TO: ALL HOLDERS OF LEFT OUTPUT QUADRANT AND SUPPORT ASSEMBLY COMPONENT MAINTENANCE MANUAL 27-11-14

REVISION NO. 3 DATED JUN 01/95

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. 2 dated Jul 10/84 on the Record of Revision Sheet.

CHAPTER/SECTION AND PAGE NO.	DESCRIPTION OF CHANGE
TITLE PAGE 1 TR & SB RECORD 1 REPAIR 1-1 601-602 REPAIR 2-1 601-602 1002,1004-1007,1009, 1011-1017	Added top assembly 251T1413-13 with crank assembly 251T1412-7, quadrant assembly 251T1411-11, and CRES bearings to improve corrosion resistance per PRR B12597.
301 REPAIR 1-1 601 REPAIR 4-1 601 1012	Edited without techincal change.

LEFT SIDE OUTPUT QUADRANT AND SUPPORT ASSEMBLY

PART NUMBER 251T1413-11,-12,-13

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
27-11-14		
TITLE PAGE		
*1	JUN 01/95	01.1
2	BLANK	
REVISION RECORD		
1	JUL 10/83	01
2	BLANK	
TR & SB RECORD		
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LIST OF EFFECTIVE PAGES		
*1	JUN 01/95	01
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1	JUL 10/83	01
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1	JUL 10/84	01.1
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*301	JUN 01/95	01.1
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CHECK		
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602	BLANK	
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*601	JUN 01/95	01.1
*602	JUN 01/95	01.1
603	JUL 10/84	01.1
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*602	JUN 01/95	01.1
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802	JUL 10/84	01.1
803	JUL 10/84	01.1
804	JUL 10/84	01.1
ILLUSTRATED PARTS LIST		
1001	JUL 10/83	01
*1002	JUN 01/95	01.1
*1003	JUN 01/95	01.1
*1004	JUN 01/95	01.1
*1005	JUN 01/95	01.1
*1006	JUN 01/95	01.1

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ILLUSTRATED PARTS LIST		CONT.
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*1012	JUN 01/95	01.1
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*1015	JUN 01/95	01.1
*1016	JUN 01/95	01.1
*1017	JUN 01/95	01.1
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TABLE OF CONTENTS

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 Revisions & 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 and a list of applicable standard Boeing practices.

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:

Disassembly
Assembly

LEFT SIDE OUTPUT QUADRANT AND SUPPORT ASSEMBLY

DESCRIPTION AND OPERATION

1. Description

   A. Left side output quadrant and support assembly is a mechanical device composed of aluminum support, crank, guard, quadrant assembly and a control rod assembly. The crank assembly rotates around the quadrant assembly on anti-friction bearings and attaches to the control rod assembly.

2. Operation

   A. The left output quadrant and support assembly converts linear motion to rotary motion and connects the output of the lateral control central actuators together.

3. Leading Particulars (approximate)

   Width -- 13 inches
   Length -- 16 inches
   Height -- 4 inches
   Weight -- To be provided

DISASSEMBLY

1. Part Replacement

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

A. Collar (255)

2. Disassembly (IPL Fig. 1)

A. Remove bolts (5, 25), washers (10, 30), nuts (15, 35) and bushings (20, 40). Remove rod assembly (45).

NOTE: Refer to CMM 27-00-11 for detail of disassembly and repair of rod assembly (45).

B. Remove screws (50, 200, 220), spacers (55, 205, 225), washers (60, 210, 230) and nuts (65, 215, 235) from support (240 or 270).

C. Remove bolt (70), washer (75), nut (80) and bushing (85). Remove quadrant assembly (140) from support (240 or 245). Remove bearing (130) and bushing (135) from quadrant assembly (140).

NOTE: Do not remove bearing (145) and guard assembly (100A) from quadrant (150) unless necessary for repair or replacement.

D. Remove bolt (155), washer (160), bushing (170) and nut (165). Remove crank assembly (185) from support (240 or 245). Remove bearing (175) and bushing (180) from crank assembly (185).

NOTE: Do not remove bearing (190) from crank (195) unless necessary for repair or replacement.

E. Assembly 251T1413-12.

NOTE: Do not remove bolts (250), collars (255), or angles (260, 265) from support (270) unless necessary for repair or replacement.

CLEANING

1. Clean all parts except bearings using standard industry practices (Ref 20-30-03) and additional procedures in following step.

2. Clean all sealed bearings (130, 145, 175, 190, IPL Fig. 1) per manufacturer's instructions.

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 the following parts (Ref IPL Fig. 1) per 20-20-01.

   A. Bolt (70)

   B. Bushing (20, 40, 85, 170)

4. Penetrant check the following parts (Ref IPL Fig. 1) per 20-20-02.

   A. Support (240)

   B. Support assembly (270)

   C. Quadrant (150)

   D. Crank (195)

   E. Angle (260, 265)

REPAIR - GENERAL

1. Content

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

P/N	NAME	REPAIR
251T1411	QUADRANT	1-1
251T1412	CRANK	2-1
251T1430	SUPPORT	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.

20-30-02 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
20-42-05 Bright Cadmium Plating
20-43-01 Chromic Acid Anodizing

3. Materials

NOTE: Equivalent substitutes may be used.

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

QUADRANT ASSY - REPAIR 1-1

251T1411-7, -11

NOTE: Refer to REPAIR-GEN for list of applicable standard practices. For repair of quadrant (140) which may only require stripping and restoration of the original finish, refer to Refinish instructions, Fig. 601.

1. Bearing Replacement (IPL Fig. 1, Fig. 601)

   A. Remove bearing (145).

   B. Install new bearing and roller swage per 20-50-03 except use wet BMS 10-11, type 1 primer (F-20.06) in lieu of MIL-G-23827 grease.

2. Guard Assy Replacement

   NOTE: Guard assy (100A) is not a part of quadrant assy (140).

   A. Remove rivets (90, 95, 105) and separate guards (120, 125A) from quadrant assy (140). Remove spacers (110A, 115).

   B. Install new guards (120, 125A) and spacers (110A, 115) with rivets (90, 95, 105) using squeeze method.

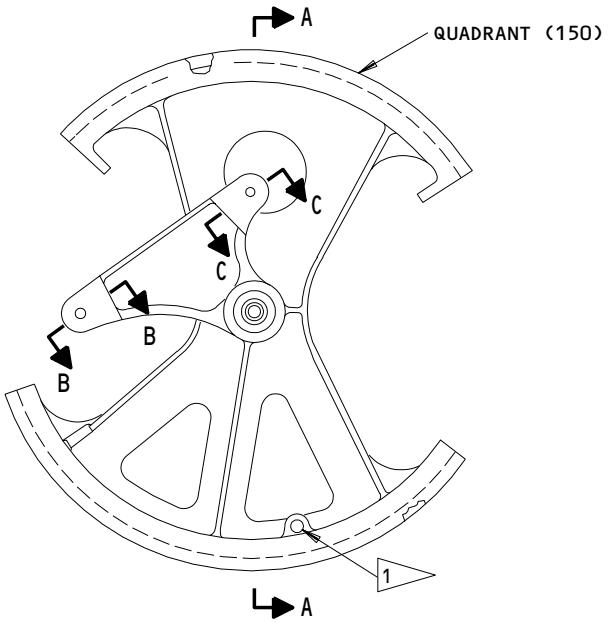
3. Repair (Fig. 601)

