CHAPTER

57

WINGS

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6	BLANK	
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7	Feb 15/2008	
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14	Jun 15/2008	
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203	Feb 15/2008	
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57-00-01		
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602	BLANK	
57-05-02		
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57-05-03		
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57-05-03 (cont)		
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A = Added, R = Revised, D = Deleted, O = Overflow, C = Customer Originated Change

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289	Oct 10/2007	
290	Oct 10/2007	
291	Oct 10/2007	
292	Oct 10/2007	
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298.2	Oct 10/2007	
298.3	Oct 10/2007	
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298.5	Oct 10/2007	
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298.10	Oct 10/2007	
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298.14	Oct 10/2007	
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57-05-03 (cont)		
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607	Oct 10/2003	

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608	Oct 10/2003	
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612	BLANK	
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R 403	Jun 15/2009	
R 404	Jun 15/2009	
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O 406	Jun 15/2009	
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57-20-00 (cont)		
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R 407	Jun 15/2009	
R 408	Jun 15/2009	
R 409	Jun 15/2009	
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811	Feb 10/2007	
812	Feb 15/2009	
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R 408	Jun 15/2009	
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WING SKINS - CORROSION PREVENTION

1. General

A. The exterior surfaces of the upper and lower inspar skins of the wing are susceptible to corrosion at fastener locations. The small gap between the countersunk skin and the head of the flush fastener leaves an unsupported area for the paint system. This area may lead to cracking of the paint system around the fastener head and opening for moisture and contaminants to enter.

TASK 57-00-00-910-801

2. Wing Skins - Corrosion Prevention

A. General

(1) Make the regular inspection to prevent or find the start of corrosion. Missing fasteners, white powdery, or other corrosion deposits are signs of corrosion. Initiate the corrosion prevention practices to decrease the occurrence of corrosion.

(2) Following cleaning of suspected areas PAGEBLOCK 51-21-31/701, a full inspection is effective to ensure that protective finishes provided during manufacture remain intact.

(3) Where corrosion exists (noticeable bulges of the skin or white deposits of corrosion products at fastener heads or joint edges), refer to Structural Repair Manual for details of corrosion removal.

(4) For minor corrosion, to minimize the downtime of the airplane, the corrosion products should be cleaned off, followed by the application of a corrosion inhibiting compound into the affected area to decrease the corrosion process. Refer to PAGEBLOCK 51-21-91/701 for details on applying corrosion inhibiting compound. The finish system should be repaired at the first opportunity consistent with the maintenance schedule.

B. References

Reference	Title
51-21-31 P/B 701	CORROSION REMOVAL AND CONTROL - CLEANING/PAINTING
51-21-91 P/B 701	CORROSION INHIBITING COMPOUND - CLEANING/PAINTING

C. Consumable Materials

Reference	Description	Specification
G00009	Compound - Organic Corrosion Inhibiting	BMS3-23

D. Location Zones

Zone	Area
500	Left Wing
600	Right Wing

E. Procedure

SUBTASK 57-00-00-370-001

(1) At first opportunity consistent with the scheduled maintenance activity, apply corrosion prevention treatment to the wing inspar skin.

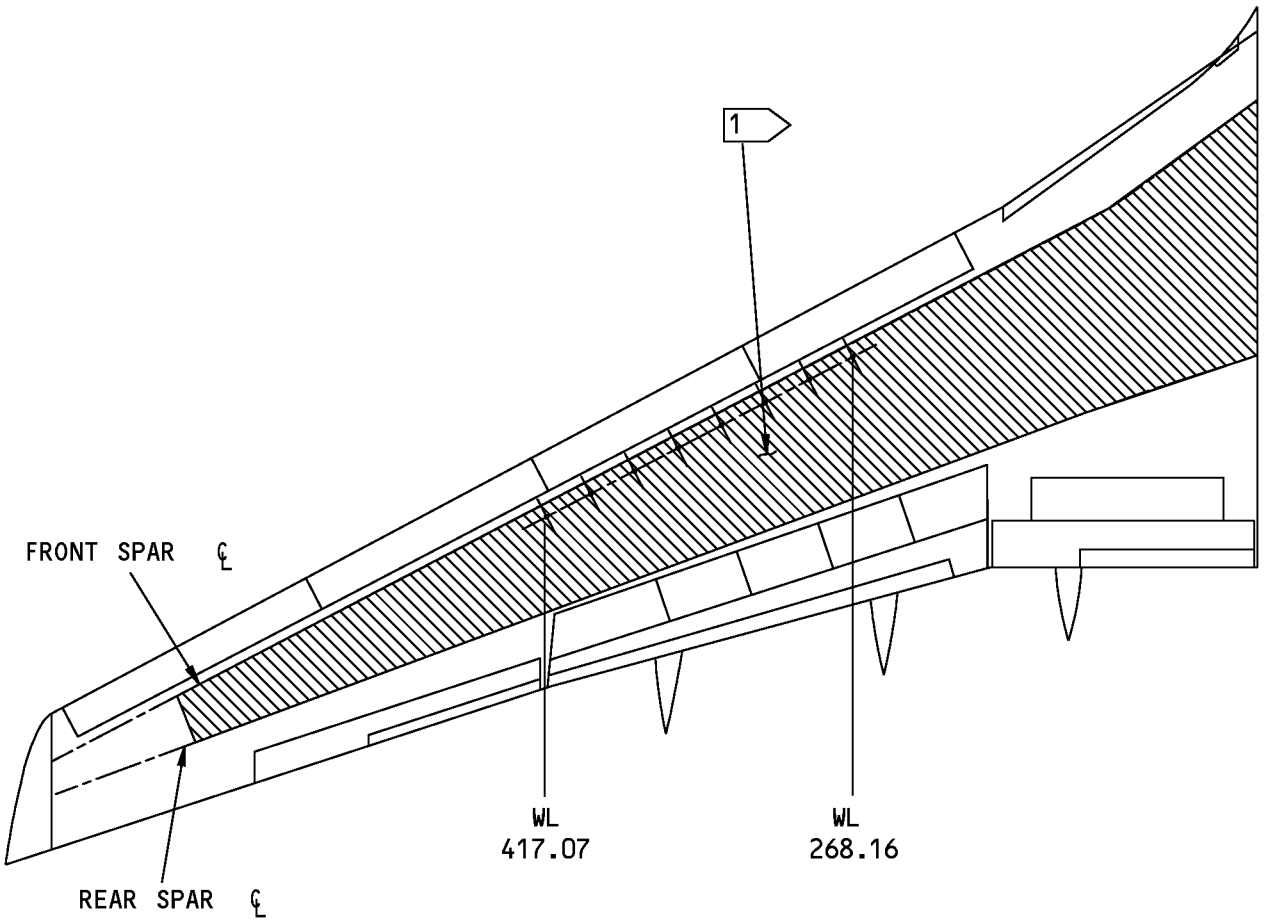
SUBTASK 57-00-00-370-002

(2) Frequency of Application

(a) Periodic inspection is required in areas identified as susceptible to corrosion and should be consistent to the schedules specified in the Maintenance Planning Document. Operators must be aware of reported problems and areas of occurrences.

(b) Periodic application of corrosion inhibiting compound, G00009 is necessary to areas identified and should be consistent to the schedule specified in the Maintenance Planning Document.

—————— END OF TASK ——————



LEFT WING
(RIGHT WING IS OPPOSITE)

1 APPLY BMS 10-79 TYPE III PRIMER AND
BMS 10-60 TYPE II GRAY ENAMEL

J12009 S0000167632_V2

Wing Skins - Corrosion Prevention
Figure 201/57-00-00-990-801

AILERON - INSPECTION/CHECK

1. General

A. This procedure has one task. The task gives instructions to do a visual inspection of the internal area of the ailerons.

TASK 57-00-01-200-801

2. Examine the Composite Flight Controls

A. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
COM-2043	Borescope - Inspection, Flexible, 11 mm, 60 Deg. Direct View, 120 Deg. Up/Down, 100 Deg. Left/Right, 2000 mm Working Length (Part #: IF11C5-20, Supplier: 32212, A/P Effectivity: 737-600, -700, -700C, -700ER, -700QC, -800, -900, -900ER, -BBJ)

B. Location Zones

Zone	Area
572	Left Wing - Aileron
672	Right Wing - Aileron

C. Procedure

SUBTASK 57-00-01-010-001

(1) Remove the access panels that are necessary.

SUBTASK 57-00-01-290-001

(2) Put a borescope, COM-2043 into an access hole that is 2 inches (5.1 cm) in diameter.

SUBTASK 57-00-01-290-002

(3) Move the borescope, COM-2043 until you can see an area where an inspection is necessary.

NOTE: If you cannot move the optical tip into the correct areas, use a guide tube.

SUBTASK 57-00-01-290-003

(4) Examine the area for these unsatisfactory conditions:

NOTE: Do not move the borescope, COM-2043 while you examine an area.

(a) Signs of deterioration.

(b) Bulges and cracks on the skins and the ribs.

(c) Corrosion on the fasteners.

(d) Other signs of the stress.

SUBTASK 57-00-01-970-001

(5) Make a record of all the unsatisfactory conditions before you move the borescope, COM-2043 to a different area.

SUBTASK 57-00-01-410-001

(6) Install the access panels.

——————— END OF TASK ———————

FATIGUE

1. General

A. This procedure contains scheduled maintenance task data.

B. MPD dummy task for task card data.

TASK 57-05-02-200-801

2. INTERNAL - SPECIAL DETAILED:LEFT LOWER WING PANEL RAIL STRINGER

A. General

(1) This procedure is a scheduled maintenance task.

B. Inspection

SUBTASK 57-05-02-200-001

(1) Do the inspection.

END OF TASK

TASK 57-05-02-200-802

3. INTERNAL - SPECIAL DETAILED:RIGHT LOWER WING PANEL RAIL STRINGE

A. General

(1) This procedure is a scheduled maintenance task.

B. Inspection

SUBTASK 57-05-02-200-002

(1) Do the inspection.

END OF TASK

TASK 57-05-02-200-803

4. EXTERNAL - SPECIAL DETAILED: LEFT LOWER WING PANEL SPLICE STRINGERS

A. General

(1) This procedure is a scheduled maintenance task.

B. Inspection

SUBTASK 57-05-02-200-003

(1) Do the inspection.

END OF TASK

TASK 57-05-02-200-804

5. EXTERNAL - SPECIAL DETAILED: RIGHT LOWER WING PANEL SPLICE STRINGERS

A. General

(1) This procedure is a scheduled maintenance task.

B. Inspection

SUBTASK 57-05-02-200-004

(1) Do the inspection.

END OF TASK

TASK 57-05-02-200-805

6. INTERNAL - HIGH FREQUENCY EDDY CURRENT: LEFT LOWER WING PANEL SPLICE STRINGERS

A. General

(1) This procedure is a scheduled maintenance task.

B. Inspection

SUBTASK 57-05-02-200-005

(1) Do the inspection.

——————— END OF TASK ———————

TASK 57-05-02-200-806

7. INTERNAL - HIGH FREQUENCY EDDY CURRENT: RIGHT LOWER WING PANEL SPLICE STRINGERS

A. General

(1) This procedure is a scheduled maintenance task.

B. Inspection

SUBTASK 57-05-02-200-006

(1) Do the inspection.

——————— END OF TASK ———————

TASK 57-05-02-200-807

8. INTERNAL - SPECIAL DETAILED:LEFT LOWER WING PANEL UNDER NACELLE FITTINGS

A. General

(1) This procedure is a scheduled maintenance task.

B. Inspection

SUBTASK 57-05-02-200-007

(1) Do the inspection.

——————— END OF TASK ———————

TASK 57-05-02-200-808

9. INTERNAL - SPECIAL DETAILED: RIGHT LOWER WING PANEL UNDER NACELLE FITTINGS

A. General

(1) This procedure is a scheduled maintenance task.

B. Inspection

SUBTASK 57-05-02-200-008

(1) Do the inspection.

——————— END OF TASK ———————

WINGS - STRUCTURAL INSPECTIONS - MAINTENANCE PRACTICES

TASK 57-05-03-210-801

1. INTERNAL - GENERAL VISUAL: INTERNAL - WING CENTER SECTION

A. General

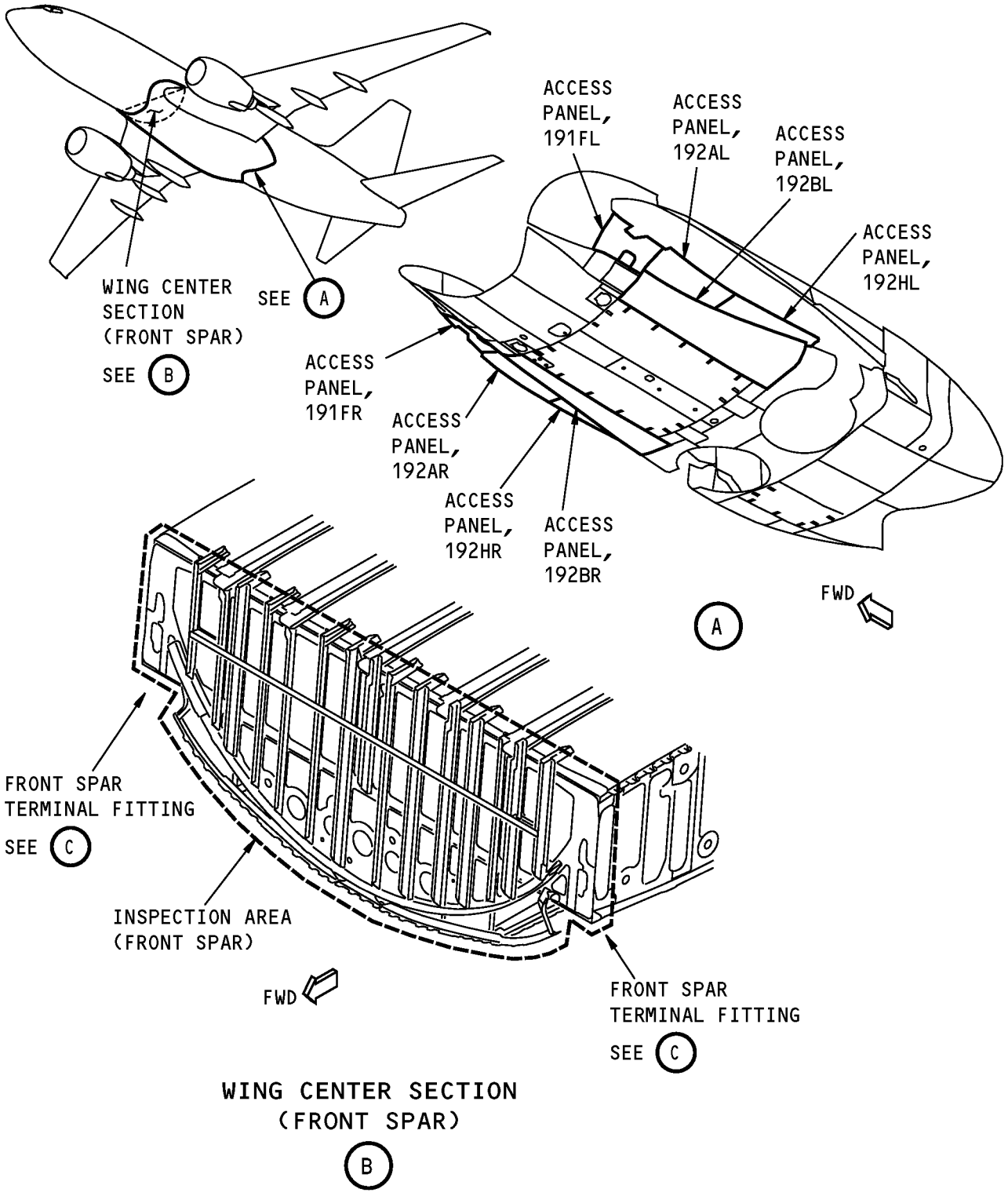
(1) This procedure is a scheduled maintenance task.

B. Inspection

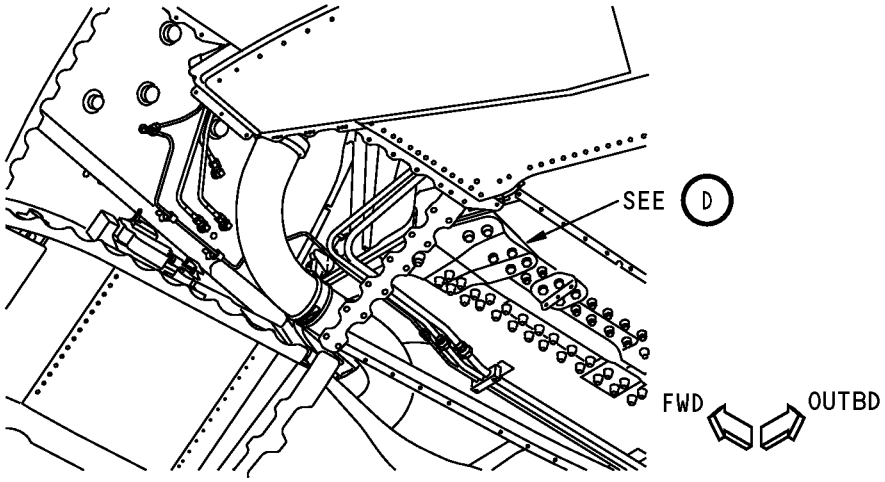
SUBTASK 57-05-03-210-001

(1) Do the inspection.

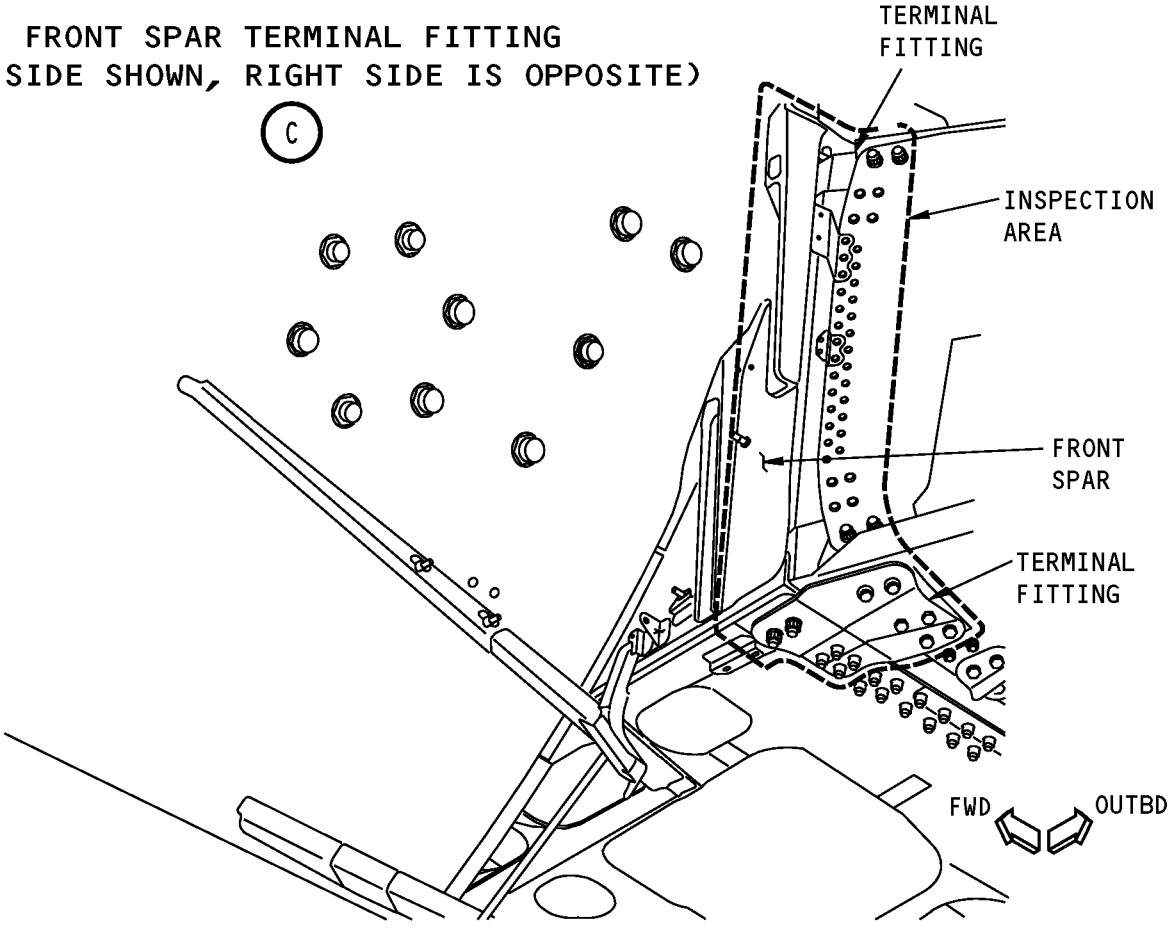
END OF TASK



INTERNAL-GENERAL VISUAL: INTERNAL-WING CENTER SECTION
Figure 201 (Sheet 1 of 2)/57-05-03-990-857



FRONT SPAR TERMINAL FITTING
(LEFT SIDE SHOWN, RIGHT SIDE IS OPPOSITE)
C



TERMINAL FITTING (EXAMPLE)
D

INTERNAL-GENERAL VISUAL: INTERNAL-WING CENTER SECTION
Figure 201 (Sheet 2 of 2)/57-05-03-990-857

TASK 57-05-03-210-802

2. INTERNAL - GENERAL VISUAL: INTERNAL - WING CENTER SECTION

A. General

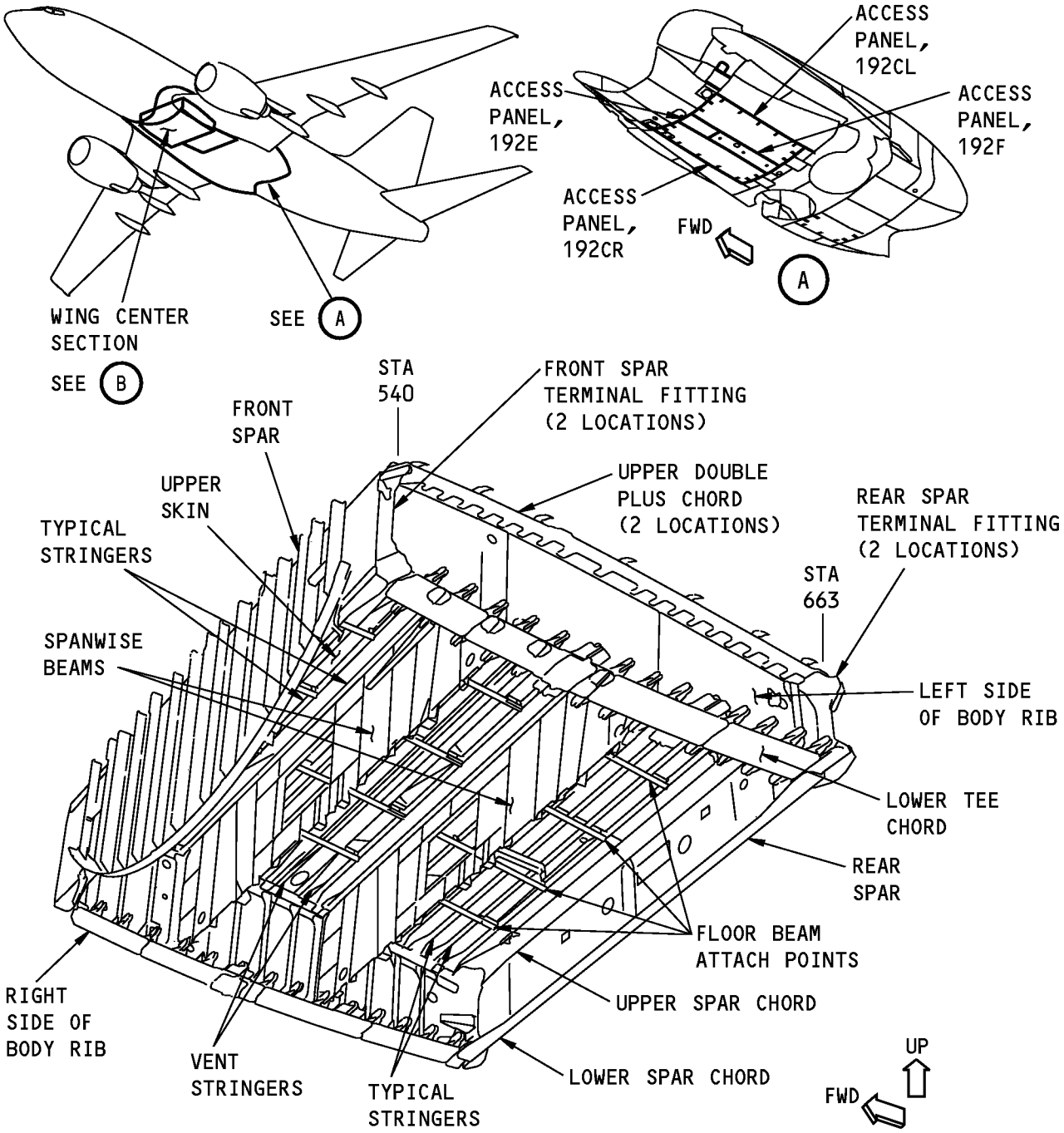
(1) This procedure is a scheduled maintenance task.

B. Inspection

SUBTASK 57-05-03-210-002

(1) Do the inspection.

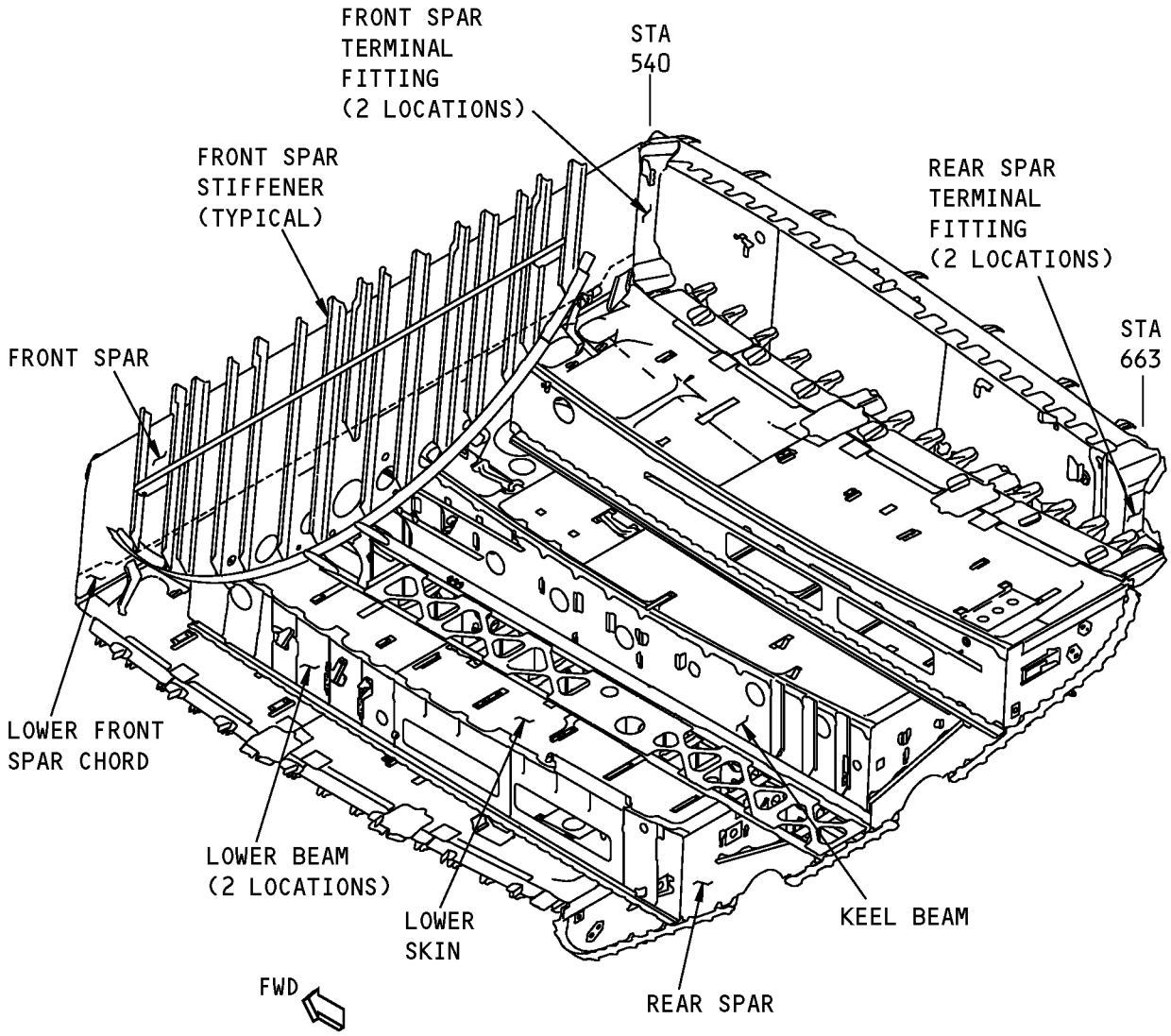
———————— END OF TASK ————————



WING CENTER SECTION
(LOWER SKIN REMOVED FOR CLARITY)

B

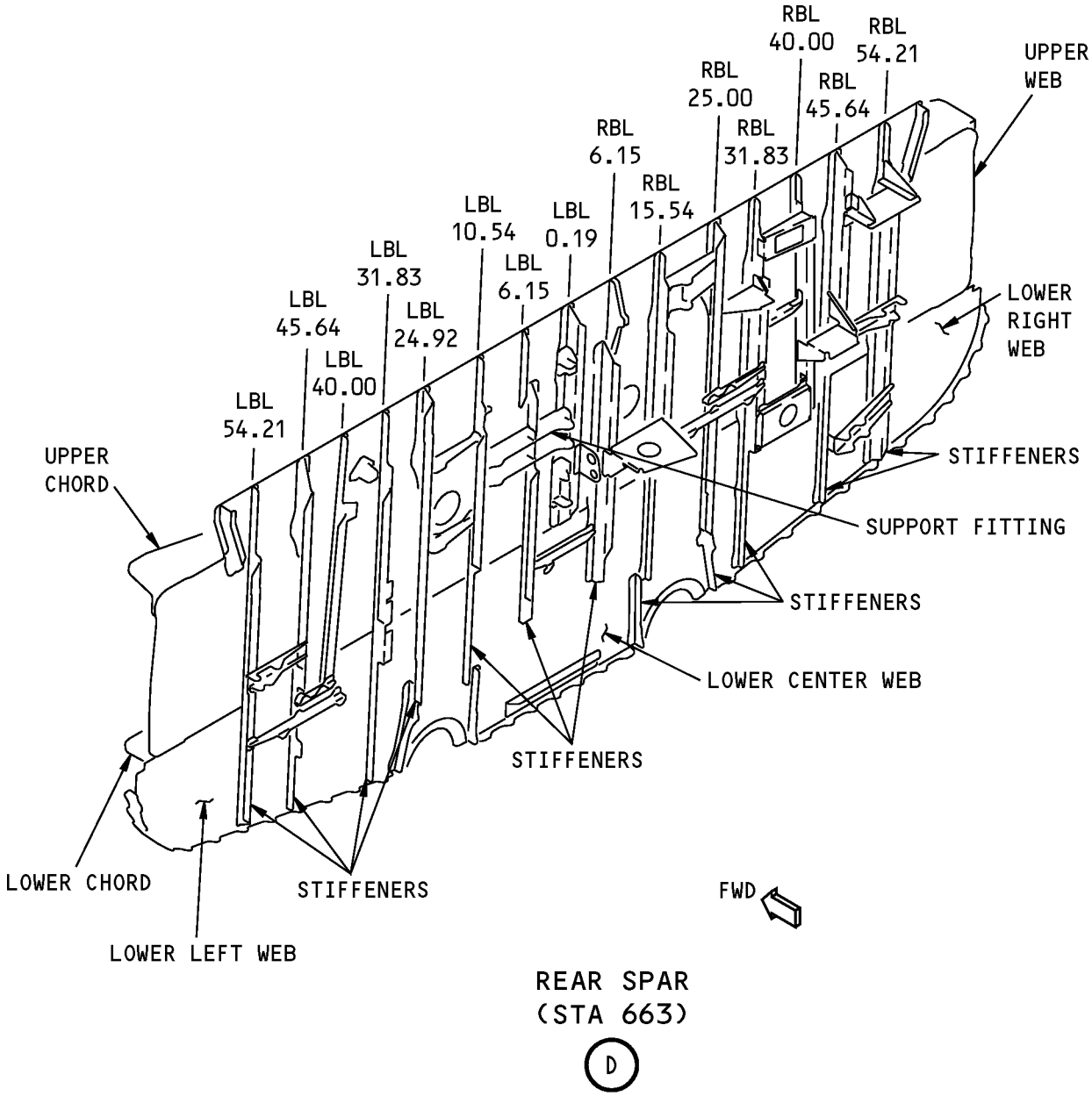
INTERNAL-GENERAL VISUAL: INTERNAL-WING CENTER SECTION
Figure 202 (Sheet 1 of 4)/57-05-03-990-858



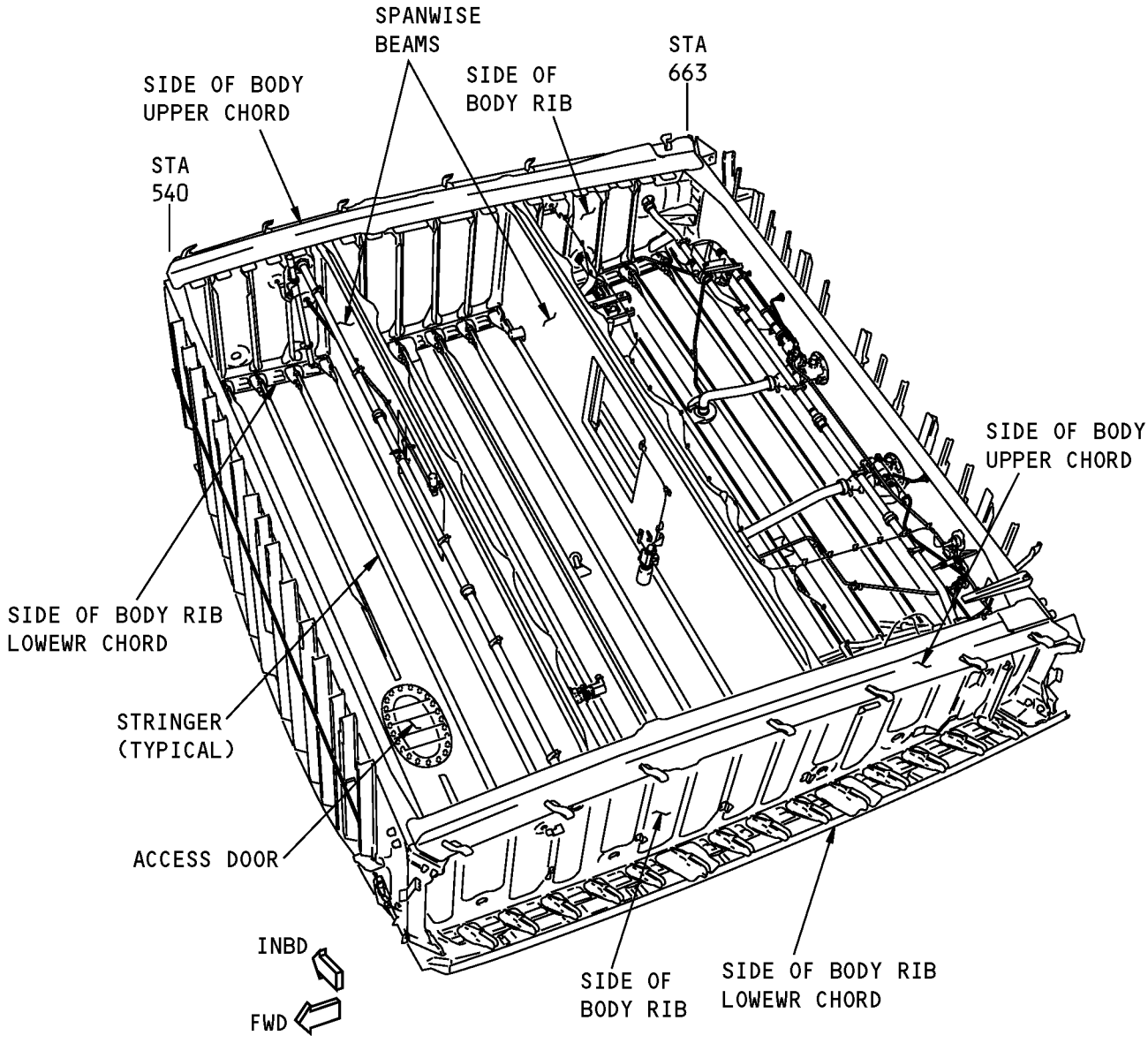
WING CENTER SECTION
(LOOKING UP)

C

INTERNAL-GENERAL VISUAL: INTERNAL-WING CENTER SECTION
Figure 202 (Sheet 2 of 4)/57-05-03-990-858



INTERNAL-GENERAL VISUAL: INTERNAL-WING CENTER SECTION
Figure 202 (Sheet 3 of 4)/57-05-03-990-858



WING CENTER SECTION
(UPPER SKIN REMOVED FOR CLARITY)

E

INTERNAL-GENERAL VISUAL: INTERNAL-WING CENTER SECTION
Figure 202 (Sheet 4 of 4)/57-05-03-990-858

TASK 57-05-03-210-803

3. EXTERNAL - GENERAL VISUAL: EXTERNAL - WING CENTER SECTION

A. General

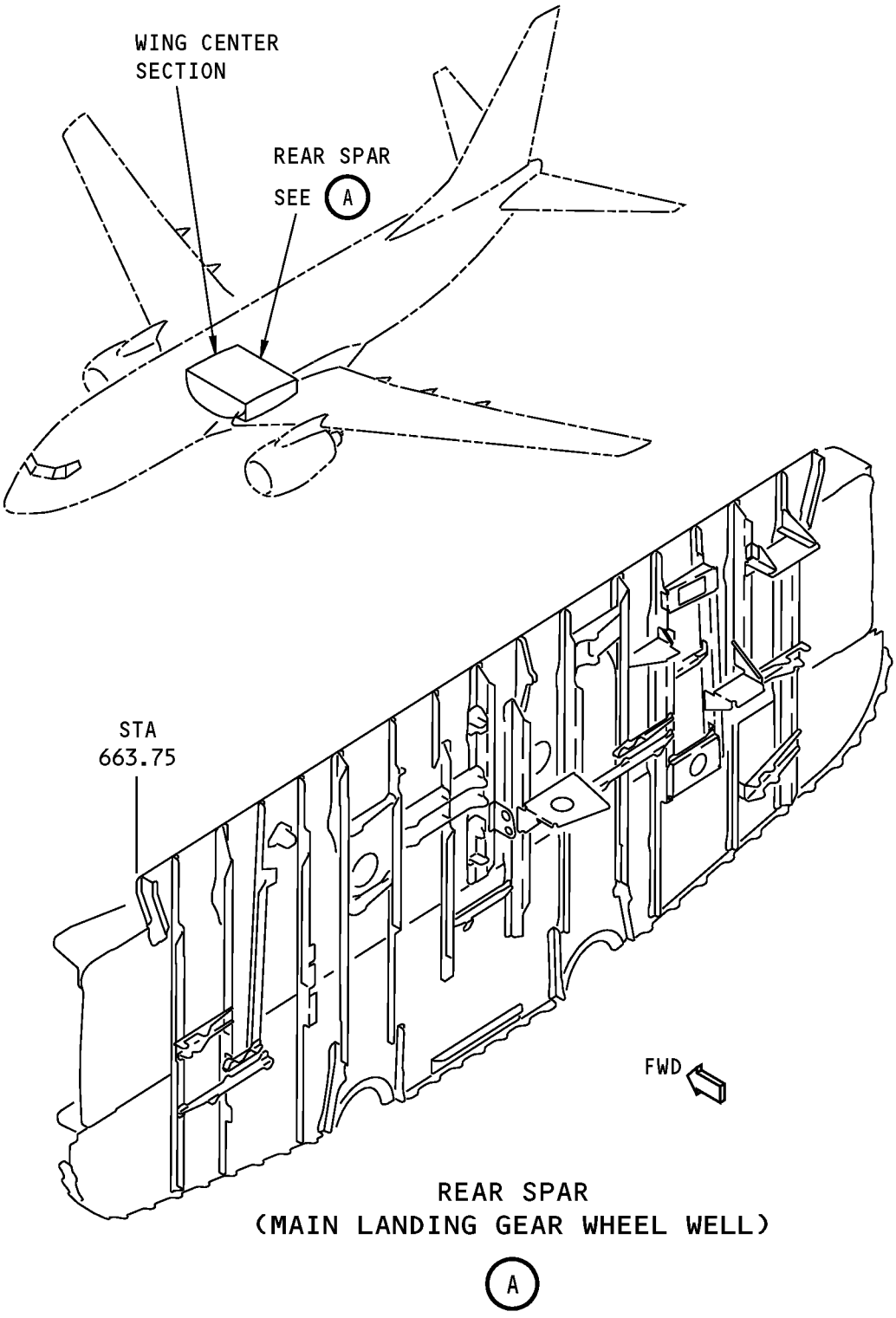
(1) This procedure is a scheduled maintenance task.

B. Inspection

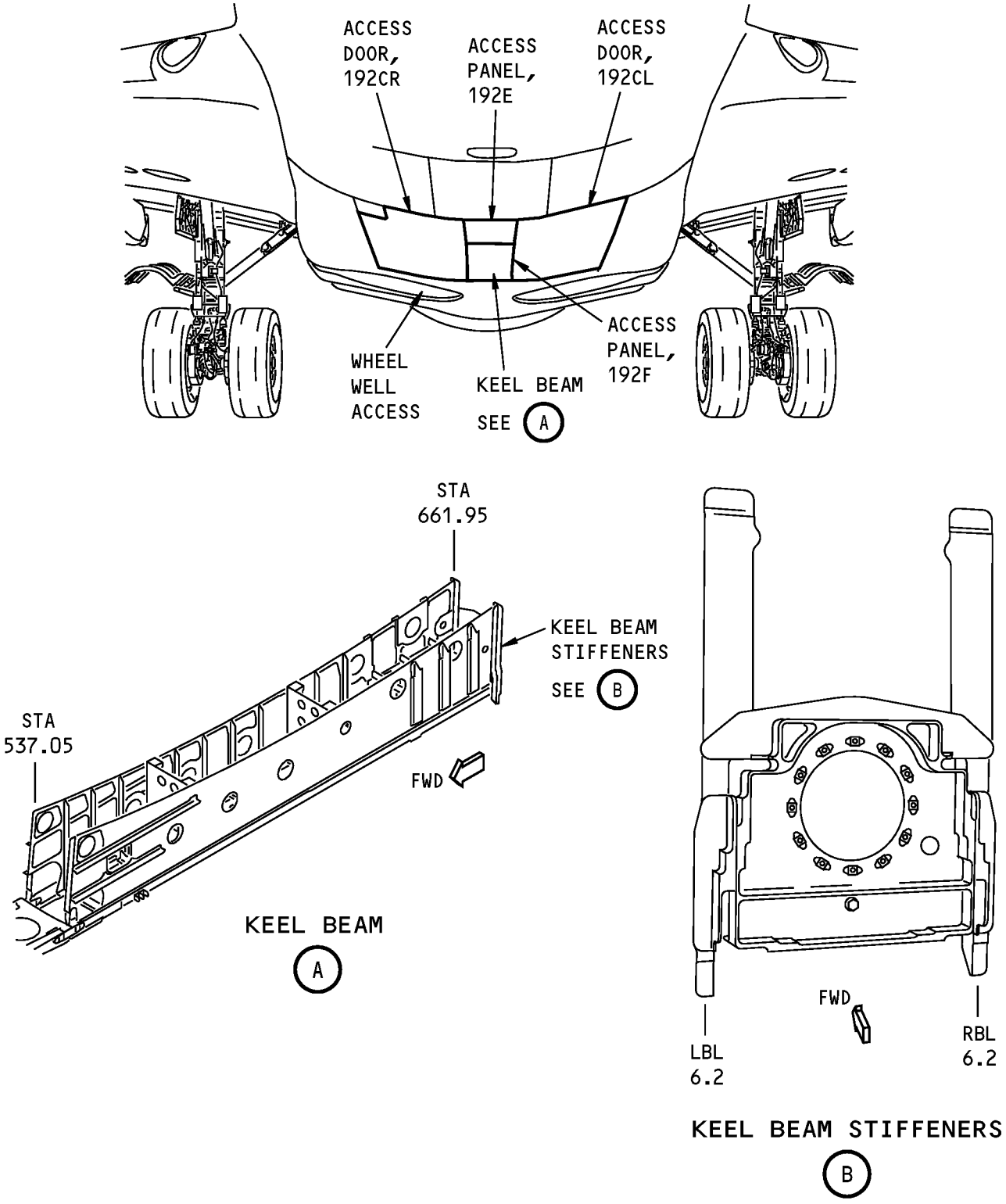
SUBTASK 57-05-03-210-003

(1) Do the inspection.

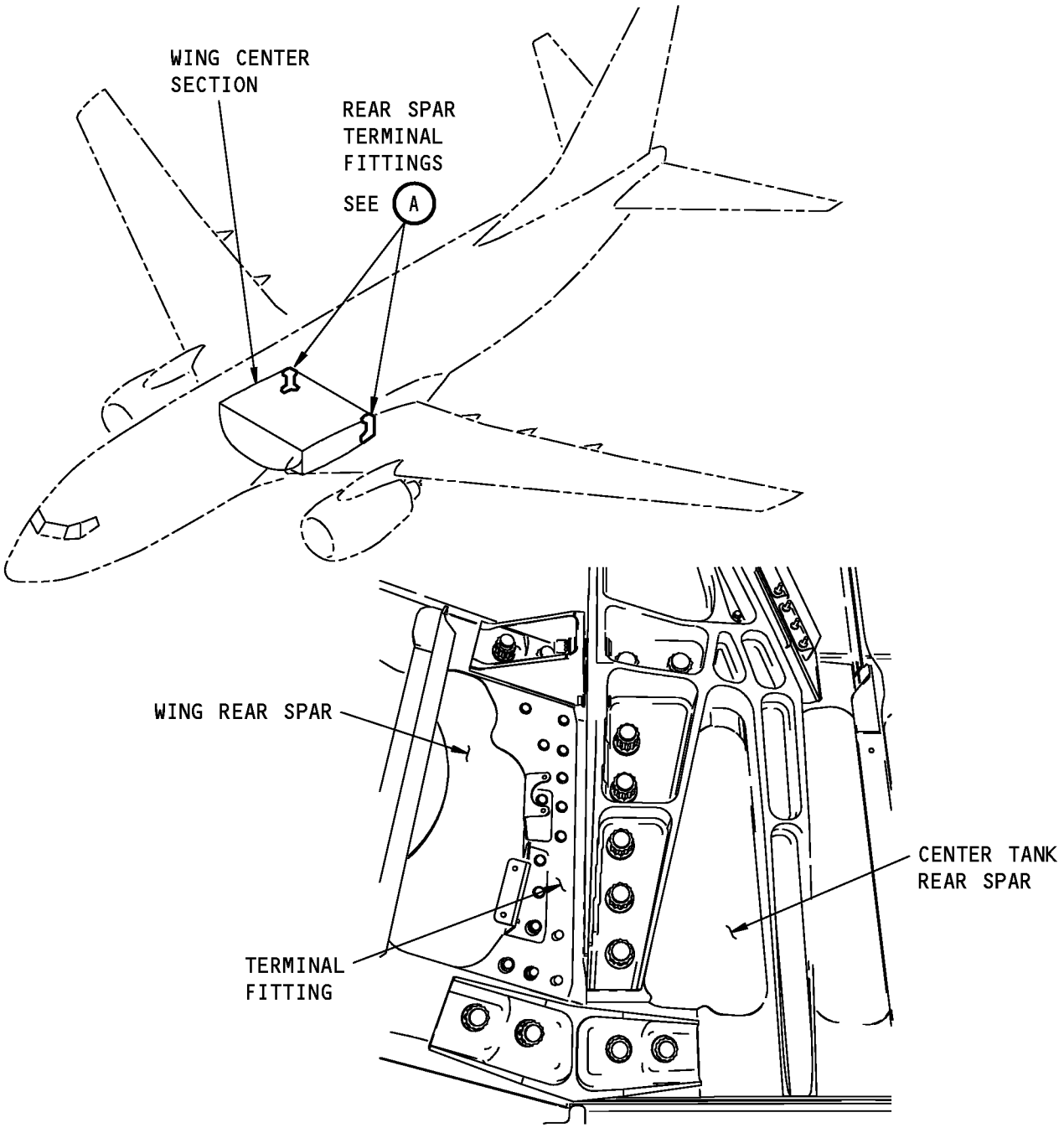
——————— END OF TASK ———————



EXTERNAL-GENERAL VISUAL: EXTERNAL-WING CENTER SECTION
Figure 203/57-05-03-990-852



EXTERNAL-GENERAL VISUAL: EXTERNAL WING CENTER SECTION
Figure 204/57-05-03-990-855



Rear Spar Terminal Fittings
Figure 205/57-05-03-990-871

TASK 57-05-03-210-804

4. INTERNAL - GENERAL VISUAL: INTERNAL - WING CENTER SECTION

A. General

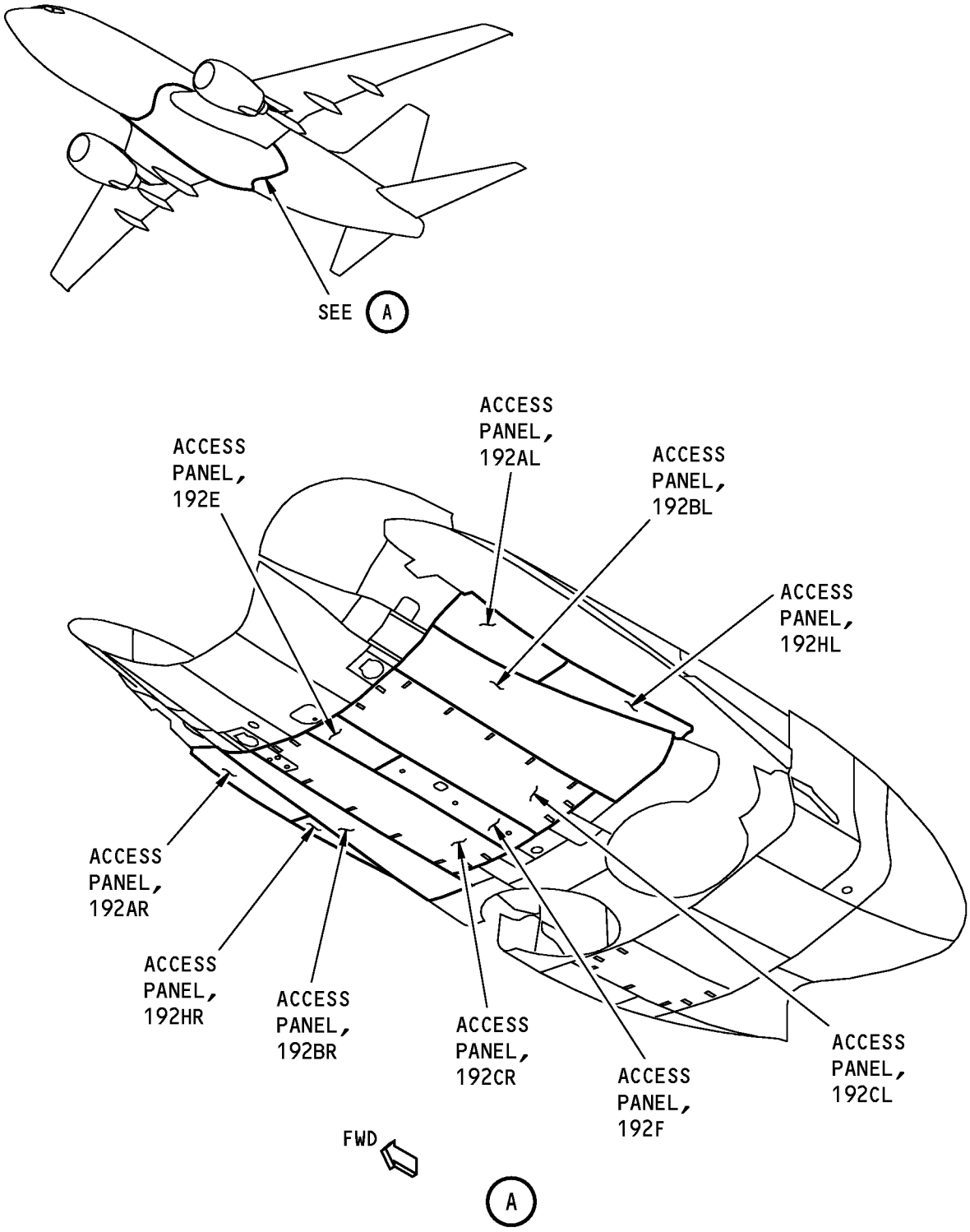
(1) This procedure is a scheduled maintenance task.

B. Inspection

SUBTASK 57-05-03-210-004

(1) Do the inspection.

——————— END OF TASK ———————



Wing Center Section - General Visual (Internal)
Figure 206/57-05-03-990-843

TASK 57-05-03-210-805

5. INTERNAL - GENERAL VISUAL: INTERNAL - WING CENTER SECTION

A. General

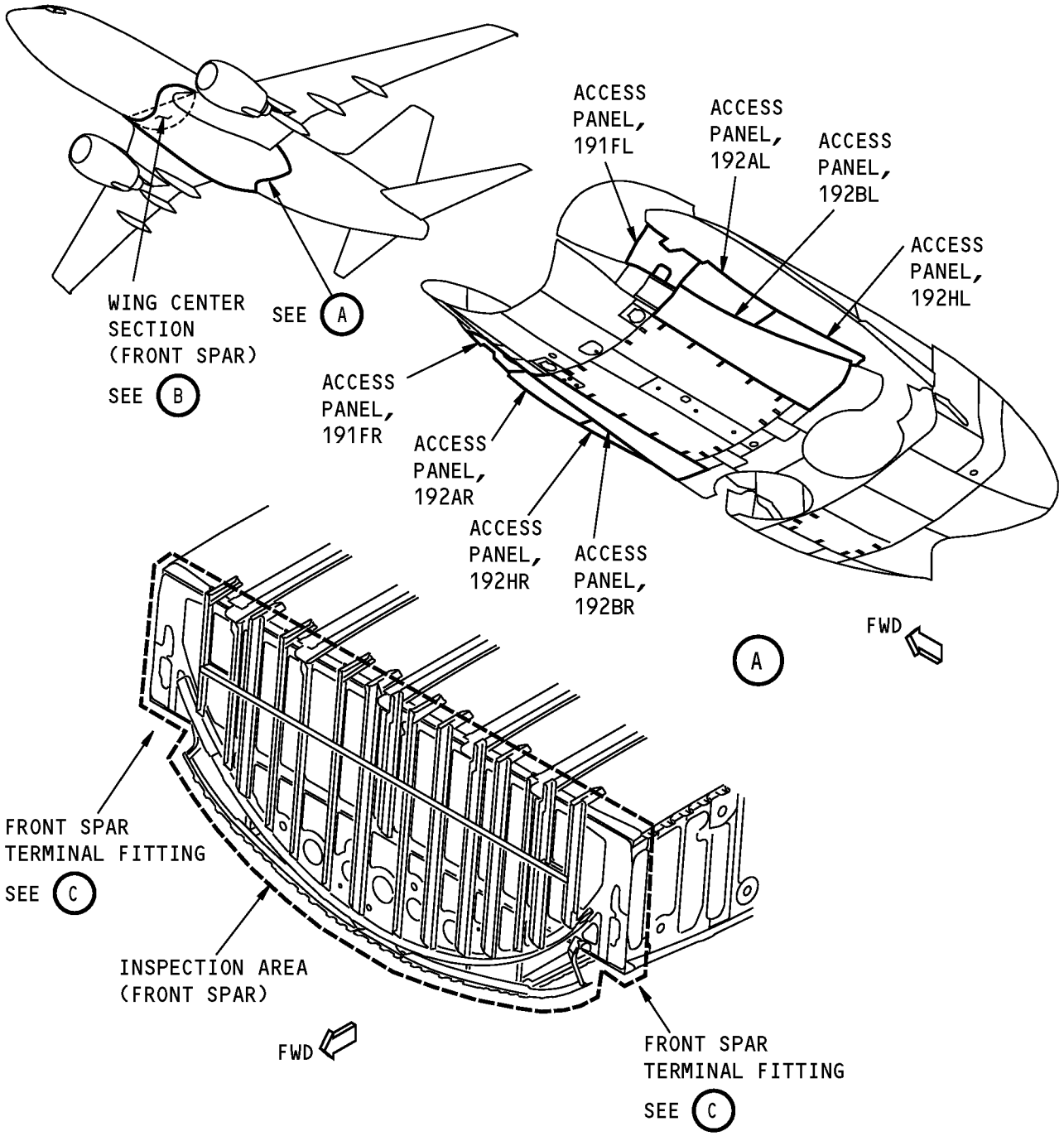
(1) This procedure is a scheduled maintenance task.

B. Inspection

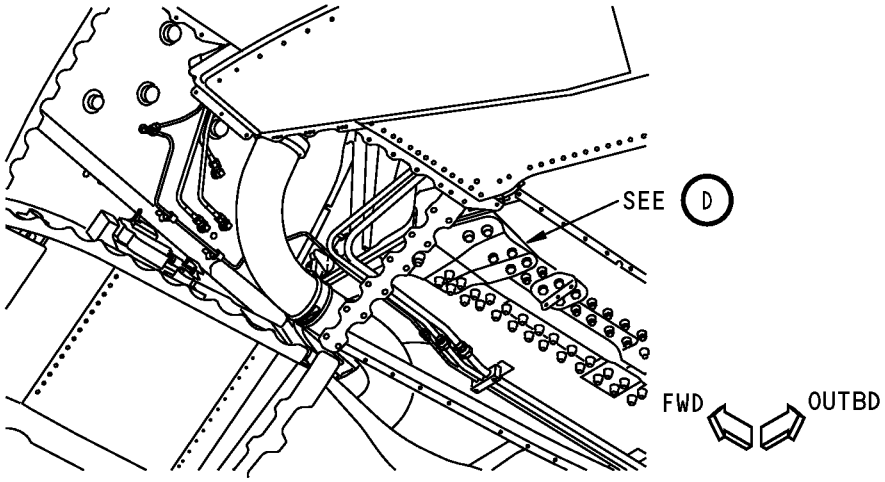
SUBTASK 57-05-03-210-005

(1) Do the inspection.

——————— END OF TASK ———————

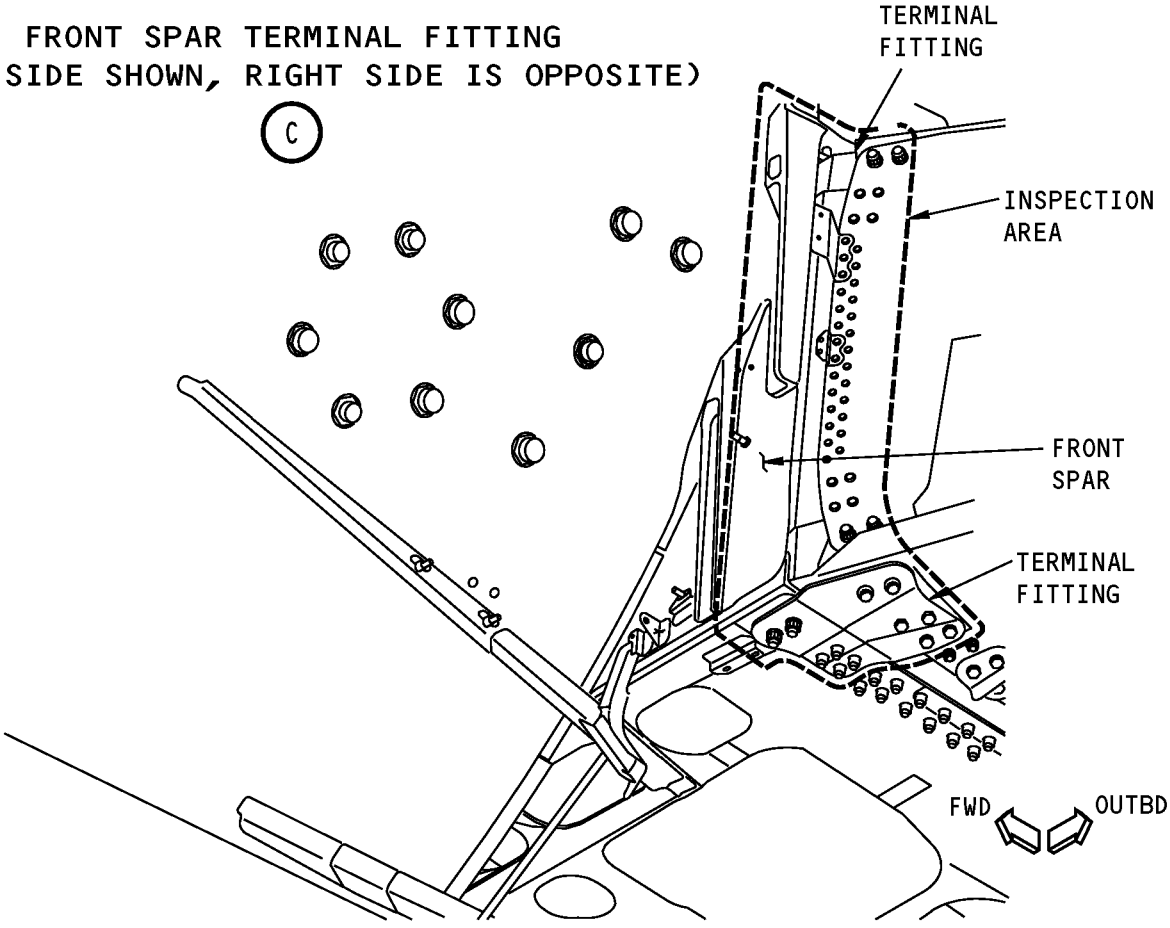


Wing Center Section
Figure 207 (Sheet 1 of 2)/57-05-03-990-823



FRONT SPAR TERMINAL FITTING
(LEFT SIDE SHOWN, RIGHT SIDE IS OPPOSITE)

C



TERMINAL FITTING (EXAMPLE)

D

Wing Center Section
Figure 207 (Sheet 2 of 2)/57-05-03-990-823

TASK 57-05-03-210-806

6. INTERNAL - GENERAL VISUAL: INTERNAL - LEFT OUTBOARD WING

A. General

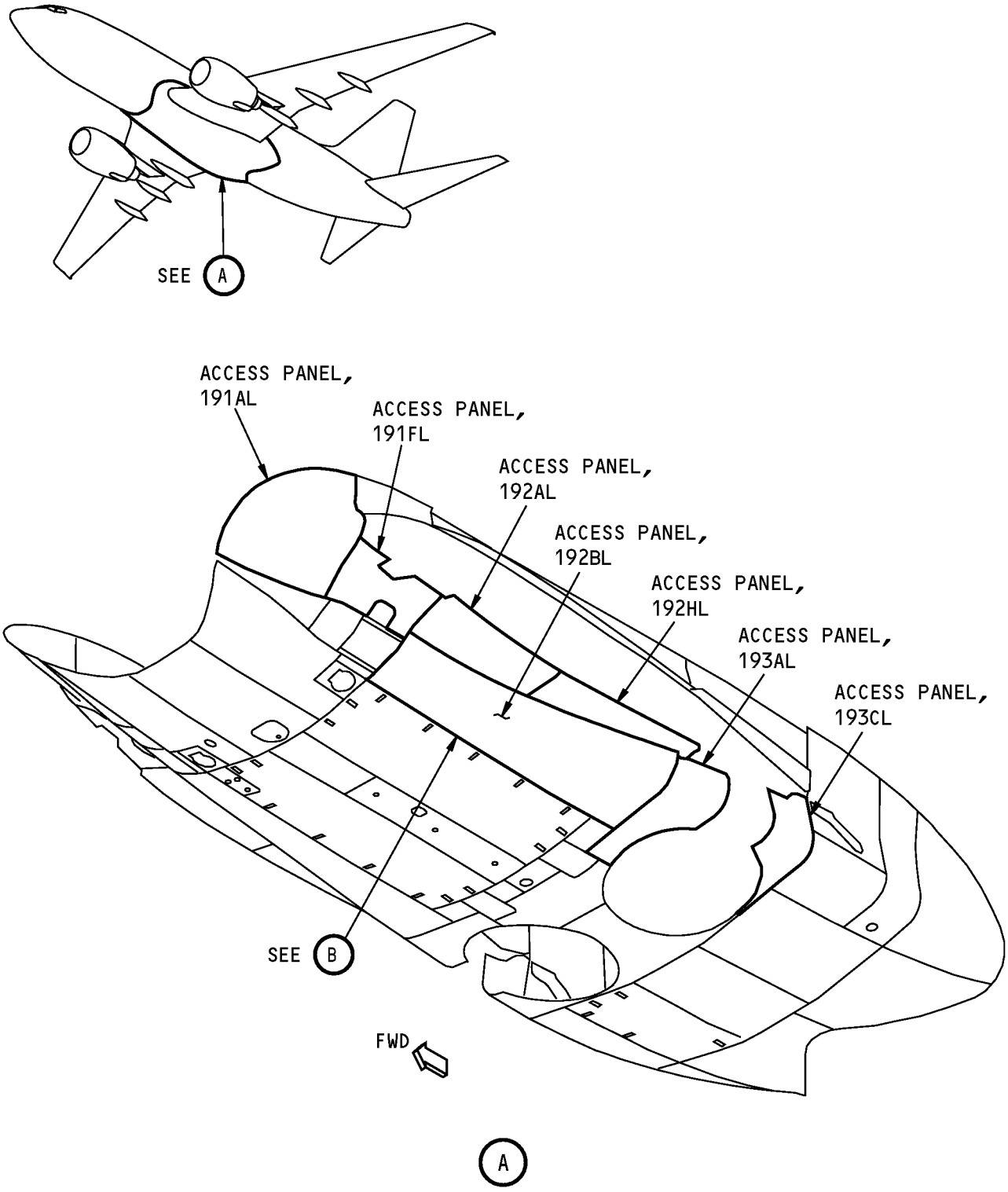
(1) This procedure is a scheduled maintenance task.

B. Inspection

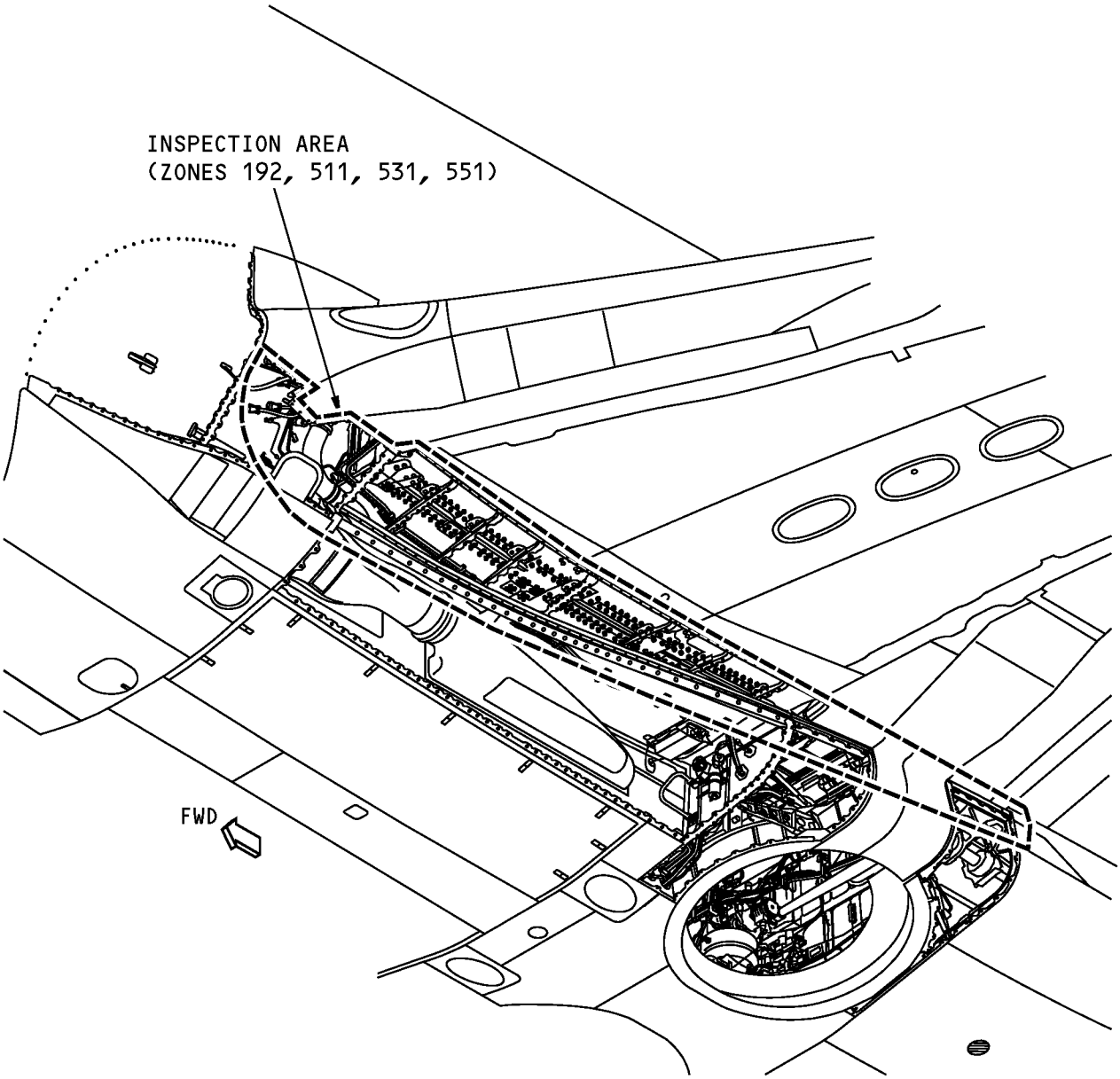
SUBTASK 57-05-03-210-006

(1) Do the inspection.

———————— END OF TASK ————————



Left Outboard Wing General Visual (Internal)
Figure 208 (Sheet 1 of 2)/57-05-03-990-838



B

Left Outboard Wing General Visual (Internal)
Figure 208 (Sheet 2 of 2)/57-05-03-990-838

TASK 57-05-03-210-807

7. INTERNAL - GENERAL VISUAL: INTERNAL - RIGHT OUTBOARD WING

A. General

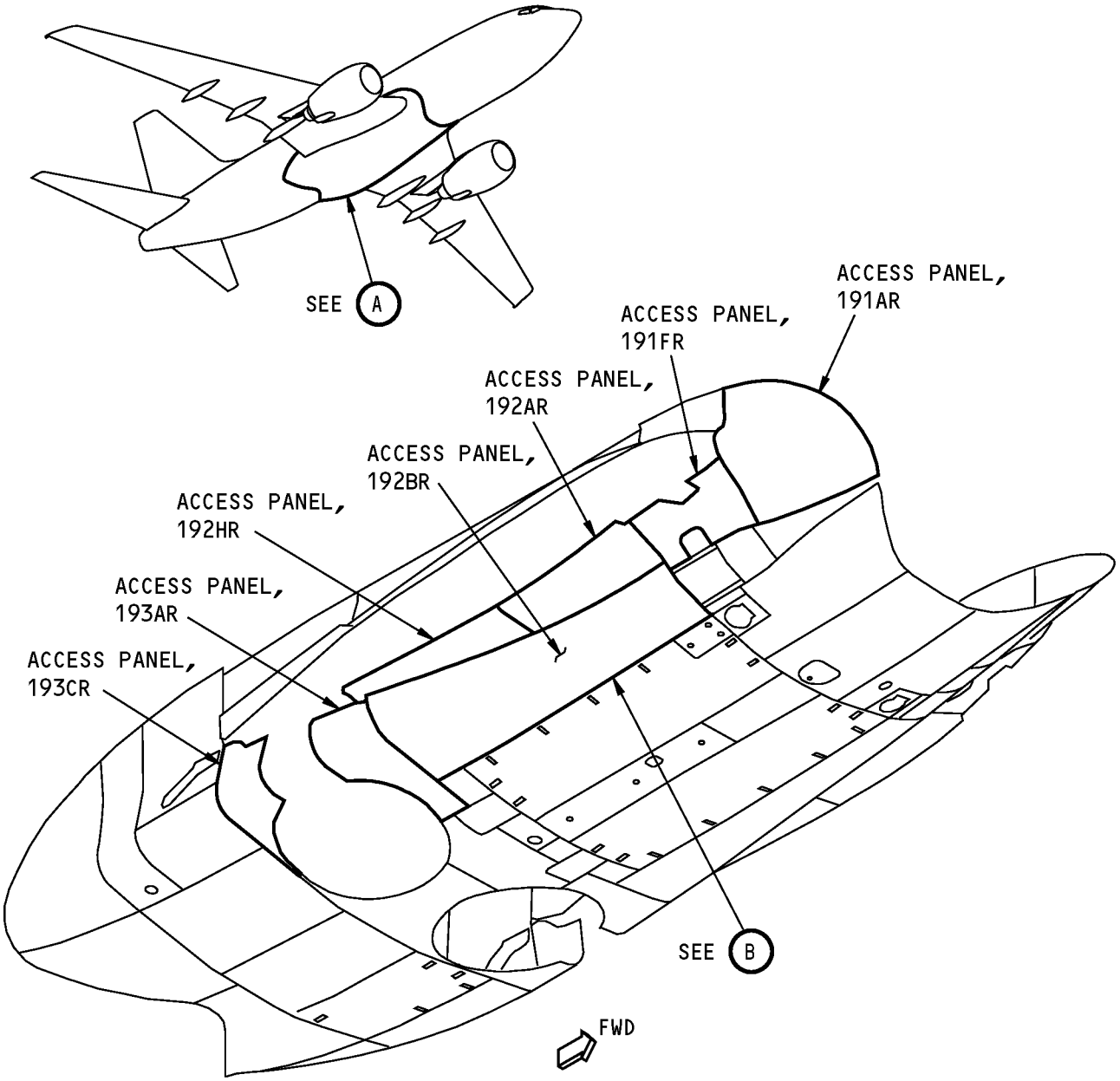
(1) This procedure is a scheduled maintenance task.

B. Inspection

SUBTASK 57-05-03-210-007

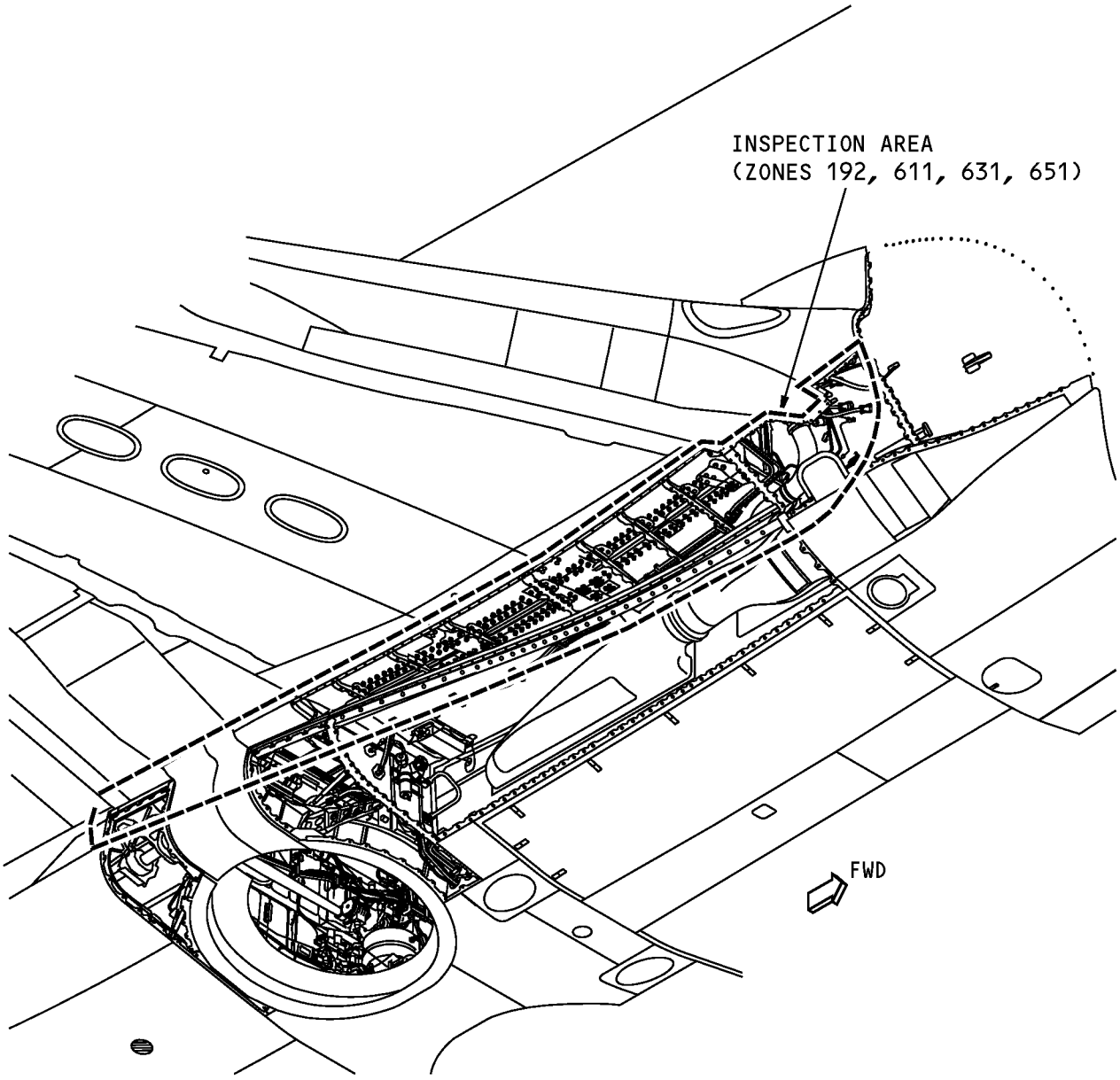
(1) Do the inspection.

———————— END OF TASK ————————



A

Right Outboard Wing General Visual (Internal)
Figure 209 (Sheet 1 of 2)/57-05-03-990-839



B

Right Outboard Wing General Visual (Internal)
Figure 209 (Sheet 2 of 2)/57-05-03-990-839

TASK 57-05-03-210-808

8. INTERNAL - GENERAL VISUAL: INTERNAL - LEFT OUTBOARD WING

A. General

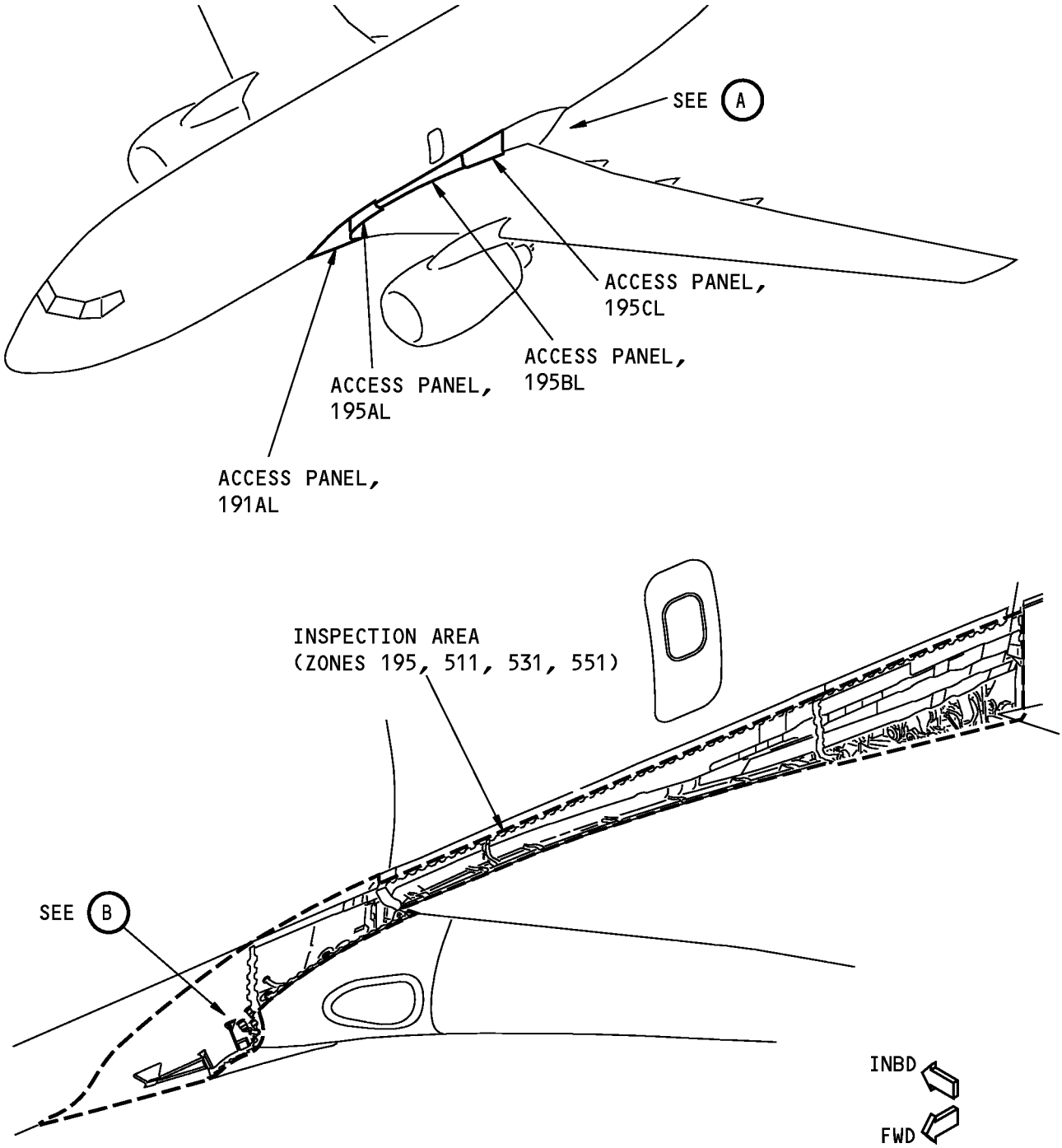
(1) This procedure is a scheduled maintenance task.

B. Inspection

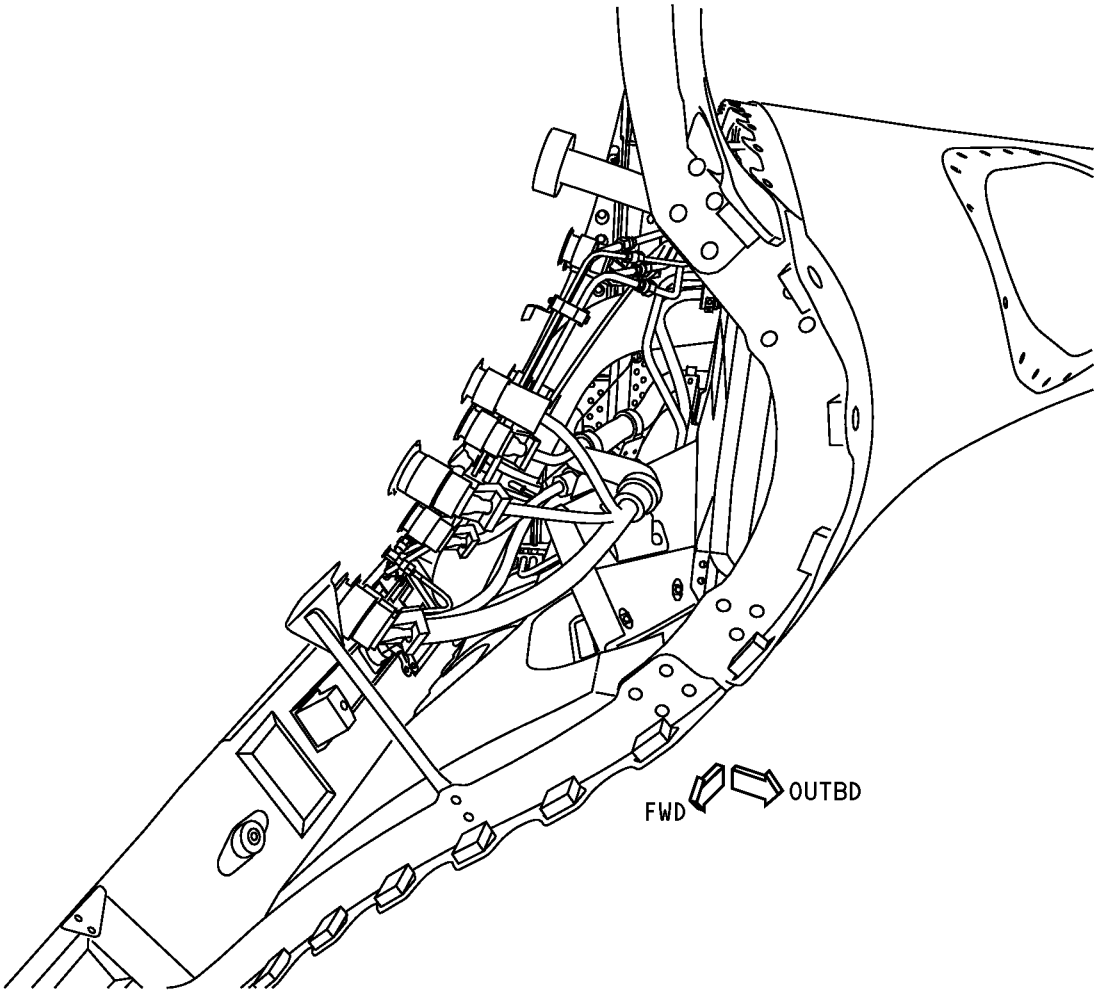
SUBTASK 57-05-03-210-008

(1) Do the inspection.

———————— END OF TASK ————————



Left Outboard Wing - Wing-to-Body Fairing General Visual (Internal)
Figure 210 (Sheet 1 of 2)/57-05-03-990-833



(ACCESS PANEL, 191AL REMOVED)

B

Left Outboard Wing - Wing-to-Body Fairing General Visual (Internal)
Figure 210 (Sheet 2 of 2)/57-05-03-990-833

TASK 57-05-03-210-809

9. INTERNAL - GENERAL VISUAL: INTERNAL - RIGHT OUTBOARD WING

A. General

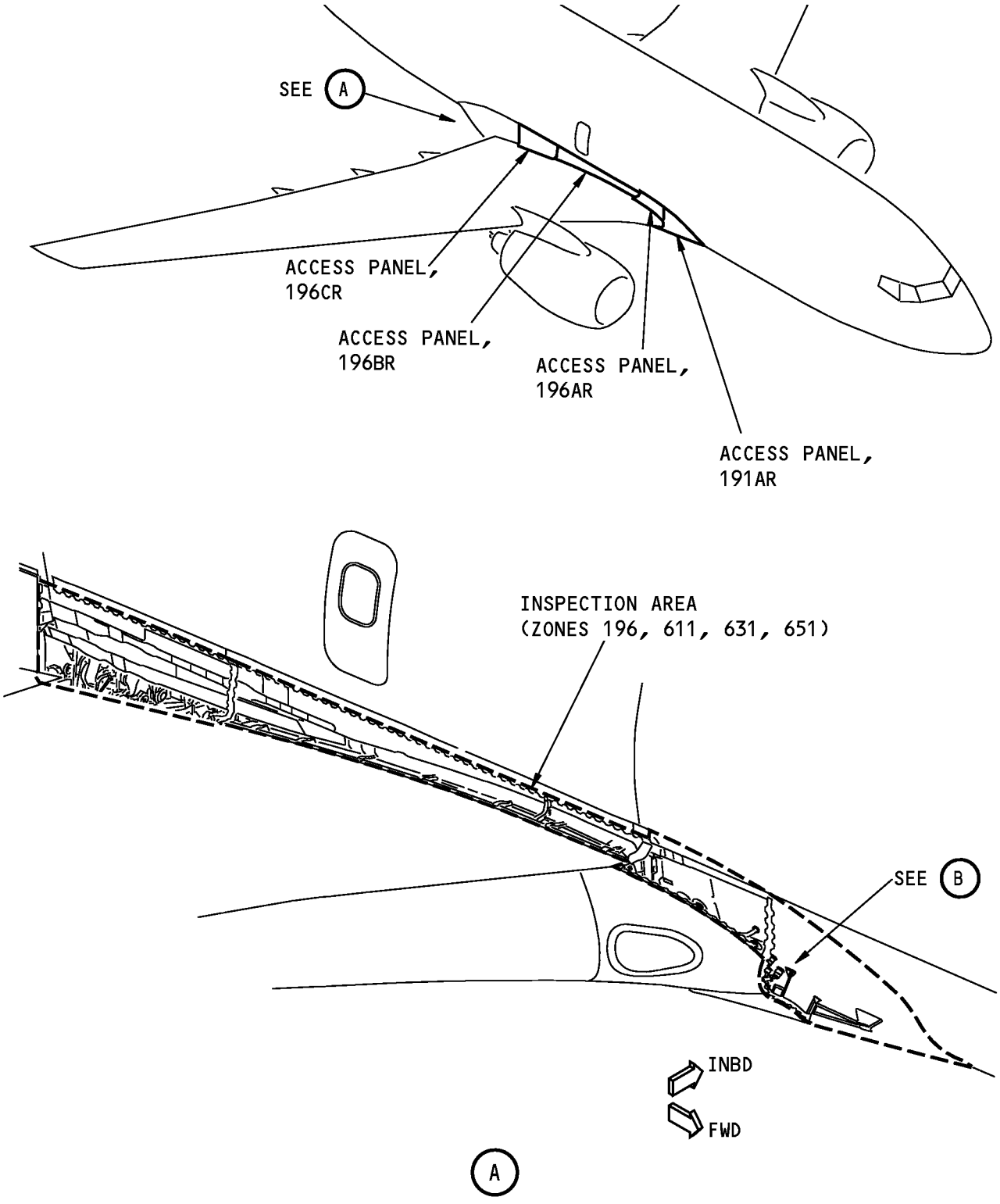
(1) This procedure is a scheduled maintenance task.

B. Inspection

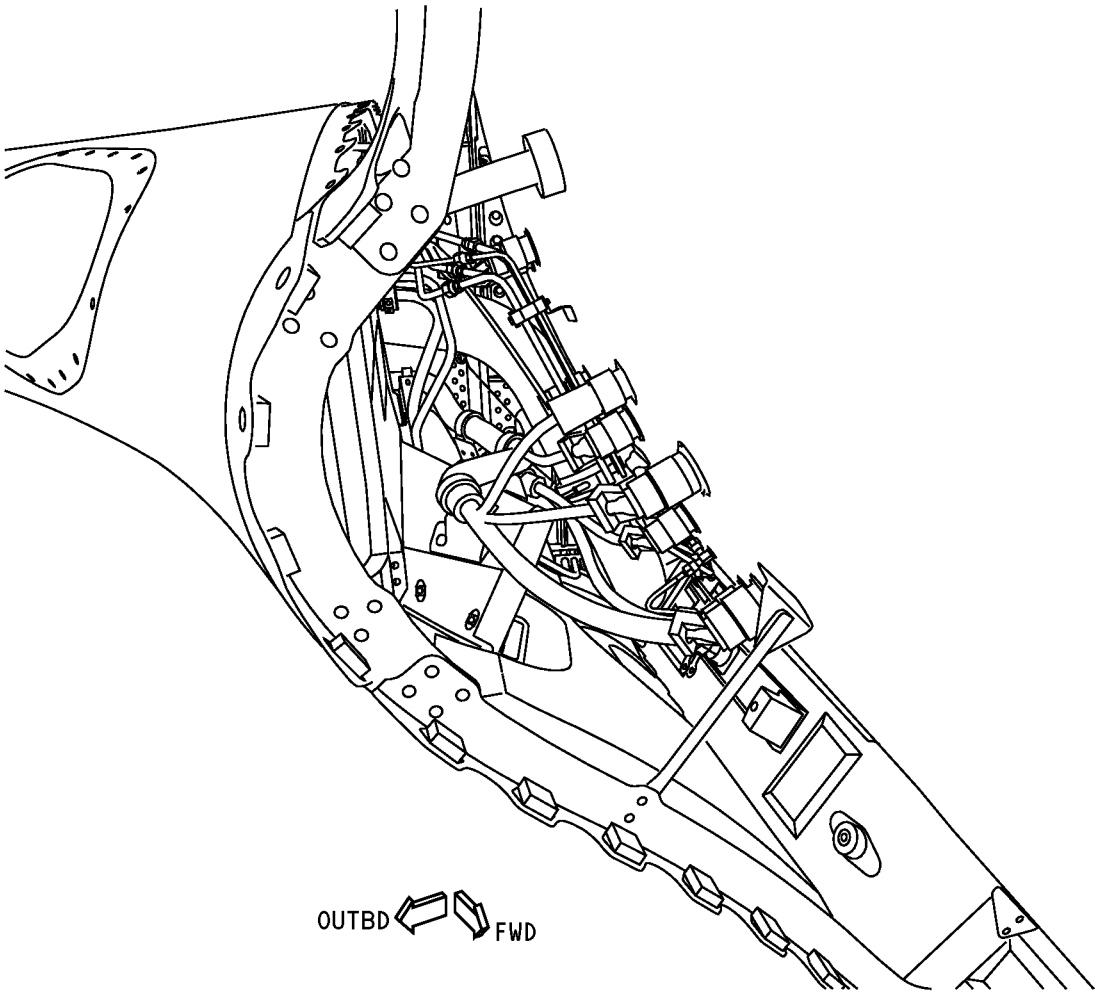
SUBTASK 57-05-03-210-009

(1) Do the inspection.

——————— END OF TASK ———————



Right Outboard Wing - Wing-to-Body Fairing General Visual (Internal)
Figure 211 (Sheet 1 of 2)/57-05-03-990-834



(ACCESS PANEL, 191AR REMOVED)

B

Right Outboard Wing - Wing-to-Body Fairing General Visual (Internal)
Figure 211 (Sheet 2 of 2)/57-05-03-990-834

TASK 57-05-03-210-810

10. INTERNAL - GENERAL VISUAL: INTERNAL - WING CENTER SECTION

A. General

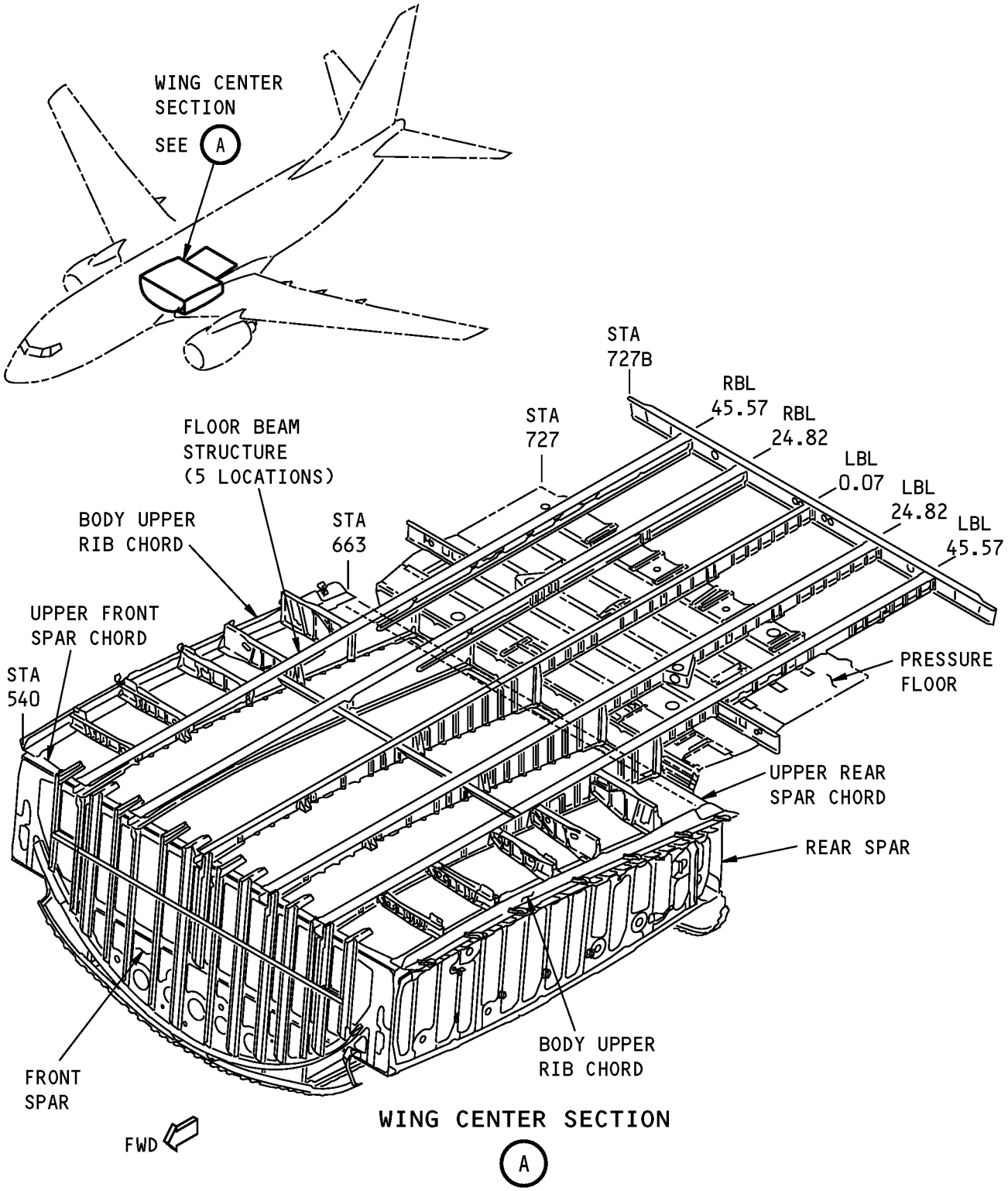
(1) This procedure is a scheduled maintenance task.

B. Inspection

SUBTASK 57-05-03-210-010

(1) Do the inspection.

———————— END OF TASK ————————



INTERNAL-GENERAL VISUAL: INTERNAL-WING CENTER SECTION
Figure 212/57-05-03-990-860

TASK 57-05-03-210-811

11. INTERNAL - GENERAL VISUAL: INTERNAL - LEFT NACELLE SUPPORT FITTINGS

(Figure 213)

A. General

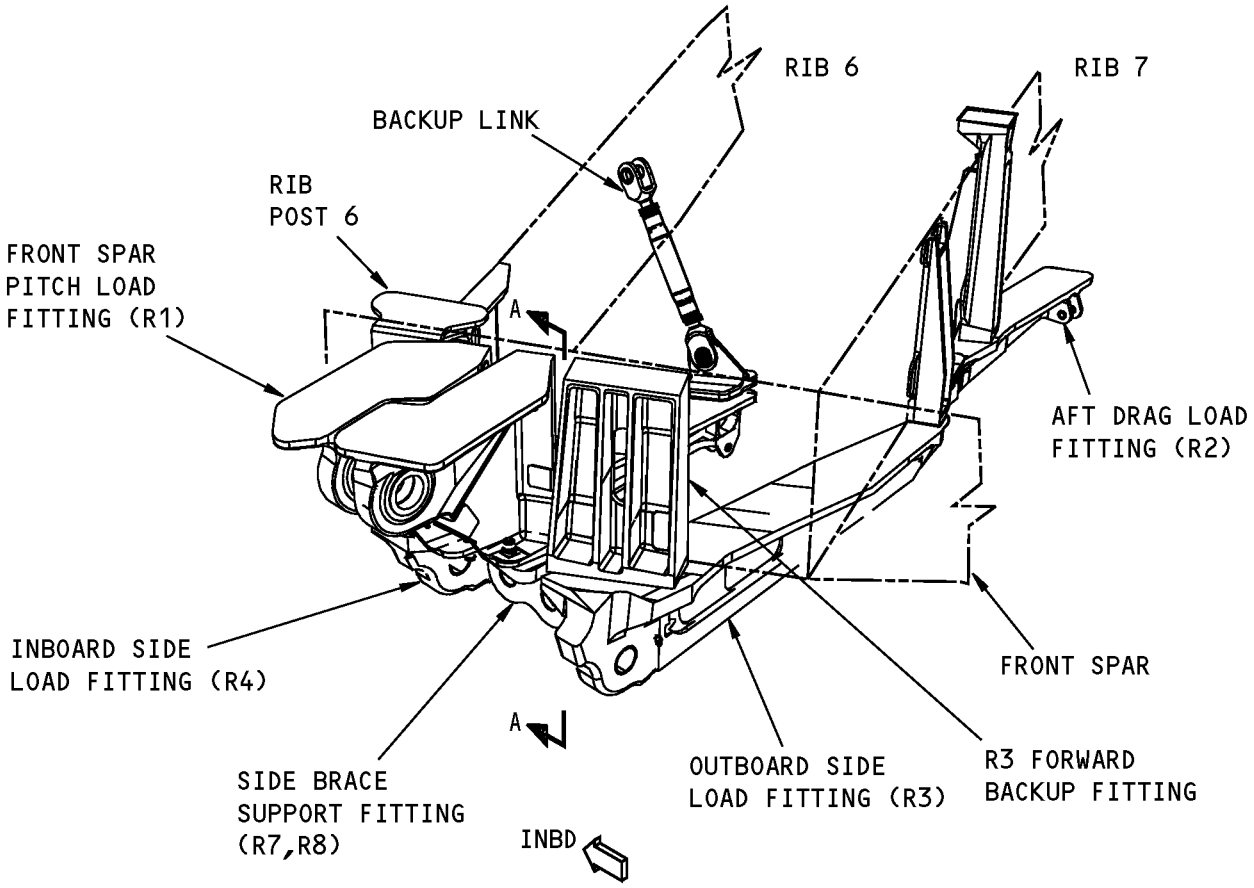
(1) This procedure is a scheduled maintenance task.

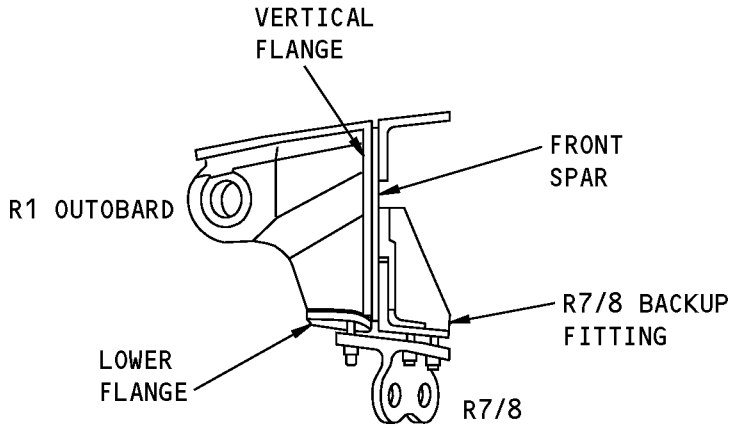
B. Inspection

SUBTASK 57-05-03-210-011

(1) Do the inspection.

——————— END OF TASK ———————





A–A

Wing - Left Nacelle Support Fittings
Figure 213/57-05-03-990-801

TASK 57-05-03-210-812

12. INTERNAL - GENERAL VISUAL: INTERNAL - RIGHT NACELLE SUPPORT FITTINGS

(Figure 214)

A. General

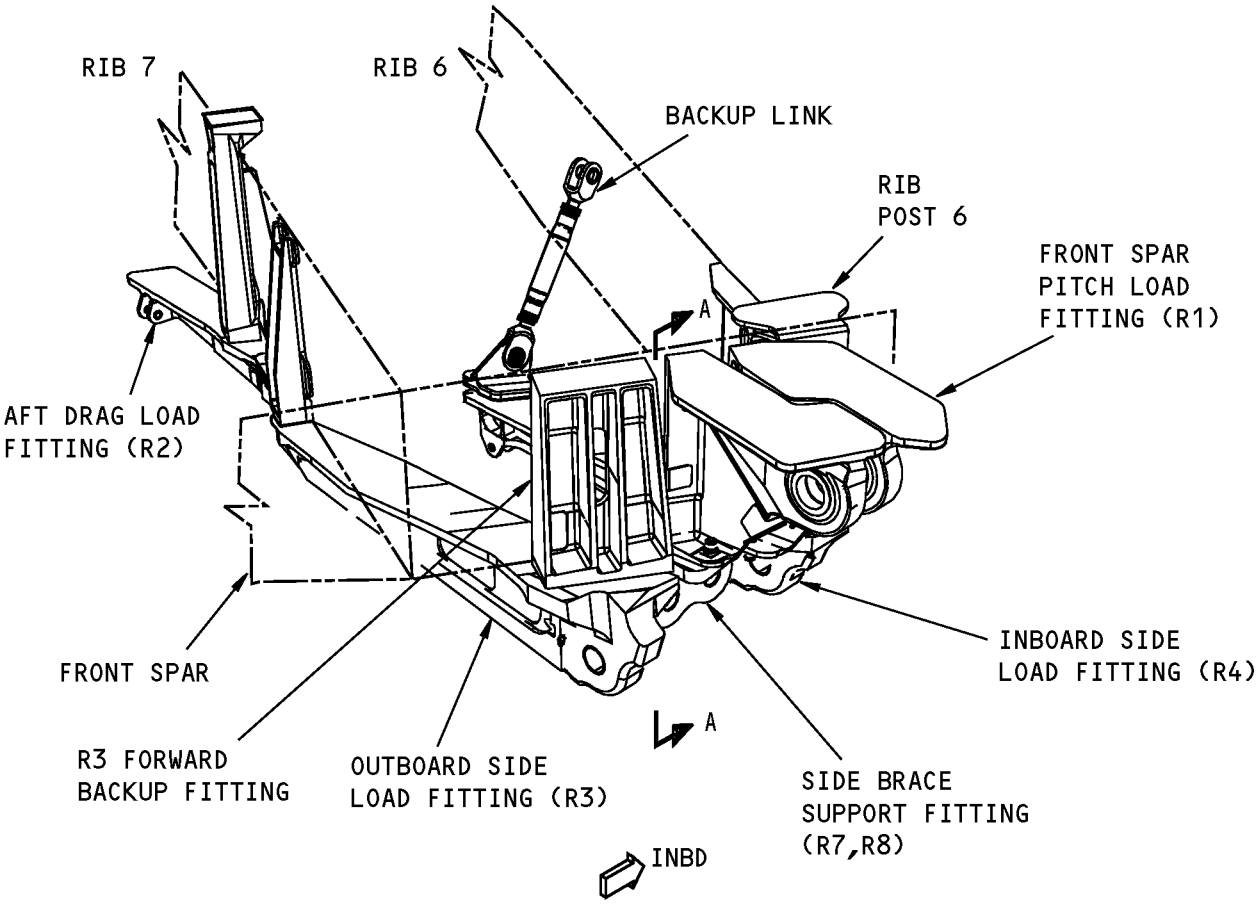
(1) This procedure is a scheduled maintenance task.

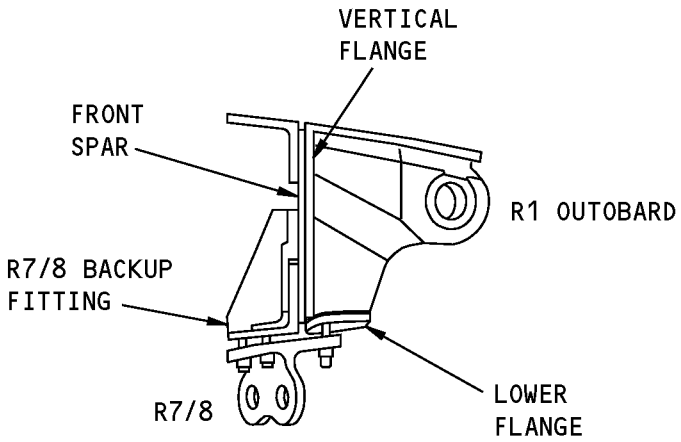
B. Inspection

SUBTASK 57-05-03-210-012

(1) Do the inspection.

——————— END OF TASK ———————





A–A

Wing - Right Nacelle Support Fittings
Figure 214/57-05-03-990-802

TASK 57-05-03-210-813

13. INTERNAL - GENERAL VISUAL: INTERNAL - LEFT OUTBOARD WING LOWER SURFACE

(Figure 215)

A. General

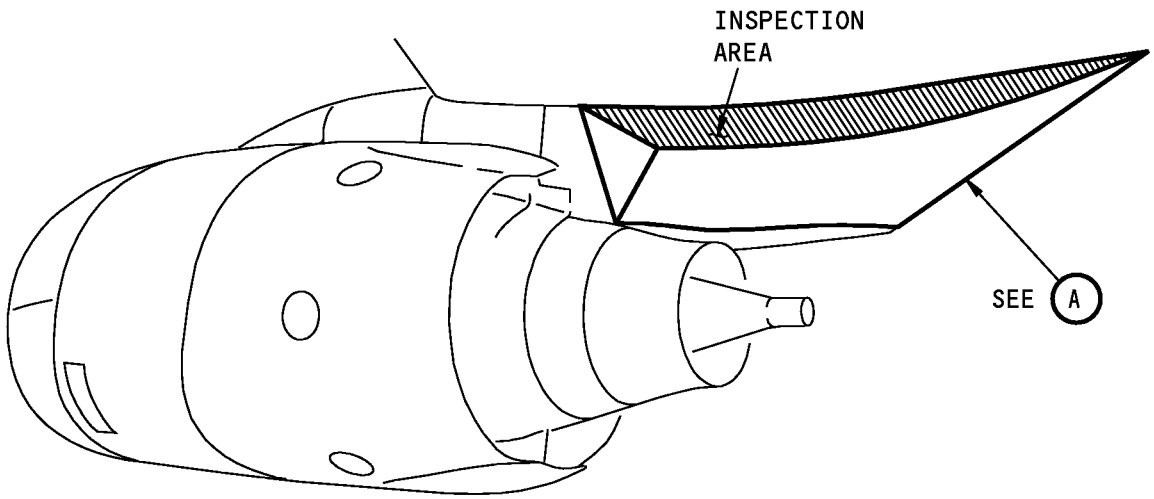
(1) This procedure is a scheduled maintenance task.

B. Inspection

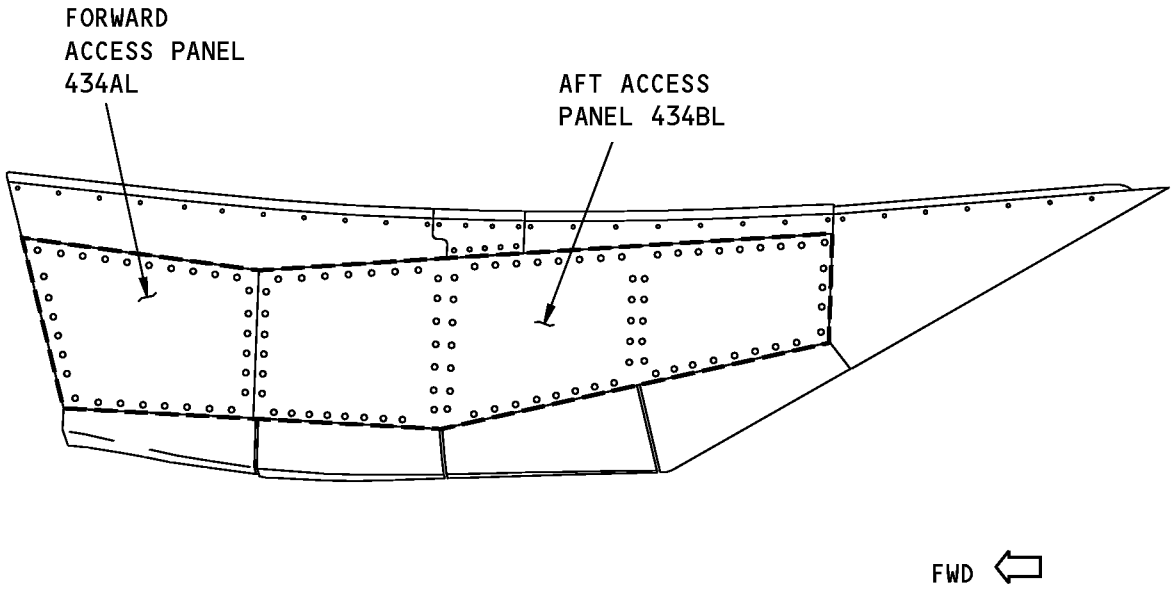
SUBTASK 57-05-03-210-013

(1) Do the inspection.

——————— END OF TASK ———————



LEFT STRUT



AFT FAIRING

A

K56390 S0006584754_V2

Left Aft Fairing Access Panels To Lower Wing Skin
Figure 215/57-05-03-990-803

TASK 57-05-03-210-814

14. INTERNAL - GENERAL VISUAL: INTERNAL - RIGHT OUTBOARD WING LOWER SURFACE

(Figure 216)

A. General

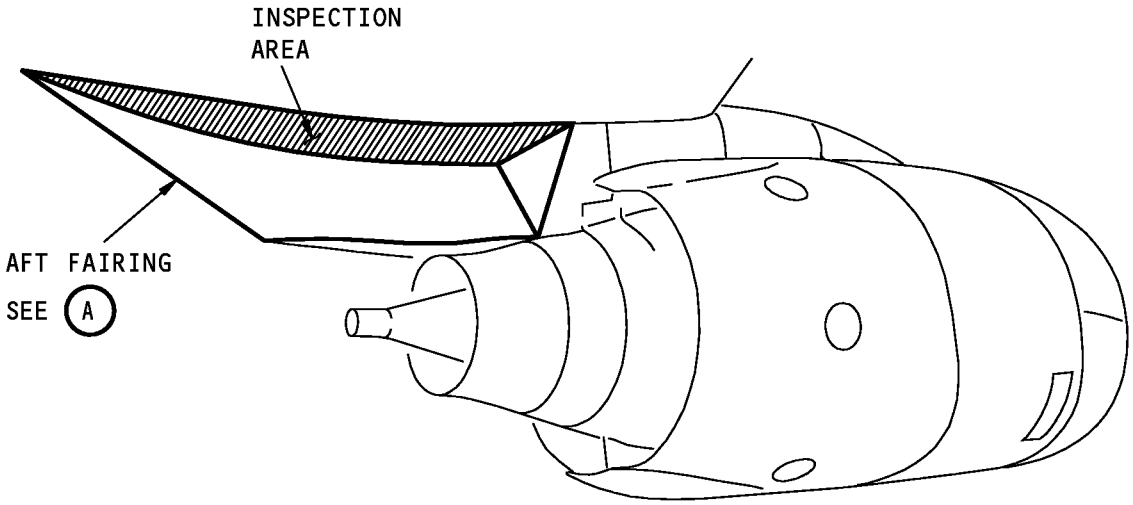
(1) This procedure is a scheduled maintenance task.

B. Inspection

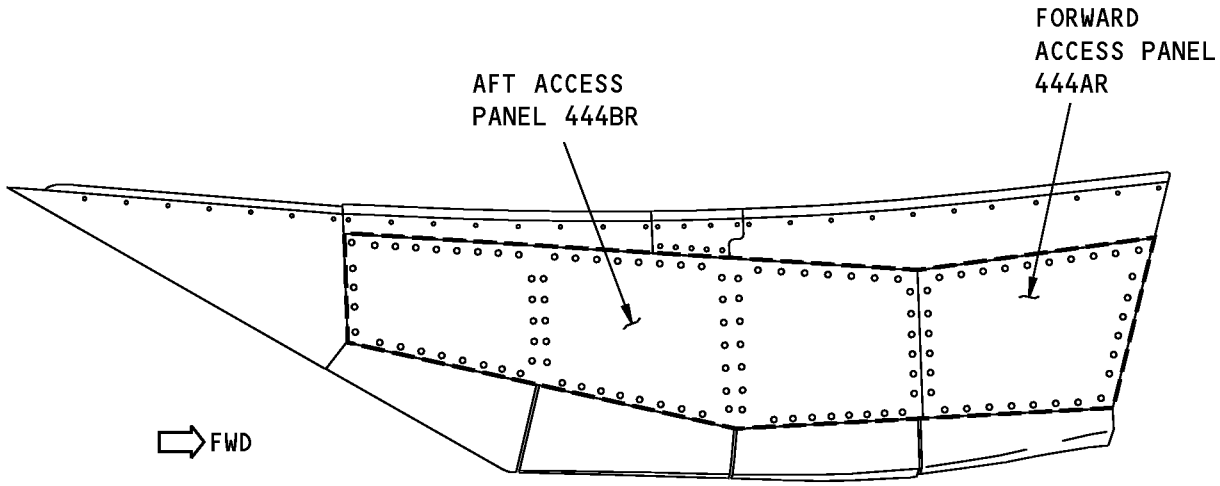
SUBTASK 57-05-03-210-014

(1) Do the inspection.

——————— END OF TASK ———————



RIGHT STRUT



AFT FAIRING
A

K56373 S0006584757_V2

Right Aft Fairing Access Panels To Lower Wing Skin
Figure 216/57-05-03-990-804

TASK 57-05-03-210-815

15. INTERNAL - GENERAL VISUAL: INTERNAL - LEFT OUTBOARD WING FRONT SPAR

A. General

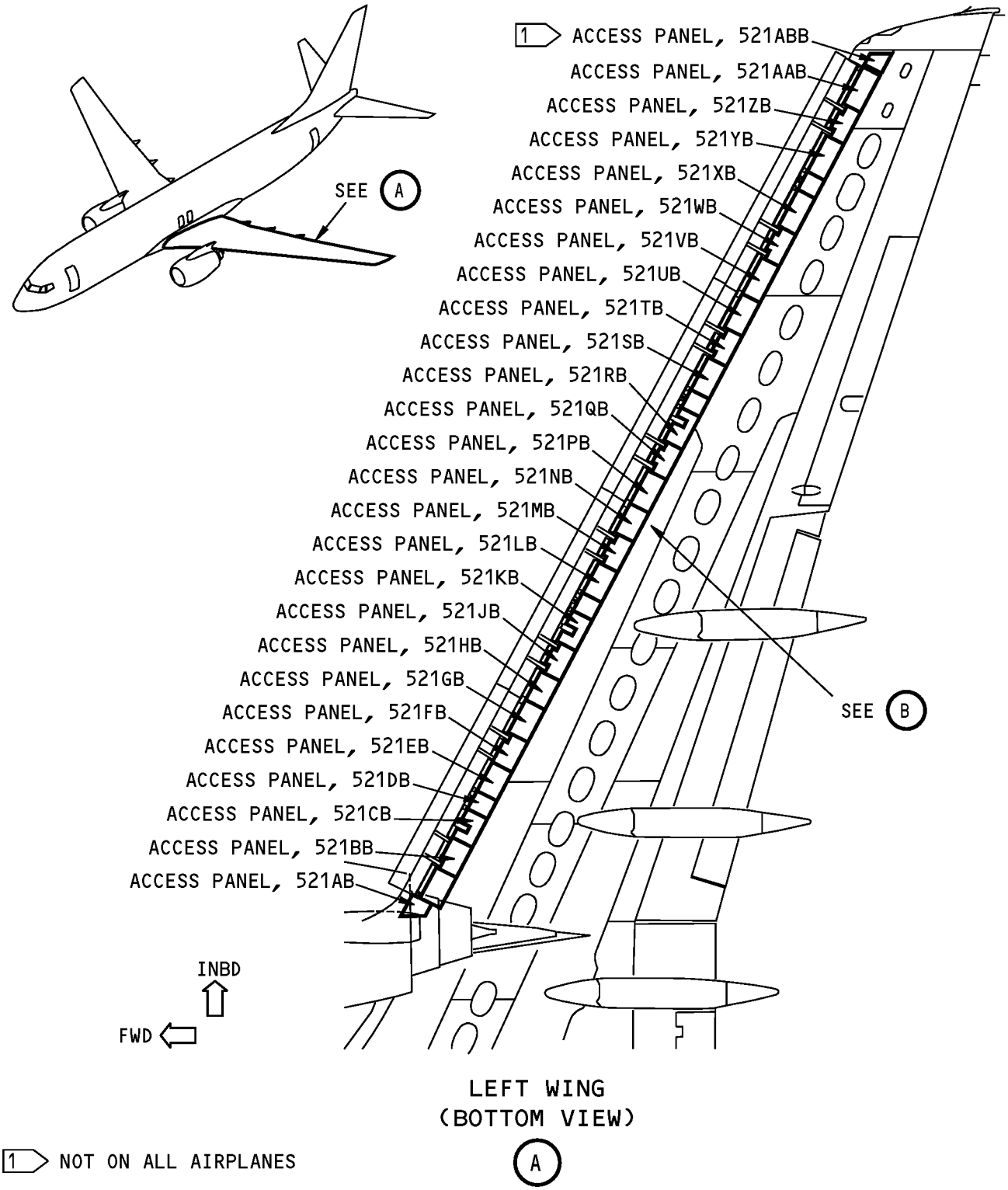
(1) This procedure is a scheduled maintenance task.

B. Inspection

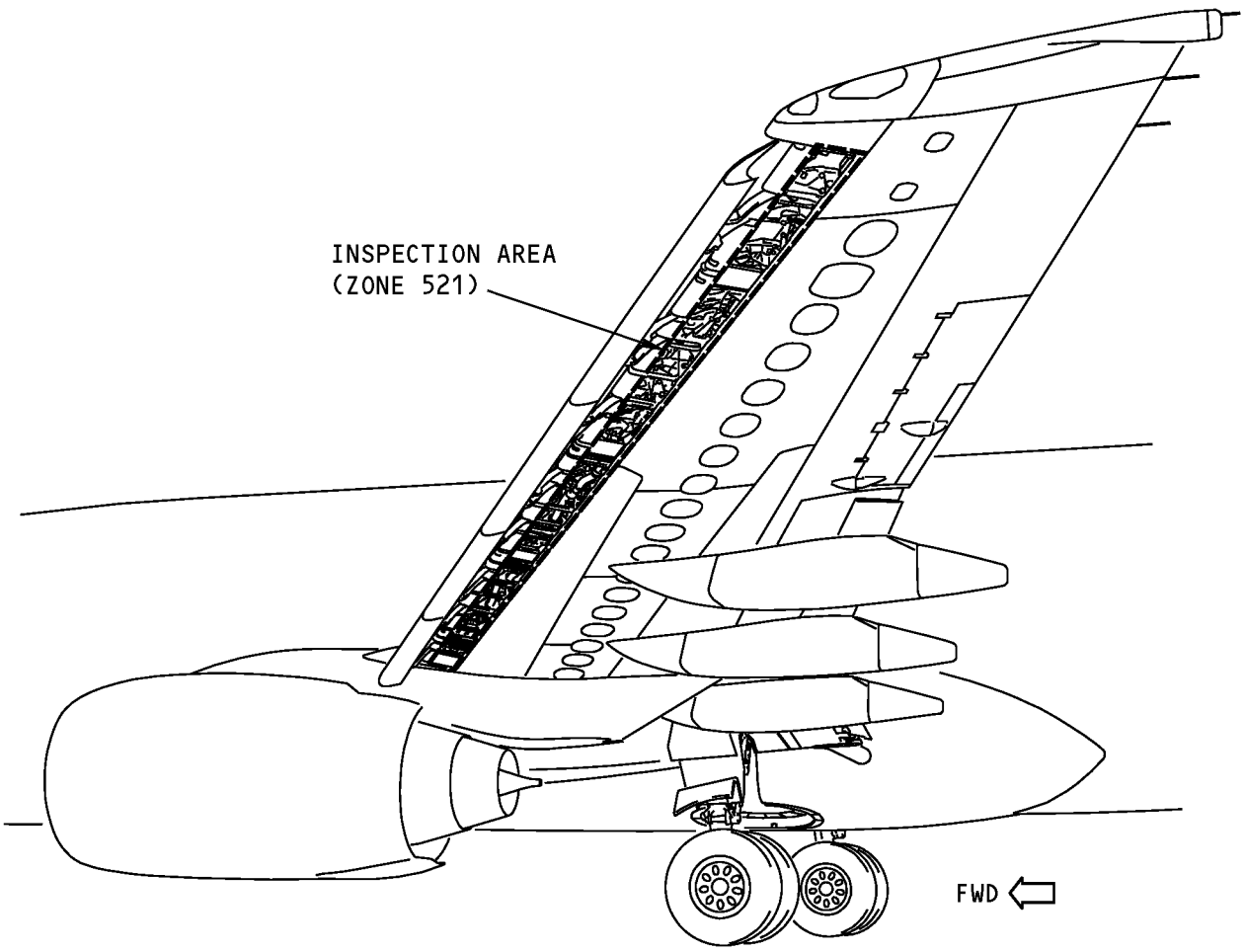
SUBTASK 57-05-03-210-015

(1) Do the inspection.

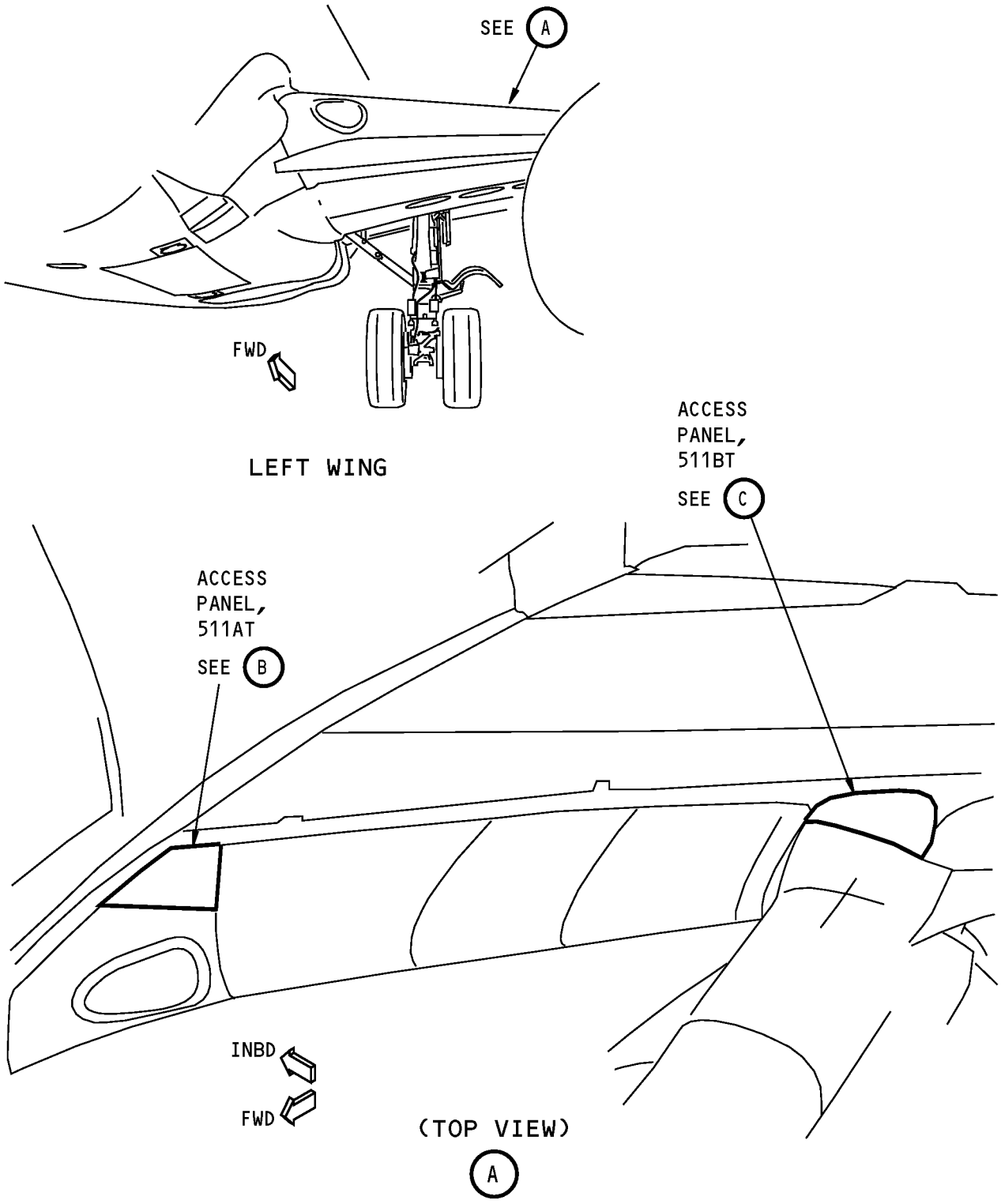
———————— END OF TASK ————————



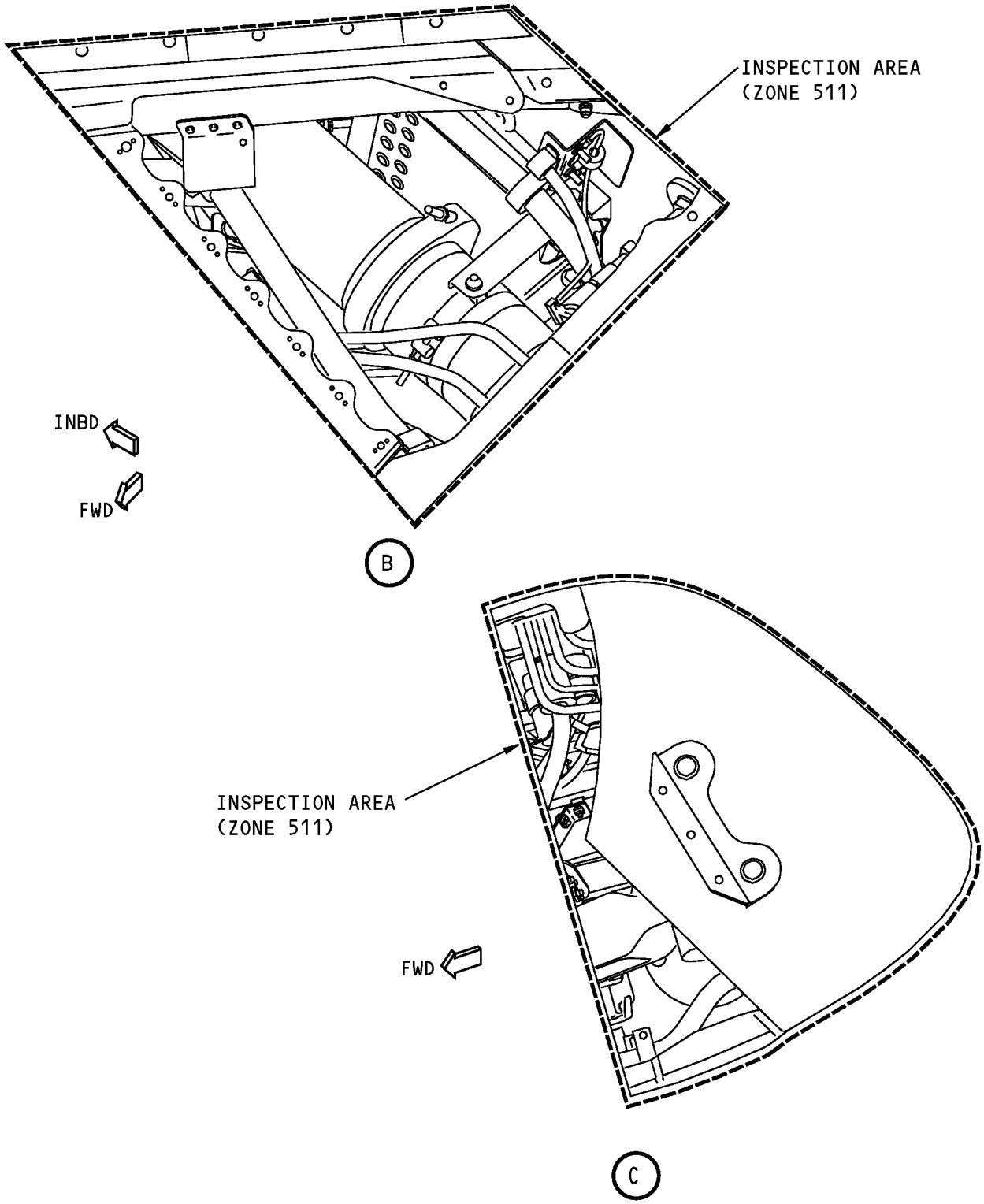
Leading Edge to Front Spar (Outboard of Nacelle Strut) Left Wing - General Visual (Internal)
Figure 217 (Sheet 1 of 2)/57-05-03-990-814



Leading Edge to Front Spar (Outboard of Nacelle Strut) Left Wing - General Visual (Internal)
Figure 217 (Sheet 2 of 2)/57-05-03-990-814



Leading Edge to Front Spar (Inboard of Nacelle Strut) Left Wing - General Visual (Internal)
Figure 218 (Sheet 1 of 2)/57-05-03-990-815



Leading Edge to Front Spar (Inboard of Nacelle Strut) Left Wing - General Visual (Internal)
Figure 218 (Sheet 2 of 2)/57-05-03-990-815

TASK 57-05-03-210-816

16. INTERNAL - GENERAL VISUAL: INTERNAL - RIGHT OUTBOARD WING FRONT SPAR

A. General

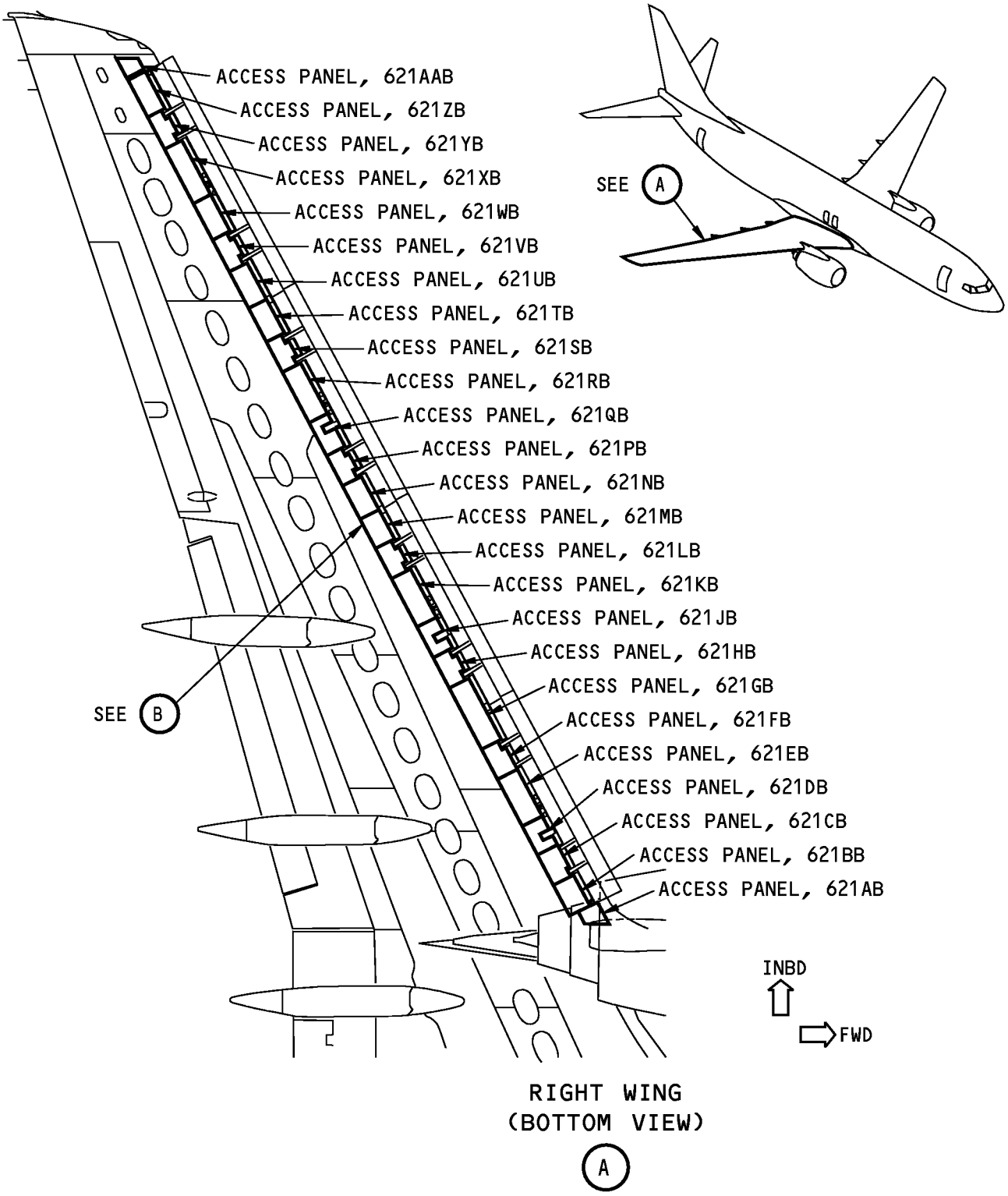
(1) This procedure is a scheduled maintenance task.

B. Inspection

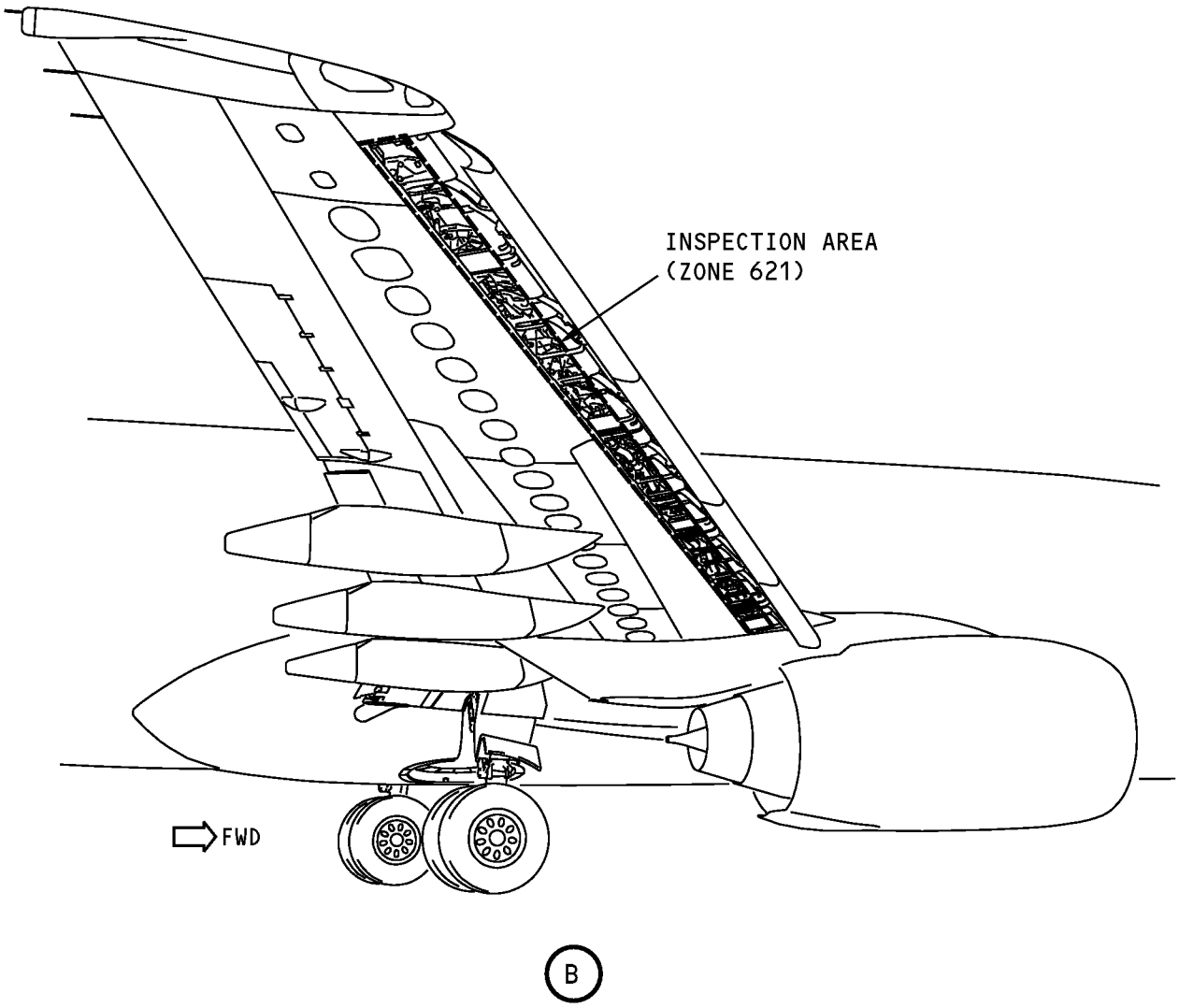
SUBTASK 57-05-03-210-016

(1) Do the inspection.

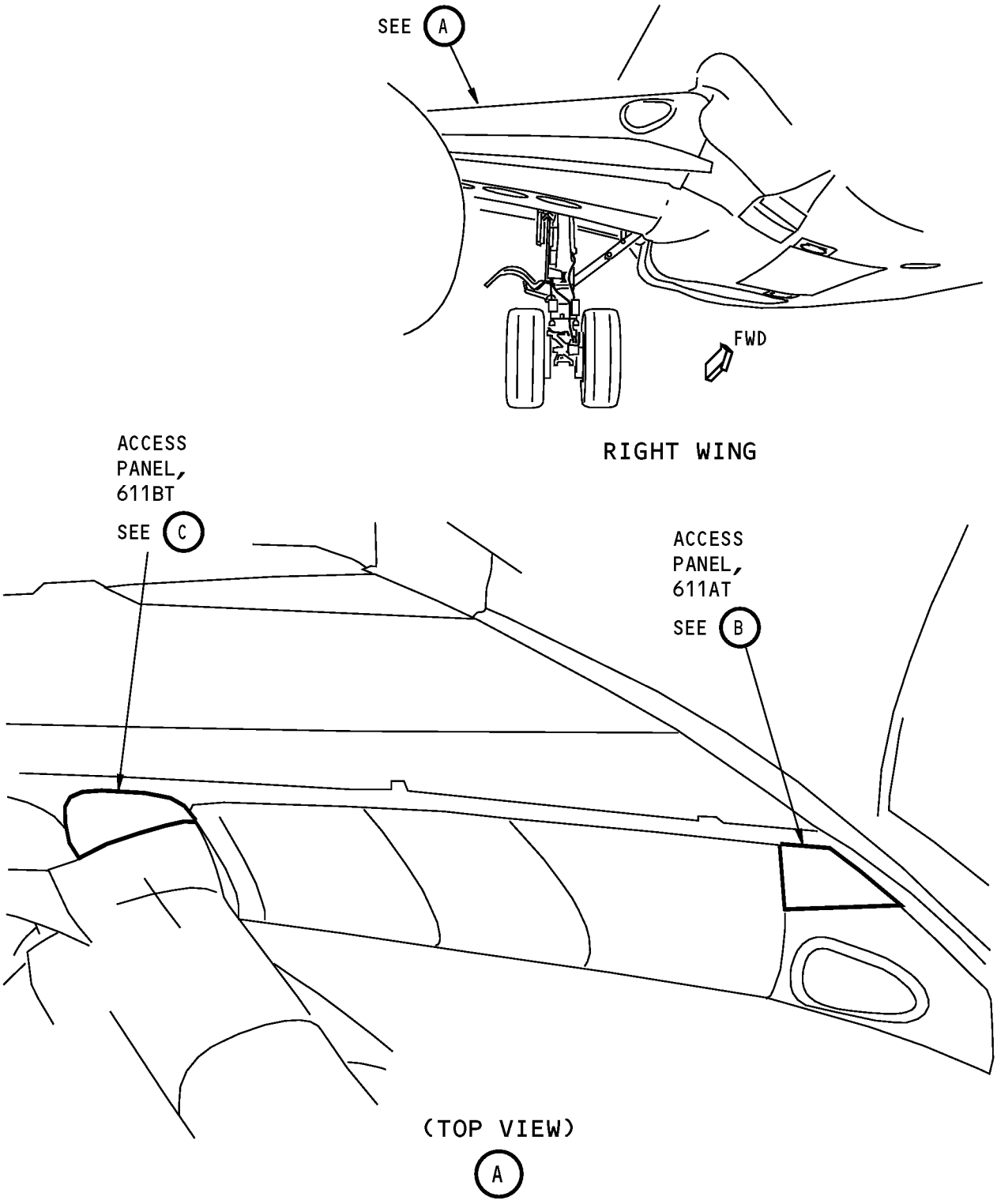
———————— END OF TASK ————————



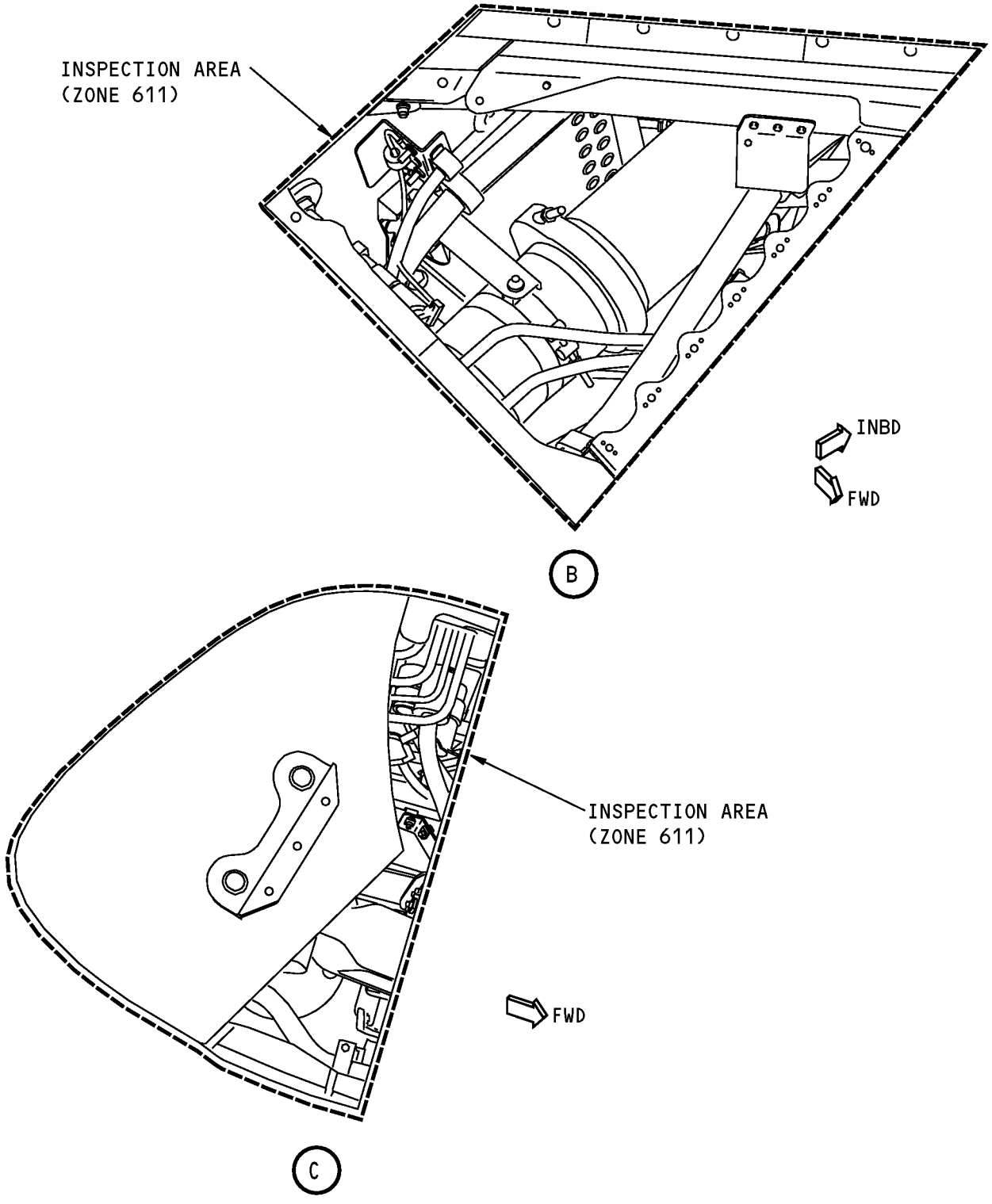
Leading Edge to Front Spar (Outboard of Nacelle Strut) Right Wing - General Visual (Internal)
Figure 219 (Sheet 1 of 2)/57-05-03-990-816



Leading Edge to Front Spar (Outboard of Nacelle Strut) Right Wing - General Visual (Internal)
Figure 219 (Sheet 2 of 2)/57-05-03-990-816



Leading Edge to Front Spar (Inboard of Nacelle Strut) Right Wing - General Visual (Internal)
Figure 220 (Sheet 1 of 2)/57-05-03-990-817



Leading Edge to Front Spar (Inboard of Nacelle Strut) Right Wing - General Visual (Internal)
Figure 220 (Sheet 2 of 2)/57-05-03-990-817

TASK 57-05-03-210-817

17. INTERNAL - GENERAL VISUAL: INTERNAL - LEFT OUTBOARD WING LEADING EDGE STRUCTURE

A. General

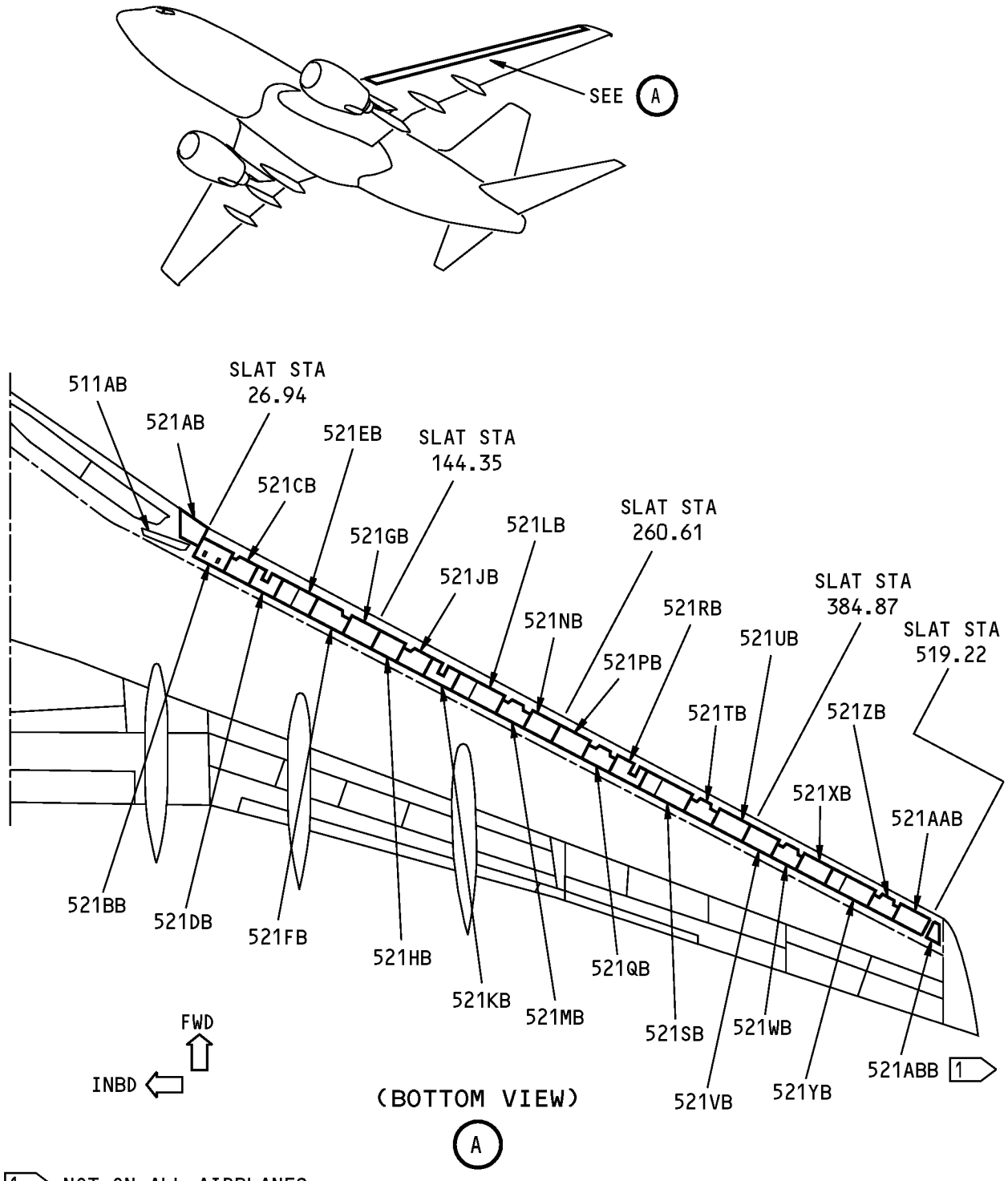
(1) This procedure is a scheduled maintenance task.

