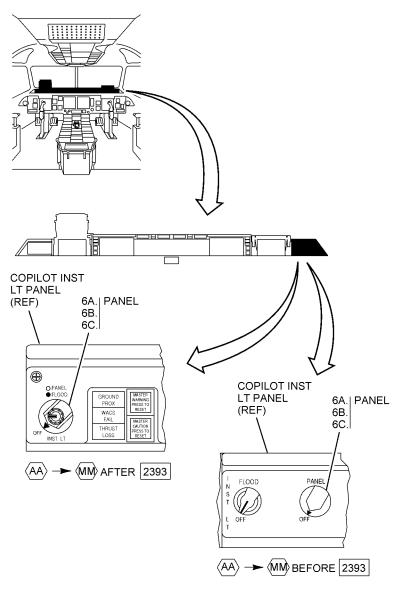


- 6A. Rotate PANEL knob on copilot INST LT panel fully clockwise.
 - Verify **AIL TRIM** indicator lights come on (33-11-BK-00).
- Rotate PANEL knob on copilot INST LT panel slowly counterclockwise.
 - Verify **AIL TRIM** indicator lights decrease in brightness (33-11-BL-00).
- Rotate PANEL knob on copilot INST LT panel fully counterclockwise.
 - Verify **AIL TRIM** indicator lights go off (33-11-BM-00).
- 7. Disconnect external electrical power (10-61-01, task 01-2).



ICN-88277-G2714007-002-01

27-14-10-1 2-91/(2-92 blank)

AILERON TRIM POSITION INDICATOR REMOVAL (27-14-10-2)

FUNCTIONAL INPUT CONDITIONS:

Applicability:	Task
All	Al
Additional information:	
This procedure consists of the following tasks:	
2-1. Preparation.2-2. Removal.	
Additional data:	Task
NA	
Personnel recommended:	Task
One	Al
Safety conditions:	
NA	Task
NA	

Support equipment:

Nomenclature	

<u>PN</u>

Specification

<u>Qty</u>

<u>Task</u>

Supplies:

NA

<u>PN</u>

Specification

Qty

<u>Task</u>

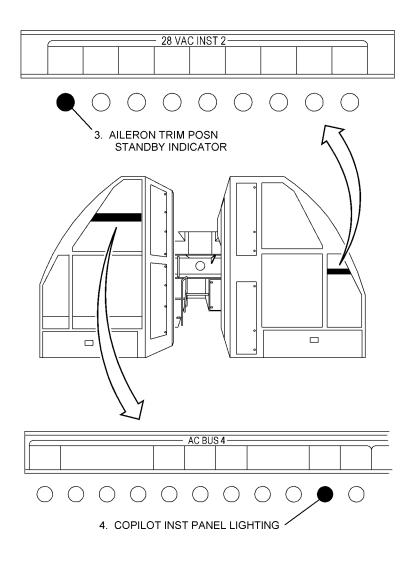
Nomenclature

Tag, Warning

2-1

2-1. PREPARATION.

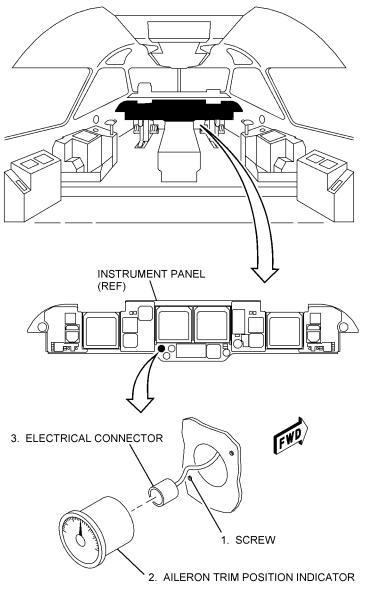
- 1. Review "Section 1 (General Information)" of this TO for system general warnings, cautions, and notes.
- 2. Review task "Functional Input Conditions" page for task specific safety conditions.
- 3. Open **AILERON TRIM POSN STANDBY INDICATOR** circuit breaker on Electrical Power Center (EPC), row **EE**, column **68**, and attach warning tag.
- 4. Open **COPILOT INST PANEL LIGHTING** circuit breaker on EPC, row **E**, column **30**, and attach warning tag.



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2-2. REMOVAL.

- 1. Loosen screw.
- 2. Remove aileron trim position indicator from instrument panel.
- 3. Disconnect electrical connector.



ICN-88277-G2714003-005-01

27-14-10-2 2-99/(2-100 blank)

AILERON TRIM POSITION INDICATOR INSTALLATION (27-14-10-3)

FUNCTIONAL INPUT CONDITIONS:

Applicability:	Task
All	Al
Additional information:	
This procedure consists of the following tasks:	
3-1. Installation.3-2. Follow-on maintenance.	
Additional data:	Task
NA	
Personnel recommended:	Task
One	Al
Safety conditions:	Task
NA	

Support equipment: 27-14-10-3 2-102/(2-103 blank) **Nomenclature** NA

<u>PN</u>

Specification

<u>Qty</u>

<u>Task</u>

Supplies:

NA

Nomenclature

<u>PN</u>

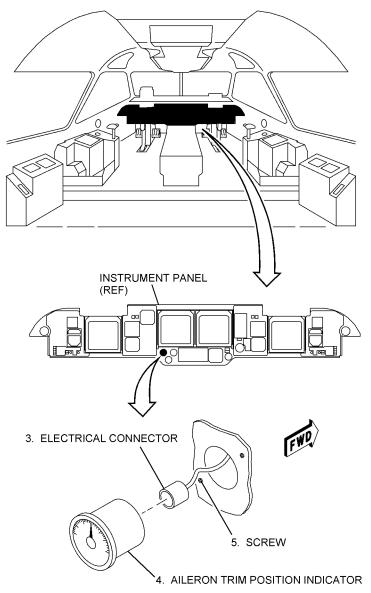
Specification

Qty

<u>Task</u>

3-1. INSTALLATION.

