TO: ALL HOLDERS OF RIGHT AILERON CONTROL OUTPUT QUADRANT ASSEMBLY COMPONENT MAINTENANCE MANUAL 27-11-09

REVISION NO. 5 DATED MAR 01/04

HIGHLIGHTS

Pages which have been added or revised are outlined below together with the highlights of the revision. Remove and insert the affected pages as listed and enter Revision No. and date on the Record of Revision Sheet.

CHAPTER/SECTION AND PAGE NO.	DESCRIPTION OF CHANGE
1011-1012	Revised IPL to add optional bearings, items (140B and 175B).

RIGHT AILERON CONTROL OUTPUT QUADRANT ASSEMBLY

PART NUMBER 251T1510-5,-6,-7,-8,-9

COMPONENT MAINTENANCE MANUAL
WITH
ILLUSTRATED PARTS LIST

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
		PRR B12597	JUN 01/95

PAGE	DATE	CODE
27-11-09		
TITLE PAGE		
1	MAR 01/97	01.1
2	BLANK	
REVISION RECORD		
1	JUL 10/85	01
2	BLANK	
TR & SB RECORD		
1	JUN 01/95	01.1
2	BLANK	
LIST OF EFFECTIVE PAGES		
*1	MAR 01/04	01
THRU LAST PAGE		
CONTENTS		
1	JUL 10/85	01
2	BLANK	
INTRODUCTION		
1	JAN 10/86	01.1
2	BLANK	
DESCRIPTION & OPERATION		
1	JUL 10/85	01
2	BLANK	
DISASSEMBLY		
301	JUL 10/85	01
302	BLANK	
CHECK		
501	JUL 10/85	01
502	BLANK	
REPAIR-GENERAL		
601	JUL 10/85	01
602	JUL 10/85	01

PAGE	DATE	CODE
REPAIR 1-1		
601	JUL 10/85	01
602	JUL 10/85	01
603	JUL 10/85	01
604	JUL 10/85	01
REPAIR 2-1		
601	DEC 01/97	01.1
602	DEC 01/97	01.1
603	MAR 01/97	01.1
604	BLANK	
REPAIR 3-1		
601	JUL 10/85	01
602	JUL 10/85	01
REPAIR 4-1		
601	JUL 10/85	01
602	BLANK	
ASSEMBLY		
701	JAN 10/86	01.1
702	BLANK	
FITS AND CLEARANCES		
801	JUL 10/85	01
802	JUL 10/85	01
ILLUSTRATED PARTS LIST		
1001	JUL 10/85	01
1002	MAR 01/97	01.1
1003	MAR 01/97	01.1
1004	MAR 01/97	01.1
1005	MAR 01/97	01.1
1006	MAR 01/97	01.1
1007	MAR 01/97	01.1
1008	MAR 01/97	01.1
1009	MAR 01/97	01.1
1010	MAR 01/97	01.1
*1011	MAR 01/04	01.1
*1012	MAR 01/04	01.1
*1013	MAR 01/04	01.1
1014	BLANK	

* = REVISED, ADDED OR DELETED

TABLE OF CONTENTS

*[1] Special instructions not required. Use standard industry practices.

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
2. Record of Revisions
3. Temporary Revision & Service Bulletin Record
4. List of Effective Pages
5. Table of Contents
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.

Verification:

Assembly Sep 5/85

RIGHT AILERON CONTROL OUTPUT QUADRANT ASSEMBLY

DESCRIPTION AND OPERATION

1. Description and Operation

   A. The right aileron control output quadrant assembly consists of sheet metal brackets and a machined aluminum quadrant assembly with bearings.

   B. The component accepts input from backup control cables and a control rod during aileron operation and transfers its motion via a pair of output cables to the right aileron power control actuator.

2. Leading Particulars (Approximate)

   Length -- 16 inches
   Width -- 8 inches
   Height -- 17 inches
   Weight -- 2 pounds

DISASSEMBLY

NOTE: Disassemble this component only as necessary to complete fault isolation, determine the serviceability of parts, perform required repairs, and restore the unit to serviceable condition.

1. Parts Replacement

   NOTE: The following parts are recommended for replacement. Unless otherwise noted, actual replacement of parts may be based on in-service experience.

   A. Nut (100, 135)

   B. Bushing (130)

   C. Bearing (140, 175)

2. Disassembly

   NOTE: Do not disassemble riveted brackets unless necessary for repair or replacement.

   A. Disassemble using standard industry practices.

CHECK

1. Check all parts for obvious defects in accordance with standard industry practices.

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

3. Magnetic particle check bolt (125, IPL Fig. 1) per 20-20-01.

4. Penetrant check quadrant (180, IPL Fig. 1) per 20-20-02.

REPAIR - GENERAL

1. Content

   A. Repair, refinish and replacement procedures are included in separate repair sections as follows:

P/N	NAME	REPAIR
- - -	BRACKET	1-1
251T1513	QUADRANT	2-1
251T1544	QUADRANT BOLT	3-1
- - -	MISC PARTS REFINISH	4-1

2. Standard Practices

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

   20-10-01 Repair and Refinish of High Strength Steel Parts
   20-30-02 Stripping of Protective Finishes
   20-30-03 General Cleaning Procedures
   20-41-01 Decoding Table for Boeing Finish Codes
   20-41-02 Application of Chemical and Solvent Resistant Finishes
   20-42-03 Hard Chrome Plating
   20-42-05 Bright Cadmium 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 -- BMS 3-24 (Ref 20-60-03)

   C. Sealant -- BMS 5-95 (Ref 20-60-03)

4. Dimensioning Symbols

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

—	STRAIGHTNESS
▱	FLATNESS
⊥	PERPENDICULARITY (OR SQUARENESS)
//	PARALLELISM
○	ROUNDNESS
⌭	CYLINDRICITY
⌒	PROFILE OF A LINE
⌓	PROFILE OF A SURFACE
◎	CONCENTRICITY
⌯	SYMMETRY
∠	ANGULARITY
↗	RUNOUT
⌖	THEORETICAL EXACT POSITION OF A FEATURE (TRUE POSITION)
∅	DIAMETER
BASIC (BSC) OR [DIM]	A THEORETICALLY EXACT DIMENSION USED TO DESCRIBE SIZE, SHAPE OR LOCATION OF A FEATURE FROM WHICH PERMISSIBLE VARIATIONS ARE ESTABLISHED BY TOLERANCES ON OTHER DIMENSIONS OR NOTES.
[-A-]	DATUM
Ⓜ	MAXIMUM MATERIAL CONDITION (MMC)
Ⓢ	REGARDLESS OF FEATURE SIZE (RFS)
Ⓟ	PROJECTED TOLERANCE ZONE

EXAMPLES

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

True Position Dimensioning Symbols
Figure 601

169991

BRACKET ASSEMBLY - REPAIR 1-1

NO ASSIGNED P/N

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 MISCELLANEOUS PARTS REFINISH, REPAIR 4-1.

