CHAPTER

52

DOORS



CHAPTER 52 DOORS

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1 thru 5	Aug 15/2009	202	Apr 01/2005	(cont)	
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5	Dec 15/2006	52-10-01 REPAIR	R 7	202	Apr 01/2005
6	Dec 15/2006	201	Apr 01/2005	52-20-01 REPAIR	R 2
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_	/ABLE DAMAGE 1	104	Apr 01/2005	52-20-01 REPAIR	₹ 5
101	Apr 01/2005	52-10-02 REPAIR	R GENERAL	201	Apr 15/2007
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104	BLANK	52-20-01 IDENTI	FICATION 1	1	Apr 01/2005
	/ABLE DAMAGE 2	1	Apr 01/2005	2	BLANK
101	Apr 01/2005	2	BLANK	52-20-02 IDENTII	FICATION 2
102	Apr 01/2005	52-20-01 IDENTI		1	Apr 01/2005
52-10-01 REPAIR	·	1	Apr 01/2005	2	Apr 01/2005
201	Apr 01/2005	2	BLANK	52-20-02 ALLOW	/ABLE DAMAGE 1
202	BLANK	52-20-01 ALLOW	/ABLE DAMAGE 1	101	Dec 15/2006
52-10-01 REPAIR		R 101	Aug 15/2009	102	Apr 01/2005
201	Apr 15/2007	R 102	Aug 15/2009	103	Apr 01/2005
202	BLANK	D 103	Aug 15/2009	104	Apr 01/2005
52-10-01 REPAIR		D 104	BLANK	52-20-02 REPAIR	R GENERAL
201	Apr 15/2007		/ABLE DAMAGE 2	201	Apr 01/2005
202	BLANK	101	Apr 01/2005	202	BLANK
52-10-01 REPAIR		102	Apr 01/2005	52-30-01 IDENTII	FICATION 1
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201	Apr 01/2005 Apr 01/2005	101	Apr 01/2005	2	BLANK
	•	102	Apr 01/2005	52-30-01 IDENTII	FICATION 2
52-10-01 REPAIR		103	Apr 01/2005	1	Dec 15/2005
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A = Added, R = Revised, O = Overflow, D = Deleted

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202	Dec 15/2007	104	Apr 01/2005	103	Apr 01/2005
52-30-01 REPAIR	R 2	105	Apr 01/2005	104	BLANK
201	Dec 15/2007	106	BLANK	52-40-01 ALLOW	ABLE DAMAGE 2
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52-30-01 REPAIR	₹ 3	201	Apr 01/2005	102	Apr 01/2005
201	Apr 15/2007	202	BLANK	103	Apr 01/2005
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201	Dec 15/2007	1	Apr 01/2005	101	Apr 01/2005
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204	Dec 15/2007	1	Apr 01/2005	104	BLANK

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201	Apr 01/2005	52-40-02 IDENTI	•	101	Apr 01/2005
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201	Apr 01/2005	52-40-02 IDENTI	·	101	Apr 01/2005
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202	Apr 01/2005 Apr 01/2005	1	Apr 01/2005	102	Apr 01/2005
52-40-01 REPAIR	•	2	Apr 01/2005	52-40-02 ALLOW	ABLE DAMAGE 8
201	Apr 01/2005	52-40-02 IDENTI	•	101	Apr 01/2005
202	Apr 01/2005 Apr 01/2005	1	Apr 01/2005	102	Apr 01/2005
52-40-01 REPAIR	·	2	Apr 01/2005	52-40-02 ALLOW	ABLE DAMAGE 9
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202	Apr 01/2005 Apr 01/2005	1	Apr 01/2005	102	Apr 01/2005
52-40-02 IDENTII	•	2	Apr 01/2005 Apr 01/2005	103	Apr 01/2005
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			Apr 15/2007	106	BLANK
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CHAPTER SECTION SUBJECT SUBJECT DOORS - GENERAL 52-00-00 GENERAL - Door Location Diagram ENTRY DOOR SKIN 52-10-01 IDENTIFICATION 1-Entry Door Skin ALLOWABLE DAMAGE 1-Entry Door Skin ALLOWABLE DAMAGE 2-Operating Limits for Passenger / Crew Entry Door Skin REPAIR GENERAL-Entry Door Skin REPAIR 1-Deleted - Entry Doors - Flush Skin Repair Between Beams REPAIR 2-Deleted - Entry Doors - Flush Skin Repair at a Beam REPAIR 3-Entry Doors - Small Hole Flush Repair REPAIR 4-Entry Doors - Small Hole External Repair REPAIR 5-Deleted - Entry Doors - External Repair REPAIR 6-Entry Doors - External Skin Repair at a Beam REPAIR 7-Passenger / Crew Service Doors - External Skin Repair Between Beams **ENTRY DOOR STRUCTURE** 52-10-02 IDENTIFICATION 1-Entry Door Structure ALLOWABLE DAMAGE 1-Entry Door Structure REPAIR GENERAL-Entry Door Structure 52-20-01 EMERGENCY EXIT DOOR SKIN IDENTIFICATION 1-Emergency Exit Door Skin IDENTIFICATION 2-Type 1 Door (Emergency Exit) Skin ALLOWABLE DAMAGE 1-Emergency Exit Door Skin ALLOWABLE DAMAGE 2 - Operating Limits for Overwing / Type I Emergency Exit Door Skin ALLOWABLE DAMAGE 3-Type I Emergency Exit Door Skin REPAIR GENERAL-Emergency Exit Door Skin REPAIR 1-Emergency Exit Door - Flush Skin Repairs Between Beams

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REPAIR 5-External Repair



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SUBJECT

ACCESS DOOR STRUCTURE

SECTION
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IDENTIFICATION 2-Controls Bay Access Door Structure

IDENTIFICATION 3-Service Access Door Structure - Sta 1690

IDENTIFICATION 4-Fin Access Door

IDENTIFICATION 5-Elec/Elex Access Door Structure

IDENTIFICATION 6-Auxiliary Power Unit Access Door Structure

IDENTIFICATION 7 - Ram Air Turbine Access Door

IDENTIFICATION 8-MLG Door Release Access Door

IDENTIFICATION 9-ADP Access Door

IDENTIFICATION 10-Hydraulic Reservoir Fill Access Door

IDENTIFICATION 11-Pressure Bottle Access Door

IDENTIFICATION 12-ECS Door

IDENTIFICATION 13-Access Door

IDENTIFICATION 14-Mechanism Access Door

IDENTIFICATION 15-Inboard Trailing Edge Flap Mechanism Access Door

ALLOWABLE DAMAGE 1-Fin Access Door

ALLOWABLE DAMAGE 2-Ram Air Turbine Access Door

ALLOWABLE DAMAGE 3-MLG Door Release Access Door

ALLOWABLE DAMAGE 4-ADP Access Door

ALLOWABLE DAMAGE 5-Hydraulic Reservoir Fill Access Door

ALLOWABLE DAMAGE 6-Pressure Bottle Access Door

ALLOWABLE DAMAGE 7-Access Door

ALLOWABLE DAMAGE 8-Mechanism Access Door

ALLOWABLE DAMAGE 9-Forward Access Door Structure

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ALLOWABLE DAMAGE 13-Auxiliary Power Unit Access Door

ALLOWABLE DAMAGE 14-ECS Door

ALLOWABLE DAMAGE 15-Inboard Trailing Edge Flap Mechanism Access Door

REPAIR 1-Ram Air Turbine Access Door

REPAIR 2-MLG Door Release Access Door

REPAIR 3-ADP Access Door

REPAIR 4-Hydraulic Reservoir Fill Access Door

REPAIR 5-Pressure Bottle Access Door

REPAIR 6-Access Door

REPAIR 7 - Mechanism Access Door

REPAIR 8-Fin Access Door

REPAIR 9-Forward Access Door Structure

REPAIR 10-Controls Bay Access Door Structure

REPAIR 11-Service Access Door Structure - Sta 1690

REPAIR 12-Elec/Elex Access Door Structure

REPAIR 13-Auxiliary Power Unit Access Door Structure

REPAIR 14-ECS Door

ACCESS DOOR FITTINGS

REPAIR 15-Inboard Trailing Edge Flap Mechanism Access Door

IDENTIFICATION 1-Forward Access Door Fittings

IDENTIFICATION 2-Elec/Elex Access Door Fittings

IDENTIFICATION 4-Controls Bay Access Door Structure Fittings

IDENTIFICATION 5-Service Access Door Structure Fittings - Station 1690

IDENTIFICATION 6-Ram Air Turbine Access Door Fittings

IDENTIFICATION 7 - Auxiliary Power Unit Access Door Structure Fittings

IDENTIFICATION 8-Inboard Trailing Edge Flap Mechanism Access Door Fittings

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CHAPTER 52 DOORS

CHAPTER SECTION **SUBJECT SUBJECT** 52-50-02 FIXED INTERIOR DOORS STRUCTURE **IDENTIFICATION 1-Fixed Interior Door** ALLOWABLE DAMAGE 1-Fixed Interior Door REPAIR 1-Flight Deck Door REPAIR 2-Flight Deck Door - Fiberglass Panels 52-80-02 LANDING GEAR DOORS STRUCTURE IDENTIFICATION 1-Main Landing Gear Door IDENTIFICATION 2-Nose Landing Gear Door IDENTIFICATION 3-Shock Strut Door **IDENTIFICATION 4-Trunnion Door** IDENTIFICATION 5-Drag Strut Door ALLOWABLE DAMAGE 1-Main Landing Gear Door ALLOWABLE DAMAGE 2-Nose Landing Gear Door ALLOWABLE DAMAGE 3-Wing Landing Gear Door REPAIR 1-Main Landing Gear Door REPAIR 2-Nose Landing Gear Door REPAIR 3-Wing Landing Gear Door LANDING GEAR DOOR FITTINGS 52-80-90 IDENTIFICATION 1-Main Landing Gear Door Fittings IDENTIFICATION 2-Nose Landing Gear Door Fittings IDENTIFICATION 3-Shock Strut Door Fittings

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IDENTIFICATION 4-Trunnion Door Fittings
IDENTIFICATION 5-Drag Strut Door Fittings

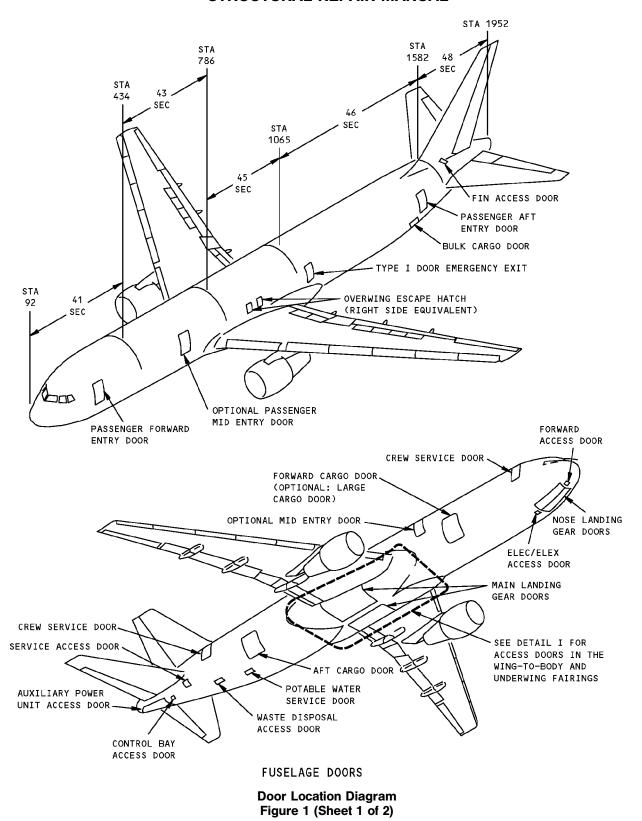


GENERAL - DOOR LOCATION DIAGRAM

1. General

- A. This chapter contains information about the passenger/crew entry doors (both sides), escape hatches, cargo doors (forward and aft including optional forward large cargo door and bulk cargo door), service doors (elec/elex access door, ram air turbine access door, potable water access door, controls bay access door, service access door, waste disposal access door, forward access door and auxiliary power unit access door) and landing gear doors.
- B. All major structural components are located and identified through the use of detailed illustrations with corresponding tabulated material lists.
- C. Allowable damage to doors is defined in this chapter.
- D. Approved repairs are described and illustrated in this chapter.

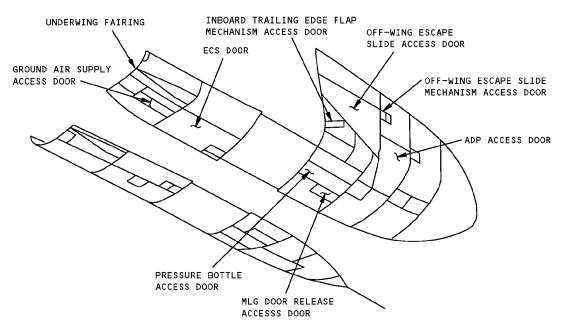




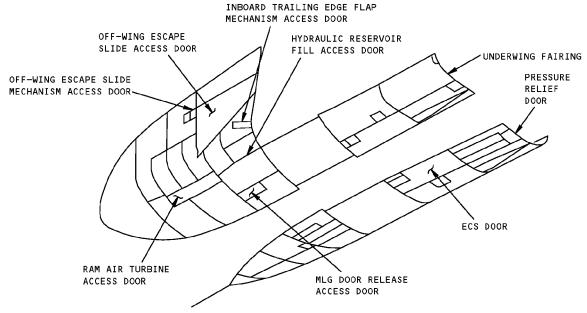
52-00-00

GENERAL Page 2 Apr 01/2005





LEFT SIDE
SECTION 46 WING-TO-BODY FAIRING AND UNDERWING FAIRING



RIGHT SIDE
SECTION 46 WING-TO-BODY FAIRING AND UNDERWING FAIRING

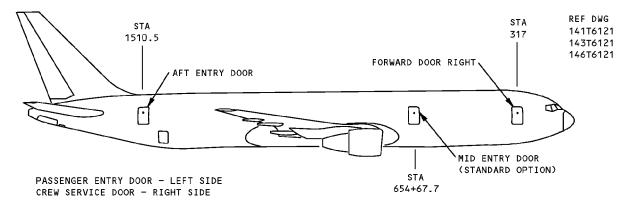
DETAIL I

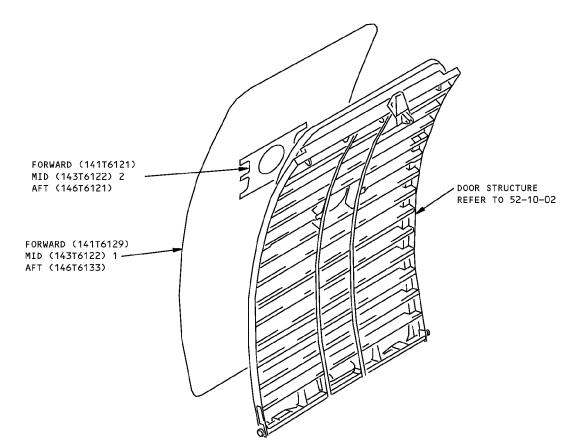
Door Location Diagram Figure 1 (Sheet 2 of 2)

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IDENTIFICATION 1 - ENTRY DOOR SKIN





ITEM	DESCRIPTION	GAGE	MATERIAL	EFFECTIVITY
1	OUTER SKIN	0.071	CLAD 2024-T3 (CHEM-MILLED TO 0.050 MIN)	
2	DOUBLER	0.080	CLAD 2024-T3	

LIST OF MATERIALS

Passenger / Crew Entry Door Skin Identification Figure 1

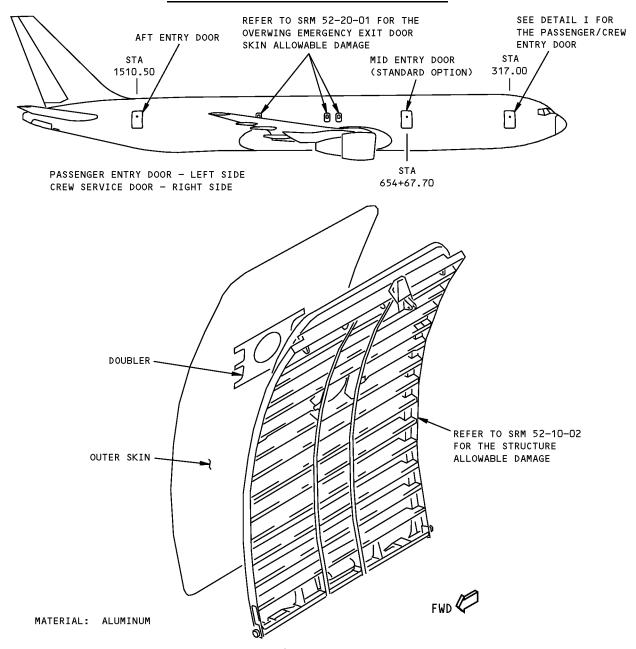
IDENTIFICATION 1
Page 1

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52-10-01



ALLOWABLE DAMAGE 1 - ENTRY DOOR SKIN



PASSENGER/CREW ENTRY DOOR DETAIL I

DESCRIPTION	CRACKS	NICKS, GOUGES AND CORROSION	DENTS	HOLES AND PUNCTURES
OUTER SKIN A	B F	C F	G	DF
DOUBLER	В	С	SEE DETAIL IV	E

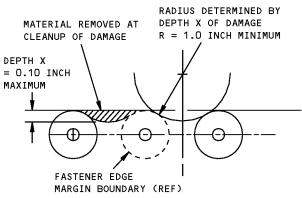
Passenger / Crew Entry Door Skin Allowable Damage Figure 101 (Sheet 1 of 3)

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DEPTH X
= 0.10 INCH MAXIMUM
FLANGE. RADIUS OF REWORKED
PORTION DETERMINED BY DEPTH
OF DAMAGE R = 1.0 INCH
MINIMUM

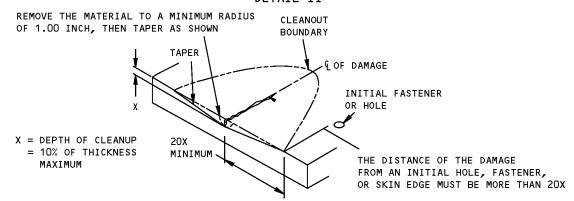
FASTENER EDGE
MARGIN BOUNDARY
(REF)

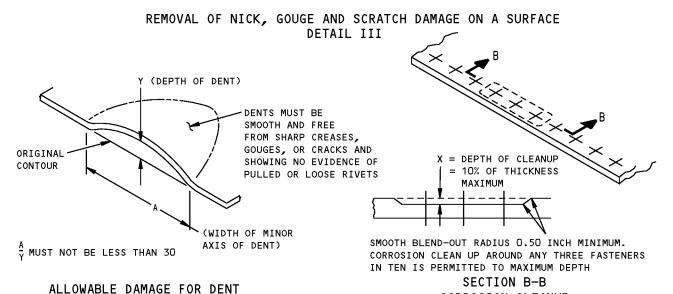
DAMAGE CLEAN UP OF EDGES WHERE FASTENER EDGE MARGINS DO NOT OVERLAP

DETAIL IV

DAMAGE CLEAN UP OF EDGES WHERE FASTENER EDGE MARGINS OVERLAP

DETAIL II





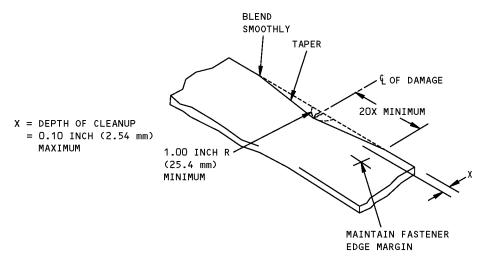
Passenger / Crew Entry Door Skin Allowable Damage Figure 101 (Sheet 2 of 3)

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CORROSION CLEANUP

DETAIL V





REMOVAL OF NICK OR CRACK DAMAGE ON AN EDGE DETAIL VI

NOTES

- REFER TO SRM 51-10-02 FOR INSPECTION AND REMOVAL OF DAMAGE.
- REFINISH REWORKED AREAS AS SHOWN IN AMM 51-21
- REFER TO SRM 51-20-01 FOR PROTECTIVE TREATMENT OF METAL
- A REFER TO SRM 51-10-01 FOR AERODYNAMIC SMOOTH-NESS REQUIREMENTS. WHERE THE DAMAGE IS MORE THAN THE LIMITS SHOWN IN SRM 51-10-01, CONSIDERATION SHOULD BE GIVEN TO THE LOSS OF PERFORMANCE INVOLVED
- B CRACKS ARE NOT PERMITTED EXCEPT FOR EDGE CRACKS WHICH MUST BE REMOVED AS SHOWN IN DETAILS II AND VI
- C REMOVE DAMAGE AS SHOWN IN DETAILS II, III, V AND VI
- D CLEAN OUT DAMAGE UP TO 0.25 INCH (6.35mm)
 MAXIMUM DIAMETER NOT CLOSER THAN 1.0 INCH
 (25.4 mm) TO FASTENER HOLE, MATERIAL EDGE,
 OR OTHER DAMAGE. FILL HOLE WITH 2117-T3
 OR T4 ALUMINUM RIVET INSTALLED WET WITH
 BMS 5-95 SEALANT. ALL OTHER HOLES TO BE
 REPAIRED
- E CLEAN OUT DAMAGE UP TO 0.25 INCH (6.35mm)
 MAXIMUM DIAMETER AND NOT CLOSER THAN
 1.0 INCH (25.4 mm) TO FASTENER HOLE,
 MATERIAL EDGE, OR OTHER DAMAGE
- F REFER TO FIGURE 102 FOR THE PASSENGER/CREW ENTRY DOOR SKIN OPERATING LIMITS AFTER DAMAGE HAS BEEN REMOVED.

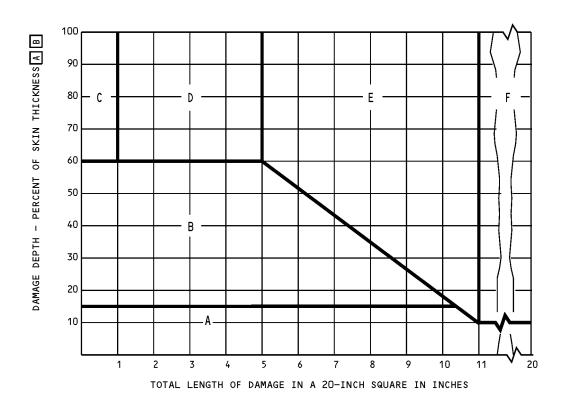
- G DENTS THAT ARE MORE THAN THE LIMITS SHOWN IN DETAIL IV SHOULD BE PERMANENTLY REPAIRED. HOWEVER, A REPAIR CAN BE DELAYED IF THE CONDITIONS THAT FOLLOW ARE MET:
 - DENTS MUST BE SMOOTH AND FREE FROM SHARP CREASES, GOUGES, OR CRACKS, AND SHOW NO EVIDENCE OF PULLED, LOOSE, OR MISSING FASTENERS
 - THERE ARE NO DAMAGED OR ELONGATED FASTENER HOLES
 - THE DENT IS NOT FILLED
 - A PERMANENT REPAIR IS MADE AT THE SUBSEQUENT C-CHECK OR BEFORE 24 MONTHS
 - THE DAMAGE IS A MINIMUM OF 1.0 INCH (25.4 mm) FROM ANY PART OF A BEAM, SKIN DOUBLER, STRAP, FRAME, INTERCOSTAL, OR STIFFENER
 - THE DAMAGE IS A MINIMUM OF 10.0 INCHES (254 mm) FROM A SKIN SPLICE OR CUTOUT, INCLUDING A HINGE CUTOUT OR A HANDLE PAN CUTOUT.
 - A DETAILED VISUAL INSPECTION OF ALL ADJACENT STRUCTURE WITHIN A 20 INCHES (508 mm) RADIUS IS PERFORMED TO MAKE SURE THERE IS NO DAMAGE TO ANY FRAME, STRINGER OR DOUBLER. IF THERE IS DAMAGE TO ANY STRUCTURE OTHER THAN THE SKIN, MAKE THE REPAIRS IMMEDIATELY.
 - AN INITIAL HIGH FREQUENCY EDDY CURRENT INSPECTION OF THE DENT IS PERFORMED.
 CONTINUE TO PERFORM DETAILED VISUAL INSPECTIONS OF THE DENT EVERY 300 FLIGHT CYCLES.

Passenger / Crew Entry Door Skin Allowable Damage Figure 101 (Sheet 3 of 3)

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ALLOWABLE DAMAGE 2 - OPERATING LIMITS FOR PASSENGER / CREW ENTRY DOOR SKIN



NOTES

- A SKIN THICKNESS DOES NOT INCLUDE THE THICKNESS OF THE DOUBLERS, TRIPLERS, OR STRAPS.
- B DAMAGE INCLUDES HOLES, PUNCTURES, NICKS, GOUGES, SCRATCHES, CORROSION AND CRACKS. DAMAGE DOES NOT INCLUDE DENTS.
- C CABIN PRESSURE LIMITS ARE FOR SKIN DAMAGE IN THE PRESSURIZED FUSELAGE CAVITY ONLY.

Operating Limits for Passenger / Crew Entry Door Skin Figure 101 (Sheet 1 of 2)

> **ALLOWABLE DAMAGE 2** 52-10-01

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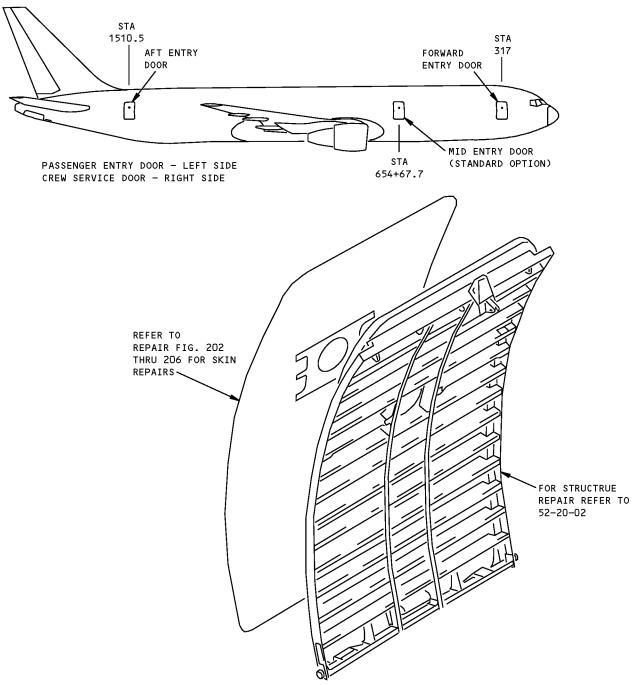
CHART AREA	DAMAGE TREATMENT	ALLOWABLE AIRPLANE OPERATIONS
A	CLEAN UP AS SPECIFIED IN ALLOWABLE DAMAGE 1	NO FLIGHT RESTRICTIONS
В	CLEAN UP AS SPECIFIED IN ALLOWABLE DAMAGE 1 TO DAMAGE DEPTH.	LIMITED TO 50 HOURS OF FLIGHT INCLUDING REVENUE FLIGHTS.
	DO AN APPLICABLE REPAIR AS GIVEN IN SRM 52-10-01.	REFER TO THE APPLICABLE REPAIR FOR THE LIMITS.
c	CLEAN UP AS SPECIFIED IN ALLOWABLE DAMAGE 1 TO DAMAGE DEPTH. STOP DRILL 0.25 INCH (6 mm) DIAMETER HOLES AT THE ENDS OF CRACKS.	A NON-REVENUE FLIGHT TO A REPAIR STATION IS PERMITTED IF THE APPLICABLE REGULATORY AUTHORITY GIVES APPROVAL BEFORE THE FLIGHT. IT IS RECOMMENDED THAT THE PROPOSED REPAIR PROCEDURE BE PROVIDED TO BOEING.
		THE MAXIMUM CABIN PRESSURE DIFFERENTIAL LIMITED C TO 6.0 PSIG UNLESS REPAIRED.
	DO AN APPLICABLE REPAIR AS GIVEN IN SRM 52-10-01.	REFER TO THE APPLICABLE REPAIR FOR THE LIMITS.
D	CLEAN UP AS SPECIFIED IN ALLOWABLE DAMAGE 1 TO DAMAGE DEPTH. STOP DRILL 0.25 INCH (6 mm) DIAMETER HOLES AT THE ENDS OF CRACKS.	A NON-REVENUE FLIGHT TO A REPAIR STATION IS PERMITTED IF THE APPLICABLE REGULATORY AUTHORITY GIVES APPROVAL BEFORE THE FLIGHT. IT IS RECOMMENDED THAT THE PROPOSED REPAIR PROCEDURE BE PROVIDED TO BOEING.
		THE MAXIMUM CABIN PRESSURE DIFFERENTIAL LIMITED C TO 6.0 PSIG UNLESS REPAIRED.
	DO AN APPLICABLE REPAIR AS GIVEN IN SRM 52-10-01.	REFER TO THE APPLICABLE REPAIR FOR THE LIMITS.
E	CLEAN UP AS SPECIFIED IN ALLOWABLE DAMAGE 1 TO DAMAGE DEPTH. STOP DRILL 0.25 INCH (6 mm) DIAMETER HOLES AT THE ENDS OF CRACKS.	A NON-REVENUE FLIGHT TO A REPAIR STATION IS PERMITTED IF THE APPLICABLE REGULATORY AUTHORITY GIVES APPROVAL BEFORE THE FLIGHT. IT IS RECOMMENDED THAT THE PROPOSED REPAIR PROCEDURE BE PROVIDED TO BOEING.
		THE MAXIMUM CABIN PRESSURE DIFFERENTIAL LIMITED [] IS NOT MORE THAN ZERO PSIG.
	DO AN APPLICABLE REPAIR AS GIVEN IN SRM 52-10-01.	REFER TO THE APPLICABLE REPAIR FOR THE LIMITS.
F	CLEAN UP AS SPECIFIED IN ALLOWABLE DAMAGE 1 TO DAMAGE DEPTH. STOP DRILL 0.25 INCH (6 mm) DIAMETER HOLES AT THE ENDS OF CRACKS.	OPERATION IS NOT PERMITTED BEFORE BOEING AND APPLICABLE REGULATORY AUTHORITY GIVES APPROVAL.
	DO AN APPLICABLE REPAIR AS GIVEN IN SRM 52-10-01.	REFER TO THE APPLICABLE REPAIR FOR THE LIMITS.

Operating Limits for Passenger / Crew Entry Door Skin Figure 101 (Sheet 2 of 2)

ALLOWABLE DAMAGE 2
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REPAIR GENERAL - ENTRY DOOR SKIN



SKIN REPAIR FIGURES:

REFER TO FIG. 202 FOR FLUSH SKIN REPAIR BETWEEN BEAMS

REFER TO FIG. 203 FOR FLUSH SKIN REPAIR AT BEAM REFER TO FIG. 204 FOR SMALL HOLE-FLUSH REPAIR REFER TO FIG. 205 FOR SMALL HOLE-EXTERNAL REPAIR REFER TO FIG. 206 FOR EXTERNAL REPAIR

REFER TO FIG. 207 FOR EXTERNAL SKIN REPAIR AT A BEAM

REFER TO FIG. 208 FOR EXTERNAL SKIN REPAIR BETWEEN BEAMS

Passenger / Crew / Service Doors - Skin Repair References Figure 201

52-10-01

REPAIR GENERAL Page 201 Apr 01/2005



REPAIR 1 - DELETED - ENTRY DOORS - FLUSH SKIN REPAIR BETWEEN BEAMS

1. General

A. This repair is obsolete. Do not use after April 15th, 2007.

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REPAIR 2 - DELETED - ENTRY DOORS - FLUSH SKIN REPAIR AT A BEAM

1. General

A. This repair is obsolete. Do not use after April 15th, 2007.

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REPAIR 3 - ENTRY DOORS - SMALL HOLE FLUSH REPAIR

REPAIR INSTRUCTIONS

- Remove the inner skin panel for access if required.
- Clean out the damaged hole to 1-inch diameter maximum. The center of the hole to an edge or cutout must not be less than 1.90.
- 3. Make repair parts 1 and 2.
- Assemble repair parts in installed postions and drill fastener holes.
- 5. Remove repair parts.
- 6. Break sharp edges of original and repair parts 0.015 to 0.030.
- Remove all nicks, scratches, burrs, sharp edges and corners from original and repair parts.
- 8. Alodize all raw edges of existing and repair parts per 51-20-01.
- Apply one coat of BMS 10-11, type 1, primer to all of part 2 and to the edges and inner surface of part 1 in accordance with 51-21-00 of the 767 Maintenance Manual.
- 10. Install repair parts, making a faying surface seal with BMS 5-95 sealant as described in 51-20-05.
- 11. Form a fillet seal around the edge of the repair parts, using the sealant squeezed out duing installation. Apply additional sealant where necessary.
- Reinstall inner skin panel if removed for access.
- Restore the surface finish in accordance with 51-20-00 of the 767 Maintenance Manual.

NOTES

- NOT TO BE USED IN AREAS WITH DOUBLERS AND THE SKIN GAGE MUST BE CONSTANT
- REFER TO 51-40 FOR FASTENER CODE, REMOVAL, INSTALLATION, HOLE SIZES, EDGE MARGINS AND SUBSTITUTIONS
- A SEE 51-10-01 FOR AERODYNAMIC SMOOTHNESS REQUIREMENTS
- B WHERE RIVET SUBSTITUTIONS ARE MADE THE COUNTERSINK DEPTH FOR BACR15CE RIVETS MUST BE MAINTAINED AND THE EXCESS PORTION OF THE SUBSTITUTE RIVET HEAD SHAVED OFF AFTER INSTALLATION PER 51-10-01

SYMBOLS

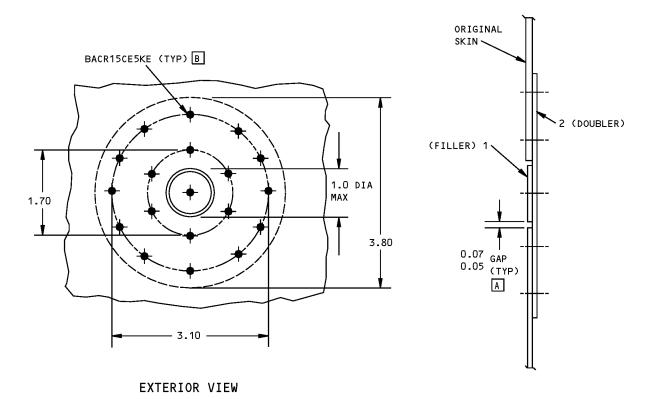
→ REPAIR FASTENER LOCATION

Passenger / Crew Entry Doors - Small Hole Flush Repair Figure 201 (Sheet 1 of 2)

52-10-01

REPAIR 3 Page 201 Apr 01/2005





SECTI	ON	THROUGH	REPAIR

	REPAIR MATERIAL				
	PART	QTY	MATERIAL		
1	FILLER	1	SAME MATERIAL AND GAGE AS ORIGINAL SKIN		
2	DOUBLER	1	SAME MATERIAL, ONE GAGE HEAVIER THAN ORIGINAL SKIN		

SYMBOLS

→ REPAIR FASTENER LOCATIONS

Passenger / Crew Entry Doors - Small Hole Flush Repair Figure 201 (Sheet 2 of 2)

52-10-01

REPAIR 3 Page 202 Apr 01/2005



REPAIR 4 - ENTRY DOORS - SMALL HOLE EXTERNAL REPAIR

REPAIR INSTRUCTIONS B

- Remove the inner skin panel for access if required.
- Clean out the damaged hole to 1.00 diameter maximum. The center of the hole to an edge or cutout must not be less than 4D.
- 3. Fabricate repair parts.
- 4. Break sharp edges of original and repair parts 0.015 to 0.030.
- Remove all nicks, scratches, burrs, sharp edges and corners from original and repair parts.
- Alodize all raw edges of existing and repair parts per 51-20-01.
- 7. Apply one coat of BMS 10-11, type 1, primer to all of part 1 and to the edges and inner surface of part 2 in accordance with 51-21 of the 767 Maintenance Manual.
- Install repair parts, making a faying surface seal with BMS 5-95 sealant as described in 51-20-05.
- Form a fillet seal around the edge of the repair parts, using the sealant squeezed out during installation. Apply additional sealant where necessary.
- Reinstall inner skin panel if removed for access.
- 11. Restore the surface finish in accordance with 51-21 of the 767 Maintenance Manual.

NOTES

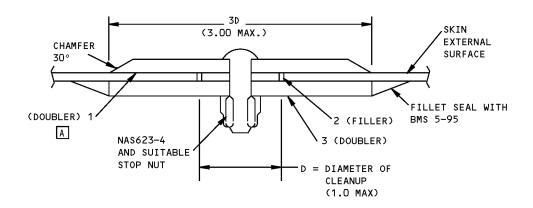
- SEE 51-10-01 FOR AERODYNAMIC SMOOTHNESS REQUIREMENTS
 - REFER TO 51-40 FOR FASTENER CODE, REMOVAL, INSTALLATION, HOLE SIZES, EDGE MARGINS AND SUBSTITUTIONS
- A THIS REPAIR IS NOT TO BE USED IN AREAS
 WITH DOUBLERS. THE AREA UNDER REPAIR
 PART 1 MUST NOT HAVE ANY FASTENERS, AND
 THE SKIN GAGE MUST BE CONSTANT
- B INSPECT THIS REPAIR AT EACH "A" CHECK.
 THIS REPAIR IS A TIME-LIMITED REPAIR.
 REPLACE THIS REPAIR WITH A PERMANENT
 REPAIR SHOWN IN FIG. 204 AT THE END OF
 2500 FLIGHTS OR AT THE NEXT "C" CHECK.
 REPLACE TIME-LIMITED REPAIR IF ANY
 DETERIORATION IS EVIDENT. THIS REPAIR
 HAS FAA APPROVAL CONTINGENT ON COMPLIANCE
 WITH THE FLIGHT RESTRICTIONS CONTAINED
 HEREIN

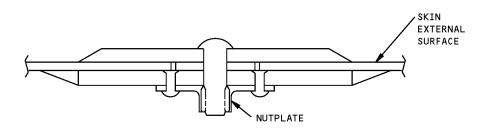
Passenger / Crew Entry Doors - Small Hole External Repair Figure 201 (Sheet 1 of 2)

52-10-01

REPAIR 4 Page 201 Apr 01/2005







OPTIONAL METHOD

	REPAIR MATERIAL				
	PART	QTY	MATERIAL		
1	DOUBLER	1	2024-T3, -T4 OR -T42 TWICE SKIN GAGE		
2	FILLER	1	2024-T3, -T4 OR -T42 SAME GAGE AS SKIN		
3	DOUBLER	1	2024-T3, -T4 OR -T42 TWICE SKIN GAGE		

Passenger / Crew Entry Doors - Small Hole External Repair Figure 201 (Sheet 2 of 2)

52-10-01



REPAIR 5 - DELETED - ENTRY DOORS - EXTERNAL REPAIR

1. General

A. This repair is obsolete. Do not use after April 15th, 2007.

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REPAIR 6 - ENTRY DOORS - EXTERNAL SKIN REPAIR AT A BEAM

REPAIR INSTRUCTIONS

- If necessary, remove the inner skin panel for access to the damage.
- Cut and remove the damaged part of the door skin. Cut to a rectangular shape with a minimum of 0.50 inch (13 mm) radius at the corners.