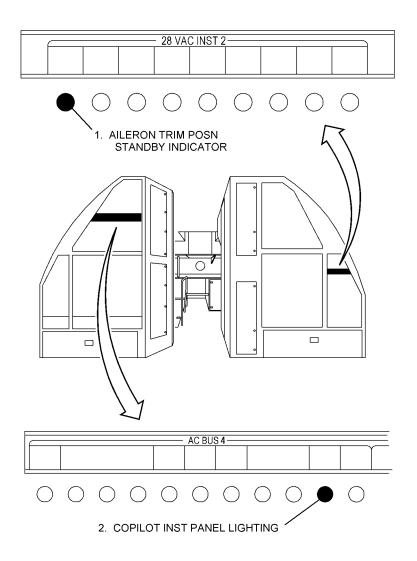
- 1. Review "Section 1 (General Information)" of this TO for system general warnings, cautions, and notes.
- 2. Review task "Functional Input Conditions" page for task specific safety conditions.
- 3. Connect electrical connector (2714PP001).
- 4. Install aileron trim position indicator in instrument panel.
- 5. Tighten screw.



ICN-88277-G2714004-005-01

3-2. FOLLOW-ON MAINTENANCE.

- Remove warning tag and close AILERON TRIM POSN STANDBY INDICATOR circuit breaker on Electrical Power Center (EPC), row EE, column 68.
- 2. Remove warning tag and close **COPILOT INST PANEL LIGHTING** circuit breaker on EPC, row **E**, column **30**.
- 3. Perform aileron trim position indicator operational checkout (task 1-1).



ICN-88277-G2714005-004-01

27-14-10-3 2-107/(2-108 blank)

AILERON POSITION-ROTARY VARIABLE DIFFERENTIAL TRANSDUCER SENSOR (27-15-10)

MASTER INPUT CONDITIONS:

Reference designators:

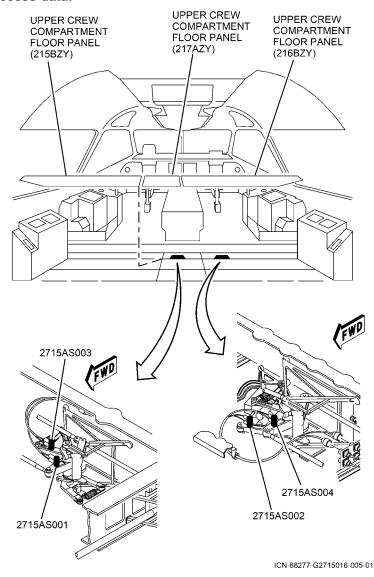
2715AS001	Pilot Aileron Position-Rotary Variable
	Differential Transducer Sensor
2715AS002	Copilot Aileron Position-Rotary Variable
	Differential Transducer Sensor
2715AS003	Pilot Aileron Position-Rotary Variable
	Differential Transducer Sensor

2715AS004 Copilot Aileron Position-Rotary Variable Differential Transducer Sensor

Applicable functions:

- -1 Maintenance Built-in Test.
- -2 Removal.
- -3 Installation.
- -5 Adjustment.

Access data:



COPILOT AILERON POSITION SENSOR MAINTENANCE BUILT-IN TEST (27-15-10-1)

FUNCTIONAL INPUT CONDITIONS:

Applicability:	Task
All	All
Additional information: This procedure consists of the following task:	
1-1. Copilot aileron position sensors maintenance built-in	test.
NOTE	Task
This is a typical maintenance built-in test task for copilot aileron position sensors 2715AS002 and 2715AS004.	All
Additional data:	Task
TO 1300i-2-12JG-29-1	All
TO 1300i-2-27FI-00-1	All
TO 1300i-2-31JG-60-1	All
Personnel recommended:	Task
One	All

Safety conditions:

Task

WARNING

Equipment must be clear of flight control surfaces. Failure to comply may cause injury or death to personnel or damage to equipment and aircraft.

All

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>
NA				

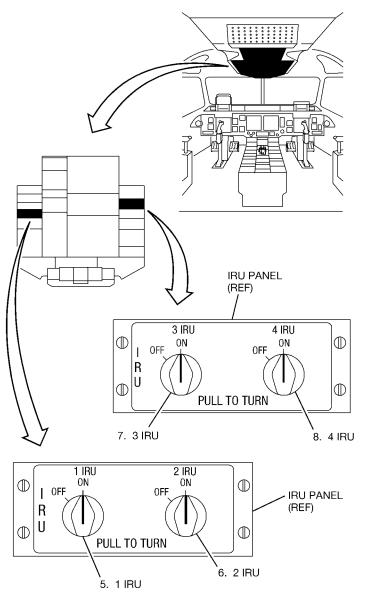
1-1. COPILOT AILERON POSITION SENSORS MAINTENANCE BUILT-IN TEST.

- 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. Operate multifunction displays system and select **CFG** format (31-61-02, task 02-1 or 02-2).

$\boldsymbol{W}\,\boldsymbol{A}\,\boldsymbol{R}\,\boldsymbol{N}\,\boldsymbol{I}\,\boldsymbol{N}\,\boldsymbol{G}$

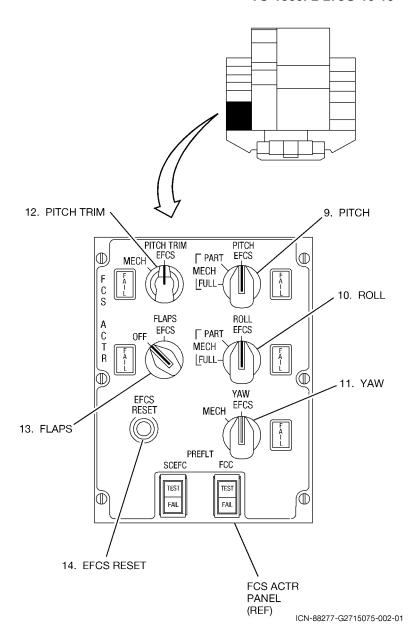
All flight control surfaces and thrust reversers shall be clear of personnel and equipment prior to any movement of the surfaces. Failure to comply may cause injury to personnel or damage to aircraft.

- 4. Operate auxiliary hydraulic system (29-20-01, task 01-1).
- 5. Set 1 IRU switch on IRU panel to ON.
- 6. Set 2 IRU switch to ON.
- 7. Set 3 IRU switch on IRU panel to ON.
- 8. Set 4 IRU switch to ON.



