

ELEVATOR CONTROL COMPONENTS

PART NUMBER: SEE CONTENTS, PAGE 1

COMPONENT MAINTENANCE MANUAL
WITH
ILLUSTRATED PARTS LIST

27-31-25

TITLE PAGE

Page 1

Oct 10/84

01

REVISION RECORD

- Retain this record in front of manual. On receipt of revision, insert revised pages in the manual, and enter revision number, date inserted and initial.

REVISION NUMBER	REVISION DATE	DATE FILED	BY	REVISION NUMBER	REVISION DATE	DATE FILED	BY

TEMPORARY REVISION AND SERVICE BULLETIN RECORD

BOEING SERVICE BULLETIN	BOEING TEMPORARY REVISION	OTHER DIRECTIVE	DATE OF INCORPORATION INTO MANUAL

27-31-25

TR & SB RECORD

01

Page 1

Oct 10/84

PAGE	DATE	CODE	PAGE	DATE	CODE
27-31-25			REPAIR 3-1		
			601	OCT 10/84	01
			602	OCT 10/84	01
TITLE PAGE			603	OCT 10/84	01
1	OCT 10/84	01	604	OCT 10/84	01
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REVISION RECORD			REPAIR 4-1		
1	OCT 10/84	01	601	OCT 10/84	01
2	BLANK		602	OCT 10/84	01
TR & SB RECORD			603	OCT 10/84	01
1	OCT 10/84	01	604	BLANK	
2	BLANK		REPAIR 5-1		
LIST OF EFFECTIVE PAGES			601	OCT 10/84	01
1	OCT 10/84	01	602	OCT 10/84	01
THRU LAST PAGE			REPAIR 6-1		
CONTENTS			601	OCT 10/84	01
1	OCT 10/84	01	602	OCT 10/84	01
2	BLANK		REPAIR 7-1		
INTRODUCTION			601	OCT 10/84	01
1	OCT 10/84	01	602	OCT 10/84	01
2	BLANK		ILLUSTRATED PARTS LIST		
REPAIR-GENERAL			1001	OCT 10/84	01
601	OCT 10/84	01	1002	OCT 10/84	01
602	OCT 10/84	01	1003	BLANK	
REPAIR 1-1			1004	OCT 10/84	01
601	OCT 10/84	01	1005	OCT 10/84	01
602	OCT 10/84	01	1006	OCT 10/84	01
REPAIR 2-1			1007	BLANK	
601	OCT 10/84	01	1008	OCT 10/84	01
602	OCT 10/84	01	1009	OCT 10/84	01
603	OCT 10/84	01	1010	OCT 10/84	01
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			1012	OCT 10/84	01
			1013	OCT 10/84	01
			1014	BLANK	

* = REVISED, ADDED OR DELETED

27-31-25

EFFECTIVE PAGES
 LAST PAGE Page 1
 01 Oct 10/84

TABLE OF CONTENTS

NOTE: This manual contains overhaul data for various components of the Elevator Control System. Functions which cannot be performed by the use of standard industry practices are included in repair instructions for each component.

ELEVATOR CONTROL COMPONENTS

<u>PART NUMBER</u>	<u>NOMENCLATURE</u>	<u>PAGE</u>
- -	REPAIR-GENERAL	601, REPAIR-GEN
251T2430	QUADRANT	601, REPAIR 1-1
251T2431	QUADRANT	601, REPAIR 1-1
251T2651	BELLCRANK	601, REPAIR 2-1
251T2652	BELLCRANK	601, REPAIR 3-1
251T2663	CRANK, IDLER	601, REPAIR 4-1
253T2211	CRANK	601, REPAIR 5-1
253T2214	HOUSING, BEARING	601, REPAIR 6-1
69B81723	HOUSING, BEARING	601, REPAIR 7-1
- -	ILLUSTRATED PARTS LIST	1001

27-31-25

CONTENTS

01

Page 1

Oct 10/84

INTRODUCTION

The instructions in this manual provide the information necessary to perform maintenance functions ranging from simple checks and replacement to complete shop-type repair.

This manual is divided into separate sections:

- | | |
|--|------------------------------|
| 1. Title Page | 4. List of Effective Pages |
| 2. Record of Revisions | 5. Table of Contents |
| 3. Temporary Revision &
Service Bulletin Record | 6. Introduction |
| | 7. Procedures & IPL Sections |

Refer to the Table of Contents for the page location of applicable sections. An asterisked flagnote *[] in place of the page number indicates that no special instructions are provided since the function can be performed using standard industry practices.

The beginning of the REPAIR section includes a list of the separate repairs, a list of applicable standard Boeing practices, and an explanation of the True Position Dimensioning symbols used.

An explanation of the use of the Illustrated Parts List is provided in the Introduction to that section.

All weights and measurements used in the manual are in English units, unless otherwise stated. When metric equivalents are given they will be in parentheses following the English units.

Design changes, optional parts, configuration differences and Service Bulletin modifications create alternate part numbers. These are identified in the Illustrated Parts List (IPL) by adding an alphabetical character to the basic item number. The resulting item number is called an alpha-variant. Throughout the manual, IPL basic item number references also apply to alpha-variants unless otherwise indicated.

27-31-25

INTRODUCTION

01

Page 1

Oct 10/84

REPAIR – GENERAL

1. Content

- A. Each separate repair includes, as applicable, check, repair, and refinish instructions.

2. Standard Practices

- A. Refer to the following standard practices as applicable, for details of procedures in individual repairs.

20-10-04 Grinding of Chrome Plated Parts
20-20-02 Penetrant Methods of Inspection
20-30-02 Stripping of Protective Finishes
20-41-01 Decoding Table for Boeing Finish Codes
20-42-03 Hard Chrome Plating
20-43-01 Chromic Acid Anodizing
20-50-03 Bearing Installation and Retention

3. Materials

NOTE: Equivalent substitutes may be used.

- A. Primer -- BMS 10-11, type 1 (Ref 20-60-02)
B. Grease -- MIL-G-23827 (Ref 20-60-03)
C. Sealant -- BMS 5-95 (Ref 20-60-04)
D. Enamel -- BMS 10-11, type 2, color white (BAC702) (Ref 20-60-02)

27-31-25

REPAIR-GENERAL

01

Page 601

Oct 10/84

4. Dimensioning Symbols

A. Standard True Position Dimensioning Symbols used in applicable repair procedures are shown in Fig. 601.

—	STRAIGHTNESS	\oplus	THEORETICAL EXACT POSITION OF A FEATURE (TRUE POSITION)
\square	FLATNESS	\varnothing	DIAMETER
\perp	PERPENDICULARITY (OR SQUARENESS)	BASIC (BSC) OR	A THEORETICALLY EXACT DIMENSION USED TO DESCRIBE SIZE, SHAPE OR LOCATION OF A FEATURE FROM WHICH PERMISSIBLE VARIATIONS ARE ESTABLISHED BY TOLERANCES ON OTHER DIMENSIONS OR NOTES.
//	PARALLELISM	DIM	
\bigcirc	ROUNDNESS	-A-	DATUM
\bigcirc	CYLINDRICITY	\textcircled{M}	MAXIMUM MATERIAL CONDITION (MMC)
\frown	PROFILE OF A LINE	\textcircled{S}	REGARDLESS OF FEATURE SIZE (RFS)
\triangle	PROFILE OF A SURFACE	\textcircled{P}	PROJECTED TOLERANCE ZONE
\odot	CONCENTRICITY		
\equiv	SYMMETRY		
\sphericalangle	ANGULARITY		
\nearrow	RUNOUT		

EXAMPLES

$\text{—} \quad 0.002$	STRAIGHT WITHIN 0.002	$\textcircled{\odot} \text{ C } \varnothing \quad 0.0005$	CONCENTRIC TO C WITHIN 0.0005 DIAMETER (FULL INDICATOR MOVEMENT)
$\perp \text{ B } \quad 0.002$	PERPENDICULAR TO B WITHIN 0.002	$\equiv \text{ A } \quad 0.010$	SYMMETRICAL WITH A WITHIN 0.010
$\parallel \text{ A } \quad 0.002$	PARALLEL TO A WITHIN 0.002	$\sphericalangle \text{ A } \quad 0.005$	ANGULAR TOLERANCE 0.005 WITH A
$\bigcirc \quad 0.002$	ROUND WITHIN 0.002	$\oplus \text{ B } \varnothing \quad 0.002 \textcircled{S}$	LOCATED AT TRUE POSITION WITHIN 0.002 DIA IN RELATION TO DATUM B, REGARDLESS OF FEATURE SIZE
$\bigcirc \quad 0.010$	CYLINDRICAL SURFACE MUST LIE BETWEEN TWO CONCENTRIC CYLINDERS, ONE OF WHICH HAS A RADIUS 0.010 INCH GREATER THAN THE OTHER	$\perp \text{ A } \varnothing \quad 0.010 \textcircled{M}$ $0.510 \textcircled{P}$	AXIS IS TOTALLY WITHIN A CYLINDER OF 0.010-INCH DIAMETER, PERPENDICULAR TO, AND EXTENDING 0.510-INCH ABOVE, DATUM A, MAXIMUM MATERIAL CONDITION
$\frown \text{ A } \quad 0.006$	EACH LINE ELEMENT OF THE SURFACE AT ANY CROSS SECTION MUST LIE BETWEEN TWO PROFILE BOUNDARIES 0.006 INCH APART IN RELATION TO DATUM PLANE A	2.000	EXACT DIMENSION IS 2.000
$\triangle \text{ A } \quad 0.020$	SURFACES MUST LIE WITHIN PARALLEL BOUNDARIES 0.02 INCH APART AND EQUALLY DISPOSED ABOUT TRUE PROFILE	OR 2.000 BSC	

