

 **BOEING**
COMPONENT
MAINTENANCE MANUAL

TO: ALL HOLDERS OF LEADING EDGE SLAT TRACK ASSEMBLIES COMPONENT MAINTENANCE
MANUAL 27-81-28

REVISION NO. 9 DATED MAR 01/05

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

REPAIR 4-2

Changed chrome plate repair to nickel plate to reflect the engineering.

602

REPAIR 5-2

602

REPAIR 6-2

602

REPAIR 7-2

601

27-81-28

HIGHLIGHTS

01.1

Page 1

Mar 01/05

LEADING EDGE SLAT TRACK ASSEMBLIES

PART NUMBERS 114T0101-1
114T0233-1,-5
114T3302-1
114T4180-1 THRU -5,-11 THRU -15,
-21 THRU -25,-31 THRU -35,
-43,-44,-45,-53,-54,-55,
-57,-58,-61,-62,-63,-65,
-67,-69,-71,-85,-89,-90

COMPONENT MAINTENANCE MANUAL
WITH
ILLUSTRATED PARTS LIST

27-81-28

TITLE PAGE

Page 1

Jul 01/04

01.1

114T0101
114T0233
114T3302
114T4180



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

27-81-28

REVISION RECORD

01.1

Page 1

Mar 01/00

143739

114T0101
114T0233
114T3302
114T4180



TEMPORARY REVISION AND SERVICE BULLETIN RECORD

BOEING SERVICE BULLETIN	BOEING TEMPORARY REVISION	OTHER DIRECTIVE	DATE OF INCORPORATION INTO MANUAL
		PRR B12628-2	JUL 01/04

27-81-28

TR & SB RECORD

01.1

Page 1

Jul 01/04

114T0101
 114T0233
 114T3302
 114T4180

 **BOEING**
 COMPONENT
 MAINTENANCE MANUAL

PAGE	DATE	CODE	PAGE	DATE	CODE
27-81-28			REPAIR 2-1		
			601	MAR 01/02	01.1
			602	MAR 01/02	01.1
TITLE PAGE			REPAIR 2-2		
1	JUL 01/04	01.1	601	MAR 01/02	01.1
2	BLANK		602	MAR 01/02	01.1
REVISION RECORD			REPAIR 3-1		
1	MAR 01/00	01.1	601	MAR 01/02	01.1
2	BLANK		602	MAR 01/00	01.1
TR & SB RECORD			REPAIR 4-1		
1	JUL 01/04	01.1	601	JUL 01/04	01.1
2	BLANK		602	JUL 01/04	01.1
LIST OF EFFECTIVE PAGES			603	JUL 01/04	01.101
*1	MAR 01/05	01	604	BLANK	
THRU LAST PAGE			REPAIR 4-2		
CONTENTS			601	JUL 01/04	01.1
1	JUL 01/04	01.1	*602	MAR 01/05	01.1
2	BLANK		603	JUL 01/04	01.1
INTRODUCTION			604	MAR 01/02	01.1
1	MAR 01/00	01.1	605	MAR 01/02	01.1
2	BLANK		606	MAR 01/02	01.1
DESCRIPTION & OPERATION			607	MAR 01/02	01.1
1	MAR 01/00	01.1	608	BLANK	
2	BLANK		REPAIR 5-1		
CHECK			601	MAR 01/02	01.1
501	MAR 01/00	01.1	602	MAR 01/02	01.1
502	BLANK		REPAIR 5-2		
REPAIR-GENERAL			601	JUL 01/04	01.1
601	MAR 01/02	01.1	*602	MAR 01/05	01.1
602	JUL 01/04	01.1	603	MAR 01/02	01.1
REPAIR 1-1			604	MAR 01/02	01.1
601	MAR 01/02	01.1	605	MAR 01/02	01.1
602	MAR 01/00	01.1	606	MAR 01/02	01.1
			607	MAR 01/02	01.1
			608	BLANK	

* = REVISED, ADDED OR DELETED

27-81-28

EFFECTIVE PAGES
 CONTINUED Page 1
 01 Mar 01/05

PAGE	DATE	CODE	PAGE	DATE	CODE
REPAIR 6-1			REPAIR 9-1		
601	MAR 01/02	01.1	601	JUL 01/04	01.1
602	MAR 01/02	01.1	602	JUL 01/04	01.1
REPAIR 6-2			603	JUL 01/04	01.101
601	NOV 01/00	01.1	604	BLANK	
*602	MAR 01/05	01.1	REPAIR 9-2		
603	MAR 01/02	01.1	601	JUL 01/04	01.1
604	MAR 01/02	01.1	602	JUL 01/04	01.1
605	MAR 01/02	01.1	603	JUL 01/04	01.101
606	MAR 01/02	01.1	604	JUL 01/04	01.101
607	MAR 01/02	01.1	605	JUL 01/04	01.101
608	BLANK		606	JUL 01/04	01.101
REPAIR 7-1			REPAIR 10-1		
601	MAR 01/02	01.1	601	MAR 01/02	01.1
602	MAR 01/02	01.1	602	MAR 01/02	01.1
REPAIR 7-2			REPAIR 10-2		
*601	MAR 01/05	01.1	601	JUL 01/04	01.1
602	MAR 01/02	01.1	602	MAR 01/02	01.1
603	MAR 01/02	01.1	603	MAR 01/02	01.1
604	MAR 01/02	01.1	604	BLANK	
605	MAR 01/02	01.1	REPAIR 11-1		
606	MAR 01/02	01.1	601	MAR 01/02	01.1
607	MAR 01/02	01.1	602	MAR 01/02	01.1
608	BLANK		REPAIR 11-2		
REPAIR 8-1			601	JUL 01/04	01.1
601	MAR 01/02	01.1	602	MAR 01/02	01.1
602	MAR 01/02	01.1	603	MAR 01/02	01.1
REPAIR 8-2			604	BLANK	
601	JUL 01/04	01.1	REPAIR 12-1		
602	JUL 01/04	01.1	601	MAR 01/02	01.1
603	JUL 01/04	01.1	602	MAR 01/02	01.1
604	MAR 01/02	01.1	REPAIR 12-2		
605	MAR 01/02	01.1	601	JUL 01/04	01.1
606	MAR 01/02	01.1	602	MAR 01/02	01.1
607	MAR 01/02	01.1	603	MAR 01/02	01.1
608	BLANK		604	MAR 01/02	01.1

* = REVISED, ADDED OR DELETED

27-81-28

EFFECTIVE PAGES
 CONTINUED Page 2
 01 Mar 01/05

114T0101
 114T0233
 114T3302
 114T4180



PAGE	DATE	CODE	PAGE	DATE	CODE
REPAIR 13-1					
601	MAR 01/02	01.1			
602	MAR 01/02	01.1			
REPAIR 13-2					
601	JUL 01/04	01.1			
602	MAR 01/02	01.1			
603	MAR 01/02	01.1			
604	BLANK				
FITS AND CLEARANCES					
801	MAR 01/02	01.1			
802	MAR 01/02	01.1			
ILLUSTRATED PARTS LIST					
1001	MAR 01/00	01.1			
1002	JUL 01/04	01.1			
1003	JUL 01/04	01.1			
1004	JUL 01/04	01.1			
1005	JUL 01/04	01.1			
1006	JUL 01/04	01.1			
1007	JUL 01/04	01.1			
1008	JUL 01/04	01.1			
1009	JUL 01/04	01.1			
1010	JUL 01/04	01.1			
1011	JUL 01/04	01.1			
1012	JUL 01/04	01.1			
1013	JUL 01/04	01.1			
1014	JUL 01/04	01.1			
1015	JUL 01/04	01.1			
1016	JUL 01/04	01.1			
1017	JUL 01/04	01.1			
1018	JUL 01/04	01.1			
1019	JUL 01/04	01.1			
1020	JUL 01/04	01.1			
1021	JUL 01/04	01.1			
1022	JUL 01/04	01.1			

* = REVISED, ADDED OR DELETED

27-81-28

EFFECTIVE PAGES
 LAST PAGE Page 3
 01 Mar 01/05

114T0101
114T0233
114T3302
114T4180



TABLE OF CONTENTS

<u>Paragraph Title</u>	<u>Page</u>
Description and Operation	1
Testing and Trouble Shooting (not applicable)	
Disassembly (not applicable)	
Cleaning.*[1]	
Check	501
Repair.	601
Assembly (not applicable)	
Fits and Clearances	801
Special Tools (not applicable)	
Illustrated Parts List.	1001

*[1] Special instructions are not necessary. Use standard industry practices and the instructions in SOPM 20-30-03.

27-81-28

CONTENTS
Page 1
Jul 01/04

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 Revision &
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.

27-81-28

INTRODUCTION

01.1

Page 1

Mar 01/00

114T0101
114T0233
114T3302
114T4180



LEADING EDGE SLAT TRACK ASSEMBLIES

DESCRIPTION AND OPERATION

1. The leading edge slat track assemblies are the tracks used to support and guide the L.E. slats during extension and retraction. The track assemblies consist of track forgings and bushings.

27-81-28

DESCRIPTION & OPERATION

01.1

Page 1

Mar 01/00

CHECK

1. Check all parts for obvious defects in accordance with standard industry practices.
2. Refer to FITS AND CLEARANCES for design dimensions and wear limits.
- | 3. Magnetic particle check the following parts per 20-20-01, class A, critical.
 - A. Track (35, IPL Fig. 1)
 - B. Track (25, IPL Fig. 2)
 - C. Track (15, IPL Fig. 3)
 - | D. Track (30, 35, 40, 45, 50, 55, 60, IPL Fig. 4)
 - | E. Track (105, IPL Fig. 5)
4. Deleted.

27-81-28

CHECK
01.1 Page 501
Mar 01/00

REPAIR – GENERAL

1. Content

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

<u>P/N</u>	<u>NAME</u>	<u>REPAIR</u>
114T0101	INBD SLAT AUX TRACK ASSEMBLY	1-1
114T0233	OUTBD SLAT AUX TRACK ASSEMBLY	2-1
114T3302	INBD LE SLAT TRACK ASSEMBLY	3-1
114T4180-1,-11,-21,-31 -57,-58	OUTBD LE 1/12 MAIN TRACK ASSEMBLY	4-1, 4-2
114T4180-12,-2,-22,-32	OUTBD LE 2/11 MAIN TRACK ASSEMBLY	5-1, 5-2
114T4180-13,-23,-3,-33 -43,-53	OUTBD LE 3/10 MAIN TRACK ASSEMBLY	6-1, 6-2
114T4180-14,-24,-34,-4 -44,-54	OUTBD LE 4/9 MAIN TRACK ASSEMBLY	7-1, 7-2
114T4180-15,-25,-35,-45 -5,-55	OUTBD LE 5/8 MAIN TRACK ASSEMBLY	8-1, 8-2
114T4180-61,-62,-63	OUTBD LE 1/12 MAIN TRACK ASSEMBLY	9-1, 9-2
114T4180-65, -85	OUTBD LE 2/11 MAIN TRACK ASSEMBLY	10-1, 10-2
114T4180-67	OUTBD LE 3/10 MAIN TRACK ASSEMBLY	11-1, 11-2
114T4180-69	OUTBD LE 4/9 MAIN TRACK ASSEMBLY	12-1, 12-2
114T4180-71	OUTBD LE 5/8 MAIN TRACK ASSEMBLY	13-1, 13-2

2. Standard Practices

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

20-00-00 Introduction
20-10-01 Repair and Refinish of High Strength Steel Parts
20-10-02 Machining of Alloy Steel
20-10-03 Shot Peening
20-20-01 Magnetic Particle Inspection
20-30-02 Stripping of Protective Finishes
20-30-03 General Cleaning Procedures
20-40-01 Decoding Table for Boeing Finish Codes
20-41-02 Application of Chemical and Solvent Resistant Finishes
20-42-05 Bright Cadmium Plating
20-42-10 Low Hydrogen Embrittlement Stylus Cadmium Plating
20-50-03 Bearing and Bushing Replacement
20-50-19 General Sealing
20-60-02 Finishing Materials
20-60-04 Miscellaneous Materials

3. Materials

NOTE: Equivalent substitutes can be used.

- A. Sealant -- BMS 5-95 (SOPM 20-60-04)
B. Primer -- BMS 10-11, Type 1 (SOPM 20-60-02)
C. Enamel -- BMS 10-60 gray gloss enamel (SOPM 20-60-02)

4. Dimensioning Symbols

- A. Standard True Position Dimensioning Symbols used in applicable repair procedures are shown in SOPM 20-00-00.

27-81-28

REPAIR-GENERAL

01.1

Page 602

Jul 01/04

INBOARD SLAT AUXILIARY TRACK ASSEMBLY – REPAIR 1-1

114T0101-1

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

1. Bushing Replacement (IPL Fig. 1, Fig. 601)
 - A. Remove bushings (15, 20, 25, 30).
 - B. Install bushings with wet BMS 5-95 sealant per 20-50-03.
 - C. Machine bushings as shown.
 - D. Fillet seal bushing flanges.
2. Deleted.

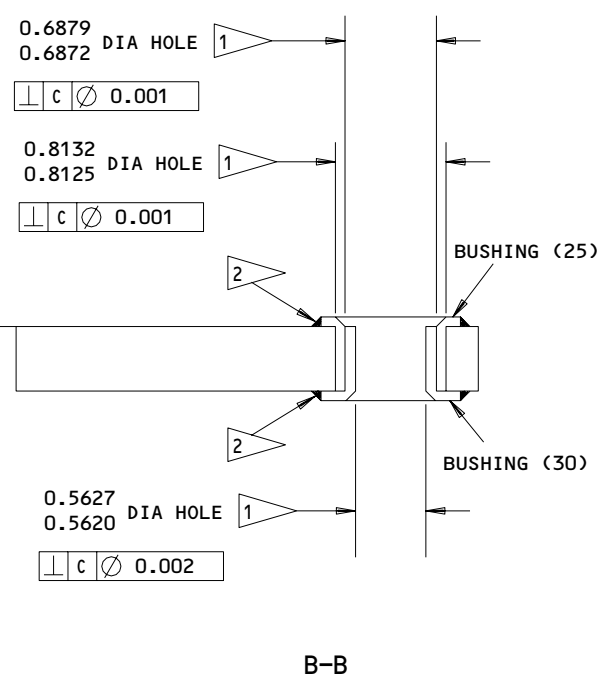
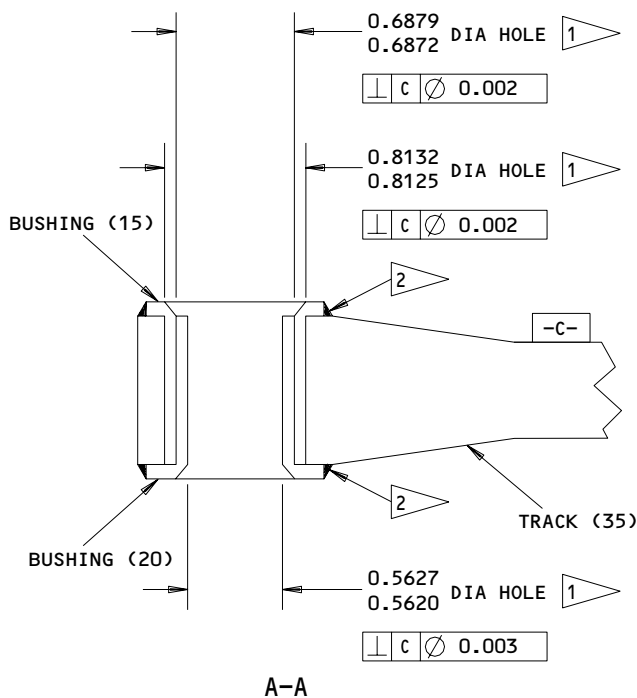
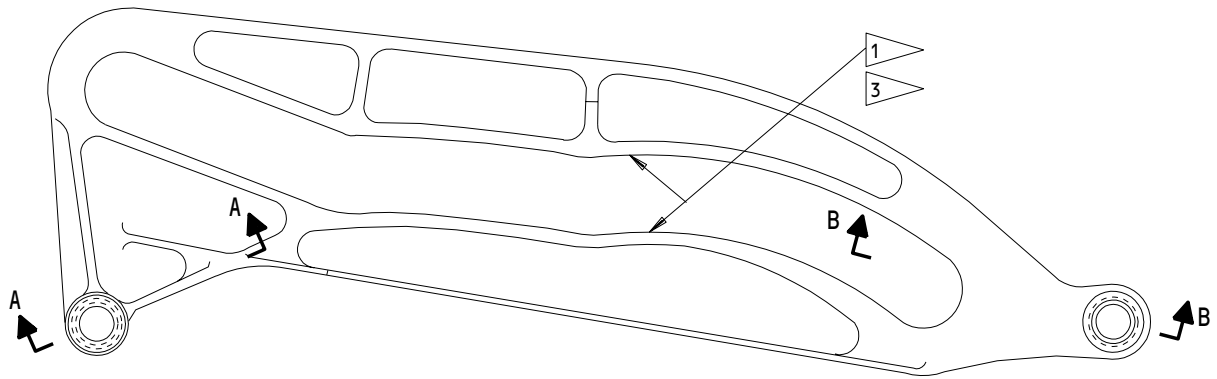
27-81-28

REPAIR 1-1

01.1

Page 601

Mar 01/02



REFINISH

TRACK (35) -- CADMIUM-TITANIUM PLATE 0.0005-0.0007 INCHES THICK (F-15.32). APPLY ONE COAT BMS 10-11 TYPE I PRIMER (F-20.02), AND BMS 10-60 GRAY GLOSS ENAMEL (SRF-14.9813) EXCEPT AS NOTED

MATERIAL: 4340M STEEL, 275-300 KSI
 ITEM NOS. REFER TO IPL FIG. 1
 ALL DIMENSIONS ARE IN INCHES

- 1 OMIT PRIMER AND ENAMEL
- 2 FILLET SEAL WITH BMS 5-95 SEALANT
- 3 ROLLER SURFACE

114T0101-1
 Inboard Slat Auxiliary Track - Repair
 Figure 601

27-81-28

REPAIR 1-1
 Page 602
 Mar 01/00

01.1

OUTBD LE SLAT AUXILIARY TRACK ASSEMBLY – REPAIR 2-1

114T0233-1, -5

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

1. Bushing Replacement (IPL Fig. 2, Fig. 601)
 - A. Remove bushings (5, 10, 15, 20).
 - B. Install bushings with wet BMS 5-95 sealant per 20-50-03.
 - C. Machine bushings as shown.
 - D. Fillet seal bushing flanges.
2. Deleted.

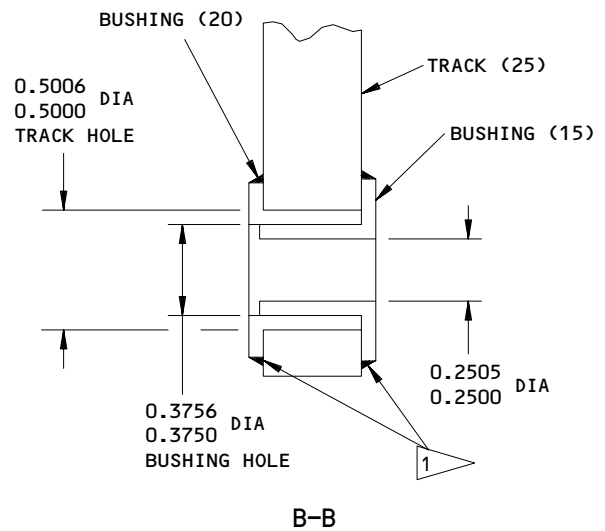
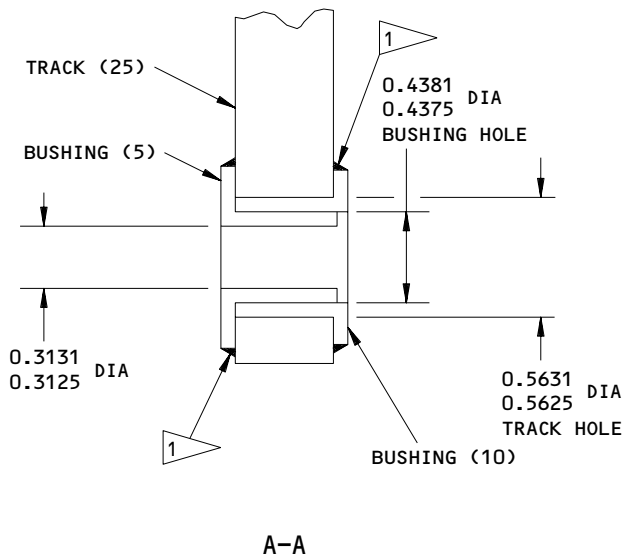
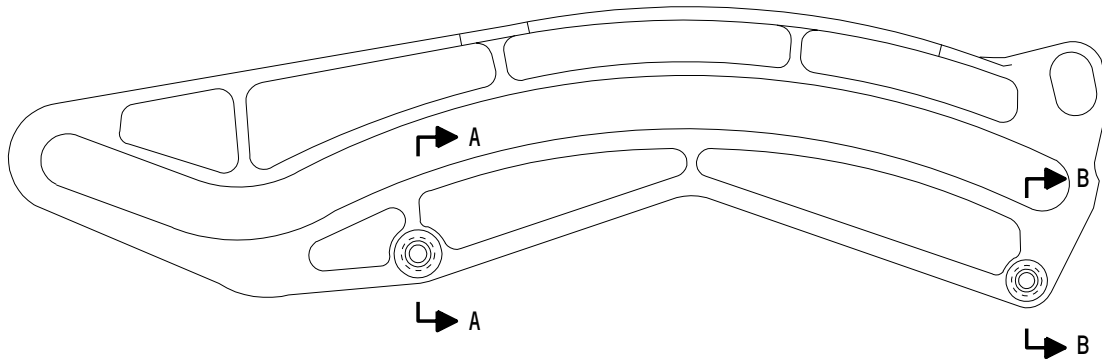
27-81-28

REPAIR 2-1

01.1

Page 601

Mar 01/02



 FILLET SEAL BUSHING WITH BMS 5-95

ITEM NUMBERS REFER TO IPL FIG. 2
 ALL DIMENSIONS ARE IN INCHES

114T0233-1,-5
 Outboard Leading Edge Slat Auxiliary Track - Repair
 Figure 601

27-81-28

REPAIR 2-1
 Page 602
 Mar 01/02

01.1

OUTBD LE SLAT AUXILIARY TRACK ASSEMBLY – REPAIR 2-2

114T0233-3, -7

NOTE: Refer to REPAIR – GENERAL for a 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. Roller Surface Repair (Fig. 601)

A. Strip organic finishes and plating as specified in SOPM 20-30-02.

NOTE: Bushings must be removed prior to stripping organic finish and plating.

B. Machine the damaged track roller surfaces up to the repair limit as shown in Fig. 601 using a minimum blend ratio of 10 to 1 and as specified in SOPM 20-10-02.

C. Magnetic particle check the track roller surfaces, class A, as specified in SOPM 20-20-01.

D. Shot peen the track roller surfaces as specified in SOPM 20-10-03, shot Rc55-65, intensity 0.008A, coverage 2.0.

E. Alkaline clean the track as specified in SOPM 20-30-03.

F. Refinish track as shown in Fig. 601.

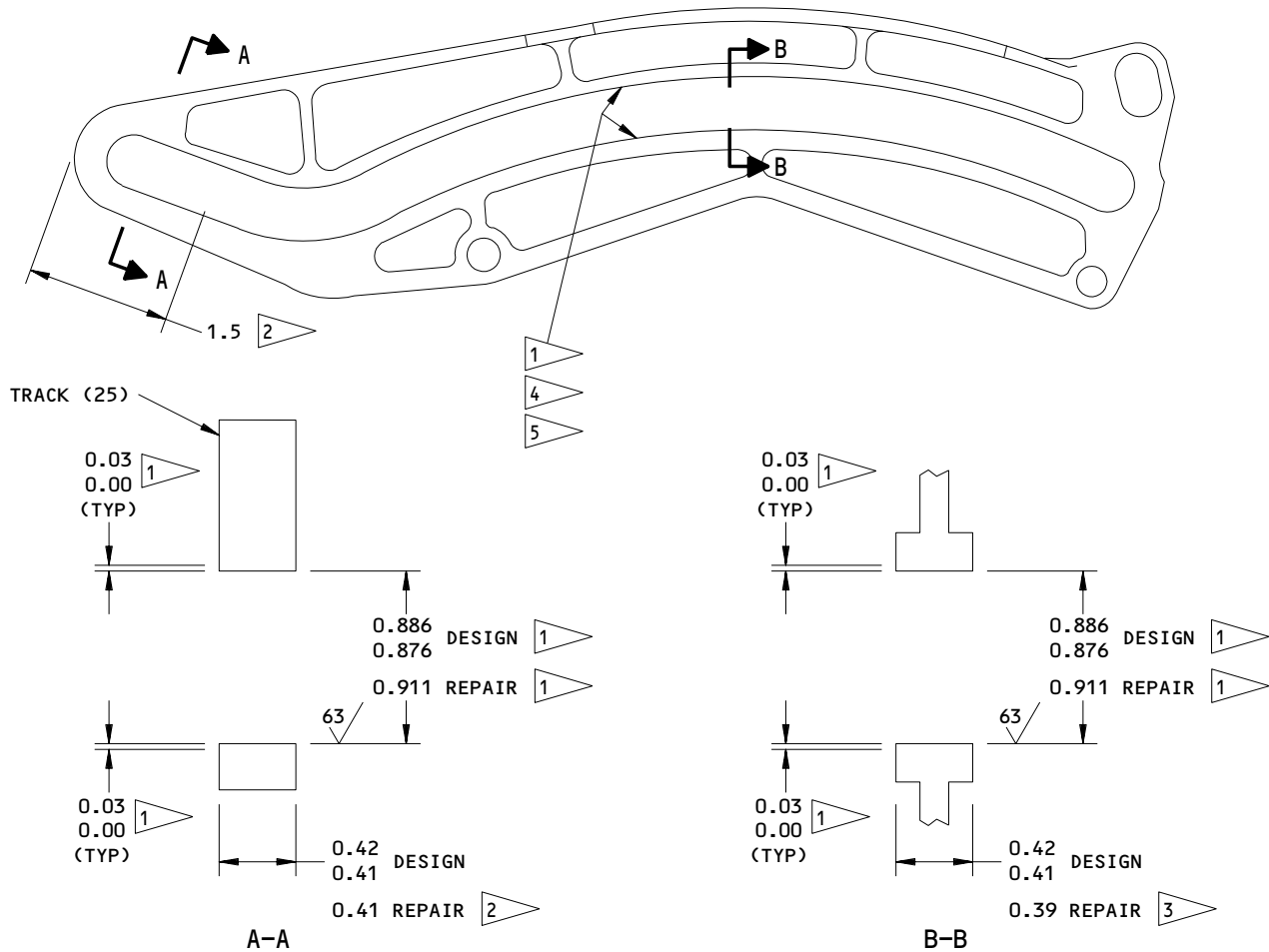
27-81-28

REPAIR 2-2

01.1

Page 601

Mar 01/02



REFINISH

114T0233-3 -- CADMIUM-TITANIUM PLATE (F-15.32) AND APPLY ONE COAT BMS 10-11, TYPE I, PRIMER (F-20.02). APPLY BMS 10-60 GRAY ENAMEL (SRF-14.9813) UNLESS SHOWN DIFFERENTLY

114T0233-7 -- CADMIUM-TITANIUM PLATE (F-15.01) AND APPLY ONE COAT BMS 10-11, TYPE I, PRIMER (F-20.02). APPLY BMS 10-60 GRAY ENAMEL (SRF-14.9813) UNLESS SHOWN DIFFERENTLY

MATERIAL: (114T0233-3) 4330 STEEL, 220-240 KSI
 (114T0233-7) 4340 STEEL, 275-300 KSI

BREAK SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 2

ALL DIMENSIONS ARE IN INCHES

- 1 OMIT PRIMER AND ENAMEL ON THIS SURFACE
- 2 REPAIR LIMIT APPLIES TO THE FORWARD 1.5 INCHES OF TRACK
- 3 REPAIR LIMIT APPLIES TO REMAINDER OF TRACK
- 4 ROLLER SURFACE
- 5 OPTIONAL: APPLY THERMAL SPRAY (F-15.370), 0.008 INCH MAXIMUM THICKNESS TO TRACK ROLLER SURFACES AFTER MACHINING

114T0233-3,-7
 Outboard Leading Edge Slat Auxiliary Track - Repair
 Figure 601

27-81-28

REPAIR 2-2

Page 602

Mar 01/02

01.1

INBOARD LE SLAT TRACK ASSEMBLY – REPAIR 3-1

114T3302-1, -3

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

1. Bushing Replacement (IPL Fig. 3, Fig. 601)
 - A. Remove bushings (5, 10).
 - B. Install bushings with wet BMS 5-95 sealant per 20-50-03.
 - C. Machine bushings as shown.
 - D. Fillet seal bushing flanges.
2. Deleted.

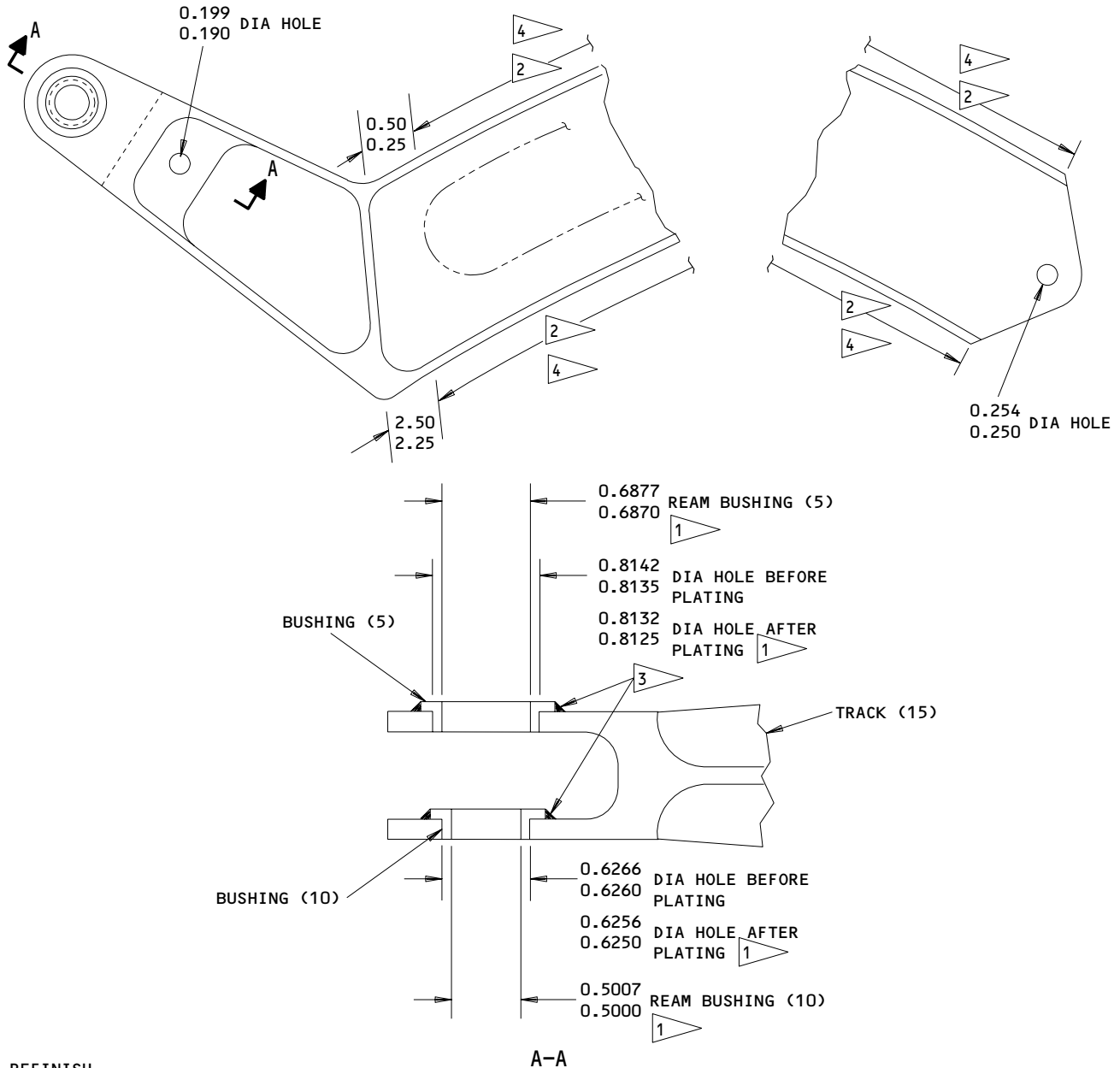
27-81-28

REPAIR 3-1

01.1

Page 601

Mar 01/02



REFINISH

TRACK (15) -- CADMIUM-TITANIUM PLATE 0.0005-0.0007 THICK (F-15.32). APPLY ONE COAT BMS 10-11, TYPE I, PRIMER (F-20.02), AND BMS 10-60 GRAY GLOSS ENAMEL (SRF-14.9813) EXCEPT AS NOTED

MATERIAL: 4340M STEEL, 275-300 KSI
 ITEM NOS. REFER TO IPL FIG. 3
 ALL DIMENSIONS ARE IN INCHES

- 1 NO PRIMER OR ENAMEL THIS SURFACE
- 2 NO ENAMEL THIS SURFACE
- 3 FILLET SEAL WITH BMS 5-95 SEALANT
- 4 ROLLER SURFACE

114T3302-1
 Inboard LE Slat Track - Repair
 Figure 601

27-81-28

REPAIR 3-1
 Page 602
 Mar 01/00

01.1

MAIN TRACK ASSEMBLY – REPAIR 4-1

114T4180-1, -11, -21, -31, -57, -58

NOTE: Refer to REPAIR-GENERAL for a list of applicable standard practices. Refer to IPL Fig. 4 or 5 for item numbers. For repair of surface which is only replacement of the original finish, refer to Refinish instructions in REPAIR 4-2.