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- 9. Set PITCH switch on FCS ACTR panel to EFCS.
- 10. Set **ROLL** switch to **EFCS**.
- 11. Set YAW switch to EFCS.
- 12. Set **PITCH TRIM** switch to **EFCS**.
- 13. Set **FLAP** switch to **EFCS**.
- 14. Press **EFCS RESET** button.

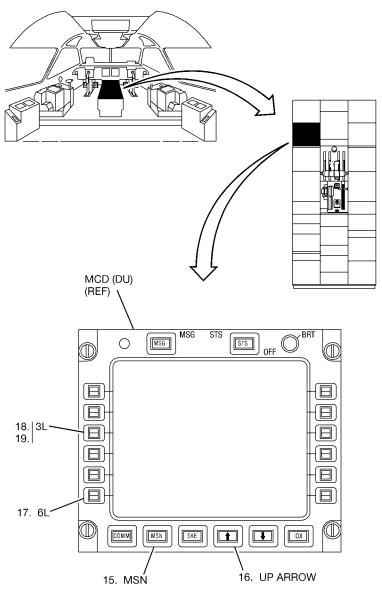


- 15. Press MSN key on MCD (DU).
 - MSN INDEX 1 displayed.
- 16. Press up arrow key.
 - MSN INDEX 2 is displayed.
- 17. Press 6L Line Select (LS) key.
 - MAINT MENU is displayed.
- 18. Press 3L LS key.
 - SCEFC MAINT MENU is displayed.

NOTE

A fault list history of each line replaceable unit can be accessed form **EFCS MAINT MENU** page by pressing 1L or 2L LS key.

- 19. Press 3L LS key.
 - SCEFC MAINTENANCE BIT is displayed.

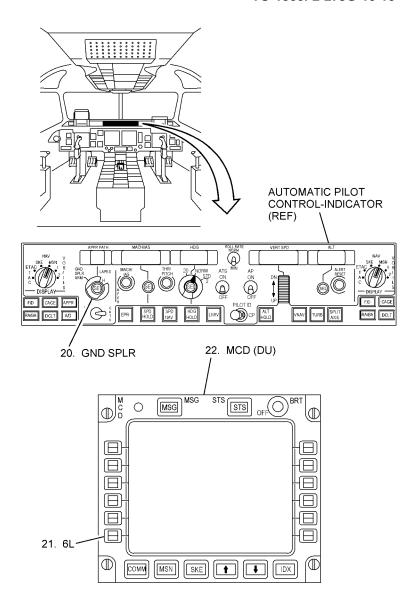


ICN-88277-G2715041-004-01

- 20. Set GND SPLR switch on AUTOMATIC PILOT CONTROL INDICATOR panel to ARM.
 - SCEFC MAINTENANCE BIT ENTRY IN PROGRESS is displayed.
 - SCEFC MAINTENANCE BIT page 1/3 is displayed.

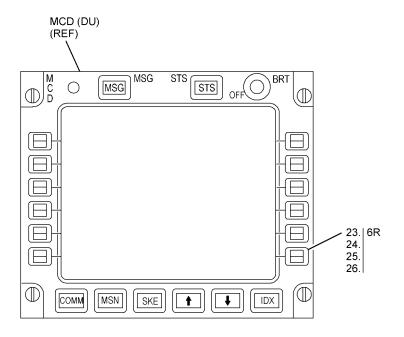
NOTE

- Do not touch LS keys, control sticks, rudder pedals, or flap/slat handle while IN PROGRESS is displayed.
- Test may be aborted at any time by pressing 6L LS key.
- Refer to (TO 1300i-2-27FI-00-1, Chapter 3) to correct any failure condition.
- 21. Press 6L LS key on MCD (DU).
 - SCEFC MAINTENANCE BIT CRS IN PROGRESS is displayed.
- 22. Follow instructions on MCD (DU).
 - **TEST PASSED** is displayed.



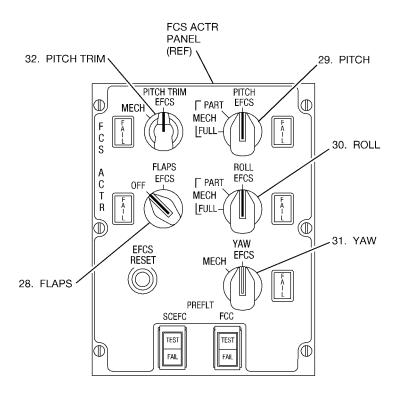
ICN-88277-G2715042-005-01

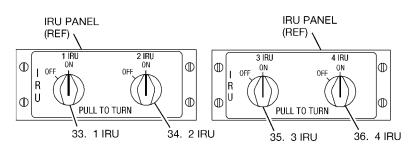
- 23. Press 6R LS key.
 - SCEFC MAINTENANCE BIT page 1/3 is displayed.
- 24. Press 6R LS key.
 - SCEFC MAINT MENU is displayed.
- 25. Press 6R LS key.
 - MAINTENANCE MENU is displayed.
 - GND SPLR switch disarms.
- 26. Press 6R LS key.
 - MSN INDEX 2 is displayed.



ICN-88277-G2715043-005-01

- 27. Shutdown auxiliary hydraulic system (29-20-01, task 01-2).
- 28. Set FLAPS switch on FCS ACTR panel to OFF.
- 29. Set PITCH switch to FULL MECH.
- 30. Set **ROLL** switch to **FULL MECH**.
- 31. Set YAW switch to MECH.
- 32. Set PITCH TRIM switch to MECH.
- 33. Set 1 IRU switch on IRU panel to OFF.
- 34. Set 2 IRU switch to OFF.
- 35. Set 3 IRU switch on IRU panel to OFF.
- 36. Set 4 IRU switch to OFF.
- 37. Shutdown multifunction displays system (31-61-02, task 02-3 or 02-4).





