

# TO 1300i-2-27JG-60-1

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## TECHNICAL MANUAL

### JOB GUIDE

### ORGANIZATIONAL MAINTENANCE

## FLIGHT CONTROLS SPOILERS

(27-60-00 THROUGH 27-63-02)

### 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-60-1 DATED 1 AUGUST 2024.

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**1 APRIL 2025**

# TO 1300i-2-27JG-60-1

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**T-2**

**1 APRIL 2025**

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# INTRODUCTION

## **SCOPE.**

This manual contains maintenance procedures for the operational checkout, removal, installation, and repair of spoilers system components.

## **MODEL(S) COVERED.**

All

## **ABBREVIATIONS.**

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

MBIT	Maintenance Built-in Test
MFD	Multifunction Display
PLCS	Places
SC/EFC	Spoiler Control/Electronic Flap Computer
WAP	Warning and caution Annunciator Panel

## **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 (27-60-00)

#### 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. 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).

#### 1-4. GENERAL WARNINGS, CAUTIONS, AND

#### NOTES.

#### **WARNING**

- Prior to applying or removing hydraulic power, personnel shall establish and maintain positive communication between flight deck and ground personnel. Failure to comply may cause injury to personnel and damage to aircraft.

**WARNING** - Continued

- 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 and damage to aircraft.

**CAUTION**

Air in a hydraulic system can cause numerous malfunctions, from total system failure to minor indication problems. If you suspect air has been induced into the system by removal of a hydraulic component or 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.

## SECTION 2

# SPOILERS SYSTEM OPERATIONAL CHECKOUT (27-60-01)

### GENERAL MAINTENANCE INPUT CONDITIONS:

#### Applicability:

All

#### Task

All

#### Additional information:

This procedure consists of the following task:

01-1. Operational checkout.

#### Additional data:

TO 1300i-2-22FI-00-1

#### Task

All

TO 1300i-2-23JG-40-1

All

TO 1300i-2-27FI-00-1

All

TO 1300i-2-29JG-20-1

All

TO 1300i-2-31JG-60-1

All

#### Personnel recommended:

Two

#### Task

All

Person (A) performs task.

Person (B) assists person (A).

**Safety conditions:**

**Task**



All four hydraulic systems shall be pressurized when operating the flaps. Flaps can be damaged during flap retraction without all four hydraulic systems operating. Failure to comply may cause damage to 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	--	--	--	--

## 01-1. OPERATIONAL CHECKOUT.

1. Review "Section 1 (General Information)" of this TO for system general warnings, cautions, and notes.
2. Review task "General Maintenance Input Conditions" page for task specific safety conditions.
3. Perform maintenance interphone operation (23-41-02, task 02-3).
4. Operate multifunction displays system and select **CFG** format (31-61-02, task 02-1 or 02-2).
5. Operate auxiliary hydraulic system (29-20-01, task 01-1).

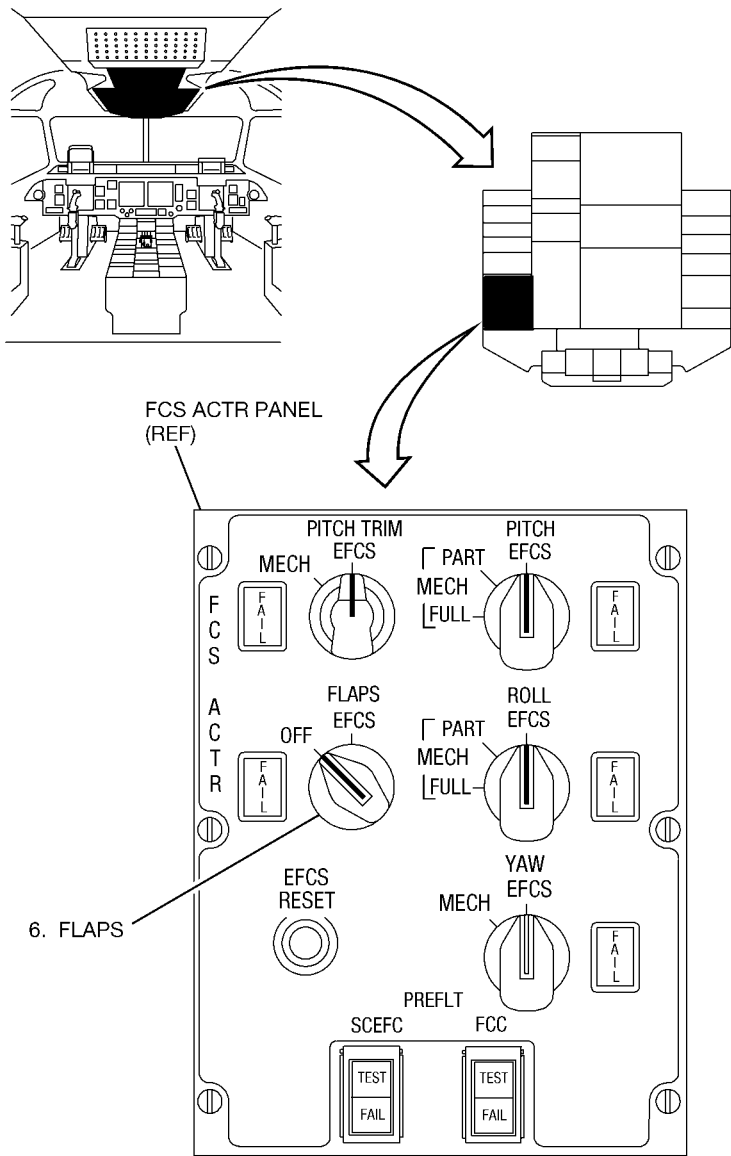


- When electrical or hydraulic power is lost during flap system operation, set **FLAPS** switch on **FCS ACTR** panel to **OFF** before reapplying electrical or hydraulic power. Failure to comply may cause damage to aircraft.
- When **SCEFC 1,2** are displayed on Warning and caution Annunciator Panel (WAP), ensure Spoiler Control/Electronic Flap Computer (SC/EFC) system passes Maintenance Built-In Test (MBIT) prior to operating flaps with auxiliary hydraulic pumps. Failure to comply may cause damage to aircraft.

### NOTE

When operating flaps during SC/EFC rig or initialization, flaps may be operated with **SCEFC 1,2** displayed on WAP.

6. (A) Rotate **FLAPS** switch on **FCS ACTR** panel to **EFCS**.



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**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 and damage to aircraft.

**NOTE**

Flap position other than **UP/RET** may result in flap movement while setting **FLAP INDEX**.

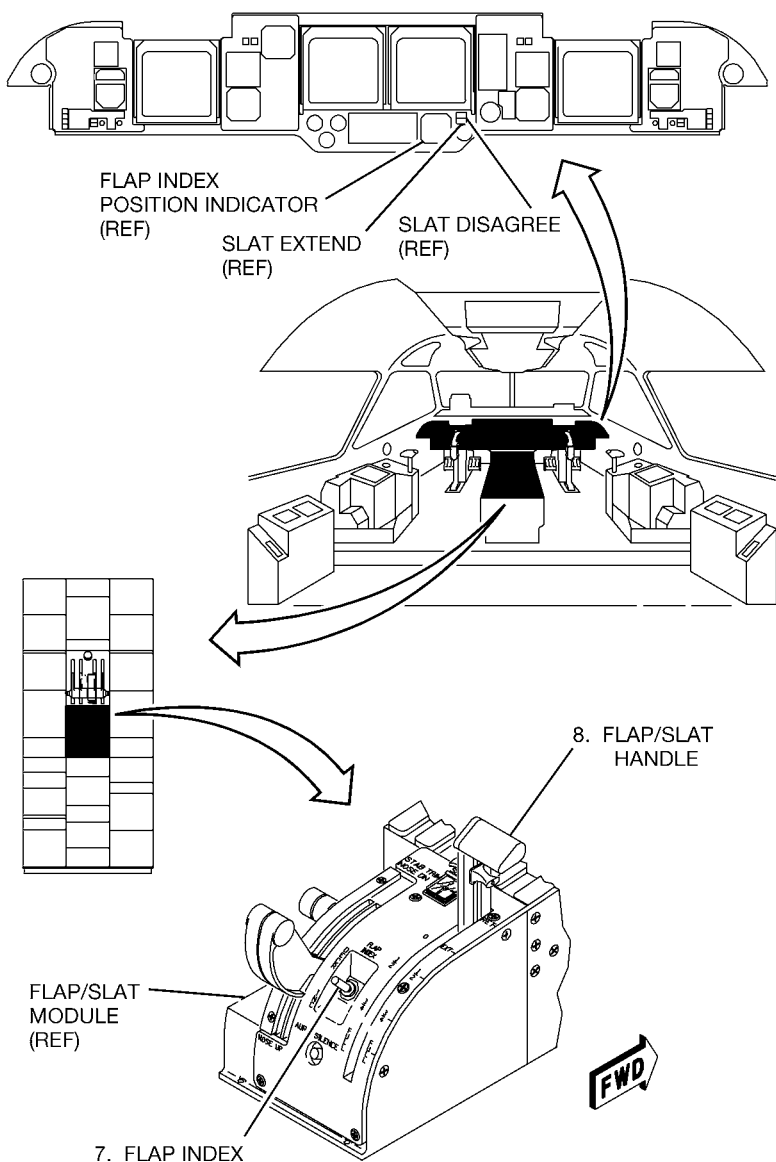
7. (A) Set **FLAP INDEX** switch on flap/slat module until flap index position indicator indicates **100**.

**NOTE**

Flap/slat positions are **UP/RET**, **0/EXT**, **1/2**, **3/4**, and **FULL**.

8. (A,B) Set flap/slat handle on flap/slat module to **UP/RET** position.
  - **SLAT DISAGREE** light momentarily comes on (27-84-AC-00).
  - **SLAT EXTEND** light goes off (27-84-AB-00).
  - Flap index position indicator agrees with flap position selected (27-53-AA-00).





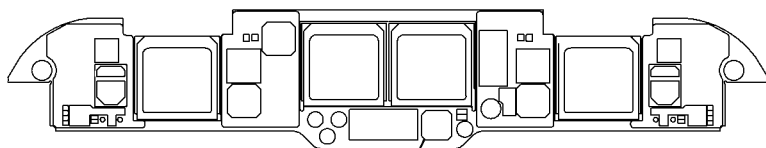
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9. (A) Press **SLAT DISABLE** switchlight on flap/slat module.
  - **DSBL** light comes on (27-80-AA-00).

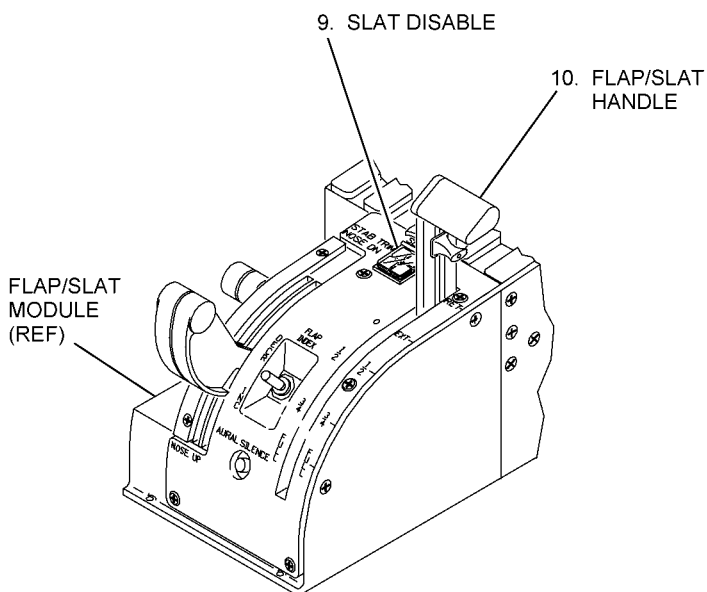
**NOTE**

Flap/slat positions are **UP/RET**, **0/EXT**, **1/2**, **3/4**, and **FULL**.

10. (A,B) Set flap/slat handle on flap/slat module to **1/2** position.
  - Flap index position indicator agrees with flap position selected (27-53-AA-00).

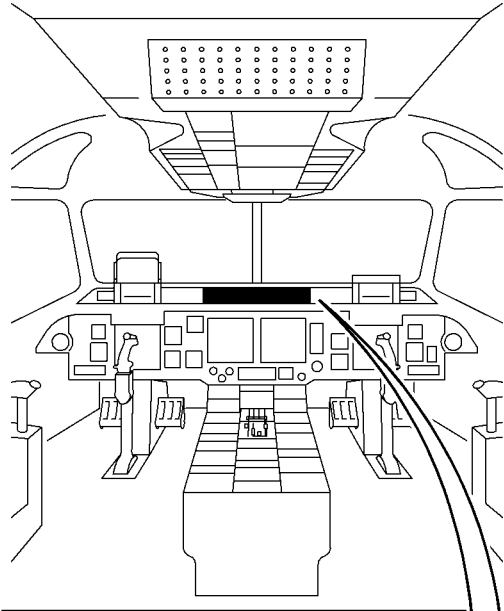


FLAP INDEX  
POSITION INDICATOR  
(REF)

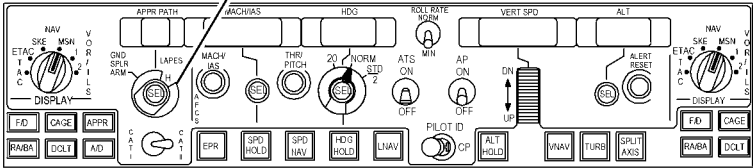


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11. (A) Rotate **GND SPLR ARM/LAPES** switch on **AFCS** panel to **GND SPLR ARM**.



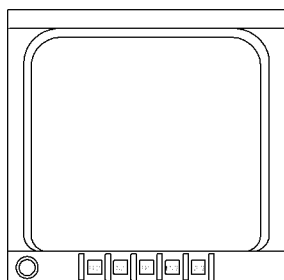
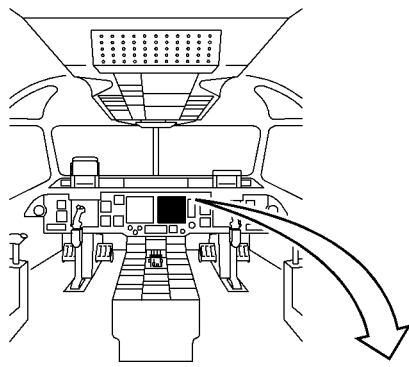
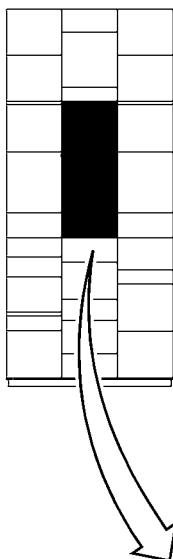
11. GND SPLR ARM/LAPES



AFCS PANEL  
(REF)

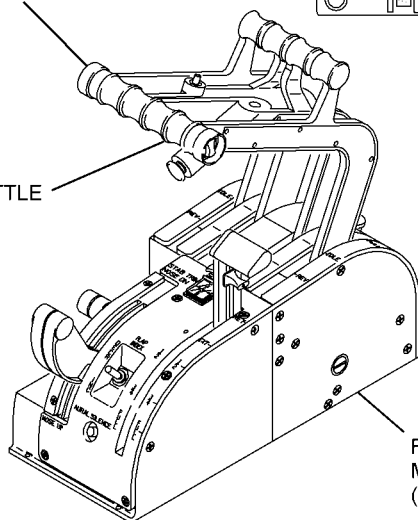
12. (A,B) Position No. 1 and No. 3 throttle levers to **REV**.

