TO: ALL HOLDERS OF LATERAL CENTRAL CONTROL ACTUATOR OUTPUT QUADRANT ASSEMBLY COMPONENT MAINTENANCE MANUAL 27-11-22

REVISION NO. 10 DATED JUL 01/99

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
TITLE PAGE	Added quadrant assembly 251T1506-13.
1	
REPAIR 7-1	
601-602	
1002,1004-1008,	
1011-1022	

BOEING

COMPONENT
MAINTENANCE MANUAL

LATERAL CENTRAL CONTROL ACTUATOR OUTPUT QUADRANT ASSEMBLY

PART NUMBER 251T1506-9 THRU -13

COMPONENT MAINTENANCE MANUAL
WITH
ILLUSTRATED PARTS LIST

13299

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 B10517 PRR B10517-1 PRR B12597	Apr 10/82 Jul 10/82 Jun 01/95

PAGE	DATE	CODE
27-11-22		
TITLE PAGE		
*1	JUL 01/99	01.1
2	BLANK	
REVISION RECORD		
1	JUL 10/83	01
2	BLANK	
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2	BLANK	
LIST OF EFFECTIVE PAGES		
*1	JUL 01/99	01
THRU LAST PAGE		
CONTENTS		
1	JUL 10/83	01
2	BLANK	
INTRODUCTION		
1	JUL 10/83	01.1
2	BLANK	
DESCRIPTION & OPERATION		
1	JUL 10/83	01
2	BLANK	
DISASSEMBLY		
301	MAR 01/98	01.1
302	BLANK	
CLEANING		
401	JUL 10/83	01
402	BLANK	
CHECK		
501	MAR 01/98	01.1
502	BLANK	

PAGE	DATE	CODE
REPAIR-GENERAL		
601	APR 10/86	01.1
602	SEP 01/95	01.1
603	SEP 01/95	01.1
604	BLANK	
REPAIR 2-1		
601	MAR 01/98	01.1
602	JUN 01/95	01.1
603	JUN 01/95	01.1
604	JUN 01/95	01.1
REPAIR 3-1		
601	APR 10/86	01.1
602	APR 10/86	01.1
603	APR 10/86	01.1
604	BLANK	
REPAIR 4-1		
601	JUL 10/83	01
602	BLANK	
REPAIR 5-1		
601	MAR 01/98	01.1
602	MAR 01/98	01.1
REPAIR 6-1		
601	APR 10/86	01.1
602	APR 10/86	01.1
REPAIR 7-1		
*601	JUL 01/99	01.1
*602	JUL 01/99	01.1
603	APR 10/86	01.1
604	BLANK	
ASSEMBLY		
701	MAR 01/98	01.1
702	MAR 01/98	01.1

* = REVISED, ADDED OR DELETED

PAGE	DATE	CODE
FITS AND CLEARANCES		
801	JUL 10/83	01
802	OCT 10/86	01.1
803	MAR 01/98	01.1
804	MAR 01/98	01.1
805	JUL 10/83	01
806	BLANK	
ILLUSTRATED PARTS LIST		
1001	JUL 10/83	01
*1002	JUL 01/99	01.1
*1003	JUL 01/99	01.1
*1004	JUL 01/99	01.1
*1005	JUL 01/99	01.1
*1006	JUL 01/99	01.1
*1007	JUL 01/99	01.1
*1008	JUL 01/99	01.1
*1009	JUL 01/99	01.1
*1010	JUL 01/99	01.1
*1011	JUL 01/99	01.1
*1012	JUL 01/99	01.1
*1013	JUL 01/99	01.1
*1014	JUL 01/99	01.1
*1015	JUL 01/99	01.1
*1016	JUL 01/99	01.1
*1017	JUL 01/99	01.1
*1018	JUL 01/99	01.1
*1019	JUL 01/99	01.1
*1020	JUL 01/99	01.1
*1021	JUL 01/99	01.1
*1022	JUL 01/99	01.1

PAGE	DATE	CODE

* = REVISED, ADDED OR DELETED

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 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:

Disassembly	Mar 29/83
Assembly	Mar 29/83

LATERAL CENTRAL CONTROL ACTUATOR OUTPUT QUADRANT ASSEMBLY

DESCRIPTION AND OPERATION

1. The LCCA output quadrant assembly consists of an aluminum support, a quadrant assy two lever assemblies and a corrosion resistant steel cam. The quadrant assembly is mounted in the support. The cam is bolted to one lever assembly which rotates around the quadrant assembly on antifriction bearings. The other lever assembly is connected to the quadrant through a rotating joint at one end and with two tension springs at the other end. A cable-transmitted input from the cockpit, moves the output lever which turns the quadrant. The turning of the quadrant subsequently initiates movement of the aileron through control cable.

2. Leading Particulars (approximate)

   Length -- 18 inches
   Width -- 14 inches
   Height -- 7 inches
   Weight -- 8 lbs

DISASSEMBLY

1. Parts Replacement (IPL Fig. 1)

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

   A. Collars (28, 105, 113A)

   B. Cotter Pin (30)

2. Disassembly (IPL Fig. 1)

   A. Remove cotter pin (30), washer (37) and pin (35A) from support (65B). Remove fairlead (26), bolts (27) and collars (28).

   B. Remove bolt (40), washer (45), nut (50), bushings (55A, 60A) from support (65B). Remove lever assy (85A) with quadrant assy (215A) from support (65B).

   WARNING: SPRINGS (115) ARE HEAVILY LOADED. USE EXTREME CARE WHEN REMOVING SPRING (115), NUT (135) AND EYEBOLT (121).

   C. Loosen nut (135) to relieve springs (115) tension then remove springs from support (111) and lever assembly (185). Remove nut (135), washers (125A, 130A) and eyebolt (121) from quadrant assembly (215A). Remove bolt (112), collar (113A), bushing (114) and support (111) from eyebolt.

   D. Remove bushings (75, 80A) and bearing (70) and separate lever assembly (85A) from quadrant assembly (215A). Remove bearing (110), spacer (107) from lever assembly.

   E. Remove bolts (100), collars (105) and cam (95) from lever assembly (85A).

      NOTE: Do not disassemble lever (85A) assembly unless necessary for repair or replacement.

   F. Remove bolt (165A), washers (170), nut (175), bushing (180) and separate lever (185) form quadrant assembly (215A). Remove bearing (210) and bushing (205) from lever assembly.

   G. Remove parts (140 thru 160) from lever assembly (185).

      NOTE: Do not disassemble lever assembly (185) or quadrant assembly (215A) unless necessary for repair or replacement.

CLEANING

1. Clean all parts except bearings using standard industry practices and information contained in 20-30-03.

2. Clean teflon sealed bearings (70, 87, 110, 155, 190, 210, 220) according to manufacturer's instructions.

CHECK

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

2. Magnetic particle check per 20-20-01:

   A. Bolts (40, 121, IPL Fig. 1)

   B. Cam (95)

   C. Support (111)

   D. Springs (115)

3. Penetrant check per 20-20-02:

   A. Levers (90A, 200)

   B. Quadrant (225A)

   C. Support (65B)

   D. Spacer (107)

4. Check Springs (115)

   CAUTION: DO NOT EXTEND SPRING (115) BEYOND 7.60 INCHES OR PERMANENT DEFORMATION MAY OCCUR.

   A. Extend spring to 5.6 inches and check that load is 29.2-35.8 lbs.

   B. Extend spring to 7.59 inches and check that load is 100.8-123.2 lbs.

REPAIR - GENERAL

1. Content

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

P/N	NAME	REPAIR
	DELETED	
251T1514	QUADRANT ASSY	2-1
251T1538	GUARD ASSY	2-1
251T1526	LEVER ASSY, OUTPUT	3-1
251T1527	LEVER ASSY, ROLLER	4-1
- - -	MISC PARTS REFINISH	5-1
251T1544	BOLT	6-1
251T1511	SUPPORT	7-1

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
20-42-03 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 20-60-04)

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
↗↗	TOTAL RUNOUT
⌴	COUNTERBORE OR SPOTFACE
∨	COUNTERSINK
⌖	THEORETICAL EXACT POSITION OF A FEATURE (TRUE POSITION)
∅	DIAMETER
S ∅	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 WHICH 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 B WITHIN 0.002
[// | 0.002 | A]	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
[⌒ | 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 PLANE A
[⌓ | 0.020 | A]	SURFACES MUST LIE WITHIN PARALLEL BOUNDARIES 0.02 INCH APART AND EQUALLY DISPOSED ABOUT TRUE PROFILE
[◎ | ∅ 0.0005 | C]	CONCENTRIC TO C WITHIN 0.0005 DIAMETER
[≡ | 0.010 | A]	SYMMETRICAL WITH A WITHIN 0.010
[∠ | 0.005 | A]	ANGULAR TOLERANCE 0.005 WITH A
[⌖ | ∅ 0.002 Ⓢ | B]	LOCATED AT TRUE POSITION WITHIN 0.002 DIA RELATIVE TO DATUM B, REGARDLESS OF FEATURE SIZE
[⊥ | ∅ 0.010 Ⓜ | A] [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	THEORETICALLY EXACT DIMENSION IS 2.000

NOTE: DATUM MAY APPEAR AT EITHER SIDE OF TOLERANCE FRAME [0.020 | A] [A | 0.020]

True Position Dimensioning Symbols
Figure 601

13301

QUADRANT ASSY - REPAIR 2-1

251T1514-6, -8, -11

NOTE: Refer to REPAIR-GEN for list of applicable standard practices. For repair of quadrant (225A, IPL Fig. 1) surfaces which may only require restoration of original finish, refer to Refinish instructions, Fig. 601.