B. Inspection

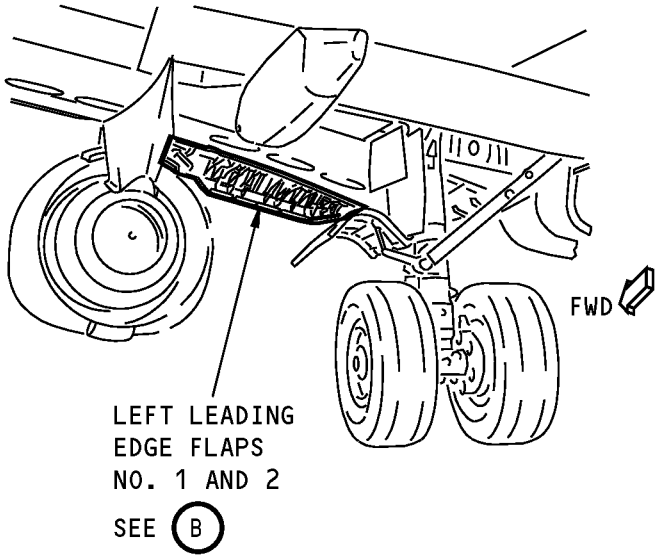
SUBTASK 57-05-03-210-017

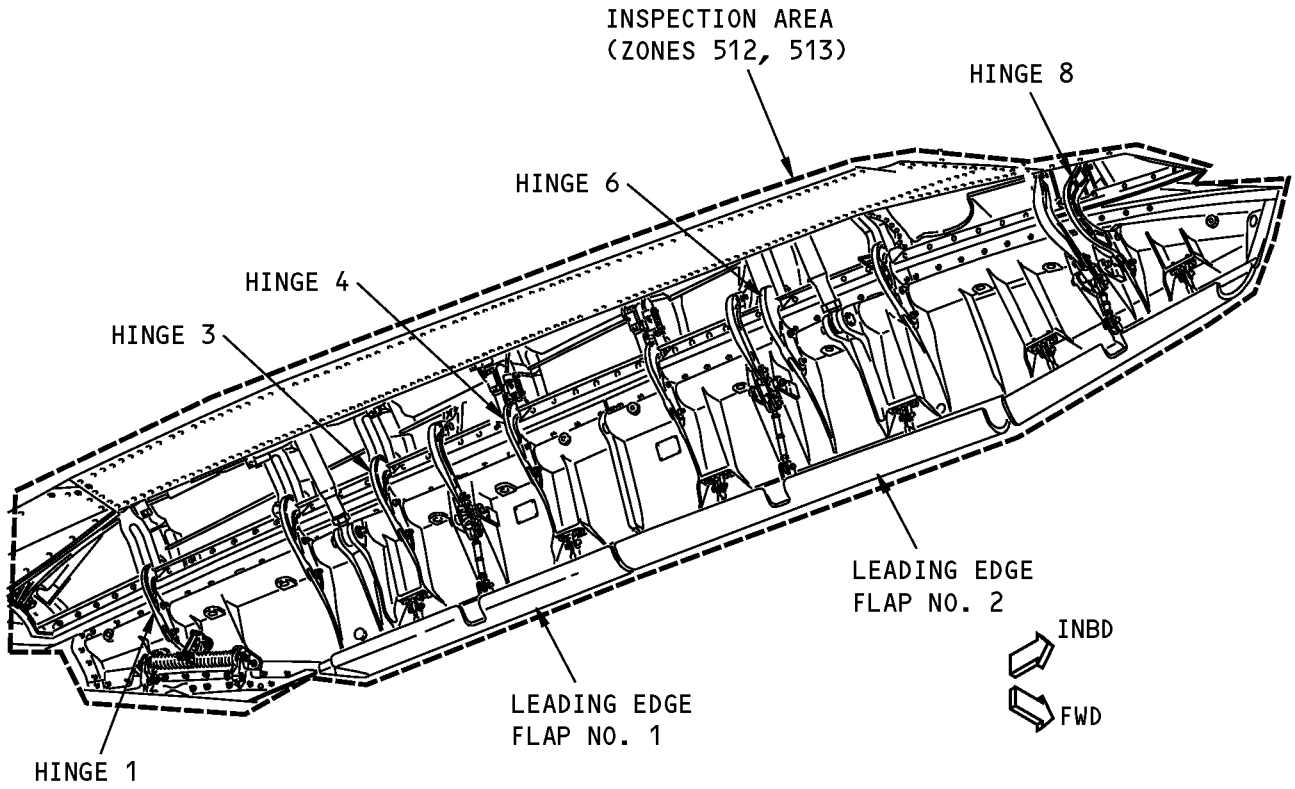
(1) Do the inspection.

———————— END OF TASK ————————



INTERNAL-GENERAL VISUAL: INTERNAL-LEFT OUTBOARD WING LEADING EDGE STRUCTURE
Figure 221 (Sheet 1 of 4)/57-05-03-990-850

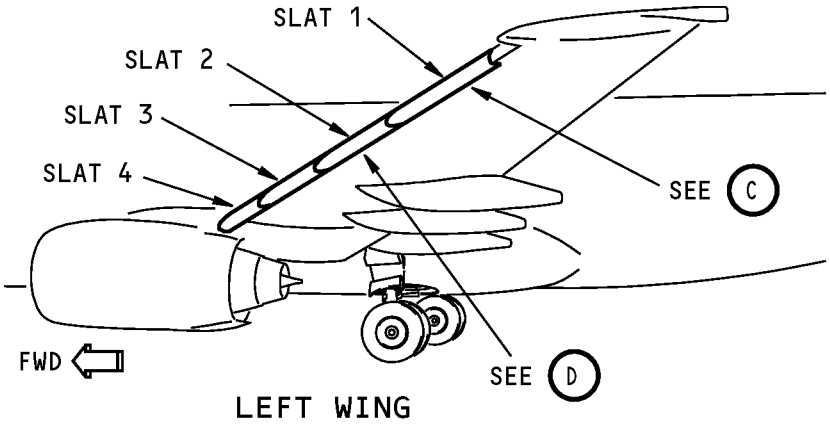


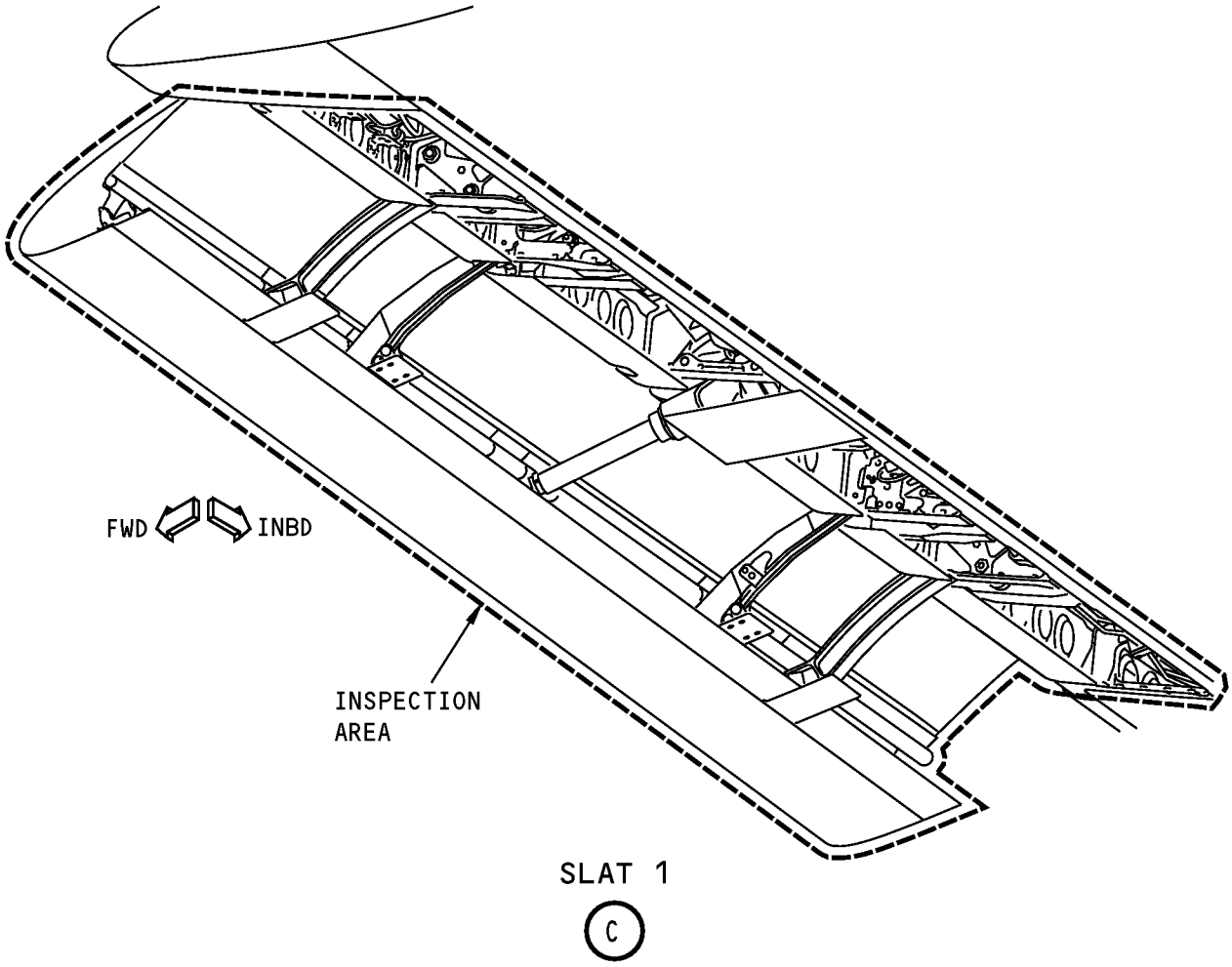


LEFT LEADING EDGE FLAPS NO. 1 AND 2

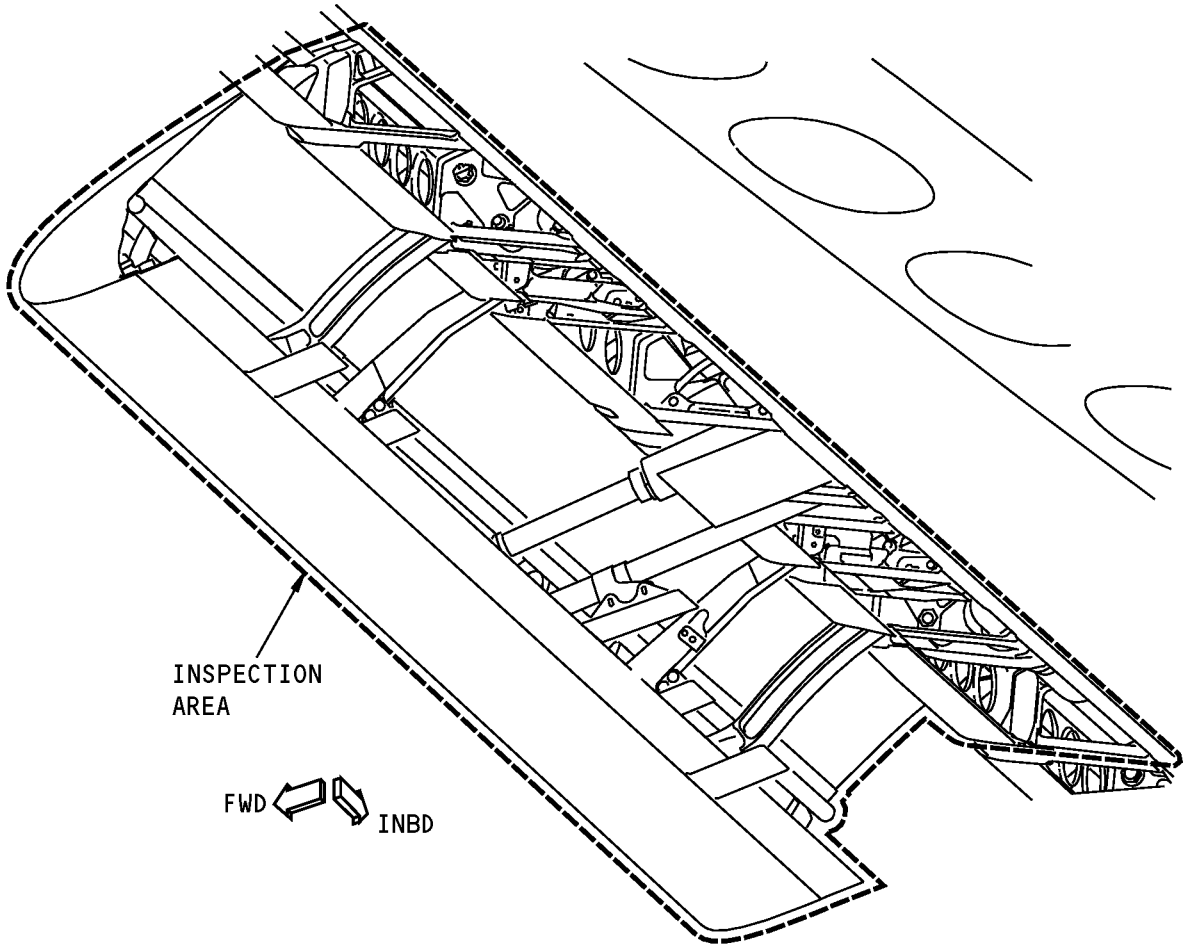
B

INTERNAL-GENERAL VISUAL: INTERNAL-LEFT OUTBOARD WING LEADING EDGE STRUCTURE
Figure 221 (Sheet 2 of 4)/57-05-03-990-850





INTERNAL-GENERAL VISUAL: INTERNAL-LEFT OUTBOARD WING LEADING EDGE STRUCTURE
Figure 221 (Sheet 3 of 4)/57-05-03-990-850



INTERNAL-GENERAL VISUAL: INTERNAL-LEFT OUTBOARD WING LEADING EDGE STRUCTURE
Figure 221 (Sheet 4 of 4)/57-05-03-990-850

TASK 57-05-03-210-818

18. INTERNAL - GENERAL VISUAL: INTERNAL - RIGHT OUTBOARD WING LEADING EDGE STRUCTURE

A. General

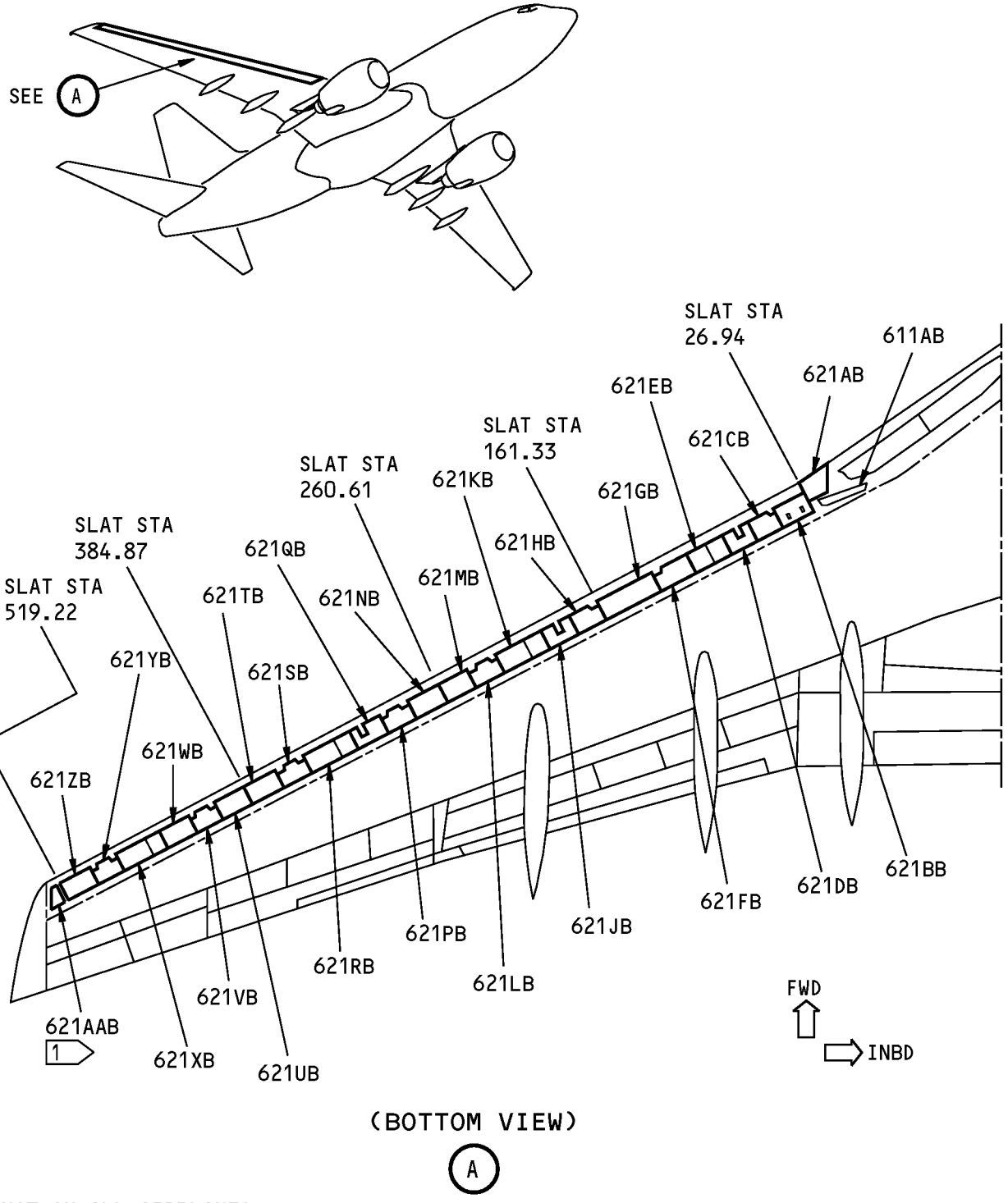
(1) This procedure is a scheduled maintenance task.

B. Inspection

SUBTASK 57-05-03-210-018

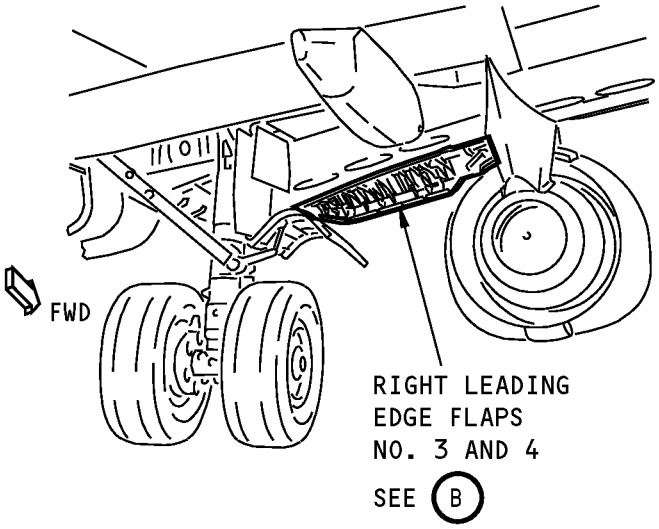
(1) Do the inspection.

———————— END OF TASK ————————

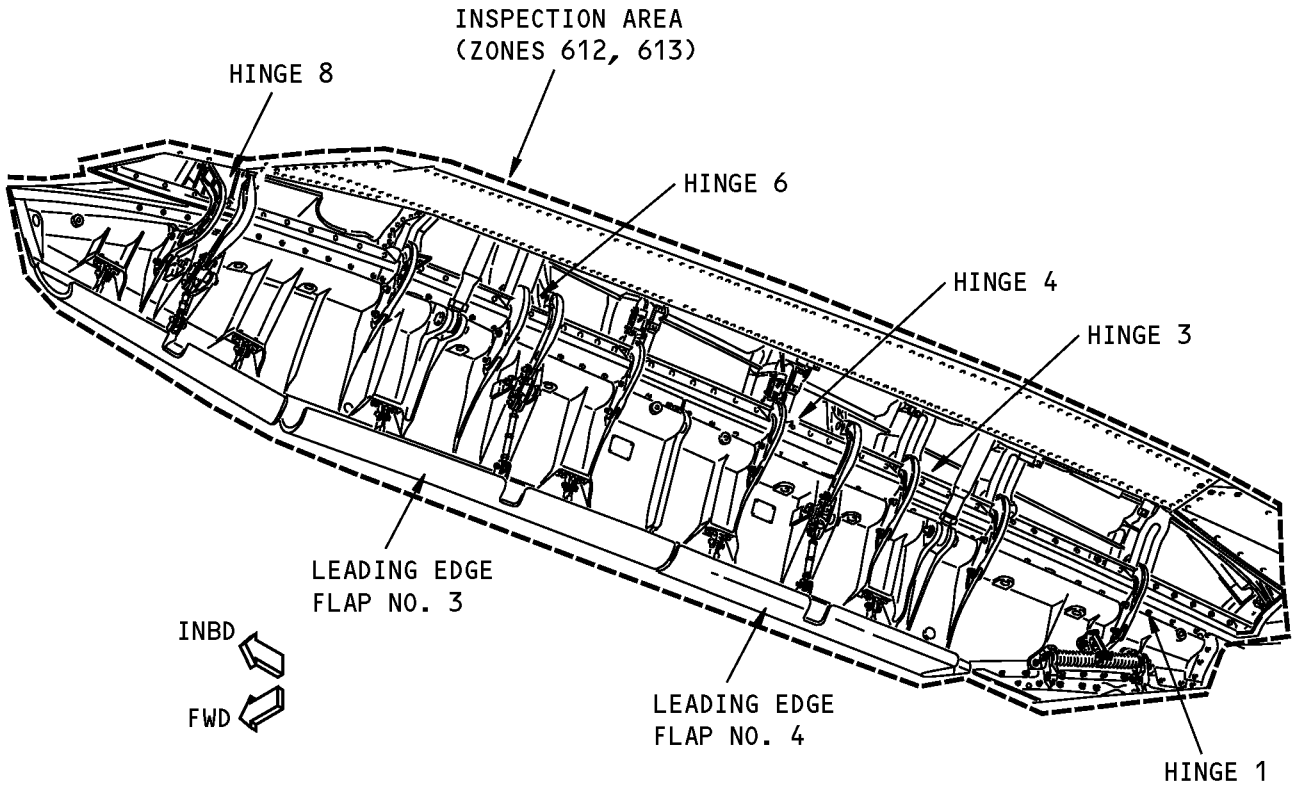


1 NOT ON ALL AIRPLANES

INTERNAL-GENERAL VISUAL: INTERNAL-RIGHT OUTBOARD WING LEADING EDGE
Figure 222 (Sheet 1 of 4)/57-05-03-990-851



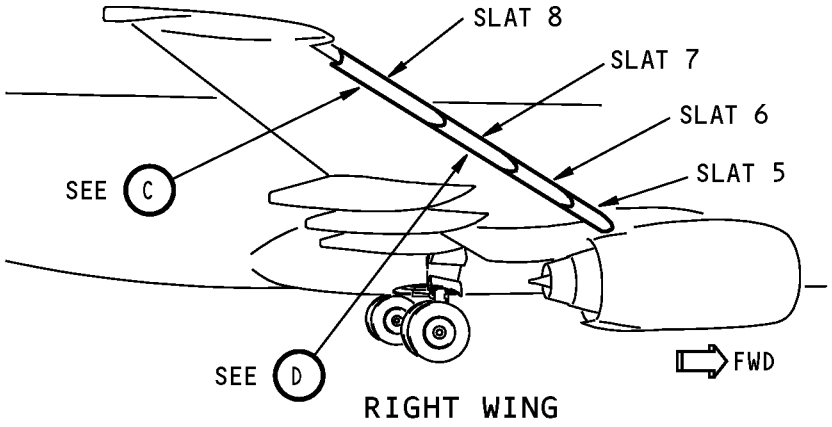
RIGHT WING

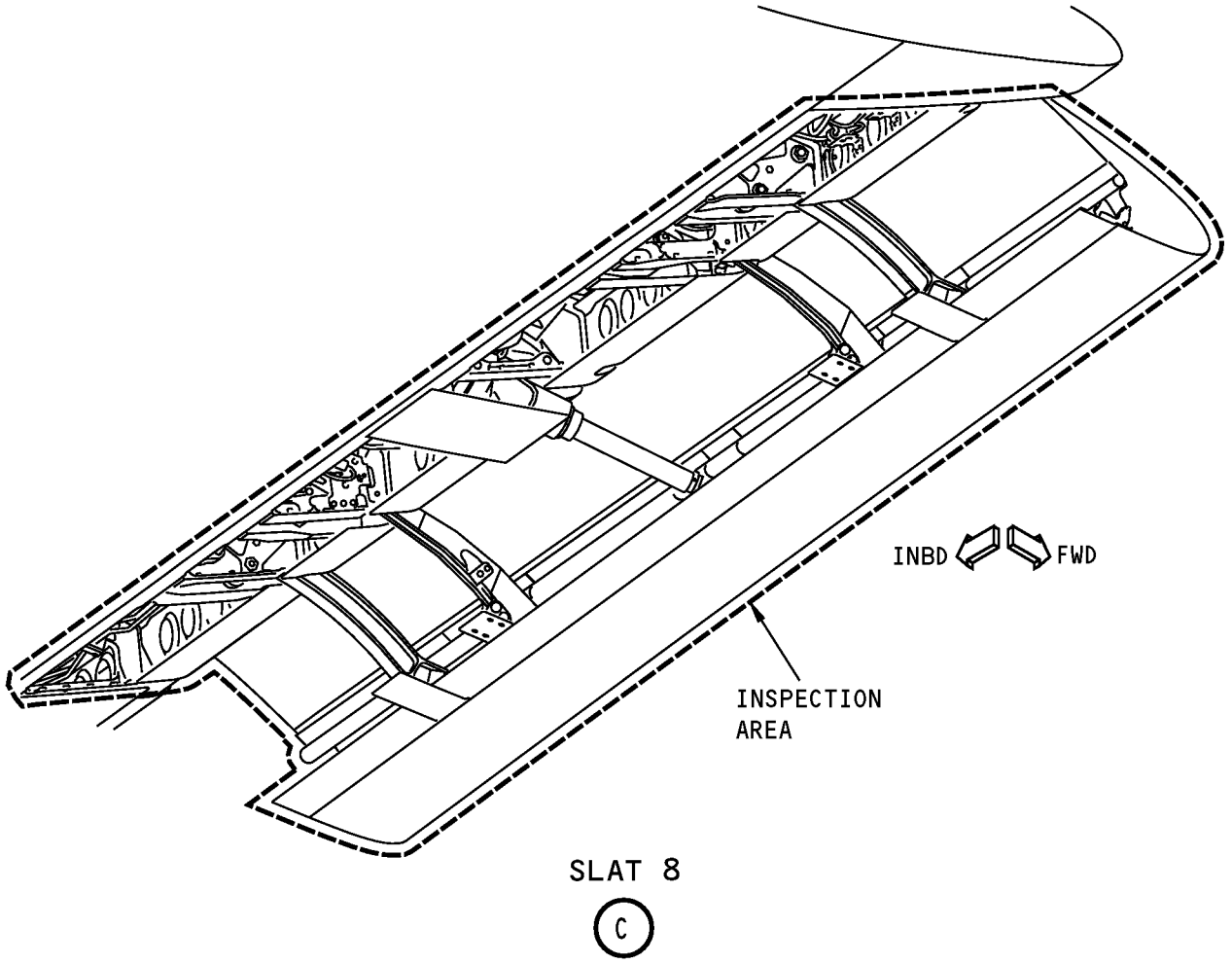


RIGHT LEADING EDGE FLAPS NO. 3 AND 4

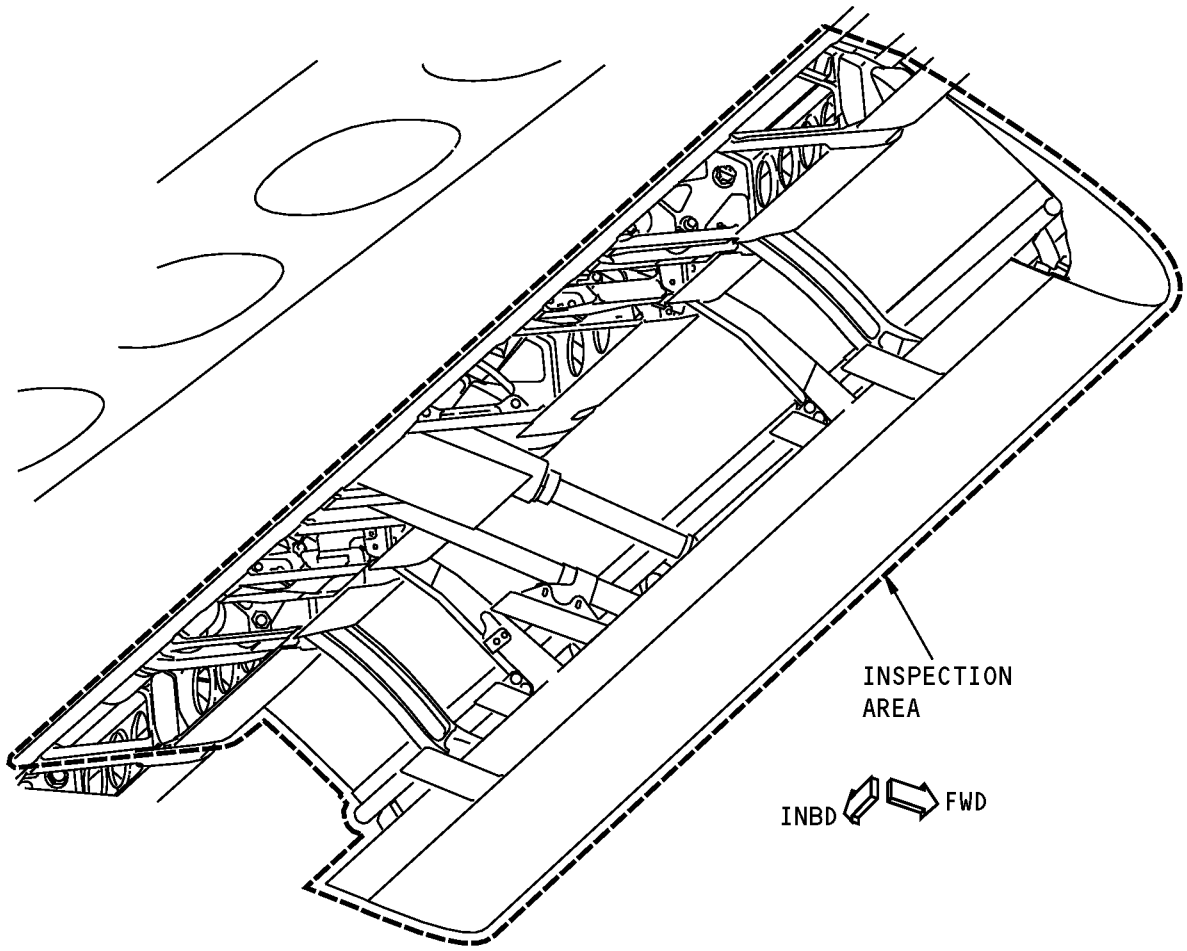
B

INTERNAL-GENERAL VISUAL: INTERNAL-RIGHT OUTBOARD WING LEADING EDGE
Figure 222 (Sheet 2 of 4)/57-05-03-990-851





INTERNAL-GENERAL VISUAL: INTERNAL-RIGHT OUTBOARD WING LEADING EDGE
Figure 222 (Sheet 3 of 4)/57-05-03-990-851



SLAT 7
(SLATS 5 AND 6 ARE EQUIVALENT)

D

INTERNAL-GENERAL VISUAL: INTERNAL-RIGHT OUTBOARD WING LEADING EDGE
Figure 222 (Sheet 4 of 4)/57-05-03-990-851

TASK 57-05-03-211-801

19. INTERNAL - DETAILED: INTERNAL - LEFT WING SLAT TRACKS

A. General

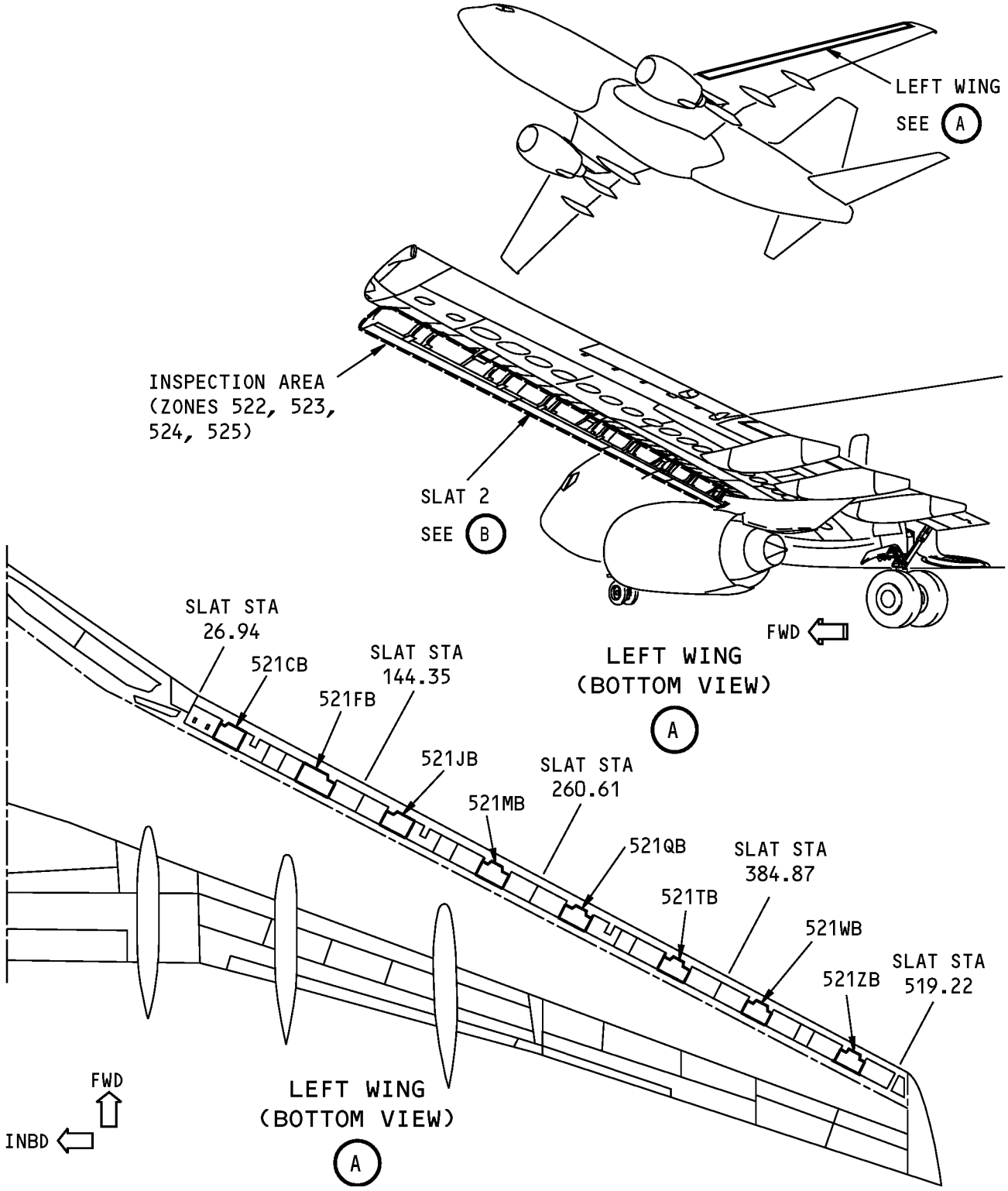
(1) This procedure is a scheduled maintenance task.

B. Inspection

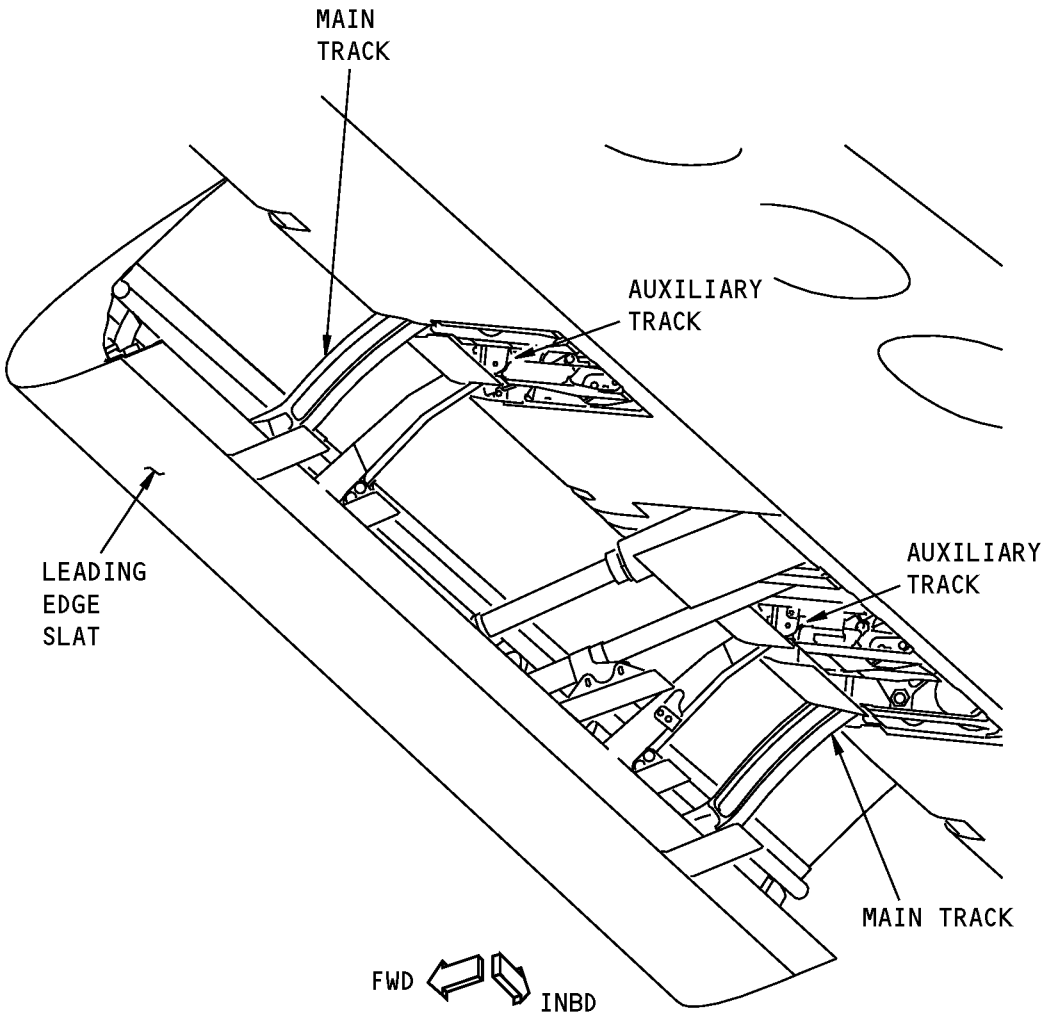
SUBTASK 57-05-03-211-001

(1) Do the inspection.

——————— END OF TASK ———————



Left Wing Leading Edge Slat Tracks
Figure 223 (Sheet 1 of 2)/57-05-03-990-806



SLAT 2
(SLATS 1, 3, AND 4 ARE EQUIVALENT)

B

Left Wing Leading Edge Slat Tracks
Figure 223 (Sheet 2 of 2)/57-05-03-990-806

TASK 57-05-03-211-802

20. INTERNAL - DETAILED: INTERNAL - RIGHT WING SLAT TRACKS

A. General

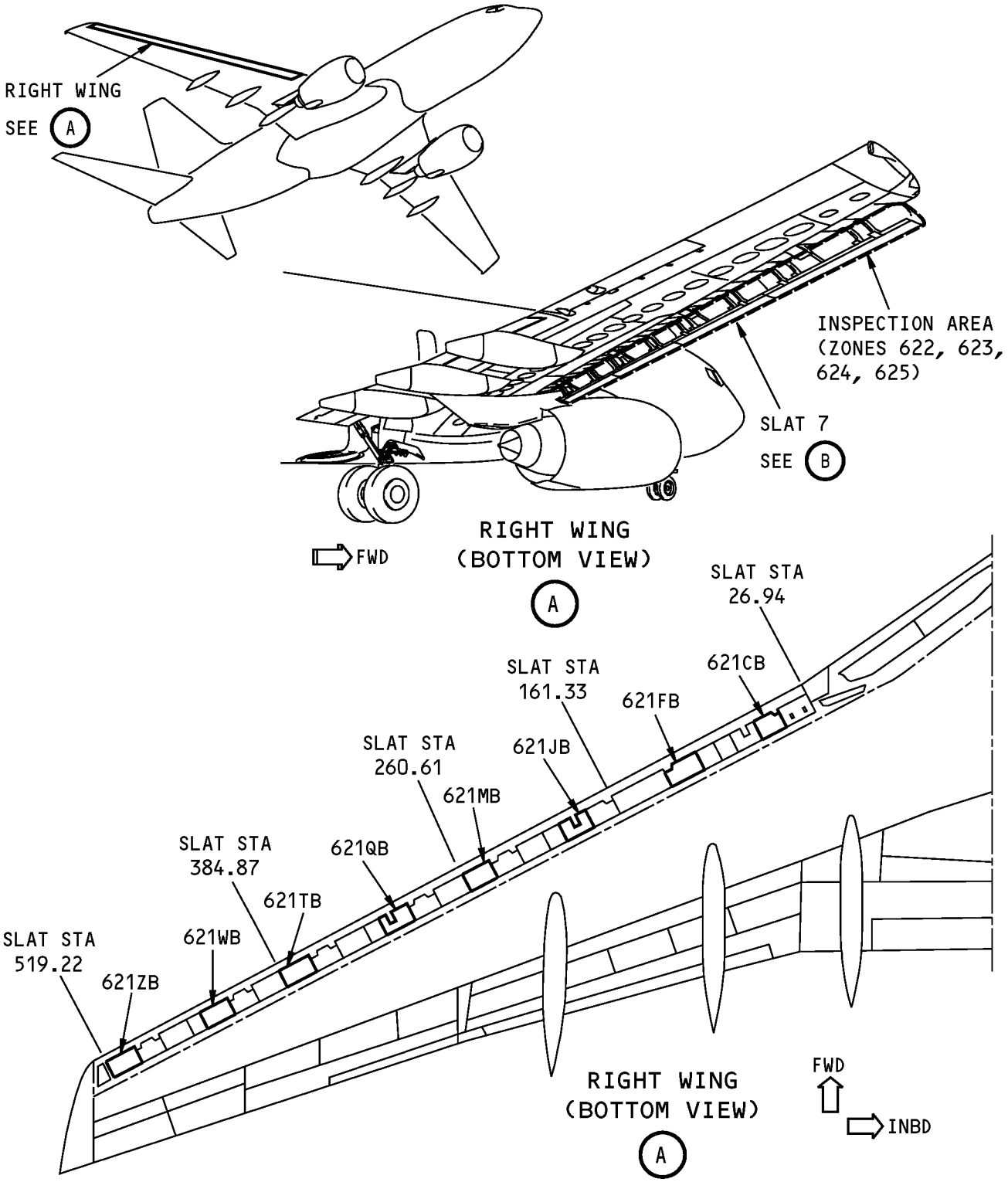
(1) This procedure is a scheduled maintenance task.

B. Inspection

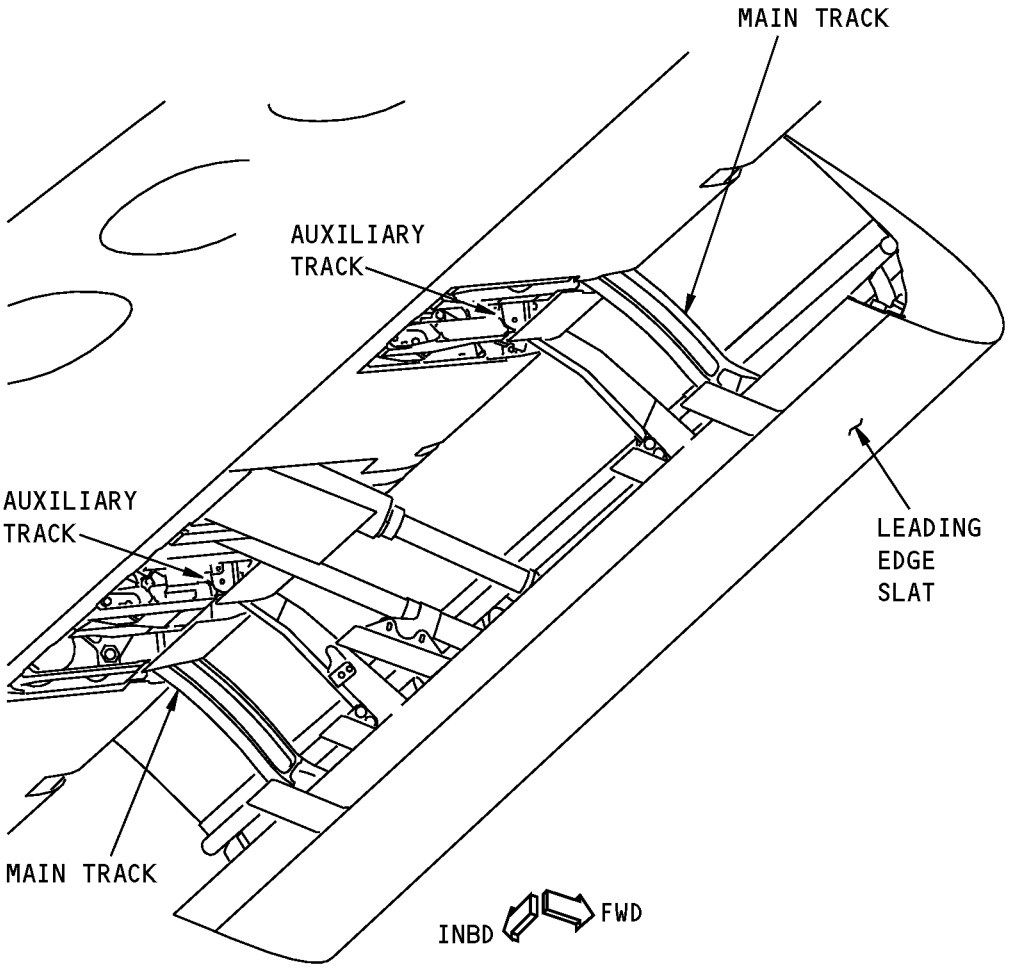
SUBTASK 57-05-03-211-002

(1) Do the inspection.

——————— END OF TASK ———————



Right Wing Leading Edge Slat Tracks
Figure 224 (Sheet 1 of 2)/57-05-03-990-810



SLAT 7
(SLATS 5, 6, AND 8 ARE EQUIVALENT)

B

Right Wing Leading Edge Slat Tracks
Figure 224 (Sheet 2 of 2)/57-05-03-990-810

TASK 57-05-03-210-819

21. INTERNAL - GENERAL VISUAL: INTERNAL - LEFT OUTBOARD WING ACCESS HOLES

A. General

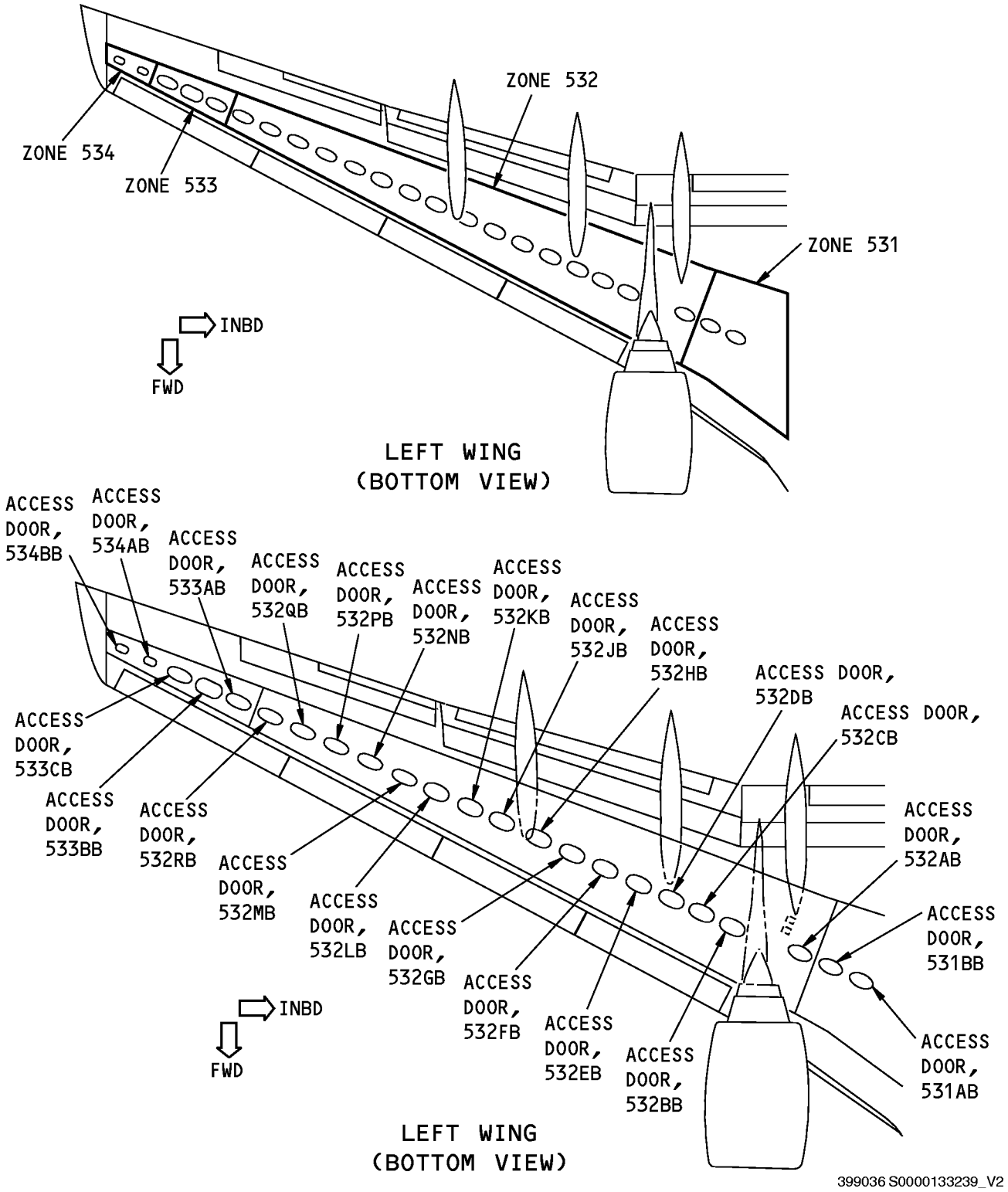
(1) This procedure is a scheduled maintenance task.

B. Inspection

SUBTASK 57-05-03-210-019

(1) Do the inspection.

———————— END OF TASK ————————



Left Outboard Wing Access Holes
Figure 225/57-05-03-990-820

TASK 57-05-03-210-820

22. INTERNAL - GENERAL VISUAL: INTERNAL - RIGHT OUTBOARD WING ACCESS HOLES

A. General

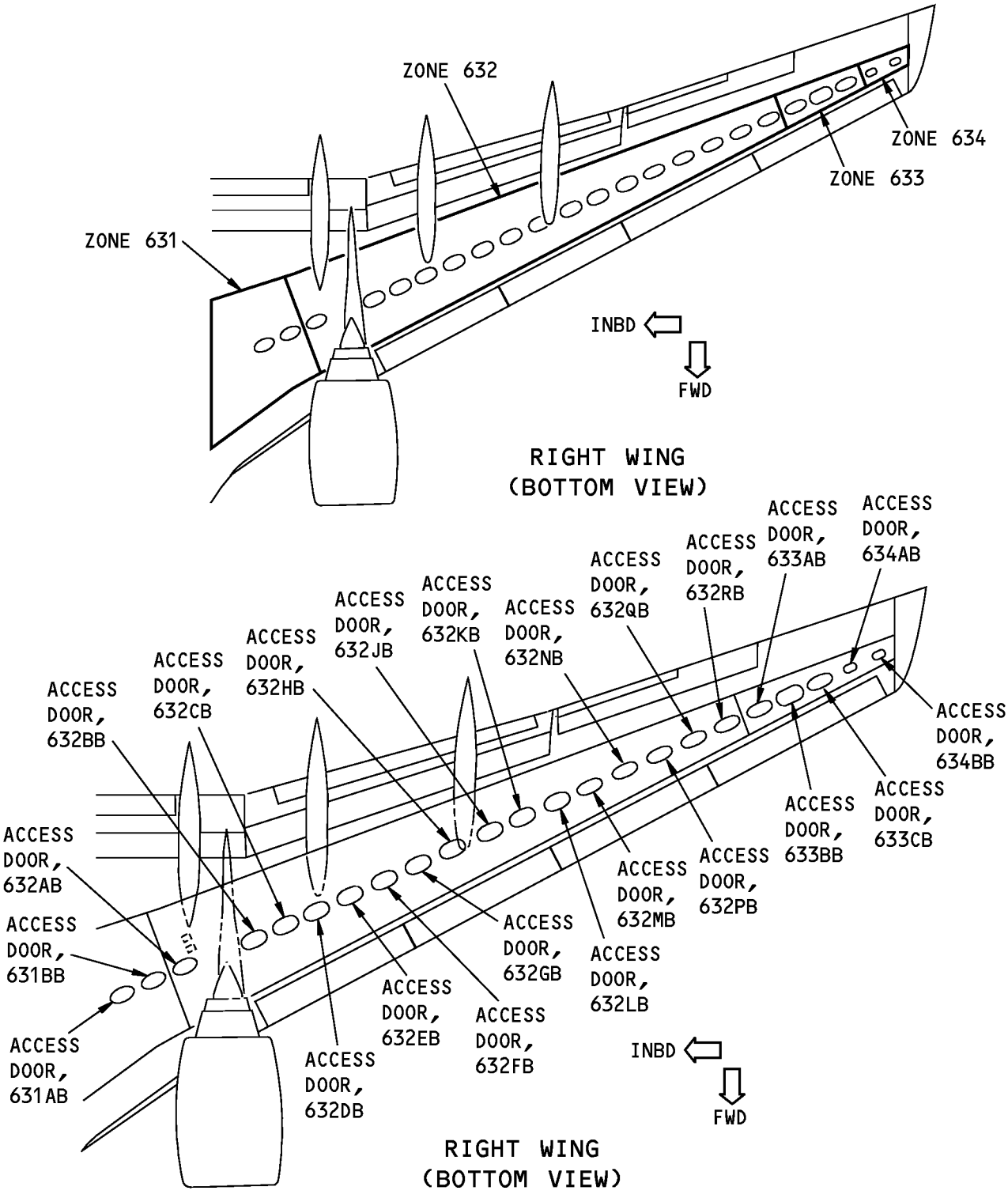
(1) This procedure is a scheduled maintenance task.

B. Inspection

SUBTASK 57-05-03-210-020

(1) Do the inspection.

——————— END OF TASK ———————



Right Outboard Wing Access Holes General Visual (Internal)
Figure 226/57-05-03-990-811

TASK 57-05-03-210-821

23. INTERNAL - GENERAL VISUAL: INTERNAL - LEFT OUTBOARD WING

A. General

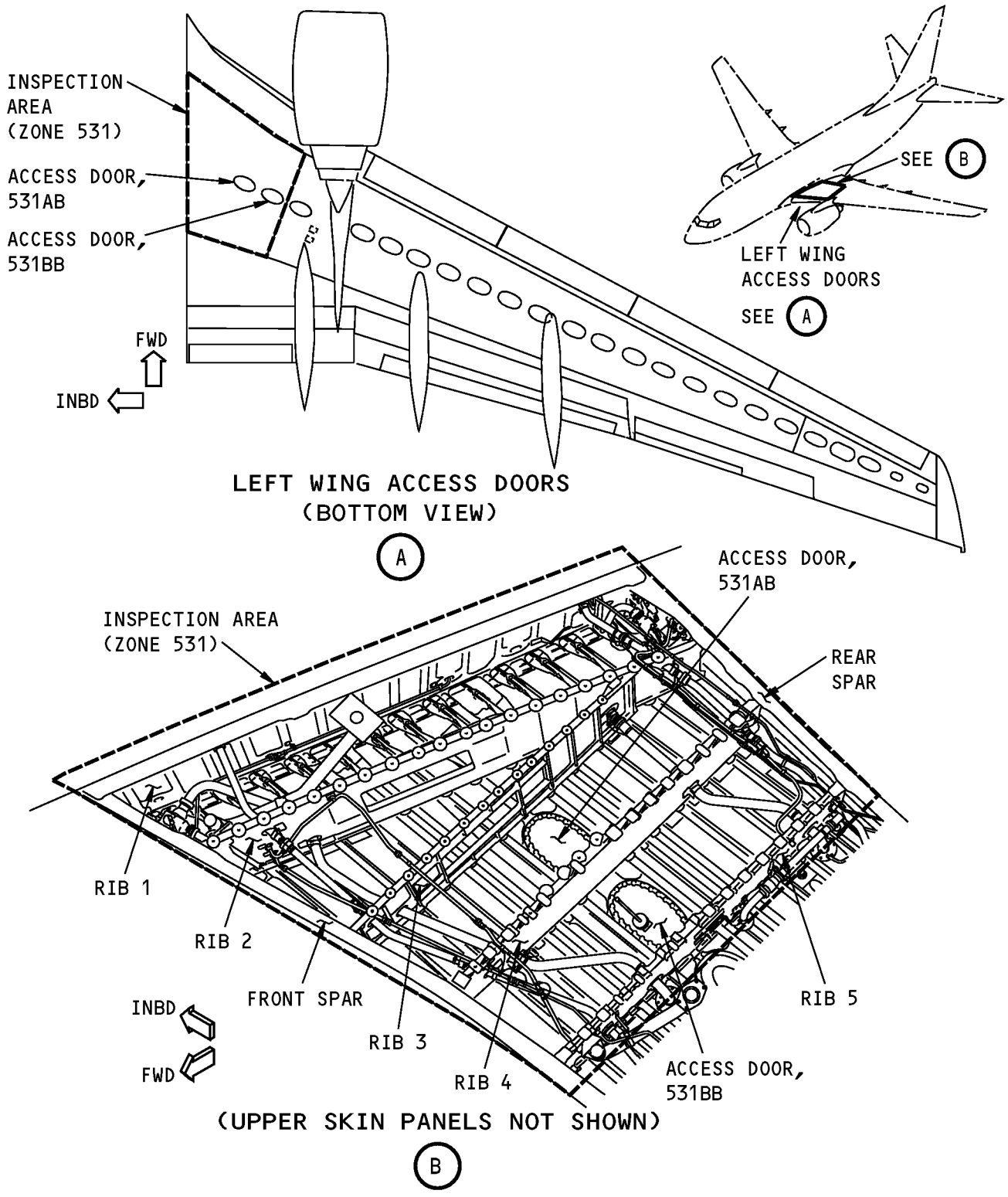
(1) This procedure is a scheduled maintenance task.

B. Inspection

SUBTASK 57-05-03-210-021

(1) Do the inspection.

———————— END OF TASK ————————



INTERNAL-GENERAL VISUAL: INTERNAL_LEFT OUTBOARD WING
Figure 227/57-05-03-990-854

TASK 57-05-03-210-822

24. INTERNAL - GENERAL VISUAL: INTERNAL - RIGHT OUTBOARD WING

A. General

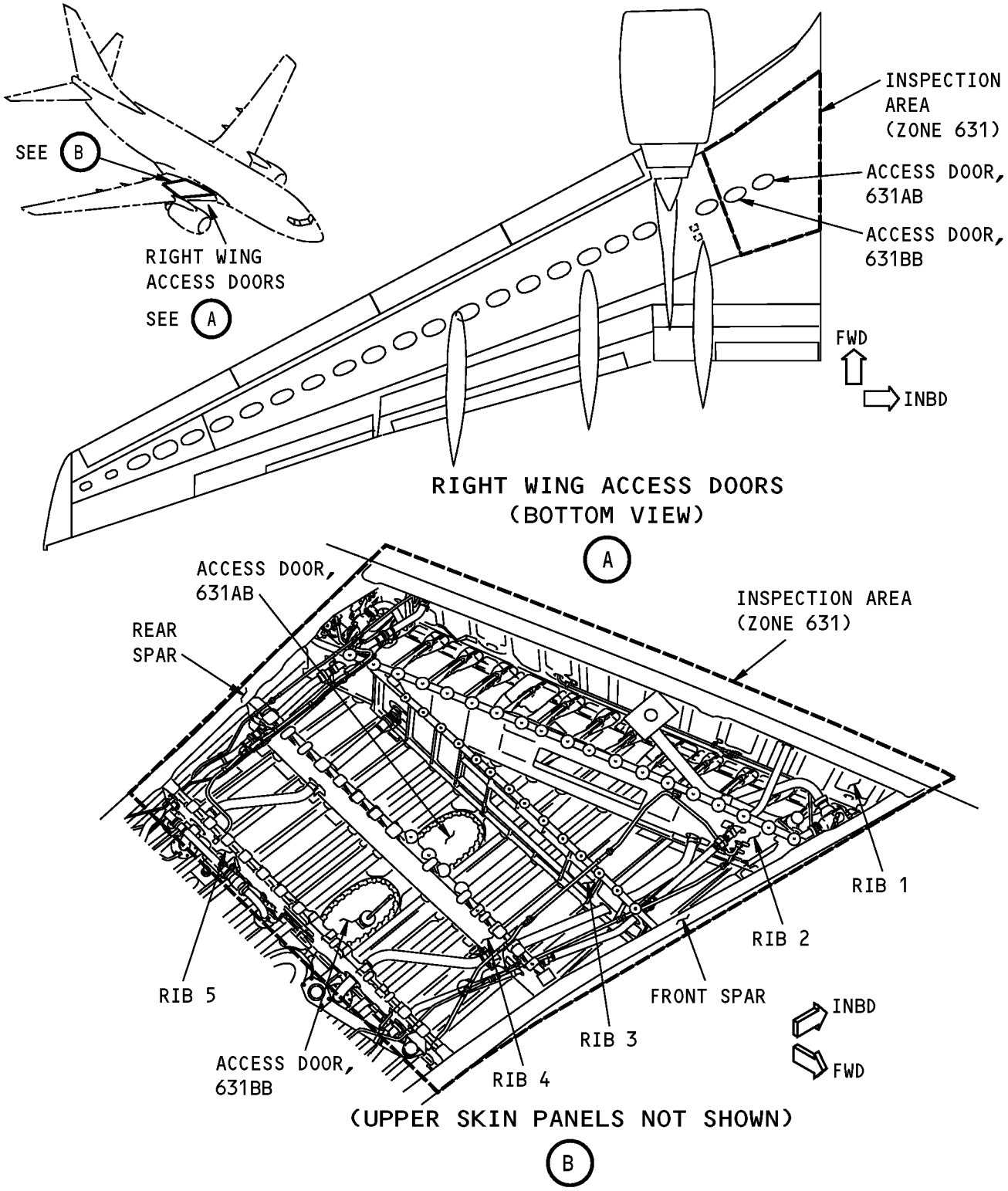
(1) This procedure is a scheduled maintenance task.

B. Inspection

SUBTASK 57-05-03-210-022

(1) Do the inspection.

———————— END OF TASK ————————



INTERNAL - GENERAL VISUAL: INTERNAL-RIGHT OUTBOARD WING
Figure 228/57-05-03-990-853

TASK 57-05-03-210-823

25. INTERNAL - GENERAL VISUAL: INTERNAL - LEFT OUTBOARD WING

A. General

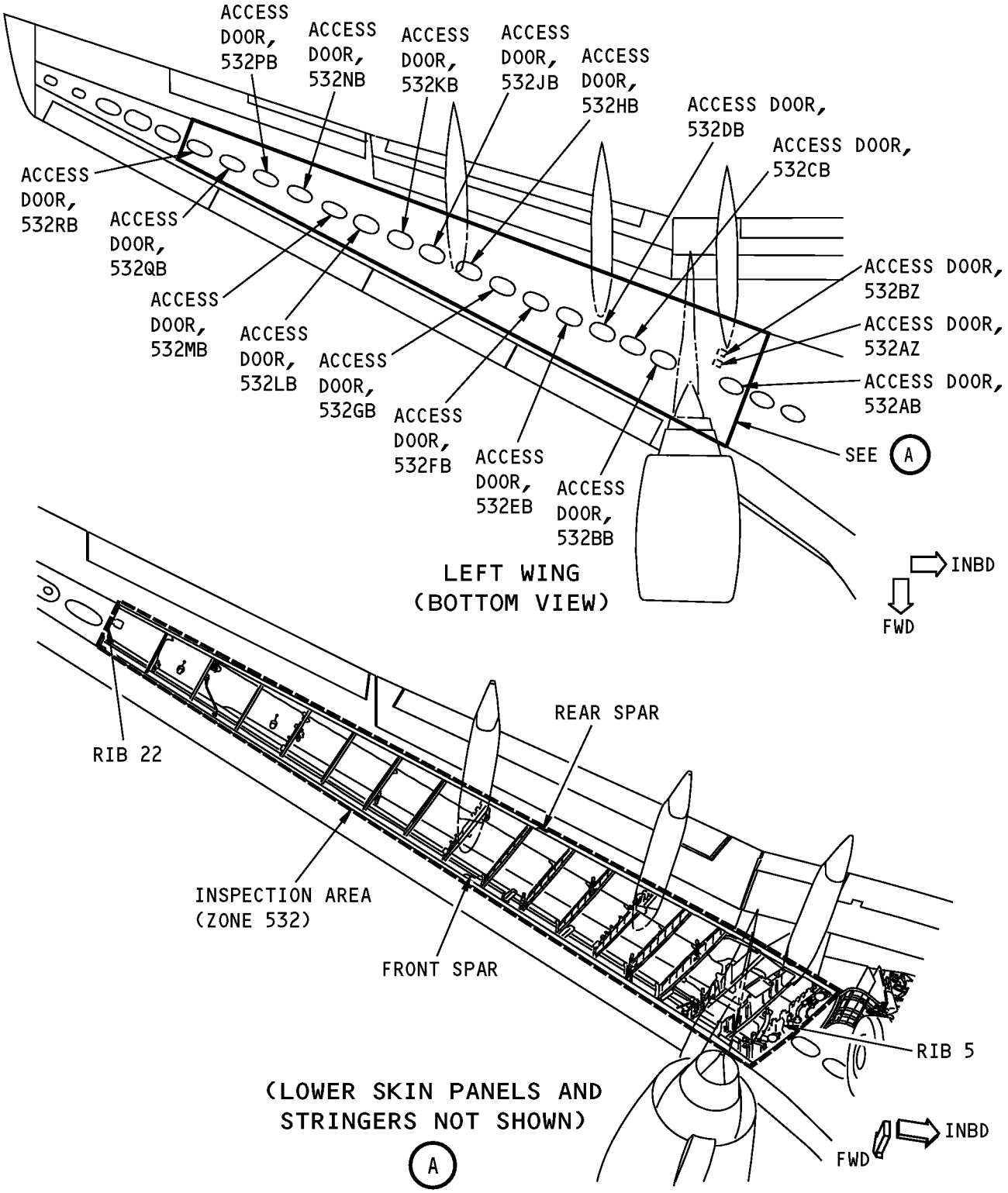
(1) This procedure is a scheduled maintenance task.

B. Inspection

SUBTASK 57-05-03-210-023

(1) Do the inspection.

——————— END OF TASK ———————



INTERNAL-GENERAL VISUAL: INTERNAL-LEFT OUTBOARD WING
Figure 229/57-05-03-990-863

TASK 57-05-03-210-824

26. INTERNAL - GENERAL VISUAL: INTERNAL - RIGHT OUTBOARD WING

A. General

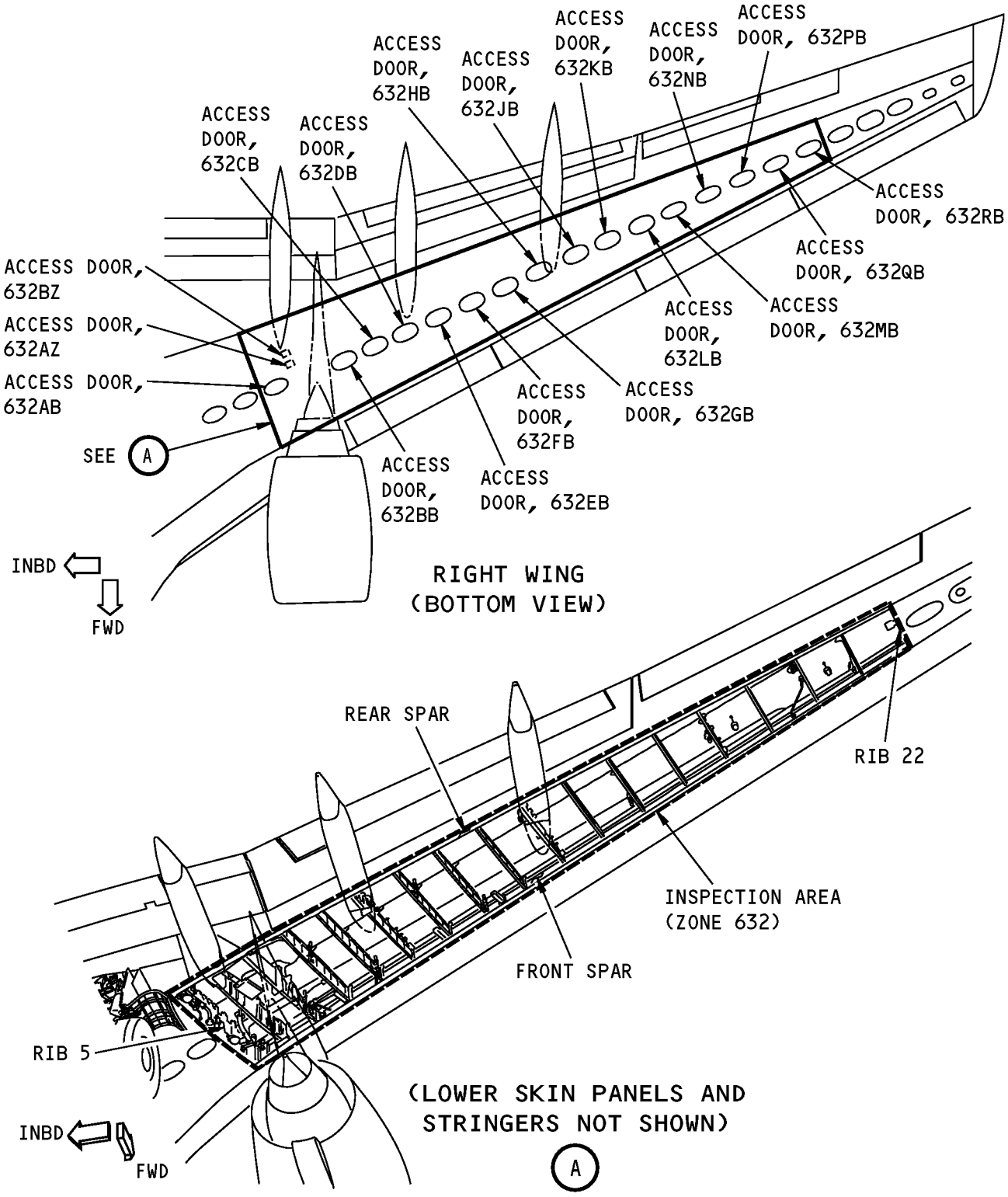
(1) This procedure is a scheduled maintenance task.

B. Inspection

SUBTASK 57-05-03-210-024

(1) Do the inspection.

———————— END OF TASK ————————



INTERNAL-GENERAL VISUAL: INTERNAL-RIGHT OUTBOARD WING
Figure 230/57-05-03-990-864

TASK 57-05-03-210-825

27. INTERNAL - GENERAL VISUAL: INTERNAL - LEFT OUTBOARD WING

A. General

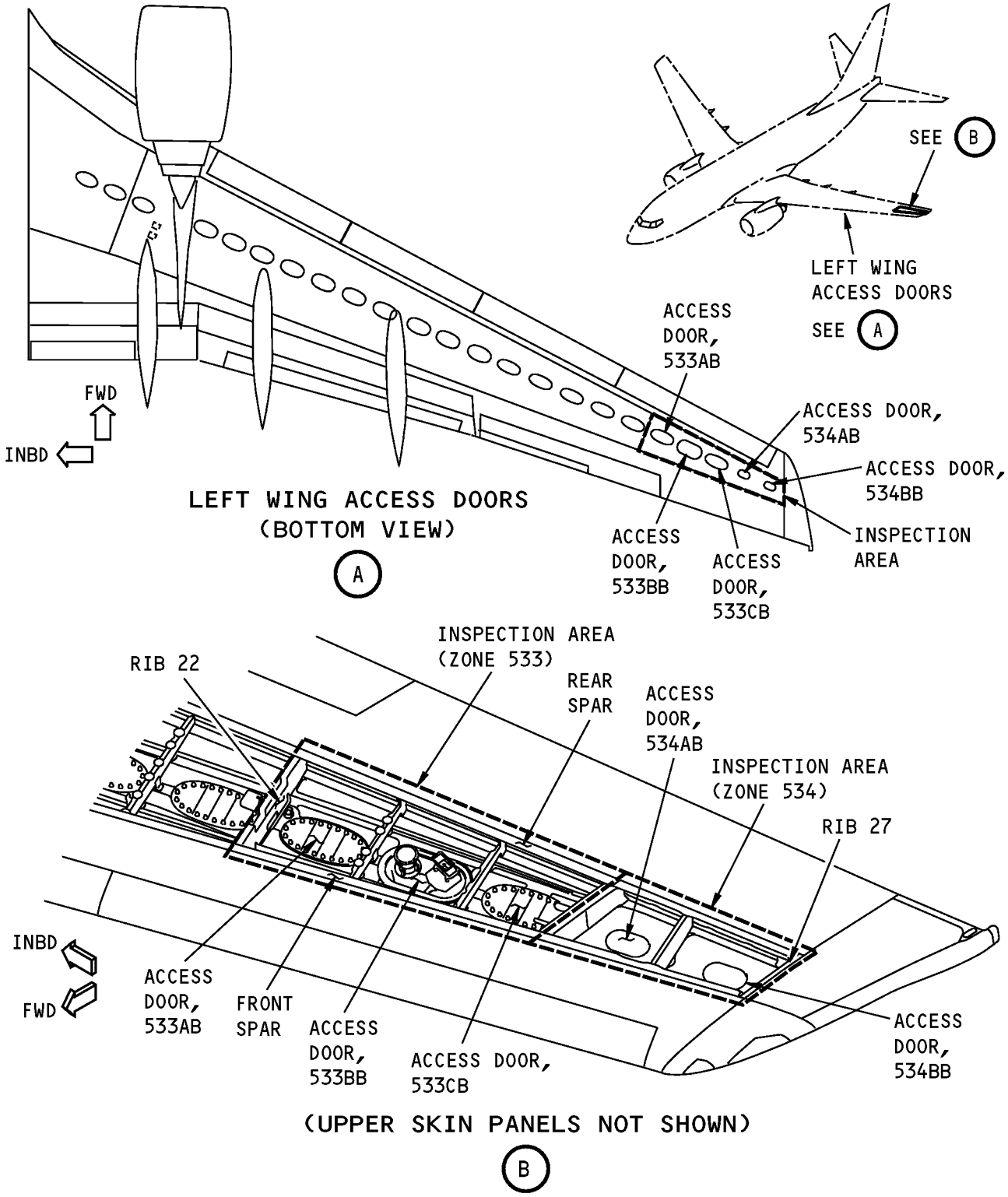
(1) This procedure is a scheduled maintenance task.

B. Inspection

SUBTASK 57-05-03-210-025

(1) Do the inspection.

——————— END OF TASK ———————



INTERNAL-GENERAL VISUAL: INTERNAL-LEFT OUTBOARD WING
Figure 231/57-05-03-990-865

TASK 57-05-03-210-826

28. INTERNAL - GENERAL VISUAL: INTERNAL - RIGHT OUTBOARD WING

A. General

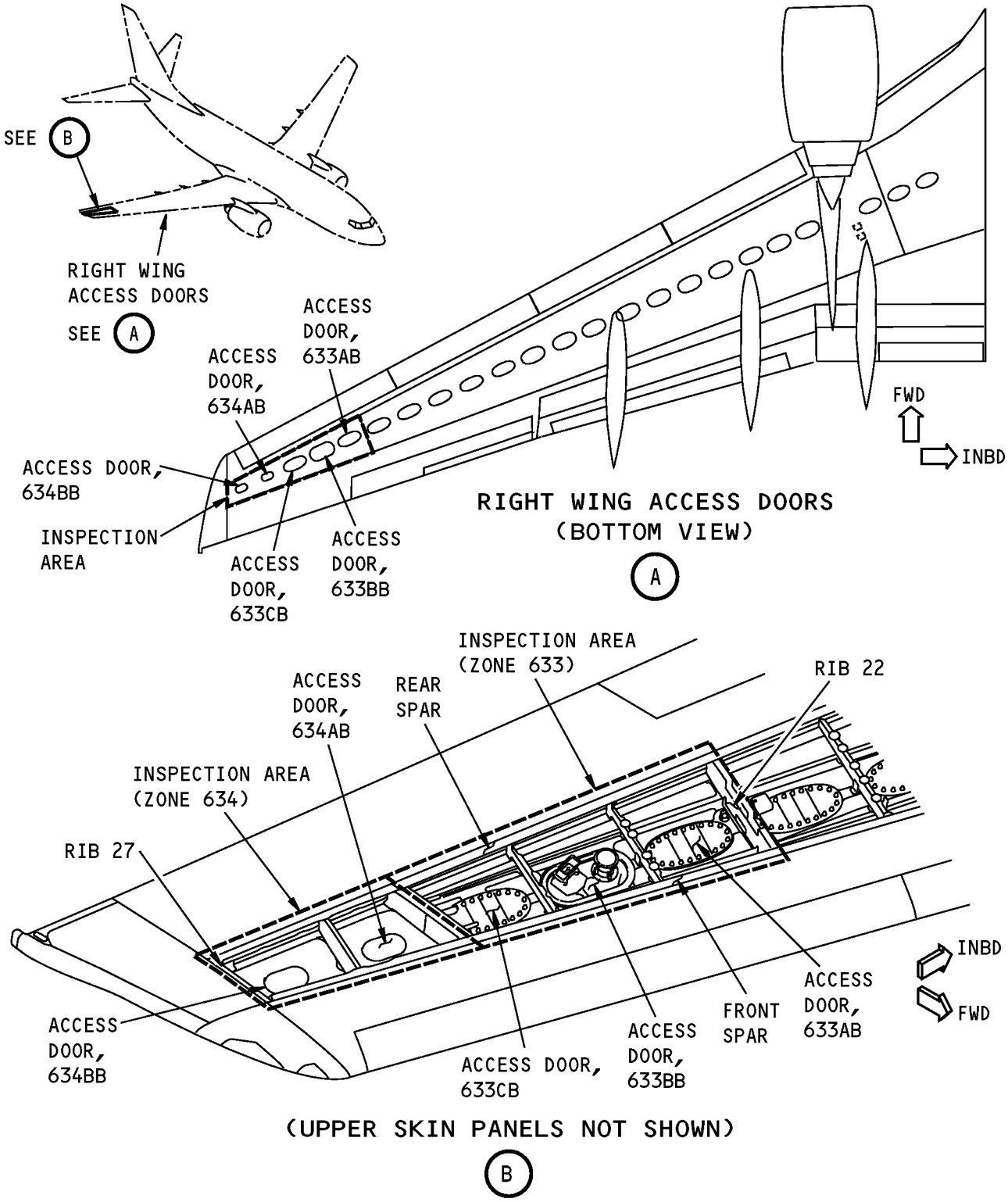
(1) This procedure is a scheduled maintenance task.

B. Inspection

SUBTASK 57-05-03-210-026

(1) Do the inspection.

———————— END OF TASK ————————



INTERNAL-GENERAL VISUAL: INTERNAL-RIGHT OUTBOARD WING
Figure 232/57-05-03-990-866

TASK 57-05-03-210-827

29. INTERNAL - GENERAL VISUAL: INTERNAL - LEFT FLAP SUPPORT NO. 4

A. General

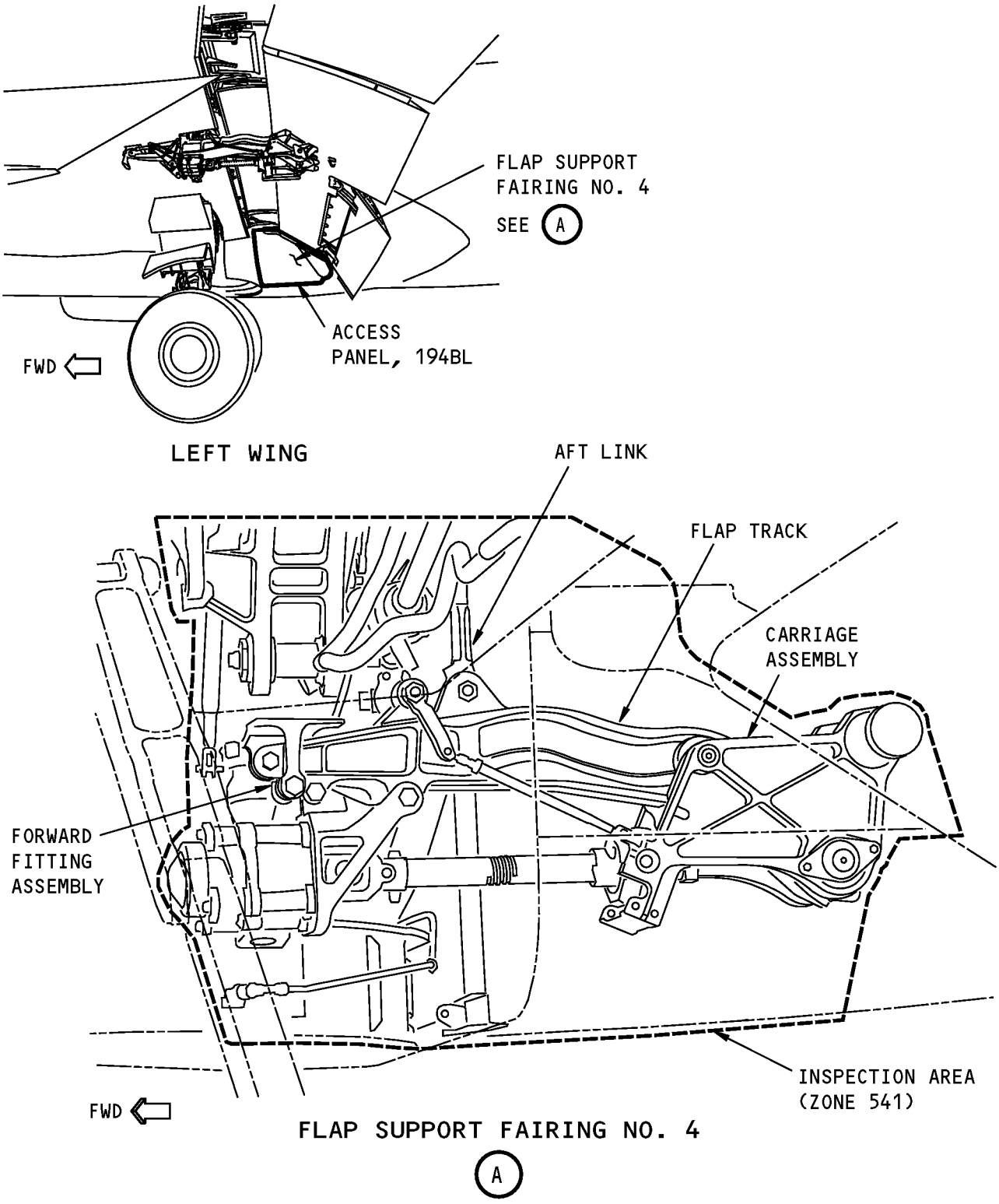
(1) This procedure is a scheduled maintenance task.

B. Inspection

SUBTASK 57-05-03-210-027

(1) Do the inspection.

———————— END OF TASK ————————



Flap Support Fairing No. 4 General Visual (Internal)
Figure 233/57-05-03-990-818

TASK 57-05-03-210-828

30. INTERNAL - GENERAL VISUAL: INTERNAL - RIGHT FLAP SUPPORT NO. 5

A. General

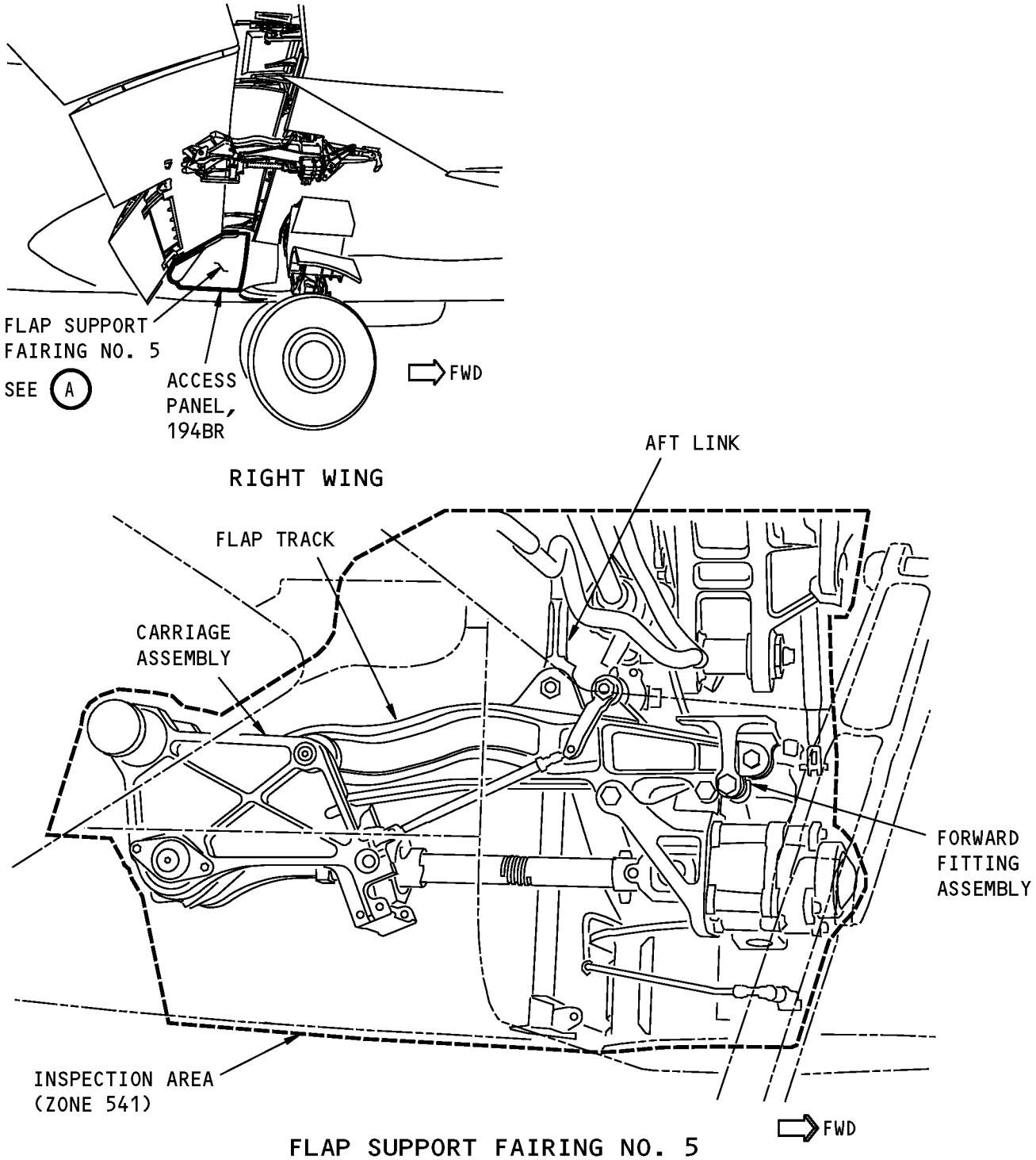
(1) This procedure is a scheduled maintenance task.

B. Inspection

SUBTASK 57-05-03-210-028

(1) Do the inspection.

———————— END OF TASK ————————



Flap Support Fairing No. 5 General Visual (Internal)
Figure 234/57-05-03-990-819

TASK 57-05-03-210-829

31. INTERNAL - GENERAL VISUAL: INTERNAL - LEFT FLAP SUPPORT NO. 3

A. General

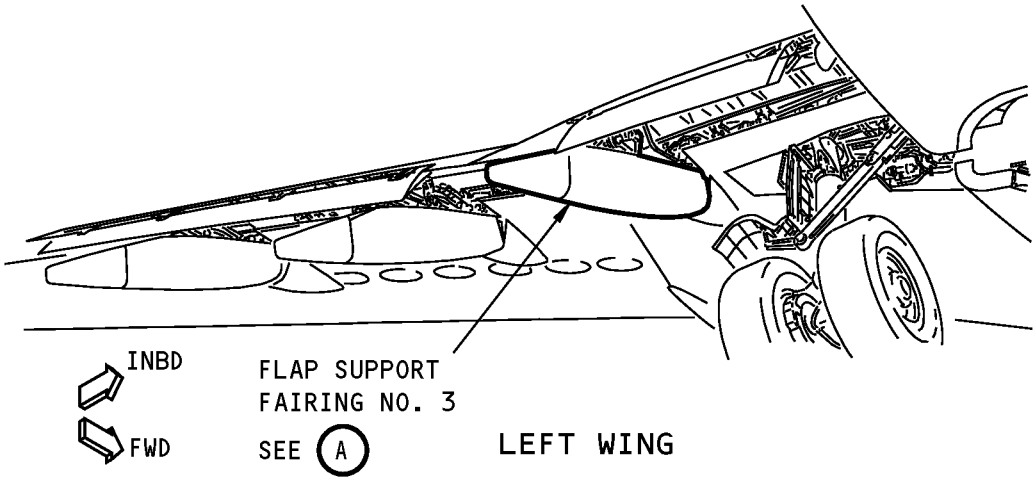
(1) This procedure is a scheduled maintenance task.

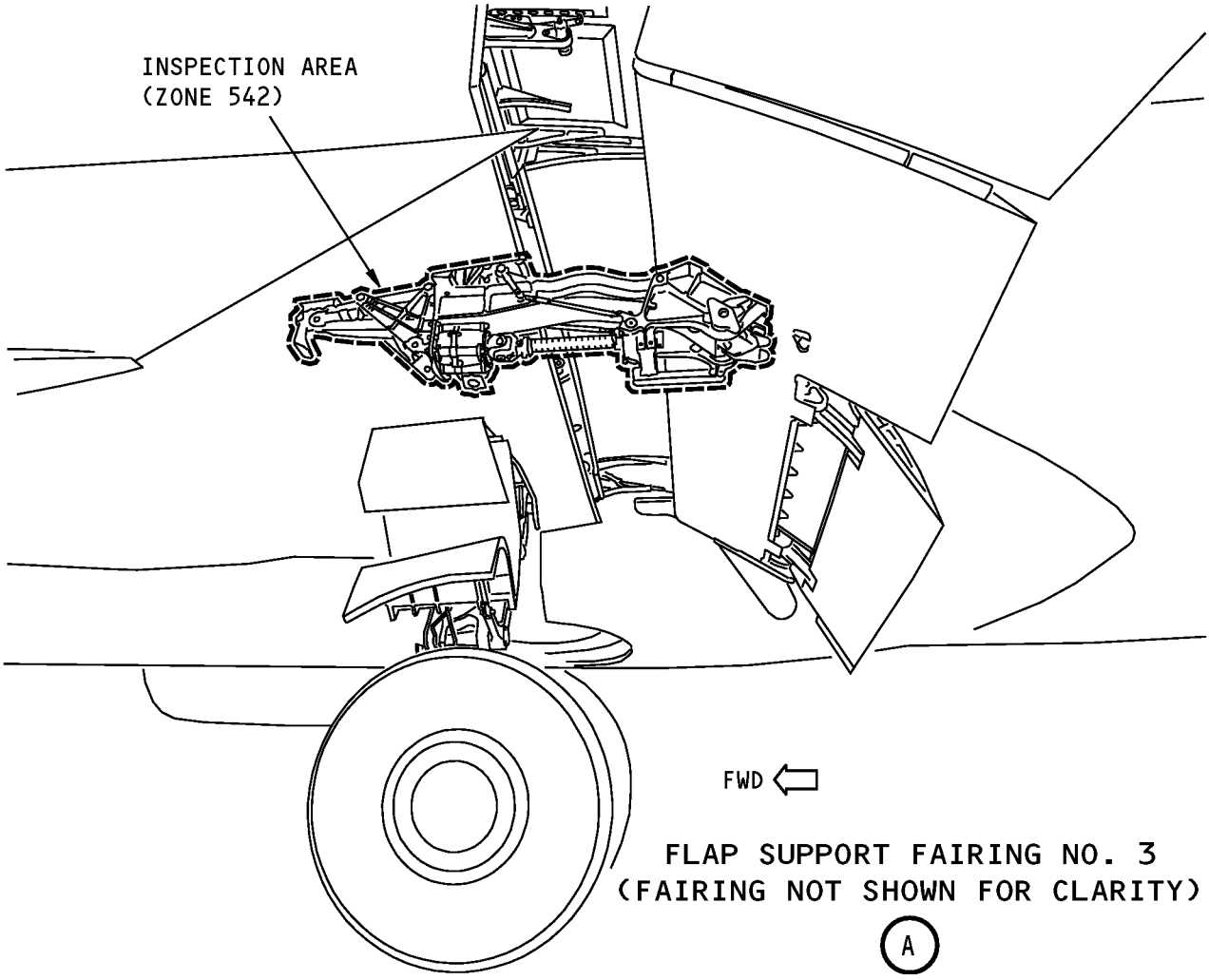
B. Inspection

SUBTASK 57-05-03-210-029

(1) Do the inspection.

———————— END OF TASK ————————





Flap Support Fairing No. 3General Visual (Internal)
Figure 235/57-05-03-990-831

TASK 57-05-03-210-830

32. INTERNAL - GENERAL VISUAL: INTERNAL - RIGHT FLAP SUPPORT NO. 6

A. General

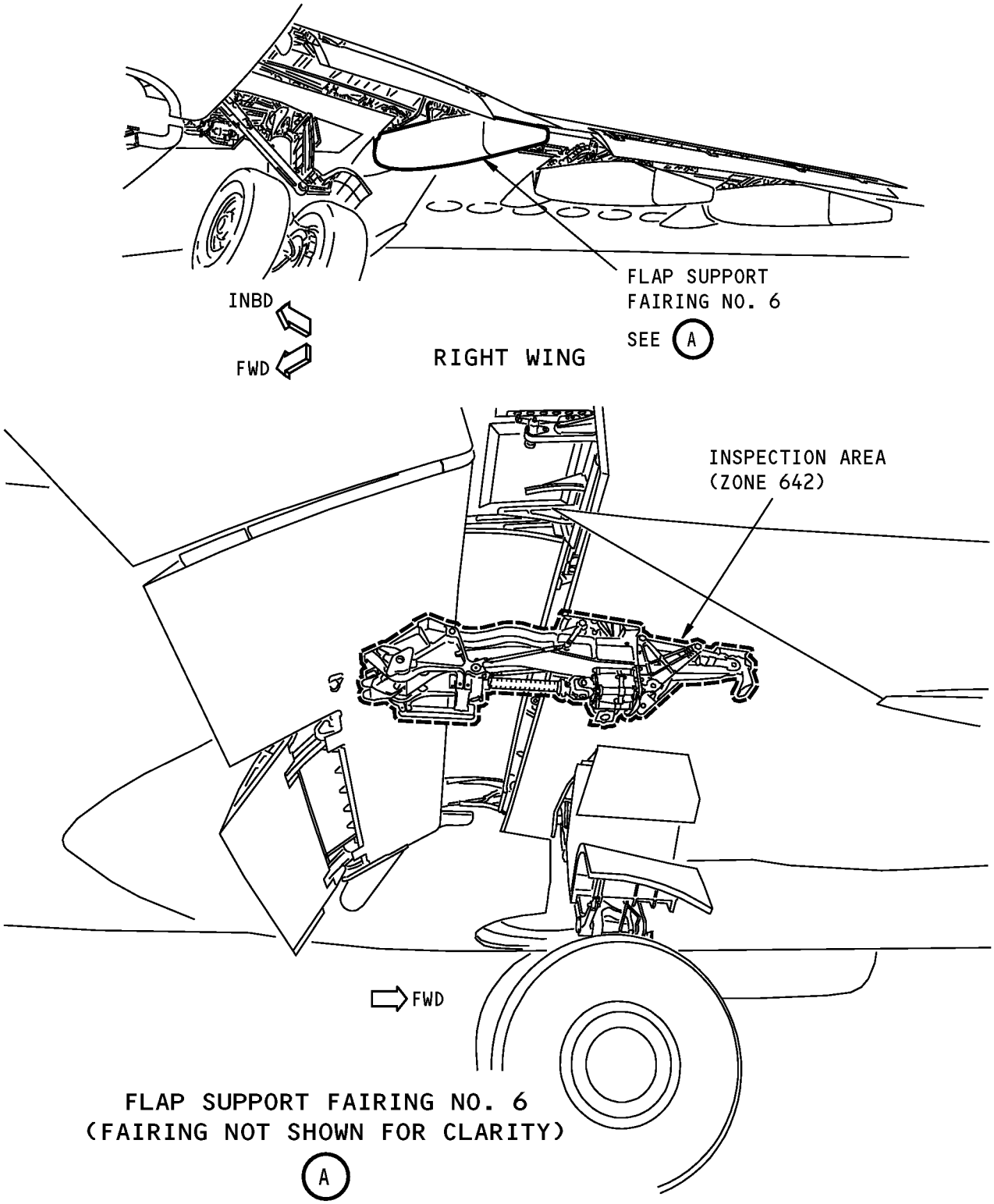
(1) This procedure is a scheduled maintenance task.

B. Inspection

SUBTASK 57-05-03-210-030

(1) Do the inspection.

———————— END OF TASK ————————



Flap Support Fairing No. 6General Visual (Internal)
Figure 236/57-05-03-990-832

TASK 57-05-03-210-831

33. INTERNAL - GENERAL VISUAL: INTERNAL - LEFT OUTBOARD WING LOWER SURFACE

A. General

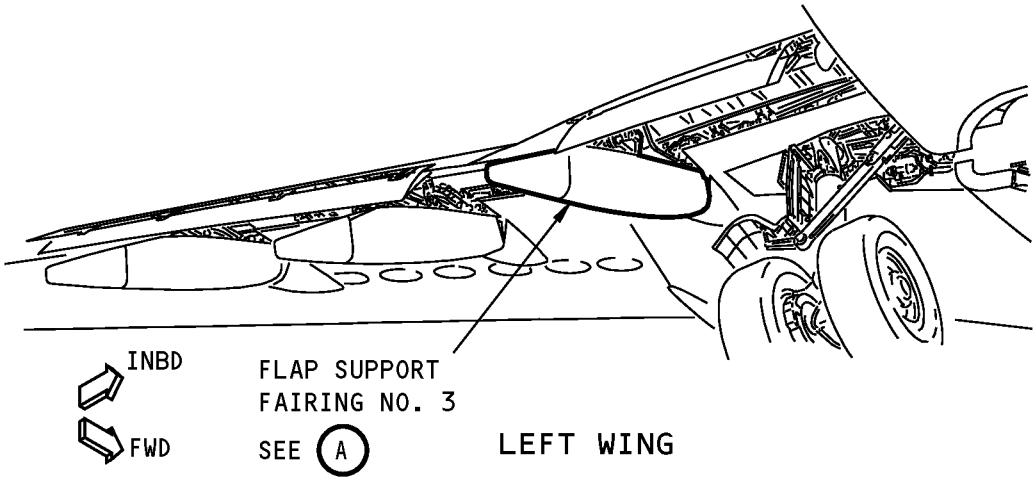
(1) This procedure is a scheduled maintenance task.

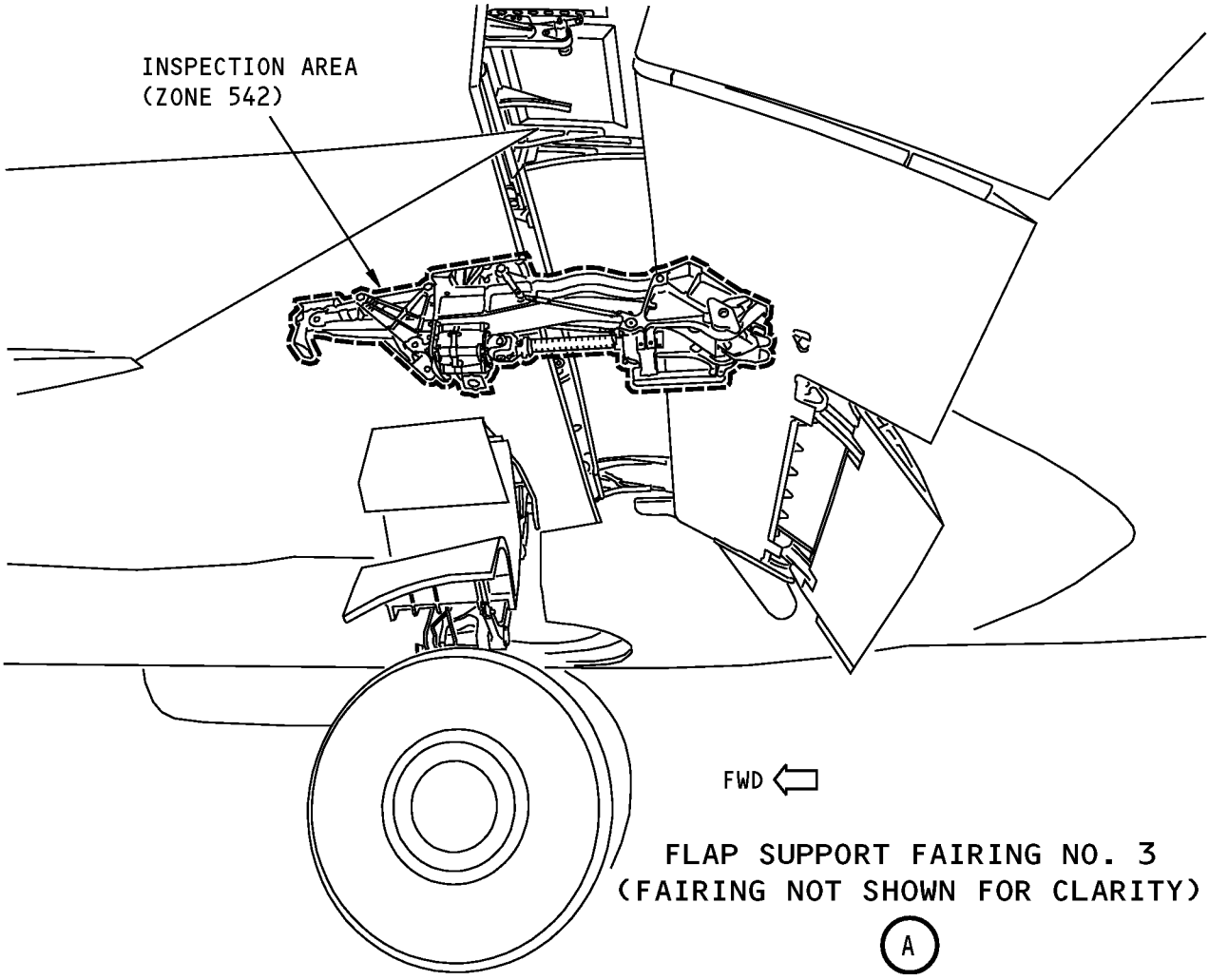
B. Inspection

SUBTASK 57-05-03-210-031

(1) Do the inspection.

———————— END OF TASK ————————





Flap Support Fairing No. 3 General Visual (Internal)
Figure 237/57-05-03-990-822

TASK 57-05-03-210-832

34. INTERNAL - GENERAL VISUAL: INTERNAL - RIGHT OUTBOARD WING LOWER SURFACE

A. General

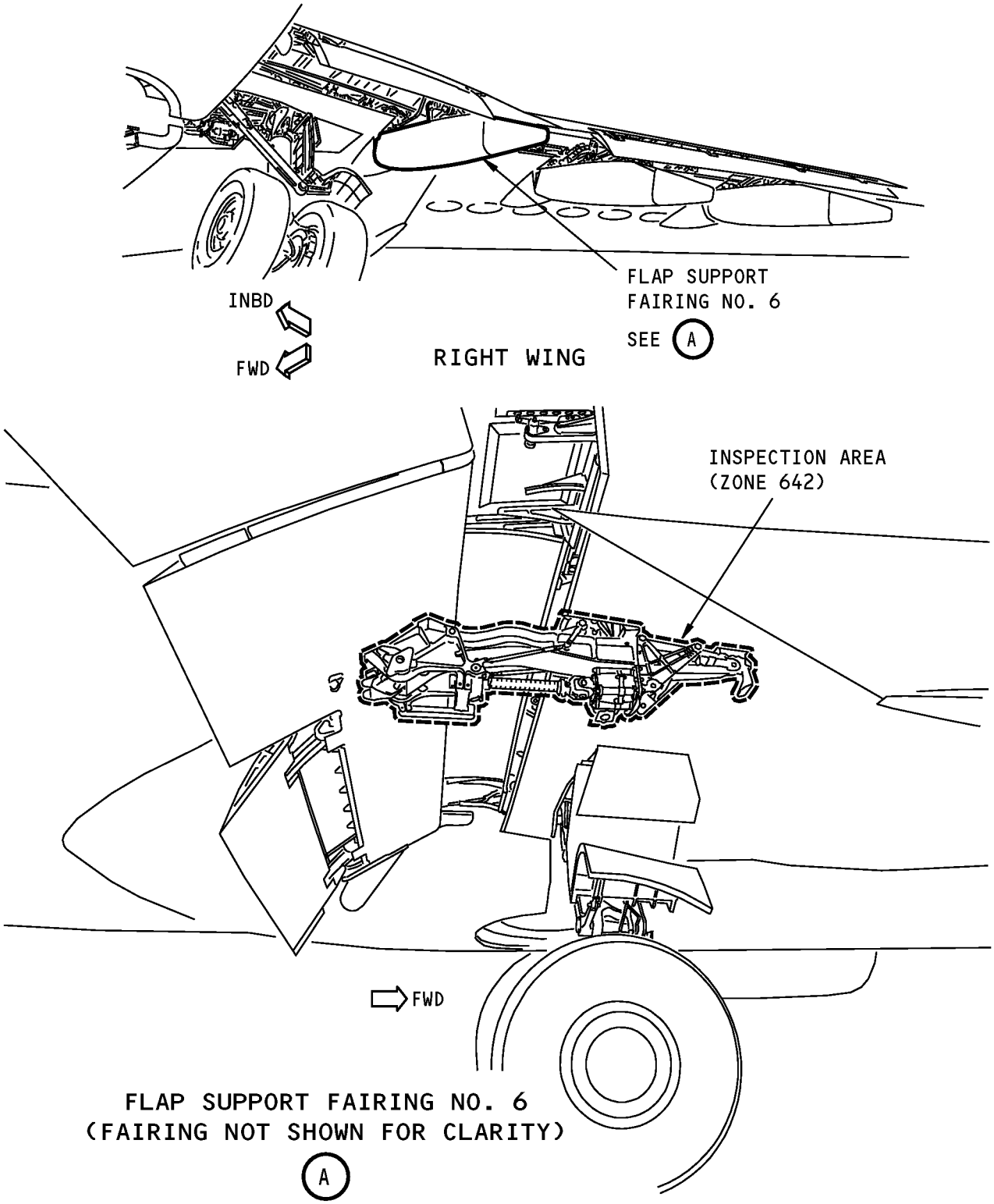
(1) This procedure is a scheduled maintenance task.

B. Inspection

SUBTASK 57-05-03-210-032

(1) Do the inspection.

———————— END OF TASK ————————



Flap Support Fairing No. 6 General Visual (Internal)
Figure 238/57-05-03-990-821

TASK 57-05-03-210-833

35. INTERNAL - GENERAL VISUAL: INTERNAL - FLAP SUPPORTS NO. 1 & 2

A. General

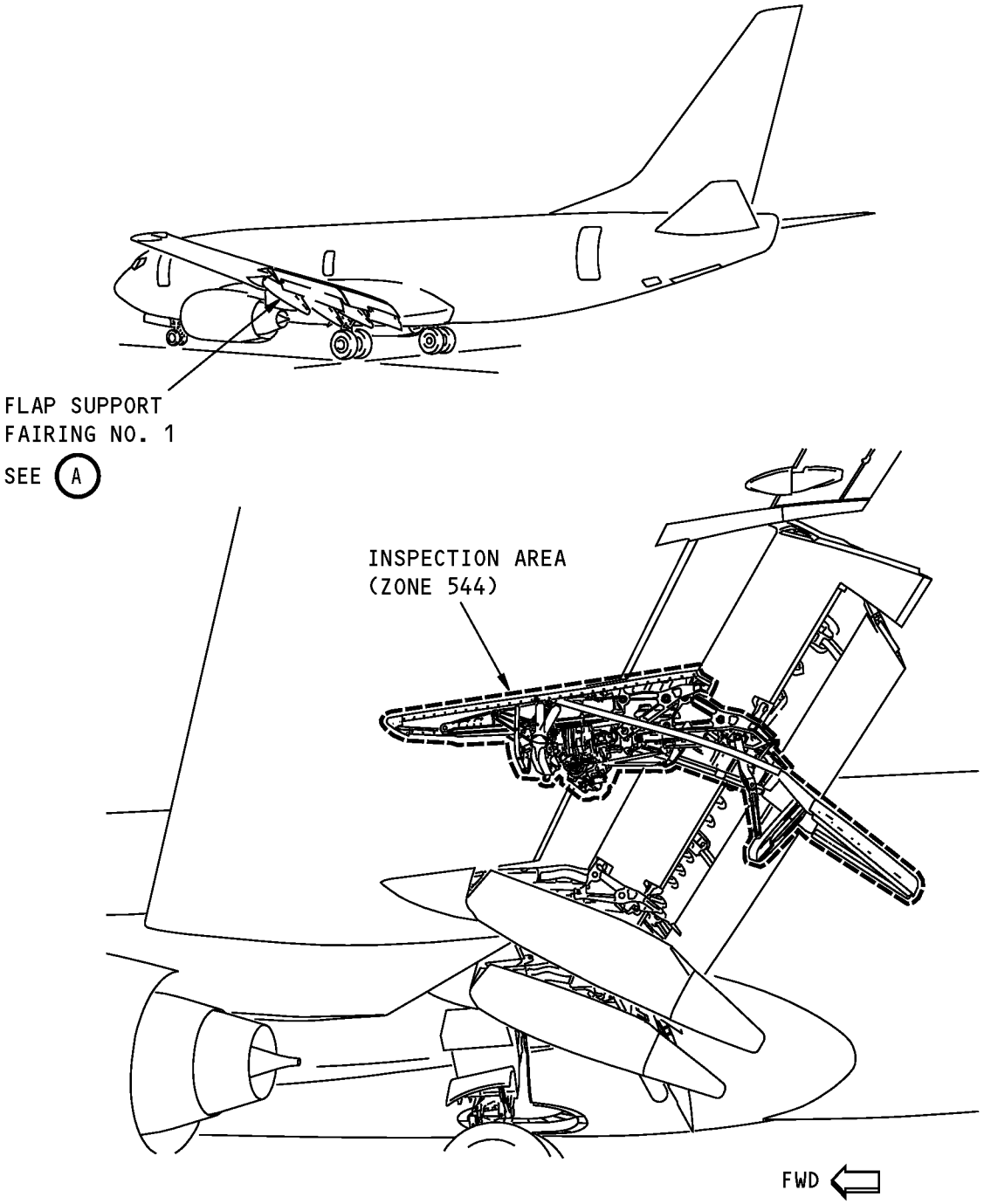
(1) This procedure is a scheduled maintenance task.

B. Inspection

SUBTASK 57-05-03-210-033

(1) Do the inspection.

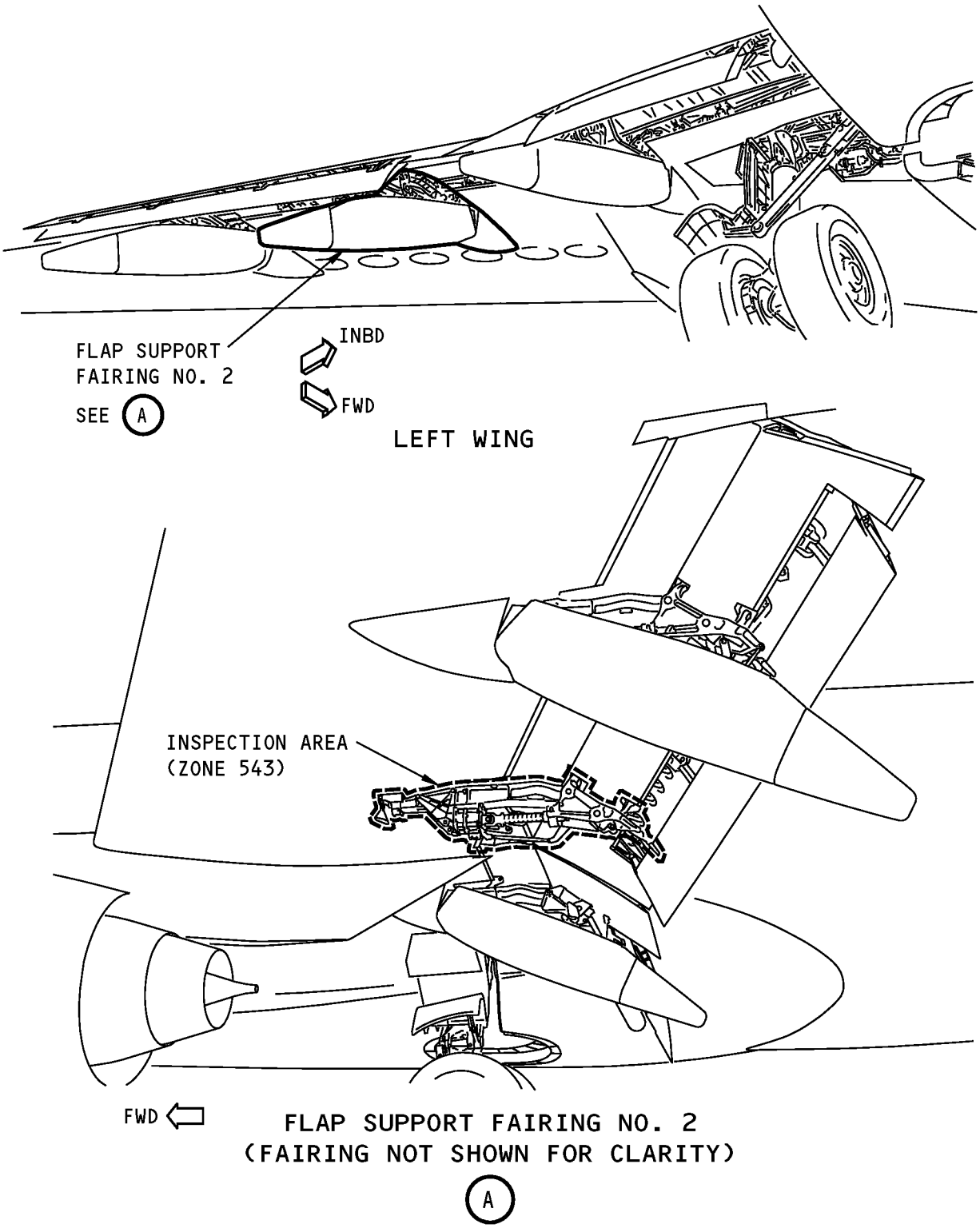
———————— END OF TASK ————————



FLAP SUPPORT FAIRING NO. 1

A

Flap Support Fairing No. 1General Visual (Internal)
Figure 239/57-05-03-990-827



Flap Support Fairing No. 2General Visual (Internal)
Figure 240/57-05-03-990-828

TASK 57-05-03-210-834

36. INTERNAL - GENERAL VISUAL: INTERNAL - FLAP SUPPORTS NO. 7 & 8

A. General

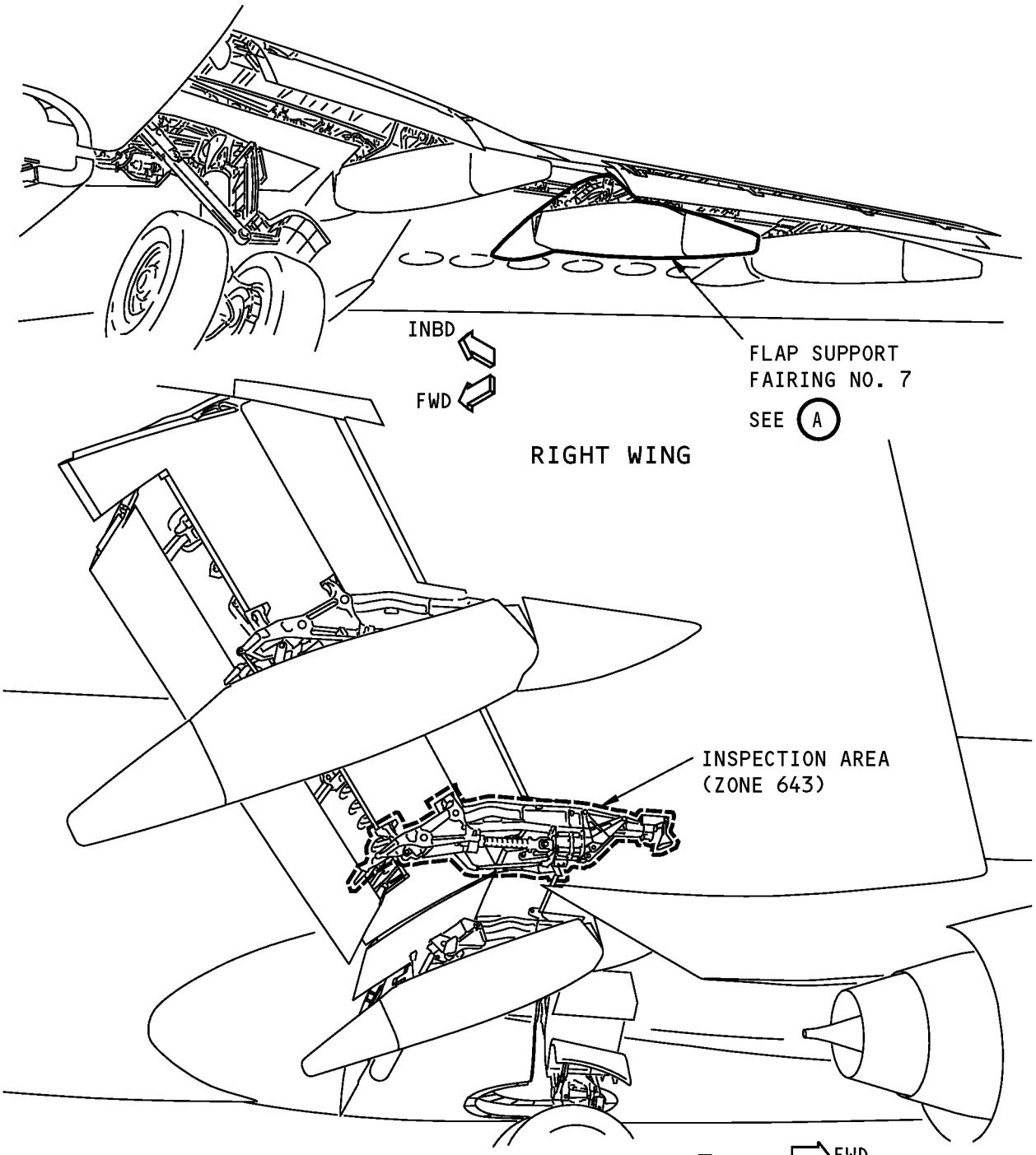
(1) This procedure is a scheduled maintenance task.

B. Inspection

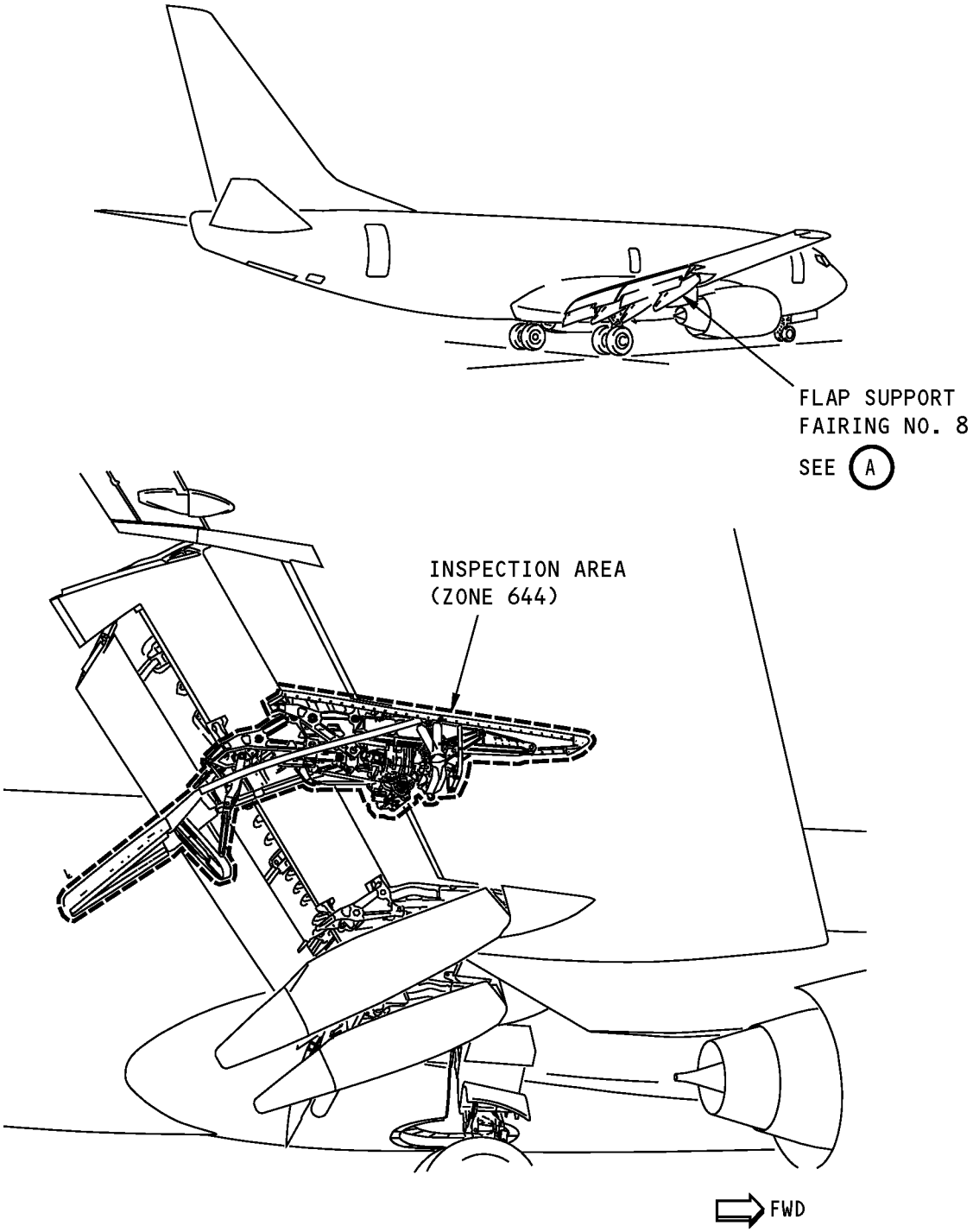
SUBTASK 57-05-03-210-034

(1) Do the inspection.

———————— END OF TASK ————————



Flap Support Fairing No. 7General Visual (Internal)
Figure 241/57-05-03-990-830



FLAP SUPPORT FAIRING NO. 8

A

Flap Support Fairing No. 8General Visual (Internal)
Figure 242/57-05-03-990-829

TASK 57-05-03-210-835

37. INTERNAL - GENERAL VISUAL: INTERNAL - LEFT OUTBOARD WING LOWER SURFACE

A. General

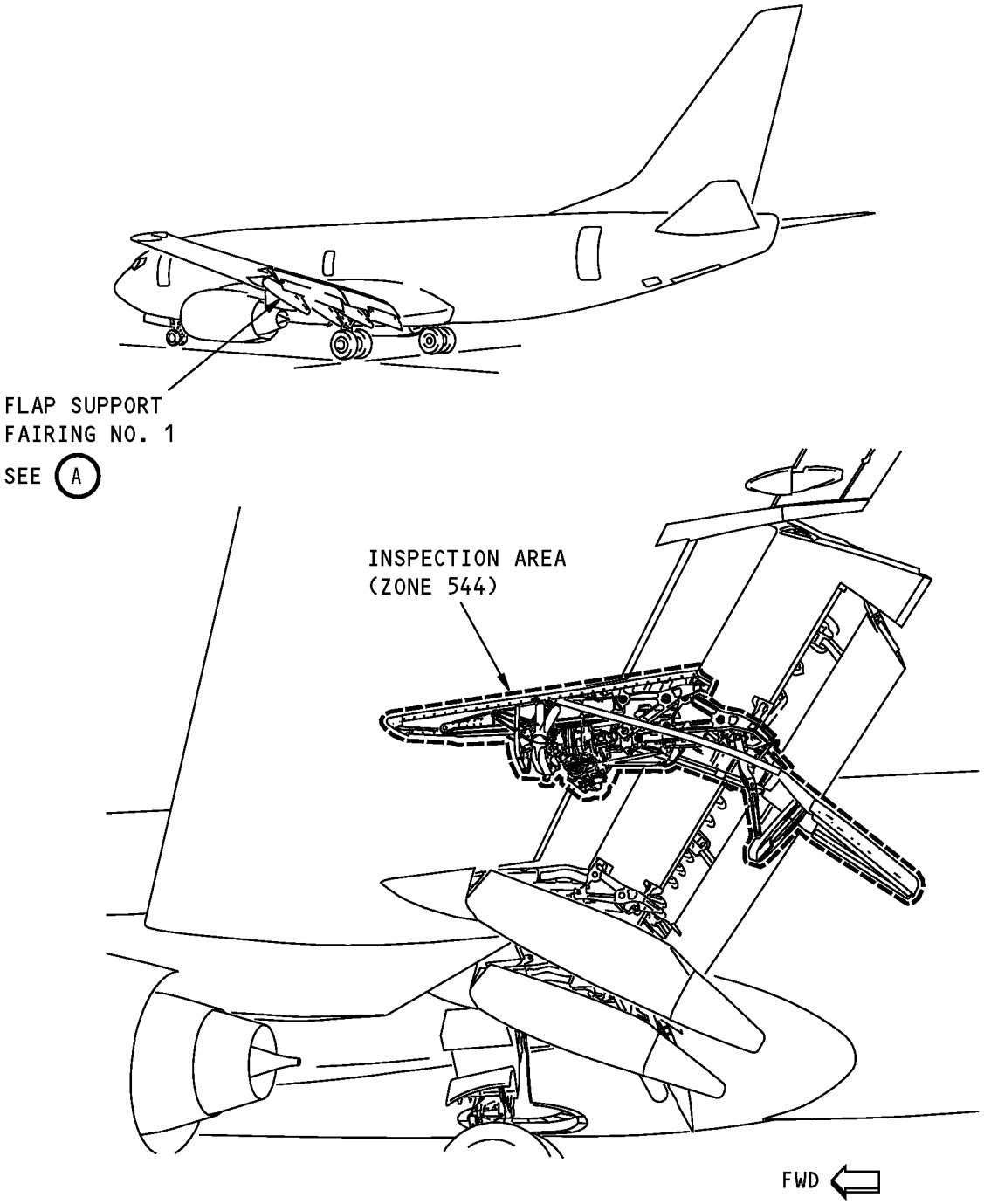
(1) This procedure is a scheduled maintenance task.

B. Inspection

SUBTASK 57-05-03-210-035

(1) Do the inspection.

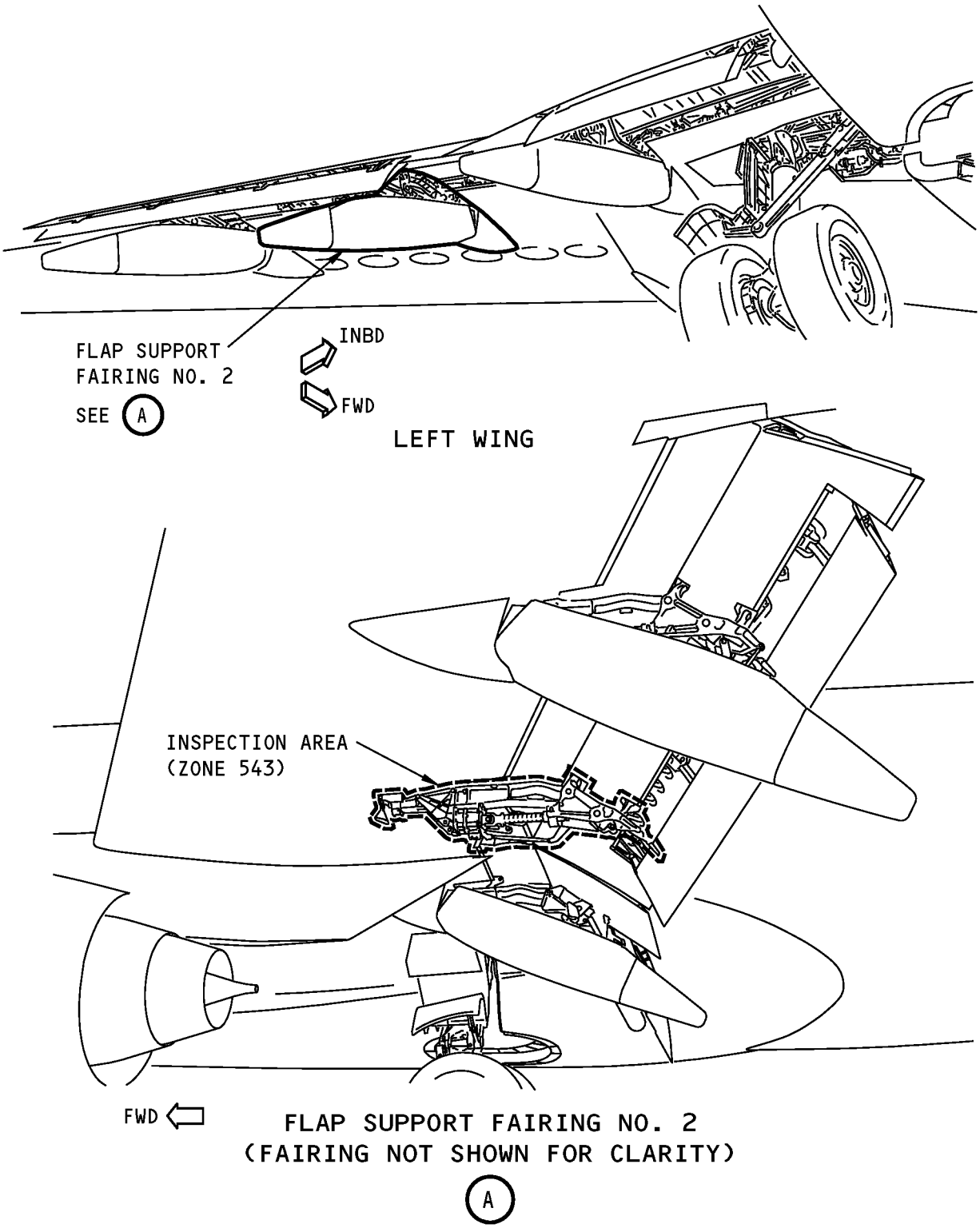
———————— END OF TASK ————————



FLAP SUPPORT FAIRING NO. 1

A

Flap Support Fairing No. 1 General Visual (Internal)
Figure 243/57-05-03-990-825



Flap Support Fairing No. 2 General Visual (Internal)
Figure 244/57-05-03-990-826

TASK 57-05-03-210-836

38. INTERNAL - GENERAL VISUAL: INTERNAL - RIGHT OUTBOARD WING LOWER SURFACE

A. General

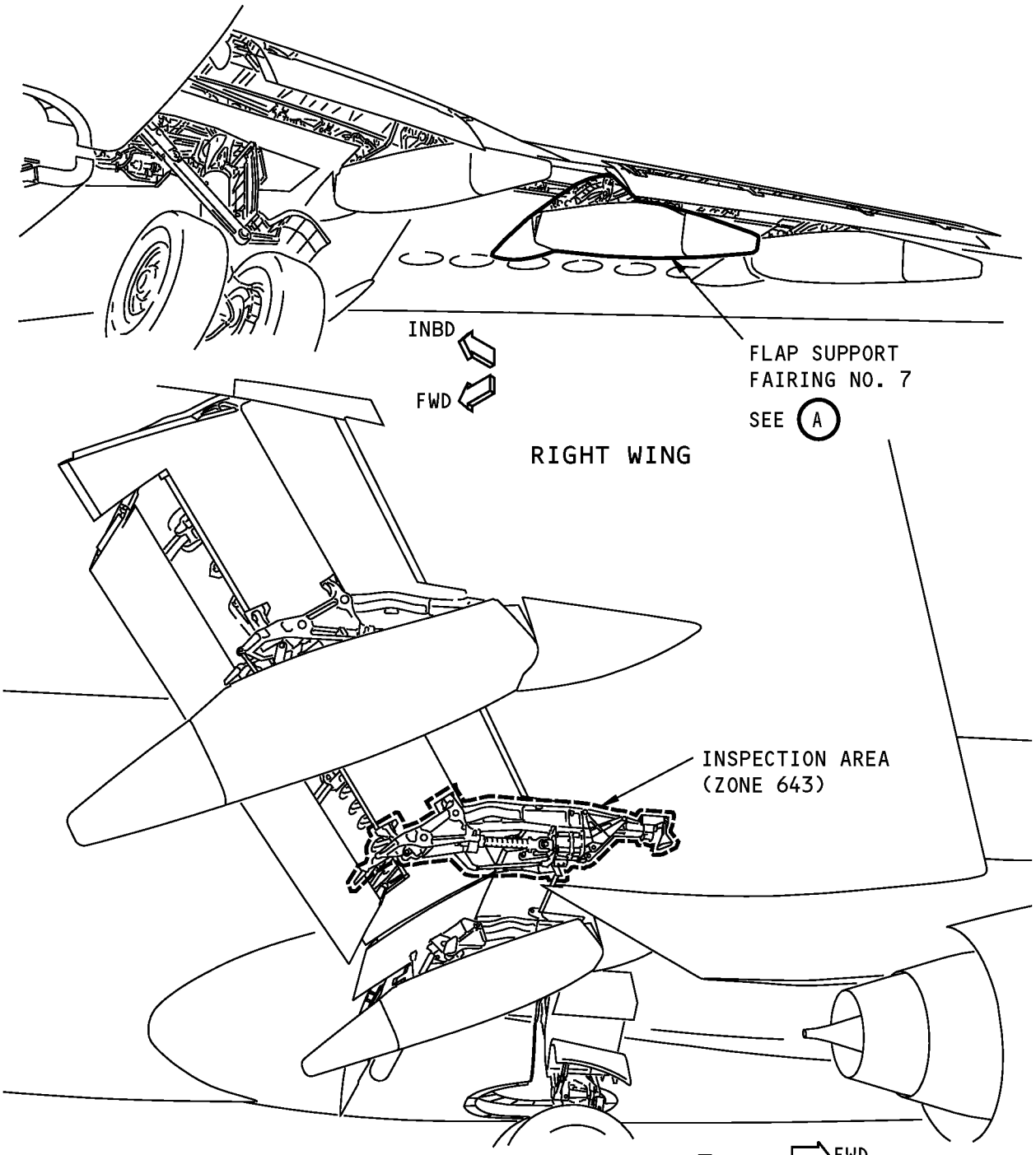
(1) This procedure is a scheduled maintenance task.

B. Inspection

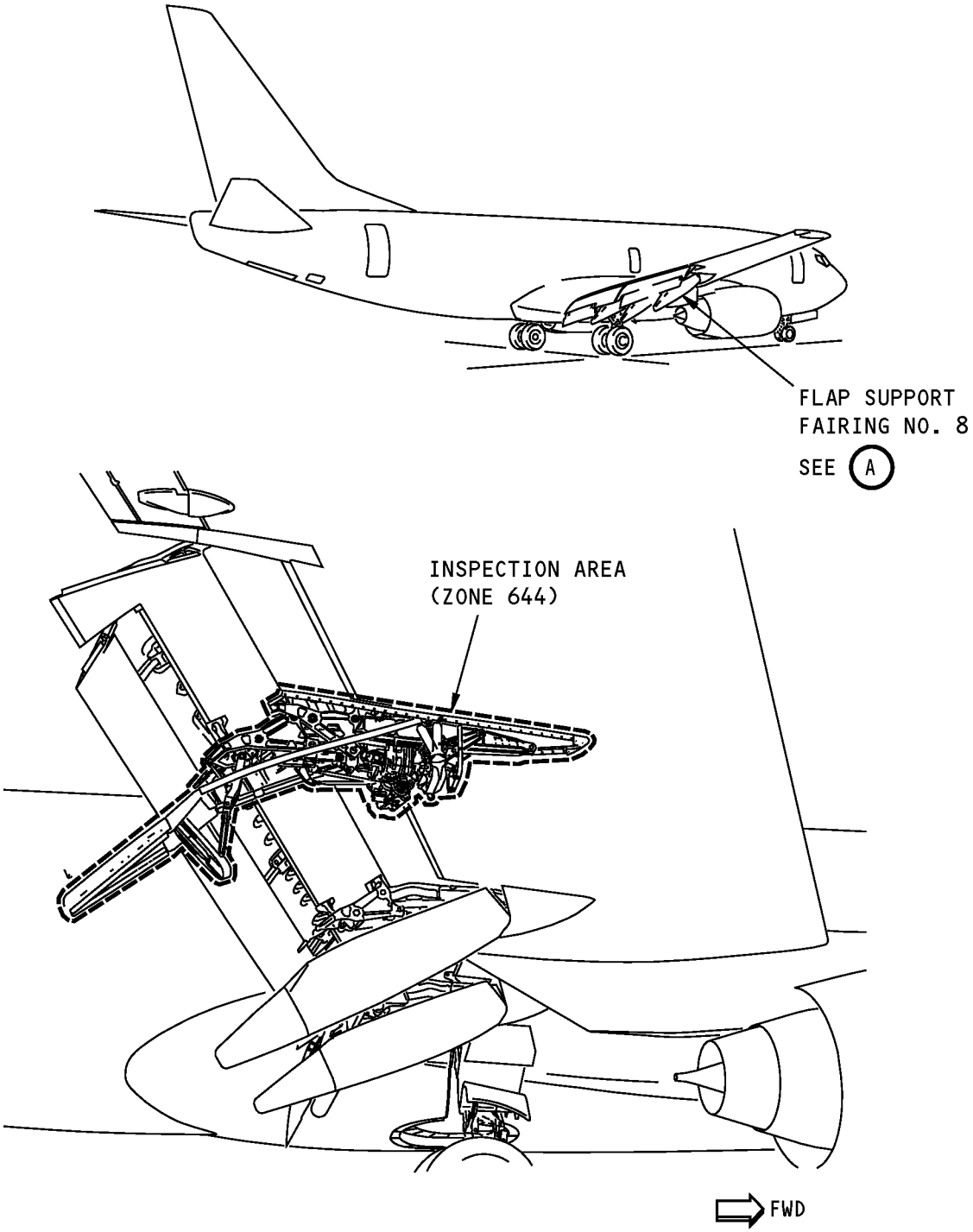
SUBTASK 57-05-03-210-036

(1) Do the inspection.

———————— END OF TASK ————————



Flap Support Fairing No. 7 General Visual (Internal)
Figure 245 (Sheet 1 of 2)/57-05-03-990-807



FLAP SUPPORT FAIRING NO. 8

A

Flap Support Fairing No. 7 General Visual (Internal)
Figure 245 (Sheet 2 of 2)/57-05-03-990-807

TASK 57-05-03-210-837

39. INTERNAL - GENERAL VISUAL: INTERNAL - LEFT MAIN LANDING GEAR SUPPORT STRUCTURE

A. General

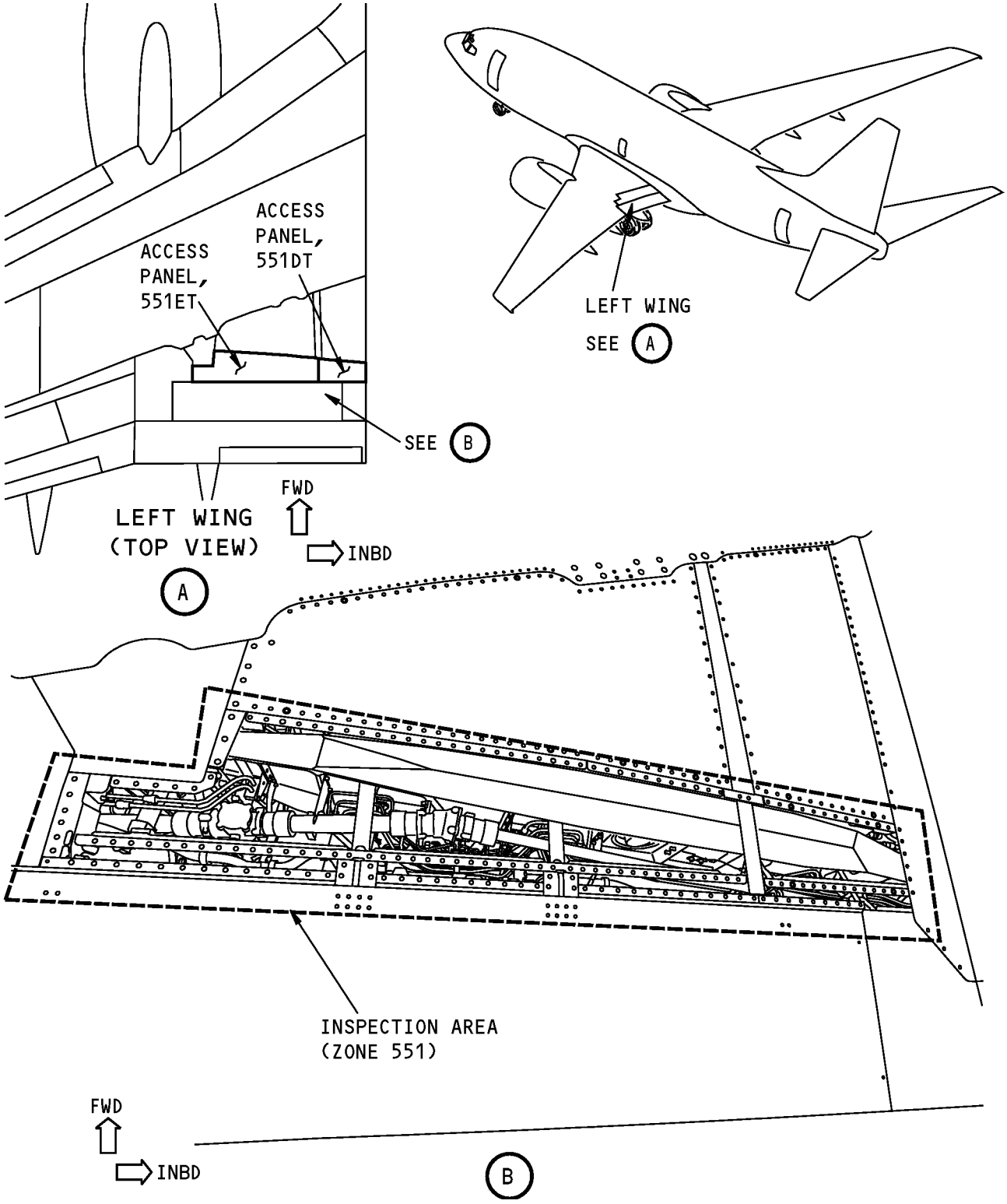
(1) This procedure is a scheduled maintenance task.

B. Inspection

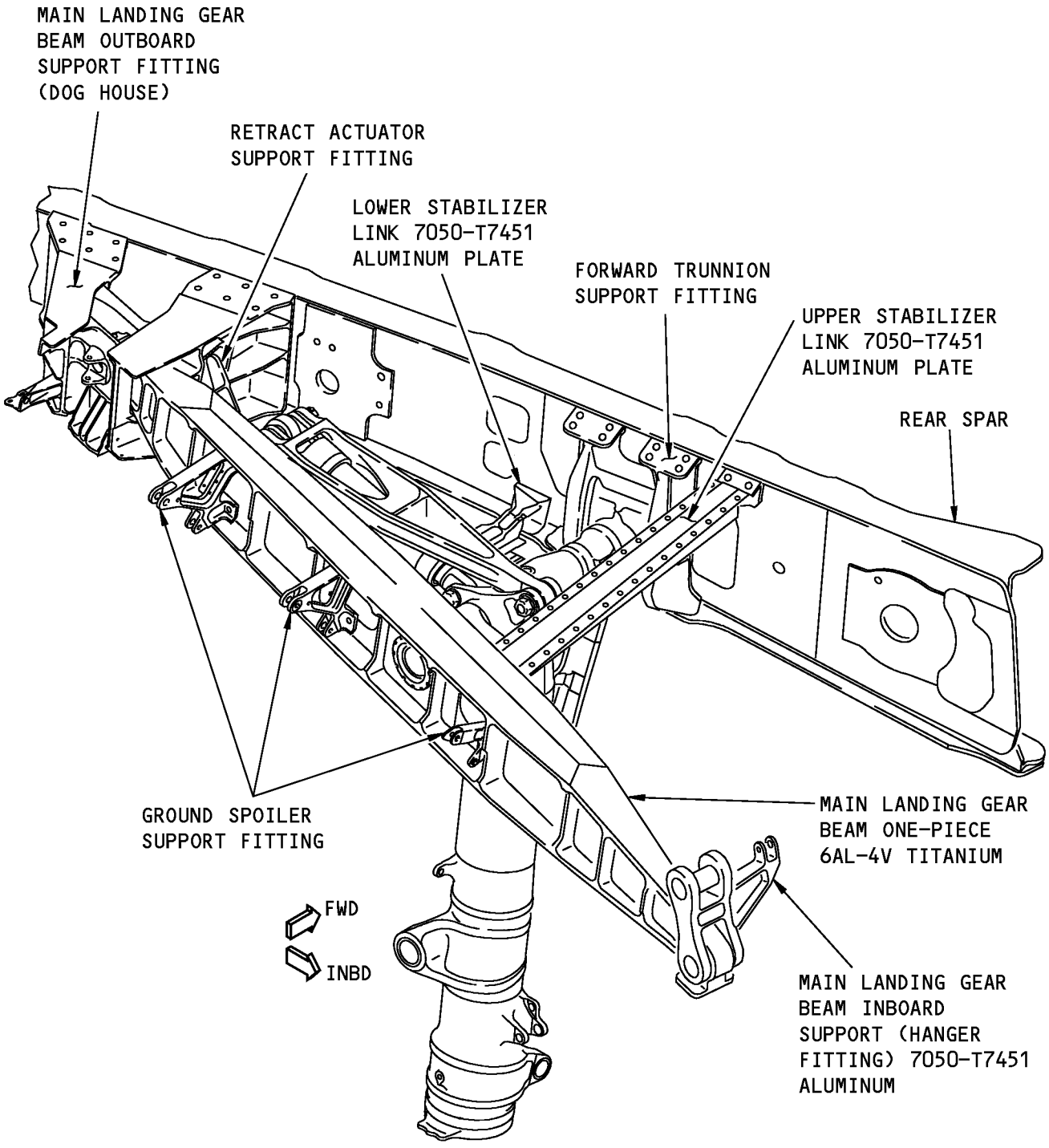
SUBTASK 57-05-03-210-037

(1) Do the inspection.

———————— END OF TASK ————————



Left Main Landing Gear Support Structure
Figure 246 (Sheet 1 of 2)/57-05-03-990-842



Left Main Landing Gear Support Structure
Figure 246 (Sheet 2 of 2)/57-05-03-990-842

TASK 57-05-03-210-838

40. INTERNAL - GENERAL VISUAL: INTERNAL - RIGHT MAIN LANDING GEAR SUPPORT STRUCTURE

A. General

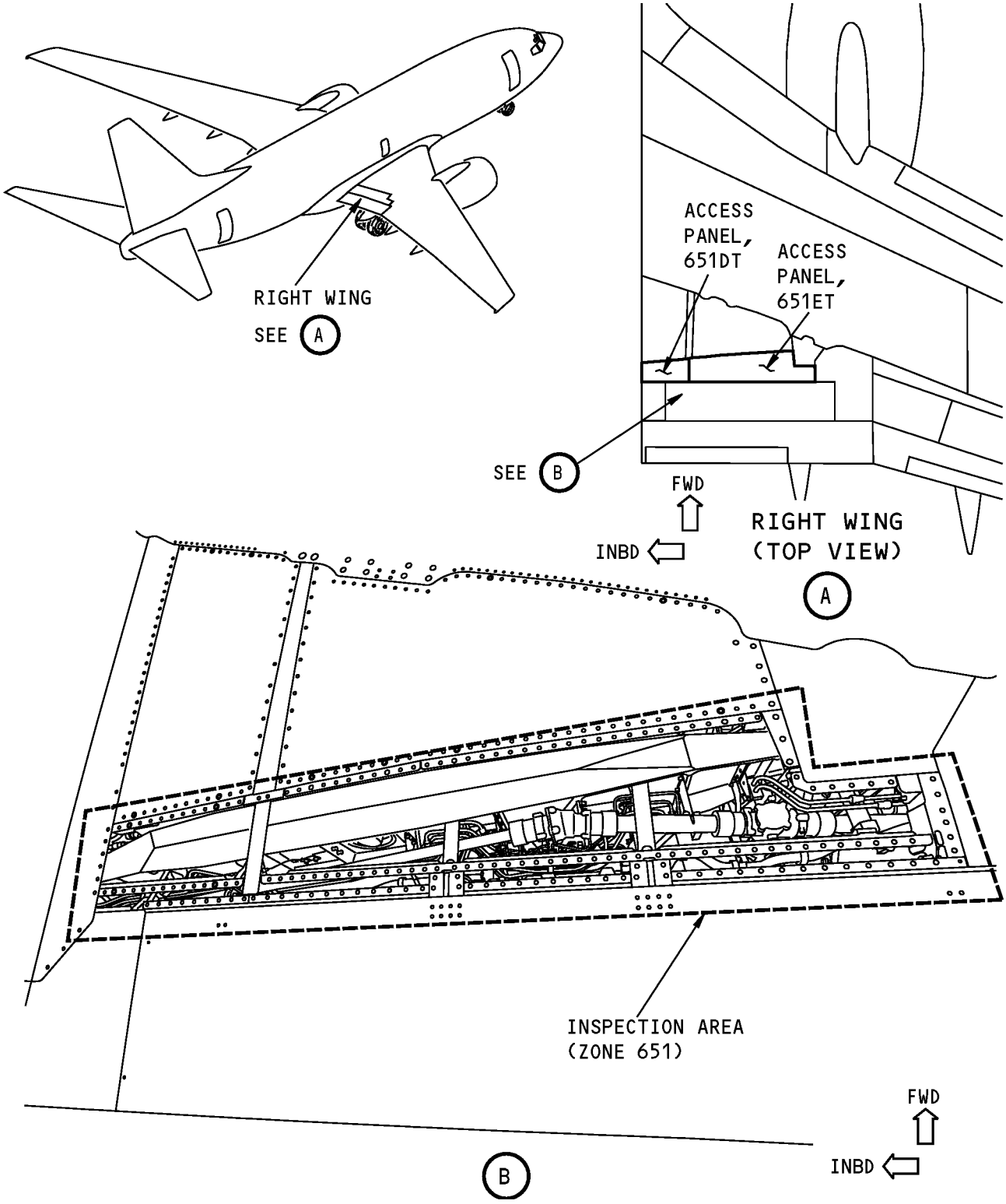
(1) This procedure is a scheduled maintenance task.

B. Inspection

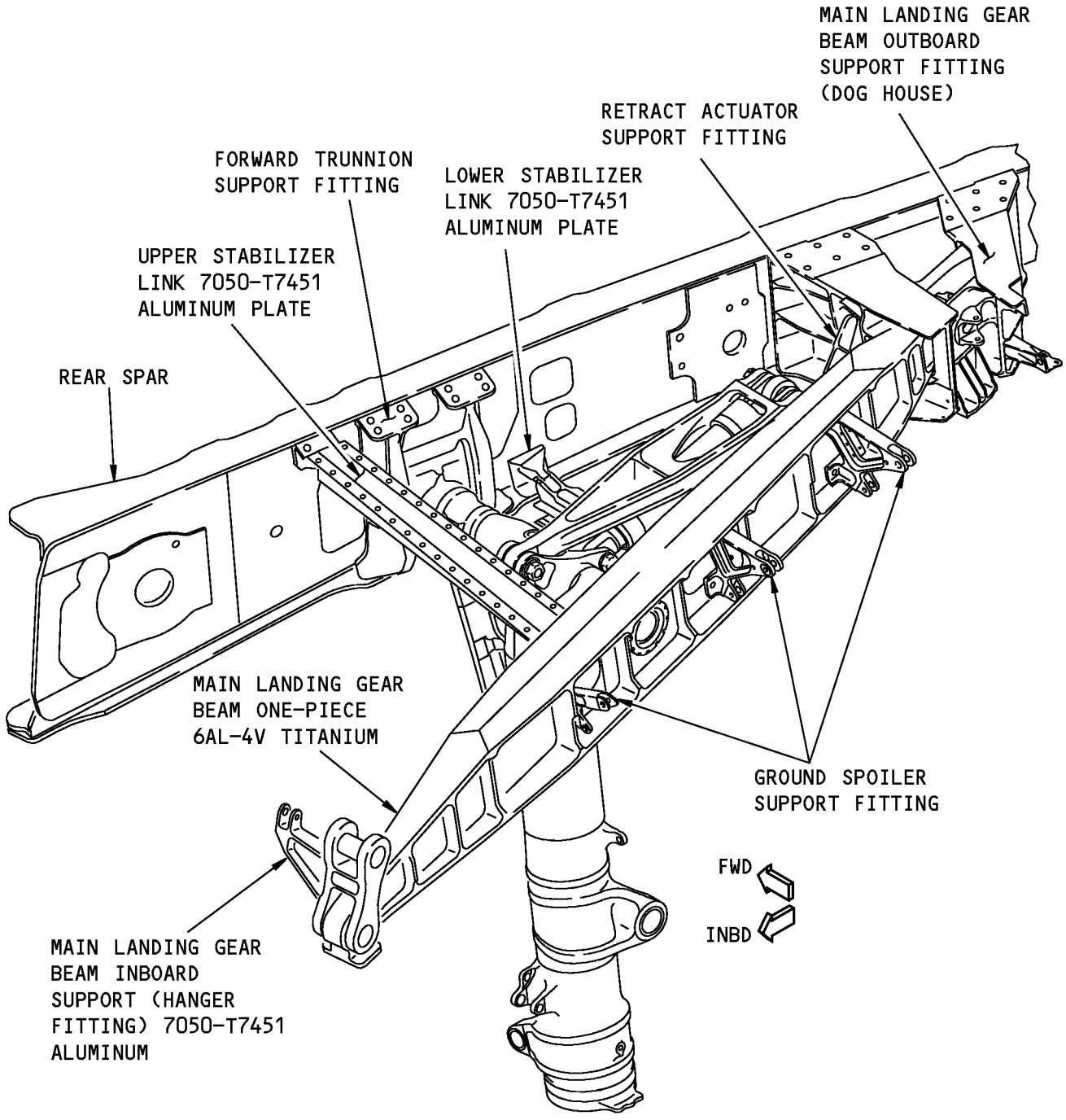
SUBTASK 57-05-03-210-038

(1) Do the inspection.

