



**COMPONENT MAINTENANCE
MANUAL
WITH
ILLUSTRATED PARTS LIST**

**CARGO COMPARTMENT PROTECTIVE
GRILL ASSEMBLY**

**PART NUMBER
65C21468-1, -10, -13, -15, -2, -9**

BOEING PROPRIETARY, CONFIDENTIAL, AND/OR TRADE SECRET

Copyright © 1995 The Boeing Company
Unpublished Work - All Rights Reserved

Boeing claims copyright in each page of this document only to the extent that the page contains copyrightable subject matter. Boeing also claims copyright in this document as a compilation and/or collective work.

This document includes proprietary information owned by The Boeing Company and/or one or more third parties. Treatment of the document and the information it contains is governed by contract with Boeing. For more information, contact The Boeing Company, P.O. Box 3707, Seattle, Washington 98124.

Boeing, the Boeing signature, the Boeing symbol, 707, 717, 727, 737, 747, 757, 767, 777, 787, Dreamliner, BBJ, DC-8, DC-9, DC-10, KC-10, KDC-10, MD-10, MD-11, MD-80, MD-88, MD-90, P-8A, Poseidon and the Boeing livery are all trademarks owned by The Boeing Company; and no trademark license is granted in connection with this document unless provided in writing by Boeing.

PUBLISHED BY BOEING COMMERCIAL AIRPLANES GROUP, SEATTLE, WASHINGTON, USA
A DIVISION OF THE BOEING COMPANY
PAGE DATE: Jul 01/2009

25-50-04

Page 1
Jul 01/2009



COMPONENT MAINTENANCE MANUAL

Revision No. 9
Jul 01/2009

To: All holders of CARGO COMPARTMENT PROTECTIVE GRILL ASSEMBLY 25-50-04.

Attached is the current revision to this COMPONENT MAINTENANCE MANUAL

The COMPONENT MAINTENANCE MANUAL is furnished either as a printed manual, on microfilm, or digital products, or any combination of the three. This revision replaces all previous microfilm cartridges or digital products. All microfilm and digital products are reissued with all obsolete data deleted and all updated pages added.

For printed manuals, changes are indicated on the List of Effective Pages (LEP). The pages which are revised will be identified on the LEP by an R (Revised), A (Added), O (Overflow, i.e. changes to the document structure and/or page layout), or D (Deleted). Each page in the LEP is identified by Chapter-Section-Subject number, page number and page date.

Pages replaced or made obsolete by this revision should be removed and destroyed.

ATTENTION

IF YOU RECEIVE PRINTED REVISIONS, PLEASE VERIFY THAT YOU HAVE RECEIVED AND FILED THE PREVIOUS REVISION. BOEING MUST BE NOTIFIED WITHIN 30 DAYS IF YOU HAVE NOT RECEIVED THE PREVIOUS REVISION. REQUESTS FOR REVISIONS OTHER THAN THE PREVIOUS REVISION WILL REQUIRE A COMPLETE MANUAL REPRINT SUBJECT TO REPRINT CHARGES SHOWN IN THE DATA AND SERVICES CATALOG.

25-50-04

TRANSMITTAL LETTER

Page 1

Jul 01/2009



COMPONENT MAINTENANCE MANUAL

Location of Change

Description of Change

NO HIGHLIGHTS

25-50-04

HIGHLIGHTS

Page 1

Jul 01/2009



COMPONENT MAINTENANCE MANUAL

Subject/Page	Date	Subject/Page	Date	Subject/Page	Date
TITLE PAGE		25-50-04 CLEANING (cont)		25-50-04 ILLUSTRATED PARTS LIST (cont)	
O 1	Jul 01/2009	402	BLANK	1011	Nov 01/2006
2	BLANK	25-50-04 CHECK		1012	Mar 01/2006
25-50-04 TRANSMITTAL LETTER		501	Mar 01/2006		
O 1	Jul 01/2009	502	Mar 01/2006		
2	BLANK	25-50-04 REPAIR - GENERAL			
25-50-04 HIGHLIGHTS		601	Mar 01/2006		
O 1	Jul 01/2009	602	Mar 01/2006		
2	BLANK	25-50-04 REPAIR 1-1			
25-50-04 EFFECTIVE PAGES		601	Mar 01/2009		
1	Jul 01/2009	602	Mar 01/2009		
2	BLANK	25-50-04 REPAIR 2-1			
25-50-04 CONTENTS		601	Mar 01/2006		
1	Mar 01/2006	602	Jul 01/2007		
2	BLANK	25-50-04 REPAIR 3-1			
25-50-04 TR AND SB RECORD		601	Mar 01/2006		
1	Mar 01/2006	602	Mar 01/2006		
2	BLANK	603	Mar 01/2006		
25-50-04 REVISION RECORD		604	BLANK		
1	Mar 01/2006	25-50-04 ASSEMBLY			
2	Mar 01/2006	701	Mar 01/2006		
25-50-04 RECORD OF TEMPORARY REVISIONS		702	BLANK		
1	Mar 01/2006	25-50-04 FITS AND CLEARANCES			
2	Mar 01/2006	801	Mar 01/2006		
25-50-04 INTRODUCTION		802	BLANK		
1	Mar 01/2009	25-50-04 SPECIAL TOOLS, FIXTURES, AND EQUIPMENT			
2	BLANK	901	Mar 01/2006		
25-50-04 DESCRIPTION AND OPERATION		902	BLANK		
1	Mar 01/2006	25-50-04 ILLUSTRATED PARTS LIST			
2	BLANK	1001	Nov 01/2008		
25-50-04 TESTING AND FAULT ISOLATION		1002	Jul 01/2006		
101	Mar 01/2006	1003	Mar 01/2006		
102	BLANK	1004	Mar 01/2006		
25-50-04 DISASSEMBLY		1005	Nov 01/2006		
301	Mar 01/2006	1006	Mar 01/2006		
302	BLANK	1007	Nov 01/2006		
25-50-04 CLEANING		1008	Mar 01/2006		
401	Mar 01/2006	1009	Nov 01/2006		
		1010	Mar 01/2006		

A = Added, R = Revised, D = Deleted, O = Overflow

25-50-04

EFFECTIVE PAGES

Page 1

Jul 01/2009

**COMPONENT MAINTENANCE MANUAL****TABLE OF CONTENTS**

<u>Paragraph Title</u>		<u>Page</u>
CARGO COMPARTMENT PROTECTIVE GRILL ASSEMBLY - DESCRIPTION AND OPERATION		1
TESTING AND FAULT ISOLATION	(Not Applicable)	
DISASSEMBLY	(Not Applicable)	
CLEANING	(Not Applicable)	
CHECK		501
REPAIR		601
ASSEMBLY	(Not Applicable)	
FITS AND CLEARANCES	(Not Applicable)	
SPECIAL TOOLS, FIXTURES, AND EQUIPMENT	(Not Applicable)	
ILLUSTRATED PARTS LIST		1001

25-50-04

CONTENTS

Page 1

Mar 01/2006



COMPONENT MAINTENANCE MANUAL

TEMPORARY REVISION AND SERVICE BULLETIN RECORD

BOEING SERVICE BULLETIN	BOEING TEMPORARY REVISION	OTHER DIRECTIVE	DATE OF INCORPORATION INTO MANUAL



COMPONENT MAINTENANCE MANUAL

All revisions to this manual will be accompanied by transmittal sheet bearing the revision number. Enter the revision number in numerical order, together with the revision date, the date filed and the initials of the person filing.

