COMPONENT MAINTENANCE MANUAL WITH ILLUSTRATED PARTS LIST

NOSE LANDING GEAR DOOR MECHANISM ASSEMBLY

PART NUMBER 162A3100–2, –3, –4, –5

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COMPONENT MAINTENANCE MANUAL

Revision No. 11
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To: All holders of NOSE LANDING GEAR DOOR MECHANISM ASSEMBLY 32-22-11.

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

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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 38139	MAR 01/99
		PRR 35385-2	MAR 01/99

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	
Number	Date	Date	Initials

Revision		Filed	
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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.

NOSE GEAR DOOR MECHANISM ASSEMBLY - DESCRIPTION AND OPERATION

1. Description

A. The nose gear door mechanism assembly has an upper pushrod, a bellcrank, and a lower pushrod with bushings, bolts, cotter pins, nuts and washers.

2. Operation

A. The nose gear door mechanism assembly connects the nose gear door to the nose landing gear. The two nose gear doors open during landing gear extension and close after landing gear retraction.

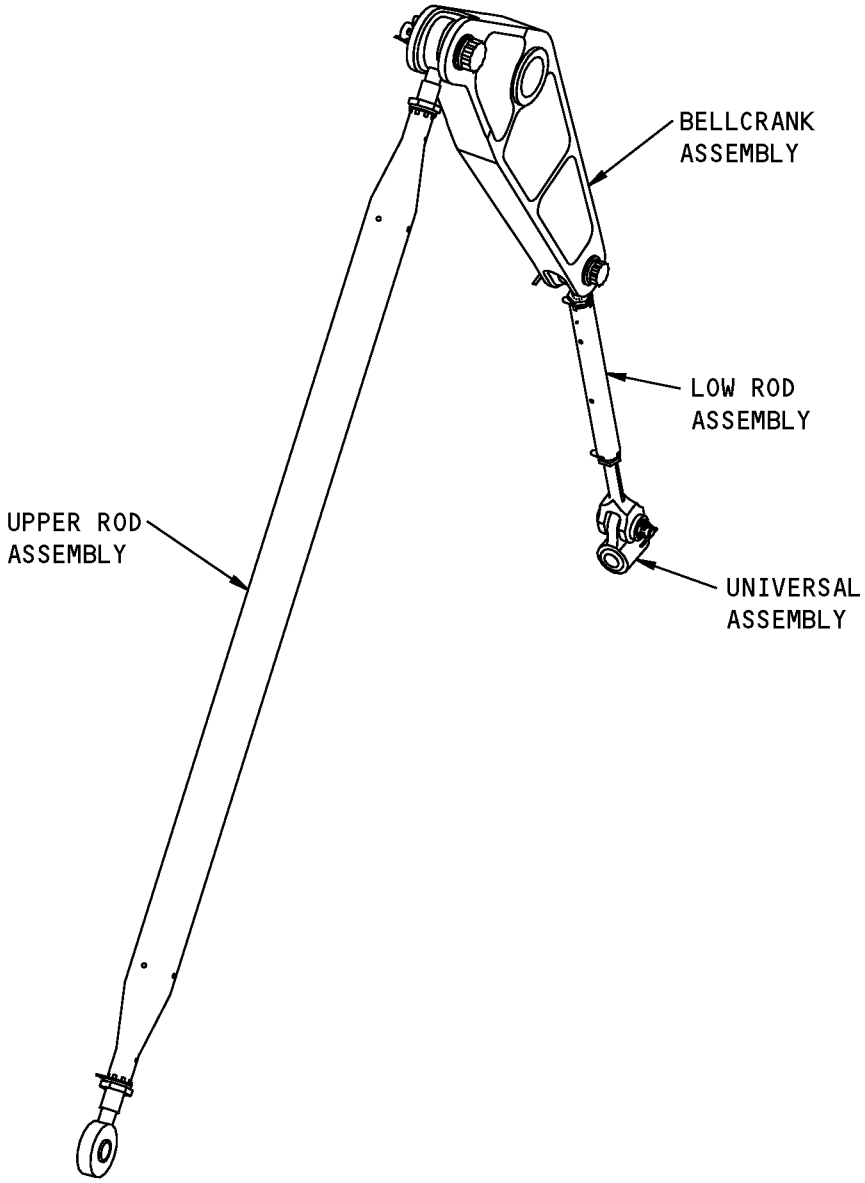
3. Leading Particulars (Approximate)

A. Length – 54 inches

B. Width – 4 inches

C. Height – 6 inches

D. Weight – 12 pounds



Nose Landing Gear Door Mechanism Assembly
Figure 1

(NOT APPLICABLE)

DISASSEMBLY

1. **General**
   A. This procedure tells how to disassemble the nose gear door mechanism assembly.
   B. Disassemble this component only sufficiently to isolate the defects, do the necessary repairs, and put the component back to a serviceable condition.
   C. Refer to IPL Figure 1 for item numbers.
2. **Disassembly**
   A. Procedure
      (1) Use standard industry practices to disassemble this component.

CLEANING

1. General

A. This procedure tells how to clean parts of the nose gear door mechanism assembly.

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. Cleaning

A. References

Reference	Title
SOPM 20-30-01	CLEANING AND RELUBRICATING BEARINGS
SOPM 20-30-03	GENERAL CLEANING PROCEDURES

B. Procedure

(1) Clean the bearings (50, 55, 115B, 120) as specified in SOPM 20-30-01.

(2) Use standard industry practices and the instructions in SOPM 20-30-03 to clean all other parts.

CHECK

1. General

A. This procedure tells how to find defects in the specified parts.

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. 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.

(2) Magnetic particle examine (SOPM 20-20-01) these parts:

(a) Universal (215)

(b) Rod end (117)

(3) Penetrant examine (SOPM 20-20-02) these parts:

(a) Bellcrank (175A, 177)

(b) Upper pushrod (65A)

(c) Lower pushrod (130A)

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
162A3102	BELLCRANK ASSEMBLY	2-1, 2-2
162A3108	PUSHROD ASSEMBLY, UPPER	3-1
162A3105	PUSHROD ASSEMBLY, LOWER	4-1
162A3106	RODEND ASSEMBLY	5-1
162A3107	UNIVERSAL ASSEMBLY	6-1

2. Dimensioning Symbols

A. Standard True Position Dimensioning Symbols used in the applicable repair procedures are shown in SOPM 20-00-00.

REFINISH OF OTHER PARTS - REPAIR 1-1

1. General

A. This procedure tells how to refinish parts which are not given in the other repairs.

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

C. Refer to IPL Figure 1 for item numbers.

2. Refinish of other parts

A. 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

B. 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.

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

Table 601: Refinish details

IPL FIG. & ITEM	MATERIAL	FINISH
Rod end (117)	15-5PH CRES, 180-200 ksi	Passivate (F-17.25). Cadmium plate (F-15.26) the threads.
Universal (215)	15-5PH CRES, 180-200 ksi	Passivate (F-17.25).

BELLCRANK ASSEMBLY - REPAIR 2-1

162A3102–1, –3

1. General

A. This procedure tells how to repair the bellcrank assembly (135B, 137).

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

C. Refer to IPL Figure 1 for item numbers.

D. General repair details

(1) Material: Aluminum alloy

2. Bushing Replacement

A. Consumable Materials

NOTE: Equivalent substitutes may be used.