1. Bearing Replacement (Fig. 601)

   A. Remove bearing (220, IPL Fig. 1) from quadrant (225A).

   B. Install new bearing with wet primer per 20-50-03.

   C. Roller swage per 20-50-03.

2. Guard Assy Replacement

   NOTE: Guard assy (255 and 5) are not a part of quadrant assy (215A).

   A. Remove rivets (10A and 11) and separate guard assy (225 and 5) from quadrant assy (215A).

   B. Install new guard assy (5 and 255) with rivets (10A and 11).

3. Bushings Replacement (251T1514-6 Assembly Only) (Fig. 601)

   A. Remove bushings (230, 235).

   B. Install replacement bushings per 20-50-03 except use wet sealant.

   C. Fillet seal flange of bushing (230) with sealant.

4. Support Bracket Replacement (251T1514-6 Assembly Only)

   A. Remove bolts (245).

   B. Install replacement bracket (240) and secure with bolts (245) and collars (250A).

5. Hole Repair (Fig. 601)

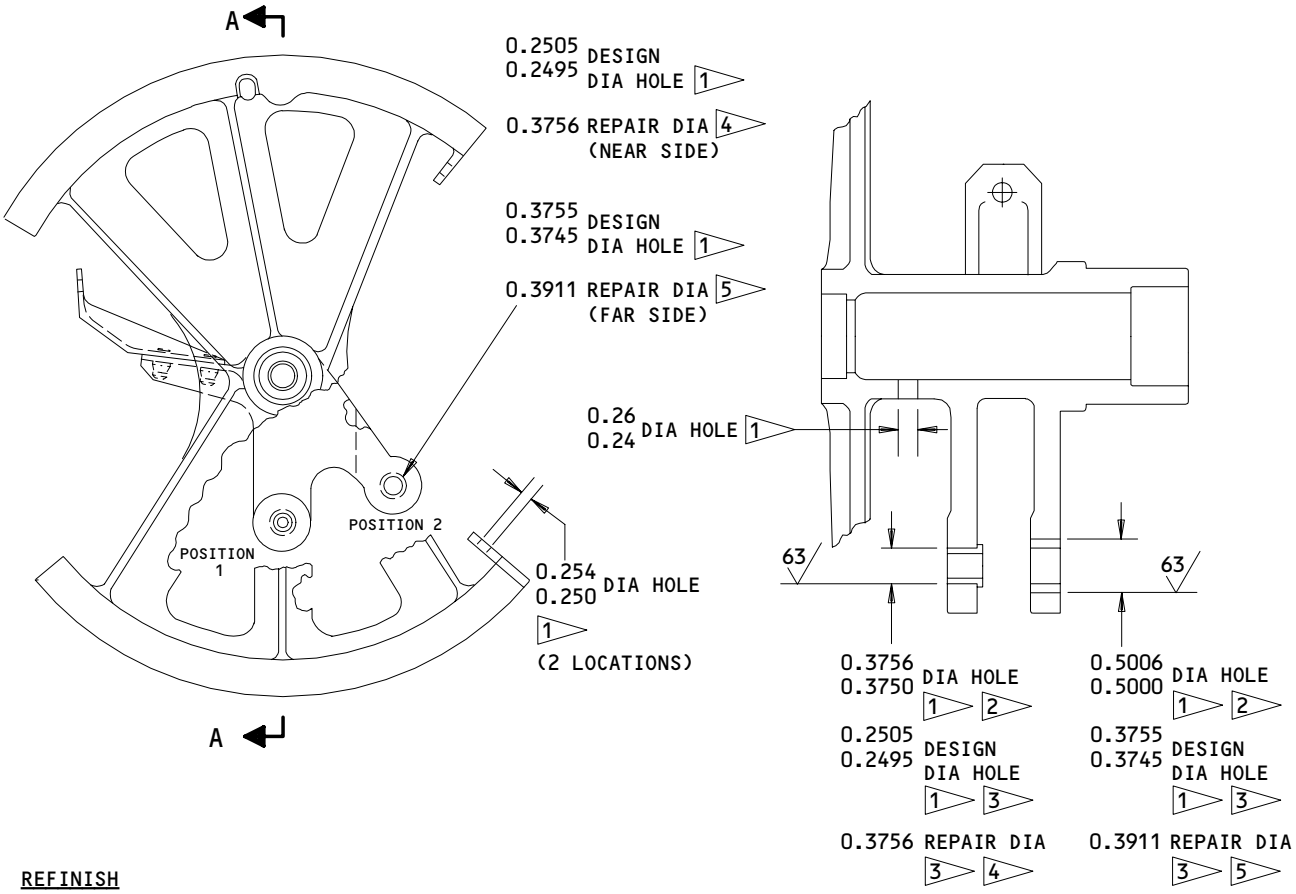
A. Machine hole to repair dimension shown.

B. Manufacture bushing per Fig. 602.

C. Install bushing with sealant per 20-50-03.

D. Machine bushing to design dimension and finish shown.

E. For 251T1514-8, -11 only, at Position 1, attach tag stating, "Repair bushing replaces installation part, BACB28AK04-050".



A-A
POSITION 1 (POSITION 2 SIMILAR)
(BEARING OMITTED FOR CLARITY)

REFINISH

QUADRANT (225A OR 225B)--CHROMIC ACID OR SULFURIC ACID ANODIZE (F-17.05) AND APPLY TWO COATS OF PRIMER (F-20.03) ALL OVER EXCEPT AS NOTED. APPLY 2 ADDITIONAL COATS OF PRIMER (F-20.03) IN CABLE GROOVE
SUPPORT BRACKET (240 IPL FIG 1)--CHROMIC ACID ANODIZE (F-17.04) AND APPLY TWO COATS OF PRIMER BMS10-11, TYPE 1 ALL OVER EXCEPT HOLES

1 OMIT PRIMER IN HOLE

2 251T1514-6

3 251T1514-8,-11

4 REPAIR DIA FOR INSTLN OF REPAIR BUSHING

5 REPAIR DIA FOR INSTLN OF OVERSIZED BUSHING TO REPLACE ASSEMBLY/INSTALLATION BUSHING

REPAIR:

REF 4 5

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

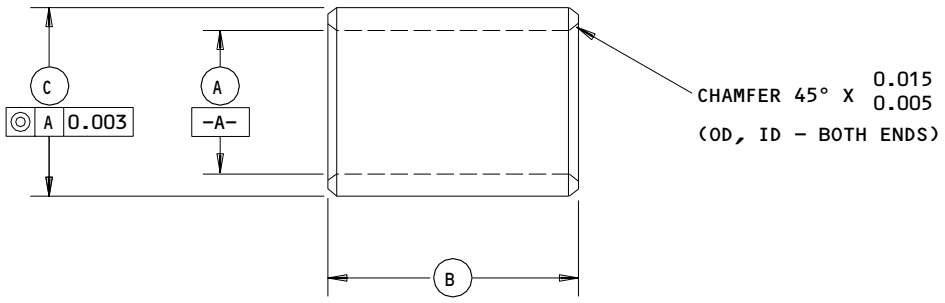
BREAK SHARP EDGES 0.008R

MATERIAL: AL ALLOY

ALL DIMENSIONS ARE IN INCHES

251T1514-6 (SHOWN)
251T1514-8,-11
Parts Replacement and Quadrant Repair
Figure 601

13308



BUSHING (REF)	A	B	C
REPAIR 1 BUSHING	0.2505 0.2495	0.37 0.35	0.3771 0.3759
OVERSIZE 2 BUSHING	0.2505 0.2495	0.35 0.33	0.3911 0.3896
OVERSIZE 3 BUSHING	0.2505 0.2495	0.21 0.19	0.3911 0.3896

1 POSITION 1 (FOR 251T1514-8,-11) AND POSITION 2. FOR 0.25-INCH DIA HOLE.

2 POSITION 1 (251T1514-8,-11). OVERSIZE BUSHING TO REPLACE INSTALLATION BUSHING, BACB28AK04-050.

3 POSITION 2. OVERSIZE BUSHING TO REPLACE ITEM (180) BUSHING, 251T3741-12.

ALL DIMENSIONS ARE IN INCHES

DIMENSIONS APPLY AFTER PLATING

63 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

ANGULAR TOLERANCE, ±0.50 DEG

MATERIAL: AL-NI-BR

FINISH: CADMIUM PLATE (F-15.06) ALL OVER

Repair/Oversize Bushing Details
Figure 602

LEVER ASSY, OUTPUT - REPAIR 3-1

251T1526-5

NOTE: Refer to REPAIR-GEN for list of applicable standard practices. For repair of output lever (90A, IPL Fig. 1) surfaces which may only require restoration of original finish, refer to Refinish instructions, Fig. 601.

