SPECIAL ATTENTION

Number: **757-54-0050**
Original Issue: July 16, 2007
Revision 1: October 07, 2009
ATA System: 5451

SUBJECT: NACELLES/PYLONS - Nacelle Strut - Thrust Reverser Aft Hinge Fitting Modification - Rolls Royce RB211-535E Engines

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Revision Transmittal Sheet

SUBJECT: NACELLES/PYLONS - Nacelle Strut - Thrust Reverser Aft Hinge Fitting Modification - Rolls Royce RB211-535E Engines

This revision includes all pages of the service bulletin.

COMPLIANCE INFORMATION RELATED TO THIS REVISION

More work is necessary on airplanes changed as shown in the original issue of this service bulletin. Washer stackup should be inspected for the correct installation sequence. If the installation is found to be incorrect, the nut(s) and bolt(s) must be removed and the washers reinstalled.

Federal Aviation Administration (FAA) Airworthiness Directive FAA AD 2008-13-20, is related to this service bulletin.

REASON FOR REVISION

This revision is sent to change the Work Instructions for Part III - Preventive Modification, and the associated figures, to allow the option of doing the Part III - Preventive Modification on just the hinges that are damaged, and allow continued repeat inspections on the hinges that are undamaged. This revision also corrects the names of the different washers (special washer, countersunk washer, plain washer) used in Figure 11 and Figure 12. This revision is also sent to add an inspection for airplanes, that did the original issue, to inspect the fastener stackup securing the aft hinge fittings to the strut.

Changes to this service bulletin include:

— Paragraph 1.E., Compliance - Footnote and Damage Tolerance note added.
— Paragraph 3.B., Work Instructions, Part III-Preventive Modification - Added steps 4, 5. Added Caution note to step 3.
— Figures 1-12 were modified to include a footnote adding flexibility in inspecting and modifying the hinges.
— Figures 13 and 14 were modified to include a note stating that quantities could be halved if only one hinge is removed/installed on either strut.
— The fastener tables in Figures 11 and 12 were modified to correct the names of washers and to add words that clarify the washer orientation.
— Added note to Figures 5, 6, 9 and 10, to clarify that you remove one bolt at a time, replace it with a new bolt, and then go to the next bolt.
— Added a second configuration for those airplanes that have completed the original issue of this service bulletin, to inspect for washer stackup in Figures 11 and 12. Added Appendix A to show correct fastener stackup.
— Added flexibility to install a new aft hinge fitting if heat damage is found after trimming.
— Added ammonium persulfate in addition to Nital to use for inspecting for heat damage.

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— Replaced BMS 3-24 grease with BMS 3-33 grease.
— Changed torque reference from SOPM 20-50-01 to BAC5009.
— Added the word "interim" to the title for Figures 13 and 14 and removed the torque specifications in the footnotes.

Vertical lines are put on the left edge of each page, except in Paragraph 1.A., Effectivity, to show the location of important changes.

Pages with no vertical lines have no important changes.

REVISION HISTORY

Original Issue:	July 16, 2007
Revision 1:	October 07, 2009

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Summary

SUBJECT: NACELLES/PYLONS - Nacelle Strut - Thrust Reverser Aft Hinge Fitting Modification - Rolls Royce RB211-535E Engines

BOEING RECOMMENDS THAT EACH OPERATOR EXAMINE THIS SERVICE BULLETIN IMMEDIATELY.

CONCURRENT REQUIREMENTS

None.

BACKGROUND

This service bulletin gives instructions to do a detailed inspection and preventive modification on the thrust reverser aft hinge fittings, and hinge fitting attachment bolts. Attachment bolts have been reported to fail at the thrust reverser aft hinge fittings. The hinge has integral fail-safe features, but loss of the entire four bolt pattern constitutes complete loss of the load path. Loss of the load path could result in the departure of the thrust reverser from the airplane which could result in damage to the airplane and hazards to persons or property on the ground.

Boeing has received 13 reports of 14 separate incidents of bolt failure at the thrust reverser aft hinge fittings. All of the reported incidents occurred on airplanes with Rolls Royce RB211-535E engines. Of the 14 incidents there were 9 hinges with 1 out of 4 bolts failed, 2 hinges with 2 out of 4 bolts failed, and 3 hinges with 3 out of 4 bolts failed.

The possible causes of the bolt failure can be attributed to high operational loads, contact loads caused by possible interference between the thrust reverser hinge and the hinge beam, and the 4 attachment bolts are installed with washers that can ride the radius of the hinge fitting spotface.

As a part of a service bulletin validation program, this change was completed on airplane NT744 by Service Bulletin 757-54-0049 Validation Copy 01 before the initial release of this service bulletin. The change completed on airplane NT744 by Service Bulletin 757-54-0049 Validation Copy 01 is equivalent to the initial release of this service bulletin.

Boeing Service Related Problem (SRP) 757-SRP-54-0098 is related to this service bulletin.

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ACTION (PRR 54530-267RS)

Inspections:

Get Access to the thrust reverser aft hinge fittings. Do a detailed inspection of the aft hinge fittings and the eight attachment bolts for signs of damage. If any damage to the aft hinge fittings and/or attachment bolts is found, the damage must be corrected before further flight and the preventive modification must be scheduled. For Group 1, Configuration 2 airplanes, do a detailed inspection of washer stackup. If the stackup is incorrect, the washers must be removed and reinstalled.

Preventive Modification:

Operators may do the preventive modification. After the preventive modification is accomplished it is no longer necessary to do the repeat inspections shown in this service bulletin. Get Access to the thrust reverser aft hinge fittings. Remove the thrust reverser C-ducts. Trim the aft hinge fitting lugs to clear possible contact with the hinge beam. Remove the four attachment bolts on each aft hinge fitting, high frequency eddy current (HFEC) inspect the fastener holes and replace with new and improved bolts, washers and nuts. Refit thrust reversers and return airplane to a serviceable condition.

The related 757-200 bulletin is Service Bulletin 757-54-0049.

EFFECTIVITY

757-300 airplanes with Rolls Royce RB211-535E engines. Refer to Paragraph 1.A.1.

COMPLIANCE

Refer to Service Bulletin Paragraph 1.E for compliance.

Federal Aviation Administration (FAA) Airworthiness Directive FAA AD 2008-13-20 is related to this service bulletin.

INDUSTRY SUPPORT INFORMATION

Boeing warranty remedies are available for airplanes in warranty as of October 17, 2003. Please refer to Paragraph 2.B., Industry Support Information.

MANPOWER

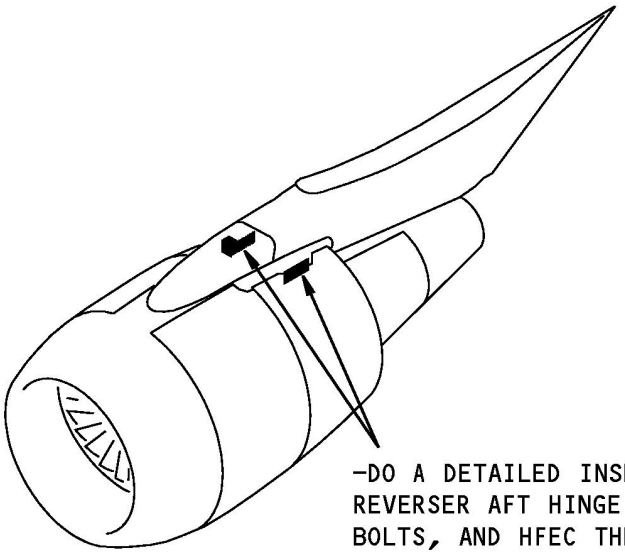
Refer to Service Bulletin Paragraph 1.G Manpower.

MATERIAL INFORMATION

Boeing Supplied Kits/Parts.

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

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-DO A DETAILED INSPECTION ON THE THRUST REVERSER AFT HINGE FITTINGS AND ATTACH BOLTS, AND HFEC THE ATTACH BOLT FASTENER HOLES FOR DAMAGE.
-REPAIR OR MODIFY AFT HINGE FITTING IF DAMAGE IS FOUND.

LEFT ENGINE SHOWN
RIGHT ENGINE SIMILAR

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BOEING RECOMMENDS THAT EACH OPERATOR EXAMINE THIS SERVICE BULLETIN IMMEDIATELY.

1. PLANNING INFORMATION

A. Effectivity

1. Airplanes

Refer to Service Bulletin Index Document D624N001 Part 3 for Airplane Variable Number, Line Number, and Serial Number data.

This service bulletin is for the airplanes shown below. Refer to PRR 54530-267RS for data about this change.

GROUP	CONFIGURATION	DESCRIPTION
1	-	757-300 Airplanes, with Rolls Royce RB211-535E engines.
	1	Airplanes that have not been modified in accordance with the original issue of this service bulletin.
	2	Airplanes that have been modified in accordance with the original issue of this service bulletin.

Airplane Models:

757-300

Variable Number	Group
NL001 - NL002	1
NL006 - NL017	1
NL101 - NL109	1

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Variable Number	Group
NL141	1
NU701 - NU705	1
NU721 - NU728	1
NU731 - NU732	1

2. Spares Affected

Examine your spares supply for the parts or components identified in Paragraph 2.C., Parts Necessary for Each Airplane. If any parts or components are found, refer to Paragraph 2.C. for the recommended use.

B. Concurrent Requirements

None.

C. Reason

This service bulletin gives instructions to do a detailed inspection and preventive modification on the thrust reverser aft hinge fittings, and hinge fitting attachment bolts. Attachment bolts have been reported to fail at the thrust reverser aft hinge fittings. The hinge has integral fail-safe features, but loss of the entire four bolt pattern constitutes complete loss of the load path. Loss of the load path could result in the departure of the thrust reverser from the airplane which could result in damage to the airplane and hazards to persons or property on the ground.

Boeing has received 13 reports of 14 separate incidents of bolt failure at the thrust reverser aft hinge fittings. All of the reported incidents occurred on airplanes with Rolls Royce RB211-535E engines. Of the 14 incidents there were 9 hinges with 1 out of 4 bolts failed, 2 hinges with 2 out of 4 bolts failed, and 3 hinges with 3 out of 4 bolts failed.

The possible causes of the bolt failure can be attributed to high operational loads, contact loads caused by possible interference between the thrust reverser hinge and the hinge beam, and the 4 attachment bolts are installed with washers that can ride the radius of the hinge fitting spotface.

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Changes to this service bulletin include:

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— Paragraph 1.E., Compliance - Footnote and Damage Tolerance note added.
— Paragraph 3.B., Work Instructions, Part III-Preventive Modification - Added steps 4, 5. Added Caution note to step 3.
— Figures 1-12 were modified to include a footnote adding flexibility in inspecting and modifying the hinges.
— Figures 13 and 14 were modified to include a flag note stating that quantities could be halved if only one hinge is removed/installed on either strut.
— The Fastener Tables in Figures 11 and 12 were modified to correct the names of washers and to add words that clarify the washer orientation.
— Added note to Figures 5, 6, 9 and 10, to clarify that you remove one bolt at a time, replace it with a new bolt, and then go to the next bolt.
— Added a second configuration for those airplanes that have completed the original issue of this service bulletin, to inspect for washer stackup in Figures 11 and 12. Added Appendix A to show correct fastener stackup.
— Added flexibility to install a new aft hinge fitting if heat damage is found after trimming.
— Added ammonium persulfate in addition to Nital to use for inspecting for heat damage.
— Replaced BMS 3-24 grease with BMS 3-33 grease.
— Changed torque reference from SOPM 20-50-01 to BAC5009.
— Changed Figures 13 and 14 to interim installation of existing fittings and removed torque specifications in footnotes.

Boeing Service Related Problem (SRP) 757-SRP-54-0098 is related to this service bulletin.

D. Description

Inspections:

Get Access to the thrust reverser aft hinge fittings. Do a detailed inspection of the aft hinge fittings and the eight attachment bolts for signs of damage. If any damage to the aft hinge fitting and/or attachment bolts is found, the damage must be corrected before further flight and the preventive modification must be scheduled. For Group 1, Configuration 2 airplanes, do a detailed inspection of washer stackup. If the stackup is incorrect, the washers must be removed and reinstalled.

Preventive Modification:

Operators may do the preventive modification. After the preventive modification is accomplished it is no longer necessary to do the repeat inspections shown in this service bulletin. Get Access to the thrust reverser aft hinge fittings. Remove the thrust reverser C-ducts. Trim the aft hinge fitting lugs to clear possible contact with the hinge beam. Remove the four attachment bolts on each aft hinge fitting, high frequency eddy current (HFEC) inspect the fastener holes and replace with new and improved bolts, washers and nuts. Refit thrust reversers and return airplane to a serviceable condition.

The related 757-200 bulletin is Service Bulletin 757-54-0049.

Revision 1: More work is necessary on airplanes changed as shown in the original issue of this service bulletin. Washer stackup should be inspected for the correct installation sequence. If the installation is found to be incorrect, the nut(s) and bolt(s) must be removed and the washers reinstalled.

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

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Affected Maintenance Zones	
Model	**Zone**
757-300	415, 416, 425, 426, 431, 441

E. Compliance

Federal Aviation Administration (FAA) Airworthiness Directive FAA AD 2008-13-20 is related to this service bulletin.

Table 1(Group 1, Configuration 1): Inspection of the two thrust reverser aft hinge fittings and eight fitting attach bolts on each engine for contact and damage

Condition	Action		Compliance Time	Repeat Interval (Not to Exceed)
Group 1, Configuration 1 Airplanes	Do a Detailed Inspection of the two thrust reverser aft hinge fittings and eight fitting attach bolts on each engine as given in Accomplishment Instruction 3.B.,Part II		Within 3000 Flight Cycles after the original issue date of this service bulletin	3000 Flight Cycles (a)
Cracked or broken aft hinge fitting	Replace the aft hinge fitting and do Preventive Modification as given in Accomplishment Instruction 3.B., Part III (c)		Before Further Flight	-
Aft hinge fitting shows contact damage less than 0.005 inch depth	Option 1	Apply surface finish as given in Accomplishment Instruction 3.B., Part II	Before Further Flight	-
		Do Preventive Modification as given in Accomplishment Instruction 3.B., Part III (c)	Within 3000 Flight Cycles after surface finish is applied	-
	Option 2	Do Preventive Modification as given in Accomplishment Instruction 3.B., Part III (c)	Before Further Flight	-
Aft hinge fitting shows contact damage greater than or equal to 0.005 inch depth	Do Preventive Modification as given in Accomplishment Instruction 3.B., Part III (c)		Before Further Flight	-

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Table 1(Group 1, Configuration 1): Inspection of the two thrust reverser aft hinge fittings and eight fitting attach bolts on each engine for contact and damage

Condition	Action		Compliance Time	Repeat Interval (Not to Exceed)
Damaged attach bolt	Option 1	Do Preventive Modification as given in Accomplishment Instruction 3.B., Part III (c)	Before Further Flight	-
	Option 2	Do a High Frequency Eddy Current (HFEC) Inspection of the attach bolt hole as given in Accomplishment Instruction 3.B., Part II	Before Further Flight	-
No crack was found in attach bolt hole as a result of HFEC inspection	Replace bolt as given in Accomplishment Instruction 3.B., Part II		Before Further Flight	-
	Do Preventive Modification as given in Accomplishment Instruction 3.B., Part III (c)		Within 3000 Flight Cycles after bolt replacement	-
A crack was found in attach bolt hole as a result of HFEC inspection	Do Preventive Modification as given in Accomplishment Instruction 3.B., Part III (c)		Before Further Flight	-
0.4688 inch nominal lower fastener hole with crack OR 0.5312 inch nominal upper fastener hole with crack	If any crack is found in aft hinge fitting, install new aft hinge fitting or contact Boeing for repair instructions and repair as given in Accomplishment Instruction 3.B., Part III. OR If any crack is found in the strut, contact Boeing for repair instructions and do the repair.		Before Further Flight	-
Aft hinge fitting is found to have heat damage after trimming.	Install new aft hinge fitting as given in Accomplishment Instruction 3.B., Part III. OR Contact Boeing for repair instructions and do the repair.		Before Further Flight	-
(a) Accomplishment of the Preventive Modification on a hinge as given in Accomplishment Instruction 3.B., Part III terminates the requirement to do repeat inspections on that hinge.				
(b) Not Used				
(c) Preventive Modification is required for hinges with damage and is optional for hinges without damage. Repeat inspections are required on all unmodified hinges until the Preventive Modification, as given in Accomplishment Instruction 3.B, Part III, is accomplished.				

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Table 2 (Group 1, Configuration 2): DETAILED INSPECTION OF FASTENER STACKUP ON AFT HINGE FITTINGS FOR AIRPLANES THAT HAVE DONE THE ORIGINAL ISSUE OF THIS SERVICE BULLETIN

Condition	Action	Compliance Time	Repeat Interval (Not to Exceed)
Group 1, Configuration 2 airplanes	Do a one-time detailed inspection of fastener stackup as given in Accomplishment Instruction 3.B., Part IV.	Within 3000 flight cycles after the Revision 1 date of this Service Bulletin.	-
Washers found to be installed incorrectly after doing one-time detailed inspection..	Reinstall washers correctly as given in Accomplishment Instruction 3.B, Part IV.	Before Further Flight	-

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.

This service bulletin has been approved by the FAA. In addition, the Manager of the FAA Seattle Aircraft Certification Office approves the inspection methods and modifications with the corresponding compliance times specified in Tables 1 and 2 under paragraph 1.E., "Compliance," of Service Bulletin 757-54-0050, Revision 1, as an AMOC to the inspection methods and modifications with the corresponding compliance times specified in paragraph 1.E., "Compliance," of Service Bulletin 757-54-0050, dated July 16, 2007 as required by paragraphs (f) and (h) of AD 2008-13-20. All provisions of AD 2008-13-20 that are not specifically referenced in the preceding sentence remain fully applicable and must be complied with.

G. Manpower

The table below shows an estimate of the task-hours necessary to do this 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 examine the work
— Time to cure the materials
— Time to make the parts
— Time to find the tools.

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Group 1, Configuration 1 - INSPECTION MANHOURS:

Task	Number of Persons	Task-Hours	Elapsed Hours
Open Access	2	2.0	1.0
Figure 1	2	1.0	0.5
Figure 2	2	1.0	0.5
Close Access	2	2.0	1.0
TOTAL FOR EACH AIRPLANE		6.0	3.0

Group 1, Configuration 1 - MODIFICATION MANHOURS:

Task	Number of Persons	Task-Hours	Elapsed Hours
Open Access	2	10.5	5.25
Figure 3	2	8.0	4.0
Figure 4	2	8.0	4.0
Figure 5	2	5.0	2.5
Figure 6	2	5.0	2.5
Figure 7	2	1.0	0.5
Figure 8	2	1.0	0.5
Figure 9	2	5.0	2.5
Figure 10	2	5.0	2.5
Figure 11	2	1.0	0.5
Figure 12	2	1.0	0.5
Close Access	2	10.5	5.25
TOTAL FOR EACH AIRPLANE		61	30.5

NOTE: The total man-hours is dependant on the method of modification. The total man-hours shown are for modification of the aft hinge fitting on the airplane.