1. Bushing Replacement (IPL Fig. 1)

   A. Remove bushing (130).

   B. Install replacement bushing with BMS 3-24 per 20-50-03.

2. Quadrant Bolt Hole Repair (IPL Fig. 1)

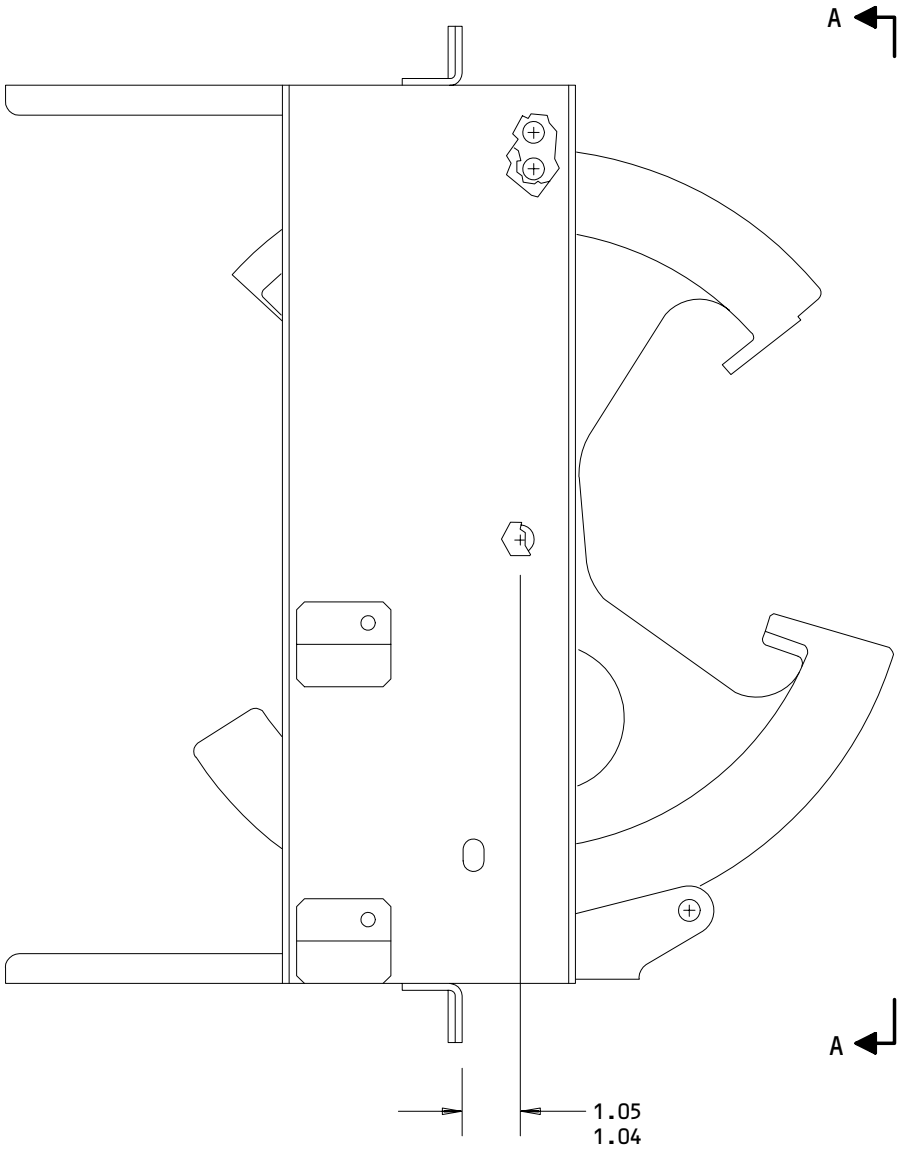
   NOTE: Brackets (150, 160, 165) must be assembled prior to machining to ensure proper alignment of reworked holes.

   A. Remove bushing (130).

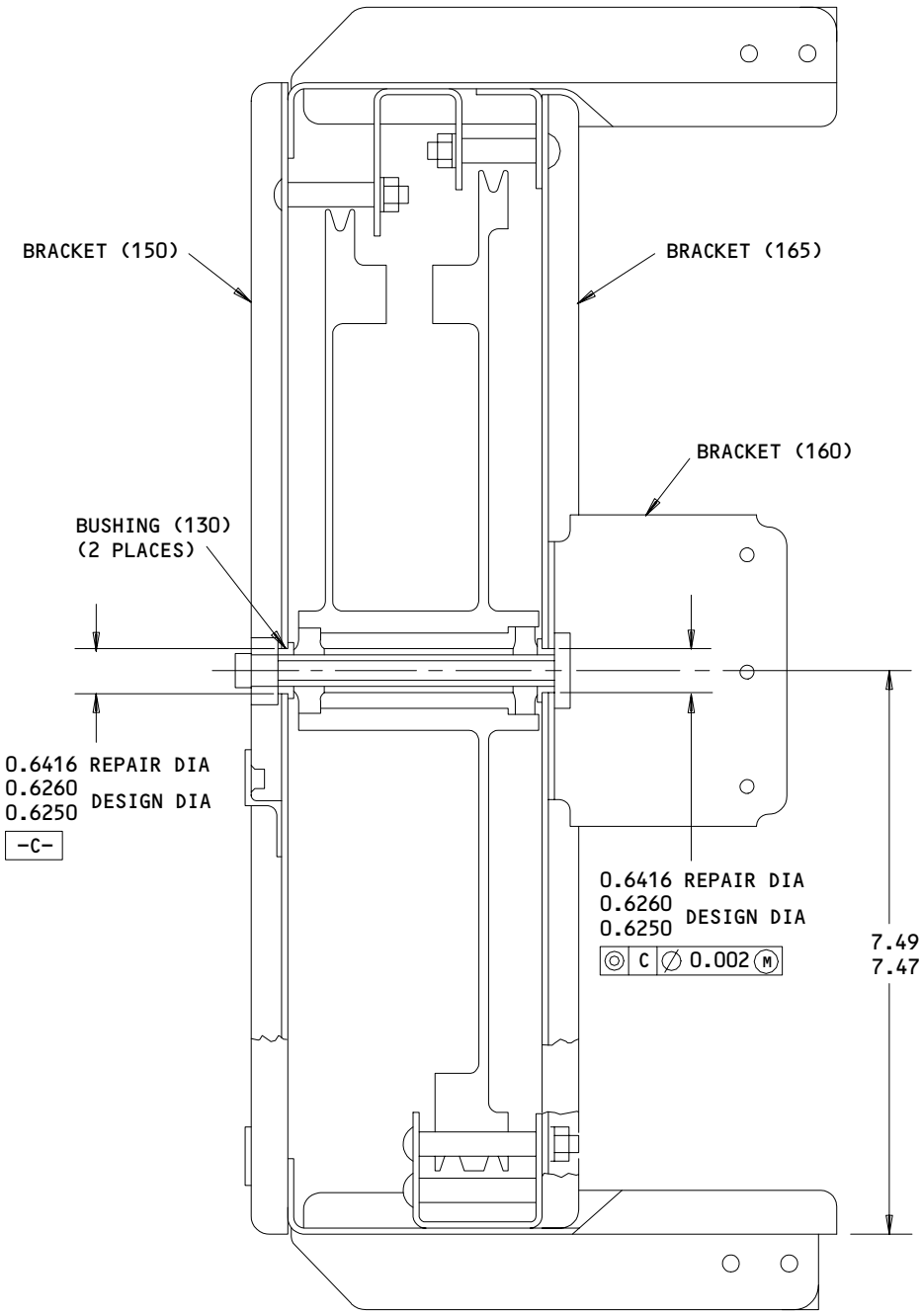
   B. Machine hole to repair dimension shown in Fig. 601.

