

 **BOEING**
COMPONENT
MAINTENANCE MANUAL

TO: ALL HOLDERS OF HORIZONTAL STABILIZER CENTER ELEVATOR CONTROLS LINKAGE
ASSEMBLY COMPONENT MAINTENANCE MANUAL 27-31-52

REVISION NO. 4 DATED JAN 01/89

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.

Remove and discard Repair 3-1, pages 601-602.

CHAPTER/SECTION

AND PAGE NO.

DESCRIPTION OF CHANGE

TITLE PAGE

Changed title to correspond to production drawing nomenclature.

1

CONTENTS

Changed Special Tools listing to indicate none required.

1

INTRODUCTION

Deleted unnecessary verification statement.

1

301

Added missing item No. reference.

REPAIR-GEN

Combined Repair 3-1 with Repair 1-1 to cover almost identical shaft assemblies.

601

REPAIR 1-1

601-602

REPAIR-GEN

Added Chapter 20 Standard Practices references.

601

REPAIR-GEN

Updated True Position Dimensioning symbols.

602

REPAIR 2-1

Added bolthole repair instructions for lever assembly.

601-603

27-31-52

HIGHLIGHTS

01.1

Page 1

Jan 01/89

 **BOEING**
COMPONENT
MAINTENANCE MANUAL

CHAPTER/SECTION
AND PAGE NO.
701

DESCRIPTION OF CHANGE

Changed procedure to provide proper installation sequence.

801-802

Identified mating installation parts.

27-31-52

HIGHLIGHTS

01.1

Page 2

Jan 01/89



HORIZONTAL STABILIZER CENTER ELEVATOR
CONTROLS LINKAGE ASSEMBLY

PART NUMBER 251T2600-9,-10

COMPONENT MAINTENANCE MANUAL
WITH
ILLUSTRATED PARTS LIST

27-31-52

TITLE PAGE

Page 1

Jan 01/89

01.1

80829



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 |
|-----------------|---------------|------------|----|-----------------|---------------|------------|----|
| | | | | | | | |

27-31-52

REVISION RECORD

01

Page 1

Jul 10/83



TEMPORARY REVISION AND SERVICE BULLETIN RECORD

| BOEING SERVICE BULLETIN | BOEING TEMPORARY REVISION | OTHER DIRECTIVE | DATE OF INCORPORATION INTO MANUAL |
|-------------------------------|---------------------------------|--------------------|---|
| | | PRR B10716 | OCT 10/83 |

27-31-52

TR & SB RECORD

01.1

Page 1

Oct 10/83


BOEING
 COMPONENT
 MAINTENANCE MANUAL

| PAGE | DATE | CODE | PAGE | DATE | CODE |
|-------------------------|-----------|--------|------------------------|-----------|--------|
| 27-31-52 | | | REPAIR-GENERAL | | |
| | | | *601 | JAN 01/89 | 01.1 |
| | | | *602 | JAN 01/89 | 01.1 |
| TITLE PAGE | | | REPAIR 1-1 | | |
| *1 | JAN 01/89 | 01.1 | *601 | JAN 01/89 | 01.1 |
| 2 | BLANK | | *602 | JAN 01/89 | 01.1 |
| REVISION RECORD | | | REPAIR 2-1 | | |
| 1 | JUL 10/83 | 01 | *601 | JAN 01/89 | 01.1 |
| 2 | BLANK | | *602 | JAN 01/89 | 01.1 |
| TR & SB RECORD | | | *603 | JAN 01/89 | 01.1 |
| 1 | OCT 10/83 | 01.1 | *604 | BLANK | |
| 2 | BLANK | | ASSEMBLY | | |
| LIST OF EFFECTIVE PAGES | | | *701 | JAN 01/89 | 01.1 |
| *1 | JAN 01/89 | 01 | 702 | BLANK | |
| THRU LAST PAGE | | | FITS AND CLEARANCES | | |
| CONTENTS | | | *801 | JAN 01/89 | 01.1 |
| *1 | JAN 01/89 | 01.1 | *802 | JAN 01/89 | 01.1 |
| 2 | BLANK | | 803 | JUL 10/85 | 01.101 |
| INTRODUCTION | | | 804 | BLANK | |
| *1 | JAN 01/89 | 01.101 | ILLUSTRATED PARTS LIST | | |
| 2 | BLANK | | 1001 | JUL 10/83 | 01 |
| DESCRIPTION & OPERATION | | | 1002 | JUL 10/83 | 01.1 |
| 1 | OCT 10/83 | 01.1 | 1003 | JUL 10/83 | 01.1 |
| 2 | BLANK | | 1004 | JUL 10/83 | 01.1 |
| DISASSEMBLY | | | 1005 | JUL 10/83 | 01.1 |
| *301 | JAN 01/89 | 01.1 | 1006 | JUL 10/83 | 01.1 |
| 302 | BLANK | | 1007 | JUL 10/83 | 01.1 |
| CLEANING | | | 1008 | BLANK | |
| 401 | JUL 10/83 | 01 | | | |
| 402 | BLANK | | | | |
| CHECK | | | | | |
| 501 | JUL 10/83 | 01 | | | |
| 502 | BLANK | | | | |

