

 **BOEING**
COMPONENT
MAINTENANCE MANUAL

TO: ALL HOLDERS OF OFF WING ESCAPE SYSTEM INTEGRATOR ASSEMBLY COMPONENT
MAINTENANCE MANUAL 25-65-61

REVISION NO. 6 DATED OCT 10/85

HIGHLIGHTS

Pages which have been added or revised are outlined below together with the highlights of the revision. Remove and insert the affected pages as listed and enter Revision No. and date on the Record of Revision Sheet.

CHAPTER/SECTION

AND PAGE NO.

TITLE PAGE

1

1003

DESCRIPTION OF CHANGE

Added integrator assembly with rigging marks
416T2091-3, -4 and deleted assembly -1, -2.

TR & SB RECORD

1

1003

Added SB25-51, PRR B11170 identifier.

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HIGHLIGHTS

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OFF WING ESCAPE SYSTEM INTEGRATOR ASSEMBLY

PART NUMBER 416T2091-3,-4

COMPONENT MAINTENANCE MANUAL
WITH
ILLUSTRATED PARTS LIST

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TITLE PAGE

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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

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REVISION RECORD

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TEMPORARY REVISION AND SERVICE BULLETIN RECORD

BOEING SERVICE BULLETIN	BOEING TEMPORARY REVISION	OTHER DIRECTIVE	DATE OF INCORPORATION INTO MANUAL
SB 25-51		PRR B11170	OCT 10/85

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TR & SB RECORD

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			601	JAN 10/84	01.1
			602	JAN 10/84	01.1
TITLE PAGE			603	JAN 10/84	01.1
*1	OCT 10/85	01.1	604	BLANK	
2	BLANK		ASSEMBLY		
REVISION RECORD			701	JAN 10/84	01.1
1	JUL 10/83	01	702	BLANK	
2	BLANK		ILLUSTRATED PARTS LIST		
TR & SB RECORD			1001	JUL 10/83	01
*1	OCT 10/85	01.1	1002	JAN 10/84	01.1
2	BLANK		*1003	OCT 10/85	01.1
LIST OF EFFECTIVE PAGES			1004	BLANK	
*1	OCT 10/85	01			
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INTRODUCTION					
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DESCRIPTION & OPERATION					
1	JAN 10/84	01.1			
2	BLANK				
DISASSEMBLY					
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302	BLANK				
CHECK					
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502	BLANK				
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*[1] Special instructions not required. Use standard industry practices.

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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.

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INTRODUCTION

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OFF WING ESCAPE SYSTEM INTEGRATOR ASSEMBLY

DESCRIPTION AND OPERATION

1. Description and Operation

A. The off wing escape system integrator assembly consists of two levers, two half levers, a spring, a spring retainer, a lifter, a piston, a locking pin, a shaft latch, and a housing. The integrator takes mechanical input from the unlatch actuator, unlatches the door, and fires the pyrotechnic actuators, which force the door outward.

2. Leading Particulars (Approximate)

Length -- 7 inches
Width -- 3 inches
Height -- 4 inches
Weight -- 1.4 pounds

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DISASSEMBLY

1. Remove pin (10). Remove spring retainer (75) and spring (80).
2. Remove pin (15). Remove locking pin (45).
3. Remove pin (20) and lifter (85).
4. Remove pins (25, 30).

NOTE: Do not remove pins (25, 30) unless repair or refinishing is needed on housing (100).

5. Remove pins (35), half-levers (55, 60), and levers (50, 65).
6. Remove pin (40), piston (90), and shaft latch (95).

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DISASSEMBLY

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CHECK

1. Check all parts in accordance with standard industry practices.
2. Magnetic particle check per 20-20-01 -- Locking pin (45, IPL Fig. 1), Lever (50, 65, 70), half fitting lever (55, 60), spring retainer (75), lifter (85), piston (90), shaft latch (95), housing (100).