1. Bearing Replacement (Fig. 601)

   A. Remove bearing (87, IPL Fig. 1) from output lever (90A).

   B. Install new bearing with grease per 20-50-03.

   C. Roller swage per 20-50-03.

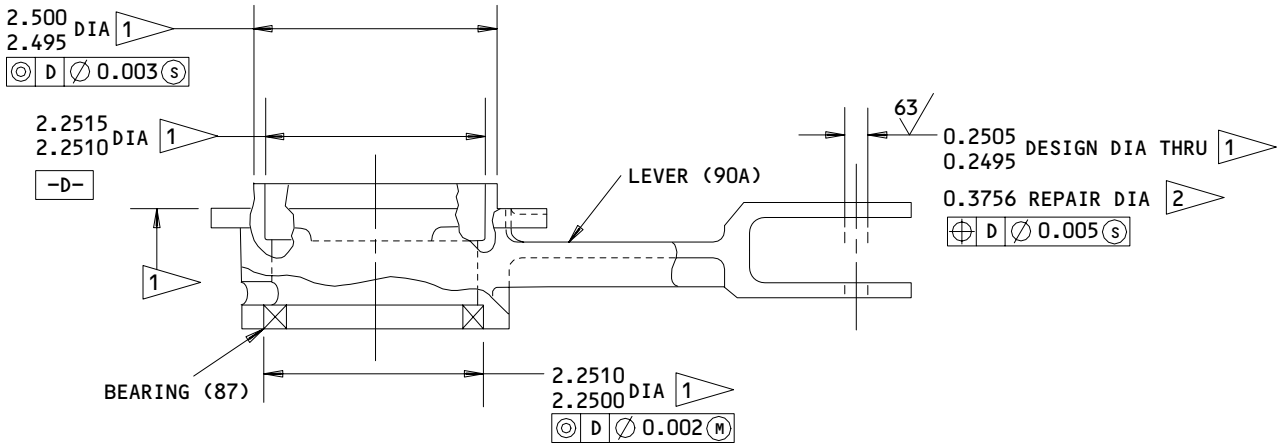
2. Hole Repair (Fig. 601)

   A. Machine hole to repair dimension shown.

   B. Manufacture bushing per Fig. 602.

   C. Install bushing with sealant per 20-50-03.

   D. Machine bushing to design dimension and finish shown.



REFINISH

LEVER (90A) -- CHROMIC ACID OR SULFURIC ACID ANODIZE (F-17.05). APPLY TWO COATS PRIMER, BMS 10-11 TYPE 1 (F-20.03) EXCEPT AS NOTED

1 OMIT PRIMER ON THIS SURFACE.

2 REPAIR DIA FOR INSTLN OF REPAIR BUSHING.

MATERIAL: AL ALLOY

ALL DIMENSIONS ARE INCHES

REPAIR

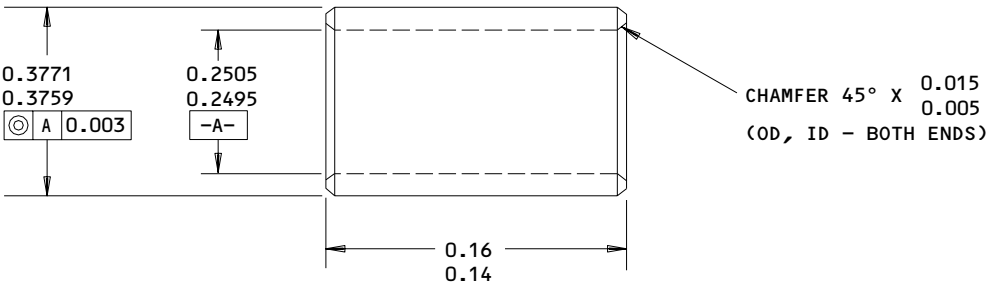
REF 2

125 ALL MACHINED SURFACES EXCEPT AS NOTED

BREAK SHARP EDGES 0.008R

Output Lever Assy - Bearing Replacement and Repair
Figure 601

13314



ALL DIMENSIONS ARE IN INCHES

DIMENSIONS APPLY AFTER PLATING

63 ALL MACHINED SURFACES, EXCEPT AS NOTED

ANGULAR TOLERANCE, ±0.50 DEG

MATERIAL: AL-NI-BR

FINISH: CADMIUM PLATE (F-15.06) ALL OVER

Repair Bushing Details
Figure 602

210078

LEVER ASSY, ROLLER - REPAIR 4-1

251T1527-1

NOTE: Refer to REPAIR-GEN for list of applicable standard practices. For repair of roller lever (200, IPL Fig. 1) surfaces which may only require stripping and restoration of original finish, refer to Refinish instructions, Fig. 601.

1. Bearing Replacement (Fig. 601)

   A. Remove bearing (190, IPL Fig. 1) from lever (200).

   B. Install new bearing with grease per 20-50-03.

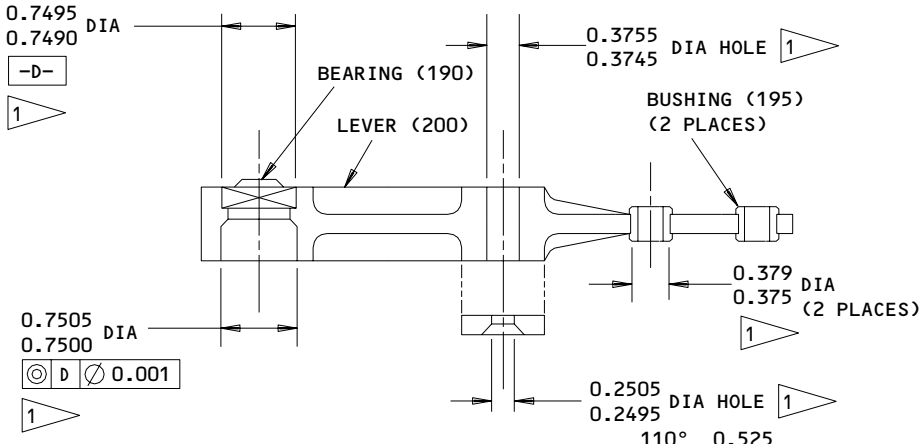
   C. Roller swage per 20-50-03.

2. Bushing Replacement (Fig. 601)

   A. Remove bushings (195) from lever (200).

   B. Install new bushings per 20-50-03.

   C. Roller stake new bushings per 20-50-03.



REFINISH

LEVER (200)--CHROMIC ACID ANODIZE AND APPLY ONE COAT PRIMER, BMS 10-11 TYPE 1 (F-18.13) EXCEPT AS NOTED

1 OMIT PRIMER ON THIS SURFACE.

MATERIAL: AL ALLOY

ALL DIMENSIONS ARE IN INCHES

Roller Lever Assy - Bearing and Bushing Replacement
Figure 601

MISCELLANEOUS PARTS REFINISH - REPAIR 5-1

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

IPL FIG. & ITEM	MATERIAL	FINISH
Fig. 1		
Bushing (75)	15-5PH CRES, 125-145 ksi	Cadmium plate 0.0002-0.0004 inch thick (F-15.02).
Bushing (160,180)	4340 Steel 125-145 ksi	Cadmium plate (F-15.06).
Cam (95)	15-5PH CRES, 150-170 ksi	Cadmium plate and apply one coat primer, BMS 10-11, type 1 (F-16.01) except omit primer on cam surface.
Spacer (107)	Al alloy	Chromic acid anodize and apply one coat primer, BMS 10-11, type 1 (F-18.13).
Spring (115, P/N 251T1536-1)	9254 Steel	Apply two coats BMS 10-11, type 1 primer (F-20.03).
Spring (115A,115B, P/N 251T1536-2)	Titanium alloy	Apply Duralon EF primer and Duralon JE topcoat to the hooks of the spring (F-21.14). Topcoat color-gray, thickness 0.004-0.008 inch. Apply no finish to spring coils (F-25.01).
Plate (15)	Al alloy	Chemical treat and apply 1 coat of primer BMS 10-11, type 1 (F-18.06) all over.
Support (111)	15-5PH CRES, 150-170 ksi	Cadmium plate and apply 1 coat of primer (F-16.01) all over.

Refinish Details
Figure 601 (Sheet 1)

IPL FIG. & ITEM	MATERIAL	FINISH
Fig. 1 (Cont)		
Bolt (121)	15-5PH CRES, 150-170 ksi	Cadmium plate 0.0002-0.0004 thick (F-15.02) and apply coat of primer BMS 10-11, type 1 (F-20.02) except omit primer on threads and holes.
Guard Assy (255)	A1 alloy	Apply one coat BMS 10-11, type 1 primer (F-20.02).
Guard (270)	A1 alloy	Chromic acid anodize (F-17.05) and apply one coat BMS 10-11, type 1 primer (F-20-02).
Guard (275)	A1 alloy	Chromic acid anodize (F-17-05) and apply one coat BMS 10-11, type 1 primer (F-20-02).

Refinish Details
Figure 601 (Sheet 2)

QUADRANT BOLT - REPAIR 6-1

251T1544-1

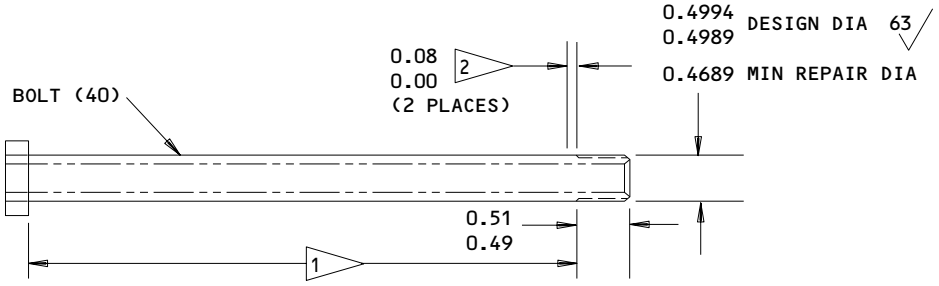
NOTE: Refer to REPAIR-GEN for list of applicable standard practices. For repair of surfaces which may only require stripping and restoration of original finish, refer to REFINISH instructions, Fig. 601.

1. Bolt Repair (Fig. 601)

   A. Machine shaft of bolt (40) as required, within repair limits shown, to remove defects.

   B. Shot peen as indicated.

   C. Build up repaired area with chrome plate and grind to design dimension and finish shown. Chrome plate must not exceed 0.015 inch after grinding.



REFINISH

CADMIUM PLATE (F-15.06) 0.0003 MINIMUM SINGLE PLATING THICKNESS.

1 BUILD UP WITH CHROME PLATE (F-15.03) AND GRIND TO DESIGN DIMENSION AND FINISH SHOWN. CHROME PLATE AT BEARING INTERFACE ONLY. 0.005 MINIMUM PLATING THICKNESS. 16 FINISH OR BETTER AFTER GRINDING.