Reference	Description	Specification
A00247	Sealant - Pressure And Environmental - Chromate Type	BMS 5-95

B. References

Reference	Title
SOPM 20-50-03	BEARING AND BUSHING REPLACEMENT
SOPM 20-60-04	MISCELLANEOUS MATERIALS

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

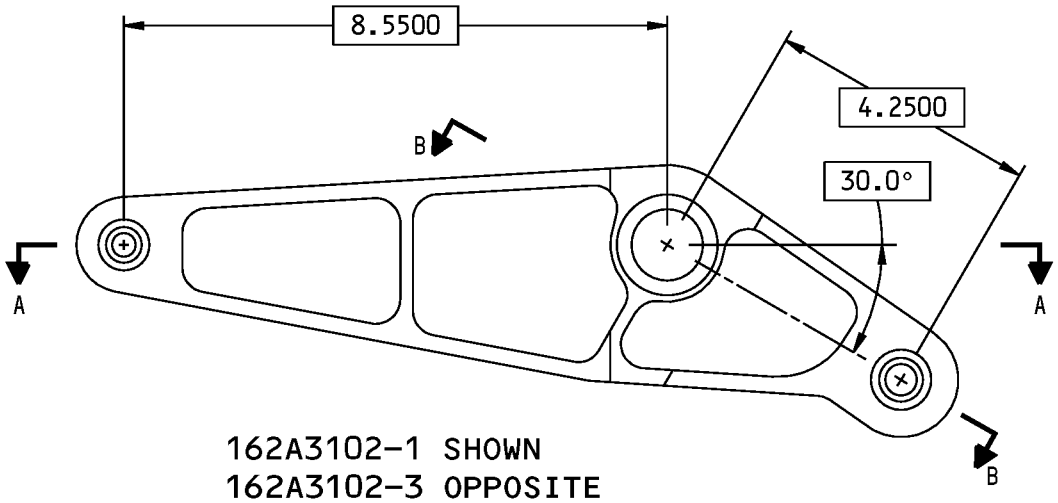
NOTE: For miscellaneous materials, refer to SOPM 20-60-04.

(1) Remove the old bushings.

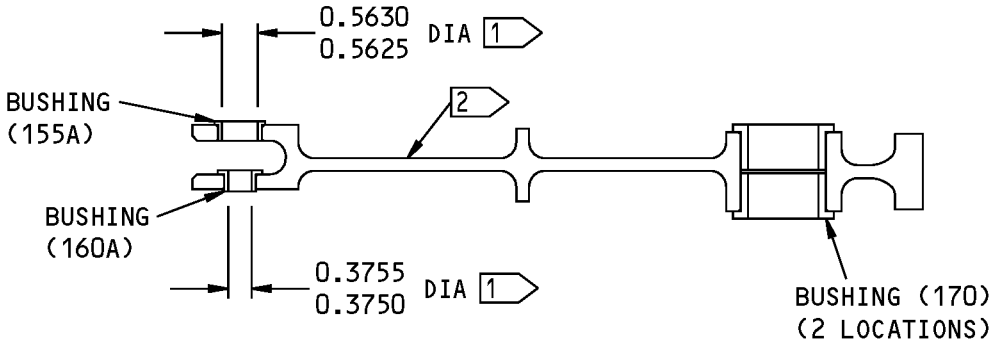
(2) If you find defects on the bellcrank surfaces, refer to REPAIR 2-2 for repair instructions.

(3) Install replacement bushings by the shrink-fit method (SOPM 20-50-03) with sealant, A00247.

(4) If necessary, machine the ID of the installed bushings to the design dimensions and finish shown.

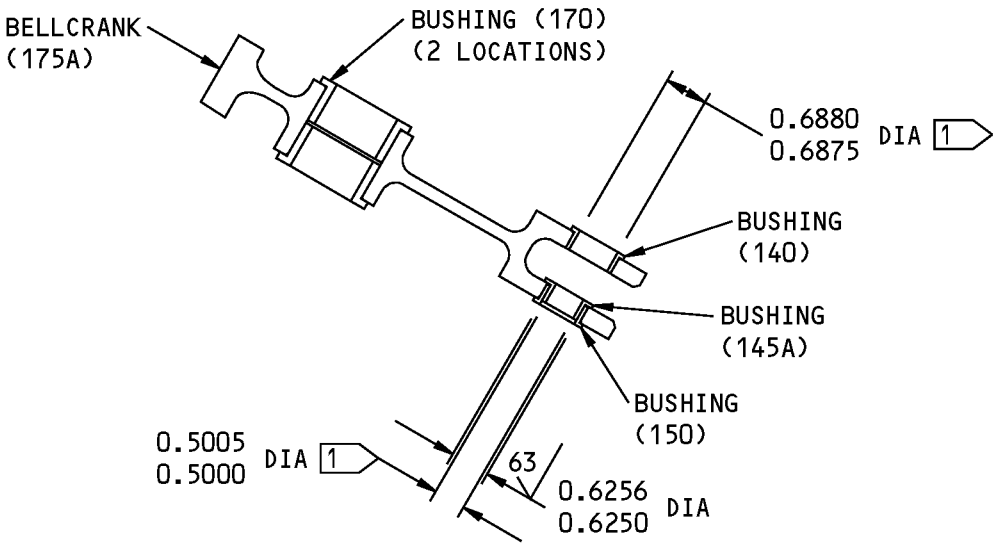


162A3102-1 SHOWN
162A3102-3 OPPOSITE



A-A

162A3102-1,-3 Bellcrank Assembly Repair
Figure 601 (Sheet 1 of 2)



B–B

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

1 INSTALLED DIMENSION. ADJUST TO THIS SIZE IF NECESSARY

2 PART NUMBER

162A3102-1,-3 Bellcrank Assembly Repair
Figure 601 (Sheet 2 of 2)

BELLCRANK - REPAIR 2-2

162A3102–2, –4

1. General

A. This procedure tells how to refinish the bellcrank (175A, 177).

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.

D. General repair details:

(1) Material: Aluminum alloy

2. Bellcrank 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
C00260	Coating - Chemical And Solvent Resistant Finish, Epoxy Resin Enamel	BMS10-11, Type II

B. References

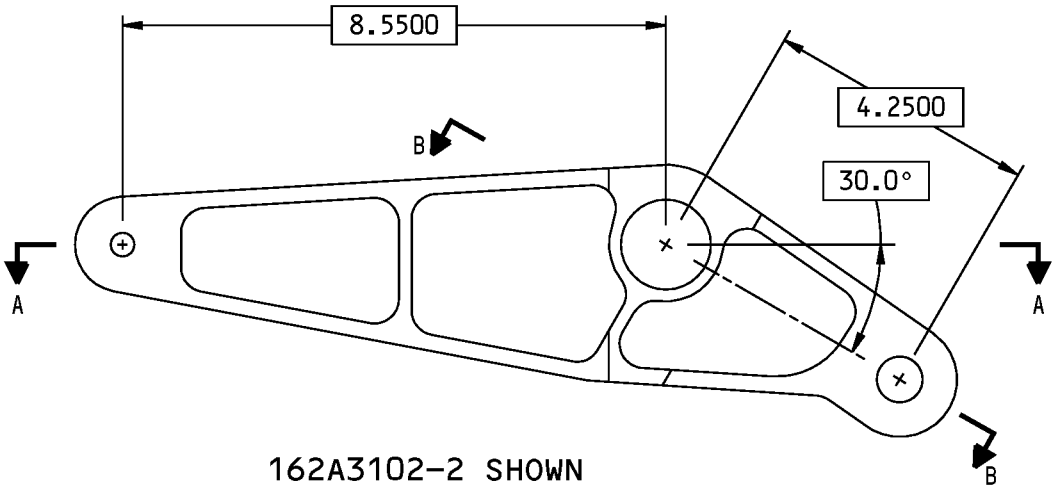
Reference	Title
SOPM 20-30-02	STRIPPING OF PROTECTIVE FINISHES
SOPM 20-41-01	DECODING TABLE FOR BOEING FINISH CODES
SOPM 20-60-02	FINISHING MATERIALS