NOTE: WHEN CUTTING THE DAMAGED SKIN DO NOT CUT THE ADJACENT BEAMS.

- 3. Make the repair parts.
- 4. Assemble the repair parts and drill the fastener holes.
- 5. Disassemble the repair parts.
- Remove the nicks, scratches, gouges, and sharp edges from the door skin and the repair parts.
- Apply a chemical conversion coating to the repair part and to the bare surfaces of the door skin. Refer to SRM 51-20-01.
- 8. Apply one layer of BMS 10-79 Type II primer to the repair parts and to the bare surfaces of the door skin.
- 9. Install the countersink repair washers. Refer to SRM 51-40-08.
- 10. Install the repair parts with BMS 5-95 sealant between the faying surfaces. Install the fasteners wet with BMS 5-95 sealant.
- 11. If the inner skin panel was removed, put it back on.
- 12. Apply the finish to the repair area. Refer to AMM 51-21.

NOTES

- WHEN YOU USE THIS REPAIR, REFER TO:
 - AMM 51-21 FOR INTERIOR AND EXTERIOR FINISHES
 - SRM 51-10-01 FOR THE AERODYNAMIC SMOOTHNESS REQUIREMENTS
 - SRM 51-10-02 FOR INSPECTION AND REMOVAL OF DAMAGE
 - SRM 51-20-01 FOR THE PROTECTIVE TREATMENT OF METAL
 - SRM 51-20-05 FOR REPAIR SEALING
 - SRM 51-40 FOR THE FASTENER CODE, INSTALLATION AND REMOVAL, HOLE SIZES, EDGE MARGINS, AND COUNTERSINKING
- A IF AN ALTERNATIVE RIVET IS USED, USE THE SAME COUNTERSINK DEPTH AS FOR A BACR15CE5 RIVET. AFTER INSTALLATION, SHAVE THE FASTENER HEAD DOWN FLUSH TO THE SKIN AS SHOWN IN SRM 51-10-01

FASTENER SYMBOLS

- REPAIR FASTENER LOCATION. INSTALL A
 BACR15CE5KE() RIVET.
 OPTIONAL: BACR15CE5D() RIVET
- INITIAL FASTENER LOCATION. REMOVE AND REPLACE THE EXISTING FASTENER WITH A BACR15CE()D() RIVET OF THE SAME DIAMETER OR 1/32 OVERSIZE

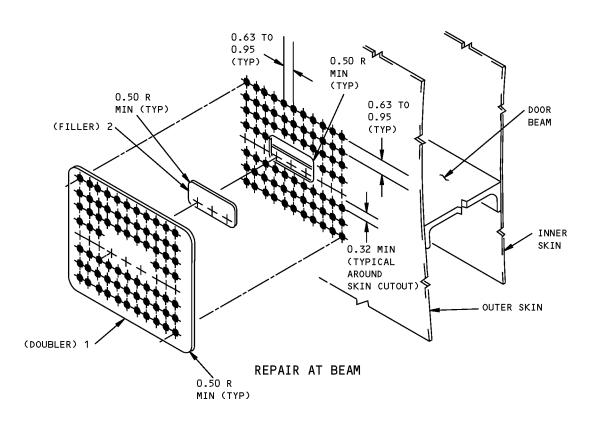
	REPAIR MATERIAL			
PA	RT	QTY	MATERIAL	
1	DOUBLER	1	0.071 CLAD 2024-T3	
2	FILLER	1	SAME GAGE AND MATERIAL AS THE DOOR SKIN	
3	REPAIR WASHER	AS REQ'D	2024-T3 OR 2024-T4	

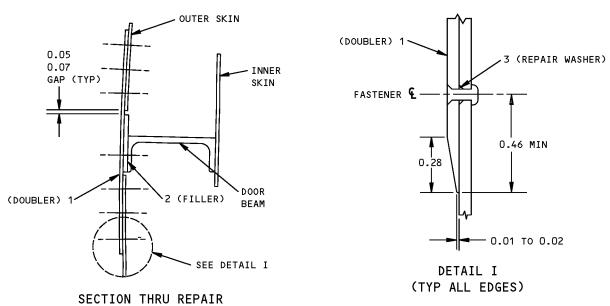
Passenger/Crew Entry Doors - External Skin Repair at a Beam Figure 201 (Sheet 1 of 2)

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REPAIR 6 Page 201 Dec 15/2006







Passenger/Crew Entry Doors - External Skin Repair at a Beam Figure 201 (Sheet 2 of 2)

52-10-01



REPAIR 7 - PASSENGER / CREW SERVICE DOORS - EXTERNAL SKIN REPAIR BETWEEN BEAMS

REPAIR INSTRUCTIONS

- If necessary, remove the inner skin panel for access to the damage.
- Cut and remove the damaged part of the door skin. Cut to a rectangular shape with a minimum of 0.50 radius at the corners.

NOTE: WHEN CUTTING THE DAMAGED SKIN DO NOT CUT THE ADJACENT BEAMS.

- 3. Make the repair parts.
- 4. Assemble the repair parts and drill the fastener holes.
- 5. Disassemble the repair parts.
- Remove the nicks, scratches, gouges, and sharp edges from the door skin and the repair parts.
- Apply a chemical conversion coating to the repair part and to the bare surfaces of the door skin. Refer to SRM 51-20-01.
- 8. Apply one layer of BMS 10-79 Type II primer to the repair parts and to the bare surfaces of the door skin.
- 9. Install the countersink repair washers. Refer to SRM 51-40-08.
- 10. Install the repair parts with BMS 5-95 sealant between the faying surfaces. Install the fasteners wet with BMS 5-95 sealant.
- 11. If the inner skin panel was removed, put it back on.
- 12. Apply the finish to the repair area. Refer to AMM 51-21.

NOTES

- WHEN YOU USE THIS REPAIR, REFER TO:
 - AMM 51-21 FOR INTERIOR AND EXTERIOR FINISHES
 - SRM 51-10-01 FOR THE AERODYNAMIC SMOOTHNESS REQUIREMENTS
 - SRM 51-10-02 FOR INSPECTION AND REMOVAL OF DAMAGE
 - SRM 51-20-01 FOR THE PROTECTIVE TREATMENT OF METAL
 - SRM 51-20-05 FOR REPAIR SEALING
 - SRM 51-40 FOR THE FASTENER CODE, INSTALLATION AND REMOVAL, HOLE SIZES, EDGE MARGINS, AND COUNTERSINKING
- A IF AN ALTERNATIVE RIVET IS USED, USE THE SAME COUNTERSINK DEPTH AS FOR A BACR15CE5 RIVET. AFTER INSTALLATION, SHAVE THE FASTENER HEAD DOWN FLUSH TO THE SKIN PER SRM 51-10-01

FASTENER SYMBOLS

- REPAIR FASTENER LOCATION. INSTALL A
 BACR15CE5KE() RIVET.
 OPTIONAL: BACR15CE5D() RIVET A
- INITIAL FASTENER LOCATION. REMOVE AND REPLACE THE EXISTING FASTENER WITH A BACR15CE()D() RIVET OF THE SAME DIAMETER OR 1/32 OVERSIZE

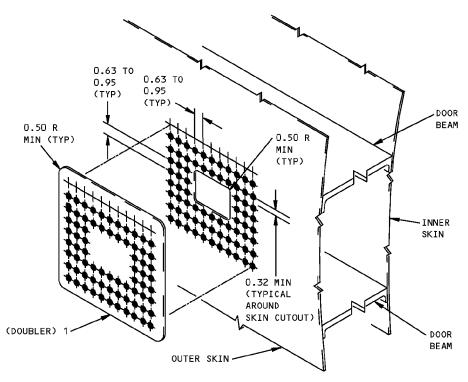
REPAIR MATERIAL							
PART		QTY	MATERIAL				
1 2	DOUBLER REPAIR WASHER	1 AS REQ'D	0.071 CLAD 2024-T3 2024-T3 OR 2024-T4				

Passenger / Crew Service Doors - External Skin Repair Between Beams Figure 201 (Sheet 1 of 2)

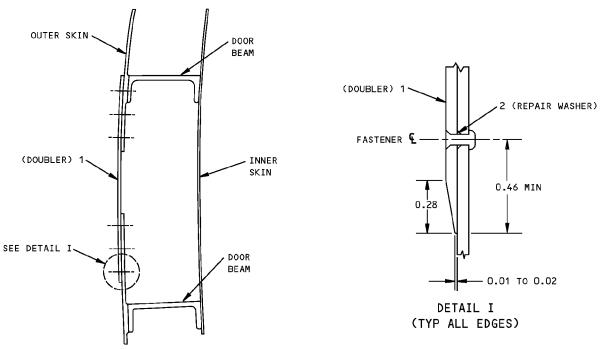
52-10-01

REPAIR 7 Page 201 Apr 01/2005





REPAIR BETWEEN BEAMS



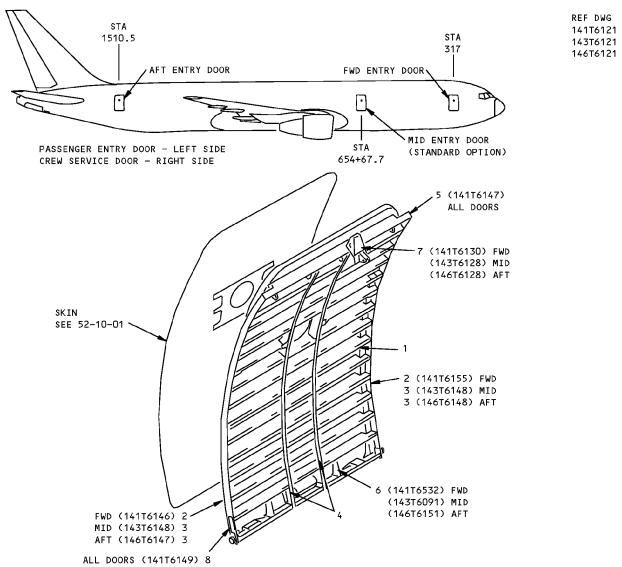
Passenger / Crew Service Doors - External Skin Repair Between Beams Figure 201 (Sheet 2 of 2)

SECTION THRU REPAIR

52-10-01



IDENTIFICATION 1 - ENTRY DOOR STRUCTURE



ITEM	DESCRIPTION	GAGE	MATERIAL	EFFECTIVITY
1	BEAM		FORGING 7075-T73	
2	EDGE MEMBER		BAC1520-2160 7050-T76	
3	EDGE MEMBER		BAC1520-2390 7050-T76 OPTIONAL: BAC1520-2160 7050-T76	
4	TENSION STRAP		BAC1511-3711 2024-T42	
5	CONTINUOUS STOP		BAC1522-379 TORLON 4301	
6	INTERCOSTAL	0.063	7075 – T62	
7	UPPER GUIDE SUPPORT		FORGING 7075-T73 OR PLATE 7075-T7351	
8	SUPPORT FTG	0.300	PLATE 15-5PH CRES HT-TR 150-170 KSI	

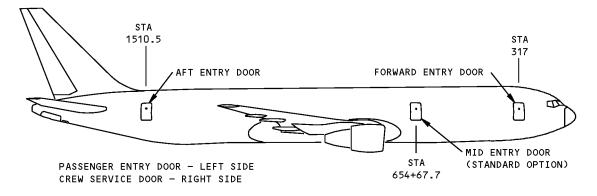
LIST OF MATERIALS

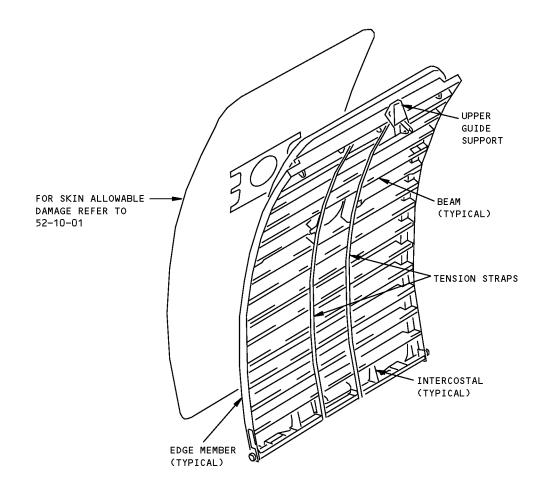
Passenger / Crew Service Doors Structure Identification Figure 1

IDENTIFICATION 1
Page 1
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ALLOWABLE DAMAGE 1 - ENTRY DOOR STRUCTURE





MATERIAL: ALUMINUM

Entry Door Structure - Allowable Damage Figure 101 (Sheet 1 of 4)

ALLOWABLE DAMAGE 1
Page 101
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DESCRIPTION	CRACKS	NICKS, GOUGES AND CORROSION	DENTS	HOLES AND PUNCTURES
BEAM H	Α	D	NOT ALLOWED	NOT ALLOWED
EDGE MEMBER	В	E	NOT ALLOWED	G
TENSION STRAP	В	E	NOT ALLOWED	G
INTERCOSTAL	С	F	SEE DETAIL III	G
UPPER GUIDE SUPPORT	В	E	NOT ALLOWED	NOT ALLOWED

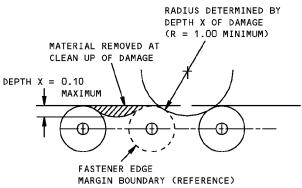
NOTES

- REFINISH REWORKED AREAS PER 51-20 OF THE MAINTENANCE MANUAL
- A CRACKS NOT ALLOWED EXCEPT FOR EDGE CRACKS
 WHICH MUST BE REMOVED PER DETAILS I AND
 VI. SHOT PEEN REWORKED AREA PER 20-10-03
 OF THE COMPONENT MAINTENANCE MAUAL WITH
 SHOT NO. 230-550, INTENSITY
 0.003A-0.005A H
- B CRACKS NOT ALLOWED EXCEPT FOR EDGE CRACKS
 WHICH MUST BE REMOVED PER DETAIL I AND VI
- C CRACKS NOT ALLOWED EXCEPT FOR EDGE CRACKS
 WHICH MUST BE REMOVED PER DETAILS I AND V
- REMOVE DAMAGE PER DETAILS I, II, IV AND VI

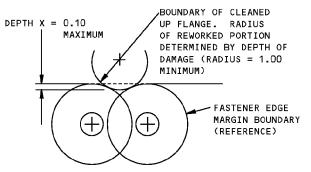
- E REMOVE DAMAGE PER DETAILS I, II, IV AND VI
- F REMOVE DAMAGE PER DETAILS I, II, IV AND V
- G CLEAN OUT DAMAGE UP TO 0.25 MAX DIA AND NOT CLOSER THAN 1.0 INCH TO FASTENER HOLE, MATERIAL EDGE, OR OTHER DAMAGE. FILL HOLE WITH 2117-T3 OR T4 ALUMINUM RIVET INSTALLED WET WITH BMS 5-95 SEALANT. ALL OTHER HOLES TO BE REPAIRED
- H SHOT PEEN ALL REWORKED SURFACES PER 51-20-06. SHOT PEEN INTENSITIES WILL VARY WITH THE THICKNESS LEFT AFTER REWORK

Entry Door Structure - Allowable Damage Figure 101 (Sheet 2 of 4)



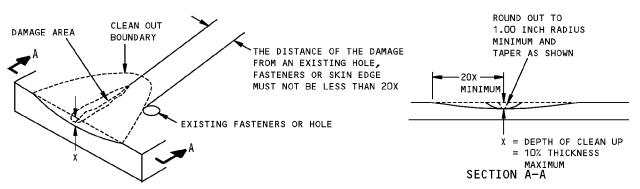


DAMAGE CLEAN UP OF EDGES WHERE FASTENER EDGE MARGINS DO NOT OVERLAP

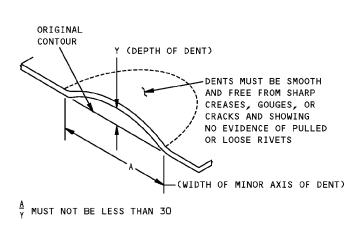


DAMAGE CLEAN UP OF EDGES WHERE FASTENER EDGE MARGINS OVERLAP

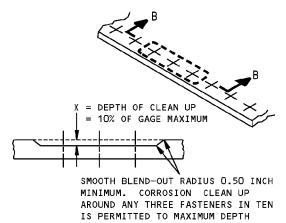
DETAIL I



REMOVAL OF NICK, GOUGE AND SCRATCH DAMAGE ON A SURFACE DETAIL II



ALLOWABLE DAMAGE FOR DENT DETAIL III



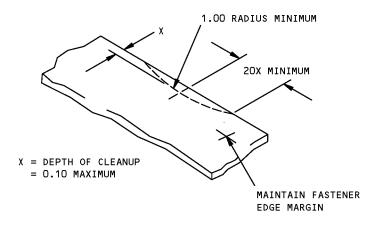
SECTION B-B

CORROSION CLEANUP
DETAIL IV

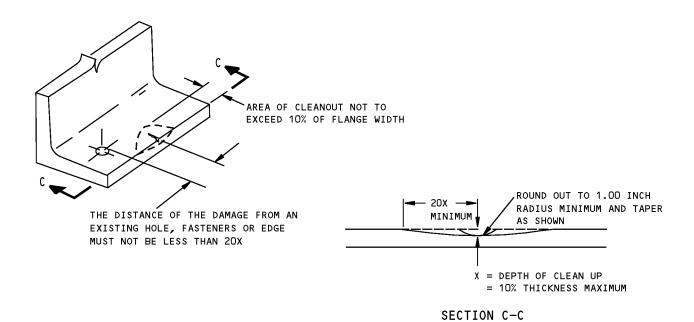
Entry Door Structure - Allowable Damage Figure 101 (Sheet 3 of 4)

ALLOWABLE DAMAGE 1
Page 103
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REMOVAL OF NICK OR CRACK DAMAGE ON AN EDGE DETAIL V



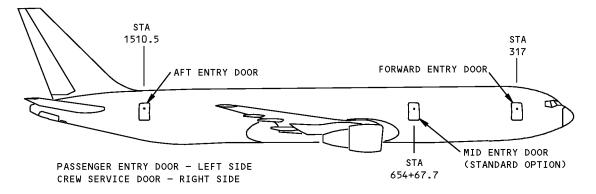
REMOVAL OF NICK OR CRACK DAMAGE ON AN EDGE DETAIL VI

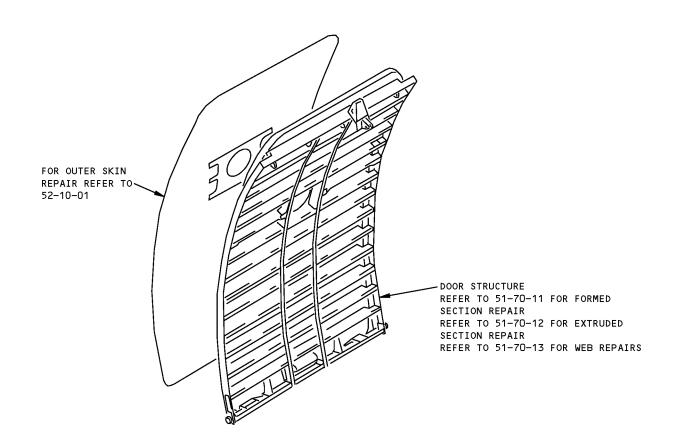
Entry Door Structure - Allowable Damage Figure 101 (Sheet 4 of 4)

ALLOWABLE DAMAGE 1
Page 104
Apr 01/2005



REPAIR GENERAL - ENTRY DOOR STRUCTURE





Passenger / Crew Service Doors Structure Repair Figure 201

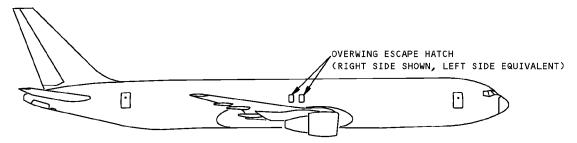
52-10-02

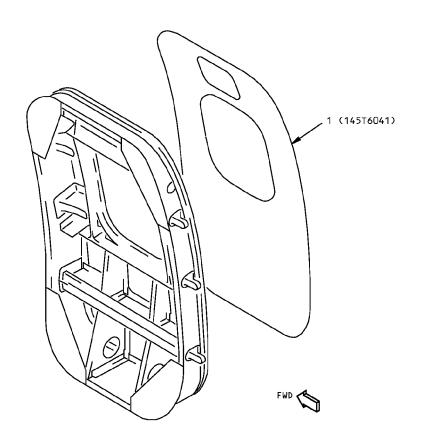
REPAIR GENERAL Page 201 Apr 01/2005



IDENTIFICATION 1 - EMERGENCY EXIT DOOR SKIN

REF DWG 145T6016





ITEM	DESCRIPTION	GAGE	MATERIAL	EFFECTIVITY
1	OUTER SKIN	0.071	CLAD 2024-T3 (CHEM-MILLED TO 0.050 MIN)	

LIST OF MATERIALS

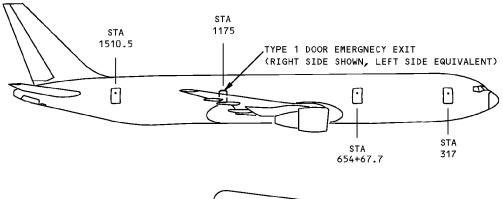
Overwing Escape Hatch Door Skin Identification Figure 1

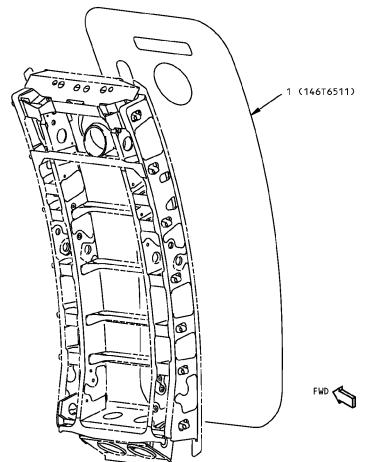
IDENTIFICATION 1
Page 1
Apr 01/2005



IDENTIFICATION 2 - TYPE 1 DOOR (EMERGENCY EXIT) SKIN

REF DWG 146T6505





ITEM	DESCRIPTION	GAGE	MATERIAL	EFFECTIVITY
1	SKIN	0.14	CLAD 2024-T3 (MACHINED TO 0.05)	

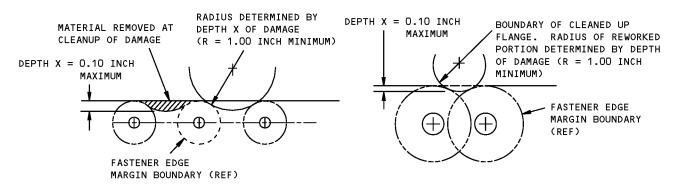
LIST OF MATERIALS

Type 1 Door (Emergency Exit) Skin Identification Figure 1

1DENTIFICATION 2 Page 1 Apr 01/2005



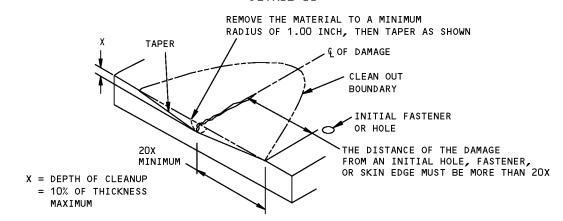
ALLOWABLE DAMAGE 1 - EMERGENCY EXIT DOOR SKIN



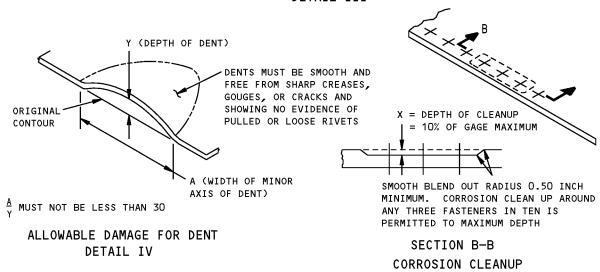
DAMAGE CLEAN UP OF EDGES WHERE FASTENER EDGE MARGINS DO NOT OVERLAP

DAMAGE CLEAN UP OF EDGES WHERE FASTENER EDGE MARGINS OVERLAP

DETAIL II



REMOVAL OF NICK, GOUGE, CORROSION, AND SCRATCH DAMAGE ON A SURFACE DETAIL III

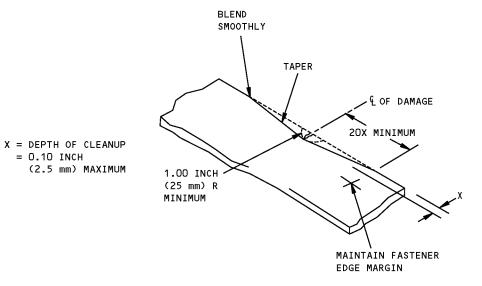


Overwing Emergency Exit Door Skin Allowable Damage Figure 101 (Sheet 1 of 2)

ALLOWABLE DAMAGE 1
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Aug 15/2009

DETAIL V





REMOVAL OF NICK OR CRACK DAMAGE ON AN EDGE DETAIL VI

NOTES

= 0.10 INCH

- REFER TO SRM 51-10-01 FOR AERODYNAMIC SMOOTHNESS REQUIREMENTS. WHERE THE DAMAGE IS MORE THAN THE LIMITS SHOWN IN SRM 51-10-01, CONSIDERATION SHOULD BE GIVEN TO THE LOSS OF PERFORMANCE INVOLVED
- REFER TO SRM 51-10-02 FOR INSPECTION AND REMOVAL OF DAMAGE
- REFINISH REWORKED AREAS AS SHOWN IN AMM 51-21
- REFER TO SRM 51-20-01 FOR PROTECTIVE TREATMENT OF METAL
- A CRACKS ARE NOT PERMITTED EXCEPT FOR EDGE CRACKS WHICH MUST BE REMOVED AS SHOWN IN DETAILS II AND VI

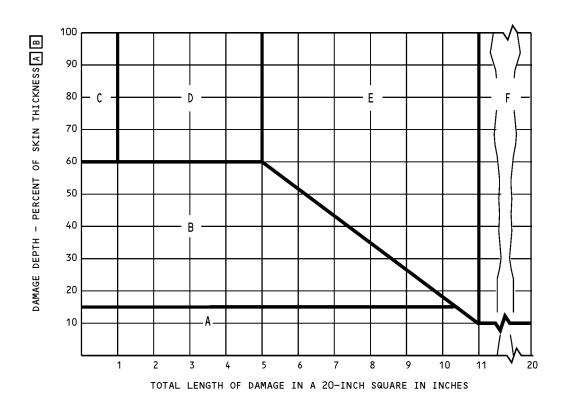
- B REMOVE DAMAGE AS SHOWN IN DETAILS II, III, V, AND VI
- C CLEAN OUT DAMAGE UP TO 0.25 INCH (6 mm) MAXIMUM DIAMETER AND NOT CLOSER THAN 1.0 INCH TO (25 mm) FASTENER HOLE, MATERIAL EDGE, OR OTHER DAMAGE. FILL HOLE WITH 2117-T3 OR T4 ALUMINUM RIVET INSTALLED WET WITH BMS 5-95 SEALANT. ALL OTHER HOLES TO BE REPAIRED
- D REFER TO ALLOWABLE DAMAGE 2 FOR THE OVERWING EMERGENCY EXIT DOOR SKIN OPERATING LIMITS AFTER DAMAGE HAS BEEN REMOVED.

Overwing Emergency Exit Door Skin Allowable Damage Figure 101 (Sheet 2 of 2)

> ALLOWABLE DAMAGE 1 Page 102 52-20-01 Aug 15/2009



ALLOWABLE DAMAGE 2 - OPERATING LIMITS FOR OVERWING / TYPE I EMERGENCY EXIT DOOR SKIN



NOTES

- A SKIN THICKNESS DOES NOT INCLUDE THE THICKNESS OF THE DOUBLERS, TRIPLERS, OR STRAPS.
- B DAMAGE INCLUDES HOLES, PUNCTURES, NICKS, GOUGES, SCRATCHES, CORROSION AND CRACKS.

 DAMAGE DOES NOT INCLUDE DENTS.
- C CABIN PRESSURE LIMITS ARE FOR SKIN DAMAGE IN THE PRESSURIZED FUSELAGE CAVITY ONLY.

Operating Limits for Overwing / Type I Emergency Exit Door Skin Identification Figure 101 (Sheet 1 of 2)

ALLOWABLE DAMAGE 2
Page 101
Apr 01/2005



NOTES (CONT)

A CABIN PRESSURE LIMITS ARE FOR SKIN DAMAGE IN THE PRESSURIZED FUSELAGE CAVITY ONLY.

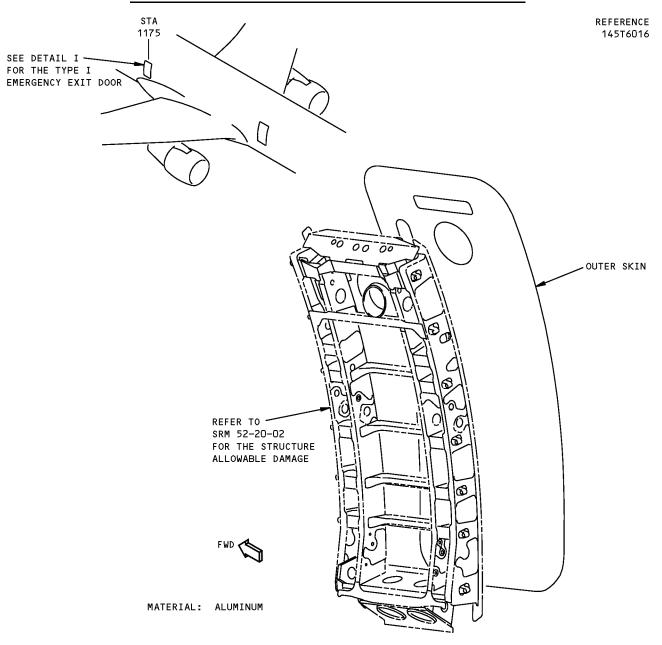
CHART AREA	DAMAGE TREATMENT	ALLOWABLE AIRPLANE OPERATIONS
А	CLEAN UP AS SPECIFIED IN ALLOWABLE DAMAGE 1	NO FLIGHT RESTRICTIONS
В	CLEAN UP AS SPECIFIED IN ALLOWABLE DAMAGE 1 TO DAMAGE DEPTH.	LIMITED TO 50 HOURS OF FLIGHT INCLUDING REVENUE FLIGHTS.
	DO AN APPLICABLE REPAIR AS GIVEN IN SRM 52-20-01.	REFER TO THE APPLICABLE REPAIR FOR THE LIMITS.
С	CLEAN UP AS SPECIFIED IN ALLOWABLE DAMAGE 1 TO DAMAGE DEPTH. STOP DRILL 0.25 INCH (6 mm) DIAMETER HOLES AT THE ENDS OF CRACKS.	A NON-REVENUE FLIGHT TO A REPAIR STATION IS PERMITTED IF THE APPLICABLE REGULATORY AUTHORITY GIVES APPROVAL BEFORE THE FLIGHT. IT IS RECOMMENDED THAT THE PROPOSED REPAIR PROCEDURE BE GIVEN TO BOEING.
		THE MAXIMUM CABIN PRESSURE DIFFERENTIAL LIMITED A TO 5.0 PSIG UNLESS THE SKIN IS REPAIRED.
	DO AN APPLICABLE REPAIR AS GIVEN IN SRM 52-00-01.	REFER TO THE APPLICABLE REPAIR FOR THE LIMITS.
D	CLEAN UP AS SPECIFIED IN ALLOWABLE DAMAGE 1 TO DAMAGE DEPTH. STOP DRILL 0.25 INCH (6 mm) DIAMETER HOLES AT THE ENDS OF CRACKS.	A NON-REVENUE FLIGHT TO A REPAIR STATION IS PERMITTED IF THE APPLICABLE REGULATORY AUTHORITY GIVES APPROVAL BEFORE THE FLIGHT. IT IS RECOMMENDED THAT THE PROPOSED REPAIR PROCEDURE BE GIVEN TO BOEING.
		THE MAXIMUM CABIN PRESSURE DIFFERENTIAL LIMITED A IS NOT MORE THAN ZERO PSIG.
	DO AN APPLICABLE REPAIR AS GIVEN IN SRM 52-00-01.	REFER TO THE APPLICABLE REPAIR FOR THE LIMITS.
Е	CLEAN UP AS SPECIFIED IN ALLOWABLE DAMAGE 1 TO DAMAGE DEPTH. STOP DRILL 0.25 INCH (6 mm) DIAMETER HOLES AT THE ENDS OF CRACKS.	OPERATION IS NOT PERMITTED BEFORE BOEING AND APPLICABLE REGULATORY AUTHORITY GIVES APPROVAL.
	DO AN APPLICABLE REPAIR AS GIVEN IN SRM 52-00-01.	REFER TO THE APPLICABLE REPAIR FOR THE LIMITS.

Operating Limits for Overwing / Type I Emergency Exit Door Skin Identification Figure 101 (Sheet 2 of 2)

ALLOWABLE DAMAGE 2
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ALLOWABLE DAMAGE 3 - TYPE I EMERGENCY EXIT DOOR SKIN



RIGHT SIDE IS SHOWN, LEFT SIDE IS SIMILAR

TYPE I EMERGENCY EXIT DOOR

DETAIL I

DESCRIPTION	CRACKS	NICKS, GOUGES AND CORROSION	DENTS	HOLES AND PUNCTURES
OUTER SKIN	A D	В D	SEE DETAIL IV	C D

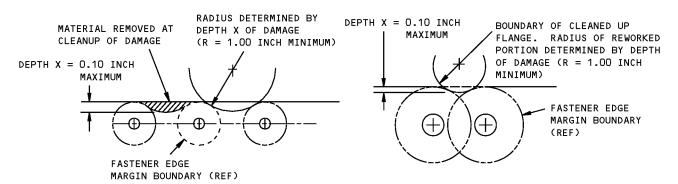
Type I Emergency Exit Door Skin Allowable Damage Figure 101 (Sheet 1 of 3)

ALLOWABLE DAMAGE 3
Page 101

Apr 01/2005

52-20-01

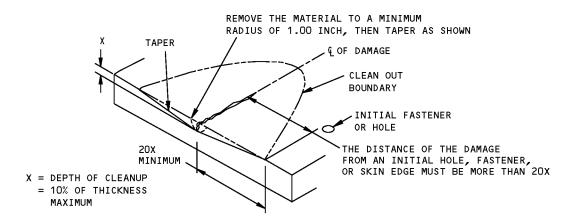




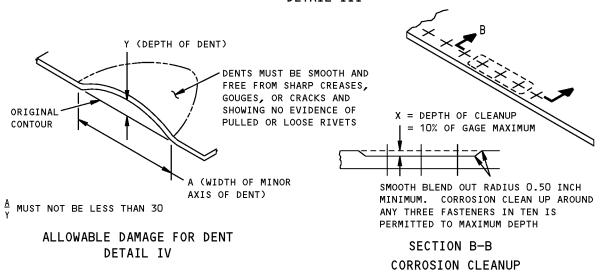
DAMAGE CLEAN UP OF EDGES WHERE FASTENER EDGE MARGINS DO NOT OVERLAP

DAMAGE CLEAN UP OF EDGES WHERE FASTENER EDGE MARGINS OVERLAP

DETAIL II



REMOVAL OF NICK, GOUGE, CORROSION, AND SCRATCH DAMAGE ON A SURFACE DETAIL III

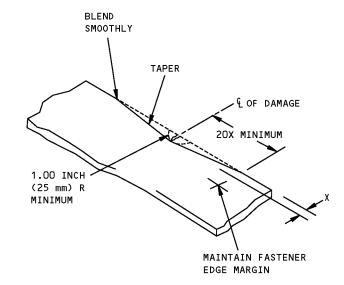


Type I Emergency Exit Door Skin Allowable Damage Figure 101 (Sheet 2 of 3)

ALLOWABLE DAMAGE 3
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DETAIL V





REMOVAL OF NICK OR CRACK DAMAGE ON AN EDGE
DETAIL VI

NOTES

- REFER TO SRM 51-10-01 FOR THE AERODYNAMIC SMOOTHNESS REQUIREMENTS. WHERE THE DAMAGE IS MORE THAN THE LIMITS SHOWN IN SRM 51-10-01, CONSIDERATION SHOULD BE GIVEN TO THE LOSS OF PERFORMANCE INVOLVED
- REFER TO SRM 51-10-02 FOR INSPECTION AND REMOVAL OF DAMAGE
- REFINISH REWORKED AREAS AS SHOWN IN AMM 51-21

X = DEPTH OF CLEANUP = 0.10 INCH

(2.5 mm) MAXIMUM

 REFER TO SRM 51-20-01 FOR THE PROTECTIVE TREATMENT OF METAL

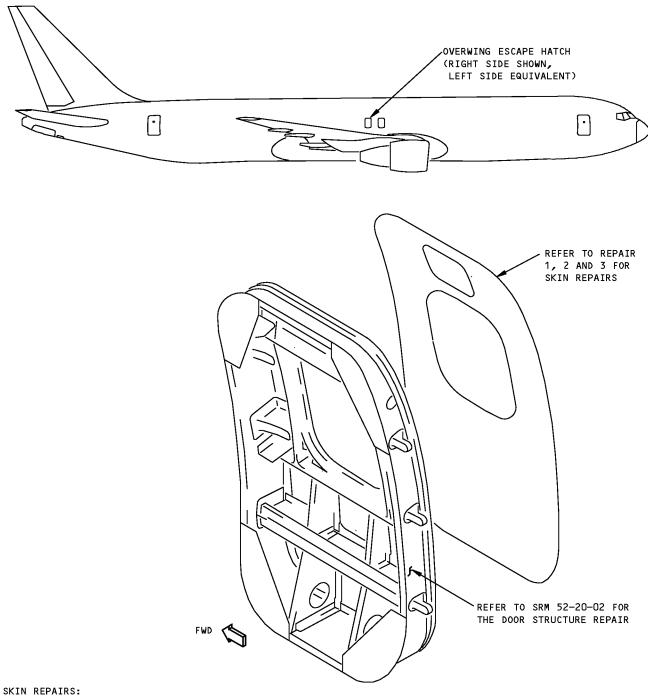
- A CRACKS ARE NOT PERMITTED EXCEPT FOR EDGE CRACKS WHICH MUST BE REMOVED AS SHOWN IN DETAILS II AND VI
- B REMOVE DAMAGE AS SHOWN IN DETAILS II, III, V, AND VI
- C CLEAN OUT DAMAGE UP TO 0.25 INCH (6 mm)
 MAXIMUM DIAMETER AND NOT CLOSER THAN 1.0
 INCH (25 mm) TO A FASTENER HOLE, MATERIAL
 EDGE, OR OTHER DAMAGE. FILL HOLE WITH
 2117-T3 OR T4 ALUMINUM RIVET INSTALLED WET
 WITH BMS 5-95 SEALANT. ALL OTHER HOLES TO
 BE REPAIRED
- D REFER TO ALLOWABLE DAMAGE 2 FOR THE TYPE I EMERGENCY EXIT DOOR SKIN OPERATING LIMITS AFTER DAMAGE HAS BEEN REMOVED.