Group 1, Configuration 2 - DETAILED INSPECTION (of Fastener Stackup) MANHOURS:

Task	Number of Persons	Task-Hours	Elapsed Hours
Open Access	2	2.0	1.0
Inspect	2	2.0	1.0
Close Access	2	2.0	1.0
TOTAL FOR EACH AIRPLANE		6.0	3.0

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H. Weight and Balance Changes

None.

I. Electrical Load Data

Not changed.

J. References

1. Existing Data:

    a. Engineering Change Memo PRR-54530-267RS.

    b. 757 Aircraft Maintenance Manual (AMM) 24-41-01, 29-11-25, 71-00-02, 78-31-00, 78-31-10, 78-31-20.

    c. 757 Non-Destructive Testing (NDT) Manual, Part 6, 51-00-16, Part 6, 51-00-17.

    d. Boeing Drawing 65-88700.

    e. Boeing Tooling Drawing MIT012N8549-2.

    f. Service Bulletin 757-54-0015 "NACELLES/PYLONS - NACELLE STRUT - THRUST REVERSER HINGE FITTING REPLACEMENT".

    g. Service Bulletin 757-54-0049 "NACELLES/PYLONS - Nacelle Strut - Thrust Reverser Hinge Fitting Modification - Rolls Royce RB211-535E Engines".

    h. Standard Overhaul Practices Manual (SOPM) 20-10-01, 20-10-02, 20-10-03, 20-30-03, 20-42-10, 20-44-01, 20-50-01, 20-50-10, 20-50-19

    i. Boeing Service Letter 757-SL-51-022

    j. Federal Aviation Administration (FAA) Airworthiness Directive 2008-13-20

2. Data supplied with this Service Bulletin:

    a. Drawings:

Drawing No	Title	Sheet	DCN/REV	ADCN
MIT012N8549-2	Miscellaneious Tool - Hinge Assembly Aligning Tool	1	-	-

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

    None.

K. Publications Affected

1. Publications:

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Publication	Chapter-Section
757 Illustrated Parts Catalog	54-51

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

Refer to Paragraph 2.C., Parts Necessary For Each Airplane, for interchangeability and intermixability information.

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2. MATERIAL INFORMATION

A. Material - Price and Availability

Boeing can supply the kits shown in Paragraph 2.C., Parts Necessary For Each Airplane, and Paragraph 2.D., Parts Necessary to Change Spares, as shown below. If there is a limit to the quantity (QTY) of available kits, a supply sequence is given by Spares. More kits become available as shown in the Reorder Lead Time (ROLT). ROLT is calculated from the date Boeing gets the purchase order.

Kit Number	Name	Date	QTY	ROLT (Weeks)	Unit Price thru Oct/31/06
012N5108-1	TOP KIT-THRUST REVERSER HINGE MODIFICATION RB211-535E	08/25/05	10	30	$5,276
012N5108-1	TOP KIT-THRUST REVERSER HINGE MODIFICATION RB211-535E	09/01/05	10	30	$5,276
012N5108-1	TOP KIT-THRUST REVERSER HINGE MODIFICATION RB211-535E	09/09/05	10	30	$5,276
012N5108-1	TOP KIT-THRUST REVERSER HINGE MODIFICATION RB211-535E	09/16/05	10	30	$5,276
012N5108-1	TOP KIT-THRUST REVERSER HINGE MODIFICATION RB211-535E	09/23/05	10	30	$5,276
012N5108-1	TOP KIT-THRUST REVERSER HINGE MODIFICATION RB211-535E	09/30/05	10	30	$5,276

The kits/parts are subject to the terms and conditions of the Boeing standard purchase order acknowledgment. After the Unit Price date, new price and ROLT data is applicable. Prices are in United States dollars. Terms: Net 30 days.

Reference this service bulletin and submit your purchase order by one of the methods that follow:

1. Order on-line via ATA Spec 2000 or Boeing Part Page

2. Fax to (206) 662-7145

3. Spares Customer Support - MC 36-65 Boeing Spares Department P.O. Box 3707 Seattle, Washington 98124-2207 USA

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B. Industry Support Information

Boeing warranty remedies are available for 757 airplanes in warranty as of October 17, 2003. For the initial inspection labor hour reimbursement for airplanes in warranty as of that date, send a claim to Boeing Warranty. Please note that subsequent inspections, as outlined in the MPD (Maintenance Planning Document), do not qualify for Boeing warranty remedies. If the condition described in this service bulletin is found during the initial, or MPD directed inspection, please note that the kits for airplanes in warranty as of October 17, 2003, will be supplied at no charge. Send a purchase order for the kits to Boeing Spares, and a warranty claim for labor hours to Boeing Commercial Airplanes Group - Warranty & Product Assurance Contracts. Please refer to this service bulletin number and reference the airplane variable numbers in your purchase order and any labor hour claim.

C. Parts Necessary For Each Airplane

1. Kits/Parts:

NOTE: One top kit and the items shown in Paragraph 2.C.2., Parts and Materials Supplied by the Operator, are necessary for each airplane.

To get the kits/parts shown below, refer to Paragraph 2.A., Material - Price and Availability.

Kit 012N5108				
New Part Number	**QTY**	**Name**	**Existing Part Number**	**Notes**
	-1			
012N5108-1	-	TOP KIT- THRUST REVERSER HINGE MODIFICATION RB211-535E		-
012N5108-2	8	WASHER- SPECIAL	-	(b)(d)
012N5108-3	8	WASHER- SPECIAL	-	(b)(d)
012N5108-4	8	WASHER- SPECIAL	-	(b)(d)
012N5108-5	8	WASHER- SPECIAL	-	(b)(d)
BACB30US7K15X	8	BOLT, 12 PT HEAD	BACB30LE7U( )	(a)(b)(c)(d)(e)
BACB30US7K15Y	8	BOLT, 12 PT HEAD	BACB30LE7U( ) BACB30LE7U( )X BACB30LE7U( )Y	(a)(b)(c)(d)(e)
BACB30US8K19X	8	BOLT, 12 PT HEAD	BACB30LE8U19	(a)(b)(c)(d)(e)
BACB30US8K19Y	8	BOLT, 12 PT HEAD	BACB30LE8U19 BACB30LE8U19X BACB30LE8U19Y	(a)(b)(c)(d)(e)
BACN10HR7CS	8	SELF-LOCKING NUT	BACN10HR7CS	(a)(c)
BACN10HR8CS	8	NUT	BACN10HR8CS	(a)(c)
BACW10BP71APU	8	WASHER, PLAIN	BACW10BP7APU	(a)(b)(c)
BACW10BP72APU	8	WASHER, PLAIN	BACW10BP7APU	(a)(b)(c)
BACW10BP81ACU	8	WASHER, PLAIN	BACW10BP8APU	(a)(b)(c)

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Kit 012N5108				
New Part Number	**QTY**	**Name**	**Existing Part Number**	**Notes**
	-1			
BACW10BP82ACU	8	WASHER, PLAIN	BACW10BP8APU	(a)(b)(c)
(a) Discard the existing part.				
(b) This part is not used in production.				
(c) You cannot use the existing part to replace the new or changed part.				
(d) There are more parts than are necessary.				
(e) If grip length shown is not available at Boeing, fasteners supplied in kits may be one grip length longer than indicated. Also, if any fasteners part numbers listed are not available or have been superseded, substitute fasteners may be supplied in kits. Boeing Document D-590 and Boeing Drawing 65-88700, are used to determine the part numbers used as substitutes.				

2. Parts and Materials Supplied by the Operator:

Part Number / Specification	QTY	Name	Notes
Type 51	4 Ounces	De-Soto Hi-Temperature Primer	(a)
BMS3-33	4 Ounces	Grease	(b)
311N5148-1	-	Hinge Fitting	(c)
(a) Refer to the Boeing Standard Overhaul Practices Manual SOPM 20-44-01 or 757 Structural Repair Manual, Chapter 51, for material sources.			
(b) See the Qualified Products List at the end of the Boeing Material Specification (BMS) for supplier data.			
(c) Hinge Fitting quantity depends on the number of fittings that need to be replaced.			

3. Parts Modified and Reidentified:

The parts shown below are changed as shown in this service bulletin. The quantity (QTY) is the number of parts changed on each airplane.

Existing Part Number	QTY	Name	New Part Number	Notes
311N5148-1	4	Hinge Fitting	(b)	(a) (c)
(a) Make the change given in this service bulletin.				
(b) There is no equivalent Boeing part number for the changed part. Identify on the part that the change given in this service bulletin was made.				
(c) You cannot use the existing part to replace the modified part. If you use the existing part to replace the modified part you will cancel the effect of the change given in this service bulletin.				

4. Parts Removed and Not Replaced:

None.

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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.

However, MIT012N8549-2 may be necessary if the aft hinge fitting is being replaced.

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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. The instructions identified in Paragraph 3.B., Work Instructions and the Figure(s) give the recommended sequence of steps. The sequence of steps to do this service bulletin can be changed.

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

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

4. 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
   – Torque limits to tighten nuts and bolts are in 757 SRM, Chapter 51

5. Use the approved fastener and process material substitutions as given in 757 SRM, Chapter 51. Alternate fasteners are listed in 757 SRM Chapter 51 and Boeing Drawing 65-88700.

6. If the length of any fastener specified in this service bulletin does not meet the installation standards in SRM Chapter 51, then a fastener of the same specification, or an approved substitute, with a length which meets the installation standards in SRM Chapter 51 may be used.

7. 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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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 "as given in" are included in the instruction, the procedure in the Boeing document must be used.

9. Boeing Service Letter 757-SL-51-022, 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 Aft Hinge Fitting Fastener Stackup.

B. WORK INSTRUCTIONS

PART I - ACCESS

1. Remove electrical power and electrically ground airplane. Refer to 757 AMM 24-41-01 as an accepted procedure.

2. Install thrust reverser lock out pins. Refer to 757 AMM 78-31-00 as an accepted procedure.

3. Open thrust reverser C-Ducts. Refer to 757 AMM 78-31-00 as an accepted procedure.

4. Install thrust reverser actuator hold open locks, tool number B71009. Refer to 757 AMM 71-00-02 as an accepted procedure.

PART II - INSPECTION (Group 1, Configuration 1)

1. Do a Detailed Inspection on the number 1 engine thrust reverser aft hinge fittings and attach bolts as given in Figure 1.

   a. If the aft hinge fitting is cracked or broken, do PART III - Preventive modification and install a new 311N5148-1 fitting.

      NOTE: The new aft hinge fitting can be positioned using tool MIT012N8549-2. See Service Bulletin 757-54-0015 for more information on how to use the tool.

   b. If no damage to aft hinge fittings and attach bolts is found, do one of the following:

      (1) Do PART V - Close Access, and do repeat inspections as given in Paragraph 1.E. Compliance until the preventive modification is accomplished.

      (2) Do PART III - Preventive Modification.

   c. If contact damage to the base metal of the thrust reverser aft hinge fittings is less than 0.005 inch deep, do one of the following:

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(1) Option 1: Reapply surface finish, Type 51 Primer, as given in SOPM 20-44-01, and do Part III - Preventive Modification as given in Paragraph 1.E Compliance.

(2) Option 2: Do PART III - Preventive Modification.

d. If contact damage to the base metal of the thrust reverser aft hinge fittings is found to be equal to or more than 0.005 inches deep, do PART III - Preventive Modification.

e. If damage to an attach bolt is found, do one of the following:

(1) Option 1: Do PART III - Preventive Modification.

(2) Option 2: Remove the damaged attach bolt and HFEC inspect the attach bolt hole as given in 757 NDT, Part 6, 51-00-17 and 757 NDT, Part 6, 51-00-16.

(a) If no crack exists install new attach bolt (either existing BACB30LE or new BACB30US) and do PART III - Preventive Modification as given in Paragraph 1.E Compliance.

(b) If a crack is found do PART III - Preventive Modification.

2. Do a Detailed Inspection on the number 2 engine thrust reverser aft hinge fittings and attach bolts as given in Figure 2.

a. If the aft hinge fitting is cracked or broken, do PART III - Preventive modification and install a new 311N5148-1 fitting.

NOTE: The new aft hinge fitting can be positioned using tool MIT012N8549-2. See Service Bulletin 757-54-0015 for more information on how to use the tool.

b. If no damage to aft hinge fittings and attach bolts is found, do one of the following:

(1) Do PART V - Close Access, and do repeat inspections as given in Paragraph 1.E. Compliance until the preventive modification is accomplished.

(2) Do PART III - Preventive Modification.

c. If contact damage to the base metal of the thrust reverser aft hinge fittings is less than 0.005 inch deep, do one of the following:

(1) Option 1: Reapply surface finish, Type 51 Primer, as given in SOPM 20-44-01, and do Part III - Preventive Modification as given in Paragraph 1.E Compliance.

(2) Option 2: Do PART III - Preventive Modification.

d. If contact damage to the base metal of the thrust reverser aft hinge fittings is found to be equal to or more than 0.005 inches deep, do PART III - Preventive Modification.

e. If damage to an attach bolt is found, do one of the following:

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(1) Option 1: Do PART III - Preventive Modification.

(2) Option 2: Remove the damaged attach bolt and HFEC inspect the attach bolt hole as given in 757 NDT, Part 6, 51-00-17 and 757 NDT, Part 6, 51-00-16.

(a) If no crack exists install new attach bolt (either existing BACB30LE or new BACB30US) and do PART III - Preventive Modification as given in Paragraph 1.E Compliance.

(b) If a crack is found do PART III - Preventive Modification.

PART III - PREVENTIVE MODIFICATION (Group 1, Configuration 1)

1. Remove hydraulic power and depressurize hydraulic systems. Refer to 757 AMM 29-11-25 as an accepted procedure.

2. Remove the C-Duct hinged access door. Refer to 757 AMM 78-31-10 as an accepted procedure.

CAUTION: THE THRUST REVERSER C-DUCTS SHOULD BE REMOVED. IF THE THRUST REVERSER C-DUCTS ARE NOT REMOVED AND YOU DO THE PREVENTIVE MODIFICATION, THEN HYDROGEN EMBRITTLEMENT CAN OCCUR AFTER THE PLATING IS APPLIED TO THE AFT HINGES.

3. Remove thrust reverser C-Ducts. Refer to 757 AMM 78-31-20 as an accepted procedure.

4. Aft Hinge Fittings that are damaged and/or have damaged bolts, must do one of the options below. Any fittings that are undamaged with undamaged bolts, and are not being re-worked per the options below, must continue to be inspected at the times shown in Paragraph 1.E Compliance, until steps 4 and 5 are accomplished.

NOTE: Option 2 below applies to NEW and EXISTING fittings. The aft hinge fitting can be positioned during installation using tool MIT012N8549-2. MIT012N8549-2 is used in Service Bulletin 757-54-0015. Step 5 of this part may be performed prior to or concurrently with step 4 of this part.

a. Option 1:

(1) Trim the thrust reverser aft hinge fittings on the number 1 engine as given in Figure 3.

(2) Trim the thrust reverser aft hinge fittings on the number 2 engine as given in Figure 4.

b. Option 2:

(1) Remove the thrust reverser aft hinge fittings on the number 1 engine as given in Figure 13.

(2) Trim the thrust reverser aft hinge fittings on the number 1 engine as given in Figure 3.

(3) Install the thrust reverser aft hinge fittings on the number 1 engine as given in Figure 13.

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(4) Remove the thrust reverser aft hinge fittings on the number 2 engine as given in Figure 14.

(5) Trim the thrust reverser aft hinge fittings on the number 2 engine as given in Figure 4.

(6) Install the thrust reverser aft hinge fittings on the number 2 engine as given in Figure 14.

5. A trimmed fitting must have larger bolts, new washers, and new nuts installed. Do the steps below which apply to a trimmed fitting.

a. Oversize and High Frequency Eddy Current (HFEC) Inspect the thrust reverser aft hinge fitting lower fastener holes on the number 1 engine as given in Figure 5.

(1) If any crack is found in the aft hinge fitting and the fastener hole size is already 0.4688 inch nominal, then install a new aft hinge fitting or contact Boeing for repair instructions and repair the fitting.

(2) If any crack is found in the strut structure and the fastener hole size is already 0.4688 inch nominal, then contact Boeing for repair instructions and do the repair.

b. Oversize and HFEC Inspect the thrust reverser aft hinge fitting lower fastener holes on the number 2 engine as given in Figure 6.

(1) If any crack is found in the aft hinge fitting and the fastener hole size is already 0.4688 inch nominal, then install a new aft hinge fitting or contact Boeing for repair instructions and repair the fitting.

(2) If any crack is found in the strut structure and the fastener hole size is already 0.4688 inch nominal, then contact Boeing for repair instructions and do the repair.

c. Install the lower fasteners in the thrust reverser aft hinge fitting on the number 1 engine as given in Figure 7.

d. Install the lower fasteners in the thrust reverser aft hinge fitting on the number 2 engine as given in Figure 8.

e. Oversize and HFEC Inspect the thrust reverser aft hinge fitting upper fastener holes on the number 1 engine as given in Figure 9.

(1) If any crack is found in the aft hinge fitting and the fastener hole size is already 0.5312 inch nominal, then install a new aft hinge fitting or contact Boeing for repair instructions and repair the fitting.

(2) If any crack is found in the strut structure and the fastener hole size is already 0.5312 inch nominal, then contact Boeing for repair instructions and do the repair.

f. Oversize and HFEC Inspect the thrust reverser aft hinge fitting upper fastener holes on the number 2 engine as given in Figure 10.

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(1) If any crack is found in the aft hinge fitting and the fastener hole size is already 0.5312 inch nominal, then install a new aft hinge fitting or contact Boeing for repair instructions and repair the fitting.

(2) If any crack is found in the strut structure and the fastener hole size is already 0.5312 inch nominal, then contact Boeing for repair instructions and do the repair.

g. Install the upper fasteners in the thrust reverser aft hinge fitting on the number 1 engine as given in Figure 11.

h. Install the upper fasteners in the thrust reverser aft hinge fitting on the number 2 engine as given in Figure 12.

6. Install thrust reverser C-Ducts. Refer to757 AMM 78-31-20as an accepted procedure.

7. Install the C-Duct hinged access door. Refer to757 AMM 78-31-10as an accepted procedure.

PART IV - ONE-TIME DETAILED INSPECTION FOR AIRPLANES THAT HAVE DONE THE ORIGINAL ISSUE OF THIS SERVICE BULLETIN (Group 1, Configuration 2)

1. Do a One-Time Detailed Inspection of the washers installed under the nuts and bolts that are installed in FIGURE 11 and FIGURE 12 to secure the aft hinge fittings to the structure. The countersunk washer must be installed under the head of the bolt with the countersink towards the bolt head and the special washer must be installed under the nut with the tapered side toward the aft hinge fitting. See Appendix A.

2. If the washers are not installed correctly, then remove the nut and bolt and reinstall the hardware as given in FIGURE 11 and FIGURE 12.

PART V - CLOSE ACCESS

1. Remove thrust reverser actuator hold open lock tool number B71009. Refer to 757 AMM 71-00-02 as an accepted procedure.

