

CESSNA AIRCRAFT COMPANY
MODEL 150 SERIES (1969 - 1976)
SERVICE MANUAL

SUPPLEMENTAL INSPECTION NUMBER: 55-10-01

1. **TITLE:**
Horizontal Stabilizer, Elevators and Attachments Inspection

2. **EFFECTIVITY**
15069309 thru 15078505,
F15000390 thru F15001338,
A15000001 thru A1500684,
FA15000001 thru FA1500120,
FRA1500121 thru FRA1500311

INSPECTION COMPLIANCE

ALL USAGE: INITIAL 10,000 Hours or 20 Years **(NOTE)**
REPEAT 2,000 Hours or 4 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 applicable Model 150 Service Manual.
- B. Visually inspect 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. Refer to Figure 1.
- (1) Clean area before inspecting if grime or debris is present.
 - (2) If cracks or frozen bearings are found, conduct a surface eddy current inspection. 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.
- C. 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. Refer to Figure 1, Detail F.
- (1) Clean area before inspecting if grime or debris is present.
- D. Using a borescope inspect forward and aft stabilizer and elevator spars, ribs and attach fittings for cracks, corrosion, loose fasteners, elongated fastener attach holes, signs of fatigue and deterioration.
- (1) Clean area before inspecting if grime or debris is present.
 - (2) 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.
 - (3) With the inspection plate on top of the horizontal stabilizer removed, pay particular attention to the forward side of the aft spar where the 0432001-15 reinforcement and 0432004 bracket are installed. Refer to Figure 1, Detail B.
 - (4) Visually inspect the forward stabilizer attachment bulkhead for loose rivets and cracks.
 - (5) Visually inspect the forward side of the front spar.
- E. Gain access to the 0432004 bracket. Remove both the 0432004 bracket and 0432001-15 reinforcement from the horizontal aft spar and visually inspect for cracks.
- (1) Clean area before inspecting if grime or debris is present.

CESSNA AIRCRAFT COMPANY
MODEL 150 SERIES (1969 - 1976)
SERVICE MANUAL

- F. Visually inspect the trailing edge portion of the elevator for indications of cracks, corrosion and deterioration. Visually inspect the attachment of the trim tab horn to the trim tab. Refer to Figure 1, Detail E.
- G. Install all previously removed access panels according to the applicable Model 150 Service Manual.