ICN-88277-G2715044-004-01

AILERON POSITION-ROTARY VARIABLE DIFFERENTIAL TRANSDUCER SENSOR REMOVAL (27-15-10-2)

FUNCTIONAL INPUT CONDITIONS:

Applicability:	Task
All	All
Additional information:	
This procedure consists of the following tasks:	
 2-1. Preparation for 2715AS001 or 2715AS003. 2-2. Preparation for 2715AS002 or 2715AS004. 2-3. Removal for 2715AS001 or 2715AS003. 2-4. Removal for 2715AS002 or 2715AS004. 2-5. Follow-on maintenance. 	
NOTE	Task
This is a typical removal task for all aileron position-rotary variable differential transducer sensors.	All
Additional data:	Task
TO 1-1A-14	2-5
TO 1300i-2-05JG-10-1	2-1, 2-2
Personnel recommended:	Task
One	All
Safety conditions:	7D 1
NA	Task

Support	equipment
---------	-----------

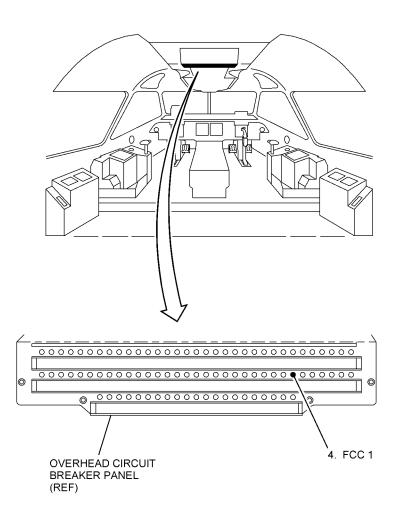
<u>Nomenclature</u>	<u>PN</u>	Specification	Qty	<u>Task</u>
Kit, Rig Pin	17G140015-1			
Pin Assy 5-10	17G140015-17		1	All

Supplies:

<u>Nomenclature</u>	<u>PN</u>	<u>Specification</u>	<u>Qty</u>	<u>Task</u>
Tag, Warning			5	2-1
Tag, Warning			7	2-2

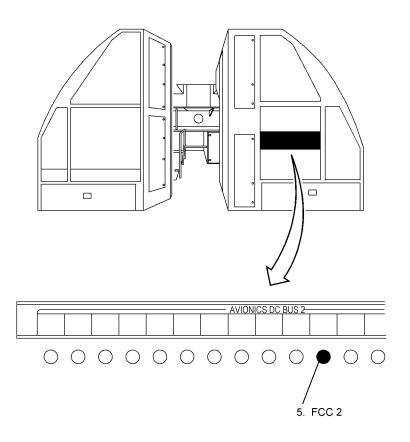
2-1. PREPARATION FOR 2715AS001 OR 2715AS003.

- 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. Connect external electrical power (10-61-01, task 01-1).
- 4. Open FCC 1 circuit breaker on overhead circuit breaker panel, row H, column 27, and attach warning tag.



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5. Open FCC 2 circuit breaker on Electrical Power Center (EPC), row T, column 50, and attach warning tag.

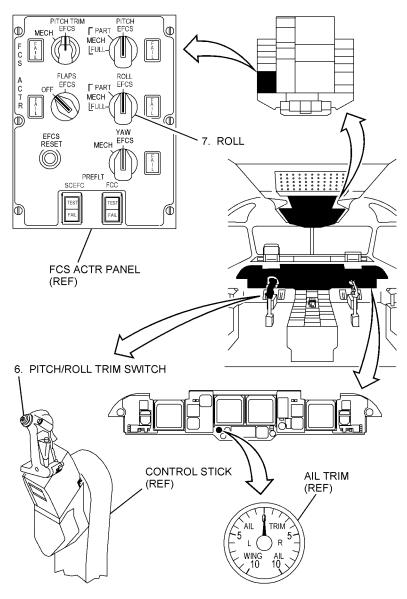


ICN-88277-G2715003-005-01

WARNING

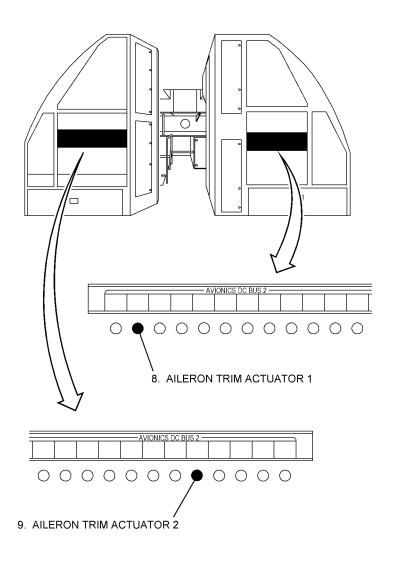
All flight control surfaces and thrust reversers shall be clear of personnel and equipment prior to any movement of the surfaces. Failure to comply may cause injury to personnel or damage to aircraft.

- 6. Set pitch/roll trim switch on control stick to **LWD** or **RWD** until **AIL TRIM** indicator shows **0**.
- 7. Set **ROLL** switch on **FCS ACTR** panel to **PART MECH**.



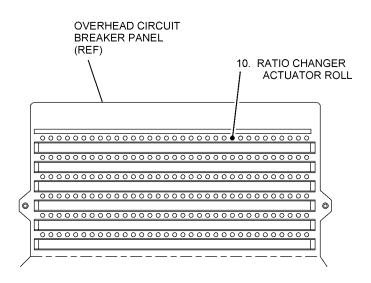
ICN-88277-G2715053-003-01

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



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10. Open **RATIO CHANGER ACTUATOR ROLL** circuit breaker on overhead circuit breaker panel, row **A**, column **24**, and attach warning tag.



ICN-88277-G2715076-003-01

11. Remove screws from upper crew compartment floor panel (217AZY).

NOTE

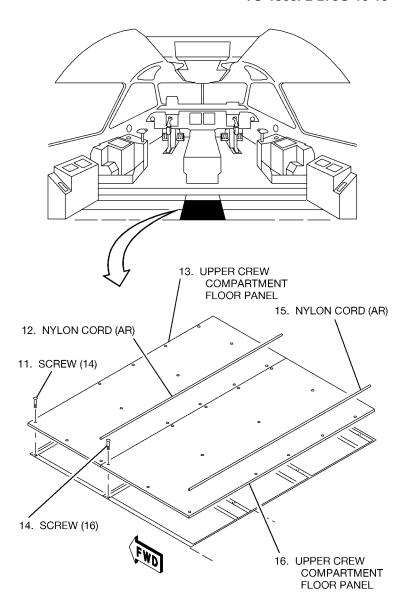
Nylon cords are being eliminated by attrition, not all floor panels will have nylon cords.