Revision		Filed	
Number	Date	Date	Initials

Revision		Filed	
Number	Date	Date	Initials



COMPONENT MAINTENANCE MANUAL

Revision		Filed		Revision		Filed	
Number	Date	Date	Initials	Number	Date	Date	Initials

25-50-04

REVISION RECORD

Page 2

Mar 01/2006



COMPONENT MAINTENANCE MANUAL

All temporary revisions to this manual will be accompanied by a cover sheet bearing the temporary revision number. Enter the temporary revision number in numerical order, together with the temporary revision date, the date the temporary revision is inserted and the initials of the person filing.

When the temporary revision is incorporated or cancelled, and the pages are removed, enter the date the pages are removed and the initials of the person who removed the temporary revision.

Temporary Revision		Inserted		Removed		Temporary Revision		Inserted		Removed	
Number	Date	Date	Initials	Date	Initials	Date	Initials	Number	Date	Date	Initials

BOEING PROPRIETARY - Copyright © Unpublished Work - See title page for details



COMPONENT MAINTENANCE MANUAL

Temporary Revision		Inserted		Removed		Temporary Revision		Inserted		Removed	
Number	Date	Date	Initials	Date	Initials	Date	Initials	Number	Date	Date	Initials

25-50-04

RECORD OF TEMPORARY REVISION

Page 2

Mar 01/2006



COMPONENT MAINTENANCE MANUAL

INTRODUCTION

1. General

- A. The instructions in this manual supply the data necessary to do the maintenance functions together with the test, fault isolation, repair, and replacement of the defective parts.
- B. This manual is divided into different parts:
 - (1) Title Page
 - (2) Transmittal Letter
 - (3) Highlights
 - (4) List of Effective Pages
 - (5) Table of Contents
 - (6) Temporary Revision & Service Bulletin Record
 - (7) Record of Revisions
 - (8) Record of Temporary Revisions
 - (9) Introduction
 - (10) Procedures & IPL Sections
- C. Components that can be repaired have a different repair number for each specified repair. To find the repair number location of a component, look in the Repair-General procedure at the beginning of the REPAIR section. The Repair-General procedure also has an explanation of the True Position Dimension symbols used.
- D. All dimensions, measures, quantities and weights included are in English units. When metric equivalents are given they will be in the parentheses that follow the English units.
- E. The introduction to the Illustrated Parts List (IPL) shows how the IPL data is used.
- F. Design changes, optional parts, configuration differences and Service Bulletin modifications may cause different part numbers. These part numbers are identified in the IPL with an alphabetical letter which is added to the end of the basic item number. This new item number is referred to as an alpha-variant. Throughout the manual, IPL basic item number references also apply to alpha-variants unless shown differently.
- G. The tool reference numbers found in the individual procedures and in the Special Tools, Fixtures, and Equipment section are used to identify if a tool is a standard tool (STD-XXXX), a commercial tool (COM-XXXX), or a Special Tool (SPL-XXXX). This reference number is also used to distinguish between tools with similar names in the same procedure. These reference numbers are for use in the documentation only. They are not to be used for ordering tools.

25-50-04

INTRODUCTION

Page 1

Mar 01/2009



COMPONENT MAINTENANCE MANUAL

CARGO COMPARTMENT PROTECTIVE GRILL ASSEMBLY - DESCRIPTION AND OPERATION

1. Description

A. The Cargo Compartment Protective Grill Assembly can be a welded tube frame with a welded wire grid. The Grill Assembly can also be a welded angle frame with a welded tube grid.

2. Operation

A. The Protective Grill is a part of the blowout panel assembly. The Grill prevents damage to the blowout panel caused by cargo movement when the airplane is in flight. The Grill also prevents damage to the blowout panel during the loading of the cargo. There is one grill assembly in the aft bulkhead of the forward cargo compartment. On some airplanes, there is also one grill assembly in the aft bulkhead of the aft cargo compartment.

3. Leading Particulars (approximate)

- A. Length – 18 to 19 inches
- B. Height – 13 to 15 inches
- C. Width – 0.75 inch
- D. Weight – 2 pounds

25-50-04

DESCRIPTION AND OPERATION

Page 1

Mar 01/2006



COMPONENT MAINTENANCE MANUAL

TESTING AND FAULT ISOLATION

(NOT APPLICABLE)

25-50-04

TESTING AND FAULT ISOLATION

Page 101

Mar 01/2006



COMPONENT MAINTENANCE MANUAL

DISASSEMBLY

(NOT APPLICABLE)

25-50-04

DISASSEMBLY

Page 301

Mar 01/2006



COMPONENT MAINTENANCE MANUAL

CLEANING

(NOT APPLICABLE)

25-50-04

CLEANING

Page 401

Mar 01/2006



COMPONENT MAINTENANCE MANUAL

CHECK

1. General

A. This procedure has the data necessary to find defects in the material of specified parts.

2. Check

A. Tools/Equipment

NOTE: Equivalent substitutes may be used.

Reference	Description
STD-1070	Lens - Magnifying, 10X, Hand Held

B. Procedure

(1) Use standard industry practices to do a visual check of all the visible parts for defects.

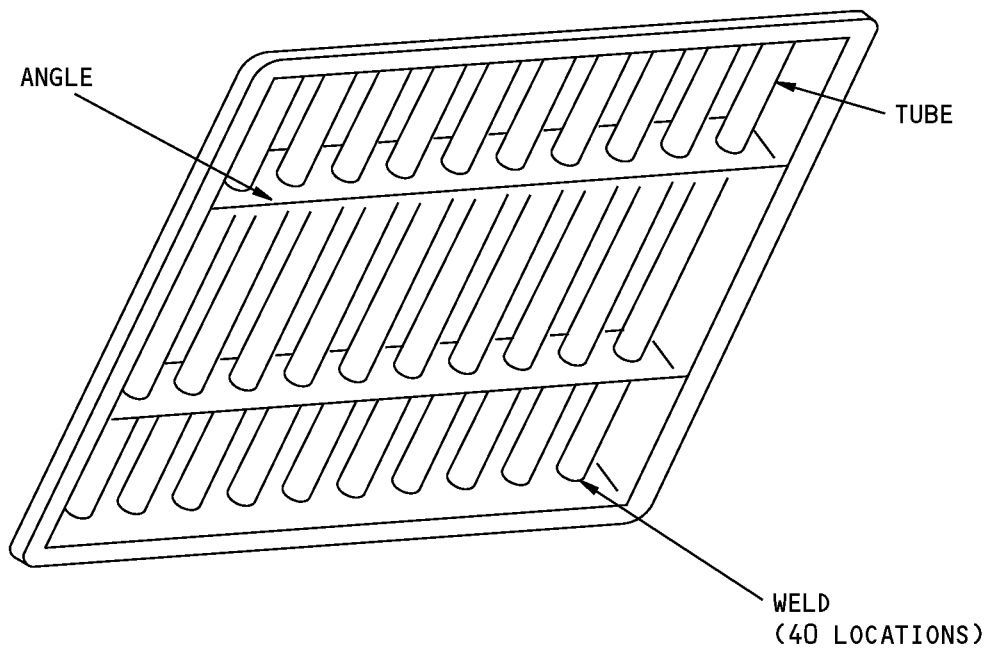
NOTE: Refer to CHECK, Figure 501 for grill assembly check.

- (a) Examine the grill assembly for missing tubes or wires.
- (b) Examine the tubes for creases or buckling. Small bends in the tubes are permitted.
- (c) Do a visual check for cracked or broken welds. If you think there is a cracked or broken weld, examine the area with a 10x hand held magnifying lens, STD-1070 to make sure.