* = REVISED, ADDED OR DELETED

27-31-52
 EFFECTIVE PAGES
 LAST PAGE Page 1
 01 Jan 01/89

TABLE OF CONTENTS

| <u>Paragraph Title</u> | <u>Page</u> |
|---|-------------|
| Description and Operation | 1 |
| Testing and Trouble Shooting (Not Applicable) | |
| Disassembly. | 301 |
| Cleaning | 401 |
| Check. | 501 |
| Repair | 601 |
| Assembly | 701 |
| Fits and Clearances. | 801 |
| Special Tools (Not Applicable) | |
| Illustrated Parts List | 1001 |

27-31-52

CONTENTS

Page 1

Jan 01/89

01.1



INTRODUCTION

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

This manual is divided into separate sections:

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

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

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

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

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

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

27-31-52

INTRODUCTION

01.101

Page 1

Jan 01/89



HORIZONTAL STABILIZER CENTER ELEVATOR CONTROLS LINKAGE ASSEMBLY

DESCRIPTION AND OPERATION

1. The linkage assembly consists of an input lever assembly attached to a shaft assembly. The lever assembly receives its input from the aft quadrant assembly and transmits this motion thru linkage to the elevator power control actuator.

2. Leading Particulars (Approximate)

Length -- 9 inches

Width -- 11 inches

Height -- 7 inches

Weight -- 4 pounds

27-31-52

DESCRIPTION & OPERATION

01.1

Page 1

Oct 10/83



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. Disassembly (IPL Fig. 1)

A. Remove bolt (10), bearing (15), spacer (25), bushing (20) and nut (30).

NOTE: Do not remove rivets (65), plate (70), stop pads (75), bushings (80, 85) from shaft (90 or 90A) unless necessary for repair or replacement. Do not disassemble lever assy (35) unless necessary for repair or replacement.

27-31-52

DISASSEMBLY

01.1

Page 301

Jan 01/89



CLEANING

1. Clean all parts, except bearings, using standard industry practices per 20-30-03.
2. Clean teflon sealed bearings (15, 45) according to manufacturer's instruction.

27-31-52

01

CLEANING
Page 401
Jul 10/83



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. Penetrant check the following parts (Ref IPL Fig. 1) per 20-20-02.
 - A. Lever (50, 55)
 - B. Shaft (90, 90A)

27-31-52

01
CHECK
Page 501
Jul 10/83

REPAIR – GENERAL1. Content

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

| <u>P/N</u> | <u>NAME</u> | <u>REPAIR</u> |
|------------|-------------|---------------|
| 251T2610 | SHAFT | 1-1 |
| 251T2618 | | |
| 251T2612 | LEVER | 2-1 |
| -- | (DELETED) | |

2. Standard Practices

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

20-10-05 Application and Finishing of Plasma Flame Sprayed Coatings
 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. Grease -- MIL-G-23827 (Ref 20-60-03)
 B. Primer -- BMS 10-11, type 1 (Ref 20-60-02)
 C. Sealant -- BMS 5-95 (Ref 20-60-04)

27-31-52

REPAIR-GENERAL

01.1

Page 601

Jan 01/89

4. Dimensioning Symbols

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

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

EXAMPLES

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

True Position Dimensioning Symbols
Figure 601

27-31-52

REPAIR-GENERAL

01.1

Page 602

Jan 01/89

SHAFT ASSEMBLY – REPAIR 1-1

251T2610-1

251T2618-1

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. Bushing Replacement (Fig. 601)

- A. Remove bushings (80, 85).
- B. Install bushings (85) per 20-50-03 except use wet sealant.
- C. Machine bushing bores as shown.
- D. Fillet seal bushing flanges with sealant.
- E. Install bushing (80) and stake with tool ST922C-4 per 20-50-03 except use wet sealant.
- F. Fillet seal bushing flanges with sealant.