Type I Emergency Exit Door Skin Allowable Damage Figure 101 (Sheet 3 of 3)

ALLOWABLE DAMAGE 3
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REPAIR GENERAL - EMERGENCY EXIT DOOR SKIN



REFER TO REPAIR 1 FOR THE FLUSH SKIN REPAIR BETWEEN BEAMS REFER TO REPAIR 3 FOR THE SMALL HOLE-FLUSH REPAIR REFER TO REPAIR 4 FOR THE SMALL HOLE-EXTERNAL REPAIR

> Overwing Escape Hatch (Emergency Exit) Door Skin Repair References Figure 201

> > 52-20-01

REPAIR GENERAL Page 201 Aug 15/2007



REPAIR 1 - EMERGENCY EXIT DOOR - FLUSH SKIN REPAIRS BETWEEN BEAMS

REPAIR INSTRUCTIONS

- Clean out the damage to the skin to a rectangular shape with a minimum of 0.50 inch (13 mm) radius at the corners. The cutout should be parallel to the centerline of the adjacent beam.
- 2. Make repair parts 1 and 2.

NOTE: Door outer skin is chem-milled.

Fabricate repair parts as required to repair chem-milled pockets.

- Assemble repair parts in installed positions and drill fastener holes.
- 4. Remove repair parts.
- Break sharp edges of initial and repair parts 0.015 to 0.030 inch (0.38 to 0.76 mm).
- Remove all nicks, scratches, burrs, sharp edges and corners from initial and repair parts.
- Apply a chemical conversion coating to the repair part and to the bare surfaces of the door skin. Refer to SRM 51-20-01.
- Apply one coat of BMS 10-11, type 1, primer to all of part 1 and to the edges and inner surface of part 2 in as given in AMM 51-21.
- Install repair parts, making a faying surface seal with BMS 5-95 sealant as given in SRM 51-20-05.
- 10. Form a fillet seal around the edge of the repair parts, using the sealant squeezed out during installation. Apply additional sealant where necessary.
- 11. Restore the surface finish in as given in AMM 51-20.

NOTES

- REFER TO THE FOLLOWING WHEN USING THESE REPAIRS:
 - AMM 51-21 FOR INTERIOR AND EXTERIOR FINISHES
 - SRM 51-10-02 FOR INSPECTION AND REMOVAL OF DAMAGE
 - SRM 51-10-01 FOR AERODYNAMIC SMOOTHNESS REQUIREMENTS. WHERE THE DAMAGE IS MORE THAN THE LIMITS SHOWN IN SRM 51-10-01, CONSIDERATION SHOULD BE GIVEN TO THE LOSS OF PERFORMANCE INVOLVED
 - SRM 51-20-01 FOR PROTECTIVE TREATMENT OF METAL
 - SRM 51-30 FOR SOURCE OF REPAIR MATERIALS
 - SRM 51-40 FOR FASTENER CODE, REMOVAL, INSTALLATION, HOLE SIZES AND EDGE MARGINS
 - SRM 51-40-08 FOR COUNTERSINKING AND USE OF COUNTERSINK REPAIR WASHERS

FASTENER SYMBOLS

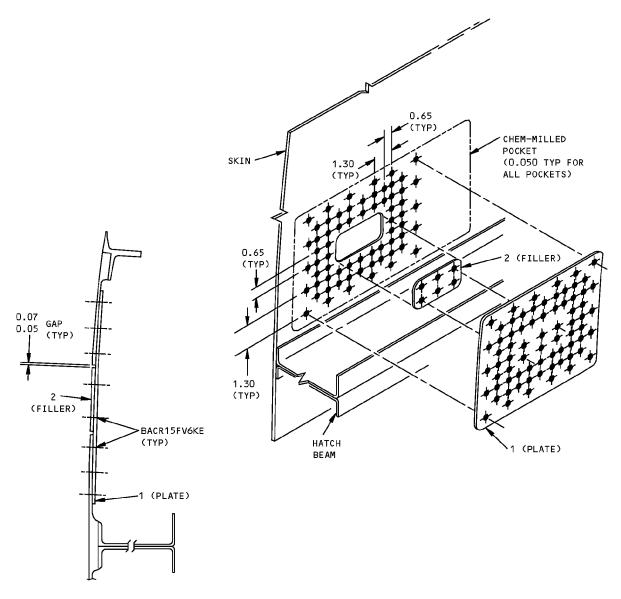
→ REPAIR FASTENER LOCATION

Overwing Escape Hatch Door - Flush Skin Repairs Between Beams Figure 201 (Sheet 1 of 2)

52-20-01

REPAIR 1 Page 201 Apr 01/2005





SECTION THRU REPAIR

	REPAIR MATERIAL							
	PART	QTY	MATERIAL					
1	PLATE	1	SAME MATERIAL ONE GAGE HEAVIER THAN ORIGINAL SKIN					
2	FILLER	1	SAME MATERIAL AND GAGE AS ORIGINAL SKIN					

Overwing Escape Hatch Door - Flush Skin Repairs Between Beams Figure 201 (Sheet 2 of 2)

52-20-01



REPAIR 2 - DELETED - EMERGENCY EXIT DOOR - FLUSH SKIN REPAIR AT A BEAM

1. General

A. This repair is obsolete. Do not use after April 15th, 2007.

52-20-01 Page 201 Apr 15/2007



REPAIR 3 - EMERGENCY EXIT DOOR - SMALL HOLE - FLUSH REPAIR

REPAIR INSTRUCTIONS

- Remove the inner skin panel for access if required.
- Clean out the damaged hole to 1-inch diameter maximum. The center of the hole to an edge or cutout must not be less than 1.90.
- 3. Make repair parts 1 and 2.
- Assemble repair parts in installed postions and drill fastener holes.
- 5. Remove repair parts.
- Break sharp edges of original and repair parts 0.015 to 0.030.
- Remove all nicks, scratches, burrs, sharp edges and corners from original and repair parts.
- 8. Alodize all raw edges of existing and repair parts per 51-20-01.
- Apply one coat of BMS 10-11, type 1, primer to all of part 2 and to the edges and inner surface of part 1 in accordance with 51-21-00 of the 767 Maintenance Manual.
- Install repair parts, making a faying surface seal with BMS 5-95 sealant as described in 51-20-05.
- 11. Form a fillet seal around the edge of the repair parts, using the sealant squeezed out duing installation. Apply additional sealant where necessary.
- Reinstall inner skin panel if removed for access.
- Restore the surface finish in accordance with 51-20-00 of the 767 Maintenance Manual.

NOTES

- NOT TO BE USED IN AREAS WITH DOUBLERS AND THE SKIN GAGE MUST BE CONSTANT
- REFER TO 51-40 FOR FASTENER CODE, REMOVAL, INSTALLATION, HOLE SIZES, EDGE MARGINS AND SUBSTITUTIONS
- A SEE 51-10-01 FOR AERODYNAMIC SMOOTHNESS REQUIREMENTS

SYMBOLS

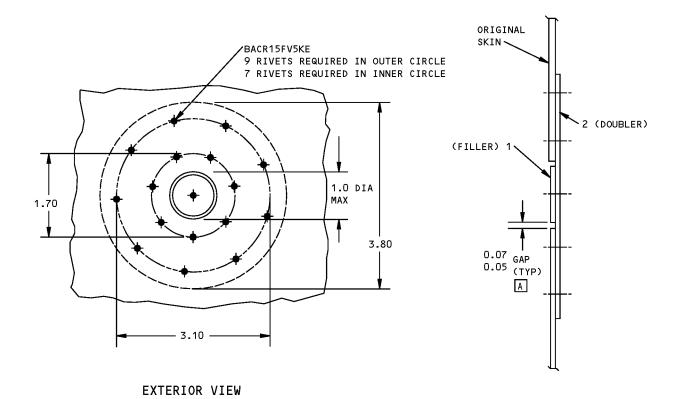
- REPAIR FASTENER LOCATION

Overwing Escape Hatch Door - Small Hole - Flush Repair Figure 201 (Sheet 1 of 2)

52-20-01

REPAIR 3 Page 201 Apr 01/2005





SECTION	THROUGH	REPAIR

REPAIR MATERIAL							
	PART	QTY	MATERIAL				
1	FILLER	1	SAME MATERIAL AND GAGE AS ORIGINAL SKIN				
2	DOUBLER	1	SAME MATERIAL, ONE GAGE HEAVIER THAN ORIGINAL SKIN				

SYMBOLS

→ REPAIR FASTENER LOCATIONS

Overwing Escape Hatch Door - Small Hole - Flush Repair Figure 201 (Sheet 2 of 2)

52-20-01

REPAIR 3 Page 202 Apr 01/2005



REPAIR 4 - EMERGENCY EXIT DOOR SKIN - EXTERNAL REPAIR

REPAIR INSTRUCTIONS B

- Remove the inner skin panel for access if required.
- Clean out the damaged hole to 1.00 diameter maximum. The center of the hole to an edge or cutout must not be less than 4D.
- 3. Fabricate repair parts.
- Break sharp edges of original and repair parts 0.015 to 0.030.
- Remove all nicks, scratches, burrs, sharp edges and corners from original and repair parts.
- Alodize all raw edges of existing and repair parts per 51-20-01.
- 7. Apply one coat of BMS 10-11, type 1, primer to all of part 1 and to the edges and inner surface of part 2 in accordance with 51-21 of the 767 Maintenance Manual.
- Install repair parts, making a faying surface seal with BMS 5-95 sealant as described in 51-20-05.
- Form a fillet seal around the edge of the repair parts, using the sealant squeezed out during installation. Apply additional sealant where necessary.
- Reinstall inner skin panel if removed for access.
- 11. Restore the surface finish in accordance with 51-21 of the 767 Maintenance Manual.

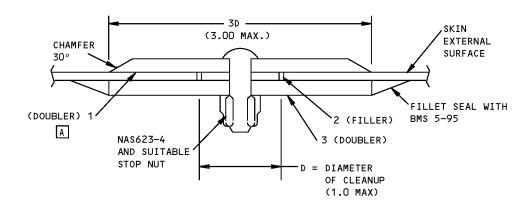
NOTES

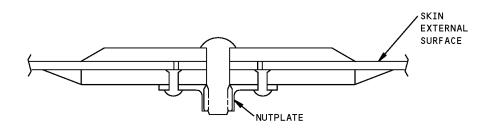
- SEE 51-10-01 FOR AERODYNAMIC SMOOTHNESS REQUIREMENTS
- REFER TO 51-40 FOR FASTENER CODE, REMOVAL, INSTALLATION, HOLE SIZES, EDGE MARGINS AND SUBSTITUTIONS
- A THIS REPAIR IS NOT TO BE USED IN AREAS WITH DOUBLERS. THE AREA UNDER REPAIR PART 1 MUST NOT HAVE ANY FASTENERS, AND THE SKIN GAGE MUST BE CONSTANT
- INSPECT THIS REPAIR AT EACH "A" CHECK.
 THIS REPAIR IS A TIME-LIMITED REPAIR.
 REPLACE THIS REPAIR WITH A PERMANENT
 REPAIR SHOWN IN FIG. 204 AT THE END OF
 2500 FLIGHTS OR AT THE NEXT "C" CHECK.
 REPLACE TIME-LIMITED REPAIR IF ANY
 DETERIORATION IS EVIDENT. THIS REPAIR
 HAS FAA APPROVAL CONTINGENT ON COMPLIANCE
 WITH THE FLIGHT RESTRICTIONS CONTAINED
 HEREIN

Overwing Escape Hatch Door - Small Hole - External Repair Figure 201 (Sheet 1 of 2)

52-20-01







OPTIONAL METHOD

	REPAIR MATERIAL							
	PART	QTY	MATERIAL					
1	DOUBLER	1	2024-T3, -T4 OR -T42 TWICE SKIN GAGE					
2	FILLER	1	2024-T3, -T4 OR -T42 SAME GAGE AS SKIN					
3	DOUBLER	1	2024-T3, -T4 OR -T42 TWICE SKIN GAGE					

Overwing Escape Hatch Door - Small Hole - External Repair Figure 201 (Sheet 2 of 2)

52-20-01



REPAIR 5 - DELETED - EMERGENCY EXIT DOOR - EXTERNAL REPAIR

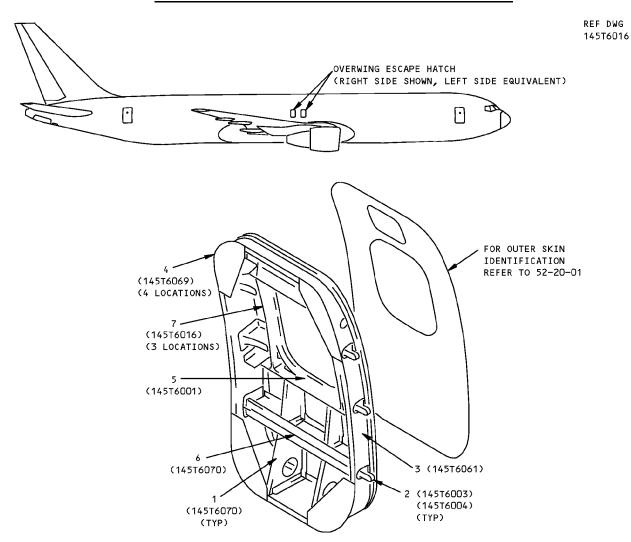
1. General

A. This repair is obsolete. Do not use after April 15th, 2007.

52-20-01 Page 201 Apr 15/2007



IDENTIFICATION 1 - EMERGENCY EXIT DOOR STRUCTURE



ITEM	DESCRIPTION	GAGE	MATERIAL	EFFECTIVITY
1	INTERCOSTAL WEB CHORD	0.071	CLAD 2024-T42 AND10136-1701 7075-T6511	
2	DOOR STOP		FORGING 7075 T73	
3	FRAME	0.071	CLAD 2024-T42	
4	GUSSET	0.063	CLAD 7075-T62	
5	WINDOW SUPPORT FRAME		FORGING 7075-T73	
6	BEAM	0.071	CLAD 2024-T42	
7	FAIL SAFE STRAP	0.150	7075-T6	

LIST OF MATERIALS

Overwing Escape Hatch (Emergency Exit) Door Structure Identification Figure 1

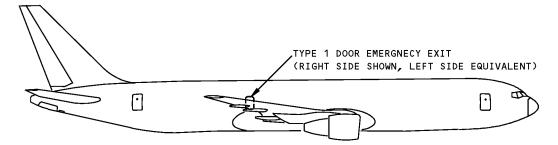
IDENTIFICATION 1
Page 1

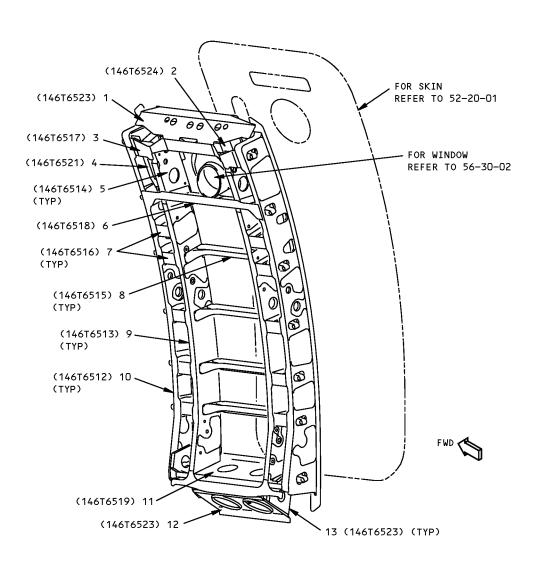
Apr 01/2005



IDENTIFICATION 2 - TYPE 1 EMERGENCY EXIT DOOR STRUCTURE

REF DWG 146T6505





Type 1 Emergency Exit Door Structure Identification Figure 1 (Sheet 1 of 2)

1DENTIFICATION 2 Page 1 Apr 01/2005



ITEM	DESCRIPTION	GAGE	MATERIAL	EFFECTIVITY
1	SUPPORT	0.125 0.10	CLAD 7075-T62 OPTIONAL	
2	HANDLE PAN	0.071	2024-T42	
3	STOP BEAM NO. 1	3.75	FORGING 7075-T73 OPTIONAL: 7075-T7351 PLATE	
4	PRESSURE FRAME	2.25	FORGING 7075-T73 OPTIONAL: 7075-T7351 PLATE	
5	STUB FRAME	2.50	7075-T7351 PLATE	
6	STOP BEAM NO. 2	3.50	FORGING 7075-T73 OPTIONAL: 7075-T7351 PLATE	
7	SEGMENTED BEAM	3.25	FORGING 7075-T73 OPTIONAL: 7075-T7351 PLATE	
8	SEGMENTED BEAM	1.75	FORGING 7075-T73 OPTIONAL: 7075-T7351 PLATE	
9	INTERMEDIATE FRAME	1.25	7075-T7351 PLATE	
10	SIDE FRAME	2.50	7075-T7351 PLATE	
11	STOP BEAM NO. 7	1.50	FORGING 7075-T73 OPTIONAL: 7075-T7351 PLATE	
12	SUPPORT	0.071	CLAD 7075-T62	
13	SUPPORT	0.063	CLAD 7075-T62	

LIST OF MATERIALS

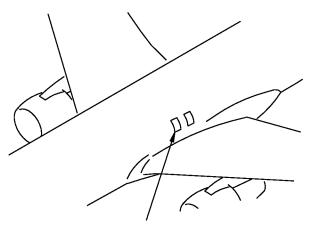
Type 1 Emergency Exit Door Structure Identification Figure 1 (Sheet 2 of 2)

52-20-02

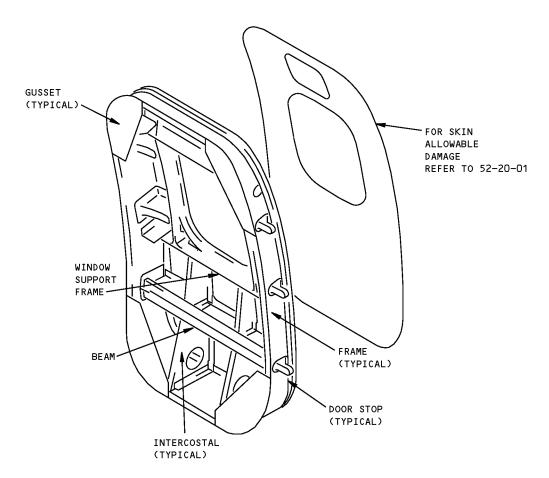
Page 2
Apr 01/2005



ALLOWABLE DAMAGE 1 - EMERGENCY EXIT DOOR STRUCTURE



OVERWING EMERGENCY EXIT DOOR



MATERIAL: ALUMINUM

Overwing Emergency Exit Door Structure Allowable Damage Figure 101 (Sheet 1 of 4)

ALLOWABLE DAMAGE 1
Page 101
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DESCRIPTION	CRACKS	NICKS, GOUGES AND CORROSION	DENTS	HOLES AND PUNCTURES
BEAM	Α	D	SEE DETAIL III	H
FRAME	А	D	SEE DETAIL III	H
INTERCOSTAL	В	E	SEE DETAIL III	H
GUSSET	В	E	SEE DETAIL III	H
DOOR STOP	CI	FΙ	NOT PERMITTED	NOT PERMITTED
WINDOW SUPPORT FRAME	С	G	NOT PERMITTED	HOLES PERMITTED IN WEBS ONLY H

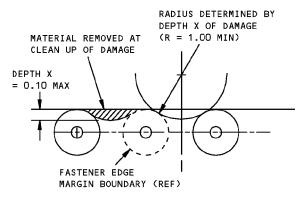
NOTES

- REFER TO SRM 51-10-02 FOR INSPECTION AND REMOVAL OF DAMAGE
- REFINISH REWORKED AREAS AS SHOWN IN AMM 51-20
- A CRACKS ARE NOT PERMITTED EXCEPT FOR EDGE CRACKS WHICH MUST BE REMOVED AS SHOWN IN DETAILS I AND VI
- B CRACKS ARE NOT PERMITTED EXCEPT FOR EDGE CRACKS WHICH MUST BE REMOVED AS SHOWN IN DETAILS I AND V
- C CRACKS ARE NOT PERMITTED EXCEPT FOR EDGE CRACKS WHICH MUST BE REMOVED AS SHOWN IN DETAILS I AND VII. J
- D REMOVE DAMAGE AS SHOWN IN DETAILS I, II, IV AND VI
- E REMOVE DAMAGE AS SHOWN IN DETAILS I, II, IV AND V
- F FOR EDGE DAMAGE SEE DETAILS I AND VII. FOR LUG DAMAGE, SEE DETAIL VIII. FOR OTHER DAMAGE, SEE DETAIL II. DAMAGE IS NOT PERMITTED IN VICINITY OF BUSHINGS.

- G REMOVE DAMAGE AS SHOWN IN DETAILS I, II, IV AND VII.
- H CLEAN OUT DAMAGE UP TO 0.25 INCH (6 mm) MAX DIA AND NOT CLOSER THAN 1.0 INCH (25 mm) TO FASTENER HOLE, MATERIAL EDGE, OR OTHER DAMAGE. FILL HOLE WITH 2117-T3 OR T4 ALUMINUM RIVET INSTALLED WET WITH BMS 5-95 SEALANT. ALL OTHER HOLES TO BE REPAIRED
- BOEING APPROVAL REQUIRED FOR ALLOWABLE DAMAGE ON OUTBOARD EDGES OF STOP OVERHANGS
- J SHOT PEEN ALL REWORKED SURFACES AS SHOWN IN SRM 51-20-06. SHOT PEEN INTENSITIES WILL VARY WITH THE THICKNESS REMAINING AFTER REWORK

Overwing Emergency Exit Door Structure Allowable Damage Figure 101 (Sheet 2 of 4)





DAMAGE CLEAN UP OF EDGES WHERE FASTENER EDGE MARGINS DO NOT OVERLAP

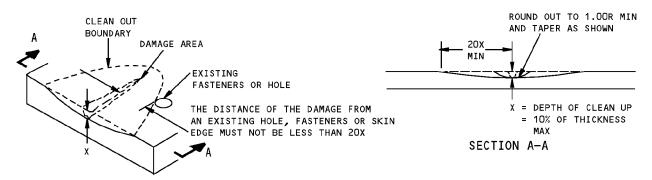
DEPTH X = 0.10 MAX

UP FLANGE. RADIUS OF REWORKED PORTION DETERMINED BY DEPTH OF DAMAGE (R = 1.00 MIN)

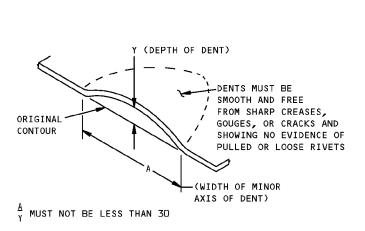
FASTENER EDGE MARGIN BOUNDARY (REF)

DAMAGE CLEAN UP OF EDGES WHERE FASTENER EDGE MARGINS OVERLAP

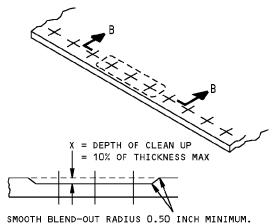
DETAIL I



REMOVAL OF NICK, GOUGE AND SCRATCH DAMAGE ON A SURFACE DETAIL II



ALLOWABLE DAMAGE FOR DENT DETAIL III



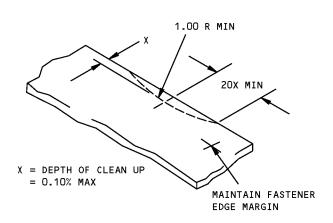
CORROSION CLEAN UP AROUND ANY THREE FASTENERS
IN TEN IS PERMITTED TO MAX DEPTH

SECTION B-B CORROSION CLEANUP DETAIL IV

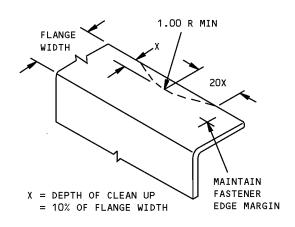
Overwing Emergency Exit Door Structure Allowable Damage Figure 101 (Sheet 3 of 4)

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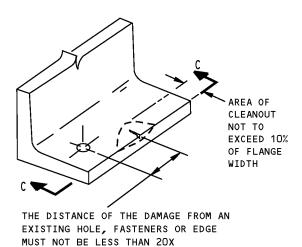




REMOVAL OF NICK OR CRACK DAMAGE ON AN EDGE DETAIL V

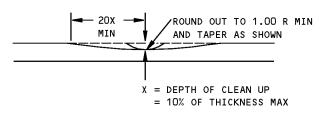


REMOVAL OF NICK OR CRACK DAMAGE ON AN EDGE DETAIL VI

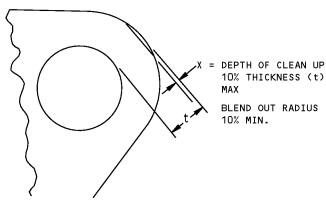


REMOVAL OF NICK OR CRACK DAMAGE ON AN EDGE

DETAIL VII



SECTION C-C



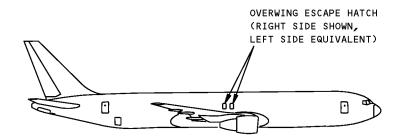
DAMAGE CLEAN UP FOR EDGES OF LUG DETAIL VIII

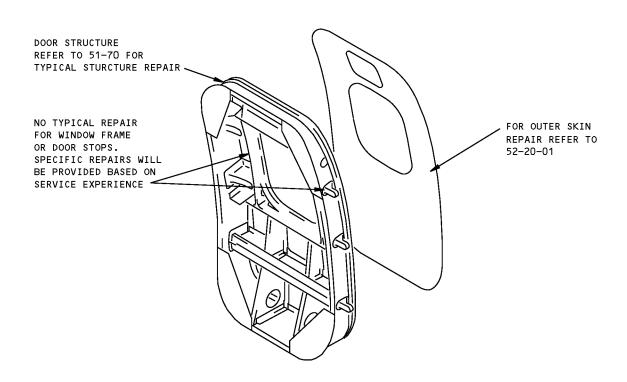
Overwing Emergency Exit Door Structure Allowable Damage Figure 101 (Sheet 4 of 4)

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Page 104
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REPAIR GENERAL - EMERGENCY EXIT DOOR STRUCTURE REPAIR





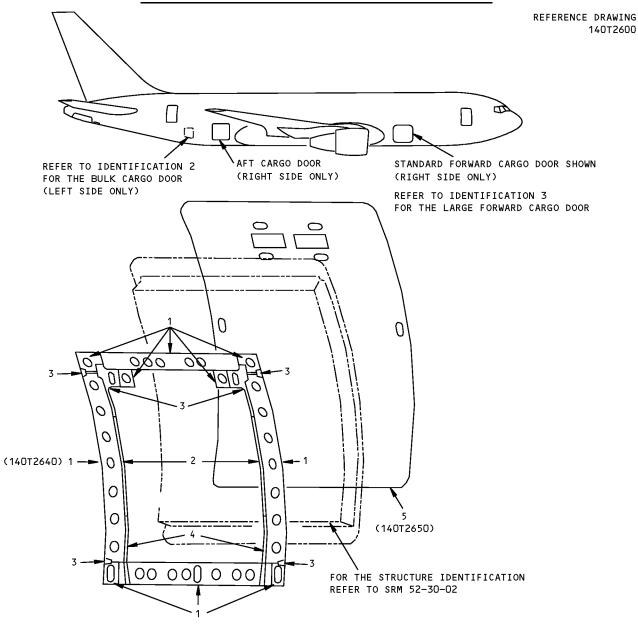
Overwing Escape Hatch (Emergency Exit) Structure Repair Figure 201

52-20-02

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IDENTIFICATION 1 - FORWARD / AFT CARGO DOOR SKIN



ITEM	DESCRIPTION	GAGE	MATERIAL	EFFECTIVITY
1	SKIN (INNER)	0.040	CLAD 7075-T6	
2	DOUBLER	0.050	CLAD 7075-T6	
3	DOUBLER	0.063	CLAD 7075-T6	
4	DOUBLER	0.090	CLAD 7075-T6	
5	OUTER SKIN	0.071	CLAD 2024-T3 (CHEM-MILLED TO 0.051 MINIMUM)	

LIST OF MATERIALS

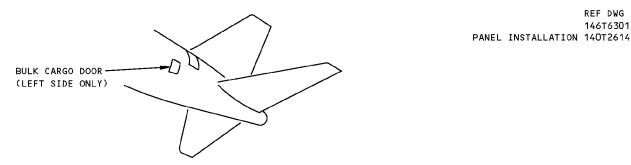
Forward / Aft Cargo Door Skin Identification Figure 1

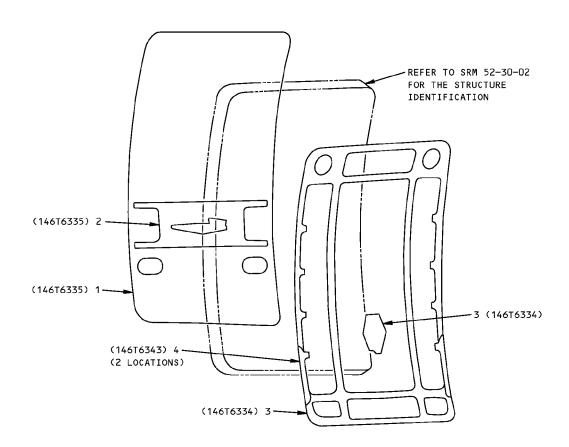
IDENTIFICATION 1
Page 1
Apr 01/2005

52-30-01



IDENTIFICATION 2 - BULK CARGO DOOR SKIN





ITEM	DESCRIPTION	GAGE	MATERIAL	EFFECTIVITY
1	OUTER SKIN	0.071	CLAD 2024-T3 (CHEM-MILLED TO 0.051 MINIMUM)	
2	DOUBLER	0.063	CLAD 2024-T3	
3	INNER SKIN	0.063	CLAD 7075-T62	
4	DOUBLER	0.063	CLAD 7075-T6	

LIST OF MATERIALS

Bulk Cargo Door Skin Identification Figure 1

> **IDENTIFICATION 2** Page 1

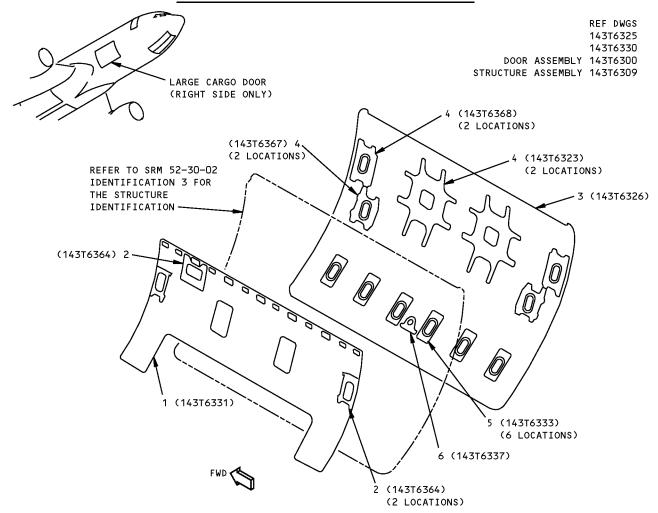
Dec 15/2005

146T6301

52-30-01



IDENTIFICATION 3 - LARGE CARGO DOOR SKIN



ITEM	DESCRIPTION	GAGE	MATERIAL	EFFECTIVITY
1	INNER SKIN	0.056	CLAD OR BARE 2024-T3 THE SKIN IS CHEM-MILLED AND MACHINED AND VARIES IN THICKNESS. REFER TO THE BOEING DRAWING TO DETERMINE THE LOCAL THICKNESS.	
2	DOUBLER	0.050	CLAD 2024-T3	
3	OUTER SKIN	0.125	CLAD 2024-T3 THE SKIN IS CHEM-MILLED AND VARIES IN THICKNESS. REFER TO THE BOEING DRAWING TO DETERMINE THE LOCAL THICKNESS.	
4	DOUBLER	0.100	CLAD 2024-T3	
5	DOUBLER	0.250	2024-T351 PLATE	
6	DOUBLER	0.140	CLAD 2024-T3	

LIST OF MATERIALS

Large Cargo Door Skin Identification Figure 1

IDENTIFICATION 3

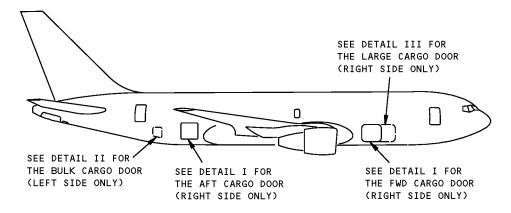
52-30-01

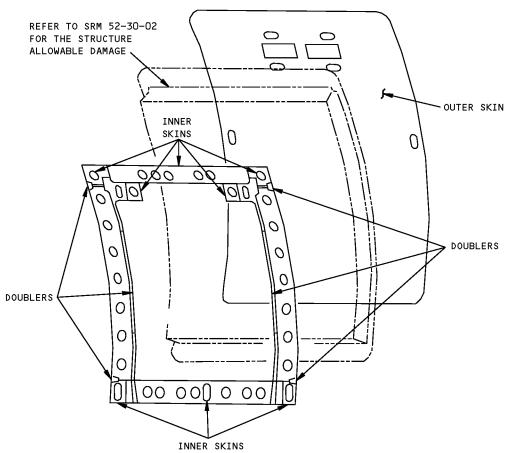
Page 1 Dec 15/2005



ALLOWABLE DAMAGE 1 - CARGO DOORS SKIN

REF DWG 140T2600





MATERIAL: ALUMINUM

FORWARD/AFT CARGO DOOR DETAIL I

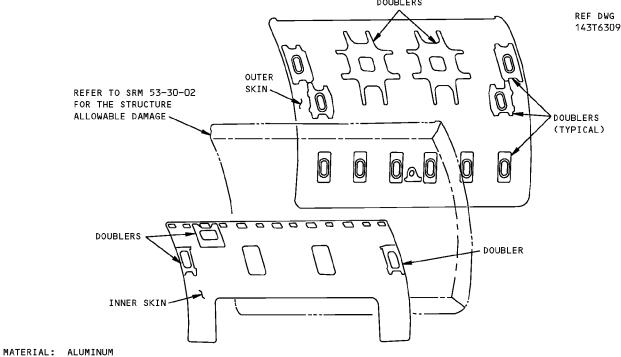
Cargo Doors Skin Allowable Damage Figure 101 (Sheet 1 of 5)

> ALLOWABLE DAMAGE 1 Page 101 Dec 15/2007

52-30-01



REF DWG 146T6301 REFER TO SRM 52-30-02 FOR THE STRUCTURE ALLOWABLE DAMAGE OUTER SKIN . INNER SKIN DOUBLER - DOUBLER MATERIAL: ALUMINUM DOUBLER-BULK CARGO DOOR DETAIL II DOUBLERS REF DWG 143T6309 OUTER



LARGE CARGO DOOR DETAIL III

Cargo Doors Skin Allowable Damage Figure 101 (Sheet 2 of 5)

ALLOWABLE DAMAGE 1
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DESCRIPTION	CRACKS	NICKS, GOUGES AND CORROSION	DENTS	HOLES AND PUNCTURES
OUTER SKIN A	вн	HI	J	EΗ
INNER SKIN	С	D	J	F
DOUBLERS	В	D	SEE DETAIL VI	F

NOTES

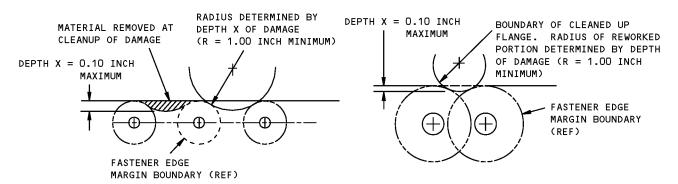
- WHEN YOU USE THIS REPAIR, REFER TO:
 - AMM 51-21-01 FOR APPLICATION OF FINISHES
 - SRM 51-10-02 FOR INSPECTION AND REMOVAL OF DAMAGE
 - SRM 51-20-01 FOR PROTECTIVE TREATMENT OF METAL.
- A REFER TO SRM 51-10-01 FOR AERODYNAMIC SMOOTHNESS REQUIREMENTS. WHERE THE DAMAGE IS MORE THAN THE LIMITS SHOWN IN SRM 51-10-01, THOUGHT SHOULD BE GIVEN TO THE LOSS OF PERFORMANCE THAT MAY OCCUR.
- B CRACKS ARE NOT PERMITTED EXCEPT FOR EDGE CRACKS WHICH MUST BE REMOVED AS SHOWN IN DETAILS IV AND VIII.
- FOR EDGE CRACKS SEE DETAILS IV AND VIII,
 FOR LIGHTENING HOLE EDGE CRACKS, SEE
 DETAIL X. FOR OTHER CRACKS SEE DETAIL IX
- REMOVE DAMAGE AS SHOWN IN DETAILS IV, V, VII AND VIII.
- E CLEAN OUT DAMAGE UP TO 0.25 INCH (6.35 mm)
 MAXIMUM DIAMETER AND NOT CLOSER THAN
 1.0 INCH (25.4 mm) TO FASTENER HOLE,
 MATERIAL EDGE, OR OTHER DAMAGE. FILL HOLE
 WITH 2117-T3 OR T4 ALUMINUM RIVET INSTALLED
 WET WITH BMS 5-95 SEALANT. ALL OTHER HOLES
 TO BE REPAIRED.
- F CLEAN OUT DAMAGE UP TO 0.25 INCH (6.35 mm)
 MAXIMUM DIAMETER AND NOT CLOSER THAN
 1.0 INCH (25.4 mm) TO FASTENER HOLE,
 MATERIAL EDGE, OR OTHER DAMAGE.
- G 1.50 INCHES (38.1 mm) MINIMUM TO EDGE OF INITIAL FASTENER HOLE TO EDGE OF FLANGED HOLE OR TO EDGE OF CUTOUT
- H REFER TO ALLOWABLE DAMAGE 2 FOR THE CARGO DOOR SKIN OPERATING LIMITS AFTER DAMAGE HAS BEEN REMOVED.

