SUPPLEMENTAL INSPECTION NUMBER: 55-10-01

1. TITLE:
Horizontal Stabilizer, Elevators and Attachments Inspection

2. EFFECTIVITY
18265176 thru 18268615,
F18200026 thru F18200169

		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 2A-14-00.

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

4. INSPECTION INSTRUCTIONS

A. Check airplane records to verify that SEB03-1 has been accomplished. If not, complete SEB03-1 with this inspection.

B. Open all stabilizer and elevator access panels, including the stinger and vertical stabilizer to horizontal tail fairings. Refer to the applicable Model 182 Service Manual.

C. 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.

D. 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.

E. 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.

F. 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.

G. 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.

H. Install all previously removed access panels. Refer to the applicable Model 182 Service Manual.

5. ACCESS AND DETECTABLE CRACK SIZE

ACCESS/LOCATION	DETECTABLE CRACK SIZE
Horizontal Tail	Not Allowed

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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. Repairs may be made in accordance with Section 18 (Structural Repair) of the applicable Model 182 Service Manual. Coordinate any repair not available in Section 18 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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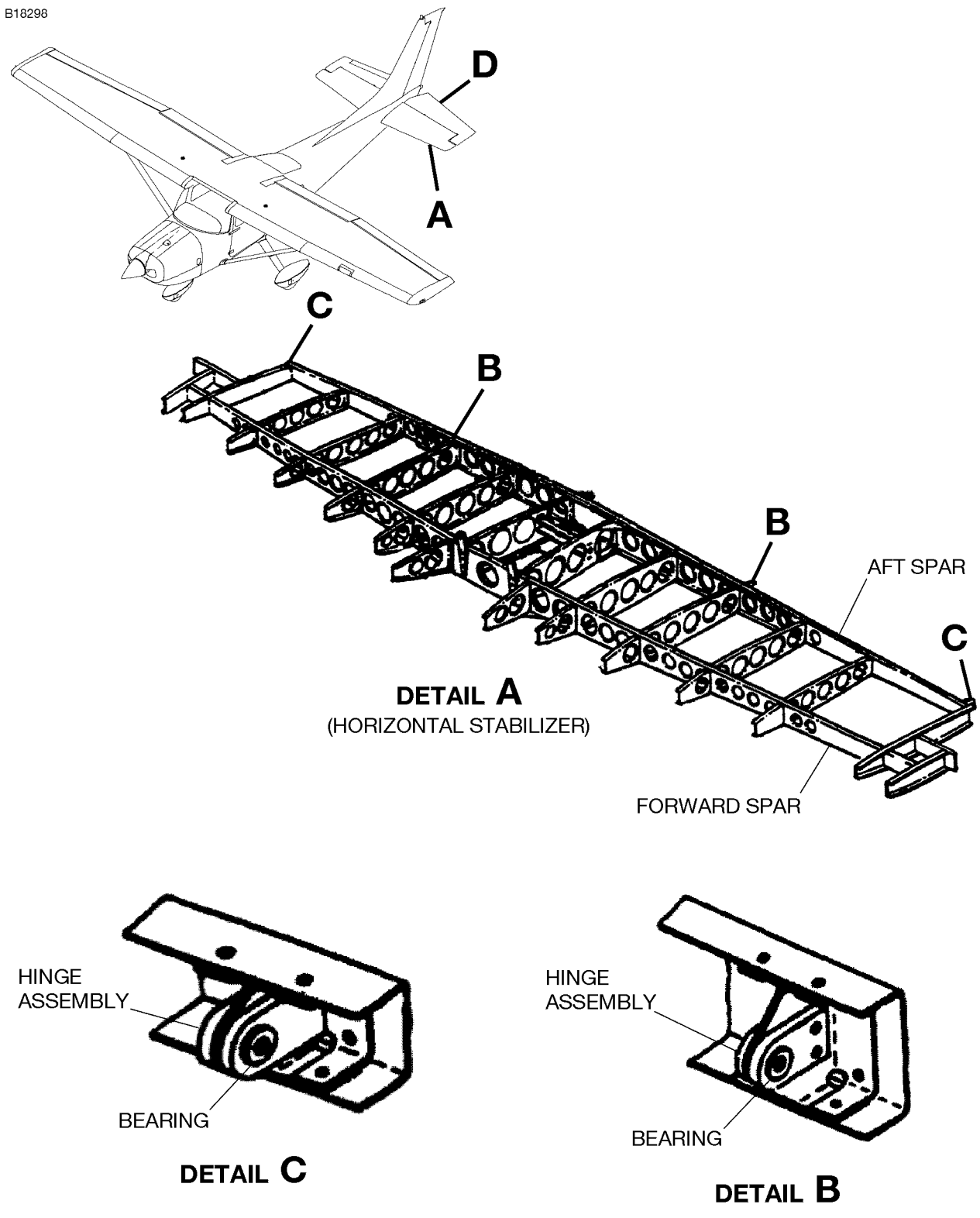