1. Bearing Replacement

- A. Remove the old bearing (25, IPL Fig. 4; 10, IPL Fig. 5) as shown in SOPM 20-50-03.
- B. Install a replacement bearing with BMS 5-95 sealant.
- C. Roller (anvil) swage the bearing (SOPM 20-50-03).
- D. Do a push out load test (SOPM 20-50-03).
 - (1) For main track assembly 114T4180-1, use a push out load of 2000 pounds.
 - (2) For the other main track assemblies. Refer to SOPM 20-50-03, "anvil swaged bearing retention" to calculate the push-out loads.

2. Conduit Replacement

- A. Remove the rivets (50, IPL Fig. 5) and the old conduit.
- B. Install a replacement conduit with new rivets.
 - (1) Before you install the rivet, apply a layer of BMS 5-95 sealant to the shank to make a continuous extrusion of sealant around the tail of the rivet when the rivet is installed.

27-81-28

REPAIR 4-1

01.1

Page 601

Jul 01/04

- (2) Install the rivet. Machine the driven head to a maximum height of 0.10 inch. Apply BMS 10-11, Type 1 primer (F-18.12) and BMS 10-60, Type 1 enamel (F-14.9813, which replaces SRF-14.9813).
- (3) Apply a faying surface seal and fillet seal between the mating surfaces of the conduit flanges and the track with BMS 5-95 sealant (SOPM 20-50-19). Adjust the conduit to be inside the track and remove all gaps between the track and the conduit.
- (4) Fill the cavities around the wires with BMS 5-95 sealant (SOPM 20-50-19).

27-81-28

REPAIR 4-1

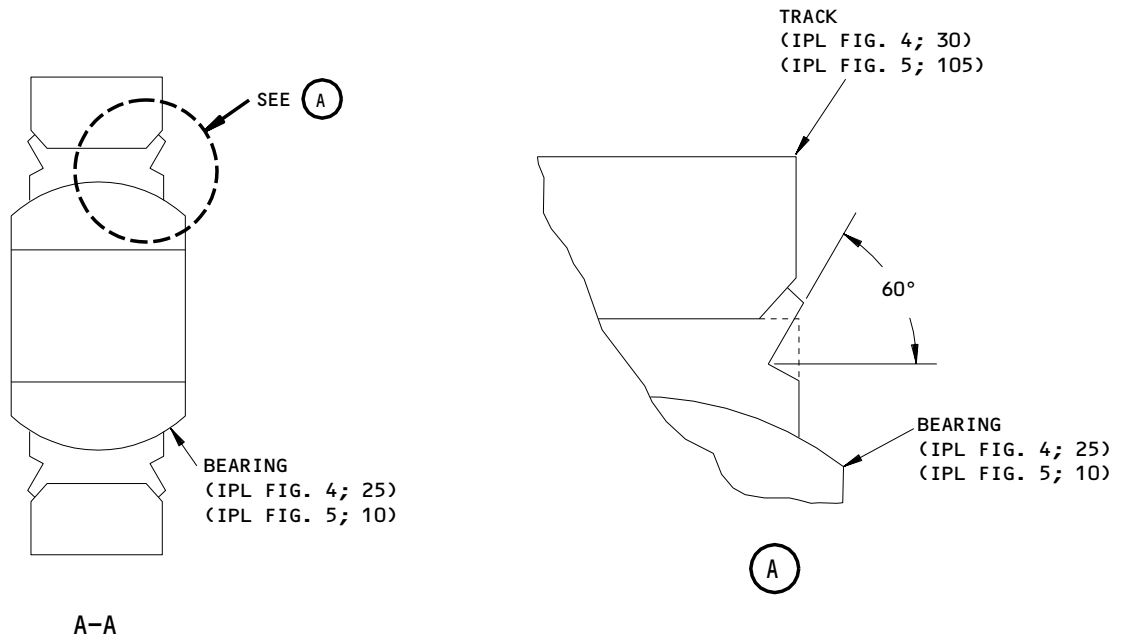
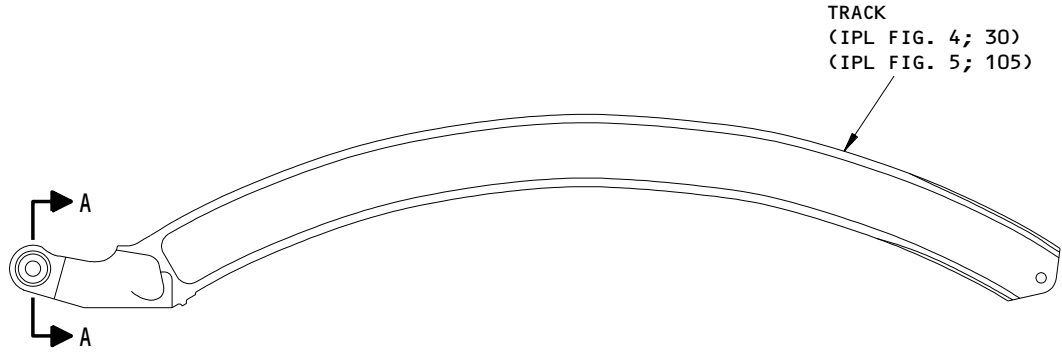
01.1

Page 602

Jul 01/04

114T0101
114T0233
114T3302
114T4180

BOEING
COMPONENT
MAINTENANCE MANUAL



ALL DIMENSIONS ARE IN INCHES

114T4180-1,-11,-21,-31,-57,-58
Main Track Assembly Repair
Figure 601

27-81-28

REPAIR 4-1

01.101

Page 603

Jul 01/04

LO3601

MAIN TRACK – REPAIR 4-2

114T4180-6, -16, -26, -36, -59

NOTE: Refer to REPAIR-GENERAL for a list of applicable standard practices. Refer to IPL Fig. 4 or 5 for item numbers. For repair of surface which is only replacement of the original finish, refer to Refinish instructions in Fig. 601.

1. Track Repair

- A. If the wear on the track (30, IPL Fig. 4; 105, IPL Fig. 5) is 0.010–0.025 inch compared to the design thickness, then the track is serviceable, but we recommend you repair the track per par. B.
- B. Repair the track (30, IPL Fig. 4; 105, IPL Fig. 5) as follows:
 - (1) Remove the finishes and the plating (SOPM 20-30-02). Abrasive blast cleaning can be used locally on the roller surfaces.
 - (2) Blend out the defects with a 100 to 1 ratio.
 - (3) Magnetic particle examine class A (SOPM 20-20-01).
 - (4) Nital etch examine (SOPM 20-10-02).
 - (5) Shot peen (SOPM 20-10-03).
 - (6) Refinish as indicated.
 - (7) Magnetic particle examine, class A (SOPM 20-20-01).
- C. If the wear on the track is greater than 0.025 inch, replace the track. Repair is not recommended.

27-81-28

REPAIR 4-2

01.1

Page 601

Jul 01/04

2. Track Bearing Bore Repair (Fig. 601)

A. Nickel Plate Repair

- (1) Remove paint and plating from the track (30, IPL Fig. 4; 105, IPL Fig. 5) (SOPM 20-30-02).
- (2) Do a magnetic particle check of the track bearing bore (SOPM 20-20-01).
- (3) Machine the track bearing bore within repair limits as shown in Fig. 601 (SOPM 20-10-02).
- (4) Apply nickel plate to the track bearing bore as shown in Fig. 601 (SOPM 20-42-09).
- (5) Machine the track bearing bore to the after plating dimensions shown in Fig. 601.

CAUTION: FAILURE TO FOLLOW THE CORRECT PROCEDURE IN SOPM 20-42-09 COULD RESULT IN HYDROGEN EMBRITTLEMENT AND CAUSE THE PART TO FAIL.

- (6) Be sure to bake the track to remove hydrogen (SOPM 20-42-09).
- (7) Refinish the track as indicated, shown in Fig. 601.
- (8) Install the bearing as specified in REPAIR 4-1.

B. Sleeve Repair

- (1) Remove paint and plating from the track bearing bore (SOPM 20-20-01).
- (2) Do a magnetic particle check of the track bearing bore (SOPM 20-20-01).
- (3) Machine the track bearing bore to the dimensions shown in Fig. 601 (SOPM 20-10-02).
- (4) Nital etch examine (SOPM 20-10-02).
- (5) Stress relieve the track (SOPM 20-10-02).
- (6) Do a magnetic particle check of the track bearing bore (SOPM 20-20-01).
- (7) Shot peen the track bearing bore (SOPM 20-10-03).

27-81-28

REPAIR 4-2
Page 602
Mar 01/05

01.1

- | (8) Apply low hydrogen embrittlement stylus cadmium plate to the track bearing bore as shown in Fig. 601 (SOPM 20-42-10).
- | (9) Make repair bushings as shown in Fig. 602.
- | (10) Refinish the track as indicated, shown in Fig. 601.
- (11) Apply BMS 5-95 to the track bearing bore.
- | (12) Install the repair bushing wet with BMS 5-95 sealant using the shrink-fit method (SOPM 20-50-03).
- | (13) Swage the repair bushing (SOPM 20-50-03).
- (14) Machine the repair bushing to the dimensions shown in Fig. 601.
- (15) Install the bearing as specified in REPAIR 4-1.

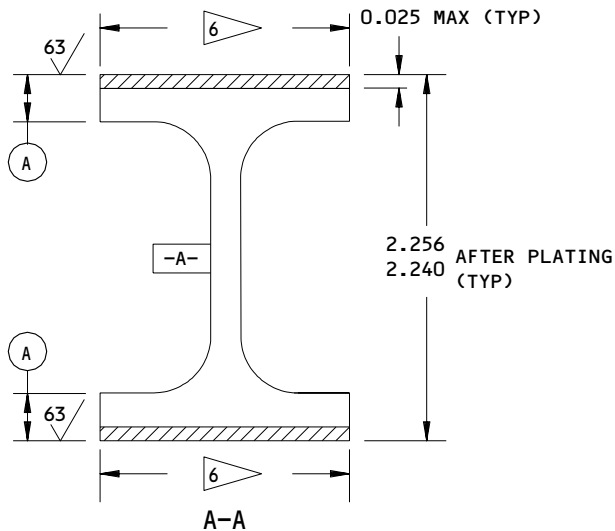
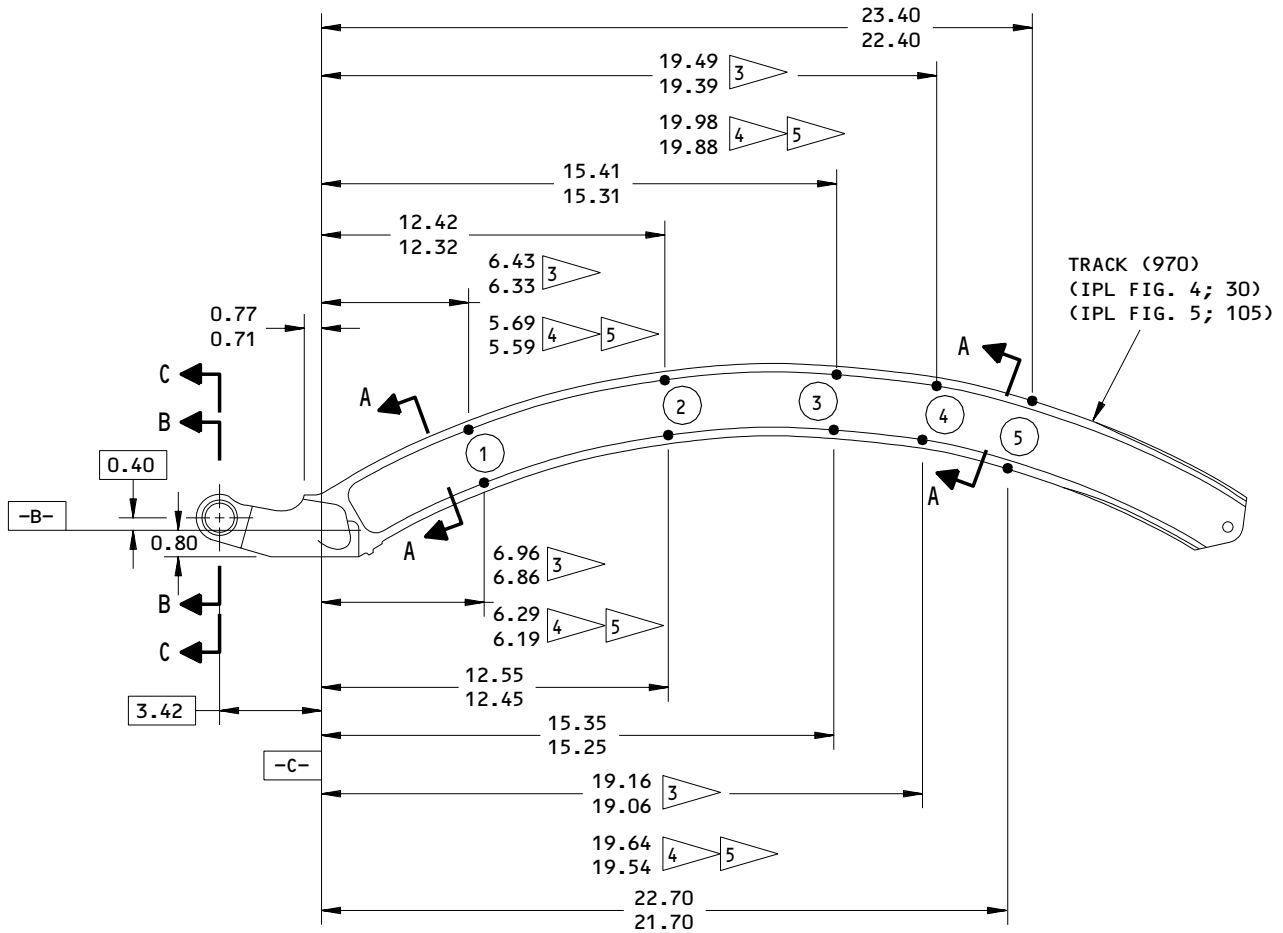
27-81-28

REPAIR 4-2

01.1

Page 603

Jul 01/04



ROLLER CONTACT WEAR SURFACE

114T4180-6,-16,-26,-36,-59
 Track Repair and Refinish
 Figure 601 (Sheet 1)

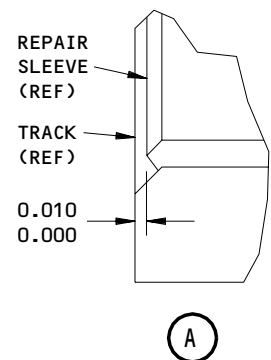
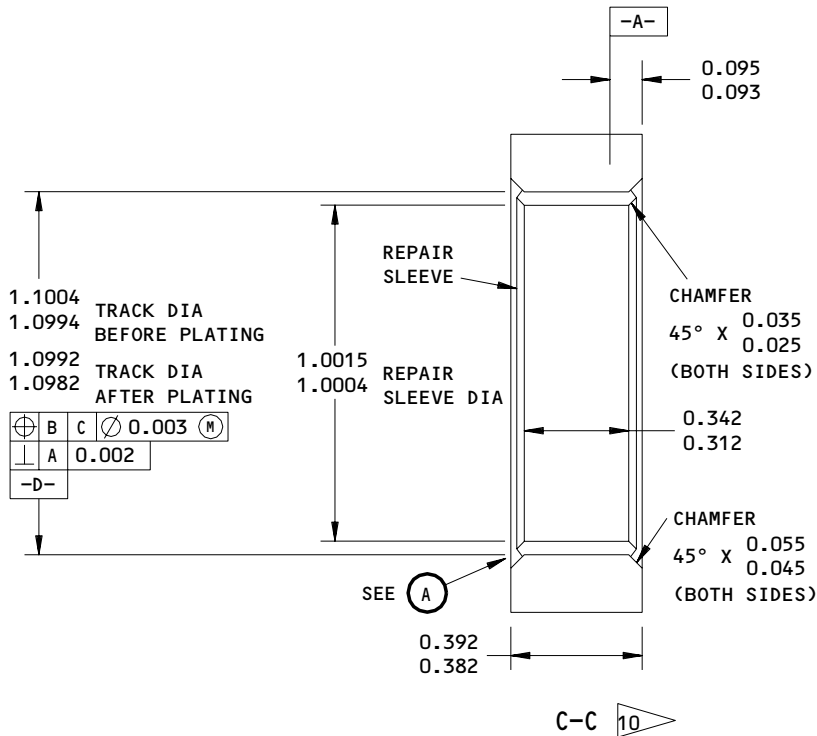
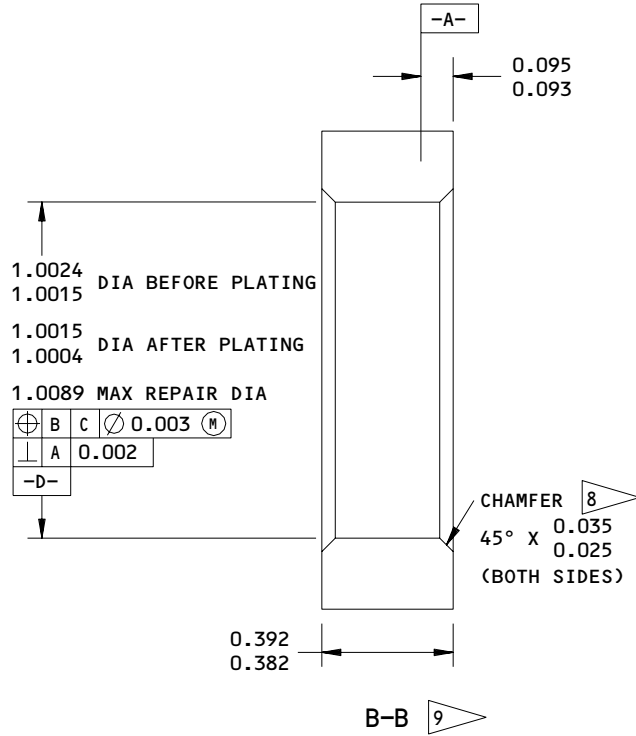
27-81-28

REPAIR 4-2
 Page 604
 Mar 01/02

01.1

114T0101
 114T0233
 114T3302
 114T4180

BOEING
 COMPONENT
 MAINTENANCE MANUAL



114T4180-6,-16,-26,-36,-59
 Track Repair and Refinish
 Figure 601 (Sheet 2)

27-81-28

REPAIR 4-2

Page 605

Mar 01/02

01.1

M33068

TRACK LOCATION	A						
	THICKNESS DESIGN DIMENSIONS 1		SERVICE WEAR MINIMUM THICKNESS 1 2 5			MINIMUM ALLOWABLE THICKNESS 1 2 7	
1	0.230 0.210		0.200			0.185	
2	0.260 0.240 3	0.280 0.260 4	0.230 3	0.250 4	0.215 3	0.235 4	
3	0.260 0.240 3	0.280 0.260 4	0.230 3	0.250 4	0.215 3	0.235 4	
4	0.230 0.210		0.200			0.185	
5	0.230 0.210		0.200			0.185	
END OF TRACK	0.230 0.210		0.200			0.185	

REFINISH

CADMIUM-TITANIUM PLATE (F-15.01) ALL OVER.

APPLY BMS 10-11, TYPE 1 PRIMER (F-20.02) ALL OVER, BUT NOT IN THE BEARING BORE OR ITS CHAMFERS.

APPLY BMS 10-60 ENAMEL (SRF-14.9813) OVER THE PRIMER, UNLESS SHOWN BY 6. WIPE WITH PRIMER (F-19.45) THE PLATED SURFACES OF THE BEARING BORE AND ITS CHAMFERS.

1 THE THICKNESS CHANGES UNIFORMLY BETWEEN LOCATIONS 1 AND 2, 3 AND 4.

2 MINIMUM THICKNESS IS EQUIVALENT TO THE LOWER DESIGN LIMIT LESS THE WEAR TOLERANCE. THE MAXIMUM THICKNESS AFTER REPAIR MUST NOT BE MORE THAN THE HIGHER DESIGN LIMIT SHOWN.

3 FOR SLAT TRACK 114T4180-6,-16.

4 FOR SLAT TRACK 114T4180-26,-36.

5 REPAIR IS NOT NECESSARY IF TRACK THICKNESS IS GREATER THAN THICKNESS SHOWN. THIS LETS 0.01 OF WEAR BE ON THE TRACK WEAR SURFACE.

6 NO ENAMEL (SRF-14.9813) ON THIS SURFACE.

7 THE TRACK CAN BE REPAIRED UNTIL IT IS WORN DOWN TO THIS MINIMUM THICKNESS. THE TRACK MUST BE REPLACED IF IT IS WORN MORE THAN THIS. THIS LETS 0.025 OF WEAR BE ON THE TRACK WEAR SURFACE.

REPAIR

125/ ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

MATERIAL: 4340M STEEL, 275-300 KSI

ALL DIMENSIONS ARE IN INCHES

8 OMIT CHROME PLATE

9 CHROME PLATE REPAIR AND BEARING REPLACEMENT

10 SLEEVE REPAIR

114T4180-6,-16,-26,-36,-59
 Track Repair and Refinish
 Figure 601 (Sheet 3)

27-81-28

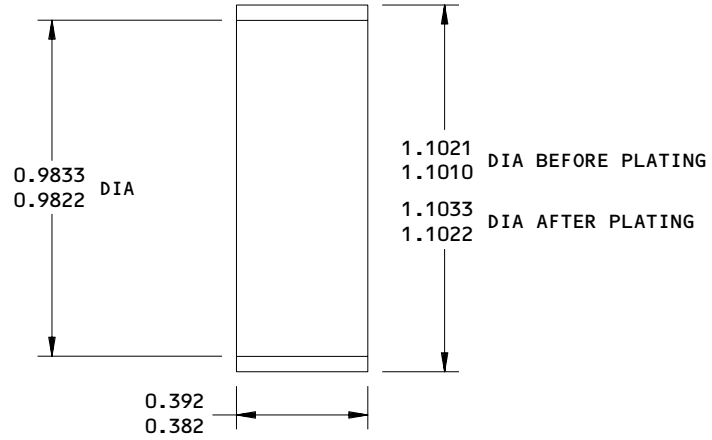
REPAIR 4-2

Page 606

Mar 01/02

01.1

114T0101
114T0233
114T3302
114T4180



63/ ALL MACHINED SURFACES UNLESS SHOWN
DIFFERENTLY

BREAK ALL SHARP EDGES

CADMIUM PLATE (F-15.29) OUTSIDE DIAMETER

MATERIAL: 304 CRES ANNEALED

MAGNETIC PARTICLE INSPECT

ALL DIMENSIONS ARE IN INCHES

Repair Sleeve Details
Figure 602

27-81-28

REPAIR 4-2

01.1

Page 607

Mar 01/02

M33171

MAIN TRACK ASSEMBLY – REPAIR 5-1

114T4180-2, -12, -22, -32

NOTE: Refer to REPAIR-GENERAL for a list of applicable standard practices. Refer to IPL Fig. 4 for item numbers. For repair of surfaces which is only replacement of the original finish, refer to Refinish instructions in REPAIR 5-2.

1. Bearing Replacement

- A. Remove the old bearing (25A) as shown in 20-50-03.
- B. Install a replacement bearing with BMS 5-95 sealant.
- C. Roller (anvil) swage the bearing per 20-50-03.
- D. Do a push out load test as shown in 20-50-03.
 - (1) For main track assembly, part number 114T4180-2, use a push out load of 2554 pounds.
 - (2) For the other main track assemblies, see SOPM 20-50-03, "anvil swaged bearing retention" section for push out loads.

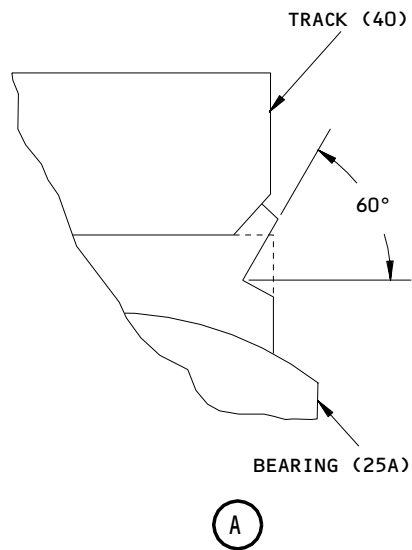
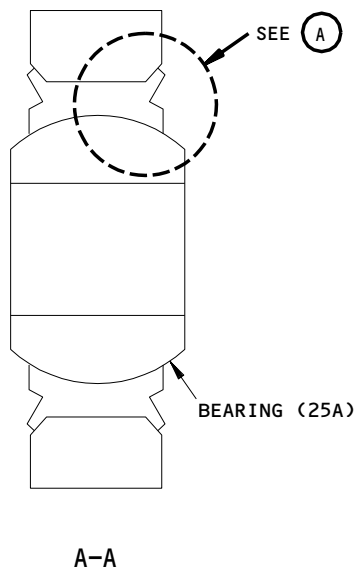
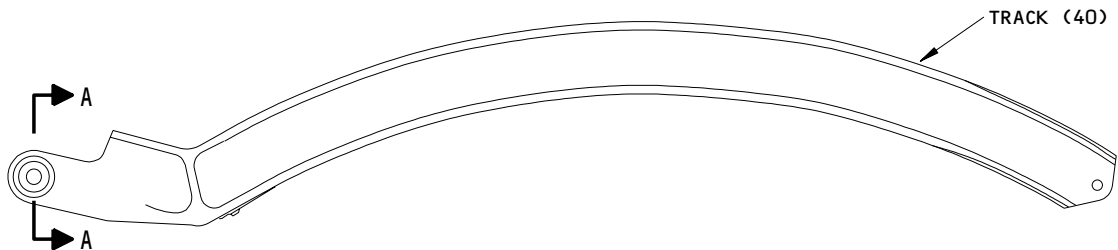
27-81-28

REPAIR 5-1

01.1

Page 601

Mar 01/02



ITEM NUMBERS REFER TO IPL FIG. 4
 ALL DIMENSIONS ARE IN INCHES

114T4180-2,-12,-22,-32
 Main Track Assembly Repair
 Figure 601

27-81-28

REPAIR 5-1
 Page 602
 Mar 01/02

01.1

MAIN TRACK - REPAIR 5-2

114T4180-7, -17, -27, -37

NOTE: Refer to REPAIR-GENERAL for a list of applicable standard practices. Refer to IPL Fig. 4 for item numbers. For repair of surfaces which is only replacement of the original finish, refer to Refinish instructions in Fig. 601.

1. Track Repair

- A. If the wear on the track (40) is 0.010-0.025 inch compared to the design thickness, then the track is serviceable, but we recommend you repair the track per par. B.
- B. Repair the track (40) as follows:
 - (1) Remove the finishes and the plating (SOPM 20-30-02). Abrasive blast cleaning can be used locally on the roller surfaces.
 - (2) Blend out the defects with a 100 to 1 ratio.
 - (3) Magnetic particle examine class A (SOPM 20-20-01).
 - (4) Nital etch examine (SOPM 20-10-02).
 - (5) Shot peen (SOPM 20-10-03)
 - (6) Refinish as indicated.
 - (7) Magnetic particle examine class A (SOPM 20-20-01).
- C. If the wear on the track is greater than 0.025 inch, replace the track. Repair is not recommended.

27-81-28

REPAIR 5-2

01.1

Page 601

Jul 01/04

2. Track Bearing Bore Repair (Fig. 601)

A. Nickel Plate Repair

- (1) Remove paint and plating from the track (40, IPL Fig. 4) as specified in (SOPM 20-30-02).
- (2) Do a magnetic particle check of the track bearing bore as specified in (SOPM 20-20-01).
- (3) Machine the track bearing bore as required up to the repair diameter shown in Fig. 601 as specified in (SOPM 20-10-02).
- (4) Apply nickel sulphamate plate to the track bearing bore as shown in Fig. 601 and as specified in (SOPM 20-42-09).
- (5) Machine the track bearing bore to the after plating dimensions shown in Fig. 601.

CAUTION: FAILURE TO FOLLOW THE CORRECT PROCEDURE IN SOPM 20-42-09 COULD RESULT IN HYDROGEN EMBRITTELEMENT AND CAUSE THE PART TO FAIL.

- (6) Brake the track to remove hydrogen as specified in (SOPM 20-42-09).
- (7) Refinish the track as shown in Fig. 601.
- (8) Install the bearing as specified in REPAIR 5-1.

B. Sleeve Repair

- (1) Remove paint and plating from the track (40, IPL Fig. 4) as specified in (SOPM 20-30-02).
- (2) Do a magnetic particle check of the track bearing bore as specified in (SOPM 20-20-01).
- (3) Machine the track bearing bore to the dimensions shown in Fig. 601 as specified in (SOPM 20-10-02).
- (4) Nital etch check as specified in (SOPM 20-10-02).
- (5) Stress relieve track as specified in (SOPM 20-10-02).
- (6) Do a magnetic particle check of the track bearing bore as specified in (SOPM 20-20-01).
- (7) Shot peen the track bearing bore as specified in (SOPM 20-20-01).

27-81-28

REPAIR 5-2

01.1

Page 602

Mar 01/05

- | (8) Apply low hydrogen embrittlement stylus cadmium plate to the track bearing bore as shown in Fig. 601 and as specified in (SOPM 20-42-10).
- | (9) Fabricate repair bushing as shown in Fig. 602.
- | (10) Refinish track as shown in Fig. 601.
- | (11) Apply BMS 5-95 to the track bearing bore.
- | (12) Install the repair bushing wet with BMS 5-95 sealant using the shrink fit method as specified in (SOPM 20-50-03).
- | (13) Swage the repair bushing as specified in (SOPM 20-50-03).
- | (14) Machine the repair bushing to the dimensions shown in Fig. 601.
- | (15) Install the bearing as specified in REPAIR 5-1.

