COMPONENT MAINTENANCE MANUAL WITH ILLUSTRATED PARTS LIST

LATERAL SYSTEM AILERON POWER CONTROL ASSEMBLY

PART NUMBER 251A1661–1, –10, –11, –12, –2, –4, –5, –6, –7, –8, –9

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COMPONENT MAINTENANCE MANUAL

Revision No. 10
Jul 01/2009

To: All holders of LATERAL SYSTEM AILERON POWER CONTROL ASSEMBLY 27-64-02.

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.

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COMPONENT MAINTENANCE MANUAL

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

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

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TEMPORARY REVISION AND SERVICE BULLETIN RECORD

BOEING SERVICE BULLETIN	BOEING TEMPORARY REVISION	OTHER DIRECTIVE	DATE OF INCORPORATION INTO MANUAL
		PRR 95000E	MAR 01/02
		PRR 95000T	MAR 01/02
		PRR 38275-65	MAR 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	
Number	Date	Date	Initials

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Temporary Revision		Inserted		Removed	
Number	Date	Date	Initials	Date	Initials

Temporary Revision		Inserted		Removed	
Date	Initials	Number	Date	Date	Initials

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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.

LATERAL SYSTEM AILERON POWER CONTROL ASSEMBLY - DESCRIPTION AND OPERATION

1. Description

A. The lateral system aileron power control assembly has two adjacent but separate units of a drum, a shaft, a reaction link, a lever and supports.

2. Operation

A. The lateral system aileron power control assembly operates when the "A" or "B" hydraulic system applies a force to the reaction link of one of the units. The center shaft rotates and causes the drums and levers to move the transducer assembly to the correct position.

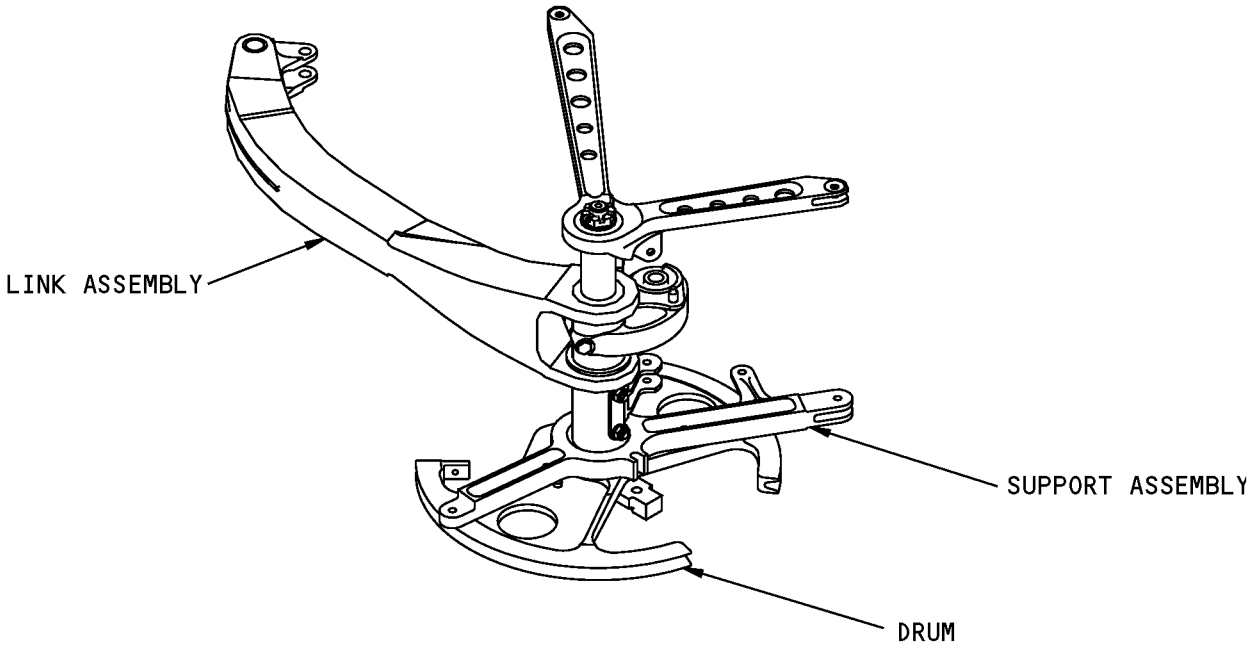
3. Leading Particulars (Approximate - Each Unit)

A. Length – 24 inches

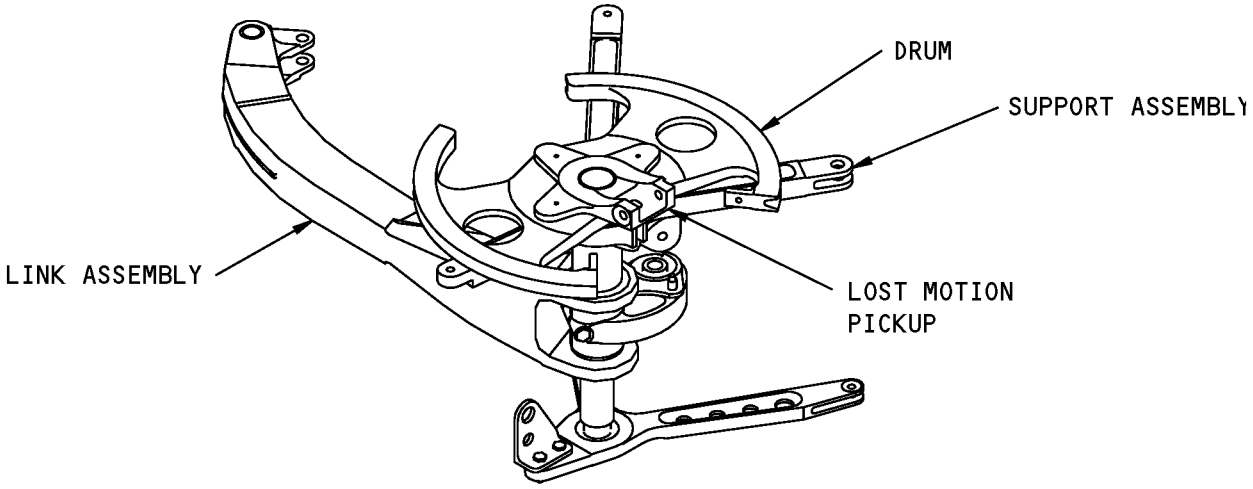
B. Width – 12 inches

C. Height – 11 inches

D. Weight – 11 pounds



UPPER UNIT



LOWER UNIT

Lateral System Aileron Power Control
Figure 1

(NOT APPLICABLE)

DISASSEMBLY

1. **General**

   A. This procedure has the data necessary to disassemble the lateral system aileron power control assembly (1A).

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

   D. Refer to IPL Figure 1 and IPL Figure 2 for item numbers.

2. **Disassembly**

   A. Procedure

      (1) Use standard industry procedures and the steps shown below to disassemble this component.

      (2) Remove the support assembly (20).

         (a) Remove the cotter pin (5), the nut (15) and the washer (10).

         (b) Remove the support assembly (20).

         (c) Remove the spacer (IPL Figure 1, 60; IPL Figure 2, 60).

      (3) Remove the link assembly (120) and the lever assembly (80, 81).

         (a) Remove the nut (75), the washer (70) and the bolt (65).

         (b) Remove the link assembly (120), the lever assembly (80, 81), and the spacers (115, 170, 175).

      (4) Remove the lever (IPL Figure 2, 260).

         (a) Remove the nuts (255), washers (250) and bolts (245).

         (b) Remove the lever (IPL Figure 2, 260).

      (5) Remove the support frame assembly (180).

         NOTE: Do not remove the drum (210) from the quadrant assembly (200) unless necessary for repair or replacement.

CLEANING

1. General

A. This procedure has the data necessary to clean the lateral system aileron power control assembly (1, 1A).

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

C. Refer to IPL Figure 1 and IPL Figure 2 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, 100, 101, 160, 165, 185) as specified in SOPM 20-30-01 .

(2) Use standard industry procedures and refer to SOPM 20-30-03 to clean all the other parts.

CHECK

1. General

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

B. Refer to FITS AND CLEARANCES for the 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 and IPL Figure 2 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 procedures to do a visual check of all the parts for defects. Do the penetrant or magnetic particle check if the visual check shows possible damage or if you suspect possible damage on the parts listed below:

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

(a) Plate (95, 96)

(b) Spacer (115)

(c) Retainer (190)

(d) Shaft Assembly (225)

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

(a) Support (55, 195)

(b) Lever (110, 114, 260)

(c) Insert (145)

(d) Link (150, 155)

(e) Drum (210)

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
65-49938	SUPPORT REPAIR	2-1, 2-2
65-50548 251A1669	LEVER	3-1
65-51250	LINK ASSEMBLY	4-1
69-40396	SPACER	5-1
69-40707	SPACER	6-1
69-41223	SPACER	7-1
69-41224	SPACER	8-1
251A1614	PLATE	9-1
251A1664	SUPPORT	10-1, 10-2
251A1667	DRUM	11-1
251A1668	SHAFT ASSEMBLY	12-1

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 THIS FEATURE 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

EXAMPLES

— | 0.002	STRAIGHT WITHIN 0.002
⊥ | 0.002 | B	PERPENDICULAR TO DATUM B WITHIN 0.002
// | 0.002 | A	PARALLEL TO DATUM 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 A
⌓ | 0.020 | A	SURFACES MUST LIE WITHIN PARALLEL BOUNDARIES 0.020 INCH APART AND EQUALLY DISPOSED ABOUT TRUE PROFILE
◎ | Ø 0.0005 | C	CONCENTRIC TO DATUM C WITHIN 0.0005 DIAMETER
⌯ | 0.010 | A	SYMMETRICAL WITH DATUM A WITHIN 0.010
∠ | 0.005 | A	ANGULAR TOLERANCE 0.005 WITH DATUM 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 DATUM A, AND EXTENDING 0.510 INCH ABOVE DATUM A, MAXIMUM MATERIAL CONDITION
[2.000] OR 2.000 BSC	THEORETICALLY EXACT DIMENSION IS 2.000

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 specified repairs.

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

C. Refer to IPL Figure 1 and IPL Figure 2 for 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

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

NOTE: For stripping of protective finishes, refer to SOPM 20-30-02. For 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 listed in REPAIR 1-1, Table 601 are for repair of the initial finish.

Table 601: Refinish Details

IPL FIG. & ITEM	MATERIAL	FINISH
IPL Fig. 1		
Support (40)	Aluminum alloy	Chemical treat and seal in dilute chromate solution (F-18.05). Apply primer, C00259 (F-18.05).
IPL Fig. 1, 2		
Retainer (190)	Steel alloy	cadmium plating (F-1.32).
Link (150,155)	Aluminum alloy	Chemical treat and seal in dilute chromate solution (F-18.05). Apply primer, C00259 (F-18.05).

SUPPORT ASSEMBLY - REPAIR 2-1

65-49938–21, –24

1. General

A. This procedure has the data necessary to repair and refinish the support assembly (20).

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

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

D. Refer to IPL Figure 1 and IPL Figure 2 for item numbers.

2. Bearing Replacement

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

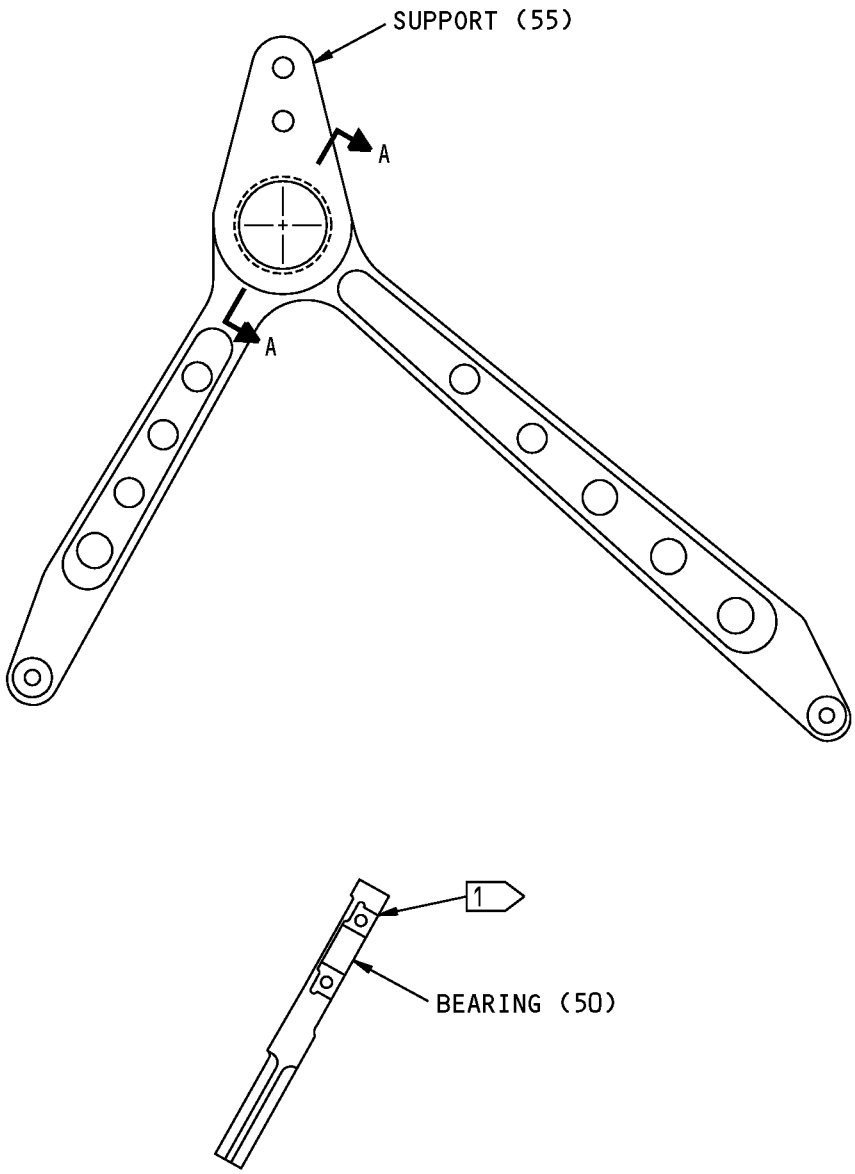
Reference	Title
SOPM 20-50-03	BEARING AND BUSHING REPLACEMENT
SOPM 20-60-02	FINISHING MATERIALS

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

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

(1) Remove the bearing (50) from the support (55).

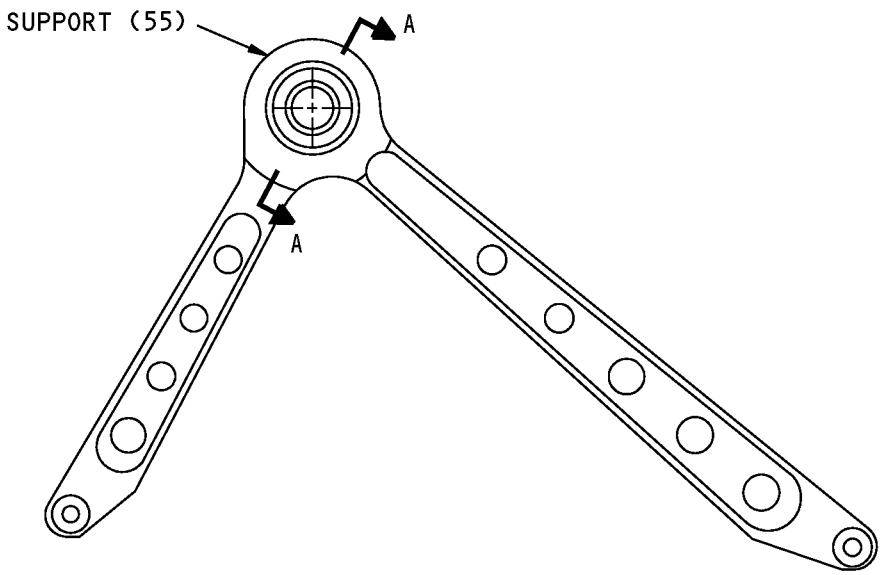
(2) Install the bearing (50) in the support (55) with wet primer, C00259 on the surfaces that touch (SOPM 20-50-03).

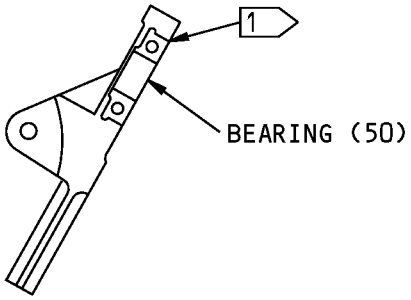


1 ROLLER SWAGE THIS BEARING (SOPM 20-50-03).

ITEM NUMBERS REFER TO IPL FIG. 1

65-49938-21 Support Assembly Repair
Figure 601





A–A

1 ROLLER SWAGE THIS BEARING (SOPM 20–50–03)

ITEM NUMBERS REFER TO IPL FIG. 2

65-49938-24 Support Assembly Repair
Figure 602

SUPPORT - REPAIR 2-2

65-49938–22, –23

1. General

A. This procedure has the data necessary to repair and refinish the support (55).

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

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

D. Refer to IPL Figure 1 and IPL Figure 2 and for item numbers.

E. For general repair details:

(1) Materials: Aluminum alloy

(2) Shot peen: All repaired surfaces, except in holes

(a) Shot size 0.023-0.028

(b) Intensity 0.006A2

(c) Coverage 2.0

(d) Overspray is permitted

2. Support Repair

A. References

Reference	Title
SOPM 20-10-03	SHOT PEENING
SOPM 20-20-02	PENETRANT METHODS OF INSPECTION
SOPM 20-30-02	STRIPPING OF PROTECTIVE FINISHES

B. Procedure (REPAIR 2-2, Figure 601 and REPAIR 2-2, Figure 602)

NOTE: For stripping of protective finishes, refer to SOPM 20-30-02.

(1) Repair the support (55) as follows:

(a) Machine within the dimensions shown to remove any defects.

(b) Obey the notes in REPAIR 2-2, Figure 601 and REPAIR 2-2, Figure 602.

(c) Do a penetrant check (SOPM 20-20-02) .

(d) Shot peen the repaired areas (SOPM 20-10-03).

3. Support Refinish

A. Consumable Materials

NOTE: Equivalent substitutes may be used.

Reference	Description	Specification
C00033	Coating - Exterior Protective Enamel, Flexibility Use	BMS10-60, Type II
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 and REPAIR 2-2, Figure 602)

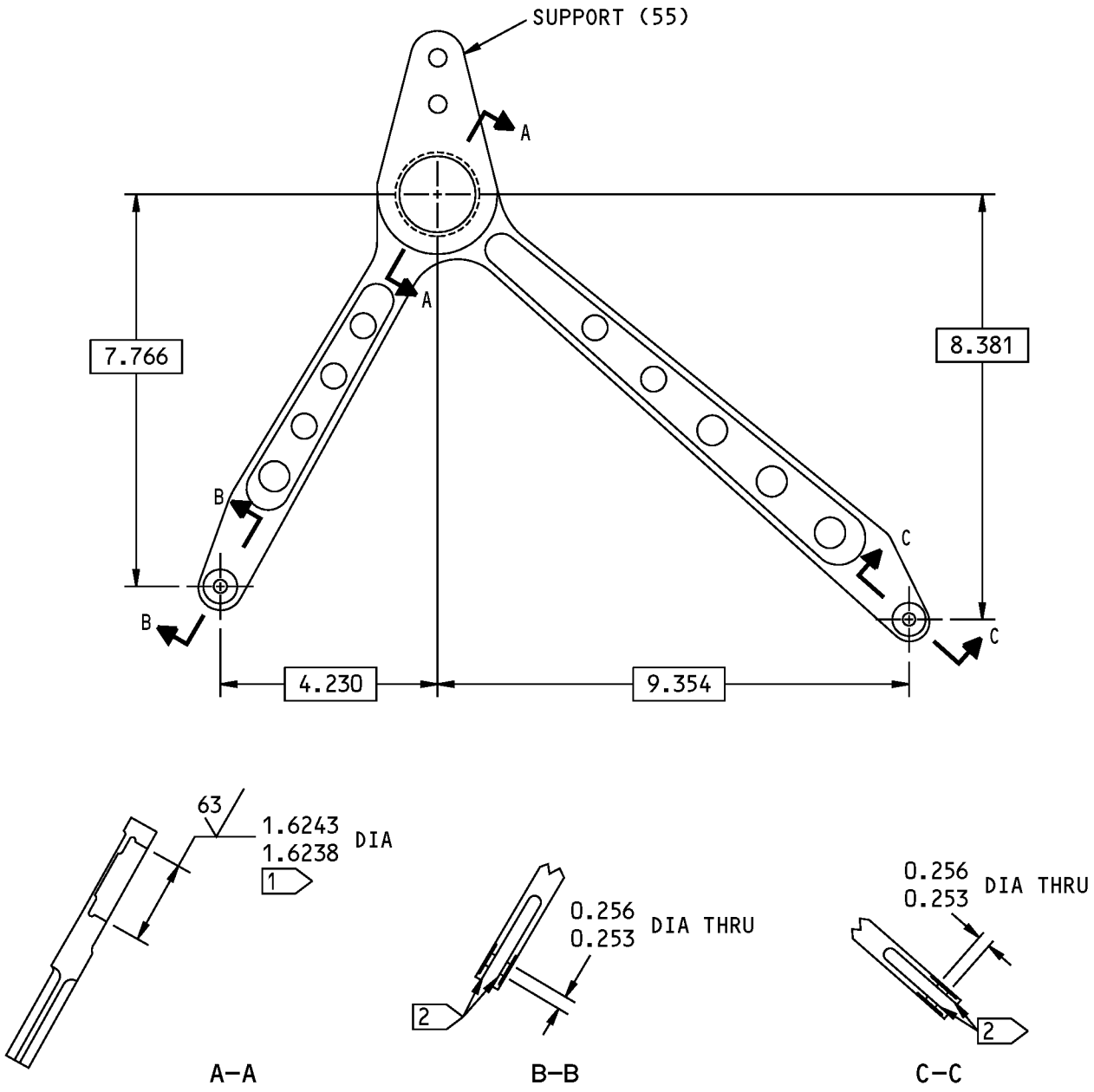
NOTE: For stripping of protective finishes, refer to SOPM 20-30-02. For decoding table for Boeing finish codes, refer to SOPM 20-41-01. For finishing materials, refer to SOPM 20-60-02.

