

TO 1300i-2-27JG-10-2

TECHNICAL MANUAL

JOB GUIDE

ORGANIZATIONAL MAINTENANCE

FLIGHT CONTROLS AILERON

(27-10-00 AND 27-11-03)

USAF SERIES

300i

AIRCRAFT

MCDONNELL DOUGLAS CORPORATION

MILITARY TRANSPORT AIRCRAFT

F33657-81-C-2108

FA8526-21-D-0001

THIS MANUAL SUPERSEDES TO 1300i-2-27JG-10-2 DATED 1 SEPTEMBER 2019.

DISCLOSURE NOTICE - This information is furnished upon the condition that it will not be released to another nation without the specific authority of the Department of the Air Force of the United States; that it will be used for military purposes only; that individual or corporate rights originating in the information, whether patented or not, will be respected; that the recipient will report promptly to the United States, any known or suspected compromise; and that the information will be provided substantially the same degree of security afforded it by the Department of Defense of the United States. Also, regardless of any other markings on the document, it will not be downgraded or declassified without written approval of the originating United States agency.

DISTRIBUTION STATEMENT D - Distribution authorized to the Department of Defense and U.S. DoD contractors only; (Administrative and Operational Use); (12 May 2001). Other requests for this documentation shall be referred to AFLCMC/WLM, Robins AFB, GA 31098-2428.

WARNING - This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec. 2751 et seq.) or the Export Administration Act of 1979 (Title 50, U.S.C., App. 2401 et seq.), as amended. Violation of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25.

Basic and all changes have been merged to make this a complete publication.

Published under authority of the Secretary of the Air Force

1 JANUARY 2023

TO 1300i-2-27JG-10-2

HANDLING AND DESTRUCTION NOTICE - Comply with distribution statement and destroy by any method that will prevent disclosure of the contents or reconstruction of the document.

Published under authority of the Secretary of the Air Force

T-2

1 JANUARY 2023

INSERT LATEST CHANGED PAGES. DESTROY SUPERSEDED PAGES.

LIST OF EFFECTIVE PAGES

NOTE: The portion of the text affected by the changes is indicated by a vertical line in the outer margins of the page. Changes to illustrations are indicated by miniature pointing hands.

Dates of issue for original and changed pages are:

Original 0 1 Jan 23

TOTAL NUMBER OF PAGES IN THIS PUBLICATION IS 164 CONSISTING OF THE FOLLOWING:

Page No.	* Change No.	Page No.	* Change No.
Title thru T-2	0		
A.	0		
B blank	0		
i	0		
ii blank	0		
iii thru iv	0		
1-1 thru 1-6	0		
2-1 thru 2-92.	0		
2-93 blank	0		
2-94 thru 2-96	0		
2-97 blank	0		
2-98 thru 2-149	0		
2-150 blank	0		

*Zero in this column indicates an original page.

TABLE OF CONTENTS

<u>SECTION</u>	<u>TO NO.</u>	<u>S/S/SN or PAGE</u>
INTRODUCTION		
Scope		iii
Model(s) covered		iii
Abbreviations		iii
Change request		iii
300i TO information		iii
List of Time Compliance Technical Orders (TCTO) . .		iv
1. GENERAL INFORMATION (27-10-00)		
General information		1-1
Aileron rig load vs. temperature chart		1-1
Cable tension regulator compensation		1-4
General warnings, cautions, and notes		1-6
2. MAINTENANCE INSTRUCTIONS		
Aileron mechanical controls and surfaces system adjustment		27-11-03

INTRODUCTION

SCOPE.

This manual contains maintenance procedures for the adjustment of aileron system components.

MODEL(S) COVERED.

All

ABBREVIATIONS.

The following is a list of non-standard abbreviations used throughout this manual:

EPC	Electrical Power Center
HSR	Hydraulic System Reservoir
IFCM	Integrated Flight Control Module
PLCS	Places

CHANGE REQUEST.

Recommended changes to this manual shall be submitted in accordance with TO 00-5-1300i **TO INFORMATION.**

General 300i TO/eTO, TO Manager, Supplement and finalized Recommended Change (RC) information can be found in the Enhanced Technical Information Management System (ETIMS), System of Record.

⌂ **LIST OF TIME COMPLIANCE TECHNICAL ORDERS (TCTO).**

This list of TCTO's contains all current TCTO's that affect the technical content of text or illustrations found in this manual.

TCTO NUMBER	TITLE	TCTO DATE	APPLICABILITY

SECTION 1

GENERAL INFORMATION (27-10-00)

1-1. GENERAL INFORMATION.

1-2. This section provides general information that is essential for ensuring complete and safe maintenance procedures contained throughout this job guide manual.

1-3. When operating an auxiliary motor pump below 15 degrees Fahrenheit a 30 seconds on/30 seconds off duty cycle for a maximum 10 cycles may be required to reach full hydraulic pressure of 3800 to 4200 psi. Allow ten minutes for cooling and repeat cycles.

1-4. Hydraulic system No. 2 may require 45 seconds before reaching full hydraulic pressure of 3800 to 4200 psi.

1-5. Flight control surfaces are to be cleared prior to turning off hydraulic auxiliary pumps from the loadmaster control panels. Flight control surface movement may occur.

1-6. To avoid erroneous cable tension readings perform all cable rig load checks at aircraft stable temperature throughout condition.

1-7. To achieve aircraft stable temperature throughout it is necessary to locate aircraft in hangar. Rig load checks to be performed after a time period of at least three hours from initial placement of the aircraft in the hangar. (This will allow fuselage external and internal temperatures to equalize as heat or cold soak condition dissipates). For rig load limits, refer to Para 1-9.

1-8. An alternate method is to perform rig load checks between the time period of three hours after sunset and one hour after sunrise. (This will allow fuselage external and internal temperatures to equalize as heat or cold soak condition dissipates). For rig load limits, refer to Para 1-9.

1-9. AILERON RIG LOAD VS. TEMPERATURE CHART.

NOTE

- This chart is only valid for aircraft that have reached a uniform temperature throughout.

NOTE - Continued

- Loads at **135°F** represent **limit rig load** for design.
- The cable tension requirement per **Aileron Rig Load vs Temperature Chart, 1/8"-35 lb Rig @ 70°F** shall apply for aileron cable runs 11, 12, 13, and 14.
- Minimum Allow Service load is the minimum cable loads acceptable before any tensioning of the cable is required. When tensioning is required, adjust cable tension until the final rig load is between the maximum and minimum initial rig load.

Aileron Rig Load vs Temperature Chart 1/8"-35 lb Rig @ 70°F.			
TEMP (°F)	MIN INITIAL (lbf)	MAX INITIAL (lbf)	MIN ALLOW SERVICE (lbf)
135	58	63	54
130	56	61	52
125	54	59	50
120	52	57	48
115	50	55	46
110	48	53	44
105	47	52	43
100	45	50	41
95	43	48	39
90	42	47	38
85	40	45	36
80	38	43	34
75	37	42	33
70	35	40	31
65	33	38	29
60	32	37	28
55	30	35	26
50	29	34	25
45	27	32	23

**Aileron Rig Load vs Temperature Chart 1/8"-35 lb Rig @
70°F.**

TEMP (°F)	MIN INITIAL (lbf)	MAX INITIAL (lbf)	MIN ALLOW SERVICE (lbf)
40	26	31	22
35	24	29	20
30	23	28	19
25	22	27	18
20	20	25	16
15	19	24	15
10	17	22	13
5	16	21	12
0	15	20	11
-5	14	19	10
-10	12	17	8
-15	11	16	7
-20	10	15	6
-25	9	14	5
-30	7	12	3
-35	6	11	3
-40	5	10	3
-45	4	9	3
-50	4	8	3
-55	4	7	3
-60	4	6	3

1-10. Rig pins are used extensively during flight control rigging procedures. To ensure accurate alignment of control system and repeatability of the rigging checks, whenever rig pins are used, differentially adjust the applicable turnbuckle so that the rig pin can be freely removed and inserted. Under no circumstances should the rig pin holes be forced into alignment by stretching the cables. Rig pin hole shall not spring out of alignment when pin is removed. When a rig pin cannot be freely removed or inserted, the applicable turnbuckle shall be adjusted within tolerances to eliminate any required force.

1-11. To complete the rigging procedures, the system shall be cycled 10-20 times, and cable tensions rechecked and adjusted when necessary.

1-12. For all non regulated cable systems, certified tensiometers shall be used for measuring cable tensions. For initial cable rigging the rig load tolerances for all temperatures are as follows:

70°F RIG LOAD (lbs)	TOLERANCES (lbs)
0 to 19	+4, -0
20 to 49	+5, -0
50 and over	+10%, -0%

1-13. The following tolerances shall be used for all cable tension inspections that are made after the above specified inspection:

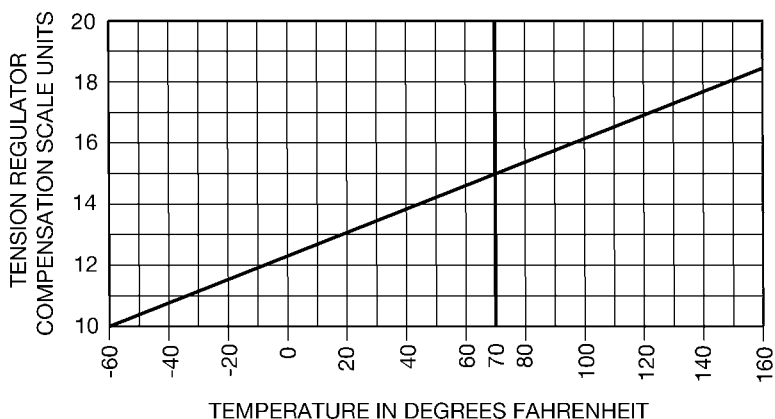
70°F RIG LOAD (lbs)	TOLERANCES (lbs)
0 to 19	+4, -3
20 to 49	+5, -4
50 and over	+10%, -10%

1-14. **CABLE TENSION REGULATOR
COMPENSATION.**

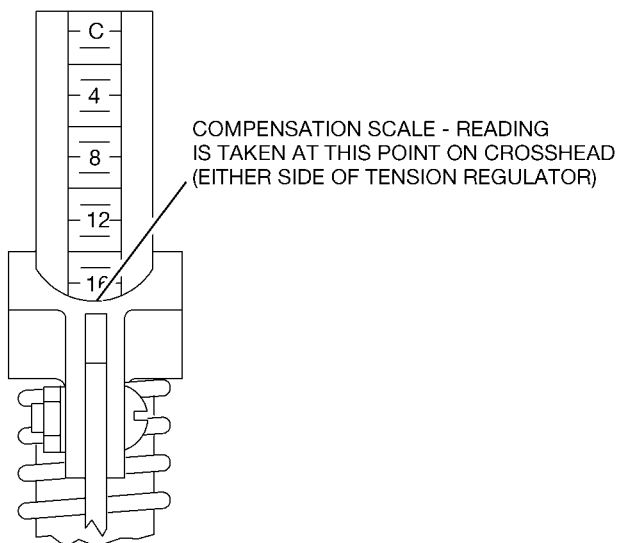
NOTE

- Aircraft shall be in a stable temperature environment for at least three hours prior to and throughout this cable tension adjustment.
- Tension regulator compensation scale unit versus temperature chart is valid only on aircraft that have reached a uniform temperature throughout. When the cable tension must be measured outside in free air, they shall be measured when the airplane structure has stabilized at air temperature between the time period of three hours after sunset and one hour after sunrise. (This will allow the fuselage heat and cold soak condition to dissipate).

1-15. Aileron cable runs 9 and 10 tension is maintained by the tension regulator located in the aileron tension regulator control assembly. Compensation scale readings may be taken from either side of the tension regulator at the crosshead alignment point as noted. The compensation scale reading shall be within $\pm 1/2$ the chart indicated value for the average temperature taken.



NOTE: TOLERANCE IS $\pm 1/2$ COMPENSATION SCALE UNIT.



ICN-88277-G2710002-003-01

1-16. GENERAL WARNINGS, CAUTIONS, AND NOTES.

WARNING

All flight control surfaces and thrust reversers shall be clear of personnel and equipment prior to applying or removing hydraulic power. Failure to comply may cause injury to personnel or damage to aircraft.

CAUTION

Air in a hydraulic system can cause numerous malfunctions, from a total system failure to a minor indication problem. If you suspect air has been inducted into a system by removing a hydraulic component or a line, refer to the hydraulic system bleed procedure, (TO 1300i-2-12JG-29-4, 12-29-08). Failure to comply may cause damage to aircraft.

NOTE

When installing or removing rig pins during the rigging of cables, the pins shall move freely in rig pin holes.

SECTION 2

AILERON MECHANICAL CONTROLS AND SURFACES SYSTEM ADJUSTMENT (27-11-03)

GENERAL MAINTENANCE INPUT CONDITIONS:

Applicability:

All

Task

All

Additional information:

This procedure consists of the following tasks:

- 03-1. Preparation for tasks 03-2 thru 03-5.
- 03-2. Control stick assembly to aileron load feel control assembly adjustment.
- 03-3. Aileron load feel control assembly to aileron center wing mechanism assembly cable adjustment.
- 03-4. Aileron center wing mechanism assembly to aileron control cable valve input mechanism assembly cable adjustment.
- 03-5. Aileron control cable valve input mechanism assembly to aileron integrated flight control module (IFCM) input connecting link adjustment.
- 03-6. Follow-on maintenance for tasks 03-2 thru 03-5.
- 03-7. Preparation for tasks 03-8 and 03-9.
- 03-8. Cable tension regulator reading and verification for cable runs 9 and 10.
- 03-9. Cable tension regulator reading and verification for cable runs 11, 12, 13, and 14.
- 03-10. Follow-on maintenance for tasks 03-8 and 03-9.

Additional data:

TO 1300i-2-00JG-00-1

Task

03-1,
03-4,
03-9

TO 1300i-2-27JG-10-2

	Task
TO 1300i-2-10JG-60-1	03-1, 03-7
TO 1300i-2-23JG-40-1	03-5
TO 1300i-2-27JG-10-1	03-6, 03-10
TO 1300i-2-27JG-10-3	03-2
TO 1300i-2-29JG-20-1	03-5
TO 1300i-2-53JG-10-1	03-1, 03-6
TO 1300i-2-53JG-20-1	03-6, 03-8
TO 1300i-2-57JG-50-1	03-1, 03-6, 03-9

Personnel recommended:

	Task
One	03-1, 03-3, 03-4, 03-6, 03-7, 03-10
Two	03-2, 03-5, 03-8, 03-9

Person (A) performs task.
Person (B) assists person (A).

Safety conditions:**Task****WARNING**

- Areas below lower wing fixed trailing edge door assembly shall remain clear of personnel when door is in lowered position and suspended from lanyards. Failure to comply may cause injury to personnel or damage to aircraft. 03-1, 03-2, 03-3, 03-4, 03-5, 03-6, 03-9
- 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 could result in injury to personnel. 03-1, 03-2, 03-3, 03-4, 03-5, 03-6

Support equipment:

<u>Nomenclature</u>	<u>PN</u>	<u>Specification</u>	<u>Qty</u>	<u>Task</u>
Kit, Rig Pin	17G140015-1	--	--	--
Pin 5-5, Rig	17G140015-33	--	2	03-4, 03-9
Pin 5-8, Rig	17G140015-35	--	1	03-3, 03-4, 03-8, 03-9
Pin 5-10, Rig	17G140015-37	--	2	03-2, 03-3, 03-8
Tensiometer (Primary)	T5-2004-113-00	(0-100 lb)	1	03-4, 03-8
Tensiometer (Alternate)	ACX-100	(5-100 lb)	1	03-4, 03-8

<u>Nomenclature</u>	<u>PN</u>	<u>Specification</u>	<u>Qty</u>	<u>Task</u>
Tensiometer (Alternate)	CT12A	--	1	03-4, 03-8
Tool, Adjusting, Turnbuckle	17G140019-1	--	1	03-3, 03-4

Supplies:

<u>Nomenclature</u>	<u>PN</u>	<u>Specification</u>	<u>Qty</u>	<u>Task</u>
Clip, Safety	MS21256-2	--	AR	03-3, 03-4
Pin, Cotter	MS24665-151	--	9	03-2
Tag, Warning	--	--	7	03-1, 03-7
Tag, Warning	--	--	2	03-2
Wire, Safety	900010-32C	--	AR	03-2, 03-5

03-1. PREPARATION FOR TASKS 03-2 THRU 03-5.

