

TO 1300i-2-27JG-20-2

TECHNICAL MANUAL

JOB GUIDE

ORGANIZATIONAL MAINTENANCE

FLIGHT CONTROLS RUDDER

(27-20-00 AND 27-21-10 THROUGH 27-21-14)

USAF SERIES

300i

AIRCRAFT

MCDONNELL DOUGLAS CORPORATION

MILITARY TRANSPORT AIRCRAFT

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THIS MANUAL SUPERSEDES TO 1300i-2-27JG-20-2 DATED 1 JUNE 2023.

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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.

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TOTAL NUMBER OF PAGES IN THIS PUBLICATION IS 188 CONSISTING OF THE FOLLOWING:

Page No.	* Change No.	Page No.	* Change No.
Title thru T-2	0	2-107 thru 2-113.	0
A.	0	2-114 blank.	0
B blank	0	2-115 thru 2-120.	0
i	0	2-121 blank	0
ii blank	0	2-122 thru 2-131.	0
iii thru iv	0	2-132 blank	0
1-1 thru 1-5	0	2-133 thru 2-148.	0
1-6 blank	0	2-149 blank	0
2-1 thru 2-4	0	2-150 thru 2-174.	0
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2-6 thru 2-15.	0		
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INTRODUCTION

SCOPE.

This job guide provides maintenance procedures for the removal and installation of rudder system components.

MODEL(S) COVERED.

All

ABBREVIATIONS.

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

EPC	Electrical Power Center
-----	-------------------------

PLCS	Places
------	--------

CHANGE REQUEST.

Recommended changes to this manual shall be submitted in accordance with TO 00-5-1.300i **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 (27-20-00)

1-1. GENERAL INFORMATION.

1-2. This section provides general information that is essential for ensuring complete and safe maintenance procedures contained throughout this 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 are 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 1-10.

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 1-10.

1-9. All adhesive sealants, sealants, and compounds used in this manual are listed with a primary part number and/or primary specification number. Any suitable substitutes and/or interchangeable adhesive sealants, sealants, and compounds may be used unless otherwise specified. Suitable substitutes and/or interchangeable adhesive sealants, sealants, and compounds are listed in the system peculiar corrosion control manual (Refer to TO 1300i-23, Chapter 1, Section III).

1-10. RUDDER RIG LOAD VS. TEMPERATURE CHART.

NOTE

- This chart is only valid for aircraft that have reached a uniform temperature throughout.
- Loads at **135° F** represent **limit rig load** for design.
- The cable tension requirement per **Rudder Rig Load vs Temperature Chart, 1/8"-75 lb Rig @ 70°F** shall apply for rudder cable runs 1 and 2.
- 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.

Rudder Rig Load vs Temperature Chart 1/8"-75 lb Rig @ 70°F			
TEMP (° F)	MIN INITIAL (lbf)	MAX INITIAL (lbf)	MIN ALLOW SERVICE (lbf)
135	105	116	95
130	102	113	92
125	100	110	90
120	98	107	88
115	95	105	86
110	93	102	83
105	90	99	81
100	88	97	79
95	86	94	77
90	84	92	75
85	81	90	73
80	79	87	71
75	77	85	69
70	75	82	67
65	73	80	66

Rudder Rig Load vs Temperature Chart 1/8"-75 lb Rig @ 70°F			
TEMP (° F)	MIN INITIAL (lbf)	MAX INITIAL (lbf)	MIN ALLOW SERVICE (lbf)
60	71	78	64
55	69	76	62
50	67	74	60
45	65	71	58
40	63	69	57
35	61	67	55
30	59	65	53
25	57	63	52
20	56	61	50
15	54	59	48
10	52	57	47
5	50	55	45
0	49	53	44
-5	47	52	42
-10	45	50	41
-15	44	48	39
-20	42	46	38
-25	40	44	36
-30	39	43	35
-35	37	41	33
-40	36	39	32
-45	34	38	31
-50	33	36	29
-55	31	34	28
-60	30	33	27

1-11. 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.

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1-12. To complete the rigging procedures, the system shall be cycled 10-20 times, and cable tensions rechecked and adjusted when necessary.

1-13. 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 %

1-14. 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 %

1-15. GENERAL WARNINGS, CAUTIONS, AND NOTES.**WARNING**

All flight control surfaces and engine thrust reverser areas must be cleared of personnel and equipment prior to application of hydraulic power. Failure to comply may cause injury to personnel and damage to equipment.

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 (12-29-08). Failure to comply may cause damage to aircraft.

SECTION 2

DIRECTION CONTROL PEDAL ASSEMBLY (27-21-10)

MASTER INPUT CONDITIONS:

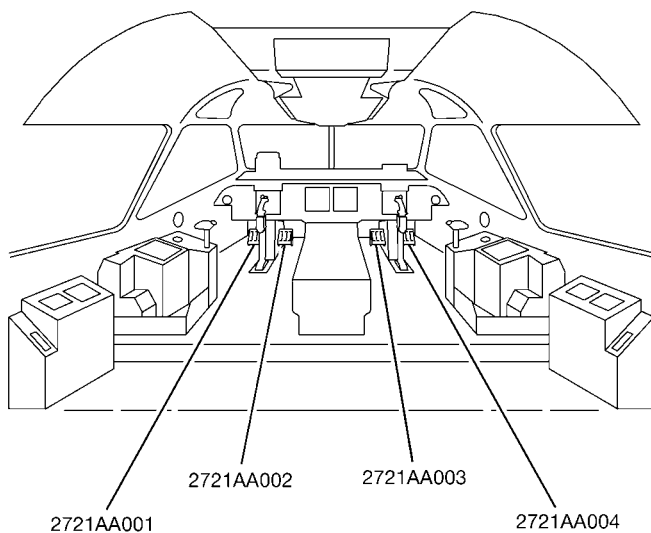
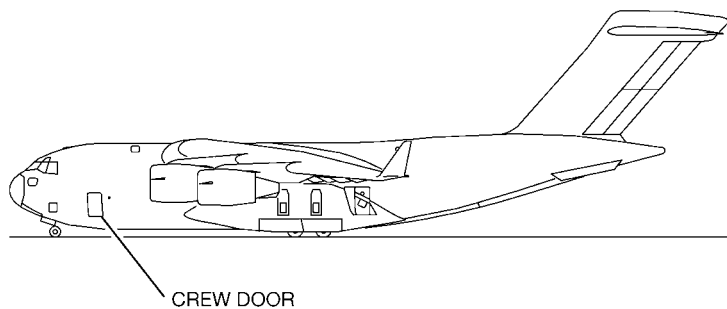
Reference designators:

2721AA001	Direction Control Pedal Assembly
2721AA002	Direction Control Pedal Assembly
2721AA003	Direction Control Pedal Assembly
2721AA004	Direction Control Pedal Assembly

Applicable functions:

- 2 Removal.
- 3 Installation.

Access data:



ICN-88277-G2721021-003-01

**DIRECTION CONTROL PEDAL ASSEMBLY
REMOVAL
(27-21-10-2)**

FUNCTIONAL INPUT CONDITIONS:

Applicability:	Task
All	All

Additional information:

This procedure consists of the following tasks:

- 2-1. Preparation.
- 2-2. Removal.

NOTE	Task
This is a typical removal task for all direction control pedal assemblies.	All

Additional data:	Task
TO 1300i-2-25JG-10-1	2-1

Personnel recommended:	Task
One	All

Safety conditions:	Task
NA	--

Support equipment:

Nomenclature

PN

Specification

Qty

Task

NA

--

--

--

--

Supplies:

Nomenclature

PN

Specification

Qty

Task

NA

--

--

--

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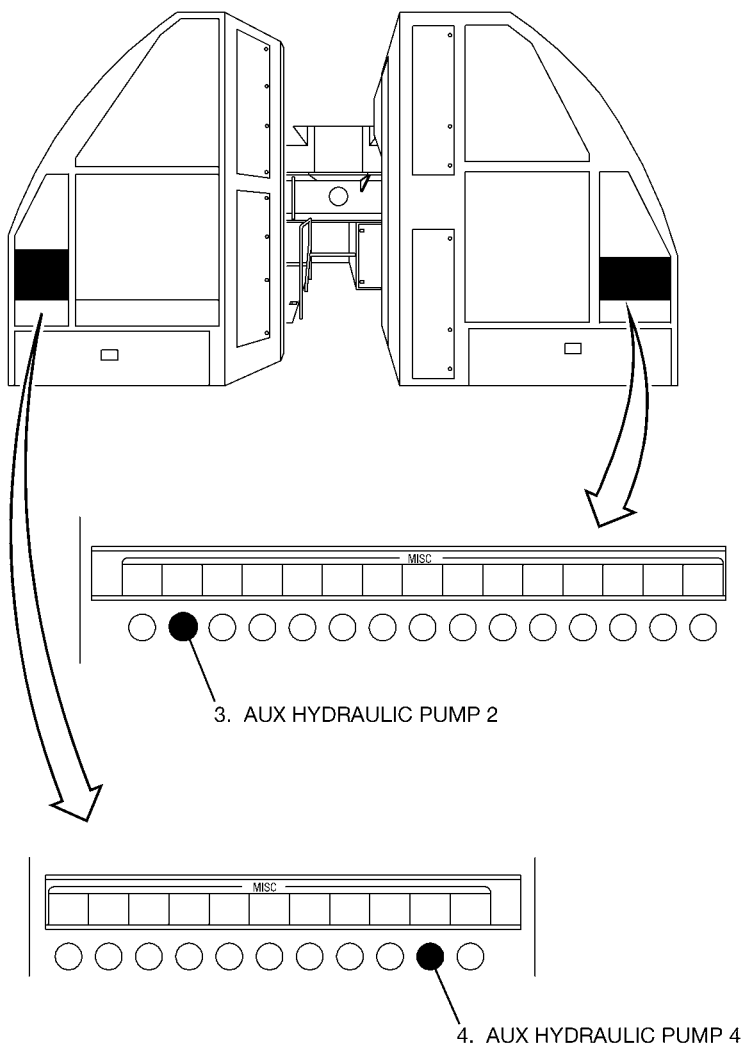
2-1. PREPARATION.

1. Review "Section 1 (General Information)" of this TO for system general warnings, cautions, and notes.
2. Review task "Functional Input Conditions" page for task specific safety conditions.

WARNING

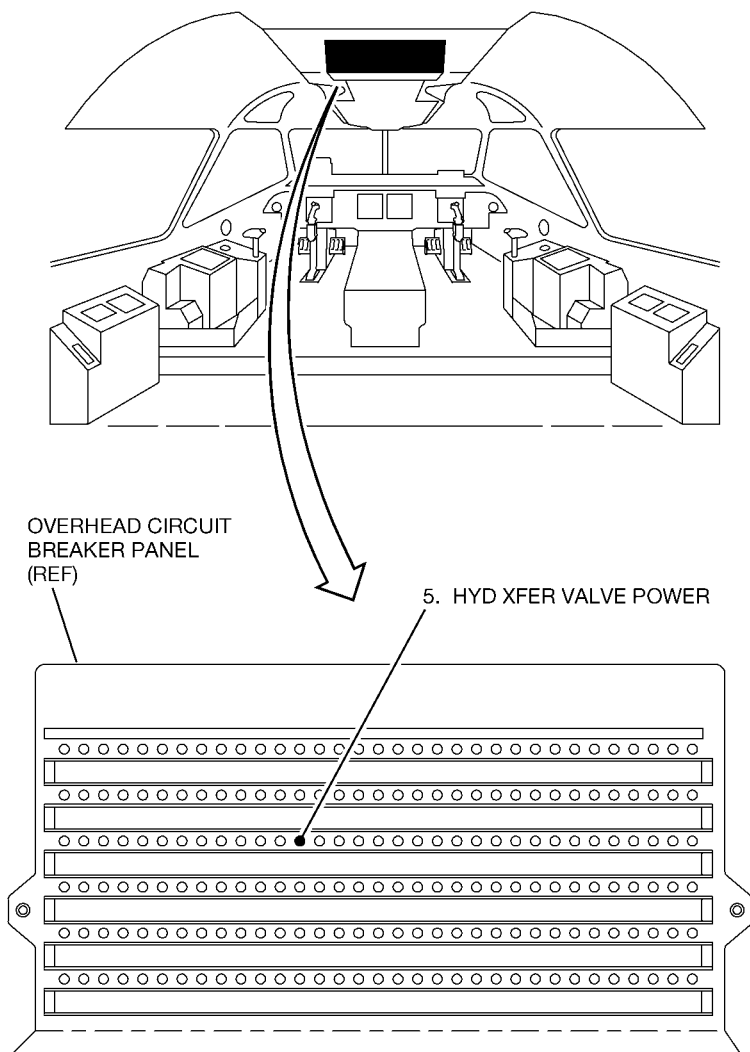
Warning tags shall be attached to all opened circuit breakers as directed by the technical order and an applicable warning statement shall be entered in the AFTO Form/IMT 781A, IAW TO 00-20-1, AFI 21-101 and TO 1300i-2-00GV-00-1, Chapter 5 anytime exiting cockpit circuit breaker area before task completion or there is a delay in maintenance where task cannot be fully accomplished. Failure to comply may cause injury to personnel or damage to aircraft.

