#### **TECHNICAL MANUAL**

# JOB GUIDE ORGANIZATIONAL MAINTENANCE

## FLIGHT CONTROLS FLAPS

(27-50-00 AND 27-51-10)

300i
AIRCRAFT

MCDONNELL DOUGLAS CORPORATION
MILITARY TRANSPORT AIRCRAFT
F33657-81-C-2108
FA8526-21-D-0001

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## TOTAL NUMBER OF PAGES IN THIS PUBLICATION IS 350 CONSISTING OF THE FOLLOWING:

Page	* Change	Page	* Change
No.	No.	No.	No.
Title thru T-2		2-183 blank 2-184 thru 2-190. 2-191 blank 2-192 thru 2-206. 2-207 blank 2-208 thru 2-234. 2-235 blank 2-235 blank 2-251 blank 2-251 blank 2-252 thru 2-262. 2-263 blank 2-264 thru 2-282. 2-283 blank 2-284 thru 2-293. 2-294 blank 2-295 thru 2-298. 2-299 blank 2-300 thru 2-302. 2-303 blank 2-304 thru 2-339. 2-340 blank	

\*Zero in this column indicates an original page.

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#### INTRODUCTION

#### SCOPE.

This manual contains maintenance procedures for the removal, installation, and repair of flight controls flap components.

#### MODEL(S) COVERED.

All

#### ABBREVIATIONS.

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

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 (27-50-00)

#### 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 auxiliary pump below 15 degrees Fahrenheit a 30 seconds on/30 seconds off duty cycle for a maximum 10 cycles may be required to reach a full hydraulic pressure of 3800 to 4200 psi. Allow 10 minutes for cooling and repeat cycle.
- 1-4. Hydraulic system No. 2 may require 45 seconds before reaching a full hydraulic pressure of 3800 to 4200 psi.
- 1-5. 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).

# 1-6. GENERAL WARNINGS, CAUTIONS, AND NOTES.

## WARNING

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

# CAUTION

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

#### **SECTION 2**

# FLAP AND VANE STRUCTURAL ASSEMBLY (27-51-10)

#### **MASTER INPUT CONDITIONS:**

#### Reference designators:

	2751AA002	Left Wing (	Outboard Flap	and Vane	Structural
--	-----------	-------------	---------------	----------	------------

Assembly

2751AA003 Left Wing Inboard Flap and Vane Structural

Assembly

2751AA004 Right Wing Inboard Flap and Vane Structural

Assembly

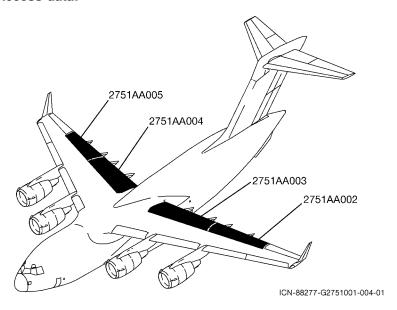
2751AA005 Right Wing Outboard Flap and Vane Structural

Assembly

#### **Applicable functions:**

- -2 Removal.
- -3 Installation.
- -4 Repair.

#### Access data:



# FLAP AND VANE STRUCTURAL ASSEMBLY REMOVAL (27-51-10-2)

#### FUNCTIONAL INPUT CONDITIONS:

FUNCTIONAL INPUT CONDITIONS:
Applicability: Task
All
Additional information:
This procedure consists of the following tasks:
<ul> <li>2-1. Preparation for 2751AA002 and 2751AA005.</li> <li>2-1A. Preparation for 2751AA002 and 2751AA005 using PN 17G110482-505.</li> <li>2-2. Preparation for 2751AA003 and 2751AA004.</li> <li>2-2A. Preparation for 2751AA003 and 2751AA004 using PN 17G110482-505.</li> <li>2-3. Removal.</li> </ul>
2-4. Follow-on maintenance.
NOTE
This is a typical removal task for all flap and vane structural assemblies.
Additional data: Task
TO 1300i-2-05JG-10-1 2-1, 2-1A, 2-2, 2-2A, 2-4
Personnel recommended: Task
Six

Task

Person (A) performs task.

Person (B) assists person A.

Person (C) assists person A.

Person (D) assists person A.

Person (E) assists person A.

Person (F) assists person A.

#### Safety conditions:

**Task** 

A11

2-1, 2-2

#### WARNING

- Do not remove flap and vane structural assembly with winds over 15 knots. Failure to comply may cause injury to personnel and damage to equipment.
- Flap assembly removals using the 17G110482-503 adapter set shall be temporarily halted until further notice. Hoisting adapter set 17G110482-503 contains defective 17G113482-525, 17G113482-527, 17G113482-529, and 17G113482-531 strap assemblies. Contact Boeing engineering when the upgraded 17G110482-505 adapter set is not available and flap removal is required. Failure to comply may cause injury to personnel or damage to aircraft.

#### NOTE

When performing flap assembly removal using hoisting 2-1A, adapter set PN 17G110482-505, if kit is unavailable, 2-2A contact Boeing engineering.

### **Support equipment:**

<u>Nomenclature</u>	PN	<b>Specification</b>	Qty	<u>Task</u>
Adapter Set, Hoisting	17G110482-503	Restricted from use		
Adapter	17G110482-195		1	2-1
Adapter	17G110482-197		1	2-1
Adapter	17G110482-199		1	2-2
Adapter	17G110482-201		1	2-2
Adapter	17G110482-203		1	2-1
Adapter	17G110482-205		1	2-2
Strap Assembly, Hoisting	17G113482-1		AR	2-1, 2-2
Strap Assembly, Hoisting	17G113482-513		AR	2-2
Strap Assembly, Hoisting	17G113482-515		AR	2-1
Strap Assembly, Hoisting	17G113482-525		AR	2-2

TO 1300i-2-27JG-50-2

27.	<u>Nomenclature</u>	PN	<u>Specification</u>	Qty	<u>Task</u>	ТО
27-51-10-2	Strap Assembly, Hoisting	17G113482-527		AR	2-2	1300i-2-27JG-50-2
<u> </u>	Strap Assembly, Hoisting	17G113482-529		AR	2-1	i-2-2
<b>N</b>	Strap Assembly, Hoisting	17G113482-531		AR	2-1	7JG-
	Adapter Set, Hoisting	17G110482-505				50-2
	Adapter	17G110482-215		1	2-1A	
	Adapter	17G110482-217		1	2-1A	
	Adapter	17G110482-219		1	2-2A	
	Adapter	17G110482-221		1	2-2A	
	Adapter	17G110482-203		1	2-1A	
	Adapter	17G110482-205		1	2-2A	
	Strap Assembly, Hoisting	17G113482-1		AR	2-1A, 2-2A	
	Strap Assembly, Hoisting	17G113482-513		AR	2-2A	

Nomenclature	<u>PN</u>	Specification	<u>Qty</u>	<u>Task</u>
Strap Assembly, Hoisting	17G113482-515		AR	2-1A
Strap Assembly, Hoisting	17G113482-533		AR	2-2A
Strap Assembly, Hoisting	17G113482-535		AR	2-2A
Strap Assembly, Hoisting	17G113482-537		AR	2-1A
Strap Assembly, Hoisting	17G113482-539		AR	2-1A
Beam, Hoisting	17G110123-1		1	All
Crane, Wheel Mounted	LRT-100		1	All
Holding Fixture, Flap	17G110116-1		1	2-3, 2-4
Hoist, Air Motor, Chain		1/2-1 ton	3	2-1, 2-1A, 2-2, 2-2A
Lanyard, Restraint, Flap Actuator	17G140022-1		2	2-3
Rope, Guide	3827T3-8		2	All

