COMPONENT MAINTENANCE MANUAL WITH ILLUSTRATED PARTS LIST

INBOARD FLAP OUTBOARD CARRIAGE ASSEMBLY

PART NUMBER 113A2850–1, –2, –201, –202, –3, –4, –5, –6

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COMPONENT MAINTENANCE MANUAL

Revision No. 9
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To: All holders of INBOARD FLAP OUTBOARD CARRIAGE ASSEMBLY 27-55-72.

Attached is the current revision to this COMPONENT MAINTENANCE MANUAL

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A = Added, R = Revised, D = Deleted, O = Overflow

Subject/Page	Date	Subject/Page	Date	Subject/Page	Date
27-55-72 ILLUSTRATED PARTS LIST (cont)					
1009	Nov 01/2006				
1010	Mar 01/2006				
1011	Mar 01/2006				
1012	Mar 01/2006				
1013	Mar 01/2006				
1014	Mar 01/2006				
1015	Mar 01/2006				
1016	Mar 01/2006				
1017	Mar 01/2006				
1018	Mar 01/2006				
1019	Nov 01/2006				
1020	Nov 01/2006				
1021	Nov 01/2006				
1022	Nov 01/2006				
1023	Nov 01/2006				
1024	Mar 01/2006				
1025	Mar 01/2006				
1026	Mar 01/2006				
1027	Mar 01/2006				
1028	Mar 01/2006				
1029	Mar 01/2006				
1030	Mar 01/2006				
1031	Nov 01/2006				
1032	Nov 01/2006				
1033	Nov 01/2006				
1034	Nov 01/2006				
1035	Nov 01/2006				
1036	BLANK				

A = Added, R = Revised, D = Deleted, O = Overflow

TABLE OF CONTENTS

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COMPONENT MAINTENANCE MANUAL

TEMPORARY REVISION AND SERVICE BULLETIN RECORD

BOEING SERVICE BULLETIN	BOEING TEMPORARY REVISION	OTHER DIRECTIVE	DATE OF INCORPORATION INTO MANUAL
		PRR 38006	MAR 01/97
		PRR 38609	JUL 01/05

All revisions to this manual will be accompanied by transmittal sheet bearing the revision number. Enter the revision number in numerical order, together with the revision date, the date filed and the initials of the person filing.

Revision		Filed		Revision		Filed	
Number	Date	Date	Initials	Number	Date	Date	Initials

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Temporary Revision		Inserted		Removed	
Number	Date	Date	Initials	Date	Initials

Temporary Revision		Inserted		Removed	
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Number	Date	Date	Initials	Date	Initials

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Date	Initials	Number	Date	Date	Initials

INTRODUCTION

1. General

A. The instructions in this manual supply the data necessary to do the maintenance functions together with the test, fault isolation, repair, and replacement of the defective parts.

B. This manual is divided into different parts:

(1) Title Page

(2) Transmittal Letter

(3) Highlights

(4) List of Effective Pages

(5) Table of Contents

(6) Temporary Revision & Service Bulletin Record

(7) Record of Revisions

(8) Record of Temporary Revisions

(9) Introduction

(10) Procedures & IPL Sections

C. Components that can be repaired have a different repair number for each specified repair. To find the repair number location of a component, look in the Repair-General procedure at the beginning of the REPAIR section. The Repair-General procedure also has an explanation of the True Position Dimension symbols used.

D. All dimensions, measures, quantities and weights included are in English units. When metric equivalents are given they will be in the parentheses that follow the English units.

E. The introduction to the Illustrated Parts List (IPL) shows how the IPL data is used.

F. Design changes, optional parts, configuration differences and Service Bulletin modifications may cause different part numbers. These part numbers are identified in the IPL with an alphabetical letter which is added to the end of the basic item number. This new item number is referred to as an alpha-variant. Throughout the manual, IPL basic item number references also apply to alpha-variants unless shown differently.

G. The tool reference numbers found in the individual procedures and in the Special Tools, Fixtures, and Equipment section are used to identify if a tool is a standard tool (STD-XXXX), a commercial tool (COM-XXXX), or a Special Tool (SPL-XXXX). This reference number is also used to distinguish between tools with similar names in the same procedure. These reference numbers are for use in the documentation only. They are not to be used for ordering tools.

INBOARD FLAP OUTBOARD CARRIAGE ASSEMBLY - DESCRIPTION AND OPERATION

1. Description

A. The inboard flap outboard carriage assembly has two titanium carriage fitting assemblies, an aluminum bridge fitting, delrin rub plate assemblies, titanium/CRES eccentric roller cartidge assemblies, CRES rollers, and titanium roller pin assemblies. On later assemblies, the eccentric adjustment function is not necessary, and the roller cartridge assemblies are replaced with rollers and pins.

B. The carriage assembly is attached to the main inboard flap and rides on the flap track.

2. Operation

A. When the ballscrew turns, it moves the inboard flap outboard carriage assembly along the support track assembly to adjust the flap assembly for maximum aerodynamic performance.

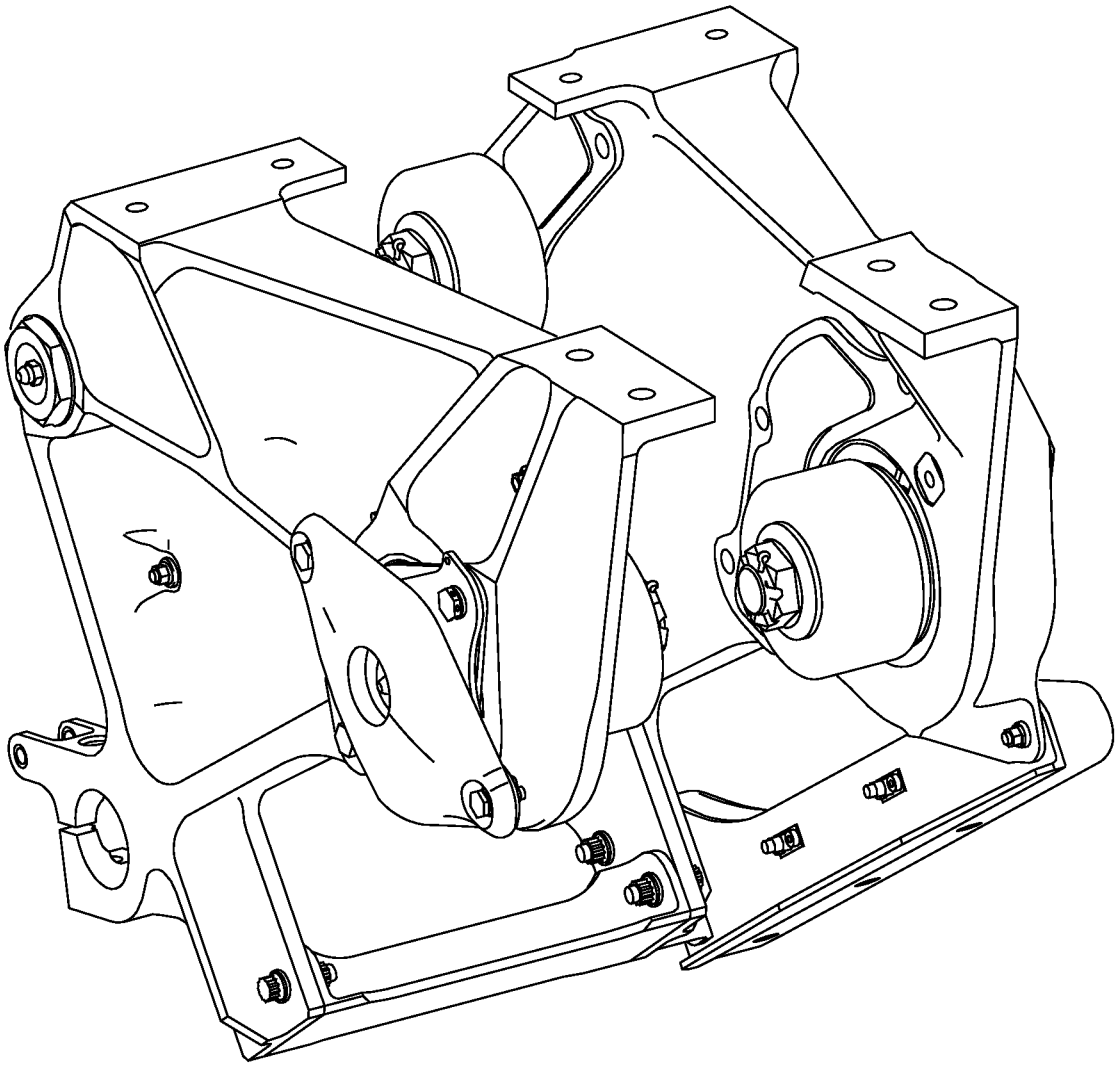
3. Leading Particulars (Approximate)

A. Length – 21 inches

B. Width – 10 inches

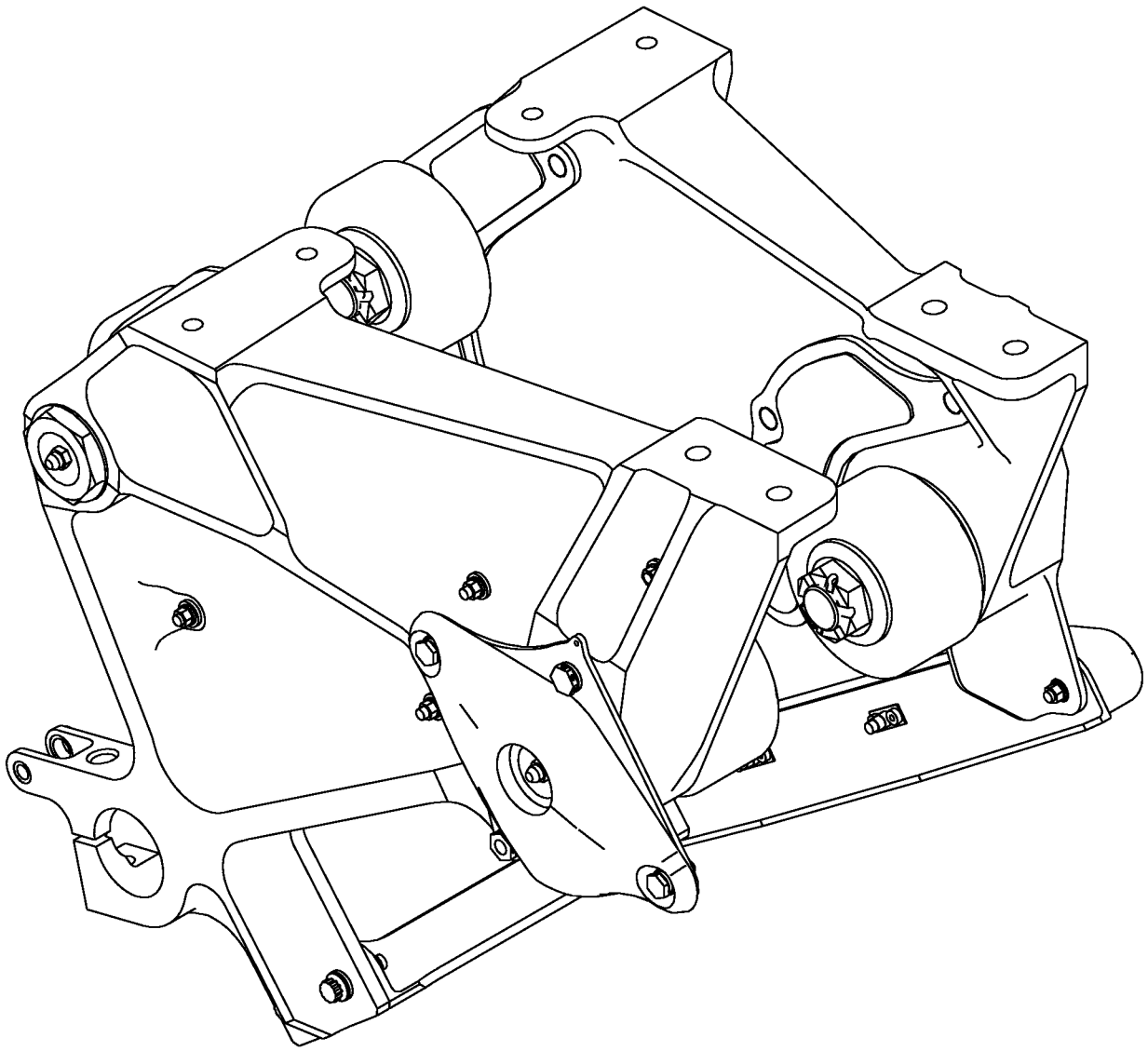
C. Height – 18 inches

D. Weight – 45 pounds



113A2850-1 SHOWN
113A2850-2 OPPOSITE

Inboard Flap Outboard Carriage Assembly
Figure 1 (Sheet 1 of 2)



113A2850-3,-5,-201 SHOWN
113A2850-4,-6,-202 OPPOSITE

Inboard Flap Outboard Carriage Assembly
Figure 1 (Sheet 2 of 2)

(NOT APPLICABLE)

DISASSEMBLY

1. General

A. This procedure has the data to disassemble the inboard flap outboard carriage assembly (IPL Figure 1; 1A, 5), (IPL Figure 2; 1A, 5).

B. Disassemble this component sufficiently to isolate the defects, do the necessary repairs, and put the component back to a serviceable condition.

C. Refer to IPL Figure 1 or IPL Figure 2 for the item numbers.

2. Disassembly

A. Procedure

(1) Use standard industry practices and these steps to disassemble this component.

NOTE: Do not disassemble the parts that are assembled with rivets unless repair or replacement is necessary.

(2) Disassemble the assemblies 113A2850-1, -2 (IPL Figure 1).

(a) Remove the roller cartridge assemblies (20, 25, 145, 150) from the fitting assemblies (460, 465, 470, 475).

1) Remove the lockwire from the bolts (10).

2) Remove the bolts (10), washers (15), and the roller cartridge assemblies (20, 25, 145, 150).

NOTE: Do not disassemble the roller cartridge assemblies unless repair or replacement is necessary.

(b) Remove the rollers (240A) from the fitting assemblies (460, 465, 470, 475).

1) Remove the cotter pins (225).

2) Remove the nuts (230), washers (235, 245), rollers (240A), and the pin assemblies (250).

(c) Remove the fasteners (265 thru 275) and the rub plate assemblies (280 thru 295).

NOTE: Do not disassemble the rub plate assemblies. The Delrin pads (300, 305) are molded in place and cannot be replaced.

(d) Remove the fasteners (330 thru 350), then remove the fitting assembly (380, 385) and the rub block assembly (355, 360) from the inboard fitting assembly (470, 475).

(e) Remove the fasteners (410 thru 445), then remove the clip (450) and the bridge fitting (455) from the fitting assembliies (460, 465, 470, 475).

NOTE: Do not disassemble the fitting assemblies unless it is necessary for repair or replacement.

(3) Disassemble the assemblies 113A2800-3, -4, -5, -6, -201, -202 (IPL Figure 2).

(a) Remove the lockwire from the bolt (10).

(b) Remove the bolts (10, 115), washers (15, 120, 125), and nut (130), then remove the retainer assembly (135) from the outboard fitting assembly (375, 380).

(c) Remove the bolts (25) and washers (30), then remove the rub block assembly (35) from the retainer assembly (135).

(d) Remove the rollers (105, 110) from the fitting assemblies (375, 380, 420, 425).

1) Remove the cotter pins (50) from the pin assemblies (75, 90) and nuts (55).

2) Remove the nuts (55), washers (60, 65, 70), rollers (105, 110), and the pin assemblies (75, 90).

(e) Remove the fasteners (155 thru 165) and the rub plate assemblies (170 thru 185).

NOTE: Do not disassemble the rub plate assemblies. The Delrin pads (190, 195) are molded in place and cannot be replaced.

(f) Remove the fasteners (275 thru 290, 300 thru 315), then remove the fitting assembly (345, 350) and the rub block assembly (320, 325) from the inboard fitting assembly (420, 425).

(g) Remove the fasteners (225 thru 265), and remove the clip (295) and the bridge fitting (270) from the fitting assemblies (375, 380, 420, 425).

NOTE: Do not disassemble the fitting assemblies unless it is necessary for repair or replacement.

CLEANING

1. General

A. This procedure has the data to clean the inboard flap outboard carriage assembly (IPL Figure 1; 1A, 5), (IPL Figure 2; 1A, 5).

B. Refer to the Standard Overhaul Practices Manual (SOPM) for the SOPM subjects identified in this procedure.

C. Refer to IPL Figure 1 or IPL Figure 2 for the item numbers.

2. Cleaning

A. References

Reference	Title
SOPM 20-30-03	GENERAL CLEANING PROCEDURES

B. Procedure

(1) Clean sealed bearings by the vendor's instructions.

(2) Clean all other parts by standard industry practices and the instructions in SOPM 20-30-03.

CHECK

1. General

A. This procedure has the data to find defects in the specified parts.

B. Refer to FITS AND CLEARANCES for design dimension and wear limits.

C. Refer to the Standard Overhaul Practices Manual (SOPM) for the SOPM subjects identified in this procedure.

D. Refer to IPL Figure 1 or IPL Figure 2 for the item numbers.

2. Check

A. References

Reference	Title
SOPM 20-20-01	MAGNETIC PARTICLE INSPECTION
SOPM 20-20-02	PENETRANT METHODS OF INSPECTION

B. Procedure

(1) Use standard industry practices to do a visual check of all the parts for defects. Do the penetrant or magnetic particle checks if the visual check shows possible damage or if you think there are defects on the parts.

(2) Do a magnetic particle check (SOPM 20-20-01) of these parts:

(a) Washer (IPL Figure 1; 85, 95, 165, 175, 235, 245), (IPL Figure 2; 60, 65, 70).

(3) Do a penetrant check (SOPM 20-20-02) of these parts:

(a) Fitting (IPL Figure 1; 400, 405, 505, 510, 515, 520), (IPL Figure 2; 365, 370, 410, 415, 440, 445)

(b) Bolt (IPL Figure 1; 110, 190, 260), (IPL Figure 2; 85, 100).

(c) Plate (IPL Figure 1; 310, 315, 320, 325), (IPL Figure 2; 200, 205, 210, 215)

(d) Housing (IPL Figure 1; 135, 140, 215, 220)

(4) Do a check of the rub plate assemblies (IPL Figure 1; 280, 285, 290, 295), (IPL Figure 2; 170, 175, 180, 185).

(a) Visually check the molded pad (IPL Figure 1; 300, 305), (IPL Figure 2; 190, 195) on the rub plate assemblies for evidence of separation from the rub plate. Gaps of 0.005 inch or less are acceptable.

(b) Do a check of the thickness of the rub plate assembly as shown in FITS AND CLEARANCES, Figure 801.

(5) Do a check of the thickness of the rub block assemblies (IPL Figure 1; 355, 360), (IPL Figure 2; 320, 325) as shown in FITS AND CLEARANCES, Figure 801.

REPAIR

1. General

A. Instructions for repair, refinish, and replacement of the specified subassembly parts are included in each REPAIR when applicable:

Table 601:

PART NUMBER	NAME	REPAIR
—	REFINISH OF OTHER PARTS	1-1
113A2861	INBOARD FITTING ASSEMBLY	2-1, 2-2
113A2862	OUTBOARD FITTING ASSEMBLY	3-1, 3-2
113A2650	ROLLER CARTRIDGE ASSEMBLY	4-1, 4-2

2. Dimensioning Symbols

A. Standard True Position Dimensioning Symbols used in the applicable repair procedures are shown in .

—	STRAIGHTNESS
▱	FLATNESS
⊥	PERPENDICULARITY (OR SQUARENESS)
//	PARALLELISM
○	ROUNDNESS
⌭	CYLINDRICITY
⌒	PROFILE OF A LINE
⌓	PROFILE OF A SURFACE
◎	CONCENTRICITY
⌯	SYMMETRY
∠	ANGULARITY
↗	RUNOUT
↗↗	TOTAL RUNOUT
⌴	COUNTERBORE OR SPOTFACE
⌵	COUNTERSINK
⌖	THEORETICAL EXACT POSITION OF A FEATURE (TRUE POSITION)
Ø	DIAMETER
S Ø	SPHERICAL DIAMETER
R	RADIUS
SR	SPHERICAL RADIUS
()	REFERENCE
BASIC (BSC) OR [DIM]	A THEORETICALLY EXACT DIMENSION USED TO DESCRIBE SIZE, SHAPE OR LOCATION OF A FEATURE FROM WHICH PERMISSIBLE VARIATIONS ARE ESTABLISHED BY TOLERANCES ON OTHER DIMENSIONS OR NOTES.
[-A-]	DATUM
Ⓜ	MAXIMUM MATERIAL CONDITION (MMC)
Ⓛ	LEAST MATERIAL CONDITION (LMC)
Ⓢ	REGARDLESS OF FEATURE SIZE (RFS)
Ⓟ	PROJECTED TOLERANCE ZONE
FIM	FULL INDICATOR MOVEMENT
TIR	TOTAL INDICATOR READING

EXAMPLES

[— | 0.002]	STRAIGHT WITHIN 0.002
[⊥ | 0.002 | B]	PERPENDICULAR TO B WITHIN 0.002
[// | 0.002 | A]	PARALLEL TO A WITHIN 0.002
[○ | 0.002]	ROUND WITHIN 0.002
[⌭ | 0.010]	CYLINDRICAL SURFACE MUST LIE BETWEEN TWO CONCENTRIC CYLINDERS, ONE OF WHICH HAS A RADIUS 0.010 INCH GREATER THAN THE OTHER
[⌒ | 0.006 | A]	EACH LINE ELEMENT OF THE SURFACE AT ANY CROSS SECTION MUST LIE BETWEEN TWO PROFILE BOUNDARIES 0.006 INCH APART RELATIVE TO DATUM PLANE A
[⌓ | 0.020 | A]	SURFACES MUST LIE WITHIN PARALLEL BOUNDARIES 0.02 INCH APART AND EQUALLY DISPOSED ABOUT TRUE PROFILE
[◎ | Ø 0.0005 | C]	CONCENTRIC TO C WITHIN 0.0005 DIAMETER
[⌯ | 0.010 | A]	SYMMETRICAL WITH A WITHIN 0.010
[∠ | 0.005 | A]	ANGULAR TOLERANCE 0.005 WITH A
[⌖ | Ø 0.002 Ⓢ | B]	LOCATED AT TRUE POSITION WITHIN 0.002 DIA RELATIVE TO DATUM B, REGARDLESS OF FEATURE SIZE
[⊥ | Ø 0.010 Ⓜ | A] [0.510 Ⓟ]	AXIS IS TOTALLY WITHIN A CYLINDER OF 0.010-INCH DIAMETER, PERPENDICULAR TO, AND EXTENDING 0.510-INCH ABOVE, DATUM A, MAXIMUM MATERIAL CONDITION
[2.000] OR 2.000 BSC	THEORETICALLY EXACT DIMENSION IS 2.000

NOTE: DATUM MAY APPEAR AT EITHER SIDE OF TOLERANCE FRAME [0.020 | A] [A | 0.020]

Standard True Position Dimensioning Symbols
Figure 601

REFINISH OF OTHER PARTS - REPAIR 1-1

1. General

A. This procedure has the data necessary to refinish the parts which are not given in the other repairs.

B. Refer to the Standard Overhaul Practices Manual (SOPM) for the SOPM subjects identified in this procedure.

C. Refer to IPL Figure 1 or IPL Figure 2 for the item numbers.

2. Refinish of Other Parts

A. Consumable Materials

NOTE: Equivalent substitutes may be used.

Reference	Description	Specification
C00259	Primer - Chemical And Solvent Resistant Finish, Epoxy Resin	BMS10-11, Type I
C00260	Coating - Chemical And Solvent Resistant Finish, Epoxy Resin Enamel	BMS10-11, Type II
D00113	Lubricant - Liquid Dispersed Solid Film Lubricant	BMS3-8, BAC 5811, TYPE VIII

B. References

Reference	Title
SOPM 20-30-02	STRIPPING OF PROTECTIVE FINISHES
SOPM 20-41-01	DECODING TABLE FOR BOEING FINISH CODES
SOPM 20-60-02	FINISHING MATERIALS
SOPM 20-60-03	LUBRICANTS

C. General

(1) Instructions for the repair of the parts in REPAIR 1-1, Table 601 are for replacement of the original finish.

D. Procedure

NOTE: For stripping of protective finishes, refer to SOPM 20-30-02. For the decoding table for Boeing finish codes, refer to SOPM 20-41-01. For finishing materials, refer to SOPM 20-60-02. For lubricants, refer to SOPM 20-60-03.

(1) Refer to REPAIR 1-1, Table 601 for the refinish of other parts.

Table 601: Refinish Details

IPL FIG. & ITEM	MATERIAL	FINISH
IPL Fig. 1		
Washer (85,165,235)	PH13-8MO CRES 200-220 ksi	Passivate (F-17.25).

Table 601: Refinish Details (Continued)

IPL FIG. & ITEM	MATERIAL	FINISH
Washer (95,175,245) Bushing (115,120, 195,200)	15-5PH CRES 180-200 ksi	Passivate (F-17.25).
Bolt (110,190,260)	Titanium	No finish (F-25.01), but apply solid film lubricant, D00113 (F-19.10) to the threads and the thread relief area.
Retainer (125,130, 205,210)	Titanium	No finish (F-25.01), but apply solid film lubricant, D00113 (F-19.10) to the 2-inch diameter serrated hole.
Rub plate assembly (280,285,290,295)		On all bare metal surfaces: Apply primer, C00259 (F-20.02). Apply enamel coating, C00260 (F-21.03). Overspray permitted on Delrin surfaces.
Plate (310,315,320, 325)	Aluminum alloy	Boric acid-sulfuric acid anodize (F-17.31).
Fitting (400,405) Clip (450)	Aluminum alloy	Boric acid-sulfuric acid anodize (F-17.31). Apply primer, C00259 (F-20.02). Apply coating, C00260 (F-19.39-707).
Fitting (455)	Aluminum alloy	Boric acid-sulfuric acid anodize (F-17.31). Apply primer, C00259 (F-20.02).
IPL Fig. 2		
Washer (60)	PH13-8MO CRES 200-220 ksi	Passivate (F-17.25).
Washer (65,70)	15-5PH CRES 180-200 ksi	Passivate (F-17.25).
Bolt (85,100)	Titanium	No finish (F-25.01), but apply solid film lubricant, D00113 (F-19.10) to the threads and the thread relief area.
Plate assembly (170,175,180,185)		On all bare metal surfaces: Apply primer, C00259 (F-20.02). Apply coating, C00260 (F-21.03). Overspray permitted on Delrin surfaces.
Plate (200,205,210, 215)	Aluminum alloy	Boric acid-sulfuric acid anodize (F-17.31).
Fitting (270)	Aluminum alloy	Boric acid-sulfuric acid anodize (F-17.31). Apply primer, C00259 (F-20.02).
Fitting (365,370) Clip (295)	Aluminum alloy	Boric acid-sulfuric acid anodize (F-17.31). Apply primer, C00259 (F-20.02). Apply coating, C00260 (F-19.39-707).

INBOARD FITTING ASSEMBLY - REPAIR 2-1

113A2861–1, –2, –5, –6

1. General

A. This procedure has the data to replace the bushings in the inboard fitting assembly (IPL Figure 1; 470, 475), (IPL Figure 2; 420, 425).

B. Refer to the Standard Overhaul Practices Manual (SOPM) for the SOPM subjects identified in this procedure.

C. Refer to IPL Figure 1 or IPL Figure 2 for the item numbers.

2. Bushing Replacement

A. Consumable Materials

NOTE: Equivalent substitutes may be used.

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

B. References

Reference	Title
SOPM 20-50-03	BEARING AND BUSHING REPLACEMENT
SOPM 20-60-03	LUBRICANTS

C. Procedure (REPAIR 2-1, Figure 601)

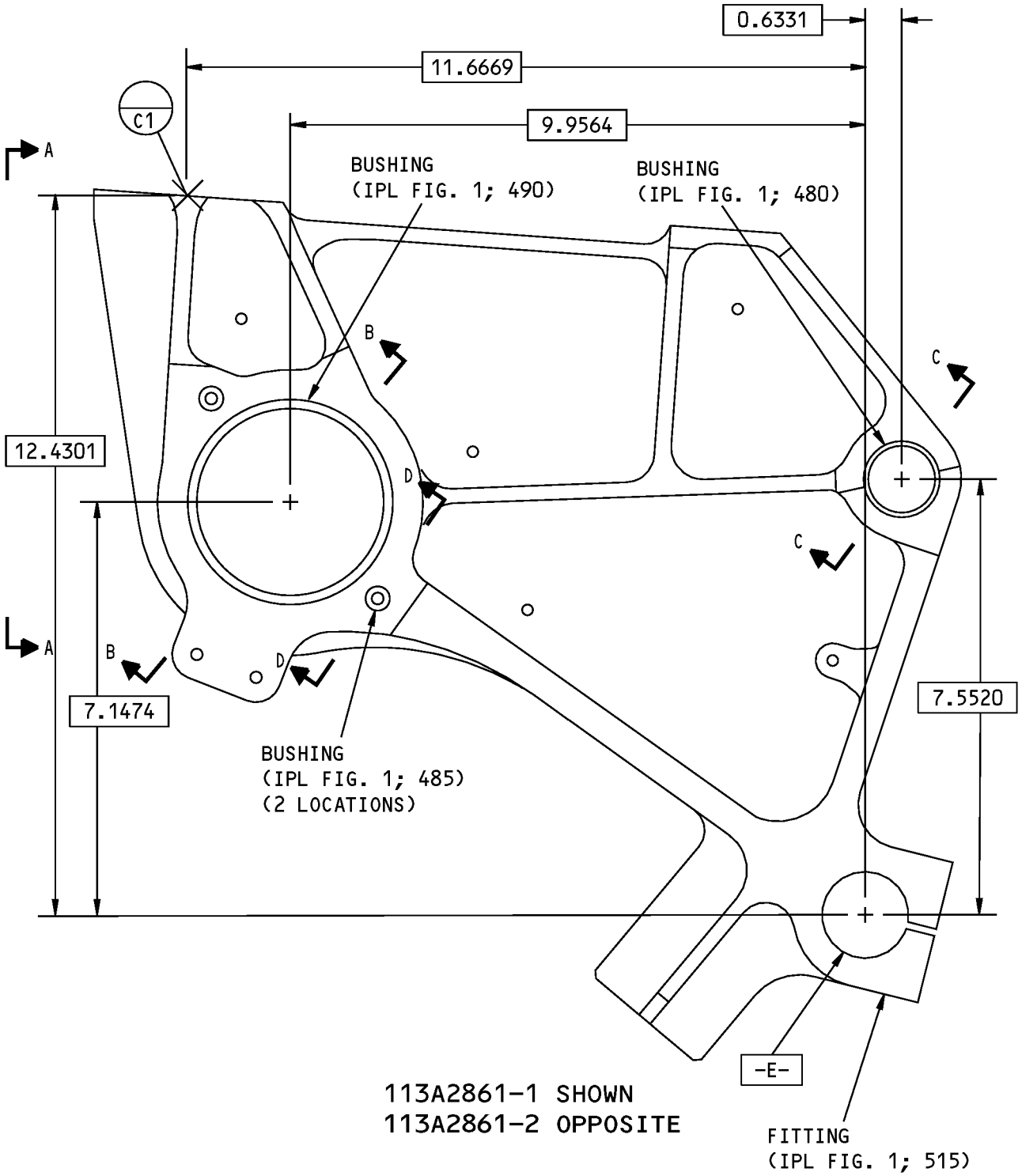
NOTE: For lubricants, refer to SOPM 20-60-03.