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

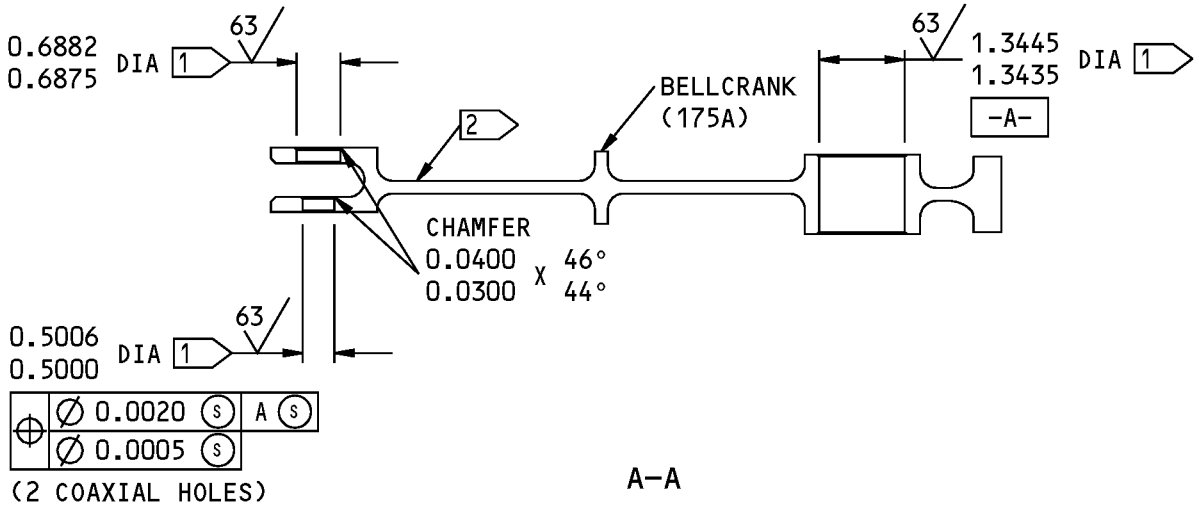
NOTE: For stripping of protective finishes, refer to SOPM 20-30-02. For the decoding table for Boeing finish codes, refer to SOPM 20-41-01. For finishing materials, refer to SOPM 20-60-02.

(1) Boric acid-sulfuric acid anodize or chromic acid anodize (F-17.31).

(2) Apply primer, C00259 (F-20.02) and enamel coating, C00260 (F-21.02), unless shown by flagnote 1.

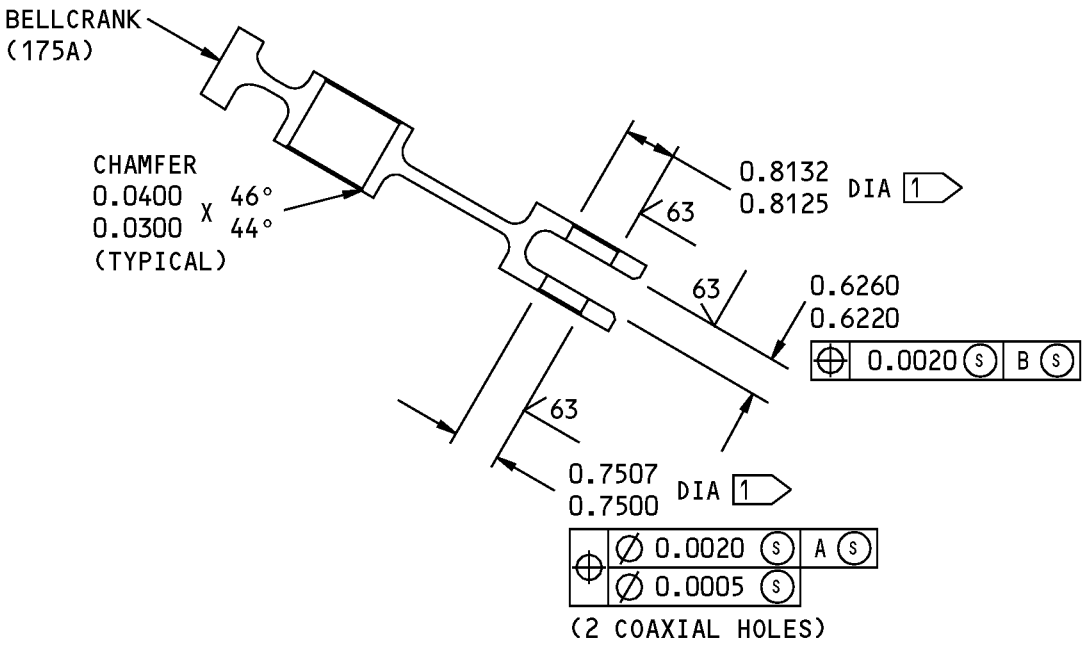


162A3102-2 SHOWN
162A3102-4 OPPOSITE



A-A

162A3102-2,-4 Bellcrank Refinish
Figure 601 (Sheet 1 of 2)



B–B

1 NO PRIMER

2 PART NUMBER

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

162A3102-2,-4 Bellcrank Refinish
Figure 601 (Sheet 2 of 2)

UPPER PUSHROD ASSEMBLY - REPAIR 3-1

162A3108–1, –3

1. General

A. This procedure tells how to repair and refinish the upper pushrod assembly (35A, 35B).

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.

D. General repair details

(1) Material: CRES tube

2. Disassembly

A. General

(1) Disassemble this component only sufficiently to isolate defects, do the necessary repairs, and put the component back into a serviceable condition.

B. Procedure

(1) Use standard industry practices.

3. Assembly

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

(1) Use standard industry practices and these steps.

(2) Apply a thin layer of compound, C00913 to the threads before assembly. Wipe off unwanted compound.

(3) Adjust the length between the rod end bearings to the dimension shown.

(4) Install lockwire, G01912 between nuts (40A, 45A) and locks (60A) by the double-twist procedure (SOPM 20-50-02).

4. Upper Pushrod Refinish

A. References

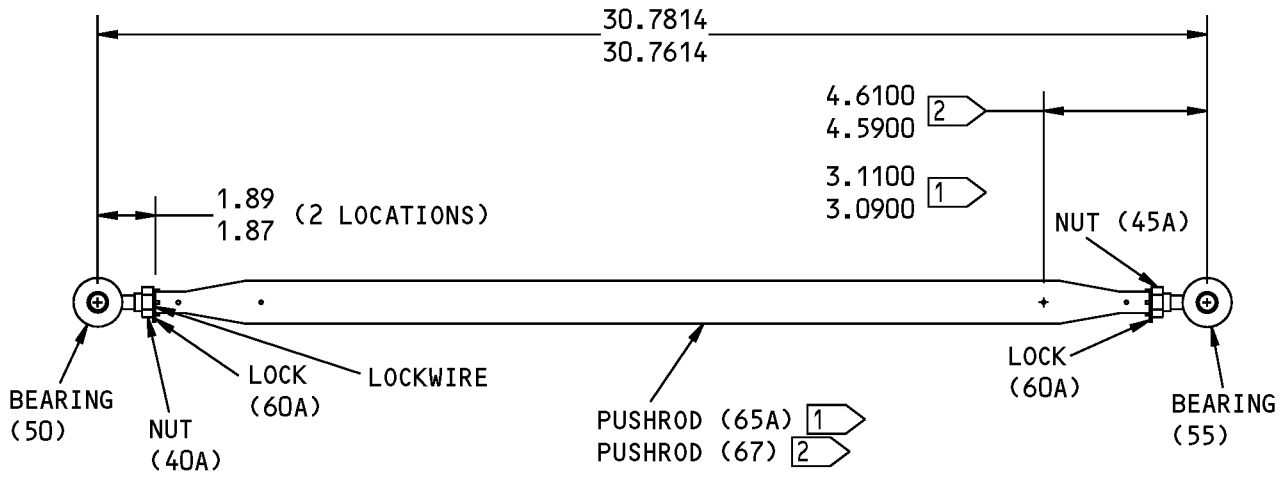
Reference	Title
SOPM 20-30-02	STRIPPING OF PROTECTIVE FINISHES
SOPM 20-41-01	DECODING TABLE FOR BOEING FINISH CODES

B. Procedure (REPAIR 3-1, 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.

(1) Passivate (F-17.25) all over.

(2) Cadmium plate (F-15.36) the threads.



1 162A3108-1

2 162A3108-3

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

162A3108-1,-3 Upper Pushrod Assembly Repair
Figure 601

LOWER PUSHROD ASSEMBLY - REPAIR 4-1

162A3105–1

1. General

A. This procedure tells how to repair and refinish the lower pushrod assembly (100A).

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.