2 OBSERVE PLATING RUNOUT. STOP PLATING 0.00-0.02 FROM INTERFACE EDGE AND FILLET RADII.

REPAIR

REF 1 2

125 ALL MACHINED SURFACES EXCEPT AS NOTED

BREAK SHARP EDGES 0.008R

SHOT PEEN: 170-460 SHOT SIZE
0.014A INTENSITY
2.0 COVERAGE

MATERIAL: 15-5 PH CRES (180-200 KSI)

ALL DIMENSIONS ARE IN INCHES AND APPLY AFTER PLATING

251T1544-1
Quadrant Bolt Repair
Figure 601

209454

SUPPORT - REPAIR 7-1

251T1511-4

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 instructions, Fig. 601.

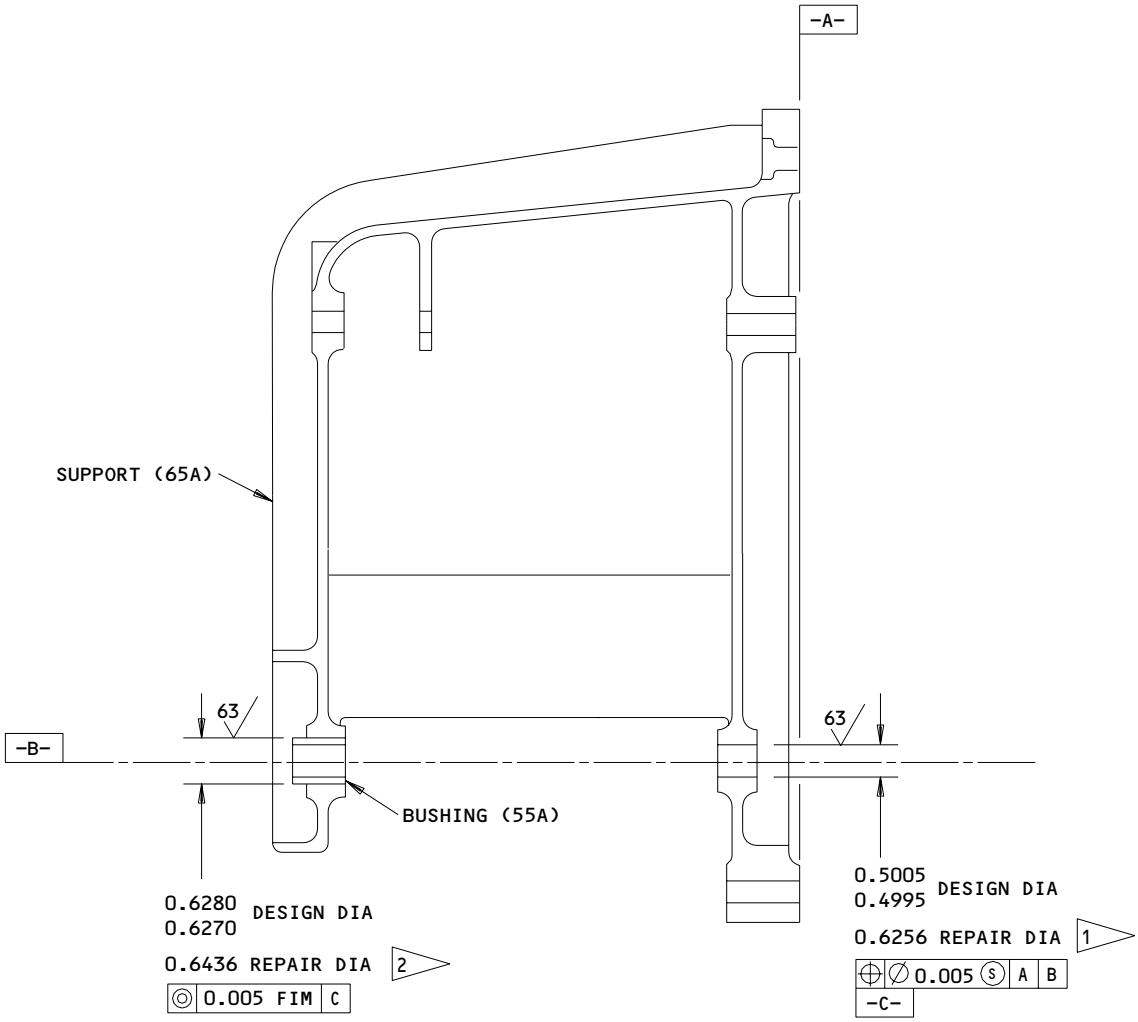
1. Hole Repair (Fig. 601)

   A. Machine hole to repair dimension shown.

   B. Manufacture bushing per Fig. 602.

   C. Install bushing with sealant, BMS 9-95, per 20-50-03.

   D. Machine bushing to design dimension and finish shown.



REFINISH

SUPPORT (65B) -- ANODIZE (F-17.05) AND APPLY 1 COAT OF PRIMER (F-20.02) EXCEPT OMIT PRIMER ON ALL MACHINED HOLES.

1 REPAIR DIAMETER FOR INSTALLATION OF REPAIR BUSHING

2 REPAIR DIAMETER FOR INSTALLATION OF OVERSIZE BUSHING TO REPLACE ASSEMBLY BUSHING (55A)

REPAIR

REF 1 2

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK SHARP EDGES 0.008 R

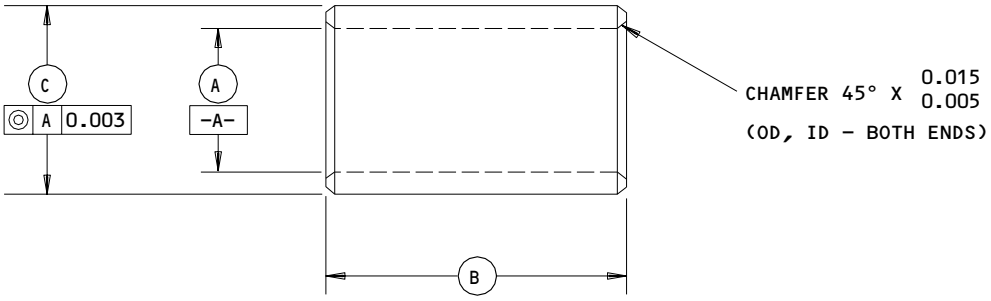
MATERIAL: ALUMINUM ALLOY

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

251T1511-4
Support Repair
Figure 601

209455



BUSHING (REF)	A	B	C
REPAIR 1 BUSHING	0.5005 0.4995	0.510 0.490	0.6273 0.6261
OVERSIZE 2 BUSHING	0.5005 0.4995	0.6875 0.6825	0.6431 0.6413

1 MATERIAL: AL-NI-BR
FINISH: CADMIUM PLATE (F-15.06)
REPAIR BUSHING FOR 0.5 DIA HOLE

2 MATERIAL: 15-5 PH CRES
FINISH: CHROME PLATE (F-15.03)
OVERSIZE BUSHING TO REPLACE ITEM (55A) BUSHING NAS75-8-022.

63 ALL MACHINED SURFACES, EXCEPT AS NOTED

ANGULAR TOLERANCE, ±0.50 DEG

ALL DIMENSIONS ARE IN INCHES
DIMENSIONS APPLY AFTER PLATING

Repair/Oversize Bushing Details
Figure 602

209453

ASSEMBLY

1. Materials

NOTE: Equivalent substitutes may be used.

A. Grease -- BMS 3-24 (Ref 20-60-03)

2. Assembly (IPL Fig. 1)

NOTE: Lubricate bolts (40, 140, 165A), bearings (70, 110, 155, 210), spacer (107) and bushings (55A, 60A, 80A, 114, 160, 180, 205) with grease before assembly.

A. Install bolt (140, 141), washer (145, 146), nut (150, 151), bearing (155) and bushing (160) on lever (200).

B. Install bushing (205) and bearing (210) on lever assembly (185). Install lever assembly on quadrant assembly (215A) with bolt (165A), bushing (180), washer (170) and nut (175).

C. Install cam (95) on lever assembly (85A) with bolts (100) and collars (105).

D. Install bearing (110), spacer (107) and lever assembly (85A) on quadrant assembly (215A or 215B) with bearing (155) seated on cam (95).

E. Install support (111), bushing (114), bolt (112) and collar (113A) on eyebolt (121).

CAUTION: SPRINGS (115) ARE HEAVILY LOADED. USE EXTREME CARE WHEN INSTALLING EYEBOLT (121).