(1) Remove the damaged or defective bushing (IPL Figure 1; 480, 485, 490), (IPL Figure 2; 430, 435) from the fitting (IPL Figure 1; 515, 520), (IPL Figure 2; 440, 445).

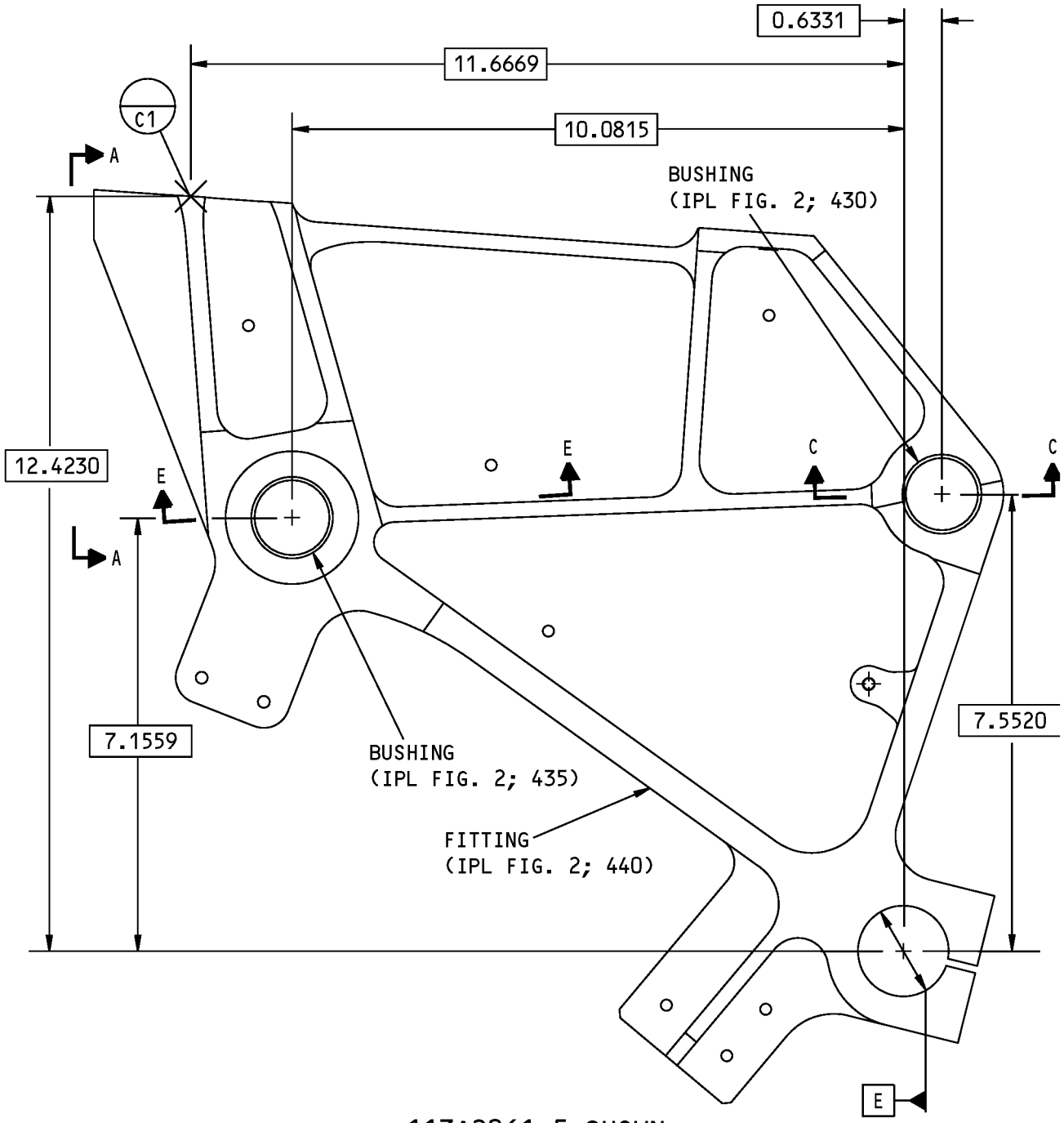
(2) If you find defects on the fitting surfaces, refer to REPAIR 2-2 for the repair instructions.

(3) Install the replacement bushing in the fitting with grease, D00633. Use the shrink-fit procedure (SOPM 20-50-03).

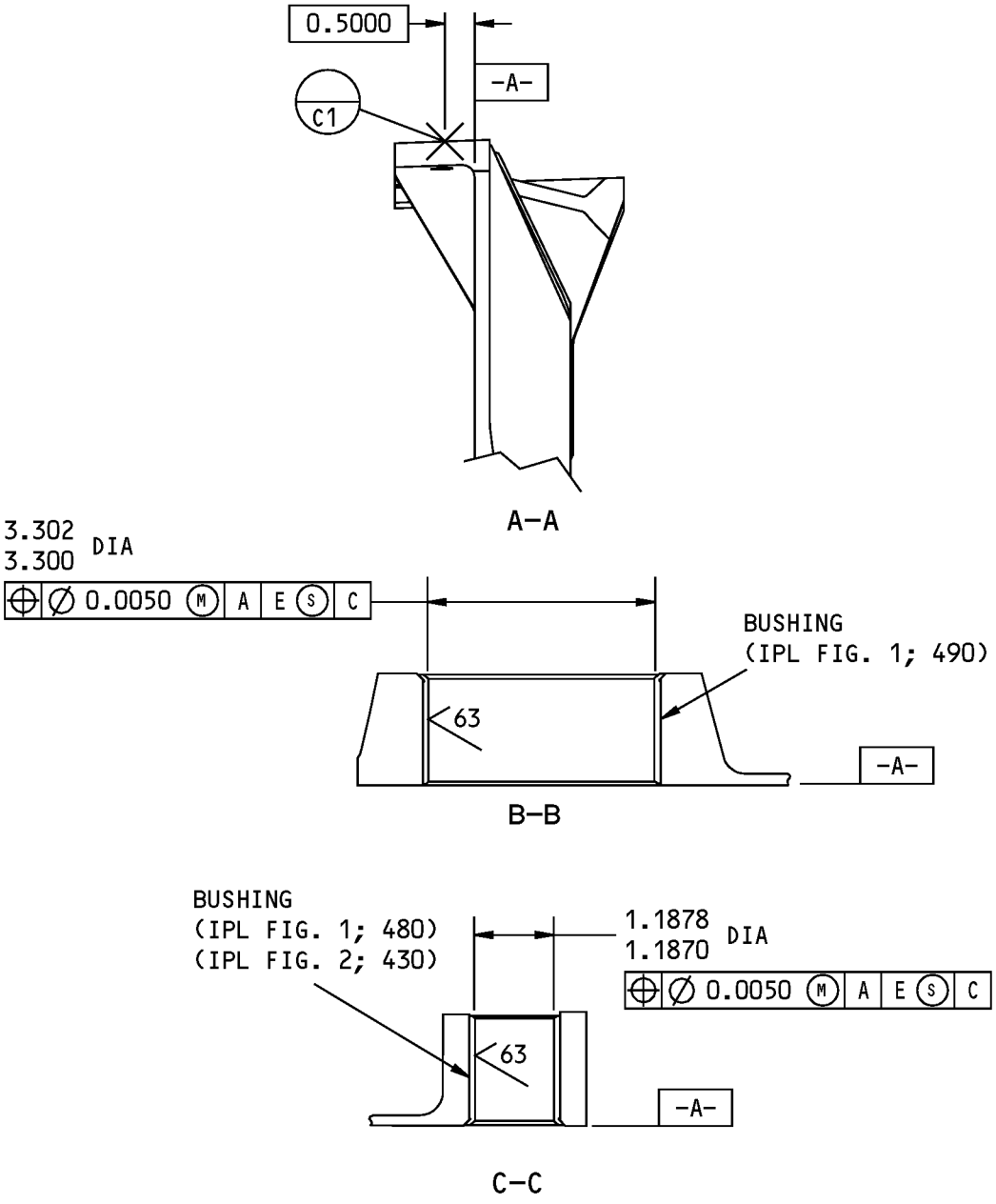
(4) Machine the inside diameter of the bushing to the design dimensions and finish as shown, but do not machine the bushing (IPL Figure 1; 485).



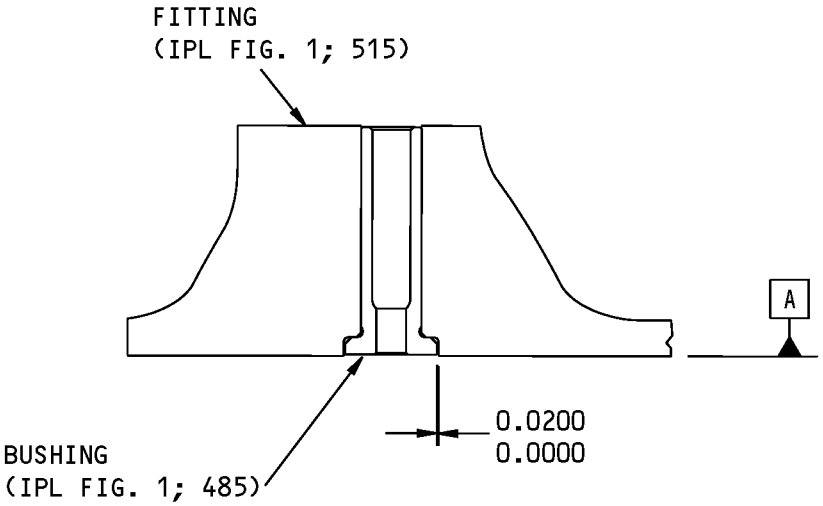
113A2861-1,-2,-5,-6 Inboard Fitting Assembly Repair
Figure 601 (Sheet 1 of 4)



113A2861-1,-2,-5,-6 Inboard Fitting Assembly Repair
Figure 601 (Sheet 2 of 4)



113A2861-1,-2,-5,-6 Inboard Fitting Assembly Repair
Figure 601 (Sheet 3 of 4)



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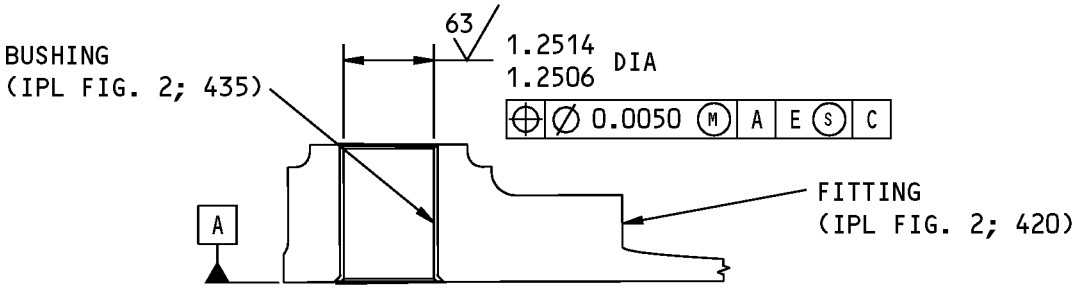


E–E

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

ALL DIMENSIONS ARE IN INCHES

113A2861-1,-2,-5,-6 Inboard Fitting Assembly Repair
Figure 601 (Sheet 4 of 4)

INBOARD FITTING - REPAIR 2-2

113A2861–3, –4, –7, –8

1. General

A. This procedure has the data to repair the inboard fitting (IPL Figure 1; 515, 520), (IPL Figure 2; 440, 445).

B. Refer to the Standard Overhaul Practices Manual (SOPM) for the SOPM subjects identified in this procedure.

C. Refer to IPL Figure 1 or IPL Figure 2 for the item numbers.

D. General repair details:

(1) Material: Titanium alloy

(2) Shot Peen: All repaired surfaces, unless shown differently

(a) Intensity 0.008-0.013A

(b) Coverage 2.0

2. Fitting Repair

A. Procedure (REPAIR 2-2, Figure 601)

(1) Machine the bushing hole in the fitting (IPL Figure 1; 515, 520), (IPL Figure 2; 440, 445) as necessary to remove defects (SOPM 20-10-07). Do not remove more than the repair limits shown.

(2) Do a penetrant check of the fitting (SOPM 20-20-02).

(3) Shot peen the machined hole (SOPM 20-10-03).

(4) Refinish as indicated.

(5) Make an oversize bushing (REPAIR 2-2, Figure 602) as necessary to adjust for the material removed from the fitting.

(6) Install the bushing as shown in REPAIR 2-1.

3. Fitting Refinish

A. Consumable Materials

NOTE: Equivalent substitutes may be used.

Reference	Description	Specification
C00259	Primer - Chemical And Solvent Resistant Finish, Epoxy Resin	BMS10-11, Type I

B. References

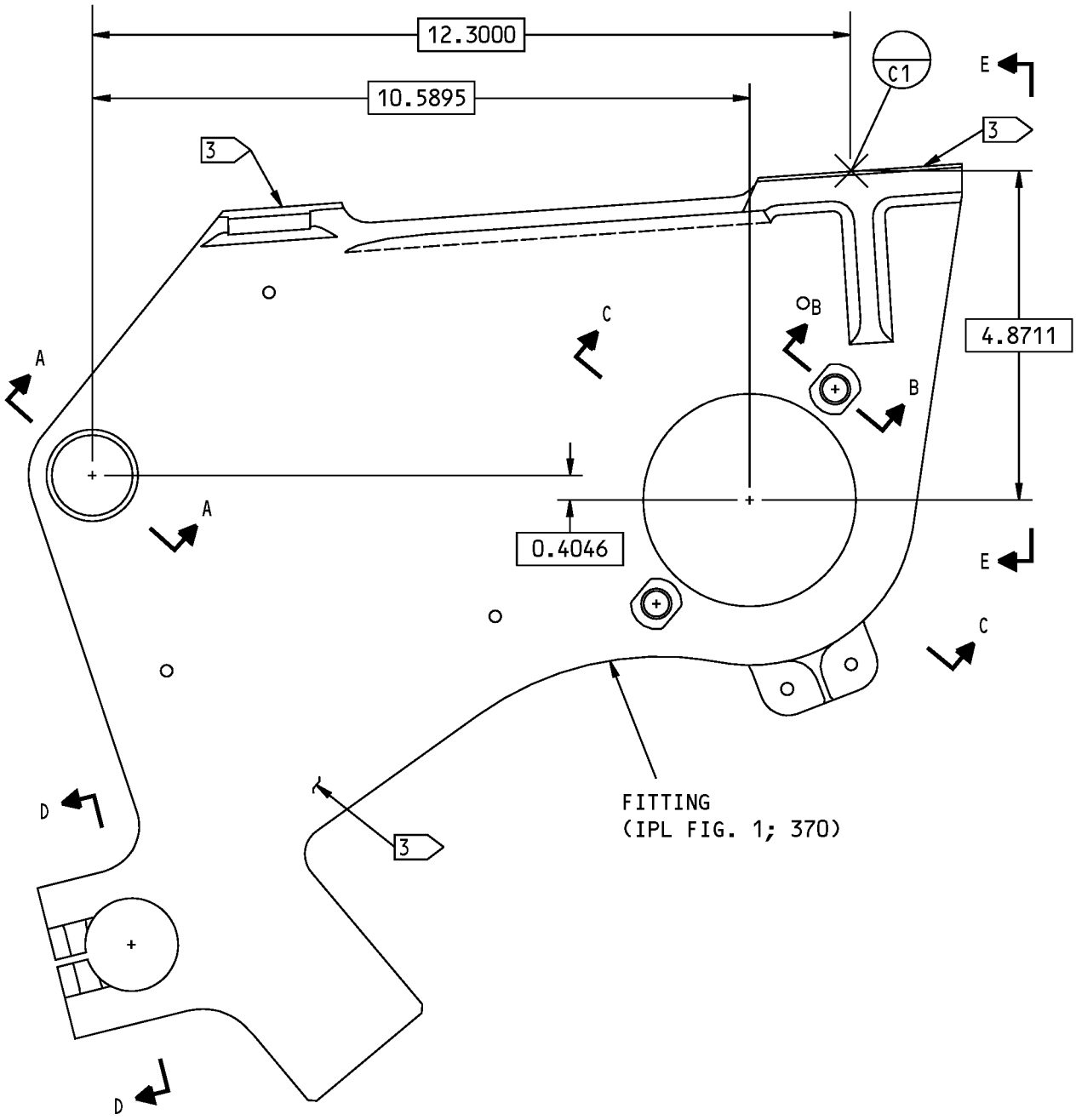
Reference	Title
SOPM 20-30-02	STRIPPING OF PROTECTIVE FINISHES
SOPM 20-41-01	DECODING TABLE FOR BOEING FINISH CODES
SOPM 20-60-02	FINISHING MATERIALS

C. Procedure (REPAIR 2-2, Figure 601)

NOTE: For stripping of protective finishes, refer to SOPM 20-30-02. For the decoding table for Boeing finish codes, refer to SOPM 20-41-01. For finishing materials, refer to SOPM 20-60-02.

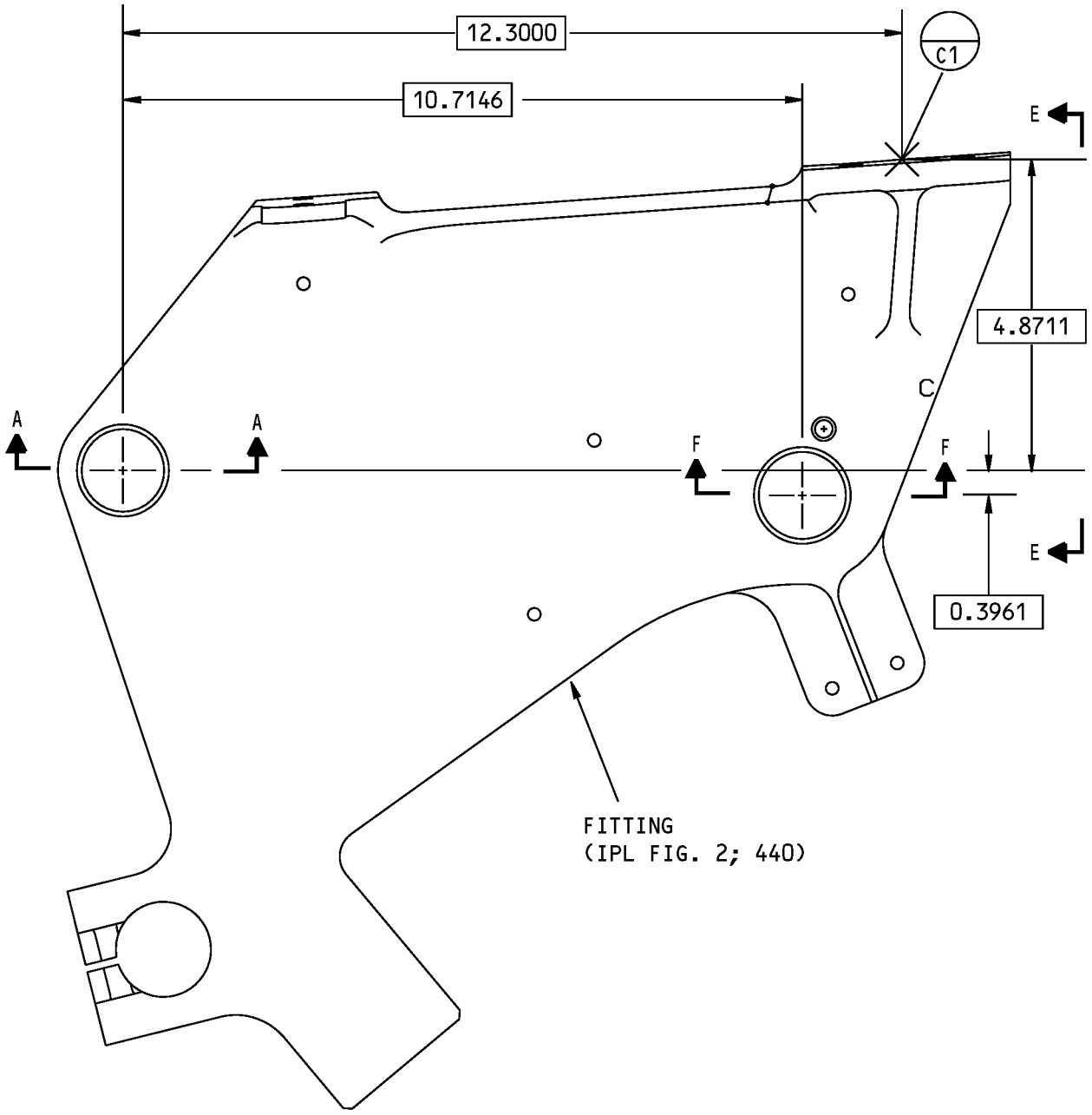
(1) Apply phosphate-fluoride coating (F-14.881) to the fitting (IPL Figure 1; 515, 520), or clean the fitting (F-14.882) (IPL Figure 2; 440, 445).

(2) Apply primer, C00259 (F-20.02) as indicated.



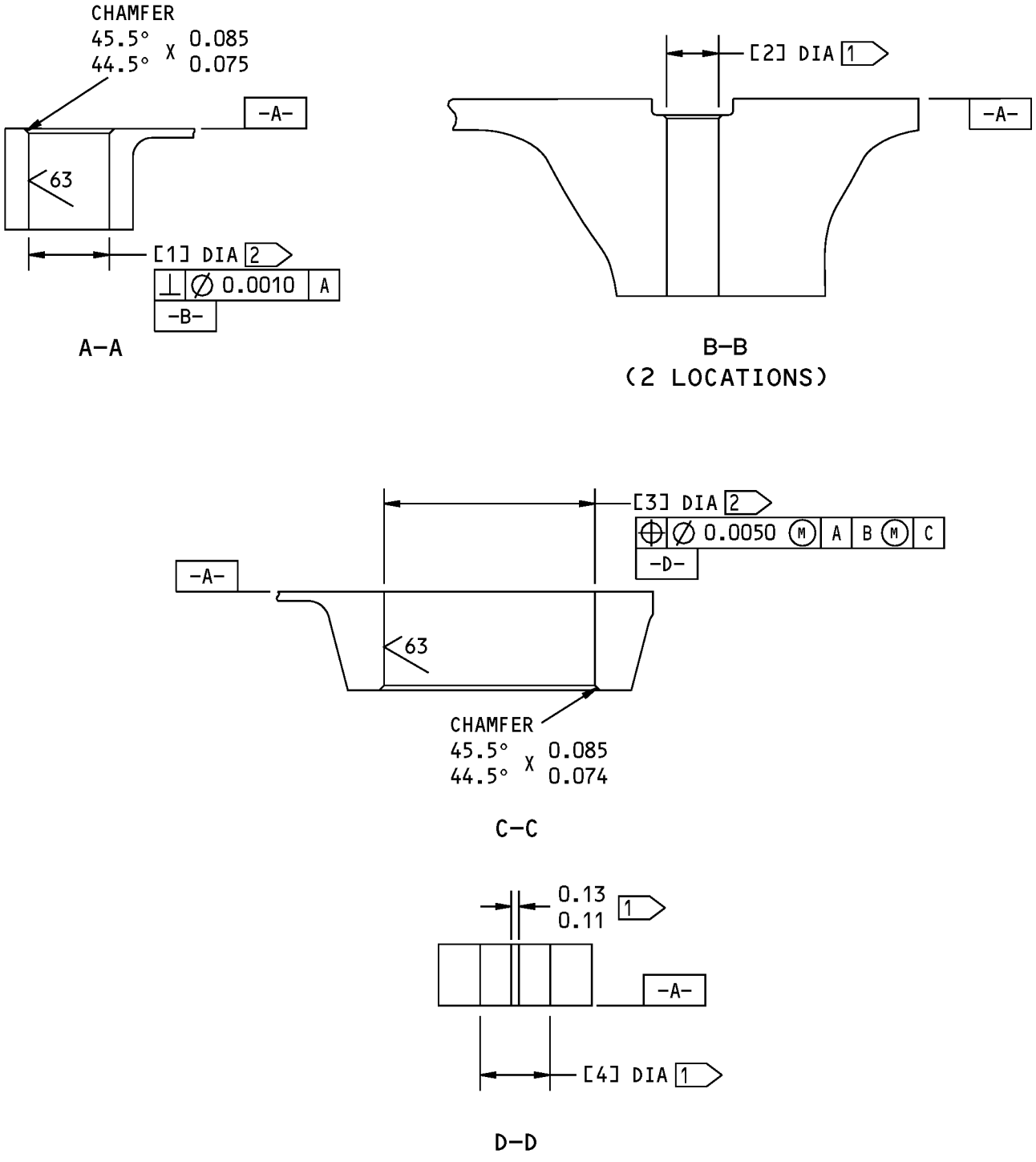
113A2861-3 SHOWN
113A2861-4 OPPOSITE

113A2861-3,-4,-7,-8 Inboard Fitting Repair
Figure 601 (Sheet 1 of 4)

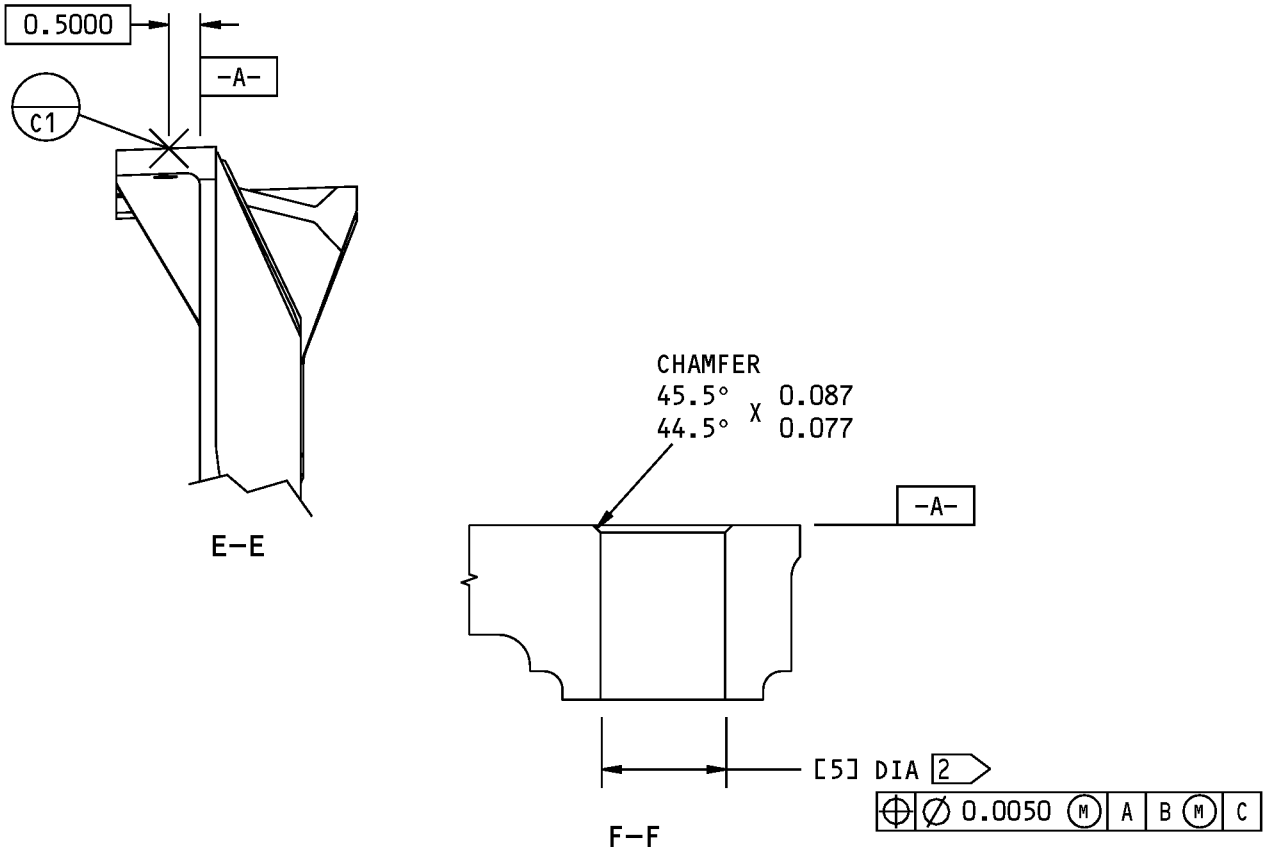


113A2861-7 SHOWN
113A2861-8 OPPOSITE

113A2861-3,-4,-7,-8 Inboard Fitting Repair
Figure 601 (Sheet 2 of 4)