D. General repair details

(1) Material: Aluminum alloy

2. Disassembly

A. General

(1) Disassemble this component only sufficiently to isolate defects, do the necessary repairs, and put the component back into a serviceable condition.

B. Procedure

(1) Use standard industry practices.

3. Assembly

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

(1) Use standard industry practices and these steps.

(2) Apply a thin layer of compound, C00913 onto the threads as shown by flagnote 1.

(3) Adjust the length between the rod end bearings to the dimensions shown.

(4) Install MS20995AB32 lockwire between nuts (105, 110) and rod end device (125A) by the double-twist procedure (SOPM 20-50-02).

4. Lower Pushrod (130A) 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
C00700	Coating - Exterior Protective Enamel, Gray Gloss Enamel	BMS10-60, Type I, BAC 707

B. References

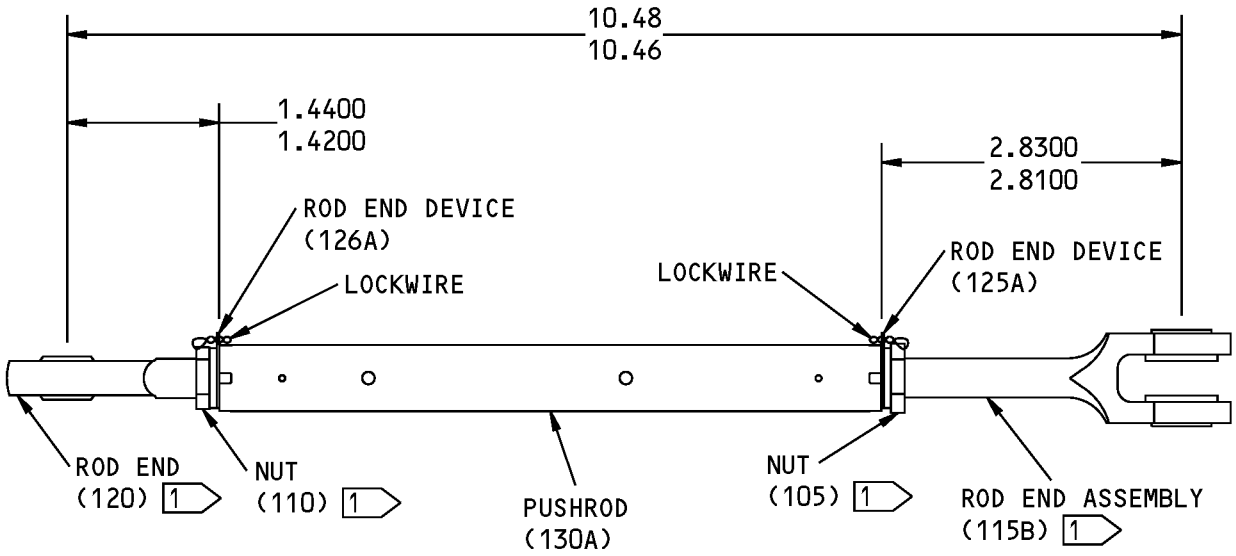
Reference	Title
SOPM 20-30-02	STRIPPING OF PROTECTIVE FINISHES
SOPM 20-41-01	DECODING TABLE FOR BOEING FINISH CODES
SOPM 20-60-02	FINISHING MATERIALS

C. Procedure REPAIR 4-1, 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) Boric acid-sulfuric acid anodize or chromic acid anodize (F-17.31) all over.

(2) Apply primer, C00259 (F-20.02) and enamel coating, C00700 (F-14.9813, which replaces SRF-14.9813), but not on the threads.



1 APPLY A THIN LAYER OF BMS 3-27 COMPOUND ON THE THREADS

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

162A3105-1 Lower Pushrod Assembly Repair
Figure 601

ROD END ASSEMBLY - REPAIR 5-1

162A3106–1

1. General

A. This procedure tells how to repair the rod end assembly (115B).

B. Refer to the Standard Overhaul Practices Manual (SOPM) for the SOPM subjects identified in the 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 20-50-03	BEARING AND BUSHING REPLACEMENT
SOPM 20-60-03	LUBRICANTS

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

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

(1) Remove the old bushings (116) from the rod end.

(2) If you find defects on rod end surfaces, refer to par. 3. below for repair instructions.

(3) Install replacement bushings (116) onto the rod end (117) by the shrink-fit procedure (SOPM 20-50-03), with grease, D00633 or grease, D00015 as the installation finish.

3. Rod End Refinish

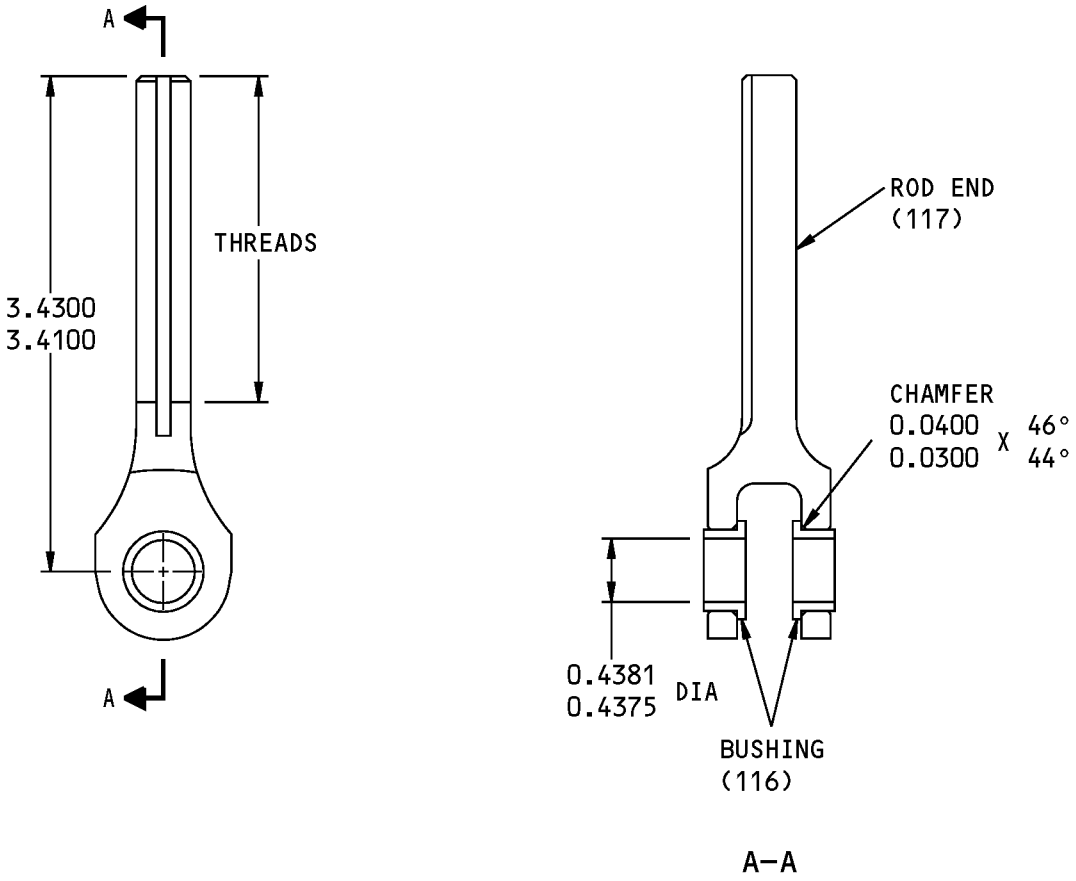
A. References

Reference	Title
SOPM 20-41-01	DECODING TABLE FOR BOEING FINISH CODES

B. Procedure

NOTE: For the decoding tables for Boeing finish codes, refer to SOPM 20-41-01.

(1) Cadmium plate (F-15.36) the threads.