2. Close and lock thrust reversers. Refer to 757 AMM 78-31-00 as an accepted procedure.

3. Remove thrust reverser lock out pins. Refer to 757 AMM 78-31-00 as an accepted procedure.

4. Return Airplane to a serviceable condition.

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This Figure applies only to: Group 1, Configuration 1.

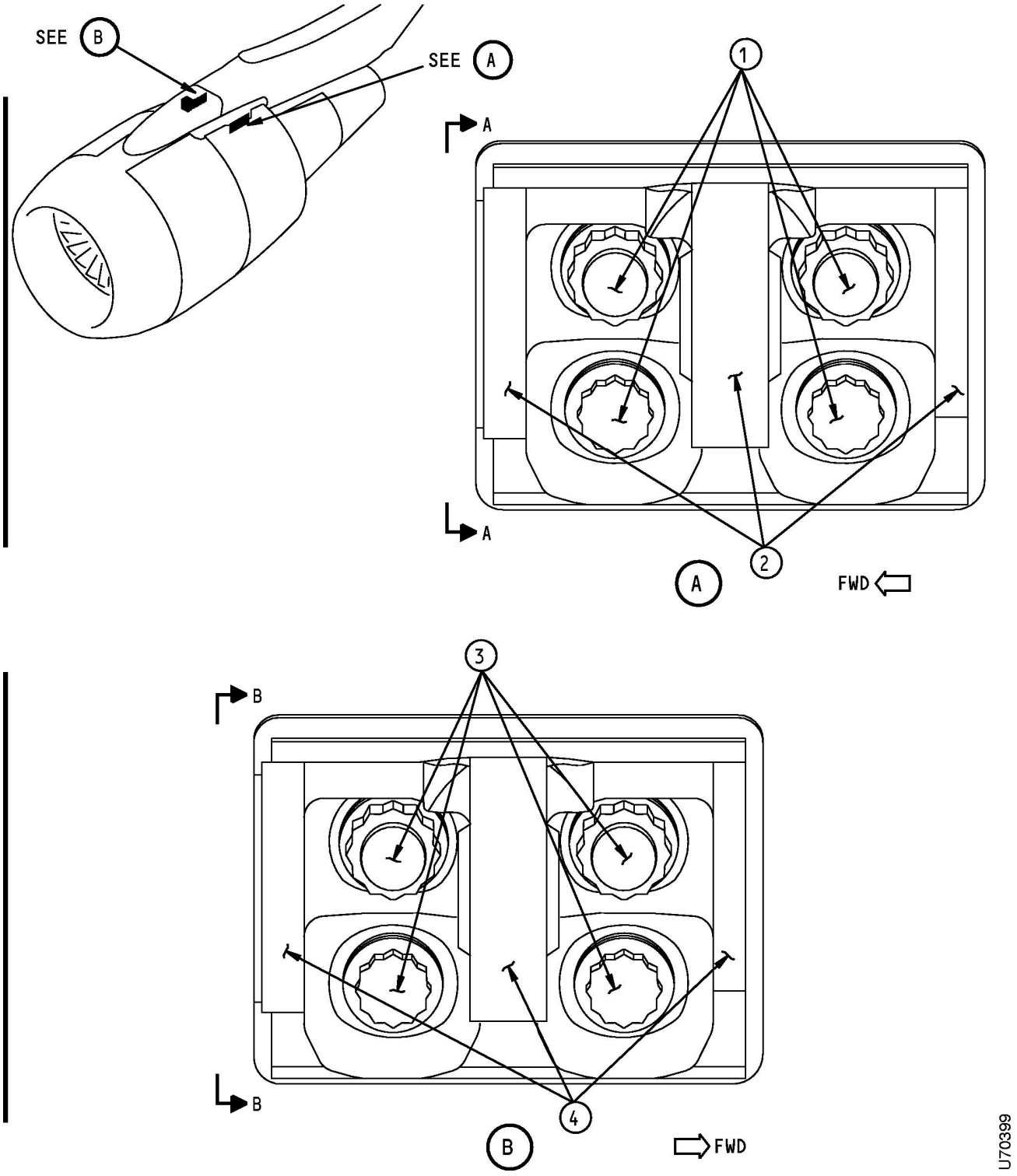
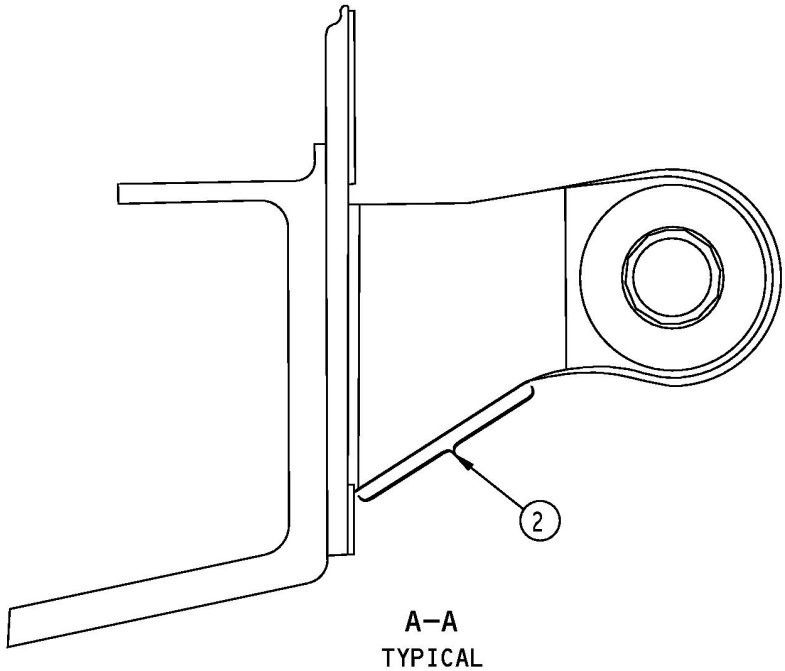
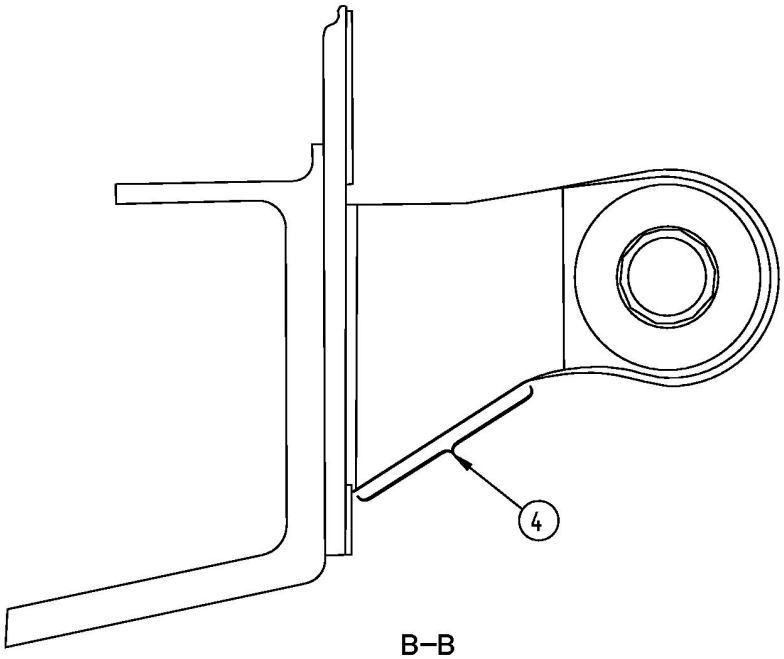


FIGURE 1: ENGINE NUMBER 1 - THRUST REVERSER AFT HINGE FITTING - DETAILED INSPECTION (SHEET 1 OF 3)

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A–A
TYPICAL
(3 LOCATIONS)



B–B
TYPICAL
(3 LOCATIONS)

1893223

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 one engine.

FIGURE 1: ENGINE NUMBER 1 - THRUST REVERSER AFT HINGE FITTING - DETAILED INSPECTION (SHEET 2 OF 3)

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STEP	TASK	NAME	PROCEDURE	MORE DATA (d)
1	Inspect	Bolts	Detailed Inspection	(a) (b)
2	Inspect	Aft Hinge Fitting	Detailed Inspection	(c)
3	Inspect	Bolts	Detailed Inspection	(a) (b)
4	Inspect	Aft Hinge Fitting	Detailed Inspection	(c)
(a)	Inspect the bolts for damage. Look for loose, fretting or broken bolts.			
(b)	Removal of the bolts is not required for this inspection.			
(c)	Inspect the aft hinge fitting for signs of contact and any broken or cracked fitting.			
(d)	If only one hinge is being inspected, it is OK to skip the steps that don't apply.			

FIGURE 1: ENGINE NUMBER 1 - THRUST REVERSER AFT HINGE FITTING - DETAILED INSPECTION (SHEET 3 OF 3)

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This Figure applies only to: Group 1, Configuration 1.

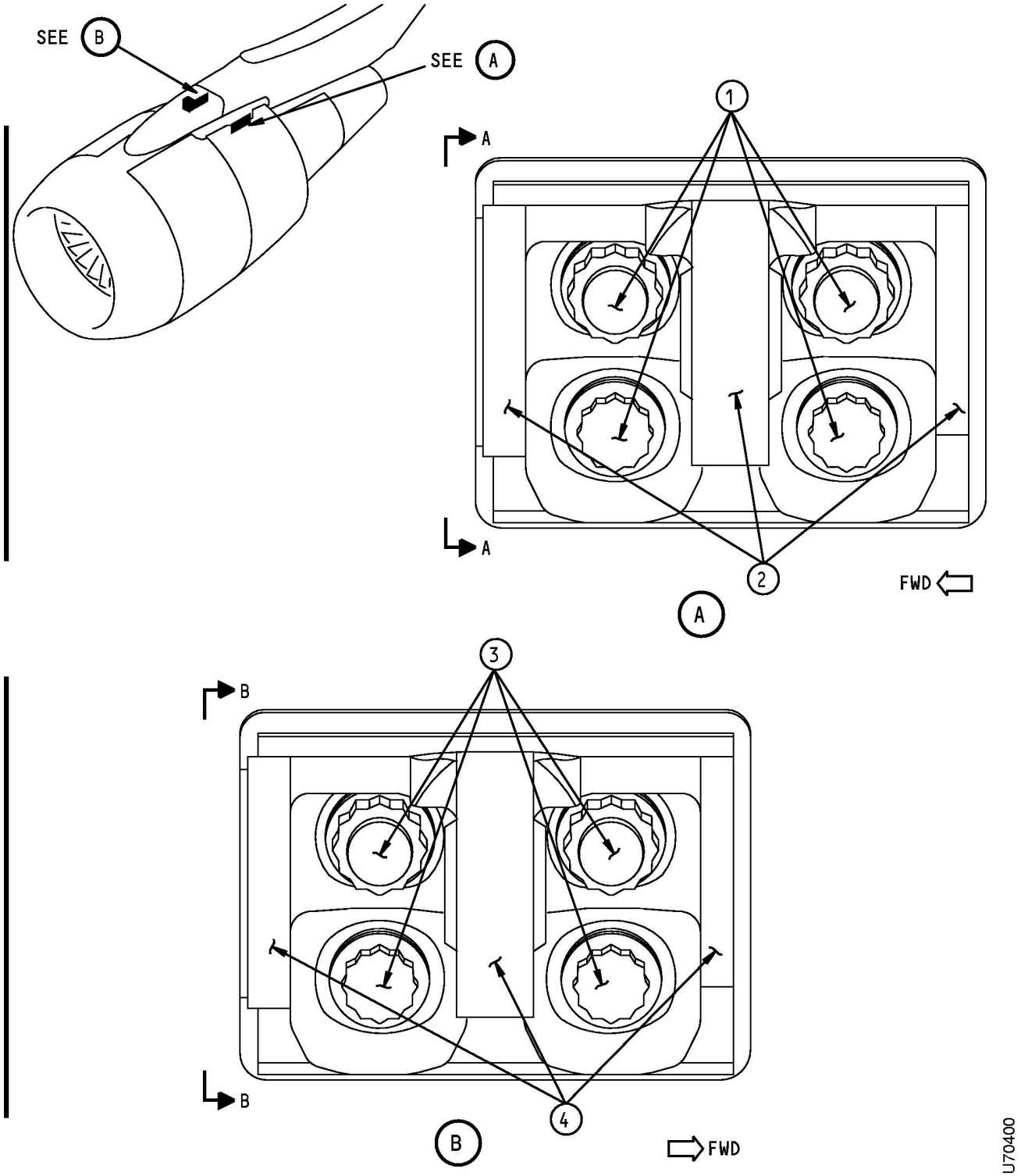
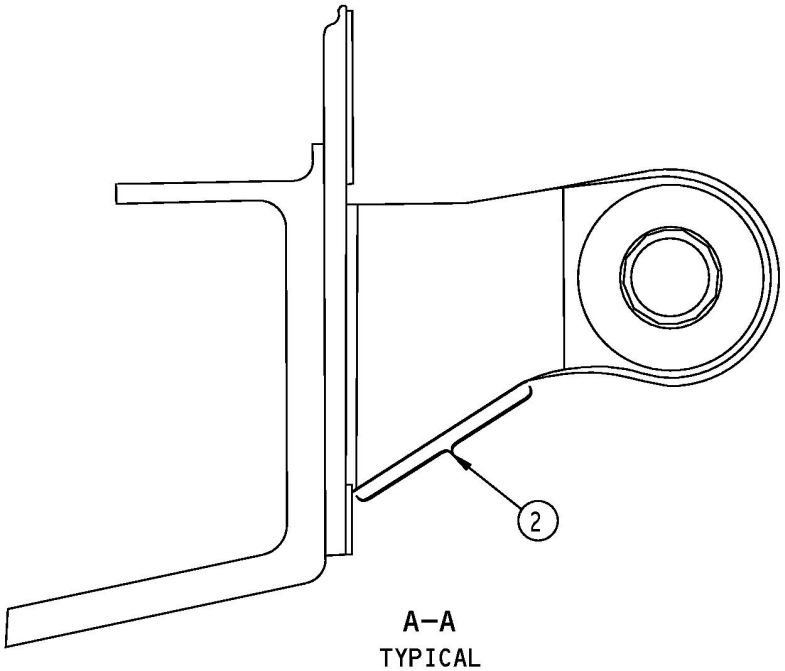
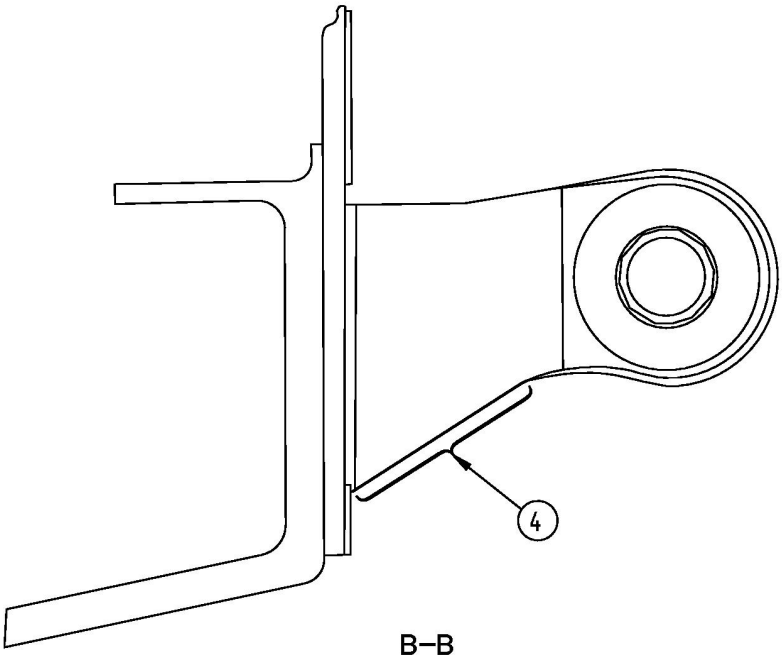


FIGURE 2: ENGINE NUMBER 2 - THRUST REVERSER AFT HINGE FITTING - DETAILED INSPECTION (SHEET 1 OF 3)

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A–A
TYPICAL
(3 LOCATIONS)



B–B
TYPICAL
(3 LOCATIONS)

1893225

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 one engine.

FIGURE 2: ENGINE NUMBER 2 - THRUST REVERSER AFT HINGE FITTING - DETAILED INSPECTION (SHEET 2 OF 3)

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STEP	TASK	NAME	PROCEDURE	MORE DATA (d)
1	Inspect	Bolts	Detailed Inspection	(a) (b)
2	Inspect	Aft Hinge Fitting	Detailed Inspection	(c)
3	Inspect	Bolts	Detailed Inspection	(a) (b)
4	Inspect	Aft Hinge Fitting	Detailed Inspection	(c)
(a)	Inspect the bolts for damage. Look for loose, fretting or broken bolts.			
(b)	Removal of the bolts is not required for this inspection.			
(c)	Inspect the aft hinge fitting for signs of contact and any broken or cracked fitting.			
(d)	If only one hinge is being inspected, it is OK to skip the steps that don't apply.			

FIGURE 2: ENGINE NUMBER 2 - THRUST REVERSER AFT HINGE FITTING - DETAILED INSPECTION (SHEET 3 OF 3)

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This Figure applies only to: Group 1, Configuration 1.