- Spoilers fully extend (27-63-ME-00).
- Multifunction Display (MFD) displays spoilers fully extended (27-64-AC-00).



12. NO. 1 THROTTLE LEVER

NO. 3 THROTTLE  
LEVER  
(REF)



MFD  
(REF)

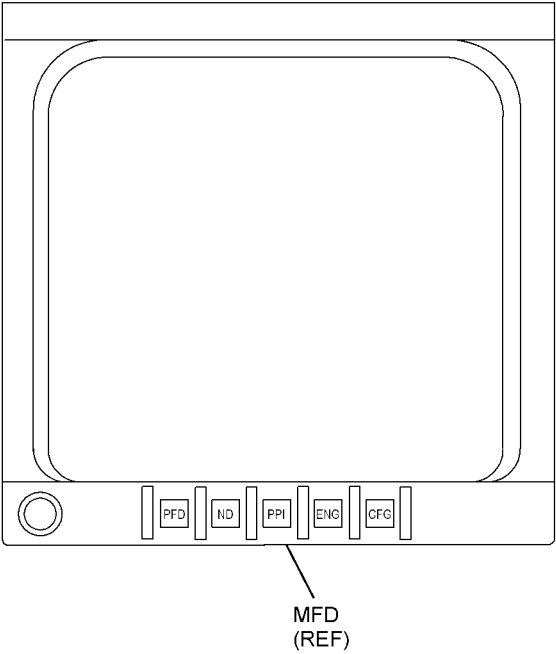
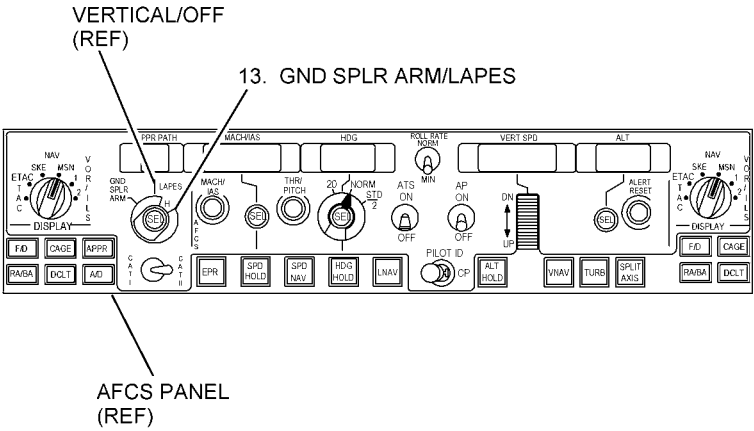
FLAP/SLAT  
MODULE  
(REF)

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## TO 1300i-2-27JG-60-1

13. (A,B) Rotate **GND SPLR ARM/LAPES** switch on **AFCS** panel to the vertical/off position.
  - Spoilers fully retract (27-63-ME-00).
  - MFD displays spoilers fully retracted (27-64-AC-00).

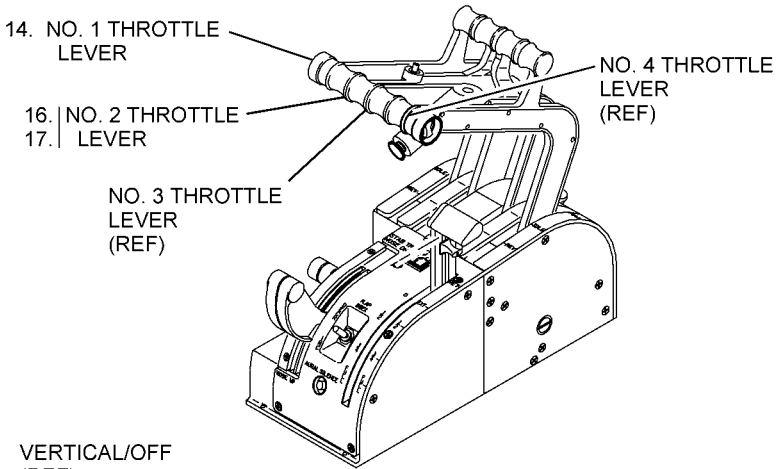




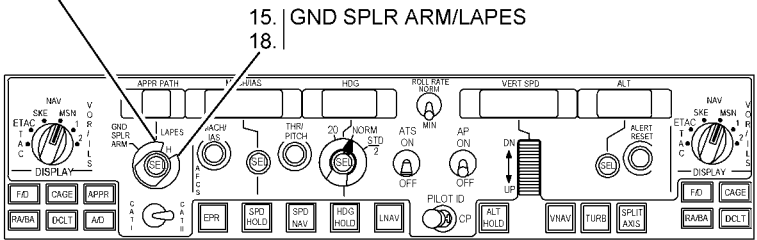
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## TO 1300i-2-27JG-60-1

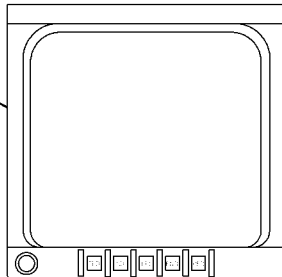
14. (A) Position No. 1 and No. 3 throttle levers to **IDLE**.
15. (A) Rotate **GND SPLR ARM/LAPES** switch on **AFCS** panel to **ARM**.
16. (A,B) Position No. 2 and No. 4 throttle levers to **REV**.
  - Spoilers fully extend (27-63-ME-00).
  - MFD displays spoilers fully extended (27-64-AC-00).
17. (A,B) Position No. 2 and No. 4 throttle levers to **IDLE**.
  - Spoilers fully retract (27-63-ME-00).
  - MFD displays spoilers fully retracted (27-64-AC-00).
18. (A) Rotate **GND SPLR ARM/LAPES** switch to the vertical/off position.



VERTICAL/OFF (REF)

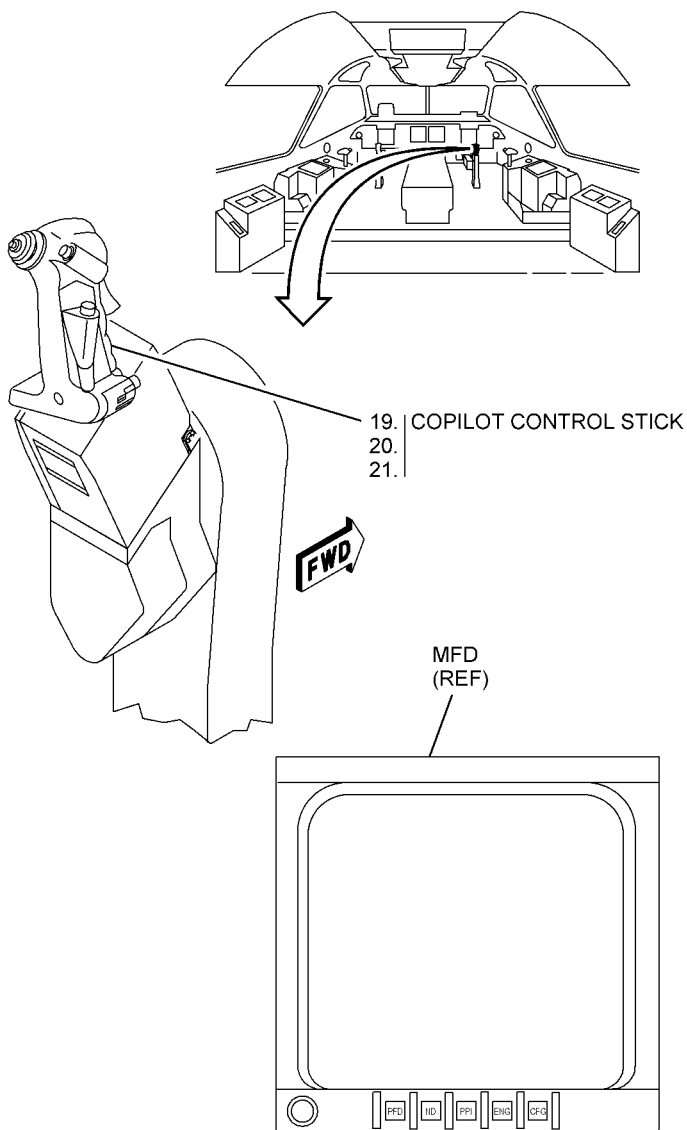


MFD (REF)



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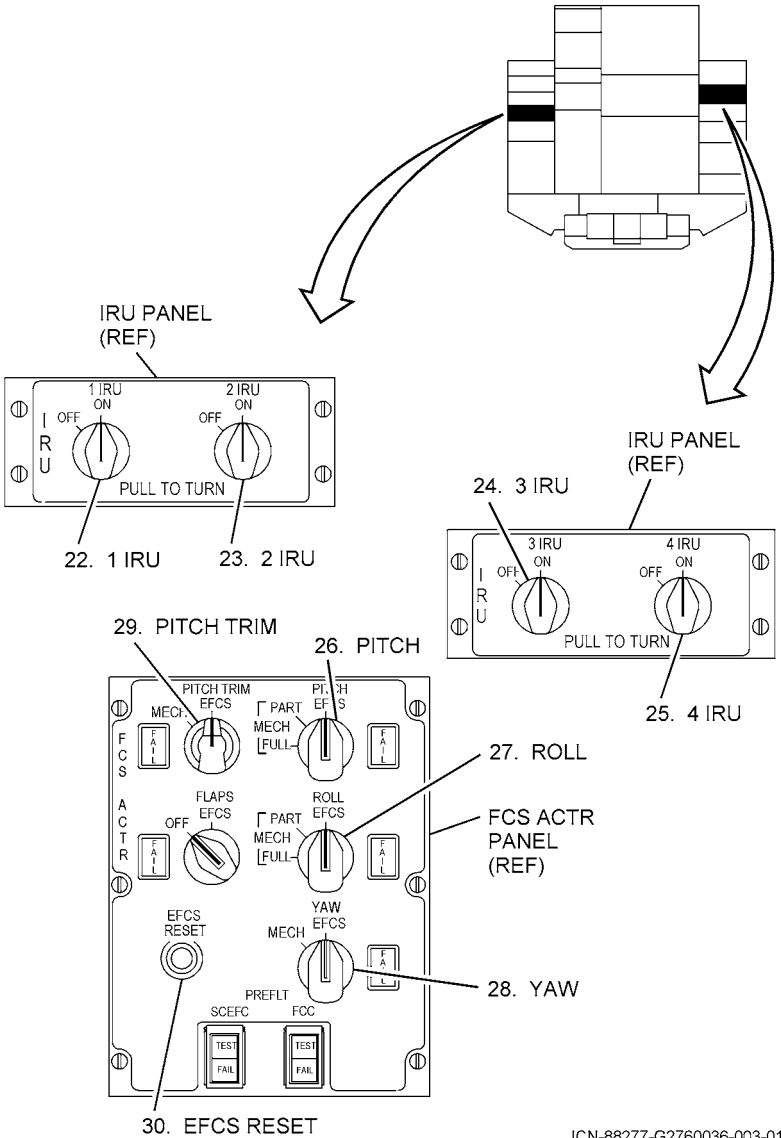
19. (A,B) Position copilot control stick left.
- Left wing spoilers fully extend (22-00-AJ-\_\_).
  - Right wing spoilers remain retracted (22-00-AJ-\_\_).
  - MFD displays left wing spoilers fully extended (27-64-AC-00).
  - MFD displays right wing spoilers retracted (27-64-AC-00).
20. (A,B) Position copilot control stick right.
- Right wing spoilers fully extend (22-00-AJ-\_\_).
  - Left wing spoilers remain retracted (22-00-AJ-\_\_).
  - MFD displays right wing spoilers fully extended (27-64-AC-00).
  - MFD displays left wing spoilers retracted (27-64-AC-00).
21. (A) Position copilot control stick to neutral.



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## TO 1300i-2-27JG-60-1

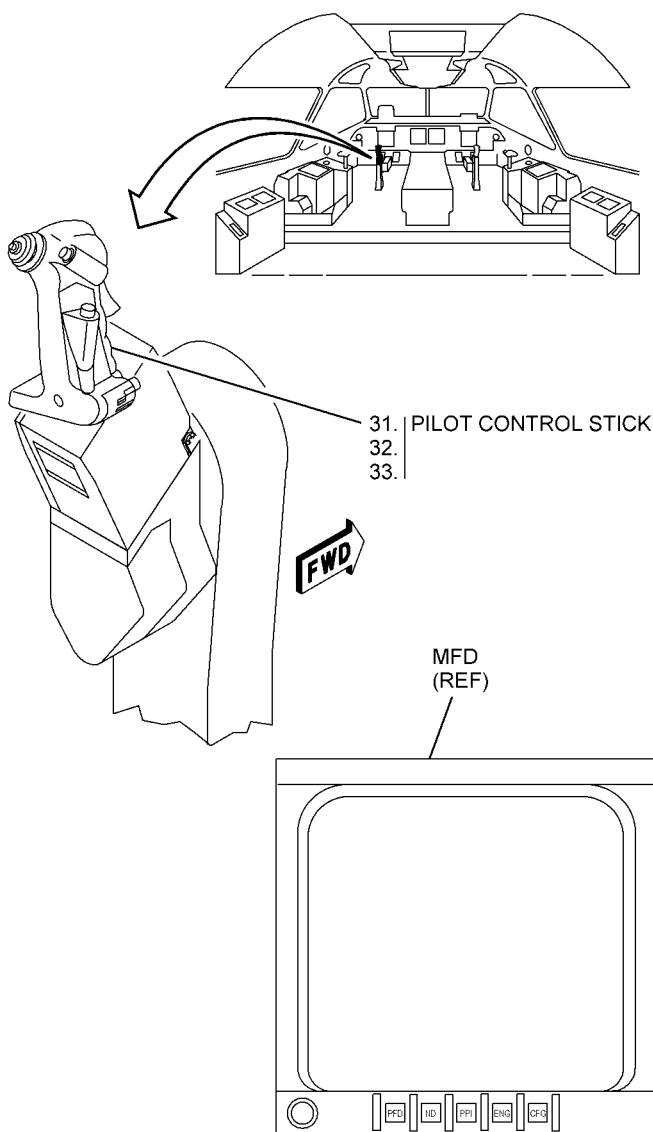
22. (A) Set **1 IRU** switch on **IRU** panel to **ON**.
23. (A) Set **2 IRU** switch to **ON**.
24. (A) Set **3 IRU** switch on **IRU** panel to **ON**.
25. (A) Set **4 IRU** switch to **ON**.
26. (A) Set **PITCH** switch on **FCS ACTR** panel to **EFCS**.
27. (A) Set **ROLL** switch to **EFCS**.
28. (A) Set **YAW** switch to **EFCS**.
29. (A) Set **PITCH TRIM** switch to **EFCS**.
30. (A) Press **EFCS RESET** button.