True Position Dimensioning Symbols
Figure 601

27-31-25

REPAIR-GENERAL

01 Page 602

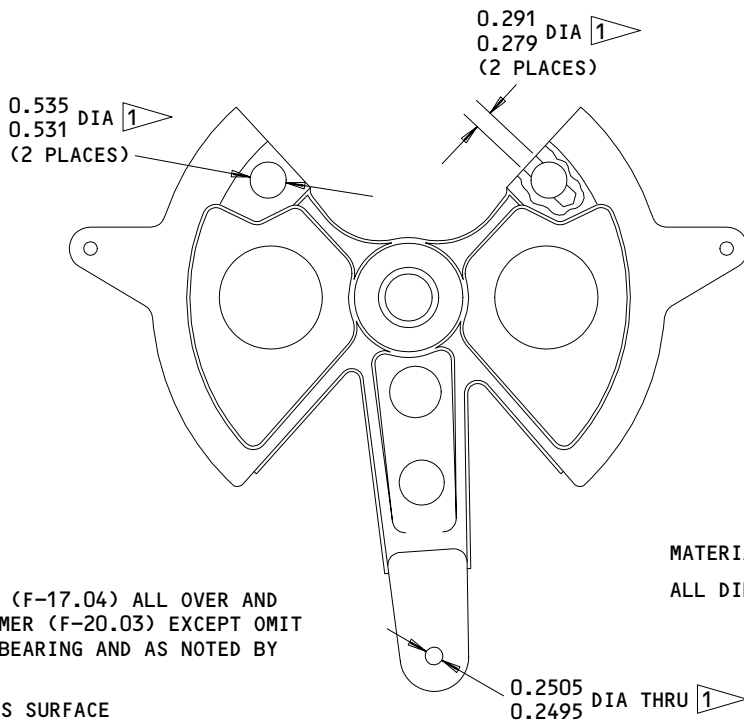
Oct 10/84

QUADRANT ASSY - REPAIR 1-1

251T2430-1, -4
251T2431-1, -4

NOTE: Refer to REPAIR-GEN for list of applicable standard practices. For repair of surfaces which may only require stripping and restoration of original finish, refer to REFINISH instruction, Fig. 601. Item numbers refer to IPL Fig. 1.

1. Penetrant check quadrant (70, 75) per 20-20-02.
2. Repair
 - A. Quadrant refinish -- Fig. 601
 - B. Bearing (65) replacement
 - (1) Remove bearing.
 - (2) Install replacement bearing with grease and roller swage per 20-50-03.



REFINISH

CHROMIC ACID ANODIZE (F-17.04) ALL OVER AND APPLY 2 COATS OF PRIMER (F-20.03) EXCEPT OMIT PRIMER IN BORES FOR BEARING AND AS NOTED BY



OMIT PRIMER THIS SURFACE

MATERIAL: AL ALLOY
ALL DIMENSIONS ARE IN INCHES

Quadrant Refinish
Figure 601

27-31-25

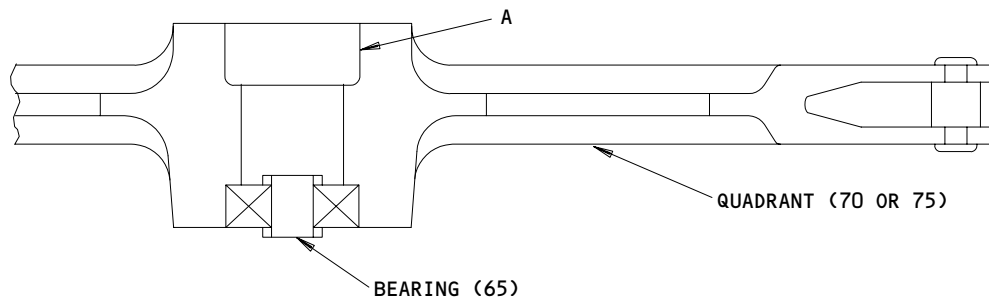
REPAIR 1-1

01

Page 601

Oct 10/84

3. Fits and Clearances



Ref Letter Fig.602	Mating Item No. IPL Fig.1	Design Dimension				Service Wear Limit			
		Dimension		Assembly Clearance *[1]		Dimension		Maximum Clearance	
		Min	Max	Min	Max	Min	Max		
A	ID 70,75 OD *[2]	0.9012	0.9017	-0.0002	0.0008	0.9004	0.9022	0.0013	

*[1] NEGATIVE VALUES DENOTE INTERFERENCE FIT

*[2] INSTALLATION PART BACB10BY4

ALL DIMENSIONS ARE IN INCHES

Fits and Clearances
 Figure 602

144008

27-31-25

REPAIR 1-1

Page 602

Oct 10/84

01

BELLCRANK ASSY - REPAIR 2-1

251T2651-1, -4

NOTE: Refer to REPAIR-GEN for list of applicable standard practices. For repair of surfaces which may only require stripping and restoration of original finish, refer to REFINISH instruction, Fig. 601. Item numbers refer to IPL Fig. 2.

1. Penetrant check bellcrank (10) per 20-20-02.

2. Repair

A. Bolt hole repair (Fig. 601)

- (1) Machine hole, as required, within limit shown to remove defects.
- (2) Manufacture repair bushing per Fig. 602.
- (3) Install repair bushing using shrink fit method except use BMS 5-95 sealant.
- (4) Check bushing I.D. and machine to design dimension if required.

B. Bellcrank refinish -- Fig. 601

C. Bearing replacement

- (1) Remove bearing.
- (2) Install bearing and roller swage per 20-50-03.

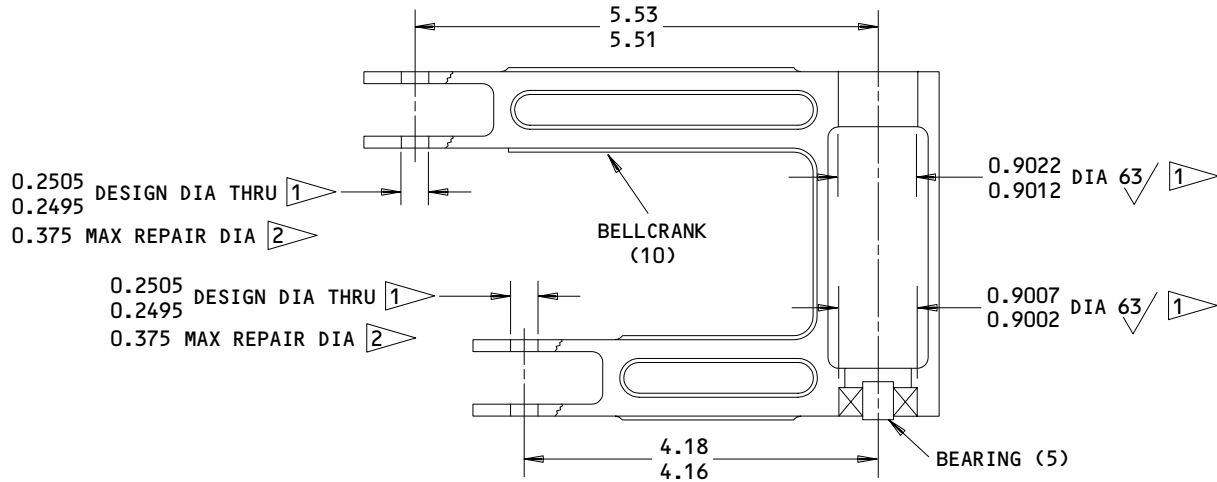
27-31-25

REPAIR 2-1

01

Page 601

Oct 10/84



REFINISH

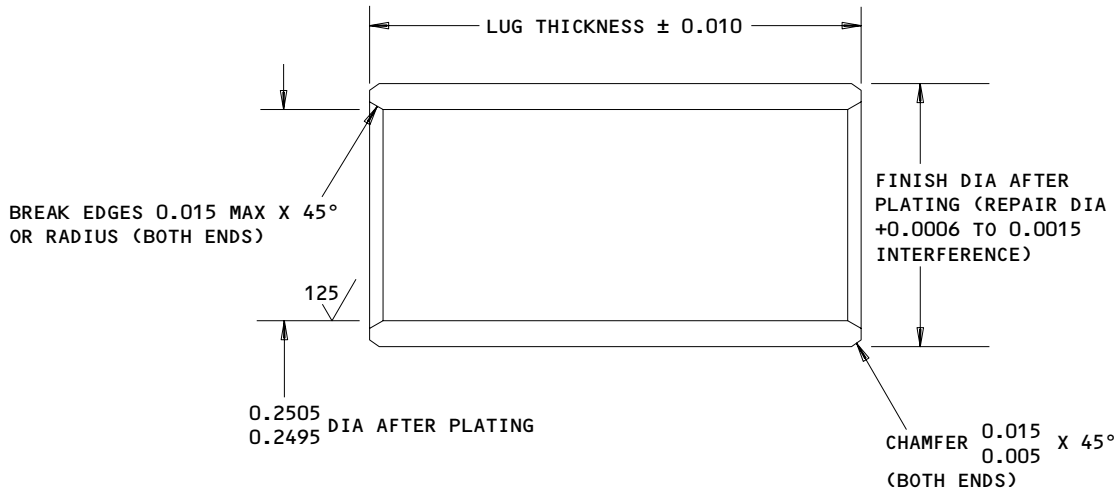
CHROMIC ACID ANODIZE (F-17.04) ALL OVER AND APPLY 2 COATS OF PRIMER (F-20.03) EXCEPT OMIT PRIMER IN AREA INDICATED BY 1