(1) Refinish the support (55) as follows:

(a) Chromic acid anodize and seal in dilute chromate solution (F-18.13) all over.

(b) Apply primer, C00259 (F-18.13) all over other than those areas identified in REPAIR 2-2, Figure 601 and REPAIR 2-2, Figure 602).

(c) Apply enamel coating, C00033 (F-14.9812) to the surfaces other than those identified in REPAIR 2-2, Figure 601 and REPAIR 2-2, Figure 602.



1 NO PRIMER OR ENAMEL IN THE HOLE

2 NO ENAMEL ON THE INSIDE SURFACE

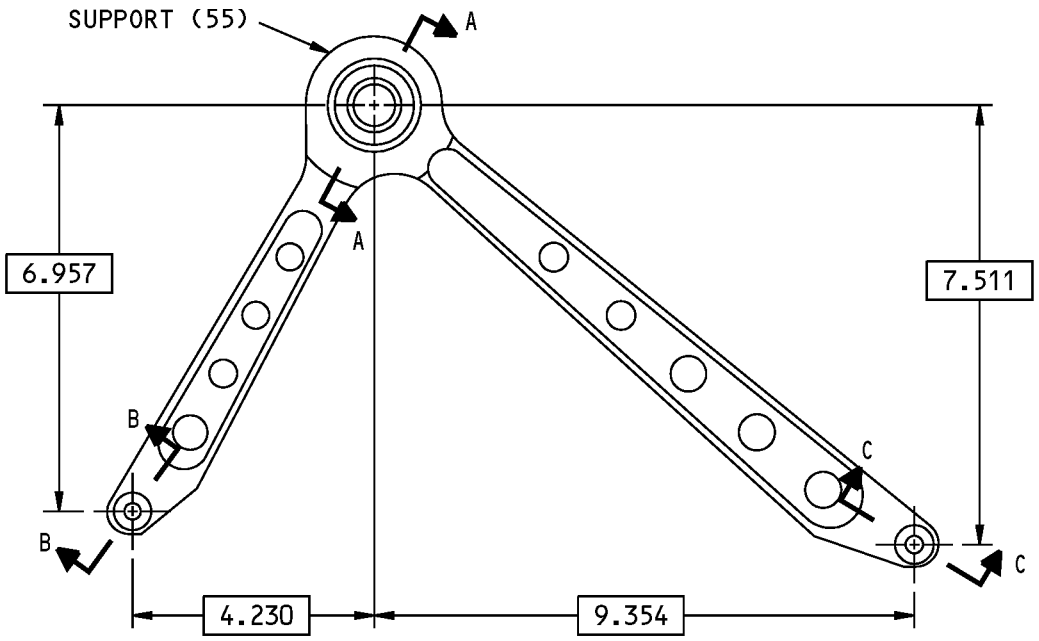
125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

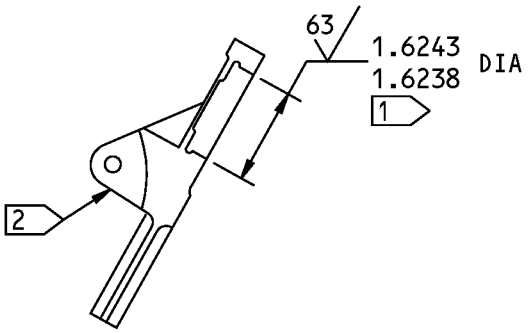
BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 1

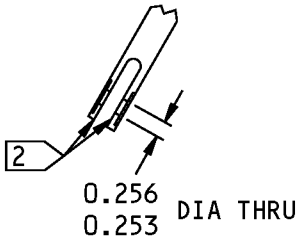
ALL DIMENSIONS ARE IN INCHES

65-49938-23 Support Repair
Figure 601

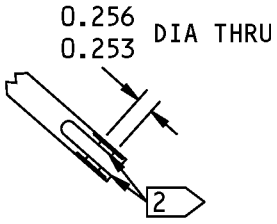




A–A



B–B



C–C

1 NO PRIMER OR ENAMEL IN THE HOLE

2 NO ENAMEL ON THE INSIDE SURFACE

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

65-49938-22 Support Repair
Figure 602

LEVER - REPAIR 3-1

65-50548 251A1669–2, –5

1. General

A. This procedure has the data necessary to repair and refinish the lever (110, 114).

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

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

D. Refer to IPL Figure 1 and IPL Figure 2 for item numbers.

E. For general repair details:

(1) Materials: Aluminum alloy

(2) Shot peen: All repaired surfaces, except in holes

(a) Shot size 0.023-0.048

(b) Intensity 0.006A2

(c) Coverage 2.0

(d) Overspray is permitted

2. Lever Repair

A. References

Reference	Title
SOPM 20-10-03	SHOT PEENING
SOPM 20-20-02	PENETRANT METHODS OF INSPECTION
SOPM 20-30-02	STRIPPING OF PROTECTIVE FINISHES

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

NOTE: For stripping of protective finishes, refer to SOPM 20-30-02.

(1) Repair the lever (110, 114) as follows:

(a) Machine within the dimensions shown to remove any defects.

(b) Obey the notes in REPAIR 3-1, Figure 601 .

(c) Do a penetrant check (SOPM 20-20-02) .

(d) Shot peen the repaired area (SOPM 20-10-03) .

3. Lever 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 3-1, Figure 601)

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

(1) Refinish the lever (110) as follows:

(a) Chemical treat (SRF2.30) all over or chromic acid anodize (SRF2.30).

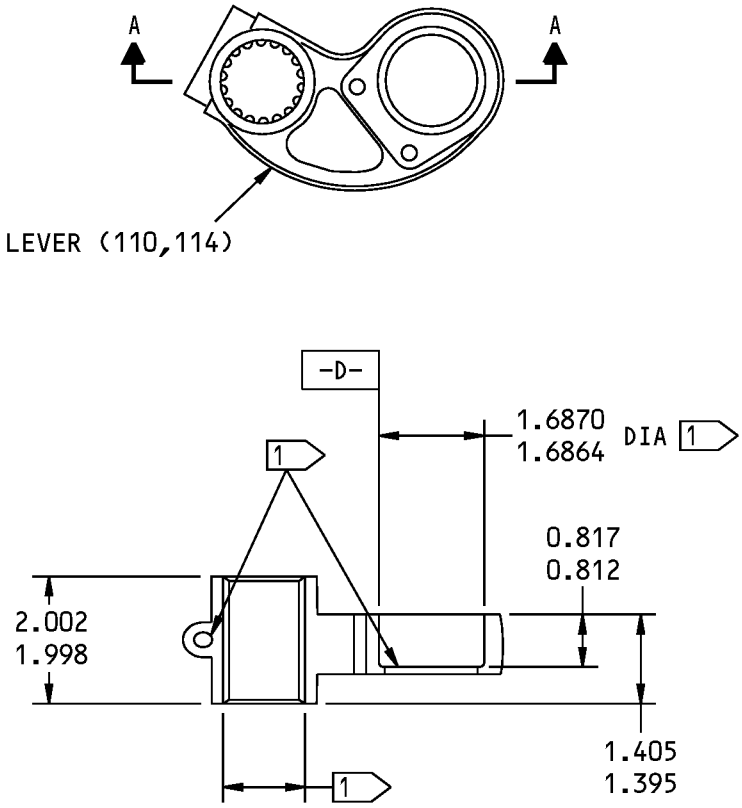
(b) Apply primer, C00259 (SRF2.30) all over other than those areas identified in REPAIR 3-1, Figure 601 .

(c) Apply enamel coating, C00260 (F-21.02) over other than those areas identified in REPAIR 3-1, Figure 601.

(2) Refinish the lever (114) as follows:

(a) Boric Acid - sulfuric acid anodize (F-17.35).

(b) Apply primer, C00259 (F-20.02) all over other than those areas identified in REPAIR 3-1, Figure 601.



1 NO PRIMER ON THIS SURFACE

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 1, 2

ALL DIMENSIONS ARE IN INCHES

65-50548-2, 251A1669-5 Lever Repair
Figure 601

LINK ASSEMBLY - REPAIR 4-1

65-51250–11, –14

1. General

A. This procedure has the data necessary to repair and refinish the link assembly (120).

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

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

D. Refer to IPL Figure 1 and IPL Figure 2 for item numbers.

2. Bushing Replacement

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 20-50-03	BEARING AND BUSHING REPLACEMENT
SOPM 20-60-02	FINISHING MATERIALS

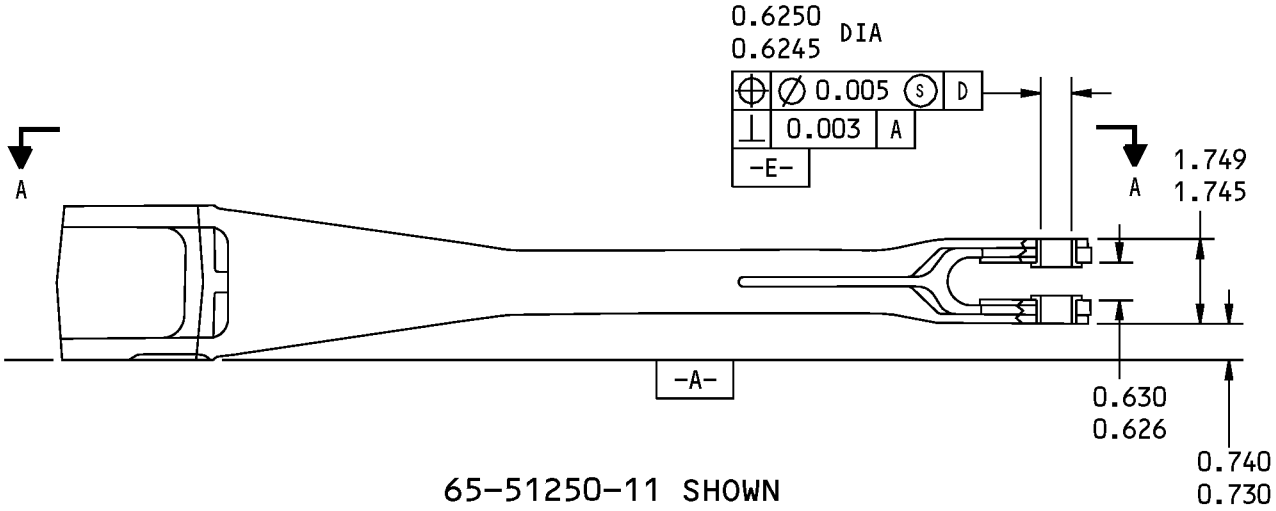
C. Procedure

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

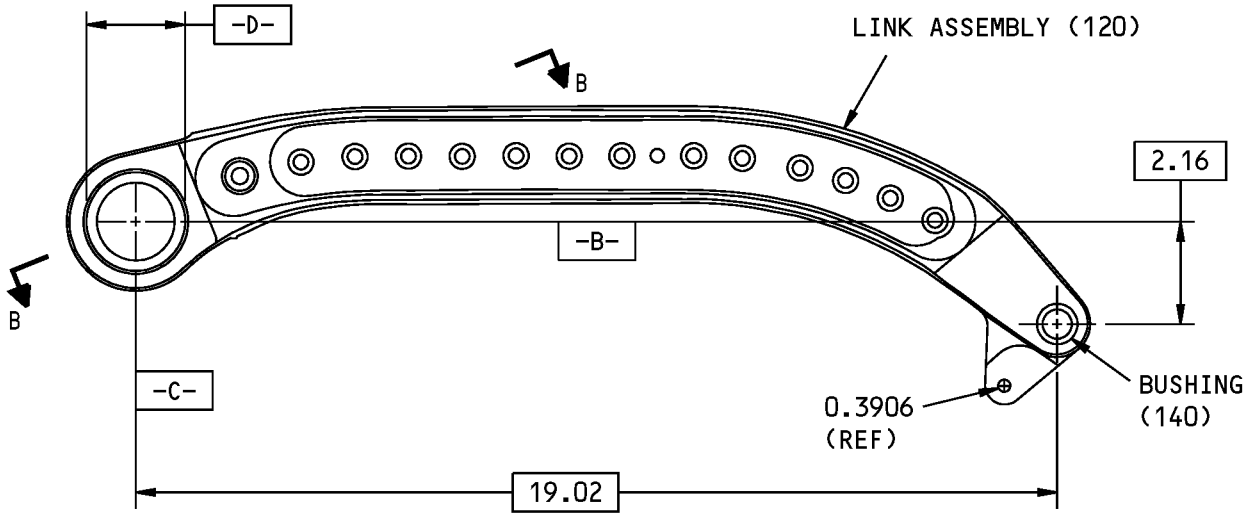
(1) Remove the bushings (140) from the link assembly (120).

(2) Install the bushings (140) in the link assembly (120) with wet primer, C00259 on the surfaces that touch (SOPM 20-50-03).

(3) Machine the inside diameter of the bushings (140) to the dimension shown in REPAIR 4-1, Figure 601.



65-51250-11 SHOWN
65-51250- 14 OPPOSITE



A-A

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 1, 2

ALL DIMENSIONS ARE IN INCHES

65-51250-11, -14 Link Assembly Repair
Figure 601

LINK - REPAIR 4-2

65-51250–11, –14

1. General

A. This procedure has the data necessary to repair and refinish the link (120).

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

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

D. Refer to IPL Figure 1 and IPL Figure 2 for item numbers.

E. General repair details:

(1) Material: Aluminum alloy

2. Link Repair

A. References

Reference	Title
SOPM 20-20-02	PENETRANT METHODS OF INSPECTION
SOPM 20-30-02	STRIPPING OF PROTECTIVE FINISHES

B. Procedure (REPAIR 4-2, Figure 601)

NOTE: For stripping of protective finishes, refer to SOPM 20-30-02.

(1) Repair the link (120) as follows:

(a) Machine within the dimensions shown to remove any defects.

(b) Obey the notes in REPAIR 4-2, Figure 601 .

(c) Do a penetrant check (SOPM 20-20-02) .

3. Link Refinish

A. Consumable Materials

NOTE: Equivalent substitutes may be used.

Reference	Description	Specification
C00033	Coating - Exterior Protective Enamel, Flexibility Use	BMS10-60, Type II
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 4-2, Figure 601)

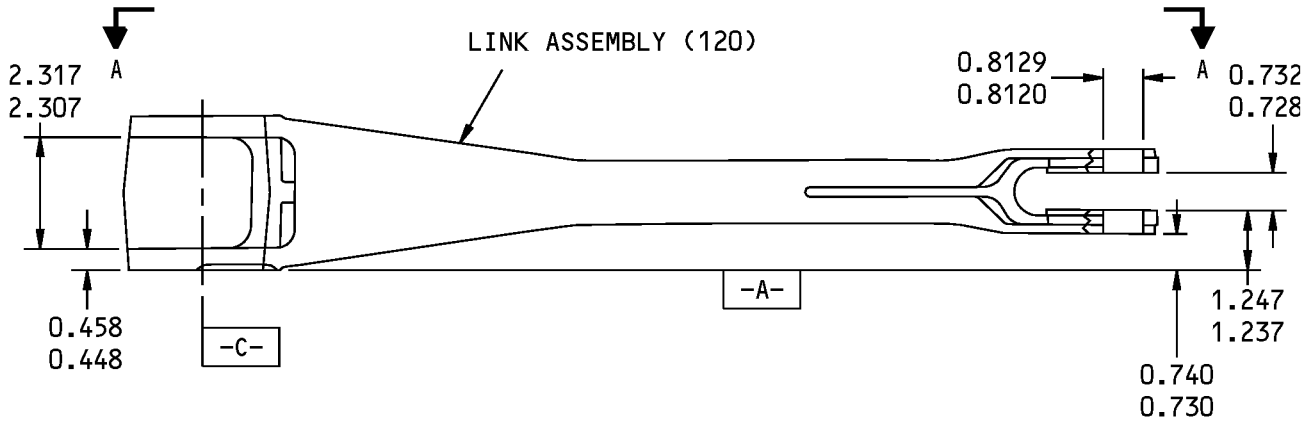
NOTE: For stripping of protective finishes, refer to SOPM 20-30-02. For decoding table for Boeing finish codes, refer to SOPM 20-41-01. For finishing materials, refer to SOPM 20-60-02.

(1) Refinish the link (120) as follows:

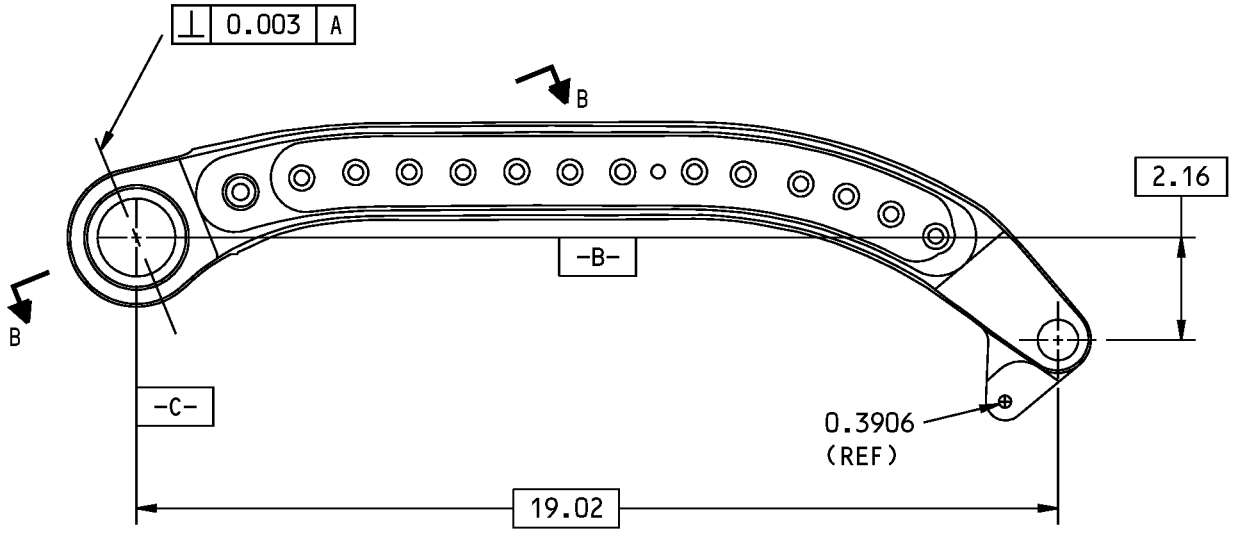
(a) Chemical treat (F-18.06) all over.

(b) Apply primer, C00259 (F-18.06) all over other than those areas identified in REPAIR 4-2, Figure 601 .

(c) Apply enamel coating, C00033 (F-14.9812) all over other than those areas identified in REPAIR 4-2, Figure 601 .

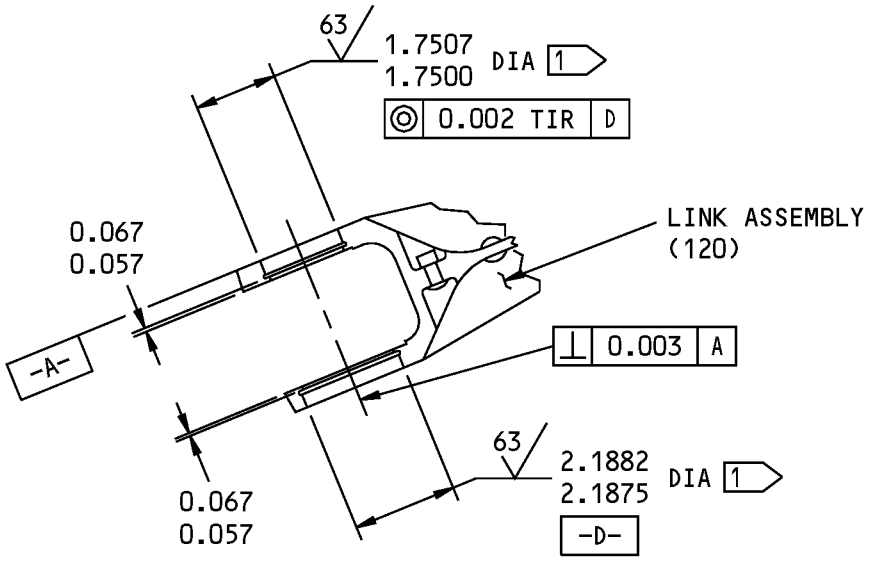


65-51250-11 SHOWN
65-51250- 14 OPPOSITE



A-A

65-51250-11, -14 Link Repair
Figure 601 (Sheet 1 of 2)



B–B

1 NO PRIMER OR ENAMEL ON THE INDICATED SURFACE

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 1, 2

ALL DIMENSIONS ARE IN INCHES

65-51250-11, -14 Link Repair
Figure 601 (Sheet 2 of 2)

SPACER - REPAIR 5-1

69-40396–2

1. General

A. This procedure has the data necessary to repair and refinish the spacer (175).

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

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

D. Refer to IPL Figure 1 for item numbers.

E. General repair details:

(1) Material: Aluminum alloy

2. Spacer Repair

A. References

Reference	Title
SOPM 20-30-02	STRIPPING OF PROTECTIVE FINISHES

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

NOTE: For stripping of protective finishing, refer to SOPM 20-30-02.

(1) Repair the spacer (175) as follows:

(a) Machine within the dimensions shown to remove any defects.

(b) Obey the notes in REPAIR 5-1, Figure 601 .

3. Spacer Refinish

A. Consumable Materials

NOTE: Equivalent substitutes may be used.

