

 **BOEING**  
COMPONENT  
MAINTENANCE MANUAL

TO: ALL HOLDERS OF SUPPORT ASSEMBLY - NOSE GEAR WHEEL WELL AFT BULKHEAD  
COMPONENT MAINTENANCE MANUAL 53-13-01

REVISION NO. 2 DATED DEC 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. and date on the Record of Revision Sheet.

CHAPTER/SECTION  
AND PAGE NO.

TITLE PAGE

1

REPAIR 1-1

601-605

605,1003,1005

DESCRIPTION OF CHANGE

Added top assembly 141T2923-27 to correspond with production drawing.

**53-13-01**

HIGHLIGHTS

01.1

Page 1

Dec 01/95

**SUPPORT ASSEMBLY – NOSE GEAR WHEEL WELL  
AFT BULKHEAD**

**PART NUMBERS 141T2923-18,-22,-26,-27**

COMPONENT MAINTENANCE MANUAL  
WITH  
ILLUSTRATED PARTS LIST

**53-13-01**

TITLE PAGE

Page 1

Dec 01/95

01.1



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

**53-13-01**

TR & SB RECORD

01

Page 1

Jul 10/84


**BOEING**  
 COMPONENT  
 MAINTENANCE MANUAL

PAGE	DATE	CODE	PAGE	DATE	CODE
53-13-01			REPAIR 1-1		
TITLE PAGE			*601	DEC 01/95	01.1
*1	DEC 01/95	01.1	*602	DEC 01/95	01.1
2	BLANK		*603	DEC 01/95	01.1
REVISION RECORD			*604	DEC 01/95	01.1
1	JUL 10/84	01	*605	DEC 01/95	01.1
2	BLANK		*606	BLANK	
TR & SB RECORD			ILLUSTRATED PARTS LIST		
1	JUL 10/84	01	1001	JUL 10/84	01
2	BLANK		*1002	DEC 01/95	01.1
LIST OF EFFECTIVE PAGES			*1003	DEC 01/95	01.1
*1	DEC 01/95	01	*1004	DEC 01/95	01.1
THRU LAST PAGE			*1005	DEC 01/95	01.1
CONTENTS			1006	BLANK	
1	JUL 10/84	01			
2	BLANK				
INTRODUCTION					
1	JUL 10/84	01			
2	BLANK				
DESCRIPTION & OPERATION					
1	JUL 10/84	01			
2	BLANK				
DISASSEMBLY					
301	JUL 10/84	01			
302	BLANK				
CHECK					
501	JUL 10/84	01			
502	BLANK				
REPAIR-GENERAL					
601	APR 10/86	01.101			
602	BLANK				

\* = REVISED, ADDED OR DELETED

**53-13-01**
 EFFECTIVE PAGES  
 LAST PAGE Page 1  
 01 Dec 01/95



TABLE OF CONTENTS

<u>Paragraph Title</u>	<u>Page</u>
Description and Operation . . . . .	1
Testing/Trouble Shooting (not applicable)	
Disassembly . . . . .	301
Cleaning. . . . . * [1]	
Check . . . . .	501
Repair. . . . .	601
Assembly (not applicable)	
Fits and Clearances (not applicable)	
Special Tools (not applicable)	
Illustrated Parts List. . . . .	1001

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

**53-13-01**

01  
 CONTENTS  
 Page 1  
 Jul 10/84



### INTRODUCTION

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

This manual is divided into separate sections:

- |  |                              |
|--|------------------------------|
| 1. Title Page                                      | 4. List of Effective Pages   |
| 2. Record of Revisions                             | 5. Table of Contents         |
| 3. Temporary Revision &<br>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.

**53-13-01**

INTRODUCTION

01

Page 1

Jul 10/84



SUPPORT ASSEMBLY - NOSE GEAR WHEEL WELL AFT BULKHEAD  
DESCRIPTION AND OPERATION

1. Description and Operation

A. The lock brace support assembly is a machined matched set of forged aluminum fittings and bushings. These fittings become a matched set when two holes are simultaneously drilled (1.7500 inch diameter and 0.7500 inch diameter ref). It is non-operational by itself.

2. Leading Particulars (approximate)

Length -- 15 inches  
Width -- 8 inches  
Thickness -- 3 inches  
Weight -- 6 pounds

53-13-01

DESCRIPTION & OPERATION

01

Page 1

Jul 10/84





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. Use standard industry practices for disassembly of this component.

