

 **BOEING**  
COMPONENT  
MAINTENANCE MANUAL

TO: ALL HOLDERS OF GIRT BAR CARRIER ASSEMBLY COMPONENT  
MAINTENANCE MANUAL 52-11-20

REVISION NO. 2 DATED OCT 01/92

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.

TR & SB RECORD

1

701-702

DESCRIPTION OF CHANGE

Incorporated SB 52A0061 for rework of plunger configuration.

301

1003-1004

Edited without technical change.

**52-11-20**

HIGHLIGHTS

01.1

Page 1

Oct 01/92

## GIRT BAR CARRIER ASSY

PART NUMBERS 141T6102-6,-7,-10,-11

COMPONENT MAINTENANCE MANUAL  
WITH  
ILLUSTRATED PARTS LIST

**52-11-20**

TITLE PAGE

Page 1

Jul 01/90

01



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
52A0061			OCT 01/92

**52-11-20**

TR &amp; SB RECORD

01.1

Page 1

Oct 01/92



**BOEING**  
 COMPONENT  
 MAINTENANCE MANUAL

PAGE	DATE	CODE	PAGE	DATE	CODE
52-11-20			CHECK		CONT.
TITLE PAGE			504	BLANK	
1	JUL 01/90	01	REPAIR-GENERAL		
2	BLANK		601	JUL 01/90	01
REVISION RECORD			602	JUL 01/90	01
1	JUL 01/90	01	REPAIR 1-1		
2	BLANK		601	JUL 01/90	01
TR & SB RECORD			602	BLANK	
*1	OCT 01/92	01.1	REPAIR 2-1		
2	BLANK		601	JUL 01/90	01
LIST OF EFFECTIVE PAGES			602	BLANK	
*1	OCT 01/92	01	REPAIR 3-1		
THRU LAST PAGE			601	JUL 01/90	01
CONTENTS			602	JUL 01/90	01
1	JUL 01/90	01	REPAIR 4-1		
2	BLANK		601	JUL 01/90	01
INTRODUCTION			602	BLANK	
1	JUL 01/90	01	ASSEMBLY		
2	BLANK		*701	OCT 01/92	01.1
DESCRIPTION & OPERATION			*702	OCT 01/92	01.1
1	JUL 01/90	01	*703	OCT 01/92	01.101
2	BLANK		*704	OCT 01/92	01.101
DISASSEMBLY			*705	OCT 01/92	01.101
*301	OCT 01/92	01.1	*706	OCT 01/92	01.101
302	BLANK		*707	OCT 01/92	01.101
CLEANING			708	BLANK	
401	JUL 01/90	01	ILLUSTRATED PARTS LIST		
402	BLANK		1001	JUL 01/90	01
CHECK			1002	JUL 01/90	01
501	JUL 01/90	01	*1003	OCT 01/92	01.1
502	JUL 01/90	01	*1004	OCT 01/92	01.1
503	JUL 01/90	01	1005	JUL 01/90	01
			1006	JUL 01/91	01.1

\* = REVISED, ADDED OR DELETED

**52-11-20**

EFFECTIVE PAGES  
 LAST PAGE Page 1  
 01 Oct 01/92



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 (not applicable)	
Special Tools (not applicable)	
Illustrated Parts List. . . . .	1001

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

**52-11-20**



### 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.

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.

**52-11-20**

INTRODUCTION

01

Page 1

Jul 01/90



GIRT BAR CARRIER ASSEMBLY

DESCRIPTION AND OPERATION

1. The carrier assembly for the girt bar has a torque shaft in the machined carrier assembly with an adapter, a girt bar lock, and a lock arm at each end.
2. An arm/disarm lever in the door assembly turns the girt bar carrier to arm or disarm the escape slide. When the escape slide is armed, the girt bar carrier locks the girt bar to the floor. You can see visual indication that the girt bar is locked in the down position through a window in the door lining. When the escape slide is disarmed, the girt bar carrier permits the girt bar to be lifted with the door.
3. Quality of Components (approximate)
  - Length -- 22 inches
  - Height -- 2 inches
  - Width -- 1 inch
  - Weight -- 7 pounds

52-11-20

DESCRIPTION & OPERATION

01

Page 1

Jul 01/90



DISASSEMBLY

NOTE: Disassemble the component only as necessary to complete the following:

- Isolate defects
- Make decisions on if parts are serviceable or not
- Do necessary repairs
- Get component back into a serviceable condition.

1. Remove cotter pin (30, IPL Fig. 1) from adapter (35) on each end of the assembly.
2. Remove nuts (10) from the lock arm (20) through the holes in the machined assembly (100). Do not remove the nuts (10) from the lock arm (15) at this time.
3. Turn the lock arms (15, 20) 180 degrees. Remove the bolts (5) from the lock arm (20) through the holes in the machined assembly (100).
4. Bend the end of each spring (40, 45) straight and remove the springs (40, 45) from the retainers (85, 90).
5. Carefully remove the lock arm (20) with adapter (35), spring (45), and washer (50) from the machined assembly (100).
6. Remove the washer (50) and the adapter (35) with the spring (45) from the lock arm (20).
7. Remove the spring (45) from the adapter (35).
8. Carefully remove lock arm (15) and torque shaft (25) from the machined assembly (100).
9. Remove nuts (10), bolts (5), and torque shaft (25) from the lock arm (15).
10. Remove the washer (50) and the adapter (35) with spring (40) from the lock arm (15).
11. Remove the spring (40) from the adapter (35).
12. Remove snap rings (60) from girt bar locks (65).
13. Remove girt bar locks (65) from machined assembly (100).