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. Connect external electrical power (10-61-01, task 01-1).

WARNING

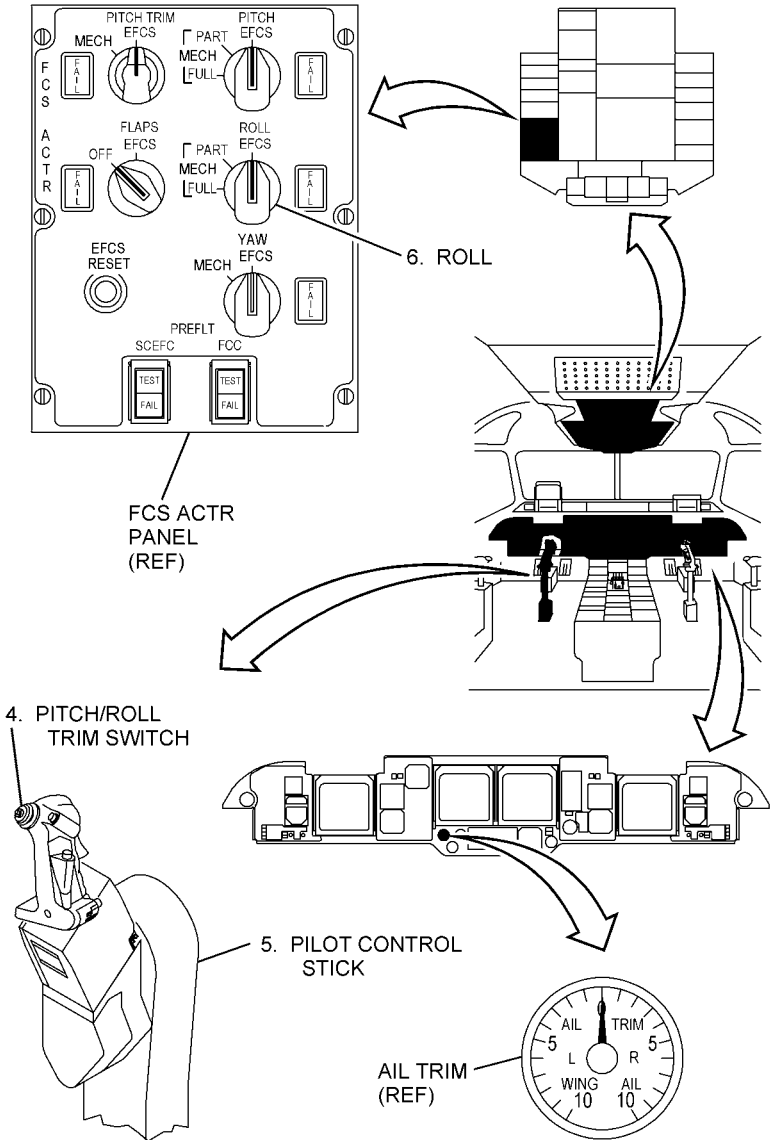
All flight control surfaces shall be clear of personnel and equipment prior to any movement of the surfaces. Failure to comply may cause injury to personnel or damage to aircraft.

4. Press and hold pitch/roll trim switch on pilot control stick until **AIL TRIM** position indicator reads 0 degrees.

NOTE

One full aileron cycle is defined as aileron left, aileron right, and neutral.

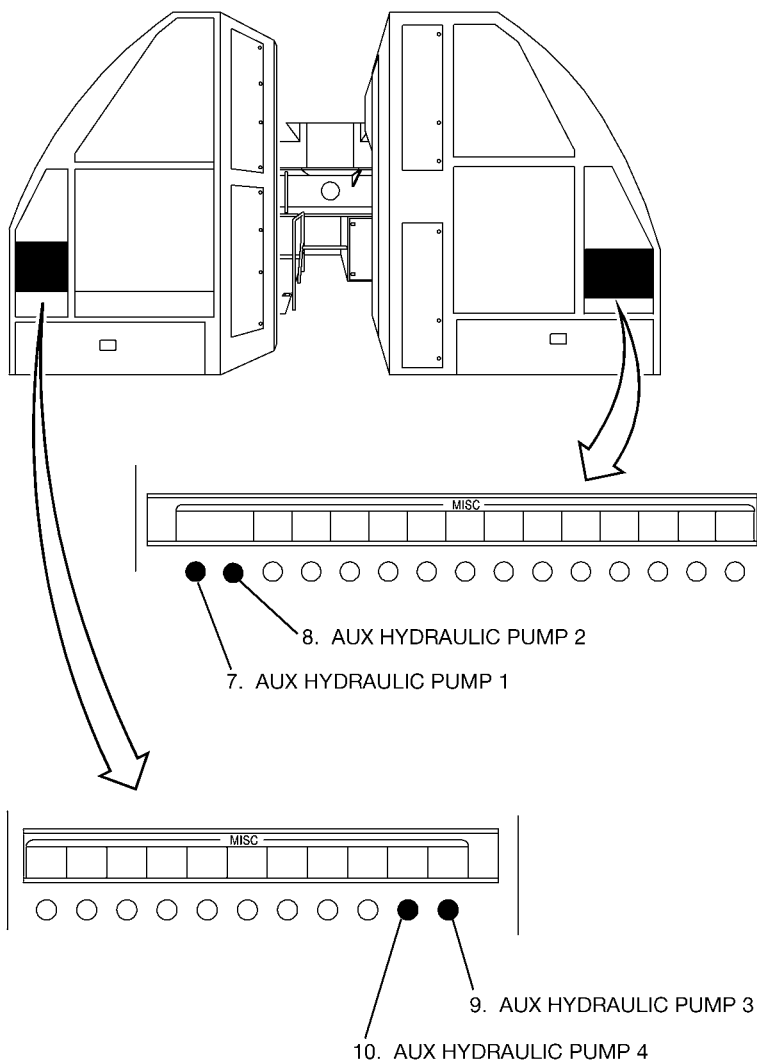
5. Operate pilot control stick through three full cycles.
6. Set **ROLL** switch on **FCS ACTR** panel to **PART MECH** and attach warning tag.



ICN-88277-G2711332-006-01

TO 1300i-2-27JG-10-2

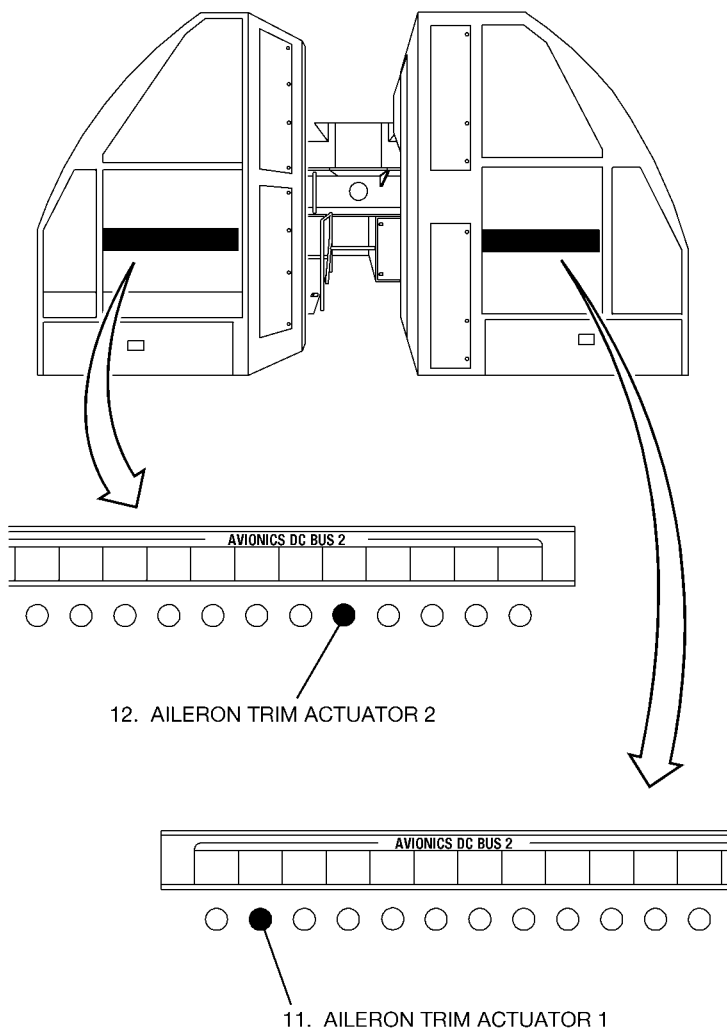
7. Open **AUX HYDRAULIC PUMP 1** circuit breaker on Electrical Power Center (EPC), row **LL**, column **68**, and attach warning tag.
8. Open **AUX HYDRAULIC PUMP 2** circuit breaker on EPC, row **LL**, column **69**, and attach warning tag.
9. Open **AUX HYDRAULIC PUMP 3** circuit breaker on EPC, row **LL**, column **11**, and attach warning tag.
10. Open **AUX HYDRAULIC PUMP 4** circuit breaker on EPC, row **LL**, column **10**, and attach warning tag.



ICN-88277-G2711333-002-01

TO 1300i-2-27JG-10-2

11. Open **AILERON TRIM ACTUATOR 1** circuit breaker on EPC, row **U**, column **41**, and attach warning tag.
12. Open **AILERON TRIM ACTUATOR 2** circuit breaker on EPC, row **U**, column **36**, and attach warning tag.



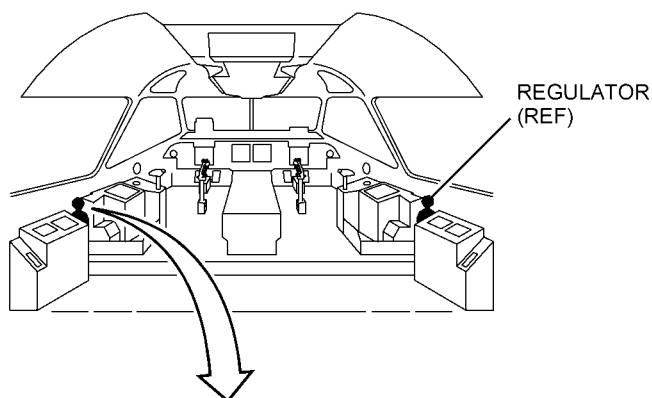
ICN-88277-G2711334-003-01

TO 1300i-2-27JG-10-2

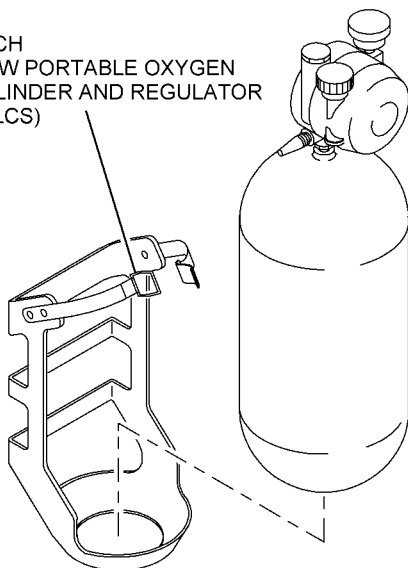
13. Remove horizontal pressure panel access cover assemblies (53-12-10).

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

14. Release latches and remove crew portable oxygen cylinders and regulators.

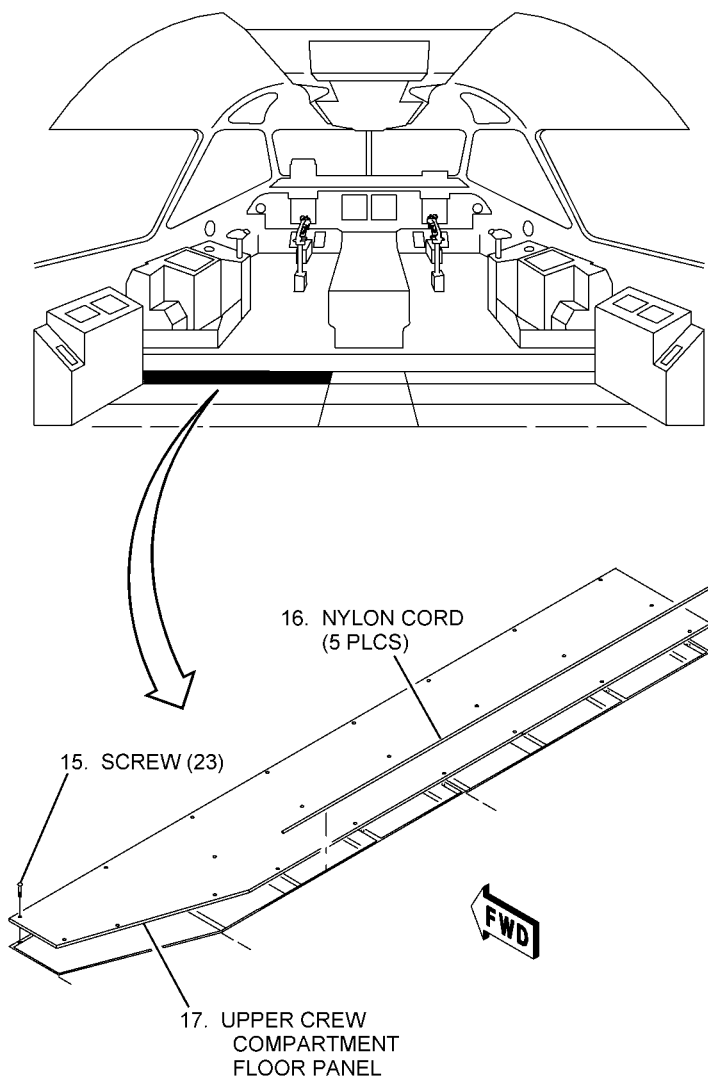


14. LATCH
CREW PORTABLE OXYGEN
CYLINDER AND REGULATOR
(2 PLCS)



TO 1300i-2-27JG-10-2

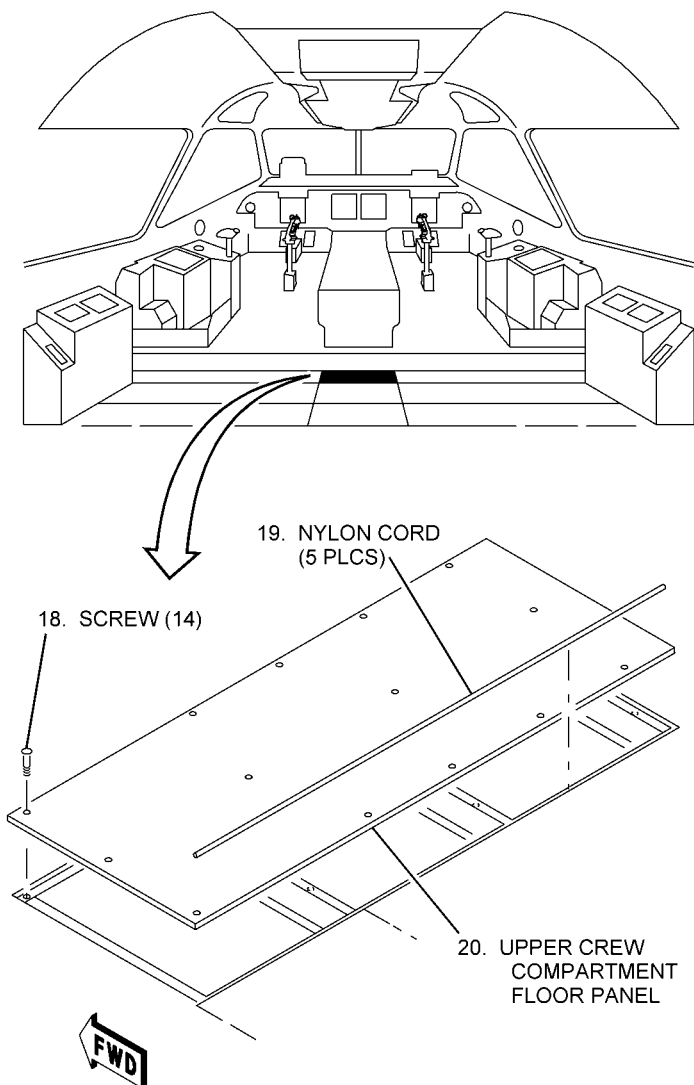
15. Remove screws from upper crew compartment floor panel (215BZY).
16. Remove and discard nylon cords.
17. Remove upper crew compartment floor panel.