2. Stop Pad Replacement

- A. Remove stop pad (75).
- B. Install new stop pad (75) with sealant. Press until flange is seated.
- C. Fillet seal stop pad flange with sealant.

3. Plate Replacement (251T2618-1 only)

- A. Remove rivets (65).
- B. Remove plate (70) from shaft (90A).
- C. Install plate (70) on shaft (90A) and secure with rivets (65).

4. Bearing Seat Repair (Fig. 601)

- A. Machine bearing seat as required, within repair limit shown, to remove defects.
- B. Build up repaired surface with chrome plate and grind to design dimension and finish shown. Observe 0.010 inch maximum plating thickness.
Optional: build up with plasma flame spray BMS 10-67, type 10 and machine to design dimension and finish shown.

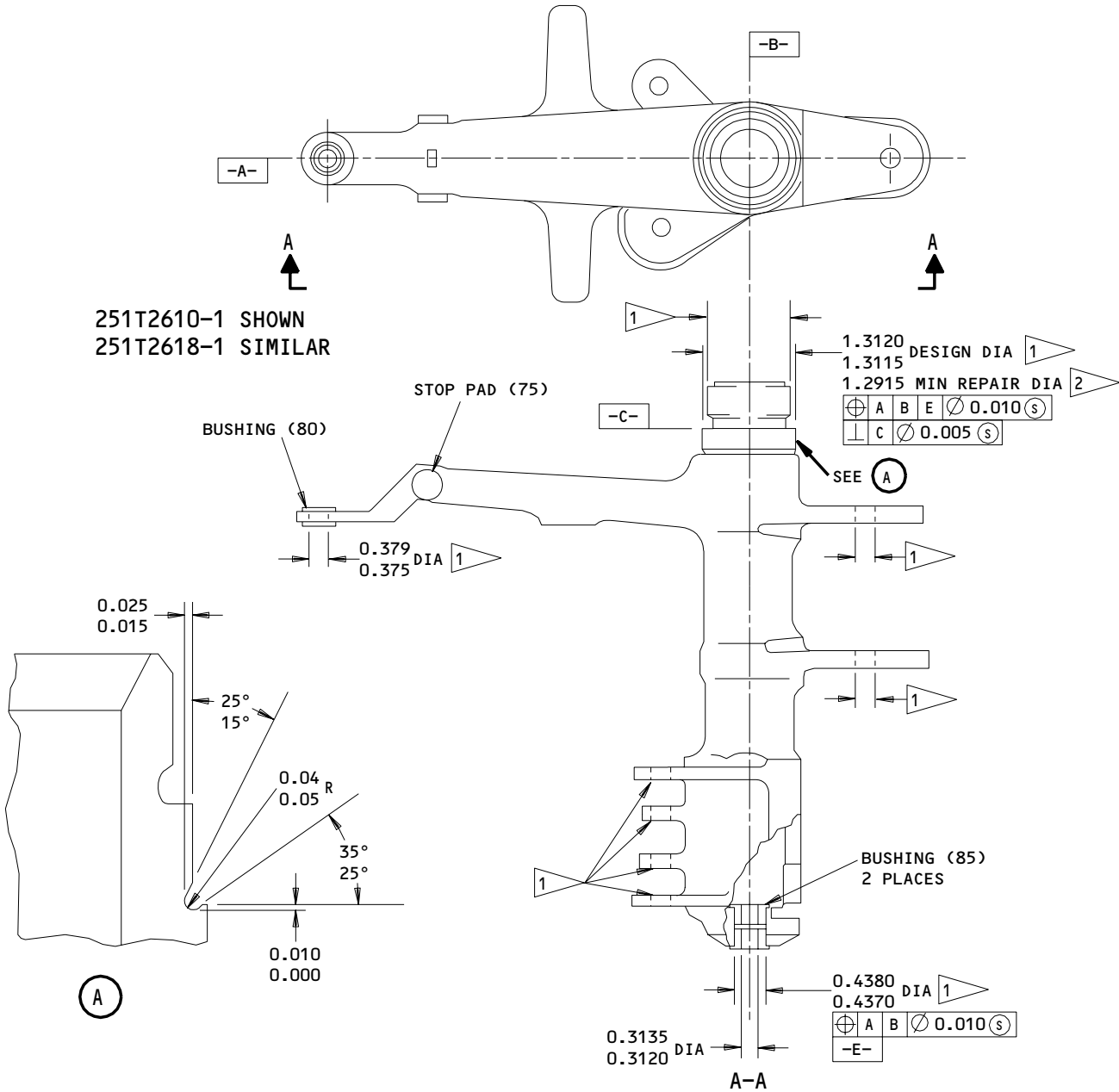
27-31-52

REPAIR 1-1

01.1

Page 601

Jan 01/89



REFINISH

SHAFT (90) -- CHROMIC ACID ANODIZE (F-17.04) AND APPLY TWO COATS OF PRIMER BMS 10-11, TYPE 1 (F-20.03) ALL OVER EXCEPT AS NOTED