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REPAIR - GENERAL1. Content

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

<u>P/N</u>	<u>NAME</u>	<u>REPAIR</u>
--	MISC PARTS	1-1

2. Standard Practices

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

20-30-02	Stripping of Protective Finishes
20-30-03	General Cleaning Procedures
20-41-01	Decoding Table for Boeing Finish Codes
20-41-02	Application of Chemical & Solvent Resistant Finishes
20-42-03	Hard Chrome Plating

3. Materials

- Enamel -- BMS 10-60, Color 701 Black
 -- BMS 10-60, Color 101 Red

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REPAIR-GENERAL

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MISCELLANEOUS PARTS - REPAIR 1-1

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

IPL FIG. & ITEM	MATERIAL	FINISH
<u>Fig. 1</u>		
Locking pin (45) Lever (50,65,70) Half Fitting Lever (55,60) Spring Retainer (75) Lifter (85)	17-4PH CRES, 180-200 KSI	Prepare surface and passivate, Method 2 (F-17.09).
Piston (90)	15-5PH CRES, 180-200 KSI	Prepare surface and passivate, Method 2 (F-17.09). See Fig. 603 for additional refinish details.
Shaft Latch (95)	15-5PH CRES, 180-200 KSI	Prepare surface and passivate, Method 2 (F-17.09). See Fig. 602 for additional refinish details.
Housing (100)	17-4PH CRES, 180-200 KSI	Prepare surface and passivate, Method 2 (F-17.09). See Fig. 604 for additional refinish details.

 Refinish Details
 Figure 601

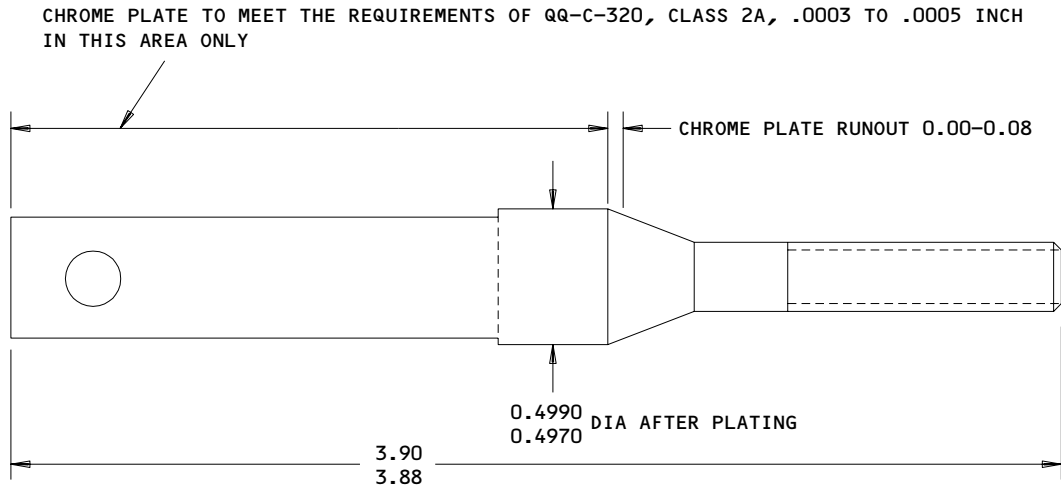
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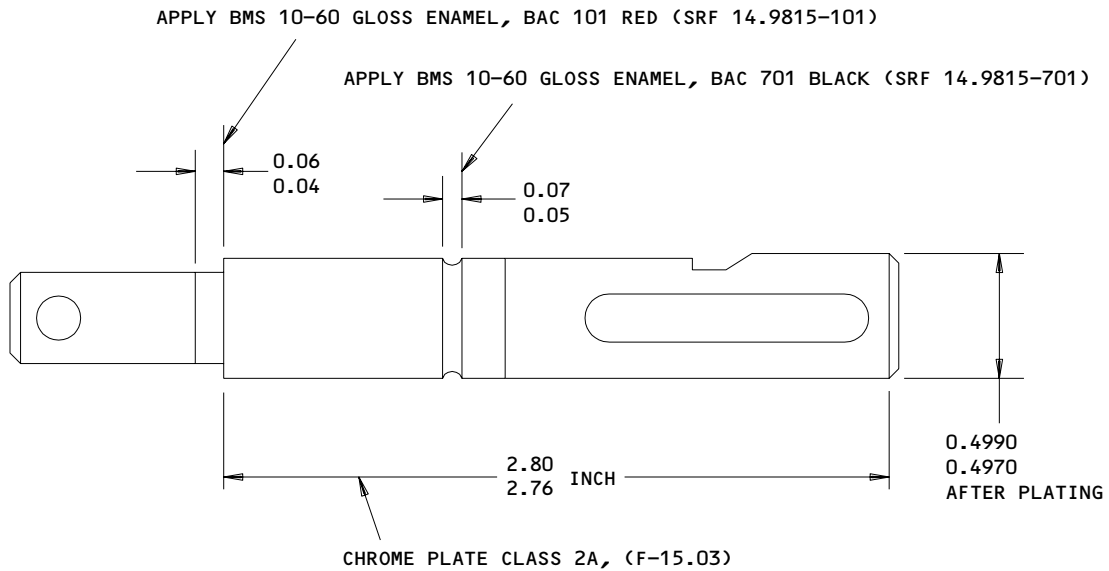
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ALL DIMENSIONS ARE IN INCHES