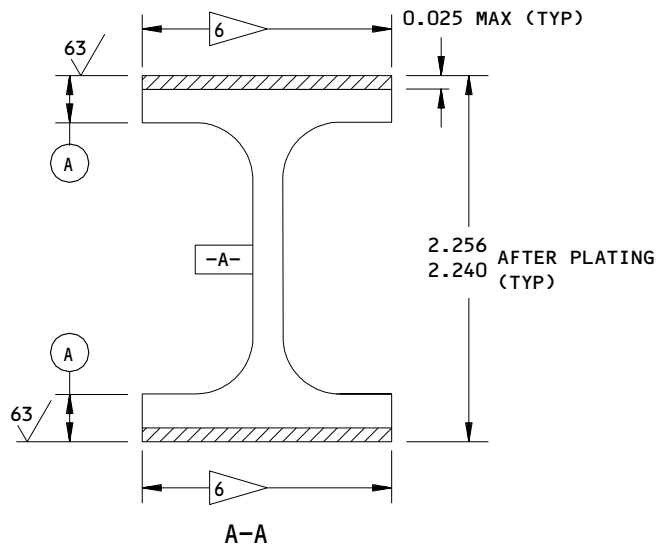
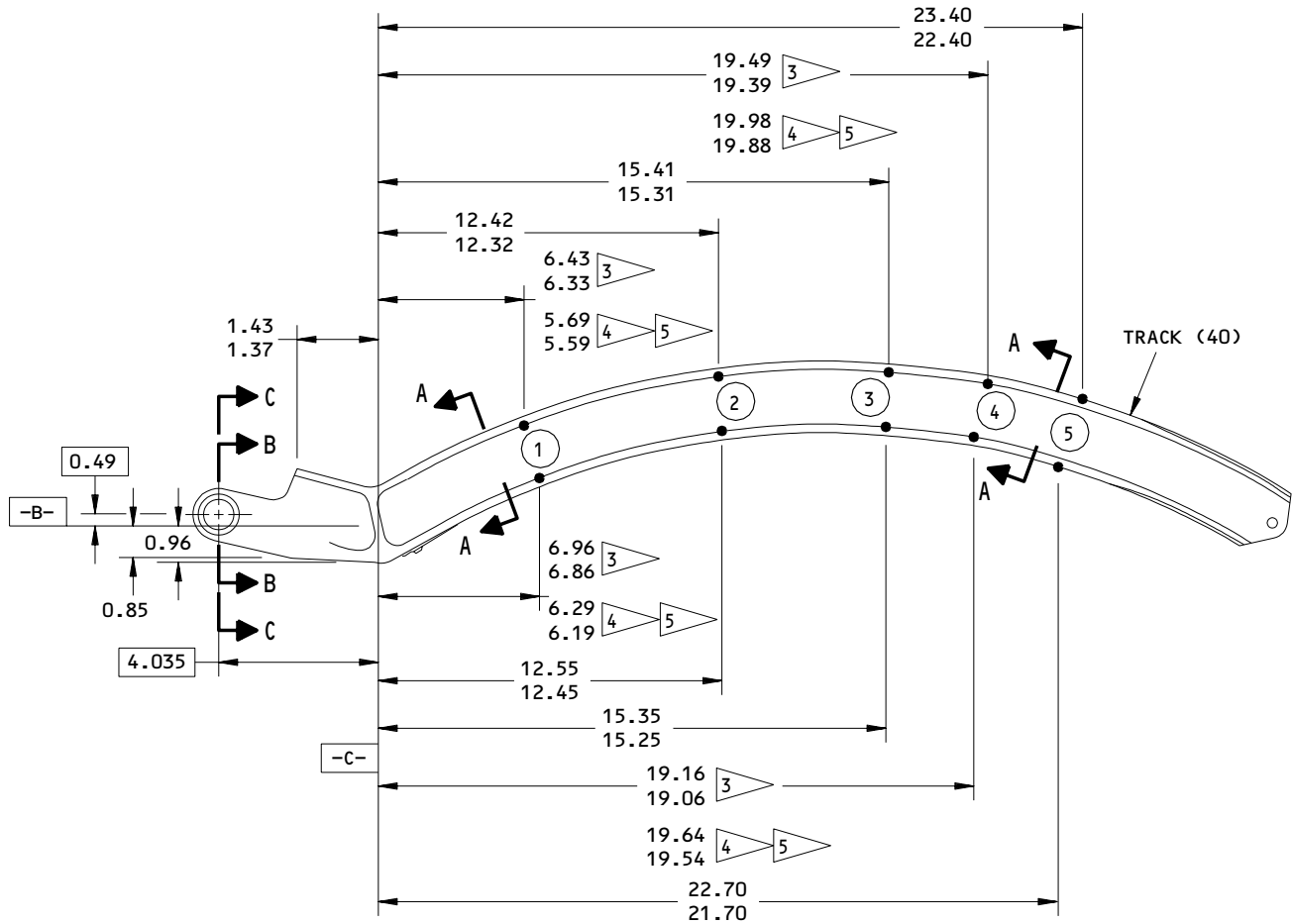
27-81-28

REPAIR 5-2

01.1

Page 603

Mar 01/02



ROLLER SURFACE WEAR SURFACE

114T4180-7,-17,-27,-37
 Track Repair and Refinish
 Figure 601 (Sheet 1)

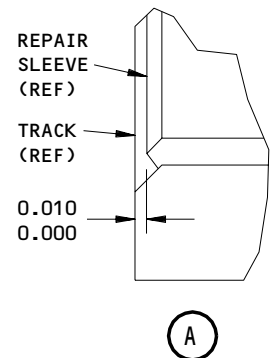
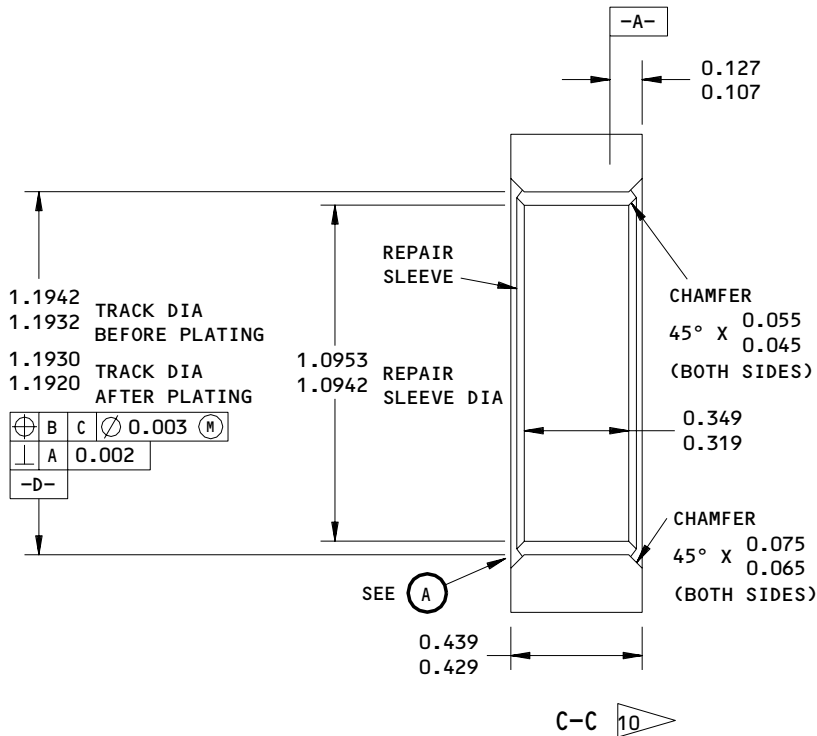
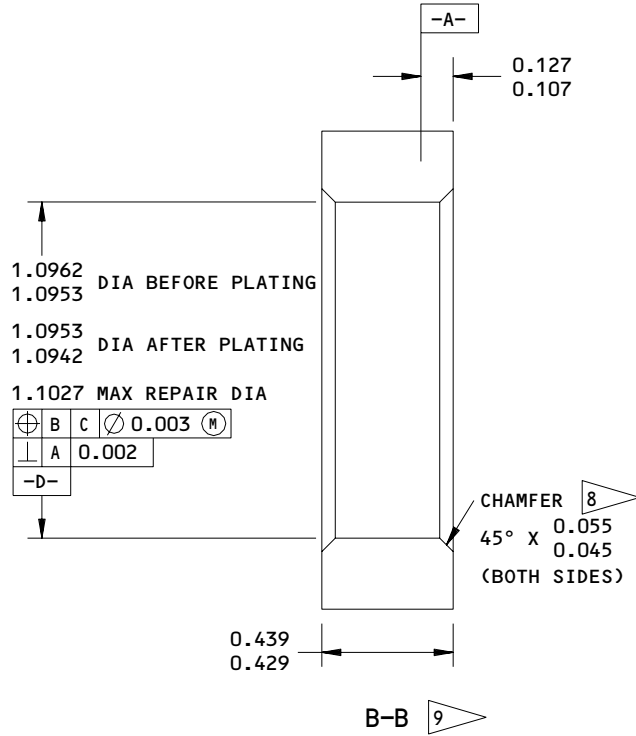
27-81-28

REPAIR 5-2
 Page 604
 Mar 01/02

01.1

114T0101
 114T0233
 114T3302
 114T4180

BOEING
 COMPONENT
 MAINTENANCE MANUAL



114T4180-7,-17,-27,-37
 Track Repair and Refinish
 Figure 601 (Sheet 2)

27-81-28

REPAIR 5-2

Page 605

Mar 01/02

01.1

M33212

TRACK LOCATION	A							
	THICKNESS DESIGN DIMENSIONS		SERVICE WEAR MINIMUM THICKNESS			MINIMUM ALLOWABLE THICKNESS		
	1		1	2	5	1	2	7
1	0.230 0.210		0.200			0.185		
2	0.330 0.310 3	0.360 0.340 4	0.300 3	0.330 4	0.285 3	0.315 4		
3	0.330 0.310 3	0.360 0.340 4	0.300 3	0.330 4	0.285 3	0.315 4		
4	0.230 0.210		0.200			0.185		
5	0.230 0.210		0.200			0.185		
END OF TRACK	0.230 0.210		0.200			0.185		

REFINISH

CADMIUM-TITANIUM PLATE (F-15.01) ALL OVER.
 APPLY BMS 10-11, TYPE 1 PRIMER (F-20.02) ALL OVER, BUT NOT IN THE BEARING BORE OR IT'S CHAMFERS.
 APPLY BMS 10-60 ENAMEL (SRF-14.9813) OVER THE PRIMER, UNLESS SHOWN BY 6.
 WIPE WITH PRIMER (F-19.45) THE PLATED SURFACES OF THE BEARING BORE AND CHAMFERS.

REPAIR

125/ ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY
 BREAK ALL SHARP EDGES
 MATERIAL: 4340M STEEL, 275-300 KSI
 ALL DIMENSIONS ARE IN INCHES
 ITEM NUMBERS REFER TO IPL FIG. 4

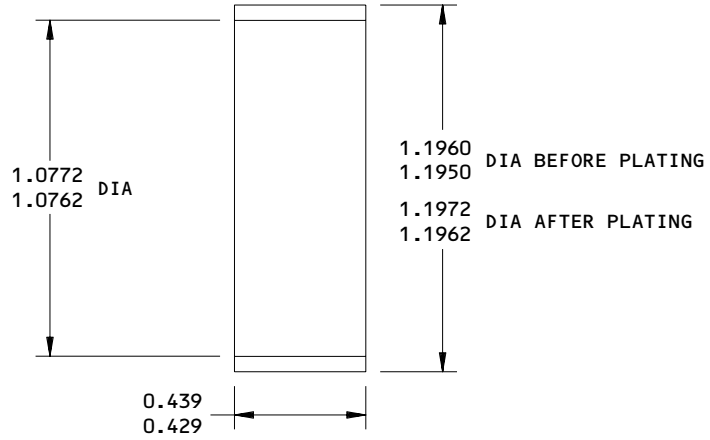
- 1 THE THICKNESS CHANGES UNIFORMLY BETWEEN LOCATIONS 1 AND 2, 3 AND 4.
- 2 MINIMUM THICKNESS IS EQUIVALENT TO THE LOWER DESIGN LIMIT LESS THE WEAR TOLERANCE. THE MAXIMUM THICKNESS AFTER REPAIR MUST NOT BE MORE THAN THE HIGHER DESIGN LIMIT SHOWN.
- 3 FOR SLAT TRACK 114T4180-7,-17.
- 4 FOR SLAT TRACK 114T4180-27,-37.
- 5 REPAIR IS NOT NECESSARY IF TRACK THICKNESS IS GREATER THAN THICKNESS SHOWN. THIS LETS 0.01 OF WEAR BE ON THE TRACK WEAR SURFACE.

- 6 NO ENAMEL (SRF-14.9813) ON THIS SURFACE.
- 7 THE TRACK CAN BE REPAIRED UNTIL IT IS WORN DOWN TO THIS MINIMUM THICKNESS. THE TRACK MUST BE REPLACED IF IT IS WORN MORE THAN THIS. THIS LETS 0.025 OF WEAR BE ON THE TRACK WEAR SURFACE.
- 8 OMIT CHROME PLATE
- 9 CHROME PLATE REPAIR AND BEARING REPLACEMENT
- 10 SLEEVE REPAIR

114T4180-7,-17,-27,-37
 Track Repair and Refinish
 Figure 601 (Sheet 3)

114T0101
114T0233
114T3302
114T4180

BOEING
COMPONENT
MAINTENANCE MANUAL



63/ ALL MACHINED SURFACES UNLESS SHOWN
DIFFERENTLY

BREAK ALL SHARP EDGES

CADMIUM PLATE (F-15.29) OUTSIDE DIAMETER

MATERIAL: 304 CRES ANNEALED

MAGNETIC PARTICLE INSPECT

ALL DIMENSIONS ARE IN INCHES

Repair Sleeve Details
Figure 602

27-81-28

REPAIR 5-2

01.1

Page 607

Mar 01/02

M33185

MAIN TRACK ASSEMBLY – REPAIR 6-1

114T4180-3, -13, -23, -33, -43, -53

NOTE: Refer to REPAIR-GENERAL for a list of applicable standard practices. Refer to IPL Fig. 4 for item numbers. For repair of surfaces which is only replacement of the original finish, refer to Refinish instructions in REPAIR 6-2.

1. Bearing Replacement

- | A. Remove the old bearing (25B) as shown in SOPM 20-50-03.
- | B. Install a replacement bearing with BMS 5-95 sealant.
- | C. Remove (anvil) swage the bearing per SOPM 20-50-03.
- | D. Do a push out load test as shown in SOPM 20-50-03.
 - | (1) For main track assembly, part number 114T4180-3, use a push out load of 2773 pounds.
 - | (2) For the other main track assemblies, see SOPM 20-50-03, "anvil swaged bearing retention" section for push out loads.

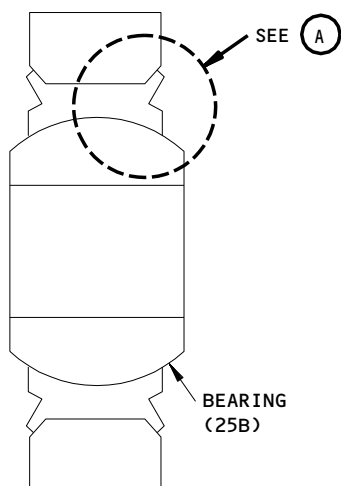
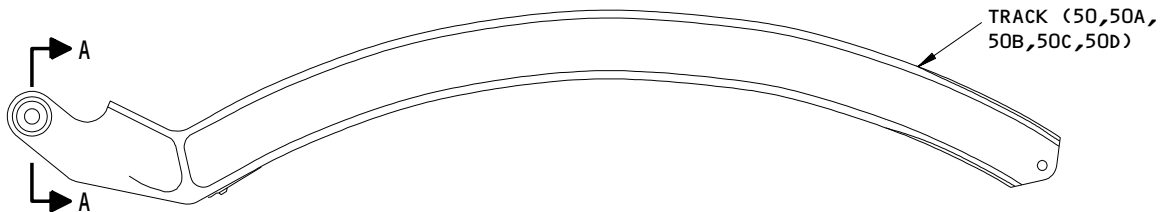
27-81-28

REPAIR 6-1

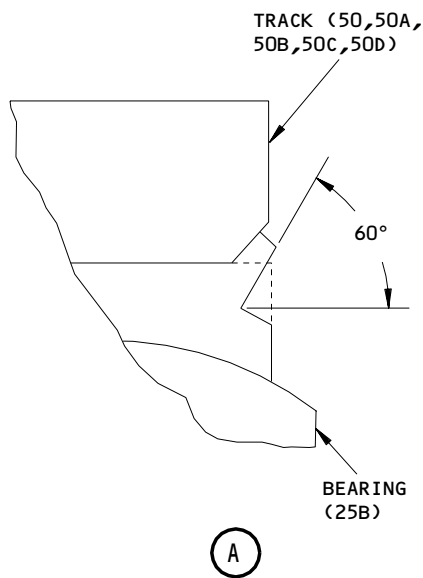
01.1

Page 601

Mar 01/02



A-A



ITEM NUMBERS REFER TO IPL FIG. 4
 ALL DIMENSIONS ARE IN INCHES

114T4180-3,-13,-23,-33,-43,-53
 Main Track Assembly Repair
 Figure 601

27-81-28

REPAIR 6-1
 Page 602
 Mar 01/02

01.1

MAIN TRACK - REPAIR 6-2

114T4180-8, -18, -28, -38, -48

NOTE: Refer to REPAIR-GENERAL for a list of applicable standard practices. Refer to IPL Fig. 4 for item numbers. For repair of surface which is only replacement of the original finish, refer to Refinish instructions in Fig. 601.

1. Track Repair

A. If the wear on the track (50, 50A, 50B, 50C, 50D) is 0.010-0.025 inch compared to the design thickness, then the track is serviceable, but we recommend you repair the track per par. B.

B. Repair the track (50, 50A, 50B, 50C, 50D) as follows:

(1) Remove the organic finishes as specified in 20-30-02.

(2) Remove the plating as specified in 20-30-02.

NOTE: Abrasive blast cleaning can be used locally on the roller surfaces.

(3) Machine blend 100 to 1 ratio as specified in 20-10-02.

(4) Magnetic particle check, class A, as specified in 20-20-01.

(5) Nital etch check as specified in 20-10-02.

(6) Shot peen as specified in 20-10-03.

(7) Refinish as specified in Fig. 601.

(8) Magnetic particle check, class A, as specified in 20-20-01.

C. If the wear on the track is greater than 0.025 inch, replace the track. No repair is recommended.

27-81-28

REPAIR 6-2

01.1

Page 601

Nov 01/00

2. Track Bearing Bore Repair

A. Nickel Plate Repair

- (1) Remove paint and plating from the track (50, 50A, 50B, 50C, 50D IPL Fig. 4) as specified in (SOPM 20-30-02).
- (2) Do a magnetic particle check of the track bearing bore as specified in (SOPM 20-20-01).
- (3) Machine the track bearing bore as required up to the repair diameter shown in Fig. 601 as specified in (SOPM 20-10-02).
- (4) Apply nickel sulphamate plate to the track bearing bore as shown in Fig. 601 and as specified in (SOPM 20-42-09).
- (5) Machine the track bearing bore to the after plating dimensions shown in Fig. 601.

CAUTION: FAILURE TO FOLLOW THE CORRECT PROCEDURE IN SOPM 20-42-09 COULD RESULT IN HYDROGEN EMBRITTLEMENT AND CAUSE THE PART TO FAIL.

- (6) Brake the track to remove hydrogen as specified in (SOPM 20-42-09).
- (7) Refinish the track as shown in Fig. 601.
- (8) Install the bearing as specified in REPAIR 6-1.

B. Sleeve Repair

- (1) Remove paint and plating from the track (50, 50A, 50B, 50C, 50D, IPL Fig. 4) as specified in (SOPM 20-30-02).
- (2) Do a magnetic particle check of the track bearing bore as specified in (SOPM 20-20-01).
- (3) Machine the track bearing bore to the dimensions shown in Fig. 601 as specified in (SOPM 20-10-02).
- (4) Nital etch check as specified in (SOPM 20-10-02).
- (5) Stress relieve track as specified in (SOPM 20-10-02).
- (6) Do a magnetic particle check of the track bearing bore as specified in (SOPM 20-20-01).
- (7) Shot peen the track bearing bore as specified in (SOPM 20-20-01).

27-81-28

REPAIR 6-2

01.1

Page 602

Mar 01/05

- | (8) Apply low hydrogen embrittlement stylus cadmium plate to the track bearing bore as shown in Fig. 601 and as specified in (SOPM 20-42-10).
- | (9) Fabricate repair bushing as shown in Fig. 602.
- | (10) Refinish track as shown in Fig. 601.
- | (11) Apply BMS 5-95 to the track bearing bore.
- | (12) Install the repair bushing wet with BMS 5-95 sealant using the shrink-fit method as specified in (SOPM 20-50-03).
- | (13) Swage the repair bushing as specified in (SOPM 20-50-03).
- | (14) Machine the repair bushing to the dimensions shown in Fig. 601.
- | (15) Install the bearing as specified in REPAIR 6-1.

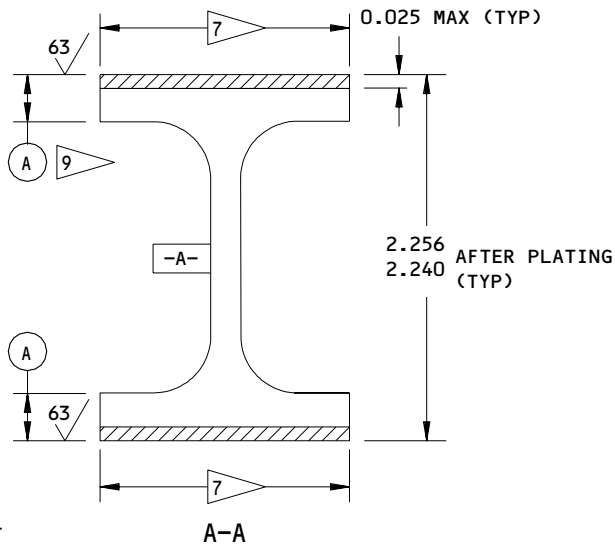
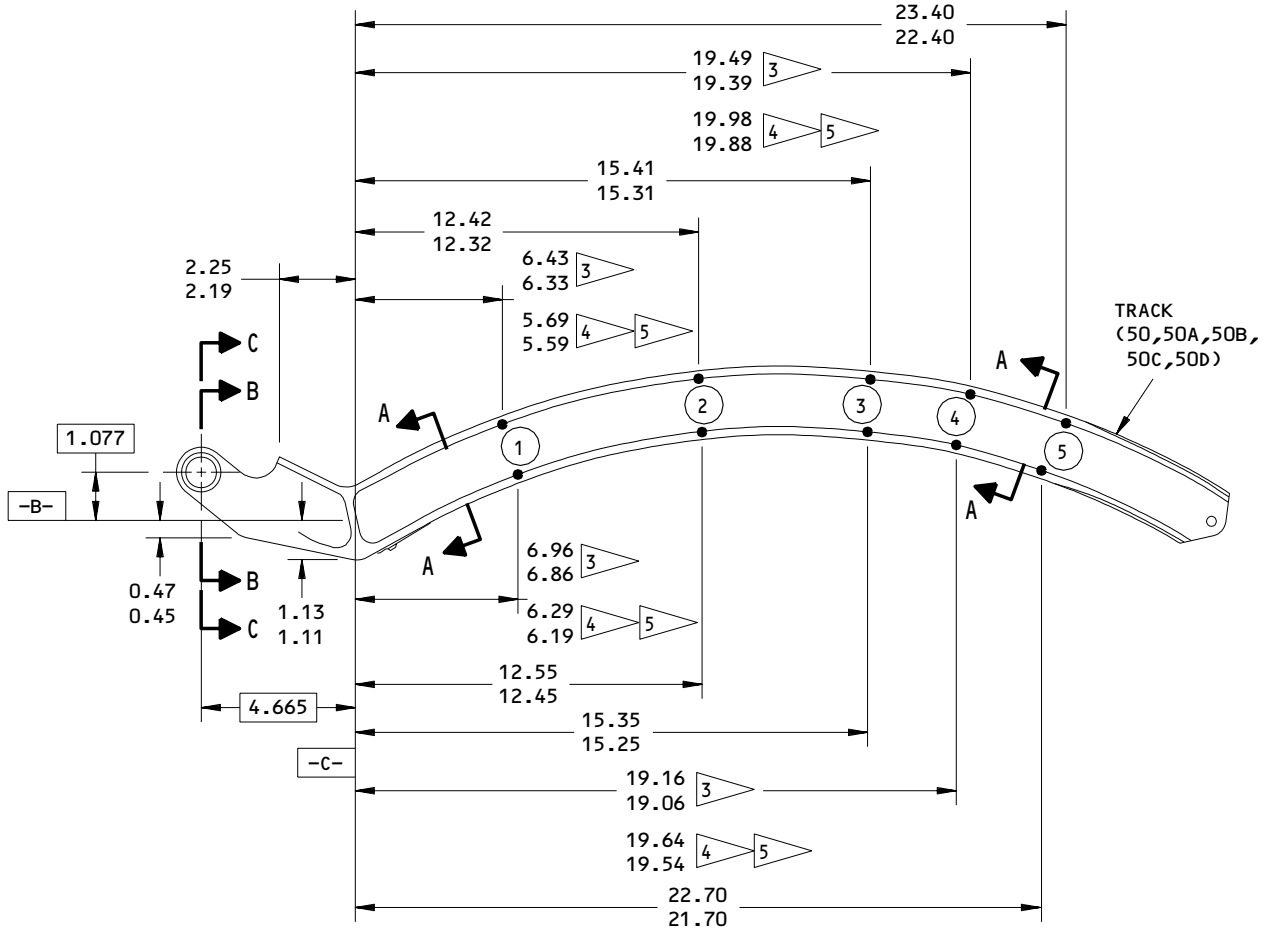
27-81-28

REPAIR 6-2

01.1

Page 603

Mar 01/02



WEAR SURFACE - ROLLER CONTACT

114T4180-8,-18,-28,-38,-48
 Track Repair and Refinish
 Figure 601 (Sheet 1)

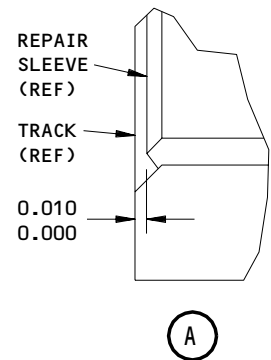
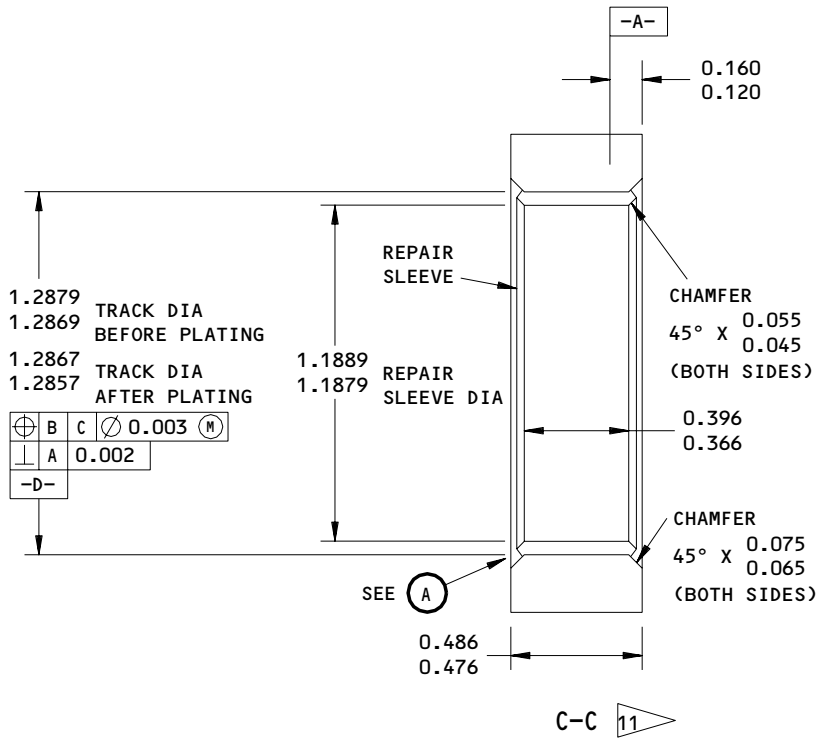
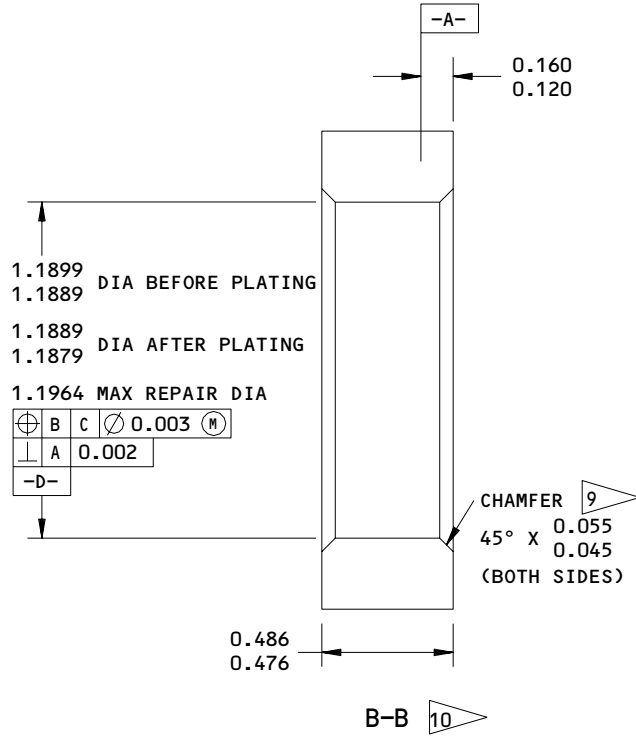
27-81-28

REPAIR 6-2
 Page 604
 Mar 01/02

01.1

114T0101
 114T0233
 114T3302
 114T4180

BOEING
 COMPONENT
 MAINTENANCE MANUAL



114T4180-8,-18,-28,-38,-48
 Track Repair and Refinish
 Figure 601 (Sheet 2)

27-81-28

REPAIR 6-2

Page 605

Mar 01/02

01.1

M33260

POINT LOCATED ON TRACK	A								
	DESIGN THICKNESS LIMIT 1			SERVICE WEAR MINIMUM THICKNESS 1 2 6			MINIMUM ALLOWABLE THICKNESS 1 2 8		
1	0.230 0.210			0.200			0.185		
2	0.400 0.380 3	0.430 0.410 4	0.470 0.450 5	0.370 3	0.400 4	0.440 5	0.355 3	0.385 4	0.425 5
3	0.410 0.380 3	0.430 0.410 4	0.470 0.450 5	0.370 3	0.400 4	0.440 5	0.355 3	0.385 4	0.425 5
4	0.230 0.210			0.200			0.185		
5	0.230 0.210			0.200			0.185		
END OF TRACK	0.230 0.210			0.200			0.185		

REFINISH

CADMIUM-TITANIUM ALLOY PLATE ALL OVER, BAKE 12 HOURS MINIMUM AT 350 TO 400°F AND APPLY CHROMATE POST-PLATE TREATMENT (F-15.01) ALL OVER.

APPLY ONE COAT OF BMS 10-11, TYPE 1 PRIMER (F-20.02) ALL OVER, EXCEPT NO PRIMER IN THE BEARING BORE AND BORE CHAMFERS.

APPLY BMS 10-60 BOEING COLOR 707 GRAY GLOSS ENAMEL (SRF-14.9813) OVER THE PRIMER, EXCEPT IN AREA NOTED IN FIG. 601. WIPE ON PRIMER ON PLATED SURFACES (F-19-45) IN THE BEARING BORE AND BORE CHAMFERS.

1 THE THICKNESS CHANGES UNIFORMLY BETWEEN DIMENSION POINTS 1 AND 2, 3 AND 4.

2 MINIMUM THICKNESS IS EQUIVALENT TO THE LOWER DESIGN LIMIT LESS THE WEAR TOLERANCE. THE MAXIMUM THICKNESS AFTER REWORK MUST NOT EXCEED THE HIGHER DESIGN LIMIT NOTED.

3 FOR SLAT TRACK 114T4180-8 AND -18 ONLY.

4 FOR SLAT TRACK 114T4180-28 AND -38 ONLY.

5 FOR SLAT TRACK 114T4180-48 ONLY.

6 NO REPAIR IS REQUIRED IF TRACK THICKNESS IS GREATER THAN THICKNESS SPECIFIED. THIS IS 0.01 INCH OF WEAR ALLOWED ON TRACK WEAR SURFACE.

REPAIR

BREAK ALL SHARP EDGES

MATERIAL: 4340M STEEL

HEAT TREAT: 275-300 KSI

ALL DIMENSIONS ARE IN INCHES

ITEM NUMBERS REFER TO IPL FIG. 4

7 NO ENAMEL (SRF-14.9813) ON THIS SURFACE.

8 THE TRACK CAN BE REPAIRED UNTIL IT IS WORN TO THE THICKNESS SPECIFIED. THE TRACK MUST BE REPLACED IF IT IS WORN MORE THAN THIS. THIS IS 0.025 INCH OF WEAR ALLOWED ON TRACK WEAR SURFACE.

9 OMIT CHROME PLATE

10 CHROME PLATE REPAIR AND BEARING REPLACEMENT

11 SLEEVE REPAIR

114T4180-8,-18,-28,-38,-48
Track Repair and Refinish
Figure 601 (Sheet 3)

27-81-28

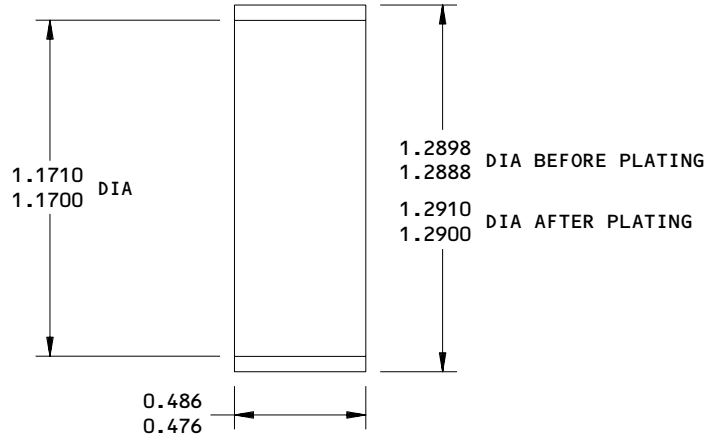
REPAIR 6-2

Page 606

Mar 01/02

01.1

114T0101
114T0233
114T3302
114T4180



63/ ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

CADMIUM PLATE (F-15.29) OUTSIDE DIAMETER

MATERIAL: 304 CRES ANNEALED

MAGNETIC PARTICLE INSPECT

ALL DIMENSIONS ARE IN INCHES

Repair Sleeve Details
Figure 602

27-81-28

REPAIR 6-2

01.1

Page 607

Mar 01/02

MAIN TRACK ASSEMBLY – REPAIR 7-1

114T4180-4, -14, -24, -34, -44, -54

NOTE: Refer to REPAIR-GENERAL for a list of applicable standard practices. Refer to IPL Fig. 4 for item numbers. For repair of surfaces which is only replacement of the original finish, refer to Refinish instructions in REPAIR 7-2.