NOTE: Do not remove bearings (95), ball plungers (70A), or rubber sleeves (55) from machined assembly (100) unless replacement is necessary.

**52-11-20**

DISASSEMBLY

01.1

Page 301

Oct 01/92



CLEANING

1. Use standard industry procedures to clean all parts (Ref 20-30-03). Use the manufacturer's instructions to clean the bearings as necessary.

52-11-20

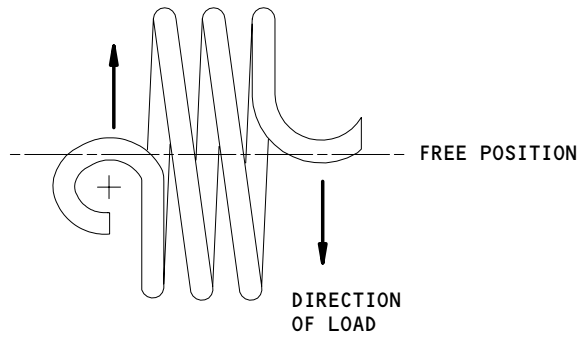
01

CLEANING  
Page 401  
Jul 01/90

CHECK

1. Do a check of all parts for defects. Refer to standard industry approved procedures.
2. Do a magnetic particle check of these parts. Refer to 20-20-01.
  - A. Lock arms (15, 20)
  - B. Torque shaft (25)
  - C. Springs (40, 45)
  - D. Locks (65)
  - E. Machined assembly (100A)
3. Do a penetrant check of these parts. Refer to 20-20-02.
  - A. Adapters (35)
  - B. Machined assembly (100)
4. Do a spring check of springs (40, 45) as shown in Fig. 501.

**52-11-20**01  
CHECK  
Page 501  
Jul 01/90



Spring Check  
Figure 501

**52-11-20**

CHECK  
Page 502  
Jul 01/90

01

**BOEING**  
COMPONENT  
MAINTENANCE MANUAL

ITEM NO.	TEST DEFLECTED (DEGREES)	ALLOWABLE LOAD LIMIT (POUND-INCH)
40, 45	15 30	1.89-2.31 3.77-4.60

141T6633-3, -4, -5, -6  
Spring Check  
Table 501

**52-11-20**

CHECK  
Page 503  
Jul 01/90

01

REPAIR – GENERAL1. Content

- A. Instructions for repair, refinish and replacement are divided into procedures as follows:

<u>P/N</u>	<u>NAME</u>	<u>REPAIR</u>
141T6632	GIRT BAR LOCK	1-1
141T6648	LOCK ARM	2-1
141T6580	WELDED CARRIER ASSEMBLY	3-1
--	REFINISH OF OTHER PARTS	4-1

2. Standard Practices

- A. Refer to these standard practices for details of the procedures in the repairs.

20-30-02 Stripping of Protective Finishes  
 20-30-03 General Cleaning Procedures  
 20-41-01 Decoding Table for Boeing Finish Codes  
 20-50-03 Bearing Installation and Retention  
 20-50-08 Application of Dry Lubricant

3. Materials

NOTE: Equivalent replacements can be used.

- A. Primer -- BMS 10-11, Type 1 (Ref 20-60-02)  
 B. Enamel -- BMS 10-11, Type 2 Gloss, BAC702 white (Ref 20-60-02)  
 C. Enamel -- BMS 10-11, Type 2 Gloss BAC701 black (Ref 20-60-02)  
 D. Enamel -- BMS 10-60, Gloss, BAC302 yellow (Ref 20-60-02)  
 E. Anti-skid coating -- MIL-W-5044, Type 2 (Ref 20-60-02)  
 F. Lubricant -- Vitrolube 1220 (Ref 20-60-04)

52-11-20

REPAIR-GENERAL

01

Page 601

Jul 01/90

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)	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.
//	PARALLELISM	<b>DIM</b>	
$\bigcirc$	ROUNDNESS	<b>-A-</b>	DATUM
$\bigcirc$	CYLINDRICITY	$\textcircled{M}$	MAXIMUM MATERIAL CONDITION (MMC)
$\frown$	PROFILE OF A LINE	$\textcircled{S}$	REGARDLESS OF FEATURE SIZE (RFS)
$\triangle$	PROFILE OF A SURFACE	$\textcircled{P}$	PROJECTED TOLERANCE ZONE
$\odot$	CONCENTRICITY		
$\equiv$	SYMMETRY		
$\sphericalangle$	ANGULARITY		
$\nearrow$	RUNOUT		

EXAMPLES

$\text{—} \quad 0.002$	STRAIGHT WITHIN 0.002	$\textcircled{\ominus} \text{ C } \varnothing \quad 0.0005$	CONCENTRIC TO C WITHIN 0.0005 DIAMETER (FULL INDICATOR MOVEMENT)
$\perp \text{ B } \quad 0.002$	PERPENDICULAR TO B WITHIN 0.002	$\equiv \text{ A } \quad 0.010$	SYMMETRICAL WITH A WITHIN 0.010
$\parallel \text{ A } \quad 0.002$	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	$\oplus \text{ B } \varnothing \quad 0.002 \textcircled{S}$	LOCATED AT TRUE POSITION WITHIN 0.002 DIA IN RELATION 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	$\perp \text{ A } \varnothing \quad 0.010 \textcircled{M}$ $0.510 \textcircled{P}$	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 IN RELATION 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	