- 1 OMIT PRIMER THIS SURFACE
- 2 REPAIR LIMIT FOR INSTALLATION OF REPAIR BUSHING

REPAIR

REF 2
 125 ALL MACHINED SURFACES EXCEPT AS NOTED
 BREAK SHARP EDGES 0.008R
 MATERIAL: AL ALLOY
 ALL DIMENSIONS ARE IN INCHES

**Bellcrank Repair and Refinish
 Figure 601**



MATERIAL: AL-NI-BR PER AMS 4640
 CADMIUM PLATE (F-15.06) ALL OVER
 ALL DIMENSIONS ARE IN INCHES

**Repair Bushing Details
 Figure 602**

144017

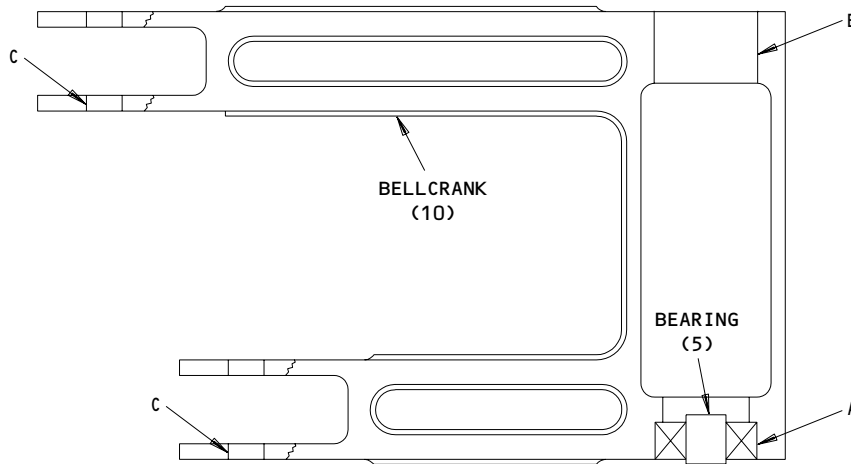
144123

27-31-25

REPAIR 2-1
 Page 602
 Oct 10/84

01

3. Fits and Clearances



Ref Letter Fig.603	Mating Item No. IPL Fig.2	Design Dimension				Service Wear Limit		
		Dimension		Assembly Clearance *[*1]		Dimension		Maximum Clearance
		Min	Max	Min	Max	Min	Max	
A	ID 10	0.9002	0.9007	-0.0012	-0.0002	0.9008	0.9013	-0.0001
	OD 5	0.9009	0.9014					
B	ID 10	0.9012	0.9022	-0.0002	0.0013	0.9008	0.9028	0.0014
	OD *[*2]	0.9009	0.9014					
C	ID 10	0.2495	0.2505	0.0000	0.0020	0.2475	0.2525	0.0030
	OD *[*3]	0.2485	0.2495					

*[*1] NEGATIVE VALUES DENOTE INTERFERENCE FIT

*[*2] INSTALLATION PART BACB10BY4

*[*3] INSTALLATION PART BACB30NF4

ALL DIMENSIONS ARE IN INCHES

Fits and Clearances
 Figure 603

144025

27-31-25

REPAIR 2-1

01

Page 603

Oct 10/84

BELLCRANK ASSY - REPAIR 3-1

251T2652-1, -2, -7, -8

NOTE: Refer to REPAIR-GEN for list of applicable standard practices. For repair of surfaces which may only require stripping and restoration of original finish, refer to REFINISH instruction, Fig. 601. Item numbers refer to IPL Fig. 3.

1. Penetrant check bellcrank (15, 20) per 20-20-02.
2. Repair
 - A. Bolt hole repair (Fig. 601)
 - (1) Machine hole as required, within repair limit shown to remove defects.
 - (2) Manufacture repair bushing per Fig. 602.
 - (3) Install repair bushing using shrink fit method with sealant, BMS 5-95.
 - (4) Check bushing I.D. and machine to design dimension if required.
 - B. Bellcrank refinish -- Fig. 601
 - C. Bearing (10) replacement
 - (1) Remove bearing.
 - (2) Install replacement bearing and roller swage per 20-50-03 except use wet sealant, BMS 5-95.

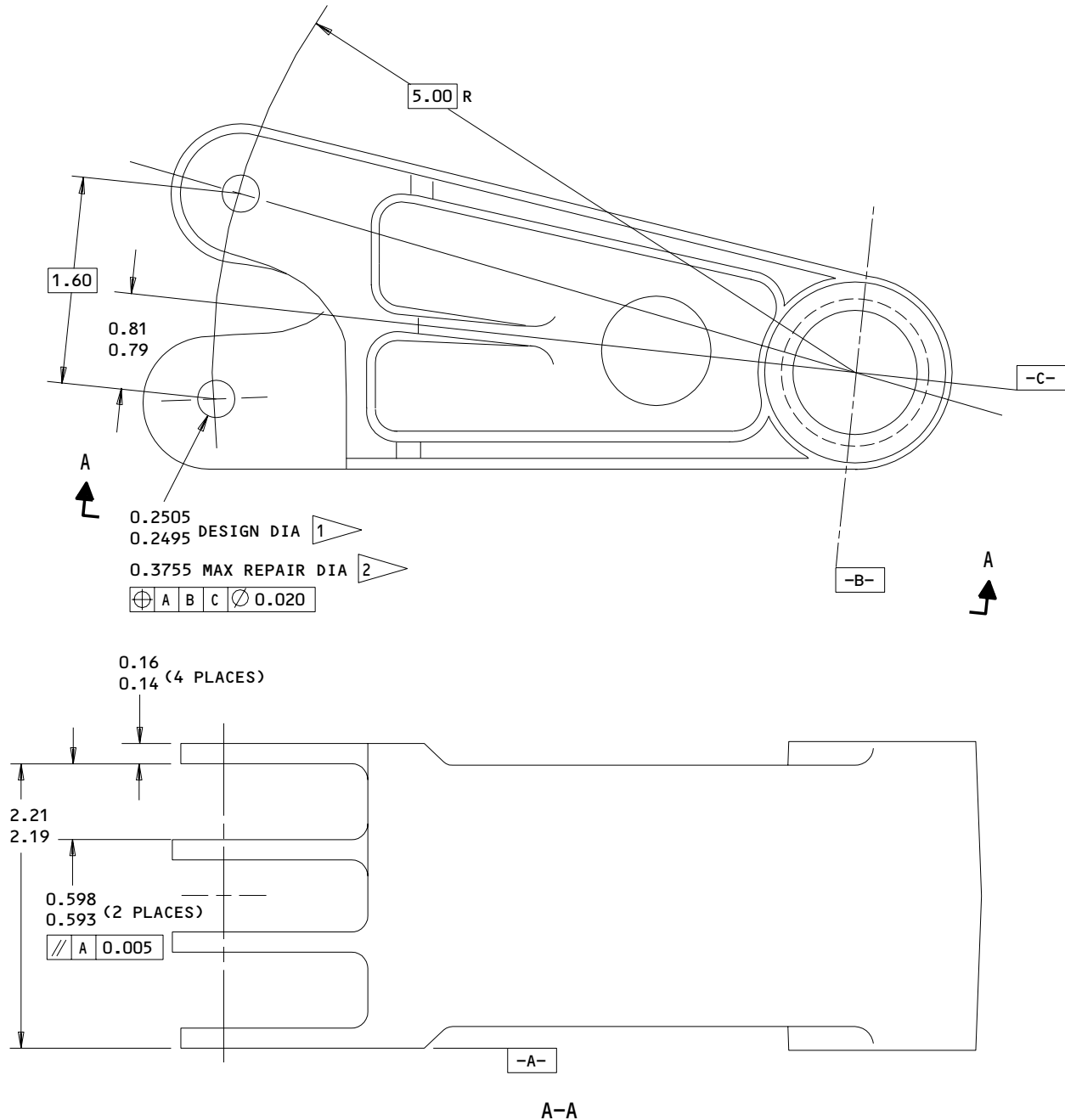
27-31-25

REPAIR 3-1

01

Page 601

Oct 10/84



REFINISH

CHROMIC ACID ANODIZE (F-17.04) ALL OVER AND APPLY 2 COATS OF PRIMER (F-20.03) EXCEPT OMIT PRIMER IN BORES FOR BEARINGS AND AS NOTED BY

