ALERT

Number: **767-57A0134**
Original Issue: May 27, 2016
ATA System: 5750

SUBJECT: WINGS - Trailing Edge and Trailing Edge Devices - Inboard Flap Outboard Support Assembly Number 3 and 6 - Inspection and Repair, Replacement or Modification

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ALERT

Number: **767-57A0134**
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Summary

SUBJECT: WINGS - Trailing Edge and Trailing Edge Devices - Inboard Flap Outboard Support Assembly Number 3 and 6 - Inspection and Repair, Replacement or Modification

THIS DOCUMENT IS SENT TO THE OPERATORS OF RECORD OF THE AIRPLANES SHOWN IN PARAGRAPH 1.A., EFFECTIVITY. IF AN AIRPLANE HAS BEEN LEASED OR SOLD, SEND THIS DOCUMENT TO THE NEW OPERATOR. IF APPLICABLE SPARES HAVE BEEN SOLD, SEND THIS DOCUMENT TO THE NEW OWNER.

CONCURRENT REQUIREMENTS

None.

BACKGROUND

This Service Bulletin is sent to give instructions to inspect for damage caused by interference between the 6-9 drive arm assembly and the 4-5 actuator crank arm assembly on the inboard flap outboard support assembly number 3 and number 6. Instructions are also given for an interim blend repair, and modification or replacement of the 4-5 actuator crank arm assembly to terminate repeat inspections. If this service bulletin is not accomplished, interference between the 6-9 drive arm assembly and the 4-5 actuator crank arm assembly will cause a fatigue load on the 5-7 link which could result in failure of the 5-7 link and subsequent loss of the inboard flap, continued safe flight and landing could be affected after the departure of a flap during takeoff or landing.

The Boeing Company received a report from an operator that while inspecting the left wing, inboard flap, outboard support assembly number 3, it was seen that the extend overtravel stops on the 4-5 actuator crank arm assembly were touching the adjacent 6-9 drive arm assembly when the flaps were fully retracted. The cause of this problem occurred with the installation of 767-400ER flaps on 767-200 airplanes which have crank arms that have extend overtravel stops that are too large. The problem did not occur during the fitting of the 767-400ER flaps in production as the 4-5 actuator crank arm assembly had been redesigned.

Accomplishment of this service bulletin will prevent interference between the 6-9 drive arm assembly and the 4-5 actuator crank arm assembly.

Boeing Service Related Problem (SRP) 767-57-0282 is related to this service bulletin.

Boeing Fleet Team Digest (FTD) 767 FTD 57-16001 is related to this service bulletin.

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ALERT **ALERT**

This table is provided to operators for planning purposes only. Refer to the applicable sections for more information.

Planning Data	Affected	Reference
Spares Affected	No	Paragraph 1.A.2., Spares Affected
AD Related	Yes	Paragraph 1.E., Compliance and Paragraph 1.F., Approval
Weight and Balance Change	No	Paragraph 1.H., Weight and Balance Changes
Electrical Load Changed	No	Paragraph 1.I., Electrical Load Data
Publications Affected	Yes	Paragraph 1.K., Publications Affected
Airplane Flight Operations Affected (Flight Crew Operations Manual and/or FAA Approved Airplane Flight Manual)	No	Paragraph 1.K., Publications Affected
Kits/Parts Required	No	Paragraph 2.C.1., Kits/Parts
Operator Supplied Parts/Material	Yes	Paragraph 2.C.2., Parts and Materials Supplied by the Operator
Special Tooling Required	No	Paragraph 2.F., Special Tooling Necessary to do this Service Bulletin

ACTION (PRR B12901-124RS)

Get access to the inboard flap outboard support assembly at the number 3 and number 6 positions. Do a general visual inspection of the 6-9 drive arm assembly for any damage caused by interference with the 4-5 actuator crank arm assembly.

If any damage is found on the 6-9 drive arm assembly, do a repair of the 6-9 drive arm assembly, do an interim blend repair of the 4-5 actuator crank arm assembly, and do a repeat general visual inspection of the 6-9 drive arm assembly. As an option, replace or modify the 4-5 actuator crank arm assembly.

If no damage is found on the 6-9 drive arm assembly, repeat the general visual inspection of the 6-9 drive arm assembly, or do replacement or modification of the 4-5 actuator crank arm assembly.

EFFECTIVITY

767-200 Airplane(s). Refer to Paragraph 1.A.1., Airplanes, for the list of affected airplane(s).

COMPLIANCE

The Federal Aviation Administration (FAA) will possibly release an Airworthiness Directive related to this service bulletin. The Airworthiness Directive will make the compliance tasks and times given in this service bulletin mandatory.

Refer to Paragraph 1.E., Compliance.

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INDUSTRY SUPPORT INFORMATION

Boeing warranty remedies are available for airplanes in warranty as of August 12, 2015. Please refer to Paragraph 2.B., Industry Support Information. The warranty remedies will expire eight years from the original issue date of this service bulletin.

MANPOWER

Refer to Paragraph 1.G., Manpower.

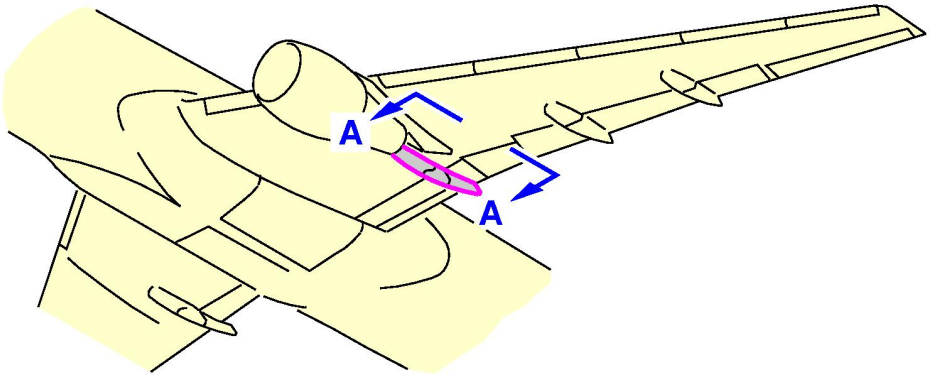
MATERIAL INFORMATION

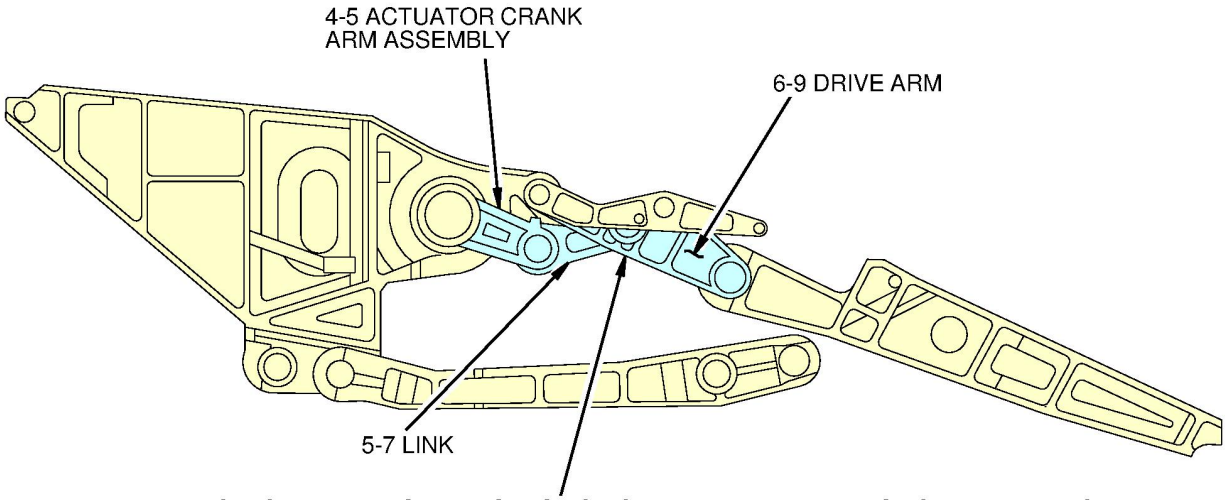
Operator Supplied Parts/Materials.

Refer to Paragraph 2.A., Material - Price and Availability.

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ALERT **ALERT**





DO A GENERAL VISUAL INSPECTION OF THE 6-9 DRIVE ARMS FOR ANY DAMAGE CAUSED BY INTERFERENCE WITH THE 4-5 ACTUATOR CRANK ARM ASSEMBLY

INBOARD FLAP, OUTBOARD SUPPORT ASSEMBLY
(LEFT SIDE SHOWN, RIGHT SIDE OPPOSITE)

A-A

2481278

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ALERT

Number: **767-57A0134**
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SUBJECT: WINGS - Trailing Edge and Trailing Edge Devices - Inboard Flap Outboard Support Assembly Number 3 and 6 - Inspection and Repair, Replacement or Modification

THIS DOCUMENT IS SENT TO THE OPERATORS OF RECORD OF THE AIRPLANES SHOWN IN PARAGRAPH 1.A., EFFECTIVITY. IF AN AIRPLANE HAS BEEN LEASED OR SOLD, SEND THIS DOCUMENT TO THE NEW OPERATOR. IF APPLICABLE SPARES HAVE BEEN SOLD, SEND THIS DOCUMENT TO THE NEW OWNER.

1. PLANNING INFORMATION

A. Effectivity

1. Airplanes

This service bulletin is applicable to 767-200 Airplanes, line numbers 912, 930, 932, 941, 943, 952, 963 and 966 in 1 Group. The Variable Numbers and Group Information for the applicable airplanes is given below. An equivalent change is on subsequent production airplanes. Refer to PRR B12901-124RS for data about this change.

Refer to Service Bulletin Index D624T001 Part 3 for Airplane Variable Number, Line Number, and Serial Number data.

GROUP	CONFIGURATION	DESCRIPTION
1	-	767-200 Tanker Transport Airplanes

Airplane Models:

767-200

Variable Number	Group
VR086 - VR089	1
VR106 - VR109	1

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2. Spares Affected

Examine your spares supply for the parts or components identified below . If any parts or components are found, refer to Paragraph 3.B., Work Instructions for the recommended action.

Part Number
113T1227-29
113T1227-30

B. Concurrent Requirements

None.

C. Reason

This Service Bulletin is sent to give instructions to inspect for damage caused by interference between the 6-9 drive arm assembly and the 4-5 actuator crank arm assembly on the inboard flap outboard support assembly number 3 and number 6. Instructions are also given for an interim blend repair, and modification or replacement of the 4-5 actuator crank arm assembly to terminate repeat inspections. If this service bulletin is not accomplished, interference between the 6-9 drive arm assembly and the 4-5 actuator crank arm assembly will cause a fatigue load on the 5-7 link which could result in failure of the 5-7 link and subsequent loss of the inboard flap, continued safe flight and landing could be affected after the departure of a flap during takeoff or landing.

The Boeing Company received a report from an operator that while inspecting the left wing, inboard flap, outboard support assembly number 3, it was seen that the extend overtravel stops on the 4-5 actuator crank arm assembly were touching the adjacent 6-9 drive arm assembly when the flaps were fully retracted. The cause of this problem occurred with the installation of 767-400ER flaps on 767-200 airplanes which have crank arms that have extend overtravel stops that are too large. The problem did not occur during the fitting of the 767-400ER flaps in production as the 4-5 actuator crank arm assembly had been redesigned.

If no damage is found on the 6-9 drive arm assembly, repeat the general visual inspection of the 6-9 drive arm assembly, or do replacement or modification of the 4-5 actuator crank arm assembly.

Boeing Service Related Problem (SRP) 767-57-0282 is related to this service bulletin.

Boeing Fleet Team Digest (FTD) 767 FTD 57-16001 is related to this service bulletin.

D. Description

Get access to the inboard flap outboard support assembly at the number 3 and number 6 positions. Do a general visual inspection of the 6-9 drive arm assembly for any damage caused by interference with the 4-5 actuator crank arm assembly.

If any damage is found on the 6-9 drive arm assembly, do a repair of the 6-9 drive arm assembly, do an interim blend repair of the 4-5 actuator crank arm assembly, and do a repeat general visual inspection of the 6-9 drive arm assembly. As an option, replace or modify the 4-5 actuator crank arm assembly.

If no damage is found on the 6-9 drive arms, repeat the general visual inspection of the 6-9 drive arms, or do replacement or modification of the 4-5 actuator crank arm assembly.

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The work in this service bulletin is done in the maintenance zone(s) given below.

Affected Maintenance Zones	
Model	**Zone**
767-200	571, 671

E. Compliance

The Federal Aviation Administration (FAA) will possibly release an Airworthiness Directive related to this service bulletin. The Airworthiness Directive will make the compliance tasks and times given in this service bulletin mandatory.

A logic diagram showing compliance tasks and compliance times is included as an aid in APPENDIX A.

When more than one OPTION is given for a CONDITION, do only one of the OPTION numbers. When more than one ACTION is given for a CONDITION number or an OPTION number, do all of the ACTION numbers for that CONDITION number or OPTION number.

Do the required actions in accordance with Paragraph 3. Accomplishment Instructions.

Table 1: General Visual Inspection of the 6-9 Drive Arm Assembly and Repair, Replacement or Modification of the 4-5 Actuator Crank Arm Assembly at Inboard Flap Outboard Support Number 3 and 6

Condition	Action	Compliance Time (Whichever Occurs Later)		Repeat Interval (Not to Exceed)
All airplanes	Do PART 1: 6-9 DRIVE ARM ASSEMBLY GENERAL VISUAL INSPECTION for any damage caused by interference with the 4-5 actuator crank arm assembly. (a)	Before 5,000 total flight cycles.	Within 36 months after the original issue date of this service bulletin.	-

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Table 1: General Visual Inspection of the 6-9 Drive Arm Assembly and Repair, Replacement or Modification of the 4-5 Actuator Crank Arm Assembly at Inboard Flap Outboard Support Number 3 and 6

Condition	Action	Compliance Time (Whichever Occurs Later)	Repeat Interval (Not to Exceed)
CONDITION 1: ANY DAMAGE FOUND ON 6-9 DRIVE ARM ASSEMBLY	OPTION 1 (ACTION 1): Do PART 2: 4-5 ACTUATOR CRANK ARM ASSEMBLY INTERIM BLEND REPAIR on the crank arms associated with the damaged 6-9 drive arm assembly.	Before further flight.	-
	OPTION 1 (ACTION 2): Do PART 3: 6-9 DRIVE ARM ASSEMBLY REPAIR.	Before further flight.	-
	OPTION 1 (ACTION 3): Repeat PART 1: 6-9 DRIVE ARM ASSEMBLY GENERAL VISUAL INSPECTION for any damage caused by interference with the 4-5 actuator crank arm assembly. (a)	-	2,500 flight cycles. (b)
	OPTION 2 (ACTION 1): Do PART 3: 6-9 DRIVE ARM ASSEMBLY REPAIR.	Before further flight.	-
	OPTION 2 (ACTION 2): Do PART 4: 4-5 ACTUATOR CRANK ARM ASSEMBLY REPLACEMENT (TERMINATING ACTION) on the crank arms associated with the damaged 6-9 drive arm assembly.	Before further flight.	-
	OPTION 3 (ACTION 1): Do PART 3: 6-9 DRIVE ARM ASSEMBLY REPAIR.	Before further flight.	-
	OPTION 3 (ACTION 2): Do PART 5: 4-5 ACTUATOR CRANK ARM ASSEMBLY MODIFICATION (TERMINATING ACTION) on the crank arms associated with the damaged 6-9 drive arm assembly.	Before further flight.	-

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Table 1: General Visual Inspection of the 6-9 Drive Arm Assembly and Repair, Replacement or Modification of the 4-5 Actuator Crank Arm Assembly at Inboard Flap Outboard Support Number 3 and 6

Condition	Action	Compliance Time (Whichever Occurs Later)	Repeat Interval (Not to Exceed)
CONDITION 2: NO DAMAGE FOUND ON 6-9 DRIVE ARM ASSEMBLY	OPTION 4: Repeat PART 1: 6-9 DRIVE ARM ASSEMBLY GENERAL VISUAL INSPECTION for any damage caused by interference with the 4-5 actuator crank arm assembly. (a)	-	2,500 flight cycles. (b)
	OPTION 5: Do PART 4: 4-5 ACTUATOR CRANK ARM ASSEMBLY REPLACEMENT (TERMINATING ACTION) on the crank arms associated with the undamaged 6-9 drive arm assembly.	Before further flight.	-
	OPTION 6: Do PART 5: 4-5 ACTUATOR CRANK ARM ASSEMBLY MODIFICATION (TERMINATING ACTION) on the crank arms associated with the undamaged 6-9 drive arm assembly.	Before further flight.	-
(a) Damage caused by interference with the 4-5 actuator crank arm assembly is defined as: Worn paint or primer, or worn paint, worn primer and bare metal.			
(b) Accomplishment of PART 4: 4-5 ACTUATOR CRANK ARM ASSEMBLY REPLACEMENT or PART 5: 4-5 ACTUATOR CRANK ARM ASSEMBLY MODIFICATION is a terminating action to the repeat inspections, for the associated 6-9 drive arm assembly.			