1. Bearing Replacement

- | A. Remove the old bearing (25B) as shown in SOPM 20-50-03.
- | B. Install a replacement bearing with BMS 5-95 sealant.
- | C. Roller (anvil) swage the bearing per SOPM 20-50-03.
- | D. Do a push out load test as shown in SOPM 20-50-03.
 - | (1) For main track assembly, part number 114T4180-4, use a push out load of 2773 pounds.
 - | (2) For the other main track assemblies, see SOPM 20-50-03, "anvil swaged bearing retention" section for push out loads.

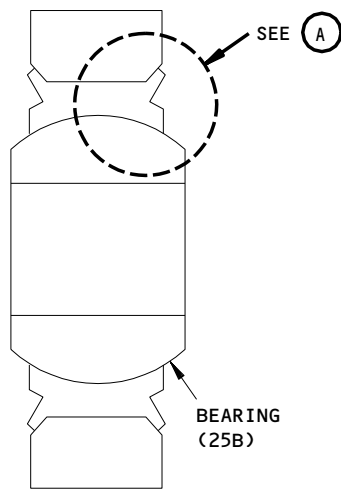
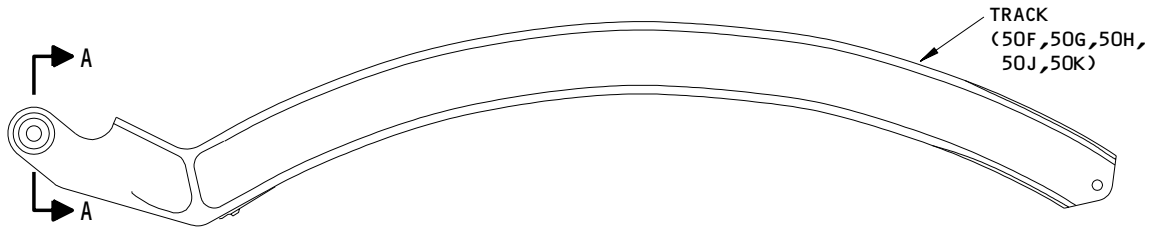
27-81-28

REPAIR 7-1

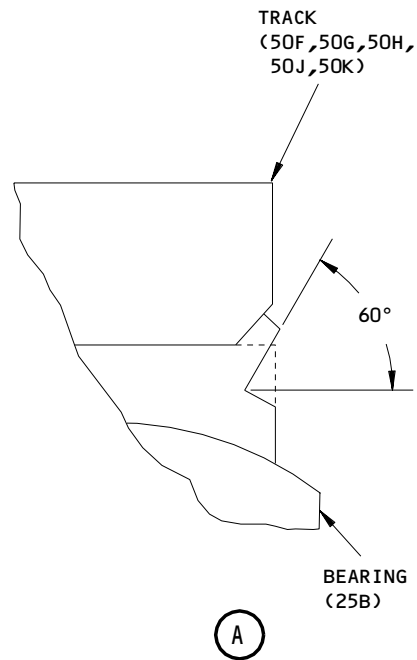
01.1

Page 601

Mar 01/02



A-A



(A)

ITEM NUMBERS REFER TO IPL FIG. 4
 ALL DIMENSIONS ARE IN INCHES

114T4180-4,-14,-24,-34,-44,-54
 Main Track Assembly Repair
 Figure 601

27-81-28

REPAIR 7-1
 Page 602
 Mar 01/02

01.1

MAIN TRACK – REPAIR 7-2

114T4180-9, -19, -29, -39, -49

NOTE: Refer to REPAIR-GENERAL for a list of applicable standard practices. Refer to IPL Fig. 4 for item numbers. For repair of surfaces which is only replacement of the original finish, refer to Refinish instructions in Fig. 601.

1. Track Repair

A. If the wear on the track (50F, 50G, 50H, 50J, 50K) is 0.010-0.025 inch compared to the design thickness, then the track is serviceable, but we recommend you repair the track per par. B.

B. Repair the track (50F, 50G, 50H, 50J, 50K) as follows:

(1) Remove the organic finishes as specified in 20-30-02.

(2) Remove the plating as specified in 20-30-02.

NOTE: Abrasive blast cleaning can be used locally on the roller surfaces.

(3) Machine blend 100 to 1 ratio as specified in 20-10-02.

(4) Magnetic particle check, class A, as specified in 20-20-01.

(5) Nital etch check as specified in 20-10-02.

(6) Shot peen as specified in 20-10-03.

(7) Refinish as specified in Fig. 601.

(8) Magnetic particle check, class A, as specified in 20-20-01.

C. If the wear on the track is greater than 0.025 inch, replace the track. No repair is recommended.

2. Track Bearing Bore Repair

A. Nickel Plate Repair

(1) Remove paint and plating from the track (50F, 50G, 50H, 50J, 50K IPL Fig. 4) as specified in (SOPM 20-30-02).

27-81-28

REPAIR 7-2

01.1

Page 601

Mar 01/05

- (2) Do a magnetic particle check of the track bearing bore as specified in (SOPM 20-20-01).
- (3) Machine the track bearing bore as required up to the repair diameter shown in Fig. 601 as specified in (SOPM 20-10-02).
- (4) Apply nickel sulphamate plate to the track bearing bore as shown in Fig. 601 as as specified in (SOPM 20-42-09).
- (5) Machine the track bearing bore to the after plating dimensions shown in Fig. 601.

CAUTION: FAILURE TO FOLLOW THE CORRECT PROCEDURE IN SOPM 20-42-09 COULD RESULT IN HYDROGEN EMBRITTLEMENT AND CAUSE THE PART TO FAIL.

- (6) Brake the track to remove hydrogen as specified in (SOPM 20-42-09).
- (7) Refinish the track as shown in Fig. 601.
- (8) Install the bearing as specified in REPAIR 7-1.

B. Sleeve Repair

- (1) Remove paint and plating from the track (50F, 50G, 50H, 50J, 50K, IPL Fig. 4) as specified in (SOPM 20-30-02).
- (2) Do a magnetic particle check of the track bearing bore as specified in (SOPM 20-20-01).
- (3) Machine the track bearing bore to the dimensions shown in Fig. 601 as specified in (SOPM 20-10-02).
- (4) Nital etch check as specified in (SOPM 20-10-02).
- (5) Stress relieve track as specified in (SOPM 20-10-02).
- (6) Do a magnetic particle check of the track bearing bore as specified in (SOPM 20-20-01).
- (7) Shot peen the track bearing bore as specified in (SOPM 20-20-01).
- (8) Apply low hydrogen embrittlement stylus cadmium plate to the track bearing bore as shown in Fig. 601 and as specified in (SOPM 20-42-10).
- (9) Fabricate repair bushing as shown in Fig. 602.
- (10) Refinish track as shown in Fig. 601.

27-81-28

REPAIR 7-2

01.1

Page 602

Mar 01/02

114T0101
114T0233
114T3302
114T4180

 **BOEING**
COMPONENT
MAINTENANCE MANUAL

- | (11) Apply BMS 5-95 to the track bearing bore.
- | (12) Install the repair bushing wet with BMS 5-95 sealant using the shrink fit method as specified in (SOPM 20-50-03).
- | (13) Swage the repair bushing as specified in (SOPM 20-50-03).
- | (14) Machine the repair bushing to the dimensions shown in Fig. 601.
- | (15) Install the bearing as specified in REPAIR 7-1.

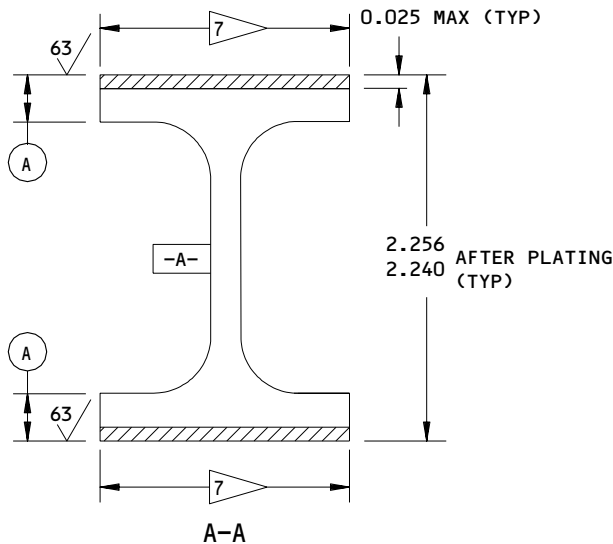
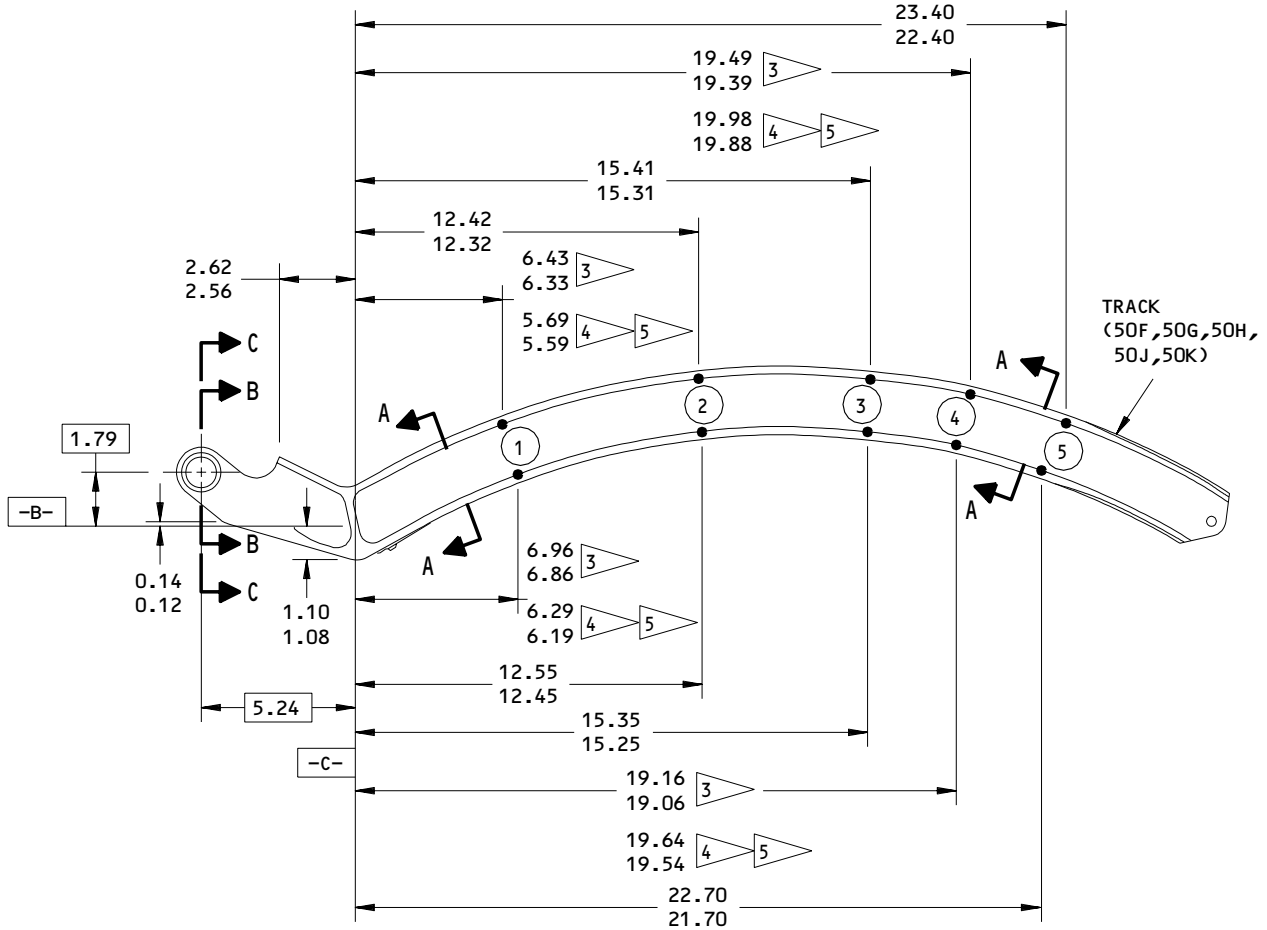
27-81-28

REPAIR 7-2

01.1

Page 603

Mar 01/02



WEAR SURFACE - ROLLER CONTACT

114T4180-9,-19,-29,-39,-49
 Track Repair and Refinish
 Figure 601 (Sheet 1)

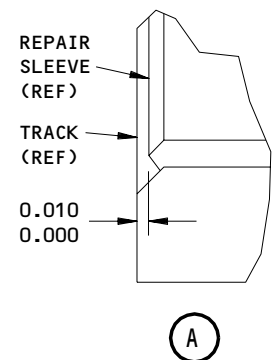
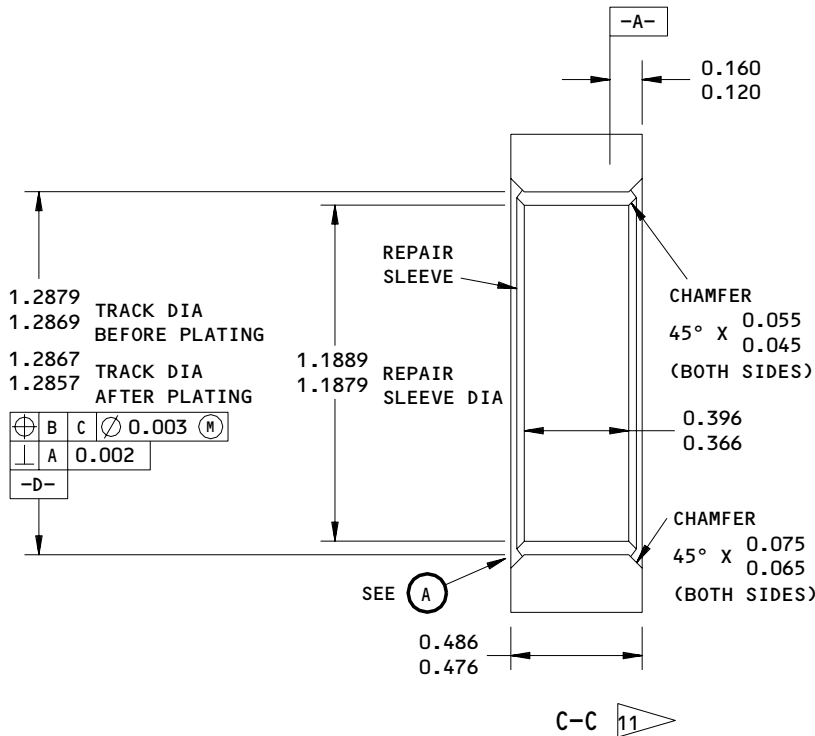
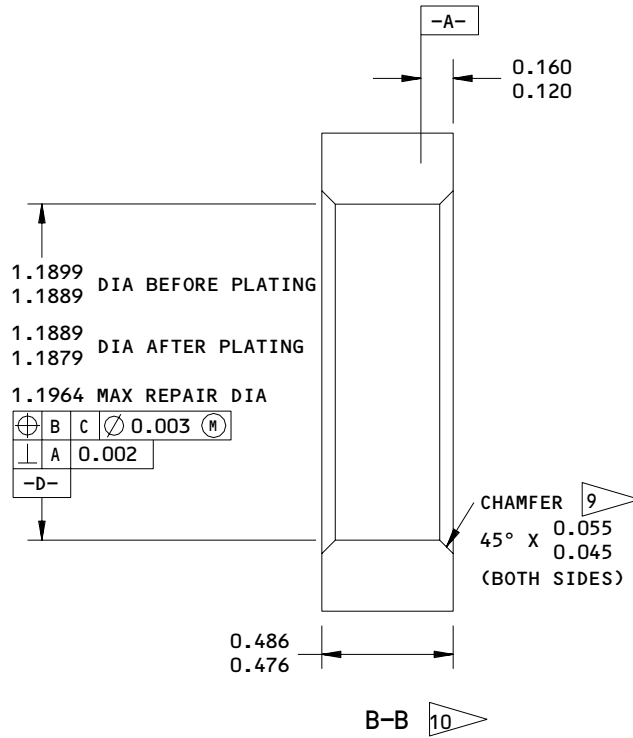
27-81-28

REPAIR 7-2
 Page 604
 Mar 01/02

01.1

114T0101
 114T0233
 114T3302
 114T4180

BOEING
 COMPONENT
 MAINTENANCE MANUAL



114T4180-9,-19,-29,-39,-49
 Track Repair and Refinish
 Figure 601 (Sheet 2)

27-81-28


























REPAIR 7-2

01.1

Page 605

Mar 01/02

M33300








POINT LOCATED ON TRACK	A								
	DESIGN THICKNESS LIMIT 			SERVICE WEAR MINIMUM THICKNESS   			MINIMUM ALLOWABLE THICKNESS   		
①	0.230 0.210			0.200			0.185		
②	0.410 0.390 	0.440 0.420 	0.510 0.490 	0.380 	0.410 	0.480 	0.365 	0.395 	0.455 
③	0.410 0.390 	0.440 0.420 	0.510 0.490 	0.380 	0.410 	0.480 	0.365 	0.395 	0.455 
④	0.230 0.210			0.200			0.185		
⑤	0.230 0.210			0.200			0.185		
END OF TRACK	0.230 0.210			0.200			0.185		

REFINISH

CADMIUM-TITANIUM ALLOY PLATE ALL OVER,
BAKE 12 HOURS MINIMUM AT 350 TO 400°F AND
APPLY CHROMATE POST-PLATE TREATMENT
(F-15.01) ALL OVER.

APPLY ONE COAT OF BMS 10-11, TYPE 1 PRIMER
(F-20.02) ALL OVER, EXCEPT NO PRIMER IN THE
BEARING BORE AND BORE CHAMFERS.

APPLY BMS 10-60 BOEING COLOR 707 GRAY GLOSS
ENAMEL (SRF-14.9813) OVER THE PRIMER, EXCEPT
IN AREA NOTED IN FIG. 601. WIPE ON PRIMER
ON PLATED SURFACES (F-19-45) IN THE BEARING
BORE AND BORE CHAMFERS.

-  THE THICKNESS CHANGES UNIFORMLY BETWEEN DIMENSION POINTS ① AND ②, ③ AND ④
-  MINIMUM THICKNESS IS EQUIVALENT TO THE LOWER DESIGN LIMIT LESS THE WEAR TOLERANCE THE MAXIMUM THICKNESS AFTER REWORK MUST NOT EXCEED THE HIGHER DESIGN LIMIT NOTED
-  FOR SLAT TRACK 114T4180-9 AND -19 ONLY
-  FOR SLAT TRACK 114T4180-29 AND -39 ONLY
-  FOR SLAT TRACK 114T4180-49 ONLY
-  NO REPAIR IS REQUIRED IF TRACK THICKNESS IS GREATER THAN THICKNESS SPECIFIED. THIS IS 0.01 INCH OF WEAR ALLOWED ON TRACK WEAR SURFACE
-  NO ENAMEL (SRF-14.9813) ON THIS SURFACE.

REPAIR





BREAK ALL SHARP EDGES

MATERIAL: 4340M STEEL

HEAT TREAT: 275-300 KSI

ALL DIMENSIONS ARE IN INCHES

ITEM NUMBERS REFER TO IPL FIG. 4

-  THE TRACK CAN BE REPAIRED UNTIL IT IS WORN TO THE THICKNESS SPECIFIED. THE TRACK MUST BE REPLACED IF IT IS WORN MORE THAN THIS. THIS IS 0.025 INCH OF WEAR ALLOWED ON TRACK WEAR SURFACE
-  OMIT CHROME PLATE
-  CHROME PLATE REPAIR AND BEARING REPLACEMENT
-  SLEEVE REPAIR

114T4180-9,-19,-29,-39,-49
Track Repair and Refinish
Figure 601 (Sheet 3)

27-81-28

REPAIR 7-2

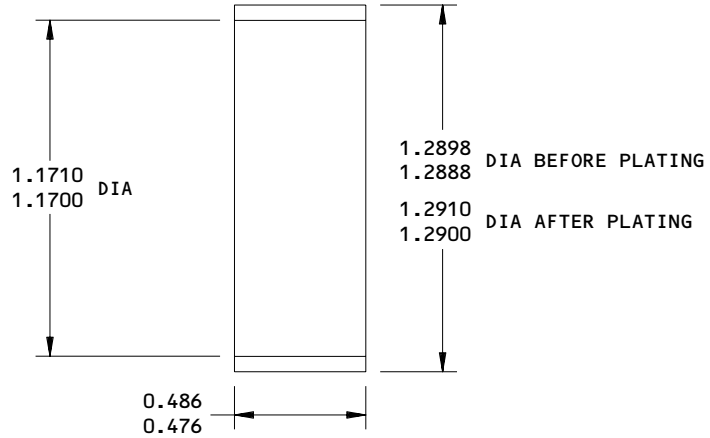
Page 606

Mar 01/02

01.1

114T0101
114T0233
114T3302
114T4180

BOEING
COMPONENT
MAINTENANCE MANUAL



63/ ALL MACHINED SURFACES UNLESS SHOWN
DIFFERENTLY

BREAK ALL SHARP EDGES

CADMIUM PLATE (F-15.29) OUTSIDE DIAMETER

MATERIAL: 304 CRES ANNEALED

MAGNETIC PARTICLE INSPECT

ALL DIMENSIONS ARE IN INCHES

Repair Sleeve Details
Figure 602

27-81-28

REPAIR 7-2

01.1

Page 607

Mar 01/02

M33191

MAIN TRACK ASSEMBLY – REPAIR 8-1

114T4180-5, -15, -25, -35, -45, -55

NOTE: Refer to REPAIR-GENERAL for a list of applicable standard practices. Refer to IPL Fig. 4 for item numbers. For repair of surface which is only replacement of the original finish, refer to Refinish instructions in REPAIR 8-2.

1. Bearing Replacement

- | A. Remove the bearing (25B) as shown in SOPM 20-50-03.
- | B. Install a replacement bearing using BMS 5-95 sealant.
- | C. Roller (anvil) swage the bearing per SOPM 20-50-03.
- | D. Do a push out load test as shown in SOPM 20-50-03.
 - | (1) For main track assembly, part number 114T4180-5, use a push out load of 2773 pounds.
 - | (2) For the other main track assemblies, see SOPM 20-50-03, "anvil swaged bearing retention" section for push out loads.

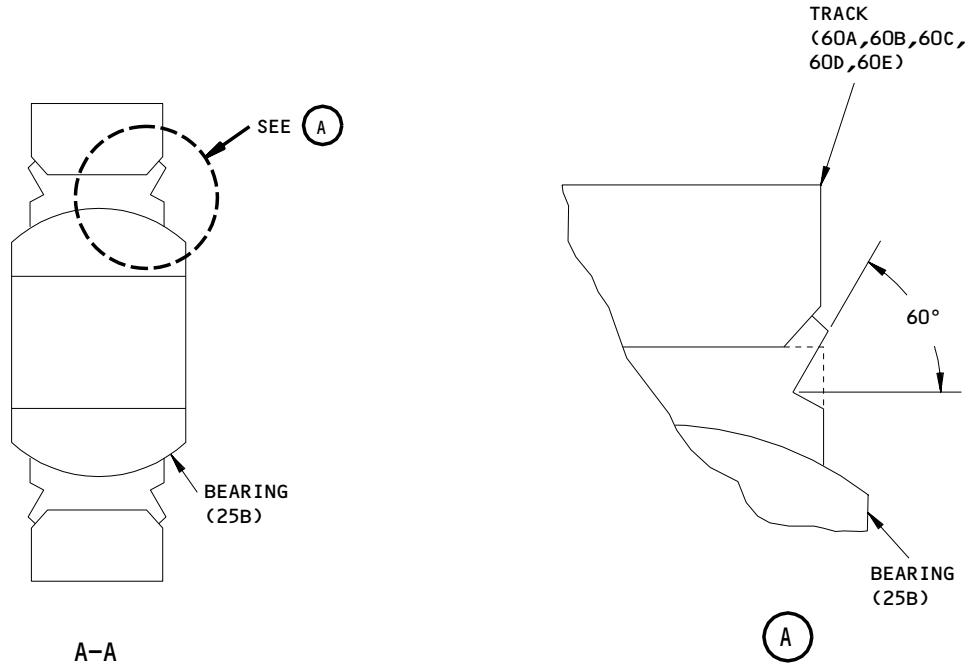
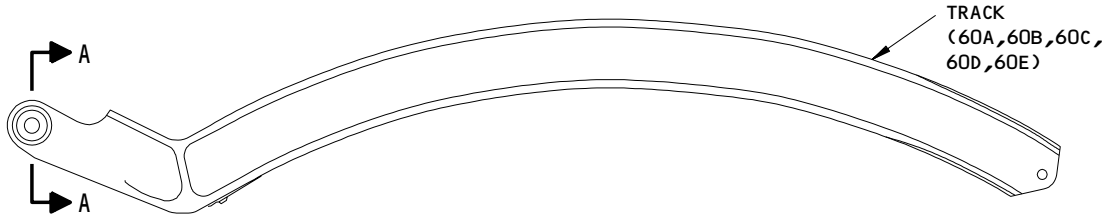
27-81-28

REPAIR 8-1

01.1

Page 601

Mar 01/02



ITEM NUMBERS REFER TO IPL FIG. 4
 ALL DIMENSIONS ARE IN INCHES

114T4180-5,-15,-25,-35,-45,-55
 Main Track Assembly Repair
 Figure 601

27-81-28

REPAIR 8-1
 Page 602
 Mar 01/02

01.1

MAIN TRACK - REPAIR 8-2

114T4180-10, -20, -30, -40, -50

NOTE: Refer to REPAIR-GENERAL for a list of applicable standard practices.
Refer to IPL Fig. 4 for item numbers. For repair of surfaces which is only replacement of the original finish, refer to Refinish instructions in Fig. 601.

1. Track Repair

A. If the wear on the track (60A, 60B, 60C, 60D, 60E) is no more than 0.010-0.025 inch compared to the design thickness, then the track is serviceable, but we recommend you repair the track per par. B.

B. Repair the track (60A, 60B, 60C, 60D, 60E) as follows:

(1) Remove the primer and enamel (SOPM 20-30-02).

(2) Remove the plating (SOPM 20-30-02).

NOTE: Abrasive blast cleaning can be used locally on the roller surfaces.

(3) Machine blend 100 to 1 ratio (SOPM 20-10-02).

(4) Magnetic particle examine, class A (SOPM 20-20-01).

(5) Nital etch examine (SOPM 20-10-02).

(6) Shot peen (SOPM 20-10-03).

(7) Refinish as specified in Fig. 601.

(8) Magnetic particle examine, class A (SOPM 20-20-01).

C. If the wear on the track is more than 0.025 inch, replace the track. Repair is not recommended.

27-81-28

REPAIR 8-2

01.1

Page 601

Jul 01/04

2. Track Bearing Bore Repair

A. Nickel Plate Repair

- (1) Remove primer, enamel and plating from the track (60A, 60B, 60C, 60D, 60E, IPL Fig. 4) (SOPM 20-30-02).
- (2) Do a magnetic particle check of the track bearing bore (SOPM 20-20-01).
- (3) Machine the track bearing bore as required up to the repair diameter shown in Fig. 601 (SOPM 20-42-09).
- (4) Apply sulfamate nickel plate to the track bearing bore as shown in Fig. 601 (SOPM 20-42-09).
- (5) Machine the track bearing bore to the after plating dimensions shown in Fig. 601.

CAUTION: FAILURE TO FOLLOW THE CORRECT PROCEDURE IN SOPM 20-42-09 COULD RESULT IN HYDROGEN EMBRITTLEMENT AND CAUSE THE PART TO FAIL.

- (6) Bake the track to remove hydrogen (SOPM 20-42-09).
- (7) Refinish the track (Fig. 601).
- (8) Install a replacement bearing (REPAIR 8-1).

B. Sleeve Repair

- (1) Remove primer, enamel and plating from the track (30, IPL Fig. 4; 105, IPL Fig. 5) (SOPM 20-30-02).
- (2) Do a magnetic particle check of the track bearing bore (SOPM 20-20-01).
- (3) Machine the track bearing bore to the dimensions shown in Fig. 601 (SOPM 20-10-02).
- (4) Nital etch examine (SOPM 20-10-02).
- (5) Stress relieve the track (SOPM 20-10-02).
- (6) Do a magnetic particle check of the track bearing bore (SOPM 20-20-01).
- (7) Shot peen the track bearing bore (SOPM 20-10-03).

27-81-28

REPAIR 8-2

01.1

Page 602

Jul 01/04

- | (8) Apply low hydrogen embrittlement stylus cadmium plate to the track bearing bore as shown in Fig. 601 (SOPM 20-42-10).
- | (9) Make a repair sleeve as shown in Fig. 602.
- | (10) Refinish the track as shown in Fig. 601.
- | (11) Apply BMS 5-95 sealant to the track bearing bore.
- | (12) Install the repair sleeve using the shrink-fit method (SOPM 20-50-03) with BMS 5-95 sealant.
- | (13) Swage the repair sleeve (SOPM 20-50-03).
- | (14) Machine the repair sleeve to the dimensions shown in Fig. 601.
- | (15) Install a replacement bearing as specified in REPAIR 8-1.