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31. (A,B) Position pilot control stick left.
- Left wing spoilers fully extend (22-00-AJ-\_\_).
  - Right wing spoilers remain retracted (22-00-AJ-\_\_).
  - MFD displays left wing spoilers fully extended (27-64-AC-00).
  - MFD displays right wing spoilers retracted (27-64-AC-00).
32. (A,B) Position pilot control stick right.
- Right wing spoilers fully extend (22-00-AJ-\_\_).
  - Left wing spoilers remain retracted (22-00-AJ-\_\_).
  - MFD displays right wing spoilers fully extended (27-64-AC-00).
  - MFD displays left wing spoilers retracted (27-64-AC-00).
33. (A) Position pilot control stick to neutral.

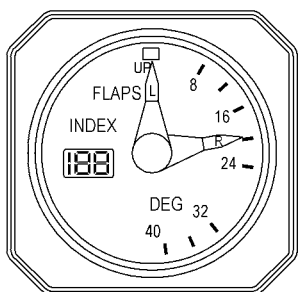




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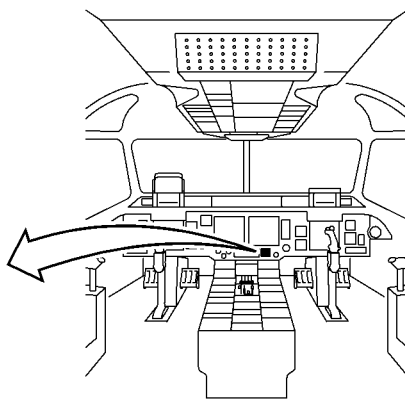
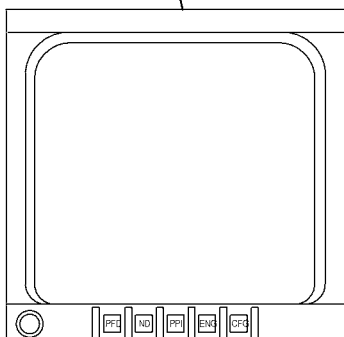
34. (A,B) Set flap/slat handle on flap/slat module to **UP/RET**.

- Flap index position indicator reads **UP** (27-53-AA-00).
- Flaps fully retract (27-51-AA-\_\_).
- MFD displays flaps fully retracted (27-64-AC-00).

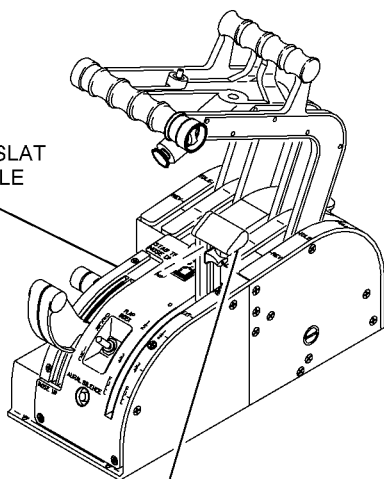


FLAP INDEX  
POSITION INDICATOR  
(REF)

MFD  
(REF)



FLAP/SLAT  
MODULE  
(REF)



34. FLAP/SLAT HANDLE

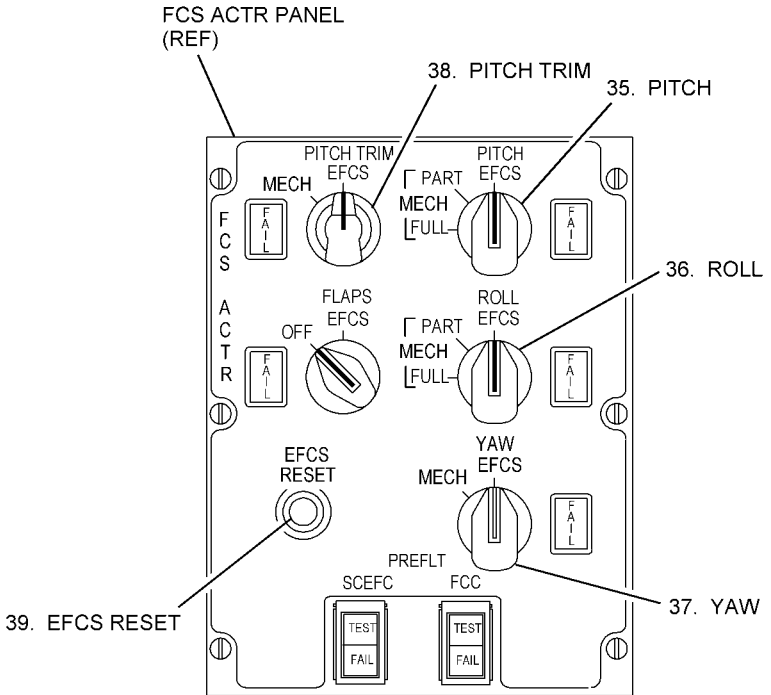
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- 35. (A) Set **PITCH** switch on **FCS ACTR** panel to **FULL MECH**.
- 36. (A) Set **ROLL** switch to **FULL MECH**.

**NOTE**

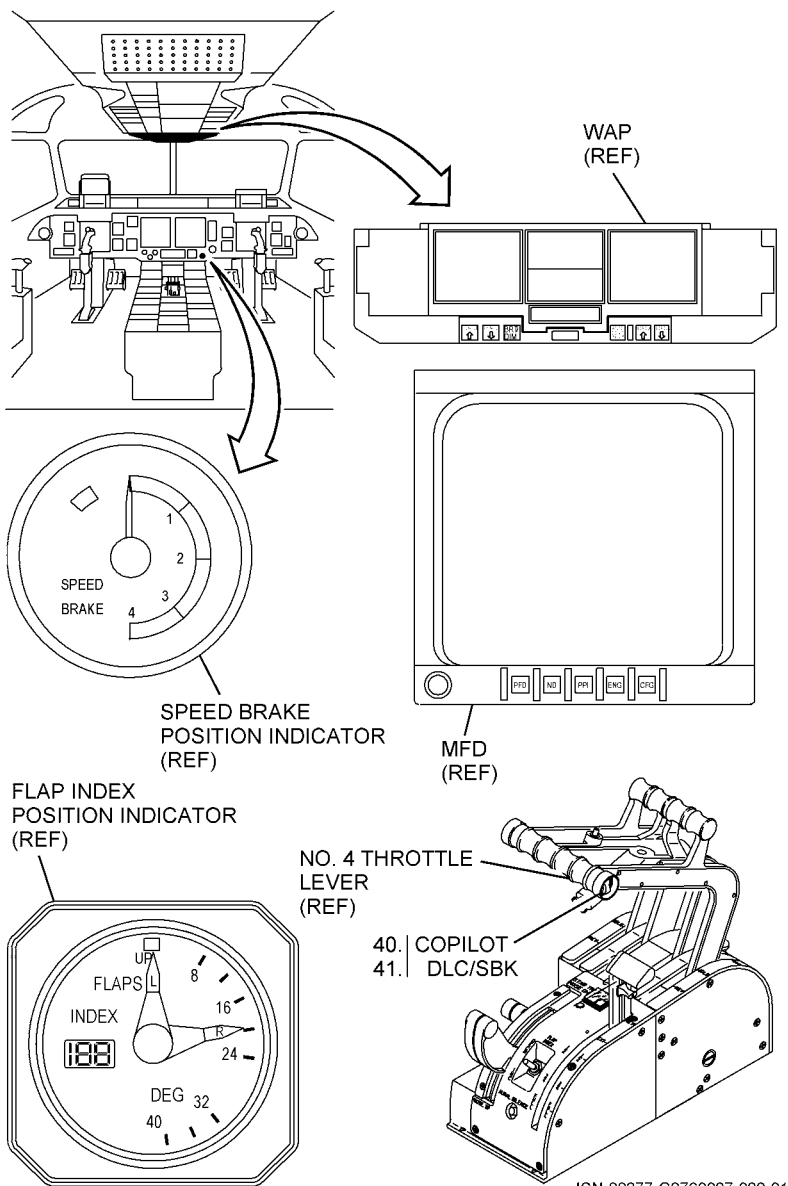
When **YAW** switch on **EFCS ACTR** panel is switched from **EFCS** to **MECH** a momentary lower rudder shudder may be felt or observed. A rudder shudder lasting no more than 10 seconds is acceptable.

- 37. (A) Set **YAW** switch to **MECH**.
- 38. (A) Set **PITCH TRIM** switch to **MECH**.
- 39. (A) Press **EFCS RESET** button.



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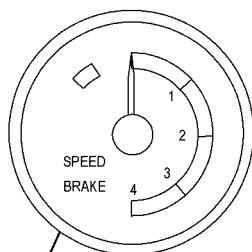
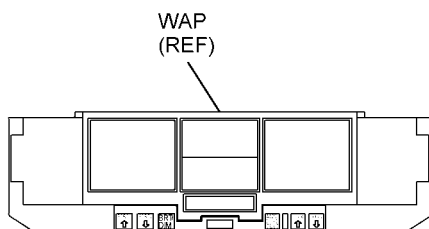
40. (A,B) Press and hold copilot **DLC/SBK** switch aft on outboard side of No. 4 throttle lever.
- Spoilers extend with graduation from inboard to outboard (27-10-ML-00).
  - MFD displays flaps and spoilers extended (27-64-AC-00).
  - Speed brake position indicator reads **4** (27-65-AA-00).
  - **SPEED BRAKES** is displayed on Warning and caution Annunciator Panel (WAP) (27-65-AA-00).
  - Flap index position indicator reads approximately **8.0** degrees (27-53-AA-00).
41. (A,B) Press and hold copilot **DLC/SBK** switch forward.
- Spoilers retract (27-10-ML-00).
  - MFD displays flaps and spoilers retracted (27-64-AC-00).
  - Speed brake position indicator reads beginning of scale (27-65-AA-00).
  - **SPEED BRAKES** display on WAP goes off (27-65-AA-00).
  - Flap index position indicator reads flaps retracted (27-53-AA-00).



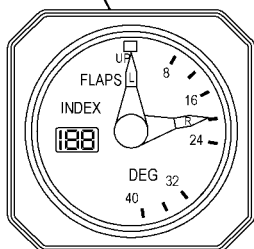
## TO 1300i-2-27JG-60-1

42. (A,B) Press and hold pilot **DLC/SBK** switch aft on outboard side of No. 1 throttle lever.
- Spoilers extend with graduation from inboard to outboard (27-10-ML-00).
  - MFD displays flaps and spoilers extended (27-64-AC-00).
  - Speed brake position indicator reads **4** (27-65-AA-00).
  - **SPEED BRAKES** is displayed on WAP (27-10-ML-00).
  - Flap index position indicator reads approximately **8.0** degrees (27-53-AA-00).
43. (A,B) Press and hold pilot **DLC/SBK** switch forward.
- Spoilers retract (27-10-ML-00).
  - MFD displays flaps and spoilers retracted (27-64-AC-00).
  - Speed brake position indicator reads beginning of scale (27-65-AA-00).
  - **SPEED BRAKES** display on WAP goes off (27-10-ML-00).
  - Flap index position indicator reads flaps retracted (27-53-AA-00).



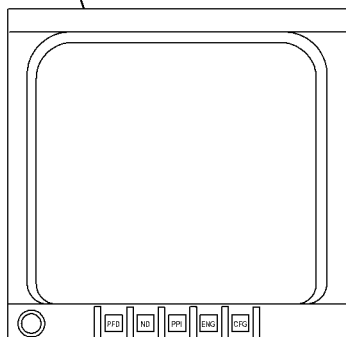


FLAP INDEX  
POSITION INDICATOR  
(REF)



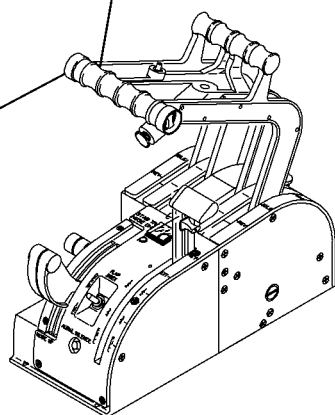
SPEED BRAKE  
POSITION INDICATOR  
(REF)

MFD  
(REF)



42. PILOT DLC/SBK  
43.

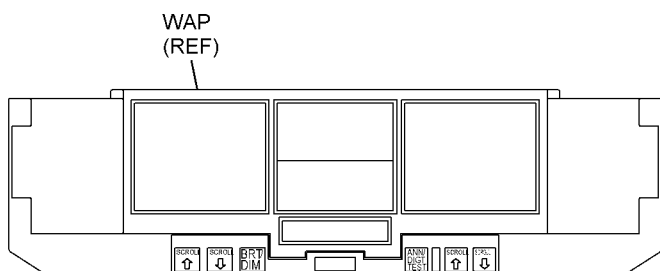
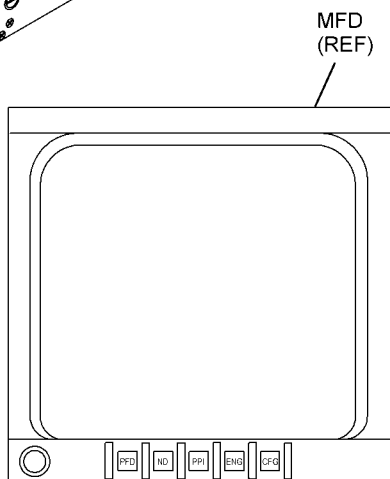
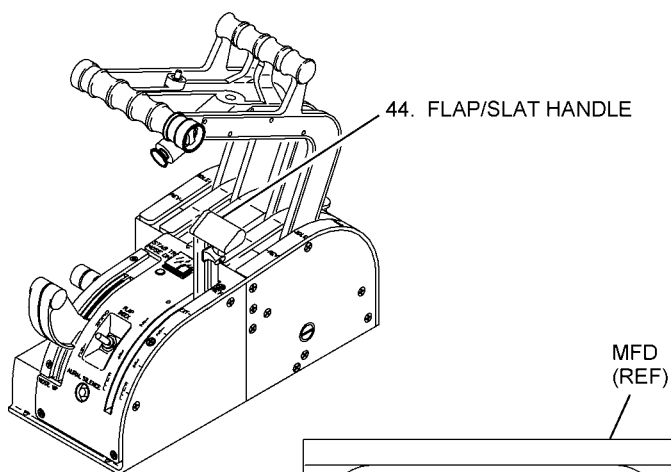
NO. 1 THROTTLE  
LEVER  
(REF)



ICN-88277-G2760008-007-01

44. (A) Set flap/slat handle on flap/slat module to **3/4**.

