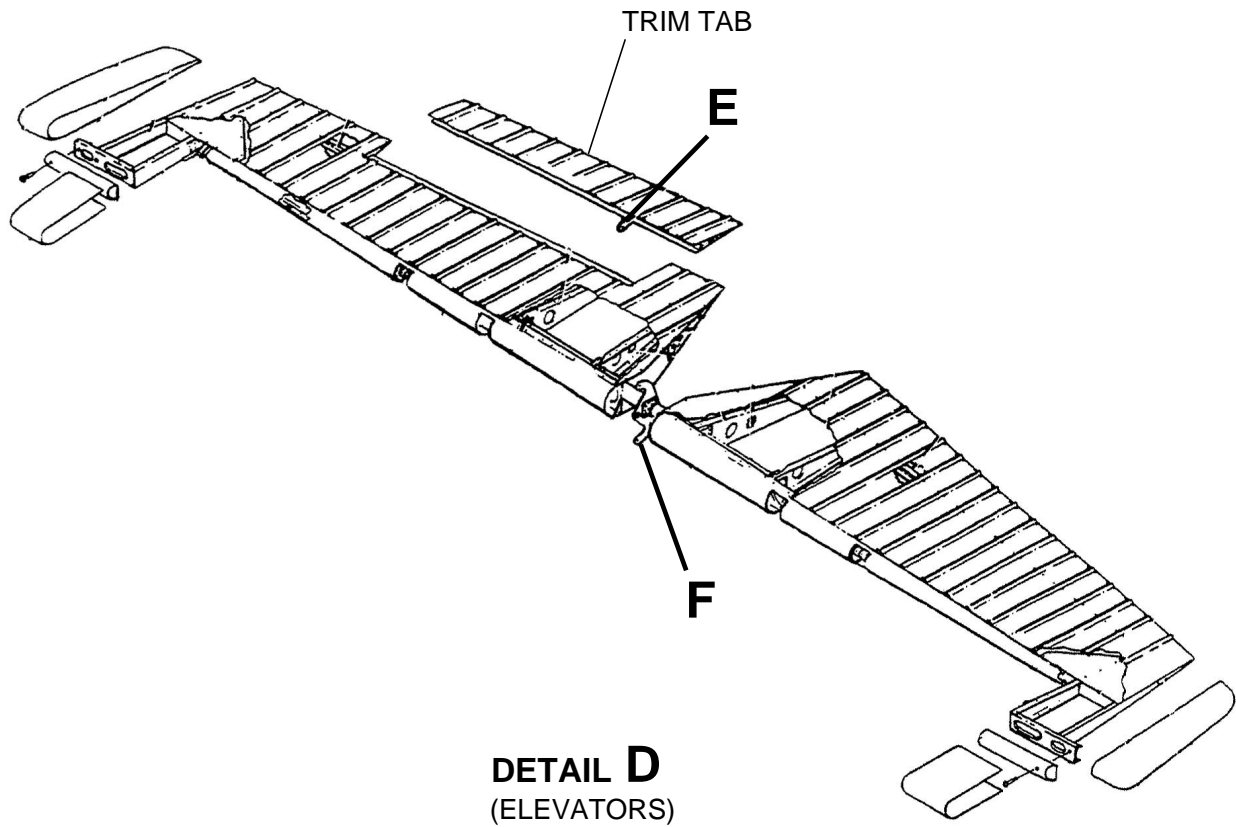


Figure 1 : Sheet 2 : Horizontal Stabilizer, Elevators and Attachments Inspection

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