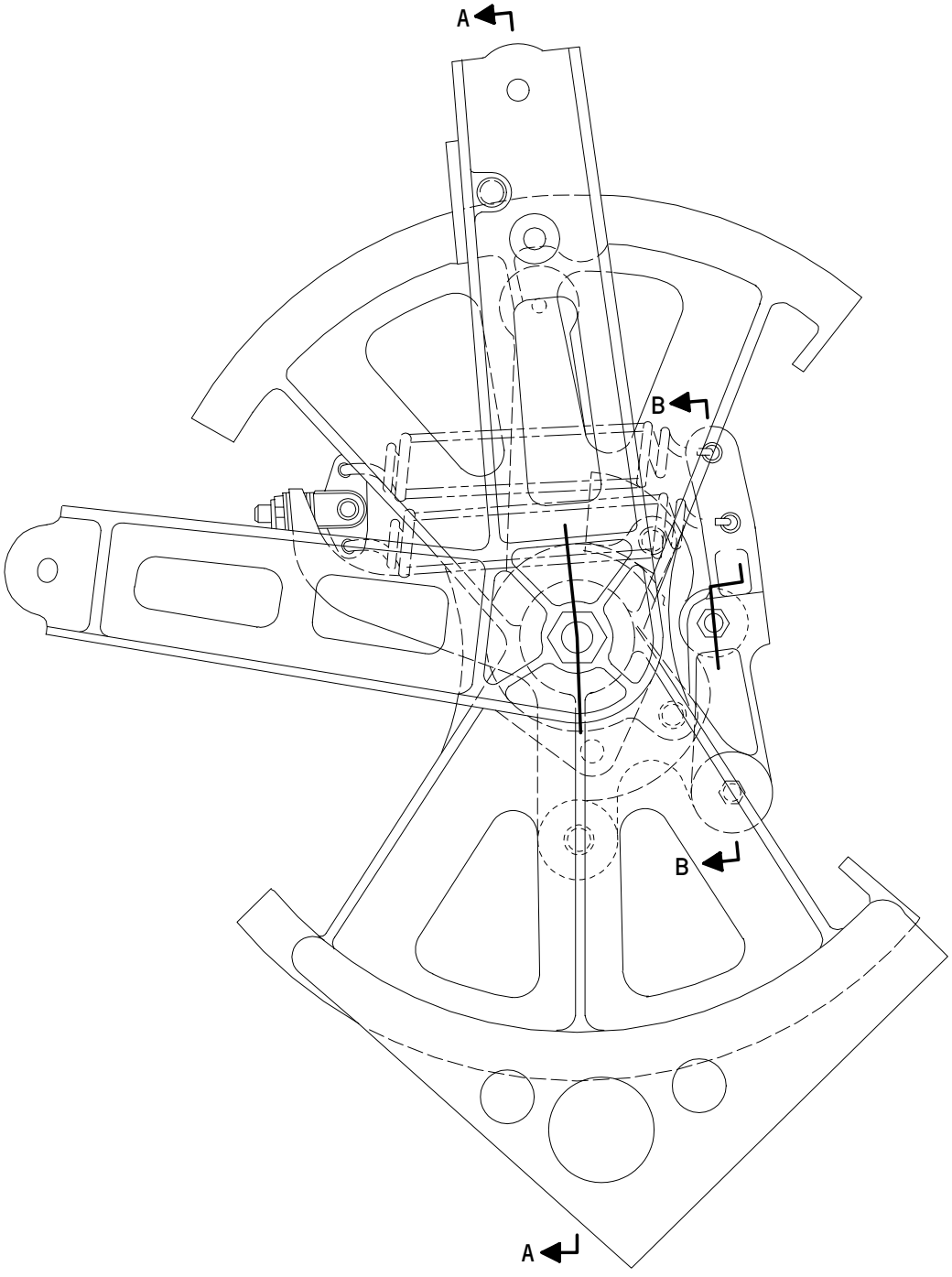
F. Coat hooks of springs (115) with grease and attach springs to support (111) and lever assembly (185). Position eyebolt (121) on quadrant assembly (215A).

G. Adjust springs tension to achieve a detent breakout torque of 150-160 lb-in. The breakout torque is measured on the lever assembly (85A) with the quadrant assembly (215A) secured. Breakout occurs when a 0.002 inch to 0.004 inch shim can be installed between the cam (95) and the roller (155) on the unloaded side. Measure gap between shoulder of eyebolt (121) and quadrant assembly (215A) and fill gap with washer (125A). Install washer (130A) and nut (135).

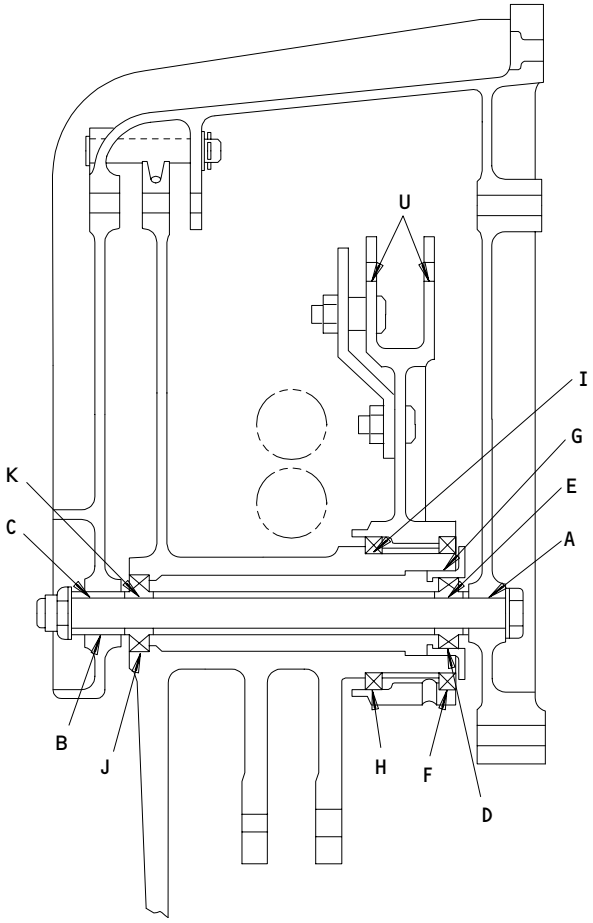
H. Install bushing (75, 80A) and bearing (70) on quadrant assembly (215A). Position quadrant assembly with attached parts on support (65B) and install bushing (55A, 60A), bolt (40), washer (45) and nut (50). Tighten nut to 200-250 lb-in.

I. Install fairlead (26) on support (65B) with bolts (27) and collars (28). Install pin (35A), washer (37) and cotter pin (30). Install cotter pin per 20-50-02.

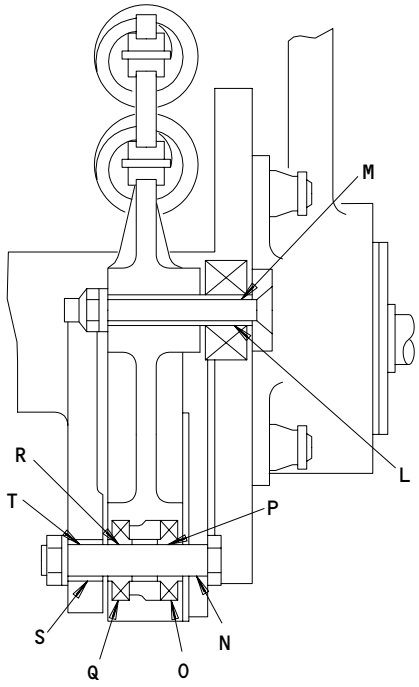
3. Use standard industry practices and information contained in 20-44-02 to store this component.



Fits and Clearances
Figure 801 (Sheet 1)



A–A



B–B

Fits and Clearances
Figure 801 (Sheet 2)

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 65B OD 40	0.4995 0.4989	0.5005 0.4994	0.0001	0.0011	0.4969	0.5030	0.0036
B	ID 65B OD 55A	0.6250 0.6270	0.6260 0.6280	−0.0030	−0.0010	0.6237	0.6288	0.0043
C	ID 55A OD 40	0.5000 0.4989	0.5015 0.4994	0.0006	0.0026	0.4969	0.5040	0.0046
D	ID 75 OD 70	1.1252 1.1246	1.1258 1.1250	0.0002	0.0012	1.1226	1.1282	0.0032
E	ID 70 OD 40	0.4997 0.4989	0.5000 0.4994	0.0003	0.0011	0.4969	0.5025	0.0031
F	ID 90A OD 87	2.2500 2.2485	2.2510 2.2500	0.0000	0.0025			
G	ID 225A OD 75	1.3120 1.3131	1.3125 1.3136	−0.0016	−0.0006			
H	ID 90A OD 110	2.2510 2.2485	2.2515 2.2500	0.0010	0.0030	2.2470	2.2545	0.0045
I	ID 87,110 OD 225A OR 225B	1.8115 1.8105	1.8135 1.8115	0.0000	0.0030	1.8090	1.8160	0.0045
J	ID 225A OR 225B OD 220	1.1238 1.1246	1.1243 1.1250	−0.0012	−0.0003			
K	ID 220 OD 40	0.4997 0.4989	0.5000 0.4994	0.0003	0.0011	0.4969	0.5025	0.0031
L	ID 155 OD 160	0.3743 0.3740	0.3750 0.3745	−0.0002	0.0010	0.3720	0.3775	0.003
M	ID 160 OD 140	0.2500 0.2485	0.2505 0.2495	0.0005	0.0020	0.2465	0.2535	0.004

Fits and Clearances
Figure 801 (Sheet 3)

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	
N	ID 225 OD 165A	0.2495 0.2485	0.2505 0.2495	0.0000	0.0020	0.2465	0.2535	0.0040
O	ID 200 OD 210	0.7500 0.7496	0.7505 0.7500	0.0000	0.0009	0.7476	0.7529	0.0029
P	ID 210 OD 165A	0.2497 0.2485	0.2500 0.2495	0.0002	0.0015	0.2465	0.2530	0.0035
Q	ID 200 OD 190	0.7490 0.7496	0.7495 0.7500	0.0010	- 0.0001			
R	ID 190 OD 165A	0.2497 0.2485	0.2500 0.2495	0.0002	0.0015	0.2465	0.2530	0.0035
S	ID 225 OD 180	0.3745 0.3740	0.3755 0.3745	0.0000	0.0015	0.3720	0.3780	0.0035
T	ID 180 OD 165A	0.2500 0.2485	0.2505 0.2495	0.0005	0.0020	0.2465	0.2535	0.0040
U	ID 90A OD 2	0.2495 0.2485	0.2505 0.2495	0.0000	0.0020	0.2465	0.2535	0.0040

1 NEGATIVE VALUES DENOTE INTERFERENCE FIT

2 INSTALLATION BOLT BACB30NF4-15

ALL DIMENSIONS ARE IN INCHES

Fits and Clearances
Figure 801 (Sheet 4)

30419

FOR TORQUE VALUES OF STANDARD FASTENERS, REFER TO 20-50-01			
ITEM NO. IPL FIG. 1	NAME	TORQUE	
		POUND-INCHES	POUND-FEET
50	NUT	200-250	