F. Approval

This service bulletin was examined by the Federal Aviation Administration (FAA). The changes specified in this service bulletin comply with the applicable regulations and are FAA approved, as well as European Aviation Safety Agency (EASA)/Joint Aviation Authorities (JAA) approved for all EASA/JAA approved airplanes listed in the service bulletin effectivity. This service bulletin and its approval were based on the airplane in its original Boeing delivery configuration or as modified by other approved Boeing changes.

If an airplane has a non-Boeing modification or repair that affects a component or system also affected by this service bulletin, the operator is responsible for obtaining appropriate regulatory agency approval before incorporating this service bulletin.

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G. Manpower

The table below shows an estimate of the task hours necessary to do the inspections, repairs or replacement for each airplane. This estimate is for direct labor only, done by an experienced crew. Adjust the estimate with operator task hour data if necessary. The estimate does not include lost time. These are some examples of lost time:

- Time to adjust to the workplace
- Time to schedule the work
- Time to inspect the work
- Time to cure the materials
- Time to make the parts
- Time to find the tools.

Inboard Flap Outboard Support Assembly Number 3 and Number 6 - Inspection of 6-9 Drive Arm Assembly

Task	Number of Persons	Task Hours	Elapsed Hours
Open Access	1	1.00	1.00
FIGURE 1	1	0.20	0.20
FIGURE 2	1	0.20	0.20
Close Access	1	1.00	1.00
TOTAL FOR EACH AIRPLANE		(a)	(a)
(a) Total time required may vary depending on conditions found during inspections and actions taken.			

4-5 Actuator Crank Arm Assembly Interim Blend Repair

Task	Number of Persons	Task Hours	Elapsed Hours
FIGURE 3	2	4.00	2.00
FIGURE 4	2	4.00	2.00
TOTAL FOR EACH AIRPLANE		8.00	4.00

6-9 Drive Arm Assembly Repair

Task	Number of Persons	Task Hours	Elapsed Hours
Finishes Repair	-	(a)	(a)
Bare Metal Repair	-	(a)	(a)
TOTAL FOR EACH AIRPLANE		(a)	(a)
(a) The time required for repair depends on the damage found. Therefore no estimate is given.			

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4-5 Actuator Crank Arm Assembly Removal, Disassembly, Modification and Installation

Task	Number of Persons	Task Hours	Elapsed Hours
FIGURE 5	2	4.00	2.00
FIGURE 6	2	4.00	2.00
FIGURE 7	1	0.70	0.70
FIGURE 8	1	0.70	0.70
FIGURE 9	2	8.00	4.00
FIGURE 10	2	8.00	4.00
FIGURE 11	2	4.00	2.00
FIGURE 12	2	4.00	2.00
TOTAL FOR EACH AIRPLANE		33.40	17.40

4-5 Actuator Crank Arm Assembly Replacement

Task	Number of Persons	Task Hours	Elapsed Hours
FIGURE 5	2	4.00	2.00
FIGURE 6	2	4.00	2.00
FIGURE 11	2	4.00	2.00
FIGURE 12	2	4.00	2.00
TOTAL FOR EACH AIRPLANE		16.00	8.00

H. Weight and Balance Changes

None.

I. Electrical Load Data

Not changed.

J. References

1. Existing Data:

   a. Engineering Change Memo PRR B12901-124RS

   b. Boeing Service Letter 767-SL-51-036

   c. Boeing Service Related Problem (SRP) 767-57-0282

   d. Component Maintenance Manual (CMM) 57-53-31, Repair 3-1

   e. Service Bulletin Index D624T001

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f. Standard Overhaul Practices Manual (SOPM) 20-10-02, 20-10-03, 20-15-19, 20-20-01, 20-20-02, 20-30-02, 20-41-02, 20-42-02, 20-42-10, 20-50-01, 20-50-03, 20-50-10

g. 767 Aircraft Maintenance Manual (AMM) 27-51-00, 27-51-04, 27-51-15, 51-21

h. 767 Fleet Team Digest (FTD) 57-16001

i. 767-200 Structural Repair Manual (SRM) 51-20-01, 57-53-02

2. Data Supplied with this Service Bulletin:

a. Drawings:

Drawing No	Title	Sheet	DCN/REV	ADCN
113T1227	4-5 ARM ASSY-SUPPORT NO. 3 IN-BOARD T.E. FLAP	6	-	-
		PSDL	C	-
113T1227-35	4-5 ARM ASSY	PL	A	-
113T1227-36	4-5 ARM ASSY	PL	A	-

3. Installation Drawings Used in the Preparation of this Service Bulletin:

Drawing Number	Title
113T1227	4-5 ARM ASSY - SUPPORT NO. 3 INBOARD T.E. FLAP

The table above lists applicable drawings used to prepare this service bulletin. The drawings are not necessary to make the specified changes, and are not supplied with this service bulletin. The drawings may not be applicable to all airplane configurations or operators.

K. Publications Affected

1. Publications:

Publication	Chapter-Section
767 Aircraft Maintenance Manual	27-51
767 Component Maintenance Manual	57-53
767 Illustrated Parts Catalog	57-51

2. Damage Tolerance Based Structural Inspections:

Boeing has evaluated the repairs and/or changes in this service bulletin for effects on Fatigue Critical Structure (FCS) and for changes to Damage Tolerance Inspections (DTI) required in the Maintenance Program. This service bulletin does not affect FCS, therefore DTIs are not necessary.

L. Interchangeability and Intermixability of Parts

Accomplishment of this service bulletin does not affect interchangeability or intermixability of parts.

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M. Software Accomplishment Summary

Not affected.

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2. MATERIAL INFORMATION

A. Material - Price and Availability

The operator can supply the parts and materials shown in Paragraph 2.C., Parts Necessary for Each Airplane . As an alternative, operators can purchase the parts from Boeing Spares. This service bulletin does not show the Boeing price and supply data.

B. Industry Support Information

Boeing warranty remedies are available for 767 airplanes in warranty as of August 12, 2015. For task hour and material reimbursement for airplanes in warranty as of that date, send a warranty claim to BCA Contracts - Warranty. The warranty remedies will expire eight years from the original issue date of this service bulletin.

C. Parts Necessary for Each Airplane

1. Kits/Parts

None.

2. Parts and Materials Supplied by the Operator

The following parts or materials are necessary to do the change in this service bulletin. Parts and materials in the manuals given in Paragraph 1.J., References, can also be necessary. Examine operator part and material supply to make sure all necessary parts and materials are available.

Part Number / Specification	QTY	Name	Existing Part Number	Notes
BMS 10-11, Type I	8 oz	Primer	-	(a)
BMS 10-60, Type I	8 oz	Gloss Enamel	-	(a)
113T1227-35	1	Crank Arm Assembly - Left Side	-	(b) (c)
113T1227-36	1	Crank Arm Assembly - Right Side	-	(b) (c)
113T1347-66	2	Bushing	-	(b) (d)
113T1347-51	4	Bushing	-	(b) (d)
113T1347-52	4	Bushing	-	(b) (d)
BACN10JC4CD	4	Nut	-	(b) (d)
BMS 5-95	12 oz	Sealant	-	(a)
(a) Refer to the Qualified Products List at the end of the Boeing Material Specification (BMS) for supplier data.				
(b) This part is used in production.				
(c) This part is only necessary for the replacement of the existing 4-5 actuator crank arm assembly.				
(d) This part is only necessary for the modification of the existing 4-5 actuator crank arm assembly.				

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3. Parts Modified and Reidentified

Existing Part Number	QTY	Name	New Part Number	Notes
113T1227-29 (c)	1	Crank Arm Assembly - Left Side	113T1227-35 (b)	(a)
113T1227-30 (c)	1	Crank Arm Assembly - Right Side	113T1227-36 (b)	(a)
113T1227-25 (c)	1	Crank Arm - Left Side	113T1227-31 (b)	(a)
113T1227-26 (c)	1	Crank Arm - Right Side	113T1227-32 (b)	(a)
113T1227-27 (c)	1	Crank Arm - Left Side	113T1227-33 (b)	(a)
113T1227-28 (c)	1	Crank Arm - Right Side	113T1227-34 (b)	(a)
(a) Make the change in accordance with this service bulletin.				
(b) This is the part number after the change is done in accordance with this service bulletin.				
(c) This part is not used in production.				

4. Parts Removed and Not Replaced

None.

D. Parts Necessary to Change Spares

None.

E. Special Tooling - Price and Availability

None.

F. Special Tooling Necessary to do this Service Bulletin

No special tools or equipment are necessary to do the change in this service bulletin. But, maintenance and overhaul tools in the manuals given in Paragraph 1.J., References, can be necessary. Examine operator tool supply to make sure all necessary tools are available.

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3. ACCOMPLISHMENT INSTRUCTIONS

A. GENERAL INFORMATION

CAUTION: KEEP THE WORK AREA, WIRES AND ELECTRICAL BUNDLES CLEAN OF METAL PARTICLES OR CONTAMINATION WHEN YOU USE TOOLS. UNWANTED MATERIAL, METAL PARTICLES OR CONTAMINATION CAUGHT IN WIRE BUNDLES CAN CAUSE DAMAGE TO THE BUNDLES. DAMAGED WIRE BUNDLES CAN CAUSE SPARKS OR OTHER ELECTRICAL DAMAGE.

NOTE:

1. Manual titles are referred to by acronyms. Refer to Paragraph 1.J., References, for definition of the acronyms.

2. Obey all of the warnings and cautions given in the specified manual sections.

3. Unless shown differently, these dimensions and tolerances are used:

   - Linear dimensions are in inches
   - Tolerance on linear dimensions, other than rivet and bolt edge margins, is plus or minus 0.03 inch
   - Tolerance on rivet and bolt edge margin is plus or minus 0.05 inch
   - Angular tolerance is plus or minus 2 degrees
   - Hole dimensions for standard solid rivets and fasteners are in Structural Repair Manual (SRM) Chapter 51
   - Torque Values:
     - Values for structural fasteners are given in 767 Structural Repair Manual, Chapter 51.
     - Values for airframe maintenance tasks are included in Chapter 20 of 767 Aircraft Maintenance Manual (AMM).
     - Values for electrical maintenance tasks are included in Chapter 20 of Standard Wiring Practices Manual (SWPM).
     - Values for engine maintenance tasks are included in Chapter 70 of 767 Aircraft Maintenance Manual (AMM).
     - Non-standard torque values for maintenance tasks are included in the applicable installation step.

4. Use the approved fastener, process and material substitutions in accordance with SRM Chapter 51.

5. If the length of any fastener specified in this service bulletin does not meet installation standards given in SRM Chapter 51, then a fastener of the same specification, or an approved substitute, with a length which meets the installation standards given in SRM Chapter 51 may be used. In addition, washers may be installed for fastener grip length in accordance with SRM Chapter 51. Refer to SOPM 20-50-01 for alternate full threaded fasteners (screws) needed for installation in this service bulletin.

6. A Detailed Inspection is defined as: An intensive examination of a specific item, installation, or assembly to detect damage, failure, or irregularity. Available lighting is normally supplemented with a direct source of good lighting at an intensity deemed appropriate. Inspection aids such as mirrors, magnifying lenses, etc. may be necessary. Surface cleaning and elaborate procedures may be required.

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7. A General Visual Inspection is defined as: A visual examination of an interior or exterior area, installation or assembly to detect obvious damage, failure or irregularity. This level of inspection is made from within touching distance unless otherwise specified. A mirror may be necessary to enhance visual access to all exposed surfaces in the inspection area. This level of inspection is made under normally available lighting conditions such as daylight, hangar lighting, flashlight or drop-light and may require removal or opening of access panels or doors. Stands, ladders or platforms may be required to gain proximity to the area being checked.

8. These work instructions refer to procedures included in other Boeing documents. When the words "refer to" are used and the operator has an accepted alternative procedure, the accepted alternative procedure can be used. When the words "in accordance with" are included in the instruction, the procedure in the Boeing document must be used.

9. Boeing Service Letter 767-SL-51-036, Damage Reporting and Repair Plan/Design Guidelines, is an acceptable procedure to request information from Boeing for additional structural repair instructions. The Service Letter describes what information must be provided to Boeing before a structural repair can be provided.

10. Refer to APPENDIX A for logic diagram. Logic diagrams are provided as an aid only. Information contained in Paragraph 1.E., Compliance is the primary source for compliance times. Information in Paragraph 3.B., Work Instructions is the primary source for tasks required for compliance.

11. The instructions in Paragraph 3.B., Work Instructions and the figures can include operation of tools or test equipment. Boeing Engineering Tool Drawings, the Illustrated Tool and Equipment Manual, and the Special Tool and Ground Handling Drawing Index contain data on versions of the tools or test equipment that you can use. It is permitted to use replaced tools. It is not permitted to use superseded tools.

12. If it is necessary to remove more parts for access, you can remove those parts. If you can get access without removing identified parts, it is not necessary to remove all of the identified parts. Jacking and shoring limitations must be observed.

13. Where the work instructions include installation of a kept part, a new or serviceable part with the same part number can be installed as an alternative to the kept part.

14. Use of colors in Figures is based on guidance from the ATA e-Business Program (ATA) iSpec 2200.

15. When more than one OPTION is given for a CONDITION, do only one of the OPTION numbers. When more than one ACTION is given for a CONDITION number or an OPTION number, do all of the ACTION numbers for that CONDITION number or OPTION number.

16. The compliance times for the actions in Paragraph 3.B., WORK INSTRUCTIONS are in Paragraph 1.E., Compliance.

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17. Some steps in the Work Instructions are labeled as Required for Compliance (RC). If this service bulletin is mandated by an Airworthiness Directive (AD), then the steps labeled as RC, including sub-steps under an RC step and any figures identified in an RC step, must be done to comply with the AD. An Alternative Method of Compliance (AMOC) is required for any deviations to RC steps, including sub-steps and identified figures. Steps not labeled as RC may be deviated from using accepted methods in accordance with the operator's maintenance or inspection program without obtaining approval of an AMOC. This is provided that the RC steps, including sub-steps and identified figures, can still be done as specified, and the airplane can be put back in an airworthy condition.

B. WORK INSTRUCTIONS

WARNING: TRAILING EDGE FLAPS ARE FAST ACTING. MAKE SURE THAT PERSONS AND EQUIPMENT ARE CLEAR OF TRAILING EDGE FLAPS AND THE FLAP DRIVE MECHANISMS BEFORE YOU MOVE THE FLAP CONTROL LEVER. ONCE THE TRAILING FLAPS ARE DEPLOYED LOCKS MUST BE INSTALLED TO PREVENT POSSIBLE INJURY DUE TO INADVERTENT OPERATION OF THE FLAPS.

1. Extend and deactivate the trailing edge flaps. Refer to 767 AMM 27-51-00 as an accepted procedure.

2. Remove and keep the mid section of the inboard flap outboard fairing at support assembly number 3 and number 6. Refer to 767 AMM 27-51-15 as an accepted procedure.

3. RC - Do PART 1: 6-9 DRIVE ARM ASSEMBLY GENERAL VISUAL INSPECTION for any damage caused by interference with the 4-5 actuator crank arm assembly.

   a. CONDITION 1: ANY DAMAGE FOUND ON 6-9 DRIVE ARM ASSEMBLY

      (1) OPTION 1:

         (a) OPTION 1 (ACTION 1): Do PART 2: 4-5 ACTUATOR CRANK ARM ASSEMBLY INTERIM BLEND REPAIR on the crank arms associated with the damaged 6-9 drive arm assembly.

         (b) OPTION 1 (ACTION 2): Do PART 3: 6-9 DRIVE ARM ASSEMBLY REPAIR.

         (c) OPTION 1 (ACTION 3): Repeat PART 1: 6-9 DRIVE ARM ASSEMBLY GENERAL VISUAL INSPECTION for any damage caused by interference with the 4-5 actuator crank arm assembly.

      (2) OPTION 2:

         (a) OPTION 2 (ACTION 1): Do PART 3: 6-9 DRIVE ARM ASSEMBLY REPAIR.

         (b) OPTION 2 (ACTION 2): Do PART 4: 4-5 ACTUATOR CRANK ARM ASSEMBLY REPLACEMENT (TERMINATING ACTION) on the crank arms associated with the damaged 6-9 drive arm assembly.

      (3) OPTION 3:

         (a) OPTION 3 (ACTION 1): Do PART 3: 6-9 DRIVE ARM ASSEMBLY REPAIR.