125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

162A3106-1 Rod End Assembly Repair
Figure 601

UNIVERSAL ASSEMBLY - REPAIR 6-1

162A3107–1

1. General

A. This procedure tells how to repair the universal assembly (200).

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

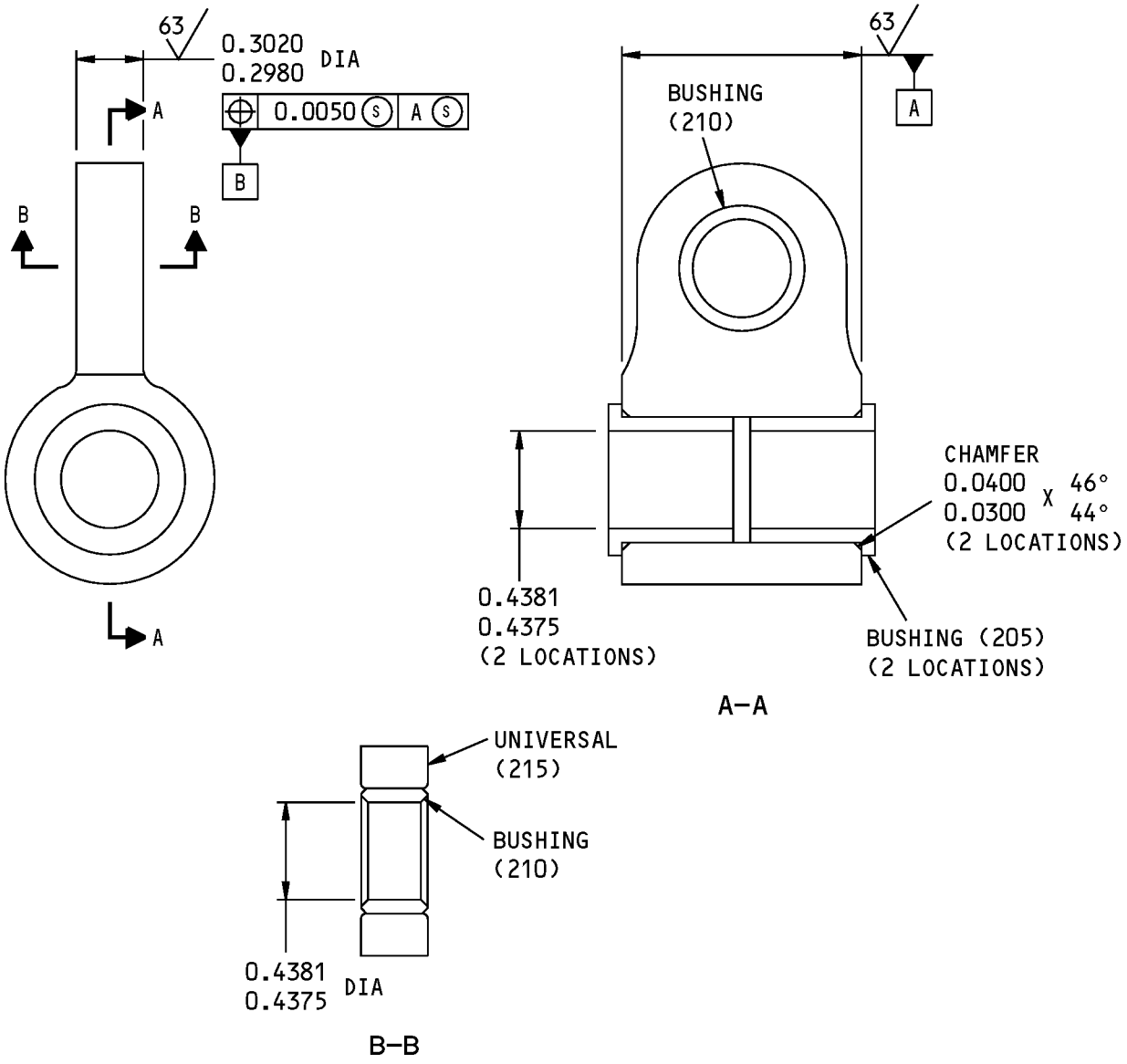
Reference	Title
SOPM 20-50-03	BEARING AND BUSHING REPLACEMENT
SOPM 20-60-03	LUBRICANTS

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

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

(1) Remove the old bushings (205, 210) from the universal (215).

(2) Install replacement bushings by the shrink-fit procedure (SOPM 20-50-03) with grease, D00633 or grease, D00015 as the installation finish.



125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

162A3107-1 Universal Assembly Repair
Figure 601

ASSEMBLY

1. General

A. This procedure tells how to assemble the nose gear door mechanism assembly.

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. Assembly

A. Consumable Materials

NOTE: Equivalent substitutes may be used.

Reference	Description	Specification
C00913	Compound - Corrosion Inhibiting Material, Nondrying Resin Mix	BMS 3-27
D00633	Grease - Aircraft General Purpose	BMS3-33

B. References

Reference	Title
SOPM 20-60-02	FINISHING MATERIALS
SOPM 20-60-03	LUBRICANTS

C. Procedure

NOTE: For finishing materials, refer to SOPM 20-60-02. For lubricants, refer to SOPM 20-60-03.

(1) Lubricate the chrome plated surfaces of the bolts and plain bushings with a thin layer of grease, D00633 before assembly.

(2) Use standard industry practices and these steps to assemble these components:

(a) Upper pushrod (35A, 35B)

(b) Lower pushrod (100A)

(c) Bellcrank (135B, 137)

(d) Universal assembly (200)

WARNING: BMS 3-27 CORROSION INHIBITING COMPOUND CONTAINS SOLVENTS, CHROMATES, AND A SMALL AMOUNT OF BOUND ASBESTOS. CONSULT THE APPLICABLE SAFETY STANDARDS FOR APPROVED HANDLING PROCEDURES.

CAUTION: BMS 3-27 COMPOUND IS USED ONLY IN STATIC JOINTS WHERE GREASE CANNOT BE APPLIED. BMS 3-27 COMPOUND IN DYNAMIC JOINTS WILL NOT LET THEM MOVE FREELY.

(3) Apply a thin layer of compound, C00913 to the threads the washer faces and the cotter pins before assembly. Wipe off unwanted compound.

(4) Attach the upper pushrod (35A, 35B) and the lower pushrod (100A) to the bellcrank (135B, 137) with bolts (5, 70A), washers (10, 15, 75, 80), nuts (20, 85). Install cotter pins (30, 95).

(5) Attach the universal assembly (200) onto the lower pushrod (100A) with bolt (185), washer (190), nut (195). Install cotter pin (180).

BOEING®

COMPONENT MAINTENANCE MANUAL

FITS AND CLEARANCES

(NOT APPLICABLE)