25-50-04

CHECK
Page 501
Mar 01/2006

COMPONENT MAINTENANCE MANUAL



Grill Assembly Check
Figure 501

25-50-04

CHECK
Page 502
Mar 01/2006



COMPONENT MAINTENANCE MANUAL

REPAIR

1. General

- A. Instructions for repair, refinish and replacement of the specified sub-assembly parts are included in each REPAIR when applicable:

Table 601:

PART NUMBER	NAME	REPAIR
_____	REFINISH OF OTHER PARTS	1-1
65C21468-1,-2	GRILL ASSEMBLY	2-1
65C21468-9,-10,-13,-15	GRILL ASSEMBLY	3-1

2. Dimensional Symbols

- A. Standard True Position Dimensioning Symbols used in the applicable repair procedures are shown in REPAIR-GENERAL, Figure 601.

25-50-04

REPAIR - GENERAL

Page 601

Mar 01/2006



COMPONENT MAINTENANCE MANUAL

—	STRAIGHTNESS	∅	DIAMETER
▭	FLATNESS	S ∅	SPHERICAL DIAMETER
⊥	PERPENDICULARITY (OR SQUARENESS)	R	RADIUS
//	PARALLELISM	SR	SPHERICAL RADIUS
○	ROUNDNESS	()	REFERENCE
⊘	CYLINDRICITY	BASIC	A THEORETICALLY EXACT DIMENSION USED
⌒	PROFILE OF A LINE	(BSC)	TO DESCRIBE SIZE, SHAPE OR LOCATION OF
⌒	PROFILE OF A SURFACE	OR	A FEATURE. FROM THIS FEATURE PERMISSIBLE
◎	CONCENTRICITY	DIM	VARIATIONS ARE ESTABLISHED BY TOLERANCES ON OTHER DIMENSIONS OR NOTES.
≡	SYMMETRY	-A-	DATUM
∠	ANGULARITY	Ⓜ	MAXIMUM MATERIAL CONDITION (MMC)
↗	RUNOUT	Ⓛ	LEAST MATERIAL CONDITION (LMC)
↗	TOTAL RUNOUT	Ⓢ	REGARDLESS OF FEATURE SIZE (RFS)
⊔	COUNTERBORE OR SPOTFACE	Ⓟ	PROJECTED TOLERANCE ZONE
∇	COUNTERSINK	FIM	FULL INDICATOR MOVEMENT
⊕	THEORETICAL EXACT POSITION OF A FEATURE (TRUE POSITION)		

EXAMPLES

$\boxed{\text{—}} \boxed{0.002}$	STRAIGHT WITHIN 0.002	$\boxed{\text{◎}} \boxed{\text{∅}} \boxed{0.0005} \boxed{C}$	CONCENTRIC TO DATUM C WITHIN 0.0005 DIAMETER
$\boxed{\text{⊥}} \boxed{0.002} \boxed{B}$	PERPENDICULAR TO DATUM B WITHIN 0.002	$\boxed{\text{≡}} \boxed{0.010} \boxed{A}$	SYMMETRICAL WITH DATUM A WITHIN 0.010
$\boxed{\text{//}} \boxed{0.002} \boxed{A}$	PARALLEL TO DATUM A WITHIN 0.002	$\boxed{\text{∠}} \boxed{0.005} \boxed{A}$	ANGULAR TOLERANCE 0.005 WITH DATUM A
$\boxed{\text{○}} \boxed{0.002}$	ROUND WITHIN 0.002	$\boxed{\text{⊕}} \boxed{\text{∅}} \boxed{0.002} \boxed{\text{Ⓢ}} \boxed{B}$	LOCATED AT TRUE POSITION WITHIN 0.002 DIA RELATIVE TO DATUM B, REGARDLESS OF FEATURE SIZE
$\boxed{\text{⊘}} \boxed{0.010}$	CYLINDRICAL SURFACE MUST LIE BETWEEN TWO CONCENTRIC CYLINDERS, ONE OF WHICH HAS A RADIUS 0.010 INCH GREATER THAN THE OTHER	$\boxed{\text{⊥}} \boxed{\text{∅}} \boxed{0.010} \boxed{\text{Ⓜ}} \boxed{A}$	AXIS IS TOTALLY WITHIN A CYLINDER OF 0.010 INCH DIAMETER, PERPENDICULAR TO DATUM A, AND EXTENDING 0.510 INCH ABOVE DATUM A, MAXIMUM MATERIAL CONDITION
$\boxed{\text{⌒}} \boxed{0.006} \boxed{A}$	EACH LINE ELEMENT OF THE SURFACE AT ANY CROSS SECTION MUST LIE BETWEEN TWO PROFILE BOUNDARIES 0.006 INCH APART RELATIVE TO DATUM A	$\boxed{0.510} \boxed{\text{Ⓟ}}$	
$\boxed{\text{⌒}} \boxed{0.020} \boxed{A}$	SURFACES MUST LIE WITHIN PARALLEL BOUNDARIES 0.020 INCH APART AND EQUALLY DISPOSED ABOUT TRUE PROFILE	$\boxed{2.000}$	THEORETICALLY EXACT DIMENSION IS 2.000
		OR	
		2.000	
		BSC	

True Position Dimensioning Symbols
Figure 601

25-50-04

REPAIR - GENERAL

Page 602

Mar 01/2006



COMPONENT MAINTENANCE MANUAL

REFINISH OF OTHER PARTS - REPAIR 1-1

1. General

- A. This procedure has the data necessary to refinish the parts, which are not given in the specified repairs.
- B. Refer to the Standard Overhaul Practices Manual (SOPM) for details of the SOPM subjects identified in the procedure.
- C. Refer to IPL Figure 1, IPL Figure 2, IPL Figure 3 and IPL Figure 4 for the item numbers.

2. Refinish of Other Parts

A. Consumable Materials

NOTE: Equivalent substitutes may be used.

Reference	Description	Specification
C00259	Primer - Chemical And Solvent Resistant Finish, Epoxy Resin	BMS10-11, Type I
C00260	Coating - Chemical And Solvent Resistant Finish, Epoxy Resin Enamel	BMS10-11, Type II
C00304	Coating - Teflon Filled, Non Decorative, Sprayable Material	BMS 10-86 Type I
C50033	Chromated Conversion Coating for Aluminum - Alodine 1200	

B. References

Reference	Title
SOPM 20-30-02	STRIPPING OF PROTECTIVE FINISHES
SOPM 20-30-03	GENERAL CLEANING PROCEDURES
SOPM 20-41-01	DECODING TABLE FOR BOEING FINISH CODES
SOPM 20-60-02	FINISHING MATERIALS

C. General

- (1) Instructions for the repair of the parts listed in REPAIR 1-1, Table 601 are for repair of the initial finish.

D. Procedure

NOTE: For stripping of protective finishes, refer to SOPM 20-30-02. For general cleaning procedure, refer to SOPM 20-30-03. For the decoding table for Boeing finish codes, refer to SOPM 20-41-01. For finishing materials, refer to SOPM 20-60-02.

- (1) Refer to REPAIR 1-1, Table 601 for refinish details.

25-50-04

REPAIR 1-1

Page 601

Mar 01/2009



COMPONENT MAINTENANCE MANUAL

Table 601: Refinish Details

IPL FIG. & ITEM	MATERIAL	FINISH
IPL Fig. 1		
Grill Assembly (1A)	321/347 CRES	Apply primer, C00259(F-20.02). Apply abrasion resistant finish coating, C00304 (SRF-14.9624).
IPL Fig. 2		
Grill Assembly (1A)	321/347 CRES	Apply primer, C00259 (F-20.02). Apply abrasion resistant finish coating, C00304(SRF-14.9624).
IPL Fig. 3		
Grill Assembly (1A)	Al alloy	Chemical treat and apply primer, C00259 (F-18.06). Apply gloss enamel coating, C00260 (F-21.03).
Grill Assembly (1B)	Al alloy	Apply Alodine 1200 coating, C50033 to bare aluminum surfaces. Apply primer, C00259 (F-20.02). Apply gloss enamel coating, C00260 (F-21.25).
Grill Assembly (1C)	Al alloy	Apply chemical conversion coating to all surfaces (F-30.006). Apply primer, C00259 (F-20.02). Apply gloss enamel coating, C00260 (F-21.17).
IPL Fig. 4		
Grill Assembly (1A)	Al alloy	Apply Alodine 1200 coating, C50033 to bare aluminum surfaces. Apply primer, C00259 (F-20.02). Apply gloss enamel coating, C00260 (F-21.25).