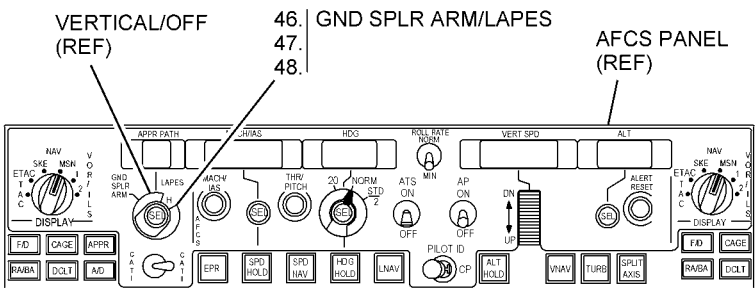
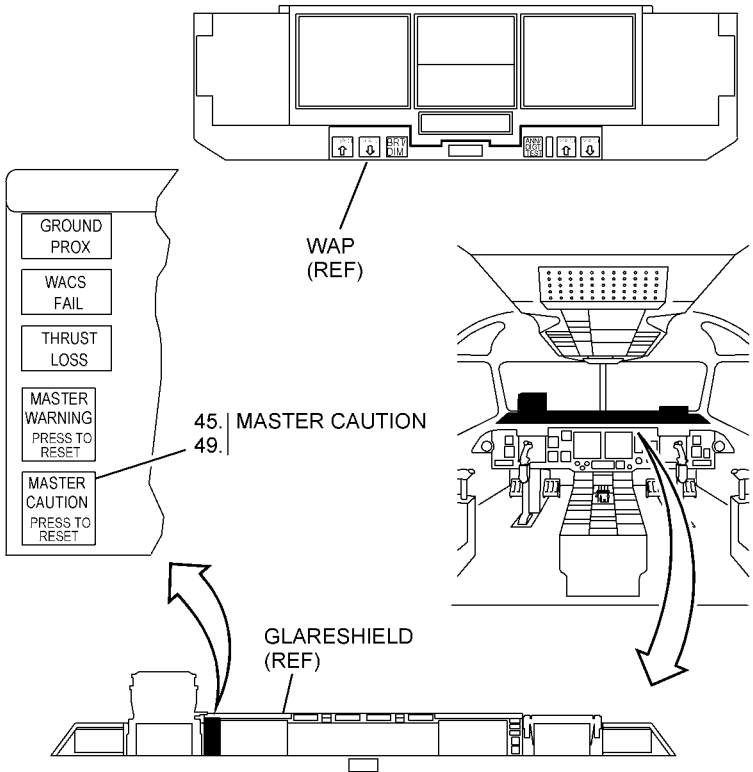
- Flap index position indicator reads approximately **32.5** degrees (27-53-AA-00).
- **FLAPS 3/4** is displayed on MFD (27-64-AC-00).
- **INDEX 100** is displayed (27-64-AC-00).
- **SPOILERS NOT ARMED** is displayed on WAP (27-63-ME-00).



ICN-88277-G2760070-003-01

## TO 1300i-2-27JG-60-1

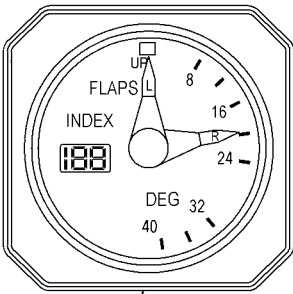
45. (A) Press **MASTER CAUTION** switchlight on glareshield.
46. (A) Rotate **GND SPLR ARM/LAPES** switch on **AFCS** panel to **ARM**.
  - **SPOILERS NOT ARMED** is not displayed on WAP (27-63-ME-00).
47. (A) Rotate **GND SPLR ARM/LAPES** switch to **LAPES, H, M, or L**.
  - **SPOILERS NOT ARMED** is displayed on WAP (27-63-ME-00).
48. (A) Rotate **GND SPLR ARM/LAPES** switch to the vertical/off position.
  - **SPOILERS NOT ARMED** remains displayed on WAP (27-63-ME-00).
49. (A) Press **MASTER CAUTION** switchlight on glareshield.



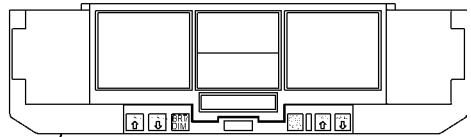
ICN-88277-G2760071-002-01

## TO 1300i-2-27JG-60-1

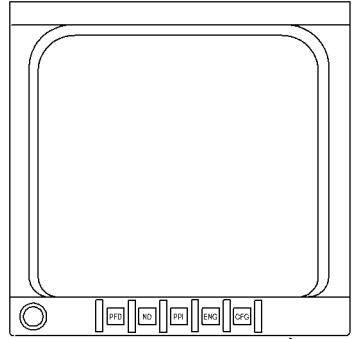
50. (A,B) Press and hold pilot **DLC/SBK** switch aft on outboard side of No. 1 throttle lever.
- **DLC** indication is displayed on MFD (27-10-ML-00).
  - Spoilers partially extend (27-10-ML-00).
51. (A,B) Release **DLC/SBK** switch.
- **DLC** indication is not displayed on MFD (27-63-AD-00).
  - Spoilers fully retract (27-10-ML-00).
52. (A) Set flap/slat handle on flap/slat module to **UP/RET**.
- Flap index position indicator reads **UP** (27-53-AA-00).
  - **SPOILERS NOT ARMED** is not displayed on WAP (27-63-ME-00).
53. (A) Press **DSBL** switchlight.
- **DSBL** light goes off (27-80-AA-00).



FLAP INDEX  
POSITION INDICATOR  
(REF)

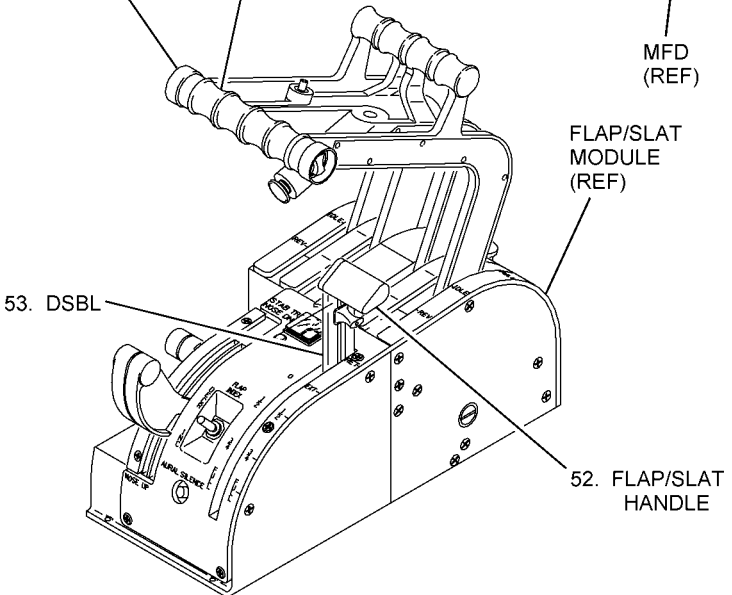


WAP  
(REF)



MFD  
(REF)

50. PILOT  
51. DLC/SBK
- NO. 1 THROTTLE  
LEVER  
(REF)



FLAP/SLAT  
MODULE  
(REF)

52. FLAP/SLAT  
HANDLE

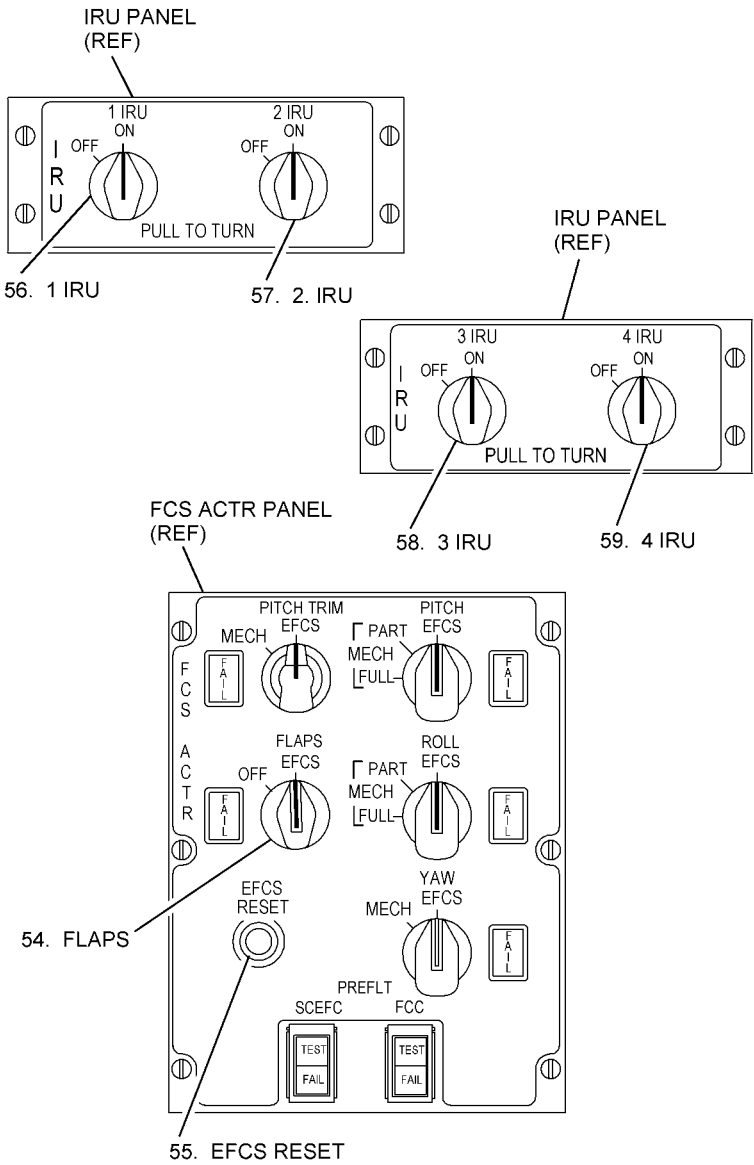
53. DSBL

ICN-88277-G2760040-007-01

## TO 1300i-2-27JG-60-1

54. (A) Set **FLAPS** switch on **FCS ACTR** panel to **OFF**.
55. (A) Press **EFCS RESET** button.
56. (A) Set **1 IRU** switch on **IRU** panel to **OFF**.
57. (A) Set **2 IRU** switch to **OFF**.
58. (A) Set **3 IRU** switch to **OFF**.
59. (A) Set **4 IRU** switch to **OFF**.
60. Shutdown auxiliary hydraulic system (29-20-01, task 01-2).
61. Perform maintenance interphone shutdown (23-41-02, task 02-4).
62. Shutdown multifunction displays system (31-61-02, task 02-3 or 02-4).





ICN-88277-G2760041-004-01



**SPOILERS SYSTEM MECHANICAL RIGGING  
(27-60-02)**

**GENERAL MAINTENANCE INPUT CONDITIONS:**

<b>Applicability:</b>	<b>Task</b>
All	All

**Additional information:**

This procedure consists of the following task:

02-1. Spoilers system mechanical rigging.

<b>Additional data:</b>	<b>Task</b>
TO 1300i-2-05JG-10-1	All
TO 1300i-2-22FI-00-1	All
TO 1300i-2-23JG-40-1	All
TO 1300i-2-27FI-00-1	All
TO 1300i-2-27JG-50-1	All
TO 1300i-2-28JG-20-1	All
TO 1300i-2-29JG-20-1	All
TO 1300i-2-31JG-60-1	All
TO 1300i-2-57JG-50-1	All
TO 1300i-23	All

<b>Personnel recommended:</b>	<b>Task</b>
Three	All
Person (A) performs task.	
Person (B) assists person (A).	

Task

Person (C) scanner for movements of flight controls.

Safety conditions:

Task



- Adjustable sleeve thread engagement on spoiler/flap interconnect pushrod assemblies shall be verified through inspection holes in housing. Holes must be completely blocked by threads. Failure to comply may cause injury to personnel and damage to aircraft. All
- Initial rod end dimension on adjustable end of pushrod assembly shall not be changed. Initial adjustment of rod end ensures proper thread engagement (depth) of the adjustable sleeve. Failure to comply may cause injury to personnel and damage to aircraft. All

**WARNING** - Continued

- 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. All

**CAUTION**

Empty fuel tanks 1 and 2 or fuel tanks 3 and 4 of the wing where the spoiler is located, by transferring fuel to other tanks or defuel. Defuel aircraft to a maximum of 40,000 pounds total (TO 1300i-2-28JG-20-1, 28-20-00) and transfer 20,000 pounds from the wing where spoiler rigging is occurring to the other wing. This will eliminate the effects of wing bending caused by the weight of the fuel. Failure to comply may cause damage to aircraft. All

Support equipment:

<u>Nomenclature</u>	<u>PN</u>	<u>Specification</u>	<u>Qty</u>	<u>Task</u>
Shield, Throttle Protective	17G230060-1	--	1	All

Supplies:

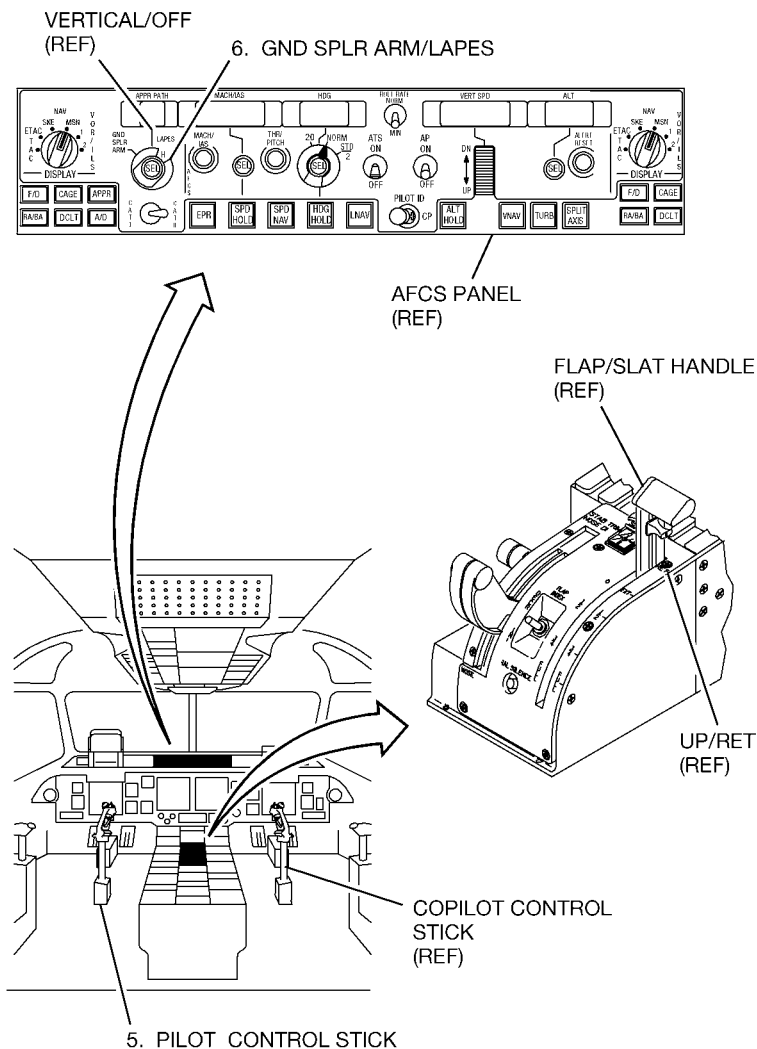
<u>Nomenclature</u>	<u>PN</u>	<u>Specification</u>	<u>Qty</u>	<u>Task</u>
Wire, Safety	900010-32C	--	AR	All
Sealant	PR-1775 B-2	AMS 3265	AR	All



## 02-1. SPOILERS SYSTEM MECHANICAL RIGGING.

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. Operate flaps system and position flap/slat handle to **UP/RET** (27-50-03, task 03-1).
4. Perform maintenance interphone operation (23-41-02, task 02-3).
5. (A) Ensure pilot or copilot control stick is in neutral.
6. (A) Ensure **GND SPLR ARM/LAPES** switch on **AFCS** panel is in the vertical/off position.
7. Install flap control handle aircraft ground safety lock (05-10-01, task 01-7).





