COMPONENT MAINTENANCE MANUAL WITH ILLUSTRATED PARTS LIST

MAIN LANDING GEAR WALKING BEAM COMPONENTS

PART NUMBER 161A7000–11, –12, –3, –4, 161A7100–1, –2, –3, –4, –5, –6, –7, –8, 161A7119–1, 161A7301–1, –2, 161A7303–1, 161A7304–1, –2, –3

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COMPONENT MAINTENANCE MANUAL

Revision No. 10
Jul 01/2009

To: All holders of MAIN LANDING GEAR WALKING BEAM COMPONENTS 32-32-27.

Attached is the current revision to this COMPONENT MAINTENANCE MANUAL

The COMPONENT MAINTENANCE MANUAL is furnished either as a printed manual, on microfilm, or digital products, or any combination of the three. This revision replaces all previous microfilm cartridges or digital products. All microfilm and digital products are reissued with all obsolete data deleted and all updated pages added.

For printed manuals, changes are indicated on the List of Effective Pages (LEP). The pages which are revised will be identified on the LEP by an R (Revised), A (Added), O (Overflow, i.e. changes to the document structure and/or page layout), or D (Deleted). Each page in the LEP is identified by Chapter-Section-Subject number, page number and page date.

Pages replaced or made obsolete by this revision should be removed and destroyed.

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Location of Change	Description of Change
	NO HIGHLIGHTS

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

Subject/Page	Date	Subject/Page	Date	Subject/Page	Date
32-32-27 ILLUSTRATED PARTS LIST (cont)					
1008	Jul 01/2008				
1009	Jul 01/2008				
1010	Jul 01/2007				
1011	Jul 01/2008				
1012	Jul 01/2007				
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TEMPORARY REVISION AND SERVICE BULLETIN RECORD

BOEING SERVICE BULLETIN	BOEING TEMPORARY REVISION	OTHER DIRECTIVE	DATE OF INCORPORATION INTO MANUAL
		PRR 38275-60	JUL 01/06
		PRR 38275-88	JUL 01/06

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

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

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All temporary revisions to this manual will be accompanied by a cover sheet bearing the temporary revision number. Enter the temporary revision number in numerical order, together with the temporary revision date, the date the temporary revision is inserted and the initials of the person filing.
When the temporary revision is incorporated or cancelled, and the pages are removed, enter the date the pages are removed and the initials of the person who removed the temporary revision.

Temporary Revision		Inserted		Removed	
Number	Date	Date	Initials	Date	Initials

Temporary Revision		Inserted		Removed	
Date	Initials	Number	Date	Date	Initials

Temporary Revision		Inserted		Removed	
Number	Date	Date	Initials	Date	Initials

Temporary Revision		Inserted		Removed	
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.

MAIN LANDING GEAR WALKING BEAM COMPONENTS - DESCRIPTION AND OPERATION

1. **Description**

   A. The Main Landing Gear (MLG) Walking Beam Components are part of the MLG installation.

2. **Operation**

   A. The MLG Walking Beam Components are the parts that retract the Main Landing Gear.

3. **Leading Particulars (Approximate)**

   A. Length – 43 inches

   B. Width – 7 inches

   C. Height – 8 inches

   D. Weight – 79.6 pounds

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COMPONENT MAINTENANCE MANUAL

TESTING AND FAULT ISOLATION

(NOT APPLICABLE)

DISASSEMBLY

1. **General**
   A. This procedure tells how to disassemble the MLG Walking Beam Components.
   B. Refer to the Standard Overhaul Practices Manual (SOPM) for the standard practices identified in this procedure.
   C. Disassemble the components sufficiently to find the defects, do the repairs, and put the components back into a serviceable condition.
2. **Procedure**
   A. Use standard industry practices.

CLEANING

1. General

A. This procedure tells how to clean the MLG Walking Beam Components.

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

2. Cleaning

A. References

Reference	Title
SOPM 20-30-03	GENERAL CLEANING PROCEDURES

B. Procedure

(1) Use standard industry procedures and the instructions in SOPM 20-30-03.

CHECK

1. General

A. This procedure tells how to do a check of the MLG Walking Beam Components.

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

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

2. Check

A. References

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

B. Procedure

(1) Examine all parts for defects by standard industry practices.

(2) Do a magnetic particle inspection (SOPM 20-20-01) on these parts:

(a) IPL Figure 1

1) Pins (35, 165)

2) Nuts (25, 130, 155)

(b) IPL Figure 4

1) Pin (25)

(c) IPL Figure 5

1) Pin (25)

(3) Do a penetrant inspection (SOPM 20-20-02) on these parts:

(a) IPL Figure 2

1) Walking Beam (25)

(b) IPL Figure 3

1) Link (35)

REPAIR

1. General

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

PART NUMBER	NAME	REPAIR
—	REFINISH OF OTHER PARTS	1-1
161A7118	PIN	2-1
161A7301	PIN	3-1
161A7302	PIN	4-1
161A7305	PIN	5-1
161A7111	MLG WALKING BEAM ASSEMBLY	6-1, 6-2
161A7114	LINK ASSEMBLY	7-1, 7-2
161A7306	LUBE INSERT ASSEMBLY	8-1
161A7307	LUBE INSERT ASSEMBLY	9-1

2. Dimensioning Symbols

A. Standard True Position Dimensioning Symbols used in the applicable repair procedures are shown in REPAIR-GENERAL, Figure 601.

—	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]

True Position Dimensioning Symbols
Figure 601

REFINISH OF OTHER PARTS - REPAIR 1-1

1. General

A. This repair tells how to refinish parts not given in the specified repairs.

B. Refer to the Standard Overhaul Practices Manual (SOPM) for the standard practices shown in the repair.

2. Refinish of Other Parts

A. Consumable Materials

NOTE: Equivalent substitutes may be used.

Reference	Description	Specification
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 20-50-08	APPLICATION OF BONDED SOLID FILM LUBRICANTS

C. General

(1) Instructions for the repair of the parts shown in REPAIR 1-1, Table 601 are for the repair of the initial 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 application of bonded solid film lubricants, refer to SOPM 20-50-08.

(1) Refer to REPAIR 1-1, Table 601 for refinish details.

Table 601: Refinish Details

IPL FIG. & ITEM	MATERIAL	FINISH
Fig. 1		
Nuts (25, 130, 155)	15-5PH CRES, 180-200 ksi	Passivate (F-17.25). Apply lubricant, D00113 (F-19.10) to threads.
Washers (30, 135, 140)	15-5PH CRES, 180-200 ksi	Passivate (F-17.25).
Washer (145)	15-5PH CRES, 180-200 ksi	Cadmium plate (F-16.06).

PIN - REPAIR 2-1

161A7118–1, –2

1. General

A. This procedure tells how to repair and refinish the pin (35).

B. Refer to the Standard Overhaul Practices Manual (SOPM) for the standard practices specified in the repair.

C. Refer to the REPAIR-GENERAL, Figure 601 for the Standard True Position Dimensioning Symbols shown in the repair.

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

E. General repair details:

(1) Material: 15-5PH CRES

180-200 ksi

(2) Shot peen: Intensity 0.008-0.013A2

Coverage 2.0

2. Pin Repair

A. References

Reference	Title
CMM 32-00-05	Repair of High Strength Steel Landing Gear Parts
SOPM 20-10-03	SHOT PEENING
SOPM 20-10-04	GRINDING OF CHROME PLATED PARTS
SOPM 20-20-01	MAGNETIC PARTICLE INSPECTION
SOPM 20-30-02	STRIPPING OF PROTECTIVE FINISHES
SOPM 20-41-01	DECODING TABLE FOR BOEING FINISH CODES
SOPM 20-42-03	HARD CHROME PLATING

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

NOTE: For grinding of chrome plated parts, refer to SOPM 20-10-04. 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 hard chrome plating, refer to SOPM 20-42-03. For repair of high strength steel landing gear parts, refer to CMM 32-00-05.

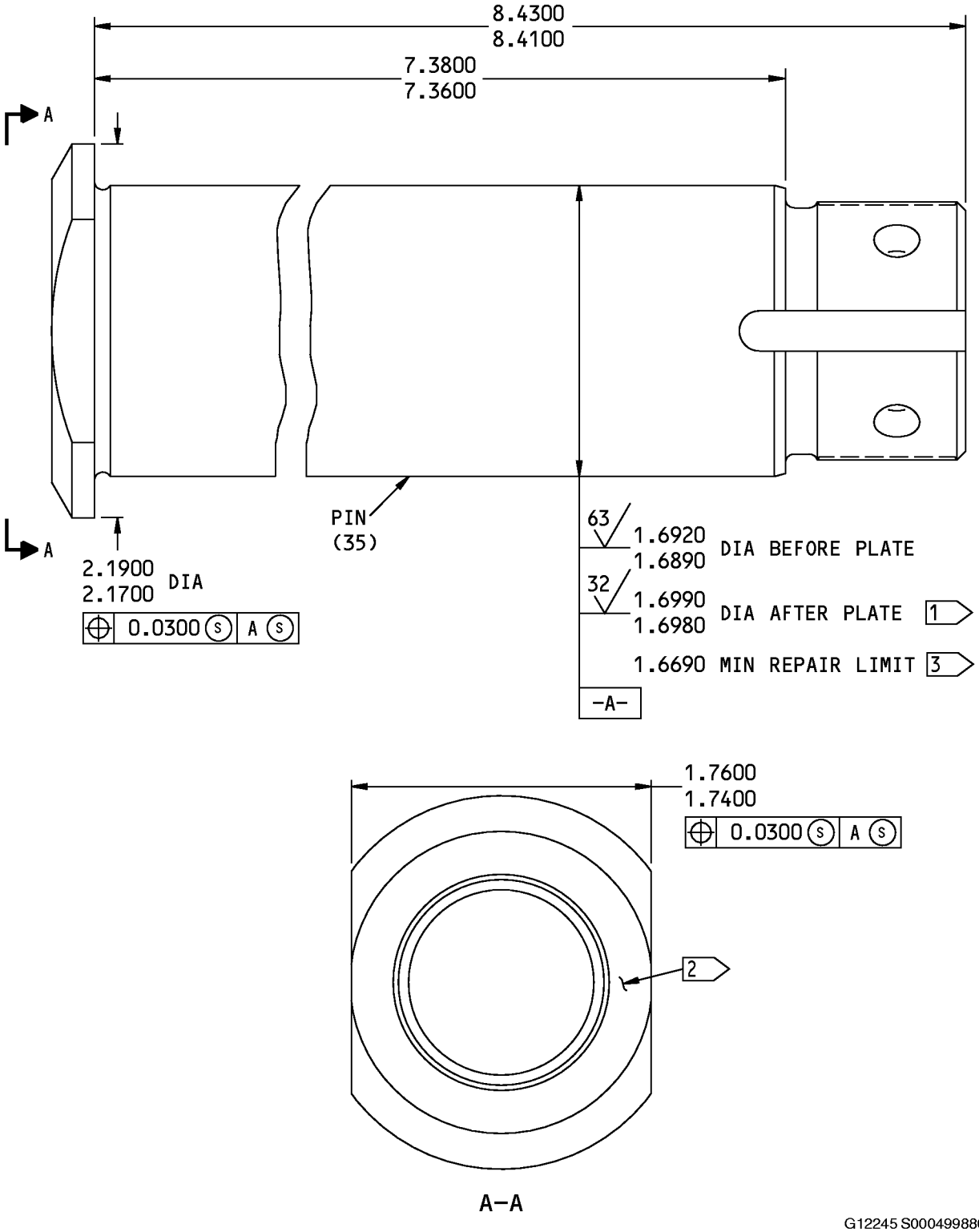
(1) Machine the pin, as required, within the repair limits, to remove defects.

(2) Magnetic particle examine the pin (SOPM 20-20-01).

(3) Shot peen the pin (SOPM 20-10-03). Mask the threads before shot peening.

(4) Chrome plate the machined surfaces of the pin to return it to the after plating dimensions shown.

(5) Passivate (F-17.25) all other surfaces.



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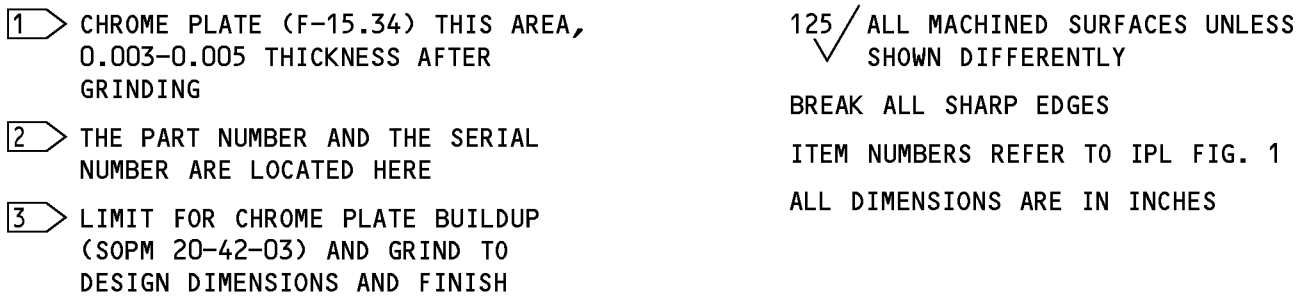
161A7118-1,-2 Pin Repair
Figure 601 (Sheet 1 of 2)



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161A7118-1,-2 Pin Repair
Figure 601 (Sheet 2 of 2)

PIN - REPAIR 3-1

161A7301–1, –2

1. General

A. This procedure tells how to repair and refinish the pin (165).

B. Refer to the Standard Overhaul Practices Manual (SOPM) for the standard practices shown in the repair.

C. Refer to the REPAIR-GENERAL, Figure 601 for the Standard True Position Dimensioning Symbols shown in the repair.

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

E. General repair details:

(1) Material: 4340M Steel

275-300 ksi

(2) Shot peen: Intensity 0.014-0.018A2

Hard Shot Rc 55-65

Shot Size 0.016-0.033

Coverage 2.0

2. Pin Repair

A. Consumable Materials

NOTE: Equivalent substitutes may be used.