<b>27</b>	<u>Nomenclature</u>	<u>PN</u>	<b>Specification</b>	<u>Qty</u>	<u>Task</u>	TO
-51-	Semitrailer, Stake	26608SSPB		1	2-4	1300
I-10-2	Sling, Multiple Leg	17G110012-1		1	2-1, 2-1A	300i-2-27JG-50-2
	Socket, Spline, 18 Tooth Involute	ANHC1719		1	2-3	G-50
	Socket, Spline, 20 Tooth Involute	ANHC1721		1	2-3	2
	Pin, Drift		8 inch x 1 3/8 inch (Aluminum or Brass)	2	2-3	
	Pin, Drift		12 inch x 1 3/8 inch (Aluminum or Brass)	2	2-3	
	Unit, Filler and Pressurizing	204000		1	2-3	
	Wrench, Torque		(0-100 ft-lb)		2-1, 2-2	

## Supplies:

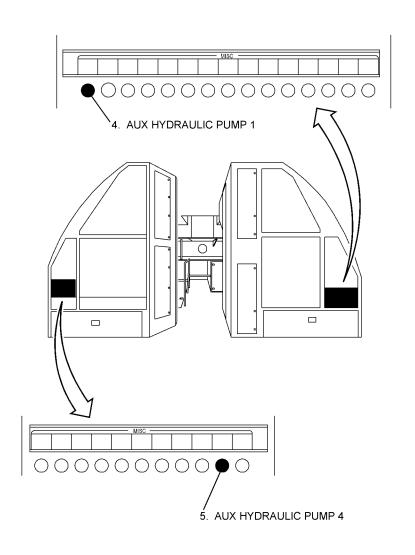
<u>Nomenclature</u>	<u>PN</u>	<b>Specification</b>	<u>Qty</u>	<u>Task</u>
Tag, Warning			2	2-1,
				2-1A,
				2-2,
				2-2A

# 2-1. PREPARATION FOR 2751AA002 AND 2751AA005.

#### WARNING

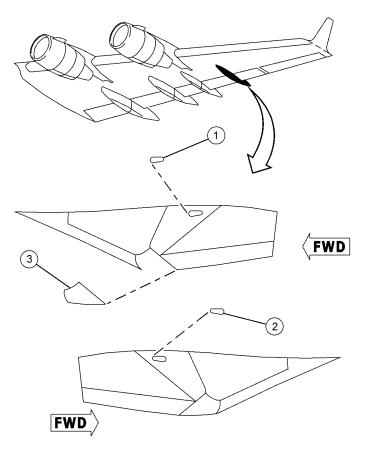
Flap assembly removal preparation using the 17G110482-503 adapter set shall be temporarily halted until further notice. Hoisting adapter set 17G110482-503 contains defective 17G113482-529 and 17G113482-531 strap assemblies. Contact Boeing engineering when the upgraded 17G110482-505 adapter set is not available and flap removal is required. Failure to comply may cause injury to personnel or damage to aircraft.

- 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 outboard spoiler positioning support assembly (05-10-04, tasks 04-1 and 04-3).
- 4. (A) Open **AUX HYDRAULIC PUMP 1** circuit breaker on Electrical Power Center (EPC), row **LL**, column **68**, and attach warning tag.
- (A) Open AUX HYDRAULIC PUMP 4 circuit breaker on EPC, row LL, column 10, and attach warning tag.



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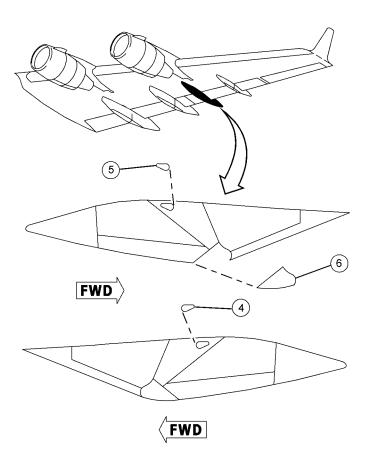
- 6. (B,D,E,F) Remove fasteners and access panels.
- 7. (B,D,E,F) Remove fasteners and access covers.



6.—	FLAP REF DES	INDEX NO.	ACCESS PANEL	FASTENER QTY
	2751AA002	1	573DLC	12
	275177002	2	573ERC	12

7.—	FLAP REF DES		ACCESS COVER	FASTENER QTY
	2751AA002	3	573FBC	16

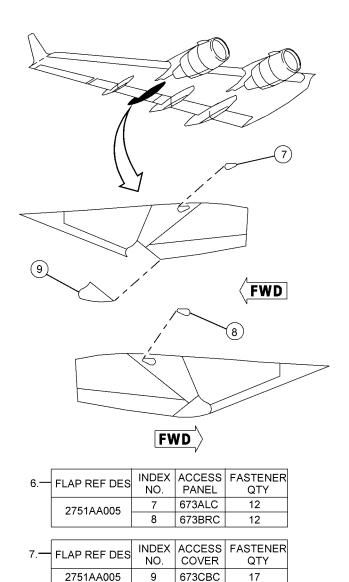
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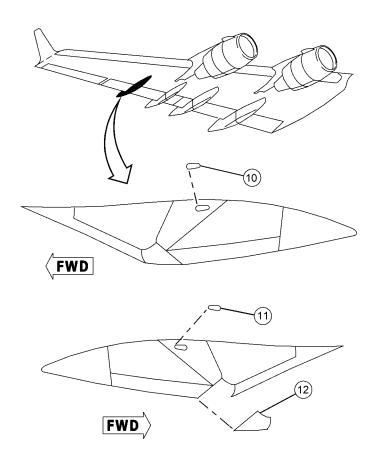
6. —	FLAP REF DES	INDEX NO.	ACCESS PANEL	FASTENER QTY
2751AA002		4	573ALC	12
	2131101002	5	573BRC	12

7.—	FLAP REF DES		ACCESS COVER	FASTENER QTY
	2751AA002		573CBC	17

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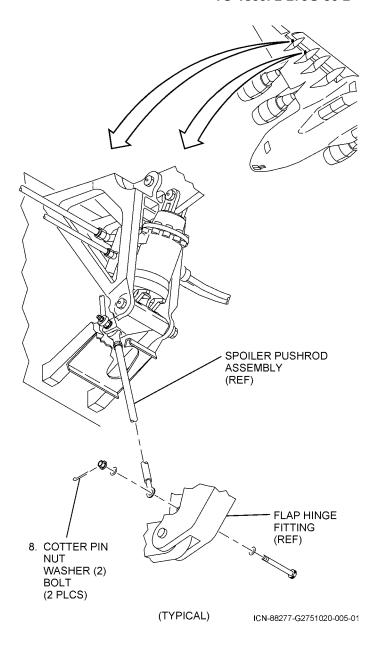


6. —	FLAP REF DES	INDEX NO.	ACCESS PANEL	FASTENER QTY
2751AA005		10	673DLC	12
	2731AA003	11	673ERC	12

7.—	FLAP REF DES		ACCESS COVER	FASTENER QTY
	2751AA005	12	673FBC	17

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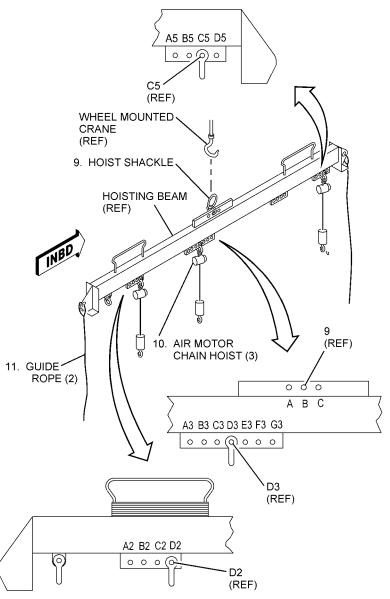
8. (D,E,F) Remove cotter pins, nuts, washers, and bolts from spoiler pushrod assemblies.



