

**DOCKET No.: SA-521**  
**EXHIBIT No. 7M**

**NATIONAL TRANSPORTATION SAFETY BOARD**  
**WASHINGTON, D.C.**

**AIRWORTHINESS GROUP CHAIRMAN'S FACTUAL REPORT**  
**ATTACHMENT XII: Emery FCD No. A27-8**

**EMERY WORLDWIDE AIRLINES  
FLEET CAMPAIGN DIRECTIVE**

No. A27-8

Issue

Date: 3-16-01

Rev. Original

Task Code: 827310

Title: Elevator Push/Pull Rod End Bolt  
Installation Inspection.

Reference: IPC 27-30-01 -020 FN 90  
DC-8 M/M 27-30-XX

Compliance

Requested:

Complete entire fleet no later than 4-2-01

Approved by:

Manpower:

8 Man Hours

Equipment Affected:

EWA DC-8 Fleet

Priority:

Mandatory

Author:

Tony Boersma

Publications Affected:

N/A

Weight Change:

N/A

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**Introduction:**

This FCD inspects the elevator control tab push/pull rod ends for proper installation of the bolt, washer, nut, and cotter pin. It also inspects for damage to the push/pull rod and checks clearances of the elevator control tab.

**ACCOMPLISHMENT INSTRUCTIONS:**

**Warning:** To avoid injury to maintenance personnel or damage to equipment, make certain adequate precautions are taken while performing any work if electrical power is applied to the aircraft.

**Caution:** Electrically ground the aircraft.

**Note:** Indicate N/A "Not Applicable" and enter EWA employee number or full signature and certificate number for any step that does not apply.

**Work Instructions:**

1. Make sure that horizontal stabilizer is in neutral position.

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2. Move gust lock control lever (Located on Pilot's control pedestal) to locked position. Safety tag the control column with a maintenance in progress tag.

M

**Note:** If any incorrect installations are found, record how it is incorrect in Step 6, then reinstall correctly.

3. Gain access to elevator control tab pushrod installation as required for inspection of forward and aft rod ends.

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4. Inspect forward end of elevator pushrod, connected to crank and verify that the bolt, washer, nut, and cotter pin are installed correctly (Figure 3).

I - Right Hand

I - Left Hand

**Note:** Correct installation for the forward end of the pushrod is bolt head facing outboard (Threads are inboard of bolt head).

5. Inspect aft end of elevator pushrod, connected to elevator control tab, and verify that the bolt, washer, nut, and cotter pin are installed correctly (Figure 3).

I - Right Hand

I - Left Hand

**Note:** Correct installation for the aft end of the elevator pushrod is bolt head facing inboard (Threads are outboard of bolt head).

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6. Record all inspection findings on Aircraft Maintenance Log and in "Findings" box below. Indicate whether or not the installation was correct, and if incorrect indicate how and accomplish Steps 6.a. and 6.b. as required.

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<u>Findings:</u>
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- a. Correct bolt installation if needed (Right hand side of aircraft).

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- b. Correct bolt installation if needed (Left hand side of aircraft).

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**Note:** Document all work done on Aircraft Maintenance Log.

EWA Quality Control Dept.  
Attn: Director of Quality Control  
Fax: 937-415-7960

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7. Inspect control tab gaps and clearances per Figure 5.

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a. If gaps and clearances are out of limits disconnect rod end to insure that the push/pull rod is not sprung.

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b. Inspect elevator push/pull rod for any damage, remove and replace as required. Reinstall per the DC-8 overhaul manual.

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c. Record all inspection findings of Steps 7., 7.a. and 7.b. on Aircraft Maintenance Log and in "Findings" box below. Indicate whether or not the installation was correct, and if incorrect indicate how.

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Findings:

**Note:** Document all work done on Aircraft Maintenance Log.

8. OK to close panels opened to gain access to push/pull rod assemblies.

I

a. Close up panels that were opened to gain access to push/pull rod installation.