113A2861-3,-4,-7,-8 Inboard Fitting Repair
Figure 601 (Sheet 3 of 4)



REFERENCE NUMBER	[1]	[2]	[3]	[4]	[5]
DESIGN DIMENSION	1.3083 1.3075	0.4194 0.4188	3.4217 3.4200	1.501 1.500	1.3629 1.3621
REPAIR LIMIT 4	1.3683	---	3.4817	---	1.4229

1 DO NOT SHOT PEEN THE HOLE OR SLOT

2 REMOVE 0.001 MAXIMUM MATERIAL AFTER SHOT PEENING TO GET 63 MICROINCH FINISH

3 APPLY BMS 10-11 PRIMER TO THESE SURFACES

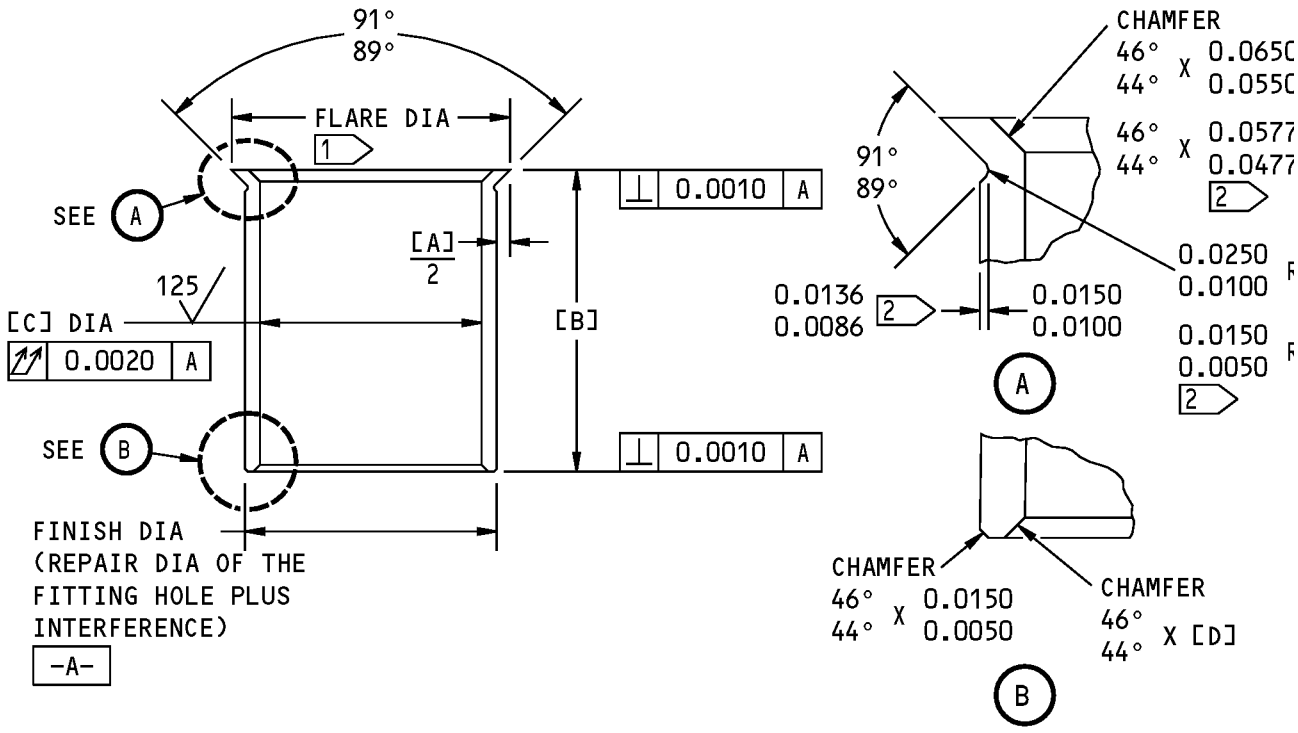
4 LIMIT FOR INSTALLATION OF OVERSIZE BUSHINGS

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

ALL DIMENSIONS ARE IN INCHES

113A2861-3,-4,-7,-8 Inboard Fitting Repair
Figure 601 (Sheet 4 of 4)



OVERSIZE REPLACEMENT FOR BUSHINGS AT LOCATIONS [1], [3], [5]

HOLE LOCATION (FIG. 601)	REPLACES BUSHING	[A] 1	[B]	[C]	[D]	INTERFERENCE
[1]	113A2653-21 (IPL FIG. 1; 480) (IPL FIG. 2; 430)	0.1473 0.1280	1.5750 1.5650	1.1750 1.1560	0.0650 0.0550	0.0027 0.0012
[3]	113A2653-5 (IPL FIG. 1; 490)	0.1432 0.1248	1.5750 1.5650	3.2870 3.2690	0.0350 0.0250	0.0068 0.0035
[5]	113A2653-23 (IPL FIG. 2; 435)	0.1546 0.1354	1.8850 1.8750	1.2199 1.2183	0.0600 0.0400	0.0028 0.0012

63 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK SHARP EDGES 0.005-0.015 R OR 0.01-0.02 R 2

MATERIAL: Al-Ni-BRONZE AMS 4640 OR AMS 4880 (113A2653-5 ONLY)

FINISH: NO FINISH

ALL DIMENSIONS ARE IN INCHES

1 FLARE DIAMETER EQUALS THE FINISH DIAMETER -A- PLUS DIMENSION [A]

2 ON 113A2653-23 ONLY

Oversize Bushing Details
Figure 602

OUTBOARD FITTING ASSEMBLY - REPAIR 3-1

113A2862–1, –2, –5, –6

1. General

A. This procedure has the data to replace the bushings in the outboard fitting assembly (IPL Figure 1; 460, 465), (IPL Figure 2; 375, 380).

B. Refer to the Standard Overhaul Practices Manual (SOPM) for the SOPM subjects identified in this procedure.

C. Refer to IPL Figure 1 or IPL Figure 2 for the item numbers.

2. Bushing (480, 485, 490, 495, 500) Replacement

A. Consumable Materials

NOTE: Equivalent substitutes may be used.

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

B. References

Reference	Title
SOPM 20-50-03	BEARING AND BUSHING REPLACEMENT
SOPM 20-60-03	LUBRICANTS

C. Procedure (REPAIR 3-1, Figure 601)

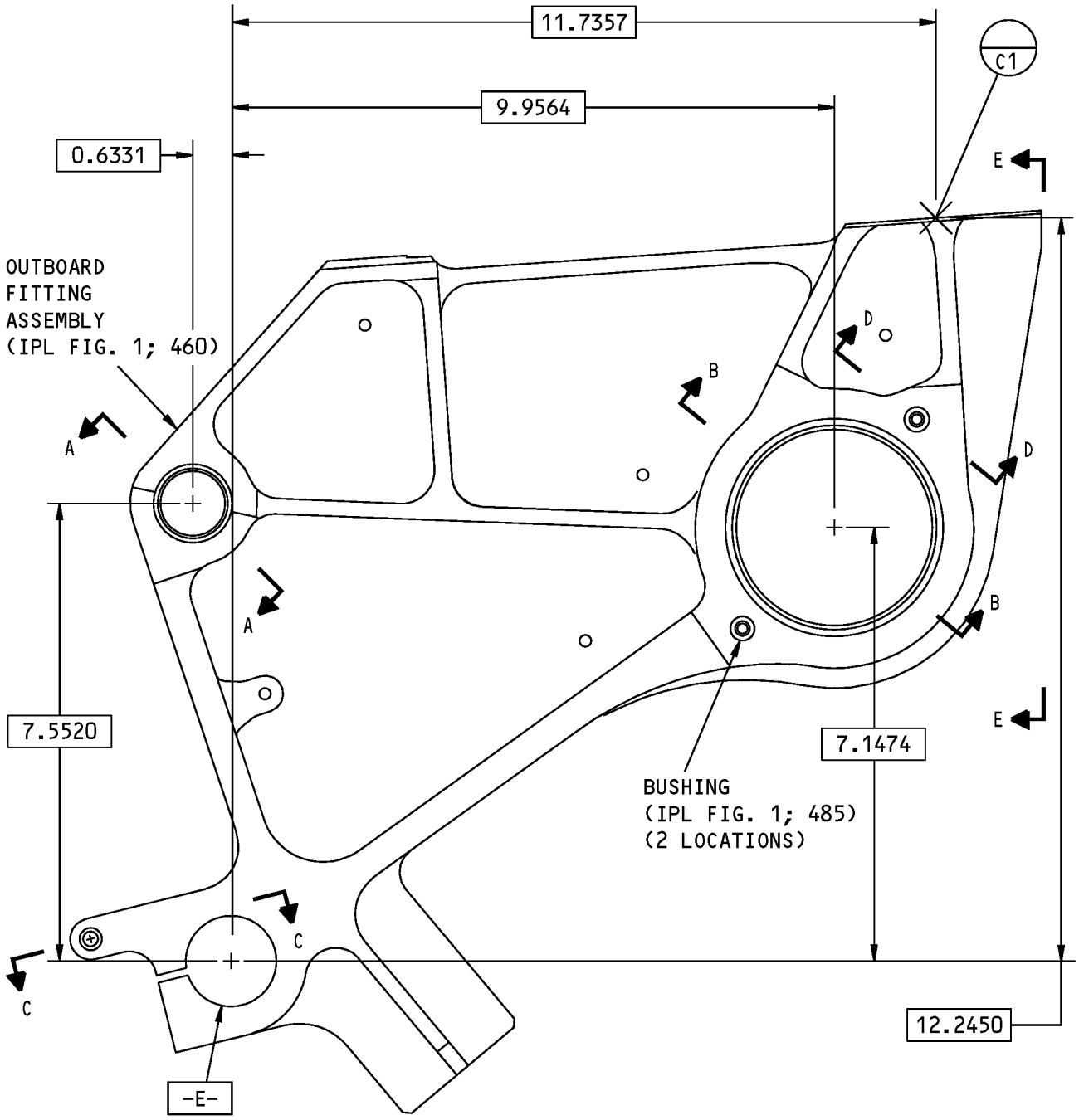
NOTE: For lubricants, refer to SOPM 20-60-03.

(1) Remove the damaged or defective bushing (IPL Figure 1; 480, 485, 490, 495, 500), (IPL Figure 2; 385, 390, 395, 400, 405) from the fitting (IPL Figure 1; 505, 510), (IPL Figure 2; 410, 415).

(2) If you find defects on the fitting surfaces, refer to REPAIR 3-2 for repair instructions.

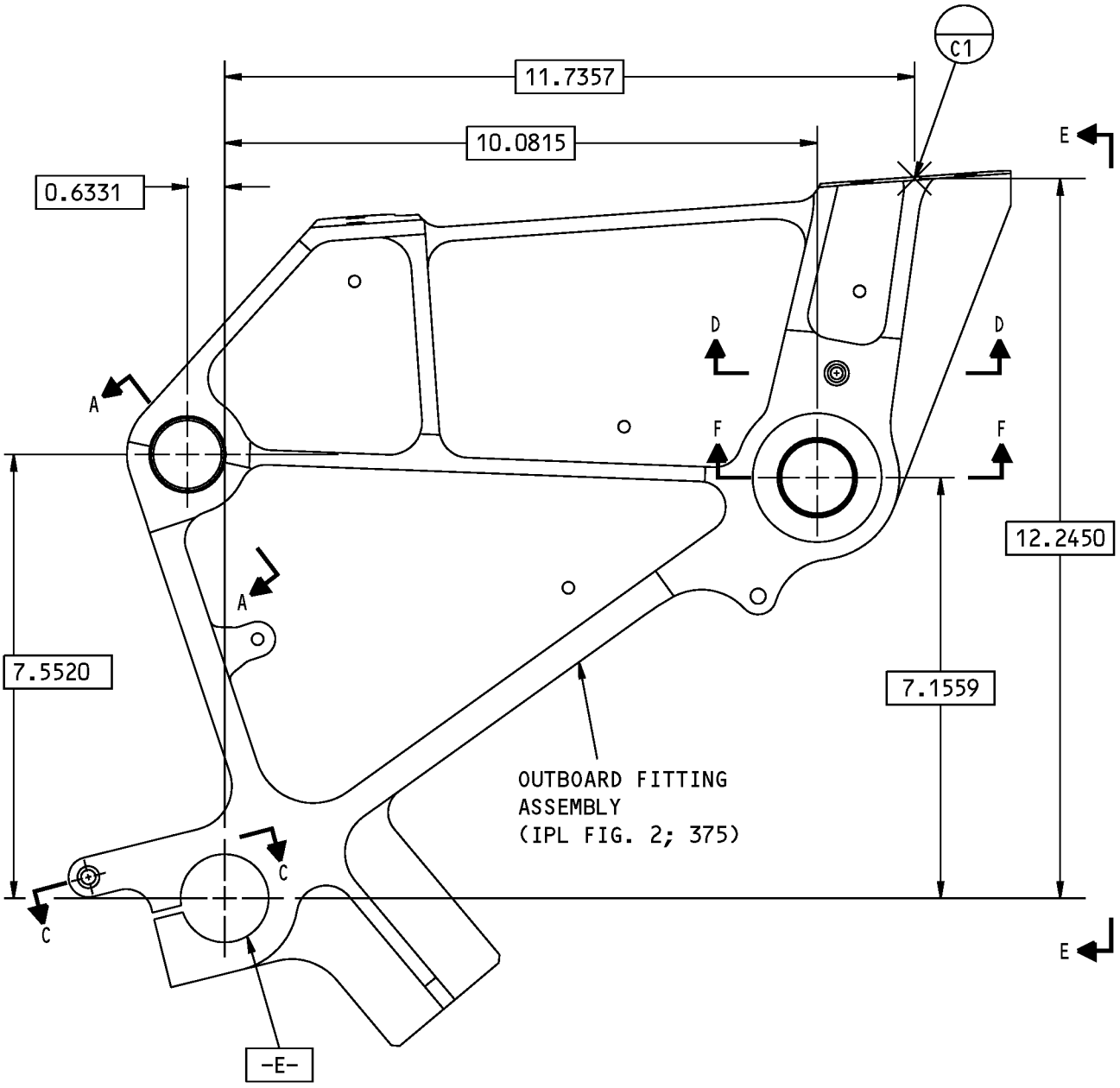
(3) Install the replacement bushing in the fitting with grease, D00633. Use the shrink-fit procedure (SOPM 20-50-03).

(4) Machine the inside diameter of the bushing to the design dimensions and finish as shown, but do not machine the bushing (IPL Figure 1; 485).



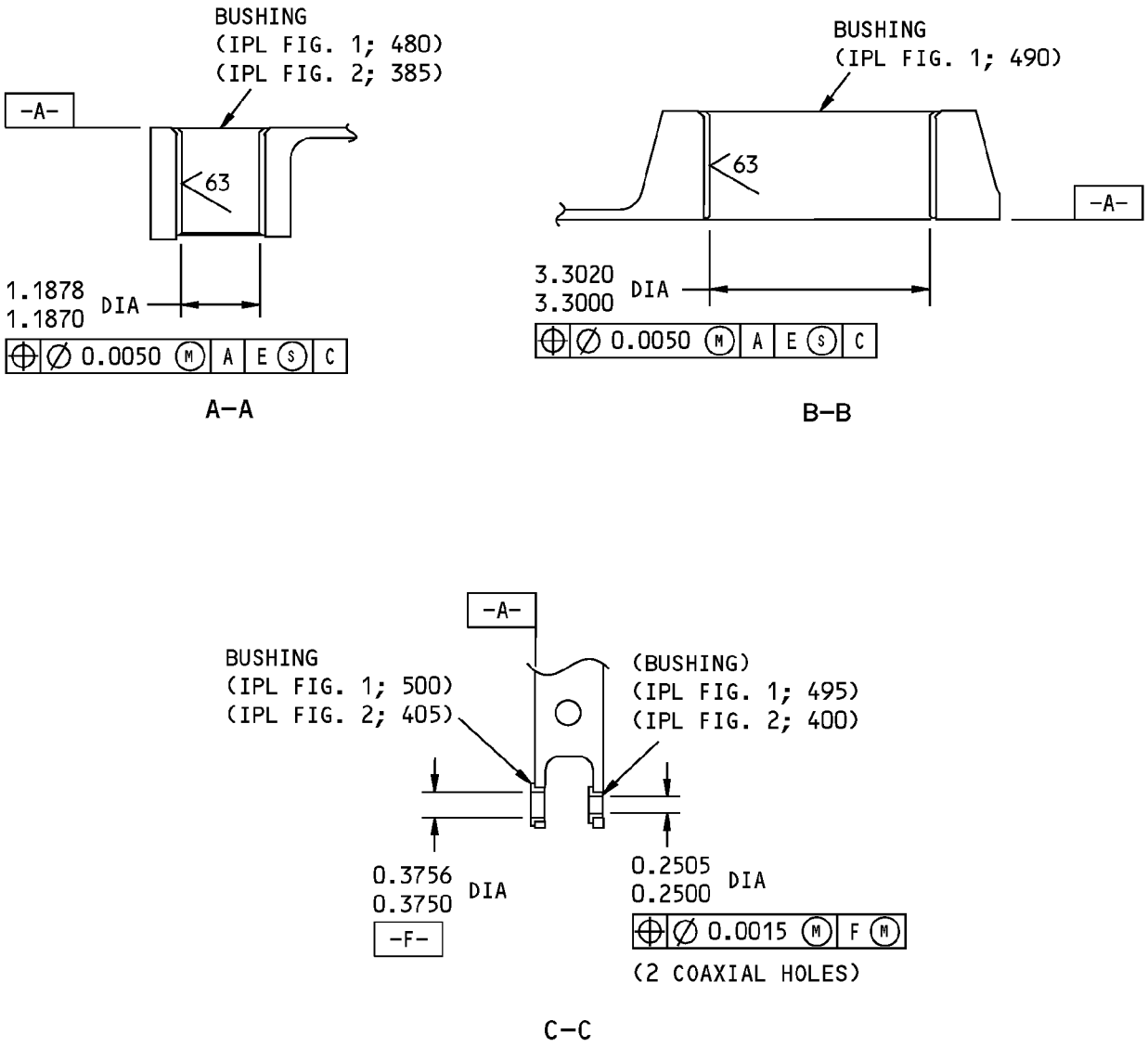
113A2862-1 SHOWN
113A2862-2 OPPOSITE

113A2862-1,-2,-5,-6 Outboard Fitting Assembly Repair
Figure 601 (Sheet 1 of 4)

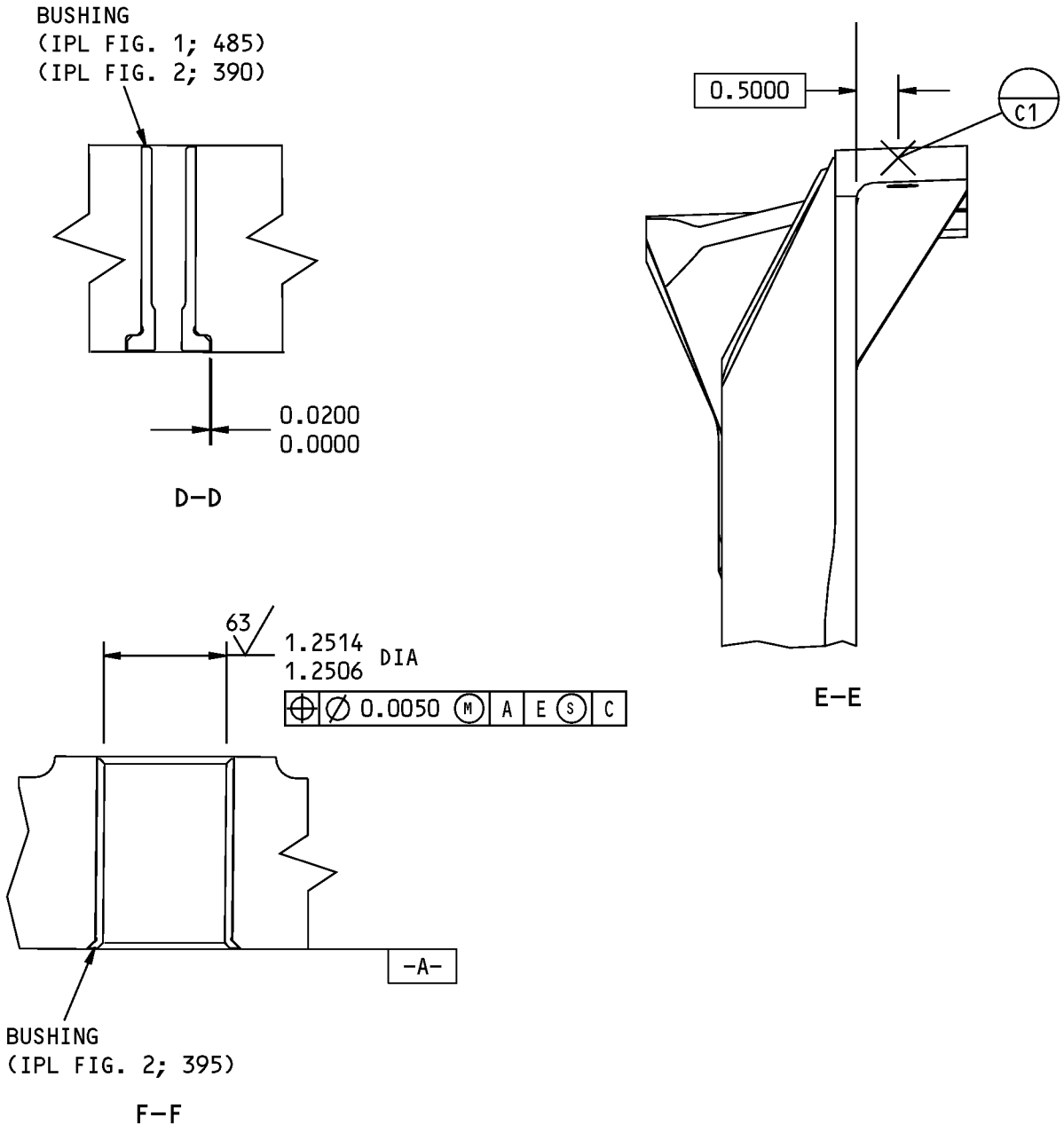


113A2862-5 SHOWN
113A2862-6 OPPOSITE

113A2862-1,-2,-5,-6 Outboard Fitting Assembly Repair
Figure 601 (Sheet 2 of 4)



113A2862-1,-2,-5,-6 Outboard Fitting Assembly Repair
Figure 601 (Sheet 3 of 4)



125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

ALL DIMENSIONS ARE IN INCHES

113A2862-1,-2,-5,-6 Outboard Fitting Assembly Repair
Figure 601 (Sheet 4 of 4)

OUTBOARD FITTING - REPAIR 3-2

113A2862–3, –4, –7, –8

1. General

A. This procedure has the data to repair the outboard fitting (IPL Figure 1; 505, 510), (IPL Figure 2; 410, 415).

B. Refer to the Standard Overhaul Practices Manual (SOPM) for the SOPM subjects identified in this procedure.

C. Refer to IPL Figure 1 or IPL Figure 2 for the item numbers.

D. General repair details:

(1) Material: Titanium alloy

(2) Shot Peen: All repaired surfaces, unless shown differently

(a) Intensity 0.008-0.013A

(b) Coverage 2.0

2. Bushing Hole Repair

A. Procedure (REPAIR 3-2, Figure 601)

(1) Machine the bushing hole in the fitting (IPL Figure 1; 505, 510), (IPL Figure 2; 410, 415) as necessary to remove defects (SOPM 20-10-07). Do not remove more than the repair limits shown.

(2) Do a penetrant check of the fitting (SOPM 20-20-02).

(3) Shot peen the machined hole (SOPM 20-10-03).

(4) Refinish as indicated.

(5) Make an oversize bushings (REPAIR 3-2, Figure 602 and REPAIR 3-2, Figure 603) as necessary to adjust for the material removed from the fitting.

(6) Install the bushing as shown in REPAIR 3-1.

3. Fitting Refinish

A. Consumable Materials

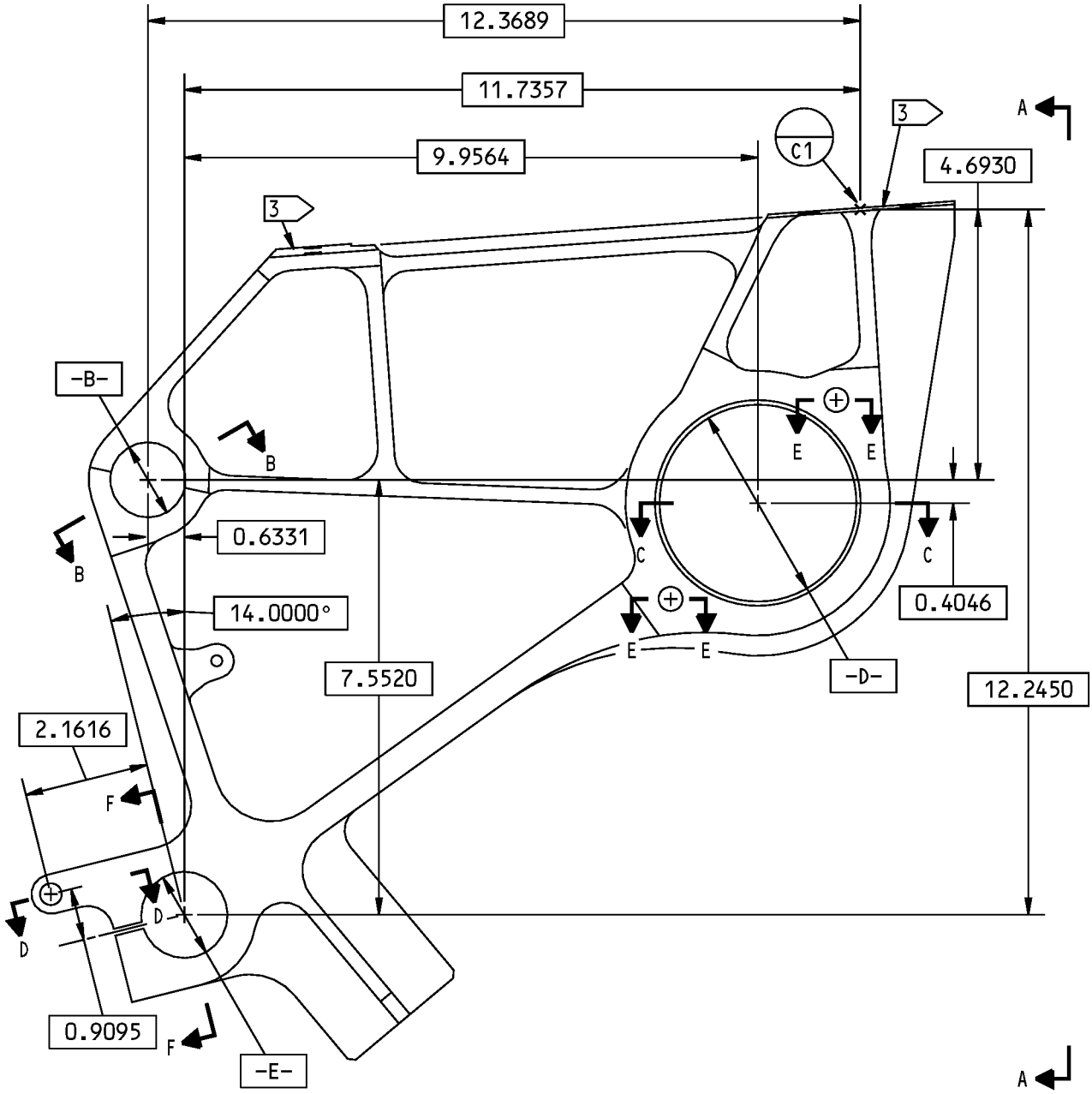
NOTE: Equivalent substitutes may be used.

Reference	Description	Specification
C00259	Primer - Chemical And Solvent Resistant Finish, Epoxy Resin	BMS10-11, Type I

B. Procedure (REPAIR 3-2, Figure 601)

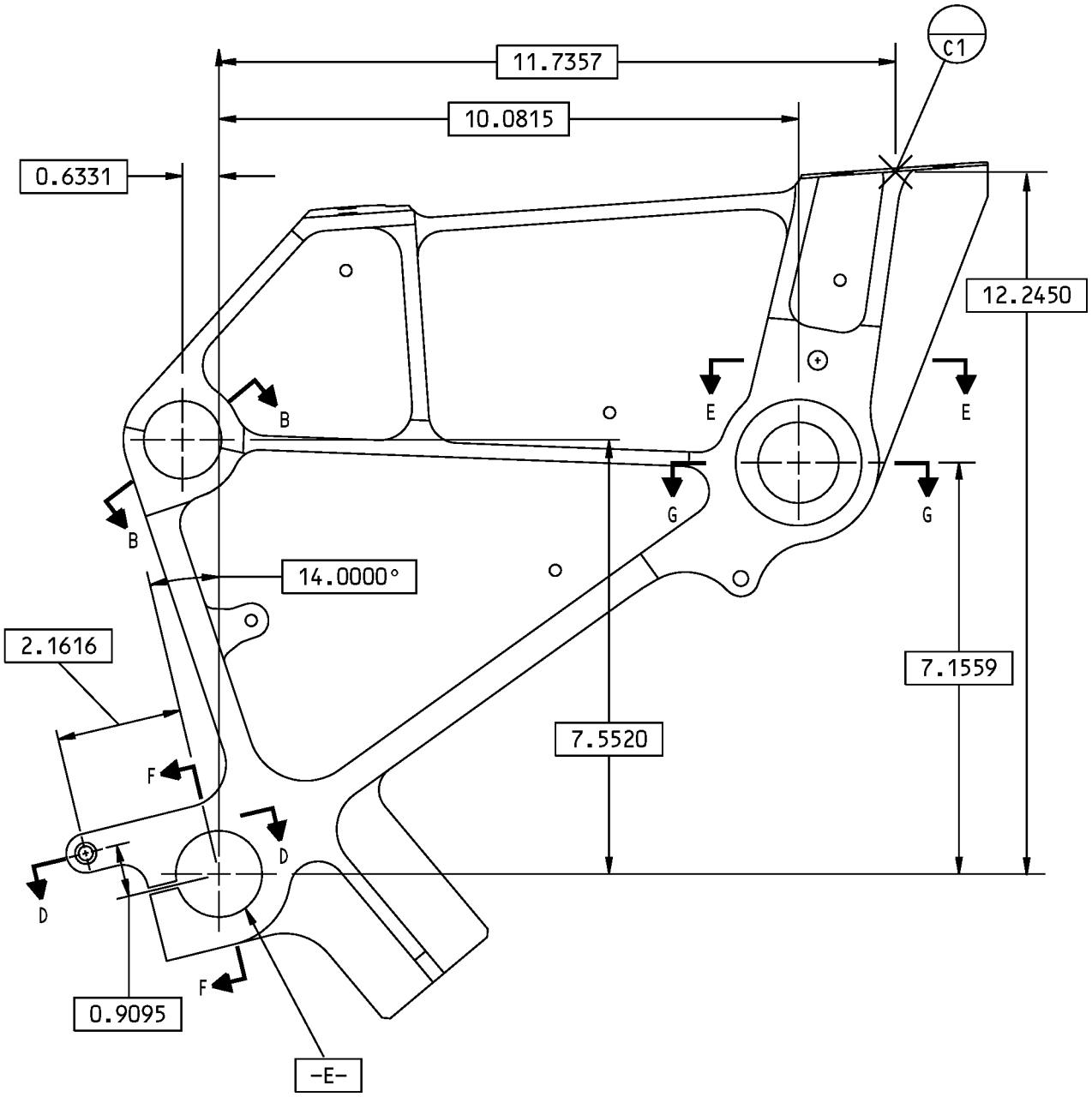
(1) Apply phosphate-fluoride coating (F-14.881) to the fitting (IPL Figure 1; 505, 510), or clean the fitting (F-14.882) (IPL Figure 2; 410, 415).