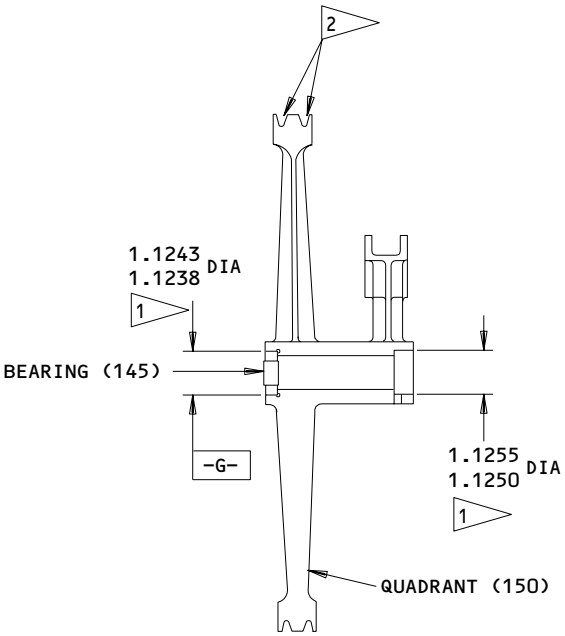
   A. Machine holes oversize as required, within repair limit shown, to remove defects. Maintain limits and dimensions shown for repair using bushings.

   B. Manufacture bushing per Fig. 601.

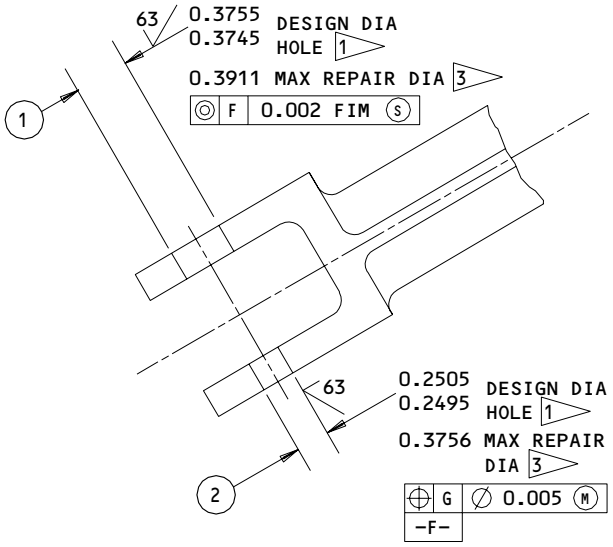
   C. Install bushing using wet BMS 5-95 sealant and shrink-fit method per 20-50-03.

   D. If necessary machine bushing bore to design dimension.

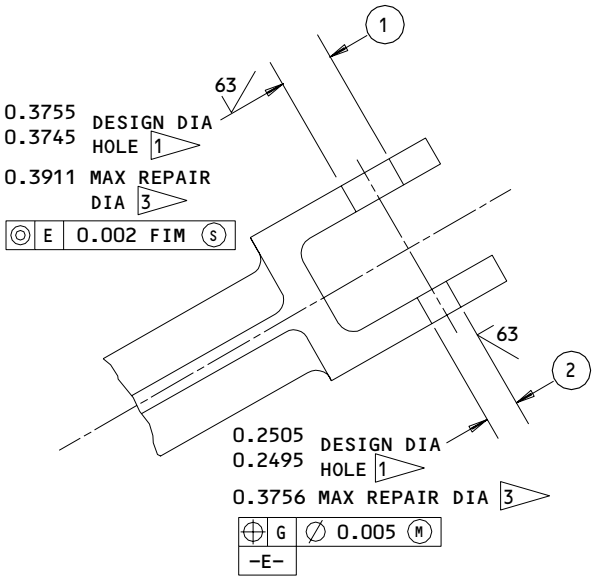




A-A



B-B



C-C

REFINISH

QUADRANT (150) -- SULFURIC ACID OR CHROMIC ACID ANODIZE (F-17.05) ALL OVER. APPLY ONE COAT OF PRIMER BMS 10-11, TYPE I (F-20.02) ALL OVER EXCEPT AS NOTED

1 OMIT PRIMER ON THIS SURFACE

2 APPLY TWO COAT OF PRIMER BMS 10-11, TYPE I (F-20.03) TO CABLE GROOVE SURFACE ONLY

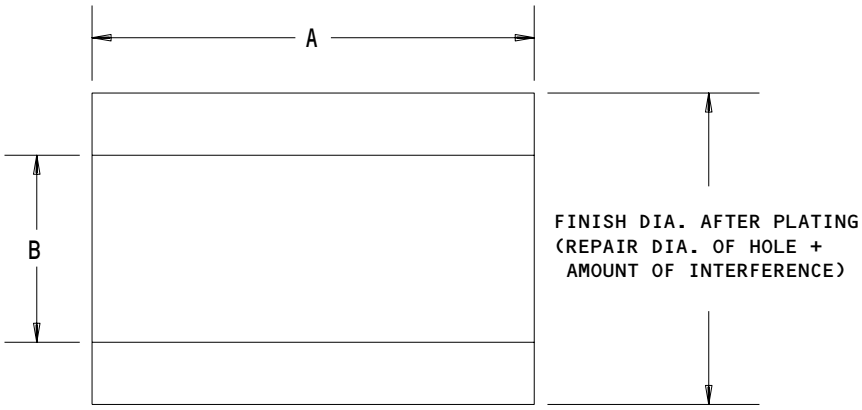
3 REPAIR LIMITS FOR INSTALLATION OF BUSHINGS

MATERIAL: AL ALLOY

ALL DIMENSIONS ARE IN INCHES

251T1411-7,-11
Quadrant Assembly Repair
Figure 601 (Sheet 1)

71252



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

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

BUSHING INSTALLED AT	A	B	INTERFERENCE
(1)	0.18	0.3755 0.3745	0.0017 0.0005
(2)	0.18	0.2505 0.2495	0.0015 0.0003

REPAIR BUSHINGS

Quadrant Assembly Repair
Figure 601 (Sheet 2)

CRANK ASSEMBLY - REPAIR 2-1

251T1412-5, -7

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

1. Bearing Replacement (IPL Fig. 1)

   A. Remove bearing (190).

   B. Install new bearing and roller swage per 20-50-03 except use wet BMS 10-11, type 1 primer (F-20.06) in lieu of MIL-G-23827 grease.