   C. Manufacture oversize repair bushing per Fig. 602.

   D. Install bushing per 20-50-03 using wet BMS 5-95.



Bracket Assembly Repair
Figure 601 (Sheet 1)



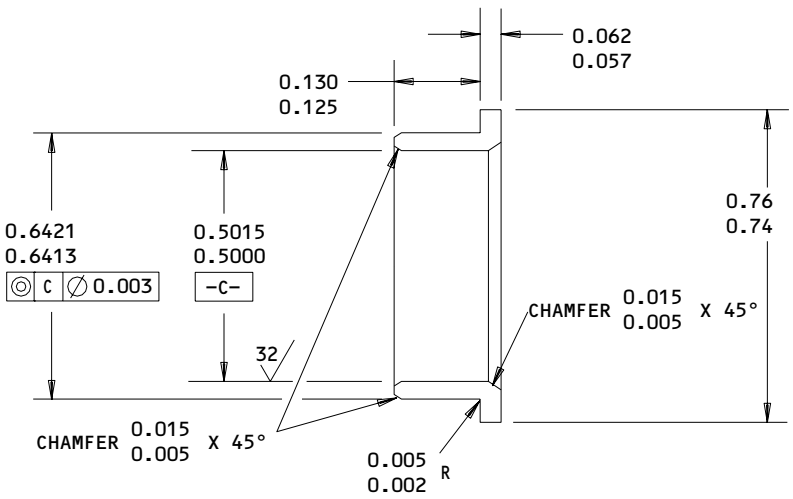
A-A

MATERIAL: AL ALLOY

ALL DIMENSIONS ARE IN INCHES

ITEM NUMBERS REFER TO IPL FIG. 1

Bracket Assembly Repair
Figure 601 (Sheet 2)



63 ON ALL SURFACES EXCEPT AS NOTED

MATERIAL: AL-NI-BRONZE PER AMS 4640

ALL DIMENSIONS ARE IN INCHES

Bracket Assembly - Oversize Bushing Details
Figure 602

170041

QUADRANT ASSEMBLY - REPAIR 2-1

251T1513-7, -9, -12, -13

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. Bearing Replacement (IPL Fig. 1)