Reference	Description	Specification
C00175	Primer - Urethane Compatible, Corrosion Resistant (Less Than 1% Aromatic Amines)	BMS10-79, Type III

B. References

Reference	Title
CMM 32-00-05	Repair of High Strength Steel Landing Gear Parts
SOPM 20-10-03	SHOT PEENING
SOPM 20-10-04	GRINDING OF CHROME PLATED PARTS
SOPM 20-20-01	MAGNETIC PARTICLE INSPECTION
SOPM 20-30-02	STRIPPING OF PROTECTIVE FINISHES
SOPM 20-41-01	DECODING TABLE FOR BOEING FINISH CODES
SOPM 20-42-03	HARD CHROME PLATING
SOPM 20-60-02	FINISHING MATERIALS

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

NOTE: For grinding of chrome plated parts, refer to SOPM 20-10-04. 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 hard chrome plating, refer to SOPM 20-42-03. For finishing materials, refer to SOPM 20-60-02. For repair of high strength steel landing gear parts, refer to CMM 32-00-05.

(1) Machine, as necessary, within repair limits, to remove defects.

(2) Magnetic particle examine the pin (SOPM 20-20-01).

(3) Shot peen the pin (SOPM 20-10-03). Mask the threads before shot peening.

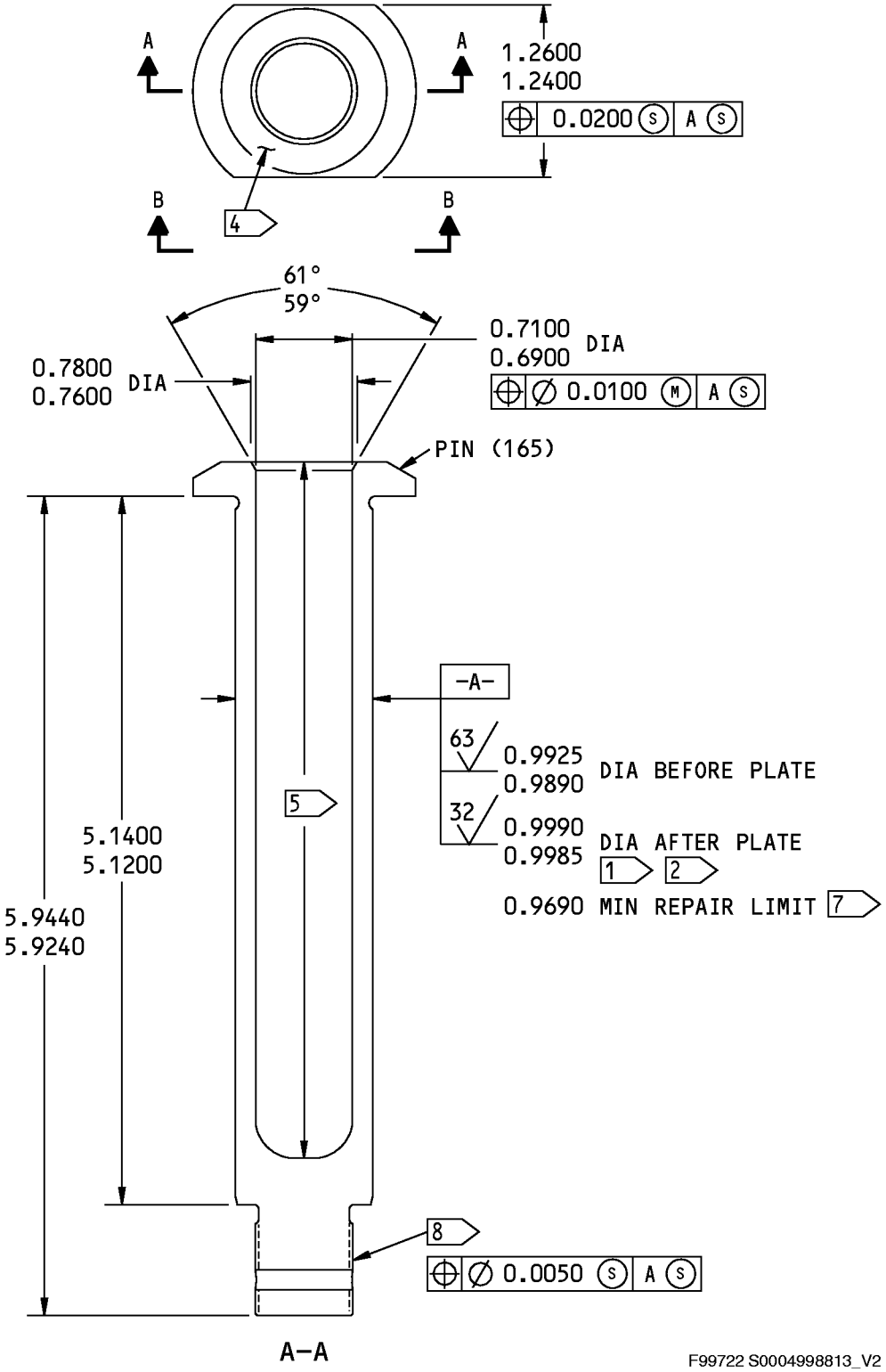
(4) Refinish the pin.

(a) Chrome plate the machined surfaces to the after plating dimensions shown.

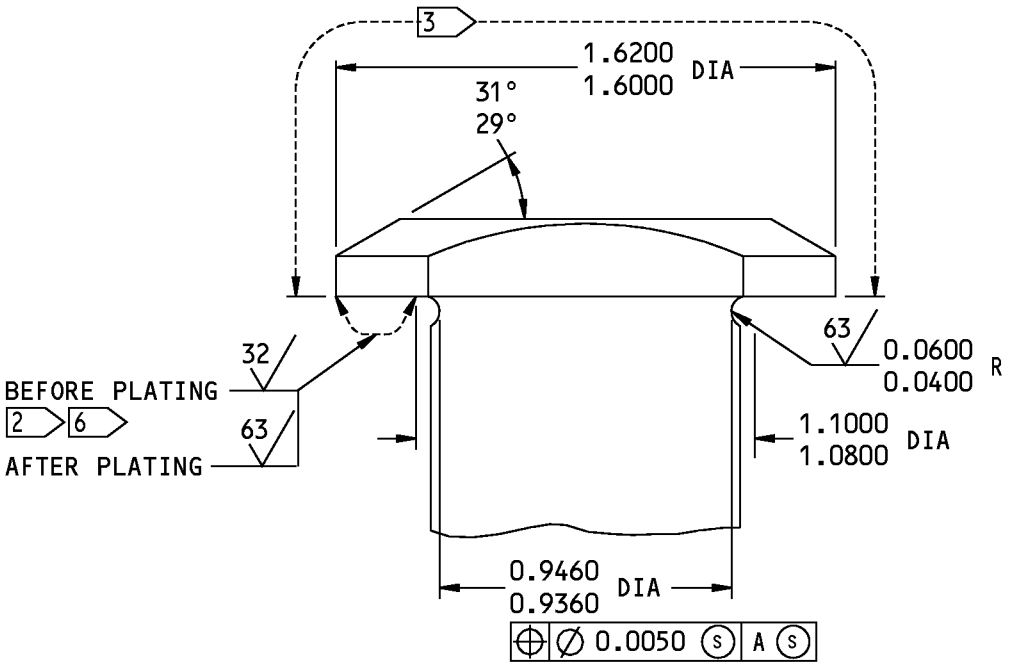
(b) Cadmium-titanium plate (F-15.01) the areas indicated in REPAIR 3-1, Figure 601.

(c) Apply primer, C00175 (F-19.47) to all but the chrome plated surfaces.

(d) Cadmium-titanium plate (F-15.32) the threads and wipe the plating with primer, C00175 (F-19.451).



161A7301-1,-2 Pin Repair
Figure 601 (Sheet 1 of 3)



B–B

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161A7301-1,-2 Pin Repair
Figure 601 (Sheet 2 of 3)

1> CHROME PLATE (F-15.34) THIS AREA. 0.003 MINIMUM THICKNESS AFTER GRINDING

2> WIPE WITH PRIMER (F-19.451)

3> CADMIUM-TITANIUM PLATE (F-15.01). APPLY BMS 10-79, TYPE 3 PRIMER (F-19.47) AND BMS 10-60 TYPE 2 GLOSS ENAMEL (F-19.39-707)

4> THE PART NUMBER AND THE SERIAL NUMBER ARE LOCATED HERE

5> CADMIUM-TITANIUM PLATE (F-15.01). APPLY BMS 10-79, TYPE 3 PRIMER (F-19.66). APPLY MIL-C-11796, CLASS 1 CORROSION PREVENTIVE COMPOUND (F-19.03)

6> CHROME PLATE (F-15.34) THIS AREA, 0.001-0.002 THICK

7> LIMIT FOR CHROME PLATE BUILDUP (SOPM 20-42-03) AND GRIND TO DESIGN DIMENSIONS AND FINISH

8> CADMIUM-TITANIUM PLATE (F-15.32) AND WIPE THE PLATING WITH BMS 10-79, TYPE 3 PRIMER (F-19.451)

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

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161A7301-1,-2 Pin Repair
Figure 601 (Sheet 3 of 3)

PIN - REPAIR 4-1

161A7302–1, –2

1. General

A. This procedure tells how to repair and refinish the pin (25).

B. Refer to the Standard Overhaul Practices Manual (SOPM) for the standard practices specified in the repair.

C. Refer to the REPAIR-GENERAL, Figure 601 for the Standard True Position Dimensioning Symbols shown in the repair.

D. Refer to IPL Figure 4 for the item numbers.

E. General repair details:

(1) Material: 15-5PH CRES

180-200 ksi

(2) Shot peen: Intensity 0.008-0.013A2

Coverage 2.0

2. Pin Repair

A. References

Reference	Title
CMM 32-00-05	Repair of High Strength Steel Landing Gear Parts
SOPM 20-10-03	SHOT PEENING
SOPM 20-10-04	GRINDING OF CHROME PLATED PARTS
SOPM 20-20-01	MAGNETIC PARTICLE INSPECTION
SOPM 20-30-02	STRIPPING OF PROTECTIVE FINISHES
SOPM 20-41-01	DECODING TABLE FOR BOEING FINISH CODES
SOPM 20-42-03	HARD CHROME PLATING
SOPM 20-60-02	FINISHING MATERIALS

B. Procedure (REPAIR 4-1, Figure 601)

NOTE: For grinding of chrome plated parts, refer to SOPM 20-10-04. 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 hard chrome plating, refer to SOPM 20-42-03. For finishing materials, refer to SOPM 20-60-02. For repair of high strength steel landing gear parts, refer to CMM 32-00-05.

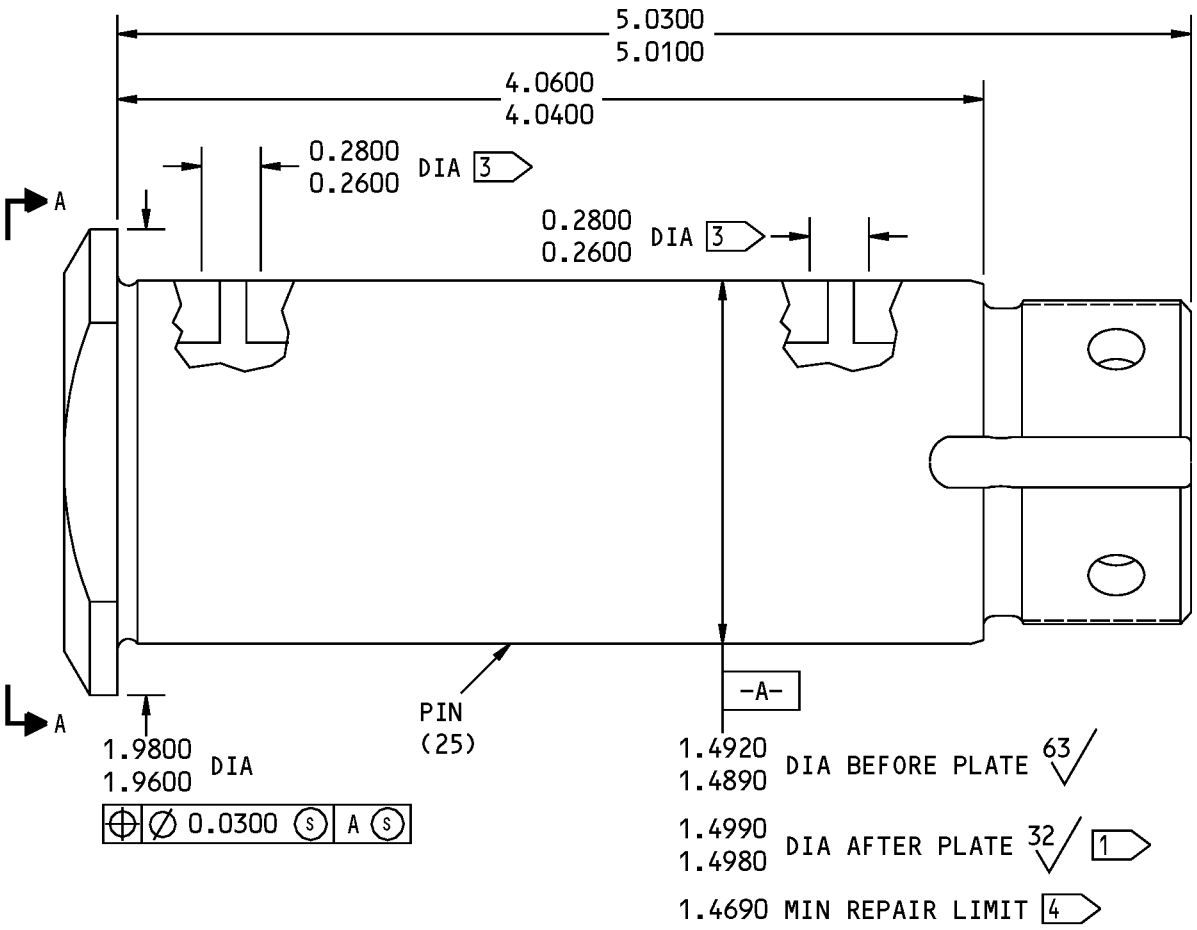
(1) Machine as required, within repair limits, to remove defects.