(2) Apply primer, C00259 (F-20.02) as shown.



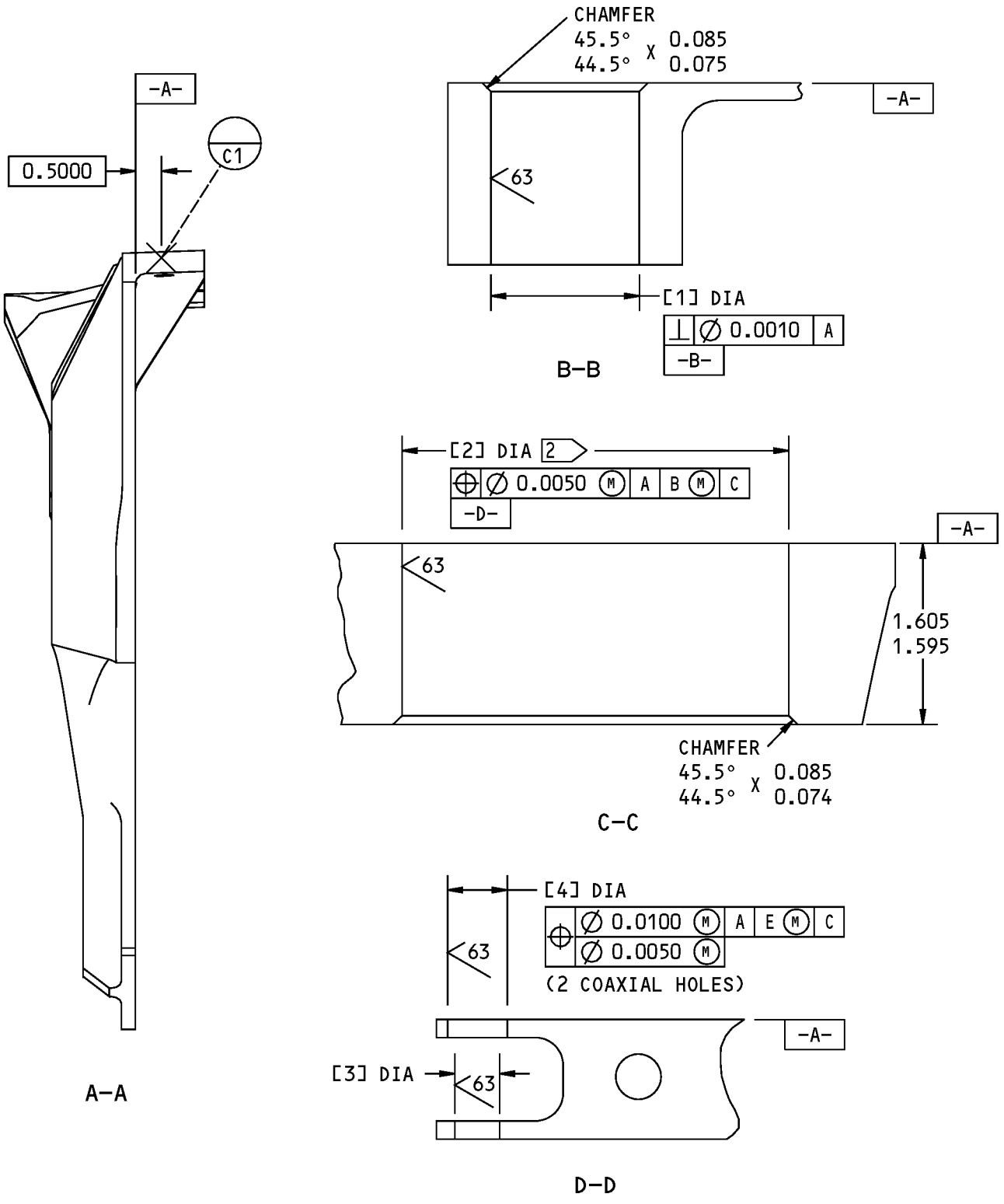
113A2862-3 SHOWN
113A2862-4 OPPOSITE

113A2862-3,-4,-7,-8 Outboard Fitting Repair
Figure 601 (Sheet 1 of 4)

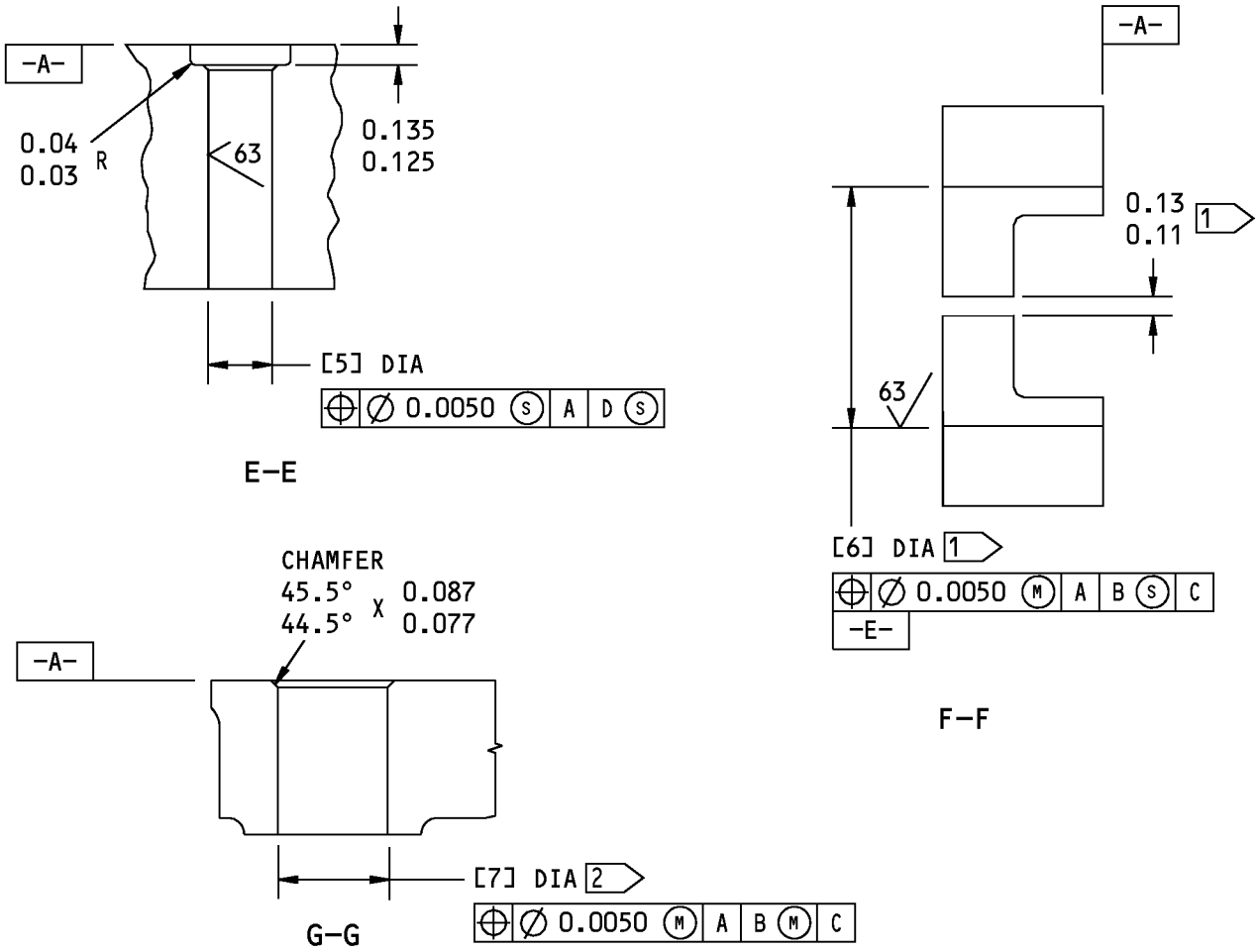


113A2862-7 SHOWN
113A2862-8 OPPOSITE

113A2862-3,-4,-7,-8 Outboard Fitting Repair
Figure 601 (Sheet 2 of 4)



113A2862-3,-4,-7,-8 Outboard Fitting Repair
Figure 601 (Sheet 3 of 4)



REFERENCE NUMBER	[1]	[2]	[3]	[4]	[5]	[6]	[7]
DESIGN DIMENSION	1.3083 1.3075	3.4217 3.4200	0.3756 0.3750	0.5006 0.5000	0.4194 0.4188	1.5010 1.5000	1.3629 1.3621
REPAIR LIMIT 4	1.3683	3.4817	0.4356	0.5606	---	---	1.4229

1 DO NOT SHOT PEEN THE HOLE OR SLOT

2 REMOVE 0.001 MAXIMUM MATERIAL AFTER SHOT PEENING TO GET 63 MICROINCH FINISH

3 APPLY BMS 10-11 PRIMER TO THIS SURFACE

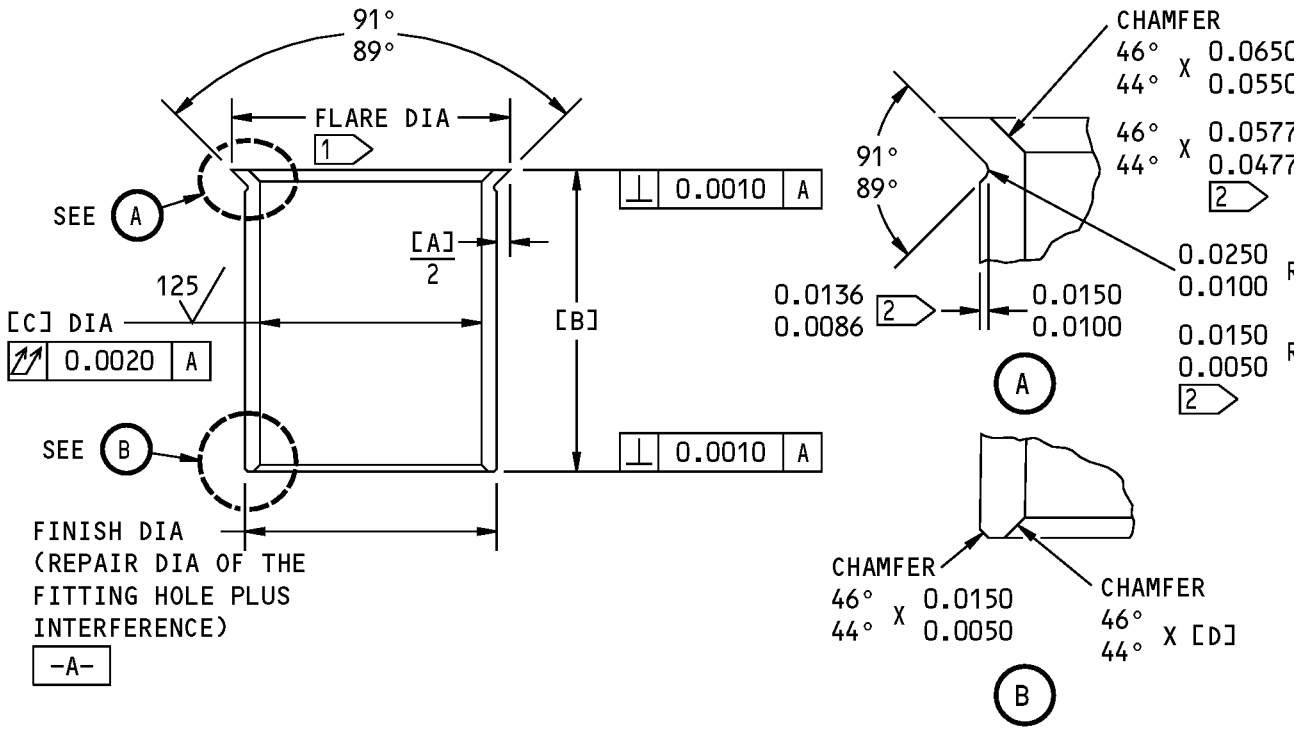
4 LIMIT FOR INSTALLATION OF OVERSIZE BUSHINGS

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

ALL DIMENSIONS ARE IN INCHES

113A2862-3,-4,-7,-8 Outboard Fitting Repair
Figure 601 (Sheet 4 of 4)



OVERSIZE REPLACEMENT FOR BUSHINGS AT LOCATIONS [1], [2], [8]

HOLE LOCATION (FIG. 601)	REPLACES BUSHING	[A] 1	[B]	[C]	[D]	INTERFERENCE
[1]	113A2653-21 (IPL FIG. 1; 480) (IPL FIG. 2; 430)	0.1473 0.1280	1.5750 1.5650	1.1750 1.1560	0.0650 0.0550	0.0027 0.0012
[2]	113A2653-5 (IPL FIG. 1; 490)	0.1432 0.1248	1.5750 1.5650	3.2870 3.2690	0.0350 0.0250	0.0068 0.0035
[8]	113A2653-23 (IPL FIG. 2; 435)	0.1546 0.1354	1.8850 1.8750	1.2199 1.2183	0.0600 0.0400	0.0028 0.0012

63 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK SHARP EDGES 0.005-0.015 R OR 0.01-0.02 R 2

MATERIAL: Al-Ni-BRONZE AMS 4640 OR AMS 4880 (113A2653-5 ONLY)

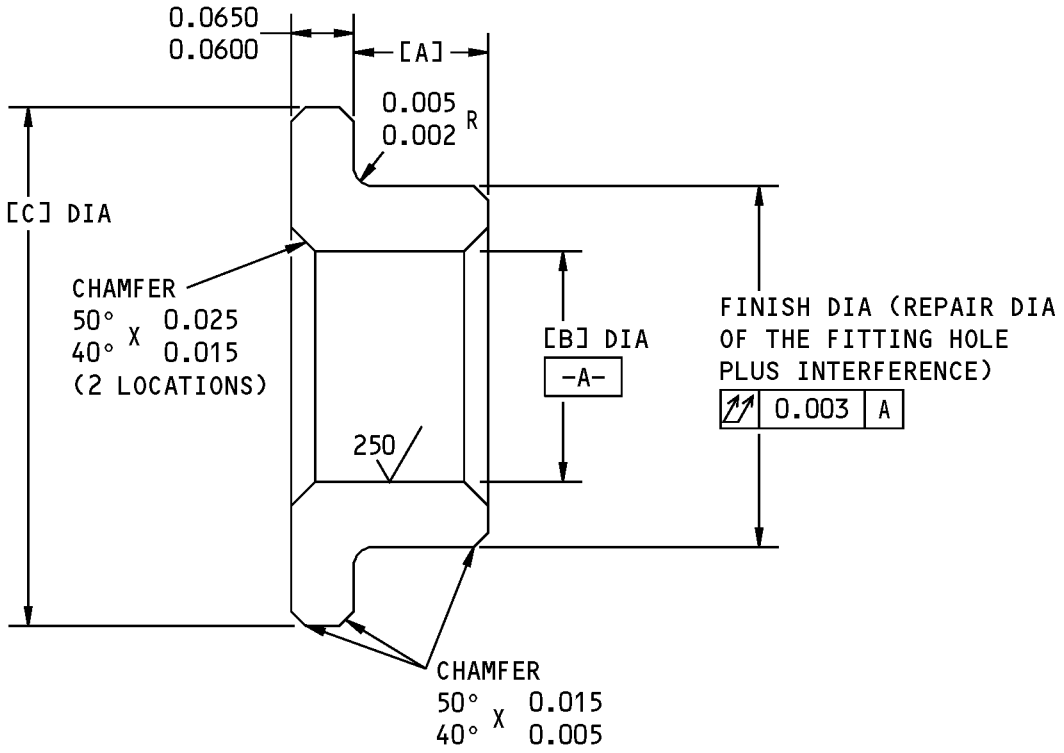
FINISH: NO FINISH

ALL DIMENSIONS ARE IN INCHES

1 FLARE DIAMETER EQUALS THE FINISH DIAMETER -A- PLUS DIMENSION [A]

2 ON 113A2653-23 ONLY

Oversize Bushing Details
Figure 602



OVERSIZE REPLACEMENT FOR BUSHINGS AT LOCATIONS [3], [4]

HOLE LOCATION (FIG. 601)	REPLACES BUSHING	[A]	[B]	[C]	INTERFERENCE	MATERIAL	FINISH
[3]	BACB28AP04-014 (IPL FIG. 1; 495) (IPL FIG. 2; 400)	0.140 0.135	0.241 0.234	0.540 0.530	0.0015 0.0003	1	3
[4]	BACB28AT6B014A (IPL FIG. 1; 500) (IPL FIG. 2; 405)	0.140 0.135	0.366 0.359	0.630 0.620	0.0016 0.0004	2	4

1. 15-5PH CRES (AMS 5659) OR 17-4PH CRES (AMS 5643 180-200 KSI
2. Al-Ni-BRONZE (AMS 4640)
3. PASSIVATE (F-17.25)
4. NO FINISH

63 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

ALL DIMENSIONS ARE IN INCHES

Oversize Bushing Details
Figure 603

ROLLER CARTRIDGE ASSEMBLY - REPAIR 4-1

113A2650–1, –2

1. General

A. This procedure has the data to repair the roller cartridge assembly (145, 150).

B. Refer to the Standard Overhaul Practices Manual (SOPM) for the SOPM subjects identified in this procedure.

C. Refer to IPL Figure 1 for item numbers.

2. Bushing Replacement

A. Consumable Materials

NOTE: Equivalent substitutes may be used.

Reference	Description	Specification
D00015	Grease - Aircraft Bearing (Use BMS 3-24 until existing stocks are depleted, BMS 3-33 supersedes BMS 3-24)	BMS3-24 (Superseded by BMS 3-33)
D00633	Grease - Aircraft General Purpose	BMS3-33

B. References

Reference	Title
SOPM 20-50-02	INSTALLATION OF SAFETYING DEVICES
SOPM 20-60-03	LUBRICANTS

C. Procedure

NOTE: For lubricants, refer to SOPM 20-60-03.

(1) Remove the cotter pin (155) from the pin assembly (180) and nut (160).

(2) Remove the nut (160), washers (165, 175), and roller (170B).

(3) Remove the pin assembly (180).

(4) Remove the damaged or defective bushing (195, 200).

(5) Apply grease, D00633 or grease, D00015 to the bore of the replacement bushing (195, 200) and the outside diameter of the pin assembly (180). Install the pin assembly in the bushing.

(6) Install the replacement bushing (195, 200) with the retainer (205, 210) on the housing (215, 220). Align the index marks on the retainer and the bushing to 0.100 inch or less.

(7) Install the washer (175) on the pin assembly (180). Engage the peg on the washer with the slot on the housing (215, 220).

(8) Install the roller (170B) and the washer (165) on the pin assembly (180). Engage the tabs on the washer with the slots on the pin assembly.

(9) Install the nut (160) on the pin assembly (180).

(10) Tighten the nut (160) to 160-975 pound-inches.

(11) Install the cotter pin (155) on the nut (160) and the pin assembly (180). The ends of the cotter pin must not be above the end of the pin assembly (180). Refer to SOPM 20-50-02.

ROLLER CARTRIDGE ASSEMBLY - REPAIR 4-2

113A2650–3, –4

1. General

A. This procedure has the data to repair the roller cartridge assembly (20, 25).

B. Refer to the Standard Overhaul Practices Manual (SOPM) for the SOPM subjects identified in this procedure.

C. Refer to IPL Figure 1 for item numbers.

2. Bushing Replacement

A. Consumable Materials

NOTE: Equivalent substitutes may be used.

Reference	Description	Specification
D00015	Grease - Aircraft Bearing (Use BMS 3-24 until existing stocks are depleted, BMS 3-33 supersedes BMS 3-24)	BMS3-24 (Superseded by BMS 3-33)
D00633	Grease - Aircraft General Purpose	BMS3-33

B. References

Reference	Title
SOPM 20-50-02	INSTALLATION OF SAFETYING DEVICES
SOPM 20-60-03	LUBRICANTS

C. Procedure

NOTE: For lubricants, refer to SOPM 20-60-03.

(1) Remove the bolts (30) and washers (35), then remove the rub block assembly (50, 55) from the retainer (125, 130).

(2) Remove the cotter pin (75) from the pin assembly (100) and nut (80).

(3) Remove the nut (80), washers (85, 95), and roller (90B).

(4) Remove the pin assembly (100).

(5) Remove the damaged or defective bushing (115, 120).

(6) Apply grease, D00633 or grease, D00015 to the bore of the replacement bushing (115, 120) and the outside diameter of the pin assembly (100). Install the pin assembly in the bushing.

(7) Install the replacement bushing (115, 120) with the retainer (125, 130) in the housing (135, 140). Align the index marks on the retainer and the bushing to 0.100 inch or less.

(8) Install the washer (95) on the pin assembly (100). Engage the peg on the washer with the slot on the housing (135, 140).

(9) Install the roller (90B) and the washer (85) on the pin assembly (100). Engage the tabs on the washer with the slots on the pin assembly.

(10) Install the nut (80) on the pin assembly (100).

(11) Tighten the nut (80) to 160-975 pound-inches.

(12) Install the cotter pin (75) on the nut (80) and the pin assembly (100). The ends of the cotter pin must not be above the end of the pin assembly. Refer to SOPM 20-50-02.

(13) Install the rub block assembly (50, 55) on the retainer (125, 130) with the bolts (30) and washers (35).

ASSEMBLY

1. General

A. This procedure has the data to assemble the inboard flap outboard carriage assembly (IPL Figure 1; 1A, 5), (IPL Figure 2; 1A, 5).

B. Refer to the Standard Overhaul Practices Manual (SOPM) for the SOPM subjects identified in this procedure.

C. Refer to IPL Figure 1 or IPL Figure 2 for the item numbers.

2. Assembly

A. Consumable Materials

NOTE: Equivalent substitutes may be used.

Reference	Description	Specification
A00247	Sealant - Pressure And Environmental - Chromate Type	BMS 5-95
D00015	Grease - Aircraft Bearing (Use BMS 3-24 until existing stocks are depleted, BMS 3-33 supersedes BMS 3-24)	BMS3-24 (Superseded by BMS 3-33)
D00633	Grease - Aircraft General Purpose	BMS3-33
G01048	Lockwire - Corrosion Resistant Steel (0.032 In. Dia.)	NASM20995~ C32

B. References

Reference	Title
SOPM 20-41-01	DECODING TABLE FOR BOEING FINISH CODES
SOPM 20-50-01	BOLT AND NUT INSTALLATION
SOPM 20-50-02	INSTALLATION OF SAFETYING DEVICES
SOPM 20-60-03	LUBRICANTS
SOPM 20-60-04	MISCELLANEOUS MATERIALS

C. Procedure

NOTE: For the decoding table for Boeing finish codes, refer to SOPM 20-41-01. For lubricants, refer to SOPM 20-60-03. For miscellaneous materials, refer to SOPM 20-60-04.

(1) Use standard industry procedures and these steps to assemble this component.

(2) Assemble the assemblies 113A2850-1, -2 (IPL Figure 1).

(a) If necessary, install the rub plate assemblies (280 thru 295) on the carriage fittings (460, 465, 470, 475) with the fasteners (265 thru 275). Apply a fay surface seal with sealant, A00247. Install the fasteners with sealant, A00247 (F-19.48).

(3) Install the rollers (240A) on the fitting assemblies (460, 465, 470, 475).

(a) Install the rollers (240A) on the carriage fitting assemblies (460, 465, 470, 475) with the pin assemblies (250), washers (235, 245), and nuts (230).

(b) Tighten the nuts (230) to 160-975 pound-inches (SOPM 20-50-01).

(c) Install the cotter pins (225) on the pin assemblies (250) (SOPM 20-50-02). The ends of the cotter pins must not be above the ends of the pin assemblies.

(4) Install the roller cartridge assemblies (20, 25, 145, 150) in the fitting assemblies (460, 465, 470, 475).

(a) Install the roller cartridge assemblies (20, 25, 145, 150) with the bolts (10) and washers (15).

(b) Tighten the bolts (10) to 95-110 pound-inches (SOPM 20-50-01).

(c) Install lockwire, G01048 (SOPM 20-50-02) from the bolts (10) to the retainer (125, 130) on the outboard fitting assembly (460, 465).

(d) Install lockwire, G01048 (SOPM 20-50-02) on the bolts (10) on the inboard fitting assembly (470, 475). Install the lockwire, G01048 so it goes around (not over) the hex head of the pin assembly (180).

(e) Install the rub block assembly (355, 360).

1) Install the clip (450) on the inboard carriage fitting assembly (470, 475) with the fasteners (415, 420, 430 thru 445). Apply a fay surface seal with sealant, A00247. Install the fasteners with sealant, A00247 (F-19.48).

2) Install the fitting assembly (380, 385) and the rub block assembly (355, 360) with the fasteners (330 thru 350). Apply a fay surface seal with sealant, A00247. Install the fasteners with sealant, A00247 (F-19.48).

(5) Assemble the assemblies 113A2850-3, -4, -5, -6, -201, -202 (IPL Figure 2)

(a) If necessary, install the rub plate assemblies (170 thru 185) on the carriage fittings (375, 380, 420, 425) with the fasteners (155 thru 165). Apply a fay surface seal with sealant, A00247. Install the fasteners with sealant, A00247 (F-19.48).

(b) Install the rollers (105, 110) on the carriage fitting assemblies (375, 380, 420, 425).

1) Apply grease, D00633 or grease, D00015 to the outside diameter of the pin assemblies (75, 90) and the bores of the bushings in the carriage fittings.

2) Install the rollers (105, 110) on the carriage fitting assemblies with the pin assemblies (75, 90), washers (60, 65, 70), and nuts (55). Make sure the pegs on the washers (70) engage the holes in the carriage fittings. Make sure the tabs on the washers (60) engage the slots on the pin assemblies.

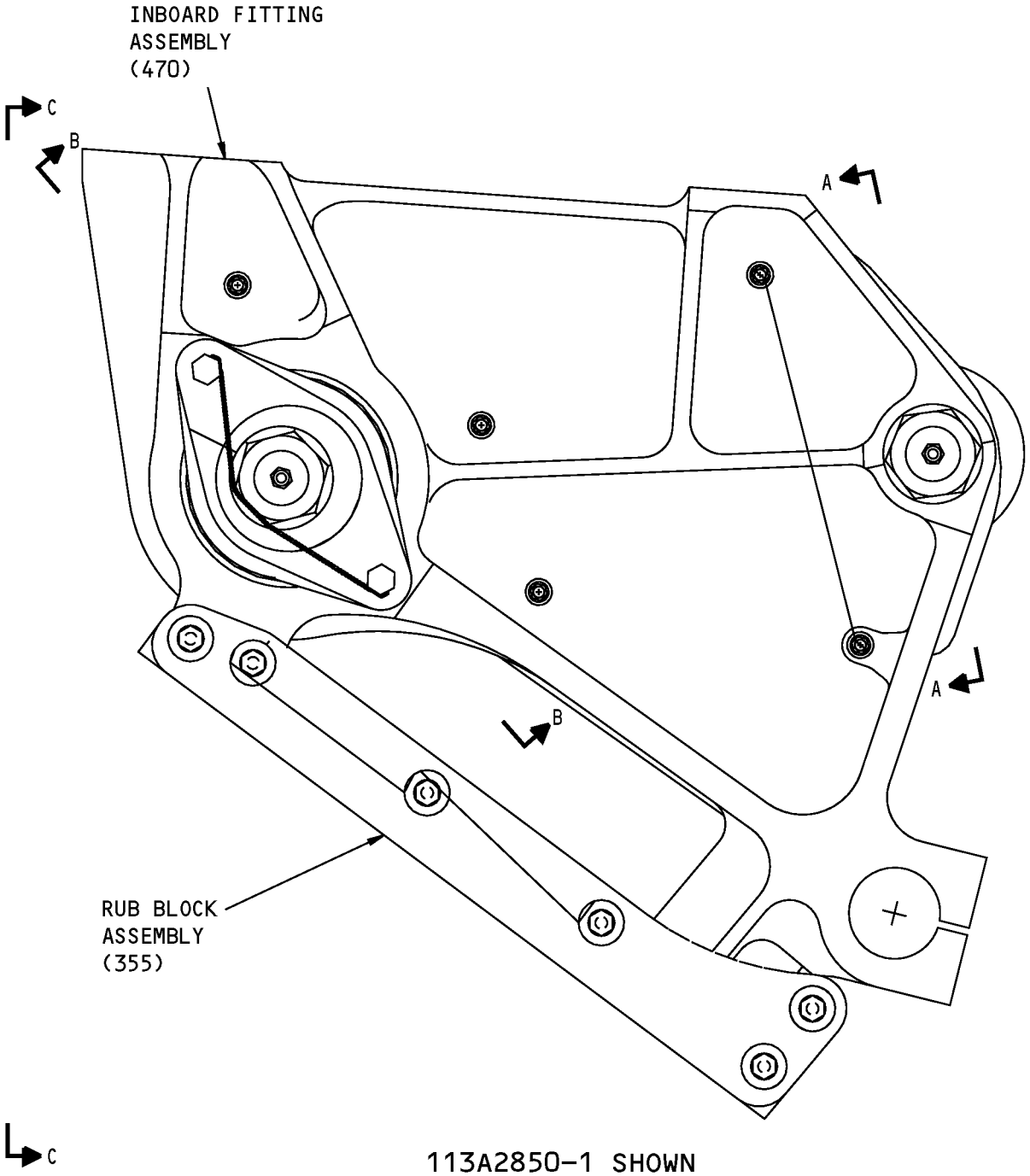
3) Tighten the nuts (55) to 160-975 pound inches (SOPM 20-50-01).