ICN-88277-G2711338-004-01

TO 1300i-2-27JG-10-2

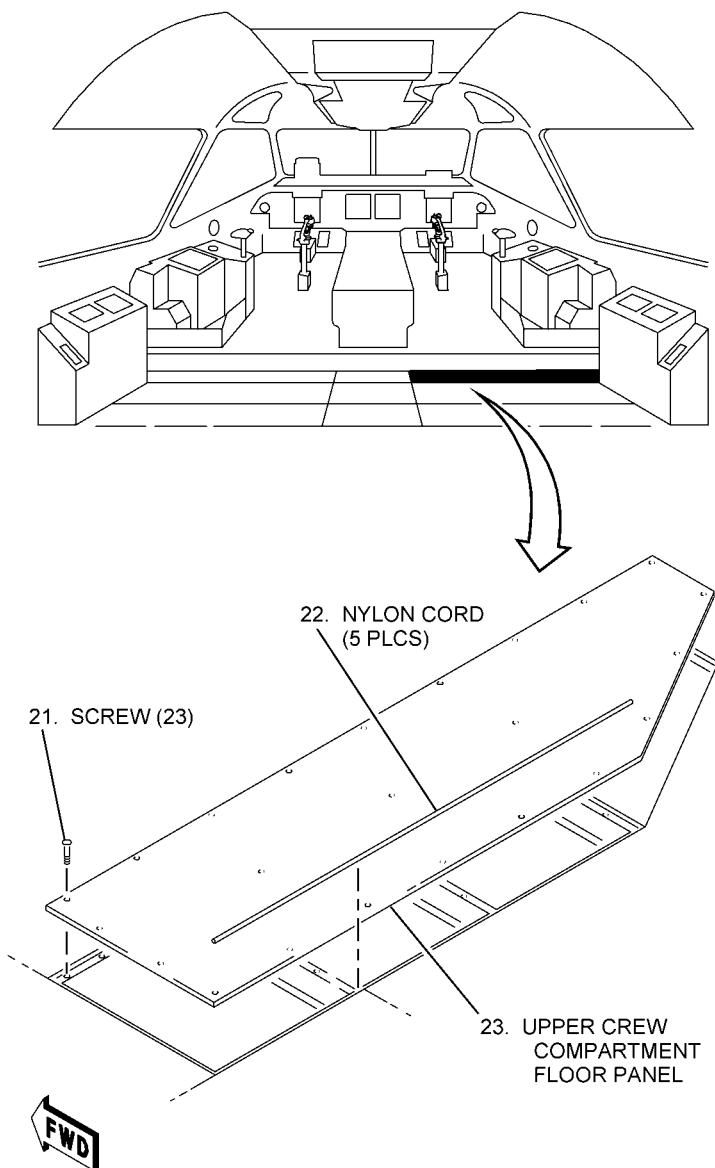
18. Remove screws from upper crew compartment floor panel (217AZY).
19. Remove and discard nylon cords.
20. Remove upper crew compartment floor panel.



ICN-88277-G2711339-004-01

TO 1300i-2-27JG-10-2

21. Remove screws from upper crew compartment floor panel (216BZY).
22. Remove and discard nylon cords.
23. Remove upper crew compartment floor panel.



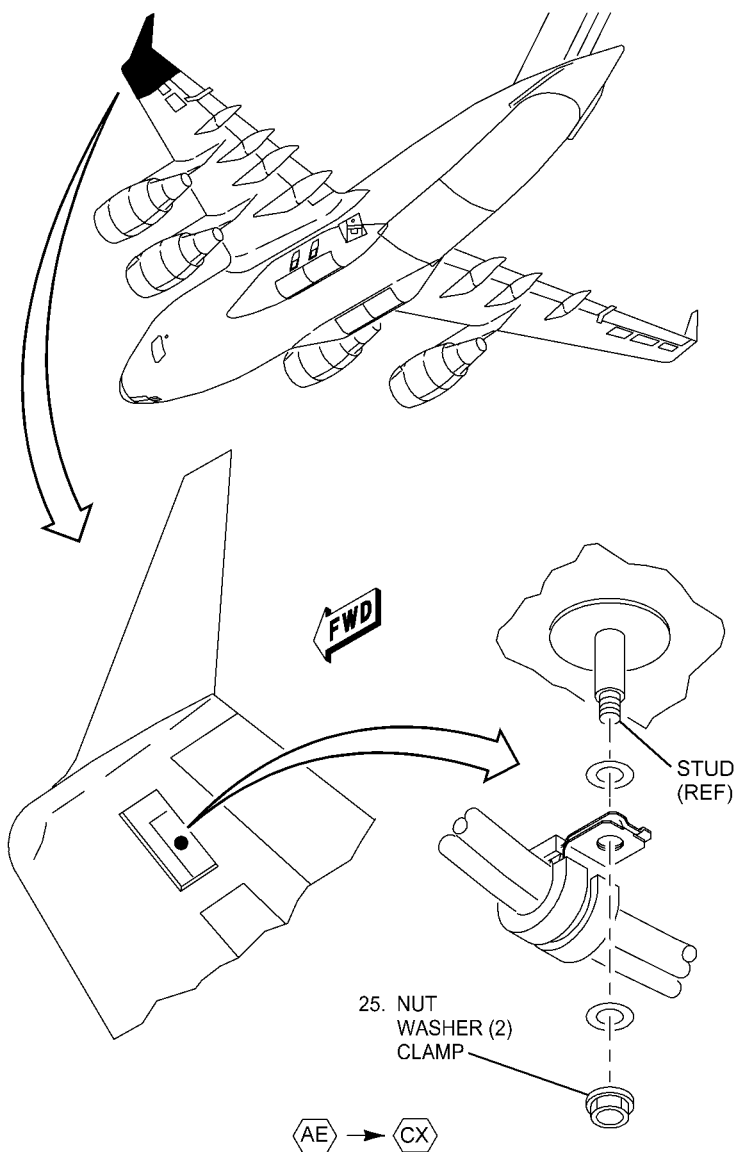
ICN-88277-G2711340-004-01

TO 1300i-2-27JG-10-2

- 24. <AA> → <AD> No action required.
- 24. <AE> → <CX> Lower lower wing fixed trailing edge door assemblies (57-54-01).

DOOR REF DES	DOOR ID
5754CA025	566BBD
5754CA040	666BBD

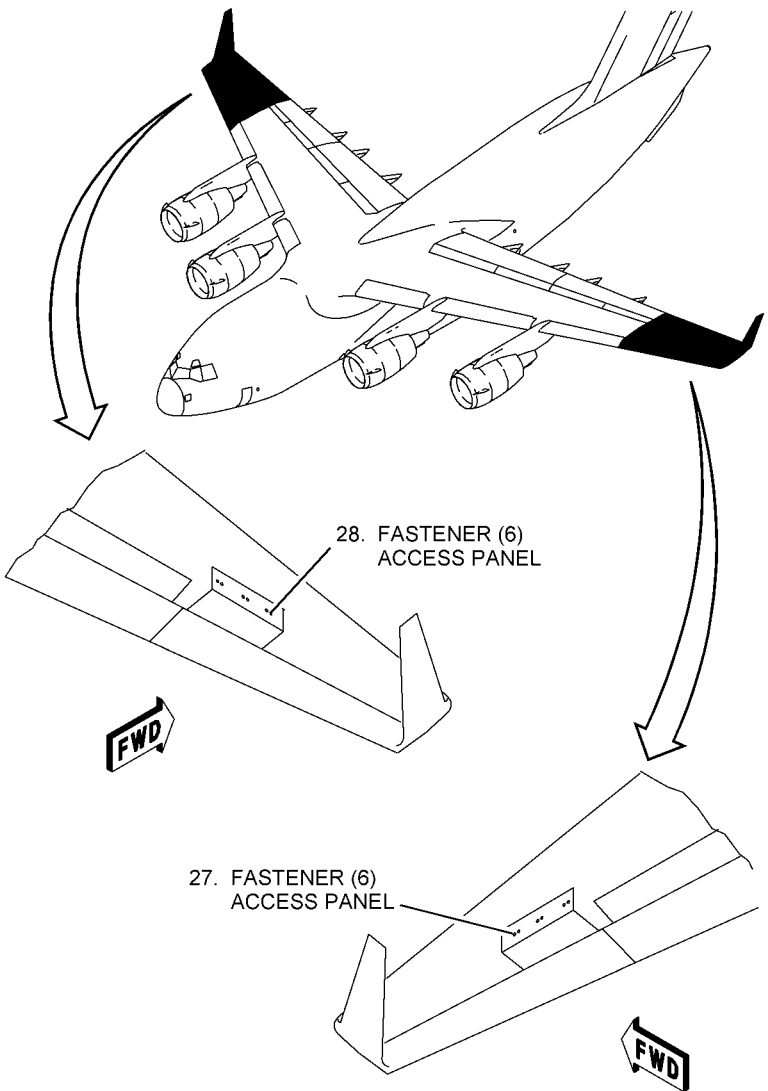
- 24. <CY> → No action required.
- 25. <AA> → <AD> No action required.
- 25. <AE> → <CX> Remove nut, washers, and clamp from stud.
- 25. <CY> → No action required.



ICN-88277-G2711464-004-01

TO 1300i-2-27JG-10-2

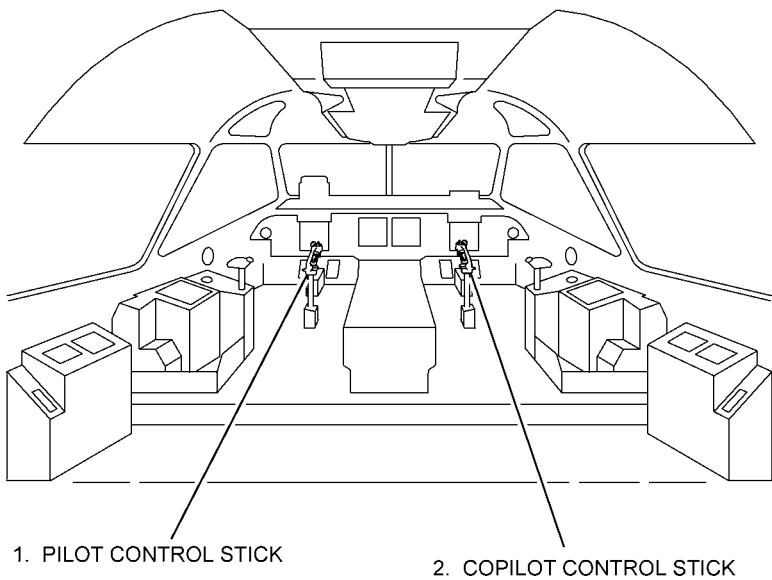
26. Enter fuselage and wing (00-00-01).
27. Loosen fasteners and open access door (566ATD).
28. Loosen fasteners and open access door (666ATD).



ICN-88277-G2711465-003-01

**03-2. CONTROL STICK ASSEMBLY TO AILERON
LOAD FEEL CONTROL ASSEMBLY
ADJUSTMENT.**

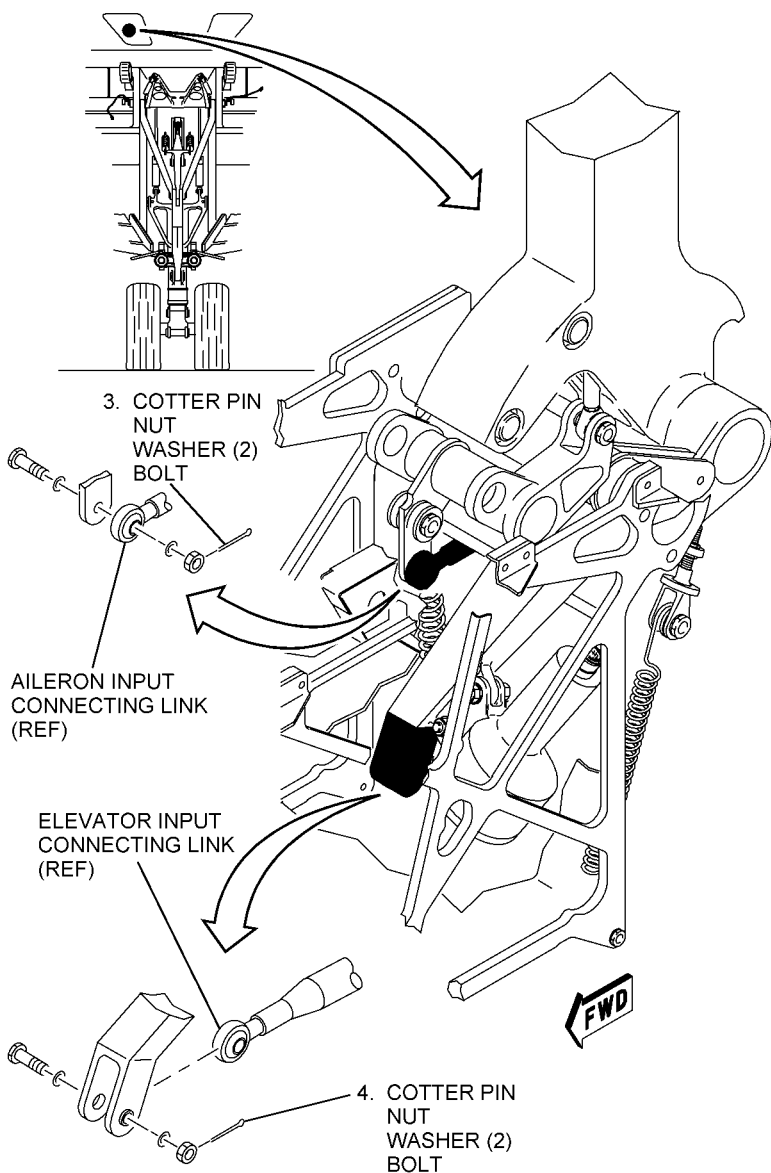
1. (A) Attach warning tag to pilot control stick.
2. (A) Attach warning tag to copilot control stick.