- 1 NO PRIMER ON THIS SURFACE
- 2 REPAIR DIA FOR BUILD UP WITH CHROME PLATE (F-15.03) OR PLASMA FLAME SPRAY, BMS 10-67, TYPE 10

REPAIR

- REF 2
- 125 MACHINED SURFACES
- BREAK SHARP EDGES 0.008 R
- MATERIAL: AL ALLOY
- ALL DIMENSIONS ARE IN INCHES
- ITEM NUMBERS REFER TO IPL FIG. 1

251T2610-1
 251T2618-1
 Shaft Repair
 Figure 601

27-31-52

REPAIR 1-1

01.1

Page 602

Jan 01/89

LEVER ASSEMBLY – REPAIR 2-1

251T2612-11 thru -14

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 (Fig. 601)

- A. Remove bearing (45).
- B. Install new bearing and roller swage per 20-50-03.

| 2. Bolthole Repair (Fig. 601)

- | A. Machine boltholes, in sets of two, to repair diameter shown.
- | B. Make repair bushings per Fig. 602 or use NAS537-4P016 or equivalent cadmium-plated steel bushing.
- | C. Install bushings per 20-50-03. Bushings shall be flush on inside surface of fork and shall protrude 0.000-0.015 inch on outside.
- | D. Machine bushings to design dimension shown.

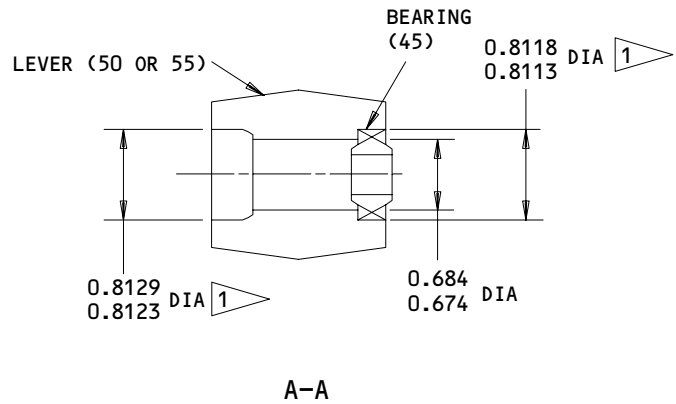
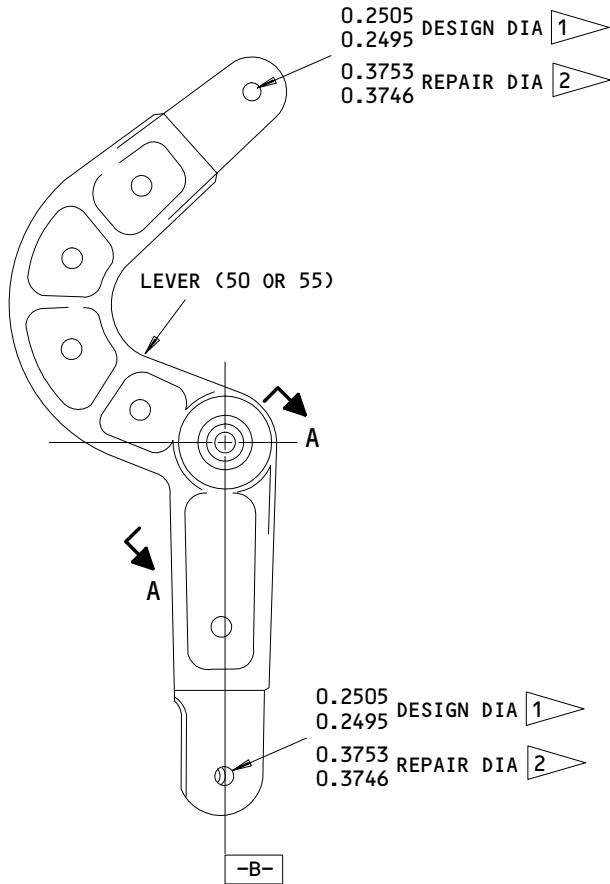
27-31-52