4) Install the cotter pins (50) on the pin assemblies (75, 90) (SOPM 20-50-02). The ends of the cotter pins must not be above the ends of the pin assemblies.

(c) Install the rub block assembly (320, 325).

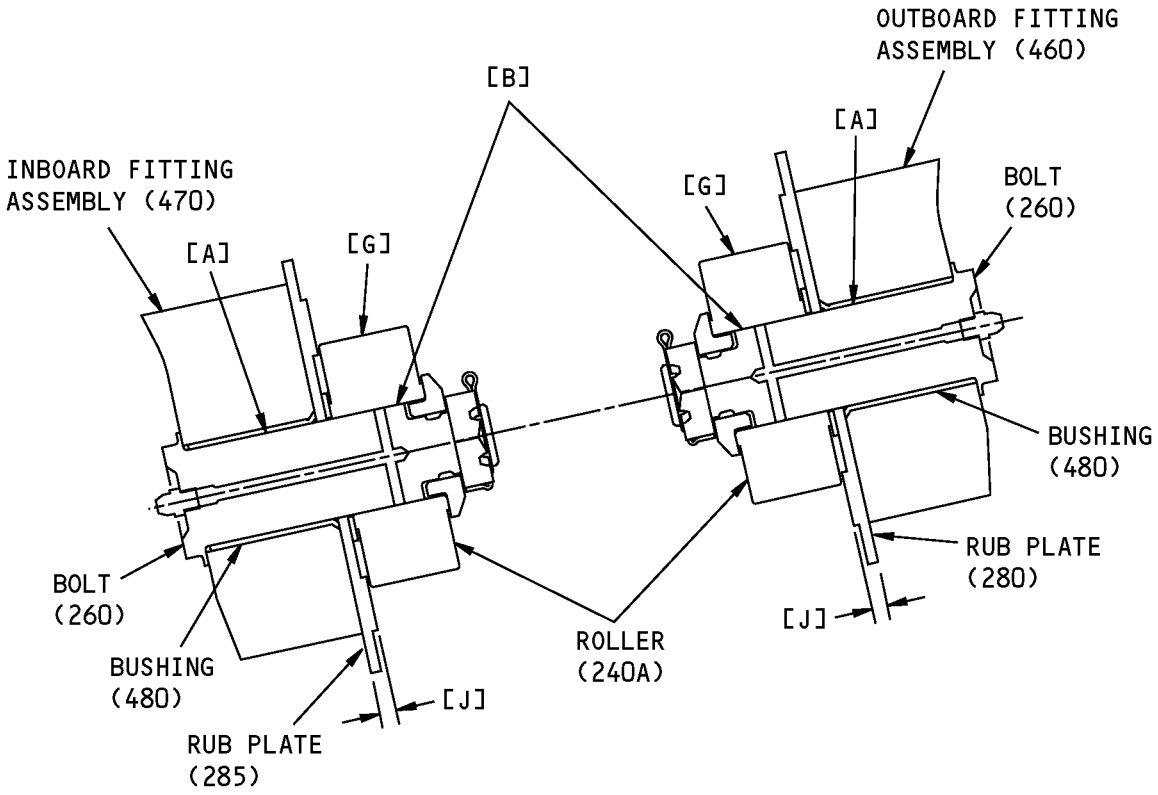
1) Install the clip (295) on the inboard carriage fitting assembly (420, 425) with the fasteners (245 thru 265). Apply a fay surface seal with sealant, A00247. Install the fasteners with sealant, A00247 (F-19.48).

2) Install the fitting assembly (345, 350) and the rub block assembly (320, 325) with the fasteners (275 thru 290). Apply a fay surface seal with sealant, A00247. Install the fasteners with sealant, A00247 (F-19.48).



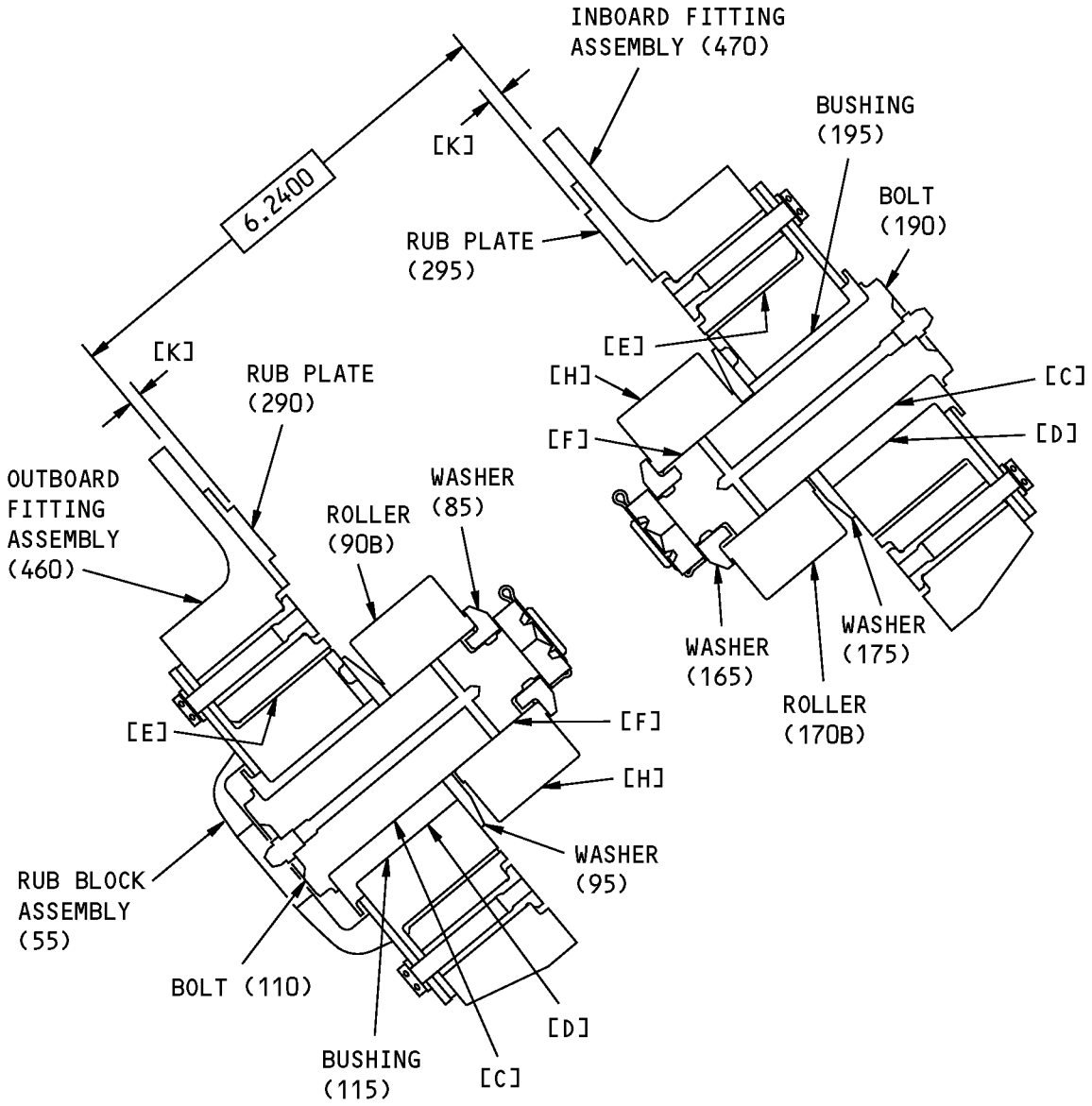
113A2850-1 SHOWN
113A2850-2 OPPOSITE

Fits and Clearances
Figure 801 (Sheet 1 of 5)



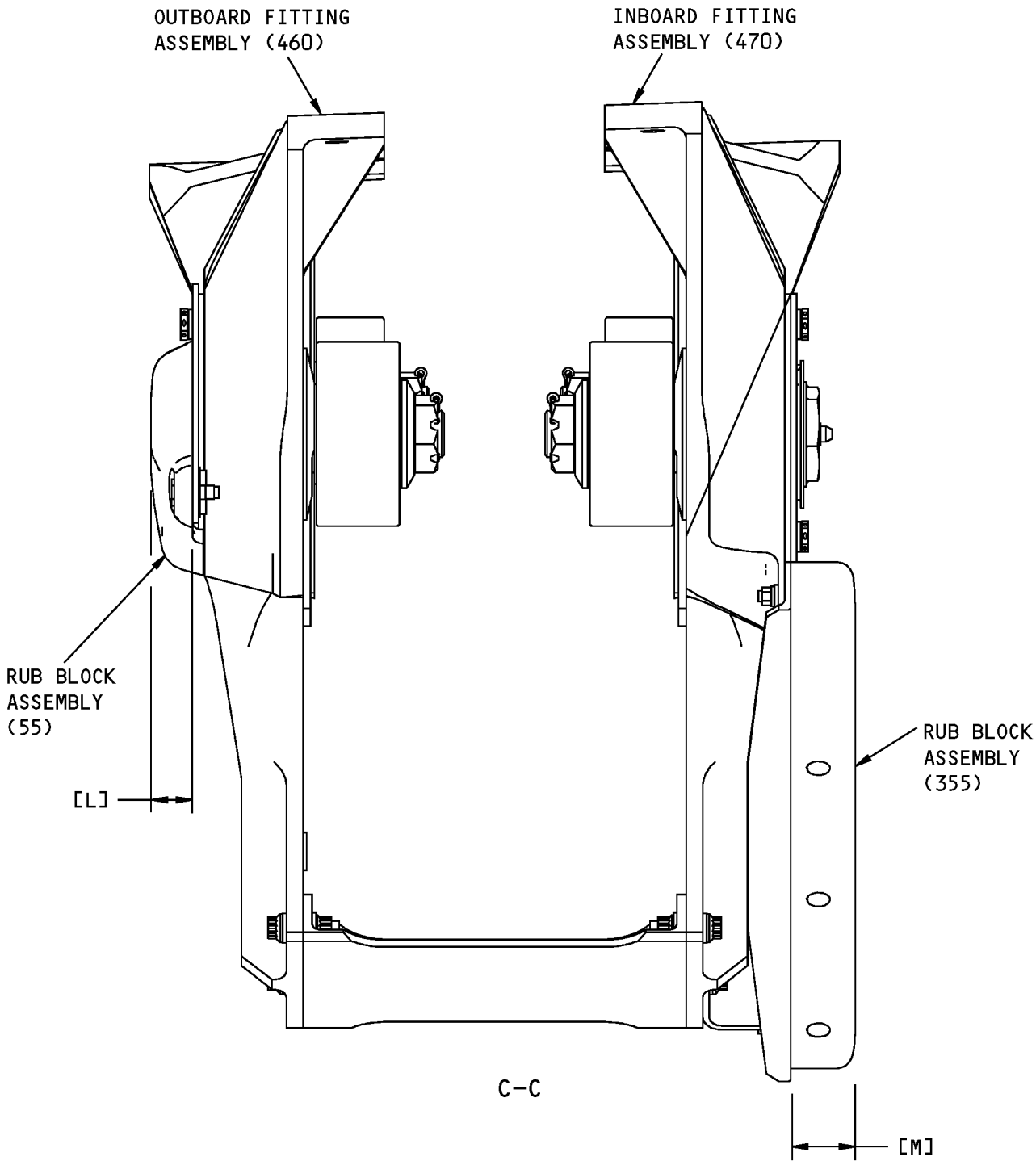
A–A

Fits and Clearances
Figure 801 (Sheet 2 of 5)



B–B

Fits and Clearances
Figure 801 (Sheet 3 of 5)



Fits and Clearances
Figure 801 (Sheet 4 of 5)

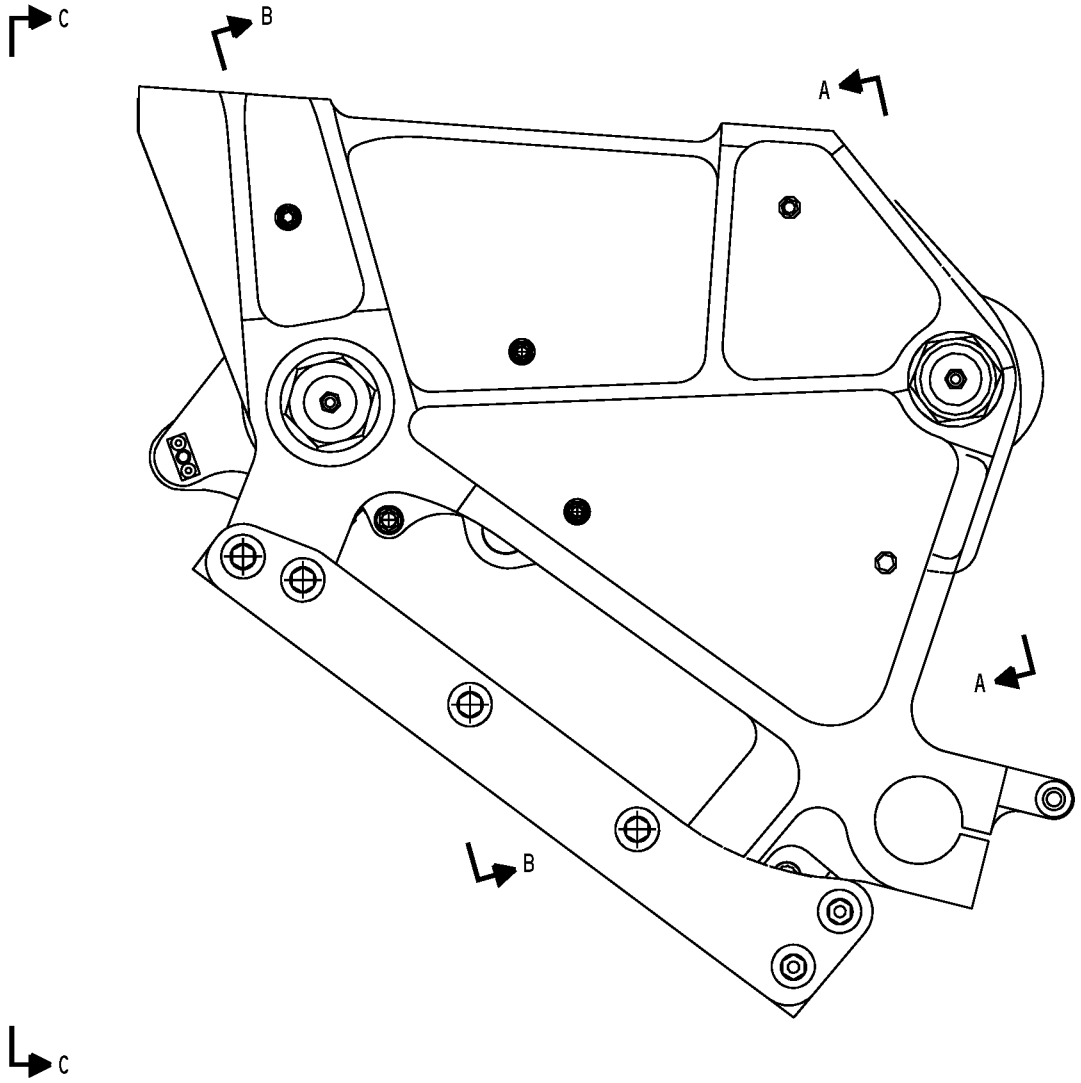
REF LETTER	REF IPL FIG. 2, MATING ITEM NO.	DESIGN DIMENSION* DIMENSION MIN	DESIGN DIMENSION* DIMENSION MAX	DESIGN DIMENSION* ASSEMBLY CLEARANCE MIN	DESIGN DIMENSION* ASSEMBLY CLEARANCE MAX	SERVICE WEAR LIMIT* DIMENSION MIN	SERVICE WEAR LIMIT* DIMENSION MAX	SERVICE WEAR LIMIT* MAXIMUM CLEARANCE
[A]	ID 480 OD 260	1.1870 1.1855	1.1878 1.1865	0.0005	0.0023	1.1828	1.1915	0.005
[B]	ID 240 OD 260	1.1868 1.1855	1.1875 1.1865	0.0003	0.0020	1.1825	1.1915	0.005
[C]	ID 115,195 OD 110,190	1.2500 1.2480	1.2514 1.2490	0.0010	0.0040	1.2470	1.2540	0.005
[D]	ID 135,215 OD 115,195	1.7010 1.6980	1.2500 1.2490	0.0015	0.0050	1.6980	1.7045	0.005
[E]	ID 490 OD 135,215	3.3000 3.2980	3.3020 3.2990	0.0010	0.0040	3.3970	3.3040	0.005
[F]	ID 90B,170B OD 110,190	1.2493 1.2480	1.2500 1.2490	0.0003	0.0020	1.2450	1.2540	0.005
[G]	OD 240A	2.999	3.001			2.997 (1)		
[H]	OD 90B,170B	2.999	3.001			2.997 (1)		
[J]	280,285 (2)	0.1850	0.1950			0.1350 (1)		
[K]	290,295 (2)	0.1850	0.1950			0.1350 (1)		
[L]	50,55 (2)	0.6636	0.6936			0.5036 (1)		
[M]	355,360 (2)	1.0350	1.0650			0.9350 (1)		

* ALL DIMENSIONS ARE IN INCHES

(1) REPLACE THE PART WHEN IT IS AT THIS DIMENSION

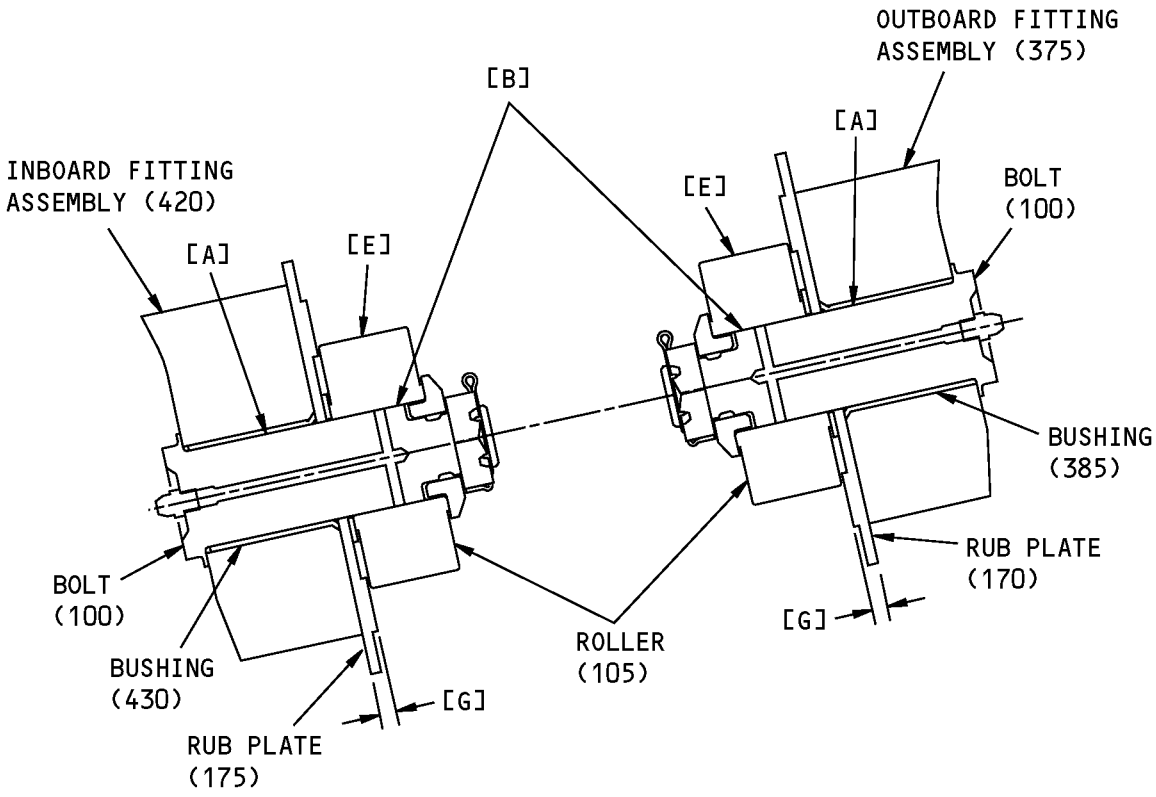
(2) THICKNESS MEASURED PERPENDICULAR TO THE MOUNTING SURFACE. MEASURE THE WEAR AT THE MINIMUM HEIGHT OF THE CONTACT AREA

Fits and Clearances
Figure 801 (Sheet 5 of 5)



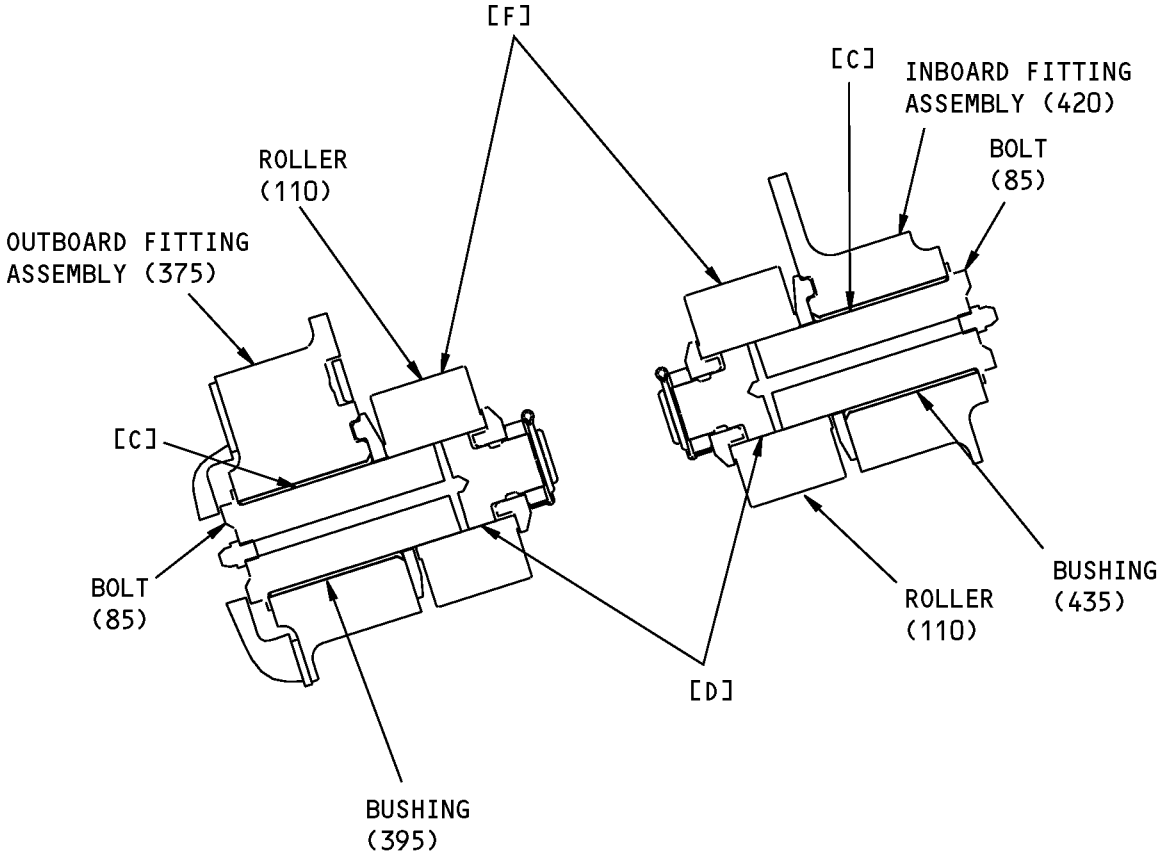
113A2850-3 SHOWN
113A2850-4 OPPOSITE

Fits and Clearances
Figure 802 (Sheet 1 of 5)



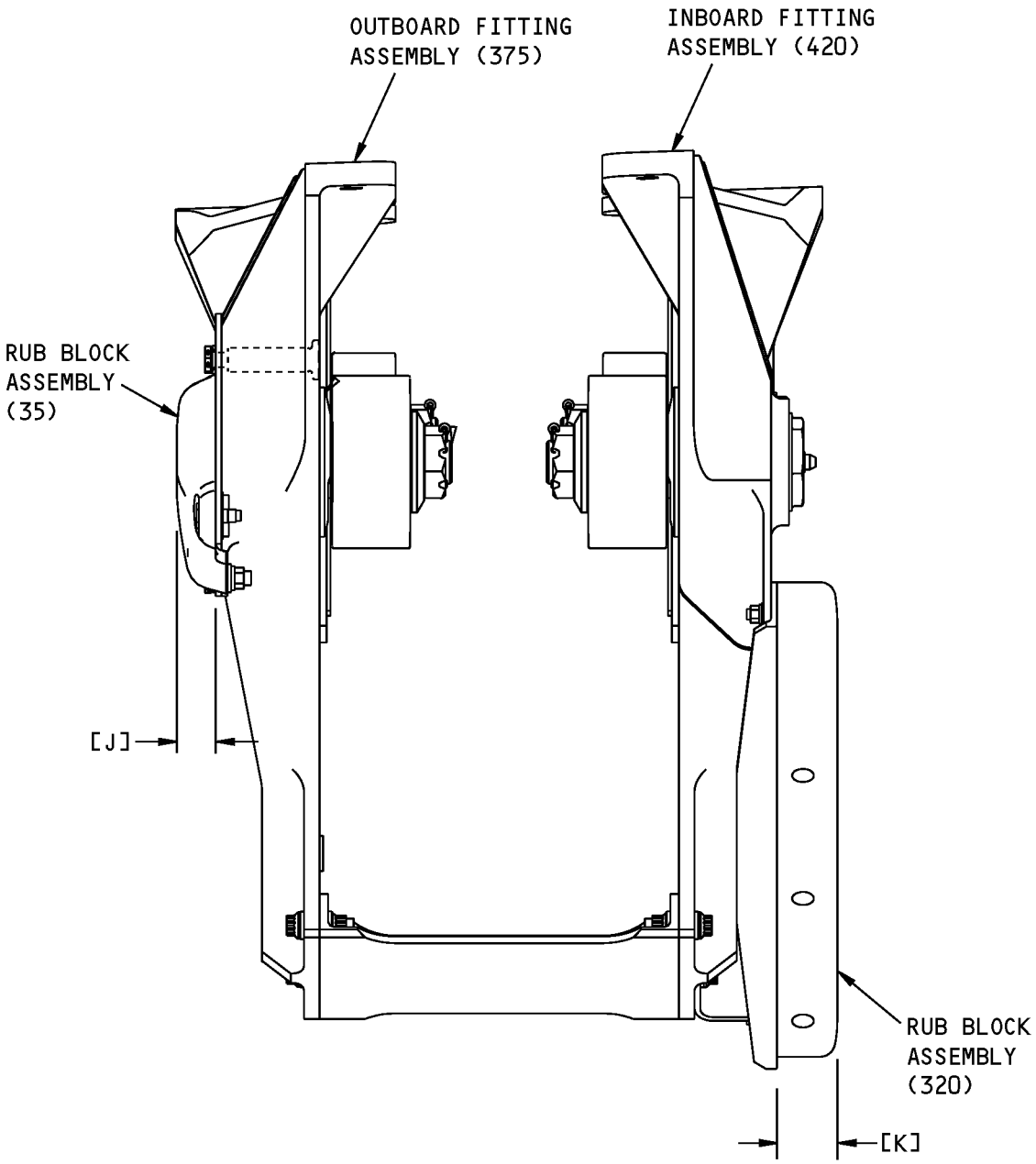
A–A

Fits and Clearances
Figure 802 (Sheet 2 of 5)



B–B

Fits and Clearances
Figure 802 (Sheet 3 of 5)



Fits and Clearances
Figure 802 (Sheet 4 of 5)

REF LETTER	REF IPL FIG. 2, MATING ITEM NO.	DESIGN DIMENSION*				SERVICE WEAR LIMIT*		
		DIMENSION		ASSEMBLY CLEARANCE		DIMENSION		MAXIMUM CLEARANCE
		MIN	MAX	MIN	MAX	MIN	MAX	
[A]	ID 385,430 OD 100	1.1870 1.1855	1.1878 1.1865	0.0005	0.0023	1.1828	1.1915	0.005
[B]	ID 105 OD 100	1.1868 1.1855	1.1875 1.1865	0.0003	0.0020	1.1825	1.1915	0.005
[C]	ID 395,435 OD 85	1.2506 1.2480	1.2514 1.2490	0.0016	0.0034	1.2470	1.2540	0.005
[D]	ID 110 OD 85	1.2493 1.2480	1.2500 1.2490	0.0003	0.0020	1.2450	1.2540	0.005
[E]	OD 105	2.999	3.001			2.997 (1)		
[F]	OD 110	2.999	3.001			2.997 (1)		
[G]	170,175 (2)	0.1850	0.1950			0.1350 (1)		
[H]	180,185 (2)	0.1850	0.1950			0.1350 (1)		
[J]	35,37 (2)	0.6636	0.6936			0.5036 (1)		
[K]	320,325 (2)	1.0350	1.0650			0.9350 (1)		

* ALL DIMENSIONS ARE IN INCHES

(1) REPLACE THE PART WHEN IT IS AT THIS DIMENSION

(2) THICKNESS MEASURED PERPENDICULAR TO THE MOUNTING SURFACE. MEASURE THE WEAR AT THE MINIMUM HEIGHT OF THE CONTACT AREA

Fits and Clearances
Figure 802 (Sheet 5 of 5)

REF IPL		NAME	TORQUE*	
FIG. NO.	ITEM NO.		POUND-INCHES	POUND-FEET
1	10	Bolt	95-110	
1	80	Nut	160-975	
1	160	Nut	160-975	
1	230	Nut	160-975	
2	55	Nut	160-975	

* REFER TO SOPM 20-50-01 FOR TORQUE VALUES OF STANDARD FASTENERS.

