

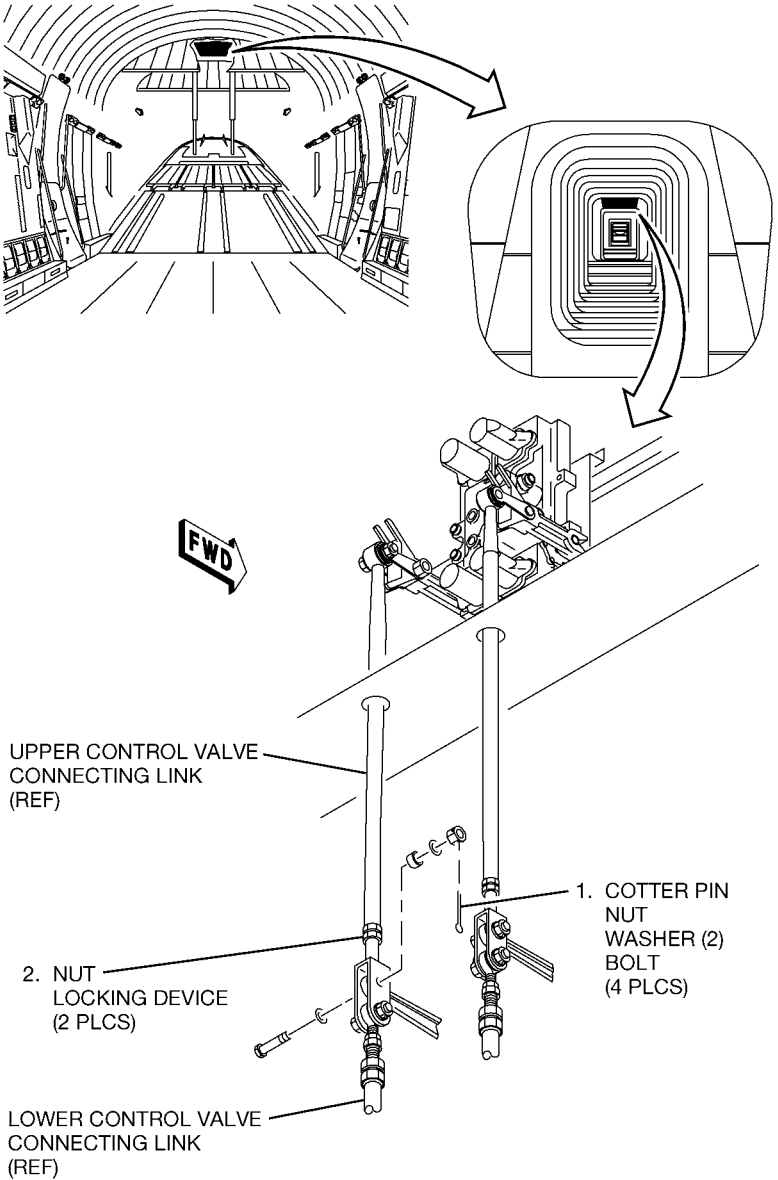
ICN-88277-G2742432-002-01

**01-4. PITCH TRIM VERTICAL STABILIZER CRANK
ASSEMBLIES TO STABILIZER CONTROL
VALVE CRANK ASSEMBLIES ADJUSTMENT.**

NOTE

The stabilizer control valve crank assemblies are
spring loaded to the neutral position.

1. Remove cotter pins, nuts, washers, and bolts from upper and lower control valve connecting links.
2. Remove safety wire; loosen nuts and disconnect locking devices.



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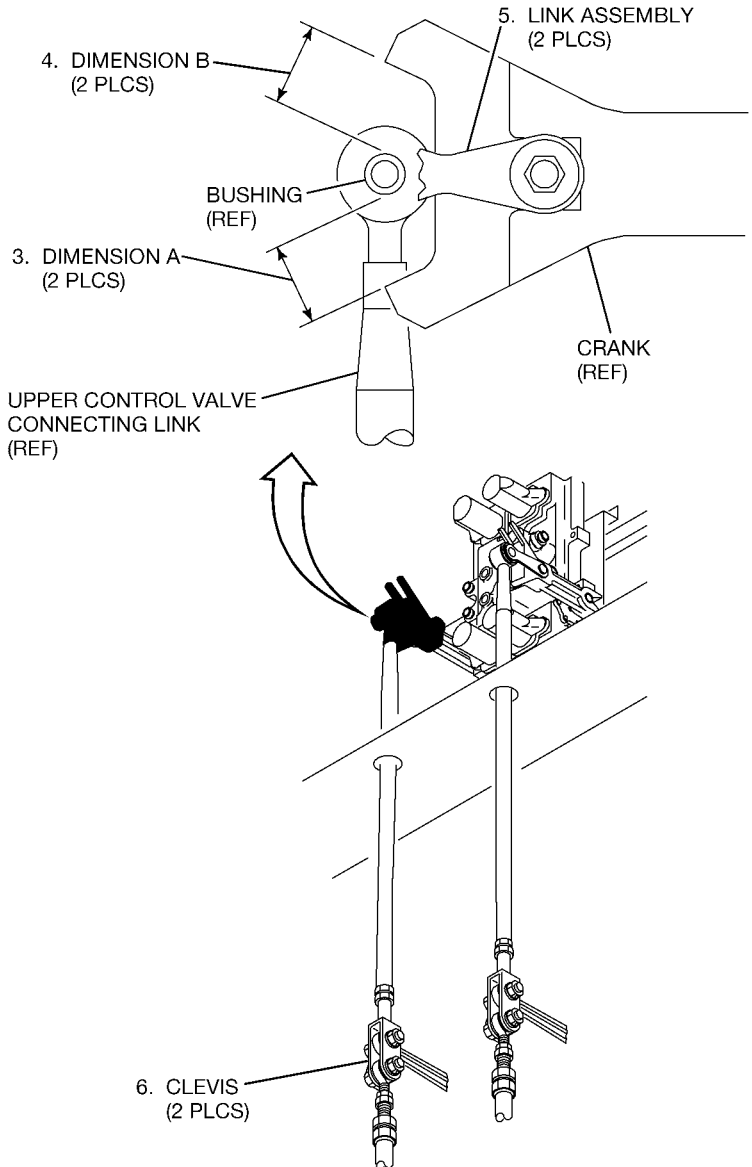
TO 1300i-2-27JG-40-1

3. Measure and record dimension A from inside of crank to edge of bushing of connecting link.
4. Measure and record dimension B from inside of crank to edge of bushing of connecting link.
5. Center link assemblies in cranks.
 - Difference between dimension A and dimension B shall be less than 0.060 inch.

NOTE

Difference between dimension A and dimension B shall remain less than 0.060 inch when adjusting clevises.