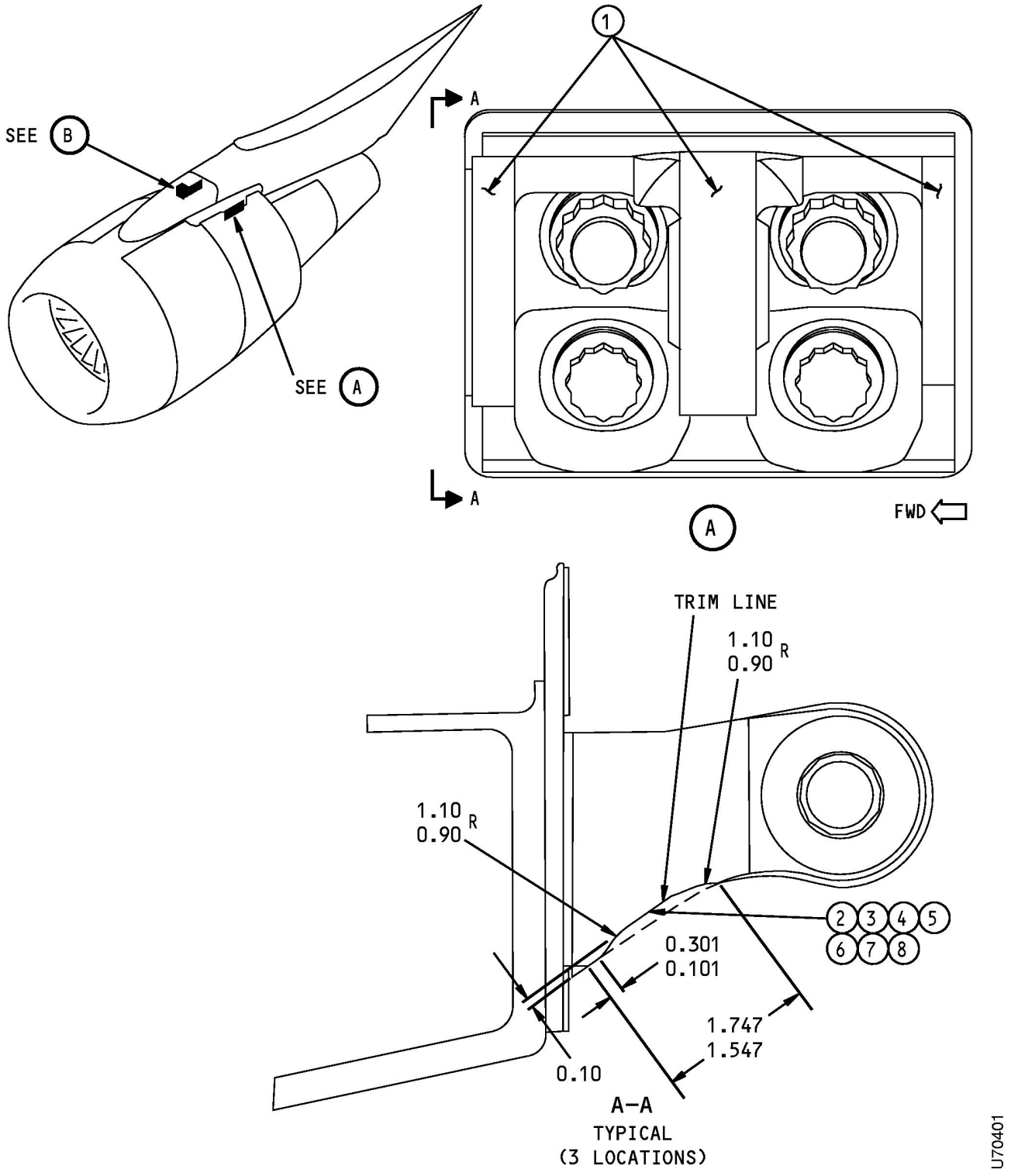
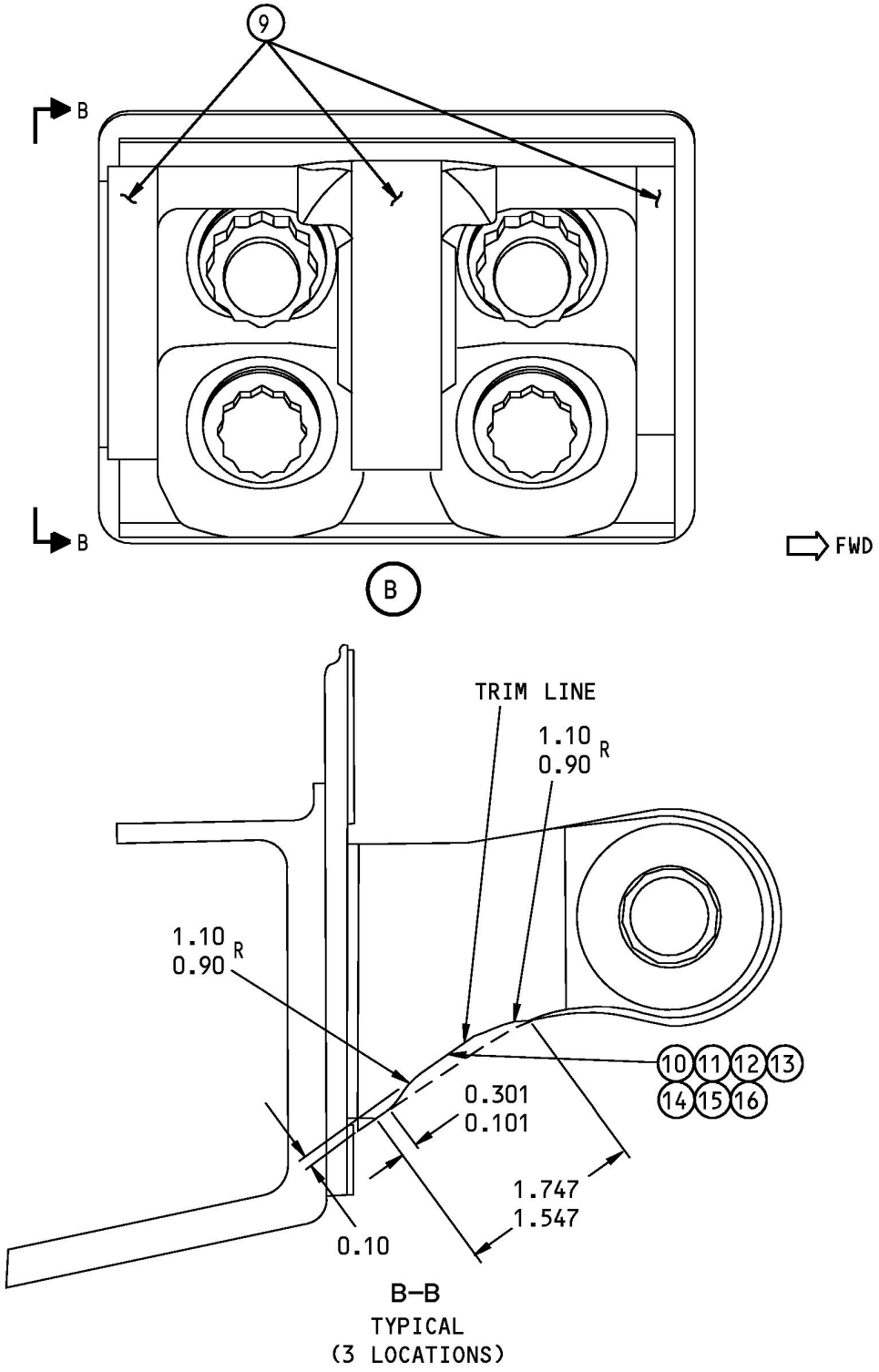


FIGURE 3: ENGINE NUMBER 1 - THRUST REVERSER AFT HINGE FITTING - TRIM (SHEET 1 OF 4)

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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 one engine.

FIGURE 3: ENGINE NUMBER 1 - THRUST REVERSER AFT HINGE FITTING - TRIM (SHEET 2 OF 4)

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STEP	TASK	NAME	IDENTIFICATION	QTY	MORE DATA (h)
1	Clean	Thrust Reverser Aft Hinge Fitting		1	(a)
2	Identify	Trim Locations		3	(b)
3	Hand Blend	Thrust Reverser Aft Hinge Fitting Lug		3	Refer to SOPM 20-10-01 and SOPM 20-10-02 as an accepted procedure. (e) (f) (c)
4	Deburr	Thrust Reverser Aft Hinge Fitting		3	(g)
5	Inspect	Thrust Reverser Aft Hinge Fitting		3	(d)
6	Do	Shot Peen or Flap Peen			Refer to SOPM 20-10-03 as an accepted procedure. Intensity 0.014A, coverage 2.0
7	Apply	Cadmium Plate			Refer to SOPM 20-42-10 an accepted procedure. Cadmium Plate to a thickness 0.0003 - 0.0005 inch.
8	Apply	Primer	Type 51	1 Coat	Refer to SOPM 20-44-01 as an accepted procedure.
9	Clean	Thrust Reverser Aft Hinge Fitting		1	(a)
10	Identify	Trim Locations		3	(b)
11	Hand Blend	Thrust Reverser Aft Hinge Fitting Lug		3	Refer to SOPM 20-10-01 and SOPM 20-10-02 as an accepted procedure. (e) (f) (c)
12	Deburr	Thrust Reverser Aft Hinge Fitting		3	(g)
13	Inspect	Thrust Reverser Aft Hinge Fitting		3	(d)
14	Do	Shot Peen or Flap Peen			Refer to SOPM 20-10-03 as an accepted procedure. Intensity 0.014A, coverage 2.0

FIGURE 3: ENGINE NUMBER 1 - THRUST REVERSER AFT HINGE FITTING - TRIM (SHEET 3 OF 4)

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STEP	TASK	NAME	IDENTIFICATION	QTY	MORE DATA (h)
15	Apply	Cadmium Plate			Refer to SOPM 20-42-10 as an accepted procedure. Cadmium Plate to a thickness 0.0003 - 0.0005 inch.
16	Apply	Primer	Type 51	1 Coat	Refer to SOPM 20-44-01 as an accepted procedure.
(a)	Clean the hinge. Refer to SOPM 20-30-03 as an accepted procedure.				
(b)	Mark the trim locations. Refer to SOPM 20-50-10 as an accepted procedure.				
(c)	Restore the surface finish to 125 micro-inches Ra.				
(d)	Do a detailed inspection of the trimmed area for signs of heat damage using Nital or Ammonium Persulfate as given in SOPM 20-10-02. If any damage is found, install a new aft hinge fitting or contact Boeing for additional repair instructions.				
(e)	Boeing recommends the use of a carbide rotary file. The part should be ground in stages, checking between stages, checking for heating after each stage. The part surface shall remain cool to the touch.				
(f)	Rotary burrs and files in portable hand-held motors may be used if the speed is limited to 500 rpm, maximum. Higher speed settings and/or other tools may be used provided that: — The operator shall produce no discoloration. — The operator shall not cause sparking or release of molten fines. — The tools shall be applied with pressure and contact time such that no heat damage occurs. — Verify the higher speed settings and/or other tools by in-process inspection of test samples or test parts. Refer to SOPM 20-10-02 as an accepted procedure.				
(g)	Break all sharp edges, the minimum/maximum radius requirement (0.02 - 0.06 radius).				
(h)	If only one hinge is being trimmed, it is OK to skip the steps that don't apply.				

FIGURE 3: ENGINE NUMBER 1 - THRUST REVERSER AFT HINGE FITTING - TRIM (SHEET 4 OF 4)

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This Figure applies only to: Group 1, Configuration 1.

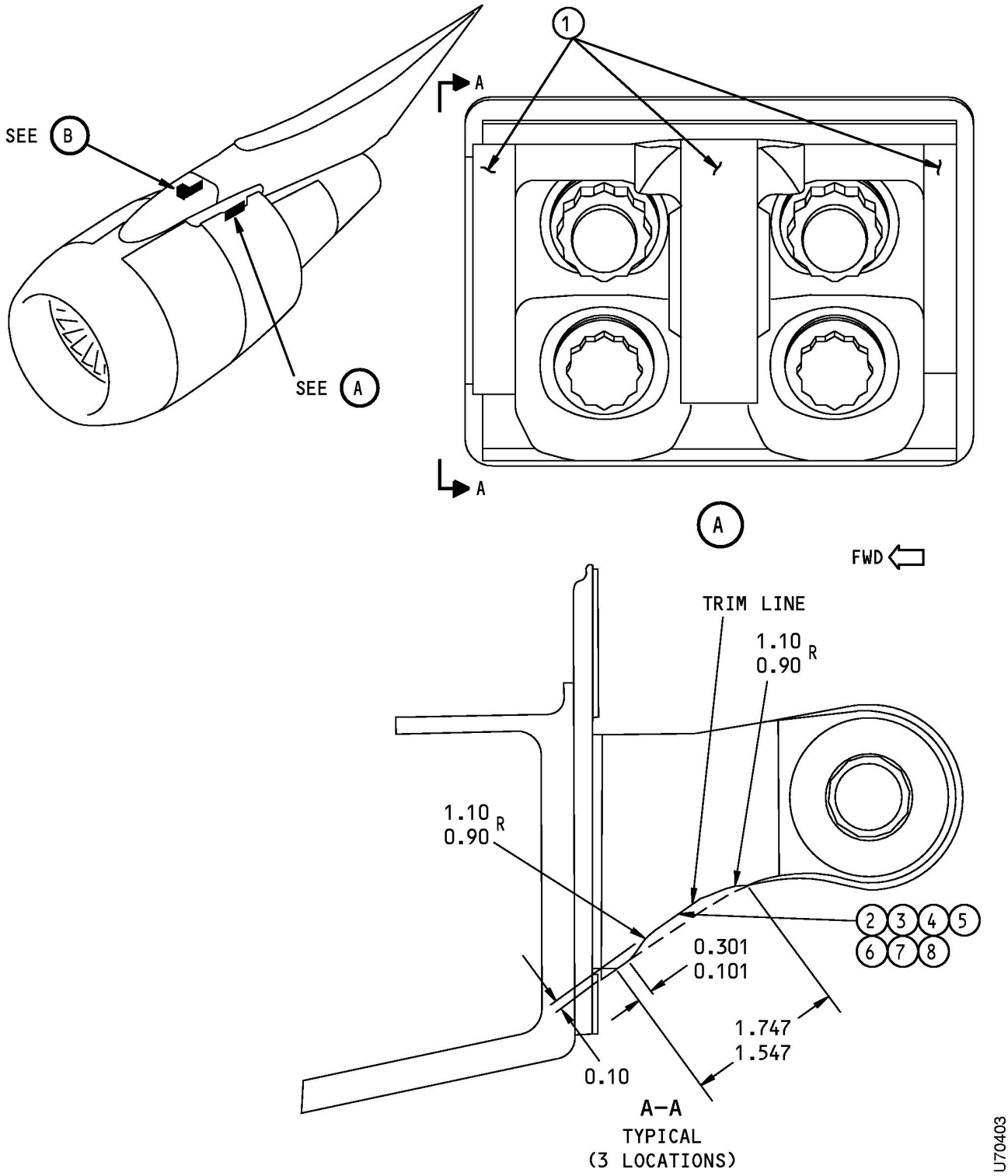
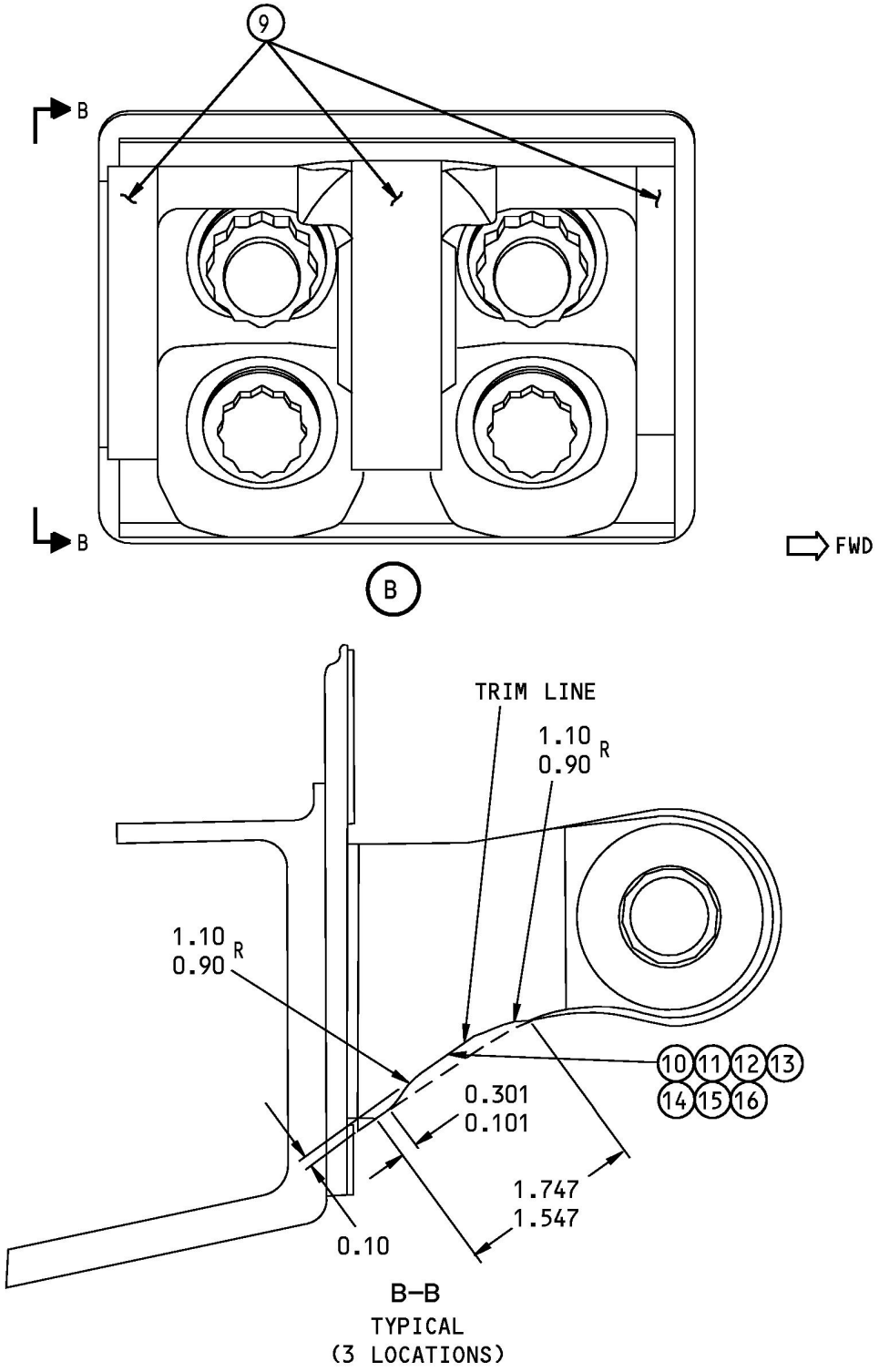


FIGURE 4: ENGINE NUMBER 2 - THRUST REVERSER AFT HINGE FITTING - TRIM (SHEET 1 OF 4)

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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 one engine.