**53-13-01**

DISASSEMBLY

01

Page 301

Jul 10/84



CHECK

1. Check for obvious defects in accordance with standard industry practices.
2. Penetrant check per 20-20-02 -- Fitting (25, 25A, 25B, 30, 30A, 30B, IPL Fig. 1)

**53-13-01**

CHECK  
Page 501  
Jul 10/84

01

REPAIR – GENERAL1. Contents

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

<u>P/N</u>	<u>NAME</u>	<u>REPAIR</u>
141T2923	SUPPORT ASSY	1-1

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
20-43-01	Chromic Acid Anodizing
20-43-03	Alodizing
20-50-03	Bearing Installation and Retention

3. Materials

NOTE: Equivalent substitutes may be used.

- A. Alodine 1200 (Colored film) (ref 20-43-03)
- B. Enamel -- BMS 10-60, color BAC702 white gloss (ref 20-60-02)  
 -- BMS 10-11, type II, color BAC702 white gloss (ref 20-60-02)
- C. Primer -- BMS 10-11, type I (ref 20-60-02)  
 -- BMS 10-11, type I, yellow (ref 20-60-02)
- D. Sealant -- BMS 5-95 (ref 20-60-04)

53-13-01

REPAIR-GENERAL

01.101

Page 601

Apr 10/86

SUPPORT ASSEMBLY – REPAIR 1-1

141T2923-18, -22, -26, -27

NOTE: Refer to REPAIR-GEN for list of applicable standard practices.

1. Bushing Replacement (5, 10, IPL Fig. 1)

- A. Remove bushings.
- B. Check holes for damage or corrosion and repair, if necessary, per 2.
- C. Install bushings per 20-50-03.
- D. For bushings used on P/N 141T2923-27 only, machine inside diameter of bushing (5 or 10) to the dimension and finish shown in Fig. 601.
- E. Fillet seal bushing (5, 10) flanges and opposite side of bushing (5).
- F. Touch-up bare machined areas on Support Assembly (20, 20A, 20B) as follows (F-21.12):
  - (1) Clean and apply alodine 1200 (colored film); fasteners need not be alodined.
  - (2) Apply BMS 10-11, type I yellow primer and BMS 10-11, type II, color BAC702 white gloss enamel.

2. Repair

NOTE: Support assembly (20, 20A, 20B) are made of matched sets of fittings (25, 30; 25A, 30A; 25B, 30B; respectively) repair in sets only.

- A. Repair hole for bushing (5, 10).
  - (1) Match the machined surfaces located on datums b and c on matched set of fittings (25, 30; 25A, 30A; 25B, 30B).
  - (2) Machine holes as required to remove defects per Fig. 601.
  - (3) Shot peen the machined hole.
  - (4) Penetrant inspect per SOPM 20-20-02.
  - (5) Refinish per Fig. 601.

**53-13-01**

REPAIR 1-1

01.1

Page 601

Dec 01/95

- (6) Manufacture oversize bushing per Fig. 602, as required, to compensate for material removed in step 2.A.(2).
- (7) Install bushing per 20-50-03.
- (8) Machine inside diameter of oversize bushing to the dimension and finish shown in Fig. 601.
- (9) Fillet seal oversize bushing flange and opposite side of oversize bushing.