A. Remove bearing (175, 175A).

B. Install new bearing (175A, 175B) with wet BMS 10-11, type 1 primer and roller swage per 20-50-03.

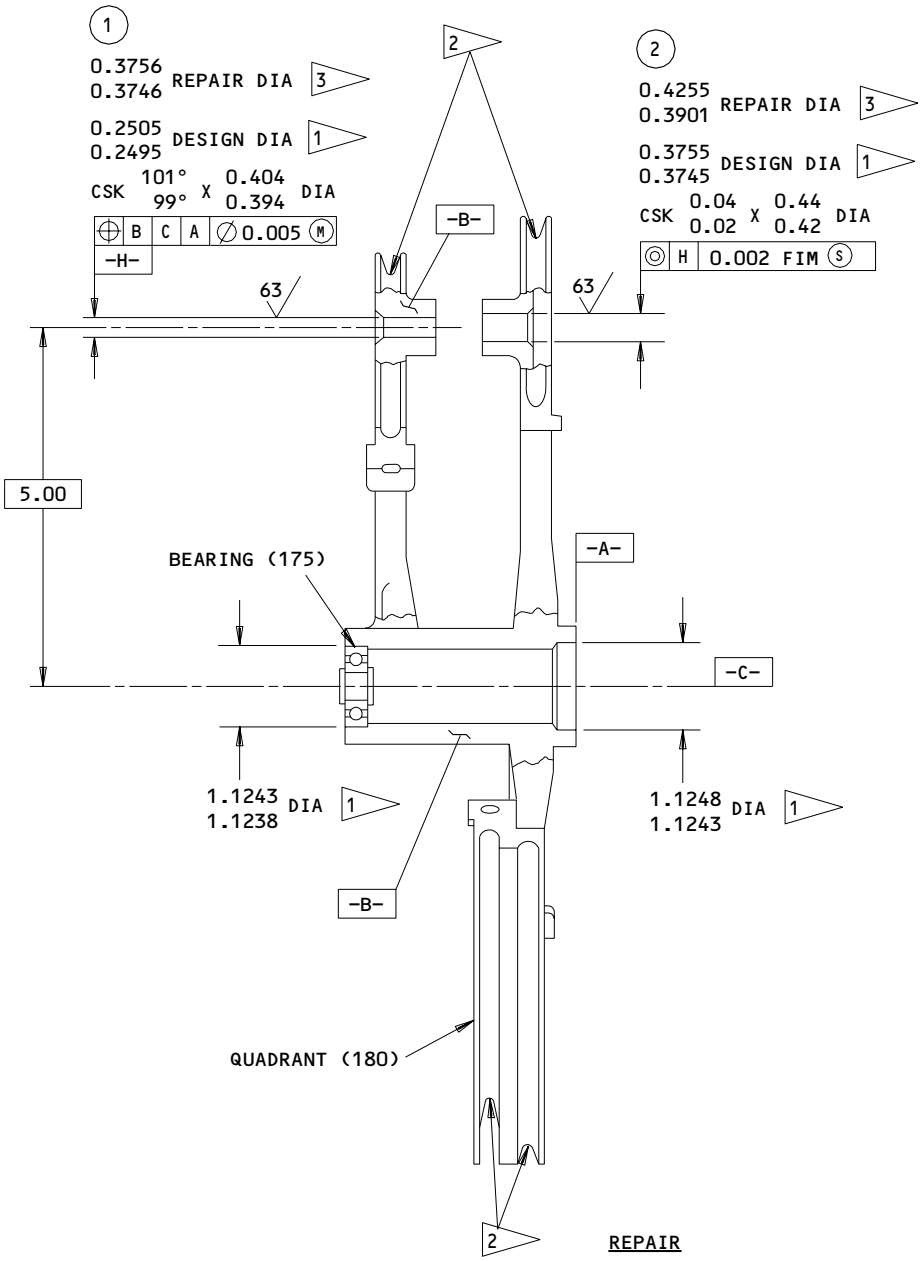
2. Quadrant Hole Repair

A. Machine hole to repair dimension shown in Fig. 601.

B. Manufacture oversize bushing, as required, per Fig. 602.

C. Install bushing per 20-50-03 using wet BMS 5-95.

D. Ream bushing to design diameter and countersink per Fig. 601.



REFINISH

QUADRANT (180) -- CHROMIC ACID ANODIZE TYPE 1 OR SULFURIC ACID ANODIZE TYPE 2 (F-17.05). APPLY ONE COAT OF BMS 10-11, TYPE 1 PRIMER (F-20.02) EXCEPT AS NOTED

1 NO PRIMER THIS SURFACE

2 APPLY TWO COATS BMS 10-11, TYPE 1, PRIMER (F-20.03) IN PULLEY GROOVES

3 REPAIR LIMIT FOR INSTALLATION OF REPAIR BUSHINGS

REPAIR

REF 3

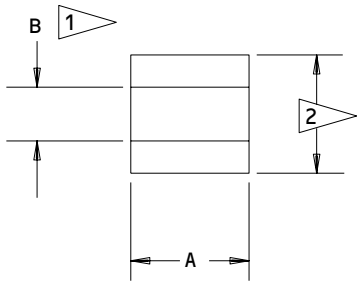
MATERIAL: AL ALLOY

ALL DIMENSIONS ARE IN INCHES

ITEM NUMBERS REFER TO IPL FIG. 1

251T1513-7,-9,-12,-13
Quadrant Assembly Repair
Figure 601

169992



BUSHINGS INSTALLED AT	A	B 1	INTERFERENCE
(1)	0.840 0.833	0.241 0.234	0.0015
(2)	0.760 0.744	0.366 0.359	0.0003

CADMIUM PLATE 0.0003-0.0005 THICK PER 20-42-05

1 UNDERSIZED BORE TO BE REAMED TO DESIGN DIMENSION AFTER INSTALLTION

2 DIMENSION AFTER PLATING TO EQUAL REPAIR DIAMETER PLUS INTERFERENCE

63 ALL MACHINED SURFACES

BREAK ALL SHARP EDGES 0.01-0.03R

MATERIAL: AL-NI-BRONZE PER AMS 4880 OR 4640

ALL DIMENSIONS ARE IN INCHES

253T1513-7,-9,-12,-13
Quadrant Assembly Repair Bushing Details
Figure 602

QUADRANT BOLT - REPAIR 3-1

251T1544-2

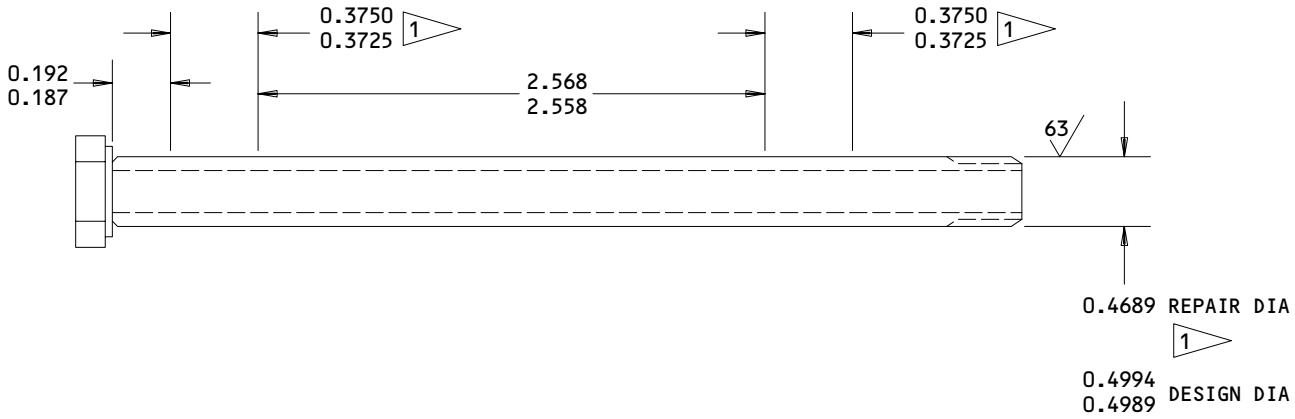
NOTE: Refer to REPAIR-GEN for list of applicable standard practices. For repair of surfaces which may only require stripping and restoration of original finish, refer to REFINISH instruction, Fig. 601.

1. Bearing Surface Repair (Fig. 601)

   A. Machine diameter as required, within repair limit shown, to remove defects.

   B. Shot peen as indicated.

   C. Build up repaired area with chrome plate per 20-42-03 and grind to design dimensions and finish shown. Chrome plate thickness must not exceed 0.015 inch after grinding.



REFINISH

CADMIUM PLATE TO MEET REQUIREMENTS OF QQ-P-416 TYPE 2, CLASS 2 (F-15.06)

1 BUILD UP WITH CHROME PLATE (F-15.03) AND GRIND TO DESIGN DIMENSIONS AND 16 MAX FINISH AT BEARING INTERFACES ONLY. OBSERVE 0.00-0.08 PLATING RUNOUT AND 0.015 MAX CHROME PLATE THICKNESS. CHROME PLATE NOT ALLOWED IN FILLET RADII OR ON PART EDGES

REPAIR

REF 1

SHOT PEEN: SHOT NO. 170-460
INTENSITY 0.014A
COVERAGE 2.0

MATERIAL: 15-5PH CRES, HT TR 180-200 KSI

ALL DIMENSIONS ARE IN INCHES

251T1544-2
Quadrant Bolt Repair
Figure 601

169994

MISCELLANEOUS PARTS REFINISH - REPAIR 4-1

1. Repair of parts listed in Fig. 601 consists of restoration of the original finish.

IPL FIG. & ITEM	MATERIAL	FINISH
Fig. 1		
Bracket (20 thru 35,105,115,120, 150,160,165,170)	Al alloy	Chemical treat (F-18.06).
Support (60)	Al alloy	Chromic acid anodize (F-17.04) and apply two coats of BMS 10-11, type 1 primer (F-20.03).