REPAIR 2-1

01.1

Page 601

Jan 01/89



REFINISH

LEVER (50,55) -- CHROMIC ACID ANODIZE (F-17.04), PLUS APPLY TWO COATS OF PRIMER BMS 10-11, TYPE 1, (F-20.03) ALL OVER EXCEPT AS NOTED

- 1 NO PRIMER ON THIS SURFACE
- 2 REPAIR LIMIT FOR INSTALLATION OF REPAIR BUSHING

REPAIR

REF 2

MATERIAL: AL ALLOY

ALL DIMENSIONS ARE IN INCHES

ITEM NUMBERS REFER TO IPL FIG. 1

251T2612-11 THRU -14

Lever Assembly Repair
 Figure 601

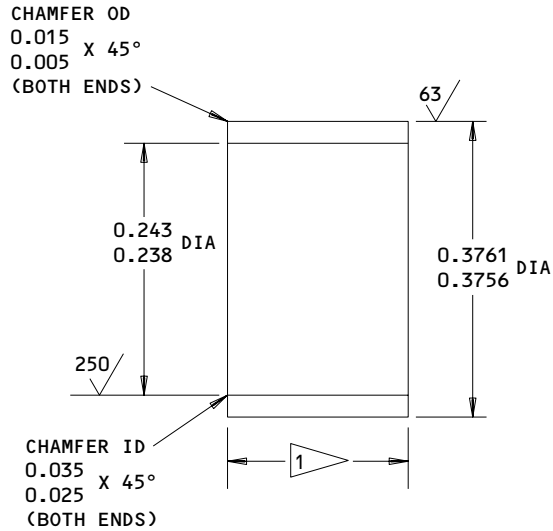
27-31-52

REPAIR 2-1


01.1

Page 602

Jan 01/89



MANUFACTURED BUSHING

 BUSHING LENGTH EQUAL TO LUG THICKNESS PLUS 0.000-0.015

MATERIAL: 4130 STEEL, 125-145 KSI
 FINISH: CADMIUM PLATE (F-15.06)
 ALL DIMENSIONS ARE IN INCHES

251T2612-11 THRU -14
 Repair Bushing for Lever Assembly
 Figure 602

598853

27-31-52

REPAIR 2-1

01.1

Page 603

Jan 01/89

ASSEMBLY1. Material

NOTE: Equivalent substitutes may be used.

A. Corrosion Preventive Compound -- MIL-C-11796, Class 3 (Ref 20-60-03)

2. Assembly (IPL Fig. 1)

A. Install spacer (25), bearing (15) into input lever assembly (35) per 20-50-03. Install bearing (15) with corrosion preventive compound.

B. Apply corrosion preventive compound to all surfaces of bolt (10), bushing (20) and nut (30).







C. Install input lever assembly (35) on shaft assembly (60) with bushing (20), bolt (10) and nut (30). Tighten nut (30) to 50-60 pound-inches.

3. Storage

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

27-31-52ASSEMBLY
Page 701
Jan 01/89

01.1

| Ref Letter Fig.801 | Mating Item No. IPL Fig. | Design Dimension | | | | Service Wear Limit | | |
|--------------------|--|------------------|--------|--|---------|--------------------|--------|-------------------|
| | | Dimension | | Assembly Clearance  | | Dimension | | Maximum Clearance |
| | | Min | Max | Min | Max | Min | Max | |
| A | ID 15,45 | 0.3120 | 0.3125 | 0.0000 | 0.0015 | | | |
| | OD 10 | 0.3110 | 0.3120 | | | | | |
| B | ID 90 | 0.4388 | 0.4393 | 0.0002 | 0.0012 | 0.4376 | 0.4398 | 0.0020 |
| | OD 20 | 0.4381 | 0.4386 | | | | | |
| C | ID 20 | 0.3125 | 0.3140 | 0.0005 | 0.0030 | 0.3105 | 0.3145 | 0.0040 |
| | OD 10 | 0.3110 | 0.3120 | | | | | |
| D | ID 50 | 0.8113 | 0.8118 | -0.0012 | -0.0002 | 0.8115 | 0.8123 | -0.0002 |
| | OD 45 | 0.8120 | 0.8125 | | | | | |
| E | ID 35 | 0.8123 | 0.8129 | -0.0002 | 0.0009 | 0.8115 | 0.8134 | 0.0020 |
| | OD 15 | 0.8120 | 0.8125 | | | | | |
| F | ID 60 | 0.3120 | 0.3130 | 0.0000 | 0.0020 | 0.3105 | 0.3135 | 0.0030 |
| | OD 10 | 0.3110 | 0.3120 | | | | | |
| G | ID  | 1.3120 | 1.3125 | 0.0000 | 0.0010 | 1.3110 | 1.3130 | 0.0020 |
| | OD 90 | 1.3115 | 1.3120 | | | | | |
| H | ID 90 | 0.2495 | 0.2505 | 0.0000 | 0.0020 | 0.2480 | 0.2510 | 0.0030 |
| | OD  | 0.2485 | 0.2495 | | | | | |
| I | ID 90 | 0.3763 | 0.3768 | 0.0002 | 0.0012 | 0.3751 | 0.3773 | 0.0020 |
| | OD  | 0.3756 | 0.3761 | | | | | |
| J | ID 35 | 0.2495 | 0.2505 | 0.0000 | 0.0020 | 0.2480 | 0.2510 | 0.0030 |
| | OD  | 0.2485 | 0.2495 | | | | | |
| K | ID 35 | 0.2495 | 0.2505 | 0.0000 | 0.0020 | 0.2480 | 0.2510 | 0.0030 |
| | OD  | 0.2485 | 0.2495 | | | | | |