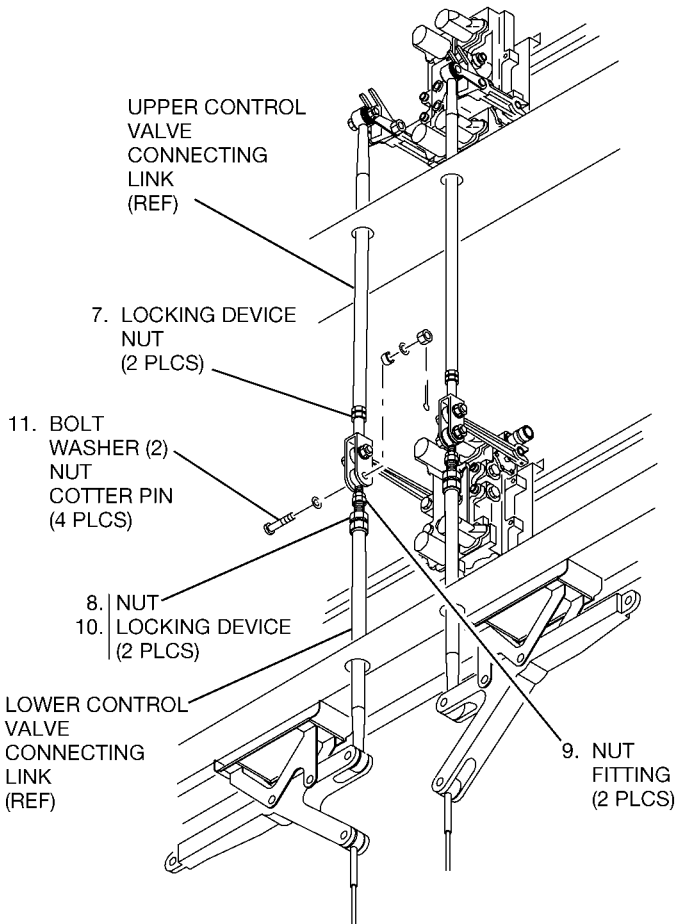
6. Adjust clevises until bolts slip fit.



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TO 1300i-2-27JG-40-1

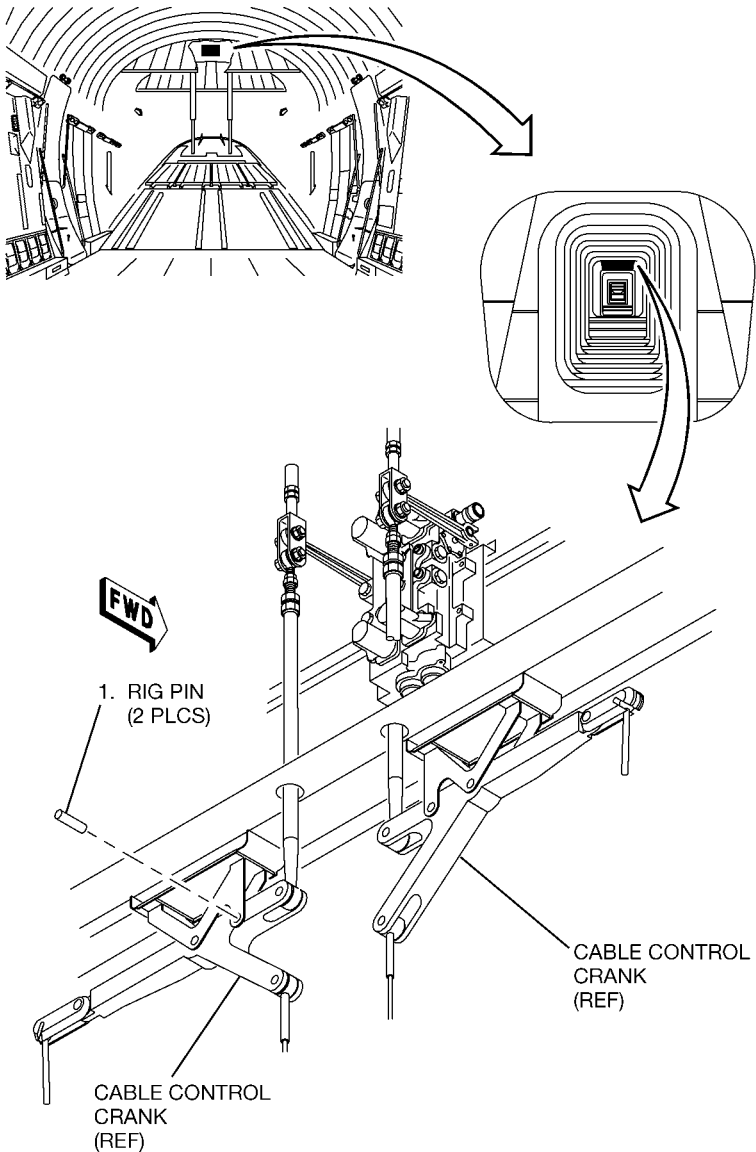
7. Position locking devices and tighten nuts; secure with safety wire.
8. Remove safety wire; loosen nuts on fittings and disconnect locking devices from lower control valve connecting link.
9. Loosen nuts; adjust fittings until bolts slip fit and tighten nuts.
10. Position locking devices and tighten nuts; secure with safety wire.
11. Position upper and lower control valve connecting links; install bolts, washers, nuts, and cotter pins.



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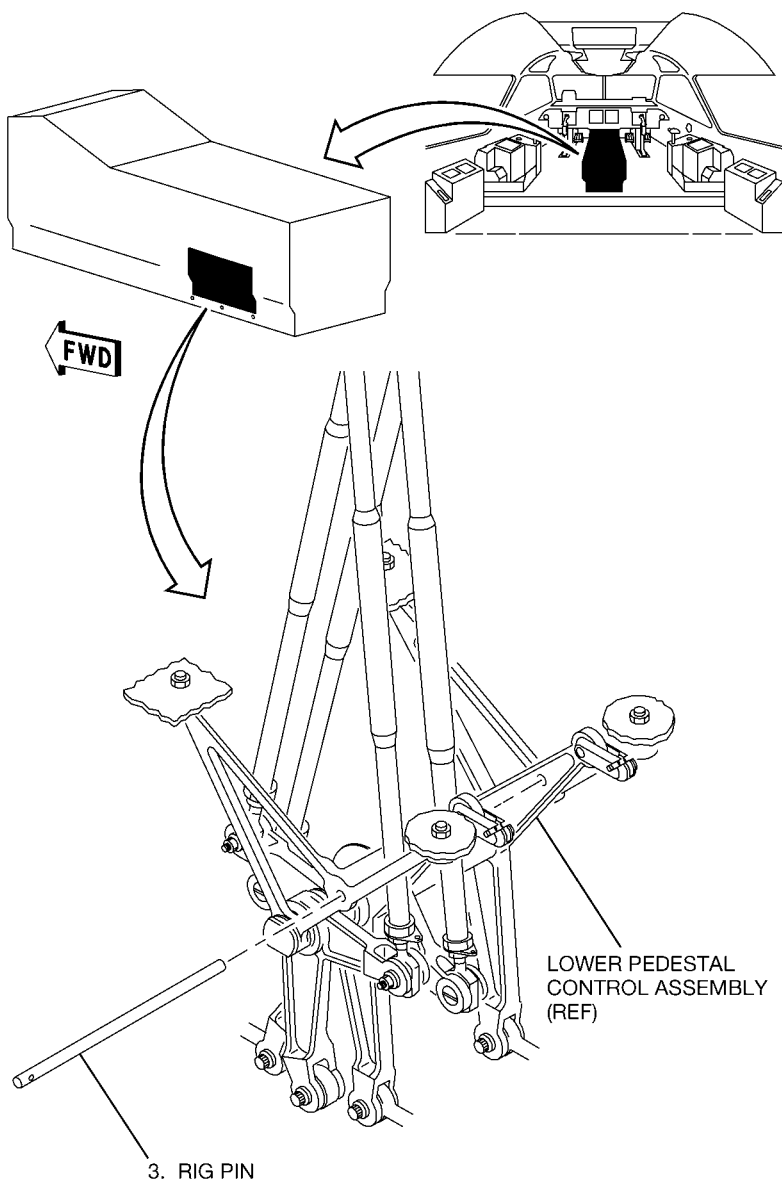
01-5. FOLLOW-ON MAINTENANCE.