HORIZONTAL STABILIZER, ELEVATORS AND ATTACHMENTS INSPECTION
Figure 1 (Sheet 1)

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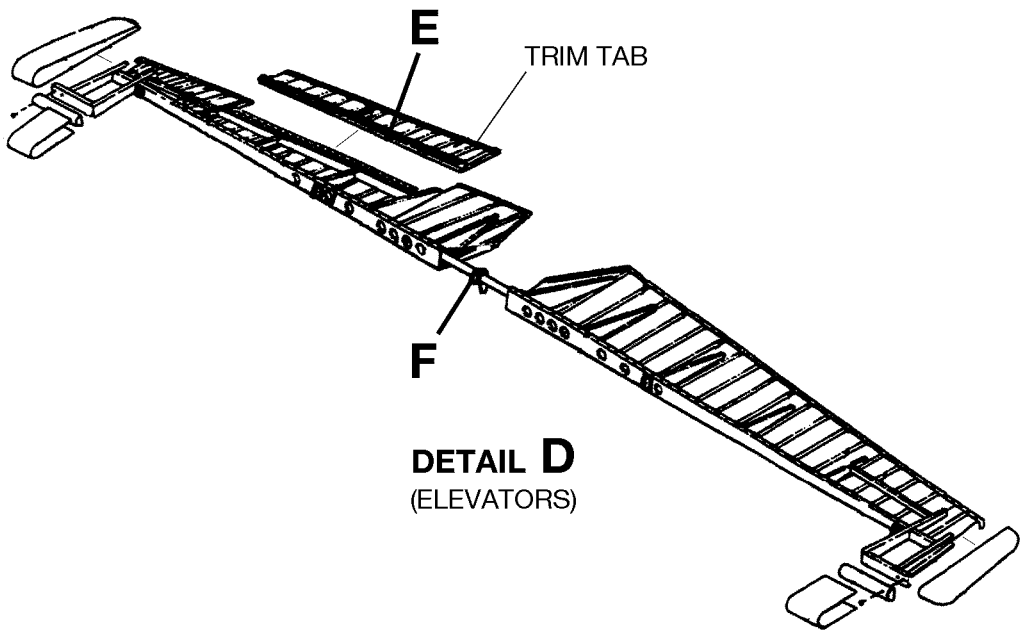
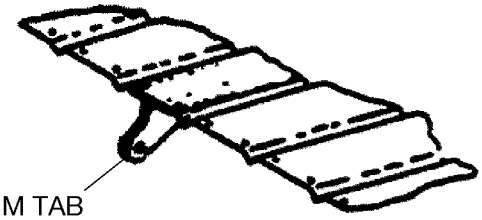
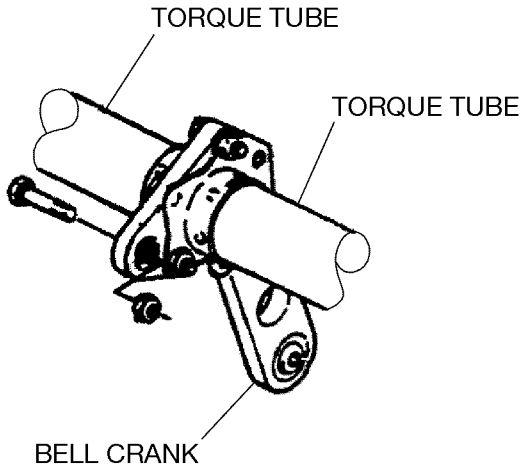


DETAIL D
(ELEVATORS)



DETAIL E



DETAIL F

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

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