Reference	Description	Specification
C00033	Coating - Exterior Protective Enamel, Flexibility Use	BMS10-60, Type II
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 5-1, Figure 601)

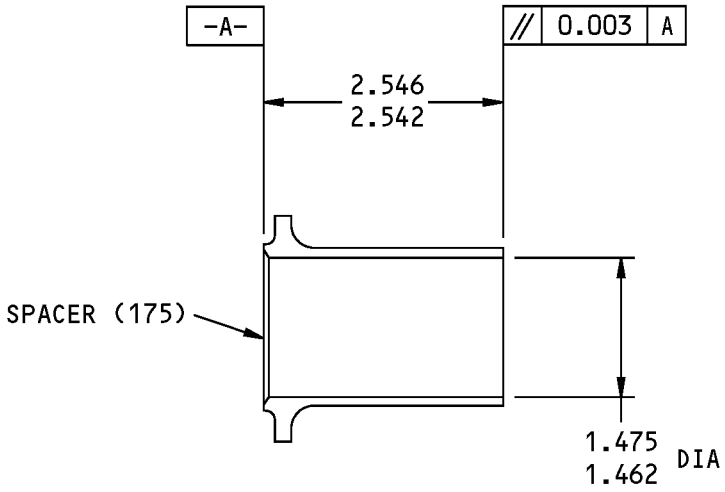
NOTE: For stripping of protective finishes, refer to SOPM 20-30-02. For decoding table for Boeing finish codes, refer to SOPM 20-41-01. For finishing materials, refer to SOPM 20-60-02.

(1) Refinish the spacer (175) as follows:

(a) Chemical treat (F-18.05) all over or chromic acid anodize and seal in dilute chromate solution (F-18.05).

(b) Apply primer, C00259 (F-18.05) all over.

(c) Apply enamel coating, C00033 (F-14.9812) to the outside surfaces.



125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

69-40396-2 Spacer Repair
Figure 601

SPACER - REPAIR 6-1

69-40707–1, –2, –3

1. General

A. This procedure has the data necessary to repair and refinish the spacer (115, 170).

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

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

D. Refer to IPL Figure 1 and IPL Figure 2 for item numbers.

E. For general repair details:

(1) Material:

(a) Aluminum alloy (69-40707-2)

(b) 4340 steel (69-40707-1)

(c) 15-5PH CRES (69-40707-3)

2. Spacer Repair

A. References

Reference	Title
SOPM 20-20-01	MAGNETIC PARTICLE INSPECTION
SOPM 20-30-02	STRIPPING OF PROTECTIVE FINISHES

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

NOTE: For stripping of protective finishes, refer to SOPM 20-30-02.

(1) Repair the spacer (115, 170) as follows:

(a) Machine within the dimensions shown to remove any defects.

(b) Obey the notes in REPAIR 6-1, Figure 601 .

(c) Do a magnetic particle check (SOPM 20-20-01) of spacer (115) only.

3. Spacer 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
C00958	Coating - Aluminum Pigmented For Fasteners	BMS10-85, 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 6-1, Figure 601)

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

(1) Refinish the spacer (170) as follows:

(a) Chemical treat (F-18.05) all over or chromic acid anodize and seal in dilute chromate solution (F-18.05).

(b) Apply primer, C00259 (F-18.05) all over.

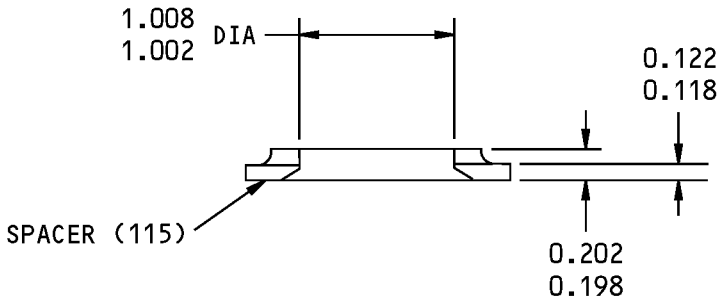
(2) Refinish the spacer (115) as follows:

(a) Cadmium plate all over and apply primer, C00259(F-16.03).

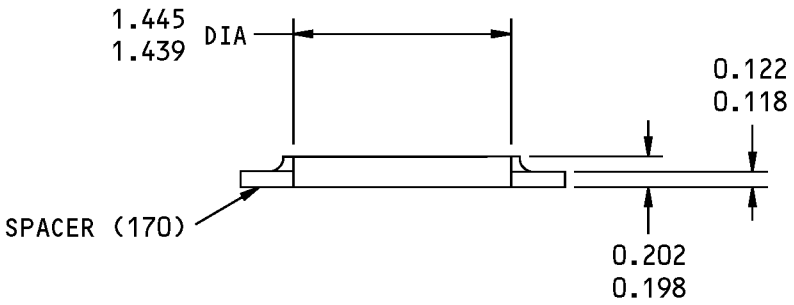
(3) Refinish the spacer (115A) as follows:

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

(b) Apply coating, C00958 (F-30.010).



69-40707-1,-3



69-40707-2

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 1, 2

ALL DIMENSIONS ARE IN INCHES

69-40707-1,-2,-3 Spacer Repair
Figure 601

SPACER - REPAIR 7-1

69-41223–2

1. General

A. This procedure has the data necessary to repair and refinish the spacer (60).

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

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

D. Refer to IPL Figure 1 for item numbers.

E. General repair details:

(1) Material: Aluminum alloy

2. Spacer Repair

A. References

Reference	Title
SOPM 20-30-02	STRIPPING OF PROTECTIVE FINISHES

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

NOTE: For stripping of protective finishes, refer to SOPM 20-30-02.

(1) Repair the spacer (60) as follows:

(a) Machine within the dimensions shown to remove any defects.

(b) Obey the notes in REPAIR 7-1, Figure 601 .

3. Spacer Refinish

A. Consumable Materials

NOTE: Equivalent substitutes may be used.

Reference	Description	Specification
C00033	Coating - Exterior Protective Enamel, Flexibility Use	BMS10-60, Type II
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 7-1, Figure 601)

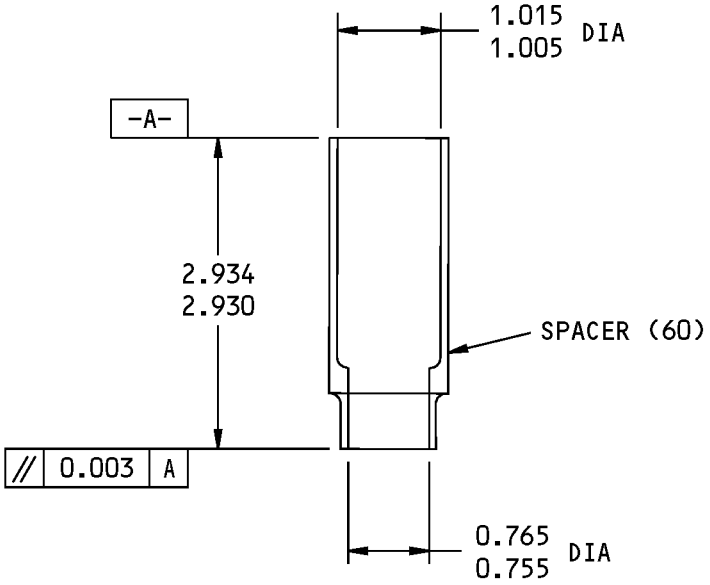
NOTE: For stripping of protective finishes, refer to SOPM 20-30-02. For decoding table for Boeing finish codes, refer to SOPM 20-41-01. For finishing materials, refer to SOPM 20-60-02.

(1) Refinish the spacer (60) as follows:

(a) Chemical treat (F-18-05) all over or chromic acid anodize and seal in dilute chromate solution (F-18.05).

(b) Apply primer, C00259 (F-18.05) all over.

(c) Apply enamel coating, C00033 (F-14.9812) to the outside surfaces.



125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

69-41223-2 Spacer Repair
Figure 601

SPACER - REPAIR 8-1

69-41224–2

1. General

A. This procedure has the data necessary to repair and refinish the spacer (60).

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

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

D. Refer to IPL Figure 2 for item numbers.

E. General repair details:

(1) Material: Aluminum alloy

2. Spacer Repair

A. References

Reference	Title
SOPM 20-30-02	STRIPPING OF PROTECTIVE FINISHES

B. Procedure (REPAIR 8-1, Figure 601)

NOTE: For stripping of protective finishes, refer to SOPM 20-30-02.

(1) Repair the spacer (60) as follows:

(a) Machine within the dimensions shown to remove any defects.

(b) Obey the notes in REPAIR 8-1, Figure 601 .

3. Spacer Refinish

A. Consumable Materials

NOTE: Equivalent substitutes may be used.

Reference	Description	Specification
C00033	Coating - Exterior Protective Enamel, Flexibility Use	BMS10-60, Type II
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 8-1, Figure 601)

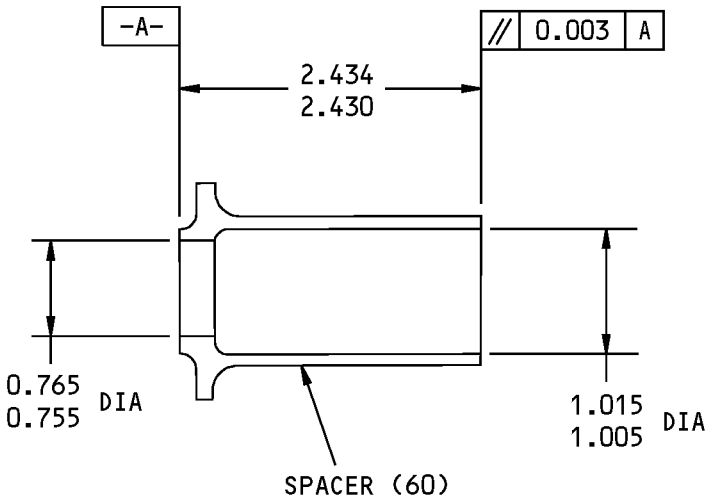
NOTE: For stripping of protective finishes, refer to SOPM 20-30-02. For decoding table for Boeing finish codes, refer to SOPM 20-41-01. For finishing materials, refer to SOPM 20-60-02.

(1) Refinish the spacer (60) as follows:

(a) Chemical treat (F-2.30) all over or chromic acid anodize and seal in dilute chromate solution (F-18.05).

(b) Apply primer, C00259 (F-18.05) all over.

(c) Apply enamel coating, C00033 (F-14.9812) to the outside surfaces.



125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 2

ALL DIMENSIONS ARE IN INCHES

69-41224-2 Spacer Repair
Figure 601

PLATE - REPAIR 9-1

251A1614–1, –2

1. General

A. This procedure has the data necessary to repair and refinish the plate (95, 96).

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

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

D. Refer to IPL Figure 1 and IPL Figure 2 for item numbers.

E. General repair details:

(1) Material: CRES, 182-200 Ksi

2. Plate Repair

A. References

Reference	Title
SOPM 20-20-01	MAGNETIC PARTICLE INSPECTION
SOPM 20-30-02	STRIPPING OF PROTECTIVE FINISHES

B. Procedure (REPAIR 9-1, Figure 601)

NOTE: For stripping of protective finishes, refer to SOPM 20-30-02.

(1) Repair the plate (95, 96) as follows:

(a) Machine within the dimensions shown to remove any defects.

(b) Obey the notes in REPAIR 9-1, Figure 601.

(c) Do a magnetic particle check (SOPM 20-20-01).

3. Plate 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

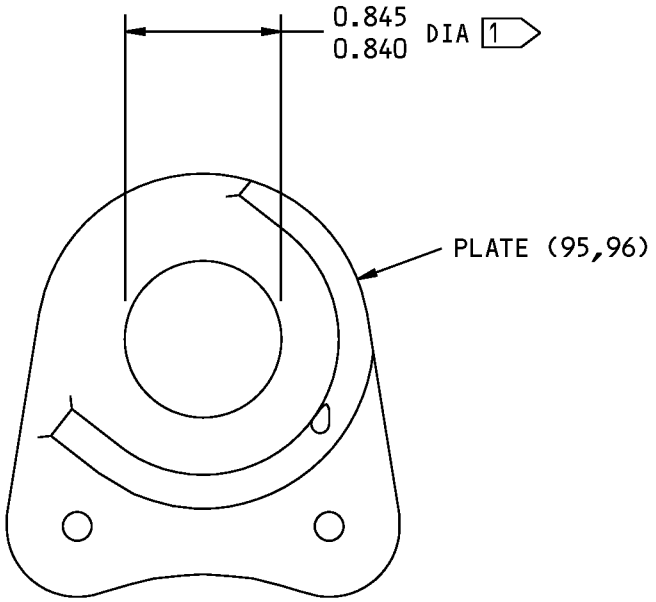
C. Procedure (REPAIR 9-1, Figure 601)

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

(1) Refinish the plate (95, 96) as follows:

(a) Cadmium plate (F-16.06) all over other than those areas identified in REPAIR 9-1, Figure 601 .

(b) Apply primer, C00259 (F-20.02) all over other than those areas identified in REPAIR 9-1, Figure 601 .



1 NO CADMIUM PLATE OR PRIMER ON THIS SURFACE

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 1, 2

ALL DIMENSIONS ARE IN INCHES

251A1614-1,-2 Plate Repair
Figure 601

SUPPORT ASSEMBLY - REPAIR 10-1

251A1664–1, –2, –11, –12

1. General

A. This procedure has the data necessary to repair and refinish the support assembly (180).

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

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

D. Refer to IPL Figure 1 and IPL Figure 2 for item numbers.

2. Bearing Replacement

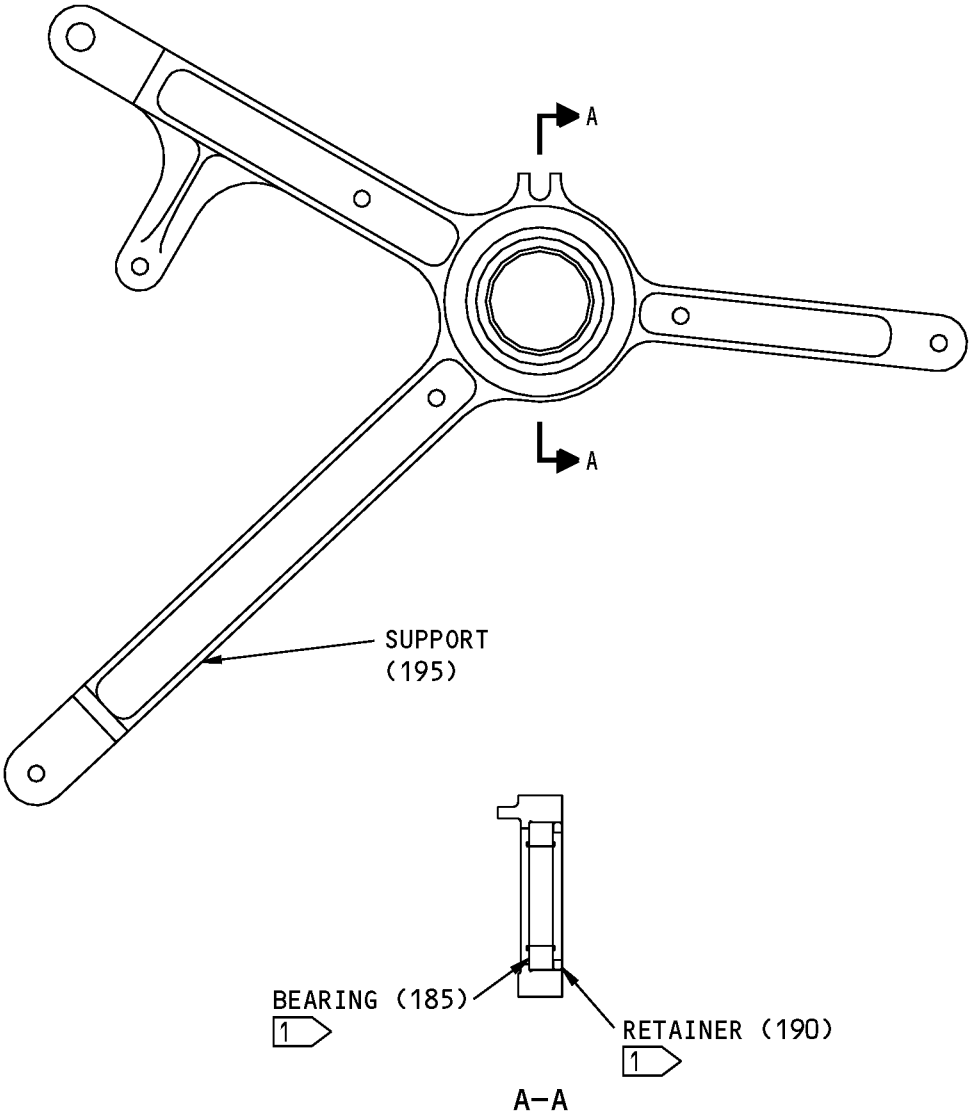
A. References

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

B. Procedure

(1) Remove the bearing (185) and the retainer (190) from the support (195) (SOPM 20-50-03).

(2) Install the bearing (185) and the retainer (190) in the support (195) and roller swage the housing over the retainer (190) (SOPM 20-50-03) .



1 ROLLER SWAGE THE HOUSING OVER THE RETAINER.

ITEM NUMBER REFER TO IPL FIG. 1 AND 2

251A1664-1,-2,-11,-12 Support Assembly Repair
Figure 601

SUPPORT - REPAIR 10-2

251A1664–3, –4, –7, –8, –13, –14, –17, –18

1. General

A. This procedure has the data necessary to repair and refinish the support (195).

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

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

D. Refer to IPL Figure 1 and IPL Figure 2 for item numbers.

E. General repair details:

(1) Material: Aluminum alloy

2. Support Repair

A. References

Reference	Title
SOPM 20-20-02	PENETRANT METHODS OF INSPECTION
SOPM 20-30-02	STRIPPING OF PROTECTIVE FINISHES

B. Procedure (REPAIR 10-2, Figure 601)

NOTE: For stripping of protective finishes, refer to SOPM 20-30-02.

(1) Repair the support (195) as follows:

(a) Machine within the dimensions shown to remove any defects.

(b) Obey the notes in REPAIR 10-2, Figure 601 .

(c) Do a penetrant check (SOPM 20-20-02) .

3. Support 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 10-2, Figure 601)

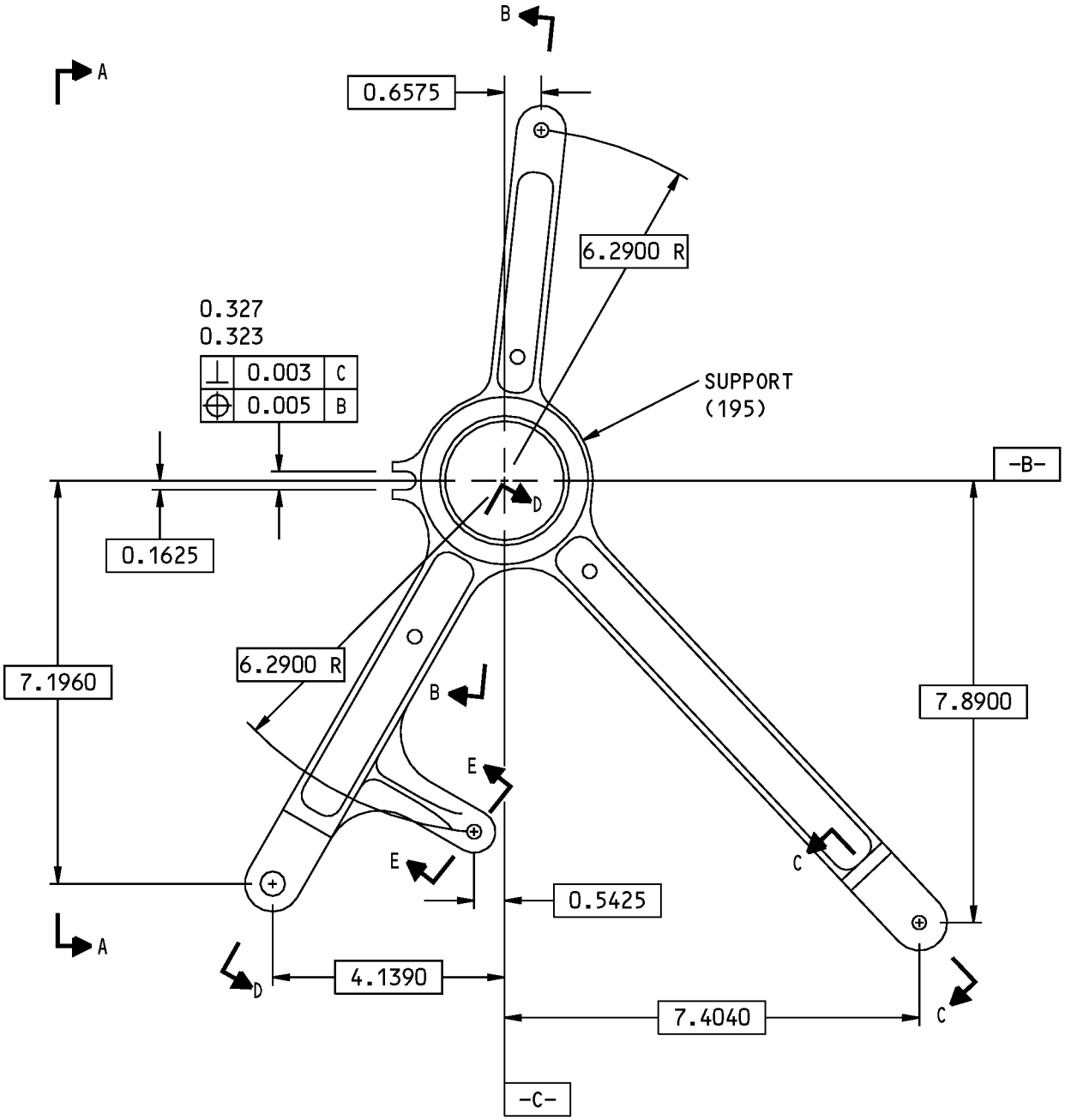
NOTE: For stripping of protective finishes, refer to SOPM 20-30-02. For decoding table for Boeing finish codes, refer to SOPM 20-41-01. For finishing materials, refer to SOPM 20-60-02.

(1) Refinish the support (195) as follows:

(a) Boric acid-Sulphuric acid anodize or chromic acid anodize (F-17.31).