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(b) OPTION 3 (ACTION 2): Do PART 5: 4-5 ACTUATOR CRANK ARM ASSEMBLY MODIFICATION (TERMINATING ACTION) on the crank arms associated with the damaged 6-9 drive arm assembly.

b. CONDITION 2: NO DAMAGE FOUND ON 6-9 DRIVE ARM ASSEMBLY

(1) OPTION 4: Repeat PART 1: 6-9 DRIVE ARM ASSEMBLY GENERAL VISUAL INSPECTION for any damage caused by interference with the 4-5 actuator crank arm assembly.

(2) OPTION 5: Do PART 4: 4-5 ACTUATOR CRANK ARM ASSEMBLY REPLACEMENT (TERMINATING ACTION) on the crank arms associated with the undamaged 6-9 drive arm assembly.

(3) OPTION 6: Do PART 5: 4-5 ACTUATOR CRANK ARM ASSEMBLY MODIFICATION (TERMINATING ACTION) on the crank arms associated with the undamaged 6-9 drive arm assembly.

4. Install the kept mid section of the inboard flap outboard fairing at support assembly number 3 and number 6. Refer to 767 AMM 27-51-15 as an accepted procedure.

5. Activate the trailing edge flaps. Refer to 767 AMM 27-51-00 as an accepted procedure.

6. Put the airplane back to a serviceable condition.

PART 1: 6-9 DRIVE ARM ASSEMBLY GENERAL VISUAL INSPECTION

1. Do a General Visual Inspection of the 6-9 drive arm assembly on the left and right wing for any damage caused by interference with the 4-5 actuator crank arm assembly in accordance with FIGURE 1 and FIGURE 2.

NOTE: Damage caused by interference with the 4-5 actuator crank arm assembly is defined as: Worn paint or primer, or worn paint, worn primer and bare metal.

NOTE: If a terminating action has been accomplished on only the left wing or right wing 6-9 drive arm assembly, then any repeat inspection is only in accordance with FIGURE 1 or FIGURE 2 as applicable.

PART 2: 4-5 ACTUATOR CRANK ARM ASSEMBLY INTERIM BLEND REPAIR

1. Do the repair of the 4-5 actuator crank arm assembly in accordance with FIGURE 3 left side, or FIGURE 4 right side.

PART 3: 6-9 DRIVE ARM ASSEMBLY REPAIR

1. If the damage to the 6-9 drive arm assembly caused by interference with the 4-5 actuator crank arm assembly is worn paint, or worn paint and primer, then repair the worn finishes. Refer to 767-200 SRM 51-20-01 as an accepted procedure.

If the damage to the 6-9 drive arm assembly caused by interference with the 4-5 actuator crank arm assembly is worn paint, worn primer and bare metal, then:

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a. Repair the bare metal in accordance with 767-200 SRM 57-53-02, Allowable Damage 2. If the damage is more than allowable in accordance with 767-200 SRM 57-53-02, Allowable Damage 2, contact The Boeing Company for instructions, and do the instructions.

b. Repair the worn finishes. Refer to 767-200 SRM 51-20-01 as an accepted procedure.

PART 4: 4-5 ACTUATOR CRANK ARM ASSEMBLY REPLACEMENT

1. Remove the damaged 4-5 actuator crank arm assembly in accordance with FIGURE 5 left side, or FIGURE 6 right side.

2. Install a new 4-5 actuator crank arm assembly in accordance with and FIGURE 11 left side, or FIGURE 12 right side.

PART 5: 4-5 ACTUATOR CRANK ARM ASSEMBLY MODIFICATION

1. Remove the 4-5 actuator crank arm assembly in accordance with FIGURE 5 left side, or FIGURE 6 right side.

2. Disassemble the 4-5 actuator crank arm assembly in accordance with FIGURE 7 left side, or FIGURE 8 right side.

3. Do the modification of the 4-5 crank arms and assemble the 4-5 actuator crank arm assembly in accordance with FIGURE 9 left side, or FIGURE 10 right side.

4. Install the modified 4-5 actuator crank arm assembly in accordance with FIGURE 11 left side, or FIGURE 12 right side.

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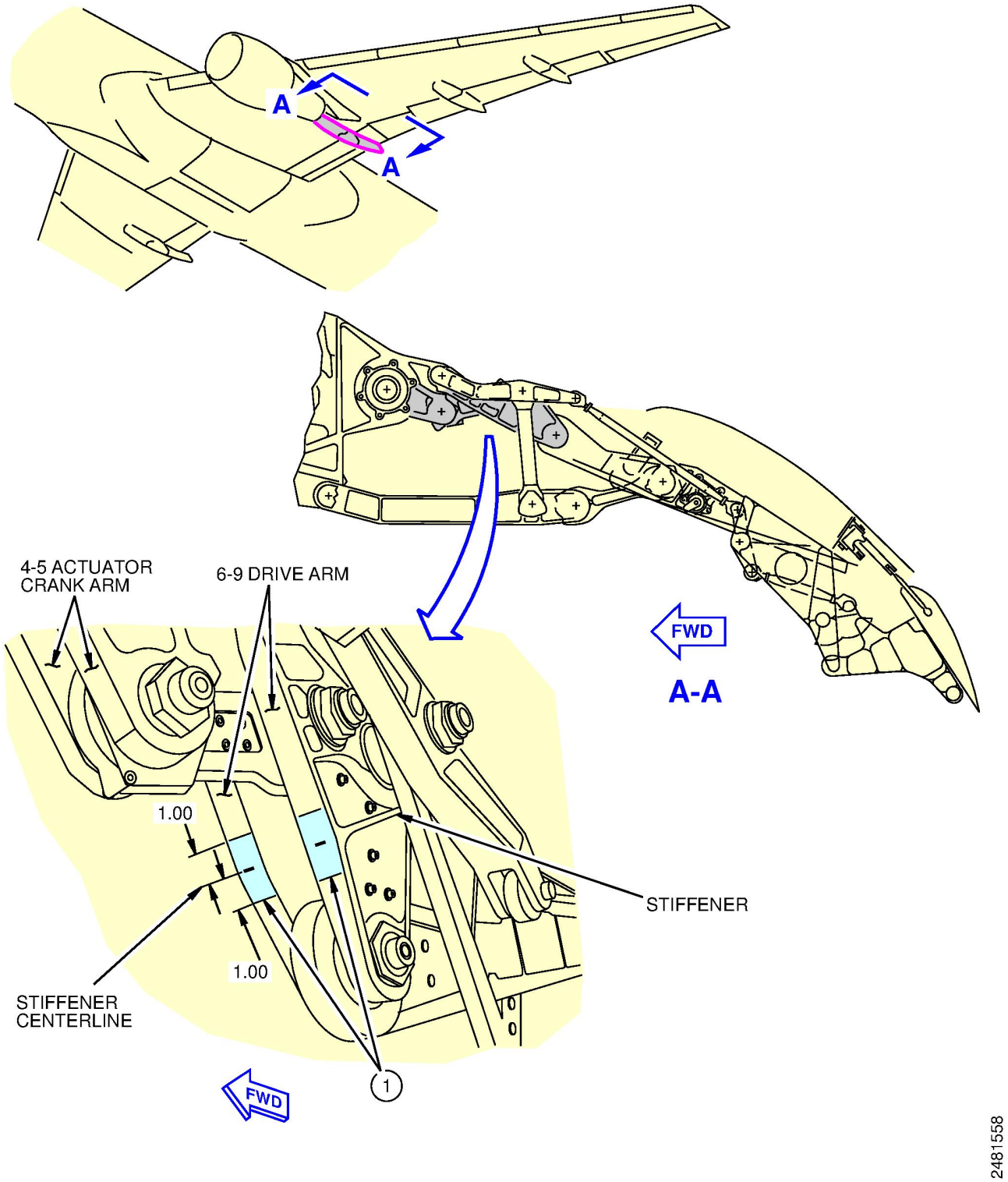


FIGURE 1: LEFT WING INBOARD FLAP OUTBOARD SUPPORT - 6-9 DRIVE ARM ASSEMBLY GENERAL VISUAL INSPECTION
(SHEET 1 OF 2)

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The step numbers shown below agree with the numbers shown in the circle symbols in the figure. The QTY numbers shown below are the number of parts necessary for Left Wing Inboard Flap Support - 6-9 Drive Arm Assembly General Visual Inspection.

Step	Task	Name	Identification	Qty	More Data
1	Inspect	6-9 Drive Arm Assembly	-	1	Do a General Visual Inspection for any damage caused by interference with the 4-5 actuator crank arm assembly.

FIGURE 1: LEFT WING INBOARD FLAP OUTBOARD SUPPORT - 6-9 DRIVE ARM ASSEMBLY GENERAL VISUAL INSPECTION
(SHEET 2 OF 2)

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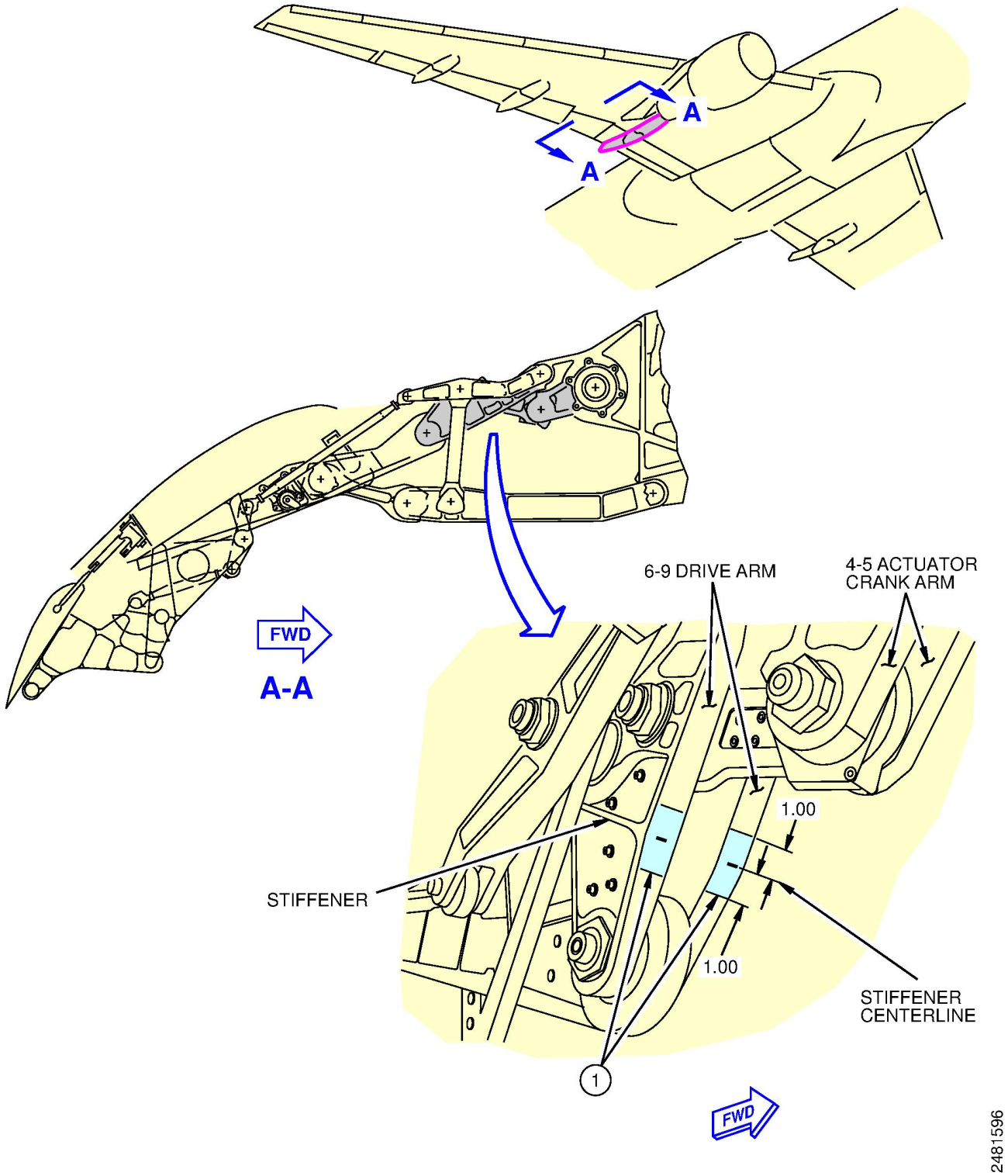


FIGURE 2: RIGHT WING INBOARD FLAP OUTBOARD SUPPORT - 6-9 DRIVE ARM ASSEMBLY GENERAL VISUAL INSPECTION (SHEET 1 OF 2)

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The step numbers shown below agree with the numbers shown in the circle symbols in the figure. The QTY numbers shown below are the number of parts necessary for Right Wing Inboard Flap Support - 6-9 Drive Arm Assembly General Visual Inspection.

Step	Task	Name	Identification	Qty	More Data
1	Inspect	6-9 Drive Arm Assembly	-	1	Do a General Visual Inspection for any damage caused by interference with the 4-5 actuator crank arm assembly.

FIGURE 2: RIGHT WING INBOARD FLAP OUTBOARD SUPPORT - 6-9 DRIVE ARM ASSEMBLY GENERAL VISUAL INSPECTION
(SHEET 2 OF 2)

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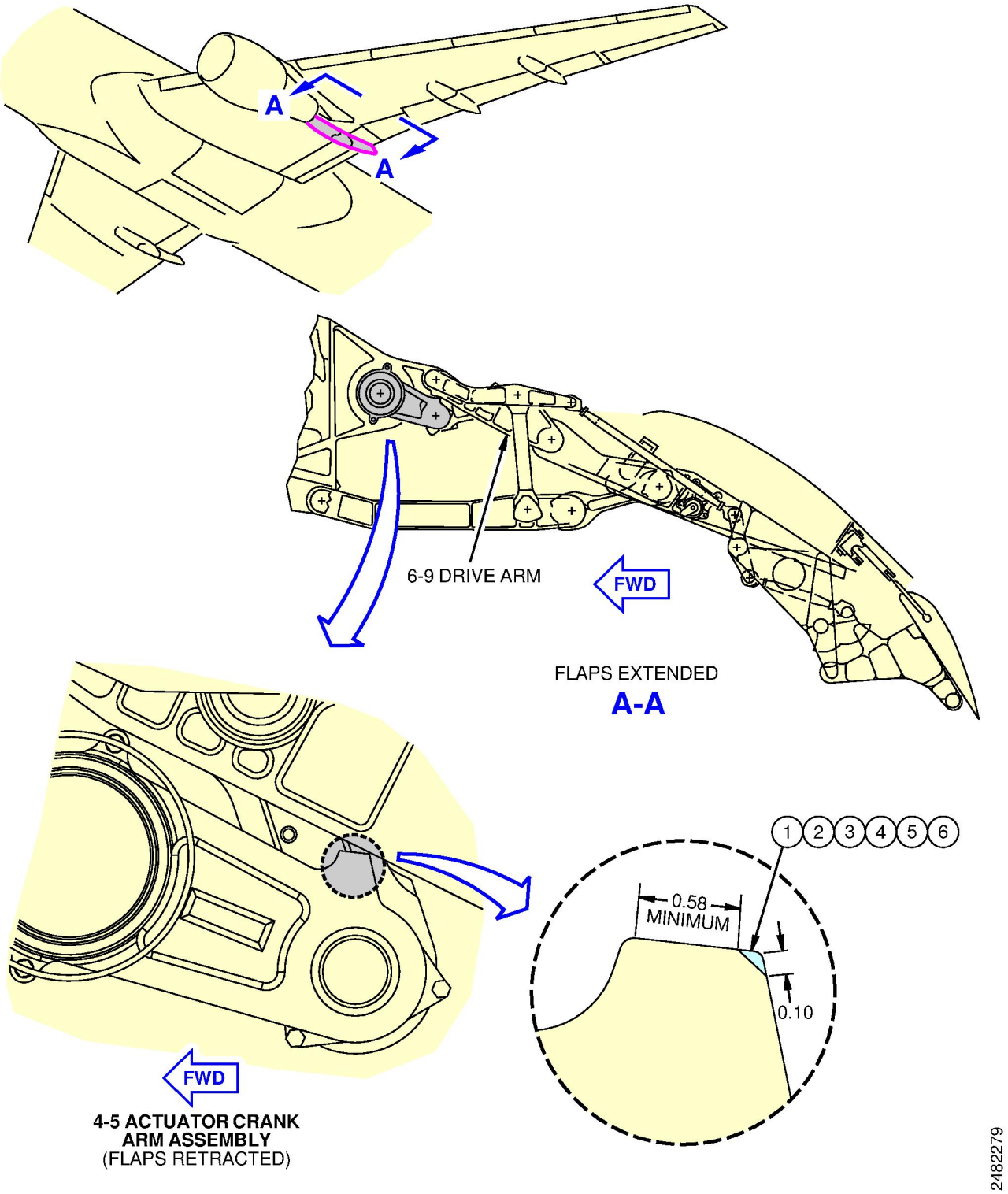


FIGURE 3: LEFT WING INBOARD FLAP OUTBOARD SUPPORT - 4-5 ACTUATOR CRANK ARM - INTERIM BLEND REPAIR
(SHEET 1 OF 2)

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The step numbers shown below agree with the numbers shown in the circle symbols in the figure. The QTY numbers shown below are the number of parts necessary for Left Wing Inboard Flap Support - 4-5 Actuator Crank Arm - Interim Blend Repair.