Torque Table
Figure 803

(NOT APPLICABLE)

ILLUSTRATED PARTS LIST

1. Introduction

A. The Illustrated Parts List (IPL) contains an illustration and a list of component parts you can repair or replace. The Illustrated Parts Catalog (IPC) shows how to use the Boeing part number system.

B. This shows how parts are related: The relation of each item to its next higher assembly (NHA) is shown in the NOMENCLATURE column. Use the indenture system that follows:

1 2 3 4 5 6 7

. Assembly

. Attaching parts for assembly

. . Detail parts for assembly

. . Subassembly

. . Attaching parts for subassembly

. . . Detail parts for subassembly

. . . Sub-subassembly

. . . Attaching parts for subassembly

. . . . . Details parts for sub-subassembly

Detail Installation Parts (Included only if installation parts may be sent to the shop as part of assembly)

C. Each top assembly is given one use code letter (A, B, C, etc.) in the USAGE CODE column. All subsequent component parts in the list can have one or more of the use code letters to show effectivity to top assemblies. A component part without a use code applies to all top assemblies.

D. An alphabetical letter is added after the item number for optional parts, parts changed by a Service Bulletin, configuration differences (except left-handed and right-handed parts), last engineering releases, and parts added between item numbers in a sequence. The alphabetical letter will not be shown on the illustration for equivalent parts of the same part number.

E. Color-coded parts are identified with a single digit alpha following the dash number or with ''SP'' suffix. If the ''SP'' suffix is used, it represents consolidation of all color codes applicable for a given usage which are not separately listed. Orders for color-coded parts should include the registry number of the airplane for which the parts are ordered.

F. If a part number is 15 characters long but will not fit in the part number column, the part number will be displayed with a ''~'' at the end of the line and will be continued on the next line. The ''~'' denotes that the part number continues on the next line.

G. Parts changed by a Service Bulletin are shown by PRE SB XXXX and POST SB XXXX added to the NOMENCLATURE column.

(1) When a new top assembly is added by a Service Bulletin, PRE SB XXXX and POST SB XXXX will be added at the top assembly level only. The configuration differences at the detail part level are shown by use code letters.

(2) When the top assembly part number is not changed by the Service Bulletin, PRE SB XXXX and POST SB XXXX will be added at the detail level.

H. Interchangeable Parts

Optional (OPT)	The part is optional to and interchangeable with other parts that have the same item number.
Replaces, Replaced by and not interchangeable with (REPLACES, REPLACED BY AND NOT INTCHG/W)	The part replaces and is not interchangeable with the initial part.
Replaces, Replaced by (REPLACES, REPLACED BY)	The part replaces and is interchangeable with, or is an alternative to, the initial part.

VENDOR CODES

Code	Name
15653	ALCOA GLOBAL FASTENERS INC DIV KAYNAR PRODUCTS 800 S STATE COLLEGE BLVD FULLERTON, CALIFORNIA 92831-3001 FORMERLY VK6405 MICRODOT AEROSP LTD; FORMERLY KAYNAR TECH FORMERLY FAIRCHILD FASTENERS KAYNAR DIV
60380	TORRINGTON CO BEARINGS DIV SUBSIDIARY OF INGERSOLL-RAND CORP 59 FIELD STREET PO BOX 1008 TORRINGTON, CONNECTICUT 06790-1008 FORMERLY TORRINGTON BEARING COMPANY
62554	SIMMONDS MECAERO FASTENERS INC 1734 SEQUOIA AVENUE ORANGE, CALIFORNIA 92668
92563	MCGILL MFG CO INC BEARINGS DIV 909 LAFAYETTE STREET VALPARAISO, INDIANA 46383-4210

NUMERICAL INDEX

PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
113A2650-1		1	150	1
113A2650-2		1	145	1
113A2650-3		1	20	1
113A2650-4		1	25	1
113A2651-1		1	135	1
		1	220	1
113A2651-2		1	140	1
		1	215	1
113A2652-1		1	100	1
		1	180	1
		2	75	2
113A2652-11		1	260	1
		2	100	1
113A2652-3		1	250	2
		2	90	2
113A2652-9		1	110	1
		1	190	1
		2	85	1
113A2653-1		1	115	1
		1	200	1
113A2653-2		1	120	1
		1	195	1
113A2653-21		1	480	1
		2	385	1
		2	430	1
113A2653-23		2	395	1
		2	435	1
113A2653-3		1	485	2
		2	20	1
		2	390	2
113A2653-5		1	490	1
113A2655-1		1	95	1
		1	175	1
113A2655-3		1	85	1

PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
		1	165	1
		1	235	2
		2	60	4
113A2655-7		1	245	2
		2	65	2
113A2655-8		2	70	2
113A2656-1		1	210	1
113A2656-2		1	205	1
113A2656-3		1	125	1
113A2656-4		1	130	1
113A2657-17		1	310	1
		2	200	1
113A2657-18		1	315	1
		2	205	1
113A2657-19		1	300	1
		2	190	1
113A2657-21		1	320	1
		2	210	1
113A2657-22		1	325	1
		2	215	1
113A2657-23		1	305	1
		2	195	1
113A2657-5		1	280	1
		2	170	1
113A2657-6		1	285	1
		2	175	1
113A2657-7		1	290	1
		2	180	1
113A2657-8		1	295	1
		2	185	1
113A2658-1		2	135	1
113A2658-2		2	137	1
113A2658-3		2	150	1
113A2850-1		1	1A	RF
113A2850-2		1	5	RF

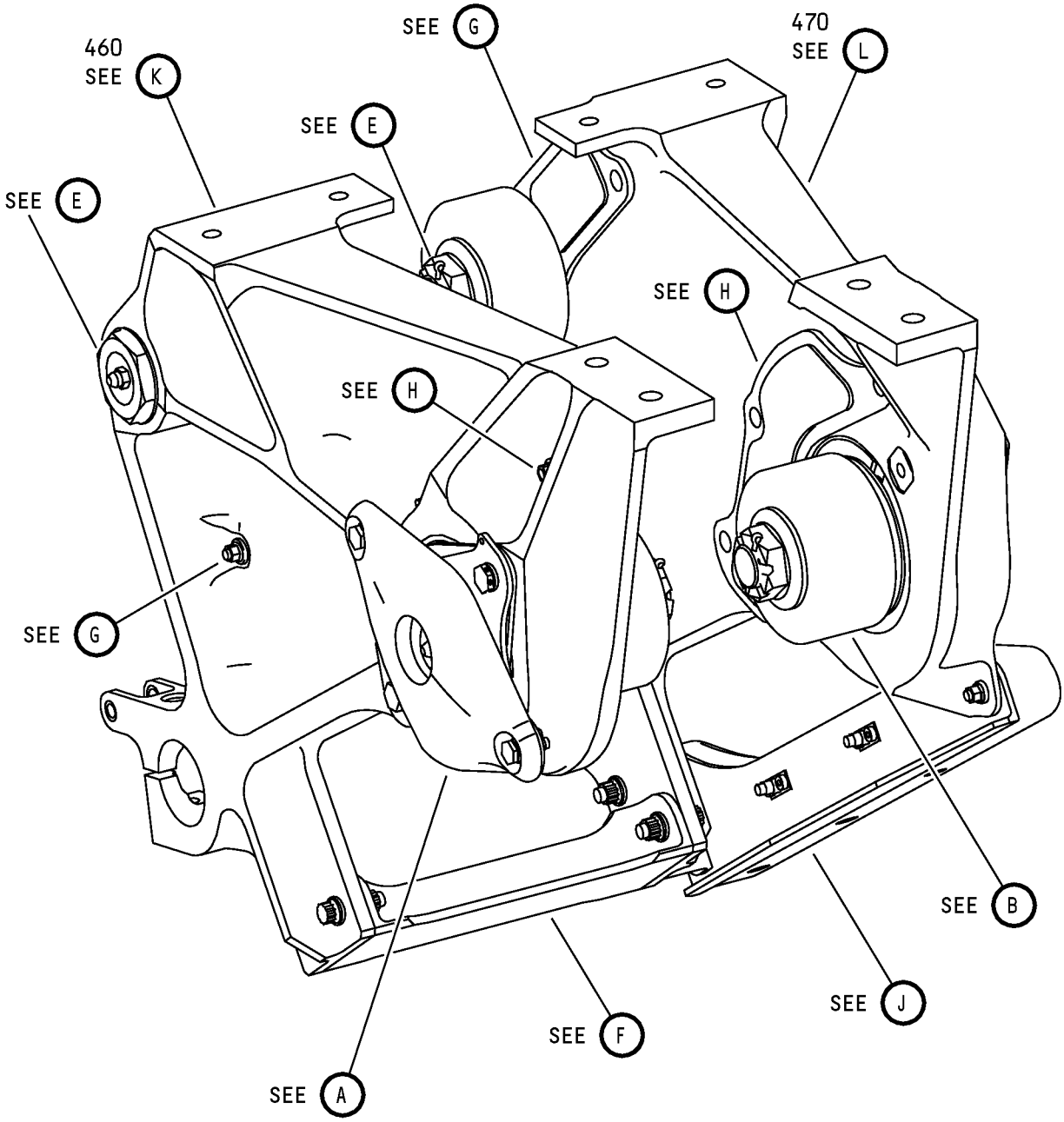
PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
113A2850-201		1	1D	RF
		2	1C	RF
113A2850-202		1	5C	RF
		2	5B	RF
113A2850-3		1	1B	RF
		2	1A	RF
113A2850-4		1	5A	RF
		2	5	RF
113A2850-5		1	1C	RF
		2	1B	RF
113A2850-6		1	5B	RF
		2	5A	RF
113A2861-1		1	470	1
113A2861-2		1	475	1
113A2861-3		1	515	1
113A2861-4		1	520	1
113A2861-5		2	420	1
113A2861-6		2	425	1
113A2861-7		2	440	1
113A2861-8		2	445	1
113A2862-1		1	460	1
113A2862-10		2	380A	1
113A2862-2		1	465	1
113A2862-3		1	505	1
113A2862-4		1	510	1
113A2862-5		2	375	1
113A2862-6		2	380	1
113A2862-7		2	410	1
113A2862-8		2	415	1
113A2862-9		2	375A	1
113A2871-1		1	455	1
		2	270	1
113A2871-201		2	270A	1
113A2872-1		1	380	1
		2	345	1

PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
113A2872-2		1	385	1
		2	350	1
113A2872-3		1	400	1
		2	365	1
113A2872-4		1	405	1
		2	370	1
113A2873-1		1	450	1
		2	295	1
113A2881-1		1	50	1
		2	35	1
113A2881-10		1	360	1
		2	325	1
113A2881-11		1	370	1
		2	335	1
113A2881-12		1	375	1
		2	340	1
113A2881-2		1	55	1
		2	37	1
113A2881-5		1	65	1
		2	45	1
113A2881-6		1	70	1
		2	47	1
113A2881-9		1	355	1
		2	320	1
60B00178-670		1	240A	2
60B00178-671		1	90B	1
		1	170B	1
AC67861		1	240A	2
AC68849		1	240A	2
AC68849T8		2	105	2
AC68850		1	90B	1
		1	170B	1
AC68850T8		2	110	2
BACB10HH19A		2	105	2
BACB10HH20A		2	110	2

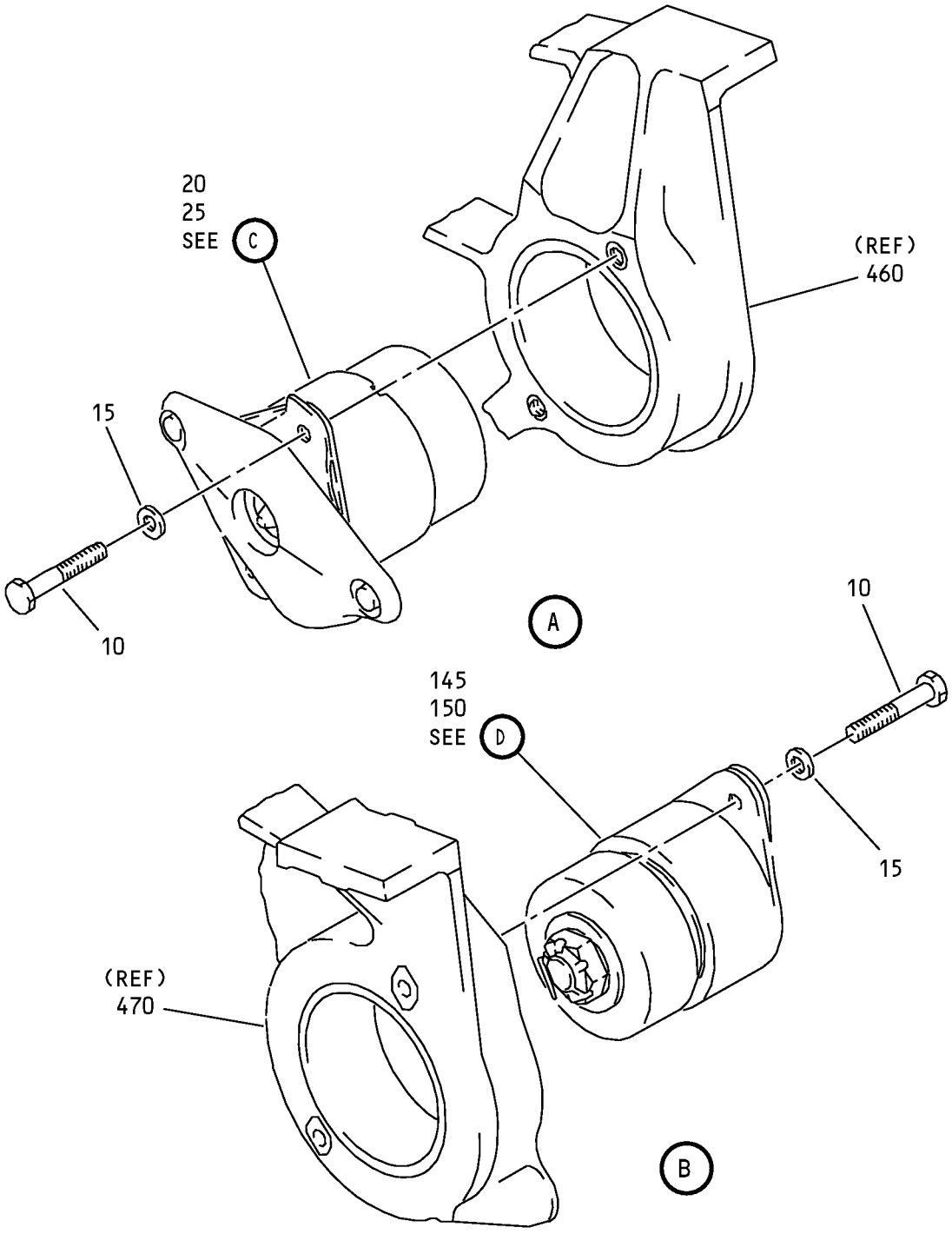
PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
BACB28AP04-014		1	495	1
		2	400	1
BACB28AT06B014A		1	500	1
		2	405	1
BACB28X3N025		1	365	6
		2	330	6
BACB28X3P009		1	60	2
		2	40	2
BACB30MR4A11		2	220A	3
BACB30MR4A13		2	250A	1
BACB30MR4A8		2	245A	1
BACB30MR4K10		1	420	1
		2	250	1
BACB30MR4K11		2	220B	3
BACB30MR4K13		2	250B	1
BACB30MR4K7		1	415	1
		2	245	1
BACB30MR4K8		1	410	3
		2	220	3
		2	245B	1
BACB30NM3K5		1	30	2
		2	25	2
BACB30NM3K9		1	330	6
		2	275	2
		2	300	4
BACB30NM4HK22		2	10A	1
BACB30NM4HK23		1	10	4
		2	10	1
BACB30NM4K4		2	115	1
BACB30XD3K5		1	265	10
		2	155	10
BACN10JD112ASU		1	80	1
		1	160	1
		1	230	2
		2	55	4

PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
BACN10YF31CM		1	45	2
		2	145	2
BACN10YF32CD		1	395	2
		2	360	2
BACN10YR3CM		1	275	10
		1	350	4
		2	165	10
		2	290	2
		2	315	2
BACN10YR4CM		2	130	1
BACN11Z4CK		2	240	3
		2	265	2
BACP18BC03A11P		1	75	1
		1	155	1
		1	225	2
		2	50	4
BACR15BA3AD2C		1	390	4
		2	355	4
BACR15GE3C4		1	40	4
		2	140	4
BACW10BP3ACU		1	35	2
		1	335	6
		2	30	2
		2	280	2
		2	305	4
BACW10BP3APU		1	340	2
		2	310	2
BACW10BP3DP		1	345	2
		2	285	2
BACW10BP4ACU		1	15	4
		1	425	3
		2	15	1
		2	120	1
		2	225	3
BACW10BP4APU		2	125A	1

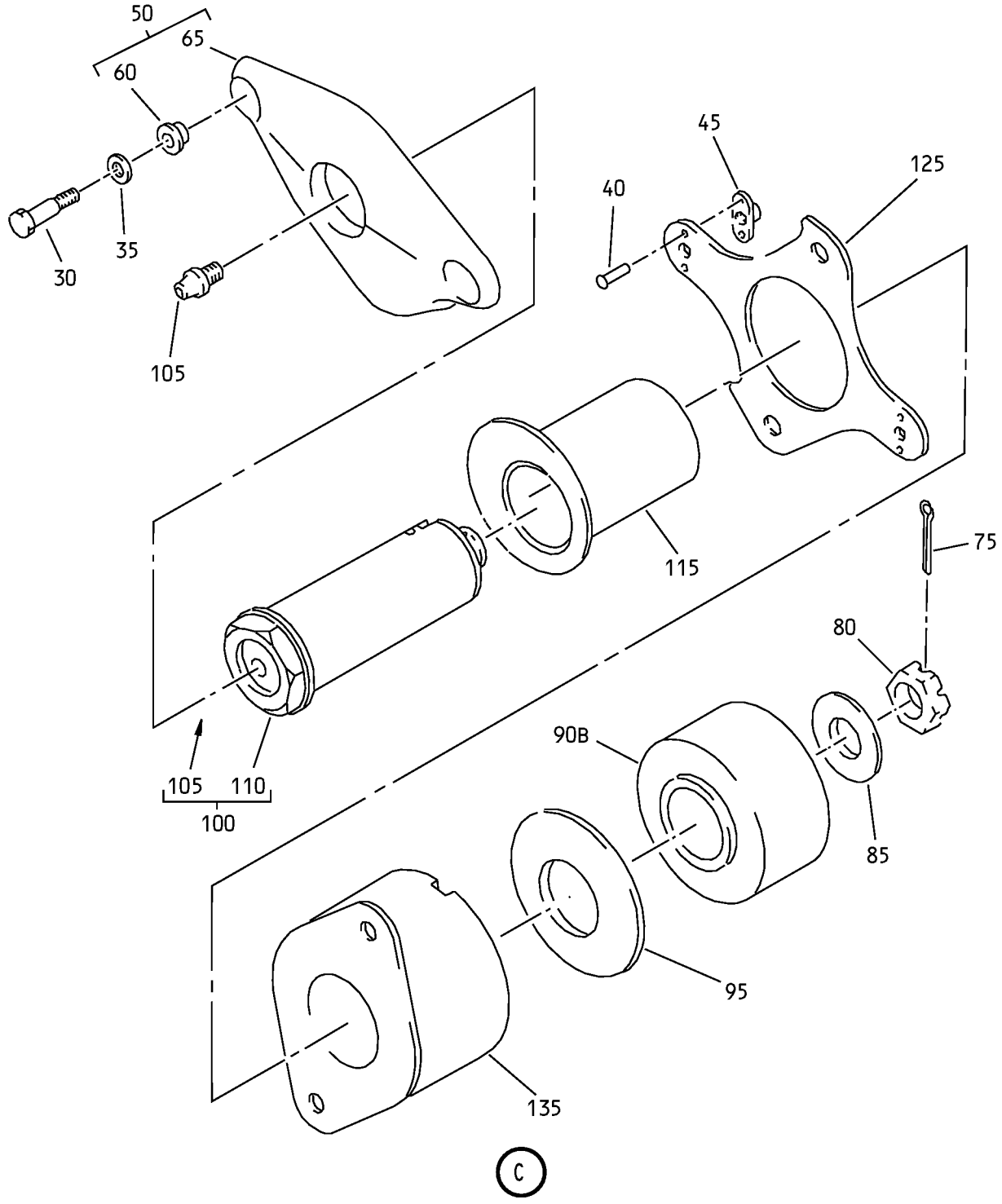
PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
BACW10BP4CD		1	430	2
		2	255	2
BACW10BP4DP		2	125	1
H52732-3CM		1	275	10
		1	350	4
		2	165	10
		2	290	2
		2	315	2
H52732-4CM		2	130	1
MF51594-3-2BAC		1	395	2
		2	360	2
MS15004-1		1	105	1
		1	185	1
		1	255	1
		2	80	1
		2	95A	1
NAS1149E0363R		1	270	10
		2	160	10
NAS1149E0463P		1	435	4
		2	230	3
		2	260	2
NAS1149E0463R		1	440	1
NAS1805-4		1	445	5
PLH53CM		1	275	10
		1	350	4
		2	165	10
		2	290	2
		2	315	2
PLH54CM		2	130	1
YR1282		1	240A	2
YR1283		1	90B	1
		1	170B	1



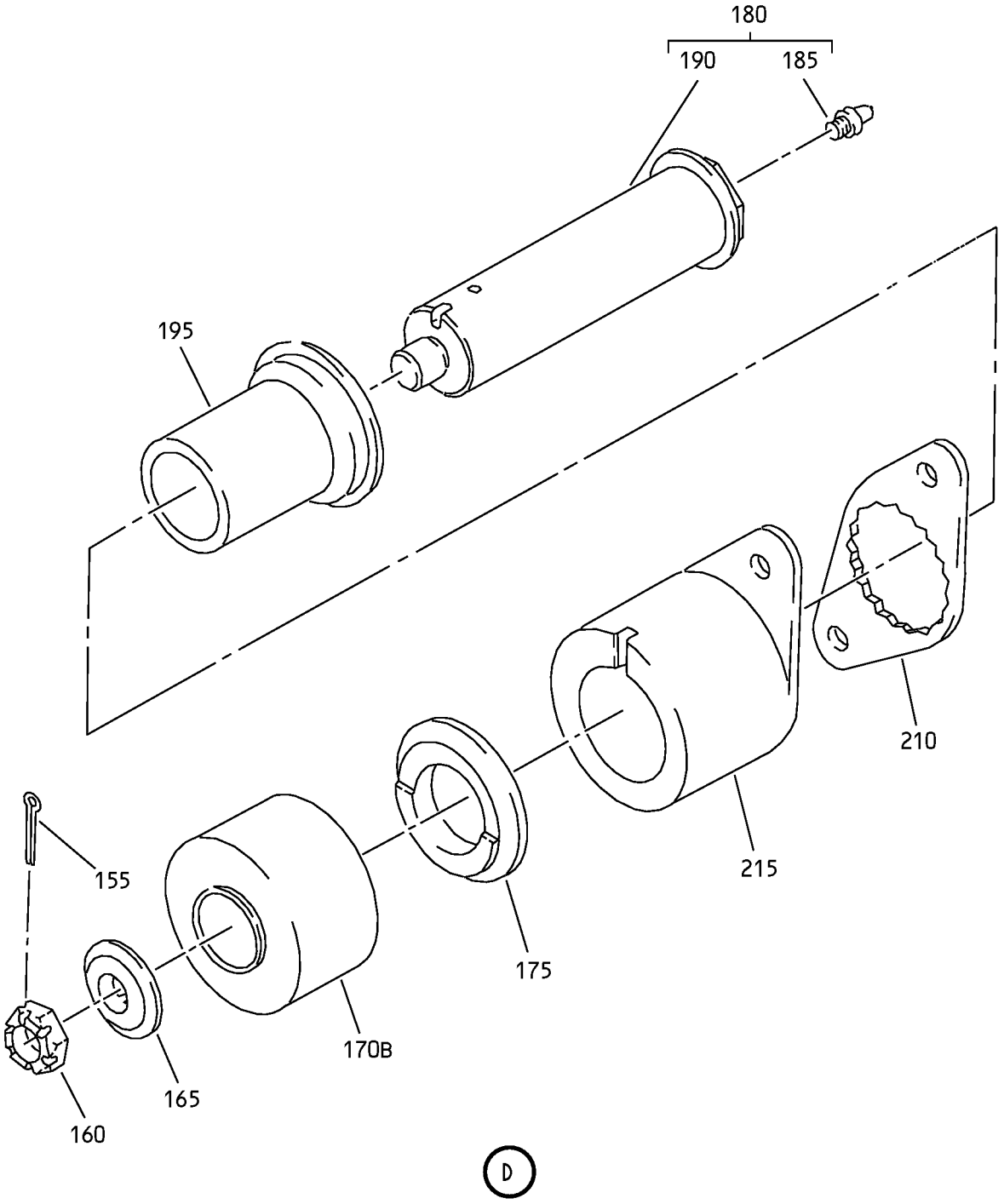
Inboard Flap Outboard Carriage Assembly
IPL Figure 1 (Sheet 1 of 9)



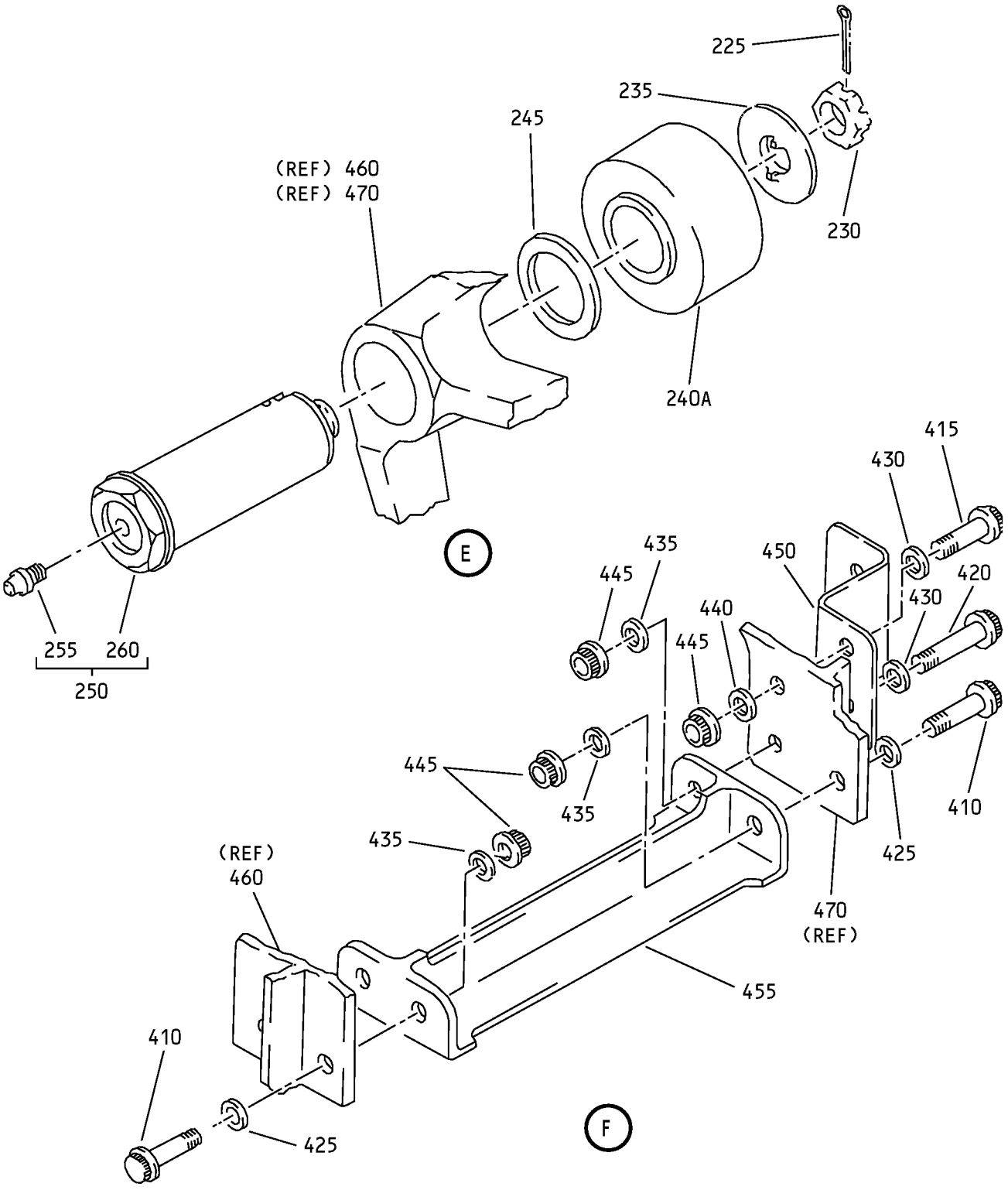
Inboard Flap Outboard Carriage Assembly
IPL Figure 1 (Sheet 2 of 9)