ICN-88277-G2711551-002-01

TO 1300i-2-27JG-10-2

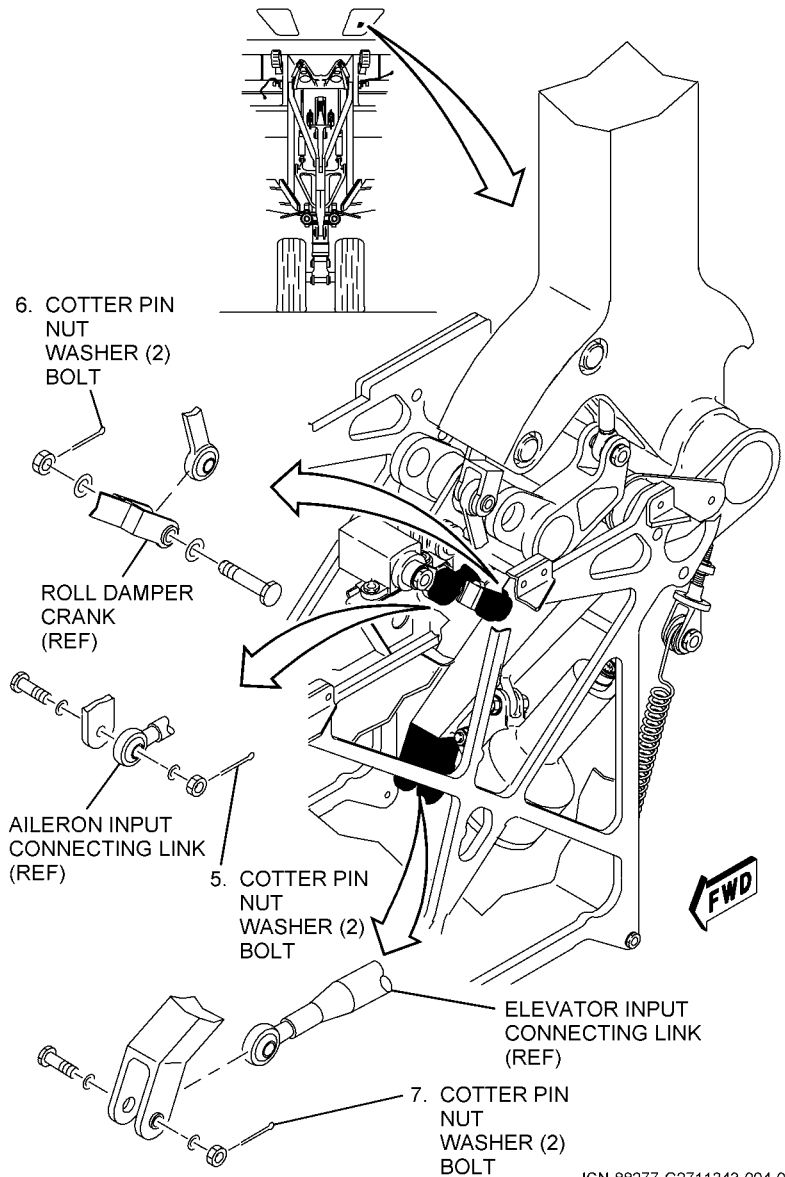
3. (A) Remove cotter pin, nut, washers, and bolt from aileron input connecting link.
4. (A) Remove cotter pin, nut, washers, and bolt from elevator input connecting link.



ICN-88277-G2711342-004-01

TO 1300i-2-27JG-10-2

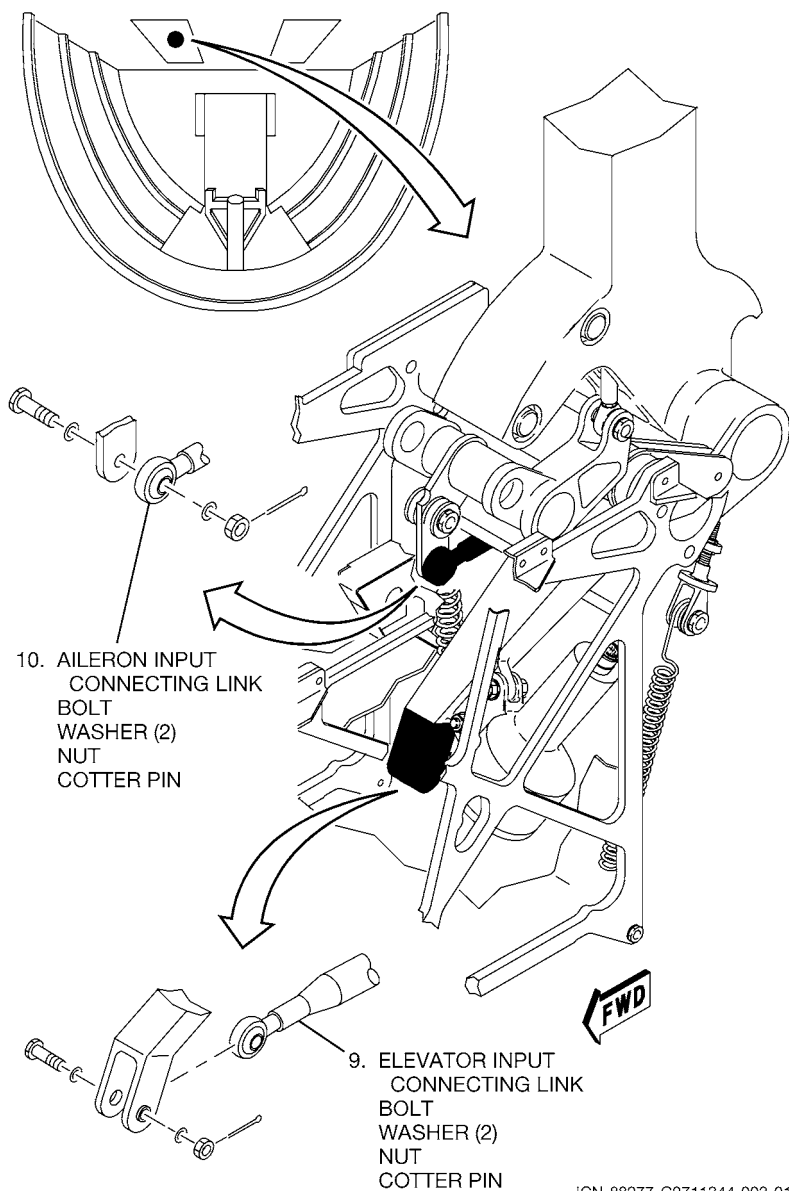
5. (A) Remove cotter pin, nut, washers, and bolt from aileron input connecting link.
6. (A) Remove cotter pin, nut, washers, and bolt from roll damper crank.
7. (A) Remove cotter pin, nut, washers, and bolt from elevator input connecting link.
8. Perform control stick assembly operational checkout (27-11-10, tasks 1-1 and 1-2).



ICN-88277-G2711343-004-01

TO 1300i-2-27JG-10-2

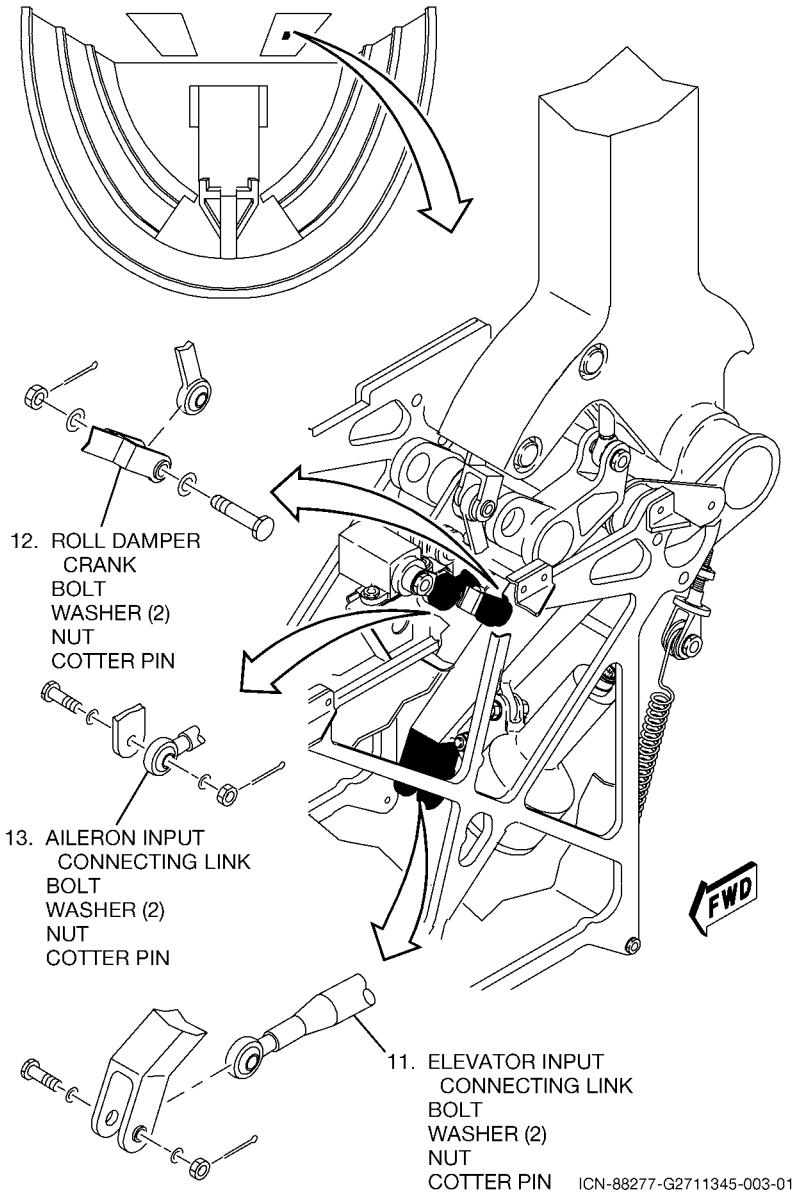
9. (A) Position elevator input connecting link; install bolt, washers, nut, and cotter pin.
10. (A) Position aileron input connecting link; install bolt, washers, nut, and cotter pin.



ICN-88277-G2711344-003-01

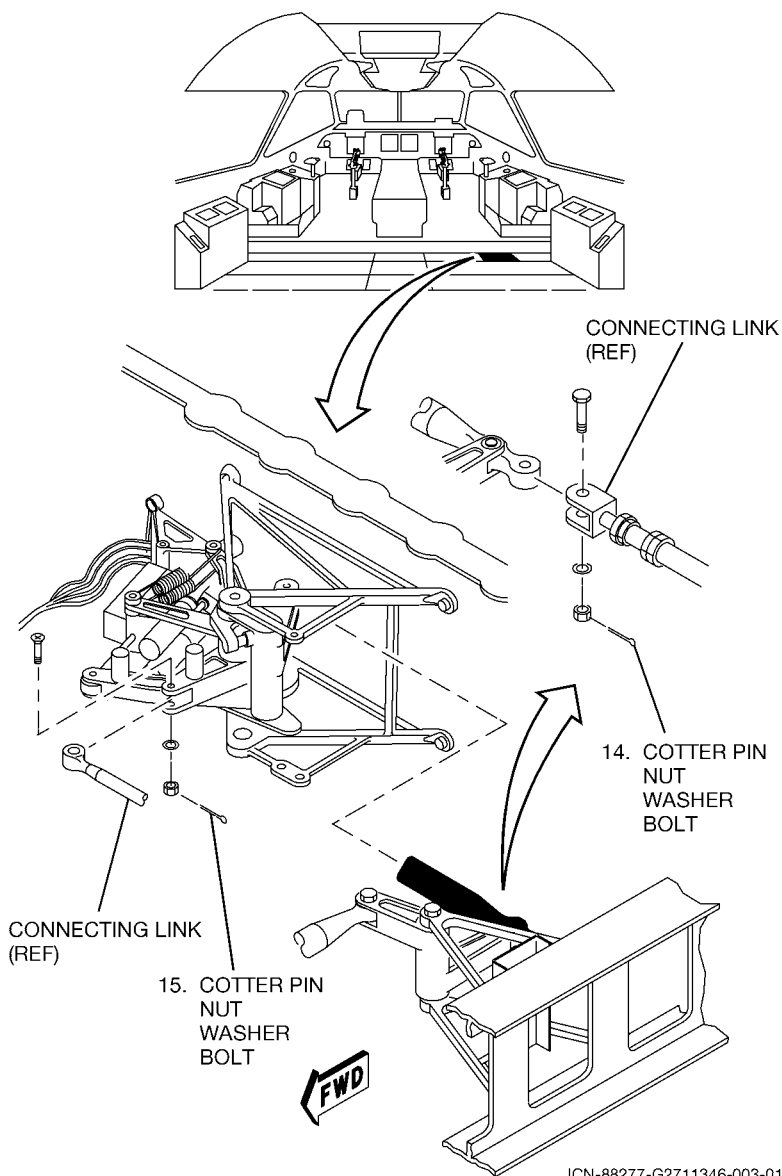
TO 1300i-2-27JG-10-2

11. (A) Position elevator input connecting link; install bolt, washers, nut, and cotter pin.
12. (A) Position roll damper crank; install bolt, washers, nut, and cotter pin.
13. (A) Position aileron input connecting link; install bolt, washers, nut, and cotter pin.

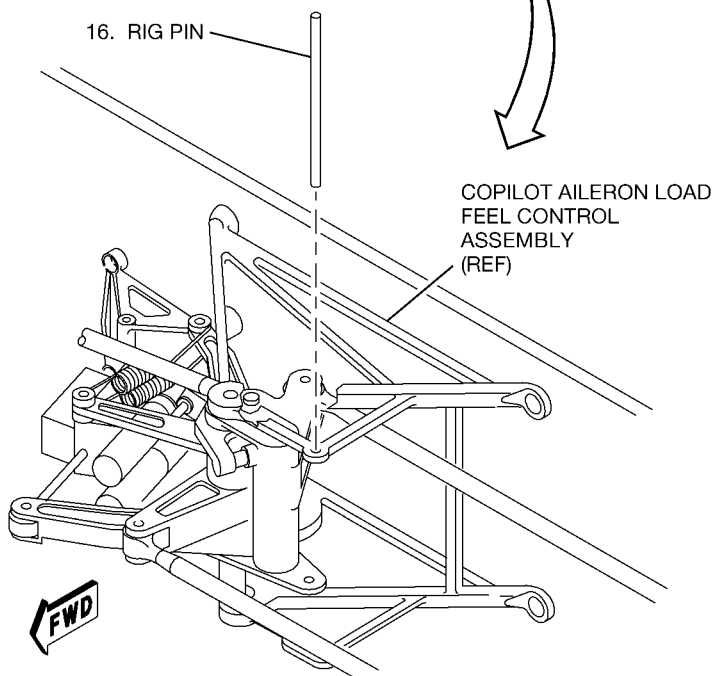
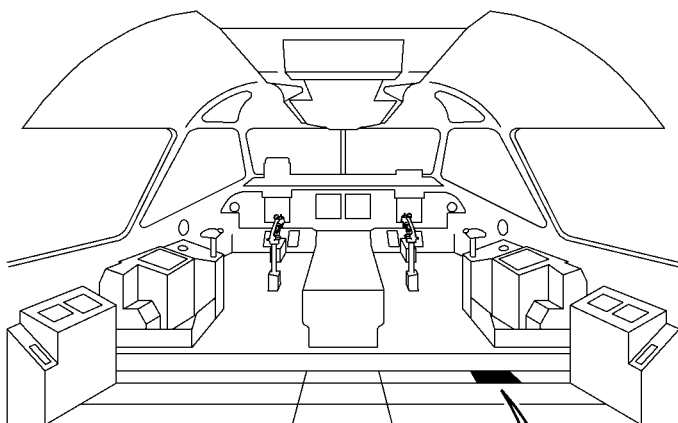


TO 1300i-2-27JG-10-2

14. (A) Remove cotter pin, nut, washer, and bolt from connecting link.
15. (A) Remove cotter pin, nut, washer, and bolt from connecting link.



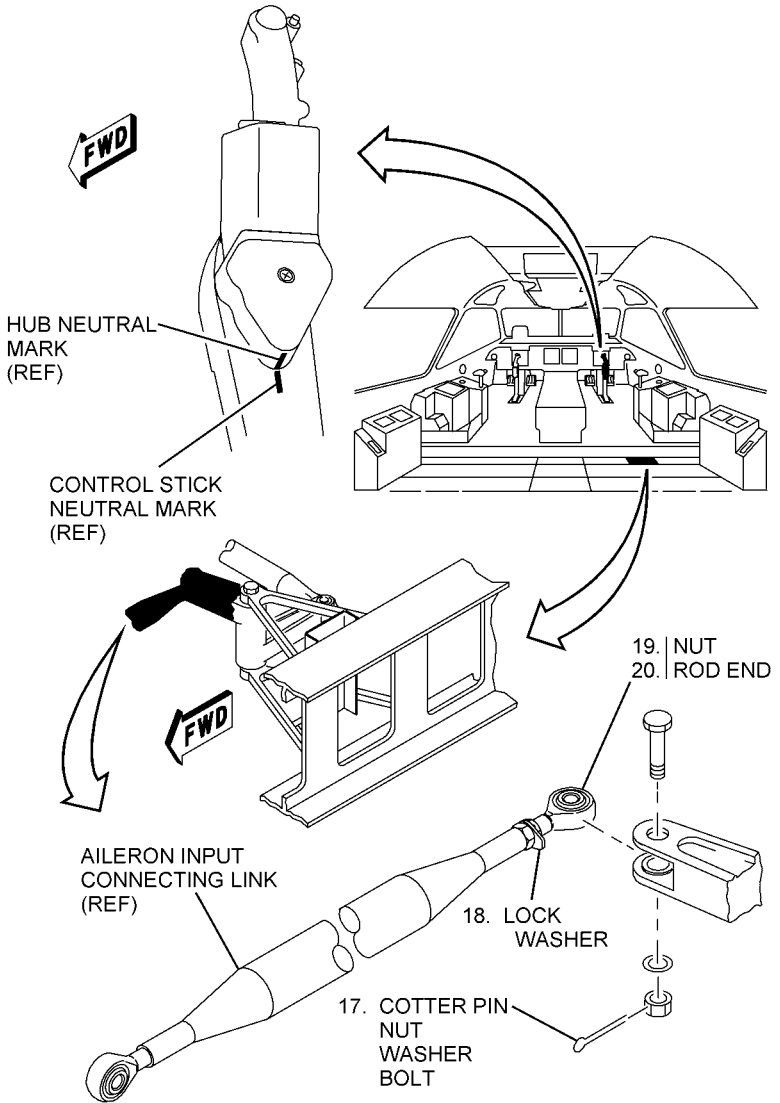
16. (A) Install rig pin 5-10 in copilot aileron load feel control assembly.