END OF TASK



Right Main Landing Gear Support Structure General Visual (Internal)
Figure 247 (Sheet 1 of 2)/57-05-03-990-840



Right Main Landing Gear Support Structure General Visual (Internal)
Figure 247 (Sheet 2 of 2)/57-05-03-990-840

TASK 57-05-03-210-839

41. INTERNAL - GENERAL VISUAL: INTERNAL - LEFT WING OUTBOARD REAR SPAR

A. General

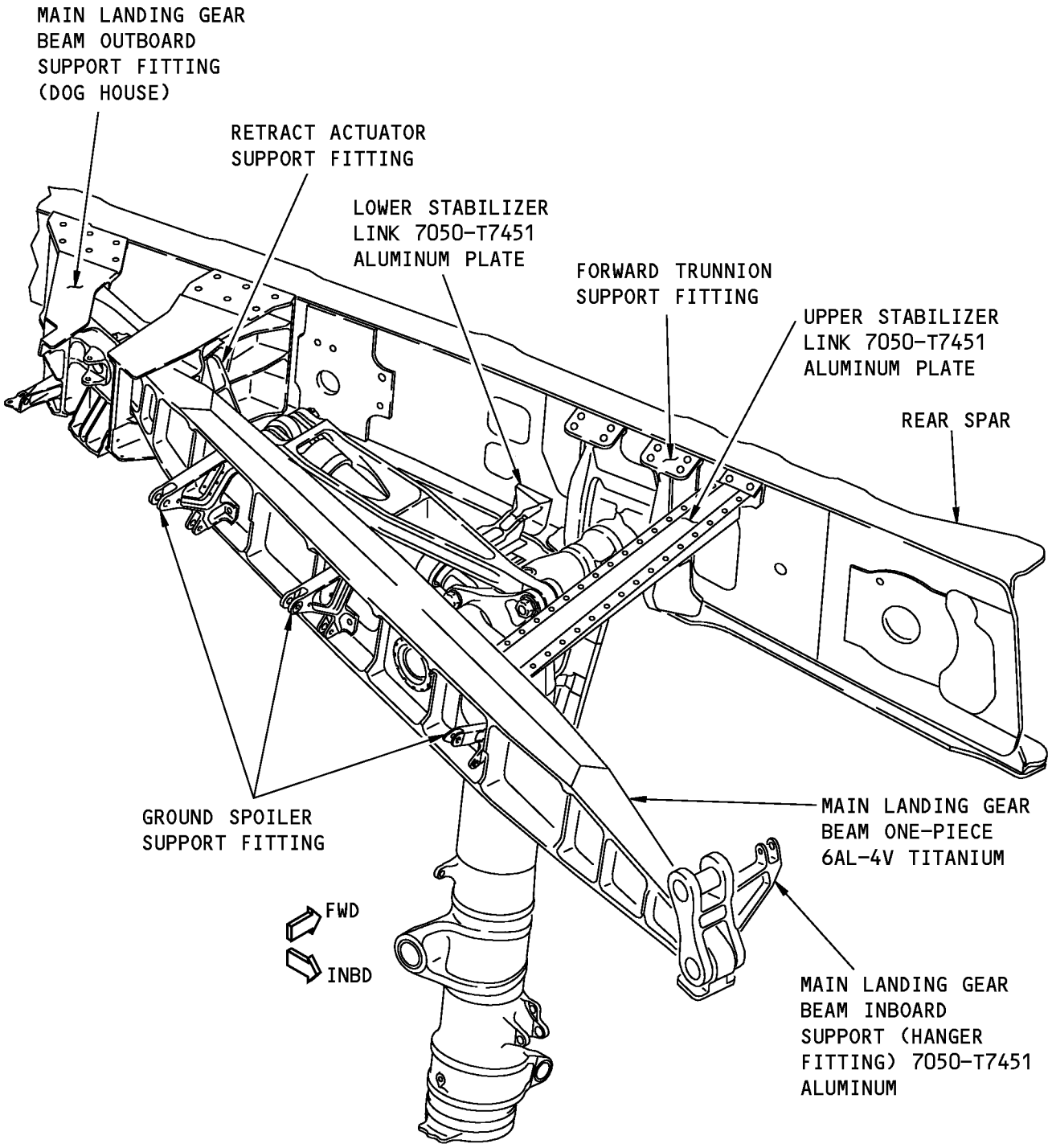
(1) This procedure is a scheduled maintenance task.

B. Inspection

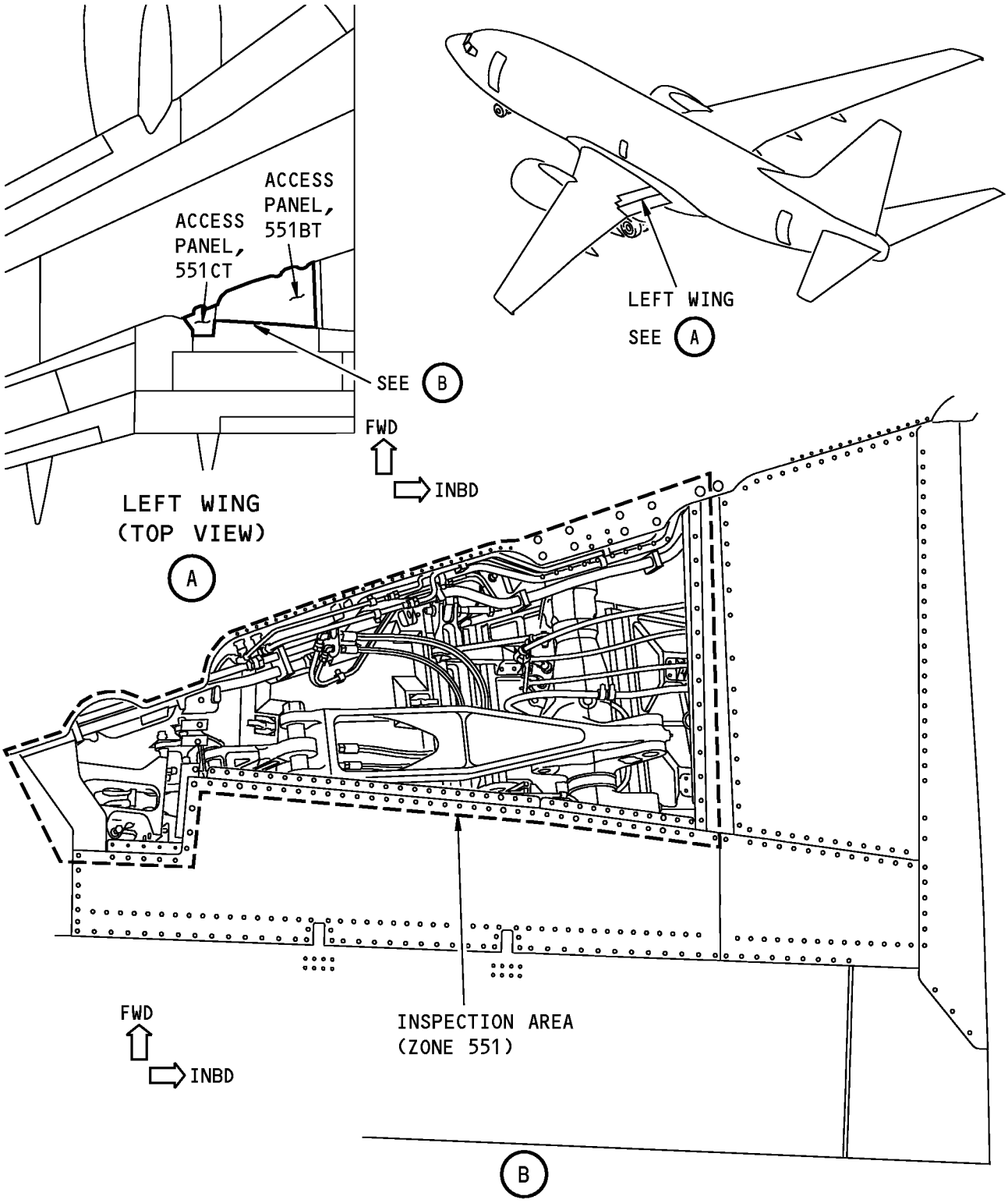
SUBTASK 57-05-03-210-039

(1) Do the inspection.

———————— END OF TASK ————————



Aft side of left wing rear spar in zone 551
Figure 248 (Sheet 1 of 2)/57-05-03-990-867



Aft side of left wing rear spar in zone 551
Figure 248 (Sheet 2 of 2)/57-05-03-990-867

TASK 57-05-03-210-840

42. INTERNAL - GENERAL VISUAL: INTERNAL - RIGHT WING OUTBOARD REAR SPAR

A. General

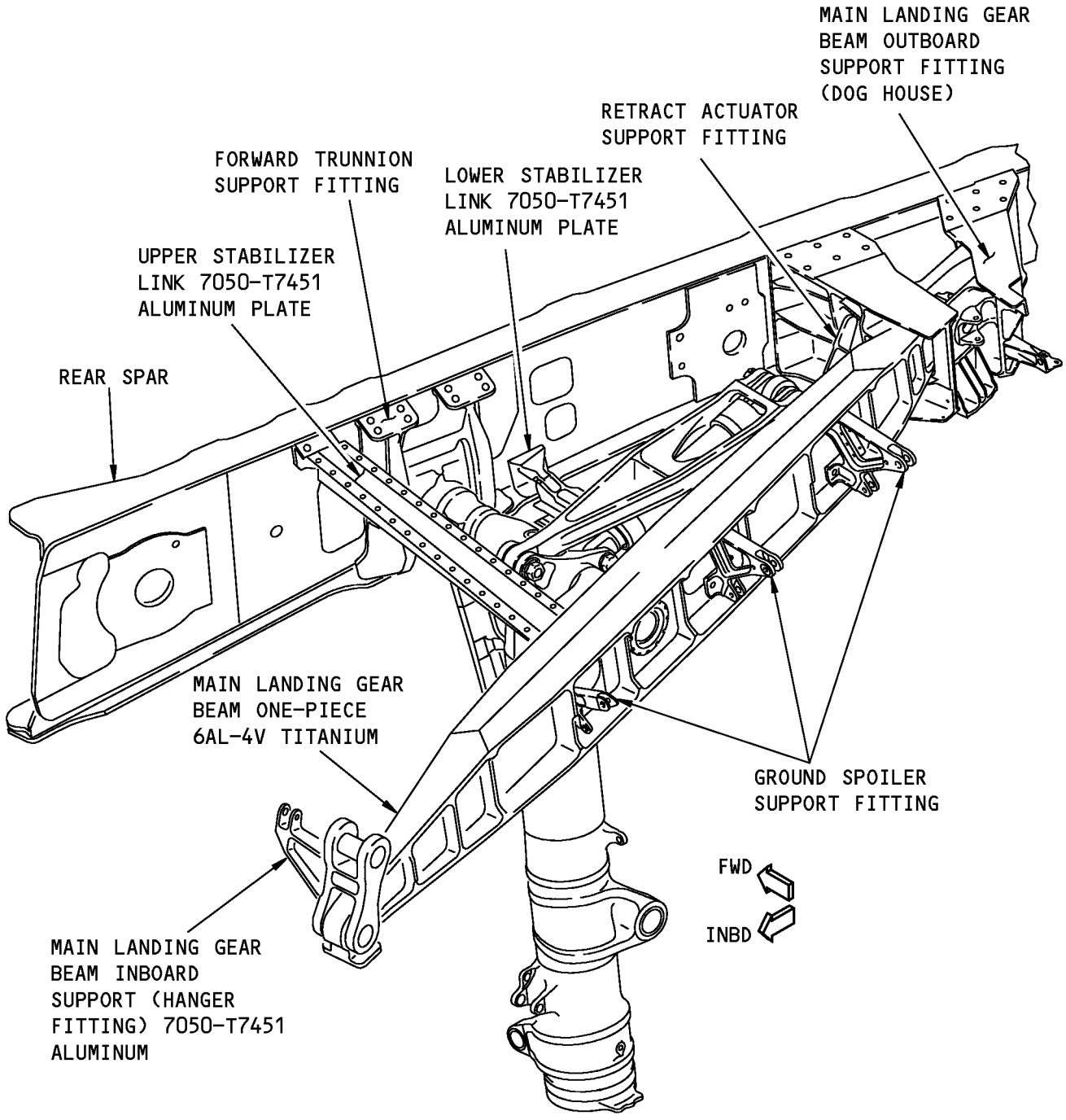
(1) This procedure is a scheduled maintenance task.

B. Inspection

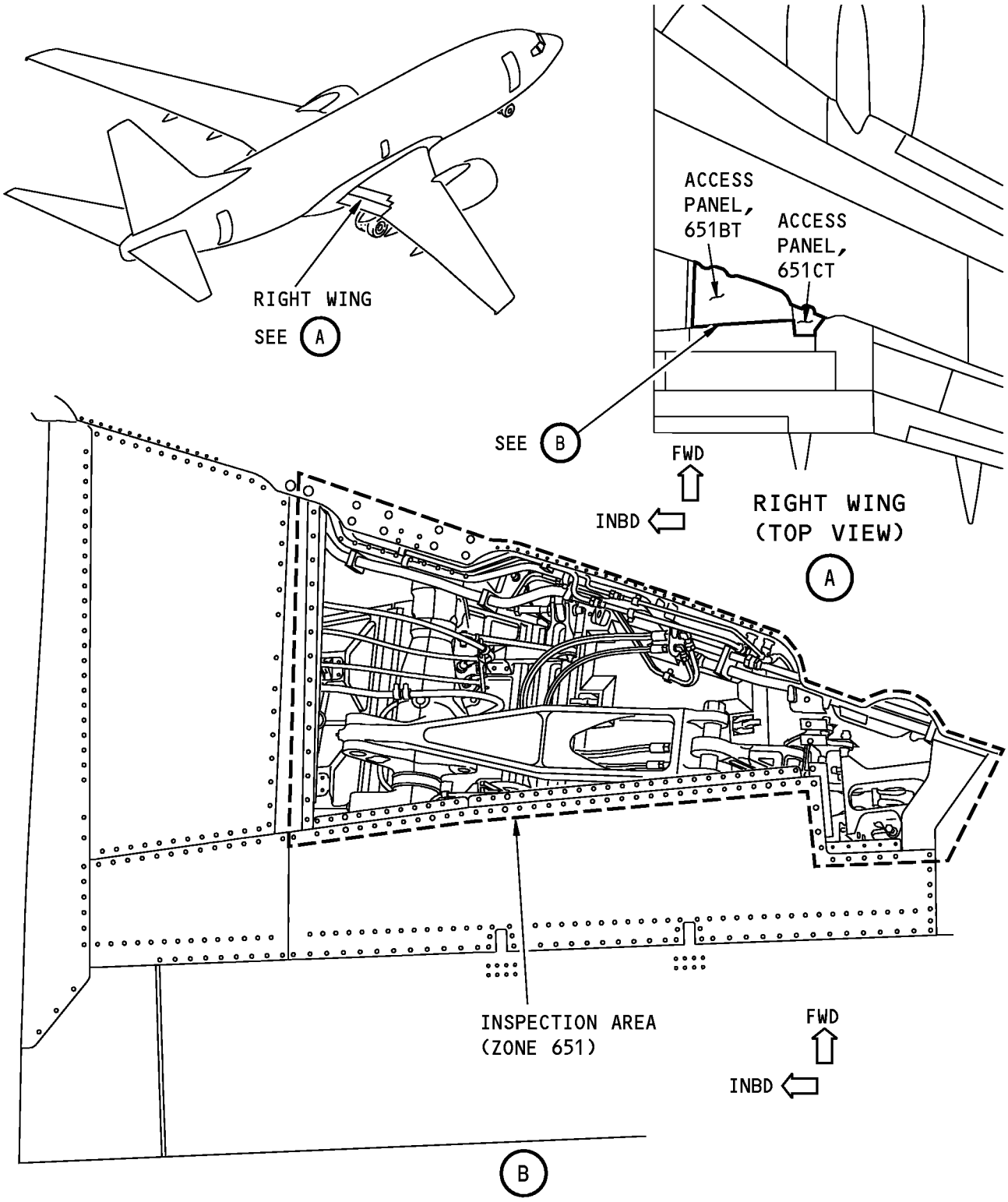
SUBTASK 57-05-03-210-040

(1) Do the inspection.

——————— END OF TASK ———————



Aft side of right wing rear spar in zone 651
Figure 249 (Sheet 1 of 2)/57-05-03-990-868



Aft side of right wing rear spar in zone 651
Figure 249 (Sheet 2 of 2)/57-05-03-990-868

TASK 57-05-03-210-841

43. INTERNAL - GENERAL VISUAL: INTERNAL - LEFT WING OUTBOARD TRAILING EDGE STRUCTURE

A. General

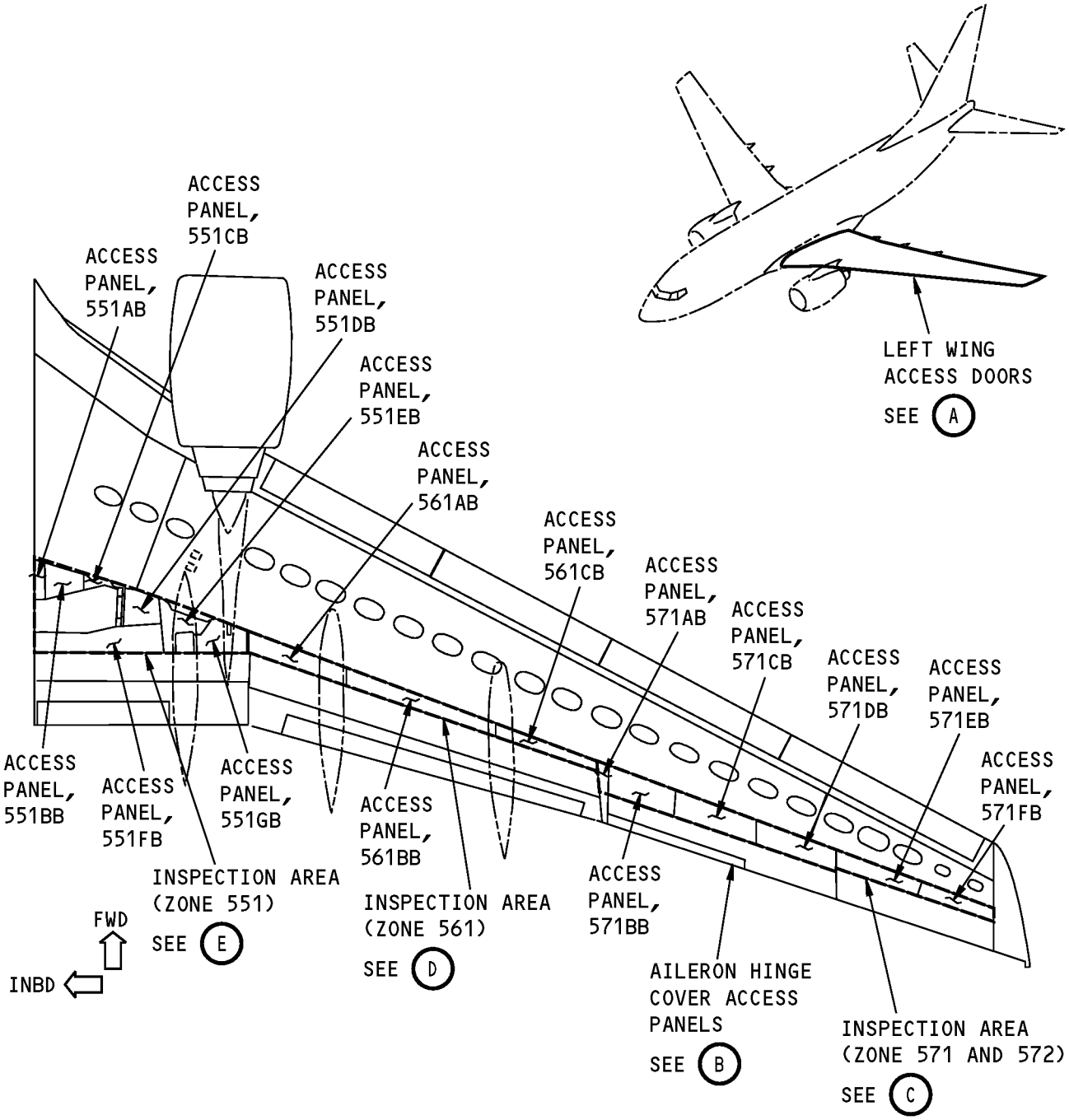
(1) This procedure is a scheduled maintenance task.

B. Inspection

SUBTASK 57-05-03-210-041

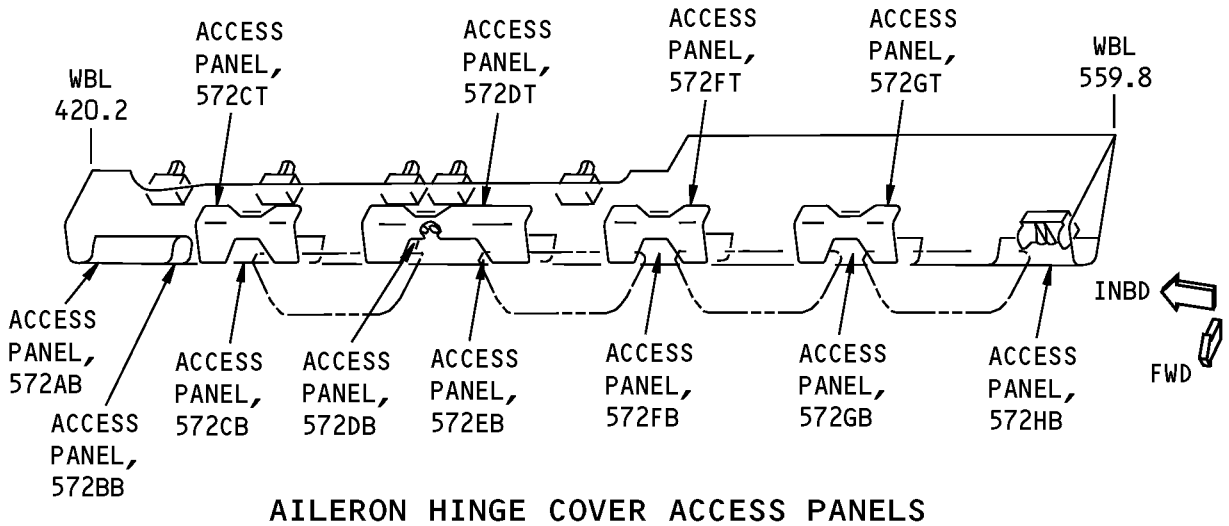
(1) Do the inspection.

———————— END OF TASK ————————



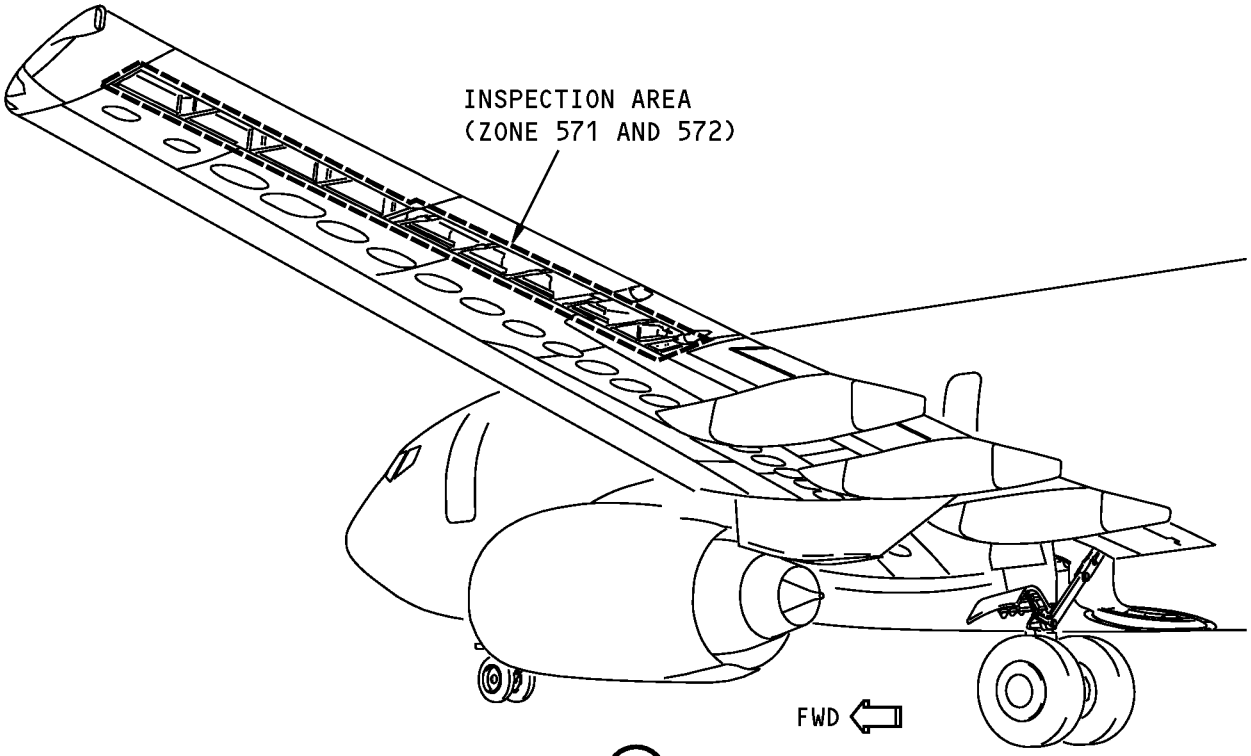
LEFT WING ACCESS DOORS
(BOTTOM VIEW)
A

INTERNAL-GENERAL VISUAL: INTERNAL-LEFT WING OUTBOARD TRAILING EDGE STRUCTURE
Figure 250 (Sheet 1 of 6)/57-05-03-990-861



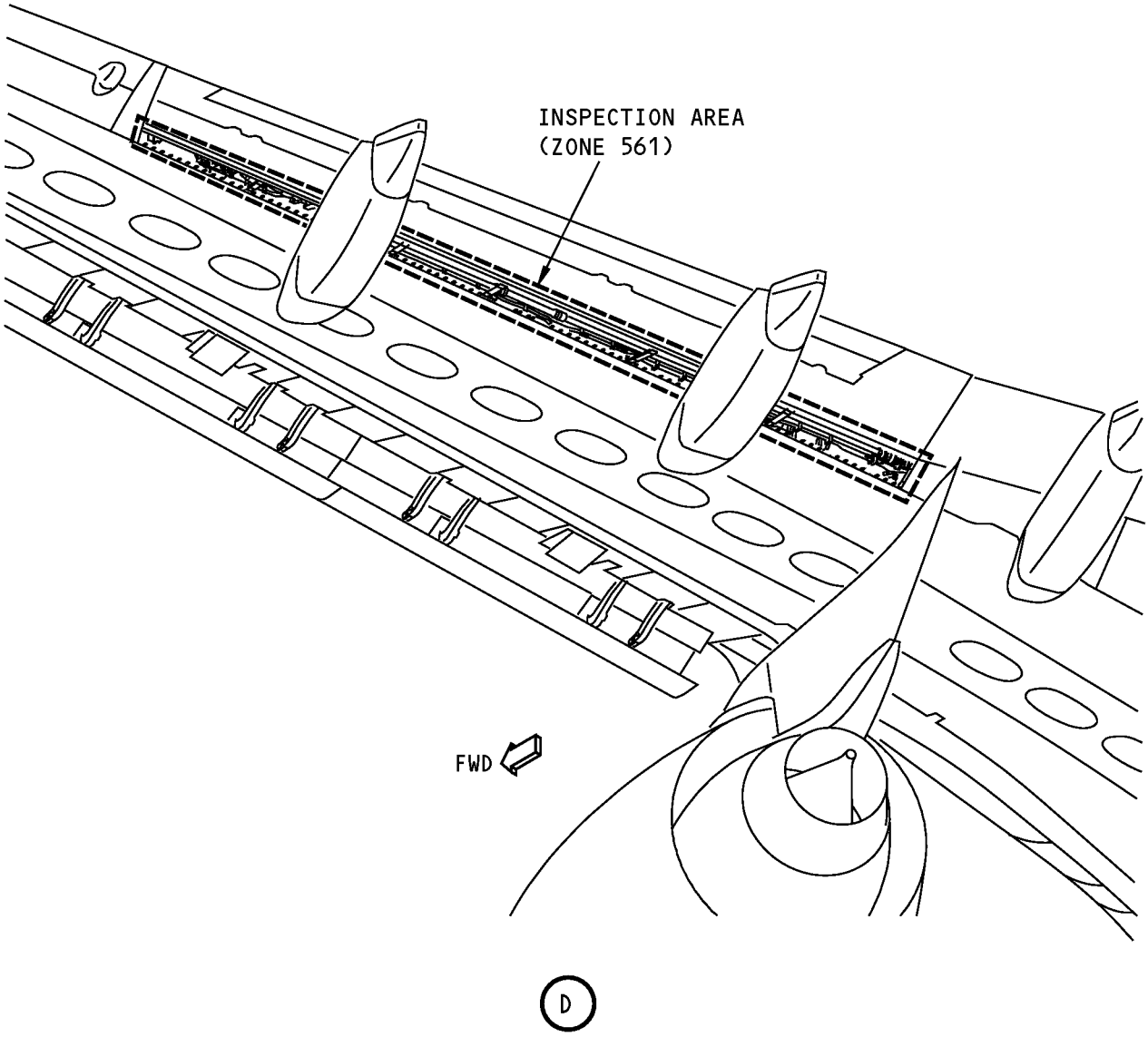
AILERON HINGE COVER ACCESS PANELS

B

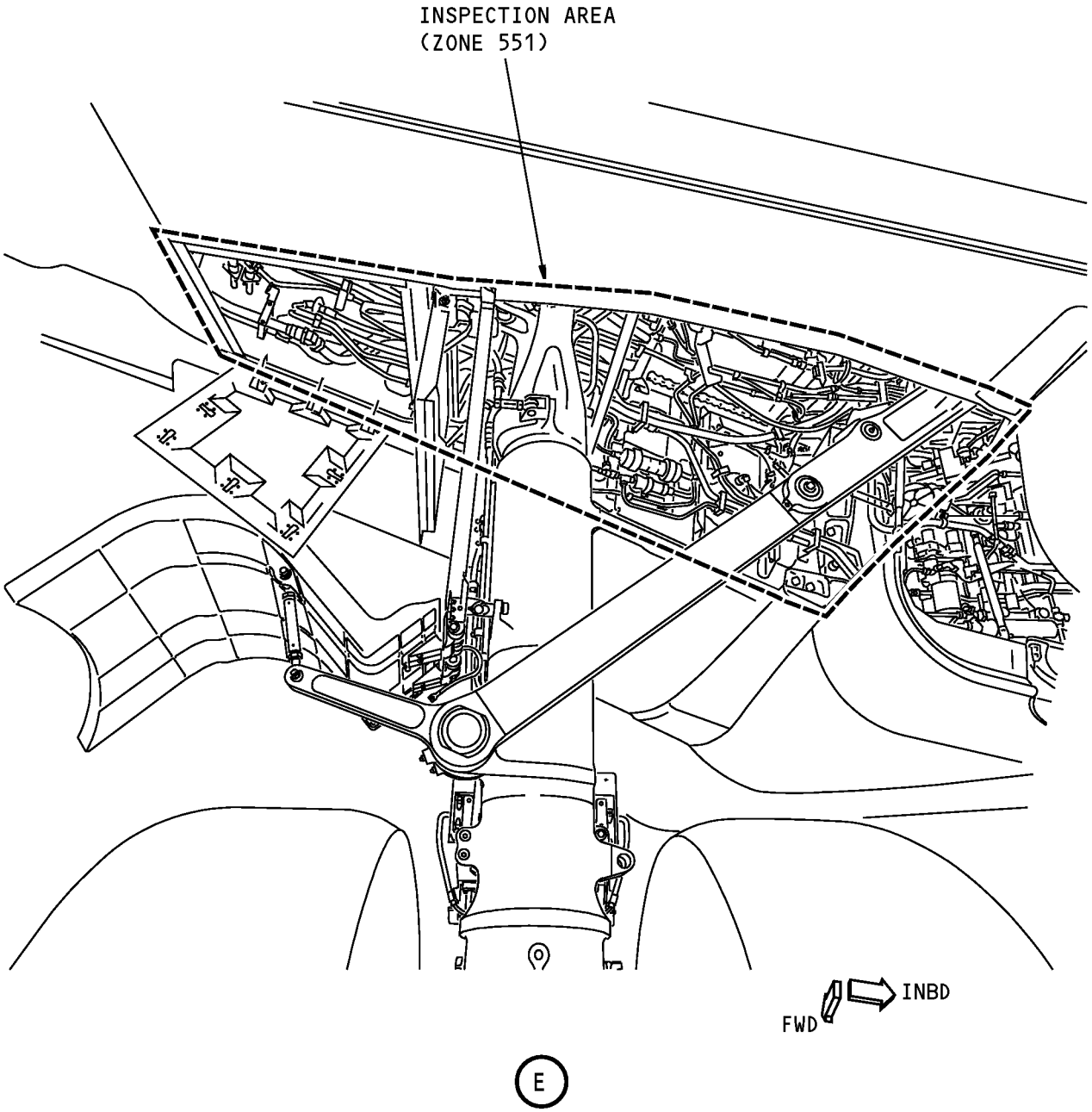


C

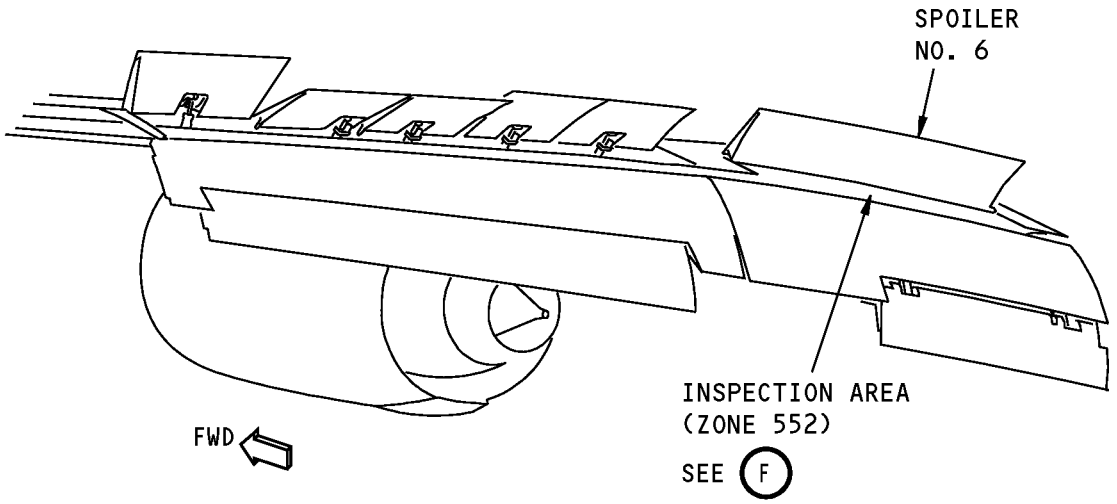
INTERNAL-GENERAL VISUAL: INTERNAL-LEFT WING OUTBOARD TRAILING EDGE STRUCTURE
Figure 250 (Sheet 2 of 6)/57-05-03-990-861



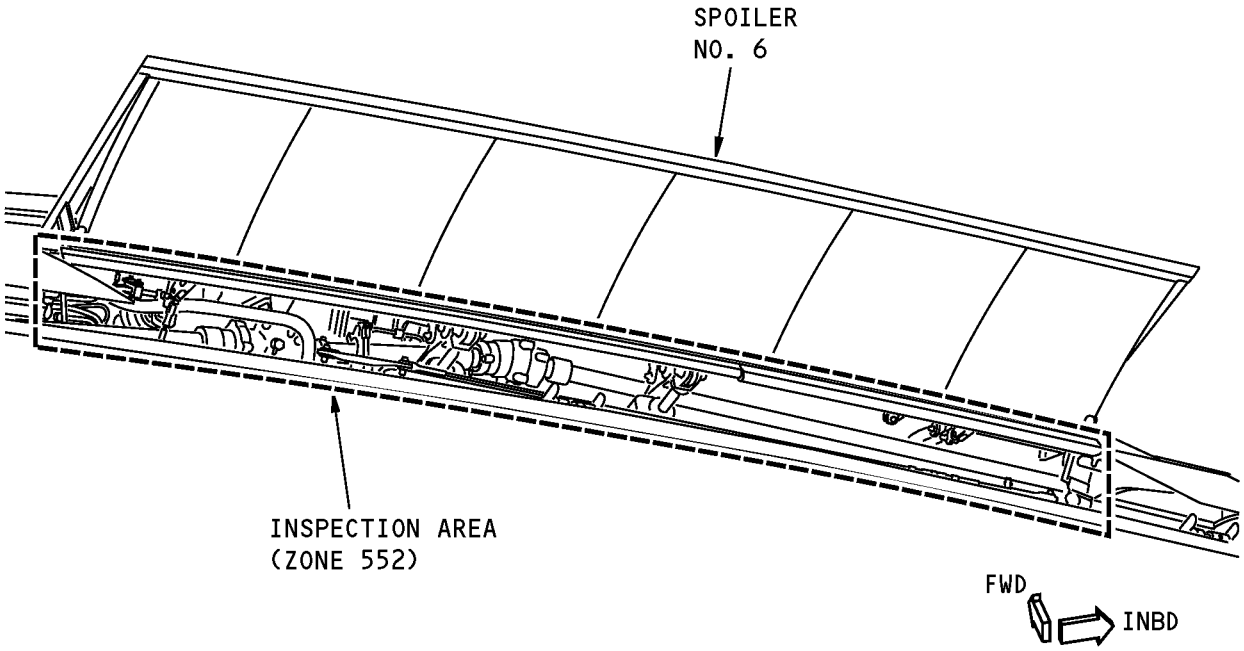
INTERNAL-GENERAL VISUAL: INTERNAL-LEFT WING OUTBOARD TRAILING EDGE STRUCTURE
Figure 250 (Sheet 3 of 6)/57-05-03-990-861



INTERNAL-GENERAL VISUAL: INTERNAL-LEFT WING OUTBOARD TRAILING EDGE STRUCTURE
Figure 250 (Sheet 4 of 6)/57-05-03-990-861

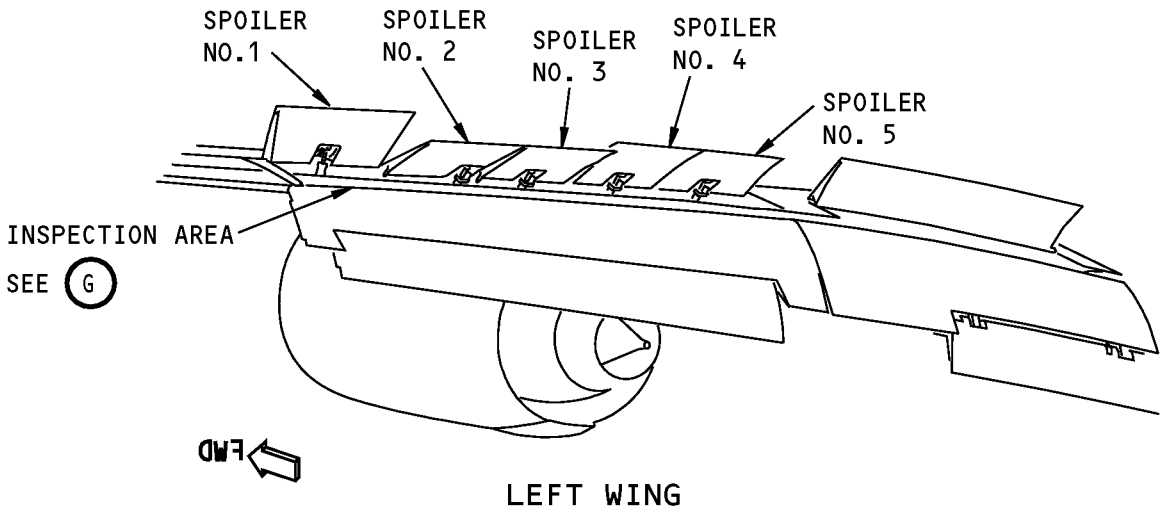


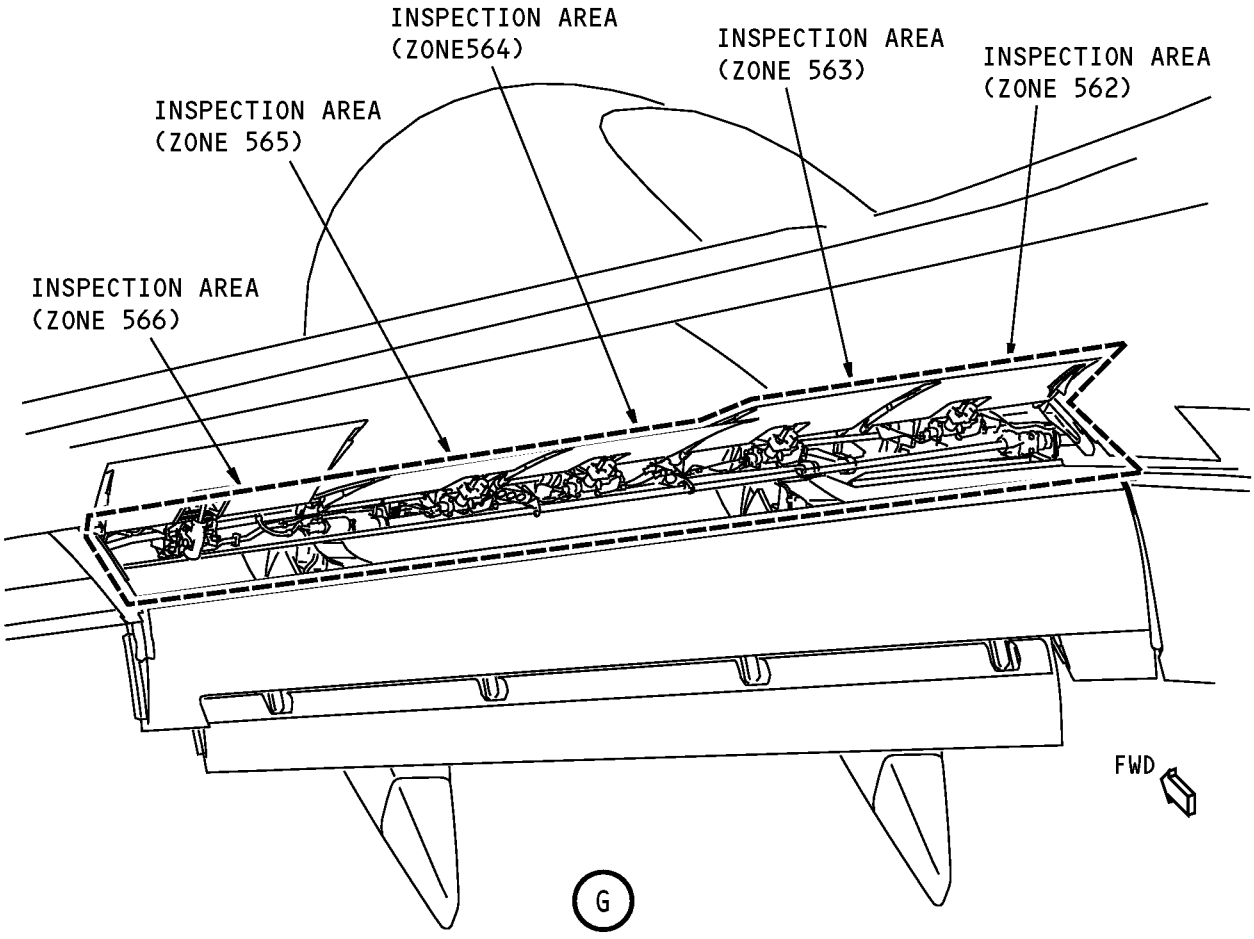
LEFT WING



F

INTERNAL-GENERAL VISUAL: INTERNAL-LEFT WING OUTBOARD TRAILING EDGE STRUCTURE
Figure 250 (Sheet 5 of 6)/57-05-03-990-861





INTERNAL-GENERAL VISUAL: INTERNAL-LEFT WING OUTBOARD TRAILING EDGE STRUCTURE
Figure 250 (Sheet 6 of 6)/57-05-03-990-861

TASK 57-05-03-210-842

44. INTERNAL - GENERAL VISUAL: INTERNAL - RIGHT WING OUTBOARD TRAILING EDGE STRUCTURE

A. General

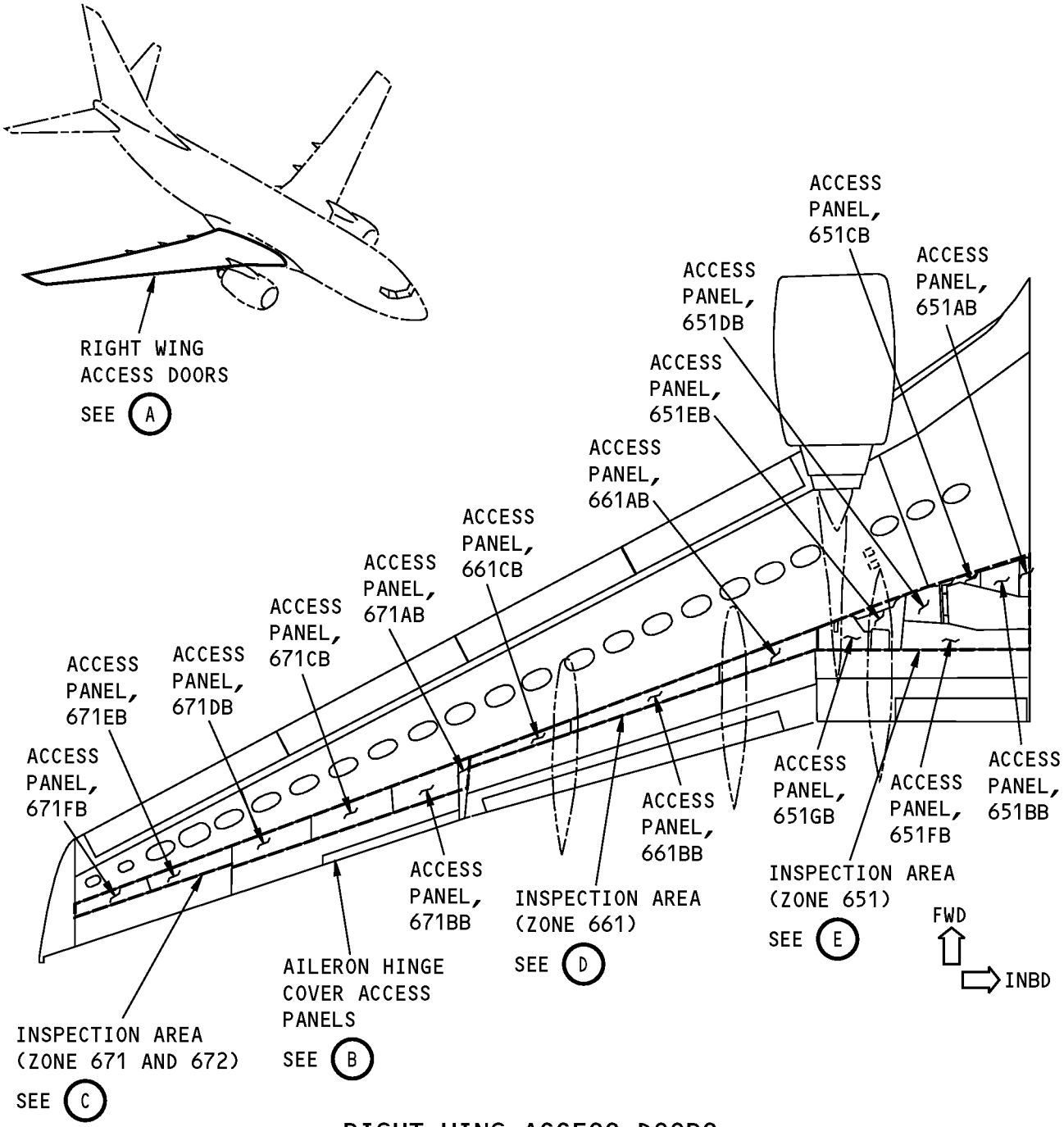
(1) This procedure is a scheduled maintenance task.

B. Inspection

SUBTASK 57-05-03-210-042

(1) Do the inspection.

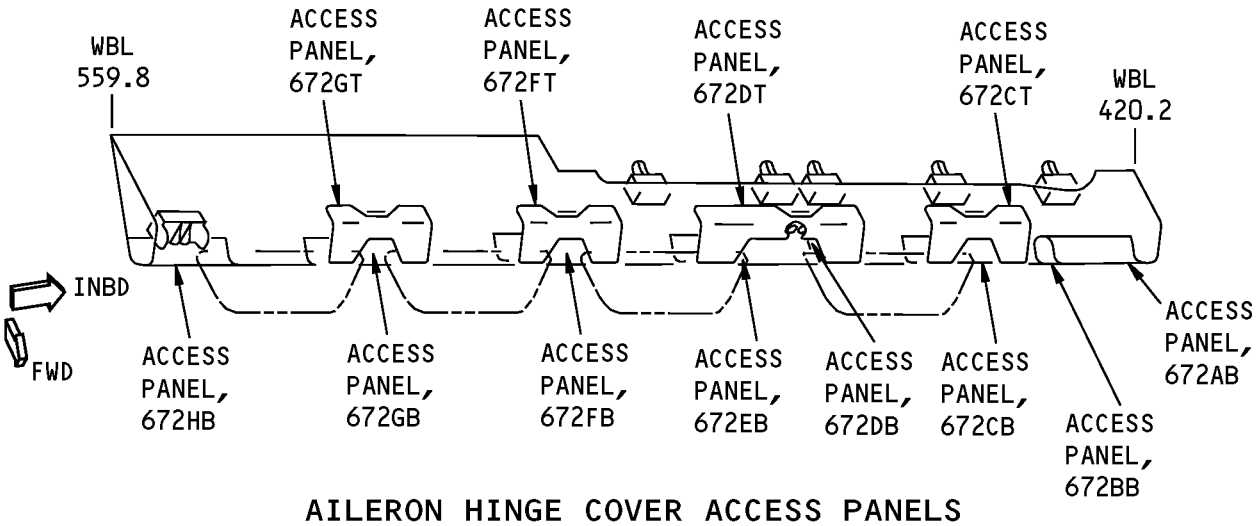
——————— END OF TASK ———————



RIGHT WING ACCESS DOORS
(BOTTOM VIEW)

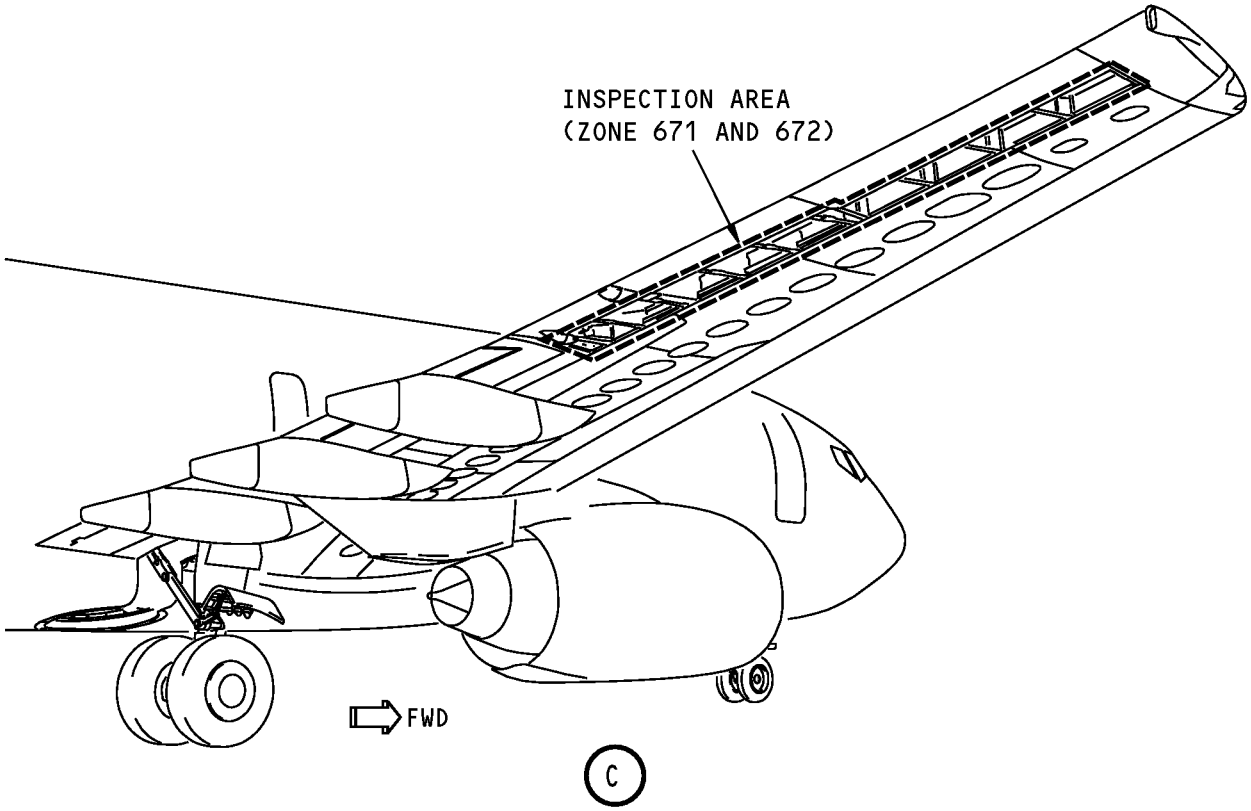
A

INTERNAL-GENERAL VISUAL: INTERNAL-RIGHT WING OUTBOARD TRAILING EDGE STRUCTURE
Figure 251 (Sheet 1 of 6)/57-05-03-990-862



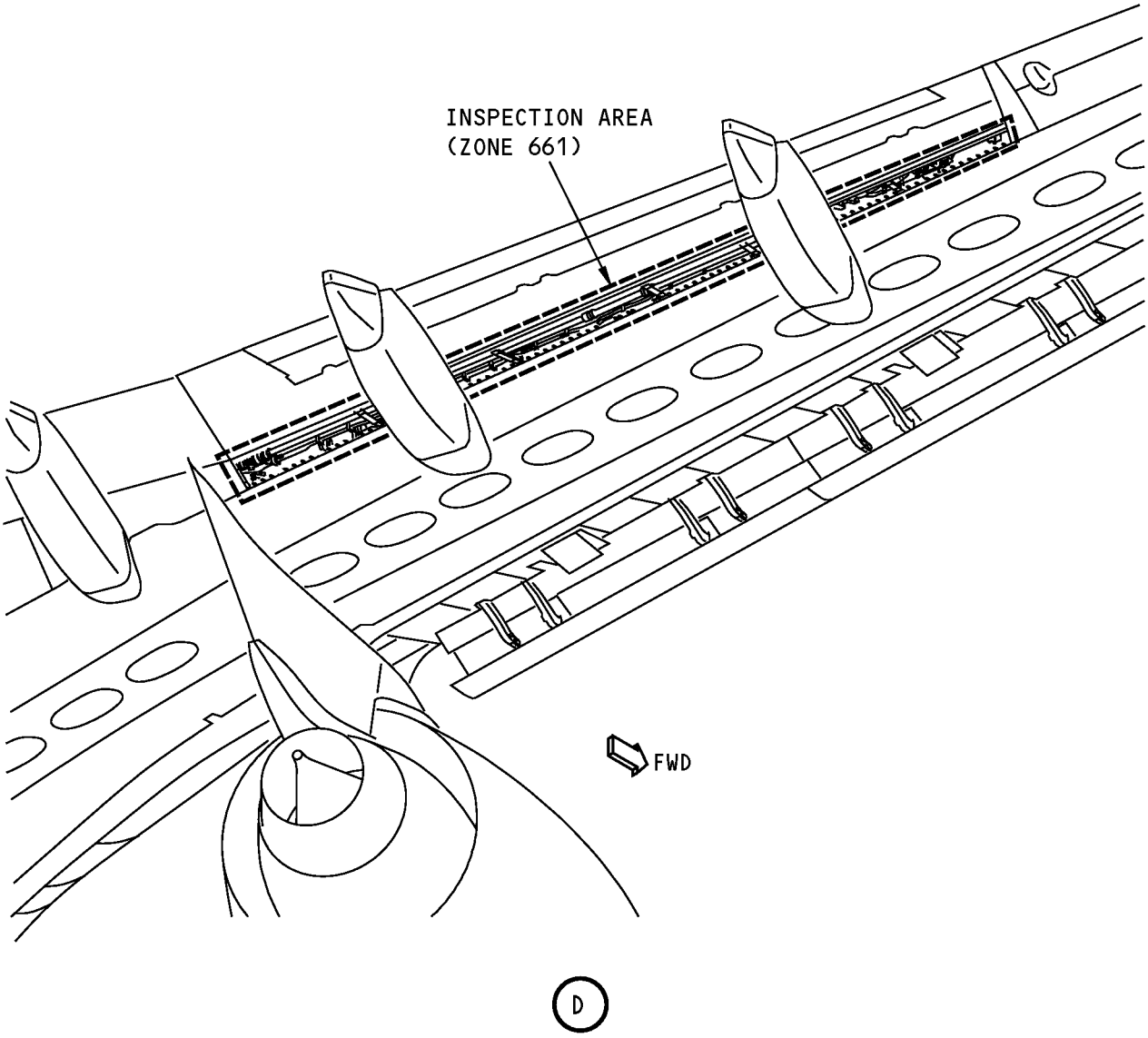
AILERON HINGE COVER ACCESS PANELS

B

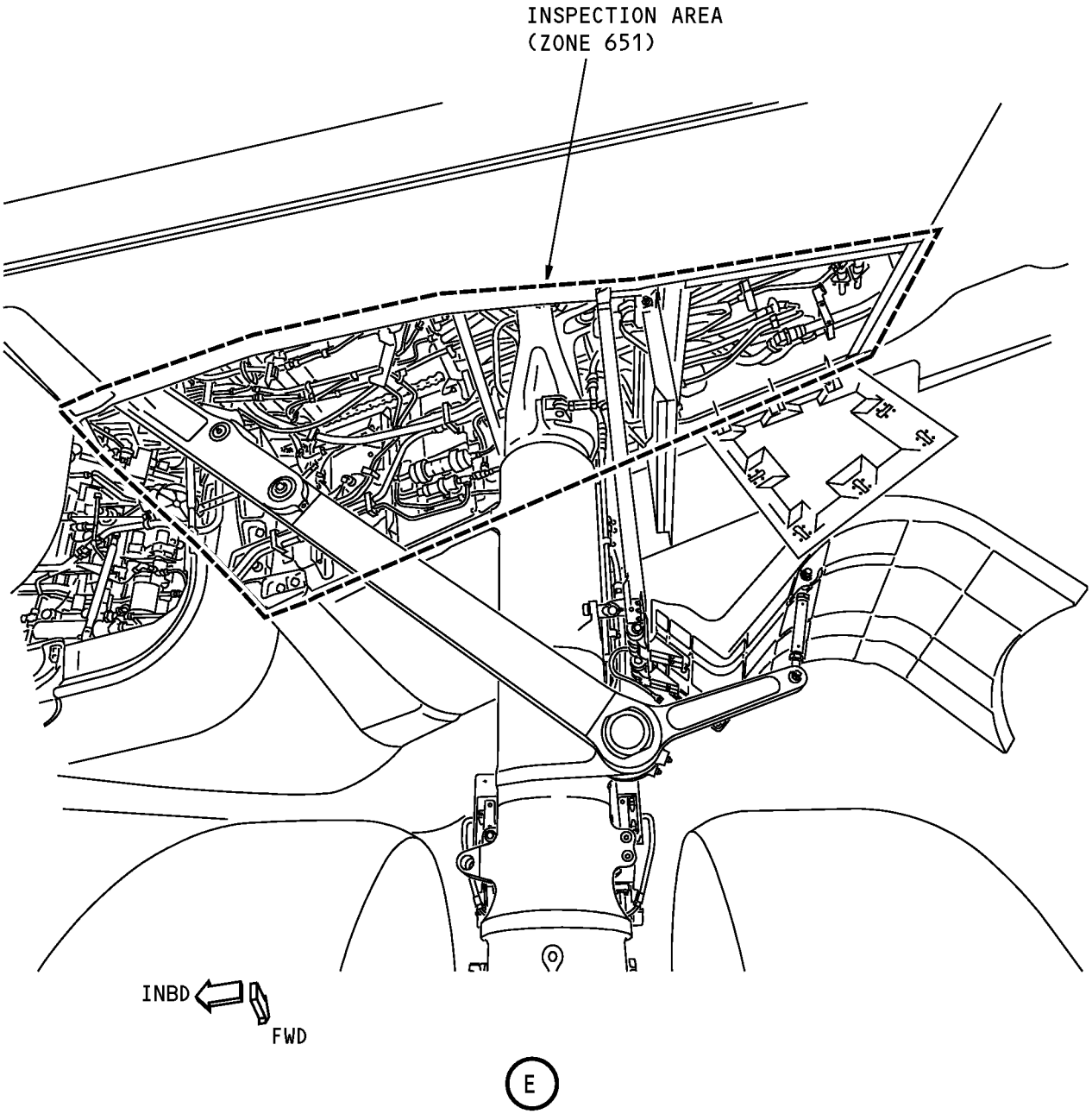


C

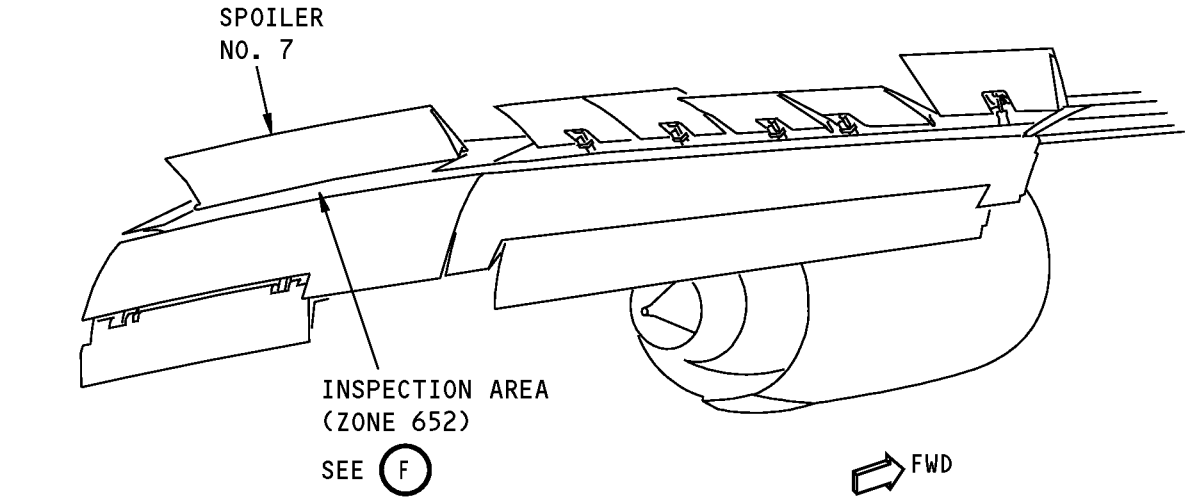
INTERNAL-GENERAL VISUAL: INTERNAL-RIGHT WING OUTBOARD TRAILING EDGE STRUCTURE
Figure 251 (Sheet 2 of 6)/57-05-03-990-862



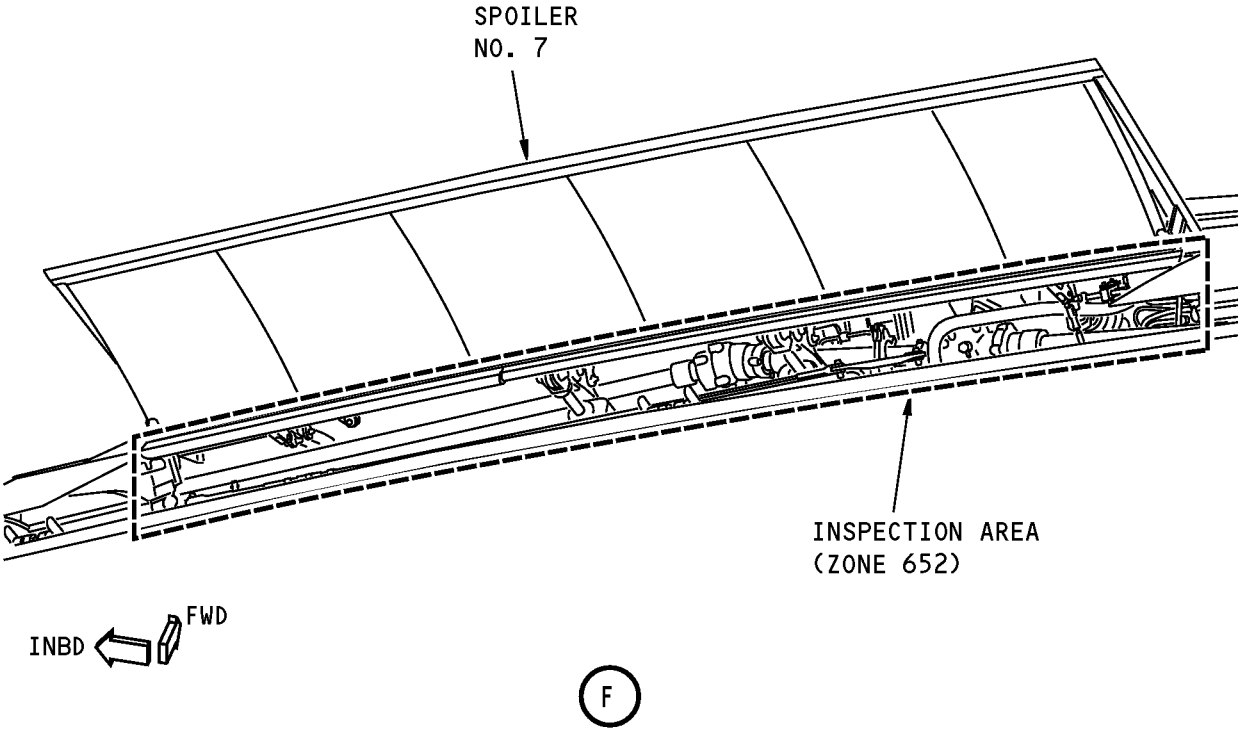
INTERNAL-GENERAL VISUAL: INTERNAL-RIGHT WING OUTBOARD TRAILING EDGE STRUCTURE
Figure 251 (Sheet 3 of 6)/57-05-03-990-862



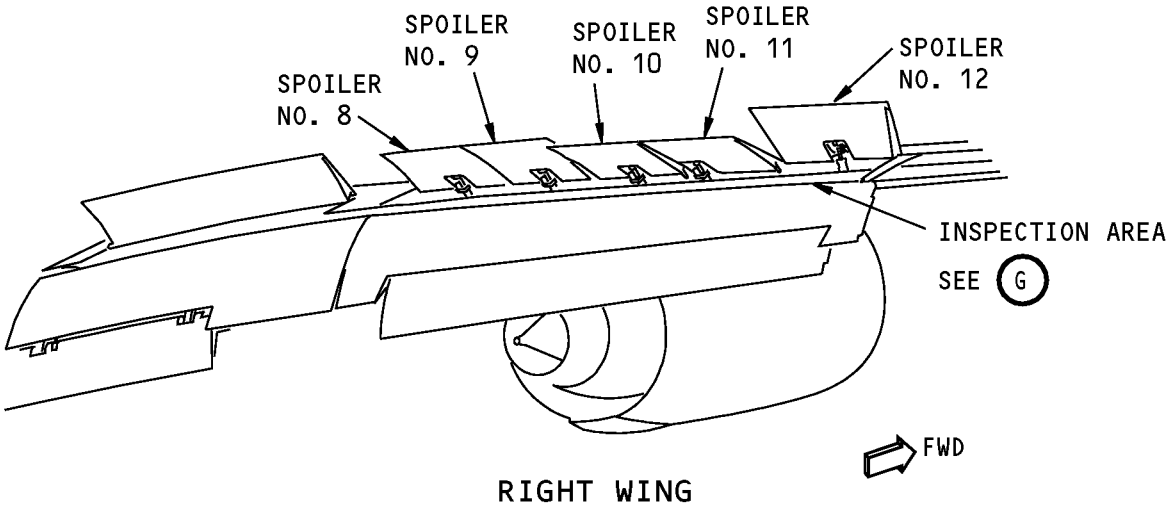
INTERNAL-GENERAL VISUAL: INTERNAL-RIGHT WING OUTBOARD TRAILING EDGE STRUCTURE
Figure 251 (Sheet 4 of 6)/57-05-03-990-862



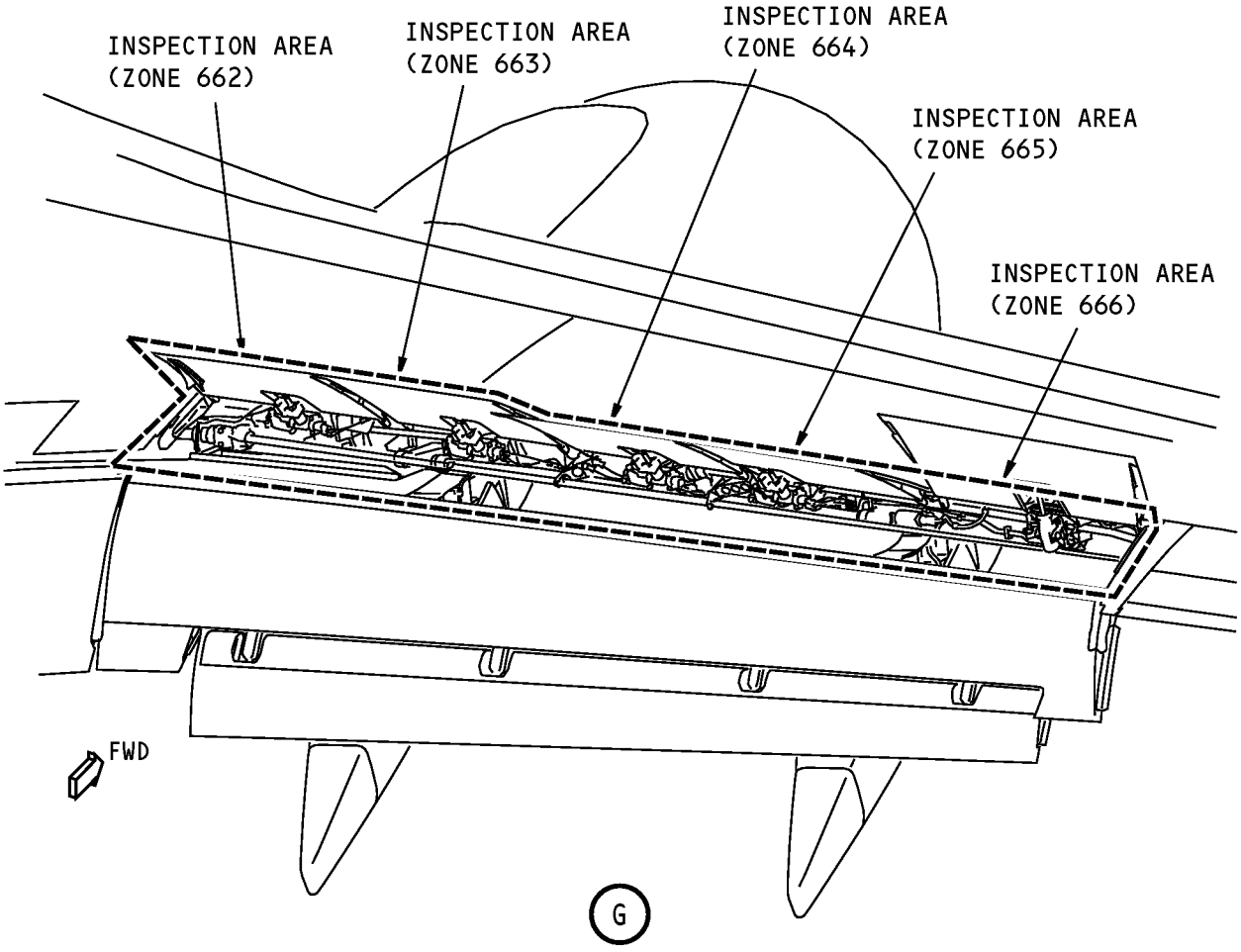
RIGHT WING



INTERNAL-GENERAL VISUAL: INTERNAL-RIGHT WING OUTBOARD TRAILING EDGE STRUCTURE
Figure 251 (Sheet 5 of 6)/57-05-03-990-862



RIGHT WING



INTERNAL-GENERAL VISUAL: INTERNAL-RIGHT WING OUTBOARD TRAILING EDGE STRUCTURE
Figure 251 (Sheet 6 of 6)/57-05-03-990-862

TASK 57-05-03-210-843

45. INTERNAL - GENERAL VISUAL: INTERNAL - LEFT INBOARD GROUND SPOILER

A. General

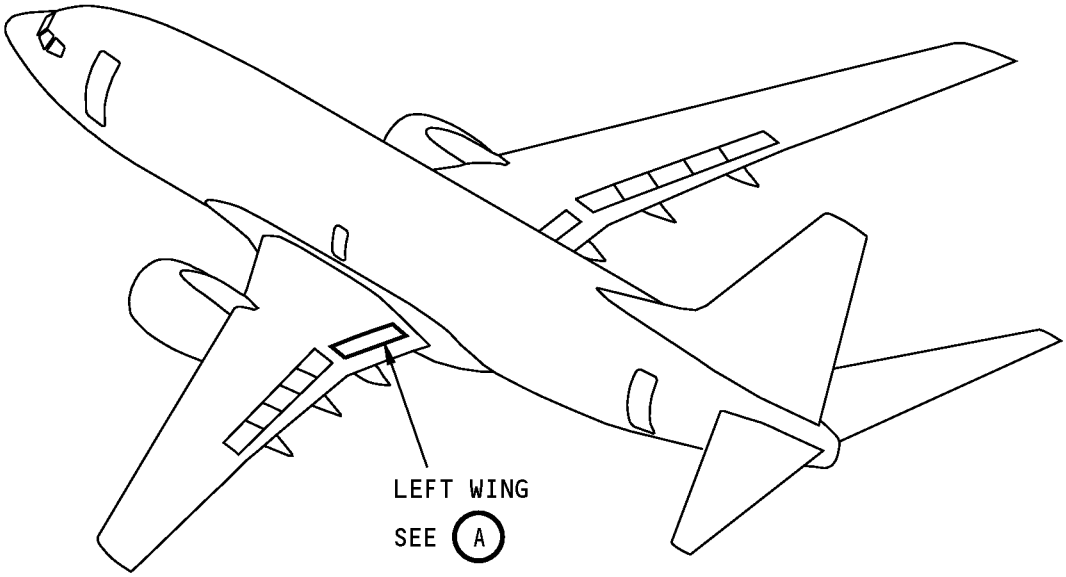
(1) This procedure is a scheduled maintenance task.

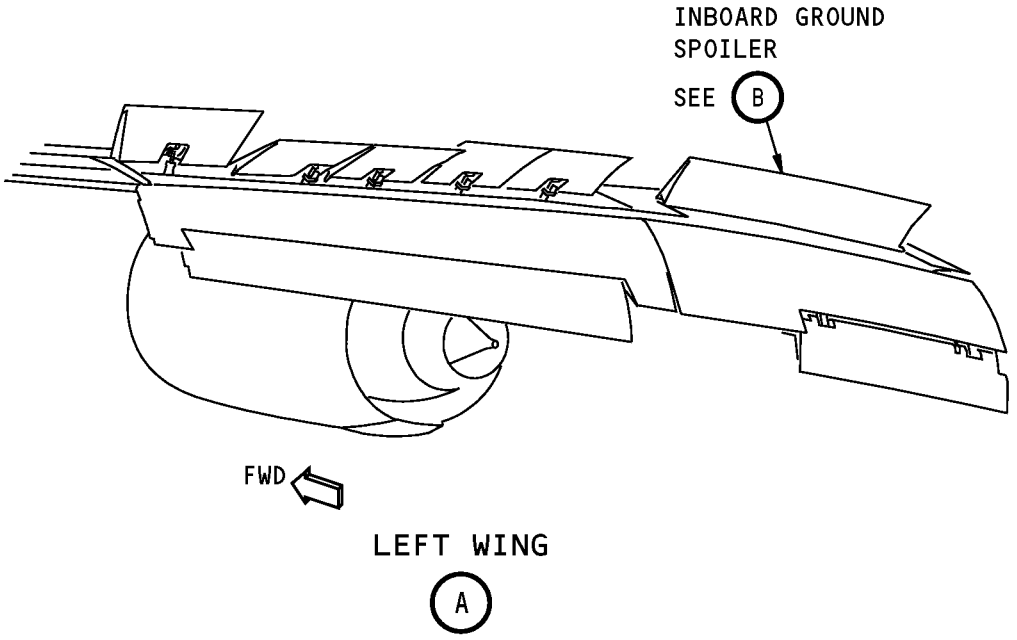
B. Inspection

SUBTASK 57-05-03-210-043

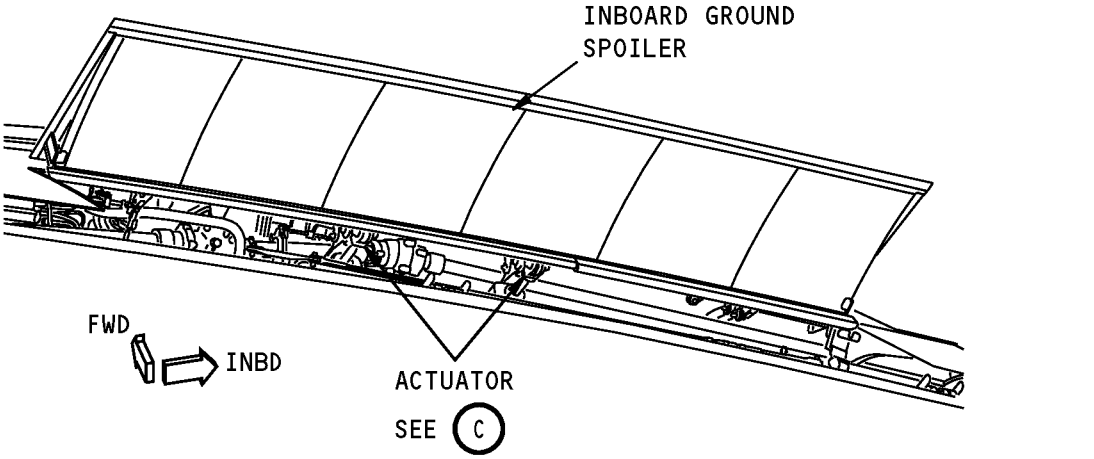
(1) Do the inspection.

———————— END OF TASK ————————



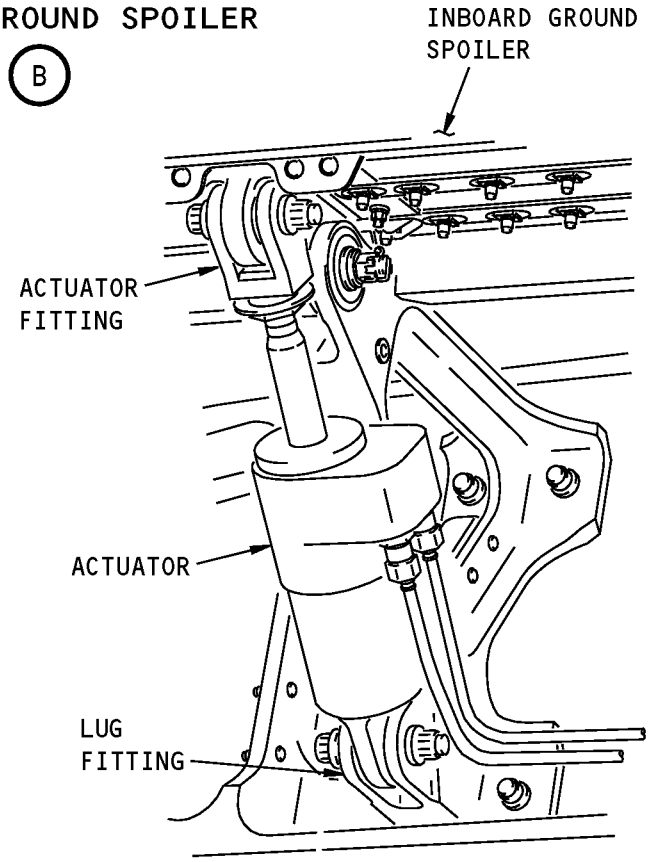


Left Inboard Ground Spoiler General Visual (Internal)
Figure 252 (Sheet 1 of 2)/57-05-03-990-808



INBOARD GROUND SPOILER

B



ACTUATOR
(EXAMPLE)

C

Left Inboard Ground Spoiler General Visual (Internal)
Figure 252 (Sheet 2 of 2)/57-05-03-990-808

TASK 57-05-03-210-844

46. INTERNAL - GENERAL VISUAL: INTERNAL - RIGHT INBOARD GROUND SPOILER

A. General

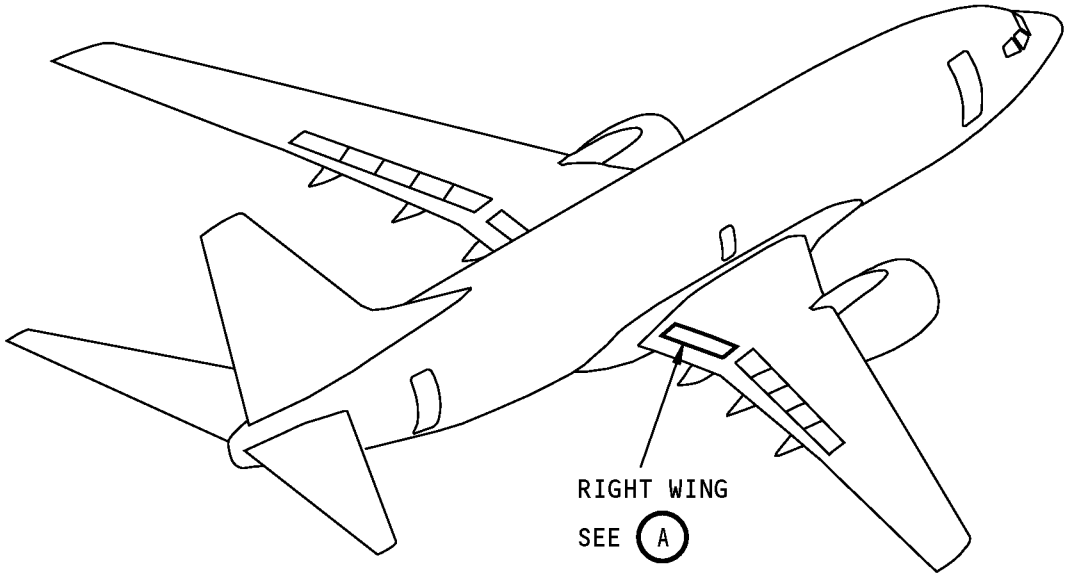
(1) This procedure is a scheduled maintenance task.

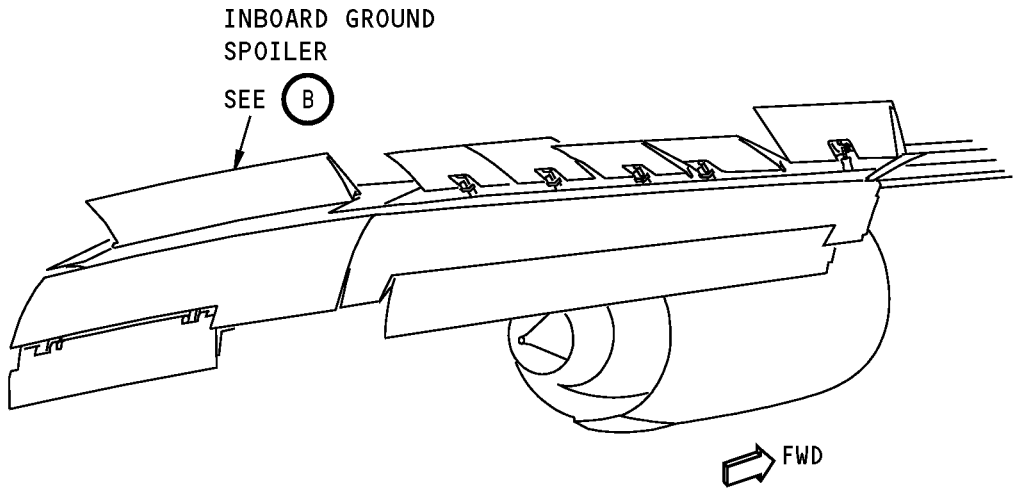
B. Inspection

SUBTASK 57-05-03-210-044

(1) Do the inspection.

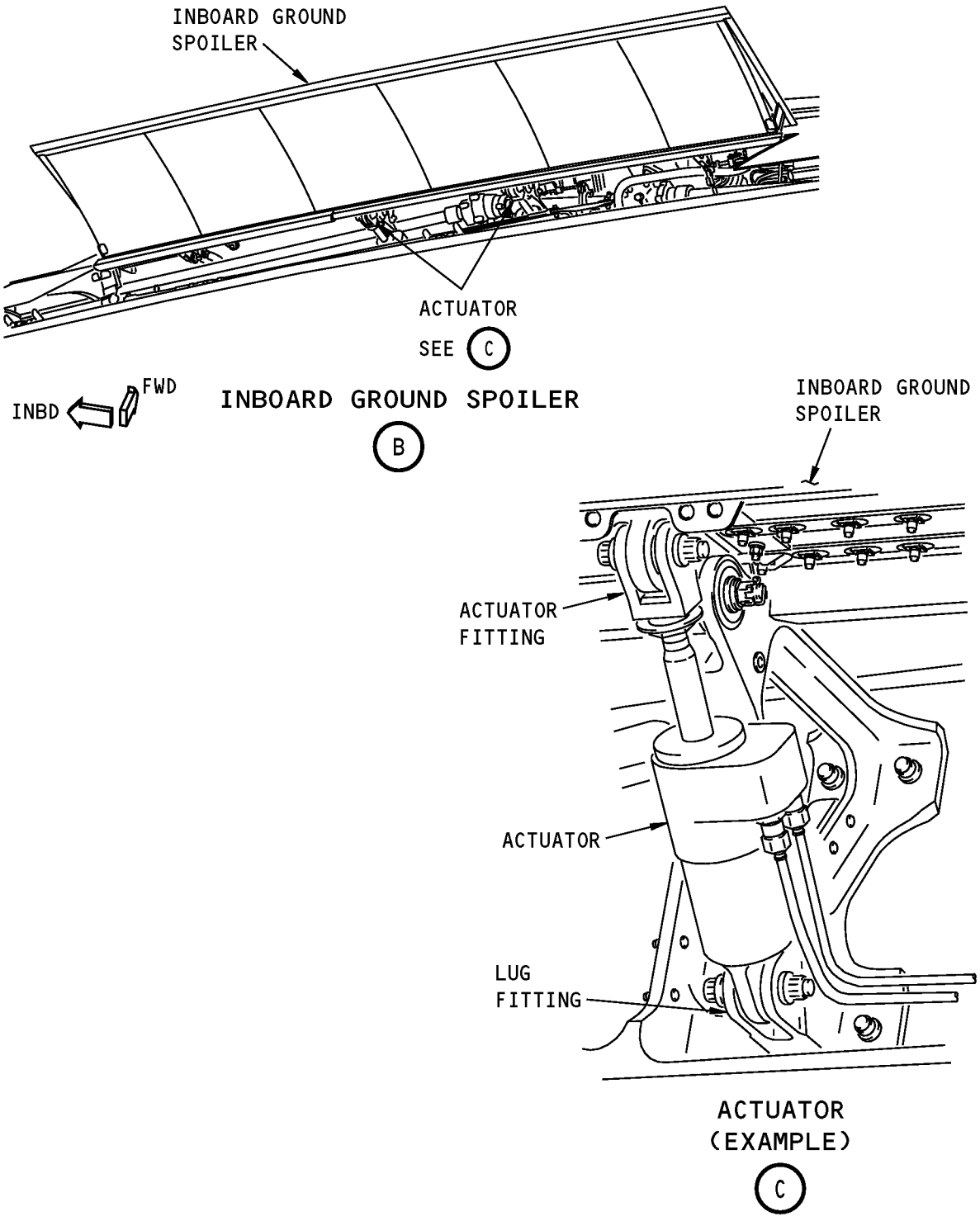
———————— END OF TASK ————————





RIGHT WING
A

Right Inboard Ground Spoiler General Visual (Internal)
Figure 253 (Sheet 1 of 2)/57-05-03-990-809



Right Inboard Ground Spoiler General Visual (Internal)
Figure 253 (Sheet 2 of 2)/57-05-03-990-809

TASK 57-05-03-210-845

47. INTERNAL - GENERAL VISUAL: INTERNAL - LEFT INBOARD FLAP

A. General

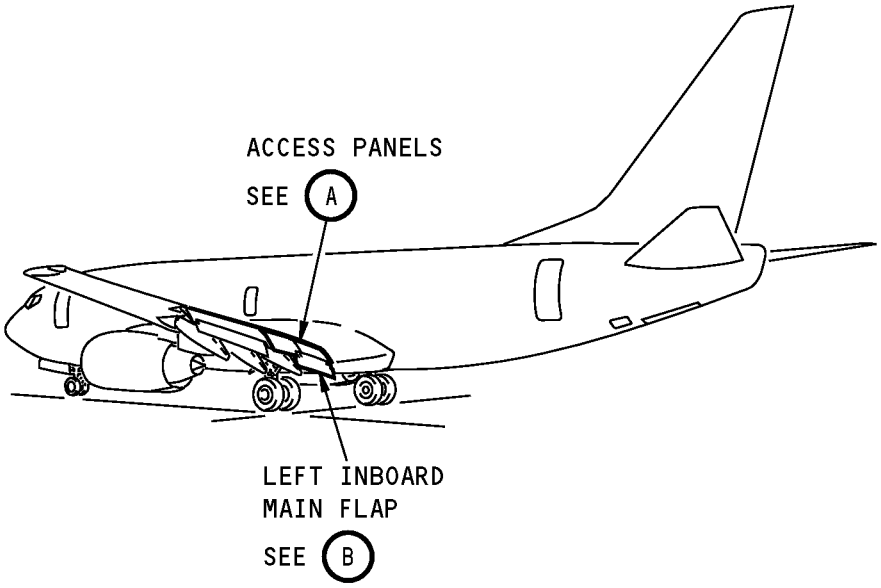
(1) This procedure is a scheduled maintenance task.

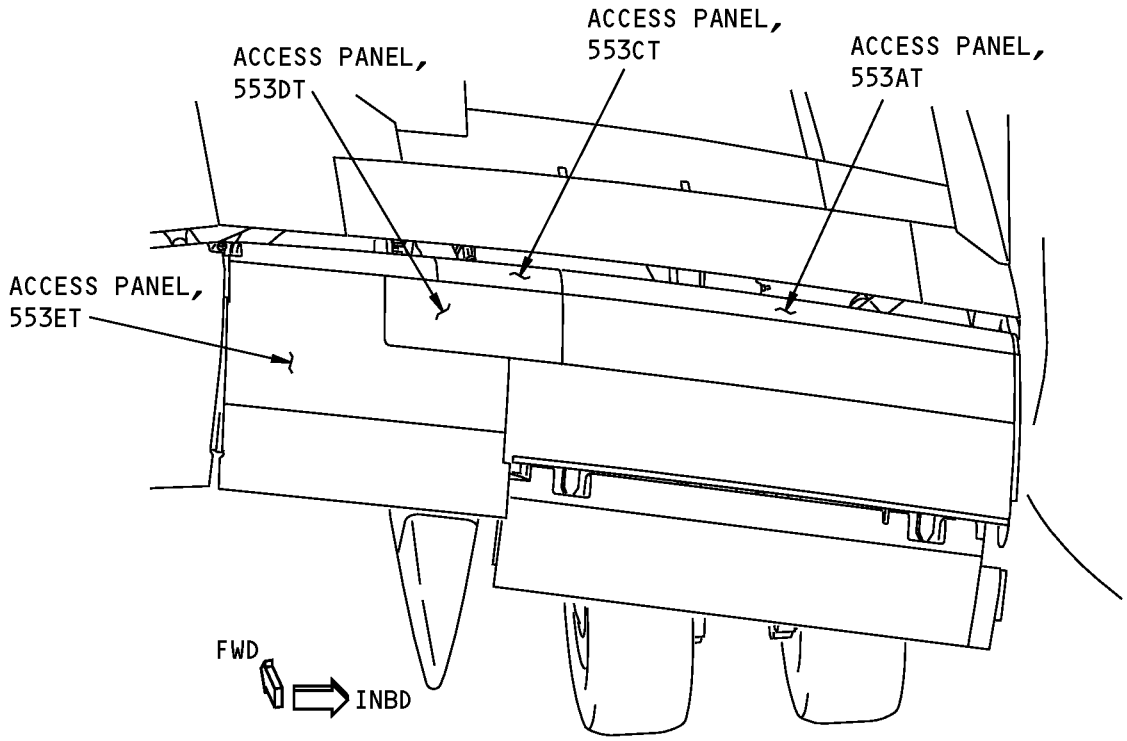
B. Inspection

SUBTASK 57-05-03-210-045

(1) Do the inspection.

——————— END OF TASK ———————

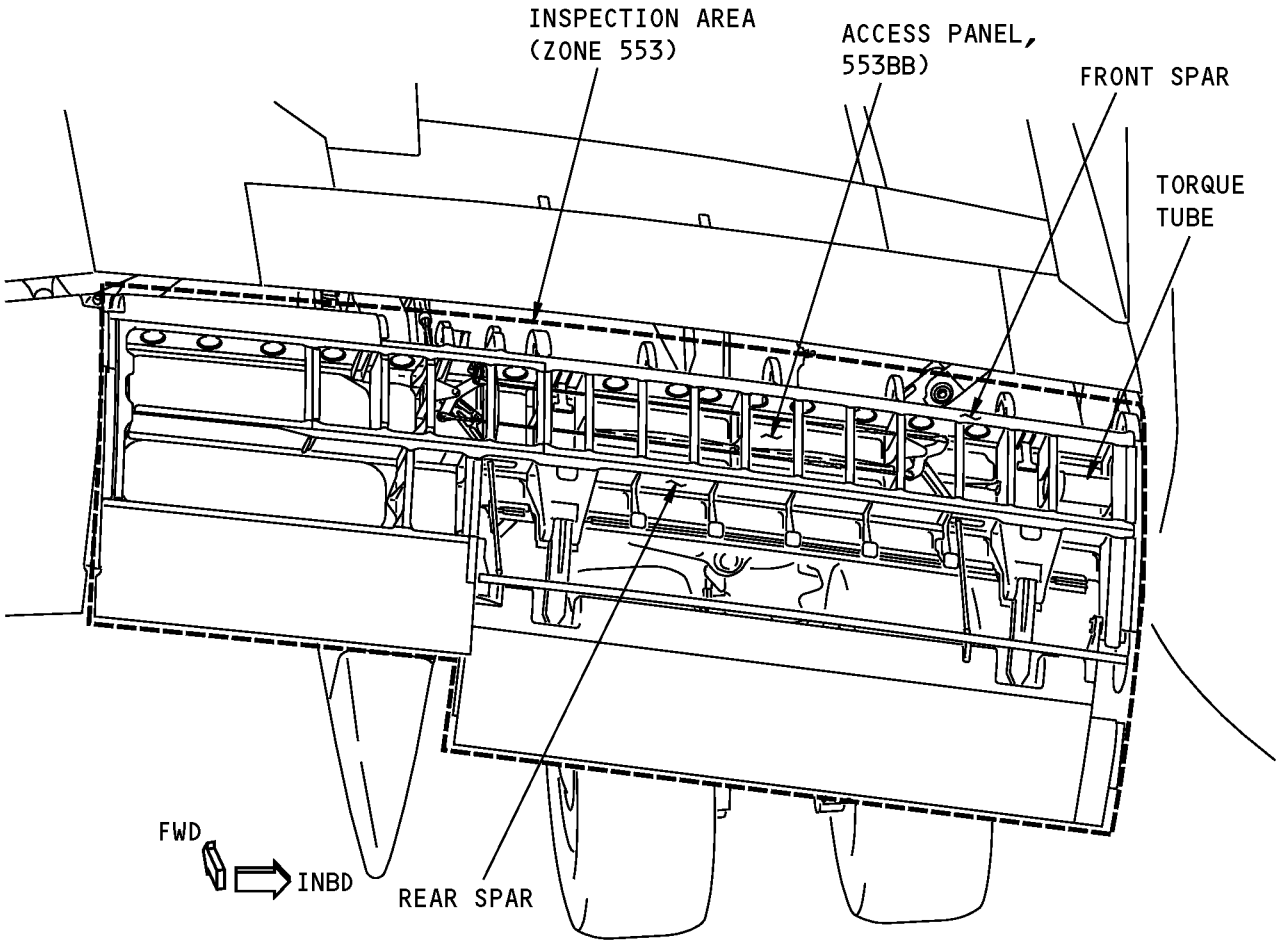




ACCESS PANELS

A

INTERNAL - GENERAL VISUAL: INTERNAL - LEFT INBOARD FLAP
Figure 254 (Sheet 1 of 2)/57-05-03-990-849



LEFT INBOARD MAIN FLAP
(UPPER ACCESS PANELS NOT SHOWN)

B

INTERNAL - GENERAL VISUAL: INTERNAL - LEFT INBOARD FLAP
Figure 254 (Sheet 2 of 2)/57-05-03-990-849

TASK 57-05-03-210-846

48. INTERNAL - GENERAL VISUAL: INTERNAL - RIGHT INBOARD FLAP

A. General

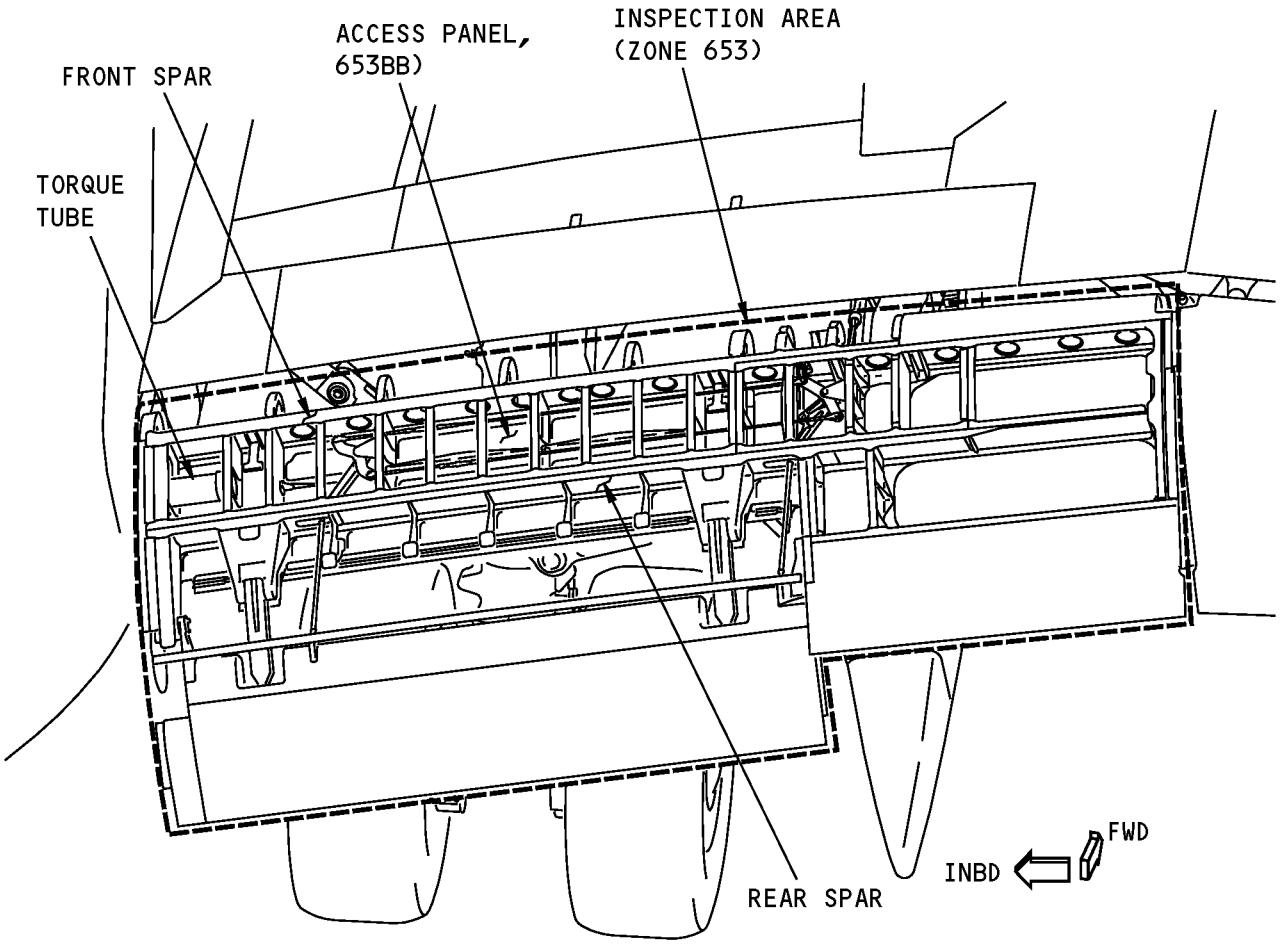
(1) This procedure is a scheduled maintenance task.

B. Inspection

SUBTASK 57-05-03-210-046

(1) Do the inspection.

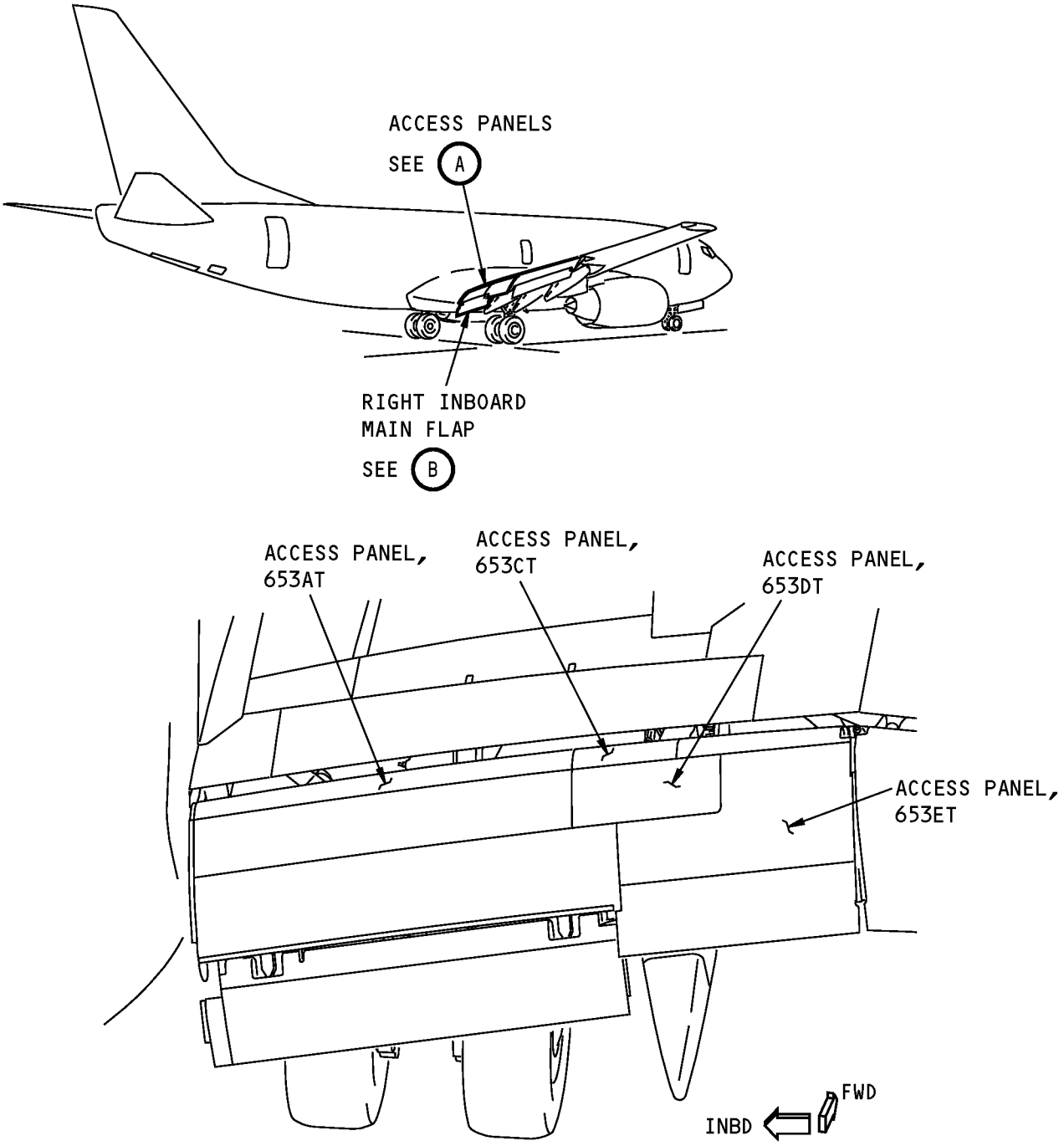
——————— END OF TASK ———————



RIGHT INBOARD MAIN FLAP
(UPPER ACCESS PANELS NOT SHOWN)

B

INTERNAL - GENERAL VISUAL: INTERNAL - RIGHT INBOARD FLAP
Figure 255 (Sheet 1 of 2)/57-05-03-990-848



INTERNAL - GENERAL VISUAL: INTERNAL - RIGHT INBOARD FLAP
Figure 255 (Sheet 2 of 2)/57-05-03-990-848

TASK 57-05-03-210-847

49. INTERNAL - GENERAL VISUAL: INTERNAL - LEFT OUTBOARD WING REAR SPAR

A. General

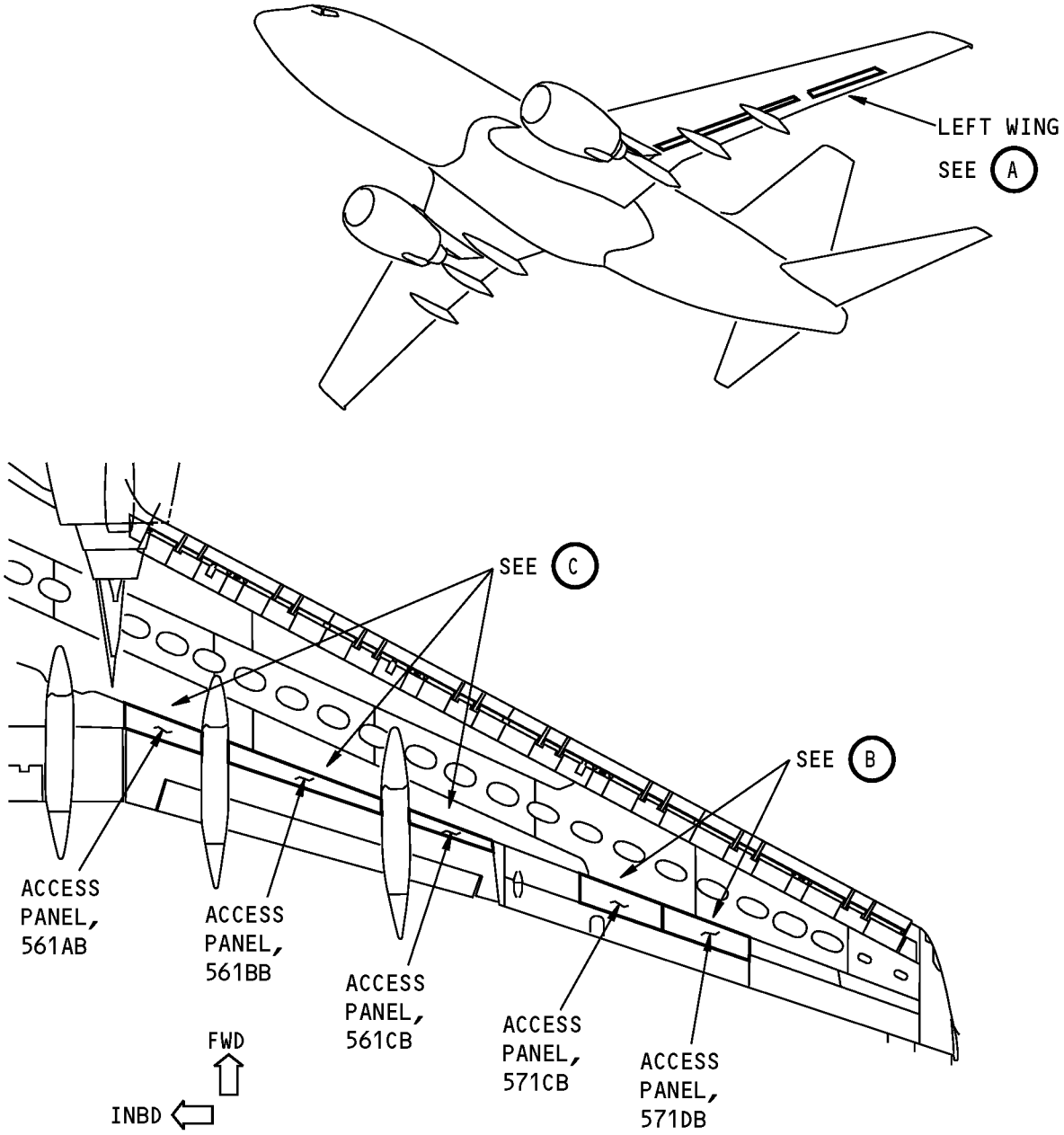
(1) This procedure is a scheduled maintenance task.

B. Inspection

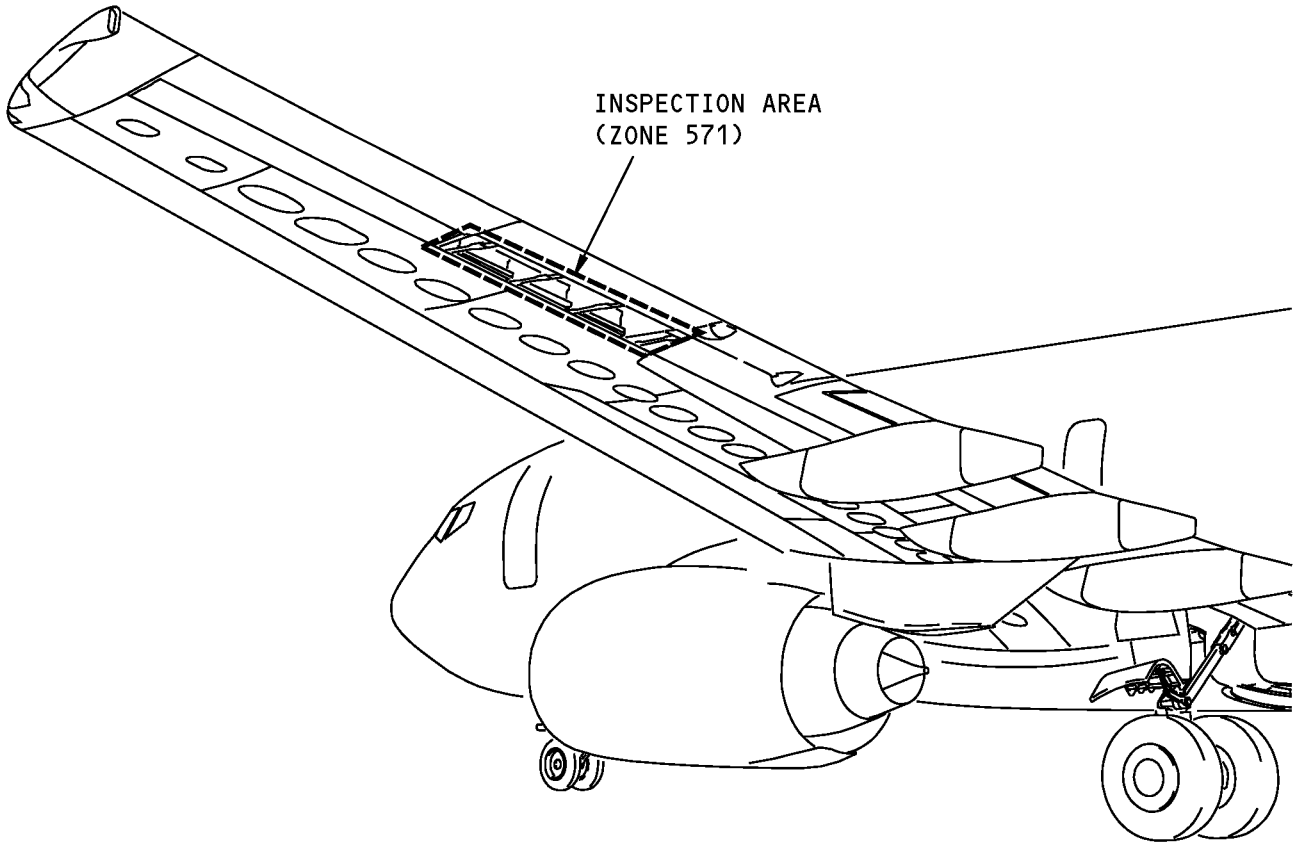
SUBTASK 57-05-03-210-047

(1) Do the inspection.

———————— END OF TASK ————————

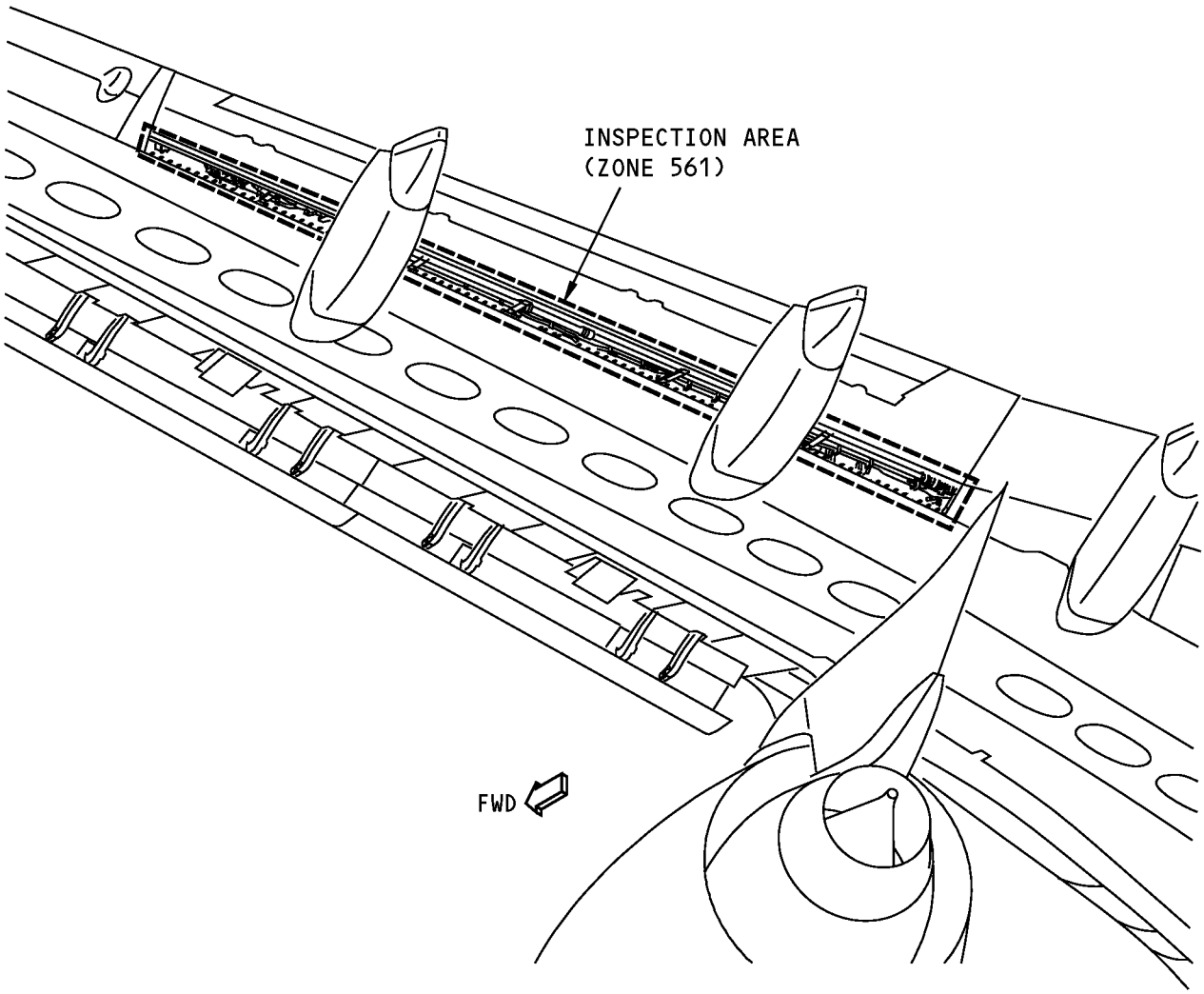


Left Outboard Wing Rear Spar General Visual (Internal)
Figure 256 (Sheet 1 of 3)/57-05-03-990-812



B

Left Outboard Wing Rear Spar General Visual (Internal)
Figure 256 (Sheet 2 of 3)/57-05-03-990-812



Left Outboard Wing Rear Spar General Visual (Internal)
Figure 256 (Sheet 3 of 3)/57-05-03-990-812

TASK 57-05-03-210-848

50. INTERNAL - GENERAL VISUAL: INTERNAL - RIGHT OUTBOARD WING REAR SPAR

A. General

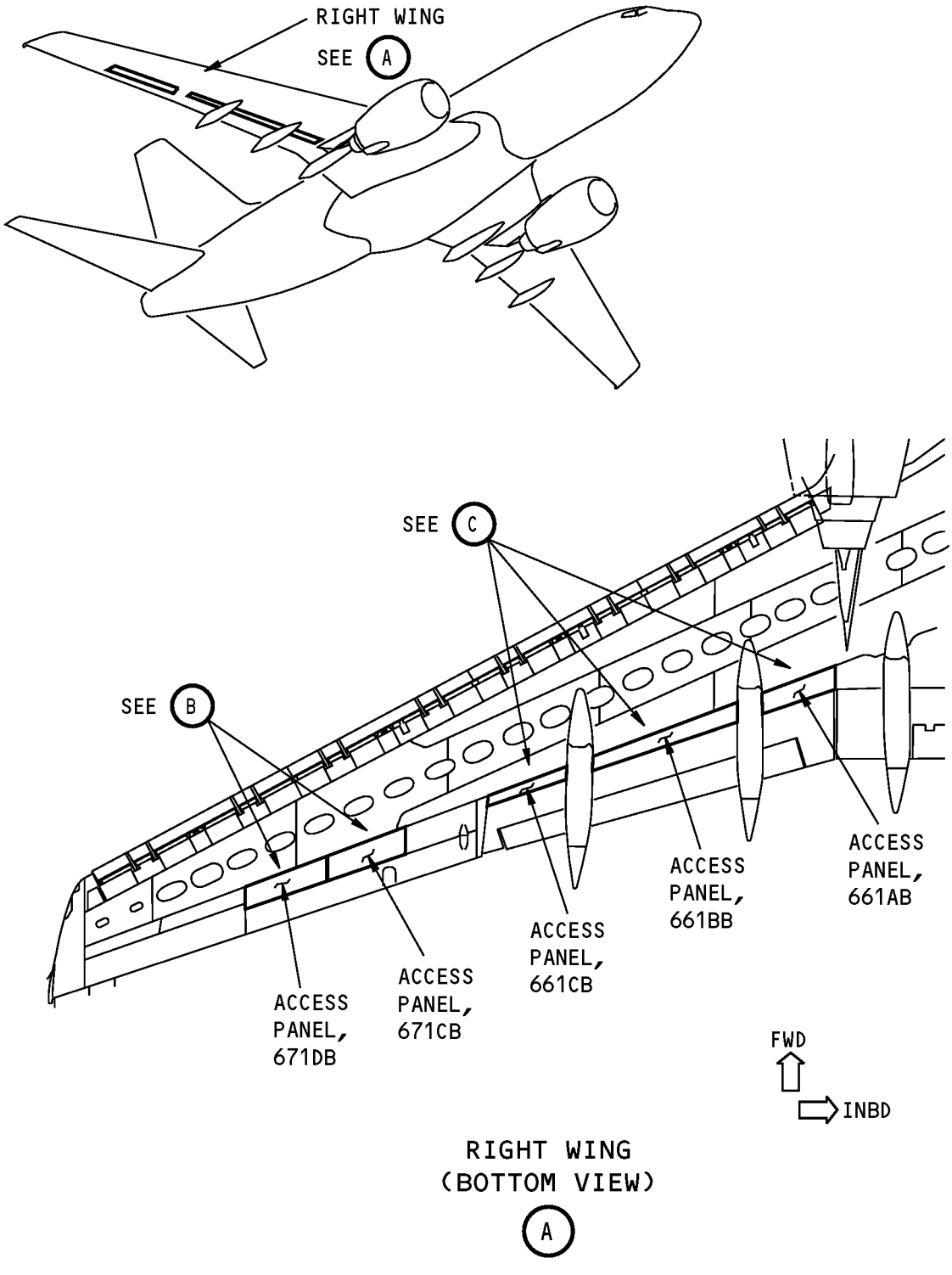
(1) This procedure is a scheduled maintenance task.

B. Inspection

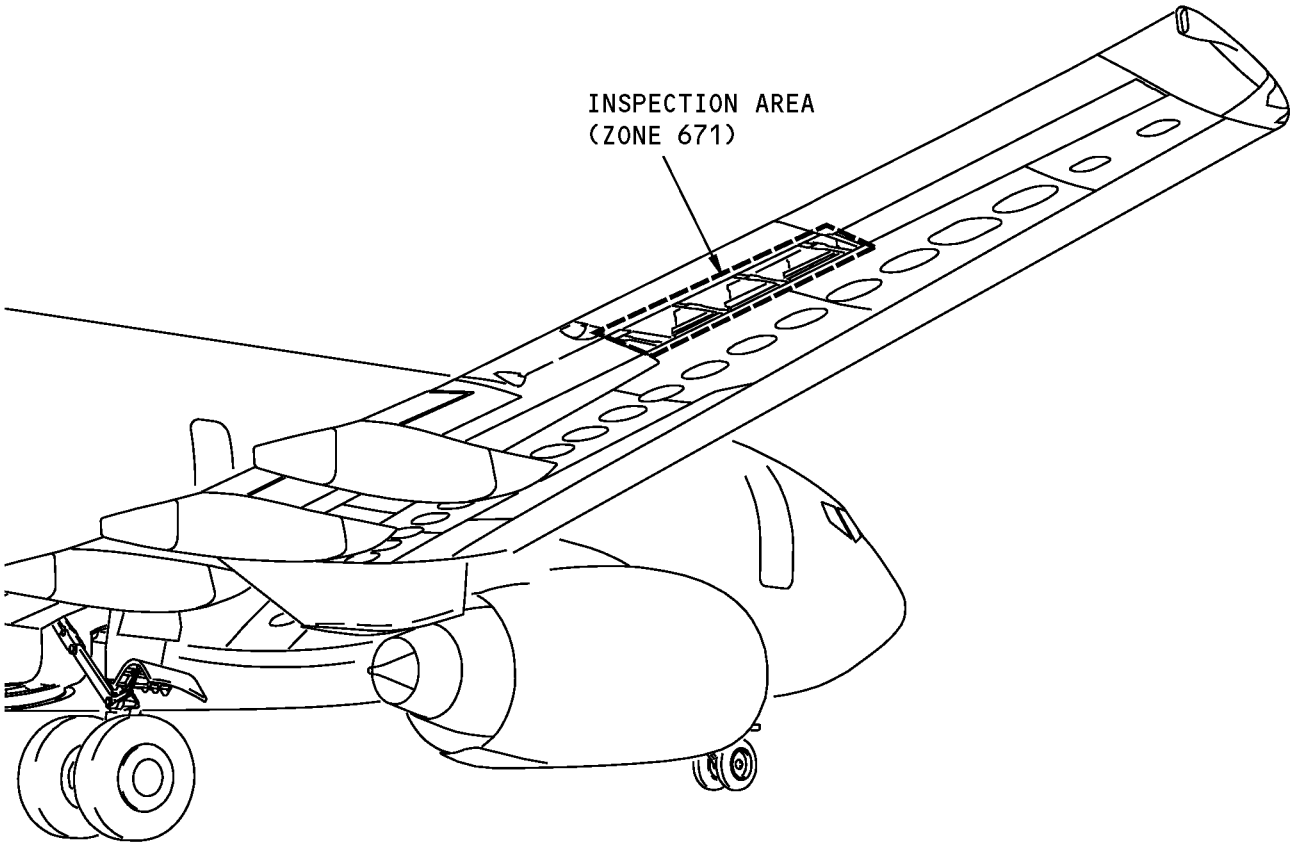
SUBTASK 57-05-03-210-048

(1) Do the inspection.

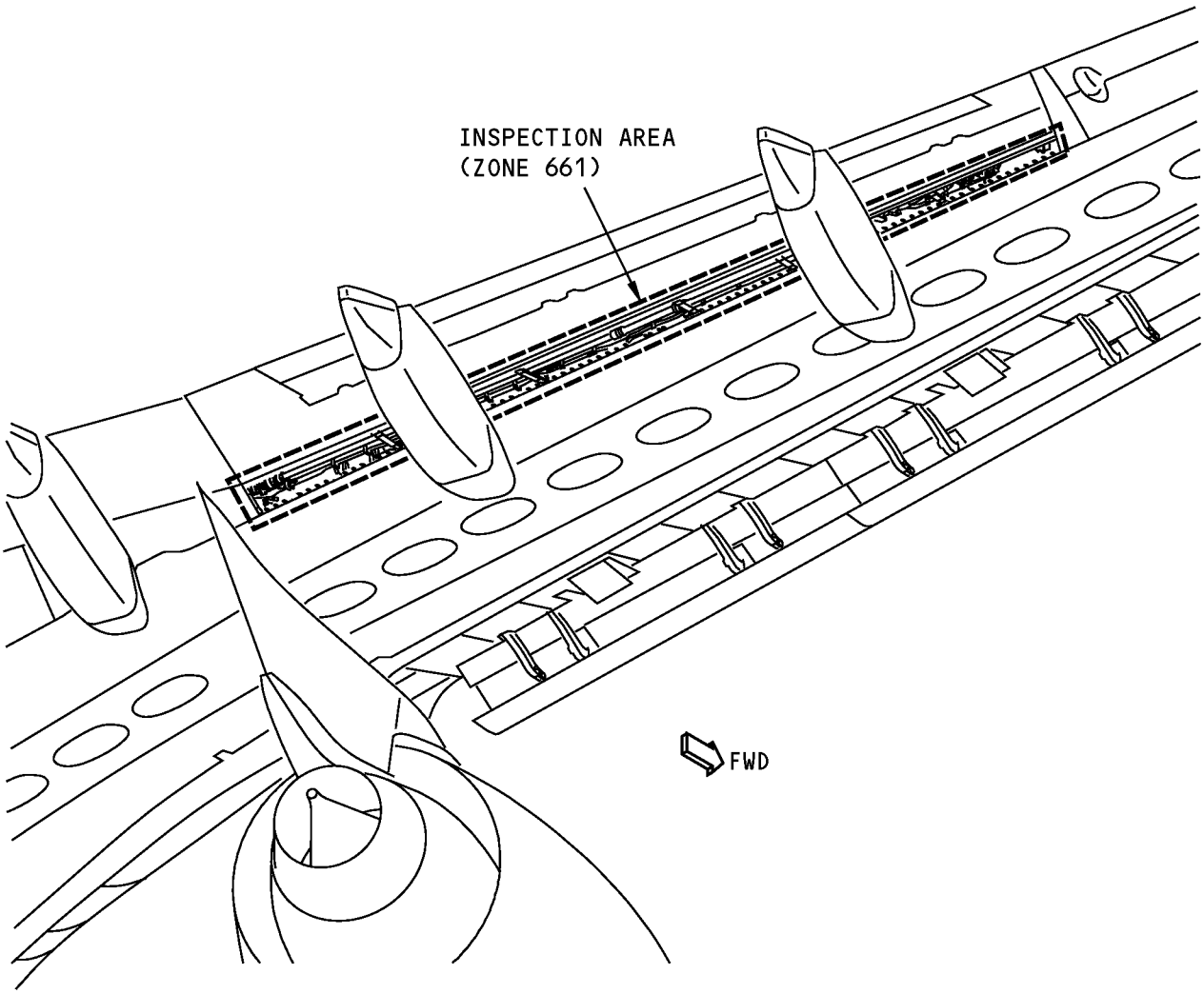
———————— END OF TASK ————————



Right Outboard Wing Rear Spar General Visual (Internal)
Figure 257 (Sheet 1 of 3)/57-05-03-990-813



Right Outboard Wing Rear Spar General Visual (Internal)
Figure 257 (Sheet 2 of 3)/57-05-03-990-813



Right Outboard Wing Rear Spar General Visual (Internal)
Figure 257 (Sheet 3 of 3)/57-05-03-990-813

TASK 57-05-03-210-849

51. INTERNAL - GENERAL VISUAL: INTERNAL - LEFT OUTBOARD FLAP

A. General

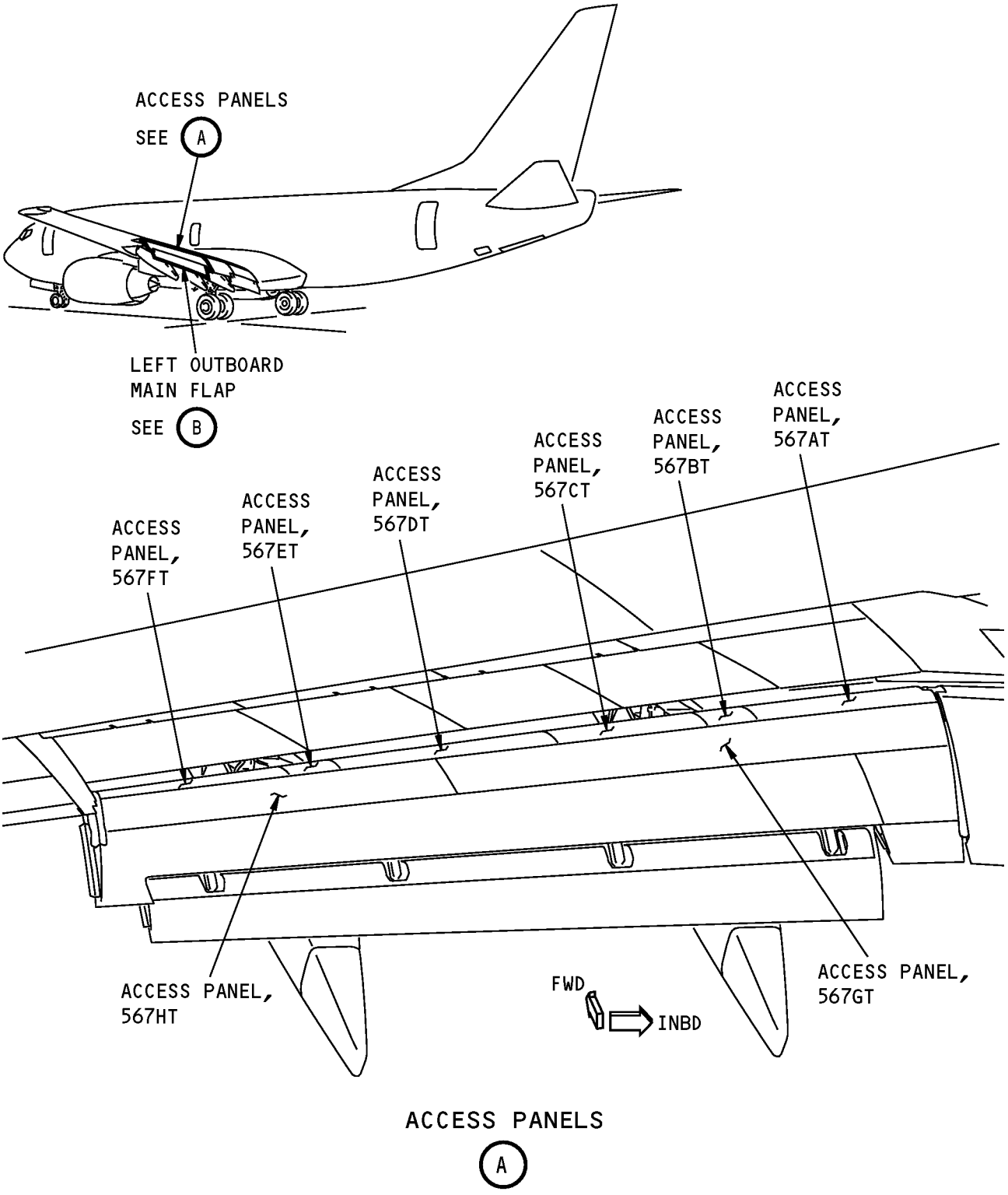
(1) This procedure is a scheduled maintenance task.

B. Inspection

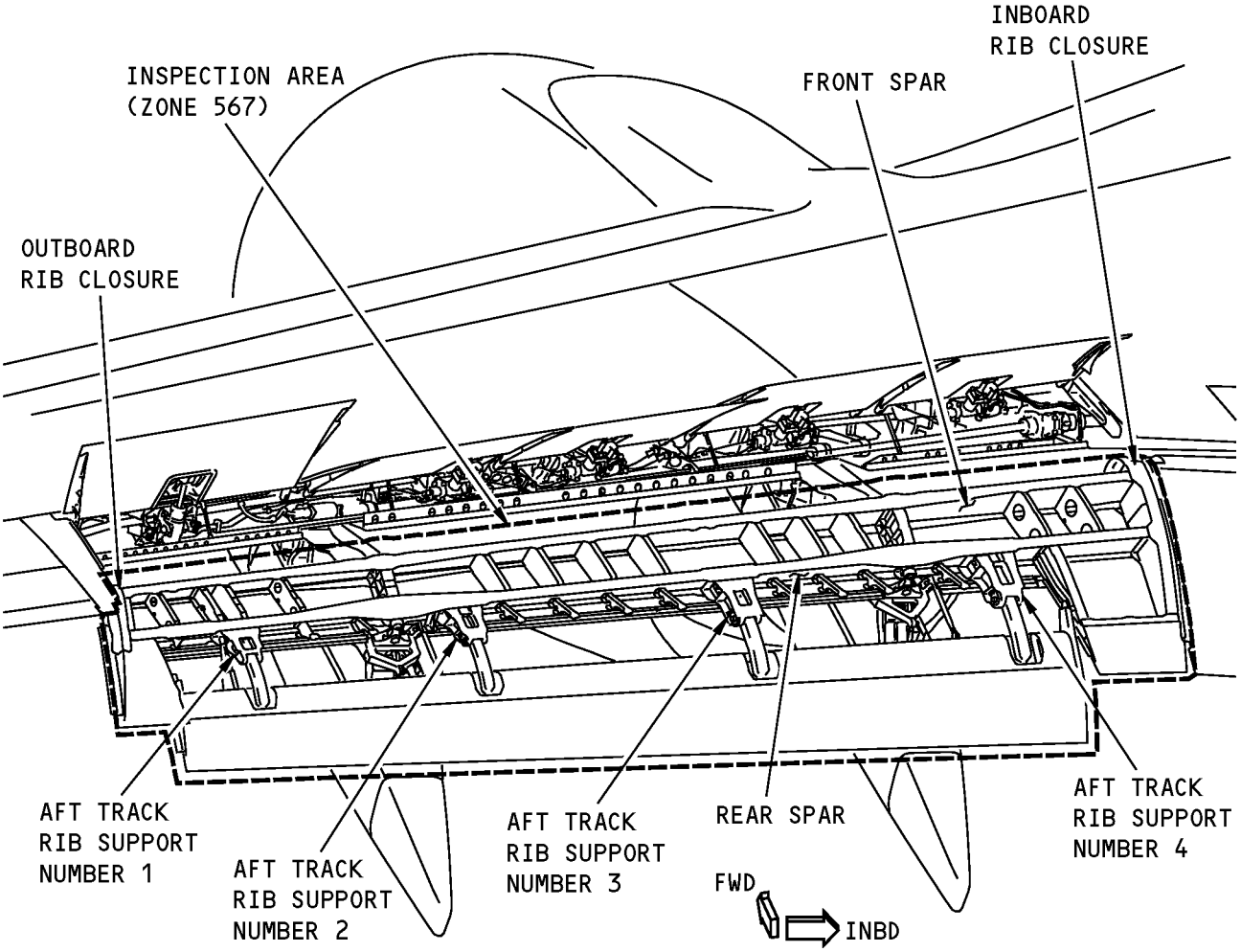
SUBTASK 57-05-03-210-049

(1) Do the inspection.

———————— END OF TASK ————————



General Visual: Left Outboard Flap
Figure 258 (Sheet 1 of 2)/57-05-03-990-846



LEFT OUTBOARD MAIN FLAP
(UPPER ACCESS PANELS NOT SHOWN)

B

General Visual: Left Outboard Flap
Figure 258 (Sheet 2 of 2)/57-05-03-990-846

TASK 57-05-03-210-850

52. INTERNAL - GENERAL VISUAL: INTERNAL - RIGHT OUTBOARD FLAP

A. General

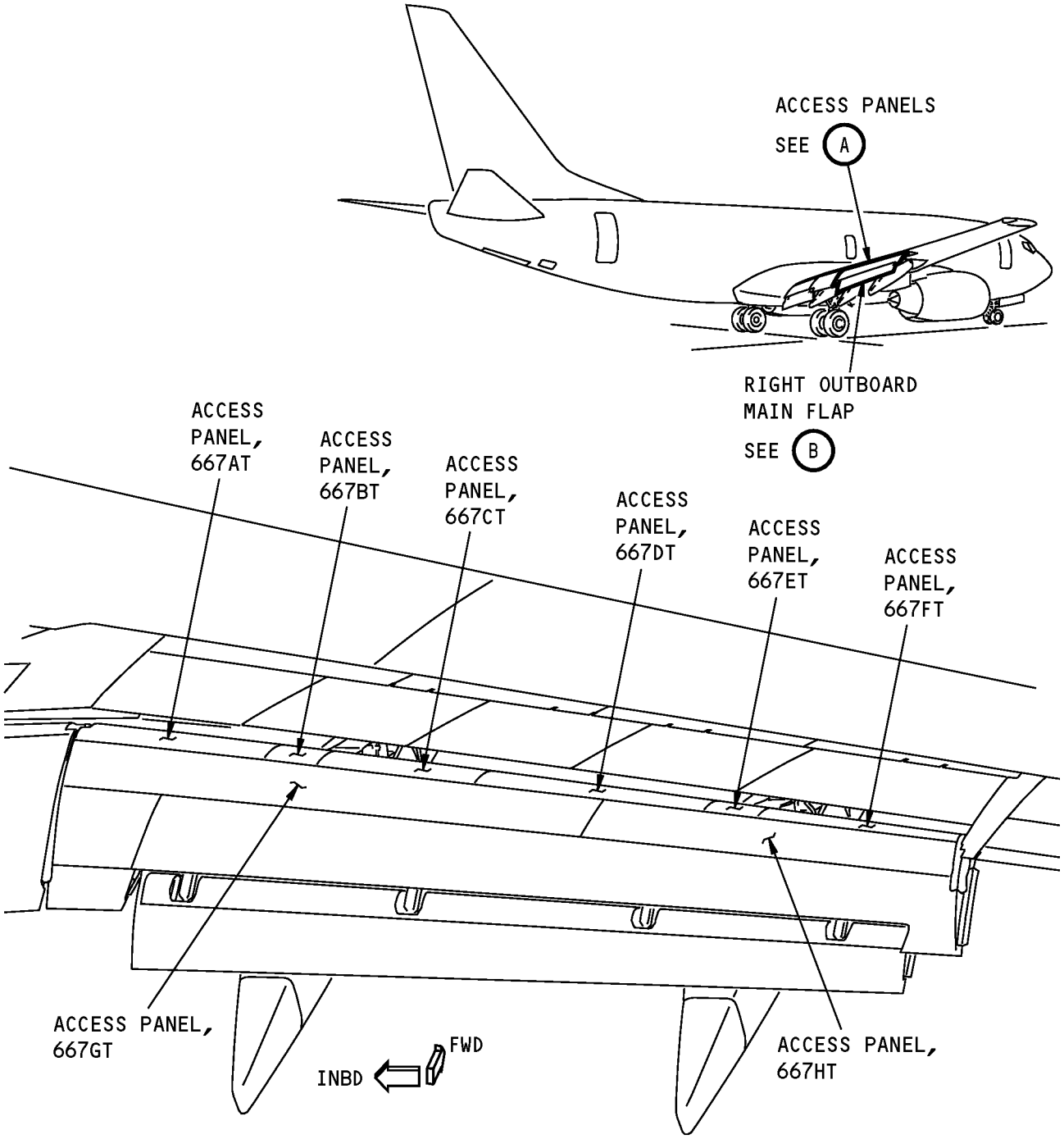
(1) This procedure is a scheduled maintenance task.

B. Inspection

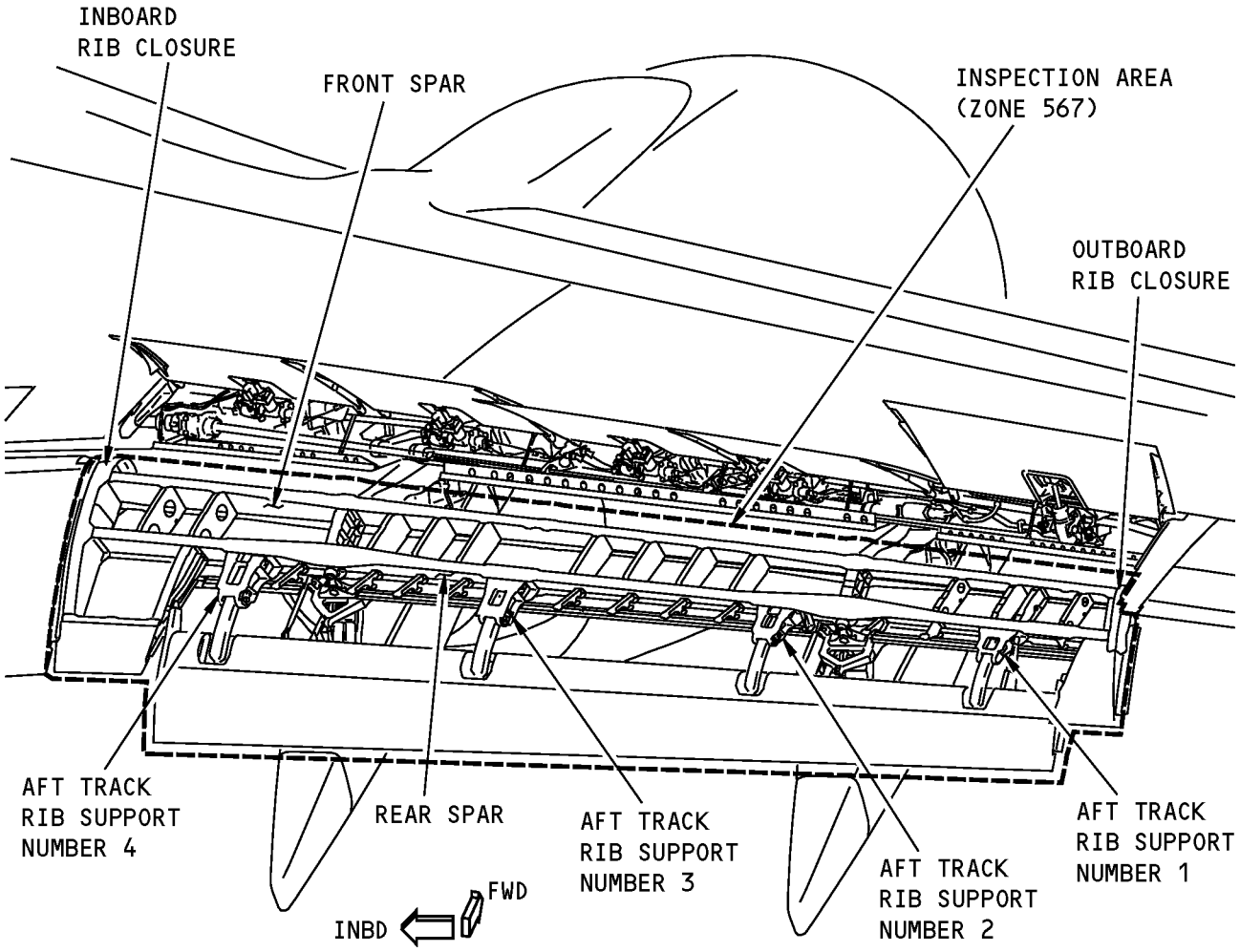
SUBTASK 57-05-03-210-050

(1) Do the inspection.

——————— END OF TASK ———————



General Visual: Right Outboard Flap
Figure 259 (Sheet 1 of 2)/57-05-03-990-847



RIGHT OUTBOARD MAIN FLAP
(UPPER ACCESS PANELS NOT SHOWN)

B

General Visual: Right Outboard Flap
Figure 259 (Sheet 2 of 2)/57-05-03-990-847

TASK 57-05-03-211-803

53. INTERNAL - SPECIAL DETAILED: LEFT WINGLET

A. General

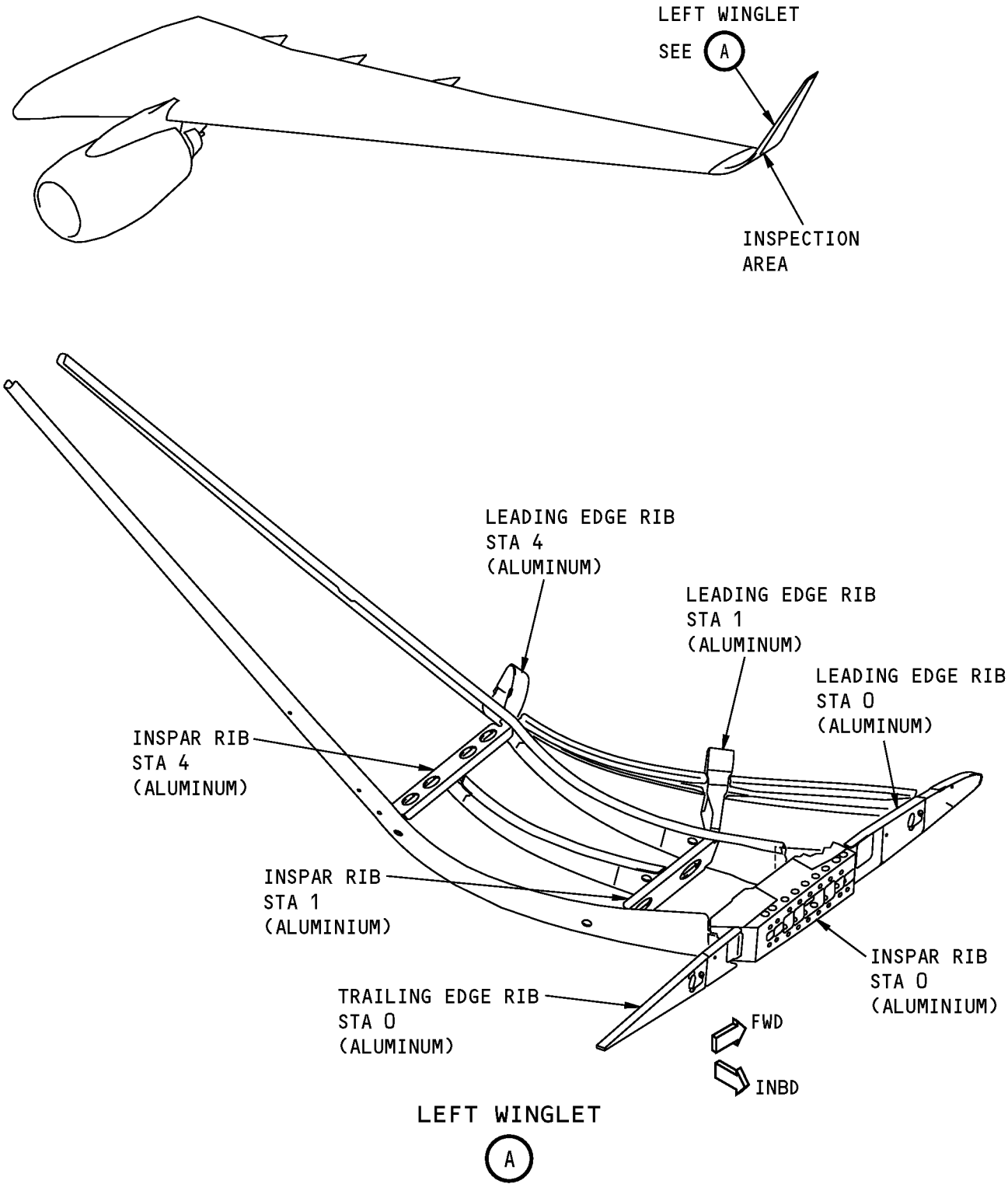
(1) This procedure is a scheduled maintenance task.

B. Inspection

SUBTASK 57-05-03-211-003

(1) Do the inspection.

———————— END OF TASK ————————



INTERNAL - SPECIAL DETAILED: LEFT WINGLET
Figure 260/57-05-03-990-844

TASK 57-05-03-211-804

54. INTERNAL - SPECIAL DETAILED: RIGHT WINGLET

A. General

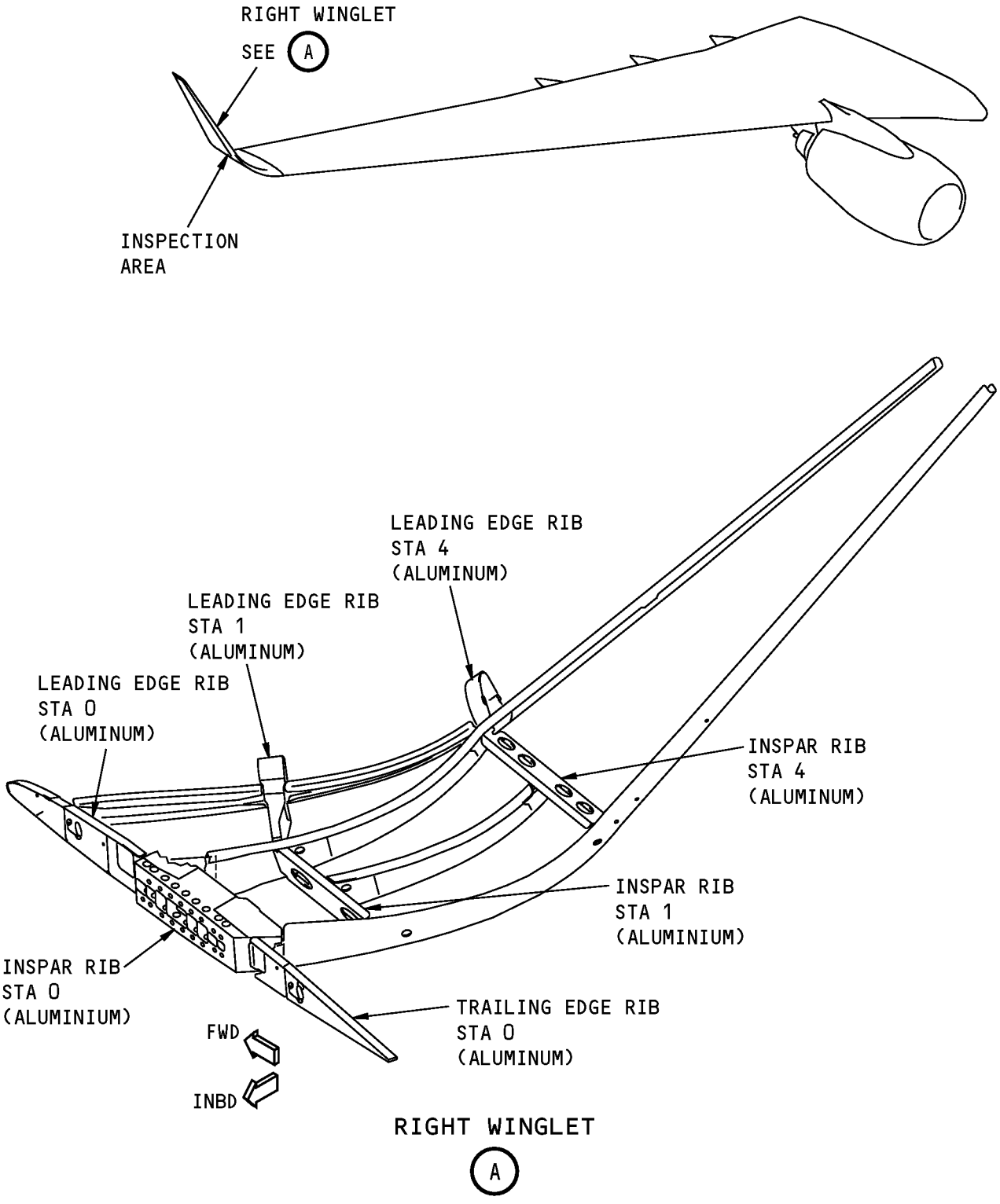
(1) This procedure is a scheduled maintenance task.

B. Inspection

SUBTASK 57-05-03-211-004

(1) Do the inspection.