3. Open **AUX HYDRAULIC PUMP 2** circuit breaker on Electrical Power Center (EPC), row **LL**, column **69**.
4. Open **AUX HYDRAULIC PUMP 4** circuit breaker on EPC, row **LL**, column **10**.



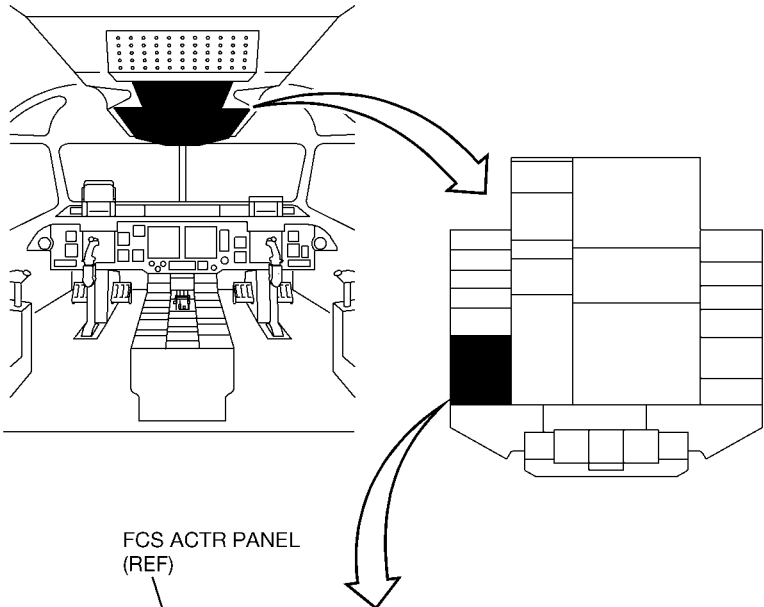
ICN-88277-G2721022-003-01

5. Open **HYD XFER VALVE POWER** circuit breaker on overhead circuit breaker panel, row **C**, column **13**.

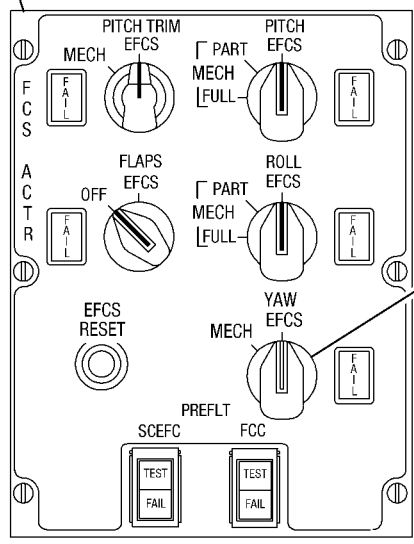


ICN-88277-G2721023-003-01

6. Rotate **YAW** switch on **FCS ACTR** panel to **MECH**.



FCS ACTR PANEL
(REF)



6. YAW

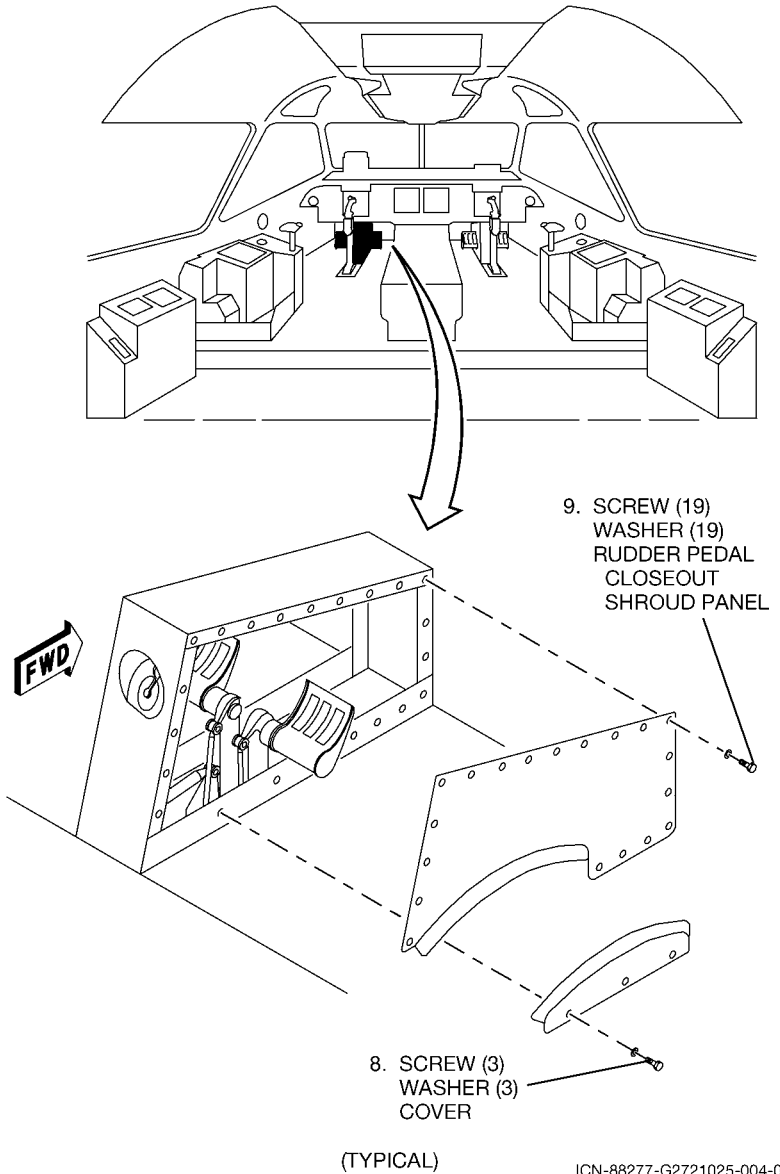
ICN-88277-G2721024-002-01

TO 1300i-2-27JG-20-2

7. Remove pilot/copilot aircraft seat (25-11-10, task 2-1) as follows:

PEDAL REF DES	SEAT REF DES
2721AA001 2721AA002	2511AA001
2721AA003 2721AA004	2511AA002

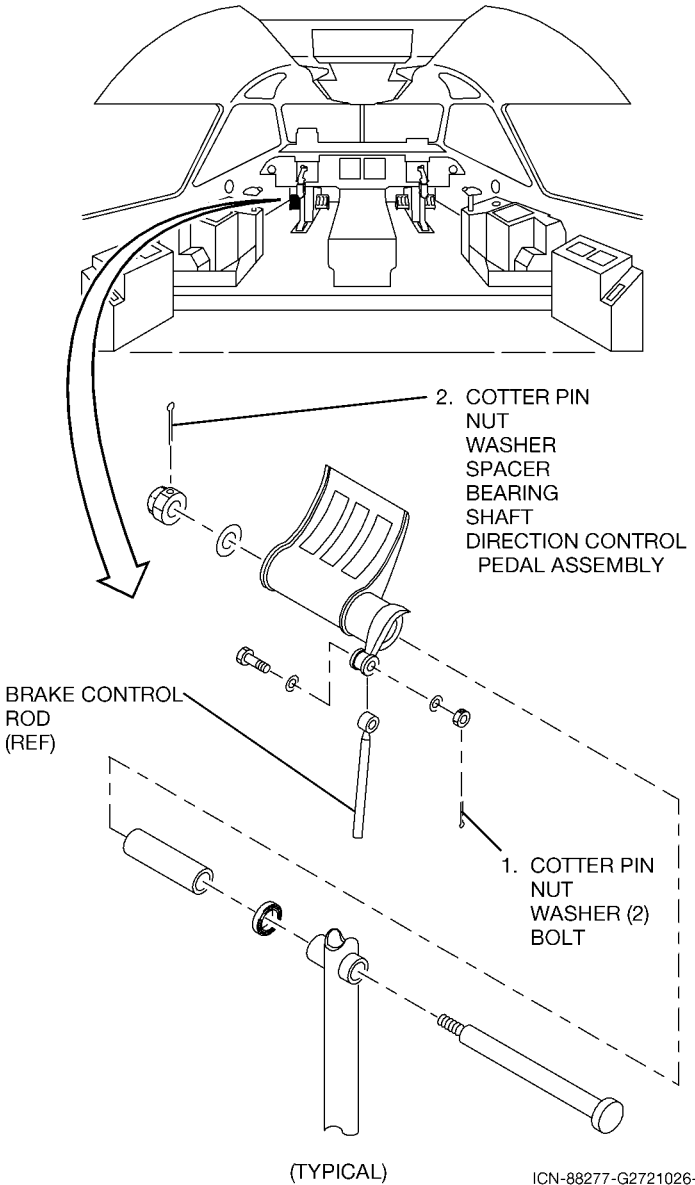
8. Remove screws, washers, and cover.
9. Remove screws, washers, and rudder pedal closeout shroud panel.



ICN-88277-G2721025-004-01

2-2. REMOVAL.

1. Remove cotter pin, nut, washers, and bolt from brake control rod.
2. Remove cotter pin, nut, washer, spacer, bearing, shaft, and direction control pedal assembly.



ICN-88277-G2721026-003-01

**DIRECTION CONTROL PEDAL ASSEMBLY
INSTALLATION
(27-21-10-3)**

FUNCTIONAL INPUT CONDITIONS:

Applicability:	Task
All	All

Additional information:

This procedure consists of the following tasks:

- 3-1. Installation.
- 3-2. Follow-on maintenance.