ICN-88277-G2711347-003-01

TO 1300i-2-27JG-10-2

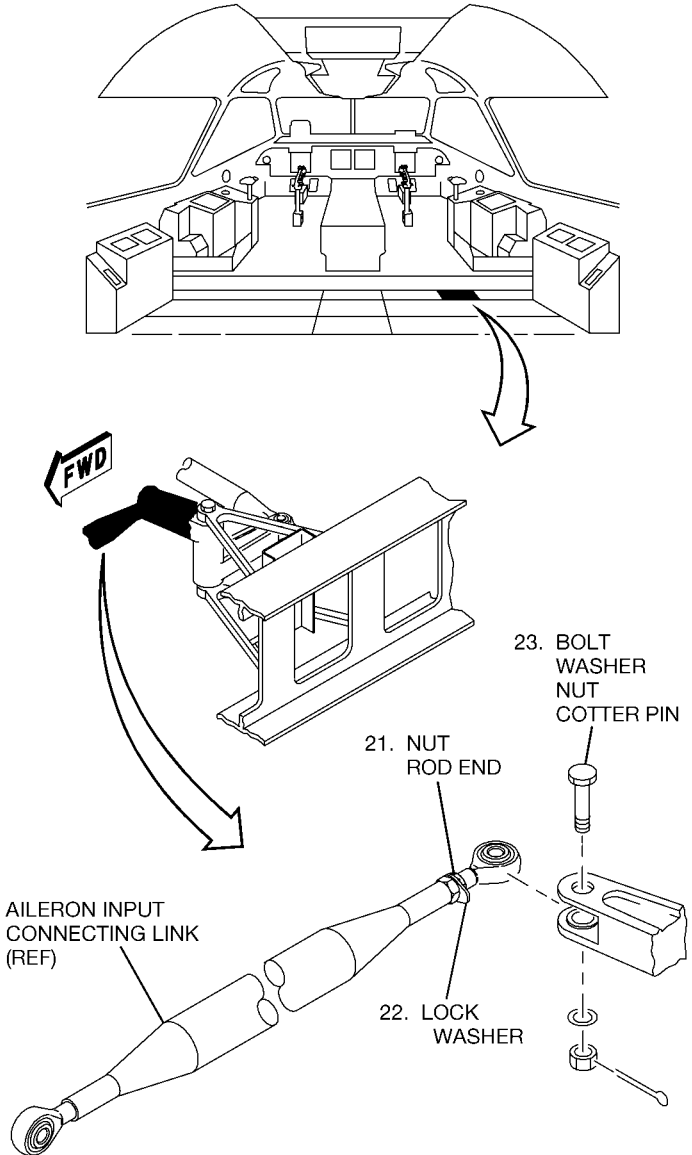
17. (A) Remove cotter pin, nut, washer, and bolt.
18. (A) Remove safety wire from lock washer.
19. (A) Loosen nut on rod end.
20. (A,B) Adjust rod end until hub neutral mark is lined up with control stick neutral mark, within 0.03 inches left or right.



ICN-88277-G2711459-004-01

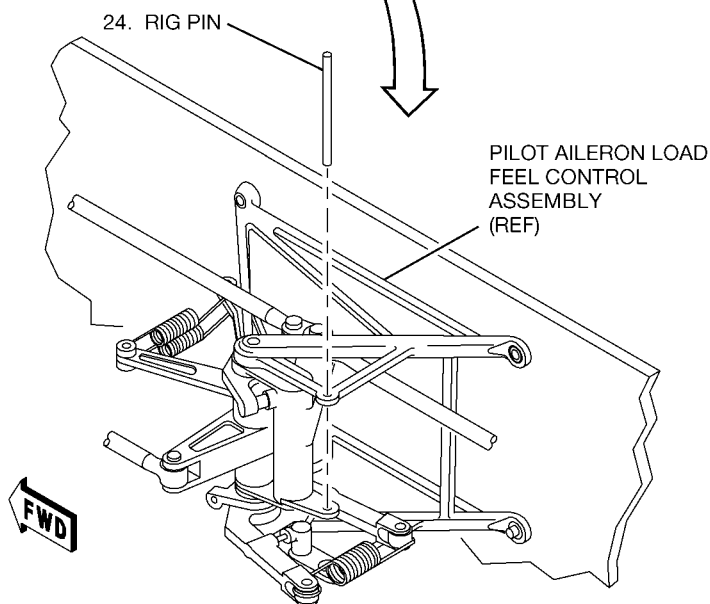
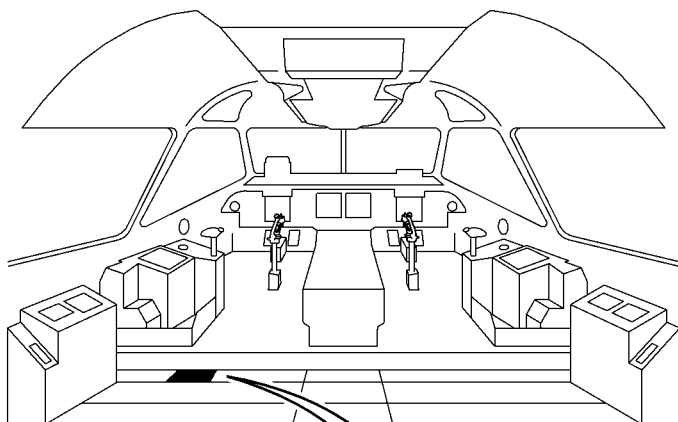
TO 1300i-2-27JG-10-2

21. (A) Tighten nut on rod end.
22. (A) Secure safety wire on lock washer and nut.
23. (A) Install bolt, washer, nut, and cotter pin.



ICN-88277-G2711460-002-01

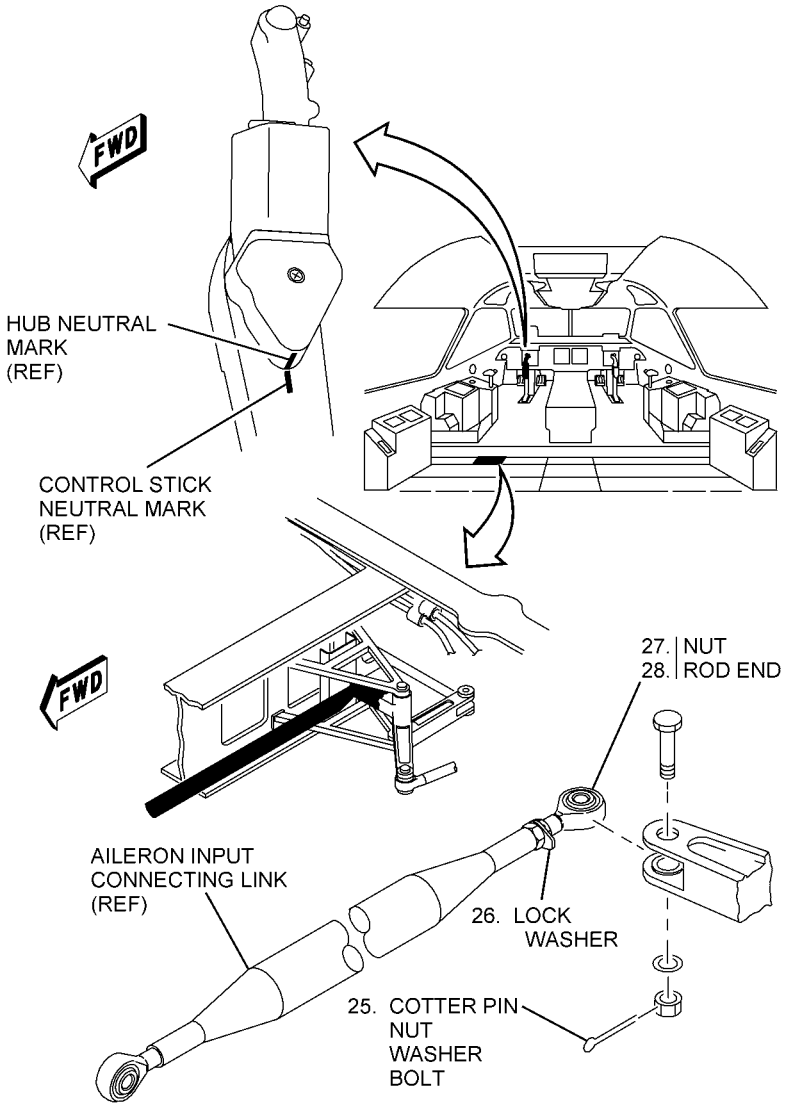
24. (A) Install rig pin 5-10 in pilot aileron load feel control assembly.



ICN-88277-G2711354-003-01

TO 1300i-2-27JG-10-2

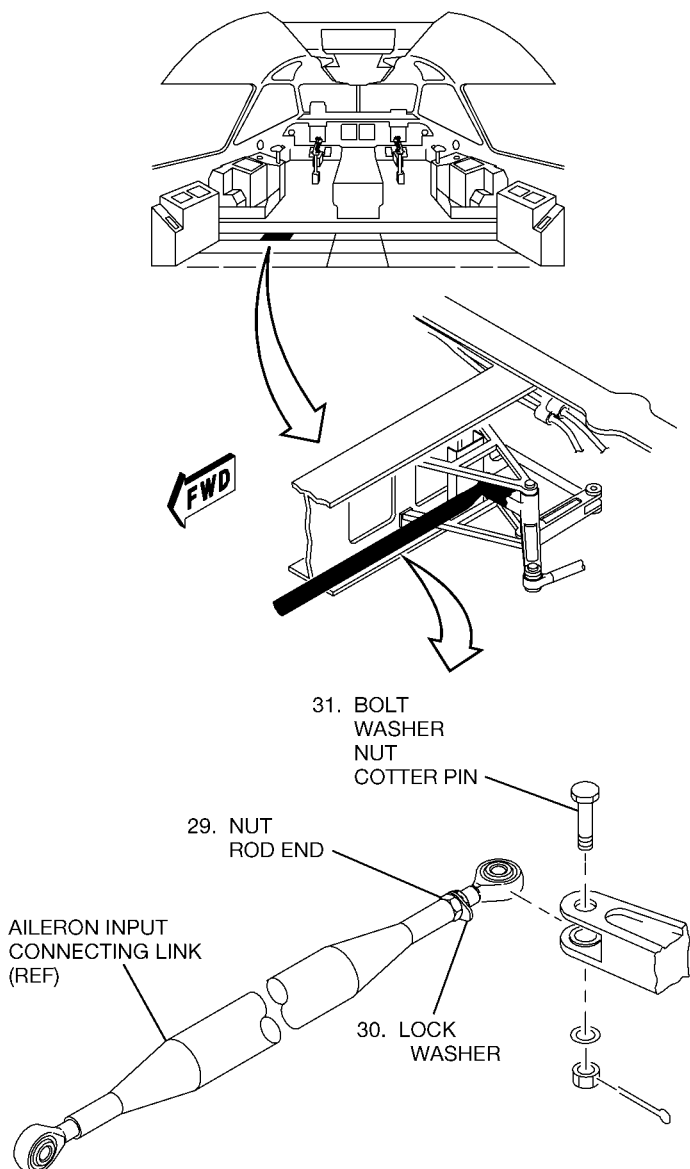
25. (A) Remove cotter pin, nut, washer, and bolt.
26. (A) Remove safety wire from lock washer.
27. (A) Loosen nut on rod end.
28. (A,B) Adjust rod end until hub neutral mark is lined up with control stick neutral mark, within 0.03 inches left or right.



ICN-88277-G2711461-004-01

TO 1300i-2-27JG-10-2

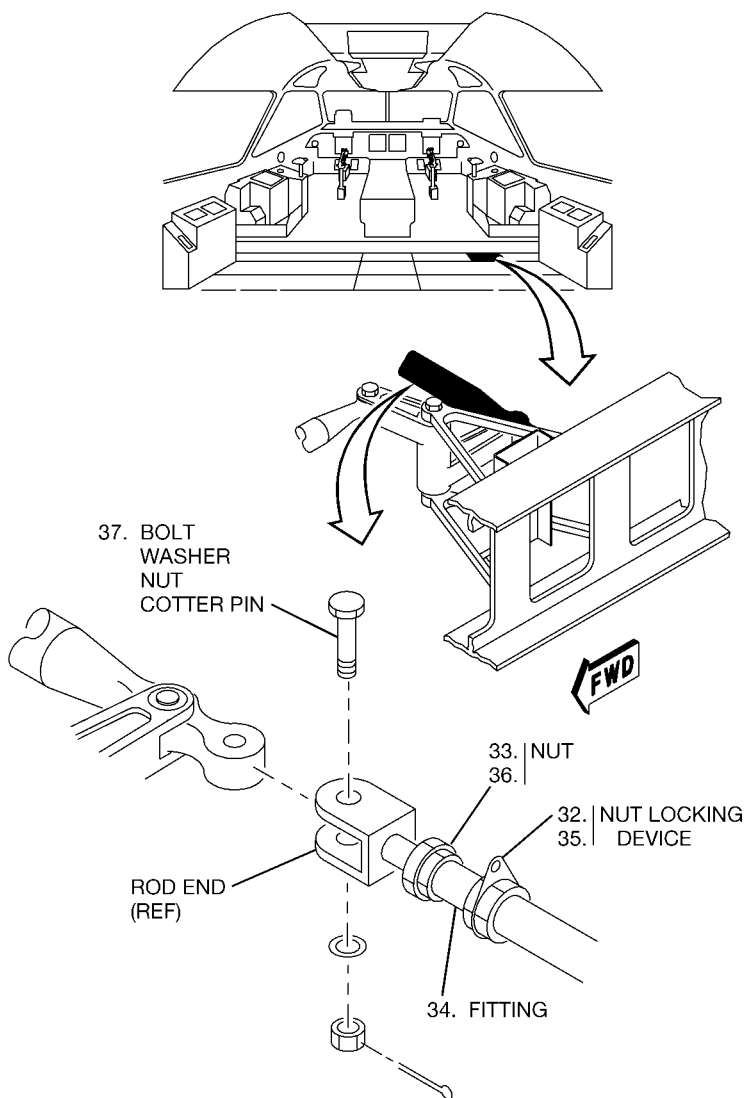
29. (A) Tighten nut on rod end.
30. (A) Secure safety wire on lock washer and nut.
31. (A) Install bolt, washer, nut, and cotter pin.