ICN-88277-G2760054-001-01

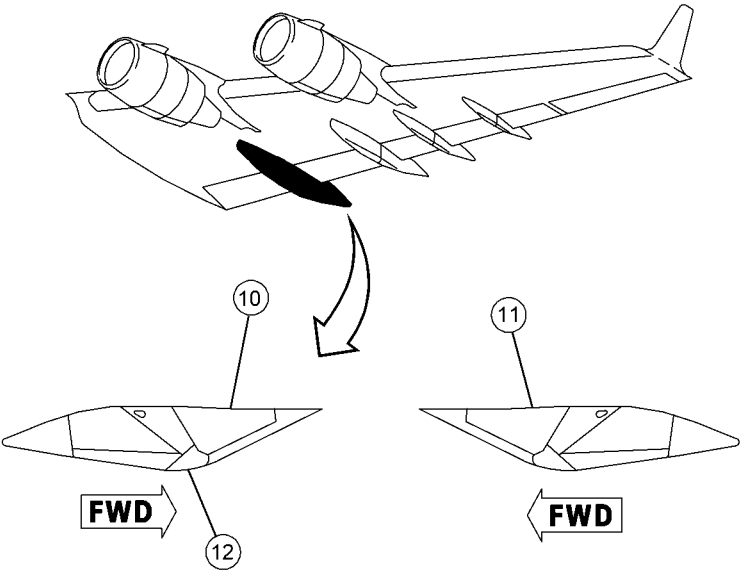
## TO 1300i-2-27JG-60-1

8. Lower lower wing fixed trailing edge door assembly (57-54-01).

SPOILER REF DES	DOOR NO.	DOOR REF DES
2761AA001	565DBD	5754CA031
2761AA002	565CBD	5754CA030
2761AA003	565BBD	5754CA029
2761AA004	565ABD	5754CA028
2761AA005	665ABD	5754CA037
2761AA006	665BBD	5754CA036
2761AA007	665CBD	5754CA035
2761AA008	665DBD	5754CA034

9. (A) Identify and remove screws and access panels.

10. (A) Remove screws and access panel.

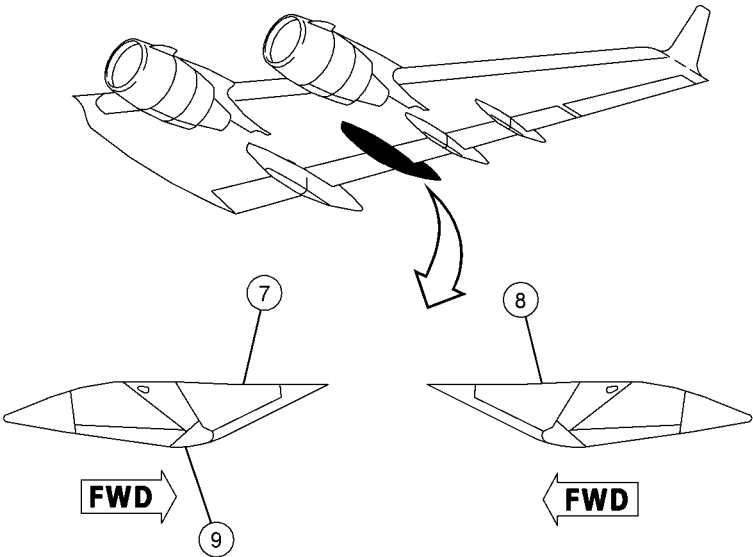


9.

PUSHROD REF DES	INDEX NO.	PANEL NO.	SCREW QTY
2764MP009	10	571HLP	102
	11	571JRP	102

10.

PUSHROD REF DES	INDEX NO.	PANEL NO.	SCREW QTY
2764MP009	12	571CBC	23

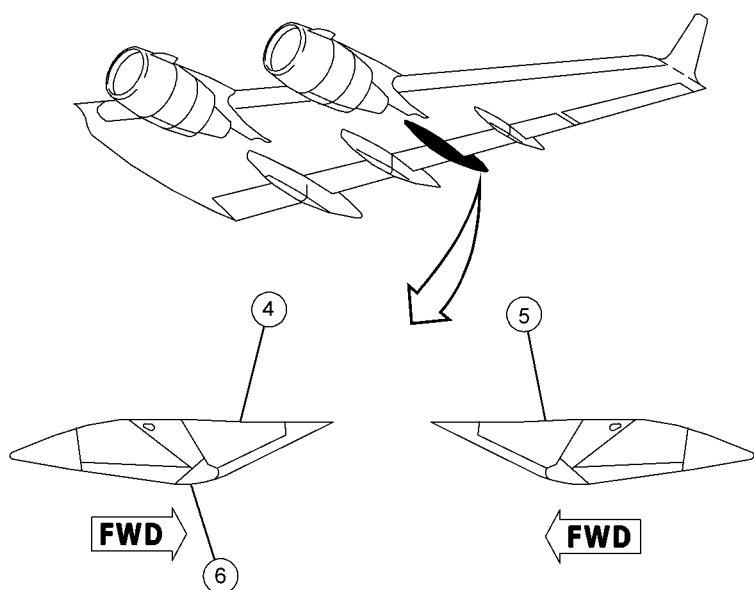


9.

PUSHROD REF DES	INDEX NO.	PANEL NO.	SCREW QTY
2764MP010	7 8	571MRP 571LLP	79 79

10.

PUSHROD REF DES	INDEX NO.	PANEL NO.	SCREW QTY
2764MP010	9	571FBC	18

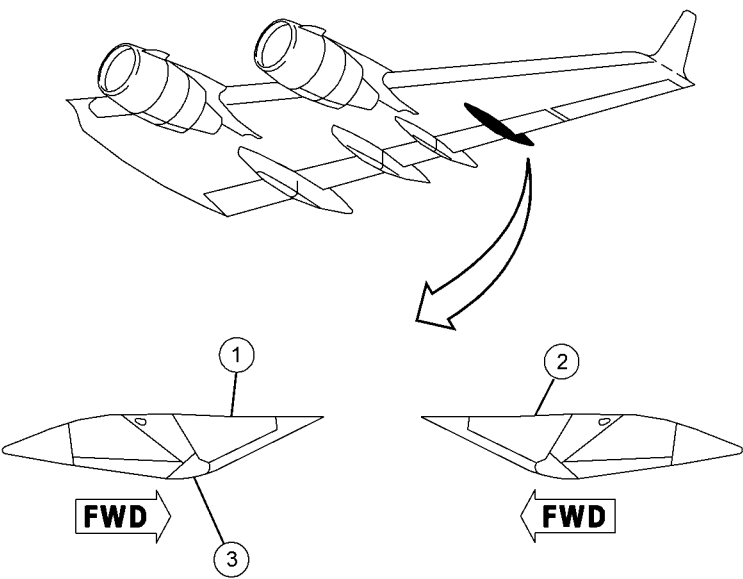


9.

PUSHROD REF DES	INDEX NO.	PANEL NO.	SCREW QTY
2764MP011	4 5	573JRP 573HLP	59 59

10.

PUSHROD REF DES	INDEX NO.	PANEL NO.	SCREW QTY
2764MP011	6	573CBC	17

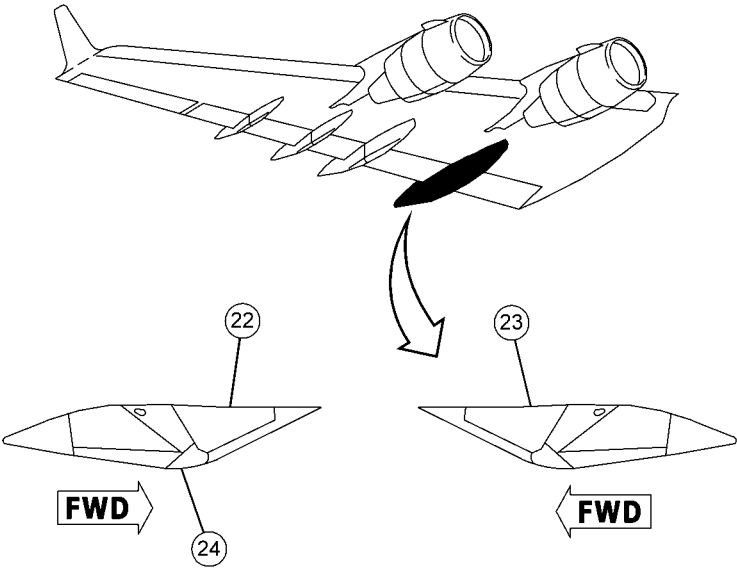


9.

PUSHROD REF DES	INDEX NO.	PANEL NO.	SCREW QTY
2764MP012	1	573MRP	44
	2	573LLP	44

10.

PUSHROD REF DES	INDEX NO.	PANEL NO.	SCREW QTY
2764MP012	3	573FBC	16

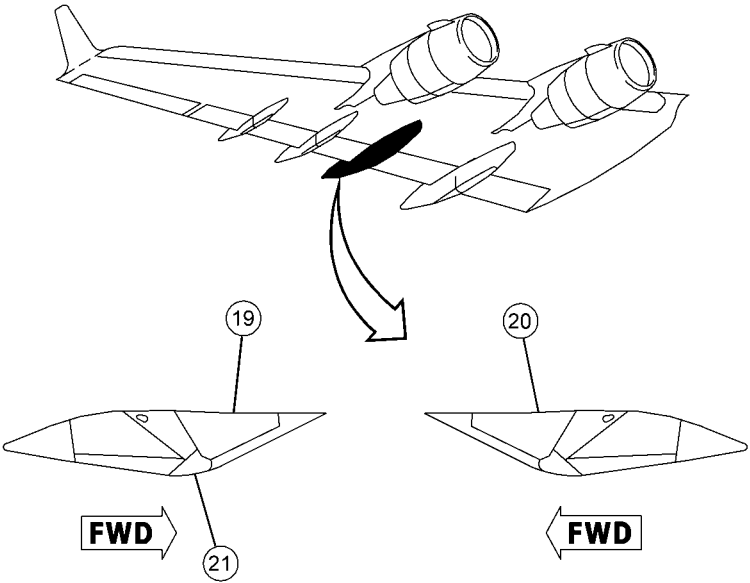


9. —

PUSHROD REF DES	INDEX NO.	PANEL NO.	SCREW QTY
2764MP013	22 23	671JRP 671HLP	102 102

10. —

PUSHROD REF DES	INDEX NO.	PANEL NO.	SCREW QTY
2764MP013	24	671CBC	23



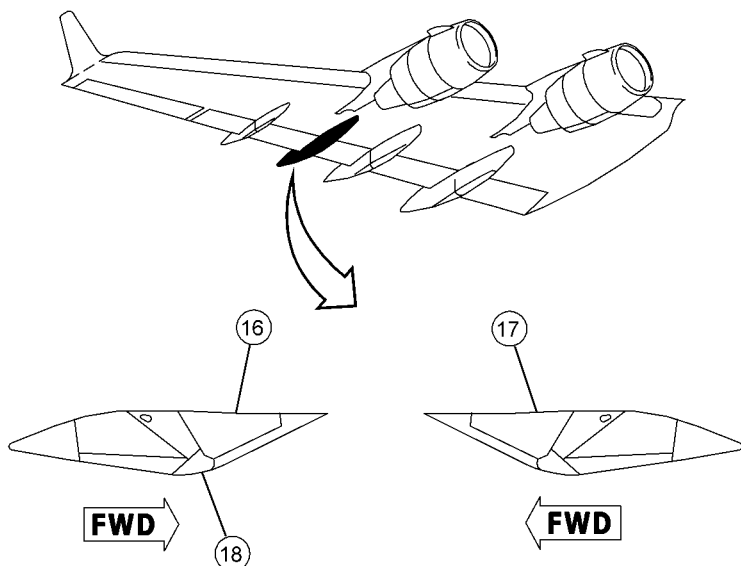
9. —

PUSHROD REF DES	INDEX NO.	PANEL NO.	SCREW QTY
2764MP014	19 20	671MRP 671LLP	79 79

10. —

PUSHROD REF DES	INDEX NO.	PANEL NO.	SCREW QTY
2764MP014	21	671FBC	18

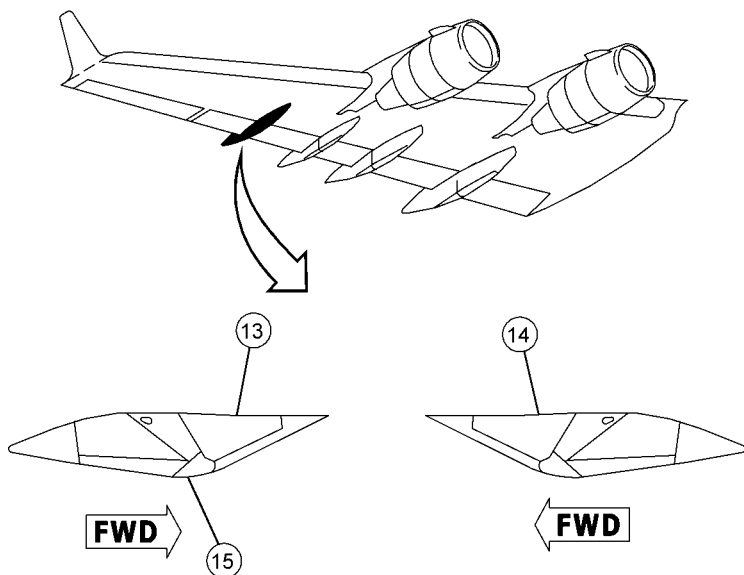




9.	PUSHROD REF DES	INDEX NO.	PANEL NO.	SCREW QTY
	2764MP015	16 17	673JRP 673HLP	59 59

10.	PUSHROD REF DES	INDEX NO.	PANEL NO.	SCREW QTY
	2764MP015	18	673CBC	17

ICN-88277-G2760023-004-01



9.	PUSHROD REF DES	INDEX NO.	PANEL NO.	SCREW QTY
	2764MP016	13 14	673MRP 673LLP	44 44

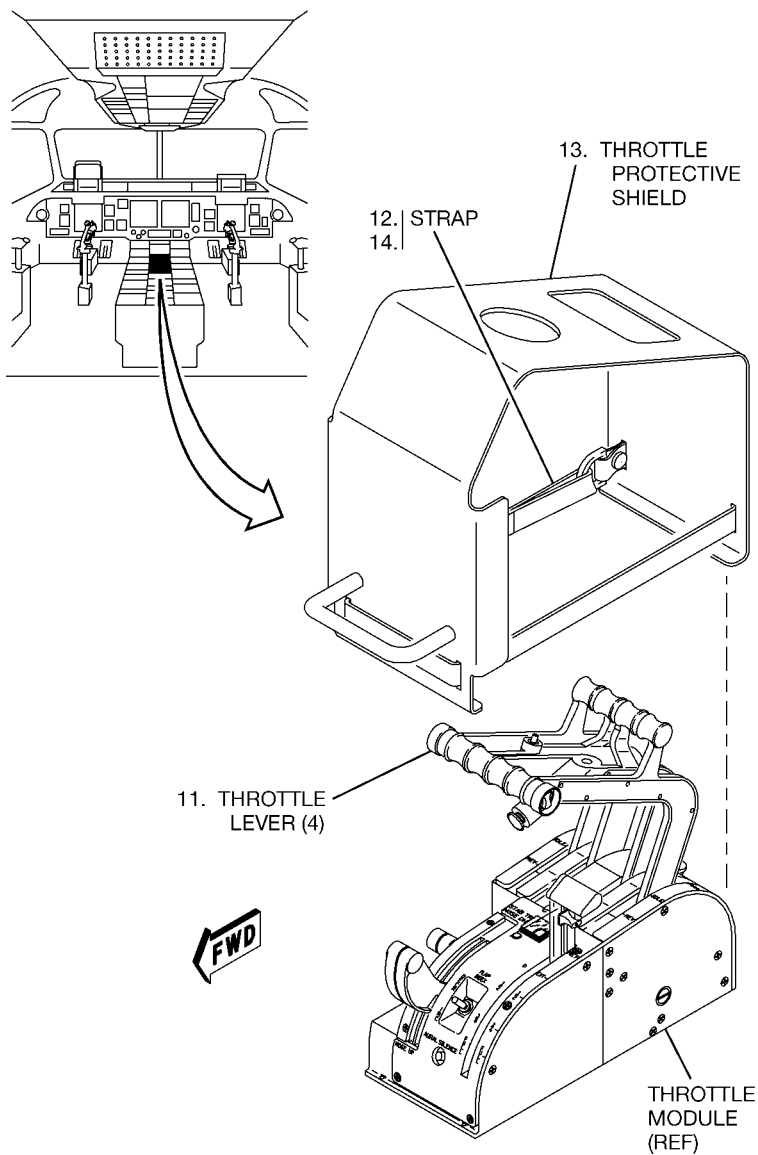
10.	PUSHROD REF DES	INDEX NO.	PANEL NO.	SCREW QTY
	2764MP016	15	673FBC	16