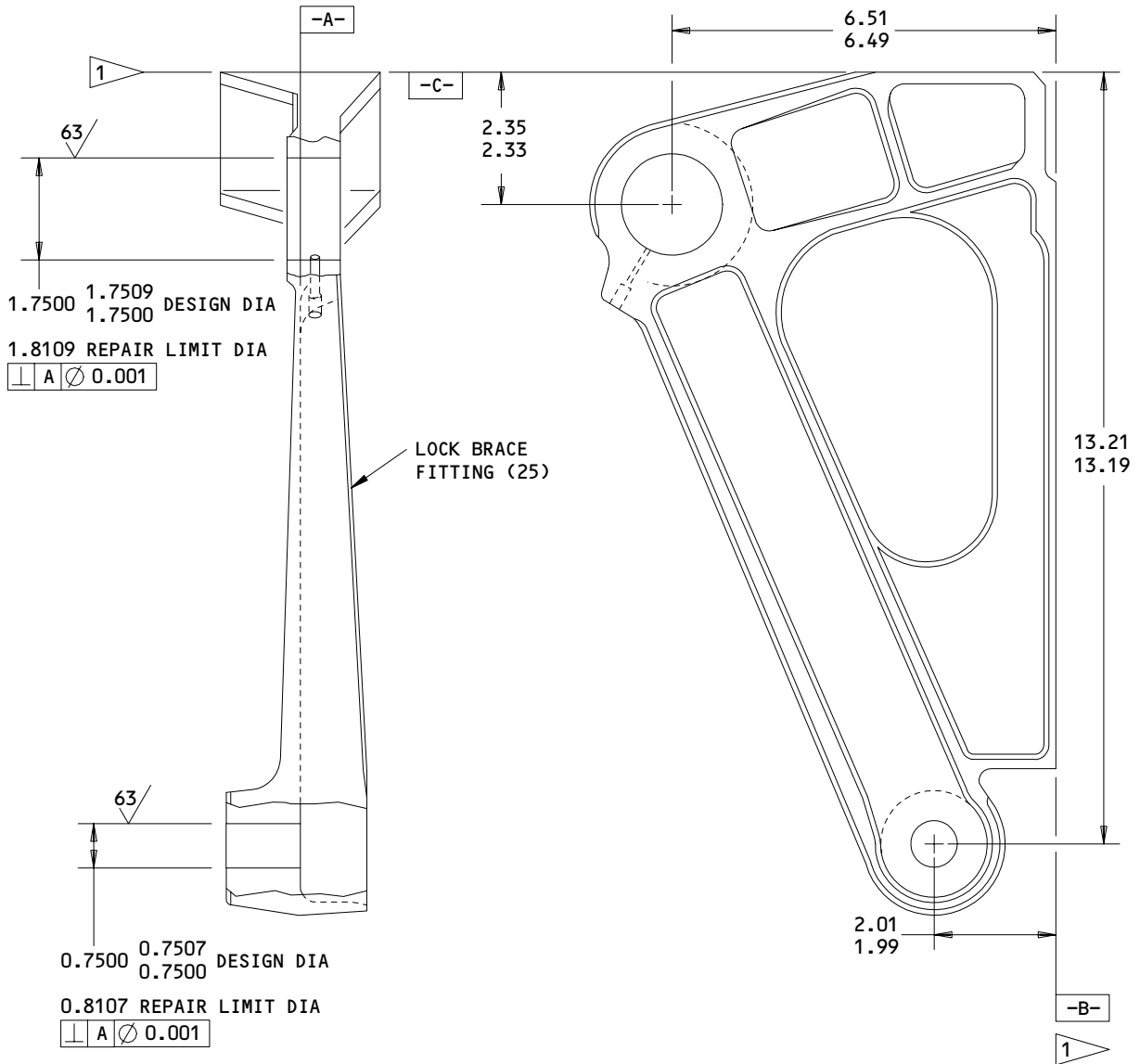
**53-13-01**

REPAIR 1-1

01.1

Page 602

Dec 01/95



ITEM NUMBERS REFER TO IPL FIG. 1  
ALL DIMENSIONS ARE IN INCHES

141T2923-22,-26,-27  
Support Assembly Repair  
Figure 601 (Sheet 1)