Step	Task	Name	Identification	Qty	More Data
1	Chamfer	Crank Arm	113T1227-25/-27	2	(a)
2	Inspect	Crank Arm	113T1227-25/-27	2	(b)
3	Prepare	Crank Arm	113T1227-25/-27	2	Flap peen the repaired area using an intensity of 0.012A and a coverage of 2.0. Refer to SOPM 20-10-03 as an accepted procedure.
4	Apply	Cadmium Plate	-	-	Stylus cadmium plate the repaired area. Refer to SOPM 20-42-10 as an accepted procedure.
5	Apply	Primer	BMS 10-11 TYPE I	-	Apply one layer of primer to the repaired area. Refer to SOPM 20-41-02 as an accepted procedure.
6	Apply	Gloss Enamel	BMS 10-60 TYPE I	-	Apply one layer of gloss enamel to the repaired area. Refer to 767 AMM 51-21 as an accepted procedure.

(a) Chamfer the extend overtravel stops as shown to remove all damage. Use hand tools or portable hand-held motors with abrasive tools to break all sharp edges caused by the repair. Refer to SOPM 20-10-03 as an accepted procedure for hand tools. Make sure that a surface roughness of 125 Ra or better is achieved. Material removal using hand-held motors must be followed with a local etch for heat damage inspection. If any discoloration is found, the part must be replaced. Refer to SOPM 20-10-02 as an accepted procedure.

(b) Do a local penetrant inspection of the repaired area for surface defects. Refer to SOPM 20-20-02 as an accepted procedure. If any surface defect is found, contact The Boeing Company for instructions, and do the instructions.

FIGURE 3: LEFT WING INBOARD FLAP OUTBOARD SUPPORT - 4-5 ACTUATOR CRANK ARM - INTERIM BLEND REPAIR
(SHEET 2 OF 2)

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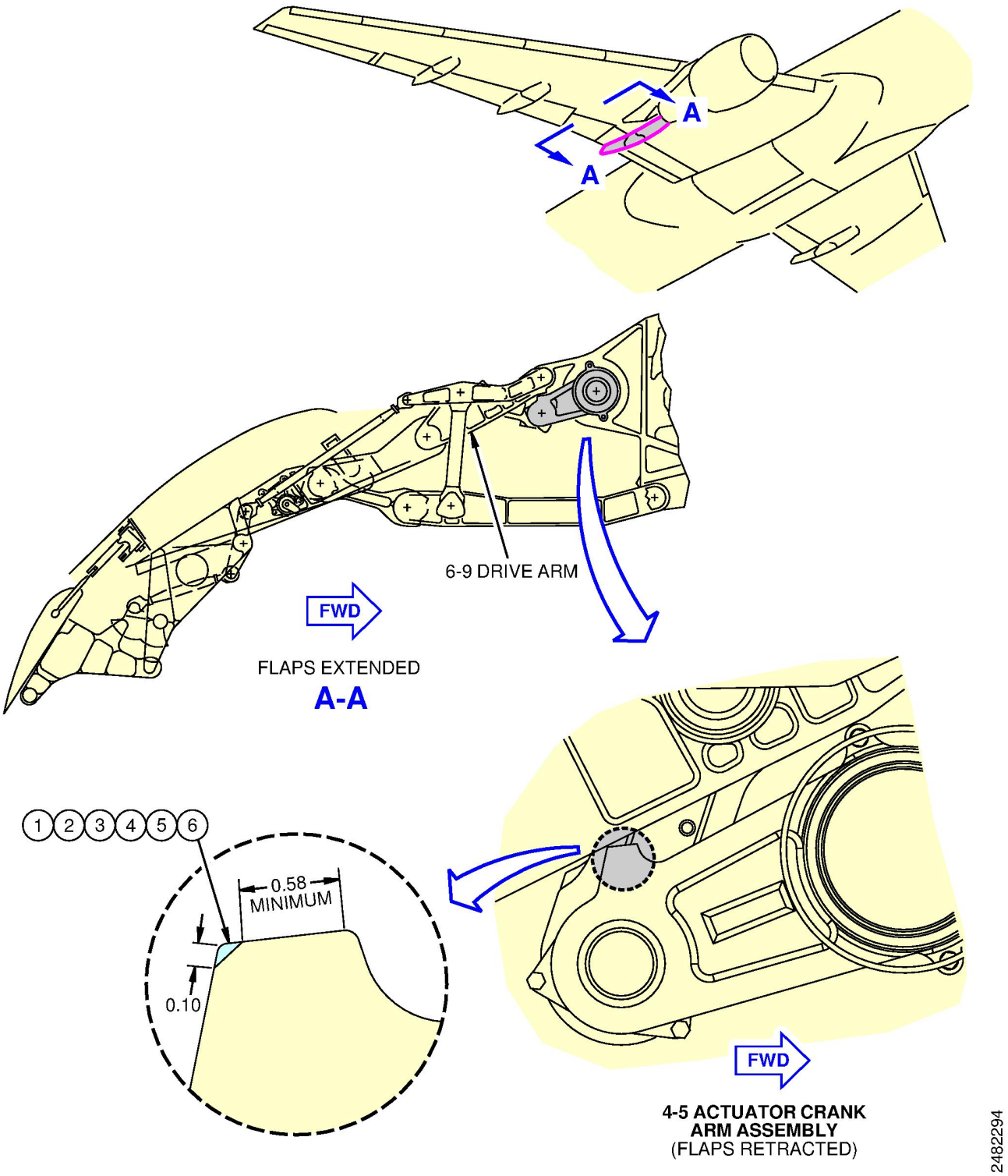


FIGURE 4: RIGHT WING INBOARD FLAP OUTBOARD SUPPORT - 4-5 ACTUATOR CRANK ARM - INTERIM BLEND REPAIR
(SHEET 1 OF 2)

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The step numbers shown below agree with the numbers shown in the circle symbols in the figure. The QTY numbers shown below are the number of parts necessary for Right Wing Inboard Flap Support - 4-5 Actuator Crank Arm - Interim Blend Repair.

Step	Task	Name	Identification	Qty	More Data
1	Chamfer	Crank Arm	113T1227-26/-28	2	(a)
2	Inspect	Crank Arm	113T1227-26/-28	2	(b)
3	Prepare	Crank Arm	113T1227-26/-28	2	Flap peen the repaired area using an intensity of 0.012A and a coverage of 2.0. Refer to SOPM 20-10-03 as an accepted procedure.
4	Apply	Cadmium Plate	-	-	Stylus cadmium plate the repaired area. Refer to SOPM 20-42-10 as an accepted procedure.
5	Apply	Primer	BMS 10-11 TYPE I	-	Apply one layer of primer to the repaired area. Refer to SOPM 20-41-02 as an accepted procedure.
6	Apply	Gloss Enamel	BMS 10-60 TYPE I	-	Apply one layer of gloss enamel to the repaired area. Refer to 767 AMM 51-21 as an accepted procedure.

(a) Chamfer the extend overtravel stops as shown to remove all damage. Use hand tools or portable hand-held motors with abrasive tools to break all sharp edges caused by the repair. Refer to SOPM 20-10-03 as an accepted procedure for hand tools. Make sure that a surface roughness of 125 Ra or better is achieved. Material removal using hand-held motors must be followed with a local etch for heat damage inspection. If any discoloration is found, the part must be replaced. Refer to SOPM 20-10-02 as an accepted procedure.

(b) Do a local penetrant inspection of the repaired area for surface defects. Refer to SOPM 20-20-02 as an accepted procedure. If any surface defect is found, contact The Boeing Company for instructions, and do the instructions.

FIGURE 4: RIGHT WING INBOARD FLAP OUTBOARD SUPPORT - 4-5 ACTUATOR CRANK ARM - INTERIM BLEND REPAIR
(SHEET 2 OF 2)

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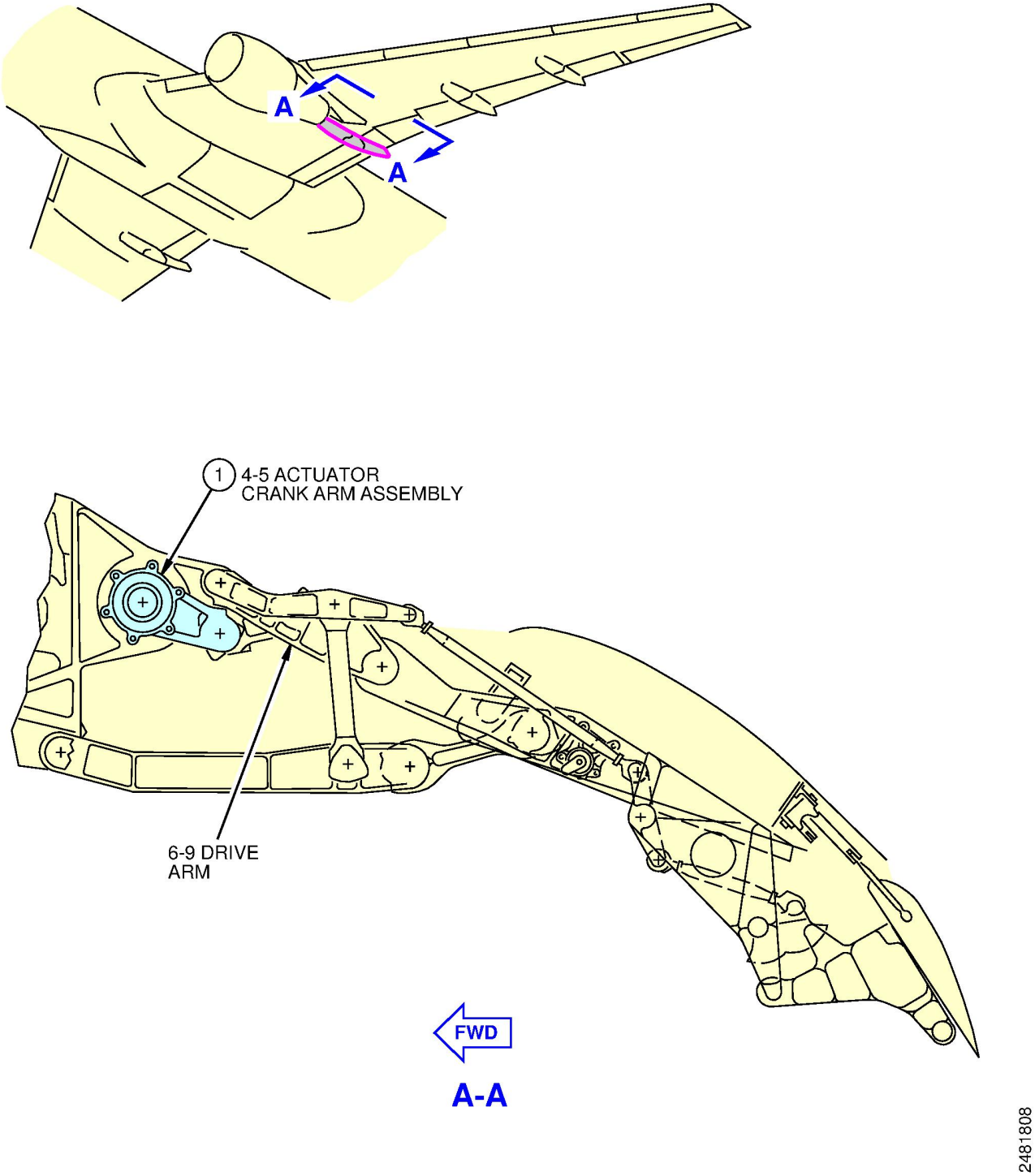


FIGURE 5: LEFT WING INBOARD FLAP OUTBOARD SUPPORT - 4-5 ACTUATOR CRANK ARM ASSEMBLY REMOVAL
(SHEET 1 OF 2)

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The step numbers shown below agree with the numbers shown in the circle symbols in the figure. The QTY numbers shown below are the number of parts necessary for Left Wing Inboard Flap Support.

Step	Task	Name	Identification	Qty	More Data
1	Remove	4-5 Actuator Crank Arm Assembly	113T1227-29	1	Refer to 767 AMM 27-51-04 as an accepted procedure.

FIGURE 5: LEFT WING INBOARD FLAP OUTBOARD SUPPORT - 4-5 ACTUATOR CRANK ARM ASSEMBLY REMOVAL
(SHEET 2 OF 2)

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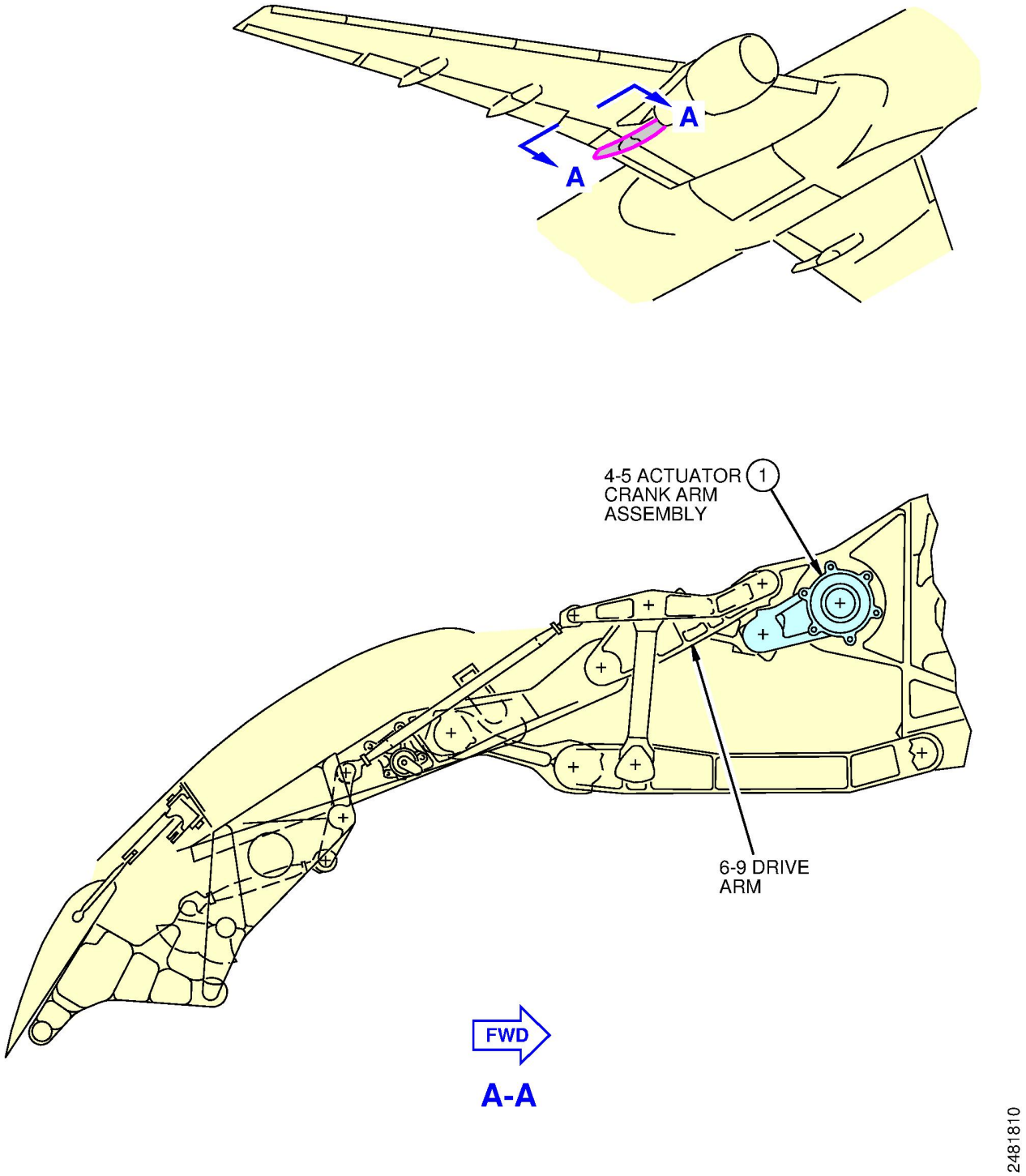


FIGURE 6: RIGHT WING INBOARD FLAP OUTBOARD SUPPORT - 4-5 ACTUATOR CRANK ARM ASSEMBLY REMOVAL
(SHEET 1 OF 2)

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ALERT **ALERT**

The step numbers shown below agree with the numbers shown in the circle symbols in the figure. The QTY numbers shown below are the number of parts necessary for Right Wing Inboard Flap Support.