- REMOVE DAMAGE AS SHOWN IN DETAILS IV, VII, VIII AND XI.
- J DENTS THAT ARE MORE THAN THE LIMITS SHOWN
 IN DETAIL VI SHOULD BE PERMANENTLY
 REPAIRED. HOWEVER, A REPAIR CAN BE
 DELAYED IF THE CONDITIONS THAT FOLLOW
 ARE MET:
 - DENTS MUST BE SMOOTH AND FREE FROM SHARP CREASES, GOUGES, OR CRACKS, AND SHOW NO EVIDENCE OF PULLED, LOOSE, OR MISSING FASTENERS
 - THERE ARE NO DAMAGED OR ELONGATED FASTENER HOLES
 - THE DENT IS NOT FILLED
 - A PERMANENT REPAIR IS MADE AT THE SUBSEQUENT C-CHECK OR BEFORE 24 MONTHS
 - THE DAMAGE IS A MINIMUM OF 1.0 INCH (25.4 mm) FROM ANY PART OF A BEAM, SKIN DOUBLER, STRAP, FRAME, INTERCOSTAL, OR STIFFENER
 - THE DAMAGE IS A MINIMUM OF 10.0 INCHES (254 mm) FROM A SKIN SPLICE OR CUTOUT, INCLUDING A HINGE CUTOUT OR A HANDLE PAN CUTOUT.
 - A DETAILED VISUAL INSPECTION OF ALL ADJACENT STRUCTURE WITHIN A 20 INCHES (508 mm) RADIUS IS PERFORMED TO MAKE SURE THERE IS NO DAMAGE TO ANY FRAME, STRINGER OR DOUBLER. IF THERE IS DAMAGE TO ANY STRUCTURE OTHER THAN THE SKIN, MAKE THE REPAIRS IMMEDIATELY.
 - AN INITIAL HIGH FREQUENCY EDDY CURRENT INSPECTION OF THE DENT IS PERFORMED.
 CONTINUE TO PERFORM DETAILED VISUAL INSPECTIONS OF THE DENT EVERY 300 FLIGHT CYCLES.

Cargo Doors Skin Allowable Damage Figure 101 (Sheet 3 of 5)

ALLOWABLE DAMAGE 1
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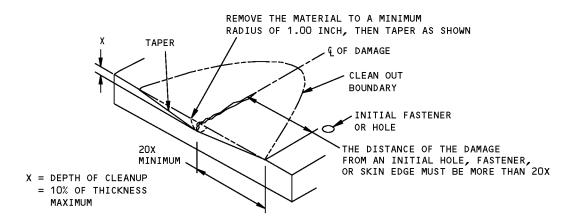




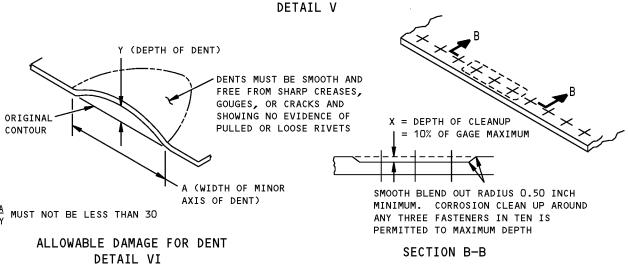
DAMAGE CLEAN UP OF EDGES WHERE FASTENER EDGE MARGINS DO NOT OVERLAP

DAMAGE CLEAN UP OF EDGES WHERE FASTENER EDGE MARGINS OVERLAP

DETAIL IV



REMOVAL OF NICK, GOUGE, CORROSION, AND SCRATCH DAMAGE ON A SURFACE

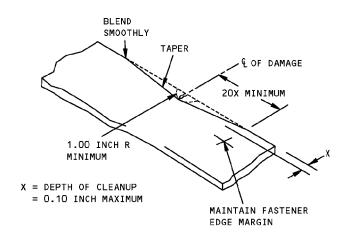


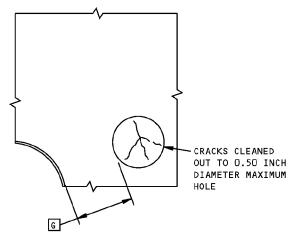
Cargo Doors Skin Allowable Damage Figure 101 (Sheet 4 of 5)

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CORROSION CLEANUP
DETAIL VII

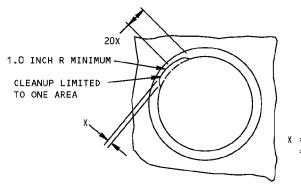






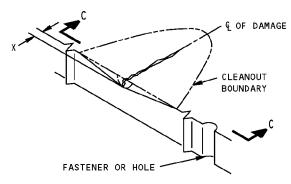
REMOVAL OF NICK OR CRACK DAMAGE ON AN EDGE DETAIL VIII

FIELD CRACK CLEAN UP
DETAIL IX



X = DEPTH OF CLEANUP = 0.10 INCH MAXIMUM OR 1/2 FLANGE WIDTH WHICHEVER IS LESS

FLANGED HOLE EDGE DAMAGE CLEAN UP DETAIL X



REMOVAL OF NICK, GOUGE AND SCRATCH DAMAGE ON AN OUTER SKIN SURFACE DETAIL XI

TAPER
T 20X
MINIMUM

X

REMOVE THE MATERIAL TO A
MINIMUM RADIUS OF 1.0 INCH
AND TAPER AS SHOWN

 ${\sf X}$ = THE DEPTH OF THE MATERIAL THAT IS REMOVED.

T = THICKNESS OF THE MATERIAL

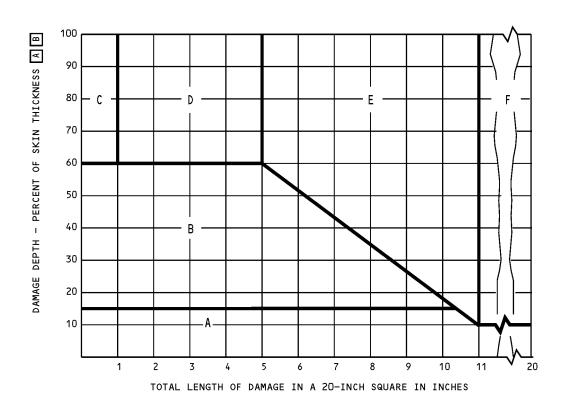
SECTION C-C

Cargo Doors Skin Allowable Damage Figure 101 (Sheet 5 of 5)

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ALLOWABLE DAMAGE 2 - OPERATING LIMITS FOR CARGO DOORS OUTER SKIN



NOTES

- A SKIN THICKNESS DOES NOT INCLUDE THE THICKNESS OF THE DOUBLERS, TRIPLERS, OR STRAPS.
- B DAMAGE INCLUDES HOLES, PUNCTURES, NICKS, GOUGES, SCRATCHES, CORROSION AND CRACKS DAMAGE DOES NOT INCLUDE DENTS
- C CABIN PRESSURE LIMITS ARE FOR SKIN DAMAGE IN THE PRESSURIZED FUSELAGE CAVITY ONLY.

Operating Limits for Cargo Doors Outer Skin Figure 101 (Sheet 1 of 2)

ALLOWABLE DAMAGE 2
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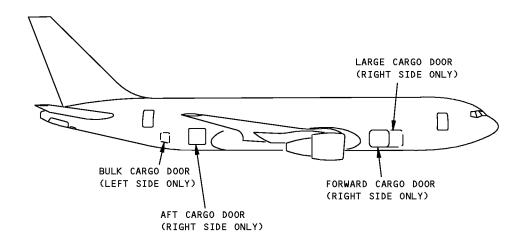
CHART AREA	DAMAGE TREATMENT	ALLOWABLE AIRPLANE OPERATIONS
A	CLEAN UP AS SPECIFIED IN ALLOWABLE DAMAGE 1	NO FLIGHT RESTRICTIONS
В	CLEAN UP AS SPECIFIED IN ALLOWABLE DAMAGE 1 TO DAMAGE DEPTH.	LIMITED TO 50 HOURS OF FLIGHT INCLUDING REVENUE FLIGHTS.
	DO AN APPLICABLE REPAIR AS GIVEN IN SRM 52-30-01.	REFER TO THE APPLICABLE REPAIR FOR THE LIMITS.
С	CLEAN UP AS SPECIFIED IN ALLOWABLE DAMAGE 1 TO DAMAGE DEPTH. STOP DRILL 0.25 INCH (6 mm) DIAMETER HOLES AT THE ENDS OF CRACKS.	A NON-REVENUE FLIGHT TO A REPAIR STATION IS PERMITTED IF THE APPLICABLE REGULATORY AUTHORITY GIVES APPROVAL BEFORE THE FLIGHT. IT IS RECOMMENDED THAT THE PROPOSED REPAIR PROCEDURE BE PROVIDED TO BOEING.
		THE MAXIMUM CABIN PRESSURE DIFFERENTIAL LIMIT C TO 6.0 PSIG UNLESS REPAIRED.
	DO AN APPLICABLE REPAIR AS GIVEN IN SRM 52-30-01.	REFER TO THE APPLICABLE REPAIR FOR THE LIMITS.
D	CLEAN UP AS SPECIFIED IN ALLOWABLE DAMAGE 1 TO DAMAGE DEPTH. STOP DRILL 0.25 INCH (6 mm) DIAMETER HOLES AT THE ENDS OF CRACKS.	A NON-REVENUE FLIGHT TO A REPAIR STATION IS PERMITTED IF THE APPLICABLE REGULATORY AUTHORITY GIVES APPROVAL BEFORE THE FLIGHT. IT IS RECOMMENDED THAT THE PROPOSED REPAIR PROCEDURE BE PROVIDED TO BOEING.
		THE MAXIMUM CABIN PRESSURE DIFFERENTIAL LIMIT C TO 6.0 PSIG UNLESS REPAIRED.
	DO AN APPLICABLE REPAIR AS GIVEN IN SRM 52-30-01.	REFER TO THE APPLICABLE REPAIR FOR THE LIMITS.
E	CLEAN UP AS SPECIFIED IN ALLOWABLE DAMAGE 1 TO DAMAGE DEPTH. STOP DRILL 0.25 INCH (6 mm) DIAMETER HOLES AT THE ENDS OF CRACKS.	A NON-REVENUE FLIGHT TO A REPAIR STATION IS PERMITTED IF THE APPLICABLE REGULATORY AUTHORITY GIVES APPROVAL BEFORE THE FLIGHT. IT IS RECOMMENDED THAT THE PROPOSED REPAIR PROCEDURE BE PROVIDED TO BOEING.
		THE MAXIMUM CABIN PRESSURE DIFFERENTIAL LIMIT C IS NOT MORE THAN ZERO PSIG.
	DO AN APPLICABLE REPAIR AS GIVEN IN SRM 52-30-01.	REFER TO THE APPLICABLE REPAIR FOR THE LIMITS.
F	CLEAN UP AS SPECIFIED IN ALLOWABLE DAMAGE 1 TO DAMAGE DEPTH. STOP DRILL 0.25 INCH (6 mm) DIAMETER HOLES AT THE ENDS OF CRACKS.	OPERATION IS NOT PERMITTED BEFORE BOEING AND APPLICABLE REGULATORY AUTHORITY GIVES APPROVAL.
	DO AN APPLICABLE REPAIR AS GIVEN IN SRM 52-30-01.	REFER TO THE APPLICABLE REPAIR FOR THE LIMITS.

Operating Limits for Cargo Doors Outer Skin Figure 101 (Sheet 2 of 2)

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REPAIR GENERAL - CARGO DOOR OUTER SKIN



NOTES

- FOR TYPICAL FORWARD/AFT/BULK CARGO DOOR OUTER SKIN REPAIRS:
 - REFER TO REPAIR 1 FOR FLUSH SKIN REPAIR BETWEEN BEAMS
 - REFER TO REPAIR 4 FOR SMALL HOLE-FLUSH REPAIR
 - REFER TO REPAIR 5 FOR SMALL HOLE-EXTERNAL REPAIR
 - REFER TO REPAIR 6 FOR EXTERNAL REPAIR
- FOR TYPICAL LARGE CARGO DOOR OUTER SKIN REPAIRS:
 - REFER TO REPAIR 2 FOR FLUSH SKIN REPAIR BETWEEN BEAMS
 - REFER TO REPAIR 4 FOR SMALL HOLE-FLUSH REPAIR
 - REFER TO REPAIR 5 FOR SMALL HOLE-EXTERNAL REPAIR
 - REFER TO REPAIR 6 FOR EXTERNAL REPAIR

89446 S0006822303_V5

Cargo Door Outer Skin Repair References Figure 201

REPAIR GENERAL
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REPAIR 1 - FORWARD / AFT / BULK CARGO DOOR - FLUSH SKIN REPAIR BETWEEN BEAMS

REPAIR INSTRUCTIONS

- Remove the inner skin panel for access if required.
- Clean out the damage to the skin to a rectangular shape with a minimum of 0.50 inch (13 mm) radius at the corners. The cutout should be parallel to the centerline of the adjacent beam.
- 3. Make repair parts 1 and 2.

NOTE: Fwd/Aft/Bulk cargo door outer skin is chem-milled. Fabricate repair parts as required to repair chemmilled pockets

- Assemble repair parts in installed positions and drill fastener holes.
- 5. Remove repair parts.
- Break the sharp edges of the initial and the repair parts 0.015 to 0.030 inch (0.38 to 0.76 mm).
- Remove all nicks, scratches, burrs, sharp edges and corners from initial and repair parts.
- Apply a chemical conversion coating to the repair parts and to the bare surfaces of the door skin. Refer to SRM 51-20-01.
- 9. Apply one coat of BMS 10-11, type 1, primer to all of part 1 and to the edges and inner surface of part 2 as shown in AMM 51-21.
- Install repair parts. Make a faying surface seal with BMS 5-95 sealant as shown in SRM 51-20-05.
- 11. Make a fillet seal around the edge of the repair parts, using the sealant squeezed out during installation. Apply additional sealant where necessary.
- Reinstall inner skin panel if removed for access.
- 13. Restore the surface finish as shown in AMM 51-20.

NOTES

- THIS IS A CATEGORY A REPAIR. THIS REPAIR
 HAS FAA APPROVAL IF YOU DO THE INSPECTIONS
 GIVEN IN THE MAINTENANCE PLANNING DATA
 (MPD). REFER TO SRM 51-00-06 FOR REPAIR
 CATEGORIES AND DEFINITIONS.
- REFER TO THE FOLLOWING WHEN USING THESE REPAIRS:
- AMM 51-21 FOR INTERIOR AND EXTERIOR FINISHES
- SRM 51-10-01 FOR AERODYNAMIC SMOOTHNESS REQUIREMENTS. WHERE THE DAMAGE IS MORE THAN THE LIMITS SHOWN IN SRM 51-10-01, CONSIDERATION SHOULD BE GIVEN TO THE LOSS OF PERFORMANCE INVOLVED
- SRM 51-10-02 FOR INSPECTION AND REMOVAL OF DAMAGE
- SRM 51-20-01 FOR PROTECTIVE TREATMENT OF METAL
- SRM 51-30 FOR SOURCE OF REPAIR MATERIALS
- SRM 51-40 FOR FASTENER CODE, INSTALLATION AND REMOVAL, HOLE SIZES AND EDGE MARGINS
- SRM 51-40-08 FOR COUNTERSINKING AND USE OF COUNTERSINK REPAIR WASHERS.
- A WHERE RIVET SUBSTITUTIONS ARE MADE THE COUNTERSINK DEPTH FOR BACR15FV RIVETS MUST BE MAINTAINED AND THE EXCESS PORTION OF THE SUBSTITUTE RIVET HEAD SHAVED OFF AFTER INSTALLATION AS SHOWN IN SRM 51-10-01

FASTENER SYMBOLS

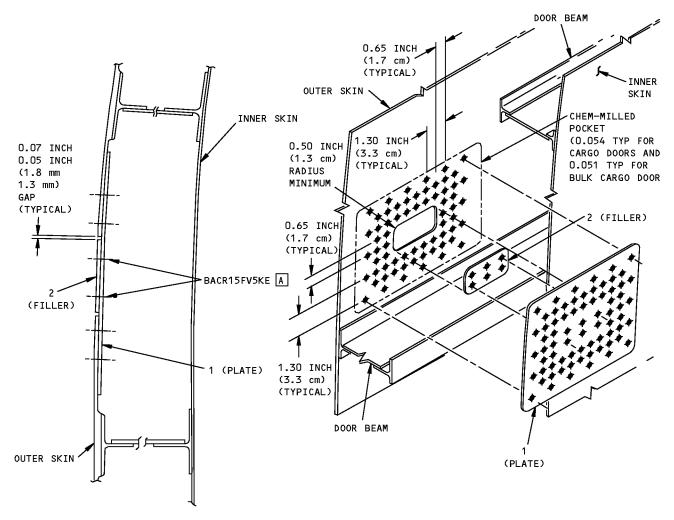
+ REPAIR FASTENER LOCATION

Forward / Aft / Bulk Cargo Door - Flush Skin Repair Between Beams Figure 201 (Sheet 1 of 2)

52-30-01

REPAIR 1 Page 201 Dec 15/2007





SECTION THRU REPAIR

REPAIR MATERIAL						
P.	PART QTY GAGE MATERIAL					
1	PLATE	1	0.063	CLAD 2024-T3		
2 FILLER 1 0.054 CLAD 2024-T3						

TABLE I

Forward / Aft / Bulk Cargo Door - Flush Skin Repair Between Beams Figure 201 (Sheet 2 of 2)

52-30-01

REPAIR 1 Page 202 Dec 15/2007



REPAIR 2 - LARGE CARGO DOOR - FLUSH SKIN REPAIR BETWEEN BEAMS

REPAIR INSTRUCTIONS

- Remove the inner skin panel for access if required.
- Clean out the damage to the skin to a rectangular shape with a minimum of 0.50 inch (13 mm) radius at the corners. The cutout should be parallel to the centerline of the adjacent beam.
- 3. Make repair parts 1 and 2.

NOTE: Door outer skin is chem-milled.
Fabricate repair parts as required
to repair chem-milled pockets

- Assemble repair parts in installed positions and drill fastener holes.
- 5. Remove repair parts.
- Break the sharp edges of the initial and the repair parts 0.015 to 0.030 inch (0.38 to 0.76 mm).
- Remove all nicks, scratches, burrs, sharp edges and corners from initial and repair parts.
- 8. Apply a chemical conversion coating to the repair parts and to the bare surfaces of the door skin. Refer to SRM 51-20-01.
- Apply one coat of BMS 10-11, type 1, primer to all of part 1 and to the edges and inner surface of part 2 as shown in AMM 51-21.
- 10. Install repair parts. Make a faying surface seal with BMS 5-95 sealant as shown in SRM 51-20-05.
- 11. Make a fillet seal around the edge of the repair parts, using the sealant squeezed out during installation. Apply additional sealant where necessary.
- 12. Reinstall inner skin panel if removed for access.
- 13. Restore the surface finish as shown in AMM 51-20.

NOTES

- THIS IS A CATEGORY A REPAIR. THIS REPAIR
 HAS FAA APPROVAL IF YOU DO THE INSPECTIONS
 GIVEN IN THE MAINTENANCE PLANNING DATA
 (MPD). REFER TO SRM 51-00-06 FOR REPAIR
 CATEGORIES AND DEFINITIONS.
- REFER TO THE FOLLOWING WHEN USING THESE REPAIRS:
- AMM 51-21 FOR INTERIOR AND EXTERIOR FINISHES
- SRM 51-10-01 FOR AERODYNAMIC SMOOTHNESS REQUIREMENTS. WHERE THE DAMAGE IS MORE THAN THE LIMITS SHOWN IN SRM 51-10-01, CONSIDERATION SHOULD BE GIVEN TO THE LOSS OF PERFORMANCE INVOLVED
- SRM 51-10-02 FOR INSPECTION AND REMOVAL OF DAMAGE
- SRM 51-20-01 FOR PROTECTIVE TREATMENT OF METAL
- SRM 51-30 FOR SOURCE OF REPAIR MATERIALS
- SRM 51-40 FOR FASTENER CODE, INSTALLATION AND REMOVAL, HOLE SIZES AND EDGE MARGINS
- SRM 51-40-08 FOR COUNTERSINKING AND USE OF COUNTERSINK REPAIR WASHERS.
- WHERE RIVET SUBSTITUTIONS ARE MADE THE COUNTERSINK DEPTH FOR BACR15FV RIVETS MUST BE MAINTAINED AND THE EXCESS PORTION OF THE SUBSTITUTE RIVET HEAD SHAVED OFF AFTER INSTALLATION AS SHOWN IN SRM 51-10-01
- B MATERIAL THICKNESS TO BE ONE GAGE THICKER
 THAN INITIAL SKIN IN CHEM-MILLED POCKETS
- C MATERIAL THICKNESS TO BE THE SAME GAGE AS INITIAL SKIN IN CHEM-MILLED POCKETS

FASTENER SYMBOLS

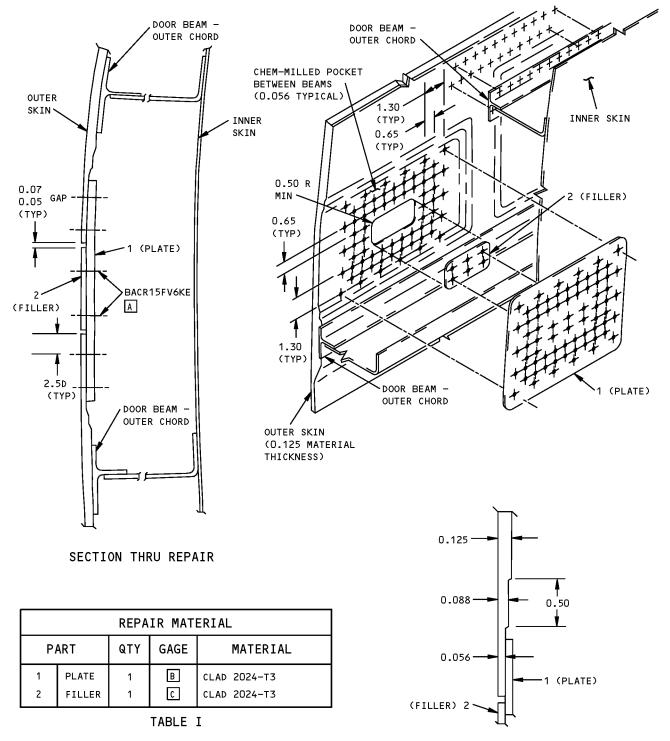
- REPAIR FASTENER LOCATION
- INITIAL FASTENER LOCATION

Large Cargo Door - Flush Skin Repair Between Beams Figure 201 (Sheet 1 of 2)

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REPAIR 2 Page 201 Dec 15/2007





SECTION THRU CHEM-MILLED SKIN (TYPICAL FOR ALL 0.056 CHEM-MILLED POCKETS)

Large Cargo Door - Flush Skin Repair Between Beams Figure 201 (Sheet 2 of 2)

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REPAIR 2 Page 202 Dec 15/2007



REPAIR 3 - DELETED - CARGO DOORS - FLUSH SKIN REPAIR AT BEAM

1. General

A. This repair is obsolete. Do not use after April 15th, 2007.



REPAIR 4 - CARGO DOORS - SMALL HOLE - FLUSH REPAIR

REPAIR INSTRUCTIONS

- Remove the inner skin panel for access if required.
- Clean out the damaged hole to 1-inch diameter maximum. The center of the hole to an edge or cutout must not be less than 1.90 inch (4.8 mm).
- 3. Make the repair parts. See table I.
- Assemble the repair parts and drill the fastener holes.
- 5. Disassemble the repair parts.
- Break sharp edges of the initial and repair parts 0.015 to 0.030 inches (0.38 to 0.76 mm).
- Remove all nicks, scratches, burrs, sharp edges and corners from the initial and repair parts.
- Apply a chemical conversion coating to the repair parts and to the bare surfaces of the door skin. Refer to SRM 51-20-01
- Apply one coat of BMS 10-11, type 1, primer to all of part 2 and to the edges and inner surface of part 1 as shown in AMM 51-21-00.
- 10. Install repair parts with BMS 5-95 sealant between the mating surfaces as shown in SRM 51-20-05.
- 11. Make a fillet seal around the edge of the repair parts, using the sealant squeezed out during installation. Apply additional sealant where necessary.
- Reinstall inner skin panel if removed for access.
- 13. Restore the surface finish as shown in AMM 51-20-00.

NOTES

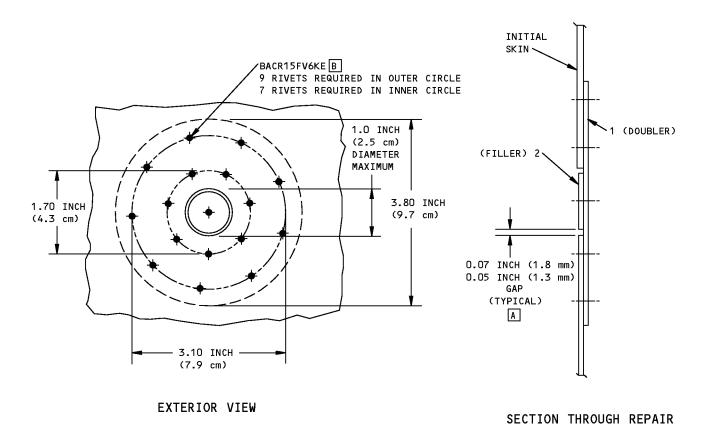
- THIS IS A CATEGORY A REPAIR. THIS REPAIR HAS FAA APPROVAL IF YOU DO THE INSPECTIONS GIVEN IN THE MAINTENANCE PLANNING DATA (MPD. REFER TO SRM 51-00-06 FOR REPAIR CATEGORIES AND DEFINITIONS.
- NOT TO BE USED IN AREAS WITH DOUBLERS AND THE SKIN GAGE MUST BE CONSTANT
- REFER TO SRM 51-40 FOR FASTENER CODE, REMOVAL, INSTALLATION, HOLE SIZES, EDGE MARGINS AND SUBSTITUTIONS
- A SEE SRM 51-10-01 FOR AERODYNAMIC SMOOTHNESS REQUIREMENTS
- B WHERE RIVET SUBSTITUTIONS ARE MADE THE COUNTERSINK DEPTH FOR BACR15FV RIVETS MUST BE MAINTAINED AND THE EXCESS PORTION OF THE SUBSTITUTE RIVET HEAD SHAVED OFF AFTER INSTALLATION AS GIVEN IN SRM 51-10-01
- C REPAIR MATERIAL TO BE ONE GAGE THICKER THAN SKIN IN REPAIR AREA
- D REPAIR MATERIAL TO BE THE SAME GAGE AS SKIN IN REPAIR AREA

SYMBOLS

→ REPAIR FASTENER LOCATION

Cargo Doors - Small Hole - Flush Repair Figure 201 (Sheet 1 of 2)





	REPAIR MATERIAL						
P	PART QTY GAGE MATERIAL						
1	DOUBLER	1	С	CLAD 2024-T3			
2 FILLER 1 D CLAD 2024-T3							

TABLE I

Cargo Doors - Small Hole - Flush Repair Figure 201 (Sheet 2 of 2)

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REPAIR 4 Page 202 Dec 15/2007



REPAIR 5 - CARGO DOORS - SMALL HOLE - EXTERNAL REPAIR

REPAIR INSTRUCTIONS

- Remove the inner skin panel for access if required.
- Clean out the damaged hole to 1.00 inch (25 mm) diameter maximum. The center of the hole to an edge or cutout must not be less than 4D.
- 3. Fabricate repair parts.
- 4. Break sharp edges of initial and repair parts 0.015 to 0.030 inch (0.38 to 0.76 mm).
- Remove all nicks, scratches, burrs, sharp edges and corners from initial and repair parts.
- Apply a chemical conversion coating to the repair part and to the bare surfaces of the door skin. Refer to SRM 51-20-01.
- Apply one coat of BMS 10-11, type 1, primer to all of part 1 and to the edges and inner surface of part 2 as shown in AMM 51-21.
- Install repair parts. Make a faying surface seal with BMS 5-95 sealant as shown in SRM 51-20-05.
- Make a fillet seal around the edge of the repair parts, using the sealant squeezed out during installation. Apply additional sealant where necessary.
- 10. Reinstall inner skin panel if removed for
- 11. Restore the surface finish as shown in AMM 51-21.

NOTES

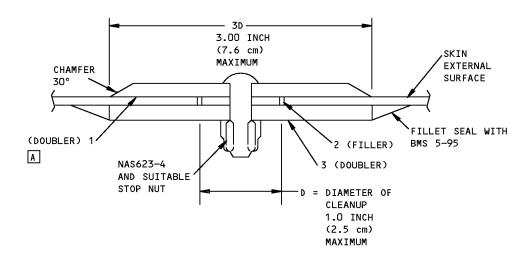
- THIS IS A CATEGORY C REPAIR. THIS REPAIR
 HAS FAA APPROVAL IF YOU DO THE INSPECTIONS
 AT THE SPECIFIED THRESHOLD AND INTERVALS,
 AND REPLACE THE REPAIR AT THE SPECIFIED
 TIME LIMIT AS GIVEN IN TABLE II.
- REFER TO SRM 53-00-01, REPAIR 7 FOR THE METHOD OF USING BRILES RIVET AS A REPAIR WASHER
- REFER TO SRM 51-10-01 FOR THE AERODYNAMIC SMOOTHNESS REQUIREMENTS
- REFER TO SRM 51-40 FOR THE FASTENER CODE, REMOVAL, INSTALLATION, HOLE SIZES, EDGE MARGINS AND SUBSTITUTIONS
- A THIS REPAIR IS NOT TO BE USED IN AREAS WITH DOUBLERS. THE AREA UNDER REPAIR PART 1 MUST NOT HAVE ANY FASTENERS, AND THE SKIN GAGE MUST BE CONSTANT
- B REPAIR MATERIAL TO BE TWICE THE THICKNESS OF SKIN IN REPAIR AREA
- C REPAIR MATERIAL TO BE THE SAME THICKNESS AS SKIN IN REPAIR AREA

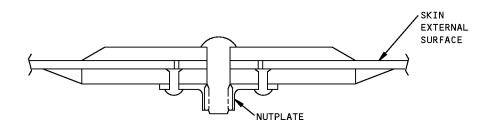
Cargo Doors - Small Hole - External Repair Figure 201 (Sheet 1 of 3)

52-30-01

REPAIR 5 Page 201 Dec 15/2007







OPTIONAL METHOD

REPAIR MATERIAL							
P	PART QTY GAGE MATERIAL						
1	DOUBLER	1	Α	CLAD 2024-T3			
2	FILLER	1	В	CLAD 2024-T3			
3	DOUBLER	1	A	CLAD 2024-T3			

TABLE I

Cargo Doors - Small Hole - External Repair Figure 201 (Sheet 2 of 3)



	CATEGORY C REPAIR REPLACEMENT REC	QUIREMENTS
INSPECTION THRESHOLD	REPEAT INSPECTION	TIME LIMIT
300 FLIGHT CYCLES AFTER REPAIR INSTALLATION	EXTERNAL DETAILED INSPECTION	2500 FLIGHT CYCLES OR AT THE NEXT "C" CHECK

NOTES

- INSPECT THE BOLT, DOUBLER, AND SURROUNDING SKIN.
- RELACE THIS REPAIR WITH A PERMENANT REPAIR IF THERE IS DETERIORATION.

TABLE II

Cargo Doors - Small Hole - External Repair Figure 201 (Sheet 3 of 3)



REPAIR 6 - CARGO DOORS - EXTERNAL SKIN REPAIR AT A BEAM

APPLICABILITY

THIS REPAIR IS APPLICABLE TO THE DAMAGE THAT IS IN THE AREA WHERE THE OUTER SKIN ATTACHES TO THE BEAM.

REPAIR INSTRUCTIONS

- Remove the inner skin panel for access to damage area if it is necessary.
- Cut and remove the damaged part of the door skin. Make a rectangular shape with a minimum of 0.50 inch (12.7 mm) radius at the corners.

NOTE: WHEN CUTTING THE DAMAGED SKIN DO NOT CUT THE ADJACENT BEAMS.

- Do a high frequency eddy current (HFEC) inspection of the repair to make sure all of the damage has been removed. Refer to NDT part 6, 51-00-01.
- 4. Make the repair parts.
- Assemble the repair parts and drill the fastener holes.
- 6. Disassemble the repair parts.
- Break the sharp edges of the initial and repair parts 0.015 inch to 0.030 inch (0.38 mm to 0.76 mm).
- Remove all nicks, scratches, burrs, sharp edges and corners from the initial and repair part.
- Apply a chemical conversion coating to the repair parts and to the bare surfaces of the door skin. Refer to SRM 51-20-01.
- 10. Apply one layer of BMS 10-79, Type II primer to the external surfaces of the repair parts and to the bare external surfaces of the door skin. Refer to SOPM 20-44-04.
- 11. Use countersink repair washers in the initial countersink holes between the doubler and the skin. Refer to SRM 51-40-08.
- 12. Install the repair parts with BMS 5-95 sealant between the mating surfaces. Refer to SRM 51-20-05
- Install the fasteners. Fasteners that are not made of aluminium must be installed wet with BMS 5-95 sealant.
- 14. Form a fillet seal around the edges of the repair parts. Use the sealant that is squeezed out during installation. Apply additional sealant where necessary.
- 15. Install the inner skin panel that was removed in step 1.
- Put back the initial finish. Refer to AMM 51-24.

NOTES

- THIS IS A CATEGORY B REPAIR. THIS REPAIR HAS FAA APPROVAL IF YOU DO THE SUPPLEMENTAL INSPECTIONS GIVEN IN TABLE II AND III AS NECESARY. INCORPORATE THESE INSPECTION REQUIREMENTS INTO THE AIRPLANES MAINTENANCE PROGRAM TO SATISFY THE DAMAGE TOLERANCE ASSESMENT OF THE REPAIR. REFER TO SRM 51-00-06 FOR THE REPAIR CATEGORIES AND DEFINITIONS.
- D = FASTENER DIAMETER
- WHEN YOU USE THIS REPAIR, REFER TO:
 - AMM 51-21 FOR INTERIOR AND EXTERIOR FINISHES
 - SOPM 20-44-04 FOR APPLICATION OF URETHANE COMPATIBLE PRIMERS
 - SRM 51-10-01 FOR AERODYNAMIC SMOOTHNESS REQUIREMENTS
 - SRM 51-20-01 FOR PROTECTIVE TREATMENT OF METALLIC AND GRAPHITE MATERIALS
 - SRM 51-20-05 FOR SEALING PROCEDURES AND ALTERNATE SEALANTS
 - SRM 51-40 FOR FASTENER CODE, INSTALLATION AND REMOVAL, HOLE SIZES, EDGE MARGINS AND SUBSTITUTIONS.
- A WHEN A RIVET SUBSTITUTION IS MADE KEEP THE SAME COUNTERSINK DEPTH AS THE BACR15CE FASTENER. REMOVE THE EXCESS PORTION OF THE RIVET HEAD AFTER INSTALLATION. REFER TO SRM 51-10-01.
- B DO NOT END THE FINAL ROW OF FASTENERS ON A BEAM OR INTERCOSTAL. EXTENED THE DOUBLER BY ONE ROW OF FASTENERS IF IT ENDS ON A BEAM OR INTERCOSTAL.
- IF THE TOTAL NUMBER OF DOOR FLIGHT CYCLES IS NOT KNOWN, START THE REPEAT INSPECTIONS 3,000 FLIGHT CYCLES AFTER THE REPAIR INSTALLATION.

Cargo Doors - External Skin Repair at a Beam Figure 201 (Sheet 1 of 5)

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REPAIR 6 Page 201 Dec 15/2007



FASTENER SYMBOLS

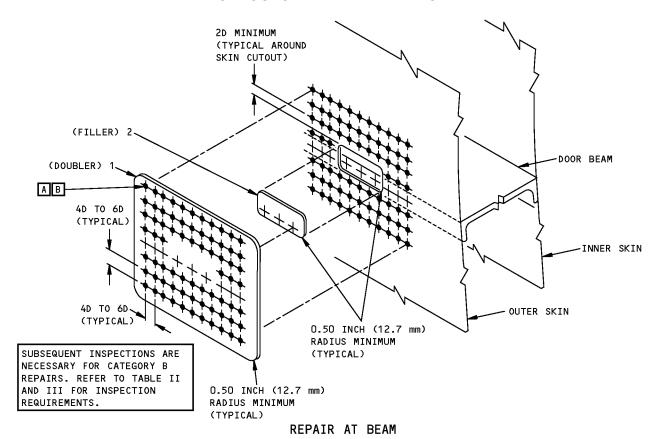
- REPAIR FASTENER LOCATION. INSTALL A BACR15CE5KE().
- + INITIAL FASTENER LOCATION. INSTALL THE SAME SIZE AND TYPE AS THE INITIAL FASTENER. OVERSIZE 1/32 AS REQUIRED.