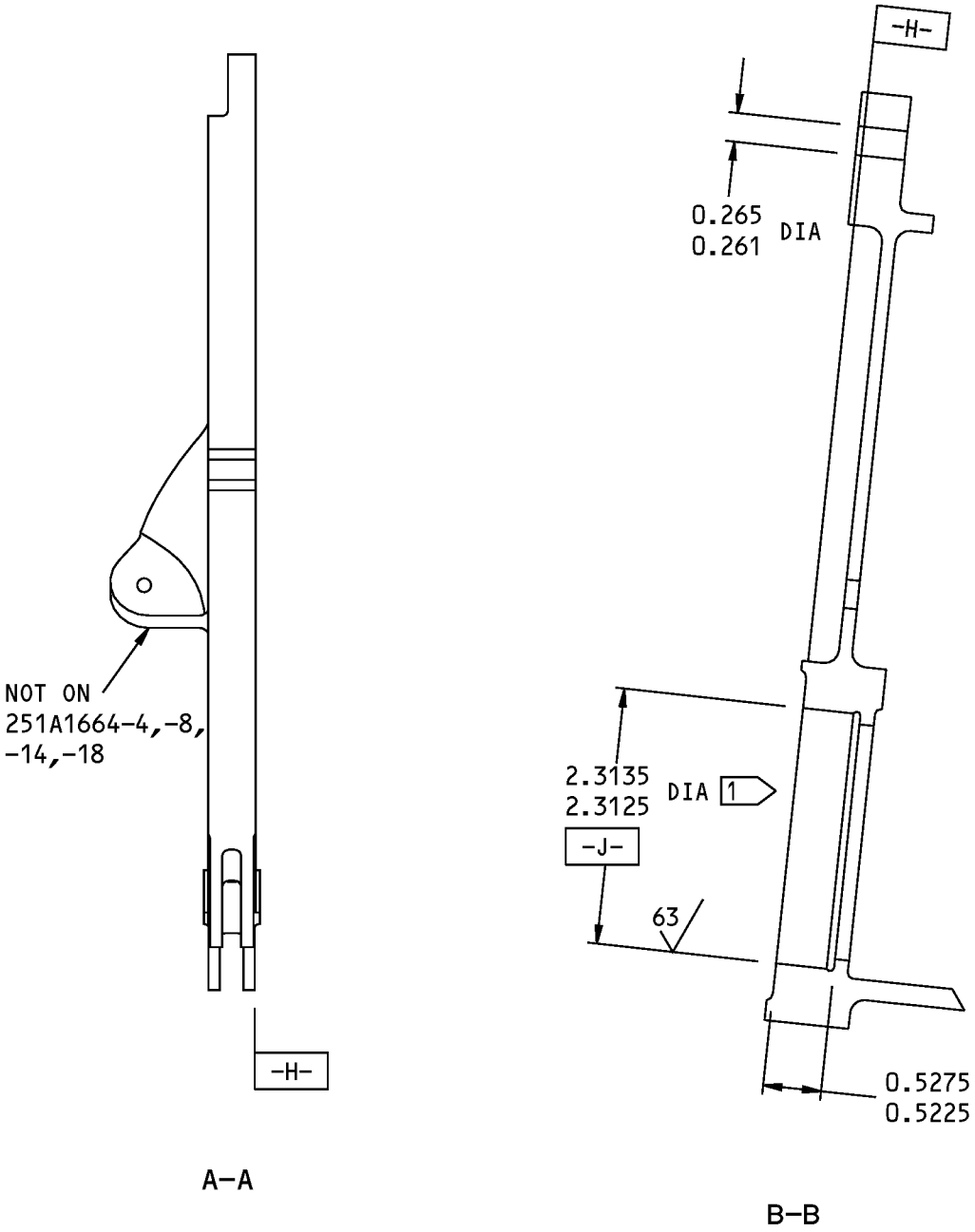
(b) Apply primer, C00259 (F-20.02) all over other than those areas identified in REPAIR 10-2, Figure 601 .

(c) Apply enamel coating, C00260 (F-21.02) to the surfaces other than those identified in REPAIR 10-2, Figure 601 .

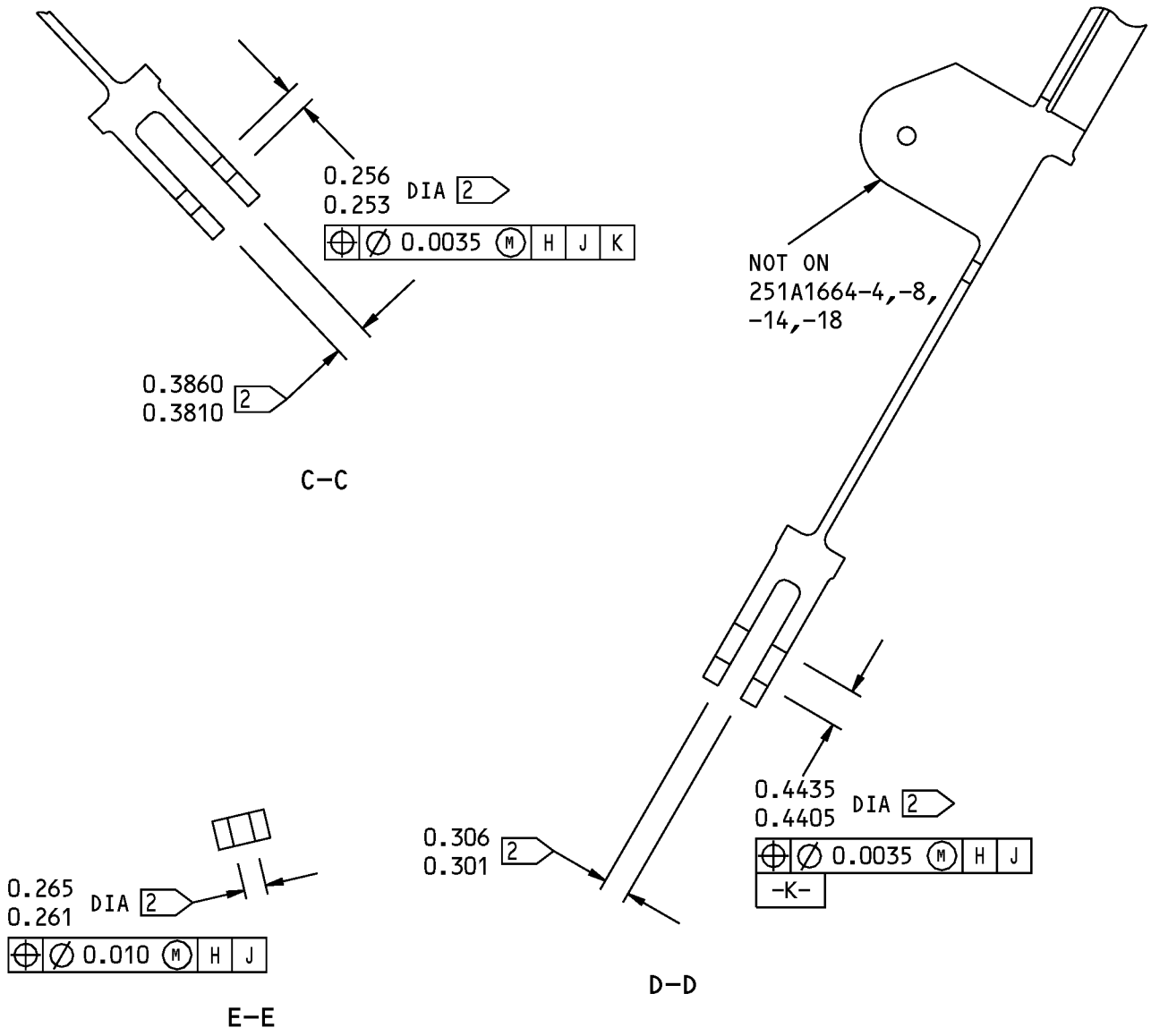


251A1664-3,-7,-13,-17 SHOWN
251A1664-4,-8,-14,-18 OPPOSITE UNLESS SHOWN DIFFERENTLY

251A1664-3,-4,-7,-8,-13,-14,-17,-18 Support Repair
Figure 601 (Sheet 1 of 3)



251A1664-3,-4,-7,-8,-13,-14,-17,-18 Support Repair
Figure 601 (Sheet 2 of 3)



1 NO PRIMER OR ENAMEL IN THE HOLE

2 NO ENAMEL ON THESE SURFACES.

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 1 AND 2

ALL DIMENSIONS ARE IN INCHES

251A1664-3,-4,-7,-8,-13,-14,-17,-18 Support Repair
Figure 601 (Sheet 3 of 3)

DRUM - REPAIR 11-1

251A1667–1, –2, –4, –5

1. General

A. This procedure has the data necessary to repair and refinish the drum (210).

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

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

D. Refer to IPL Figure 1 and IPL Figure 2 for item numbers.

E. General repair details:

(1) Material: Aluminum alloy

2. Drum Repair

A. References

Reference	Title
SOPM 20-20-02	PENETRANT METHODS OF INSPECTION
SOPM 20-30-02	STRIPPING OF PROTECTIVE FINISHES

B. Procedure (REPAIR 11-1, Figure 601)

NOTE: For stripping of protective finishes, refer to SOPM 20-30-02.

(1) Repair the drum (210) as follows:

(a) Machine within the dimensions shown to remove any defects.

(b) Obey the notes in REPAIR 11-1, Figure 601 .

(c) Do a penetrant check (SOPM 20-20-02) .

3. Drum 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 11-1, Figure 601)

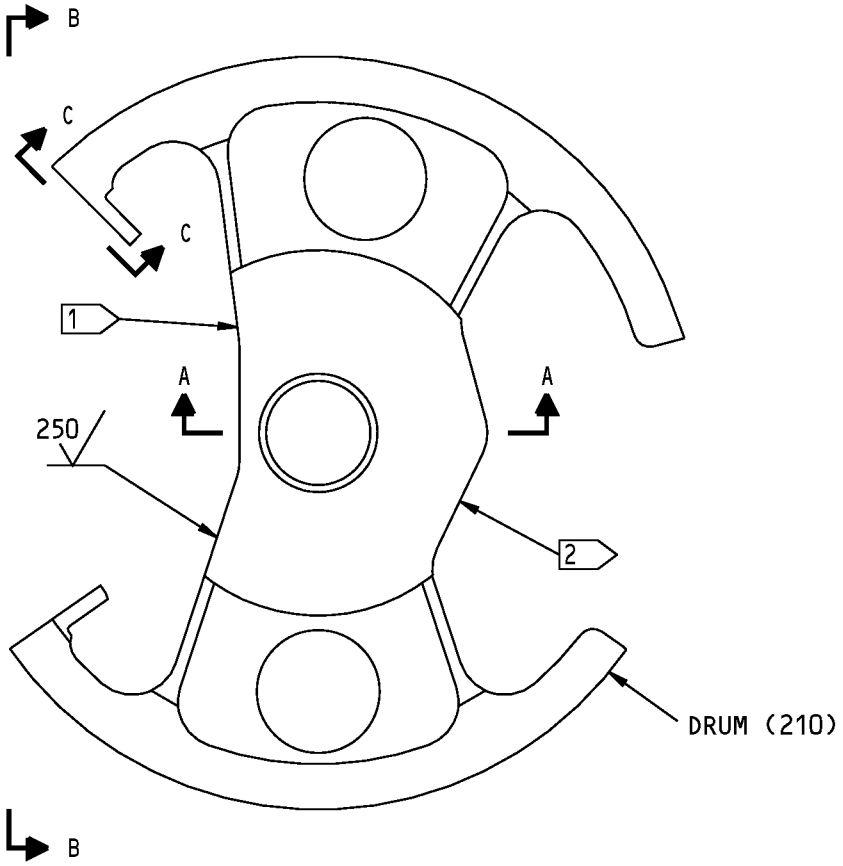
NOTE: For stripping of protective finishes, refer to SOPM 20-30-02. For decoding table for Boeing finish codes, refer to SOPM 20-41-01. For finishing materials, refer to SOPM 20-60-02.

(1) Refinish the drum (210) as follows:

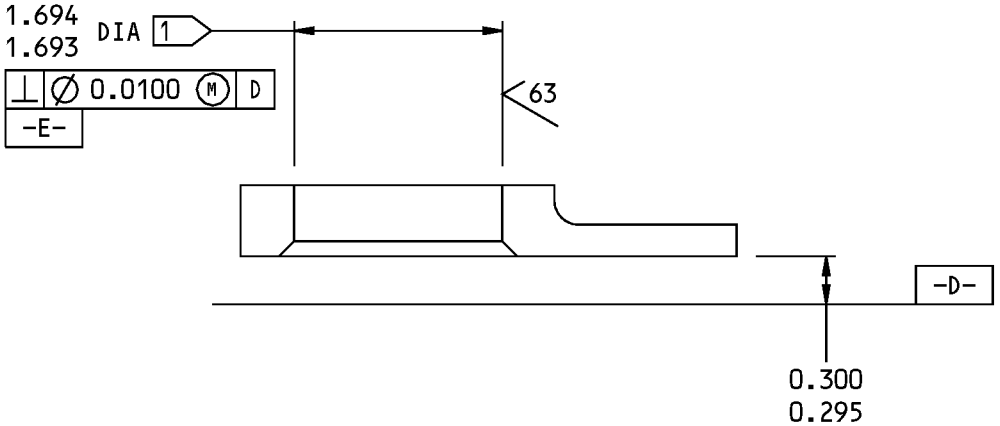
(a) Boric acid-Sulphuric acid anodize or chromic acid anodize (F-17.31).

(b) Apply primer, C00259 (F-20.02) all over other than those areas identified in REPAIR 11-1, Figure 601 .

(c) Apply enamel coating, C00260 (F-21.02) to the surfaces other than those identified in REPAIR 11-1, Figure 601 .

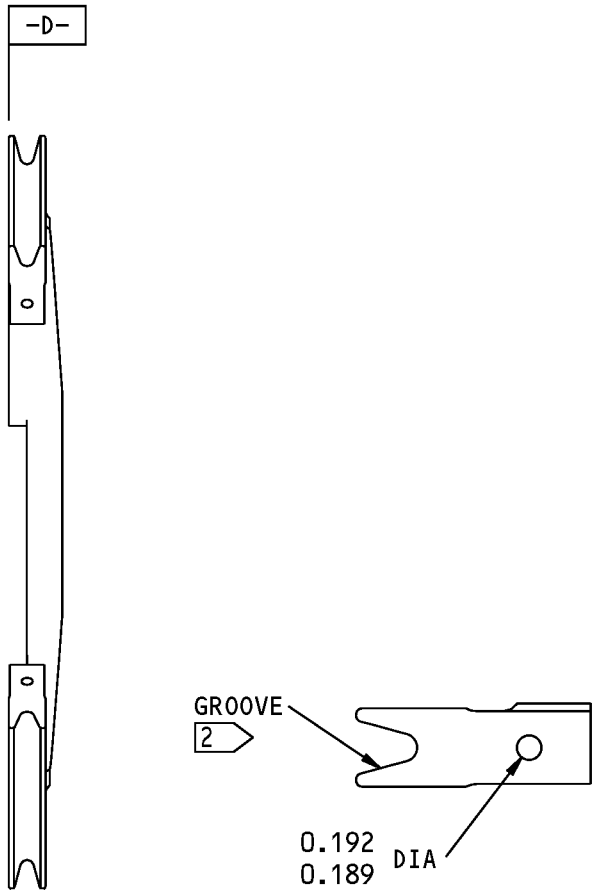


251A1667-1,-4 SHOWN
251A1667-2,-5 OPPOSITE



A-A

251A1667-1,-2,-4,-5 Drum Repair
Figure 601 (Sheet 1 of 2)



1 NO PRIMER OR ENAMEL ON THIS SURFACE

2 NO ENAMEL ON THIS SURFACE.

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 1 AND 2

ALL DIMENSIONS ARE IN INCHES

251A1667-1,-2,-4,-5 Drum Repair
Figure 601 (Sheet 2 of 2)

SHAFT ASSEMBLY - REPAIR 12-1

251A1668–1, –2, –4, –8, –10, –11, –12, –13

1. General

A. This procedure has the data necessary to repair and refinish the shaft assembly (215).

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

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

D. Refer to IPL Figure 1 and IPL Figure 2 for item numbers.

E. For general repair details:

(1) Material: 15-5 PH CRES, 180-200 ksi

2. Shaft Assembly Repair

A. References

Reference	Title
SOPM 20-20-01	MAGNETIC PARTICLE INSPECTION
SOPM 20-30-02	STRIPPING OF PROTECTIVE FINISHES

B. Procedure (REPAIR 12-1, Figure 601, REPAIR 12-1, Figure 602)

NOTE: For stripping of protective finishes, refer to SOPM 20-30-02.

(1) Repair the shaft assembly (215) as follows:

NOTE: Do not remove the plug (220), if there is one, unless repair or replacement is needed.

(a) Machine within the dimensions shown to remove any defects.

(b) Obey the notes in REPAIR 12-1, Figure 601 and REPAIR 12-1, Figure 602.

(c) Do a magnetic particle check (SOPM 20-20-01) .

3. Shaft Assembly Refinish

A. Consumable Materials

NOTE: Equivalent substitutes may be used.

Reference	Description	Specification
C00958	Coating - Aluminum Pigmented For Fasteners	BMS10-85, 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 12-1, Figure 601 and REPAIR 12-1, Figure 602)

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

(1) Refinish the shaft assembly (225, 225A, IPL Figure 1; 225, 225A, 225B, 225C, IPL Figure 2) as follows:

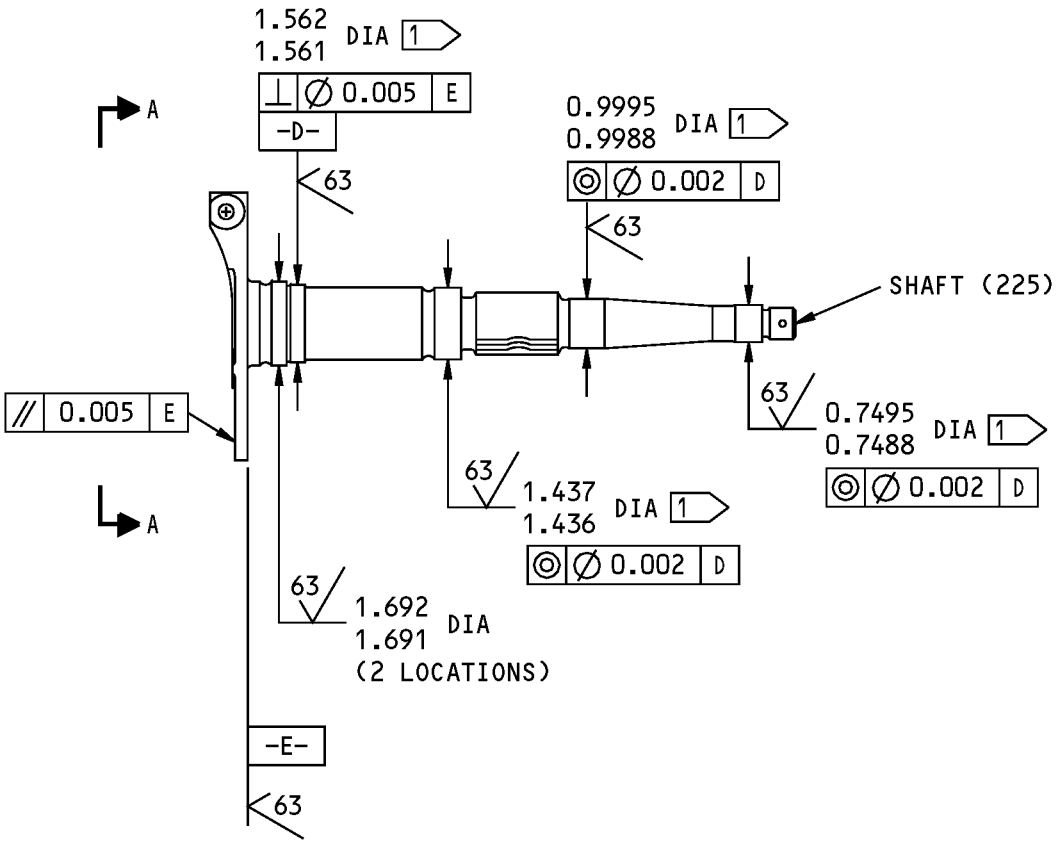
(a) Passivate (F-17.25) all over.

(b) Apply cadmium plating (F-16.06) all over other than those areas identified in REPAIR 12-1, Figure 601 and REPAIR 12-1, Figure 602.

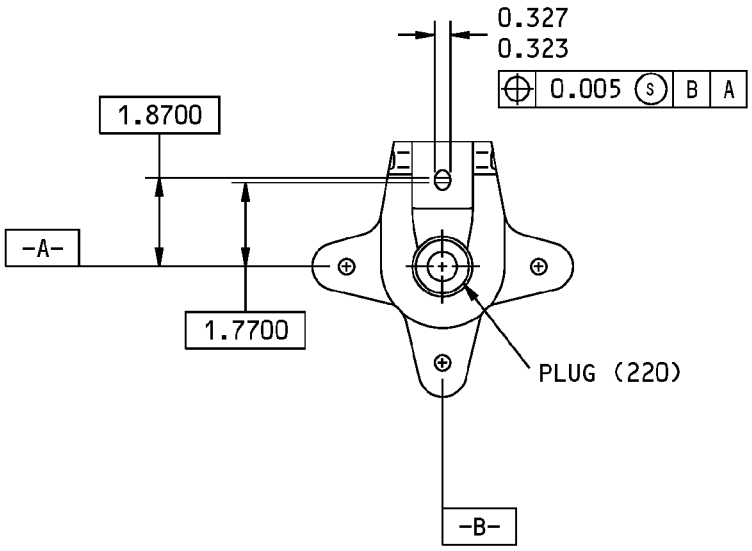
(2) Refinish the shaft assembly (225B, 225C, IPL Figure 1; 225C, 225D, IPL Figure 2) as follows:

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

(b) Apply coating, C00958 (F-30.010) except as noted in REPAIR 12-1, Figure 601 and REPAIR 12-1, Figure 602.