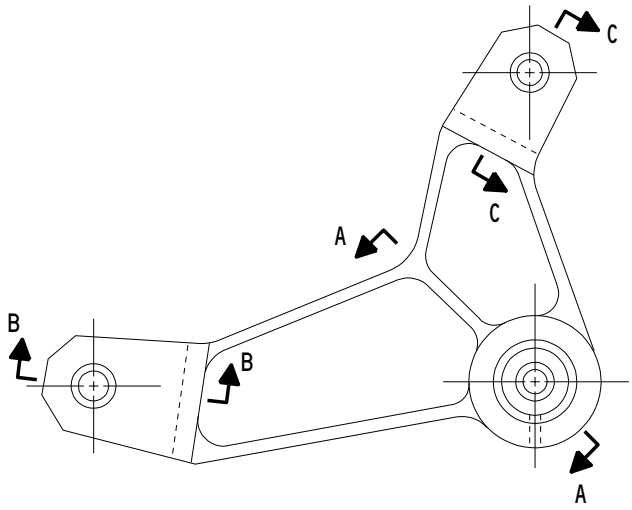
2. Repair

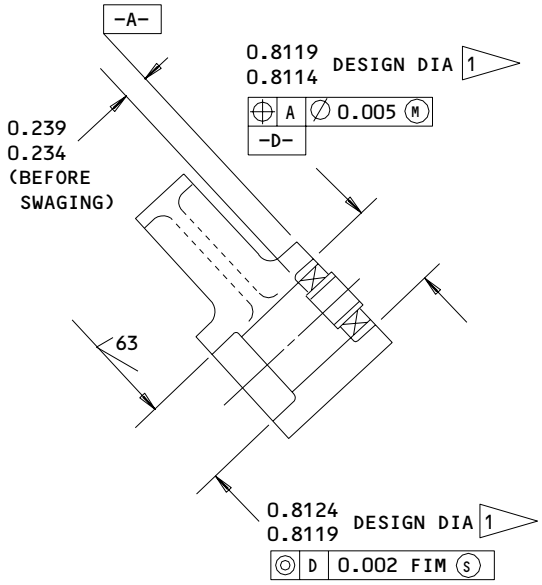
   A. Machine holes oversize as required, within repair limit shown to remove defects. Maintain limits and dimensions shown for repair using bushings.

   B. Manufacture bushings per Fig. 601.

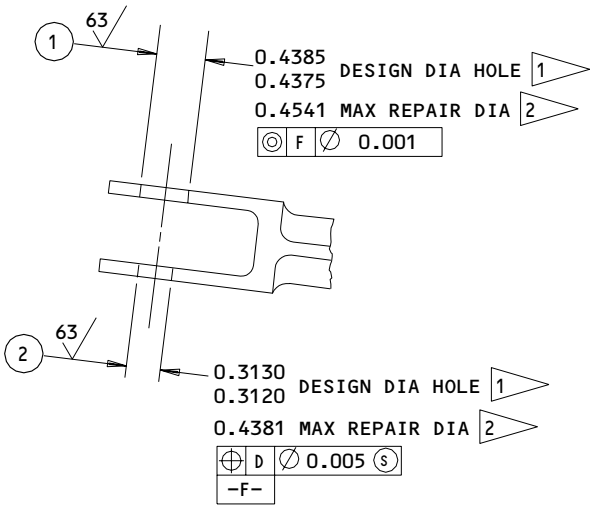
   C. Install bushing using wet BMS 5-95 sealant and shrink-fit method per 20-50-03.

   D. If necessary machine bushing bore to design dimensions.

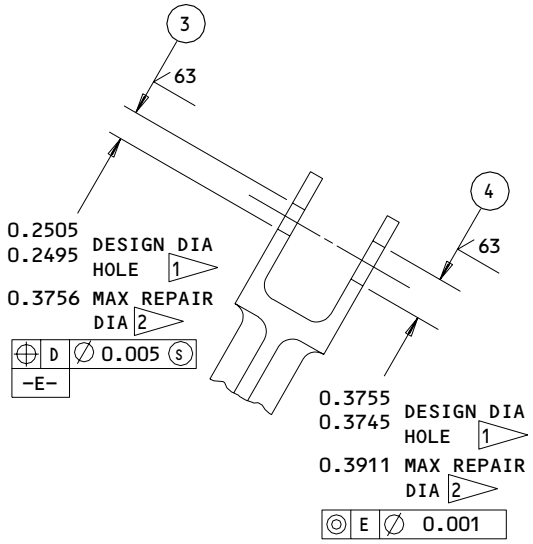




A-A



B-B



C-C

REFINISH

CHROMIC ACID ANODIZE (SRF-2.311) PER 20-43-01 AND APPLY ONE COAT OF PRIMER BMS 10-11, TYPE 1 PER 20-41-02 ALL OVER EXCEPT AS NOTED

1 OMIT PRIMER ON THIS SURFACE

2 REPAIR LIMITS FOR INSTALLATION OF BUSHINGS

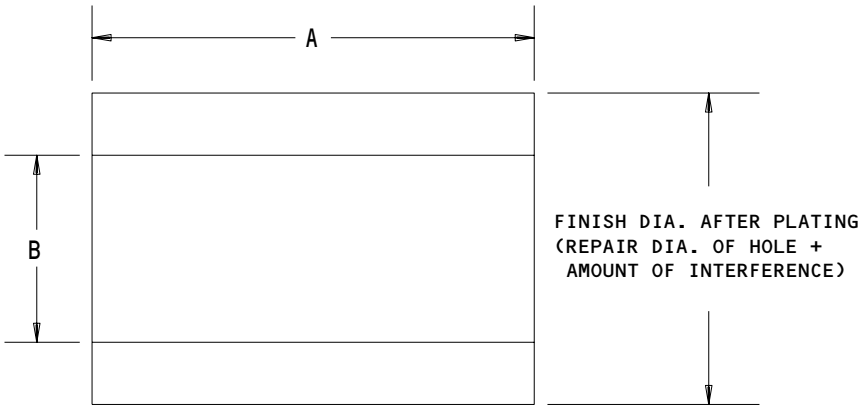
MATERIAL: AL ALLOY

ALL DIMENSIONS ARE IN INCHES

251T1412-5,-7

Crank Assembly Repair
Figure 601 (Sheet 1)

131228



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

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

BUSHING INSTALLED AT	A	B	INTERFERENCE
(1)	0.11	0.4385 0.4375	0.0015 0.0003
(2)	0.11	0.3130 0.3120	0.0015 0.0003
(3)	0.11	0.2505 0.2495	0.0015 0.0003
(4)	0.11	0.3755 0.3745	0.0015 0.0003

REPAIR BUSHINGS

Crank Assembly Repair
Figure 601 (Sheet 2)