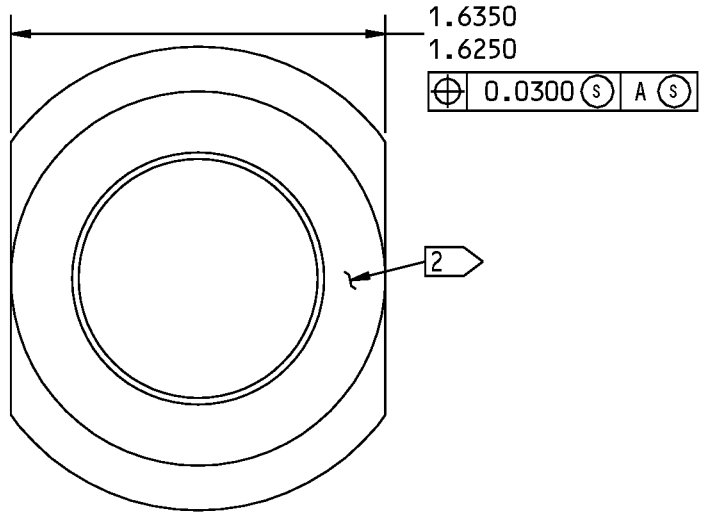
(2) Magnetic particle examine the pin (SOPM 20-20-01).

(3) Shot peen the pin (SOPM 20-10-03). Mask the threads before shot peening.

(4) Chrome plate the machined surfaces to return the part to the after plating dimensions shown.

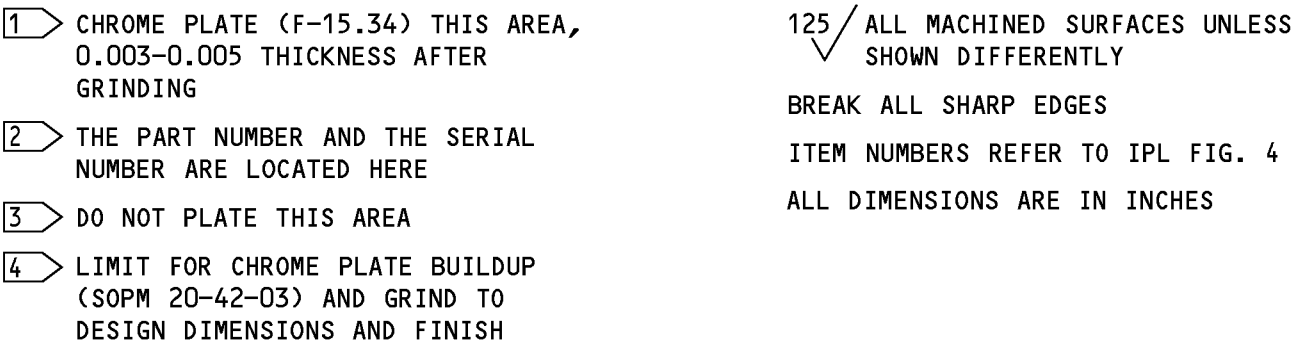
(5) Passivate (F-17.25) all other surfaces.





A–A

161A7302-1,-2 Pin Repair
Figure 601 (Sheet 1 of 2)



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161A7302-1,-2 Pin Repair
Figure 601 (Sheet 2 of 2)

PIN - REPAIR 5-1

161A7305–1, –2

1. General

A. This procedure tells how to repair and refinish the pin (25).

B. Refer to the Standard Overhaul Practices Manual (SOPM) for the standard practices specified in the repair.

C. Refer to the REPAIR-GENERAL, Figure 601 for the Standard True Position Dimensioning Symbols shown in the repair.

D. Refer to IPL Figure 5 for the item numbers.

E. General repair details:

(1) Material: 15-5PH CRES

180-200 ksi

(2) Shot peen: Intensity 0.008-0.013A2

Coverage 2.0

2. Pin Repair

A. References

Reference	Title
CMM 32-00-05	Repair of High Strength Steel Landing Gear Parts
SOPM 20-10-03	SHOT PEENING
SOPM 20-10-04	GRINDING OF CHROME PLATED PARTS
SOPM 20-20-01	MAGNETIC PARTICLE INSPECTION
SOPM 20-30-02	STRIPPING OF PROTECTIVE FINISHES
SOPM 20-41-01	DECODING TABLE FOR BOEING FINISH CODES
SOPM 20-42-03	HARD CHROME PLATING
SOPM 20-60-02	FINISHING MATERIALS

B. Procedure (REPAIR 5-1, Figure 601)

NOTE: For grinding of chrome plated parts, refer to SOPM 20-10-04. 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 hard chrome plating, refer to SOPM 20-42-03. For finishing materials, refer to SOPM 20-60-02. For repair of high strength steel landing gear parts, refer to CMM 32-00-05.

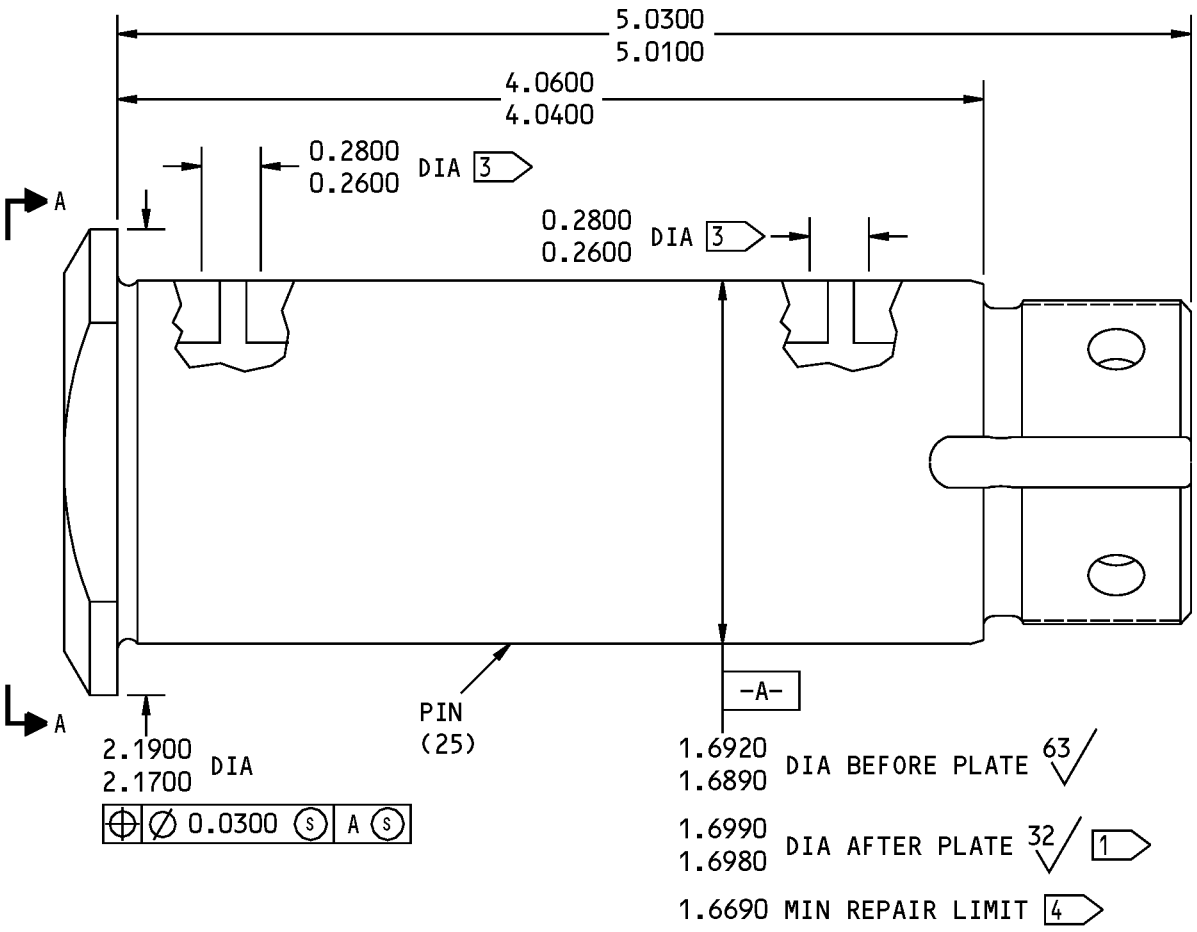
(1) Machine as required, within repair limits, to remove defects.

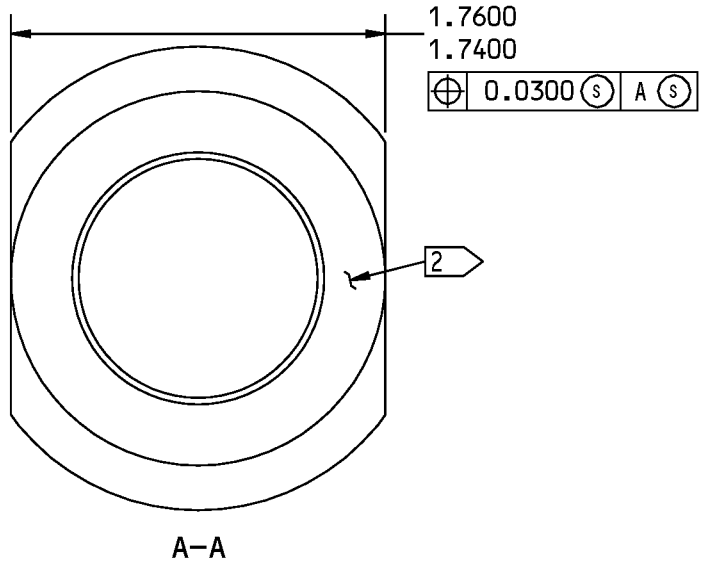
(2) Magnetic particle examine the pin (SOPM 20-20-01).

(3) Shot peen the pin (SOPM 20-10-03). Mask the threads before shot peening.

(4) Apply chrome plate to the machined surfaces to return the part to the after plating dimensions shown.

(5) Passivate (F-17.25) all other surfaces.





A–A

161A7305-1,-2 Pin Repair
Figure 601 (Sheet 1 of 2)

1 CHROME PLATE (F-15.34) THIS AREA, 0.003-0.005 THICKNESS AFTER GRINDING

2 THE PART NUMBER AND THE SERIAL NUMBER ARE LOCATED HERE

3 DO NOT PLATE THIS AREA

4 LIMIT FOR CHROME PLATE BUILDUP (SOPM 20-42-03) AND GRIND TO DESIGN DIMENSIONS AND FINISH

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 5

ALL DIMENSIONS ARE IN INCHES

F99010 S0004998823_V2

161A7305-1,-2 Pin Repair
Figure 601 (Sheet 2 of 2)

MLG WALKING BEAM ASSEMBLY - REPAIR 6-1

161A7111–1, –3

1. General

A. This repair tells how to replace the bushings (15, 20) and lube fittings (5) in the walking beam assembly.

B. Refer to the Standard Overhaul Practices Manual (SOPM) for the standard practices shown in the repair.

C. Refer to the REPAIR-GENERAL, Figure 601 for the Standard True Position Dimensioning Symbols shown in the repair.

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

2. Bushing and Lube Fitting Replacement

A. Consumable Materials

NOTE: Equivalent substitutes may be used.

Reference	Description	Specification
D00013	Grease - Aircraft And Instrument Grease	MIL-PRF-23827 (NATO G-354) (Supersedes MIL-G-23827)
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 20-50-01	BOLT AND NUT INSTALLATION
SOPM 20-50-03	BEARING AND BUSHING REPLACEMENT
SOPM 20-60-03	LUBRICANTS
SOPM 20-60-04	MISCELLANEOUS MATERIALS

C. Procedure (REPAIR 6-1, Figure 601)

NOTE: For bolt and nut installation, refer to SOPM 20-50-01. For lubricants, refer to SOPM 20-60-03. For miscellaneous materials, refer to SOPM 20-60-04.

(1) Bushing Replacement

(a) Remove the old bushings (15, 20) from the beam (25) (SOPM 20-50-03).

(b) Use the shrink-fit method (SOPM 20-50-03) to install the replacement bushings (15, 20) in the beam (25) with grease, D00633 (grease, D00015 optional). The distance between the face of the lug and the inner face of the bushing cannot be more than 0.0010 inch.

(2) Lube Fitting Replacement

(a) Remove the lube fittings (5) and inserts (10) from the beam (25).

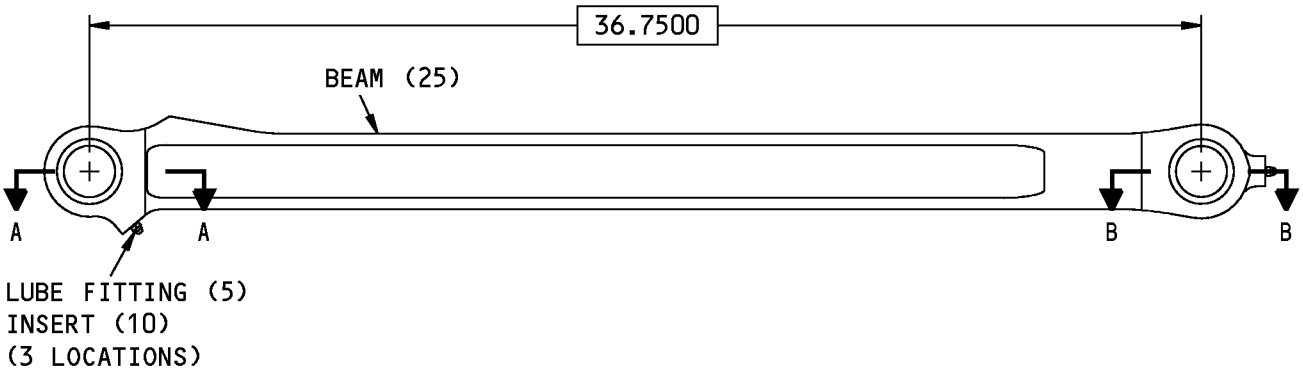
(b) Use the shrink-fit method (SOPM 20-50-03) to install the replacement inserts (10) in the beam (25). Install the inserts (10) dry without lubrication. The inserts (10) are to be flush with the surface of the beam within 0.0200 inch.

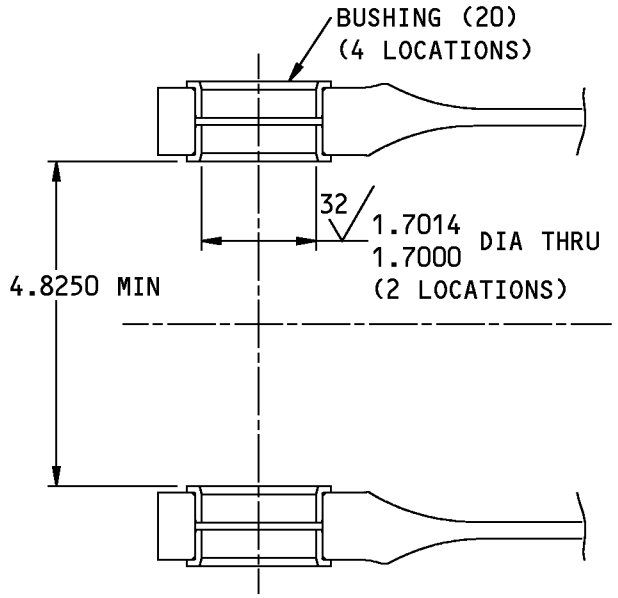
(c) Install the replacement lube fittings (5) in the beam (25). Tighten the lube fittings to 25-30 pound-inches.