Step	Task	Name	Identification	Qty	More Data
1	Remove	4-5 Actuator Crank Arm Assembly	113T1227-30	1	Refer to 767 AMM 27-51-04 as an accepted procedure.

FIGURE 6: RIGHT WING INBOARD FLAP OUTBOARD SUPPORT - 4-5 ACTUATOR CRANK ARM ASSEMBLY REMOVAL
(SHEET 2 OF 2)

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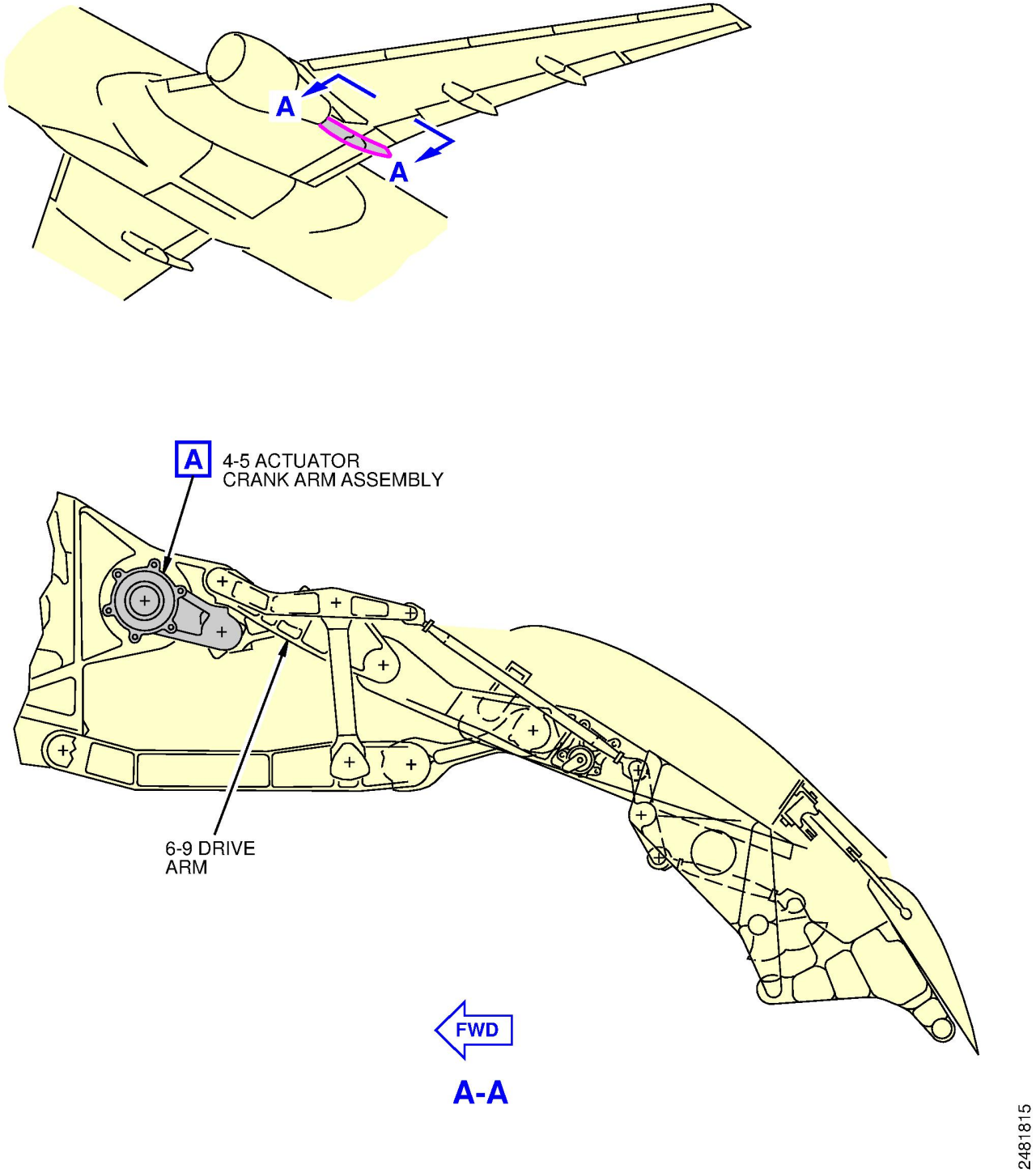


FIGURE 7: LEFT WING INBOARD FLAP OUTBOARD SUPPORT - 4-5 ACTUATOR CRANK ARM DISASSEMBLY
(SHEET 1 OF 3)

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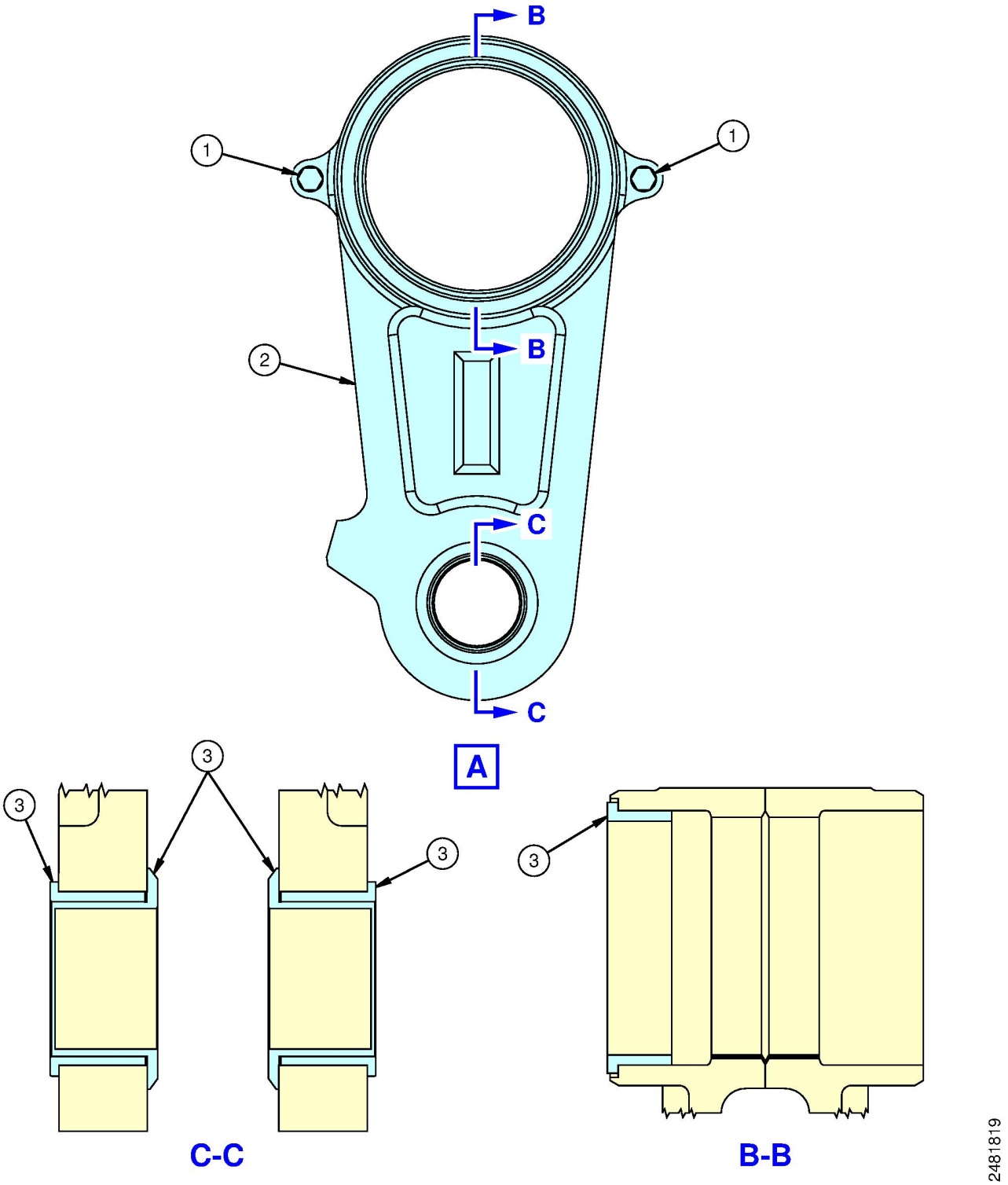


FIGURE 7: LEFT WING INBOARD FLAP OUTBOARD SUPPORT - 4-5 ACTUATOR CRANK ARM DISASSEMBLY
(SHEET 2 OF 3)

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The step numbers shown below agree with the numbers shown in the circle symbols in the figure. The QTY numbers shown below are the number of parts necessary for Left Wing Inboard Flap Support.

Step	Task	Name	Identification	Qty	More Data
1	Remove	Nut	BACN10JC4CD	2	-
	Remove / Keep	Bolt	BACB30NR4K14	2	-
	Remove / Keep	Washer	BACW10BP4CD	2	-
	Remove / Keep	Washer	BACW10BP4DP	2	-
2	Disassemble	4-5 Actuator Crank Arm Assembly	113T1227-29	1	-
3	Remove	Bushing	113T1347-66	1	Discard removed bushing.
	Remove	Bushing	113T1347-51	2	Discard removed bushing.
	Remove	Bushing	113T1347-52	2	Discard removed bushing.

FIGURE 7: LEFT WING INBOARD FLAP OUTBOARD SUPPORT - 4-5 ACTUATOR CRANK ARM DISASSEMBLY
(SHEET 3 OF 3)

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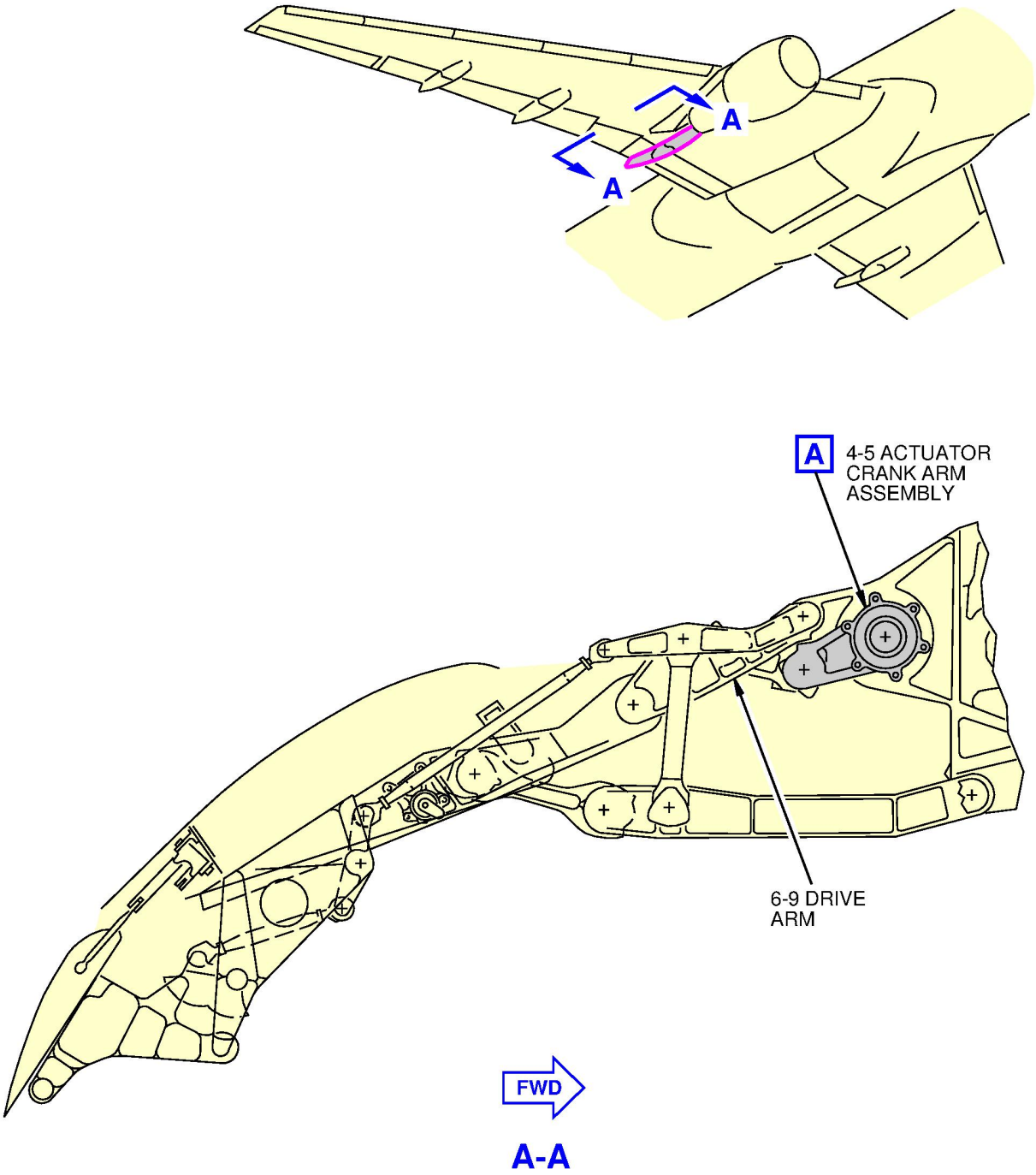


FIGURE 8: RIGHT WING INBOARD FLAP OUTBOARD SUPPORT - 4-5 ACTUATOR CRANK ARM DISASSEMBLY
(SHEET 1 OF 3)

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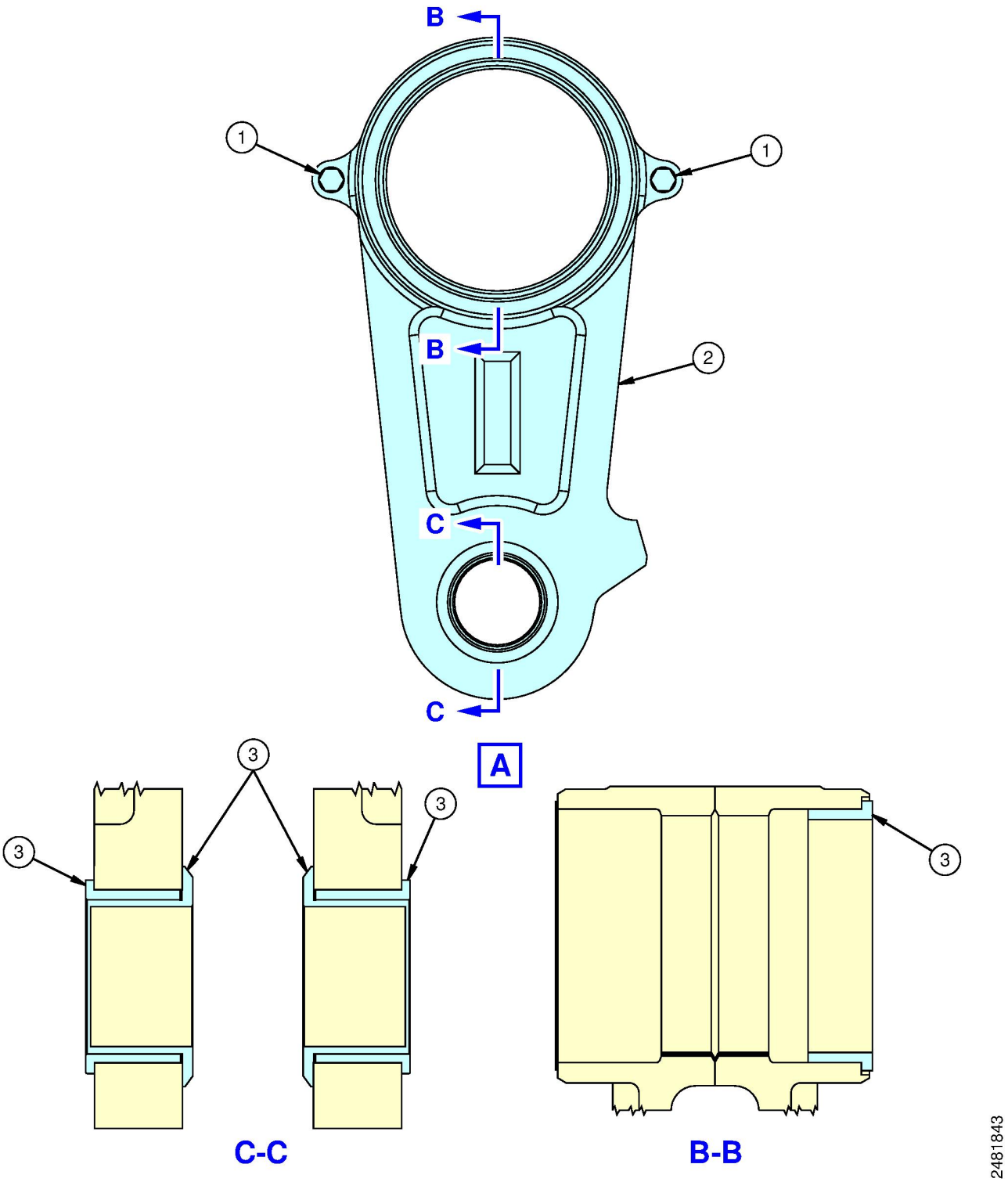


FIGURE 8: RIGHT WING INBOARD FLAP OUTBOARD SUPPORT - 4-5 ACTUATOR CRANK ARM DISASSEMBLY
(SHEET 2 OF 3)

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ALERT **ALERT**

The step numbers shown below agree with the numbers shown in the circle symbols in the figure. The QTY numbers shown below are the number of parts necessary for Right Wing Inboard Flap Support.