- 9. (C,E,F) Attach hoist shackle to attachment B on hoisting beam and wheel mounted crane.
- 10. (C,E,F) Attach air motor chain hoists to hoisting beam as follows:

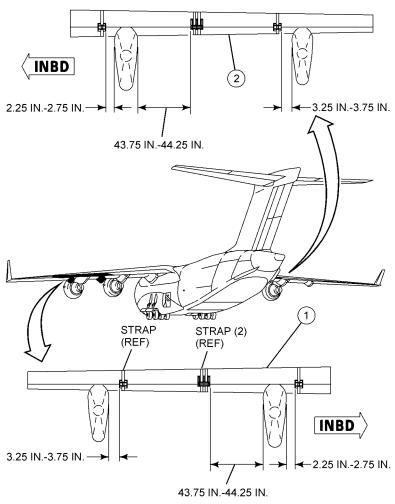
HOIST BEAM HOLE					
SECTION 2	SECTION 2 SECTION 3 SECTION 5				
D2	D3	C5			

11. (E,F) Unwrap guide ropes from hoisting beam.



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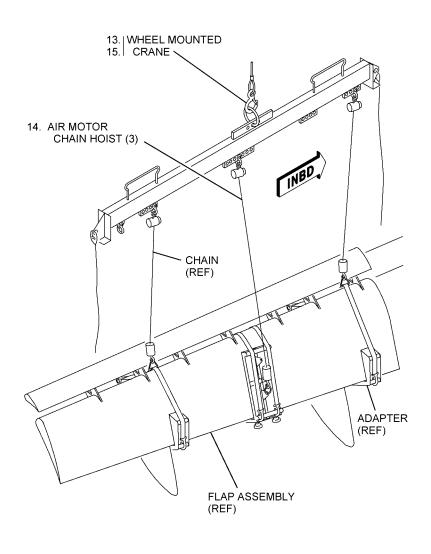
12. (B,D,E,F) Position adapters and torque straps 30-35 ft-lbs.



12 <del></del>	FLAP REF DES	INDEX NO.	ADAPTER NO.	LOCATION		BOTTOM STRAP (17G113482)
	2751AA002	1	17G110482-195	INBOARD	-531	-1
			17G110482-197	OUTBOARD	-529	-1
	2751AA005	2	17G110482-203	CENTER	-1 -1	-515 -515

ICN-88277-G2751127-006-01

- 13. (A,C) Position wheel mounted crane over flap assembly.
- 14. (A,C,E,F) Operate air motor chain hoists and attach chains to adapters.
- 15. (C) Operate wheel mounted crane; remove slack from chains.



(TYPICAL)

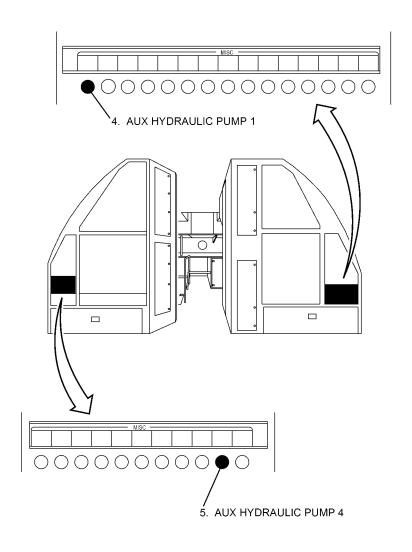
ICN-88277-G2751122-008-01

# 2-1A. PREPARATION FOR 2751AA002 AND 2751AA005 USING PN 17G110482-505.

#### **NOTE**

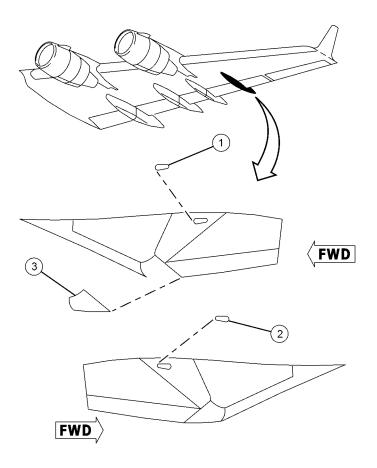
When performing flap assembly removal preparation using hoisting adapter set PN 17G110482-505, if kit is unavailable, contact Boeing engineering.

- 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 outboard spoiler positioning support assembly (05-10-04, tasks 04-1 and 04-3).
- 4. (A) Open **AUX HYDRAULIC PUMP 1** circuit breaker on Electrical Power Center (EPC), row **LL**, column **68**, and attach warning tag.
- 5. (A) Open **AUX HYDRAULIC PUMP 4** circuit breaker on EPC, row **LL**, column **10**, and attach warning tag.



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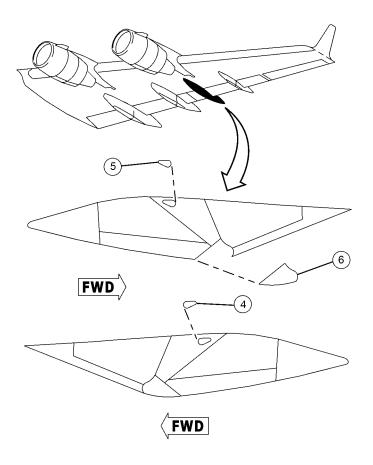
- 6. (B,D,E,F) Remove fasteners and access panels.
- 7. (B,D,E,F) Remove fasteners and access covers.