(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

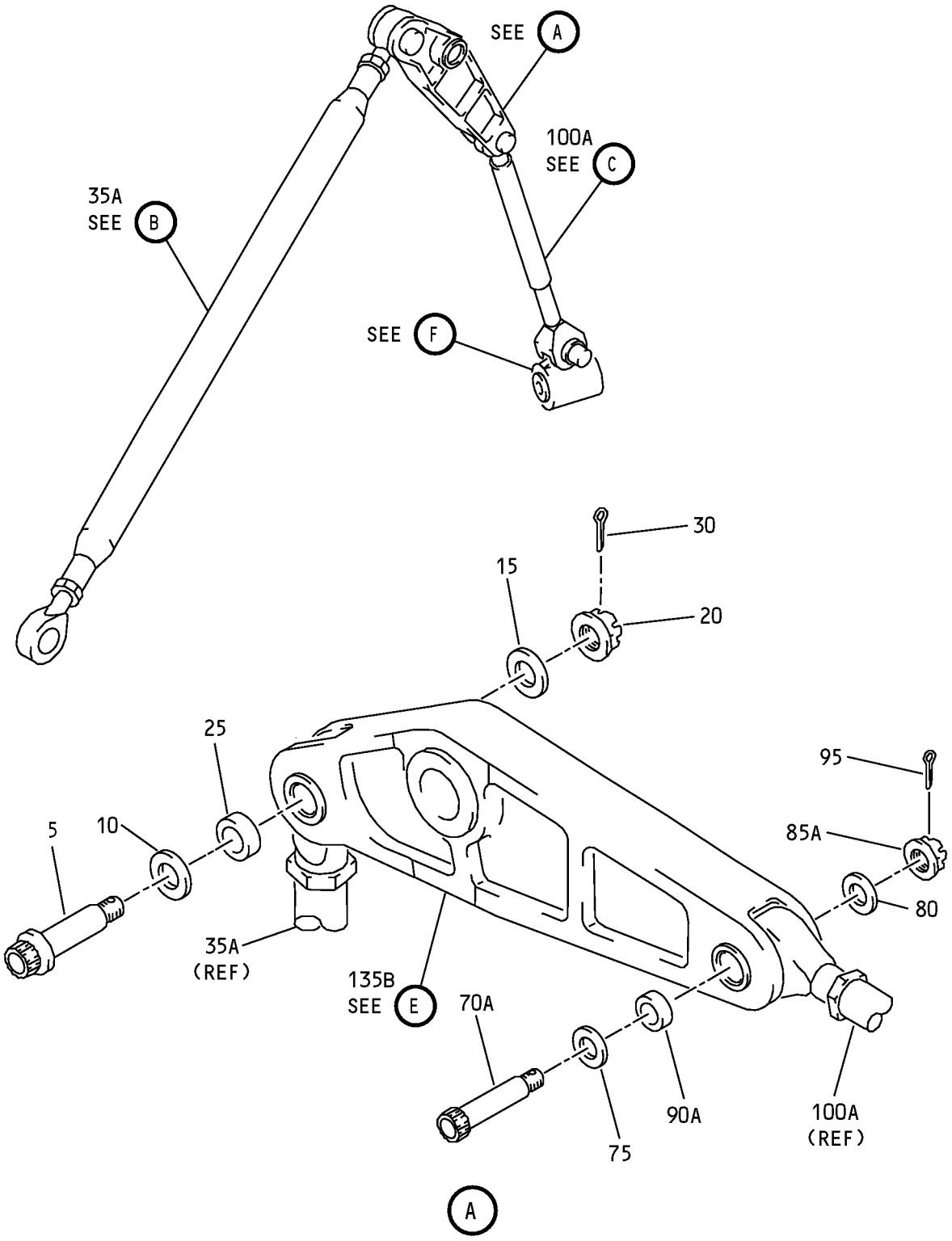
Code	Name
50632	KAMATICS CORP SUB OF KAMAN CORP 1335 BLUE HILLS ROAD BLOOMFIELD, CONNECTICUT 06002-1304
56644	AURORA BEARING CO 970 SOUTH LAKE STREET AURORA, ILLINOIS 60506-5929

NUMERICAL INDEX

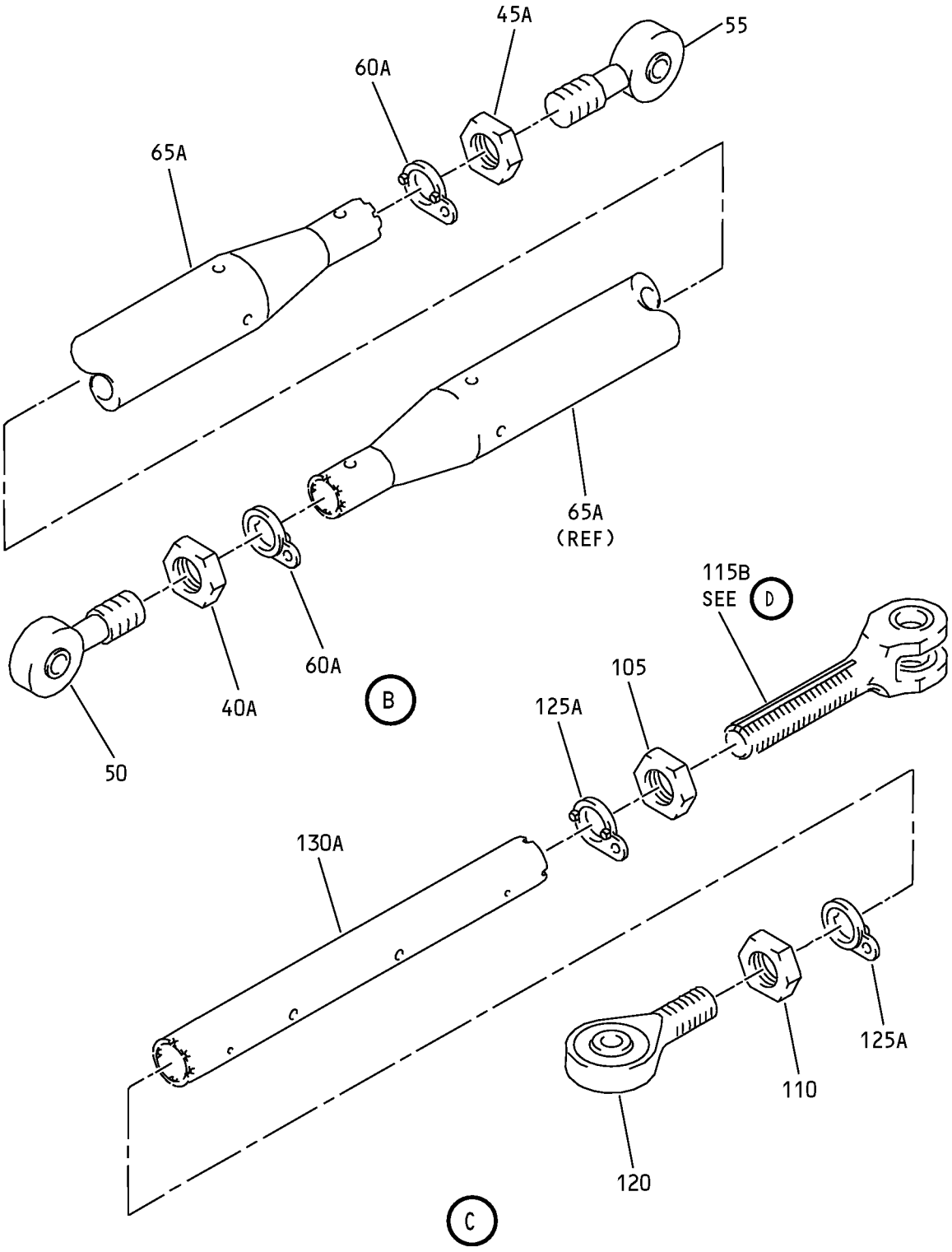
PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
162A3100-2		1	1B	RF
162A3100-3		1	3	RF
162A3100-4		1	1C	RF
162A3100-5		1	3A	RF
162A3102-1		1	135B	1
162A3102-2		1	175A	1
162A3102-3		1	137	1
162A3102-4		1	177A	1
162A3105-1		1	100A	1
162A3105-2		1	130A	1
162A3106-1		1	115B	1
162A3106-2		1	17	1
		1	117	1
162A3107-1		1	200	1
162A3107-2		1	215	1
162A3108-1		1	35A	1
162A3108-2		1	65A	1
162A3108-3		1	35B	1
162A3108-4		1	67	1
162A3109-1		1	185	1
162A3110-1		1	190	1
ATBK6T		1	120A	1
ATBK8T		1	55A	1
ATMK8T		1	50A	1
BACB28AK06-040		1	90A	1
BACB28AK08-045		1	25	1
BACB28AP06P027		1	160A	1
BACB28AP08P028		1	145A	1
BACB28AT09B024C		1	155A	1
BACB28AT10D027C		1	150	1
BACB28AT11B028C		1	140	1
BACB28AZ07A023B		1	16	2
		1	116	2
BACB28AZ07A050B		1	205	2

PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
BACB28BC07A030B		1	210	1
BACB30LJ6CD19		1	70C	1
BACB30LJ6D19		1	70B	1
BACB30LJ8CD23		1	5C	1
		1	5E	1
BACB30LJ8D23		1	5D	1
		1	5F	1
BACB30US8C23D		1	5	1
BACB30US8K23D		1	5A	1
BACB30UU6C19D		1	70A	1
BACB30UU8C23D		1	5B	1
BACN10JD8ASU		1	20	1
BACN11N105CS		1	195	1
BACN11N106CS		1	85A	1
BACN11N108CS		1	20A	1
		1	20C	1
BACP18BC02A06P		1	180A	1
BACP18BC03A10P		1	30	1
		1	95	1
BACW10BP6ACU		1	75	1
BACW10BP6APU		1	80	1
BACW10BP8ACU		1	10	1
BACW10BP8APU		1	15	1
KJB423918B1		1	170	2
M81935-4-8K		1	50	1
M81935-4-8KL		1	55	1
M819354-6KL		1	120	1
MS14145L5		1	195A	1
MS14145L6		1	85B	1
MS14145L8		1	20B	1
		1	20D	1
MS14198K6C		1	125D	2
NAS1193E6CP		1	125A	2
NAS1193E8CP		1	60A	2
NAS1193K6CP		1	125B	2

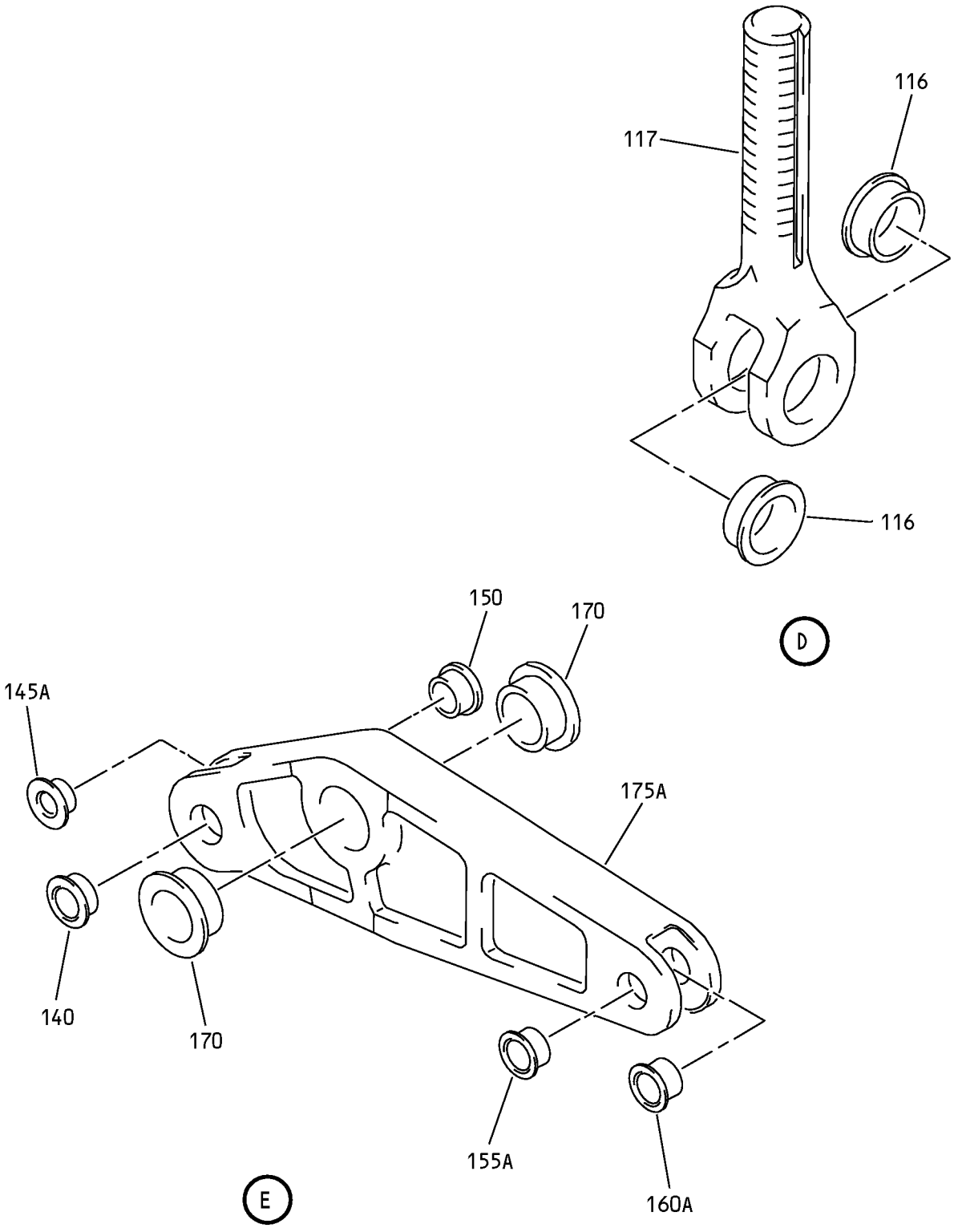
PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
NAS1193K8CP		1	60B	2
NAS1423-6		1	105A	1
NAS1423-6LH		1	110A	1
NAS1423-8		1	40A	1
NAS1423-8LH		1	45A	1
NAS509-6		1	105	1
NAS509L6		1	110	1



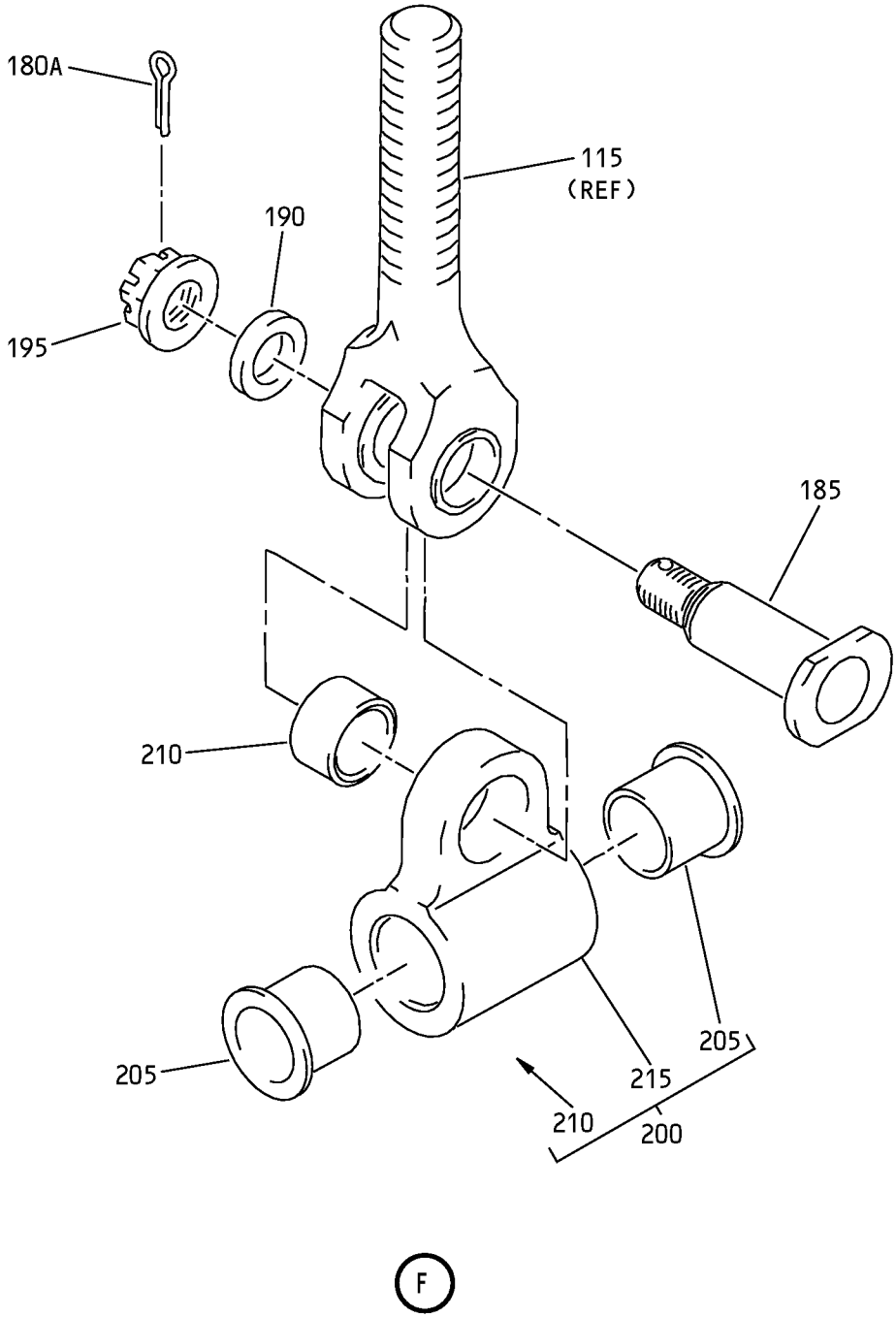
Nose Landing Gear Door Mechanism Assembly
IPL Figure 1 (Sheet 1 of 4)



