

SUPPLEMENTAL INSPECTION NUMBER: 55-10-01

1. TITLE:

- Horizontal Stabilizer, Elevators and Attachments Inspection

2. EFFECTIVITY

- 18280001 and On, T18208001 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 applicable airplanes, check the airplane maintenance records to verify that Service Bulletins SB02-55-01, SB98-55-03 and SB04-27-01 have been complied with. If one or more of these service bulletins has not been complied with but is applicable to the airplane being inspected, compliance is required with this inspection.
- Remove all of the horizontal 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 the 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 the area before inspecting if grime or debris is present.
- Visually inspect the 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 the area before inspecting if grime or debris is present.
- Visually inspect the 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.
- 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, make sure the instrument is set for aluminum before beginning this inspection.
- 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

Horizontal Stabilizer

DETECTABLE CRACK SIZE

Not Allowed

6. INSPECTION METHOD

- Visual with Eddy Current if required

7. REPAIR/MODIFICATION

- Replace damaged bolts and nuts. Replace damaged fittings and small parts. Replace damaged or loose rivets. Hinge bearings are prepacked 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/operator option to replace stiff bearings. Make repairs in accordance with the 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

- Coordinate this inspection with SID 55-30-01, Vertical Stabilizer, Rudder and Attachments Inspection.