NOTE	Task
This is a typical installation task for all direction control pedal assemblies.	All

Additional data:	Task
TO 1300i-2-27FI-00-1	3-2
TO 1300i-2-25JG-10-1	3-2

Personnel recommended:	Task
One	All

Safety conditions:	Task
NA	--

Support equipment:

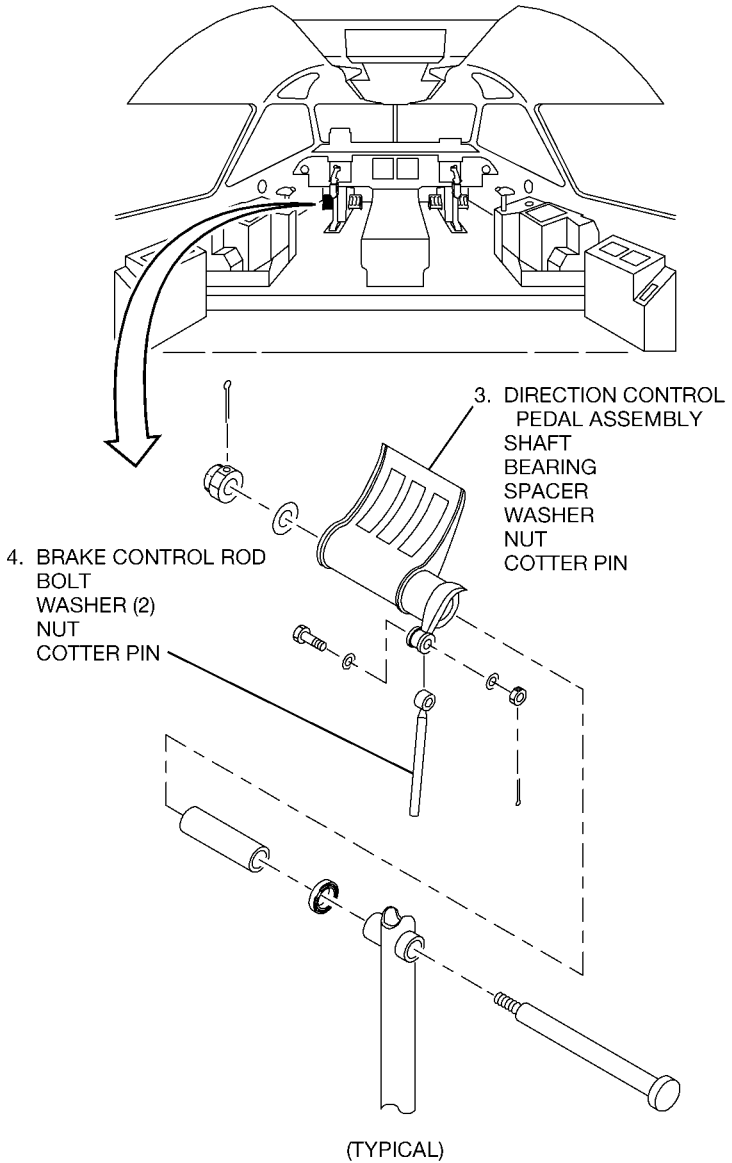
<u>Nomenclature</u>	<u>PN</u>	<u>Specification</u>	<u>Qty</u>	<u>Task</u>
NA	--	--	--	--

Supplies:

<u>Nomenclature</u>	<u>PN</u>	<u>Specification</u>	<u>Qty</u>	<u>Task</u>
Pin, Cotter	MS24665-151	--	1	3-1
Pin, Cotter	MS24665-153	--	1	3-1

3-1. INSTALLATION.

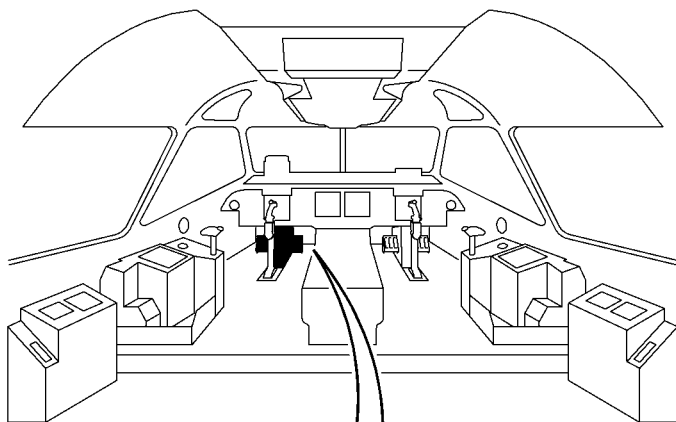
1. Review "Section 1 (General Information)" of this TO for system general warnings, cautions, and notes.
2. Review task "Functional Input Conditions" page for task specific safety conditions.
3. Position direction control pedal assembly and install shaft, bearing, spacer, washer, nut, and cotter pin (PN MS24665-153).
4. Position brake control rod and install bolt, washers, nut, and cotter pin (PN MS24665-151).



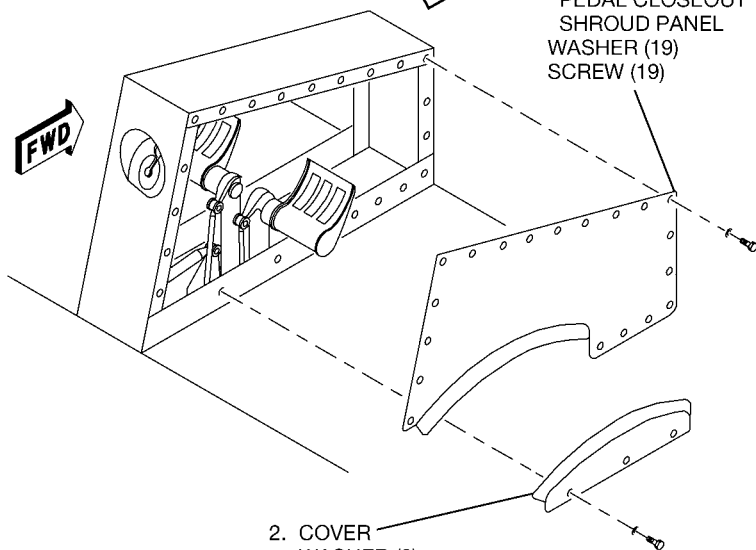
ICN-88277-G2721027-004-01

3-2. FOLLOW-ON MAINTENANCE.

1. Position direction control pedal closeout shroud panel and install washers and screws.
2. Position cover; install washers and screws.



1. DIRECTION CONTROL
PEDAL CLOSEOUT
SHROUD PANEL
WASHER (19)
SCREW (19)



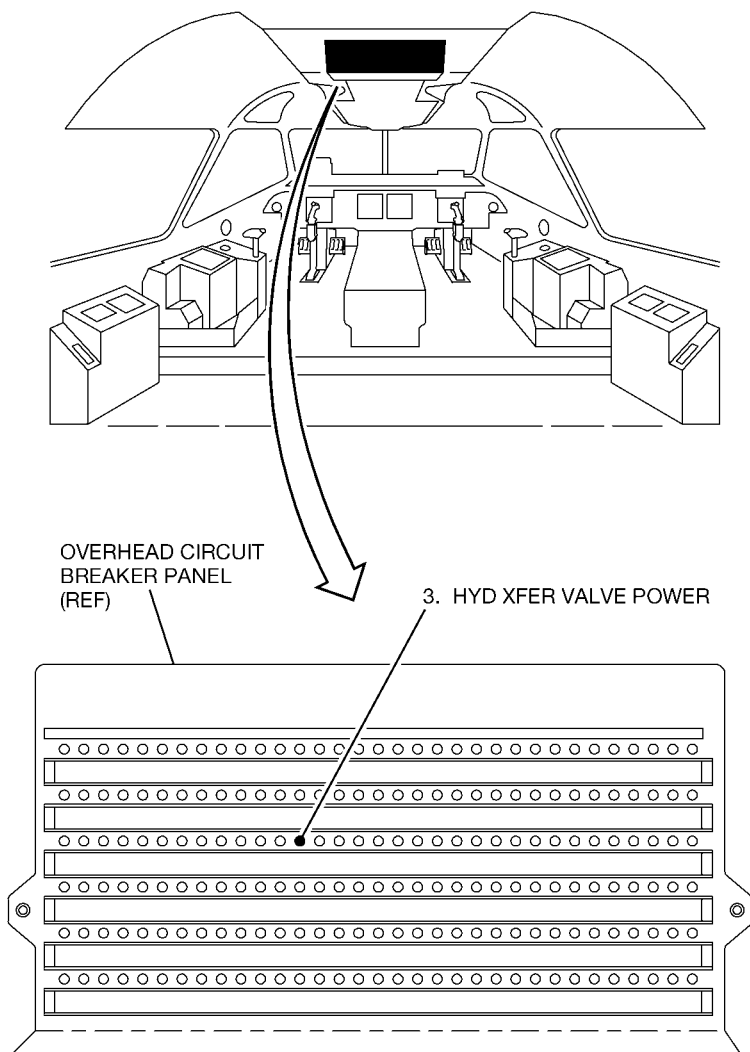
2. COVER
WASHER (3)
SCREW (3)

(TYPICAL)

ICN-88277-G2721028-004-01

TO 1300i-2-27JG-20-2

3. Close **HYD XFER VALVE POWER** circuit breaker on overhead circuit breaker panel, row **C**, column **13**.

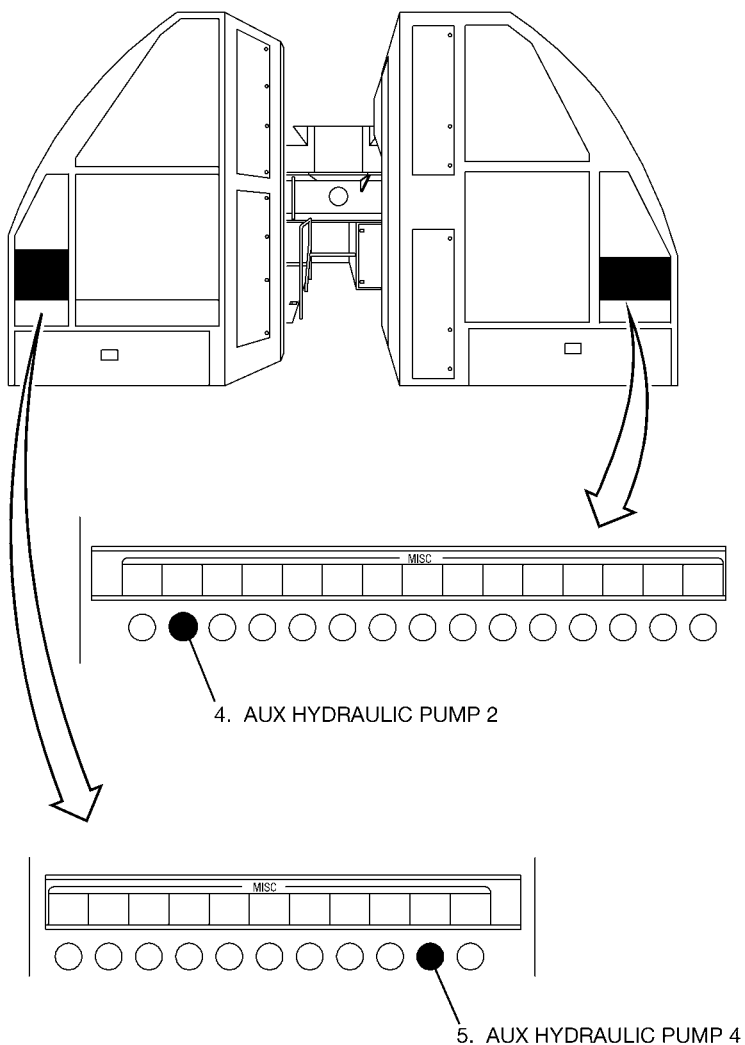


ICN-88277-G2721029-003-01

TO 1300i-2-27JG-20-2

- 4. Close **AUX HYDRAULIC PUMP 2** circuit breaker on Electrical Power Center (EPC), row **LL**, column **69**.
- 5. Close **AUX HYDRAULIC PUMP 4** circuit breaker on EPC, row **LL**, column **10**.
- 6. Install pilot/copilot aircraft seat (25-11-10, task 3-2) as follows:

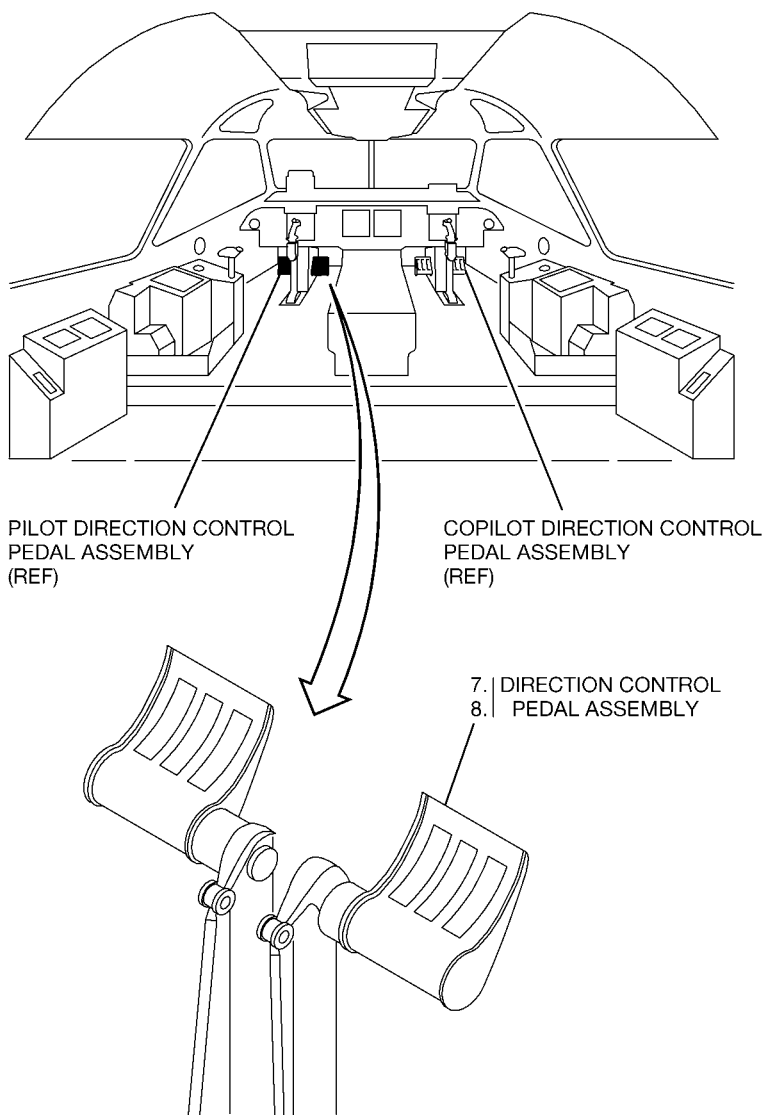
PEDAL REF DES	SEAT REF DES
2721AA001 2721AA002	2511AA001
2721AA003 2721AA004	2511AA002



ICN-88277-G2721030-002-01

TO 1300i-2-27JG-20-2

7. Move direction control pedal assemblies alternately, left and right.
 - Observe for freedom of movement (27-21-AG-).
8. Operate direction control pedals to apply brakes.
 - Observe for freedom of movement (27-21-AG-).



