

CESSNA AIRCRAFT COMPANY
MODEL 100 SERIES (1963 - 1968)
SERVICE MANUAL

SUPPLEMENTAL INSPECTION NUMBER: 55-10-01

1. TITLE:

Horizontal Stabilizer, Elevators and Attachments Inspection - All Models

2. EFFECTIVITY

Model 150 Serial Numbers 644, 649, 15059701 thru 15069308,
Model F150 Serial Numbers F150-0001 thru F150-0389,
Model 172 Serial Numbers 639, 17249545 thru 17257161,
Model F172 Serial Numbers F172-0001 thru F172-0559,
Model P172 Serial Numbers P17257120 thru P17257188,
Model FP172 Serial Numbers FP172-0001 thru FP172-0003,
Model 180 Serial Numbers 645, 18051184 thru 18051993,
Model 182 Serial Numbers 18254424 thru 18259305,
Model A182 Serial Numbers A182-0001 thru A182-0116,
Model 185 Serial Numbers 185-0513 thru 185-1149,
Model A185 Serial Numbers 185-0968 thru 185-1447

INSPECTION COMPLIANCE

ALL USAGE:	INITIAL	5,000 Hours	or	20 Years (NOTE)
	REPEAT	2,000 Hours	or	5 Years (NOTE)

NOTE: Refer to Note 1, Section 2A-14-00.

3. PURPOSE

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

4. INSPECTION INSTRUCTIONS

- A. Open all stabilizer and elevator access panels, including the stinger and vertical stabilizer to horizontal tail fairings. Refer to the Model 100 Series Service Manual.
- B. Visually inspect stabilizer and elevator for condition, cracks and security; elevator hinges, hinge bolts, hinge bearings for condition and security; bearings for freedom of rotation; attach fittings for evidence of damage, wear, failed fasteners and security. Refer to Figure 1.
 - (1) Clean area before inspecting if grime or debris is present.
- C. 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.
 - (1) Clean area before inspecting if grime or debris is present.
- D. 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.
 - (1) Clean area before inspecting if grime or debris is present.
- E. 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 2A-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.
- F. 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.
- G. Install all previously removed access panels. Refer to the Model 100 Series Service Manual.

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5. ACCESS AND DETECTABLE CRACK SIZE

ACCESS/LOCATION

Horizontal Tail

DETECTABLE CRACK SIZE

Not Allowed

6. INSPECTION METHOD

Visual with Eddy Current if required.

7. REPAIR/MODIFICATION

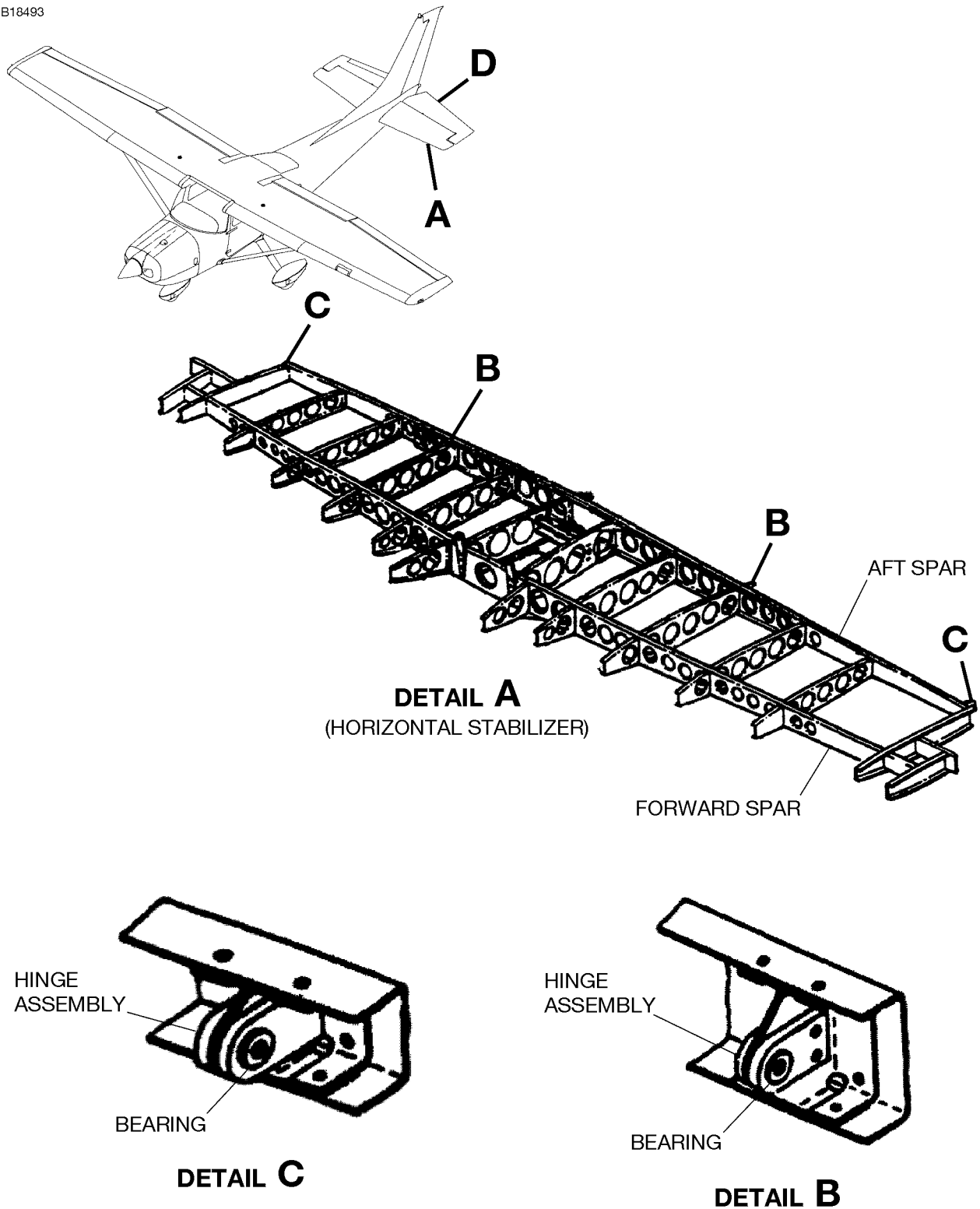
Replace damaged bolts and nuts. Replace damaged fittings and small parts. Replace damaged or loose rivets. Hinge bearings are pre-packed with grease, which will eventually oxidize and harden after years of service. Several applications of penetrating oil will help free up a stiff bearing. It is the owner's/operator's option to replace stiff bearings. Repairs may be made in accordance with Section 19 (Structural Repair) of the Model 100 Series Service Manual. Any repair not available in Section 19 should be coordinated 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.