6.—	FLAP REF DES	INDEX NO.	ACCESS PANEL	FASTENER QTY
	2751AA002		573DLC	12
	213177002	2	573ERC	12

7.—	FLAP REF DES		ACCESS COVER	FASTENER QTY	
	2751AA002	3	573FBC	16	

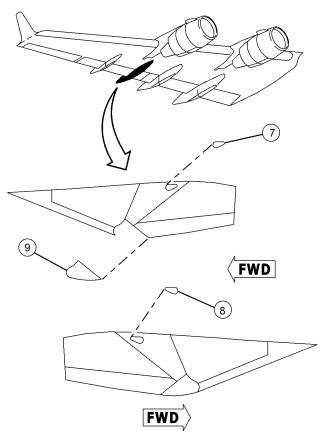
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6. —	FLAP REF DES	INDEX NO.	ACCESS PANEL	FASTENER QTY
	2751AA002		573ALC	12
	2751777002	5	573BRC	12

7. —	FLAP REF DES		ACCESS COVER	FASTENER QTY
	2751AA002	6	573CBC	17

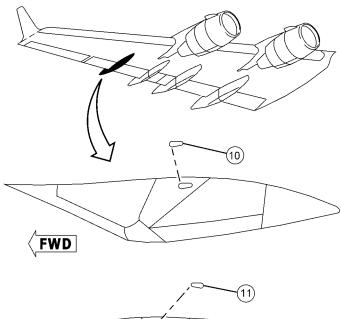
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6.—	FLAP REF DES	INDEX NO.	ACCESS PANEL	FASTENER QTY
	2751AA005	7	673ALC	12
	275177005	8	673BRC	12

7.—	FLAP REF DES		ACCESS COVER	FASTENER QTY	
	2751AA005	Ø	673CBC	17	

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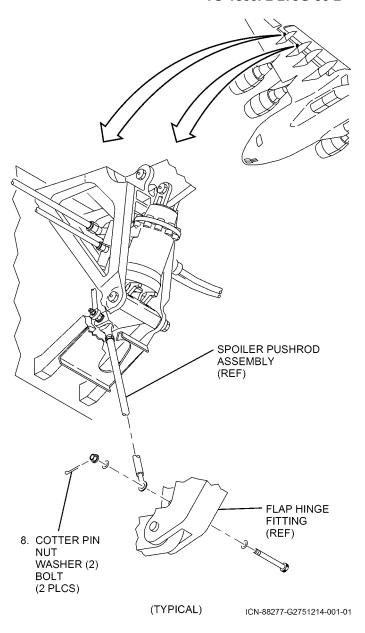
,	/ 11
6	
	12)
<b>FWD</b>	

6. —	FLAP REF DES	INDEX NO.	ACCESS PANEL	FASTENER QTY
	2751AA005	10	673DLC	12
	2/3/1/1003	11	673ERC	12

7. —	FLAP REF DES		ACCESS COVER	FASTENER QTY
	2751AA005	12	673FBC	17

ICN-88277-G2751213-001-01

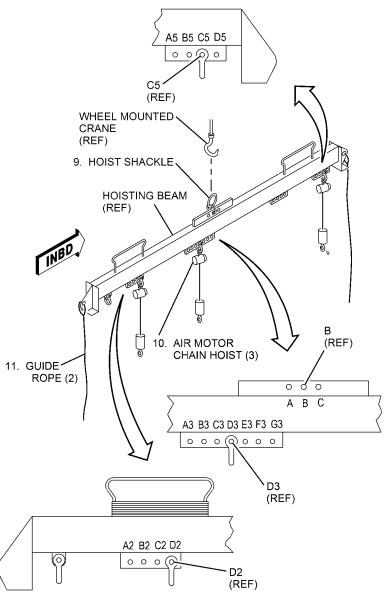
8. (D,E,F) Remove cotter pins, nuts, washers, and bolts from spoiler pushrod assemblies.



- 9. (C,E,F) Attach hoist shackle to attachment B on hoisting beam and wheel mounted crane.
- 10. (C,E,F) Attach air motor chain hoists to hoisting beam as follows:

HOIST BEAM HOLE						
SECTION 2	SECTION 2 SECTION 3 SECTION 5					
D2	D3	C5				

11. (E,F) Unwrap guide ropes from hoisting beam.

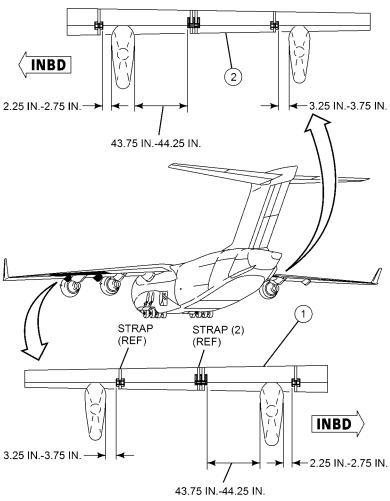


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## WARNING

Strap shall be wrapped a minimum of 2-1/2 times around the ratchet buckle drum. Failure to comply may cause injury to personnel and damage to equipment.

12. (B,D,E,F) Position adapters and tension straps from taut with a minimum of 5, maximum of 6 clicks on the ratchet buckle.



12.	FLAP REF DES	INDEX NO.	ADAPTER NO.	LOCATION	ST	OP RAP 13482)	BOT STF (17G1	RAP
	2751AA002	1	17G110482-215	INBOARD	-53	39		1
			17G110482-217	OUTBOARD	-53	37	-	1
	2751AA005		17G110482-203	CENTER	-1	-1	-515	-515

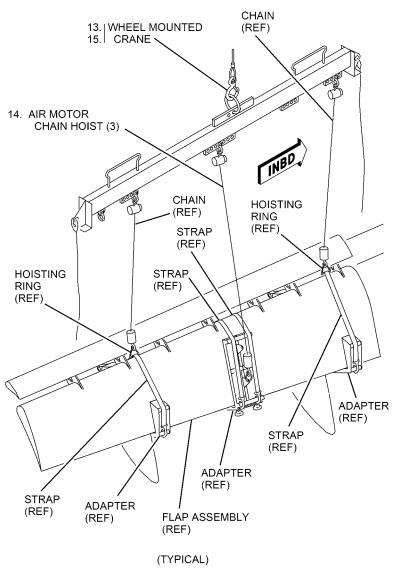
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13. (A,C) Position wheel mounted crane over flap assembly.

#### NOTE

Chain hoist attached to the center adapter. The inboard and outboard hoist chains are installed to the hoisting rings on the straps.

- 14. (A,C,E,F) Operate air motor chain hoists and attach chains to adapter and straps.
- 15. (C) Operate wheel mounted crane; remove slack from chains.



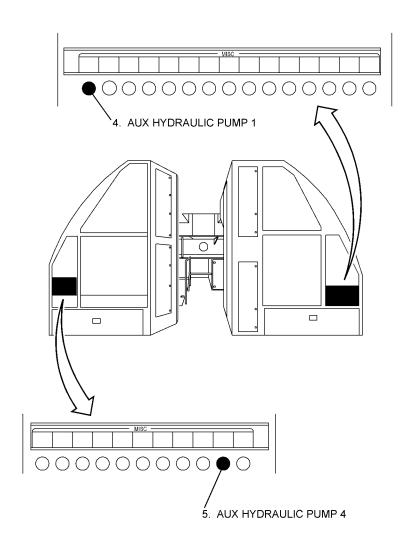
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#### 2-2. PREPARATION FOR 2751AA003 AND 2751AA004.

## WARNING

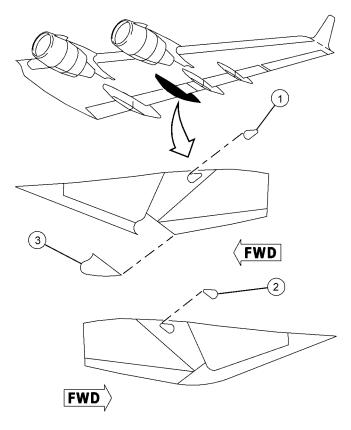
Flap assembly removal preparation using the 17G110482-503 adapter set shall be temporarily halted until further notice. Hoisting adapter set 17G110482-503 contains defective 17G113482-525 and 17G113482-527 strap assemblies. Contact Boeing engineering when the upgraded 17G110482-505 adapter set is not available and flap removal is required. Failure to comply may cause injury to personnel or damage to aircraft.