1

1 OMIT PRIMER THIS SURFACE

2 REPAIR LIMIT FOR INSTL OF REPAIR BUSHING

REPAIR

REF 2

125 ALL MACHINED SURFACES EXCEPT AS NOTED
 BREAK SHARP EDGES 0.008R

MATERIAL: AL ALLOY

ALL DIMENSIONS ARE IN INCHES

Bellcrank Repair
 Figure 601

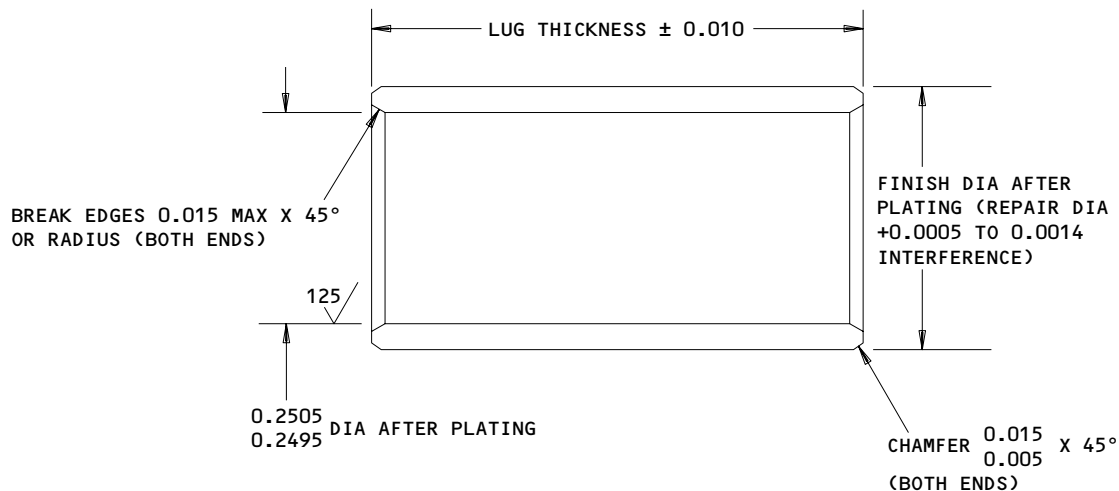
27-31-25

REPAIR 3-1

Page 602

Oct 10/84

01



MATERIAL: AL-NI-BR PER AMS 4640
CADMIUM PLATE (F-15.06) ALL OVER
ALL DIMENSIONS ARE IN INCHES

Repair Bushing Details
Figure 602

144124

27-31-25

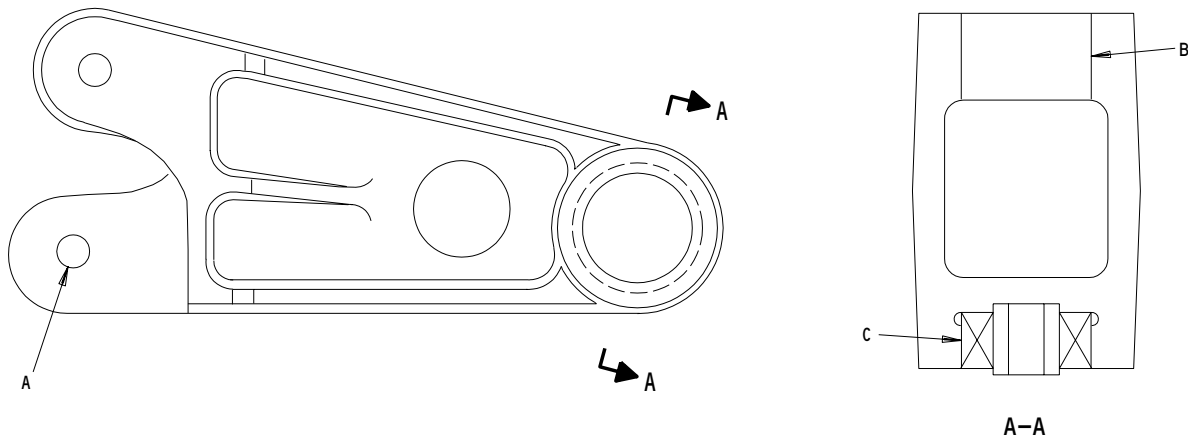
REPAIR 3-1

01

Page 603

Oct 10/84

3. Fits and Clearances



Ref Letter Fig.603	Mating Item No. IPL Fig.3	Design Dimension				Service Wear Limit		
		Dimension		Assembly Clearance *[1]		Dimension		Maximum Clearance
		Min	Max	Min	Max	Min	Max	
A	ID 15,20	0.2495	0.2505	0.0000	0.0020	0.2475	0.2525	0.0030
	OD *[2]	0.2485	0.2495					
B	ID 15,20	0.9012	0.9022	-0.0002	0.0013	0.9009	0.9044	0.0030
	OD *[3]	0.9009	0.9014					
C	ID 15,20	0.9002	0.9007	-0.0012	-0.0002	0.9009	0.9008	-0.0001
	OD 10	0.9009	0.9014					

*[1] NEGATIVE VALUES DENOTE INTERFERENCE FIT
 *[2] INSTALLATION PART BACB30NF4
 *[3] INSTALLATION PART BACB10BY4
 ALL DIMENSIONS ARE IN INCHES

**Fits and Clearances
 Figure 603**

144097

27-31-25

REPAIR 3-1
 Page 604
 Oct 10/84

01

IDLER CRANK ASSY - REPAIR 4-1

251T2663-1

NOTE: Refer to REPAIR-GEN for list of applicable standard practices. For repair of surfaces which may only require stripping and restoration of original finish, refer to REFINISH instruction, Fig. 601. Item numbers refer to IPL Fig. 4.

1. Penetrant check crank (10) per 20-20-02.

2. Repair

A. Bolt hole repair (Fig. 601)

- (1) Machine hole as required, within repair limit shown to remove defects.
- (2) Manufacture repair bushing per Fig. 602.
- (3) Install repair bushing per 20-50-03 except use wet sealant, BMS 5-95.
- (4) Check bushing I.D. and machine to design dimension if required.

B. Crank (10) refinish -- Fig. 601

C. Bearing (5) replacement

- (1) Remove bearing.
- (2) Install replacement bearing and roller swage per 20-50-03 except use wet sealant, BMS 5-95.