True Position Dimensioning Symbols  
Figure 601

52-11-20

REPAIR-GENERAL

01 Page 602

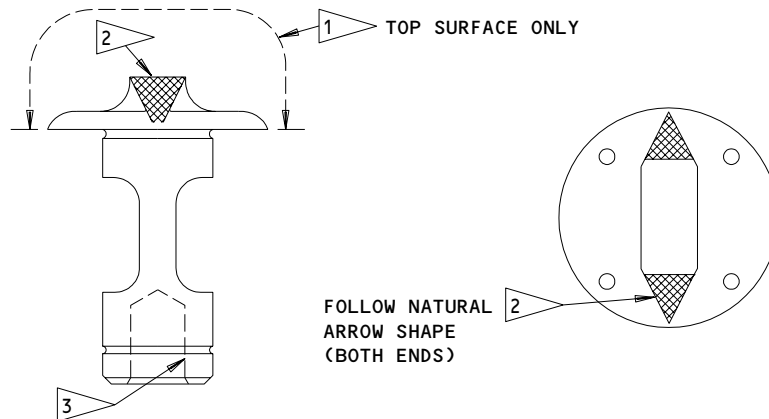
Jul 01/90




GIRT BAR LOCK – REPAIR 1-1

141T6632-1




## 1. Plating repair

**NOTE:** This repair procedure gives special instructions for the surface finish of this part. Refer to the refinish instructions in Fig. 601 and to REPAIR-GEN for the list of applicable standard practices.



**REFINISH:**  
 PASSIVATE (F-17.09) AND APPLY  
 VITROLUBE 1220 EXCEPT AS NOTED  
 BY    REFER TO 20-50-08.

**REPAIR:**  
 MATERIAL: 15-5PH CRES  
 180-200 ksi  
 OR  
 TITANIUM ALLOY

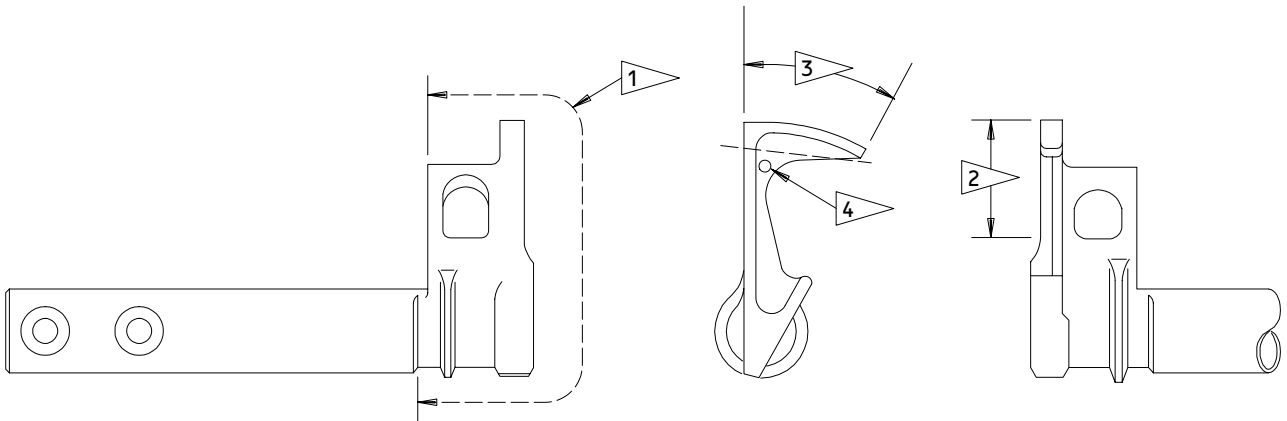
-  APPLY ONE LAYER BMS 10-11, TYPE 1, PRIMER (F-20.02). APPLY ONE COAT OF BMS 10-11, TYPE 2 WHITE GLOSS ENAMEL (SRF 14.905-702)
-  APPLY ONE LAYER BMS 10-11, TYPE 1, PRIMER (F-20.02). APPLY ONE COAT OF BMS 10-11, TYPE 2 BLACK GLOSS ENAMEL (SRF 14.905-701)
-  DO NOT PUT VITROLUBE 1220 ON INTERNAL SURFACES

Girt Bar Lock Refinish  
 Figure 601



LOCK ARM - REPAIR 2-1141T6648-1, -21. Plating repair

**NOTE:** This repair procedure gives special instructions for the finish of this part. Refer to the refinish instructions in Fig. 601 and to REPAIR-GEN for the list of applicable standard procedures.