- Review "Section 1 (General Information)" of this TO for system 1. general warnings, cautions, and notes.
- Review task "Functional Input Conditions" page for task specific 2. safety conditions.
- Install inboard spoiler positioning support assembly (05-10-04, tasks 3. 04-1 and 04-2).
- 4. (A) Open AUX HYDRAULIC PUMP 1 circuit breaker on Electrical Power Center (EPC), row LL, column 68, and attach warning tag.
- 5. (A) Open AUX HYDRAULIC PUMP 4 circuit breaker on EPC, row LL, column 10, and attach warning tag.



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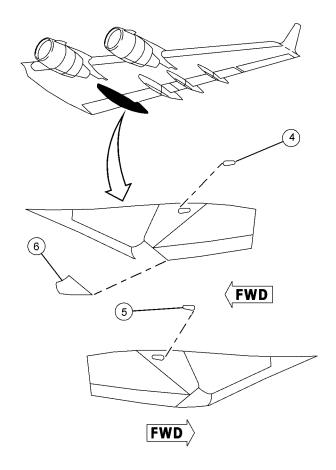
- 6. (B,D,E,F) Remove fasteners and access panels.
- 7. (B,D,E,F) Remove fasteners and access covers.



6.—	FLAP REF DES	INDEX NO.	ACCESS PANEL	FASTENER QTY
2751AA003		1	571DLC	12
		2	571ERC	12

7. —	7. — FLAP REF DES		ACCESS COVER	FASTENER QTY
2751AA003		3	571FBC	18

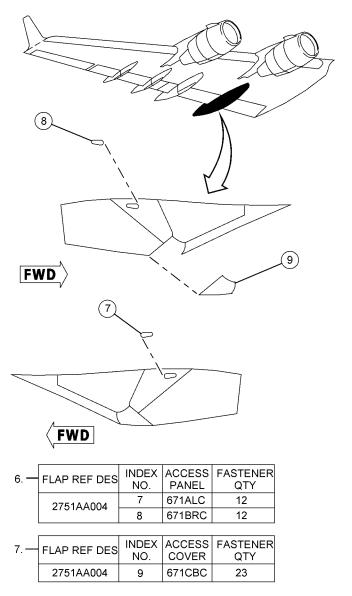
ICN-88277-G2751059-006-01



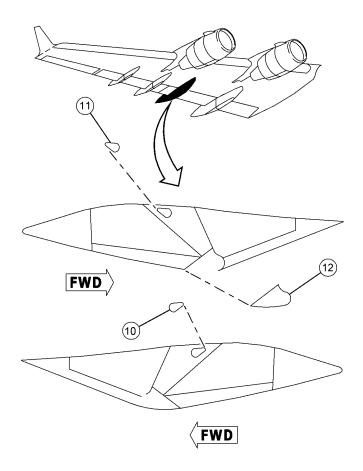
6.—	FLAP REF DES	INDEX NO.	ACCESS PANEL	FASTENER QTY
	2751AA003	4	571ALC	12
2/3/2003		5	571BRC	12

7.—	FLAP REF DES	INDEX NO.	ACCESS COVER	FASTENER QTY
	2751AA003	6	571CBC	23

ICN-88277-G2751058-007-01



ICN-88277-G2751054-007-01

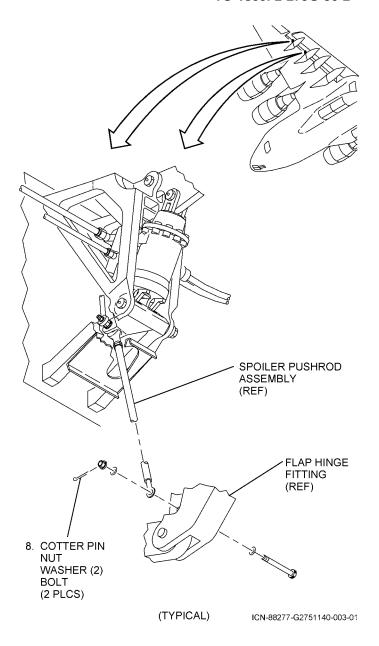


6. —	FLAP REF DES	INDEX NO.	ACCESS PANEL	FASTENER QTY
2751AA004		10	671DLC	12
		11	671ERC	12

7. —	FLAP REF DES		ACCESS COVER	FASTENER QTY
	2751AA004	12	671FBC	18

ICN-88277-G2751055-006-01

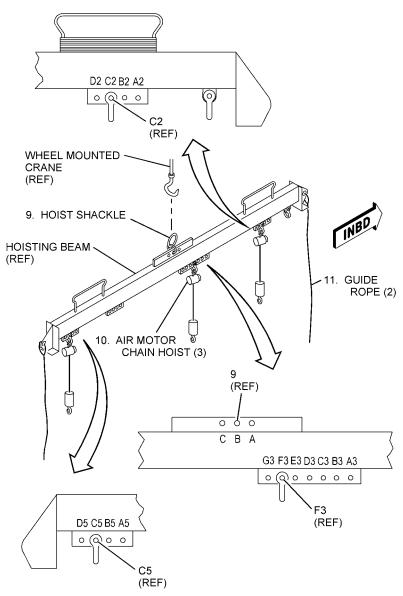
8. (B,D,E,F) Remove cotter pins, nuts, washers, and bolts from spoiler pushrod assemblies.



- 9. (C,E,F) Attach hoist shackle to attachment point B on hoisting beam and wheel mounted crane.
- 10. (C,E,F) Attach air motor chain hoists to hoisting beam as follows:

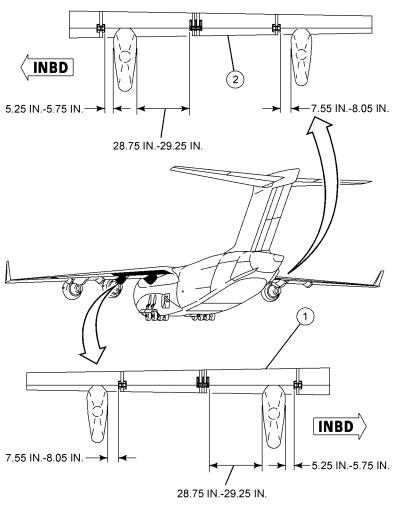
HOIST BEAM HOLE				
SECTION 2 SECTION 3 SECTION 5				
C2	F3	C5		

(E,F) Unwrap guide ropes from hoisting beam. 11.



ICN-88277-G2751129-006-01

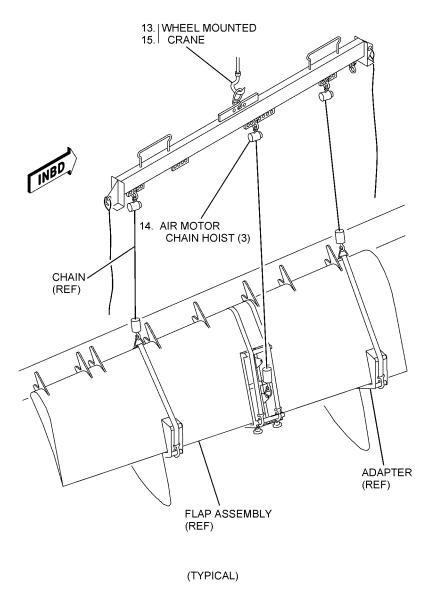
12. (B,D,E,F) Position adapters and torque straps 30-35 ft-lbs.