Step	Task	Name	Identification	Qty	More Data
1	Remove	Nut	BACN10JC4CD	2	-
	Remove / Keep	Bolt	BACB30NR4K14	2	-
	Remove / Keep	Washer	BACW10BP4CD	2	-
	Remove / Keep	Washer	BACW10BP4DP	2	-
2	Disassemble	4-5 Actuator Crank Arm Assembly	113T1227-29	1	-
3	Remove	Bushing	113T1347-66	1	Discard removed bushing.
	Remove	Bushing	113T1347-51	2	Discard removed bushing.
	Remove	Bushing	113T1347-52	2	Discard removed bushing.

FIGURE 8: RIGHT WING INBOARD FLAP OUTBOARD SUPPORT - 4-5 ACTUATOR CRANK ARM DISASSEMBLY
(SHEET 3 OF 3)

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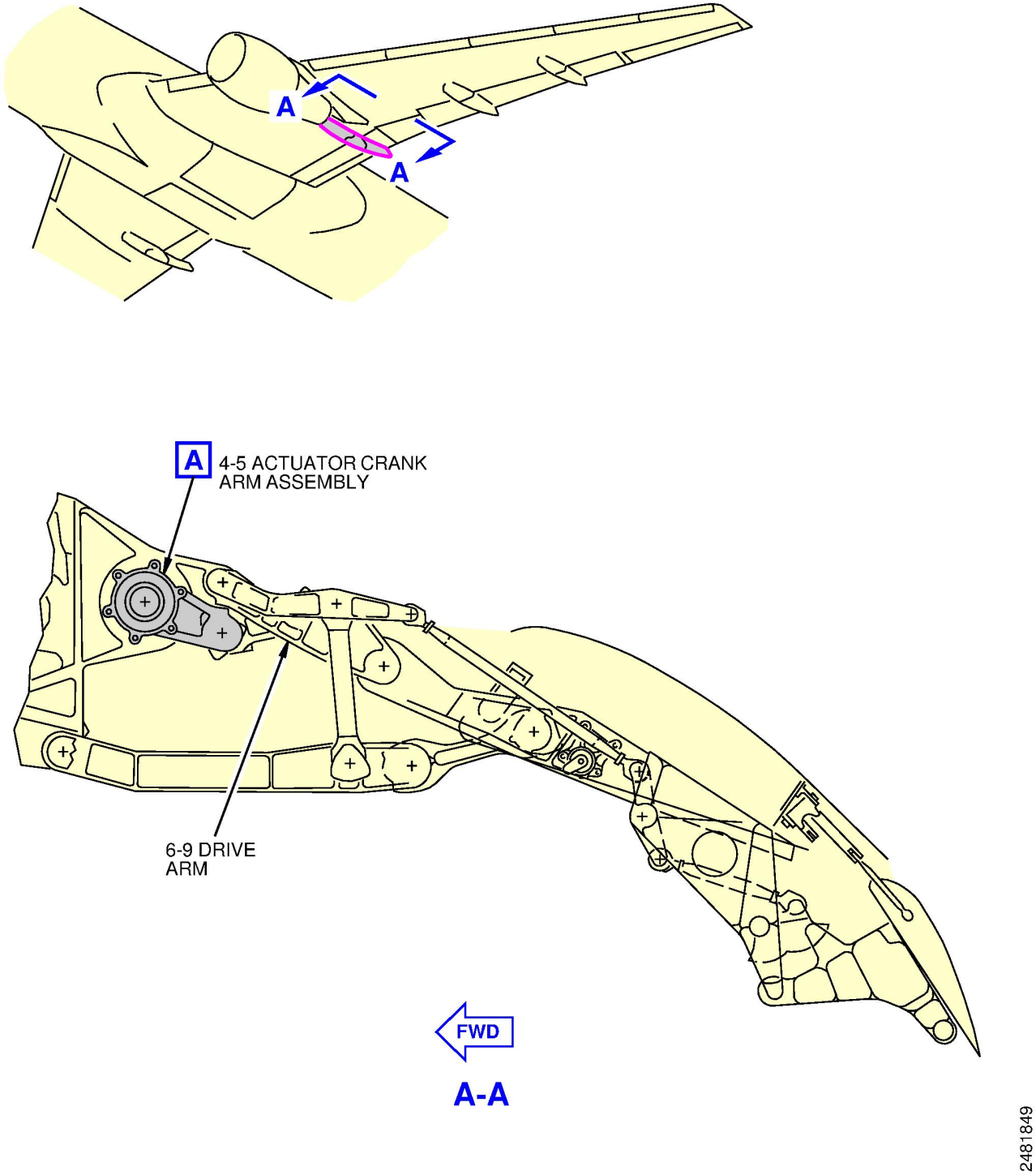


FIGURE 9: LEFT WING INBOARD FLAP OUTBOARD SUPPORT - 4-5 ACTUATOR CRANK ARM MODIFICATION
(SHEET 1 OF 5)

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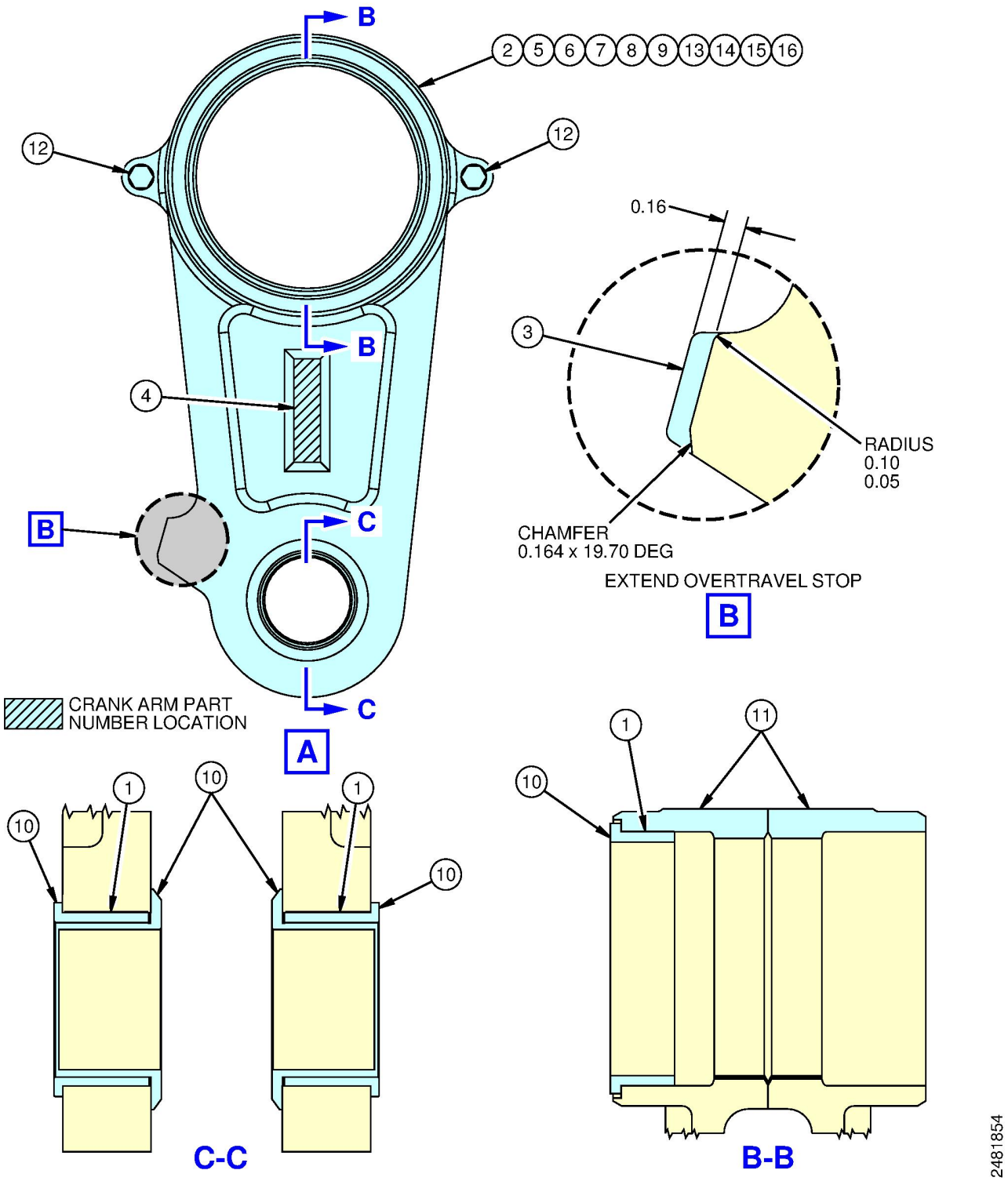


FIGURE 9: LEFT WING INBOARD FLAP OUTBOARD SUPPORT - 4-5 ACTUATOR CRANK ARM MODIFICATION
(SHEET 2 OF 5)

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The step numbers shown below agree with the numbers shown in the circle symbols in the figure. The QTY numbers shown below are the number of parts necessary for Left Wing Inboard Flap Support.

Step	Task	Name	Identification	Qty	More Data
1	Inspect	Bushing Bore	-	3	(a)
2	Clean	Crank Arm	113T1227-25/-27	-	Remove all finishes from the crank arms. Refer to SOPM 20-30-02 as an accepted procedure.
3	Machine	Crank Arm	113T1227-25/-27	2	(b)
4	Identify	Crank Arm	113T1227-31/-33	2	(c)
5	Inspect	Crank Arm	113T1227-31/-33	2	(d)
	Inspect	Crank Arm	113T1227-31/-33	2	(e)
6	Shot Peen	Crank Arm	113T1227-31/-33	2	All areas except splines. Intensity 0.012A, coverage 2.0. Refer to SOPM 20-10-03 as an accepted procedure. Do not peen part numbers.
7	Prepare	Crank Arm	113T1227-31/-33	2	Glass bead peen the splines. Intensity 0.003 - 0.005A, coverage 2.0. Refer to SOPM 20-10-03 as an accepted procedure.
8	Apply	Cadmium Plate	-	-	Apply cadmium-titanium alloy plate and apply chromate treatment all over. 0.0005 - 0.0007 inch. Refer to SOPM 20-42-02 as an accepted procedure.
9	Apply	Primer	BMS 10-11, TYPE 1	-	One coat all areas except bolt holes, splines and 4.75 inch bore. Refer to SOPM 20-41-02 as an accepted procedure.

FIGURE 9: LEFT WING INBOARD FLAP OUTBOARD SUPPORT - 4-5 ACTUATOR CRANK ARM MODIFICATION
(SHEET 3 OF 5)

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Step	Task	Name	Identification	Qty	More Data
10	Install (New)	Bushing	113T1347-52	2	Install bushing by shrink fit method with BMS 5-95 sealant. Refer to SOPM 20-50-03 as an accepted procedure.
	Install (New)	Bushing	113T1347-51	2	-
	Install (New)	Bushing	113T1347-66	1	-
11	Assemble	4-5 Actuator Crank Arm Assembly	113T1227-35	1	In accordance with Boeing Drawing 113T1227.
12	Install (Kept)	Bolt	BACB30NR4K14	2	Apply BMS 5-95 sealant to thread, shank and beneath head of bolts. Refer to SOPM 20-15-19 as an accepted procedure.
	Install (New)	Nut	BACN10JC4CD	2	-
	Install (Kept)	Washer	BACW10BP4CD	2	-
	Install (Kept)	Washer	BACW10BP4DP	2	-
13	Clean	Crank Arm	113T1227-31/-33	2	Clean and reactivate the primed surfaces. Refer to SOPM 20-41-02 as an accepted procedure.
14	Apply	Primer	BMS 10-11, TYPE 1	-	(f)
15	Apply	Gloss Enamel	BMS 10-60 TYPE I	-	All areas except bolt holes, splines, 4.75 inch bore and bushing flanges. Refer to 767 AMM 51-21 as an accepted procedure.
16	Identify	4-5 Actuator Crank Arm Assembly	113T1227-35	1	Re-number the actuator crank arm assembly. Rubber stamp Code RH. Refer to SOPM 20-50-10 as an accepted procedure.

FIGURE 9: LEFT WING INBOARD FLAP OUTBOARD SUPPORT - 4-5 ACTUATOR CRANK ARM MODIFICATION
(SHEET 4 OF 5)

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Step	Task	Name	Identification	Qty	More Data
(a)	Do a detailed inspection with a 10-power magnifying glass, or do a magnetic particle inspection for any crack, scratch or corrosion. Refer to SOPM 20-20-01 as an accepted procedure. If any crack, scratch or corrosion is found, overhaul the crank arm. Refer to CMM 57-53-31, Repair 3-1 as an accepted procedure. If any crack, scratch or corrosion is larger than the rework limits in CMM 57-53-31, Repair 3-1, contact The Boeing Company for instructions, and do the instructions.				
(b)	Remove material from the extend overtravel stops as shown. Refer to SOPM 20-10-02 as an accepted procedure. Make sure that a surface roughness of 125 Ra or better is achieved. Stress relieve the part. Refer to SOPM 20-10-02 as an accepted procedure.				
(c)	Re-number the two crank arms. Vibro-engrave, steel stamp, or dot peen part number in the indicated area only. Characters shall be placed no closer than 0.050 inch to the edge of the indicated area, and a maximum of 0.015 inch deep. Refer to SOPM 20-50-10 as an accepted procedure.				
(d)	Do a heat damage inspection. Refer to SOPM 20-10-02 as an accepted procedure. If any discoloration is found, the part must be replaced.				
(e)	Do a Magnetic Particle Inspection for any surface defects (crack, corrosion or other irregularities). Refer to SOPM 20-20-01 as an accepted procedure. If any surface defect is found, do the repair in accordance with 767-200 SRM 57-53-02 Allowable Damage 2. If any surface defect is larger than the rework limits in 767-200 SRM 57-53-02 Allowable Damage 2, contact The Boeing Company for instructions, and do the instructions.				
(f)	All areas except bolt holes, splines, 4.75 inch bore and bushing flanges. Refer to SOPM 20-41-02 as an accepted procedure. It is not necessary to apply primer to areas that cannot be seen without a mirror.				