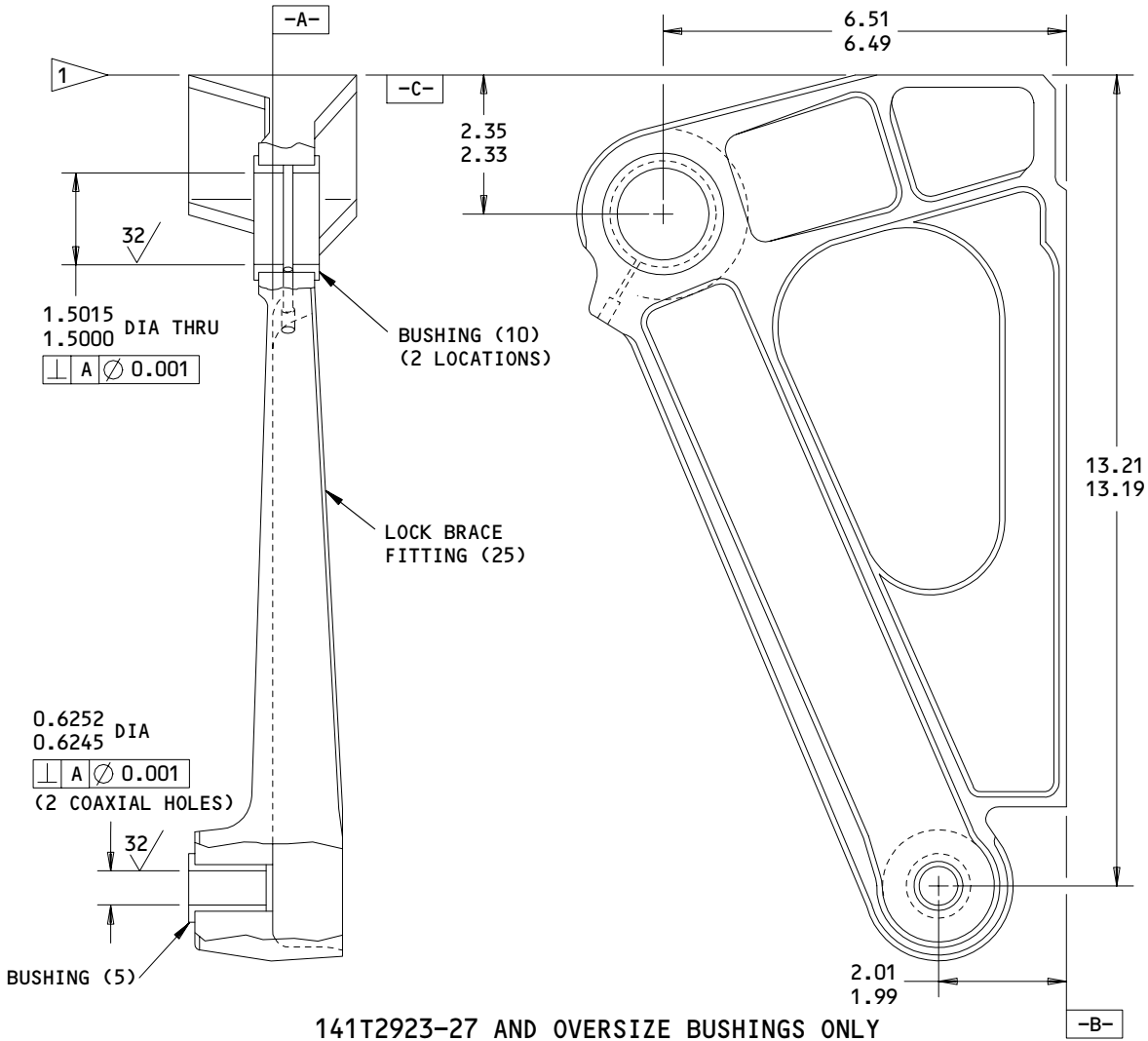
**53-13-01**

REPAIR 1-1

01.1

Page 603

Dec 01/95



141T2923-27 AND OVERSIZE BUSHINGS ONLY

**REFINISH**

CHROMIC ACID ANODIZE, TYPE I AND APPLY ONE COAT BMS 10-11. TYPE I PRIMER (F-18.13). ALSO APPLY ONE COAT BMS 10-60, COLOR BAC702 WHITE GLOSS ENAMEL (F-21.03), EXCEPT OMITTING PRIMER AND ENAMEL FROM HOLES FOR BUSHING AND LUBRICATION FITTING.

1 MATCH THESE SURFACES ON EACH PAIR OF MATCH SETS

**REPAIR**

125/ ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK SHARP EDGES

MATERIAL: 7075-T73 ALUMINUM ALLOY  
 HEAT TREAT PER BAC5602

PENETRANT CHECK

SHOT PEEN ALL OVER INCLUDING HOLES AS SHOWN IN SOPM 20-10-03

SHOT NUMBER: 230-250

INTENSITY: 0.004A-0.007A

COVERAGE: 2.0

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

141T2923-22,-26,-27  
 Support Assembly Repair  
 Figure 601 (Sheet 2)