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9. Remove the tags and unlock the gust lock control lever and perform an operational check of the elevator flight controls (Ref. DC-8 M/M 27-30-XX) after all work has been completed.

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10. Make a logbook entry indicating compliance with this FCD. Fax a completed copy of this FCD to EWA Quality Control Department at number listed above.

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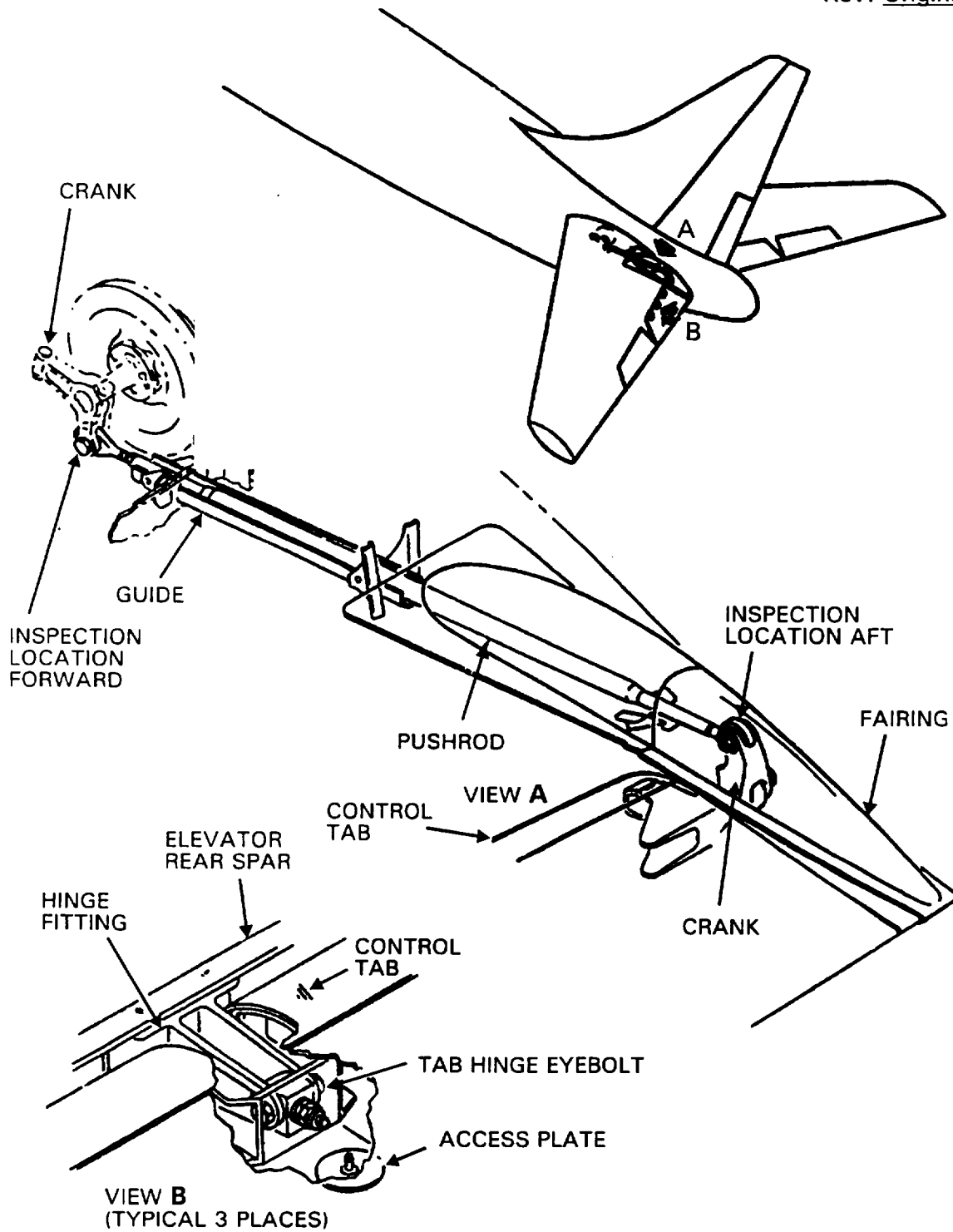
A/C \_\_\_\_\_