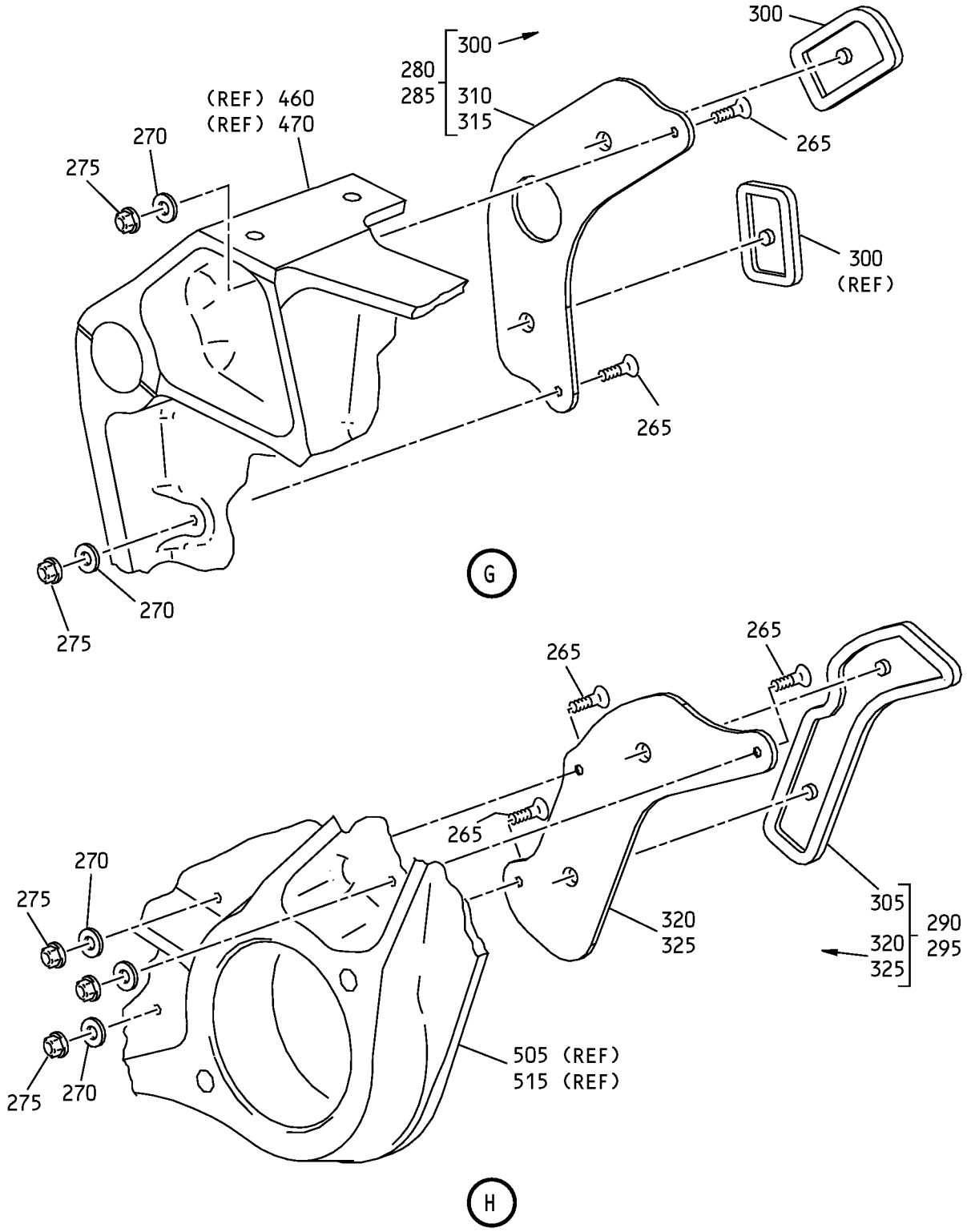
Inboard Flap Outboard Carriage Assembly
IPL Figure 1 (Sheet 3 of 9)



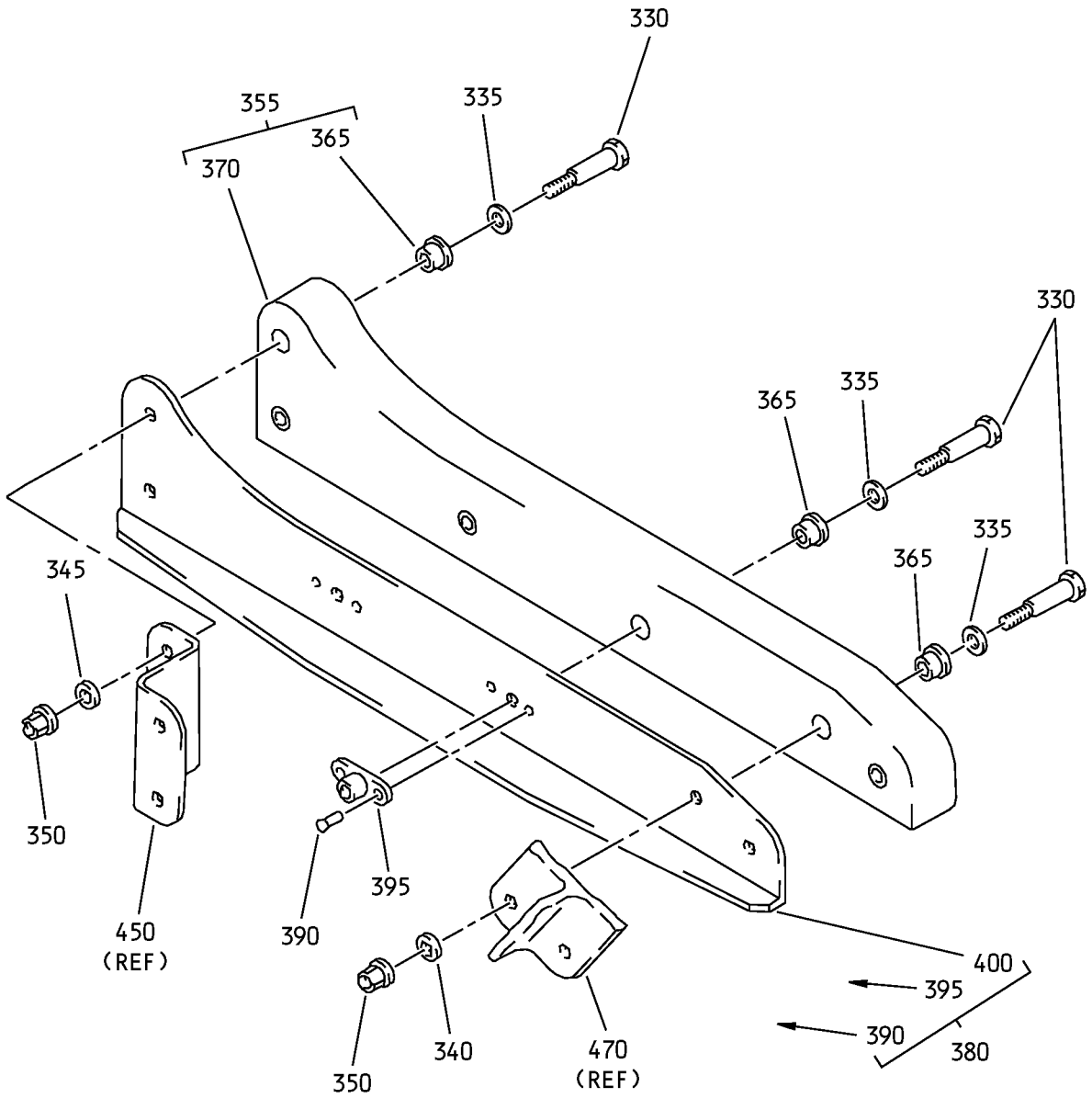
Inboard Flap Outboard Carriage Assembly
IPL Figure 1 (Sheet 4 of 9)



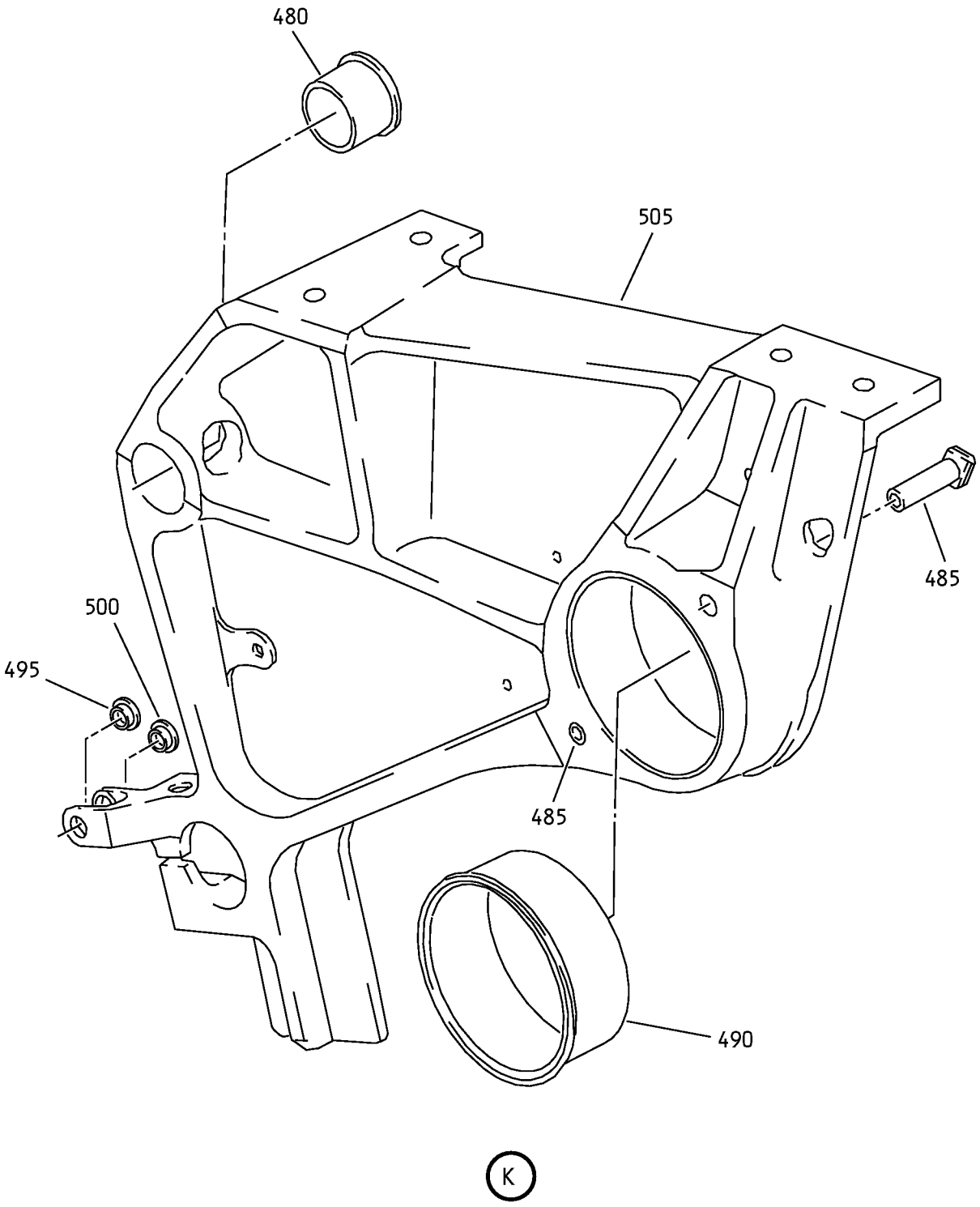
Inboard Flap Outboard Carriage Assembly
IPL Figure 1 (Sheet 5 of 9)



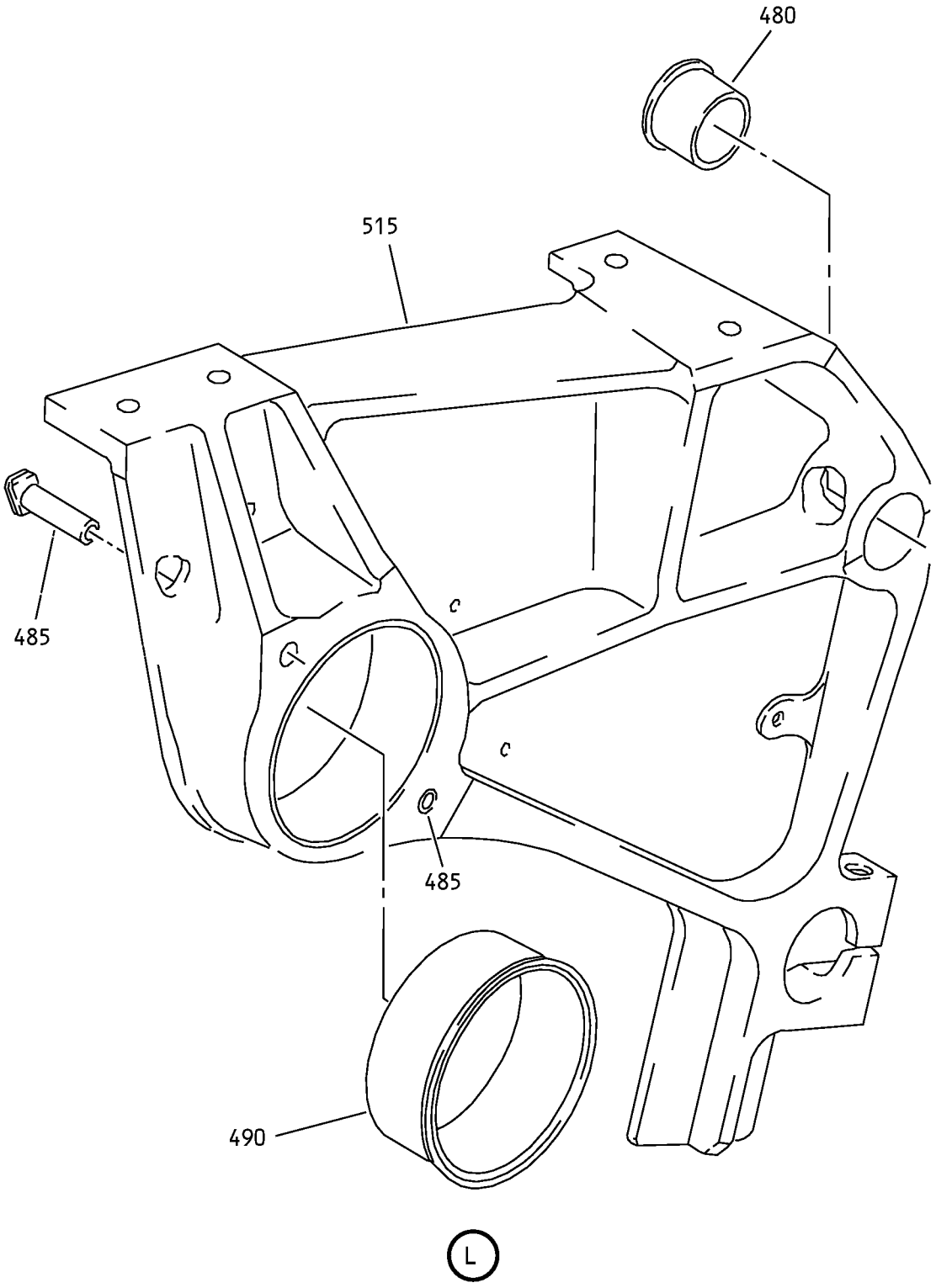
Inboard Flap Outboard Carriage Assembly
IPL Figure 1 (Sheet 6 of 9)



Inboard Flap Outboard Carriage Assembly
IPL Figure 1 (Sheet 7 of 9)



Inboard Flap Outboard Carriage Assembly
IPL Figure 1 (Sheet 8 of 9)



Inboard Flap Outboard Carriage Assembly
IPL Figure 1 (Sheet 9 of 9)

FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USAGE CODE	UNITS PER ASSY
1–					
–1A	113A2850-1		CARRIAGE ASSY-OUTBD, INBD FLAP	A	RF
–1B	113A2850-3		CARRIAGE ASSY-OUTBD, INBD FLAP (FOR DETAILS SEE FIG. 2)	C	RF
–1C	113A2850-5		CARRIAGE ASSY-OUTBD, INBD FLAP (FOR DETAILS SEE FIG. 2)	E	RF
–1D	113A2850-201		CARRIAGE ASSY-OUTBD, INBD FLAP (FOR DETAILS SEE FIG. 2)	G	RF
–5	113A2850-2		CARRIAGE ASSY-OUTBD, INBD FLAP	B	RF
–5A	113A2850-4		CARRIAGE ASSY-OUTBD, INBD FLAP (FOR DETAILS SEE FIG. 2)	D	RF
–5B	113A2850-6		CARRIAGE ASSY-OUTBD, INBD FLAP (FOR DETAILS SEE FIG. 2)	F	RF
–5C	113A2850-202		CARRIAGE ASSY-OUTBD, INBD FLAP (FOR DETAILS SEE FIG. 2)	H	RF
10	BACB30NM4HK23		. BOLT	A, B	4
15	BACW10BP4ACU		. WASHER	A, B	4
20	113A2650-3		. CARTRIDGE ASSY-ROLLER	A	1
–25	113A2650-4		. CARTRIDGE ASSY-ROLLER	B	1
30	BACB30NM3K5		. . BOLT	A, B	2
35	BACW10BP3ACU		. . WASHER	A, B	2
40	BACR15GE3C4		. . RIVET	A, B	4
45	BACN10YF31CM		. . NUTPLATE	A, B	2
50	113A2881-1		. . BLOCK ASSY-RUB	A	1
–55	113A2881-2		. . BLOCK ASSY-RUB	B	1
60	BACB28X3P009		. . . BUSHING	A, B	2
65	113A2881-5		. . . BLOCK	A	1
–70	113A2881-6		. . . BLOCK	B	1
75	BACP18BC03A11P		. . PIN-COTTER	A, B	1
80	BACN10JD112ASU		. . NUT	A, B	1
85	113A2655-3		. . WASHER	A, B	1
90	AC67862		DELETED		
90A	YR1283		DELETED		

–Item not Illustrated

FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USAGE CODE	UNITS PER ASSY
1–					
90B	AC68850		. . ROLLER (V60380) (SPEC 60B00178-671) (OPT YR1283 (V92563))	A, B	1
95	113A2655-1		. . WASHER	A, B	1
100	113A2652-1		. . PIN ASSY	A, B	1
105	MS15004-1		. . . FITTING	A, B	1
110	113A2652-9		. . . BOLT	A, B	1
115	113A2653-1		. . BUSHING	A	1
–120	113A2653-2		. . BUSHING	B	1
125	113A2656-3		. . RETAINER	A	1
–130	113A2656-4		. . RETAINER	B	1
135	113A2651-1		. . HOUSING	A	1
–140	113A2651-2		. . HOUSING	B	1
145	113A2650-2		. CARTRIDGE ASSY-ROLLER	A	1
–150	113A2650-1		. CARTRIDGE ASSY-ROLLER	B	1
155	BACP18BC03A11P		. . PIN-COTTER	A, B	1
160	BACN10JD112ASU		. . NUT	A, B	1
165	113A2655-3		. . WASHER	A, B	1
170	AC67862		DELETED		
170A	YR1283		DELETED		
170B	AC68850		. . ROLLER (V60380) (SPEC 60B00178-671) (OPT YR1283 (V92563))	A, B	1
175	113A2655-1		. . WASHER	A, B	1
180	113A2652-1		. . PIN ASSY	A, B	1
185	MS15004-1		. . . FITTING	A, B	1
190	113A2652-9		. . . BOLT	A, B	1
195	113A2653-2		. . BUSHING	A	1
–200	113A2653-1		. . BUSHING	B	1
205	113A2656-2		. . RETAINER	A	1
–210	113A2656-1		. . RETAINER	B	1

–Item not Illustrated

FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USAGE CODE	UNITS PER ASSY
1–					
215	113A2651-2		. . HOUSING	A	1
–220	113A2651-1		. . HOUSING	B	1
225	BACP18BC03A11P		. PIN-COTTER	A, B	2
230	BACN10JD112ASU		. NUT	A, B	2
235	113A2655-3		. WASHER	A, B	2
240	AC67861		DELETED		
240A	YR1282		. ROLLER (V92563) (SPEC 60B00178-670) (OPT AC67861 (V60380)) (OPT AC68849 (V60380))	A, B	2
245	113A2655-7		. WASHER	A, B	2
250	113A2652-3		. PIN ASSY	A, B	2
255	MS15004-1		. . FITTING	A, B	1
260	113A2652-11		. . BOLT	A, B	1
265	BACB30XD3K5		. BOLT	A, B	10
270	NAS1149E0363R		. WASHER	A, B	10
275	H52732-3CM		. NUT (V15653) (SPEC BACN10YR3CM) (OPT PLH53CM (V62554))	A, B	10
280	113A2657-5		. PLATE ASSY-RUB	A, B	1
285	113A2657-6		. PLATE ASSY-RUB	A, B	1
290	113A2657-7		. PLATE ASSY-RUB	A, B	1
295	113A2657-8		. PLATE ASSY-RUB	A, B	1
300	113A2657-19		. . PAD-MOLDED (USED ON ITEMS 280, 285)	A, B	1
305	113A2657-23		. . PAD-MOLDED (USED ON ITEMS 290, 295)	A, B	1
310	113A2657-17		. . PLATE (USED ON ITEM 280)	A, B	1
315	113A2657-18		. . PLATE (USED ON ITEM 285)	A, B	1
320	113A2657-21		. . PLATE (USED ON ITEM 290)	A, B	1

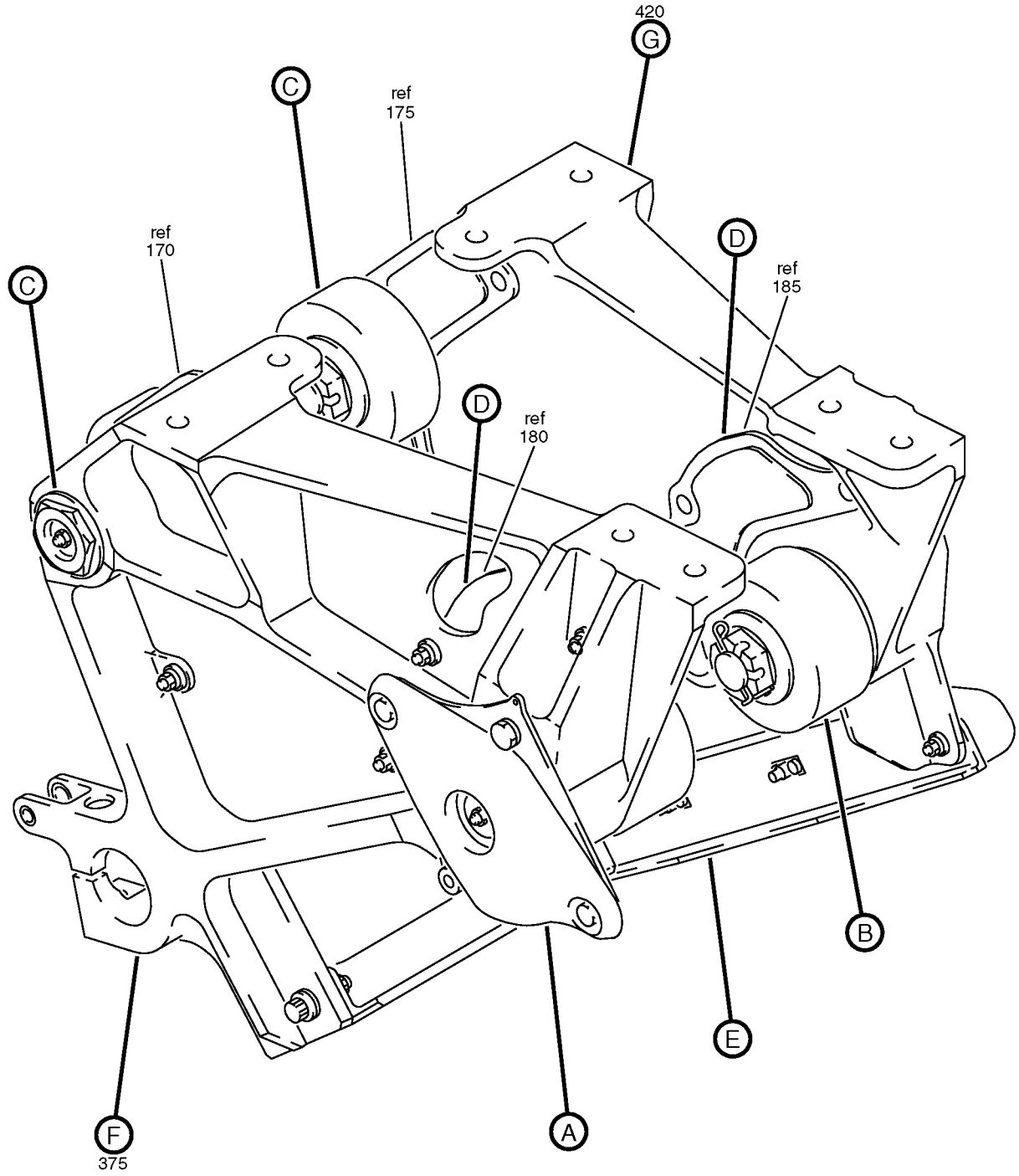
–Item not Illustrated

FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USAGE CODE	UNITS PER ASSY
1–					
325	113A2657-22		. . PLATE (USED ON ITEM 295)	A, B	1
330	BACB30NM3K9		. BOLT	A, B	6
335	BACW10BP3ACU		. WASHER	A, B	6
340	BACW10BP3APU		. WASHER	A, B	2
345	BACW10BP3DP		. WASHER	A, B	2
350	H52732-3CM		. NUT (V15653) (SPEC BACN10YR3CM) (OPT PLH53CM (V62554))	A, B	4
355	113A2881-9		. BLOCK ASSY-RUB	A	1
–360	113A2881-10		. BLOCK ASSY-RUB	B	1
365	BACB28X3N025		. . BUSHING	A, B	6
370	113A2881-11		. . BLOCK	A	1
–375	113A2881-12		. . BLOCK	B	1
380	113A2872-1		. FITTING ASSY-FAIRING DEFLECTION CONT	A	1
–385	113A2872-2		. FITTING ASSY-FAIRING DEFLECTION CONT	B	1
390	BACR15BA3AD2C		. . RIVET	A, B	4
395	MF51594-3-2BAC		. . NUTPLATE (V15653) (SPEC BACN10YF32CD)	A, B	2
400	113A2872-3		. . FITTING	A	1
–405	113A2872-4		. . FITTING	B	1
410	BACB30MR4K8		. BOLT	A, B	3
415	BACB30MR4K7		. BOLT	A, B	1
420	BACB30MR4K10		. BOLT	A, B	1
425	BACW10BP4ACU		. WASHER	A, B	3
430	BACW10BP4CD		. WASHER	A, B	2
435	NAS1149E0463P		. WASHER	A, B	4
440	NAS1149E0463R		. WASHER	A, B	1
445	NAS1805-4		. NUT	A, B	5
450	113A2873-1		. CLIP	A, B	1

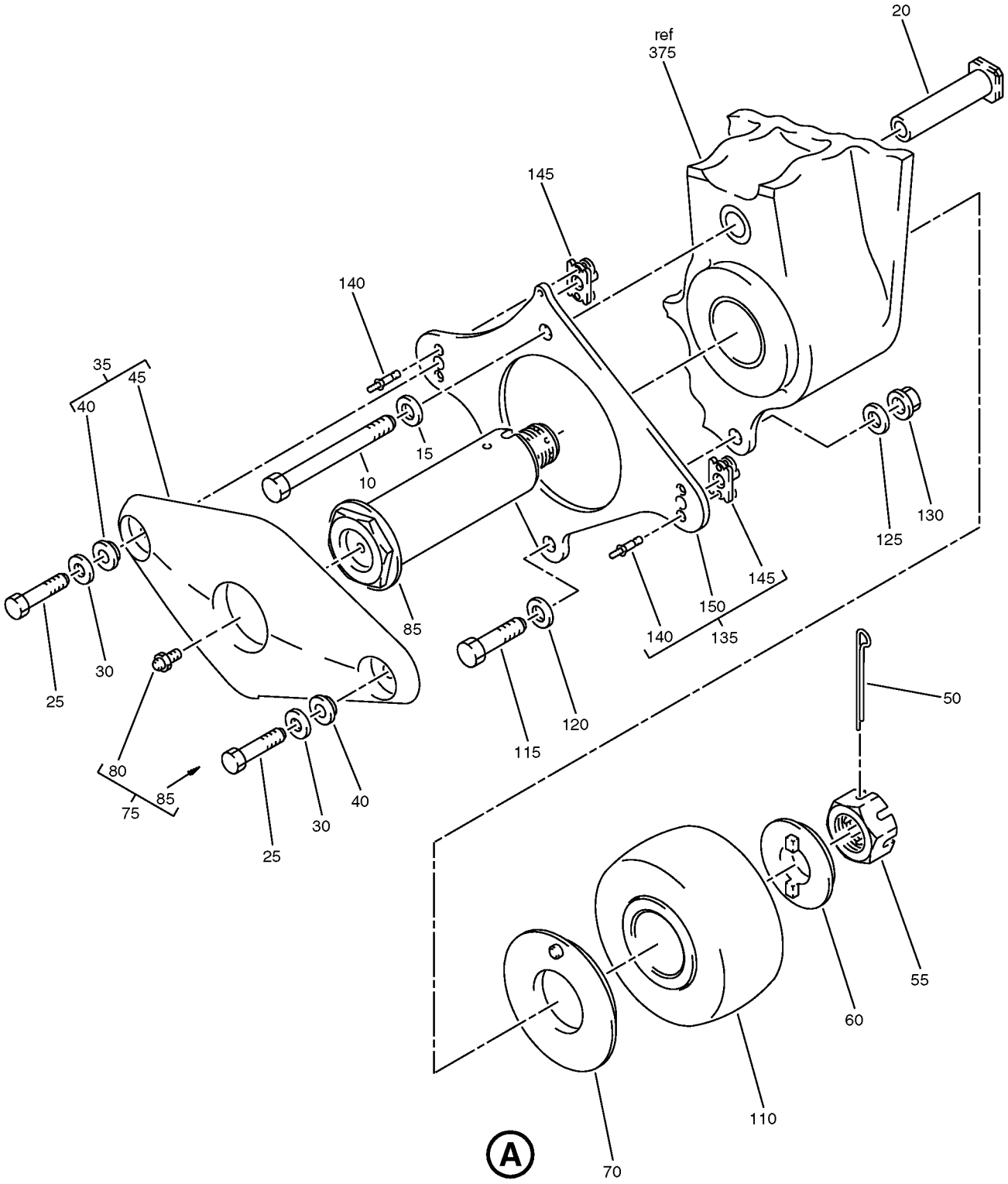
–Item not Illustrated

FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USAGE CODE	UNITS PER ASSY
1–					
455	113A2871-1		. FITTING-BRIDGE	A, B	1
460	113A2862-1		. FITTING ASSY-OUTBD	A	1
–465	113A2862-2		. FITTING ASSY-OUTBD	B	1
470	113A2861-1		. FITTING ASSY-INBD	A	1
–475	113A2861-2		. FITTING ASSY-INBD	B	1
480	113A2653-21		. . BUSHING	A, B	1
485	113A2653-3		. . BUSHING	A, B	2
490	113A2653-5		. . BUSHING	A, B	1
495	BACB28AP04-014		. . BUSHING (USED ON ITEMS 460, 465)	A, B	1
500	BACB28AT06B014A		. . BUSHING (USED ON ITEMS 460, 465)	A, B	1
505	113A2862-3		. . FITTING (USED ON ITEM 460)	A	1
–510	113A2862-4		. . FITTING (USED ON ITEM 465)	B	1
515	113A2861-3		. . FITTING (USED ON ITEM 470)	A	1
–520	113A2861-4		. . FITTING (USED ON ITEM 475)	B	1
			DELETED		