Refinish Details
Figure 601

ASSEMBLY

1. Materials

   NOTE: Equivalent substitutes may be used.

   A. Primer -- BMS 10-11, type 1 (Ref 20-60-02)

2. Assembly (IPL Fig. 1)

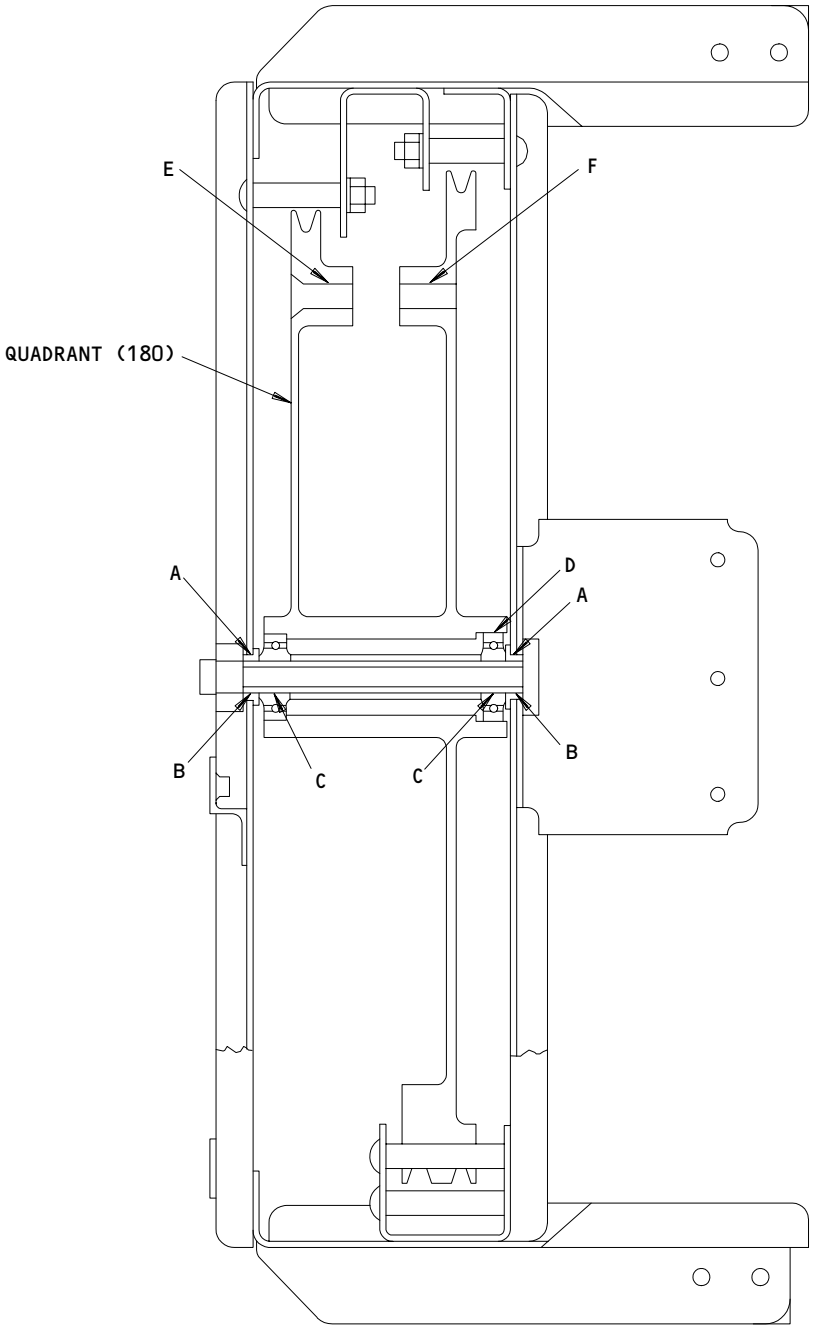
   A. Install spacers (85, 90, 95) with screws (65, 70, 75), washers (80) and nuts (100). Tighten nuts to employ self-locking feature.

   B. Install spacer (145) and bearing (140) in quadrant assembly (170) with wet BMS 10-11, type 1 primer. Align quadrant assembly (170) with 0.6250-0.6260 inch diameter holes in brackets (150, 160, 165) and install bolt (125).

   C. Thread nut (135) onto bolt (125) and tighten nut to employ self-locking feature.

3. Storage

   A. Protect and prepare unit for storage in accordance with standard industry practices.



Fits and Clearances
Figure 801 (Sheet 1)

Ref Letter Fig.801	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 150,160, 165 OD 130	0.6250 0.6257	0.6260 0.6265	-0.0015	0.0003	0.6237	0.6288	0.0023
B	ID 130 OD 125	0.5000 0.4989	0.5015 0.4994	0.0006	0.0026	0.4969	0.5040	0.0046
C	ID 140,175 OD 125	0.4997 0.4989	0.5000 0.4994	0.0003	0.0011	0.4969	0.5025	0.0031
D	ID 180 OD 140	1.1243 1.1246	1.1248 1.1250	-0.0007	0.0002	1.1226	1.1272	0.0022
E	ID 180	0.2495	0.2505				0.2540	
F	ID 180	0.3745	0.3755				0.3780	

*[1] NEGATIVE VALUES DENOTE INTERFERENCE FIT

ALL DIMENSIONS ARE IN INCHES

Fits and Clearances
Figure 801 (Sheet 2)

169995

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.