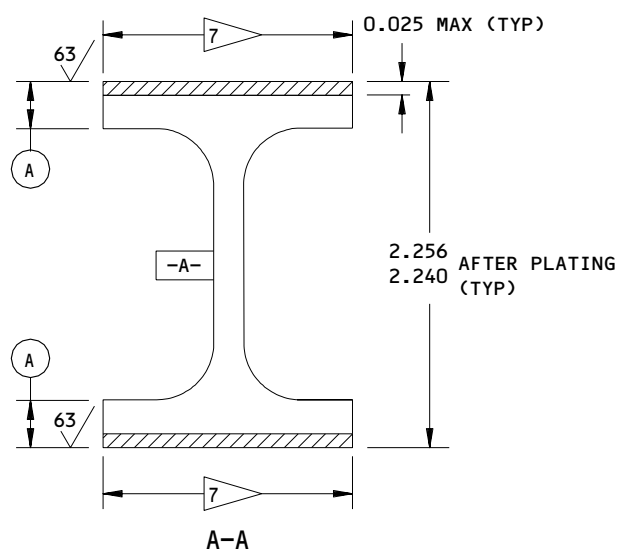
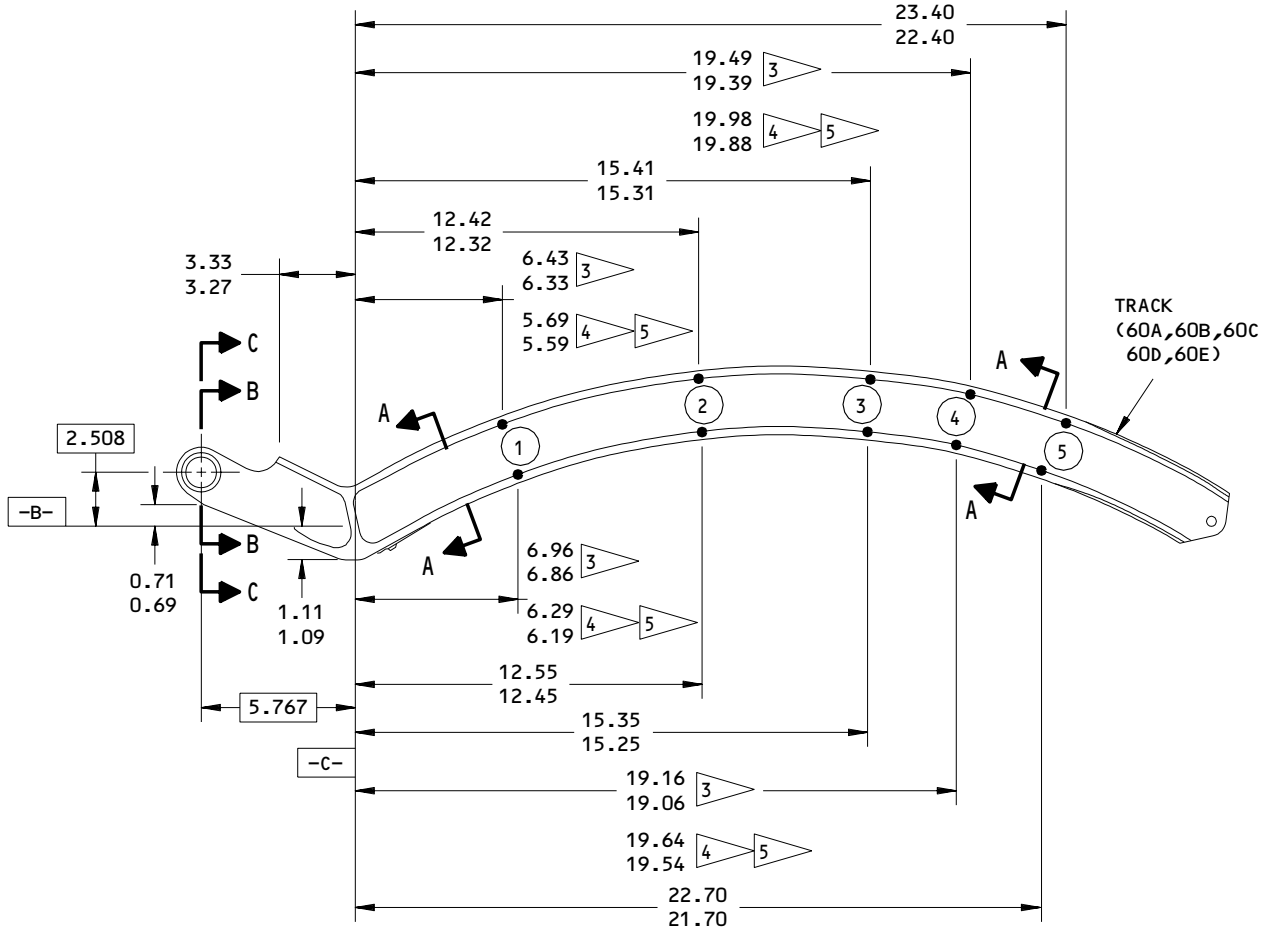
27-81-28


REPAIR 8-2

01.1

Page 603

Jul 01/04



 WEAR SURFACE - ROLLER CONTACT

114T4180-10,-20,-30,-40,-50
 Track Repair and Refinish
 Figure 601 (Sheet 1)

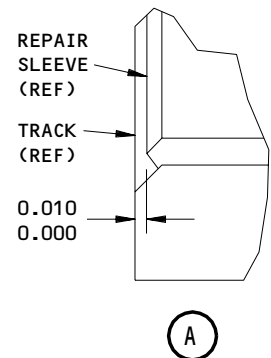
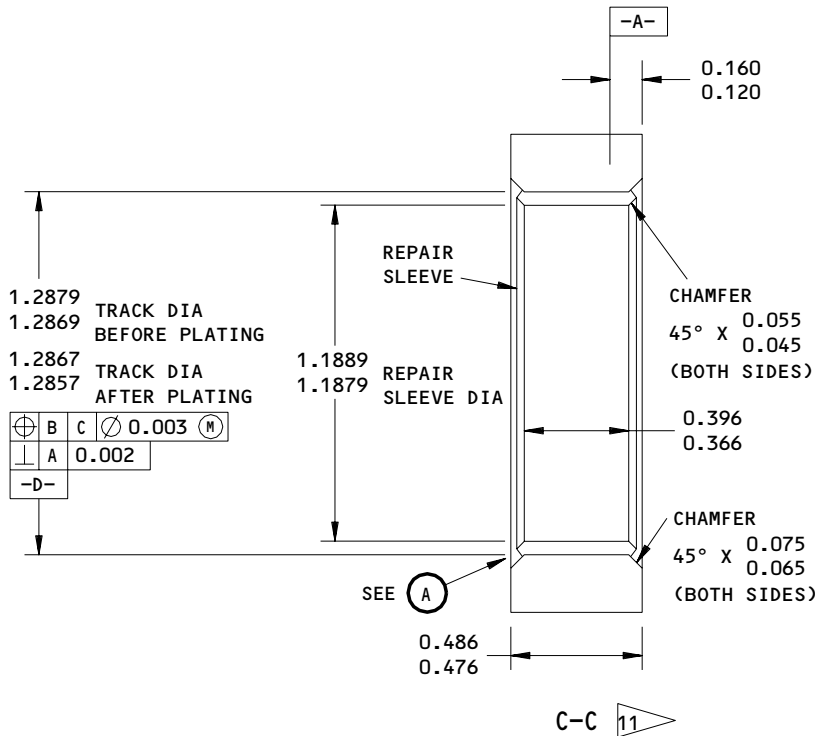
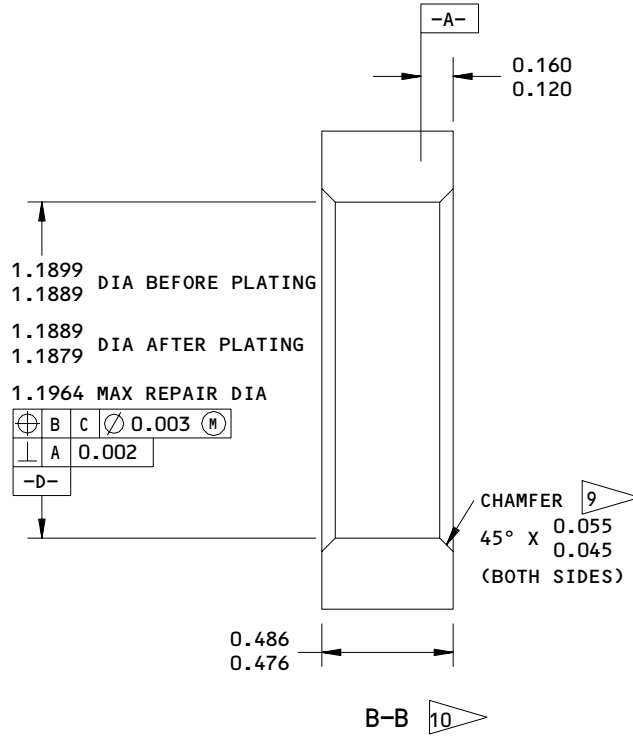
27-81-28

REPAIR 8-2
 Page 604
 Mar 01/02

01.1

114T0101
 114T0233
 114T3302
 114T4180

BOEING
 COMPONENT
 MAINTENANCE MANUAL



114T4180-10,-20,-30,-40,-50
 Track Repair and Refinish
 Figure 601 (Sheet 2)

27-81-28

REPAIR 8-2

Page 605

Mar 01/02

01.1

M33317

POINT LOCATED ON TRACK	A								
	DESIGN THICKNESS LIMIT 1			SERVICE WEAR MINIMUM THICKNESS 1 2 6			MINIMUM ALLOWABLE THICKNESS 1 2 8		
1	0.230 0.210			0.200			0.185		
2	0.380 0.360 3	0.410 0.390 4	0.460 0.440 5	0.350 3	0.380 4	0.430 5	0.335 3	0.365 4	0.415 5
3	0.380 0.360 3	0.410 0.390 4	0.460 0.440 5	0.350 3	0.380 4	0.430 5	0.335 3	0.365 4	0.415 5
4	0.230 0.210			0.200			0.185		
5	0.230 0.210			0.200			0.185		
END OF TRACK	0.230 0.210			0.200			0.185		

REFINISH

CADMIUM-TITANIUM ALLOY PLATE ALL OVER,
 BAKE 12 HOURS MINIMUM AT 350 TO 400°F AND
 APPLY CHROMATE POST-PLATE TREATMENT
 (F-15.01) ALL OVER.

APPLY ONE COAT OF BMS 10-11, TYPE 1 PRIMER
 (F-20.02) ALL OVER, EXCEPT NO PRIMER IN THE
 BEARING BORE AND BORE CHAMFERS.

APPLY BMS 10-60 BOEING COLOR 707 GRAY GLOSS
 ENAMEL (SRF-14.9813) OVER THE PRIMER, EXCEPT
 IN AREA NOTED IN FIG. 601. WIPE ON PRIMER
 ON PLATED SURFACES (F-19-45) IN THE BEARING
 BORE AND BORE CHAMFERS.

- 1 THE THICKNESS CHANGES UNIFORMLY BETWEEN DIMENSION POINTS 1 AND 2, 3 AND 4
- 2 MINIMUM THICKNESS IS EQUIVALENT TO THE LOWER DESIGN LIMIT LESS THE WEAR TOLERANCE. THE MAXIMUM THICKNESS AFTER REWORK MUST NOT EXCEED THE HIGHER DESIGN LIMIT NOTED
- 3 FOR SLAT TRACK 114T4180-10 AND -20 ONLY
- 4 FOR SLAT TRACK 114T4180-30 AND -40 ONLY
- 5 FOR SLAT TRACK 114T4180-50 ONLY
- 6 NO REPAIR IS REQUIRED IF TRACK THICKNESS IS GREATER THAN THICKNESS SPECIFIED. THIS IS 0.01 INCH OF WEAR ALLOWED ON TRACK WEAR SURFACE

REPAIR

BREAK ALL SHARP EDGES

MATERIAL: 4340M STEEL

HEAT TREAT: 275-300 KSI

ALL DIMENSIONS ARE IN INCHES

ITEM NUMBERS REFER TO IPL FIG. 4

- 7 NO ENAMEL (SRF-14.9813) ON THIS SURFACE
- 8 THE TRACK CAN BE REPAIRED UNTIL IT IS WORN TO THE THICKNESS SPECIFIED. THE TRACK MUST BE REPLACED IF IT IS WORN MORE THAN THIS. THIS IS 0.025 INCH OF WEAR ALLOWED ON TRACK WEAR SURFACE
- 9 OMIT CHROME PLATE
- 10 CHROME PLATE REPAIR AND BEARING REPLACEMENT
- 11 SLEEVE REPAIR

114T4180-10,-20,-30,-40,-50
 Track Repair and Refinish
 Figure 601 (Sheet 3)

27-81-28

REPAIR 8-2

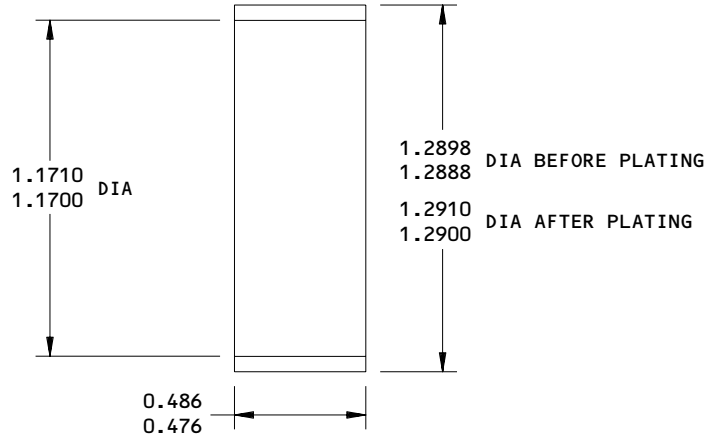
Page 606

Mar 01/02

01.1

114T0101
114T0233
114T3302
114T4180

BOEING
COMPONENT
MAINTENANCE MANUAL



63/ ALL MACHINED SURFACES UNLESS SHOWN
DIFFERENTLY

BREAK ALL SHARP EDGES

CADMIUM PLATE (F-15.29) OUTSIDE DIAMETER

MATERIAL: 304 CRES ANNEALED

MAGNETIC PARTICLE INSPECT

ALL DIMENSIONS ARE IN INCHES

Repair Sleeve Details
Figure 602

27-81-28

REPAIR 8-2

01.1

Page 607

Mar 01/02

M33192

MAIN TRACK ASSEMBLY – REPAIR 9-1

114T4180-61, -62, -63

NOTE: Refer to REPAIR-GENERAL for a list of applicable standard practices. Refer to IPL Fig. 4 and 5 for item numbers. For repair of surfaces which is only replacement of the original finish, refer to Refinish instructions in REPAIR 9-2.

1. Bearing Replacement

- A. Remove the old bearing (25, IPL Fig. 4; 10, IPL Fig. 5) as shown in SOPM 20-50-03.
- B. Install a replacement bearing with BMS 5-95 sealant.
- C. Roller (anvil) swage the bearing per 20-50-03.
- D. Do a push out load test as shown in SOPM 20-50-03.
 - (1) See SOPM 20-50-03, "anvil swaged bearing retention" section for push out loads.

2. Conduit Replacement

- A. Remove the rivets (50, IPL Fig. 5) and the old conduit.
- B. Install a replacement conduit with new rivets.
 - (1) Before you install the rivet, apply a layer of BMS 5-95 sealant to the shank to make a continuous extrusion of sealant around the tail of the rivet when the rivet is installed.
 - (2) Install the rivet. Machine the driven head to a maximum height of 0.10 inch. Apply BMS 10-11, Type 1 primer (F-18.12) and BMS 10-60, Type 1 enamel (F-14.9813, which replaces SRF-14.9813).

27-81-28

REPAIR 9-1

01.1

Page 601

Jul 01/04

- (3) Apply a faying surface seal and fillet seal between the mating surfaces of the conduit flanges and the track with BMS 5-95 sealant (SOPM 20-50-19). Adjust the conduit to be inside the track and remove all gaps between the track and the conduit.
- (4) Fill the cavities around the wires with BMS 5-95 sealant (SOPM 20-50-19).

27-81-28

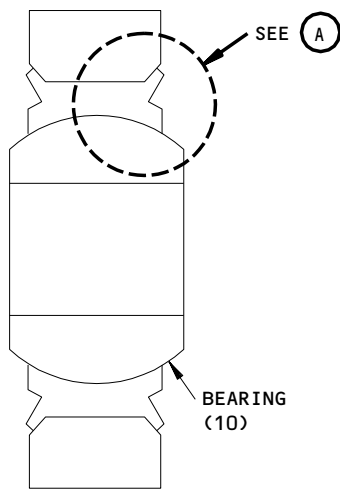
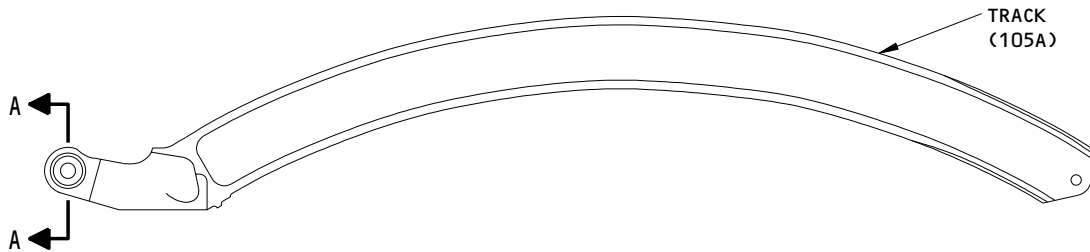
REPAIR 9-1

01.1

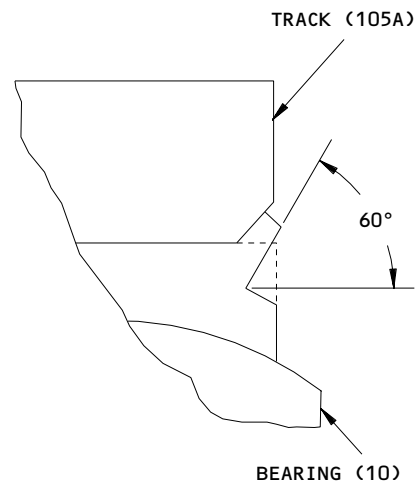
Page 602

Jul 01/04

114T0101
114T0233
114T3302
114T4180



A-A



(A)

ITEM NUMBERS REFER TO IPL FIG. 5
ALL DIMENSIONS ARE IN INCHES

114T4180-61,-62,-63
Main Track Assembly Repair
Figure 601

27-81-28

REPAIR 9-1

01.101

Page 603

Jul 01/04

MAIN TRACK - REPAIR 9-2

114T4180-73, -75

NOTE: Refer to REPAIR-GENERAL for a list of applicable standard practices. Refer to IPL Fig. 4 for item numbers. For repair of surfaces which is only replacement of the original finish, refer to Refinish instructions in Fig. 601.

| 1. Track Repair

- A. If the wear on the track (35, IPL Fig. 4; 105A, IPL Fig. 5) is 0.010-0.025 inch compared to the design thickness, then the track is serviceable, but we recommend you repair the track per par. B.
- B. Repair the track (35, IPL Fig. 4; 105A, IPL Fig. 5) as follows:
 - | (1) Remove the finishes and the plating (SOPM 20-30-02). Abrasive blast cleaning can be used locally on the roller surfaces.
 - | (2) Blend out the defects with a 100 to 1 ratio.
 - | (3) Magnetic particle examine class A (SOPM 20-20-01).
 - | (4) Nital etch examine (SOPM 20-10-02).
 - | (5) Shot peen (SOPM 20-10-03).
 - | (6) Refinish as indicated.
 - | (7) Magnetic particle examine class A (SOPM 20-20-01).
- | C. If the wear on the track is more than 0.025 inch, replace the track. Repair is not recommended.

27-81-28

REPAIR 9-2

01.1

Page 601

Jul 01/04

2. Conduit Replacement

A. Remove the rivets (50, IPL Fig. 5) and the old conduit.

B. Install a replacement conduit with new rivets.

- (1) Before you install the rivet, apply a layer of BMS 5-95 sealant to the shank to make a continuous extrusion of sealant around the tail of the rivet when the rivet is installed.
- (2) Install the rivet. Machine the driven head to a maximum height of 0.10 inch. Apply BMS 10-11, Type 1 primer (F-18.12) and BMS 10-60, Type 1 enamel (F-14.9813, which replaces SRF-14.9813).
- (3) Apply a faying surface seal and fillet seal between the mating surfaces of the conduit flanges and the track with BMS 5-95 sealant (SOPM 20-50-19). Adjust the conduit to be inside the track and remove all gaps between the track and the conduit.
- (4) Fill the cavities around the wires with BMS 5-95 sealant (SOPM 20-50-19).

27-81-28

REPAIR 9-2

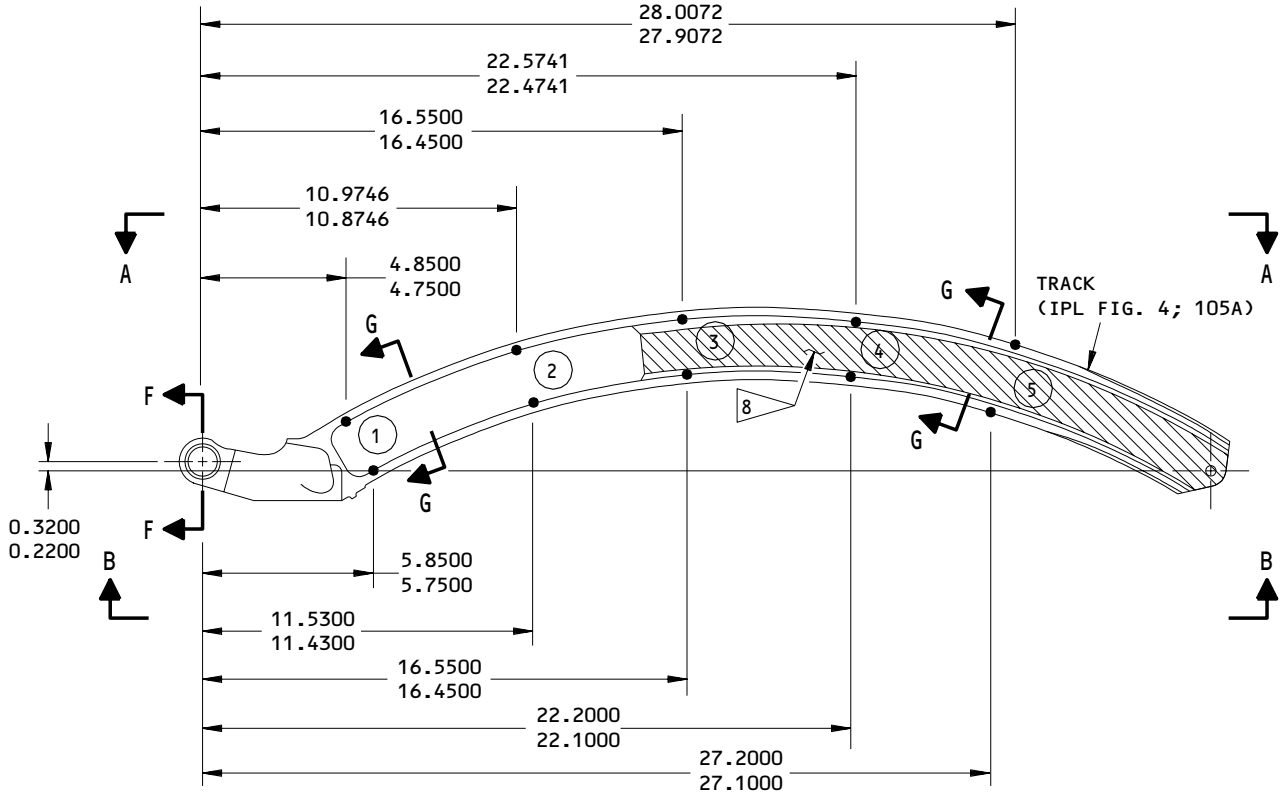
01.1

Page 602

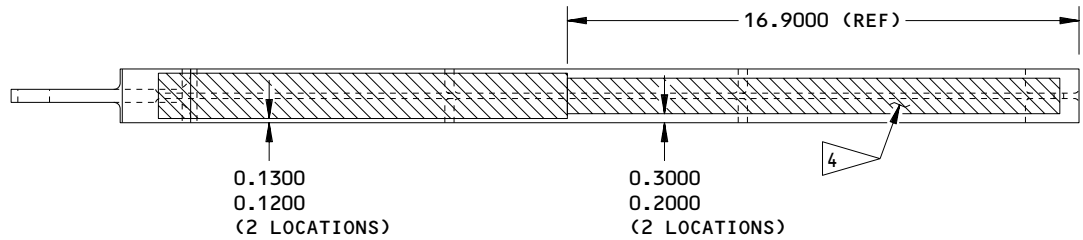
Jul 01/04

114T0101
 114T0233
 114T3302
 114T4180

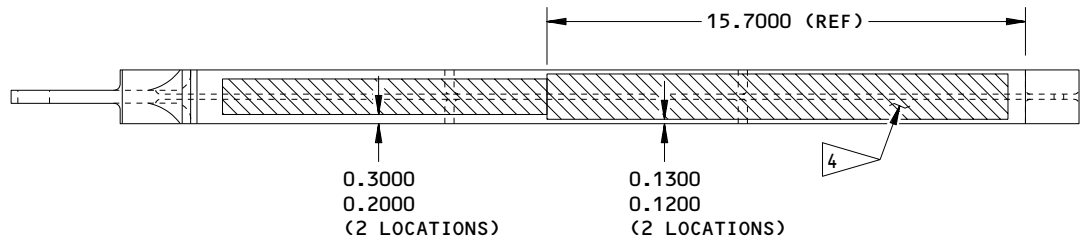
BOEING
 COMPONENT
 MAINTENANCE MANUAL



114T4180-73



A-A



B-B

114T4180-73,-75
 Track Repair and Refinish
 Figure 601 (Sheet 1)

27-81-28

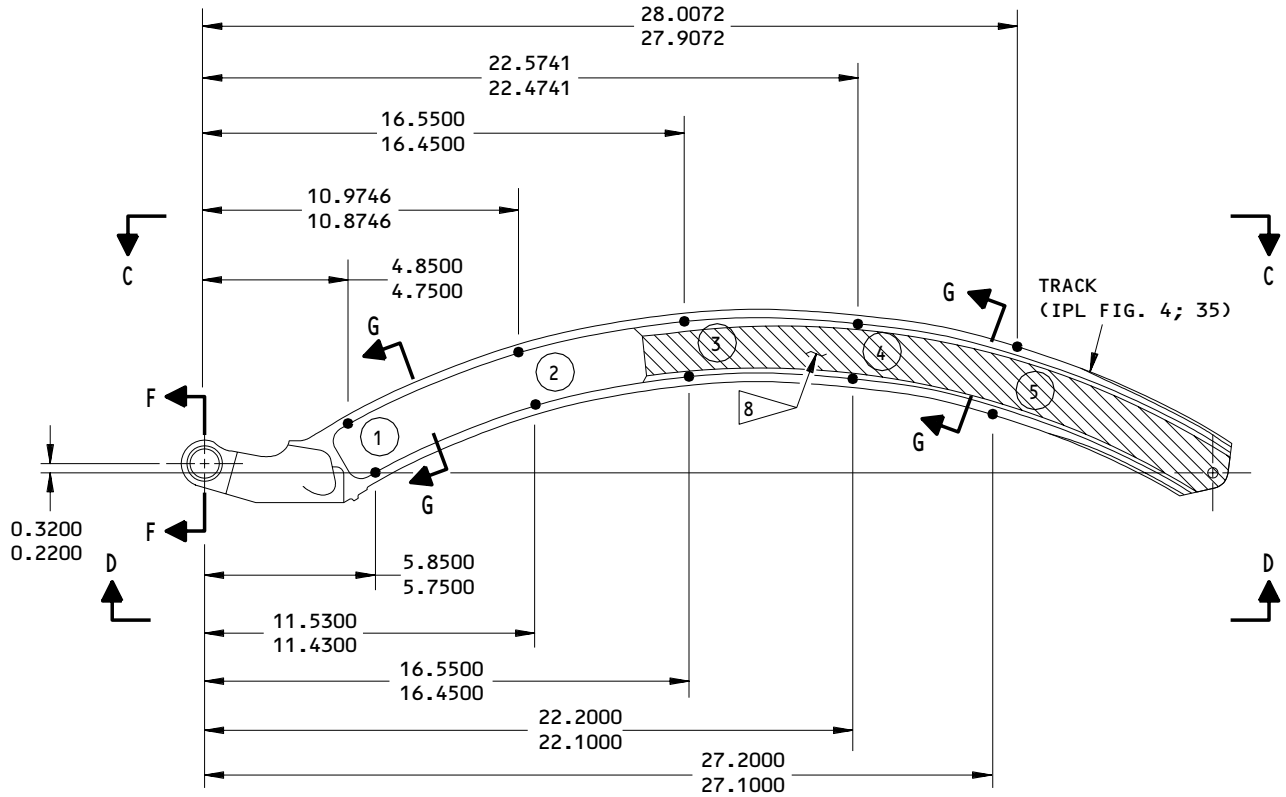
REPAIR 9-2

01.101

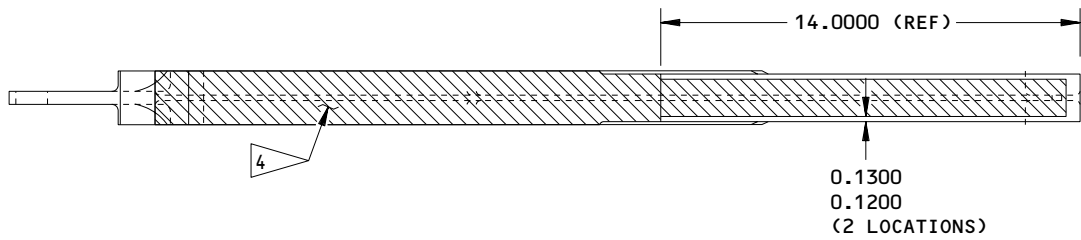
Page 603

Jul 01/04

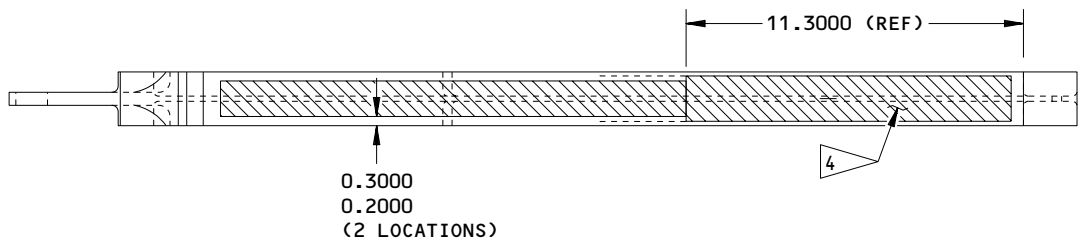
L03648



114T4180-75



C-C



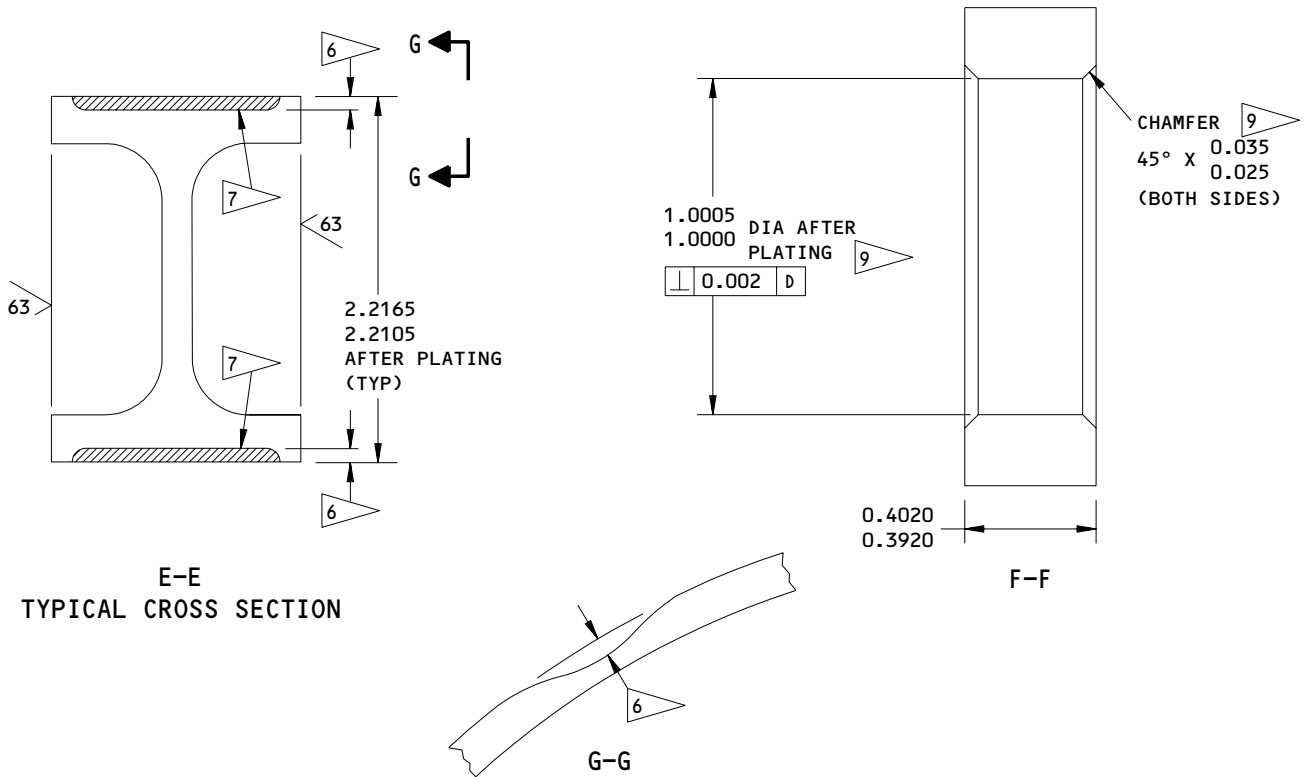
D-D

114T4180-73,-75
 Track Repair and Refinish
 Figure 601 (Sheet 2)

27-81-28

REPAIR 9-2
 Page 604
 Jul 01/04

01.101



TRACK LOCATION	FLANGE THICKNESS				
	THICKNESS DESIGN DIMENSIONS	SERVICE WEAR MINIMUM THICKNESS			
		1	2	3	MINIMUM ALLOWABLE THICKNESS
		1	5		
①	0.247 (TOP) 0.227	0.217			0.202
	0.150 (BOTTOM) 0.130	0.120			0.105
②	0.287 0.267	0.257			0.242
③	0.370 0.350	0.340			0.325
④	0.270 0.250	0.240			0.225
⑤	0.130 0.110	0.100			0.085
END OF TRACK	0.130 0.110	0.100			0.085

TABLE A

114T4180-73,-75
 Track Repair and Refinish
 Figure 601 (Sheet 3)

27-81-28

REPAIR 9-2

01.101

Page 605

Jul 01/04

REFINISH

CADMIUM-TITANIUM PLATE (F-15.01) ALL OVER.

APPLY BMS 10-11, TYPE 1 PRIMER (F-20.02) ALL OVER, EXCEPT AS SHOWN.

APPLY BMS 10-60, ENAMEL (F-14.9813) OVER THE PRIMER, EXCEPT AS SHOWN. APPLY WIPE ON PRIMER (F-19.45) TO THE ROLLER CONTACT AREAS

REPAIR

125/ ✓ ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

MATERIAL: 4340M STEEL, 275-300 KSI

ALL DIMENSIONS ARE IN INCHES

- 1 MEASURE THE THICKNESS AT POINTS 1 THRU 5. DO A VISUAL CHECK BETWEEN THE POINTS AS SHOWN IN VIEW G-G
- 2 THE SERVICE WEAR MINIMUM THICKNESS IS EQUIVALENT TO THE LOWER DESIGN LIMIT MINUS ALLOWABLE WEAR. THE MAXIMUM THICKNESS AFTER REWORK MUST NOT EXCEED THE DESIGN DIMENSION
- 3 NO REPAIR IS REQUIRED IF THE TRACK THICKNESS IS GREATER THAN THE SERVICE WEAR MINIMUM THICKNESS
- 4 DO NOT APPLY ENAMEL (SRF-14.9625) OR PRIMER (F-20.02) TO THIS SURFACE
- 5 THE TRACK CAN BE REPAIRED UNTIL IT IS WORN TO THE MINIMUM ALLOWABLE THICKNESS, OR A DEPTH OF 0.025 INCH. IF THE TRACK IS WORN MORE THAN THIS, THEN REPLACE IT

- 6 THE SERVICE WEAR MINIMUM THICKNESS IS EQUIVALENT TO A WEAR DEPTH OF 0.010 INCH. THE MINIMUM ALLOWABLE THICKNESS IS EQUIVALENT TO A WEAR DEPTH OF 0.025 INCH
- 7 ROLLER CONTACT WEAR SURFACE
- 8 APPLY BMS 10-86 TEFLON COATING (SRF-14.9625) IN PLACE OF ENAMEL (SRF-14.9813) IN THIS AREA OF THE 0.200 INCH THICK WEB ONLY. TOLERANCE ON TEFLON APPLICATION ± 0.05 INCH. OVERSPRAY ALLOWED.
- 9 DO NOT APPLY PRIMER (F-20.02) AND ENAMEL (SRF-14.9813) TO BEARING BORE AND CHAMFER

114T4180-73,-75
Track Repair and Refinish
Figure 601 (Sheet 4)

27-81-28

REPAIR 9-2

01.101

Page 606

Jul 01/04

MAIN TRACK ASSEMBLY – REPAIR 10-1

114T4180-65, -85

NOTE: Refer to REPAIR-GENERAL for a list of applicable standard practices. Refer to IPL Fig. 4 for item numbers. For repair of surfaces which is only replacement of the original finish, refer to Refinish instructions in REPAIR 10-2.