- 12. Remove and discard nylon cords.
- 13. Remove upper crew compartment floor panel.
- 14. Remove screws from upper crew compartment floor panel (217BZY).

NOTE

Nylon cords are being eliminated by attrition, not all floor panels will have nylon cords.

- 15. Remove and discard nylon cords.
- 16. Remove upper crew compartment floor panel.



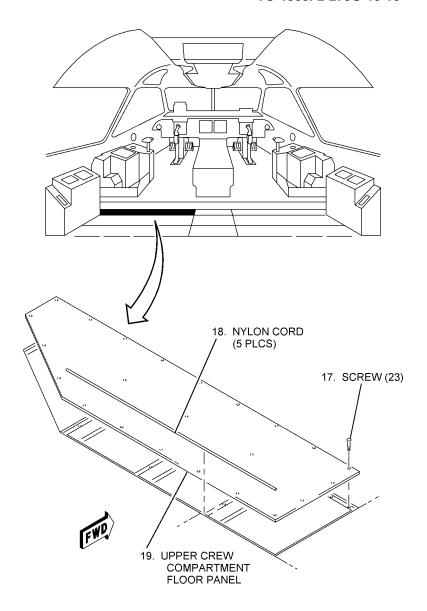
ICN-88277-G2715004-005-01

17. Remove screws from upper crew compartment floor panel (215BZY).

NOTE

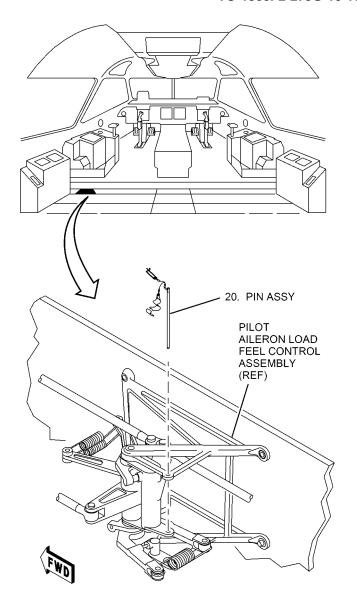
Nylon cords are being eliminated by attrition, not all floor panels will have nylon cords.

- 18. Remove and discard nylon cords.
- 19. Remove upper crew compartment floor panel.



ICN-88277-G2715005-005-01

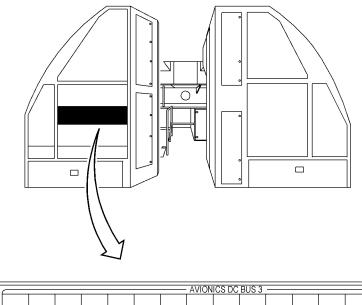
20. Install pin assy 5-10 in pilot aileron load feel control assembly.

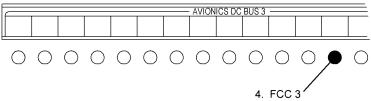


ICN-88277-G2715006-006-01

2-2. PREPARATION FOR 2715AS002 OR 2715AS004.

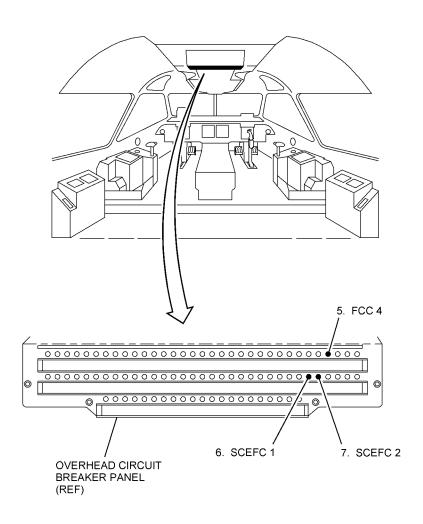
- 1. Review "Section 1 (General Information)" of this TO for system general warnings, cautions, and notes.
- 2. Review task "Functional Input Conditions" page for task specific safety conditions.
- 3. Connect external electrical power (10-61-01, task 01-1).
- 4. Open FCC 3 circuit breaker on electrical power center, row T, column 24, and attach warning tag.





ICN-88277-G2715009-005-01

- Open FCC 4 circuit breaker on overhead circuit breaker panel, row G, column 30, and attach warning tag.
- 6. Open SCEFC 1 circuit breaker on overhead circuit breaker panel, row H, column 28, and attach warning tag.
- 7. Open SCEFC 2 circuit breaker on overhead circuit breaker panel, row H, column 29, and attach warning tag.

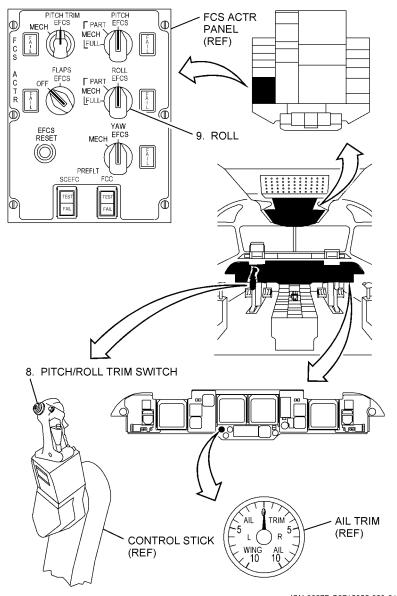


ICN-88277-G2715010-005-01

WARNING

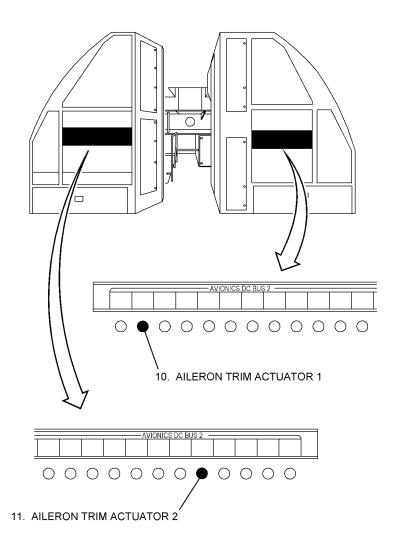
All flight control surfaces and thrust reversers shall be clear of personnel and equipment prior to any movement of the surfaces. Failure to comply may cause injury to personnel or damage to aircraft.