12	FLAP REF DES	INDEX NO.	ADAPTER NO.	LOCATION	TOF STR/ (17G11)	AP	BOT STF (17G1	RAP
	2751AA003	1	17G110482-199	INBOARD	-52	5	-1	1
			17G110482-201	OUTBOARD	-52	7	-1	1
ľ	2751AA004	751AA004 2	17G110482-205	CENTER	-1	-1	-513	-513

ICN-88277-G2751128-005-01

- 13. (A,C) Position wheel mounted crane over flap assembly.
- 14. (A,C,E,F) Operate air motor chain hoists and attach chains to adapters.
- 15. (A,C) Operate wheel mounted crane; remove slack from chains.



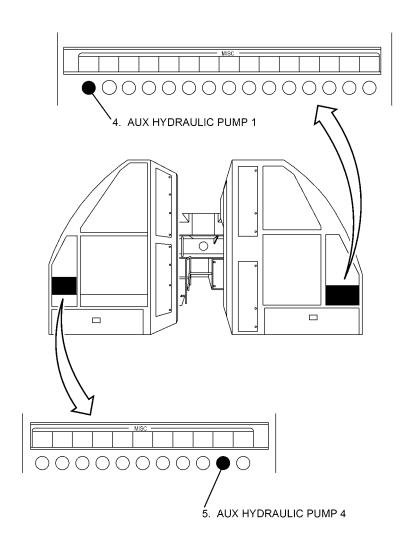
ICN-88277-G2751126-005-01

# 2-2A. PREPARATION FOR 2751AA003 AND 2751AA004 USING PN 17G110482-505.

#### NOTE

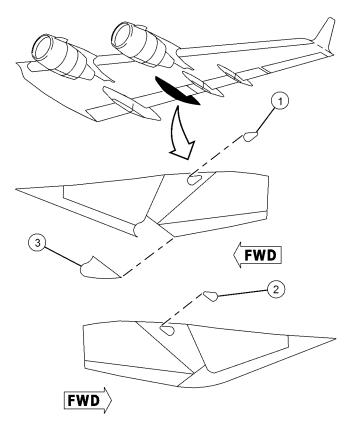
When performing flap assembly removal preparation using hoisting adapter set PN 17G110482-505, if kit is unavailable, contact Boeing engineering.

- 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 inboard spoiler positioning support assembly (05-10-04, tasks 04-1 and 04-2).
- 4. (A) Open **AUX HYDRAULIC PUMP 1** circuit breaker on Electrical Power Center (EPC), row **LL**, column **68**, and attach warning tag.
- 5. (A) Open **AUX HYDRAULIC PUMP 4** circuit breaker on EPC, row **LL**, column **10**, and attach warning tag.



ICN-88277-G2751218-001-01

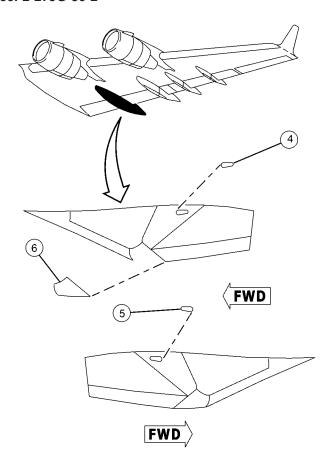
- 6. (B,D,E,F) Remove fasteners and access panels.
- 7. (B,D,E,F) Remove fasteners and access covers.



6 —	FLAP REF DES	INDEX		FASTENER
V. ILAI KEI DES	NO.	PANEL	QTY	
	2751AA003	1	571DLC	12
2731AA003		2	571ERC	12

7. —	FLAP REF DES		ACCESS COVER	FASTENER QTY
	2751AA003	3	571FBC	18

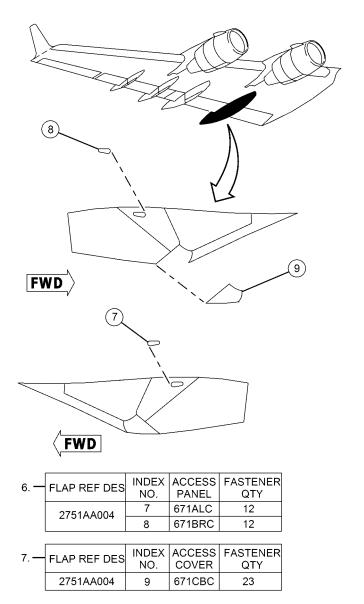
ICN-88277-G2751219-001-01



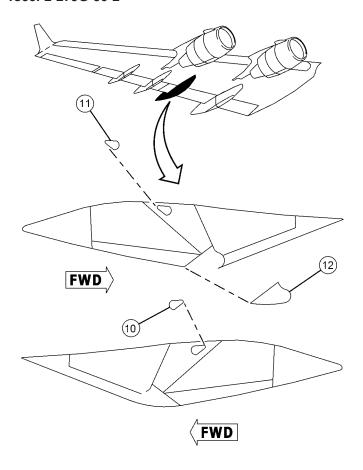
6.—	FLAP REF DES	INDEX NO.	ACCESS PANEL	FASTENER QTY
	2751AA003	4	571ALC	12
273177003		5	571BRC	12

7.—	FLAP REF DES		ACCESS COVER	FASTENER QTY
	2751AA003	6	571CBC	23

ICN-88277-G2751220-001-01



ICN-88277-G2751221-001-01

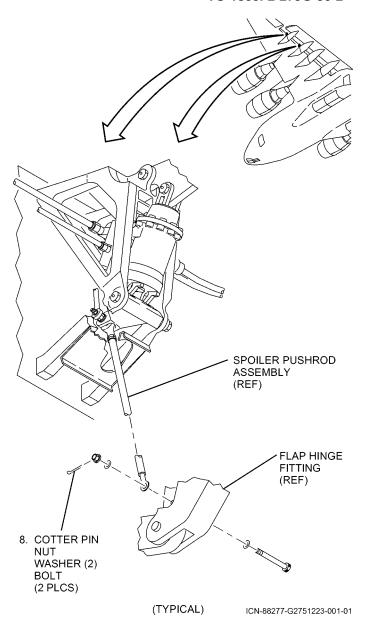


6. —	FLAP REF DES	INDEX NO.	ACCESS PANEL	FASTENER QTY
	2751AA004	10	671DLC	12
	213177004	11	671ERC	12

7.—	FLAP REF DES		ACCESS COVER	FASTENER QTY
	2751AA004	12	671FBC	18

ICN-88277-G2751222-001-01

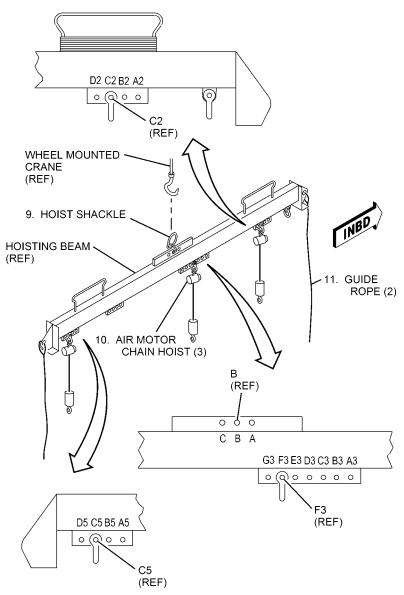
8. (B,D,E,F) Remove cotter pins, nuts, washers, and bolts from spoiler pushrod assemblies.