**53-13-01**

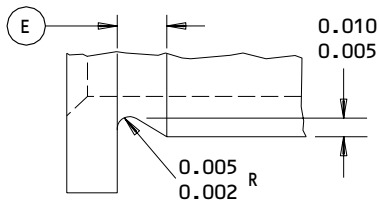
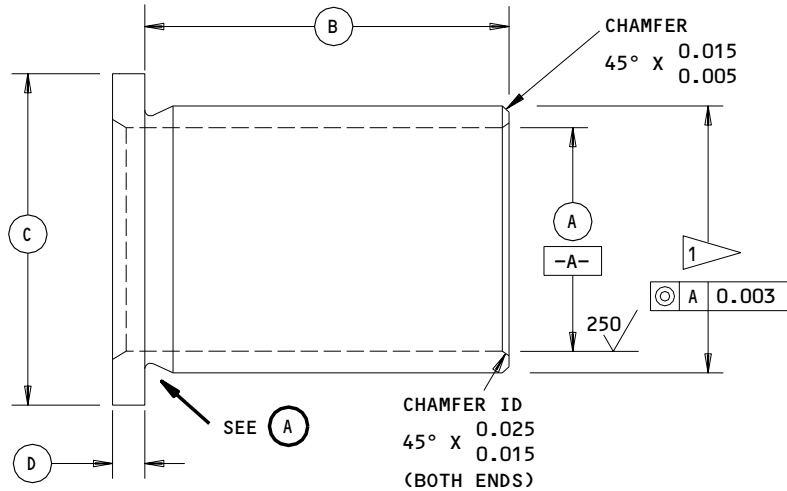
REPAIR 1-1

01.1

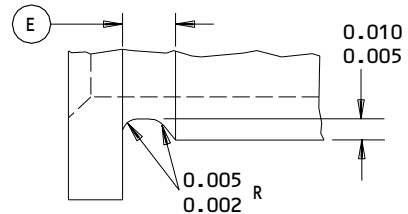
Page 604

Dec 01/95

**BOEING**  
**COMPONENT**  
**MAINTENANCE MANUAL**



TYPE 1



TYPE 2

UNDERCUT TYPE 1 OR TYPE 2 OPTIONAL



ORIGINAL BUSHING NO. (REF)	(A)	(B)	(C)	(D)	(E)	INTERFERENCE	MATERIAL
5	0.621 0.615	1.190 1.185	1.06 1.04	0.125 1.120	0.060 0.030	0.0005-0.0019	15-5 PH CRES 180-200 KSI
10	1.498 1.492	0.341 0.336	2.01 1.99	0.065 0.060	0.030 0.015	0.0011-0.0029	AL-NI-BR PER AMS 4640

**FINISH**

CADMIUM PLATE AS SHOWN IN SOPM 20-42-02, TYPE 2, CLASS 2, EXCEPT DO NOT PLATE BUSHING (10, REF) BORE.

1 FINAL BUSHING OUTSIDE DIA EQUALS REPAIR DIA OF FITTING PLUS INTERFERENCE

63 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK SHARP EDGES 0.01-0.02 RADIUS UNLESS SHOWN DIFFERENTLY

PENETRANT CHECK

DIMENSIONS APPLY AFTER PLATING

ALL DIMENSIONS ARE IN INCHES

Oversize Bushing Details  
 Figure 602

**53-13-01**

REPAIR 1-1

01.1

Page 605

Dec 01/95



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.

**53-13-01**

ILLUSTRATED PARTS LIST

01

Page 1001

Jul 10/84

VENDORS

95879 ALEMITE DIVISION OF STEWART WARNER CORP  
1826 DIVERSEY PARKWAY  
CHICAGO, ILLINOIS 60614-1540

**53-13-01**

ILLUSTRATED PARTS LIST  
01.1 Page 1002  
Dec 01/95


**BOEING**  
 COMPONENT  
 MAINTENANCE MANUAL

PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
141T2923-15		1	25	1
141T2923-16		1	30	1
141T2923-17		1	20	1
141T2923-18		1	1	RF
141T2923-19		1	25A	1
141T2923-20		1	30A	1
141T2923-21		1	20A	1
141T2923-22		1	1A	RF
141T2923-23		1	25B	1
141T2923-24		1	30B	1
141T2923-25		1	20B	1
141T2923-26		1	1B	RF
141T2923-27		1	1C	RF
141T2935-1		1	5	2
141T2935-2		1	10	4
141T2935-3		1	5A	2
141T2935-4		1	10A	4
1728B		1	15	2