416T2110-1
 Shaft Latch Refinish
 Figure 602



ALL DIMENSIONS ARE IN INCHES

69B54647-1
 Piston Refinish
 Figure 603

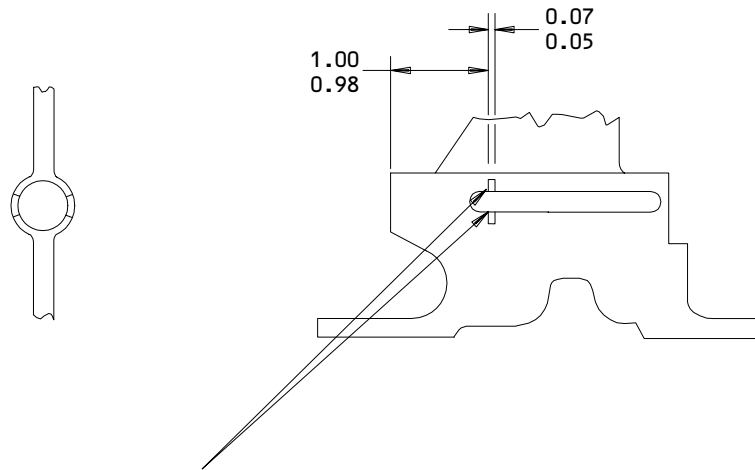
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APPLY BMS 10-60 GLOSS ENAMEL, BAC 701 BLACK (SRF 14.9815-701)

ALL DIMENSIONS ARE IN INCHES

65B53226-1
Housing Refinish
Figure 604

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REPAIR 1-1

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ASSEMBLY

1. Insert shaft latch (95) and piston (90) into housing (100) and join with pin (40).
2. Insert lever (65) into housing (100). Fit half-lever (55) onto lever (65) and insert pin (35).
3. Insert pins (25, 30).
4. Insert lever (50) into housing (100). Fit half-lever (60) onto lever (50) and insert pin (35).
5. Position lifter (85) onto housing (100) and insert pin (20).
6. Insert locking pin (45) into housing (100) and insert pin (15).
7. Insert spring (80) and spring retainer (75) into housing (100) and insert pin (10).

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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.