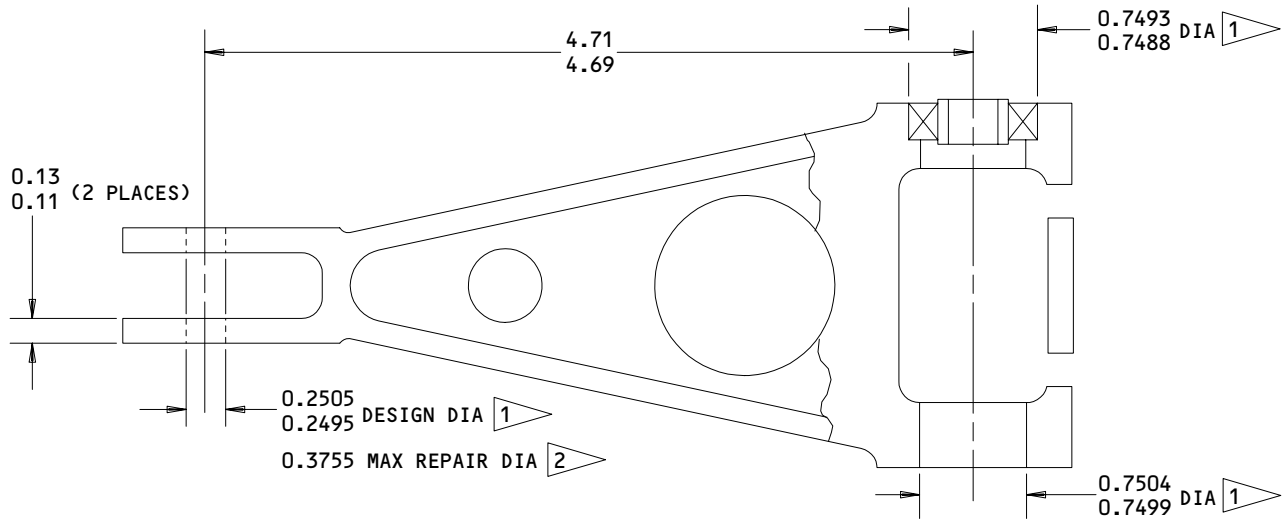
27-31-25

REPAIR 4-1

01

Page 601

Oct 10/84



REFINISH

CHROMIC ACID ANODIZE AND APPLY 1 COAT OF PRIMER (F-18.13) EXCEPT OMIT PRIMER AS NOTED IN 1

1 OMIT PRIMER THIS SURFACE

2 REPAIR LIMIT FOR INSTL OF REPAIR BUSHING

REPAIR

REF 2

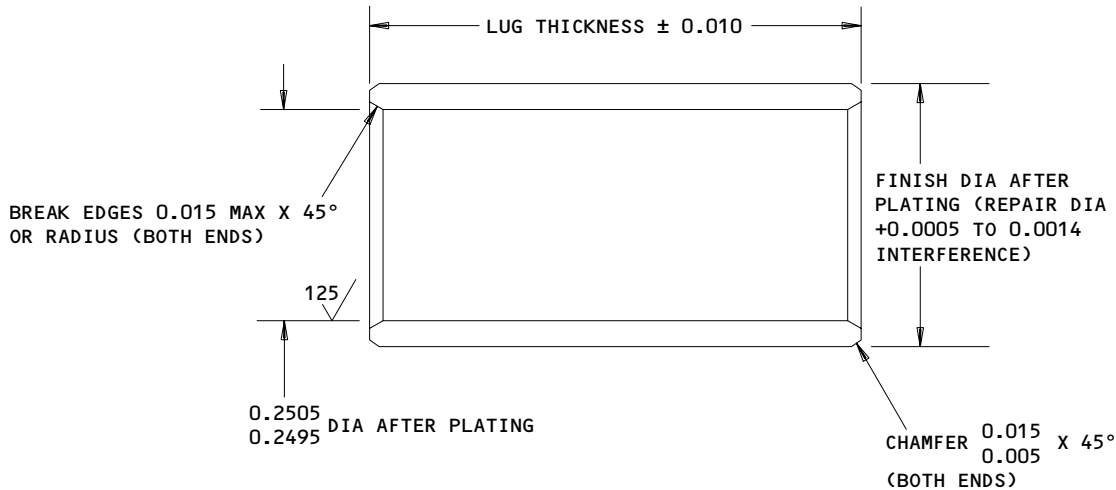
125 ALL MACHINED SURFACES

BREAK SHARP EDGES 0.008R

MATERIAL: AL ALLOY

ALL DIMENSIONS ARE IN INCHES

Crank Repair
Figure 601



MATERIAL: AL-NI-BR PER AMS 4640
 CADMIUM PLATE (F-15.06) ALL OVER
 ALL DIMENSIONS ARE IN INCHES

Repair Bushing Details
Figure 602

144115

144125

27-31-25

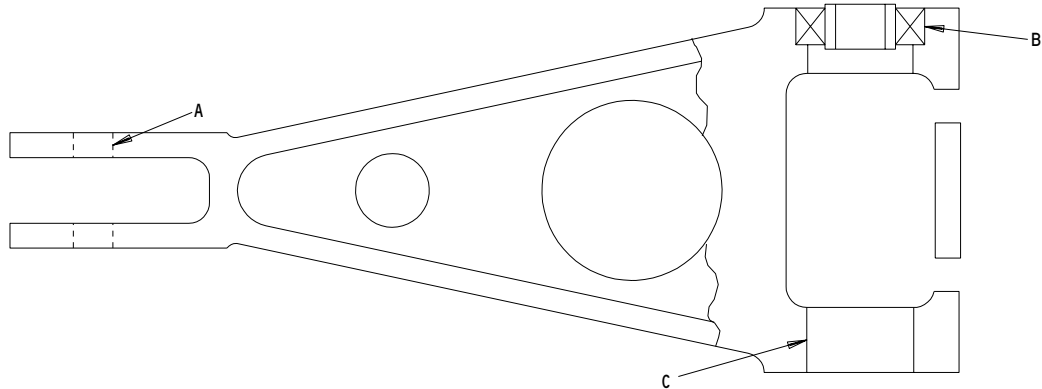
REPAIR 4-1

Page 602

Oct 10/84

01

3. Fits and Clearances



Ref Letter Fig.603	Mating Item No. IPL Fig.4	Design Dimension				Service Wear Limit		
		Dimension		Assembly Clearance *[*1]		Dimension		Maximum Clearance
		Min	Max	Min	Max	Min	Max	
A	ID 10	0.2495	0.2505	0.0000	0.0020	0.2475	0.2515	0.0040
	OD *[*2]	0.2485	0.2495					
B	ID 10	0.7488	0.7493	-0.0012	-0.0002	0.7495	0.7494	-0.0001
	OD 5	0.7495	0.7500					
C	ID 10	0.7499	0.7504	-0.0001	0.0009	0.7495	0.7520	
	OD *[*3]	0.7495	0.7500					

*[*1] NEGATIVE VALUES DENOTE INTERFERENCE FIT
 *[*2] INSTALLATION PART BACB30NF4
 *[*3] INSTALLATION PART BACB10BX4
 ALL DIMENSIONS ARE IN INCHES

Fits and Clearances
Figure 603

144098

27-31-25

REPAIR 4-1

01

Page 603

Oct 10/84

CRANK - REPAIR 5-1

253T2211-4 thru -7

NOTE: Refer to REPAIR-GEN for list of applicable standard practices. For repair of surfaces which may only require stripping and restoration of original finish, refer to REFINISH instruction, Fig. 601.

1. Penetrant check crank per 20-20-02.
2. Repair
 - A. Bolt hole repair
 - (1) Machine hole as required, within repair limit shown to remove defects.
 - (2) Build up repair surface with chrome plate and grind to design dimension and finish shown.
 - B. Crank refinish -- Fig. 601.

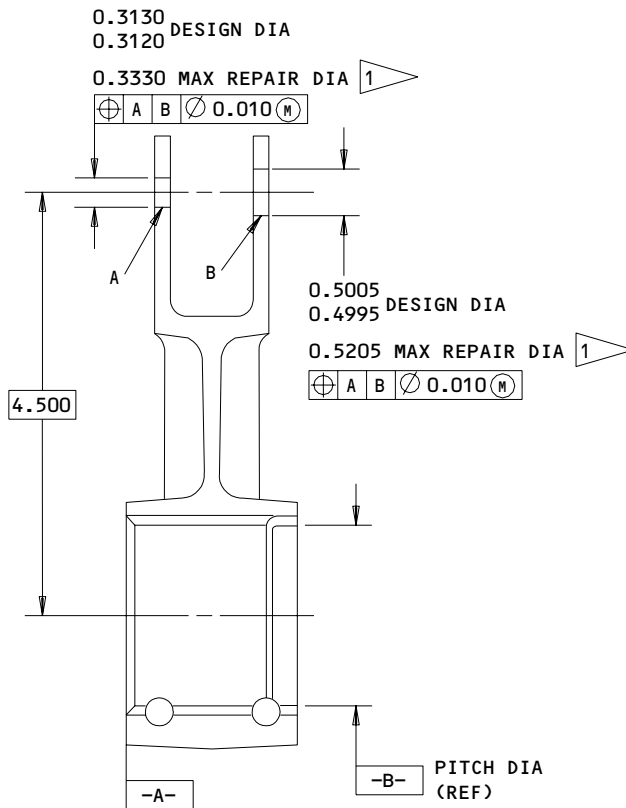
27-31-25

REPAIR 5-1

01

Page 601

Oct 10/84



REFINISH

CHROMIC ACID ANODIZE AND APPLY 1 COAT OF PRIMER (F-18.13) EXCEPT OMIT PRIMER IN ALL HOLES AND ON SPLINES

1 BUILD UP WITH CHROME PLATE (F-15.03) AND GRIND TO DESIGN DIMENSION AND FINISH SHOWN

2 INSTALLATION PARTS

REPAIR

REF 1

125 ALL MACHINED SURFACES

BREAK SHARP EDGES 0.008R

MATERIAL: AL ALLOY

Ref Letter Fig.601	Mating Item No. IPL Fig.1	Design Dimension				Service Wear Limit		
		Dimension		Assembly Clearance		Dimension		Maximum Clearance
		Min	Max	Min	Max	Min	Max	
A	ID 30	0.3120	0.3130	0.0001	0.0020	0.3090	0.3150	0.0060
	OD 2	0.3110	0.3120					
B	ID 30	0.4995	0.5005	0.0015	0.0035	0.4950	0.5025	0.0075
	OD 2	0.4970	0.4980					

ALL DIMENSIONS ARE IN INCHES

253T2211-4 thru -7
 Crank Repair
 Figure 601

27-31-25

REPAIR 5-1

Page 602

Oct 10/84

01

BEARING HOUSING - REPAIR 6-1

253T2214-3, -4

NOTE: Refer to REPAIR-GEN for list of applicable standard practices. For repair of surfaces which may only require stripping and restoration of original finish, refer to REFINISH instruction, Fig. 601.

1. Penetrant check housing per 20-20-02.
2. Repair
 - A. Bearing seat repair (Fig. 601)
 - (1) Machine bearing seat as required, within repair limit shown to remove defects.
 - (2) Build up repair surface with chrome plate and grind to design dimension and finish shown.
 - B. Housing refinish -- Fig. 601.