25-50-04

REPAIR 1-1

Page 602

Mar 01/2009



COMPONENT MAINTENANCE MANUAL

GRILL ASSEMBLY - REPAIR 2-1

65C21468-1, -2

1. General

- A. This procedure has the data necessary to repair the grill assembly (1A, IPL Figure 1; 1A, IPL Figure 2).
- B. Refer to the Standard Overhaul Practices Manual (SOPM) for details of the SOPM subjects identified in the procedure.
- C. Refer to REPAIR-GENERAL, Figure 601 for the Standard True Position Dimensioning Symbols shown in the repair.
- D. Refer to IPL Figure 1 and IPL Figure 2 for the item numbers.

2. Wire (5, 10) Replacement

A. Tools/Equipment

NOTE: Equivalent substitutes may be used.

Reference	Description
STD-1070	Lens - Magnifying, 10X, Hand Held

B. References

Reference	Title
CMM 25-50-04	CARGO COMPARTMENT PROTECTIVE GRILL ASSEMBLY
SOPM 20-30-02	STRIPPING OF PROTECTIVE FINISHES
SOPM 20-30-03	GENERAL CLEANING PROCEDURES
SOPM 20-41-01	DECODING TABLE FOR BOEING FINISH CODES
SOPM 20-60-02	FINISHING MATERIALS

C. Procedures

NOTE: For stripping of protective finishes, refer to SOPM 20-30-02. For general cleaning procedure, refer to SOPM 20-30-03. For the decoding table for Boeing finish codes, refer to SOPM 20-41-01. For finishing materials, refer to SOPM 20-60-02.

- (1) Remove the damaged wire as shown in REPAIR 2-1, Figure 601. Make sure the surface roughness is 63 microinch or smoother.
- (2) Visually examine the grill assembly (1A, IPL Figure 1; 1A, IPL Figure 2) to make sure the damage was completely removed.
- (3) Make a repair wire from CRES 321-347 and equal in length to the removed wire.
- (4) Weld the repair wire in its position as specified in BAC5975, Class 5A or 6. Use MIL-R-5031 filler rod. Material: CRES 321-347.
- (5) Do a visual inspection of the welded area with a 10x hand held magnifying lens, STD-1070 to make sure the weld is satisfactory.

D. Refinish

- (1) Break sharp edges 0.020/0.030 R.
- (2) Apply a finish as specified in CMM 25-50-04, Repair 1-1.

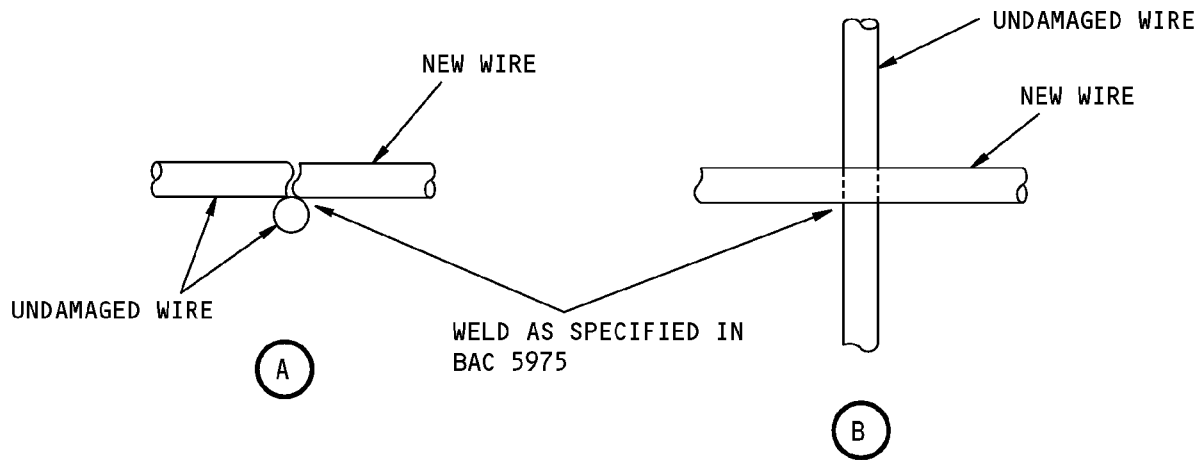
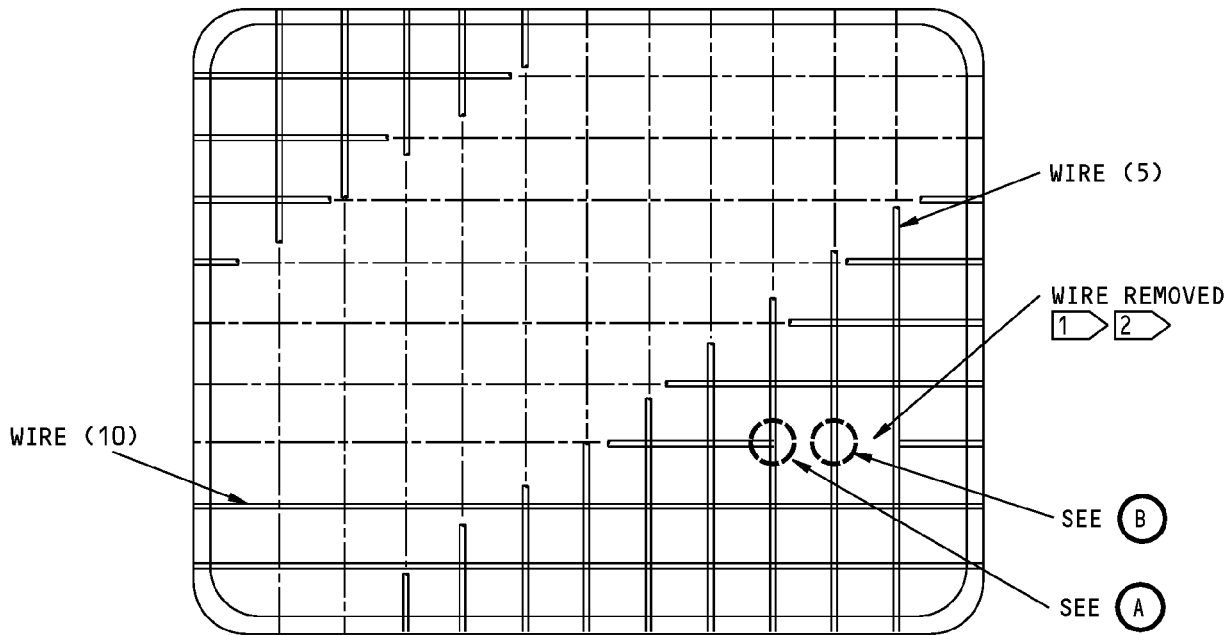
25-50-04

REPAIR 2-1

Page 601

Mar 01/2006

COMPONENT MAINTENANCE MANUAL



- 1 REMOVE DAMAGED WIRE COMPLETELY. MAKE SURE THE ENDS ARE REMOVED TO APPROXIMATELY HALF THE DIAMETER OF THE UNDAMAGED WIRE
- 2 MAKE SURE THE SURFACE ROUGHNESS IS 63 MICROINCH OR SMOOTHER

ITEM NUMBERS REFER TO IPL FIG. 1 AND 2

65C21468-1,-2 Wire Replacement
Figure 601

25-50-04

REPAIR 2-1
Page 602
Jul 01/2007



COMPONENT MAINTENANCE MANUAL

GRILL ASSEMBLY - REPAIR 3-1

65C21468-9, -10, -13, -15

1. General

- A. This procedure has the data necessary to repair the grill assembly (1A, 1B, 1C, IPL Figure 3; 1A, IPL Figure 4).
- B. Refer to the Standard Overhaul Practices Manual (SOPM) for details of the SOPM subjects identified in the procedure.
- C. Refer to REPAIR-GENERAL, Figure 601 for the Standard True Position Dimensioning Symbols shown in the repair.
- D. Refer to IPL Figure 3 and IPL Figure 4 for the item numbers.