**REFINISH:**  
 PASSIVATE ALL OVER (F-17.09)  
 AND REFINISH AS NOTED.

**REPAIR:**  
 MATERIAL: 15-5 PH CRES  
 180-200 ksi

- 1 APPLY VITROLUBE 1220 EXCEPT ON AREA INDICATED BY 3
- 2 EDGE RADII AND FLAT SURFACE BETWEEN RADII SHALL HAVE A POLISHED FINISH IN THIS AREA
- 3 APPLY BMS 10-60 YELLOW GLOSS ENAMEL (SRF-14.9815-302)
- 4 NO PAINT IN HOLE

Lock Arm Refinish  
 Figure 601

**52-11-20**

REPAIR 2-1

01

Page 601

Jul 01/90



WELDED CARRIER ASSEMBLY - REPAIR 3-1

141T6580-1, -4

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

1. Bearings Replacement (95, IPL Fig. 1)
  - A. Remove bearings (95).
  - B. Install replacement bearings (95). Refer to 20-50-12, Type 93 and 20-50-03.
  - C. Hold bearings (95) in position for one minute after installation.
  - D. Remove all excess adhesive at ends of bushing.
2. Plating Repair
  - A. Refer to refinish instructions in Fig. 601.

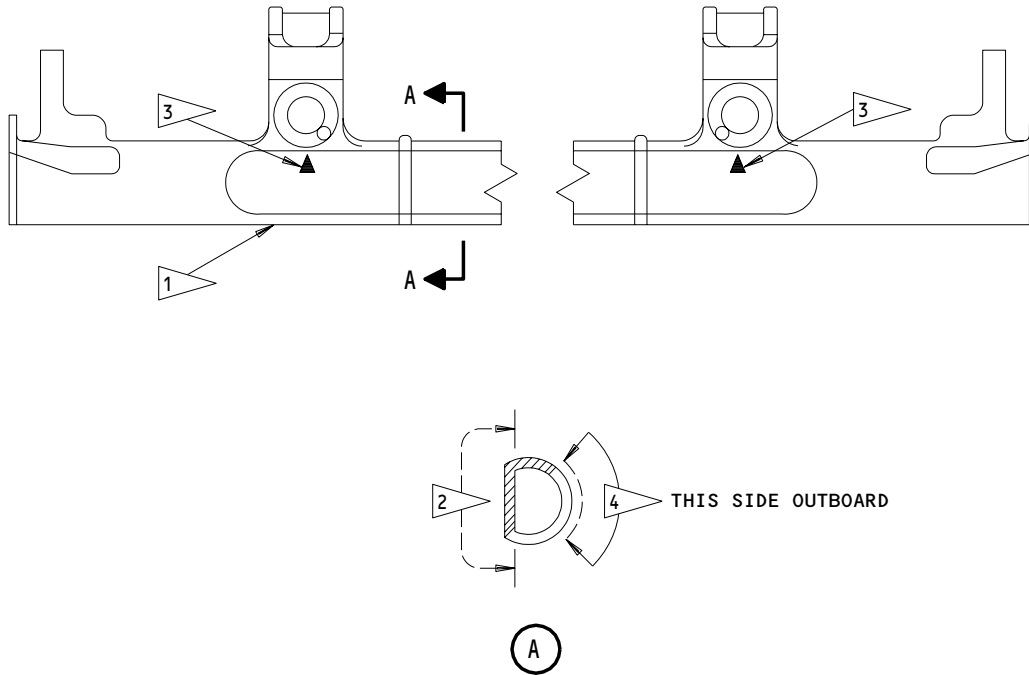
52-11-20

REPAIR 3-1

01

Page 601

Jul 01/90



**REFINISH:**  
 FOR 141T6580-1 ONLY, PASSIVATE (F-17.09)

- 1 APPLY ONE LAYER OF BMS 10-11 TYPE 1 PRIMER (F-20.02) AND APPLY ONE COAT OF BMS 10-11 TYPE 2 WHITE ENAMEL (F-21.03) ALL OVER
- 2 APPLY ANTI-SKID COATING (F-19.21)
- 3 APPLY ONE LAYER OF BMS 10-11, TYPE 2 BLACK ENAMEL (SRF-14.905-701)
- 4 STENCIL IN ONE LAYER FLAT ENAMEL 0.75 HIGH LETTERS AS SHOWN (SRF-14.903-701)

**REPAIR:**  
 ALL DIMENSIONS ARE IN INCHES

- MATERIAL:**
- 141T6580-1: 15-5 PH CRES  
 150-170 ksi
  - 141T6580-4: TITANIUM ALLOY

Welded Carrier Assembly Refinish  
 Figure 601

**52-11-20**

REPAIR 3-1  
 Page 602  
 Jul 01/90

01

MISCELLANEOUS PARTS REFINISH – REPAIR 4-1

1. Instructions given in Fig. 601 are to put back the finishes of the items.

IPL FIG. & ITEM	MATERIAL	FINISH
<u>Fig. 1</u>		
Torque Shaft (25)	15-5PH CRES 180-200 ksi	Passivate (F-17.09)
Adapter (35)	15-5PH CRES 180-200 ksi	Passivate (F-17.09) and apply vitrolube 1220 all over. Refer to 20-50-08.

Refinish Details  
Figure 601

**52-11-20**

REPAIR 4-1

01

Page 601

Jul 01/90

ASSEMBLY1. Materials

NOTE: Equivalent substitutes may be used.

A. Grease -- Dow Corning III or 976V compound (Ref 20-60-03)

B. Sealant -- BMS 5-95 (Ref 20-60-04)

C. Retaining Compound -- Loctite 242 (Ref 20-60-04)

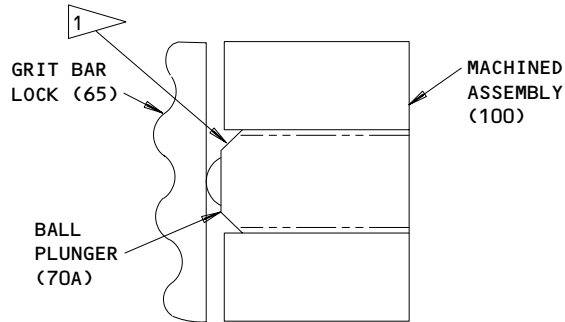
2. Assembly

NOTE: Unless specified, tighten fasteners as shown in 20-50-01.