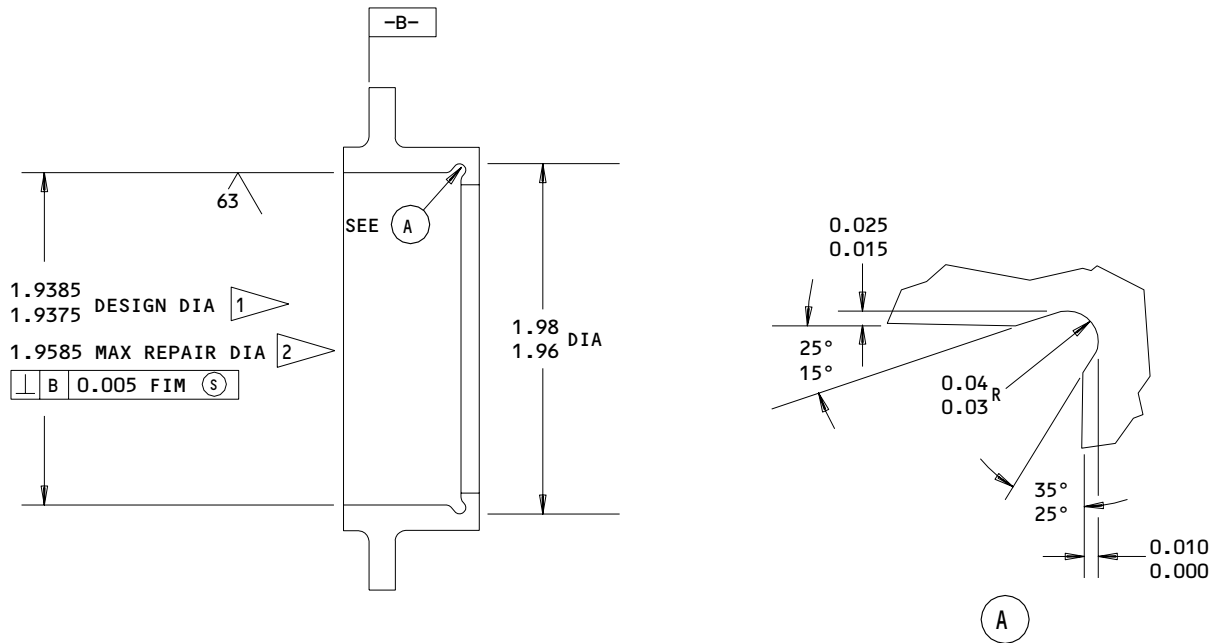
27-31-25

REPAIR 6-1

01

Page 601

Oct 10/84



REFINISH

CHROMIC ACID ANODIZE (F-17.04) ALL OVER. APPLY 1 COAT OF PRIMER (F-20.02) AND ENAMEL (F-21.03) ALL OVER EXCEPT OMIT PRIMER AND ENAMEL AS NOTED BY 1

- 1 OMIT PRIMER AND ENAMEL THIS SURFACE
- 2 BUILD UP WITH CHROME PLATE AND GRIND TO DESIGN DIMENSION AND FINISH SHOWN. CHROME PLATE RUN OUT 0.00-0.06. STOP CHROME PLATE 0.00-0.02 FROM EDGE OR CORNER RADIUS

REPAIR

REF 2
125 ALL MACHINED SURFACES EXCEPT AS NOTED
BREAK SHARP EDGES 0.008R
MATERIAL: AL ALLOY

Ref Letter Fig.601	Mating Item No. IPL Fig.1	Design Dimension				Service Wear Limit		
		Dimension		Assembly Clearance		Dimension		Maximum Clearance
		Min	Max	Min	Max	Min	Max	
A	ID 35 OD *[1]	1.9375	1.9385	0.0000	0.0020	1.9345	1.9415	0.007

*[1] INSTALLATION PART BACB10EX16
ALL DIMENSIONS ARE IN INCHES

253T2214-3,-4
Housing Repair
Figure 601

27-31-25

REPAIR 6-1
Page 602
Oct 10/84

BEARING HOUSING - REPAIR 7-1

69B81723-1

NOTE: Refer to REPAIR-GEN for list of applicable standard practices. For repair of surfaces which may only require stripping and restoration of original finish, refer to REFINISH instruction, Fig. 601.

1. Penetrant check housing per 20-20-02.
2. Repair
 - A. Bearing seat repair (Fig. 601)
 - (1) Machine bearing seat as required, within repair limit shown to remove defect.
 - (2) Build up repair surface with chrome plate and grind to design dimension and finish shown.
 - B. Housing refinish -- Fig. 601.

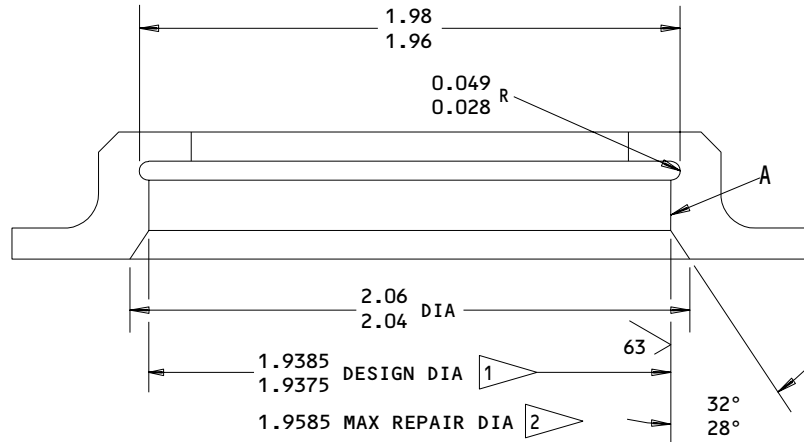
27-31-25

REPAIR 7-1

01

Page 601

Oct 10/84



REFINISH

CHEMICAL TREAT (F-17.01) ALL OVER AND APPLY 1 COAT OF PRIMER (F-20.02) EXCEPT OMIT PRIMER AS NOTED IN 1

1 OMIT PRIMER THIS SURFACE

2 BUILD UP WITH CHROME PLATE AND GRIND TO DESIGN DIMENSION AND FINISH SHOWN. CHROME PLATE RUN OUT 0.00-0.06. STOP CHROME PLATE 0.00-0.02 FROM EDGE OR CORNER RADIUS

REPAIR

REF 2

125/ ALL MACHINED SURFACES EXCEPT AS NOTED
 BREAK SHARP EDGES 0.008R

MATERIAL: AL ALLOY

Ref Letter Fig.601	Mating Item No. IPL Fig.1	Design Dimension				Service Wear Limit		
		Dimension		Assembly Clearance		Dimension		Maximum Clearance
		Min	Max	Min	Max	Min	Max	
A	ID 40 OD *[*1]	1.9375 1.9365	1.9385 1.9375	0.0000	0.0020	1.9345	1.9415	0.007

*[*1] INSTALLATION PART BACB10EX16
 ALL DIMENSIONS ARE IN INCHES

69B81723-1
 Housing Repair
 Figure 601

27-31-25

REPAIR 7-1
 Page 602
 Oct 10/84

01

ILLUSTRATED PARTS LIST

1. This section lists and illustrates replaceable or repairable component parts. The Illustrated Parts Catalog contains a complete explanation of the Boeing part numbering system.

2. Indentures show parts relationships as follows:

Assembly

Detail Parts for Assembly

Subassembly

Attaching Parts for Subassembly

Detail Parts for Subassembly

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

3. One use code letter (A, B, C, etc.) is assigned in the EFF CODE column for each variation of top assembly. All listed parts are used on all top assemblies except when limitations are shown by use code letter opposite individual part entries.

4. Letter suffixes (alpha-variants) are added to item numbers for optional parts, Service Bulletin modification parts, configuration differences (Except left- and right-hand parts), product improvement parts, and parts added between two sequential item numbers. The alpha-variant is not shown on illustrations when appearance and location of all variants of the part is the same.

5. Service Bulletin modifications are shown by the notations PRE SB XXXX and POST SB XXXX.

A. When a new top assembly part number is assigned by Service Bulletin, the notations appear at the top assembly level only. The configuration differences at detail part level are then shown by use code letter.

B. When the top assembly part number is not changed by the Service Bulletin, the notations appear at the detail part level.

6. Parts Interchangeability

Optional
(OPT)

The parts are optional to and interchangeable with other parts having the same item number.

Supersedes, Superseded By
(SUPSDS, SUPSD BY)

The part supersedes and is not interchangeable with the original part.

Replaces, Replaced By
(REPLS, REPLD BY)

The part replaces and is interchangeable with, or is an alternate to, the original part.