2. Tube (40) Replacement

A. Tools/Equipment

NOTE: Equivalent substitutes may be used.

Reference	Description
STD-1070	Lens - Magnifying, 10X, Hand Held

B. References

Reference	Title
SOPM 20-30-02	STRIPPING OF PROTECTIVE FINISHES
SOPM 20-30-03	GENERAL CLEANING PROCEDURES
SOPM 20-41-01	DECODING TABLE FOR BOEING FINISH CODES
SOPM 20-60-02	FINISHING MATERIALS

C. Procedure

NOTE: For stripping of protective finishes, refer to SOPM 20-30-02. For general cleaning procedure, refer to SOPM 20-30-03. For the decoding table for Boeing finish codes, refer to SOPM 20-41-01. For finishing materials, refer to SOPM 20-60-02.

- (1) Remove the damaged tube as shown in REPAIR 3-1, Figure 601. Make sure the surface roughness is 63 microinch or smoother.
- (2) Visually examine the grill assembly (1A, 1B, 1C, IPL Figure 3; 1A, IPL Figure 4) to make sure the damage was completely removed.
- (3) Make a repair tube or rod from one of the materials that follow and equal in length to the removed tube.
 - (a) 0.25 inch OD X 0.028 inch wall 6061-T6 aluminum tubing as specified in WW-T-700/6.
 - (b) Solid 6061-T6 Aluminum, machined to 0.24 to 0.26 inch diameter.
- (4) Weld the repair tube or rod in its position as specified in BAC5975, Class B. Use AMS 4190 filler rod. Material: 6061-T6 Aluminum.
- (5) Do a visual inspection of the welded area with a 10x hand held magnifying lens, STD-1070 to make sure the weld is satisfactory.

25-50-04

REPAIR 3-1

Page 601

Mar 01/2006



COMPONENT MAINTENANCE MANUAL

D. Refinish

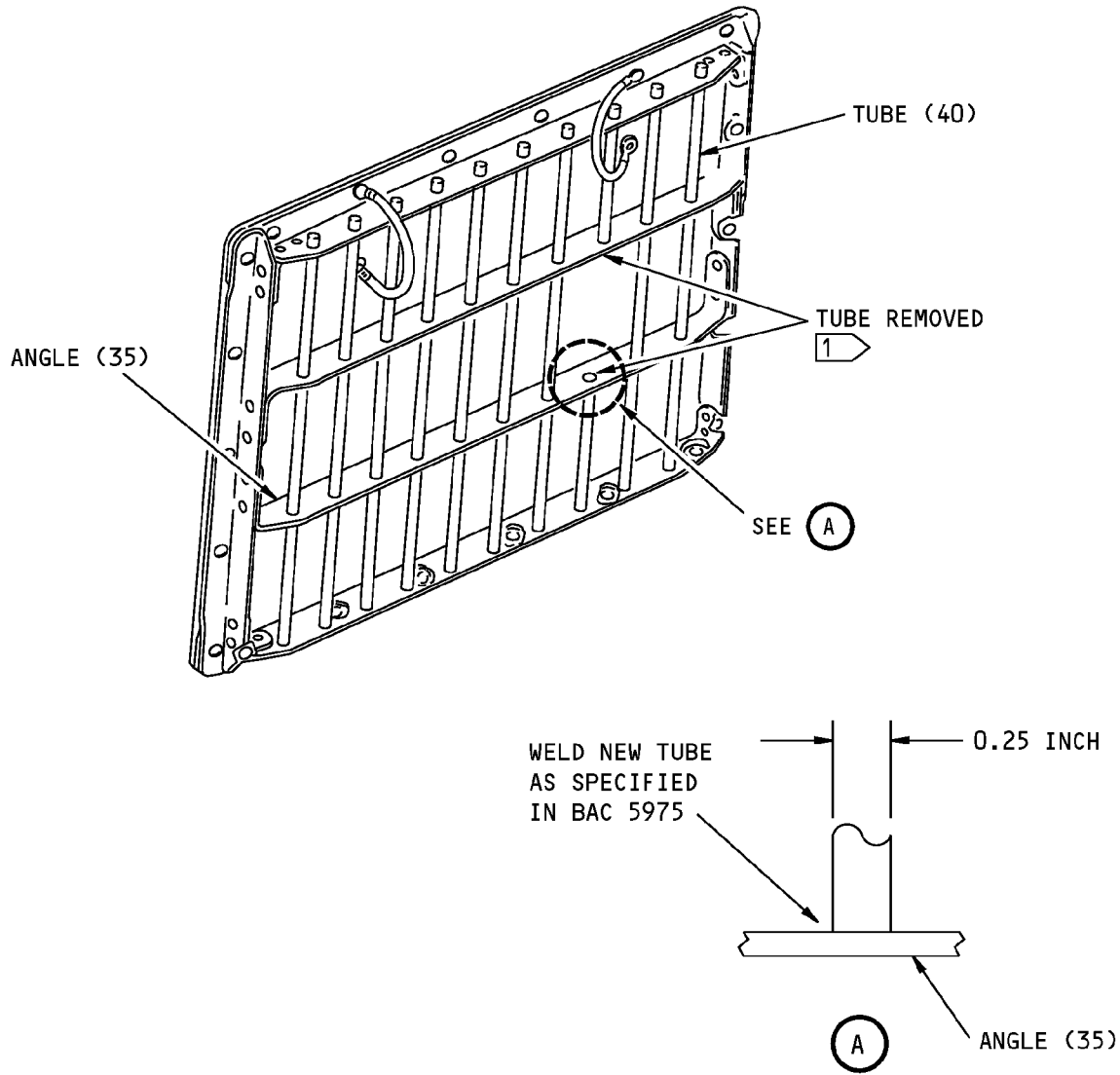
- (1) Break sharp edges 0.020/0.030 R.
- (2) Apply a finish as specified in REPAIR 1-1.

25-50-04

REPAIR 3-1
Page 602

Mar 01/2006

COMPONENT MAINTENANCE MANUAL



1 REMOVE DAMAGED TUBE COMPLETELY. MAKE SURE THE SURFACE ROUGHNESS IS 63 MICROINCH OR SMOOTHER

ITEM NUMBERS REFER TO IPL FIG. 3 AND 4

65C21468-9,-10,-13,-15 Tube Replacement
Figure 601

25-50-04

REPAIR 3-1
Page 603
Mar 01/2006



COMPONENT MAINTENANCE MANUAL

ASSEMBLY

(NOT APPLICABLE)

25-50-04

ASSEMBLY

Page 701

Mar 01/2006



COMPONENT MAINTENANCE MANUAL

FITS AND CLEARANCES

(NOT APPLICABLE)

25-50-04

FITS AND CLEARANCES

Page 801

Mar 01/2006



COMPONENT MAINTENANCE MANUAL

SPECIAL TOOLS, FIXTURES, AND EQUIPMENT

(NOT APPLICABLE)