- 8. Set pitch/roll trim switch on control stick to **LWD** or **RWD** until **AIL TRIM** indicator shows **0**.
- 9. Set **ROLL** switch on **FCS ACTR** panel to **PART MECH**.



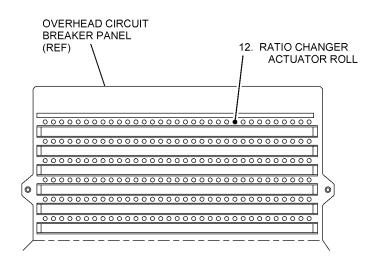
ICN-88277-G2715055-003-01

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



ICN-88277-G2715056-003-01

12. Open **RATIO CHANGER ACTUATOR ROLL** circuit breaker on overhead circuit breaker panel, row **A**, column **24**, and attach warning tag.



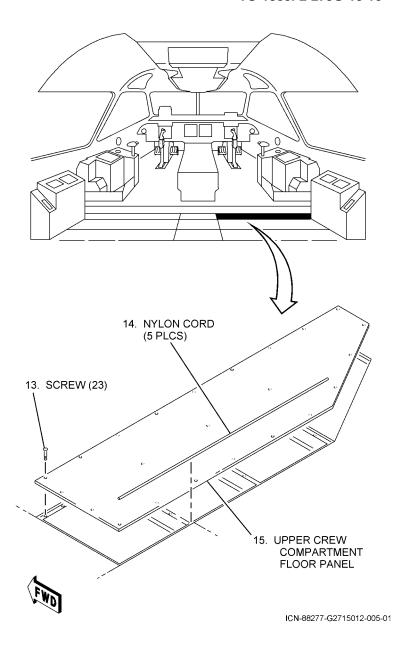
ICN-88277-G2715077-003-01

13. Remove screws from upper crew compartment floor panel (216BZY).

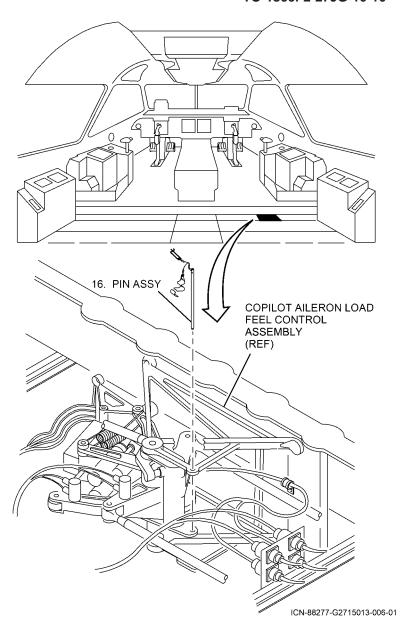
NOTE

Nylon cords are being eliminated by attrition, not all floor panels will have nylon cords.

- 14. Remove and discard nylon cords.
- 15. Remove upper crew compartment floor panel.



16. Install pin assy 5-10 in copilot aileron load feel control assembly.

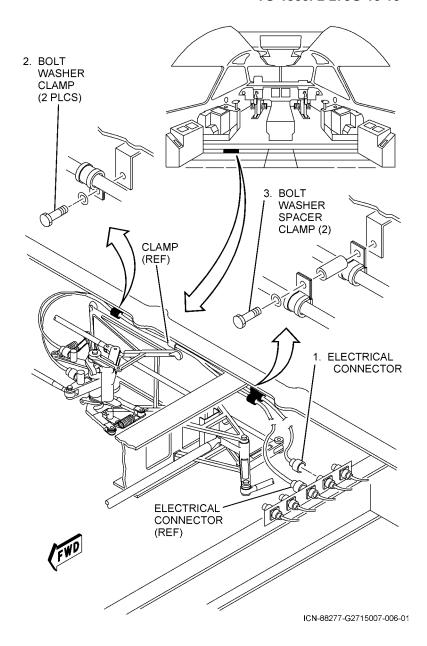


2-3. REMOVAL FOR 2715AS001 OR 2715AS003.

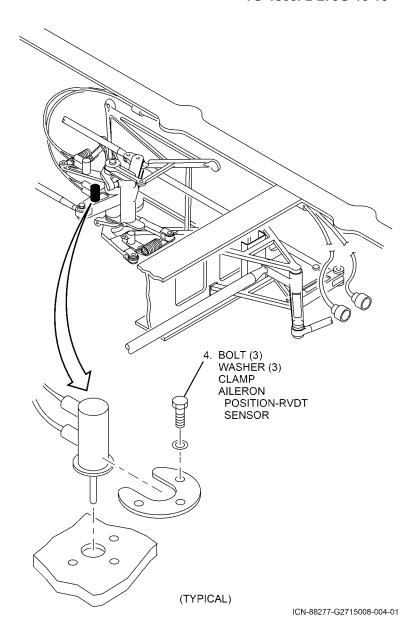
1. Disconnect electrical connector as follows:

RVDT REF DES	CONNECTOR REF DES	RECEPTACLE REF DES
2715AS001	2715PP001	2715JE001
2715AS003	2715PP003	2715JE003

- 2. Remove bolts, washers, and clamps.
- 3. Remove bolt, washer, clamps, and spacer.



4. Remove safety wire, bolts, washers, clamp, and aileron position-Rotary Variable Differential Transducer (RVDT) sensor.