27-31-25

VENDORS

11815 TOWNSEND DIV OF TEXTRON INC CHERRY FASTENER UNIT
BOX 2157 1224 EAST WARNER AVENUE
SANTA ANA, CALIFORNIA 92707

15653 MICRODOT AEROSPACE FASTENING SYS DIV OF MICRODOT INC
800 SOUTH COLLEGE BLVD PO BOX 3001
FULLERTON, CALIFORNIA 92634

21335 TEXTRON INC FAFNIR BEARING DIVISION
37 BOOTH STREET
NEW BRITAIN, CONNECTICUT 06050

30163 DAYRON CORP
333 MAGUIRE BLVD PO BOX 20394
ORLANDO, FLORIDA 32814

38443 TRW INC BEARING DIV
402 CHANDLER STREET
JAMESTOWN, NEW YORK 14701

43991 FAG BEARING INCORPORATED
HAMILTON AVENUE
STAMFORD, CONNECTICUT 06904

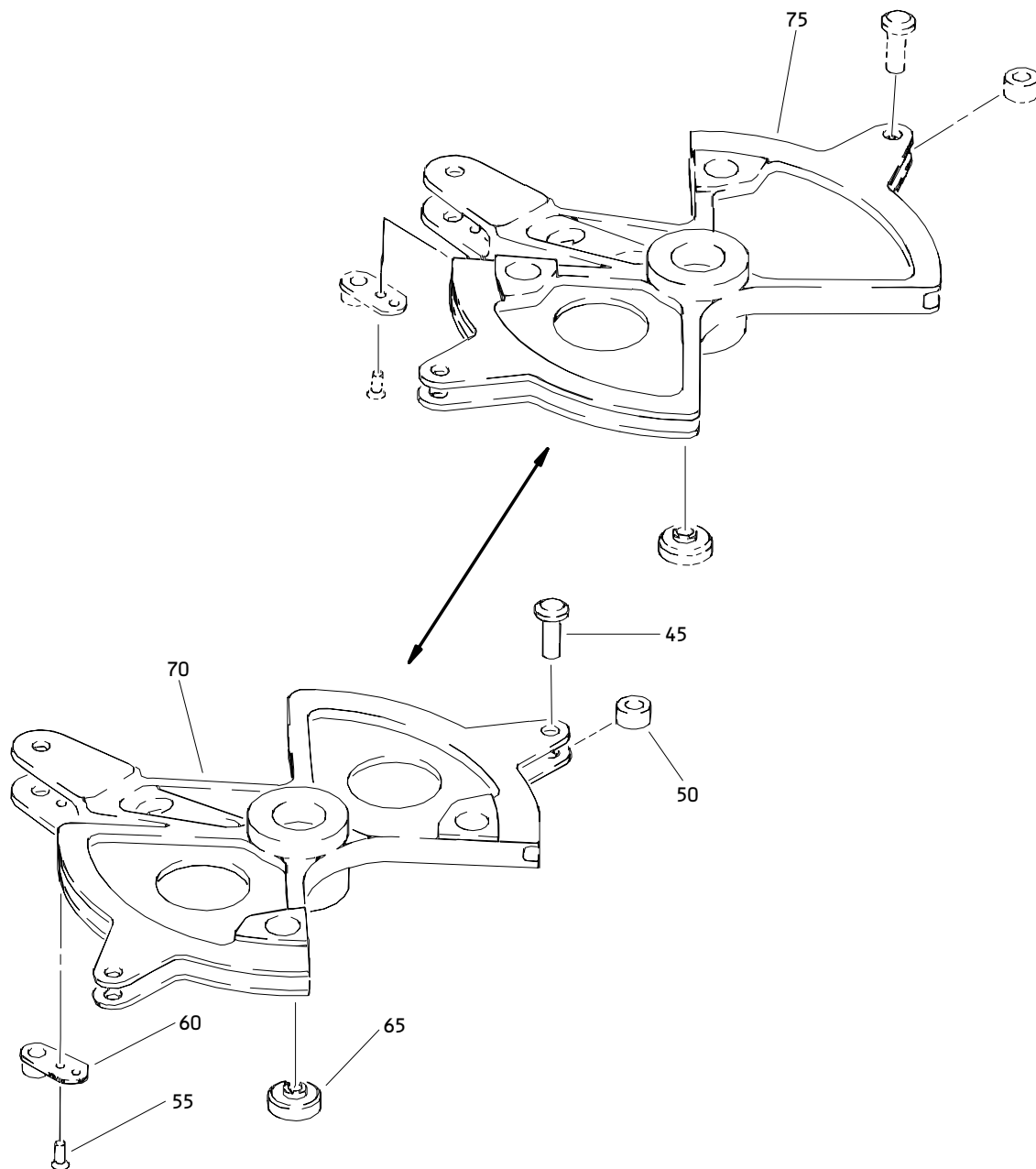
52828 REPUBLIC FASTENER MFG CORP
1300 RANCHO CONEJO BLVD
NEWBURY PARK, CALIFORNIA 91320

72962 AMERACE CORP ESNA DIV
2330 VAUXHALL ROAD
UNION, NEW JERSEY 07083

92215 VOI-SHAN DIV OF VSI CORP SUB OF FAIRCHILD INDUSTRIAL INC
8463 HIGUERA STREET
CULVER CITY, CALIFORNIA 90230

27-31-25

ILLUSTRATED PARTS LIST
01 Page 1002
Oct 10/84



Elevator Slave Cable System Quadrant Assembly
Figure 1

27-31-25

ILLUSTRATED PARTS LIST
01 Page 1004
Oct 10/84

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-			COMPONENTS-ELEVATOR CONTROL		
-5	251T2430-1		QUADRANT ASSY-ELEV R SIDE SLAVE CABLE SYS	A	RF
-5A	251T2430-4		QUADRANT ASSY-ELEV R SIDE SLAVE CABLE SYS	B	RF
-10	251T2431-1		QUADRANT ASSY-ELEV L SIDE SLAVE CABLE SYS	C	RF
-10A	251T2431-4		QUADRANT ASSY-ELEV L SIDE SLAVE CABLE SYS	D	RF
-15	251T2651-1		BELLCRANK ASSY-ELEV CONT SYS (FOR DETAILS SEE FIG. 2)	E	RF
-15A	251T2651-4		BELLCRANK ASSY-ELEV CONT SYS (FOR DETAILS SEE FIG. 2)	F	RF
-20	251T2652-1		BELLCRANK ASSY-ELEV CONT SYS (FOR DETAILS SEE FIG. 3)	G	RF
-20A	251T2652-2		BELLCRANK ASSY-ELEV CONT SYS (FOR DETAILS SEE FIG. 3)	H	RF
-20B	251T2652-7		BELLCRANK ASSY-ELEV CONT SYS (FOR DETAILS SEE FIG. 3)	J	RF
-20C	251T2652-8		BELLCRANK ASSY-ELEV CONT SYS (FOR DETAILS SEE FIG. 3)	K	RF
-25	251T2663-1		CRANK ASSY-ELEV CONT IDLER (FOR DETAILS SEE FIG. 4)	L	RF
-30	253T2211-7		CRANK-ELEV CONT QUADRANT	Q	RF
-30A	253T2211-4		CRANK-ELEV CONT QUADRANT	M	RF
-30B	253T2211-5		CRANK-ELEV CONT QUADRANT	N	RF
-30C	253T2211-6		CRANK-ELEV CONT QUADRANT	P	RF
-35	253T2214-3		HOUSING-ELEV TNSN REGULATOR INBD BRG	R	RF
-35A	253T2214-4		HOUSING-ELEV TNSN REGULATOR INBD BRG	S	RF
-40	69B81723-1		HOUSING-TNSN REGULATOR UPR BRG	T	RF

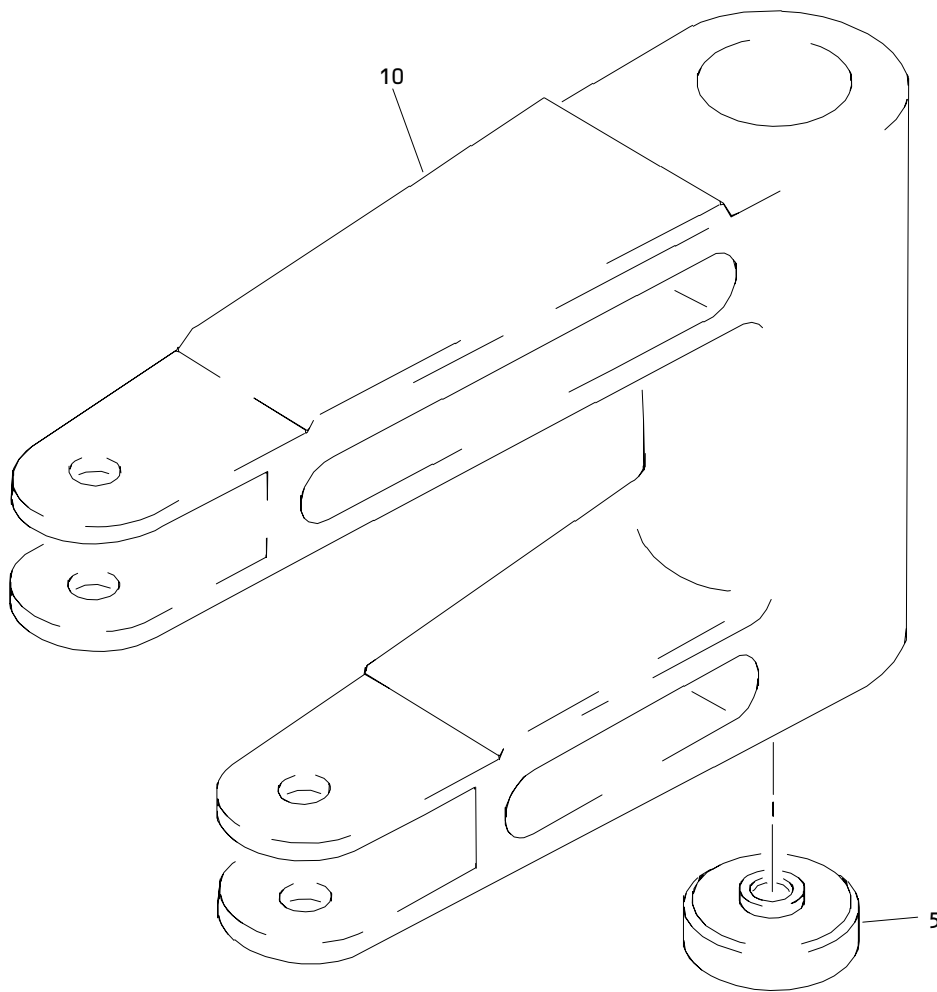
27-31-25

ILLUSTRATED PARTS LIST
01 Page 1005
Oct 10/84

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE	EFF CODE	QTY PER ASSY
			1234567		
01- 45 50 55 60	BACR15FT5AD NAS42HT5-17 BACR15BA3KE BRF100A4		.RIVET .SPACER .RIVET .NUTPLATE- (V52828) (SPEC BACN10KB4F) (OPT F2000-4 (V15653)) (OPT RMF9207-4 (V72962)) (OPT T8114S428S (V11815)) (OPT VN151A1-048 (V92215)) (OPT F2000-4 (V15653))	A-D A-D A-D A-D	2 2 2 1
65	KP4FS428		.BEARING- (V21335) (SPEC BACB10BY4) (OPT KP4-2TS (V43991)) (OPT KP4TT (V43991)) (OPT LLKP4 (V38443)) (OPT KP4G27 (V30163))	A-D	1
70 -70A 75 -75A	251T2430-2 251T2430-5 251T2431-2 251T2431-5		.QUADRANT .QUADRANT .QUADRANT .QUADRANT	A B C D	1 1 1 1