1. Remove rig pins 5-3 from cable control cranks.
2. Exit vertical stabilizer (00-00-02, task 02-8).









ICN-88277-G2742251-003-01

3. Remove rig pin 5-8 from lower pedestal control assembly.

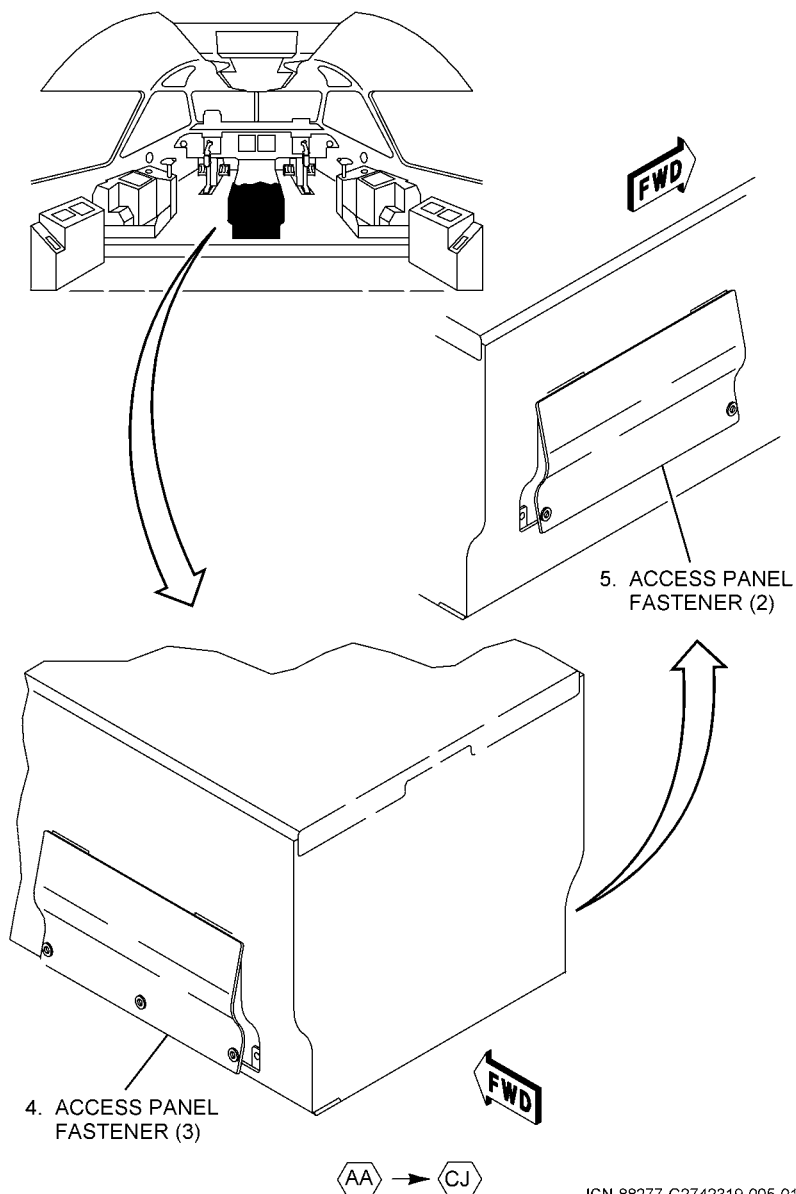


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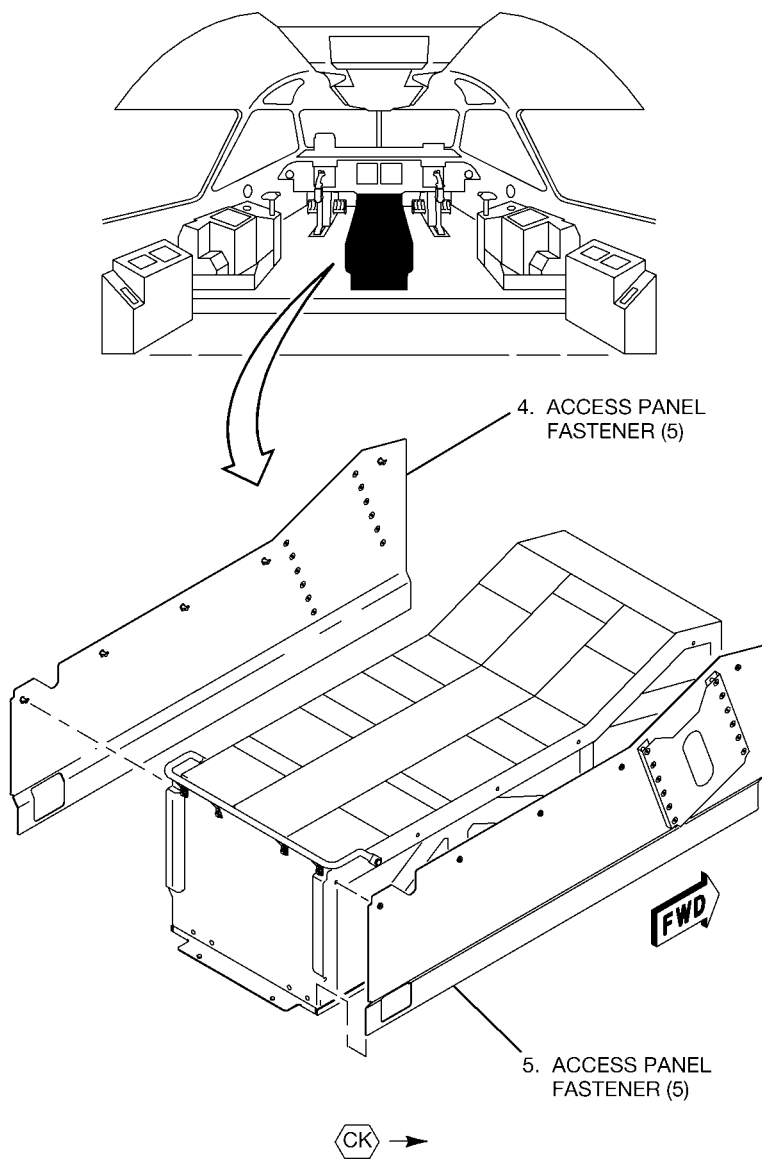
TO 1300i-2-27JG-40-1

- 4.  →  Close access panel (212AZC) and tighten fasteners.
- 4.  → Position access panel (212AZP) and tighten fasteners.
- 5.  →  Close access panel (212BZC) and tighten fasteners.
- 5.  → Position access panel (212BZP) and tighten fasteners.
- 6. Install horizontal pressure panel access cover assemblies (53-12-10).