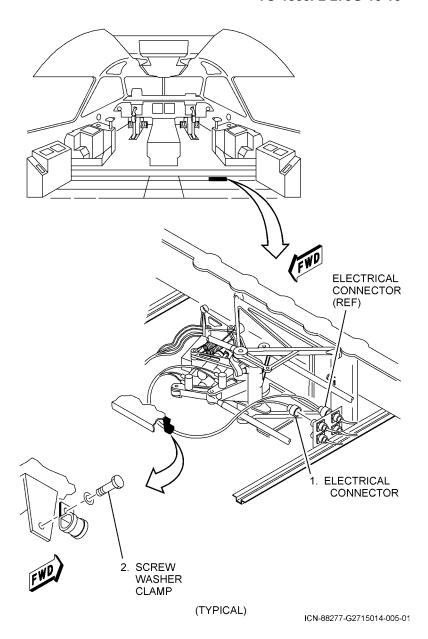


2-4. REMOVAL FOR 2715AS002 OR 2715AS004.

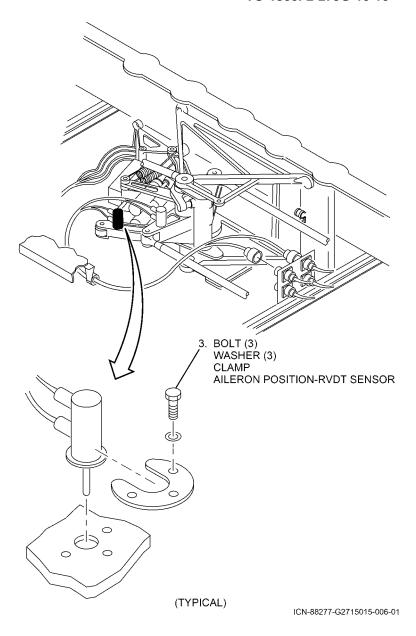
1. Disconnect electrical connector as follows:

RVDT REF DES	CONNECTOR REF DES	RECEPTACLE REF DES
2715AS002	2715PP002	2715JE002
2715AS004	2715PP004	2715JE004

2. Remove screw, washer, and clamp.



3. Remove safety wire, bolts, washers, clamp, and aileron position-Rotary Variable Differential Transducer (RVDT) sensor.



2-5. FOLLOW-ON MAINTENANCE.

1. Remove electrical connectors from aileron position-Rotary Variable Differential Transducer (RVDT) sensors (TO 1-1A-14).

Task

All

AILERON POSITION-ROTARY VARIABLE DIFFERENTIAL TRANSDUCER SENSOR INSTALLATION (27-15-10-3)

FUNCTIONAL INPUT CONDITIONS:

Applicability:

All

Addition	al information:	
This pro	ocedure consists of the following tasks:	
3-4.	1	
	NOTE	Task
	This is a typical installation task for all aileron position-rotary variable differential transducer sensors.	All
Addition	al data:	Task
TO 1	-1A-14	3-1
TO 1	300i-2-05JG-10-1	3-4, 3-5
ТО	1300i-2-27JG-10-1	3-4, 3-5
ТО	1300i-2-53JG-20-1	3-4, 3-5
TO 1	300i-23	3-2, 3-3

Personnel recommended:

Task All

One

Safety conditions:

Task

NA ---

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

Supplies:

<u>Nomenclature</u>	<u>PN</u>	Specification	Qty	<u>Task</u>
Pin, Connector	M39029/4-110		10	3-1
Sealant	PR-1775 B-1/2	AMS 3265	AR	3-2, 3-3
Sealant		MIL-PRF-81733	AR	3-2, 3-3

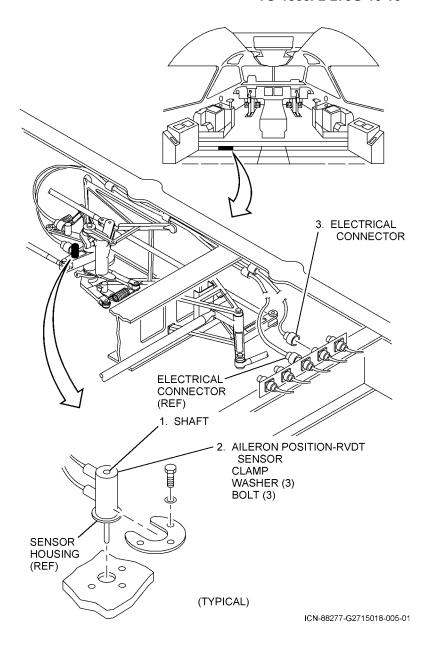
3-1. PREPARATION.

- 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. Install electrical connectors on aileron position-Rotary Variable Differential Transducer (RVDT) sensor (TO 1-1A-14).

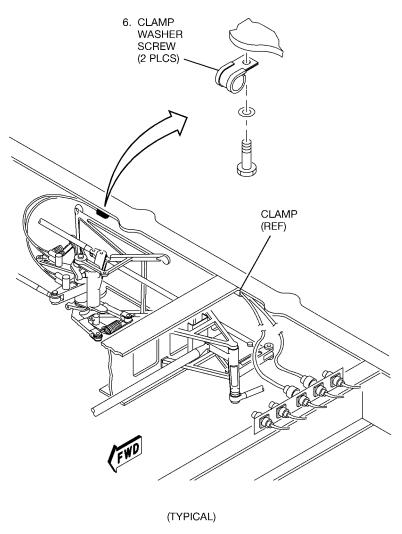
3-2. INSTALLATION FOR 2715AS001 OR 2715AS003.

- 1. Align red dot on end of shaft with red dot on sensor housing.
- 2. Position aileron position-Rotary Variable Differential Transducer (RVDT) sensor and clamp; install washers and bolts.
- 3. Connect electrical connector as follows:

RVDT REF DES	CONNECTOR REF DES	RECEPTACLE REF DES
2715AS001	2715PP001	2715JE001
2715AS003	2715PP003	2715JE003



- 4. Perform faying surface sealing using MIL-PRF-81733 (TO 1300i-23, Chapter 1, Section III).
- 5. Perform wet fastener installation using AMS 3265 (TO 1300i-23, Chapter 1, Section III).
- 6. Install clamps, washers, and screws.