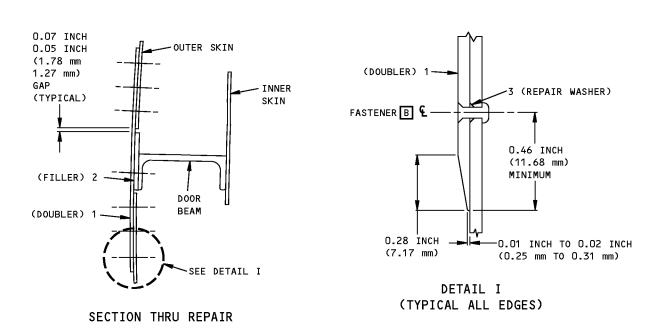
	REPAIR MATERIAL					
	PART	QTY	MATERIAL			
1	DOUBLER	1	SAME MATERIAL AND ONE GAGE THICKER THAN THE INITIAL SKIN			
2	FILLER	1	USE THE SAME MATERIAL AND THICKNESS AS THE INITIAL SKIN			
3	REPAIR WASHER	AS REQD	2024-T3 OR 2024-T4			

TABLE I

Cargo Doors - External Skin Repair at a Beam Figure 201 (Sheet 2 of 5)





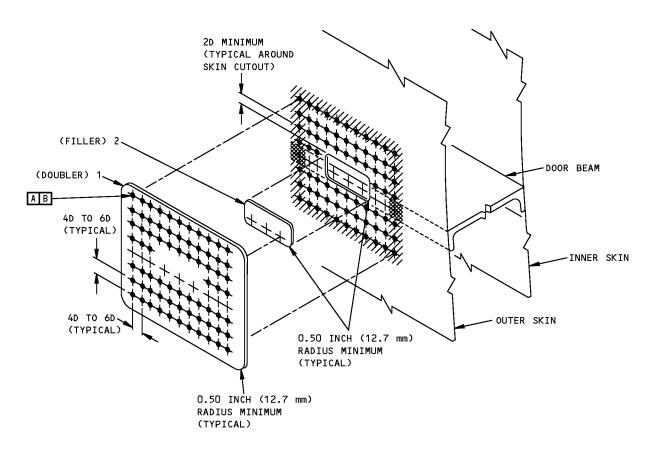


Cargo Doors - External Skin Repair at a Beam Figure 201 (Sheet 3 of 5)

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SKIN INSPECTION AREA

DETAIL II

Cargo Doors - External Skin Repair at a Beam Figure 201 (Sheet 4 of 5)

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CATEGORY	B REPAIR INSPECTION REQUIREMEN	TS FOR FWD/AFT AND	BULK CARGO DOORS
INSPECTION	REPEA	T INSPECTION	
THRESHOLD	METHOD	INTERVAL	REFERENCE
30,000 DOOR FLIGHT CYCLES AFTER AIRPLANE DELIVERY	LOW FREQUENCY EDDY CURRENT (LFEC)	3000 FLIGHT CYCLES	NDT PART 6, 53-00-06

NOTE: USE LFEC TO INSPECT THE SKIN AND CHORD EXTERNALLY THROUGH THE REPAIR DOUBLER. REFER TO DETAIL II FOR THE INSPECTION AREAS.

TABLE II

CATEGORY B REPAIR INSPECTION REQUIREMENTS FOR LARGE CARGO DOOR AND MAIN DECK CARO DOOR								
INSPECTION	REPE A	T INSPECTION						
THRESHOLD	METHOD	INTERVAL	REFERENCE					
30,000 DOOR FLIGHT CYCLES AFTER	LOW FREQUENCY EDDY CURRENT (LFEC)	3000 FLIGHT CYCLES	NDT PART 6, 53-00-06					
AIRPLANE DELIVERY C	INTERNAL DETAILED INSPECTION	6000 FLIGHT CYCLES						

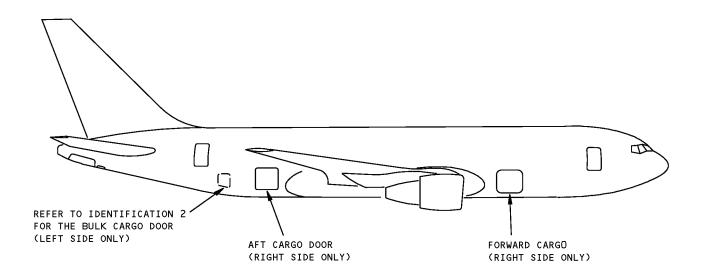
NOTE: USE LFEC TO INSPECT THE SKIN AND CHORD EXTERNALLY THROUGH THE REPAIR DOUBLER. REFER TO DETAIL II FOR THE INSPECTION AREAS.

TABLE III

Cargo Doors - External Skin Repair at a Beam Figure 201 (Sheet 5 of 5)



IDENTIFICATION 1 - FORWARD / AFT CARGO DOOR STRUCTURE



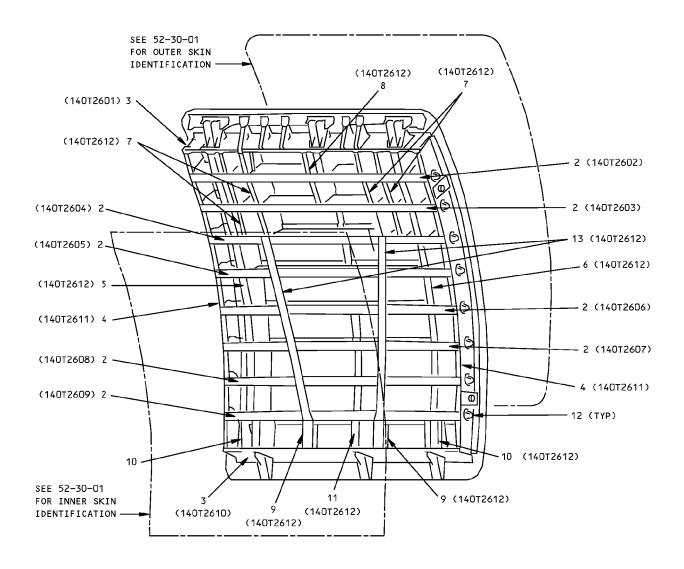
Forward / Aft Cargo Door Structure Identification Figure 1 (Sheet 1 of 3)

> **IDENTIFICATION 1** 52-30-02 Apr 01/2005

Page 1



REF DWG 140T2600



DETAIL I



Forward / Aft Cargo Door Structure Identification Figure 1 (Sheet 2 of 3)

IDENTIFICATION 1

52-30-02

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ITEM	DESCRIPTION	GAGE	MATERIAL	EFFECTIVITY
1	BEAM OUTER CHORD INNER CHORD WEB	0.063	BAC1505-2451 7075-T6511 BAC1514-2451 7075-T6511 CLAD 7075-T6	
2	BEAM OUTER CHORD INNER CHORD WEB	0.063	BAC1505-101147 7075-T3511 BAC1505-101148 7075-T6511 CLAD 7075-T6	
3	BEAM OUTER CHORD INNER CHORD WEB	0.063	BAC1505-101147 2024-T3511 BAC1514-2451 7075-T6511 CLAD 7075-T6	
4	SIDE FRAME WEB AND ANGLE	0.080	CLAD 7075-T62	
5	INTERCOSTAL WEB TEE	0.050	CLAD 7075-T62 AND10136-2001 2024-T42	
6	INTERCOSTAL WEB WEB TEE	0.050 0.056	CLAD 7075-T62 CLAD 7075-T62 AND10136-2001 2024-T42	
7	INTERCOSTAL WEB TEE	0.050	CLAD 7075-T62 AND10136-2001 2024-T42	
8	INTERCOSTAL WEB TEE TEE	0.056	CLAD 7075-T62 AND10136-2001 2024-T42 AND10136-2001 7075-T6511	
9	INTERCOSTAL		AND10136-2001 2024-T42	
10	INTERCOSTAL WEB	0.080	CLAD 7075-T62	
11	INTERCOSTAL WEB TEE TEE	0.056	CLAD 7075-T62 AND10136-2001 2024-T42 AND10136-2001 7075-T6511	
12	DOOR STOP		FORGING 7075-T73	
13	TENSION STRAP TEE TEE		AND10136-2001 7075-T6511 BAC1505-100274 7075-T6511	

LIST OF MATERIALS FOR DETAIL I

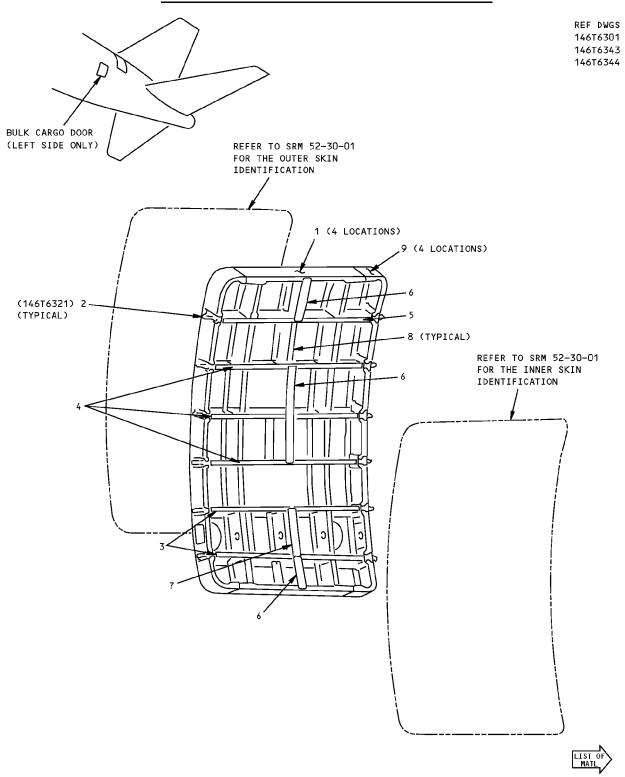
Forward / Aft Cargo Door Structure Identification Figure 1 (Sheet 3 of 3)

1DENTIFICATION 1 Page 3 Apr 01/2005

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IDENTIFICATION 2 - BULK CARGO DOOR STRUCTURE



Bulk Cargo Door Structure Identification Figure 1 (Sheet 1 of 2)

IDENTIFICATION 2



ITEM	DESCRIPTION	GAGE	MATERIAL	EFFECTIVITY
1	FRAME	0.063	CLAD 7075-T62	
2	DOOR STOP		7075-T73 FORGING	
3	BEAM WEB OUTER CHORD INNER CHORD	0.050	CLAD 7075-T6 BAC1505-100274 2024-T42 BAC1505-100274 7075-T62	
4	BEAM WEB OUTER CHORD INNER CHORD	0.050	CLAD 7075-T6 BAC1505-100274 2024-T42 BAC1505-100274 7075-T6511	
5	BEAM WEB OUTER CHORD INNER CHORD	0.056	CLAD 7075-T6 BAC1505-100274 2024-T42 BAC1505-100274 7075-T62 BAC1505-18721 7075-T62	
6	CHORD		BAC1505-100274 7075-T62	
7	CHORD			
8	INTERCOSTAL WEB CHORD	0.063	CLAD 7075-T62 BAC1505-100274 2024-T42	
9	CORNER	0.063	7075–T62	

Bulk Cargo Door Structure Identification Figure 1 (Sheet 2 of 2)

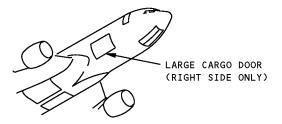
52-30-02

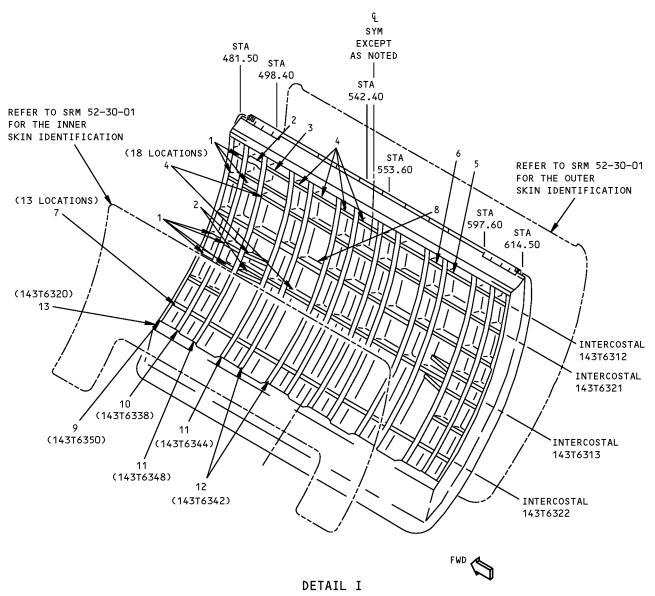
Page 2
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IDENTIFICATION 3 - LARGE CARGO DOOR STRUCTURE

REFERENCE DRAWING 143T6309





LIST OF MATL

Apr 01/2005

Large Cargo Door Structure Identification Figure 1 (Sheet 1 of 4)

IDENTIFICATION 3
Page 1



ITEM	DESCRIPTION	GAGE	MATERIAL	EFFECTIVITY
1	INTERCOSTAL OUTER CHORD WEB	0.063	AND10136-2004 7075-T6511 CLAD 7075-T62	
2	INTERCOSTAL OUTER CHANNEL WEB INNER CHORD	0.100 0.040	CLAD 7075-T62 CLAD 7075-T62 AND10136-2407 7075-T6511	
3	INTERCOSTAL OUTER CHORD WEB INNER CHORD	0.040	AND10136-2407 7075-T6511 CLAD 7075-T6 AND10134-1205 7075-T6511	
4	INTERCOSTAL OUTER CHORD WEB	0.040	AND10136-2004 7075-T6511 CLAD 7075-T62	
5	INTERCOSTAL OUTER CHORD WEB INNER CHORD	0.040	AND10136-2004 7075-T6511 CLAD 7075-T6 AND10134-1205 7075-T6511	
6	INTERCOSTAL OUTER CHORD WEB	0.063	AND10136-2004 7075-T6511 CLAD 7075-T62	
7	INTERCOSTAL OUTER CHORD WEB	0.050	AND10136-2004 7075-T6511 CLAD 7075-T62	
8	INTERCOSTAL OUTER TEE WEB	0.040	BAC1506-1922 2024-T3511 CLAD 7075-T62	
9	FRAME OUTER CHORD ANGLE WEB INNER ANGLE	0.050	BAC1505-101109 2024-T3511 OR 2024-T42 BAC1490-2735 CLAD 7075-T62 CLAD 7075-T62 BAC1490-2739 CLAD 7075-T62	
10	FRAME OUTER CHORD ANGLE WEB INNER CHORD	0.063	BAC1505-101109 2024-T3511 OR 2024-T42 BAC1490-2773 7075-T62 CLAD 7075-T6 BAC1505-101273 7075-T6511 OR BAC1505-101120 7075-T6511	
11	FRAME OUTER CHORD ANGLE WEB INNER CHORD	0.063	BAC1505-101109 2024-T3511 OR 2024-T42 BAC1490-2773 CLAD 7075-T62 CLAD 7075-T6 BAC1505-100438 7075-T6511	
12	FRAME OUTER CHORD ANGLE WEB INNER CHORD	0.063	BAC1505-101109 2024-T3511 OR 2024-T42 BAC1490-63 7075-T62 CLAD 7075-T6 BAC1505-100438 7075-T6511	
13	LOWER BEAM BEAM ANGLE	0.125	CLAD 7075-T62 AND10133-1001 7075-T6511	

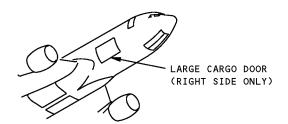
LIST OF MATERIALS FOR DETAIL I

Large Cargo Door Structure Identification Figure 1 (Sheet 2 of 4)

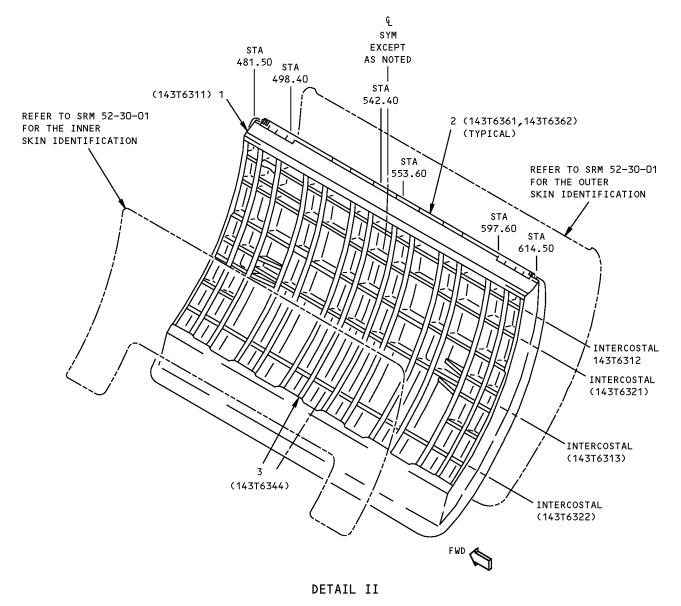
52-30-02

Page 2
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REFERENCE DRAWING 143T6309



LIST OF MATL

Large Cargo Door Structure Identification Figure 1 (Sheet 3 of 4)

IDENTIFICATION 3

52-30-02

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ITEM	DESCRIPTION	GAGE	MATERIAL	EFFECTIVITY
1	UPPER BEAM OUTER CHORD WEB INNER CHORD SEAL ANGLE	0.063	BAC1514-2579 2024-T3511 7075-T6 BAC1514-2584 7075-T6511 BAC1489-119 7075-T62	
2	HINGE HALF		FORGING OR BAR 15-5PH CRES HT TR 180-200 KSI	
3	FRAME WEB ANGLE OUTER CHORD INNER CHORD	0.063	CLAD 7075-T6 BAC1490-2815 7075-T62 BAC1505-100370 2024-T3511 (OPTIONAL: T42) BAC1505-100438 7075-T6511	

LIST OF MATERIALS FOR DETAIL II

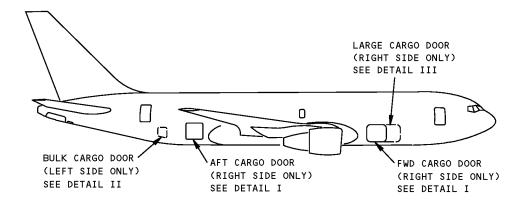
Large Cargo Door Structure Identification Figure 1 (Sheet 4 of 4)

52-30-02

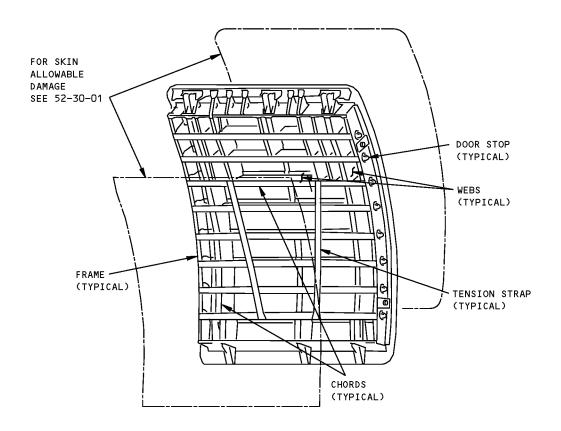
Page 4
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ALLOWABLE DAMAGE 1 - CARGO DOORS STRUCTURE



REF DWG 140T2600



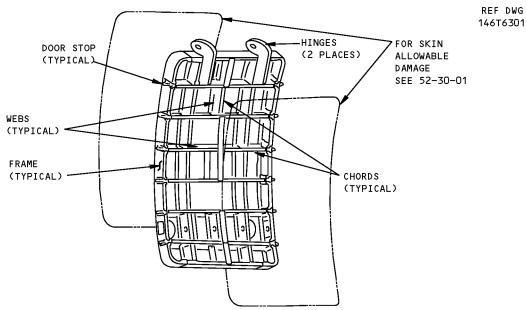
FORWARD/AFT CARGO DOOR DETAIL I

MATERIAL: ALUMINUM

Cargo Doors Structure Allowable Damage Figure 101 (Sheet 1 of 5)

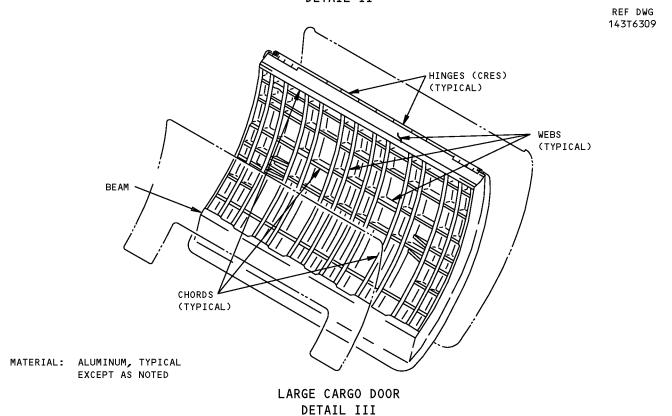
ALLOWABLE DAMAGE 1
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MATERIAL: ALUMINUM

BULK CARGO DOOR DETAIL II



Cargo Doors Structure Allowable Damage Figure 101 (Sheet 2 of 5)

ALLOWABLE DAMAGE 1
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Apr 01/2005



DESCRIPTION	CRACKS	NICKS, GOUGES AND CORROSION	DENTS	HOLES AND PUNCTURES
CHORD	А	F	NOT ALLOWED	HOLES ALLOWED IN FREE FLANGE ONLY
FRAME	В	G	SEE DETAIL VI	K
BEAM	В	G	SEE DETAIL VI	K
WEB	С	H	SEE DETAIL VI	K
TENSION STRAP	А	F	NOT ALLOWED	K
DOOR STOP	D	I	NOT ALLOWED	NOT ALLOWED
HINGE	E	J	NOT ALLOWED	NOT ALLOWED

NOTES

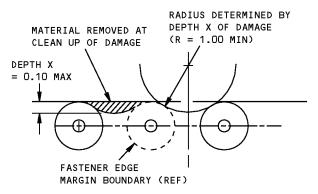
- REFINISH REWORKED AREAS PER 51-20 OF THE MAINTENANCE MANUAL
- A CRACKS NOT ALLOWED EXCEPT FOR EDGE CRACKS
 WHICH MUST BE REMOVED PER DETAILS IV AND X
- B CRACKS NOT ALLOWED EXCEPT FOR EDGE CRACKS
 WHICH MUST BE REMOVED PER DETAILS IV AND IX
- C CRACKS NOT ALLOWED EXCEPT FOR EDGE CRACKS
 WHICH MUST BE REMOVED PER DETAILS IV AND
 VIII
- D CRACKS NOT ALLOWED EXCEPT FOR EDGE CRACKS WHICH MUST BE REMOVED PER DETAILS IV AND X. EXCEPTION NOT ALLOWED ON OUTBOARD EDGES OF STOP OVERHANGS WITHOUT BOEING APPROVAL. SHOT PEEN REWORKED AREA PER 20-10-03 OF THE COMPONENT MAINTENANCE MANUAL WITH SHOT NO. 230-550, INTENSITY .006A
- E CRACKS NOT ALLOWED EXCEPT FOR EDGE CRACKS WHICH MUST BE REMOVED PER DETAILS IV AND X. SHOT PEEN REWORKED AREA PER 20-10-03 OF THE COMPONENT MAINTENANCE MANUAL WITH SHOT NO. 170-460, INTENSITY .012A
- F REMOVE DAMAGE PER DETAILS IV, V, VII AND X
- G REMOVE DAMAGE PER DETAILS IV, V, VII AND IX
- H REMOVE DAMAGE PER DETAILS IV, V, VII AND VIII

- FOR EDGE DAMAGE SEE DETAILS IV AND X. FOR LUG DAMAGE, SEE DETAIL XI. FOR OTHER DAMAGE, SEE DETAIL V. EXCEPTION NOT ALLOWED ON OUTBOARD EDGES OF STOP OVERHANGS WITHOUT BOEING APPROVAL. DAMAGE NOT ALLOWED IN VICINITY OF BUSHINGS. SHOT PEEN REWORKED AREA PER 20-10-03 OF THE COMPONENT MAINTENANCE MANUAL WITH SHOT NO. 230-550, INTENSITY .0064
- J FOR EDGE DAMAGE SEE DETAILS IV AND X. FOR LUG DAMAGE, SEE DETAIL XI. FOR OTHER DAMAGE, SEE DETAIL V. DAMAGE NOT ALLOWED IN VICINITY OF BUSHINGS. SHOT PEEN REWORKED AREA PER 20-10-03 OF THE COMPONENT MAINTENANCE MANUAL WITH SHOT NO. 170-460, INTENSITY .012A
- K CLEAN OUT DAMAGE UP TO 0.25 MAX DIA AND NOT CLOSER THAN 1.0 INCH TO FASTENER HOLE, MATERIAL EDGE, OR OTHER DAMAGE. FILL HOLE WITH 2117-T3 OR T4 ALUMINUM RIVET INSTALLED WET WITH BMS 5-95 SEALANT. ALL OTHER HOLES TO BE REPAIRED
- SHOT PEEN INTENSITIES SHOWN FOR MANUFACTURED COMPONENTS. SEE 51-20-06 FOR SHOT PEEN INTENSITIES REQUIRED DUE TO THICKNESS REDUCTION RESULTING FROM REWORK.

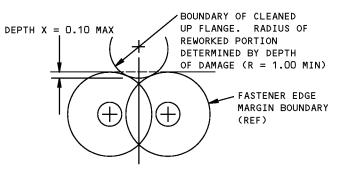
Cargo Doors Structure Allowable Damage Figure 101 (Sheet 3 of 5)

ALLOWABLE DAMAGE 1
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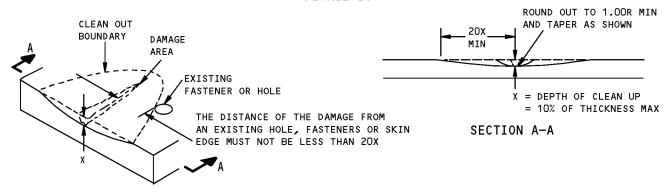


DAMAGE CLEAN UP OF EDGES WHERE FASTENER EDGE MARGINS DO NOT OVERLAP

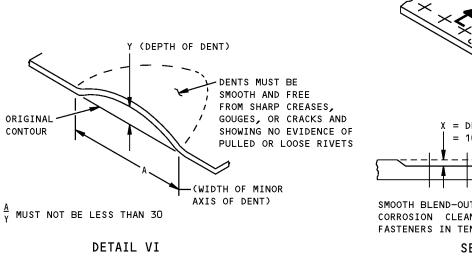


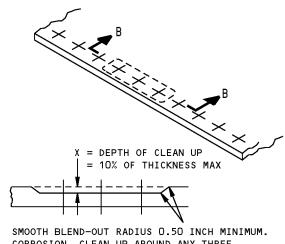
DAMAGE CLEAN UP OF EDGES WHERE FASTENER EDGE MARGINS OVERLAP

DETAIL IV



REMOVAL OF NICK, GOUGE AND SCRATCH DAMAGE ON A SURFACE DETAIL V





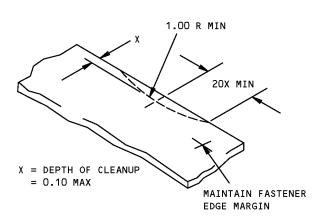
CORROSION CLEAN UP AROUND ANY THREE FASTENERS IN TEN IS PERMITTED TO MAX DEPTH

> SECTION B-B DETAIL VII

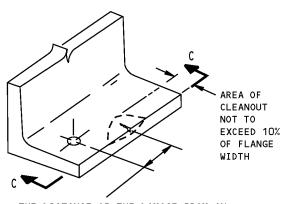
Cargo Doors Structure Allowable Damage Figure 101 (Sheet 4 of 5)

> ALLOWABLE DAMAGE 1 Page 104 **52-30-02** Apr 01/2005



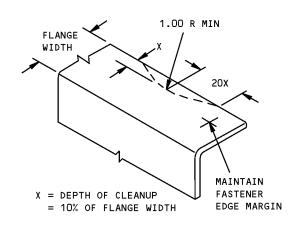


REMOVAL OF NICK OR CRACK DAMAGE ON AN EDGE DETAIL VIII

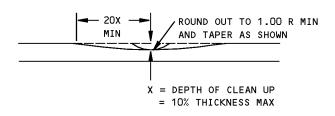


THE DISTANCE OF THE DAMAGE FROM AN EXISTING HOLE, FASTENERS OR EDGE MUST NOT BE LESS THAN 20X

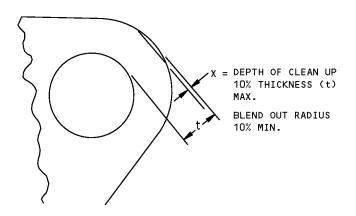
REMOVAL OF NICK OR CRACK DAMAGE ON AN EDGE DETAIL X



REMOVAL OF NICK OR CRACK DAMAGE ON AN EDGE DETAIL IX



SECTION C-C



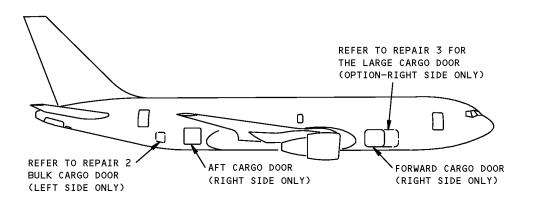
DAMAGE CLEAN UP FOR EDGES OF LUG
DETAIL XI

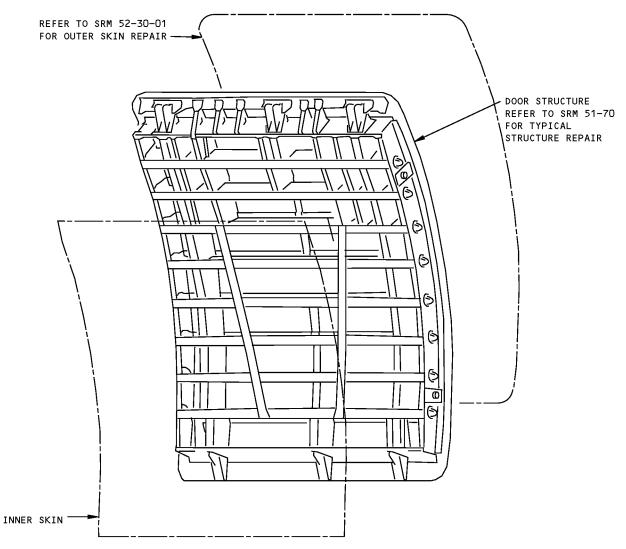
Cargo Doors Structure Allowable Damage Figure 101 (Sheet 5 of 5)

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REPAIR 1 - FORWARD / AFT CARGO DOOR STRUCTURE





Forward / Aft Cargo Door Structure Repair Figure 201

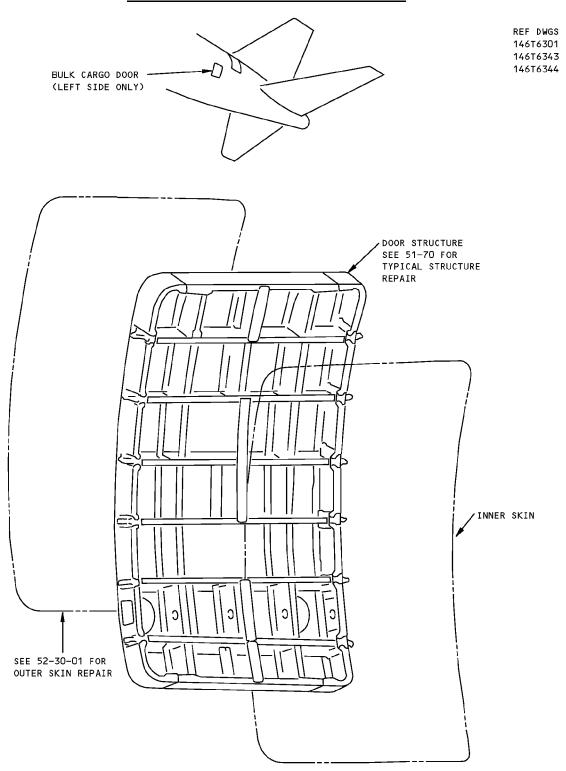
52-30-02

REPAIR 1 Page 201 Apr 01/2005

REF DWG 140T2600



REPAIR 2 - BULK CARGO DOOR STRUCTURE



Bulk Cargo Door Structure Repair Figure 201

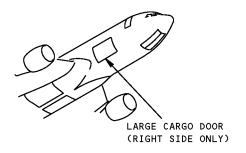
52-30-02

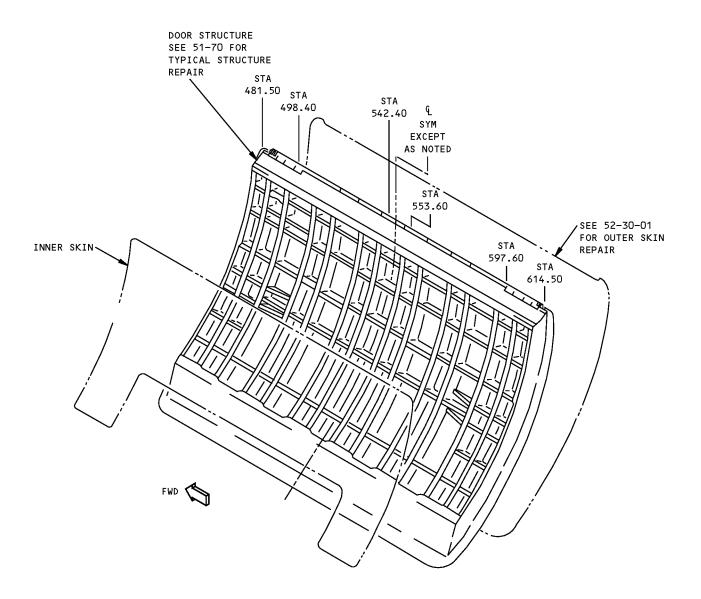
REPAIR 2 Page 201 Apr 01/2005



REPAIR 3 - LARGE CARGO DOOR STRUCTURE

REF DWG 143T6309





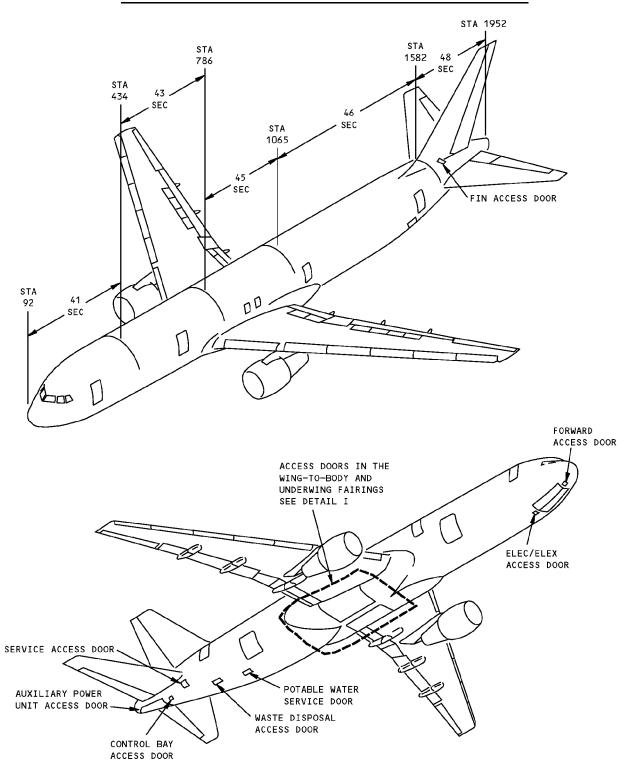
Large Cargo Door Structure Repair Figure 201

52-30-02

REPAIR 3 Page 201 Apr 01/2005



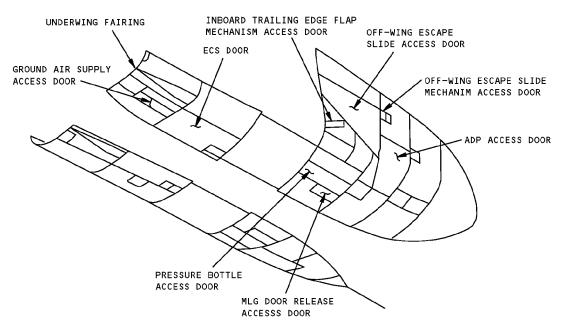
IDENTIFICATION GENERAL - SERVICE DOOR LOCATION DIAGRAM



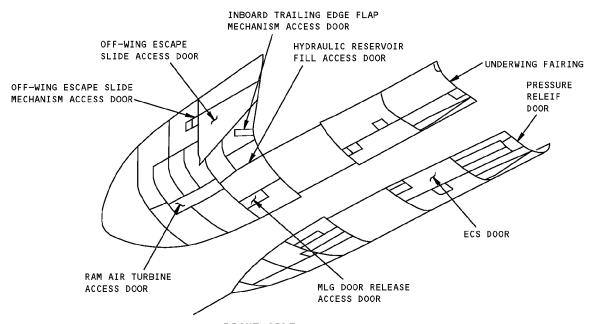
Service Door Location Diagram Figure 1 (Sheet 1 of 2)

IDENTIFICATION GENERAL Page 1 Apr 01/2005





LEFT SIDE
SECTION 46 WING-TO-BODY FAIRING AND UNDERWING FAIRING



RIGHT SIDE
SECTION 46 WING-TO-BODY FAIRING AND UNDERWING FAIRING

DETAIL I

Service Door Location Diagram Figure 1 (Sheet 2 of 2)