———————— END OF TASK ————————



INTERNAL - SPECIAL DETAILED: RIGHT WINGLET
Figure 261/57-05-03-990-845

TASK 57-05-03-211-805

55. INTERNAL - DETAILED: LEFT WINGLET

A. General

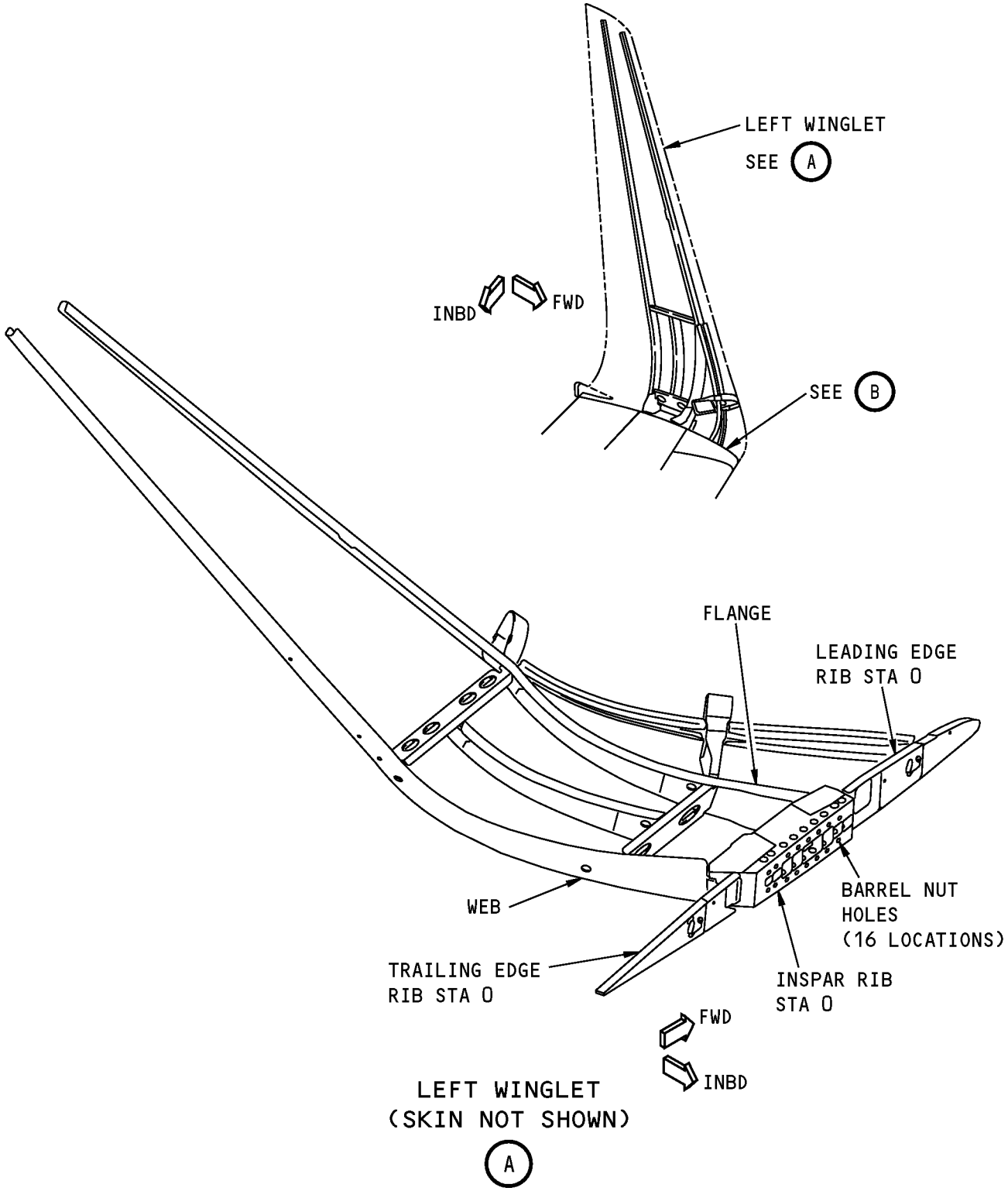
(1) This procedure is a scheduled maintenance task.

B. Inspection

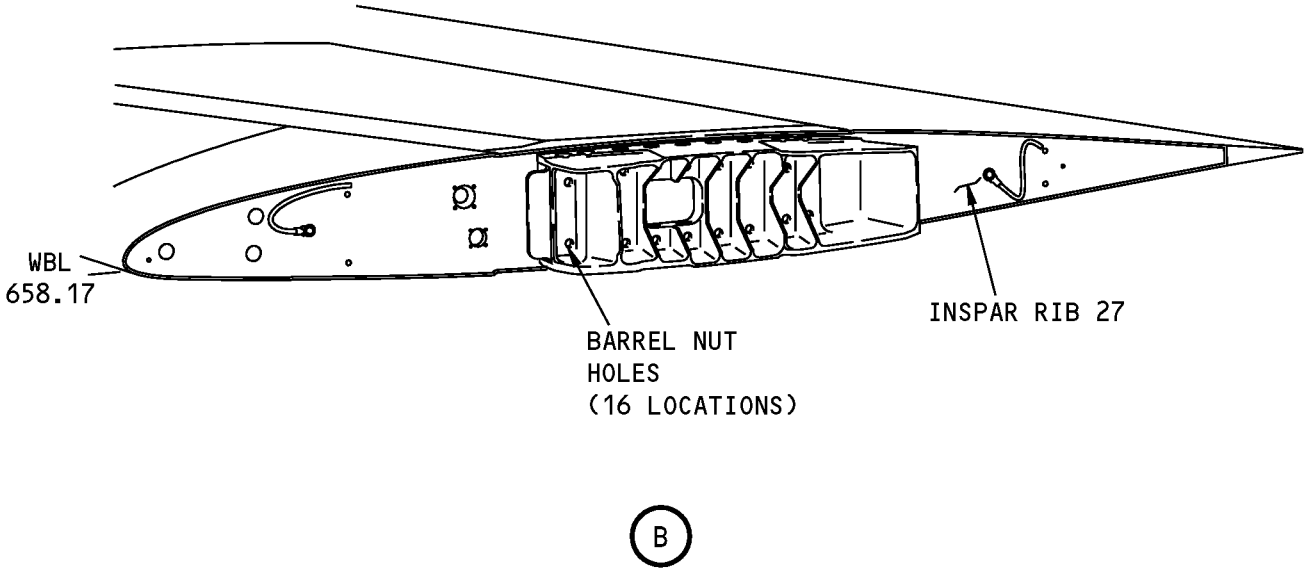
SUBTASK 57-05-03-211-005

(1) Do the inspection.

———————— END OF TASK ————————



Left Winglet
Figure 262 (Sheet 1 of 2)/57-05-03-990-869



Left Winglet
Figure 262 (Sheet 2 of 2)/57-05-03-990-869

TASK 57-05-03-211-806

56. INTERNAL - DETAILED: RIGHT WINGLET

A. General

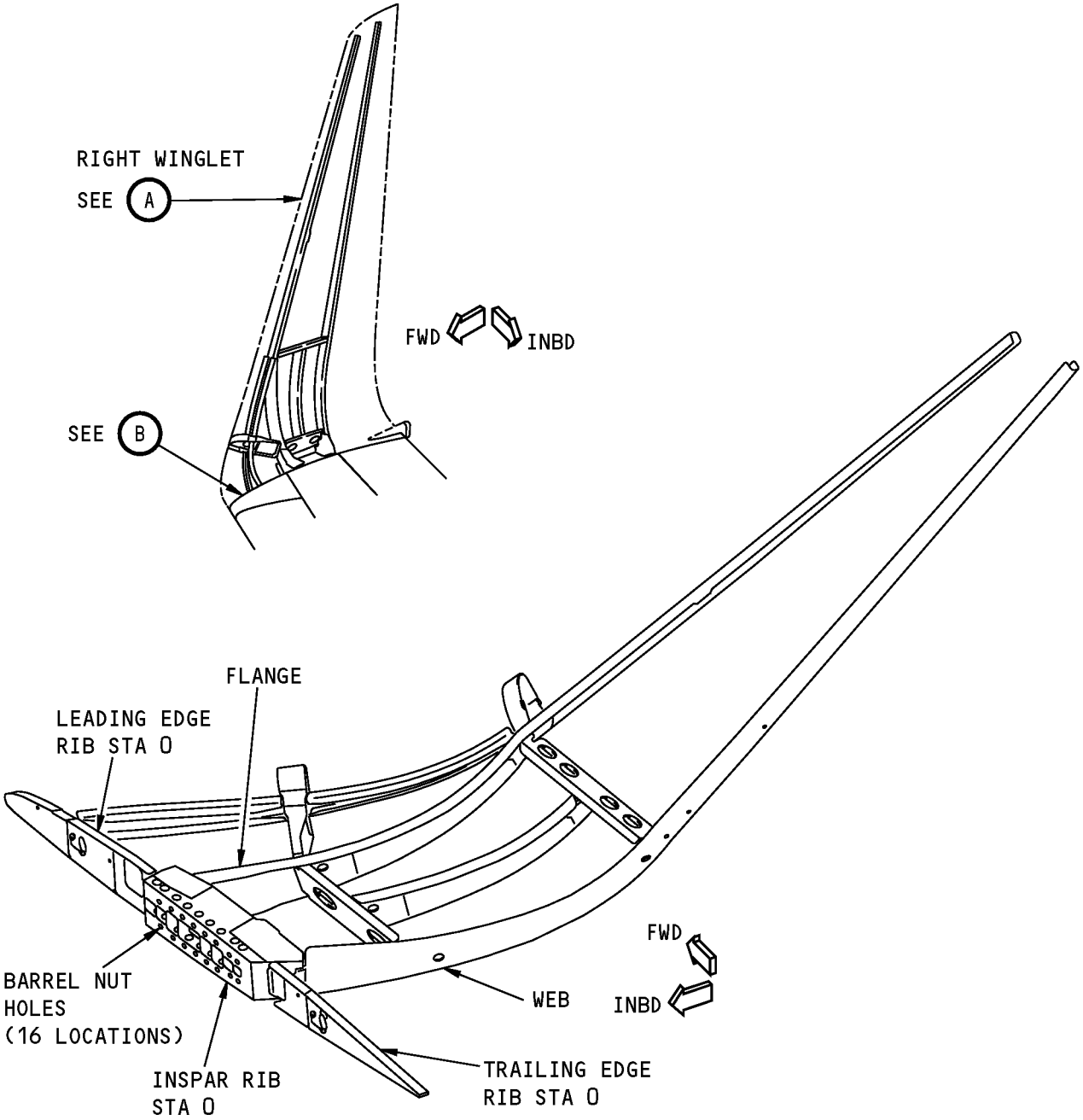
(1) This procedure is a scheduled maintenance task.

B. Inspection

SUBTASK 57-05-03-211-006

(1) Do the inspection.

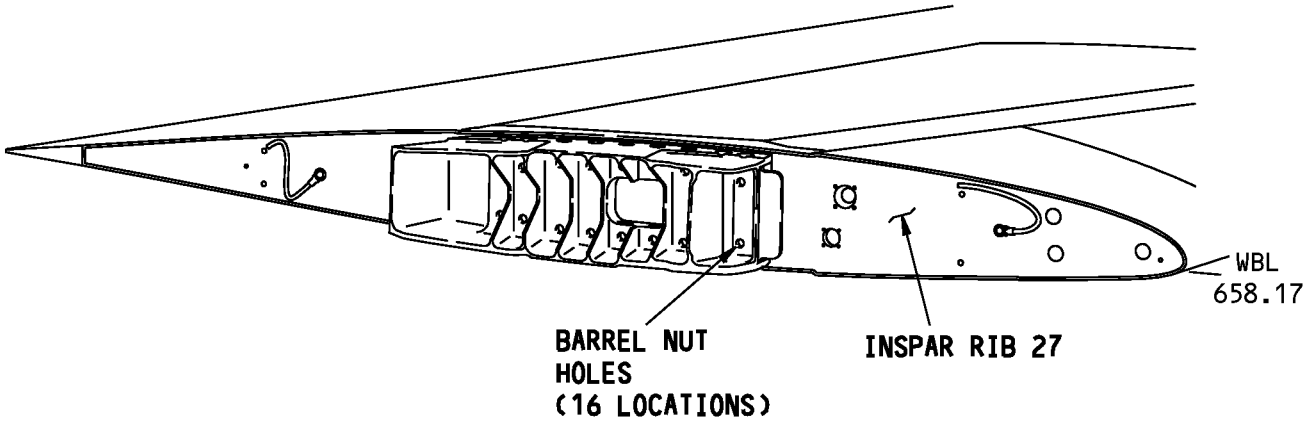
END OF TASK



RIGHT WINGLET
(SKIN NOT SHOWN)

A

Right Winglet
Figure 263 (Sheet 1 of 2)/57-05-03-990-870



Right Winglet
Figure 263 (Sheet 2 of 2)/57-05-03-990-870

WING CENTER SECTION - CORROSION PREVENTION

1. General

A. Corrosion can occur on the upper and lower external surfaces of the wing center section. This procedure is for the lower skin of the wing center section and lower portion of the front spar. For corrosion prevention on the upper surfaces of the wing center section, refer to Approved Repair of the Secondary Fuel Barrier Sealant, TASK 28-11-00-300-804.

B. The lower skin is susceptible to corrosion due to moisture accumulation. Corrosion can readily start where protective finishes have been damaged.

C. Corrosion in the bottom surface of the center wing may cause loss of cross-sectional area of the skin. This can result in a reduction in the load carrying capability of this primary structure and fuel leakage from airplanes which are equipped with integral center wing tanks.

TASK 57-14-00-910-801

2. Wing Center Section - Corrosion Prevention

A. General

(1) Make a regular inspection to prevent or find the start of corrosion. Missing fasteners, white powdery, or other corrosion deposits are signs of corrosion. Initiate the corrosion prevention practices to decrease the occurrence of corrosion.

(2) Following cleaning of suspected areas (PAGEBLOCK 51-21-31/701), a full inspection is effective to ensure that protective finishes provided during manufacture remain intact.

(3) Where corrosion exists (noticeable bulges of the skin or white deposits of corrosion products at fastener heads or joint edges), refer to the Structural Repair Manual for details of corrosion removal.

(4) For minor corrosion, to minimize the downtime of the airplane, the corrosion products should be cleaned off, followed by the application of a corrosion inhibiting compound into the affected area to decrease the corrosion process. Refer to PAGEBLOCK 51-21-91/701 for details on applying corrosion inhibiting compound. The finish system should be repaired at the first opportunity consistent with the maintenance schedule.

B. References

Reference	Title
51-21-31 P/B 701	CORROSION REMOVAL AND CONTROL - CLEANING/PAINTING
51-21-91 P/B 701	CORROSION INHIBITING COMPOUND - CLEANING/PAINTING

C. Consumable Materials

Reference	Description	Specification
C00033	Coating - Exterior Protective Enamel, Flexibility Use	BMS10-60, Type II
C00175	Primer - Urethane Compatible, Corrosion Resistant (Less Than 1% Aromatic Amines)	BMS10-79, Type III
C00259	Primer - Chemical And Solvent Resistant Finish, Epoxy Resin	BMS10-11, Type I
G00009	Compound - Organic Corrosion Inhibiting	BMS3-23

D. Location Zones

Zone	Area
135	Area Above Wing Center Section, Body Station 540 to Body Station 663.75 - Left
136	Area Above Wing Center Section, Body Station 540 to Body Station 663.75 - Right

E. Procedure

SUBTASK 57-14-00-100-001

(1) Clean the affected area to remove corrosion products .

SUBTASK 57-14-00-370-005

(2) Apply 2 coats of primer, C00175 or primer, C00259 to areas where the paint is missing.

SUBTASK 57-14-00-390-001

(3) If you used primer, C00175, coating, C00033 may be applied to the area for additional corrosion protection. Do not apply coating, C00033 if you used primer, C00259.

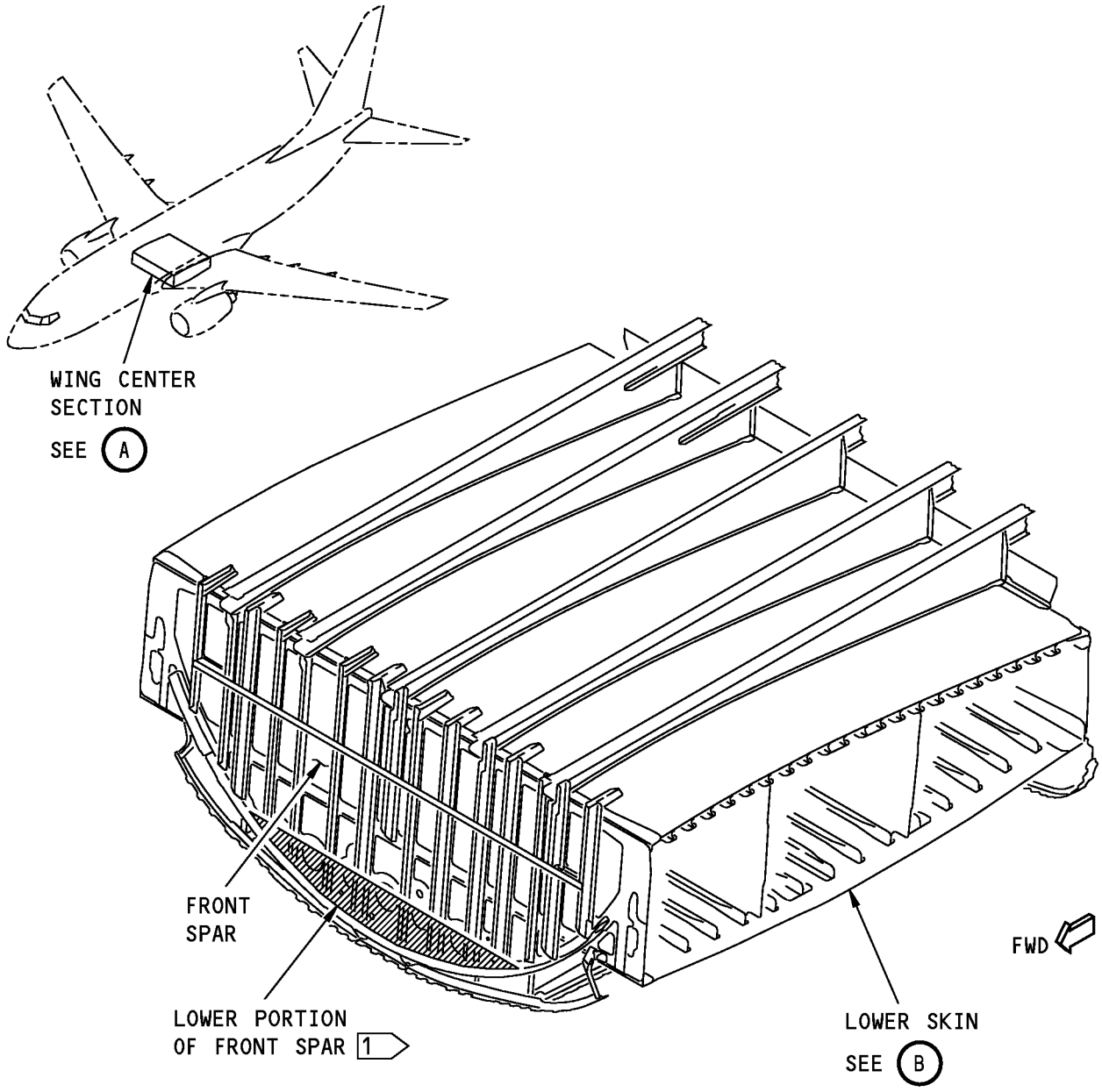
SUBTASK 57-14-00-370-004

(4) Frequency of Application

(a) Periodic inspection is required in areas identified as susceptible to corrosion and should be consistent to the schedules specified in the Maintenance Planning Document. Operators must be aware of reported problems and areas of occurrences.

(b) Periodic application of corrosion inhibiting compound, G00009 is necessary to areas identified and should be consistent to the schedule specified in the Maintenance Planning Document.

———————— END OF TASK ————————

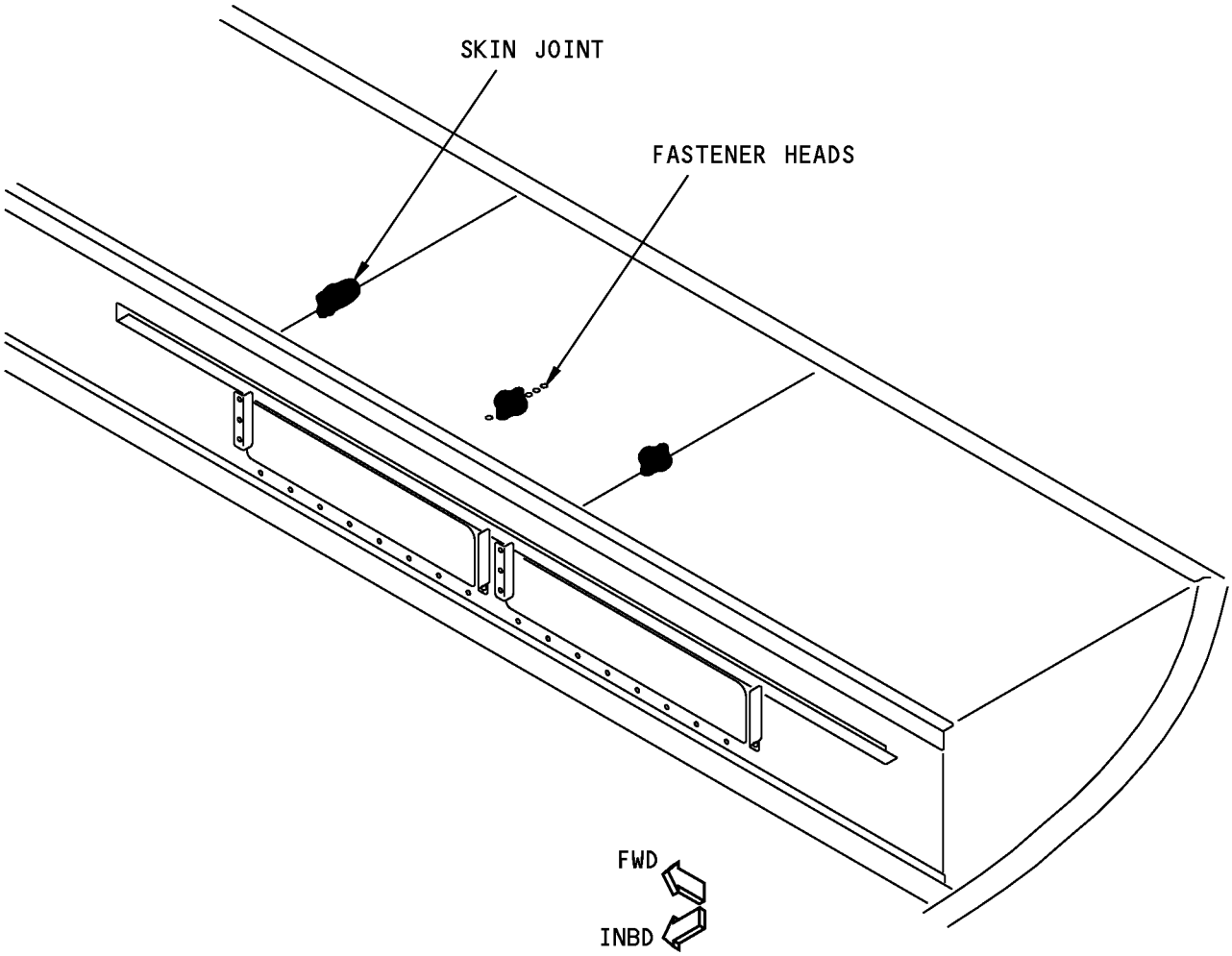


WING CENTER SECTION

A

1 CORROSION PREVENTION ON THE UPPER SKIN OR UPPER PORTION OF THE FRONT SPAR MUST BE DONE PER 28-11-00-300-804

Wing Center Section - Corrosion Prevention
Figure 201 (Sheet 1 of 2)/57-14-00-990-801



CENTER WING SECTION LOWER SKIN

B

Wing Center Section - Corrosion Prevention
Figure 201 (Sheet 2 of 2)/57-14-00-990-801

MAIN LANDING GEAR SUPPORT BEAM - CORROSION PREVENTION

1. General

A. Corrosion and stress corrosion cracks can occur on the main landing gear support beam.

B. Corrosion can occur on the bolts that connect the landing gear beams to the flap track support fitting and swing link.

C. Stress corrosion cracks can occur in the forward and aft lugs of the swing link.

D. Corrosion frequently occurs in the trunnion fitting bearing hole.

E. Stress corrosion cracking can occur in and around the inboard lug attach hole of the MLG support beam.

F. Stress corrosion cracks have been found on four main landing gear beam swing links. On one link, the crack was in the aft lug of the forward clevis at BS 695. On the other three links, the crack was in the forward lug of aft clevis at BS 706. Stress corrosion also broke bolts at the link attachment to the body frame at Sta 706 and at the link-to-beam attachment.

G. Corrosion can occur on the stabilizer and its attach fitting at the landing gear beam.

H. Corrosion has been found on the mating surfaces of the stabilizer link assembly of the support beam and on components of the stabilizer link.

I. The wing wheel well is exposed to atmospheric pollutants and runway splash, and is susceptible to corrosion.

J. The wing well should be treated for corrosion at the same time as the wing torque box, trunnion and trunnion support fittings

TASK 57-15-00-910-801

2. Main Landing Gear Support Beam - Corrosion Prevention

A. General

(1) Make the regular inspection to prevent or find the start of corrosion. Missing fasteners, white powdery, or other corrosion deposits are signs of corrosion. Initiate the corrosion prevention practices to decrease the occurrence of corrosion.

(2) Following cleaning of suspected areas PAGEBLOCK 51-21-31/701, a full inspection is effective to ensure that protective finishes provided during manufacture remain intact.

(3) Where corrosion exists (noticeable bulges of the skin or white deposits of corrosion products at fastener heads or joint edges), refer to Structural Repair Manual for details of corrosion removal.

(4) For minor corrosion, to minimize the downtime of the airplane, the corrosion products should be cleaned off, followed by the application of a corrosion inhibiting compound into the affected area to decrease the corrosion process. Refer to PAGEBLOCK 51-21-91/701 for details on applying corrosion inhibiting compound. The finish system should be repaired at the first opportunity consistent with the maintenance schedule.

B. References

Reference	Title
51-21-31 P/B 701	CORROSION REMOVAL AND CONTROL - CLEANING/PAINTING
51-21-91 P/B 701	CORROSION INHIBITING COMPOUND - CLEANING/PAINTING

C. Consumable Materials

Reference	Description	Specification
G00009	Compound - Organic Corrosion Inhibiting	BMS3-23

D. Location Zones

Zone	Area
734	Left Main Landing Gear
744	Right Main Landing Gear

E. Procedure

SUBTASK 57-15-00-370-001

(1) At first opportunity consistent with the scheduled maintenance activity, apply corrosion prevention treatment to the main landing gear trunnion support structure.

SUBTASK 57-15-00-200-002

(2) Periodically inspect the main landing gear beam and the forward trunnion fitting attached to the rear spar for damaged finish and evidence of corrosion.

SUBTASK 57-15-00-370-002

(3) Apply water displacing corrosion inhibiting compound to landing gear beams.

SUBTASK 57-15-00-910-001

(4) Remove runway debris and clean the entire wheel well area.

SUBTASK 57-15-00-370-003

(5) Apply corrosion inhibiting compound, G00009 to all exposed wheel well structure. Pay particular attention to applying the corrosion inhibitor along doubler edges, along edges of structure, forgings, etc., and on fastener heads. Use spray equipment with nozzle directed into faying surfaces.

SUBTASK 57-15-00-370-004

(6) Apply corrosion inhibiting compound, G00009 to landing gear attachment fittings. Make sure to apply the compound to lugs and lug faces.

SUBTASK 57-15-00-370-005

(7) Regrease all grease fittings in the treatment area.

SUBTASK 57-15-00-370-006

(8) After cleaning the wheel well with steam or high pressure water and detergent, apply corrosion inhibiting compound, G00009.

SUBTASK 57-15-00-200-003

(9) Periodically inspect heavily loaded structural members and wheel well closure walls for deterioration of protective finishes.

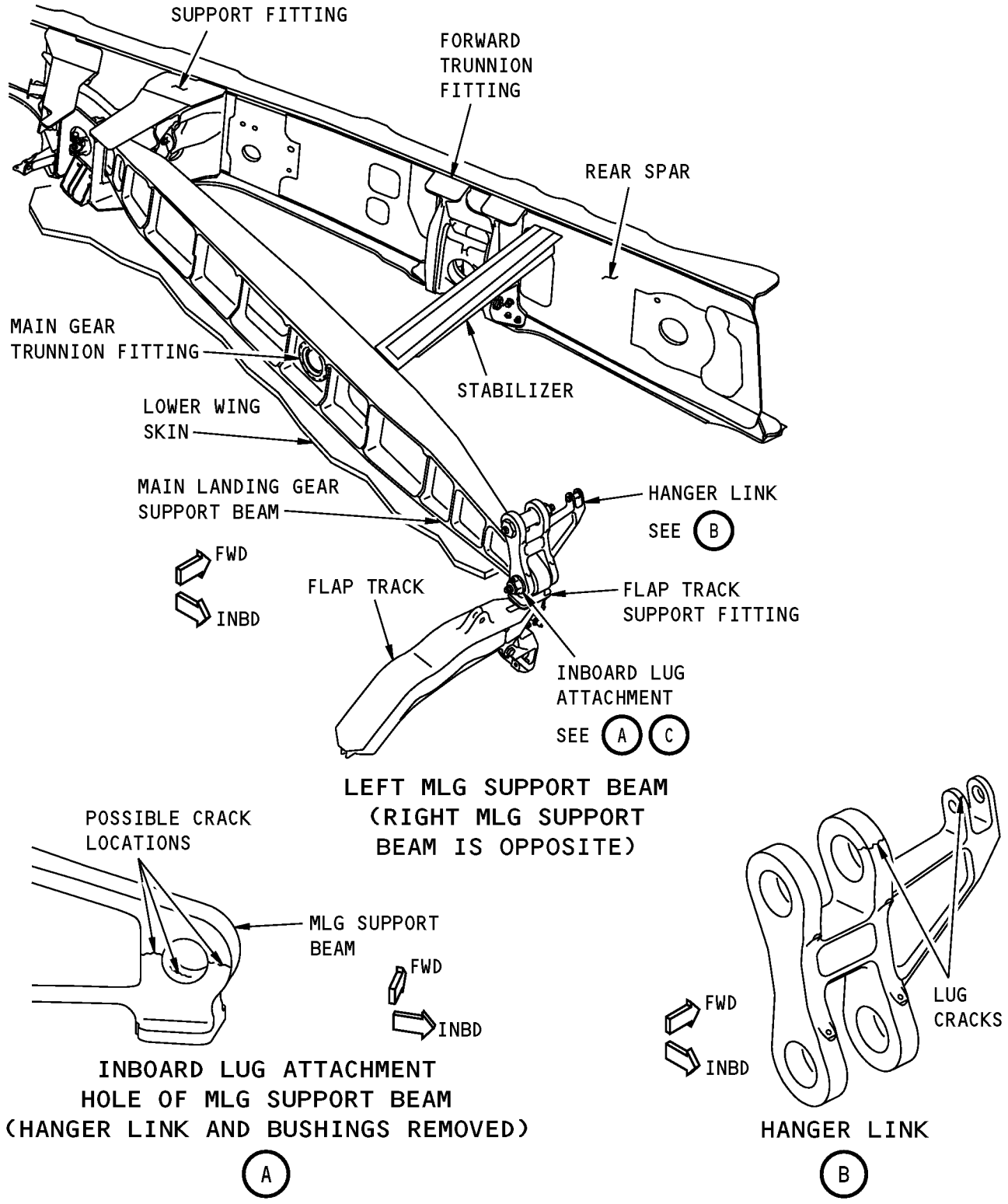
SUBTASK 57-15-00-370-007

(10) Frequency of Application

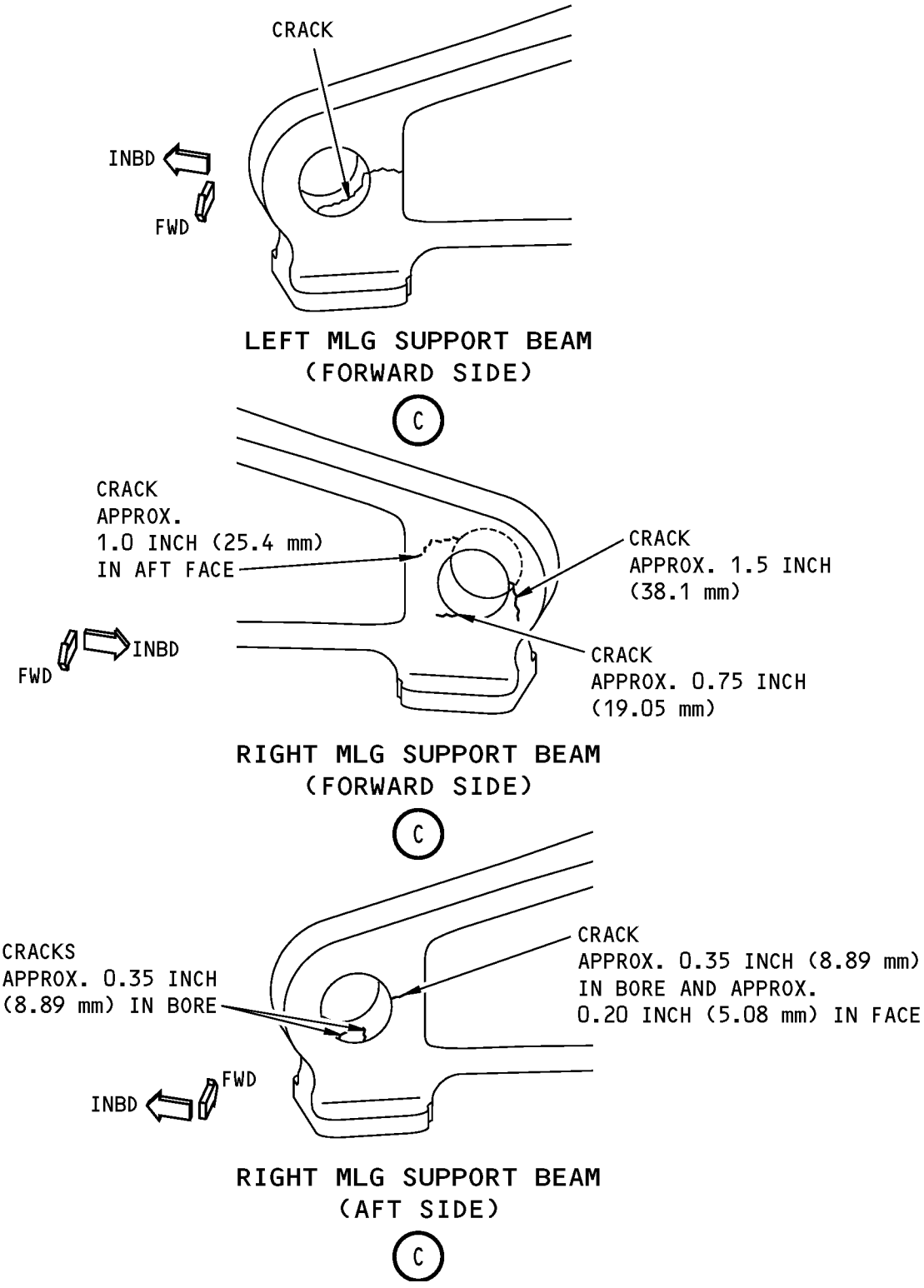
(a) Periodic inspection is required in areas identified as susceptible to corrosion and should be consistent to the schedules specified in the Maintenance Planning Document. Operators must be aware of reported problems and areas of occurrences.

(b) Periodic application of corrosion inhibiting compound, G00009 is necessary to areas identified and should be consistent to the schedule specified in the Maintenance Planning Document.

——————— END OF TASK ———————



Main Landing Gear Support Beam - Corrosion Prevention
Figure 201 (Sheet 1 of 2)/57-15-00-990-804



Main Landing Gear Support Beam - Corrosion Prevention
Figure 201 (Sheet 2 of 2)/57-15-00-990-804

MAIN LANDING GEAR SUPPORT BEAM - REMOVAL/INSTALLATION

1. General

A. There are two tasks in this procedure. There is one task for the removal and one task for the installation of a landing gear support beam.

(1) The removal procedure has these parts:

(a) The removal of the fuel from the airplane

(b) The removal of the inboard trailing edge flap

(c) The removal of one main landing gear

(d) The removal of the main gear wing door

(e) The removal of the flap track fairing

(f) The removal of the inboard ground spoiler

(g) The inspection of the rear spar bushings.

(h) The removal of the surrounding panels

(i) The removal of a landing gear support beam.

(2) The installation procedure has these parts:

(a) The installation of a landing gear support beam

(b) The installation of the upper and lower stabilizer links

(c) The installation of the surrounding panels

(d) The installation of one main landing gear

(e) The installation of the inboard trailing edge flap

(f) The installation of the main gear wing door

(g) The installation of the fairings for the inboard flap track

(3) The landing gear support beam will be referred to as the support beam.

TASK 57-15-00-000-801

2. Landing Gear Support Beam Removal

(Figure 401)

A. References

Reference	Title
27-51-15-000-802	Inboard Flap Inboard Track Removal (P/B 401)
27-51-18-000-802	Inboard Flap Support Aft Fairing Removal (P/B 401)
27-51-31-000-801	Inboard Flap Outboard Transmission Removal (P/B 401)
27-51-31-000-802	Inboard Flap Inboard Transmission Removal (P/B 401)
27-51-56-000-801	Main Landing Gear Beam Angle Gearbox Removal (P/B 401)
27-51-58-000-803	Wheel Well Flap Torque Tube Removal (P/B 401)
27-62-12-000-801	Inboard Ground Spoiler Removal (P/B 401)
27-62-71-000-801	Inboard Ground Spoiler Actuator Removal (P/B 401)
28-26-00-650-801	Fuel Tank Defueling (P/B 201)
32-11-00-000-801	Main Landing Gear Removal (P/B 401)
32-13-21-000-802	Main Landing Gear Wing Door Removal (P/B 401)
32-32-11-000-801	Removal of the Actuator Assembly for the Main Gear (P/B 401)

B. Location Zones

Zone	Area
734	Left Main Landing Gear
744	Right Main Landing Gear

C. Access Panels

Number	Name/Location
551AT	Upper Inboard Fixed Trailing Edge Access Panel
551BT	Upper Inboard Fixed Trailing Edge, MLG Actuator Access Panel
551DB	Lower Inboard Fixed Trailing Edge, Lube Actuator & MLG Beam Outboard Attach Pin Access Panel
551DT	Upper Inboard Fixed Trailing Edge, Structural MLG Beam Access Panel
551EB	Lower Inboard Fixed Trailing Edge, MLG Attach Fitting Access Panel
551ET	Upper Inboard Fixed Trailing Edge, Structural MLG Beam Access Panel
551FB	Lower Inboard Fixed Trailing Edge, Landing Gear Access Panel
651AT	Upper Inboard Fixed Trailing Edge Access Panel
651BT	Upper Inboard Fixed Trailing Edge, MLG Actuator Access Panel
651DB	Lower Inboard Fixed Trailing Edge, Lube Actuator & MLG Beam Outboard Attach Pin Access Panel
651DT	Upper Inboard Fixed Trailing Edge, MLG Beam Access Panel
651EB	Lower Inboard Fixed Trailing Edge, MLG Attach Fitting Access Panel
651ET	Upper Inboard Fixed Trailing Edge, MLG Beam Access Panel
651FB	Lower Inboard Fixed Trailing Edge, Landing Gear Access Panel

D. Prepare to Remove the Support Beam

SUBTASK 57-15-00-860-001

(1) To defuel the wing fuel tanks, do this task: Fuel Tank Defueling, TASK 28-26-00-650-801.

SUBTASK 57-15-00-860-002

(2) To remove the applicable inboard trailing edge flap, do this task: Inboard Flap Inboard Transmission Removal, TASK 27-51-31-000-802.

SUBTASK 57-15-00-860-003

(3) Lower the trailing edge flaps.

SUBTASK 57-15-00-020-002

(4) To remove the applicable main landing gear, do this task: Main Landing Gear Removal, TASK 32-11-00-000-801.

SUBTASK 57-15-00-010-001

(5) To remove the wing door, do this task: Main Landing Gear Wing Door Removal, TASK 32-13-21-000-802.

SUBTASK 57-15-00-010-002

(6) To remove the fairing for the inboard flap track, do this task: Inboard Flap Support Aft Fairing Removal, TASK 27-51-18-000-802.

SUBTASK 57-15-00-010-003

(7) To remove the applicable inboard ground spoiler, do this task: Inboard Ground Spoiler Removal, TASK 27-62-12-000-801.

SUBTASK 57-15-00-200-001

(8) At the fitting on the rear spar holding the outboard end of the support beam, measure to find if it is necessary to install new bushings.

NOTE: The installation of new bushings will be done after removing the support beam completely.

(a) Measure the clearance between the bushing face on the FORWARD side of the support beam and the adjacent bushing face in the support fitting.

1) This clearance cannot be more than 0.020 inch (0.508 mm).

(b) Measure the clearance between the bushing face on the AFT side of the support beam and the adjacent bushing face in the support fitting.

1) This clearance cannot be more than 0.020 inch (0.508 mm).

2) The total clearance, aft side plus the forward side, cannot be more than 0.025 inch (0.635 mm).

(c) If these clearances are more than the allowed limits, replace defective bushings.

NOTE: Shim washers are not allowed.

NOTE: Defective bushings may be in the support beam and/or the support fitting.

SUBTASK 57-15-00-010-004

(9) Remove the applicable panels surrounding the main landing gear support beam:

(a) On the left wing, remove these access panels:

Number	Name/Location
551AT	Upper Inboard Fixed Trailing Edge Access Panel
551BT	Upper Inboard Fixed Trailing Edge, MLG Actuator Access Panel
551DB	Lower Inboard Fixed Trailing Edge, Lube Actuator & MLG Beam Outboard Attach Pin Access Panel
551DT	Upper Inboard Fixed Trailing Edge, Structural MLG Beam Access Panel
551EB	Lower Inboard Fixed Trailing Edge, MLG Attach Fitting Access Panel
551ET	Upper Inboard Fixed Trailing Edge, Structural MLG Beam Access Panel
551FB	Lower Inboard Fixed Trailing Edge, Landing Gear Access Panel

(b) On the right wing, remove these access panels:

Number	Name/Location
651AT	Upper Inboard Fixed Trailing Edge Access Panel
651BT	Upper Inboard Fixed Trailing Edge, MLG Actuator Access Panel
651DB	Lower Inboard Fixed Trailing Edge, Lube Actuator & MLG Beam Outboard Attach Pin Access Panel
651DT	Upper Inboard Fixed Trailing Edge, MLG Beam Access Panel
651EB	Lower Inboard Fixed Trailing Edge, MLG Attach Fitting Access Panel

(Continued)

Number	Name/Location
651ET	Upper Inboard Fixed Trailing Edge, MLG Beam Access Panel
651FB	Lower Inboard Fixed Trailing Edge, Landing Gear Access Panel

E. Remove the Main Landing Gear Support Beam

SUBTASK 57-15-00-020-003

(1) Remove the upper and lower stabilizer links, (Figure 401).

(a) Remove the cotter pin [8], nut [7], fuse pin [4], washer [5], and washer [6] which connect the forward end of the lower stabilizer link [3] to the attach fitting on the rear spar.

(b) Disconnect the bonding jumper.

(c) Remove the cotter pin [8], nut [7], fuse pin [4], washer [5], and washer [6] which connect the aft end of the lower stabilizer link [3] to the attach fitting on the support beam.

(d) Disconnect the bonding jumper.

(e) Remove the four bolts [9] and the four collars [10] which connect the two tray brackets to the upper stabilizer link [14].

(f) Remove the cotter pin [13], nut [12], bolt [15], washer [16], and washer [11] which connect the aft end of the upper stabilizer link [14] to the attach fitting on the support beam.

(g) Remove the cotter pin [8], nut [7], fuse pin [4], washer [5], and washer [6] which connect the forward end of the upper stabilizer link [14] to the attach fitting on the rear spar.

(h) Disconnect the bonding jumper.

(i) Remove the bolts from the upper and lower stabilizer link attach fittings on the support beam, if necessary.

1) Remove the attach fittings from the support beam.

2) Make a note of the location of the shims.

SUBTASK 57-15-00-020-004

(2) To remove the walking beam hanger fitting, the walking beam, and the actuator, do this task: Removal of the Actuator Assembly for the Main Gear, TASK 32-32-11-000-801.

SUBTASK 57-15-00-020-005

(3) To remove the two ground spoiler actuators from the aft side of the support beam, do this task: Inboard Ground Spoiler Actuator Removal, TASK 27-62-71-000-801.

(a) Also, remove the two spoiler hinge supports, if necessary.

SUBTASK 57-15-00-020-006

(4) Disconnect the necessary hydraulic and fire extinguishing tubes from the support beam.

NOTE: These tubes are on the aft and the forward side of the support beam.

(a) Make a note of the locations of the tubes.

SUBTASK 57-15-00-020-007

(5) Disconnect the necessary electrical wires from the support beam.

NOTE: Make sure that there is no tension in the wires. The wires must be loose for removal of the support beam.

SUBTASK 57-15-00-970-001

(6) Make a note of the location of the wires.

SUBTASK 57-15-00-020-008

(7) To remove the inboard flap inboard transmission, do this task: Inboard Flap Inboard Transmission Removal, TASK 27-51-31-000-802.

SUBTASK 57-15-00-020-009

(8) To remove the inboard flap outboard transmission if necessary, do this task: Inboard Flap Outboard Transmission Removal, TASK 27-51-31-000-801.

SUBTASK 57-15-00-020-010

(9) To remove the main landing gear beam angle gear box from the aft side of the support beam, do this task: Main Landing Gear Beam Angle Gearbox Removal, TASK 27-51-56-000-801.

SUBTASK 57-15-00-010-005

(10) To remove the inboard torque tube, do this task: Wheel Well Flap Torque Tube Removal, TASK 27-51-58-000-803.

SUBTASK 57-15-00-010-006

(11) To remove the inboard flap track, do this task: Inboard Flap Inboard Track Removal, TASK 27-51-15-000-802.

SUBTASK 57-15-00-020-011

WARNING: THE SUPPORT BEAM WEIGHS MORE THAN 250 POUNDS. WITHOUT APPROPRIATE TOOLS TO SUPPORT THIS WEIGHT, INJURY TO PERSONS AND/OR DAMAGE TO THE EQUIPMENT MAY OCCUR.

(12) Remove the support beam [1] or [2]:

(a) Hold the support beam in its position.

(b) Disconnect the hanger link [39] from the support beam, do these steps, (Figure 401).

1) Remove the pin [20], bolt [17], countersunk washer [18], two caps [19], washer [21], self-locking nut [22], nut [23], collar [24], radius filler [25], bolt [26], washers [27], washers [28], and washers [29] from the hanger link.

NOTE: Make a note of the location of all of the washers.

2) Keep all of the washers.

3) If you will not remove the hanger link [39] from the airplane, do these steps (Figure 401):

a) Swing the hanger link [39] inboard.

b) Hold the lower end of the hanger link [39] inboard by temporarily fastening it.

NOTE: This will allow removal of the support beam.

WARNING: THE SUPPORT BEAM WEIGHS MORE THAN 250 POUNDS. WITHOUT APPROPRIATE TOOLS TO SUPPORT THIS WEIGHT, INJURY TO PERSONS AND/OR DAMAGE TO THE EQUIPMENT MAY OCCUR.

4) If you will remove the hanger link [39] from the airplane, do these steps:

a) Remove the pin [43], bolt [40], countersunk washer [41], caps [42], washer [46], self-locking nut [44], nut [45], collar [49], radius filler [48], bolt [47], self-locking nut [50], bolt [54], countersunk washer [53], washer [51], and bushing [52].

b) Remove the hanger link [39].

(c) Remove the nut [30], washer [31], washer [32], and bolt [33] (4 locations) from the attach fitting at the inboard end of the support beam.

NOTE: This attach fitting connects the support beam to the inboard flap track. See illustration.

(d) Remove the outboard attach fuse pin [34], the two bolts [35], the two washers [36], the two bushings [37], and the two nuts [38].

(e) Carefully remove the support beam.

1) Move the support beam inboard until it is clear of the fitting at the outboard end, the electrical wire bundles, the fire extinguishing tube, and the hydraulic tubes.

2) Lower the outboard end of the beam and move the beam outboard.

3) Remove the support beam from the airplane.

——————— END OF TASK ———————

TASK 57-15-00-400-801

3. Landing Gear Support Beam Installation

(Figure 401)

A. References

Reference	Title
12-25-07-600-801	Lubricate the Support Beam Assembly of the Main Landing Gear (P/B 301)
27-51-11-400-801	Inboard Trailing Edge Flap Installation (P/B 401)
27-51-15-400-802	Inboard Flap Inboard Track Installation (P/B 401)
27-51-18-400-802	Inboard Flap Support Aft Fairing Installation (P/B 401)
27-51-31-400-801	Inboard Flap Outboard Transmission Installation (P/B 401)
27-51-31-400-802	Inboard Flap Inboard Transmission Installation (P/B 401)
27-51-56-400-801	Main Landing Gear Beam Angle Gearbox Installation (P/B 401)
27-51-58-400-802	Inboard Wing Flap Torque Tube Installation (P/B 401)
27-62-71-400-801	Inboard Ground Spoiler Actuator Installation (P/B 401)
32-11-00-400-801	Main Landing Gear Installation (P/B 401)
32-13-21-420-801	Main Landing Gear Wing Door Installation (P/B 401)
32-32-11-400-801	Installation of the Actuator Assembly for the Main Gear (P/B 401)

B. Consumable Materials

Reference	Description	Specification
D00633	Grease - Aircraft General Purpose	BMS3-33

C. Location Zones

Zone	Area
734	Left Main Landing Gear
744	Right Main Landing Gear

D. Access Panels

Number	Name/Location
551AT	Upper Inboard Fixed Trailing Edge Access Panel
551BT	Upper Inboard Fixed Trailing Edge, MLG Actuator Access Panel

(Continued)

Number	Name/Location
551DB	Lower Inboard Fixed Trailing Edge, Lube Actuator & MLG Beam Outboard Attach Pin Access Panel
551DT	Upper Inboard Fixed Trailing Edge, Structural MLG Beam Access Panel
551EB	Lower Inboard Fixed Trailing Edge, MLG Attach Fitting Access Panel
551ET	Upper Inboard Fixed Trailing Edge, Structural MLG Beam Access Panel
551FB	Lower Inboard Fixed Trailing Edge, Landing Gear Access Panel
651AT	Upper Inboard Fixed Trailing Edge Access Panel
651BT	Upper Inboard Fixed Trailing Edge, MLG Actuator Access Panel
651DB	Lower Inboard Fixed Trailing Edge, Lube Actuator & MLG Beam Outboard Attach Pin Access Panel
651DT	Upper Inboard Fixed Trailing Edge, MLG Beam Access Panel
651EB	Lower Inboard Fixed Trailing Edge, MLG Attach Fitting Access Panel
651ET	Upper Inboard Fixed Trailing Edge, MLG Beam Access Panel
651FB	Lower Inboard Fixed Trailing Edge, Landing Gear Access Panel

E. Procedure

SUBTASK 57-15-00-420-002

WARNING: THE SUPPORT BEAM WEIGHS MORE THAN 250 POUNDS. WITHOUT APPROPRIATE TOOLS TO SUPPORT THIS WEIGHT, INJURY TO PERSONS AND/OR DAMAGE TO THE EQUIPMENT MAY OCCUR.

(1) Install the outboard end of the main landing gear support beam [1] or [2].

(a) Put the support beam into its position.

1) Lift the inboard end of the support beam and move it inboard until it is above any structure.

2) Lift the outboard end of the support beam.

3) Put the outboard end of the support beam in the outboard support fitting.

4) Hold the support beam in its position.

(b) Attach the support beam to the rear spar support fitting.

1) Apply a thin layer of grease, D00633 to the outer diameter and threads of the outboard attach fuse pin [34].

2) Install the outboard attach fuse pin [34], two bolts [35], two washers [36], two bushings [37], and two nuts [38] to connect the rear spar support fitting and the outboard end of the support beam.

a) Tighten the nuts [38] on the bolts [35] to 250-300 pound-inches (28.2-33.9 mm).

SUBTASK 57-15-00-420-003

(2) Reconnect the inboard end of the support beam [1] or [2] to the airplane as follows:

(a) Install the attach fitting at the inboard end of the support beam.

1) Put the attach fitting into its place.

2) Install the nut [30], [30A], washer [31], [31A], washer [32], [32A], and the bolt [33], [33A].

(b) If you removed the hanger link [39] from the airplane, do these steps:

1) Put the hanger link [39] into its position.

a) Before you install the pin [43], apply a light coat of grease, grease, D00633 to its outer diameter and threads.

b) Install the pin [43], bolt [40], countersunk washer [41], caps [42], washer [46], self-locking nut [44], nut [45], collars [49], radius fillers [48], and bolts [47] and [54].

c) Tighten the nut [45] to 1000- 2000 pound-inches (113.0-226.0 Nm).

d) Tighten the self-locking nut [44] to 1000-1200 pound-inches (113.0-135.6 Nm).

2) Install the bolt [54], self-locking nut [50], countersunk washer [53], washer [51], and bushing [52].

a) Before you install the bushing, apply a light coat of grease, grease, D00633 to its outer diameter.

b) Tighten the self-locking nut [50] to 480-790 pound-inches (54.2-89.3 Nm).

(c) To connect the lower end of the hanger link [39] to the support beam, do these steps:

1) Install the pin [20], two nuts [23], two collars [24], two radius fillers [25], two bolts [26], washer [27], washer [28], and washer [29] on the hanger link [39], (Figure 401).

NOTE: Install the washers [27], [28], and [29] between the bushing flanges at each side of the support beam to reduce the gap to a minimum of 0.005 inches (0.127 mm) per side and 0.025 inches (0.635 mm) maximum total for both sides.

a) Apply a light coat of grease, D00633 on the outer diameter and threads of the pin [20].

b) Tighten the nut [23] to 1000-2000 pound-inches (113.0-226.0 Nm).

2) Install the bolt [17], washer [18], two caps [19], washer [21], and self-locking nut [22].

3) Tighten the self-locking nut [22] to 1000-1200 pound-inches (113.0-135.6 Nm).

WARNING: MAKE SURE THAT THE SYSTEM-TO-SYSTEM SEPARATIONS ARE CORRECT. SEPARATIONS THAT ARE NOT CORRECT COULD CAUSE UNWANTED CONDITIONS, WHICH COULD INCLUDE CHAFING, FIRE OR ELECTROMAGNETIC INTERFERENCE. THIS CAN CAUSE INJURIES TO PERSONNEL, OR CAN MAKE FLIGHT DANGEROUS, OR CAN CAUSE DAMAGE TO THE SYSTEMS.

(d) Make sure there is a minimum distance of 0.13 inch (3.302 mm) between the wire bundles and the hangar link.

NOTE: For more detailed information in the wire bundle installation, refer to the Standard Wiring Practices Manual, Wiring Assembly and Installation Configuration, SWPM 20-10-11.

(e) Apply grease, D00633 through all grease fittings on the hanger link until grease can be seen coming out.

SUBTASK 57-15-00-420-004

(3) To attach the inboard flap inboard track to the support beam, do this task: Inboard Flap Inboard Track Installation, TASK 27-51-15-400-802.

SUBTASK 57-15-00-420-005

(4) To install the inboard flap inboard transmission, do this task: Inboard Flap Inboard Transmission Installation, TASK 27-51-31-400-802.

SUBTASK 57-15-00-420-006

(5) To install the inboard flap outboard transmission, if necessary, do this task: Inboard Flap Outboard Transmission Installation, TASK 27-51-31-400-801.

SUBTASK 57-15-00-020-012

(6) To install the main landing gear beam angle gear box on the aft side of the support beam, do this task: Main Landing Gear Beam Angle Gearbox Installation, TASK 27-51-56-400-801.

SUBTASK 57-15-00-410-001

(7) To install the flap torque tubes, do this task: Inboard Wing Flap Torque Tube Installation, TASK 27-51-58-400-802.

SUBTASK 57-15-00-860-004

(8) Remove the support tools from the support beam.

SUBTASK 57-15-00-420-007

(9) To install the ground spoiler actuator, do this task: Inboard Ground Spoiler Actuator Installation, TASK 27-62-71-400-801.

SUBTASK 57-15-00-420-008

(10) Attach all hydraulic tubes to the support beam.

SUBTASK 57-15-00-420-009

(11) Attach all of the electrical wires to the support beam.

SUBTASK 57-15-00-420-010

(12) To install the walking beam hanger fitting, the walking beam, and the actuator, do this task: Installation of the Actuator Assembly for the Main Gear, TASK 32-32-11-400-801.

SUBTASK 57-15-00-420-011

(13) Install the upper and lower stabilizer links:

(a) Install the attach fittings for the upper and lower stabilizer links to the support beam, if necessary.

(b) Install the lower stabilizer link [3]:

1) Install the cotter pin [8], nut [7], fuse pin [4], washer [5], and washer [6] which connect the forward end of the lower stabilizer link [3] to the attach fitting on the rear spar.

a) Tighten the nut [7] to 1100-1500 pound-inches (124.3-169.5 Nm).

b) Apply a light coat of grease, D00633 on the fuse pin [4] outer diameter and threads.

2) Connect the bonding jumper.

3) Connect the cotter pin [8], nut [7], fuse pin [4], washer [5], and washer [6] which connect the aft end of the lower stabilizer link [3] to the attach fitting on the support beam.

a) Tighten the nut [7] to 1100-1500 pound-inches (124.3-169.5 Nm).

b) Apply a light coat of grease, D00633 on fuse pin [4] outer diameter and threads.

4) Connect the bonding jumper.

(c) Install the upper stabilizer link [14]:

1) Install the cotter pin [13], nut [12], bolt [15], washer [16], and washer [11] which connect the aft end of the upper stabilizer link [14] to the attach fitting on the support beam.

a) Apply a light coat of grease, D00633 on bolt [15] outer diameter and threads.

b) Tighten the nut [12] to 250-350 pound-inches (28.2-39.5 Nm).

2) Install the cotter pin [8], nut [7], fuse pin [4], washers [5], and washer [6] which connect the forward end of the upper stabilizer link [14] to the attach fitting on the rear spar.

a) Apply a light coat of grease, D00633 on fuse pin [4] outer diameter and threads.

b) Tighten the nut [7] to 1100-1500 pound-inches (124.3-169.5 Nm).

3) Connect the bonding jumper.

4) Install the four bolts [9] and four collars [10] which connect the two tray brackets to the upper stabilizer link [14].

F. Put the Airplane Back to Its Usual Condition

SUBTASK 57-15-00-010-007

(1) Install the applicable panels surrounding the main landing gear support beam:

(a) On the left wing, install these access panels:

Number	Name/Location
551AT	Upper Inboard Fixed Trailing Edge Access Panel
551BT	Upper Inboard Fixed Trailing Edge, MLG Actuator Access Panel
551DB	Lower Inboard Fixed Trailing Edge, Lube Actuator & MLG Beam Outboard Attach Pin Access Panel
551DT	Upper Inboard Fixed Trailing Edge, Structural MLG Beam Access Panel
551EB	Lower Inboard Fixed Trailing Edge, MLG Attach Fitting Access Panel
551ET	Upper Inboard Fixed Trailing Edge, Structural MLG Beam Access Panel
551FB	Lower Inboard Fixed Trailing Edge, Landing Gear Access Panel

(b) On the right wing, install these access panels:

Number	Name/Location
651AT	Upper Inboard Fixed Trailing Edge Access Panel
651BT	Upper Inboard Fixed Trailing Edge, MLG Actuator Access Panel
651DB	Lower Inboard Fixed Trailing Edge, Lube Actuator & MLG Beam Outboard Attach Pin Access Panel
651DT	Upper Inboard Fixed Trailing Edge, MLG Beam Access Panel
651EB	Lower Inboard Fixed Trailing Edge, MLG Attach Fitting Access Panel
651ET	Upper Inboard Fixed Trailing Edge, MLG Beam Access Panel
651FB	Lower Inboard Fixed Trailing Edge, Landing Gear Access Panel

SUBTASK 57-15-00-420-012

(2) To install the main landing gear, do this task: Main Landing Gear Installation, TASK 32-11-00-400-801.

SUBTASK 57-15-00-860-005

(3) To install the applicable inboard trailing edge flap, do this task: Inboard Trailing Edge Flap Installation, TASK 27-51-11-400-801.

SUBTASK 57-15-00-410-002

(4) To install the wing door, do this task: Main Landing Gear Wing Door Installation, TASK 32-13-21-420-801.

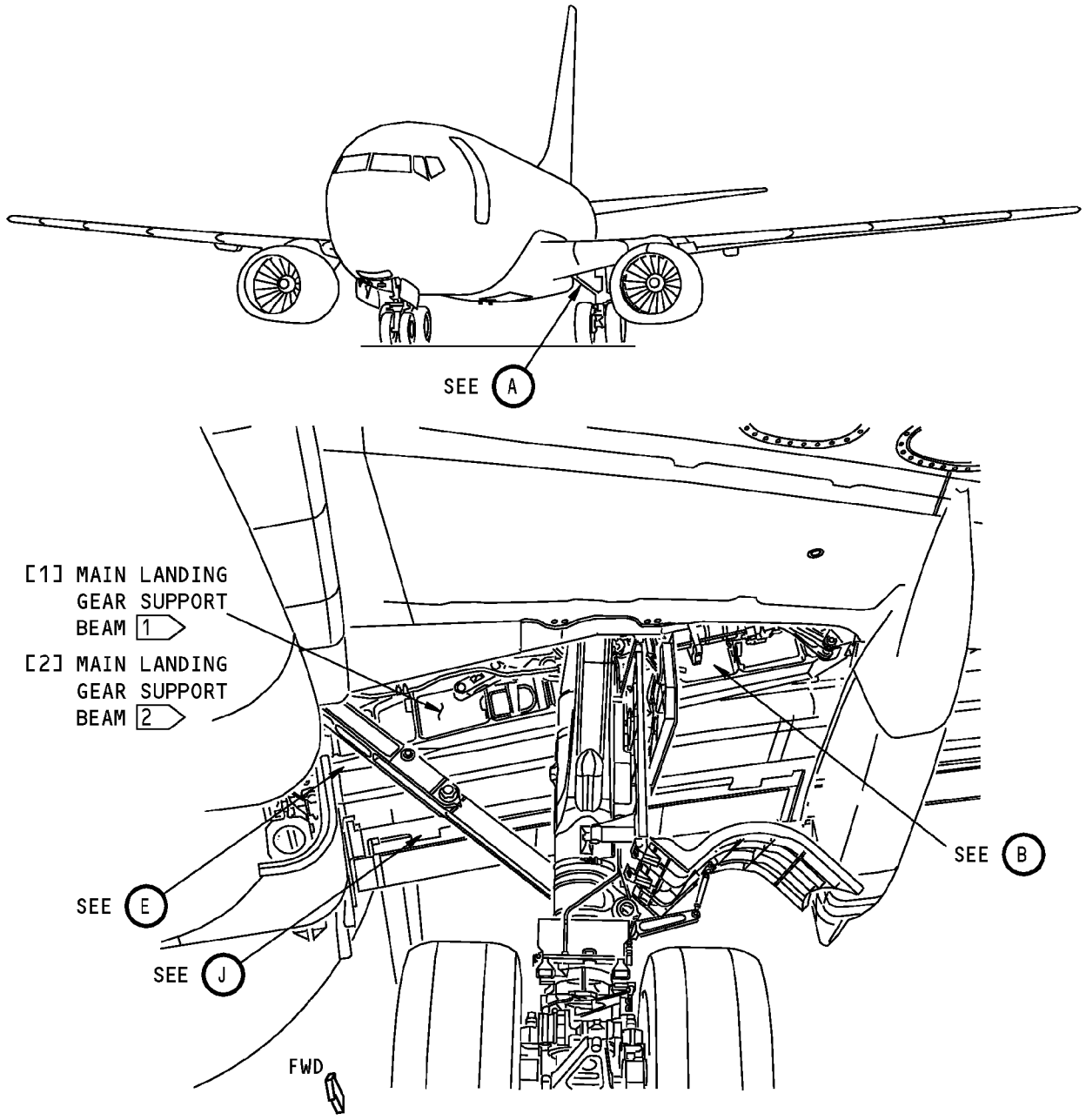
SUBTASK 57-15-00-410-003

(5) To install the fairings for the inboard flap track, do this task: Inboard Flap Support Aft Fairing Installation, TASK 27-51-18-400-802.

SUBTASK 57-15-00-640-001

(6) To lubricate the support beam, do this task: Lubricate the Support Beam Assembly of the Main Landing Gear, TASK 12-25-07-600-801.

——————— END OF TASK ———————



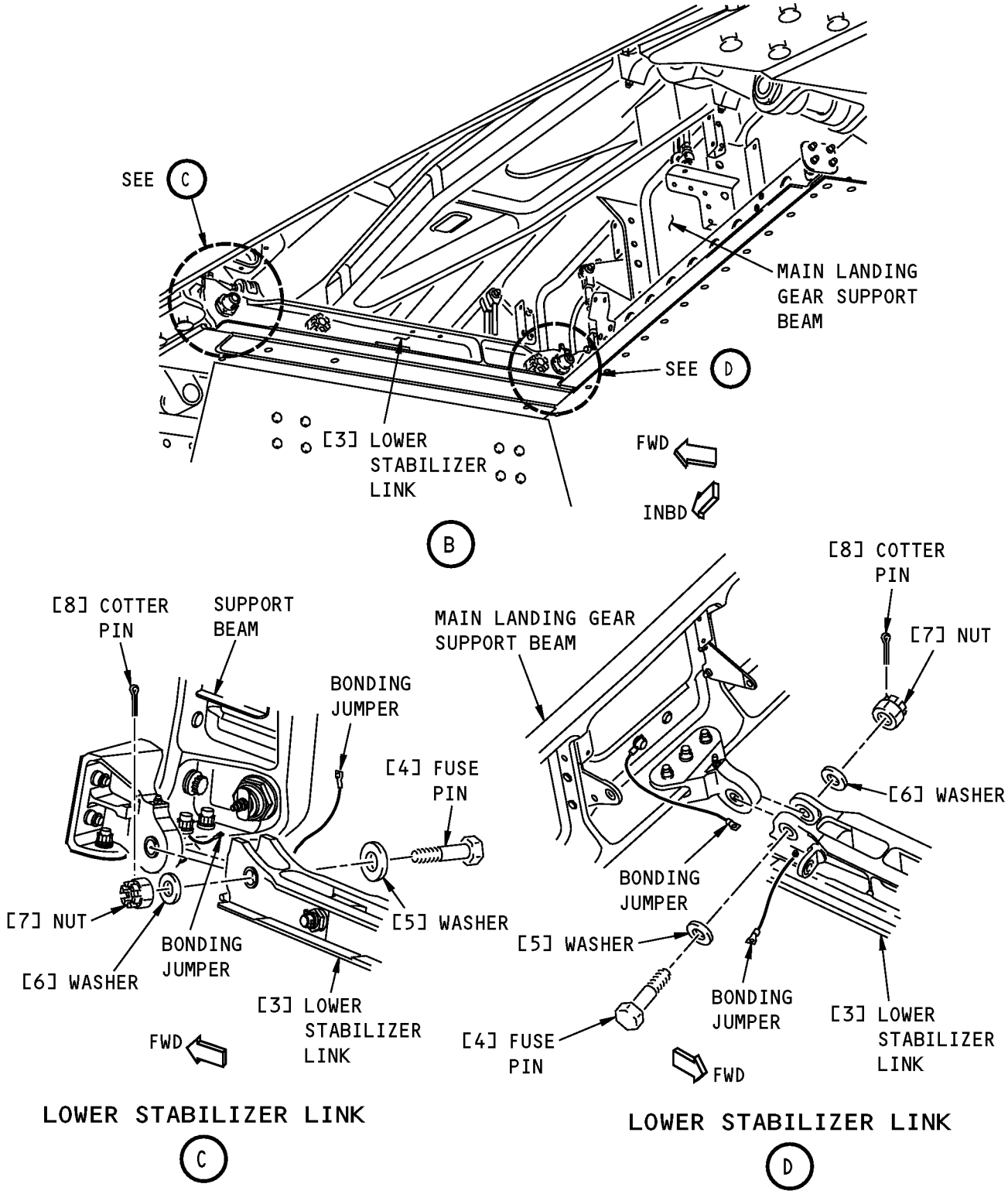
LEFT MAIN LANDING GEAR
(RIGHT MAIN LANDING GEAR IS EQUIVALENT)

A

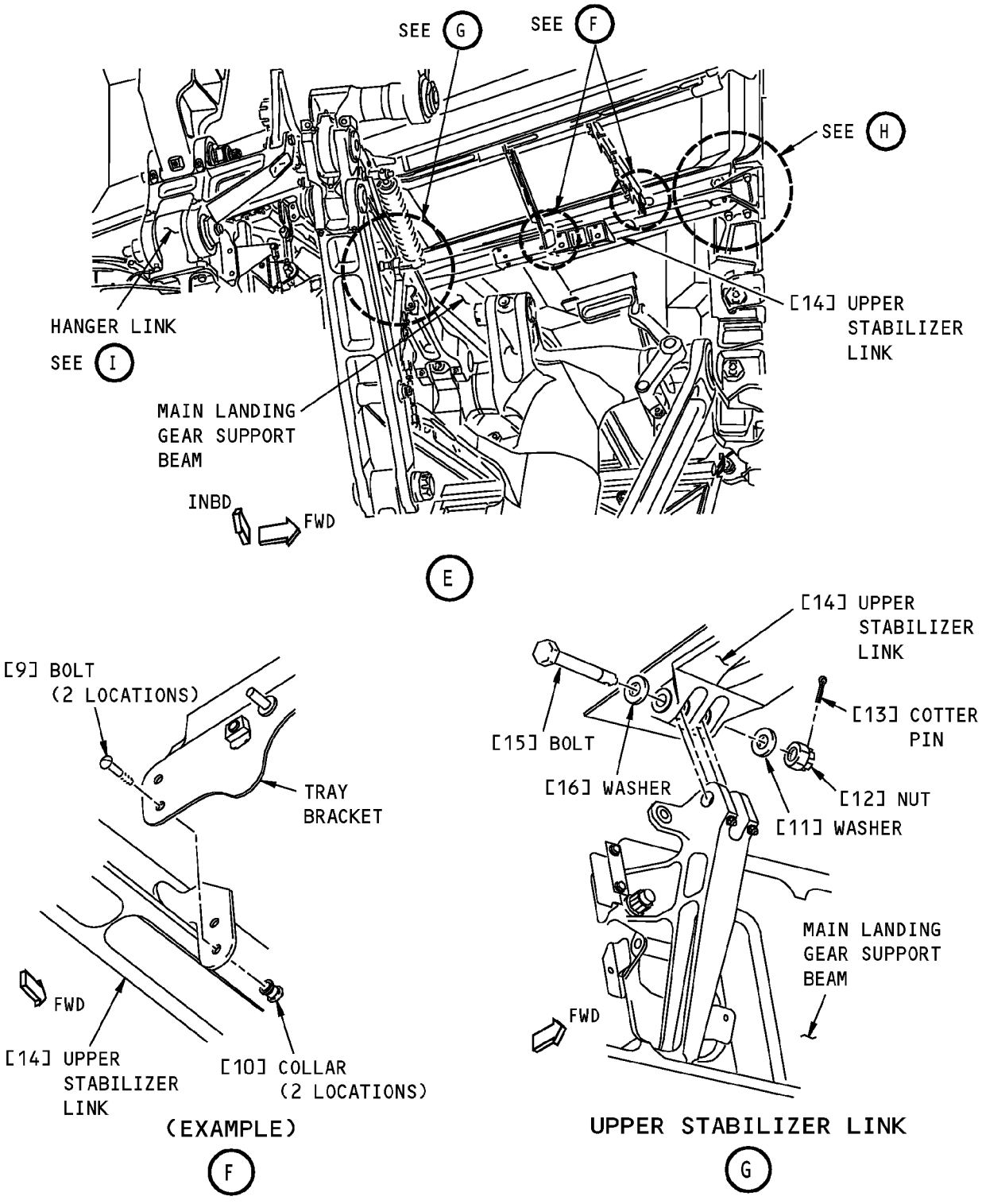
1 LEFT SIDE

2 RIGHT SIDE

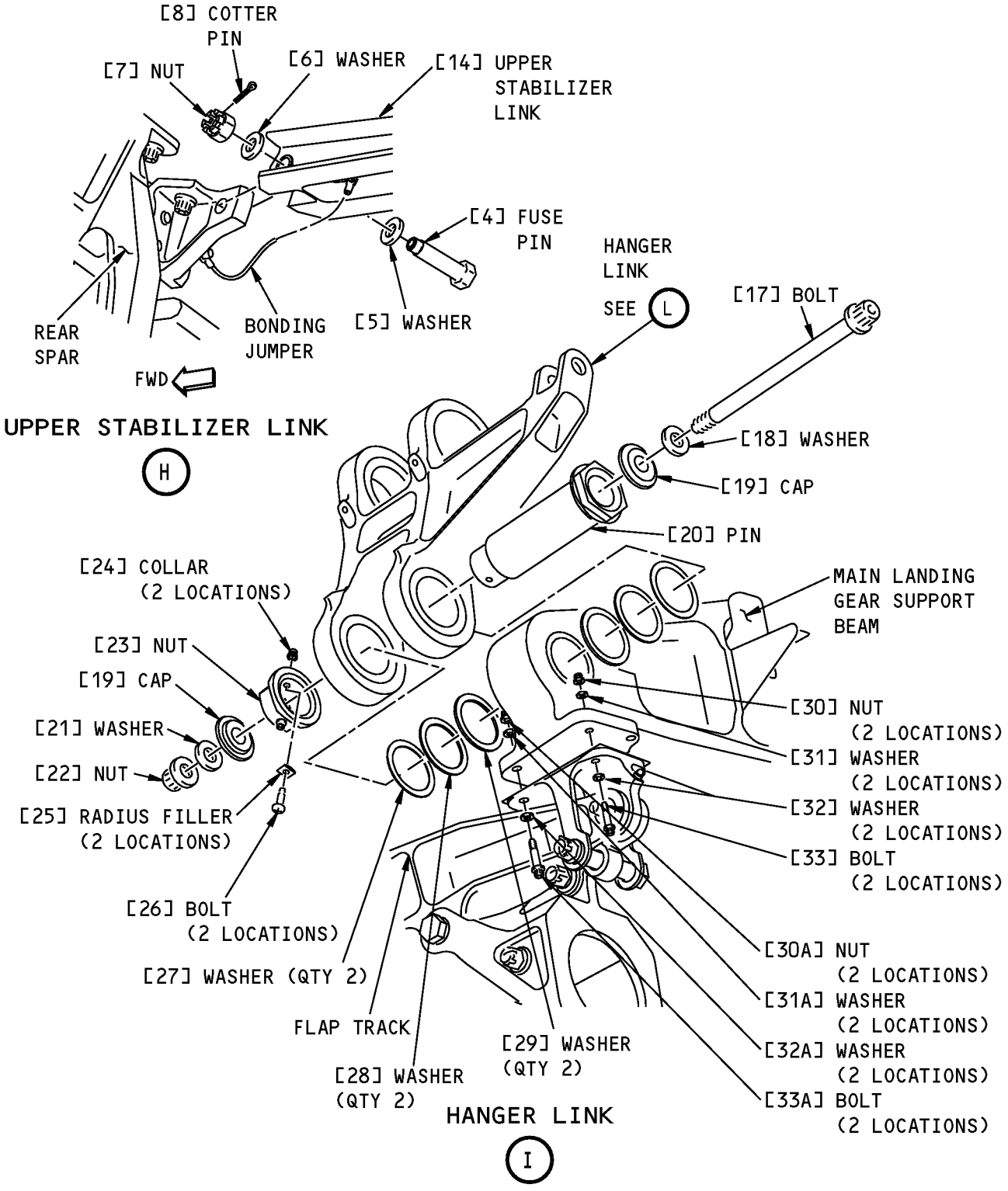
Main Landing Gear Support Beam Installation
Figure 401 (Sheet 1 of 6)/57-15-00-990-803



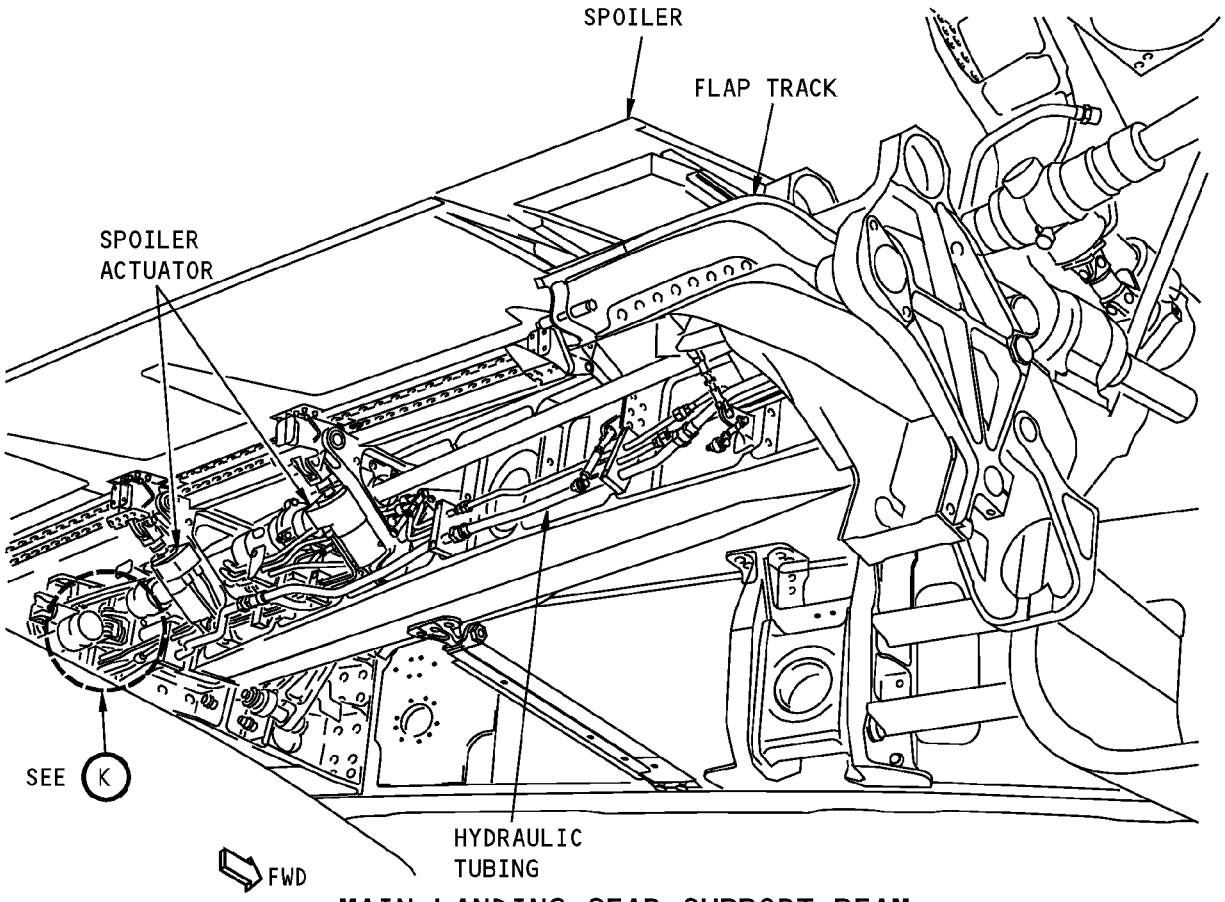
Main Landing Gear Support Beam Installation
Figure 401 (Sheet 2 of 6)/57-15-00-990-803



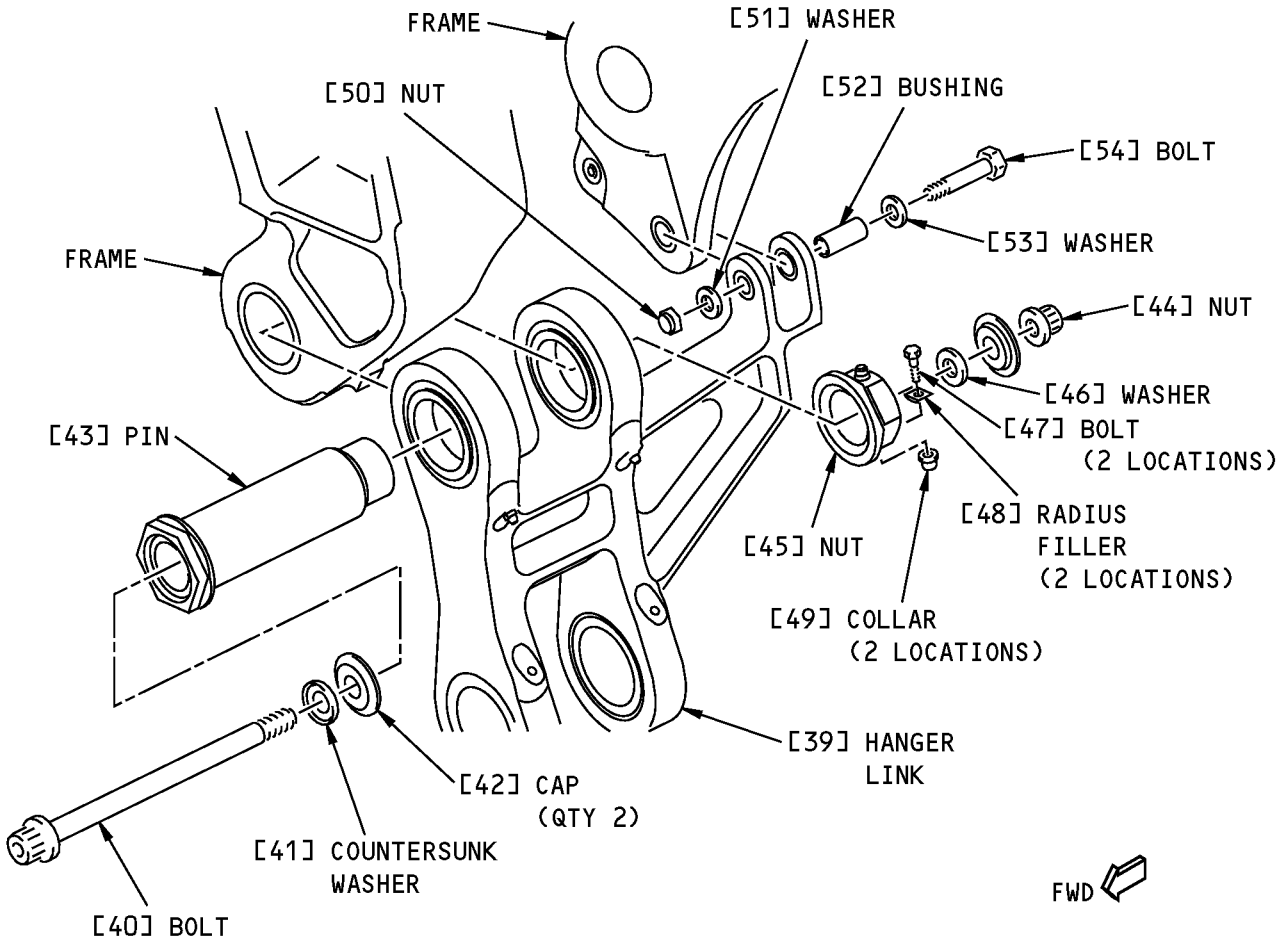
Main Landing Gear Support Beam Installation
Figure 401 (Sheet 3 of 6)/57-15-00-990-803



Main Landing Gear Support Beam Installation
Figure 401 (Sheet 4 of 6)/57-15-00-990-803



Main Landing Gear Support Beam Installation
Figure 401 (Sheet 5 of 6)/57-15-00-990-803



HANGER LINK

L

Main Landing Gear Support Beam Installation
Figure 401 (Sheet 6 of 6)/57-15-00-990-803

LANDING GEAR SUPPORT BEAM - INSPECTION/CHECK

1. General

A. There is one task in this procedure, an inspection of the landing gear support beam (referred to as the support beam). To do the inspection, you measure the inner and outer diameters of the bolts and bushings which attach the support beam.

TASK 57-15-00-200-801

2. Landing Gear Support Beam Inspection

(Figure 601)

A. References

Reference	Title
57-15-00-000-801	Landing Gear Support Beam Removal (P/B 401)
57-15-00-400-801	Landing Gear Support Beam Installation (P/B 401)

B. Tools/Equipment

Reference	Description
STD-1096	Micrometer - Depth, 0-1 Inch, Readable to 1/1000 Inch
STD-1097	Caliper - Vernier, 0-6 Inch, Readable to 1/1000 Inch

C. Location Zones

Zone	Area
734	Left Main Landing Gear
744	Right Main Landing Gear

D. Procedure

SUBTASK 57-15-00-020-001

(1) Do this task: Landing Gear Support Beam Removal, TASK 57-15-00-000-801.

SUBTASK 57-15-00-210-001

(2) Look for worn areas on the bolts and the bushings which attach the support beam, (Figure 601).

(a) Use a micrometer (0-1 Inch, readable to 1/1000 Inch), STD-1096 or a readable to 1/1000 inch vernier 0 - 6 inch caliper, STD-1097 to measure the diameters of the bolts and the bushings.

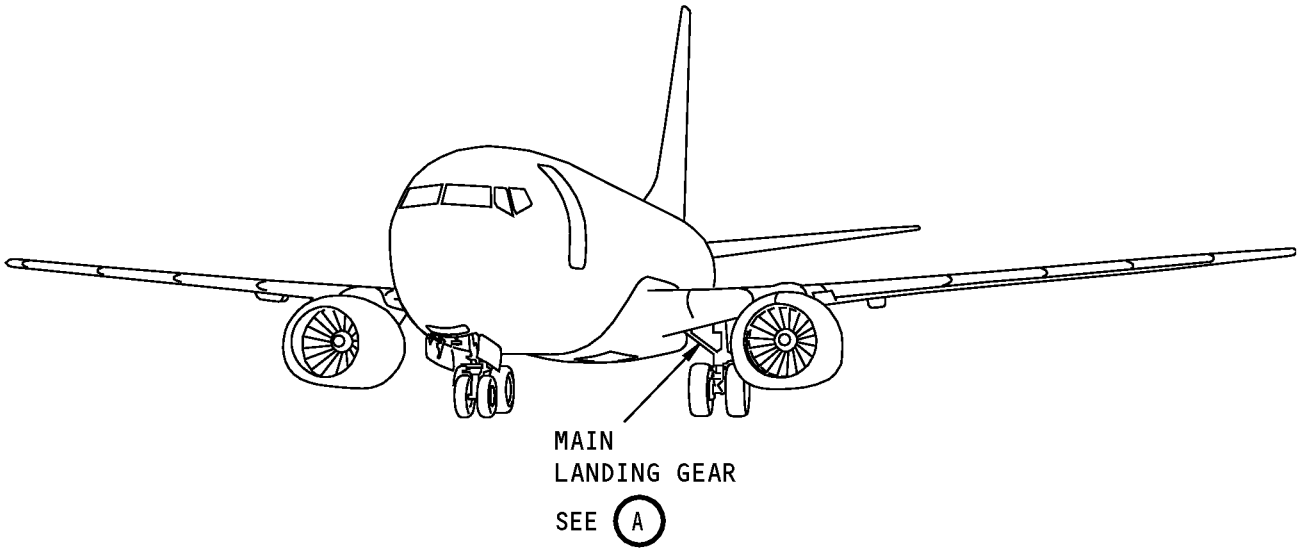
(b) Compare the dimensions you measured, with the permitted dimensions shown in (Figure 601).

(c) Replace the parts which are out of the tolerance.

SUBTASK 57-15-00-420-001

(3) Do this task: Landing Gear Support Beam Installation, TASK 57-15-00-400-801.

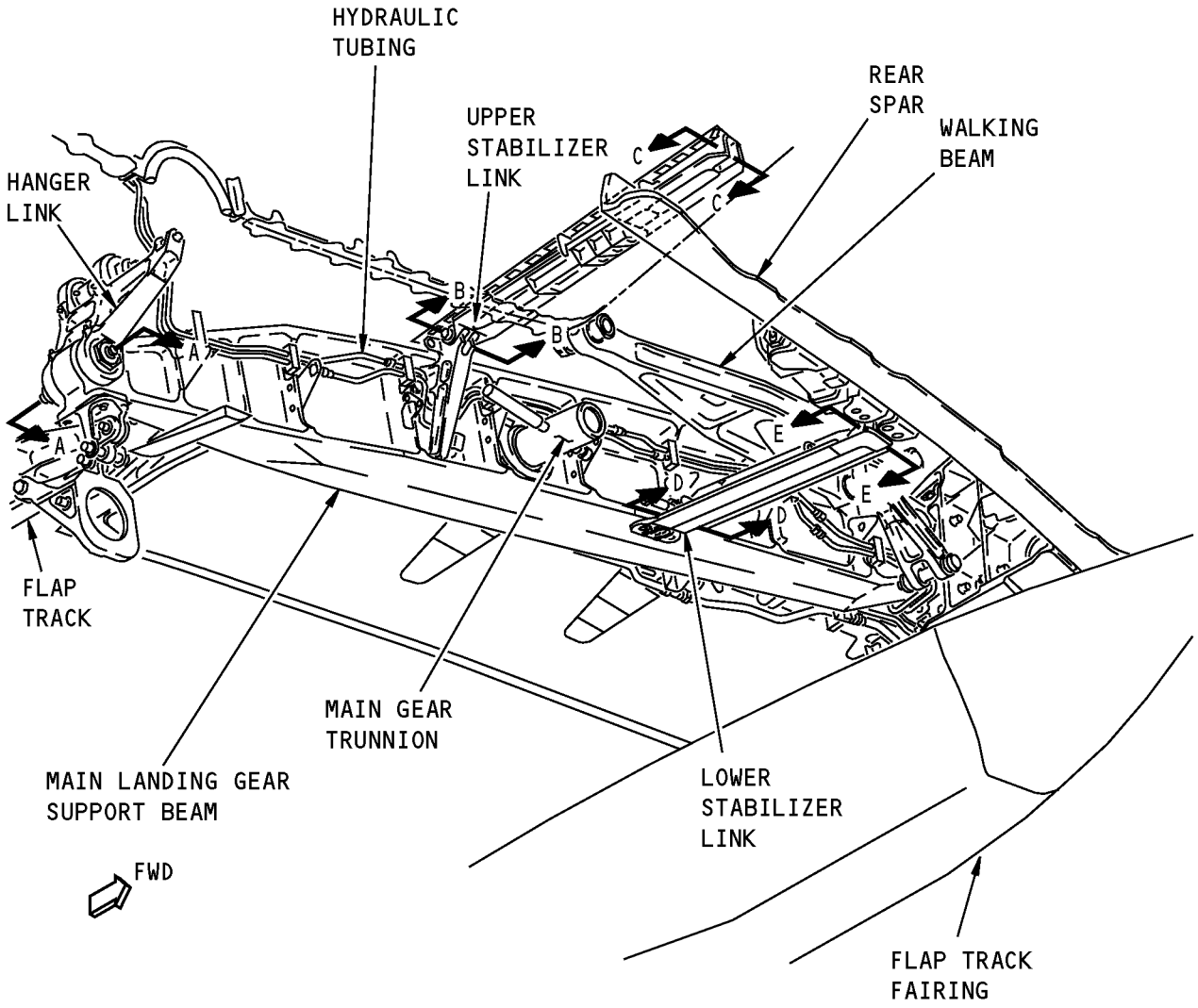
——————— END OF TASK ———————



MAIN LANDING GEAR
(LEFT SIDE IS SHOWN, RIGHT SIDE IS EQUIVALENT)

A

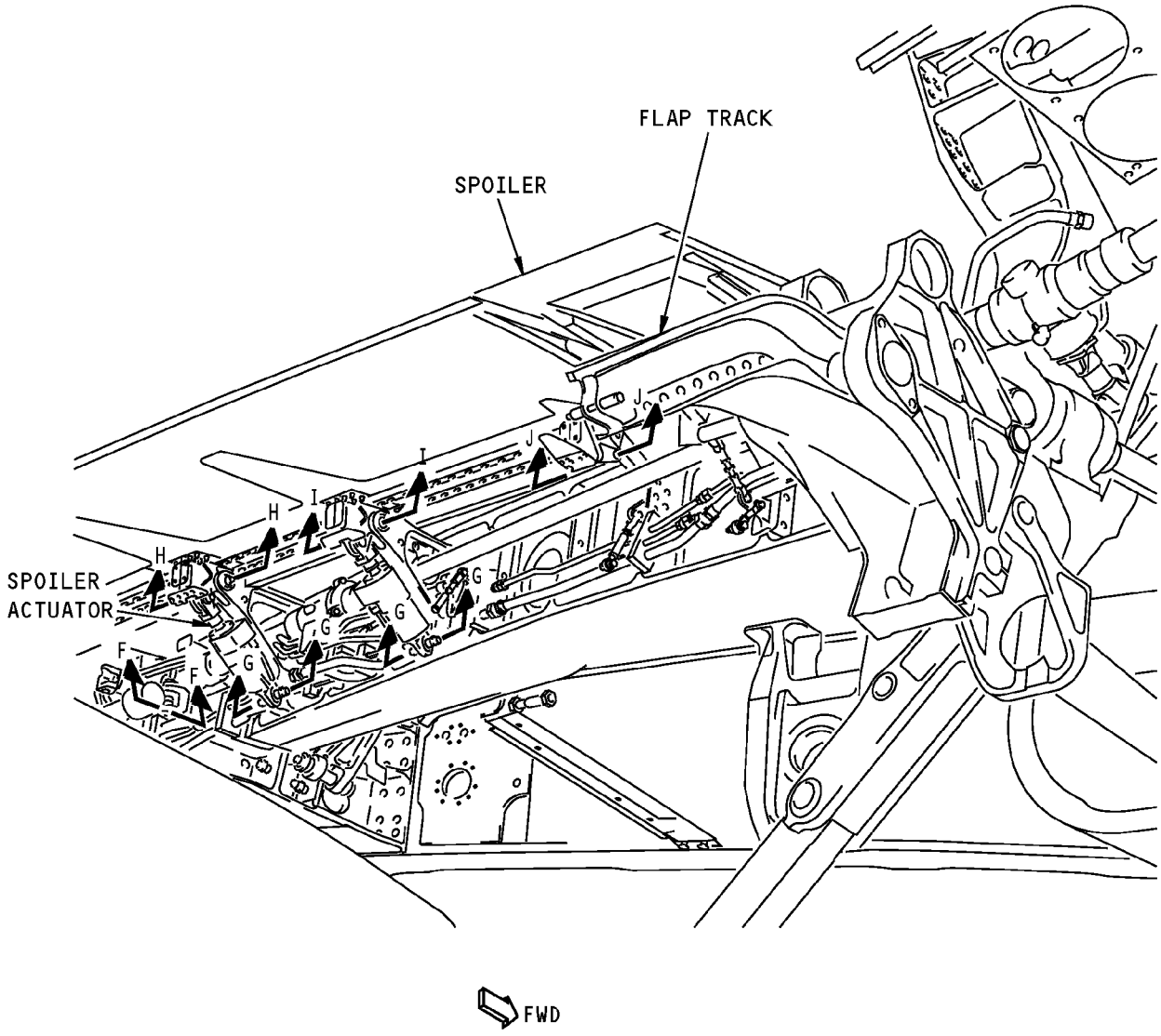
Main Landing Gear Beam Inspection
Figure 601 (Sheet 1 of 10)/57-15-00-990-801



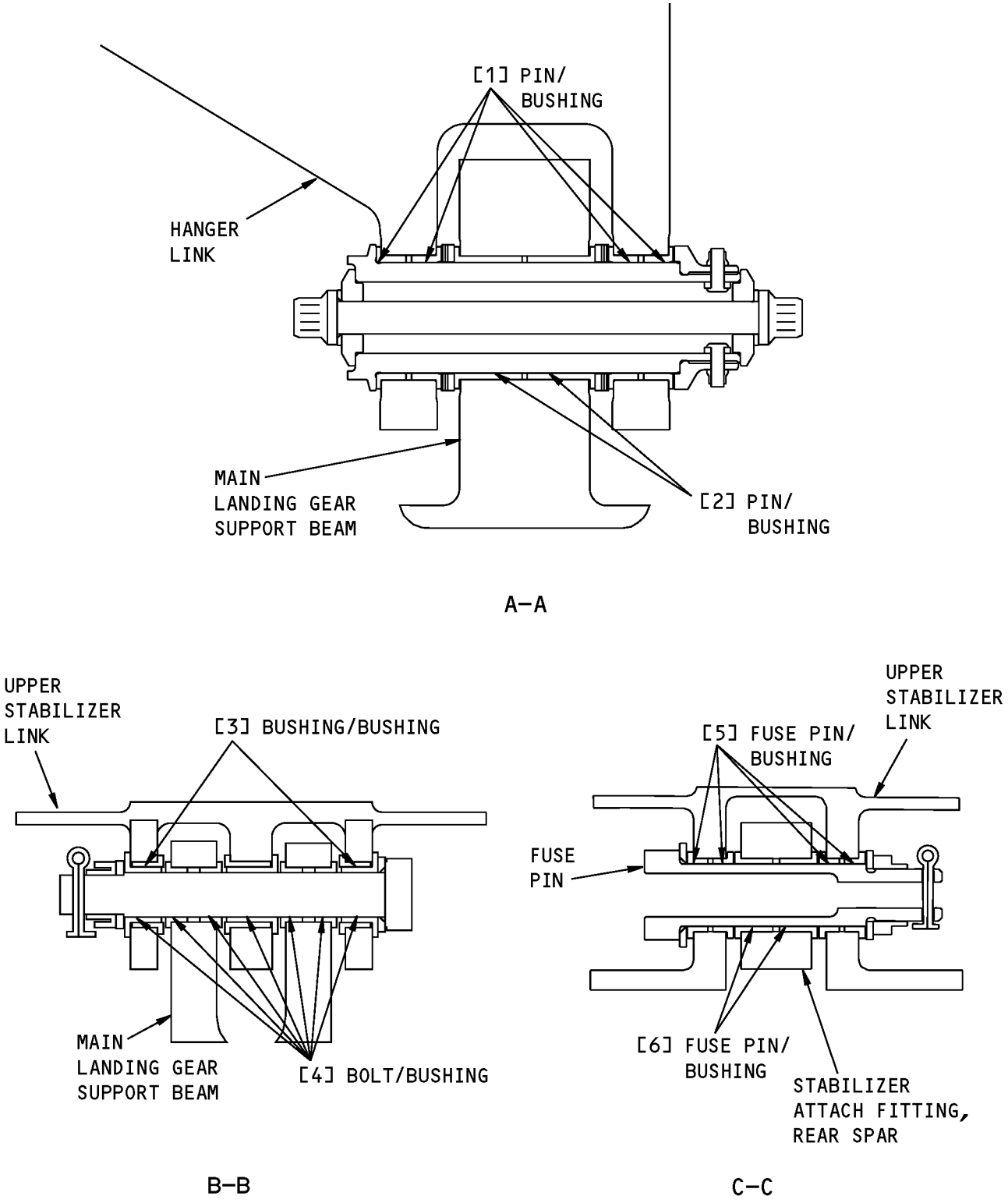
SUPPORT BEAM
(MAIN GEAR REMOVED)

B

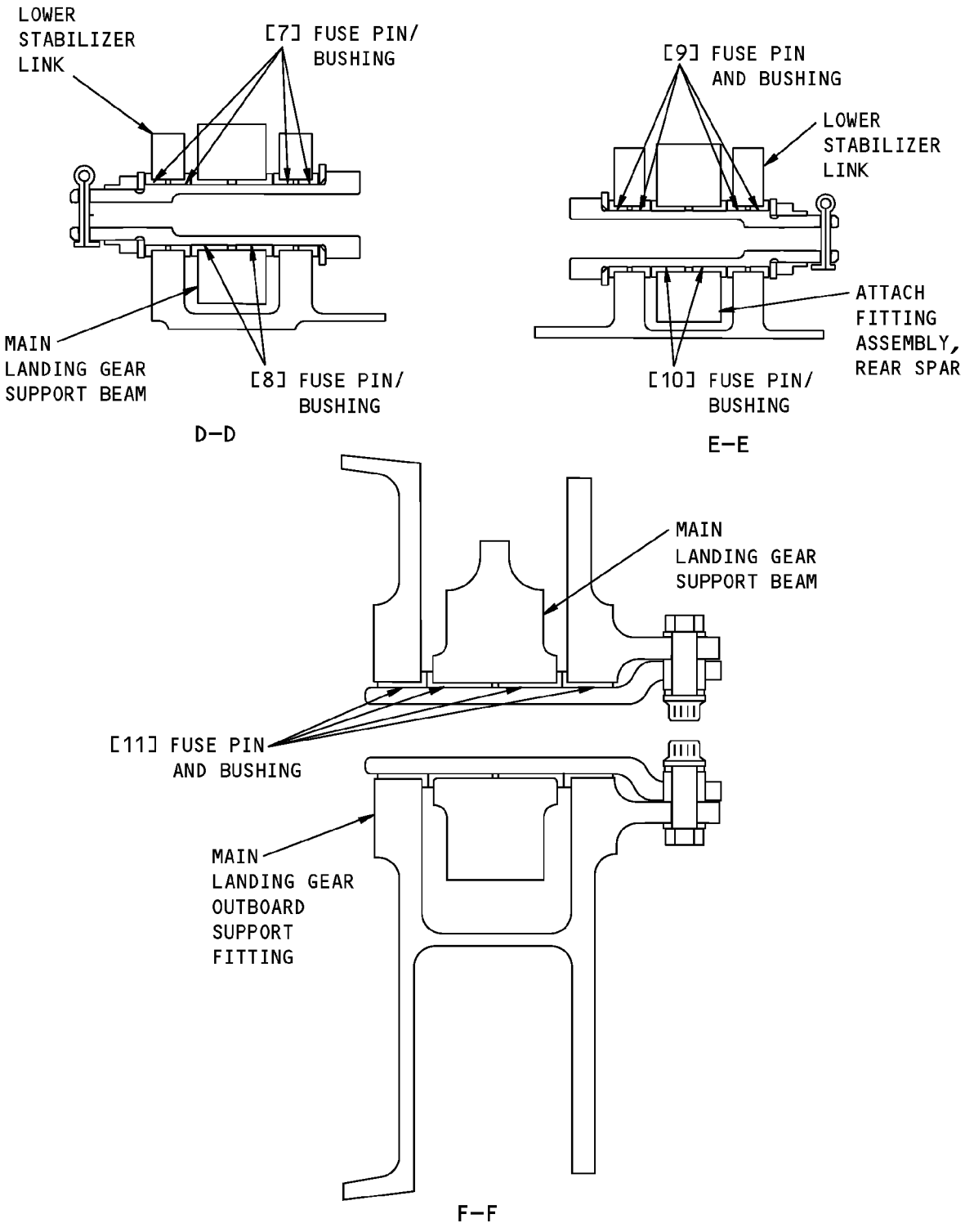
Main Landing Gear Beam Inspection
Figure 601 (Sheet 2 of 10)/57-15-00-990-801



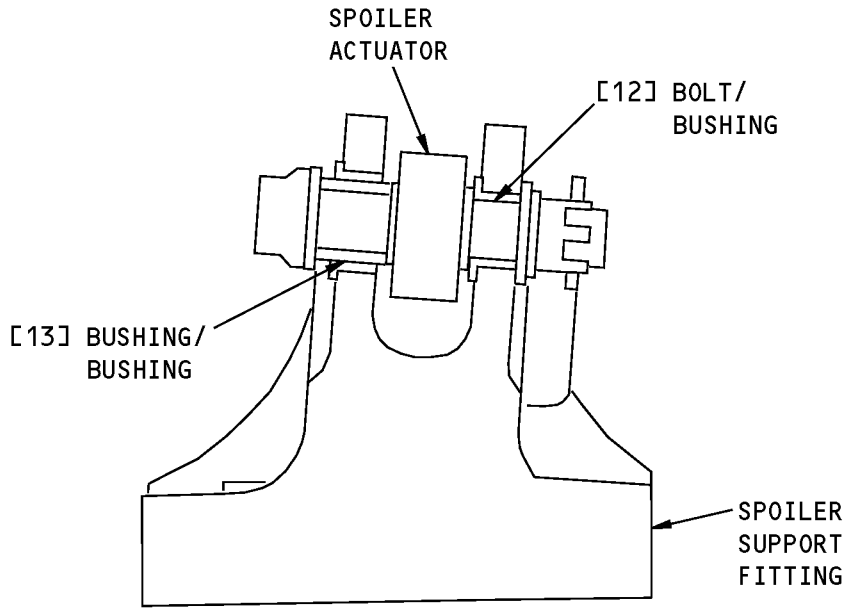
Main Landing Gear Beam Inspection
Figure 601 (Sheet 3 of 10)/57-15-00-990-801



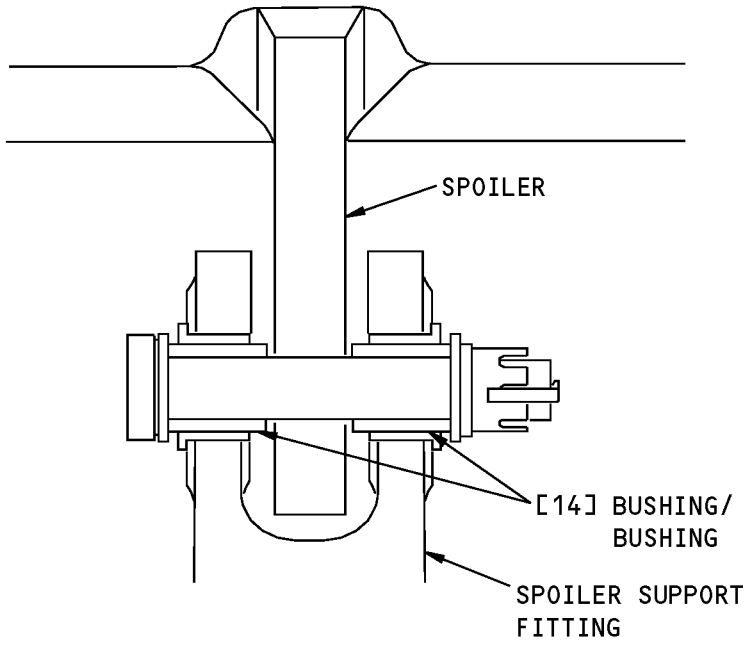
Main Landing Gear Beam Inspection
Figure 601 (Sheet 4 of 10)/57-15-00-990-801



Main Landing Gear Beam Inspection
Figure 601 (Sheet 5 of 10)/57-15-00-990-801

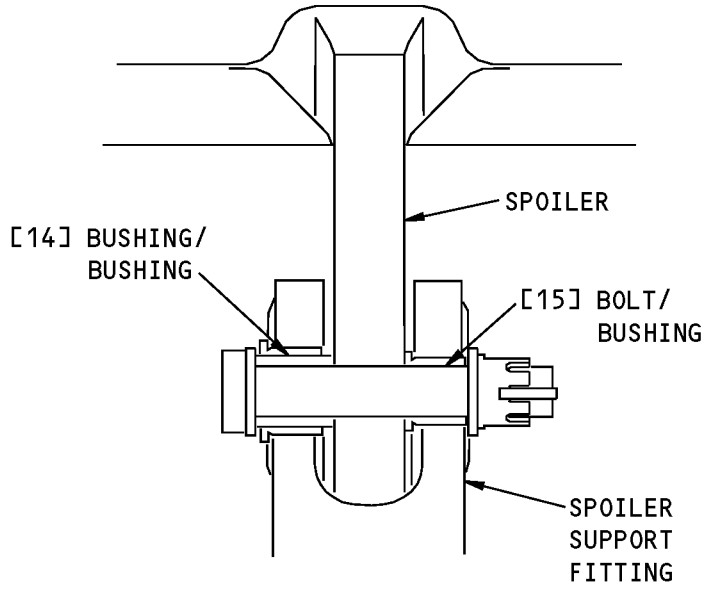


G–G

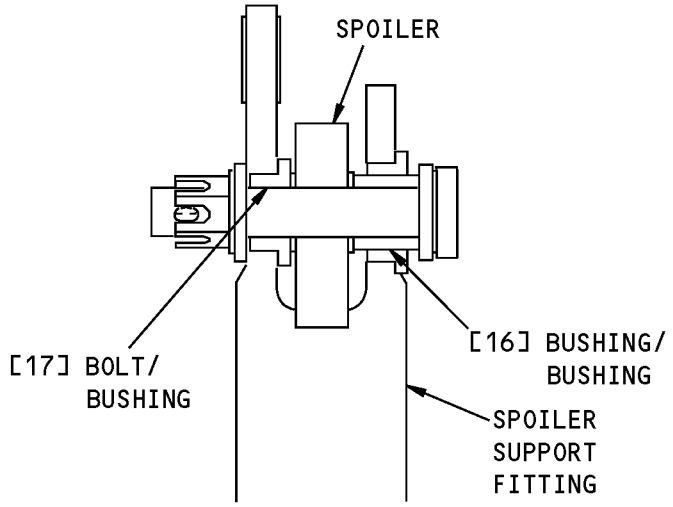


H–H

Main Landing Gear Beam Inspection
Figure 601 (Sheet 6 of 10)/57-15-00-990-801



I–I



J–J

Main Landing Gear Beam Inspection
Figure 601 (Sheet 7 of 10)/57-15-00-990-801

INDEX NO.	PART NAME	DIM.	DESIGN LIMITS		WEAR LIMITS		REPLACE WORN PART	REPAIR WORN PART	REPAIR INSTR
			DIAMETER		PERMITTED WEAR DIMENSION INCHES (mm)	MAXIMUM DIAMETER CLEARANCE INCHES (mm)			
			MINIMUM INCHES (mm)	MAXIMUM INCHES (mm)					
1	BUSHING	ID	2.1250 (53.975)	2.1262 (54.005)	2.1318 (54.148)	0.0080 (0.203)	X		1
	FUSE PIN	OD	2.1232 (53.929)	2.1238 (53.945)	2.1182 (53.802)			2	
2	BUSHING	ID	2.1250 (53.975)	2.1262 (54.005)	2.1318 (54.148)	0.0080 (0.203)	X		1
	PIN	OD	2.1232 (53.929)	2.1238 (53.945)	2.1182 (53.802)			2	
3	BUSHING	ID	0.6250 (15.875)	0.6256 (15.890)	------	0.0000	X		1
	BUSHING	OD	0.6261 (15.903)	0.6266 (15.916)	------		X		
4	BOLT	OD	0.4985 (12.662)	0.4995 (12.687)	0.4957 (12.591)	0.0050 (0.127)	X		1
	BUSHING	ID	0.5000 (12.700)	0.5007 (12.718)	0.5045 (12.814)		X		
5	BUSHING	ID	0.7495 (19.037)	0.7503 (19.058)	0.7545 (19.164)	0.0055 (0.140)	X		1
	FUSE PIN	OD	0.7472 (18.979)	0.7490 (19.025)	0.7448 (18.918)			2	
6	BUSHING	ID	0.7495 (19.037)	0.7503 (19.058)	0.7545 (19.164)	0.0055 (0.140)	X		
	FUSE PIN	OD	0.7472 (18.979)	0.7490 (19.025)	0.7448 (18.918)			2	
7	BUSHING	ID	0.7495 (19.037)	0.7503 (19.058)	0.7545 (19.164)	0.0055 (0.140)	X		1
	FUSE PIN	OD	0.7472 (18.979)	0.7490 (19.025)	0.7448 (18.918)			2	
8	BUSHING	ID	0.7495 (19.037)	0.7503 (19.058)	0.7545 (19.164)	0.0055 (0.140)	X		1
	FUSE PIN	OD	0.7472 (18.979)	0.7490 (19.025)	0.7448 (18.918)			2	

Main Landing Gear Beam Inspection
Figure 601 (Sheet 8 of 10)/57-15-00-990-801

INDEX NO.	PART NAME	DIM.	DESIGN LIMITS		WEAR LIMITS		REPLACE WORN PART	REPAIR WORN PART	REPAIR INSTR
			DIAMETER		PERMITTED WEAR DIMENSION INCHES (mm)	MAXIMUM DIAMETER CLEARANCE INCHES (mm)			
			MINIMUM INCHES (mm)	MAXIMUM INCHES (mm)					
9	BUSHING	ID	0.7495 (19.037)	0.7503 (19.058)	0.7545 (19.164)	0.0055 (0.140)	X		1
	FUSE PIN	OD	0.7472 (18.979)	0.7490 (19.025)	0.7448 (18.918)			2	
10	BUSHING	ID	0.7495 (19.037)	0.7503 (19.058)	0.7545 (19.164)	0.0055 (0.140)	X		1
	FUSE PIN	OD	0.7472 (18.979)	0.7490 (19.025)	0.7448 (18.918)			2	
11 3	BUSHING	ID	1.4317 (36.365)	1.4330 (36.398)	1.4376 (36.515)	0.0065 (0.165)	X		1
	FUSE PIN	OD	1.4306 (36.337)	1.4311 (36.350)	1.4265 (36.233)		X		1
11 4	BUSHING	ID	1.4817 (37.635)	1.4830 (37.668)	1.4876 (37.785)	0.0065 (0.165)	X		
	FUSE PIN	OD	1.4806 (37.607)	1.4811 (37.620)	1.4765 (37.503)			2	
11 5	BUSHING	ID	1.5817 (40.175)	1.5830 (40.208)	1.5876 (40.325)	0.0065 (0.165)	X		
	BOLT	OD	1.5806 (40.147)	1.5811 (40.160)	1.5765 (40.043)			2	
12	BUSHING	ID	0.4375 (11.113)	0.4382 (11.130)	0.4405 (11.189)	0.0035 (0.089)	X		1
	BOLT	OD	0.4360 (11.074)	0.4370 (11.100)	0.4347 (11.041)		X		
13	BUSHING	ID	0.6245 (15.862)	0.6252 (15.880)	0.6275 (15.939)	0.0035 (0.089)	X		1
	BUSHING	OD	0.6235 (15.837)	0.6240 (15.850)	0.6217 (15.791)		X		
14	BUSHING	ID	0.6245 (15.862)	0.6252 (15.880)	0.6273 (15.933)	0.0033 (0.084)	X		1
	BUSHING	OD	0.6235 (15.837)	0.6240 (15.850)	0.6219 (15.796)		X		

Main Landing Gear Beam Inspection
Figure 601 (Sheet 9 of 10)/57-15-00-990-801

INDEX NO.	PART NAME	DIM.	DESIGN LIMITS		WEAR LIMITS		REPLACE WORN PART	REPAIR WORN PART	REPAIR INSTR
			DIAMETER		PERMITTED WEAR DIMENSION INCHES (mm)	MAXIMUM DIAMETER CLEARANCE INCHES (mm)			
			MINIMUM INCHES (mm)	MAXIMUM INCHES (mm)					
15	BUSHING	ID	0.4375 (11.113)	0.4382 (11.130)	0.4405 (11.189)	0.0035 (0.089)	X		1
	BOLT	OD	0.4360 (11.074)	0.4370 (11.100)	0.4347 (11.041)		X		
16	BUSHING	ID	0.3750 (9.525)	0.3756 (9.540)	0.3773 (9.583)	0.0028 (0.071)	X		1
	BUSHING	OD	0.3740 (9.500)	0.3745 (9.512)	0.3728 (9.469)		X		
17	BUSHING	ID	0.2500 (6.350)	0.2505 (6.363)	0.2525 (6.414)	0.0030 (0.0076)	X		1
	BOLT	OD	0.2485 (6.312)	0.2495 (6.337)	0.2475 (6.287)		X		

1 OVERSIZED BUSHING PERMITTED. REFER TO CMM 57-15-01.

2 REFER TO CMM 57-15-01.

3 737-600 AIRPLANES

4 737-700 AIRPLANES

5 737-800 AND 737-900 AIRPLANES

Main Landing Gear Beam Inspection
Figure 601 (Sheet 10 of 10)/57-15-00-990-801

MLG FORWARD TRUNNION HOUSING ASSEMBLY - REMOVAL/INSTALLATION

1. General

A. This procedure has two tasks:

(1) The first task is instructions to remove the forward trunnion housing assembly.

(2) The second task is instructions to install the forward trunnion housing assembly.

TASK 57-16-01-000-801

2. Remove the MLG Forward Trunnion Housing Assembly

(Figure 401)

A. References

Reference	Title
32-11-83-000-801	Main Landing Gear Forward Trunnion Bearing Assembly Removal (P/B 401)

B. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-4360	Wrench - Trunnion Spherical Bearing, MLG (Part #: C32023-1, Supplier: 81205, A/P Effectivity: 737-600, -700, -700C, -700ER, -700QC, -800, -900, -900ER, -BBJ)

C. Consumable Materials

Reference	Description	Specification
G01048	Lockwire - Corrosion Resistant Steel (0.032 In. Dia.)	NASM20995~ C32

D. Location Zones

Zone	Area
551	Left Wing - Rear Spar To Landing Gear Support Beam
651	Right Wing - Rear Spar to Landing Gear Support Beam

E. Procedure

SUBTASK 57-16-01-010-001

(1) To remove the housing assembly from the airplane, do this task: Main Landing Gear Forward Trunnion Bearing Assembly Removal, TASK 32-11-83-000-801

SUBTASK 57-16-01-020-001

(2) Do the steps that follow to disassemble the housing assembly [5], (Figure 401):

(a) Remove the lockwire, G01048 [2] from the retainer nut [1].

(b) Remove the retainer nut [1], the pin assembly [4], and the race assembly [3].

NOTE: Use wrench, SPL-4360 to remove the retainer nut [1].

(c) Remove the support ring [6], the support ring assembly [7], and the retaining ring [8].

END OF TASK

TASK 57-16-01-400-801

3. Install the MLG Forward Trunnion Housing Assembly

(Figure 401)

A. References

Reference	Title
32-11-83-400-801	Main Landing Gear Forward Trunnion Bearing Assembly Installation (P/B 401)

B. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-4360	Wrench - Trunnion Spherical Bearing, MLG (Part #: C32023-1, Supplier: 81205, A/P Effectivity: 737-600, -700, -700C, -700ER, -700QC, -800, -900, -900ER, -BBJ)

C. Consumable Materials

Reference	Description	Specification
D00633	Grease - Aircraft General Purpose	BMS3-33
G01048	Lockwire - Corrosion Resistant Steel (0.032 In. Dia.)	NASM20995˜ C32

D. Location Zones

Zone	Area
551	Left Wing - Rear Spar To Landing Gear Support Beam
651	Right Wing - Rear Spar to Landing Gear Support Beam

E. Procedure

SUBTASK 57-16-01-020-002

(1) Install the pin assembly [4] the race assembly [3] into the housing assembly [5].

(a) Apply a coating of grease, D00633, to these parts before assembly.

(b) Make sure that the splines of the race assembly [3] are in full contact with the housing assembly [5] splines before you install the retainer nut [1].

SUBTASK 57-16-01-640-001

(2) Install the retainer nut [1]:

(a) Apply grease, D00633, to the retainer nut threads.

(b) Tighten the retainer nut [1] to 50 ft-lb (68 N·m) to 75 ft-lb (102 N·m).

NOTE: Use the wrench, SPL-4360 to tighten the retainer nut [1].

CAUTION: THE GAP BETWEEN THE RACE ASSEMBLY AND THE HOUSING ASSEMBLY MUST BE LESS THAN 0.0050 INCH (0.1270 MM). IF THIS GAP IS NOT KEPT DURING THE INSTALLATION OF THE FORWARD TRUNNION BEARINGS, DAMAGE TO THE AIRPLANE MAY OCCUR.

(c) Make sure that the gap between the aft face of the race assembly [3] and the housing assembly [5] is not greater than 0.0050 in. (0.1270 mm).

NOTE: Do not continue with the installation until a correct gap is measured after tightening the retainer nut.

1) If a gap greater than 0.0050 in. (0.1270 mm) is found, disassemble the retainer nut [1], the pin assembly [4], and the race assembly [3] to look for unwanted material between the mated parts.

SUBTASK 57-16-01-020-003

(3) Install the lockwire, G01048 [2] (two locations) onto the retainer nut [1] and housing assembly [5] with the double twist method.

SUBTASK 57-16-01-020-004

(4) Install the retaining ring [8], the support ring assembly [7], and the support ring [6].

(a) Apply a coating of grease, D00633, to these parts.

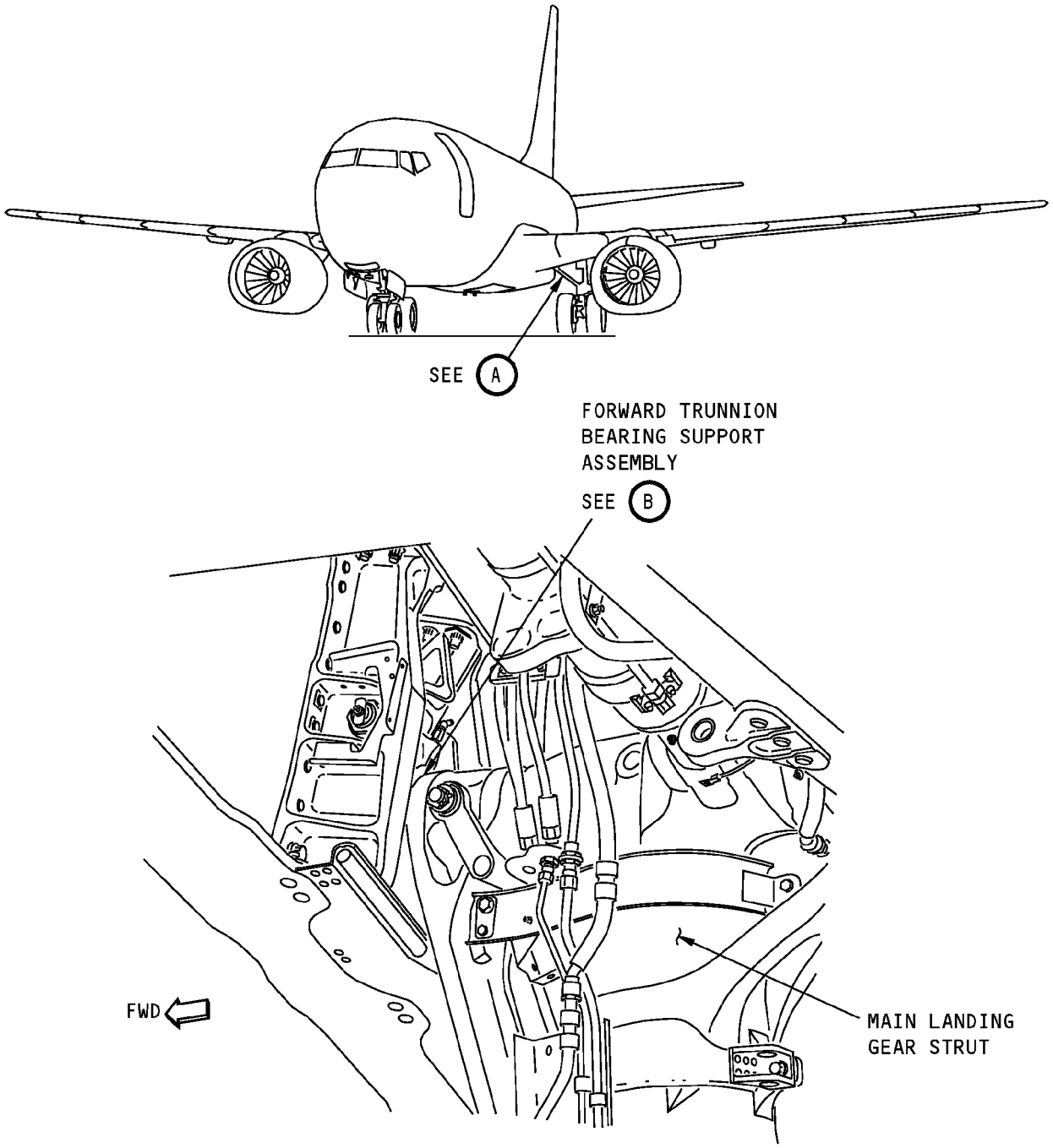
SUBTASK 57-16-01-410-001

(5) Put grease, D00633, into the grease fitting on the housing assembly [1] until the grease can be seen at the aft edge of the bearing race.

SUBTASK 57-16-01-410-002

(6) Do this task: Main Landing Gear Forward Trunnion Bearing Assembly Installation, TASK 32-11-83-400-801.

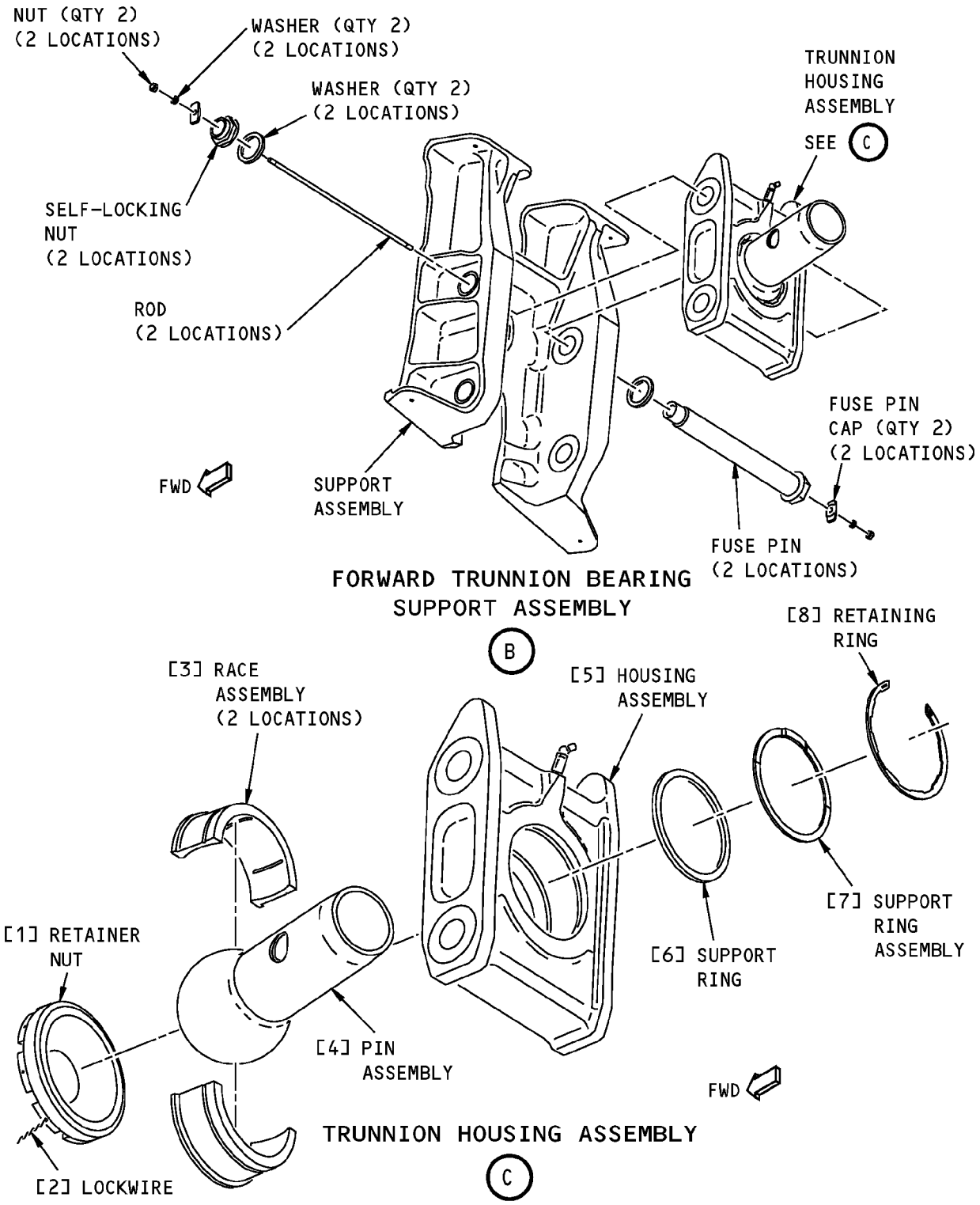
——————— END OF TASK ———————



LEFT MAIN LANDING GEAR
(RIGHT MAIN LANDING GEAR IS EQUIVALENT)

A

Forward Trunnion Housing Assembly Installation
Figure 401 (Sheet 1 of 2)/57-16-01-990-801



Forward Trunnion Housing Assembly Installation
Figure 401 (Sheet 2 of 2)/57-16-01-990-801

MLG FORWARD TRUNNION BEARING AND SUPPORT - INSPECTION/CHECK

1. General

A. This procedure examines the bearings of the main landing gear forward trunnion. (Figure 601)

TASK 57-16-01-200-801

2. MLG Forward Trunnion Bearing Wear Limits

A. References

Reference	Title
57-16-01-000-801	Remove the MLG Forward Trunnion Housing Assembly (P/B 401)
57-16-01-400-801	Install the MLG Forward Trunnion Housing Assembly (P/B 401)

B. Location Zones

Zone	Area
551	Left Wing - Rear Spar To Landing Gear Support Beam
651	Right Wing - Rear Spar to Landing Gear Support Beam

C. Prepare for the Procedure

SUBTASK 57-16-01-010-002

(1) Do this task: Remove the MLG Forward Trunnion Housing Assembly, TASK 57-16-01-000-801.

D. Procedure

SUBTASK 57-16-01-200-001

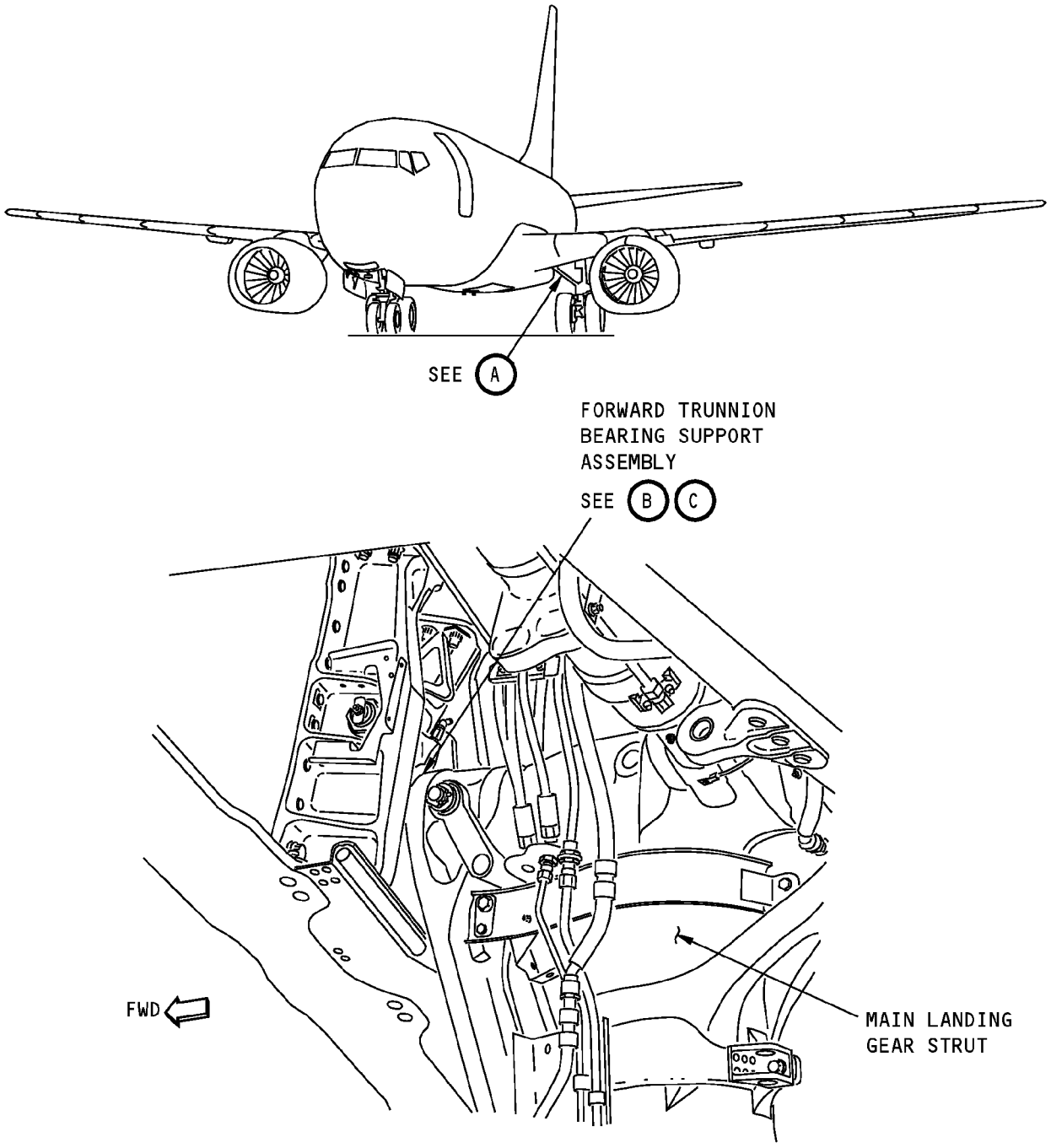
(1) Make sure that the dimensions for each part are within tolerance, (Figure 601).

E. Put the Airplane Back to its Usual Condition

SUBTASK 57-16-01-410-003

(1) Do this task: Install the MLG Forward Trunnion Housing Assembly, TASK 57-16-01-400-801.

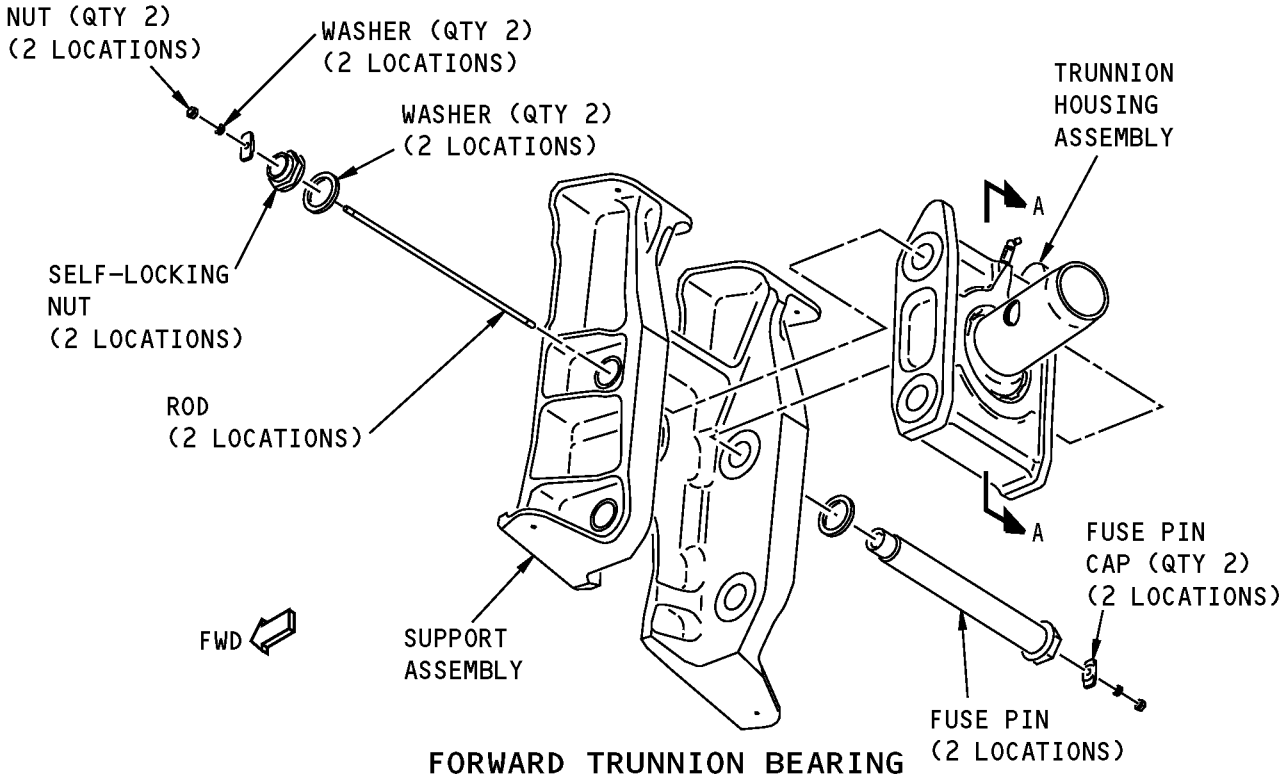
END OF TASK



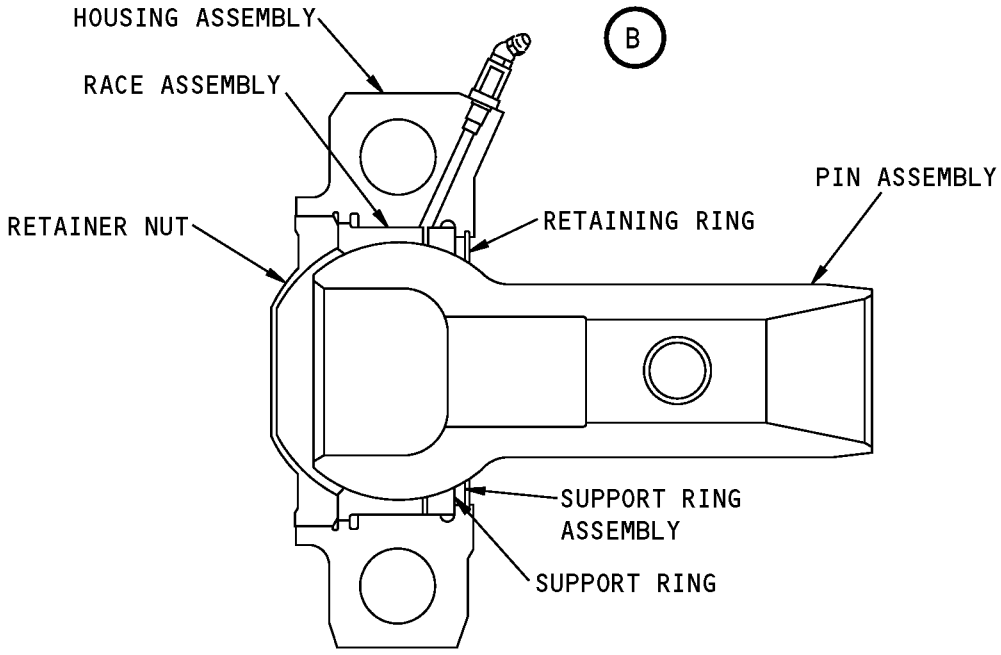
LEFT MAIN LANDING GEAR
(RIGHT MAIN LANDING GEAR IS EQUIVALENT)

A

Forward Trunnion Housing Assembly Inspection
Figure 601 (Sheet 1 of 4)/57-16-01-990-802

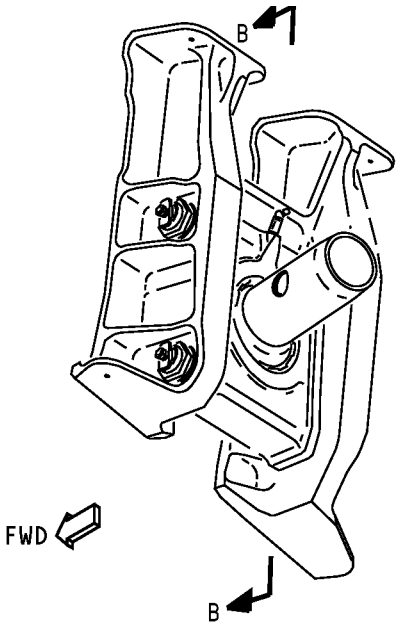


FORWARD TRUNNION BEARING
SUPPORT ASSEMBLY

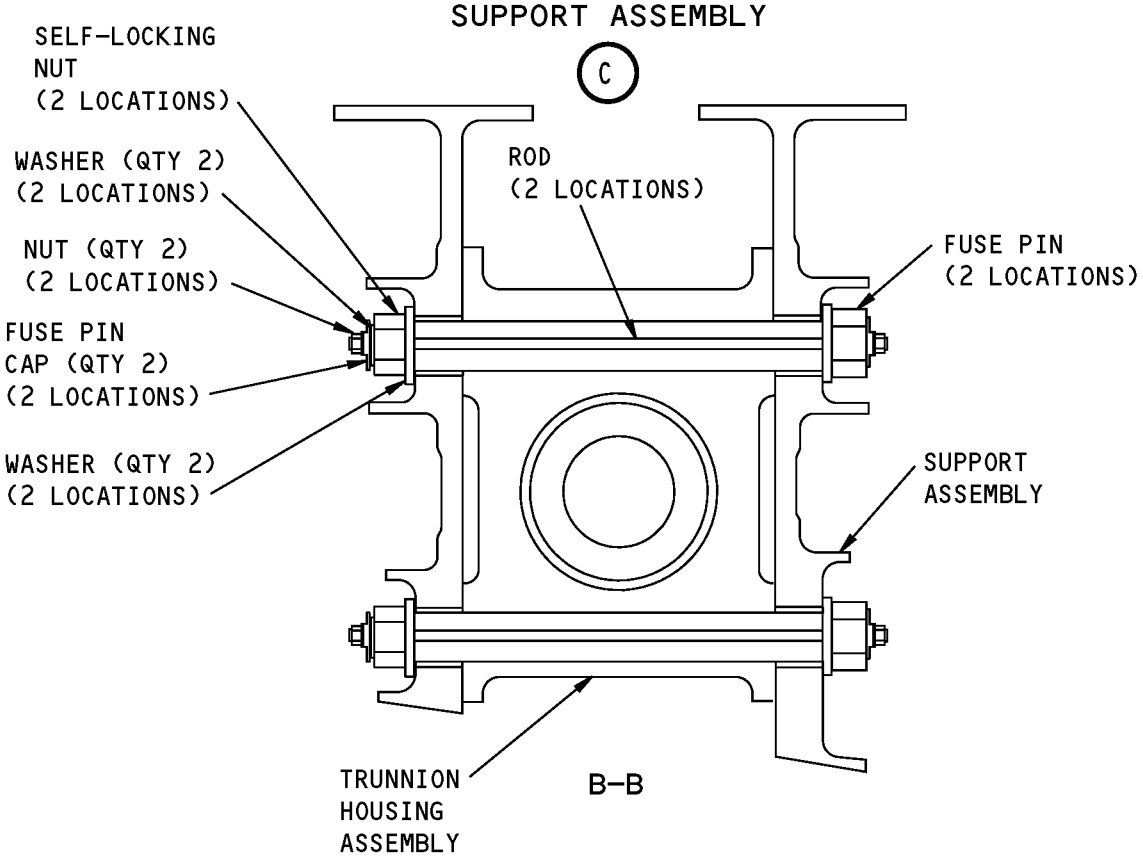


A–A

Forward Trunnion Housing Assembly Inspection
Figure 601 (Sheet 2 of 4)/57-16-01-990-802



FORWARD TRUNNION BEARING
SUPPORT ASSEMBLY



Forward Trunnion Housing Assembly Inspection
Figure 601 (Sheet 3 of 4)/57-16-01-990-802

INDEX NO.	PART NAME	DIM.	DESIGN LIMITS		WEAR LIMITS	
			DIAMETER		PERMITTED WEAR DIMENSION INCHES (mm)	MAXIMUM DIAMETER CLEARANCE INCHES (mm)
			MINIMUM INCHES (mm)	MAXIMUM INCHES (mm)		
1	HOUSING	ID	4.9990 (126.975)	5.0010 (127.025)	5.0065 (127.165)	0.0087 (0.221)
	RACE ASSY	OD	4.9968 (126.919)	4.9978 (126.944)	--	0.0087 (0.221)
2	RACE ASSY	ID	4.5020 (114.351)	4.5030 (114.376)	4.5082 (114.508)	0.0082 (0.2083)
	PIN ASSY	OD	4.4990 (114.275)	4.5000 (114.300)	4.4948 (114.168)	0.0082 (0.2083)
3	SUPPORT ASSY	ID	1.5602 (39.629)	1.5610 (39.649)	--	--
	BUSHING	OD	1.5630 (39.700)	1.5638 (39.721)	--	--
4	BUSHING	ID	1.2905 (32.779)	1.2915 (32.804)	1.2973 (32.951)	0.0088 (0.2235)
	FUSE PIN	OD	1.2880 (32.715)	1.2885 (32.728)	1.2827 (32.581)	0.0088 (0.2235)

Forward Trunnion Housing Assembly Inspection
Figure 601 (Sheet 4 of 4)/57-16-01-990-802

MAIN LANDING GEAR (MLG) AFT TRUNNION BEARING ASSEMBLY - REMOVAL/INSTALLATION

1. General

A. This procedure contains scheduled maintenance task data.

B. This procedure has two tasks:

(1) The first task is instructions to remove the aft trunnion bearing assembly.

(2) The second task is instructions to install the aft trunnion bearing assembly.

TASK 57-16-02-000-801

2. Remove the MLG Aft Trunnion Bearing Assembly

(Figure 401)

A. General

(1) This procedure is a scheduled maintenance task.

B. References

Reference	Title
07-11-01-580-815	Lift the Airplane with the Jacks (P/B 201)
32-00-01-480-801	Landing Gear Downlock Pins Installation (P/B 201)
32-11-00-000-801	Main Landing Gear Removal (P/B 401)

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-11076	Torque Wrench Adaptor (Part #: C32013-1, Supplier: 81205, A/P Effectivity: 737-600, -700, -700C, -700ER, -700QC, -800, -900, -900ER, -BBJ)

D. Location Zones

Zone	Area
133	Main Landing Gear Wheel Well, Body Station 663.75 to Body Station 727.00 - Left
134	Main Landing Gear Wheel Well, Body Station 663.75 to Body Station 727.00 - Right
734	Left Main Landing Gear
744	Right Main Landing Gear

E. Prepare for the Removal

SUBTASK 57-16-02-010-001

WARNING: MAKE SURE THE DOWNLOCK PINS ARE INSTALLED ON ALL THE LANDING GEAR. WITHOUT THE DOWNLOCK PINS, THE LANDING GEAR COULD RETRACT AND CAUSE INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT.

(1) If the downlock pins are not installed on all of the landing gear, do this task: Landing Gear Downlock Pins Installation, TASK 32-00-01-480-801

SUBTASK 57-16-02-010-002

(2) To get access to the aft trunnion bearing assembly, do one of these two options:

(a) If you do not want to remove the main landing gear, do these steps:

1) Do this task: Lift the Airplane with the Jacks, TASK 07-11-01-580-815.

2) Move aft trunnion pin [6] forward into the aft trunnion of the main landing gear.

NOTE: This will disconnect the main landing gear from the aft trunnion bearing assembly. Move the aft trunnion pin as needed.

(b) If you will remove the main landing gear, do these steps:

1) Do this task: Main Landing Gear Removal, TASK 32-11-00-000-801.

2) Remove the aft trunnion pin [6] from the aft trunnion bearing assembly.

NOTE: This pin was attached to the aft trunnion with tie wraps within the procedure done before.

F. Procedure

SUBTASK 57-16-02-020-001

(1) Remove the lock tab [4] from the lock plate.

(a) Remove the screws [2], the washers [3], and the lockwire.

SUBTASK 57-16-02-020-002

(2) Remove the retainer nut [1].

NOTE: Use wrench, torque wrench adaptor, SPL-11076 to remove the retainer nut [1].

SUBTASK 57-16-02-020-003

(3) Remove the split ball assembly [7] and the outer race assembly [5].

———————— END OF TASK ————————

TASK 57-16-02-400-801

3. Install the MLG Aft Trunnion Bearing Assembly

(Figure 401)

A. General

(1) This procedure is a scheduled maintenance task.

B. References

Reference	Title
07-11-01-580-816	Lower the Airplane Off the Jacks (P/B 201)
32-00-01-480-801	Landing Gear Downlock Pins Installation (P/B 201)
32-11-00-400-801	Main Landing Gear Installation (P/B 401)

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-11076	Torque Wrench Adaptor (Part #: C32013-1, Supplier: 81205, A/P Effectivity: 737-600, -700, -700C, -700ER, -700QC, -800, -900, -900ER, -BBJ)

D. Consumable Materials

Reference	Description	Specification
D00013	Grease - Aircraft And Instrument Grease	MIL-PRF-23827 (NATO G-354) (Supersedes MIL-G-23827)
D00633	Grease - Aircraft General Purpose	BMS3-33

E. Location Zones

Zone	Area
133	Main Landing Gear Wheel Well, Body Station 663.75 to Body Station 727.00 - Left
134	Main Landing Gear Wheel Well, Body Station 663.75 to Body Station 727.00 - Right
734	Left Main Landing Gear
744	Right Main Landing Gear

F. Procedure

SUBTASK 57-16-02-020-004

(1) Install the split ball assembly [7] and the outer race assembly [5].

(a) Apply a thin coat of grease, D00633 or grease, D00013 to all parts before you install them.

NOTE: BMS 3-33 is the preferred grease because it has offers protection against corrosion and oxidation.

SUBTASK 57-16-02-020-005

(2) Install the retainer nut [1].

(a) Tighten the retainer nut [1] to 10 ft-lb (14 N·m) to 15 ft-lb (20 N·m).

NOTE: Use the wrench, torque wrench adaptor, SPL-11076 to tighten the retainer nut [1].

SUBTASK 57-16-02-020-006

(3) Install the lock tab [4] to the lock plate.

(a) If necessary, loosen the retainer nut [1] until the lock tab [4] can engage into the slot of the retainer nut [1].

NOTE: Do not loosen the retainer nut [1] very much.

1) To do this, these steps can help:

a) The lock tab [4] can be flipped.

b) The lock tab [4] can be moved to adjacent threaded holes in the lock plate.

(b) Install the screws [2], the washers [3], and the lockwire.

1) Tighten the screws [2] to 50 in-lb (6 N·m) to 80 in-lb (9 N·m).

2) Install the lockwire by the double-twist procedure.

SUBTASK 57-16-02-020-007

(4) Lubricate the aft trunnion bearing assembly at the lubrication fitting.

NOTE: Move the spherical bearing until in a position that lets grease to come into view at the inner diameter of the spherical bearing.

SUBTASK 57-16-02-020-008

(5) Install the aft trunnion pin [6] into the aft trunnion bearing assembly.

G. Put the Airplane to Back to its Usual Condition

SUBTASK 57-16-02-010-003

(1) Do one of the applicable options below:

(a) If you did not remove the main landing gear, do these steps:

1) Pull the aft trunnion pin [6] into the aft trunnion assembly.

NOTE: This will allow the main landing gear to connect to the aft trunnion assembly.

2) To connect the aft trunnion pin [6] to the main landing gear, install the aft trunnion bolt, the pin, the nut, and the washer, do this task: Main Landing Gear Installation, TASK 32-11-00-400-801.

3) Do this task: Lower the Airplane Off the Jacks, TASK 07-11-01-580-816.

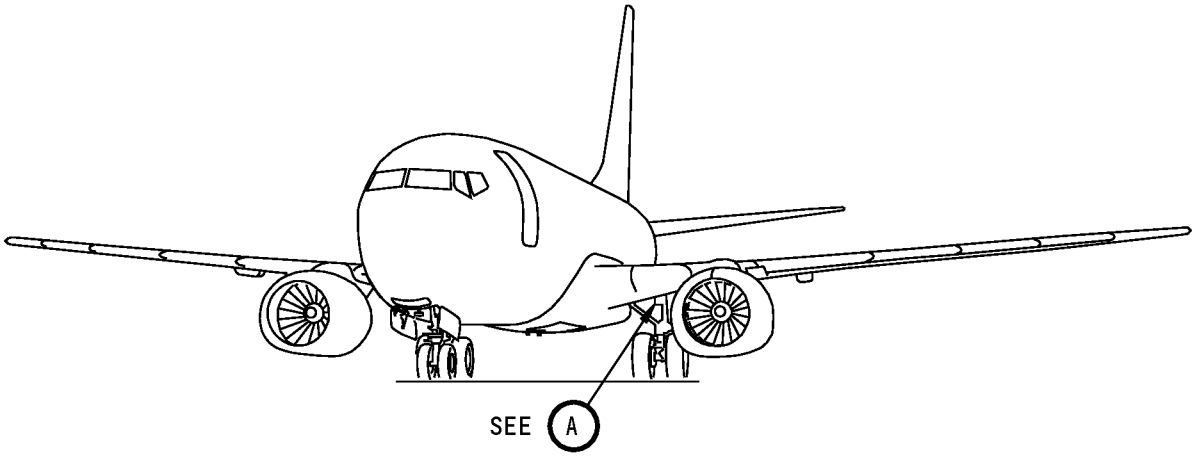
(b) If you did remove the main landing gear, do this task: Main Landing Gear Installation, TASK 32-11-00-400-801.

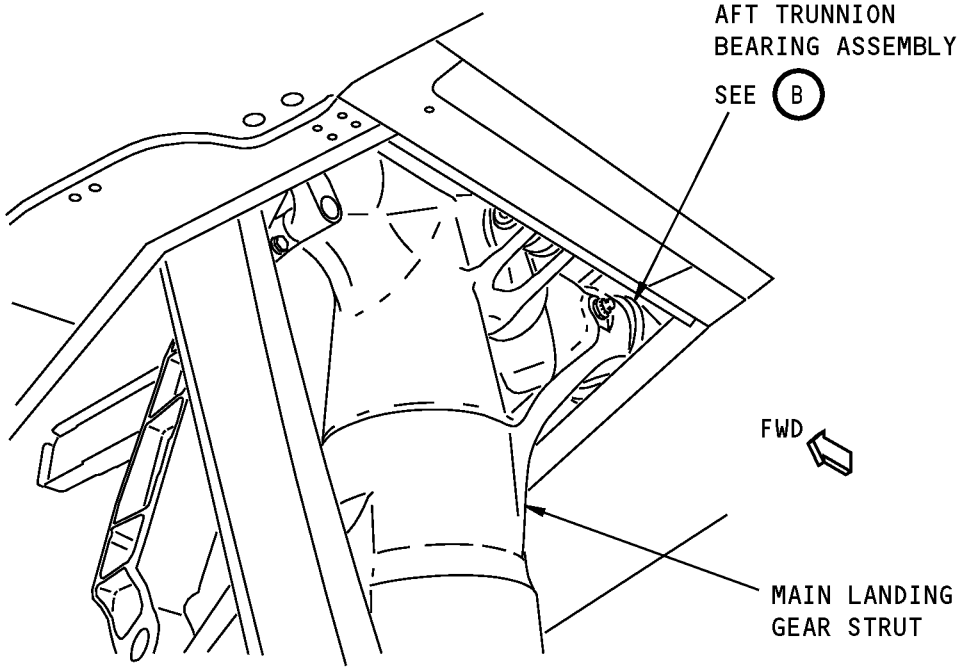
SUBTASK 57-16-02-010-004

WARNING: MAKE SURE THE DOWNLOCK PINS ARE INSTALLED ON ALL THE LANDING GEAR. WITHOUT THE DOWNLOCK PINS, THE LANDING GEAR COULD RETRACT AND CAUSE INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT.