25-50-04

SPECIAL TOOLS, FIXTURES, AND EQUIPMENT

Page 901

Mar 01/2006



COMPONENT MAINTENANCE MANUAL

ILLUSTRATED PARTS LIST

1. Introduction

- A. The Illustrated Parts List (IPL) contains an illustration and a list of component parts you can repair or replace. The Illustrated Parts Catalog (IPC) shows how to use the Boeing part number system.
- B. This shows how parts are related: The relation of each item to its next higher assembly (NHA) is shown in the NOMENCLATURE column. Use the indenture system that follows:

1	2	3	4	5	6	7
.	Assembly					
.	Attaching parts for assembly					
.	.	Detail parts for assembly				
.	.	Subassembly				
.	.	Attaching parts for subassembly				
.	.	.	Detail parts for subassembly			
.	.	.	Sub-subassembly			
.	.	.	Attaching parts for subassembly			
.	.	.	.	Details parts for sub-subassembly		
						Detail Installation Parts (Included only if installation parts may be sent to the shop as part of assembly)

- C. Each top assembly is given one use code letter (A, B, C, etc.) in the USAGE CODE column. All subsequent component parts in the list can have one or more of the use code letters to show effectivity to top assemblies. A component part without a use code applies to all top assemblies.
- D. An alphabetical letter is added after the item number for optional parts, parts changed by a Service Bulletin, configuration differences (except left-handed and right-handed parts), last engineering releases, and parts added between item numbers in a sequence. The alphabetical letter will not be shown on the illustration for equivalent parts of the same part number.
- E. Color-coded parts are identified with a single digit alpha following the dash number or with "SP" suffix. If the "SP" suffix is used, it represents consolidation of all color codes applicable for a given usage which are not separately listed. Orders for color-coded parts should include the registry number of the airplane for which the parts are ordered.
- F. If a part number is 15 characters long but will not fit in the part number column, the part number will be displayed with a "~" at the end of the line and will be continued on the next line. The "~" denotes that the part number continues on the next line.
- G. Parts changed by a Service Bulletin are shown by PRE SB XXXX and POST SB XXXX added to the NOMENCLATURE column.
- (1) When a new top assembly is added by a Service Bulletin, PRE SB XXXX and POST SB XXXX will be added at the top assembly level only. The configuration differences at the detail part level are shown by use code letters.
- (2) When the top assembly part number is not changed by the Service Bulletin, PRE SB XXXX and POST SB XXXX will be added at the detail level.
- H. Interchangeable Parts

25-50-04

ILLUSTRATED PARTS LIST

Page 1001

Nov 01/2008



COMPONENT MAINTENANCE MANUAL

Optional
(OPT)

The part is optional to and interchangeable with other parts that have the same item number.

Replaces, Replaced by and not interchangeable with
(REPLACES, REPLACED BY AND NOT INTCHG/W)

The part replaces and is not interchangeable with the initial part.

Replaces, Replaced by
(REPLACES, REPLACED BY)

The part replaces and is interchangeable with, or is an alternative to, the initial part.

25-50-04

ILLUSTRATED PARTS LIST

Page 1002

Jul 01/2006



COMPONENT MAINTENANCE MANUAL

NUMERICAL INDEX

PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
65C21468-1		1	1A	RF
65C21468-10		1	1D	RF
		4	1A	RF
65C21468-11		3	25	1
65C21468-12		4	25	1
65C21468-13		1	1E	RF
		3	1B	RF
65C21468-14		3	25A	1
65C21468-15		1	1F	RF
		3	1C	RF
65C21468-2		1	1B	RF
		2	1A	RF
65C21468-3		1	15	1
65C21468-4		2	15	1
65C21468-5		1	5	11
65C21468-6		1	10	9
65C21468-7		2	5	11
65C21468-8		2	10	8
65C21468-9		1	1C	RF
		3	1A	RF
65C27524-1		3	15	2
		3	15B	2
65C27524-10		3	20	4
		3	20B	4
		4	20	4
65C27524-11		4	40	10
65C27524-12		3	15A	2
		3	15C	2
65C27524-13		3	20A	4
		3	20C	4
65C27524-2		3	30	2
65C27524-3		3	35	2
65C27524-4		3	40	10
65C27524-7		4	30	2

25-50-04

ILLUSTRATED PARTS LIST

Page 1003

Mar 01/2006

**COMPONENT MAINTENANCE MANUAL**

PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
65C27524-8		4	15	2
65C27524-9		4	35	2
BACR15FTD		3	10	24
		4	10	8
BACR15GF5		3	5	8
		4	5	24