ICN-88277-G2760022-004-01



## TO 1300i-2-27JG-60-1

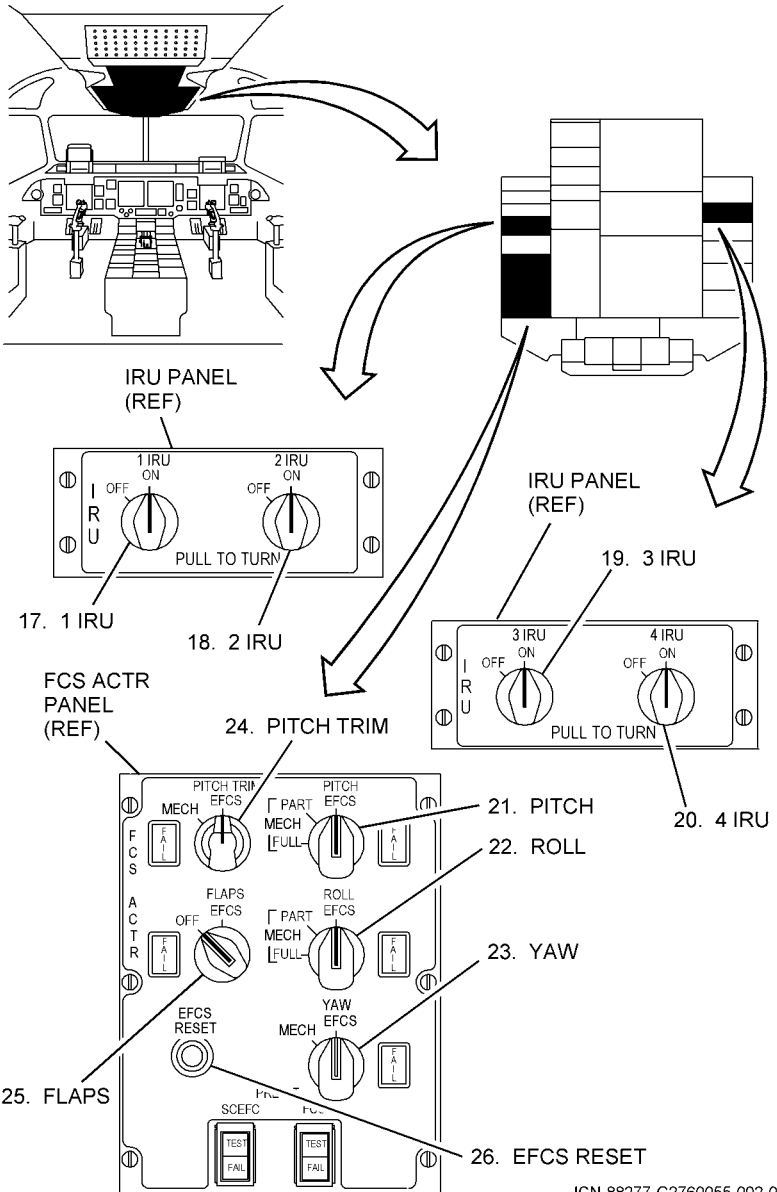
11. (A) Ensure all throttle levers are in **IDLE**.
12. (A) Loosen strap.
13. (A) Position throttle protective shield on throttle module.
14. (A) Tighten strap.



ICN-88277-G2760035-003-01

## TO 1300i-2-27JG-60-1

15. Operate multifunction displays system and select **CFG** format (31-61-02, task 02-1 or 02-2).
16. Operate auxiliary hydraulic system (29-20-01, task 01-1).
17. (A) Set **1 IRU** switch on **IRU** panel to **ON**.
18. (A) Set **2 IRU** switch to **ON**.
19. (A) Set **3 IRU** switch on **IRU** panel to **ON**.
20. (A) Set **4 IRU** switch to **ON**.
21. (A) Set **PITCH** switch on **FCS ACTR** panel to **EFCS**.
22. (A) Set **ROLL** switch to **EFCS**.
23. (A) Set **YAW** switch to **EFCS**.
24. (A) Set **PITCH TRIM** switch to **EFCS**.
25. (A) Set **FLAPS** switch to **EFCS**.
26. (A) Press **EFCS RESET** button.



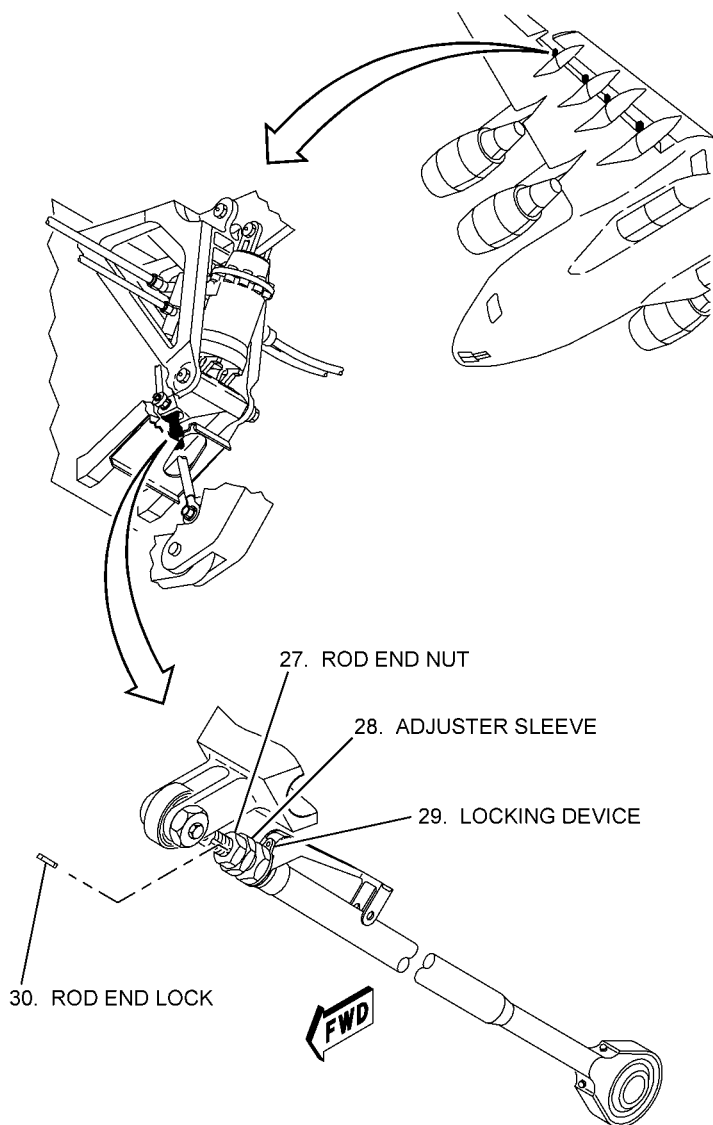
ICN-88277-G2760055-002-01



Do not disturb rod end measurement. Failure to comply may cause damage to aircraft.

27. (A) Remove safety wire and loosen rod end nut.
28. (A) Remove safety wire and loosen adjuster sleeve.
29. (A) Disengage locking device.
30. (A) Remove rod end lock.





(TYPICAL)

ICN-88277-G2760010-004-01



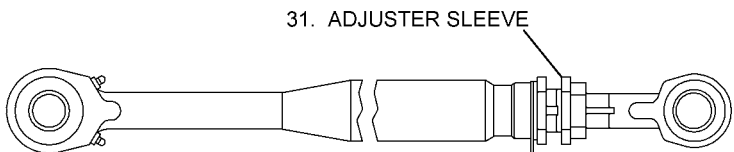
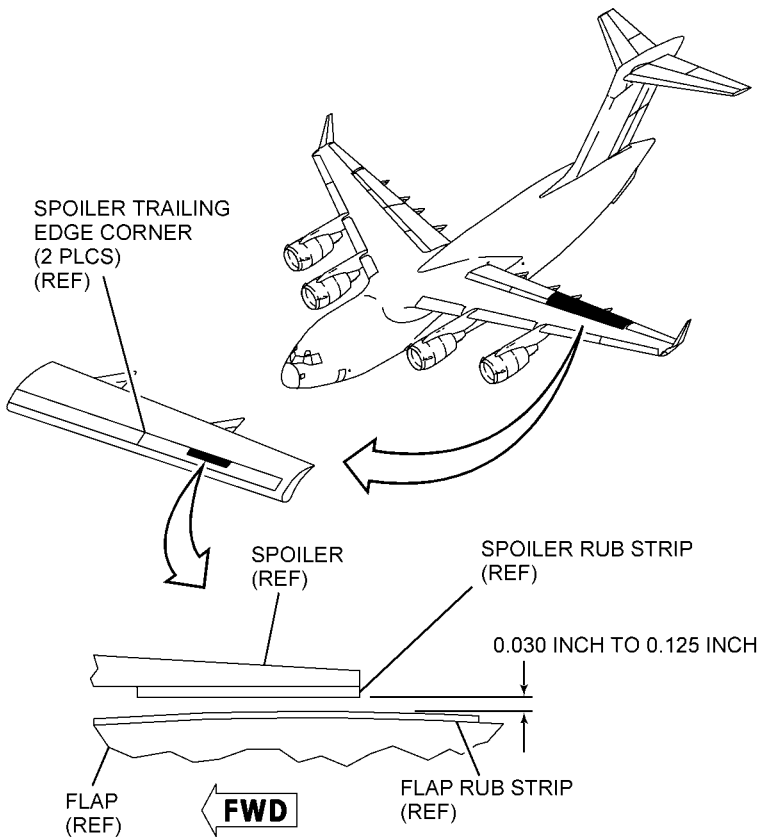
- Do not disturb rod end measurement. Failure to comply may cause damage to aircraft.
- Ensure spoiler corners do not damage the flap surface, and fasteners common to bulb seals are not riding hard on the flap rub strip. Failure to comply may cause damage to aircraft.

### NOTE

- The spoiler gap tolerances, in addition to any mismatch tolerances of the leading edge of the spoiler to the trailing edge of the wing, shall be performed with zero or near zero (unusable) fuel in the wing in place of mismatch tolerances of the lead. Fuel from one wing half shall be drained or transferred to other wing half prior to measuring the mismatch.
- The corners of spoilers may lift off flap surface provided the maximum gap between spoiler lower surface trailing edge and flap upper surfaces meet the gap requirements, and the spoiler has a minimum of two contact areas.
- The minimum gap allowance is required to protect the spoilers from excessive preload.

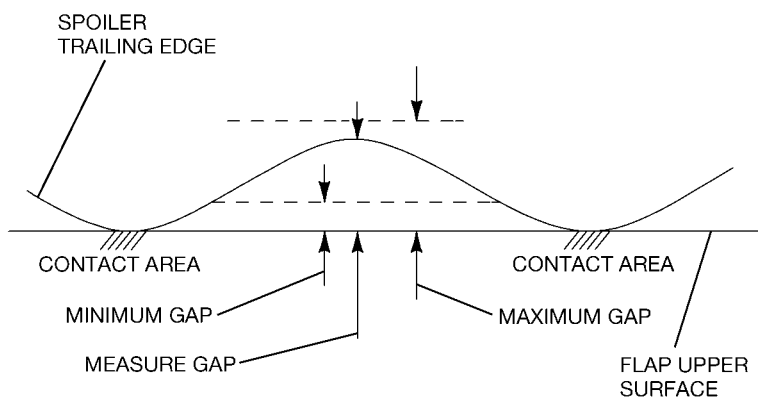
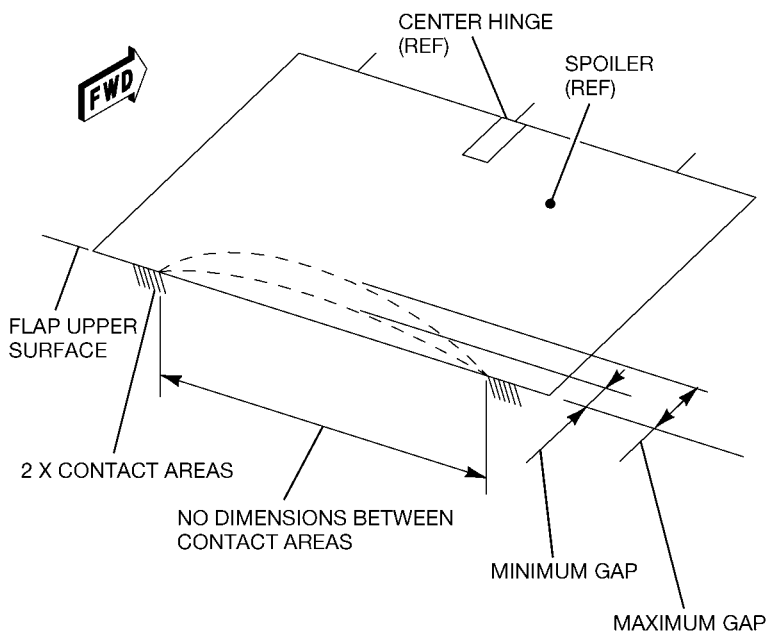
31. (A,B) Turn adjuster sleeve clockwise or counterclockwise until spoiler trailing edge corners touch flap. Continue to adjust until gap is as follows:

- The gap between the spoiler rub strip and the flap rub strip shall be between **0.030** and **0.125 inch**. There shall be no gap at the spoiler to flap contact areas.