- 9. (C,E,F) Attach hoist shackle to attachment point B on hoisting beam and wheel mounted crane.
- 10. (C,E,F) Attach air motor chain hoists to hoisting beam as follows:

HOIST BEAM HOLE					
SECTION 2 SECTION 3 SECTION 5					
C2	F3	C5			

11. (E,F) Unwrap guide ropes from hoisting beam.

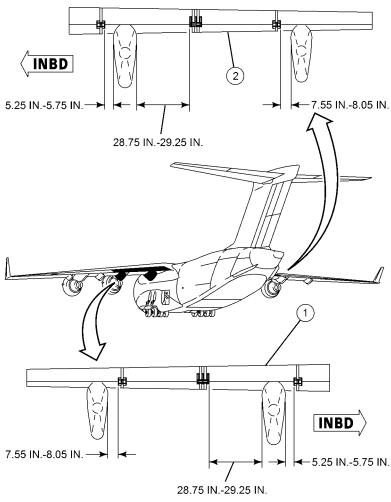


ICN-88277-G2751224-001-01

# WARNING

Strap shall be wrapped a minimum of 2-1/2 times around the ratchet buckle drum. Failure to comply may cause injury to personnel and damage to equipment.

12. (B,D,E,F) Position adapters and tension straps from taut with a minimum of 5, maximum of 6 clicks on the ratchet buckle.



12	FLAP REF DES	INDEX NO.	ADAPTER NO.	LOCATION			BOTTOM STRAP (17G113482)	
	2751AA003	1	17G110482-219	INBOARD	-53	33	ì	1
			17G110482-221	OUTBOARD	-53	35	_^	1
	2751AA004	2	17G110482-205	CENTER	-1	-1	-513	-513

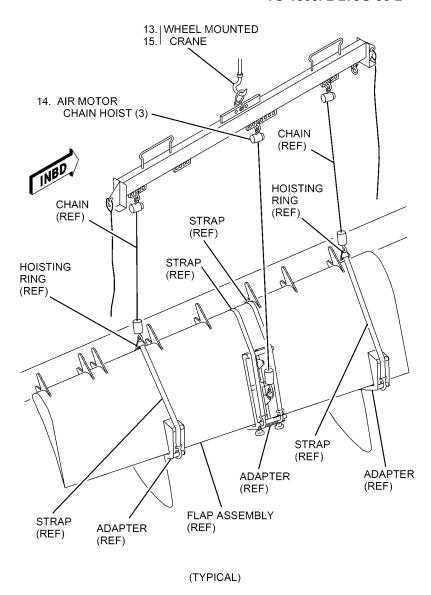
ICN-88277-G2751225-001-01

13. (A,C) Position wheel mounted crane over flap assembly.

#### NOTE

Chain hoist attached to the center adapter. The inboard and outboard hoist chains are installed to the hoisting rings on the straps.

- 14. (A,C,E,F) Operate air motor chain hoists and attach chains to adapter and straps.
- 15. (A,C) Operate wheel mounted crane; remove slack from chains.



ICN-88277-G2751226-001-01

### 2-3. REMOVAL.

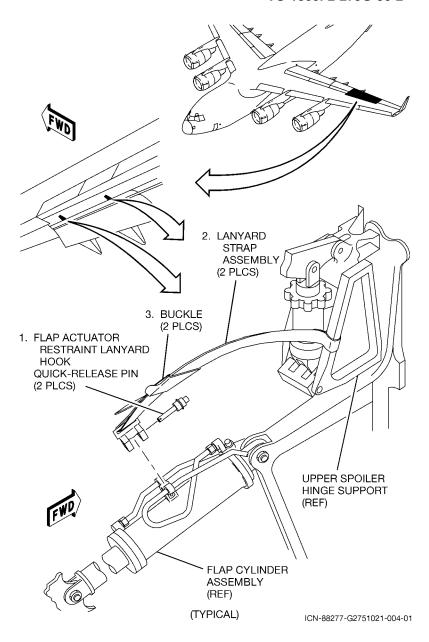
# WARNING

Flap assembly removals using the 17G110482-503 adapter set shall be temporarily halted until further notice. Hoisting adapter set 17G110482-503 contains defective 17G113482-525, 17G113482-527, 17G113482-529, and 17G113482-531 strap assemblies. Contact Boeing engineering when the upgraded 17G110482-505 adapter set is not available and flap removal is required. Failure to comply may cause injury to personnel or damage to aircraft.

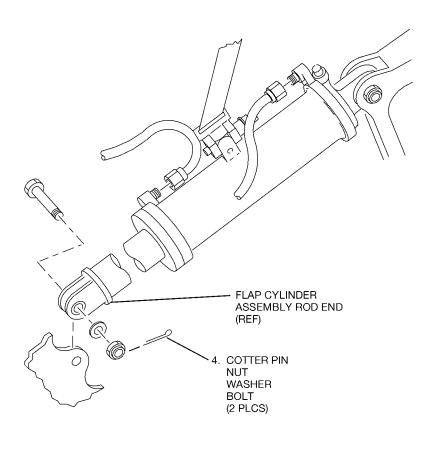
#### **NOTE**

When performing flap assembly removal preparation using hoisting adapter set PN 17G110482-505, if kit is unavailable, contact Boeing engineering.

- 1. (B,D) Position flap actuator restraint lanyard hooks and install quick-release pins.
- 2. (B,D) Wrap lanyard strap assemblies around upper spoiler hinge supports and thread through buckles.
- (B,D) Adjust and tighten buckles to support flap cylinder assemblies.



4. (B,D) Remove cotter pins, nuts, washers, and bolts from flap cylinder assembly rod end.

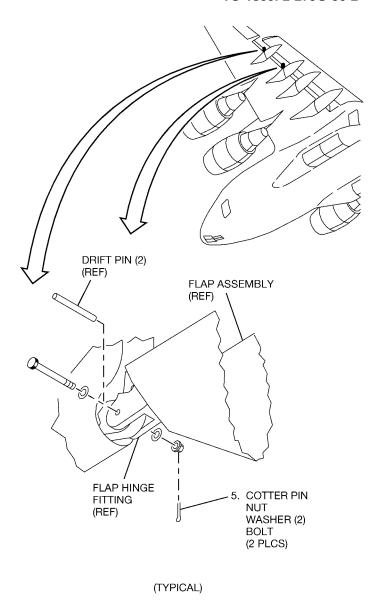


(TYPICAL)