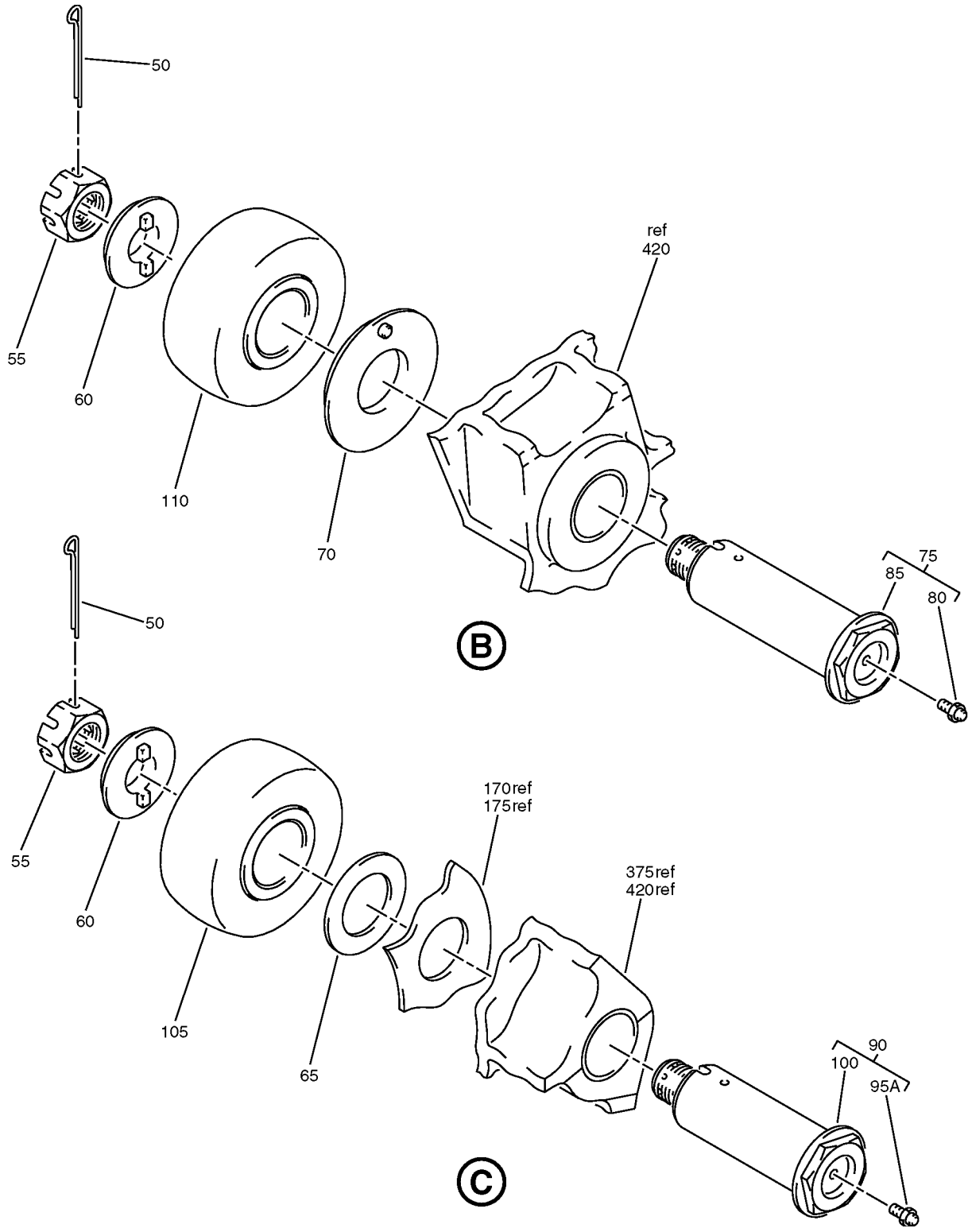
–Item not Illustrated



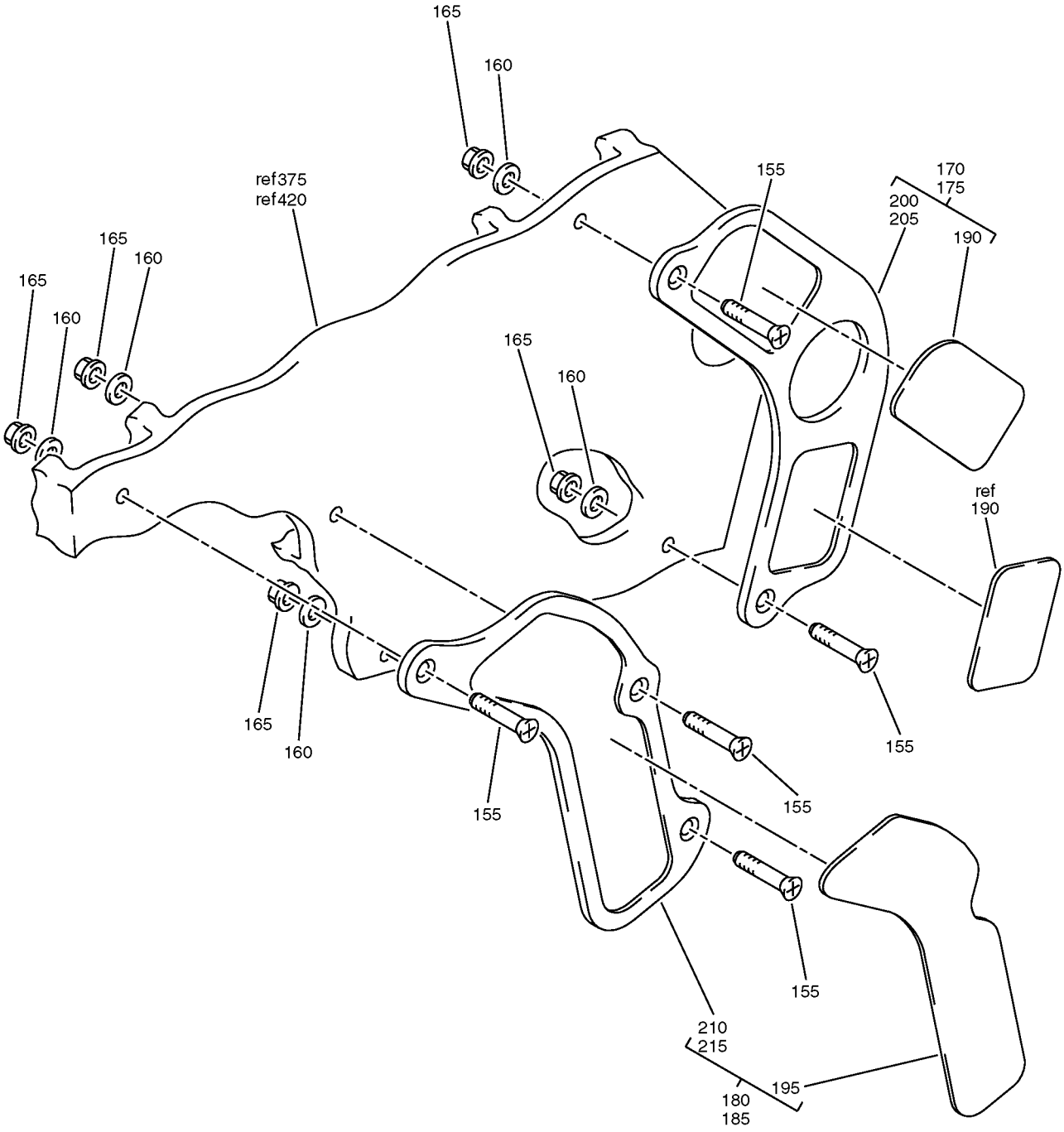
Inboard Flap Outboard Carriage Assembly
IPL Figure 2 (Sheet 1 of 7)



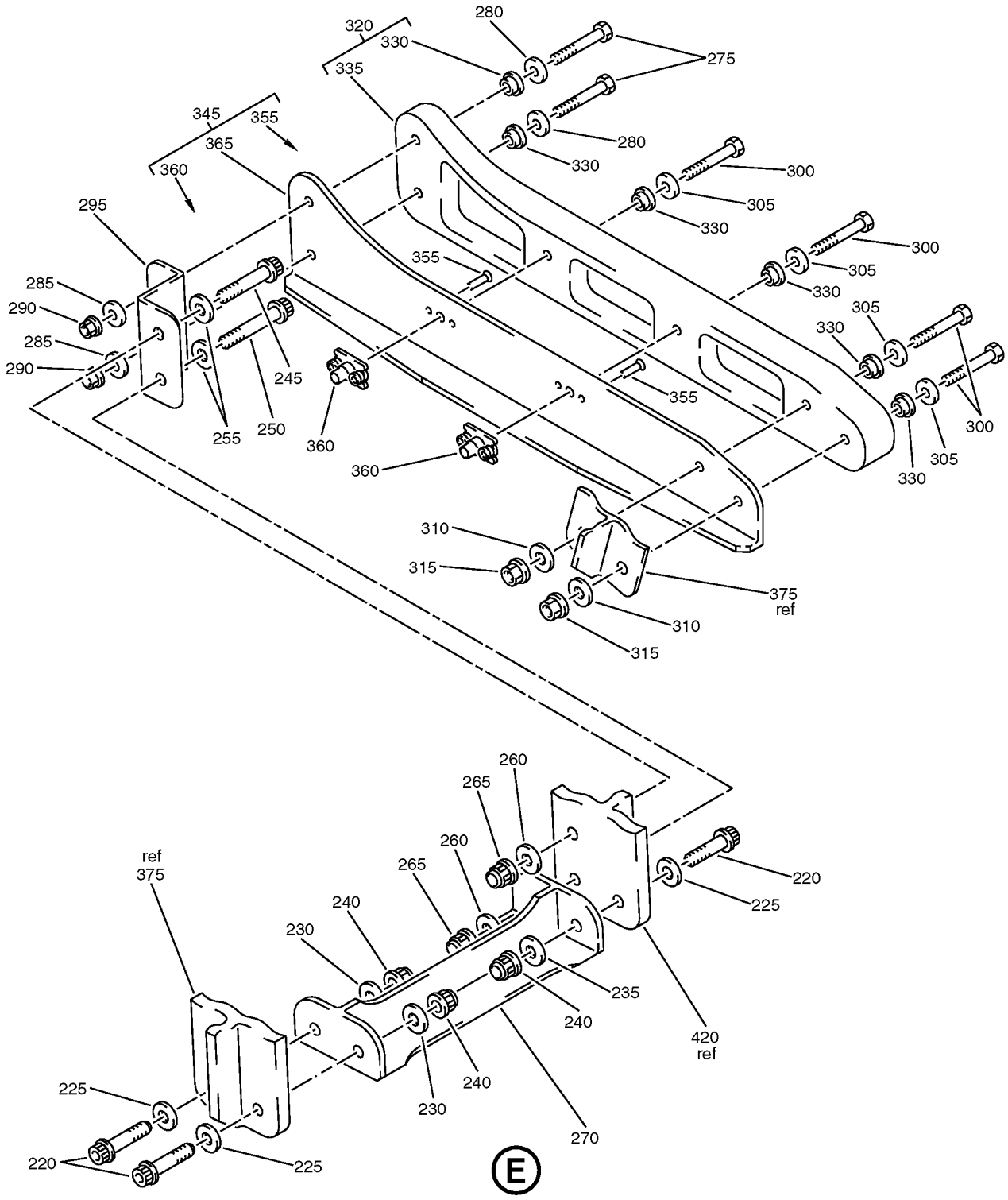
Inboard Flap Outboard Carriage Assembly
IPL Figure 2 (Sheet 2 of 7)



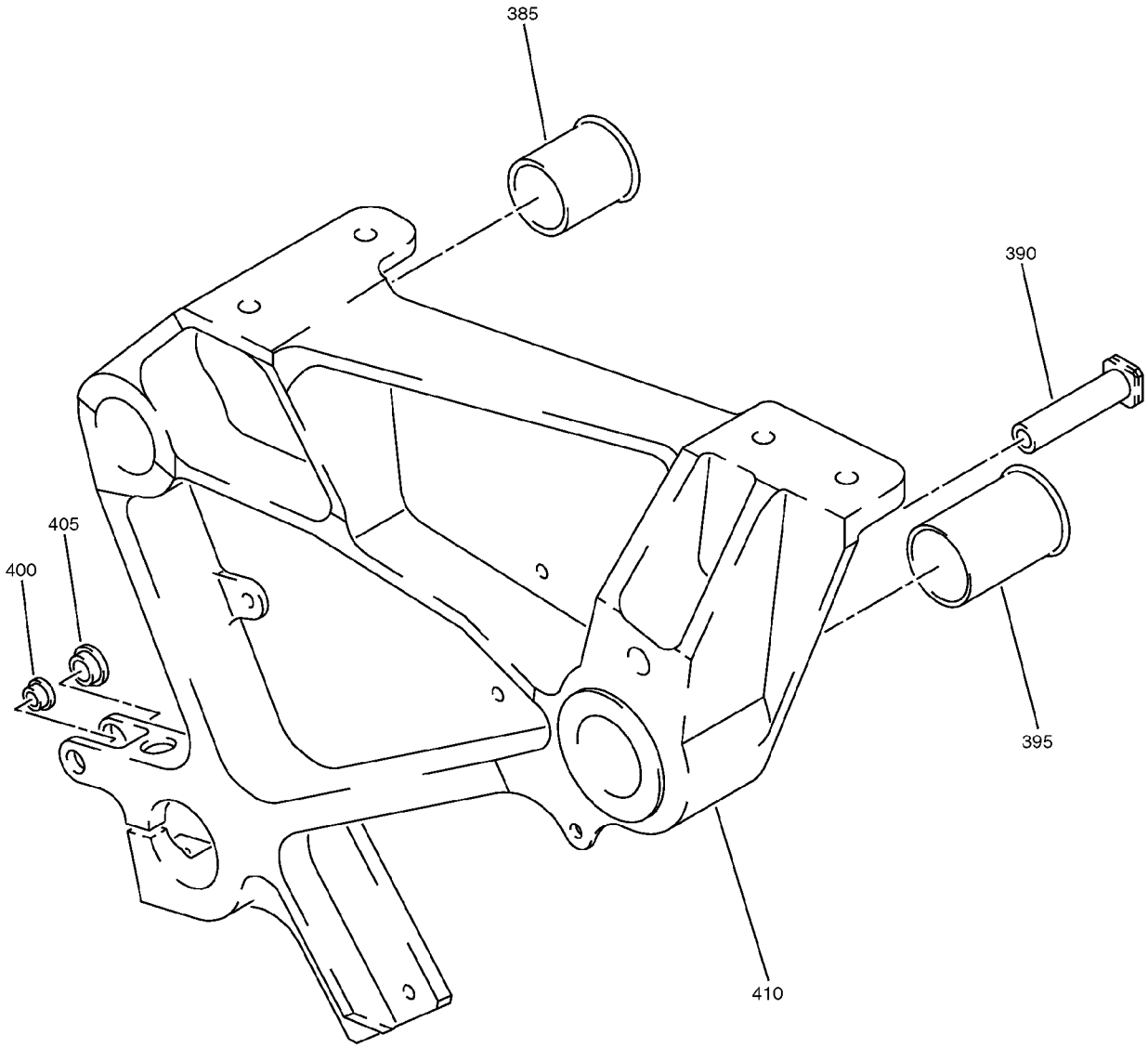
Inboard Flap Outboard Carriage Assembly
IPL Figure 2 (Sheet 3 of 7)



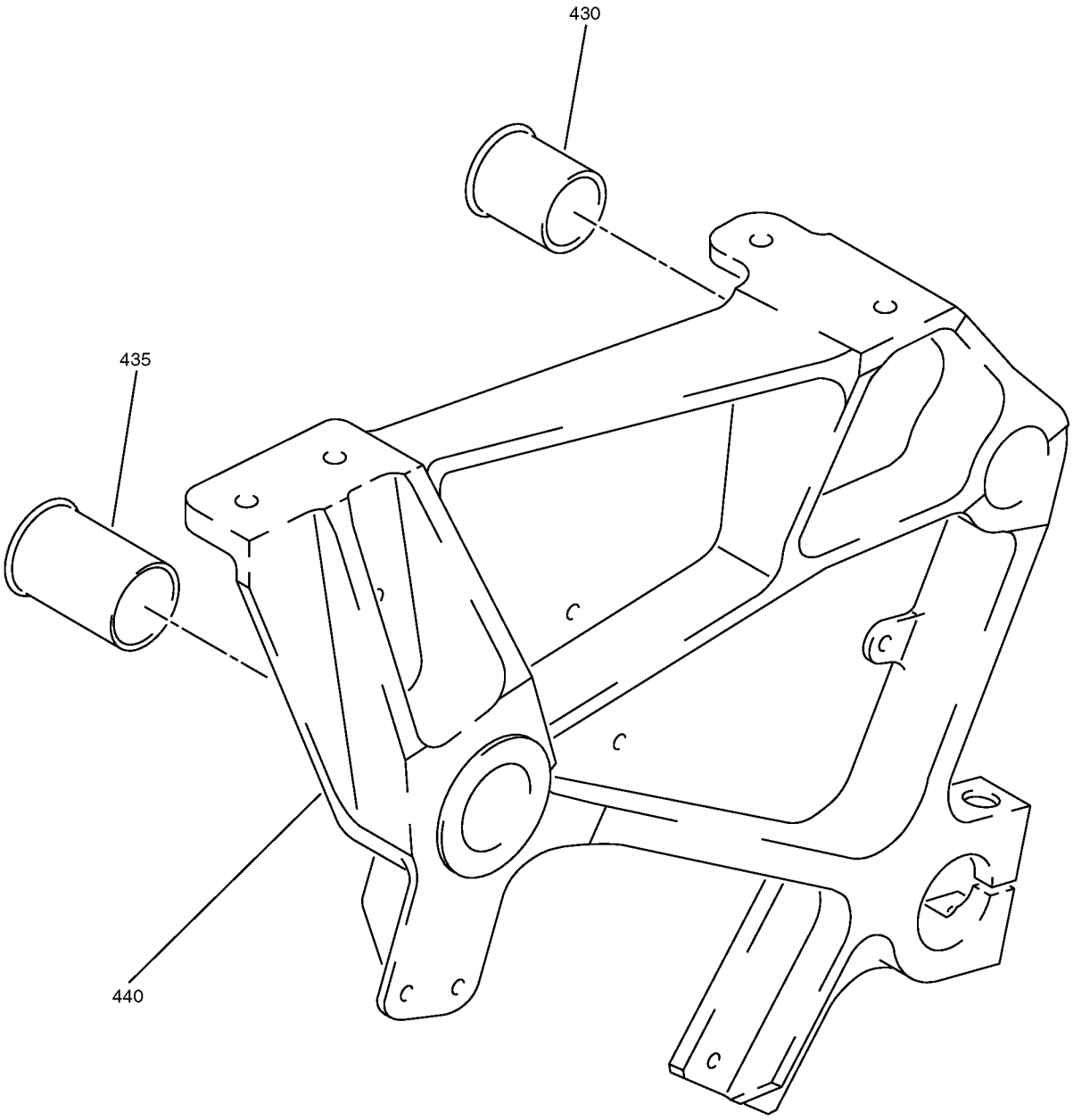
Inboard Flap Outboard Carriage Assembly
IPL Figure 2 (Sheet 4 of 7)



Inboard Flap Outboard Carriage Assembly
IPL Figure 2 (Sheet 5 of 7)



Inboard Flap Outboard Carriage Assembly
IPL Figure 2 (Sheet 6 of 7)



Inboard Flap Outboard Carriage Assembly
IPL Figure 2 (Sheet 7 of 7)

FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USAGE CODE	UNITS PER ASSY
2–					
–1A	113A2850-3		CARRIAGE ASSY-OUTBD, INBD FLAP	C	RF
–1B	113A2850-5		CARRIAGE ASSY-OUTBD, INBD FLAP	E	RF
–1C	113A2850-201		CARRIAGE ASSY-OUTBD, INBD FLAP	G	RF
–5	113A2850-4		CARRIAGE ASSY-OUTBD, INBD FLAP	D	RF
–5A	113A2850-6		CARRIAGE ASSY-OUTBD, INBD FLAP	F	RF
–5B	113A2850-202		CARRIAGE ASSY-OUTBD, INBD FLAP	H	RF
10	BACB30NM4HK23		. BOLT	C, D	1
–10A	BACB30NM4HK22		. BOLT	E-H	1
15	BACW10BP4ACU		. WASHER	C-H	1
20	113A2653-3		. BUSHING	C-H	1
25	BACB30NM3K5		. BOLT	C-H	2
30	BACW10BP3ACU		. WASHER	C-H	2
35	113A2881-1		. BLOCK ASSY-RUB	C, E, G	1
–37	113A2881-2		. BLOCK ASSY-RUB	D, F, H	1
40	BACB28X3P009		. . BUSHING	C-H	2
45	113A2881-5		. . BLOCK	C, E, G	1
–47	113A2881-6		. . BLOCK	D, F, H	1
50	BACP18BC03A11P		. PIN-COTTER	C-H	4
55	BACN10JD112ASU		. NUT-CASTELLATED	C-H	4
60	113A2655-3		. WASHER	C-H	4
65	113A2655-7		. WASHER	C-H	2
70	113A2655-8		. WASHER	C-H	2
75	113A2652-1		. PIN ASSY	C-H	2
80	MS15004-1		. . FITTING	C-H	1
85	113A2652-9		. . BOLT	C-H	1
90	113A2652-3		. PIN ASSY	C-H	2
95	BACP18BC03A11P		DELETED		
95A	MS15004-1		. . FITTING	C-H	1
100	113A2652-11		. . BOLT	C-H	1

–Item not Illustrated

FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USAGE CODE	UNITS PER ASSY
2–					
105	AC68849T8		. ROLLER-TRACK ROLLER (V60380) (SPEC BACB10HH19A)	C-H	2
110	AC68850T8		. ROLLER-TRACK ROLLER (V60380) (SPEC BACB10HH20A)	C-H	2
115	BACB30NM4K4		. BOLT	C-H	1
120	BACW10BP4ACU		. WASHER	C-H	1
125	BACW10BP4DP		. WASHER	C, D	1
–125A	BACW10BP4APU		. WASHER	E-H	1
130	PLH54CM		. NUT (V62554) (SPEC BACN10YR4CM) (OPT H52732-4CM (V15653))	C-H	1
135	113A2658-1		. PLATE ASSY-ATTACH	C, E, G	1
–137	113A2658-2		. PLATE ASSY-ATTACH	D, F, H	1
140	BACR15GE3C4		. . RIVET	C-H	4
145	BACN10YF31CM		. . NUTPLATE	C-H	2
150	113A2658-3		. . RETAINER	C-H	1
155	BACB30XD3K5		. BOLT	C-H	10
160	NAS1149E0363R		. WASHER	C-H	10
165	PLH53CM		. NUT (V62554) (SPEC BACN10YR3CM) (OPT H52732-3CM (V15653))	C-H	10
170	113A2657-5		. PLATE ASSY-RUB	C-H	1
175	113A2657-6		. PLATE ASSY-RUB	C-H	1
180	113A2657-7		. PLATE ASSY-RUB	C-H	1
185	113A2657-8		. PLATE ASSY-RUB	C-H	1
190	113A2657-19		. . PAD-MOLDED (USED ON ITEMS 170, 175)	C-H	1
195	113A2657-23		. . PAD-MOLDED (USED ON ITEMS 180, 185)	C-H	1
200	113A2657-17		. . PLATE (USED ON ITEM 170)	C-H	1

–Item not Illustrated

FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USAGE CODE	UNITS PER ASSY
2–					
205	113A2657-18		. . PLATE (USED ON ITEM 175)	C-H	1
210	113A2657-21		. . PLATE (USED ON ITEM 180)	C-H	1
215	113A2657-22		. . PLATE (USED ON ITEM 185)	C-H	1
220	BACB30MR4K8		. BOLT	C-F	3
–220A	BACB30MR4A11		. BOLT (OPT ITEM 220B)	G, H	3
–220B	BACB30MR4K11		. BOLT (OPT ITEM 220A)	G, H	3
225	BACW10BP4ACU		. WASHER	C-H	3
230	NAS1149E0463P		. WASHER	C-H	3
235	NAS1149E0463R		DELETED		
240	BACN11Z4CK		. NUT	C-H	3
245	BACB30MR4K7		. BOLT	C-F	1
–245A	BACB30MR4A8		. BOLT (OPT ITEM 245B)	G, H	1
–245B	BACB30MR4K8		. BOLT (OPT ITEM 245A)	G, H	1
250	BACB30MR4K10		. BOLT	C-F	1
–250A	BACB30MR4A13		. BOLT (OPT ITEM 250B)	G, H	1
–250B	BACB30MR4K13		. BOLT (OPT ITEM 250A)	G, H	1
255	BACW10BP4CD		. WASHER	C-H	2
260	NAS1149E0463P		. WASHER	C-H	2
265	BACN11Z4CK		. NUT	C-H	2
270	113A2871-1		. FITTING-BRIDGE	C-F	1
–270A	113A2871-201		. FITTING-BRIDGE	G, H	1
275	BACB30NM3K9		. BOLT	C-H	2
280	BACW10BP3ACU		. WASHER	C-H	2
285	BACW10BP3DP		. WASHER	C-H	2

–Item not Illustrated

FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USAGE CODE	UNITS PER ASSY
2–					
290	PLH53CM		. NUT (V62554) (SPEC BACN10YR3CM) (OPT H52732-3CM (V15653))	C-H	2
295	113A2873-1		. CLIP	C-H	1
300	BACB30NM3K9		. BOLT	C-H	4
305	BACW10BP3ACU		. WASHER	C-H	4
310	BACW10BP3APU		. WASHER	C-H	2
315	PLH53CM		. NUT (V62554) (SPEC BACN10YR3CM) (OPT H52732-3CM (V15653))	C-H	2
320	113A2881-9		. BLOCK ASSY-RUB	C, E, G	1
–325	113A2881-10		. BLOCK ASSY-RUB	D, F, H	1
330	BACB28X3N025		. . BUSHING	C-H	6
335	113A2881-11		. . BLOCK	C, E, G	1
–340	113A2881-12		. . BLOCK	D, F, H	1
345	113A2872-1		. FITTING ASSY-FAIRING DEFLECTION CONT	C, E, G	1
–350	113A2872-2		. FITTING ASSY-FAIRING DEFLECTION CONT	D, F, H	1
355	BACR15BA3AD2C		. . RIVET	C-H	4
360	MF51594-3-2BAC		. . NUTPLATE (V15653) (SPEC BACN10YF32CD)	C-H	2
365	113A2872-3		. . FITTING	C, E, G	1
–370	113A2872-4		. . FITTING	D, F, H	1
375	113A2862-5		. FITTING ASSY-OUTBD	C	1
–375A	113A2862-9		. FITTING ASSY-OUTBD	E, G	1
–380	113A2862-6		. FITTING ASSY-OUTBD	D	1
–380A	113A2862-10		. FITTING ASSY-OUTBD	F, H	1
385	113A2653-21		. . BUSHING	C-H	1
390	113A2653-3		. . BUSHING	C-H	2
395	113A2653-23		. . BUSHING	C-H	1
400	BACB28AP04-014		. . BUSHING	C-H	1

–Item not Illustrated

FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USAGE CODE	UNITS PER ASSY
2–					
405	BACB28AT06B014A		. . BUSHING	C-H	1
410	113A2862-7		. . FITTING	C, E, G	1
–415	113A2862-8		. . FITTING	D, F, H	1
420	113A2861-5		. FITTING ASSY-INBD	C, E, G	1
–425	113A2861-6		. FITTING ASSY-INBD	D, F, H	1
430	113A2653-21		. . BUSHING	C-H	1
435	113A2653-23		. . BUSHING	C-H	1
440	113A2861-7		. . FITTING	C, E, G	1
–445	113A2861-8		. . FITTING	D, F, H	1

–Item not Illustrated