VENDORS

K8455 RHP BEARINGS PLC RHP AEROSPACE
OLDENDS LANE
STONEHOUSE GL10 3RM UK

11815 CHERRY AEROSPACE FASTENERS DIV OF TEXTRON
1224 EAST WARNER AVENUE PO BOX 2157
SANTA ANA, CALIFORNIA 92707-0157

15653 KAYNAR TECHNOLOGY KAYNAR DIV
800 SOUTH STATE COLLEGE BLVD PO BOX 3001
FULLERTON, CALIFORNIA 92634-3001

21335 TORRINGTON CO FAFNIR BEARING DIV
59 FIELD STREET
TORRINGTON, CONNECTICUT 06790-4942

38443 MRC BEARINGS
402 CHANDLER STREET
JAMESTOWN, NEW YORK 14701-3802

40920 MPB MINIATURE PRECISION BEARING DIV
PRECISION PARK PO BOX 547
KEENE, NEW HAMPSHIRE 03431

43991 FAG BEARING INCORPORATED
118 HAMILTON AVENUE
STAMFORD, CONNECTICUT 06904

52828 REPUBLIC FASTENER MFG CORP
1300 RANCHO CONEJO BLVD
NEWBURY PARK, CALIFORNIA 91320-1405

56878 SPS TECHNOLOGIES INC AEROSPACE AND INDUSTRIAL PRODUCTS DIV
HIGHLAND AVENUE
JENKINTOWN, PENNSYLVANIA 19046

71087 BOOTS ACFT NUT DIV TOWNSEND CO SEE TEXTRON INC CHERRY
FASTENER TOWNSEND DIV V11815

72962 ELASTIC STOP NUT A DIV OF HARTFORD INDUSTRIES INC
2330 VAUXHALL ROAD
UNION, NEW JERSEY 07083-5038

80539 SPS TECHNOLOGIES INC AEROSPACE PRODUCTS DIV
2701 SOUTH HARBOR BOULEVARD PO BOX 1259
SANTA ANA, CALIFORNIA 92702-1259

VENDORS

85495 BRILES MFG CO SEE OMARK INDUSTRIES
PRECISION FASTENING SUB OF OMARK IND INC SEE DEUTSCH
FASTENER CORP V08524

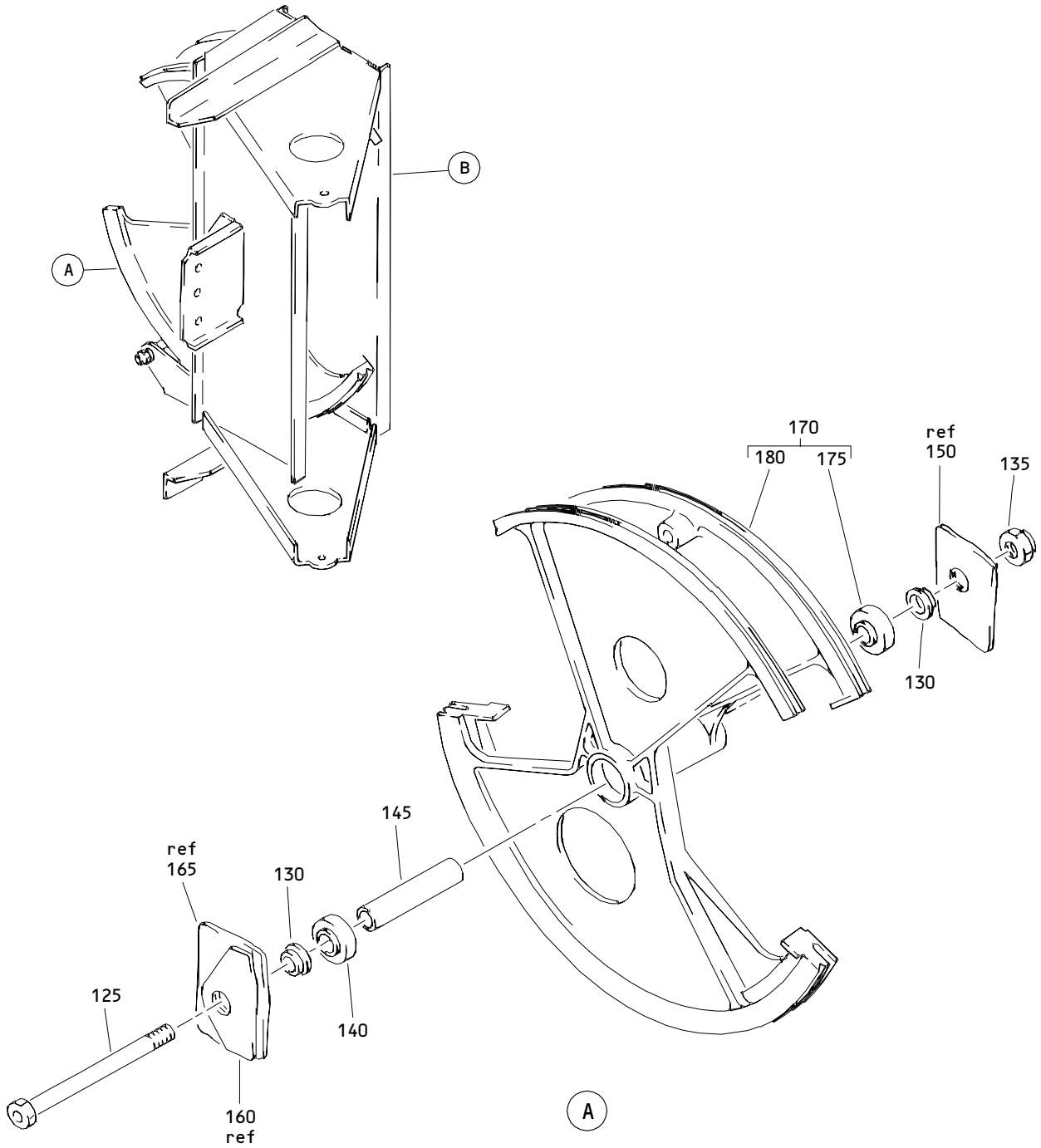
92215 FAIRCHILD IND INC FAIRCHILD AEROSP FASTNR DIV DESIGN & ENGRG
3000 WEST LOMITA BLVD
TORRANCE, CALIFORNIA 90505-5102