27-31-25

ILLUSTRATED PARTS LIST
01 Page 1006
Oct 10/84



Elevator Control System Bellcrank Assembly
Figure 2

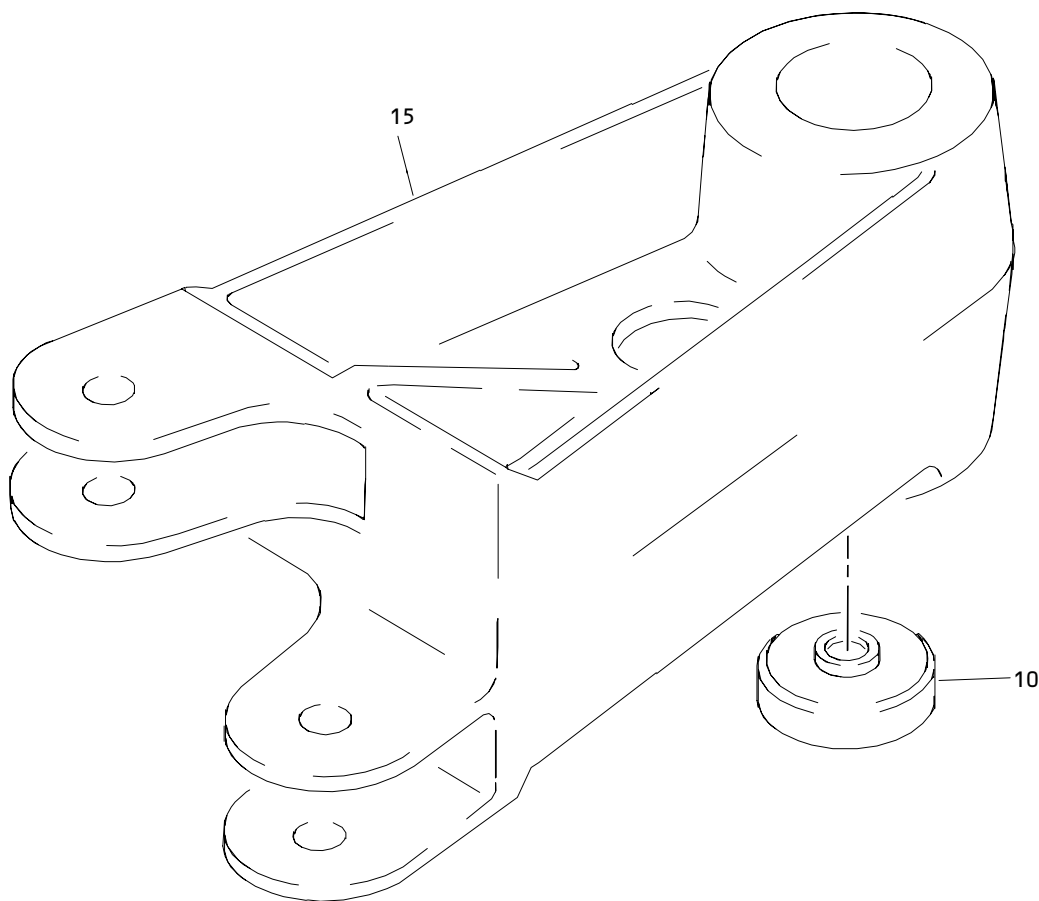
27-31-25

ILLUSTRATED PARTS LIST
01 Page 1008
Oct 10/84

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
02- -1	251T2651-1		BELLCRANK ASSY-ELEV CONT SYS	A	RF
-1A	251T2651-4		BELLCRANK ASSY-ELEV CONT SYS	B	RF
5	KP4FS428		.BEARING- (V21335) (SPEC BACB10BY4) (OPT KP4-2TS (V43991)) (OPT KP4TT (V43991)) (OPT LLKP4 (V38443)) (OPT KP4G27 (V30163))		1
10	251T2651-2		.BELLCRANK	A	1
-10A	251T2651-5		.BELLCRANK	B	1

27-31-25

ILLUSTRATED PARTS LIST
 01 Page 1009
 Oct 10/84



Elevator Control System Bellcrank Assembly
Figure 3

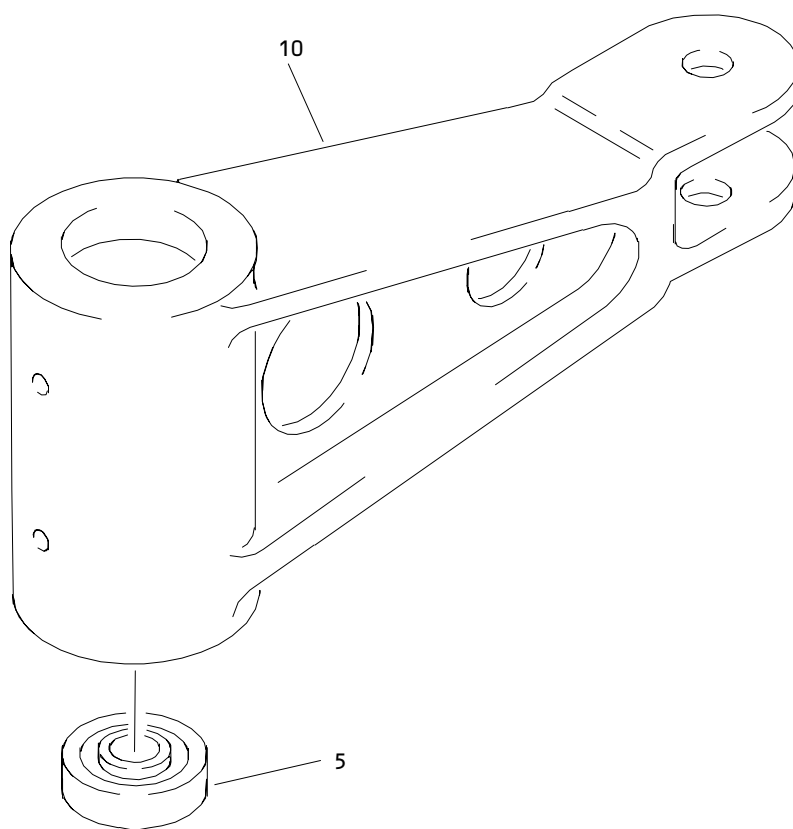
27-31-25

ILLUSTRATED PARTS LIST
01 Page 1010
Oct 10/84

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
03- -1	251T2652-1		BELLCRANK ASSY-ELEV CONT SYS	A	RF
-1A	251T2652-7		BELLCRANK ASSY-ELEV CONT SYS	B	RF
-5	251T2652-2		BELLCRANK ASSY-ELEV CONT SYS	C	RF
-5A	251T2652-8		BELLCRANK ASSY-ELEV CONT SYS	D	RF
10	KP4FS428		.BEARING- (V21335) (SPEC BACB10BY4) (OPT KP4-2TS (V43991)) (OPT KP4TT (V43991)) (OPT LLKP4 (V38443)) (OPT KP4G27 (V30163))		1
15	251T2652-3		.BELLCRANK	A	1
-15A	251T2652-9		.BELLCRANK	B	1
-20	251T2652-4		.BELLCRANK	C	1
-20A	251T2652-10		.BELLCRANK	D	1

27-31-25

ILLUSTRATED PARTS LIST
 01 Page 1011
 Oct 10/84



Elevator Control Idler Crank Assembly
Figure 4

27-31-25

ILLUSTRATED PARTS LIST
01 Page 1012
Oct 10/84

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
04- -1	251T2663-1		CRANK ASSY-ELEV CONT IDLER		RF
5	KP4AFS428		.BEARING- (V21335) (SPEC BACB10BX4) (OPT KP4A2TS (V43991)) (OPT LLKP4A (V38443)) (OPT KP4AG27 (V30163))		1
10	251T2663-2		.CRANK		1

27-31-25

ILLUSTRATED PARTS LIST
 01 Page 1013
 Oct 10/84