(TYPICAL)

ICN-88277-G2721362-002-01

RUDDER PEDAL SUPPORT ASSEMBLY (27-21-11)

MASTER INPUT CONDITIONS:

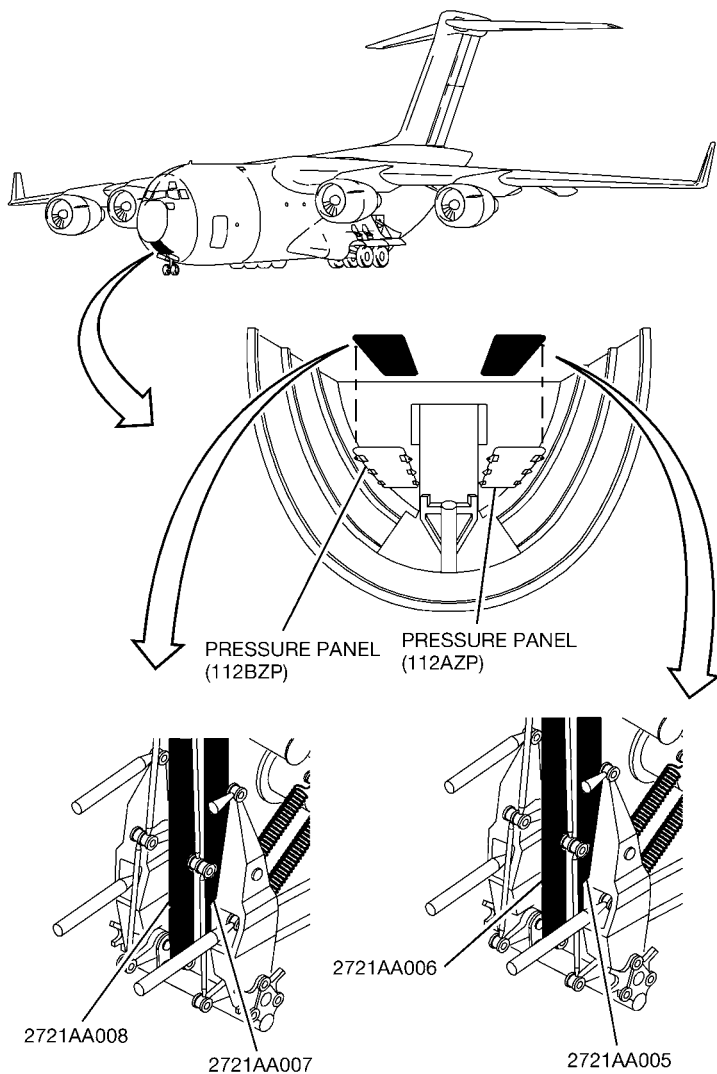
Reference designators:

2721AA005	Rudder Pedal Support Assembly
2721AA006	Rudder Pedal Support Assembly
2721AA007	Rudder Pedal Support Assembly
2721AA008	Rudder Pedal Support Assembly

Applicable functions:

- 2 Removal.
- 3 Installation.

Access data:



ICN-88277-G2721031-003-01

**RUDDER PEDAL SUPPORT ASSEMBLY
REMOVAL
(27-21-11-2)**

FUNCTIONAL INPUT CONDITIONS:

Applicability:	Task
All	All

Additional information:

This procedure consists of the following tasks:

- 2-1. Preparation.
- 2-2. Removal.

	Task
NOTE	
This is a typical installation task for all rudder pedal support assemblies.	All

Additional data:	Task
TO 1300i-2-53JG-10-1	2-1

Personnel recommended:	Task
One	2-1
Two	2-2
Person (A) performs task.	
Person (B) assists person (A).	

Safety conditions:

Task

WARNING

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.

All

Support equipment:

<u>Nomenclature</u>	<u>PN</u>	<u>Specification</u>	<u>Qty</u>	<u>Task</u>
Tool, Turnbuckle Adjustment	17G140019-1	--	1	2-2

Supplies:

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

2-1. PREPARATION.

- 1. Review "Section 1 (General Information)" of this TO for system general warnings, cautions, and notes.
- 2. Review task "Functional Input Conditions" page for task specific safety conditions.
- 3. Remove direction control pedal assembly (27-21-10) as follows:

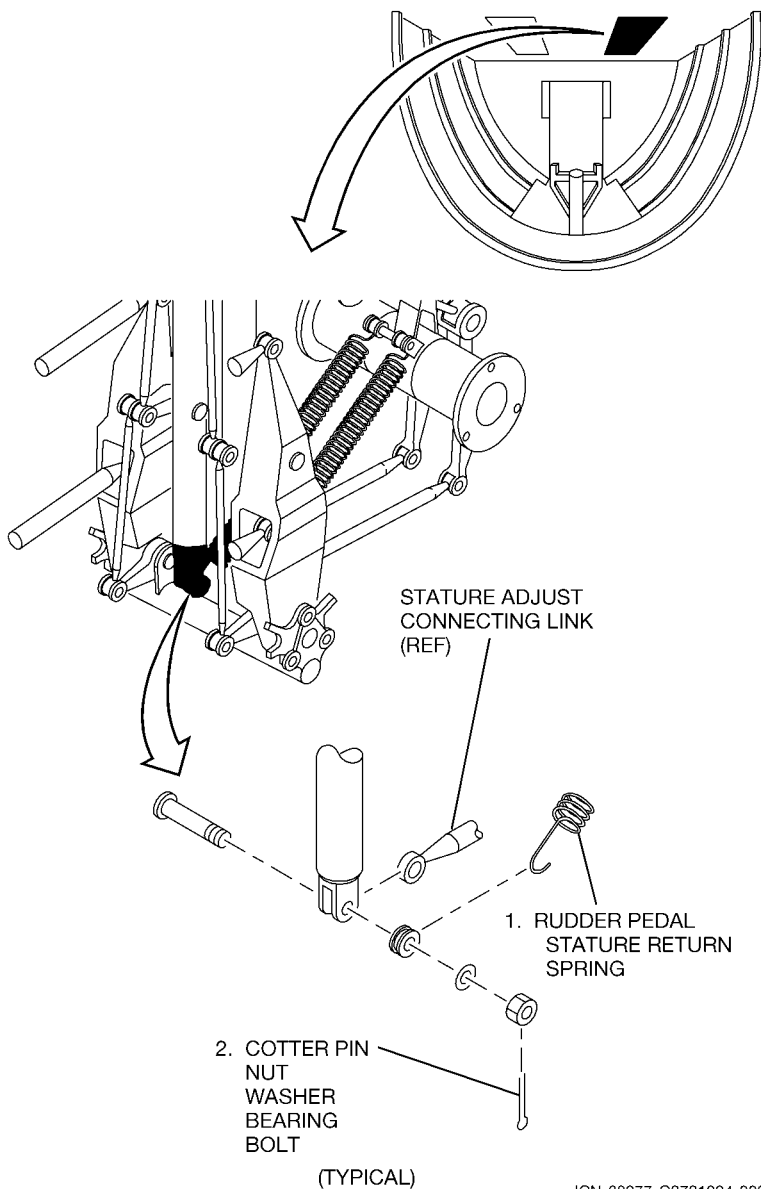
SUPPORT ASSEMBLY REF DES	PEDAL REF DES
2721AA005	2721AA001
2721AA006	2721AA002
2721AA007	2721AA003
2721AA008	2721AA004

- 4. Remove horizontal pressure panel access cover assembly (53-12-10).

SUPPORT REF DES	PANEL NO.	PANEL REF DES
2721AA005 2721AA006	112AZP	5312CA001
2721AA007 2721AA008	112BZP	5312CA002

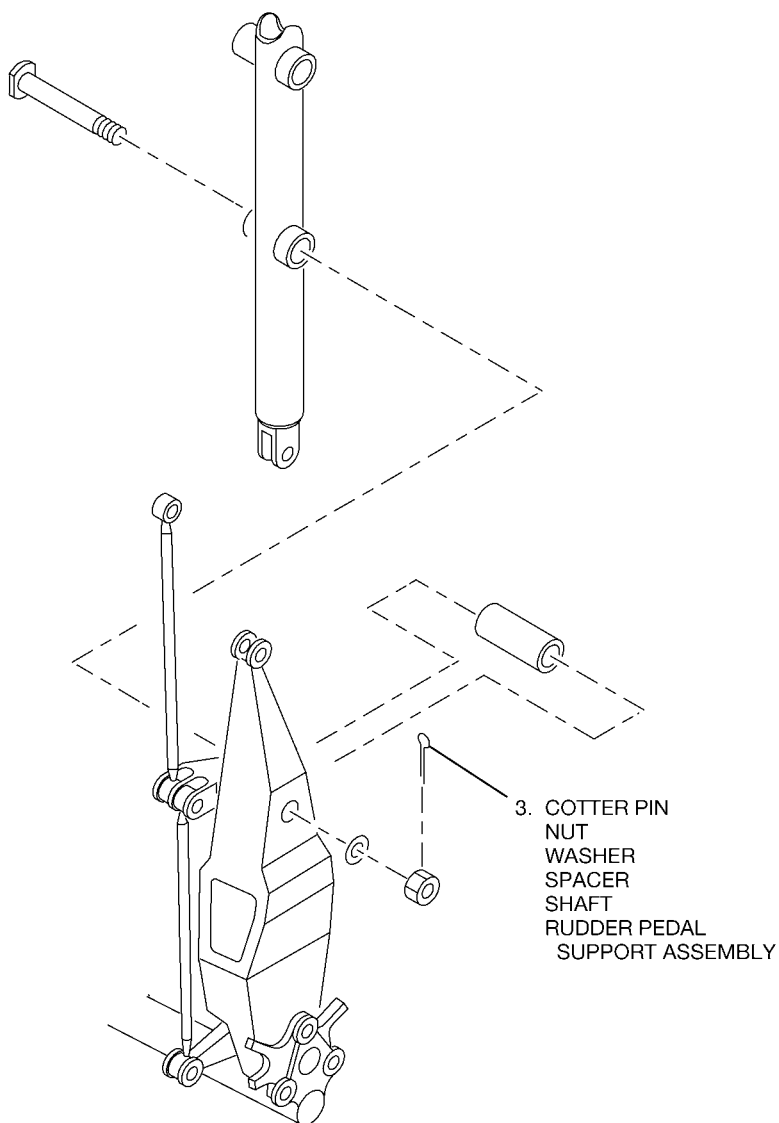
2-2. REMOVAL.

1. (A,B) Disconnect rudder pedal stature return spring.
2. (A,B) Remove cotter pin, nut, washer, bearing, and bolt from stature adjust connecting link.