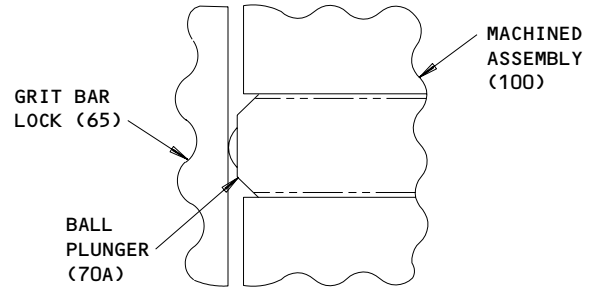
3. Install ball plungers (70A, IPL Fig. 1) with Loctite 242 Retaining Compound into machined assembly (100). For assemblies 141T6102-6, -7 only, make sure the surfaces of the ball plungers (70A) are aligned with the surface of the machined assembly (100). Install the girtbar locks (65) into the machined assembly (100) and lock them into position with the snap rings (60). For assemblies 141T6102-10, -11, and assemblies reworked by service bulletin 52A0061 adjust the ball plunger (70A) as follows: thread the ball plungers in until the plunger body contacts the back of the girtbar lock (65), then thread the ball plungers out so that the girtbar lock can be rotated freely between detent positions and so that the ball plunger provides a positive holding force on the girtbar lock when it is in a detent position. See Fig. 701.

**52-11-20**ASSEMBLY  
Page 701  
Oct 01/92

01.1



141T6102-6,-7 ONLY



141T6102-10,-11, AND  
 ASSEMBLIES REWORKED  
 BY SB 52A0061

1 INSTALL BALL PLUNGER (70) FLUSH WITH MACHINED ASSEMBLY (100)  
 FOR 141T6102-6,-7 ONLY.

Assembly Details - Ball Plunger  
 Figure 701

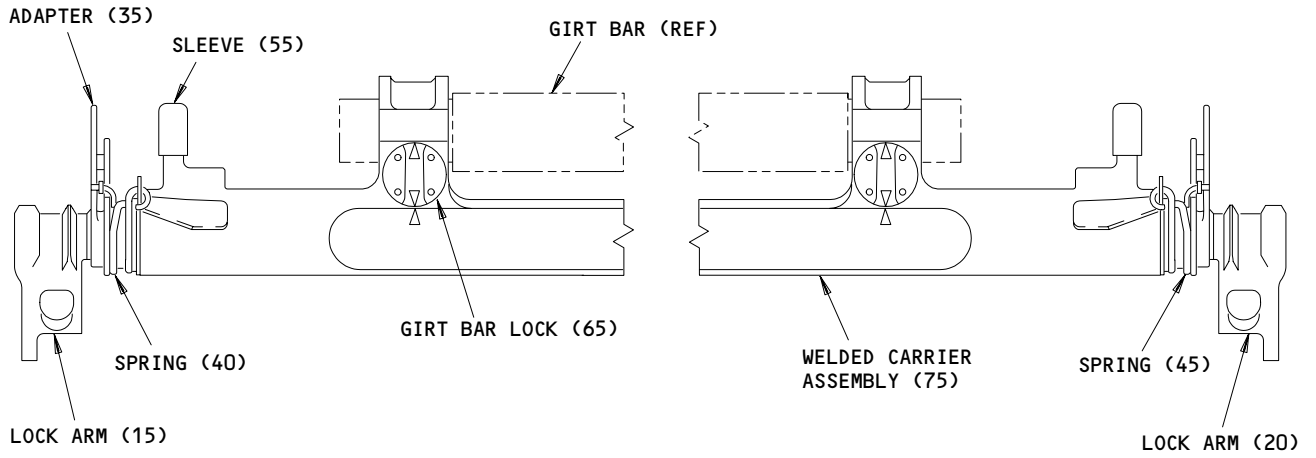
4. If rubber sleeves (55) were removed, attach with BMS 5-95 sealant.
5. Put the spring (40) on an adapter (35).
6. Put the adapter (35) with spring (40) and a washer (50) on the lock arm (15).
7. Connect the torque shaft (25) to the lock arm (15) with the bolts (5) and the nuts (10).
8. For 141T6102-10, -11 assemblies, apply a thick layer of Dow Corning III or 976V compound to bearing surfaces of the lock arm (15) and to the bearings (95).
9. Carefully put torque shaft (25) and lock arm (15) assembly into the machined assembly (100). Refer to Fig. 702 to make sure lock arm (15) is on the correct end of the machined assembly (100).