5. ACCESS AND DETECTABLE CRACK SIZE

ACCESS/LOCATION

Horizontal Tail

DETECTABLE CRACK SIZE

Not Allowed

6. INSPECTION METHOD

Visual and Eddy Current

7. REPAIR/MODIFICATION

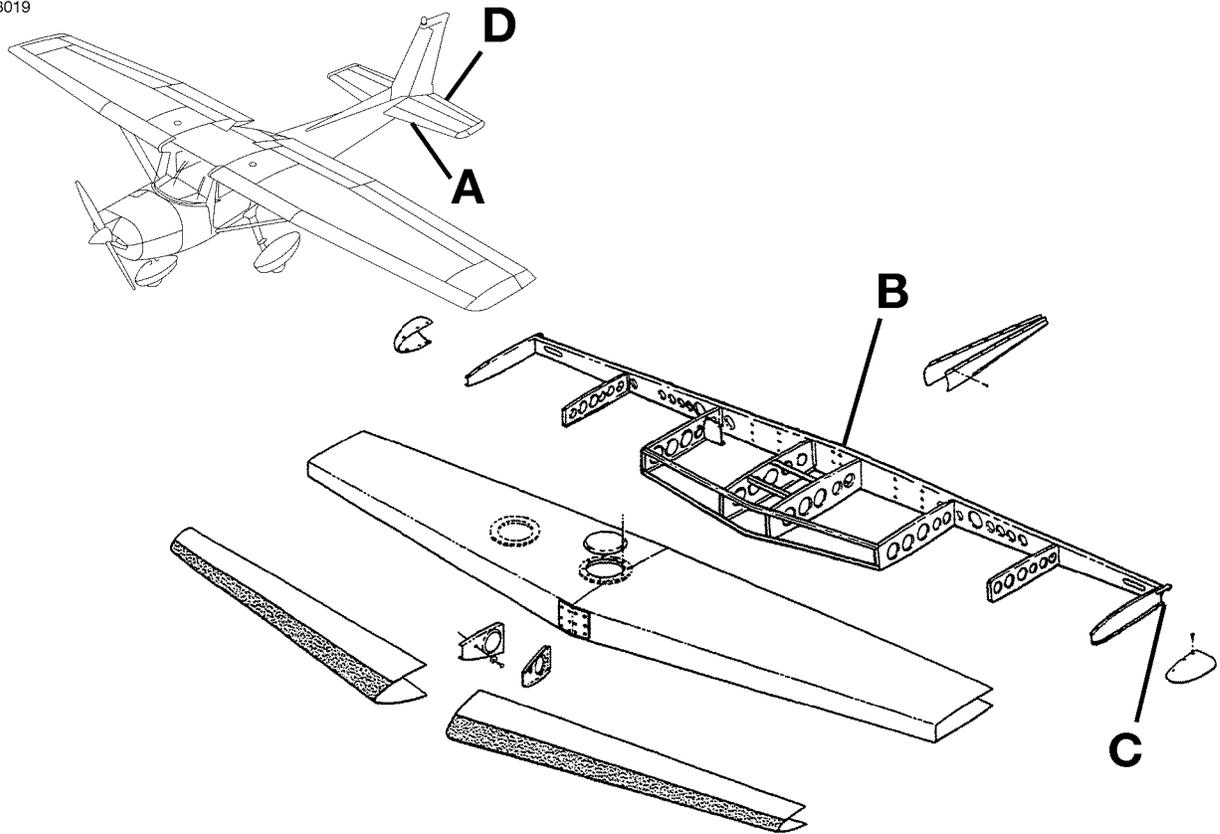
Replace damaged bolts and nuts. Replace damaged fittings and small parts. Replace damaged or loose rivets. Hinge bearings are prepacked with grease, which will eventually oxidize and harden after years of service. Several applications of penetrating oil will help free up a stiff bearing. It is the owner/operator option to replace stiff bearings. Repairs may be made in accordance with Section 18 (Structural Repair) of the applicable Model 150 Service Manual. Any repair not available in Section 18 should be coordinated with Cessna Customer Service prior to beginning the repair.

8. COMMENTS

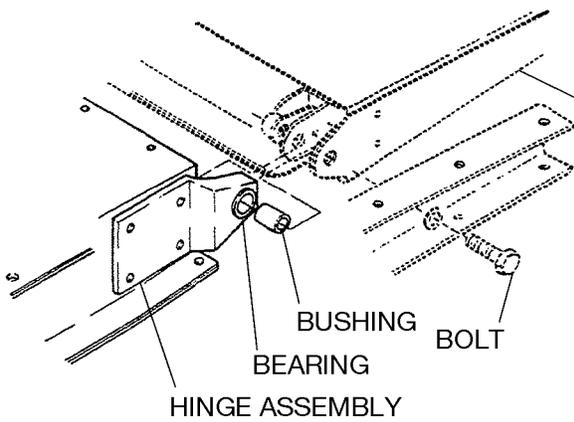
Coordinate this inspection with SID 55-30-01, Vertical Stabilizer, Rudder and Attachments Inspection.