97928 DEUTSCH FASTENER CORP
3969 PARAMONT BOULEVARD
LAKEWOOD, CALIFORNIA 90712-4193

PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
ACMKP8AA3908		1	140A	1
		1	175A	1
ACMKP8AP26LY198		1	140A	1
		1	175A	1
AN960-10		1	80	4
BACB10AP8		1	140	1
		1	175	1
BACB10FS8R		1	140A	1
		1	175A	1
BACB28X8M013		1	130	2
BACN10JC3		1	100	4
BACN10JC8		1	135	1
BACN10JP3A		1	55A	2
BACN10JP3B		1	55	2
BACR15BA3AD		1	50	4
BACR15BA4AD		1	5	4
BACR15BB5AD		1	15	35
		1	110	9
BACR15BB6AD		1	155	2
BMN4122AD3-8		1	135	1
BMN4122A8		1	135	1
BRH10A3		1	100	4
BRM100A3		1	55	2
BRM200A3		1	55A	2
H10-3BAC		1	100	4
H10-8BAC		1	135	1
LLMKP8A		1	140	1
		1	175	1
MCS28E		1	140	1
		1	175	1
MKP8A		1	140	1
		1	175	1
MKP8AFS428		1	140	1
		1	175	1
MKP8AG20		1	140	1
		1	175	1
MKP8ALY196		1	140	1
		1	175	1
MKP8ATT		1	140	1
		1	175	1
MKP8A2TS		1	140	1
		1	175	1
MKP8E6531		1	140	1
MKP8E6531		1	175	1
MK1000-3BAC		1	55A	2
MK2000-3BAC		1	55	2
NAS42DD6-67		1	85	1

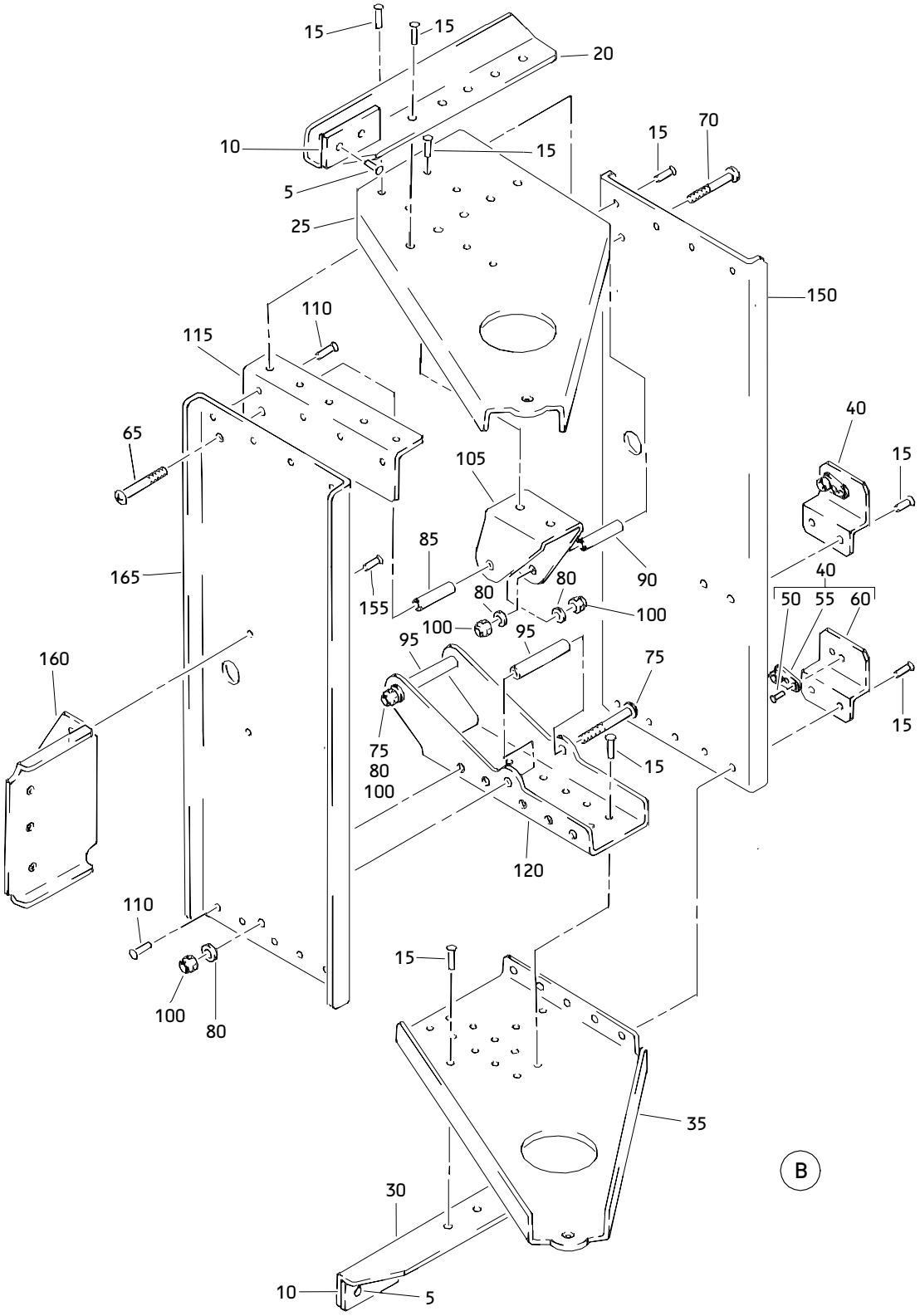
PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
NAS42DD6-74		1	90	1
NAS42DD6-98		1	95	2
NAS43DD8-164		1	145A	1
NAS623-3-19		1	65	1
NAS623-3-21		1	70	1
NAS623-3-28		1	75	2
NS103197-02		1	55A	2
NS103198-02		1	55	2
NS202101-02		1	100	4
RMA9201M3		1	55A	2
RMA9207-3		1	55	2
RMLH9074-8		1	135	1
RMLH9075-3W		1	100	4
T6S1032J		1	100	4
T8076S1032		1	55A	2
T8077S1032		1	55	2
VN201A1-02		1	55	2
VN202A1-02		1	55A	2
VN303A02		1	100	4
251T1510-2		1	10	2
251T1510-5		1	1	RF
251T1510-6		1	1A	RF
251T1510-7		1	1B	RF
251T1510-8		1	1C	RF
251T1510-9		1	1D	RF
251T1513-10		1	180	1
251T1513-12		1	170C	1
251T1513-13		1	170D	1
251T1513-14		1	180B	1
251T1513-7		1	170A	1
251T1513-8		1	180A	1
251T1513-9		1	170	1
251T1530-1		1	150	1
251T1530-10		1	115	1
251T1530-11		1	30	1
251T1530-12		1	35	1
251T1530-13		1	25A	1
251T1530-14		1	35B	1
251T1530-2		1	165	1
251T1530-3		1	25	1
251T1530-5		1	20	1
251T1530-7		1	160	1
251T1530-8		1	120	1
251T1530-9		1	105	1
251T1544-2		1	125	1

PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
287T0015-169		1	40	2
287T0015-170		1	60	2
48FT820		1	135	1
96-02		1	100	4



Aileron Control RH Output Quadrant Assembly
Figure 1 (Sheet 1)