Nose Landing Gear Door Mechanism Assembly
IPL Figure 1 (Sheet 2 of 4)



Nose Landing Gear Door Mechanism Assembly
IPL Figure 1 (Sheet 3 of 4)



Nose Landing Gear Door Mechanism Assembly
IPL Figure 1 (Sheet 4 of 4)

FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USAGE CODE	UNITS PER ASSY
1–					
–1A	162A3100-1		DELETED		
–1B	162A3100-2		DOOR MECHANISM ASSY-NLG	A	RF
–1C	162A3100-4		DOOR MECHANISM ASSY-NLG	C	RF
–3	162A3100-3		DOOR MECHANISM ASSY-NLG	B	RF
–3A	162A3100-5		DOOR MECHANISM ASSY-NLG	D	RF
5	BACB30US8C23D		. BOLT (OPT ITEM 5A, 5B, 5C, 5D)	A, B	1
–5A	BACB30US8K23D		. BOLT (OPT ITEM 5, 5B, 5C, 5D)	A, B	1
–5B	BACB30UU8C23D		. BOLT (OPT ITEM 5, 5A, 5C, 5D)	A, B	1
–5C	BACB30LJ8CD23		. BOLT (OPT ITEM 5, 5A, 5B, 5D)	A, B	1
–5D	BACB30LJ8D23		. BOLT (OPT ITEM 5, 5A, 5B, 5C)	A, B	1
–5E	BACB30LJ8CD23		. BOLT (OPT ITEM 5F)	C, D	1
–5F	BACB30LJ8D23		. BOLT (OPT ITEM 5E)	C, D	1
10	BACW10BP8ACU		. WASHER		1
15	BACW10BP8APU		. WASHER		1
16	BACB28AZ07A023B		. . BUSHING		2
17	162A3106-2		. . ROD END		1
20	BACN10JD8ASU		. NUT (OPT ITEM 20A, 20B)	A, B	1
–20A	BACN11N108CS		. NUT (OPT ITEM 20, 20B)	A, B	1
–20B	MS14145L8		. NUT (OPT ITEM 20, 20A)	A, B	1
–20C	BACN11N108CS		. NUT (OPT ITEM 20D)	C, D	1
–20D	MS14145L8		. NUT (OPT ITEM 20C)	C, D	1
25	BACB28AK08-045		. BUSHING		1
30	BACP18BC03A10P		. PIN-COTTER		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–					
35	162A3103-1		DELETED		
35A	162A3108-1		. ROD ASSY-UPR (OPT ITEM 35B)		1
–35B	162A3108-3		. ROD ASSY-UPR (OPT ITEM 35A)		1
40	NAS509-8		DELETED		
40A	NAS1423-8		. . NUT		1
45	NAS509L8		DELETED		
45A	NAS1423-8LH		. . NUT		1
50	M81935-4-8K		. . BEARING (OPT ITEM 50A)		1
–50A	ATMK8T		. . BEARING (V56644) (OPT ITEM 50)		1
55	M81935-4-8KL		. . BEARING (OPT ITEM 55A)		1
–55A	ATBK8T		. . BEARING (V56644) (OPT ITEM 55)		1
60	MS14198K8C		DELETED		
60A	NAS1193E8CP		. . LOCK (OPT ITEM 60B)		2
–60B	NAS1193K8CP		. . LOCK (OPT ITEM 60A)		2
65	162A3103-2		DELETED		
65A	162A3108-2		. . PUSHROD (USED ON ITEM 35)		1
–67	162A3108-4		. . PUSHROD (USED ON ITEM 35A)		1
70	BACB30US6C21D		DELETED		
70A	BACB30UU6C19D		. BOLT (OPT ITEM 70B, 70C)		1
–70B	BACB30LJ6D19		. BOLT (OPT ITEM 70A, 70C)		1
–70C	BACB30LJ6CD19		. BOLT (OPT ITEM 70A, 70B)		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–					
75	BACW10BP6ACU		. WASHER		1
80	BACW10BP6APU		. WASHER		1
85	BACN10JD6ASU		DELETED		
85A	BACN11N106CS		. NUT (OPT ITEM 85B)		1
–85B	MS14145L6		. NUT (OPT ITEM 85A)		1
90	BACB28AK06-044		DELETED		
90A	BACB28AK06-040		. BUSHING		1
95	BACP18BC03A10P		. PIN-COTTER		1
100	162A3104-1		DELETED		
100A	162A3105-1		. ROD ASSY-LWR		1
105	NAS509-6		. . NUT (OPT ITEM 105A)		1
–105A	NAS1423-6		. . NUT (OPT ITEM 105)		1
110	NAS509L6		. . NUT (OPT ITEM 110A)		1
–110A	NAS1423-6LH		. . NUT (OPT ITEM 110)		1
115	ARNM5-102		DELETED		
115A	S012T235-14		DELETED		
115B	162A3106-1		. . ROD END		1
116	BACB28AZ07A023B		. . . BUSHING		2
117	162A3106-2		. . . ROD END		1
120	M819354-6KL		. . BEARING (OPT ITEM 120A)		1
–120A	ATBK6T		. . BEARING (V56644) (OPT ITEM 120)		1
125	MS14198K6C		DELETED		
125A	NAS1193E6CP		. . DEVICE-ROD END (OPT ITEM 125B, 125D)		2
–125B	NAS1193K6CP		. . LOCKING DEVICE-ROD END (OPT ITEM 125A, 125D)		2

–Item not Illustrated

FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USAGE CODE	UNITS PER ASSY
1–					
–125C	NAS14198K6C		DELETED		
–125D	MS14198K6C		. . LOCK-END ROD (OPT ITEM 125A, 125B)		2
130	162A3104-2		DELETED		
130A	162A3105-2		. . PUSHROD		1
135	162A3103-1		DELETED		
135A	162A3101-1		DELETED		
135B	162A3102-1		. BELLCRANK ASSY-L	A, C	1
–137	162A3102-3		. BELLCRANK ASSY-R	B, D	1
140	BACB28AT11B028C		. . BUSHING		1
145	BACB28P08P028		DELETED		
145A	BACB28AP08P028		. . BUSHING		1
150	BACB28AT10D027C		. . BUSHING		1
155	BACB28AT09B028C		DELETED		
155A	BACB28AT09B024C		. . BUSHING		1
160	BACB28AP06P028		DELETED		
160A	BACB28AP06P027		. . BUSHING		1
165	BACB28AT08D027C		DELETED		
170	KJB423918B1		. . BUSHING (V50632)		2
175	162A3101-2		DELETED		
175A	162A3102-2		. . BELLCRANK (USED ON ITEM 135B)		1
–177	162A3102-2		DELETED		
–177A	162A3102-4		. . BELLCRANK (USED ON ITEM 137)		1
–180	BACP10BC02A06P		DELETED		
180A	BACP18BC02A06P		. PIN-COTTER		1
185	162A3109-1		. BOLT		1
190	162A3110-1		. WASHER		1
195	BACN11N105CS		. NUT (OPT ITEM 195A)		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–					
–195A	MS14145L5		. NUT (OPT ITEM 195)		1
200	162A3107-1		. UNIVERSAL ASSY		1
205	BACB28AZ07A050B		. . BUSHING		2
210	BACB28BC07A030B		. . BUSHING		1
215	162A3107-2		. . UNIVERSAL		1

–Item not Illustrated