131222

SUPPORT - REPAIR 3-1

251T1430

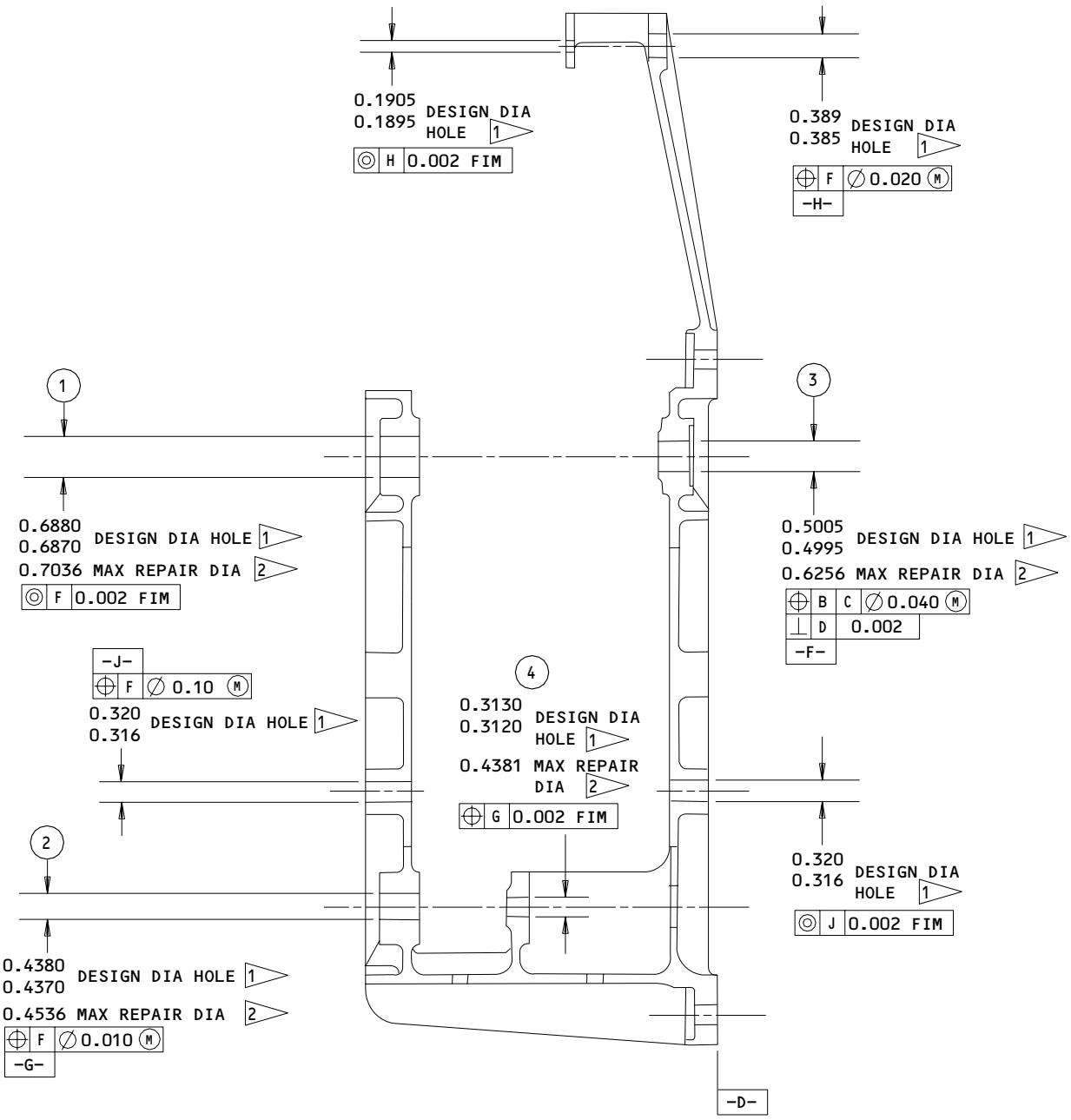
NOTE: Refer to REPAIR-GEN for list of applicable standard practices. For repair of support (240) which only requires stripping and restoration of the original finish, refer to Refinish Instructions, Fig. 601.

1. Repair (Fig. 601)

A. Machine holes oversize as required, within repair limit shown to remove defects. Maintain limits and dimensions shown for repair using bushings.

B. Manufacture bushings per Fig. 601.

C. Install bushing using wet BMS 5-95 sealant and shrink-fit method per 20-50-03. If necessary machine bushing ID to design dimension.



REFINISH

CHROMIC ACID OR SULFURIC ACID ANODIZE (F-17.05) AND APPLY ONE COAT OF PRIMER BMS 10-11, TYPE 1 (F-20.02) ALL OVER EXCEPT OMIT PRIMER FROM ALL HOLES

MATERIAL: AL ALLOY

ALL DIMENSIONS ARE IN INCHES

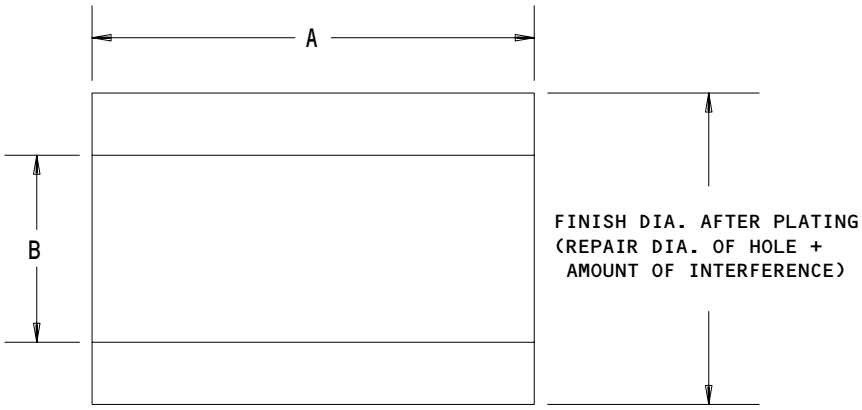
1 OMIT PRIMER THIS AREA

2 REPAIR LIMITS FOR INSTALLATION OF BUSHINGS

251T1430

Support Repair
Figure 601 (Sheet 1)

131231



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

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

BUSHING INSTALLED AT	A	B	INTERFERENCE
(1)	0.62	0.6880 0.6870	0.0017 0.0005
(2)	0.62	0.4380 0.4370	0.0017 0.0005
(3)	0.50	0.5005 0.4995	0.0017 0.0005
(4)	0.38	0.3130 0.3120	0.0015 0.0003

REPAIR BUSHINGS

Support Repair
Figure 601 (Sheet 2)

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		
Angle (260,265)	Al alloy	Chromic acid or sulfuric acid anodize (F-17.05) and apply one coat of primer BMS 10-11, type 1 (F-20.02).
Bolt (70)	15-5PH CRES 180-200 KSI	Cadmium plate (F-15.06)
Guard Assembly (100A)	Al alloy	Apply one coat of primer BMS 10-11, type 1 (F-20.02) all over.
Guard (120,125A)	Al alloy	Chromic acid anodize (F-17.04). Apply two coat of primer BMS 10-11, type 1 (F-20.03).
Bushing (20,40,85, 170)	4340 Steel 125-145 KSI	Cadmium plate (F-15.06)

Refinish Details
Figure 601

ASSEMBLY

1. Material

   A. Grease -- BMS 3-24 (Ref 20-50-03)

2. Assembly (IPL Fig. 1)

   A. On assembly 251T1413-12, install angles (260, 265) on support (270) using bolts (250) and collars (255).

   B. Install bearing (130) and bushing (135) into quadrant assembly (140). Install bearing (130) per 20-50-03 except use grease.

   C. Apply grease to bushing (85) and shank and threads of bolt (70). Position quadrant assembly (140) in support (240 or 245). Insert bolt (70) through support (240 or 245), quadrant assembly (140) with installed bearing (130) and bushing (135). Install bushing (85), washer (75) and nut (80). Tighten nut (80) to 95-105 lb-in.

   D. Install bushing (180) and bearing (175) into crank assembly (185). Install bearing (175) per 20-50-03 except use grease.

   E. Apply grease to shank and thread of bolt (155) and bushing (170). Insert bolt through support (240 or 245) and crank assembly (185). Install bushing (170), washer (160) and nut (165) on support (240 or 245).