FIGURE 9: LEFT WING INBOARD FLAP OUTBOARD SUPPORT - 4-5 ACTUATOR CRANK ARM MODIFICATION
(SHEET 5 OF 5)

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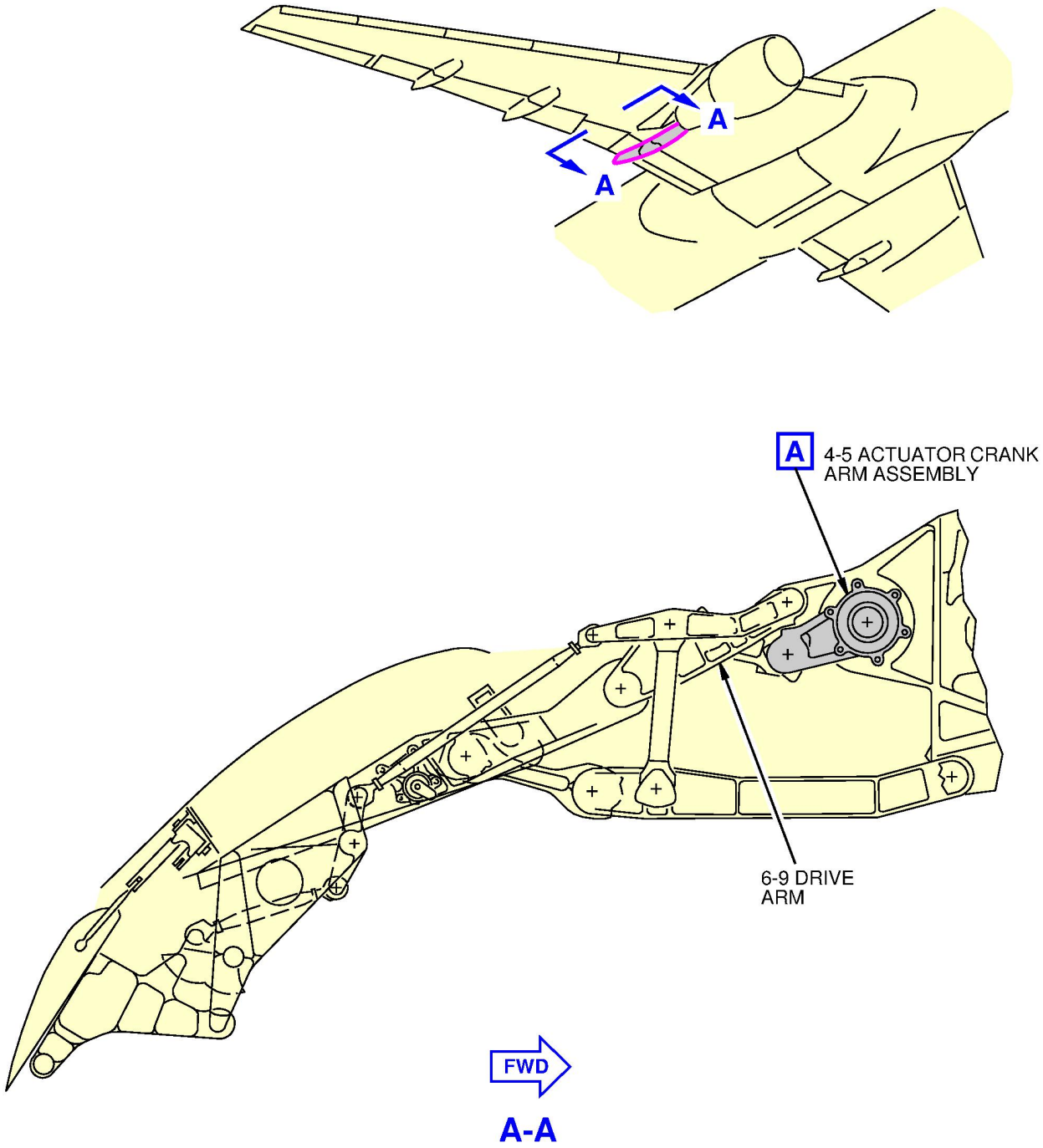


FIGURE 10: RIGHT WING INBOARD FLAP OUTBOARD SUPPORT - 4-5 ACTUATOR CRANK ARM MODIFICATION
(SHEET 1 OF 5)

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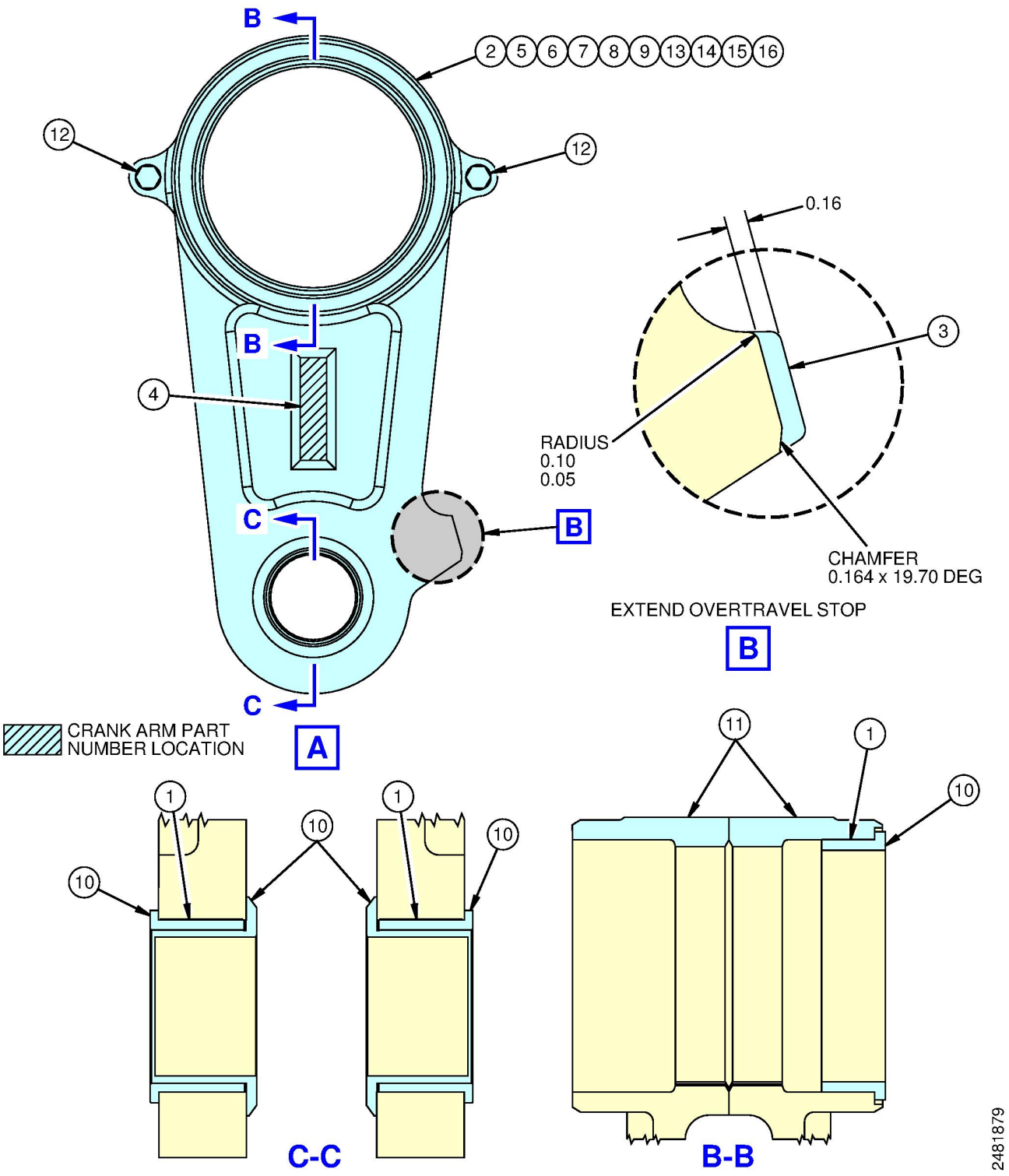


FIGURE 10: RIGHT WING INBOARD FLAP OUTBOARD SUPPORT - 4-5 ACTUATOR CRANK ARM MODIFICATION
(SHEET 2 OF 5)

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The step numbers shown below agree with the numbers shown in the circle symbols in the figure. The QTY numbers shown below are the number of parts necessary for Right Wing Inboard Flap Support.

Step	Task	Name	Identification	Qty	More Data
1	Inspect	Bushing Bore	-	3	(a)
2	Clean	Crank Arm	113T1227-26/-28	-	Remove all finishes from the crank arms. Refer to SOPM 20-30-02 as an accepted procedure.
3	Machine	Crank Arm	113T1227-26/-28	2	(b)
4	Identify	Crank Arm	113T1227-32/-34	2	(c)
5	Inspect	Crank Arm	113T1227-32/-34	2	(d)
	Inspect	Crank Arm	113T1227-32/-34	2	(e)
6	Shot Peen	Crank Arm	113T1227-32/-34	2	All areas except splines. Intensity 0.012A, coverage 2.0. Refer to SOPM 20-10-03 as an accepted procedure. Do not peen part numbers.
7	Prepare	Crank Arm	113T1227-32/-34	2	Glass bead peen the splines. Intensity 0.003 - 0.005A, coverage 2.0. Refer to SOPM 20-10-03 as an accepted procedure.
8	Apply	Cadmium Plate	-	-	Apply cadmium-titanium alloy plate and apply chromate treatment all over. 0.0005 - 0.0007 Inch. Refer to SOPM 20-42-02 as an accepted procedure.
9	Apply	Primer	BMS 10-11, TYPE 1	-	One coat all areas except bolt holes, splines and 4.75 inch bore. Refer to SOPM 20-41-02 as an accepted procedure.

FIGURE 10: RIGHT WING INBOARD FLAP OUTBOARD SUPPORT - 4-5 ACTUATOR CRANK ARM MODIFICATION
(SHEET 3 OF 5)

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Step	Task	Name	Identification	Qty	More Data
10	Install (New)	Bushing	113T1347-52	2	Install bushing by shrink fit method with BMS 5-95 sealant. Refer to SOPM 20-50-10 as an accepted procedure.
	Install (New)	Bushing	113T1347-51	2	-
	Install (New)	Bushing	113T1347-66	1	-
11	Assemble	4-5 Actuator Crank Arm Assembly	113T1227-36	1	In accordance with Boeing Drawing 113T1227.
12	Install (Kept)	Bolt	BACB30NR4K14	2	Apply BMS 5-95 sealant to thread, shank and beneath head of bolts. Refer to SOPM 20-15-19 as an accepted procedure.
	Install (New)	Nut	BACN10JC4CD	2	-
	Install (Kept)	Washer	BACW10BP4CD	2	-
	Install (Kept)	Washer	BACW10BP4DP	2	-
13	Clean	Crank Arm	113T1227-32/-34	2	Clean and reactivate the primed surfaces. Refer to SOPM 20-41-02 as an accepted procedure.
14	Apply	Primer	BMS 10-11, TYPE 1	-	(f)
15	Apply	Gloss Enamel	BMS 10-60 TYPE I	-	All areas except bolt holes, splines, 4.75 inch bore and bushing flanges. Refer to 767 AMM 51-21 as an accepted procedure.
16	Identify	4-5 Actuator Crank Arm Assembly	113T1227-36	1	Re-number the actuator crank arm assembly. Rubber stamp Code RH. Refer to SOPM 20-50-10 as an accepted procedure.

FIGURE 10: RIGHT WING INBOARD FLAP OUTBOARD SUPPORT - 4-5 ACTUATOR CRANK ARM MODIFICATION
(SHEET 4 OF 5)

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Step	Task	Name	Identification	Qty	More Data
(a)	Do a detailed inspection with a 10-power magnifying glass, or do a magnetic particle inspection for any crack, scratch or corrosion. Refer to SOPM 20-20-01 as an accepted procedure. If any crack, scratch or corrosion is found, overhaul the crank arm. Refer to CMM 57-53-31, Repair 3-1 as an accepted procedure. If any crack, scratch or corrosion is larger than the rework limits in CMM 57-53-31, Repair 3-1, contact The Boeing Company for instructions, and do the instructions.				
(b)	Remove material from the extend overtravel stops as shown. Refer to SOPM 20-10-02 as an accepted procedure. Make sure that a surface roughness of 125 Ra or better is achieved. Stress relieve the part. Refer to SOPM 20-10-02 as an accepted procedure.				
(c)	Re-number the two crank arms. Vibro-engrave, steel stamp, or dot peen part number in the indicated area only. Characters shall be placed no closer than 0.050 inch to the edge of the indicated area, and a maximum of 0.015 inch deep. Refer to SOPM 20-50-10 as an accepted procedure.				
(d)	Do a heat damage inspection. Refer to SOPM 20-10-02 as an accepted procedure. If any discoloration is found, the part must be replaced.				
(e)	Do a Magnetic Particle Inspection for any surface defects (crack, corrosion or other irregularities). Refer to SOPM 20-20-01 as an accepted procedure. If any surface defect is found, do the repair in accordance with 767-200 SRM 57-53-02 Allowable Damage 2. If any surface defect is larger than the rework limits in 767-200 SRM 57-53-02 Allowable Damage 2, contact The Boeing Company for instructions, and do the instructions.				
(f)	All areas except bolt holes, splines, 4.75 inch bore and bushing flanges. Refer to SOPM 20-41-02 as an accepted procedure. It is not necessary to apply primer to areas that cannot be seen without a mirror.				

FIGURE 10: RIGHT WING INBOARD FLAP OUTBOARD SUPPORT - 4-5 ACTUATOR CRANK ARM MODIFICATION
(SHEET 5 OF 5)

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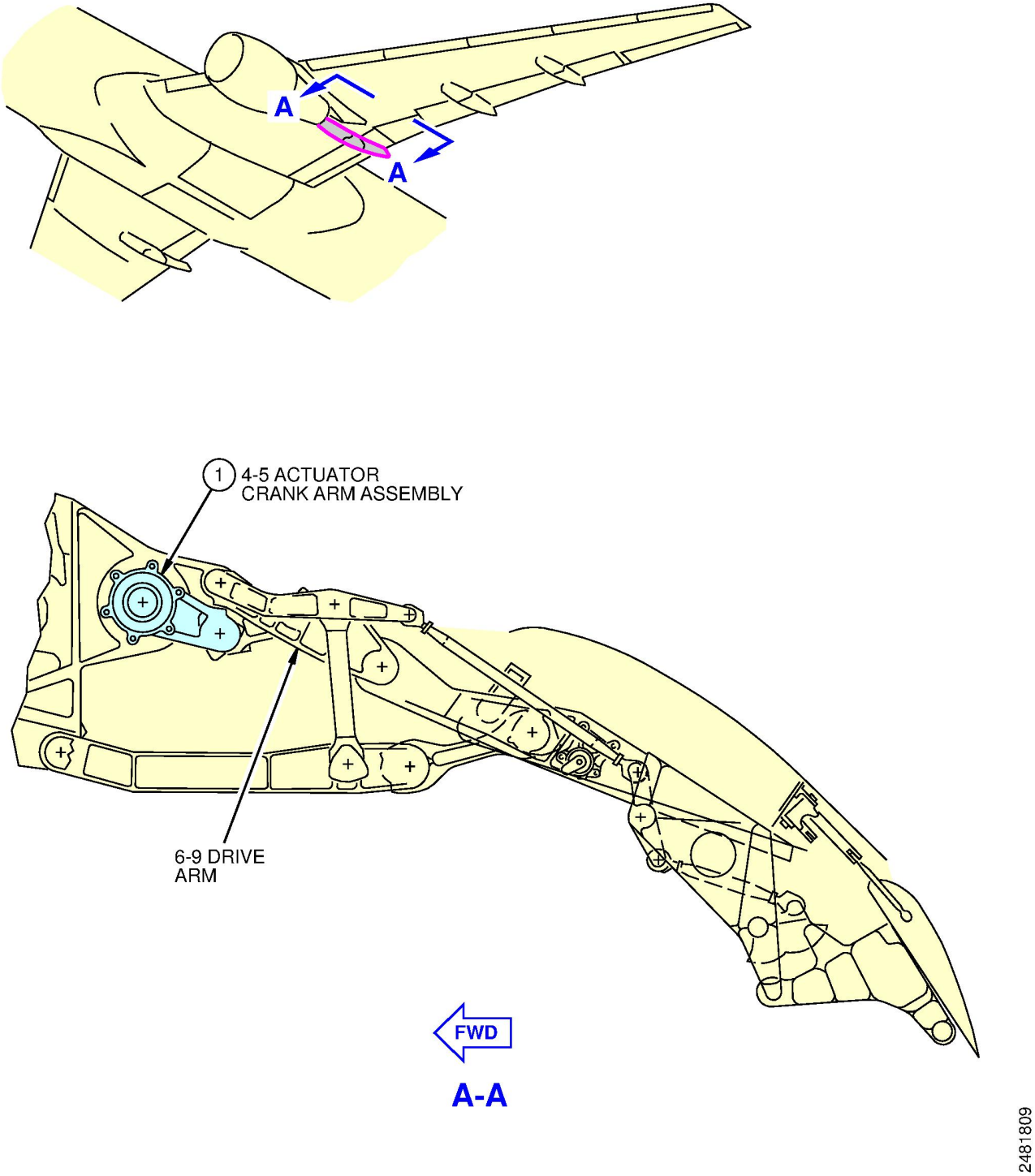


FIGURE 11: LEFT WING INBOARD FLAP OUTBOARD SUPPORT - 4-5 ACTUATOR CRANK ARM INSTALLATION
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The step numbers shown below agree with the numbers shown in the circle symbols in the figure. The QTY numbers shown below are the number of parts necessary for Left Wing Inboard Flap Support.

Step	Task	Name	Identification	Qty	More Data
1	Install (Changed)	4-5 Actuator Crank Arm Assembly	113T1227-35	1	(a) Refer to 767 AMM 27-51-04 as an accepted procedure.
(a) Applicable for modified or new 4-5 actuator crank arm assembly.					