ICN-88277-G2751023-005-01

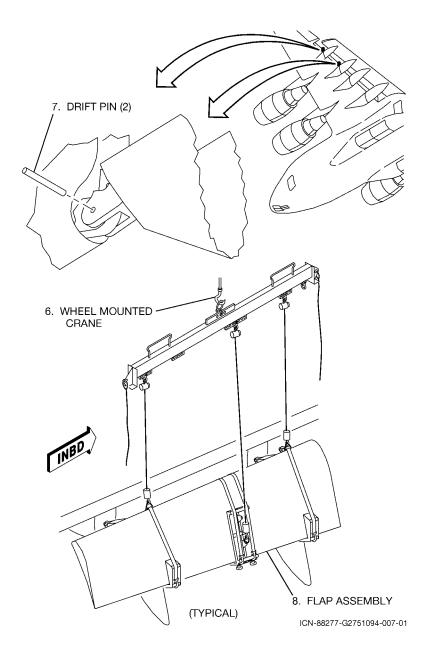
5. (B,D) Remove cotter pins, nuts, washers, and bolts attaching flap and vane structural assembly to flap hinge fittings, and install drift pins as follows:

FLAP REF DES	SOCKET PART NO.
2751AA002	ANHC1719
2751AA003	ANHC1721
2751AA004	ANHC1721
2751AA005	ANHC1719

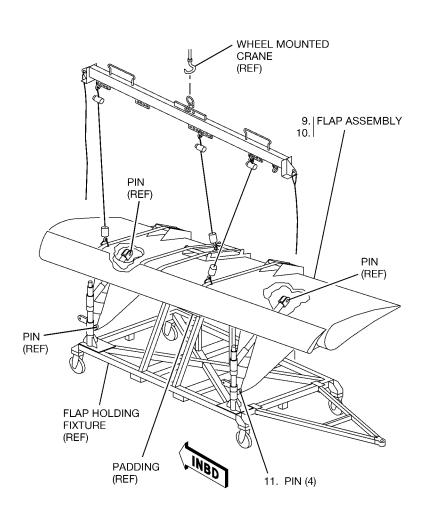


ICN-88277-G2751076-007-01

- 6. (A,C) Operate wheel mounted crane to remove weight/binding condition.
- 7. (B,D) Remove drift pins.
- 8. (A,B,C,D,E,F) Remove flap assembly.



- 9. (A,B,C,D,E,F) Operate wheel mounted crane and lower flap assembly onto flap holding fixture.
- 10. (A,B,C,D,E,F) Position flap assembly onto padding.
- 11. (E,F) Install pins.

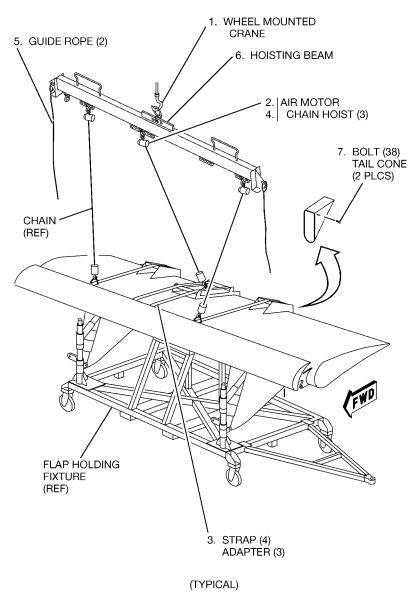


(TYPICAL)

ICN-88277-G2751071-007-01

# 2-4. FOLLOW-ON MAINTENANCE.

- 1. (A,C) Operate wheel mounted crane and slacken chains.
- 2. (A,B,D,E) Operate air motor chain hoists and remove chains.
- 3. (B,D,E,F) Loosen straps and remove adapters.
- 4. (B,D,E,F) Remove air motor chain hoists from hoisting beam.
- 5. (E,F) Wrap guide ropes on hoisting beam.
- 6. (B,D,E,F) Remove hoisting beam from wheel mounted crane.
- 7. (B,D,E,F) Remove bolts and tail cones.

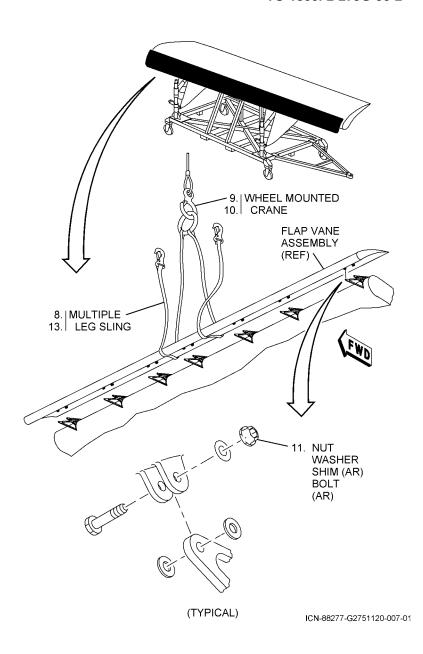


ICN-88277-G2751078-007-01

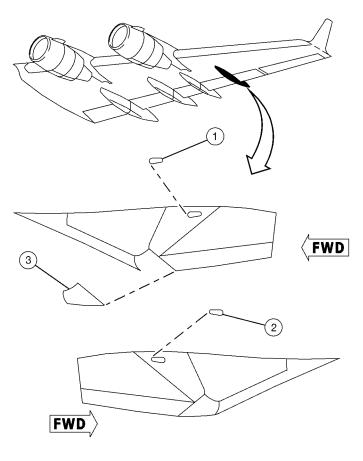
- 8. (C,D) Attach multiple leg sling to wheel mounted crane.
- 9. (A,C,D,E,F) Position wheel mounted crane over flap vane assembly and wrap legs of sling around center of vane in choker configuration.
- 10. (A,C) Operate wheel mounted crane and remove slack from sling.
- 11. (B,D,E,F) Identify and remove nuts, washers, shims, and bolts as follows:

REF DES	NUT, WASHER, BOLT QTY
2751AA002	14
2751AA003	16
2751AA004	16
2751AA005	14

- (A,B,C,D,E,F) Remove flap vane assembly and secure on stake semitrailer.
- 13. (C,D) Remove sling from flap vane assembly.



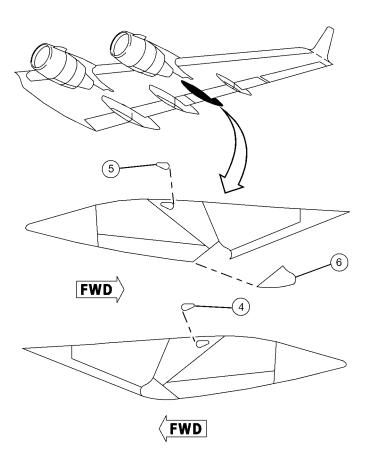
- 14. (A,B) Position access panels.
- 15. (A,B) Install fasteners.
- 16. (A,B) Position access covers.
- 17. (A,B) Install fasteners.



14. 15.	FLAP REF DES	INDEX NO.	ACCESS PANEL	FASTENER QTY
	2751AA002	1	573DLC	12
	2/3/24002	2	573ERC	12

16.	FLAP REF DES	INDEX	ACCESS	FASTENER
17.		NO.	COVER	QTY
	2751AA002	3	573FBC	16

ICN-88277-G2751147-003-01



14. 15.	FLAP REF DES	INDEX NO.	ACCESS PANEL	FASTENER QTY
	2751AA002	4	573ALC	12
	270174002	5	573BRC	12

16.	FLAP REF DES	INDEX	ACCESS	FASTENER
17.		NO.	COVER	QTY
	2751AA002	6	573CBC	17

ICN-88277-G2751148-002-01