762780

**52-11-20**

ASSEMBLY  
 Page 702  
 Oct 01/92

01.1



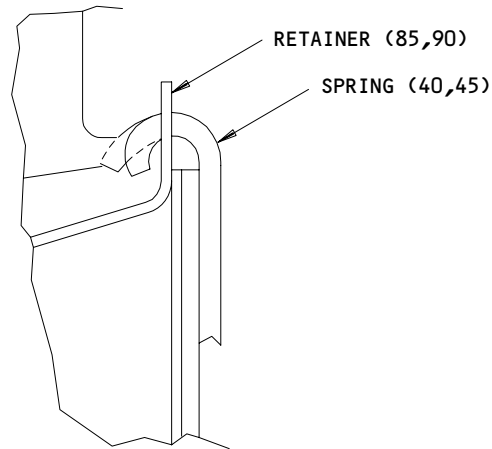
Girt Bar Carrier Assembly  
 Figure 702

762786

- Put the end of the spring (40) into the retainer (85). Make the end of the spring (40) in the shape shown in Fig. 703.

**52-11-20**

ASSEMBLY  
 Page 703  
 Oct 01/92



Assembly Details - Spring Rework  
Figure 703

762790

**CAUTION:** MAKE SURE THE SPRING (40) IS TIGHTLY CONNECTED TO THE RETAINER (85) BEFORE YOU ADJUST THE LENGTH OF THE SPRING (40). IF THE SPRING (40) IS CUT TOO SHORT, IT WILL NOT STAY CONNECTED TO THE ADAPTER (35).

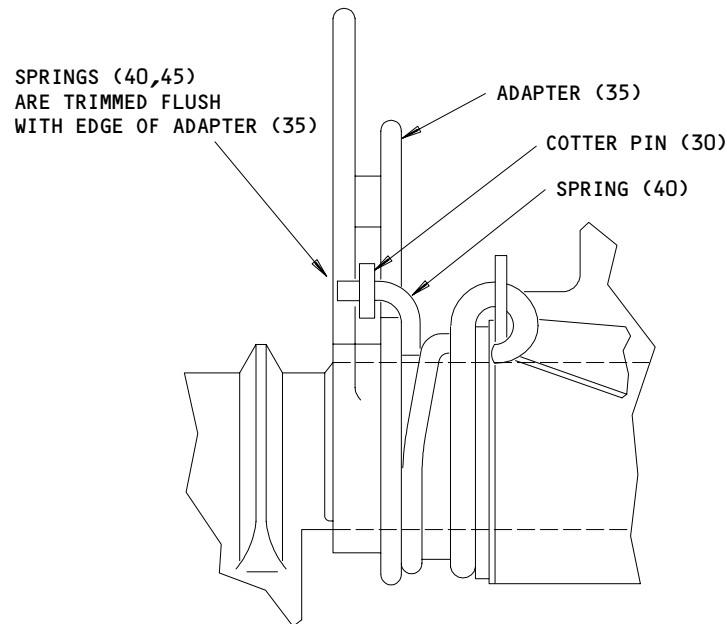
11. Push the adapter (35) against the machined assembly (100). Cut the spring (40) so that it does not extend farther than the edge of the adapter arm (35). See Fig. 704.

**52-11-20**

ASSEMBLY  
Page 704  
Oct 01/92

01.101





Assembly Details - Spring Trim  
Figure 704

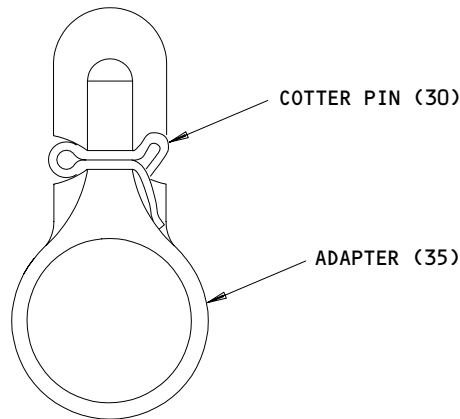
762804

12. Attach the end of the spring (40) to the adapter (35) with the cotter pin (30). Bend the tangs of the cotter pin (30) as shown in Fig. 705.