FIGURE 4: ENGINE NUMBER 2 - THRUST REVERSER AFT HINGE FITTING - TRIM (SHEET 2 OF 4)

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STEP	TASK	NAME	IDENTIFICATION	QTY	MORE DATA (h)
1	Clean	Thrust Reverser Aft Hinge Fitting		1	(a)
2	Identify	Trim Locations		3	(b)
3	Hand Blend	Thrust Reverser Aft Hinge Fitting Lug		3	Refer to SOPM 20-10-01 and SOPM 20-10-02 as an accepted procedure. (e) (f) (c)
4	Deburr	Thrust Reverser Aft Hinge Fitting		3	(g)
5	Inspect	Thrust Reverser Aft Hinge Fitting		3	(d)
6	Do	Shot Peen or Flap Peen			Refer to SOPM 20-10-03 as an accepted procedure. Intensity 0.014A, coverage 2.0
7	Apply	Cadmium Plate			Refer to SOPM 20-42-10 an accepted procedure. Cadmium Plate to a thickness 0.0003 - 0.0005 inch.
8	Apply	Primer	Type 51	1 Coat	Refer to SOPM 20-44-01 as an accepted procedure.
9	Clean	Thrust Reverser Aft Hinge Fitting		1	(a)
10	Identify	Trim Locations		3	(b)
11	Hand Blend	Thrust Reverser Aft Hinge Fitting Lug		3	Refer to SOPM 20-10-01 and SOPM 20-10-02 as an accepted procedure. (e) (f) (c)
12	Deburr	Thrust Reverser Aft Hinge Fitting		3	(g)
13	Inspect	Thrust Reverser Aft Hinge Fitting		3	(d)
14	Do	Shot Peen or Flap Peen			Refer to SOPM 20-10-03 as an accepted procedure. Intensity 0.014A, coverage 2.0

FIGURE 4: ENGINE NUMBER 2 - THRUST REVERSER AFT HINGE FITTING - TRIM (SHEET 3 OF 4)

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STEP	TASK	NAME	IDENTIFICATION	QTY	MORE DATA (h)
15	Apply	Cadmium Plate			Refer to SOPM 20-42-10 as an accepted procedure. Cadmium Plate to a thickness 0.0003 - 0.0005 inch.
16	Apply	Primer	Type 51	1 Coat	Refer to SOPM 20-44-01 as an accepted procedure.
(a)	Clean the hinge. Refer to SOPM 20-30-03 as an accepted procedure.				
(b)	Mark the trim locations. Refer to SOPM 20-50-10 as an accepted procedure.				
(c)	Restore the surface finish to 125 micro-inches Ra.				
(d)	Do a detailed inspection of the trimmed area for signs of heat damage using Nital or Ammonium Persulfate as given in SOPM 20-10-02. If any damage is found, install a new aft hinge fitting or contact Boeing for additional repair instructions.				
(e)	Boeing recommends the use of a carbide rotary file. The part should be ground in stages, checking between stages, checking for heating after each stage. The part surface shall remain cool to the touch.				
(f)	Rotary burrs and files in portable hand-held motors may be used if the speed is limited to 500 rpm, maximum. Higher speed settings and/or other tools may be used provided that: — The operator shall produce no discoloration. — The operator shall not cause sparking or release of molten fines. — The tools shall be applied with pressure and contact time such that no heat damage occurs. — Verify the higher speed settings and/or other tools by in-process inspection of test samples or test parts. Refer to SOPM 20-10-02 as an accepted procedure.				
(g)	Break all sharp edges, the minimum/maximum radius requirement (0.02 - 0.06 radius).				
(h)	If only one hinge is being trimmed, it is OK to skip the steps that don't apply.				

FIGURE 4: ENGINE NUMBER 2 - THRUST REVERSER AFT HINGE FITTING - TRIM (SHEET 4 OF 4)

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This Figure applies only to: Group 1, Configuration 1.

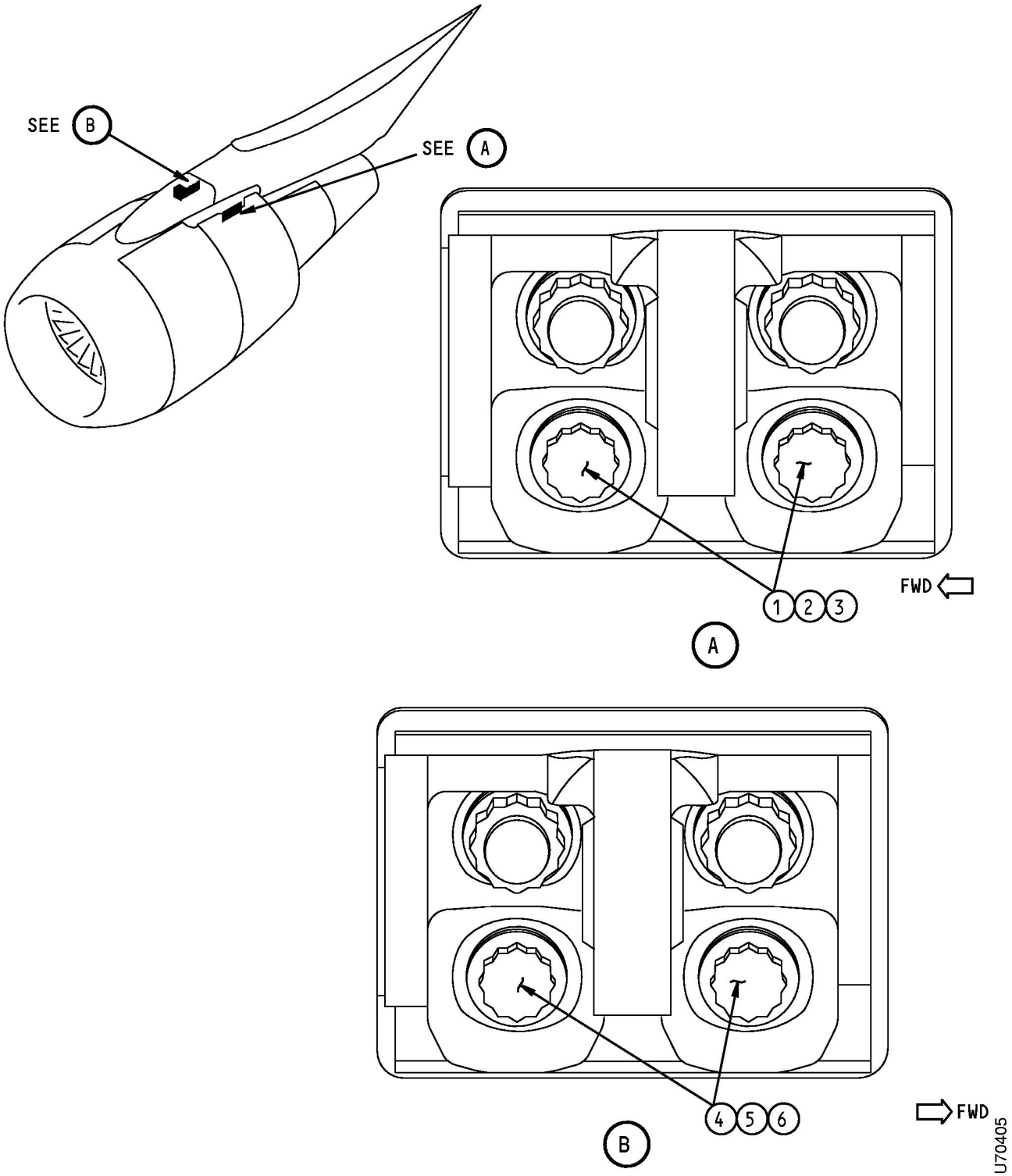


FIGURE 5: ENGINE NUMBER 1 - THRUST REVERSER AFT HINGE FITTING LOWER FASTENER HOLES - OVERSIZE AND HIGH FREQUENCY EDDY CURRENT INSPECTION (SHEET 1 OF 2)

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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 one engine.

STEP	TASK	NAME	IDENTIFICATION	QTY	MORE DATA (e)
1	Remove	Nut	BACN10HR7CS	2	(f)
		Bolt	BACB30LE7U( )	2	
		Washer	BACW10BP7ACU	2	
		Washer	BACW10BP7APU	2	
2	Drill/Ream	Fastener Hole		2	Oversize the hole to the size listed in table 1 below. (a)
3	Inspect	Open Hole	High Frequency Eddy Current (HFEC)	2	As given in 757 NDT, Part 6, 51-00-17 and757 NDT, Part 6, 51-00-16 (b)
4	Remove	Nut	BACN10HR7CS	2	(f)
		Bolt	BACB30LE7U( )	2	
		Washer	BACW10BP7ACU	2	
		Washer	BACW10BP7APU	2	
5	Drill/Ream	Fastener Hole		2	Oversize the hole to the size listed in table 1 below. (a)
6	Inspect	Open Hole	High Frequency Eddy Current (HFEC)	2	As given in 757 NDT, Part 6, 51-00-17 and 757 NDT, Part 6, 51-00-16 (c)
(a)	The hole through the hinge fitting may be up to 0.457 inch diameter from production. This condition is equivalent to a 0.4526 - 0.4536 inch existing hole diameter.				
(b)	If any crack is found repeat steps 2 and 3.				
(c)	If any crack is found repeat steps 5 and 6.				
(d)	Not Used				
(e)	If only one hinge is being oversized and inspected, it is OK to skip the steps that don't apply.				
(f)	Remove one bolt at a time when oversizing and inspecting.				

Table 1 Fastener Hole Sizes

Existing Hole Diameter	New Hole Diameter
Nominal	0.4526 - 0.4536 inch
0.4526 - 0.4536 inch	0.4683 - 0.4693 inch
0.4683 - 0.4693 inch	Do Not Oversize Hole

FIGURE 5: ENGINE NUMBER 1 - THRUST REVERSER AFT HINGE FITTING LOWER FASTENER HOLES - OVERSIZE AND HIGH FREQUENCY EDDY CURRENT INSPECTION (SHEET 2 OF 2)

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This Figure applies only to: Group 1, Configuration 1.

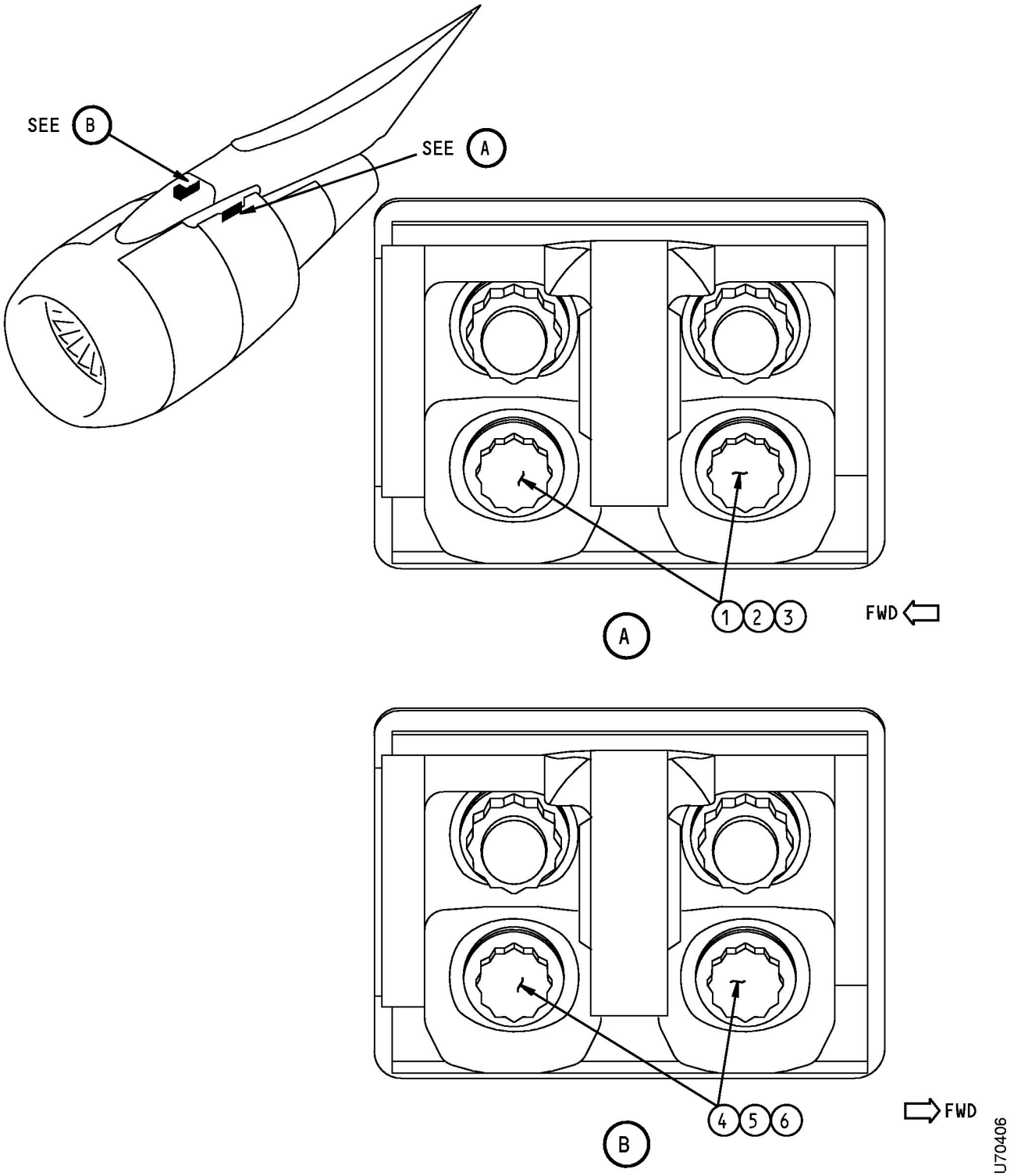


FIGURE 6: ENGINE NUMBER 2 - THRUST REVERSER AFT HINGE FITTING LOWER FASTENER HOLES - OVERSIZE AND HIGH FREQUENCY EDDY CURRENT INSPECTION (SHEET 1 OF 2)

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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 one engine.

STEP	TASK	NAME	IDENTIFICATION	QTY	MORE DATA (e)
1	Remove	Nut	BACN10HR7CS	2	(f)
		Bolt	BACB30LE7U( )	2	
		Washer	BACW10BP7ACU	2	
		Washer	BACW10BP7APU	2	
2	Drill/Ream	Fastener Hole		2	Oversize the hole to the size listed in table 1 below. (a)
3	Inspect	Open Hole	High Frequency Eddy Current (HFEC)	2	As given in 757 NDT, Part 6, 51-00-17 and 757 NDT, Part 6, 51-00-16 (b)
4	Remove	Nut	BACN10HR7CS	2	(f)
		Bolt	BACB30LE7U( )	2	
		Washer	BACW10BP7ACU	2	
		Washer	BACW10BP7APU	2	
5	Drill/Ream	Fastener Hole		2	Oversize the hole to the size listed in table 1 below. (a)
6	Inspect	Open Hole	High Frequency Eddy Current (HFEC)	2	As given in 757 NDT, Part 6, 51-00-17 and757 NDT, Part 6, 51-00-16 (c)
(a)	The hole through the hinge fitting may be up to 0.457 inch diameter from production. This condition is equivalent to a 0.4526 - 0.4536 inch existing hole diameter.				
(b)	If any crack is found repeat steps 2 and 3.				
(c)	If any crack is found repeat steps 5 and 6.				
(d)	Not Used				
(e)	If only one hinge is being oversized and inspected, it is OK to skip the steps that don't apply.				
(f)	Remove one bolt at a time when oversizing and inspecting.				

Table 1 Fastener Hole Sizes

Existing Hole Diameter	New Hole Diameter
Nominal	0.4526 - 0.4536 inch
0.4526 - 0.4536 inch	0.4683 - 0.4693 inch
0.4683 - 0.4693 inch	Do Not Oversize Hole

FIGURE 6: ENGINE NUMBER 2 - THRUST REVERSER AFT HINGE FITTING LOWER FASTENER HOLES - OVERSIZE AND HIGH FREQUENCY EDDY CURRENT INSPECTION (SHEET 2 OF 2)

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This Figure applies only to: Group 1, Configuration 1.

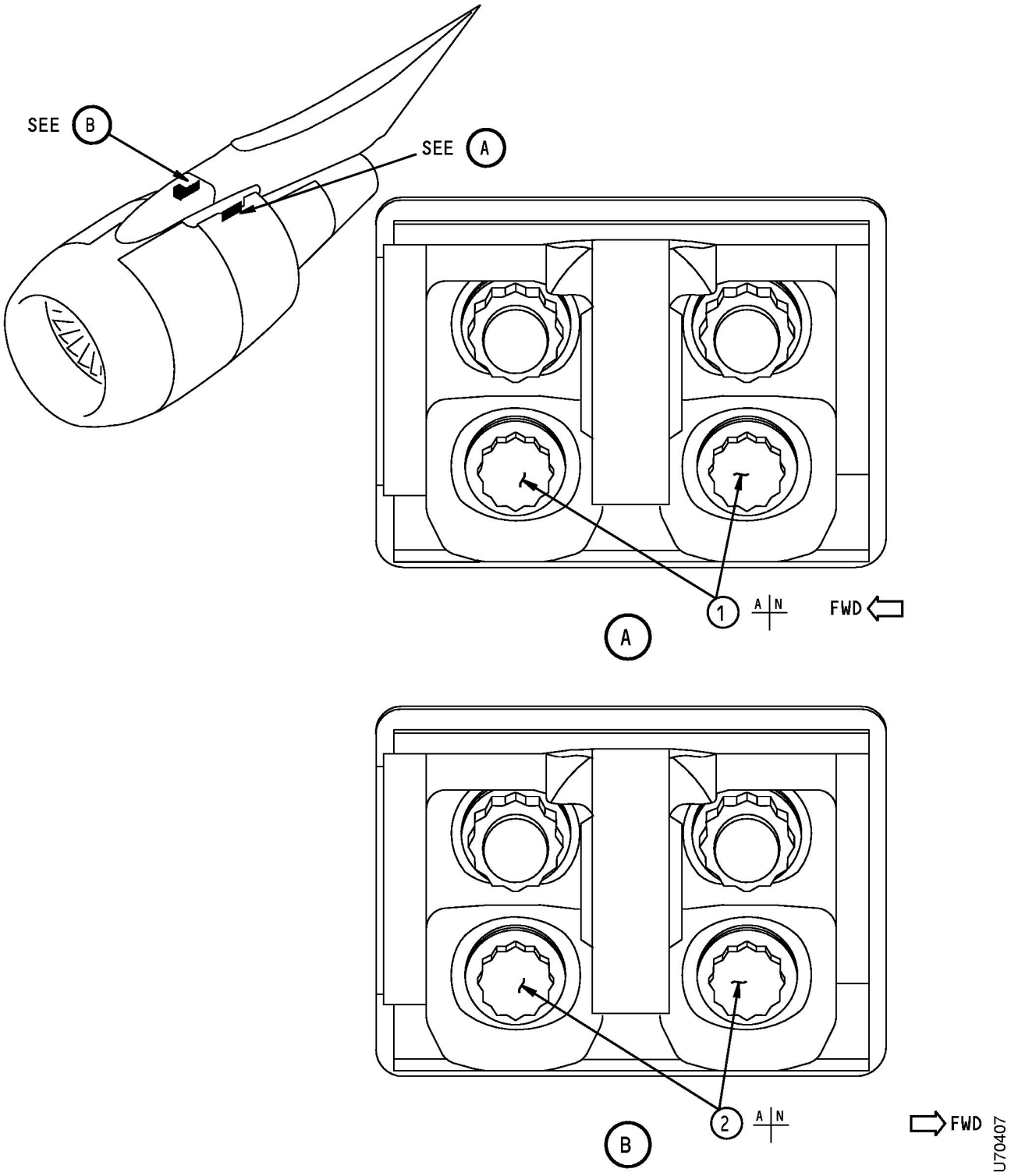
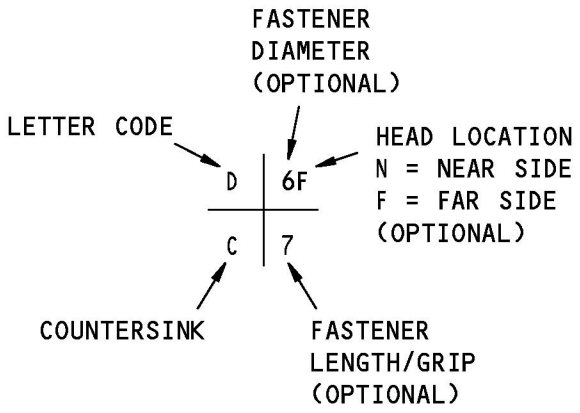


FIGURE 7: ENGINE NUMBER 1 - THRUST REVERSER AFT HINGE FITTING LOWER FASTENER HOLES - FASTENER INSTALLATION
(SHEET 1 OF 3)

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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 one engine.