Date \_\_\_\_\_

Station \_\_\_\_\_

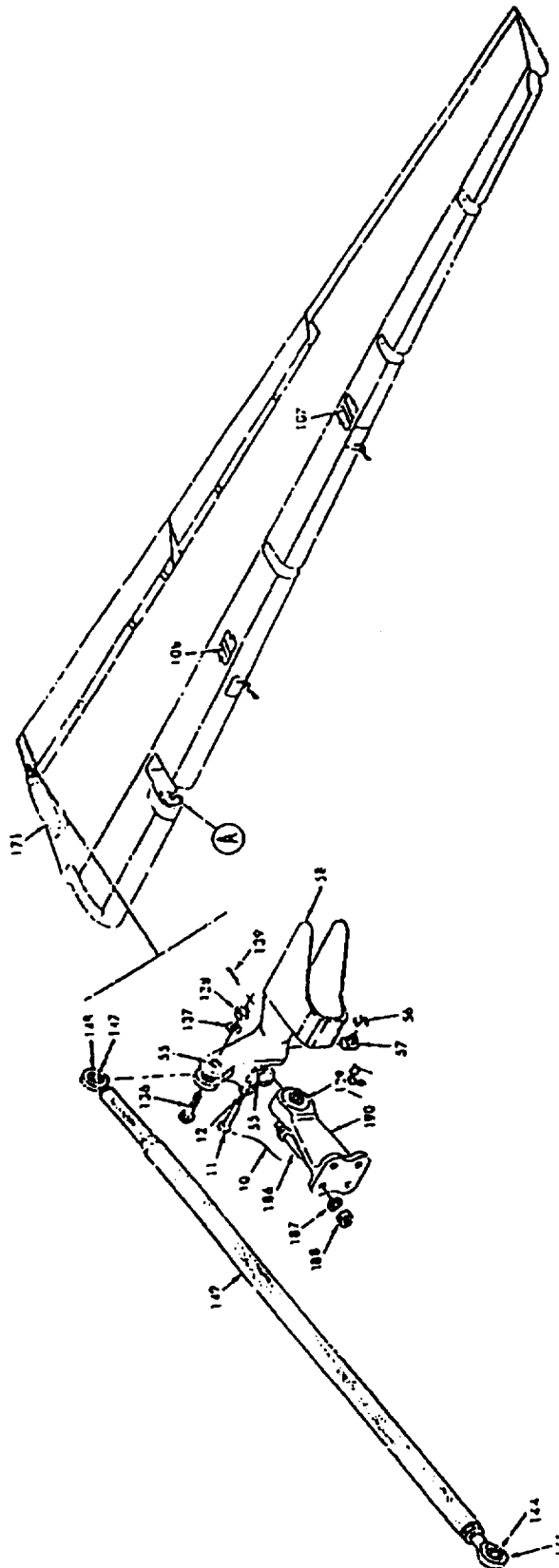
Employee # \_\_\_\_\_

Log Book \_\_\_\_\_