(d) Make sure that the lubrication passage is clear.

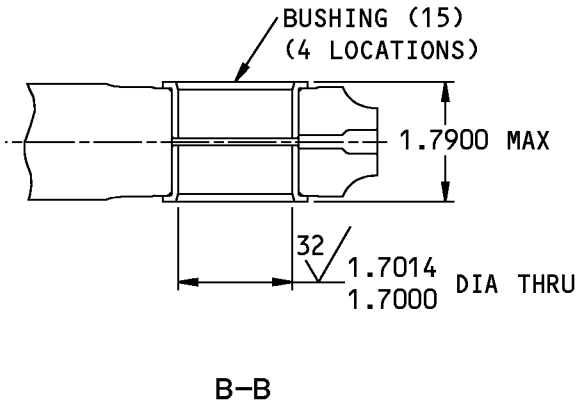
1) For Walking Beam Assembly 161A7111-1: Apply grease, D00633 (grease, D00013 optional) to the fittings (5) until you see the grease on the inner surfaces of the bushings.

2) For Walking Beam Assembly 161A7111-3: Apply grease, D00633 to the fittings (5) until you see grease, D00633 on the inner surfaces of the bushings.





A–A



B–B

63 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 2

ALL DIMENSIONS ARE IN INCHES

G12452 S0004998825_V2

161A7111-1,-3 Beam Assembly Repair
Figure 601

MLG WALKING BEAM - REPAIR 6-2

161A7111–2, –4

1. General

A. This procedure tells how to repair and refinish the MLG walking beam (25).

B. Refer to the Standard Overhaul Practices Manual (SOPM) for the standard practices shown in the repair.

C. Refer to the REPAIR-GENERAL, Figure 601 for the Standard True Position Dimensioning Symbols shown in the repair.

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

E. General repair details:

(1) Material: Titanium alloy

(2) Shot peen:

Intensity 0.014-0.019A2

Coverage 2.0

2. Beam Repair

A. References

Reference	Title
SOPM 20-10-03	SHOT PEENING
SOPM 20-10-07	MACHINING OF TITANIUM
SOPM 20-20-02	PENETRANT METHODS OF INSPECTION

B. Procedure

(1) Machine lug holes and faces as required, within repair limits, to remove defects (SOPM 20-10-07).

(2) Countersink the machined holes.

(3) Penetrant examine the part (SOPM 20-20-02).

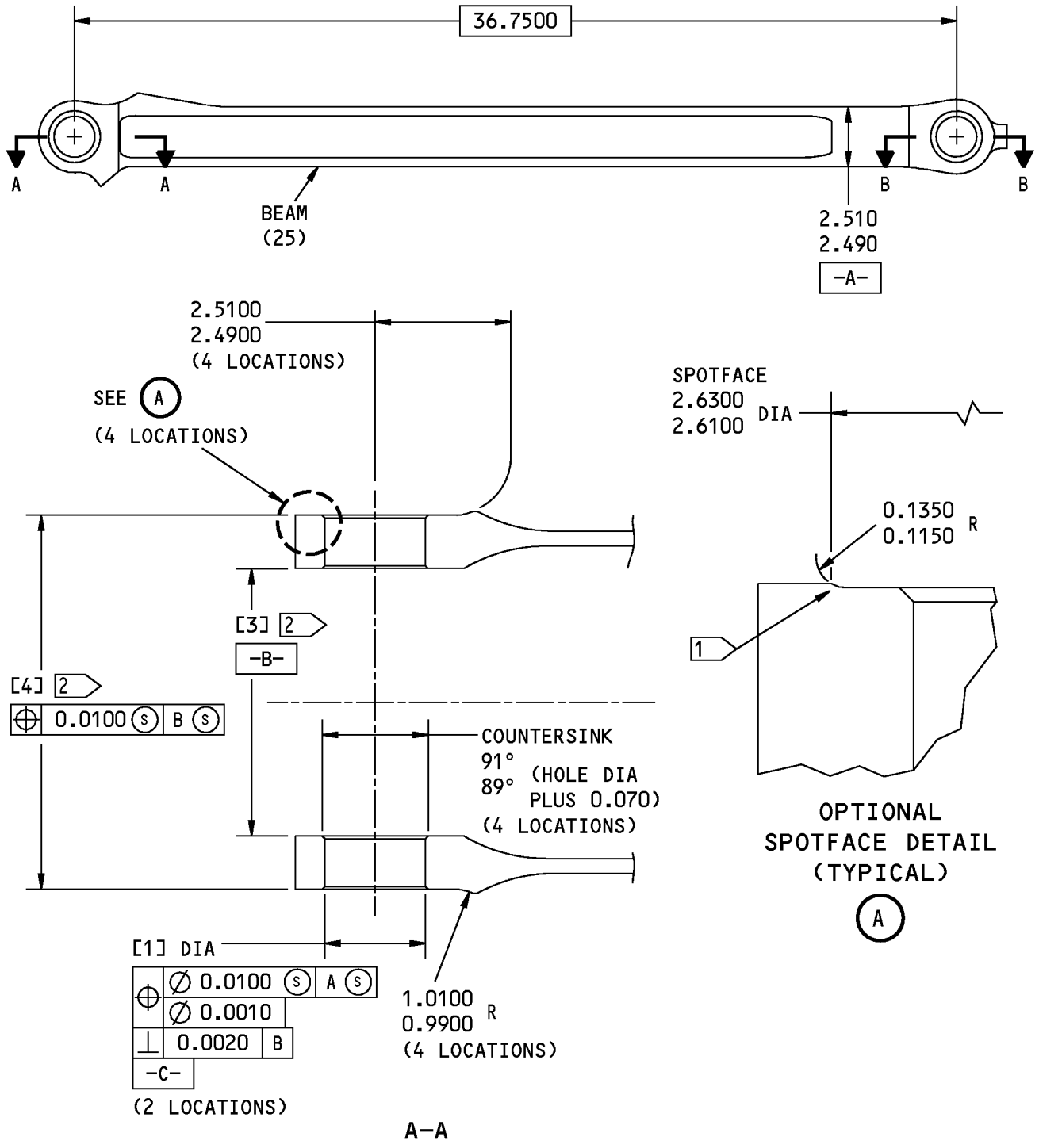
(4) Shot peen all surfaces, but not in the holes (SOPM 20-10-03).

3. Oversize Bushings

A. Procedure

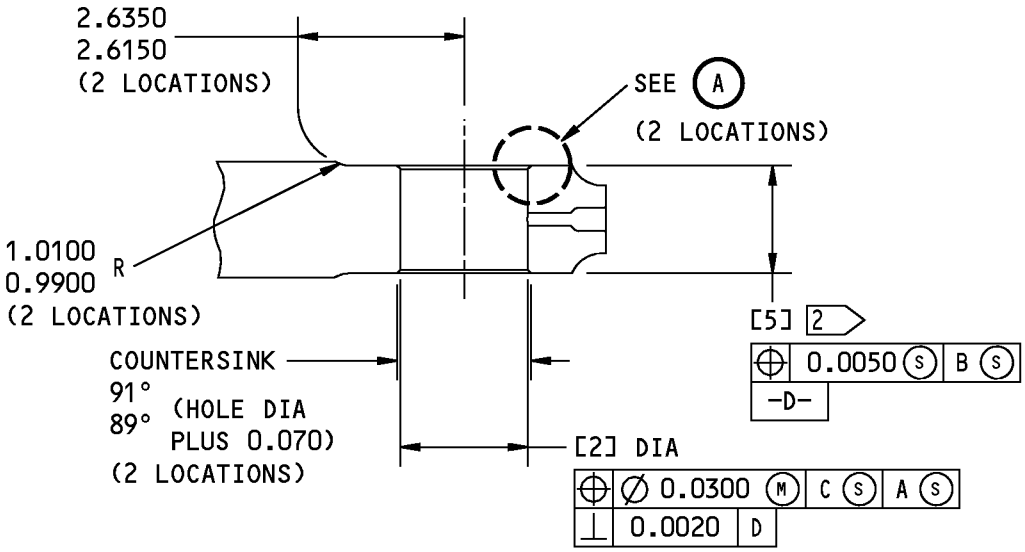
(1) Make oversize bushings (REPAIR 6-2, Figure 602), as required, to adjust for the material removed in REPAIR 6-2, Paragraph 2.B.(1).

(2) Install the bushings per REPAIR 6-1.



G12457 S0004998828_V2

161A7111-2,-4 Beam Repair
Figure 601 (Sheet 1 of 2)



B–B

REFERENCE NUMBER	[1]	[2]	[3]	[4]	[5]
DESIGN DIMENSION	1.8894 1.8880	1.8894 1.8880	5.0250 5.0150	7.0300 7.0100	1.6000 1.5950
REPAIR LIMIT	1.9494	1.9494	5.0850	6.9000	1.5350

1> MAKE THE EDGE OF THE SPOTFACE SMOOTH WITH A RADIUS OF 0.0600–0.0800.

2> THIS DIMENSION IS TO THE SPOT-FACED SURFACE.

63 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

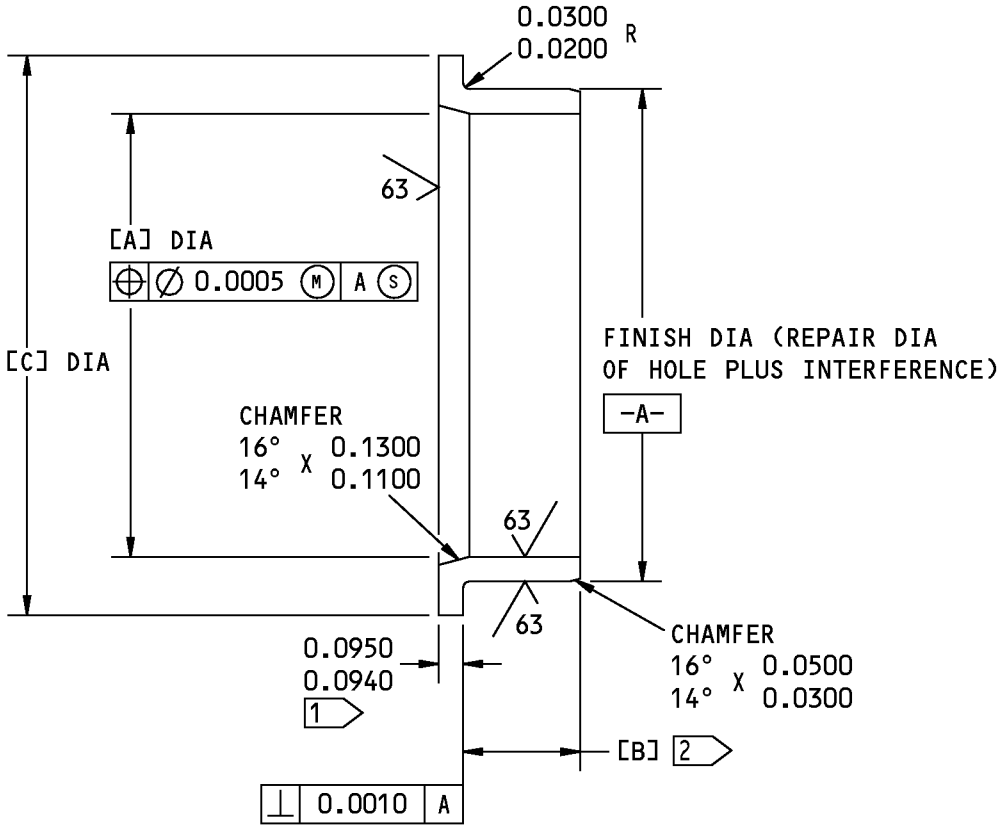
BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 2

ALL DIMENSIONS ARE IN INCHES

G12470 S0004998829_V2

161A7111-2,-4 Beam Repair
Figure 601 (Sheet 2 of 2)



HOLE LOCATION (FIG. 601)	REPLACES BUSHING (IPL FIG. 2)	[A]	[B]	[C]	INTERFERENCE
[1]	161A7117-1 (20)	1.7027 1.7013	0.4600 0.4400	2.1600 2.1400	0.0045 0.0017
[2]	161A7117-2 (15)	1.7027 1.7013	0.7600 0.7400	2.1600 2.1400	0.0045 0.0017

1 PLUS THE AMOUNT REMOVED FROM THE LUG FACE.

2 MINUS THE AMOUNT REMOVED FROM THE LUG FACE.

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

MATERIAL: AL-NI-BRONZE PER AMS4640

BREAK ALL SHARP EDGES 0.01-0.02 R

FINISH: NO FINISH (F-25.01)

ALL DIMENSIONS ARE IN INCHES

G12612 S0004998830_V3

Oversize Bushing Details
Figure 602

LINK ASSEMBLY - REPAIR 7-1

161A7114–1, –3

1. General

A. This repair tells how to replace the ball assembly (5), lube fittings (25), and bushings (30) on the link assembly (1A).

B. Refer to the Standard Overhaul Practices Manual (SOPM) for the standard practices shown in the repair.

C. Refer to the REPAIR-GENERAL, Figure 601 for the Standard True Position Dimensioning Symbols shown in the repair.

D. Refer to IPL Figure 3 for the item numbers.

2. Bushing, Lube Fitting, and Ball Assembly Replacement

A. Consumable Materials

NOTE: Equivalent substitutes may be used.

Reference	Description	Specification
D00013	Grease - Aircraft And Instrument Grease	MIL-PRF-23827 (NATO G-354) (Supersedes MIL-G-23827)
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 20-50-03	BEARING AND BUSHING REPLACEMENT
SOPM 20-60-03	LUBRICANTS

C. Procedure (REPAIR 7-1, Figure 601)

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

(1) Bushing Replacement

(a) Remove the old bushings (30) from the link (35).