FIGURE 11: LEFT WING INBOARD FLAP OUTBOARD SUPPORT - 4-5 ACTUATOR CRANK ARM INSTALLATION
(SHEET 2 OF 2)

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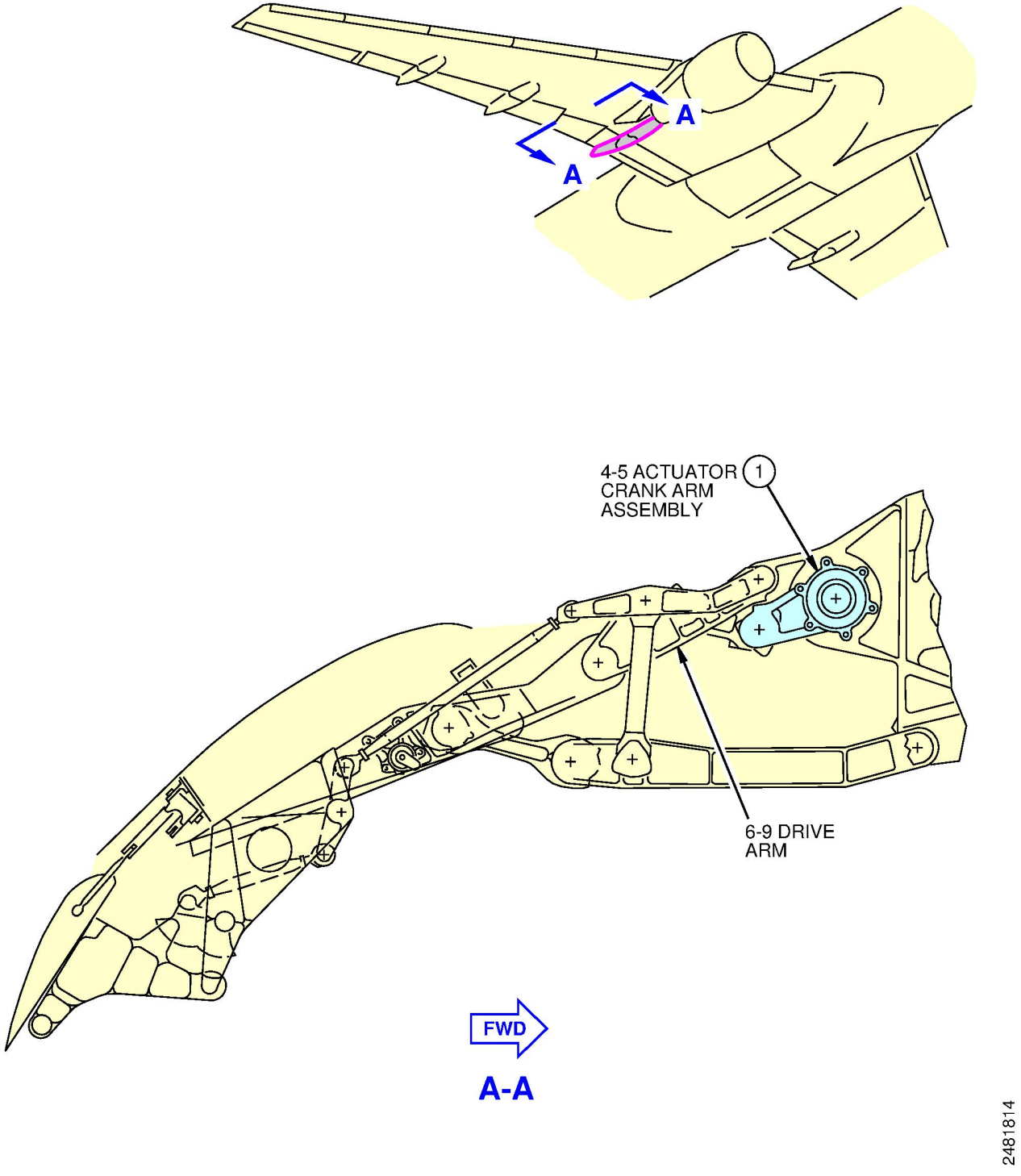


FIGURE 12: RIGHT WING INBOARD FLAP OUTBOARD SUPPORT - 4-5 ACTUATOR CRANK ARM INSTALLATION
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The step numbers shown below agree with the numbers shown in the circle symbols in the figure. The QTY numbers shown below are the number of parts necessary for Right Wing Inboard Flap Support.

Step	Task	Name	Identification	Qty	More Data
1	Install (Changed)	4-5 Actuator Crank Arm Assembly	113T1227-36	1	(a) Refer to 767 AMM 27-51-04 as an accepted procedure.
(a) Applicable for modified or new 4-5 actuator crank arm assembly.					

FIGURE 12: RIGHT WING INBOARD FLAP OUTBOARD SUPPORT - 4-5 ACTUATOR CRANK ARM INSTALLATION
(SHEET 2 OF 2)

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Logic diagrams are provided as an aid only. Information contained in Paragraph 1.E., Compliance is the primary source for compliance times. Information contained in Paragraph 3.B., Work Instructions is the primary source for tasks required for compliance.

1. The table below gives the description for the parts and conditions called out in the logic diagrams.

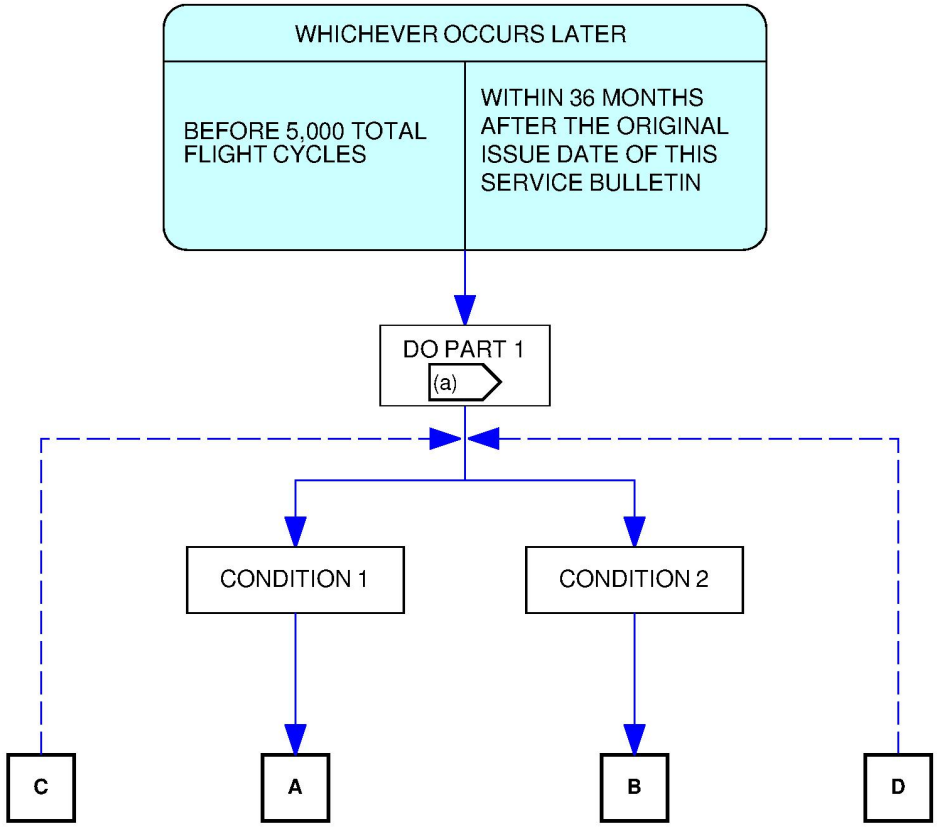
Title	Description
PART 1	6-9 DRIVE ARM ASSEMBLY GENERAL VISUAL INSPECTION
PART 2	4-5 ACTUATOR CRANK ARM ASSEMBLY INTERIM BLEND REPAIR
PART 3	6-9 DRIVE ARM ASSEMBLY REPAIR
PART 4	4-5 ACTUATOR CRANK ARM ASSEMBLY REPLACEMENT
PART 5	4-5 ACTUATOR CRANK ARM ASSEMBLY MODIFICATION
CONDITION 1	ANY DAMAGE FOUND ON 6-9 DRIVE ARM ASSEMBLY
CONDITION 2	NO DAMAGE FOUND ON 6-9 DRIVE ARM ASSEMBLY

2. The table below gives the description for the flag notes called out in the logic diagram.

Flag Note Letter	Description
(a)	Damage caused by interference with the 4-5 actuator crank arm assembly is defined as: Worn paint or primer, or worn paint, primer and bare metal.
(b)	Accomplishment of PART 4: 4-5 ACTUATOR CRANK ARM ASSEMBLY REPLACEMENT or PART 5: 4-5 ACTUATOR CRANK ARM ASSEMBLY MODIFICATION is a terminating action to the repeat inspections, for the associated 6-9 drive arm assembly.

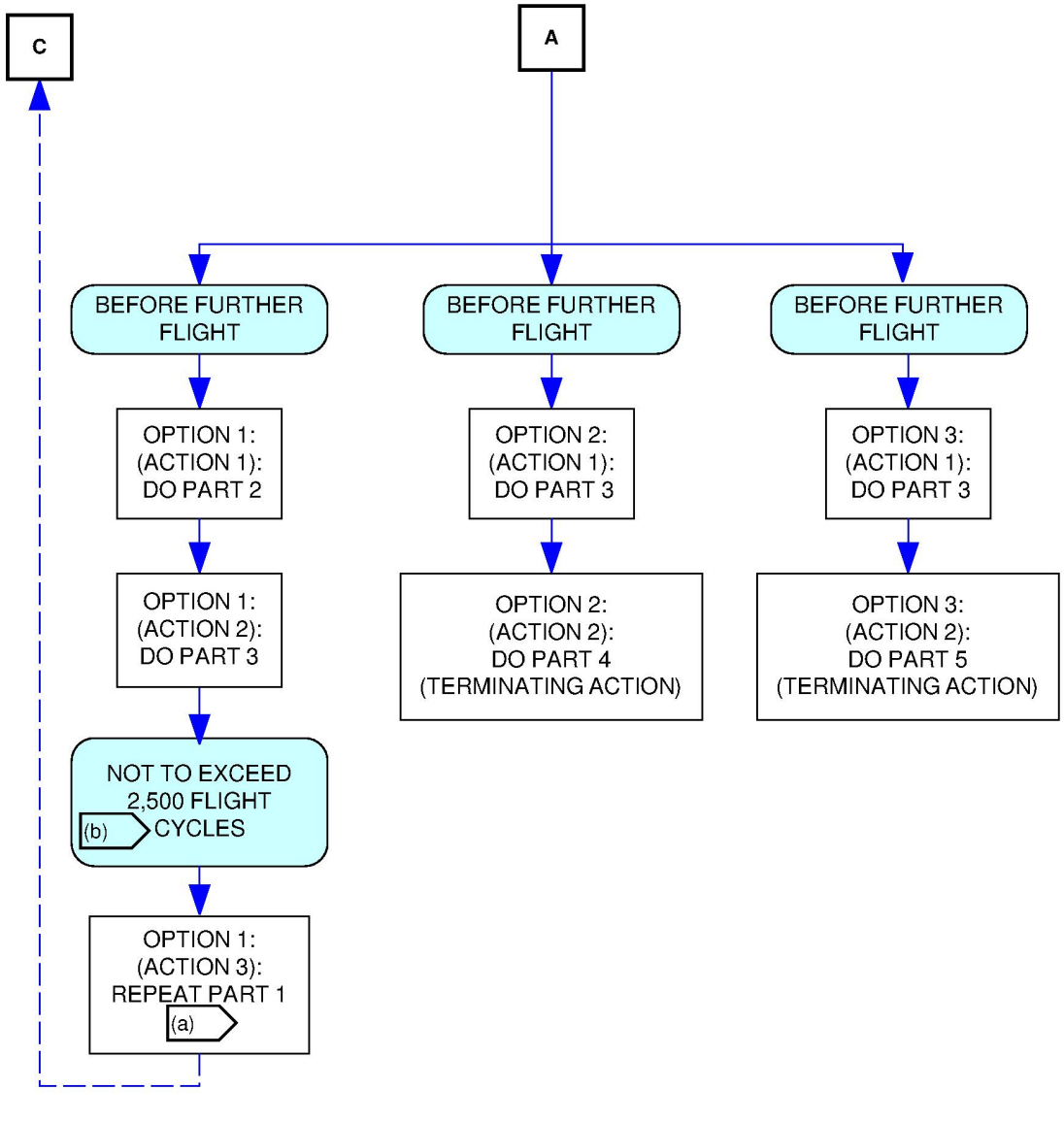
APPENDIX A: LOGIC DIAGRAM FOR PARAGRAPH 1.E. COMPLIANCE: TABLE 1: GENERAL VISUAL INSPECTION OF THE 6-9 DRIVE ARM ASSEMBLY AND REPAIR, REPLACEMENT OR MODIFICATION OF THE 4-5 ACTUATOR CRANK ARM ASSEMBLY AT INBOARD FLAP OUTBOARD SUPPORT NUMBER 3 AND 6
(SHEET 1 OF 4)

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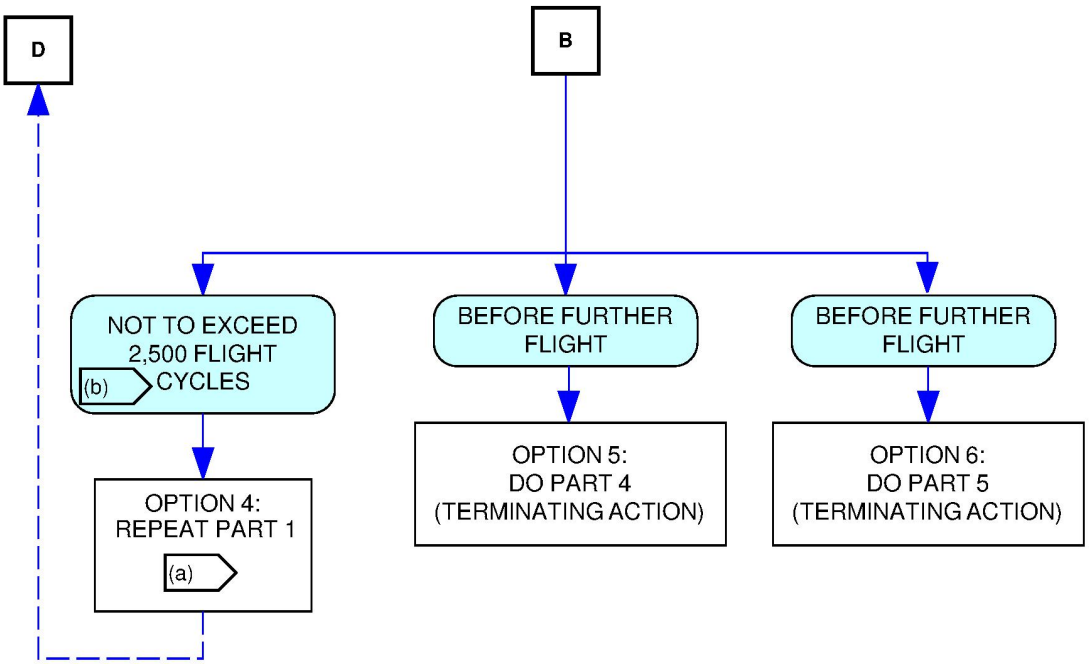
APPENDIX A: LOGIC DIAGRAM FOR PARAGRAPH 1.E. COMPLIANCE: TABLE 1: GENERAL VISUAL INSPECTION OF THE 6-9 DRIVE ARM ASSEMBLY AND REPAIR, REPLACEMENT OR MODIFICATION OF THE 4-5 ACTUATOR CRANK ARM ASSEMBLY AT INBOARD FLAP OUTBOARD SUPPORT NUMBER 3 AND 6
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APPENDIX A: LOGIC DIAGRAM FOR PARAGRAPH 1.E. COMPLIANCE: TABLE 1: GENERAL VISUAL INSPECTION OF THE 6-9 DRIVE ARM ASSEMBLY AND REPAIR, REPLACEMENT OR MODIFICATION OF THE 4-5 ACTUATOR CRANK ARM ASSEMBLY AT INBOARD FLAP OUTBOARD SUPPORT NUMBER 3 AND 6
(SHEET 3 OF 4)

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APPENDIX A: LOGIC DIAGRAM FOR PARAGRAPH 1.E. COMPLIANCE: TABLE 1: GENERAL VISUAL INSPECTION OF THE 6-9 DRIVE ARM ASSEMBLY AND REPAIR, REPLACEMENT OR MODIFICATION OF THE 4-5 ACTUATOR CRANK ARM ASSEMBLY AT INBOARD FLAP OUTBOARD SUPPORT NUMBER 3 AND 6
(SHEET 4 OF 4)

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