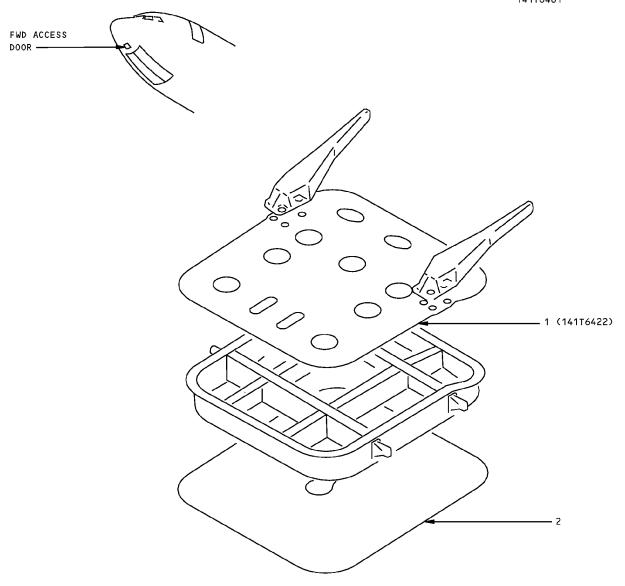
IDENTIFICATION GENERAL Page 2 Apr 01/2005

D634T210



IDENTIFICATION 1 - FORWARD ACCESS DOOR SKIN

REFERENCE DRAWING 141T6401



ITEM	DESCRIPTION	GAGE	MATERIAL	EFFECTIVITY
1	INNER SKIN	0.032	CLAD 2024-T42	
2	OUTER SKIN	0.050	CLAD 2024-T3	

LIST OF MATERIALS

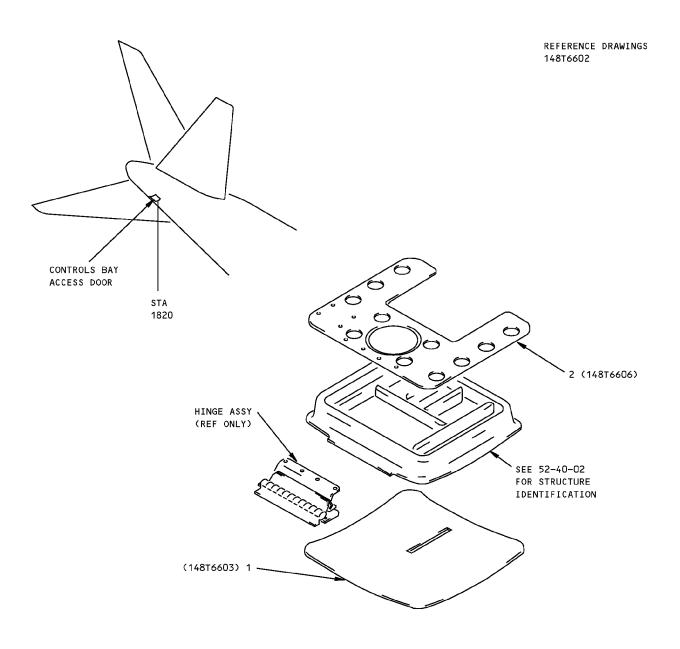
Forward Access Door Skin Identification Figure 1

52-40-01

IDENTIFICATION 1
Page 1
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IDENTIFICATION 2 - CONTROLS BAY ACCESS DOOR SKIN



ITEM	DESCRIPTION	GAGE	MATERIAL	EFFECTIVITY
1	OUTER SKIN	0.056	CLAD 7075-T6	
2	INNER SKIN	0.025	CLAD 7075-T6	

LIST OF MATERIALS

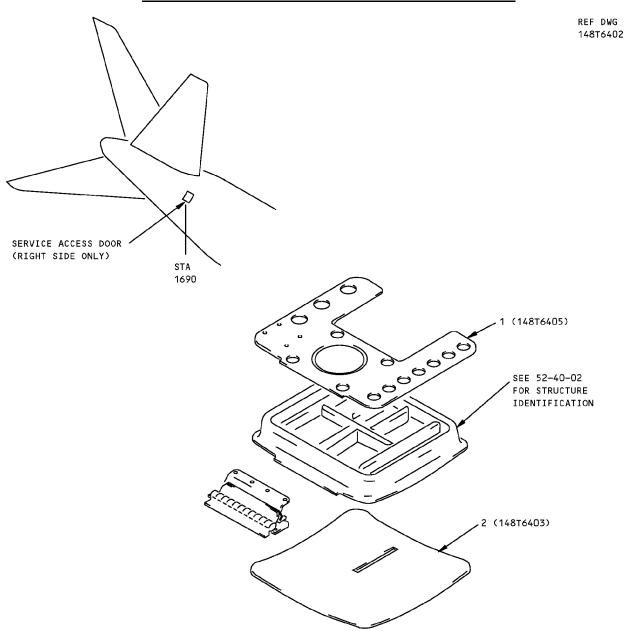
Controls Bay Access Door Skin Identification Figure 1

> **IDENTIFICATION 2** 52-40-01 Apr 01/2005

Page 1



IDENTIFICATION 3 - SERVICE ACCESS DOOR SKIN- STA 1690



ITEM	DESCRIPTION	GAGE	MATERIAL	EFFECTIVITY
1	INNER SKIN	0.025	CLAD 7075-T6	
2	OUTER SKIN	0.063	CLAD 7075-T6	

LIST OF MATERIALS

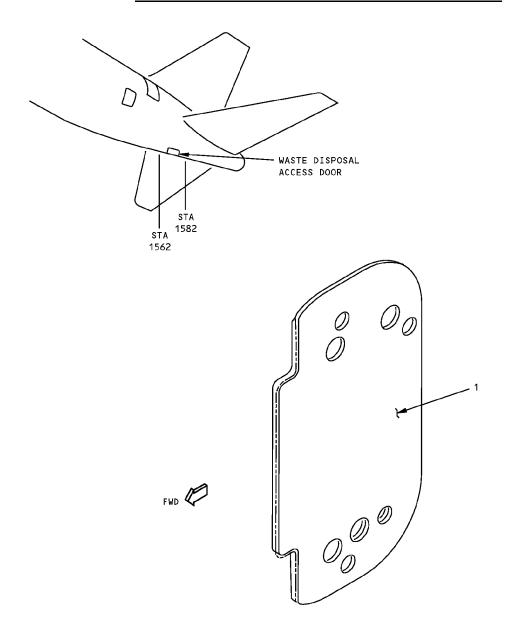
Service Access Door Skin Identification - Sta 1690 Figure 1

> **IDENTIFICATION 3** 52-40-01



IDENTIFICATION 4 - WASTE DISPOSAL ACCESS DOOR SKIN

REF DWG 146T3249



ITEM	DESCRIPTION	GAGE	MATERIAL	EFFECTIVITY
1	DOOR	0.140	CLAD 2024-T3 (CHEM-MILLED TO 0.063 MIN)	

LIST OF MATERIALS

Waste Disposal Access Door Skin Identification Figure 1

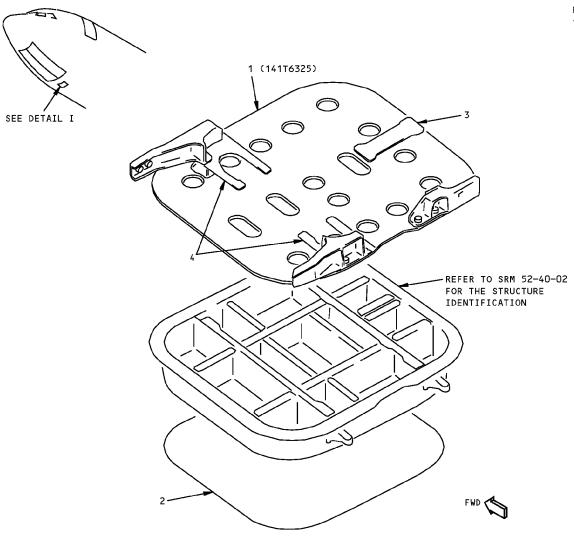
> **IDENTIFICATION 4** 52-40-01

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IDENTIFICATION 5 - ELEC/ELEX ACCESS DOOR SKIN

REF DWG 141T6301



DETAIL I

ITEM	DESCRIPTION	GAGE	MATERIAL	EFFECTIVITY
1	INNER SKIN	0.032	CLAD 2024-T3	
2	OUTER SKIN	0.050	CLAD 2024-T3	
3	SPACER	0.080	CLAD 2024-T3	
4	SPACER	0.050	CLAD 2024-T3	

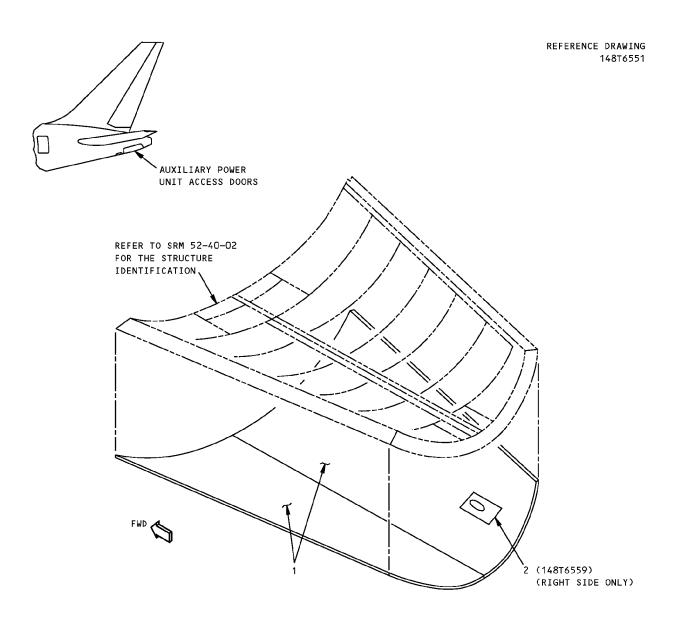
LIST OF MATERIALS

Elec/Elex Access Door Skin Identification Figure 1

IDENTIFICATION 5 Page 1 Apr 01/2005



IDENTIFICATION 6 - AUXILIARY POWER UNIT ACCESS DOOR SKIN



ITEM	DESCRIPTION	GAGE	MATERIAL	EFFECTIVITY
1	BONDED SKIN PANEL ASSEMBLY	0.016 (EACH PLY)	TWO-PLY CLAD 2024-T3 LAMINATION AS GIVEN IN BMS 5-69, TYPE I, CLASS 3, GRADE B	
2	DOUBLER	0.040	CLAD 7075-T62	

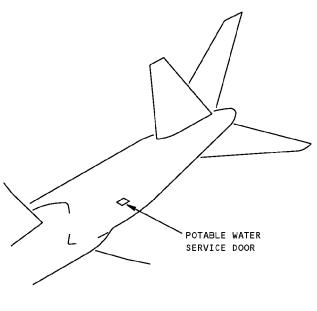
LIST OF MATERIALS

Auxiliary Power Unit Access Door Skin Identification Figure 1

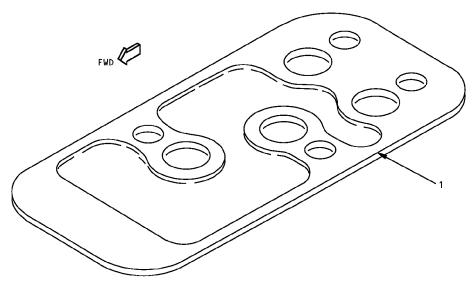
> **IDENTIFICATION 6** 52-40-01



IDENTIFICATION 7 - POTABLE WATER SERVICE DOOR SKIN



REF DWG 146T3256



ITEM	DESCRIPTION	GAGE	MATERIAL	EFFECTIVITY
1	DOOR	0.140	CLAD 2024-T3 (CHEM-MILLED OR MACHINE MILLED TO 0.063 MIN)	

LIST OF MATERIALS

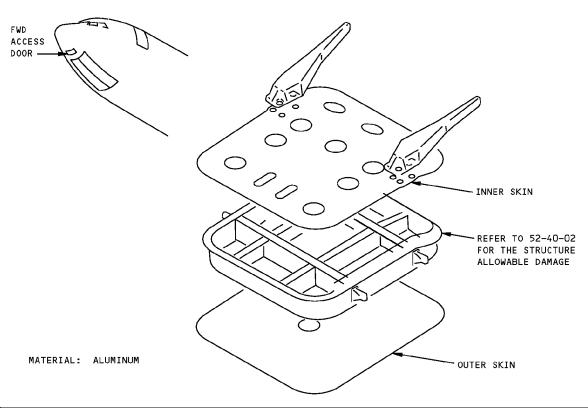
Potable Water Service Door Skin Identification Figure 1

52-40-01

IDENTIFICATION 7
Page 1
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ALLOWABLE DAMAGE 1 - FORWARD ACCESS DOOR



ITEM	CRACKS	NICKS, GOUGES AND CORROSION	DENTS	HOLES AND PUNCTURES
OUTER SKIN A	В	D	SEE DETAIL IV	E
INNER SKIN	C	G	SEE DETAIL IV	F

NOTES

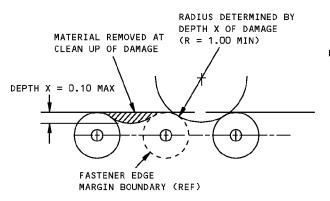
- REFINISH REWORK AREAS PER AMM 51-20.
- Α REFER TO SRM 51-10-01 FOR THE AERODYNAMIC SMOOTHNESS REQUIREMENTS. WHERE THE DAMAGE EXCEEDS THE LIMITS SHOWN IN SRM 51-10-01, CONSIDERATION SHOULD BE GIVEN TO THE LOSS OF PERFORMANCE INVOLVED
- B | CRACKS NOT ALLOWED EXCEPT FOR EDGE CRACKS WHICH MUST BE REMOVED PER DETAILS I AND III
- CRACKS WITHIN THE LIMITS SHOWN IN DETAIL VI ARE ALLOWED. REMOVE EDGE CRACKS PER DETAILS I AND III AND FLANGED HOLE EDGE CRACKS PER DETAIL VII
- D REMOVE DAMAGE PER DETAILS I, II, III AND V

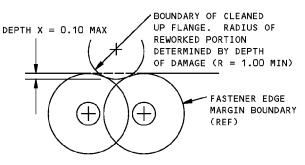
- E | CLEAN OUT DAMAGE UP TO 0.25 MAXIMUM DIAMETER AND NOT CLOSER THAN 1.0 INCH TO FASTENER HOLE, MATERIAL EDGE, OR OTHER DAMAGE. FILL HOLE WITH 2117-T3 OR T4 ALUMINUM RIVET INSTALLED WET WITH BMS 5-95 SEALANT. ALL OTHER HOLES TO BE REPAIRED
- | F | CLEAN OUT DAMAGE UP TO 0.25 MAXIMUM DIAMETER AND NOT CLOSER THAN 1.0 INCH TO FASTENER HOLE, MATERIAL EDGE, OR OTHER DAMAGE
- REMOVE DAMAGE PER DETAILS I, II, III, AND V. CORROSION MAY BE DRILLED OUT UP TO 0.5 MAXIMUM DIAMETER PROVIDED FASTENER EDGE MARGINS ARE MAINTAINED
- Н 1.50 MINIMUM TO EDGE OF EXISTING FASTENER HOLE, TO EDGE OF FLANGED HOLE, OR TO EDGE OF CUTOUT

Forward Access Door Allowable Damage Figure 101 (Sheet 1 of 3)

> ALLOWABLE DAMAGE 1 Page 101 Apr 01/2005



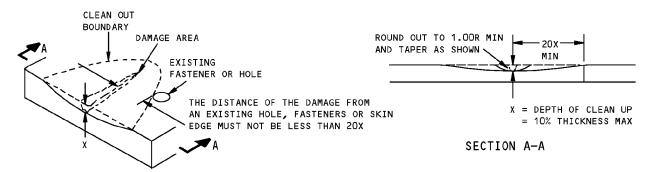




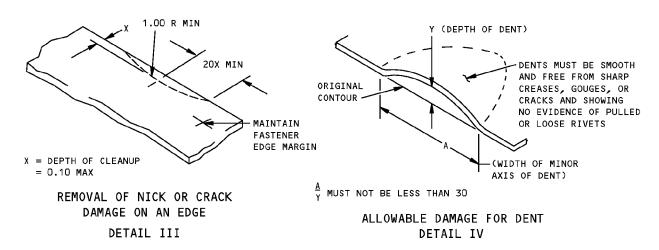
DAMAGE CLEAN UP OF EDGES WHERE FASTENER EDGE MARGINS DO NOT OVERLAP

DAMAGE CLEAN UP OF EDGES WHERE FASTENER EDGE MARGINS OVERLAP

DETAIL I



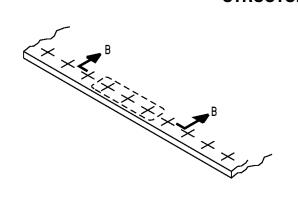
REMOVAL OF NICK, GOUGE AND SCRATCH DAMAGE ON A SURFACE DETAIL II

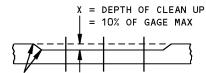


Forward Access Door Allowable Damage Figure 101 (Sheet 2 of 3)

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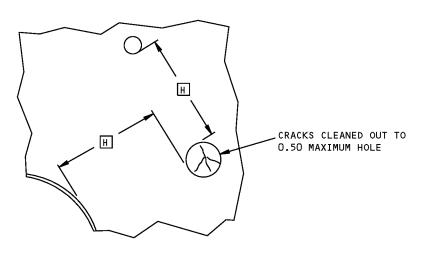




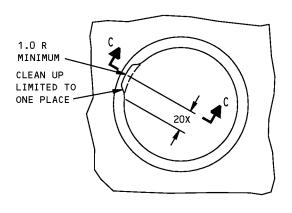
SMOOTH BLEND-OUT RADIUS 0.50 INCH MINIMUM. CORROSION CLEAN UP AROUND ANY THREE FASTENERS IN TEN IS PERMITTED TO MAX DEPTH

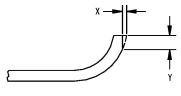
SECTION B-B

CORROSION CLEANUP DETAIL V



SURFACE CRACKS
DETAIL VI





SECTION C-C

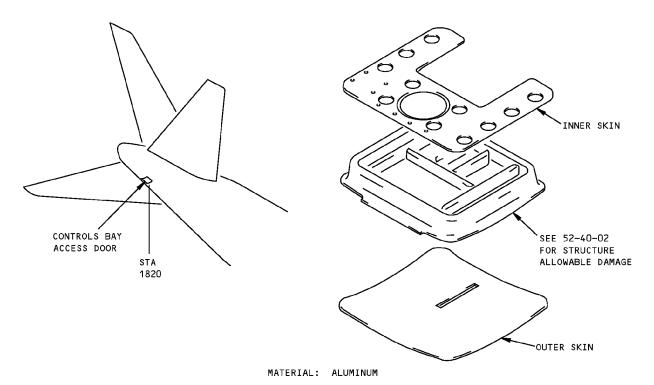
FLANGED HOLE DETAIL VII

Forward Access Door Allowable Damage Figure 101 (Sheet 3 of 3)

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ALLOWABLE DAMAGE 2 - CONTROLS BAY ACCESS DOOR



DESCRIPTION	CRACKS	NICKS, GOUGES	DENTS	HOLES AND
7 2001121 1 2011		AND CORROSION		PUNCTURES
OUTER SKIN A	В	D	SEE DETAIL III	D
INNER SKIN	С	G	SEE DETAIL III	F

NOTES

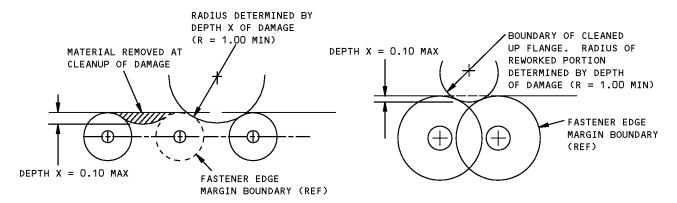
- REFINISH REWORKED AREAS PER 51-20 OF THE MAINTENANCE MANUAL
- A REFER TO 51-10-01 FOR AERODYNAMIC SMOOTH-NESS REQUIREMENTS. WHERE THE DAMAGE EXCEEDS THE LIMITS SHOWN IN 51-10-01, CONSIDERATION SHOULD BE GIVEN TO THE LOSS OF PERFORMANCE INVOLVED
- B CRACKS NOT ALLOWED EXCEPT FOR EDGE CRACKS
 WHICH MUST BE REMOVED PER DETAILS I AND III
- C 1.00 MAX LENGTH SURFACE CRACKS ALLOWED,
 PROVIDED CRACKS ARE WITHIN LIMITS SHOWN IN
 DETAIL VI. REMOVE EDGE CRACKS PER DETAILS
 I AND V AND FLANGED HOLE EDGE CRACKS PER
 DETAIL VII
- D REMOVE DAMAGE PER DETAILS I, II, IV AND V

- E CLEAN OUT DAMAGE UP TO 0.25 MAX DIA AND NOT CLOSER THAN 1.0 INCH TO FASTENER HOLE, MATERIAL EDGE, OR OTHER DAMAGE. FILL HOLE WITH 2117-T3 OR T4 ALUMINUM RIVET INSTALLED WET WITH BMS 5-95 SEALANT. ALL OTHER HOLES TO BE REPAIRED
- F CLEAN OUT DAMAGE UP TO 0.25 MAX DIA AND NOT CLOSER THAN 1.0 INCH TO FASTENER HOLE, MATERIAL EDGE, OR OTHER DAMAGE
- G REMOVE DAMAGE PER DETAILS I, II, IV, AND V.
 CORROSION MAY BE DRILLED OUT UP TO 0.5 MAX
 DIA PROVIDED FASTENER EDGE MARGINS ARE
 MAINTAINED
- H 1.50 MIN TO EDGE OF EXISTING FASTENER HOLE, TO EDGE OF FLANGED HOLE, OR TO EDGE OF CUTOUT

Controls Bay Access Door Allowable Damage Figure 101 (Sheet 1 of 3)

ALLOWABLE DAMAGE 2
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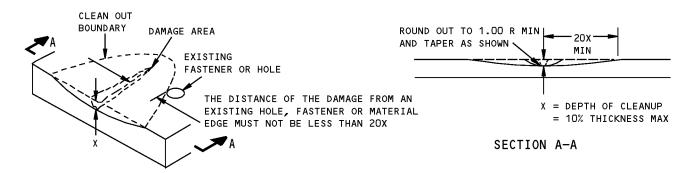




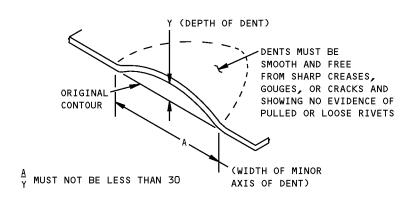
DAMAGE CLEANUP OF EDGES WHERE FASTENER EDGE MARGINS DO NOT OVERLAP

DAMAGE CLEANUP OF EDGES WHERE FASTENER EDGE MARGINS OVERLAP

DETAIL I



REMOVAL OF NICK, GOUGE AND SCRATCH DAMAGE ON A SURFACE DETAIL II

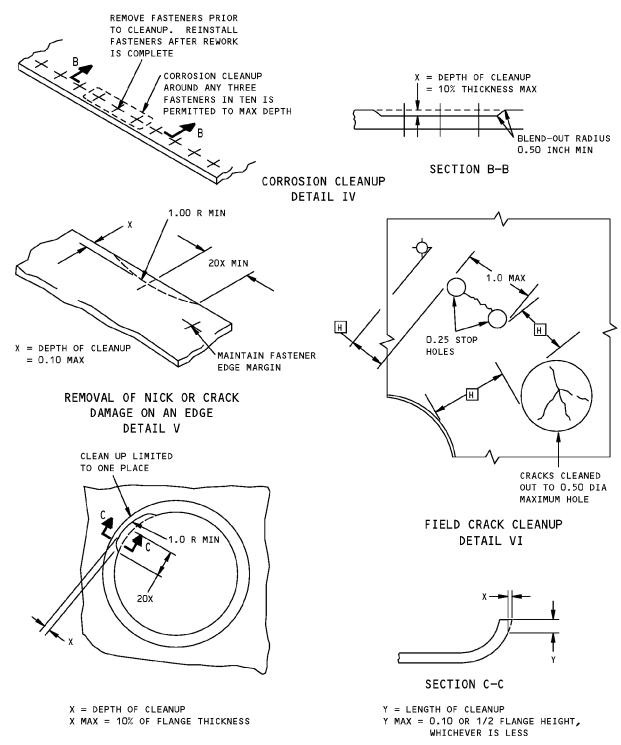


ALLOWABLE DAMAGE FOR DENT DETAIL III

Controls Bay Access Door Allowable Damage Figure 101 (Sheet 2 of 3)

ALLOWABLE DAMAGE 2
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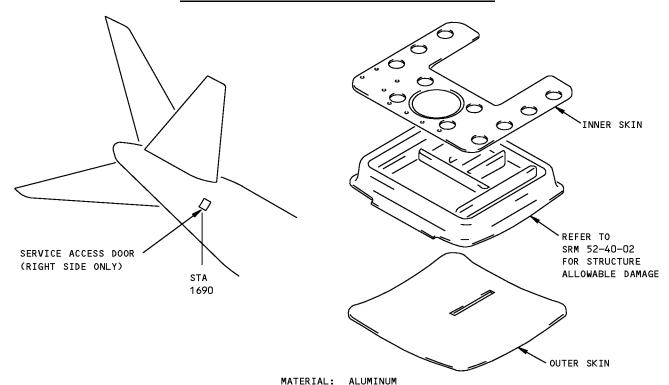
FLANGED HOLE EDGE DAMAGE CLEANUP
DETAIL VII

Controls Bay Access Door Allowable Damage Figure 101 (Sheet 3 of 3)

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ALLOWABLE DAMAGE 3 - SERVICE ACCESS DOOR



DESCRIPTION	CRACKS	NICKS, GOUGES AND CORROSION	DENTS	HOLES AND PUNCTURES
OUTER SKIN A	В	D	SEE DETAIL III	D
INNER SKIN	С	G	SEE DETAIL III	F

NOTES

- REFINISH REWORKED AREAS AS SHOWN IN AMM 51-20
- A REFER TO SRM 51-10-01 FOR AERODYNAMIC SMOOTH-NESS REQUIREMENTS. WHERE THE DAMAGE IS MORE THAN THE LIMITS SHOWN IN SRM 51-10-01, CONSIDERATION SHOULD BE GIVEN TO THE LOSS OF PERFORMANCE INVOLVED
- B CRACKS NOT ARE NOT PERMITTED EXCEPT FOR EDGE CRACKS WHICH MUST BE REMOVED AS SHOWN IN DETAILS I AND V
- C 1.00 INCH MAXIMUM LENGTH SURFACE CRACKS
 PERMITTED, PROVIDED CRACKS ARE WITHIN LIMITS
 SHOWN IN DETAIL VI. REMOVE EDGE CRACKS AS
 SHOWN IN DETAILS I AND V AND FLANGED HOLE
 EDGE CRACKS AS SHOWN IN DETAIL VII
- D REMOVE DAMAGE AS SHOWN IN DETAILS I, II, IV AND V

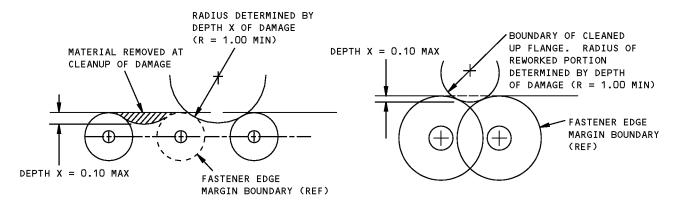
- E CLEAN OUT DAMAGE UP TO 0.25 INCH MAXIMUM DIAMETER AND NOT CLOSER THAN 1.0 INCH TO FASTENER HOLE, MATERIAL EDGE, OR OTHER DAMAGE. FILL HOLE WITH 2117-T3 OR T4 ALUMINUM RIVET INSTALLED WET WITH BMS 5-95 SEALANT. ALL OTHER HOLES TO BE REPAIRED
- F CLEAN OUT DAMAGE UP TO 0.25 INCH MAXIMUM DIAMETER AND NOT CLOSER THAN 1.0 INCH TO FASTENER HOLE, MATERIAL EDGE, OR OTHER DAMAGE
- G REMOVE DAMAGE AS SHOWN IN DETAILS I, II,
 IV, AND V. CORROSION MAY BE DRILLED OUT UP
 TO 0.5 INCH MAXIMUM DIAMETER PROVIDED
 FASTENER EDGE MARGINS ARE MAINTAINED
- H 1.50 INCH MINIMUM TO EDGE OF THE INITIAL FASTENER HOLE, TO EDGE OF FLANGED HOLE, OR TO EDGE OF CUTOUT

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Service Access Door Allowable Damage Figure 101 (Sheet 1 of 3)

ALLOWABLE DAMAGE 3
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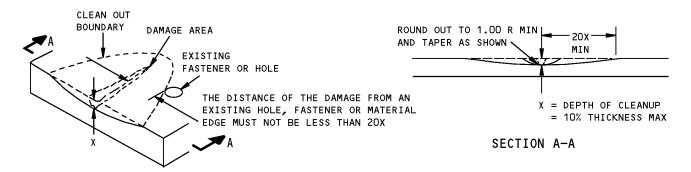




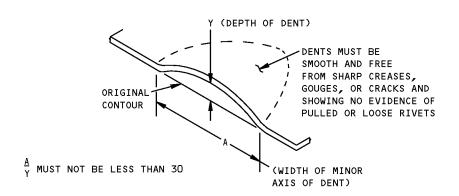
DAMAGE CLEANUP OF EDGES WHERE FASTENER EDGE MARGINS DO NOT OVERLAP

DAMAGE CLEANUP OF EDGES WHERE FASTENER EDGE MARGINS OVERLAP

DETAIL I



REMOVAL OF NICK, GOUGE AND SCRATCH DAMAGE ON A SURFACE DETAIL II

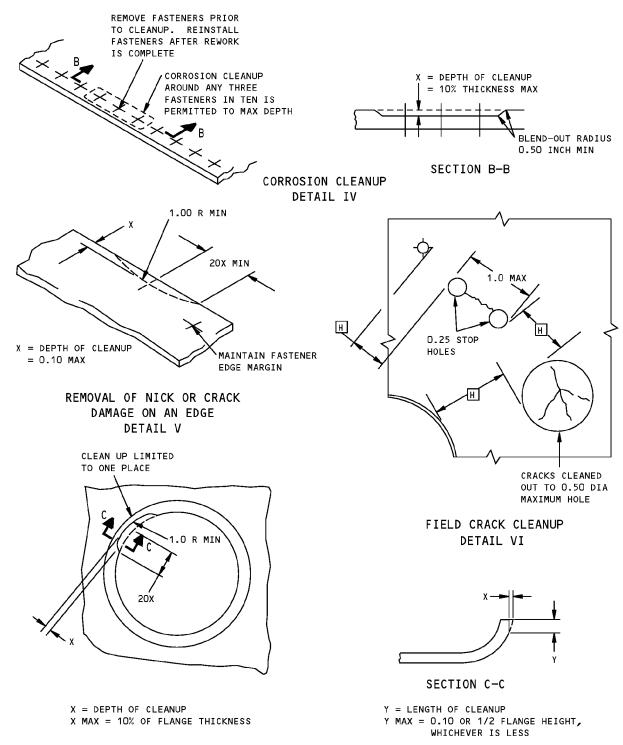


ALLOWABLE DAMAGE FOR DENT DETAIL III

Service Access Door Allowable Damage Figure 101 (Sheet 2 of 3)

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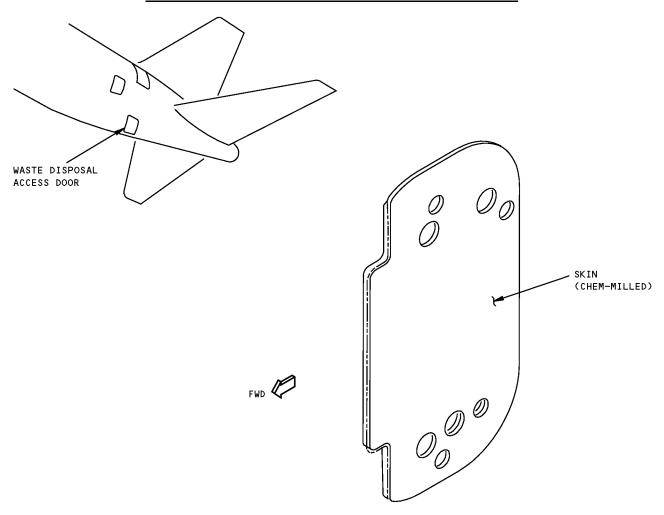
FLANGED HOLE EDGE DAMAGE CLEANUP
DETAIL VII

Service Access Door Allowable Damage Figure 101 (Sheet 3 of 3)

ALLOWABLE DAMAGE 3
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ALLOWABLE DAMAGE 4 - WASTE DISPOSAL ACCESS DOOR



DESCRIPTION	CRACKS	NICKS, GOUGES AND CORROSION	DENTS	HOLES AND PUNCTURES
SKIN (CHEM-MILLED) A	В	С	SEE DETAIL III	D

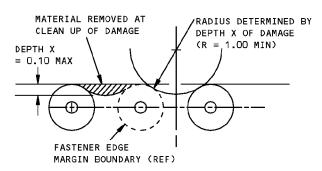
NOTES

- MATERIAL: ALUMINUM
- REFINISH REWORKED AREAS PER 51-20 OF THE MAINTENANCE MANUAL
- A REFER TO 51-10-01 FOR AERODYNAMIC SMOOTH-NESS REQUIREMENTS. WHERE THE DAMAGE EXCEEDS THE LIMITS SHOWN IN 51-10-01, CONSIDERATION SHOULD BE GIVEN TO THE LOSS OF PERFORMANCE INVOLVED
- B CRACKS NOT ALLOWED EXCEPT FOR EDGE CRACKS
 WHICH MUST BE REMOVED PER DETAILS I AND V
- REMOVE DAMAGE PER DETAILS I, II, IV AND V
- D CLEAN OUT DAMAGE UP TO 0.25 MAX DIA AND NOT CLOSER THAN 1.0 INCH TO FASTENER HOLE, MATERIAL EDGE, OR OTHER DAMAGE. FILL HOLE WITH 2117-T3 OR T4 ALUMINUM RIVET INSTALLED WET WITH BMS 5-95 SEALANT. ALL OTHER HOLES TO BE REPAIRED

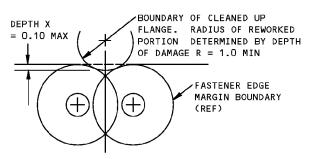
Waste Disposal Access Door Allowable Damage Figure 101 (Sheet 1 of 2)

ALLOWABLE DAMAGE 4
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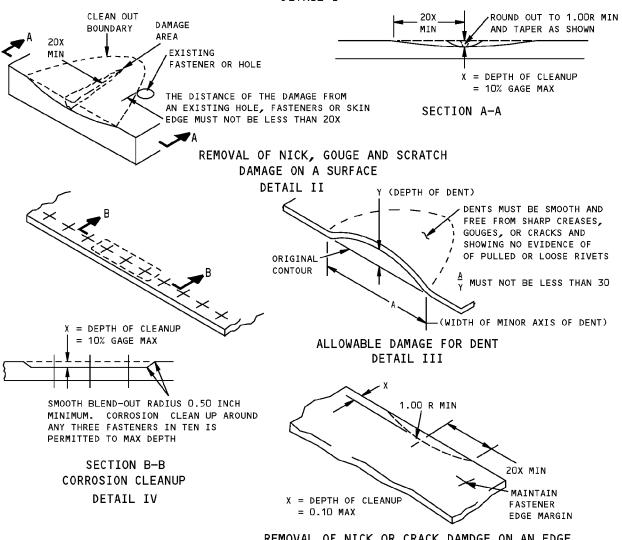


DAMAGE CLEAN UP OF EDGES WHERE FASTENER EDGE MARGINS DO NOT OVERLAP



DAMAGE CLEAN UP OF EDGES WHERE FASTENER EDGE MARGINS OVERLAP

DETAIL I



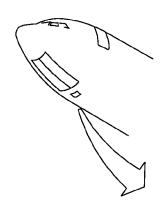
REMOVAL OF NICK OR CRACK DAMDGE ON AN EDGE
DETAIL V

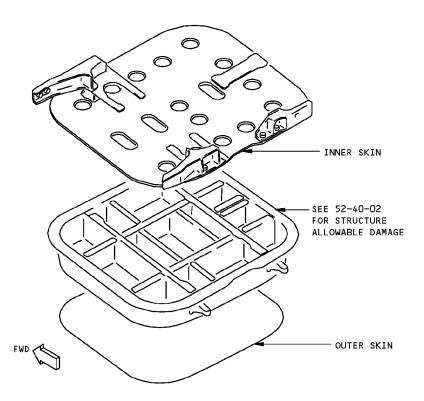
Waste Disposal Access Door Allowable Damage Figure 101 (Sheet 2 of 2)

ALLOWABLE DAMAGE 4
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ALLOWABLE DAMAGE 5 - ELEC/ELEX ACCESS DOOR





MATERIAL: ALUMINUM

ITEM	CRACKS	NICKS, GOUGES AND CORROSION	DENTS	HOLES AND PUNCTURES
OUTER SKIN A	В	D	SEE DETAIL IV	E
INNER SKIN	С	G	SEE DETAIL IV	F

NOTES

- REFINISH REWORK AREAS PER 51-20 OF THE MAINTENANCE MANUAL
- REFER TO 51-10-01 FOR AERODYNAMIC SMOOTH-NESS REQUIREMENTS. WHERE THE DAMAGE EXCEEDS THE LIMITS SHOWN IN 51-10-01, CONSIDERATION SHOULD BE GIVEN TO THE LOSS OF PERFORMANCE INVOLVED
- CRACKS NOT ALLOWED EXCEPT FOR EDGE CRACKS WHICH MUST BE REMOVED PER DETAILS I AND III
- C THE CRACKS WITHIN LIMITS SHOWN IN DETAIL VI ARE ALLOWED. REMOVE EDGE CRACKS PER DETAILS I AND III AND FLANGED HOLE EDGE CRACKS PER DETAIL VII
- D REMOVE DAMAGE PER DETAILS I, II, III AND V