**Figure 1**  
Elevator Control Tab (Installation)





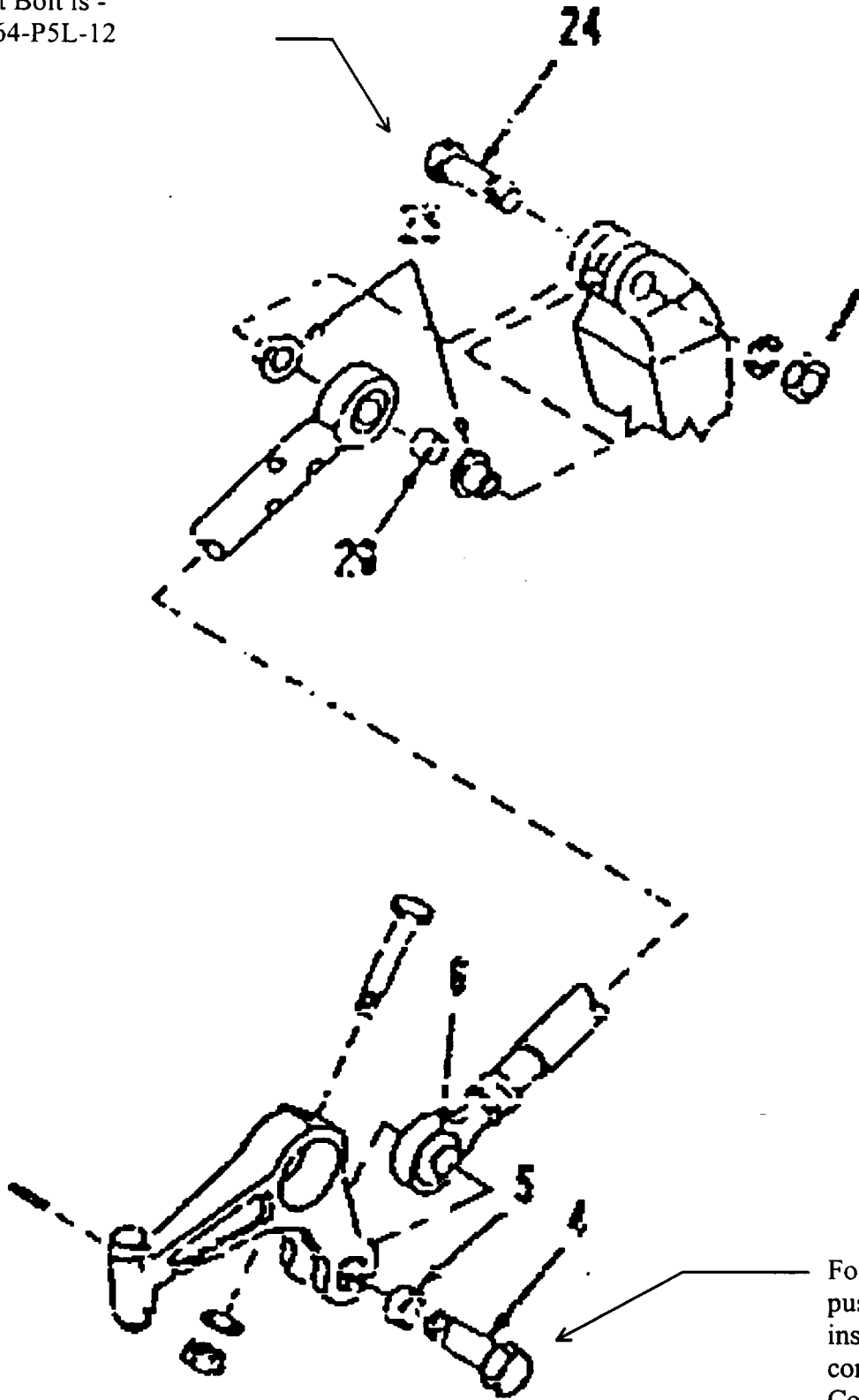
**Figure 2**  
Elevator Control Tab Push/Pull Rod Assembly