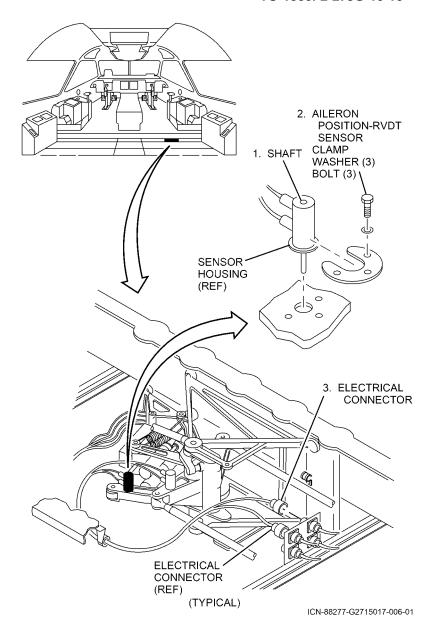


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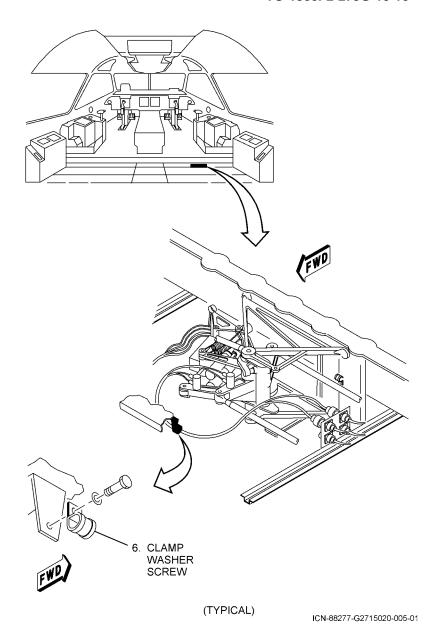
3-3. INSTALLATION FOR 2715AS002 OR 2715AS004.

- 1. Align red dot on end of shaft with red dot on sensor housing.
- 2. Position aileron position-Rotary Variable Differential Transducer (RVDT) sensor and clamp; install washers, and bolts.
- 3. Connect electrical connector as follows:

RVDT REF DES	CONNECTOR REF DES	RECEPTACLE REF DES
2715AS002	2715PP002	2715JE002
2715AS004	2715PP004	2715JE004



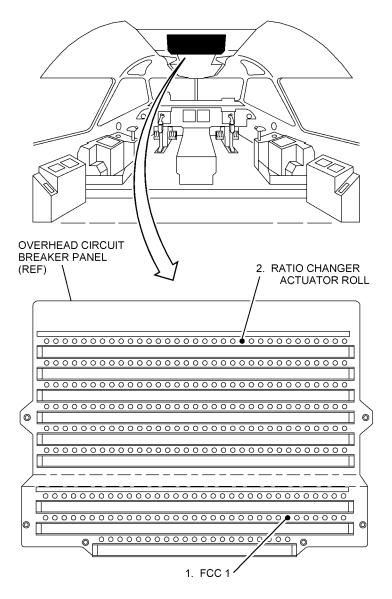
- 4. Perform faying surface sealing using MIL-PRF-81733 (TO 1300i-23, Chapter 1, Section III).
- 5. Perform wet fastener installation using AMS 3265 (TO 1300i-23, Chapter 1, Section III).
- 6. Install clamp, washer, and screw.



27-15-10-32-181

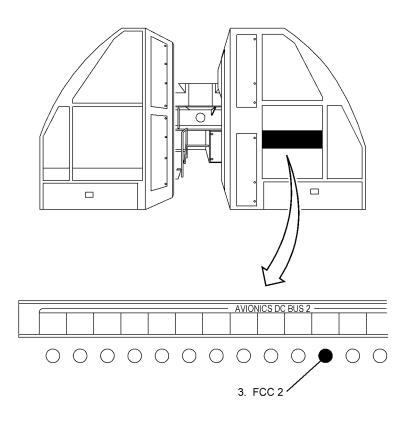
3-4. FOLLOW-ON MAINTENANCE FOR 2715AS001 OR 2715AS003.

- 1. Remove warning tag and close FCC 1 circuit breaker on overhead circuit breaker panel, row H, column 27.
- 2. Remove warning tag and close **RATIO CHANGER ACTUATOR ROLL** circuit breaker on overhead circuit breaker panel, row **A**, column **24**.



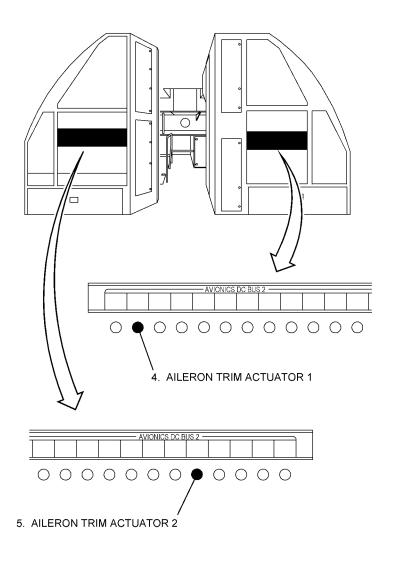
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3. Remove warning tag and close FCC 2 circuit breaker on Electrical Power Center (EPC), row T, column 50.



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- 4. Remove warning tag and close **AILERON TRIM ACTUATOR 1** circuit breaker on EPC, row **U**, column **41**.
- 5. Remove warning tag and close **AILERON TRIM ACTUATOR 2** circuit breaker on EPC, row **U**, column **36**.
- 6. Perform aileron position-Rotary Variable Differential Transducer (RVDT) sensor adjustment (task 5-1).



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3-5. FOLLOW-ON MAINTENANCE FOR 2715AS002 OR 2715AS004.

- 1. Remove warning tag and close FCC 4 circuit breaker on overhead circuit breaker panel, row G, column 30.
- 2. Remove warning tag and close **SCEFC 1** circuit breaker on overhead circuit breaker panel, row **H**, column **28**.
- 3. Remove warning tag and close **SCEFC 2** circuit breaker on overhead circuit breaker panel, row **H**, column **29**.
- Remove warning tag and close RATIO CHANGER ACTUATOR ROLL circuit breaker on overhead circuit breaker panel, row A, column 24.