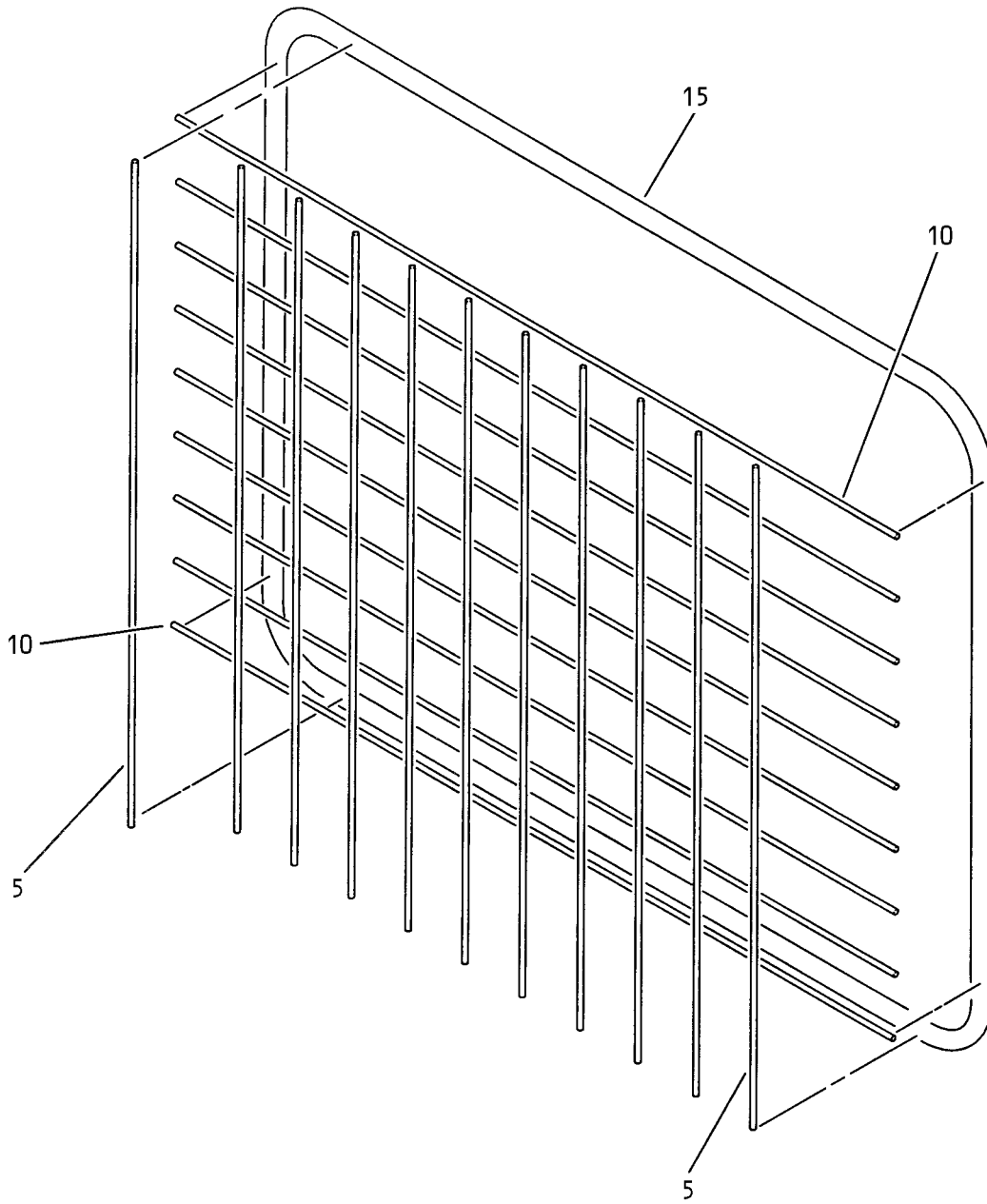
25-50-04

ILLUSTRATED PARTS LIST

Page 1004

Mar 01/2006

COMPONENT MAINTENANCE MANUAL



Protective Grill Assembly
IPL Figure 1

25-50-04

ILLUSTRATED PARTS LIST

Page 1005

Nov 01/2006



COMPONENT MAINTENANCE MANUAL

FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE							USAGE CODE	UNITS PER ASSY
			1	2	3	4	5	6	7		
1-											
-1A	65C21468-1									A	RF
-1B	65C21468-2									B	RF
-1C	65C21468-9									C	RF
-1D	65C21468-10									D	RF
-1E	65C21468-13									E	RF
-1F	65C21468-15									F	RF
5	65C21468-5									A	11
10	65C21468-6									A	9
15	65C21468-3									A	1