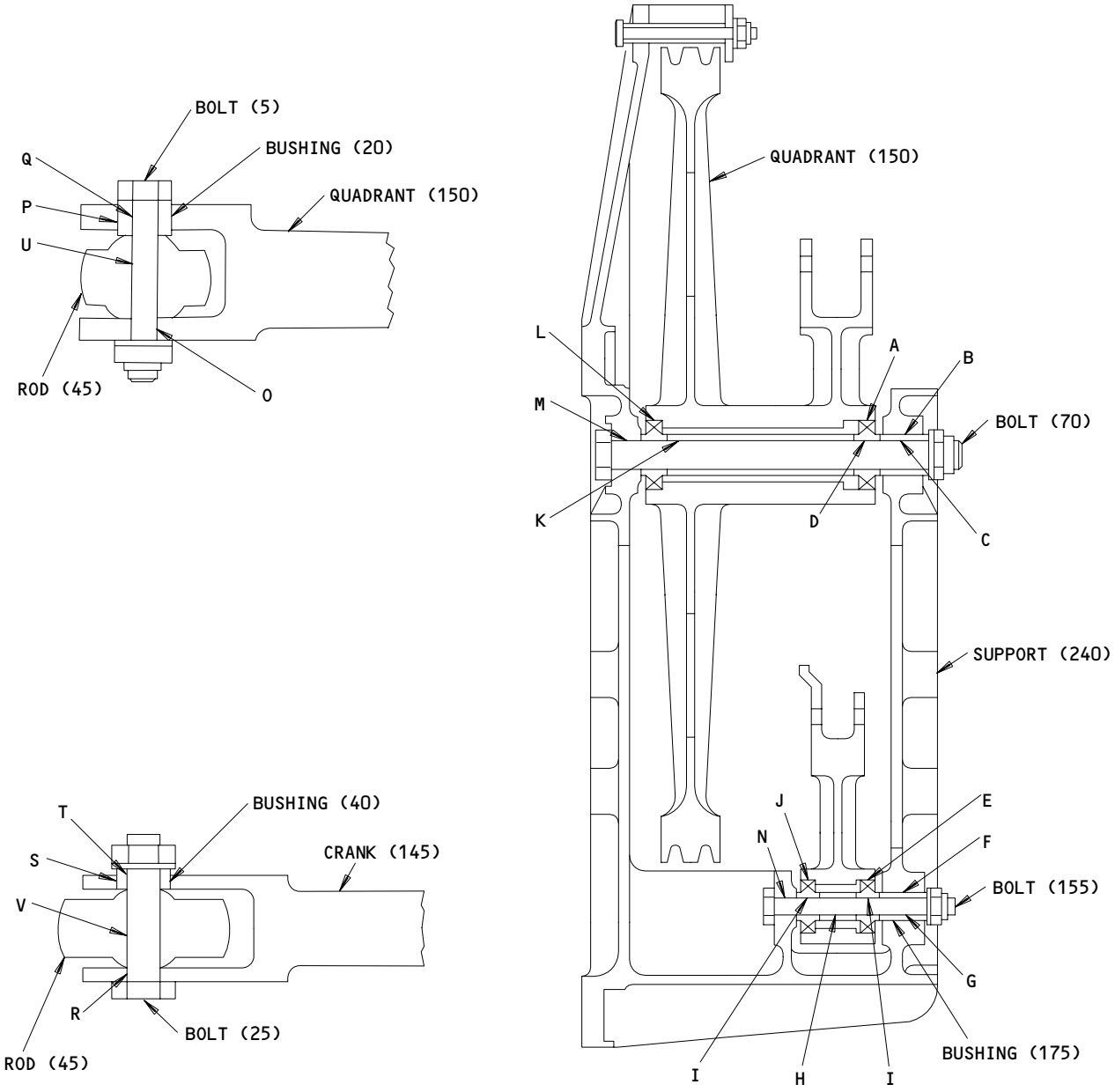
   F. Apply grease to shank and threads of bolts (5, 25) and bushings (20, 40). Position rod assembly (45) on support (240 or 245) and quadrant assembly (140). Install bushings (20, 40), bolts (5, 25), washers (10, 30) and nuts (15, 35).

   G. Apply grease to shank and threads of screws (50, 200, 220). Install screws (50, 200, 220), washers (60, 210, 230), spacers (55, 205, 225), and nut (65, 215, 235) on support (240 or 245).

3. Storage

   A. Prepare and store component in accordance with standard industry practices.

FITS AND CLEARANCES



Fits and Clearances
Figure 801 (Sheet 1)

Ref Letter Fig.801	Mating Item No. IPL Fig.	Design Dimension				Service Wear Limit		
		Dimension		Assembly Clearance *[1]		Dimension		Maximum Clearance
		Min	Max	Min	Max	Min	Max	
A	ID 150 OD 130	1.1250 1.1246	1.1255 1.1250	0.0000	0.0008	1.1227	1.1278	0.0028
B	ID 240 OD 85	0.6870 0.6865	0.6880 0.6870	0.0000	0.0015	0.6845	0.6905	0.0035
C	ID 85 OD 70	0.5000 0.4989	0.5005 0.4994	0.0006	0.0016	0.4969	0.5030	0.0036
D	ID 130 OD 70	0.4997 0.4989	0.5000 0.4994	0.0003	0.0011	0.4969	0.5025	0.0031
E	ID 195 OD 175	0.8119 0.8121	0.8124 0.8125	-0.0006	0.0003	0.8101	0.8148	0.0023
F	ID 240 OD 170	0.4370 0.4365	0.4380 0.4370	0.0000	0.0015	0.4345	0.4405	0.0035
G	ID 170 OD 155	0.3125 0.3110	0.3131 0.3120	0.0005	0.0021	0.3091	0.3161	0.0041
H	ID 180 OD 155	0.3125 0.3110	0.3140 0.3120	0.0005	0.0030			
I	ID 190 OD 155	0.3122 0.3110	0.3125 0.3120	0.0002	0.0015	0.3090	0.3155	0.0035
J	ID 195 OD 190	0.8114 0.8121	0.8119 0.8125	-0.0011	-0.0002			
K	ID 135 OD 70	0.5000 0.4989	0.5015 0.4994	0.0006	0.0026			
L	ID 140 OD 145	1.1238 1.1246	1.1243 1.1250	-0.0012	-0.0003			

*[1] NEGATIVE VALUES DENOTE INTERFERENCE FIT

ALL DIMENSIONS ARE IN INCHES

Fits and Clearances
Figure 801 (Sheet 2)

71667

Ref Letter Fig.801	Mating Item No. IPL Fig.	Design Dimension				Service Wear Limit		
		Dimension		Assembly Clearance *[1]		Dimension		Maximum Clearance
		Min	Max	Min	Max	Min	Max	
M	ID 240 OD 70	0.4995 0.4989	0.5005 0.4994	0.0001	0.0016	0.4969	0.5030	0.0036
N	ID 240 OD 155	0.3120 0.3110	0.313 0.312	0.000	0.002	0.309	0.316	0.004
O	ID 150 OD 5	0.2495 0.2485	0.2505 0.2495	0.0000	0.0020	0.2465	0.2535	0.0040
P	ID 150 OD 20	0.3745 0.3740	0.3755 0.3745	0.0000	0.0015	0.3720	0.3780	0.0035
Q	ID 20 OD 5	0.2500 0.2485	0.2505 0.2495	0.0005	0.0020	0.2465	0.2535	0.0040
R	ID 145 OD 25	0.3120 0.3110	0.3130 0.3120	0.0000	0.0020	0.3090	0.3160	0.0040
S	ID 145 OD 40	0.4375 0.4365	0.4385 0.4375	0.0000	0.0020	0.4345	0.4415	0.0040
T	ID 40 OD 5	0.3125 0.3110	0.3131 0.3120	0.0005	0.0021	0.3090	0.3161	0.0041
U	ID 45 OD 5	0.2495 0.2485	0.2500 0.2495	0.0000	0.0015	0.2465	0.2530	0.0035
V	ID 45 OD 25	0.3120 0.3110	0.3125 0.3120	0.0000	0.0015	0.3090	0.3155	0.0035