(b) Use the shrink-fit method (SOPM 20-50-03) to install the replacement bushings (30) in the link (35) with grease, D00633 (grease, D00015 optional). The distance between the face of the lug and the inner face of the bushing cannot be more than 0.0010 inch.

(c) Machine the bushings to design dimensions and finish.

(2) Lube Fitting Replacement

(a) Remove the lube fittings (25) and inserts (20) from the link.

(b) Use the shrink-fit method (SOPM 20-50-03) to install replacement inserts (20) in the link. Install the inserts (20) dry without lubrication. The inserts (20) are to be flush with the surface of the link within 0.0200 inch.

(c) Install replacement lube fittings (25) in the link. Tighten the lube fittings to 25-30 pound-inches.

(d) Make sure that the lubrication passage is clear.

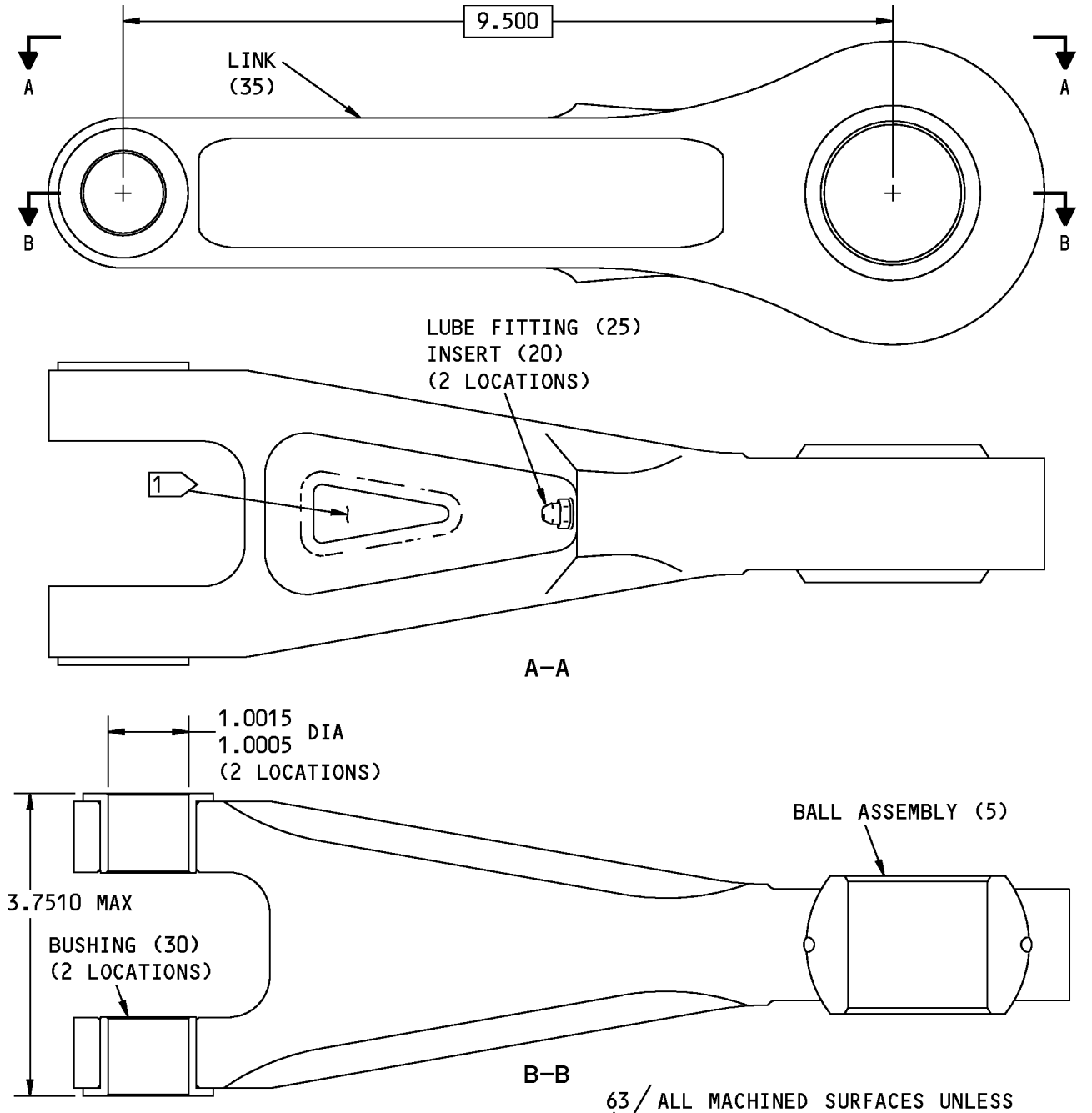
1) For Link Assembly 161A7114-1: Apply grease, D00633 (grease, D00013 optional) to the fittings (25) until you see the grease on the inner surface of the ball assembly (5).

2) For Link Assembly 161A7114-3: Apply grease, D00633 to the fittings (25) until you see grease, D00633 on the inner surface of the ball assembly (5).

(3) Ball Assembly Replacement

(a) Remove the old ball assembly (5) from the link (35) (SOPM 20-50-03).

(b) Install a replacement ball assembly (5) in the link (35) (SOPM 20-50-03).



161A7114-1,3 Link Assembly Repair
Figure 601

LINK - REPAIR 7-2

161A7114–2, –4

1. General

A. Use this procedure to repair and refinish link (35).

B. Refer to the Standard Overhaul Practices Manual (SOPM) for the standard practices shown in the repair.

C. Refer to the REPAIR-GENERAL, Figure 601 for the Standard True Position Dimensioning Symbols shown in the repair figure.

D. Refer to IPL Figure 3 for item numbers.

E. General repair details:

(1) Material: Titanium alloy

(2) Shot peen:

Intensity 0.014-0.019A2

Coverage 2.0

2. Link Repair and Refinish

A. Consumable Materials

NOTE: Equivalent substitutes may be used.

Reference	Description	Specification
G00167	Coating - Flame Spray Tungsten Carbide Powder	BMS10-67, Type I

B. References

Reference	Title
SOPM 20-10-03	SHOT PEENING
SOPM 20-10-05	APPLICATION AND FINISHING OF THERMAL SPRAY COATINGS
SOPM 20-20-02	PENETRANT METHODS OF INSPECTION
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 7-2, Figure 601)

NOTE: For application and finish of thermal spray coatings, refer to SOPM 20-10-05. 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) Spherical bore

(a) Machine as necessary, within repair limits, to remove defects.

(b) Penetrant examine (SOPM 20-20-02).

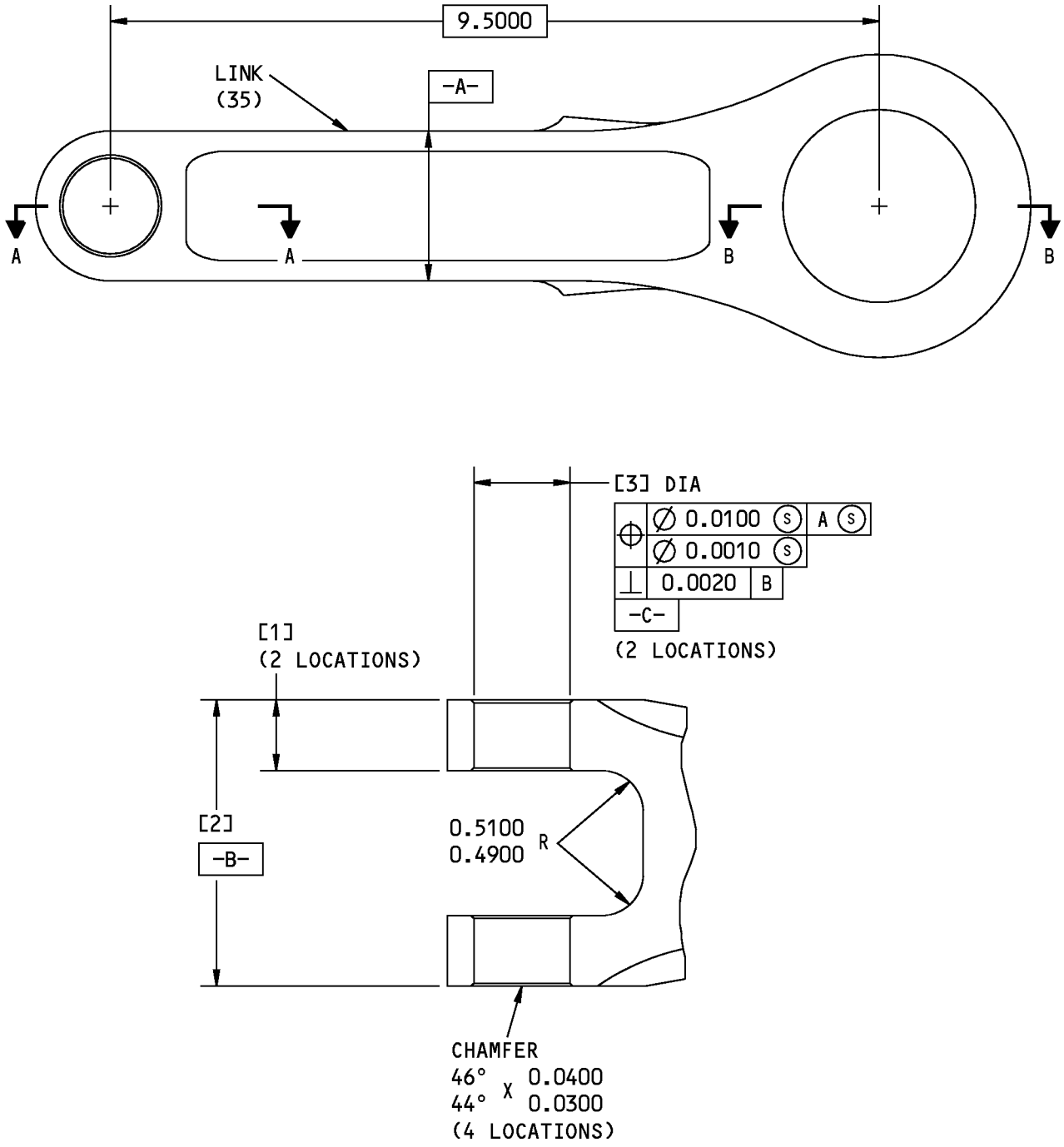
(c) Shot peen all surfaces, but not in the lubrication holes (SOPM 20-10-03).

(d) Build up with thermal spray coating (SOPM 20-10-05) as indicated.

(2) Refinish

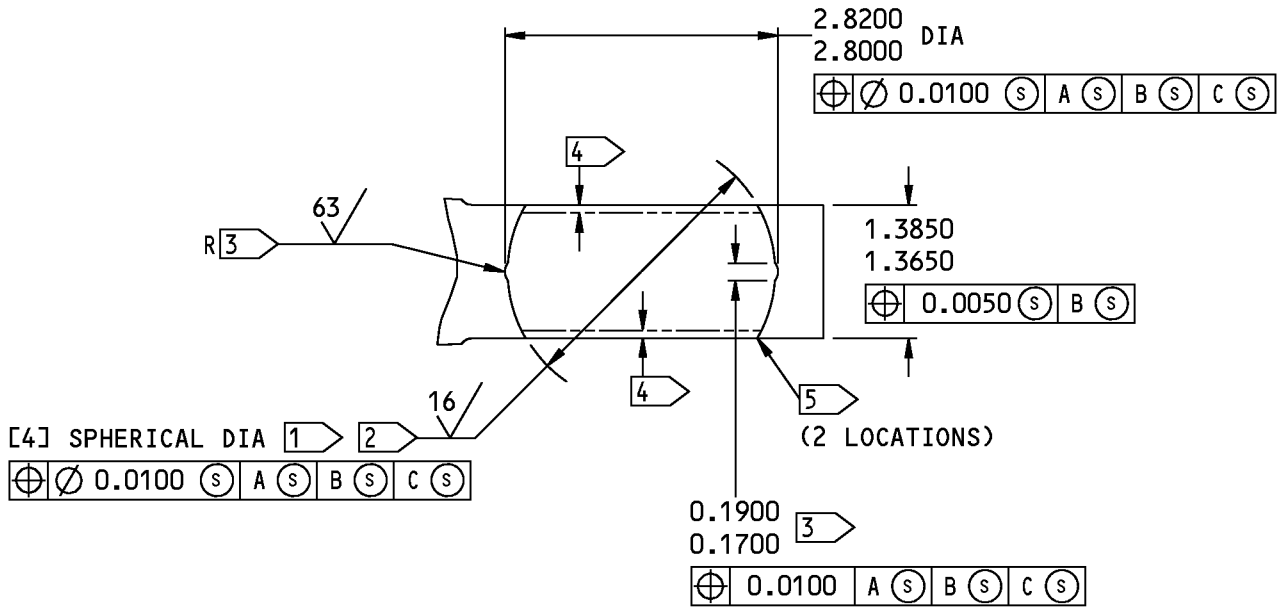
(a) Apply flame spray coating, G00167 (F-15.380) as indicated.

(b) No finish on other surfaces.



G12722 S0004998835_V2

161A7114-2,-4 Link Repair
Figure 601 (Sheet 1 of 2)



B–B

REFERENCE NUMBER	[1]	[2]	[3]	[4]
DESIGN DIMENSION	0.8850 0.8650	3.5410 3.5360	1.1884 1.1870	2.7530 2.7520
REPAIR LIMIT	---	---	---	2.7710 6

1 APPLY BMS 10-67 TYPE 1 THERMAL SPRAY (F-15.380) ON THIS AREA, 0.0040-0.0060 THICK AFTER GRINDING

2 DIMENSION AFTER FINISH

3 FINISH IS NOT NECESSARY HERE. OVERSPRAY IS OK IN THIS AREA

4 FINISH RUNOUT AREA 0.0800 MAXIMUM

5 BREAK SHARP EDGE 0.0150-0.0250 R

6 LIMIT FOR BUILDUP WITH BMS 10-67 TYPE 1 THERMAL SPRAY (SOPM 20-10-05) AND GRIND TO DESIGN DIMENSIONS AND FINISH

63 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 3

ALL DIMENSIONS ARE IN INCHES

G12730 S0004998836_V4

161A7114-2,-4 Link Repair
Figure 601 (Sheet 2 of 2)

INSERT ASSEMBLY - REPAIR 8-1

161A7306–1

1. General

A. This repair tells how to replace O-rings (30), lube fitting (10), and lube insert (15) on the insert assembly (5).

B. Refer to the Standard Overhaul Practices Manual (SOPM) for the standard practices shown in the repair.

C. Refer to IPL Figure 5 for the item numbers.

2. Parts Replacement

A. Procedure

(1) Remove the old lube insert (15) and lube fitting (10) from the insert assembly (5).