-Item not Illustrated

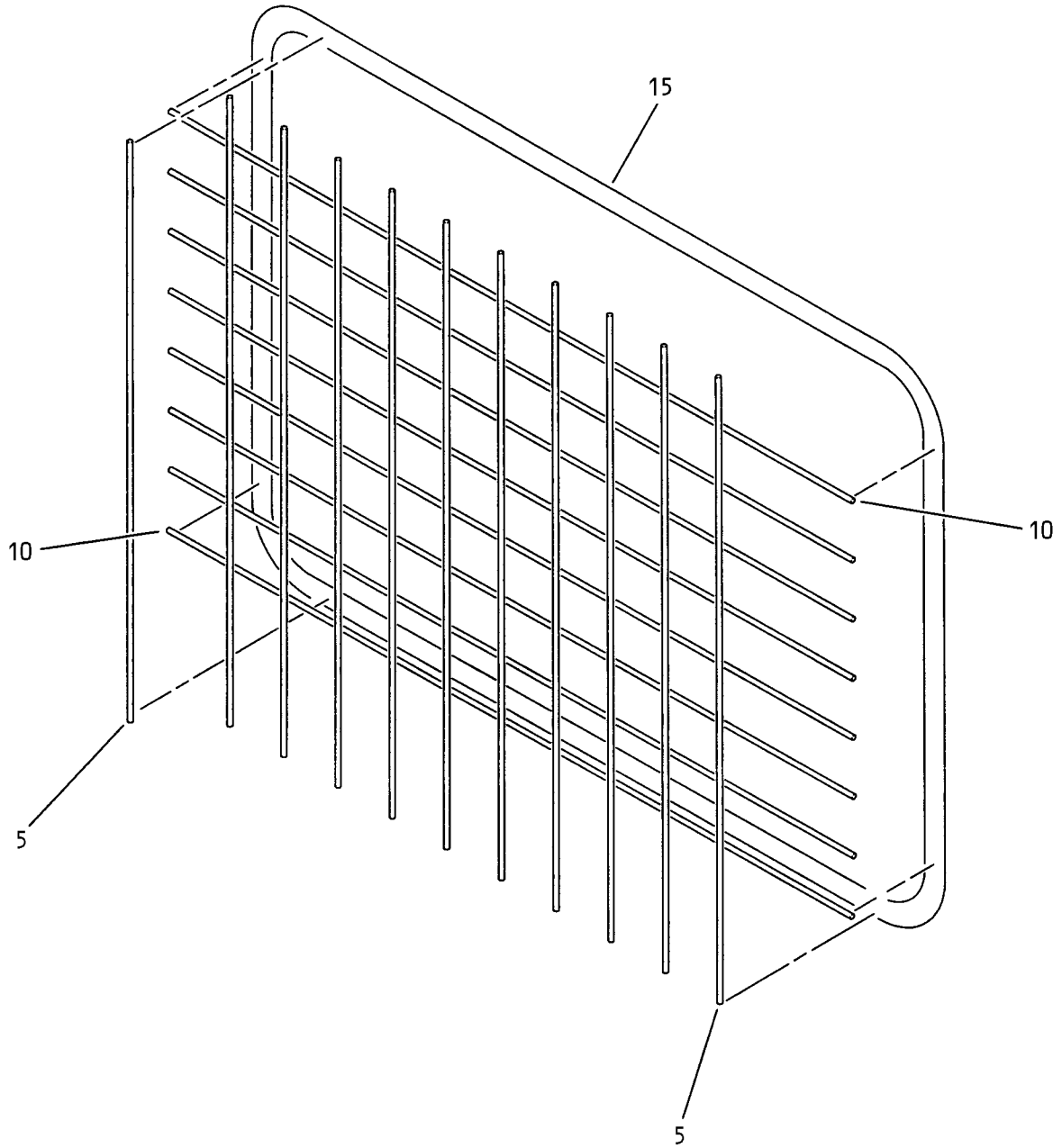
25-50-04

ILLUSTRATED PARTS LIST

Page 1006

Mar 01/2006

COMPONENT MAINTENANCE MANUAL



Protective Grill Assembly
IPL Figure 2

25-50-04

ILLUSTRATED PARTS LIST

Page 1007

Nov 01/2006

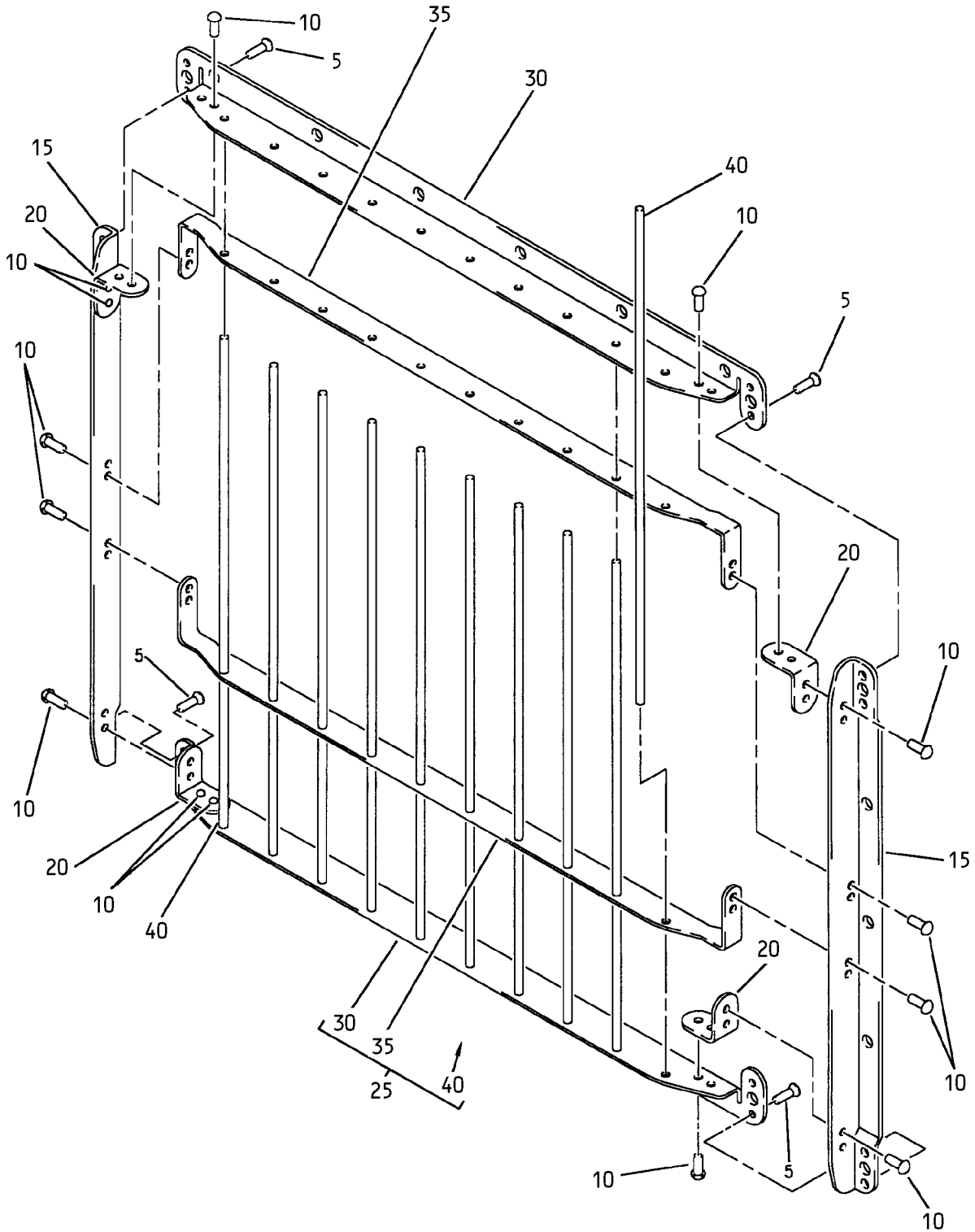


COMPONENT MAINTENANCE MANUAL

FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE							USAGE CODE	UNITS PER ASSY
			1	2	3	4	5	6	7		
2- -1A	65C21468-2		GRILL ASSY-PROTECTIVE, CARGO COMPT							B	RF
5	65C21468-7		. WIRE							B	11
10	65C21468-8		. WIRE							B	8
15	65C21468-4		. TUBE							B	1

-Item not Illustrated

COMPONENT MAINTENANCE MANUAL



Protective Grill Assembly
IPL Figure 3

25-50-04

ILLUSTRATED PARTS LIST

Page 1009

Nov 01/2006



COMPONENT MAINTENANCE MANUAL

FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE							USAGE CODE	UNITS PER ASSY
			1	2	3	4	5	6	7		
3-											
-1A	65C21468-9									C	RF
-1B	65C21468-13									E	RF
-1C	65C21468-15									F	RF
5	BACR15GF5									C, E, F	8
10	BACR15FTD									C, E, F	24
15	65C27524-1									C	2
-15A	65C27524-12									E	2
-15B	65C27524-1									F	2
-15C	65C27524-12									F	2
20	65C27524-10									C	4
-20A	65C27524-13									E	4
-20B	65C27524-10									F	4
-20C	65C27524-13									F	4
25	65C21468-11									C, F	1
-25A	65C21468-14									E	1
30	65C27524-2									C, E, F	2
35	65C27524-3									C, E, F	2
40	65C27524-4									C, E, F	10

-Item not Illustrated

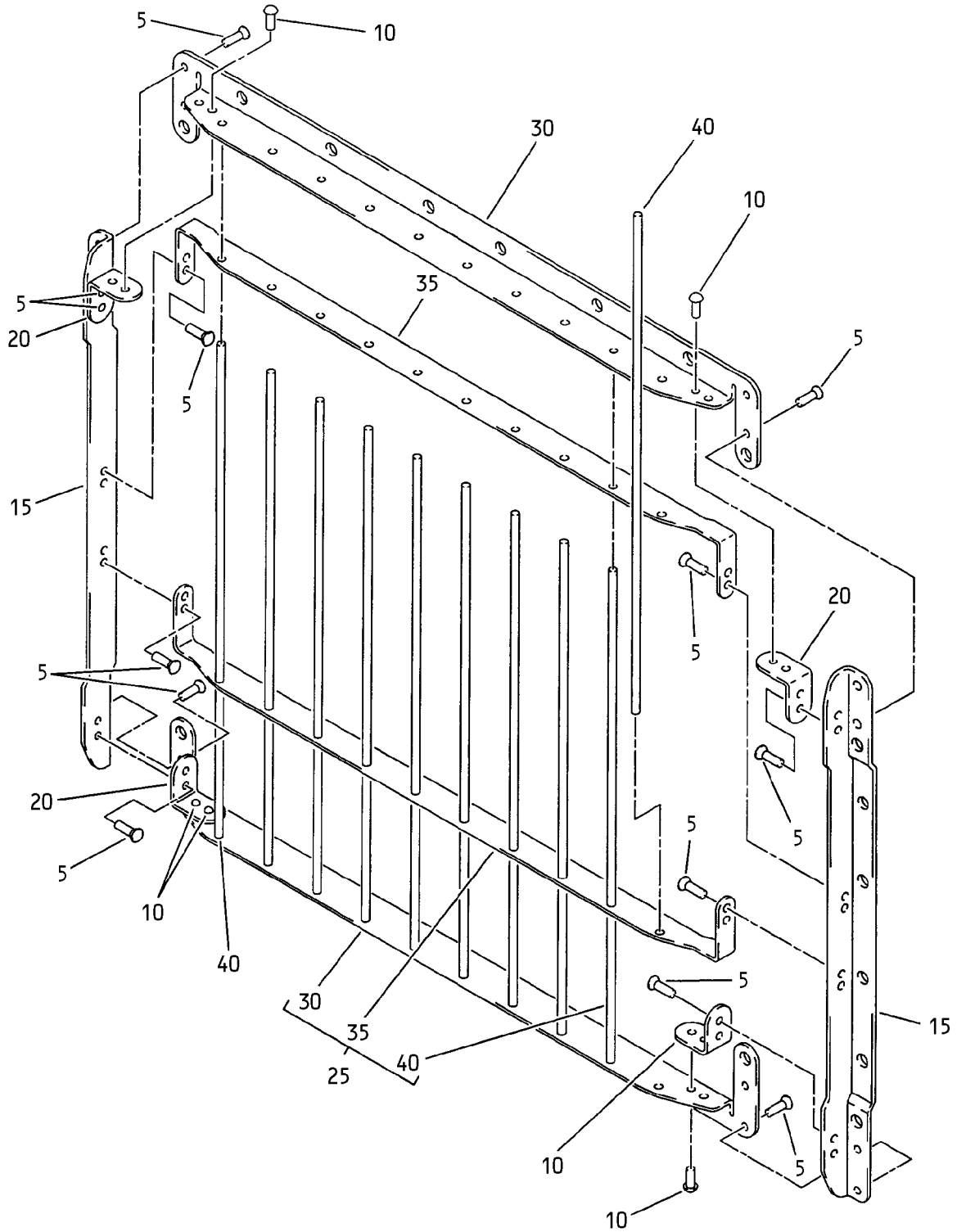
25-50-04

ILLUSTRATED PARTS LIST

Page 1010

Mar 01/2006

COMPONENT MAINTENANCE MANUAL



Protective Grill Assembly
IPL Figure 4

25-50-04

ILLUSTRATED PARTS LIST

Page 1011

Nov 01/2006



COMPONENT MAINTENANCE MANUAL

FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE							USAGE CODE	UNITS PER ASSY
			1	2	3	4	5	6	7		
4-											
-1A	65C21468-10									D	RF
5	BACR15GF5									D	24
10	BACR15FTD									D	8
15	65C27524-8									D	2
20	65C27524-10									D	4
25	65C21468-12									D	1
30	65C27524-7									D	2
35	65C27524-9									D	2
40	65C27524-11									D	10

-Item not Illustrated

25-50-04

ILLUSTRATED PARTS LIST

Page 1012

Mar 01/2006