1. Bearing Replacement

- | A. Remove the old bearing (25A) as shown in SOPM 20-50-03.
- | B. Install a replacement bearing with BMS 5-95 sealant.
- | C. Roller (anvil) swage the bearing per 20-50-03.
- | D. Do a push out load test as shown in SOPM 20-50-03.
 - | (1) See SOPM 20-50-03, "anvil swaged bearing retention" section for push out loads.

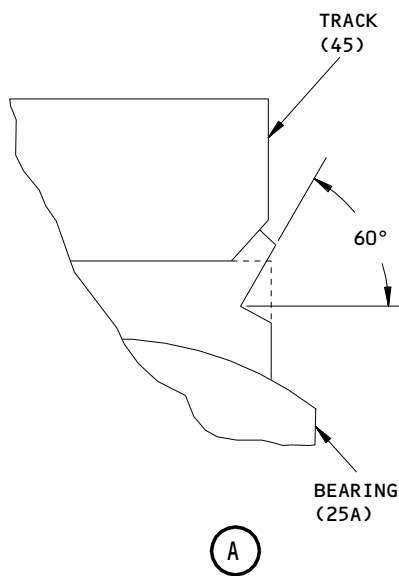
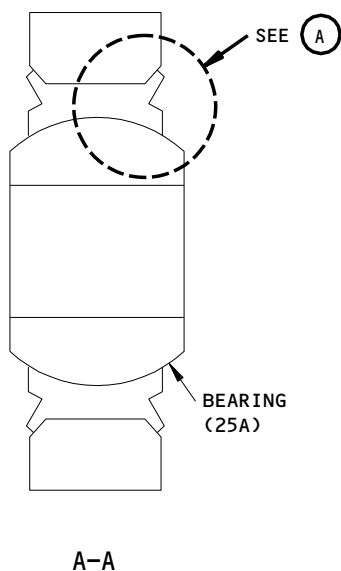
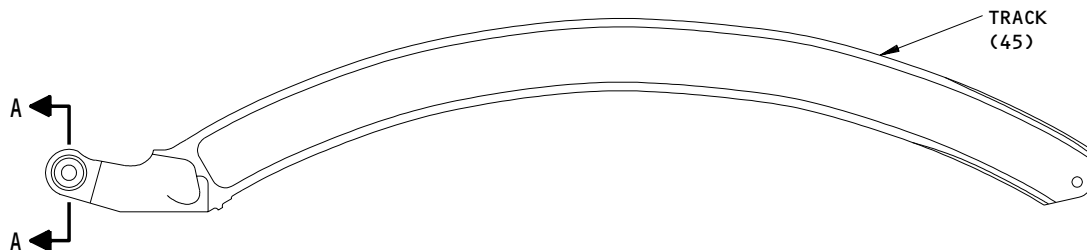
27-81-28

REPAIR 10-1

01.1

Page 601

Mar 01/02



ITEM NUMBERS REFER TO IPL FIG. 4
 ALL DIMENSIONS ARE IN INCHES

114T4180-65,-85
 Main Track Assembly Repair
 Figure 601

27-81-28
 REPAIR 10-1
 Page 602
 Mar 01/02

01.1

MAIN TRACK – REPAIR 10-2

114T4180-77, -87

NOTE: Refer to REPAIR-GENERAL for a list of applicable standard practices. Refer to IPL Fig. 4 for item numbers. For repair of surfaces which is only replacement of the original finish, refer to Refinish instructions in Fig. 601.

| 1. Track Repair

- | A. If the wear on the track (45) is 0.010-0.025 inch compared to the design thickness, then the track is serviceable, but we recommend you repair the track per par. B.
- B. Repair the track (45) as follows:
- | (1) Remove the finishes and the plating (SOPM 20-30-02). Abrasive blast cleaning can be used locally on the roller surfaces.
- | (2) Blend out the defects with a 100 to 1 ratio.
- | (3) Magnetic particle examine class A (SOPM 20-20-01).
- | (4) Nital etch examine (SOPM 20-10-02).
- | (5) Shot peen (SOPM 20-10-03).
- | (6) Refinish as indicated.
- | (7) Magnetic particle examine class A (SOPM 20-20-01).
- | C. If the wear on the track is more than 0.025 inch, replace the track. Repair is not recommended.

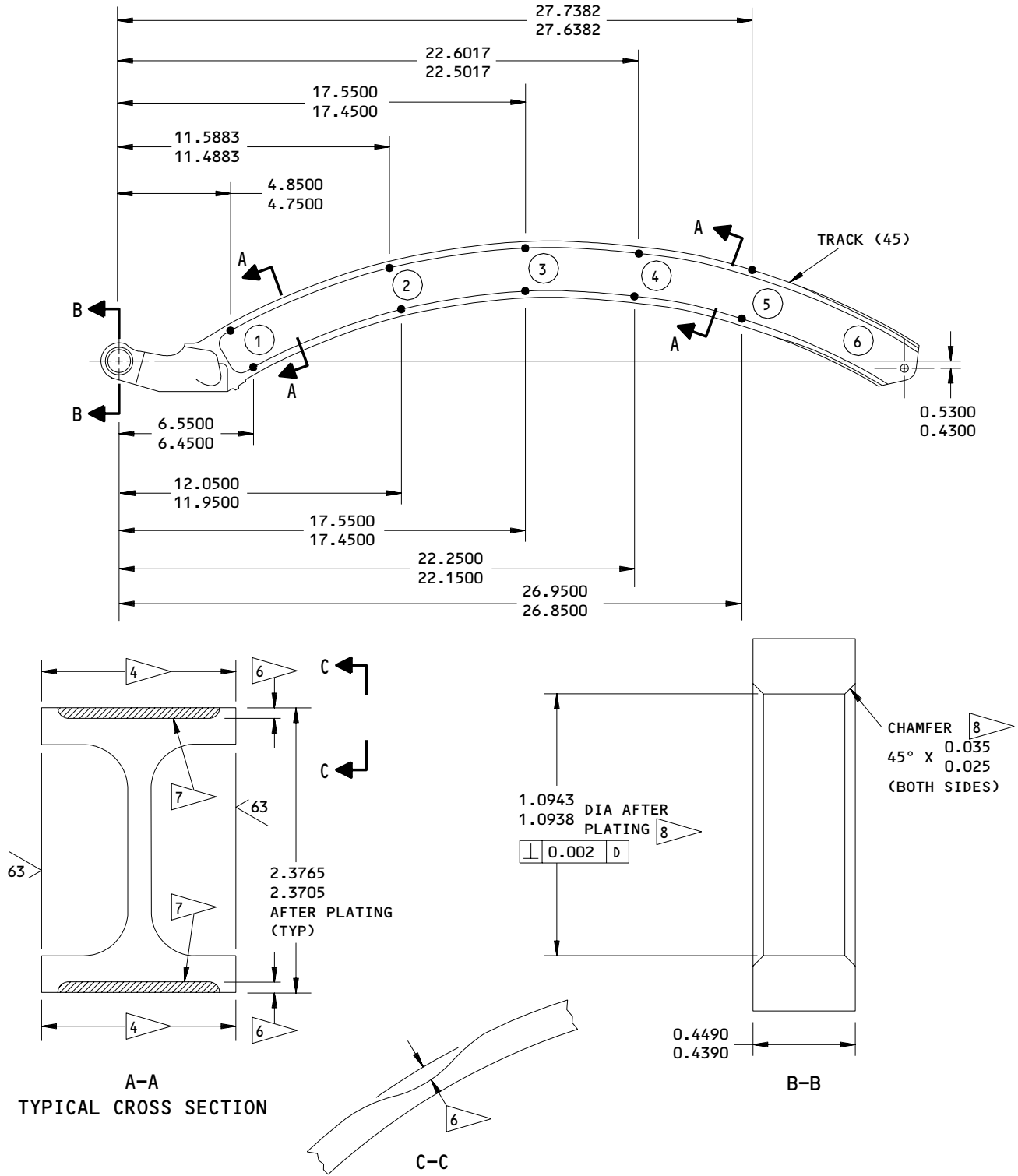
27-81-28

REPAIR 10-2

01.1

Page 601

Jul 01/04



114T4180-77,-87
 Track Repair and Refinish
 Figure 601 (Sheet 1)

27-81-28

REPAIR 10-2
 Page 602
 Mar 01/02

01.1

TRACK LOCATION	FLANGE THICKNESS		
	THICKNESS DESIGN DIMENSIONS	SERVICE WEAR MINIMUM THICKNESS 1 2 3	MINIMUM ALLOWABLE THICKNESS 1 5
①	0.149 (TOP) 0.129	0.119	0.104
	0.169 (BOTTOM) 0.149	0.139	0.124
②	0.285 0.265	0.255	0.240
③	0.390 0.370	0.360	0.345
④	0.273 0.253	0.243	0.228
⑤	0.150 0.130	0.120	0.105
END OF TRACK	0.150 0.130	0.120	0.105
⑥ WEB	0.210 0.190	DESIGN LIMITS	DESIGN LIMITS

TABLE A

REFINISH

CADMIUM-TITANIUM PLATE (F-15.01) ALL OVER.
 APPLY BMS 10-11, TYPE 1 PRIMER (F-20.02) ALL OVER, EXCEPT AS SHOWN.
 APPLY BMS 10-60, ENAMEL (F-14.9813) OVER THE PRIMER, EXCEPT AS SHOWN. APPLY WIPE ON PRIMER (F-19.45) TO THE PLATED SURFACES OF THE BEARING BORE, ITS CHAMFERS, AND THE ROLLER CONTACT AREAS.

- 1 MEASURE THE THICKNESS AT POINTS 1 THRU 5. DO A VISUAL CHECK BETWEEN THE POINTS AS SHOWN IN VIEW C-C
- 2 THE SERVICE WEAR MINIMUM THICKNESS IS EQUIVALENT TO THE LOWER DESIGN LIMIT MINUS ALLOWABLE WEAR. THE MAXIMUM THICKNESS AFTER REWORK MUST NOT EXCEED THE DESIGN DIMENSION
- 3 NO REPAIR IS REQUIRED IF THE TRACK THICKNESS IS GREATER THAN THE SERVICE WEAR MINIMUM THICKNESS
- 4 DO NOT APPLY ENAMEL (SRF-14.9625) OR PRIMER (F-20.02) TO THIS SURFACE
- 5 THE TRACK CAN BE REPAIRED UNTIL IT IS WORN TO THE MINIMUM ALLOWABLE THICKNESS, OR A DEPTH OF 0.025 INCH. IF THE TRACK IS WORN MORE THAN THIS, THEN REPLACE IT

REPAIR

125 ✓ ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY
 BREAK ALL SHARP EDGES
 MATERIAL: 4340M STEEL, 275-300 KSI
 ALL DIMENSIONS ARE IN INCHES
 ITEM NUMBERS REFER TO IPL FIG. 4

- 6 THE SERVICE WEAR MINIMUM THICKNESS IS EQUIVALENT TO A WEAR DEPTH OF 0.010 INCH. THE MINIMUM ALLOWABLE THICKNESS IS EQUIVALENT TO A WEAR DEPTH OF 0.025 INCH
- 7 ROLLER CONTACT WEAR SURFACE
- 8 DO NOT APPLY PRIMER (F-20.02) AND ENAMEL (SRF-14.9813) TO BEARING BORE AND CHAMFER

114T4180-77,-87
 Track Repair and Refinish
 Figure 601 (Sheet 2)

27-81-28
 REPAIR 10-2
 Page 603
 Mar 01/02

01.1

MAIN TRACK ASSEMBLY – REPAIR 11-1

114T4180-67

NOTE: Refer to REPAIR-GENERAL for a list of applicable standard practices. Refer to IPL Fig. 4 for item numbers. For repair of surfaces which is only replacement of the original finish, refer to Refinish instructions in REPAIR 11-2.

1. Bearing Replacement

- | A. Remove the old bearing (25B) as shown in SOPM 20-50-03.
- | B. Install a replacement bearing with BMS 5-95 sealant.
- | C. Roller (anvil) swage the bearing per 20-50-03.
- | D. Do a push out load test as shown in SOPM 20-50-03.
 - | (1) See SOPM 20-50-03, "anvil swaged bearing retention" section for push out loads.

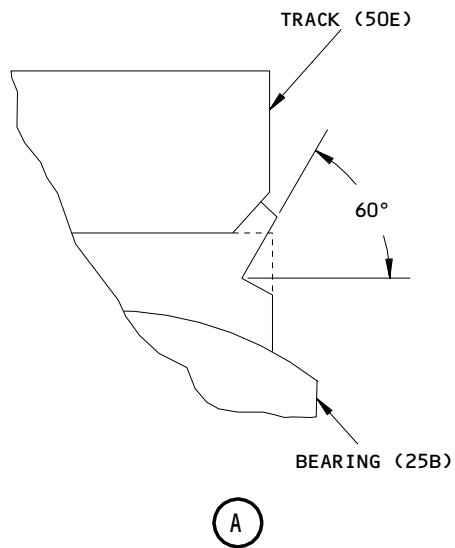
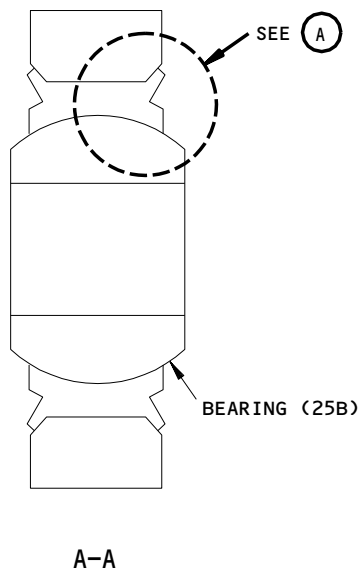
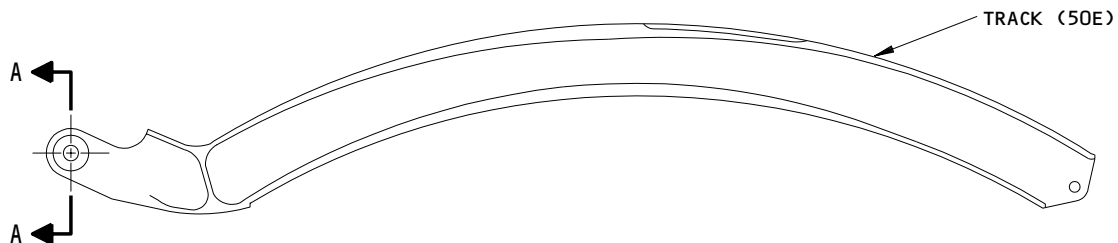
27-81-28

REPAIR 11-1

01.1

Page 601

Mar 01/02



ITEM NUMBERS REFER TO IPL FIG. 4
 ALL DIMENSIONS ARE IN INCHES

114T4180-67
 Main Track Assembly Repair
 Figure 601

27-81-28

REPAIR 11-1
 Page 602
 Mar 01/02

01.1

MAIN TRACK – REPAIR 11-2

114T4180-79

NOTE: Refer to REPAIR-GENERAL for a list of applicable standard practices. Refer to IPL Fig. 4 for item numbers. For repair of surfaces which is only replacement of the original finish, refer to Refinish instructions in Fig. 601.

| 1. Track Repair

- | A. If the wear on the track (50E) is 0.010-0.025 inch compared to the design thickness, then the track is serviceable, but we recommend you repair the track per par. B.
- B. Repair the track (50E) as follows:
- | (1) Remove the finishes and the plating (SOPM 20-30-02). Abrasive blast cleaning can be used locally on the roller surfaces.
- | (2) Blend out the defects with a 100 to 1 ratio.
- | (3) Magnetic particle examine class A (SOPM 20-20-01).
- | (4) Nital etch examine (SOPM 20-10-02).
- | (5) Shot peen (SOPM 20-10-03).
- | (6) Refinish as indicated.
- | (7) Magnetic particle examine class A (SOPM 20-20-01).
- | C. If the wear on the track is more than 0.025 inch, replace the track. Repair is not recommended.

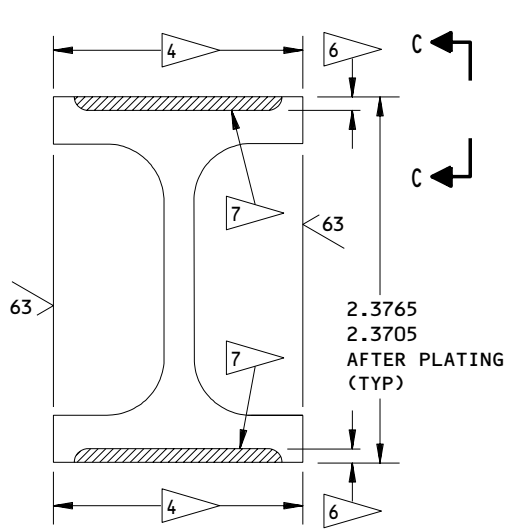
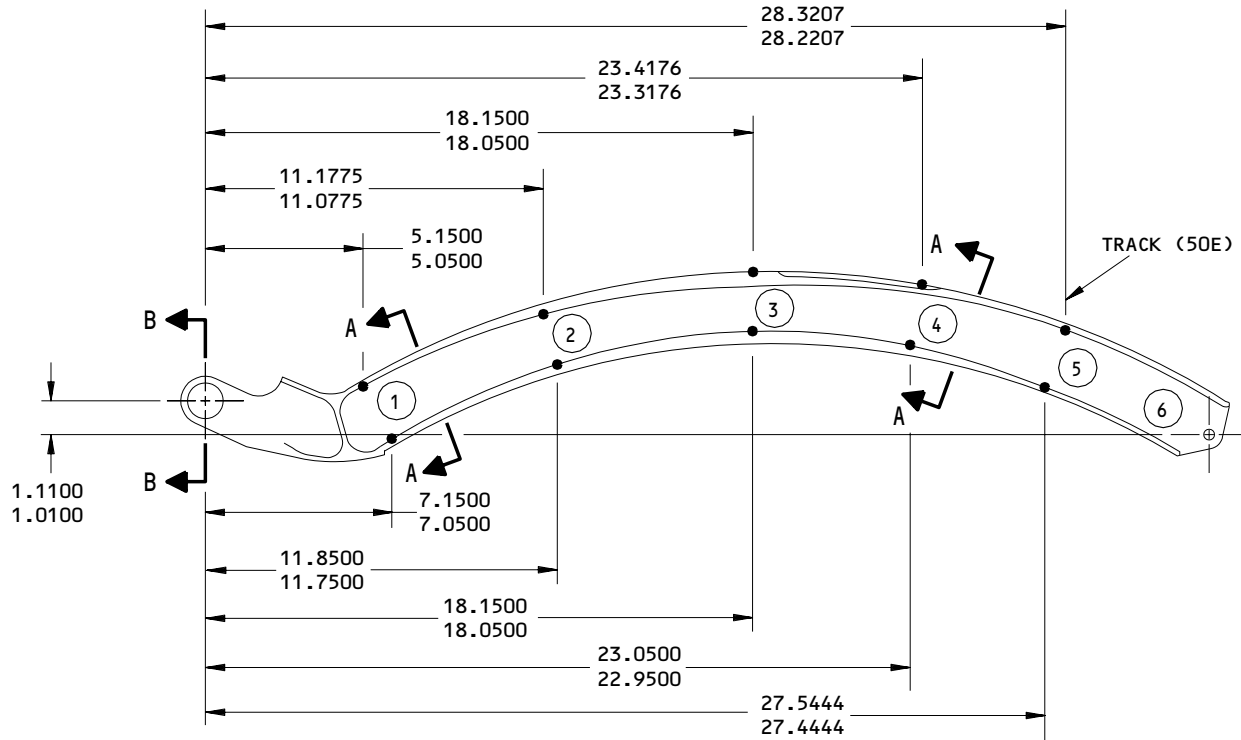
27-81-28

REPAIR 11-2

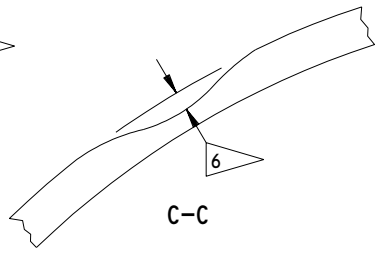
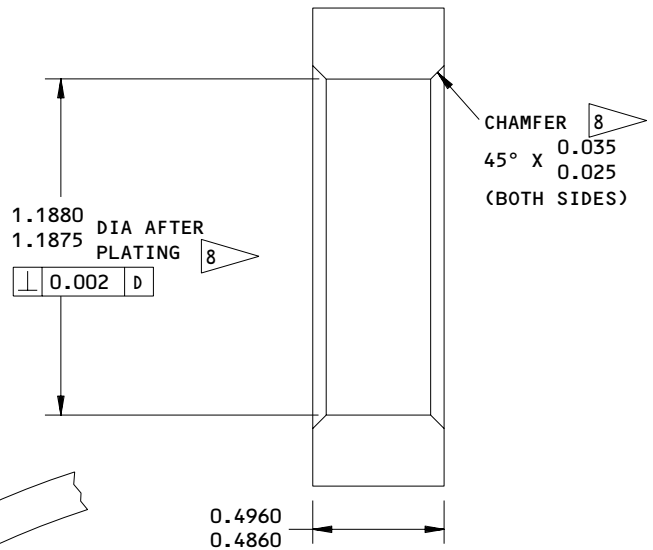
01.1

Page 601

Jul 01/04



A-A
 TYPICAL CROSS SECTION



114T4180-79
 Track Repair and Refinish
 Figure 601 (Sheet 1)

27-81-28

REPAIR 11-2
 Page 602
 Mar 01/02

01.1

TRACK LOCATION	FLANGE THICKNESS		
	THICKNESS DESIGN DIMENSIONS	SERVICE WEAR MINIMUM THICKNESS 1 > 2 > 3 >	MINIMUM ALLOWABLE THICKNESS 1 > 5 >
①	0.181 (TOP) 0.161	0.151	0.136
	0.204 (BOTTOM) 0.184	0.174	0.159
②	0.314 0.294	0.284	0.269
③	0.450 0.430	0.420	0.405
④	0.309 0.289	0.279	0.264
⑤	0.170 0.150	0.140	0.125
END OF TRACK	0.170 0.150	0.140	0.125
⑥ WEB	0.210 0.190	DESIGN LIMITS	DESIGN LIMITS

TABLE A

REFINISH

CADMIUM-TITANIUM PLATE (F-15.01) ALL OVER.

APPLY BMS 10-11, TYPE 1 PRIMER (F-20.02) ALL OVER, EXCEPT AS SHOWN.

APPLY BMS 10-60, ENAMEL (F-14.9813) OVER THE PRIMER, EXCEPT AS SHOWN. APPLY WIPE ON PRIMER (F-19.45) TO THE PLATED SURFACES OF THE BEARING BORE, ITS CHAMFERS, AND THE ROLLER CONTACT AREAS.

- 1 > MEASURE THE THICKNESS AT POINTS 1 THRU 5. DO A VISUAL CHECK BETWEEN THE POINTS AS SHOWN IN VIEW C-C
- 2 > THE SERVICE WEAR MINIMUM THICKNESS IS EQUIVALENT TO THE LOWER DESIGN LIMIT MINUS ALLOWABLE WEAR. THE MAXIMUM THICKNESS AFTER REWORK MUST NOT EXCEED THE DESIGN DIMENSION
- 3 > NO REPAIR IS REQUIRED IF THE TRACK THICKNESS IS GREATER THAN THE SERVICE WEAR MINIMUM THICKNESS.
- 4 > DO NOT APPLY ENAMEL (SRF-14.9625) OR PRIMER (F-20.02) TO THIS SURFACE
- 5 > THE TRACK CAN BE REPAIRED UNTIL IT IS WORN TO THE MINIMUM ALLOWABLE THICKNESS, OR A DEPTH OF 0.025 INCH. IF THE TRACK IS WORN MORE THAN THIS, THEN REPLACE IT

REPAIR

125/ ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

MATERIAL: 4340M STEEL, 275-300 KSI

ALL DIMENSIONS ARE IN INCHES

ITEM NUMBERS REFER TO IPL FIG. 4

- 6 > THE SERVICE WEAR MINIMUM THICKNESS IS EQUIVALENT TO A WEAR DEPTH OF 0.010 INCH. THE MINIMUM ALLOWABLE THICKNESS IS EQUIVALENT TO A WEAR DEPTH OF 0.025 INCH
- 7 > ROLLER CONTACT WEAR SURFACE
- 8 > DO NOT APPLY PRIMER (F-20.02) AND ENAMEL (SRF-14.9813) TO BEARING BORE AND CHAMFER

114T4180-79
 Track Repair and Refinish
 Figure 601 (Sheet 2)

27-81-28

REPAIR 11-2

01.1

Page 603

Mar 01/02

MAIN TRACK ASSEMBLY – REPAIR 12-1

114T4180-69

NOTE: Refer to REPAIR-GENERAL for a list of applicable standard practices. Refer to IPL Fig. 4 for item numbers. For repair of surfaces which is only replacement of the original finish, refer to Refinish instructions in REPAIR 12-2.

1. Bearing Replacement

| A. Remove the old bearing (25B) as shown in SOPM 20-50-03.

| B. Install a replacement bearing with BMS 5-95 sealant.

| C. Roller (anvil) swage the bearing per 20-50-03.

| D. Do a push out load test as shown in SOPM 20-50-03.

| (1) See SOPM 20-50-03, "anvil swaged bearing retention" section for push out loads.

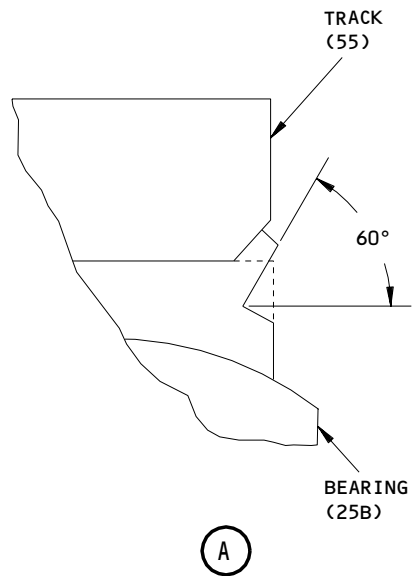
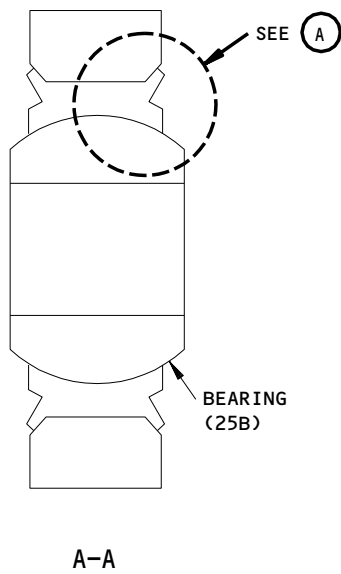
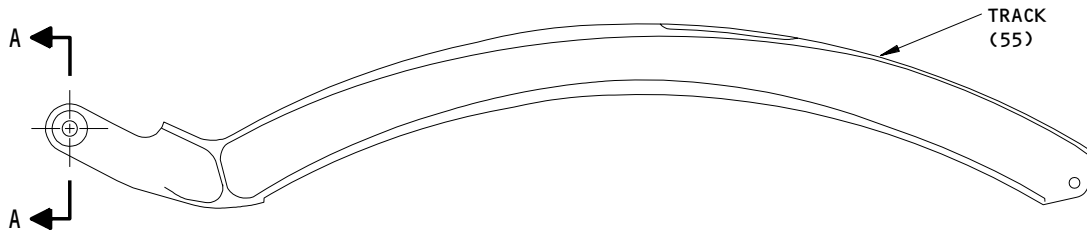
27-81-28

REPAIR 12-1

01.1

Page 601

Mar 01/02



ITEM NUMBERS REFER TO IPL FIG. 4
 ALL DIMENSIONS ARE IN INCHES

114T4180-69
 Main Track Assembly Repair
 Figure 601

27-81-28

REPAIR 12-1
 Page 602
 Mar 01/02

01.1

MAIN TRACK – REPAIR 12-2

114T4180-81

NOTE: Refer to REPAIR-GENERAL for a list of applicable standard practices. Refer to IPL Fig. 4 for item numbers. For repair of surfaces which is only replacement of the original finish, refer to Refinish instructions in Fig. 601.

| 1. Track Repair

- | A. If the wear on the track (55) is 0.010-0.025 inch compared to the design thickness, then the track is serviceable, but we recommend you repair the track per par. B.
- B. Repair the track (55) as follows:
- | (1) Remove the finishes and the plating (SOPM 20-30-02). Abrasive blast cleaning can be used locally on the roller surfaces.
- | (2) Blend out the defects with a 100 to 1 ratio.
- | (3) Magnetic particle examine class A (SOPM 20-20-01).
- | (4) Nital etch examine (SOPM 20-10-02).
- | (5) Shot peen (SOPM 20-10-03).
- | (6) Refinish as indicated.
- | (7) Magnetic particle examine class A (SOPM 20-20-01).
- | C. If the wear on the track is more than 0.025 inch, replace the track. Repair is not recommended.