(2) Install a replacement lube insert (15) and lube fitting (10) into the insert (20). Tighten the lube fitting (10) to 10-15 pound-inches.

3. O-Ring 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 20-60-03	LUBRICANTS

C. Procedure

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

(1) Remove the O-rings (30) from the insert assembly (5).

(2) Clean the insert assembly (5).

(3) Apply grease, D00633 to new O-rings (30).

(4) Install the O-rings (30) on the insert assembly (5).

INSERT ASSEMBLY - REPAIR 9-1

161A7307–1

1. General

A. This repair tells how to replace O-rings (30), lube fitting (10), and lube insert (15) on the lube insert assembly (5).

B. Refer to the Standard Overhaul Practice Manual (SOPM) for the standard practices shown in the repair.

C. Refer to IPL Figure 4 for the item numbers.

2. Parts Replacement

A. Procedure

(1) Remove the old lube insert (15) and lube fitting (10) from the insert assembly (5).

(2) Install a replacement lube insert (15) and lube fitting (10) into the insert (20). Tighten the lube fitting (10) to 10-15 pound-inches.

3. O-Ring 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 20-60-03	LUBRICANTS

C. Procedure

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

(1) Remove the old O-rings (30) from the insert assembly (5).

(2) Clean the insert assembly (5).

(3) Apply grease, D00633 to the new O-rings (30).

(4) Install the O-rings (30) on the insert assembly (5).

ASSEMBLY

1. General

A. This procedure tells how to assemble the MLG Walking Beam Components.

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

C. Refer to IPL Figure 1, IPL Figure 4 and IPL Figure 5 for the item numbers.

2. Assembly

A. Consumable Materials

NOTE: Equivalent substitutes may be used.

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

B. References

Reference	Title
SOPM 20-50-01	BOLT AND NUT INSTALLATION
SOPM 20-60-03	LUBRICANTS

C. Procedure

NOTE: For bolt and nut installation, refer to SOPM 20-50-01. For lubricants, refer to SOPM 20-60-03.

(1) Walking Beam assembly (IPL Figure 1)

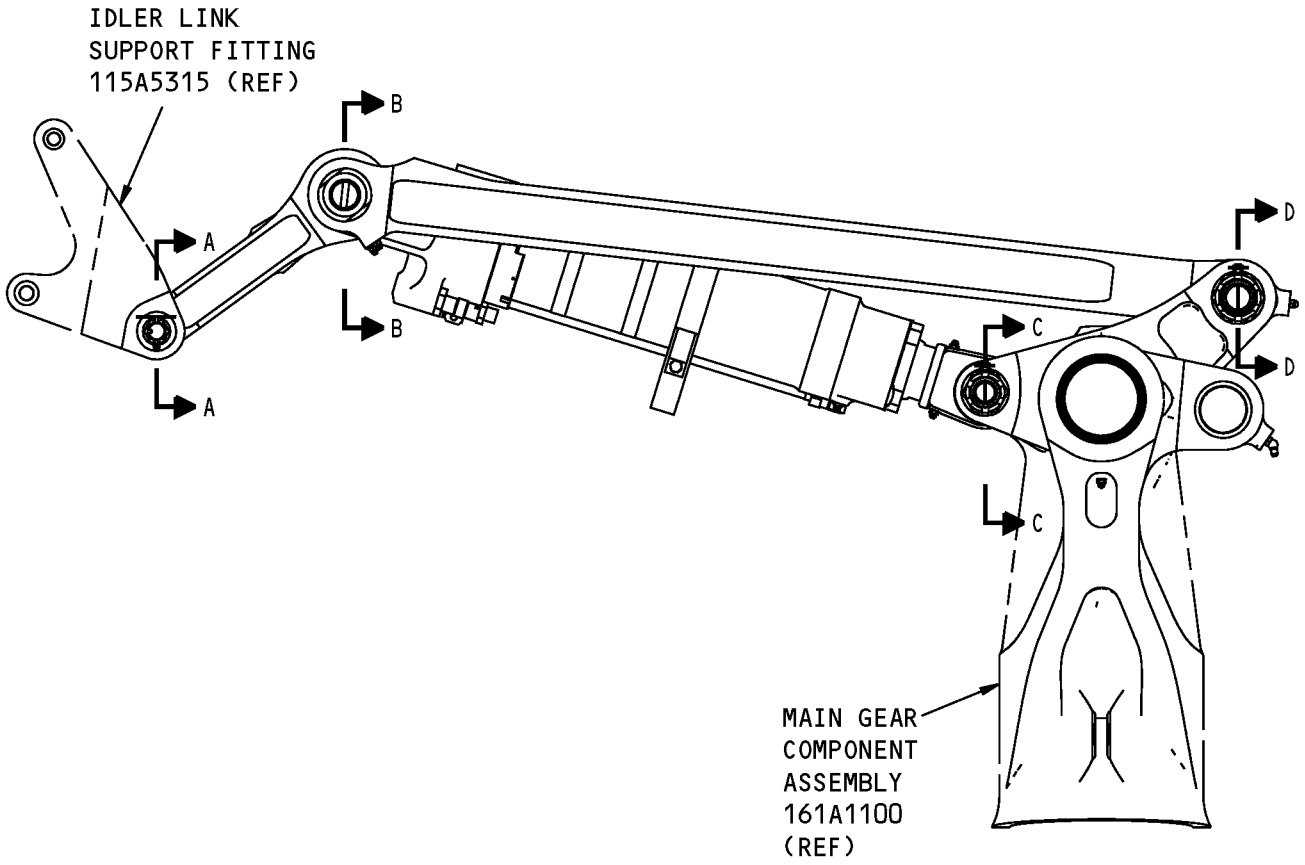
(a) Use standard industry practices and these steps.

(b) Connect the walking beam (45), actuator (50), and link (40) together with pin (35) and related hardware. Be sure to install pin (35) in the direction shown in IPL Fig. 1 for the 161A7100-1, -3, -5, -7 assemblies, and in the opposite direction for the 161A7100-2, -4, -6, -8 assemblies. For the 161A7100-1, -2, -3, -4 assemblies, lubricate the chrome-plated surfaces of pin (35) with grease, D00633 or grease, D00013 before installation. For the 161A7100-5, -6, -7, -8 assemblies, lubricate the chrome-plated surfaces of pin (35) with grease, D00633 before installation. Tighten the nut (25) to 35-50 pound-feet.

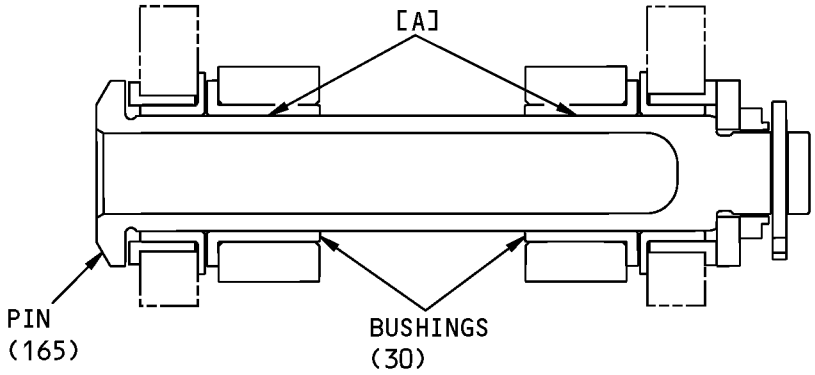
(c) Install bolt (13) and nut (15). Tighten nut (15) to 50-75 pound-inches.

(2) Pin Assemblies (IPL Figure 4, IPL Figure 5)

(a) Use standard industry practices.

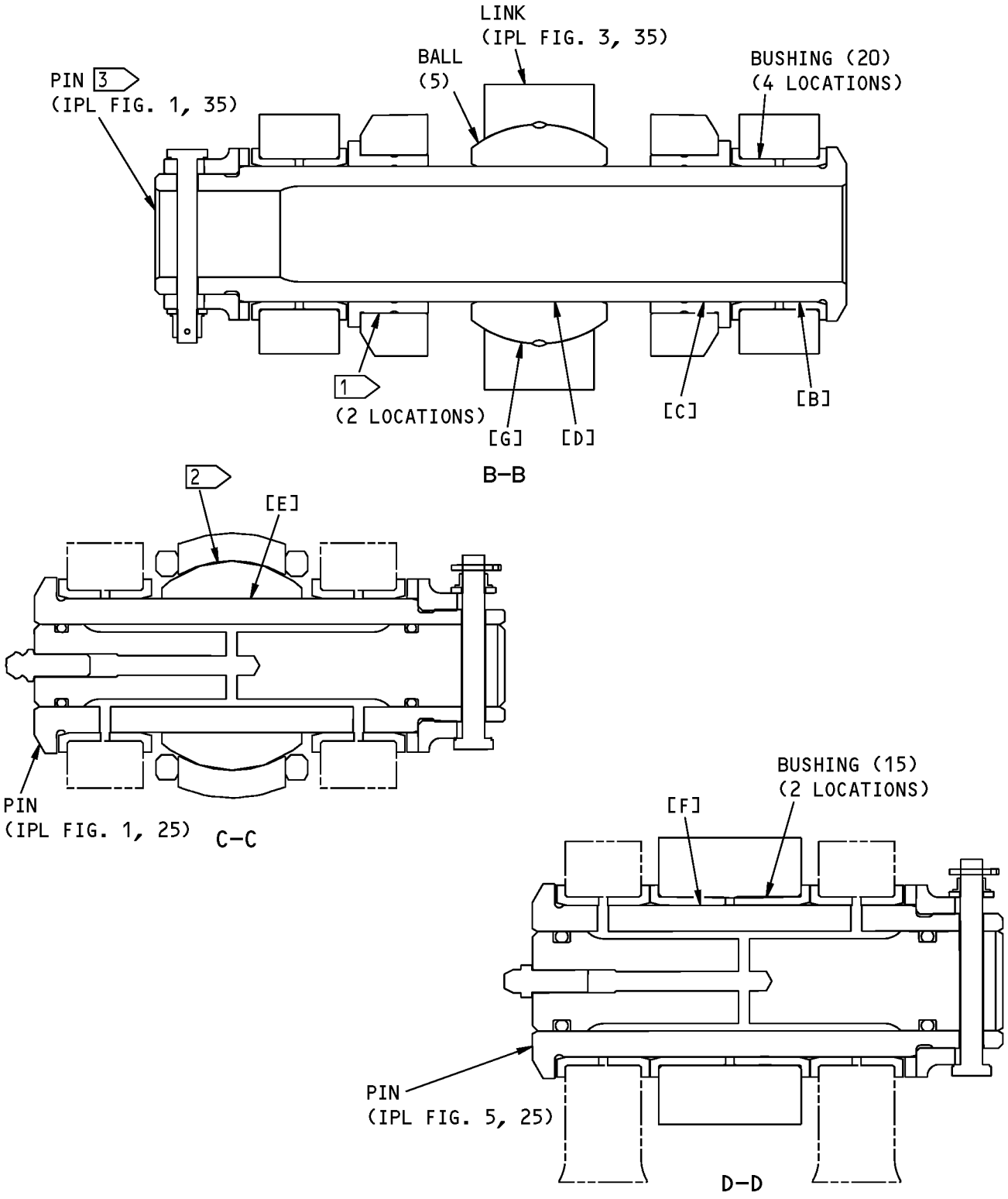


MAIN LANDING GEAR WALKING BEAM ASSEMBLY
AND INSTALLATION COMPONENTS



A–A

Fits and Clearances
Figure 801 (Sheet 1 of 3)



Fits and Clearances
Figure 801 (Sheet 2 of 3)

REF LETTER	REF IPL		DESIGN DIMENSION*				SERVICE WEAR LIMIT*		
	FIG. NO.	ITEM NO.	DIMENSION		ASSEMBLY CLEARANCE		DIMENSION		MAXIMUM CLEARANCE
			MIN	MAX	MIN	MAX	MIN	MAX	
[A]	3	ID 30	1.0005	1.0015	0.0015	0.0030		1.0040	0.0052
	1	OD 165	0.9985	0.9990			0.9965		
[B]	2	ID 20	1.7000	1.7014	0.0010	0.0034		1.7050	0.0060
	1	OD 35	1.6980	1.6990			1.6954		
[C]	---	ID 1	1.7000	1.7010	0.0010	0.0030		1.7046	0.0056
	1	OD 35	1.6980	1.6990			1.6954		
[D]	3	ID 5	1.7000	1.7015	0.0010	0.0035		1.7051	0.0061
	1	OD 35	1.6980	1.6990			1.6954		
[E]	---	ID 2	1.4995	1.5000	0.0005	0.0020		1.5034	0.0044
	4	OD 25	1.4980	1.4990			1.4960		
[F]	2	ID 15	1.7000	1.7014	0.0010	0.0034		1.7050	0.0060
	5	OD 25	1.6980	1.6990			1.6954		
[G]	3	ID 35	2.7520	2.7530	0.0020	0.0040		2.7573	0.0073
	3	OD 5	2.7490	2.7500			2.7457		

* ALL DIMENSIONS ARE IN INCHES

1 ACTUATOR BUSHING 273A2123-1

2 ACTUATOR BEARING 270T0002-42

3 PIN DIRECTION SHOWN FOR 161A7100-1,-3,-5,-7; DIRECTION IS OPPOSITE ON 161A7100-2,-4,-6,-8

G13206 S0004998843_V3

Fits and Clearances
Figure 801 (Sheet 3 of 3)