(2) Do this task: Landing Gear Downlock Pins Installation, TASK 32-00-01-480-801.

END OF TASK

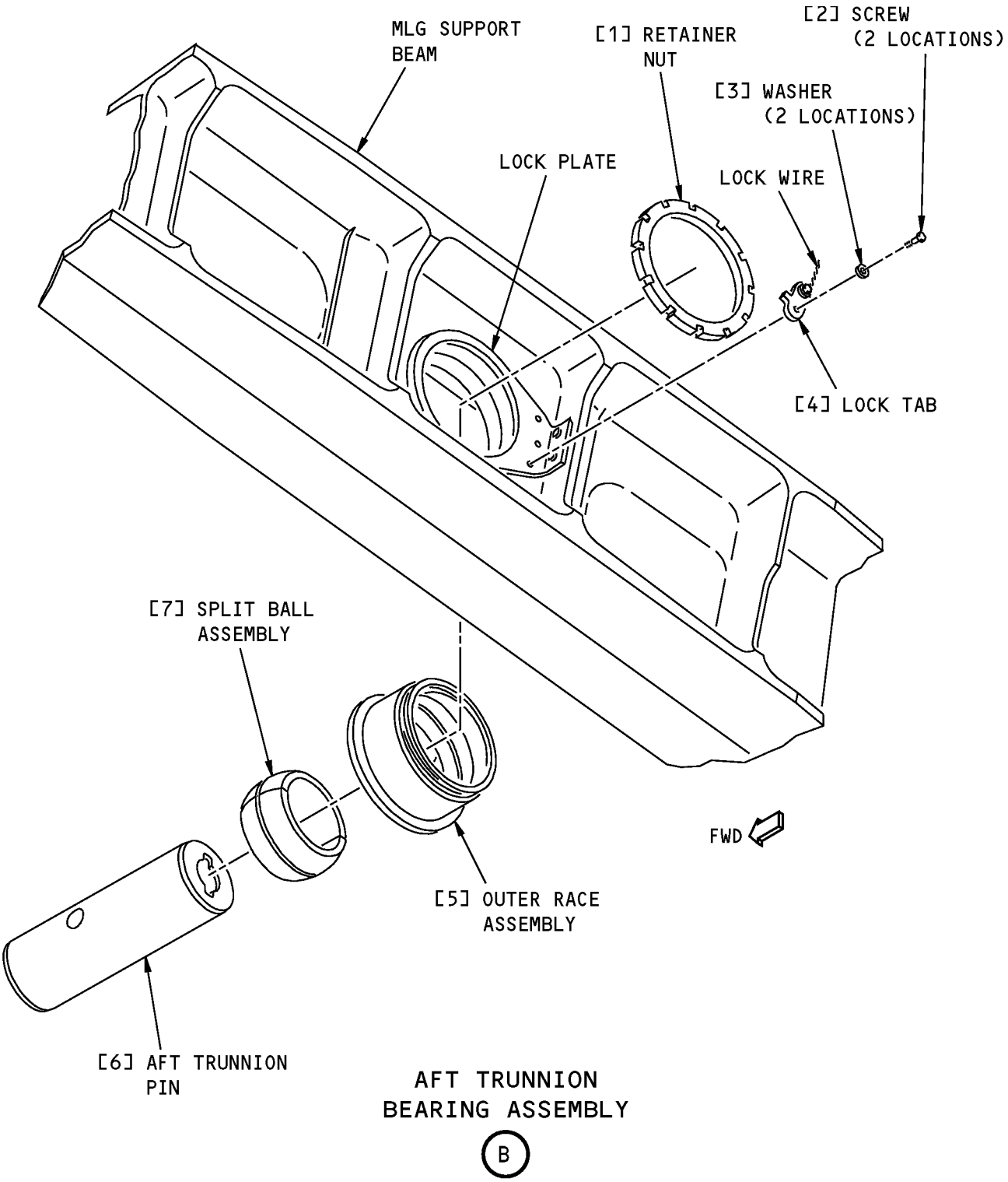




LEFT MAIN LANDING GEAR
(RIGHT MAIN LANDING GEAR IS EQUIVALENT)

A

MLG Aft Trunnion Bearing Assembly Installation
Figure 401 (Sheet 1 of 2)/57-16-02-990-801



MLG Aft Trunnion Bearing Assembly Installation
Figure 401 (Sheet 2 of 2)/57-16-02-990-801

OUTER WING - CORROSION PREVENTION

1. General

A. The outer wing consists of the structural units and components and members which support the airplane in flight. These include spars, skins, ribs, stringers, etc., and integral fuel tank structures.

B. The front and rear spars on the left and right wing boxes are primary structural components of the main wing frame. They extend from the wing root rib to the wingtip. The spars consist of vertical sheet metal webs tapering down in depth towards the wingtips and provided with chords along the upper and lower edges. Vertical stiffeners are attached to the vertical faces of the spare.

(1) The deployment of flight control surfaces exposes the spars to the ground air contaminants, thrust reverser soot, runway dirt and debris, and inclement weather elements all of which may cause corrosion.

(2) The spar chords are particularly susceptible to corrosion originating most likely at the fasteners common to the chord and web.

(3) Stress corrosion cracks have been found on the front and rear spar upper chords.

(4) Stress corrosion cracks have been found on the Krueger flap actuator support fittings mounted on the front spars.

(5) Stress corrosion cracks have been found in the right outboard trailing edge midflap at WBL 399.85. The cracks were in the flap rear spar and were 1.15 and 3.38 inches long, with the shorter crack through the two flap track attach holes

(6) Stress corrosion cracks have been found in the aft lug of the engine mount outboard support bracket which attaches to the wing front spar. Corrosion was also found between the bushing and the lug bore.

(7) Exfoliation corrosion has been found on the back side of the front spar upper chord vertical flange at the interface with the spar web surface at approximately FSS 430, and between FSS 150 and 212.

(8) Corrosion has been reported between RSS 250 and 499 upper rear spar chords.

(9) Corrosion has been found around fastener heads in the front and rear spar cavities on airplanes operating in warm moist climatic conditions. Affected fasteners were located in the upper and lower spar chords and the fasteners were made of aluminum.

(10) Stress corrosion cracks have been found in the lower wing panel stringer-to-rib splice fittings (WBL 70.85) at left wing stringers 5 and 7, and right stringers 5 and 10. These cracks were located in the fillet between the vertical and horizontal flanges of the fittings.

C. Corrosion can occur on the interior surfaces of the wing. This corrosion is usually caused by microbial growth which requires the presence of water in the tank

D. Inter granular corrosion can occur on the wing lower skin in the area of the reserve and main tank access door cutouts. This is caused by exposed aluminum end grain combined with fretting between the access panel and the wing lower skin. Corrosion occurs on the wing lower skin faying surface adjacent to the access door clamp ring. Cracks can originate in the machined radius of the wing skin which may extend parallel to the skin surface.

TASK 57-20-00-910-801

2. Outer Wing - Corrosion Prevention

A. General

(1) Make the regular inspection to prevent or find the start of corrosion. Missing fasteners, white powdery, or other corrosion deposits are signs of corrosion. Initiate the corrosion prevention practices to decrease the occurrence of corrosion.

(2) Following cleaning of suspected areas PAGEBLOCK 51-21-31/701, a full inspection is effective to ensure that protective finishes provided during manufacture remain intact.

(3) Where corrosion exists (noticeable bulges of the skin or white deposits of corrosion products at fastener heads or joint edges), refer to Structural Repair Manual for details of corrosion removal.

(4) For minor corrosion, to minimize the downtime of the airplane, the corrosion products should be cleaned off, followed by the application of a corrosion inhibiting compound into the affected area to decrease the corrosion process. Refer to PAGEBLOCK 51-21-91/701 for details on applying corrosion inhibiting compound. The finish system should be repaired at the first opportunity consistent with the maintenance schedule.

B. References

Reference	Title
51-21-31 P/B 701	CORROSION REMOVAL AND CONTROL - CLEANING/PAINTING
51-21-91 P/B 701	CORROSION INHIBITING COMPOUND - CLEANING/PAINTING

C. Consumable Materials

Reference	Description	Specification
D50050	Grease - Multipurpose, Helicopter Oscillating Bearing Grease with Calcium Soap Thickener - Aeroshell 14	MIL-G-25537
G00009	Compound - Organic Corrosion Inhibiting	BMS3-23
G50237	Compound - Corrosion Inhibiting, Non-drying - Cor-Ban 27L	BMS 3-38

D. Location Zones

Zone	Area
500	Left Wing
600	Right Wing

E. Procedure

SUBTASK 57-20-00-370-001

(1) At first opportunity consistent with scheduled maintenance activity, apply corrosion prevention treatment to the front and rear spars, wing internal structure, and the fuel tank and boost pump access cutout.

SUBTASK 57-20-00-200-001

(2) Replace damaged or broken finishes.

NOTE: When refinishing the areas around fasteners, inspect around fasteners to ensure that corrosion is not present and apply fillet seal around fasteners prior to paint finishing.

SUBTASK 57-20-00-910-001

(3) Do these steps to prevent corrosion on front spar and rear spar:

(a) Apply corrosion inhibiting compound to the forward surface areas of the front spar. Pay particular attention to spar chord and web joints and faying surfaces of stiffeners, brackets, etc. Use the spray equipment with nozzle directed into faying surfaces.

(b) Apply corrosion inhibiting compound to the aft surface areas of the rear spar. Pay particular attention to the spar chord and web joints, faying surfaces of stiffeners, brackets, etc., and around high strength boltheads.

(c) Regrease all grease fittings in treatment area.

NOTE: The expansion of the corroded material may cause a localized lifting of the free end of the chord flange. This lifting can be detected by checking the chord surface for flatness using a straightedge or scanning with fingers. In some cases, instead of chord flange lifting, the spar web may be depressed. Local depression of the web generally occurs where the spar chord flange is stiffer than the web. These web depressions can be detected visually.

SUBTASK 57-20-00-910-002

(4) Do these steps to prevent corrosion in wing internal structure:

(a) Corrosion prevention includes drainage of water, controlling microbial growth, and making periodic inspection.

(b) Inspect the limber holes and drain tubes to make sure the drainage of water, when entering the wing

(c) There are three options for the removal of water or prevention of corrosion:

1) Installing a water scavenge system.

2) Adding sealant to fill areas where water accumulates.

3) Using Strontium chromate canisters to inhibit corrosion

(d) Refer to Structural Repair Manual for details on removing corrosion if extensive corrosion exists on the wing inspar skin.

(5) Restore integral fuel tank finish.

SUBTASK 57-20-00-910-003

(6) Do these steps to prevent corrosion in fuel tank and boost pump cutouts:

(a) Inspect the mating surfaces of the access door clamp ring and wing skin at regularly scheduled maintenance periods to find corrosion.

(b) If there is no corrosion, install the access clamp rings with knitted aluminum gaskets after applying anti-corrosion compound for corrosion protection. Apply 0.010 - 0.015 inches of Cor-Ban 27L Compound, G50237 or Aeroshell 14 helicopter grease, D50050 to wing skin faying surface prior to installing door ring and gasket.

NOTE: Cor-Ban 27L Compound, G50237 is the recommended anti-corrosion compound for access door gasket installations. Cor-Ban 27L Compound, G50237 gives improved corrosion protection between the access door, mesh gasket and wing surfaces. Anti-corrosion compound, Aeroshell 14 helicopter grease, D50050, can still be used for access door gaskets, but should be replaced with Cor-Ban 27L Compound, G50237 as soon as practical.

1) Do not mix the two types of anti-corrosion compounds, Cor-Ban 27L Compound, G50237 and Aeroshell 14 helicopter grease, D50050. When applying the recommended anti-corrosion compound, Cor-Ban 27L Compound, G50237, make sure to remove all Aeroshell 14 helicopter grease, D50050 from the mesh gasket, clamp ring and the access door structure on the airplane.

(c) If there is corrosion, refer to Structural Repair Manual for corrosion removal.

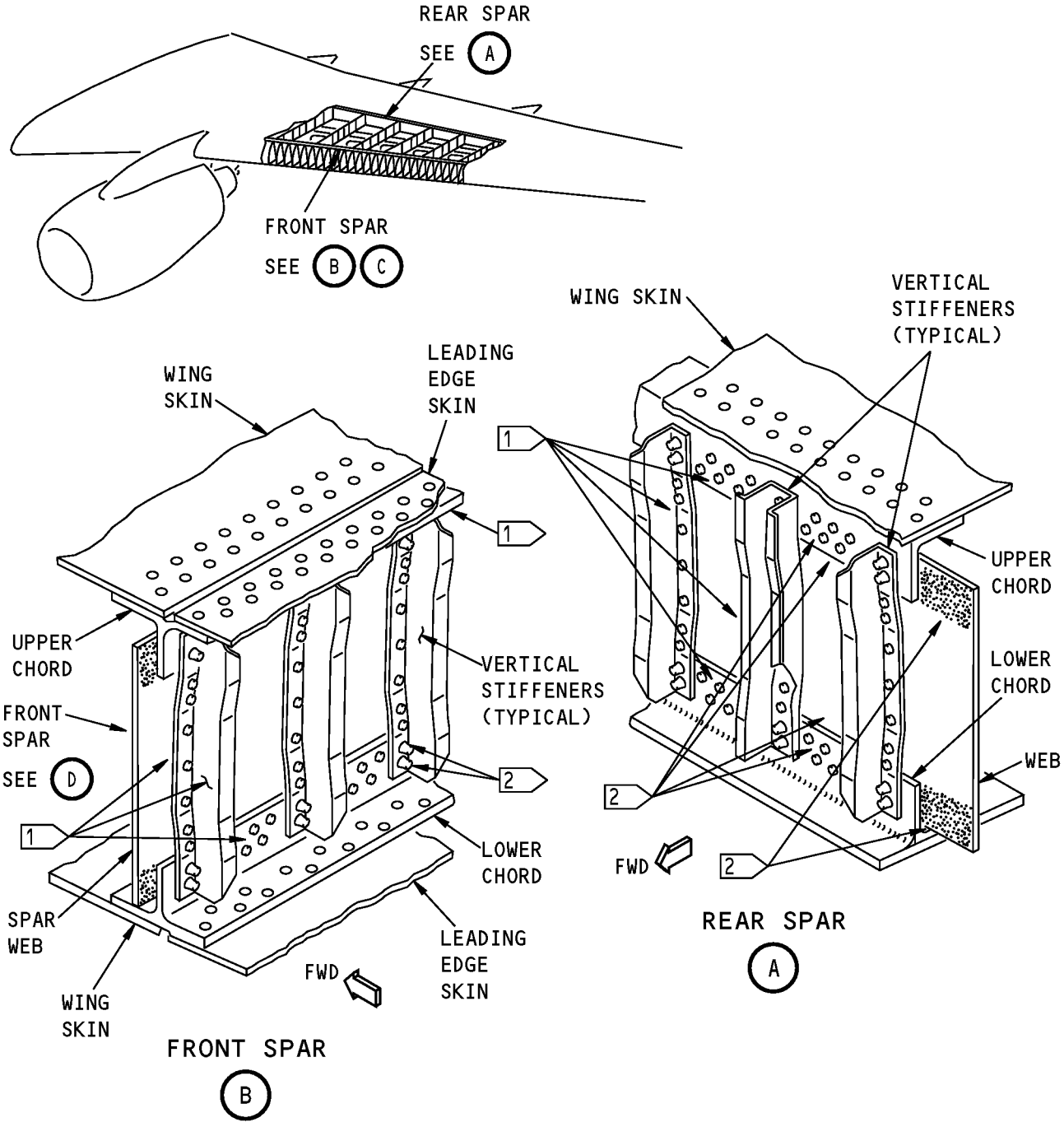
SUBTASK 57-20-00-370-002

(7) Frequency of Application

(a) Periodic inspection is required in areas identified as susceptible to corrosion and should be consistent to the schedules specified in the Maintenance Planning Document. Operators must be aware of reported problems and areas of occurrences.

(b) Periodic application of corrosion inhibiting compound, G00009 is necessary to areas identified and should be consistent to the schedule specified in the Maintenance Planning Document.

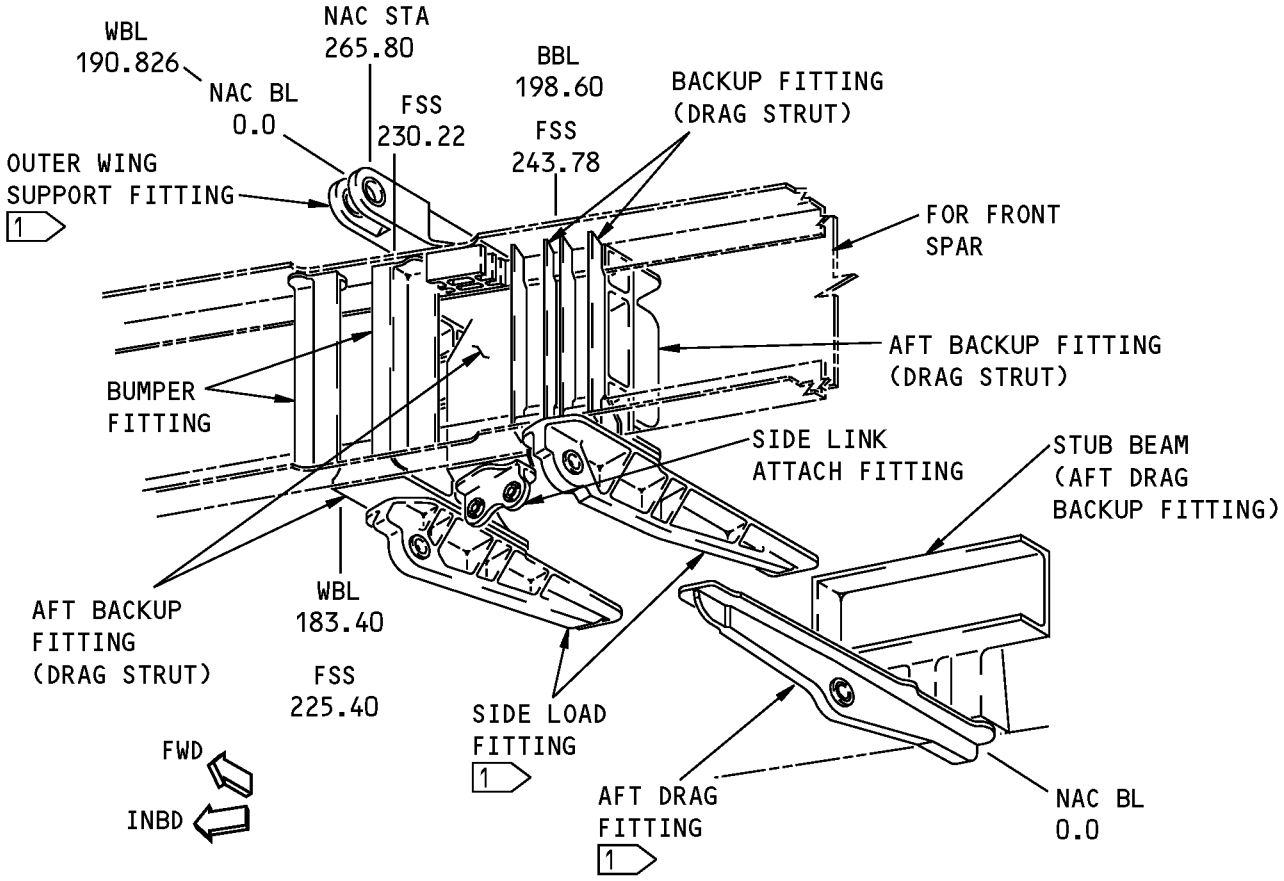
—————— END OF TASK ——————



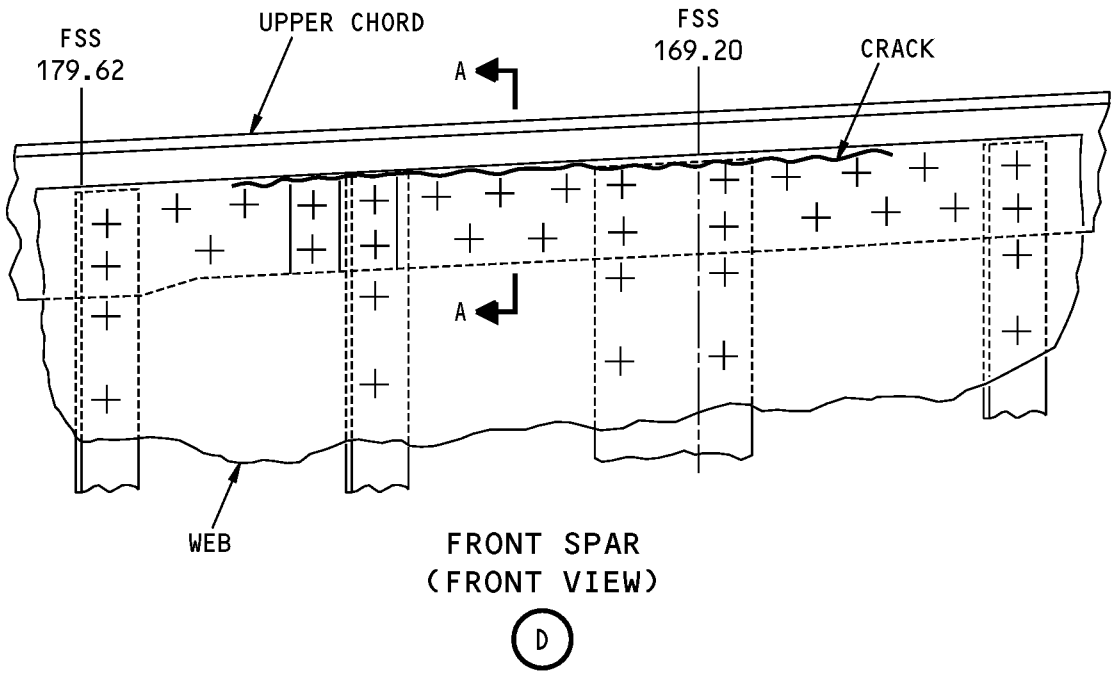
1 APPLY CORROSION INHIBITOR ON ALL EXPOSED STRUCTURE

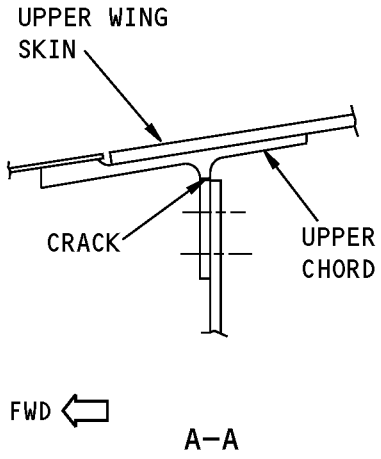
2 POSSIBLE CORROSION AREA

Outer Wing Front and Rear Spars - Corrosion Prevention
Figure 201 (Sheet 1 of 6)/57-20-00-990-801

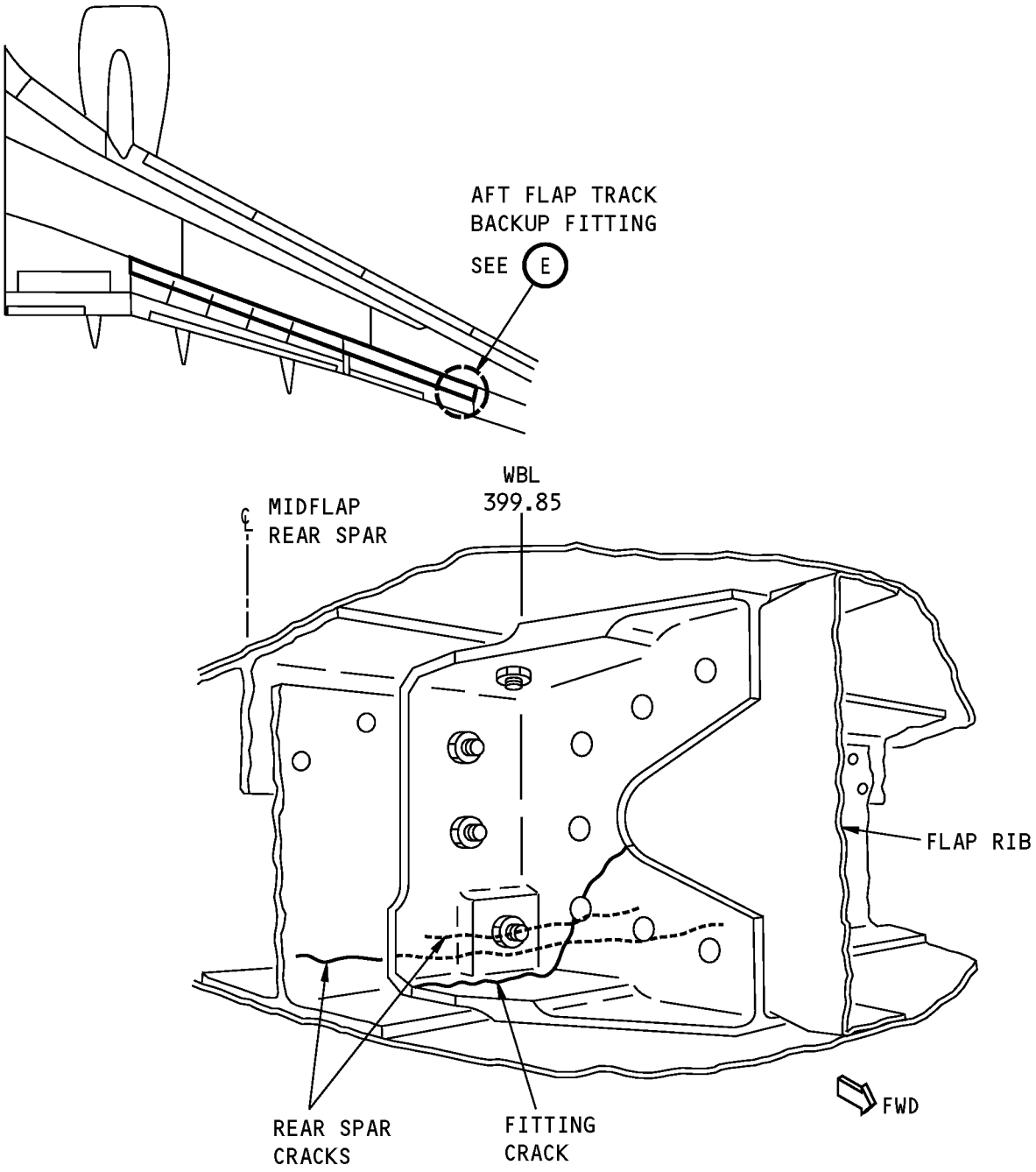


Outer Wing Front and Rear Spars - Corrosion Prevention
Figure 201 (Sheet 2 of 6)/57-20-00-990-801





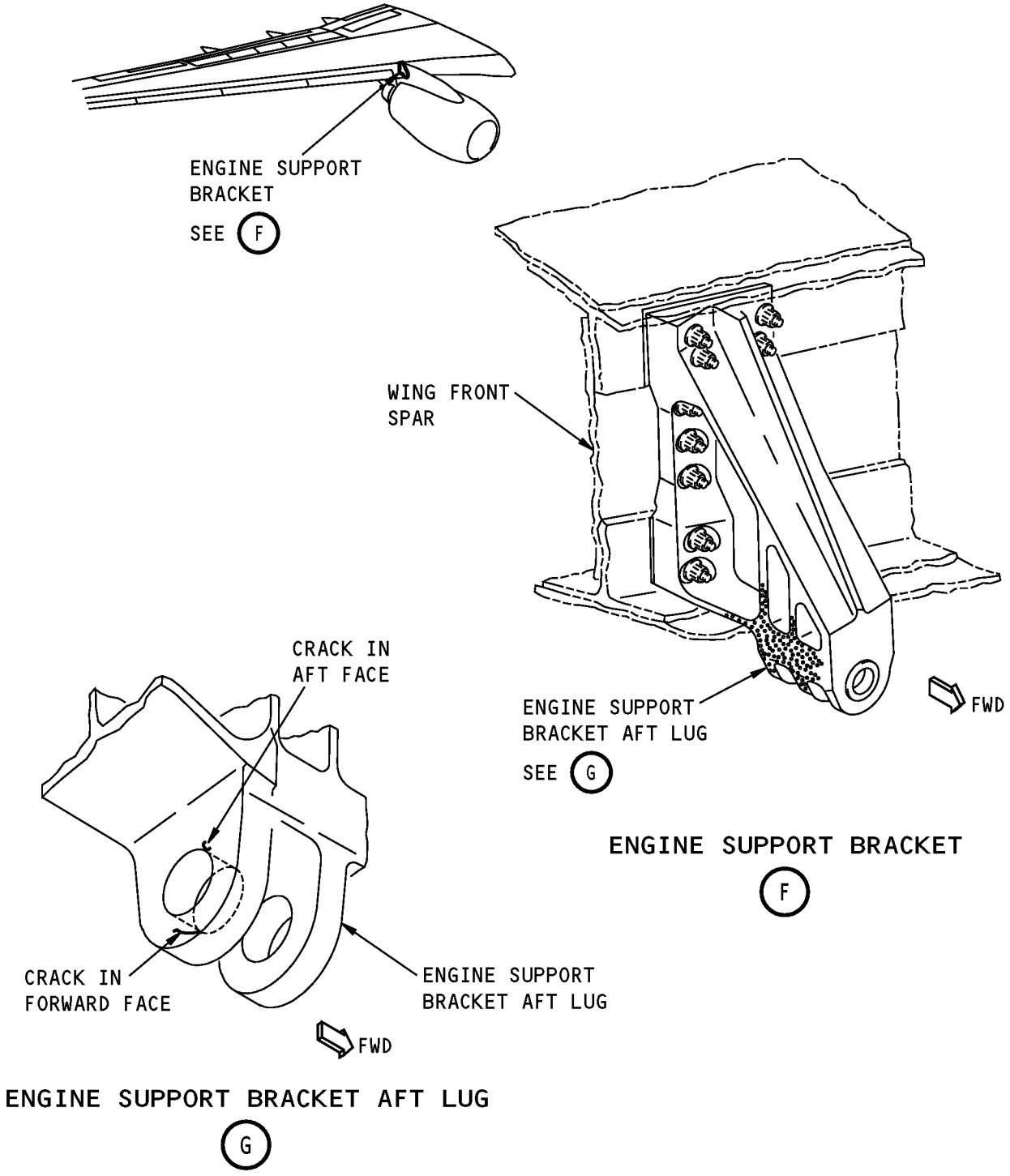
Outer Wing Front and Rear Spars - Corrosion Prevention
Figure 201 (Sheet 3 of 6)/57-20-00-990-801



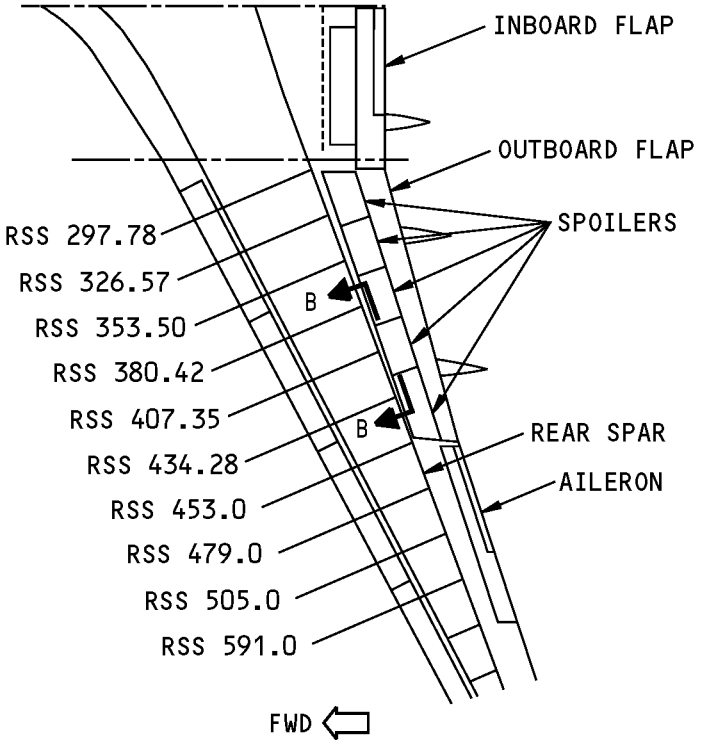
AFT FLAP TRACK BACKUP FITTING
(VIEW IN THE INBOARD DIRECTION)

E

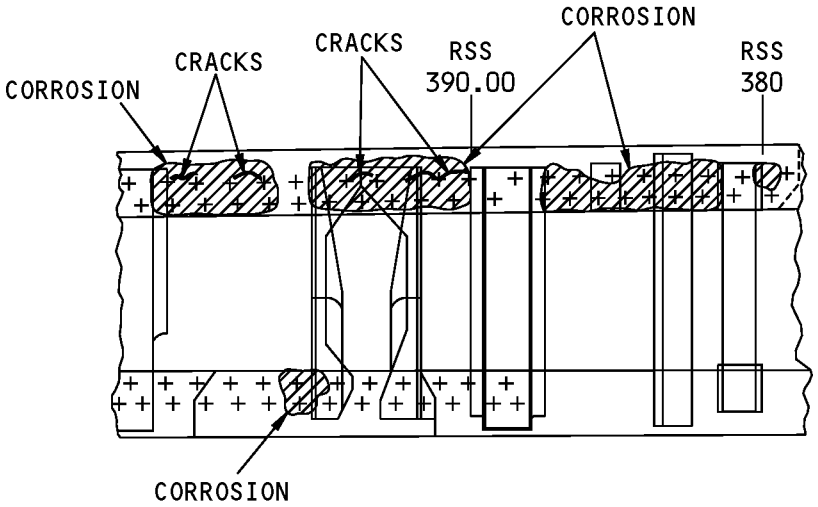
Outer Wing Front and Rear Spars - Corrosion Prevention
Figure 201 (Sheet 4 of 6)/57-20-00-990-801



Outer Wing Front and Rear Spars - Corrosion Prevention
Figure 201 (Sheet 5 of 6)/57-20-00-990-801

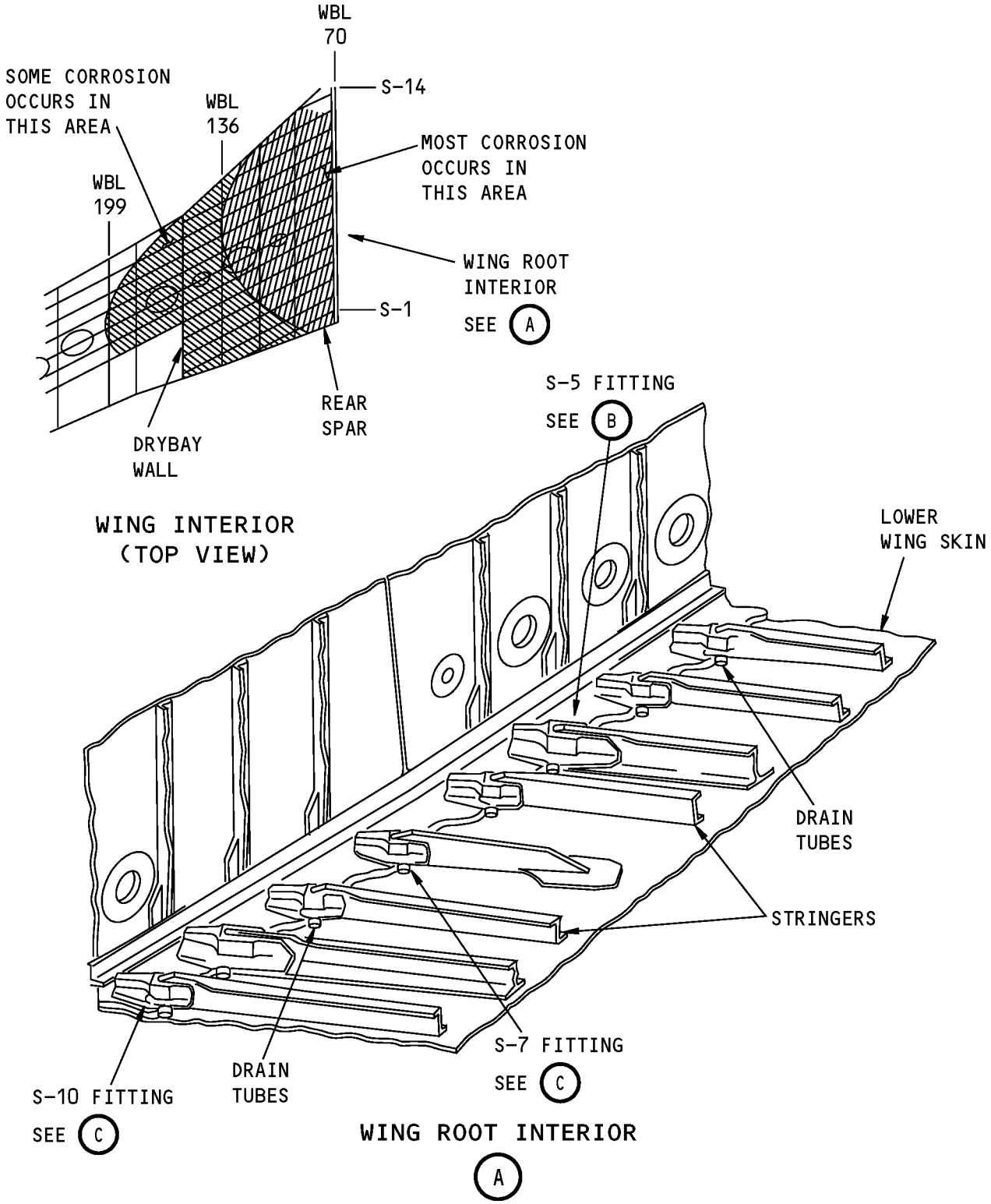


LEFT WING
(RIGHT WING IS OPPOSITE)

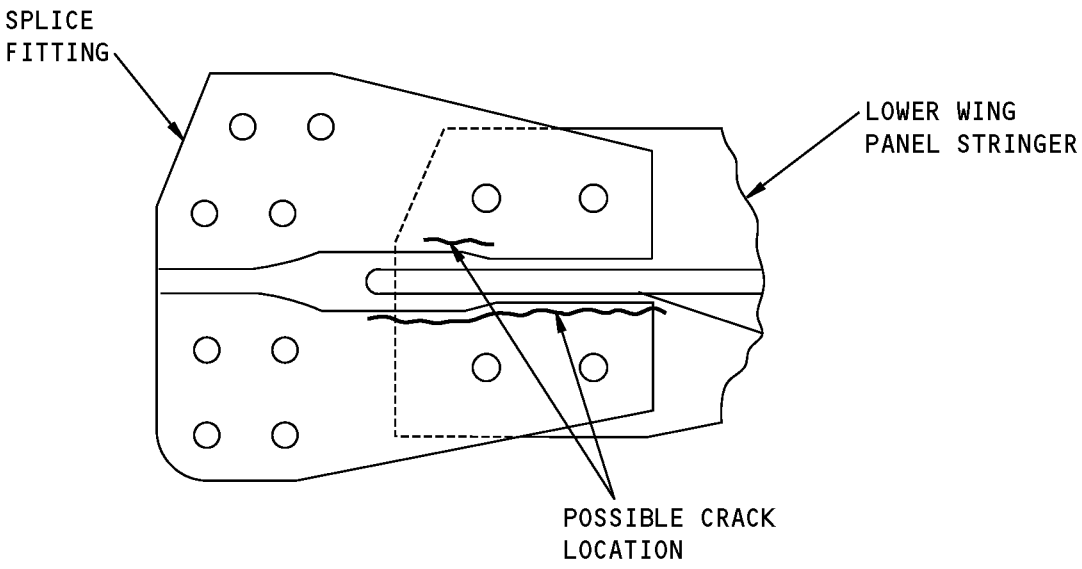


(TYPICAL CORROSION DAMAGE AREA)
B–B

Outer Wing Front and Rear Spars - Corrosion Prevention
Figure 201 (Sheet 6 of 6)/57-20-00-990-801

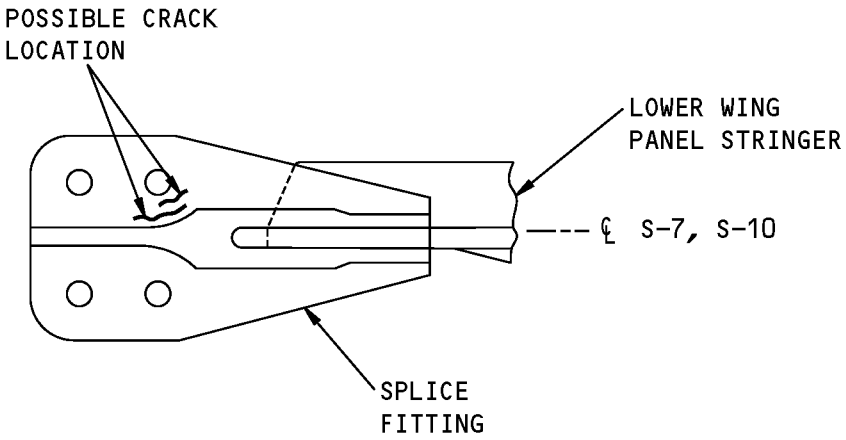


Outer Wing Internal Structure - Corrosion Prevention
Figure 202 (Sheet 1 of 2)/57-20-00-990-802



S-5 FITTING

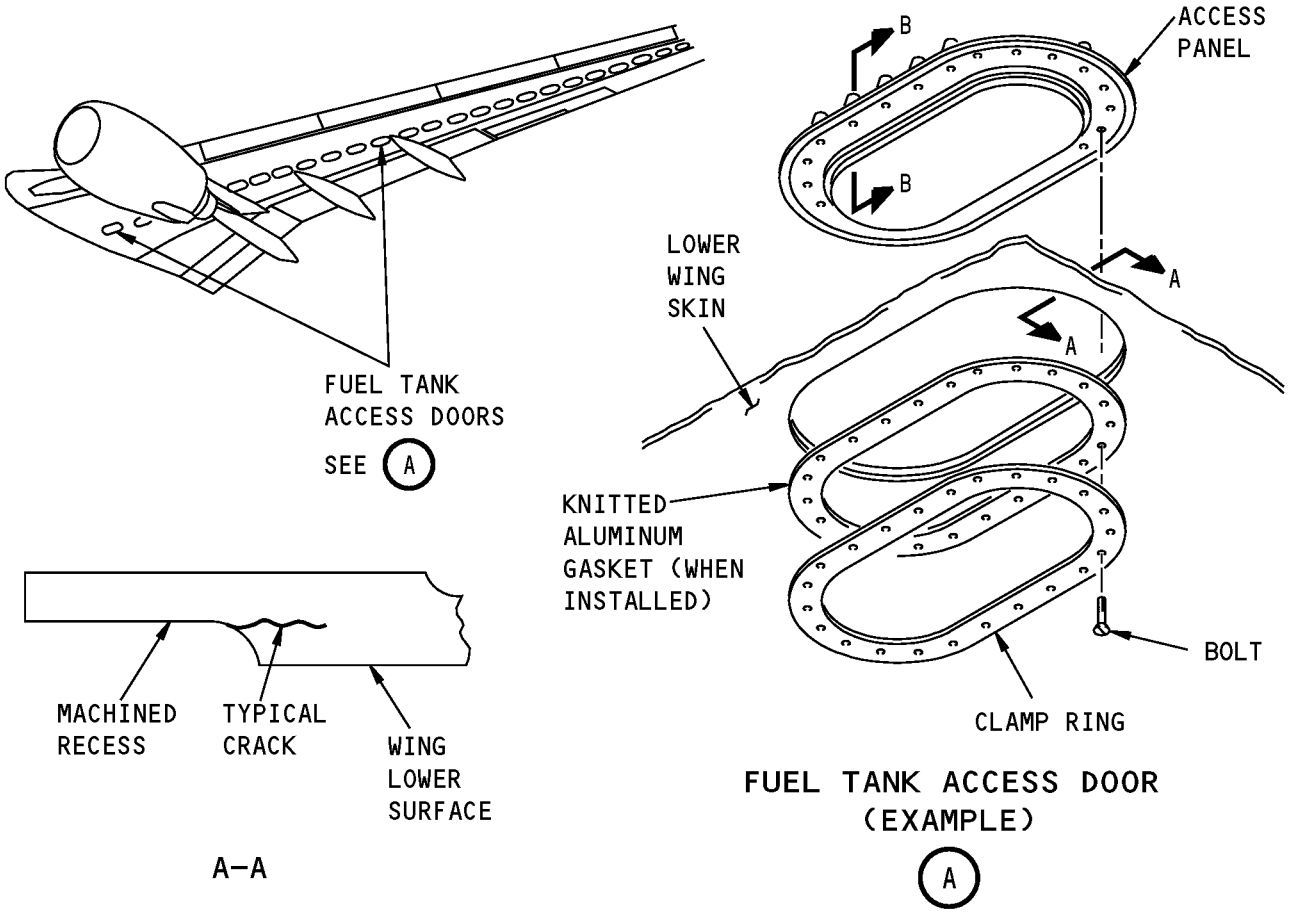
B



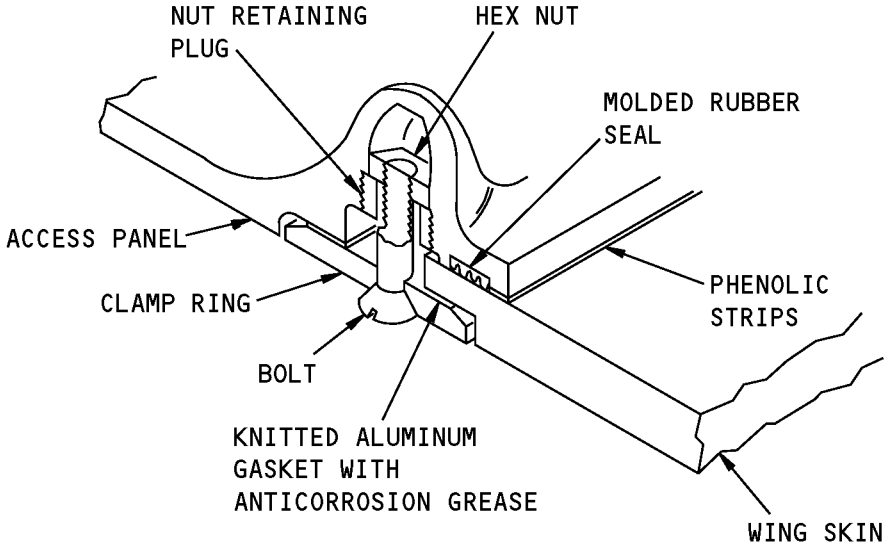
S-7, S-10 FITTINGS

C

Outer Wing Internal Structure - Corrosion Prevention
Figure 202 (Sheet 2 of 2)/57-20-00-990-802



FUEL TANK ACCESS DOOR
(EXAMPLE)
A



B–B

Fuel Tank and Boost Pump Access Cutouts - Corrosion Prevention
Figure 203/57-20-00-990-803

REMOVABLE WINGTIP LEADING EDGE LIGHT LENS - REPAIR

1. General

A. There is one task to polish a lens in this procedure.

TASK 57-21-11-910-801

2. Polish the Leading Edge Light Lens

A. General

(1) This procedure gives the task to polish the exterior surface of the lens on the left or right wingtip.

B. Consumable Materials

Reference	Description	Specification
B50025	Compound - Polishing, Final Finish - NuShine II, Grade S	
G50138	Cloth - Soft Cotton	
G50140	Gloves - Protective, Latex or Nitrile	
G50141	Towel - Paper, High Quality, Single Ply, White or Natural Colors	

C. Location Zones

Zone	Area
500	Left Wing
526	Left Wing - Wing Tip
600	Right Wing
626	Right Wing - Wing Tip

D. Procedure

SUBTASK 57-21-11-910-001

(1) Apply small amounts of NuShine II, Grade S compound, B50025 along the leading edge of the lens.

(a) Use a pair of protective gloves, G50140.

(b) Do only half of the length of the lens at a time, or the polish will become dry too soon.

(c) Polish with a high quality paper towel, G50141with light pressure only in a linear motion along the leading edge.

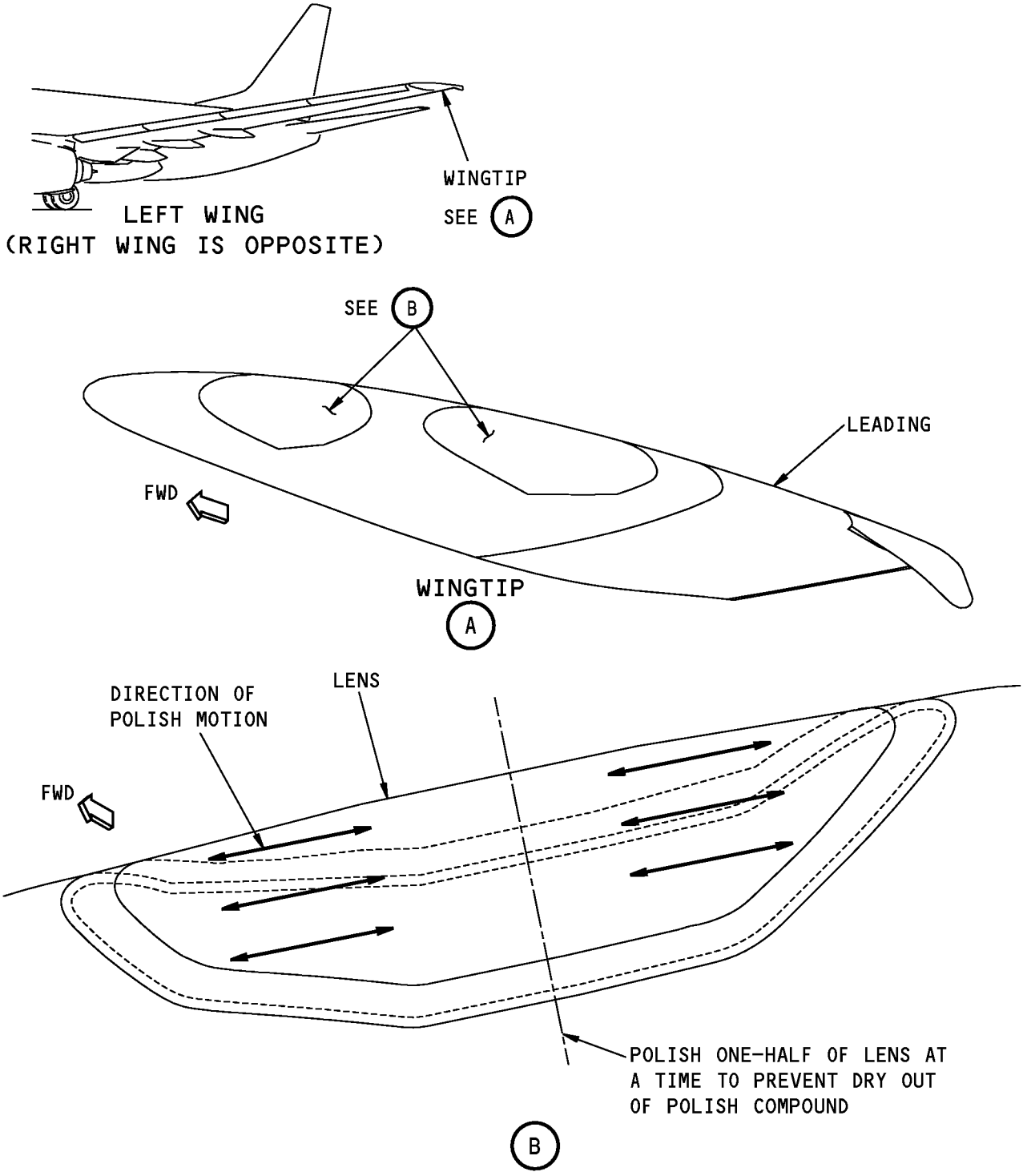
NOTE: Use only plain white or natural color paper towels.

NOTE: There will be a transition line, approximately 0.25 inch (6.25 millimeters) wide between the hazed surface and the undamaged clear surface. Do not try to polish this portion of the lens, a hard coat material remains on the lens and can not be polish out to a clear state.

SUBTASK 57-21-11-910-002

(2) Repeat the polish process; after the polish process is complete, use a clean soft cotton cloth, G50138 in order to achieve a final luster.

END OF TASK



1542540 S0000281710_V1

Removable Wingtip Leading Edge Light Lens Polish
Figure 201/57-21-11-990-802

REMOVABLE WINGTIP - REMOVAL/INSTALLATION

1. General

A. There are two tasks in this procedure. There is one task for the removal of the wingtip and one task for the installation of the wingtip.

(1) To remove and install the wingtip fairing, a second person is needed.

TASK 57-21-11-000-801

2. Wingtip Removal

(Figure 401)

A. Tools/Equipment

Reference	Description
STD-1064	Scraper - Phenolic, Hard Resin

B. Location Zones

Zone	Area
526	Left Wing - Wing Tip
626	Right Wing - Wing Tip

C. Access Panels

Number	Name/Location
526BB	Wing Tip Access Door, Forward Tip
526CB	Wing Tip Access Door, Aft Tip
626BB	Wing Tip Access Door, Forward Tip
626CB	Wing Tip Access Door, Aft Tip

D. Procedure

SUBTASK 57-21-11-020-001

(1) Disconnect the two electrical connectors.

SUBTASK 57-21-11-020-002

CAUTION: BE CAREFUL WHEN YOU REMOVE THE FAIRING. THE AERODYNAMIC SEALANT CAN BOND TO THE FAIRING. THIS CAN CAUSE DAMAGE TO THE FAIRING.

(2) Remove the wingtip fairing [1].

NOTE: A second person is needed to hold the fairing up while it is being removed.

(a) Remove the 32 bolts [11] that attach the access doors [2] and [3].

(b) Remove the applicable access panels:

Number	Name/Location
526BB	Wing Tip Access Door, Forward Tip
526CB	Wing Tip Access Door, Aft Tip
626BB	Wing Tip Access Door, Forward Tip
626CB	Wing Tip Access Door, Aft Tip

(c) Remove the 2 bolts [4], 4 washers [5], 1 washer [6], 1 washer [7], 4 bolts [8], 4 washers [9], and 2 bolts [10] which attach the fairing to the wingtip closure rib.

NOTE: The access door near the forward position light lens gives you access to four sets of fasteners. The middle access door [2] gives access to two set of fasteners near the aft edge of its opening. The aft access door [3] gives access to two sets of fasteners near the aft edge of its opening.

1) Put a label on each set of fasteners to install them in the correct location.

SUBTASK 57-21-11-020-004

(3) Remove the excess sealant with a hard resin phenolic scraper, STD-1064.

SUBTASK 57-21-11-950-001

(4) If you will not install the fairings in a short time, install a cover on the closure rib.

END OF TASK

TASK 57-21-11-400-802

3. Wingtip Installation

(Figure 401)

A. References

Reference	Title
51-31-00-390-801	Non-Removable Faying (Mated) Surface Seal Application (P/B 201)
51-31-00-390-806	Aerodynamic Smoother Application (P/B 201)

B. Consumable Materials

Reference	Description	Specification
A02315	Sealant - Low Density, Synthetic Rubber. 2 Part	BMS5-142

C. Location Zones

Zone	Area
526	Left Wing - Wing Tip
626	Right Wing - Wing Tip

D. Access Panels

Number	Name/Location
526BB	Wing Tip Access Door, Forward Tip
526CB	Wing Tip Access Door, Aft Tip
626BB	Wing Tip Access Door, Forward Tip
626CB	Wing Tip Access Door, Aft Tip

E. Procedure

SUBTASK 57-21-11-390-003

(1) Do this task: Non-Removable Faying (Mated) Surface Seal Application, TASK 51-31-00-390-801.

SUBTASK 57-21-11-420-004

(2) Install the wingtip fairing [1].

NOTE: A second person is needed to hold up the wingtip fairing during installation.

(a) Put the wingtip fairing [1] in its position on the closure rib.

(b) Loosely install the 2 bolts [4], 4 washers [5], 1 washer [6], 1 washer [7], 4 bolts [8], 4 washers [9], and 2 bolts [10] which attach the fairing to the wingtip closure rib.

NOTE: By installing bolts loosely, you make sure that all holes can be aligned at the wingtip fairing [1] and wing joint.

(c) Tighten the bolts which hold the wingtip fairing [1] to the wing.

NOTE: Make sure that the loose ends of the jumpers are attached.

(d) Install 32 bolts [11] to attach these access panels:

Number	Name/Location
526BB	Wing Tip Access Door, Forward Tip
526CB	Wing Tip Access Door, Aft Tip
626BB	Wing Tip Access Door, Forward Tip
626CB	Wing Tip Access Door, Aft Tip

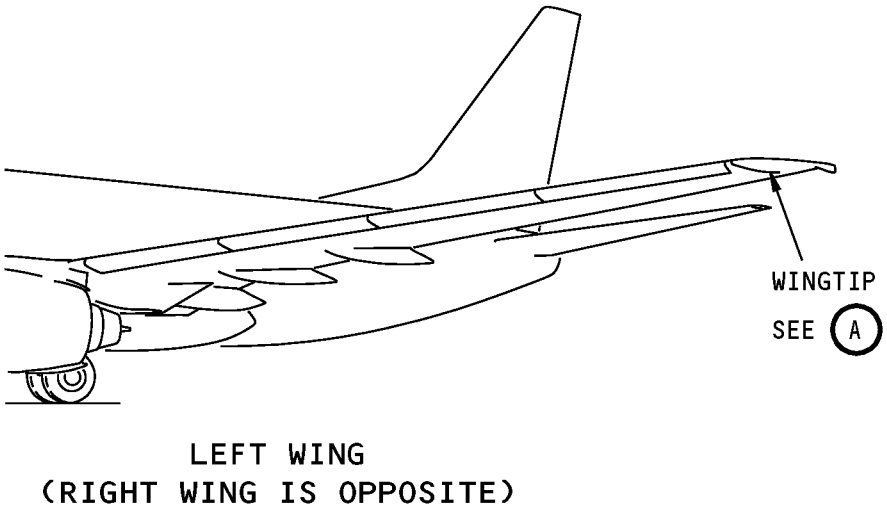
SUBTASK 57-21-11-420-005

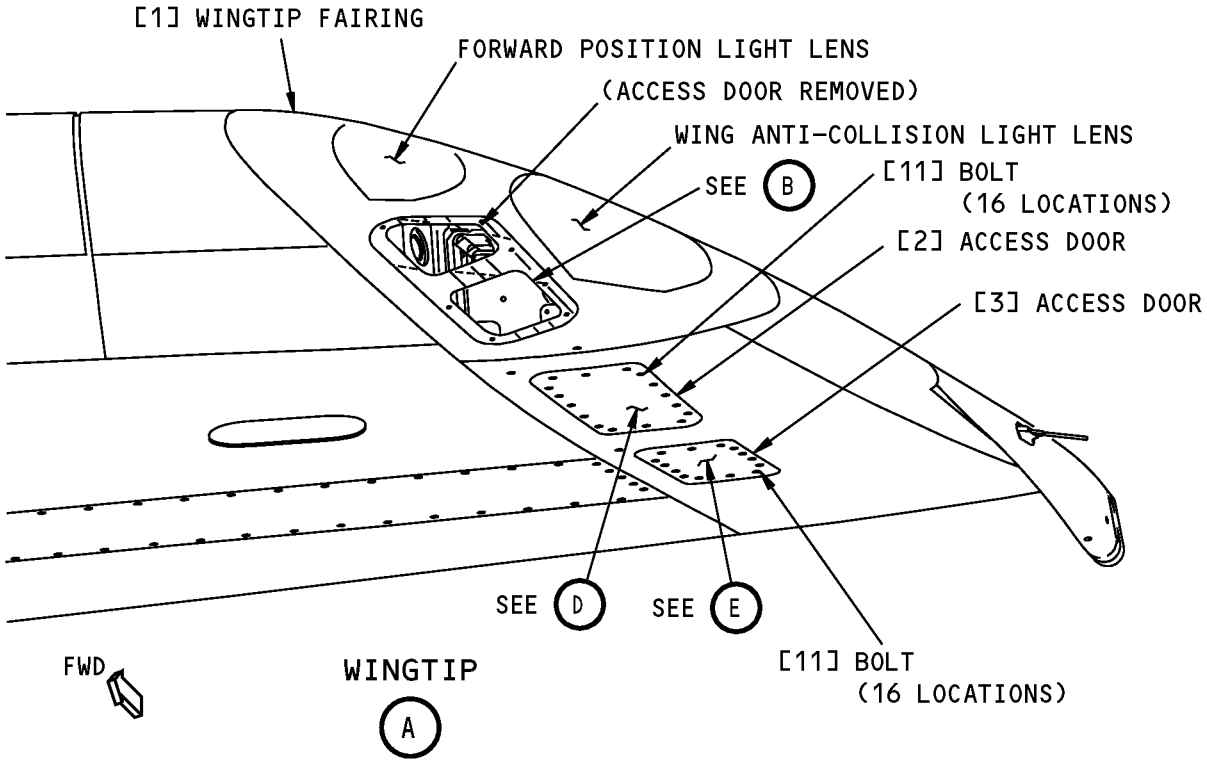
(3) Connect the two electrical connectors.

SUBTASK 57-21-11-390-004

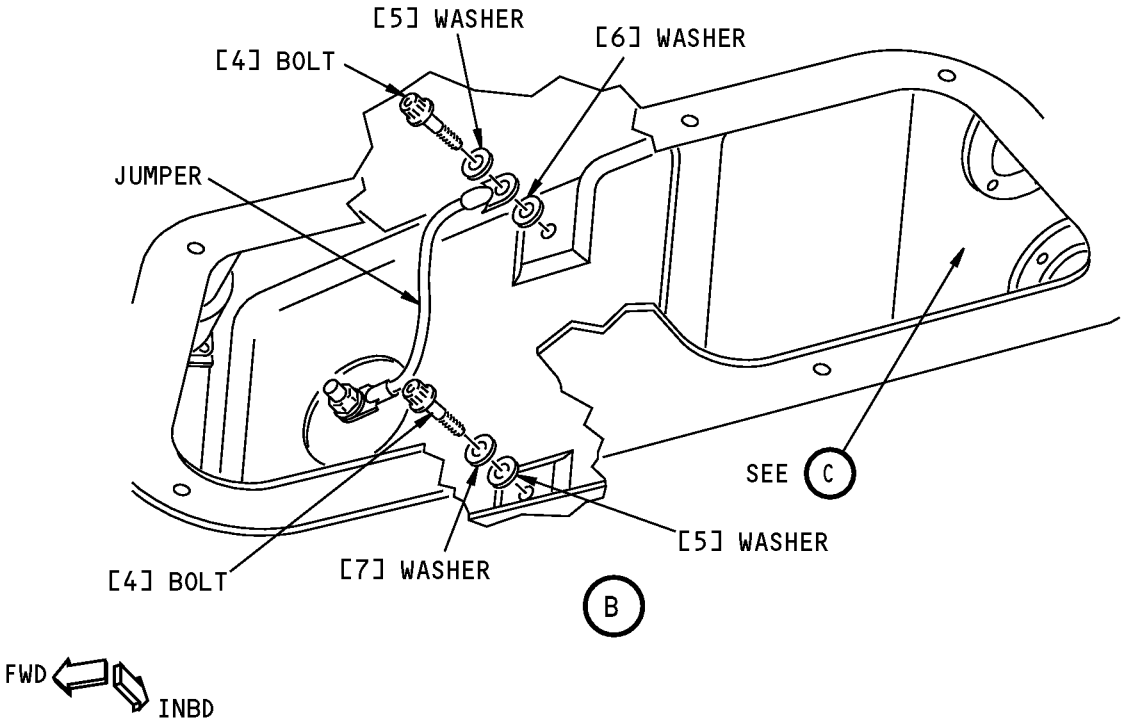
(4) To apply sealant, A02315 around the access door [2], the access door [3], and the joint between the wingtip fairing and wing, do this task: Aerodynamic Smoother Application, TASK 51-31-00-390-806

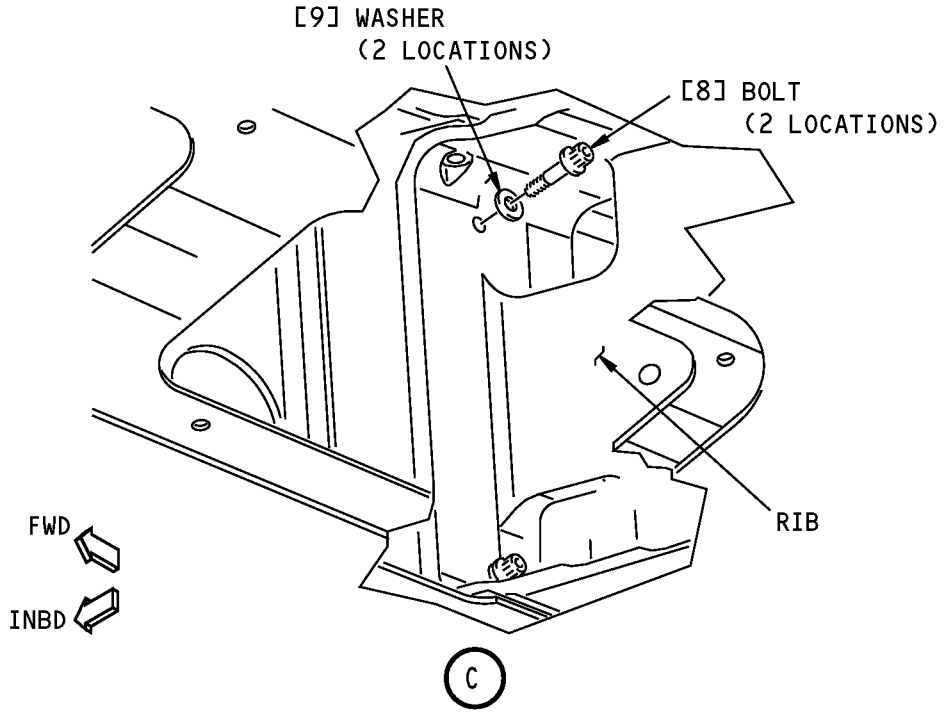
———————— END OF TASK ————————



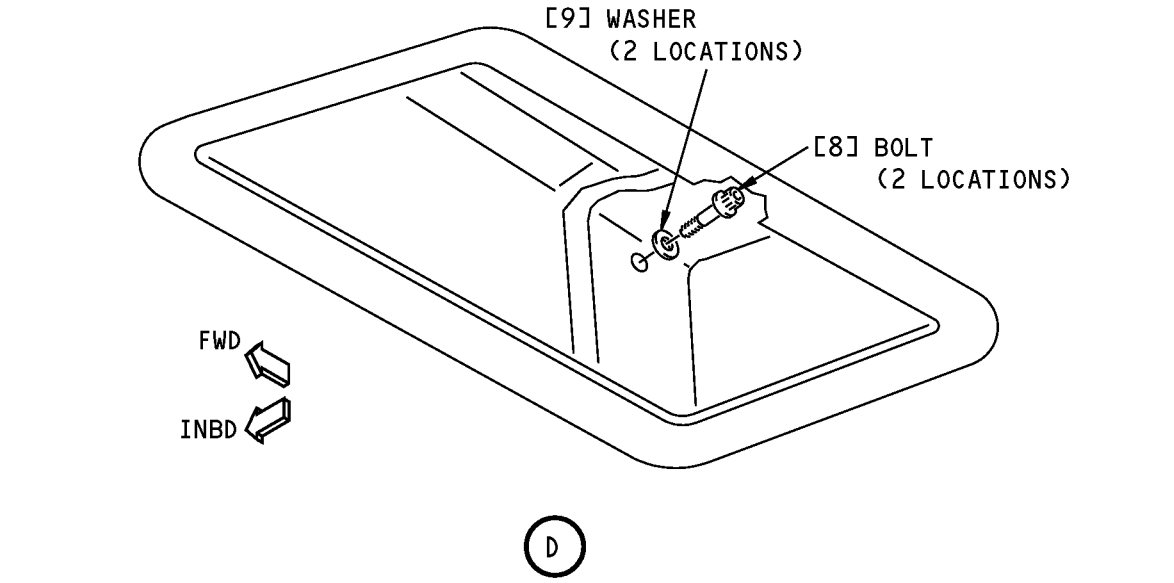


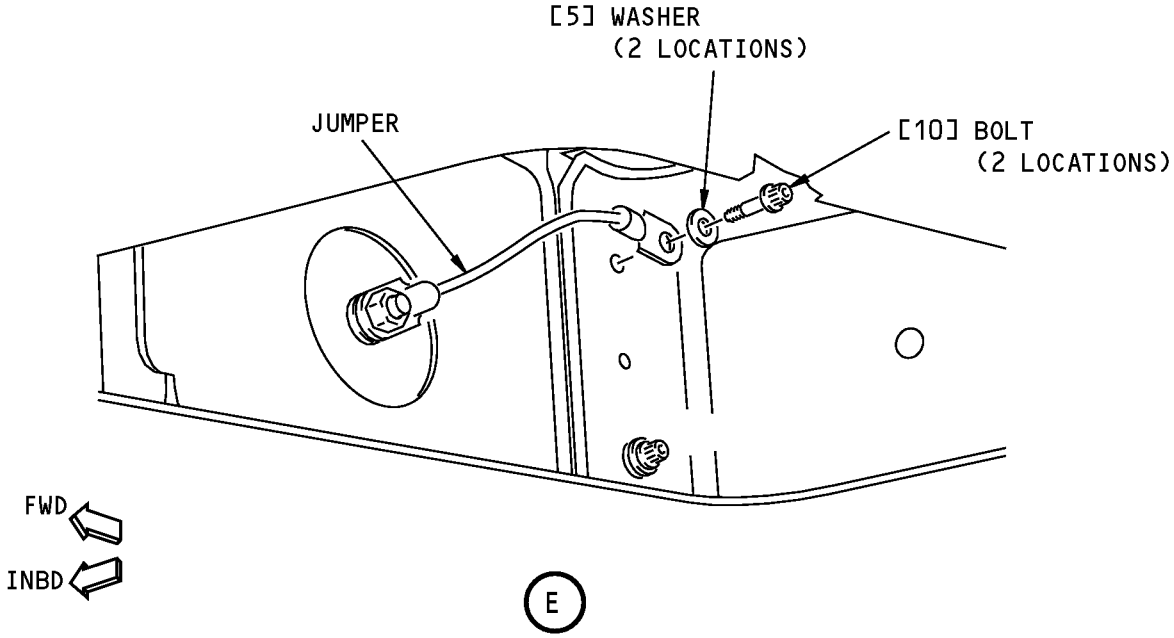
Wingtip Installation
Figure 401 (Sheet 1 of 3)/57-21-11-990-801





Wingtip Installation
Figure 401 (Sheet 2 of 3)/57-21-11-990-801





Wingtip Installation
Figure 401 (Sheet 3 of 3)/57-21-11-990-801

WINGLET - REMOVAL/INSTALLATION

1. General

A. There are two tasks in this procedure.

(1) The task for the removal of the winglet.

(2) The task for the installation of the winglet.

(3) To remove and install the winglet, a second person is needed.

TASK 57-21-21-000-801

2. Winglet Removal

A. General

(1) This task gives the procedure to remove the winglet from the left or right wing.

B. References

Reference	Title
20-40-11-910-801	Static Grounding (P/B 201)
27-51-00-040-801	Trailing Edge Flap System Deactivation (P/B 201)
27-81-00-040-801	Deactivate the Leading Edge Flaps and Slats (P/B 201)
33-43-10-020-801	Position Lights - Disconnect the Electrical Connector (P/B 201)
33-44-13-020-801	Anti-Collision Lights - Disconnect the Electrical Connector (P/B 201)
57-21-23-000-801	Dry Bay Access Doors Removal (P/B 401)

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
COM-2480	Platform - Mobile Elevating Work Platform SJ II Series (Part #: 4620, Supplier: 3AF08, A/P Effectivity: 737-ALL)
SPL-659	Platform - Maintenance Lift, 3 ft Minimum Height, 12.5 ft Maximum Height (Part #: 8662-010, Supplier: 00994, A/P Effectivity: 737-ALL)
SPL-2044	Sling - Winglet (Part #: C57002-1, Supplier: 81205, A/P Effectivity: 737-700, -700C, -700ER, -700QC, -800, -900, -900ER, -BBJ) (Part #: HSE 737-0010-7, Supplier: $0708, A/P Effectivity: 737-700, -700C, -700ER, -700QC, -800, -900, -900ER, -BBJ) (Opt Part #: HSE 737-0010-1, Supplier: $0708, A/P Effectivity: 737-700, -700C, -700ER, -700QC, -800, -900, -900ER, -BBJ)
STD-1064	Scraper - Phenolic, Hard Resin
STD-1081	Flashlight - Explosion Proof
STD-1194	Crane - Lift, 250 Lb (113 kg) Capacity, Lift Range 20 to 60 Inches (508-1524 Millimeters)

D. Consumable Materials

Reference	Description	Specification
A50001	compound - corrosion inhibiting - ZC-027L	ZC-027L
G50237	Compound - Corrosion Inhibiting, Non-drying - Cor-Ban 27L	BMS 3-38

E. Location Zones

Zone	Area
500	Left Wing
527	Left Winglet
534	Left Wing - Dry Bay
600	Right Wing
627	Right Winglet
634	Right Wing - Dry Bay

F. Access Panels

Number	Name/Location
534AB	Main Tank Access Door - Wing Station 727
534BB	Main Tank Access Door - Wing Station 748
634AB	Main Tank Access Door - Wing Station 727
634BB	Main Tank Access Door - Wing Station 748

HAP 001-013, 015-026, 028-030

G. Prepare to Remove the APB Winglet

(Figure 402)

SUBTASK 57-21-21-860-004

(1) Make sure the airplane is correctly grounded to an approved and identified ground.

(a) Do this task: Static Grounding, TASK 20-40-11-910-801.

SUBTASK 57-21-21-040-003

(2) Do this task:Trailing Edge Flap System Deactivation, TASK 27-51-00-040-801.

SUBTASK 57-21-21-040-004

(3) Do this task: Deactivate the Leading Edge Flaps and Slats, TASK 27-81-00-040-801.

SUBTASK 57-21-21-490-005

(4) Get a ladders, work platform, COM-2480 or maintenance platform, SPL-659.

NOTE: A scissors type, mobile work platform or scaffold maintenance platform is recommended for two persons, one person to control the movement of the winglet which is suspended from the crane/sling and the other person to remove the winglet bolts and the grounding straps.

SUBTASK 57-21-21-490-006

(5) Get an overhead, 250 lb (113 kg) capacity crane, STD-1194 for the sling equipment.

NOTE: The complete sling assembly weighs 20 pounds (9.07 kilograms). The winglet weighs 137 pounds (62.14 kilograms).

SUBTASK 57-21-21-490-007

(6) Prepare a location to store the winglet after the winglet is removed from the airplane.

NOTE: You can use a wood pallet covered with carpet or a layer of sandbags as a temporary storage location.

HAP 001-013, 015-026, 028-030 (Continued)

SUBTASK 57-21-21-860-005

(7) Do these steps to prepare metal support equipment such as work platforms, work/maintenance stands, ladders.

NOTE: These steps apply to all metal support equipment within a 50-foot (15.24 meter) radius of an open fuel tank.

(a) All support equipment must be in place before you begin the procedure.

(b) Bond the support equipment at an approved airplane bonding location.

(c) Ground the support equipment to the same earth ground as the airplane.

SUBTASK 57-21-21-010-002

(8) Remove the dry bay access door under the wing, adjacent to the outboard rib 27.

(a) Open these access panels:

Number	Name/Location
534BB	Main Tank Access Door - Wing Station 748
634BB	Main Tank Access Door - Wing Station 748

(b) Do this task:Dry Bay Access Doors Removal, TASK 57-21-23-000-801.

SUBTASK 57-21-21-020-016

(9) Disconnect the two electrical connectors:

(a) Do this task: Anti-Collision Lights - Disconnect the Electrical Connector, TASK 33-44-13-020-801.

(b) Do this task: Position Lights - Disconnect the Electrical Connector, TASK 33-43-10-020-801.

HAP 031-054, 101-999

H. Prepare to Remove the Boeing Winglet

(Figure 401)

SUBTASK 57-21-21-860-002

(1) Make sure the airplane is correctly grounded to an approved and identified ground.

(a) Do this task: Static Grounding, TASK 20-40-11-910-801.

SUBTASK 57-21-21-040-001

(2) Do this task: Trailing Edge Flap System Deactivation, TASK 27-51-00-040-801.

SUBTASK 57-21-21-040-002

(3) Do this task: Deactivate the Leading Edge Flaps and Slats, TASK 27-81-00-040-801.

SUBTASK 57-21-21-490-001

(4) Get a ladders, work platform, COM-2480 or maintenance platform, SPL-659.

NOTE: A scissors type, mobile work platform or scaffold maintenance platform is recommended for two persons, one person to control the movement of the winglet which is suspended from the crane/sling and the other person to remove the winglet bolts and the grounding straps.

HAP 031-054, 101-999 (Continued)

SUBTASK 57-21-21-490-002

(5) Get an overhead, 250 lb (113 kg) capacity crane, STD-1194 for the sling equipment.

NOTE: The complete sling assembly weighs 20 pounds (9.07 kilograms). The winglet weighs 137 pounds (62.14 kilograms).

SUBTASK 57-21-21-490-003

(6) Prepare a location to store the winglet after the winglet is removed from the airplane.

NOTE: You can use a wood pallet covered with carpet or a layer of sandbags as a temporary storage location.

SUBTASK 57-21-21-860-003

(7) Do these steps to prepare metal support equipment such as work platforms, work/maintenance stands, ladders.

NOTE: These steps apply to all metal support equipment within a 50-foot (15.24 meter) radius of an open fuel tank.

(a) All support equipment must be in place before you begin the procedure.

(b) Bond the support equipment at an approved airplane bonding location.

(c) Ground the support equipment to the same earth ground as the airplane.

SUBTASK 57-21-21-020-001

(8) Remove the dry bay access door located under the wing, adjacent to the outboard rib 27.

(a) Open these access doors.

Number	Name/Location
534AB	Main Tank Access Door - Wing Station 727
634AB	Main Tank Access Door - Wing Station 727

(b) Do this task: Dry Bay Access Doors Removal, TASK 57-21-23-000-801.

SUBTASK 57-21-21-020-002

(9) Disconnect the two electrical connectors:

(a) Do this task: Anti-Collision Lights - Disconnect the Electrical Connector, TASK 33-44-13-020-801.

(b) Do this task: Position Lights - Disconnect the Electrical Connector, TASK 33-43-10-020-801.

HAP 001-013, 015-026, 028-030

I. Remove the APB Winglet

SUBTASK 57-21-21-020-017

(1) Install the sling, SPL-2044 on the winglet [10] (Figure 402).

NOTE: The sling equipment has three attachment fittings, six screws and washers, and a sling strap assembly.

(a) Remove the six bolts [17] from the winglet where the attachment fittings for the sling, SPL-2044 will be attached to the winglet.

1) Store the bolts in a bag for the installation procedure.

(b) Install 6 bolts and washers to attach the 3 attachment fittings to the winglet.

1) Tighten the bolts to 30 in-lb (3 N·m) to 40 in-lb (5 N·m).

NOTE: The attachment bolts and washers for the sling are stored in the threaded storage holes on the end surfaces of the attachment fittings.

(c) Attach the sling strap assembly to the three fittings with the short strap attached to the upper, outboard fitting of the winglet.

SUBTASK 57-21-21-420-014

(2) Attach the sling, SPL-2044 to the overhead crane (Figure 402).

NOTE: The winglet weighs approximately 137 lbs.

SUBTASK 57-21-21-500-003

(3) Operate the overhead crane to lift the sling equipment until the 3 lines equally support the winglet.

(a) Balance the overhead crane tension, so you can loosen the bolts that hold the winglet to the wing, without damage to the bolt threads or to the winglet.

SUBTASK 57-21-21-490-008

(4) Use an explosion proof flashlight, STD-1081 when you look inside the dry bay tank.

SUBTASK 57-21-21-020-018

(5) Remove the 10 bolts [4] and 10 washers [6] from the center of the wing (Figure 402).

(a) Store the bolts and washers in a separate bag for the installation procedure; label the bag as the diameters and lengths are different for each attachment location.

SUBTASK 57-21-21-020-019

(6) Remove the remaining four bolts [1] and four washers [5], two bolts [2] and two washers [5], and two bolts [3] and two washers [5] in the reverse order of the installation.

(a) Refer to the table: Table 402.

(b) Remove the two bolts [2] and two washers [5].

(c) Store the each set of bolts and washers in a separate bag for the installation procedure; label the bag as the diameters and lengths are different for each attachment location.

SUBTASK 57-21-21-020-020

(7) Disconnect the forward grounding strap [12] and aft grounding strap [11] (Figure 402).

(a) You must control movement of the sling and the winglet as you remove the attachment fasteners for the grounding straps.

NOTE: A second person is recommended to control the movement of the winglet which is suspended from the crane/sling. A gust of wind could cause the winglet to move as you remove the attachment fasteners for the grounding straps.

(b) Do not pull the winglet away from the wing, the forward and aft grounding straps are attached between the winglet and the wing outboard rib.

(c) Remove the washer [8] and nut [9].

(d) Disconnect the lug for the grounding strap from the electrical stud on the wing rib.

(e) Store the washer and nut in a bag for the installation procedure.

SUBTASK 57-21-21-100-002

(8) Remove the excess corrosion inhibitiing compound - ZC-027L, A50001 or Cor-Ban 27L Compound, G50237 with a hard resin phenolic scraper, STD-1064.

SUBTASK 57-21-21-900-002

(9) Use the overhead crane and the sling, SPL-2044 to move the winglet to a storage location.

HAP 031-054, 101-999

J. Remove the Boeing Winglet

SUBTASK 57-21-21-020-003

(1) Install the sling, SPL-2044 on the winglet [10] (Figure 401).

NOTE: The sling equipment has three attachment fittings, six screws and washers, and a sling strap assembly.

(a) Remove the six bolts [17] from the winglet where the attachment fittings for the sling, SPL-2044 will be attached to the winglet.

1) Store the bolts in a bag for the installation procedure.

(b) Install 6 bolts and washers to attach the 3 attachment fittings to the winglet.

1) Tighten the bolts to 84.0 inch-pounds (9.5 newton-meters).

NOTE: The attachment bolts and washers for the sling are stored in the threaded storage holes on the end surfaces of the attachment fittings.

(c) Attach the sling strap assembly to the three fittings with the short strap attached to the upper, outboard fitting of the winglet.

SUBTASK 57-21-21-420-002

(2) Attach the sling, SPL-2044 to the overhead crane (Figure 401).

NOTE: The winglet weighs approximately 137 lbs.

SUBTASK 57-21-21-500-001

(3) Operate the overhead crane to lift the sling equipment until the 3 lines equally support the winglet.

(a) Balance the overhead crane tension, so you can loosen the bolts that hold the winglet to the wing, without damage to the bolt threads or to the winglet.

SUBTASK 57-21-21-490-004

(4) Use an explosion proof flashlight, STD-1081 when you look inside the dry bay tank.

SUBTASK 57-21-21-020-004

(5) Remove the 10 bolts [4] and 10 washers [6] from the center of the wing (Figure 401).

(a) Store the bolts and washers in a separate bag for the installation procedure; label the bag as the diameters and lengths are different for each attachment location.

SUBTASK 57-21-21-020-014

(6) Remove the remaining four bolts [1] and four washers [5], two bolts [2] and two washers [5], and two bolts [3] and two washers [5] in the reverse order of the installation.

(a) Refer to the table: Winglet Attachment Bolt Installation Order/Table 401.

(b) Remove the radius filler [7] when you remove the two bolts [2] and two washers [5].

(c) Store the each set of bolts and washers in a separate bag for the installation procedure; label the bag as the diameters and lengths are different for each attachment location.

SUBTASK 57-21-21-020-005

(7) Disconnect the forward grounding strap [12] and aft grounding strap [11] (Figure 401).

HAP 031-054, 101-999 (Continued)

(a) You must control movement of the sling and the winglet as you remove the attachment fasteners for the grounding straps.

NOTE: A second person is recommended to control the movement of the winglet which is suspended from the crane/sling. A gust of wind could cause the winglet to move as you remove the attachment fasteners for the grounding straps.

(b) Do not pull the winglet away from the wing, the forward and aft grounding straps are attached between the winglet and the wing outboard rib.

(c) Remove the washer [8] and nut [9].

(d) Disconnect the lug for the grounding strap from the electrical stud on the wing rib.

(e) Store the washer and nut in a bag for the installation procedure.

SUBTASK 57-21-21-100-001

(8) Remove the excess corrosion inhibitiing compound - ZC-027L, A50001 or Cor-Ban 27L Compound, G50237 with a hard resin phenolic scraper, STD-1064.

SUBTASK 57-21-21-900-001

(9) Use the overhead crane and the sling, SPL-2044 to move the winglet to a storage location.

HAP ALL

———————— END OF TASK ————————

TASK 57-21-21-400-801

3. Winglet Installation

A. General

(1) This task gives the procedure to install the winglet on the left or right wing.

B. References

Reference	Title
27-51-00-440-801	Trailing Edge Flap System Reactivation (P/B 201)
27-81-00-440-801	Reactivate the Leading Edge Flaps and Slats (P/B 201)
33-43-10-420-801	Position Lights - Connect the Electrical Connector (P/B 201)
33-44-13-420-801	Anti-Collision Lights - Connect the Electrical Connector (P/B 201)
51-21-11-150-801	Paint Stripping (P/B 701)
51-31-00-390-806	Aerodynamic Smoother Application (P/B 201)
57-21-23-400-801	Dry Bay Access Doors Installation (P/B 401)
57-21-23-790-801	Vapor Seal Leak Check (P/B 601)

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
COM-1587	Wrench - Torque, 30 in-lbs (4 N-m) (Part #: TE3FUA, Supplier: 55719, A/P Effectivity: 737-ALL)
COM-2480	Platform - Mobile Elevating Work Platform SJ II Series (Part #: 4620, Supplier: 3AF08, A/P Effectivity: 737-ALL)

(Continued)

Reference	Description
SPL-659	Platform - Maintenance Lift, 3 ft Minimum Height, 12.5 ft Maximum Height (Part #: 8662-010, Supplier: 00994, A/P Effectivity: 737-ALL)
SPL-2044	Sling - Winglet (Part #: C57002-1, Supplier: 81205, A/P Effectivity: 737-700, -700C, -700ER, -700QC, -800, -900, -900ER, -BBJ) (Part #: HSE 737-0010-7, Supplier: $0708, A/P Effectivity: 737-700, -700C, -700ER, -700QC, -800, -900, -900ER, -BBJ) (Opt Part #: HSE 737-0010-1, Supplier: $0708, A/P Effectivity: 737-700, -700C, -700ER, -700QC, -800, -900, -900ER, -BBJ)
STD-247	Crane - Lift, 250 lb (113 kg) Capacity, Lift Range 20 to 60 in (508 to 1524 mm)

D. Consumable Materials

Reference	Description	Specification
A00247	Sealant - Pressure And Environmental - Chromate Type	BMS 5-95
A02315	Sealant - Low Density, Synthetic Rubber. 2 Part	BMS5-142
A50001	compound - corrosion inhibiting - ZC-027L	ZC-027L
C00528	Compound - Corrosion Preventive, Petroleum Hot Application (Soft Film)	MIL-C-11796, Class III
G50237	Compound - Corrosion Inhibiting, Non-drying - Cor-Ban 27L	BMS 3-38

E. Location Zones

Zone	Area
500	Left Wing
527	Left Winglet
534	Left Wing - Dry Bay
600	Right Wing
627	Right Winglet
634	Right Wing - Dry Bay

F. Access Panels

Number	Name/Location
534BB	Main Tank Access Door - Wing Station 748
634BB	Main Tank Access Door - Wing Station 748

HAP 031-054, 101-999

G. Install the Boeing Winglet

(Figure 401)

SUBTASK 57-21-21-390-001

(1) Prepare to install the winglet.

(a) To install the winglet, a second person is needed.

SUBTASK 57-21-21-370-001

(2) Touch-up the paint on the winglet as required.

NOTE: The winglet is weight and center of gravity (CG) critical. You must strip the paint on the winglet, as given in the procedure referenced, before the repaint procedure can start. Whenever possible, you must prevent application of excess paint, such as logo color masking. The requirement is a zero net increase in winglet weight after the repaint procedure is completed.

(a) Do this task: Paint Stripping, TASK 51-21-11-150-801.

SUBTASK 57-21-21-390-002

(3) Apply a thin coat of corrosion inhibitiing compound - ZC-027L, A50001 or Cor-Ban 27L Compound, G50237 to the entire faying surface of rib 27 on the wing, and the entire faying surface of the winglet root rib before the installation.

(a) Make sure the chamfered drainage passages on the winglet wing root, below the barrel nut openings, are not closed with corrosion inhibiting compound.

SUBTASK 57-21-21-200-001

(4) Do a check the locking feature of the barrel nuts in the winglet as follows (Figure 401):

(a) Refer to the table: Winglet Attachment Bolt Installation Order/Table 401.

(b) Apply a thin coat of corrosion inhibitiing compound - ZC-027L, A50001 or Cor-Ban 27L Compound, G50237 to all surfaces of the bolt threads.

(c) Install the four bolts [1], two bolts [2] and two bolts [3], one at a time, in number order, until seated in the correct hole.

(d) Install the 10 bolts [4], one at a time, until seated in the correct holes.

(e) Tighten each of the four bolts [1], two bolts [2] and two bolts [3] in proper number order.

1) Use a torque wrench (30 in-lbs), COM-1587 set to 18 in-lb (2 N·m).

NOTE: These bolts are 0.5000 in. (12.7000 mm) diameter.

2) Apply force with the torque wrench in a clockwise direction.

3) If the bolts can be tightened until the threads protrude, then the barrel nuts must be replaced.

(f) Tighten each of the 10 bolts [4].

1) Use a torque wrench (30 in-lbs), COM-1587 to 14.0 in-lb (1.6 N·m).

NOTE: These bolts are 0.4375 in. (11.1125 mm) diameter.

2) Apply force with the torque wrench in a clockwise direction.

3) If the bolts can be torqued until the threads protrude, then the barrel nuts in the winglet must be replaced.

SUBTASK 57-21-21-960-001

(5) To replace the barrel nuts in the winglet, do these steps:

(a) Remove the retainer and barrel nut through the access holes in the wing root of the winglet.

(b) Replace the barrel nut [14] for bolt [1], bolt [2] and bolt [3].

(c) Replace the barrel nut [16] for bolt [4].

(d) Install the barrel nut [14] with retainer [13] through the access holes in the wing root of the winglet.

(e) Install the barrel nut [16] with retainer [15] through the access holes in the wing root of the winglet.

SUBTASK 57-21-21-420-003

(6) Install the sling, SPL-2044 on the winglet (Figure 401).

(a) Remove the six bolts [17] from the replacement winglet where the attachment fittings for the sling, SPL-2044 will be attached to the winglet.

1) Store the 6 screws in a bag.

(b) Attach the 3 attachment fittings to the winglet with 6 screws and washers.

1) Tighten the 6 bolts to 84 in-lb (9 N·m).

(c) Attach the sling straps to the 3 attachment fittings with the short line attached to the upper leading edge of the winglet.

SUBTASK 57-21-21-420-005

(7) Attach the sling, SPL-2044 to the overhead, 250 lb (113 kg) Capacity, Lift Range 20 to 60 in lift crane, STD-247 (Figure 401).

SUBTASK 57-21-21-500-002

(8) Operate the overhead crane to lift the sling until the 3 lines are equally supporting the winglet.

(a) Balance the overhead crane tension, so you can tighten the bolts that hold the winglet to the wing, without damage to the bolt threads or to the winglet.

SUBTASK 57-21-21-420-006

(9) Connect the two electrical connectors in the winglet:

(a) Do this task: Anti-Collision Lights - Connect the Electrical Connector, TASK 33-44-13-420-801.

(b) Do this task: Position Lights - Connect the Electrical Connector, TASK 33-43-10-420-801.

SUBTASK 57-21-21-400-001

(10) Connect the forward grounding strap [12] and aft grounding strap [11] (Figure 401).

(a) You must control movement of the sling and the winglet as you install the attachment fasteners for the grounding straps.

NOTE: A second person is recommended to control the movement of the winglet which is suspended from the crane and sling. A gust of wind could cause the winglet to move as you install the attachment fasteners for the grounding straps.

(b) Do not pull the winglet away from the wing, the forward and aft grounding straps are attached between the winglet and the wing outboard rib.

(c) Install the lug of the grounding strap on the electrical stud on the wing rib.

(d) Install a washer [8] and nut [9] and tighten.

SUBTASK 57-21-21-420-007

(11) Install the winglet (Figure 401).

(a) Refer to the table: Winglet Attachment Bolt Installation Order/Table 401.

(b) If you did not keep the bolts in separate bags or you replace the bolt, make sure the bolt grip length is correct for the installation location.

(c) Apply a thin coat of corrosion inhibitiing compound - ZC-027L, A50001 or Cor-Ban 27L Compound, G50237 to all surfaces of the bolt threads, shanks, and under the bolt head prior to installation.

(d) Install the four bolts [1], two bolts [2] and two bolts [3] with the order sequence in the table.

1) Refer to the table: Winglet Attachment Bolt Installation Order/Table 401.

2) Do not tighten the bolts to the final torque value at this time.

a) Install of the bolt [1] and washer [5] one at a time in number order until seated in the correct hole.

b) Install of the bolt [2] and washer [5] one at a time in number order until seated in the correct hole.

<1> Apply sealant, A00247 to the faying surface between the radius filler [7] and rib 27.

<2> Position the radius filler [7] before you install the bolt [2] and washer [5].

c) Install of the bolt [3] and washer [5] one at a time in number order until seated in the correct hole.

(e) Install the 10 bolts [4] and washers [6], one at a time, until seated; do not tighten the bolts to the final torque value at this time.

Table 401/57-21-21-993-804 Winglet Attachment Bolt Installation Order

ITEM	BOLT	INSTALLATION ORDER	LOCATION	TORQUE
[1]	BACB30US8K27M 0.5000 inch (12.7000 mm) dia.	A	Upper Forward (Front)	600-700 inch-pounds (67.790-79.089 Nm)
[2]	BACB30US8K20M 0.5000 inch (12.7000 mm) dia.	B	Lower Aft (Back)	600-700 inch-pounds (67.790-79.089 Nm)
[1]	BACB30US8K27M 0.5000 inch (12.7000 mm) dia.	C	Lower Forward (Back)	600-700 inch-pounds (67.790-79.089Nm)
[2]	BACB30US8K20M 0.5000 inch (12.7000 mm) dia.	D	Upper Aft (Back)	600-700 inch-pounds (67.790-79.089 Nm)
[1]	BACB30US8K27M 0.5000 inch (12.7000 mm) dia.	E	Upper Forward (Back)	600-700 inch-pounds (67.790-79.089 Nm)
[3]	BACB30US8K18M 0.5000 inch (12.7000 mm) dia.	F	Lower Aft (Front)	600-700 inch-pounds (67.790-79.089 Nm)
[1]	BACB30US8K27M 0.5000 inch (12.7000 mm) dia.	G	Lower Forward (Front)	600-700 inch-pounds (67.790-79.089 Nm)

HAP 031-054, 101-999 (Continued)

(Continued)

ITEM	BOLT	INSTALLATION ORDER	LOCATION	TORQUE
[3]	BACB30US8K18M 0.5000 inch (12.7000 mm) dia.	H	Upper Aft (Front)	600-700 inch-pounds (67.790-79.089 Nm)
[4]	BACB30US7K12M 0.4375 inch (11.1125 mm) dia.	J - S	Middle Upper and Lower	400-450 inch-pounds (45.194-50.843 Nm)

(f) Tighten the four bolts [1], two bolts [2] and two bolts [3] in the order sequence in the table.

1) Refer to the table for the bolt torque values: Winglet Attachment Bolt Installation Order/Table 401.

2) Apply force with the torque wrench in a clockwise direction.

(g) Tighten each of the 10 bolts [4].

1) Refer to the table for the bolt torque value: Winglet Attachment Bolt Installation Order/Table 401.

2) Apply force with the torque wrench in a clockwise direction.

SUBTASK 57-21-21-020-006

(12) Remove the sling, SPL-2044 from the winglet.

(a) Remove the six bolts and washers from the 3 attachment fittings.

(b) Install the six bolts and washers in the threaded storage holes in the ends of the attachment fittings.

(c) Apply compound, C00528 to the six holes in the winglet and immediately install the bolts.

(d) Install the six bolts [17].

(e) Tighten the bolts to 30-40 inch-pounds (3.39-4.52 newton-meters).

SUBTASK 57-21-21-390-003

(13) Apply a seal to the external gap on the upper surface of the winglet between point A and B with sealant, A00247 Figure 401.

NOTE: It is optional to use sealant, A02315.

(a) To apply the sealant, refer to this task: Aerodynamic Smoother Application, TASK 51-31-00-390-806.

SUBTASK 57-21-21-790-001

(14) If the Absolute Vapor Seal has been moved or changed, do the vapor seal leak check of the dry bay.

(a) Do this task: Vapor Seal Leak Check, TASK 57-21-23-790-801.

HAP 001-013, 015-026, 028-030

H. Install the Winglet

(Figure 402)

SUBTASK 57-21-21-390-007

(1) Prepare to install the APB winglet.

(a) To install the winglet, a second person is needed.

SUBTASK 57-21-21-370-004

(2) Touch-up the paint on the winglet as required.

NOTE: The winglet is weight and center of gravity (CG) critical. You must strip the paint on the winglet, as given in the procedure referenced, before the repaint procedure can start. Whenever possible, you must prevent application of excess paint, such as logo color masking. The requirement is a zero net increase in winglet weight after the repaint procedure is completed.

(a) Do this task: Paint Stripping, TASK 51-21-11-150-801.

SUBTASK 57-21-21-390-008

(3) Apply a thin coat of corrosion inhibitiing compound - ZC-027L, A50001 or Cor-Ban 27L Compound, G50237 to the entire faying surface of rib 27 on the wing, and the entire faying surface of the winglet root rib before the installation.

(a) Make sure the chamfered drainage passages on the winglet wing root, below the barrel nut openings, are not closed with corrosion inhibiting compound.

SUBTASK 57-21-21-200-003

(4) Do a check the locking feature of the barrel nuts in the winglet as follows (Figure 402):

(a) Refer to the table: Table 402.

(b) Apply a thin coat of corrosion inhibitiing compound - ZC-027L, A50001 or Cor-Ban 27L Compound, G50237 to all surfaces of the bolt threads.

(c) Install the four bolts [1], two bolts [2] and two bolts [3], one at a time, in number order, until seated in the correct hole.

(d) Install the 10 bolts [4], one at a time, until seated in the correct holes.

(e) Tighten each of the four bolts [1], two bolts [2] and two bolts [3] in proper number order.

1) Use a torque wrench (30 in-lbs), COM-1587 set to 18 in-lb (2 N·m).

NOTE: These bolts are 0.5000 in. (12.7000 mm) diameter.

2) Apply force with the torque wrench in a clockwise direction.

3) If the bolts can be tightened until the threads protrude, then the barrel nuts must be replaced.

(f) Tighten each of the 10 bolts [4].

1) Use a torque wrench (30 in-lbs), COM-1587 to 14 in-lb (2 N·m).

NOTE: These bolts are 0.4375 in. (11.1125 mm) diameter.

2) Apply force with the torque wrench in a clockwise direction.

3) If the bolts can be torqued until the threads protrude, then the barrel nuts in the winglet must be replaced.

SUBTASK 57-21-21-960-002

(5) To replace the barrel nuts in the winglet, do these steps:

(a) Remove the retainer and barrel nut through the access holes in the wing root of the winglet.

(b) Replace the barrel nut [14] for bolt [1], bolt [2] and bolt [3].

(c) Replace the barrel nut [16] for bolt [4].

(d) Install the barrel nut [14] with retainer [13] through the access holes in the wing root of the winglet.

(e) Install the barrel nut [16] with retainer [15] through the access holes in the wing root of the winglet.

SUBTASK 57-21-21-420-015

(6) Install the sling, SPL-2044 on the winglet (Figure 402).

(a) Remove the six bolts [17] from the replacement winglet where the attachment fittings for the sling, SPL-2044 will be attached to the winglet.

1) Store the 6 screws in a bag.

(b) Attach the 3 attachment fittings to the winglet with 6 screws and washers.

1) Tighten the 6 bolts to 30 in-lb (3 N·m) to 40 in-lb (5 N·m).

(c) Attach the sling straps to the 3 attachment fittings with the short line attached to the upper leading edge of the winglet.

SUBTASK 57-21-21-420-016

(7) Attach the sling, SPL-2044 to the overhead, 250 lb (113 kg) Capacity, Lift Range 20 to 60 in lift crane, STD-247. (Figure 402)

SUBTASK 57-21-21-500-004

(8) Operate the overhead crane to lift the sling until the 3 lines are equally supporting the winglet.

(a) Balance the overhead crane tension, so you can tighten the bolts that hold the winglet to the wing, without damage to the bolt threads or to the winglet.

SUBTASK 57-21-21-420-017

(9) Connect the two electrical connectors in the winglet:

(a) Do this task: Anti-Collision Lights - Connect the Electrical Connector, TASK 33-44-13-420-801.

(b) Do this task: Position Lights - Connect the Electrical Connector, TASK 33-43-10-420-801.

SUBTASK 57-21-21-400-009

(10) Connect the forward grounding strap [12] and aft grounding strap [11] (Figure 402).

(a) You must control movement of the sling and the winglet as you install the attachment fasteners for the grounding straps.

NOTE: A second person is recommended to control the movement of the winglet which is suspended from the crane and sling. A gust of wind could cause the winglet to move as you install the attachment fasteners for the grounding straps.

(b) Do not pull the winglet away from the wing, the forward and aft grounding straps are attached between the winglet and the wing outboard rib.

(c) Install the lug of the grounding strap on the electrical stud on the wing rib.

(d) Install a washer [8] and nut [9] and tighten.

SUBTASK 57-21-21-420-018

(11) Install the winglet (Figure 402).

(a) Refer to the table: Table 402.

(b) If you did not keep the bolts in separate bags or you replace the bolt, make sure the bolt grip length is correct for the installation location.

(c) Apply a thin coat of corrosion inhibitiing compound - ZC-027L, A50001 or Cor-Ban 27L Compound, G50237 to all surfaces of the bolt threads, shanks, and under the bolt head prior to installation.

(d) Install the four bolts [1], two bolts [2] and two bolts [3] with the order sequence in the table.

1) Refer to the table: Table 402.

2) Do not tighten the bolts to the final torque value at this time.

a) Install of the bolt [1] and washer [5] one at a time in number order until seated in the correct hole.

b) Install of the bolt [2] and washer [5] one at a time in number order until seated in the correct hole.

c) Install of the bolt [3] and washer [5] one at a time in number order until seated in the correct hole.

(e) Install the 10 bolts [4] and washers [6], one at a time, until seated; do not tighten the bolts to the final torque value at this time.

Table 402/57-21-21-993-805 Winglet Attachment Bolt Installation Order

ITEM	BOLT	INSTALLATION ORDER	LOCATION	TORQUE
[1]	BACB30US8K26 0.5000 inch (12.7000 mm) dia.	A	Upper Forward (Front)	600-700 inch-pounds (67.790-79.089 Nm)
[2]	BACB30US8K18 0.5000 inch (12.7000 mm) dia.	B	Lower Aft (Back)	600-700 inch-pounds (67.790-79.089 Nm)
[1]	BACB30US8K26 0.5000 inch (12.7000 mm) dia.	C	Lower Forward (Back)	600-700 inch-pounds (67.790-79.089Nm)
[2]	BACB30US8K18 0.5000 inch (12.7000 mm) dia.	D	Upper Aft (Back)	600-700 inch-pounds (67.790-79.089 Nm)
[1]	BACB30US8K26 0.5000 inch (12.7000 mm) dia.	E	Lower Forward (Front)	600-700 inch-pounds (67.790-79.089 Nm)
[2]	BACB30US8K18M 0.5000 inch (12.7000 mm) dia.	F	Upper Aft (Front)	600-700 inch-pounds (67.790-79.089 Nm)
[1]	BACB30US8K26 0.5000 inch (12.7000 mm) dia.	G	Upper Forward (Back)	600-700 inch-pounds (67.790-79.089 Nm)

HAP 001-013, 015-026, 028-030 (Continued)

(Continued)

ITEM	BOLT	INSTALLATION ORDER	LOCATION	TORQUE
[2]	BACB30US8K18 0.5000 inch (12.7000 mm) dia.	H	Lower Aft (Front)	600-700 inch-pounds (67.790-79.089 Nm)
[3]	BACB30US7K12 0.4375 inch (11.1125 mm) dia.	J — S	Middle Upper and Lower	400-450 inch-pounds (45.194-50.843 Nm)

(f) Tighten the four bolts [1], two bolts [2] and two bolts [3] in the order sequence in the table.

1) Refer to the table for the bolt torque values: Table 402.

2) Apply force with the torque wrench in a clockwise direction.

(g) Tighten each of the 10 bolts [4].

1) Refer to the table for the bolt torque value: Table 402.

2) Apply force with the torque wrench in a clockwise direction.

SUBTASK 57-21-21-020-021

(12) Remove the sling, SPL-2044 from the winglet.

(a) Remove the six bolts and washers from the 3 attachment fittings.

(b) Install the six bolts and washers in the threaded storage holes in the ends of the attachment fittings.

(c) Apply compound, C00528 to the six holes in the winglet and immediately install the bolts.

(d) Install thesix bolts [17].

(e) Tighten the bolts to 30 in-lb (3 N·m)-40 in-lb (5 N·m).

SUBTASK 57-21-21-390-009

(13) Apply a seal to the external gap on the upper surface of the winglet between point A and B with sealant, A00247 (Figure 402).

NOTE: It is optional to use sealant, A02315.

(a) To apply the sealant, refer to this task: Aerodynamic Smoother Application, TASK 51-31-00-390-806.

SUBTASK 57-21-21-790-002

(14) If the Absolute Vapor Seal has been moved or changed, do the vapor seal leak check of the dry bay.

(a) Do this task: Vapor Seal Leak Check, TASK 57-21-23-790-801.

HAP 031-054, 101-999

I. Put the Airplane Back to the Usual Condition

SUBTASK 57-21-21-410-002

(1) Install these access doors on the left or right wing.

HAP 031-054, 101-999 (Continued)

(a) Close these access doors.

Number	Name/Location
534BB	Main Tank Access Door - Wing Station 748
634BB	Main Tank Access Door - Wing Station 748

1) Do this task: Dry Bay Access Doors Installation, TASK 57-21-23-400-801.

SUBTASK 57-21-21-090-001

(2) Remove the ladders, work platform, COM-2480 or maintenance platform, SPL-659.

SUBTASK 57-21-21-440-001

(3) Do this task: Trailing Edge Flap System Reactivation, TASK 27-51-00-440-801.

SUBTASK 57-21-21-440-002

(4) Do this task: Reactivate the Leading Edge Flaps and Slats, TASK 27-81-00-440-801.

HAP 001-013, 015-026, 028-030

J. Put the Airplane Back to the Usual Condition

SUBTASK 57-21-21-410-003

(1) Install these access doors on the left or right wing.

(a) Close these access doors.

Number	Name/Location
534BB	Main Tank Access Door - Wing Station 748
634BB	Main Tank Access Door - Wing Station 748

1) Do this task: Dry Bay Access Doors Installation, TASK 57-21-23-400-801.

SUBTASK 57-21-21-090-002

(2) Remove the ladders, work platform, COM-2480 or maintenance platform, SPL-659.

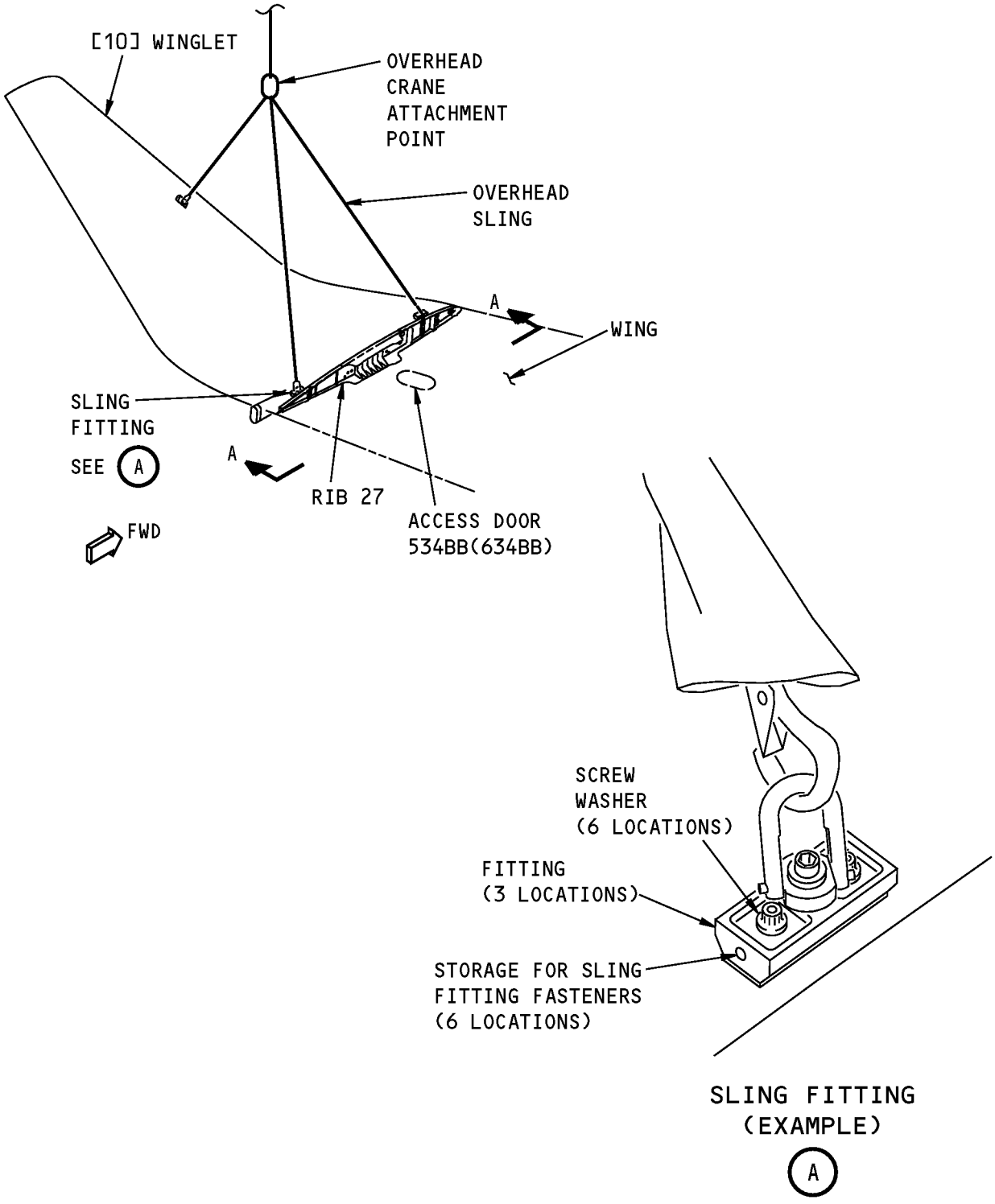
SUBTASK 57-21-21-440-003

(3) Do this task: Trailing Edge Flap System Reactivation, TASK 27-51-00-440-801.

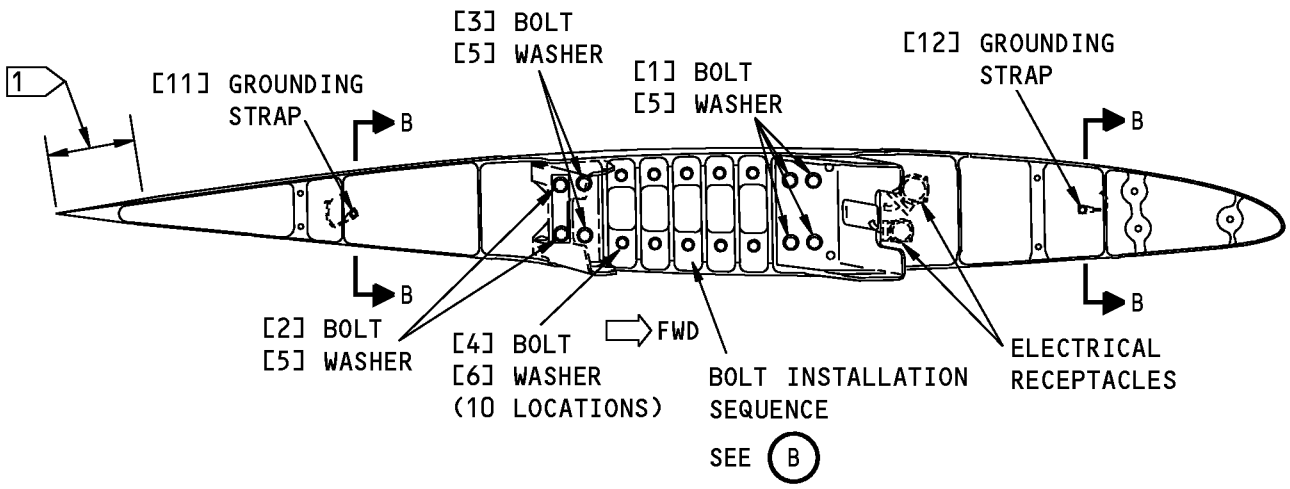
SUBTASK 57-21-21-440-004

(4) Do this task: Reactivate the Leading Edge Flaps and Slats, TASK 27-81-00-440-801.

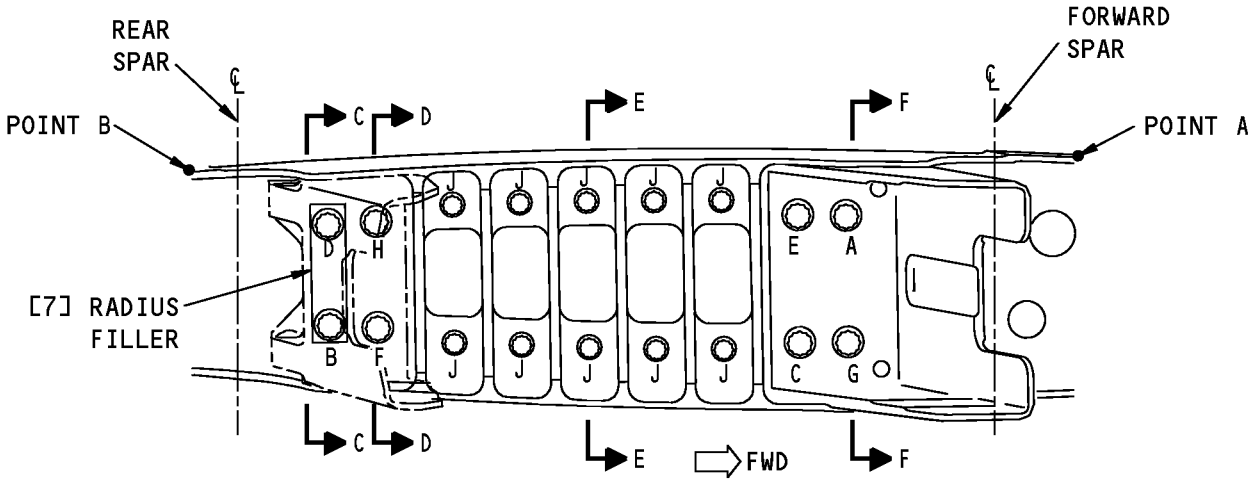
END OF TASK



Winglet Installation
Figure 401 (Sheet 1 of 4)/57-21-21-990-801



RIB 27
(VIEW IN THE OUTBOARD DIRECTION)
A-A



BOLT INSTALLATION SEQUENCE
(B)

NOTE: 1. A THRU H ARE THE ORDER OF THE INSTALLATION FOR THE BOLTS.

2. H THRU A IS THE REVERSE ORDER FOR REMOVAL OF THE BOLTS.

1 6.000 ±0.500 INCH (152.4 ±12.7 mm), ONLY UPPER SURFACE, MAXIMUM ALLOWED MISFAIR 0.1200 INCH (3.048 mm)

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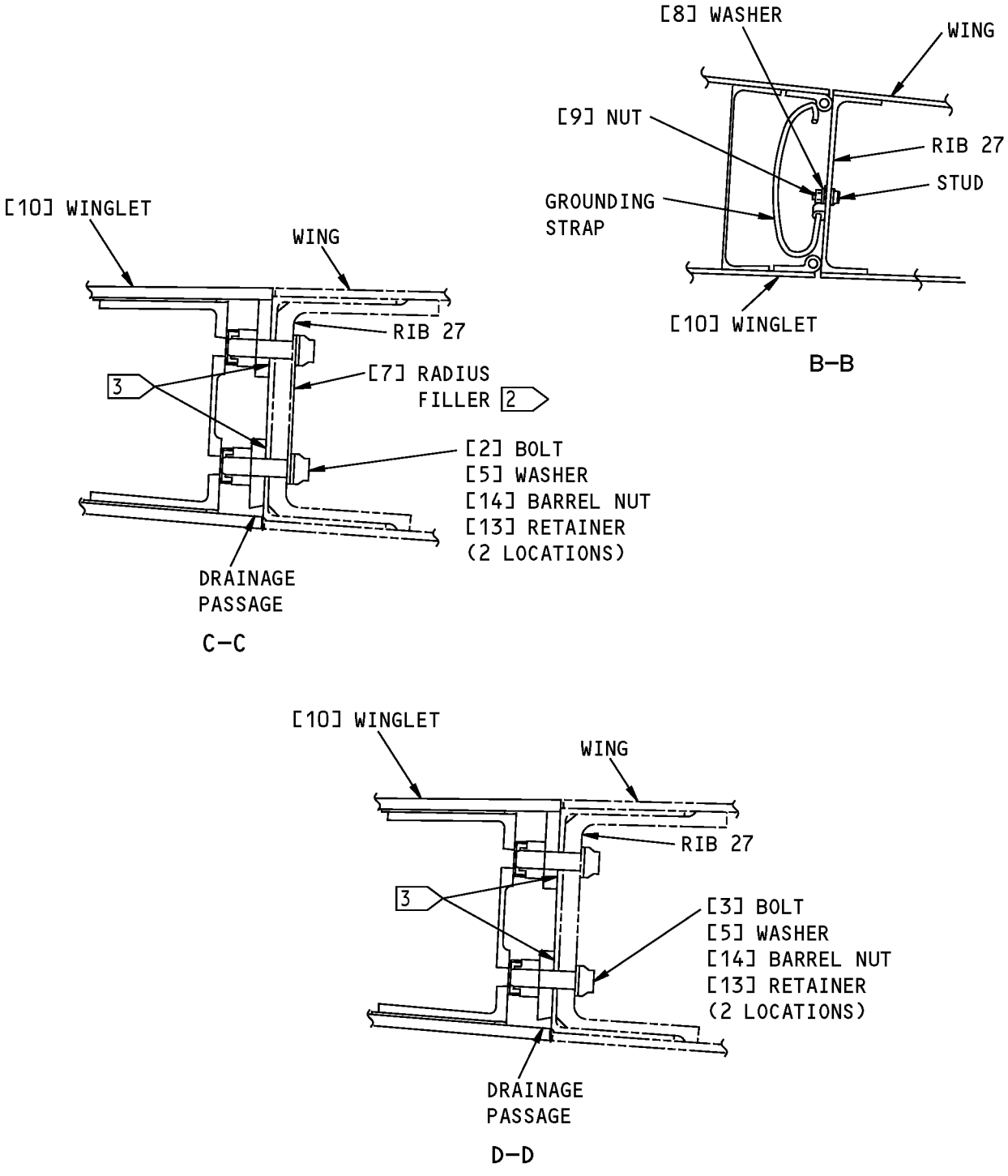
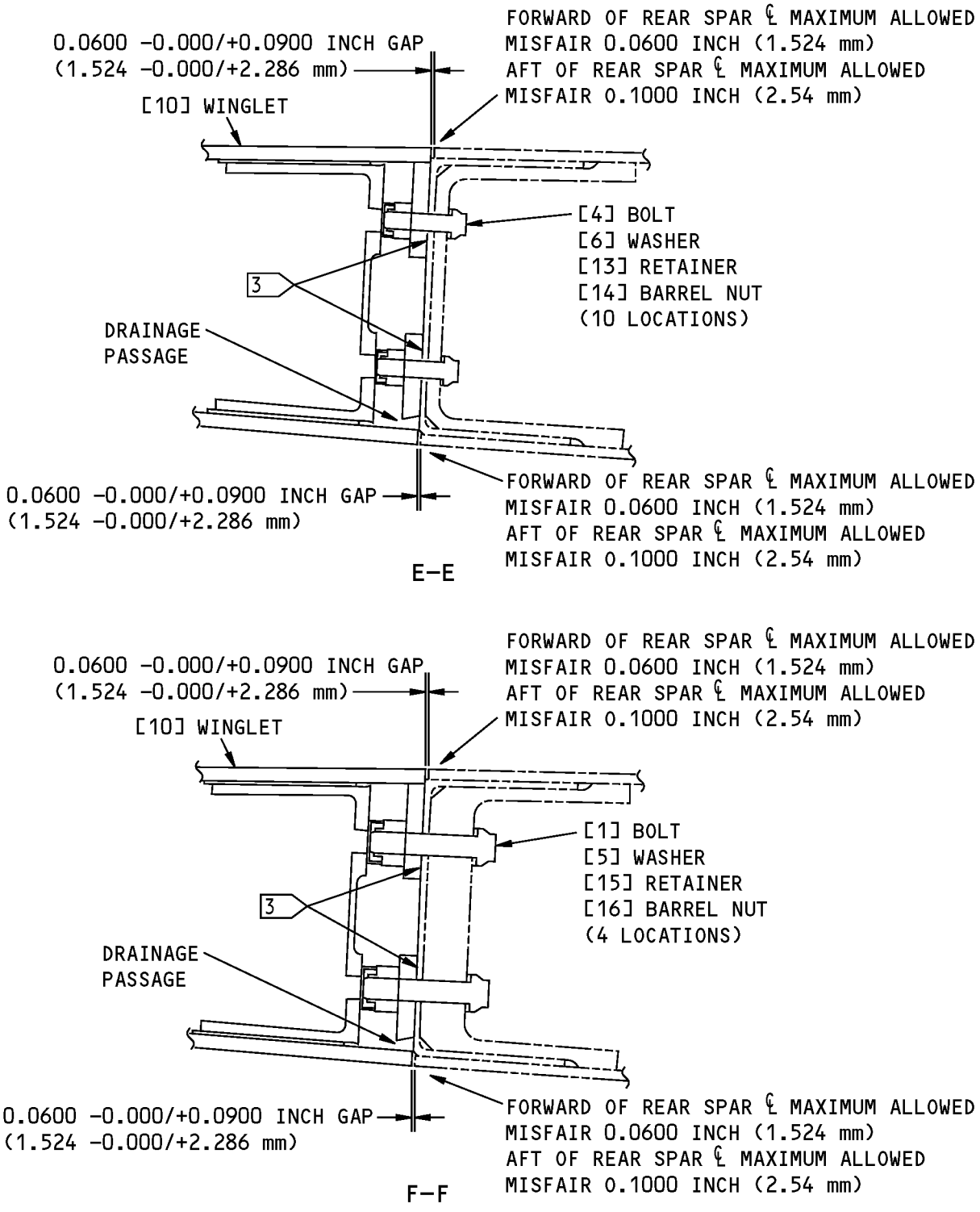
Winglet Installation
Figure 401 (Sheet 2 of 4)/57-21-21-990-801



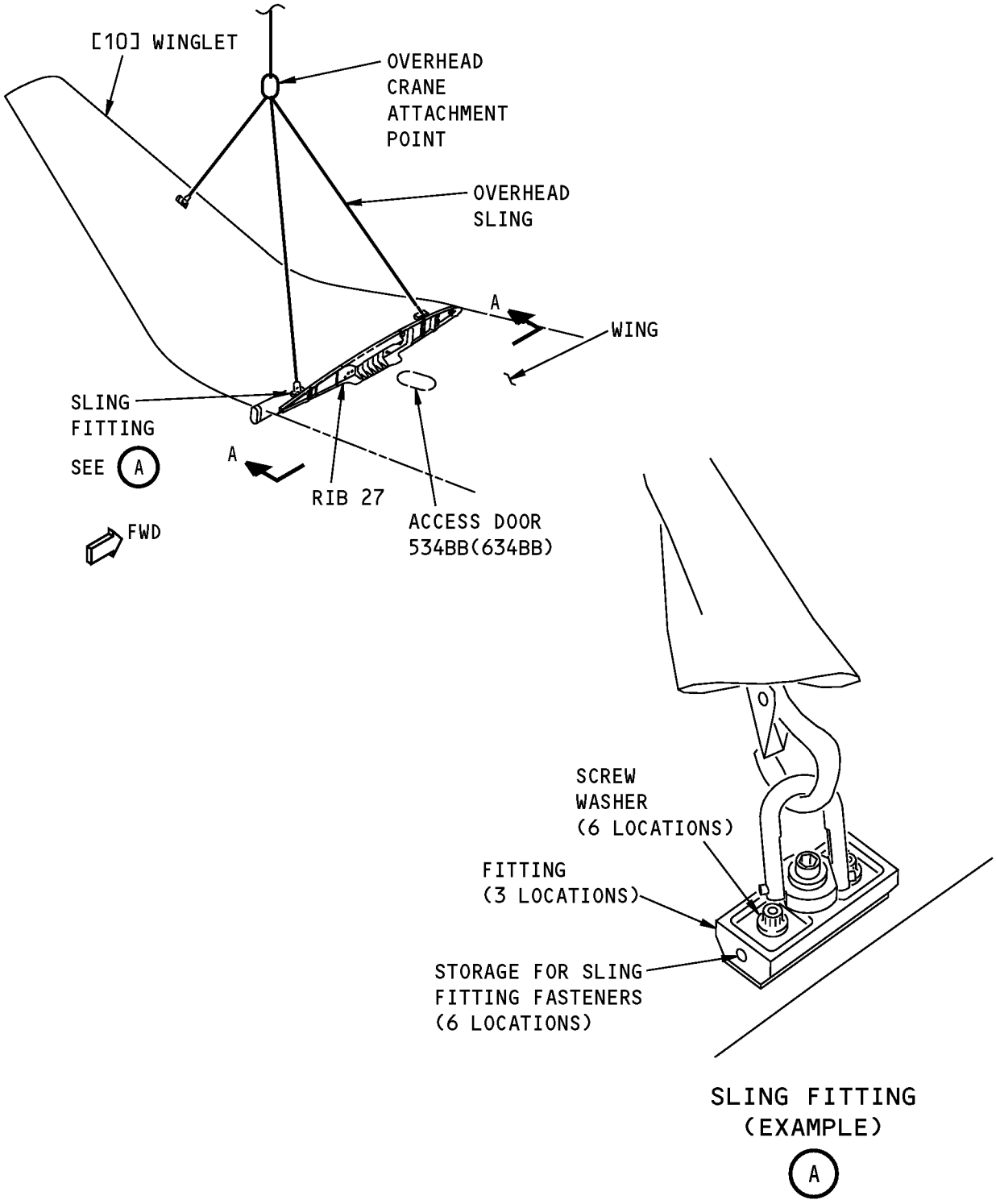
2 ONLY BOLT [2] INSTALLATION

3 APPLY CORROSION INHIBITING COMPOUND

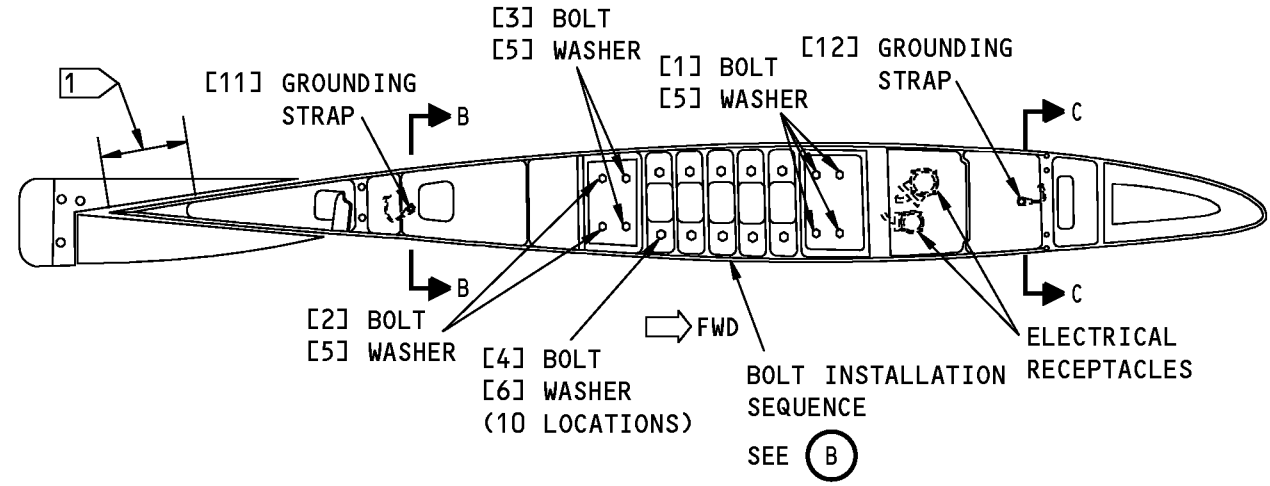
Winglet Installation
Figure 401 (Sheet 3 of 4)/57-21-21-990-801



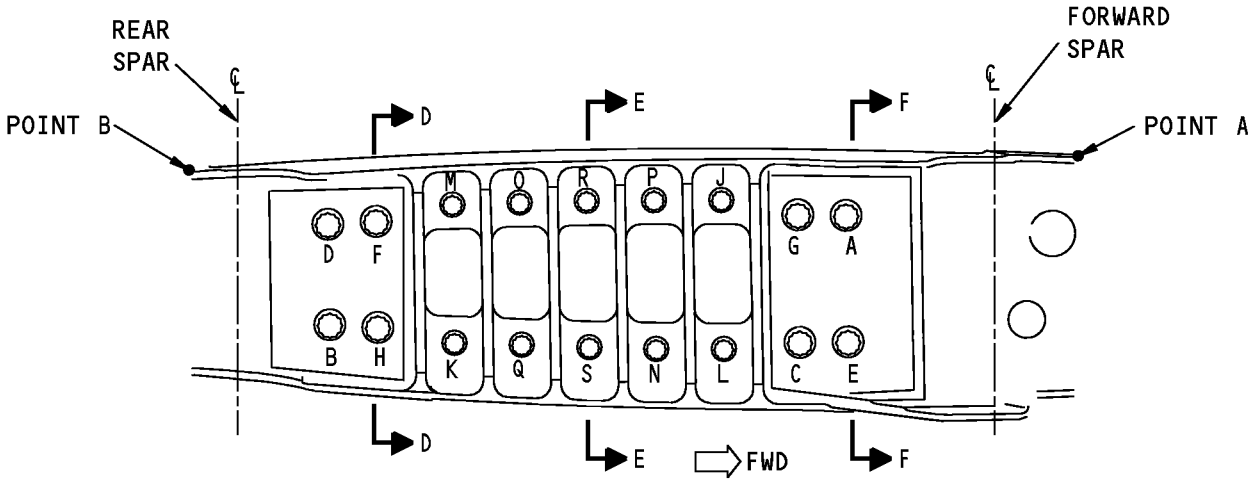
Winglet Installation
Figure 401 (Sheet 4 of 4)/57-21-21-990-801



Winglet Installation
Figure 402 (Sheet 1 of 4)/57-21-21-990-808



RIB 27
(VIEW IN THE OUTBOARD DIRECTION)
A-A



BOLT INSTALLATION SEQUENCE
(B)

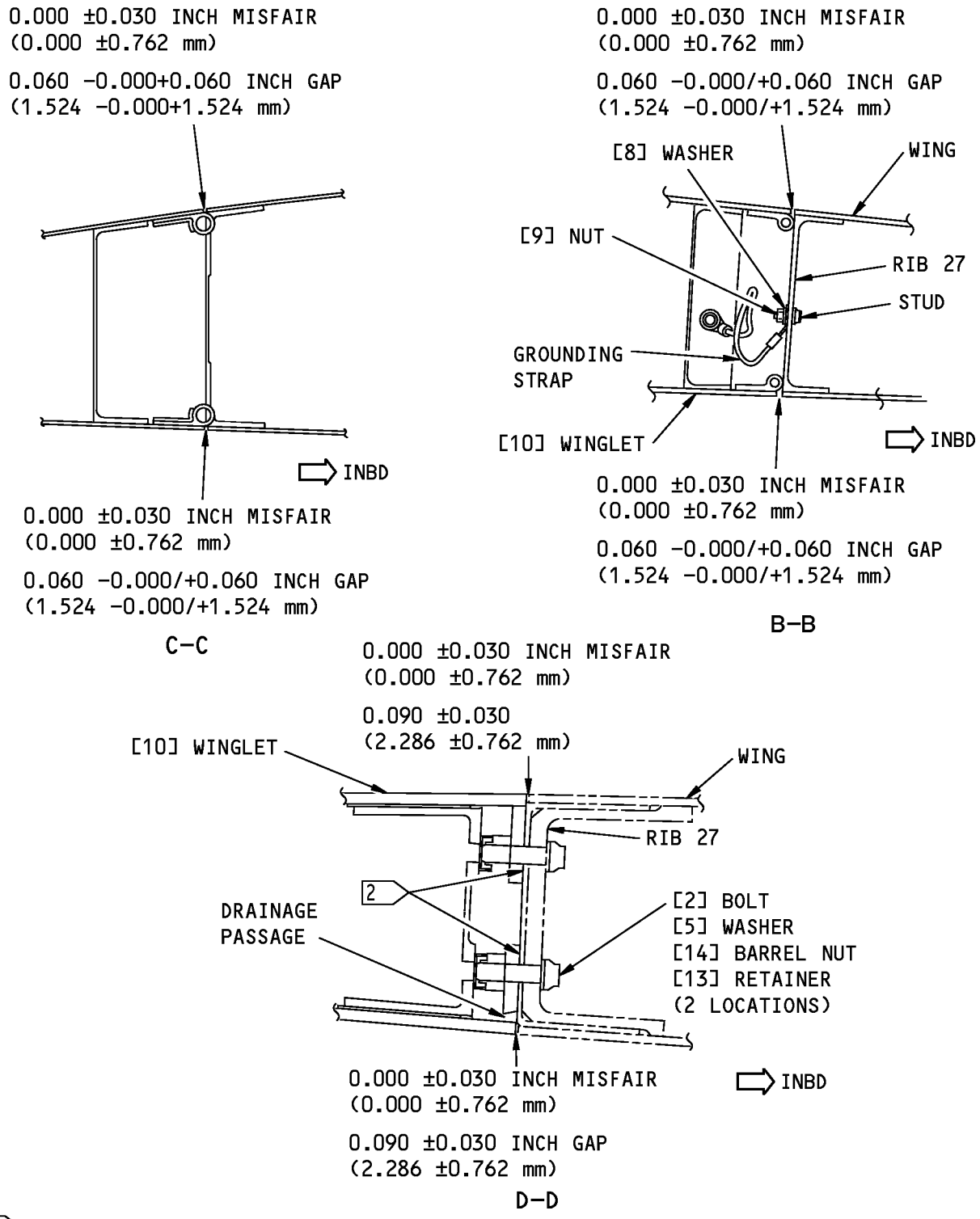
NOTE: 1. A THRU H ARE THE ORDER OF THE INSTALLATION FOR THE BOLTS.

2. H THRU A IS THE REVERSE ORDER FOR REMOVAL OF THE BOLTS.

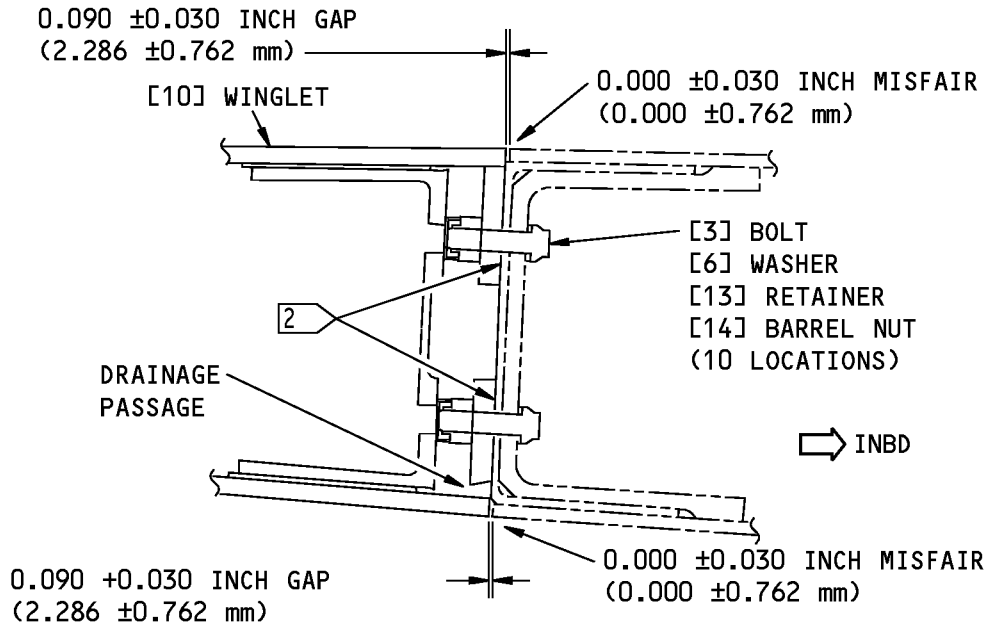
1 6.000 ±0.500 INCH (152.4 ±12.7 mm), ONLY UPPER SURFACE, MAXIMUM ALLOWED MISFAIR 0.1200 INCH (3.048 mm)

1413322 S0000254810_V2

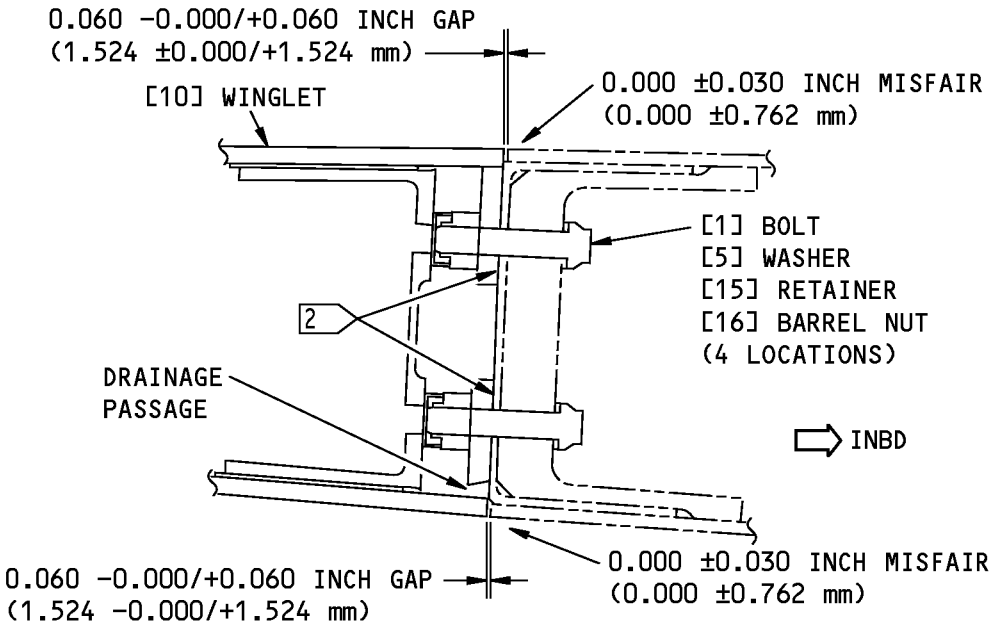
Winglet Installation
Figure 402 (Sheet 2 of 4)/57-21-21-990-808



Winglet Installation
Figure 402 (Sheet 3 of 4)/57-21-21-990-808



E–E



F–F

1413777 S0000254831_V3

Winglet Installation
Figure 402 (Sheet 4 of 4)/57-21-21-990-808

WINGLET - PAINTING/CLEANING

1. General

A. This procedure contains one task.

(1) This task is to prepare the winglet for painting.

TASK 57-21-21-300-801

2. Winglet - Painting

A. References

Reference	Title
51-21-11-150-801	Paint Stripping (P/B 701)

B. General

SUBTASK 57-21-21-370-003

(1) Aviation Partners blended winglets may be repainted with a compatible enamel topcoat applied to a existing single coat of topcoat finish with a logo paint scheme. During the repainting, two coats of paint may be applied, but not exceeded. One color coat may be applied to the entire exterior surface of the winglet, with the exception of the mandatory masked areas defined below. A second coat may be applied above winglet station 4 for the customer logo or decorative markings. Reference APB AMM Supplement, Part 1, 57-00–00, Figure 3., for winglet station 4 definition.

(a) If the winglet has already received two full coats of enamel finish, excluding any logos above station 4, then both layers, plus any logos and decorative markings, must be stripped per Paint Stripping, TASK 51-21-11-150-801.

C. Masking Requirements

SUBTASK 57-21-21-950-001

(1) The three polished leading edge skins from the winglet root up to, but not including the wingtip fairing. This includes the navigation lens assembly mounted in the inboard leading edge skin.

(2) The Drawing Identified Ground Support Equipment (GSE) attach locations that are not in use with exposed threads.

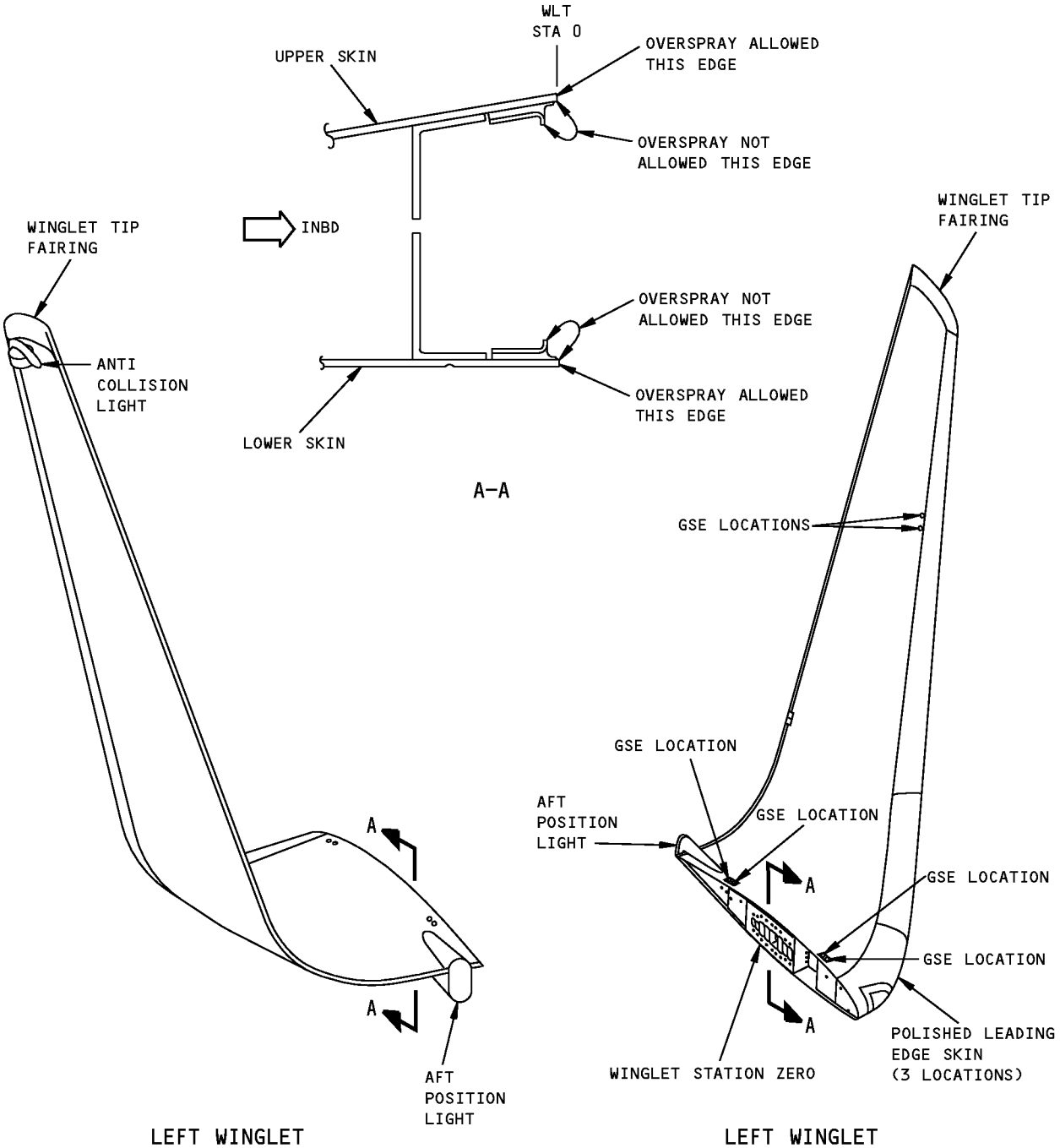
NOTE: If a fastener is an installed at the GSE location, then masking is not required

(3) Inboard surfaces at winglet station zero. Overspray is allowed onto inboard upper and lower skin edges. Overspray is not allowed on bulb seal. Refer to Figure 701 for overspray allowance and masking requirements.

(4) The exposed portion of the aft position light glass lens.

(5) If installed, the exposed portion of the anti-collision light glass lens.

———————— END OF TASK ————————



Winglet Masking Requirements
Figure 701/57-21-21-990-807

WINGLET POSITION AND ANTI-COLLISION LIGHTS AND LENS - MAINTENANCE PRACTICES

1. General

A. This procedure gives these tasks:

(1) The removal of the forward position and anti-collision light panel (Single Forward Lens) on the winglet.

(2) The removal of the lens for the forward position and anti-collision light panel (Single Forward Lens).

(3) The installation of the lens for the forward position and anti-collision light panel (Single Forward Lens).

(4) The installation of the forward position and anti-collision light panel (Single Forward Lens) on the winglet.

(5) The removal of the aft position light fairing on the winglet.

(6) The installation of the aft position light fairing on the winglet.

(7) The removal of the forward position and anti-collision light panel (Dual Forward Lens) on the winglet.

(8) The installation of the forward position and anti-collision light panel (Dual Forward Lens) on the winglet.

(9) The removal of the lens mask for the forward position and anti-collision light panel (Single Forward Lens).

(10) The installation of the lens mask for the forward position and anti-collision light panel (Single Forward Lens).

HAP ALL; AIRPLANES WITH SINGLE FORWARD LENS CONFIGURATION

(11) Clean the lens mask.

TASK 57-21-22-000-801

2. Forward Position Light and Anti-Collision Light Panel (Single Forward Lens) Removal

(Figure 202, Figure 203)

A. General

(1) This procedure gives the task to remove the leading edge panel with the single forward lens from the winglet.

(2) The removal of the leading edge panel gives access to the stair-step bracket for the anti-collision light and forward position lights in the winglet.

B. References

Reference	Title
33-43-10-020-801	Position Lights - Disconnect the Electrical Connector (P/B 201)
33-44-13-020-801	Anti-Collision Lights - Disconnect the Electrical Connector (P/B 201)

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
COM-2209	Pliers - Electrical Connector (Part #: TG69, Supplier: 06324, A/P Effectivity: 737-600, -700, -700C, -700ER, -700QC, -800, -900, -900ER, -BBJ)
SPL-768	Sealant Removal Tool, Hardwood or Plastic (Part #: ST982, Supplier: 81205, A/P Effectivity: 737-ALL)

D. Location Zones

Zone	Area
500	Left Wing
527	Left Winglet
600	Right Wing
627	Right Winglet

E. Access Panels

Number	Name/Location
527AB	Winglet Access Panel
627AB	Winglet Access Panel

F. Prepare for the Procedure

SUBTASK 57-21-22-865-001

WARNING: DO NOT TOUCH THE ANTI-COLLISION LIGHT FOR 10 MINUTES AFTER YOU REMOVE ELECTRICAL POWER. AN ELECTRICAL SHOCK CAN CAUSE INJURIES TO PERSONNEL OR DAMAGE TO EQUIPMENT.

(1) Open these circuit breakers and install safety tags:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
A	12	C00113	EXTERIOR LIGHTING POSITION RIGHT
A	13	C00114	EXTERIOR LIGHTING POSITION LEFT
B	13	C00115	EXTERIOR LIGHTING ANTI COLLISION WHITE

SUBTASK 57-21-22-010-002

(2) Open the applicable access panel [21] under the left or right winglet (Figure 202).

(a) Open these access panels:

Number	Name/Location
527AB	Winglet Access Panel
627AB	Winglet Access Panel

(b) Install a bolt in the center of the door into the nutplate.

NOTE: Installation of the bolt will help you remove the access panel.

(c) Remove 12 bolts [22] to remove the access panel.

G. Procedure

SUBTASK 57-21-22-020-002

(1) Disconnect the two electrical connectors, using a pair of connector pliers, COM-2209 (Figure 207).

(a) Do this task: Position Lights - Disconnect the Electrical Connector, TASK 33-43-10-020-801.

(b) Do this task: Anti-Collision Lights - Disconnect the Electrical Connector, TASK 33-44-13-020-801.

SUBTASK 57-21-22-020-003

(2) Remove the leading edge panel [31] (Figure 203).

(a) Remove the 53 bolts [32] on the leading edge panel.

NOTE: Do not remove the screws on the inboard side of the leading edge skin. The screws hold a bulb seal to the leading edge skin.

(b) Remove the leading edge panel that contains the light lens and the lights.

(c) Tag all the bolts and keep for the bolts for the installation procedure.

SUBTASK 57-21-22-160-004

(3) Remove all sealant in the gap between the leading edge panel [31] and the outboard lead edge panel and the upper skin panel and the lower skin panel with a sealant removal tool, SPL-768.

———————— END OF TASK ————————

TASK 57-21-22-000-802

3. Forward Position Light and Anti-Collision Light Lens (Single Forward Lens) Removal

(Figure 204, Figure 206, Figure 208)

A. General

(1) This procedure gives the task to remove the single forward lens in the leading edge panel. The leading edge panel was removed from the winglet.

B. References

Reference	Title
57-21-22-200-801	Forward Position Light and Anti-Collision Light Lens (Single Lens) Inspection (P/B 601)

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-768	Sealant Removal Tool, Hardwood or Plastic (Part #: ST982, Supplier: 81205, A/P Effectivity: 737-ALL)

D. Location Zones

Zone	Area
500	Left Wing
527	Left Winglet
600	Right Wing
627	Right Winglet

E. Procedure

SUBTASK 57-21-22-010-003

(1) Remove the leading edge panel from the winglet.

(a) Do this task: Forward Position Light and Anti-Collision Light Panel (Single Forward Lens) Removal, TASK 57-21-22-000-801.

SUBTASK 57-21-22-000-001

(2) Remove the stair-step, light bracket [41] from the leading edge panel [31] (Figure 204).

(a) Remove the 10 bolts [42], six bolts on the upper surface and four bolts on the lower surface, to remove the stair-step light bracket.

(b) Tag the 10 bolts and keep for the bolts for the installation procedure.

SUBTASK 57-21-22-010-001

(3) Remove the nuts [56], washers [57], retainer [55], cushion [54] and bolts [52] that attach the lens [53] to the skin panel [31] (Figure 208).

SUBTASK 57-21-22-030-001

(4) Separate the lens [53] from the leading edge panel [31] (Figure 206).

SUBTASK 57-21-22-160-005

(5) Remove all sealant in the gap between the leading edge panel [31] and the lens [53] with a sealant removal tool, SPL-768.

SUBTASK 57-21-22-210-001

(6) Inspect the lens [53] for damage.

(a) Do this task: Forward Position Light and Anti-Collision Light Lens (Single Lens) Inspection, TASK 57-21-22-200-801.

HAP ALL

——————— END OF TASK ———————

TASK 57-21-22-000-804

4. Aft Position Light Fairing Removal

A. General

(1) This procedure gives the task to remove the canoe fairing for the aft position light under the winglet.

B. References

Reference	Title
27-51-00-040-801	Trailing Edge Flap System Deactivation (P/B 201)
27-81-00-040-801	Deactivate the Leading Edge Flaps and Slats (P/B 201)
33-43-12-960-801	Aft Position Light - Lamp Replacement (P/B 201)
33-43-12-960-802	Aft Position Light - Light Assembly Replacement (P/B 201)

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
COM-2209	Pliers - Electrical Connector (Part #: TG69, Supplier: 06324, A/P Effectivity: 737-600, -700, -700C, -700ER, -700QC, -800, -900, -900ER, -BBJ)
COM-2480	Platform - Mobile Elevating Work Platform SJ II Series (Part #: 4620, Supplier: 3AF08, A/P Effectivity: 737-ALL)
SPL-659	Platform - Maintenance Lift, 3 ft Minimum Height, 12.5 ft Maximum Height (Part #: 8662-010, Supplier: 00994, A/P Effectivity: 737-ALL)
STD-1064	Scraper - Phenolic, Hard Resin

D. Location Zones

Zone	Area
500	Left Wing
527	Left Winglet
600	Right Wing
627	Right Winglet

E. Prepare for the Procedure

SUBTASK 57-21-22-865-005

(1) Open these circuit breakers and install safety tags:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
A	12	C00113	EXTERIOR LIGHTING POSITION RIGHT
A	13	C00114	EXTERIOR LIGHTING POSITION LEFT

SUBTASK 57-21-22-040-005

(2) Do this task: Trailing Edge Flap System Deactivation, TASK 27-51-00-040-801.