PANEL NO.	PANEL REF DES
112AZP	5312CA001
112BZP	5312CA002



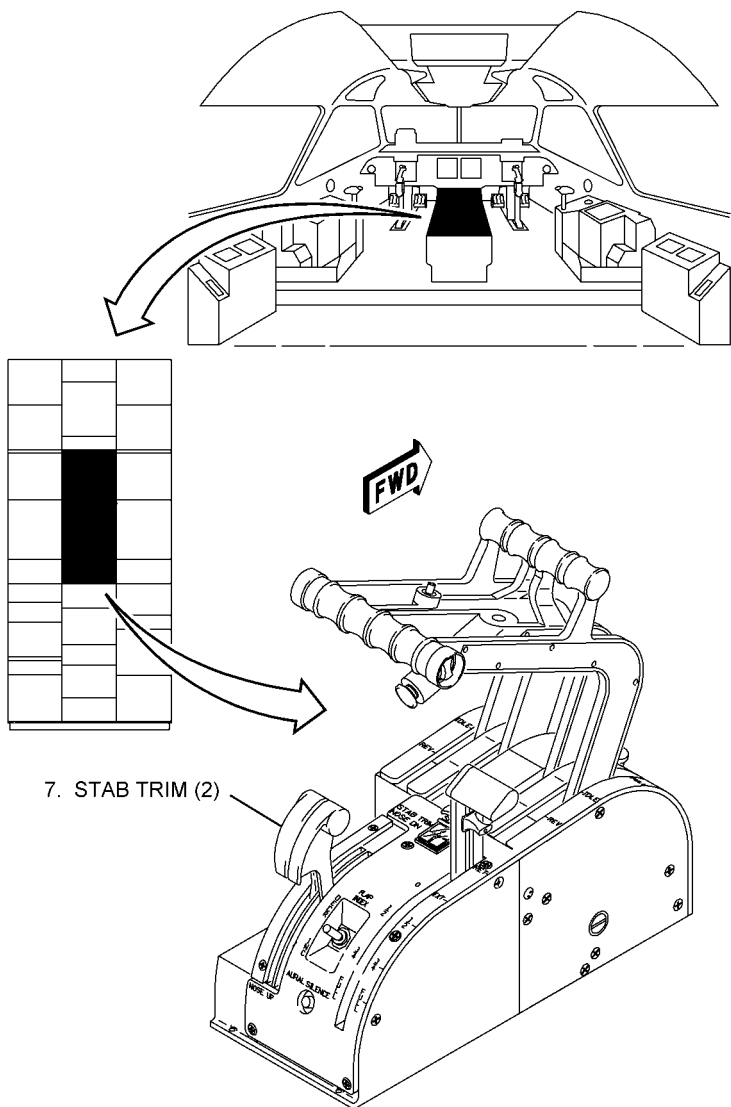
ICN-88277-G2742319-005-01



ICN-88277-G2742435-002-01

TO 1300i-2-27JG-40-1

7. Remove warning tag from **STAB TRIM** handles.
8. Perform horizontal stabilizer system operational checkout (27-40-01, task 01-1).



ICN-88277-G2742255-004-01

**MECHANICAL CONTROLS AND SURFACES
SYSTEM REPAIR
(27-42-02)**

GENERAL MAINTENANCE INPUT CONDITIONS:

Applicability:	Task
All	All

Additional information:

This procedure consists of the following task:

- 02-1. Repair mechanical controls and surfaces system by replacing side roller bearing.

Additional data:	Task
TO 1300i-2-00JG-00-1	All
TO 1300i-2-23JG-40-1	All
TO 1300i-23	All

Personnel recommended:	Task
Two	All
Person (A) performs task.	
Person (B) assists person (A).	

Safety conditions:	Task
NA	--

Support equipment:

<u>Nomenclature</u>	<u>PN</u>	<u>Specification</u>	<u>Qty</u>	<u>Task</u>
Caliper, Vernier	--	(0-24 in.)	1	All

Supplies:

<u>Nomenclature</u>	<u>PN</u>	<u>Specification</u>	<u>Qty</u>	<u>Task</u>
Grease, Aircraft	AEROSHELL GREASE 22	MIL-G-81322	AR	All
Sealant	PR-1775 B-2	AMS 3265	AR	All
Sealant	--	MIL-PRF-81733	AR	All
Shim	4D0047C67-091	--	AR	All
Shim	4D0047E67-091	--	AR	All
Shim	4D0047H67-091	--	AR	All

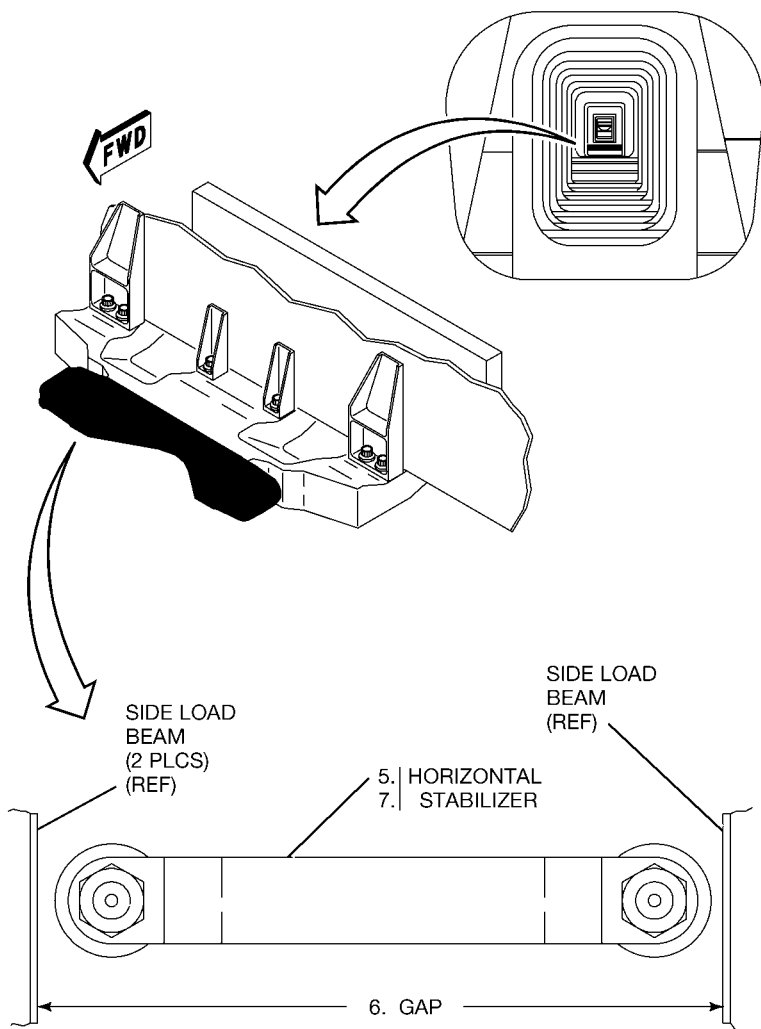
<u>Nomenclature</u>	<u>PN</u>	<u>Specification</u>	<u>Qty</u>	<u>Task</u>
Tag, Warning	--	--	3	All
Wire, Safety	900010-32	--	AR	All

02-1. REPAIR MECHANICAL CONTROLS AND SURFACES SYSTEM BY REPLACING SIDE ROLLER BEARING.

1. Review "Section 1 (General Information)" of this TO for system general warnings, cautions, and notes.
2. Review task "General Maintenance Input Conditions" page for task specific safety conditions.
3. Perform maintenance interphone operation (23-41-02, task 02-3).
4. Enter vertical stabilizer (00-00-02, task 02-1).
5. (A,B) Operate horizontal stabilizer (27-40-02); mark positions on side load beams as follows:

POSITION	DEGREES
Nose Up	3
Nose Down	2
Nose Down	7
Nose Down	12

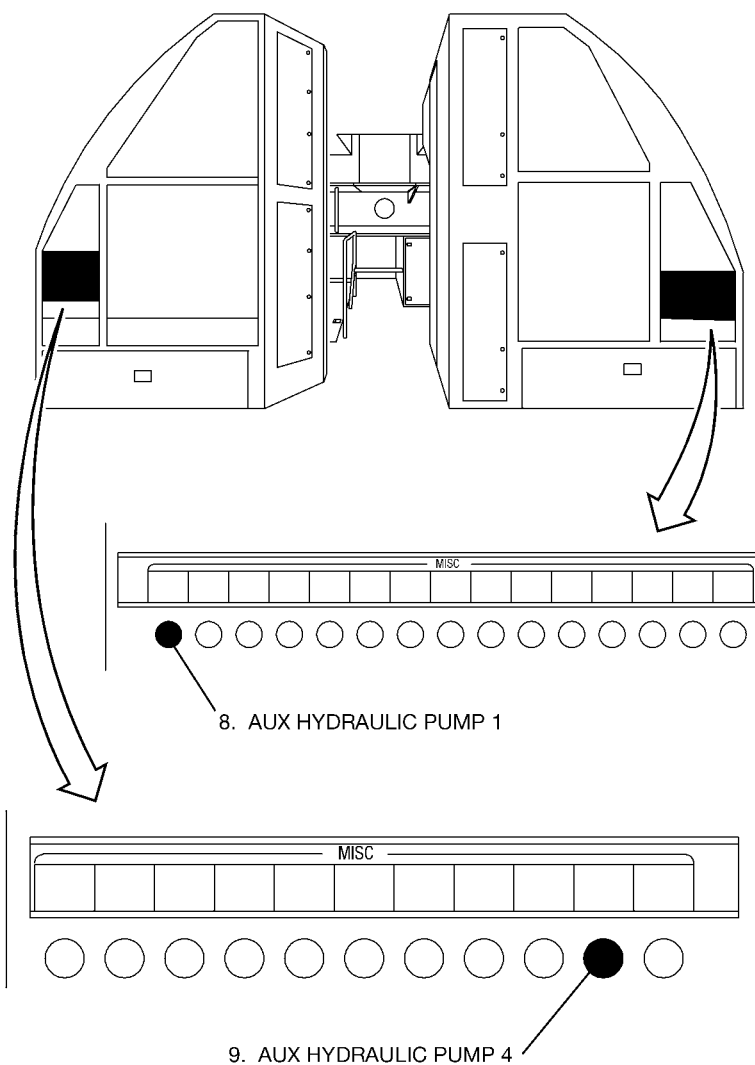
6. (A,B) Measure and record the gap between each of the side load beams at marked positions.
7. (A,B) Operate horizontal stabilizer to the position with the smallest gap.



ICN-88277-G2742310-004-01

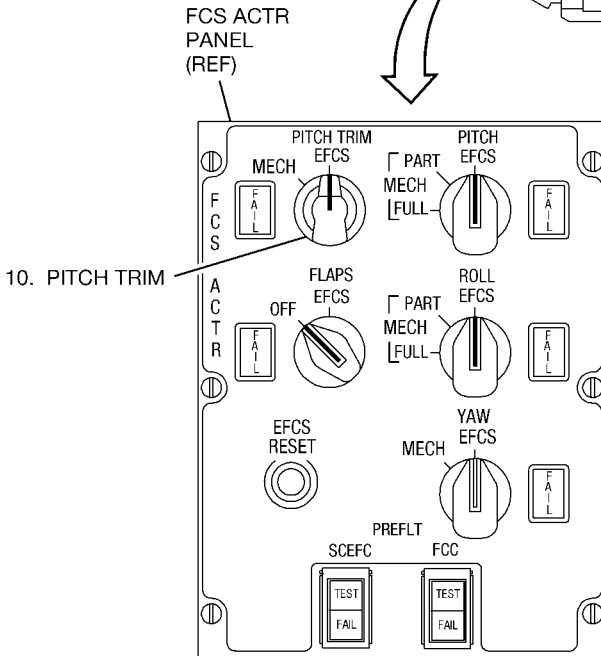
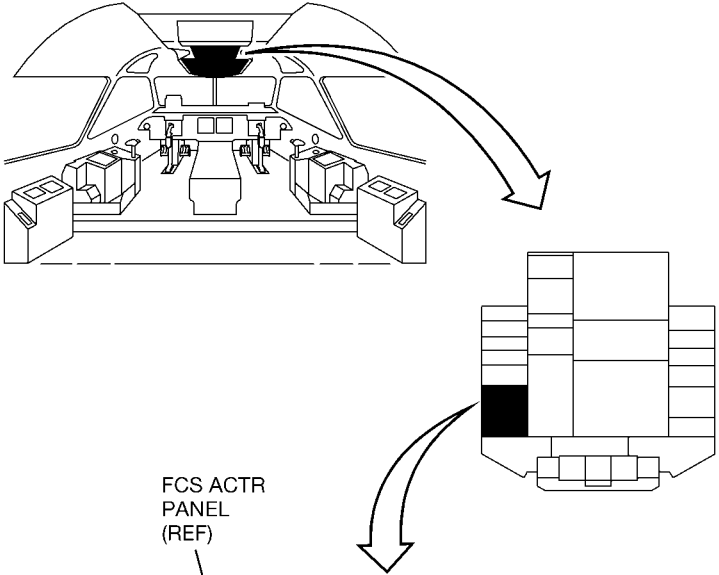
TO 1300i-2-27JG-40-1

8. (B) Open **AUX HYDRAULIC PUMP 1** circuit breaker on Electrical Power Center (EPC), row **LL**, column **68**, and attach warning tag.
9. (B) Open **AUX HYDRAULIC PUMP 4** circuit breaker on EPC, row **LL**, column **10**, and attach warning tag.



ICN-88277-G2742311-003-01

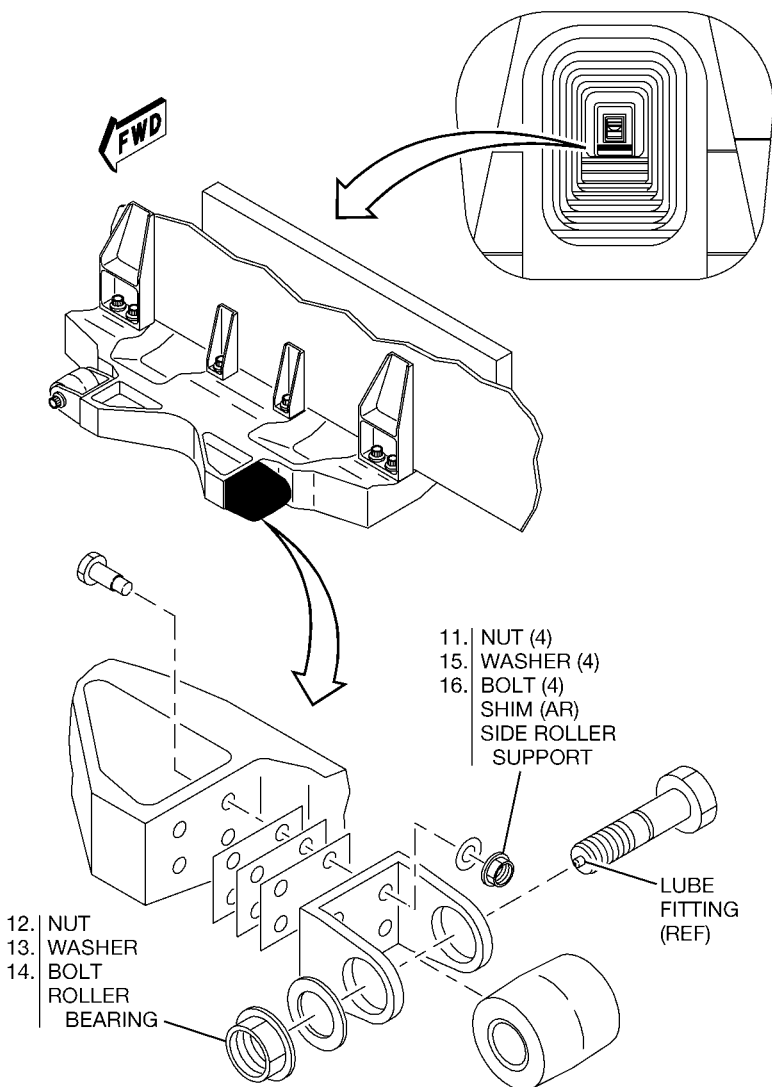
10. (B) Attach warning tag to **PITCH TRIM** switch on **FCS ACTR** panel.