ICN-88277-G2721034-002-01

3. (A,B) Remove cotter pin, nut, washer, spacer; offset rudder pedal support assembly and remove shaft and rudder pedal support assembly.



(TYPICAL)

ICN-88277-G2721035-003-01

**RUDDER PEDAL SUPPORT ASSEMBLY
INSTALLATION
(27-21-11-3)**

FUNCTIONAL INPUT CONDITIONS:

Applicability:	Task
All	All

Additional information:

This procedure consists of the following tasks:

- 3-1. Installation.
- 3-2. Follow-on maintenance.

NOTE	Task
This is a typical installation task for all rudder pedal support assemblies.	All

Additional data:	Task
TO 1300i-2-27FI-00-1	3-2
TO 1300i-2-53JG-10-1	3-2

Personnel recommended:	Task
One	3-2
Two	3-1
Person (A) performs task.	
Person (B) assists person (A).	

Safety conditions:

Task

WARNING

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.

All

Support equipment:

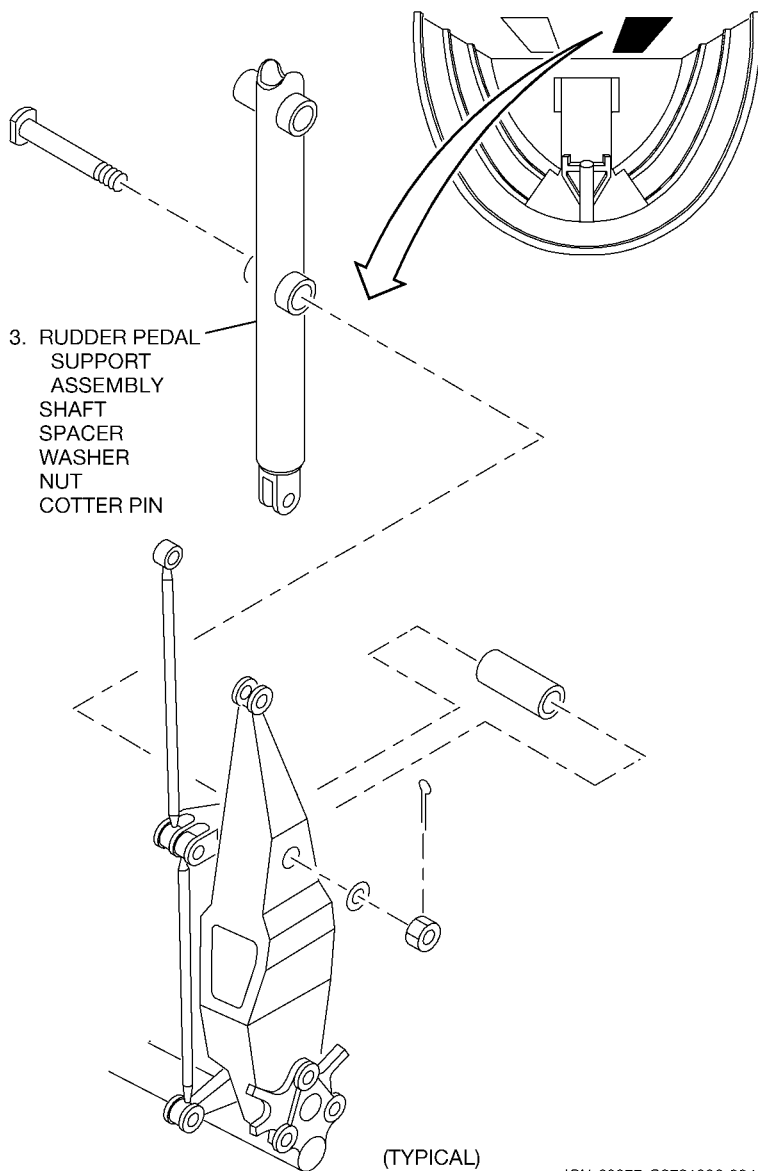
<u>Nomenclature</u>	<u>PN</u>	<u>Specification</u>	<u>Qty</u>	<u>Task</u>
Tool, Turnbuckle Adjustment	17G140019-1	--	1	3-1

Supplies:

<u>Nomenclature</u>	<u>PN</u>	<u>Specification</u>	<u>Qty</u>	<u>Task</u>
Pin, Cotter	MS24665-151	--	1	3-1
Pin, Cotter	MS24665-153	--	1	3-1

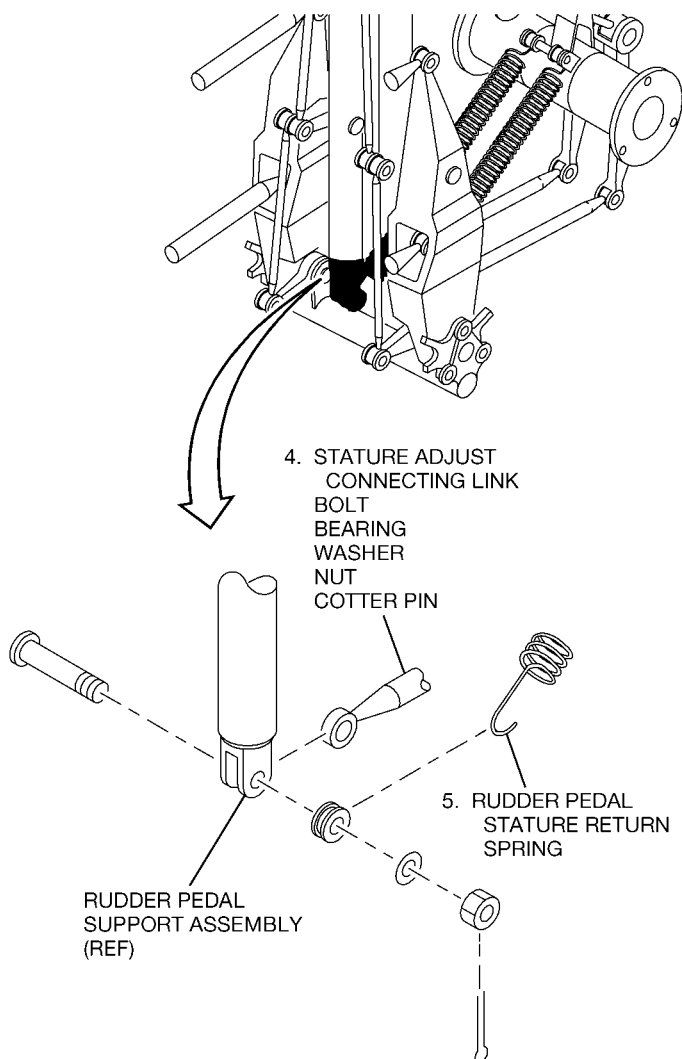
3-1. INSTALLATION.

1. Review "Section 1 (General Information)" of this TO for system general warnings, cautions, and notes.
2. Review task "Functional Input Conditions" page for task specific safety conditions.
3. (A,B) Position and offset rudder pedal support assembly; install shaft, spacer, washer, nut, and cotter pin (PN MS24665-151).



TO 1300i-2-27JG-20-2

4. (A,B) Position stature adjust connecting link; install bolt, bearing, washer, nut, and cotter pin (PN MS24665-153) on rudder pedal support assembly.
5. (A,B) Connect rudder pedal stature return spring to rudder pedal support assembly.



ICN-88277-G2721037-003-01

3-2. FOLLOW-ON MAINTENANCE.

1. Install direction control pedal assembly (27-21-10, task 3-1) as follows:

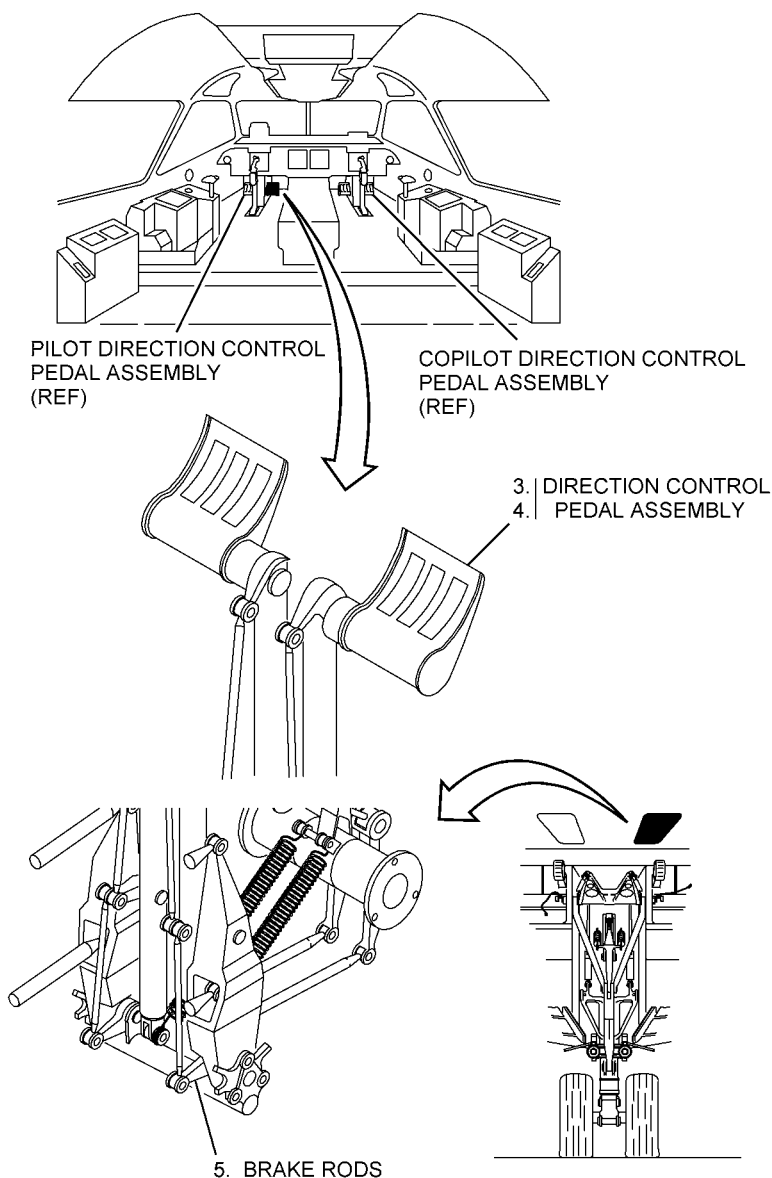
SUPPORT ASSEMBLY REF DES	PEDAL REF DES
2721AA005	2721AA001
2721AA006	2721AA002
2721AA007	2721AA003
2721AA008	2721AA004

2. Install horizontal pressure panel access cover assembly (53-12-10).

SUPPORT REF DES	PANEL NO.	PANEL REF DES
2721AA005 2721AA006	112AZP	5312CA001
2721AA007 2721AA008	112BZP	5312CA002

TO 1300i-2-27JG-20-2

3. Place feet firmly on direction control pedals assemblies.
4. (A,B) Turn stature release lever 90 degrees and position direction control pedal assemblies forward and aft.
 - Observe rudder pedal support assembly and input support assembly for smooth operation (27-21-AG-__).
5. (A,B) Operate direction control pedal assemblies to engage and disengage brakes.
 - Observe brake rods for smooth operation (27-21-AG-__).