ICN-88277-G2711462-002-01

TO 1300i-2-27JG-10-2

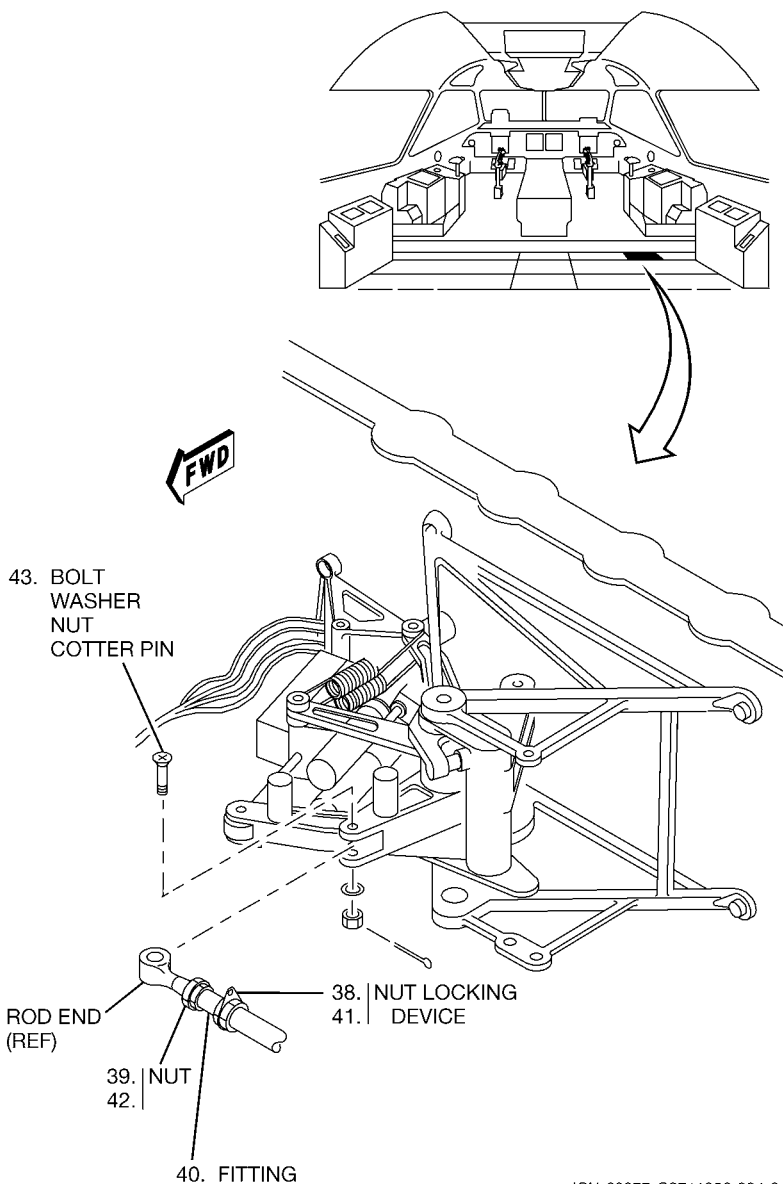
32. (A) Remove safety wire; loosen nut locking device.
33. (A) Loosen nut on rod end.
34. (A) Adjust fitting.
35. (A) Position nut locking device and tighten; secure with safety wire.
36. (A) Tighten nut.
37. (A) Install bolt, washer, nut, and cotter pin.



ICN-88277-G2711355-004-01

TO 1300i-2-27JG-10-2

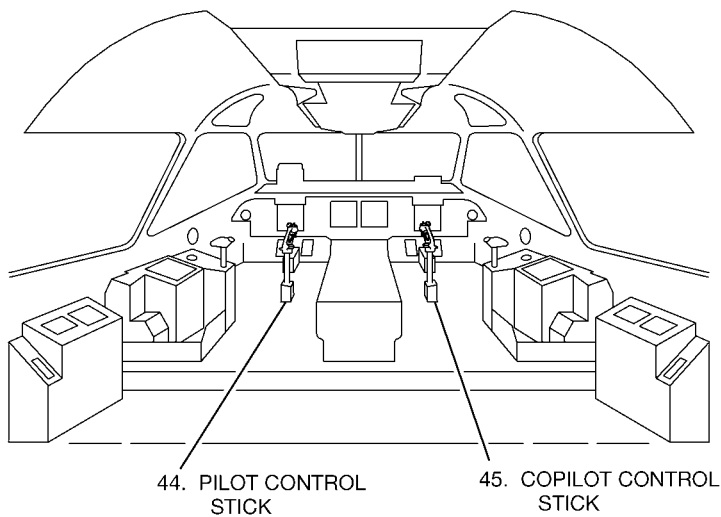
38. (A) Remove safety wire; loosen nut locking device.
39. (A) Loosen nut on rod end.
40. (A) Adjust fitting.
41. (A) Position nut locking device and tighten; secure with safety wire.
42. (A) Tighten nut.
43. (A) Install bolt, washer, nut, and cotter pin.



ICN-88277-G2711356-004-01

TO 1300i-2-27JG-10-2

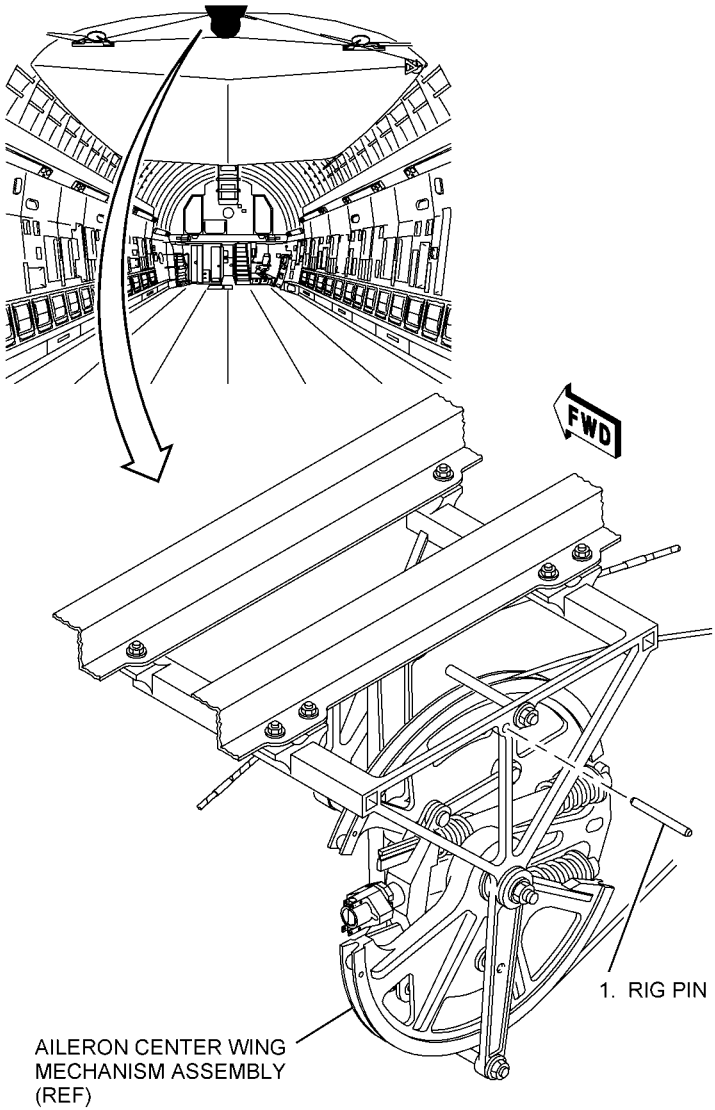
44. (A) Remove warning tag from pilot control stick.
45. (A) Remove warning tag from copilot control stick.



ICN-88277-G2711552-001-01

**03-3. AILERON LOAD FEEL CONTROL ASSEMBLY
TO AILERON CENTER WING MECHANISM
ASSEMBLY CABLE ADJUSTMENT.**

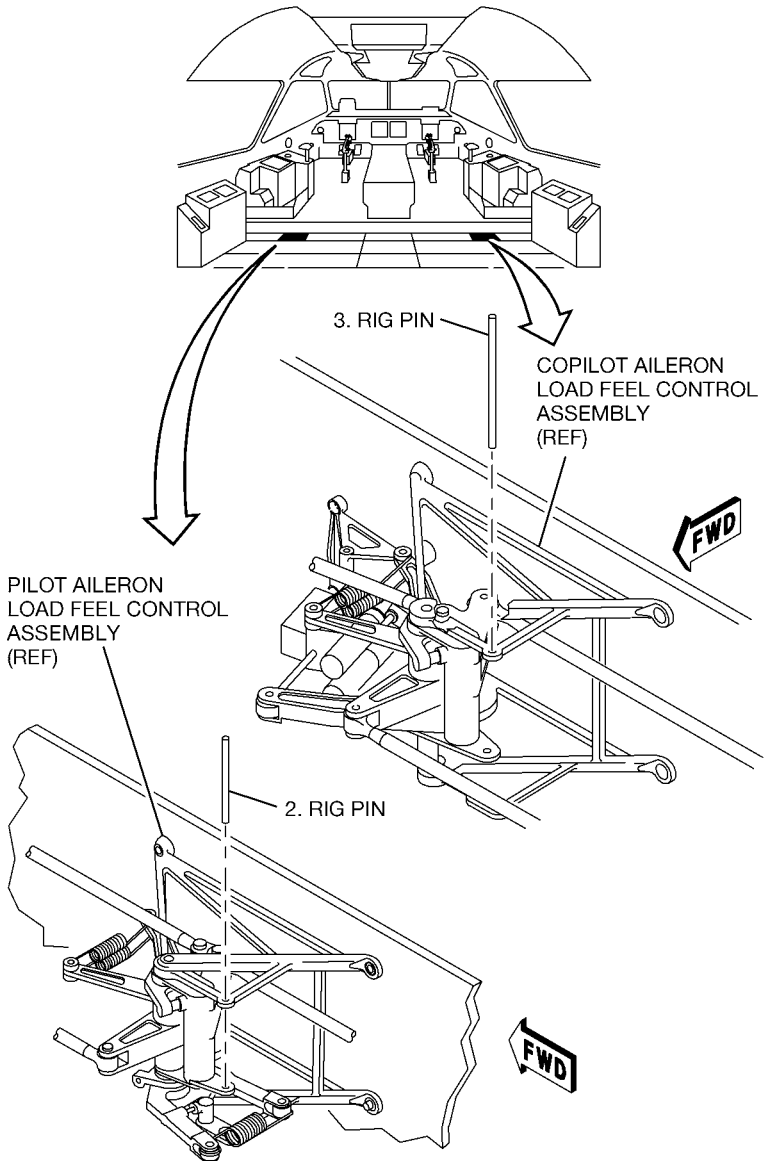
1. Install rig pin 5-8 in aileron center wing mechanism assembly.



ICN-88277-G2711357-005-01

TO 1300i-2-27JG-10-2

2. Install rig pin 5-10 in pilot aileron load feel control assembly.
3. Install rig pin 5-10 in copilot aileron load feel control assembly.



ICN-88277-G2711503-002-01

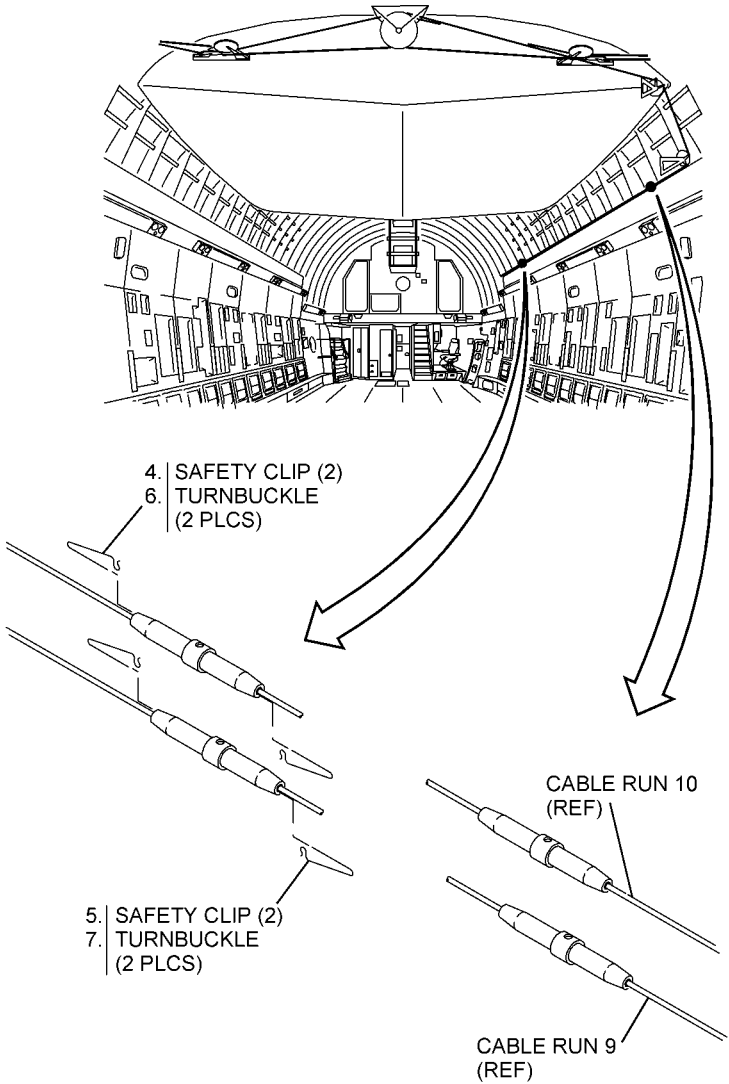
TO 1300i-2-27JG-10-2

4. Remove and discard safety clips; loosen turnbuckles on cable run 9.
5. Remove and discard safety clips; loosen turnbuckles on cable run 10.



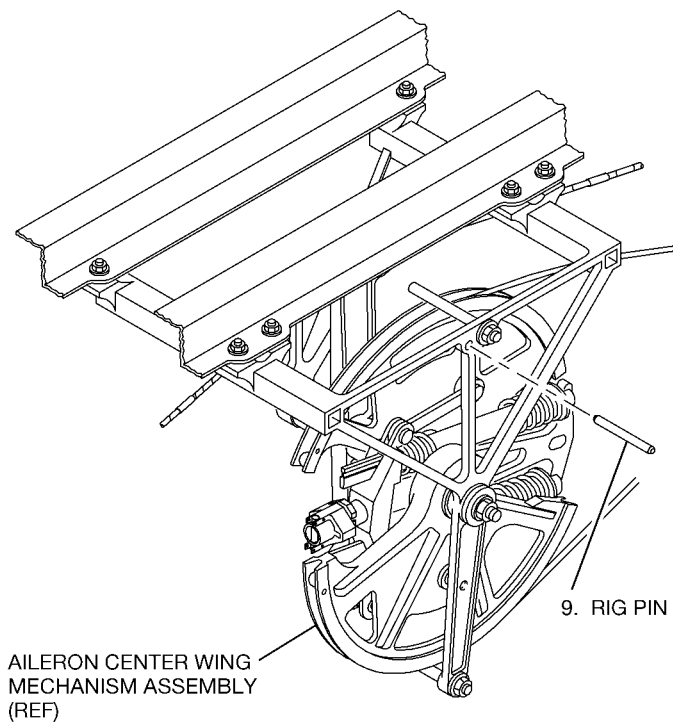
A maximum of three cable terminal threads are allowed to be exposed at each end of turnbuckle barrel after adjusting cable tension. Failure to comply may cause damage to aircraft or equipment.

6. Adjust turnbuckles on cable run 9.
7. Adjust turnbuckles on cable run 10.
8. Observe cable tension regulator for correct compensation scale reading (Para 1-14).
 - 15+/- 1/2 unit @ 70°F.