CESSNA AIRCRAFT COMPANY
MODEL 150 SERIES (1969 - 1976)
 SERVICE MANUAL

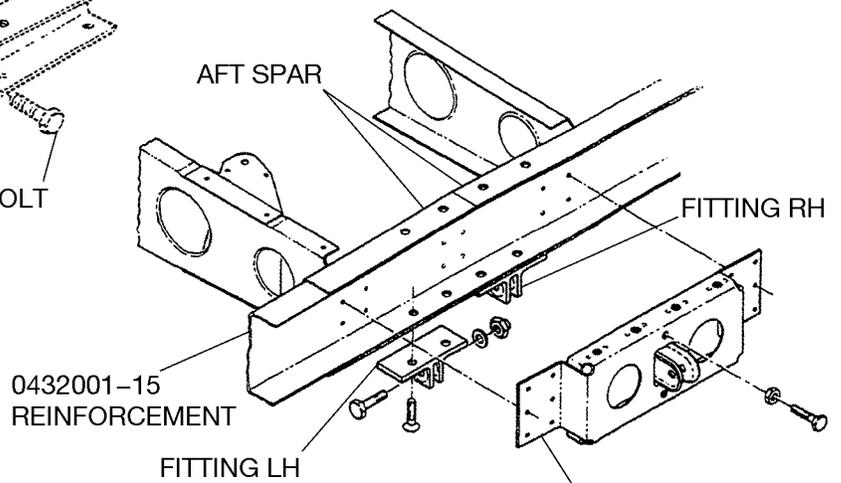
B18019



DETAIL A
 HORIZONTAL STABILIZER



DETAIL C



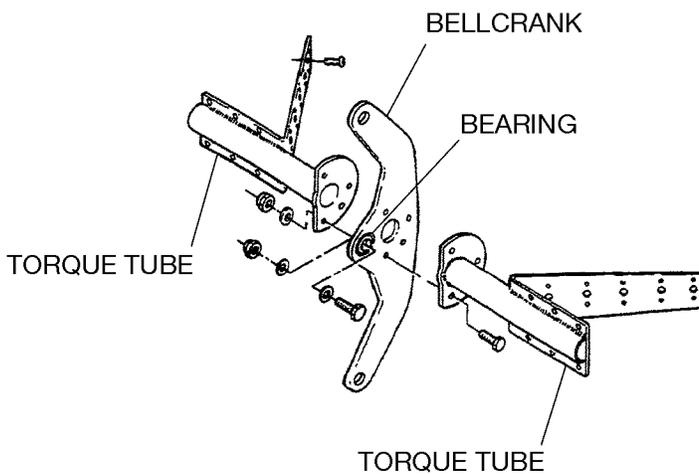
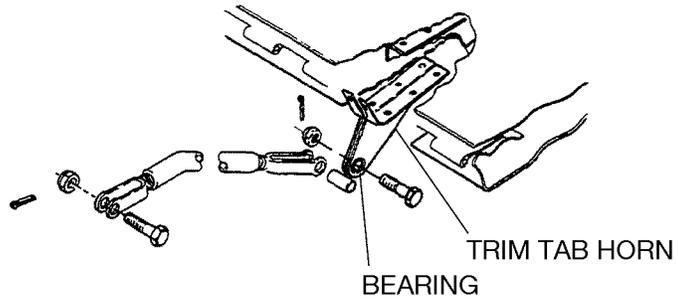
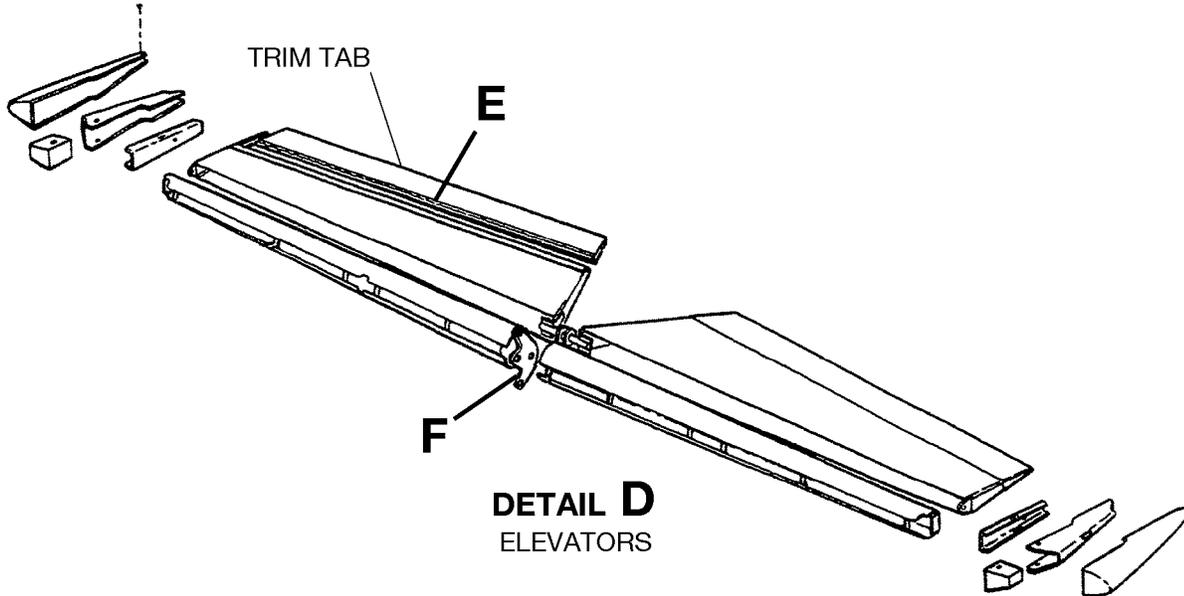
DETAIL B

0432004
 BRACKET
 0410T1003
 A0432R1001
 B0432R1001
 C0432R1001

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

CESSNA AIRCRAFT COMPANY
MODEL 150 SERIES (1969 - 1976)
SERVICE MANUAL

B18020



D0434R1001
E0434R1001
F0434R1001

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