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 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

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

06725 AIR INDUSTRIES CORPORATION
12570 KNOTT STREET
GARDEN GROVE, CALIFORNIA 92641-3932

08524 DEUTSCH FASTENER CORP SEE CODE V97928

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

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

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

50632 KAMATICS CORP SUB OF KAMAN CORP
1335 BLUE HILLS ROAD
BLOOMFIELD, CONNECTICUT 06002-1304

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

60380 TORRINGTON CO BEARINGS DIV SUBSIDIARY OF INGERSOLL-RAND CORP
59 FIELD STREET PO BOX 1008
TORRINGTON, CONNECTICUT 06790-4942

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 HARVARD INDUSTRIES INC
3 WERNER WAY SUITE 210
LEBANON, NEW JERSEY 08833

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

83086 NEW HAMPSHIRE BALL BEARINGS, INCORPORATED
ROUTE 202
PETERBOROUGH, NEW HAMPSHIRE 03458

92215 FAIRCHILD IND INC FAIRCHILD AEROSPACE FASTENER DIV
3010 W LOMITA BLVD
TORRANCE, CALIFORNIA 90505-5102

92563 MCGILL MFG CO INC BEARINGS DIV
909 LAFAYETTE STREET
VALPARAISO, INDIANA 46383-4210

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

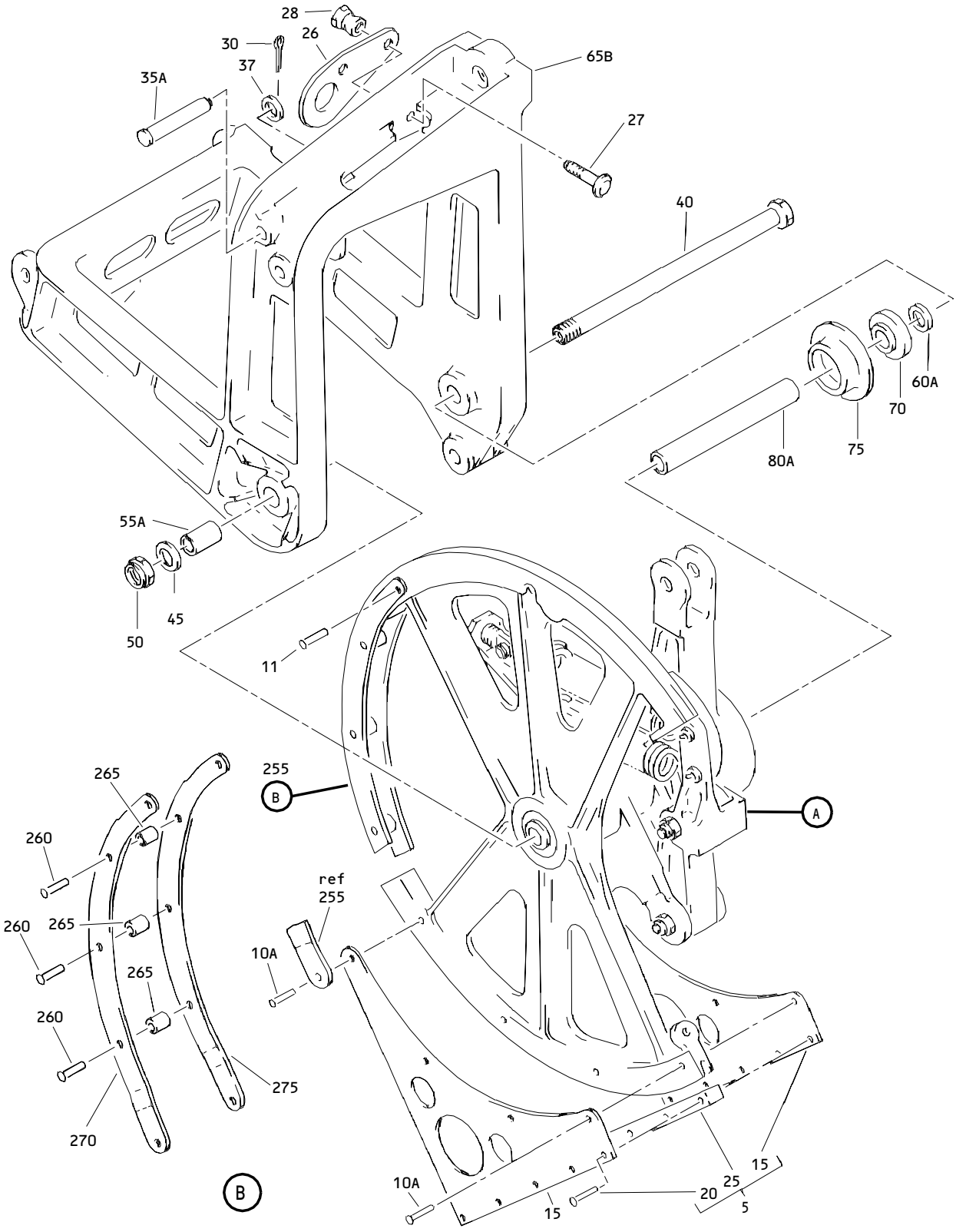
PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
ACMKP4AA3908		1	210A	1
		1	210B	1
ACMKP8AA3908		1	70A	1
		1	220A	1
ACMKP8AP26LY198		1	70A	1
		1	220A	1
AN960JD416		1	125A	1
AN960JD416L		1	130A	1
AN960JD516		1	37	1
AN960KD10L		1	93	1
AN960PD416		1	145	1
		1	170	1
AN960PD816		1	45	1
ATF6		1	155	1
BACB10AP4		1	190	1
		1	210	1
BACB10AP8		1	70	1
		1	220	1
BACB10CF29PP		1	87	1
		1	110	1
BACB10ET06		1	155	1
BACB10FS04RJ		1	210C	1
BACB10FS4R		1	210A	1
BACB10FS8R		1	70A	1
		1	220A	1
BACB10FS8RJ		1	70C	1
BACB28B4-325		1	195	2
BACB28X4C032		1	230	1
BACB28Y3C025		1	114	1
BACB28Y4C022		1	205	1
BACB28Y6C034		1	235	1
BACB30LU4-26		1	140	1
BACB30MY5K6		1	27	2
BACB30MY6K4		1	245	2
BACB30MY6K5		1	112	1
BACB30MY8K6		1	100	2
BACB30NF4-23		1	165A	1
BACB30NN4K26		1	141	1
BACC30M5		1	28	2
BACC30M6		1	113A	1
		1	250A	2
BACC30M8		1	105	2
BACN10JC3		1	93G	1

PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
BACN10JC4		1	135	1
		1	150	1
		1	175	1
BACN10JC4CD		1	135A	1
		1	150A	1
		1	175A	1
BACN10JC8		1	50	1
BACP18BC03C04P		1	30A	1
BACP18BD4C55		1	35B	1
BACR15BB4		1	20	5
BACR15BB4AD		1	260	3
BACR15BB4AD18C		1	20A	5
BACR15BB5AD		1	10A	4
		1	11	1
BACR15FT5AD		1	91	1
BMN4122AD3-8		1	50	1
BMN4122CPD8-8		1	50A	1
BRH10A3		1	93G	1
B544-2TS		1	87	1
		1	110	1
B544DD		1	87	1
		1	110	1
B544DDFS428		1	87	1
		1	110	1
B544SSG27		1	87	1
		1	110	1
HL10VAZ5-6		1	27	2
HL10VAZ6-4		1	245	2
HL10VAZ6-5		1	112	1
HL10VAZ8-6		1	100	2
HL70-5		1	28	2
HL79-6		1	113A	1
		1	250A	2
HL79-8		1	105	2
H10-3BAC		1	93G	1
H10-8BAC		1	50	1
H51650-8BAC		1	50A	1
KRP173406FT		1	155A	1
LLMKP4A		1	190	1
		1	210	1
LLMKP8A		1	70	1
		1	220	1
L8006K4		1	245	2

PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
MCS24E		1	190	1
		1	210	1
MCS28E		1	70	1
		1	220	1
MKP4A		1	190	1
		1	210	1
MKP4AFS428		1	190	1
		1	210	1
MKP4AG20		1	190	1
		1	210	1
MKP4ALY196		1	190	1
		1	210	1
MKP4ATT		1	190	1
		1	210	1
MKP4A2TS		1	190	1
		1	210	1
MKP4E6531		1	190	1
		1	210	1
MKP8A		1	70	1
		1	220	1
MKP8AFS428		1	70	1
		1	220	1
MKP8AG20		1	70	1
		1	220	1
MKP8ALY196		1	70	1
		1	220	1
MKP8ATT		1	70	1
		1	220	1
MKP8A2TS		1	70	1
		1	220	1
MKP8E6531		1	70	1
		1	220	1
MS20392-4C55		1	35A	1
MS24665-281		1	30	1
NAS1149D0416J		1	125B	1
NAS1149D0463J		1	130B	1
		1	146	1
		1	170A	1
NAS1149D0563J		1	37A	1
NAS1149D0863J		1	45A	1
NAS1805-4L		1	151	1
NAS42DD4-26		1	265	3
NAS42DD5-11		1	92	1
NAS623-3-3		1	92G	1
NAS75-8-005		1	60A	1