ICN-88277-G2711358-005-01

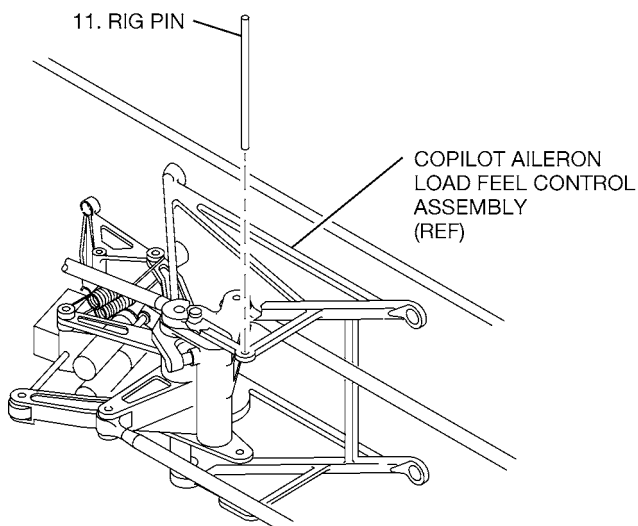
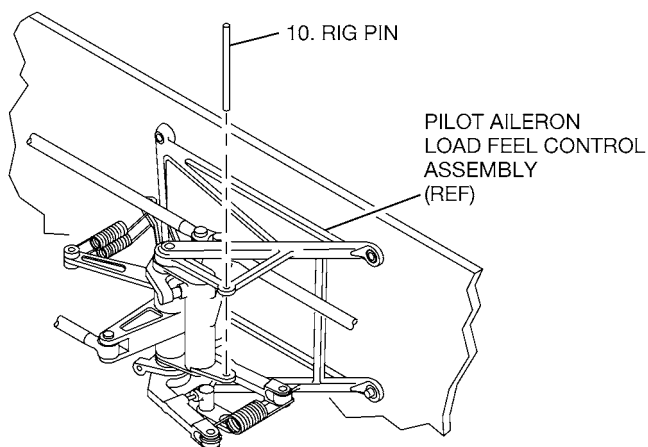
9. Verify rig pin 5-8 in aileron center wing mechanism assembly can be freely removed and reinstalled.



ICN-88277-G2711499-002-01

TO 1300i-2-27JG-10-2

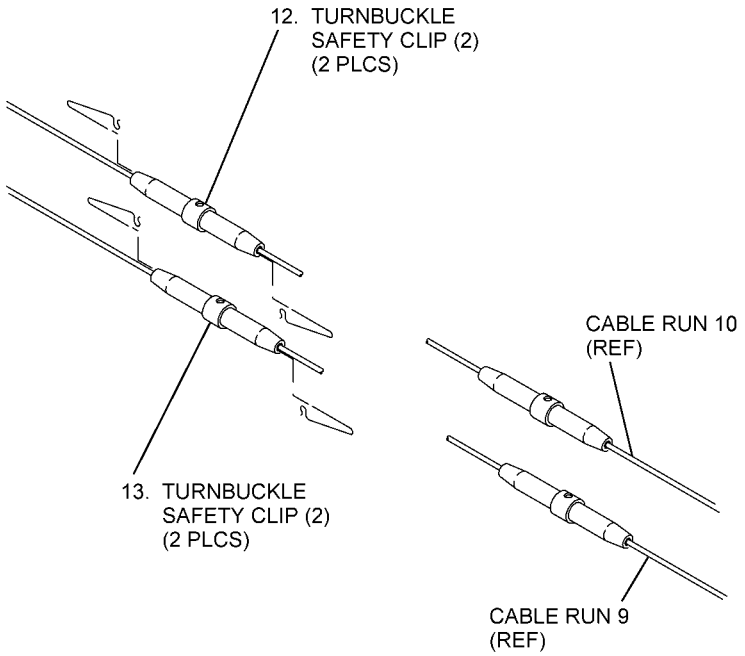
10. Verify rig pin 5-10 in pilot aileron load feel control assembly can be freely removed and reinstalled.
11. Verify rig pin 5-10 in copilot aileron load feel control assembly can be freely removed and reinstalled.



ICN-88277-G2711504-003-01

TO 1300i-2-27JG-10-2

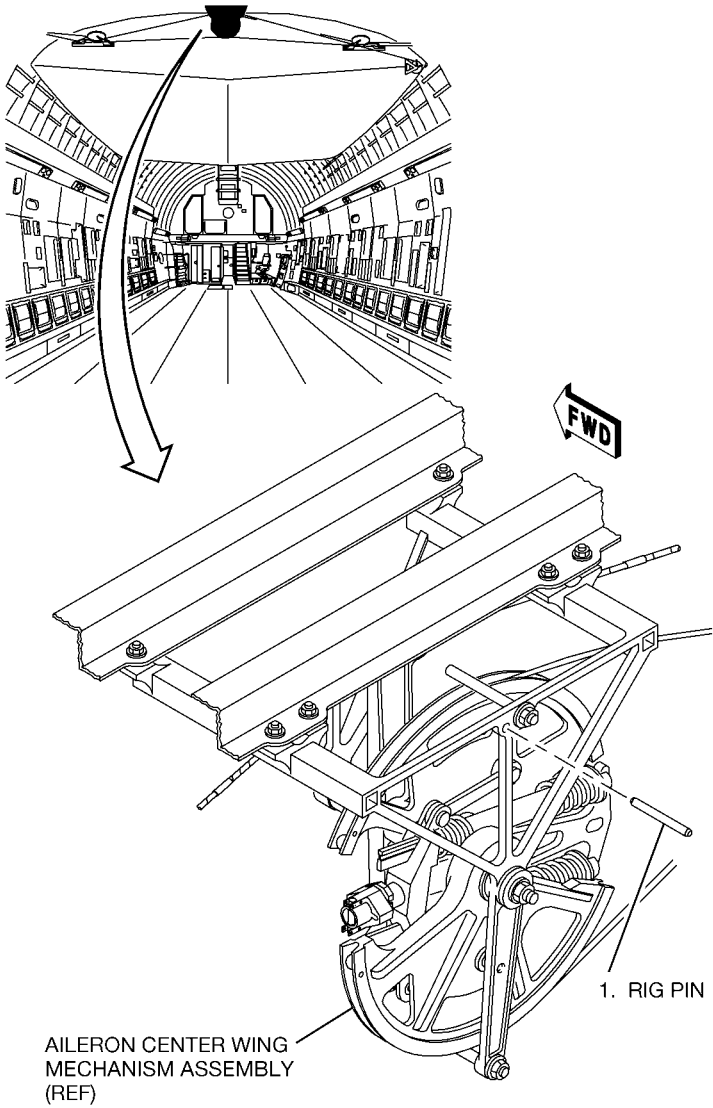
12. Align turnbuckles and install safety clips in cable run 9.
13. Align turnbuckles and install safety clips in cable run 10.



ICN-88277-G2711505-004-01

**03-4. AILERON CENTER WING MECHANISM
ASSEMBLY TO AILERON CONTROL CABLE
VALVE INPUT MECHANISM ASSEMBLY
CABLE ADJUSTMENT.**

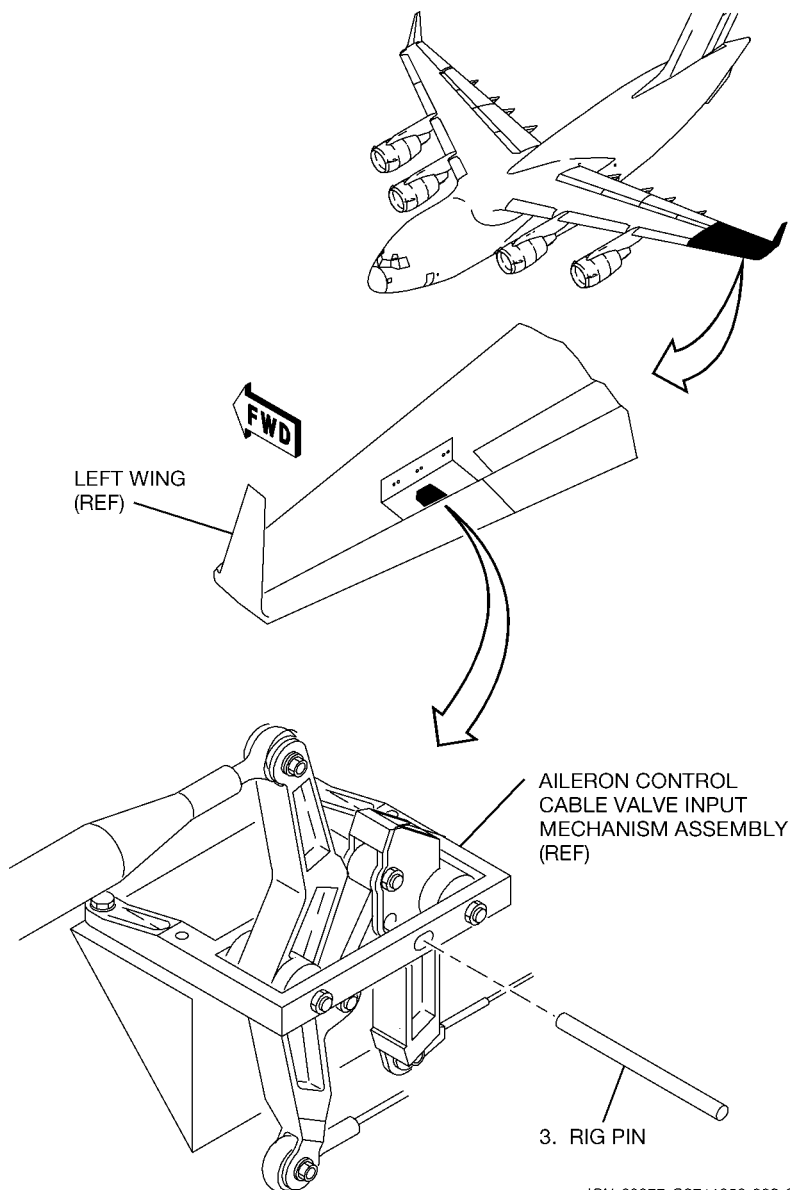
1. Install rig pin 5-8 in aileron center wing mechanism assembly.



ICN-88277-G2711500-002-01

TO 1300i-2-27JG-10-2

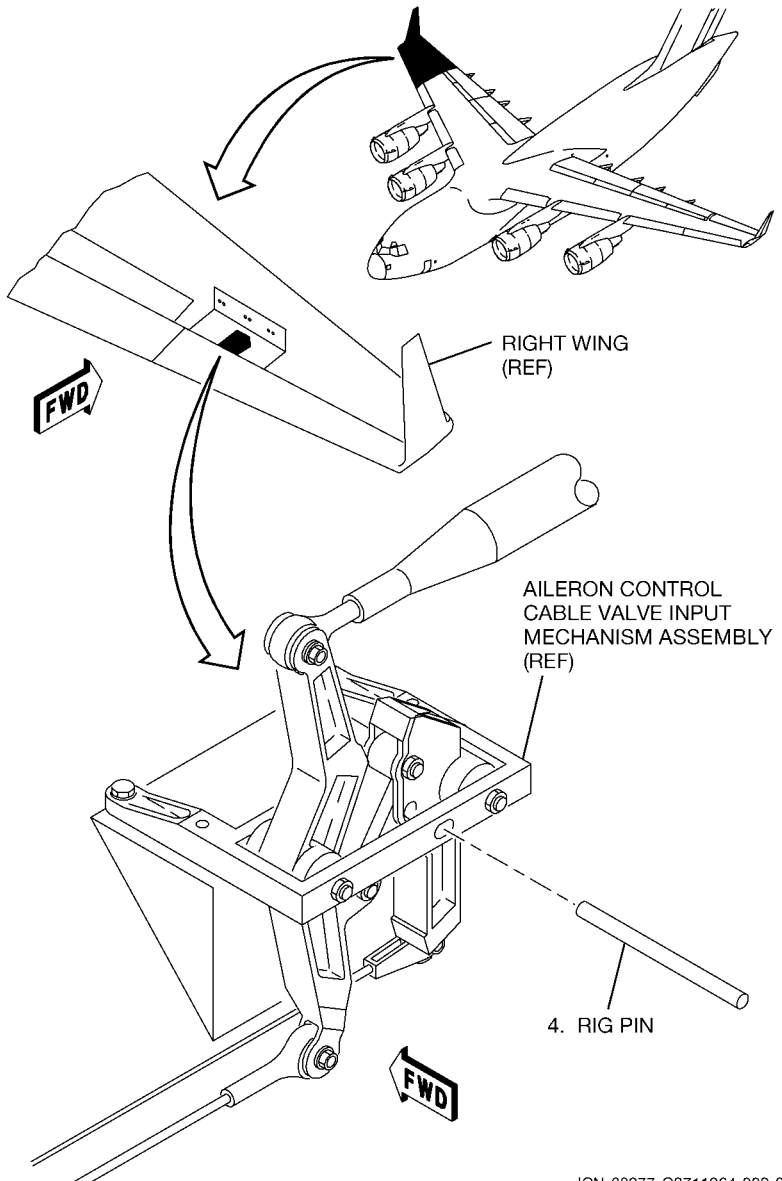
2. Enter fuselage and wing (00-00-01).
3. Install rig pin 5-5 in left wing aileron control cable valve input mechanism assembly.



ICN-88277-G2711359-003-01

TO 1300i-2-27JG-10-2

4. Install rig pin 5-5 in right wing aileron control cable valve input mechanism assembly.



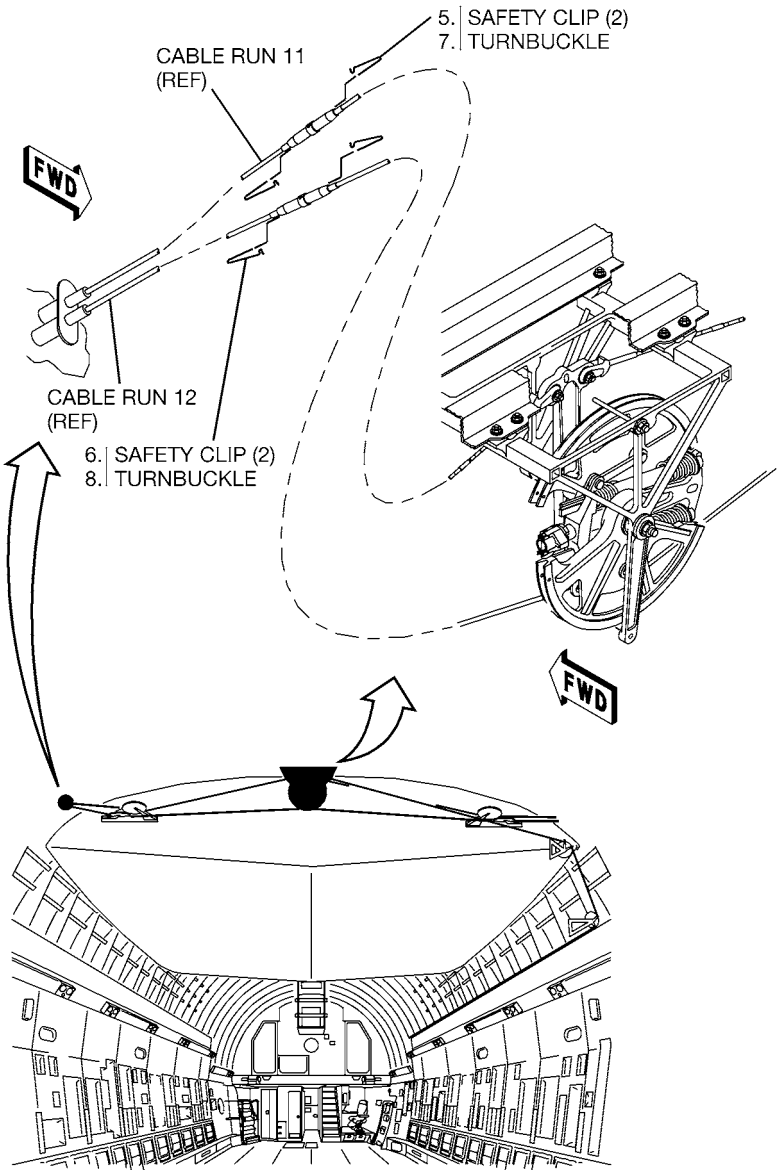
ICN-88277-G2711364-003-01

5. Remove and discard safety clips; loosen turnbuckle on cable run 11.
6. Remove and discard safety clips; loosen turnbuckle on cable run 12.



A maximum of three cable terminal threads are allowed to be exposed at each end of turnbuckle barrel after adjusting cable tension. Failure to comply may cause damage to aircraft or equipment.