*[1] NEGATIVE VALUES DENOTE INTERFERENCE FIT

ALL DIMENSIONS ARE IN INCHES

Fits and Clearances
Figure 801 (Sheet 3)

FOR TORQUE VALUES OF STANDARD FASTENERS. REFER TO 20-50-01			
ITEM NO. IPL Fig. 1	NAME	TORQUE	
		POUND-INCHES	POUND-FEET
80	Nut	95-105	

Torque Table
Figure 802

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 are 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

0PTK6 SPS TECHNOLOGIES INC AEROSPACE PRODUCTS DIV
5195 W 4700 SPO BOX 18459
KEARNS, UTAH 84118

08524 DEUTSCH FASTENER CORP SEE CODE V97928

15653 MICRODOT INC AEROSPACE FASTENING SYS KAYNAR MFG 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

VENDORS

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

60516 WEST COAST AEROSPACE INC
812 MIRAFLORES STREET
SAN PEDRO, CALIFORNIA 90731-1439

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

73197 HI-SHEAR TECHNOLOGY CORP
2600 SKYPARK DRIVE
TORRANCE, CALIFORNIA 90509

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

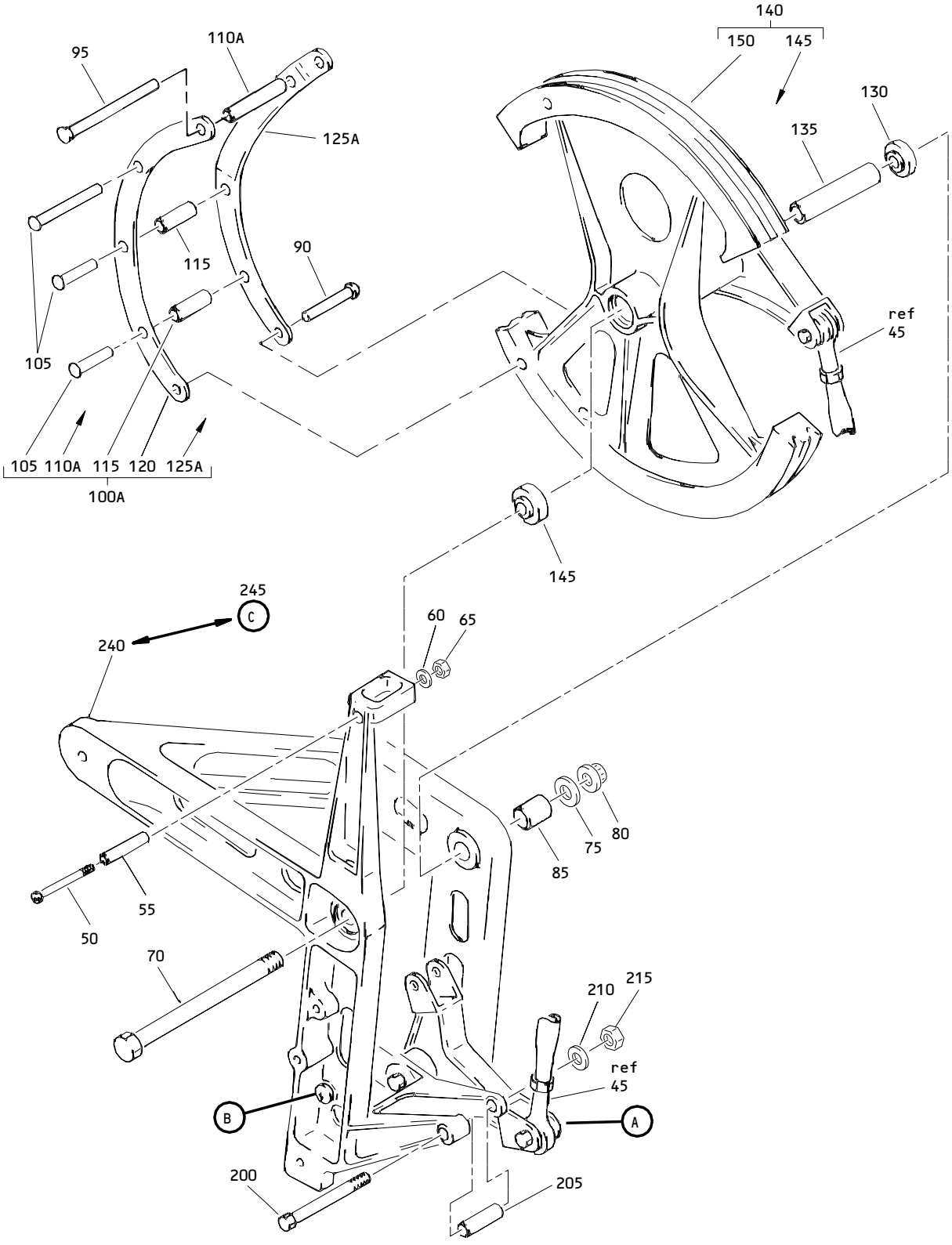
92215 FAIRCHILD IND INC FAIRCHILD AEROSP FASTNR DIV DESIGN & ENGRG
3000 WEST LOMITA BLVD
TORRANCE, CALIFORNIA 90505-5102

PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
ACMKP5AA3908		1	175A	1
		1	190A	1
ACMKP8AA3908		1	130A	1
		1	145A	1
ACMKP8AP26LY198		1	130A	1
		1	145A	1
AN960PD10		1	60	1
		1	210	1
		1	230	2
AN960PD416		1	10	1
AN960PD516		1	30	1
		1	160	1
AN960PD816		1	75	1
BACB10AP5		1	175	1
		1	190	1
BACB10AP8		1	130	1
		1	145	1
BACB10FS5R		1	175A	1
		1	190A	1
BACB10FS8R		1	130A	1
		1	145A	1
BACB30MY5K4		1	250	16
BACB30NF4-19		1	5	1
BACB30NF5-15		1	25	1
BACB30NF5-40		1	155	1
BACC30M5		1	255	16
BACN10JC3		1	65	1
		1	215	1
		1	235	1
BACN10JC4		1	15	1
BACN10JC5		1	35	1
		1	165	1
BACN10JC8		1	80	1
BACR15BA4AD		1	95	1
BACR15BB4AD		1	90	1
		1	105	3
BMN4122AD3-8		1	80	1
BRH10A3		1	65	1
		1	215	1
		1	235	1

PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
BRH10A4		1	15	1
BRH10A5		1	35	1
		1	165	1
HL10VAZ5-4		1	250	16
HL70-5		1	255	16
H10-3BAC		1	65	1
		1	215	1
		1	235	1
H10-4BAC		1	15	1
H10-5BAC		1	35	1
		1	165	1
H10-8BAC		1	80	1
LLMKP5A		1	175	1
		1	190	1
LLMKP8A		1	130	1
		1	145	1
MCS25E		1	175	1
		1	190	1
MCS28E		1	130	1
		1	145	1
MKP5A		1	175	1
		1	190	1
MKP5AFS428		1	175	1
		1	190	1
MKP5AG20		1	175	1
		1	190	1
MKP5ALY196		1	175	1
		1	190	1
MKP5ATT		1	175	1
		1	190	1
MKP5A2TS		1	175	1
		1	190	1
MKP5E6531		1	175	1
		1	190	1
MKP8A		1	130	1
		1	145	1
MKP8AFS428		1	130	1
		1	145	1
MKP8AG20		1	130	1
		1	145	1
MKP8ALY196		1	130	1
		1	145	1
MKP8ATT		1	130	1
		1	145	1
MKP8A2TS		1	130	1
		1	145	1

PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
MKP8E6531		1	130	1
		1	145	1
NAS42DD4-35		1	115	2
NAS42DD4-68		1	110A	1
NAS42DD6-104		1	55	1
NAS42DD6-132		1	225	1
NAS42DD6-95		1	205	1
NAS623-3-29		1	50	1
NAS623-3-30		1	200	1
NAS623-3-35		1	220	1
NAS75-5-022		1	180	1
NAS75-8-302		1	135	1
NS202101-02		1	65	1
		1	215	1
		1	235	1
NS202101-048		1	15	1
RMLH9074-8		1	80	1
RMLH9075-3W		1	65	1
		1	215	1
		1	235	1
RMLH9075-4W		1	15	1
RMLH9075-5W		1	35	1
		1	165	1
T6S1032J		1	65	1
		1	215	1
		1	235	1
T6S428J		1	15	1
T6S524J		1	35	1
		1	165	1
VN303A02		1	65	1
		1	215	1
		1	235	1

PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
VN303A048		1	15	1
251T0100-358		1	45	1
251T1410-5		1	245	1
251T1410-6		1	270	1
251T1411-11		1	140A	1
251T1411-7		1	140	1
251T1411-8		1	150	1
251T1412-5		1	185	1
251T1412-6		1	195	1
251T1412-7		1	185A	1
251T1413-11		1	1B	RF
251T1413-12		1	1C	RF
251T1413-13		1	1D	RF
251T1429-1		1	265	1
251T1429-2		1	260	1
251T1430-3		1	240	1
251T1544-3		1	70	1
251T1589-10		1	125A	1
251T1589-7		1	120	1
251T1589-9		1	100A	1
251T3741-16		1	85	1
251T3741-17		1	170	1
251T3741-18		1	40	1
251T3742-3		1	20	1
48FT820		1	80	1
66014-5		1	255	16
96-02		1	65	1
		1	215	1
		1	235	1
96-048		1	15	1
96-054		1	35	1
		1	165	1



Left Side Output Quadrant and Support Assembly
Figure 1 (Sheet 1)

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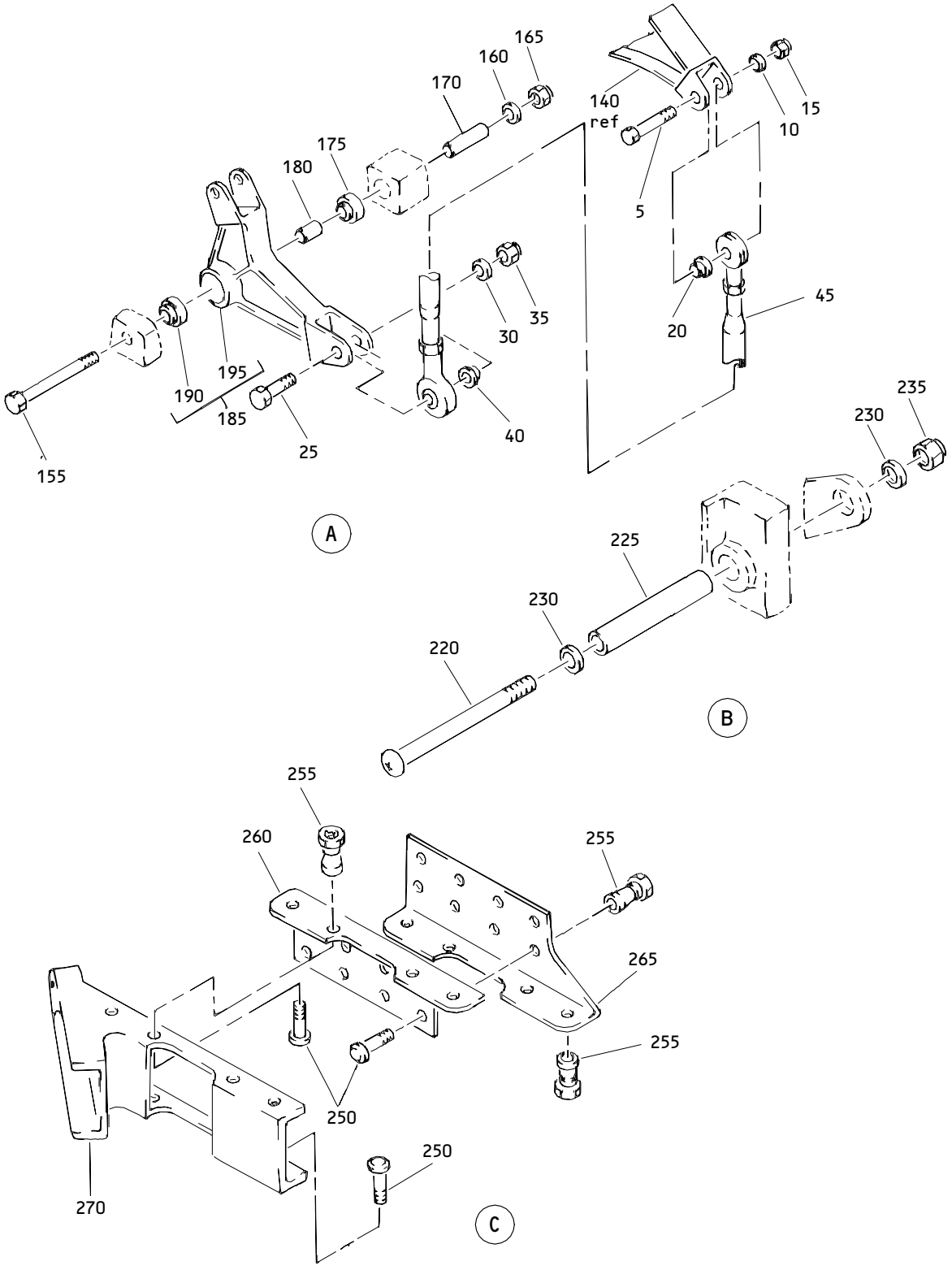

Left Side Output Quadrant and Support Assembly
Figure 1 (Sheet 2)

	FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
	01-					
	-1	251T1413-9		DELETED		
	-1A	251T1413-10		DELETED		
R	-1B	251T1413-11		QUADRANT AND SUPPORT ASSY- L SIDE OUTPUT	A	RF
R	-1C	251T1413-12		QUADRANT AND SUPPORT ASSY- L SIDE OUTPUT	B	RF
R	-1D	251T1413-13		QUADRANT AND SUPPORT ASSY- L SIDE OUTPUT	C	RF
R	5	BACB30NF4-19		.BOLT		1
R	10	AN960PD416		.WASHER		1
R	15	H10-4BAC		.NUT- (V15653) (SPEC BACN10JC4) (OPT NS202101-048 (V80539)) (OPT RMLH9075-4W (V72962)) (OPT T6S428J (V71087)) (OPT VN303A048 (V92215)) (OPT 96-048 (V80539)) (OPT BRH10A4 (V52828))		1
R	20	251T3742-3		.BUSHING		1
R	25	BACB30NF5-15		.BOLT		1
R	30	AN960PD516		.WASHER		1
R	35	H10-5BAC		.NUT- (V15653) (SPEC BACN10JC5) (OPT RMLH9075-5W (V72962)) (OPT T6S524J (V71087)) (OPT 96-054 (V80539)) (OPT BRH10A5 (V52828))		1
R	40	251T3741-18		.BUSHING		1
R	45	251T0100-358		.ROD ASSY- (FOR DETAILS SEE 27-00-11)		1
R	50	NAS623-3-29		.SCREW		1
R	55	NAS42DD6-104		.SPACER		1

	FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
	01-					
R	60	AN960PD10		.WASHER		1
R	65	H10-3BAC		.NUT-		1
				(V15653)		
				(SPEC BACN10JC3)		
				(OPT NS202101-02		
				(V80539))		
				(OPT RMLH9075-3W		
				(V72962))		
				(OPT T6S1032J		
				(V71087))		
				(OPT VN303A02		
				(V92215))		
				(OPT 96-02		
				(V80539))		
				(OPT BRH10A3		
				(V52828))		
R	70	251T1544-3		.BOLT		1
R	75	AN960PD816		.WASHER		1
R	80	H10-8BAC		.NUT-		1
				(V15653)		
				(SPEC BACN10JC8)		
				(OPT RMLH9074-8		
				(V72962))		
				(OPT BMN4122AD3-8		
				(V08524))		
				(OPT RMLH9074-8		
				(V72962))		
				(OPT 48FT820		
				(V56878))		
				(OPT BMN4122AD3-8		
				(V08524))		
R	85	251T3741-16		.BUSHING		1
R	90	BACR15BB4AD		.RIVET-		1
				(SIZE DETERMINE ON INST)		
R	95	BACR15BA4AD		.RIVET-		1
				(SIZE DETERMINE ON INST)		
	100	251T1589-6		DELETED		
R	100A	251T1589-9		.GUARD ASSY-AIL. CONT LCCA AND OVERRIDE		1
R	105	BACR15BB4AD		..RIVET-		3
				(SIZE DETERMINE ON INST)		
	110	NAS42DD4-69		DELETED		
R	110A	NAS42DD4-68		..SPACER		1
R	115	NAS42DD4-35		..SPACER		2
R	120	251T1589-7		..GUARD		1

	FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
	01-125	251T1589-8		DELETED		
R	125A	251T1589-10		..GUARD		1
R	130	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 130A)	A,B	1
R	-130A	ACMKP8AA3908		.BEARING- (V21335) (SPEC BACB10FS8R) (OPT ACMKP8AP26LY198 (V40920)) (REPLS ITEM 130)		1
R	135	NAS75-8-302		.BUSHING		1
R	140	251T1411-7		.QUADRANT ASSY-AIL. CONT LCCA	A,B	1
R	-140A	251T1411-11		.QUADRANT ASSY-AIL. CONT LCCA	C	1

	FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
	01-					
R	145	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 145A)	A,B	1
R	-145A	ACMKP8AA3908		..BEARING- (V21335) (SPEC BACB10FS8R) (OPT ACMKP8AP26LY198 (V40920)) (REPLS ITEM 145)		1
R	150	251T1411-8		..QUADRANT		1
R	155	BACB30NF5-40		.BOLT		1
R	160	AN960PD516		.WASHER		1
R	165	H10-5BAC		.NUT- (V15653) (SPEC BACN10JC5) (OPT RMLH9075-5W (V72962)) (OPT T6S524J (V71087)) (OPT 96-054 (V80539)) (OPT BRH10A5 (V52828))		1
R	170	251T3741-17		.BUSHING		1

	FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
R	01-175	MKP5A		.BEARING- (V38443) (SPEC BACB10AP5) (OPT LLMKP5A (V38443)) (OPT MKP5AFS428 (V21335)) (OPT MKP5ATT (V43991)) (OPT MKP5A2TS (V43991)) (OPT MKP5E6531 (V21335)) (OPT MKP5AG20 (V38443)) (OPT MKP5ALY196 (V40920)) (OPT MKP5A (V38443)) (OPT MCS25E (VK8455)) (REPLD BY ITEM 175A)	A,B	1
R	-175A	ACMKP5AA3908		.BEARING- (V21335) (SPEC BACB10FS5R) (REPLS ITEM 175)		1
R	180	NAS75-5-022		.BUSHING		1
R	185	251T1412-5		.CRANK ASSY-AIL. CONT LCCA	A,B	1
R	-185A	251T1412-7		.CRANK ASSY-AIL. CONT LCCA	C	1

	FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
	01-					
R	190	MKP5A		..BEARING- (V38443) (SPEC BACB10AP5) (OPT LLMKP5A (V38443)) (OPT MKP5AFS428 (V21335)) (OPT MKP5ATT (V43991)) (OPT MKP5A2TS (V43991)) (OPT MKP5E6531 (V21335)) (OPT MKP5AG20 (V38443)) (OPT MKP5ALY196 (V40920)) (OPT MKP5A (V38443)) (OPT MCS25E (VK8455)) (REPLD BY ITEM 190A)	A,B	1
R	-190A	ACMKP5AA3908		..BEARING- (V21335) (SPEC BACB10FS5R) (REPLS ITEM 190)		1
R	195	251T1412-6		..CRANK		1
R	200	NAS623-3-30		.SCREW		1
R	205	NAS42DD6-95		.SPACER		1
R	210	AN960PD10		.WASHER		1
R	215	H10-3BAC		.NUT- (V15653) (SPEC BACN10JC3) (OPT NS202101-02 (V80539)) (OPT RMLH9075-3W (V72962)) (OPT T6S1032J (V71087)) (OPT VN303A02 (V92215)) (OPT 96-02 (V80539)) (OPT BRH10A3 (V52828))		1

	FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
	01-					
R	220	NAS623-3-35		.SCREW		1
R	225	NAS42DD6-132		.SPACER		1
R	230	AN960PD10		.WASHER		2
R	235	H10-3BAC		.NUT- (V15653) (SPEC BACN10JC3) (OPT NS202101-02 (V80539)) (OPT RMLH9075-3W (V72962)) (OPT T6S1032J (V71087)) (OPT VN303A02 (V92215)) (OPT 96-02 (V80539)) (OPT BRH10A3 (V52828))		1
R	240	251T1430-3		.SUPPORT	A,C	1
R	245	251T1410-5		.SUPPORT ASSY-AIL. CONT	B	1
R	250	HL10VAZ5-4		..BOLT- (V60516) (SPEC BACB30MY5K4) (OPT HL10VAZ5-4 (V0PTK6))	B	16
R	255	HL70-5		..COLLAR- (V56878) (SPEC BACC30M5) (OPT HL70-5 (V73197)) (OPT HL70-5 (V92215)) (OPT 66014-5 (V56878))	B	16
R	260	251T1429-2		..ANGLE	B	1
R	265	251T1429-1		..ANGLE	B	1
R	270	251T1410-6		..SUPPORT	B	1