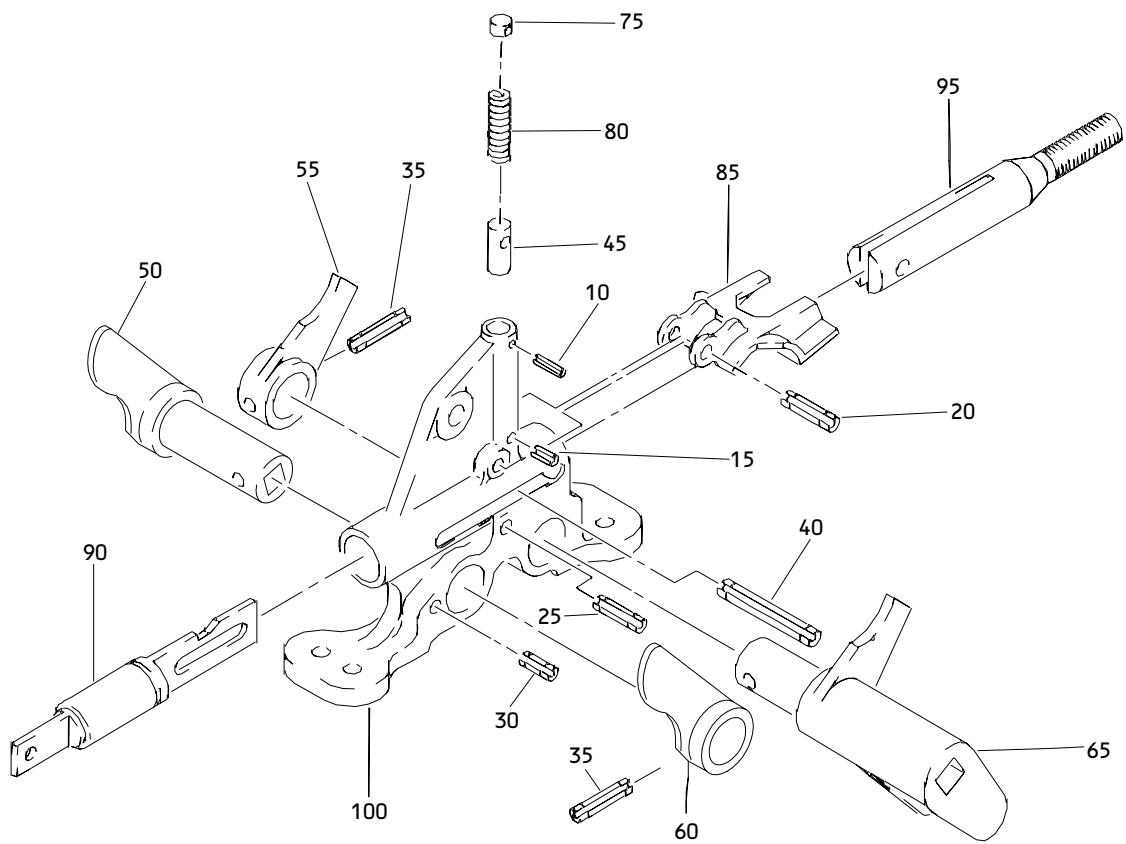
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ILLUSTRATED PARTS LIST

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Offwing Escape System Integrator Assembly
Figure 1

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-					
-1	416T2091-1		DELETED		
-1A	416T2091-3		INTEGRATOR ASSY-OFF WING ESCAPE SYSTEM (LH) (PRE SB 25-51) *[1]	A	RF
-5	416T2091-2		DELETED		
-5A	416T2091-4		INTEGRATOR ASSY-OFF WING ESCAPE SYSTEM (RH) (PRE SB 25-51) *[1]	B	RF
10	MS16562-193		.PIN		1
15	MS16562-196		.PIN		1
20	MS16562-225		.PIN		1
25	MS16562-226		.PIN		1
30	MS16562-227		.PIN		1
35	MS16562-236		.PIN		2
40	MS16562-241		.PIN		1
45	69B54654-1		.PIN-LOCKING		1
50	65B53215-2		.LEVER		1
55	65B52436-1		.LEVER-HALF FITTING		1
60	65B52437-2		.LEVER-HALF FITTING		1
65	416T2109-1		.LEVER	A	1
-70	416T2109-2		.LEVER	B	1
75	69B54655-1		.RETAINER-SPRING		1
80	MS24585C108		.SPRING		1
85	65B53229-1		.LIFTER		1
90	69B54647-1		.PISTON		1
95	416T2110-1		.LATCH-SHAFT		1
100	65B53226-1		.HOUSING		1

*[1] Refer to OVERHAUL MANUAL 25-65-62 for POST SB 25-51.

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