ICN-88277-G2742312-004-01

TO 1300i-2-27JG-40-1

11. (A) Remove nuts, washers, bolts, shims, and side roller support.
12. (A) Remove safety wire, nut, washer, bolt, and roller bearing.
13. (A) Position roller bearing in side roller support; install bolt, washer, and nut.
14. (A) Install safety wire and lubricate bearing.
15. (A) Position shims and side roller support assembly.
16. (A) Install bolts, washers, and nuts.



ICN-88277-G2742303-004-01

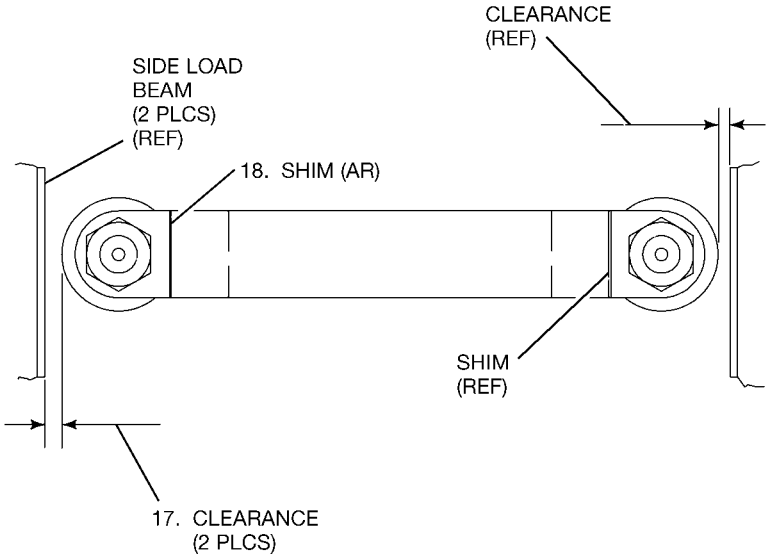
17. (A) Measure clearance at location of smallest distance between rollers and side load beams.

- Clearance should be 0.0 - 0.010 inch.

NOTE

- It may be necessary to reshim either or both side roller support assemblies to adjust roller bearing clearance.
- Total difference in shim thickness side to side shall be 0.020 inch or less.
- No more than three shims per side may be used.

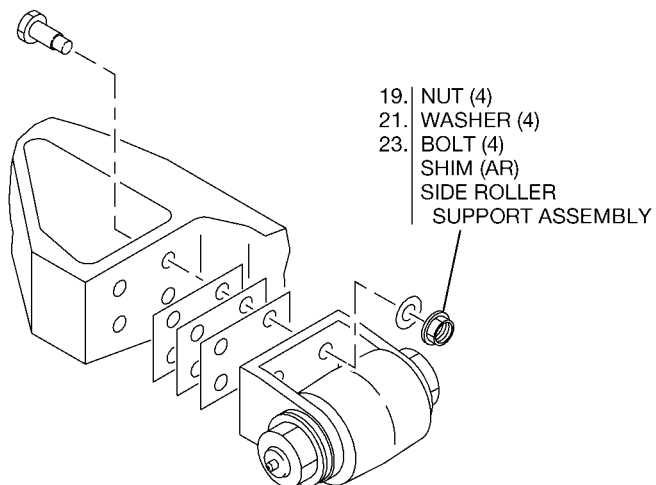
18. (A) Select shims as required.



ICN-88277-G2742313-004-01

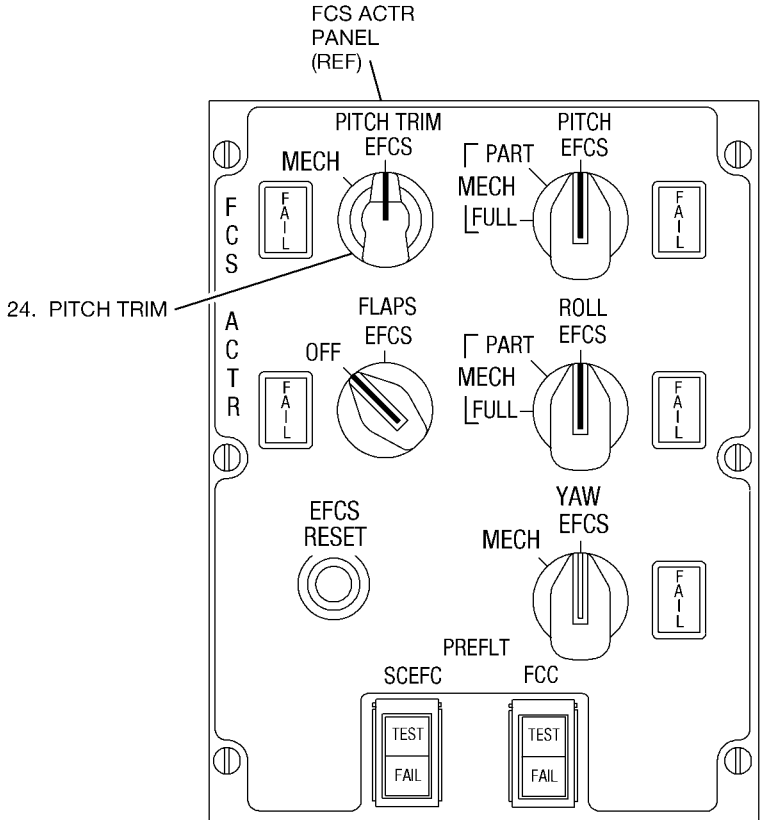
TO 1300i-2-27JG-40-1

19. (A) Remove nuts, washers, bolts, shims, and side roller support assembly.
20. Perform faying surface sealing using MIL-PRF-81733 (TO 1300i-23, Chapter 1, Section III).
21. (A) Position selected shims and side roller support assembly.
22. Perform wet fastener installation using AMS 3265 (TO 1300i-23, Chapter 1, Section III).
23. (A) Install bolts, washers, and nuts.



ICN-88277-G2742314-005-01

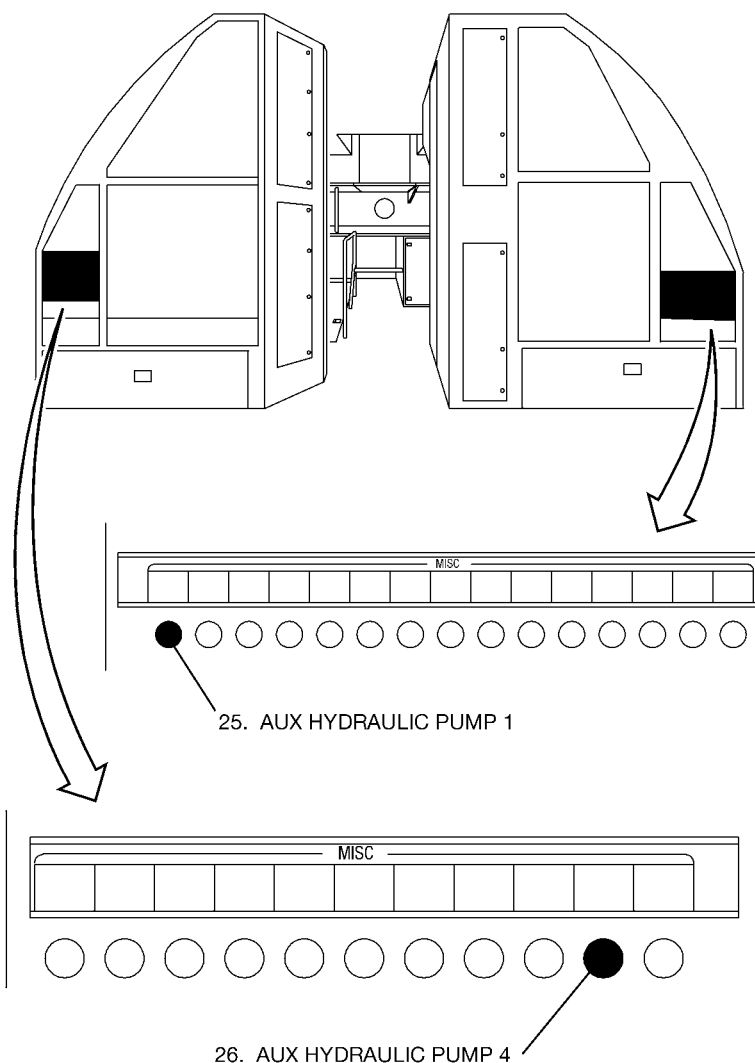
24. (B) Remove warning tag from **PITCH TRIM** switch on **FCS ACTR** panel.