251A1668-1,-11 Shaft Assembly Repair
Figure 601 (Sheet 1 of 2)



A-A

1 DO NOT APPLY CADMIUM PLATE TO THESE SURFACES OF SHAFT (225,225A). DO NOT APPLY BMS 10-85, TYPE 1, CLASS A COATING TO THESE SURFACES OF SHAFT (225B,225C)

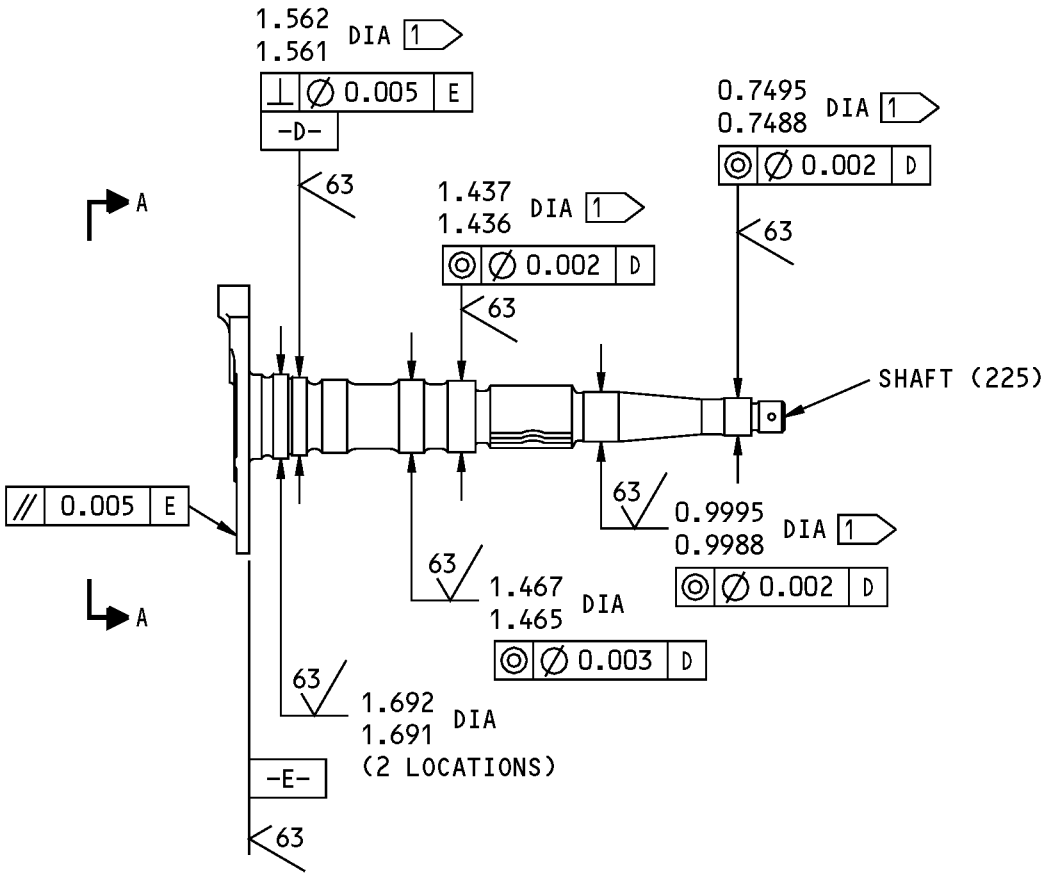
125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

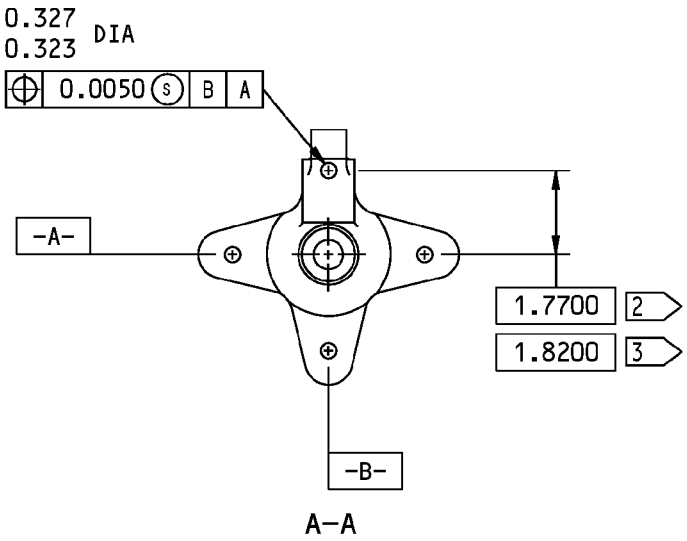
ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

251A1668-1,-11 Shaft Assembly Repair
Figure 601 (Sheet 2 of 2)



251A1668-2,-4,-8,-10,-12,-13 Shaft Assembly Repair
Figure 602 (Sheet 1 of 2)



1 DO NOT APPLY CADMIUM PLATE TO THESE SURFACES OF SHAFT (225,225A, 225B,225C). DO NOT APPLY BMS 10-85, TYPE 1, CLASS A COATING TO THESE SURFACES OF SHAFT (225D,225E)

2 THIS DIMENSION IS FOR 251A1668-2,-4

3 THIS DIMENSION IS FOR 251A1668-8,-10

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 2

ALL DIMENSIONS ARE IN INCHES

251A1668-2,-4,-8,-10,-12,-13 Shaft Assembly Repair
Figure 602 (Sheet 2 of 2)

ASSEMBLY

1. General

A. This procedure has the data necessary to assemble the lateral system aileron power control assembly (1A).

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

C. Refer to IPL Figure 1 and IPL Figure 2 for 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
C00528	Compound - Corrosion Preventive, Petroleum Hot Application (Soft Film)	MIL-C-11796, Class III
C00913	Compound - Corrosion Inhibiting Material, Nondrying Resin Mix	BMS 3-27
G50136	Paste - Corrosion Inhibiting, Non-drying	BMS 3-38

B. References

Reference	Title
SOPM 20-41-01	DECODING TABLE FOR BOEING FINISH CODES
SOPM 20-50-01	BOLT AND NUT INSTALLATION
SOPM 20-60-02	FINISHING MATERIALS
SOPM 20-60-04	MISCELLANEOUS MATERIALS

C. Procedure

NOTE: For decoding table for Boeing finish codes, refer to SOPM 20-41-01. For bolt and nut installation, refer to SOPM 20-50-01. For finishing materials, refer to SOPM 20-60-02. For miscellaneous materials, refer to SOPM 20-60-04.

(1) Use standard industry procedures and the steps shown below to assemble this component.

(2) Install the bearing (100, 101) in the lever (110, 114) (ASSEMBLY, Figure 701) .

(a) Install the bearing (100, 101) in the lever (110, 114) with wet compound, C00528 (F-19.09) on the surfaces that touch and in all the inside spaces.

(b) Install the plate (95, 96) on the lever (110, 114) with wet compound, C00528 (F-19.09) on the surfaces that touch and in all the inside spaces.

(c) Make sure there is a gap between the plate (95, 96) and the bearing (100, 101) all around.

(d) Install the bolts (85) and the collars (90), or inserts (113), screws (86) and washers (87).

(e) Install the bolt (65), the washer (70) and the nut (75) finger-tight.

(3)

Install the drum (210) on the shaft (IPL Figure 1, 215; IPL Figure 2, 225) if it is necessary (ASSEMBLY, Figure 702) .

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.

(a) Apply a layer of compound, C00913 to the surfaces of the drum (210) and the shaft (215, IPL Figure 1; 225, 225A, 225B, 225C, IPL Figure 2) that touch. Apply a layer of corrosion inhibiting non-drying paste, G50136 to the surfaces of the drum (210) and the shaft (215A, IPL Figure 1; 225D, 225E, IPL Figure 2) that touch.

(b) Install the drum (210) on the shaft (IPL Figure 1, 215; IPL Figure 2, 225) so there is no gap between the surfaces that touch.

(c) Wipe off the excess compound, C00913 and corrosion inhibiting non-drying paste, G50136.

(d) Align the drum (210) and the shaft (IPL Figure 1, 215; IPL Figure 2, 225) as indicated in ASSEMBLY, Figure 702 .

(e) Drill the holes for the rivets (205).

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.

(f) Install the rivets with compound, C00913 on the shaft (215, IPL Figure 1; 225, 225A, 225B, 225C, IPL Figure 2) or with corrosion inhibiting non-drying paste, G50136 on the shaft (215A, IPL Figure 1; 225D, 225E, IPL Figure 2) and squeeze to form a button (head) as shown in ASSEMBLY, Figure 702 .

(4) Install the components on the lateral system aileron power control assembly (1).

(a) Install the support frame assembly (180) on the shaft assembly (IPL Figure 1, 215; IPL Figure 2, 225).

(b) Install the lever (IPL Figure 2, 260) with the bolts (IPL Figure 2, 245), the washers (IPL Figure 2, 250) and the nuts (IPL Figure 2, 255) on 251A1661-2, -4, or install the spacer (IPL Figure 1, 175) with wet compound, C00528 (F-19.09) on the surfaces that touch and in all the inside spaces on 251A1661-1.

(c) Install the link assembly (120), and the bearings (160, 165) with wet sealant, A00247 on the surfaces that touch.

(d) Install the lever (80, 81) with all the inside spaces filled with compound, C00528 (F-19.09).

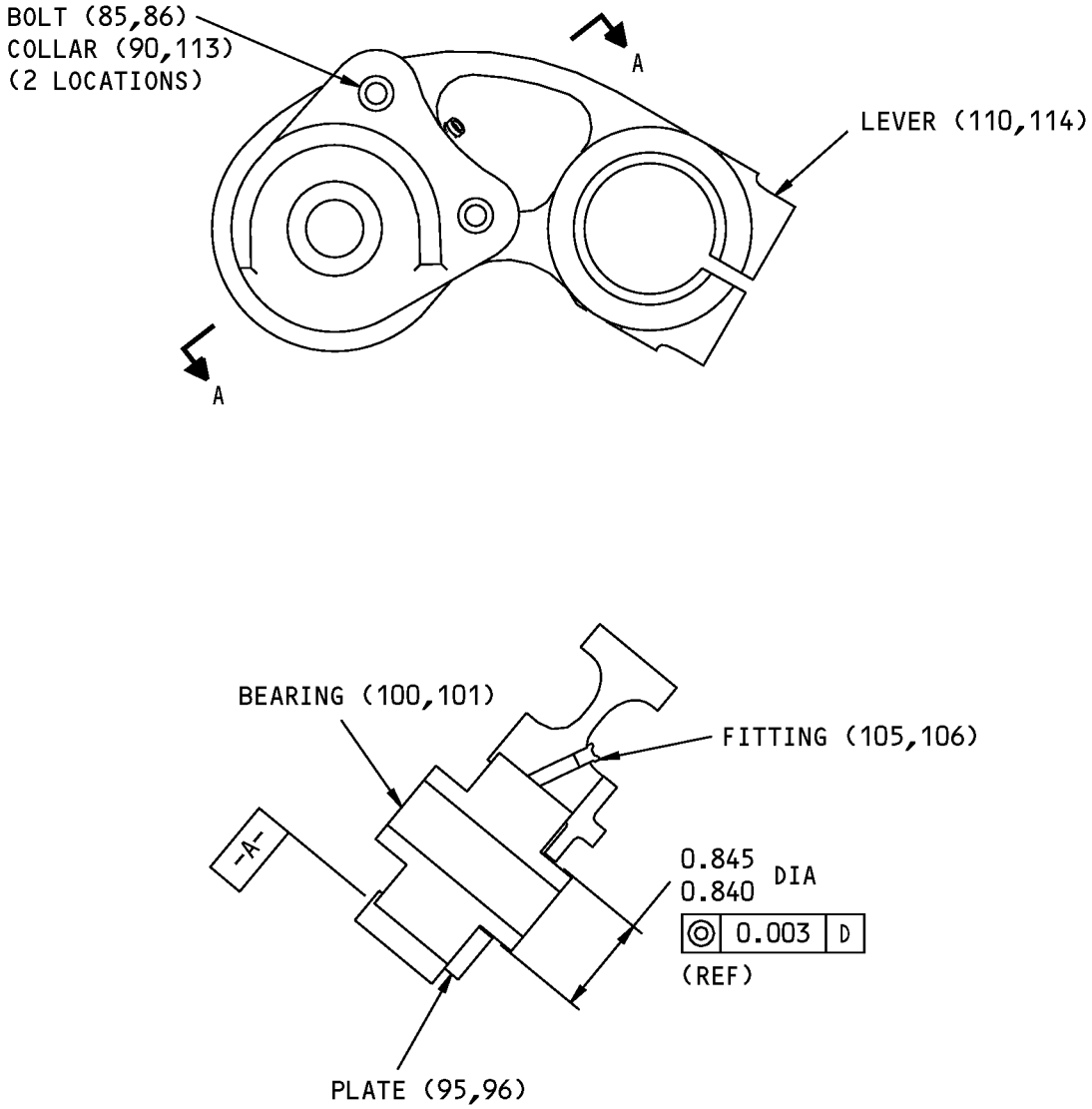
(e) Install the spacer (IPL Figure 1, 60; IPL Figure 2, 60) with all the inside spaces filled with compound, C00528 (F-19.09).

(f) Install the support assembly (20).

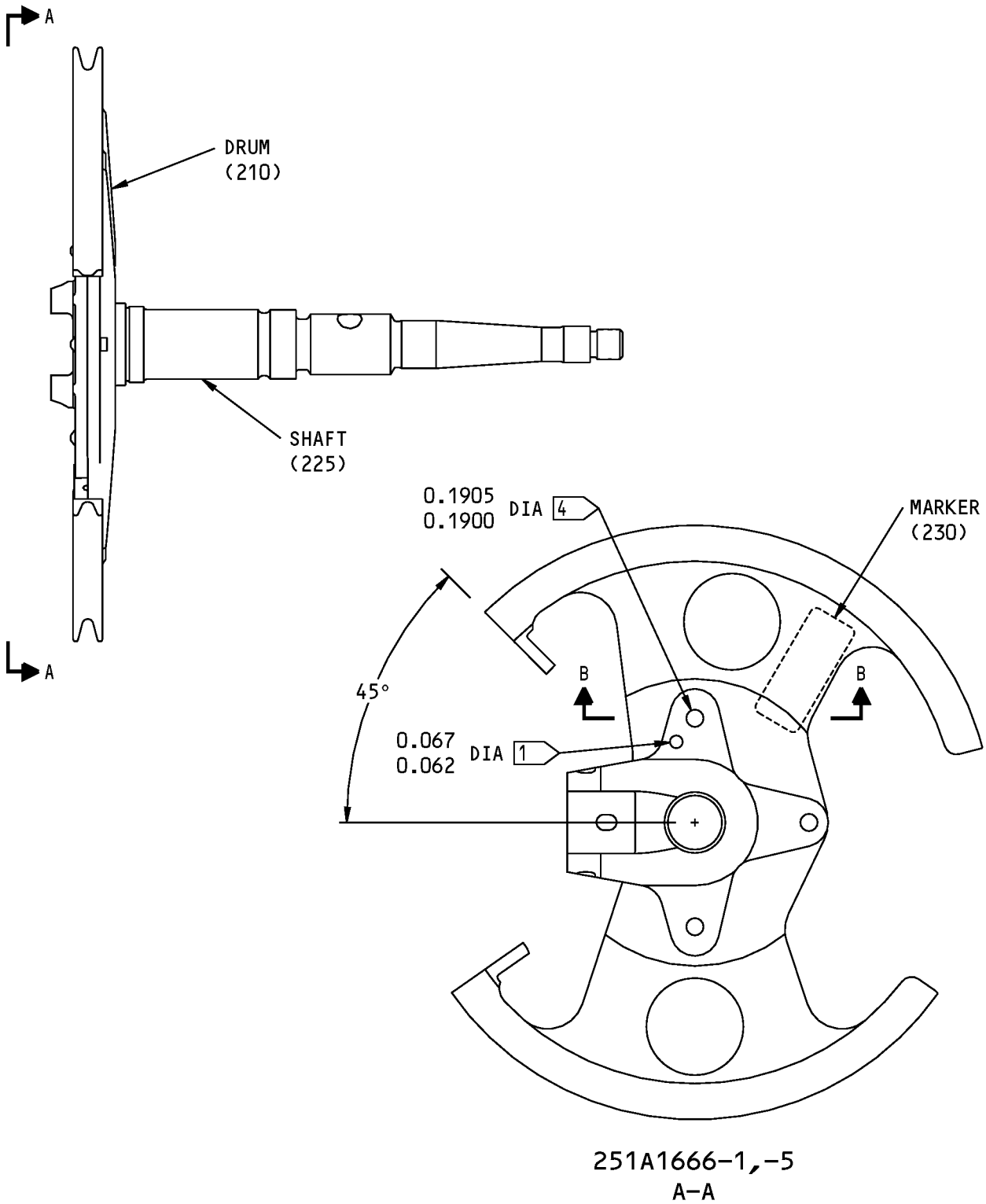
(g) Install the washer (10) and nut (15).

(h) Torque the nut (15) to 400 to 450 pound-inches.

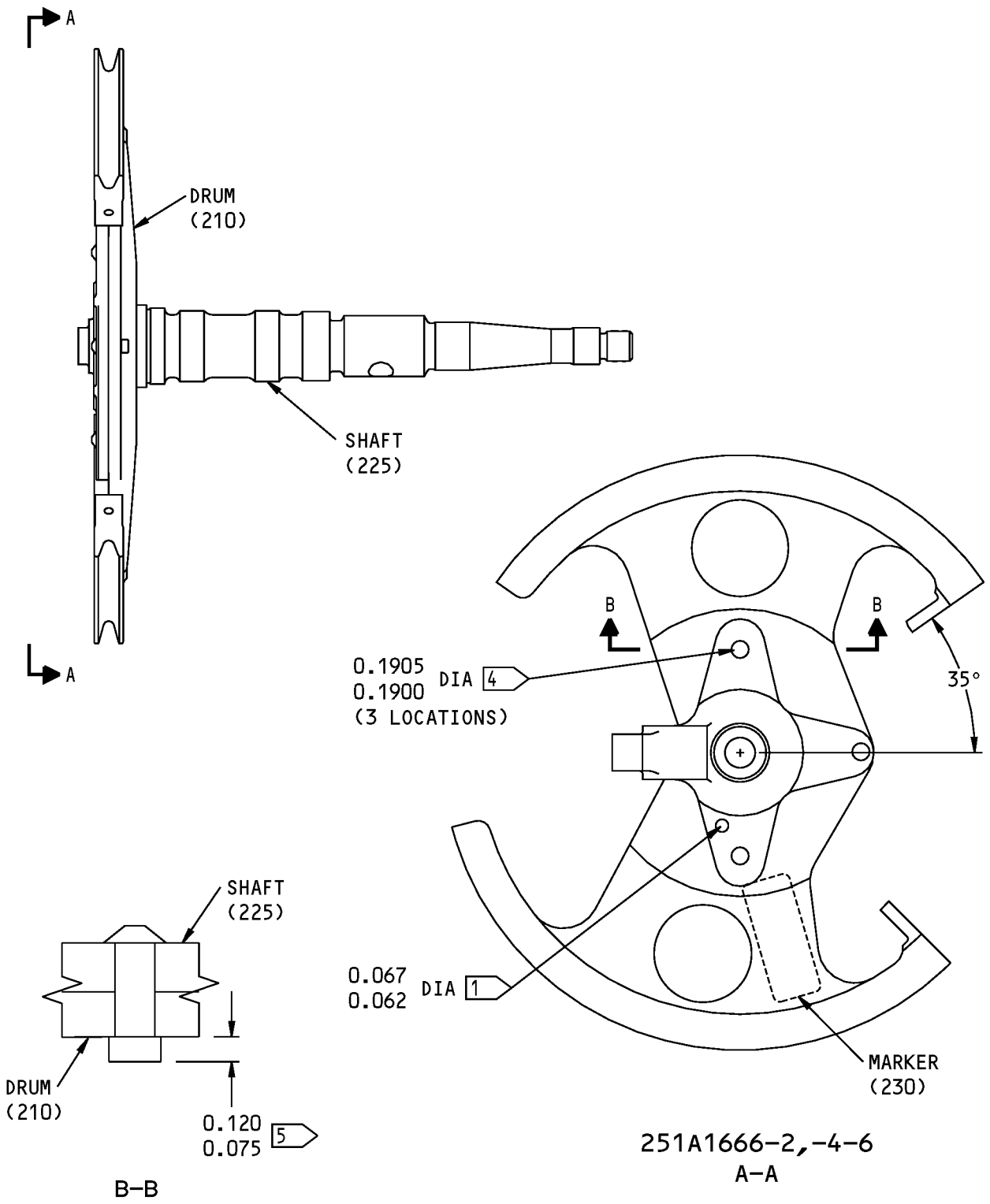
(i) Install the cotter pin (5).



Lever Assembly Detail
Figure 701



Quadrant Assembly Details
Figure 702 (Sheet 1 of 3)



Quadrant Assembly Details
Figure 702 (Sheet 2 of 3)

1 DRILL THE HOLE AFTER THE RIVETS ARE IN INSTALLED

2 BOND THE MARKER AS SHOWN IN BAC5305 AND SEAL THE EDGE AS SHOWN IN BAC5710 TYPE 41

3 APPLY BMS 3-27 CORROSION INHIBITING COMPOUND TO THE SURFACES OF THE DRUM AND THE SHAFT THAT TOUCH FOR QUADRANT ASSEMBLIES 251A1666-1,-2,-4. APPLY BMS 3-38 CORROSION INHIBITING PASTE TO SURFACES OF THE DRUM AND THE SHAFT THAT TOUCH FOR QUADRANT ASSEMBLIES A51A1666-5,-6. ASSEMBLE THE DRUM AND THE SHAFT TO REMOVE ANY GAP BETWEEN THE PARTS.