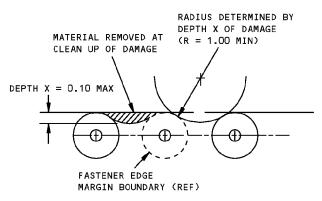
- E | CLEAN OUT DAMAGE UP TO 0.25 MAX DIA AND NOT CLOSER THAN 1.0 INCH TO FASTENER HOLE, MATERIAL EDGE, OR OTHER DAMAGE. FILL HOLE WITH 2117-T3 OR T4 ALUMINUM RIVET INSTALLED WET WITH BMS 5-95 SEALANT. ALL OTHER HOLES TO BE REPAIRED
- F | CLEAN OUT DAMAGE UP TO 0.25 MAX DIA AND NOT CLOSER THAN 1.0 INCH TO FASTENER HOLE, MATERIAL EDGE, OR OTHER DAMAGE
- G REMOVE DAMAGE PER DETAILS I, II, III, AND V. CORROSION MAY BE DRILLED OUT UP TO 0.5 MAX DIA PROVIDED FASTENER EDGE MARGINS ARE MAINTAINED
- 1.50 MIN TO EDGE OF EXISTING FASTENER HOLE, TO EDGE OF FLANGED HOLE, OR TO EDGE OF CUTOUT

Elec/Elex Access Door Allowable Damage Figure 101 (Sheet 1 of 3)

> ALLOWABLE DAMAGE 5 52-40-01

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DEPTH X = 0.10 MAX

BOUNDARY OF CLEANED

UP FLANGE. RADIUS OF

REWORKED PORTION

DETERMINED BY DEPTH

OF DAMAGE (R = 1.00 MIN)

FASTENER EDGE

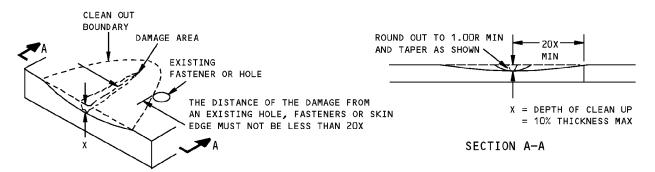
MARGIN BOUNDARY

(REF)

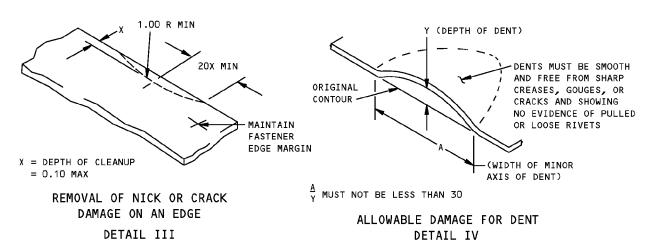
DAMAGE CLEAN UP OF EDGES WHERE FASTENER EDGE MARGINS DO NOT OVERLAP

DAMAGE CLEAN UP OF EDGES WHERE FASTENER EDGE MARGINS OVERLAP

DETAIL I



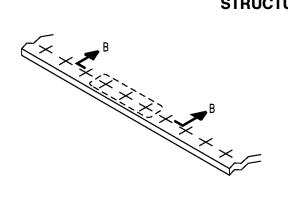
REMOVAL OF NICK, GOUGE AND SCRATCH DAMAGE ON A SURFACE DETAIL II

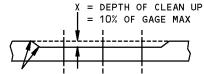


Elec/Elex Access Door Allowable Damage Figure 101 (Sheet 2 of 3)

ALLOWABLE DAMAGE 5
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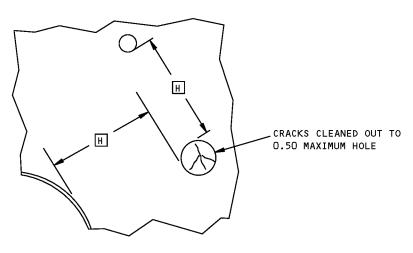




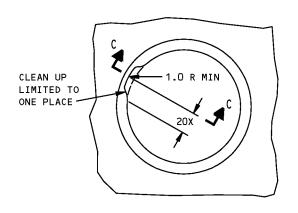
SMOOTH BLEND-OUT RADIUS 0.50 INCH MINIMUM. CORROSION CLEAN UP AROUND ANY THREE FASTENERS IN TEN IS PERMITTED TO MAXIMUM DEPTH

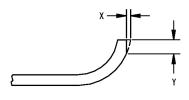
SECTION B-B

CORROSION CLEANUP DETAIL V



SURFACE CRACKS
DETAIL VI





SECTION C-C

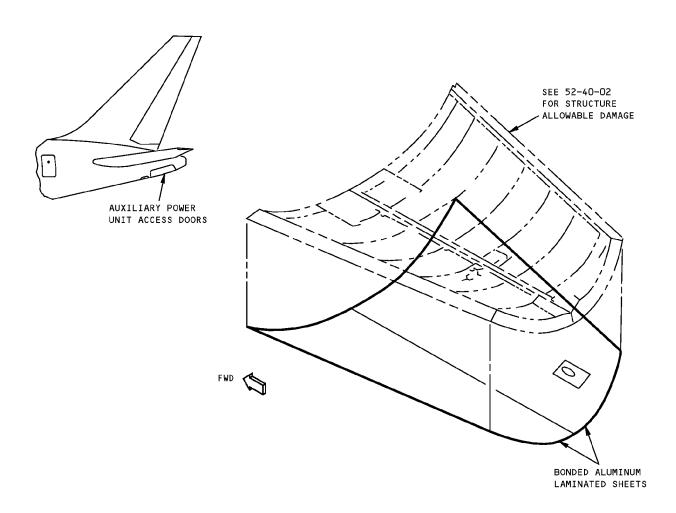
FLANGED HOLE DETAIL VII

Elec/Elex Access Door Allowable Damage Figure 101 (Sheet 3 of 3)

ALLOWABLE DAMAGE 5
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ALLOWABLE DAMAGE 6 - AUXILIARY POWER UNIT ACCESS DOOR



DESCRIPTION	CRACKS	NICKS, GOUGES AND CORROSION	DENTS	HOLES AND PUNCTURES	DELAMINATION
BONDED ALUMINUM LAMINATED SHEETS	В	С	SEE DETAIL IV	D	E

NOTES

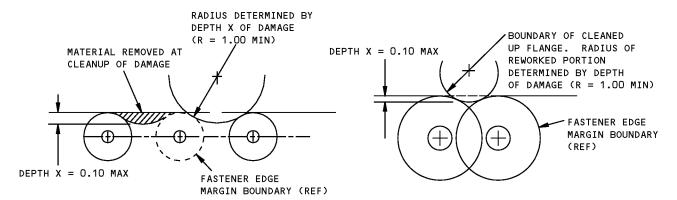
- REFINISH REWORKED AREAS PER 51-20 OF THE MAINTENANCE MANUAL
- A REFER TO 51-10-01 FOR AERODYNAMIC SMOOTH-NESS REQUIREMENTS. WHERE THE DAMAGE EXCEEDS THE LIMITS SHOWN IN 51-10-01, CONSIDERATION SHOULD BE GIVEN TO THE LOSS OF PERFORMANCE INVOLVED
- B CRACKS NOT ALLOWED EXCEPT FOR EDGE CRACKS
 WHICH MUST BE REMOVED PER DETAILS I AND III
- C REMOVE DAMAGE PER DETAILS I, II, III AND V
- D CLEAN OUT DAMAGE UP TO 0.25 MAX DIA AND NOT CLOSER THAN 1.0 INCH TO FASTENER HOLE, MATERIAL EDGE, OR OTHER DAMAGE. FILL HOLE WITH 2117-T3 OR T4 ALUMINUM RIVET INSTALLED WET WITH BMS 5-95 SEALANT. ALL OTHER HOLES TO BE REPAIRED
- E 2.0 DIA DELAMINATION ALLOWED PROVIDED NOT NEAR AN EDGE. ANY DELAMINATION ON PANEL EDGE MUST BE CLEANED AND RESEALED PER 51-20-05

Auxiliary Power Unit Access Door Allowable Damage Figure 101 (Sheet 1 of 3)

52-40-01

ALLOWABLE DAMAGE 6
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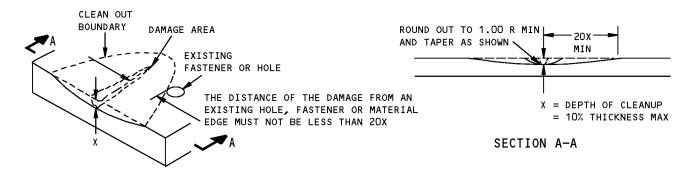




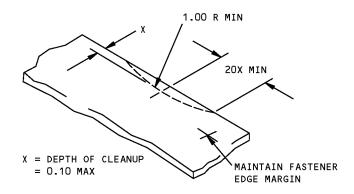
DAMAGE CLEANUP OF EDGES WHERE FASTENER EDGE MARGINS DO NOT OVERLAP

DAMAGE CLEANUP OF EDGES WHERE FASTENER EDGE MARGINS OVERLAP

DETAIL I



REMOVAL OF NICK, GOUGE AND SCRATCH DAMAGE ON A SURFACE DETAIL II

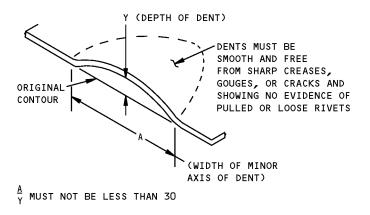


REMOVAL OF NICK OR CRACK DAMAGE ON AN EDGE DETAIL III

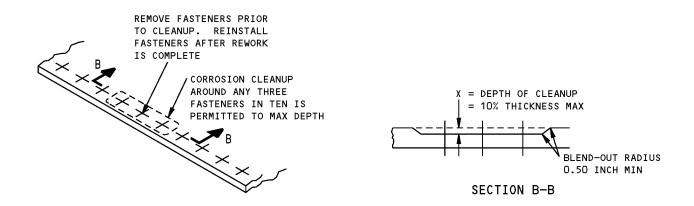
Auxiliary Power Unit Access Door Allowable Damage Figure 101 (Sheet 2 of 3)

ALLOWABLE DAMAGE 6
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ALLOWABLE DAMAGE FOR DENT DETAIL IV



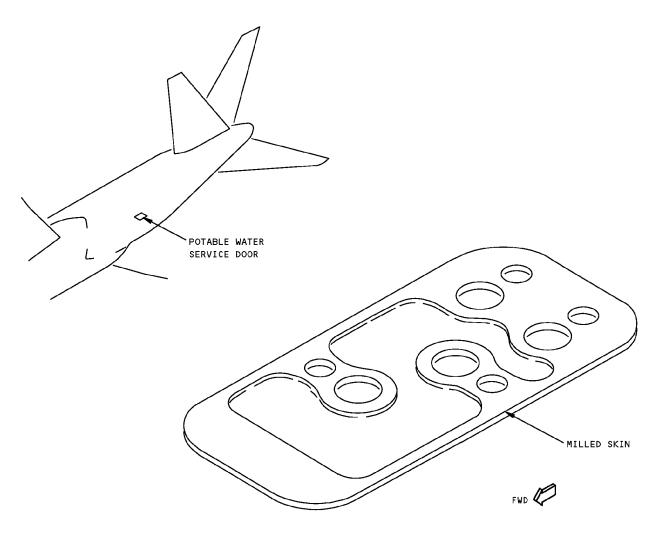
CORROSION CLEANUP
DETAIL V

Auxiliary Power Unit Access Door Allowable Damage Figure 101 (Sheet 3 of 3)

ALLOWABLE DAMAGE 6
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ALLOWABLE DAMAGE 7 - POTABLE WATER SERVICE DOOR



DESCRIPTION	CRACKS	NICKS, GOUGES AND CORROSION	DENTS	HOLES AND PUNCTURES
MILLED SKIN A	В	С	SEE DETAIL III	D

NOTES

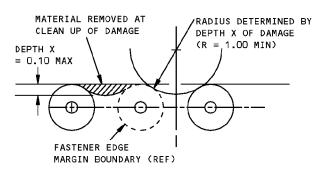
- MATERIAL: ALUMINUM
- REFINISH REWORKED AREAS PER 51-20 OF THE MAINTENANCE MANUAL
- A REFER TO 51-10-01 FOR AERODYNAMIC SMOOTH-NESS REQUIREMENTS. WHERE THE DAMAGE EXCEEDS THE LIMITS SHOWN IN 51-10-01, CONSIDERATION SHOULD BE GIVEN TO THE LOSS OF PERFORMANCE INVOLVED
- B CRACKS NOT ALLOWED EXCEPT FOR EDGE CRACKS WHICH MUST BE REMOVED PER DETAILS I AND V
- C REMOVE DAMAGE PER DETAILS I, II, IV AND V
- D CLEAN OUT DAMAGE UP TO 0.25 MAX DIA AND NOT CLOSER THAN 1.0 INCH TO FASTENER HOLE, MATERIAL EDGE, OR OTHER DAMAGE. FILL HOLE WITH 2117-T3 OR T4 ALUMINUM RIVET INSTALLED WET WITH BMS 5-95 SEALANT. ALL OTHER HOLES TO BE REPAIRED

Potable Water Service Door Allowable Damage Figure 101 (Sheet 1 of 2)

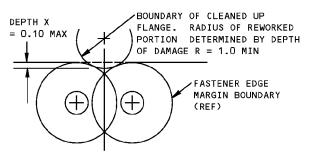
> ALLOWABLE DAMAGE 7 52-40-01

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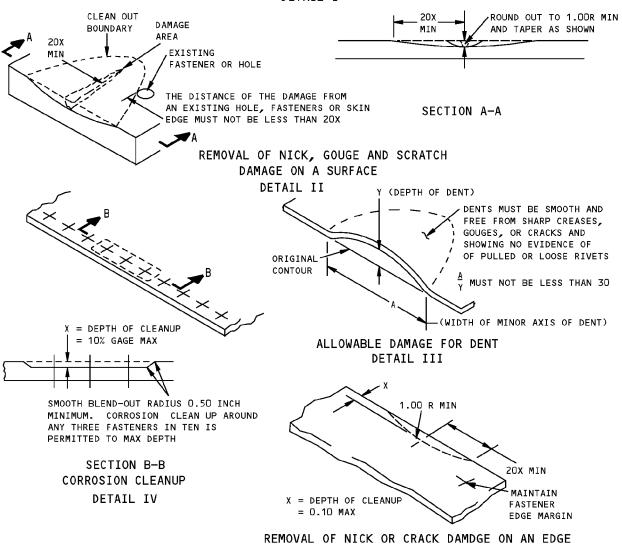


DAMAGE CLEAN UP OF EDGES WHERE FASTENER EDGE MARGINS DO NOT OVERLAP



DAMAGE CLEAN UP OF EDGES WHERE FASTENER EDGE MARGINS OVERLAP

DETAIL I



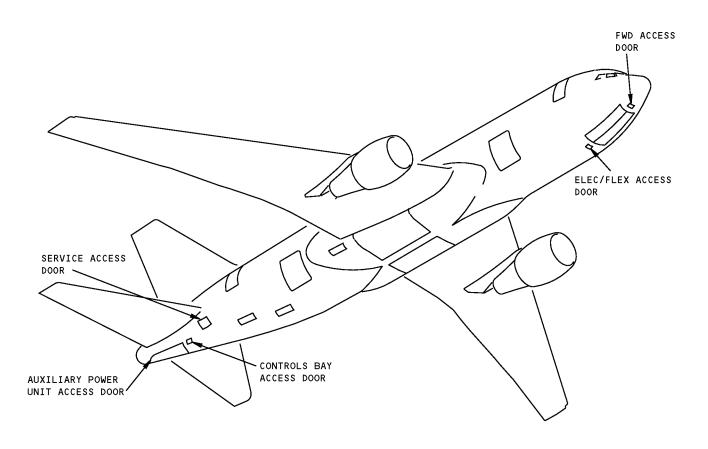
DETAIL V

Potable Water Service Door Allowable Damage Figure 101 (Sheet 2 of 2)

ALLOWABLE DAMAGE 7
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REPAIR GENERAL - TYPICAL SKIN REPAIRS FOR ACCESS DOORS WITH ALUMINUM OUTER SKINS



NOTE

FOR THE REPAIRS, REFER TO THE FOLLOWING:

- REPAIR 1 FOR FLUSH SKIN REPAIR BETWEEN BEAMS
- REPAIR 2 FOR FLUSH SKIN REPAIR AT BEAM
- REPAIR 3 FOR SMALL HOLE-FLUSH REPAIR
- REPAIR 4 FOR SMALL HOLE-EXTERNAL REPAIR
- REPAIR 5 FOR EXTERNAL REPAIR.

Typical Skin Repairs for Access Doors with Aluminum Outer Skins Figure 201

> REPAIR GENERAL 52-40-01



REPAIR 1 - FLUSH SKIN REPAIR BETWEEN BEAMS

REPAIR INSTRUCTIONS

- Remove the inner skin panel for access if required.
- Clean out the damage to the skin to a rectangular shape with a minimum of 0.50 radius at the corners. The cutout should be parallel to the centerline of the adjacent beam.
- 3. Make repair parts 1 and 2.
- Assemble repair parts in installed positions and drill fastener holes.
- 5. Remove repair parts.
- Break sharp edges of original and repair parts 0.015 to 0.030.
- Remove all nicks, scratches, burrs, sharp edges and corners from original and repair parts.
- 8. Alodize all raw edges of existing and repair parts per 51-20-01.
- Apply one coat of BMS 10-11, type 1, primer to all of part 1 and to the edges and inner surface of part 2 in accordance with 51-21-00 of the 767 Maintenance Manual.
- 10. Install repair parts, making a faying surface seal with BMS 5-95 sealant as described in 51-20-05.
- 11. Form a fillet seal around the edge of the repair parts, using the sealant squeezed out during installation. Apply additional sealant where necessary.

- Re-install inner skin panel, if removed for access.
- Restore the surface finish in accordance with 51-20-00 of the 767 Maintenance Manual.

NOTES

- REFER TO 51-40 FOR FASTENER CODE, REMOVAL, INSTALLATION, HOLE SIZES, EDGE MARGINS AND SUBSTITUTIONS.
- A SEE 51-10-01 FOR AERODYNAMIC SMOOTHNESS REQUIREMENTS
- B WHERE RIVET SUBSTITUTIONS ARE MADE THE COUNTERSINK DEPTH FOR BACR15CE RIVETS MUST BE MAINTAINED AND THE EXCESS PORTION OF THE SUBSTITUTE RIVET HEAD SHAVED OFF AFTER INSTALLATION PER 51-10-01

FASTENER SYMBOLS

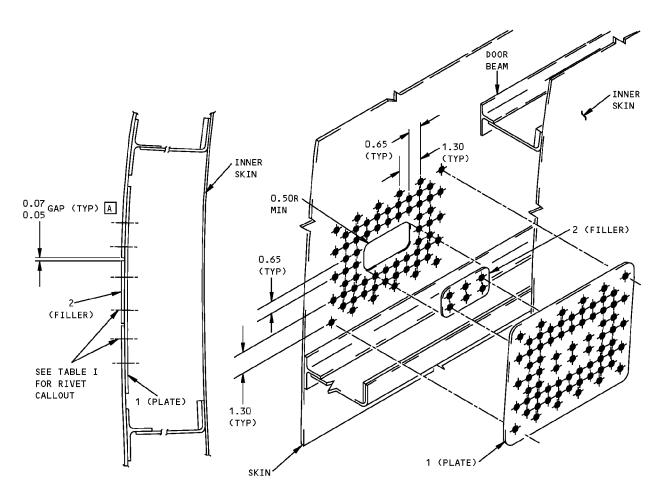
→ REPAIR FASTENER LOCATION

Flush Skin Repair Between Beams Figure 201 (Sheet 1 of 2)

52-40-01

REPAIR 1 Page 201 Apr 01/2005





SECTION THROUGH REPAIR

	REPAIR MATERIAL				
P	ART	QTY	MATERIAL		
1	PLATE	1	SAME MATERIAL ONE GAGE HEAVIER THAN ORIGINAL SKIN		
2	FILLER	1	SAME MATERIAL AND GAGE AS ORIGINAL SKIN		

RIVET CALLOUT			
ACCESS DOOR	RIVET THRU SKIN		
FORWARD ACCESS	BACR15CE5KE B		
CONTROLS BAY ACCESS	BACR15FT5AD		
SERVICE ACCESS	BACR15BA5AD		
ELEC/ELEX ACCESS	BACR15CE5KE B		
APU ACCESS	BACR15FT5AD		

TABLE I

Flush Skin Repair Between Beams Figure 201 (Sheet 2 of 2)



REPAIR 2 - FLUSH SKIN REPAIR AT BEAM

REPAIR INSTRUCTIONS

- Remove inner skin panel for access to the damaged area if required.
- Clean out damage to skin to a rectangular shape parallel to the beam, with a minimum corner radius of 0.50 inch.
- Cut out beam flanges to width of repair plate to permit its insertion against the skin.
- 4. Make repair parts.
- Assemble repair parts and drill the fastener holes in original and new locations.
 Add spacer or shims between part 1 plate or inner side of beam flange and new angles, whichever is required to fill gap.
- 6. Remove repair parts.
- Break sharp edges of original and repair parts 0.015 to 0.030.
- Remove all nicks, scratches, burrs, sharp edges and corners from original and repair parts.
- Alodize raw edges of original and repair parts per 51-20-01.
- 10. Apply one coat of BMS 10-11, type 1, primer to all of parts 1,3, spacer or shims, and to the edges and inner surface of part 2 in accordance with 51-21-00 of the 767 Maintenance Manual.
- Install repair parts, making a faying surface seal with BMS 5-95 sealant as described in 51-20-05.

- 12. Form a fillet seal around the edge of the repair parts, using the sealant squeezed out during installation. Apply additional sealant where necessary.
- Re-install inner skin panel if removed for access.
- 14. Restore surface finish in accordance with 51-20-00 of the 767 Maintenance Manual.

NOTES

- REFER TO 51-40 FOR FASTENER CODE, REMOVAL, INSTALLATION, HOLE SIZES, EDGE MARGINS AND SUBSTITUTIONS
- MINIMUM OF THREE FASTENERS IN EACH ROW
 JOINING REPAIR ANGLES TO ORIGINAL SECTION.
 WHERE REPAIR ANGLES ARE USED AT VERTICAL
 BEAMS, A MINIMUM OF FOUR FASTENERS IS
 REQUIRED
- B FOR AERODYNAMIC SMOOTHNESS REQUIREMENTS SEE 51-10-01
- C WHERE RIVET SUBSTITUTIONS ARE MADE THE COUNTERSINK DEPTH FOR BACR15CE RIVETS MUST BE MAINTAINED AND THE EXCESS PORTION OF THE SUBSTITUTE RIVET HEAD SHAVED OFF AFTER INSTALLATION PER 51-10-01

FASTENER SYMBOLS

→ REPAIR FASTENER LOCATION

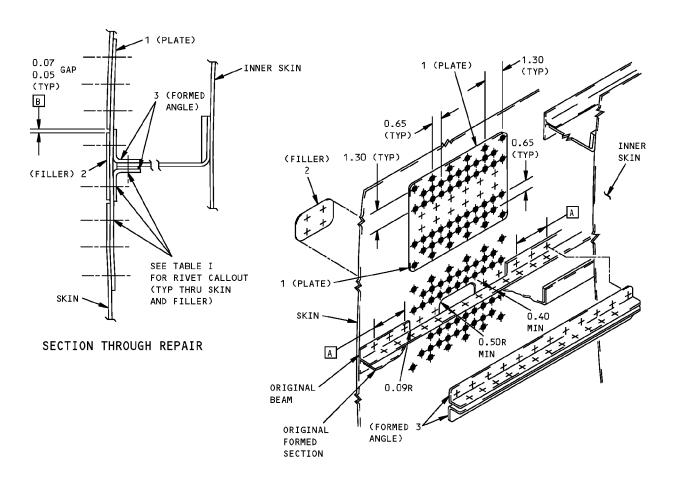
ORIGINAL FASTENER LOCATION

Flush Skin Repair at Beam Figure 201 (Sheet 1 of 2)

52-40-01

REPAIR 2 Page 201 Apr 01/2005





	REPAIR MATERIAL				
PART		QTY	MATERIAL		
1	DOUBLER	1	SAME MATERIAL, ONE GAGE HEAVIER THAN ORIGINAL SKIN		
2	FILLER	1	SAME MATERIAL AND GAGE AS ORIGINAL SKIN		
3	FORMED ANGLE	2	SAME MATERIAL, ONE GAGE HEAVIER THAN SKIN SIDE LEG OF ORIGINAL SECTION		

RIVET CALLOUT				
ACCESS DOOR	RIVET THRU SKIN	RIVET THRU 3 ANGLE		
FORWARD ACCESS	BACR15CE5KE C	BACR15FT5KE()C		
CONTROLS BAY ACCESS	BACR15FT5AD	BACR15FT5AD		
SERVICE ACCESS	BACR15BA5AD	BACR15FT5AD		
ELEC/ELEX ACCESS	BACR15CE5KE C	BACR15FT5KE		
APU ACCESS	BACR15FT5AD	BACR15FT5AD		

TABLE I

Flush Skin Repair at Beam Figure 201 (Sheet 2 of 2)



REPAIR 3 - SMALL HOLE - FLUSH REPAIR

REPAIR INSTRUCTIONS

- Remove the inner skin panel for access if required.
- Clean out the damaged hole to 1-inch diameter maximum. The center of the hole to an edge or cutout must not be less than 1.90.
- 3. Make repair parts 1 and 2.
- Assemble repair parts in installed position and drill fastener holes.
- 5. Remove repair parts.
- Break sharp edges of original and repair parts 0.015 to 0.030.
- Remove all nicks, scratches, burrs, sharp edges and corners from original and repair parts.
- 8. Alodize all raw edges of existing and repair parts per 51-20-01.
- Apply one coat of BMS 10-11, type 1, primer to all of part 2 and to the edges and inner surface of part 1 in accordance with 51-21-00 of the 767 Maintenance Manual.
- Install repair parts, making a faying surface seal with BMS 5-95 sealant as described in 51-20-05.
- 11. Form a fillet seal around the edge of the repair parts, using the sealant squeezed out during installation. Apply additional sealant where necessary.

- Re-install inner skin panel if removed for access.
- Restore the surface finish in accordance with 51-20-00 of the 767 Maintenance Manual.

NOTES

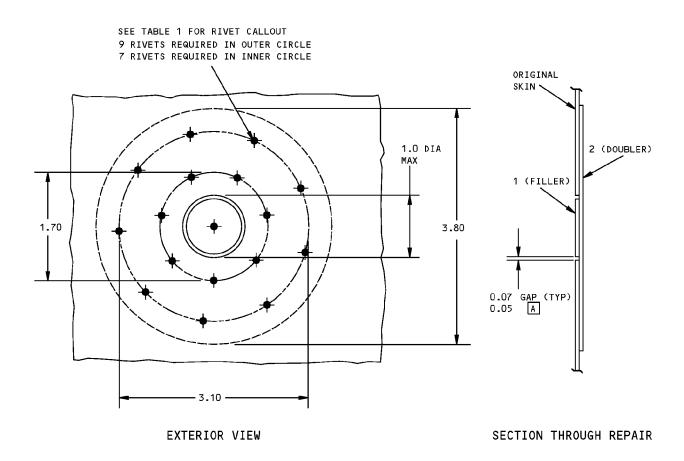
- THIS REPAIR IS NOT TO BE USED IN AREAS WITH DOUBLERS AND THE SKIN GAGE MUST BE CONSTANT
- REFER TO 51-40 FOR FASTENER CODE, REMOVAL, INSTALLATION, HOLE SIZES, EDGE MARGINS AND SUBSTITUTIONS.
- A SEE 51-10-01 FOR AERODYNAMIC SMOOTHNESS REQUIREMENTS
- B WHERE RIVET SUBSTITUTIONS ARE MADE THE COUNTERSINK DEPTH FOR BACR15CE RIVETS MUST BE MAINTAINED AND THE EXCESS PORTION OF THE SUBSTITUTE RIVET HEAD SHAVED OFF AFTER INSTALLATION PER 51-10-01

FASTENER SYMBOLS

→ REPAIR FASTENER LOCATION

Small Hole - Flush Repair Figure 201 (Sheet 1 of 2)





SYMBOLS

+ REPAIR FASTENER LOCATIONS

	REPAIR MATERIAL				
PART QTY MATERIAL					
1	FILLER	1	SAME MATERIAL AND GAGE AS ORIGINAL SKIN		
2	DOUBLER	1	SAME MATERIAL, ONE GAGE HEAVIER THAN ORIGINAL SKIN		

RIVET CALLOUT			
ACCESS DOOR	RIVET THRU SKIN		
FORWARD ACCESS	BACR15CE5KE B		
CONTROLS BAY ACCESS	BACR15FT5AD		
SERVICE ACCESS	BACR15BA5AD		
ELEC/ELEX ACCESS	BACR15CE5KE B		
APU ACCESS	BACR15FT5AD		

TABLE I

Small Hole - Flush Repair Figure 201 (Sheet 2 of 2)



REPAIR 4 - SMALL HOLE - EXTERNAL REPAIR

REPAIR INSTRUCTIONS

- Remove the inner skin panel for access if required.
- Clean out the damaged hole to 1.00
 (25 mm) inch diameter maximum. The
 center of the hole to an edge or cutout
 must not be less than 4D.
- 3. Fabricate repair parts.
- 4. Break sharp edges of initial and repair parts 0.015 to 0.030 inch (0.38 to 0.76 mm).
- Remove all nicks, scratches, burrs, sharp edges and corners from initial and repair parts.
- 6. Apply a chemical conversion coating to the repair part and to the bare surfaces of the door skin. Refer to SRM 51-20-01.
- Apply one coat of BMS 10-11, type 1, primer to all of part 1 and to the edges and inner surface of part 2 as shown in AMM 51-21-00.
- Install repair parts, making a faying surface seal with BMS 5-95 sealant as described in 51-20-05.
- Form a fillet seal around the edge of the repair parts, using the sealant squeezed out during installation. Apply additional sealant where necessary.

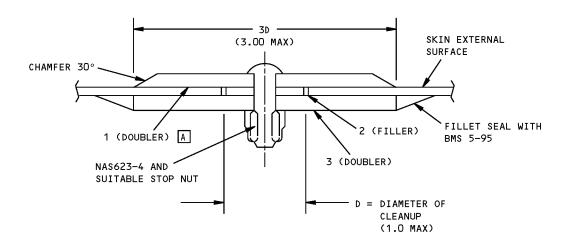
- 10. Re-install inner skin panel if removed for
- 11. Restore the surface finish as shown in AMM 51-20-00.

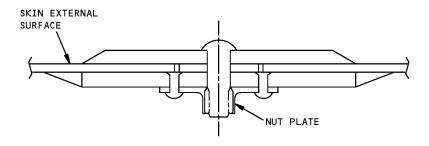
NOTES

- REFER TO SRM 51-10-01 FOR AERODYNAMIC SMOOTHNESS REQUIREMENTS
- REFER TO SRM 51-40 FOR FASTENER CODE, REMOVAL, INSTALLATION, HOLE SIZES, EDGE MARGINS AND SUBSTITUTIONS
- A THIS REPAIR IS NOT TO BE USED IN AREAS WITH DOUBLERS. THE AREA UNDER REPAIR PART 1 MUST NOT HAVE ANY FASTENERS, AND THE SKIN GAGE MUST BE CONSTANT

Small Hole - External Repair Figure 201 (Sheet 1 of 2)







OPTIONAL METHOD

	REPAIR MATERIAL					
P.F	ART	QTY	MATERIAL			
1	DOUBLER	1	2024-T3,-T4 OR -T42 TWICE SKIN GAGE			
2	FILLER	1	2024-T3,-T4 OR -T42 SAME GAGE AS SKIN			
3	DOUBLER	1	2024-T3,-T4 OR -T42 TWICE SKIN GAGE			

Small Hole - External Repair Figure 201 (Sheet 2 of 2)

52-40-01



REPAIR 5 - EXTERNAL REPAIR

REPAIR INSTRUCTIONS

- Get access to the damaged area. Remove the inner skin panel if necessary.
- 2. Drill 0.25 inch (6 mm) diameter stop hole at the end of the crack. Refer to SRM 51-10-02. Leave the hole open.
- 3. Make the repair part. See Table I.
- 4. Assemble the part 1 doubler and drill the fastener holes.
- 5. Disassemble the repair part.
- Remove the nicks, scratches, gouges, burrs, and sharp edges from the repair part and the skin.
- Apply a chemical conversion coating to the repair part and to the bare surfaces of the skin. Refer to SRM 51-20-01.
- Apply one layer of BMS 10-79, Type II or III primer to the part 1 doubler and to the bare surfaces of the skin. Refer to SOPM 20-44-04.
- At initial fastener locations, fabricate and install countersink repair washers as given in SRM 51-40-08. Install the doubler with BMS 5-95 sealant between the mating surfaces.
- 10. Install the fasteners.
- Install the inner skin if it was removed for access.
- 12. Apply the finish coat. Refer to AMM 51-20.

NOTES

- WHEN YOU USE THIS REPAIR REFER TO:
 - SOPM 20-44-04 FOR APPLICATION OF URETHANE COMPATIBLE PRIMER
 - SRM 51-10-01 FOR AERODYNAMIC SMOOTHNESS REQUIREMENTS
 - SRM 51-10-02 FOR INSPECTION AND REMOVAL OF DAMAGE
 - SRM 51-20-01 FOR PROTECTIVE TREATMENT OF METALLIC AND GRAPHITE MATERIALS
 - SRM 51-20-05 FOR REPAIR SEALING
 - SRM 51-40 FOR FASTENER CODE, INSTALLATION AND REMOVAL, HOLE SIZES, EDGE MARGINS AND COUNTERSINK REPAIR WASHERS
 - SRM 51-40-03 FOR FASTENER SUBSTITUTIONS. A
- A WHERE FLUSH HEAD RIVET SUBSTITUTIONS ARE MADE, KEEP THE SAME COUNTERSINK DEPTH AS FOR BACR15CE5() RIVETS. SHAVE OFF THE EXCESS PORTION OF THE HEAD OF THE SUBSTITUTE RIVET AFTER INSTALLATION. REFER TO SRM 51-10-01.

FASTENER SYMBOLS

- + INITIAL FASTENER LOCATION. INSTALL THE SAME DIAMETER BACR15CE()D() OR BACR15BB()D() RIVET (UP TO 1/32-INCH DIAMETER OVERSIZE). USE ONLY ONE TYPE OF FASTENER.
- REPAIR FASTENER LOCATION. INSTALL A BACR15CE5D() OR BACR15BB5D() RIVET. USE ONLY ONE TYPE OF FASTENER.