STEP	TASK	NAME	IDENTIFICATION	QTY	MORE DATA (d)
1	Install (New)	Fasteners	-	2	See fastener table and Appendix A (a) (b) (c)
2	Install (New)	Fasteners	-	2	See fastener table and Appendix A (a) (b) (c)
(a)	Torque the fasteners. Refer to BAC5009 as an accepted procedure. Torque bolt head. Torque to 427-453 in-lbs (target 440 in-lbs).				
(b)	Apply BMS3-33 grease to the threads.				
(c)	Apply type 51 high temperature primer to bolt shank only. Refer to SOPM 20-44-01 as an accepted procedure.				
(d)	If only one hinge is being worked, it is OK to skip the step that doesn't apply.				



EXAMPLE OF FASTENER SYMBOL

S36173

The codes shown below agree with the letter shown in the upper left corner of the fastener symbols in the figure. A number in the lower right corner gives the grip length of the fastener.

If the grip length shown is not available at Boeing, fasteners supplied in kits may be one grip length longer than indicated. Also, if any of the fastener part numbers are not available or have been superseded, substitute fasteners may be supplied in Boeing kits, Boeing Document D-590 and Boeing drawing 65-88700 are used to determine the part numbers used as substitutes.

FIGURE 7: ENGINE NUMBER 1 - THRUST REVERSER AFT HINGE FITTING LOWER FASTENER HOLES - FASTENER INSTALLATION (SHEET 2 OF 3)

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CODE	NAME	IDENTIFICATION	HOLE DIA	MORE DATA
A	Nut	BACN10HR7CS	0.4531 inch	Install special washer under the head of the bolt with countersink towards bolt head and install the plain washer under the nut. See Appendix A.
	Bolt	BACB30US7K15X		
	Plain Washer	BACW10BP71APU		
	Special Washer	012N5108-2		
A	Nut	BACN10HR7CS	0.4688 inch	Install special washer under the head of the bolt with countersink towards bolt head and install the plain washer under the nut. See Appendix A.
	Bolt	BACB30US7K15Y		
	Plain Washer	BACW10BP72APU		
	Special Washer	012N5108-4		

FIGURE 7: ENGINE NUMBER 1 - THRUST REVERSER AFT HINGE FITTING LOWER FASTENER HOLES - FASTENER INSTALLATION
(SHEET 3 OF 3)

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This Figure applies only to: Group 1, Configuration 1.

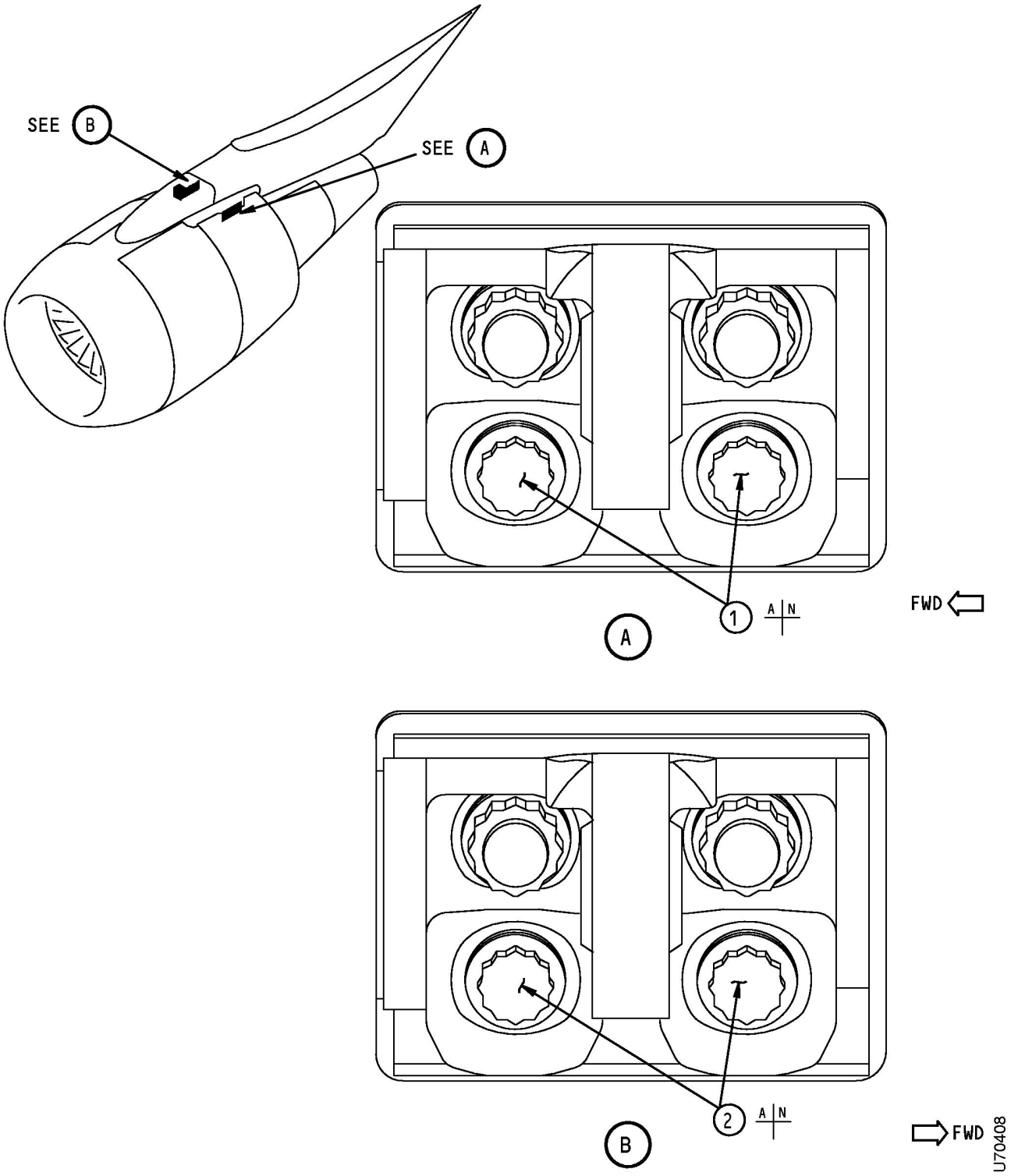
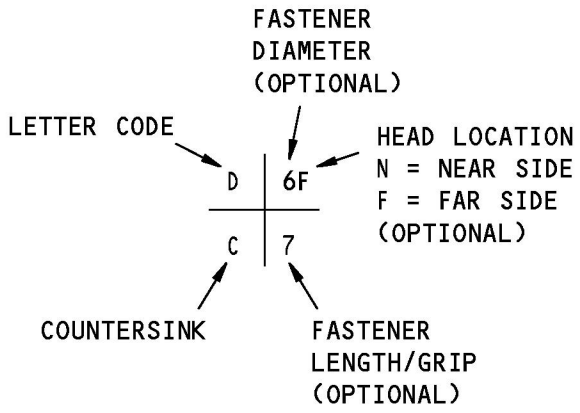


FIGURE 8: ENGINE NUMBER 2 - THRUST REVERSER AFT HINGE FITTING LOWER FASTENER HOLES - FASTENER INSTALLATION
(SHEET 1 OF 3)

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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 one engine.

STEP	TASK	NAME	IDENTIFICATION	QTY	MORE DATA (d)
1	Install (New)	Fasteners	-	2	See fastener table and Appendix A (a) (b) (c)
2	Install (New)	Fasteners	-	2	See fastener table and Appendix A (a) (b) (c)
(a)	Torque the fasteners. Refer to BAC5009 as an accepted procedure. Torque bolt head. Torque to 427-453 in-lbs (target 440 in-lbs).				
(b)	Apply BMS3-33 grease to the threads.				
(c)	Apply type 51 high temperature primer to bolt shank only. Refer to SOPM 20-44-01 as an accepted procedure.				
(d)	If only one hinge is being worked, it is OK to skip the step that doesn't apply.				



EXAMPLE OF FASTENER SYMBOL

S36173

The codes shown below agree with the letter shown in the upper left corner of the fastener symbols in the figure. A number in the lower right corner gives the grip length of the fastener.

If the grip length shown is not available at Boeing, fasteners supplied in kits may be one grip length longer than indicated. Also, if any of the fastener part numbers are not available or have been superseded, substitute fasteners may be supplied in Boeing kits, Boeing Document D-590 and Boeing drawing 65-88700 are used to determine the part numbers used as substitutes.

FIGURE 8: ENGINE NUMBER 2 - THRUST REVERSER AFT HINGE FITTING LOWER FASTENER HOLES - FASTENER INSTALLATION
(SHEET 2 OF 3)

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CODE	NAME	IDENTIFICATION	QTY	HOLE DIA	MORE DATA
A	Nut	BACN10HR7CS	4	0.4531 inch	Install special washer under the head of the bolt with countersink towards bolt head and install the plain washer under the nut. See Appendix A.
	Bolt	BACB30US7K15X	4		
	Plain Washer	BACW10BP71APU	4		
	Special Washer	012N5108-2	4		
A	Nut	BACN10HR7CS	4	0.4688 inch	Install special washer under the head of the bolt with countersink towards bolt head and install the plain washer under the nut. See Appendix A.
	Bolt	BACB30US7K15Y	4		
	Plain Washer	BACW10BP72APU	4		
	Special Washer	012N5108-4	4		

FIGURE 8: ENGINE NUMBER 2 - THRUST REVERSER AFT HINGE FITTING LOWER FASTENER HOLES - FASTENER INSTALLATION (SHEET 3 OF 3)

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This Figure applies only to: Group 1, Configuration 1.

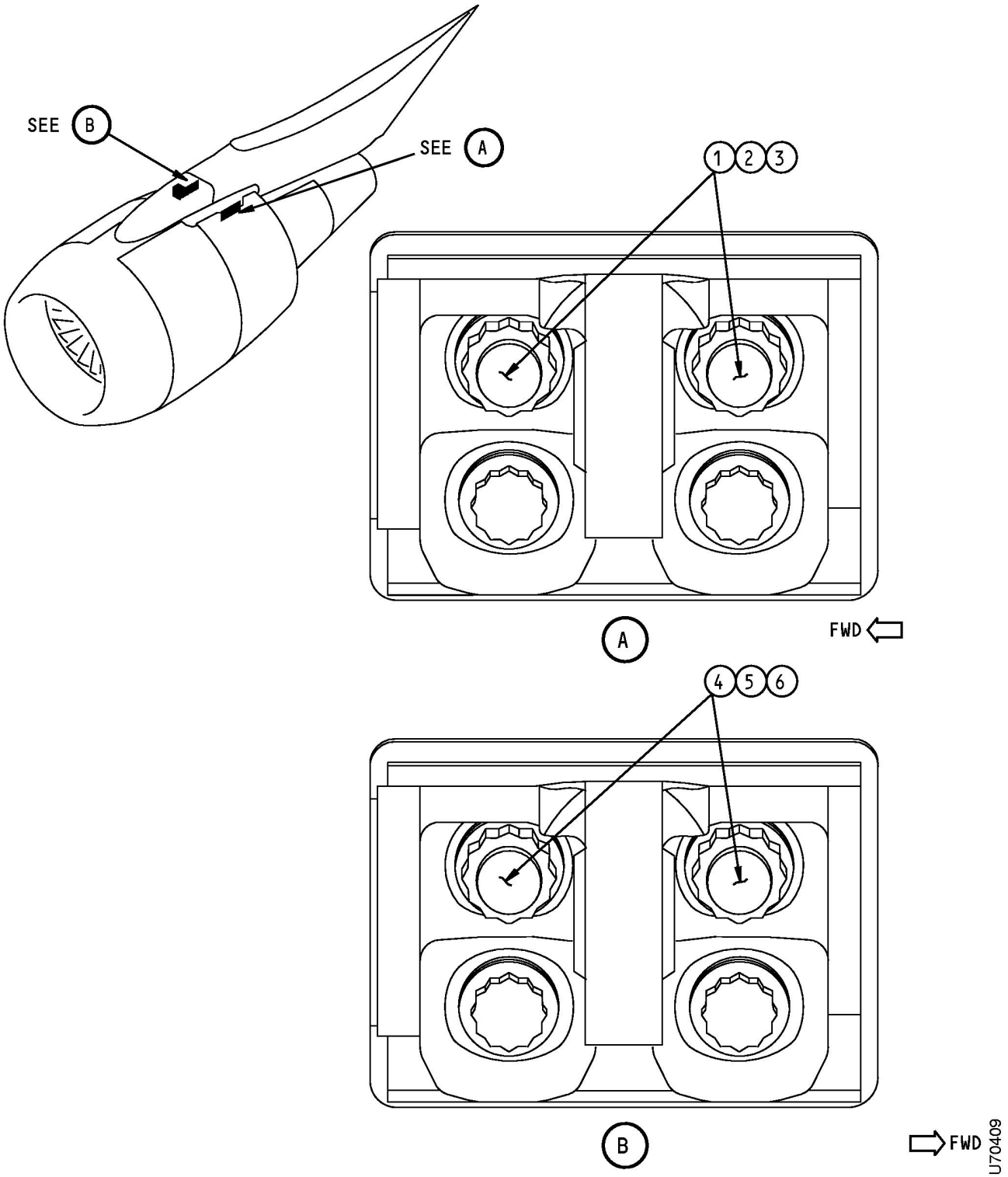


FIGURE 9: ENGINE NUMBER 1 - THRUST REVERSER AFT HINGE FITTING UPPER FASTENER HOLES - OVERSIZE AND HIGH FREQUENCY EDDY CURRENT INSPECTION (SHEET 1 OF 2)

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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 one engine.

STEP	TASK	NAME	IDENTIFICATION	QTY	MORE DATA (e)
1	Remove	Nut	BACN10HR8CS	2	(f)
		Bolt	BACB30LE8U19	2	
		Washer	BACW10BP8ACU	2	
		Washer	BACW10BP8APU	2	
2	Drill/Ream	Fastener Hole	-	2	Oversize the hole to the size listed in table 1 below. (a)
3	Inspect	Fastener Holes	High Frequency Eddy Current (HFEC)	2	As given in 757 NDT, Part 6, 51-00-17 and 757 NDT, Part 6, 51-00-16 (b)
4	Remove	Nut	BACN10HR8CS	2	(f)
		Bolt	BACB30LE8U19	2	
		Washer	BACW10BP8ACU	2	
		Washer	BACW10BP8APU	2	
5	Drill/Ream	Fastener Hole	-	2	Oversize the hole to the size listed in table 1 below. (a)
6	Inspect	Fastener Holes	High Frequency Eddy Current (HFEC)	2	As given in 757 NDT, Part 6, 51-00-17 and 757 NDT, Part 6, 51-00-16 (c)
(a)	The hole through the hinge fitting may be up to 0.521 inch diameter from production. This condition is equivalent to a 0.5151 - 0.5161 inch existing diameter hole.				
(b)	If any crack is found repeat steps 2 and 3.				
(c)	If any crack is found repeat steps 5 and 6.				
(d)	Not Used				
(e)	If only one hinge is being oversized and inspected, it is OK to skip the steps that don't apply.				
(f)	Remove one bolt at a time when oversizing and inspecting.				

Table 1 Fastener Hole Sizes

Existing Hole Diameter	New Hole Diameter
Nominal	0.5151 - 0.5161 inch
0.5151 - 0.5161 inch	0.5307 - 0.5317 inch
0.5307 - 0.5317 inch	Do Not Oversize Hole

FIGURE 9: ENGINE NUMBER 1 - THRUST REVERSER AFT HINGE FITTING UPPER FASTENER HOLES - OVERSIZE AND HIGH FREQUENCY EDDY CURRENT INSPECTION (SHEET 2 OF 2)

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This Figure applies only to: Group 1, Configuration 1.

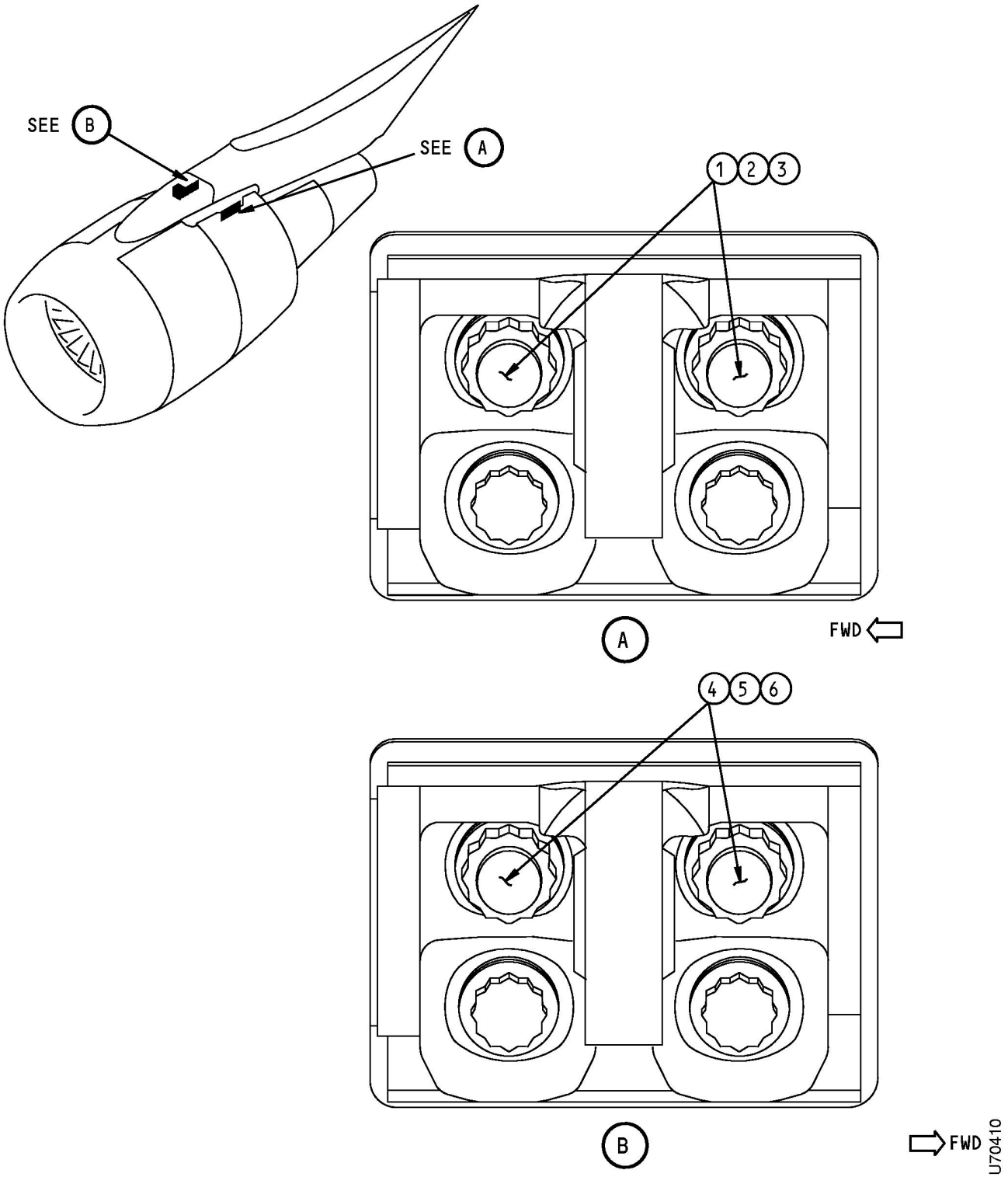


FIGURE 10: ENGINE NUMBER 2 - THRUST REVERSER AFT HINGE FITTING UPPER FASTENER HOLES - OVERSIZE AND HIGH FREQUENCY EDDY CURRENT INSPECTION (SHEET 1 OF 2)

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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 one engine.