ICN-88277-G2721363-003-01

DIRECTION CONTROL PEDAL SUPPORT ASSEMBLY (27-21-12)

MASTER INPUT CONDITIONS:

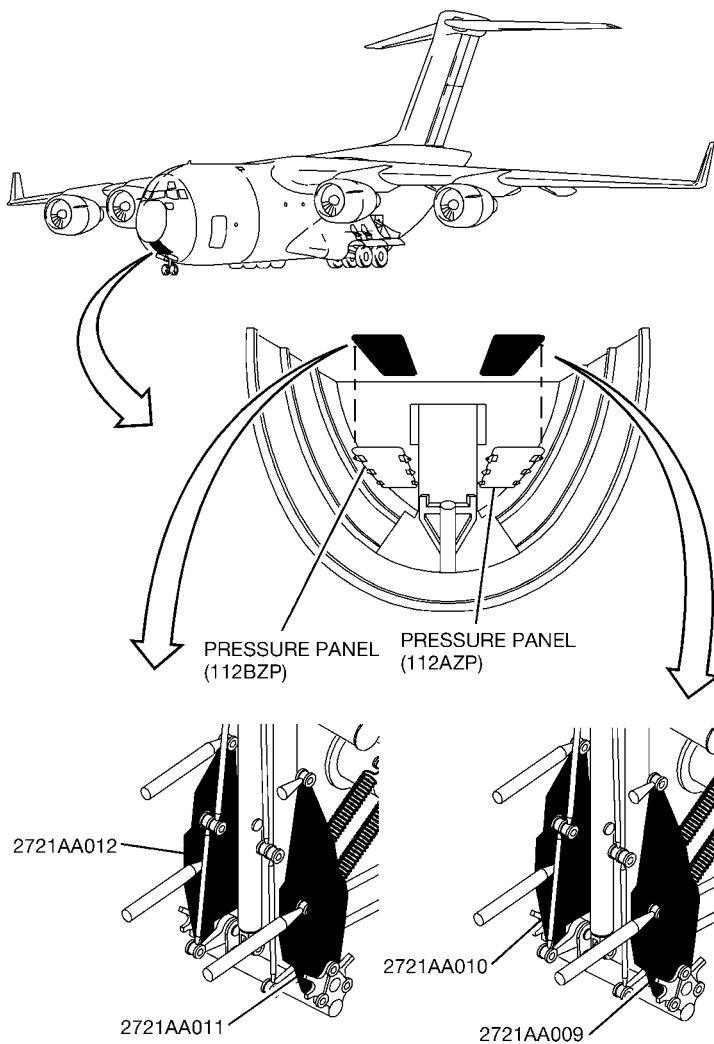
Reference designators:

2721AA009	Direction Control Pedal Support Assembly
2721AA010	Direction Control Pedal Support Assembly
2721AA011	Direction Control Pedal Support Assembly
2721AA012	Direction Control Pedal Support Assembly

Applicable functions:

- 2 Removal.
- 3 Installation.

Access data:



ICN-88277-G2721051-003-01

**DIRECTION CONTROL PEDAL SUPPORT
ASSEMBLY REMOVAL
(27-21-12-2)**

FUNCTIONAL INPUT CONDITIONS:

Applicability:	Task
All	All

Additional information:

This procedure consists of the following tasks:

- 2-1. Preparation.
- 2-2. Removal.

NOTE	Task
This is a typical removal task for all direction control pedal support assemblies.	All

Additional data:	Task
TO 1300i-2-25JG-10-1	2-1
TO 1300i-2-53JG-10-1	2-1

Personnel recommended:	Task
One	2-1
Two	2-2
Person (A) performs task.	
Person (B) assists person (A).	

Safety conditions:

Task

WARNING

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.

All

Support equipment:

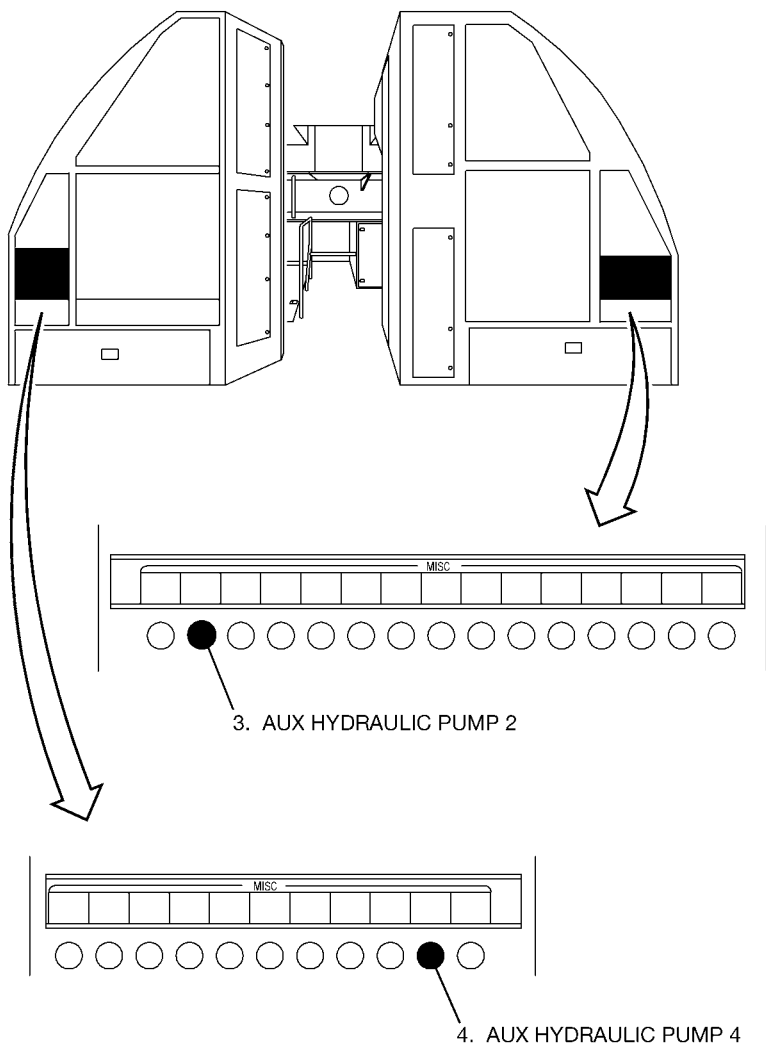
<u>Nomenclature</u>	<u>PN</u>	<u>Specification</u>	<u>Qty</u>	<u>Task</u>
Tool, Turnbuckle Adjustment	17G140019-1	--	1	2-2

Supplies:

<u>Nomenclature</u>	<u>PN</u>	<u>Specification</u>	<u>Qty</u>	<u>Task</u>
Tag, Warning	--	--	4	2-1

2-1. PREPARATION.

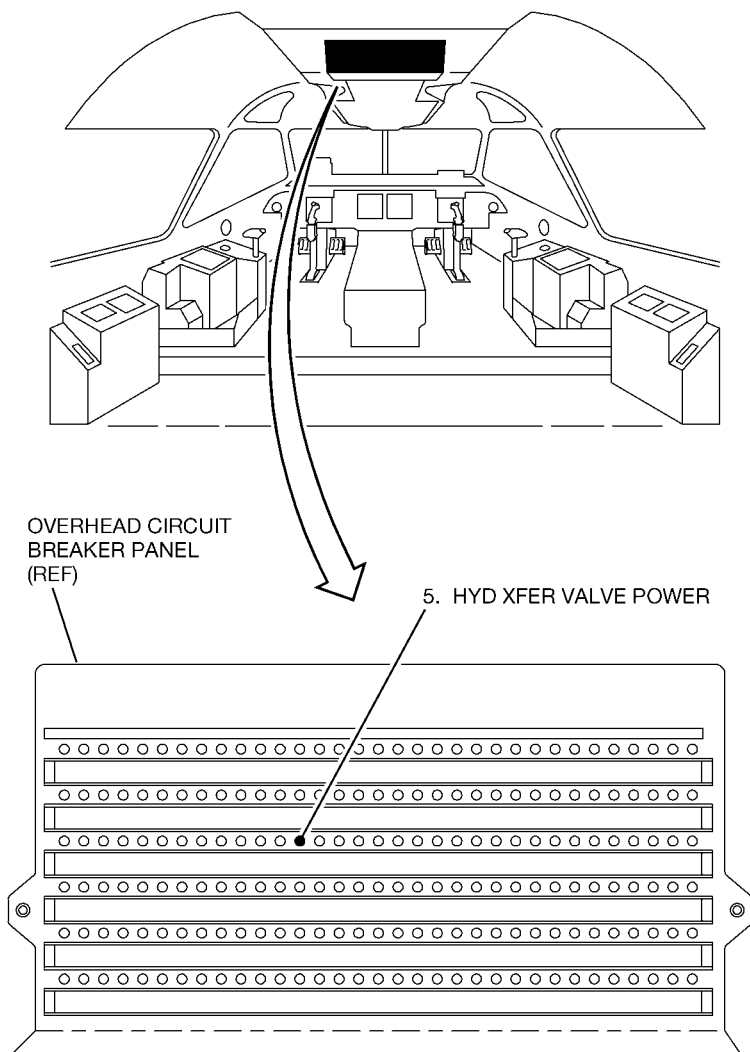
1. Review "Section 1 (General Information)" of this TO for system general warnings, cautions, and notes.
2. Review task "Functional Input Conditions" page for task specific safety conditions.
3. Open **AUX HYDRAULIC PUMP 2** circuit breaker on Electrical Power Center (EPC) row **LL**, column **69**, and attach warning tag.
4. Open **AUX HYDRAULIC PUMP 4** circuit breaker on EPC, row **LL**, column **10**, and attach warning tag.



ICN-88277-G2721052-003-01

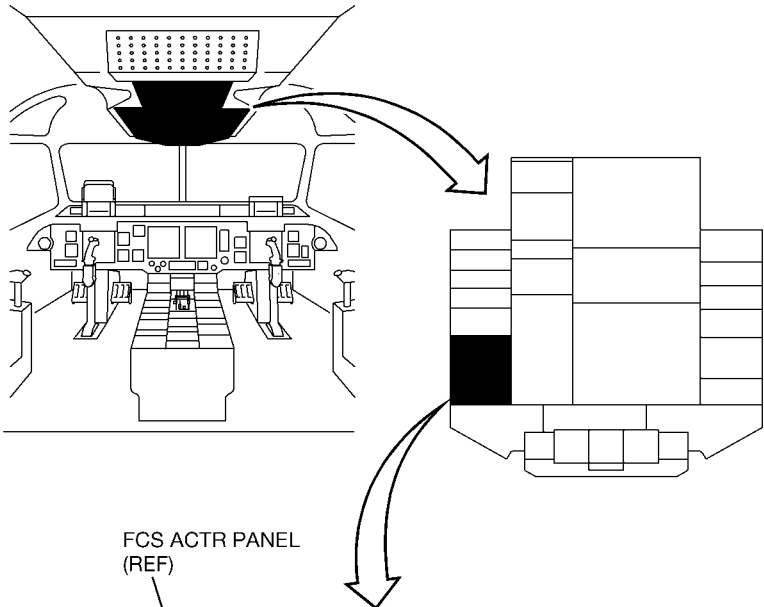
TO 1300i-2-27JG-20-2

5. Open **HYD XFER VALVE POWER** circuit breaker on overhead panel, row **C**, column **13**, and attach warning tag.

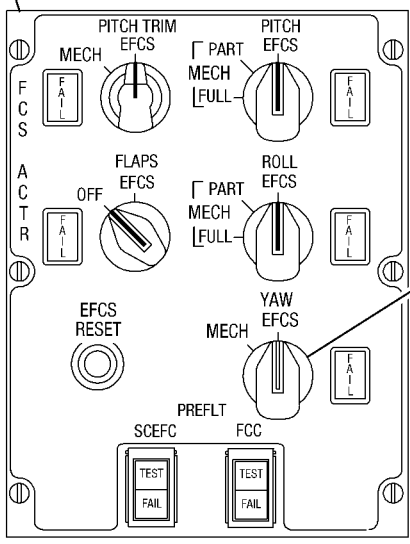


ICN-88277-G2721053-003-01

6. Rotate **YAW** switch on **FCS ACTR** panel to **MECH** and attach warning tag.



FCS ACTR PANEL
(REF)



6. YAW

ICN-88277-G2721054-002-01

TO 1300i-2-27JG-20-2

7. Remove pilot/copilot aircraft seat (25-11-10, task 2-1) as follows:

SUPPORT REF DES	SEAT REF DES
2721AA009 2721AA010	2511AA001
2721AA011 2721AA012	2511AA002

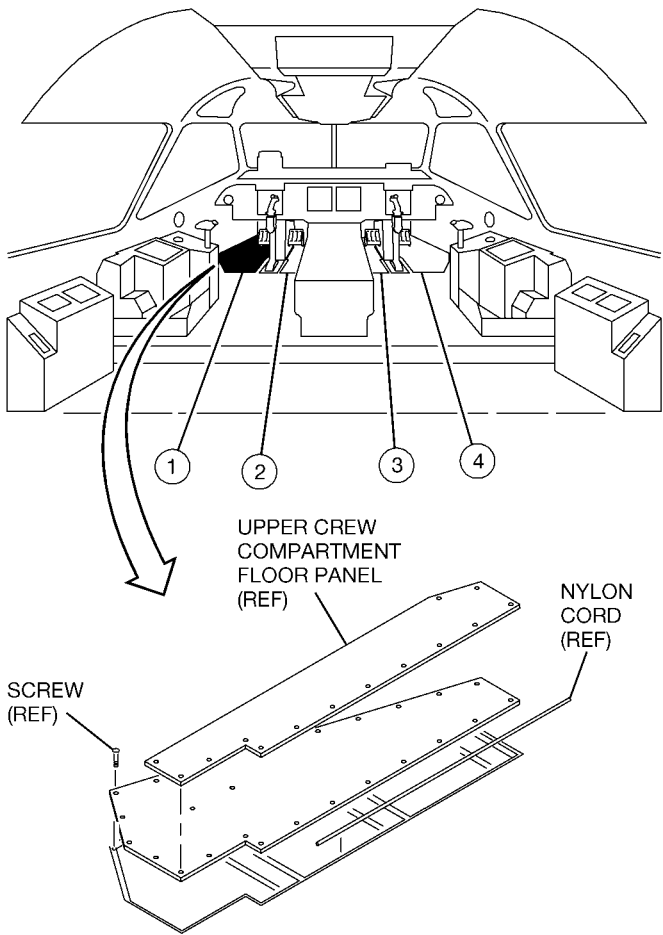
8. Identify and remove screws from upper crew compartment floor panels.