(TYPICAL)

ICN-88277-G2760011-004-01

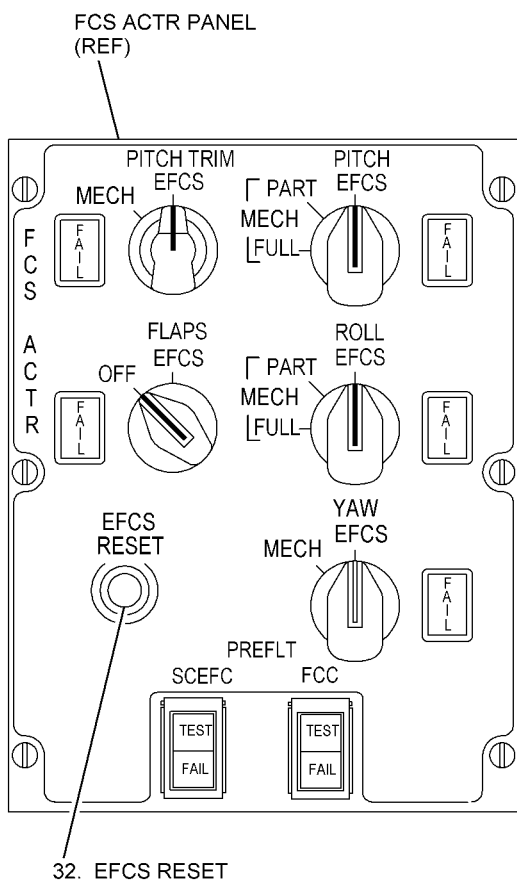


SPOILER TRAILING EDGE TO FLAP (AFT VIEW)

ICN-88277-G2760062-001-01



32. (A) Press **EFCS RESET** button.



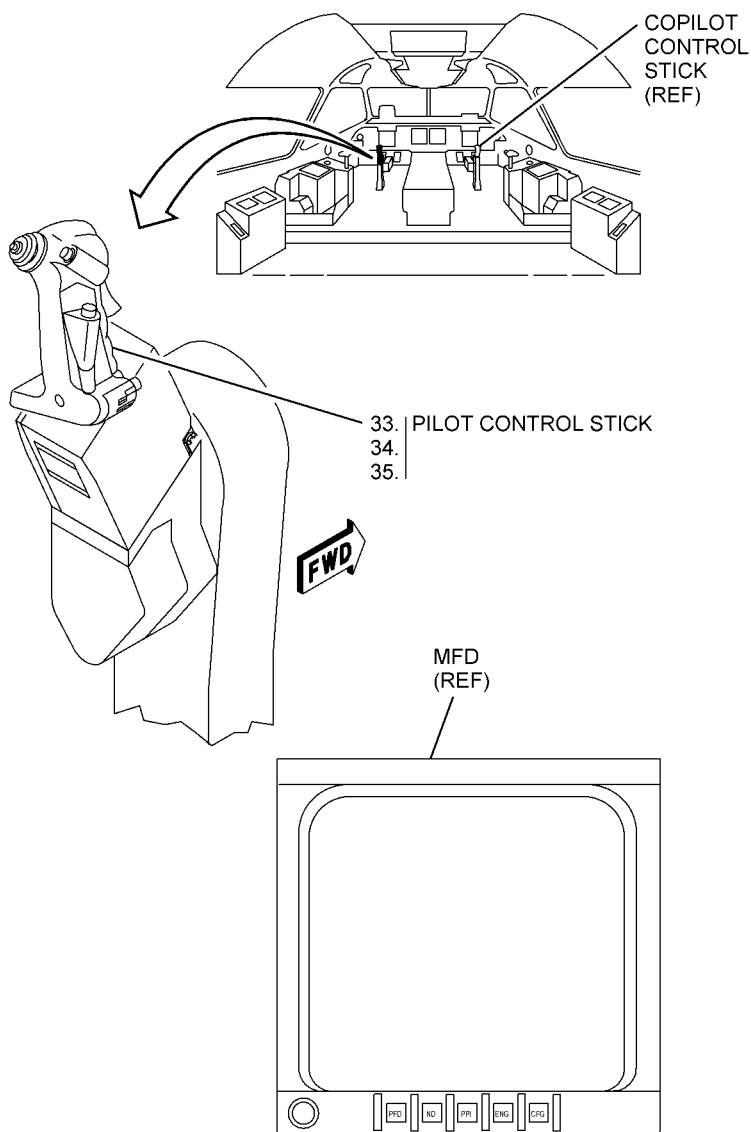
ICN-88277-G2760056-002-01

**NOTE**

The spoilers shall be cycled at least five times.

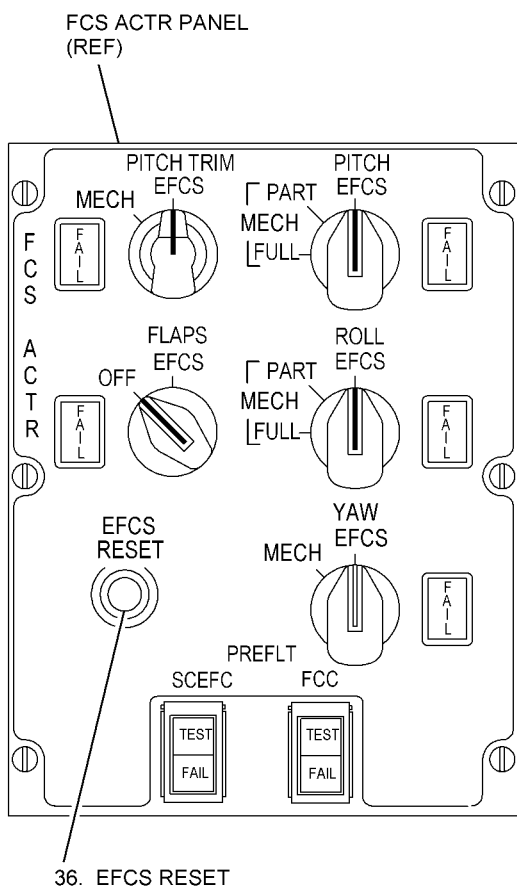
33. (A,B) Position pilot or copilot control stick left.
- Left wing spoilers fully extended (22-00-AJ-\_\_).
  - Right wing spoilers remain retracted (22-00-AJ-\_\_).
  - MFD displays left wing spoilers fully extended (27-64-AC-00).
  - MFD displays right wing spoilers retracted (27-64-AC-00).
34. (A,B) Position pilot or copilot control stick right.
- Right wing spoilers fully extended (22-00-AJ-\_\_).
  - Left wing spoilers remain retracted (22-00-AJ-\_\_).
  - MFD displays right wing spoilers fully extended (27-64-AC-00).
  - MFD displays left wing spoilers retracted (27-64-AC-00).
35. Release pilot or copilot control stick to neutral.





ICN-88277-G2760057-002-01

36. Press **EFCS RESET** button on **FCS ACTR** panel.



ICN-88277-G2760058-002-01



- Do not disturb rod end measurement. Failure to comply may cause damage to aircraft.
- Ensure spoiler corners do not damage the flap surface, and fasteners common to bulb seals are not riding hard on the flap rub strip. Failure to comply may cause damage to aircraft.

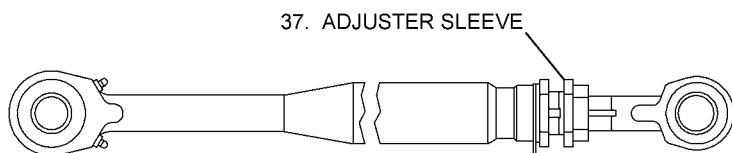
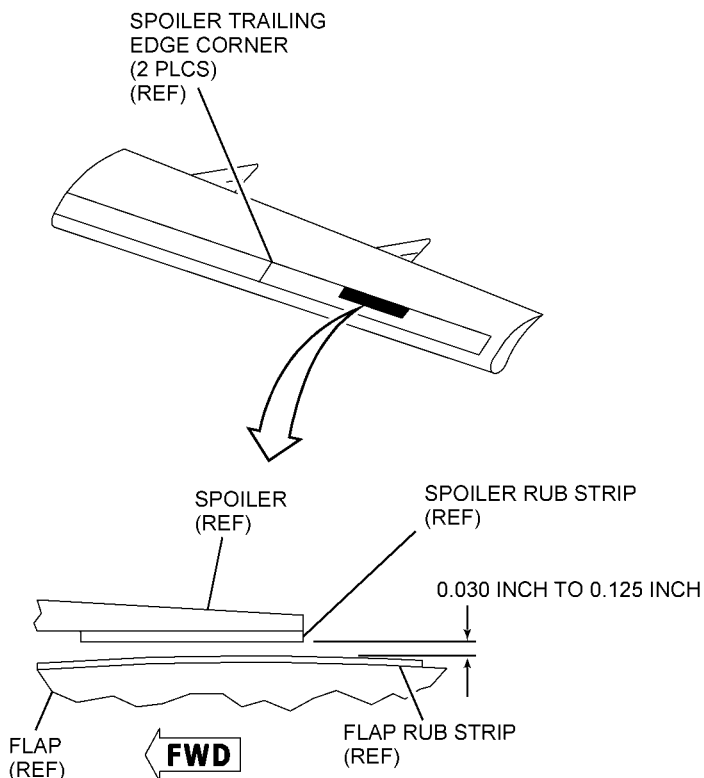
### NOTE

- The spoiler gap tolerances, in addition to any mismatch tolerances of the leading edge of the spoiler to the trailing edge of the wing, shall be performed with zero or near zero (unusable) fuel in the wing in place of mismatch tolerances of the lead. Fuel from one wing half shall be drained or transferred to other wing half prior to measuring the mismatch.
- The corners of spoilers may lift off flap surface provided the maximum gap between spoiler lower surface trailing edge and flap upper surfaces meet the gap requirements, and the spoiler has a minimum of two contact areas.
- The minimum gap allowance is required to protect the spoilers from excessive preload.

37. (A,B) Turn adjuster sleeve clockwise or counterclockwise until spoiler trailing edge corners touch flap. Continue to adjust until gap is as follows:

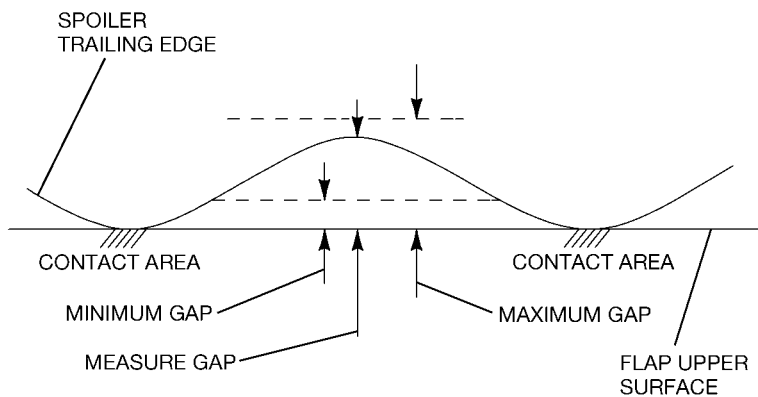
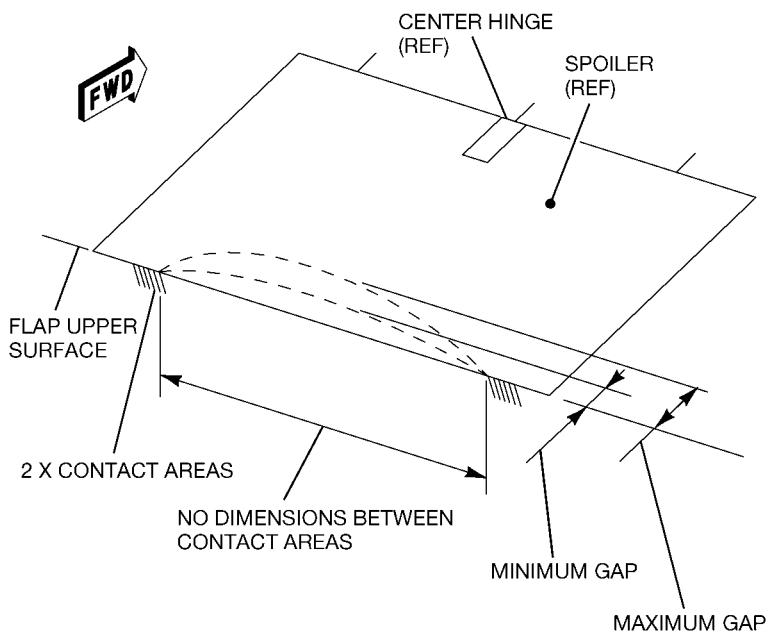
- The gap between the spoiler rub strip and the flap rub strip shall be between **0.030** and **0.125 inch**. There shall be no gap at the spoiler to flap contact areas.

38. Shutdown auxiliary hydraulic system (29-20-01, task 01-2).



(TYPICAL)

ICN-88277-G2760059-002-01



SPOILER TRAILING EDGE TO FLAP (AFT VIEW)

ICN-88277-G2760063-001-01

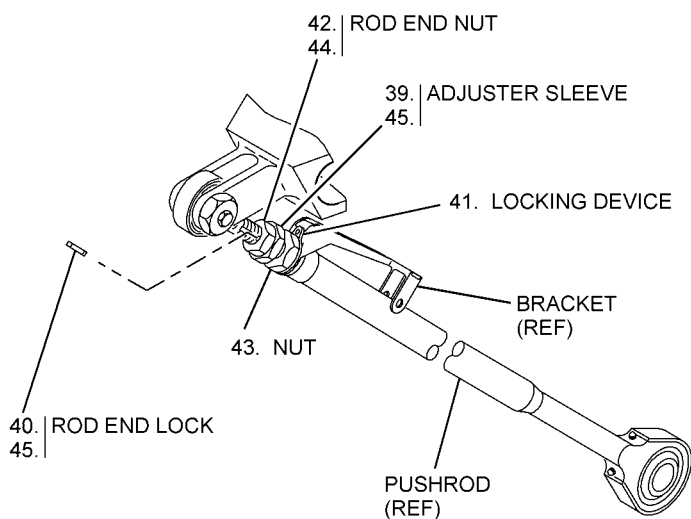


**NOTE**

Adjuster sleeve engagement is checked through pushrod inspection holes.

- 39. (A) Ensure adjuster sleeve is engaged with pushrod.
- 40. (A) Install rod end lock.
- 41. (A) Engage locking device.
- 42. (A) Tighten rod end nut.
- 43. (A) Tighten nut to secure bracket.
- 44. (A) Safety wire rod end nut, locking device and adjuster sleeve.
- 45. (A) Safety wire adjuster sleeve, rod end lock, and pushrod.