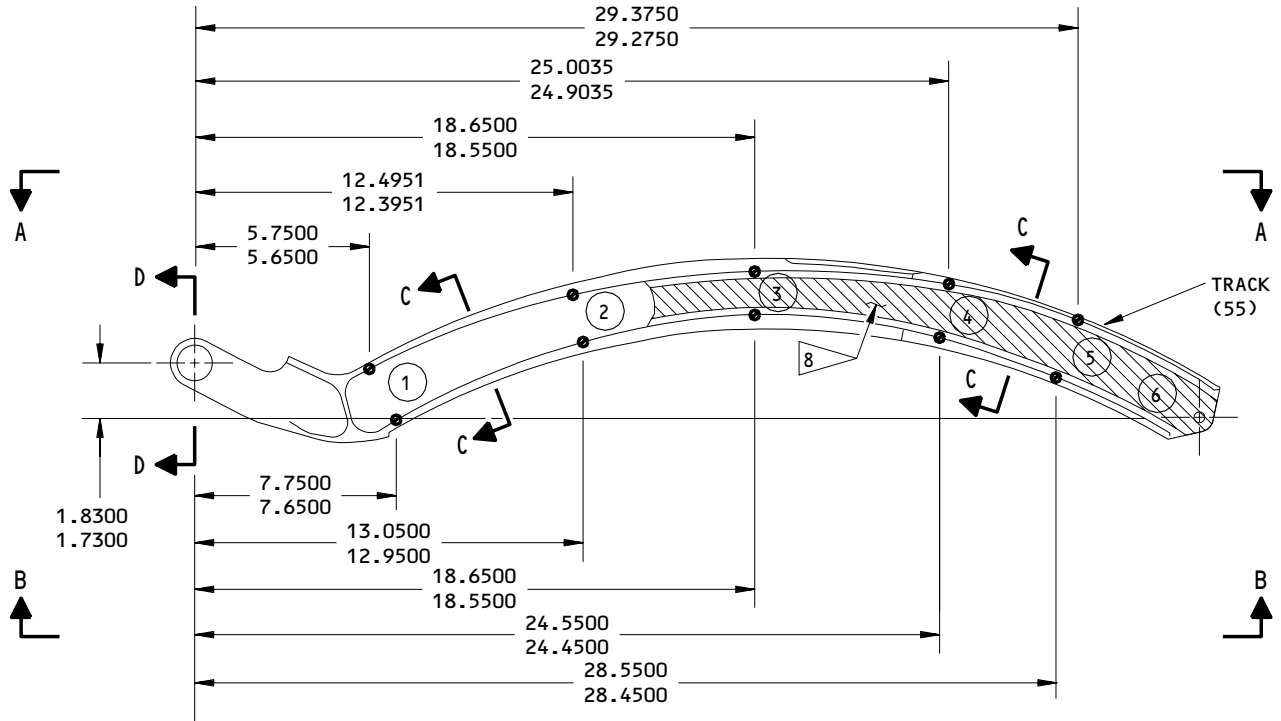
27-81-28

REPAIR 12-2

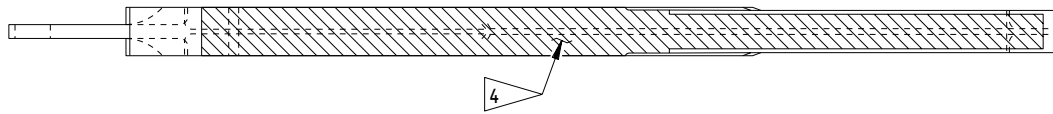
01.1

Page 601

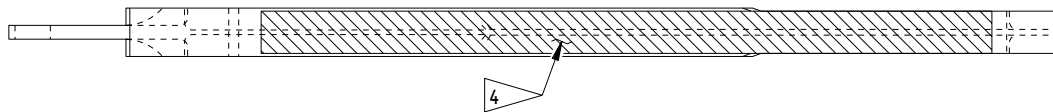
Jul 01/04



114T4180-81



A-A



B-B

114T4180-81
 Track Repair and Refinish
 Figure 601 (Sheet 1)

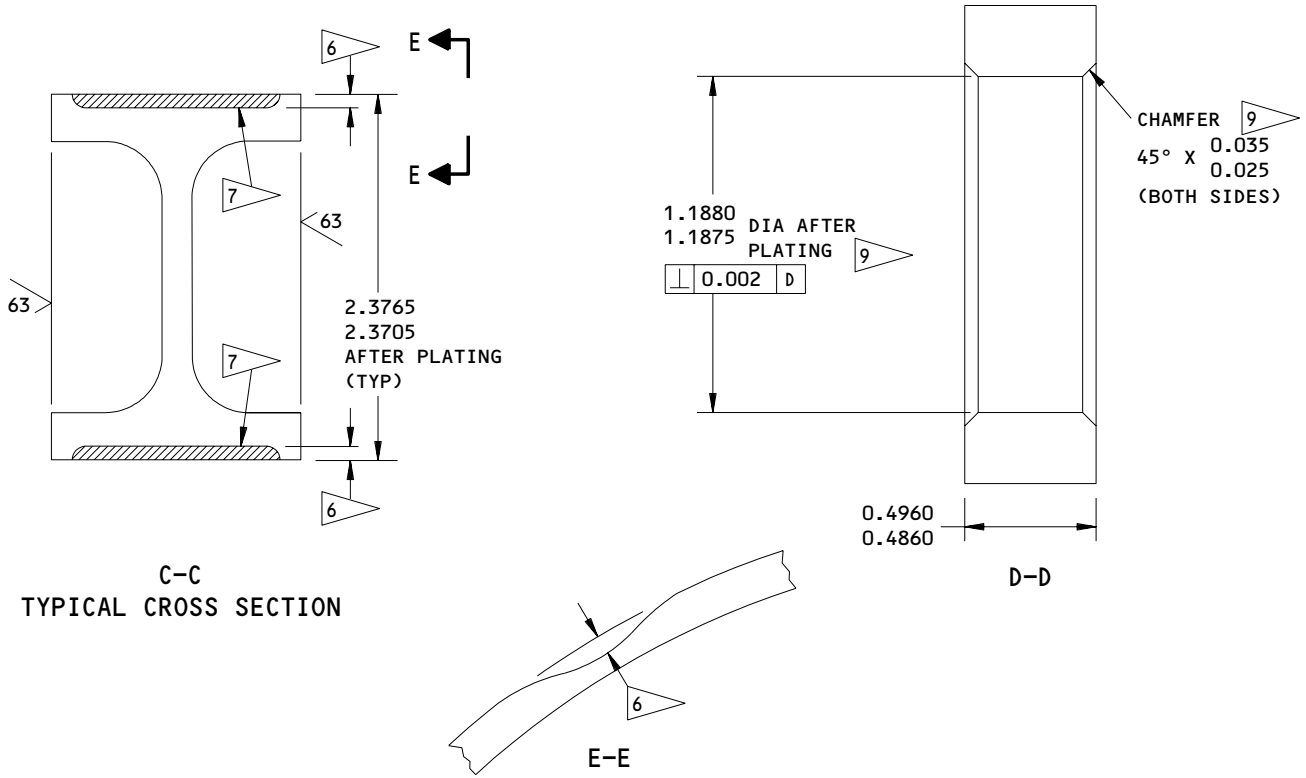
27-81-28

REPAIR 12-2
 Page 602
 Mar 01/02

01.1

114T0101
 114T0233
 114T3302
 114T4180

BOEING
 COMPONENT
 MAINTENANCE MANUAL



TRACK LOCATION	FLANGE THICKNESS		
	THICKNESS DESIGN DIMENSIONS	SERVICE WEAR MINIMUM THICKNESS 1 2 3	MINIMUM ALLOWABLE THICKNESS 1 5
①	0.221 0.201 (TOP)	0.191	0.176
	0.244 0.224 (BOTTOM)	0.214	0.199
②	0.369 0.349	0.339	0.324
③	0.490 0.470	0.460	0.445
④	0.293 0.273	0.263	0.248
⑤	0.170 0.150	0.140	0.125
END OF TRACK	0.170 0.150	0.140	0.125
⑥ WEB	0.210 0.190	DESIGN LIMITS	DESIGN LIMITS

TABLE A

114T4180-81
 Track Repair and Refinish
 Figure 601 (Sheet 2)

27-81-28

REPAIR 12-2

01.1

Page 603

Mar 01/02

1148475

REFINISH

CADMIUM-TITANIUM PLATE (F-15.01) ALL OVER.

APPLY BMS 10-11, TYPE 1 PRIMER (F-20.02) ALL OVER, EXCEPT AS SHOWN.

APPLY BMS 10-60, ENAMEL (F-14.9813) OVER THE PRIMER, EXCEPT AS SHOWN. APPLY WIPE ON PRIMER (F-19.45) TO THE PLATED SURFACES OF THE BEARING BORE, ITS CHAMFERS, AND THE ROLLER CONTACT AREAS.

- 1 ▷ MEASURE THE THICKNESS AT POINTS 1 THRU 5. DO A VISUAL CHECK BETWEEN THE POINTS AS SHOWN IN VIEW C-C
- 2 ▷ THE SERVICE WEAR MINIMUM THICKNESS IS EQUIVALENT TO THE LOWER DESIGN LIMIT MINUS ALLOWABLE WEAR. THE MAXIMUM THICKNESS AFTER REWORK MUST NOT EXCEED THE DESIGN DIMENSION
- 3 ▷ NO REPAIR IS REQUIRED IF THE TRACK THICKNESS IS GREATER THAN THE SERVICE WEAR MINIMUM THICKNESS
- 4 ▷ DO NOT APPLY ENAMEL (SRF-14.9625) OR PRIMER (F-20.02) TO THIS SURFACE
- 5 ▷ THE TRACK CAN BE REPAIRED UNTIL IT IS WORN TO THE MINIMUM ALLOWABLE THICKNESS, OR A DEPTH OF 0.025 INCH. IF THE TRACK IS WORN MORE THAN THIS, THEN REPLACE IT

REPAIR

125 ✓ ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

MATERIAL: 4340M STEEL, 275-300 KSI

ALL DIMENSIONS ARE IN INCHES

ITEM NUMBERS REFER TO IPL FIG. 4

- 6 ▷ THE SERVICE WEAR MINIMUM THICKNESS IS EQUIVALENT TO A WEAR DEPTH OF 0.010 INCH. THE MINIMUM ALLOWABLE THICKNESS IS EQUIVALENT TO A WEAR DEPTH OF 0.025 INCH
- 7 ▷ ROLLER CONTACT WEAR SURFACE
- 8 ▷ APPLY BMS 10-86 TEFLON COATING (SRF-14.9625) IN PLACE OF ENAMEL (SRF-14.9813) IN THIS AREA OF THE 0.200 INCH THICK WEB ONLY. TOLERANCE ON TEFLON APPLICATION ± 0.05 INCH. OVERSPRAY ALLOWED.
- 9 ▷ DO NOT APPLY PRIMER (F-20.02) AND ENAMEL (SRF-14.9813) TO BEARING BORE AND CHAMFER

114T4180-81
Track Repair and Refinish
Figure 601 (Sheet 3)

27-81-28

REPAIR 12-2

01.1

Page 604

Mar 01/02

MAIN TRACK ASSEMBLY – REPAIR 13-1

114T4180-71

NOTE: Refer to REPAIR-GENERAL for a list of applicable standard practices. Refer to IPL Fig. 4 for item numbers. For repair of surfaces which is only replacement of the original finish, refer to Refinish instructions in REPAIR 13-2.

1. Bearing Replacement

| A. Remove the old bearing (25B) as shown in SOPM 20-50-03.

B. Install a replacement bearing with BMS 5-95 sealant.

| C. Roller (anvil) swage the bearing per 20-50-03.

| D. Do a push out load test as shown in SOPM 20-50-03.

| (1) See SOPM 20-50-03, "anvil swaged bearing retention" section for push out loads.

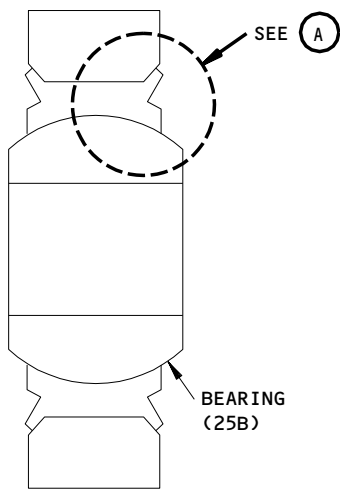
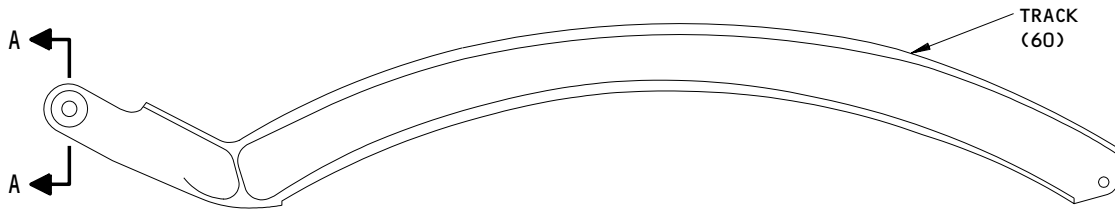
27-81-28

REPAIR 13-1

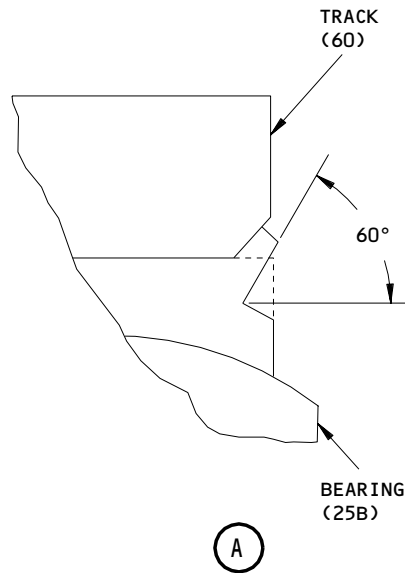
01.1

Page 601

Mar 01/02



A-A



ITEM NUMBERS REFER TO IPL FIG. 4
 ALL DIMENSIONS ARE IN INCHES

114T4180-71
 Main Track Assembly Repair
 Figure 601

27-81-28

REPAIR 13-1
 Page 602
 Mar 01/02

01.1

MAIN TRACK – REPAIR 13-2

114T4180-83

NOTE: Refer to REPAIR-GENERAL for a list of applicable standard practices. Refer to IPL Fig. 4 for item numbers. For repair of surfaces which is only replacement of the original finish, refer to Refinish instructions in Fig. 601.

| 1. Track Repair

- | A. If the wear on the track (60) is 0.010-0.025 inch compared to the design thickness, then the track is serviceable, but we recommend you repair the track per par. B.
- B. Repair the track (60) as follows:
- | (1) Remove the finishes and the plating (SOPM 20-30-02). Abrasive blast cleaning can be used locally on the roller surfaces.
- | (2) Blend out the defects with a 100 to 1 ratio.
- | (3) Magnetic particle examine class A (SOPM 20-20-01).
- | (4) Nital etch examine (SOPM 20-10-02).
- | (5) Shot peen (SOPM 20-10-03).
- | (6) Refinish as indicated.
- | (7) Magnetic particle examine class A (SOPM 20-20-01).
- | C. If the wear on the track is more than 0.025 inch, replace the track. Repair is not recommended.

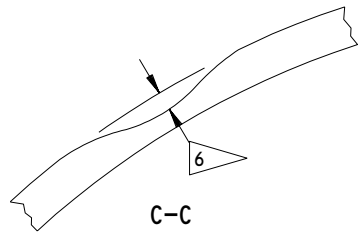
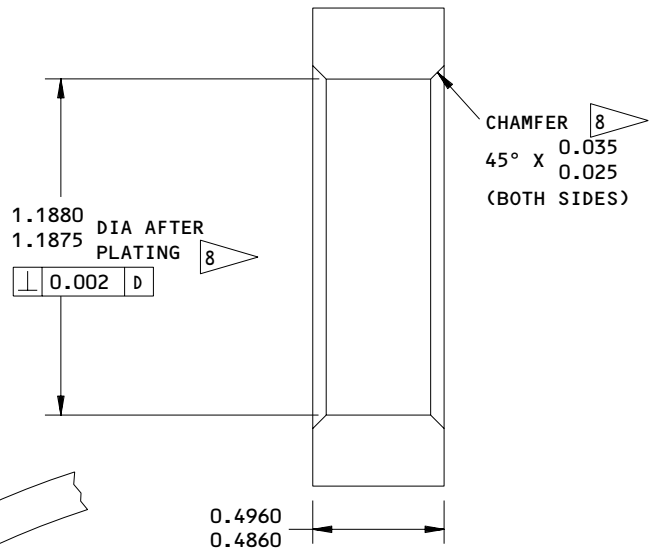
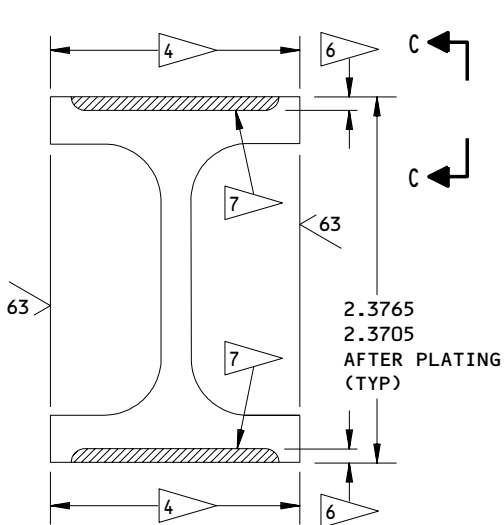
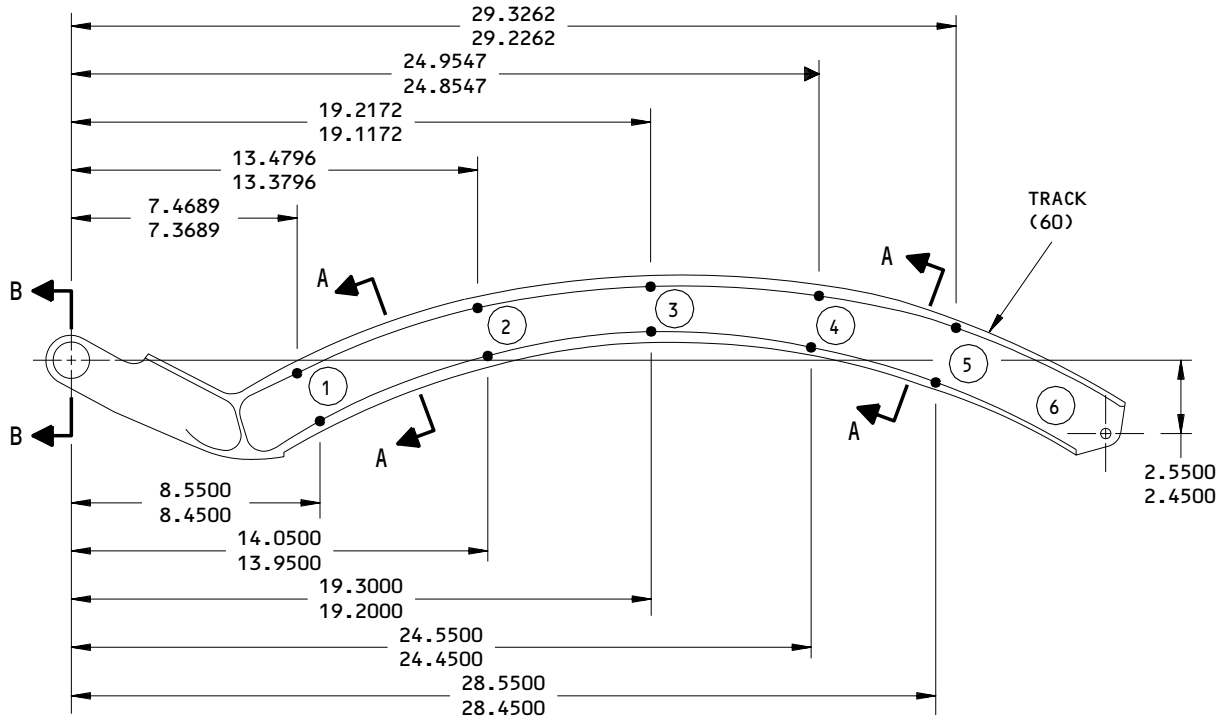
27-81-28

REPAIR 13-2

01.1

Page 601

Jul 01/04



114T4180-83
 Track Repair and Refinish
 Figure 601 (Sheet 1)

27-81-28

REPAIR 13-2
 Page 602
 Mar 01/02

01.1

TRACK LOCATION	FLANGE THICKNESS		
	THICKNESS DESIGN DIMENSIONS	SERVICE WEAR MINIMUM THICKNESS 1 > 2 > 3 >	MINIMUM ALLOWABLE THICKNESS 1 > 5 >
①	0.264 0.244	0.234	0.219
②	0.374 0.354	0.344	0.229
③	0.470 0.450	0.440	0.425
④	0.305 0.285	0.275	0.260
⑤	0.170 0.150	0.140	0.125
END OF TRACK	0.170 0.150	0.140	0.125
⑥ WEB	0.210 0.190	DESIGN LIMITS	DESIGN LIMITS

TABLE A

REFINISH

CADMIUM-TITANIUM PLATE (F-15.01) ALL OVER.
 APPLY BMS 10-11, TYPE 1 PRIMER (F-20.02) ALL OVER, EXCEPT AS SHOWN.
 APPLY BMS 10-60, ENAMEL (F-14.9813) OVER THE PRIMER, EXCEPT AS SHOWN. APPLY WIPE ON PRIMER (F-19.45) TO THE PLATED SURFACES OF THE BEARING BORE, ITS CHAMFERS, AND THE ROLLER CONTACT AREAS.

- 1 > MEASURE THE THICKNESS AT POINTS 1 THRU 5. DO A VISUAL CHECK BETWEEN THE POINTS AS SHOWN IN VIEW C-C
- 2 > THE SERVICE WEAR MINIMUM THICKNESS IS EQUIVALENT TO THE LOWER DESIGN LIMIT MINUS ALLOWABLE WEAR. THE MAXIMUM THICKNESS AFTER REWORK MUST NOT EXCEED THE DESIGN DIMENSION
- 3 > NO REPAIR IS REQUIRED IF THE TRACK THICKNESS IS GREATER THAN THE SERVICE WEAR MINIMUM THICKNESS
- 4 > DO NOT APPLY ENAMEL (SRF-14.9625) OR PRIMER (F-20.02) TO THIS SURFACE
- 5 > THE TRACK CAN BE REPAIRED UNTIL IT IS WORN TO THE MINIMUM ALLOWABLE THICKNESS, OR A DEPTH OF 0.025 INCH. IF THE TRACK IS WORN MORE THAN THIS, THEN REPLACE IT

REPAIR

125/ ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY
 BREAK ALL SHARP EDGES
 MATERIAL: 4340M STEEL, 275-300 KSI
 ALL DIMENSIONS ARE IN INCHES
 ITEM NUMBERS REFER TO IPL FIG. 4

- 6 > THE SERVICE WEAR MINIMUM THICKNESS IS EQUIVALENT TO A WEAR DEPTH OF 0.010 INCH. THE MINIMUM ALLOWABLE THICKNESS IS EQUIVALENT TO A WEAR DEPTH OF 0.025 INCH
- 7 > ROLLER CONTACT WEAR SURFACE
- 8 > DO NOT APPLY PRIMER (F-20.02) AND ENAMEL (SRF-14.9813) TO BEARING BORE AND CHAMFER

114T4180-83
 Track Repair and Refinish
 Figure 601 (Sheet 2)

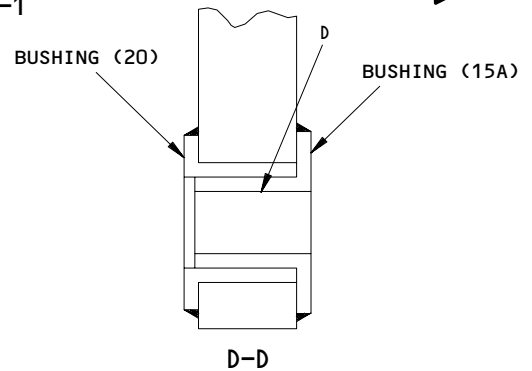
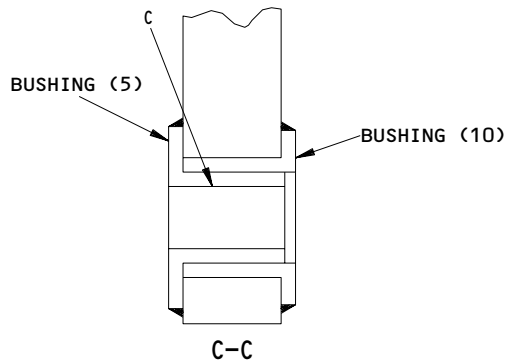
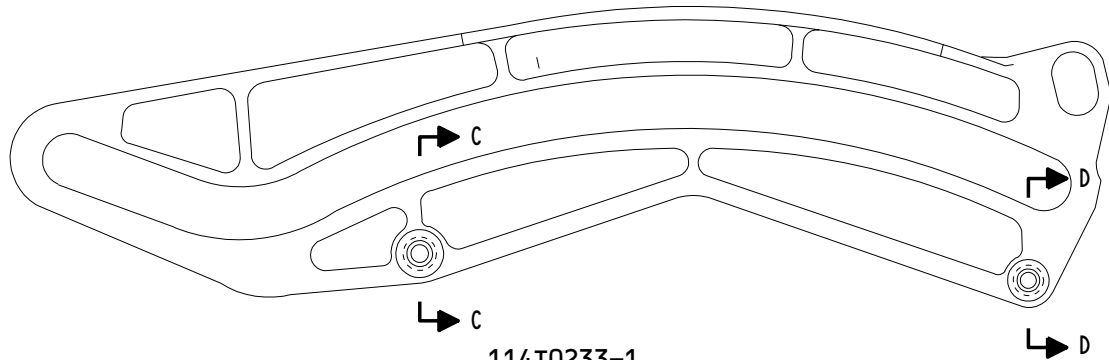
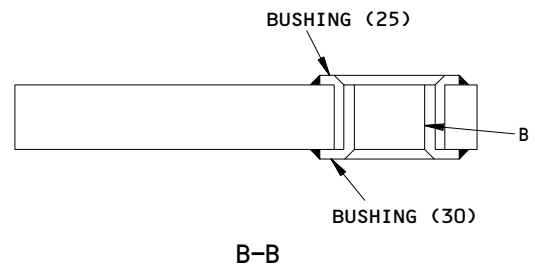
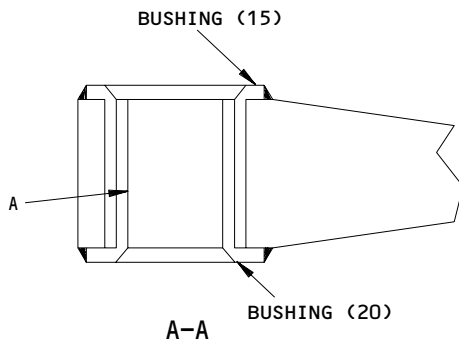
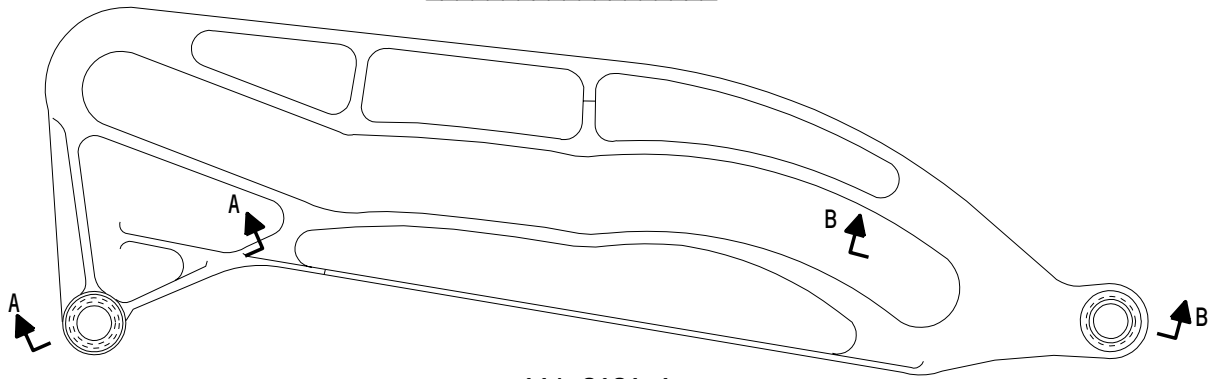
27-81-28
 REPAIR 13-2
 Page 603
 Mar 01/02

01.1

114T0101
114T0233
114T3302
114T4180

BOEING
COMPONENT
MAINTENANCE MANUAL





FITS AND CLEARANCES







Fits and Clearances
Figure 801 (Sheet 1)

27-81-28

FITS AND CLEARANCES
01.1 Page 801
Mar 01/02

REF LETTER	REF IPL		DESIGN DIMENSION*				SERVICE WEAR LIMIT*		
	FIG. NO.	MATING ITEM NO.	DIMENSION		ASSEMBLY CLEARANCE		DIMENSION		MAXIMUM CLEARANCE
			MIN	MAX	MIN	MAX	MIN	MAX	
A	1	ID 20 OD 	0.5620 0.5610	0.5627 0.5615	0.0005	0.0017	0.5577	0.5665	0.005
B	1	ID 30 OD 	0.5620 0.5610	0.5627 0.5615	0.0005	0.0017	0.5577	0.5665	0.005
C	2	ID 5 OD 	0.3125 0.3110	0.3131 0.3120	0.0005	0.0021	0.3081	0.3170	0.0050
D	2	ID 15A OD 	0.2500 0.2485	0.2505 0.2495	0.0005	0.0020	0.2455	0.2545	0.0050

* ALL DIMENSION ARE IN INCHES

-  BACB28AK06-124 INSTALLATION PART
-  BACB28AK06-085 INSTALLATION PART
-  BACB30NR5K18 INSTALLATION PART
-  BACB30NR4K16 INSTALLATION PART

Fits and Clearances
Figure 801 (Sheet 2)

27-81-28

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

S0352 NIPPON MINIATURE BEARING CO LTD
TOKYO, JAPAN

15860 NEW HAMPSHIRE BALL BEARINGS, INC ASTRO DIVISION
155 LEXINGTON AVENUE
LACONIA, NEW HAMPSHIRE 03246-2937
FORMERLY ASTRO BEARING CORP, LOS ANGELES, CALIF.

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

73134 ROLLER BEARING COMPANY OF AMER DBA HEIM BEARINGS DIV
60 ROUND HILL RD
FAIRFIELD, CONNECTICUT 06430-0000
FORMERLY INCOM INTL HEIM DIV; HEIM UNIVERSAL CORP INCOM;
FORMERLY HEIM DIV INCOM INTL; IMO IND HEIM BEARINGS DIV

97613 SARGENT CONTROLS & AEROSPACE/KAHR BEARING DIV
5675 W BURLINGAME RD
TUCSON, ARIZONA 85743
FORMERLY AETNA STEEL PROD KAHR BEARING DIV V96579
FORMERLY SARGENT IND KAHR BEARING DIV, BURBANK, CALIFORNIA

27-81-28

114T0101
 114T0233
 114T3302
 114T4180

 **BOEING**
 COMPONENT
 MAINTENANCE MANUAL

PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
ADB07V301NC		4	25	1
		5	10	1
ADB08V301NC		4	25A	1
		5	10	1
BACB10FB08GC		4	25A	1
BACB28AA4C045		2	15A	1
BACB28AA5C045		2	5	1
BACB28AM11B014		3	5	1
BACB28AP06P041		2	20	1
BACB28AP07P041		2	10	1
BACB28AP08P014		3	10	1
BACB28W10C045		1	25	1
BACB28W10C083		1	15	1
BACR15DR3A		5	50	2
HTFB07V		4	25	1
		5	10	1
HTFB08GC		4	25A	1
		5	10	1
KNDB08-70		4	25A	1
		5	10	1
KSC145700BZ08GC		4	25A	1
NAS1200M6-7P		5	15	2
NAS1200M6-9P		5	20	1
NES07FBG		4	25	1
		5	10	1
NES08FBGC		4	25A	1
012T2400-3		2	15	1
012T2400-4		1	30	1
012T2400-5		1	20	1
114T0101-1		1	1	RF
114T0101-2		1	35	1

27-81-28

ILLUSTRATED PARTS LIST
 01.1 Page 1003
 Jul 01/04

PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
114T0233-1		1	5	RF
		2	1	RF
114T0233-3		2	25	1
114T0233-5		1	5A	RF
		2	1A	RF
114T0233-7		2	25A	1
114T3302-1		1	10	RF
		3	1	RF
114T3302-2		3	15	1
114T4180-1		1	3	RF
		4	1A	RF
114T4180-10		4	60E	1
114T4180-11		1	3A	RF
		4	1B	RF
114T4180-12		1	4	RF
		4	5	RF
114T4180-13		1	7	RF
		4	10	RF
114T4180-14		1	8	RF
		4	15	RF
114T4180-15		1	12	RF
		4	20	RF
114T4180-16		4	30A	1
114T4180-17		4	40A	1
114T4180-18		4	50	1
114T4180-19		4	50F	1
114T4180-2		1	4A	RF
		4	5A	RF
114T4180-20		4	60A	1
114T4180-21		1	3B	RF
		4	1C	RF
114T4180-22		1	4B	RF
		4	5B	RF

27-81-28

 ILLUSTRATED PARTS LIST
 01.1 Page 1004
 Jul 01/04

114T0101
 114T0233
 114T3302
 114T4180

 **BOEING**
 COMPONENT
 MAINTENANCE MANUAL

PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
114T4180-23		1	7A	RF
		4	10A	RF
114T4180-24		1	8A	RF
		4	15A	RF
114T4180-25		1	12A	RF
		4	20A	RF
114T4180-26		4	30B	1
114T4180-27		4	40B	1
114T4180-28		4	50A	1
114T4180-29		4	50G	1
114T4180-3		1	7B	RF
		4	10B	RF
114T4180-30		4	60B	1
114T4180-31		1	3C	RF
		4	1D	RF
114T4180-32		1	4C	RF
		4	5C	RF
114T4180-33		1	7C	RF
		4	10C	RF
114T4180-34		1	8B	RF
		4	15B	RF
114T4180-35		1	12B	RF
		4	20B	RF
114T4180-36		4	30C	1
114T4180-37		4	40C	1
114T4180-38		4	50C	1
114T4180-39		4	50H	1
114T4180-4		1	8C	RF
		4	15C	RF
114T4180-40		4	60C	1
114T4180-43		1	7D	RF
		4	10D	RF
114T4180-44		1	8D	RF
		4	15D	RF

27-81-28

ILLUSTRATED PARTS LIST
 01.1 Page 1005
 Jul 01/04

PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
114T4180-45		1	12C	RF
		4	20C	RF
114T4180-48		4	50D	1
114T4180-5		1	12D	RF
		4	20D	RF
114T4180-50		4	60D	1
114T4180-53		1	7E	RF
		4	10E	RF
114T4180-54		1	8E	RF
		4	15E	RF
114T4180-55		1	12E	RF
		4	20E	RF
114T4180-57		1	3D	RF
		5	1A	RF
114T4180-58		1	13	RF
		5	5	RF
114T4180-59		5	105	1
114T4180-6		4	30	1
114T4180-61		1	3E	RF
		5	1B	RF
114T4180-62		1	13A	RF
		5	5A	RF
114T4180-63		1	3F	RF
		4	1E	RF
114T4180-65		1	4D	RF
		4	5D	RF
114T4180-67		1	7F	RF
114T4180-67		4	10F	RF
114T4180-69		1	8F	RF
		4	15F	RF
114T4180-7		4	40	1
114T4180-71		1	12F	RF
		4	20F	RF
114T4180-73		5	105A	1
114T4180-75		4	35	1
114T4180-77		4	45	1
114T4180-79		4	50E	1
114T4180-8		4	50B	1