9. Remove and discard nylon cords.

10. Remove panels.

11. Remove horizontal pressure panel access cover assembly (53-12-10).

SUPPORT REF DES	PANEL NO.	PANEL REF DES
2721AA009 2721AA010	112AZP	5312CA001
2721AA011 2721AA012	112BZP	5312CA002



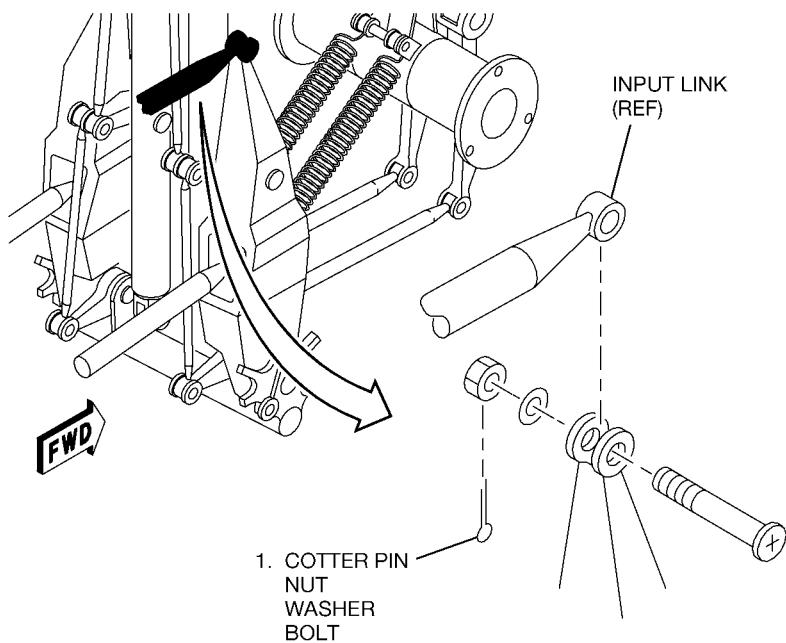
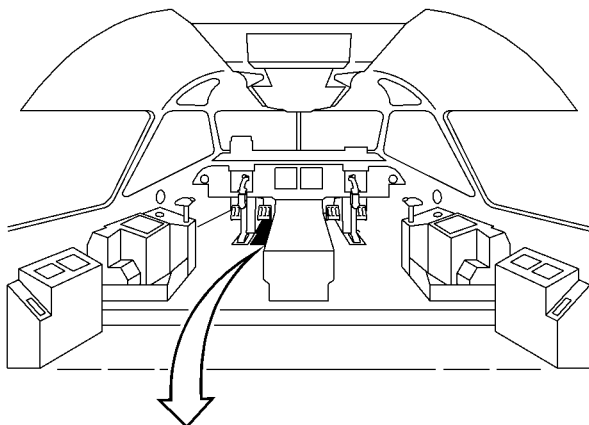
8.	SUPPORT	INDEX	PANEL	SCREW	NYLON CORD
9.	REF DES	NO	NO	QTY	QTY
10.	2721AA009	1	211AZY	28	7
	2721AA010	2	211BZY	21	6
	2721AA011	3	211CZY	21	6
	2721AA012	4	211DZY	28	7

(TYPICAL)

ICN-88277-G2721055-003-01

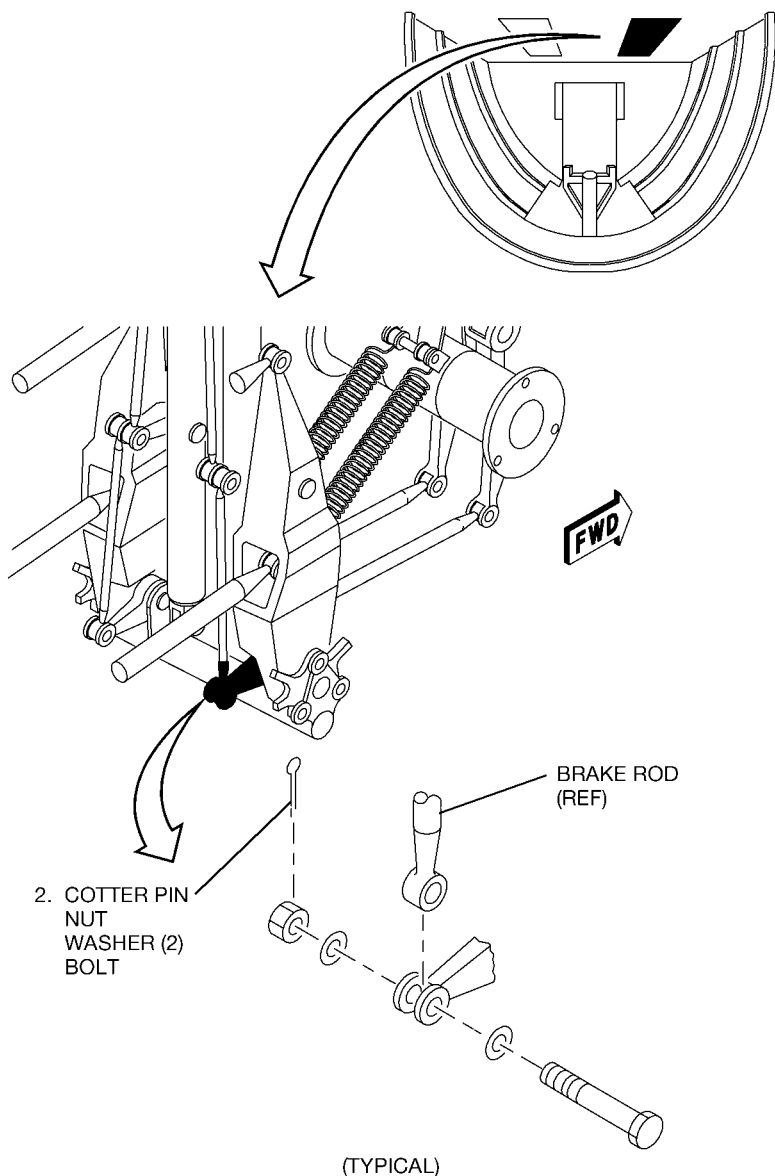
2-2. REMOVAL.

1. (A) Remove cotter pin, nut, washer, and bolt from input link.



ICN-88277-G2721058-003-01

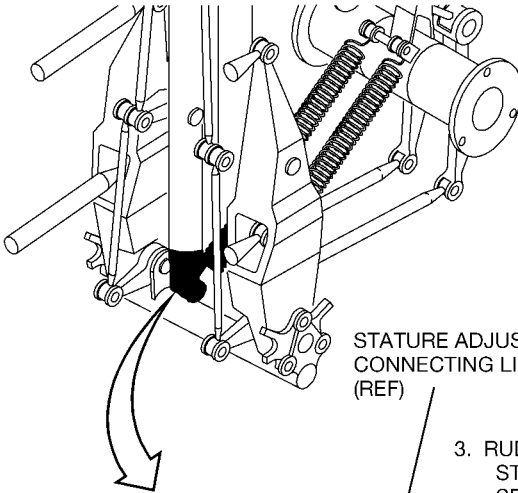
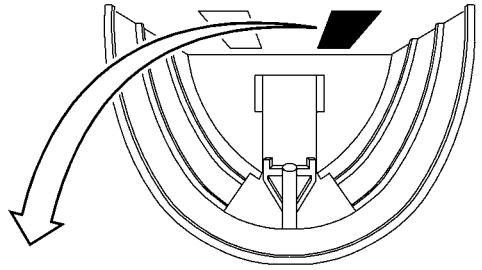
2. (A,B) Remove cotter pin, nut, washers, and bolt from brake rod.



ICN-88277-G2721059-004-01

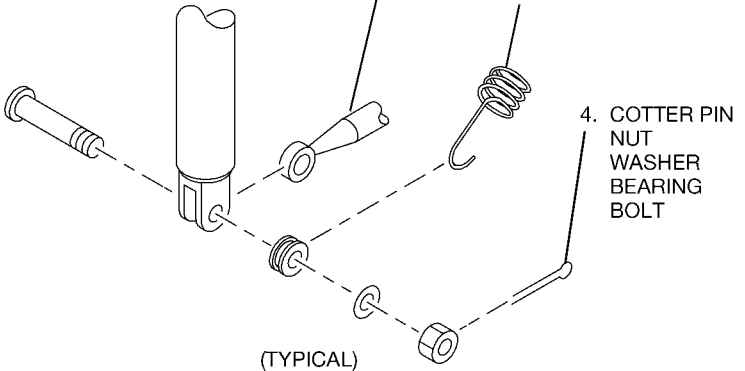
TO 1300i-2-27JG-20-2

3. (B) Remove rudder pedal stature return spring.
4. (B) Remove cotter pin, nut, washer, bearing, and bolt from stature adjust connecting link.



STATURE ADJUST
CONNECTING LINK
(REF)

3. RUDDER PEDAL
STATURE RETURN
SPRING



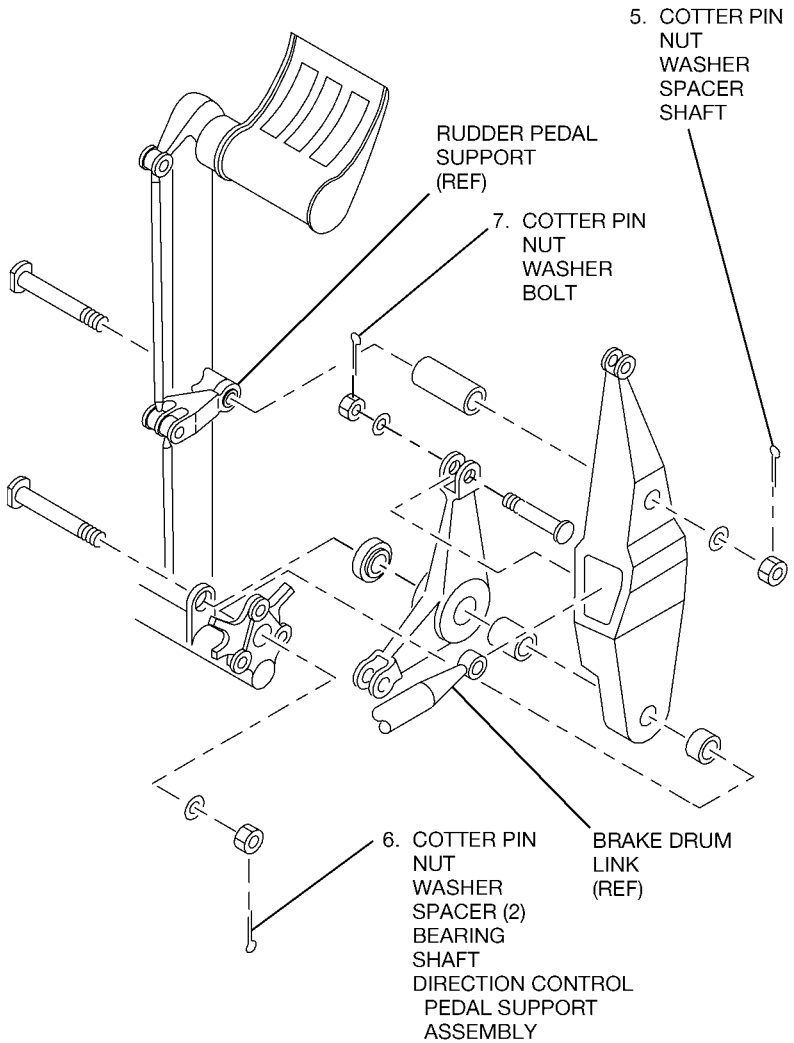
4. COTTER PIN
NUT
WASHER
BOLT

(TYPICAL)

ICN-88277-G2721060-003-01

TO 1300i-2-27JG-20-2

5. (A,B) Remove cotter pin, nut, washer, spacer, and shaft.
6. (A,B) Remove cotter pin, nut, washer, spacers, bearing, shaft and direction control pedal support assembly.
7. (A,B) Remove cotter pin, nut, washer, and bolt from brake drum link.