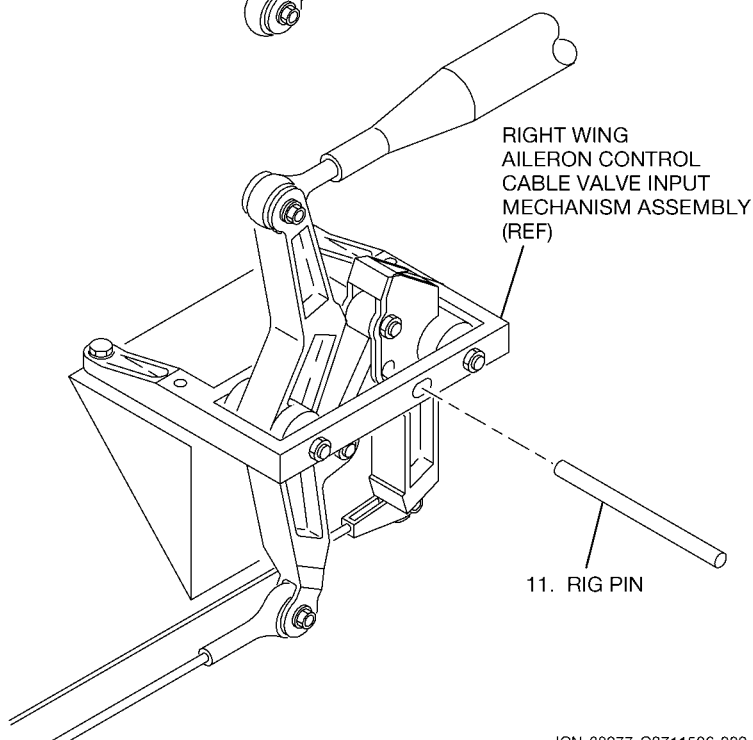
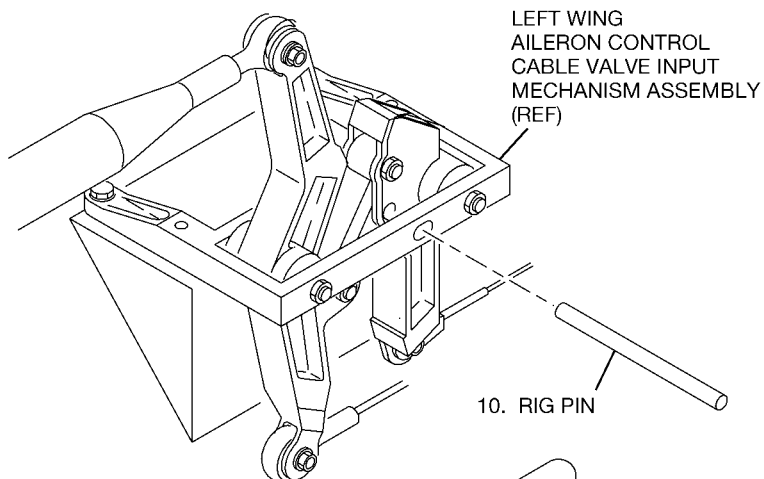
7. Adjust turnbuckle on cable run 11.
8. Adjust turnbuckle on cable run 12.
9. Observe tensiometer for correct cable tension (Para 1-9).
 - 1/8"-35 lb. Rig @ 70°F.



ICN-88277-G2711360-003-01

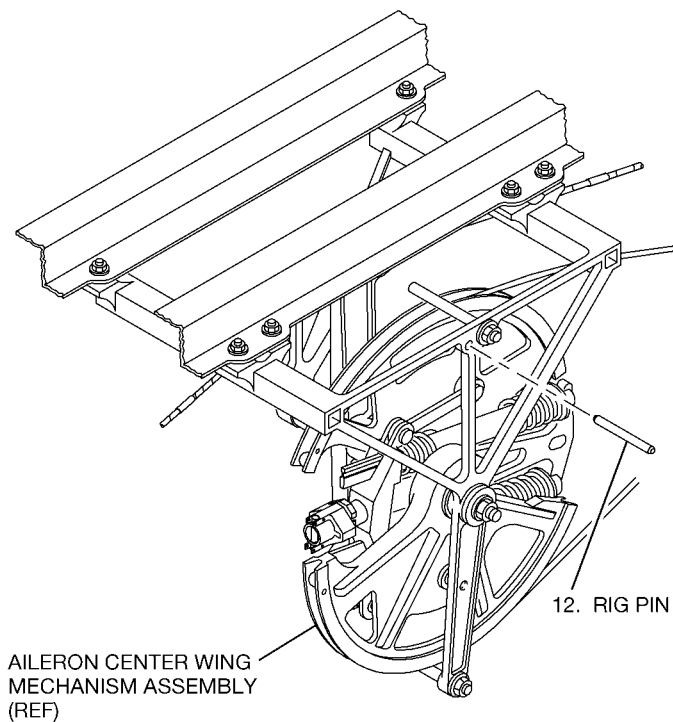
TO 1300i-2-27JG-10-2

10. Verify rig pin 5-5 in left wing aileron control cable valve input mechanism assembly can be freely removed and reinstalled.
11. Verify rig pin 5-5 in right wing aileron control cable valve input mechanism assembly can be freely removed and reinstalled.



ICN-88277-G2711506-002-01

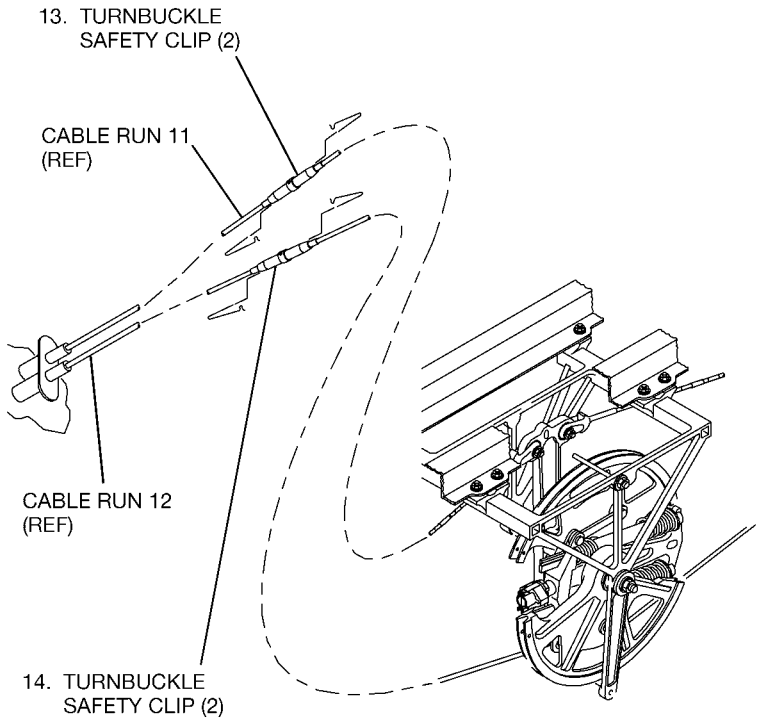
12. Verify rig pin 5-8 in aileron center wing mechanism assembly can be freely removed and reinstalled.



ICN-88277-G2711501-002-01

TO 1300i-2-27JG-10-2

13. Align turnbuckle and install safety clips in cable run 11.
14. Align turnbuckle and install safety clips in cable run 12.



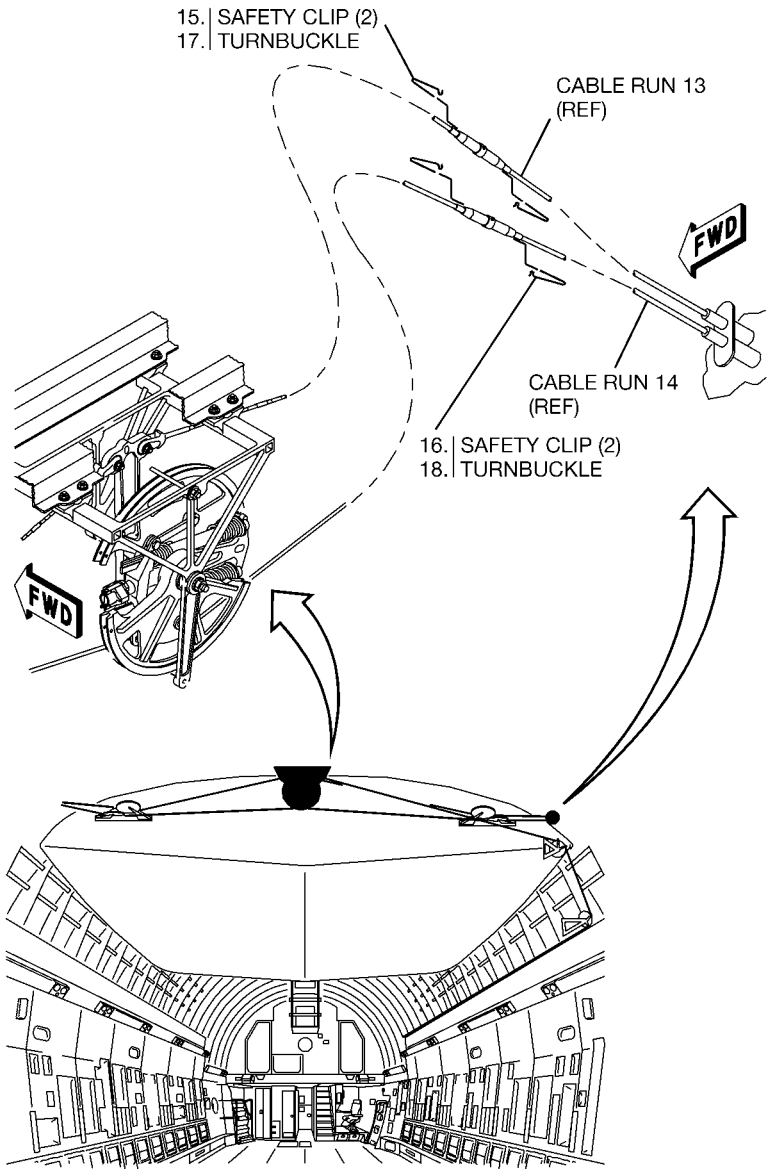
ICN-88277-G2711507-002-01

15. Remove and discard safety clips; loosen turnbuckle on cable run 13.
16. Remove and discard safety clips; loosen turnbuckle on cable run 14.



A maximum of three cable terminal threads are allowed to be exposed at each end of turnbuckle barrel after adjusting cable tension. Failure to comply may cause damage to aircraft or equipment.

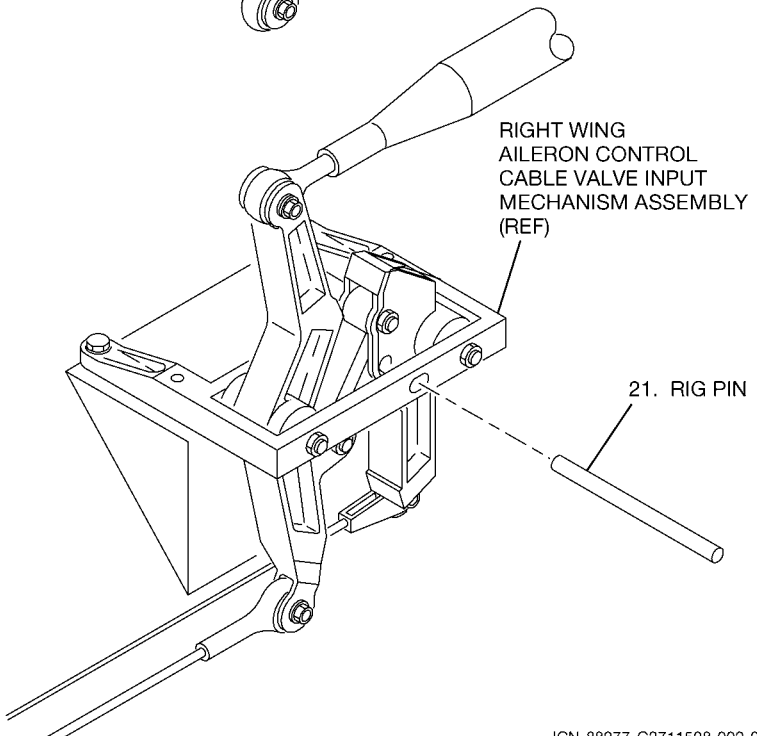
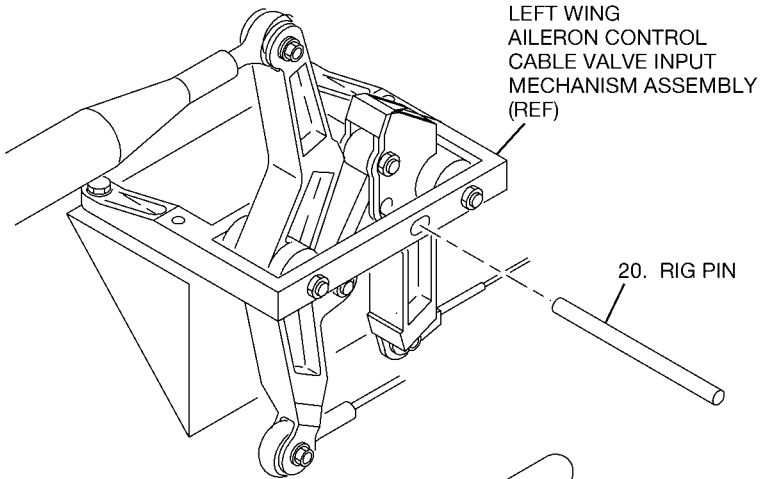
17. Adjust turnbuckle on cable run 13.
18. Adjust turnbuckle on cable run 14.
19. Observe tensiometer for correct cable tension (Para 1-9).
 - 1/8"-35 lb. Rig @ 70°F.



ICON-88277-G2711363-003-01

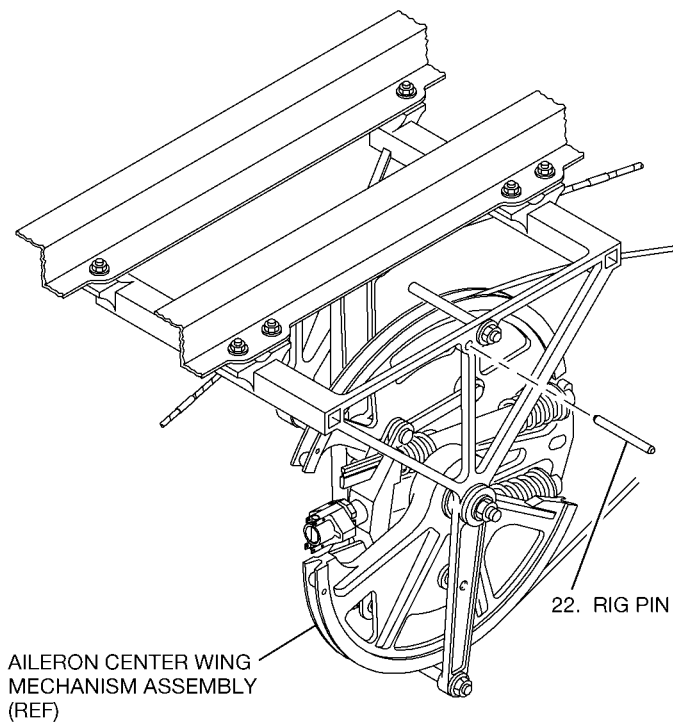
TO 1300i-2-27JG-10-2

20. Verify rig pin 5-5 in left wing aileron control cable valve input mechanism assembly can be freely removed and reinstalled.
21. Verify rig pin 5-5 in right wing aileron control cable valve input mechanism assembly can be freely removed and reinstalled.



ICN-88277-G2711508-002-01

22. Verify rig pin 5-8 in aileron center wing mechanism assembly can be freely removed and reinstalled.



ICN-88277-G2711502-002-01

TO 1300i-2-27JG-10-2

23. Align turnbuckle and install safety clips in cable run 13.
24. Align turnbuckle and install safety clips in cable run 14.