ICN-88277-G2742315-004-01

TO 1300i-2-27JG-40-1

25. (B) Remove warning tag and close **AUX HYDRAULIC PUMP 1** circuit breaker on EPC, row **LL**, column **68**.
26. (B) Remove warning tag and close **AUX HYDRAULIC PUMP 4** circuit breaker on EPC, row **LL**, column **10**.
27. Exit horizontal stabilizer (00-00-02).
28. Perform maintenance interphone shutdown (23-41-02, task 02-4).



ICN-88277-G2742316-003-01

**MECHANICAL CONTROLS AND SURFACES
SYSTEM CABLE TENSION INSPECTION
(27-42-03)**

GENERAL MAINTENANCE INPUT CONDITIONS:

Applicability:	Task
All	All

Additional information:

This procedure consists of the following task:

- 03-1. Cable tension inspection for cable runs 29, 30, 31, and 32.

Additional data:	Task
NA	--

Personnel recommended:	Task
One	All

Safety conditions:	Task
---------------------------	-------------



The horizontal pressure panel access cover(s) are removed in these tasks to gain access to the cavity above. When rudder, aileron, and elevator aircraft ground safety locks are not installed, care shall be taken working around rudder, aileron, and elevator cables, pulleys, and linkage due to possible moving parts. Failure to comply may cause injury to personnel.	All
--	-----

Support equipment:

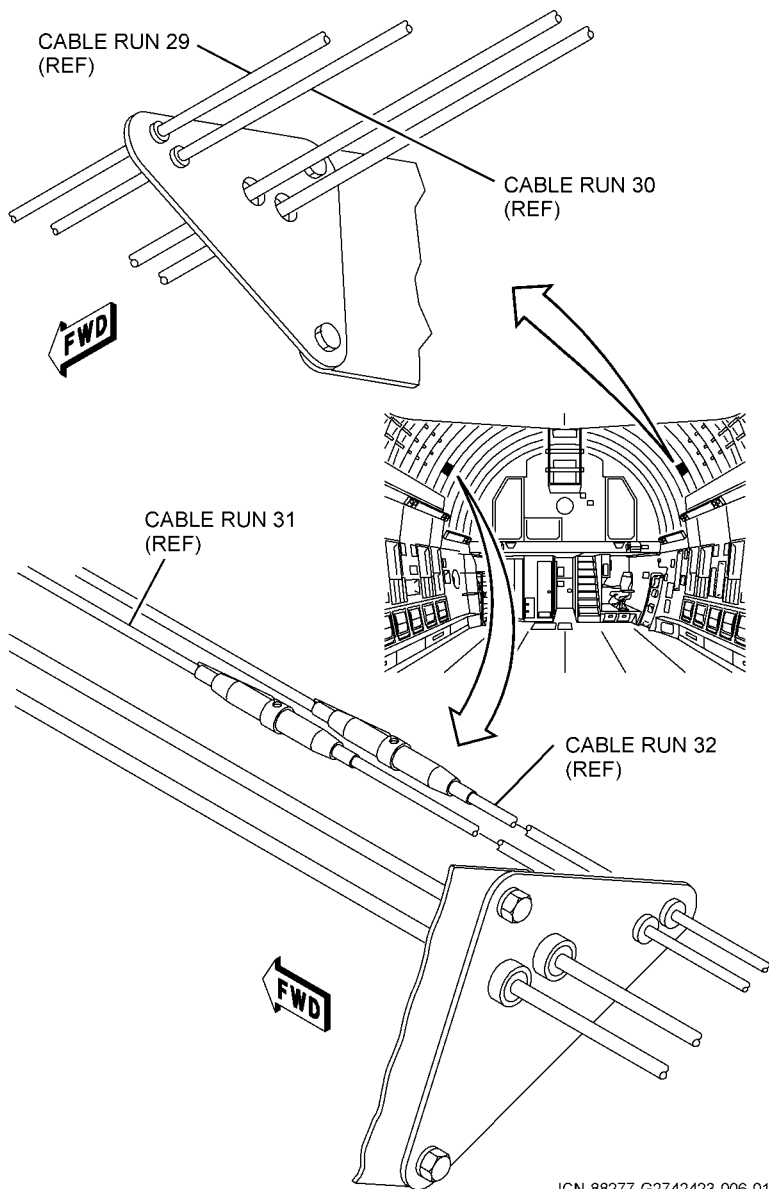
<u>Nomenclature</u>	<u>PN</u>	<u>Specification</u>	<u>Qty</u>	<u>Task</u>
Tensiometer	--	(0-100 lb)	1	All

Supplies:

<u>Nomenclature</u>	<u>PN</u>	<u>Specification</u>	<u>Qty</u>	<u>Task</u>
NA	--	--	--	--

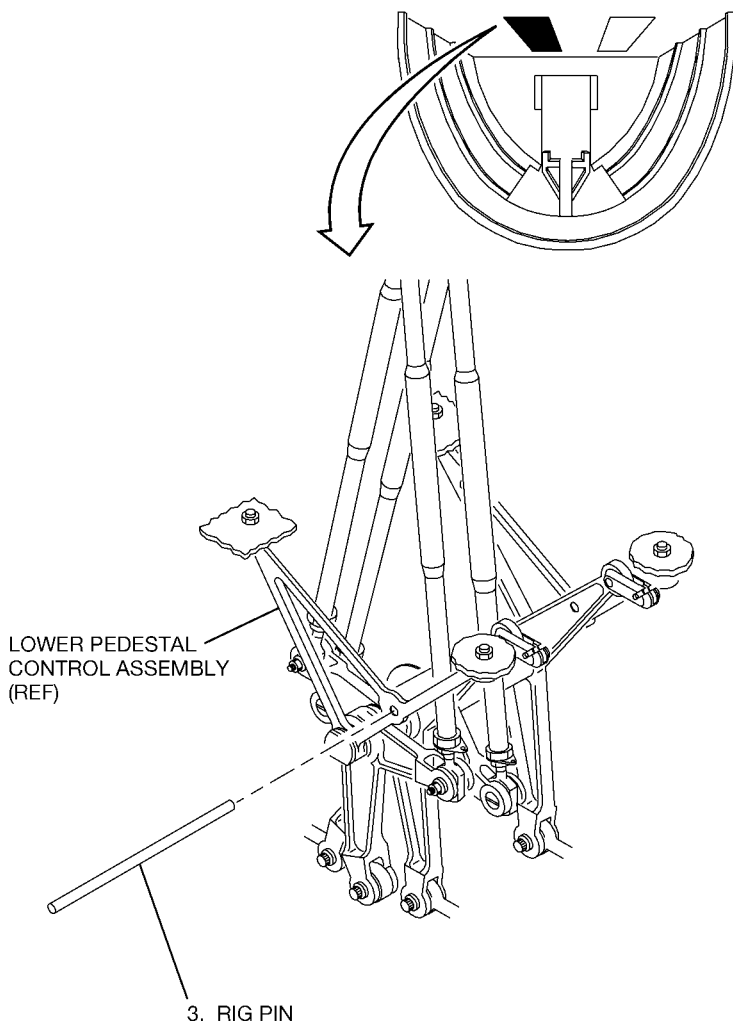
**03-1. CABLE TENSION INSPECTION FOR CABLE
RUNS 29, 30, 31, AND 32.**

1. Perform mechanical controls and surfaces system adjustment (27-42-01, task 01-1).
2. Perform cable tension check for cable runs 29, 30, 31, and 32 (TO 1300i-2-27JG-40-1, 27-40-00, para 1-1).