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

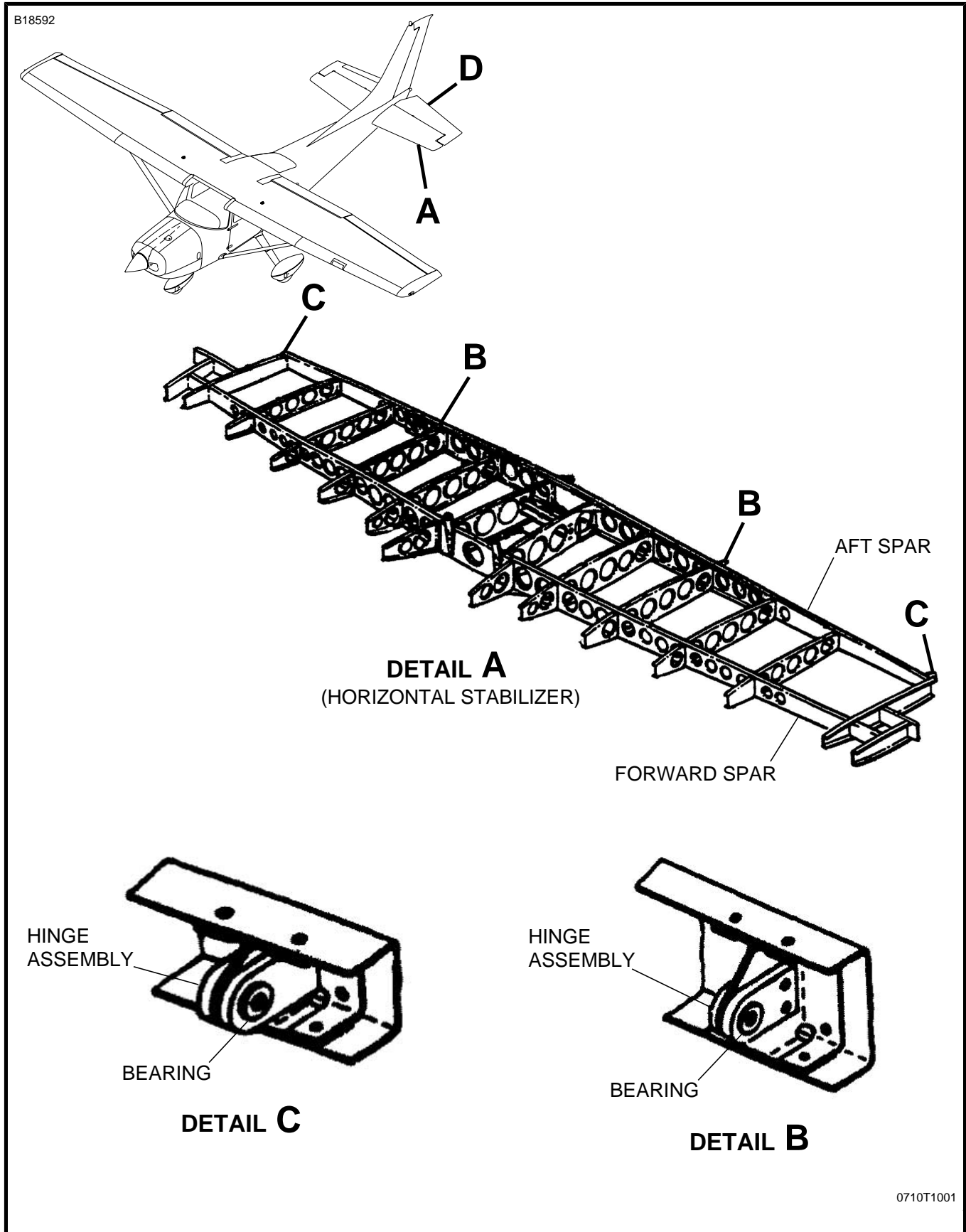
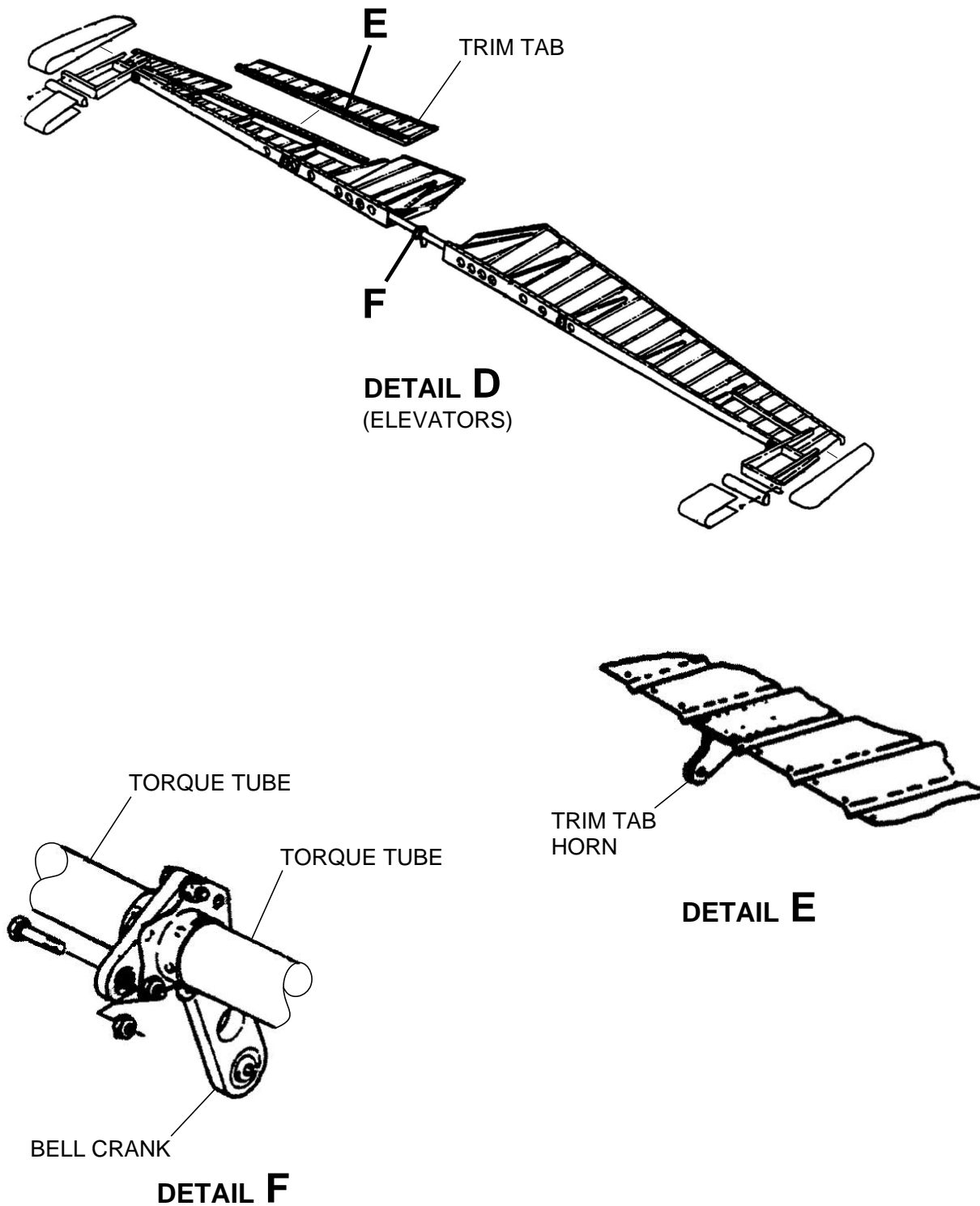


Figure 1 : Sheet 2 : Horizontal Stabilizer, Elevators and Attachments Inspection

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