BOEING®

COMPONENT MAINTENANCE MANUAL

SPECIAL TOOLS, FIXTURES, AND EQUIPMENT

(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

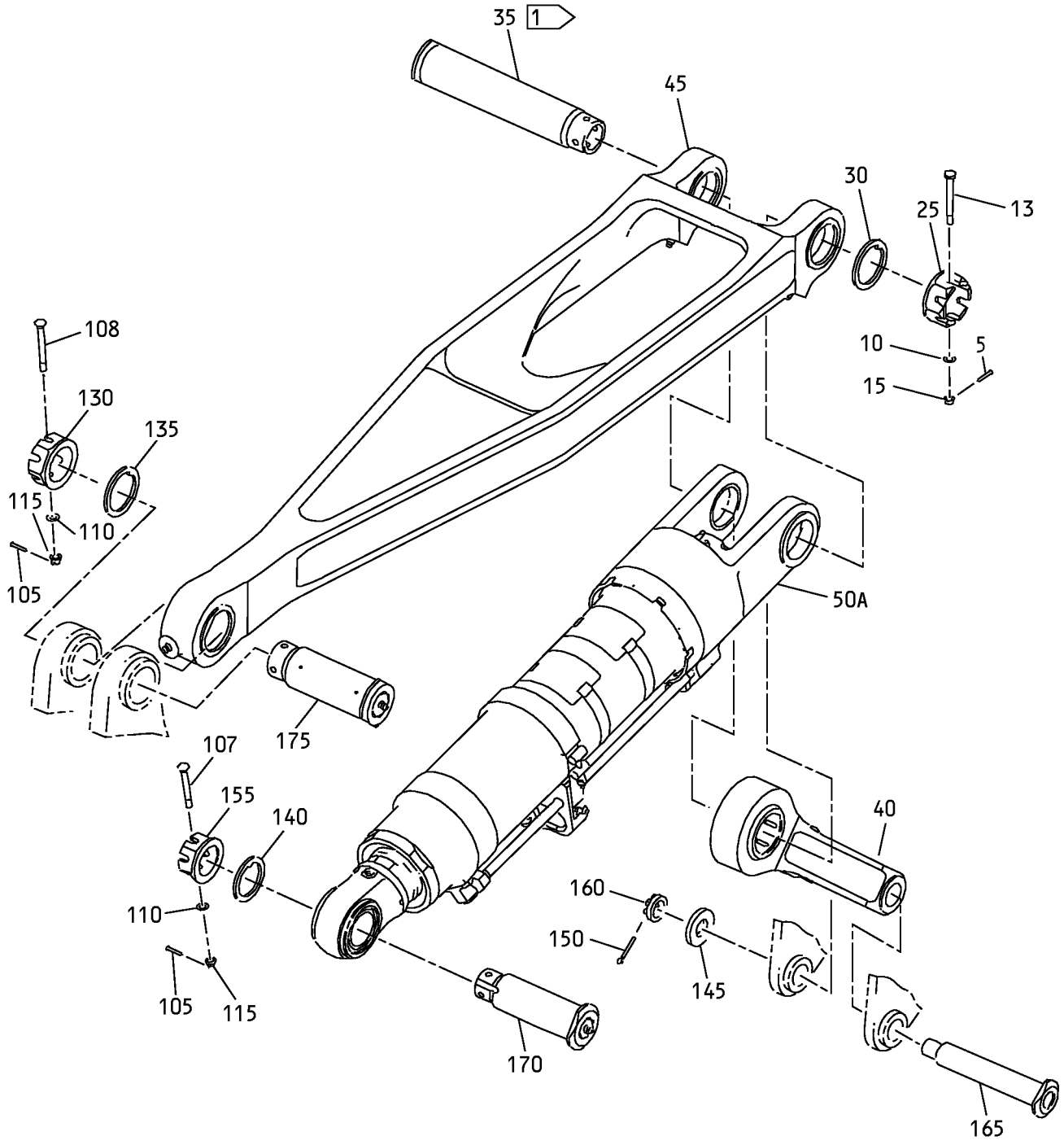
Optional (OPT)	The part is optional to and interchangeable with other parts that have the same item number.
Replaces, Replaced by and not interchangeable with (REPLACES, REPLACED BY AND NOT INTCHG/W)	The part replaces and is not interchangeable with the initial part.
Replaces, Replaced by (REPLACES,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

NUMERICAL INDEX

PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
		1		1
		1		1
		1		1
161A7000-11		1	170A	1
		4	1B	RF
161A7000-12		1	175A	1
		5	1B	RF
161A7000-3		1	170	1
		4	1A	RF
161A7000-4		1	175	1
		5	1A	RF
161A7100-1		1	2A	RF
161A7100-2		1	2B	RF
161A7100-3		1	2C	RF
161A7100-4		1	2D	RF
161A7100-5		1	2E	RF
161A7100-6		1	2F	RF
161A7100-7		1	2G	RF
161A7100-8		1	2H	RF
161A7111-1		1	45	1
		2	1A	RF
161A7111-2		2	25	1
161A7111-3		1	45A	1
		2	1B	RF
161A7111-4		2	25A	1
161A7114-1		1	40	1
		3	1A	RF
161A7114-2		3	35	1
161A7114-3		1	40A	1
		3	1B	RF
161A7114-4		3	35A	1
161A7116-1		3	5	1
161A7116-2		3	10	1
161A7116-3		3	15	1

PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
161A7117-1		2	20	4
161A7117-2		2	15	2
161A7118-1		1	35	1
161A7118-2		1	35A	1
161A7119-1		1	25	1
		1	130	1
161A7120-1		1	30	1
161A7301-1		1	165	1
161A7301-2		1	165A	1
161A7302-1		4	25	1
161A7302-2		4	25A	1
161A7303-1		1	155	1
161A7304-1		1	135	1
161A7304-2		1	140	1
161A7304-3		1	145	1
161A7305-1		5	25	1
161A7305-2		5	25A	1
161A7306-1		5	5	1
161A7306-2		5	20	1
161A7307-1		4	5	1
161A7307-2		4	20	1
161W7010-1		2	10	3
		3	20	2
273A2101-2		1	50A	1
		1	50C	1
273A2101-3		1	50B	1
273A2101-5		1	50D	1
273A2101-6		1	50E	1
AS15004-1		2	5A	3
		3	25A	2
BACB28BB16A088B		3	30	2
BACB30LM4DU26		1	107A	1
		1	107C	1
BACB30LM4DU30		1	13A	1
		1	13C	1

PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
		1	108A	1
		1	108C	1
BACN11N112CD		1	160	1
BACN11N4CS		1	15	1
		1	115	2
BACP10BC02A06P		1	105	2
BACP18BC02A06P		1	5	1
BACP18BC04A14P		1	150	1
M832481-116		4	30	2
M832481-212		5	30	2
MS15001-2		4	10	1
		5	10	1
MS15004-1		2	5	3
		3	25	2
MS21209F4-15L		4	15	1
		5	15	1
NAS1149E0463R		1	10	1
		1	110	2
NAS6704DU26		1	107	1
		1	107B	1
NAS6704DU30		1	13	1
		1	13B	1
		1	108	1
		1	108B	1



1 ON 161A7100-2,-4,-6,-8 INSTALL THIS PIN IN THE OPPOSITE DIRECTION

G12987 S0004998846_V5

Main Landing Gear Walking Beam Components
IPL Figure 1

FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USAGE CODE	UNITS PER ASSY
1–					
			MAIN LANDING GEAR		
			WALKING BEAM COMPONENTS		
–2A	161A7100-1		BEAM ASSY-WALKING	A	RF
–2B	161A7100-2		BEAM ASSY-WALKING	B	RF
–2C	161A7100-3		BEAM ASSY-WALKING	C	RF
–2D	161A7100-4		BEAM ASSY-WALKING	D	RF
–2E	161A7100-5		BEAM ASSY-WALKING	E	RF
–2F	161A7100-6		BEAM ASSY-WALKING	F	RF
–2G	161A7100-7		BEAM ASSY-WALKING	G	RF
–2H	161A7100-8		BEAM ASSY-WALKING	H	RF
5	BACP18BC02A06P		. PIN-COTTER		1
10	NAS1149E0463R		. WASHER		1
13	NAS6704DU30		. BOLT	A, B	1
–13A	BACB30LM4DU30		. BOLT (OPT ITEM 13B)	C, D	1
–13B	NAS6704DU30		. BOLT (OPT ITEM 13A)	C, D	1
–13C	BACB30LM4DU30		. BOLT	E, F, G, H	1
15	BACN11N4CS		. NUT		1
–20	NAS6704DU30		DELETED		
25	161A7119-1		. NUT		1
30	161A7120-1		. WASHER		1
35	161A7118-1		. PIN	A-F	1
–35A	161A7118-2		. PIN	G, H	1
40	161A7114-1		. LINK ASSY-RETRACTION (FOR DETAILS SEE FIG. 3)	A-F	1
–40A	161A7114-3		. LINK ASSY-RETRACTION (FOR DETAILS SEE FIG. 3)	G, H	1
45	161A7111-1		. BEAM ASSY (FOR DETAILS SEE FIG. 2)	A-F	1
–45A	161A7111-3		. BEAM ASSY (FOR DETAILS SEE FIG. 2)	G, H	1
–50	273A2101-1		DELETED		

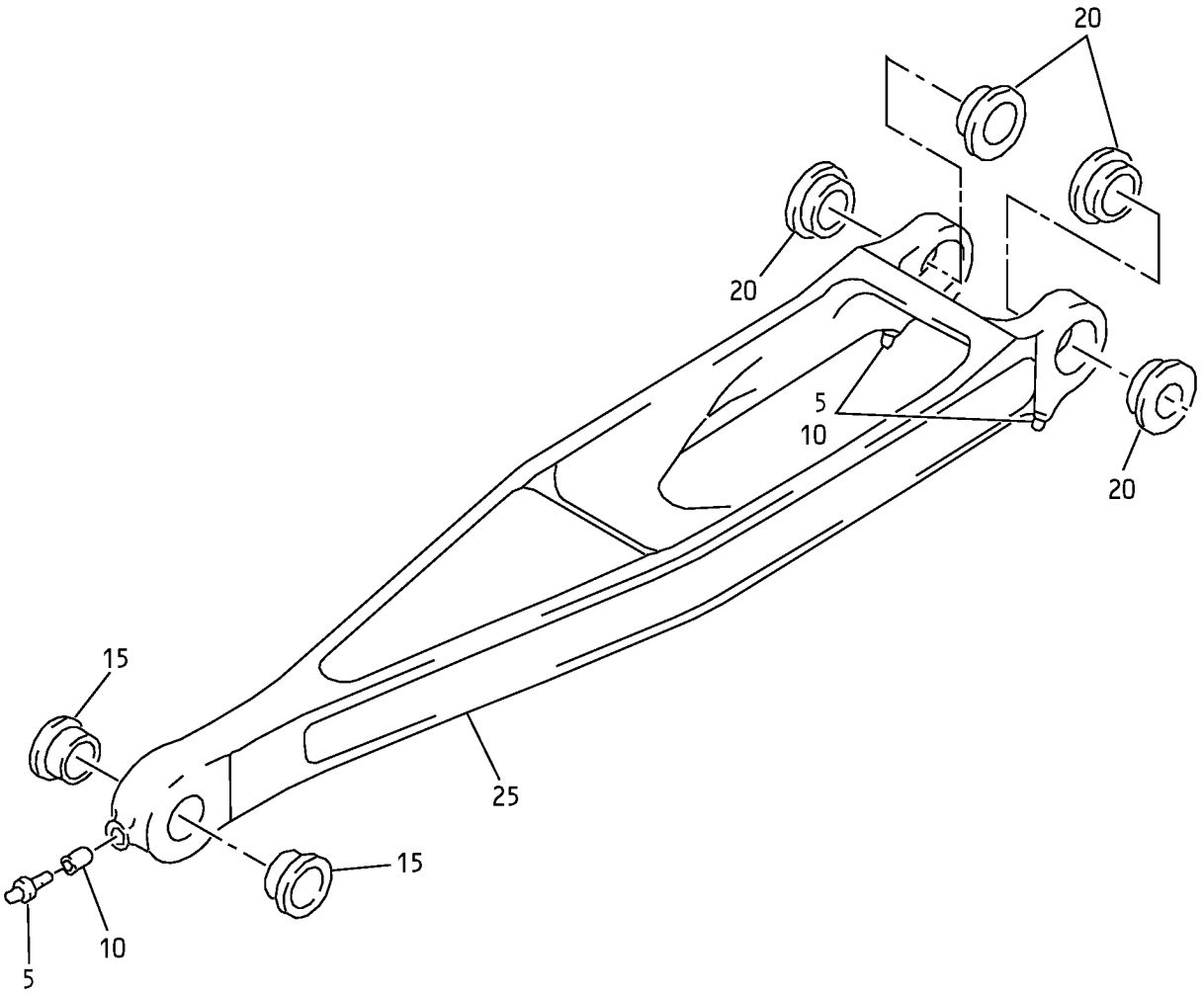
–Item not Illustrated

FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USAGE CODE	UNITS PER ASSY
1–					
50A	273A2101-2		. ACTUATOR ASSY (REF CMM 32-32-37)	A, B	1
–50B	273A2101-3		. ACTUATOR ASSY (OPT ITEM 50C, 50E) (REF CMM 32-32-37)	C, D	1
–50C	273A2101-2		. ACTUATOR ASSY (OPT ITEM 50B, 50E) (REF CMM 32-32-37)	C, D	1
–50D	273A2101-5		. ACTUATOR ASSY (REF CMM 32-32-37)	E, F, G, H	1
–50E	273A2101-6		. ACTUATOR ASSY (OPT ITEM 50B, 50C) (REF CMM 32-32-37)	C, D	1
			INSTALLATION COMPONENTS		
105	BACP10BC02A06P		PIN-COTTER		2
107	NAS6704DU26		BOLT	A, B	1
–107A	BACB30LM4DU26		BOLT (OPT ITEM 107B)	C, D	1
–107B	NAS6704DU26		BOLT (OPT ITEM 107A)	C, D	1
–107C	BACB30LM4DU26		BOLT	E, F, G, H	1
108	NAS6704DU30		BOLT	A, B	1
–108A	BACB30LM4DU30		BOLT (OPT ITEM 108B)	C, D	1
–108B	NAS6704DU30		BOLT (OPT ITEM 108A)	C, D	1
–108C	BACB30LM4DU30		BOLT	E, F, G, H	1
110	NAS1149E0463R		WASHER		2
115	BACN11N4CS		NUT		2
–120	NAS6704DU26		DELETED		
–125	NAS6704DU30		DELETED		
130	161A7119-1		NUT		1
135	161A7304-1		WASHER		1
140	161A7304-2		WASHER		1
145	161A7304-3		WASHER		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–					
150	BACP18BC04A14P		PIN-COTTER		1
155	161A7303-1		NUT		1
160	BACN11N112CD		NUT		1
165	161A7301-1		PIN	A-F	1
–165A	161A7301-2		PIN	G, H	1
170	161A7000-3		PIN ASSY (FOR DETAILS SEE FIG. 4)	A-F	1
–170A	161A7000-11		PIN ASSY (FOR DETAILS SEE FIG. 4)	G, H	1
175	161A7000-4		PIN ASSY (FOR DETAILS SEE FIG. 5)	A-F	1
–175A	161A7000-12		PIN ASSY (FOR DETAILS SEE FIG. 5)	G, H	1