 NEGATIVE VALUES DENOTE INTERFERENCE FIT

 INSTALLATION PART BACB10AW21

 INSTALLATION PART BACB30NF4-()

 INSTALLATION PART NAS77-4-25

ALL DIMENSIONS ARE IN INCHES

Fits and Clearances
Figure 801 (Sheet 2)

27-31-52

FITS AND CLEARANCES
01.1 Page 802
Jan 01/89

| FOR TORQUE VALUES OF STANDARD FASTENERS. REFER TO 20-50-01 | | | |
|--|------|--------------|------------|
| ITEM NO. IPL Fig. 1 | NAME | TORQUE | |
| | | POUND-INCHES | POUND-FEET |
| 30 | Nut | 50-60 | |

Torque Table
Figure 802

27-31-52

FITS AND CLEARANCES
01.101 Page 803
Jul 10/85

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.

27-31-52

ILLUSTRATED PARTS LIST

01 Page 1001

Jul 10/83

VENDORS

06710 VALLEY-TODECO INCORPORATED
12975 BRADLEY AVENUE
SYLMAR, CALIFORNIA 91342

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

06950 VSI CORP SCREWCORP DIV
13001 EAST TEMPLE AVENUE
CITY OF INDUSTRY, CALIFORNIA 91746

08524 DEUTSCH FASTENER CORPORATION
PO BOX 92925 7001 WEST IMPERIAL HIGHWAY
LOS ANGELES, CALIFORNIA 90045