SUBTASK 57-21-22-040-006

(3) Do this task: Deactivate the Leading Edge Flaps and Slats, TASK 27-81-00-040-801.

SUBTASK 57-21-22-490-003

(4) Get a ladder, work platform, COM-2480 or maintenance platform, SPL-659.

SUBTASK 57-21-22-430-004

(5) Do these steps to prepare metal support equipment such as work platforms, work/maintenance stands, ladders.

NOTE: These steps apply to all metal support equipment within a 50-foot radius of an open fuel tank.

(a) All support equipment must be in place before you begin the procedure.

(b) Bond the support equipment at an approved airplane bonding location.

(c) Ground the support equipment to the same earth ground as the airplane.

F. Procedure

SUBTASK 57-21-22-020-004

(1) Remove the canoe fairing [63] for the aft position light Figure 201.

(a) Remove the two screws [61] and eight screws [62] from the canoe fairing [63] which is forward of the aft collision light on the lower surface of the winglet.

1) Store the screws in a separate bag for the installation procedure; tag the screws as the lengths are different for the attachment location.

(b) Use a hard resin phenolic scraper, STD-1064 to remove the sealant around the canoe fairing.

(c) Remove the canoe fairing [63].

SUBTASK 57-21-22-020-009

(2) If it is necessary, remove the aft position light assemby.

(a) Disconnect the electrical connector [64] using a pair of connector pliers, COM-2209.

(b) Do this task: Aft Position Light - Light Assembly Replacement, TASK 33-43-12-960-802.

(c) Store the four bolts, screw and washer in a bag for the installation procedure.

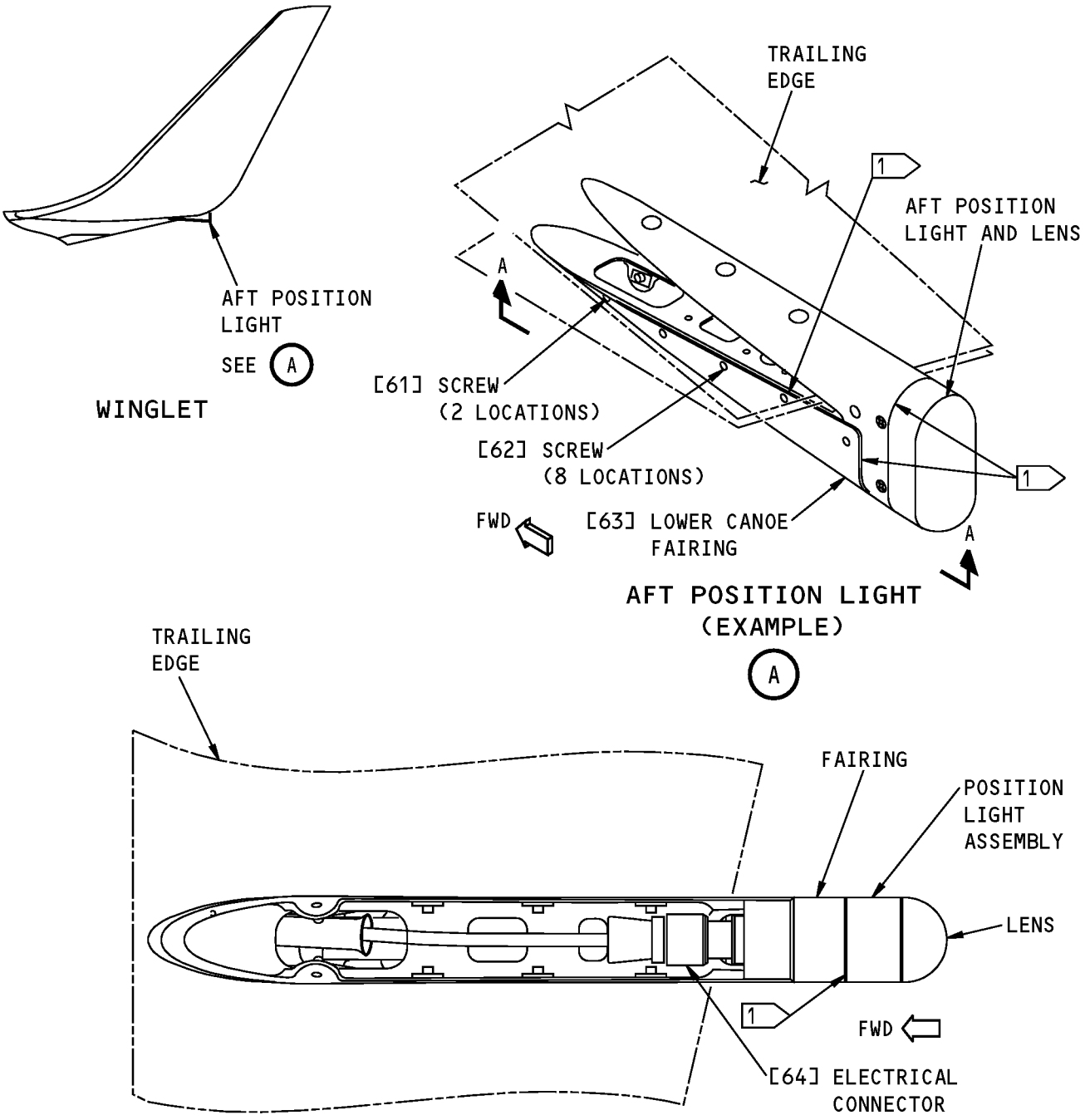
SUBTASK 57-21-22-020-010

(3) If it is necessary, remove the aft position light lens.

(a) Do this task to get the steps for the lens removal: Aft Position Light - Lamp Replacement, TASK 33-43-12-960-801.

(b) Store the fasteners in a separate bag for the installation procedure.

—————— END OF TASK ——————



1 APPLY SEALANT TO SEAM AROUND FAIRING.

Winglet Aft Position Light Fairing Installation
Figure 201/57-21-22-990-812

TASK 57-21-22-400-801

5. Aft Position Light Fairing Installation

A. General

(1) This procedure gives the task to install the canoe fairing for the aft position light under the winglet.

B. References

Reference	Title
27-51-00-440-801	Trailing Edge Flap System Reactivation (P/B 201)
27-81-00-440-801	Reactivate the Leading Edge Flaps and Slats (P/B 201)
33-43-12-960-801	Aft Position Light - Lamp Replacement (P/B 201)
33-43-12-960-802	Aft Position Light - Light Assembly Replacement (P/B 201)

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
COM-2209	Pliers - Electrical Connector (Part #: TG69, Supplier: 06324, A/P Effectivity: 737-600, -700, -700C, -700ER, -700QC, -800, -900, -900ER, -BBJ)
COM-2480	Platform - Mobile Elevating Work Platform SJ II Series (Part #: 4620, Supplier: 3AF08, A/P Effectivity: 737-ALL)
SPL-659	Platform - Maintenance Lift, 3 ft Minimum Height, 12.5 ft Maximum Height (Part #: 8662-010, Supplier: 00994, A/P Effectivity: 737-ALL)
STD-810	Spatula - Fillet Smoothing, Hardwood or Plastic

D. Consumable Materials

Reference	Description	Specification
A00247	Sealant - Pressure And Environmental - Chromate Type	BMS 5-95
A50009	Sealant - Low Density, Chromate Type Synthetic Rubber	BMS5-142, Class B-1/2

E. Location Zones

Zone	Area
500	Left Wing
527	Left Winglet
600	Right Wing
627	Right Winglet

F. Procedure

SUBTASK 57-21-22-420-008

(1) If it is necessary, install the aft position light lens.

(a) Do this task to get the steps for the lens installation: Aft Position Light - Lamp Replacement, TASK 33-43-12-960-801.

SUBTASK 57-21-22-420-009

(2) If it is necessary, install the aft position light assembly.

(a) Remove the tags from the bolts for the lower canoe fairing.

(b) Do this task: Aft Position Light - Light Assembly Replacement, TASK 33-43-12-960-802.

(c) Apply sealant, A00247 or sealant, A50009 at the gap between the fairing body and the aft position light assembly.

NOTE: Keep the sealant away from the lens.

1) Make the sealant smooth and flush with the adjacent surfaces with a hardwood or plastic fillet smoothing spatula, STD-810.

(d) Connect the electrical connector [64] using the connector pliers, COM-2209 Figure 201.

SUBTASK 57-21-22-390-001

(3) Install the aft position light fairing Figure 201.

(a) Remove the tags from the screws for the lower canoe fairing.

(b) Put the lower canoe fairing [63] in the position.

(c) Install the two screws [61] and eight screws [62] that hold the lower canoe fairing to the lower surface of the winglet.

1) Tighten to 15-17 inch-pounds (1.69-1.92 newton-meters).

(d) Apply sealant, A00247 or sealant, A50009 at the gap between the upper fairing and the lower canoe fairing [63] as needed.

1) Make the sealant smooth and flush with the adjacent surfaces with a hardwood or plastic fillet smoothing spatula, STD-810.

G. Put the Airplane Back to the Usual Condition

SUBTASK 57-21-22-090-003

(1) Remove the ladder, work platform, COM-2480 or maintenance platform, SPL-659.

SUBTASK 57-21-22-440-005

(2) Do this task: Trailing Edge Flap System Reactivation, TASK 27-51-00-440-801.

SUBTASK 57-21-22-440-006

(3) Do this task: Reactivate the Leading Edge Flaps and Slats, TASK 27-81-00-440-801.

SUBTASK 57-21-22-865-006

(4) Remove the safety tags and close these circuit breakers:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
A	12	C00113	EXTERIOR LIGHTING POSITION RIGHT
A	13	C00114	EXTERIOR LIGHTING POSITION LEFT

END OF TASK

HAP ALL; AIRPLANES WITH SINGLE FORWARD LENS CONFIGURATION

TASK 57-21-22-400-803

6. Forward Position Light and Anti-Collision Light Lens (Single Forward Lens) Installation

(Figure 204, Figure 206, Figure 208)

A. General

(1) This procedure gives the task to install the single forward lens in the leading edge panel. The leading edge panel was removed from the winglet.

B. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
COM-1550	Meter - Bonding (Approved Explosion Proof & Intrinsically Safe) (Part #: C15292 (MODEL T477W), Supplier: 01014, A/P Effectivity: 737-ALL) (Part #: M1, Supplier: 3AD17, A/P Effectivity: 737-ALL) (Part #: M1B, Supplier: 3AD17, A/P Effectivity: 737-ALL)
STD-297	Drill - Hand
STD-1328	Machine - Drilling, Electrical or Pneumatic

C. Consumable Materials

Reference	Description	Specification
A00027	Adhesive - Silicone Rubber, 1 Part, RTV	BAC5010, Type 60
A00562	Adhesive - High Strength Silicone Rubber, One-Part - RTV157	
A50011	Sealant - Silicone, Aluminum Color - RTV109	
B00130	Alcohol - Isopropyl	TT-I-735
B00541	Cleaner - General Purpose Household Detergent	
G00034	Cotton Wiper - Process Cleaning Absorbent Wiper (Cheesecloth, Gauze)	BMS15-5
G01061	Water - Distilled	

D. Location Zones

Zone	Area
500	Left Wing
527	Left Winglet
600	Right Wing
627	Right Winglet

E. Procedure

SUBTASK 57-21-22-410-002

(1) Install the new lens [53] using the best fit possible within the leading edge panel [31] (Figure 206).

(a) Make sure that the leading edge panel [31] does not ride the lens radius.

SUBTASK 57-21-22-410-003

(2) Use a hand drill, STD-297 or electrical or pneumatic drilling machine, STD-1328 and drill bit to make 19 pilot holes through the lens [53] to match the holes in the leading edge panel [31].

(a) Make the pilot holes with a smaller diameter than the final hole diameter of 0.323 in. (8.2 mm) to 0.327 in. (8.3 mm).

SUBTASK 57-21-22-410-004

(3) Remove the lens [53] from the leading edge panel [31].

SUBTASK 57-21-22-430-001

(4) Increase the diameter of the pilot holes to a diameter of 0.323 in. (8.2 mm) to 0.327 in. (8.3 mm).

SUBTASK 57-21-22-410-005

(5) Measure the lens thickness at each hole location to obtain the dimension "x" (Figure 208).

(a) Measure the "x" dimension at each hole location to determine the correct spacer [51].

(b) Install the spacer [51] to the lens [53].

1) Apply RTV109 sealant, A50011 or RTV157 adhesive, A00562 or adhesive, A00027 to the spacer and install the spacer with wet adhesive/sealant.

2) Install the spacer flush to the outer surface of the lens [53].

SUBTASK 57-21-22-410-006

(6) Determine the correct length of the bolt [52] for each lens hole.

(a) Refer to the figure: Forward Position and Anti-Collision Lights (Lens Attachment)/Figure 208, Table 1.

SUBTASK 57-21-22-410-007

(7) Assemble the lens [53] to the leading edge panel [31] (Figure 208).

(a) Apply RTV109 sealant, A50011 or RTV157 adhesive, A00562 or adhesive, A00027 to the faying surface of the lens or the leading edge panel.

(b) Install the bolts [52], cushion [54], retainer [55], washer [57] and nuts [56].

(c) Tighten the nuts to 10 in-lb (1.1 N·m) to 14 in-lb (1.6 N·m).

(d) Do not let the sealant cover the lens area.

1) Use a clean cotton wiper, G00034cotton wiper, G00034 and only distilled water, G01061 with general purpose household detergent cleaner, B00541 or alcohol, B00130 to clean the lens.

NOTE: The polycarbonate lens material is sensitive to volatile solvents such as MEK and acetone.

SUBTASK 57-21-22-410-008

(8) Fill the gap flush 0.000 ±0.010 in. (0.000 ±0.254 mm) between the leading edge panel and the lens.

(a) Apply RTV109 sealant, A50011 or RTV157 adhesive, A00562 or adhesive, A00027 to fill the gap.

(b) Do not allow the sealant to cover the lens area inside the step.

SUBTASK 57-21-22-410-009

(9) Install the stair-step, light bracket [41] to the leading edge panel [31] (Figure 204).

(a) Install the 10 bolts [42], six bolts on the upper surface and four bolts on the lower surface, to install the stair-step light bracket.

SUBTASK 57-21-22-765-001

(10) Do a check of the electrical resistance between the leading edge panel and the leading edge ribs with an bonding meter, COM-1550.

(a) Make sure the electrical resistance does not exceed 0.0005 ohms.

SUBTASK 57-21-22-410-010

(11) Install the leading edge panel on the winglet.

(a) Do this task: Forward Position Light and Anti-Collision Light Panel (Single Forward Lens) Installation, TASK 57-21-22-400-802.

—————— END OF TASK ——————

TASK 57-21-22-400-802

7. Forward Position Light and Anti-Collision Light Panel (Single Forward Lens) Installation

(Figure 202, Figure 203)

A. General

(1) This procedure gives the task to install the leading edge panel with the single forward lens on the winglet.

(2) The removal of the leading edge panel gave access to the stair-step bracket for the anti-collision light and forward position lights in the winglet.

B. References

Reference	Title
33-43-10-420-801	Position Lights - Connect the Electrical Connector (P/B 201)
33-43-10-710-801	Position Lights - Operational Test (P/B 201)
33-44-00-710-801	Anti-Collision Lights - Operational Test (P/B 501)
33-44-13-420-801	Anti-Collision Lights - Connect the Electrical Connector (P/B 201)

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
COM-1550	Meter - Bonding (Approved Explosion Proof & Intrinsically Safe) (Part #: C15292 (MODEL T477W), Supplier: 01014, A/P Effectivity: 737-ALL) (Part #: M1, Supplier: 3AD17, A/P Effectivity: 737-ALL) (Part #: M1B, Supplier: 3AD17, A/P Effectivity: 737-ALL)
COM-2209	Pliers - Electrical Connector (Part #: TG69, Supplier: 06324, A/P Effectivity: 737-600, -700, -700C, -700ER, -700QC, -800, -900, -900ER, -BBJ)
STD-810	Spatula - Fillet Smoothing, Hardwood or Plastic

D. Consumable Materials

Reference	Description	Specification
A00247	Sealant - Pressure And Environmental - Chromate Type	BMS 5-95
A50009	Sealant - Low Density, Chromate Type Synthetic Rubber	BMS5-142, Class B-1/2
C00528	Compound - Corrosion Preventive, Petroleum Hot Application (Soft Film)	MIL-C-11796, Class III
G02185	Agent - Peelable Parting (Valspar - 4A-183 Green Strippable Coating) (Formerly 598-5002 Green Strippable Coating)	BAC 5000

E. Location Zones

Zone	Area
500	Left Wing
527	Left Winglet
600	Right Wing
627	Right Winglet

F. Access Panels

Number	Name/Location
527AB	Winglet Access Panel
627AB	Winglet Access Panel

G. Procedure

SUBTASK 57-21-22-400-001

(1) Install the leading edge panel [31] in the winglet (Figure 203).

(a) Install the 53 bolts [32].

1) Tighten the bolts to 20 in-lb (2.26 N·m) to 25 in-lb (2.82 N·m).

SUBTASK 57-21-22-765-002

(2) Do a check of the electrical resistance between the leading edge panel to the leading edge ribs with an bonding meter, COM-1550.

(a) Make sure the electrical resistance does not exceed 0.0005 ohms.

SUBTASK 57-21-22-390-002

(3) Apply sealant, A00247 or sealant, A50009 at the gap between the leading edge panel [31] and outboard leading edge panel and the upper skin panel and the lower skin panel.

(a) Make the sealant smooth and flush with the adjacent surfaces with a hardwood or plastic fillet smoothing spatula, STD-810.

SUBTASK 57-21-22-400-002

(4) Connect the two electrical connectors using a pair of connector pliers, COM-2209.

(a) Do this task: Position Lights - Connect the Electrical Connector, TASK 33-43-10-420-801.

(b) Do this task: Anti-Collision Lights - Connect the Electrical Connector, TASK 33-44-13-420-801.

SUBTASK 57-21-22-410-001

(5) Close the applicable access panel [21] on the left or right winglet (Figure 202).

NOTE: The access panel has an oblong shape. The panel is put inside the winglet and then pulled outward into position with the bolt installed in the center of the panel.

(a) Close these access panels:

Number	Name/Location
527AB	Winglet Access Panel
627AB	Winglet Access Panel

(b) If it is necessary, apply a form in place and removable gasket of sealant, A00247 at the faying surfaces for the access panel inside the winglet.

1) Apply a parting agent, Valspar 4A-183 green strippable coating, G02185, to the panel.

(c) Install a bolt in the center of the access panel to install the panel in the winglet.

(d) Put the panel inside the winglet and pull the panel outward with the bolt installed in the center of the panel.

(e) Install the 12 bolts [22].

1) Apply corrosion preventive compound, C00528 to the hole, countersink or counterbore and immediately install the fastener.

2) Tighten to 18 in-lb (2.03 N·m) to 25 in-lb (2.82 N·m).

3) The countersunk heads must be flush with the surface, -0.0100 in. (-0.2540 mm) low to 0.0000 in. (0.0000 mm) high.

(f) Remove the bolt from the center of the winglet access panel.

H. Put the Airplane Back to the Usual Condition

SUBTASK 57-21-22-865-002

(1) Remove the safety tags and close these circuit breakers:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
A	12	C00113	EXTERIOR LIGHTING POSITION RIGHT
A	13	C00114	EXTERIOR LIGHTING POSITION LEFT
B	13	C00115	EXTERIOR LIGHTING ANTI COLLISION WHITE

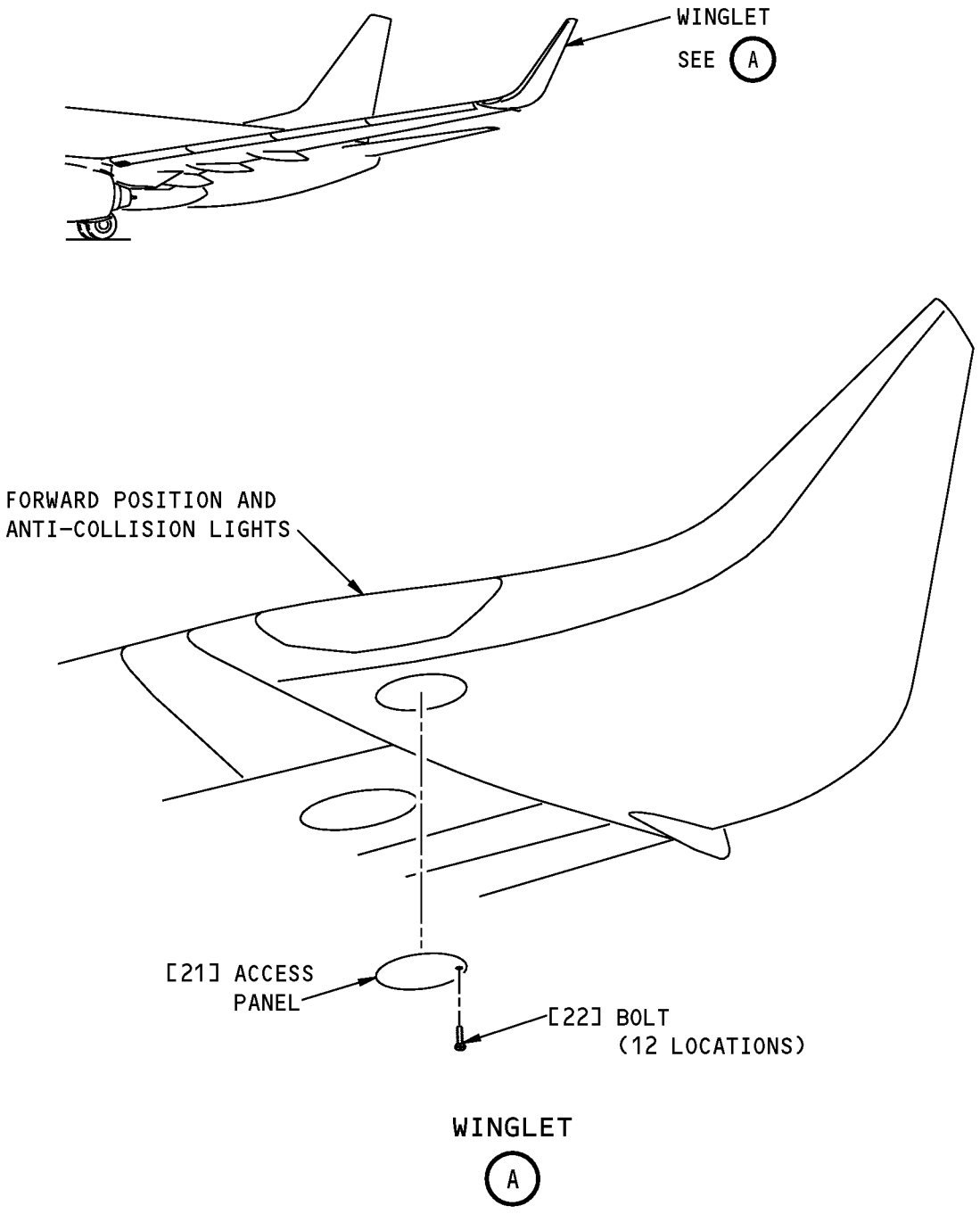
SUBTASK 57-21-22-710-001

(2) Do this task: Position Lights - Operational Test, TASK 33-43-10-710-801.

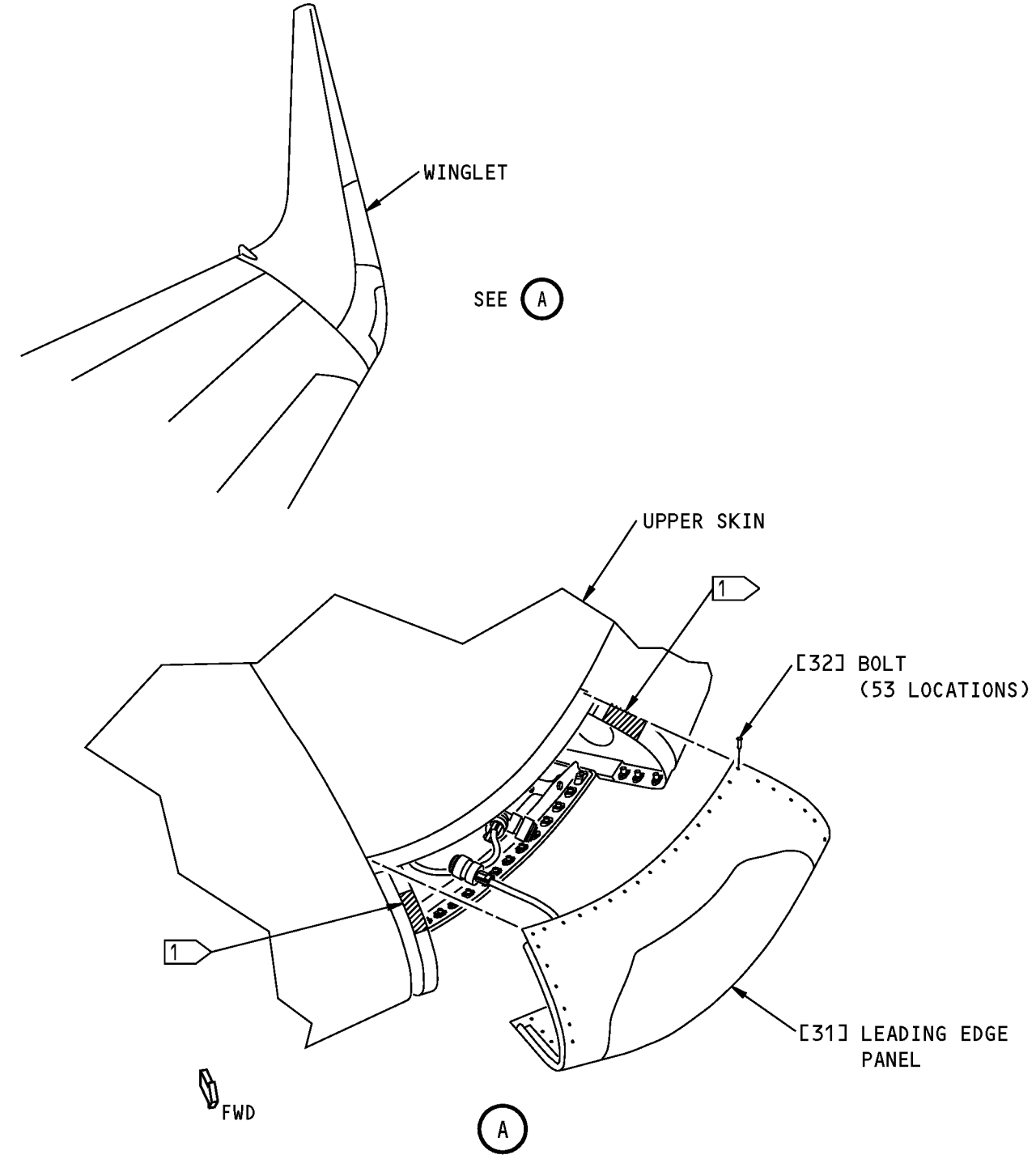
SUBTASK 57-21-22-710-002

(3) Do this task: Anti-Collision Lights - Operational Test, TASK 33-44-00-710-801.

END OF TASK

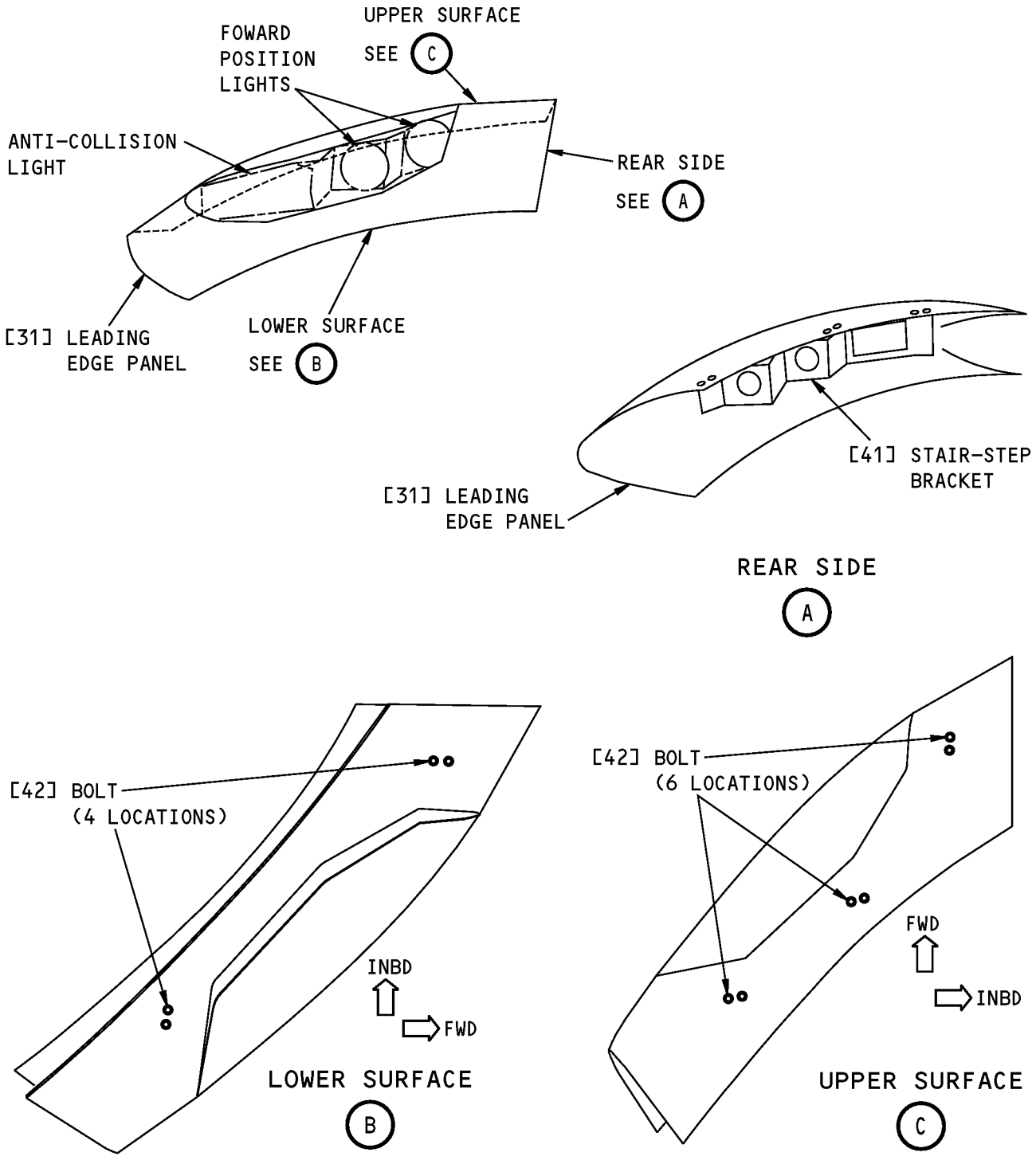


Winglet Access Panel
Figure 202/57-21-22-990-810

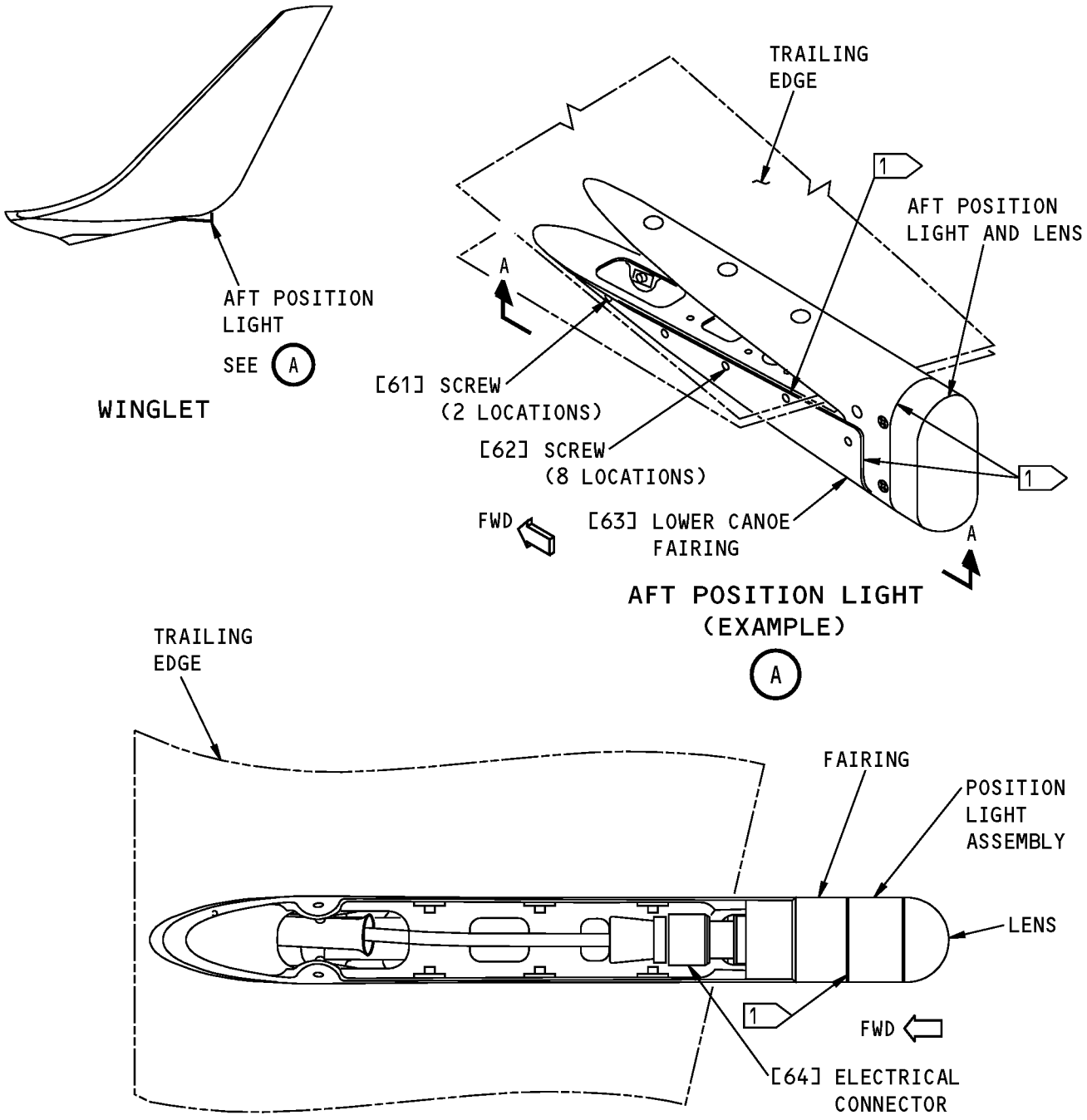


1 ELECTRICAL BONDING PATH

Winglet Forward Leading Edge Light Panel
Figure 203/57-21-22-990-811

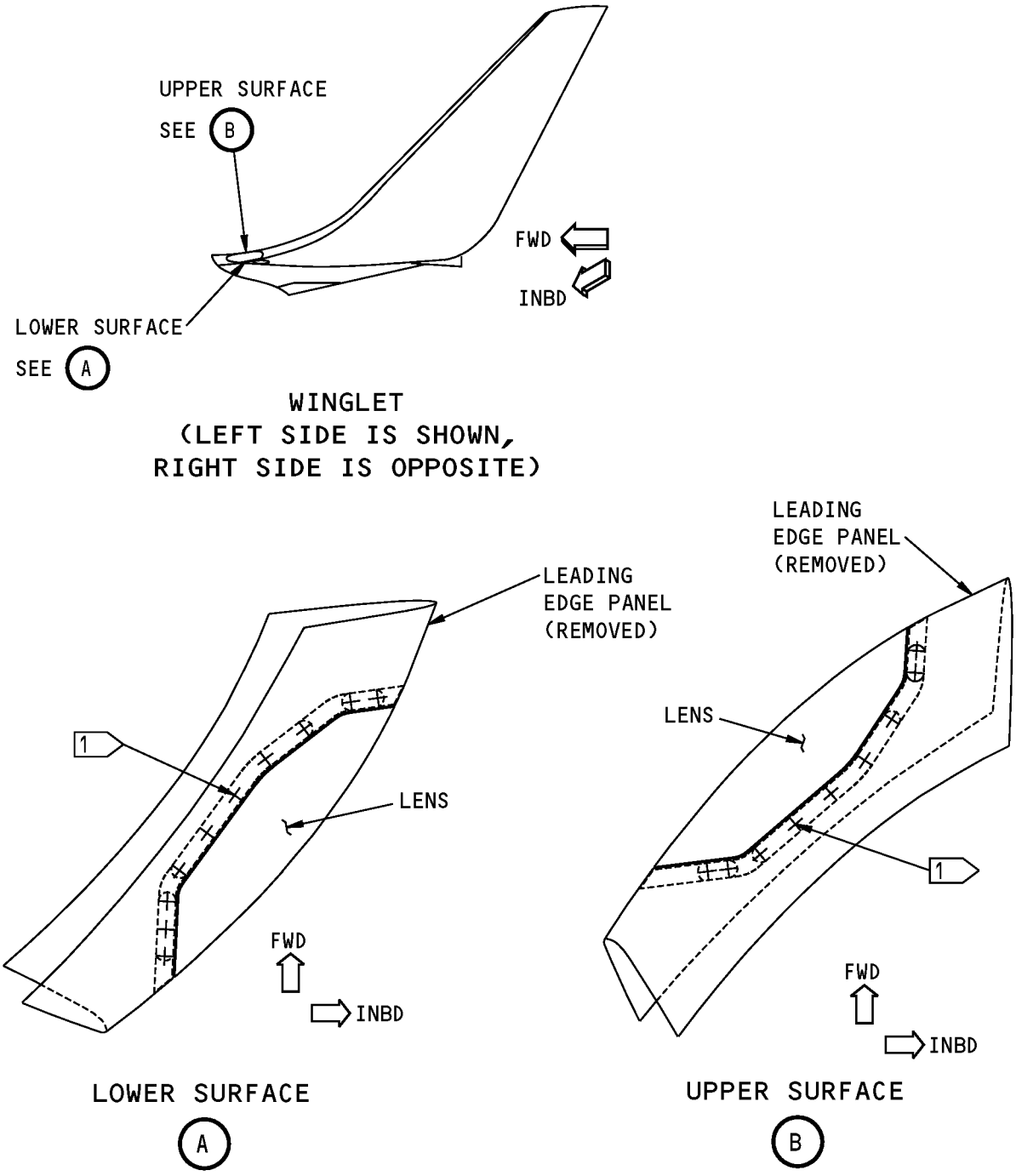


Winglet Forward Position and Anti-Collision Light Bracket
Figure 204/57-21-22-990-801



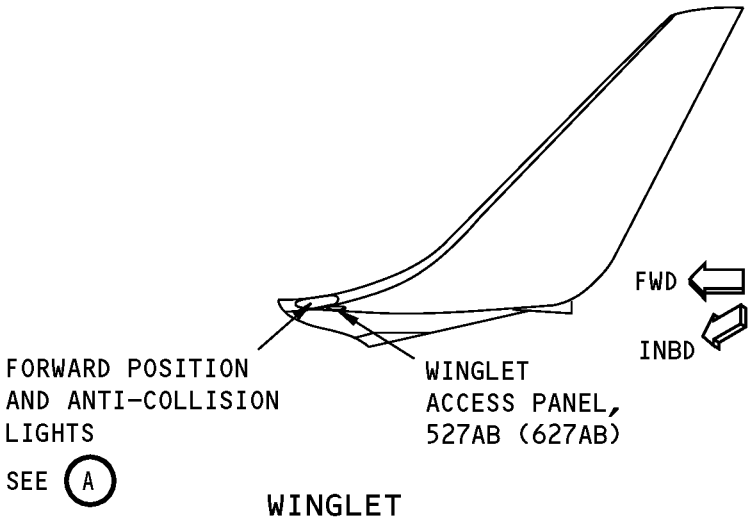
1 APPLY SEALANT TO SEAM AROUND FAIRING.

Winglet Aft Position Light Fairing
Figure 205/57-21-22-990-802

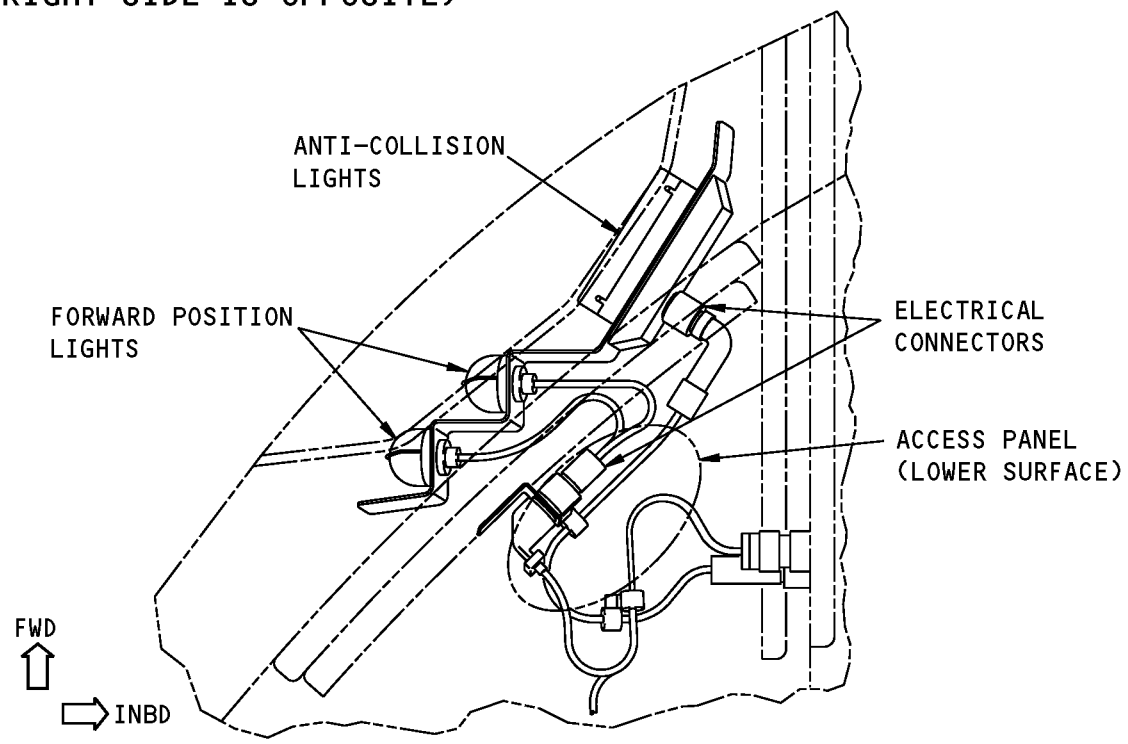


1 BOLTHOLE PATTERN AROUND LENS; DRILL THROUGH PANEL INTO LENS

Forward Position and Anti-Collision Lights (Lens)
Figure 206/57-21-22-990-803

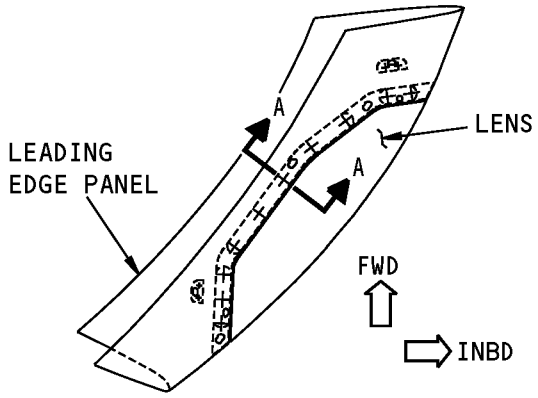


WINGLET
(LEFT SIDE IS SHOWN,
RIGHT SIDE IS OPPOSITE)

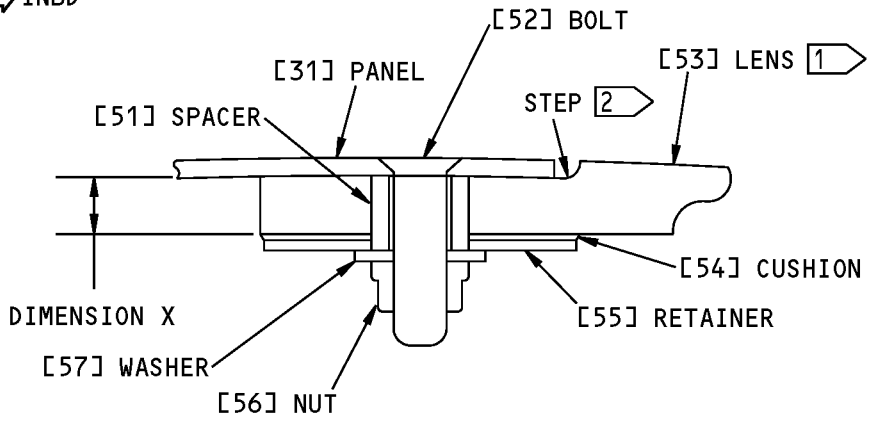


FORWARD POSITION AND ANTI-COLLISION LIGHTS
ELECTRICAL CONNECTORS
A

Forward Position and Anti-Collision Lights (Electrical Connectors)
Figure 207/57-21-22-990-804



LENS ATTACHMENT



A-A

DIMENSION X INCH (mm)	SLEEVE SPACER	BOLT
0.160-0.164 (4.064-4.166)	NAS43DD3-13FC	BACB30VF3K4
0.165-0.179 (4.191-4.547)	NAS43DD3-14FC	BACB30VF3K4
0.180-0.194 (4.572-4.298)	NAS43DD3-15FC	BACB30VF3K4
0.195-0.210 (4.953-5.334)	NAS43DD3-16FC	BACB30VF3K5
0.211-0.225 (5.359-5.715)	NAS43DD3-17FC	BACB30VF3K5
0.226-0.241 (5.740-6.121)	NAS43DD3-18FC	BACB30VF3K5
0.242-0.250 (6.147-6.350)	NAS43DD3-19FC	BACB30VF3K5

TABLE A

1 NO SEALANT ON LENS

2 APPLY SEALANT IN STEP

Forward Position and Anti-Collision Lights (Lens Attachment)
Figure 208/57-21-22-990-805

HAP ALL; AIRPLANES WITH DUAL FORWARD LENS CONFIGURATION

TASK 57-21-22-000-803

8. Forward Position Light and Anti-Collision Light Lens (Dual Forward Lens) Removal

(Figure 209)

A. General

(1) This procedure gives the task to remove the dual forward lens in the leading edge panel.

B. References

Reference	Title
27-51-00-040-801	Trailing Edge Flap System Deactivation (P/B 201)
27-81-00-040-801	Deactivate the Leading Edge Flaps and Slats (P/B 201)
57-21-22-200-802	Forward Position Light and Anti-Collision Light Lens (Dual Lens) Inspection (P/B 601)

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
COM-2480	Platform - Mobile Elevating Work Platform SJ II Series (Part #: 4620, Supplier: 3AF08, A/P Effectivity: 737-ALL)
SPL-659	Platform - Maintenance Lift, 3 ft Minimum Height, 12.5 ft Maximum Height (Part #: 8662-010, Supplier: 00994, A/P Effectivity: 737-ALL)
SPL-768	Sealant Removal Tool, Hardwood or Plastic (Part #: ST982, Supplier: 81205, A/P Effectivity: 737-ALL)

D. Location Zones

Zone	Area
500	Left Wing
534	Left Wing - Dry Bay
600	Right Wing
634	Right Wing - Dry Bay

E. Prepare for the Procedure

SUBTASK 57-21-22-865-003

WARNING: DO NOT TOUCH THE ANTI-COLLISION LIGHT FOR 10 MINUTES AFTER YOU REMOVE ELECTRICAL POWER. AN ELECTRICAL SHOCK CAN CAUSE INJURIES TO PERSONNEL OR DAMAGE TO EQUIPMENT.

(1) Open these circuit breakers and install safety tags:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
A	12	C00113	EXTERIOR LIGHTING POSITION RIGHT
A	13	C00114	EXTERIOR LIGHTING POSITION LEFT
B	13	C00115	EXTERIOR LIGHTING ANTI COLLISION WHITE

SUBTASK 57-21-22-040-001

(2) Do this task: Trailing Edge Flap System Deactivation, TASK 27-51-00-040-801.

SUBTASK 57-21-22-040-002

(3) Do this task: Deactivate the Leading Edge Flaps and Slats, TASK 27-81-00-040-801.

SUBTASK 57-21-22-490-001

(4) Get a ladder, work platform, COM-2480 or maintenance platform, SPL-659.

SUBTASK 57-21-22-430-002

(5) Do these steps to prepare metal support equipment such as work platforms, work/maintenance stands, ladders.

NOTE: These steps apply to all metal support equipment within a 50-foot (15.24 meter) radius of an open fuel tank.

(a) All support equipment must be in place before you begin the procedure.

(b) Bond the support equipment at an approved airplane bonding location.

(c) Ground the support equipment to the same earth ground as the airplane.

F. Lens Assembly Removal

SUBTASK 57-21-22-020-005

(1) Remove the forward position light lens assembly [85] from the outboard leading edge skin.

(a) Remove 14 screws [81] from the lens retainer.

(b) Remove the screw [83] and nut [84] to disconnect the electrical bonding jumper [87] from the lens assembly.

(c) Remove old sealant from the faying surfaces of the skin with a sealant removal tool, SPL-768.

SUBTASK 57-21-22-020-006

(2) Remove the anti-collision lght lens assembly [88] from the outboard leading edge skin.

(a) Remove 12 screws [82] from the lens retainer.

(b) Remove the screw [83] and nut [84] to disconnect the electrical bonding jumper [87] from the lens assembly.

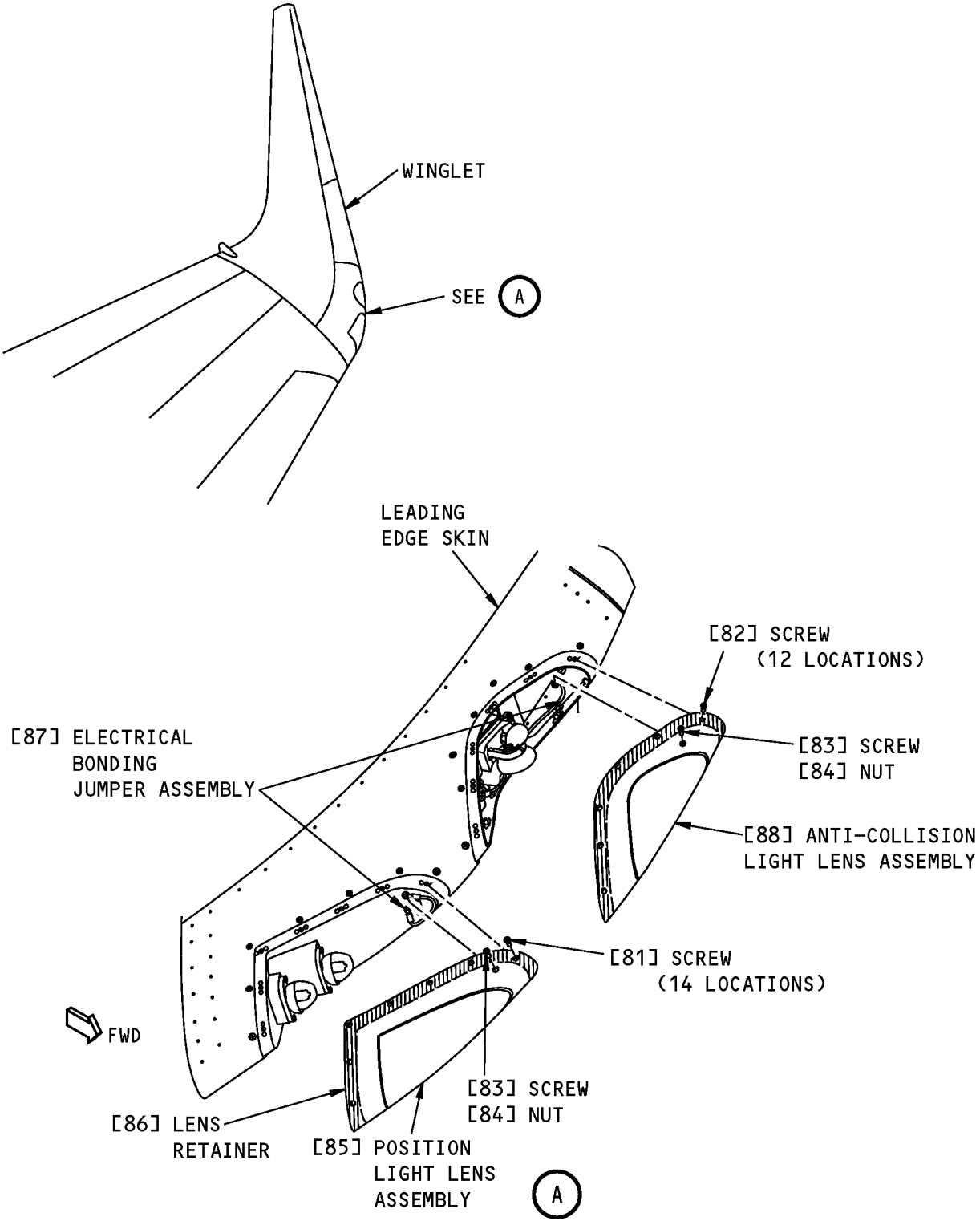
(c) Remove old sealant from the faying surfaces of the skin with a sealant removal tool, SPL-768.

SUBTASK 57-21-22-212-003

(3) Inspect the lens for damage.

(a) Do this task: Forward Position Light and Anti-Collision Light Lens (Dual Lens) Inspection, TASK 57-21-22-200-802.

END OF TASK



Forward Dual Lens Installation
Figure 209/57-21-22-990-807

TASK 57-21-22-400-804

9. Forward Position Light and Anti-Collision Light Lens (Dual Forward Lens) Installation

(Figure 209)

A. General

(1) This procedure gives the task to install the dual forward lens in the leading edge panel.

B. References

Reference	Title
27-51-00-440-801	Trailing Edge Flap System Reactivation (P/B 201)
27-81-00-440-801	Reactivate the Leading Edge Flaps and Slats (P/B 201)
33-43-10-710-801	Position Lights - Operational Test (P/B 201)
33-44-00-710-801	Anti-Collision Lights - Operational Test (P/B 501)

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
COM-1550	Meter - Bonding (Approved Explosion Proof & Intrinsically Safe) (Part #: C15292 (MODEL T477W), Supplier: 01014, A/P Effectivity: 737-ALL) (Part #: M1, Supplier: 3AD17, A/P Effectivity: 737-ALL) (Part #: M1B, Supplier: 3AD17, A/P Effectivity: 737-ALL)
COM-2480	Platform - Mobile Elevating Work Platform SJ II Series (Part #: 4620, Supplier: 3AF08, A/P Effectivity: 737-ALL)
SPL-659	Platform - Maintenance Lift, 3 ft Minimum Height, 12.5 ft Maximum Height (Part #: 8662-010, Supplier: 00994, A/P Effectivity: 737-ALL)
STD-810	Spatula - Fillet Smoothing, Hardwood or Plastic

D. Consumable Materials

Reference	Description	Specification
A00160	Sealant - Firewall - Hydraulic Fluid Resistant	BMS5-63

E. Location Zones

Zone	Area
500	Left Wing
527	Left Winglet
600	Right Wing
627	Right Winglet

F. Install the Lens Assembly

SUBTASK 57-21-22-420-005

(1) Attach the forward position light lens assembly [85] to the leading edge.

(a) Attach the bonding jumper [87] to the lens assembly.

1) Position the jumper lug and install the screw [83] and nut [84].

(b) Measure the electrical resistance between the lens assembly and the light assembly with a bonding meter, COM-1550.

1) The maximum resistance must not be more than 0.0025 ohms.

(c) Apply firewall sealant, A00160 to the faying surface of the lens assembly and immediately install the lens assembly.

(d) Install the 14 screws [81] and tighten to 10.00 in-lb (1.13 N·m) to 18.00 in-lb (2.03 N·m).

(e) Smooth the sealant that has squeezed out of the gap; use a hardwood or plastic fillet smoothing spatula, STD-810.

SUBTASK 57-21-22-420-006

(2) Attach the anti-collision light lens assembly [88] to the leading edge.

(a) Attach the bonding jumper [87] to the lens assembly.

1) Position the jumper lug and install the screw [83] and nut [84].

(b) Measure the electrical resistance between the lens assembly and the light assembly with a bonding meter, COM-1550.

1) The maximum resistance must not be more than 0.0025 ohms.

(c) Apply firewall sealant, A00160 to the faying surface of the lens assembly and immediately install the lens assembly.

(d) Install the 12 screws [82] and tighten to 10.00 in-lb (1.13 N·m) to 18.00 in-lb (2.03 N·m).

(e) Smooth the sealant that has squeezed out of the gap; use a hardwood or plastic fillet smoothing spatula, STD-810.

SUBTASK 57-21-22-865-004

(3) Remove the safety tags and close these circuit breakers:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
A	12	C00113	EXTERIOR LIGHTING POSITION RIGHT
A	13	C00114	EXTERIOR LIGHTING POSITION LEFT
B	13	C00115	EXTERIOR LIGHTING ANTI COLLISION WHITE

SUBTASK 57-21-22-710-003

(4) Do this task: Position Lights - Operational Test, TASK 33-43-10-710-801.

SUBTASK 57-21-22-710-004

(5) Do this task: Anti-Collision Lights - Operational Test, TASK 33-44-00-710-801.

G. Put the Airplane Back to the Usual Condition

SUBTASK 57-21-22-090-002

(1) Remove the ladder, work platform, COM-2480 or maintenance platform, SPL-659.

SUBTASK 57-21-22-440-003

(2) Do this task: Trailing Edge Flap System Reactivation, TASK 27-51-00-440-801.

SUBTASK 57-21-22-440-004

(3) Do this task: Reactivate the Leading Edge Flaps and Slats, TASK 27-81-00-440-801.

——————— END OF TASK ———————

TASK 57-21-22-000-806

10. Forward Position Light and Anti-Collision Light Panel (Dual Forward Lens) Removal

(Figure 210)

A. General

(1) This procedure gives the task to remove the leading edge panel from the winglet.

(2) The removal of the leading edge panel gives access to the anti-collision light attentuator in the winglet.

B. References

Reference	Title
27-51-00-040-801	Trailing Edge Flap System Deactivation (P/B 201)
27-81-00-040-801	Deactivate the Leading Edge Flaps and Slats (P/B 201)

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
COM-2480	Platform - Mobile Elevating Work Platform SJ II Series (Part #: 4620, Supplier: 3AF08, A/P Effectivity: 737-ALL)
SPL-659	Platform - Maintenance Lift, 3 ft Minimum Height, 12.5 ft Maximum Height (Part #: 8662-010, Supplier: 00994, A/P Effectivity: 737-ALL)
SPL-768	Sealant Removal Tool, Hardwood or Plastic (Part #: ST982, Supplier: 81205, A/P Effectivity: 737-ALL)

D. Location Zones

Zone	Area
500	Left Wing
527	Left Winglet
600	Right Wing
627	Right Winglet

E. Prepare for the Procedure

SUBTASK 57-21-22-865-007

WARNING: DO NOT TOUCH THE ANTI-COLLISION LIGHT FOR 10 MINUTES AFTER YOU REMOVE ELECTRICAL POWER. AN ELECTRICAL SHOCK CAN CAUSE INJURIES TO PERSONNEL OR DAMAGE TO EQUIPMENT.

(1) Open these circuit breakers and install safety tags:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
A	12	C00113	EXTERIOR LIGHTING POSITION RIGHT
A	13	C00114	EXTERIOR LIGHTING POSITION LEFT
B	13	C00115	EXTERIOR LIGHTING ANTI COLLISION WHITE

SUBTASK 57-21-22-040-007

(2) Do this task: Trailing Edge Flap System Deactivation, TASK 27-51-00-040-801.

SUBTASK 57-21-22-040-008

(3) Do this task: Deactivate the Leading Edge Flaps and Slats, TASK 27-81-00-040-801.

SUBTASK 57-21-22-490-004

(4) Get a ladder, work platform, COM-2480 or maintenance platform, SPL-659.

SUBTASK 57-21-22-430-005

(5) Do these steps to prepare metal support equipment such as work platforms, work/maintenance stands, ladders.

NOTE: These steps apply to all metal support equipment within a 50-foot radius of an open fuel tank.

(a) All support equipment must be in place before you begin the procedure.

(b) Bond the support equipment at an approved airplane bonding location.

(c) Ground the support equipment to the same earth ground as the airplane.

F. Procedure

SUBTASK 57-21-22-020-008

(1) Remove the leading edge panel [91] for the forward position and anti-collision lights (Figure 210).

(a) Remove the 50 bolts [92] and four bolts [93] on the leading edge panel.

NOTE: Do not remove the screws on the inboard side of the leading edge skin. The screws hold a bulb seal to the leading edge skin.

(b) Remove the leading edge panel [91].

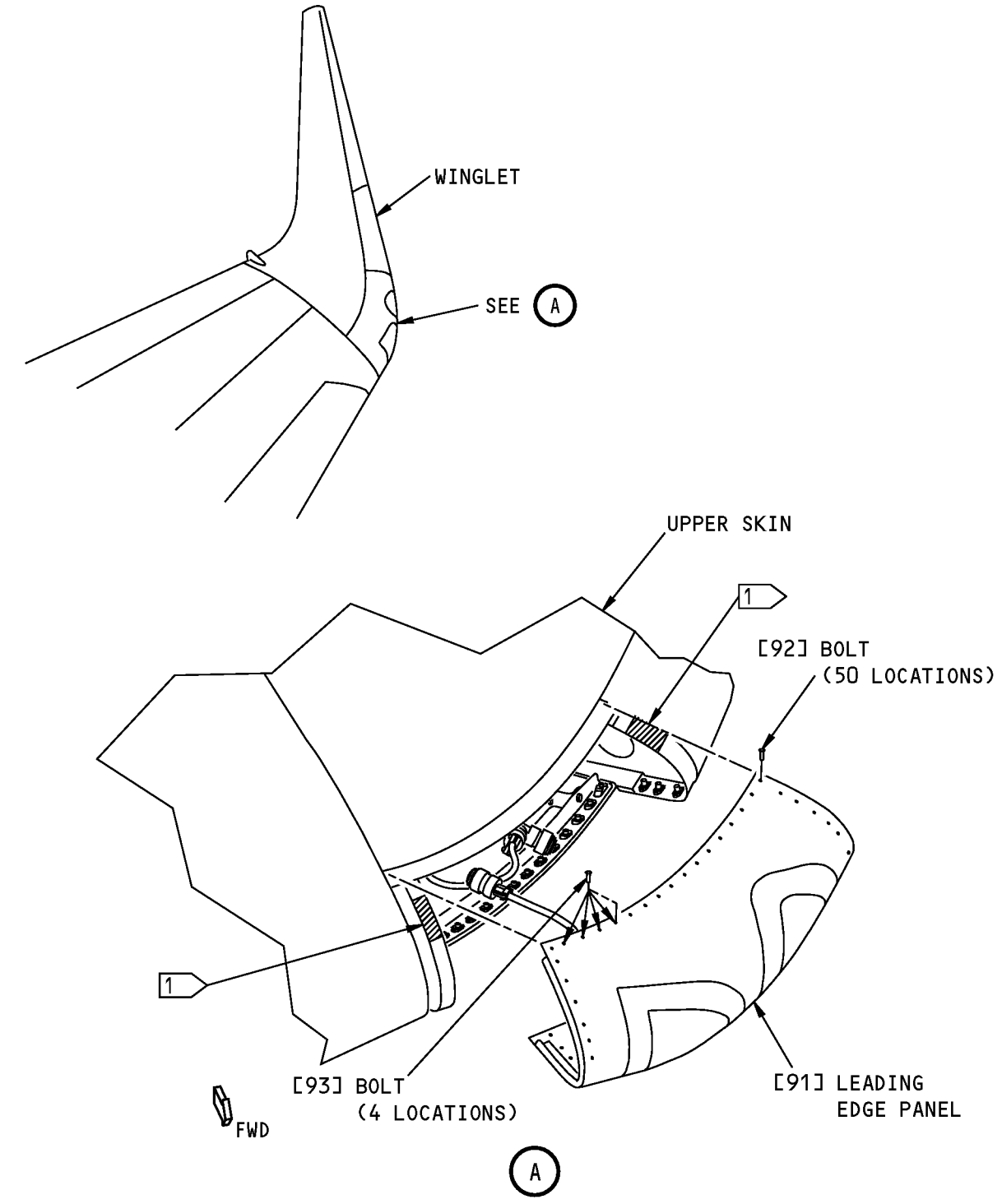
NOTE: The panel that contains the light lens and the lights.

(c) Tag all the bolts and keep for the bolts for the installation procedure.

SUBTASK 57-21-22-160-006

(2) Remove all sealant from the gap between the leading edge panel [91] and the outboard leading edge panel and the upper skin panel and the lower skin panel with a sealant removal tool, SPL-768.

———————— END OF TASK ————————



Forward Position Light and Anti-Collision Light Panel Installation
Figure 210/57-21-22-990-809

TASK 57-21-22-400-806

11. Forward Position Light and Anti-Collision Light Panel (Dual Forward Lens) Installation

(Figure 210)

A. General

(1) This procedure gives the task to install the leading edge panel on the winglet.

(2) The removal of the leading edge panel gave access to the anti-collision light attentuator in the winglet.

B. References

Reference	Title
27-51-00-440-801	Trailing Edge Flap System Reactivation (P/B 201)
27-81-00-440-801	Reactivate the Leading Edge Flaps and Slats (P/B 201)

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
COM-1550	Meter - Bonding (Approved Explosion Proof & Intrinsically Safe) (Part #: C15292 (MODEL T477W), Supplier: 01014, A/P Effectivity: 737-ALL) (Part #: M1, Supplier: 3AD17, A/P Effectivity: 737-ALL) (Part #: M1B, Supplier: 3AD17, A/P Effectivity: 737-ALL)
COM-2480	Platform - Mobile Elevating Work Platform SJ II Series (Part #: 4620, Supplier: 3AF08, A/P Effectivity: 737-ALL)
SPL-659	Platform - Maintenance Lift, 3 ft Minimum Height, 12.5 ft Maximum Height (Part #: 8662-010, Supplier: 00994, A/P Effectivity: 737-ALL)
STD-810	Spatula - Fillet Smoothing, Hardwood or Plastic

D. Consumable Materials

Reference	Description	Specification
A00247	Sealant - Pressure And Environmental - Chromate Type	BMS 5-95
A50009	Sealant - Low Density, Chromate Type Synthetic Rubber	BMS5-142, Class B-1/2

E. Location Zones

Zone	Area
500	Left Wing
527	Left Winglet
600	Right Wing
627	Right Winglet

F. Procedure

SUBTASK 57-21-22-420-007

(1) Install the forward position light and the anti-collision light panel [91].

(a) Install the panel assembly for the forward position light and the anti-collision light in the leading edge skin.

(b) Install the 50 bolts [92] and four bolts [93].

1) Tighten the bolts to 18 in-lb (2.03 N·m) to 25 in-lb (2.82 N·m).

SUBTASK 57-21-22-765-003

(2) Do a check of the electrical resistance between the leading edge skin to the leading edge ribs with an bonding meter, COM-1550.

(a) Make sure the electrical resistance does not exceed 0.0025 ohms.

SUBTASK 57-21-22-390-003

(3) Apply sealant, A00247 or sealant, A50009 at the gap between the leading edge panel [91] and the outboard leading edge panel and the upper skin panel and lower skin panel.

(a) Make the sealant smooth and flush with the adjacent surfaces with a hardwood or plastic fillet smoothing spatula, STD-810.

G. Put the Airplane Back to the Usual Condition

SUBTASK 57-21-22-090-004

(1) Remove the ladder, work platform, COM-2480 or maintenance platform, SPL-659.

SUBTASK 57-21-22-440-007

(2) Do this task: Trailing Edge Flap System Reactivation, TASK 27-51-00-440-801.

SUBTASK 57-21-22-440-008

(3) Do this task: Reactivate the Leading Edge Flaps and Slats, TASK 27-81-00-440-801.

SUBTASK 57-21-22-865-008

(4) Remove the safety tags and close these circuit breakers:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
A	12	C00113	EXTERIOR LIGHTING POSITION RIGHT
A	13	C00114	EXTERIOR LIGHTING POSITION LEFT
B	13	C00115	EXTERIOR LIGHTING ANTI COLLISION WHITE

———————— END OF TASK ————————

HAP ALL; AIRPLANES WITH SINGLE FORWARD LENS CONFIGURATION

TASK 57-21-22-000-805

12. Forward Position Light and Anti-Collision Light Lens Mask (Single Forward Lens) Removal

(Figure 211)

A. General

(1) This procedure gives the task to remove the mask from the single forward lens in the leading edge panel.

(2) This procedure can also be done with the leading edge panel removed from the winglet.

B. References

Reference	Title
27-51-00-040-801	Trailing Edge Flap System Deactivation (P/B 201)
27-81-00-040-801	Deactivate the Leading Edge Flaps and Slats (P/B 201)

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
COM-2480	Platform - Mobile Elevating Work Platform SJ II Series (Part #: 4620, Supplier: 3AF08, A/P Effectivity: 737-ALL)
SPL-659	Platform - Maintenance Lift, 3 ft Minimum Height, 12.5 ft Maximum Height (Part #: 8662-010, Supplier: 00994, A/P Effectivity: 737-ALL)
STD-821	Squeegee - Plastic

D. Consumable Materials

Reference	Description	Specification
B00065	Alcohol - Denatured, Ethyl (Ethanol)	27CFR21.35
B00068	Alcohol - Ethyl (Denatured)	AMS 3002F (MIL-E-51454, Type II)
G00034	Cotton Wiper - Process Cleaning Absorbent Wiper (Cheesecloth, Gauze)	BMS15-5

E. Location Zones

Zone	Area
500	Left Wing
534	Left Wing - Dry Bay
600	Right Wing
634	Right Wing - Dry Bay

F. Prepare for the Procedure

SUBTASK 57-21-22-040-003

(1) Do this task: Trailing Edge Flap System Deactivation, TASK 27-51-00-040-801.

SUBTASK 57-21-22-040-004

(2) Do this task: Deactivate the Leading Edge Flaps and Slats, TASK 27-81-00-040-801.

SUBTASK 57-21-22-490-002

(3) Get a ladder, work platform, COM-2480 or maintenance platform, SPL-659.

SUBTASK 57-21-22-430-003

(4) Do these steps to prepare metal support equipment such as work platforms, work/maintenance stands, ladders.

NOTE: These steps apply to all metal support equipment within a 50-foot radius of an open fuel tank.

(a) All support equipment must be in place before you begin the procedure.

(b) Bond the support equipment at an approved airplane bonding location.

(c) Ground the support equipment to the same earth ground as the airplane.

G. Remove the Forward Light Lens Mask

SUBTASK 57-21-22-020-007

(1) Lift an edge of the lens mask [71] on one end to carefully peel and pull the mask off at an angle of 180 degrees.

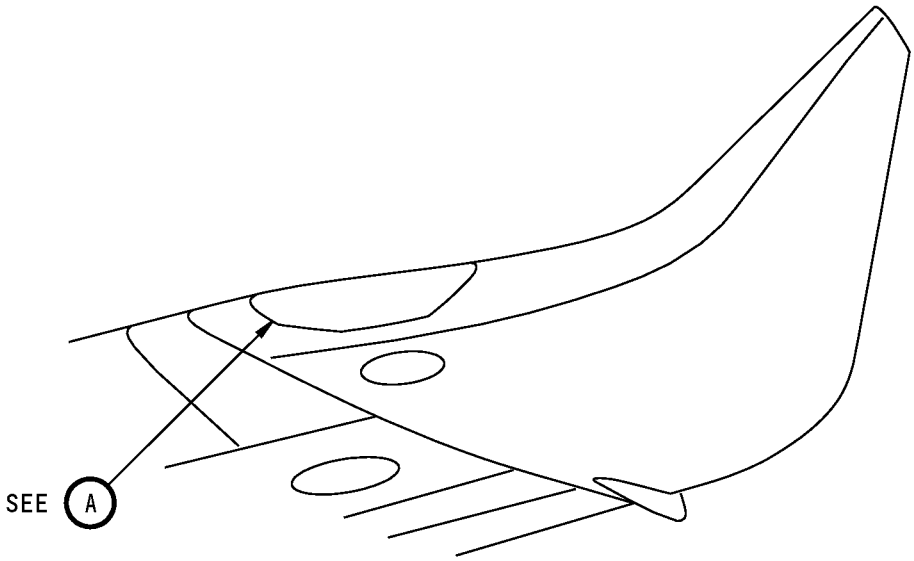
SUBTASK 57-21-22-160-001

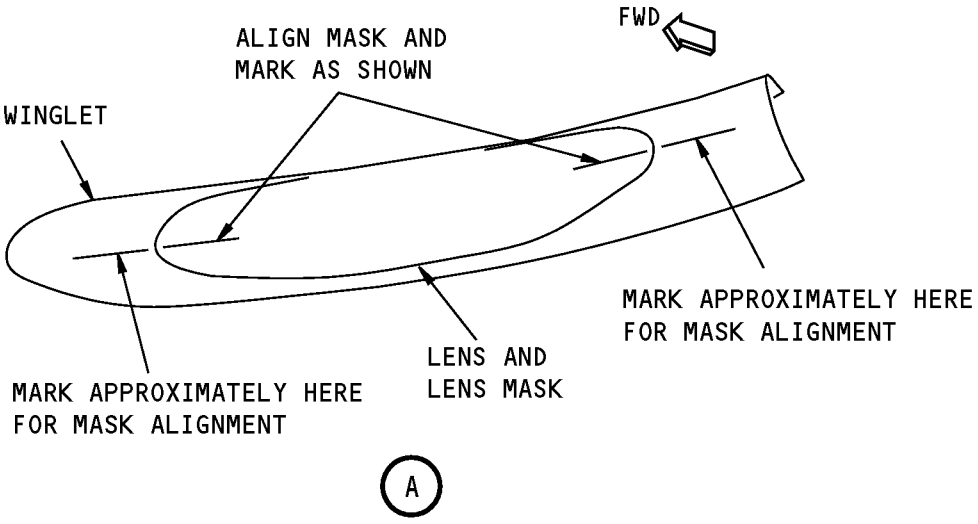
(2) If an adhesive remains on the lens after the mask is removed, clean the lens.

(a) Use a clean cotton wiper, G00034 that is saturated with alcohol, B00065 or alcohol, B00068.

(b) Remove the softened residue with a plastic squeegee, STD-821.

END OF TASK





Lens Alignment Marks
Figure 211/57-21-22-990-808

TASK 57-21-22-400-805

13. Forward Position Light and Anti-Collision Light Lens Mask (Single Forward Lens) Installation

(Figure 211)

A. General

(1) This procedure gives the task to install the mask on the single forward lens in the leading edge panel.

(2) This procedure can also be done with the leading edge panel removed from the winglet.

B. References

Reference	Title
27-51-00-440-801	Trailing Edge Flap System Reactivation (P/B 201)
27-81-00-440-801	Reactivate the Leading Edge Flaps and Slats (P/B 201)

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
COM-2480	Platform - Mobile Elevating Work Platform SJ II Series (Part #: 4620, Supplier: 3AF08, A/P Effectivity: 737-ALL)
SPL-659	Platform - Maintenance Lift, 3 ft Minimum Height, 12.5 ft Maximum Height (Part #: 8662-010, Supplier: 00994, A/P Effectivity: 737-ALL)
STD-551	Knife - Razor
STD-625	Pen
STD-821	Squeegee - Plastic
STD-3949	Scalpel - X-ACTO Knife

D. Consumable Materials

Reference	Description	Specification
B00130	Alcohol - Isopropyl	TT-I-735
B50026	Soap - Clear Liquid Dishwashing	
G00270	Tape - Scotch Flatback Masking 250	ASTM D6123 (Supersedes A-A-883)
G01061	Water - Distilled	
G50140	Gloves - Protective, Latex or Nitrile	

E. Location Zones

Zone	Area
500	Left Wing
527	Left Winglet
600	Right Wing
627	Right Winglet

F. Install the Forward Light Lens Mask

SUBTASK 57-21-22-420-002

(1) Remove the old lens mask.

(a) Put the applicable trim template in the correct position on the rigid plastic support of the lens mask.

NOTE: Use the trim template PM737TL for the left lens mask and trim template PM737TR for the right lens mask.

(b) Cut the mask out with a sharp, X-ACTO knife scalpel, STD-3949 or razor knife, STD-551.

(c) Remove the mask from the rigid plastic support.

SUBTASK 57-21-22-420-001

(2) Fit the mask [71] to the lens.

(a) Put two marks on the aluminum leading edge adjacent to the light lens at approximately the center of the leading edge.

1) Make the marks with Scotch Flatback Masking Tape 250, G00270 or non-permanent ink pen, STD-625.

NOTE: These marks will be used to align the mask.

(b) Put the mask on the lens in the correct position.

NOTE: When the mask is in the correct position, the upper surface of the mask will cover approximately 2.0 inches back from the leading edge along the contour. The lower surface will cover approximately 1.3 inches back from the leading edge along the contour.

(c) Mark the ends of the mask with Scotch Flatback Masking Tape 250, G00270 or non-permanent ink pen, STD-625 to align with the marks on the aluminum leading edge.

(d) Remove the mask from the lens.

SUBTASK 57-21-22-160-002

(3) Thoroughly clean the forward position light lens with a wetting solution of alcohol, B00130, distilled water, G01061 and clear, liquid, dish-washing soap, B50026.

NOTE: Mix the wetting solution by volume; 4 oz. isopropyl alcohol (70% by volume), 12 oz. distilled water and 21 drops of regular strength, clear, liquid, dish-washing soap, or 7 drops of concentrated strength, clear, liquid, dish-washing soap.

SUBTASK 57-21-22-420-003

(4) Install the lens mask.

(a) Spray the lens leading edge with the wetting solution.

(b) Separate the lens mask from the release liner in several small steps.

NOTE: If you do not peel the release liner from the lens mask in small steps, the mask can stick to itself. The mask will be not be useable.

1) Slowly peel away only a small amount of release liner at each time and spray the adhesive of the lens mask with the wetting solution.

2) Do the previous step again until the entire lens mask is removed.

3) Spray the entire lens mask again with the wetting solution when the entire lens mask is removed.

(c) Put the wetted lens mask on the leading edge of the lens.

1) Align the index marks on each end of the mask to the marks on the leading edge radius.

(d) Use protective gloves, G50140 to carefully make the mask smooth along the surface of the lens.

(e) Carefully remove the bubbles and blisters under the mask.

1) Use a plastic squeegee, STD-821 to carefully make the mask smooth; use only light to moderate pressure on the squeegee tool.

2) Start from the center of the leading edge radius and work outward to the edges.

(f) Let the lens become dry for a minimum of two hours before flight.

G. Put the Airplane Back to the Usual Condition

SUBTASK 57-21-22-090-001

(1) Remove the ladder, work platform, COM-2480 or maintenance platform, SPL-659.

SUBTASK 57-21-22-440-001

(2) Do this task: Trailing Edge Flap System Reactivation, TASK 27-51-00-440-801.

SUBTASK 57-21-22-440-002

(3) Do this task: Reactivate the Leading Edge Flaps and Slats, TASK 27-81-00-440-801.

———————— END OF TASK ————————

TASK 57-21-22-100-801

14. Forward Position Light and Anti-Collision Light Lens Mask Cleaning

A. General

(1) This procedure gives the task to clean the mask for the lens of the forward position lights and anti-collision lights.

B. References

Reference	Title
12-40-00-100-801	Clean the External Surfaces of the Airplane (P/B 201)

C. Location Zones

Zone	Area
500	Left Wing
527	Left Winglet
600	Right Wing
627	Right Winglet

D. Procedure

SUBTASK 57-21-22-160-003

(1) The lens mask may be cleaned with any cleaners that are usually used on the airplane.

(a) Refer to this task: Clean the External Surfaces of the Airplane, TASK 12-40-00-100-801.

(b) After the lens mask is cleaned, apply a good quality, non-silicone based automobile wax or equivalent to the mask.

(c) If the lens mask becomes hazed, discolored, or blistered, the lens mask must be replaced.

(d) If the lens mask becomes separated from the lens or the edge of the mask lifts from the lens, the lens mask must be replaced.

(e) To replace the lens mask, do these tasks:

1) Do this task: Forward Position Light and Anti-Collision Light Lens Mask (Single Forward Lens) Removal, TASK 57-21-22-000-805.

2) Do this task: Forward Position Light and Anti-Collision Light Lens Mask (Single Forward Lens) Installation, TASK 57-21-22-400-805.

——————— END OF TASK ———————

WINGLET FORWARD ANTI-COLLISION LIGHT AND POSITION LIGHT LENS - INSPECTION/CHECK

1. General

A. This procedure contains scheduled maintenance task data.

B. This procedure gives the task to inspect the light lens.

HAP ALL; AIRPLANES WITH SINGLE FORWARD LENS CONFIGURATION

TASK 57-21-22-200-801

2. Forward Position Light and Anti-Collision Light Lens (Single Lens) Inspection

A. General

(1) This procedure is a scheduled maintenance task.

(2) This procedure gives the task to do a visual inspection of the exterior surface of the single lens on the left or right winglet.

B. References

Reference	Title
57-21-22-000-801	Forward Position Light and Anti-Collision Light Panel (Single Forward Lens) Removal (P/B 201)
57-21-22-400-803	Forward Position Light and Anti-Collision Light Lens (Single Forward Lens) Installation (P/B 201)

C. Location Zones

Zone	Area
500	Left Wing
527	Left Winglet
600	Right Wing
627	Right Winglet

D. Procedure

SUBTASK 57-21-22-212-001

(1) Do a visual inspection of the exterior surface of the lens on the left or right winglet; look for these conditions.

(a) Crazing

1) The lens must not have a network of fine cracks on or under the surface of the lens.

(b) Cracks

1) The lens must not have any cracks.

(c) Blisters or Bubbles

1) The lens must not contain any air pockets, lumps or voids.

NOTE: Small bubbles in the lens or the coating that do not appear in large quantities or concentrations are allowed.

(d) Discoloration

1) The lens must not have any signs of yellow color or a change to a dark color.

(e) Physical Deformation

1) The lens must not show signs of distortion or the contour of the lens must not show signs of irregularities.

(f) Hazing

1) A hazed lens is an allowable condition; the replacement of the hazed lens for appearance purposes is optional.

2) The hazed lens is not transparent and clear in appearance; the lens can be cloudy, translucent or opaque.

NOTE: Lens hazing is caused by rain erosion and/or normal airstream abrasions.

(g) If the other lens has not been inspected, repeat this task for the other lens.

(h) If both lenses have been inspected, this task is complete.

SUBTASK 57-21-22-960-001

(2) If any of these conditions are seen, replace the lens.

(a) Do this task: Forward Position Light and Anti-Collision Light Panel (Single Forward Lens) Removal, TASK 57-21-22-000-801.

(b) Do this task: Forward Position Light and Anti-Collision Light Lens (Single Forward Lens) Installation, TASK 57-21-22-400-803.

———————— END OF TASK ————————

HAP ALL; AIRPLANES WITH DUAL FORWARD LENS CONFIGURATION

TASK 57-21-22-200-802

3. Forward Position Light and Anti-Collision Light Lens (Dual Lens) Inspection

A. General

(1) This procedure gives the task to do a visual inspection of the exterior surface of the dual lens on the left or right winglet.

B. References

Reference	Title
57-21-22-000-803	Forward Position Light and Anti-Collision Light Lens (Dual Forward Lens) Removal (P/B 201)
57-21-22-400-804	Forward Position Light and Anti-Collision Light Lens (Dual Forward Lens) Installation (P/B 201)

C. Location Zones

Zone	Area
500	Left Wing
527	Left Winglet
600	Right Wing
627	Right Winglet

D. Procedure

SUBTASK 57-21-22-212-002

(1) Do a visual inspection of the exterior surface of the lens on the left or right winglet; look for these conditions.

(a) Disbonding

1) No disbonding between the lens and the lens retainer are allowed.

(b) Cracks

1) The lens must not have any cracks.

(c) If the other lens has not been inspected, repeat this task for the other lens.

(d) If both lenses have been inspected, this task is complete.

SUBTASK 57-21-22-960-002

(2) If any of these conditions are seen, replace the lens.

(a) Do this task: Forward Position Light and Anti-Collision Light Lens (Dual Forward Lens) Removal, TASK 57-21-22-000-803

(b) Do this task: Forward Position Light and Anti-Collision Light Lens (Dual Forward Lens) Installation, TASK 57-21-22-400-804

——————— END OF TASK ———————

WINGLET LEADING EDGE LIGHT LENS - REPAIR

1. General

A. There is one task to polish a lens in this procedure.

TASK 57-21-22-910-801

2. Polish the Leading Edge Light Lens

(Figure 801)

A. General

(1) This procedure gives the task to polish the exterior surface of the lens on the left or right winglet.

B. Consumable Materials

Reference	Description	Specification
B50025	Compound - Polishing, Final Finish - NuShine II, Grade S	
G50138	Cloth - Soft Cotton	
G50140	Gloves - Protective, Latex or Nitrile	
G50141	Towel - Paper, High Quality, Single Ply, White or Natural Colors	

C. Location Zones

Zone	Area
500	Left Wing
527	Left Winglet
600	Right Wing
627	Right Winglet

D. Procedure

SUBTASK 57-21-22-910-001

(1) Apply small amounts of NuShine II, Grade S compound, B50025 along the leading edge of the lens.

(a) Use a pair of protective gloves, G50140.

(b) Do only half of the length of the lens at a time, or the polish will become dry too soon.

(c) Polish with a high quality paper towel, G50141 with light pressure only in a linear motion along the leading edge.

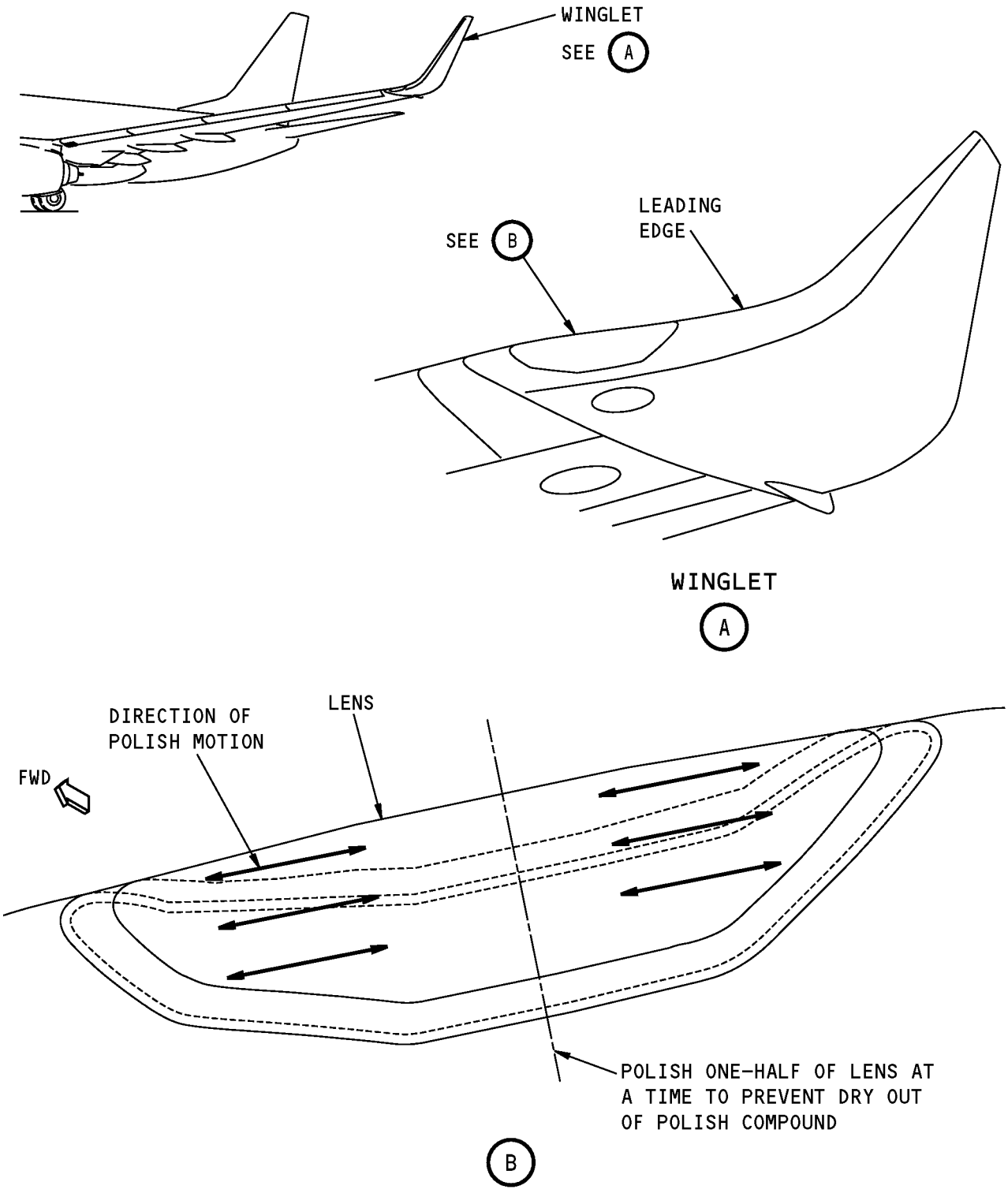
NOTE: Use only plain white or natural color paper towels.

NOTE: There will be a transition line, approximately 0.25 inch (6.25 millimeters) wide between the hazed surface and the undamaged clear surface. Do not try to polish this portion of the lens, a hard coat material remains on the lens and can not be polish out to a clear state.

SUBTASK 57-21-22-910-002

(2) Repeat the polish process; after the polish process is complete, use a clean soft cotton cloth, G50138 in order to achieve a final luster.

END OF TASK



Winglet Leading Edge Light Lens Polish
Figure 801/57-21-22-990-806

WING DRY BAY TANK ACCESS DOORS - REMOVAL/INSTALLATION

1. General

A. This task gives the procedure to remove and install the access doors for wing, dry bay tanks.

B. There are two dry bay tanks that are outboard of the surge fuel tank which is a wet bay. The dry bay tanks are between the outboard wing rib 27, the middle rib 26 and the outboard rib 25 of the surge fuel tank.

TASK 57-21-23-000-801

2. Dry Bay Access Doors Removal

(Figure 401)

A. General

(1) This task gives the procedure to remove the two access doors for the inboard or outboard wing dry bay tanks in the left or right wing.

B. References

Reference	Title
20-40-11-910-801	Static Grounding (P/B 201)
24-22-00-860-812	Remove Electrical Power (P/B 201)
27-51-00-040-801	Trailing Edge Flap System Deactivation (P/B 201)
27-81-00-040-801	Deactivate the Leading Edge Flaps and Slats (P/B 201)

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
COM-2480	Platform - Mobile Elevating Work Platform SJ II Series (Part #: 4620, Supplier: 3AF08, A/P Effectivity: 737-ALL)
SPL-659	Platform - Maintenance Lift, 3 ft Minimum Height, 12.5 ft Maximum Height (Part #: 8662-010, Supplier: 00994, A/P Effectivity: 737-ALL)

D. Location Zones

Zone	Area
500	Left Wing
534	Left Wing - Dry Bay
600	Right Wing
634	Right Wing - Dry Bay

E. Access Panels

Number	Name/Location
534AB	Main Tank Access Door - Wing Station 727
534BB	Main Tank Access Door - Wing Station 748
634AB	Main Tank Access Door - Wing Station 727
634BB	Main Tank Access Door - Wing Station 748

F. Remove the Access Doors

SUBTASK 57-21-23-760-001

(1) Make sure the airplane is correctly grounded to an approved and identified ground.

(a) Do this task: Static Grounding, TASK 20-40-11-910-801.

SUBTASK 57-21-23-040-001

(2) Do this task: Trailing Edge Flap System Deactivation, TASK 27-51-00-040-801.

SUBTASK 57-21-23-040-002

(3) Do this task: Deactivate the Leading Edge Flaps and Slats, TASK 27-81-00-040-801.

SUBTASK 57-21-23-490-001

(4) Make sure one of these portable fire extinguishers is available:

(a) one - 150 pound dry chemical wheeled extinguisher.

(b) one - 150 pound CO2 wheeled extinguisher.

(c) one - 150 pound Halon wheeled extinguisher.

SUBTASK 57-21-23-490-002

(5) Get a ladder, work platform, COM-2480 or maintenance platform, SPL-659.

SUBTASK 57-21-23-765-001

(6) Do these steps to prepare metal support equipment such as work platforms, work/maintenance stands, ladders.

NOTE: These steps apply to all metal support equipment within a 50 ft (15 m) radius of an open fuel tank.

(a) All support equipment must be in place before you begin the procedure.

(b) Bond the support equipment at an approved airplane bonding location.

(c) Ground the support equipment to the same earth ground as the airplane.

SUBTASK 57-21-23-862-001

(7) Remove the electrical power from the airplane before you remove the tank access doors.

(a) Install a ''Do Not Apply Electrical Power'' tag on the external power source receptacle and on the cockpit left control stick.

(b) Do this task: Remove Electrical Power, TASK 24-22-00-860-812.

(c) Do not supply electrical power again until you have completed this procedure.

SUBTASK 57-21-23-020-001

(8) If it is necessary, open the access door for the inboard, dry bay tank on the left or right wing.

(a) Open these access doors.

Number	Name/Location
534AB	Main Tank Access Door - Wing Station 727
634AB	Main Tank Access Door - Wing Station 727

(b) Remove the 16 bolts [6]; and store the bolts in a bag for the installation.

(c) Remove the access door [5].

SUBTASK 57-21-23-020-002

(9) If it is necessary, open the access door for the outboard, dry bay tank on the left or right wing.

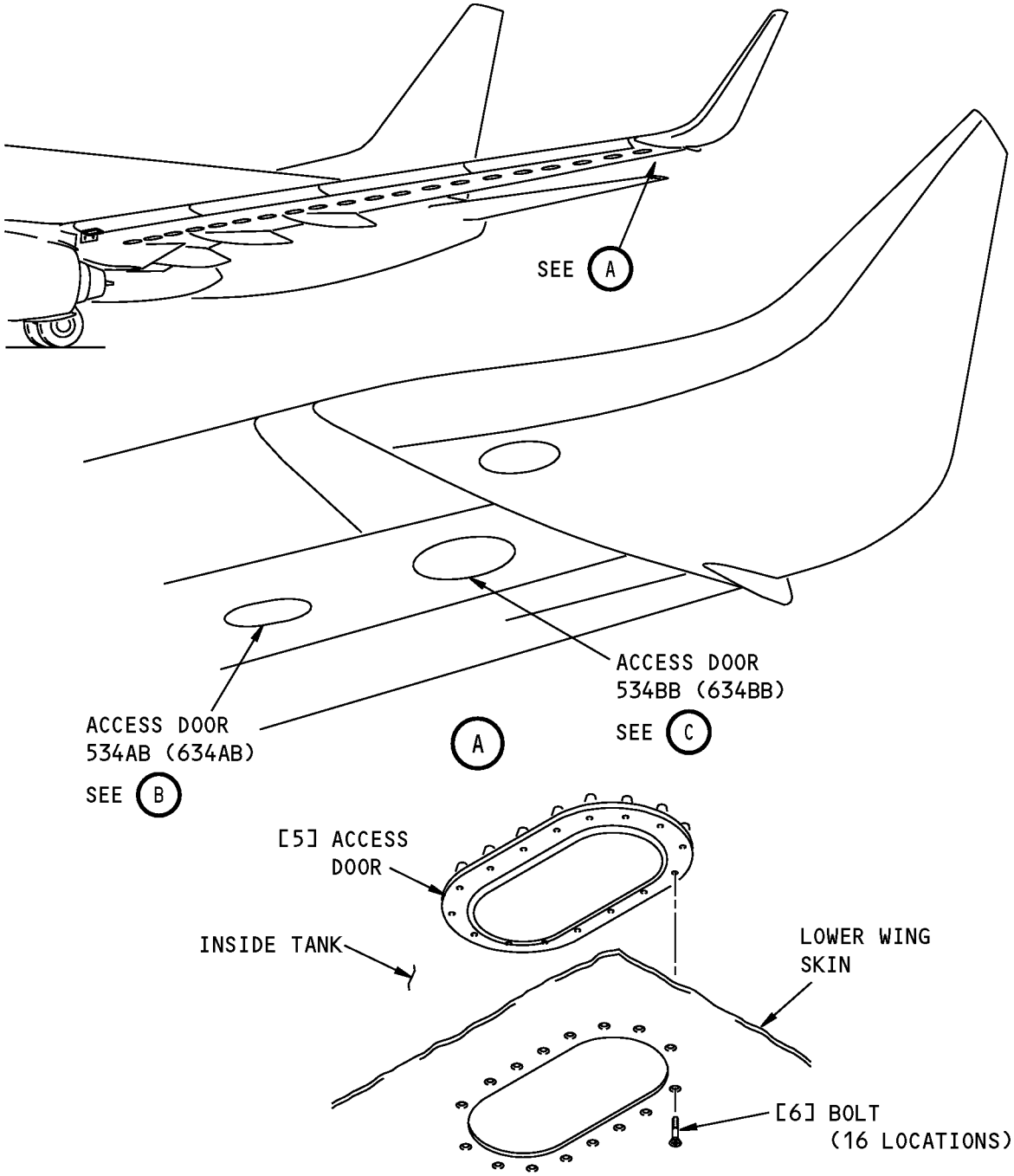
(a) Open these access doors.

Number	Name/Location
534BB	Main Tank Access Door - Wing Station 748
634BB	Main Tank Access Door - Wing Station 748

(b) Remove the 16 bolts [2]; store the bolts in a bag for the installation.

(c) Remove the gasket [4], the clamp ring [3] and the access door [1].

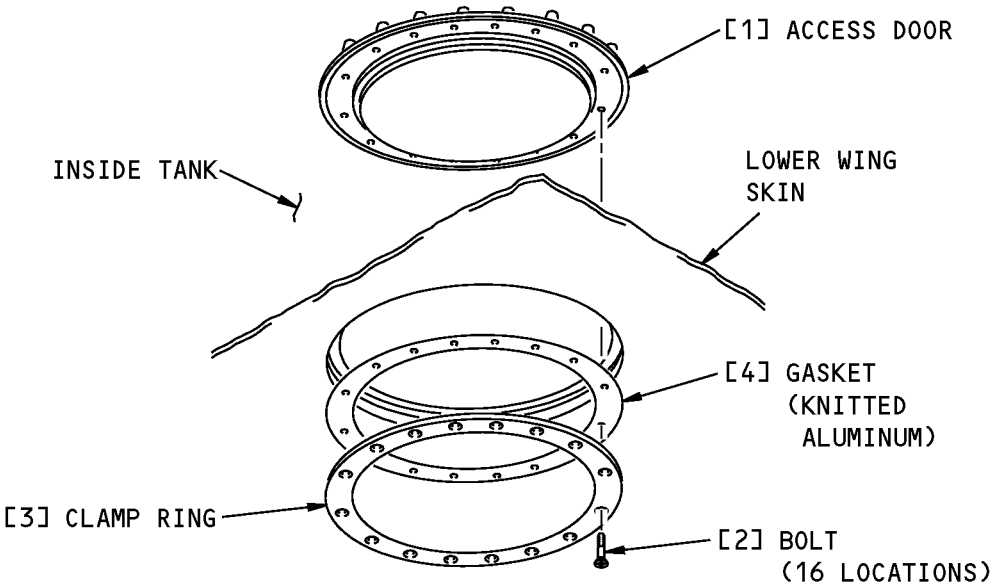
——————— END OF TASK ———————



ACCESS DOOR, 534AB (634AB)

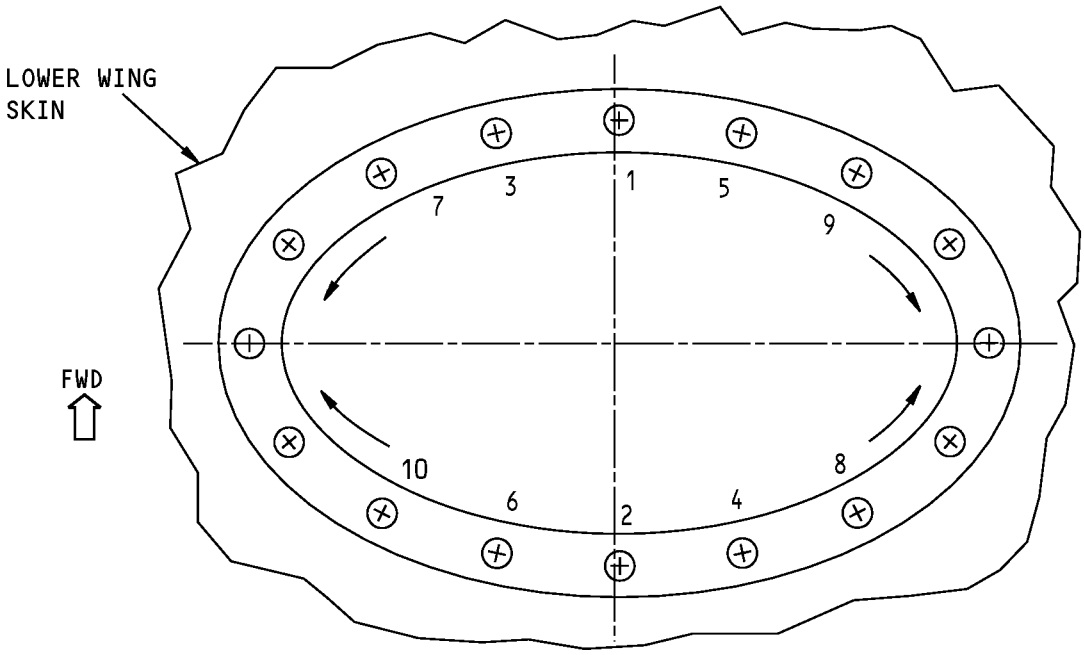
B

Dry Bay Access Doors Installation
Figure 401 (Sheet 1 of 2)/57-21-23-990-801



ACCESS DOOR, 534BB (634BB) SEE (D)

(C)



BOLT TORQUE PATTERN

(D)

NOTE: TORQUE THE MOUNT BOLTS IN THE SEQUENCE SHOWN BY THE NUMBERS.

Dry Bay Access Doors Installation
Figure 401 (Sheet 2 of 2)/57-21-23-990-801

TASK 57-21-23-400-801

3. Dry Bay Access Doors Installation

(Figure 401)

A. General

(1) This task gives the procedure to install the two access doors for the inboard or outboard wing dry bay tanks in the left or right wing.

B. References

Reference	Title
27-51-00-440-801	Trailing Edge Flap System Reactivation (P/B 201)
27-81-00-440-801	Reactivate the Leading Edge Flaps and Slats (P/B 201)

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
COM-1550	Meter - Bonding (Approved Explosion Proof & Intrinsically Safe) (Part #: C15292 (MODEL T477W), Supplier: 01014, A/P Effectivity: 737-ALL) (Part #: M1, Supplier: 3AD17, A/P Effectivity: 737-ALL) (Part #: M1B, Supplier: 3AD17, A/P Effectivity: 737-ALL)
COM-2480	Platform - Mobile Elevating Work Platform SJ II Series (Part #: 4620, Supplier: 3AF08, A/P Effectivity: 737-ALL)
SPL-659	Platform - Maintenance Lift, 3 ft Minimum Height, 12.5 ft Maximum Height (Part #: 8662-010, Supplier: 00994, A/P Effectivity: 737-ALL)

D. Consumable Materials

Reference	Description	Specification
B00130	Alcohol - Isopropyl	TT-I-735
B00148	Solvent - Methyl Ethyl Ketone (MEK)	ASTM D740
B00634	Solvent - Stabilized Limonene Cleaner	BMS11-10 Type 1, 2, or 3
C00528	Compound - Corrosion Preventive, Petroleum Hot Application (Soft Film)	MIL-C-11796, Class III
D50050	Grease - Multipurpose, Helicopter Oscillating Bearing Grease with Calcium Soap Thickener - Aeroshell 14	MIL-G-25537
G00834	Cloth - Lint-free Cotton	

E. Location Zones

Zone	Area
500	Left Wing
534	Left Wing - Dry Bay
600	Right Wing
634	Right Wing - Dry Bay

F. Access Panels

Number	Name/Location
534AB	Main Tank Access Door - Wing Station 727
534BB	Main Tank Access Door - Wing Station 748
634AB	Main Tank Access Door - Wing Station 727
634BB	Main Tank Access Door - Wing Station 748

G. Access Doors Installation

SUBTASK 57-21-23-160-001

(1) Use a clean, lint-free cloth, G00834 that is moist with Limonene solvent, B00634, or solvent, B00148, or alcohol, B00130 to remove all old grease, corrosion resistant compound, dirt and unwanted material.

(a) You must clean the surface around the wing panel access hole faying surface.

(b) You must clean the access door and the clamp ring faying surfaces.

(c) Wipe the surfaces with a new, dry, clean cloth before the solvent evaporates; do not let the solvent become dry on the surfaces.

SUBTASK 57-21-23-942-001

(2) Do an check of the tanks to make sure you removed all unwanted materials, tools, and equipment.

SUBTASK 57-21-23-420-001

(3) If these access doors were opened to find the vapor leak, close the access door for the outboard dry bay tanks on the left or right wing.

(a) Close these access doors.

Number	Name/Location
534BB	Main Tank Access Door - Wing Station 748
634BB	Main Tank Access Door - Wing Station 748

1) Install the access door [1] in the wing access hole.

2) Apply a thin, approximately 0.010 in. (0.254 mm) to 0.015 in. (0.381 mm) thick, layer of Aeroshell 14 helicopter grease, D50050 to the surface of the clamp ring.

3) Install the gasket [4] between the clamp ring [3] and the bottom surface of the wing skin.

4) Apply a thin layer of corrosion resistant compound, C00528 to all areas of the clamp ring fastener holes; include the countersink and counterbore.

5) Immediately install the 16 bolts [2] after you apply the corrosion resistant compound.

a) Tighten the bolts to 18 in-lb (2 N·m) to 25 in-lb (3 N·m); use the bolt torque pattern shown.

(b) Measure the electrical resistance of the door to the adjacent wing skin with an bonding meter, COM-1550.

1) The maximum resistance must not be more than 100 milliohms.

2) If it is necessary, remove the paint from the lower skin countersinks to meet the electrical resistance.

SUBTASK 57-21-23-420-002

(4) If these access doors were opened, close the access door for the inboard dry bay tank on the left or right wing.

(a) Close these access doors.

Number	Name/Location
534AB	Main Tank Access Door - Wing Station 727
634AB	Main Tank Access Door - Wing Station 727

(b) If it is necessary, remove the paint from fastener hole countersinks of a new panel to get the electrical continuity.

(c) Install the access door [5] in the wing access hole.

(d) Install 16 bolts [6] to install this access door.

1) Tighten the bolts to 18 in-lb (2 N·m) to 25 in-lb (3 N·m); use the bolt torque pattern shown.

(e) Measure the electrical resistance of the door to the adjacent wing skin with a bonding meter, COM-1550.

1) The maximum resistance must not be more than 100 milliohms.

SUBTASK 57-21-23-090-001

(5) Remove the ladder, work platform, COM-2480 or maintenance platform, SPL-659.

SUBTASK 57-21-23-440-001

(6) Do this task: Trailing Edge Flap System Reactivation, TASK 27-51-00-440-801.

SUBTASK 57-21-23-440-002

(7) Do this task: Reactivate the Leading Edge Flaps and Slats, TASK 27-81-00-440-801.

——————— END OF TASK ———————

WING DRY BAY TANK VAPOR SEAL - INSPECTION/CHECK

1. General

A. This task gives the procedure to do a check of the vapor seal of the wing dry bay tanks between wing rib 25 and 26.

(1) There are two dry bay tanks that are outboard of the surge fuel tank which is a wet bay. The dry bay tanks are between the outboard wing rib 27, the middle rib 26 and the rib 25 of the surge fuel tank.

(2) Rib 25 is the outboard rib for the surge fuel tank. The seams between rib 25, the forward and aft spars, and the upper and lower skin panels are filled with sealant to prevent fuel leakage into the dry bay tank.

(3) Rib 26 is the common rib between the two dry bays. The seams between rib 26, the forward and aft spars, and the upper and lower skin panels are filled with sealant to prevent fuel leakage or fuel vapor movement from the inboard dry bay to the outboard dry bay tank.

(4) Because the anti-collision and position lights on the end of the wing are not explosion-proof, the vapor seal must be intact to separate a potential ignition source from any fuel vapor.

TASK 57-21-23-790-801

2. Vapor Seal Leak Check

(Figure 601)

A. General

(1) This task gives the procedure to do a check of the vapor seal of the inboard dry bay tank between rib 25 and rib 26.

(2) The check requires pressurization of the dry bay tank for 10 minutes with a minimum pressure loss.

(3) It is difficult to find the vapor leaks on the outside surface of the wing; the tank can be pressurized and a bubble solution applied to the wing. The bubbles will show the external leak points.

(4) Ground support equipment tool part numbers are to be determined after the factory tools are converted to the equivalent ground support equipment. The equivalent factory tools are expand vent plug assembly, SPL-11086 which closes the hole for the leading edge slat track, pressure test door assembly, SPL-11088, and the FD1107-02.46 pneumatic test bench or shop air supply console, SPL-6214 and manometer.

(5) The pressure test equipment must be able to supply positive pressure, 2.5 ±0.6 psig (17.2 ±4.2 kPa). The maximum pressure to the structure is 3.0 psig (20.7 kPa) positive pressure and 2.0 psig (13.8 kPa) vacuum. A safety device which limits internal pressure to72 in/H_2O (2.6 psig) and -20 in/H_2O (-0.7 psig) is required.

NOTE: Since water manometer, SPL-1774 does not have a mark for 72 in/H_2O (2.6 psig), it is recommended to place a temporary mark at the height of 31.25 inches measured from the top of the cross tube, and the manometer tube could be filled to that height to provide 2.6 psig safety relief manometer setting.

(6) All plugs are installed from inside the dry bay tank (the pressure side) to prevent blowout of the plug.

(7) The leading edge slats must be fully extended to install the block off plug in the forward spar.

(8) To prevent damage to the wing, all repairs to the wing structure must be completed before the tank is pressurized.

(9) Only pressurize one tank at a time. No two adjacent tanks can be pressurized at the same time when you do a check for leakage from one tank to the adjacent tank.

(10) All areas where the sealant was changed by damage or rework must be tested again to make sure the seal is good.

(11) All leak repairs must be tested again with this procedure.

B. References

Reference	Title
20-40-11-910-801	Static Grounding (P/B 201)
24-22-00-860-812	Remove Electrical Power (P/B 201)
27-51-00-040-801	Trailing Edge Flap System Deactivation (P/B 201)
27-51-00-440-801	Trailing Edge Flap System Reactivation (P/B 201)
27-81-00-040-801	Deactivate the Leading Edge Flaps and Slats (P/B 201)
27-81-00-440-801	Reactivate the Leading Edge Flaps and Slats (P/B 201)
27-81-00-860-803	Leading Edge Flaps and Slats Extension (P/B 201)
27-81-00-860-804	Leading Edge Flaps and Slats Retraction (P/B 201)
57-21-23-000-801	Dry Bay Access Doors Removal (P/B 401)
57-21-23-390-801	Repair of Sealant Leaks in the Wing Dry Bay Tanks (P/B 801)
57-21-23-400-801	Dry Bay Access Doors Installation (P/B 401)
SRM 57-00-00	Structural Repair Manual

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
COM-2480	Platform - Mobile Elevating Work Platform SJ II Series (Part #: 4620, Supplier: 3AF08, A/P Effectivity: 737-ALL)
SPL-659	Platform - Maintenance Lift, 3 ft Minimum Height, 12.5 ft Maximum Height (Part #: 8662-010, Supplier: 00994, A/P Effectivity: 737-ALL)
SPL-1774	Manometer - Water, Test Equipment (Part #: F72951-1, Supplier: 81205, A/P Effectivity: 737-100, -200, -200C, -300, -400, -500, -600, -700, -700C, -700ER, -700QC, -800, -900, -900ER, -BBJ)
SPL-6214	Console - Shop Air Supply (Part #: J28010-26, Supplier: 81205, A/P Effectivity: 737-ALL)
SPL-11086	Plug Assembly - Expand Vent (C57003-2 included with C57003-1) (Part #: C57003-1, Supplier: 81205, A/P Effectivity: 737-700, -700C, -700ER, -700QC, -800, -900, -900ER, -BBJ)
SPL-11088	Door Assembly - Pressure Test (C57003-3 Included with C57003-1) (Part #: C57003-1, Supplier: 81205, A/P Effectivity: 737-700, -700C, -700ER, -700QC, -800, -900, -900ER, -BBJ)
STD-600	Mirror - Inspection
STD-1081	Flashlight - Explosion Proof
STD-1083	Source - Air, Regulated, Dry Filtered, 0-10 PSIG

D. Consumable Materials

Reference	Description	Specification
G00034	Cotton Wiper - Process Cleaning Absorbent Wiper (Cheesecloth, Gauze)	BMS15-5
G02061	Marker - Permanent, Felt Tip Pen	
G50135	Leak Detector - Liquid, Non-Corrosive Soap Compound	MIL-PRF-25567
G50219	Marking Pen	
G50256	Water, Regular	

E. Location Zones

Zone	Area
500	Left Wing
521	Left Wing - Leading Edge to Front Spar
534	Left Wing - Dry Bay
571	Left Wing - Fixed Trailing Edge
600	Right Wing
621	Right Wing - Leading Edge to Front Spar
634	Right Wing - Dry Bay
671	Right Wing - Fixed Trailing Edge

F. Access Panels

Number	Name/Location
521ZB	Lower Leading Edge Access Panel - Slat Station 488.05
534AB	Main Tank Access Door - Wing Station 727
534BB	Main Tank Access Door - Wing Station 748
571FB	Lower Outboard Fixed Trailing Edge Wedge Access Panel
621ZB	Lower Leading Edge Access Panel - Slat Station 508.31
634AB	Main Tank Access Door - Wing Station 727
634BB	Main Tank Access Door - Wing Station 748
671FB	Lower Outboard Fixed Trailing Edge, Wedge Access Panel

G. Prepare for the Procedure

SUBTASK 57-21-23-760-002

(1) Make sure the airplane is correctly grounded to an approved and identified ground.

(a) Do this task: Static Grounding, TASK 20-40-11-910-801.

SUBTASK 57-21-23-981-001

(2) Do this task: Leading Edge Flaps and Slats Extension, TASK 27-81-00-860-803.

(a) Move the slats to the full extended position.

SUBTASK 57-21-23-040-003

(3) Do this task: Trailing Edge Flap System Deactivation, TASK 27-51-00-040-801.

SUBTASK 57-21-23-040-004

(4) Do this task: Deactivate the Leading Edge Flaps and Slats, TASK 27-81-00-040-801.

SUBTASK 57-21-23-490-003

(5) Make sure one of these portable fire extinguishers is available:

(a) one - 150 pound dry chemical wheeled extinguisher.

(b) one - 150 pound CO2 wheeled extinguisher.

(c) one - 150 pound Halon wheeled extinguisher.

SUBTASK 57-21-23-862-002

(6) Remove the electrical power from the airplane before you remove the tank access doors.

(a) Do this task: Remove Electrical Power, TASK 24-22-00-860-812.

(b) Do not supply electrical power again until you have completed this procedure.

SUBTASK 57-21-23-010-001

(7) Remove the access door for the inboard, wing dry bay tank on the applicable wing.

(a) Open these access doors.

Number	Name/Location
534AB	Main Tank Access Door - Wing Station 727
634AB	Main Tank Access Door - Wing Station 727

(b) Do this task: Dry Bay Access Doors Removal, TASK 57-21-23-000-801.

SUBTASK 57-21-23-490-004

(8) Install the pressure test equipment (Figure 601).

NOTE: Ground support equipment tool part numbers are to be determined after the factory tools are converted to the equivalent ground support equipment. The equivalent factory tools are pressure test door assembly, SPL-11088, expand vent plug assembly, SPL-11086 which closes the hole for the leading edge slat track, and the FD1107-02.46 pneumatic test bench or shop air supply console, SPL-6214 and manometer.

(a) Install the drain plug into the drain hole in the lower skin panel at the inboard, forward corner of the dry bay tank.

1) Install the plug from the inside of the tank.

NOTE: The drain hole in the lower skin panel is 0.375 in. (9.525 mm) diameter; use a rubber tapered stopper or plug.

(b) Install the block off plug from the inside of the tank.

1) Put the plug into position in the slat track hole in the forward spar.

2) Turn the handle to tighten the press plate.

NOTE: As the press plate is tightened, the press plate will compress the plug. This will cause a clamp force between the plug and the slat track hole in the forward spar.

(c) Install the pressure test door.

1) Put the pressure test door into position in the hole for the access door.

2) Turn the T-handle to turn the clamp plate 90 degrees on the pressure test door.

NOTE: The clamp plate turned 90 degrees is will hold the pressure test door in position.

3) Turn the cross-handle to tighten the pressure test door against the outside surface of the lower skin panel.

4) Make sure the pressure test door has a good seal over the hole for tank access door.

(d) Connect the hose from the pressure test equipment to one of the pressure test door connectors.

NOTE: The pressure test equipment must be able to supply positive pressure in the range of 2.0 to 3.0 psig with a the variation of not more than ± 0.1 psig (± 0.7 kPa). The test uses a pressure of 2.2-2.4 psig (15.2-16.5 kPa).

NOTE: The maximum pressure to the structure is 3.0 psig (20.7 kPa) positive pressure and 2.0 psig (13.8 kPa) vacuum.

NOTE: A safety device which limits internal pressure to +72 inches of water (+2.6 psig or +17.9 kPa) and -20 inches of water (-0.72 psig or -5.0 kPa) is required.

NOTE: The pressure test door has two connectors, a 0.375 inch (9.525 millimeters) connector and a 0.250 inch (6.250 millimeters) connector. Both connectors have flared caps.

(e) Connect the long hose from the water manometer, SPL-1774, to the 2.0 in. (50.8 mm) diameter adapter on the pressure test door (Figure 602).

(f) Connect a 0-10 psig dry filtered regulated air source, STD-1083 to the pressure test equipment.

H. Pressure Check Procedure

SUBTASK 57-21-23-790-001

(1) Do the pressure check.

NOTE: This task is extremely sensitive to the surrounding temperature changes. Avoid any unnecessary activities that might cause a change in temperature.

(a) Supply 2.2-2.4 psig (15.2-16.5 kPa) air pressure to test equipment.

(b) Open the test equipment valve from the air pressure source; the dry bay tank is now pressurized.

(c) Wait 2 minutes minimum for the pressure in the tank to become stable before you start the check.

(d) Close the test equipment valve to from the air pressure source.

(e) Record the start time of the check and the inches of water at the beginning of the check.

(f) Wait 10 minutes; the tank must hold the pressure for this time.

(g) After 10 minutes, make a record of the inches of water on the manometer.

(h) Calculate the pressure drop.

1) Subtract the value for the inches of water at the start of the check from the inches of water at the end of the check.

2) If the pressure drop is less than 0.11 inches of water (0.004 psi or 0.03 kPa), the vapor seal is good.

a) Reduce the pressure in the tank to zero.

b) Put the airplane back to the usual condition.

3) If the pressure drop is more than 0.11 inches of water (0.004 psi or 0.03 kPa), there is vapor movement through the vapor seal.

a) Reduce the pressure in the tank to zero.

b) Continue with the procedure to find the location of the vapor leak.

I. Vapor Leak Location Procedure

SUBTASK 57-21-23-010-002

(1) Open the applicable lower leading edge access panel on the left or right wing.

(a) Open these access panels:

Number	Name/Location
521ZB	Lower Leading Edge Access Panel - Slat Station 488.05
621ZB	Lower Leading Edge Access Panel - Slat Station 508.31

SUBTASK 57-21-23-010-003

(2) Open the applicable lower trailing edge access panel on the left or right wing.

(a) Open these access panels:

Number	Name/Location
571FB	Lower Outboard Fixed Trailing Edge Wedge Access Panel
671FB	Lower Outboard Fixed Trailing Edge, Wedge Access Panel

SUBTASK 57-21-23-010-004

(3) Open the access door for the outboard, dry bay tank on the applicable wing.

(a) Open these access doors.

Number	Name/Location
534BB	Main Tank Access Door - Wing Station 748
634BB	Main Tank Access Door - Wing Station 748

(b) Do this task: Dry Bay Access Doors Removal, TASK 57-21-23-000-801.

SUBTASK 57-21-23-790-002

(4) Find the vapor leak in the dry bay tank.

(a) Apply a non-corrosive soap solution, leak detector, G50135 or bubble solution, BMS10-34 System 3, to the all seal areas on the outside of the dry bay tank.

NOTE: All seal areas on the outside of the dry bay tank includes the forward spar, the aft spar and the outboard side of rib 26.

(b) Supply 2.2-2.4 psig (15.2-16.5 kPa) air pressure to test equipment.

(c) Open the test equipment valve from the air pressure source.

(d) Watch these areas for air bubbles.

NOTE: The size of the leak can cause the bubbles to form very slowly. It can be necessary to constantly watch the seals to see the leak.

(e) Make a mark at the locations where you see bubbles with a marking pen, G50219 or marker, G02061 or equivalent.

(f) Close the test equipment valve from the air pressure source.

(g) Reduce the pressure in the wing tank to zero.

SUBTASK 57-21-23-080-001

(5) Remove the pressure test equipment.

(a) Disconnect the hose from the water manometer, SPL-1774 from the adapter on the pressure test door.

(b) Disconnect the 0-10 psig dry filtered regulated air source, STD-1083 from the pressure test equipment.

(c) Disconnect the hose from the pressure test equipment from the pressure test door.

(d) Remove the pressure test door.

1) Turn the cross-handle to remove the clamp force from the clamp plate.

2) Turn the T-handle to turn the clamp plate 90 degrees on the pressure test door.

3) Remove the pressure test door from the hole for the access door.

(e) Remove the block off plug from the inside of the tank.

1) Turn the handle to loosen the press plate which will remove the clamp force from the plug.

(f) Remove the drain plug on the lower skin panel, from the inside of the tank.

SUBTASK 57-21-23-211-001

(6) Visual Procedure

(a) Examine the area you think contains a leak for seal defects such as cracked or loose fillets, pinholes, or loose fasteners.

1) Use an explosion proof flashlight, STD-1081 when you look inside the dry bay tank.

2) If it is necessary, use an inspection mirror, STD-600 to examine seals which are difficult to see.

(b) Do a check of the fillet seals that you think have a bad bond.

(c) Look at the tank structure for cracks or distortion.

(d) If you find tank damage, cracks, distortion or loose fasteners, refer to the structural repair manual (SRM 57-00-00).

SUBTASK 57-21-23-360-001

(7) Repair or replace the sealant as necessary.

(a) Do this task: Repair of Sealant Leaks in the Wing Dry Bay Tanks, TASK 57-21-23-390-801.

J. Put the Airplane Back to the Usual Condition

SUBTASK 57-21-23-080-002

(1) Make sure the drain holes are free from unwanted material or objects.

SUBTASK 57-21-23-090-002

(2) Do an check of the tanks to make sure you removed all unwanted materials, tools, and equipment.

SUBTASK 57-21-23-160-002

(3) Use water, G50256 and a moist, clean cotton wiper, G00034 to remove the bubble solution from the external surface of the fuel tank.

SUBTASK 57-21-23-410-001

(4) If these access doors were opened to find the vapor leak, close these access doors and panels on the left or right wing.

(a) Close these access doors.

Number	Name/Location
534BB	Main Tank Access Door - Wing Station 748
634BB	Main Tank Access Door - Wing Station 748

1) Do this task: Dry Bay Access Doors Installation, TASK 57-21-23-400-801.

SUBTASK 57-21-23-410-002

(5) If these access panels were opened to find the vapor leak, close these access panels on the left or right wing.

(a) Close these access panels:

Number	Name/Location
521ZB	Lower Leading Edge Access Panel - Slat Station 488.05
571FB	Lower Outboard Fixed Trailing Edge Wedge Access Panel
621ZB	Lower Leading Edge Access Panel - Slat Station 508.31
671FB	Lower Outboard Fixed Trailing Edge, Wedge Access Panel

SUBTASK 57-21-23-410-003

(6) Close the access door for the inboard, dry bay tank on the left or right wing.

(a) Close these access doors.

Number	Name/Location
534AB	Main Tank Access Door - Wing Station 727
634AB	Main Tank Access Door - Wing Station 727

(b) Do this task: Dry Bay Access Doors Installation, TASK 57-21-23-400-801.

SUBTASK 57-21-23-360-002

(7) Remove the work platform, COM-2480 or maintenance platform, SPL-659.

SUBTASK 57-21-23-440-003

(8) Do this task: Trailing Edge Flap System Reactivation, TASK 27-51-00-440-801.

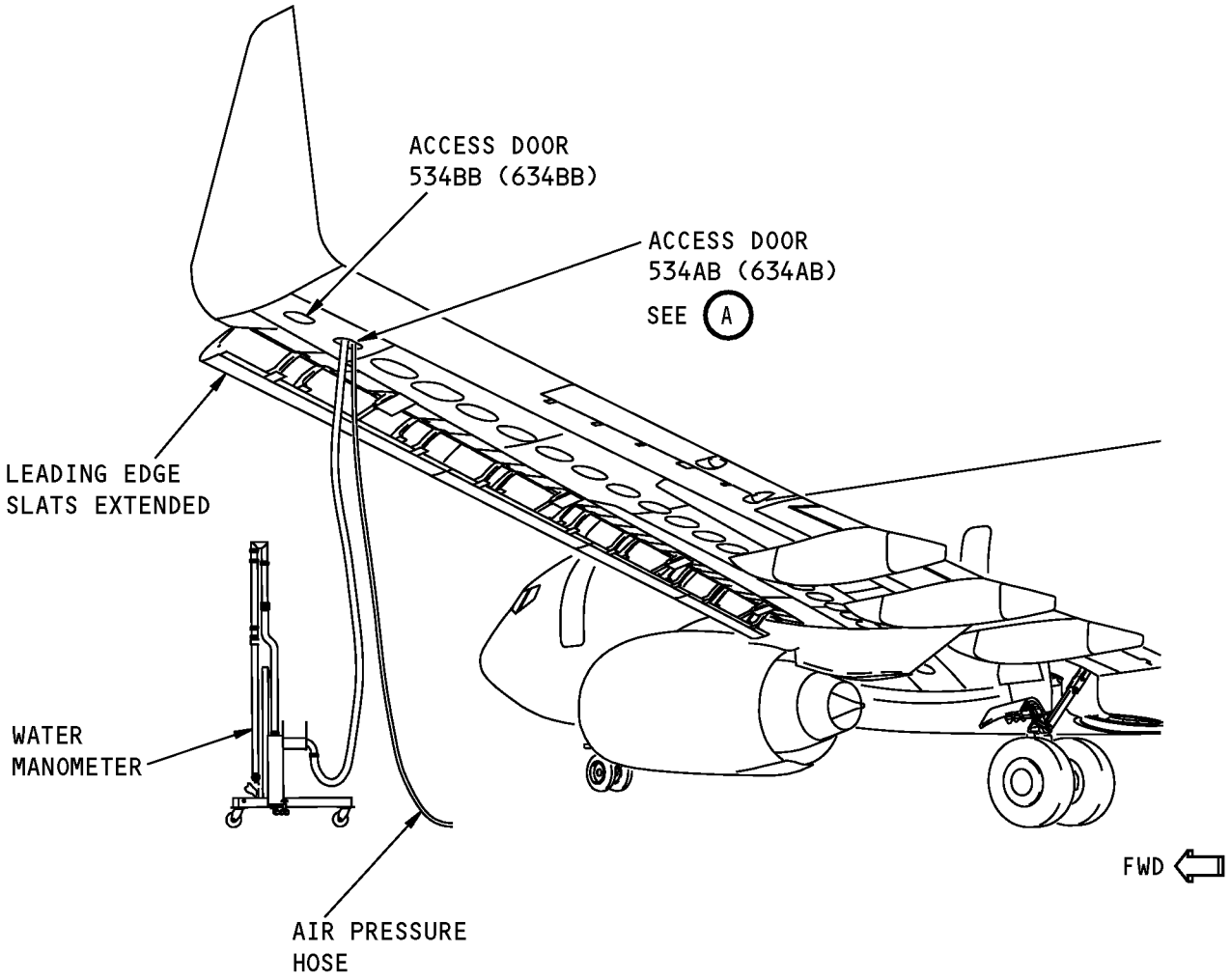
SUBTASK 57-21-23-440-004

(9) Do this task: Reactivate the Leading Edge Flaps and Slats, TASK 27-81-00-440-801.

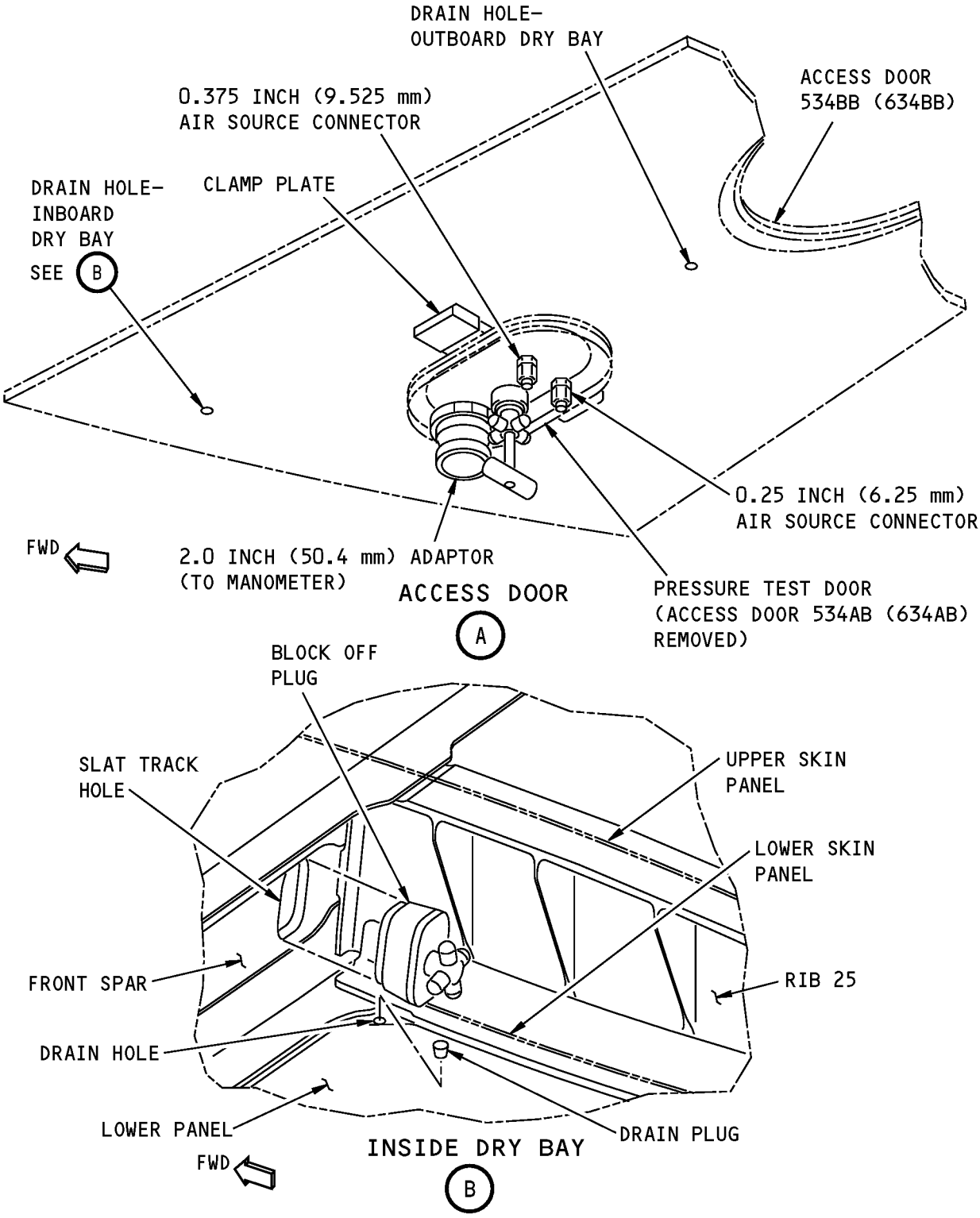
SUBTASK 57-21-23-981-002

(10) Do this task: Leading Edge Flaps and Slats Retraction, TASK 27-81-00-860-804.

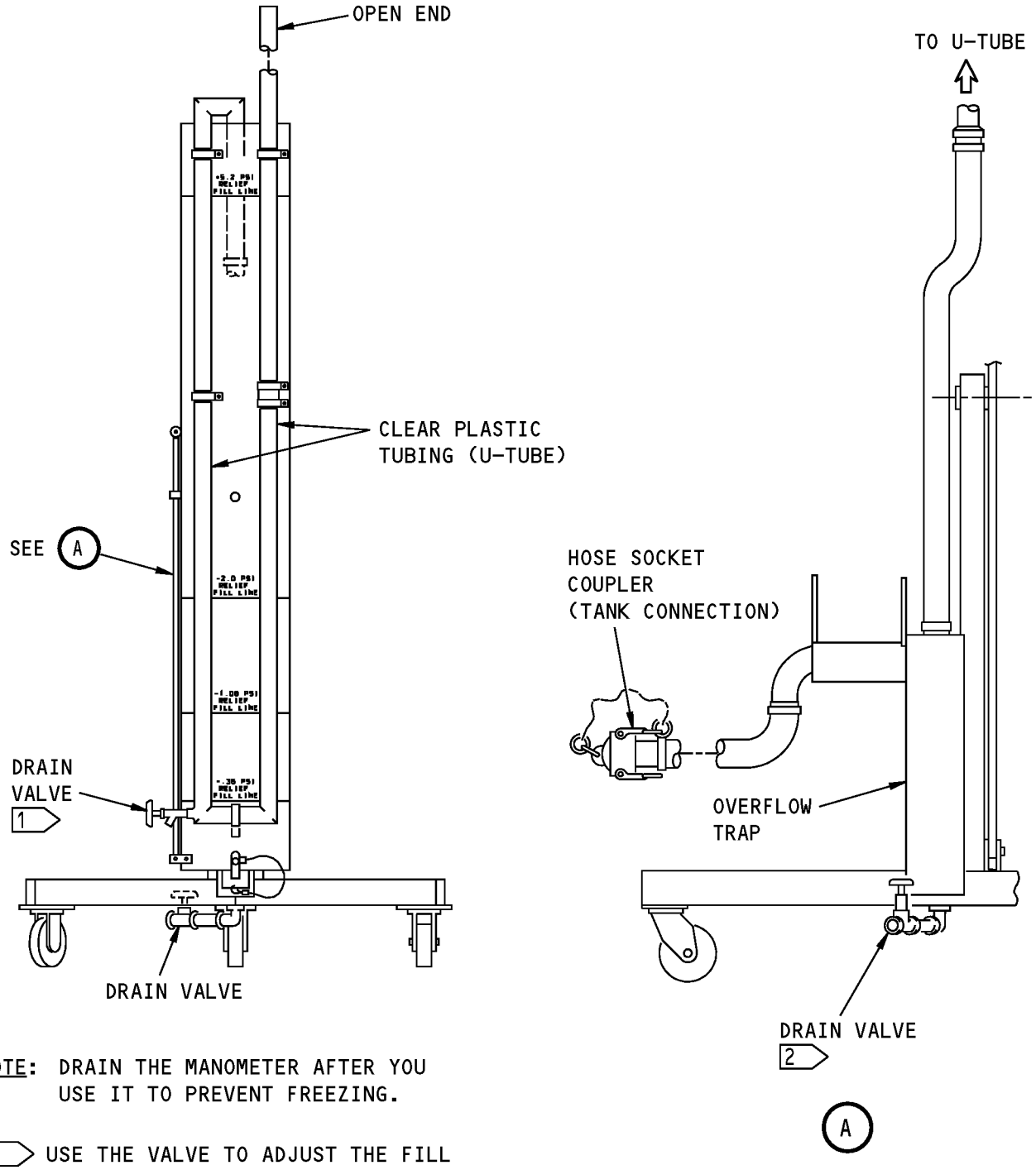
——————— END OF TASK ———————



Dry Bay Tank Pressure Check
Figure 601 (Sheet 1 of 2)/57-21-23-990-802



Dry Bay Tank Pressure Check
Figure 601 (Sheet 2 of 2)/57-21-23-990-802



NOTE: DRAIN THE MANOMETER AFTER YOU USE IT TO PREVENT FREEZING.

1 USE THE VALVE TO ADJUST THE FILL LEVEL AND TO DRAIN THE TUBING

2 USE THE VALVE TO DRAIN THE OVERFLOW TRAP

Water Manometer Assembly
Figure 602/57-21-23-990-804

WING DRY BAY TANK VAPOR SEAL - REPAIR

1. General

A. This procedure has this tasks:

(1) A task to repair the sealant in the wing dry bay tanks.

B. A related task is to repair the sealant at the wing leading edge seal ribs.

C. It is necessary to use materials that are poisonous and flammable when you repair the sealant. You must have a good flow of air in the area. You must obey all fire safety precautions.

D. Before you repair a leak, make an analysis of the source and cause of the leak with the Vapor Seal Leak Check procedure.

E. If the cause of the leak is a result of structural damage, do the structural repair. Refer to the Structural Repair Manual before you apply sealant.

TASK 57-21-23-390-801

2. Repair of Sealant Leaks in the Wing Dry Bay Tanks

(Figure 801)

A. General

(1) This task gives the procedure to apply sealant to the vapor leaks of the dry bay tank between rib 25 and rib 26, and rib 27 and rib 26.

(2) The dry bay tanks are sealed as follows:

(a) The dry bay tanks are sealed with sealant, BMS 5-142.

1) The sealant was applied to the seams between the ribs and the upper and lower skin panels and the forward and aft spar on the inside of the dry bay tanks.

2) The sealant was applied to the outside surface of the forward spar and the leading edge panel.

3) The sealant was applied to the outside surface of the aft spar and the trailing edge panel.

(b) The leading edge ribs are sealed with sealant, BMS 5-142.

1) The sealant was applied to the seams between the ribs and the upper and lower skin panels and the outside of the forward spar.

2) The sealant was applied to the outside surface of the forward spar and the leading edge panel.

(c) Injection seals with sealant BMS 5-45 are made to the channels and cavities between the rib 25 and the forward and aft spars.

(d) Injection seals with sealant BMS 5-142 are made to the channels and cavities between the rib 26, rib 27 and the forward and aft spars.

(e) Injection seals with sealant BMS 5-142 are made to the channels and cavities between the rib 27 and the forward spar.

(f) All fillet seals must touch the injection and prepack seals to maintain seal continuity.

(g) Tool holes for manufacture and alignment of the wing parts were filled and sealed.

(h) All non-aluminum fasteners were fillet sealed for corrosion prevention with sealant, BMS 5-142. A thick sealant layer applied to the fasteners with a brush was optional.

(i) All exposed sealant was covered with a corrosion resistant finish (topcoat) of primer and enamel paint or hydraulic fluid resistant sealant, BMS 5710 Type 41.

(j) After all sealant application was complete, corrosion inhibiting compound, BMS 3-23 was applied to the dry bay tanks.

(3) Application of sealants.

(a) If you do not do the subsequent steps, vapor leaks can occur:

1) Make sure the surfaces are prepared correctly.

a) The surfaces must not contain unwanted materials such as grease, metal particles, hair, loose paint, corrosion inhibiting compounds or wax.

b) Unwanted materials can cause the sealant not to bond correctly; make the surfaces clean.

2) Follow all manufacturer's instructions for the sealant.

a) Sealants are supplied in two parts; base material and accelerator.

NOTE: You must be very careful to make sure the correct proportions of the base material and the accelerator recommended by the manufacturer are used. If you do not obey the manufacturer's instructions, you can change the physical properties of the mixture which can cause a seal failure and a tank leak.

b) Sealing compounds have a specified shelf life.

NOTE: After the specified time, you must do a test of the sealing compounds to find out if you can use them.

c) You can keep some sealants in refrigeration for a short time after they are mixed with the accelerator.

NOTE: You must discard these sealants after the specified time.

d) Make sure the sealant is applied during the work life or application time after you mix the sealant.

3) Use a brush to apply precoat when recommended.

4) Do all the steps to apply the sealant.

5) Make sure there are no air bubbles in the sealant.

6) Make sure you fill all the spaces completely with sealant.

7) Make sure you do not make an overlap with the sealants.

8) Make sure the sealant touches all the surfaces.

(4) After you find the external leak point and the internal leak source, find the point where the vapor goes through the seal plane.

(a) The area where you see the bubbles usually shows the point where the vapor goes through the seal plane.

(b) If there is an injection, prepack or hidden seal failure, the vapor can move along the tank structure and leak at a point far from the leak source.

(c) If you repair the internal area where you see the bubbles and do not repair the injection, prepack or hidden seal failure, you can only temporarily repair the leak.

(d) You must find all possible leak paths between the external leak point and internal leak source to repair the seal failure.

NOTE: You can increase the height of the seal plane as an alternative to a repair of the seal.

(e) Look for loose fasteners.

1) Loose fasteners start vapor leaks because they let attached surfaces move.
2) Faying surface seals get cracks and let vapor leak through the seal plane.
3) Loose rivets are not self-sealing.
4) Sealant or metal seal covers do not bond with loose fasteners.

(f) To understand the leak, examine the tank structure and sealant.

B. References

Reference	Title
20-30-82-910-801	General Cleaning of Solvent Resistant Organic Coatings (Series 82) (P/B 201)
20-30-92-910-801	Final Cleaning Prior to General Sealing (Series 92) (P/B 201)
20-30-93-910-801	Final Cleaning Prior to Fuel Tank Sealing (Series 93) (P/B 201)
28-11-00-300-803	Repair of Sealant Leaks in the Fuel Tank Structure (P/B 801)
28-11-00-600-801	Apply the Corrosion Resistant Finish (Topcoat) (P/B 701)
51-31-00-390-802	Injection Seal Application (P/B 201)
51-31-00-390-804	Fillet Seal Application (P/B 201)
51-31-00-390-805	Fastener Seal Application (P/B 201)
57-21-23-000-801	Dry Bay Access Doors Removal (P/B 401)
57-21-23-400-801	Dry Bay Access Doors Installation (P/B 401)

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-768	Sealant Removal Tool, Hardwood or Plastic (Part #: ST982, Supplier: 81205, A/P Effectivity: 737-ALL)
STD-185	Cleaners - Pipe
STD-449	Gun - Sealant
STD-600	Mirror - Inspection
STD-1081	Flashlight - Explosion Proof
STD-1280	Source - Air, Regulated, Dry Filtered, 0-30 PSIG

D. Consumable Materials

Reference	Description	Specification
A00767	Sealant - Fuel Tank	BMS5-45
A02315	Sealant - Low Density, Synthetic Rubber. 2 Part	BMS5-142
A50009	Sealant - Low Density, Chromate Type Synthetic Rubber	BMS5-142, Class B-1/2
B00130	Alcohol - Isopropyl	TT-I-735
B00571	Coating - Clear Hydraulic Fluid Resistant Topcoat	BAC5710, Type 41
B01002	Solvent - General Cleaning Of Solvent Resistant Organic Coatings (AMM 20-30-82/201) - Series 82	
B01012	Solvent - Final Cleaning Prior To General Sealing (AMM 20-30-92/201) - Series 92	
B01013	Solvent - Final Cleaning Prior To Fuel Tank Sealing (AMM 20-30-93/201) - Series 93	

(Continued)

Reference	Description	Specification
C00064	Coating - Aluminum Chemical Conversion	BAC5719, Type II, Class A (MIL-C-5541, Class A)
G00009	Compound - Organic Corrosion Inhibiting	BMS3-23
G00034	Cotton Wiper - Process Cleaning Absorbent Wiper (Cheesecloth, Gauze)	BMS15-5
G00268	Brush - Soft Bristle, Paint	
G00834	Cloth - Lint-free Cotton	
G01061	Water - Distilled	
G50222	Brush - Stiff Bristle, Non-Metalic - Tampico GA55-1	

E. Location Zones

Zone	Area
500	Left Wing
521	Left Wing - Leading Edge to Front Spar
534	Left Wing - Dry Bay
571	Left Wing - Fixed Trailing Edge
600	Right Wing
621	Right Wing - Leading Edge to Front Spar
634	Right Wing - Dry Bay
671	Right Wing - Fixed Trailing Edge

F. Prepare for the Procedure

SUBTASK 57-21-23-010-005

(1) Do the task: Dry Bay Access Doors Removal, TASK 57-21-23-000-801.

SUBTASK 57-21-23-212-001

(2) Examine the area you think contains a leak; look for seal defects such as cracked or loose fillets, pinholes, or loose fasteners.

(a) Use an explosion proof flashlight, STD-1081 when you look inside the dry bay tank.

(b) If it is necessary, use an inspection mirror, STD-600 to examine seals which are difficult to see.

(c) You can increase the seal plane to isolate a bad seal, or.

NOTE: Because you add a large quantity of sealant when you increase the seal plane above the initial seal plane, it is better to replace the bad seal.

1) Examine the structure around the bad seal to find where to increase the seal plane.

2) Apply a new fillet seal around the structure with the applicable seals and fasteners to increase the seal plane.

(d) You can remove the sealant to replace the bad seal.

SUBTASK 57-21-23-360-003

(3) Use the sealant removal tool, SPL-768 to remove the bad sealant in the fillet seal.

(a) Cut the ends of the bad sealant at a slope such that the new sealant makes an overlap with the remaining sealant.

1) Make sure you cut the sealant smoothly.

(b) If the fillet seal bond is good, it is not necessary to cut the sealant to the metal.

1) Make sure you remove all sealant that is loose.

(c) If the bad sealant includes fasteners with fillet seals, do the steps that follow:

1) Cut around the bottom of the fastener with a sealant cutting tool.

2) Use a pliers and pull the sealant from the fastener.

a) It is not necessary to remove small quantities of the sealant that bond to the fastener.

(d) If the fillet seal is to be applied to cured structural adhesives, remove all adhesive material that has not adhered to the metal or primed surface.

1) Scrape the adhesive with a abrasive-free hardwood or plastic tool to remove the loose adhesive.

a) It is not necessary to remove adhesive that remains bonded to the metal or primed surface after you scrape the loose adhesive.

SUBTASK 57-21-23-360-004

(4) If there is a bad injection or prepack seal at rib 25, refer to this task to repair the seal for the surge fuel tank: Repair of Sealant Leaks in the Fuel Tank Structure, TASK 28-11-00-300-803.

SUBTASK 57-21-23-360-005

(5) If there is a bad injection seal at rib 26 and rib 27 and the upper and lower skin panels, do the steps that follow:

(a) Remove the all loose sealant; it is not necessary to remove the sealant inside short injection channels that have a good sealant bond.

NOTE: You can repair bad injection seals if you raise the new seal plane above the old seal plane. When the hole for the injection seal is covered with a fillet seal, it is not necessary to inject sealant in the entire depth of the channel.

(b) If the injection channel does not have any sealant for the length of the channel, do the steps that follow:

1) Remove the any loose sealant with pipe cleaners, STD-185 and small sealant removal tool, SPL-768.

a) Be careful not to cause damage to the tank structure.

2) For channels that are too small for pipe cleaners, apply Series 93 solvent, B01013 to the channel with a brush.

a) Refer to Final Cleaning Prior to Fuel Tank Sealing (Series 93), TASK 20-30-93-910-801 for a complete list of Series 93 solvent, B01013.

3) Clean the channel of unwanted sealant debris or make the channel dry to evaporate the solvent with a clean, oil-free, 0-30 psig dry filtered regulated air source, STD-1280.

4) Continue the procedure to do an injection seal at one end of the channel.

SUBTASK 57-21-23-160-003

(6) For tank surfaces covered with corrosion inhibiting compound, G00009 (BMS 3-23), clean the tank surface around the repair area as follows:

(a) Wipe off excess corrosion inhibiting compound, G00009 with a clean, lint-free cloth, G00834.

(b) Clean the area approximately 1.0 inches (25.4 millimeters) larger than the area to be sealed to prevent contamination from the corrosion inhibiting compound, G00009.

1) Make the surface clean with a new, clean cotton wiper, G00034 moist with Series 82 solvent, B01002.

a) Refer to General Cleaning of Solvent Resistant Organic Coatings (Series 82), TASK 20-30-82-910-801 for the complete list of Series 82 solvent, B01002.

2) Wipe the surface with a new, clean, dry cloth to remove excess solvent; do not let the solvent become dry on the surface.

3) Replace the cloth as the cloth becomes soiled.

4) Continue to clean and dry the surfaces until the a clean, dry cloth remains clean.

5) Do not touch the cleaned area with your fingers or allow the surface to become contaminated.

SUBTASK 57-21-23-160-004

(7) If there is topcoat on the surface of the sealant, remove all the topcoat from the sealant repair area.

(a) Use abrasive paper and remove the used topcoat until the sealant is shown and is in good condition.

(b) Use clean, cotton wiper, G00034 soaked with Series 92 solvent, B01012 to clean all surfaces and sealant from which you removed the topcoat.

1) Refer to Final Cleaning Prior to General Sealing (Series 92), TASK 20-30-92-910-801 for the complete list of Series 92 solvent, B01012.

(c) Wipe the surface with a clean, dry cloth to remove excess solvent; do not let the solvent become dry on the surface.

(d) Continue to clean and dry the surfaces until the a clean, dry cloth remains clean.

(e) Do not touch the cleaned area with your fingers or allow the surface to become contaminated.

SUBTASK 57-21-23-350-001

(8) If the alodine metal surface treatment is worn or damaged, you must apply an alodine coating, C00064, to the metal surface before you apply the new sealant or finish material.

(a) Apply alodine to the surfaces that are worn, damaged or where the metal is shown.

1) Refer to the task:Apply the Corrosion Resistant Finish (Topcoat), TASK 28-11-00-600-801.

SUBTASK 57-21-23-160-005

(9) Immediately before you apply the sealant, clean the surface with a clean cotton wiper, G00034 moist with Series 92 solvent, B01012.

NOTE: Do not use an aqueous cleaner to clean the repair area. Use of this kind of material requires a flush and rinse with water. The dry bay tanks are a small enclosed structure where water can collect and become entrapped.

(a) Refer to Final Cleaning Prior to General Sealing (Series 92), TASK 20-30-92-910-801 for the complete list of Series 92 solvent, B01012.

(b) Wipe the surface with a clean dry cloth to remove excess solvent; do not let the solvent become dry on the surface.

(c) Do not touch the cleaned area with your fingers or allow the surface to become contaminated.

G. Wing Dry Bay Tank Repair - Injection Seals

SUBTASK 57-21-23-390-001

(1) Prepare the sealant, A00767.

(a) Match the batch number of the base compound to the accelerator compound.

NOTE: Compounds from the same batch number will be the same age. The different age of compounds can cause problems with the sealant.

(b) Mix the two-part sealant to the accelerator-to-base ratios given by the supplier.

NOTE: The table is a guide for the sealant mix ratios and the amount of usable time to apply the sealant. Accelerated mix ratios can affect the application time and can increase the sealant weight and defects in the applied sealant.

1) Refer to the table: Sealant Usable Time/Table 801.

SUBTASK 57-21-23-390-002

(2) To apply a new injection seal of sealant, A00767, do the steps that follow:

(a) Refer to this task for the method and examples of injection seals: Injection Seal Application, TASK 51-31-00-390-802.

(b) Examine the seal area to make sure you have the correct selection of tools for the job.

1) Use an explosion proof flashlight, STD-1081 when you look inside the dry bay tank.

2) If it is necessary, use an inspection mirror, STD-600 to examine seals which are difficult to see.

(c) Apply the injection seal of sealant, A00767 with the sealant gun, STD-449.

H. Wing Dry Bay Tank Repair - Fillet Seals

SUBTASK 57-21-23-390-003

(1) Prepare the sealant, A50009 Class B-1/2 or sealant, A02315 Class B-2 sealant.

(a) Match the batch number of the base compound to the accelerator compound.

NOTE: Compounds from the same batch number will be the same age. The different age of compounds can cause problems with the sealant.

(b) Mix the two-part sealant to the accelerator-to-base ratios given by the supplier.

NOTE: The table is a guide for the sealant mix ratios and the amount of usable time to apply the sealant. Accelerated mix ratios can affect the application time and can increase the sealant weight and defects in the applied sealant.

1) Refer to the table: Sealant Usable Time/Table 801.

(c) Completely mix the two compounds until the mixture is all the same color and the same texture and viscosity.

Table 801/57-21-23-993-801 Sealant Usable Time

SEALANT	APPLICATION TIME (MINIMUM) HOURS	TACK-FREE TIME (MINIMUM) HOURS	SQUEEZE-OUT LIFE (MINIMUM) HOURS	CURING TIME (MINIMUM) HOURS
BMS 5-142 B-1/2 *[1]	0.5	10	N/A	24
BMS 5-142 B-2 *[1]*[2]	2	24	N/A	48
BMS 5-45 B-1/2 *[1]	0.5	8	N/A	24
BMS 5-45 B-2 *[1]*[3]	2	24	6	48
BMS 5-45 B-2 *[1]*[4]	0.5	N/A	N/A	6

*[1] At 77 degrees F (25 degrees c) and 50% relative humidity ambient conditions. Other temperature and relative humidity conditions will change the times.

*[2] Standard mix ratio for BMS 5-142, Class B-2 sealant, 6.32:100 accelerator-to-base ratio by volume or 10:100 accelerator-to-base ratio by weight.

*[3] Standard mix ratio for BMS 5-45, Class B-2 sealant, 8.4:100 accelerator-to-base ratio by volume or 10:100 accelerator-to-base ratio by weight.

*[4] Accelerated mix ratio for BMS 5-45, Class B-2 sealant, 16.8:100 accelerator-to-base ratio by volume or 20:100 accelerato-to-base ratio by weight.

SUBTASK 57-21-23-390-004

(2) To apply a new fillet seal of sealant, A50009 Class B-1/2 or sealant, A02315 Class B-2 sealant, do the steps that follow:

(a) Refer to this task for the method and examples to apply a fillet seal: Fillet Seal Application, TASK 51-31-00-390-804.

(b) Examine the seal area to make sure you have the correct selection of tools for the job.