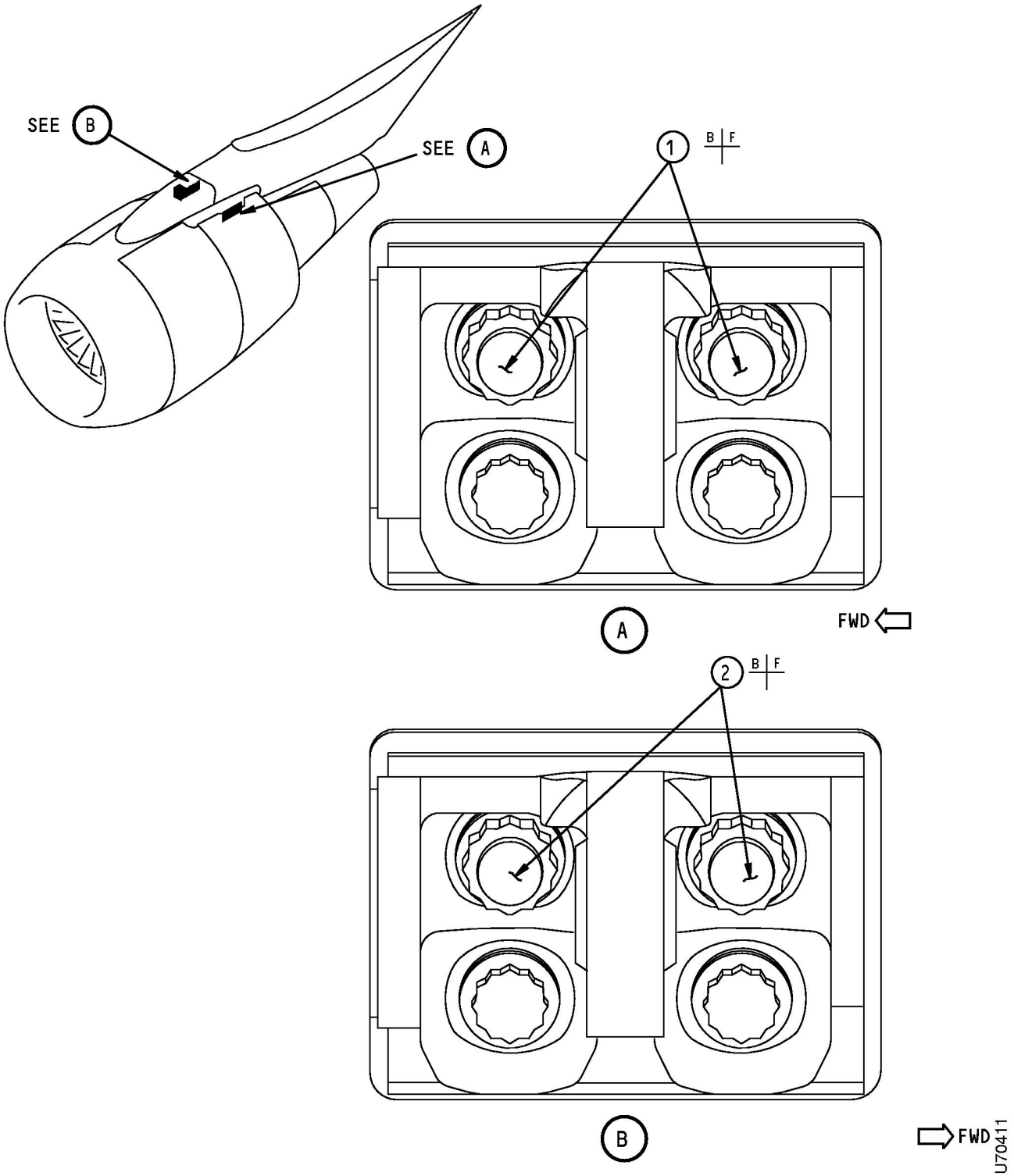
STEP	TASK	NAME	IDENTIFICATION	QTY	MORE DATA (e)
1	Remove	Nut	BACN10HR8CS	2	(f)
		Bolt	BACB30LE8U19	2	
		Washers	BACW10BP8ACU	2	
		Washer	BACW10BP8APU	2	
2	Drill/Ream	Fastener Hole	-	2	Oversize the hole to the size listed in table 1 below. (a)
3	Inspect	Fastener Holes	High Frequency Eddy Current (HFEC)	2	As given in 757 NDT, Part 6, 51-00-17 and 757 NDT, Part 6, 51-00-16 (b)
4	Remove	Nut	BACN10HR8CS	2	(f)
		Bolt	BACB30LE8U19	2	
		Washers	BACW10BP8ACU	2	
		Washer	BACW10BP8APU	2	
5	Drill/Ream	Fastener Hole	-	2	Oversize the hole to the size listed in table 1 below. (a)
6	Inspect	Fastener Holes	High Frequency Eddy Current (HFEC)	2	As given in 757 NDT, Part 6, 51-00-17 and 757 NDT, Part 6, 51-00-16 (c)
(a)	The hole through the hinge fitting may be up to 0.521 inch diameter from production. This condition is equivalent to a 0.5151 - 0.5161 inch existing hole diameter.				
(b)	If any crack is found repeat steps 2 and 3.				
(c)	If any crack is found repeat steps 5 and 6.				
(d)	Not Used				
(e)	If only one hinge is being oversized and inspected, it is OK to skip the steps that don't apply.				
(f)	Remove one bolt at a time when oversizing and inspecting.				

Table 1 Fastener Hole Sizes

Existing Hole Diameter	New Hole Diameter
Nominal	0.5151 - 0.5161 inch
0.5151 - 0.5161 inch	0.5307 - 0.5317 inch
0.5307 - 0.5317 inch	Do Not Oversize Hole

FIGURE 10: ENGINE NUMBER 2 - THRUST REVERSER AFT HINGE FITTING UPPER FASTENER HOLES - OVERSIZE AND HIGH FREQUENCY EDDY CURRENT INSPECTION (SHEET 2 OF 2)

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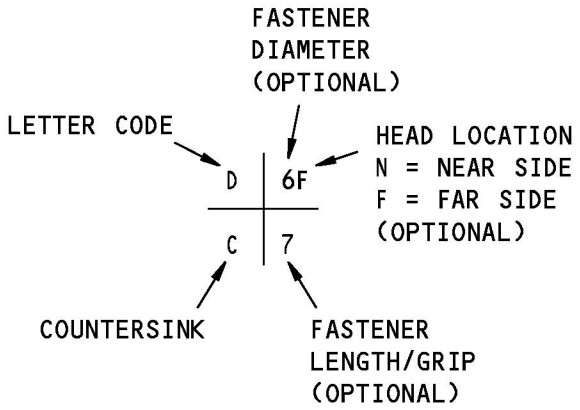


The step numbers shown below agree with the numbers shown in the circle symbols in the figure. The QTY numbers shown below are the number of parts necessary for one engine.

FIGURE 11: ENGINE NUMBER 1 - THRUST REVERSER AFT HINGE FITTING UPPER FASTENER HOLES - FASTENER INSTALLATION
(SHEET 1 OF 3)

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STEP	TASK	NAME	IDENTIFICATION	QTY	MORE DATA (d)
1	Install (New)	Fasteners	-	2	See fastener table and Appendix A (a) (b) (c)
2	Install (New)	Fasteners	-	2	See fastener table and Appendix A (a) (b) (c)
(a)	Torque the fasteners. Refer to BAC5009 as an accepted procedure. Torque nut. Torque to 558 - 592 in-lbs (target 575 in-lbs).				
(b)	Apply BMS3-33 grease to the threads.				
(c)	Apply type 51 high temperature primer to bolt shank only. Refer to SOPM 20-44-01 as an accepted procedure.				
(d)	If only one hinge is being worked, it is OK to skip the step that doesn't apply.				



The codes shown below agree with the letter shown in the upper left corner of the fastener symbols in the figure. A number in the lower right corner gives the grip length of the fastener.

If the grip length shown is not available at Boeing, fasteners supplied in kits may be one grip length longer than indicated. Also, if any of the fastener part numbers are not available or have been superseded, substitute fasteners may be supplied in Boeing kits, Boeing Document D-590 and Boeing drawing 65-88700 are used to determine the part numbers used as substitutes.

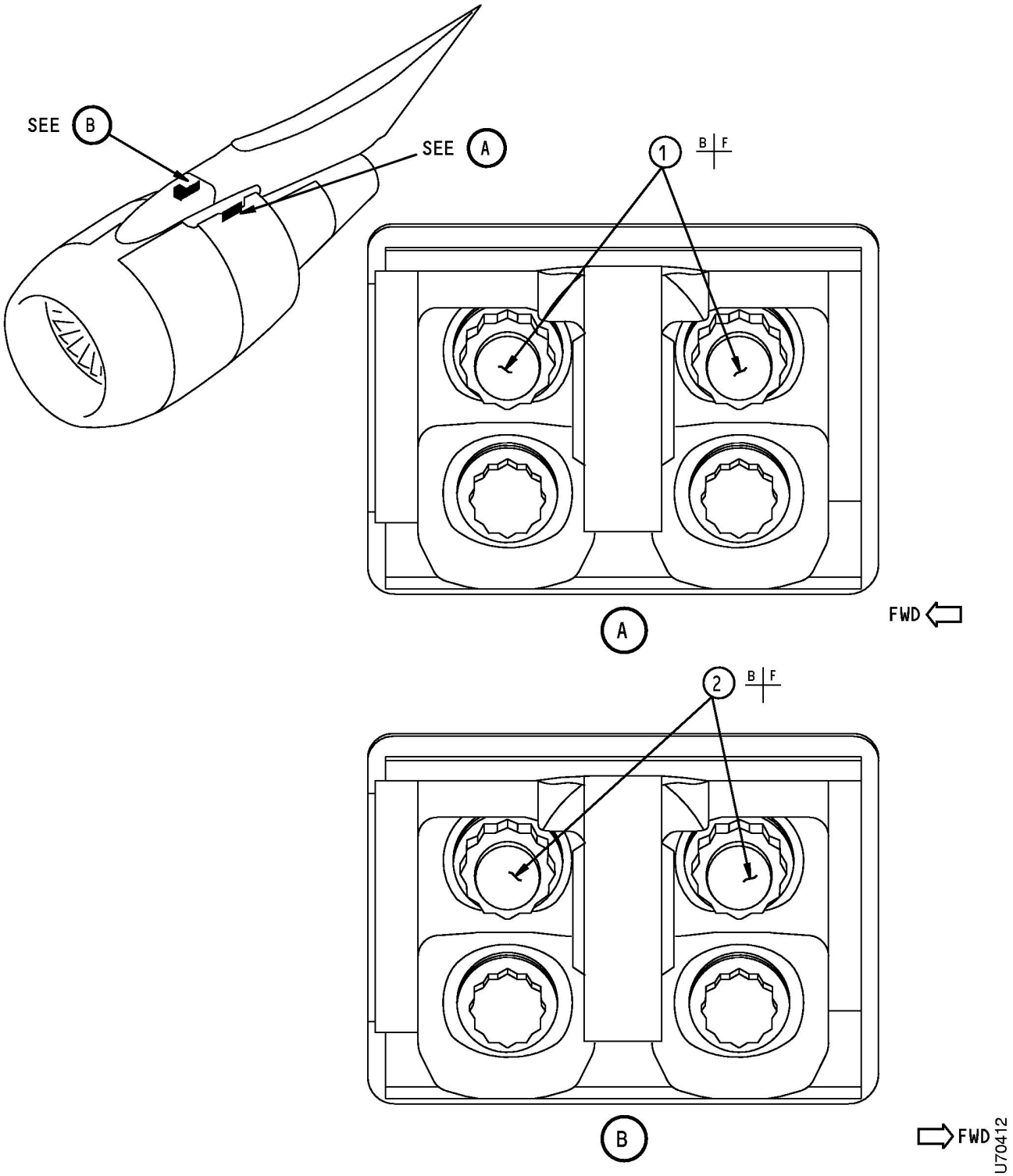
FIGURE 11: ENGINE NUMBER 1 - THRUST REVERSER AFT HINGE FITTING UPPER FASTENER HOLES - FASTENER INSTALLATION (SHEET 2 OF 3)

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CODE	NAME	IDENTIFICATION	HOLE DIA	MORE DATA
B	Nut	BACN10HR8CS	0.5156 inch	Install countersunk washer under the head of the bolt with countersink towards bolt head and install the special washer under the nut with the tapered side toward the aft hinge fitting. See Appendix A.
	Bolt	BACB30US8K19X		
	Countersunk Washer	BACW10BP81ACU		
	Special Washer	012N5108-3		
B	Nut	BACN10HR8CS	0.5312 inch	Install countersunk washer under the head of the bolt with countersink towards bolt head and install the special washer under the nut with the tapered side toward the aft hinge fitting. See Appendix A.
	Bolt	BACB30US8K19Y		
	Countersunk Washer	BACW10BP82ACU		
	Special Washer	012N5108-5		

FIGURE 11: ENGINE NUMBER 1 - THRUST REVERSER AFT HINGE FITTING UPPER FASTENER HOLES - FASTENER INSTALLATION
(SHEET 3 OF 3)

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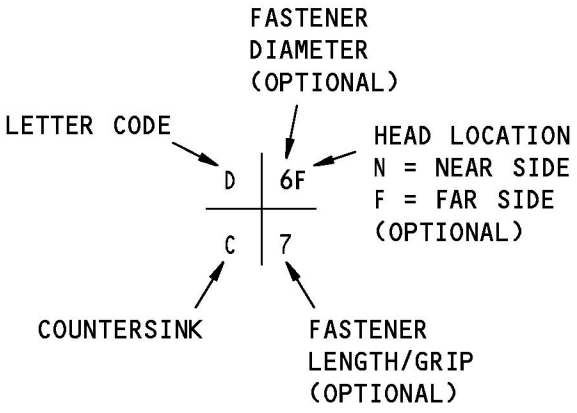


The step numbers shown below agree with the numbers shown in the circle symbols in the figure. The QTY numbers shown below are the number of parts necessary for one engine.

FIGURE 12: ENGINE NUMBER 2 - THRUST REVERSER AFT HINGE FITTING UPPER FASTENER HOLES - FASTENER INSTALLATION (SHEET 1 OF 3)

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STEP	TASK	NAME	IDENTIFICATION	QTY	MORE DATA (d)
1	Install (New)	Fasteners	-	2	See fastener table and Appendix A (a) (b) (c)
2	Install (New)	Fasteners	-	2	See fastener table and Appendix A (a) (b) (c)
(a)	Torque the fasteners. Refer to BAC5009 as an accepted procedure. Torque nut. Torque to 558 - 592 in-lbs (target 575 in-lbs).				
(b)	Apply BMS3-33 grease to the threads.				
(c)	Apply type 51 high temperature primer to bolt shank only. Refer to SOPM 20-44-01 as an accepted procedure.				
(d)	If only one hinge is being worked, it is OK to skip the step that doesn't apply.				



The codes shown below agree with the letter shown in the upper left corner of the fastener symbols in the figure. A number in the lower right corner gives the grip length of the fastener.

If the grip length shown is not available at Boeing, fasteners supplied in kits may be one grip length longer than indicated. Also, if any of the fastener part numbers are not available or have been superseded, substitute fasteners may be supplied in Boeing kits, Boeing Document D-590 and Boeing drawing 65-88700 are used to determine the part numbers used as substitutes.

FIGURE 12: ENGINE NUMBER 2 - THRUST REVERSER AFT HINGE FITTING UPPER FASTENER HOLES - FASTENER INSTALLATION
(SHEET 2 OF 3)

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CODE	NAME	IDENTIFICATION	HOLE DIA	MORE DATA
B	Nut	BACN10HR8CS	0.5156 inch	Install countersunk washer under the head of the bolt with counter-sink towards bolt head and install the special washer under the nut with the tapered side toward the aft hinge fitting. See Appendix A.
	Bolt	BACB30US8K19X		
	Countersunk Washer	BACW10BP81ACU		
	Special Washer	012N5108-3		
B	Nut	BACN10HR8CS	0.5312 inch	Install countersunk washer under the head of the bolt with counter-sink towards bolt head and install the special washer under the nut with the tapered side toward the aft hinge fitting. See Appendix A.
	Bolt	BACB30US8K19Y		
	Countersunk Washer	BACW10BP82ACU		
	Special Washer	012N5108-5		

FIGURE 12: ENGINE NUMBER 2 - THRUST REVERSER AFT HINGE FITTING UPPER FASTENER HOLES - FASTENER INSTALLATION (SHEET 3 OF 3)

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This Figure applies only to: Group 1, Configuration 1.