(TYPICAL)

ICN-88277-G2721061-004-01

**DIRECTION CONTROL PEDAL SUPPORT
ASSEMBLY INSTALLATION
(27-21-12-3)**

FUNCTIONAL INPUT CONDITIONS:

Applicability:	Task
All	All

Additional information:

This procedure consists of the following tasks:

- 3-1. Installation.
- 3-2. Follow-on maintenance.

NOTE	Task
This is a typical installation task for all direction control pedal support assemblies.	All

Additional data:	Task
TO 1300i-2-25JG-10-1	3-2
TO 1300i-2-53JG-10-1	3-2
TO 1300i-23	3-2

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

Safety conditions:

Task

WARNING

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.

All

Support equipment:

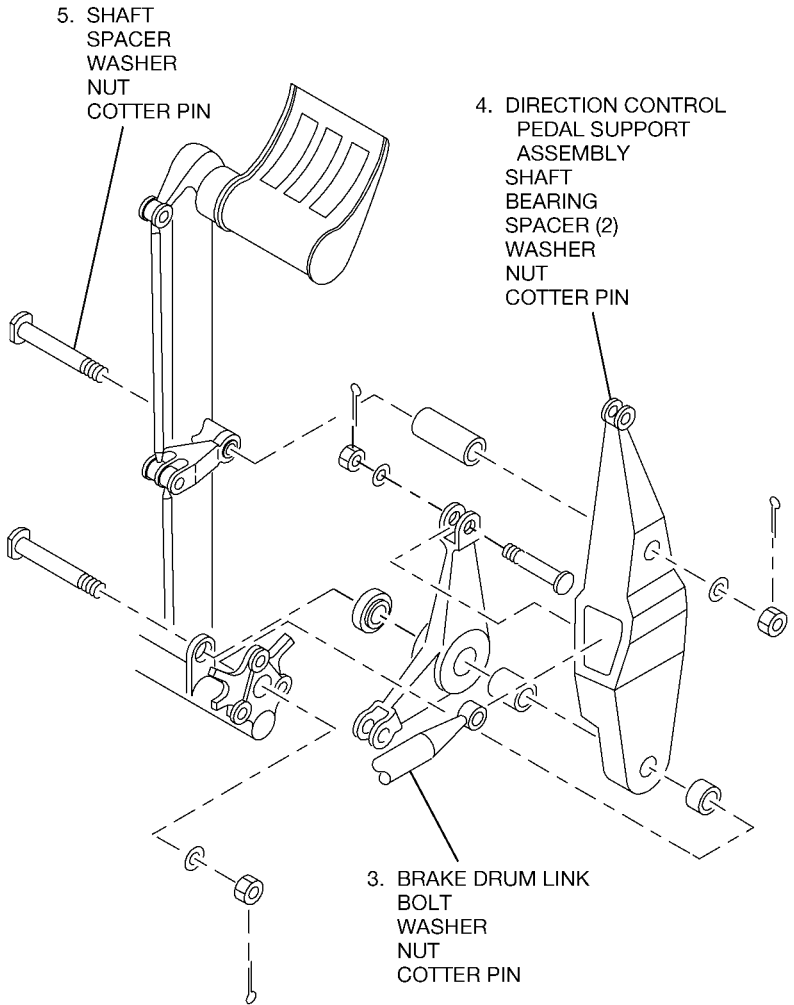
<u>Nomenclature</u>	<u>PN</u>	<u>Specification</u>	<u>Qty</u>	<u>Task</u>
Tool, Turnbuckle Adjustment	17G140019-1	--	1	3-1

Supplies:

<u>Nomenclature</u>	<u>PN</u>	<u>Specification</u>	<u>Qty</u>	<u>Task</u>
Pin, Cotter	MS24665-151	--	4	3-1
Pin, Cotter	MS24665-153	--	2	3-1
Sealant	PR-1775 B-2	AMS 3265	AR	3-2
Tape, Sealant	GSC-21-80902-00	--	AR	3-2

3-1. INSTALLATION.

1. Review "Section 1 (General Information)" of this TO for system general warnings, cautions, and notes.
2. Review task "Functional Input Conditions" page for task specific safety conditions.
3. (A,B) Position brake drum link and install bolt, washer, nut, and cotter pin (PN MS24665-151).
4. (A,B) Position direction control pedal support assembly; install shaft, bearing, spacers, washer, nut, and cotter pin (PN MS24665-153).
5. (A,B) Install shaft, spacer, washer, nut, and cotter pin (PN MS24665-153).

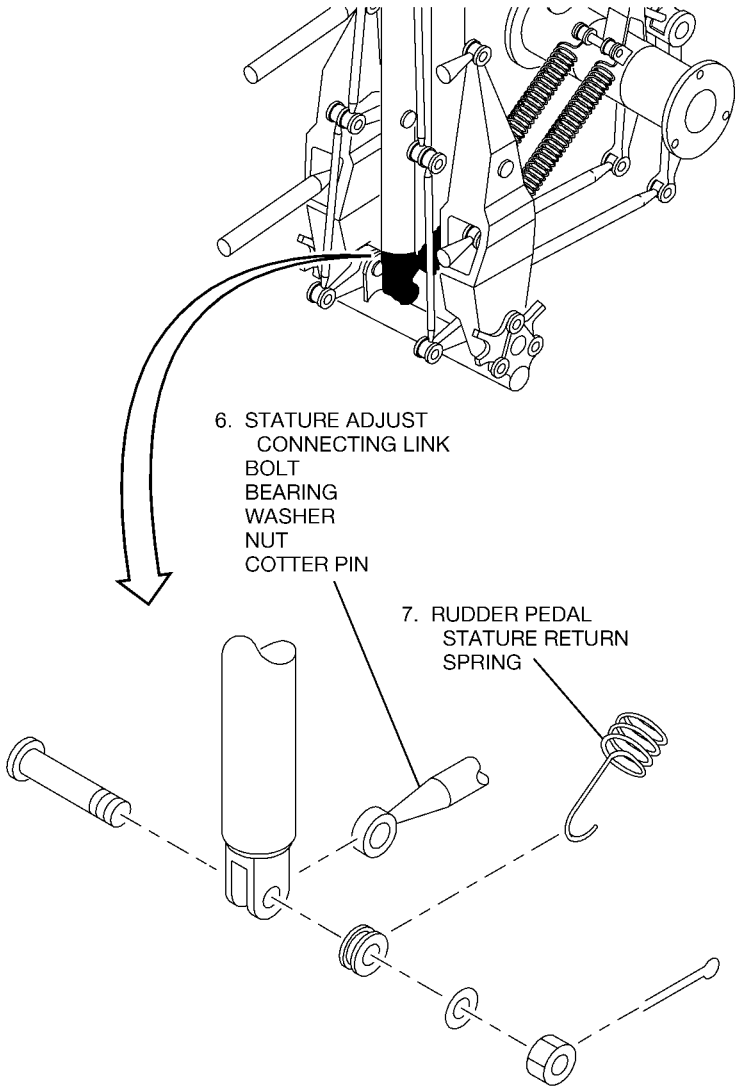


(TYPICAL)

ICN-88277-G2721062-004-01

TO 1300i-2-27JG-20-2

6. (A,B) Position stature adjust connecting link and install bolt, bearing, washer, nut, and cotter pin (PN MS24665-151).
7. (A,B) Install rudder pedal stature return spring.

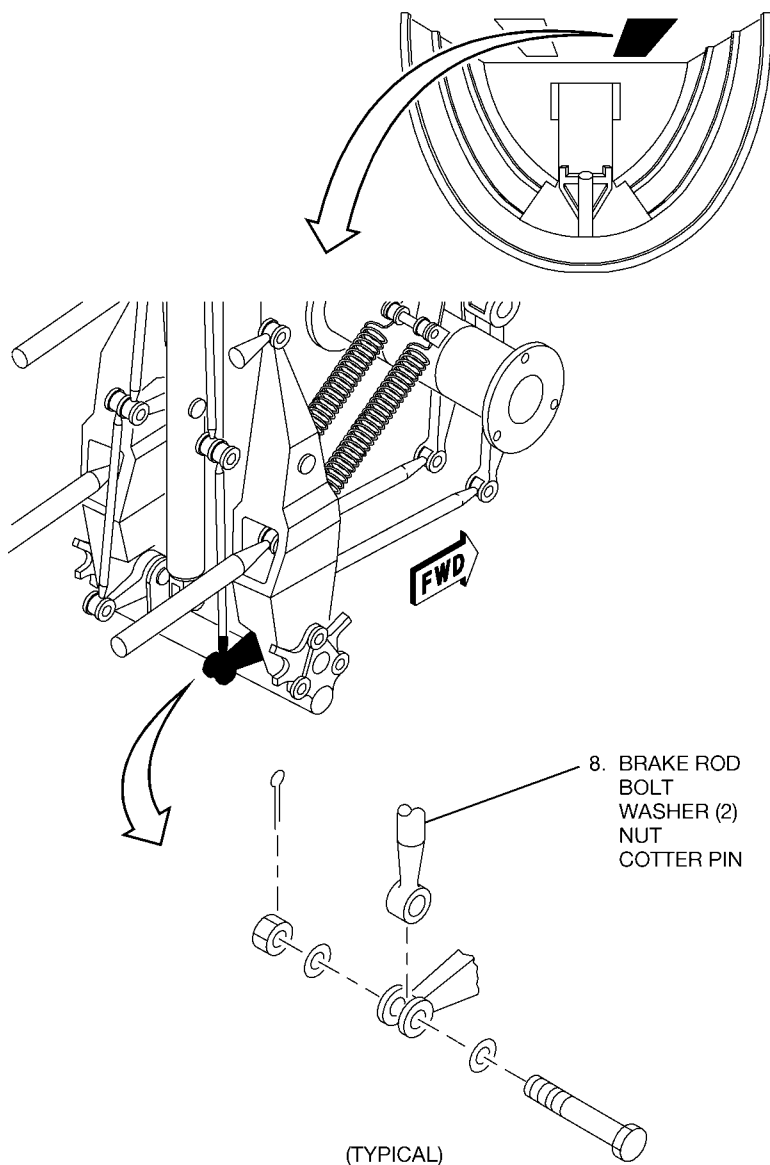


(TYPICAL)

ICN-88277-G2721063-003-01

TO 1300i-2-27JG-20-2

8. (A,B) Position brake rod and install bolt, washers, nut, and cotter pin (PN MS24665-151).



ICN-88277-G2721064-004-01

TO 1300i-2-27JG-20-2

9. (A,B) Position input link and install bolt, washer, nut, and cotter pin (PN MS24665-151).