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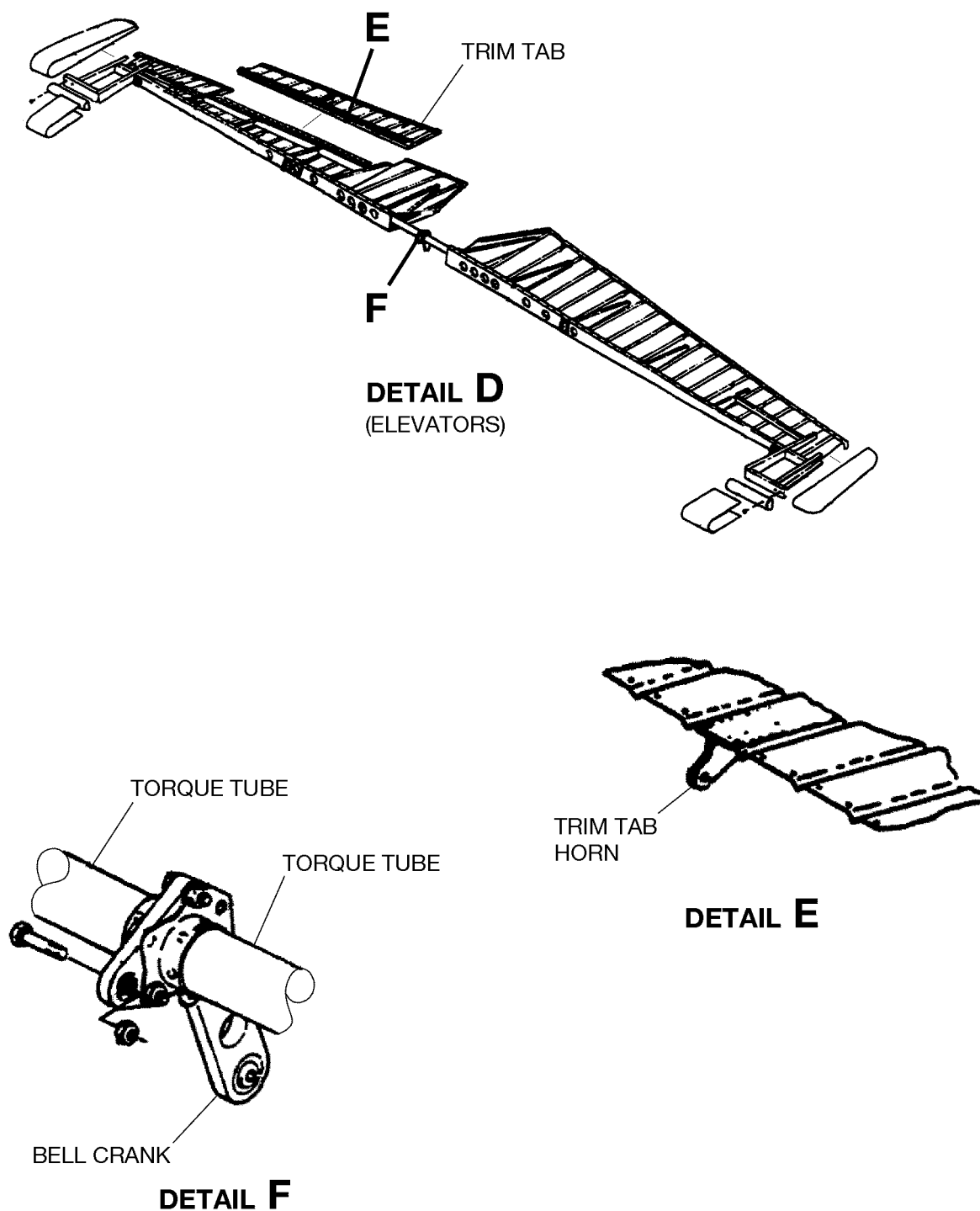
NOTE: MODEL 182 SHOWN, OTHER MODELS TYPICAL.

HORIZONTAL STABILIZER, ELEVATORS AND ATTACHMENTS INSPECTION - ALL MODELS
 Figure 1 (Sheet 1)

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NOTE: MODEL 182 SHOWN, OTHER MODELS TYPICAL.

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HORIZONTAL STABILIZER, ELEVATORS AND ATTACHMENTS INSPECTION - ALL MODELS
 Figure 1 (Sheet 2)