**52-11-20**

ASSEMBLY  
Page 705  
Oct 01/92

01.101



Assembly Details - Cotter Pin  
Figure 705

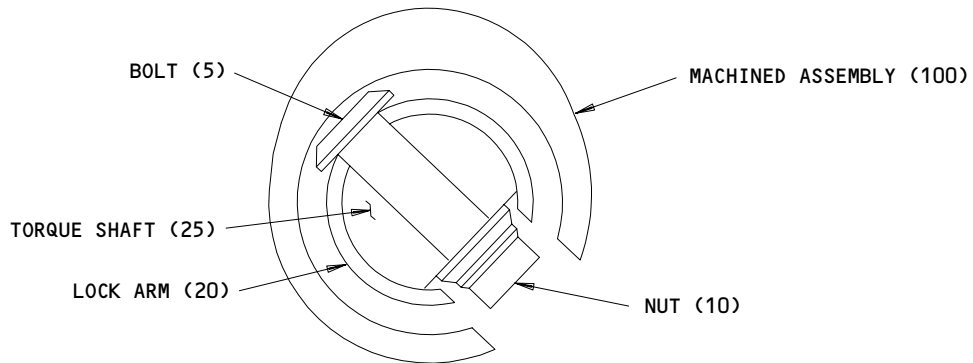
762807

13. Put the spring (45) on the other adapter (35).
  14. Put the adapter (35) with spring (45) and a washer (50) on the lock arm (20).
  15. For 141T6102-10, -11 assemblies, apply a thick layer of Dow Corning III or 976V compound to bearing surfaces of the lock arm (20) and to the bearings (95).
  16. Carefully put the lock arm (20) with adapter (35), spring (45), and washer (50) into the machined assembly (100). Make sure the end of the torque shaft (25) goes into the open end of the lock arm (20).
  17. Put the end of the spring (45) into the retainer (90). Shape the end of the spring (45) as shown in Fig. 703.
- CAUTION:** MAKE SURE THE SPRING (45) IS TIGHTLY CONNECTED TO THE RETAINER (90) BEFORE YOU ADJUST THE LENGTH OF THE SPRING (45). IF THE SPRING (45) IS CUT TOO SHORT, IT WILL NOT STAY CONNECTED TO THE ADAPTER (35).
18. Push the adapter (35) against the machined assembly (100). Cut the spring (45) so that it does not extend farther than the edge of the adapter arm (35). See Fig. 704.
  19. Attach the end of the spring (45) to the adapter (35) with the cotter pin (30). Bend the tangs of the cotter pin (30) as shown in Fig. 705.

**52-11-20**

01.101 ASSEMBLY  
Page 706  
Oct 01/92

20. Make sure the machined assembly (100) and lock arms (15, 20) are in position as shown in Fig. 702. Turn lock arm (20) and the torque shaft (25) to align the boltholes of each with the holes in the machined assembly (100).
21. Put the bolts (5) into the holes, and turn the torque shaft (25) and lock arms (15, 20) 180 degrees. Attach nuts (10) through the holes in the machine assembly (100). See Fig. 706.



Assembly Details  
 Figure 706

22. Remove grease that is not necessary for the operation of the completed carrier assembly (1). Make sure the drain holes are clear.

**NOTE:** For 141T6102-10, -11 assemblies, no more than 1.5 pounds of force applied at the end of the lock arm flag (3.3 inch-pounds) must be necessary to turn the completed carrier assembly (1) from any point in 360 degrees.

52-11-20

01.101

ASSEMBLY  
 Page 707  
 Oct 01/92

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.

**52-11-20**

ILLUSTRATED PARTS LIST

01

Page 1001

Jul 01/90

VENDORS

01226 VLIER ENGINEERING DIV OF BARRY WRIGHT CORP  
2333 VALLEY STREET  
BURBANK, CALIFORNIA 91505-1336

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

08524 DEUTSCH FASTENER CORP SEE CODE V97928

10630 ANILLO INDUSTRIES, INCORPORATED  
2090 NORTH GLASSELL  
ORANGE, CALIFORNIA 92667

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

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

77896 REXNORD INC BEARING OPERATION  
2400 CURTIS STREET  
DOWNERS GROVE, ILLINOIS 60515-4005

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

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

52-11-20

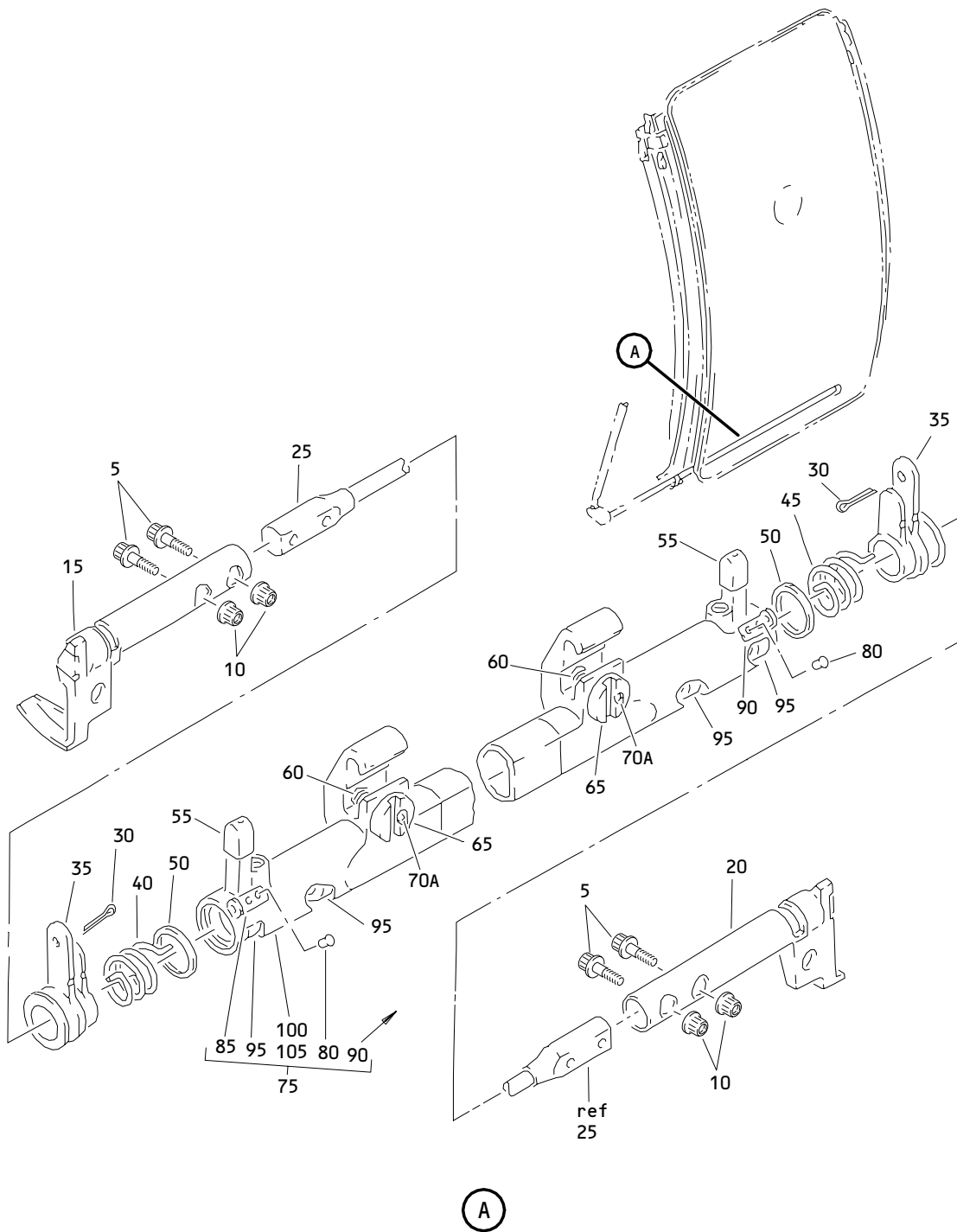
ILLUSTRATED PARTS LIST  
01 Page 1002  
Jul 01/90