4 LOCATE THE HOLES FROM THE HOLES IN THE SHAFT (225)

5 SQUEEZE THE RIVET BUTTON TO THIS DIMENSION.

ITEM NUMBER REFER TO IPL FIG. 1,2

ALL DIMENSIONS ARE IN INCHES

Quadrant Assembly Details
Figure 702 (Sheet 3 of 3)

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
11815	CHERRY AEROSPACE FASTENERS DIV OF TEXTRON 1224 EAST WARNER AVENUE PO BOX 2157 SANTA ANA, CALIFORNIA 92707-0157 FORMERLY IN LOS ANGELES, CALIF , FORMERLY CHERRY FASTENERS TOWNSEND DIV OF TEXTRON INC V71087
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
17446	HUCK INTL INC AEROSPACE FASTENER DIV 900 WATSON CENTER ROAD CARSON, CALIFORNIA 90745-4201 FORMERLY V32134 REXNORD INC; FORMERLY V97928 HUCK INTL
21335	TIMKEN US CORPORATION DIV FAFNIR 336 MECHANIC STREET LEBANON, NH 03766-0267 FORMERLY FAFNIR BRG AND TEXTRON INC FAFNIR DIV IN NEW BRITAIN, CONNECTICUT ; FORMERLY TORRINGTON CO THE SPECIAL PRODUCTS DIV SUB OF THE INGERSOLL-RAND CO V8D210 FORMERLY TORRINGTON CO FAFNIR BEARING DIV IN TORRINGTON, CT
29666	HUCK MANUFACTURING CO SUB OF FEDERAL-MOGUL CORP 6 THOMAS IRVINE, CALIFORNIA 92714 FORMERLY HUCK MFG CO VB0016 IN DETROIT, MICHIGAN

Code	Name
30163	VALENTEC DAYRON INC 333 MAGUIRE BLVD PO BOX 140394 ORLANDO, FLORIDA 32814-0394
38443	MRC BEARINGS 402 CHANDLER STREET JAMESTOWN, NEW YORK 14701-3802 FORMERLY MARLIN-ROCKWELL CORP DIV TRW AND TRW INC
40920	MPB MINIATURE PRECISION BEARING DIV PRECISION PARK PO BOX 547 KEENE, NEW HAMPSHIRE 03431 FORMERLY MPB CORP AND MINIATURE BRG DIV MPB CORP
43991	FAG BEARING INCORPORATED 118 HAMILTON AVENUE STAMFORD, CONNECTICUT 06904 FORMERLY NORMA-HOFFMAN BEARING CORPORATION FORMERLY NORMA FAG BEARINGS CORPORATION
56878	SPS TECHNOLOGIES INC AEROSPACE AND INDUSTRIAL PRODUCTS DIV 301 HIGHLAND AVE JENKINTOWN, PENNSYLVANIA 19046 FORMERLY STANDARD PRESSED STEEL FORMERLY IN SALT LAKE, UTAH
5M902	ALCOA GLOBAL FASTENERS INC, DIV OF VOI-SHAN PRODUCTS 3000 W LOMITA BLVD TORRANCE, CALIFORNIA 90505-5103 FORMERLY FAIRCHILD INC INC FAIRCHILD AEROSPACE FASTENERS DIV
62554	SIMMONDS MECAERO FASTENERS INC 1734 SEQUOIA AVENUE ORANGE, CALIFORNIA 92668
73197	HI-SHEAR TECHNOLOGY CORP 2600 SKYPARK DRIVE TORRANCE, CALIFORNIA 90509

Code	Name
77896	REXNORD INC BEARING OPERATION 2400 CURTIS STREET DOWNERS GROVE, ILLINOIS 60515-4005 FORMERLY SHAEFER BEARING DIV REX CHAINBELT FORMERLY REX CHAINBELT INC BEARING DIV.
83086	NEW HAMPSHIRE BALL BEARING, INC HITECH DIVISION 172 JAFFREY ROAD PETERBOROUGH, NEW HAMPSHIRE 03458
92215	FAIRCHILD IND INC FAIRCHILD AEROSPACE FASTENER DIV 3010 W LOMITA BLVD TORRANCE, CALIFORNIA 90505-5102 FORMERLY VOI-SHAN IN CULVER CITY, CALIF
S0352	NIPPON MINIATURE BEARING CO LTD TOKYO, JAPAN

NUMERICAL INDEX

PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
251A1614-1		1	95	1
		2	95	1
251A1614-2		1	96	1
		2	96	1
251A1661-1		1	1A	RF
251A1661-10		1	1J	RF
		2	1D	RF
		2	1D	RF
251A1661-11		1	1K	RF
251A1661-12		1	1L	RF
		2	1E	RF
251A1661-2		1	1B	RF
		2	1	RF
251A1661-4		1	1C	RF
		2	1A	RF
251A1661-5		1	1D	RF
251A1661-6		1	1E	RF
		2	1B	RF
251A1661-7		1	1F	RF
251A1661-8		1	1G	RF
		2	1C	RF
		2	1C	RF
251A1661-9		1	1H	RF
251A1664-1		1	180	1
251A1664-11		1	180A	1
251A1664-12		2	180A	1
251A1664-13		1	195B	1
251A1664-14		2	195B	1
251A1664-17		1	195C	1
251A1664-18		2	195C	1
251A1664-2		2	180	1
251A1664-3		1	195	1
251A1664-4		2	195	1
251A1664-7		1	195A	1

PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
251A1664-8		2	195A	1
251A1666-1		1	200	1
251A1666-2		2	200	1
251A1666-4		2	200A	1
251A1666-5		1	200A	1
251A1666-6		2	200B	1
251A1667-1		1	210	1
251A1667-2		2	210	1
251A1667-4		1	210A	1
251A1667-5		2	210A	1
251A1668-1		1	215	1
251A1668-10		2	225C	1
251A1668-11		1	215A	1
251A1668-12		2	225D	1
251A1668-13		2	225E	1
251A1668-14		1	225B	1
251A1668-15		1	225C	1
251A1668-2		2	225	1
251A1668-3		1	225	1
251A1668-4		2	225A	1
251A1668-5		1	225A	1
251A1668-8		2	225B	1
251A1669-1		1	80	1
		2	80	1
251A1669-2		1	80A	1
		2	80A	1
251A1669-3		1	81	1
		2	81	1
251A1669-4		1	112	1
		2	112	1
251A1669-5		1	114	1
		2	114	1
2LSPT8-7		1	130	2
		1	130	2
		2	130	2

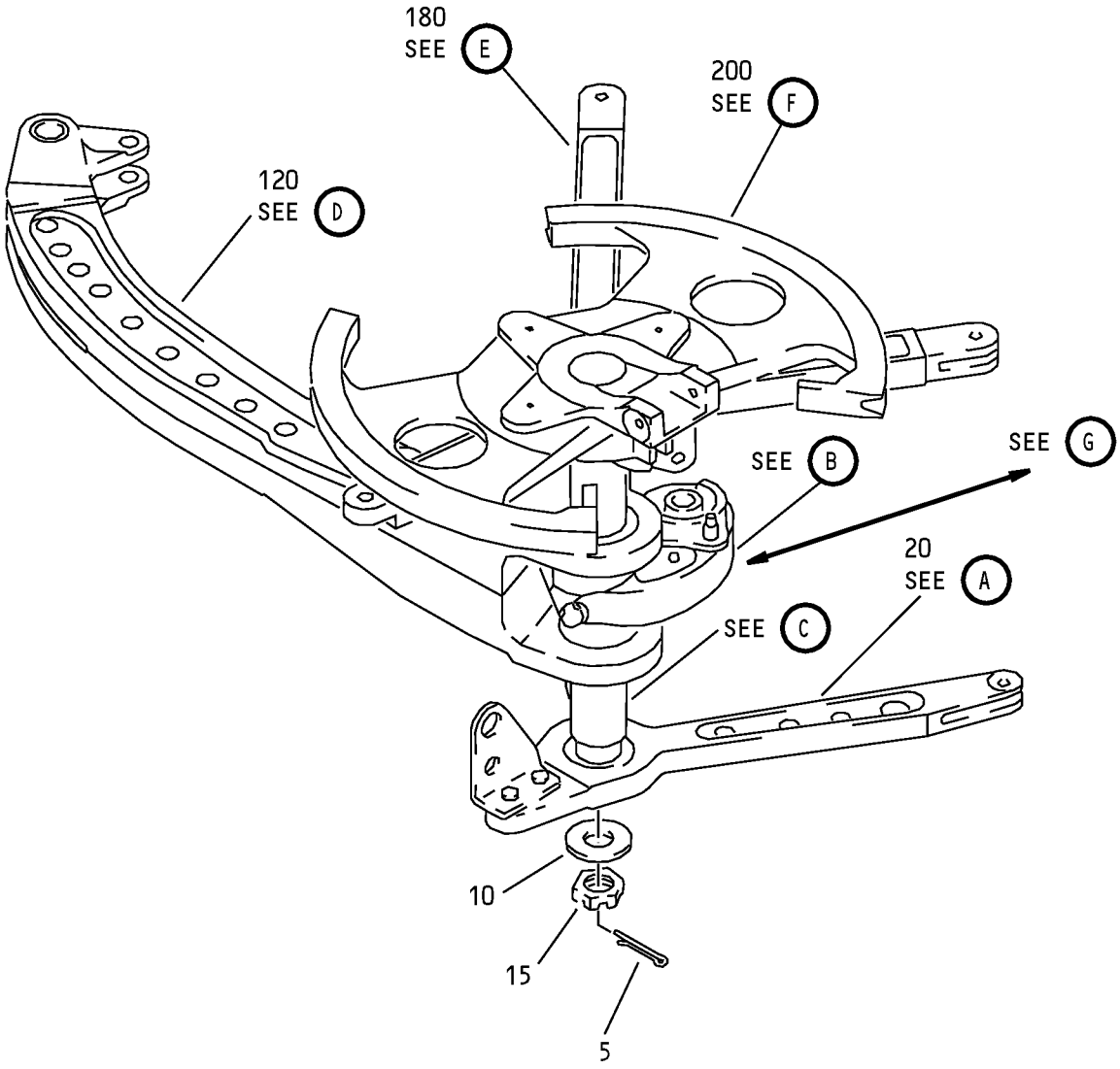
PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
		2	130	2
2TCC06		1	90	2
		1	90	2
		2	90	2
		2	90	2
65-49938-21		1	20	1
65-49938-22		2	55	1
65-49938-23		1	55	1
65-49938-24		2	20	1
65-49947-7		1	150	1
		2	150	1
65-49947-8		1	155	1
		2	155	1
65-50548-2		1	110	1
		2	110	1
65-51250-11		1	120	1
65-51250-14		2	120	1
65-51528-5		2	260	2
65-51528-6		2	260A	2
65-53835-3		1	145	1
		2	145	1
69-35875-1		1	40	1
69-35875-2		1	45	1
69-37493-1		1	190	1
		2	190	1
69-40396-2		1	175	1
69-40707-1		1	115	1
		2	115	1
69-40707-2		1	170	1
		2	170	1
69-40707-3		1	115A	1
		2	115A	1
69-41220-1		1	220	1
69-41223-2		1	60	1
69-41224-2		2	60	1

PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
ACMKP16B005M		1	160	1
		2	160	1
ACMKP23BP26LY19		2	165	1
ACMKP23BP26LY198		1	165	1
ACMKP23BP510LY1		2	165	1
ACMKP23BP510LY198		1	165	1
ACMKP23P26LY198		1	165	1
		2	165	1
AN960PD10		1	30	4
ASRD8CH30C		1	100	1
		1	101	2
		2	100	1
		2	101	2
BAC27DCT520		1	230	1
		2	230	1
BACB10A685		1	50	1
		2	50	1
BACB10BW25		1	185	1
		2	185	1
BACB10CH85C		1	100	1
		1	101	2
		2	100	1
		2	101	2
BACB10FR16		1	160	1
		2	160	1
BACB10FR16J		1	160A	1
		2	160A	1
BACB10FR23		1	165	1
		2	165	1
BACB10FR23J		1	165A	1
		2	165A	1
BACB30HC8-7		1	130	2
		2	130	2
BACB30LR4K29		2	245	2
BACB30NR4K25		1	65	1

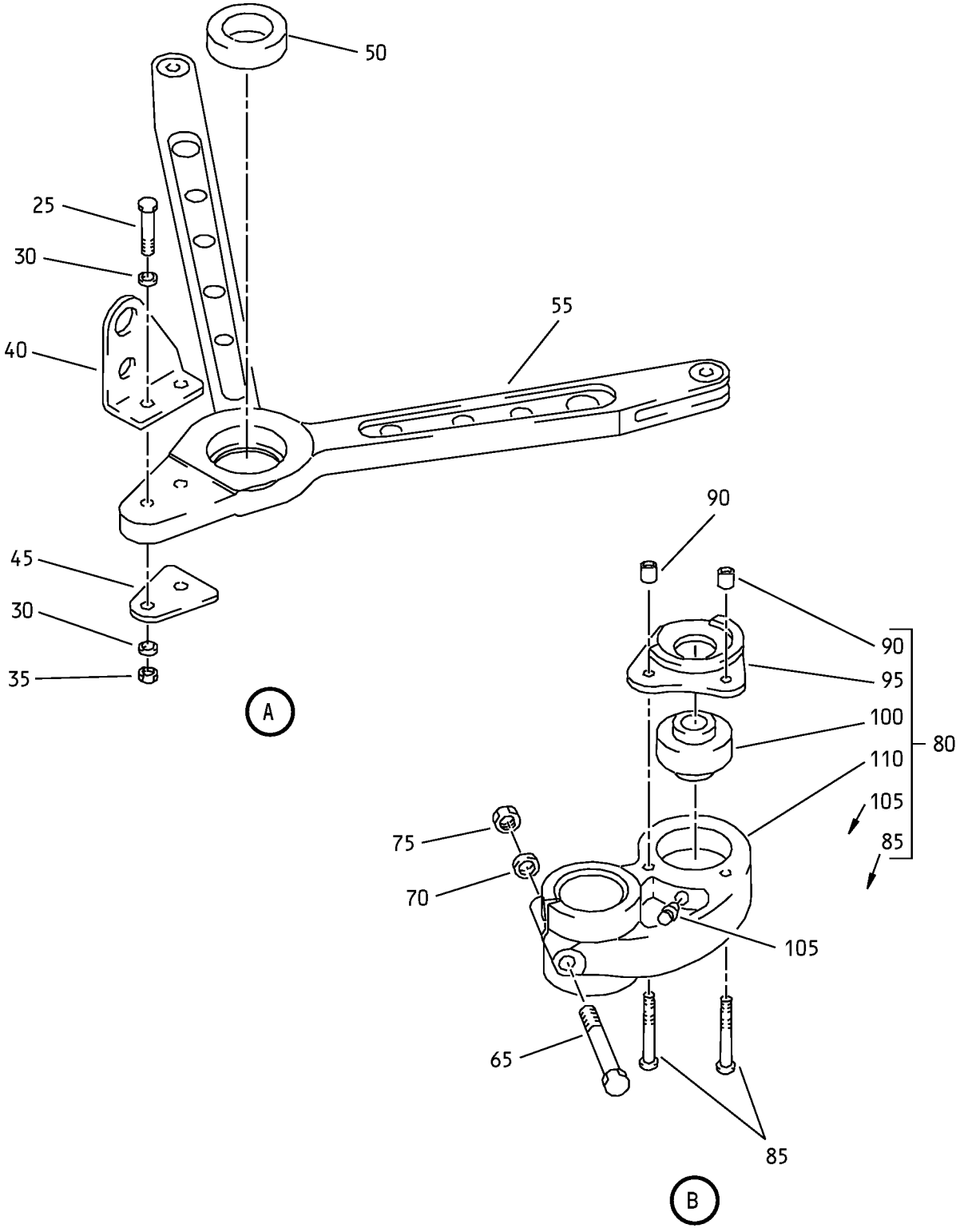
PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
		2	65	1
BACB30UB6K16		1	85A	2
		2	85A	2
BACB30UB6K20		1	85	2
		2	85	2
BACC30BF6		1	90	2
		2	90	2
BACC30BL6		1	90A	2
		2	90A	2
BACN10JC110CD		2	15	1
BACN10JD110ASU		1	15A	1
		2	15B	1
BACN10JD110CD		1	15	1
BACN10YR4CD		1	75	1
		2	75	1
		2	255	2
BACN10YR4CM		1	75A	1
		2	75A	1
		2	255A	2
BACP18BC04A10P		1	5A	1
		2	5A	1
BACP18BC04C10P		1	5	1
		2	5	1
BACR15FT6KE12C		1	205	3
		2	205	3
BACW10BP3CD		1	87	2
		2	87	2
BACW10BP4PK		1	70A	1
		2	70A	1
		2	250A	2
DAS8-27B48		1	100	1
		1	101	2
		2	100	1
		2	101	2
H52732-4CD		1	75	1

PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
		2	75	1
		2	255	2
HST79-6		1	90A	2
		2	90A	2
HST79CY6		1	90A	2
		1	90A	2
		1	90A	2
		2	90A	2
		2	90A	2
		2	90A	2
KP12AE6531		1	50	1
		2	50	1
KP12ATT		1	50	1
		2	50	1
KP25B		1	185	1
		2	185	1
KP25B2TS		1	185	1
		2	185	1
KP25BFS428		1	185	1
		2	185	1
KP25BG27		1	185	1
		2	185	1
KP25BLY196		1	185	1
		2	185	1
KP25BSD610		1	185	1
		2	185	1
LLKP12A		1	50	1
		2	50	1
LLKP25B		1	185	1
		2	185	1
MS20470D8		1	125	12
		2	125	12
MS212099F1-20P		1	113	2
MS21209F1-20P		2	113	2
NAS1080-8		1	135	2

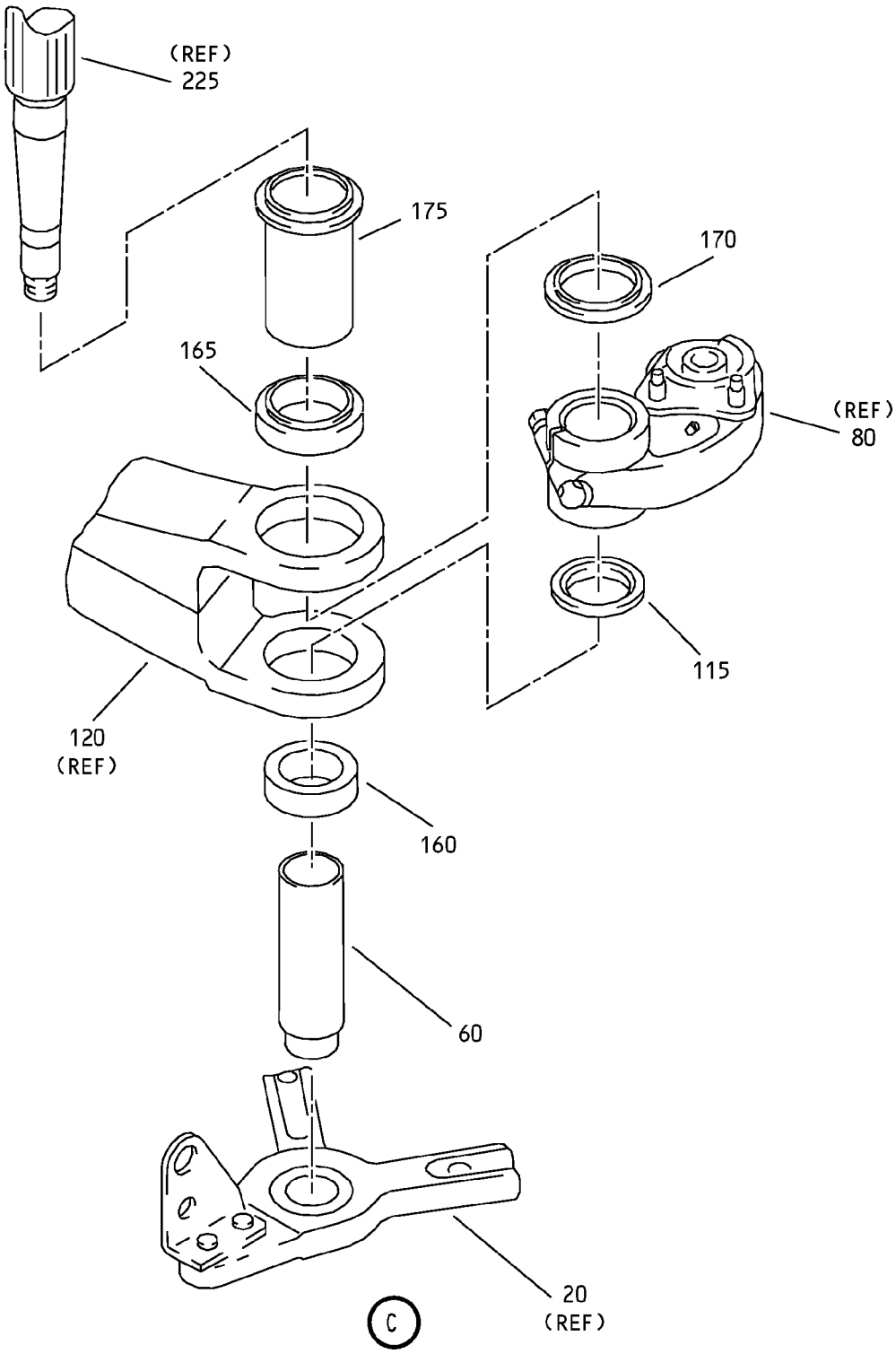
PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
		2	135	2
NAS1103-9		1	25	2
NAS1149C1063R		1	10A	1
		2	10A	1
NAS1149D0463J		1	70	1
		2	70	1
		2	250	2
NAS1149E1063P		1	10	1
		2	10	1
NAS516-1A		1	105	1
		1	106	1
		2	105	1
		2	106	1
NAS538B10P53		1	140	2
		2	140	2
NAS679A3W		1	35	2
NAS8203A9		1	86	2
		2	86	2
PACMKP16BA3908		1	160	1
		2	160	1
PACMKP23BA3908		1	165	1
		2	165	1
PLH54CD		1	75	1
		2	75	1
		2	255	2
SSMKP16BSD702		1	160	1
		2	160	1
SSMKP23BSD702		1	165	1
		2	165	1