17943 FEDERAL MANUFACTURING CORPORATION
6910 FARMDALE AVENUE
NORTH HOLLYWOOD, CALIFORNIA 91605

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

23294 AVALON MACHINE PRODUCTS INC
15337 ALLEN STREET
PARAMOUNT, CALIFORNIA 90723

27624 PAUL R BRILES INC P.B. FASTENER DIV
1700 WEST 132ND STREET PO BOX 1157
GARDENA, CALIFORNIA 90249

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

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

43991 FAG BEARING INCORPORATED
HAMILTON AVENUE
STAMFORD, CONNECTICUT 06904

27-31-52

ILLUSTRATED PARTS LIST
01.1 Page 1002
Jul 10/83

**BOEING**
COMPONENT
MAINTENANCE MANUALVENDORS

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

56878 SPS TECHNOLOGIES INC
HIGHLAND AVENUE
JENKINTOWN, PENNSYLVANIA 19046

70265 ALL POWER MANUFACTURING COMPANY
13141 MOLETTE STREET
SANTE FE SPRINGS, CALIFORNIA 90670

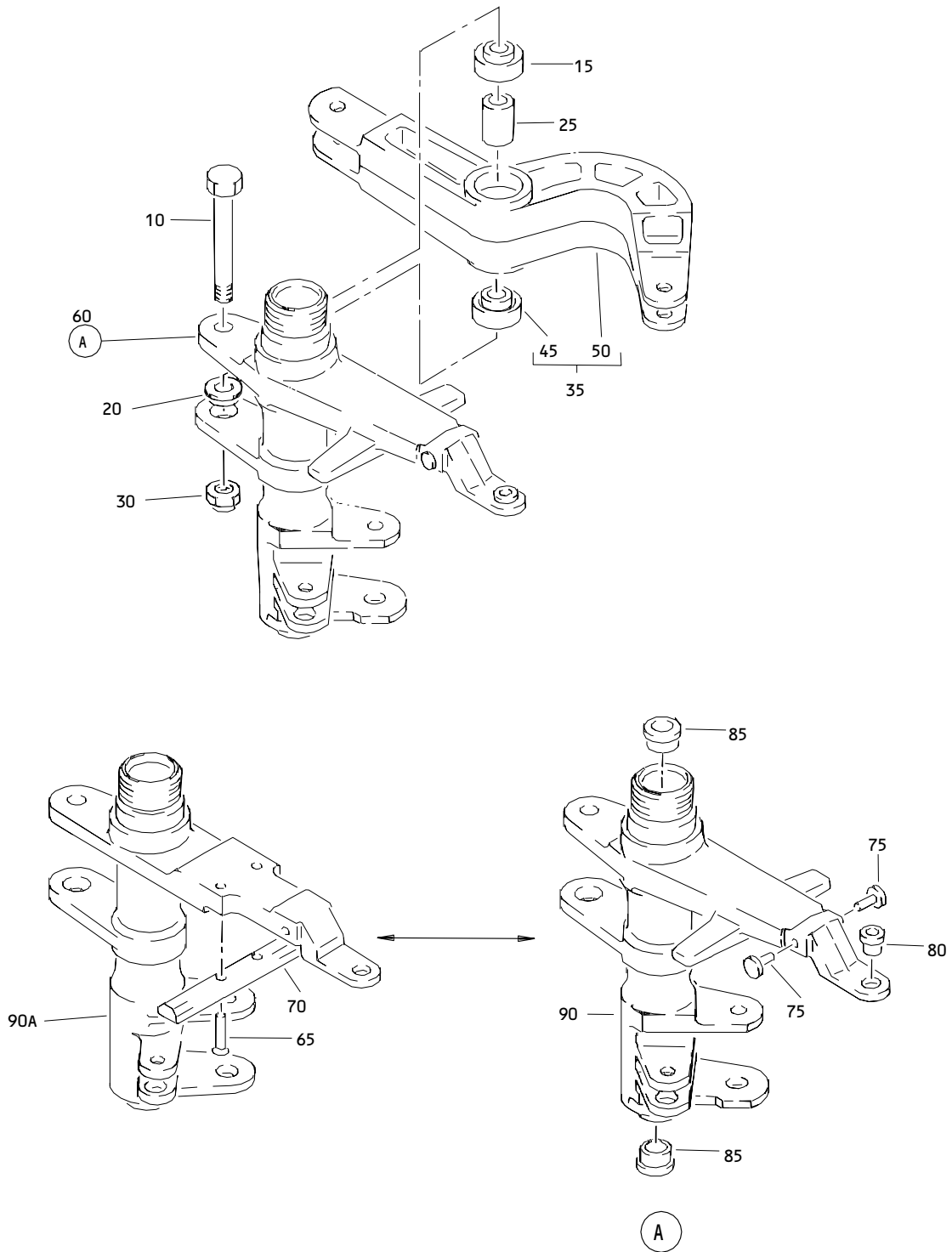
80539 SPS TECHNOLOGIES INC AEROSPACE PRODUCTS DIV
2701 SOUTH HARBOR BOULEVARD PO BOX 1259
SANTA ANA, CALIFORNIA 92702