1) Use an explosion proof flashlight, STD-1081 when you look inside the dry bay tank.

2) If it is necessary, use an inspection mirror, STD-600 to examine seals which are difficult to see.

(c) Apply a small fillet seal of sealant with the sealant gun, STD-449.

(d) Use a sealant fairing tool and push the fillet seals tightly into position.

1) Make sure all sealant fairing tools are clean; use a clean cotton wiper, G00034.

2) Use a solution of alcohol, B00130 and distilled water, G01061, mixed to a ratio of 1:5 or 1:6 by volume to wet the tool surface to prevent sticking of the sealant to the fairing tools.

(e) If the first fillet seal is hard, but is not clean, then it must be cleaned before you apply the second fillet seal.

(f) Apply sealant a second time to make a full bodied fillet seal.

1) If you do not use an extruded nozzle, use a sealant fairing tool to make a full bodied fillet seal.

2) Remove all air bubbles and re-entrant fillet seal edges.

(g) Apply a corrosion resistant finish (topcoat).

I. Fastener Sealant Application

SUBTASK 57-21-23-390-005

(1) Repair of the fastener fillet seals.

(a) Refer to this task for the method and examples to apply a fastener fillet seal: Fastener Seal Application, TASK 51-31-00-390-805.

1) Apply sealant, A50009 Class B-1/2 or sealant, A02315 Class B-2 sealant to the fastener and the area 0.50 inch (12.7 millimeters) in width in all directions from the fastener.

a) Use a stiff bristled Tamico GA55-1 brush, G50222 to apply the sealant on the surfaces and into crevices.

2) Let the sealant become dry until it is not tacky.

3) Use a sealing gun or spatula and apply sealant, A50009 Class B-1/2 or sealant, A02315 Class B-2 around and on the fastener.

4) Move the sealant with a sealant fairing tool until you get the dimensions shown for the fillet seal.

5) Examine the sealant for holes, bubbles, or spaces.

a) If there are holes, bubbles or spaces, do the procedure again.

6) Apply a corrosion resistant finish (topcoat).

J. Apply a Corrosion Resistant Finish (Topcoat)

SUBTASK 57-21-23-390-007

(1) Apply a corrosion resistant finish (topcoat) to all exposed sealant.

NOTE: The new sealant must become dry and tack free before the corrosion resistant finish (topcoat) can be applied.

(a) Prepare primer and enamel for a topcoat, or

(b) Prepare a two-part coating, B00571 for a topcoat.

1) Match the batch number of the base to the catalyst and expiration date.

2) Mix the two-part finish coating to the catalyst-to-base ratios given by the supplier.

NOTE: The amount of usable time to apply the finish coating. The two-part coating is a hydraulic fluid resistant coating. Kits that are identified as BAC 5710 Type 41 ''fc'' are fast cure.

a) Refer to the table: BAC 5710 Type 41 Finish Coating/Table 802.

3) Completely mix the two compounds until the mixture is all the same color and the same texture and viscosity.

Table 802/57-21-23-993-802 BAC 5710 Type 41 Finish Coating

BAC 5710 Type 41	Mix Ratio By Volume	Application Time	Minimum Cure
683-3-2 Base, X-310A catalyst	2 parts base to 1 part catalyst	4 Hours*[1]	4 hours*[2]
683-3-9 Base, X-310A catalyst	2 parts base to 1 part catalyst	100 minutes*[1]	100 minutes*[2]
683-3-20 Base, X-310A catalyst	2 parts base to 1 part catalyst	30 minutes*[1]	30 minutes*[2]

*[1] At 70 degrees F.

*[2] Full cure 14 days.

(c) Use clean, cotton wiper, G00034 soaked with Series 93 solvent, B01013 to clean all surfaces and sealant before you apply the topcoat.

1) Wipe the surface with a clean, dry cloth to remove excess solvent; do not let the solvent become dry on the surface.

2) Continue to clean and dry the surfaces until the a clean, dry cloth remains clean.

3) Do not touch the cleaned area with your fingers or allow the surface to become contaminated.

(d) Apply the finish coating with a brush, G00268.

SUBTASK 57-21-23-390-006

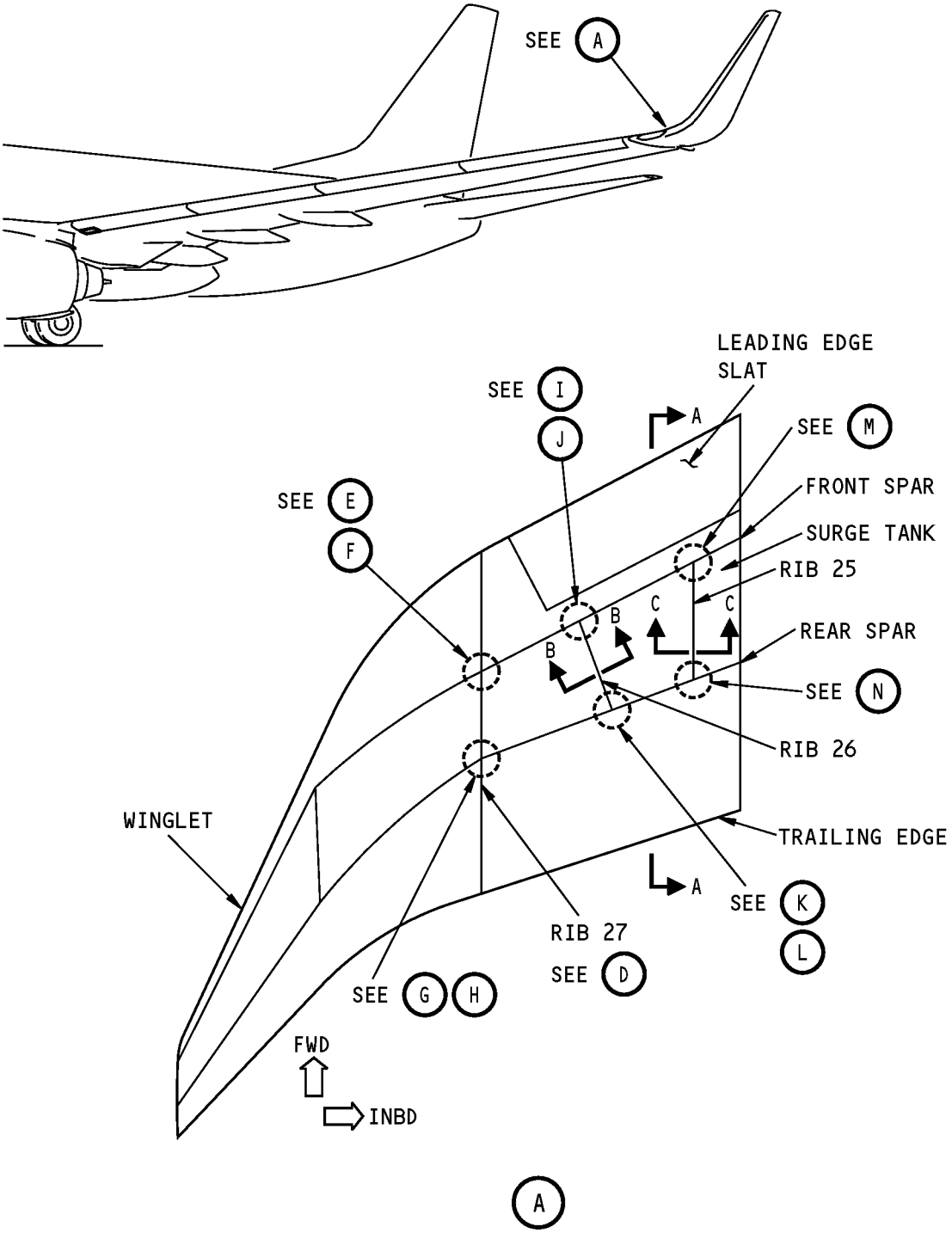
(2) After all sealant and corrosion resistant finish (topcoat) application is completed, apply corrosion inhibiting compound, G00009 (BMS 3-23) to the area of repair of the dry bay tank.

K. Put the Airplane Back to the Usual Condition

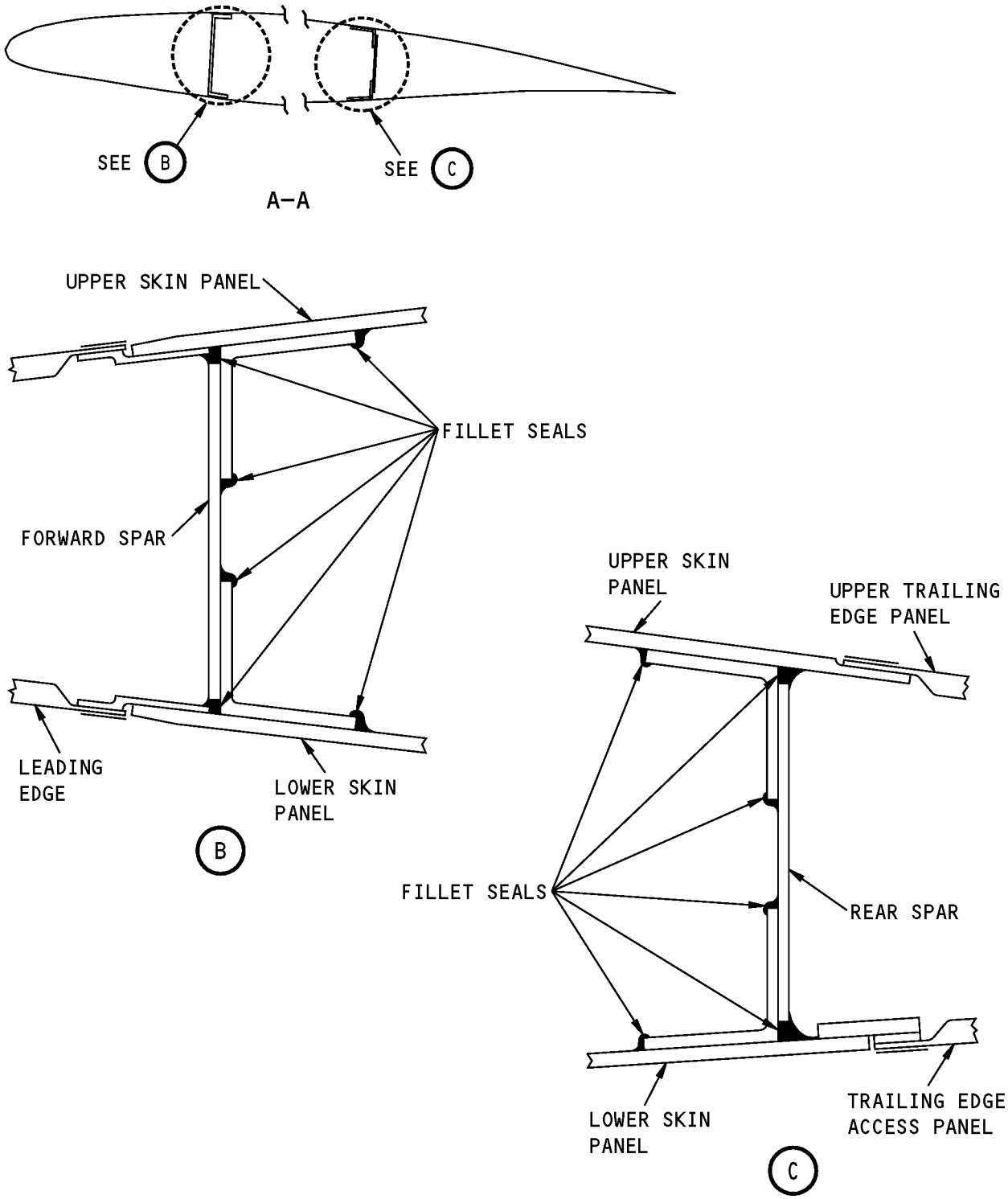
SUBTASK 57-21-23-410-004

(1) Do this task: Dry Bay Access Doors Installation, TASK 57-21-23-400-801.

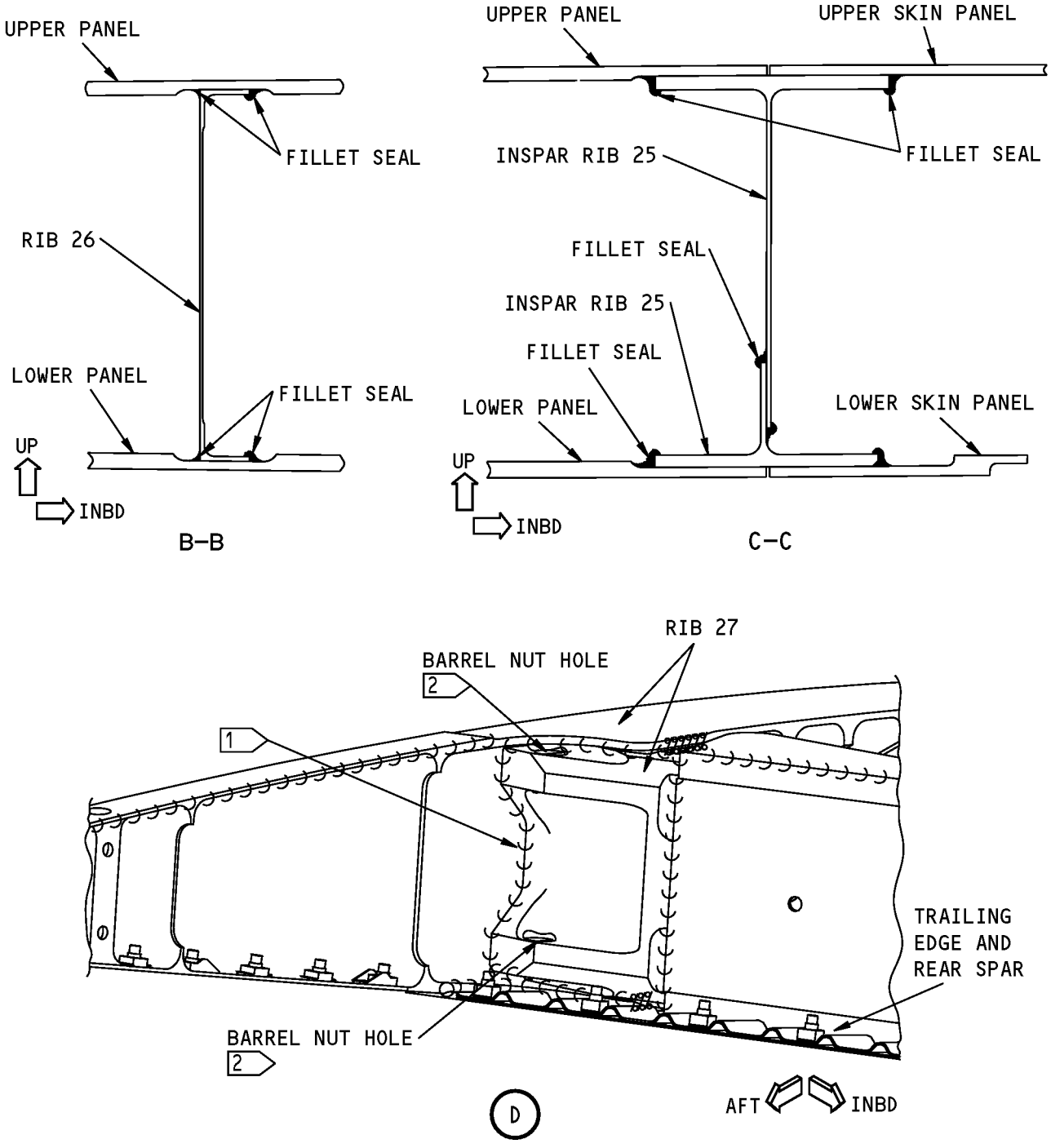
—————— END OF TASK ——————



Dry Bay Tank Seals
Figure 801 (Sheet 1 of 6)/57-21-23-990-803

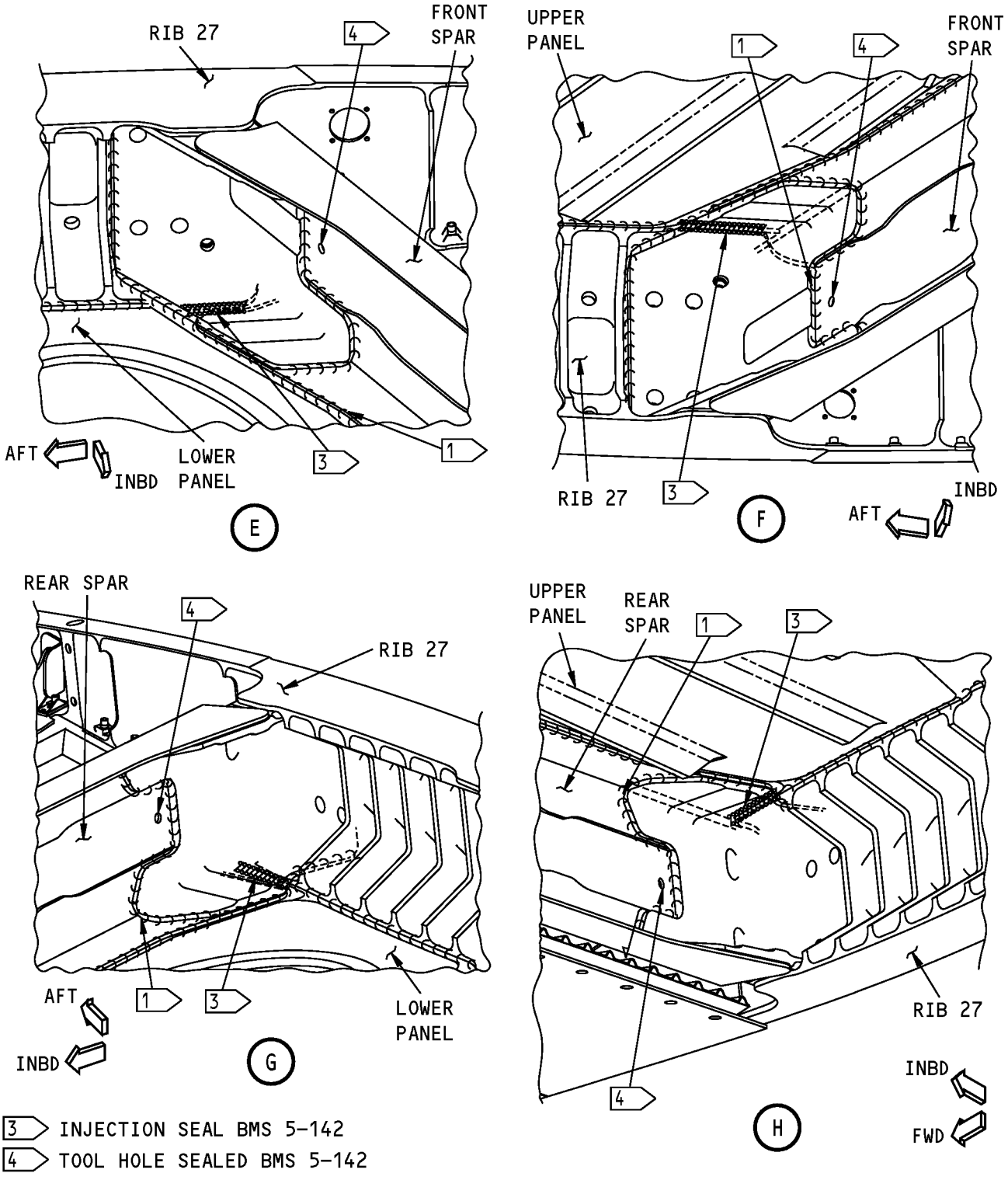


Dry Bay Tank Seals
Figure 801 (Sheet 2 of 6)/57-21-23-990-803

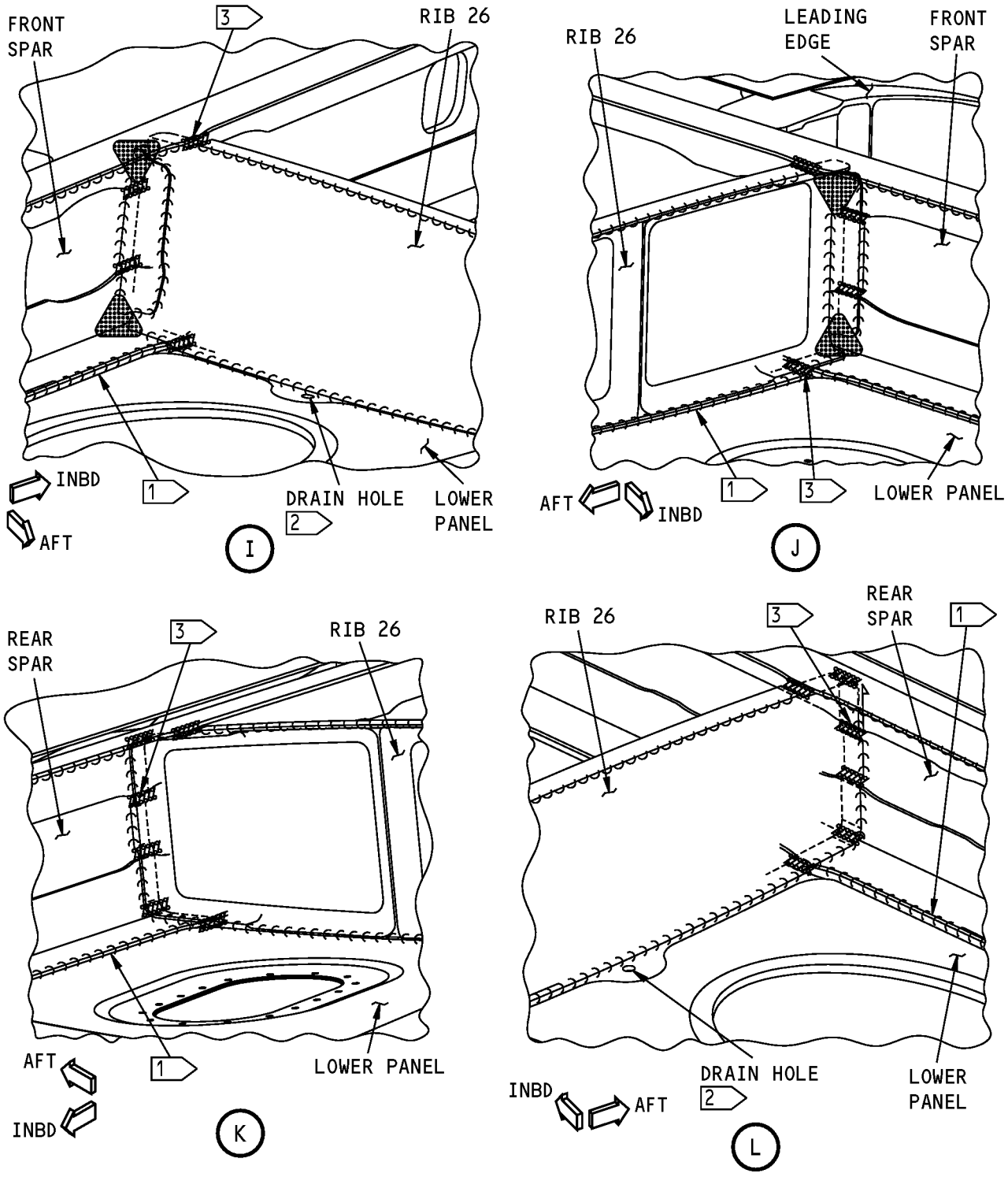


1 FILLET SEAL BMS 5-142
2 DO NOT FILL WILL SEALANT, KEEP OPEN

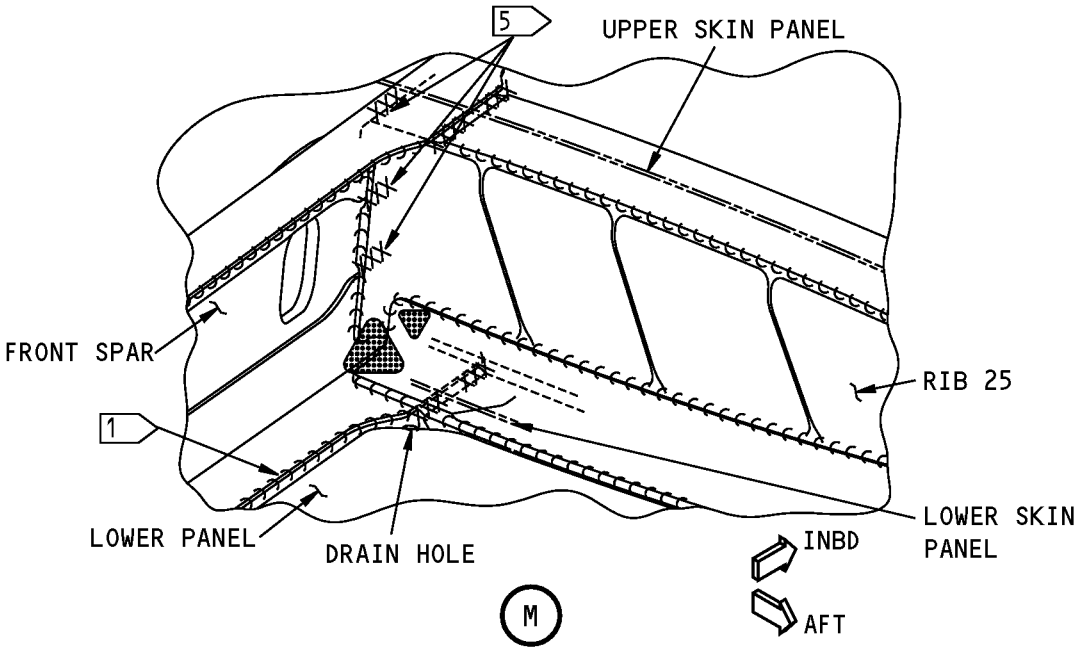
Dry Bay Tank Seals
Figure 801 (Sheet 3 of 6)/57-21-23-990-803

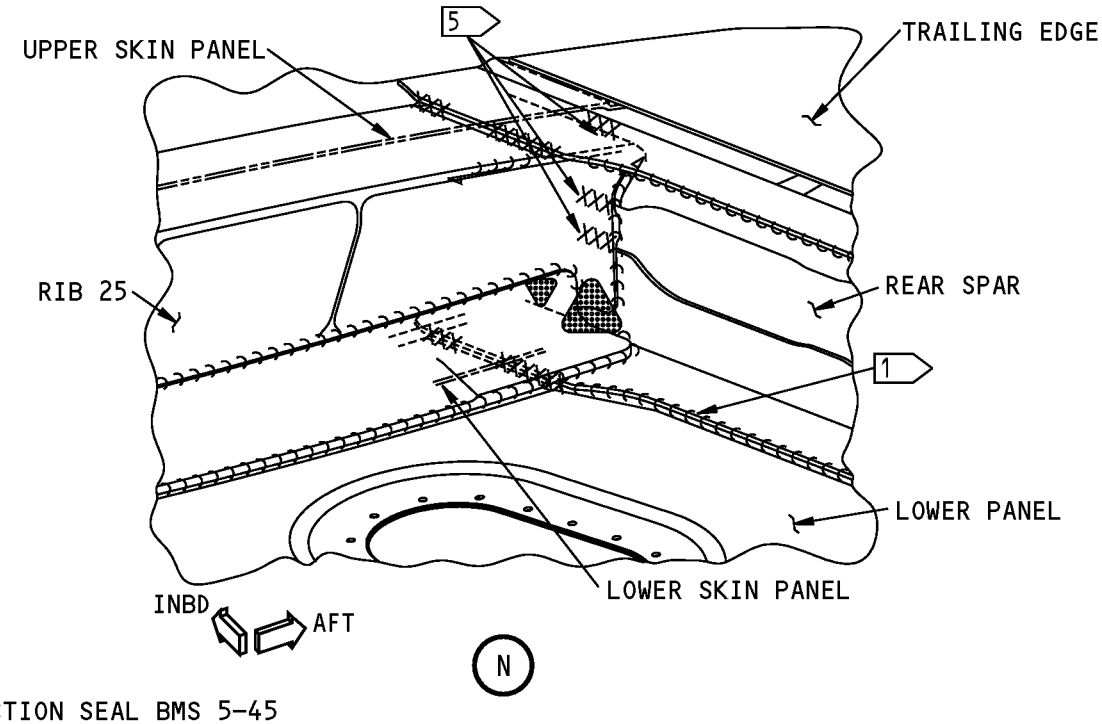


Dry Bay Tank Seals
Figure 801 (Sheet 4 of 6)/57-21-23-990-803



Dry Bay Tank Seals
Figure 801 (Sheet 5 of 6)/57-21-23-990-803





5 INJECTION SEAL BMS 5-45

Dry Bay Tank Seals
Figure 801 (Sheet 6 of 6)/57-21-23-990-803

WING VORTEX GENERATORS - REMOVAL/INSTALLATION

1. General

A. This procedure contains two tasks. The first task is the removal of the wing vortex generator. The second task is the installation of the wing vortex generator.

TASK 57-32-00-000-801

2. Remove the Wing Vortex Generators

(Figure 401)

A. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
COM-2481	Tool - Sealant Removal, BAC5000, PSD 6-184 Approved (Part #: 1-6390-A, Supplier: 63318, A/P Effectivity: 737-ALL) (Part #: 10810, Supplier: $0855, A/P Effectivity: 737-ALL) (Part #: 234350, Supplier: $0857, A/P Effectivity: 737-ALL) (Part #: 311, Supplier: KA861, A/P Effectivity: 737-ALL) (Part #: 411B60, Supplier: 3DN12, A/P Effectivity: 737-ALL) (Part #: 411B90, Supplier: 3DN12, A/P Effectivity: 737-ALL) (Part #: DAD5013, Supplier: $0856, A/P Effectivity: 737-ALL) (Part #: DFD5019, Supplier: $0856, A/P Effectivity: 737-ALL) (Part #: J5-0275-2010, Supplier: 435R8, A/P Effectivity: 737-ALL) (Part #: SCD5019, Supplier: $0856, A/P Effectivity: 737-ALL) (Part #: ST982LF, Supplier: 3Z323, A/P Effectivity: 737-ALL) (Part #: TS1275-4, Supplier: 1DWR5, A/P Effectivity: 737-ALL)

B. Location Zones

Zone	Area
500	Left Wing
600	Right Wing

C. Procedure - Remove the Wing Vortex Generator

SUBTASK 57-32-00-020-001

(1) Remove the loose vortex generator [1] with sealant removal tool, COM-2481.

———————— END OF TASK ————————

TASK 57-32-00-400-801

3. Install the Wing Vortex Generator

(Figure 401)

A. References

Reference	Title
51-21-00-100-801	Airplane Surface Preparation for Application of Finish (P/B 701)

B. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
COM-2481	Tool - Sealant Removal, BAC5000, PSD 6-184 Approved (Part #: 1-6390-A, Supplier: 63318, A/P Effectivity: 737-ALL) (Part #: 10810, Supplier: $0855, A/P Effectivity: 737-ALL) (Part #: 234350, Supplier: $0857, A/P Effectivity: 737-ALL) (Part #: 311, Supplier: KA861, A/P Effectivity: 737-ALL) (Part #: 411B60, Supplier: 3DN12, A/P Effectivity: 737-ALL) (Part #: 411B90, Supplier: 3DN12, A/P Effectivity: 737-ALL) (Part #: DAD5013, Supplier: $0856, A/P Effectivity: 737-ALL) (Part #: DFD5019, Supplier: $0856, A/P Effectivity: 737-ALL) (Part #: J5-0275-2010, Supplier: 435R8, A/P Effectivity: 737-ALL) (Part #: SCD5019, Supplier: $0856, A/P Effectivity: 737-ALL) (Part #: ST982LF, Supplier: 3Z323, A/P Effectivity: 737-ALL) (Part #: TS1275-4, Supplier: 1DWR5, A/P Effectivity: 737-ALL)

C. Consumable Materials

Reference	Description	Specification
A00142	Sealant - Temperature Resistant, Fuel Pressure, And Weather Sealant	BMS5-44
A00436	Sealant - Fuel Tank	BMS5-45 (Supersedes BMS 5-26)
A00708	Sealant - Fast Curing, 2-Part - PR-1828	AMS 3277

D. Location Zones

Zone	Area
500	Left Wing
600	Right Wing

E. Procedure - Install the Wing Vortex Generator

SUBTASK 57-32-00-150-001

(1) Remove the remaining adhesive with a sealant removal tool, COM-2481.

SUBTASK 57-32-00-150-002

(2) Restore any damaged paint prior to installation, do this task: Airplane Surface Preparation for Application of Finish, TASK 51-21-00-100-801.

SUBTASK 57-32-00-820-001

(3) Put the vortex generator [1] in the correct position.

SUBTASK 57-32-00-420-001

(4) Do the steps that follow to bond the vortex generator to the upper wing surface:

(a) Mix the base compound for the sealant, A00436, sealant, A00142, or PR-1828 sealant, A00708 with the activator.

NOTE: Refer to the manufacturer's instructions for the details.

(b) Apply a thin, constant layer of the adhesive mixture to each mating surface.

(c) Put the vortex generator on the upper wing surface immediately with sufficient pressure.

NOTE: Make sure that the surfaces are sealed together completely. Make sure that a continuous bead of extruded adhesive is around the edge of the vortex generator. This seals the surfaces together and indicates proper contact.

(d) Remove the unwanted adhesive around the edges of the vortex generator.

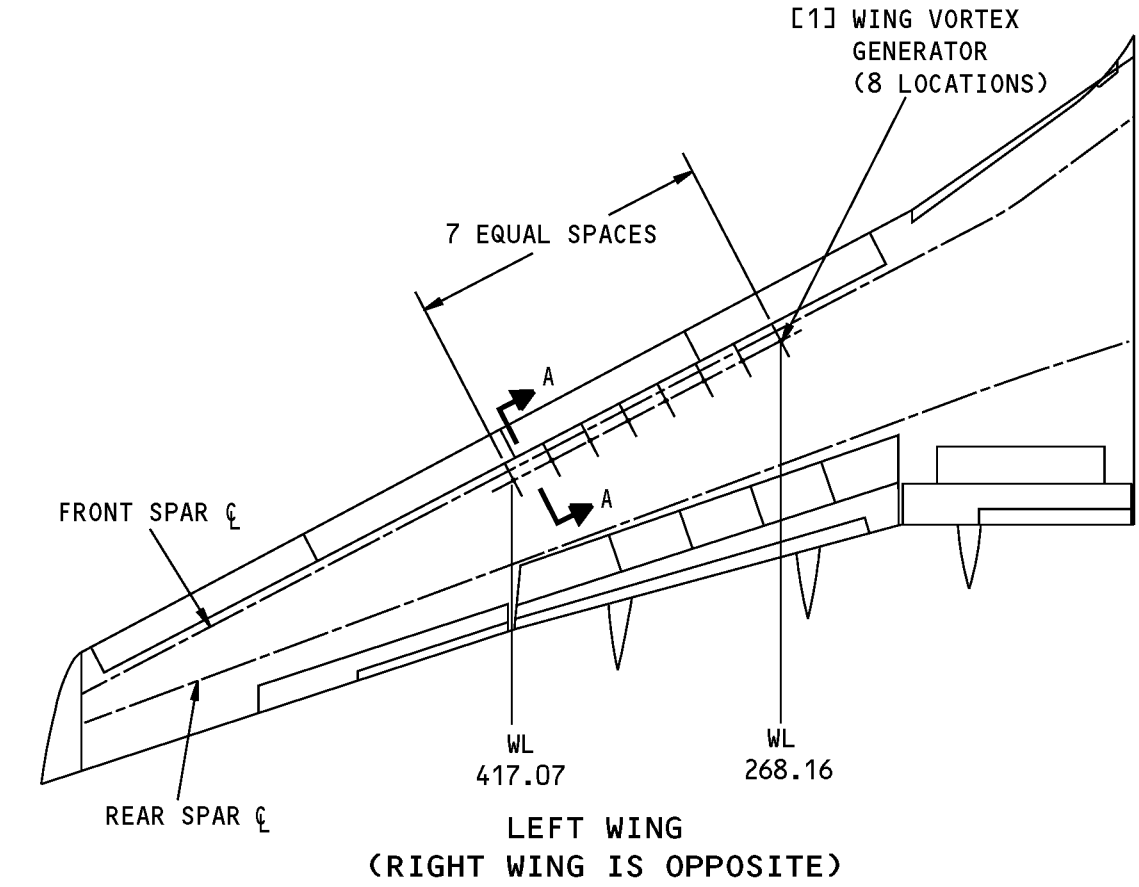
SUBTASK 57-32-00-370-001

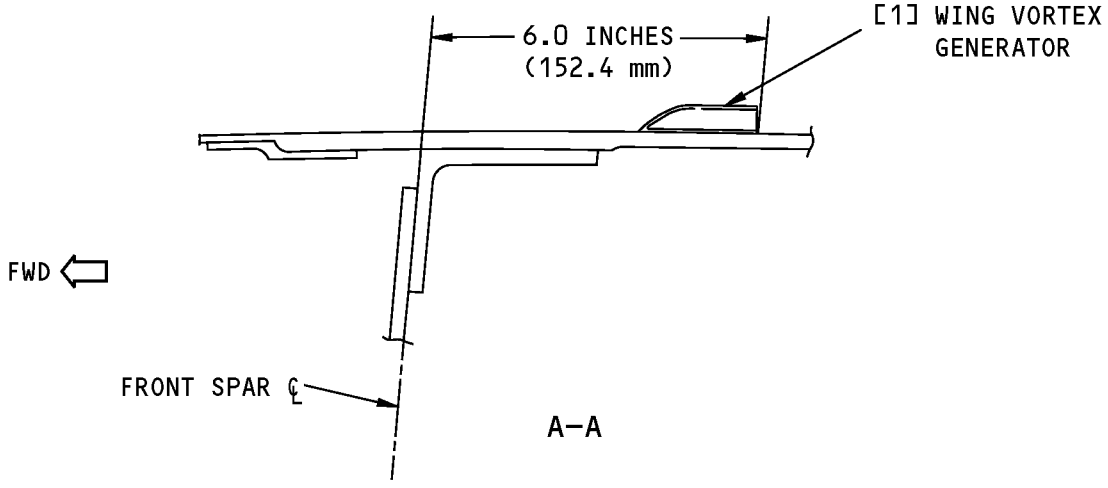
(5) After the adhesive dries, (Table 401), apply paint to the wing surface if it is necessary.

Table 401/57-32-00-993-802 Cure Time For BMS 5-44 (Class B), BMS 5-45 (Class B) and PR-1828 (Class B)

Adhesive	Cure Time
BMS 5-44 Class B-1/2	24 hours
BMS 5-44 Class B-2	48 hours
BMS 5-45 Class B-1/2	12 hours
BMS 5-45 Class B-2	24 hours
PR-1828 Class B-1/4	4 hours @ 50°F (10°C); 10 hours @ 35°F (2°C)
PR-1828 Class B-1/2	4.5 hours @ 50°F (10°C); 10 hours @ 35°F (2°C)

END OF TASK





Wing Vortex Generator Installation
Figure 401/57-32-00-990-801

WING LEADING EDGE - CORROSION PREVENTION

1. General

A. Stress corrosion cracking has been found in the hinge support ribs of the inboard leading edge flaps. Most of the cracks were along the fastener line through the inboard and outboard flanges of the ribs, and the remainder were at the flange radius.The rib webs are considered susceptible to stress corrosion cracks.

B. Severe exfoliation corrosion has been found on the leading edge slat ribs. Ribs at main track attach point were corroded through the web. The rib at actuator attach point was also severely corroded.

C. Stress corrosion cracks have been found in the flanges of the slat track roller support ribs attached to the leading edge of the wing front spar.

D. Stress corrosion cracking has been found on the slat actuator support fittings. Two fittings were cracked through the attaching bolt lug, and three fittings were cracked near the lug

TASK 57-41-00-910-801

2. Wing Leading Edge - Corrosion Prevention

A. General

(1) Make the regular inspection to prevent or find the start of corrosion. Missing fasteners, white powdery, or other corrosion deposits are signs of corrosion. Initiate the corrosion prevention practices to decrease the occurrence of corrosion.

(2) Following cleaning of suspected areas PAGEBLOCK 51-21-31/701, a full inspection is effective to ensure that protective finishes provided during manufacture remain intact.

(3) Where corrosion exists (noticeable bulges of the skin or white deposits of corrosion products at fastener heads or joint edges), refer to Structural Repair Manual for details of corrosion removal.

(4) For minor corrosion, to minimize the downtime of the airplane, the corrosion products should be cleaned off, followed by the application of a corrosion inhibiting compound into the affected area to decrease the corrosion process. Refer to PAGEBLOCK 51-21-91/701 for details on applying corrosion inhibiting compound. The finish system should be repaired at the first opportunity consistent with the maintenance schedule.

B. References

Reference	Title
51-21-31 P/B 701	CORROSION REMOVAL AND CONTROL - CLEANING/PAINTING
51-21-91 P/B 701	CORROSION INHIBITING COMPOUND - CLEANING/PAINTING

C. Consumable Materials

Reference	Description	Specification
G00009	Compound - Organic Corrosion Inhibiting	BMS3-23

D. Location Zones

Zone	Area
511	Left Wing - Leading Edge To Front Spar
521	Left Wing - Leading Edge to Front Spar
611	Right Wing - Leading Edge to Front Spar
621	Right Wing - Leading Edge to Front Spar

E. Procedure

SUBTASK 57-41-00-370-001

(1) At first opportunity consistent with the scheduled maintenance activity, apply corrosion prevention treatment to the wing leading edge.

SUBTASK 57-41-00-200-001

(2) Periodically inspect the leading edge slat rib webs and flanges for evidence of corrosion.

SUBTASK 57-41-00-370-002

CAUTION: DO NOT APPLY CORROSION INHIBITING COMPOUND ON GREASE JOINTS OR SEALED BEARINGS. THESE COMPOUNDS DISSOLVE GREASE AND OTHER LUBRICANTS. THEY ARE PENETRATING COMPOUNDS AND CAN GET AROUND THE SEALS AND INTO THE BEARINGS.

(3) Apply corrosion inhibiting compound, G00009 to slat ribs, hinge support ribs, and seat track roller support ribs.

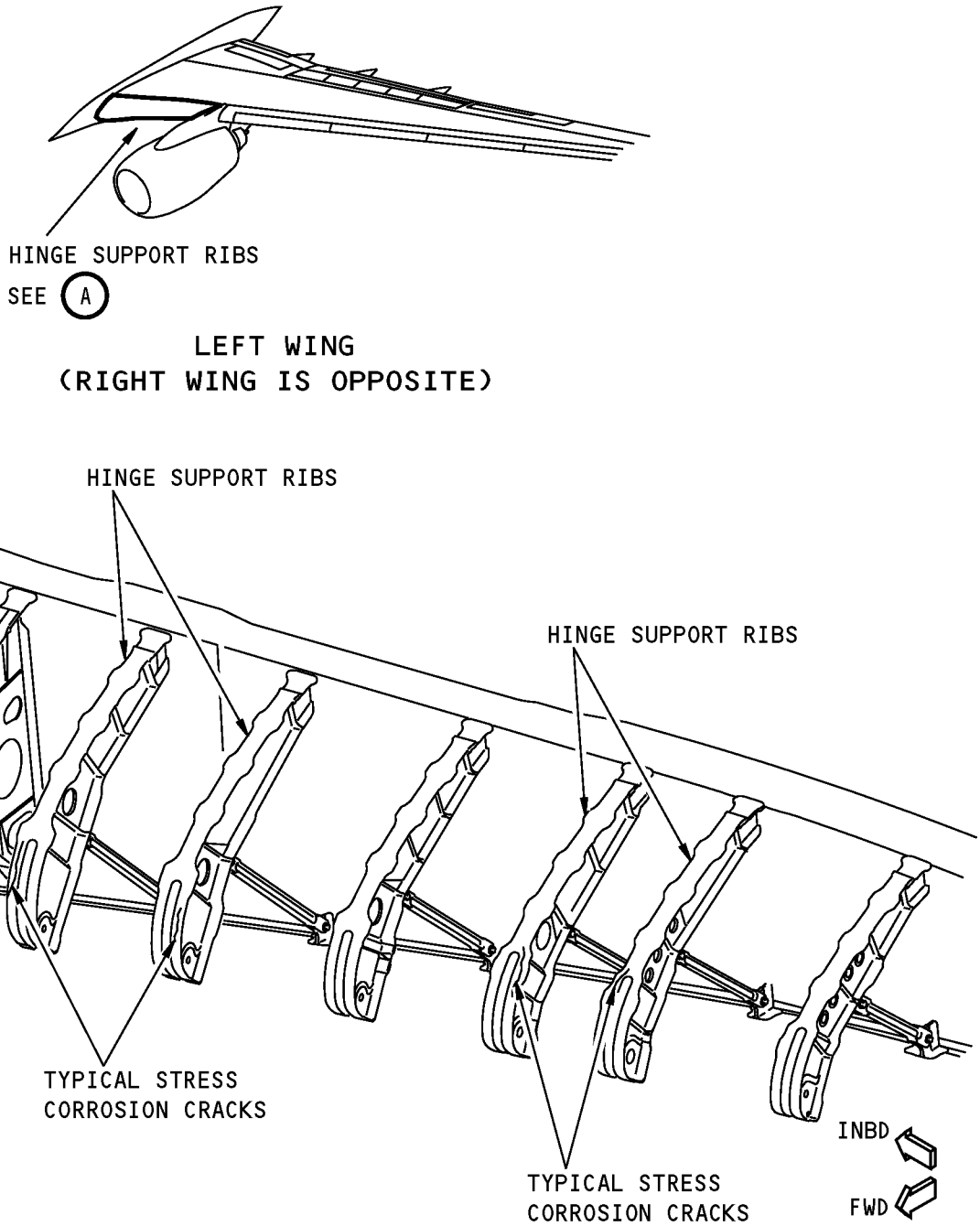
SUBTASK 57-41-00-370-003

(4) Frequency of Application

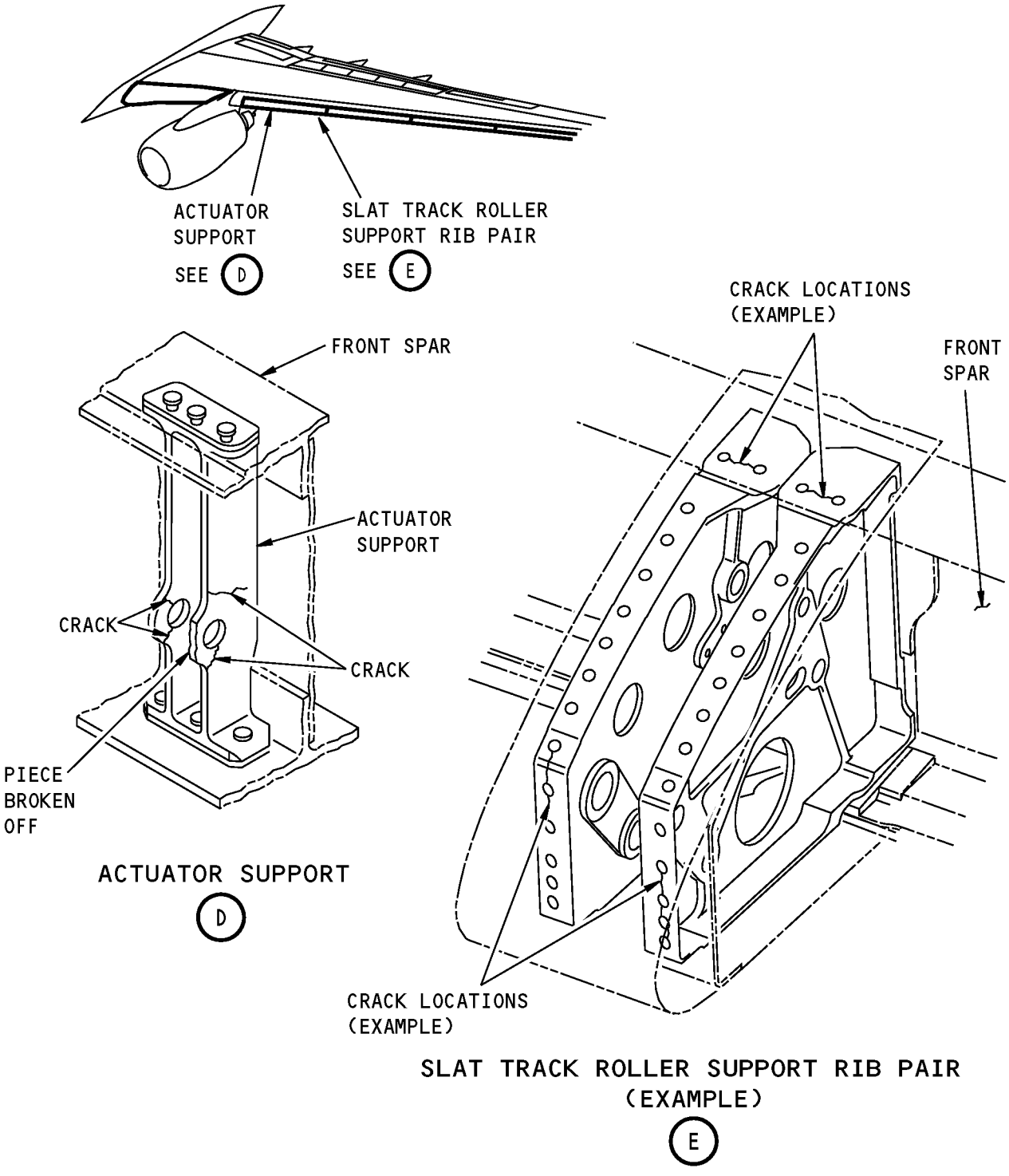
(a) Periodic inspection is required in areas identified as susceptible to corrosion and should be consistent to the schedules specified in the Maintenance Planning Document. Operators must be aware of reported problems and areas of occurrences.

(b) Periodic application of corrosion inhibiting compound, G00009 is necessary to areas identified and should be consistent to the schedule specified in the Maintenance Planning Document.

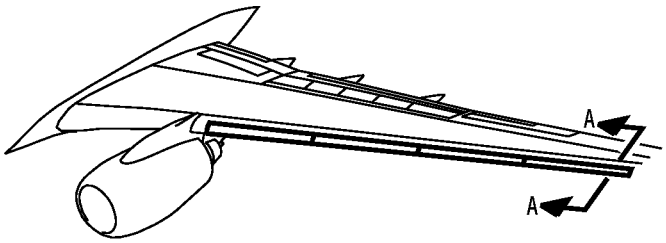
———————— END OF TASK ————————



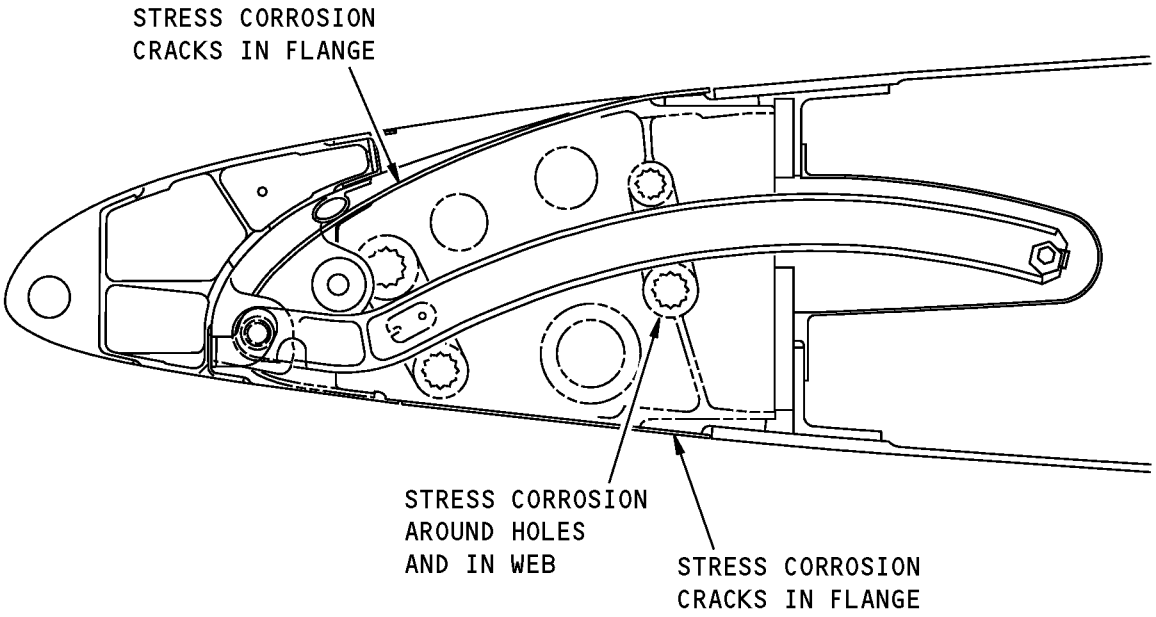
Wing Leading Edge - Corrosion Prevention
Figure 201 (Sheet 1 of 3)/57-41-00-990-801



Wing Leading Edge - Corrosion Prevention
Figure 201 (Sheet 2 of 3)/57-41-00-990-801



LEFT WING
(RIGHT WING IS OPPOSITE)



LEADING EDGE SLAT TRACK
ROLLER SUPPORT RIB
(EXAMPLE)
A–A

Wing Leading Edge - Corrosion Prevention
Figure 201 (Sheet 3 of 3)/57-41-00-990-801

LEADING EDGE ACCESS PANELS - MAINTENANCE PRACTICES

1. General

A. There are access panels aft of the leading edge which gives access to the wing forward spar.

TASK 57-41-02-000-801

2. Leading Edge Access Panel Removal

A. General

(1) This procedure gives the task for the removal of the access panels on the lower surface of the wing leading edge.

B. References

Reference	Title
06-44-00-800-801	Finding an Access Door or Panel on the Wings (P/B 201)
27-51-00-040-801	Trailing Edge Flap System Deactivation (P/B 201)
27-81-00-040-801	Deactivate the Leading Edge Flaps and Slats (P/B 201)

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
COM-2480	Platform - Mobile Elevating Work Platform SJ II Series (Part #: 4620, Supplier: 3AF08, A/P Effectivity: 737-ALL)
SPL-659	Platform - Maintenance Lift, 3 ft Minimum Height, 12.5 ft Maximum Height (Part #: 8662-010, Supplier: 00994, A/P Effectivity: 737-ALL)
SPL-1558	Adapter - Access Panel, Leverage (Part #: 3008-550, Supplier: 55856, A/P Effectivity: 737-ALL) (Part #: B20004-21, Supplier: 81205, A/P Effectivity: 737-100, -200, -200C, -300, -400, -500, -600, -700, -700C, -700ER, -700QC, -800, -900, -900ER, -BBJ)
STD-1265	Screwdriver - #3 Phillips ACR

D. Location Zones

Zone	Area
500	Left Wing
511	Left Wing - Leading Edge To Front Spar
521	Left Wing - Leading Edge to Front Spar
600	Right Wing
611	Right Wing - Leading Edge to Front Spar
621	Right Wing - Leading Edge to Front Spar

E. Access Panels

Number	Name/Location
521AAB	Lower Leading Edge Access Panel - Slat Station 508.31
521AB	Outboard Leading Edge Blowout Door - Slat Station 20.04
521ABB	Lower Leading Edge Access Panel-Slat Station 524.31
521AT	Outbd Leading Edge - Gap Cover Access
521BB	Engine Fuel Valve Shutoff Access Panel - Slat Station 36.02

(Continued)

Number	Name/Location
521CB	Lower Leading Edge Access Panel - Slat Station 53.95
521DB	Lower Leading Edge Access Panel - Slat Station 71.38
521EB	Lower Leading Edge Access Panel - Slat Station 98.95
521FB	Lower Leading Edge Access Panel - Slat Station 116.32
521GB	Lower Leading Edge Access Panel - Slat Station 125.27
521HB	Lower Leading Edge Access Panel - Slat Station 152.81
521JB	Lower Leading Edge Access Panel - Slat Station 170.20
521KB	Lower Leading Edge Access Panel - Slat Station 188.12
521LB	Lower Leading Edge Access Panel - Slat Station 216.76
521MB	Lower Leading Edge Access Panel - Slat Station 234.65
521NB	Lower Leading Edge Access Panel - Slat Station 252.04
521PB	Lower Leading Edge Access Panel - Slat Station 270.42
521QB	Lower Leading Edge Access Panel - Slat Station 289.17
521RB	Lower Leading Edge Access Panel - Slat Station 307.75
521SB	Lower Leading Edge Access Panel - Slat Station 337.62
521TB	Lower Leading Edge Access Panel - Slat Station 356.14
521UB	Lower Leading Edge Access Panel - Slat Station 374.95
521VB	Lower Leading Edge Access Panel - Slat Station 395.64
521WB	Lower Leading Edge Access Panel - Slat Station 415.79
521XB	Lower Leading Edge Access Panel - Slat Station 435.91
521YB	Lower Leading Edge Access Panel - Slat Station 467.98
521ZB	Lower Leading Edge Access Panel - Slat Station 488.05
621AAB	Lower Leading Edge Access Panel - Slat Station 524.31
621AB	Outboard Leading Edge Blowout Door - Slat Station 20.04
621BB	Engine Fuel Spar Valve Access Panel - Slat Station 36.02
621CB	Lower Leading Edge Access Panel - Slat Station 53.95
621DB	Lower Leading Edge Access Panel - Slat Station 71.38
621EB	Defuel Access Panel - Slat Station 95.15
621FB	Lower Leading Edge Access Panel - Slat Station 112.52
621GB	Refuel Access Panel - Slat Station 143.27
621HB	Lower Leading Edge Access Panel - Slat Station 170.21
621JB	Lower Leading Edge Access Panel - Slat Station 188.14
621KB	Lower Leading Edge Access Panel - Slat Station 216.71
621LB	Lower Leading Edge Access Panel - Slat Station 234.59
621MB	Lower Leading Edge Access Panel - Slat Station 252.04
621NB	Lower Leading Edge Access Panel - Slat Station 270.63
621PB	Lower Leading Edge Access Panel - Slat Station 289.18
621QB	Lower Leading Edge Access Panel - Slat Station 307.75
621RB	Lower Leading Edge Access Panel - Slat Station 337.62
621SB	Lower Leading Edge Access Panel - Slat Station 356.15
621TB	Lower Leading Edge Access Panel - Slat Station 374.95
621UB	Lower Leading Edge Access Panel - Slat Station 395.64
621VB	Lower Leading Edge Access Panel - Slat Station 415.79
621WB	Lower Leading Edge Access Panel - Slat Station 435.91
621XB	Lower Leading Edge Access Panel - Slat Station 467.98
621YB	Lower Leading Edge Access Panel - Slat Station 488.04

(Continued)

Number	Name/Location
621ZB	Lower Leading Edge Access Panel - Slat Station 508.31

F. Prepare for the Procedure

SUBTASK 57-41-02-040-001

(1) Do this task: Trailing Edge Flap System Deactivation, TASK 27-51-00-040-801.

SUBTASK 57-41-02-040-002

(2) Do this task: Deactivate the Leading Edge Flaps and Slats, TASK 27-81-00-040-801.

SUBTASK 57-41-02-490-002

(3) Get a ladder, work platform, COM-2480 or maintenance platform, SPL-659.

SUBTASK 57-41-02-490-003

(4) Do these steps to prepare metal support equipment such as work platforms, work/maintenance stands, ladders.

NOTE: These steps apply to all metal support equipment within a 50-foot radius of an open fuel tank.

(a) All support equipment must be in place before you begin the procedure.

(b) Bond the support equipment at an approved airplane bonding location.

(c) Ground the support equipment to the same earth ground as the airplane.

SUBTASK 57-41-02-860-001

(5) To help you find the applicable leading edge panel, refer to Finding an Access Door or Panel on the Wings, TASK 06-44-00-800-801.

SUBTASK 57-41-02-490-001

(6) Get these tools to remove the bolts from the access panels:

NOTE: These tools are for corroded fasteners that are difficult to remove.

(a) A leverage access panel adapter, SPL-1558 with a customer furnished, removal anti cam-out ribbed (ACR) bit and socket.

(b) A phillips screwdriver, STD-1265 with a removal anti cam-out ribbed (ACR) bit (customer furnished).

NOTE: The ACR bit should have a hardness of 56-58 RC. A combination removal/installation ACR bit is not recommended.

(c) Apply a fastener removal compound on the driver bit if a fastener is difficult to remove.

G. Procedure

SUBTASK 57-41-02-020-001

(1) Remove the access panel [1].

(a) For the left wing, remove these access panels.

Number	Name/Location
521AAB	Lower Leading Edge Access Panel - Slat Station 508.31
521AB	Outboard Leading Edge Blowout Door - Slat Station 20.04
521ABB	Lower Leading Edge Access Panel-Slat Station 524.31
521AT	Outbd Leading Edge - Gap Cover Access

(Continued)

Number	Name/Location
521BB	Engine Fuel Valve Shutoff Access Panel - Slat Station 36.02
521CB	Lower Leading Edge Access Panel - Slat Station 53.95
521DB	Lower Leading Edge Access Panel - Slat Station 71.38
521EB	Lower Leading Edge Access Panel - Slat Station 98.95
521FB	Lower Leading Edge Access Panel - Slat Station 116.32
521GB	Lower Leading Edge Access Panel - Slat Station 125.27
521HB	Lower Leading Edge Access Panel - Slat Station 152.81
521JB	Lower Leading Edge Access Panel - Slat Station 170.20
521KB	Lower Leading Edge Access Panel - Slat Station 188.12
521LB	Lower Leading Edge Access Panel - Slat Station 216.76
521MB	Lower Leading Edge Access Panel - Slat Station 234.65
521NB	Lower Leading Edge Access Panel - Slat Station 252.04
521PB	Lower Leading Edge Access Panel - Slat Station 270.42
521QB	Lower Leading Edge Access Panel - Slat Station 289.17
521RB	Lower Leading Edge Access Panel - Slat Station 307.75
521SB	Lower Leading Edge Access Panel - Slat Station 337.62
521TB	Lower Leading Edge Access Panel - Slat Station 356.14
521UB	Lower Leading Edge Access Panel - Slat Station 374.95
521VB	Lower Leading Edge Access Panel - Slat Station 395.64
521WB	Lower Leading Edge Access Panel - Slat Station 415.79
521XB	Lower Leading Edge Access Panel - Slat Station 435.91
521YB	Lower Leading Edge Access Panel - Slat Station 467.98
521ZB	Lower Leading Edge Access Panel - Slat Station 488.05

(b) For the right wing, remove these access panels.

Number	Name/Location
621AAB	Lower Leading Edge Access Panel - Slat Station 524.31
621AB	Outboard Leading Edge Blowout Door - Slat Station 20.04
621BB	Engine Fuel Spar Valve Access Panel - Slat Station 36.02
621CB	Lower Leading Edge Access Panel - Slat Station 53.95
621DB	Lower Leading Edge Access Panel - Slat Station 71.38
621EB	Defuel Access Panel - Slat Station 95.15
621FB	Lower Leading Edge Access Panel - Slat Station 112.52
621GB	Refuel Access Panel - Slat Station 143.27
621HB	Lower Leading Edge Access Panel - Slat Station 170.21
621JB	Lower Leading Edge Access Panel - Slat Station 188.14
621KB	Lower Leading Edge Access Panel - Slat Station 216.71
621LB	Lower Leading Edge Access Panel - Slat Station 234.59
621MB	Lower Leading Edge Access Panel - Slat Station 252.04
621NB	Lower Leading Edge Access Panel - Slat Station 270.63
621PB	Lower Leading Edge Access Panel - Slat Station 289.18
621QB	Lower Leading Edge Access Panel - Slat Station 307.75
621RB	Lower Leading Edge Access Panel - Slat Station 337.62
621SB	Lower Leading Edge Access Panel - Slat Station 356.15
621TB	Lower Leading Edge Access Panel - Slat Station 374.95
621UB	Lower Leading Edge Access Panel - Slat Station 395.64
621VB	Lower Leading Edge Access Panel - Slat Station 415.79
621WB	Lower Leading Edge Access Panel - Slat Station 435.91
621XB	Lower Leading Edge Access Panel - Slat Station 467.98
621YB	Lower Leading Edge Access Panel - Slat Station 488.04
621ZB	Lower Leading Edge Access Panel - Slat Station 508.31

WARNING: DO NOT LET OBJECTS GET IN THE HOUSING ASSEMBLY OF THE SLAT TRACK. THIS WILL HELP PREVENT A PUNCTURE OF THE HOUSING ASSEMBLY THAT COULD CAUSE A FUEL LEAK. THE FUEL LEAK COULD CAUSE A FIRE AND POSSIBLE DEATH OR INJURY TO PERSONNEL.

(c) Remove the bolt [2] to remove the panel [1].

1) Identify and tag the bolts as you remove them from the holes with the hole location in the panel.

NOTE: The access panels have bolts with different grip lengths at different hole locations in the panel.

(d) Examine the area to make sure objects have not been left in the slat track housing assembly.

———————— END OF TASK ————————

TASK 57-41-02-400-801

3. Leading Edge Access Panel Installation

A. General

(1) This procedure gives the task for the installation of the access panels on the lower surface of the wing leading edge.

B. References

Reference	Title
06-44-00-800-801	Finding an Access Door or Panel on the Wings (P/B 201)
20-50-11-910-801	Standard Torque Values (P/B 201)
27-51-00-440-801	Trailing Edge Flap System Reactivation (P/B 201)
27-81-00-440-801	Reactivate the Leading Edge Flaps and Slats (P/B 201)

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
COM-591	Multimeter - Digital, Handheld (volt dc/vac, ampere & resistance measurements or equivalent Multimeter) (Part #: 187, Supplier: 89536, A/P Effectivity: 737-ALL) (Part #: 189, Supplier: 89536, A/P Effectivity: 737-ALL) (Part #: 87V, Supplier: 89536, A/P Effectivity: 737-ALL) (Part #: FLUKE 117, Supplier: 89536, A/P Effectivity: 737-ALL) (Part #: MODEL 27, Supplier: 89536, A/P Effectivity: 737-ALL)
COM-2480	Platform - Mobile Elevating Work Platform SJ II Series (Part #: 4620, Supplier: 3AF08, A/P Effectivity: 737-ALL)
SPL-659	Platform - Maintenance Lift, 3 ft Minimum Height, 12.5 ft Maximum Height (Part #: 8662-010, Supplier: 00994, A/P Effectivity: 737-ALL)
SPL-1558	Adapter - Access Panel, Leverage (Part #: 3008-550, Supplier: 55856, A/P Effectivity: 737-ALL) (Part #: B20004-21, Supplier: 81205, A/P Effectivity: 737-100, -200, -200C, -300, -400, -500, -600, -700, -700C, -700ER, -700QC, -800, -900, -900ER, -BBJ)
STD-1265	Screwdriver - #3 Phillips ACR

D. Consumable Materials

Reference	Description	Specification
A50142	Sealant - Fuel Tank	BMS5-45 B 1/2 or BMS5-45 B 1/4
C00528	Compound - Corrosion Preventive, Petroleum Hot Application (Soft Film)	MIL-C-11796, Class III

E. Location Zones

Zone	Area
500	Left Wing
511	Left Wing - Leading Edge To Front Spar
521	Left Wing - Leading Edge to Front Spar
600	Right Wing
611	Right Wing - Leading Edge to Front Spar
621	Right Wing - Leading Edge to Front Spar

F. Access Panels

Number	Name/Location
511AB	Inboard Leading Edge, Lower Removable Panel
521AAB	Lower Leading Edge Access Panel - Slat Station 508.31
521AB	Outboard Leading Edge Blowout Door - Slat Station 20.04
521ABB	Lower Leading Edge Access Panel-Slat Station 524.31
521BB	Engine Fuel Valve Shutoff Access Panel - Slat Station 36.02
521CB	Lower Leading Edge Access Panel - Slat Station 53.95
521DB	Lower Leading Edge Access Panel - Slat Station 71.38
521EB	Lower Leading Edge Access Panel - Slat Station 98.95
521FB	Lower Leading Edge Access Panel - Slat Station 116.32
521GB	Lower Leading Edge Access Panel - Slat Station 125.27
521HB	Lower Leading Edge Access Panel - Slat Station 152.81
521JB	Lower Leading Edge Access Panel - Slat Station 170.20
521KB	Lower Leading Edge Access Panel - Slat Station 188.12
521LB	Lower Leading Edge Access Panel - Slat Station 216.76
521MB	Lower Leading Edge Access Panel - Slat Station 234.65
521NB	Lower Leading Edge Access Panel - Slat Station 252.04
521PB	Lower Leading Edge Access Panel - Slat Station 270.42
521QB	Lower Leading Edge Access Panel - Slat Station 289.17
521RB	Lower Leading Edge Access Panel - Slat Station 307.75
521SB	Lower Leading Edge Access Panel - Slat Station 337.62
521TB	Lower Leading Edge Access Panel - Slat Station 356.14
521UB	Lower Leading Edge Access Panel - Slat Station 374.95
521VB	Lower Leading Edge Access Panel - Slat Station 395.64
521WB	Lower Leading Edge Access Panel - Slat Station 415.79
521XB	Lower Leading Edge Access Panel - Slat Station 435.91
521YB	Lower Leading Edge Access Panel - Slat Station 467.98
521ZB	Lower Leading Edge Access Panel - Slat Station 488.05
611AB	Inboard Leading Edge, Lower Removable Access Panel
621AAB	Lower Leading Edge Access Panel - Slat Station 524.31

(Continued)

Number	Name/Location
621AB	Outboard Leading Edge Blowout Door - Slat Station 20.04
621AT	Outbd Leading Edge - Gap Cover Access
621BB	Engine Fuel Spar Valve Access Panel - Slat Station 36.02
621CB	Lower Leading Edge Access Panel - Slat Station 53.95
621DB	Lower Leading Edge Access Panel - Slat Station 71.38
621EB	Defuel Access Panel - Slat Station 95.15
621FB	Lower Leading Edge Access Panel - Slat Station 112.52
621GB	Refuel Access Panel - Slat Station 143.27
621HB	Lower Leading Edge Access Panel - Slat Station 170.21
621JB	Lower Leading Edge Access Panel - Slat Station 188.14
621KB	Lower Leading Edge Access Panel - Slat Station 216.71
621LB	Lower Leading Edge Access Panel - Slat Station 234.59
621MB	Lower Leading Edge Access Panel - Slat Station 252.04
621NB	Lower Leading Edge Access Panel - Slat Station 270.63
621PB	Lower Leading Edge Access Panel - Slat Station 289.18
621QB	Lower Leading Edge Access Panel - Slat Station 307.75
621RB	Lower Leading Edge Access Panel - Slat Station 337.62
621SB	Lower Leading Edge Access Panel - Slat Station 356.15
621TB	Lower Leading Edge Access Panel - Slat Station 374.95
621UB	Lower Leading Edge Access Panel - Slat Station 395.64
621VB	Lower Leading Edge Access Panel - Slat Station 415.79
621WB	Lower Leading Edge Access Panel - Slat Station 435.91
621XB	Lower Leading Edge Access Panel - Slat Station 467.98
621YB	Lower Leading Edge Access Panel - Slat Station 488.04
621ZB	Lower Leading Edge Access Panel - Slat Station 508.31

G. Procedure

SUBTASK 57-41-02-860-002

(1) To help you find the applicable leading edge panel, refer to Finding an Access Door or Panel on the Wings, TASK 06-44-00-800-801.

SUBTASK 57-41-02-420-001

(2) Install the access panel [1] on the wing.

(a) For the left wing, install these access panels.

Number	Name/Location
511AB	Inboard Leading Edge, Lower Removable Panel
521AAB	Lower Leading Edge Access Panel - Slat Station 508.31
521AB	Outboard Leading Edge Blowout Door - Slat Station 20.04
521ABB	Lower Leading Edge Access Panel-Slat Station 524.31
521BB	Engine Fuel Valve Shutoff Access Panel - Slat Station 36.02
521CB	Lower Leading Edge Access Panel - Slat Station 53.95

(Continued)

Number	Name/Location
521DB	Lower Leading Edge Access Panel - Slat Station 71.38
521EB	Lower Leading Edge Access Panel - Slat Station 98.95
521FB	Lower Leading Edge Access Panel - Slat Station 116.32
521GB	Lower Leading Edge Access Panel - Slat Station 125.27
521HB	Lower Leading Edge Access Panel - Slat Station 152.81
521JB	Lower Leading Edge Access Panel - Slat Station 170.20
521KB	Lower Leading Edge Access Panel - Slat Station 188.12
521LB	Lower Leading Edge Access Panel - Slat Station 216.76
521MB	Lower Leading Edge Access Panel - Slat Station 234.65
521NB	Lower Leading Edge Access Panel - Slat Station 252.04
521PB	Lower Leading Edge Access Panel - Slat Station 270.42
521QB	Lower Leading Edge Access Panel - Slat Station 289.17
521RB	Lower Leading Edge Access Panel - Slat Station 307.75
521SB	Lower Leading Edge Access Panel - Slat Station 337.62
521TB	Lower Leading Edge Access Panel - Slat Station 356.14
521UB	Lower Leading Edge Access Panel - Slat Station 374.95
521VB	Lower Leading Edge Access Panel - Slat Station 395.64
521WB	Lower Leading Edge Access Panel - Slat Station 415.79
521XB	Lower Leading Edge Access Panel - Slat Station 435.91
521YB	Lower Leading Edge Access Panel - Slat Station 467.98
521ZB	Lower Leading Edge Access Panel - Slat Station 488.05

(b) For the right wing, install these access panels:

Number	Name/Location
611AB	Inboard Leading Edge, Lower Removable Access Panel
621AAB	Lower Leading Edge Access Panel - Slat Station 524.31

(Continued)

Number	Name/Location
621AB	Outboard Leading Edge Blowout Door - Slat Station 20.04
621AT	Outbd Leading Edge - Gap Cover Access
621BB	Engine Fuel Spar Valve Access Panel - Slat Station 36.02
621CB	Lower Leading Edge Access Panel - Slat Station 53.95
621DB	Lower Leading Edge Access Panel - Slat Station 71.38
621EB	Defuel Access Panel - Slat Station 95.15
621FB	Lower Leading Edge Access Panel - Slat Station 112.52
621GB	Refuel Access Panel - Slat Station 143.27
621HB	Lower Leading Edge Access Panel - Slat Station 170.21
621JB	Lower Leading Edge Access Panel - Slat Station 188.14
621KB	Lower Leading Edge Access Panel - Slat Station 216.71
621LB	Lower Leading Edge Access Panel - Slat Station 234.59
621MB	Lower Leading Edge Access Panel - Slat Station 252.04
621NB	Lower Leading Edge Access Panel - Slat Station 270.63
621PB	Lower Leading Edge Access Panel - Slat Station 289.18
621QB	Lower Leading Edge Access Panel - Slat Station 307.75
621RB	Lower Leading Edge Access Panel - Slat Station 337.62
621SB	Lower Leading Edge Access Panel - Slat Station 356.15
621TB	Lower Leading Edge Access Panel - Slat Station 374.95
621UB	Lower Leading Edge Access Panel - Slat Station 395.64
621VB	Lower Leading Edge Access Panel - Slat Station 415.79
621WB	Lower Leading Edge Access Panel - Slat Station 435.91
621XB	Lower Leading Edge Access Panel - Slat Station 467.98
621YB	Lower Leading Edge Access Panel - Slat Station 488.04
621ZB	Lower Leading Edge Access Panel - Slat Station 508.31

HAP 037-054, 101-999; HAP 001-013, 015-026, 028-036 POST SB 737-57-1293

(c) Make sure that there is no damage to the sealant around the door structure of the 521AB, 521BB, 621AB, 621BB access panels.

1) If there are signs of damage to the sealant, do the steps that follow:

a) Apply seal at the fay surface of the doorway surround with sealant, A50142 refer to BAC5000.

<1> Apply the parting agent only to the door surface in contact with the seal.

NOTE: This will allow the sealant to release from the door during operation. Do not apply the parting agent to the doorway surround structure.

<2> When the sealant is cured, open and close the door to break the door free from the sealant.

NOTE: Open and close the door until the door can open partially without help.

b) Make sure that the sealant is attached on the door structure and not on the door.

HAP ALL

(d) Make sure that the bolt [2] have correct grip length, undamaged threads,and undamaged recesses.

NOTE: If any fasteners need to be replaced, it is recommended that aluminum pigmented coated, titanium bolts, BACB30XD( )K( ), BACB30XD( )K( )G, BACB30ZE4-( )G are used where applicable. No grip length substitution allowed. On the panel, use cadmium plated, corrosion resistant steel (CRES) nut-plates where applicable.

(e) Remove any excess paint or debris on bolt hole recesses.

(f) Apply corrosion preventative compound, C00528 to all areas of the hole, the countersink, counterbore or other recess and immediately install the bolt [2]..

WARNING: DO NOT LET OBJECTS GET IN THE HOUSING ASSEMBLY OF THE SLAT TRACK. THIS WILL HELP PREVENT A PUNCTURE OF THE HOUSING ASSEMBLY THAT COULD CAUSE A FUEL LEAK. THE FUEL LEAK COULD CAUSE A FIRE AND POSSIBLE DEATH OR INJURY TO PERSONNEL.

(g) Examine the area to make sure objects are not left in the slat track housing assembly.

(h) Install the bolt [2] with a phillips screwdriver, STD-1265 and an installation anti cam-out (ACR) driver bit (customer furnished) or a leverage access panel adapter, SPL-1558.

NOTE: The ACR bit should have a hardness of 56-58 RC. A combination removal/ installation ACR bit is not recommended.

1) For the applicable torques; refer to Standard Torque Values, TASK 20-50-11-910-801.

2) Make sure the bolt is installed flush with the panel surface, +0.002 inch or -0.010 inch.

3) Install the electrical bonding fastener (BACB30ZE4-( )G) and measure the electrical resistance between the anti-static coating on the access panel and the fastener with a handheld digital multimeter, COM-591.

a) Maximum resistance should not be more than 10 ohms.

H. Put the Airplane Back to the Usual Condition

SUBTASK 57-41-02-090-001

(1) Remove the ladder, work platform, COM-2480 or maintenance platform, SPL-659.

SUBTASK 57-41-02-440-001

(2) Do this task: Trailing Edge Flap System Reactivation, TASK 27-51-00-440-801.

SUBTASK 57-41-02-440-002

(3) Do this task: Reactivate the Leading Edge Flaps and Slats, TASK 27-81-00-440-801.

——————— END OF TASK ———————

TASK 57-41-02-200-801

4. Guidelines for Missing Fasteners in the Leading Edge Access Panels

A. General

(1) This procedure gives the task guidelines for missing fasteners from the access panels on the lower surface of the wing leading edge.

B. References

Reference	Title
06-44-00-800-801	Finding an Access Door or Panel on the Wings (P/B 201)
20-50-11-910-801	Standard Torque Values (P/B 201)

C. Location Zones

Zone	Area
500	Left Wing
511	Left Wing - Leading Edge To Front Spar
521	Left Wing - Leading Edge to Front Spar
600	Right Wing
611	Right Wing - Leading Edge to Front Spar
621	Right Wing - Leading Edge to Front Spar

D. Procedure

SUBTASK 57-41-02-860-003

(1) To find the applicable leading edge panel, refer to Finding an Access Door or Panel on the Wings, TASK 06-44-00-800-801.

SUBTASK 57-41-02-212-001

(2) Make sure the leading edge access panel [1] meet these guidelines:

(a) One bolt can be missing from a panel if the panel has six to twelve bolts to keep the panel on the airplane.

(b) Two bolts can be missing from a panel if the panel has more than twelve bolts to keep the panel on the airplane.

1) The two missing bolts must not be adjacent to each other.

SUBTASK 57-41-02-211-001

WARNING: DO NOT LET OBJECTS GET IN THE HOUSING ASSEMBLY OF THE SLAT TRACK. THIS WILL HELP PREVENT A PUNCTURE OF THE HOUSING ASSEMBLY THAT COULD CAUSE A FUEL LEAK. THE FUEL LEAK COULD CAUSE A FIRE AND POSSIBLE DEATH OR INJURY TO PERSONNEL.

(3) Make sure the missing fasteners are not inside the leading edge housing.

SUBTASK 57-41-02-420-002

(4) To install the bolt [2] with the applicable torques, refer to Standard Torque Values, TASK 20-50-11-910-801.

——————— END OF TASK ———————

OUTBOARD LEADING EDGE SLAT ROLLERS - REMOVAL/INSTALLATION

1. General

A. This procedure has these tasks:

(1) A removal of the outboard leading edge slat rollers.

(2) An installation of the outboard leading edge slat rollers.

B. There are four slats on each wing. This procedure is applicable for the leading edge slats no. 1 thru 8.

C. You can do this procedure with the airplane on jacks or off jacks, but the wing should not be supported outboard of the engines.

TASK 57-44-01-000-801

2. Outboard Leading Edge Slat Roller Removal

(Figure 401)

A. References

Reference	Title
27-81-21-000-801	Leading Edge Slat Removal (P/B 401)
27-81-21-400-801	Leading Edge Slat Installation (P/B 401)

B. Location Zones

Zone	Area
522	Left Wing - Slat No. 4
523	Left Wing - Slat No. 3
524	Left Wing - Slat No. 2
525	Left Wing - Slat No. 1
622	Right Wing - Slat No. 5
623	Right Wing - Slat No. 6
624	Right Wing - Slat No. 7
625	Right Wing - Slat No. 8

C. Prepare for the removal

SUBTASK 57-44-01-020-001

(1) Remove outboard leading edge slat before accessing the roller assemblies. These are the tasks:

Leading Edge Slat Removal, TASK 27-81-21-000-801,

Leading Edge Slat Installation, TASK 27-81-21-400-801.

SUBTASK 57-44-01-020-002

(2) Remove the 2 cotter pins [9] from the aft roller as shown in (Figure 401) and discard them.

(a) Remove the nuts [18] and [19], and the bushings [10] and [20].

WARNING: DO NOT LET OBJECTS GET IN THE HOUSING ASSEMBLY OF THE SLAT TRACK. THIS WILL HELP PREVENT A PUNCTURE OF THE HOUSING ASSEMBLY THAT COULD CAUSE A FUEL LEAK. THE FUEL LEAK COULD CAUSE A FIRE AND POSSIBLE DEATH OR INJURY TO PERSONNEL.

(b) Remove the 2 bolts [6] and the 2 bearings [8].

CAUTION: THE QUANTITIES FOR THE WASHERS [11] AND [16] CAN VARY BECAUSE OF ADJUSTMENTS. SEE THE CAUTIONS IN THE INSTALLATION PROCEDURE FOR THE MINIMUM AND MAXIMUM QUANTITIES.

(c) Remove the 2 washers [7], and the washers [11], and [16].

(d) Examine the area to make sure objects are not left in the slat track housing assembly.

SUBTASK 57-44-01-930-001

(3) Label the bolts [6], the bearings [8], the washers [7], [11], and [16], the nuts [18], and [19], and the bushings [10], and [20].

SUBTASK 57-44-01-020-003

(4) Remove the 2 cotter pins [9] from the forward roller as shown in (Figure 401) and discard them.

(a) Remove the nuts [12] and [18], and the bushings [20] and [21].

WARNING: DO NOT LET OBJECTS GET IN THE HOUSING ASSEMBLY OF THE SLAT TRACK. THIS WILL HELP PREVENT A PUNCTURE OF THE HOUSING ASSEMBLY THAT COULD CAUSE A FUEL LEAK. THE FUEL LEAK COULD CAUSE A FIRE AND POSSIBLE DEATH OR INJURY TO PERSONNEL.

(b) Remove the 2 bolts (6), and the 2 bearings [8]

CAUTION: THE QUANTITIES FOR THE WASHERS [16] AND [17] CAN VARY BECAUSE OF ADJUSTMENTS. SEE THE CAUTIONS IN THE INSTALLATION PROCEDURE FOR THE MINIMUM AND MAXIMUM QUANTITIES.

(c) Remove the 2 washers [7], and the washers [16], and [17].

SUBTASK 57-44-01-930-002

(5) Label the bolts [6], the bearings [8], the washers [7], the washers [16] and [17], the nuts [12] and [18], and the bushings [20] and [21].

END OF TASK

TASK 57-44-01-400-801

3. Outboard Leading Edge Rollers Installation

(Figure 401)

A. References

Reference	Title
27-81-21-000-801	Leading Edge Slat Removal (P/B 401)
27-81-21-400-801	Leading Edge Slat Installation (P/B 401)

B. Location Zones

Zone	Area
522	Left Wing - Slat No. 4
523	Left Wing - Slat No. 3
524	Left Wing - Slat No. 2
525	Left Wing - Slat No. 1
622	Right Wing - Slat No. 5
623	Right Wing - Slat No. 6
624	Right Wing - Slat No. 7
625	Right Wing - Slat No. 8

C. Prepare for the installation

SUBTASK 57-44-01-000-001

(1) Remove the labels from the 2 bolts [6], the 2 bearings [8], the 2 washers [7], the washers [16] and [17], the 2 nuts [12] and [18], the 2 bushings [20] and [21] from the forward roller. These are the tasks:

Leading Edge Slat Removal, TASK 27-81-21-000-801,

Leading Edge Slat Installation, TASK 27-81-21-400-801.

SUBTASK 57-44-01-420-001

WARNING: DO NOT LET OBJECTS GET IN THE HOUSING ASSEMBLY OF THE SLAT TRACK. THIS WILL HELP PREVENT A PUNCTURE OF THE HOUSING ASSEMBLY THAT COULD CAUSE A FUEL LEAK. THE FUEL LEAK COULD CAUSE A FIRE AND POSSIBLE DEATH OR INJURY TO PERSONNEL.

(2) Examine the area to make sure objects are not left in the slat track housing assembly.

(3) Loosely install the 2 bolts [6], the 2 washers [7], and the 2 bearings [8]. (Figure 401)

(a) Install the 2 bushings [20] and [21].

CAUTION: THE QUANTITIES FOR THE WASHERS [16] AND [17] CAN VARY BECAUSE OF ADJUSTMENTS. USE A MINIMUM OF 1 WASHER AND A MAXIMUM OF 4 WASHERS.

(b) Install the washers [16] and [17].

(c) Install the 2 nuts [12] and [18] by doing the following steps:

1) For slats 2 to 7, torque the upper nut [12] to a minimum of 1200 in-lb (136 N·m).

CAUTION: MAXIMUM TORQUE IS NOT TO EXCEED 1500 INCH POUNDS (169.5 NEWTON-METERS).

2) Rotate the nut an additional 1 castellation maximum to align the cotter pin hole.

3) For slats 1 and 8, torque the upper nut [12] to a minimum of 400 in-lb (45 N·m).

CAUTION: MAXIMUM TORQUE IS NOT TO EXCEED 700 INCH POUNDS (79.1 NEWTON-METERS).

4) Rotate the nut an additional 1 castellation maximum to align the cotter pin hole.

5) Install the 2 new cotter pins [9].

6) For slats 2 to 7, verify that the bolt assembly cannot rotate by applying a minimum torque of 600 in-lb (68 N·m) to the bolt [6] or the nut [12].

7) For slats 1 and 8, verify that the bolt assembly cannot rotate by applying a minimum torque of 200 in-lb (23 N·m) to the bolt [6] or the nut [12].

CAUTION: DO NOT APPLY MORE THAN 700 IN-LB (79 N·M) TORQUE. TOO MUCH TORQUE WILL CAUSE DAMAGE TO EQUIPMENT.

8) For slats 2 to 7, torque the lower nut [18] to a minimum of 400 in-lb (45 N·m).

CAUTION: DO NOT APPLY MORE THAN350 IN-LB (40 N·M) TORQUE. TOO MUCH TORQUE WILL CAUSE DAMAGE TO EQUIPMENT.

9) For slats 1 and 8, torque the lower nut [18] to a minimum of 200 in-lb (23 N·m).

10) Rotate the nut an additional 1 castellation maximum to align the cotter pin hole.

11) Install the 2 new cotter pins [9].

12) For slats 2 to 7, verify that the bolt assembly cannot rotate by applying a minimum torque of 200 in-lb (23 N·m) to the bolt [6] or the nut [18].

13) For slats 1 and 8, verify that the bolt assembly cannot rotate by applying a minimum torque of 70 in-lb (8 N·m) to the bolt [6] or the nut [18].

SUBTASK 57-44-01-000-002

(4) Remove the labels from the bolts [6], the bearings [8], the washers [7], the washers [11] and [16], the nuts [18] and [19], and the bushings [10] and [20] for the aft roller. These are the tasks:

Leading Edge Slat Removal, TASK 27-81-21-000-801,

Leading Edge Slat Installation, TASK 27-81-21-400-801.

SUBTASK 57-44-01-420-002

WARNING: DO NOT LET OBJECTS GET IN THE HOUSING ASSEMBLY OF THE SLAT TRACK. THIS WILL HELP PREVENT A PUNCTURE OF THE HOUSING ASSEMBLY THAT COULD CAUSE A FUEL LEAK. THE FUEL LEAK COULD CAUSE A FIRE AND POSSIBLE DEATH OR INJURY TO PERSONNEL.

(5) Examine the area to make sure objects are not left in the slat track housing assembly.

(6) Loosely install the 2 bolts [6], the 2 bearings [8], and the 2 washers [7]. (Figure 401)

(a) Install the 2 bushings [10] and [20].

CAUTION: THE QUANTITIES FOR THE WASHERS [11] AND [16] CAN VARY BECAUSE OF ADJUSTMENTS. USE A MINIMUM 0F 1 WASHER AND A MAXIMUM OF 4 WASHERS.

(b) Install the washers [11] and [16].

(c) Install the 2 nuts [18] and [19] by doing the following steps:

1) Torque the upper nut [19] to a minimum of 200 in-lb (23 N·m).

CAUTION: MAXIMUM TORQUE IS NOT TO EXCEED 350 INCH POUNDS (39.5 NEWTON-METERS).

2) Rotate the nut an additional castellation maximum to align the cotter pin hole.

3) Install the 2 new cotter pins [9].

4) Verify that the bolt assembly cannot rotate by applying a minimum torque of 70 in-lb (8 N·m) to the bolt [6] or the nut [19].

5) For slats 2 to 7, torque the lower nut [18] to a minimum of 400 in-lb (45 N·m).

CAUTION: MAXIMUM TORQUE IS NOT TO EXCEED 700 INCH POUNDS (79.1 NEWTON-METERS).

6) Rotate the nut an additional 1 castellation maximum to align the cotter pin hole.

7) For slats 1 and 8, torque the lower nut [18] to a minimum of 200 in-lb (23 N·m).

CAUTION: MAXIMUM TORQUE IS NOT TO EXCEED 350 INCH POUNDS (39.5 NEWTON-METERS).

8) Rotate the nut an additional 1 castellation maximum to align the cotter pin hole.

9) Install the 2 new cotter pins [9].

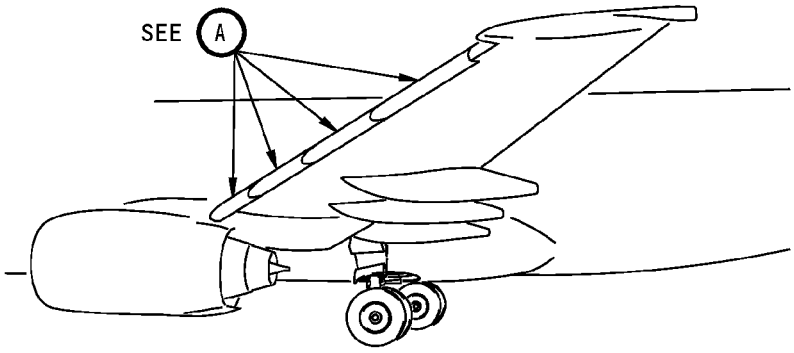
10) For slats 2 to 7, verify that the bolt assembly cannot rotate by applying a minimum torque of 200 in-lb (23 N·m) to the bolt [6] or the nut [19].

11) For slats 1 and 8, verify that the bolt assembly cannot rotate by applying a minimum torque of 70 in-lb (8 N·m) to the bolt [6] or the nut [19].

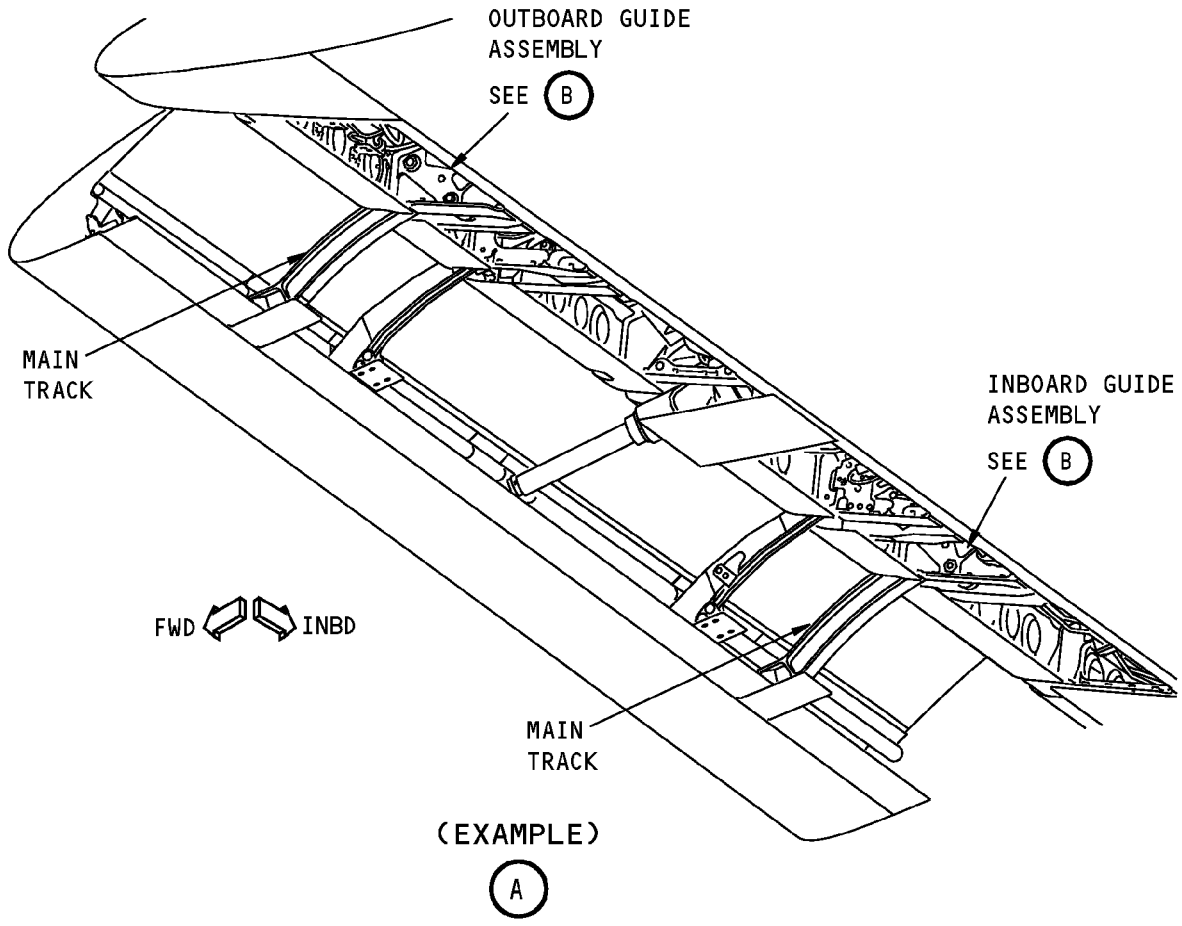
SUBTASK 57-44-01-410-001

(7) Install the outboard leading edge slat. These are the tasks:
Leading Edge Slat Removal, TASK 27-81-21-000-801,
Leading Edge Slat Installation, TASK 27-81-21-400-801.

——————— END OF TASK ———————



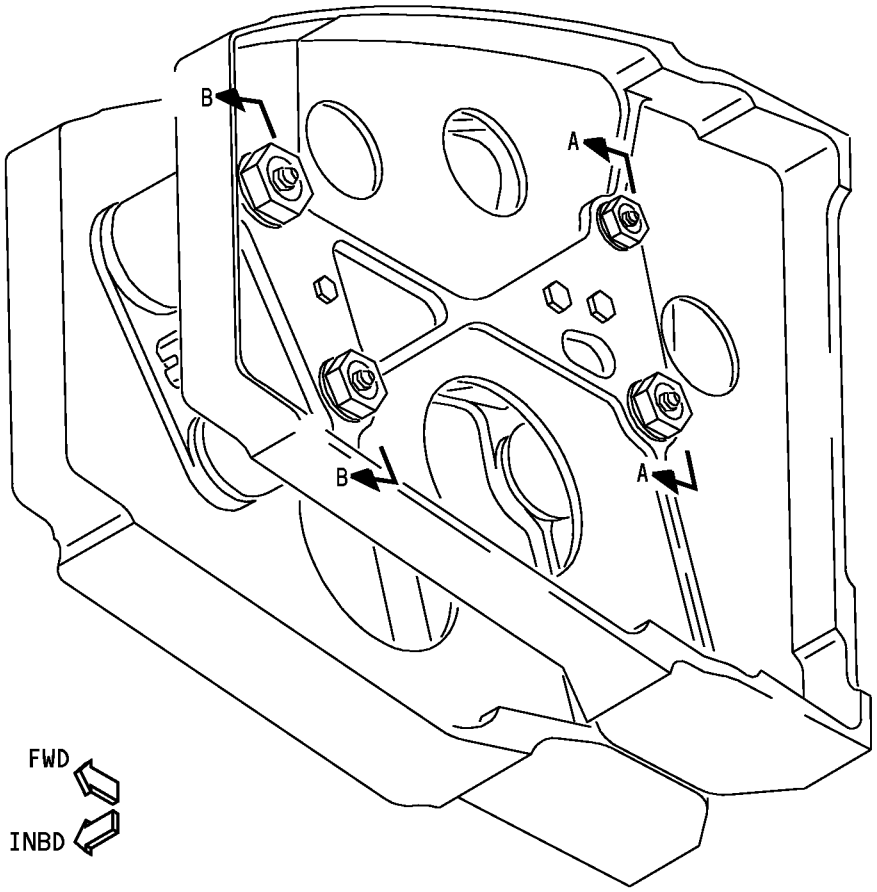
LEFT WING
(RIGHT WING IS EQUIVALENT)



(EXAMPLE)

A

Outboard Fixed Leading Edge Slat Rollers Installation
Figure 401 (Sheet 1 of 4)/57-44-01-990-801

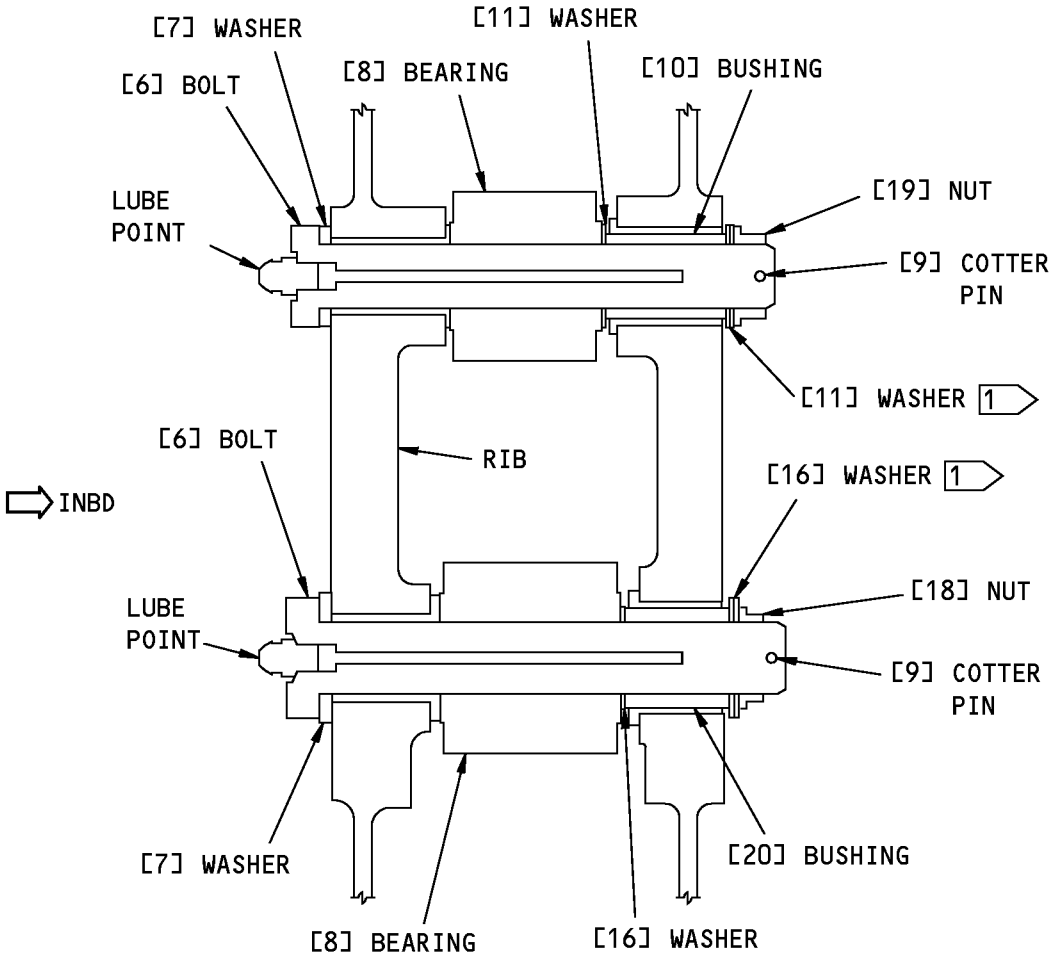


INBOARD GUIDE ASSEMBLY
(OUTBOARD GUIDE ASSEMBLY IS OPPOSITE)

B

K55795 S0006581599_V2

Outboard Fixed Leading Edge Slat Rollers Installation
Figure 401 (Sheet 2 of 4)/57-44-01-990-801

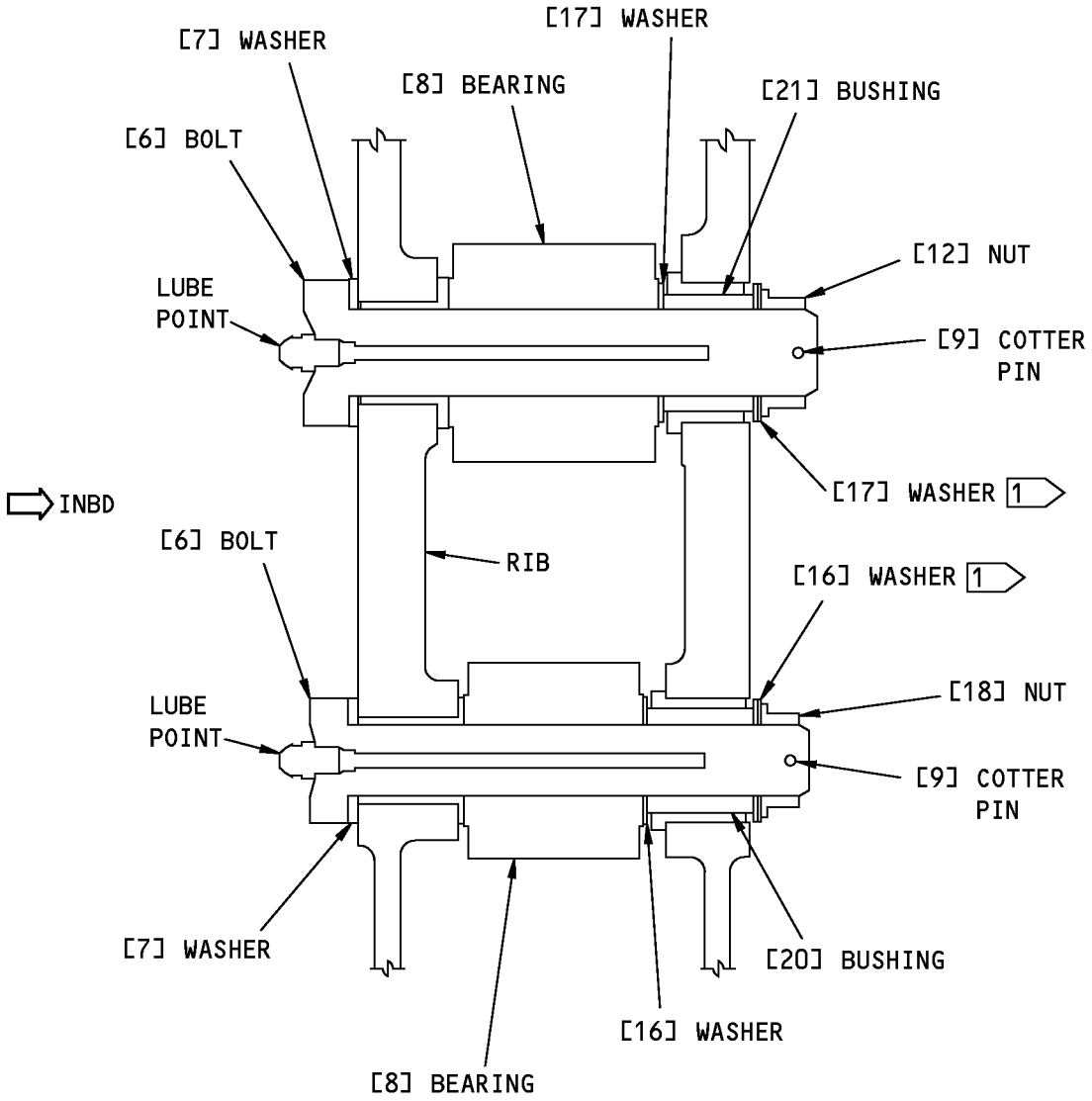


AFT ROLLER
A–A

1 USE A MINIMUM OF 1 WASHER
AND A MAXIMUM OF 4 WASHERS

K55883 S0006581600_V2

Outboard Fixed Leading Edge Slat Rollers Installation
Figure 401 (Sheet 3 of 4)/57-44-01-990-801



FORWARD ROLLER
B–B

K55986 S0006581601_V2

Outboard Fixed Leading Edge Slat Rollers Installation
Figure 401 (Sheet 4 of 4)/57-44-01-990-801

OUTBOARD LEADING EDGE BALLAST - REMOVAL/INSTALLATION

1. General

A. This procedure has these tasks:

(1) The removal of the outboard leading edge ballast.

(2) The installation of the outboard leading edge ballast.

TASK 57-44-02-000-801

2. Outboard Leading Edge Ballast Removal

(Figure 401)

A. General

(1) This task gives the procedure to remove the outboard leading edge ballast weight from the left or right wing.

B. References

Reference	Title
20-40-11-910-801	Static Grounding (P/B 201)
27-51-00-040-801	Trailing Edge Flap System Deactivation (P/B 201)
27-81-00-040-801	Deactivate the Leading Edge Flaps and Slats (P/B 201)

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
COM-2480	Platform - Mobile Elevating Work Platform SJ II Series (Part #: 4620, Supplier: 3AF08, A/P Effectivity: 737-ALL)
SPL-659	Platform - Maintenance Lift, 3 ft Minimum Height, 12.5 ft Maximum Height (Part #: 8662-010, Supplier: 00994, A/P Effectivity: 737-ALL)

D. Location Zones

Zone	Area
500	Left Wing
521	Left Wing - Leading Edge to Front Spar
527	Left Winglet
600	Right Wing
621	Right Wing - Leading Edge to Front Spar
627	Right Winglet

E. Access Panels

Number	Name/Location
521ABB	Lower Leading Edge Access Panel-Slat Station 524.31
621AAB	Lower Leading Edge Access Panel - Slat Station 524.31

F. Prepare for the Procedure

SUBTASK 57-44-02-760-001

(1) Make sure the airplane is correctly grounded to an approved and identified ground.

(a) Do this task: Static Grounding, TASK 20-40-11-910-801.

SUBTASK 57-44-02-040-001

(2) Do this task: Trailing Edge Flap System Deactivation, TASK 27-51-00-040-801.

SUBTASK 57-44-02-040-002

(3) Do this task: Deactivate the Leading Edge Flaps and Slats, TASK 27-81-00-040-801.

SUBTASK 57-44-02-490-001

(4) Get a ladders, work platform, COM-2480 or maintenance platform, SPL-659.

NOTE: A scissors type, mobile work platform or scaffold maintenance platform is recommended for two persons, one person to control the movement of the winglet which is suspended from the crane/sling and the other person to remove the winglet bolts and the grounding straps.

SUBTASK 57-44-02-860-001

(5) Do these steps to prepare metal support equipment such as work platforms, work/maintenance stands, ladders.

NOTE: These steps apply to all metal support equipment within a 50-foot (15.24 meter) radius of an open fuel tank.

(a) All support equipment must be in place before you begin the procedure.

(b) Bond the support equipment at an approved airplane bonding location.

(c) Ground the support equipment to the same earth ground as the airplane.

SUBTASK 57-44-02-010-001

(6) Remove the applicable access panel [2] located under the wing, adjacent to the outboard rib 27 and the winglet.

(a) Open these access panels.

Number	Name/Location
521ABB	Lower Leading Edge Access Panel-Slat Station 524.31
621AAB	Lower Leading Edge Access Panel - Slat Station 524.31

G. Outboard Leading Edge Ballast Removal

SUBTASK 57-44-02-020-001

(1) Remove the ballast [1].

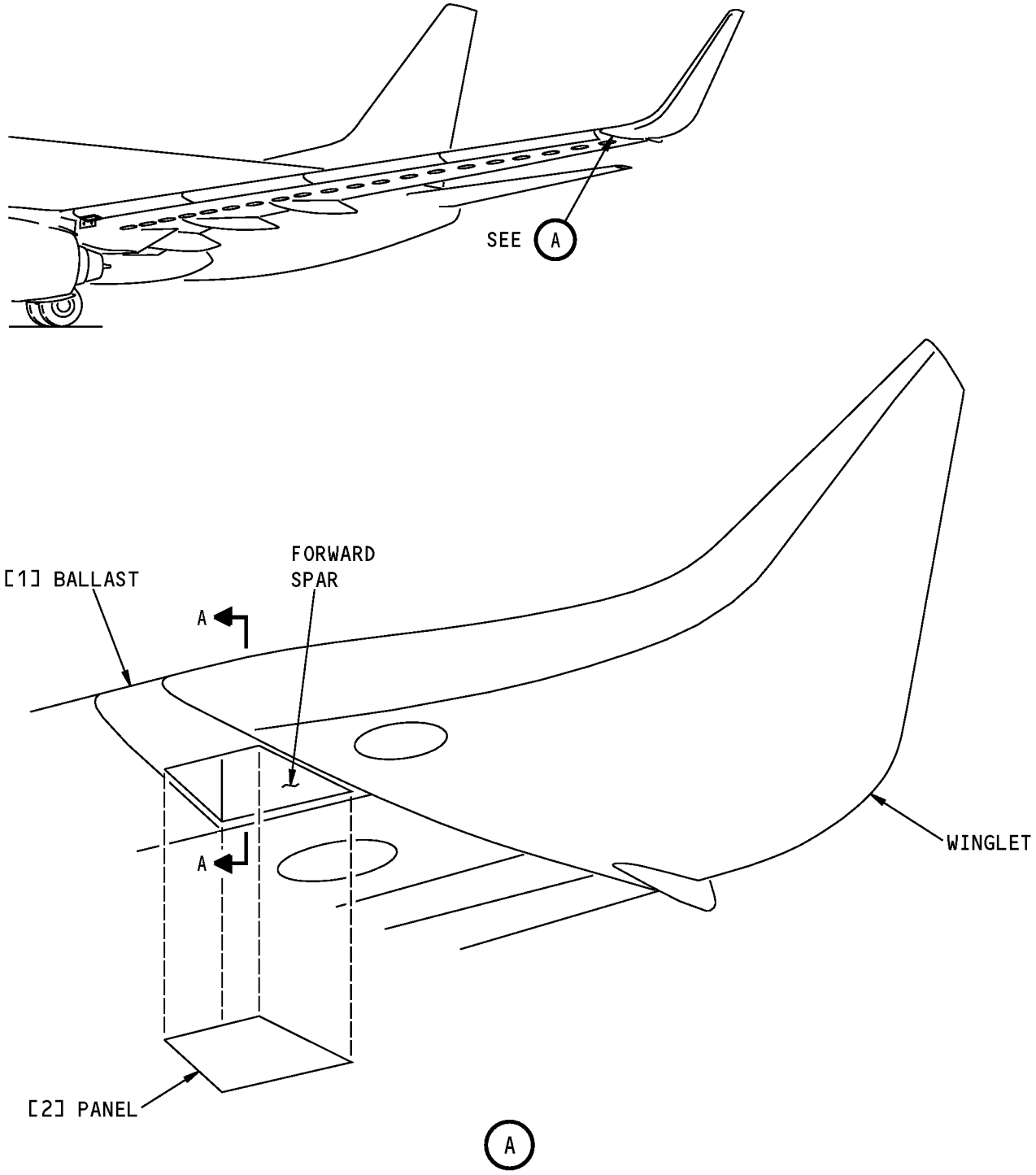
(a) Hold the ballast [1] as you remove the attachment fasteners.

NOTE: The ballast weighs approximately 75.0 pounds (34.0 kilograms).

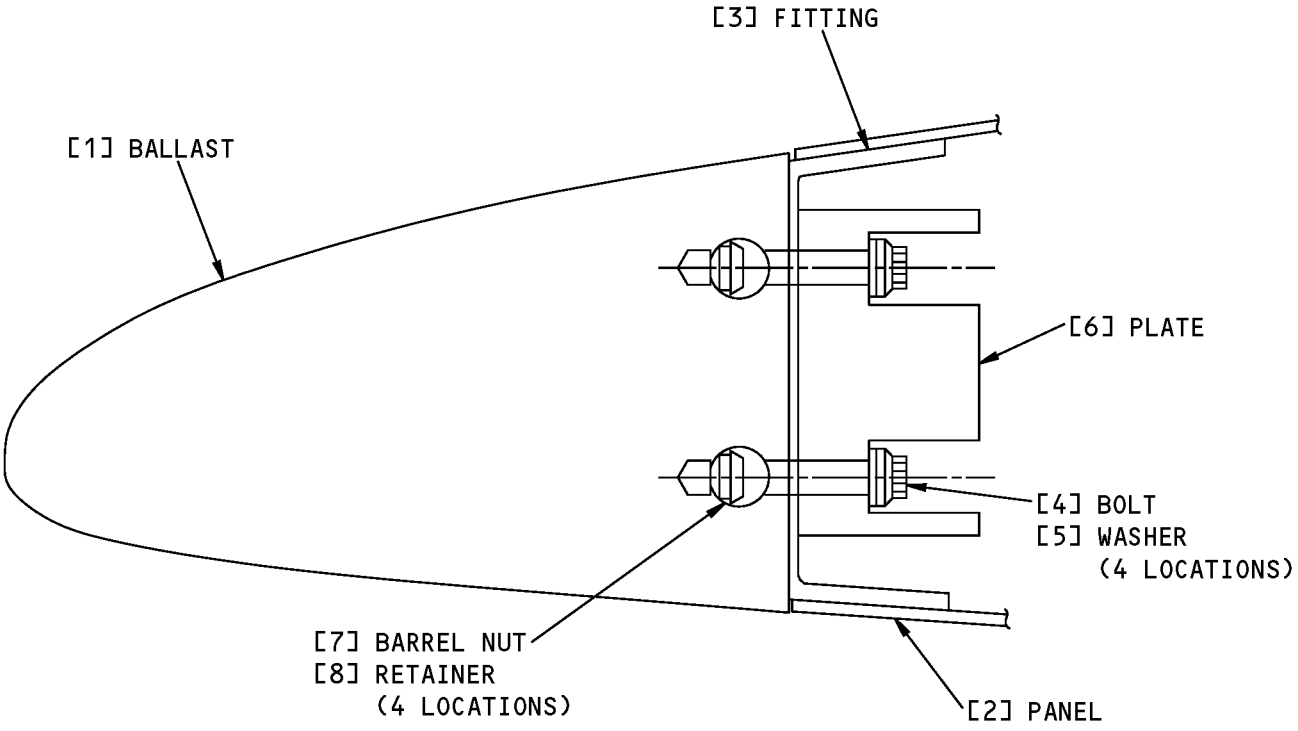
(b) Remove the four bolts [4] and four washers [5] from the plate [6].

(c) Remove the ballast [1] and the plate [6].

——————— END OF TASK ———————



Outboard Leading Edge Ballast Installation
Figure 401 (Sheet 1 of 2)/57-44-02-990-801



A–A

Outboard Leading Edge Ballast Installation
Figure 401 (Sheet 2 of 2)/57-44-02-990-801

TASK 57-44-02-400-801

3. Outboard Leading Edge Ballast Installation

(Figure 401)

A. General

(1) This task gives the procedure to install the outboard leading edge ballast on the left or right wing.

B. References

Reference	Title
27-51-00-440-801	Trailing Edge Flap System Reactivation (P/B 201)
27-81-00-440-801	Reactivate the Leading Edge Flaps and Slats (P/B 201)

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
COM-2480	Platform - Mobile Elevating Work Platform SJ II Series (Part #: 4620, Supplier: 3AF08, A/P Effectivity: 737-ALL)
SPL-659	Platform - Maintenance Lift, 3 ft Minimum Height, 12.5 ft Maximum Height (Part #: 8662-010, Supplier: 00994, A/P Effectivity: 737-ALL)

D. Consumable Materials

Reference	Description	Specification
A00247	Sealant - Pressure And Environmental - Chromate Type	BMS 5-95

E. Location Zones

Zone	Area
500	Left Wing
521	Left Wing - Leading Edge to Front Spar
527	Left Winglet
600	Right Wing
621	Right Wing - Leading Edge to Front Spar
627	Right Winglet

F. Access Panels

Number	Name/Location
521ABB	Lower Leading Edge Access Panel-Slat Station 524.31
621AAB	Lower Leading Edge Access Panel - Slat Station 524.31

G. Outboard Leading Edge Ballast Installation

SUBTASK 57-44-02-420-001

(1) If a new ballast [1] is installed, install the four barrel nuts [7] and four retainers [8] in the holes in the sides of the ballast.

(a) Fill the holes in the sides of the ballast with sealant, A00247.

SUBTASK 57-44-02-420-002

(2) Install the ballast [1].

(a) Lift and put the ballast [1] in position on the forward side of the attachment fitting [3].

NOTE: The ballast weighs approximately 75.0 pounds (34.0 kilograms).

(b) Put the plate [6] on the aft side of the attachment fitting [3].

(c) Install the four bolts [4] and four washers [5] through the plate [6] and into the ballast [1].

1) Tighten the bolts to 150-250 inch-pounds (16.9-28.2 newton-meters).

H. Put the Airplane Back to the Usual Condition

SUBTASK 57-44-02-410-001

(1) Install the applicable access panel [2] on the left or right wing.

(a) Close these access panels.

Number	Name/Location
521ABB	Lower Leading Edge Access Panel-Slat Station 524.31
621AAB	Lower Leading Edge Access Panel - Slat Station 524.31

SUBTASK 57-44-02-090-001

(2) Remove the ladders, work platform, COM-2480 or maintenance platform, SPL-659.

SUBTASK 57-44-02-440-001

(3) Do this task: Trailing Edge Flap System Reactivation, TASK 27-51-00-440-801.

SUBTASK 57-44-02-440-002

(4) Do this task: Reactivate the Leading Edge Flaps and Slats, TASK 27-81-00-440-801.

———————— END OF TASK ————————

OUTBOARD LEADING EDGE SEAL RIB - INSPECTION/CHECK

1. General

A. this procedure has the task to inspect the fillet seals on the seal ribs adjacent to the leading edge slats.

TASK 57-44-03-200-801

2. Check of Sealant at Leading Edge Seal Rib

A. General

(1) This task gives the procedure to do a visual check of the sealant applied to the forward spar and the leading edge seal rib.

(2) A visual inspection for condition of the fillet seals of the seal rib, the forward spar, and rib 27 is necessary because these seals must have absolute seals to form a vapor barrier. These fillet seals can not be tested by pressurization. If the fillet seal is damaged, a repair of the fillet seal or replacement of the fillet seal is neccesary.

(3) The inboard side of rib 27, the forward spar and leading edge seal rib are sealed with sealant, BMS 5-142:

(a) The sealant was applied to the seams between the ribs and the upper and lower skin panels, the leading edge panel and the outside surface of the forward spar.

(b) Injection seals with sealant BMS 5-142 are made to the channels and cavities between the rib 27 and the forward spar.

(c) All fillet seals must touch the injection and prepack seals to maintain seal continuity.

(d) Tool holes for manufacture and alignment of the wing parts were filled and sealed.

(4) Vapor can go through the seal plane from a leak point.

(a) If there is an injection, prepack or hidden seal failure, the vapor can move along the structure and leak at a point far from the leak source.

(b) You must find all possible leak paths between the external leak point and internal leak point to repair the seal failure.

NOTE: You can increase the height of the seal plane as an alternative to a repair of the seal.

(c) Look for loose fasteners.

1) Loose fasteners start vapor leaks because they let attached surfaces move.

2) Faying surface seals get cracks and let vapor leak through the seal plane.

3) Loose rivets are not self-sealing.

4) Sealant does not bond with loose fasteners.

(d) To understand the leak, examine the wing structure and sealant.

B. References

Reference	Title
57-41-02-000-801	Leading Edge Access Panel Removal (P/B 201)
57-41-02-400-801	Leading Edge Access Panel Installation (P/B 201)
57-44-03-390-801	Repair of Sealant at Leading Edge Seal Rib (P/B 801)

C. Tools/Equipment

Reference	Description
STD-600	Mirror - Inspection
STD-1081	Flashlight - Explosion Proof

D. Location Zones

Zone	Area
500	Left Wing
521	Left Wing - Leading Edge to Front Spar
600	Right Wing
621	Right Wing - Leading Edge to Front Spar

E. Prepare for the Procedure

SUBTASK 57-44-03-010-002

(1) Do the task: Leading Edge Access Panel Removal, TASK 57-41-02-000-801.

F. Visual Check

SUBTASK 57-44-03-212-002

(1) Examine the area you think contains a leak; look for seal defects such as cracked or loose fillets, pinholes, or loose fasteners.

HAP 101-999

(a) Refer to the figure: Leading Edge Seal Rib Fillet Seals/Figure 601.

HAP 001-013, 015-026, 028-054

(b) Refer to the figure: Leading Edge Seal Rib Fillet Seals/Figure 602.

HAP ALL

(c) Use an explosion proof flashlight, STD-1081 when you look inside the leading edge area.

(d) If it is necessary, use an inspection mirror, STD-600 to examine seals which are difficult to see.

SUBTASK 57-44-03-212-003

(2) If you find seal defects, repair or replace the fillet seal:

(a) Do this task: Repair of Sealant at Leading Edge Seal Rib, TASK 57-44-03-390-801.

1) You can remove and replace the bad sealant.

a) Examine the structure around the bad seal to find where to increase the seal plane.

b) Remove the length of bad sealant.

c) Apply a new fillet seal around the structure with the applicable seals and fasteners.

2) You can increase the seal plane to isolate a bad seal.

NOTE: Because you add a large quantity of sealant when you increase the seal plane above the initial seal plane, it is better to replace the bad seal.

a) Examine the structure around the bad seal to find where to increase the seal plane.

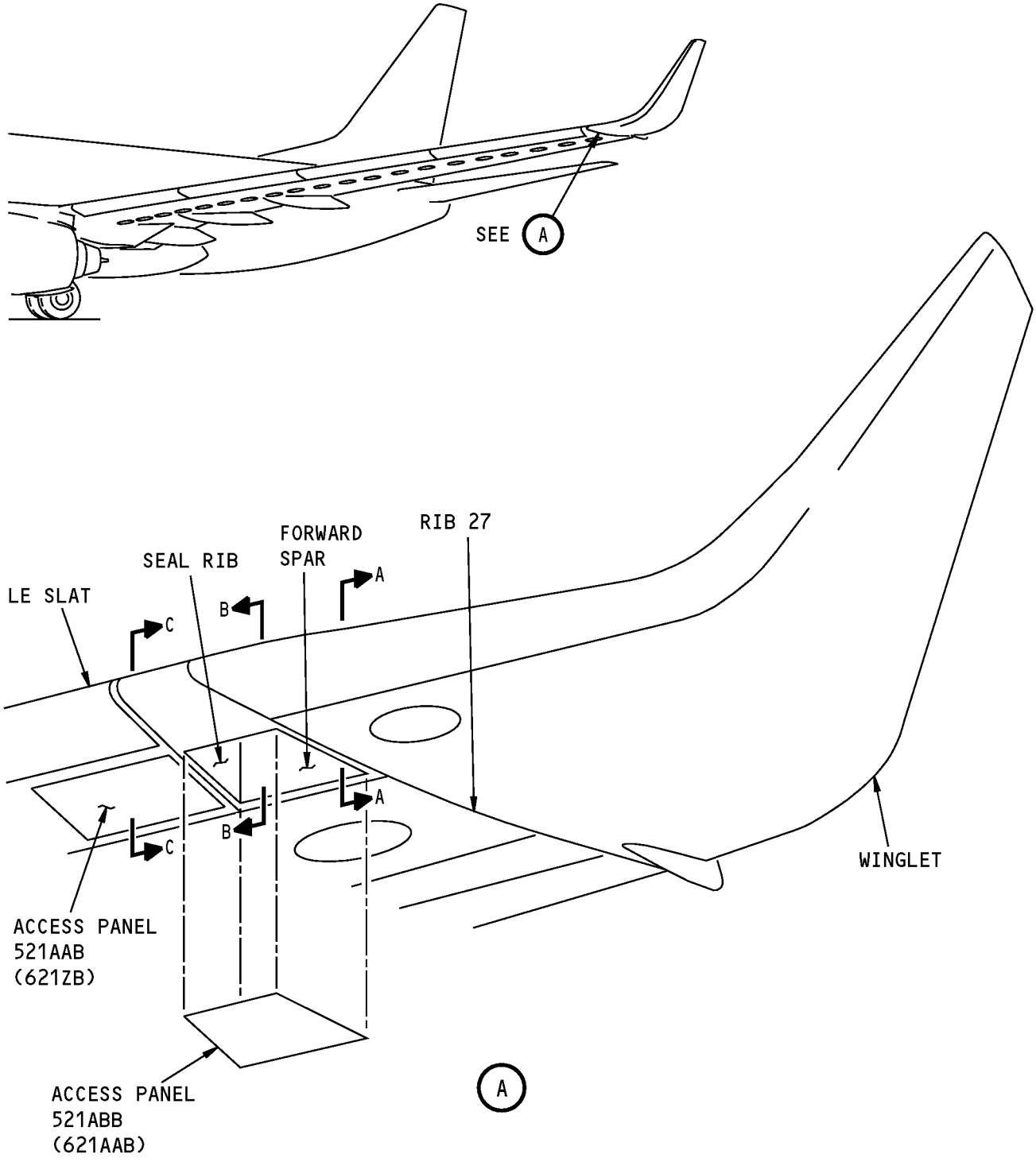
b) Apply a new fillet seal around the structure with the applicable seals and fasteners to increase the seal plane.

G. Put the Airplane Back to the Usual Condition

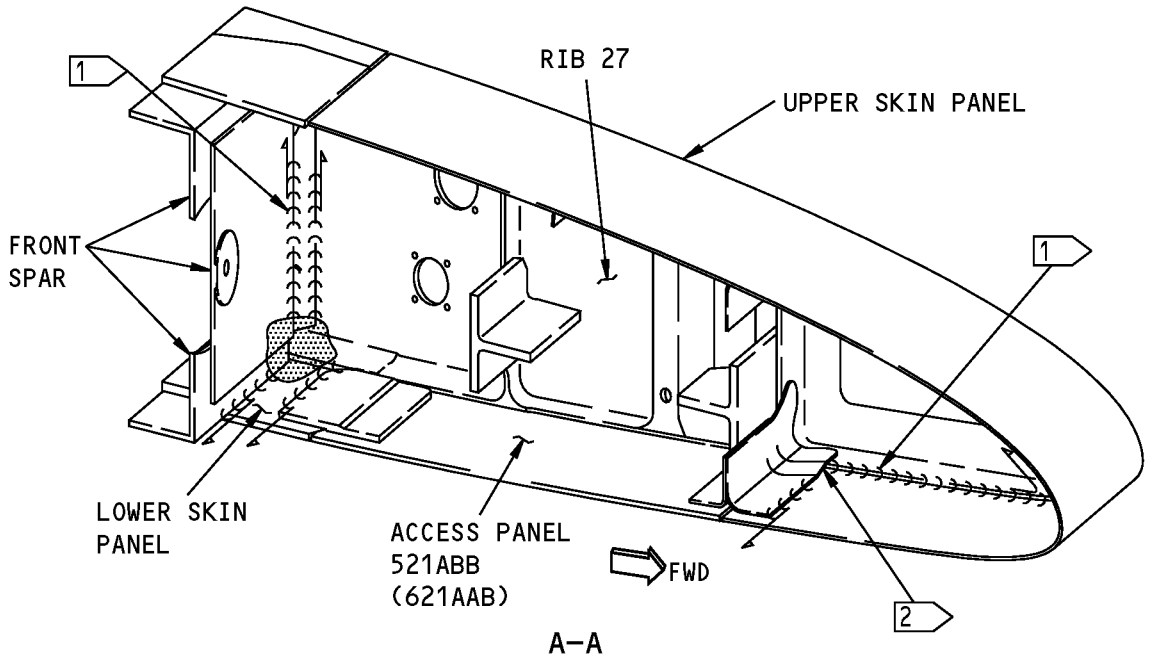
SUBTASK 57-44-03-410-002

(1) Do this task: Leading Edge Access Panel Installation, TASK 57-41-02-400-801.

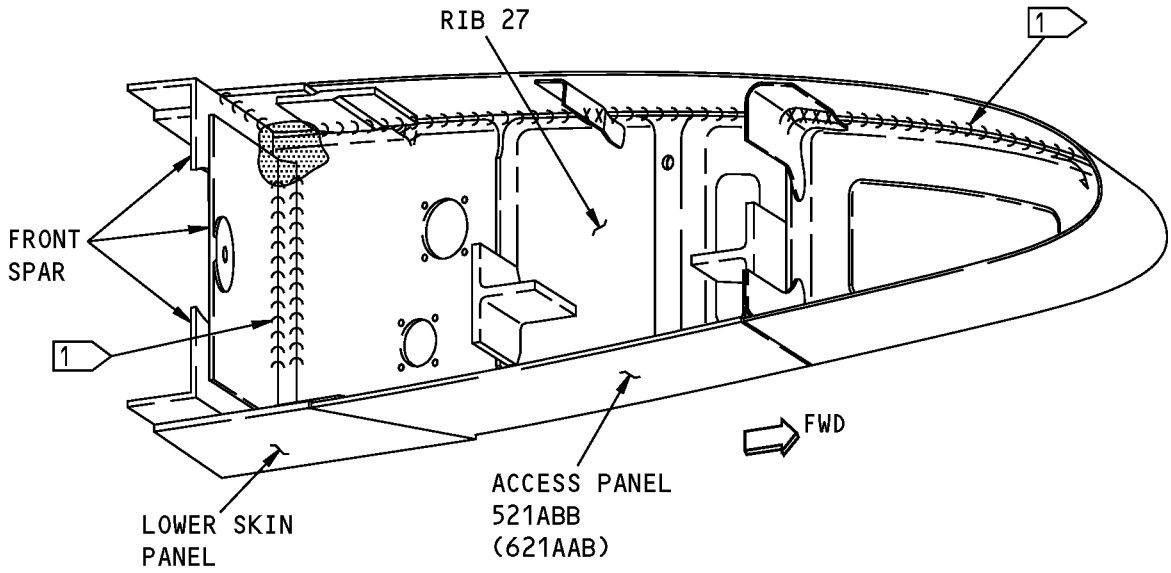
——————— END OF TASK ———————



Leading Edge Seal Rib Fillet Seals
Figure 601 (Sheet 1 of 4)/57-44-03-990-802



A–A



A–A

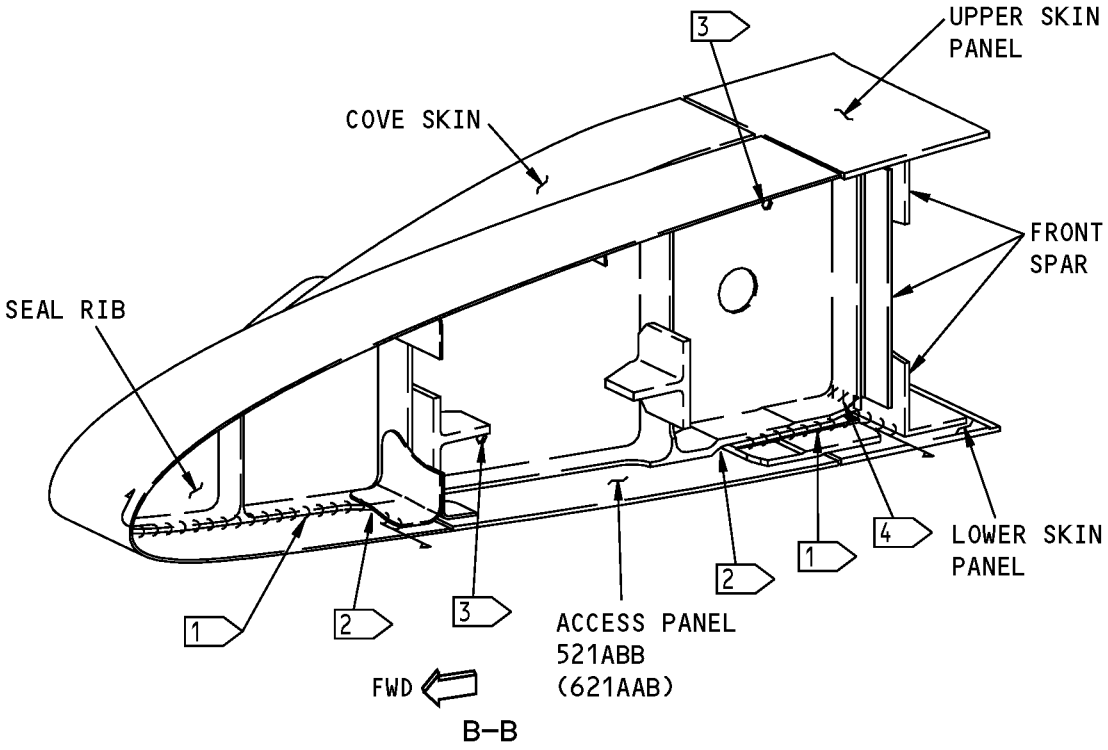
1 FILLET SEAL BMS 5-142

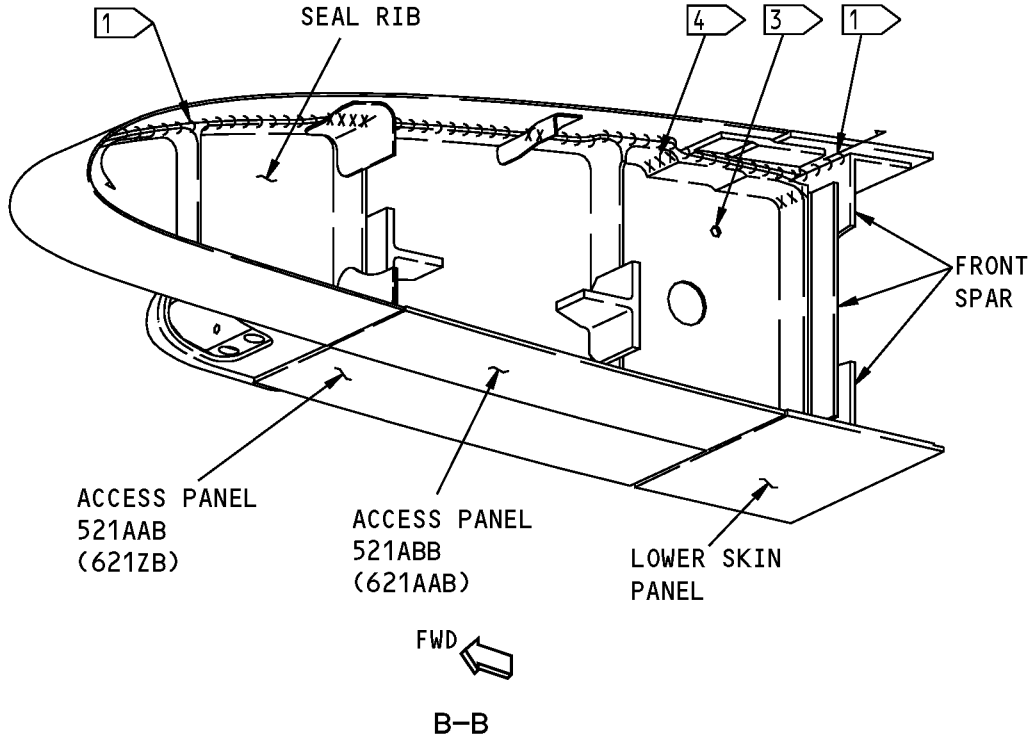
2 DO NOT FILL WITH SEALANT, KEEP OPEN, DRAINAGE PATH

3 TOOL HOLE SEAL BMS 5-142

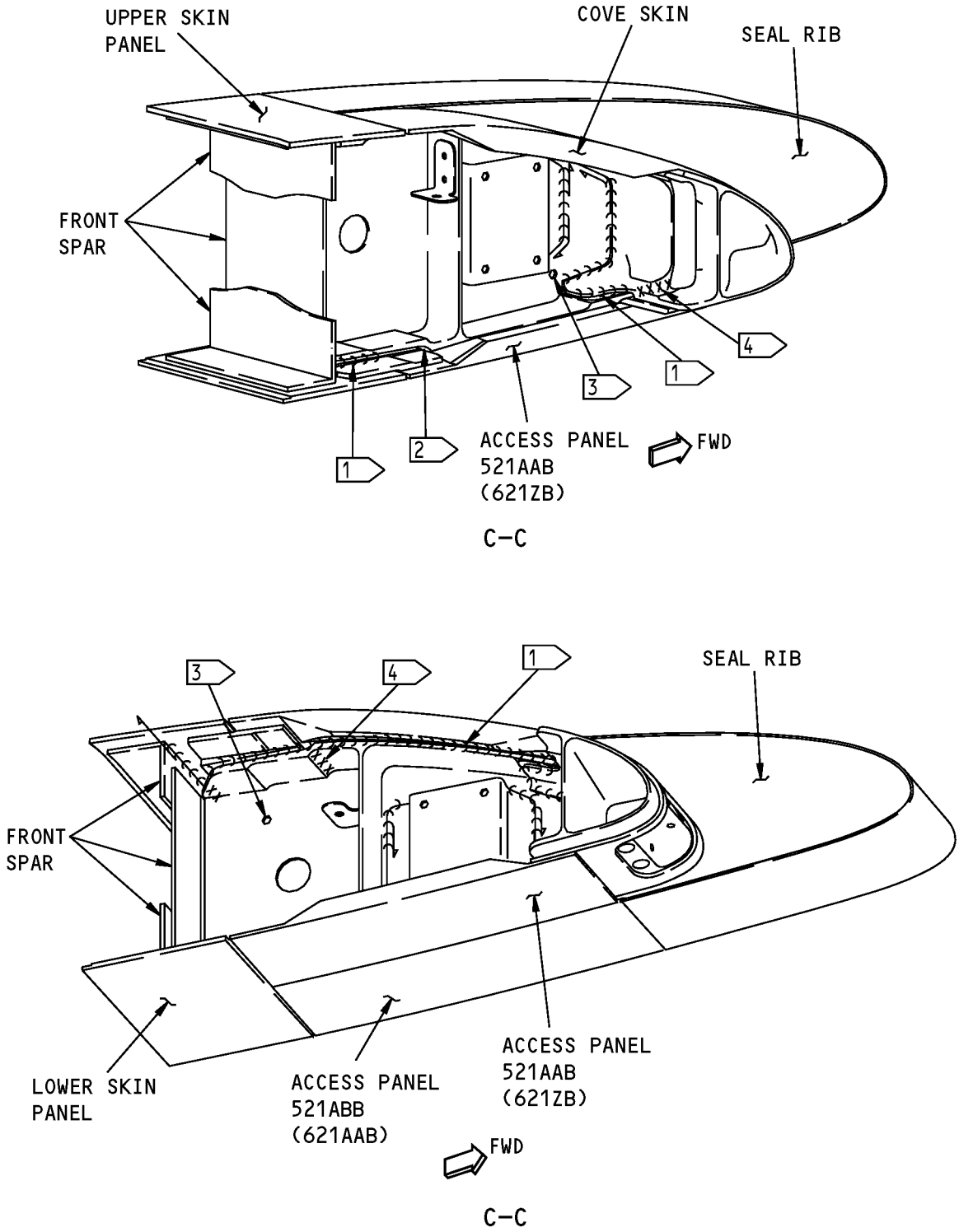
4 INJECTION SEAL BMS 5-142

Leading Edge Seal Rib Fillet Seals
Figure 601 (Sheet 2 of 4)/57-44-03-990-802

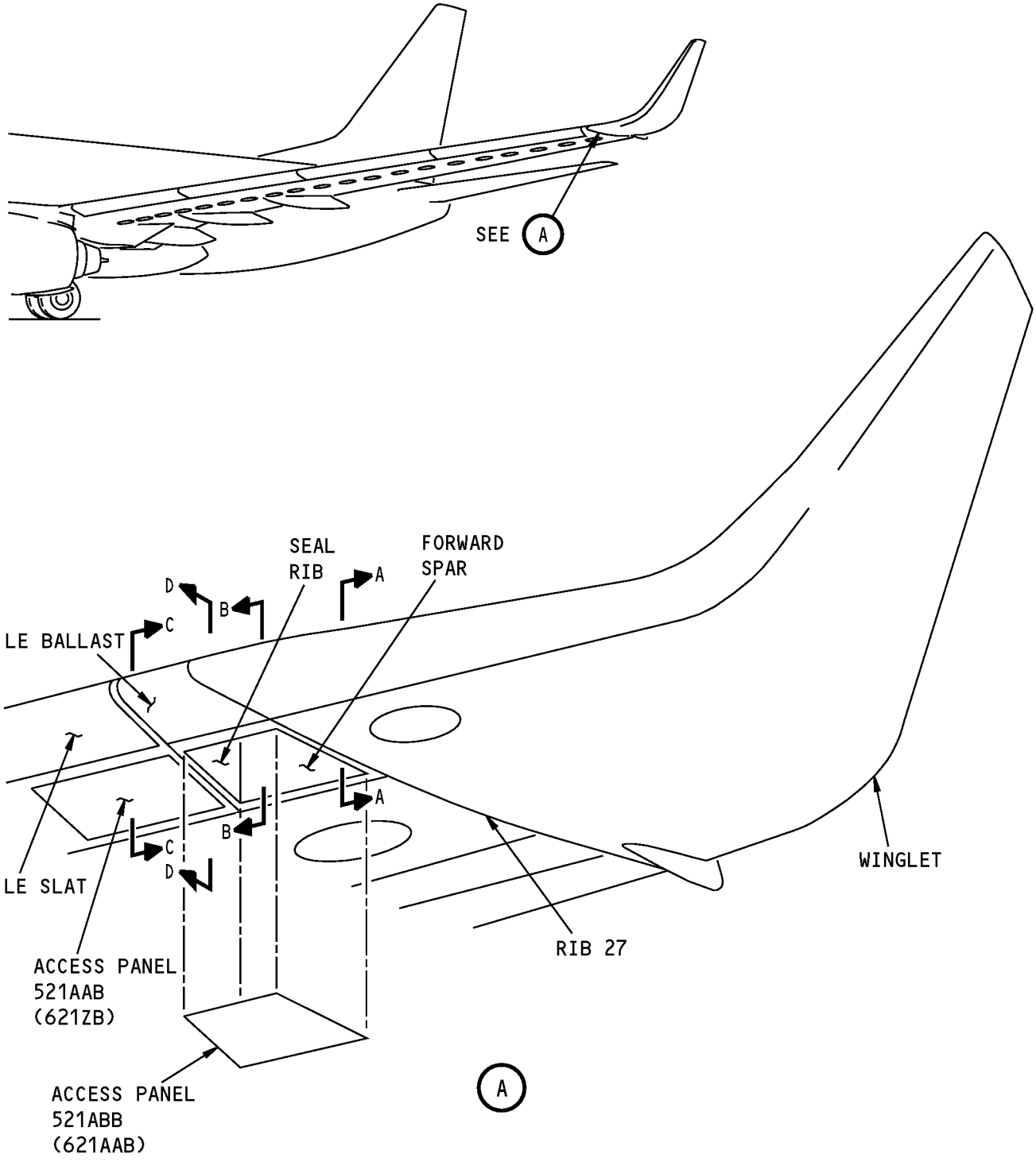




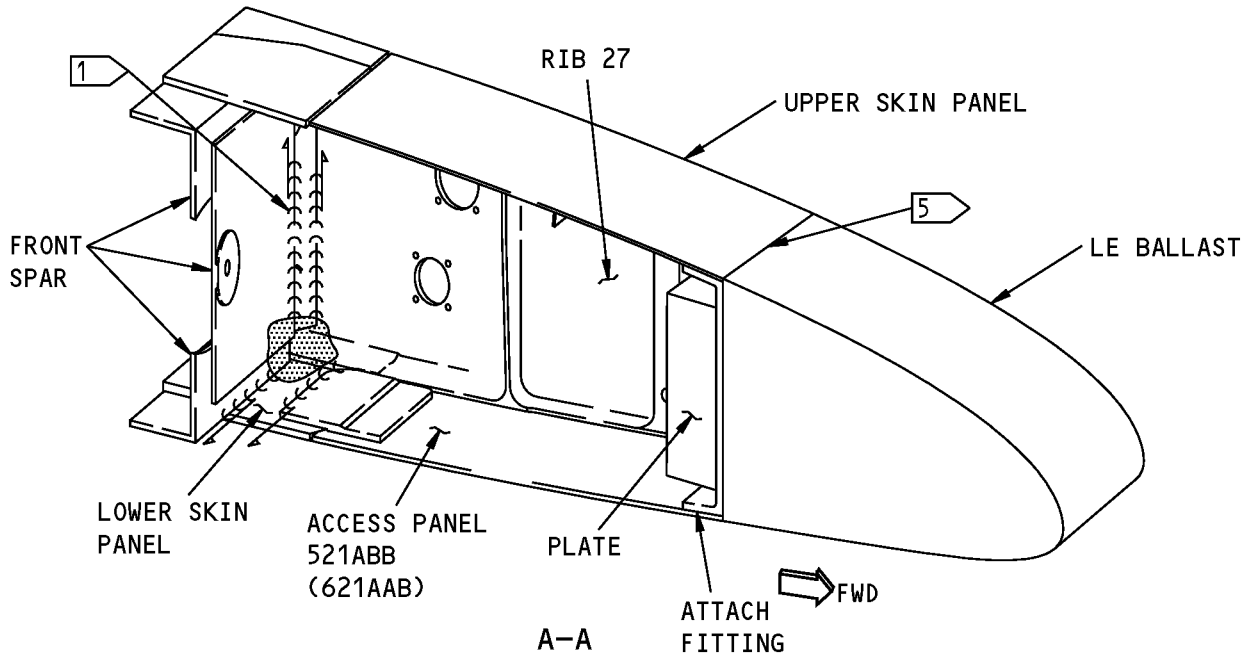
Leading Edge Seal Rib Fillet Seals
Figure 601 (Sheet 3 of 4)/57-44-03-990-802

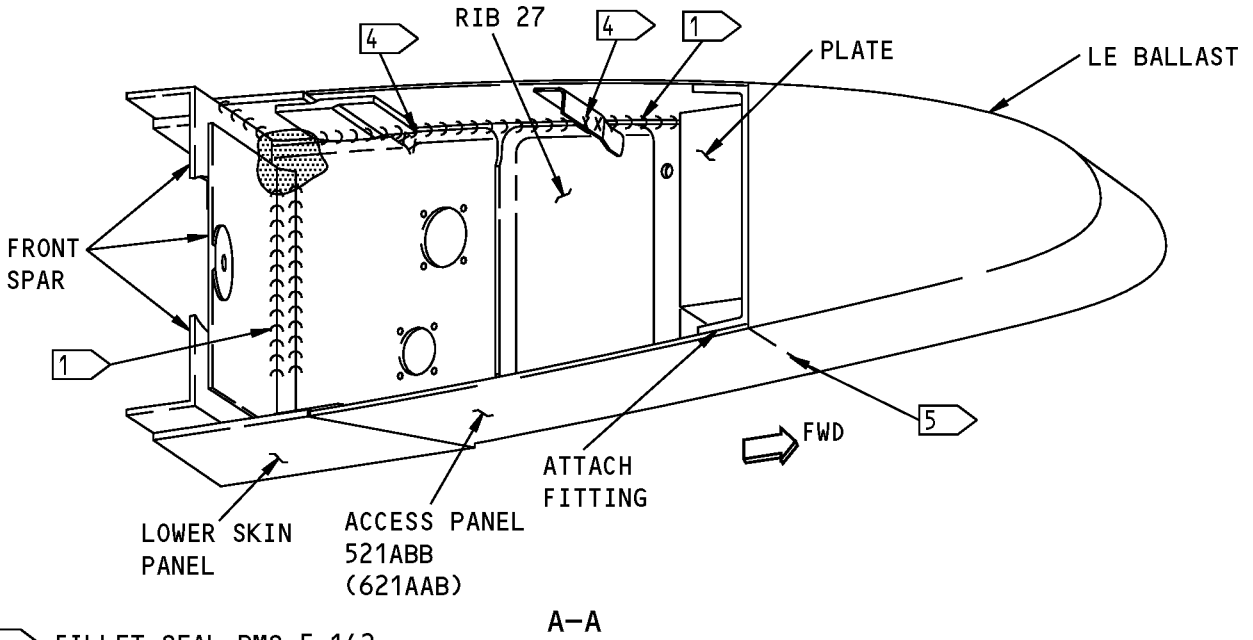


Leading Edge Seal Rib Fillet Seals
Figure 601 (Sheet 4 of 4)/57-44-03-990-802



Leading Edge Seal Rib Fillet Seals
Figure 602 (Sheet 1 of 5)/57-44-03-990-804





1 FILLET SEAL BMS 5-142

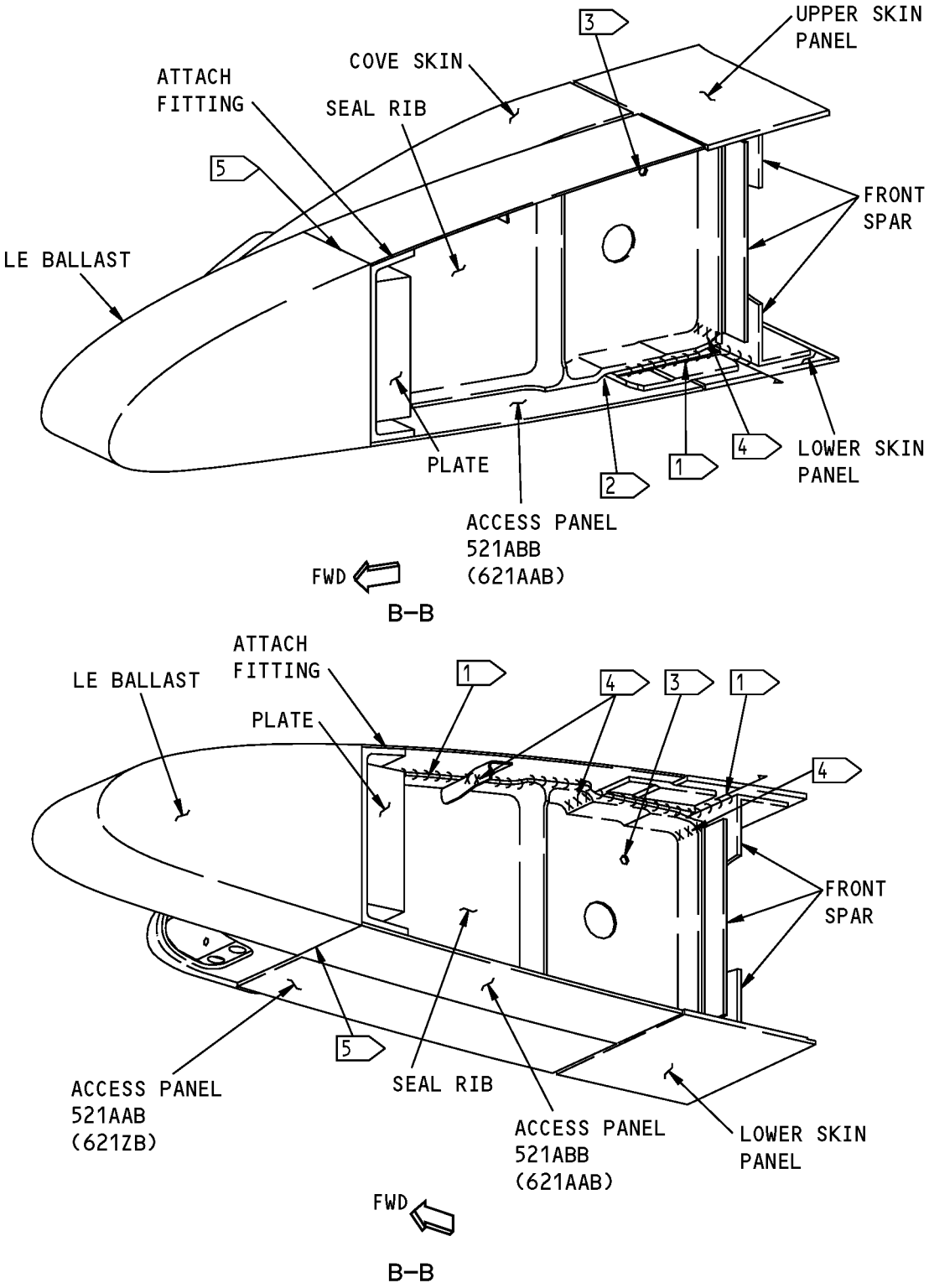
2 DO NOT FILL WITH SEALANT, KEEP OPEN, DRAINAGE PATH

3 TOOL HOLE SEAL BMS 5-142

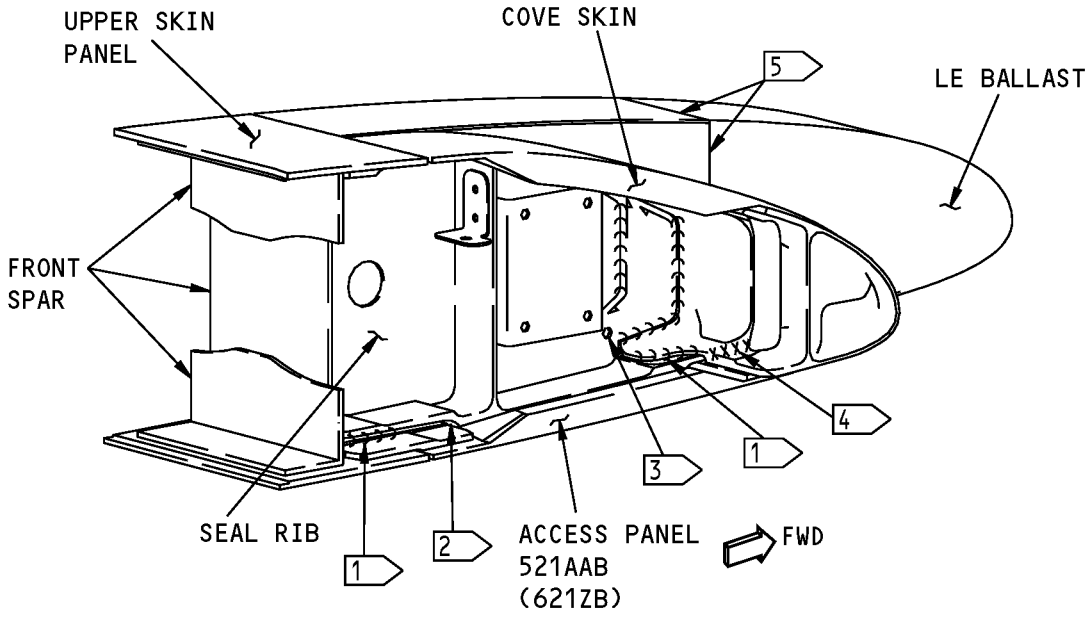
4 INJECTION SEAL BMS 5-142

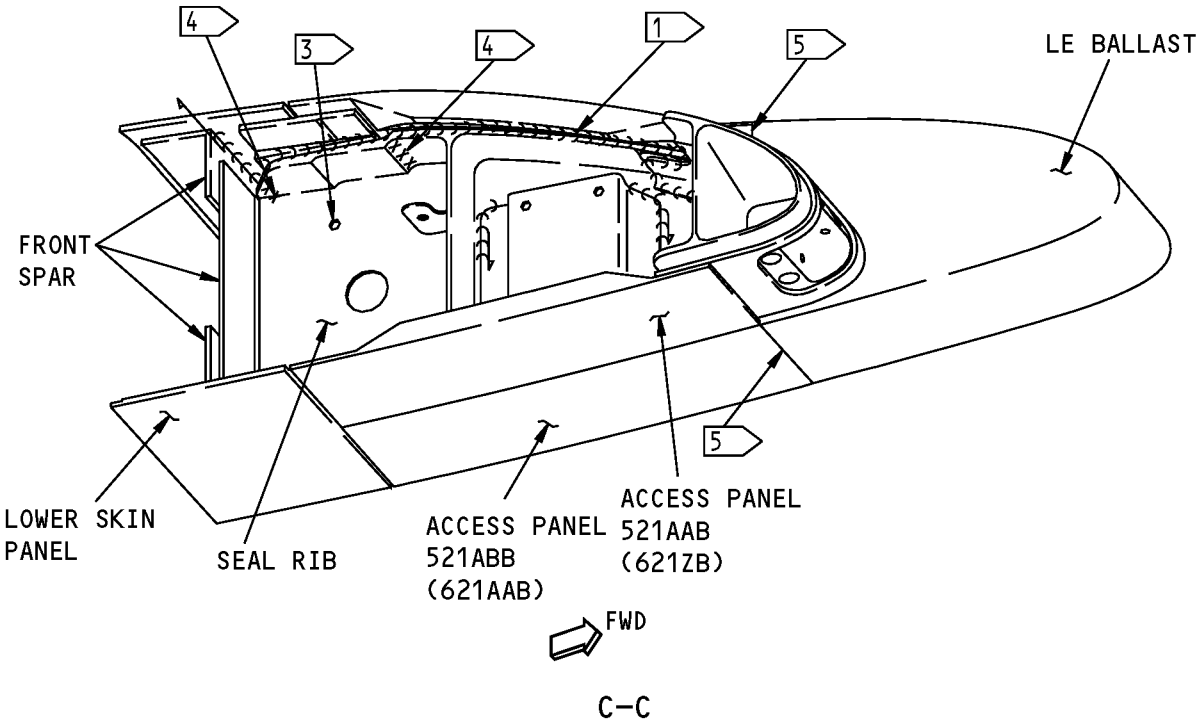
5 PANEL GAPS SEAL BMS 5-95

Leading Edge Seal Rib Fillet Seals
Figure 602 (Sheet 2 of 5)/57-44-03-990-804

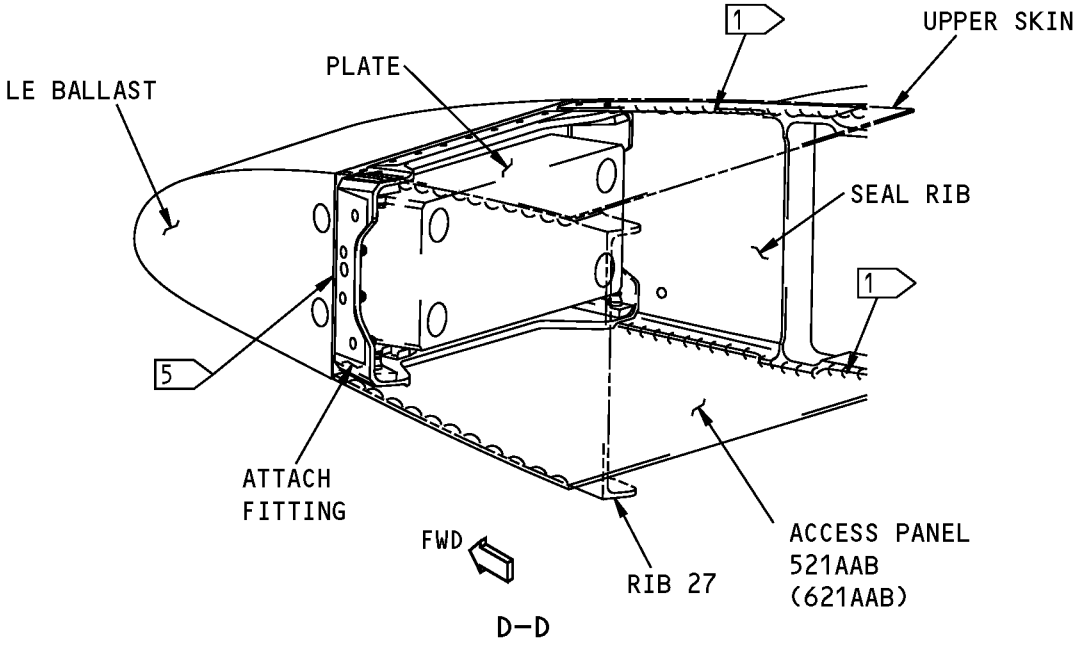


Leading Edge Seal Rib Fillet Seals
Figure 602 (Sheet 3 of 5)/57-44-03-990-804





Leading Edge Seal Rib Fillet Seals
Figure 602 (Sheet 4 of 5)/57-44-03-990-804



Leading Edge Seal Rib Fillet Seals
Figure 602 (Sheet 5 of 5)/57-44-03-990-804

OUTBOARD LEADING EDGE SEAL RIB - REPAIR

1. General

A. This procedure has the task to repair the fillet seals on the seal rib that is adjacent to the leading edge slats.

TASK 57-44-03-390-801

2. Repair of Sealant at Leading Edge Seal Rib

A. General

(1) This task gives the procedure to apply sealant to seal the forward spar and the leading edge seal rib for vapor leaks.