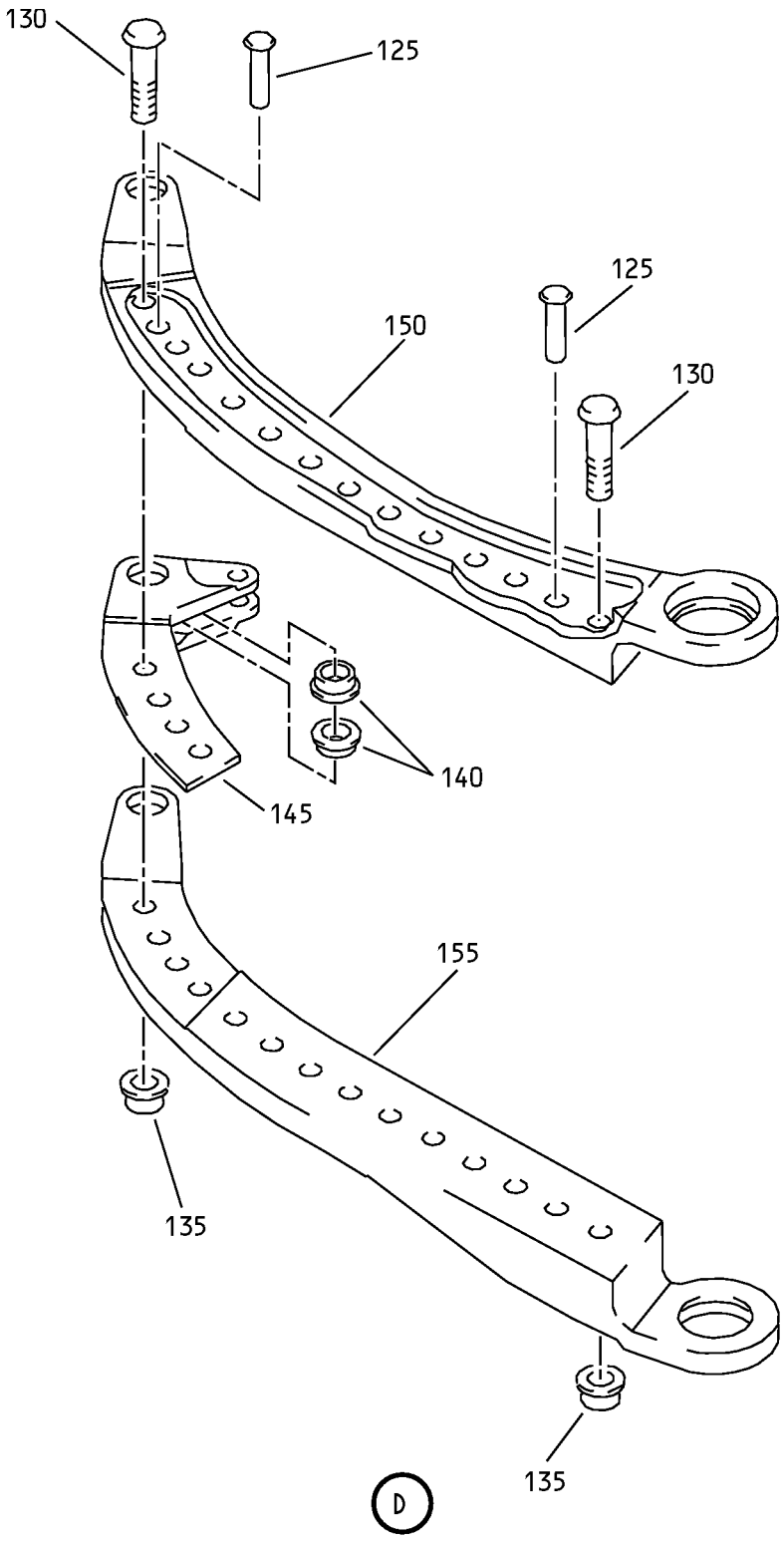
Aileron Power Control Assembly - Lower
IPL Figure 1 (Sheet 1 of 5)



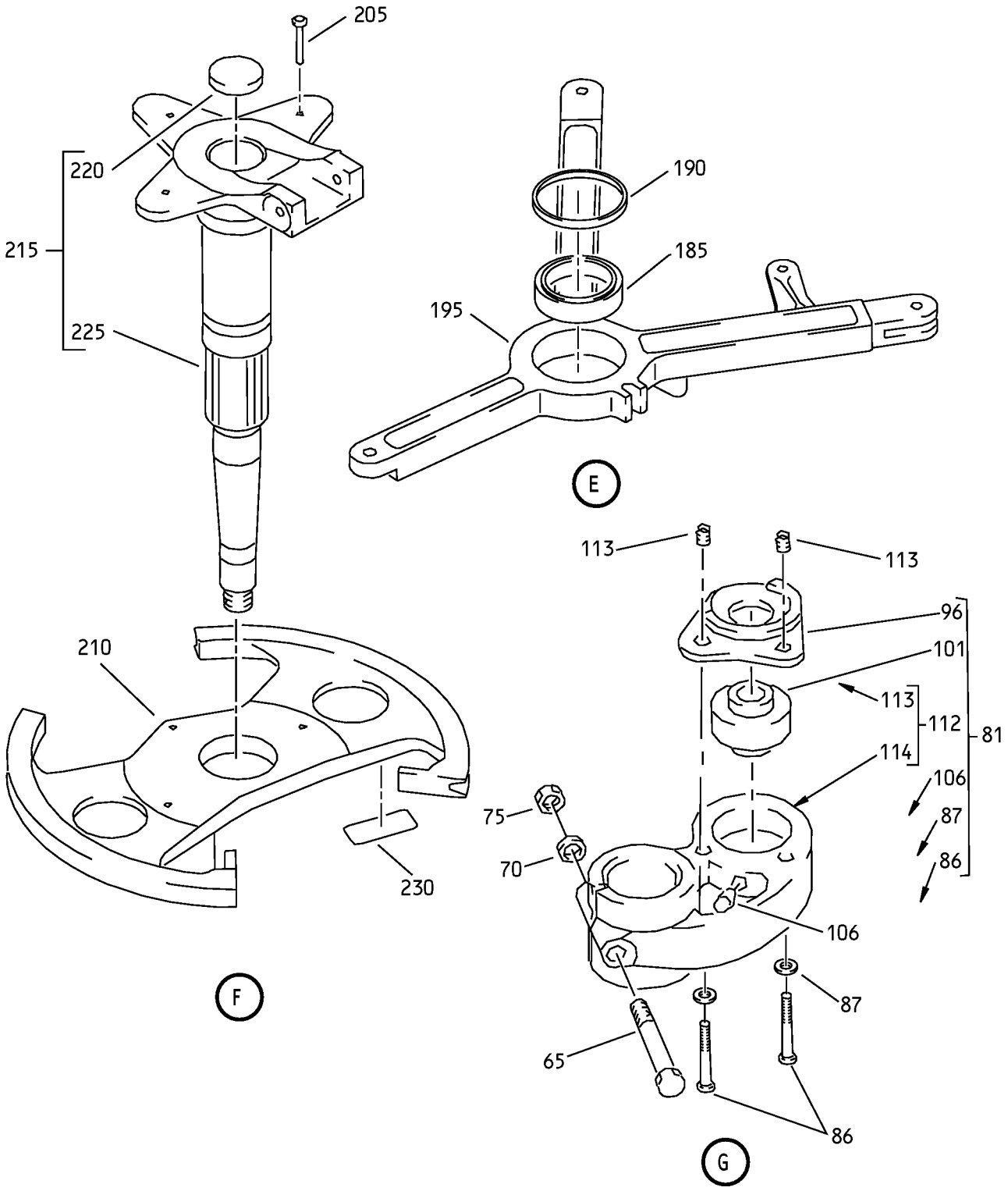
Aileron Power Control Assembly - Lower
IPL Figure 1 (Sheet 2 of 5)



Aileron Power Control Assembly - Lower
IPL Figure 1 (Sheet 3 of 5)



Aileron Power Control Assembly - Lower
IPL Figure 1 (Sheet 4 of 5)



Aileron Power Control Assembly - Lower
IPL Figure 1 (Sheet 5 of 5)

FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USAGE CODE	UNITS PER ASSY
1–					
–1A	251A1661-1		POWER CONTROL ASSY-AILERON CONT LATERAL SYS	A	RF
–1B	251A1661-2		POWER CONTROL ASSY-AILERON CONT LATERAL SYS (FOR DETAILS SEE FIG. 2)	B	RF
–1C	251A1661-4		POWER CONTROL ASSY-AILERON CONT LATERAL SYS (FOR DETAILS SEE FIG. 2)	C	RF
–1D	251A1661-5		POWER CONTROL ASSY-AILERON CONT LATERAL SYS	D	RF
–1E	251A1661-6		POWER CONTROL ASSY-AILERON CONT LATERAL SYS (FOR DETAILS SEE FIG. 2)	E	RF
–1F	251A1661-7		POWER CONTROL ASSY-AILERON CONT LATERAL SYS	F	RF
–1G	251A1661-8		POWER CONTROL ASSY-AILERON CONT LATERAL SYS (FOR DETAILS SEE FIG. 2)	G	RF
–1H	251A1661-9		POWER CONTROL ASSY-AIL. CONT LATERAL SYS	H	RF
–1J	251A1661-10		POWER CONTROL ASSY-AIL. CONT LATERAL SYS (FOR DETAILS SEE FIG. 2)	J	RF
–1K	251A1661-11		POWER CONTROL ASSY-AIL. CONT LATERAL SYS	K	RF
–1L	251A1661-12		POWER CONTROL ASSY-AIL. CONT LATERAL SYS (FOR DETAILS SEE FIG. 2)	L	RF
5	BACP18BC04C10P		. PIN-COTTER	A, D, F, H	1
–5A	BACP18BC04A10P		. PIN-COTTER	K	1
10	NAS1149E1063P		. WASHER	A, D, F, H	1
–10A	NAS1149C1063R		. WASHER	K	1
15	BACN10JD110CD		. NUT	A, D, F, H	1
–15A	BACN10JD110ASU		. NUT	K	1
20	65-49938-21		. SUPPORT ASSY	A, D, F, H, K	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–					
25	NAS1103-9		. . BOLT	A, D, F, H, K	2
30	AN960PD10		. . WASHER	A, D, F, H, K	4
35	NAS679A3W		. . NUT	A, D, F, H, K	2
40	69-35875-1		. . SUPPORT	A, D, F, H, K	1
45	69-35875-2		. . FILLER	A, D, F, H, K	1
50	KP12AE6531		. . BEARING (V21335) (SPEC BACB10A685) (OPT LLKP12A (V38443)) (OPT KP12ATT (V43991))	A, D, F, H, K	1
55	65-49938-23		. . SUPPORT	A, D, F, H, K	1
60	69-41223-2		. SPACER	A, D, F, H, K	1
65	BACB30NR4K25		. BOLT	A, D, F, H, K	1
70	NAS1149D0463J		. WASHER	A, D, F, H	1
–70A	BACW10BP4PK		. WASHER	K	1
75	H52732-4CD		. NUT (V15653) (SPEC BACN10YR4CD) (OPT PLH54CD (V62554))	A, D, F, H	1
–75A	BACN10YR4CM		. NUT	K	1
80	251A1669-1		. LEVER ASSY	A, D	1
–80A	251A1669-2		. LEVER ASSY	F	1
81	251A1669-3		. LEVER ASSY	H, K	1
85	BACB30UB6K20		. . BOLT	A, D	2
–85A	BACB30UB6K16		. . BOLT	F	2
86	NAS8203A9		. . SCREW	H, K	2
87	BACW10BP3CD		. . WASHER	H, K	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–					
90	2TCC06		. . COLLAR (V17446) (SPEC BACC30BF6) (OPT 2TCC06 (V92215))	A, D	2
–90A	HST79CY6		. . COLLAR (V73197) (SPEC BACC30BL6) (OPT HST79-6 (V92215)) (OPT HST79CY6 (V56878)) (OPT HST79CY6 (V5M902))	F	2
95	251A1614-1		. . PLATE-ANTI ROTATION	A, D, F	1
96	251A1614-2		. . PLATE-ANTI ROTATION	H, K	1
100	ASRD8CH30C		. . BEARING (VS0352) (SPEC BACB10CH85C) (OPT DAS8-27B48 (V77896))	A, D, F	1
101	ASRD8CH30C		. . BEARING (VS0352) (SPEC BACB10CH85C) (OPT DAS8-27B48 (V77896))	H, K	2
105	NAS516-1A		. . FITTING	A, D, F	1
106	NAS516-1A		. . FITTING	H, K	1
110	65-50548-2		. . LEVER	F	1
112	251A1669-4		. . LEVER ASSY	H, K	1
113	MS212099F1-20P		. . . INSERT	H, K	2
114	251A1669-5		. . . LEVER	H, K	1
115	69-40707-1		. SPACER	F, H	1
–115A	69-40707-3		. SPACER	K	1
120	65-51250-11		. LINK ASSY	A, D, F, H, K	1
125	MS20470D8		. . RIVET	A, D, F, H, K	12
130	2LSPT8-7		. . BOLT (V11815) (SPEC BACB30HC8-7) (OPT 2LSPT8-7 (V29666))	A, D, F, H, K	2
135	NAS1080-8		. . COLLAR	A, D, F, H, K	2

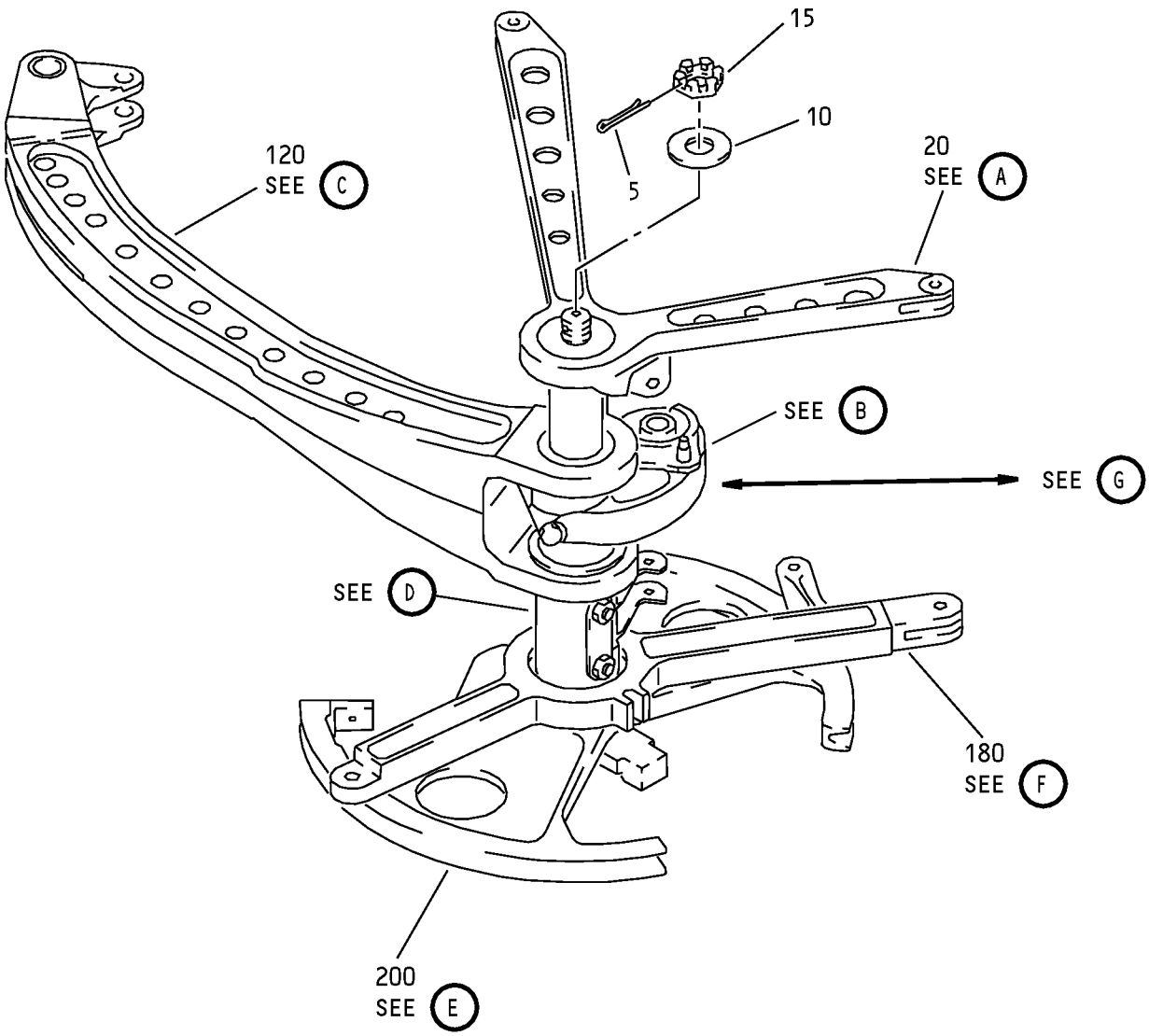
–Item not Illustrated

FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USAGE CODE	UNITS PER ASSY
1–					
140	NAS538B10P53		. . BUSHING	A, D, F, H, K	2
145	65-53835-3		. . INSERT	A, D, F, H, K	1
150	65-49947-7		. . LINK	A, D, F, H, K	1
155	65-49947-8		. . LINK	A, D, F, H, K	1
160	PACMKP16BA3908		. BEARING (V21335) (SPEC BACB10FR16) (OPT ACMKP16B005M (V40920)) (OPT SSMKP16BSD702 (V83086))	A, D, F, H	1
–160A	BACB10FR16J		. BEARING	K	1
165	SSMKP23BSD702		. BEARING (V83086) (SPEC BACB10FR23) (OPT ACMKP23BP510LY198 (V40920)) (OPT PACMKP23BA3908 (V21335)) (OPT ACMKP23BP26LY198 (V40920)) (OPT ACMKP23P26LY198 (V40920))	A, D, F, H	1
–165A	BACB10FR23J		. BEARING	K	1
170	69-40707-2		. SPACER	A, D, F, H, K	1
175	69-40396-2		. SPACER	A, D, F, H, K	1
180	251A1664-1		. FRAME ASSY-SPRT	A	1
–180A	251A1664-11		. FRAME ASSY-SPRT	D, F, H, K	1
185	KP25B		. . BEARING (V38443) (SPEC BACB10BW25) (OPT KP25B2TS (V43991)) (OPT LLKP25B (V38443)) (OPT KP25BG27 (V30163)) (OPT KP25BFS428 (V21335)) (OPT KP25BLY196 (V40920)) (OPT KP25BSD610 (V83086))	A, D, F, H, K	1
190	69-37493-1		. . RETAINER	A, D, F, H, K	1

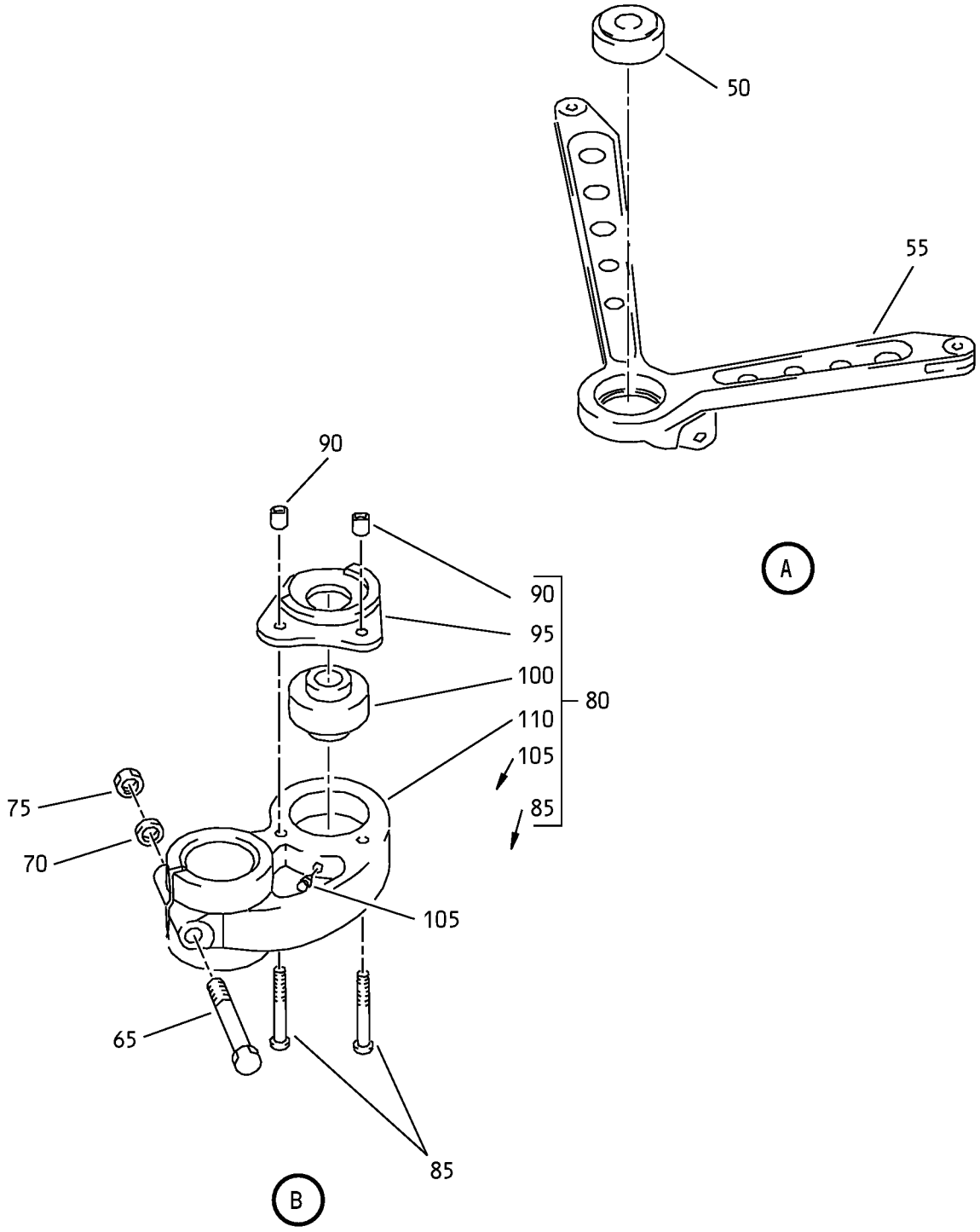
–Item not Illustrated

FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USAGE CODE	UNITS PER ASSY
1–					
195	251A1664-3		. . SUPPORT (OPT ITEM 195A)	A	1
–195A	251A1664-7		. . SUPPORT (OPT ITEM 195)	A	1
–195B	251A1664-13		. . SUPPORT (OPT ITEM 195C)	D, F, H, K	1
–195C	251A1664-17		. . SUPPORT (OPT ITEM 195B)	D, F, H, K	1
200	251A1666-1		. QUADRANT ASSY	A, D, F, H	1
–200A	251A1666-5		. QUADRANT ASSY	K	1
205	BACR15FT6KE12C		. . RIVET	A, D, F, H, K	3
210	251A1667-1		. . DRUM (OPT ITEM 210A)	A, D, F, H, K	1
–210A	251A1667-4		. . DRUM (OPT ITEM 210)	A, D, F, H, K	1
215	251A1668-1		. . SHAFT ASSY	A, D, F, H	1
–215A	251A1668-11		. . SHAFT ASSY	K	1
220	69-41220-1		. . . PLUG	A, D, F, H	1
225	251A1668-3		. . . SHAFT (OPT ITEM 225A)	A, D, F, H	1
–225A	251A1668-5		. . . SHAFT (OPT ITEM 225)	A, D, F, H	1
–225B	251A1668-14		. . . SHAFT (OPT ITEM 225C)	K	1
–225C	251A1668-15		. . . SHAFT (OPT ITEM 225B)	K	1
230	BAC27DCT520		. . MARKER	A, D, F, H, K	1