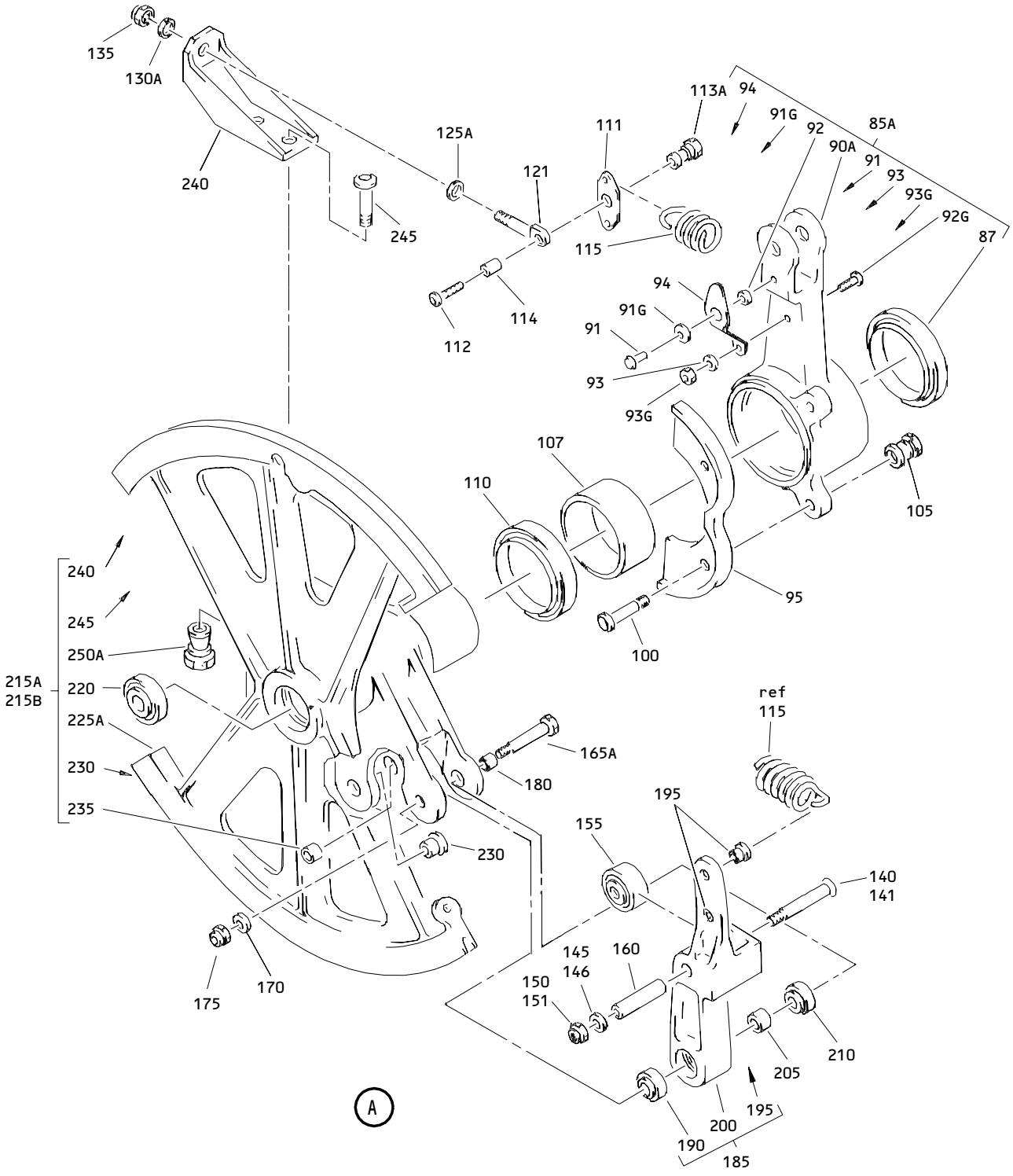
PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
NAS75-8-022		1	55A	1
NAS75-8-403		1	80A	1
NS202101-02		1	93G	1
PACMKP4AA3908		1	210A	1
RMLH9074-8		1	50	1
RMLH9075-3W		1	93G	1
SMCS28EG7A		1	70A	1
		1	220A	1
SSMKP4SD706		1	210A	1
T344E		1	87	1
		1	110	1
T6S1032J		1	93G	1
102LH9074-8		1	50A	1
251T1147-2		1	94	1
251T1506-10		1	1G	RF
251T1506-11		1	1H	RF
251T1506-12		1	1J	RF
251T1506-13		1	1K	RF
251T1506-9		1	1F	RF
251T1511-3		1	65C	1
251T1511-4		1	65B	1
251T1514-11		1	215C	1
251T1514-6		1	215B	1
251T1514-7		1	225B	1
251T1514-8		1	215A	1
251T1514-9		1	225A	1
251T1526-5		1	85A	1
251T1526-6		1	90A	1
251T1527-1		1	185	1
251T1527-2		1	200	1
251T1528-1		1	95	1
251T1536-1		1	115	2
251T1536-2		1	115A	2
251T1538-1		1	5	1
251T1538-2		1	15	2
251T1538-3		1	25	1
251T1538-4		1	5A	1
251T1538-5		1	15A	2
251T1538-6		1	25A	1
251T1543-2		1	75	1
251T1544-1		1	40	1
251T1555-2		1	107	1
251T1584-1		1	240	1
251T1585-1		1	111	1
251T1586-1		1	121	1
251T1587-1		1	26	1

PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
251T1589-1		1	255	1
251T1589-3		1	275	1
251T1589-4		1	270	1
251T3741-12		1	180	1
251T3741-24		1	160	1
251T3743-2		1	160A	1
6AFC817		1	155	1
66014-5		1	28	2
66014-6		1	113A	1
		1	250A	2
66014-8		1	105	2
69235-820CD		1	50A	1
96-02		1	93G	1



Lateral Central Control Actuator Output Quadrant Assembly
Figure 1 (Sheet 1)

T60324



Lateral Central Control Actuator Output Quadrant Assembly
Figure 1 (Sheet 2)

T60325

	FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
	01-					
	-1	251T1506-2		DELETED		
	-1A	251T1506-3		DELETED		
	-1B	251T1506-4		DELETED		
	-1C	251T1506-5		DELETED		
	-1D	251T1506-4		DELETED		
	-1E	251T1506-6		DELETED		
	-1F	251T1506-9		QUADRANT ASSY-LATERAL CENTRAL CONT ACTR OUTPUT	A	RF
	-1G	251T1506-10		QUADRANT ASSY-LATERAL CENTRAL CONT ACTR OUTPUT	B	RF
	-1H	251T1506-11		QUADRANT ASSY-LATERAL CENTRAL CONT ACTR OUTPUT	C	RF
R	-1J	251T1506-12		QUADRANT ASSY-LATERAL CENTRAL CONT ACTR OUTPUT	D	RF
R	-1K	251T1506-13		QUADRANT ASSY-LATERAL CENTRAL CONT ACTR OUTPUT	E	RF
	5	251T1538-1		.GUARD ASSY-CABLE	A-D	1
R	-5A	251T1538-4		.GUARD ASSY-CABLE	E	1
				ATTACHING PARTS		
	10	BACR15BB5		DELETED		
R	10A	BACR15BB5AD		.RIVET- (SIZE DETERMINE ON INST)		4
R	11	BACR15BB5AD		.RIVET- (SIZE DETERMINE ON INST)		1
				-------*-------		
	15	251T1538-2		..PLATE-SIDE	A-D	2
R	-15A	251T1538-5		..PLATE-SIDE	E	2
				ATTACHING PARTS		
	20	BACR15BB4		..RIVET- (SIZE DETERMINE ON INST)	A-D	5
R	-20A	BACR15BB4AD18C		..RIVET- (SIZE DETERMINE ON INST)	E	5
				-------*-------		
	25	251T1538-3		..SPACER	A-D	1
R	-25A	251T1538-6		..SPACER	E	1
	26	251T1587-1		.FAIRLEAD		1
				ATTACHING PARTS		
	27	HL10VAZ5-6		.BOLT- (V60516) (SPEC BACB30MY5K6) (OPT HL10VAZ5-6 (VOPTK6))		2

	FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
	01-					
	28	HL70-5		.COLLAR- (V56878) (SPEC BACC30M5) (OPT HL70-5 (V73197)) (OPT HL70-5 (V92215)) (OPT 66014-5 (V56878)) -------*-------		2
	30	MS24665-281		.PIN-COTTER	A-D	1
R	-30A	BACP18BC03C04P		.PIN-COTTER	E	1
	35	MS20392-4C53		DELETED		
	35A	MS20392-4C55		.PIN-DRILLED SHANK	A-D	1
R	-35B	BACP18BD4C55		.PIN-DRILLED SHANK	E	1
	37	AN960JD516		.WASHER	A-D	1
R	-37A	NAS1149D0563J		.WASHER	E	1
	40	251T1544-1		.BOLT		1
	45	AN960PD816		.WASHER	A-D	1
R	-45A	NAS1149D0863J		.WASHER	E	1
	50	H10-8BAC		.NUT- (V15653) (SPEC BACN10JC8) (OPT RMLH9074-8 (V72962)) (OPT BMN4122AD3-8 (V08524)) (OPT RMLH9074-8 (V72962)) (OPT BMN4122AD3-8 (V97928))	A-D	1
R	-50A	H51650-8BAC		.NUT- (V15653) (SPEC BACN10JC8CD) (OPT 102LH9074-8 (V72962)) (OPT 69235-820CD (V92215)) (OPT BMN4122CPD8-8 (V97928))	E	1
	55	BACB28Y8C070		DELETED		
	55A	NAS75-8-022		.BUSHING		1
	60	BACB28Y8C015		DELETED		
	60A	NAS75-8-005		.BUSHING		1
	65	251T1511-1		DELETED		

	FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
	01-					
	65A	251T1511-3		DELETED		
	65B	251T1511-4		.SUPPORT	C-E	1
R	-65C	251T1511-3		.SUPPORT- (RPLCD BY ITEM 65D)	A,B	1
R	-65D	251T1511-4		.SUPPORT- (RPLS ITEM 65C)	A,B	1
	70	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 70A)	A,B	1
	-70A	ACMKP8AA3908		.BEARING- (V21335) (SPEC BACB10FS8R) (OPT ACMKP8AP26LY198 (V40920)) (OPT SMCS28EG7A (VK8455)) (REPLS ITEM 70)	A,B	1
R	-70B	ACMKP8AA3908		.BEARING- (V21335) (SPEC BACB10FS8R) (OPT ACMKP8AP26LY198 (V40920)) (OPT SMCS28EG7A (VK8455))	C,D	1
R	-70C	BACB10FS8RJ		.BEARING	E	1

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-					
75	251T1543-2		.BUSHING		1
80	NAS43DD8-261		DELETED		
80A	NAS75-8-403		.BUSHING		1
85	251T1526-3		DELETED		
85A	251T1526-5		.LEVER ASSY		1
87	B544DD		..BEARING-		1
			(V38443)		
			(SPEC BACB10CF29PP)		
			(OPT B544-2TS		
			(V43991))		
			(OPT B544DDFS428		
			(V21335))		
			(OPT B544SSG27		
			(V30163))		
			(OPT T344E		
			(VK8455))		
90	251T1526-4		DELETED		
90A	251T1526-6		..LEVER		1
91	BACR15FT5AD		..RIVET-		1
			(SIZE DETERMINE ON INST)		
91G	BACW10P75AL		..WASHER		1
92	NAS42DD5-11		..SPACER		1
92G	NAS623-3-3		..SCREW		1
93	AN960KD10L		..WASHER		1
93G	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))		

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-					
94	251T1147-2		..RETAINER		1
95	251T1528-1		.CAM		1
			ATTACHING PARTS		
100	HL10VAZ8-6		.BOLT-		2
			(V60516)		
			(SPEC BACB30MY8K6)		
			(OPT HL10VAZ8-6		
			(VOPTK6))		
105	HL79-8		.COLLAR-		2
			(V56878)		
			(SPEC BACC30M8)		
			(OPT HL79-8		
			(V73197))		
			(OPT HL79-8		
			(V92215))		
			(OPT 66014-8		
			(V56878))		
			-------*-------		
107	251T1555-2		.SPACER		1
110	B544DD		.BEARING-		1
			(V38443)		
			(SPEC BACB10CF29PP)		
			(OPT B544-2TS		
			(V43991))		
			(OPT B544DDFS428		
			(V21335))		
			(OPT B544SSG27		
			(V30163))		
			(OPT T344E		
			(VK8455))		

	FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
	01-					
	111	251T1585-1		.SUPPORT-SPR		1
				ATTACHING PARTS		
	112	HL10VAZ6-5		.BOLT-		1
				(V60516)		
				(SPEC BACB30MY6K5)		
				(OPT HL10VAZ6-5		
				(VOPTK6))		
	113	BACC30M		DELETED		
	113A	HL79-6		.COLLAR-		1
				(V56878)		
				(SPEC BACC30M6)		
				(OPT HL79-6		
				(V73197))		
				(OPT HL79-6		
				(V92215))		
				(OPT 66014-6		
				(V56878))		
				-------*-------		
	114	BACB28Y3C025		.BUSHING		1
	115	251T1536-1		.SPRING-	A-C	2
				(OPT ITEM 115B)		
R	-115A	251T1536-2		.SPRING	D,E	2
R	-115B	251T1536-2		.SPRING-	A-C	2
				(OPT ITEM 115)		
				ATTACHING PARTS		
	120	AN43B6A		DELETED		
	121	251T1586-1		.BOLT-EYE		1
	125	AN960PD416		DELETED		
	125A	AN960JD416		.WASHER	A-D	AR
R	-125B	NAS1149D0416J		.WASHER	E	AR

	FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
	01-					
	130	AN960PD416L		DELETED		
	130A	AN960JD416L		.WASHER	A-D	AR
R	-130B	NAS1149D0463J		.WASHER	E	AR
	135	BACN10JC4		.NUT	A-D	1
R	-135A	BACN10JC4CD		.NUT	E	1
	140	BACB30LU4-26		.BOLT	A-C	1
R	141	BACB30NN4K26		.BOLT	D,E	1
	145	AN960PD416		.WASHER	A-C	1
R	146	NAS1149D0463J		.WASHER	D	1
	150	BACN10JC4		.NUT	A-C	1
R	-150A	BACN10JC4CD		.NUT	E	1
R	151	NAS1805-4L		.NUT	D,E	1
	155	ATF6		.BEARING- (V60380) (SPEC BACB10ET06) (OPT 6AFC817 (V92563))	A-C	1
R	-155A	KRP173406FT		.BEARING- (V50632)	D,E	1
	160	251T3741-24		.BUSHING	A-C	1
R	-160A	251T3743-2		.BUSHING	D,E	1
	165	BACB30NF4-21		DELETED		
	165A	BACB30NF4-23		.BOLT		1
	170	AN960PD416		.WASHER	A-D	1
R	-170A	NAS1149D0463J		.WASHER	E	1
	175	BACN10JC4		.NUT	A-D	1
R	-175A	BACN10JC4CD		.NUT	E	1
	180	251T3741-12		.BUSHING		1

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-					
185	251T1527-1		.LEVER ASSY		1
190	MKP4A		..BEARING- (V38443) (SPEC BACB10AP4) (OPT LLMKP4A (V38443)) (OPT MKP4AFS428 (V21335)) (OPT MKP4ATT (V43991)) (OPT MKP4A2TS (V43991)) (OPT MKP4E6531 (V21335)) (OPT MKP4AG20 (V38443)) (OPT MKP4ALY196 (V40920)) (OPT MKP4A (V38443)) (OPT MCS24E (VK8455))		1
195	BACB28B4-325		..BUSHING		2
200	251T1527-2		..LEVER		1
205	BACB28Y4C022		.BUSHING		1

	FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
	01-210	MKP4A		.BEARING- (V38443) (SPEC BACB10AP4) (OPT LLMKP4A (V38443)) (OPT MKP4AFS428 (V21335)) (OPT MKP4ATT (V43991)) (OPT MKP4A2TS (V43991)) (OPT MKP4E6531 (V21335)) (OPT MKP4AG20 (V38443)) (OPT MKP4ALY196 (V40920)) (OPT MKP4A (V38443)) (OPT MCS24E (VK8455)) (REPLD BY ITEM 210A)	A,B	1
	-210A	ACMKP4AA3908		.BEARING- (V21335) (SPEC BACB10FS4R) (OPT PACMKP4AA3908 (V21335)) (OPT SSMKP4SD706 (V83086)) (REPLS ITEM 210)	A,B	1
R	-210B	ACMKP4AA3908		.BEARING- (V21335) (SPEC BACB10FS4R) (OPT PACMKP4AA3908 (V21335)) (OPT SSMKP4SD706 (V83086))	C,D	1
R	-210C	BACB10FS04RJ		.BEARING	E	1
	215	251T1514-5		DELETED		
	215A	251T1514-8		.QUADRANT ASSY- (REPLD BY ITEM 215C)	A	1
	215B	251T1514-6		.QUADRANT ASSY- (REPLD BY ITEM 215C)	B	1
	-215C	251T1514-11		.QUADRANT ASSY- (REPLS ITEMS 215A, 215B)	A,B	1

	FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
	01-					
R	-215D	251T1514-11		.QUADRANT ASSY	C-E	1
	220	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 220A) (USED ON ITEMS 215A, 215B)	A,B	1
	-220A	ACMKP8AA3908		..BEARING- (V21335) (SPEC BACB10FS8R) (OPT ACMKP8AP26LY198 (V40920)) (OPT SMCS28EG7A (VK8455)) (REPLS ITEM 220) (USED ON ITEMS 215A, 215B)	A,B	1
R	-220B	ACMKP8AA3908		..BEARING- (V21335) (SPEC BACB10FS8R) (OPT ACMKP8AP26LY198 (V40920)) (OPT SMCS28EG7A (VK8455)) (USED ON ITEM 215D)	C-E	1

	FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
R	01- -220C	ACMKP8AA3908		..BEARING- (V21335) (SPEC BACB10FS8R) (OPT ACMKP8AP26LY198 (V40920)) (OPT SMCS28EG7A (VK8455)) (USED ON ITEM 215C)	A,B	1
	225	251T1514-4		DELETED		
	225A	251T1514-9		..QUADRANT- (USED ON ITEMS 215A, 215C, 215D)	A-E	1
	-225B	251T1514-7		..QUADRANT- (USED ON ITEM 215B)	B	1
	230	BACB28X4C032		..BUSHING- (USED ON ITEM 215B)	B	1
	235	BACB28Y6C034		..BUSHING- (USED ON ITEM 215B)	B	1
	240	251T1584-1		..BRACKET-SPRT (USED ON ITEM 215B)	B	1
	245	HL10VAZ6-4		..BOLT- (V60516) (SPEC BACB30MY6K4) (OPT HL10VAZ6-4 (VOPTK6)) (OPT HL10VAZ6-4 (V92215)) (OPT HL10VAZ6-4 (V97928)) (OPT L8006K4 (V06725)) (OPT HL10VAZ6-4 (V08524)) (USED ON ITEM 215B)	B	2

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-					
250	BACC30M4		DELETED		
250A	HL79-6		..COLLAR-	B	2
			(V56878)		
			(SPEC BACC30M6)		
			(OPT HL79-6		
			(V73197))		
			(OPT HL79-6		
			(V92215))		
			(OPT 66014-6		
			(V56878))		
			(USED ON ITEM 215B)		
			-------*-------		
255	251T1589-1		.GUARD ASSY		1
260	BACR15BB4AD		..RIVET-		3
			(SIZE DETERMINE ON INST)		
265	NAS42DD4-26		..SPACER		3
270	251T1589-4		..GUARD		1
275	251T1589-3		..GUARD		1

- Item Not Illustrated