27-81-28

 ILLUSTRATED PARTS LIST
 01.1 Page 1006
 Jul 01/04

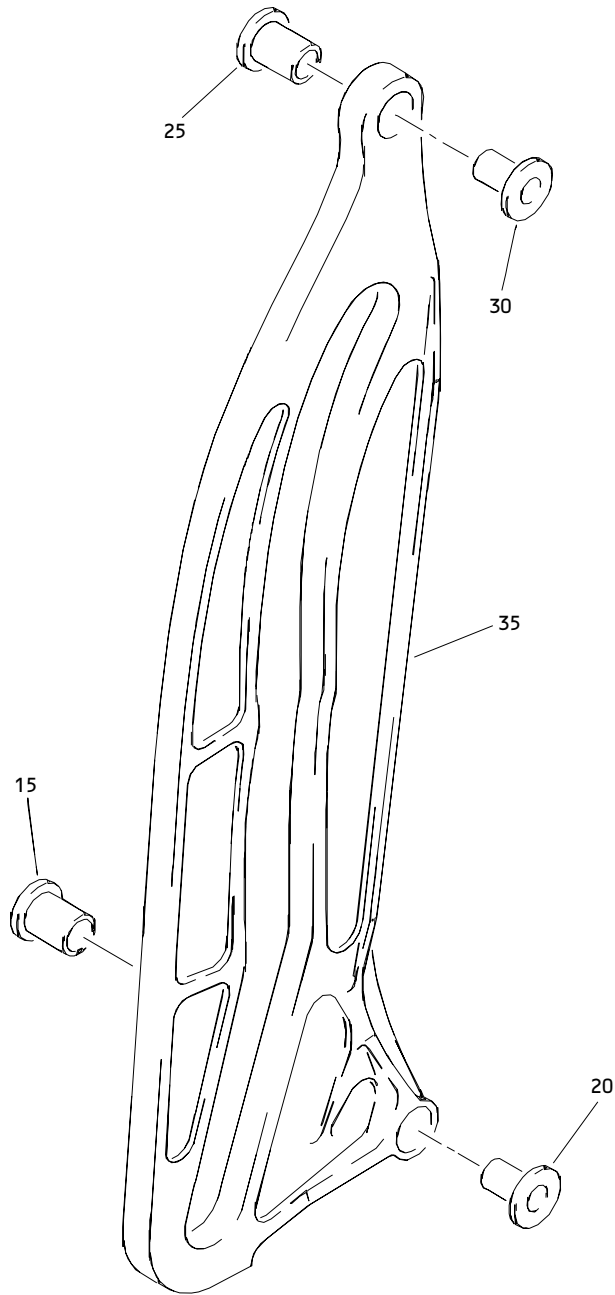
114T0101
 114T0233
 114T3302
 114T4180

 **BOEING**
 COMPONENT
 MAINTENANCE MANUAL

PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
114T4180-81		4	55	1
114T4180-83		4	60	1
114T4180-85		1	4E	RF
		4	5E	RF
114T4180-87		4	45A	1
114T4180-89		1	3G	RF
		5	1C	RF
114T4180-9		4	50J	1
114T4180-90		1	13B	RF
		5	5B	RF
286T0401-001		5	55B	2
286T0403-001		5	60B	1
286T0403-701		5	60A	1
287T1049-1		5	25	1
287T1049-11		5	70	1
287T1049-12		5	80	1
287T1049-13		5	90	1
287T1049-14		5	100	1
287T1049-15		5	30	1
287T1049-16		5	40	1
287T1049-2		5	35	1
287T1049-3		5	85	1
287T1049-4		5	95	1
287T1049-5		5	65	1
287T1049-6		5	75	1
287T1049-7		5	45	2
287T1050-401		5	55	2
287T1050-403		5	60	1

27-81-28

ILLUSTRATED PARTS LIST
 01.1 Page 1007
 Jul 01/04



Inboard Slat Auxiliary Track Assembly
Figure 1

27-81-28

ILLUSTRATED PARTS LIST
01.1 Page 1008
Jul 01/04

114T0101
 114T0233
 114T3302
 114T4180

 **BOEING**
 COMPONENT
 MAINTENANCE MANUAL

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-					
-1	114T0101-1		TRACK ASSY-INBD SLAT AUX	A	RF
-3	114T4180-1		TRACK ASSY-SLAT 1 (FOR DETAILS SEE FIG. 4)	E	RF
-3A	114T4180-11		TRACK ASSY-SLAT 1 (FOR DETAILS SEE FIG. 4)	F	RF
-3B	114T4180-21		TRACK ASSY-SLAT 1 (FOR DETAILS SEE FIG. 4)	G	RF
-3C	114T4180-31		TRACK ASSY-SLAT 1 (FOR DETAILS SEE FIG. 4)	H	RF
-3D	114T4180-57		TRACK ASSY-SLAT 1 (FOR DETAILS SEE FIG. 5)	J	RF
-3E	114T4180-61		TRACK ASSY-SLAT 1 (FOR DETAILS SEE FIG. 5)	K	RF
-3F	114T4180-63		TRACK ASSY-SLAT 1 (FOR DETAILS SEE FIG. 4)	L	RF
R -3G	114T4180-89		TRACK ASSY-SLAT 1 (FOR DETAILS SEE FIG. 5)	AS	RF
-4	114T4180-12		TRACK ASSY-SLAT 2 (FOR DETAILS SEE FIG. 4)	M	RF
-4A	114T4180-2		TRACK ASSY-SLAT 2 (FOR DETAILS SEE FIG. 4)	N	RF
-4B	114T4180-22		TRACK ASSY-SLAT 2 (FOR DETAILS SEE FIG. 4)	P	RF
-4C	114T4180-32		TRACK ASSY-SLAT 2 (FOR DETAILS SEE FIG. 4)	Q	RF
-4D	114T4180-65		TRACK ASSY-SLAT 2 (FOR DETAILS SEE FIG. 4)	R	RF
-4E	114T4180-85		TRACK ASSY-SLAT 2 (FOR DETAILS SEE FIG. 4)	AR	RF

27-81-28

ILLUSTRATED PARTS LIST
 01.1 Page 1009
 Jul 01/04

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-5	114T0233-1		TRACK ASSY-OUTBD LE SLAT AUX (FOR DETAILS SEE FIG. 2)	B	RF
-5A	114T0233-5		TRACK ASSY-OUTBD LE SLAT AUX (FOR DETAILS SEE FIG. 2)	D	RF
-7	114T4180-13		TRACK ASSY-SLAT 3 (FOR DETAILS SEE FIG. 4)	S	RF
-7A	114T4180-23		TRACK ASSY-SLAT 3 (FOR DETAILS SEE FIG. 4)	T	RF
-7B	114T4180-3		TRACK ASSY-SLAT 3 (FOR DETAILS SEE FIG. 4)	U	RF
-7C	114T4180-33		TRACK ASSY-SLAT 3 (FOR DETAILS SEE FIG. 4)	V	RF
-7D	114T4180-43		TRACK ASSY-SLAT 3 (FOR DETAILS SEE FIG. 4)	W	RF
-7E	114T4180-53		TRACK ASSY-SLAT 3 (FOR DETAILS SEE FIG. 4)	X	RF
-7F	114T4180-67		TRACK ASSY-SLAT 3 (FOR DETAILS SEE FIG. 4)	Y	RF
-8	114T4180-14		TRACK ASSY-SLAT 4 (FOR DETAILS SEE FIG. 4)	Z	RF
-8A	114T4180-24		TRACK ASSY-SLAT 4 (FOR DETAILS SEE FIG. 4)	AA	RF
-8B	114T4180-34		TRACK ASSY-SLAT 4 (FOR DETAILS SEE FIG. 4)	AB	RF
-8C	114T4180-4		TRACK ASSY-SLAT 4 (FOR DETAILS SEE FIG. 4)	AC	RF
-8D	114T4180-44		TRACK ASSY-SLAT 4 (FOR DETAILS SEE FIG. 4)	AD	RF
-8E	114T4180-54		TRACK ASSY-SLAT 4 (FOR DETAILS SEE FIG. 4)	AE	RF
-8F	114T4180-69		TRACK ASSY-SLAT 4 (FOR DETAILS SEE FIG. 4)	AF	RF

27-81-28

 ILLUSTRATED PARTS LIST
 01.1 Page 1010
 Jul 01/04

114T0101
 114T0233
 114T3302
 114T4180

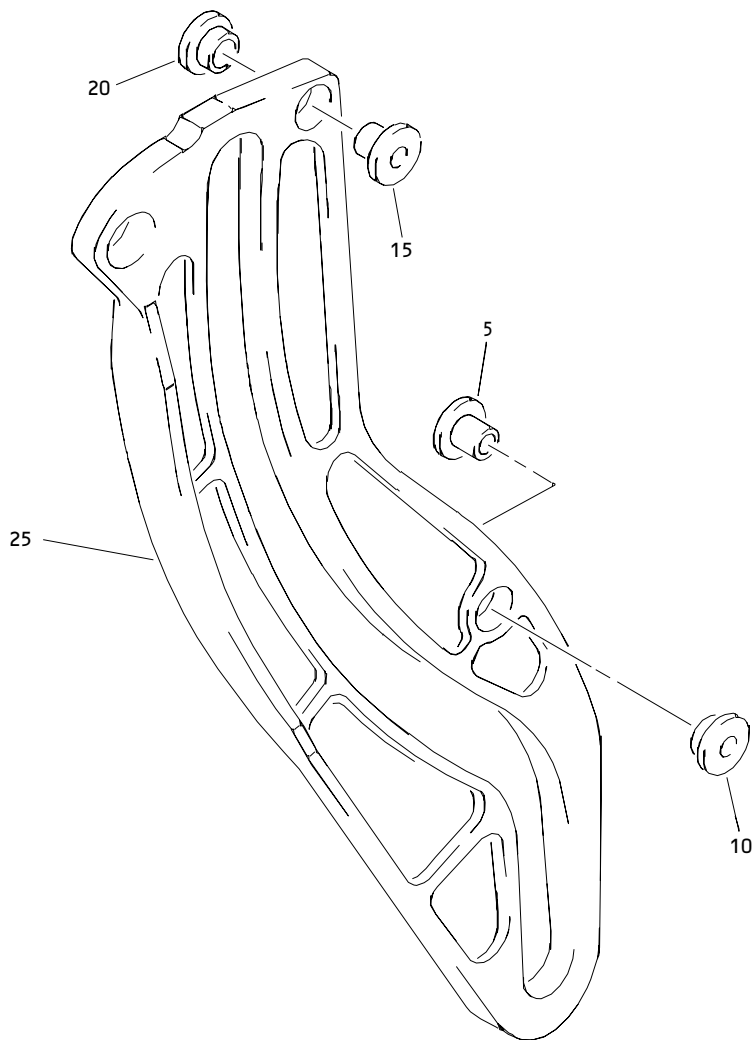
 **BOEING**
 COMPONENT
 MAINTENANCE MANUAL

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01- -10	114T3302-1		TRACK ASSY-INBD LE (FOR DETAILS SEE FIG. 3)	C	RF
-12	114T4180-15		TRACK ASSY-SLAT 5 (FOR DETAILS SEE FIG. 4)	AG	RF
-12A	114T4180-25		TRACK ASSY-SLAT 5 (FOR DETAILS SEE FIG. 4)	AH	RF
-12B	114T4180-35		TRACK ASSY-SLAT 5 (FOR DETAILS SEE FIG. 4)	AJ	RF
-12C	114T4180-45		TRACK ASSY-SLAT 5 (FOR DETAILS SEE FIG. 4)	AK	RF
-12D	114T4180-5		TRACK ASSY-SLAT 5 (FOR DETAILS SEE FIG. 4)	AL	RF
-12E	114T4180-55		TRACK ASSY-SLAT 5 (FOR DETAILS SEE FIG. 4)	AM	RF
-12F	114T4180-71		TRACK ASSY-SLAT 5 (FOR DETAILS SEE FIG. 4)	AN	RF
-13	114T4180-58		TRACK ASSY-SLAT 12 (FOR DETAILS SEE FIG. 5)	AP	RF
-13A	114T4180-62		TRACK ASSY-SLAT 12 (FOR DETAILS SEE FIG. 5)	AQ	RF
R -13B	114T4180-90		TRACK ASSY-SLAT 12 (FOR DETAILS SEE FIG. 5)	AT	RF
15	BACB28W10C083		.BUSHING	A	1
20	012T2400-5		.BUSHING	A	1
25	BACB28W10C045		.BUSHING	A	1
30	012T2400-4		.BUSHING	A	1
35	114T0101-2		.TRACK	A	1

- Item Not Illustrated

27-81-28

ILLUSTRATED PARTS LIST
 01.1 Page 1011
 Jul 01/04



Outboard Leading Edge Slat Auxiliary Track Assembly
Figure 2

27-81-28

ILLUSTRATED PARTS LIST
01.1 Page 1012
Jul 01/04

114T0101
 114T0233
 114T3302
 114T4180

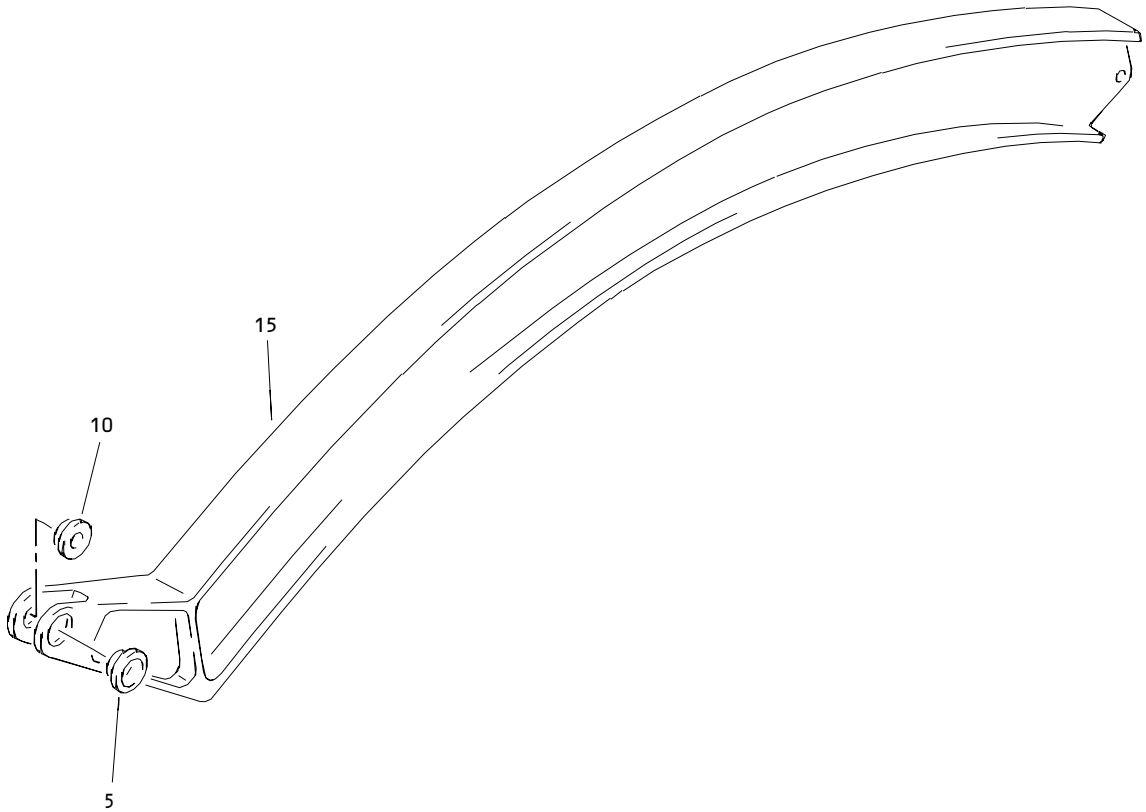
 **BOEING**
 COMPONENT
 MAINTENANCE MANUAL

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
02- -1	114T0233-1		TRACK ASSY-OUTBD LE SLAT AUX	B	RF
-1A	114T0233-5		TRACK ASSY-OUTBD LE SLAT AUX	D	RF
5	BACB28AA5C045		.BUSHING	B,D	1
10	BACB28AP07P041		.BUSHING	B,D	1
15	012T2400-3		.BUSHING- (OPT ITEM 15A)	B,D	1
-15A	BACB28AA4C045		.BUSHING- (OPT ITEM 15)	B,D	1
20	BACB28AP06P041		.BUSHING	B,D	1
25	114T0233-3		.TRACK	B	1
-25A	114T0233-7		.TRACK	D	1

- Item Not Illustrated

27-81-28

ILLUSTRATED PARTS LIST
 01.1 Page 1013
 Jul 01/04



Inboard Leading Edge Slat Track Assembly
Figure 3

27-81-28

ILLUSTRATED PARTS LIST
01.1 Page 1014
Jul 01/04

114T0101
114T0233
114T3302
114T4180

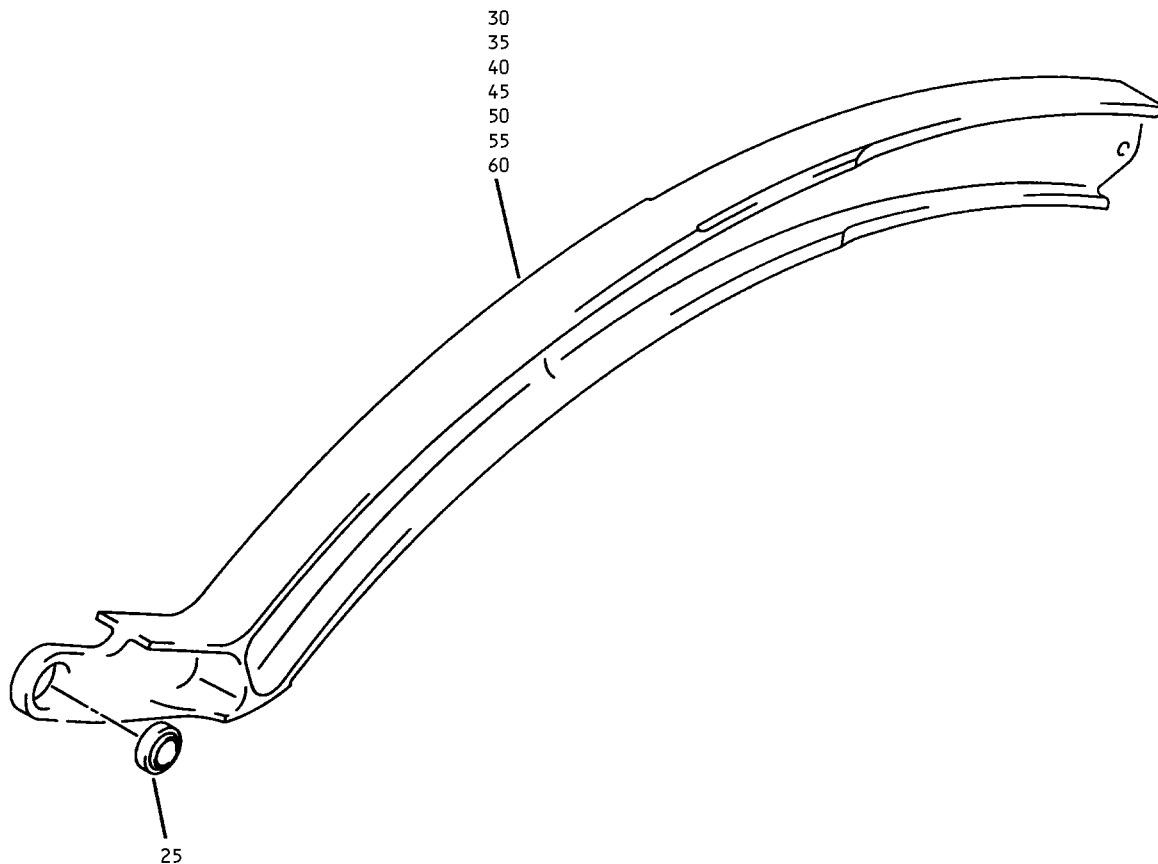
 **BOEING**
COMPONENT
MAINTENANCE MANUAL

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE	EFF CODE	QTY PER ASSY
03-			1234567		
-1	114T3302-1		TRACK ASSY-INBD LE	C	RF
5	BACB28AM11B014		.BUSHING	C	1
10	BACB28AP08P014		.BUSHING	C	1
15	114T3302-2		.TRACK	C	1

- Item Not Illustrated

27-81-28

ILLUSTRATED PARTS LIST
01.1 Page 1015
Jul 01/04



Outboard Leading Edge Slat Main Track Assembly
Figure 4

27-81-28

ILLUSTRATED PARTS LIST
01.1 Page 1016
Jul 01/04

114T0101
 114T0233
 114T3302
 114T4180

 **BOEING**
 COMPONENT
 MAINTENANCE MANUAL

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
04-					
-1A	114T4180-1		TRACK ASSY-SLAT 1	E	RF
-1B	114T4180-11		TRACK ASSY-SLAT 1	F	RF
-1C	114T4180-21		TRACK ASSY-SLAT 1	G	RF
-1D	114T4180-31		TRACK ASSY-SLAT 1	H	RF
-1E	114T4180-63		TRACK ASSY-SLAT 1	L	RF
-5	114T4180-12		TRACK ASSY-SLAT 2	M	RF
-5A	114T4180-2		TRACK ASSY-SLAT 2	N	RF
-5B	114T4180-22		TRACK ASSY-SLAT 2	P	RF
-5C	114T4180-32		TRACK ASSY-SLAT 2	Q	RF
-5D	114T4180-65		TRACK ASSY-SLAT 2	R	RF
-5E	114T4180-85		TRACK ASSY-SLAT 2	AR	RF
-10	114T4180-13		TRACK ASSY-SLAT 3	S	RF
-10A	114T4180-23		TRACK ASSY-SLAT 3	T	RF
-10B	114T4180-3		TRACK ASSY-SLAT 3	U	RF
-10C	114T4180-33		TRACK ASSY-SLAT 3	V	RF
-10D	114T4180-43		TRACK ASSY-SLAT 3	W	RF
-10E	114T4180-53		TRACK ASSY-SLAT 3	X	RF
-10F	114T4180-67		TRACK ASSY-SLAT 3	Y	RF
-15	114T4180-14		TRACK ASSY-SLAT 4	Z	RF
-15A	114T4180-24		TRACK ASSY-SLAT 4	AA	RF
-15B	114T4180-34		TRACK ASSY-SLAT 4	AB	RF
-15C	114T4180-4		TRACK ASSY-SLAT 4	AC	RF
-15D	114T4180-44		TRACK ASSY-SLAT 4	AD	RF
-15E	114T4180-54		TRACK ASSY-SLAT 4	AE	RF
-15F	114T4180-69		TRACK ASSY-SLAT 4	AF	RF
-20	114T4180-15		TRACK ASSY-SLAT 5	AG	RF
-20A	114T4180-25		TRACK ASSY-SLAT 5	AH	RF
-20B	114T4180-35		TRACK ASSY-SLAT 5	AJ	RF
-20C	114T4180-45		TRACK ASSY-SLAT 5	AK	RF
-20D	114T4180-5		TRACK ASSY-SLAT 5	AL	RF
-20E	114T4180-55		TRACK ASSY-SLAT 5	AM	RF
-20F	114T4180-71		TRACK ASSY-SLAT 5	AN	RF

27-81-28

ILLUSTRATED PARTS LIST
 01.1 Page 1017
 Jul 01/04

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
04-25	ADB07V301NC		.BEARING- (V15860) (SPEC BACB10FB07GC) (OPT KSC145700BZ07GC (V50632)) (OPT NES07FBG (V73134)) (OPT HTFB07V (VS0352)) (OPT KNDB07-62 (V97613))	E-H,L	1
-25A	ADB08V301NC		.BEARING- (V15860) (SPEC BACB10FB08GC) (OPT HTFB08GC (VS0352)) (OPT KNDB08-70 (V97613)) (OPT KSC145700BZ08GC (V50632)) (OPT NES08FBGC (V73134))	M-R,A R	1
-25B	ADB09V301NC		.BEARING- (V15860) (SPEC BACB10FB09GC) (OPT HTFB09GC (VS0352)) (OPT KNDB09-70 (V97613)) (OPT KSC145700BZ09GC (V50632)) (OPT NES09FBGC (V73134))	S-AN	1

27-81-28

 ILLUSTRATED PARTS LIST
 01.1 Page 1018
 Jul 01/04

114T0101
 114T0233
 114T3302
 114T4180

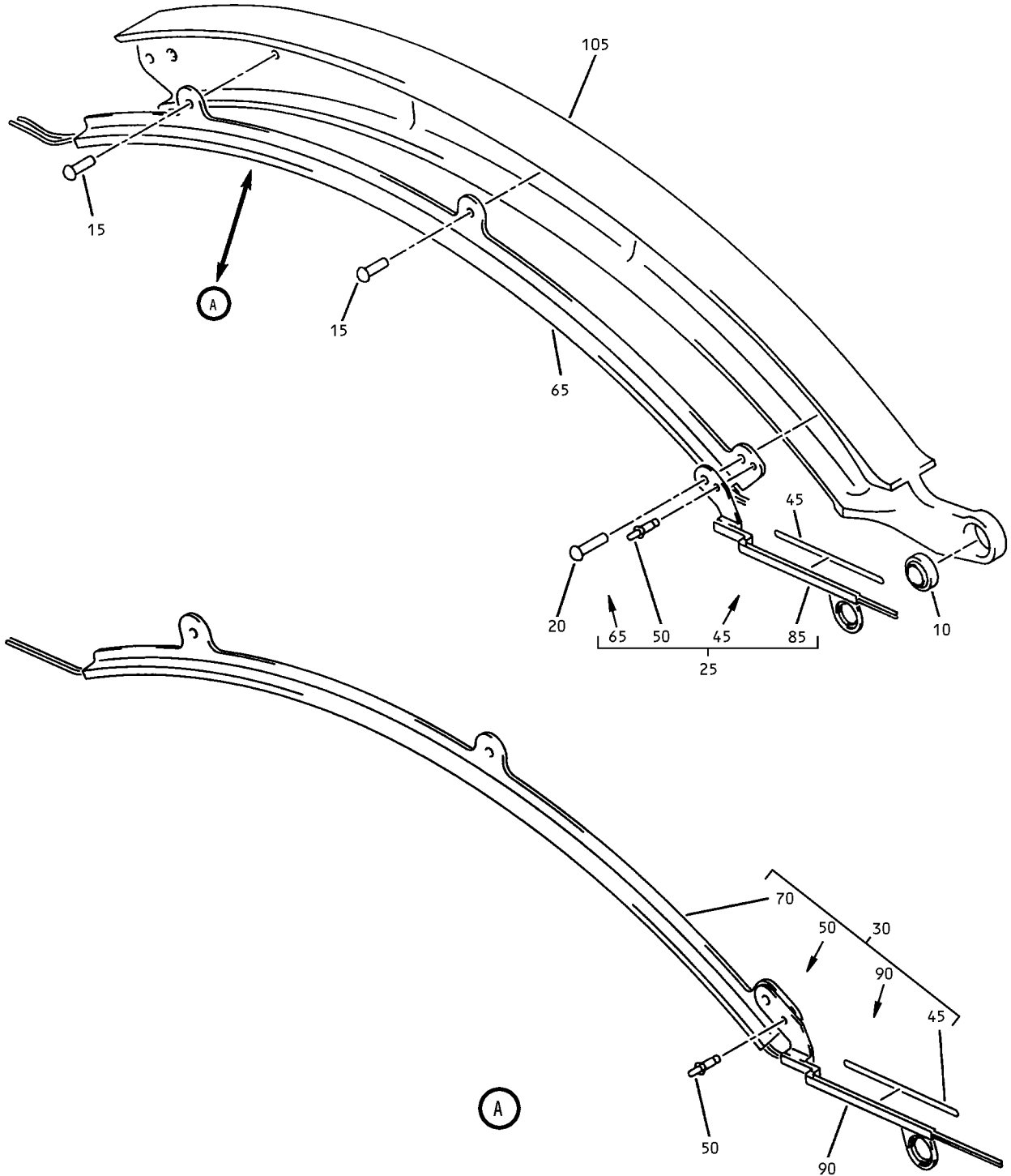
 **BOEING**
 COMPONENT
 MAINTENANCE MANUAL

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
04-					
30	114T4180-6		.TRACK	E	1
-30A	114T4180-16		.TRACK	F	1
-30B	114T4180-26		.TRACK	G	1
-30C	114T4180-36		.TRACK	H	1
35	114T4180-75		.TRACK	L	1
40	114T4180-7		.TRACK	N	1
-40A	114T4180-17		.TRACK	M	1
-40B	114T4180-27		.TRACK	P	1
-40C	114T4180-37		.TRACK	Q	1
45	114T4180-77		.TRACK	R	1
-45A	114T4180-87		.TRACK	AR	1
50	114T4180-18		.TRACK	S	1
-50A	114T4180-28		.TRACK	T	1
-50B	114T4180-8		.TRACK	U	1
-50C	114T4180-38		.TRACK	V	1
-50D	114T4180-48		.TRACK	W,X	1
-50E	114T4180-79		.TRACK	Y	1
-50F	114T4180-19		.TRACK	Z	1
-50G	114T4180-29		.TRACK	AA	1
-50H	114T4180-39		.TRACK	AB	1
-50J	114T4180-9		.TRACK	AC	1
-50K	114T4180-49		.TRACK	AD,AE	1
55	114T4180-81		.TRACK	AF	1
60	114T4180-83		.TRACK	AN	1
-60A	114T4180-20		.TRACK	AG	1
-60B	114T4180-30		.TRACK	AH	1
-60C	114T4180-40		.TRACK	AJ	1
-60D	114T4180-50		.TRACK	AK,AM	1
-60E	114T4180-10		.TRACK	AL	1

- Item Not Illustrated

27-81-28

ILLUSTRATED PARTS LIST
 01.1 Page 1019
 Jul 01/04



Outboard Leading Edge Slat Main Track Assembly
 Figure 5

27-81-28

ILLUSTRATED PARTS LIST
 01.1 Page 1020
 Jul 01/04

114T0101
 114T0233
 114T3302
 114T4180

 **BOEING**
 COMPONENT
 MAINTENANCE MANUAL

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
05-					
R -1A	114T4180-57		TRACK ASSY-SLAT 1	J	RF
-1B	114T4180-61		TRACK ASSY-SLAT 1	K	RF
R -1C	114T4180-89		TRACK ASSY-SLAT 1	AS	RF
-5	114T4180-58		TRACK ASSY-SLAT 12	AP	RF
-5A	114T4180-62		TRACK ASSY-SLAT 12	AQ	RF
R -5B	114T4180-90		TRACK ASSY-SLAT 12	AT	RF
10	ADB07V301NC		.BEARING- (V15860) (SPEC BACB10FB07GC) (OPT KSC145700BZ07GC (V50632)) (OPT NES07FBG (V73134)) (OPT HTFB07V (VS0352)) (OPT KNDB07-62 (V97613))	J,K,A P,AQ, AS,AT	1
15	NAS1200M6-7P		.RIVET	J,K,A P,AQ, AS,AT	2
20	NAS1200M6-9P		.RIVET	J,K,A P,AQ, AS,AT	1
25	287T1049-1		.CONDUIT ASSY	J	1
30	287T1049-15		.CONDUIT ASSY	K,AS	1
-35	287T1049-2		.CONDUIT ASSY	AP	1
-40	287T1049-16		.CONDUIT ASSY	AQ,AT	1
45	287T1049-7		..STRIP-RUB	J,K,A P,AQ, AS,AT	1
50	BACR15DR3A		..RIVET- (SIZE DETERMINE ON INST)	J,K,A P,AQ, AS,AT	1
-55	287T1050-401		..WIRE BUNDLE- (OPT ITEMS 55A, 55B)	J,K,A Q,AS, AT	1
-55A	286T0401-701		..WIRE BUNDLE- (OPT ITEMS 55, 55B)	J,K,A Q,AS, AT	1
-55B	286T0401-001		..WIRE BUNDLE- (OPT ITEMS 55, 55A)	J,K,A Q,AS, AT	1
-60	287T1050-403		..WIRE BUNDLE- (OPT ITEMS 60A, 60B)	AP	1

27-81-28

ILLUSTRATED PARTS LIST
 01.1 Page 1021
 Jul 01/04

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
05- -60A	286T0403-701		..WIRE BUNDLE- (OPT ITEMS 60, 60B)	AP	1
-60B	286T0403-001		..WIRE BUNDLE- (OPT ITEMS 60, 60A)	AP	1
65	287T1049-5		..RACEWAY	J	1
70	287T1049-11		..RACEWAY	K,AS	1
-75	287T1049-6		..RACEWAY	AP	1
-80	287T1049-12		..RACEWAY	AQ,AT	1
85	287T1049-3		..FITTING	J	1
90	287T1049-13		..FITTING	K,AS	1
-95	287T1049-4		..FITTING	AP	1
-100	287T1049-14		..FITTING	AQ,AT	1
105	114T4180-59		.TRACK	J,AP	1
-105A	114T4180-73		.TRACK	K,AQ, AS,AT	1

- Item Not Illustrated

27-81-28

 ILLUSTRATED PARTS LIST
 01.1 Page 1022
 Jul 01/04