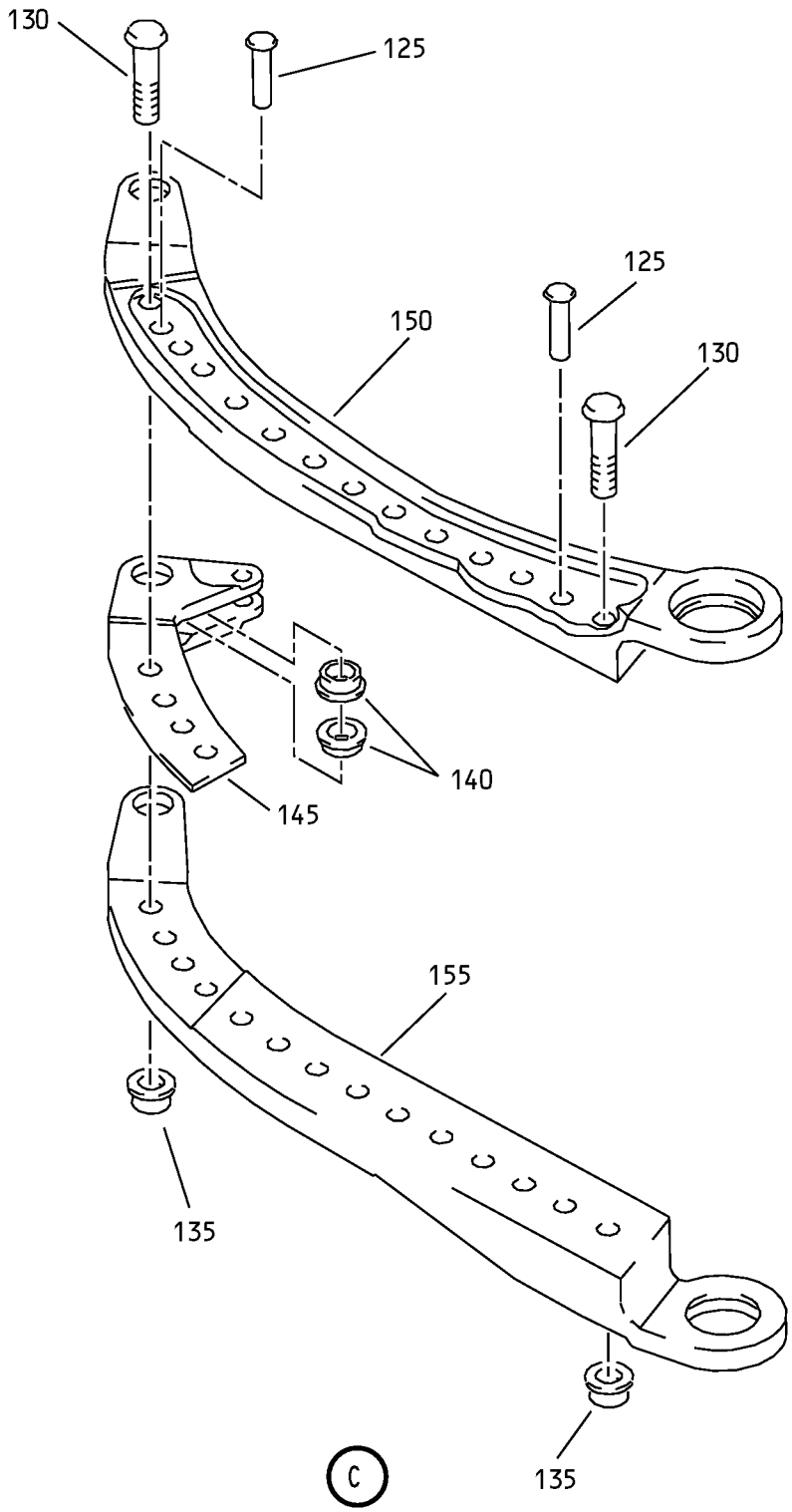
–Item not Illustrated



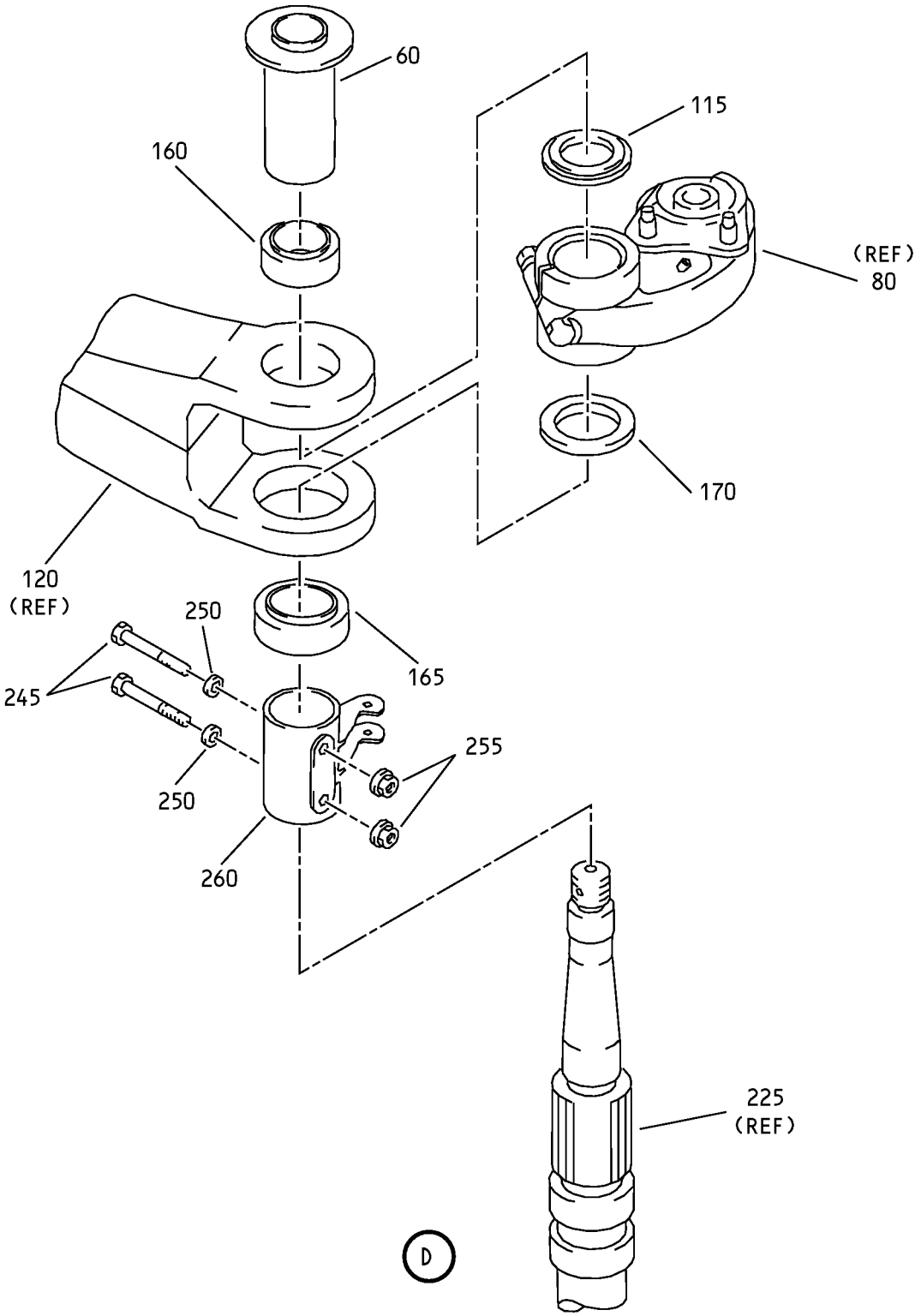
Aileron Power Control Assembly - Upper
IPL Figure 2 (Sheet 1 of 5)



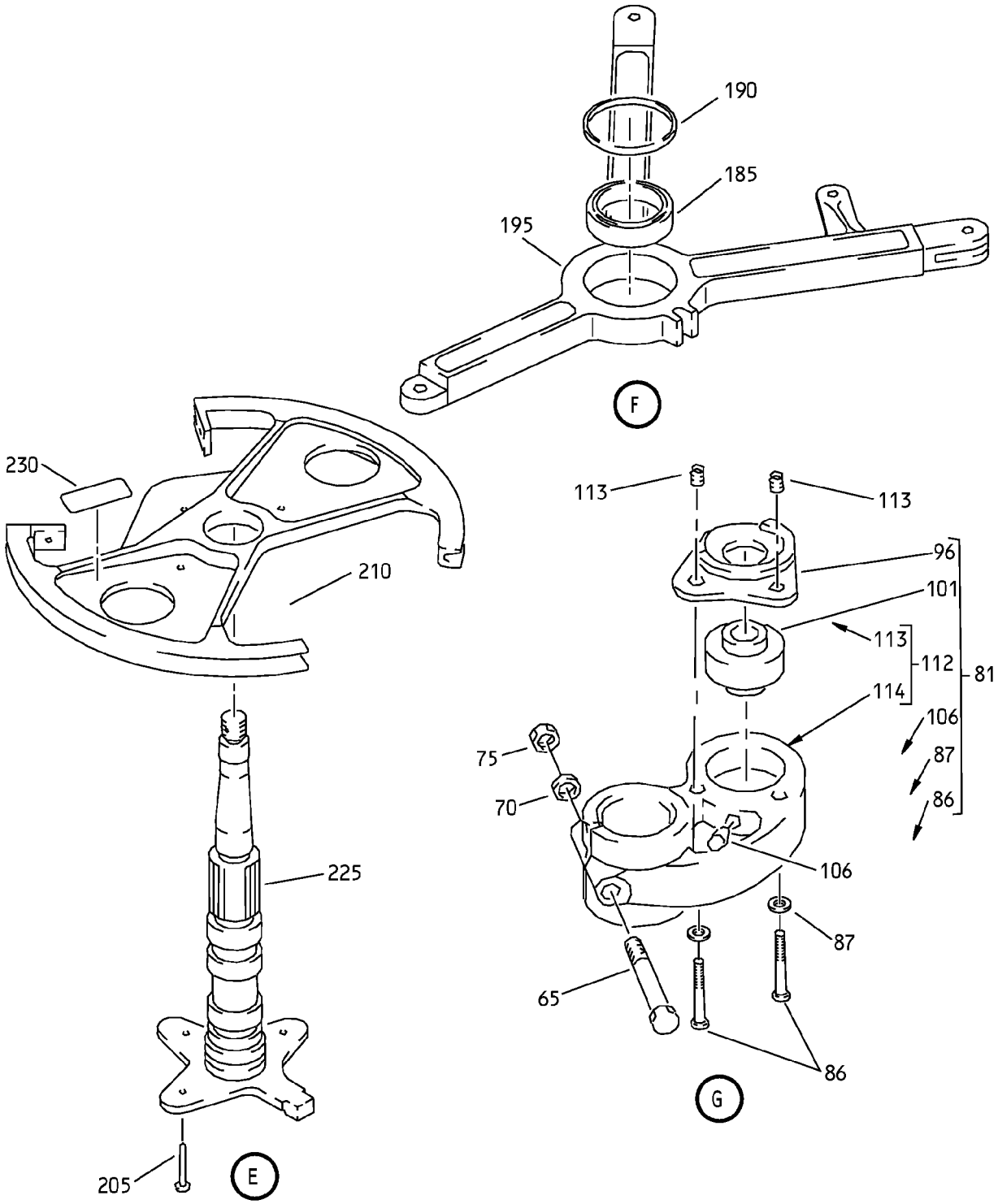
Aileron Power Control Assembly - Upper
IPL Figure 2 (Sheet 2 of 5)



Aileron Power Control Assembly - Upper
IPL Figure 2 (Sheet 3 of 5)



Aileron Power Control Assembly - Upper
IPL Figure 2 (Sheet 4 of 5)



Aileron Power Control Assembly - Upper
IPL Figure 2 (Sheet 5 of 5)

FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USAGE CODE	UNITS PER ASSY
2–					
–1	251A1661-2		POWER CONTROL ASSY-AILERON CONT LATERAL SYS	B	RF
–1A	251A1661-4		POWER CONTROL ASSY-AILERON CONT LATERAL SYS	C	RF
–1B	251A1661-6		POWER CONTROL ASSY-AILERON CONT LATERAL SYS	E	RF
–1C	251A1661-8		POWER CONTROL ASSY-AILERON CONT LATERAL SYS	G	RF
–1D	251A1661-10		POWER CONTROL ASSY-AIL. CONT LATERAL SYS	J	RF
–1C	251A1661-8		POWER CONTROL ASSY-AILERON CONT LATERAL SYS	G	RF
–1D	251A1661-10		POWER CONTROL ASSY-AIL. CONT LATERAL SYS	J	RF
–1E	251A1661-12		POWER CONTROL ASSY-AIL. CONT LATERAL SYS	L	RF
5	BACP18BC04C10P		. PIN-COTTER	B, C, E, G, J	1
–5A	BACP18BC04A10P		. PIN-COTTER	L	1
10	NAS1149E1063P		. WASHER	B, C, E, G, J	1
–10A	NAS1149C1063R		. WASHER	L	1
15	BACN10JC110CD		. NUT	B, C, E, G, J	1
–15B	BACN10JD110ASU		. NUT	L	1
20	65-49938-24		. SUPPORT ASSY	B, C, E, G, J, L	1
25	BACB10A685		DELETED		
30	65-49938-22		DELETED		
35	69-41224-2		DELETED		
40	BACB30NR4K25		DELETED		
45	NAS1149D0463J		DELETED		

–Item not Illustrated

FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USAGE CODE	UNITS PER ASSY
2–					
50	KP12AE6531		. . BEARING (V21335) (SPEC BACB10A685) (OPT LLKP12A (V38443)) (OPT KP12ATT (V43991))	B, C, E, G, J, L	1
55	65-49938-22		. . SUPPORT	B, C, E, G, J, L	1
60	69-41224-2		. SPACER	B, C, E, G, J, L	1
65	BACB30NR4K25		. BOLT	B, C, E, G, J, L	1
70	NAS1149D0463J		. WASHER	B, C, E, G, J	1
–70A	BACW10BP4PK		. WASHER	L	1
75	H52732-4CD		. NUT (V15653) (SPEC BACN10YR4CD) (OPT PLH54CD (V62554))	B, C, E, G, J	1
–75A	BACN10YR4CM		. NUT	L	1
80	251A1669-1		. LEVER ASSY	B, C, E	1
–80A	251A1669-2		. LEVER ASSY	G	1
81	251A1669-3		. LEVER ASSY	J, L	1
85	BACB30UB6K20		. . BOLT	B, C, E	2
–85A	BACB30UB6K16		. . BOLT	G	2
86	NAS8203A9		. . SCREW	J, L	2
87	BACW10BP3CD		. . WASHER	J, L	2
90	2TCC06		. . COLLAR (V17446) (SPEC BACC30BF6) (OPT 2TCC06 (V92215))	B, C, E	2
–90A	HST79CY6		. . COLLAR (V73197) (SPEC BACC30BL6) (OPT HST79-6 (V92215)) (OPT HST79CY6 (V56878)) (OPT HST79CY6 (V5M902))	G	2
95	251A1614-1		. . PLATE-ANTI ROTATION	B, C, E, G	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–					
96	251A1614-2		. . PLATE-ANTI ROTATION	J, L	1
100	ASRD8CH30C		. . BEARING (VS0352) (SPEC BACB10CH85C) (OPT DAS8-27B48 (V77896))	B, C, E, G	1
101	ASRD8CH30C		. . BEARING (VS0352) (SPEC BACB10CH85C) (OPT DAS8-27B48 (V77896))	J, L	2
105	NAS516-1A		. . FITTING	B, C, E, G	1
106	NAS516-1A		. . FITTING	J, L	1
110	65-50548-2		. . LEVER	B, C, E, G	1
112	251A1669-4		. . LEVER ASSY	J, L	1
113	MS21209F1-20P		. . . INSERT	J, L	2
114	251A1669-5		. . . LEVER	J, L	1
115	69-40707-1		. SPACER	B, C, E, G, J	1
–115A	69-40707-3		. SPACER	L	1
120	65-51250-14		. LINK ASSY	B, C, E, G, J, L	1
125	MS20470D8		. . RIVET	B, C, E, G, J, L	12
130	2LSPT8-7		. . BOLT (V11815) (SPEC BACB30HC8-7) (OPT 2LSPT8-7 (V29666))	B, C, E, G, J, L	2
135	NAS1080-8		. . COLLAR	B, C, E, G, J, L	2
140	NAS538B10P53		. . BUSHING	B, C, E, G, J, L	2
145	65-53835-3		. . INSERT	B, C, E, G, J, L	1
150	65-49947-7		. . LINK	B, C, E, G, J, L	1
155	65-49947-8		. . LINK	B, C, E, G, J, L	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–					
160	PACMKP16BA3908		. BEARING (V21335) (SPEC BACB10FR16) (OPT ACMKP16B005M (V40920)) (OPT SSMKP16BSD702 (V83086))	B, C, E, G, J	1
–160A	BACB10FR16J		. BEARING	L	1
165	SSMKP23BSD702		. BEARING (V83086) (SPEC BACB10FR23) (OPT ACMKP23BP510LY1 (V40920)) (OPT PACMKP23BA3908 (V21335)) (OPT ACMKP23BP26LY19 (V40920)) (OPT ACMKP23P26LY198 (V40920))	B, C, E, G, J	1
–165A	BACB10FR23J		. BEARING	L	1
170	69-40707-2		. SPACER	B, C, E, G, J, L	1
175	69-37493-1		DELETED		
180	251A1664-2		. FRAME ASSY	B, C	1
–180A	251A1664-12		. FRAME ASSY	E, G, J, L	1
185	KP25B		. . BEARING (V38443) (SPEC BACB10BW25) (OPT KP25B2TS (V43991)) (OPT LLKP25B (V38443)) (OPT KP25BG27 (V30163)) (OPT KP25BFS428 (V21335)) (OPT KP25BLY196 (V40920)) (OPT KP25BSD610 (V83086))	B, C, E, G, J, L	1
–185A	251A1666-4		DELETED		
190	69-37493-1		. . RETAINER	B, C, E, G, J, L	1
195	251A1664-4		. . SUPPORT (OPT ITEM 195A)	B, C	1
–195A	251A1664-8		. . SUPPORT (OPT ITEM 195)	B, C	1
–195B	251A1664-14		. . SUPPORT (OPT ITEM 195C)	E, G, J, L	1
–195C	251A1664-18		. . SUPPORT (OPT ITEM 195B)	E, G, J, L	1
200	251A1666-2		. QUADRANT ASSY	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
2–					
–200A	251A1666-4		. QUADRANT ASSY	C, E, G, J	1
–200B	251A1666-6		. QUADRANT ASSY	L	1
–200C	251A1668-10		DELETED		
205	BACR15FT6KE12C		. . RIVET	B, C, E, G, J, L	3
210	251A1667-2		. . DRUM (OPT ITEM 210A)	B, C, E, G, J, L	1
–210A	251A1667-5		. . DRUM (OPT ITEM 210)	B, C, E, G, J, L	1
215	BAC27DCT520		DELETED		
225	251A1668-2		. . SHAFT ASSY (OPT ITEM 225A)	B	1
–225A	251A1668-4		. . SHAFT ASSY (OPT ITEM 225)	B	1
–225B	251A1668-8		. . SHAFT ASSY (OPT ITEM 225C)	C, E, G, J	1
–225C	251A1668-10		. . SHAFT ASSY (OPT ITEM 225B)	C, E, G, J	1
–225D	251A1668-12		. . SHAFT ASSY (OPT ITEM 225E)	L	1
–225E	251A1668-13		. . SHAFT ASSY (OPT ITEM 225D)	L	1
230	BAC27DCT520		. . MARKER	B, C, E, G, J, L	1
245	BACB30LR4K29		. BOLT	B, C, E, G, J, L	2
250	NAS1149D0463J		. WASHER	B, C, E, G, J	2
–250A	BACW10BP4PK		. WASHER	L	2
255	H52732-4CD		. NUT (V15653) (SPEC BACN10YR4CD) (OPT PLH54CD (V62554))	B, C, E, G, J	2
–255A	BACN10YR4CM		. NUT	L	2
260	65-51528-5		. LEVER (OPT ITEM 260A)	B, C, E, G, J, L	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–					
–260A	65-51528-6		. LEVER (OPT ITEM 260)	B, C, E, G, J, L	2

–Item not Illustrated