TO 1300i-2-27JG-40-1

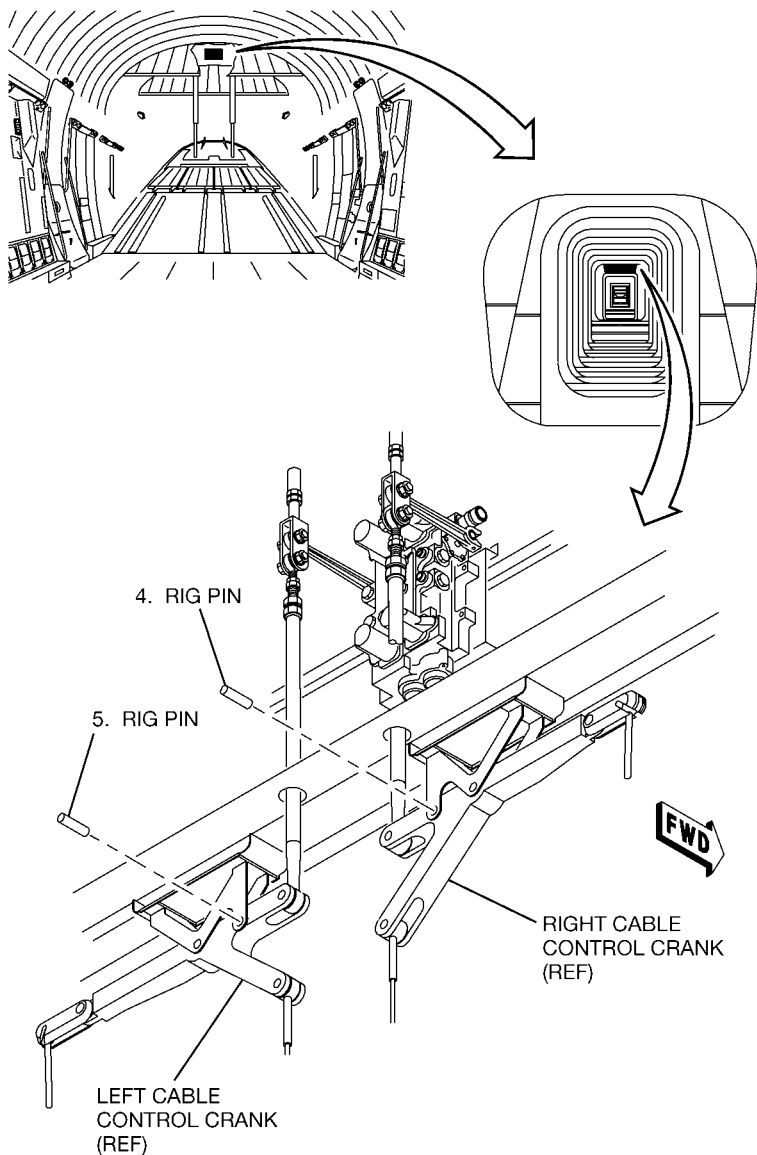
3. Verify rig pin 5-8 in lower pedestal control assembly can be freely installed and removed.



ICN-88277-G2742437-001-01

TO 1300i-2-27JG-40-1

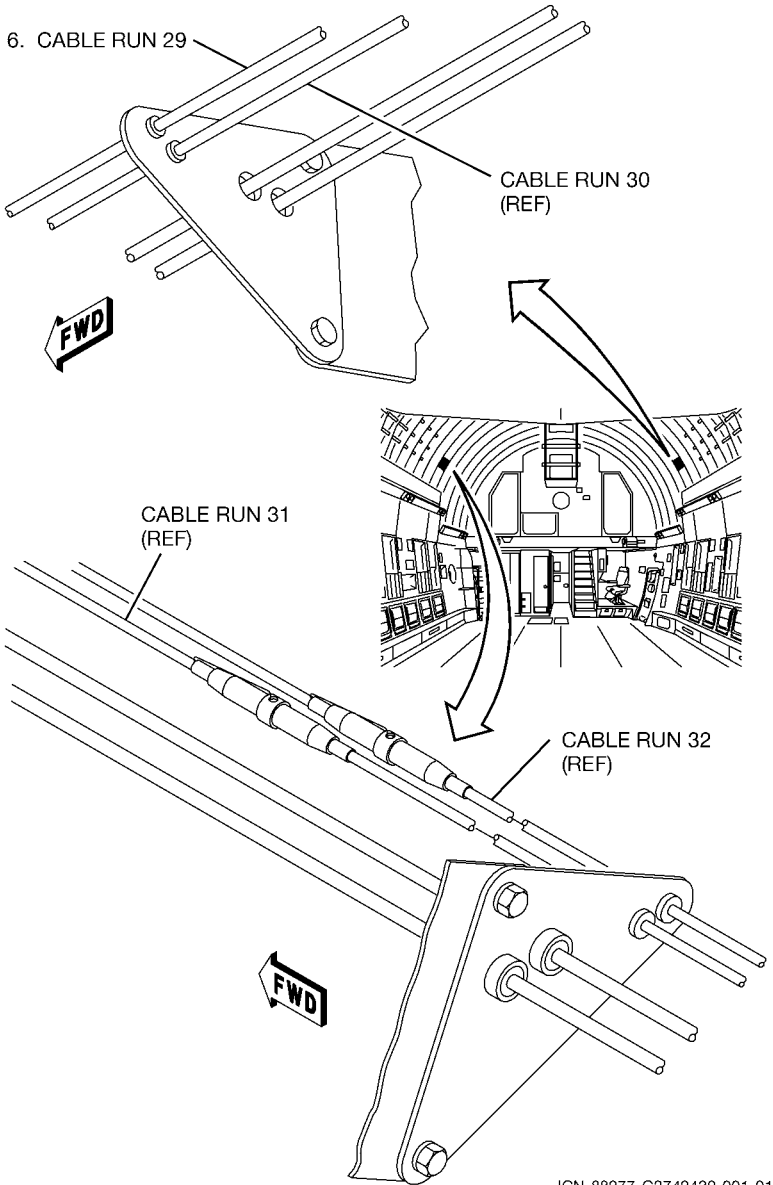
4. Verify rig pin 5-3 in right cable control crank can be freely installed and removed.
5. Verify rig pin 5-3 in left cable control crank can be freely installed and removed.



ICN-88277-G2742438-001-01

TO 1300i-2-27JG-40-1

6. Check cable runs 29, 30, 31, and 32 for proper cable tension.
 - Cable tension checks to 14-21 lb rig (1/16"-17 lb load rig@70° F) (TO 1300i-2-27JG-40-1, 27-40-00, para 1-9) (27-42-01, task 01-3).
7. Perform mechanical controls and surfaces system adjustment (27-42-01, task 01-5).



ICN-88277-G2742439-001-01