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

94892 MASTER MACHINE PRODUCTS CORPORATION
2069 RANDOLPH STREET
HUNTINGTON PARK, CALIFORNIA 90255

97928 LITTON FASTENING SYSTEMS DIV OF LITTON SYSTEMS INC
3969 PARAMONT BOULEVARD
LAKEWOOD, CALIFORNIA 90712

27-31-52ILLUSTRATED PARTS LIST
01.1 Page 1003
Jul 10/83



Horizontal Stabilizer Center Elevator Controls Linkage Assembly
 Figure 1

27-31-52

ILLUSTRATED PARTS LIST
 01.1 Page 1004
 Jul 10/83

BOEING
 COMPONENT
 MAINTENANCE MANUAL

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| FIG. & ITEM | PART NO. | AIRLINE PART NUMBER | NOMENCLATURE 1234567 | EFF CODE | QTY PER ASSY |
|-------------|--------------|---------------------|---|----------|--------------|
| 01- -1 | 251T2600-9 | | LINKAGE ASSY-HORIZ STAB. CTR ELEVATOR CONT (LH) | A | RF |
| -5 | 251T2600-10 | | LINKAGE ASSY-HORIZ STAB. CTR ELEVATOR CONT (RH) | B | RF |
| 10 | BACB30NF5-37 | | .BOLT- (V06710) (SPEC BACB30NF5-37) (OPT BACB30NF5-37 (V06725)) (OPT BACB30NF5-37 (V06950)) (OPT BACB30NF5-37 (V08524)) (OPT BACB30NF5-37 (V17943)) (OPT BACB30NF5-37 (V27624)) (OPT BACB30NF5-37 (V56878)) (OPT BACB30NF5-37 (V80539)) (OPT BACB30NF5-37 (V92215)) (OPT BACB30NF5-37 (V97928)) | | 1 |
| 15 | KP5A | | .BEARING- (V38443) (SPEC BACB10BX5) (OPT KP5AFS428 (V21335)) (OPT KP5A2TS (V43991)) (OPT LLKP5A (V38443)) (OPT KP5AG27 (V30163)) | | 1 |

27-31-52

ILLUSTRATED PARTS LIST
 01.1 Page 1005
 Jul 10/83

| FIG. & ITEM | PART NO. | AIRLINE PART NUMBER | NOMENCLATURE 1234567 | EFF CODE | QTY PER ASSY |
|-------------|-------------|---------------------|--|----------|--------------|
| 01- | | | | | |
| 20 | NAS77-5-32 | | .BUSHING | | 1 |
| 25 | NAS43DD5-72 | | .SPACER | | 1 |
| 30 | BRH10-5 | | .NUT- (V52828) (SPEC BACN10JC5) | | 1 |
| 35 | 251T2612-11 | | .LEVER ASSY-PILOT INPUT (OPT ITEM 35A) | A | 1 |
| -35A | 251T2612-13 | | .LEVER ASSY-PILOT INPUT (OPT ITEM 35) | A | 1 |
| -40 | 251T2612-12 | | .LEVER ASSY-PILOT INPUT (OPT ITEM 40A) | B | 1 |
| -40A | 251T2612-14 | | .LEVER ASSY-PILOT INPUT (OPT ITEM 40) | B | 1 |
| 45 | KP5A | | ..BEARING- (V38443) (SPEC BACB10BX5) (SEE ITEM 15 FOR OPT PARTS) | | 1 |
| 50 | 251T2612-15 | | ..LEVER- (USED ON ITEM 35) | A | 1 |
| -50A | 251T2612-17 | | ..LEVER- (USED ON ITEM 35A) | A | 1 |
| -55 | 251T2612-16 | | ..LEVER- (USED ON ITEM 40) | B | 1 |
| -55A | 251T2612-18 | | ..LEVER- (USED ON ITEM 40A) | B | 1 |
| 60 | 251T2610-1 | | .SHAFT ASSY- (OPT ITEM 60A) | | 1 |
| -60A | 251T2618-1 | | .SHAFT ASSY- (OPT ITEM 60) | | 1 |
| 65 | BACR15BA5KE | | ..RIVET- (USED ON ITEM 60A) | | 2 |
| 70 | 251T2618-3 | | ..PLATE- (USED ON ITEM 60A) | | 1 |
| 75 | 251T2626-1 | | ..PAD-STOP | | 2 |

27-31-52

 ILLUSTRATED PARTS LIST
 01.1 Page 1006
 Jul 10/83


BOEING
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 MAINTENANCE MANUAL

| FIG. & ITEM | PART NO. | AIRLINE PART NUMBER | NOMENCLATURE 1234567 | EFF CODE | QTY PER ASSY |
|-------------------|---------------|---------------------------|--|-------------|--------------------|
| 01- 80 | BACB28B4-225P | | ..BUSHING- (V23294) (SPEC BACB28B4-225P) (OPT BACB28B4-225P (V70265)) (OPT BACB28B4-225P (V94892)) | | 1 |
| 85 | BACB28W5C022 | | ..BUSHING- (V23294) (SPEC BACB28W5C022) (OPT BACB28W5C022 (V70265)) (OPT BACB28W5C022 (V94892)) | | 2 |
| 90 | 251T2610-2 | | ..SHAFT- (USED ON ITEM 60) | | 1 |
| 90A | 251T2618-2 | | ..SHAFT- (USED ON ITEM 60A) | | 1 |

27-31-52

ILLUSTRATED PARTS LIST

01.1

Page 1007

Jul 10/83