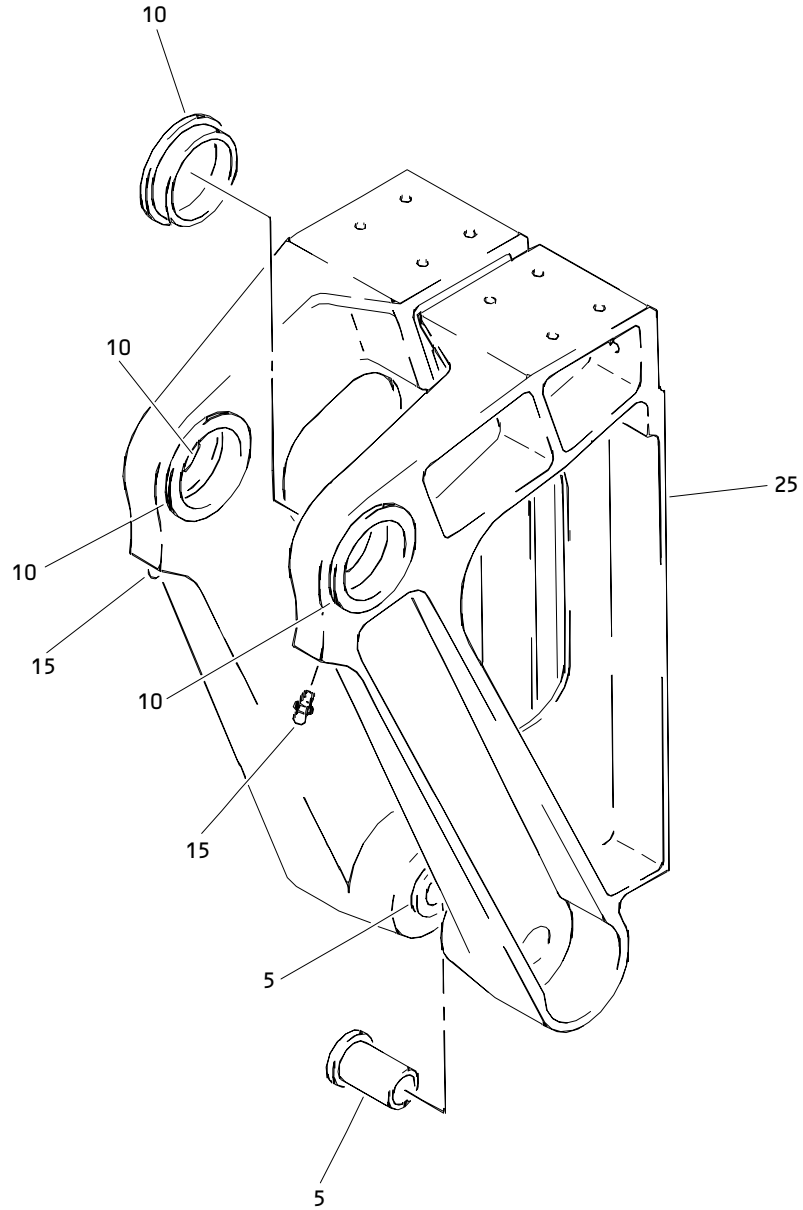
53-13-01

ILLUSTRATED PARTS LIST

01.1

Page 1003

Dec 01/95



Nose Gear Wheel Well Aft Bulkhead Support Assembly  
Figure 1

**53-13-01**

ILLUSTRATED PARTS LIST  
01.1 Page 1004  
Dec 01/95


**BOEING**  
 COMPONENT  
 MAINTENANCE MANUAL

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01- -1	141T2923-18		SUPPORT ASSY-NOSE GR WHL WELL AFT BHD	A	RF
-1A	141T2923-22		SUPPORT ASSY-NOSE GR WHL WELL AFT BHD	B	RF
-1B	141T2923-26		SUPPORT ASSY-NOSE GR WHL WELL AFT BHD	C	RF
R -1C	141T2923-27		SUPPORT ASSY-NOSE GR WHL WELL AFT BHD	D	RF
R 5	141T2935-1		.BUSHING	A-C	2
R -5A	141T2935-3		.BUSHING	D	2
R 10	141T2935-2		.BUSHING	A-C	4
R -10A	141T2935-4		.BUSHING	D	4
R 15	1728B		.FITTING-LUBE (V95879)		2
R -20	141T2923-17		.SUPPORT ASSY	A	1
-20A	141T2923-21		.SUPPORT ASSY	B	1
-20B	141T2923-25		.SUPPORT ASSY	C,D	1
25	141T2923-15		..FITTING	A	1
-25A	141T2923-19		..FITTING	B	1
-25B	141T2923-23		..FITTING	C,D	1
-30	141T2923-16		..FITTING	A	1
-30A	141T2923-20		..FITTING	B	1
-30B	141T2923-24		..FITTING	C,D	1

53-13-01

ILLUSTRATED PARTS LIST

01.1

Page 1005

Dec 01/95