**BOEING**  
 COMPONENT  
 MAINTENANCE MANUAL

PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
BACB30NX8K8		1	5	4
BACR15DX4M		1	80	4
BACW10P316L		1	50	2
HL12VAZ8-8		1	5	4
L802-8K8		1	5	4
MS16624-4050		1	60	2
MS24665-304		1	30	2
NAS1805-4		1	10	4
SSB52N		1	70	2
SSB52P		1	70A	2
141T6102-10		1	1	RF
141T6102-11		1	1A	RF
141T6102-6		1	1B	RF
141T6102-7		1	1C	RF
141T6270-1		1	25	1
141T6270-5		1	25A	1
141T6555-6		1	35	2
141T6580-1		1	75A	1
141T6580-2		1	105A	1
141T6580-3		1	100A	1
141T6580-4		1	75	1
141T6580-5		1	105	1
141T6580-6		1	100	1
141T6632-1		1	65	2
141T6633-3		1	45	1
141T6633-4		1	40	1
141T6633-5		1	45A	1
141T6633-6		1	40A	1
141T6634-1		1	55	2
141T6636-5		1	85	1
141T6636-6		1	90	1
141T6648-1		1	15	1
141T6648-2		1	20	1
501-0014-016		1	95	4

52-11-20

 ILLUSTRATED PARTS LIST  
 01.1 Page 1003  
 Oct 01/92



Girt Bar Carrier Assembly  
 Figure 1

**52-11-20**

ILLUSTRATED PARTS LIST  
 01.1 Page 1004  
 Oct 01/92


**BOEING**  
 COMPONENT  
 MAINTENANCE MANUAL

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-					
-1	141T6102-10		CARRIER ASSY-GIRT BAR	A	RF
-1A	141T6102-11		CARRIER ASSY-GIRT BAR	B	RF
-1B	141T6102-6		CARRIER ASSY-GIRT BAR	C	RF
-1C	141T6102-7		CARRIER ASSY-GIRT BAR	D	RF
5	HL12VAZ8-8		.BOLT- (V56878) (SPEC BACB30NX8K8) (OPT HL12VAZ8-8 (V73197)) (OPT HL12VAZ8-8 (V92215)) (OPT HL12VAZ8-8 (V97928)) (OPT L802-8K8 (V06725)) (OPT HL12VAZ8-8 (V08524))		4
10	NAS1805-4		.NUT		4
15	141T6648-1		.ARM-LOCK		1
20	141T6648-2		.ARM-LOCK		1
25	141T6270-1		.SHAFT-TORQUE (OPT ITEM 25A)		1
-25A	141T6270-5		.SHAFT-TORQUE (OPT ITEM 25)		1
30	MS24665-304		.PIN-COTTER		2
35	141T6555-6		.ADAPTER		2
40	141T6633-4		.SPRING- (OPT ITEM 40A)		1
-40A	141T6633-6		.SPRING- (OPT ITEM 40)		1
45	141T6633-3		.SPRING- (OPT ITEM 45A)		1
-45A	141T6633-5		.SPRING- (OPT ITEM 45)		1
50	BACW10P316L		.WASHER- (V10630) (SPEC BACW10P316L)		2
55	141T6634-1		.SLEEVE-RUBBER		2
60	MS16624-4050		.RING		2

52-11-20

ILLUSTRATED PARTS LIST

01

Page 1005

Jul 01/90



FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-65	141T6632-1		.LOCK-GIRT BAR		2
70	SSB52N		DELETED		
70A	SSB52P		.PLUNGER-BALL (V01226)		2
75	141T6580-4		.CARRIER ASSY-WELD	A,C	1
-75A	141T6580-1		.CARRIER ASSY-WELD	B,D	1
80	BACR15DX4M		..RIVET- (SIZE DETERMINE ON INST)		4
85	141T6636-5		..RETAINER		1
90	141T6636-6		..RETAINER		1
95	501-0014-016		..BEARING- (V77896)		4
100	141T6580-6		..MACHINED ASSY	A,C	1
-100A	141T6580-3		..MACHINED ASSY	B,D	1
105	141T6580-5		...WELDED ASSY	A,C	1
-105A	141T6580-2		...WELDED ASSY	B,D	1

52-11-20

ILLUSTRATED PARTS LIST

01.1 Page 1006

Jul 01/91