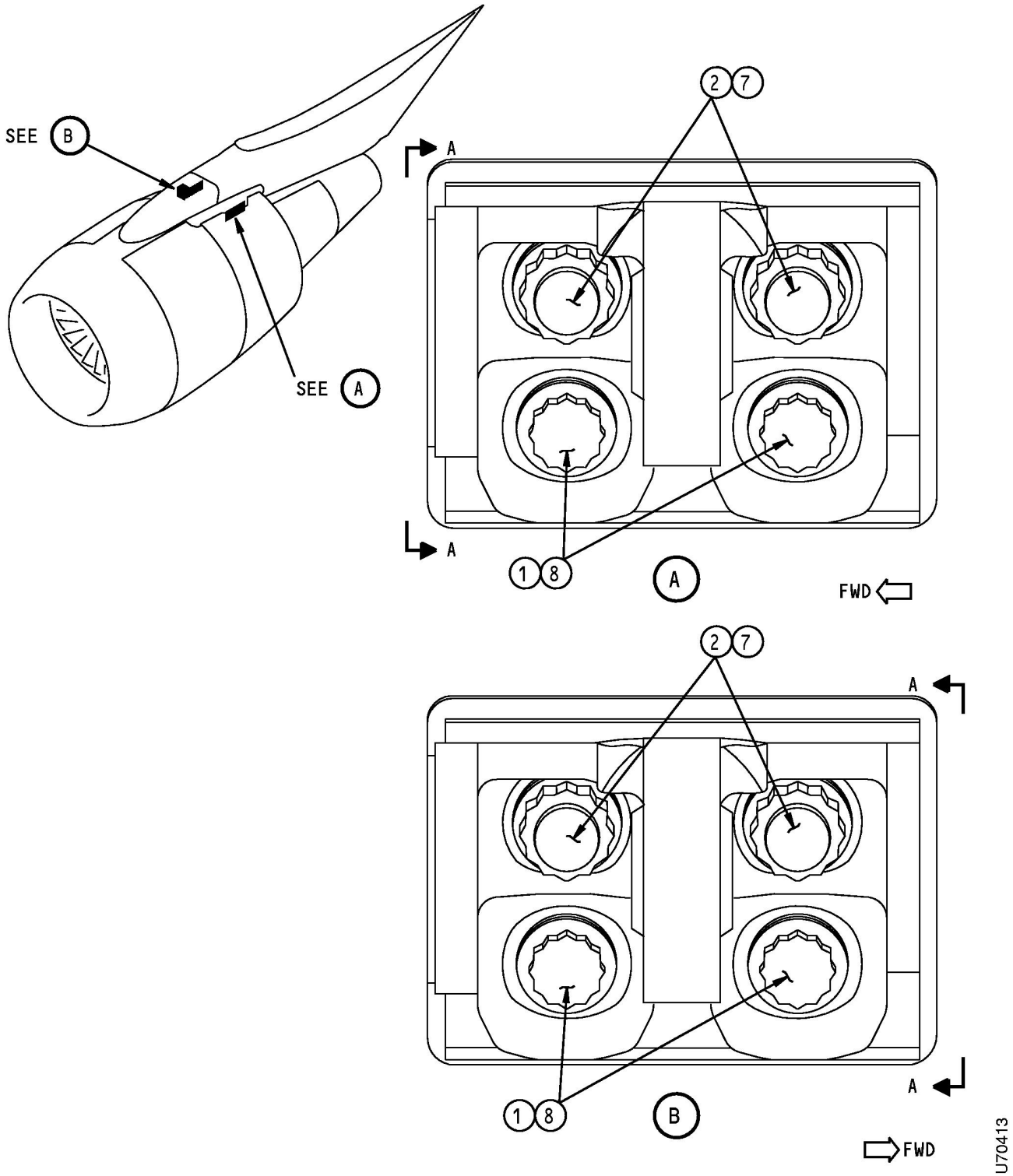
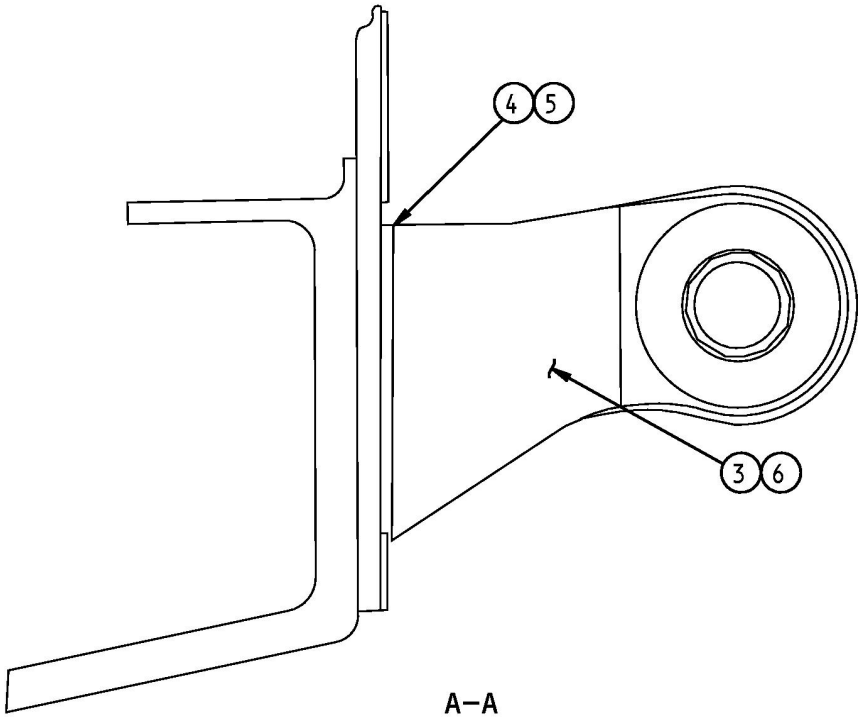


FIGURE 13: ENGINE NUMBER 1 -RE-USEDTHRUST REVERSER AFT HINGE FITTING - REMOVAL ANDINTERIMINSTALLATION
(SHEET 1 OF 3)

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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 to remove/install both hinge fittings on the number 1 strut. If only one hinge is being removed/installed on the number 1 strut, then the quantities shown should be halved.

STEP	TASK	NAME	IDENTIFICATION	QTY	MORE DATA
REMOVAL					
1	Remove/Keep	Nut	BACN10HR7CS	4	(b)
		Bolt	BACB30LE7U( )	4	
			BACB30LE7U( )X		
			BACB30LE7U( )Y		
		Washer	BACW10BP7ACU	4	
		Washer	BACW10BP7APU	4	

FIGURE 13: ENGINE NUMBER 1 -RE-USEDTHRUST REVERSER AFT HINGE FITTING - REMOVAL ANDINTERIMINSTALLATION (SHEET 2 OF 3)

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STEP	TASK	NAME	IDENTIFICATION	QTY	MORE DATA
2	Remove/Keep	Nut	BACN10HR8CS	4	(b)
		Bolt	BACB30LE8U19	4	
			BACB30LE8U19X		
			BACB30LE8U19Y		
		Washer	BACW10BP8ACU	4	
		Washer	BACW10BP8APU	4	
3	Remove/Keep	Thrust Reverser Aft Hinge Fitting	311N5148-1	2	
4	Remove	Sealant	BMS 5-26	-	
INSTALLATION					
5	Apply	Sealant	BMS 5-45	-	Fay surface seal. Refer to SOPM 20-50-19 as an accepted procedure.
6	Install	Thrust Reverser Aft Hinge Fitting	311N5148-1	2	
7	Install	Nut	BACN10HR8CS	4	(a)
		Bolt	BACB30LE8U19	4	
			BACB30LE8U19X		
			BACB30LE8U19Y		
		Washer	BACW10BP8ACU	4	
		Washer	BACW10BP8APU	4	
8	Install	Nut	BACN10HR7CS	4	(a)
		Bolt	BACB30LE7U( )	4	
			BACB30LE7U( )X		
			BACB30LE7U( )Y		
		Washer	BACW10BP7ACU	4	
		Washer	BACW10BP7APU	4	
(a)	Tighten the fasteners to secure the fittings in place.				
(b)	If existing hardware is undamaged, you can reuse it.				

FIGURE 13: ENGINE NUMBER 1 -RE-USEDTHRUST REVERSER AFT HINGE FITTING - REMOVAL ANDINTERIMINSTALLATION
(SHEET 3 OF 3)

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This Figure applies only to: Group 1, Configuration 1.

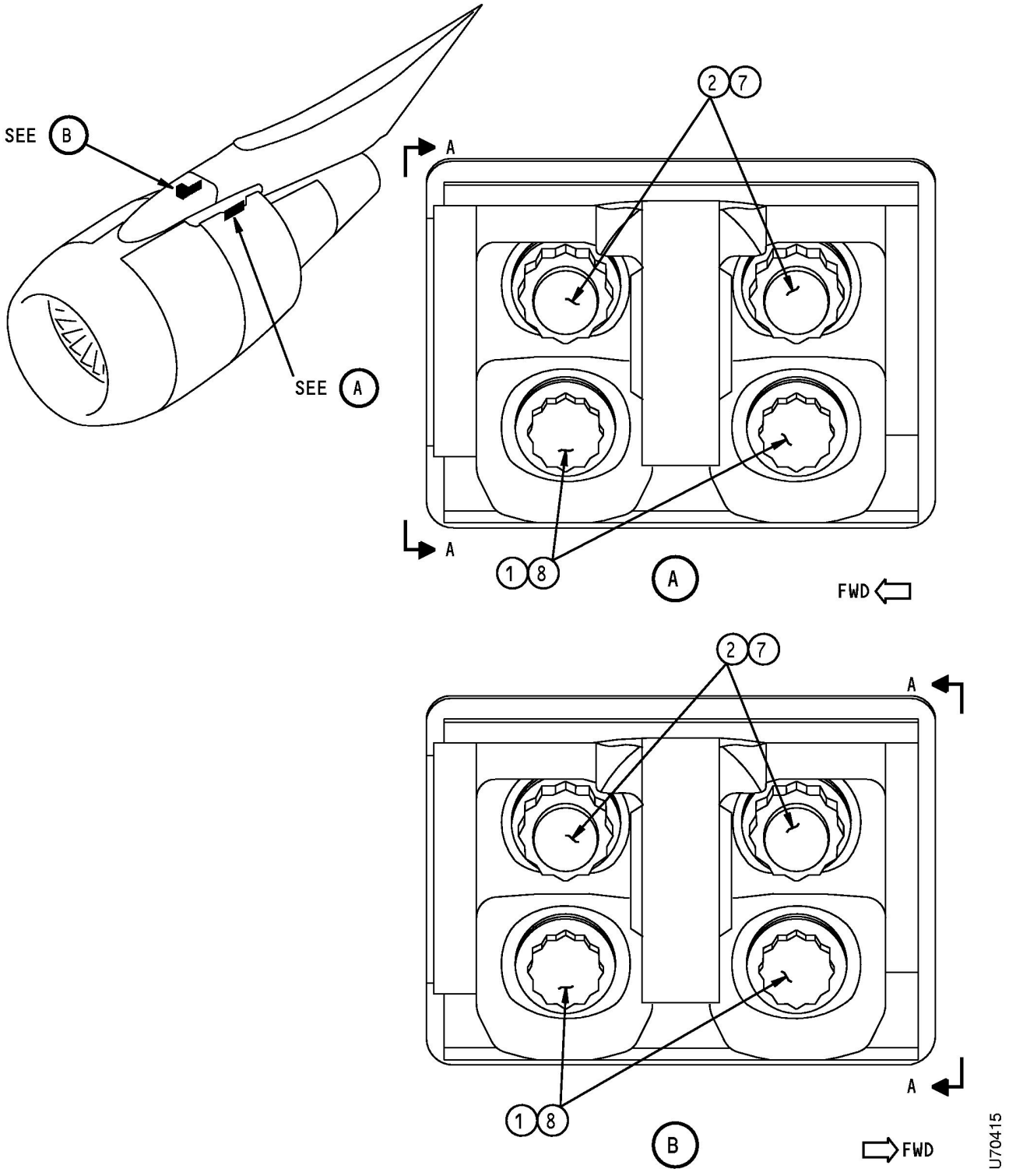
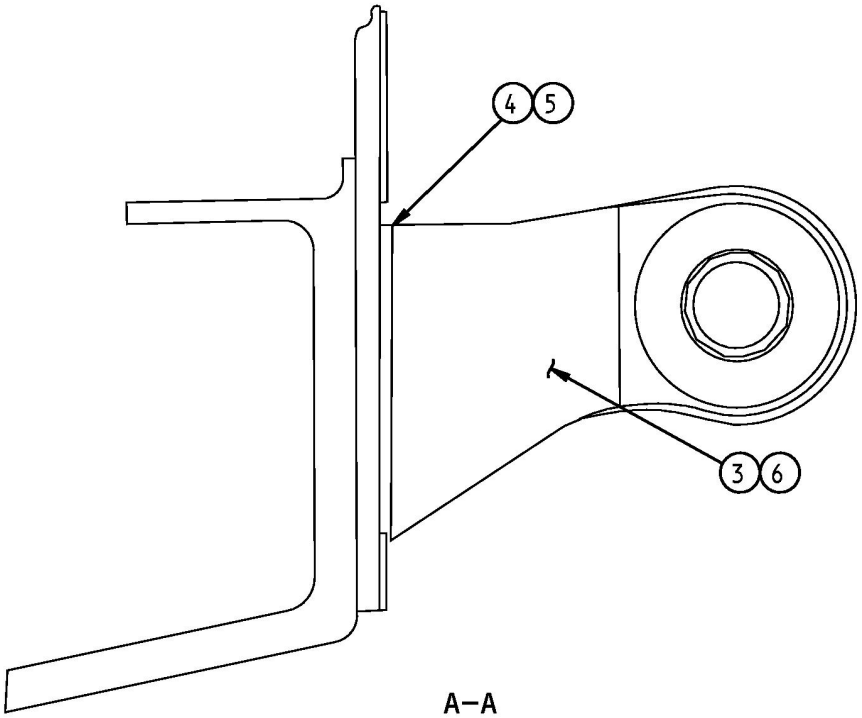


FIGURE 14: ENGINE NUMBER 2 -RE-USEDTHRUST REVERSER AFT HINGE FITTING - REMOVAL ANDINTERIMINSTALLATION (SHEET 1 OF 3)

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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 to remove/install both hinge fittings on the number 2 strut. If only one hinge is being removed/installed on the number 2 strut, then the quantities shown should be halved.

STEP	TASK	NAME	IDENTIFICATION	QTY	MORE DATA
REMOVAL					
1	Remove/Keep	Nut	BACN10HR7CS	4	(b)
		Bolt	BACB30LE7U( )	4	
			BACB30LE7U( )X		
			BACB30LE7U( )Y		
		Washer	BACW10BP7ACU	4	
		Washer	BACW10BP7APU	4	

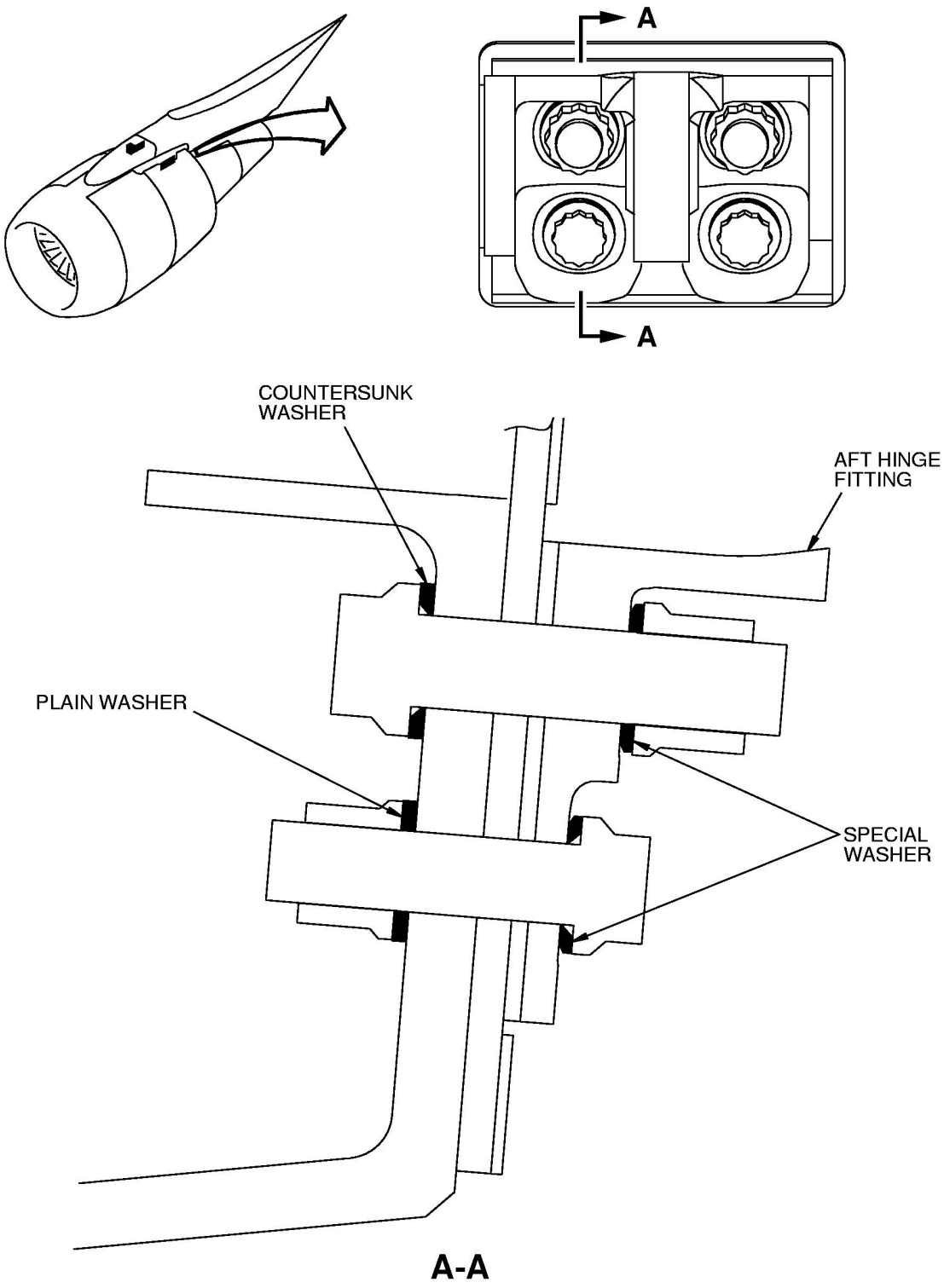
FIGURE 14: ENGINE NUMBER 2 -RE-USEDTHRUST REVERSER AFT HINGE FITTING - REMOVAL ANDINTERIMINSTALLATION (SHEET 2 OF 3)

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STEP	TASK	NAME	IDENTIFICATION	QTY	MORE DATA
2	Remove/Keep	Nut	BACN10HR8CS	4	(b)
		Bolt	BACB30LE8U19	4	
			BACB30LE8U19X		
			BACB30LE8U19Y		
		Washer	BACW10BP8ACU	4	
		Washer	BACW10BP8APU	4	
3	Remove/Keep	Thrust Reverser Aft Hinge Fitting	311N5148-1	2	
4	Remove	Sealant	BMS 5-26	-	
INSTALLATION					
5	Apply	Sealant	BMS 5-45	-	Fay surface seal. Refer to SOPM 20-50-19 as an accepted procedure.
6	Install	Thrust Reverser Aft Hinge Fitting	311N5148-1	2	
7	Install	Nut	BACN10HR8CS	4	(a)
		Bolt	BACB30LE8U19	4	
			BACB30LE8U19X		
			BACB30LE8U19Y		
		Washer	BACW10BP8ACU	4	
		Washer	BACW10BP8APU	4	
8	Install	Nut	BACN10HR7CS	4	(a)
		Bolt	BACB30LE7U( )	4	
			BACB30LE7U( )X		
			BACB30LE7U( )Y		
		Washer	BACW10BP7ACU	4	
		Washer	BACW10BP7APU	4	
(a)	Tighten the fasteners to secure the fittings in place.				
(b)	If existing hardware is undamaged, you can reuse it.				

FIGURE 14: ENGINE NUMBER 2 -RE-USEDTHRUST REVERSER AFT HINGE FITTING - REMOVAL ANDINTERIMINSTALLATION
(SHEET 3 OF 3)

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APPENDIX A: AFT HINGE FITTING FASTENER STACKUP
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