(2) The forward spar and leading edge ribs are sealed with sealant, BMS 5-142:

(a) The sealant was applied to the seams between the ribs and the upper and lower skin panels, the leading edge panel and the outside surface of the forward spar.

(b) Injection seals with sealant BMS 5-142 are made to the channels and cavities between the rib 27 and the forward spar.

(c) All fillet seals must touch the injection and prepack seals to maintain seal continuity.

(d) Tool holes for manufacture and alignment of the wing parts were filled and sealed.

(3) Application of sealants.

(a) If you do not do the subsequent steps, vapor leaks can occur:

1) Make sure the surfaces are prepared correctly.

a) The surfaces must not contain unwanted materials such as grease, metal particles, hair, loose paint, corrosion inhibiting compounds or wax.

b) Unwanted materials can cause the sealant not to bond correctly; make the surfaces clean.

2) Follow all manufacturer's instructions for the sealant.

a) Sealants are supplied in two parts; base material and accelerator.

NOTE: You must be very careful to make sure the correct proportions of the base material and the accelerator recommended by the manufacturer are used. If you do not obey the manufacturer's instructions, you can change the physical properties of the mixture which can cause a seal failure and a tank leak.

b) Sealing compounds have a specified shelf life.

NOTE: After the specified time, you must do a test of the sealing compounds to find out if you can use them.

c) You can keep some sealants in refrigeration for a short time after they are mixed with the accelerator.

NOTE: You must discard these sealants after the specified time.

d) Make sure the sealant is applied during the work life or application time after you mix the sealant.

3) Use a brush to apply precoat when recommended.

4) Do all the steps to apply the sealant.

5) Make sure there are no air bubbles in the sealant.

6) Make sure you fill all the spaces completely with sealant.

7) Make sure you do not make an overlap with the sealants.

8) Make sure the sealant touches all the surfaces.

(4) After you find the external leak point and the internal leak source, find the point where the vapor goes through the seal plane.

(a) If there is an injection, prepack or hidden seal failure, the vapor can move along the structure and leak at a point far from the leak source.

(b) You must find all possible leak paths between the external leak point and internal leak source to repair the seal failure.

NOTE: You can increase the height of the seal plane as an alternative to a repair of the seal.

(c) Look for loose fasteners.

1) Loose fasteners start vapor leaks because they let attached surfaces move.

2) Faying surface seals get cracks and let vapor leak through the seal plane.

3) Loose rivets are not self-sealing.

4) Sealant does not bond with loose fasteners.

(d) To understand the leak, examine the wing structure and sealant.

B. References

Reference	Title
20-30-82-910-801	General Cleaning of Solvent Resistant Organic Coatings (Series 82) (P/B 201)
20-30-92-910-801	Final Cleaning Prior to General Sealing (Series 92) (P/B 201)
51-31-00-390-804	Fillet Seal Application (P/B 201)
57-41-02-000-801	Leading Edge Access Panel Removal (P/B 201)
57-41-02-400-801	Leading Edge Access Panel Installation (P/B 201)

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-768	Sealant Removal Tool, Hardwood or Plastic (Part #: ST982, Supplier: 81205, A/P Effectivity: 737-ALL)
STD-449	Gun - Sealant
STD-600	Mirror - Inspection
STD-1081	Flashlight - Explosion Proof

D. Consumable Materials

Reference	Description	Specification
A02315	Sealant - Low Density, Synthetic Rubber. 2 Part	BMS5-142
A50009	Sealant - Low Density, Chromate Type Synthetic Rubber	BMS5-142, Class B-1/2
B00130	Alcohol - Isopropyl	TT-I-735
B00571	Coating - Clear Hydraulic Fluid Resistant Topcoat	BAC5710, Type 41
B01002	Solvent - General Cleaning Of Solvent Resistant Organic Coatings (AMM 20-30-82/201) - Series 82	

(Continued)

Reference	Description	Specification
B01012	Solvent - Final Cleaning Prior To General Sealing (AMM 20-30-92/201) - Series 92	
B01013	Solvent - Final Cleaning Prior To Fuel Tank Sealing (AMM 20-30-93/201) - Series 93	
G00009	Compound - Organic Corrosion Inhibiting	BMS3-23
G00034	Cotton Wiper - Process Cleaning Absorbent Wiper (Cheesecloth, Gauze)	BMS15-5
G00268	Brush - Soft Bristle, Paint	
G00834	Cloth - Lint-free Cotton	
G01061	Water - Distilled	

E. Location Zones

Zone	Area
500	Left Wing
521	Left Wing - Leading Edge to Front Spar
600	Right Wing
621	Right Wing - Leading Edge to Front Spar

F. Prepare for the Procedure

SUBTASK 57-44-03-010-001

(1) Do the task: Leading Edge Access Panel Removal, TASK 57-41-02-000-801.

SUBTASK 57-44-03-212-001

(2) Examine the area you think contains a leak; look for seal defects such as cracked or loose fillets, pinholes, or loose fasteners.

HAP 101-999

(a) Refer to this figure to examine the seal rib and rib 27: Leading Edge Seal Rib Fillet Seals/Figure 801.

HAP 001-013, 015-026, 028-054

(b) Refer to this figure to examine the attach fitting for the leading edge ballast, the seal rib and rib 27:Leadng Edge Seal Rib Fillet Seals/Figure 802.

HAP ALL

(c) Use an explosion proof flashlight, STD-1081 when you look inside the leading edge area.

(d) If it is necessary, use an inspection mirror, STD-600 to examine seals which are difficult to see.

(e) You can increase the seal plane to isolate a bad seal, or.

NOTE: Because you add a large quantity of sealant when you increase the seal plane above the initial seal plane, it is better to replace the bad seal.

1) Examine the structure around the bad seal to find where to increase the seal plane.

2) Apply a new fillet seal around the structure with the applicable seals and fasteners to increase the seal plane.

(f) You can remove the sealant to replace the bad seal.

SUBTASK 57-44-03-140-001

(3) Use the sealant removal tool, SPL-768 to remove the bad sealant in the fillet seal.

(a) Cut the ends of the bad sealant at a slope such that the new sealant makes an overlap with the remaining sealant.

1) Make sure you cut the sealant smoothly.

(b) If the fillet seal bond is good, it is not necessary to cut the sealant to the metal.

1) Make sure you remove all sealant that is loose.

(c) If the bad sealant includes fasteners with fillet seals, do the steps that follow:

1) Cut around the bottom of the fastener with a sealant cutting tool.

2) Use a pliers and pull the sealant from the fastener.

a) It is not necessary to remove small quantities of the sealant that bond to the fastener.

(d) If the fillet seal is to be applied to cured structural adhesives, remove all adhesive material that has not adhered to the metal or primed surface.

1) Scrape the adhesive with a abrasive-free hardwood or plastic tool to remove the loose adhesive.

a) It is not necessary to remove adhesive that remains bonded to the metal or primed surface after you scrape the loose adhesive.

SUBTASK 57-44-03-160-002

(4) For surfaces covered with corrosion inhibiting compound, G00009 (BMS 3-23), clean the surface around the repair area as follows:

(a) Wipe off excess corrosion inhibiting compound, G00009 with a clean, lint-free cloth, G00834.

(b) Clean the area approximately 1.0 inches (25.4 millimeters) larger than the area to be sealed to prevent contamination from the corrosion inhibiting compound, G00009.

1) Make the surface clean with a new, clean cotton wiper, G00034 moist with Series 82 solvent, B01002.

a) Refer to General Cleaning of Solvent Resistant Organic Coatings (Series 82), TASK 20-30-82-910-801 for the complete list of Series 82 solvent, B01002.

2) Wipe the surface with a new, clean, dry cloth to remove excess solvent; do not let the solvent become dry on the surface.

3) Replace the cloth as the cloth becomes soiled.

4) Continue to clean and dry the surfaces until the a clean, dry cloth remains clean.

5) Do not touch the cleaned area with your fingers or allow the surface to become contaminated.

SUBTASK 57-44-03-160-003

(5) If there is topcoat on the surface of the sealant, remove all the topcoat from the sealant repair area.

(a) Use abrasive paper and remove the used topcoat until the sealant is shown and is in good condition.

(b) Use clean, cotton wiper, G00034 soaked with Series 92 solvent, B01012 to clean all surfaces and sealant from which you removed the topcoat.

1) Refer to Final Cleaning Prior to General Sealing (Series 92), TASK 20-30-92-910-801 for the complete list of Series 92 solvent, B01012.

(c) Wipe the surface with a clean, dry cloth to remove excess solvent; do not let the solvent become dry on the surface.

(d) Continue to clean and dry the surfaces until the a clean, dry cloth remains clean.

(e) Do not touch the cleaned area with your fingers or allow the surface to become contaminated.

SUBTASK 57-44-03-160-001

(6) Immediately before you apply the sealant, clean the surface with a clean cotton wiper, G00034 moist with Series 92 solvent, B01012.

(a) Refer to Final Cleaning Prior to General Sealing (Series 92), TASK 20-30-92-910-801 for the complete list of Series 92 solvent, B01012.

(b) Wipe the surface with a clean dry cloth to remove excess solvent; do not let the solvent become dry on the surface.

(c) Do not touch the cleaned area with your fingers or allow the surface to become contaminated.

G. Wing Leading Edge Seal Ribs and Forward Spar Repair - Fillet Seals

SUBTASK 57-44-03-390-001

(1) Prepare the sealant, A50009 Class B-1/2 or sealant, A02315 Class B-2 sealant.

(a) Match the batch number of the base compound to the accelerator compound.

NOTE: Compounds from the same batch number will be the same age. The different age of compounds can cause problems with the sealant.

(b) Mix the two-part sealant to the accelerator-to-base ratios given by the supplier.

NOTE: The table is a guide for the sealant mix ratios and the amount of usable time to apply the sealant. Accelerated mix ratios can affect the application time and can increase the sealant weight and defects in the applied sealant.

1) Refer to the table: Sealant BMS5-142 Useable Time/Table 801.

(c) Completely mix the two compounds until the mixture is all the same color and the same texture and viscosity.

Table 801/57-44-03-993-801 Sealant BMS5-142 Useable Time

SEALANT	APPLICATION TIME (MINIMUM) HOURS	TACK-FREE TIME (MINIMUM) HOURS	SQUEEZE-OUT LIFE (MINIMUM) HOURS	CURING TIME (MINIMUM) HOURS
BMS 5-142 B-1/2 *[1]	0.5	10	N/A	24
BMS 5-142 B-2 *[1]*[2]	2	24	N/A	48

*[1] At 77 degrees F (25 degrees c) and 50% relative humidity ambient conditions. Other temperature and relative humidity conditions will change the times.

*[2] Standard mix ratio for BMS 5-142, Class B-2 sealant, 6.32:100 accelerator-to-base ratio by volume or 10:100 accelerator-to-base ratio by weight.

SUBTASK 57-44-03-390-002

(2) To apply a new fillet seal of sealant, A50009 Class B-1/2 or sealant, A02315 Class B-2 sealant, do the steps that follow:

(a) Refer to this task for the method and examples to apply a fillet seal: Fillet Seal Application, TASK 51-31-00-390-804.

(b) Examine the seal area to make sure you have the correct selection of tools for the job.

1) Use an explosion proof flashlight, STD-1081 when you look inside the leading edge area.

2) If it is necessary, use an inspection mirror, STD-600 to examine seals which are difficult to see.

(c) Apply a small fillet seal of sealant with the sealant gun, STD-449.

(d) Use a sealant fairing tool and push the fillet seals tightly into position.

1) Make sure all sealant fairing tools are clean; use a clean cotton wiper, G00034.

2) Use a solution of alcohol, B00130 and distilled water, G01061, mixed to a ratio of 1:5 or 1:6 by volume to wet the tool surface to prevent sticking of the sealant to the fairing tools.

(e) If the first fillet seal is hard, but is not clean, then it must be cleaned before you apply the second fillet seal.

(f) Apply sealant a second time to make a full bodied fillet seal.

1) If you do not use an extruded nozzle, use a sealant fairing tool to make a full bodied fillet seal.

2) Remove all air bubbles and re-entrant fillet seal edges.

H. Apply a Corrosion Resistant Finish (Topcoat)

SUBTASK 57-44-03-390-003

(1) If there is topcoat on the surface of the old sealant, apply a corrosion resistant finish (topcoat) to all exposed new sealant.

NOTE: The new sealant must become dry and tack free before the corrosion resistant finish (topcoat) can be applied.

(a) Prepare primer and enamel for a topcoat, or

(b) Prepare a two-part coating, B00571 for a topcoat.

1) Match the batch number of the base to the catalyst and expiration date.

2) Mix the two-part finish coating to the catalyst-to-base ratios given by the supplier.

NOTE: The amount of usable time to apply the finish coating. The two-part coating is a hydraulic fluid resistant coating. Kits that are identified as BAC 5710 Type 41 ''fc'' are fast cure.

a) Refer to the table: Table 802.

3) Completely mix the two compounds until the mixture is all the same color and the same texture and viscosity.

Table 802/57-44-03-993-802 BAC5710 Type 41 Finish Coat

BAC 5710 Type 41	Mix Ratio By Volume	Application Time	Minimum Cure
683-3-2 Base, X-310A catalyst	2 parts base to 1 part catalyst	4 hours*[1]	4 hours*[2]
683-3-9 Base, X-310A catalyst	2 parts base to 1 part catalyst	100 minutes*[1]	100 minutes*[2]
683-3-20 Base, X-310A catalyst	2 parts base to 1 part catalyst	30 minutes*[1]	30 minutes*[2]

*[1] At 70 degrees F.

*[2] Full cure 14 days

(c) Use clean, cotton wiper, G00034 soaked with Series 93 solvent, B01013 to clean all surfaces and sealant before you apply the topcoat.

1) Wipe the surface with a clean, dry cloth to remove excess solvent; do not let the solvent become dry on the surface.

2) Continue to clean and dry the surfaces until the a clean, dry cloth remains clean.

3) Do not touch the cleaned area with your fingers or allow the surface to become contaminated.

(d) Apply the finish coating with a brush, G00268.

SUBTASK 57-44-03-390-004

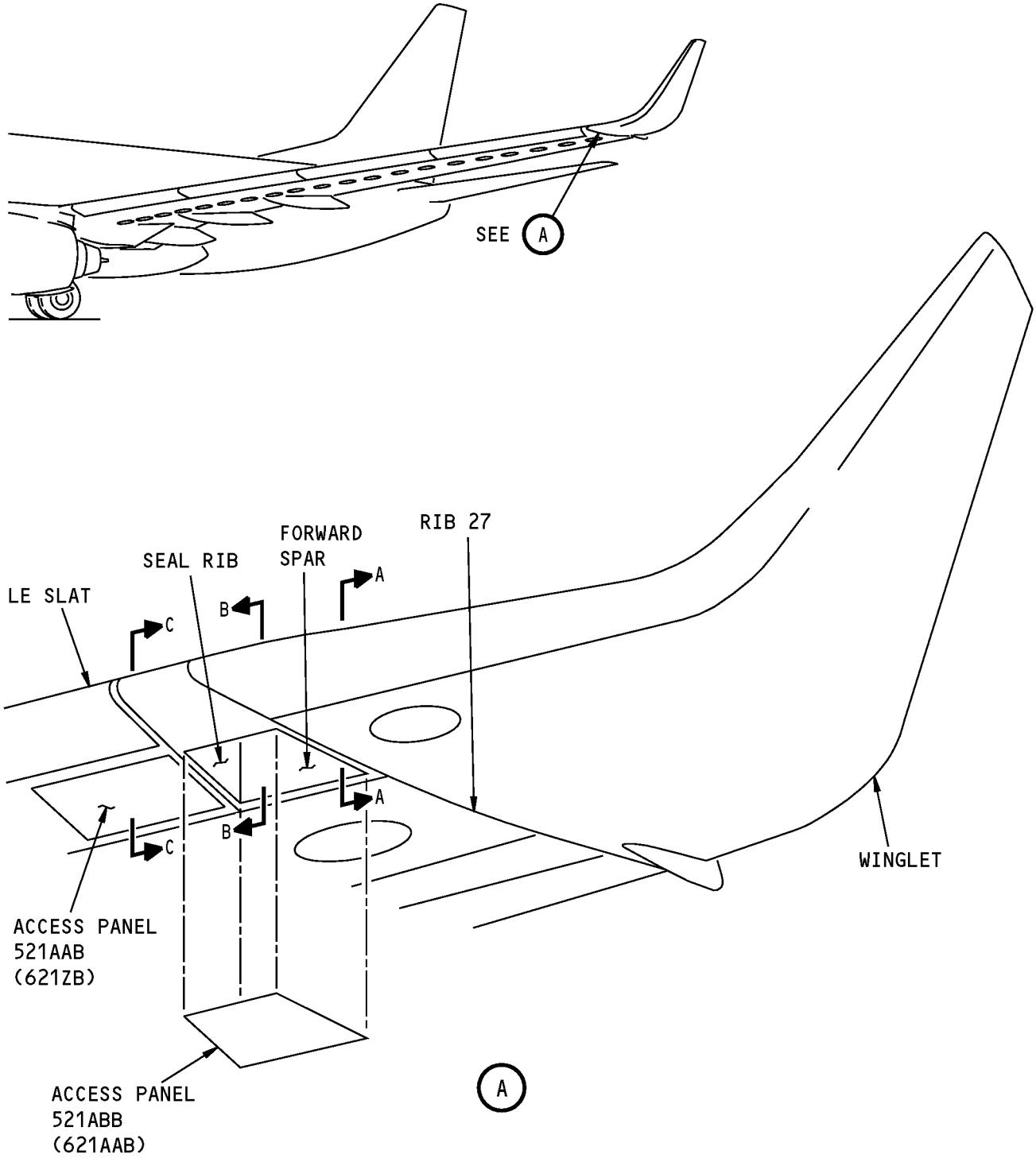
(2) If there is corrosion inhibiting compound on the surface of the old sealant, apply corrosion inhibiting compound, G00009 (BMS 3-23) to the area of repair after all sealant and corrosion resistant finish (topcoat) application is completed.

I. Put the Airplane Back to the Usual Condition

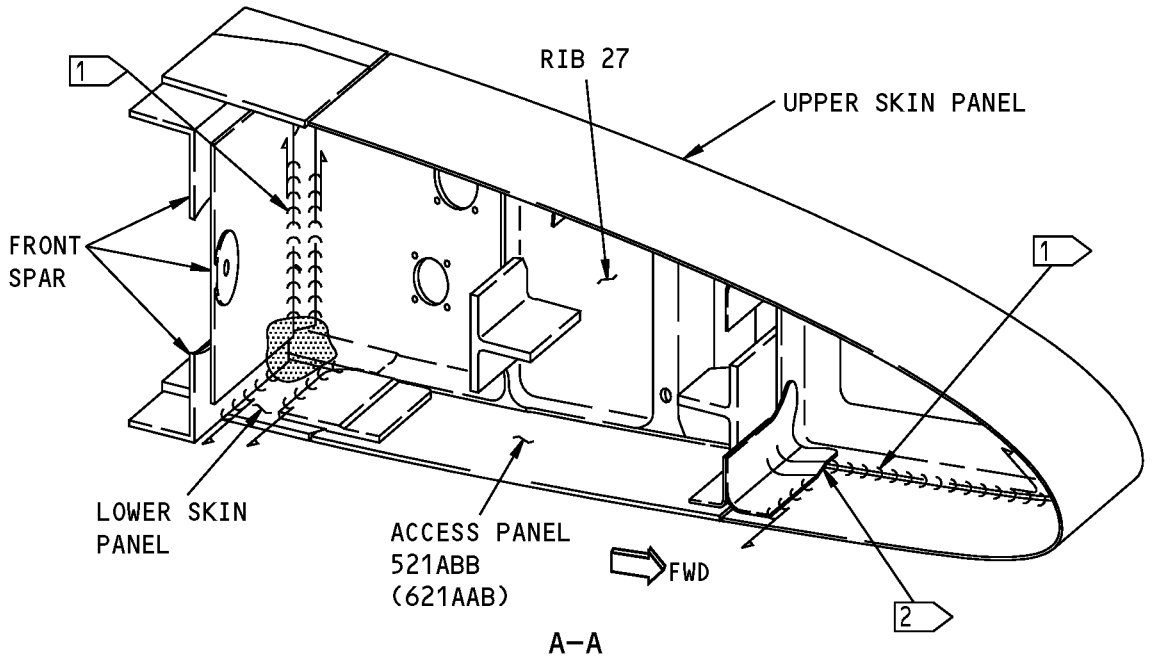
SUBTASK 57-44-03-410-001

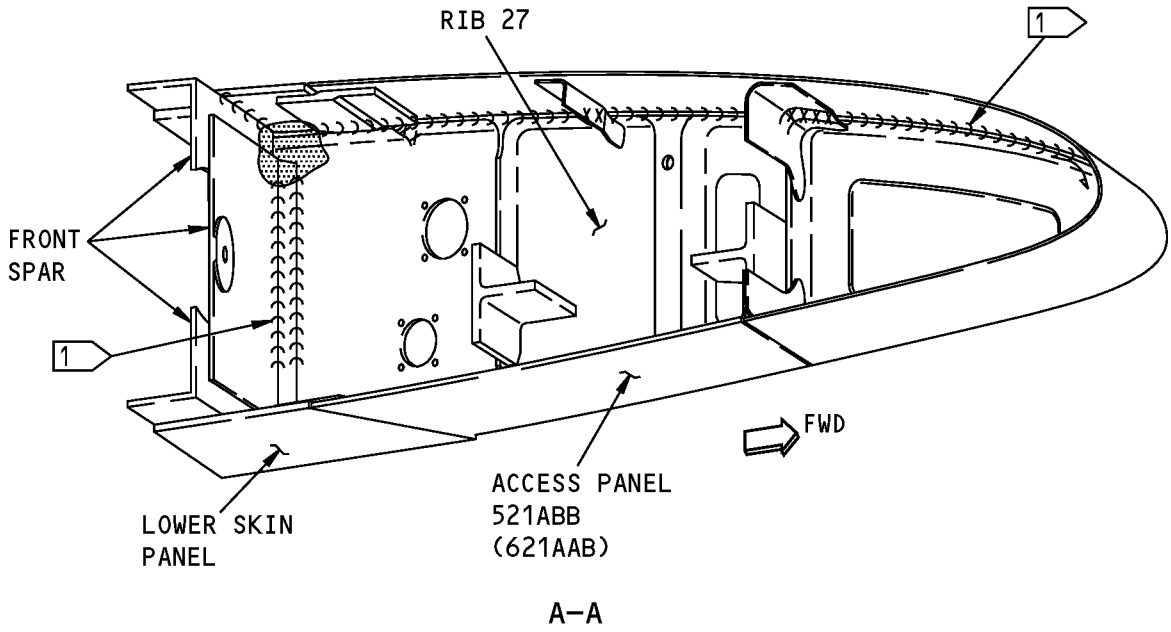
(1) Do this task: Leading Edge Access Panel Installation, TASK 57-41-02-400-801.

——————— END OF TASK ———————



Leading Edge Seal Rib Fillet Seals
Figure 801 (Sheet 1 of 4)/57-44-03-990-801





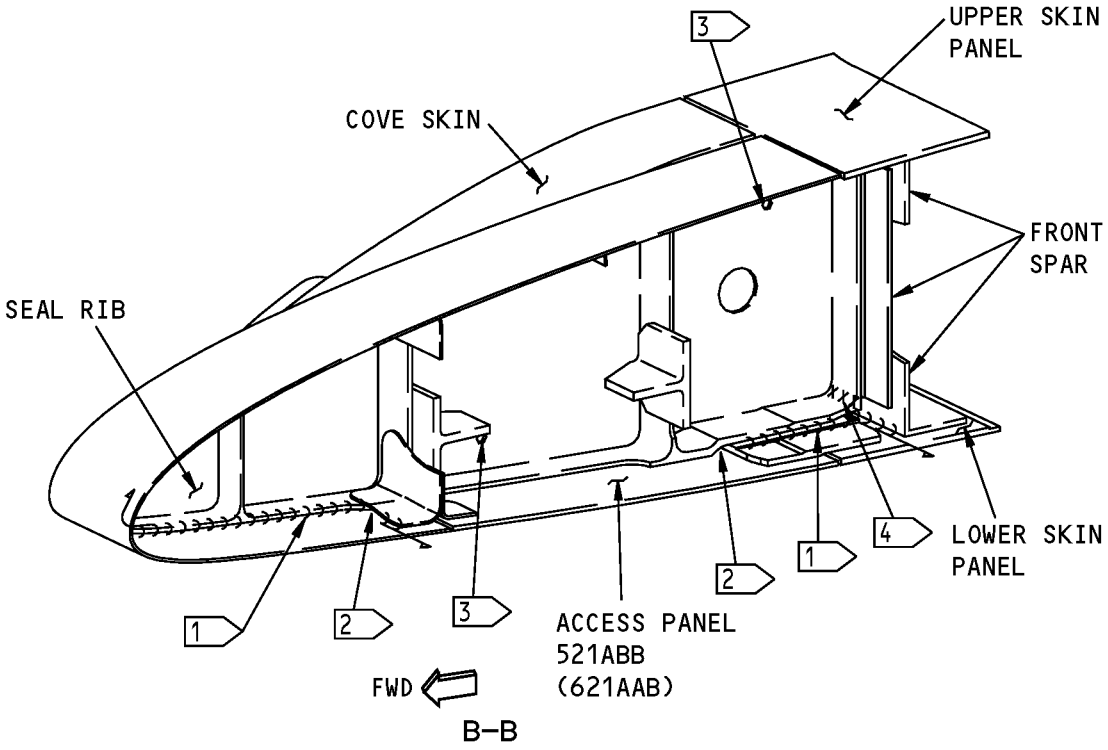
1 FILLET SEAL BMS 5-142

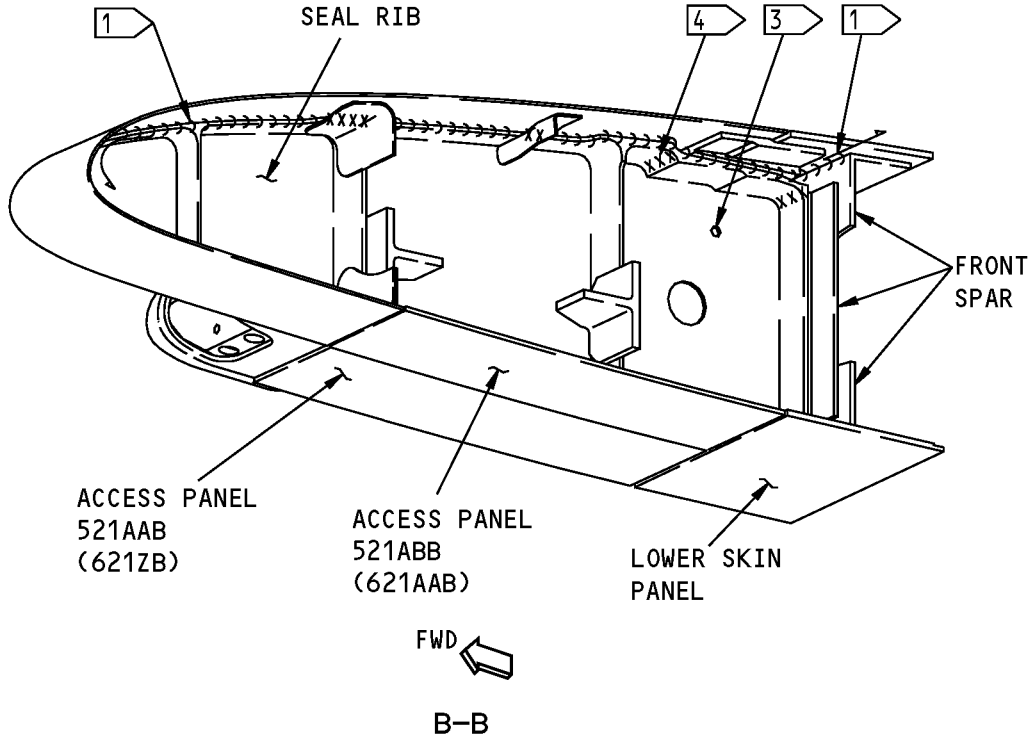
2 DO NOT FILL WITH SEALANT, KEEP OPEN, DRAINAGE PATH

3 TOOL HOLE SEAL BMS 5-142

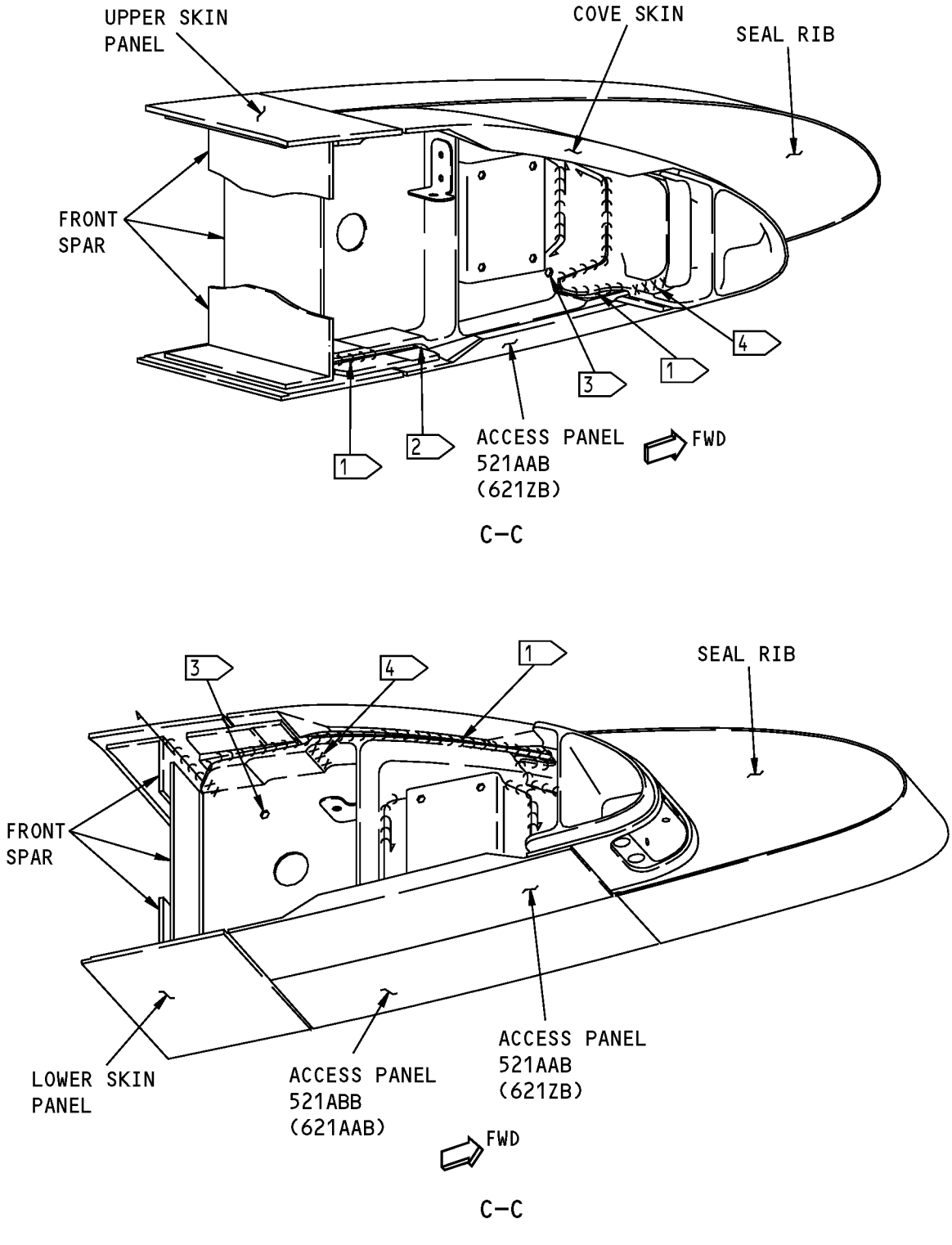
4 INJECTION SEAL BMS 5-142

Leading Edge Seal Rib Fillet Seals
Figure 801 (Sheet 2 of 4)/57-44-03-990-801

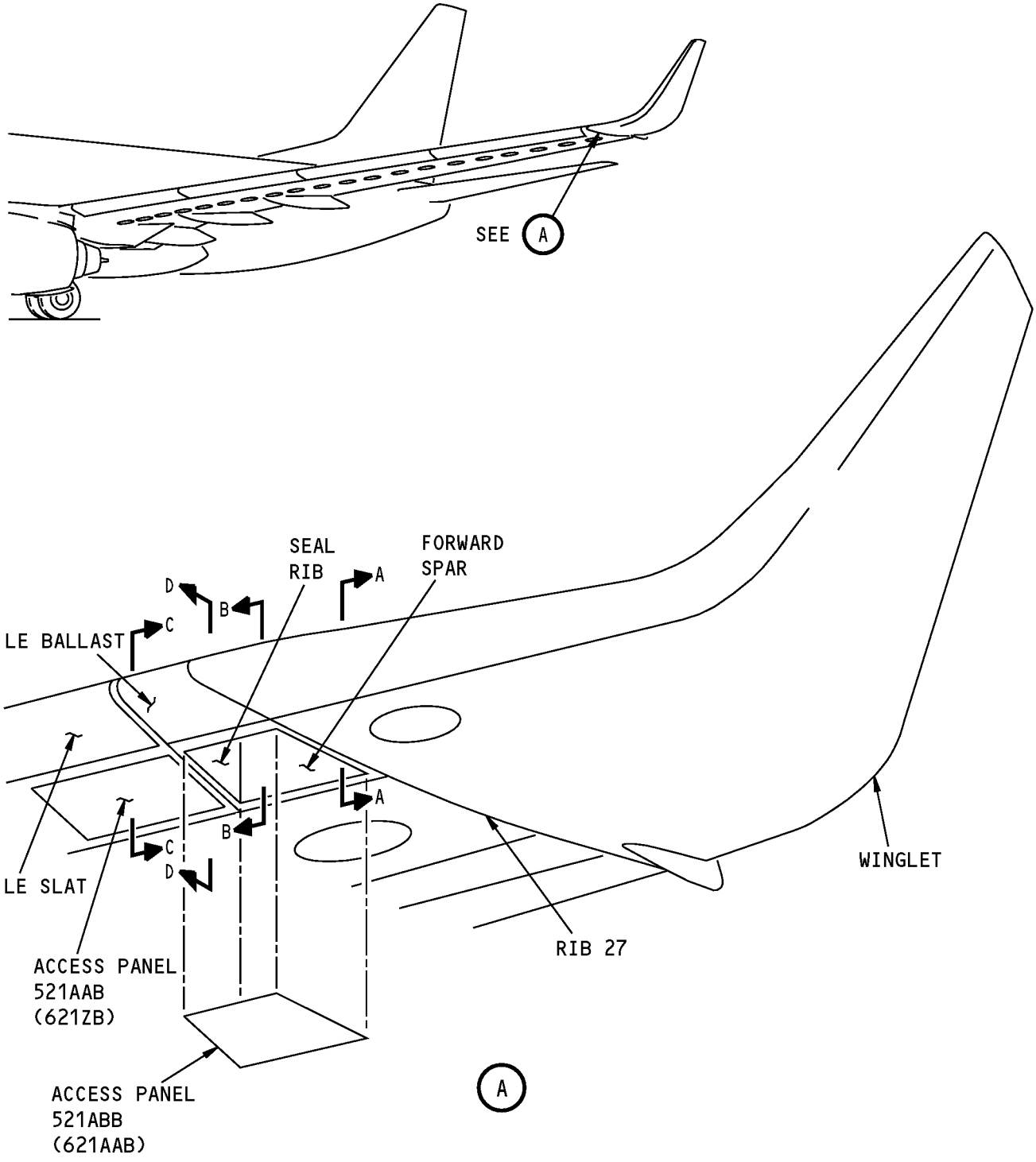




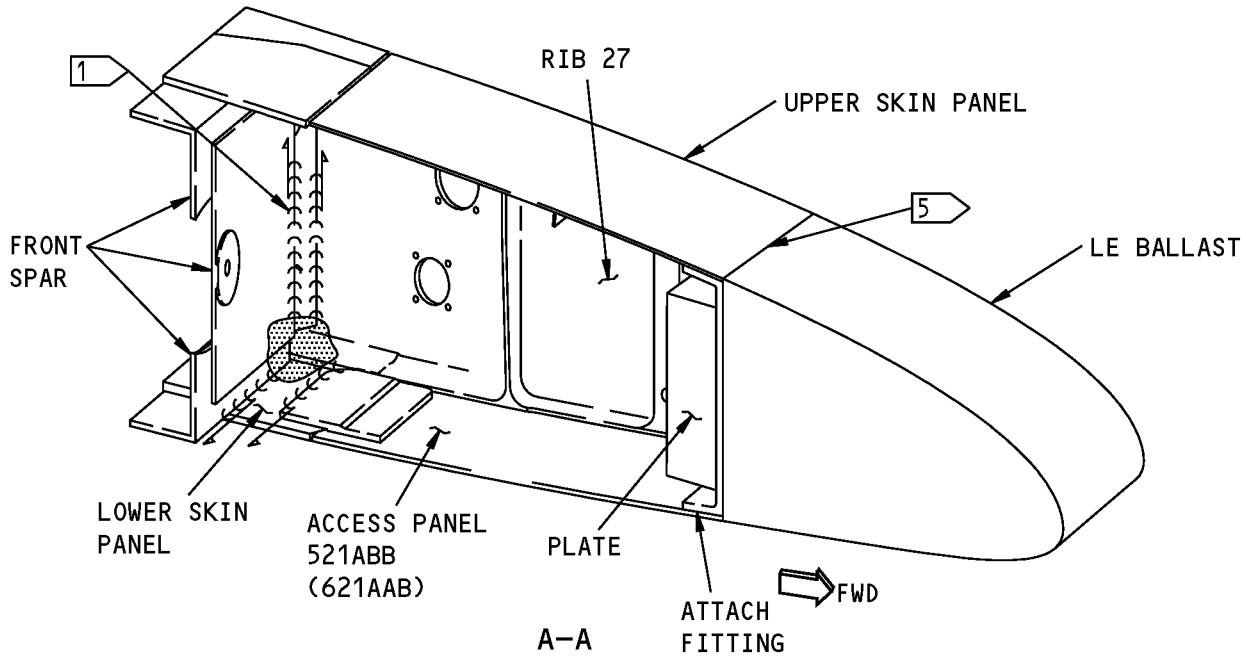
Leading Edge Seal Rib Fillet Seals
Figure 801 (Sheet 3 of 4)/57-44-03-990-801

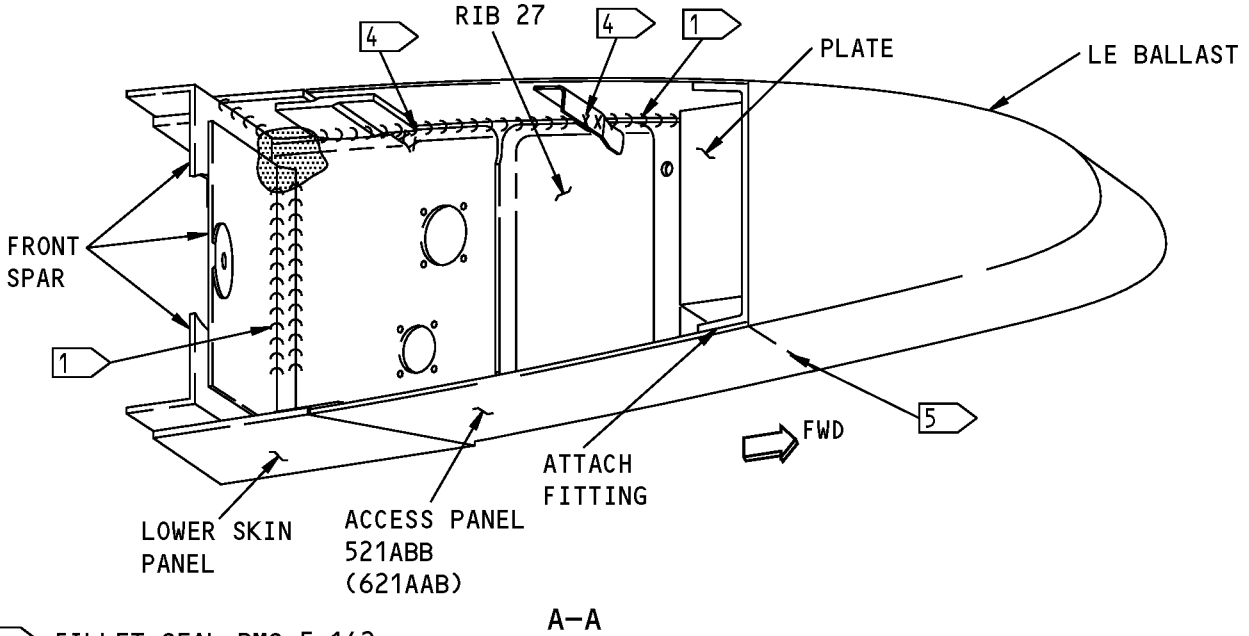


Leading Edge Seal Rib Fillet Seals
Figure 801 (Sheet 4 of 4)/57-44-03-990-801



Leadng Edge Seal Rib Fillet Seals
Figure 802 (Sheet 1 of 5)/57-44-03-990-803





1 FILLET SEAL BMS 5-142

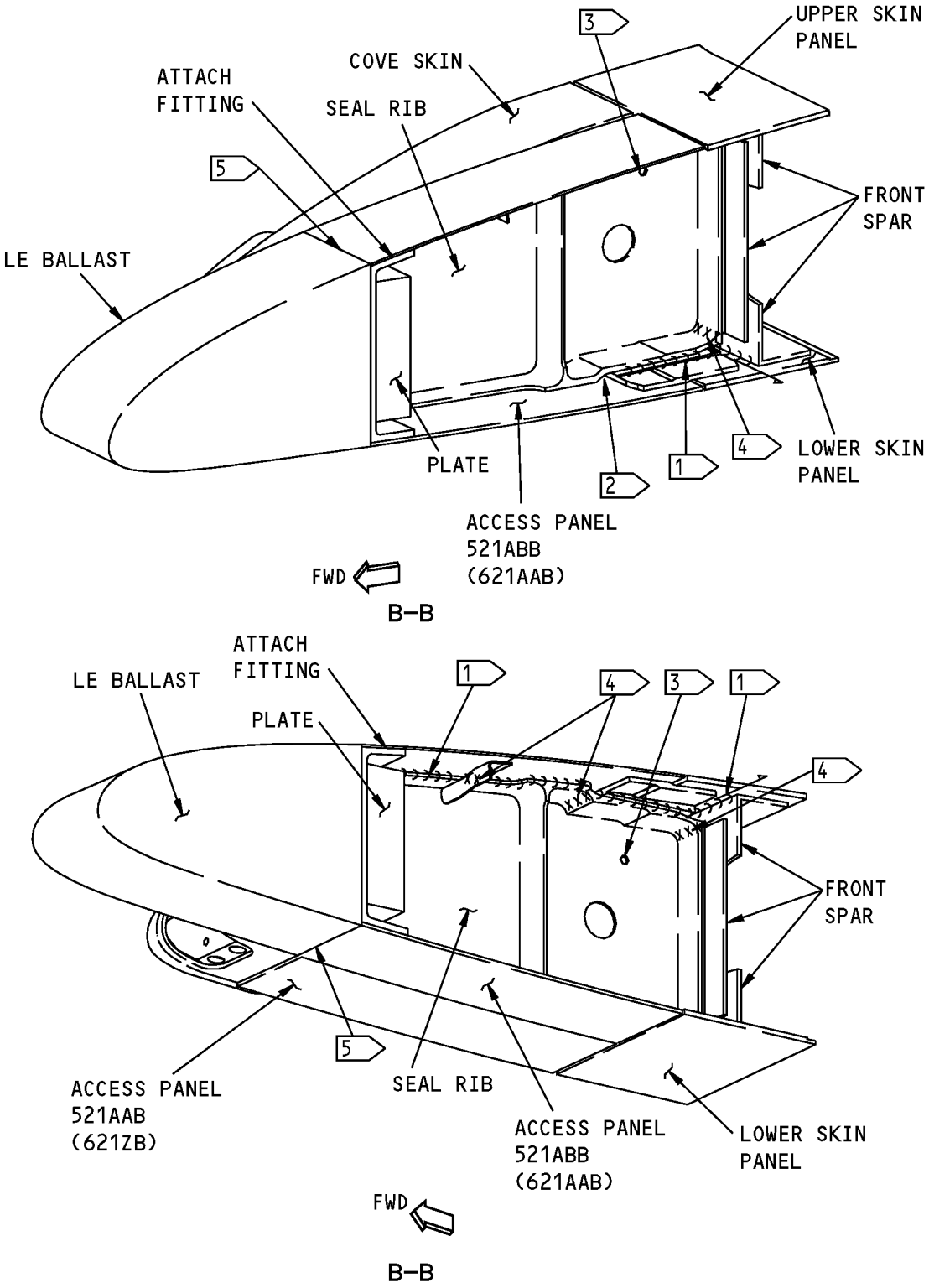
2 DO NOT FILL WITH SEALANT, KEEP OPEN, DRAINAGE PATH

3 TOOL HOLE SEAL BMS 5-142

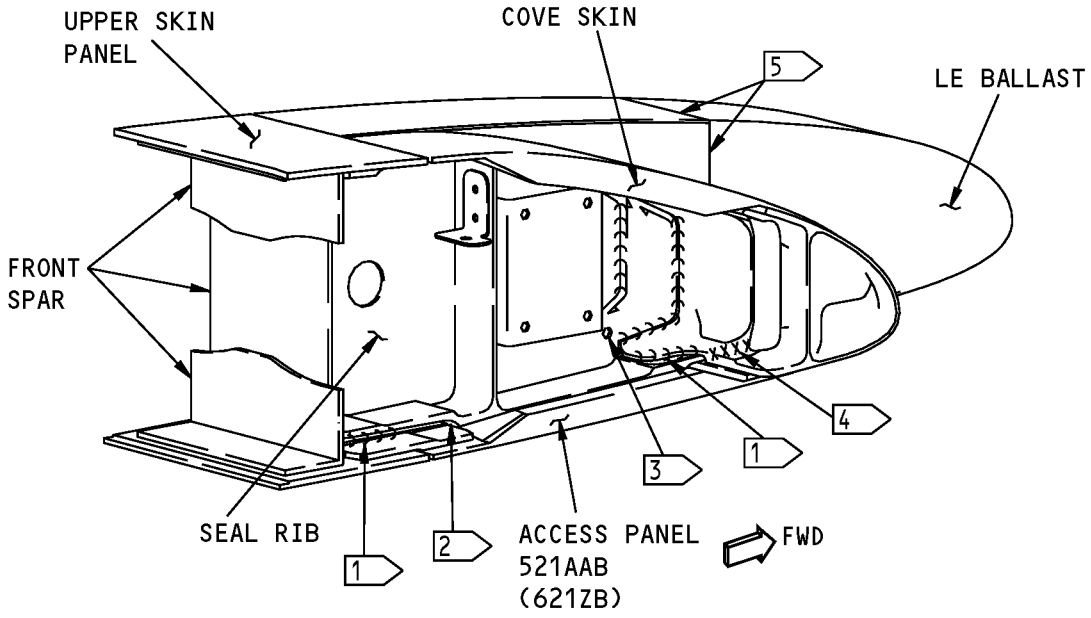
4 INJECTION SEAL BMS 5-142

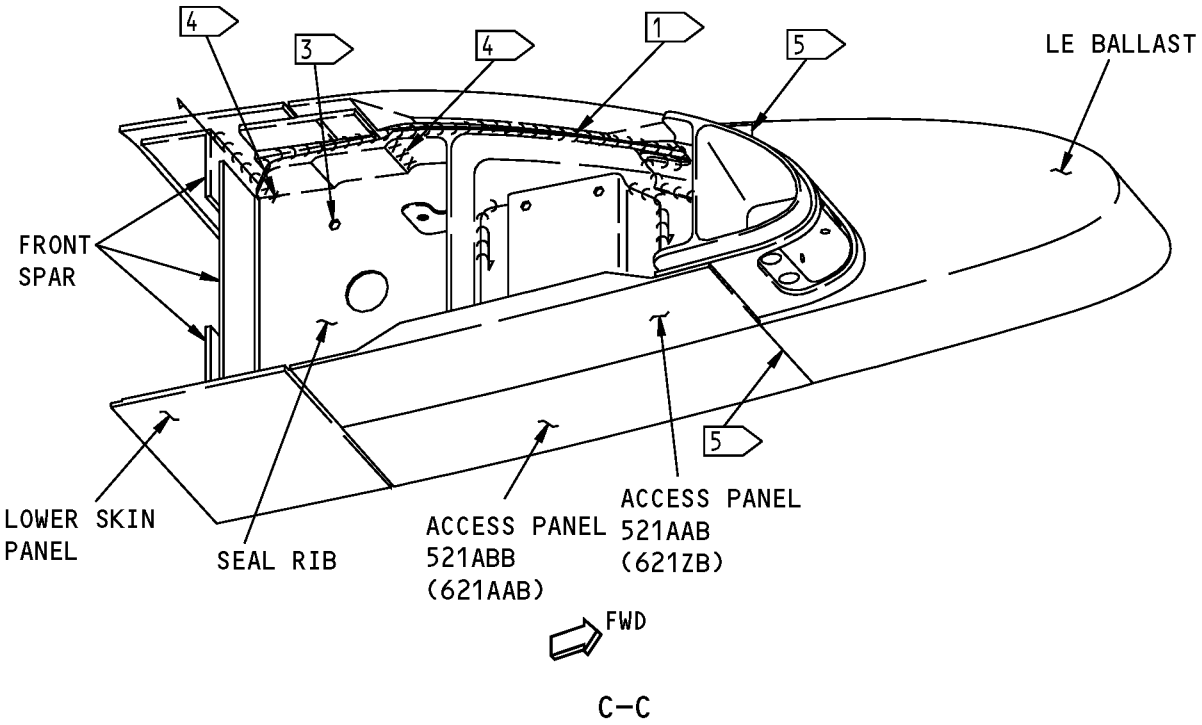
5 PANEL GAPS SEAL BMS 5-95

Leadng Edge Seal Rib Fillet Seals
Figure 802 (Sheet 2 of 5)/57-44-03-990-803

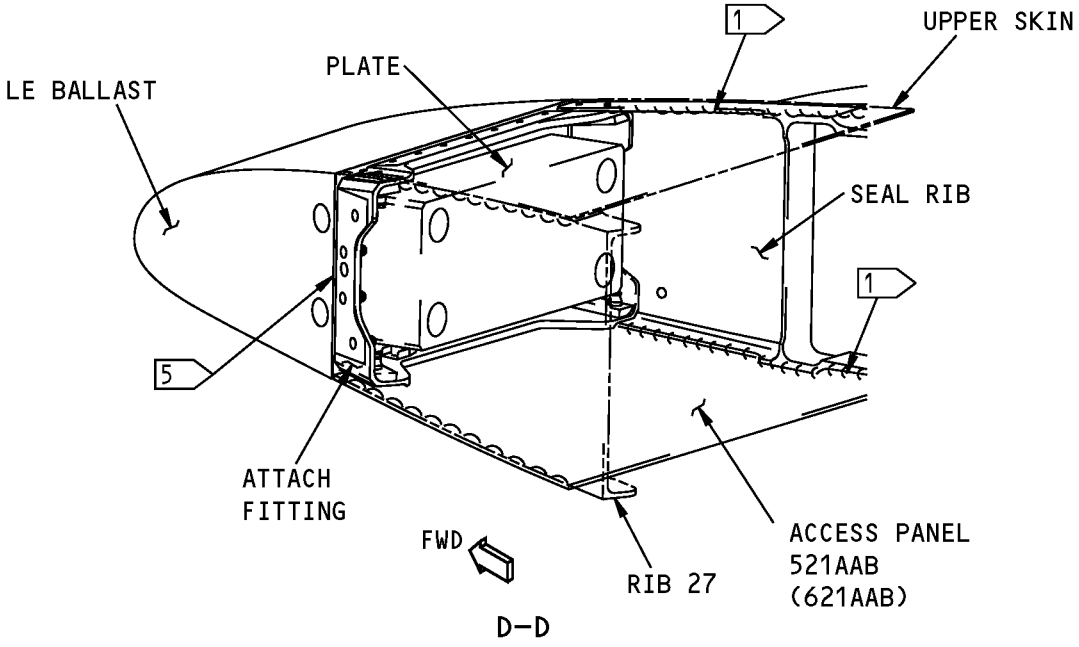


Leadng Edge Seal Rib Fillet Seals
Figure 802 (Sheet 3 of 5)/57-44-03-990-803





Leadng Edge Seal Rib Fillet Seals
Figure 802 (Sheet 4 of 5)/57-44-03-990-803



Leadng Edge Seal Rib Fillet Seals
Figure 802 (Sheet 5 of 5)/57-44-03-990-803

TRAILING EDGE FLAPS - CORROSION PREVENTION

1. General

A. The flap tracks, track attachment fittings on rear spar, and actuator rods are susceptible to corrosion since they are in exposed positions. Damaged finishes of these fittings, flap skin panels, and ribs are caused by exposure to the weather and runway debris. Service wear also causes galling of the moveable bearing surfaces.

B. Corrosion can occur at the main flap track attachments at the wing rear spar.

C. Stress corrosion cracks can occur in aft flap track support fittings.

D. Stress corrosion cracks can occur in the inboard and outboard trailing edge flap tracks. Some of these cracks are found in the web at the aft end of the tracks.

E. Corrosion and stress corrosion cracking can occur in the outboard main flap carriage spindle.

F. Corrosion and subsequent failure of the thrust bearing retention bolts has been found on the main flap carriage.

G. Corrosion has been found on the midflap rear spar in the vicinity of the cutout for the foreflap track.

H. Stress corrosion cracking has been found on the outboard flap carriage spindle located aft of the slider bearing.

I. Corrosion can occur in the rear spar backup fitting of the right-hand outboard trailing edge midflap at WBL 399.8. Cracks are likely to begin in the backup fitting and propagate until the fitting fails. Cracks have been found in the rear spar adjacent to the backup fitting.

J. Corrosion and stress corrosion cracks have been found in the rib flanges and support fittings and brackets at WBL 74.50, 82.58, 84.96, 117.10 and 159.50 in the inboard midflaps.

K. Corrosion has been found on the front spar lower chord of the inboard trailing edge midflap. Corrosion extended from WBL 71.24 to WBL 80.0 on the forward horizontal and vertical flange.

L. Stress corrosion cracks have been found in the gimbal supports and indexing plate of the inboard trailing edge midflap.

M. Heavy corrosion has been found on the inner diameter of the foreflap guide bushings.

N. Heavy corrosion has been found in the outboard trailing edge flap carriage retainer bolt. Stress corrosion crack has also been found on the retainer bolts.

O. Corrosion can occur on the flap drive ballscrew. Although The ballscrew has a thin dense chrome plating, corrosion will start if this plating is not continuous, because the base metal has no resistance to corrosion.

P. Delamination and corrosion of the skin and honeycomb have been found on the inboard and outboard trailing edge flaps. Cracks in the edge potting material permit moisture to go into the aft flaps.

Q. Corrosion has been found on the trailing edge flap track roller contact surfaces. Many airplanes operate in areas with harsh winter environments where runway deicing compounds are frequently used. When exposed to moisture in the form of slush, rain, deicing fluids, or airplane washing, the grease is washed from the track, and it leaves the unpainted wear surfaces unprotected. The best way to protect the flap track wear surfaces from corrosion is to increase the frequency of cleaning and application of BMS 3-24 grease.

TASK 57-50-00-910-801

2. Trailing Edge Flaps - Corrosion Prevention

A. General

(1) Make the regular inspection to prevent or find the start of corrosion. Missing fasteners, white powdery, or other corrosion deposits are signs of corrosion. Initiate the corrosion prevention practices to prevent the accumulation of moisture or corrosive products in the structure of the door openings and surrounding structure to minimize the occurrence of corrosion.

(2) Where corrosion exists (noticeable bulges of the skin or white deposits of corrosion products at fastener heads or joint edges), refer to Structural Repair Manual for details of corrosion removal.

(3) For minor corrosion, to minimize the downtime of the airplane, the corrosion products should be cleaned off, followed by the application of a corrosion inhibiting compound into the affected area to decrease the corrosion process. Refer to PAGEBLOCK 51-21-91/701 for details on applying corrosion inhibiting compound. The finish system should be repaired at the first opportunity consistent with the maintenance schedule.

B. References

Reference	Title
51-21-91 P/B 701	CORROSION INHIBITING COMPOUND - CLEANING/PAINTING

C. Consumable Materials

Reference	Description	Specification
D00015	Grease - Aircraft Bearing (Use BMS 3-24 until existing stocks are depleted, BMS 3-33 supersedes BMS 3-24)	BMS3-24 (Superseded by BMS 3-33)
G00009	Compound - Organic Corrosion Inhibiting	BMS3-23

D. Location Zones

Zone	Area
571	Left Wing - Fixed Trailing Edge
671	Right Wing - Fixed Trailing Edge

E. Procedure

SUBTASK 57-50-00-370-001

CAUTION: DO NOT APPLY CORROSION-INHIBITING COMPOUND ON GREASE JOINTS, OR SEALED BEARINGS. THESE COMPOUNDS REMOVE GREASE AND OTHER LUBRICANTS. THEY ARE PENETRATING COMPOUNDS. THEY WILL MOVE AROUND THE SEALS AND INTO THE BEARINGS. THIS WILL CAUSE DAMAGE TO THE BEARINGS, AND JOINTS.

(1) Apply corrosion inhibiting compound, G00009 annually to the areas in flap tracks which are susceptible to corrosion.

(a) Apply corrosion inhibiting compound, G00009 over the full interior surface of the flap tracks at every D check.

SUBTASK 57-50-00-370-002

(2) Apply corrosion inhibitor to broken finishes on flap skin panels and movable flap track fairings as necessary.

(a) Treat the local areas where gouges or scratches have occurred at first opportunity consistent with the maintenance schedule.

SUBTASK 57-50-00-200-001

(3) Inspect the main flap carriage thrust bearing retention bolts periodically for evidence of corrosion.

(a) If there is corrosion, remove the bolts for further examination.

(b) Reinstall bolts with wet primer.

SUBTASK 57-50-00-200-002

(4) Examine the interior of the midflap structure near the foreflap track for corrosion.

(a) Spray the area with water displacing corrosion inhibiting compound.

(b) Add a drain hole in the skin adjacent to the rear spar, if necessary.

SUBTASK 57-50-00-370-003

(5) After application of corrosion inhibitor, regrease all grease fittings in the treated areas.

SUBTASK 57-50-00-370-004

(6) Apply corrosion inhibitor to retard the corrosion process after cleaning off minor corrosion at the main flap track support fittings.

SUBTASK 57-50-00-370-005

(7) Clean off minor corrosion on the aft flap track support fitting. Refinish the areas and apply corrosion inhibitor.

SUBTASK 57-50-00-370-006

(8) Do these steps to prevent corrosion pitting and stop small pits that may not be seen visually on the trailing edge flap track roller contact surfaces.

NOTE: Corrosion pitting occurs frequently especially during winter operations on runways where anti-ice compounds are used.

(a) Clean debris (i.e. sand, corrosion products, residual grease, etc.) from track surfaces.

NOTE: The purpose is to remove salt or sand contaminants from surface and to expose corrosion pits.

(b) Allow surfaces to dry.

(c) Examine the track flanges for visible cracks.

(d) Apply corrosion inhibiting compound, G00009 to entire flange surface.

(e) Allow corrosion inhibiting compound, G00009 to set for a minimum of 30 minutes to ensure penetration into pits.

1) Wipe excess compound off the track.

NOTE: It is important to remove all surface compound residue so that subsequently applied grease does not readily run/wash off.

(f) Apply grease, D00015 to all wear surfaces of the track.

1) Periodically check surfaces of flanges and repeat procedure to preclude further pitting attack to track.

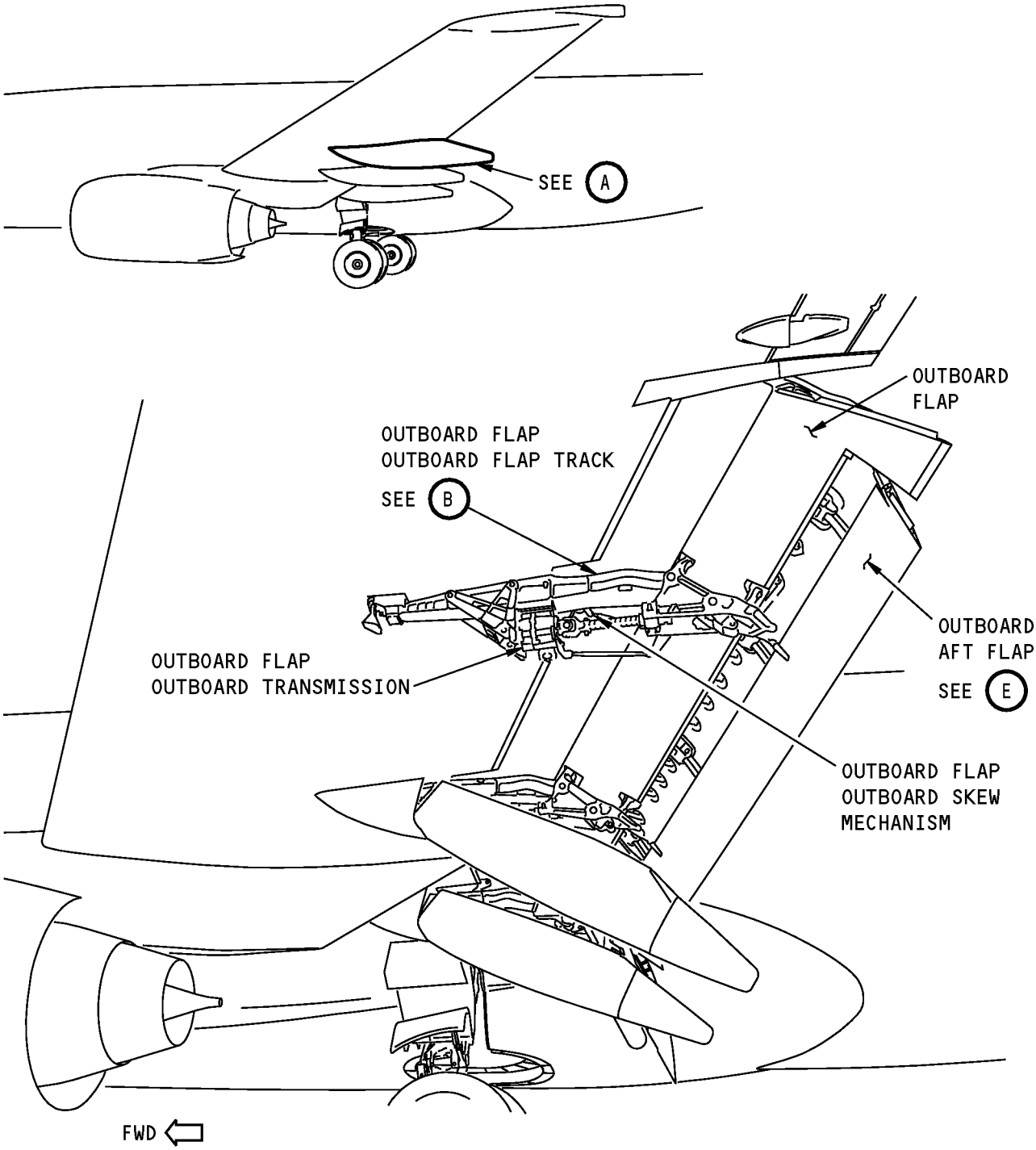
NOTE: Hand application of grease on the outboard flap tracks can generally be accomplished without removing the flap track fairings.

(g) Refer to Structural Repair Manual to remove localized corrosion.

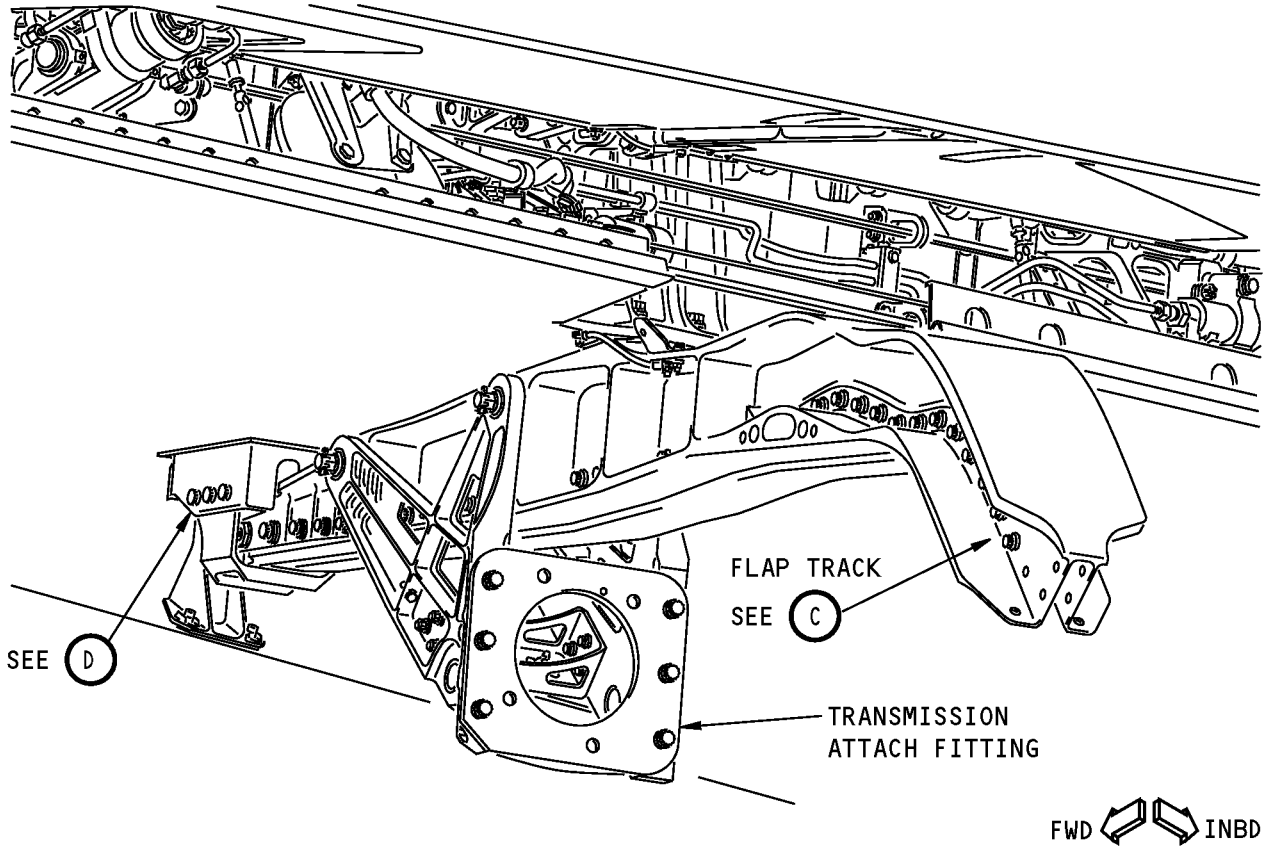
SUBTASK 57-50-00-370-007

(9) After cleaning areas with steam or high pressure water and detergent, apply the corrosion inhibitor and/or grease again.

———————— END OF TASK ————————

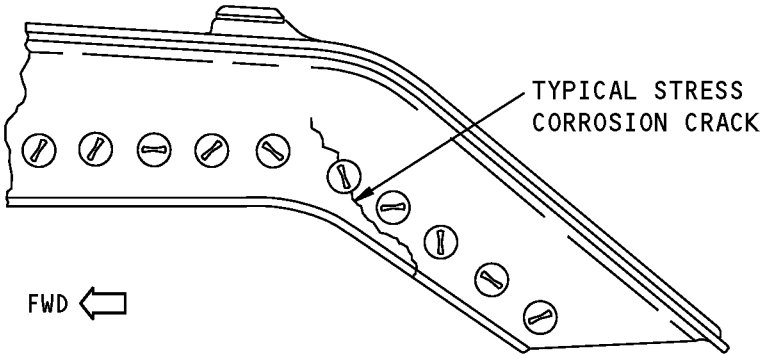


Trailing Edge Flaps - Corrosion Prevention
Figure 201 (Sheet 1 of 3)/57-50-00-990-801



OUTBOARD FLAP OUTBOARD FLAP TRACK

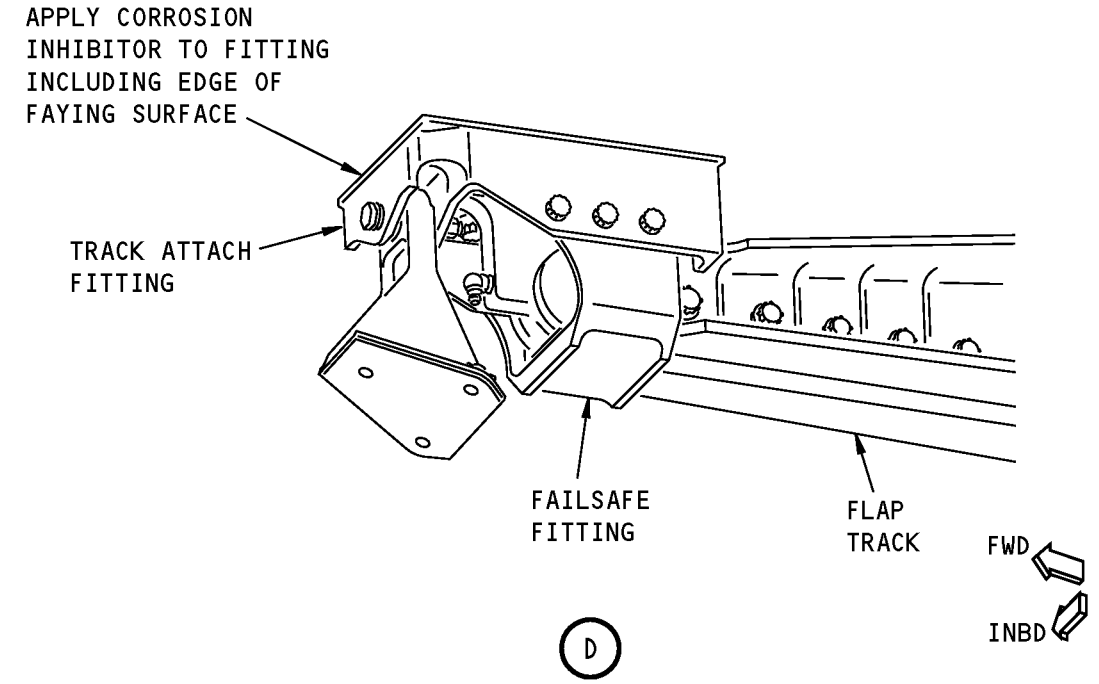
B

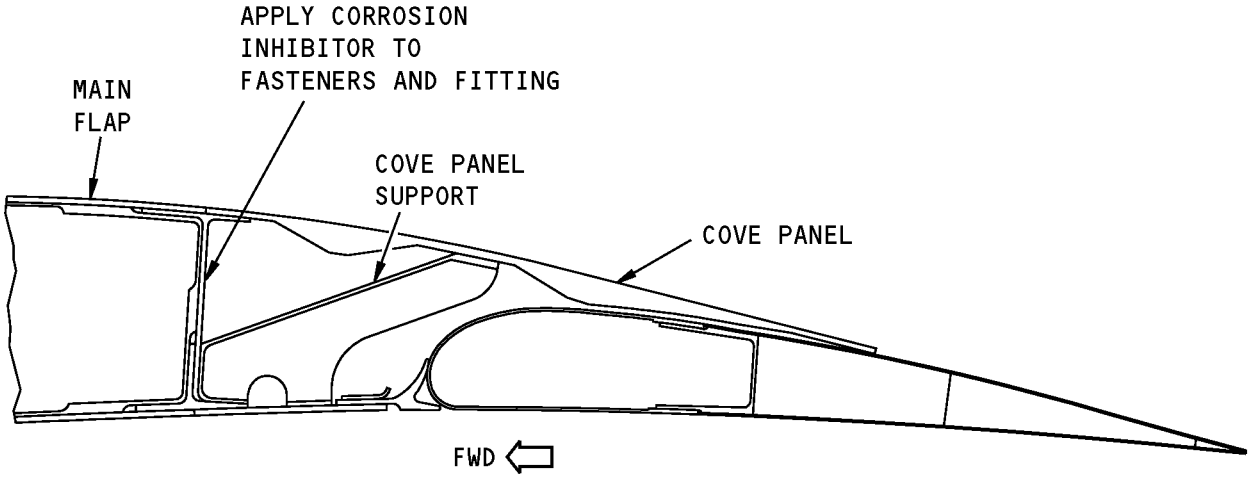


FLAP TRACK

C

Trailing Edge Flaps - Corrosion Prevention
Figure 201 (Sheet 2 of 3)/57-50-00-990-801





Trailing Edge Flaps - Corrosion Prevention
Figure 201 (Sheet 3 of 3)/57-50-00-990-801

FIXED TRAILING EDGE UPPER PANEL - REMOVAL/INSTALLATION

1. General

A. This procedure contains these task:

(1) Removing inboard fixed trailing edge upper panels.

(2) Installing inboard fixed trailing edge upper panels.

TASK 57-50-01-000-801

2. Inboard Fixed Trailing Edge Upper Panel - Removal

Figure 401

A. References

Reference	Title
27-51-00-040-801	Trailing Edge Flap System Deactivation (P/B 201)
27-61-00-800-802	Remove Pressure from the Spoiler Hydraulic Systems A and B (P/B 201)
32-00-01-480-801	Landing Gear Downlock Pins Installation (P/B 201)

B. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-1743	Set - Ground Lock, Outboard Spoiler Actuators (Part #: C27001-35, Supplier: 81205, A/P Effectivity: 737-600, -700, -700C, -700ER, -700QC, -800, -900, -900ER, -BBJ)

C. Location Zones

Zone	Area
561	Left Wing - Rear Spar to Trailing Edge, Outboard Of Inboard Flap, Inboard of Fixed Trailing Edge
661	Right Wing - Rear Spar to Trailing Edge, Outboard of Inboard Flap, Inboard of Fixed Trailing Edge

D. Prepare for the Removal

SUBTASK 57-50-01-480-002

WARNING: MAKE SURE THAT THE DOWNLOCK PINS ARE INSTALLED IN ALL OF THE LANDING GEAR. WITHOUT THE DOWNLOCK PINS, THE LANDING GEAR CAN RETRACT AND CAUSE INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT.

(1) If the downlock pins are not installed in the nose and main landing gear, do this task: Landing Gear Downlock Pins Installation, TASK 32-00-01-480-801.

SUBTASK 57-50-01-860-003

(2) Extend the inboard main flaps.

SUBTASK 57-50-01-860-004

(3) Extend spoilers to get access to the upper panels.

SUBTASK 57-50-01-040-003

(4) Do this task: Trailing Edge Flap System Deactivation, TASK 27-51-00-040-801.

SUBTASK 57-50-01-430-001

(5) Install lock-set, SPL-1743 on the actuator for the applicable ground spoiler.

SUBTASK 57-50-01-864-001

(6) Do this task: Remove Pressure from the Spoiler Hydraulic Systems A and B, TASK 27-61-00-800-802.

E. Removal

SUBTASK 57-50-01-010-003

(1) Remove upper panel [1].

(a) Remove bolts [7], washers [8], washers [9], nuts [10] from the upper links of tie rod [11] and tie rod [12].

1) Disconnect the upper links of tie rod [11] and tie rod [12] from upper panel [1].

(b) Remove the retainers [3] (2 locations) on serrated plate.

(c) Remove the bolts [5], collars [6], shim [4].

(d) Remove all sealant from the upper surface of the panel to expose the fasteners attaching the ribs to the panel.

1) Remove all fasteners that attach the panel to the rib, skin, and wing-to-body fillet fairing adjacent to the body.

(e) Remove upper panel [1].

SUBTASK 57-50-01-010-002

(2) Remove upper panel [2].

(a) Remove bolts [13], washers [14], washers [15], nuts [16].

1) Disconnect the upper link of tie rod [17] from upper panel [2].

(b) Remove bolts [18], washers [19], washers [20], washers [21], nuts [22] from the lugs on both side of upper panel [2].

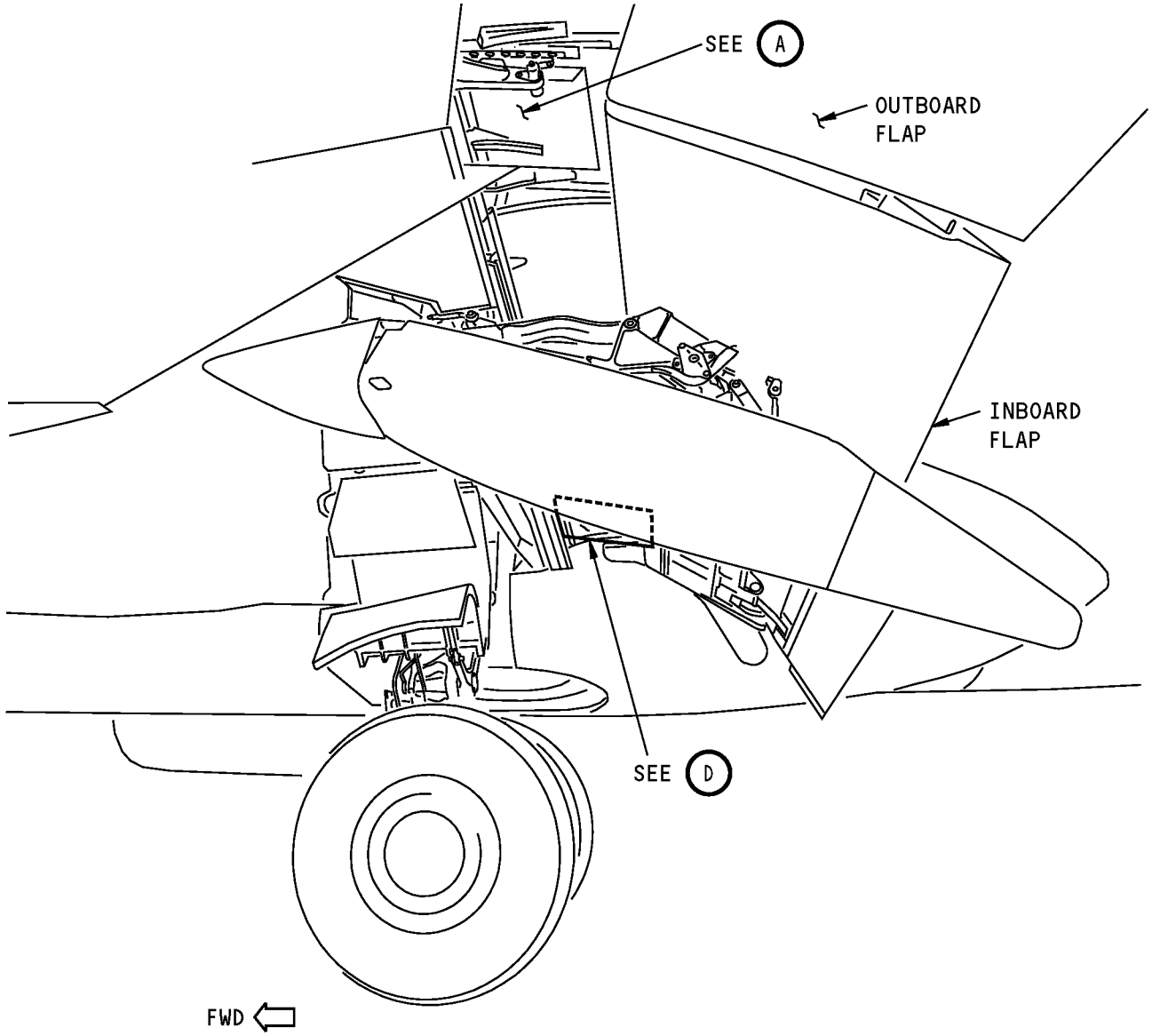
(c) Remove washer [25], nut [24], jumper assembly [23].

(d) Remove all sealant from the upper surface of the panel to expose the fasteners attaching the ribs to the panel.

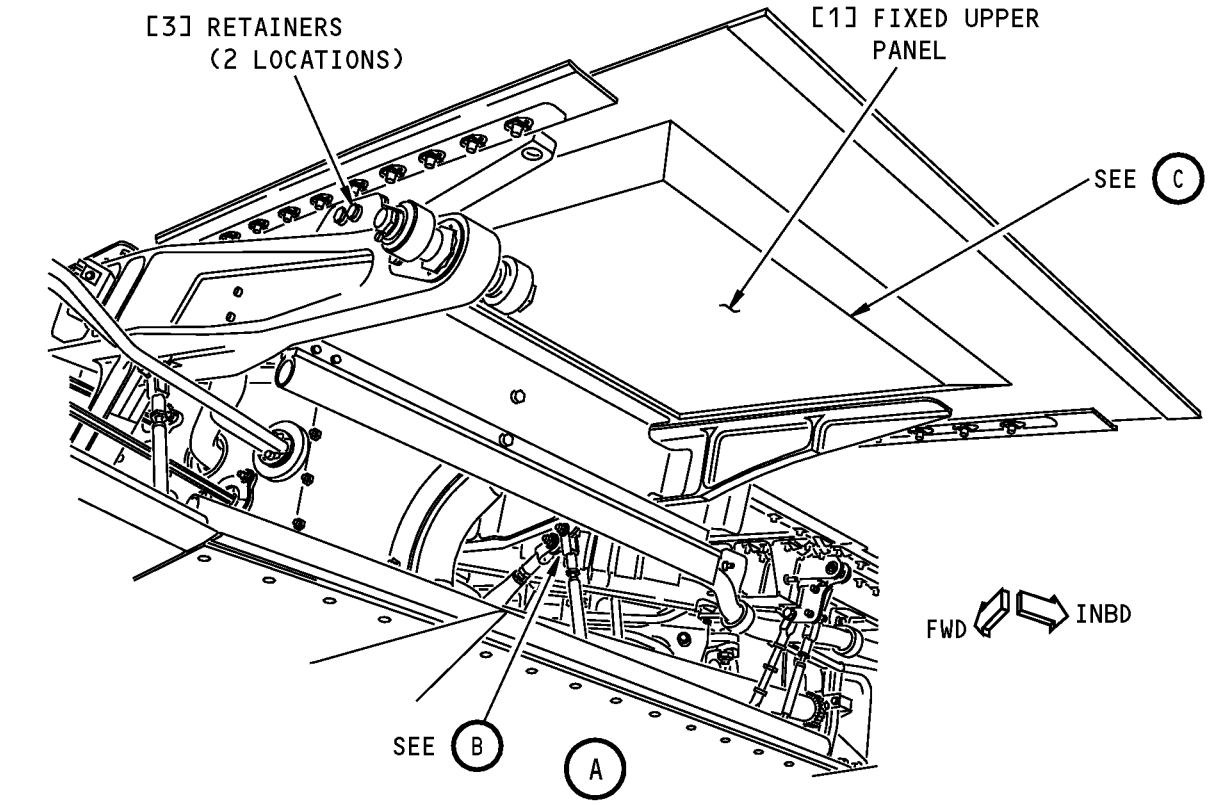
1) Remove all fasteners that attach the panel to the rib, skin, and wing-to-body fillet fairing adjacent to the body.

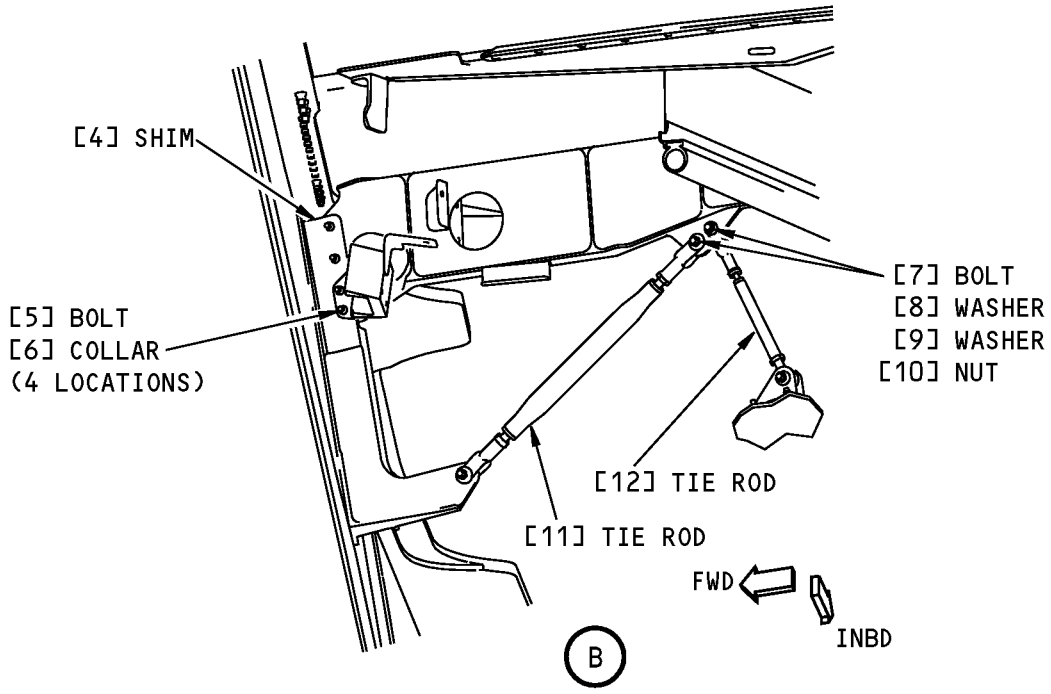
(e) Remove upper panel [2].

———————— END OF TASK ————————

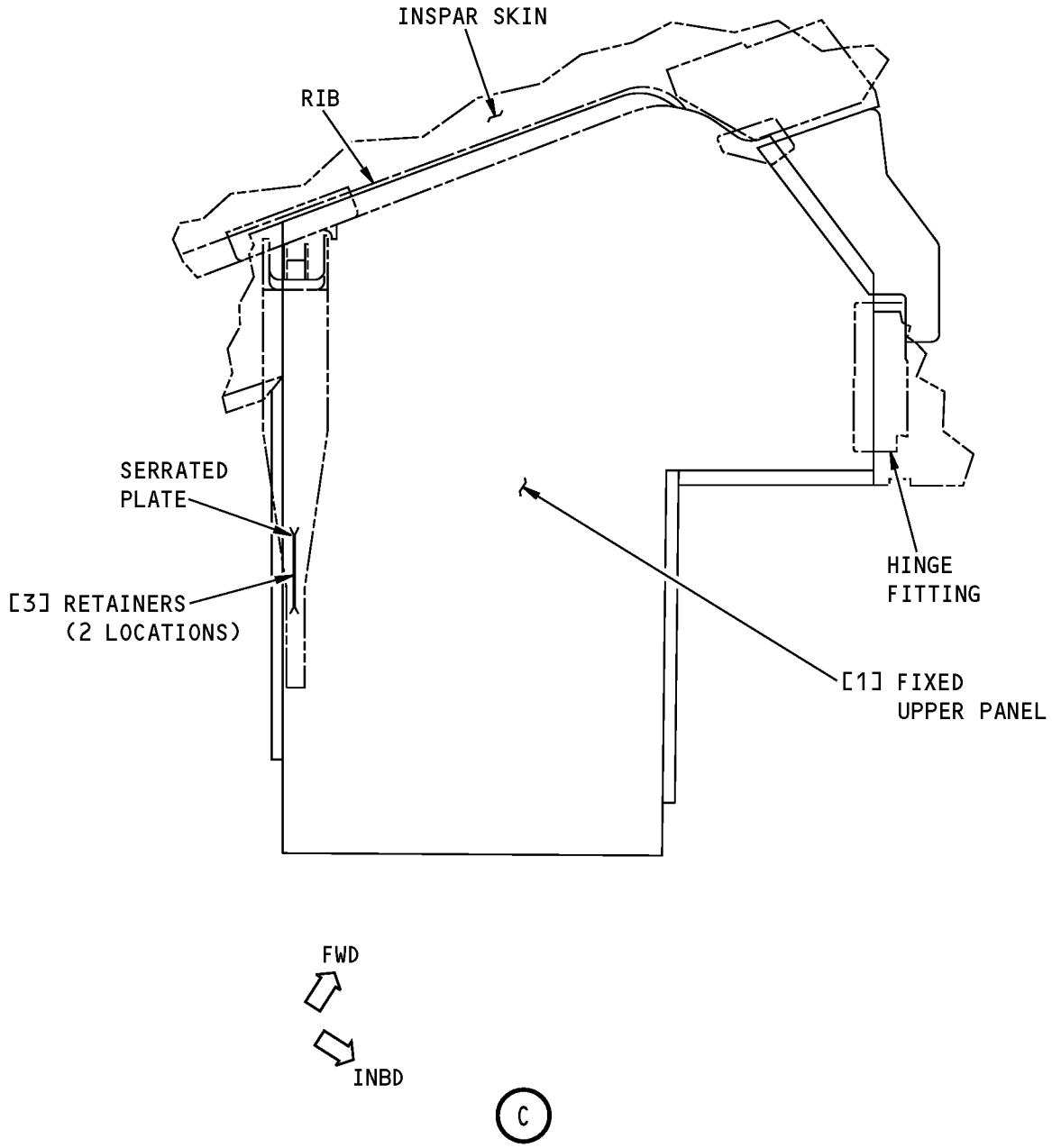


Inboard Fixed Trailing Edge Upper Panel Installation
Figure 401 (Sheet 1 of 5)/57-50-01-990-802

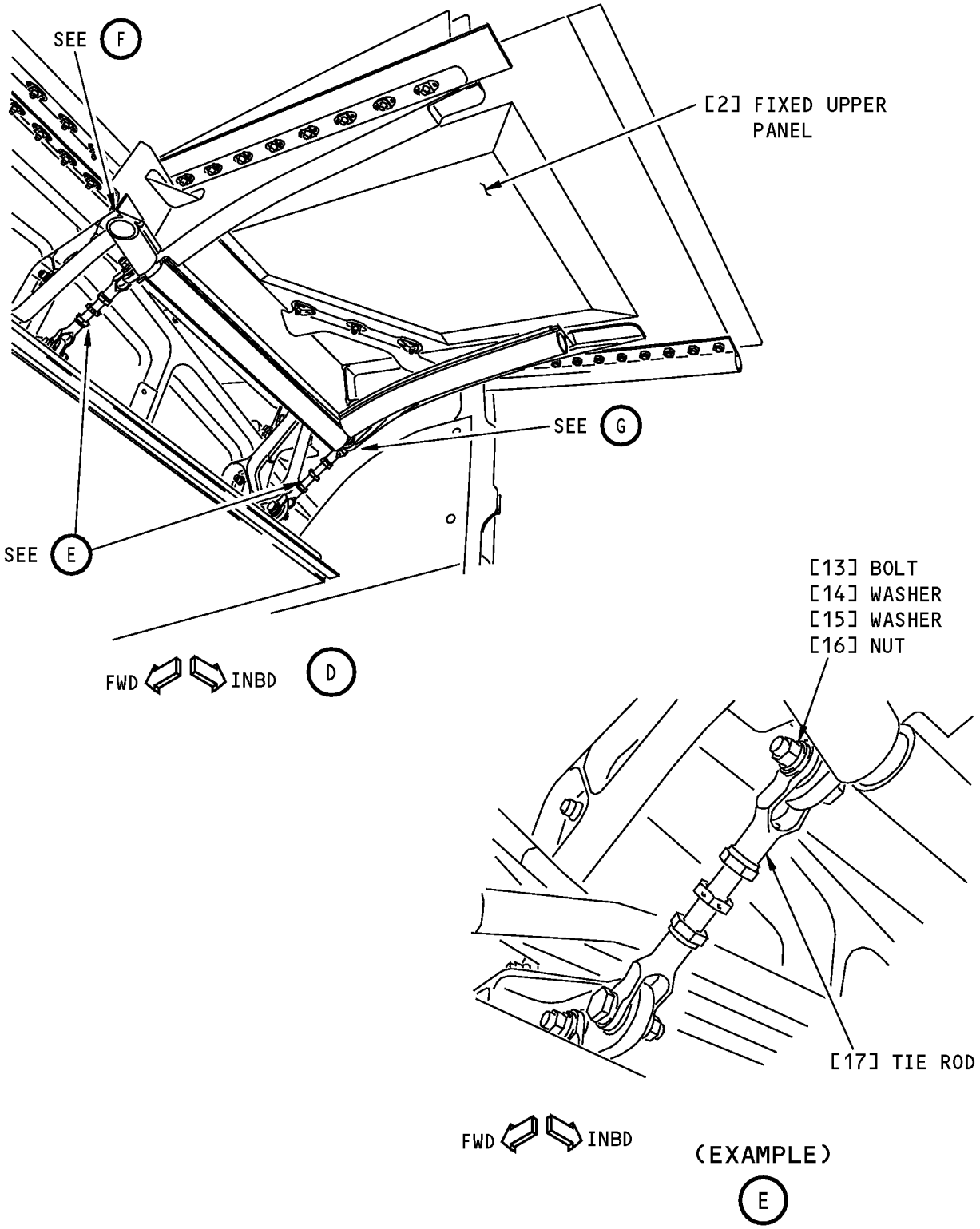




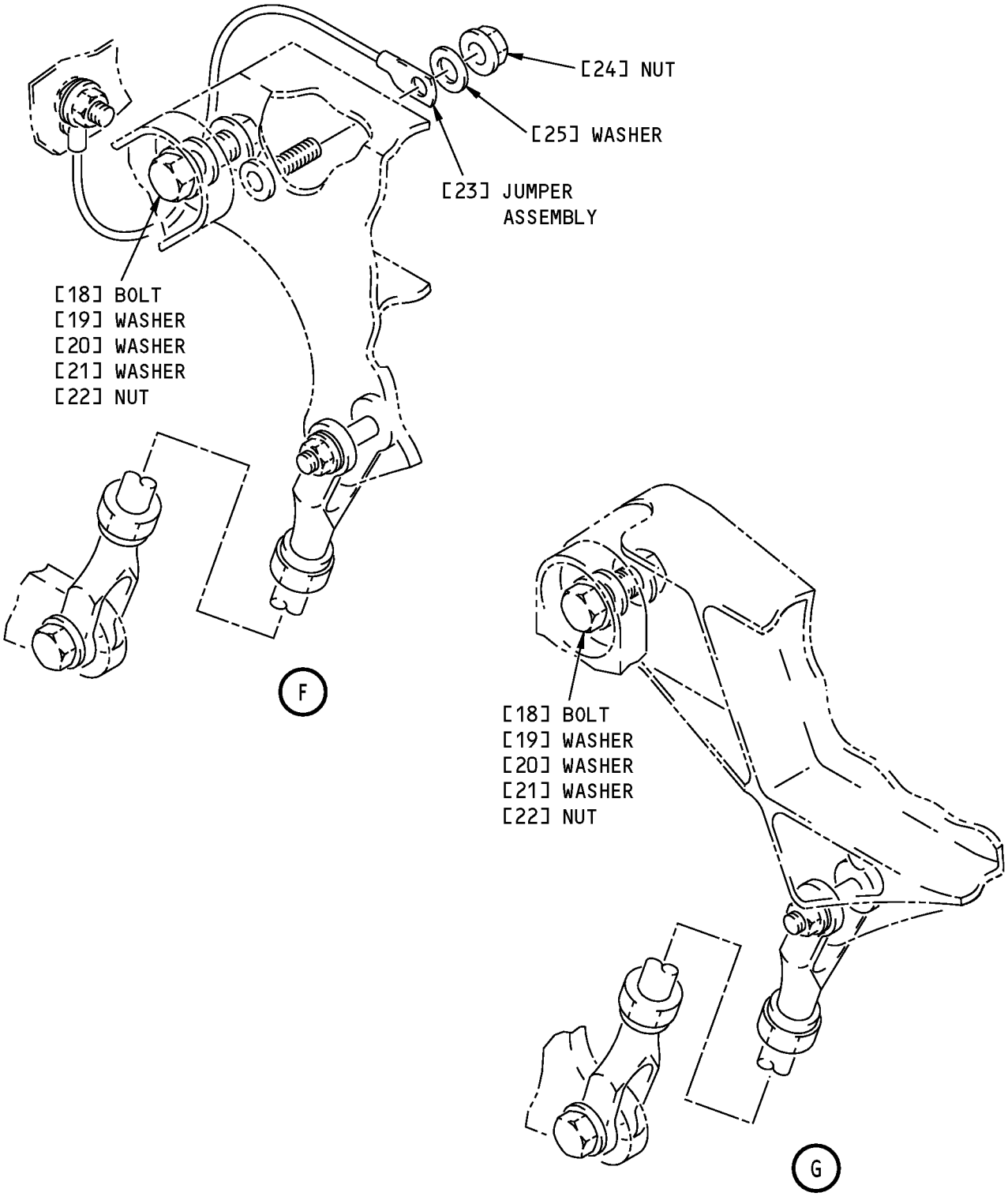
Inboard Fixed Trailing Edge Upper Panel Installation
Figure 401 (Sheet 2 of 5)/57-50-01-990-802



Inboard Fixed Trailing Edge Upper Panel Installation
Figure 401 (Sheet 3 of 5)/57-50-01-990-802



Inboard Fixed Trailing Edge Upper Panel Installation
Figure 401 (Sheet 4 of 5)/57-50-01-990-802



Inboard Fixed Trailing Edge Upper Panel Installation
Figure 401 (Sheet 5 of 5)/57-50-01-990-802

TASK 57-50-01-400-801

3. Inboard Fixed Trailing Edge Upper Panel - Installation

Figure 401

A. References

Reference	Title
27-51-00-440-801	Trailing Edge Flap System Reactivation (P/B 201)
57-50-01-820-801	Inboard Fixed Trailing Edge Upper Panel Adjustment (P/B 501)

B. Consumable Materials

Reference	Description	Specification
A00247	Sealant - Pressure And Environmental - Chromate Type	BMS 5-95
C50056	Compound - Nondrying Resin Mix Corrosion Inhibiting Material	BMS 3-27

C. Location Zones

Zone	Area
561	Left Wing - Rear Spar to Trailing Edge, Outboard Of Inboard Flap, Inboard of Fixed Trailing Edge
661	Right Wing - Rear Spar to Trailing Edge, Outboard of Inboard Flap, Inboard of Fixed Trailing Edge

D. Installation

SUBTASK 57-50-01-860-005

WARNING: DO NOT OPERATE THE SPOILER AND AILERON CONTROLS UNTIL SYSTEM MAINTENANCE IS COMPLETE. INJURY TO PERSONS AND DAMAGE TO EQUIPMENT CAN OCCUR.

(1) Make sure ailerons, flaps, and spoilers will not operate.

SUBTASK 57-50-01-400-001

(2) Install upper panel [1].

(a) Put the upper panel [1] in place.

(b) Connect the upper links of tie rod [11] and tie rod [12] to upper panel [1].

1) Install bolts [7], washers [8], washers [9], nuts [10].

(c) Install the retainers [3] with compound, C50056 (2 locations) on serrated plate.

(d) Install bolts [5], collars [6], shim [4] to attach the upper panel [1] to rear spar.

(e) Install the fasteners to attach the panel to the rib, skin, and wing-to-body fillet fairing adjacent to the body.

1) Apply sealant, A00247 prior to installing the fasteners.

SUBTASK 57-50-01-400-002

(3) Install upper panel [2].

(a) Put the upper panel [2] in place.

(b) Connect the upper links of tie rods [17] to upper panel [2] to the upper panel [2].

1) Install bolts [13], washers [14], washers [15], nuts [16].

(c) Install bolts [18], washers [19], washers [20], washers [21], nuts [22] to the both sides of upper panel [2].

(d) Install washer [25], nut [24], jumper assembly [23].

(e) Install the fasteners to attach the panel to the rib, skin, and wing-to-body fillet fairing adjacent to the body.

1) Apply sealant, A00247 prior to installing the fasteners.

SUBTASK 57-50-01-830-001

(4) Do this task: Inboard Fixed Trailing Edge Upper Panel Adjustment, TASK 57-50-01-820-801.

E. Put the Airplane Back to its Usual Condition

SUBTASK 57-50-01-440-001

WARNING: KEEP PERSONS AND EQUIPMENT AWAY FROM THE FLIGHT CONTROL SURFACES. THE AILERONS, ELEVATORS, RUDDER, FLAPS, SLATS, SPOILERS, STABILIZER AND NOSE GEAR CAN MOVE SUDDENLY WHEN YOU SUPPLY HYDRAULIC POWER. THIS CAN CAUSE INJURY TO PERSONS AND DAMAGE TO EQUIPMENT.

(1) Do this task: Trailing Edge Flap System Reactivation, TASK 27-51-00-440-801.

SUBTASK 57-50-01-860-006

(2) Retract the inboard trailing edge flaps.

SUBTASK 57-50-01-090-001

(3) Remove the spoiler lock-set tools.

SUBTASK 57-50-01-860-007

(4) Retract the inboard spoilers.

END OF TASK

FIXED TRAILING EDGE UPPER PANEL - ADJUSTMENT/TEST

1. General

A. This procedure has one task: the adjustment of the inboard fixed trailing edge upper panels.

TASK 57-50-01-820-801

2. Inboard Fixed Trailing Edge Upper Panel Adjustment

A. References

Reference	Title
27-51-00-040-801	Trailing Edge Flap System Deactivation (P/B 201)
27-51-00-440-801	Trailing Edge Flap System Reactivation (P/B 201)
27-51-00-860-803	Extend the Trailing Edge Flaps (P/B 201)
27-51-00-860-804	Retract the Trailing Edge Flaps (P/B 201)
27-51-18-400-802	Inboard Flap Support Aft Fairing Installation (P/B 401)
32-00-01-480-801	Landing Gear Downlock Pins Installation (P/B 201)

B. Location Zones

Zone	Area
561	Left Wing - Rear Spar to Trailing Edge, Outboard Of Inboard Flap, Inboard of Fixed Trailing Edge
661	Right Wing - Rear Spar to Trailing Edge, Outboard of Inboard Flap, Inboard of Fixed Trailing Edge

C. Prepare for the Adjustment

SUBTASK 57-50-01-480-001

WARNING: MAKE SURE THAT THE DOWNLOCK PINS ARE INSTALLED IN ALL OF THE LANDING GEAR. WITHOUT THE DOWNLOCK PINS, THE LANDING GEAR CAN RETRACT AND CAUSE INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT.

(1) If the downlock pins are not installed in the nose and main landing gear, do this task: Landing Gear Downlock Pins Installation, TASK 32-00-01-480-801.

SUBTASK 57-50-01-040-001

(2) Do this task: Trailing Edge Flap System Deactivation, TASK 27-51-00-040-801.

D. Procedure

SUBTASK 57-50-01-860-001

(1) Make sure the flap is in the retracted position.

SUBTASK 57-50-01-220-001

(2) Measure the mismatch between the fixed upper panels [1], [2] and the upper surface of the inboard flap assembly.

SUBTASK 57-50-01-820-001

(3) If the mismatch is not in the limit of 0.005 to 0.100 inch (0.127 to 2.54 millimeters), adjust the applicable upper panel:

(a) Do this task: Trailing Edge Flap System Reactivation, TASK 27-51-00-440-801.

(b) Extend the trailing edge flaps to get access to the rods [3], [4], [6] for the upper and lower panels. To extend them, do this task: Extend the Trailing Edge Flaps, TASK 27-51-00-860-803.

(c) Do this task: Trailing Edge Flap System Deactivation, TASK 27-51-00-040-801.

(d) Adjust the fixed upper panel [1]:

1) Loosen the retainers [5] on serrated plate [12].
2) Remove or loosen the lower panel tie rod [6] which is attached to the upper panel support beam.
3) Loosen the nut [10] at each end of the upper panel tie rod [3].
4) Loosen the jam nut [11] for the upper panel tie rod [3].
5) Adjust upper panel tie rod [3] and serrated plate [12] to set the gap between the fixed upper panel [1] and the flap upper surface to within the limit.

(e) Adjust the fixed upper panel [2]:

1) Loosen the nut [17] at each end of the upper panel tie rod [4].
2) Loosen the jam nut [13] for the upper panel tie rod [4].
3) Adjust upper panel tie rod [4] to set the gap between the fixed upper panel [2] and the flap upper surface to within the limit.

(f) Tighten all fasteners loosened or removed in steps for adjusting the upper panel [1], [2].

E. Put the Airplane Back to Its Usual Condition

SUBTASK 57-50-01-820-002

(1) Do this task: Inboard Flap Support Aft Fairing Installation, TASK 27-51-18-400-802.

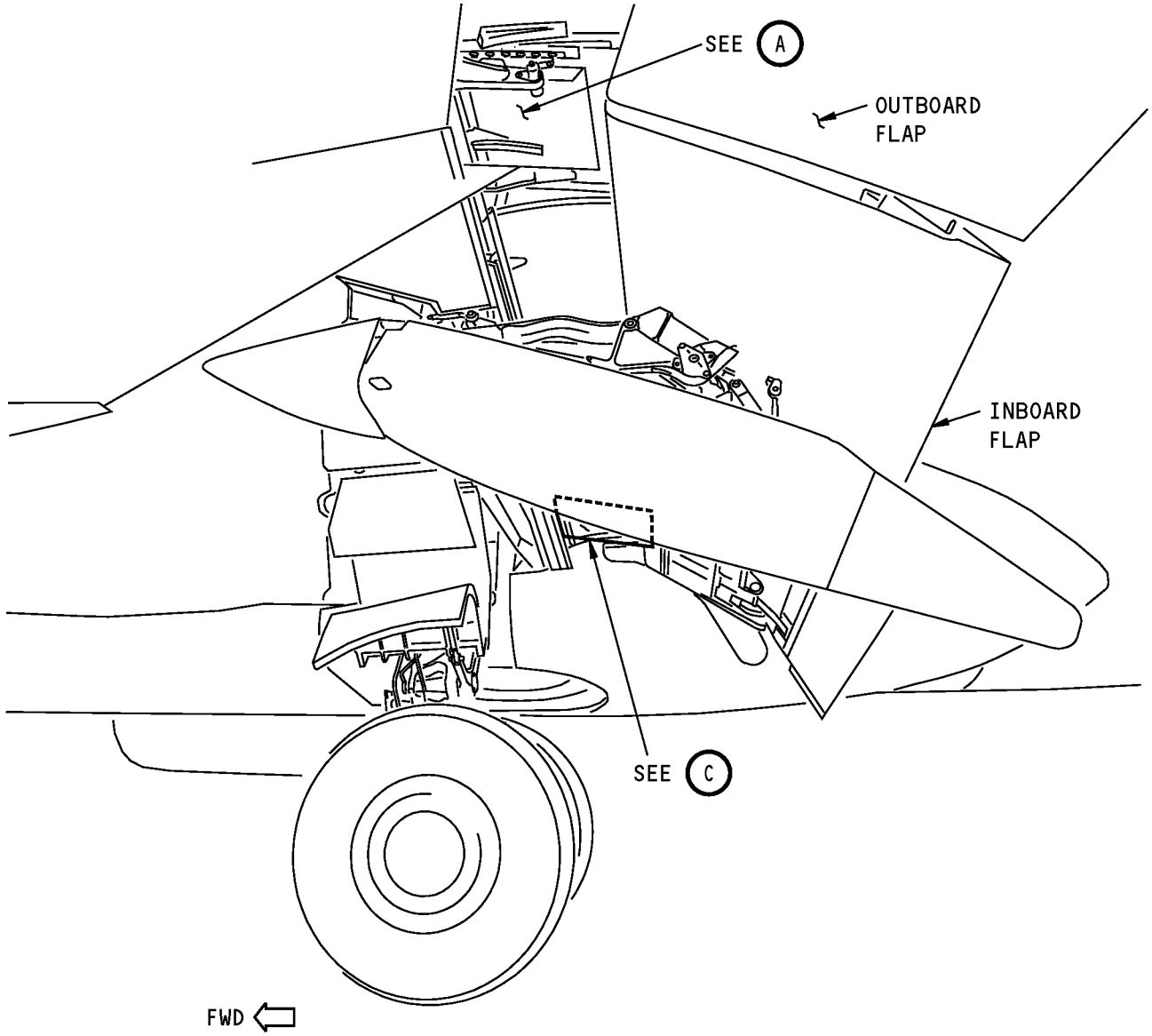
SUBTASK 57-50-01-410-001

(2) Do this task: Trailing Edge Flap System Reactivation, TASK 27-51-00-440-801.

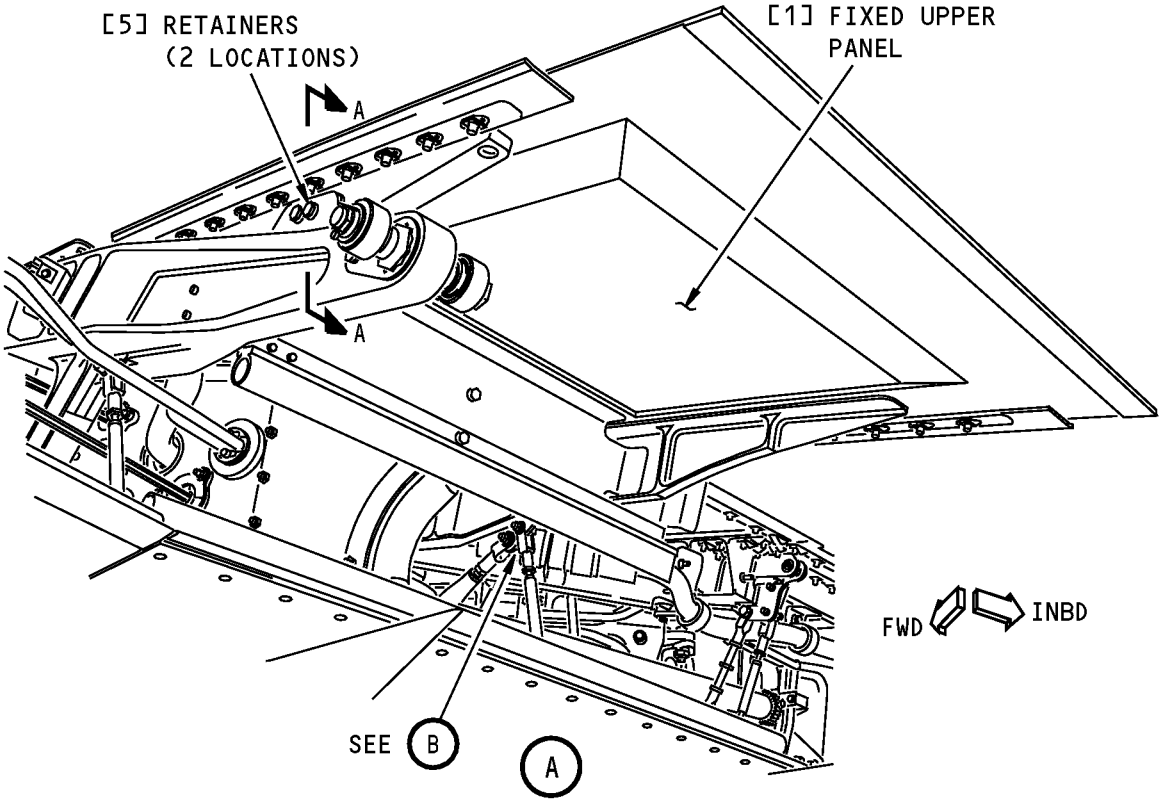
SUBTASK 57-50-01-860-002

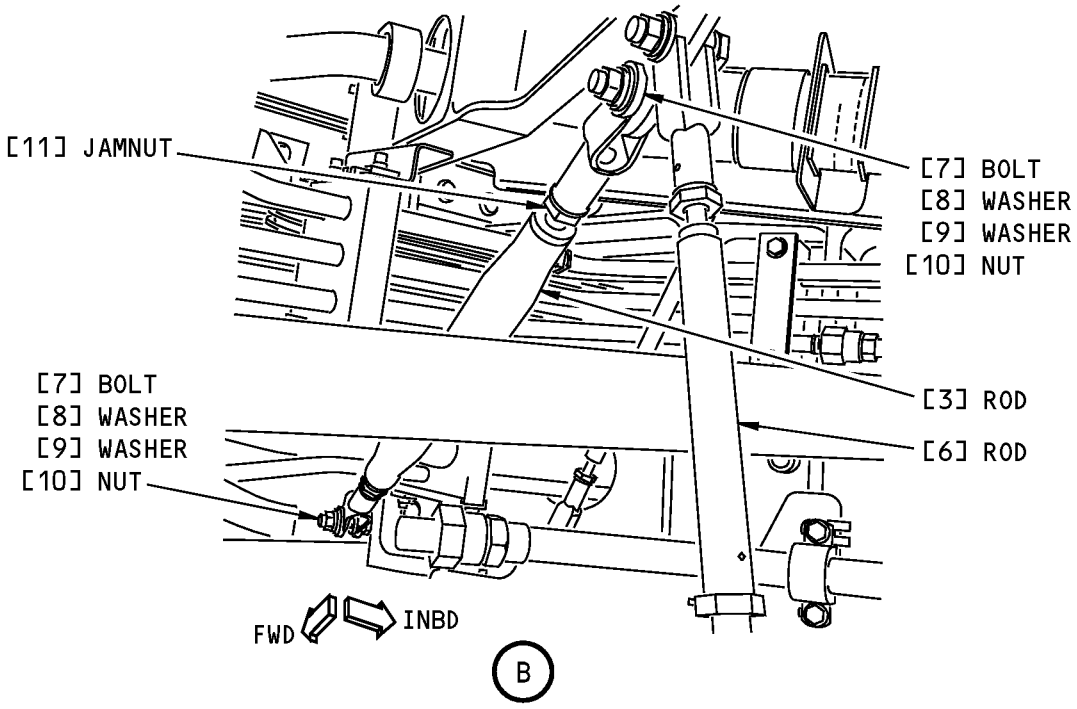
(3) Retract the trailing edge flaps to the retracted position. To retract the flaps, do this task: Retract the Trailing Edge Flaps, TASK 27-51-00-860-804.

———————— END OF TASK ————————

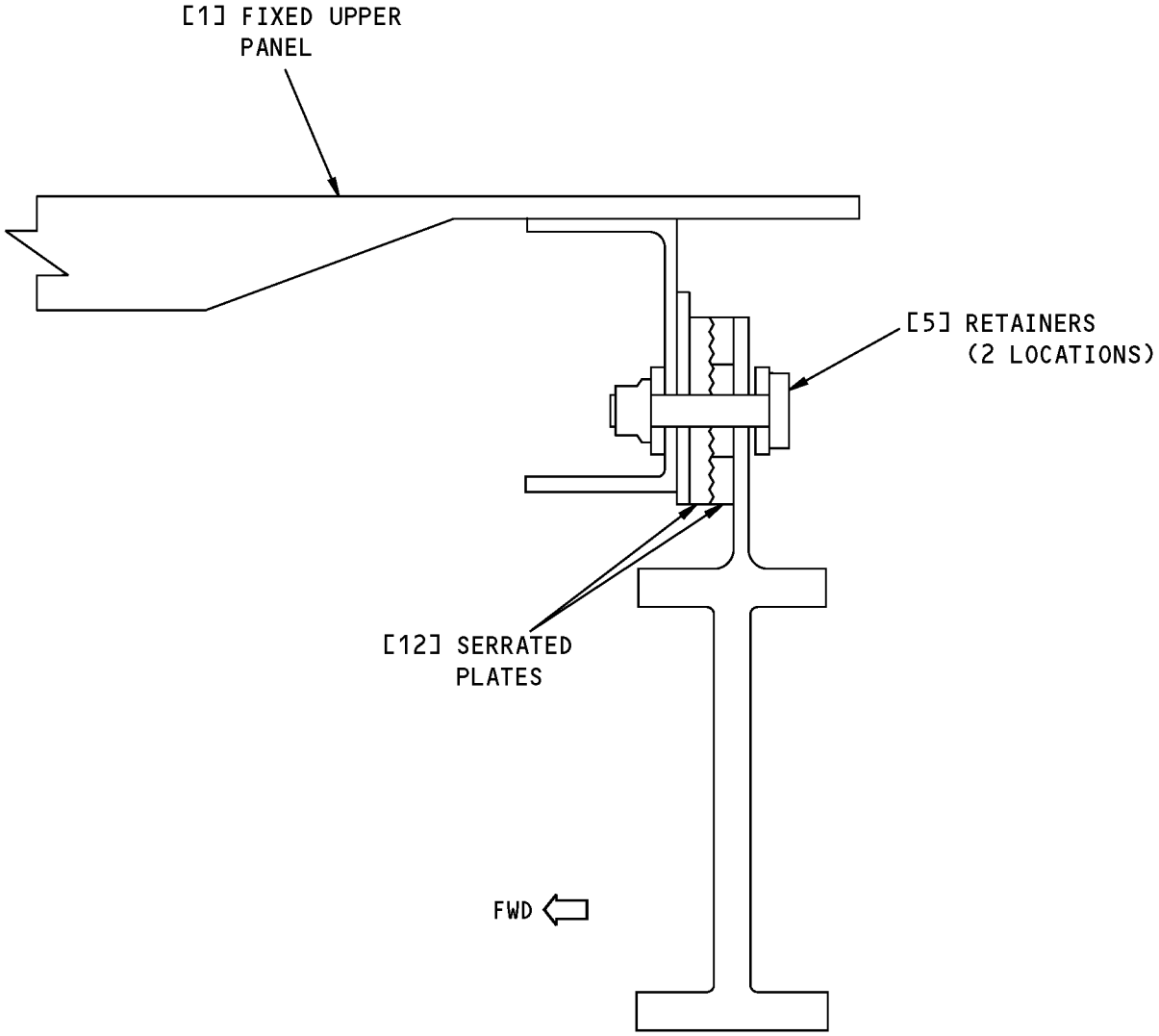


Inboard Fixed Upper Panel Adjustment
Figure 501 (Sheet 1 of 4)/57-50-01-990-801

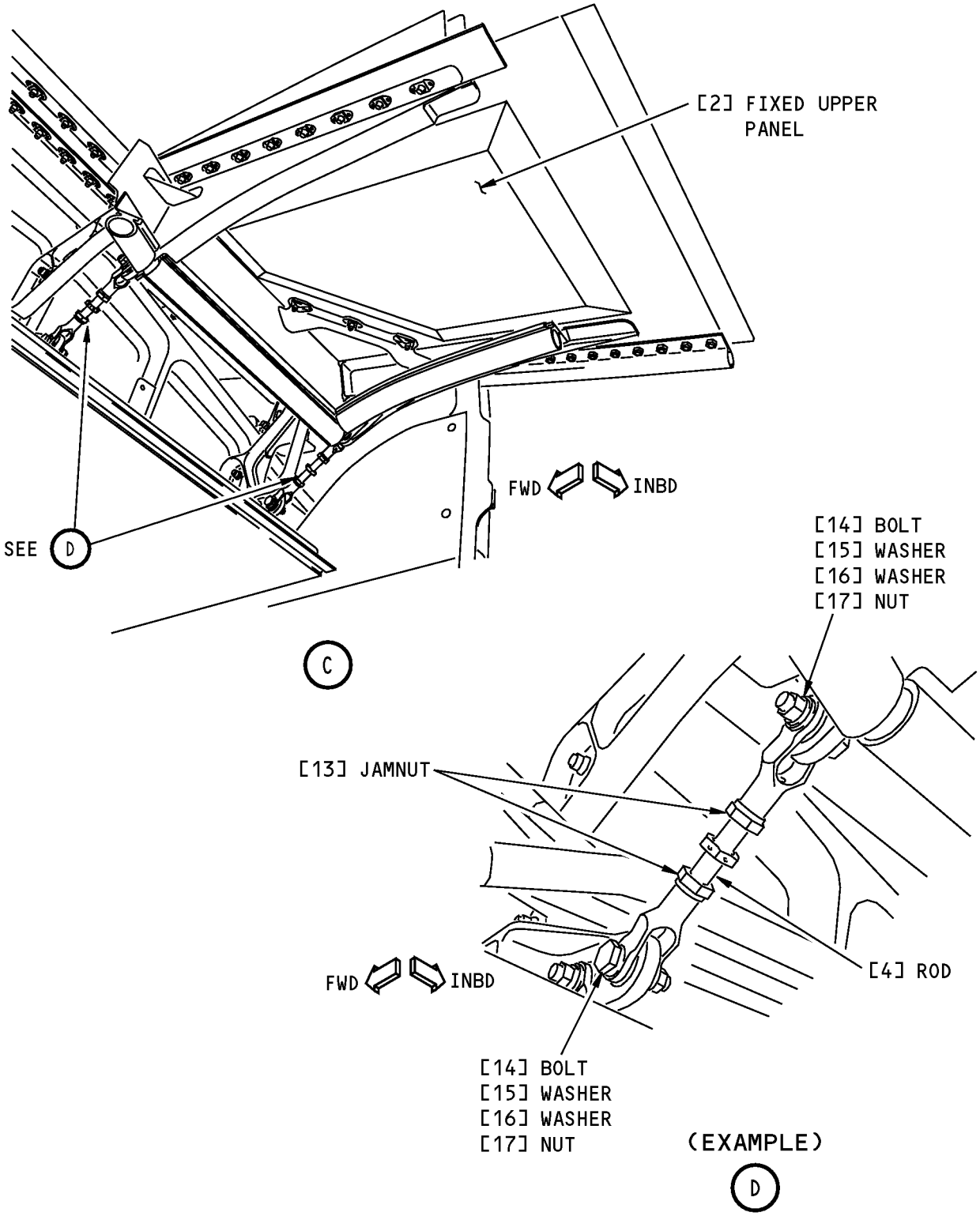




Inboard Fixed Upper Panel Adjustment
Figure 501 (Sheet 2 of 4)/57-50-01-990-801



Inboard Fixed Upper Panel Adjustment
Figure 501 (Sheet 3 of 4)/57-50-01-990-801



Inboard Fixed Upper Panel Adjustment
Figure 501 (Sheet 4 of 4)/57-50-01-990-801

FIXED TRAILING EDGE LOWER PANEL

1. General

A. This procedure contains these task:

(1) Removing inboard fixed trailing edge lower panels.

(2) Installing inboard fixed trailing edge lower panels.

TASK 57-50-02-000-801

2. Inboard Fixed Trailing Edge Lower Panel - Removal

A. References

Reference	Title
27-51-00-040-801	Trailing Edge Flap System Deactivation (P/B 201)
32-00-01-480-801	Landing Gear Downlock Pins Installation (P/B 201)

B. Location Zones

Zone	Area
551	Left Wing - Rear Spar To Landing Gear Support Beam
661	Right Wing - Rear Spar to Trailing Edge, Outboard of Inboard Flap, Inboard of Fixed Trailing Edge

C. Prepare for the Removal

WARNING: MAKE SURE THAT THE DOWNLOCK PINS ARE INSTALLED IN ALL OF THE LANDING GEAR. WITHOUT THE DOWNLOCK PINS, THE LANDING GEAR CAN RETRACT AND CAUSE INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT.

SUBTASK 57-50-02-490-001

(1) If the downlock pins are not installed in the nose and main landing gear, do this task: Landing Gear Downlock Pins Installation, TASK 32-00-01-480-801.

SUBTASK 57-50-02-860-001

(2) Extend the inboard main flaps.

SUBTASK 57-50-02-040-001

(3) Do this task: Trailing Edge Flap System Deactivation, TASK 27-51-00-040-801.

D. Removal

SUBTASK 57-50-02-010-001

(1) Remove Lower Panel [1].

(a) Disconnect wire bundle on aft end of Lower Panel [1] from the brackets.

(b) Remove Nut [24], Washer [25]Jumper [26] and Washer [27].

(c) Remove Nut [7], Washer [6], Washer [5], Washer [4], Washer [3] and Bolt [2].

NOTE: Make a note of the location of all of the washers.

1) Disconnect the upper link of Tie Rod [8] and Tie Rod [9].

(d) Remove Nut [15], Washer [14], Washer [13], Washer [12], Washer [11] and Bolt [10].

NOTE: Make a note of the location of all of the washers.

1) Disconnect the upper link of Tie Rods [16].

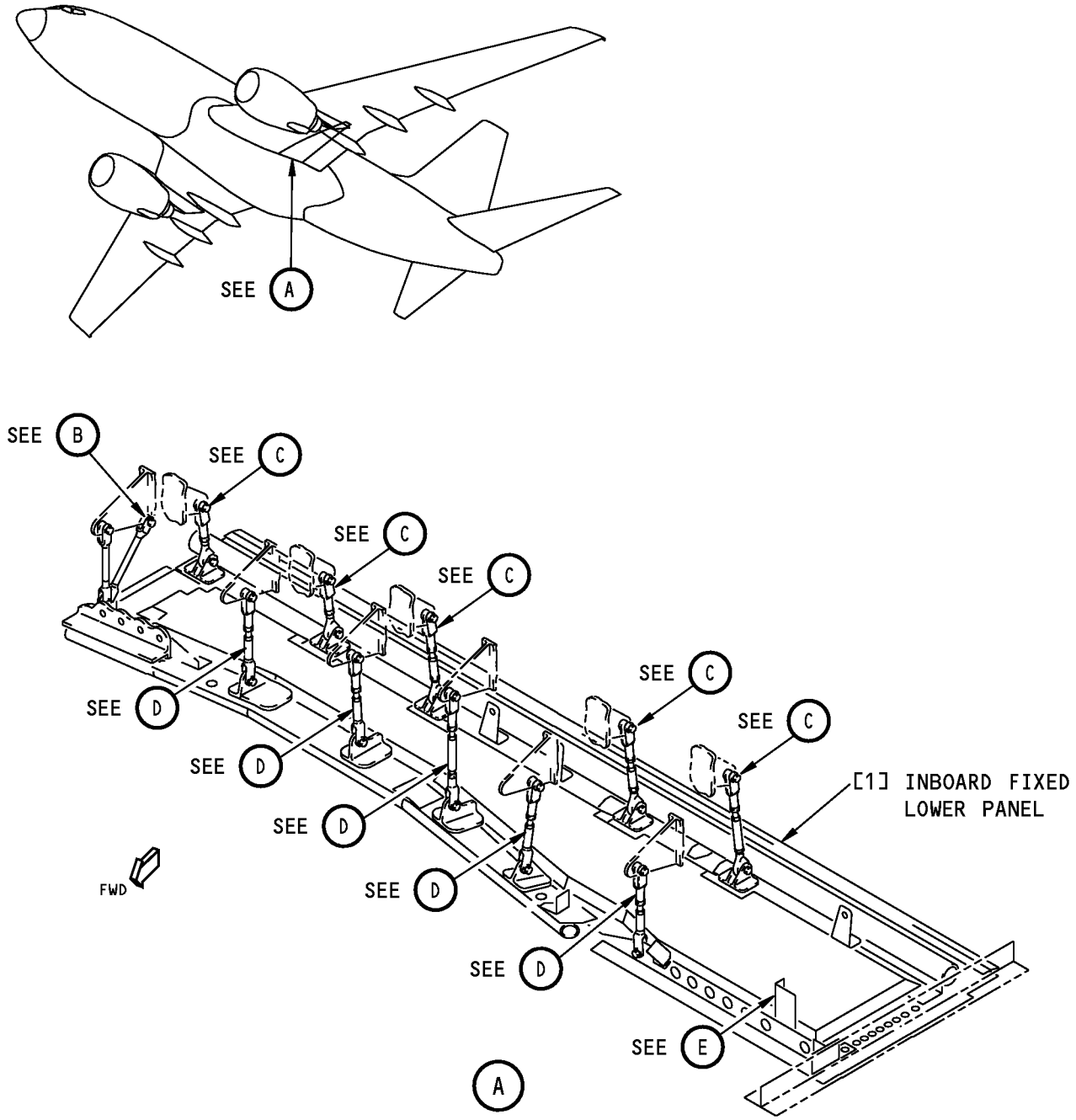
(e) Remove Nut [22], Washer [21], Washer [20], Washer [19], Washer [18] and Bolt [17].

NOTE: Make a note of the location of all of the washers.

1) Disconnect the upper link of Tie Rods [23].

(f) Remove Lower Panel [1].

——————— END OF TASK ———————



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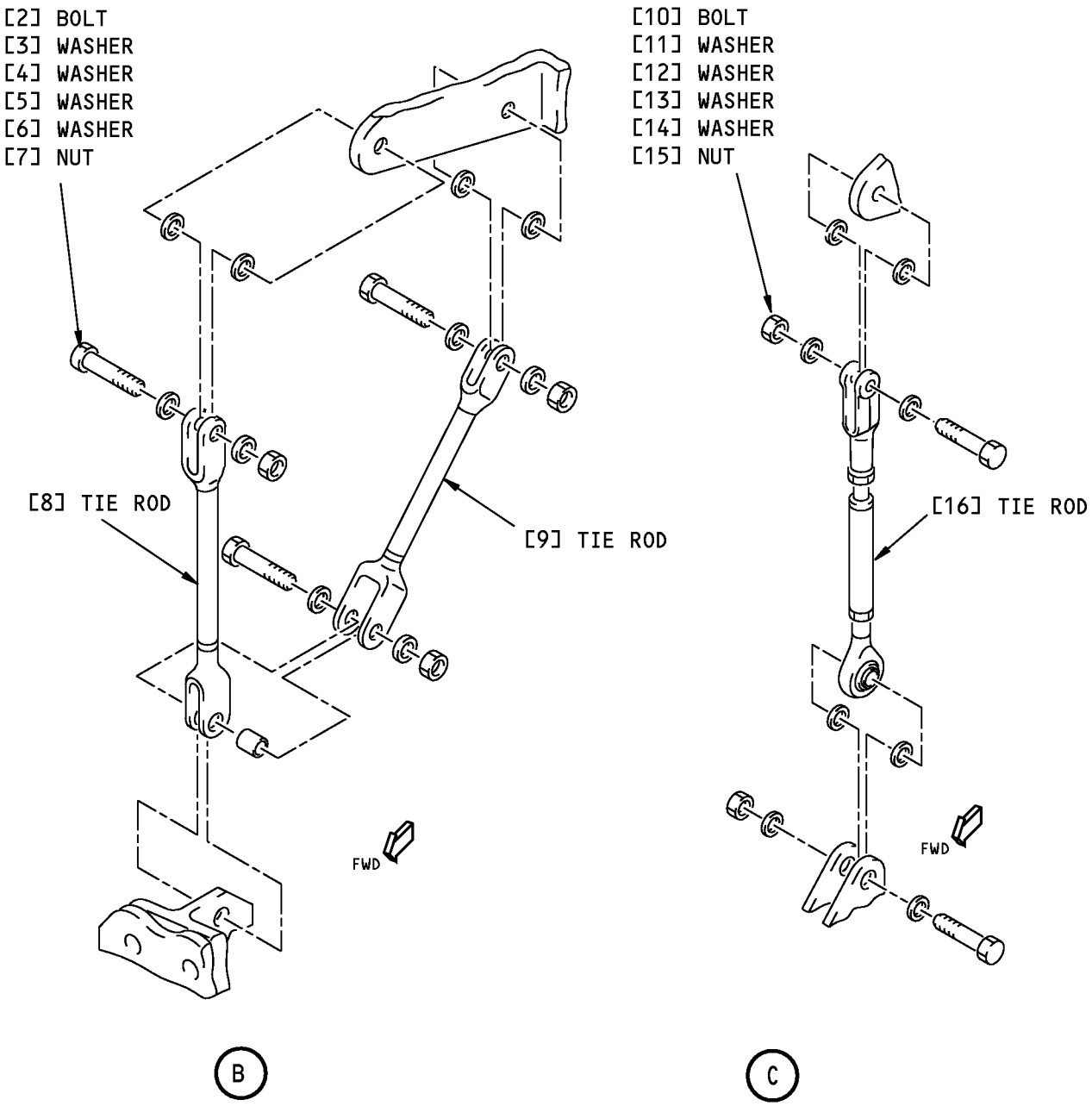
Inboard Fixed Trailing Edge Lower Panel Installation
Figure 401 (Sheet 1 of 3)/57-50-02-990-801



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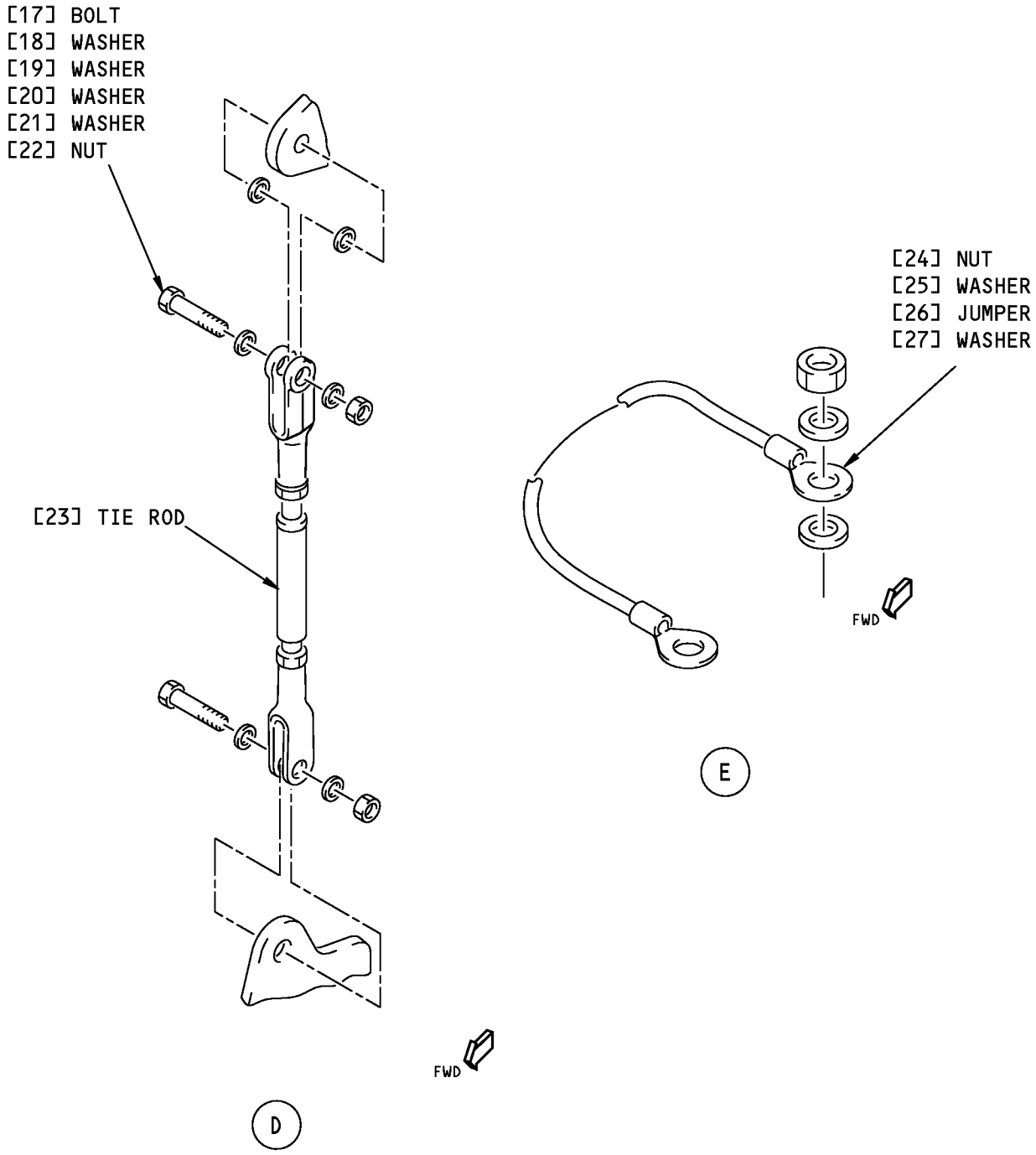
Inboard Fixed Trailing Edge Lower Panel Installation
Figure 401 (Sheet 2 of 3)/57-50-02-990-801



1555403 S0000281994_V1

Inboard Fixed Trailing Edge Lower Panel Installation
Figure 401 (Sheet 3 of 3)/57-50-02-990-801

TASK 57-50-02-400-801

3. Inboard Fixed Trailing Edge Lower Panel - Installation

A. References

Reference	Title
27-51-00-440-801	Trailing Edge Flap System Reactivation (P/B 201)

B. Consumable Materials

Reference	Description	Specification
A50009	Sealant - Low Density, Chromate Type Synthetic Rubber	BMS5-142, Class B-1/2

C. Location Zones

Zone	Area
551	Left Wing - Rear Spar To Landing Gear Support Beam
661	Right Wing - Rear Spar to Trailing Edge, Outboard of Inboard Flap, Inboard of Fixed Trailing Edge

D. Installation

SUBTASK 57-50-02-860-002

(1) Make sure flaps do not operate.

SUBTASK 57-50-02-400-001

(2) Install Lower Panel [1].

(a) Put the Lower Panel [1] in place.

NOTE: Use washers as required between each side of lug and clevis to reduce total gap to 0.030 in. (0.762 mm) max prior to clamp-up. Minimum of one washer per side. Washers to be distributed evenly to best center lug in clevis unless off-set is required to correct mis-alignment of upper and lower joints. Maintain a minimum of one washer per side.

(b) Connect the upper links of Tie Rod [8] and Tie Rod [9].

1) Install Bolt [2], Washer [3], Washer [4], Washer [5], Washer [6] and Nut [7].

(c) Connect the upper links of Tie Rods [16].

1) Install Bolt [10], Washer [11], Washer [12], Washer [13], Washer [14] and Nut [15].

(d) Connect the upper links of Tie Rods [23].

1) Install Bolt [17], Washer [18], Washer [19], Washer [20], Washer [21] and Nut [22].

(e) Torque the nuts on the upper end of turnbuckles to 63 in-lb (7 N·m) to 67 in-lb (8 N·m).

(f) Install Washer [27], Jumper [26], Washer [25] and Nut [24].

NOTE: Seal nut per BAC5000 with sealant, A50009.

(g) Secure wire bundle on aft end of Lower Panel [1] to the brackets.

E. Put the Airplane Back to its Usual Condition

SUBTASK 57-50-02-440-001

WARNING: KEEP PERSONS AND EQUIPMENT AWAY FROM THE FLIGHT CONTROL SURFACES. THE AILERONS, ELEVATORS, RUDDER, FLAPS, SLATS, SPOILERS, STABILIZER AND NOSE GEAR CAN MOVE SUDDENLY WHEN YOU SUPPLY HYDRAULIC POWER. THIS CAN CAUSE INJURY TO PERSONS AND DAMAGE TO EQUIPMENT.

(WARNING PRECEDES)

(1) Do this task: Trailing Edge Flap System Reactivation, TASK 27-51-00-440-801

SUBTASK 57-50-02-860-003

(2) Retract the inboard trailing edge flaps.

——————— END OF TASK ———————

SPOILER SUPPORT FITTINGS - REPAIRS

1. General

A. This procedure includes a repair of the inboard ground spoiler support fittings. This procedure repairs spoiler support fittings by replacing damaged fittings with new, replacement fittings. Only one spoiler support may be repaired at a time for a single inboard ground spoiler.

B. This procedure may only be done if the two other spoiler support fittings are correctly located for the inboard ground spoiler.

C. The spoiler support fittings repaired in this procedure provide support to the inboard ground spoiler and their actuators. (The other spoiler support fittings that do not support an actuator are not repaired in this procedure). They are attached to the main landing gear support beam.

(1) The replacement spoiler support fittings are different from the originally produced spoiler support fittings in two aspects:

(a) They require the installation of shims.

(b) They require mounting holes to be drilled by the operator.

TASK 57-71-01-000-801

2. Spoiler Support Fitting Repair

A. References

Reference	Title
12-40-00-100-801	Clean the External Surfaces of the Airplane (P/B 201)
20-10-51-000-801	Flareless Tubing Assembly Removal (P/B 401)
20-10-51-000-802	Flareless Fittings in Pressurized Areas Installation (P/B 401)
20-40-11-760-801	Electrical Bonding (P/B 201)
27-62-12-000-801	Inboard Ground Spoiler Removal (P/B 401)
27-62-71-400-801	Inboard Ground Spoiler Actuator Installation (P/B 401)
29-09-00-860-802	Hydraulic Reservoirs Depressurization (P/B 201)
29-11-01-860-802	Hydraulic Reservoirs Depressurization (P/B 201)

B. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
COM-1550	Meter - Bonding (Approved Explosion Proof & Intrinsically Safe) (Part #: C15292 (MODEL T477W), Supplier: 01014, A/P Effectivity: 737-ALL) (Part #: M1, Supplier: 3AD17, A/P Effectivity: 737-ALL) (Part #: M1B, Supplier: 3AD17, A/P Effectivity: 737-ALL)

C. Consumable Materials

Reference	Description	Specification
A00247	Sealant - Pressure And Environmental - Chromate Type	BMS 5-95

D. Location Zones

Zone	Area
734	Left Main Landing Gear
744	Right Main Landing Gear

E. Access Panels

Number	Name/Location
551DB	Lower Inboard Fixed Trailing Edge, Lube Actuator & MLG Beam Outboard Attach Pin Access Panel
651DB	Lower Inboard Fixed Trailing Edge, Lube Actuator & MLG Beam Outboard Attach Pin Access Panel

F. Prepare to Repair the Spoiler Support Fitting

SUBTASK 57-71-01-010-001

(1) Remove the applicable access panels:

Number	Name/Location
551DB	Lower Inboard Fixed Trailing Edge, Lube Actuator & MLG Beam Outboard Attach Pin Access Panel
651DB	Lower Inboard Fixed Trailing Edge, Lube Actuator & MLG Beam Outboard Attach Pin Access Panel

SUBTASK 57-71-01-010-002

(2) To remove the applicable inboard ground spoiler, do this task: Inboard Ground Spoiler Removal, TASK 27-62-12-000-801.

SUBTASK 57-71-01-010-003

(3) To remove the pressure from all hydraulic systems, do this task: Hydraulic Reservoirs Depressurization, TASK 29-11-01-860-802 or Hydraulic Reservoirs Depressurization, TASK 29-09-00-860-802.

SUBTASK 57-71-01-020-001

WARNING: REMOVE ALL PRESSURE FROM THE HYDRAULIC SYSTEM BEFORE YOU START TO REMOVE HYDRAULIC TUBING. A PRESSURIZED SYSTEM CAN CAUSE INJURY.

(4) To disconnect the hydraulic tubes from the support beam as necessary, do this task: Flareless Tubing Assembly Removal, TASK 20-10-51-000-801.

WARNING: MAKE SURE THAT THE CORRECT TUBING CONNECTIONS CAN BE DETERMINED WHEN YOU INSTALL THE HYDRAULIC TUBING LATER. INCORRECT INSTALLATION OF THE HYDRAULIC TUBING CAN CAUSE INJURY TO PERSONS AND DAMAGE TO THE AIRPLANE.

(a) Put caps on the ends of the hydraulic tubes to prevent contamination.

(b) Make a note of the location of each piece of hydraulic tubing that is removed.

(c) To clean up the hydraulic fluid, do this task: Clean the External Surfaces of the Airplane, TASK 12-40-00-100-801.

G. Procedure

SUBTASK 57-71-01-010-004

CAUTION: REMOVE AND INSTALL ONLY ONE SPOILER SUPPORT FITTING PER SPOILER EACH TIME. THE OTHER THREE SUPPORT FITTINGS SHOW THE NEW SUPPORT FITTING'S HOLE LOCATIONS. DAMAGE TO THE AIRPLANE WILL OCCUR IF THE SUPPORT FITTINGS ARE NOT LOCATED CORRECTLY.

(CAUTION PRECEDES)

CAUTION: IF THERE IS DAMAGE AT A SPOILER SUPPORT FITTING THAT IS NOT BEING REPLACED, THIS PROCEDURE CANNOT BE ACCOMPLISHED. THE SPOILER'S HINGE POINTS MUST CORRECTLY LOCATE THE HOLES OF THE SUPPORT FITTING BEING REPLACED. DAMAGE TO THE AIRPLANE WILL OCCUR IF THE SUPPORT FITTINGS ARE NOT LOCATED CORRECTLY.

(1) Replace one inboard spoiler support fitting.

NOTE: There are two spoiler support fittings on each main landing gear support beam that may be replaced. Only one may be replaced at a time.

(a) Remove the four bolts and the four collars of the support fitting to be replaced.

1) If you are removing the inboard support fitting, remove the two washers for the jumper.

(b) To install the applicable inboard ground spoiler, do this task: Inboard Ground Spoiler Removal, TASK 27-62-12-000-801.

1) Attach the new support fitting to the spoiler hinge.

2) Do not attach the new support fitting to the support beam while installing the spoiler.

(c) Make the holes needed for attaching the support fitting to the support beam.

1) Temporarily hold the support fitting and the two shims against the aft side of the support beam.

2) On the forward side of the support beam, drill through the existing holes in the support beam and into the support fitting and shims.

(d) Attach the support fitting and shims to the support beam.

1) Install the bolts and collars.

a) Put the head of the bolts on the forward face of the support beam.

b) Fillet seal the fasteners with sealant, A00247.

2) If you are installing the inboard support fitting, also install the two washers and the jumper terminal on the forward side of the support beam.

NOTE: Put one washer between the head of the bolt and the jumper terminal. Put the other washer between the jumper terminal and the support beam.

a) Use an bonding meter, COM-1550 to make sure that the resistance between the jumper and structure is no more than 0.003 ohms, (TASK 20-40-11-760-801).

H. Put the Airplane Back to Its Usual Condition

SUBTASK 57-71-01-020-002

WARNING: MAKE SURE THAT THE CORRECT TUBING CONNECTIONS ARE DETERMINED WHEN YOU INSTALL THE HYDRAULIC TUBING. INCORRECT INSTALLATION OF THE HYDRAULIC TUBING CAN CAUSE INJURY TO PERSONS AND DAMAGE TO THE AIRPLANE.

(1) Connect the hydraulic tubes to the support beam, (TASK 20-10-51-000-802).

(a) Remove the caps from the ends of the hydraulic tubes.

SUBTASK 57-71-01-020-003

(2) Install the applicable ground spoiler actuator to the spoiler and the spoiler support fitting, do this task: Inboard Ground Spoiler Actuator Installation, TASK 27-62-71-400-801.

(a) Make sure that the hydraulic tubing that you removed does not leak after you pressurize the hydraulic systems.

SUBTASK 57-71-01-010-005

(3) Install the applicable access panels:

Number	Name/Location
551DB	Lower Inboard Fixed Trailing Edge, Lube Actuator & MLG Beam Outboard Attach Pin Access Panel
651DB	Lower Inboard Fixed Trailing Edge, Lube Actuator & MLG Beam Outboard Attach Pin Access Panel

——————— END OF TASK ———————