T99134



Aileron Control RH Output Quadrant Assembly
Figure 1 (Sheet 2)

T99135

	FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
	01-					
	-1	251T1510-5		QUADRANT ASSY-AIL. CONT RH OUTPUT	A	RF
	-1A	251T1510-6		QUADRANT ASSY-AIL. CONT RH OUTPUT	B	RF
	-1B	251T1510-7		QUADRANT ASSY-AIL. CONT RH OUTPUT	C	RF
	-1C	251T1510-8		QUADRANT ASSY-AIL. CONT RH OUTPUT	D	RF
R	-1D	251T1510-9		QUADRANT ASSY-AIL. CONT RH OUTPUT	E	RF
	5	BACR15BA4AD		.RIVET- (SIZE DETERMINE ON INST)		4
	10	251T1510-2		.FILLER		2
	15	BACR15BB5AD		.RIVET- (SIZE DETERMINE ON INST)		35
	20	251T1530-5		.BRACKET		1
	25	251T1530-3		.BRACKET	A,B	1
	-25A	251T1530-13		.BRACKET	C-E	1
	30	251T1530-11		.BRACKET		1
	35	251T1530-12		.BRACKET	A,B,E	1
	-35A	251T1530-12		.BRACKET- (OPT ITEM 35B)	C,D	1
	-35B	251T1530-14		.BRACKET- (OPT ITEM 35A)	C,D	1
R	-35C	251T1530-14		.BRACKET	E	1
	40	287T0015-169		.SUPPORT ASSY-WIRE		2
	50	BACR15BA3AD		..RIVET- (SIZE DETERMINE ON INST)		2
	55	BRM100A3		..NUTPLATE- (V52828) (SPEC BACN10JP3B) (OPT MK2000-3BAC (V15653)) (OPT NS103198-02 (V80539)) (OPT RMA9207-3 (V72962)) (OPT T8077S1032 (V11815)) (OPT VN201A1-02 (V92215)) (OPT ITEM 55A)		1

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-					
-55A	BRM200A3		..NUTPLATE-		1
			(V52828)		
			(SPEC BACN10JP3A)		
			(OPT MK1000-3BAC		
			(V15653))		
			(OPT NS103197-02		
			(V80539))		
			(OPT RMA9201M3		
			(V72962))		
			(OPT T8076S1032		
			(V11815))		
			(OPT VN202A1-02		
			(V92215))		
			(OPT ITEM 55)		
60	287T0015-170		..SUPPORT		1
65	NAS623-3-19		.SCREW		1
70	NAS623-3-21		.SCREW		1
75	NAS623-3-28		.SCREW		2
80	AN960-10		.WASHER		4
85	NAS42DD6-67		.SPACER		1
90	NAS42DD6-74		.SPACER		1
95	NAS42DD6-98		.SPACER		2
100	H10-3BAC		.NUT-		4
			(V15653)		
			(SPEC BACN10JC3)		
			(OPT NS202101-02		
			(V80539))		
			(OPT RMLH9075-3W		
			(V72962))		
			(OPT T6S1032J		
			(V71087))		
			(OPT VN303A02		
			(V92215))		
			(OPT 96-02		
			(V80539))		
			(OPT BRH10A3		
			(V52828))		
105	251T1530-9		.BRACKET		1
110	BACR15BB5AD		.RIVET-		9
			(SIZE DETERMINE ON INST)		
115	251T1530-10		.BRACKET		1
120	251T1530-8		.BRACKET		1
125	251T1544-2		.BOLT		1
130	BACB28X8M013		.BUSHING		2

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-					
135	H10-8BAC		.NUT- (V15653) (SPEC BACN10JC8) (OPT BMN4122A8 (V85495)) (OPT RMLH9074-8 (V72962)) (OPT 48FT820 (V56878)) (OPT BMN4122AD3-8 (V97928))		1
140	MKP8A		.BEARING- (V38443) (SPEC BACB10AP8) (OPT LLMKP8A (V38443)) (OPT MKP8AFS428 (V21335)) (OPT MKP8ATT (V43991)) (OPT MKP8A2TS (V43991)) (OPT MKP8E6531 (V21335)) (OPT MKP8AG20 (V38443)) (OPT MKP8ALY196 (V40920)) (OPT MKP8A (V38443)) (OPT MCS28E (VK8455)) (REPLD BY ITEM 140B)	A,B,D E	1
-140A	ACMKP8AA3908		.BEARING- (V21335) (SPEC BACB10FS8R) (OPT ACMKP8AP26LY198 (V40920))	C	1
-140B	BACB10FS8R		.BEARING (REPLS ITEM 140)	A,B,D E	1
145	NAS42DD8-164		DELETED		
145A	NAS43DD8-164		.SPACER		1
150	251T1530-1		.BRACKET		1
155	BACR15BB6AD		.RIVET- (SIZE DETERMINE ON INST)		2

	FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
	01-					
	160	251T1530-7		.BRACKET		1
	165	251T1530-2		.BRACKET		1
	170	251T1513-9		.QUADRANT ASSY- (OPT ITEM 170A)	A,B,D	1
	-170A	251T1513-7		.QUADRANT ASSY- (OPT ITEM 170)	A,B,D	1
	-170B	251T1513-7		DELETED		
R	-170C	251T1513-12		.QUADRANT ASSY	C	1
R	-170D	251T1513-13		.QUADRANT ASSY	E	1
	175	MKP8A		..BEARING- (V38443) (SPEC BACB10AP8) (OPT LLMKP8A (V38443)) (OPT MKP8AFS428 (V21335)) (OPT MKP8ATT (V43991)) (OPT MKP8A2TS (V43991)) (OPT MKP8E6531 (V21335)) (OPT MKP8AG20 (V38443)) (OPT MKP8ALY196 (V40920)) (OPT MKP8A (V38443)) (OPT MCS28E (VK8455)) (REPLD BY ITEM 175B)	A,B,D E	1

	FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
	01-					
	-175A	ACMKP8AA3908		..BEARING- (V21335) (SPEC BACB10FS8R) (OPT ACMKP8AP26LY198 (V40920)) (REPLS ITEM 175)	C	1
|	-175B	BACB10FS8R		..BEARING (REPLS ITEM 175)	A,B,D E	1
	180	251T1513-10		..QUADRANT- (USED ON ITEM 170)	A,B,D	1
	-180A	251T1513-8		..QUADRANT- (USED ON ITEM 170A)	A,B,D	1
R	-180B	251T1513-14		..QUADRANT- (USED ON ITEMS 170C, 170D)	C,E	1