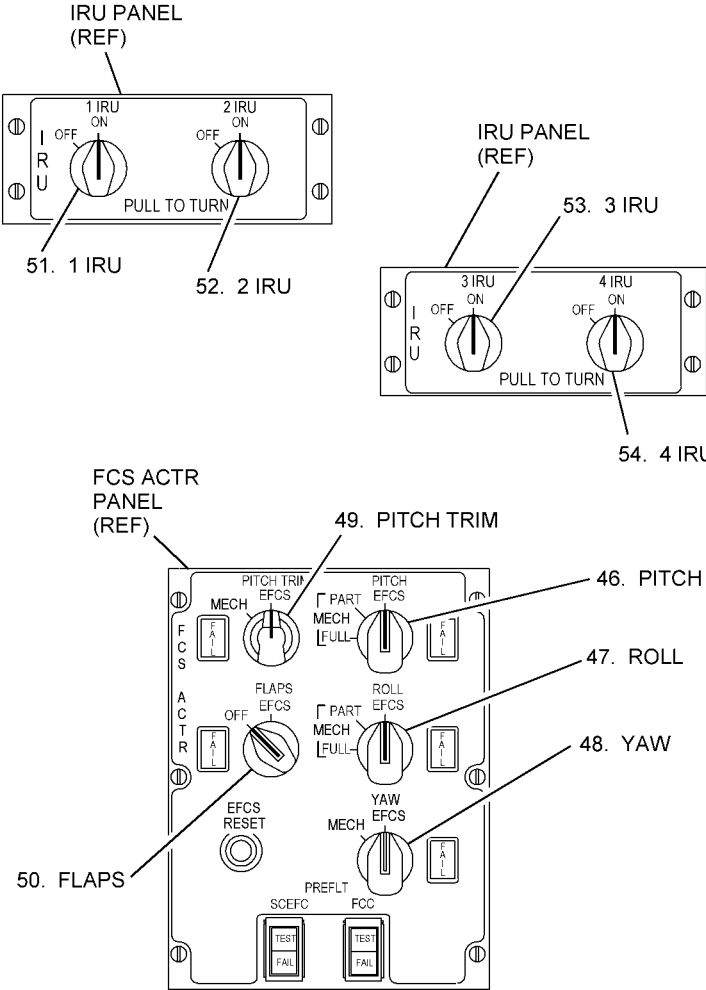


(TYPICAL)

ICN-88277-G2760012-004-01

## TO 1300i-2-27JG-60-1

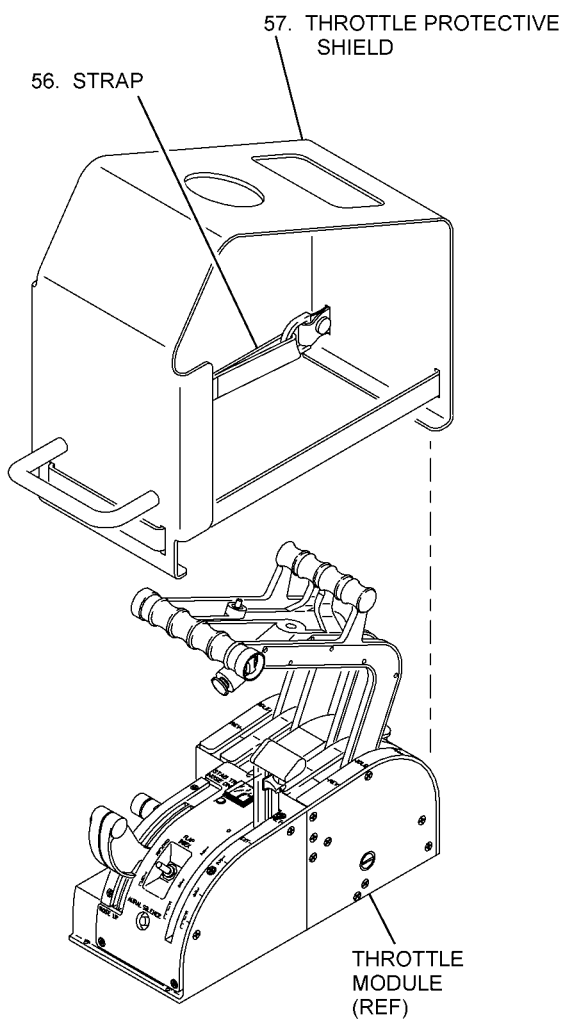
46. (A) Set **PITCH** switch on **FCS ACTR** panel to **FULL MECH**.
47. (A) Set **ROLL** switch to **FULL MECH**.
48. (A) Set **YAW** switch to **FULL MECH**.
49. (A) Set **PITCH TRIM** switch to **MECH**.
50. (A) Set **FLAPS** switch to **OFF**.
51. (A) Set **1 IRU** switch on **IRU** panel to **OFF**.
52. (A) Set **2 IRU** switch to **OFF**.
53. (A) Set **3 IRU** switch on **IRU** panel to **OFF**.
54. (A) Set **4 IRU** switch to **OFF**.
55. Shutdown multifunction displays system (31-61-02, task 02-3 or 02-4).



ICN-88277-G2760060-002-01

## **TO 1300i-2-27JG-60-1**

56. (A) Loosen strap.
57. (A) Remove throttle protective shield from throttle module.
58. Remove flap control handle aircraft ground safety lock (05-10-01, task 01-8).



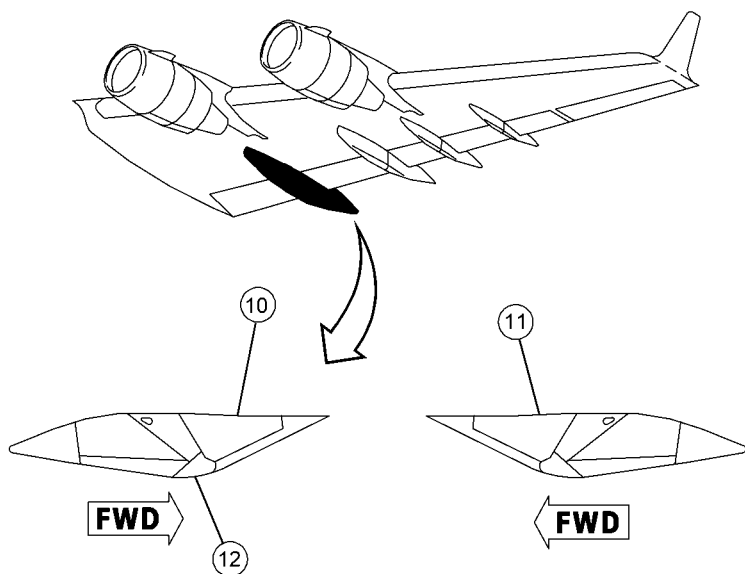
ICN-88277-G2760061-002-01

## TO 1300i-2-27JG-60-1

59. Raise lower wing fixed trailing edge door assembly (57-54-01).

SPOILER REF DES	DOOR NO.	DOOR REF DES
2761AA001	565DBD	5754CA031
2761AA002	565CBD	5754CA030
2761AA003	565BBD	5754CA029
2761AA004	565ABD	5754CA028
2761AA005	665ABD	5754CA037
2761AA006	665BBD	5754CA036
2761AA007	665CBD	5754CA035
2761AA008	665DBD	5754CA034

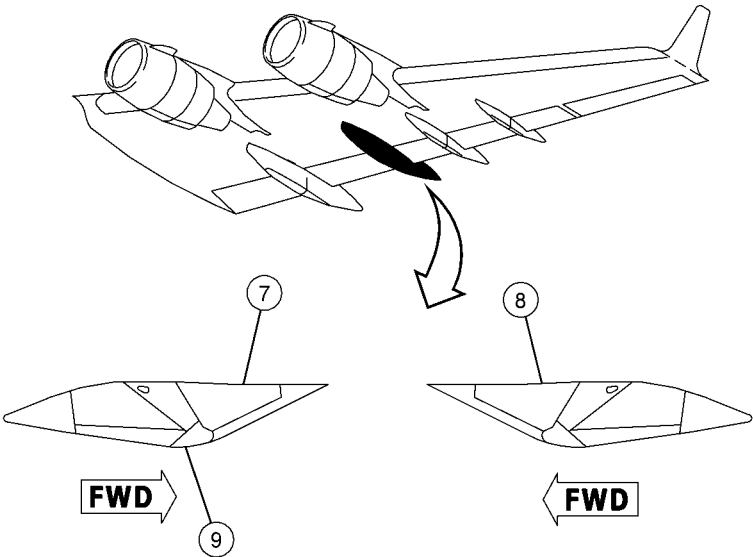
60. Perform separable faying surface sealing (TO 1300i-23, Chapter 1, Section III).
61. (A) Position access panels.
62. Perform wet fastener installation (TO 1300i-23, Chapter 1, Section III).
63. (A) Install screws as identified.
64. Perform fillet sealing (TO 1300i-23, Chapter 1, Section III).
65. (A) Position access panel.
66. Perform wet fastener installation (TO 1300i-23, Chapter 1, Section III).
67. (A) Install screws.
68. Perform maintenance interphone shutdown (23-41-02, task 02-4).



61. 63.	PUSHROD REF DES	INDEX NO.	PANEL NO.	SCREW QTY
	2764MP009	10 11	571HLP 571JRP	102 102

65. 67.	PUSHROD REF DES	INDEX NO.	PANEL NO.	SCREW QTY
	2764MP009	12	571CBC	23

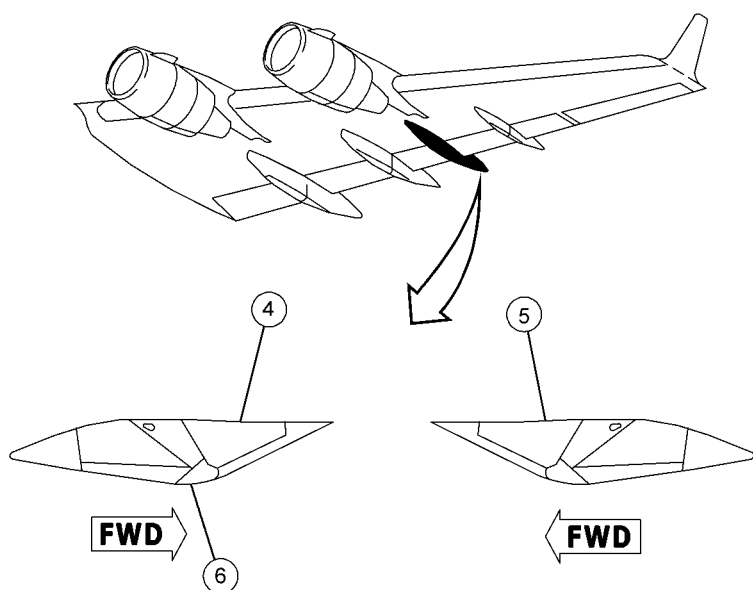
ICN-88277-G2760030-004-01



61.	PUSHROD	INDEX	PANEL	SCREW
63.	REF DES	NO.	NO.	QTY
	2764MP010	7	571MRP	79
		8	571LLP	79

65.	PUSHROD	INDEX	PANEL	SCREW
67.	REF DES	NO.	NO.	QTY
	2764MP010	9	571FBC	18

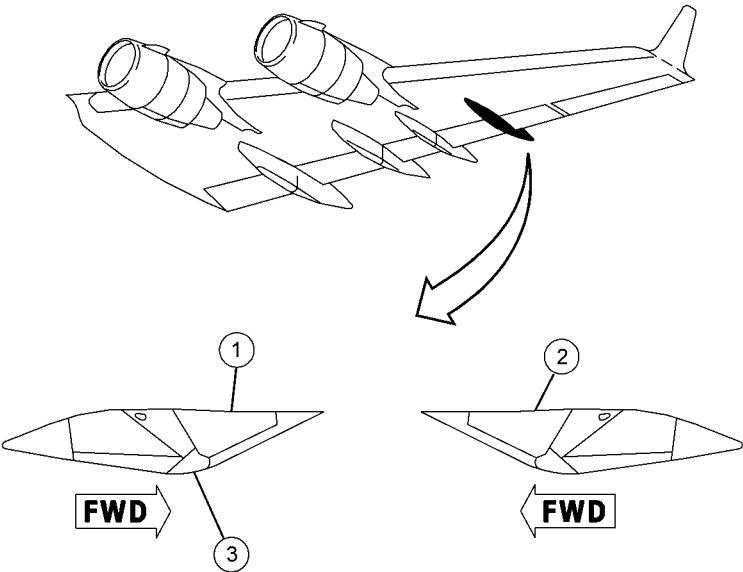




61.	PUSHROD	INDEX	PANEL	SCREW
63.	REF DES	NO.	NO.	QTY
	2764MP011	4	573JRP	59
		5	573HLP	59

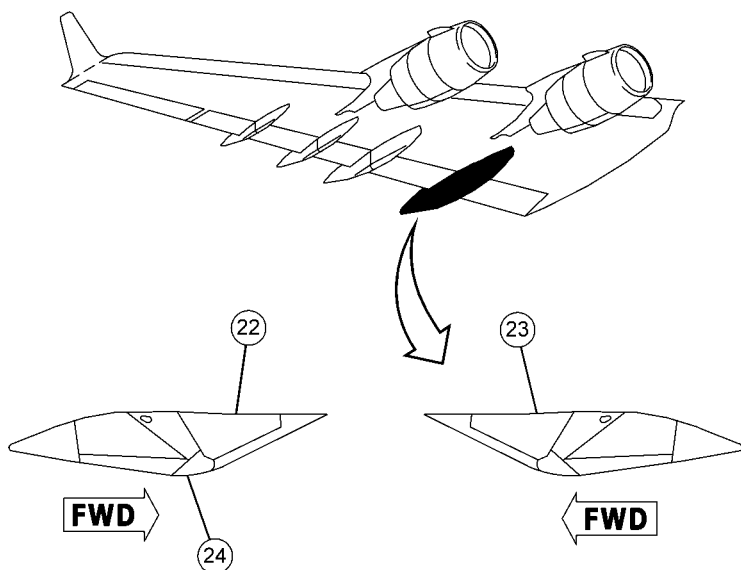
65.	PUSHROD	INDEX	PANEL	SCREW
67.	REF DES	NO.	NO.	QTY
	2764MP011	6	573CBC	17

ICN-88277-G2760028-004-01



61.	PUSHROD	INDEX	PANEL	SCREW
63.	REF DES	NO.	NO.	QTY
	2764MP012	1	573MRP	44
		2	573LLP	44

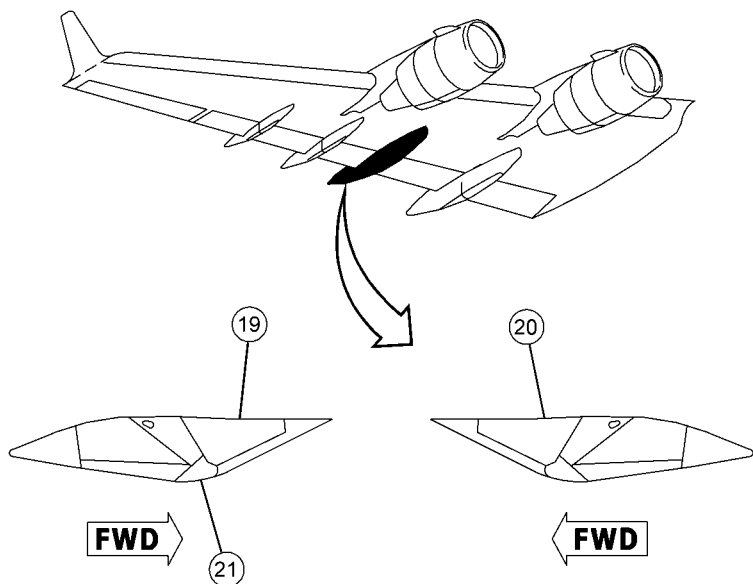
65.	PUSHROD	INDEX	PANEL	SCREW
67.	REF DES	NO.	NO.	QTY
	2764MP012	3	573FBC	16



61.	PUSHROD	INDEX	PANEL	SCREW
63.	REF DES	NO.	NO.	QTY
	2764MP013	22	671JRP	102
		23	671HLP	102

65.	PUSHROD	INDEX	PANEL	SCREW
67.	REF DES	NO.	NO.	QTY
	2764MP013	24	671CBC	23

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61. 63.	PUSHROD REF DES	INDEX NO.	PANEL NO.	SCREW QTY
	2764MP014	19 20	671MRP 671LLP	79 79

65. 67.	PUSHROD REF DES	INDEX NO.	PANEL NO.	SCREW QTY
	2764MP014	21	671FBC	18