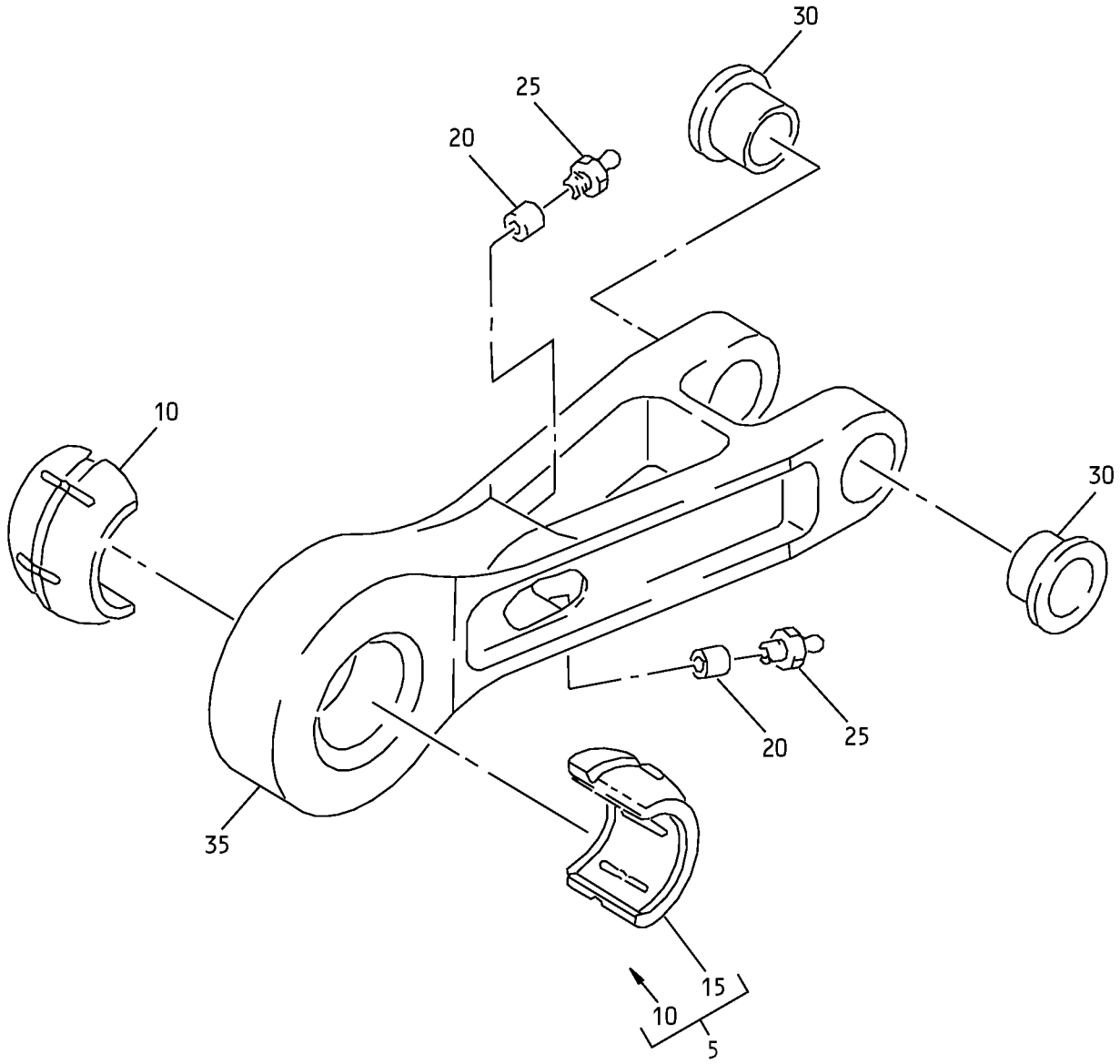
–Item not Illustrated



Walking Beam Assembly
IPL Figure 2

FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USAGE CODE	UNITS PER ASSY
2–					
–1A	161A7111-1		BEAM ASSY	A-F	RF
–1B	161A7111-3		BEAM ASSY	G, H	RF
5	MS15004-1		. FITTING-LUBE	A-F	3
–5A	AS15004-1		. FITTING-LUBE	G, H	3
10	161W7010-1		. INSERT-LUBE		3
15	161A7117-2		. BUSHING		2
20	161A7117-1		. BUSHING		4
25	161A7111-2		. BEAM (LIFE LIMITED PART)	A-F	1
–25A	161A7111-4		. BEAM (LIFE LIMITED PART)	G, H	1

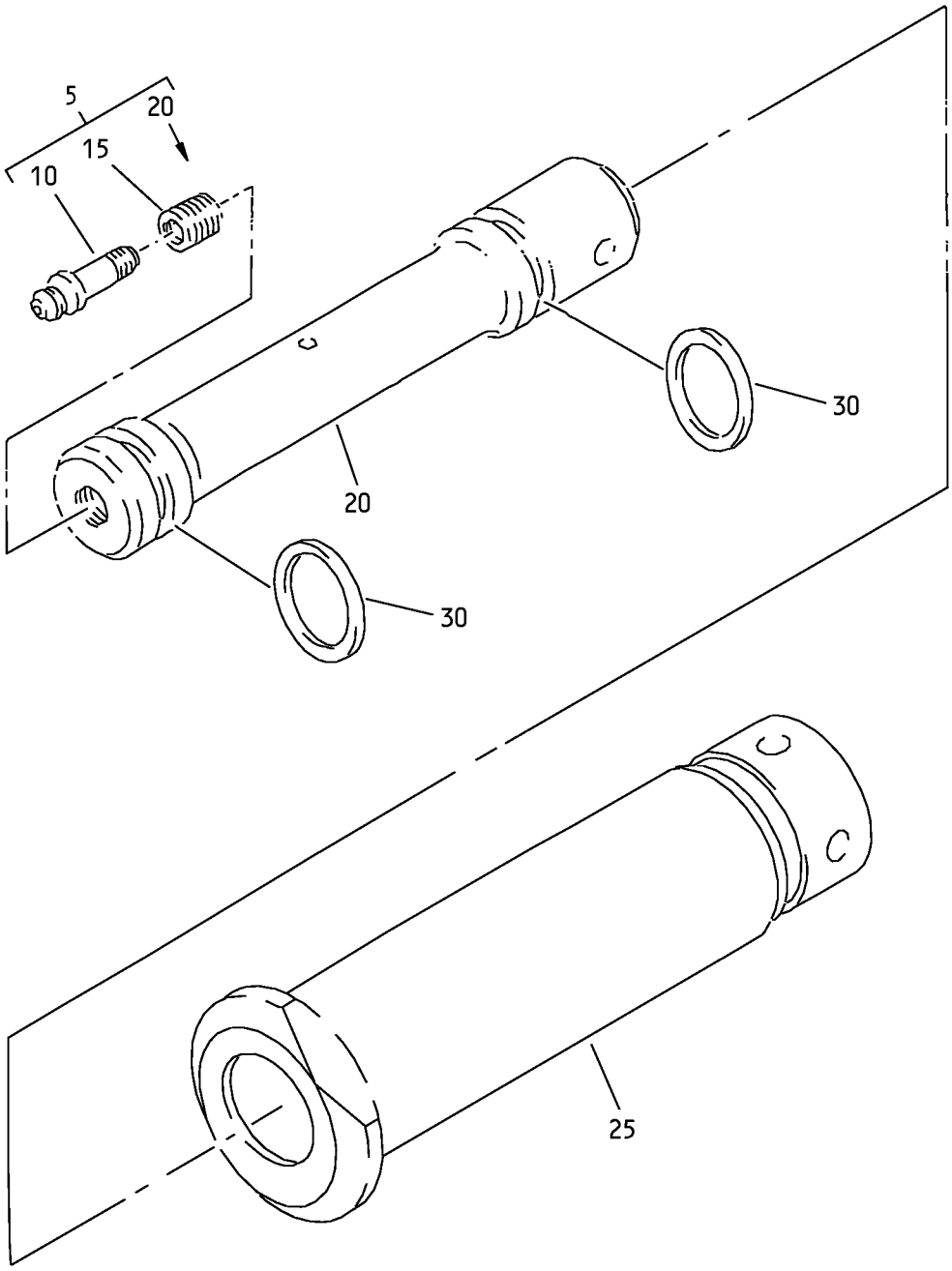
–Item not Illustrated



Link Assembly
IPL Figure 3

FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USAGE CODE	UNITS PER ASSY
3–					
–1A	161A7114-1		LINK ASSY-RETRACTION	A-F	RF
–1B	161A7114-3		LINK ASSY-RETRACTION	G, H	RF
5	161A7116-1		. BALL ASSY-SPLIT		1
10	161A7116-2		. . BALL HALF (MATCHED SET)		1
15	161A7116-3		. . BALL HALF (MATCHED SET)		1
20	161W7010-1		. INSERT-LUBE		2
25	MS15004-1		. FITTING-LUBE	A-F	2
–25A	AS15004-1		. FITTING-LUBE	G, H	2
30	BACB28BB16A088B		. BUSHING		2
35	161A7114-2		. LINK	A-F	1
–35A	161A7114-4		. LINK	G, H	1

–Item not Illustrated



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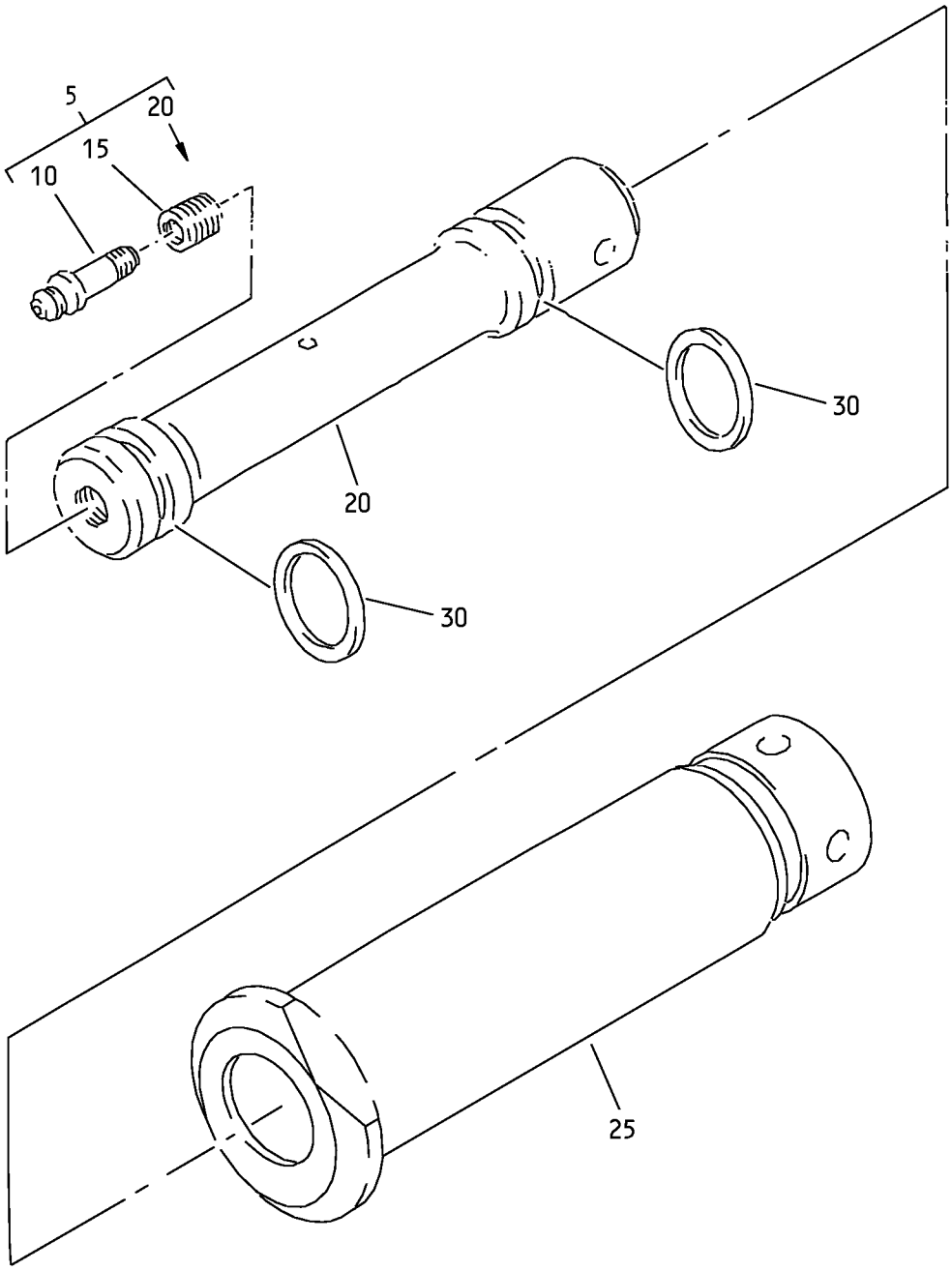
Pin Assembly
IPL Figure 4

FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USAGE CODE	UNITS PER ASSY
4–					
–1A	161A7000-3		PIN ASSY	A-F	RF
–1B	161A7000-11		PIN ASSY	G, H	RF
5	161A7307-1		. INSERT ASSY-LUBE		1
10	MS15001-2		. . FITTING		1
15	MS21209F4-15L		. . INSERT		1
20	161A7307-2		. . INSERT		1
25	161A7302-1		. PIN	A-F	1
–25A	161A7302-2		. PIN	G, H	1
30	M832481-116		. PACKING		2

–Item not Illustrated



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Pin Assembly
IPL Figure 5

FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USAGE CODE	UNITS PER ASSY
5–					
–1A	161A7000-4		PIN ASSY	A-F	RF
–1B	161A7000-12		PIN ASSY	G, H	RF
5	161A7306-1		. INSERT ASSY		1
10	MS15001-2		. . FITTING		1
15	MS21209F4-15L		. . INSERT		1
20	161A7306-2		. . INSERT		1
25	161A7305-1		. PIN	A-F	1
–25A	161A7305-2		. PIN	G, H	1
30	M832481-212		. PACKING		2

–Item not Illustrated