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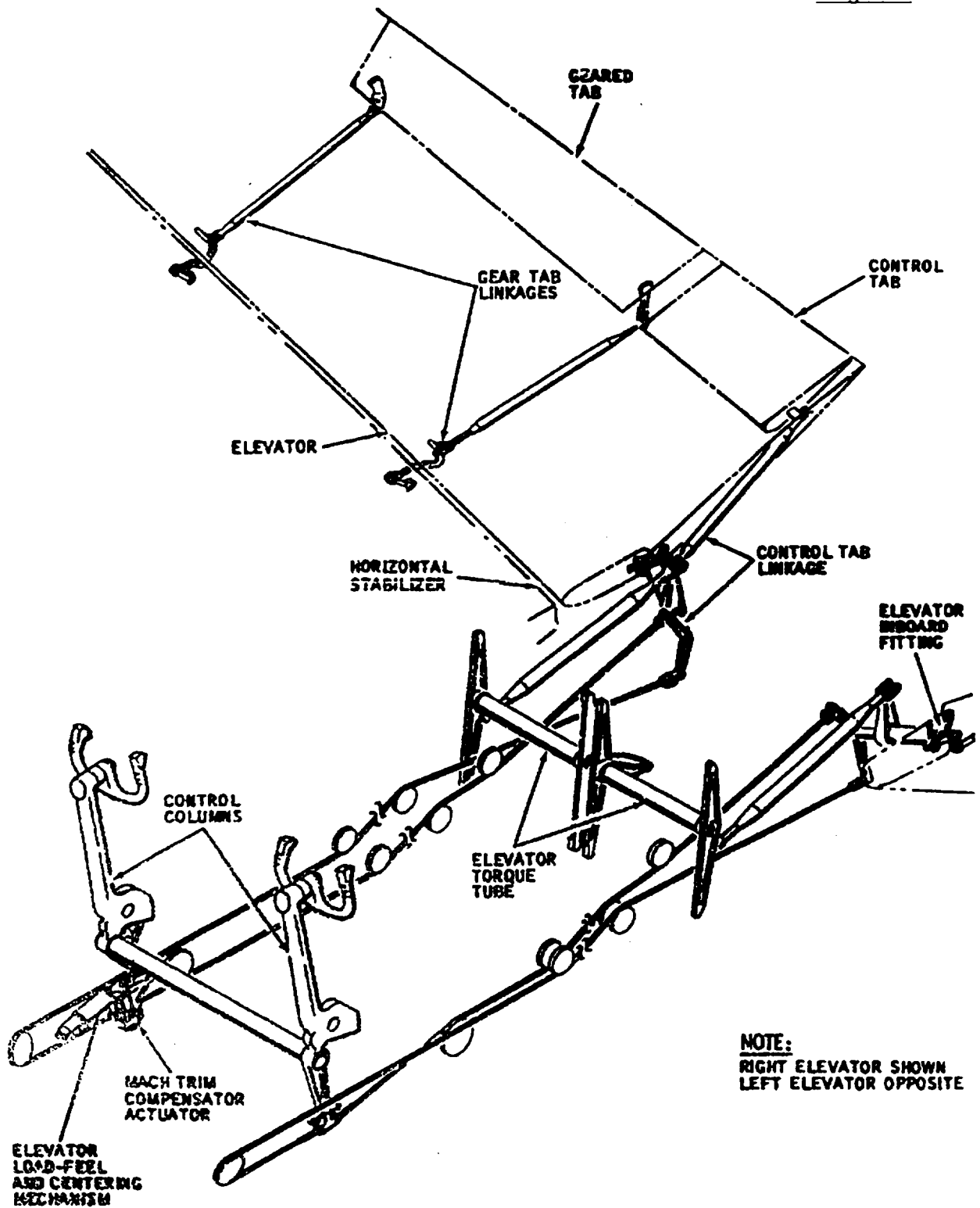
Aft end of push/pull rod  
installation (End connected  
to control tab).  
Correct Bolt is -  
NAS464-P5L-12

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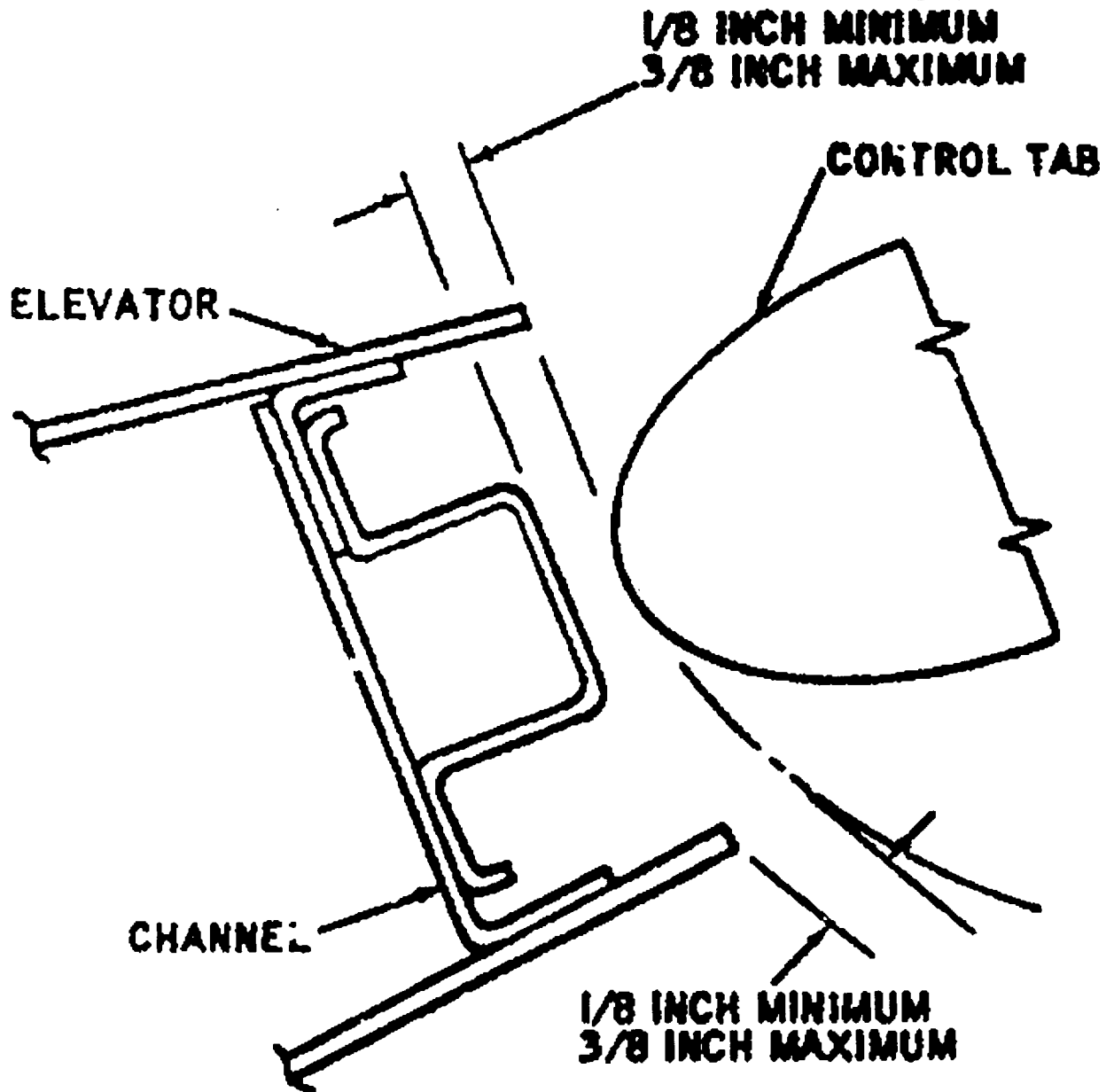


Forward end of  
push/pull rod  
installation (End  
connected to crank).  
Correct Bolt is -  
NAS464-P5L-12

**Figure 3**  
Elevator Control Tab Push/Pull Rod Bolt Installation



**Figure 4**  
Elevator Control System Schematic



**Figure 5**  
Elevator Control Tab Clearances