REPAIR MATERIAL				
	PART	MATERIAL		
1	DOUBLER	1	0.050 CLAD 2024-T3	

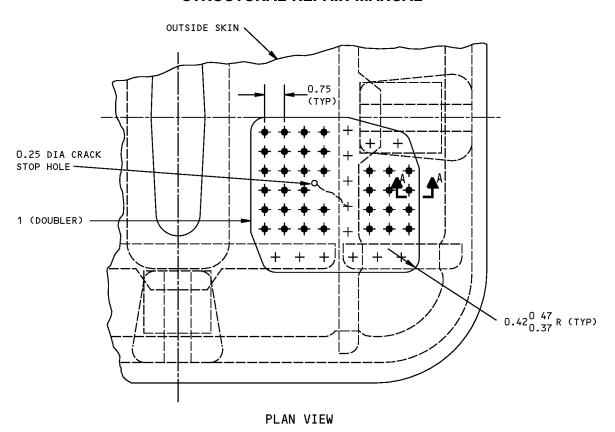
TABLE I

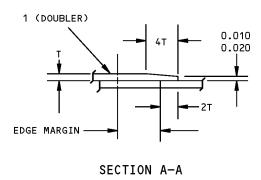
External Repair Figure 201 (Sheet 1 of 2)

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REPAIR 5 Page 201 Apr 01/2005





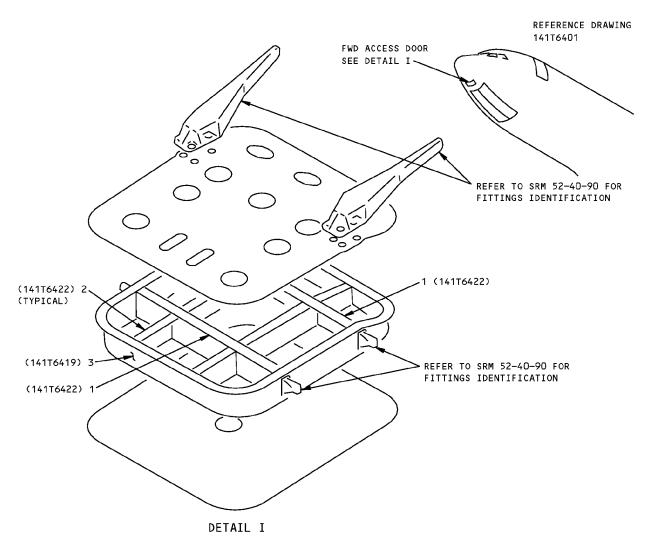


External Repair Figure 201 (Sheet 2 of 2)

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IDENTIFICATION 1 - FORWARD ACCESS DOOR STRUCTURE



ITEM	DESCRIPTION	GAGE	MATERIAL	EFFECTIVITY
1	BEAM WEB CHORD	0.063	CLAD 2024-T42 BAC1505-100261 2024-T42	
2	INTERCOSTAL WEB, FORWARD AND AFT WEB, CENTER CHORD	0.040 0.040	CLAD 2024-T42 CLAD 2024-T3 BAC1506-2195 2024-T42	
3	FRAME	0.050	CLAD 2024-T42	

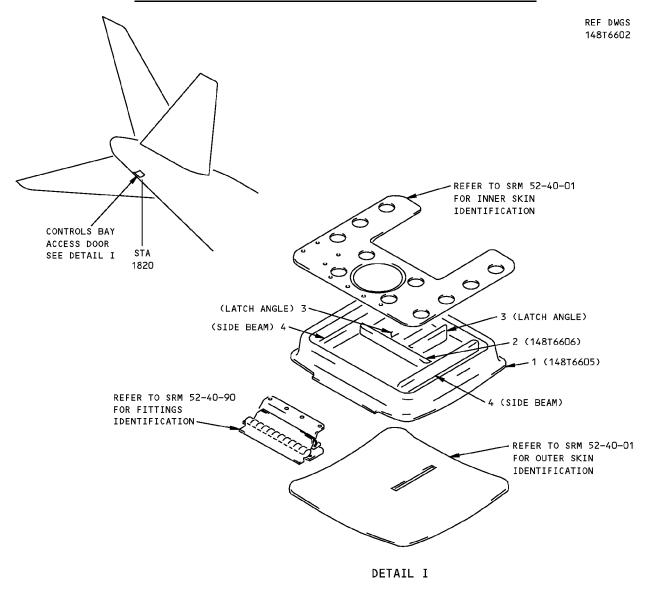
LIST OF MATERIALS FOR DETAIL I

Forward Access Door Structure Identification Figure 1

> **IDENTIFICATION 1** 52-40-02



IDENTIFICATION 2 - CONTROLS BAY ACCESS DOOR STRUCTURE



ITEM	DESCRIPTION	GAGE	MATERIAL	EFFECTIVITY
1	FRAME	0.050	CLAD 2024-T42	
2	CENTER BEAM	0.050	CLAD 7075-T62	
3	LATCH ANGLE	0.063	CLAD 7075-T62	
4	SIDE BEAM	0.040	CLAD 7075-T62	

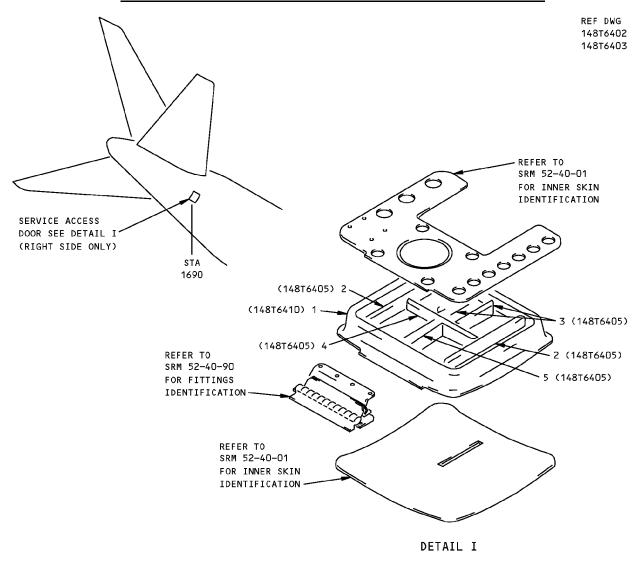
LIST OF MATERIALS FOR DETAIL I

Controls Bay Access Door Structure Identification Figure 1

> **IDENTIFICATION 2** 52-40-02



IDENTIFICATION 3 - SERVICE ACCESS DOOR STRUCTURE - STA 1690



ITEM	DESCRIPTION	GAGE	MATERIAL	EFFECTIVITY
1	FRAME	0.050	CLAD 2024-T42	
2	SIDE BEAM	0.040	CLAD 7075-T62	
3	LATCH ANGLE	0.063	CLAD 7075-T62	
4	CENTER BEAM	0.050	CLAD 7075-T62	
5	STIFFENER	0.040	CLAD 7075-T62	

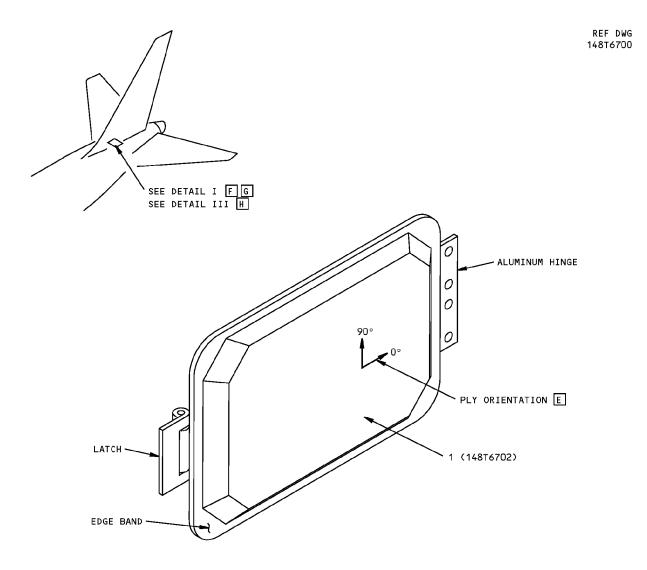
LIST OF MATERIALS FOR DETAIL I

Service Access Door Structure Identification - Sta 1690 Figure 1

> 1DENTIFICATION 3 Page 1 Apr 01/2005



IDENTIFICATION 4 - FIN ACCESS DOOR



DETAIL I F G

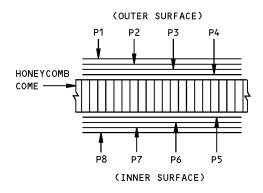
ITEM	DESCRIPTION	GAGE	MATERIAL	EFFECTIVITY
1	DOOR PANEL SKIN CORE		FIBERGLASS/EPOXY HONEYCOMB SANDWICH SEE DETAIL II NONMETALLIC HONEYCOMB PER BMS 8-124 CLASS IV, TYPE I, GRADE 4.0	

LIST OF MATERIALS FOR DETAIL I

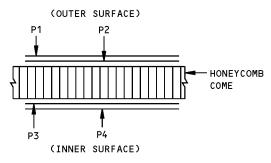
Fin Access Door Identification Figure 1 (Sheet 1 of 3)

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SECTION THRU HONEYCOMB PANEL G

ITEM NO.		PLY NO.	MATERIAL	PLY CORIENTATION
	급	P1,P2,P7,P8	В	0° OR 90°
1		P3 THRU P6	А	0° OR 90°
	G	P1 THRU P4	В	0° OR 90°

PLY TABLE D

DETAIL II

NOTES

- TEDLAR FILM OVER OUTER AND INNER SURFACES
 OF PANEL EXCEPT AT EDGE BANDS
- A FIBERGLASS/EPOXY FABRIC PER BMS 8-79, CLASS III, GRADE I, TYPE 120, 250°F (121°C) CURE
- B FIBERGLASS/EPOXY FABRIC PER BMS 8-79, CLASS III, GRADE I, TYPE 1581 (TYPE 7781 OPTIONAL), 250°F (121°C) CURE
- C PLY ORIENTATION CONVENTION, DEGREES INDICATED IS PARALLEL TO THE FABRIC WARP DIRECTION
- D MATERIAL AND PLY ORIENTATION SHOWN FOR FIELD AREAS ONLY. SEE BOEING DRAWINGS FOR EDGE BANDS AND AREAS WITH DOUBLERS

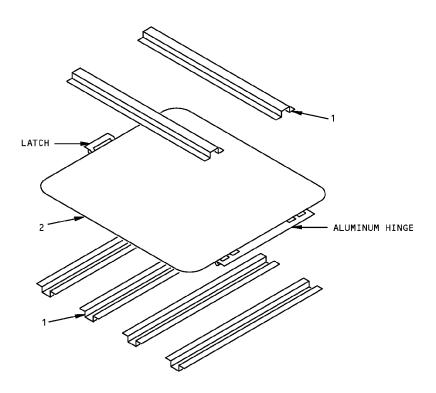
- E DIAGRAM OF PLY ORIENTATION, SEE PLY TABLE FOR PLY ORIENTATION AND MATERIAL
- F FOR CUM LINE NUMBERS: 136 THRU 154
- G FOR CUM LINE NUMBERS: 158 AND ON
- H FOR ALL AIRPLANES WITH ALL METAL FIN ACCESS DOOR (CUSTOMER OPTION)

Fin Access Door Identification Figure 1 (Sheet 2 of 3)

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REF DWG 148T6702



DETAIL III H

I.	TEM	DESCRIPTION	GAGE	MATERIAL	EFFECTIVITY
	1	STIFFENER		BAC1500-6056 7075-T62	
	2	WEB	0.080	CLAD 7075-T6	

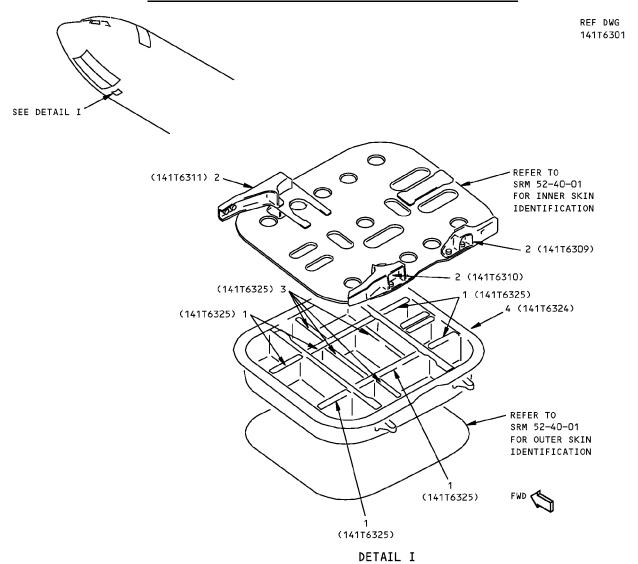
LIST OF MATERIALS FOR DETAIL III

Fin Access Door Identification Figure 1 (Sheet 3 of 3)

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IDENTIFICATION 5 - ELEC/ELEX ACCESS DOOR STRUCTURE



ITEM	DESCRIPTION	GAGE	MATERIAL	EFFECTIVITY
1	WEB	0.040	CLAD 2024-T42	
2	ROLLER SUPPORT		FORGING 7075-T73	
3	WEB	0.063	CLAD 2024-T42	
4	FRAME	0.050	CLAD 2024-T42	

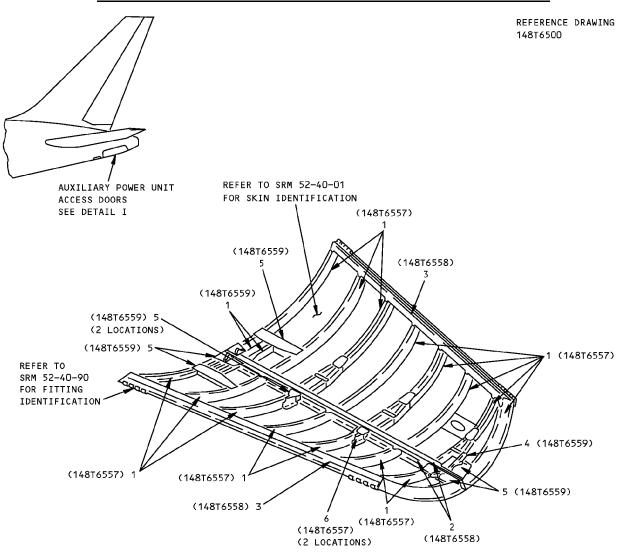
LIST OF MATERIALS FOR DETAIL I

Elec/Elex Access Door Structure Identification Figure 1

52-40-02



IDENTIFICATION 6 - AUXILIARY POWER UNIT ACCESS DOOR STRUCTURE



DETAIL I

ITEM	DESCRIPTION	GAGE	MATERIAL	EFFECTIVITY
1	FRAME	0.050	CLAD 7075-T62	
2	CHANNEL	0.063	clad 7075-T62	
3	HINGE MEMBER	0.063	CLAD 7075-T62	
4	PIVOT MEMBER	0.071	CLAD 7075-T62	
5	GUSSET	0.050	clad 7075-T62	
6	STIFFENER	0.050	CLAD 7075-T62	

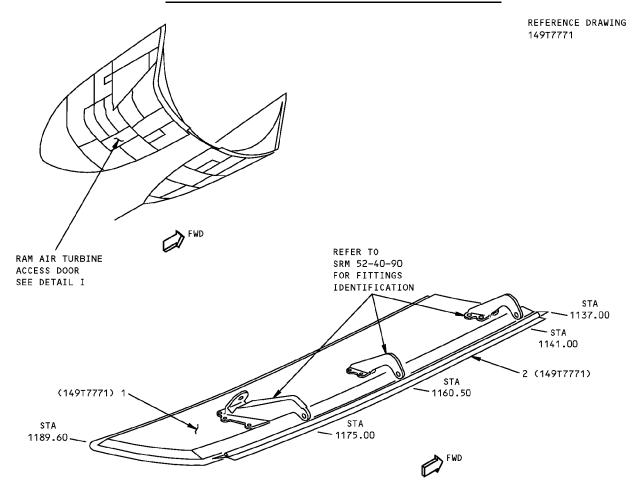
LIST OF MATERIALS FOR DETAIL I

Auxiliary Power Unit Access Door Structure Identification Figure 1

1DENTIFICATION 6
Page 1
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IDENTIFICATION 7 - RAM AIR TURBINE ACCESS DOOR



DETAIL I

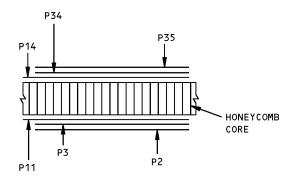
ITEM	DESCRIPTION	GAGE	MATERIAL	EFFECTIVITY
1	DOOR PANEL SKIN CORE CORE (AT FASTENER		GRAPHITE, ARAMID, FIBERGLASS HONEYCOMB SANDWICH SEE DETAIL II NOMEX HONEYCOMB PER BMS 8-124, CLASS IV, TYPE V, GRADE 3.0 FIBERGLASS HONEYCOMB PER BMS 8-124, CLASS I, TYPE I, GRADE 8.0	
2	LOCATIONS) SEAL ASSEMBLY SEAL SEAL DEPRESSOR	0.032	DACRON FABRIC BONDED OVER SILICONE CORE CLAD 2024-T42	

LIST OF MATERIALS FOR DETAIL I

Ram Air Turbine Access Door Identification Figure 1 (Sheet 1 of 2)

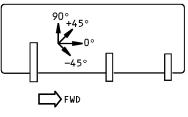
> **IDENTIFICATION 7** 52-40-02





SECTION THRU HONEYCOMB DOOR PANEL

ITEM NO.	PLY NO.	MATERIAL	PLY ORIENTATION A
1	P2	٥	0° OR 90°
	Р3	C	±45°
	P11	C	±45°
	P14	C	±45°
	P34	С	±45°
	P35	В	0° OR 90°



PLY ORIENTATION DIAGRAM

MATERIAL AND PLY ORIENTATION SHOWN FOR FIELD AREAS ONLY. SEE BOEING DRAWINGS FOR EDGE BANDS AND AREAS WITH DOUBLERS

TABLE I

ACCESS DOOR PANEL DETAIL II

NOTES

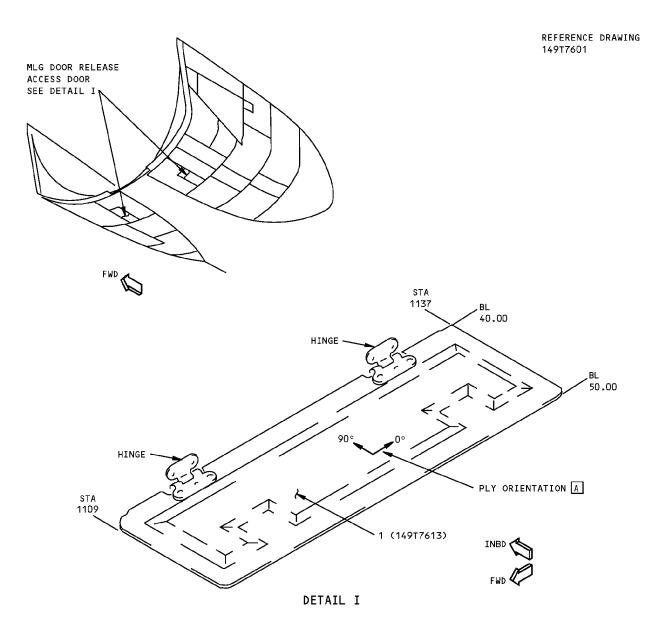
- A PLY ORIENTATION CONVENTION, DEGREES INDICATED IS PARALLEL TO FABRIC WARP DIRECTION
- B ARAMID/EPOXY FABRIC PER BMS 8-219, STYLE 285, 250°F (121°C) CURE
- GRAPHITE/EPOXY FABRIC PER BMS 8-168, TYPE II, CLASS 2, STYLE 3K-70-PW, 250°F (121°C) CURE
- D PREPREG EPOXY PER BMS 8-79, TYPE 1581, CLASS III, GRADE I

Ram Air Turbine Access Door Identification Figure 1 (Sheet 2 of 2)

> **IDENTIFICATION 7** 52-40-02



IDENTIFICATION 8 - MLG DOOR RELEASE ACCESS DOOR



ITEM	DESCRIPTION	GAGE	MATERIAL	EFFECTIVITY
1	DOOR PANEL SKIN CORE		ARAMID/GRAPHITE/EPOXY HONEYCOMB SANDWICH SEE DETAIL II NOMEX HONEYCOMB PER BMS 8-124, CLASS IV, TYPE V, GRADE 3.0	

LIST OF MATERIALS FOR DETAIL I

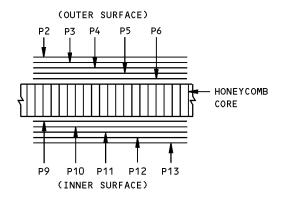
MLG Door Release Access Door Identification Figure 1 (Sheet 1 of 2)

IDENTIFICATION 8

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Page 1





SECTION THRU HONEYCOMB PANEL

ITEM NO.	PLY NO.	MATERIAL	PLY ORIENTATION B
	P2,P3,P4, P9,P11	D	0° OR 90°
1	P5,P10	E	0° OR 90°
	P13	F	0° OR 90°

PLY TABLE C H

ITEM NO.	PLY NO.	MATERIAL	PLY ORIENTATION B
	P2	G	0° OR 90°
1	P3,P4,P9, P11,P12	D	0° OR 90°
	P5,P10	E	0° OR 90°
	P13	F	0° OR 90°

PLY TABLE C I

DETAIL II

NOTES

- A DIAGRAM OF PLY ORIENTATION, SEE PLY TABLE FOR PLY ORIENTATION AND MATERIAL
- B PLY ORIENTATION CONVENTION, DEGREES
 INDICATED IS PARALLEL TO THE FABRIC
 WARP DIRECTION
- MATERIAL AND PLY ORIENTATION SHOWN FOR FIELD AREAS ONLY. SEE BOEING DRAWINGS FOR EDGE BANDS AND AREAS WITH DOUBLERS
- D ARAMID/EPOXY FABRIC PER BMS 8-219, STYLE 285, 250°F (121°C) CURE

- E GRAPHITE/EPOXY FABRIC PER BMS 8-168, TYPE II, CLASS 2, STYLE 3K-70-PW, 250°F (121°C) CURE
- F ARAMID/EPOXY FABRIC PER BMS 8-219, STYLE 120, 250°F (121°C) CURE
- G FIBERGLASS/EPOXY FABRIC PER BMS 8-79, TYPE 1581, CLASS III, 250°F (121°C) CURE
- H FOR CUM LINE NUMBERS: 1 THRU 211
- I FOR CUM LINE NUMBERS: 212 AND ON

MLG Door Release Access Door Identification Figure 1 (Sheet 2 of 2)

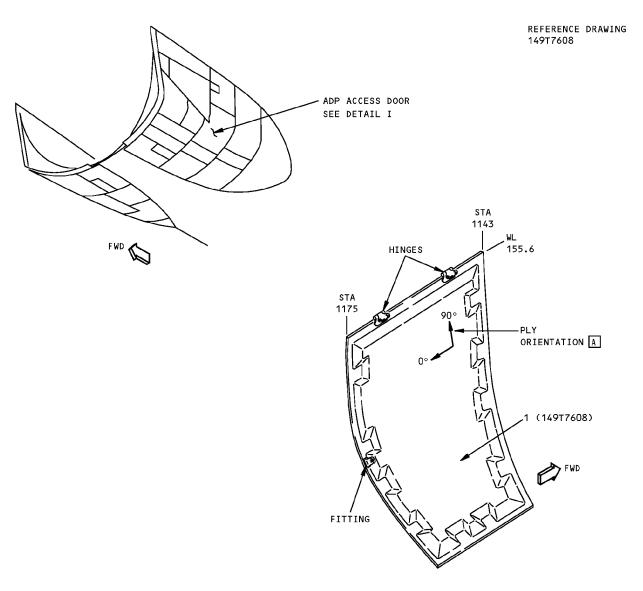
52-40-02

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IDENTIFICATION 9 - ADP ACCESS DOOR



DETAIL I

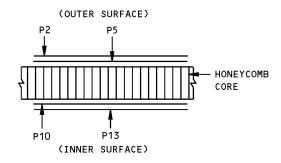
ITEM	DESCRIPTION	GAGE	MATERIAL	EFFECTIVITY
1	DOOR PANEL SKIN CORE		ARAMID/GRAPHITE/EPOXY HONEYCOMB SANDWICH SEE DETAIL II FIBERGLASS HONEYCOMB PER BMS 8-124, CLASS I, TYPE I, GRADE 4.0	

LIST OF MATERIALS

ADP Access Door Identification Figure 1 (Sheet 1 of 2)

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SECTION THRU HONEYCOMB PANEL

ITEM NO.	PLY NO.	MATERIAL	PLY ORIENTATION B
	P2	D	0° OR 90°
1	P5, P10	E	0° OR 90°
	P13	F	0° OR 90°

ITEM **PLY** PLY **MATERIAL** NO. NO. ORIENTATION B G Р2 0° OR 90° E 1 P5, P10 $0\,^{\circ}$ or $90\,^{\circ}$ P13 0° OR 90° F

PLY TABLE C H

PLY TABLE C I

DETAIL II

NOTES

- A DIAGRAM OF PLY ORIENTATION, SEE PLY TABLE FOR PLY ORIENTATION AND MATERIAL
- B PLY ORIENTATION CONVENTION, DEGREES INDICATED IS PARALLEL TO THE FABRIC WARP DIRECTION
- C MATERIAL AND PLY ORIENTATION SHOWN FOR FIELD AREAS ONLY. SEE BOEING DRAWINGS FOR EDGE BANDS AND AREAS WITH DOUBLERS
- D ARAMID/EPOXY FABRIC PER BMS 8-219, STYLE 285, 250°F (121°C) CURE

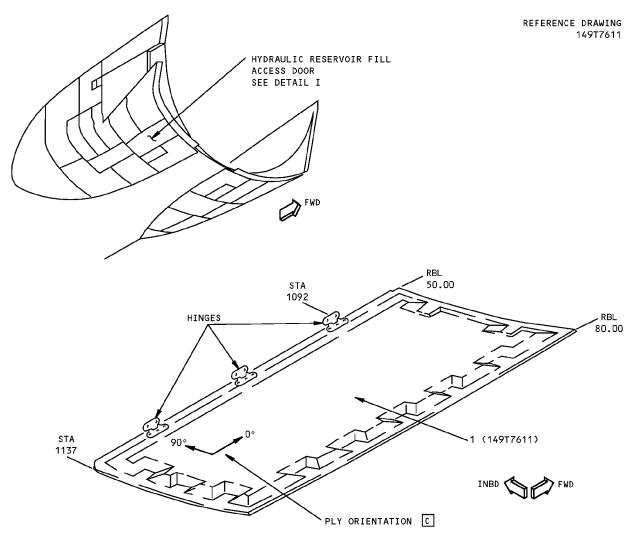
- E GRAPHITE/EPOXY FABRIC PER BMS 8-168, TYPE II, CLASS 2, STYLE 3K-70-PW, 250°F (121°C) CURE
- F ARAMID/EPOXY FABRIC PER BMS 8-219, STYLE 120, 250°F (121°C) CURE
- G FIBERGLASS/EPOXY FABRIC PER BMS 8-79, TYPE 1581, CLASS III, 250°F (121°C) CURE
- H FOR CUM LINE NUMBERS: 1 THRU 211
- I FOR CUM LINE NUMBERS: 212 AND ON

ADP Access Door Identification Figure 1 (Sheet 2 of 2)

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IDENTIFICATION 10 - HYDRAULIC RESERVOIR FILL ACCESS DOOR



DETAIL I

ITEM	DESCRIPTION	GAGE	MATERIAL	EFFECTIVITY
1	DOOR PANEL SKIN CORE		ARAMID/GRAPHITE/EPOXY HONEYCOMB SANDWICH SEE DETAIL II FIBERGLASS HONEYCOMB PER BMS 8-124, CLASS I, TYPE I, GRADE 4.0	

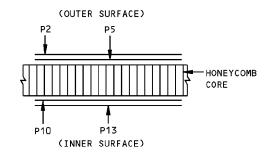
LIST OF MATERIALS FOR DETAIL I

Hydraulic Reservoir Fill Access Door Identification Figure 1 (Sheet 1 of 2)

IDENTIFICATION 10
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SECTION THRU HONEYCOMB PANEL

ITEM NO.	PLY NO.	MATERIAL	PLY ORIENTATION A
	P2	D	0° OR 90°
1	P5, P10	E	0° or 90°
	P13	F	0° OR 90°

ITEM NO.	PLY NO.	MATERIAL	PLY ORIENTATION A
	P2	G	0° OR 90°
1	P5, P10	E	0° OR 90°
	P13	F	0° OR 90°

PLY TABLE B H

PLY TABLE B I

DETAIL II

NOTES

- A PLY ORIENTATION CONVENTION, DEGREES INDICATED IS PARALLEL TO THE FABRIC WARP DIRECTION
- B MATERIAL AND PLY ORIENTATION SHOWN FOR FIELD AREAS ONLY. SEE BOEING DRAWINGS FOR EDGE BANDS AND AREAS WITH DOUBLERS
- DIAGRAM OF PLY ORIENTATION, SEE PLY TABLE FOR PLY ORIENTATION AND MATERIAL
- D ARAMID/EPOXY FABRIC PER BMS 8-219, STYLE 285, 250°F (121°C) CURE
- E GRAPHITE/EPOXY FABRIC PER BMS 8-168, TYPE II, CLASS 2, STYLE 3K-70-PW, 250°F (121°C) CURE

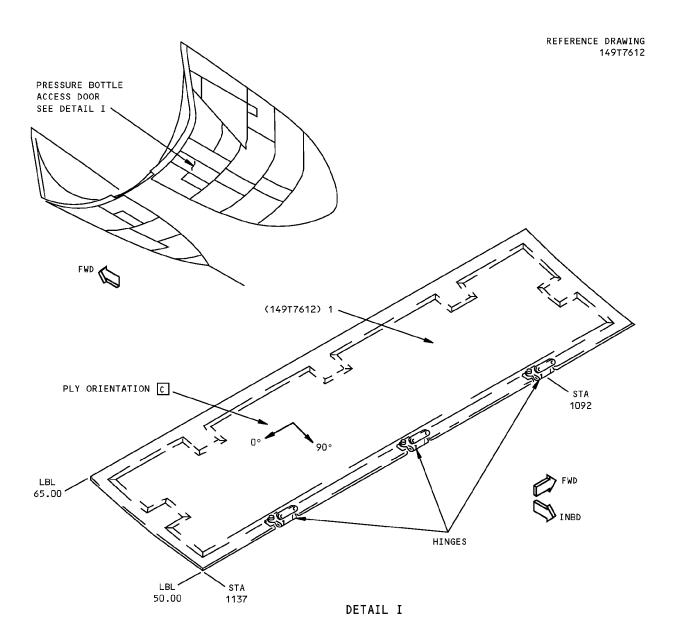
- F ARAMID/EPOXY FABRIC PER BMS 8-219, STYLE 120, 250°F (121°C) CURE
- G FIBERGLASS/EPOXY FABRIC PER BMS 8-79, TYPE 1581, CLASS III, 250°F (121°C) CURE
- H FOR CUM LINE NUMBERS: 1 THRU 211
- I FOR CUM LINE NUMBERS: 212 AND ON

Hydraulic Reservoir Fill Access Door Identification Figure 1 (Sheet 2 of 2)

52-40-02



IDENTIFICATION 11 - PRESSURE BOTTLE ACCESS DOOR



ITEM	DESCRIPTION	GAGE	MATERIAL	EFFECTIVITY
1	DOOR PANEL SKIN CORE		ARAMID/GRAPHITE/EPOXY HONEYCOMB SANDWICH SEE DETAIL II FIBERGLASS HONEYCOMB PER BMS 8-124, CLASS I, TYPE I, GRADE 4.0	

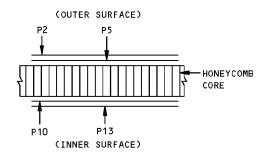
LIST OF MATERIALS FOR DETAIL I

Pressure Bottle Access Door Identification Figure 1 (Sheet 1 of 2)

IDENTIFICATION 11
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SECTION THRU HONEYCOMB PANEL

ITEM NO.	PLY NO.	MATERIAL	PLY ORIENTATION A
	P2	D	0° OR 90°
1	P5, P10	E	0° OR 90°
	P13	F	0° OR 90°

ITEM NO.	PLY NO.	MATERIAL	PLY ORIENTATION A
	P2	G	0° OR 90°
1	P5, P10	ш	0° OR 90°
	P13	F	0° OR 90°

PLY TABLE BH

PLY TABLE B I

DETAIL II

NOTES

- A PLY ORIENTATION CONVENTION, DEGREES INDICATED IS PARALLEL TO THE FABRIC WARP DIRECTION
- B MATERIAL AND PLY ORIENTATION SHOWN FOR FIELD AREAS ONLY. SEE BOEING DRAWINGS FOR EDGE BANDS AND AREAS WITH DOUBLERS
- DIAGRAM OF PLY ORIENTATION, SEE PLY TABLE FOR PLY ORIENTATION AND MATERIAL
- D ARAMID/EPOXY FABRIC PER BMS 8-219, STYLE 285, 250°F (121°C) CURE
- E GRAPHITE/EPOXY FABRIC PER BMS 8-168, TYPE II, CLASS 2, STYLE 3K-70-PW, 250°F (121°C) CURE

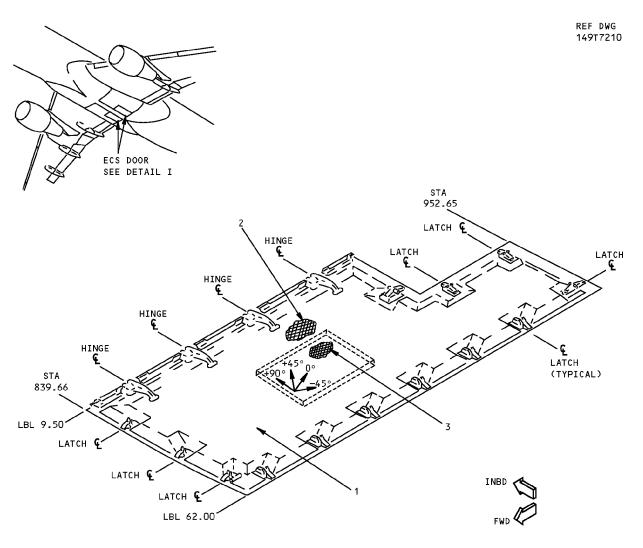
- F ARAMID/EPOXY FABRIC PER BMS 8-219, STYLE 120, 250°F (121°C) CURE
- G FIBERGLASS/EPOXY FABRIC PER BMS 8-79, TYPE 1581, CLASS III, 250°F (121°C) CURE
- H FOR CUM LINE NUMBERS: 1 THRU 211
- I FOR CUM LINE NUMBERS: 212 AND ON

Pressure Bottle Access Door Identification Figure 1 (Sheet 2 of 2)

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IDENTIFICATION 12 - ECS DOOR



ECS DOOR DETAIL I

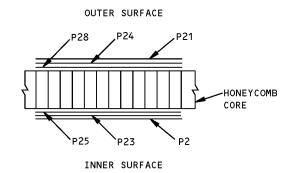
ITEM	DESCRIPTION	GAGE	MATERIAL	EFFECTIVITY
1	DOOR PANEL SKIN		ARAMID/GRAPHITE/EPOXY HONEYCOMB SANDWICH SEE DETAIL I	
2	CORE		NOMEX HONEYCOMB PER BMS 8-124, CLASS I, TYPE I GRADE 5.5	
3	CORE		NOMEX HONEYCOMB PER BMS 8-124, CLASS IV, TYPE V, GRADE 3.0	

LIST OF MATERIALS FOR DETAIL I

ECS Door Identification Figure 1 (Sheet 1 of 2)

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ITEM NO.	PLY NO.	MATERIAL	PLY A ORIENTATION
	P2,P21	C	0° OR 90°
1	P25,P28	D	0° OR 90°
	P23,P24	E	90°

PLY TABLE B

DETAIL II

NOTES

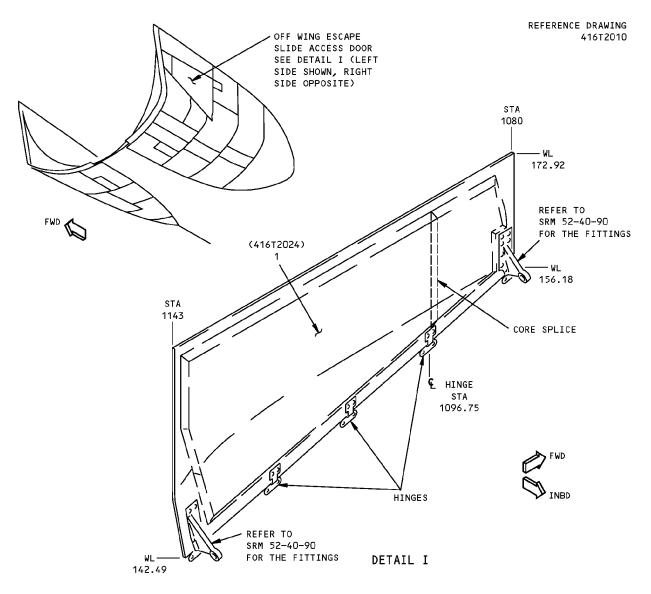
- A PLY ORIENTATION CONVENTION, DEGREES INDICATED IS PARALLEL TO THE FABRIC WARP DIRECTION
- B MATERIAL AND PLY ORIENTATION SHOWN FOR FIELD AREAS ONLY. SEE BOEING DRAWINGS FOR EDGE BANDS AND AREAS WITH DOUBLERS
- C ARAMID/EPOXY FABRIC PER BMS 8-219, STYLE 285, 250°F (121°C) CURE
- D GRAPHITE/EPOXY FABRIC PER BMS 8-168, TYPE II, CLASS 2, STYLE 3K-70-PW, 250°F (121°C) CURE
- E GRAPHITE/EPOXY TAPE PER BMS 8-168, TYPE II, CLASS I, GRADE 190, 250°F (121°C) CURE

ECS Door Identification Figure 1 (Sheet 2 of 2)

52-40-02



IDENTIFICATION 13 - ACCESS DOOR



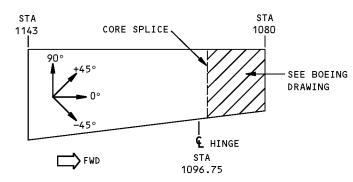
ITEM	DESCRIPTION	GAGE	MATERIAL	EFFECTIVITY
1	DOOR PANEL SKIN FWD CORE AFT CORE		ARAMID/GRAPHITE EPOXY HONEYCOMB SANDWICH SEE DETAIL II NOMEX HONEYCOMB PER BMS 8-124, CLASS IV, TYPE V, GRADE 8.0 NOMEX HONEYCOMB PER BMS 8-124, CLASS IV, TYPE V, GRADE 3.0	

LIST OF MATERIALS FOR DETAIL I

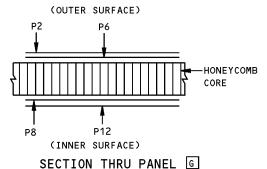
Off-Wing Escape Slide Access Door Identification Figure 1 (Sheet 1 of 2)

> **IDENTIFICATION 13** 52-40-02



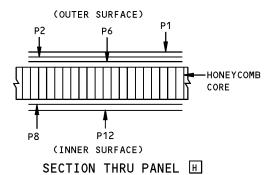


VIEW ON PANEL [C]



ITEM NO.	PLY NO.	MATERIAL	PLY ORIENTATION A
1	P2, P12	D	±45°
	P6, P8	E	±45°

PLY TABLE B G



ITEM NO.	PLY NO.	MATERIAL	PLY ORIENTATION A
	P1	F	OPTIONAL
1	P2, P12	D	±45°
	P6, P8	E	±45°

PLY TABLE B H

DETAIL II

NOTES

- A PLY ORIENTATION CONVENTION, DEGREES INDICATED IS PARALLEL TO THE FABRIC WARP DIRECTION
- B MATERIAL AND PLY ORIENTATION SHOWN FOR FIELD AREAS ONLY. SEE BOEING DRAWINGS FOR EDGE BANDS AND AREAS WITH DOUBLERS
- C DIAGRAM OF PLY ORIENTATION, SEE PLY TABLE FOR PLY ORIENTATION AND MATERIAL
- D ARAMID/EPOXY FABRIC PER BMS 8-219, STYLE 285, 250°F (121°C) CURE

- E GRAPHITE/EPOXY FABRIC PER BMS 8-168, TYPE II, CLASS 2, STYLE 3K-70-PW, 250°F (121°C) CURE
- F FIBERGLASS/EPOXY FABRIC PER BMS 8-79, TYPE 120, CLASS III, 250°F (121°C) CURE
- G FOR CUM LINE NUMBERS: 1 THRU 211
- H FOR CUM LINE NUMBERS: 212 AND ON

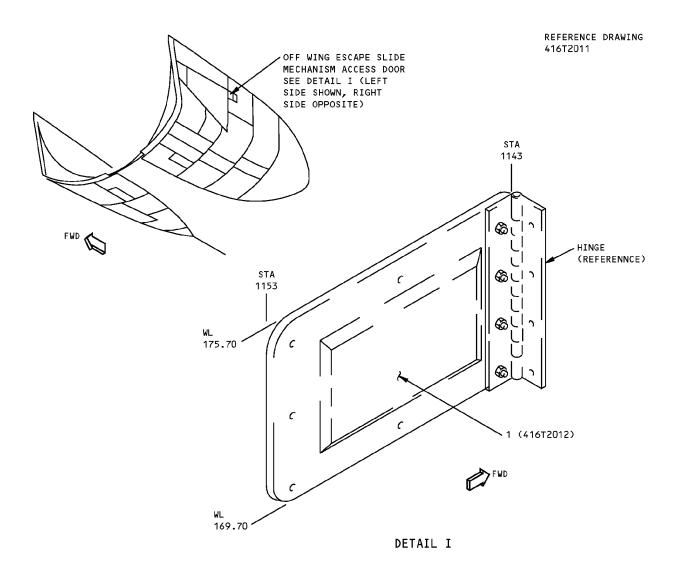
Off-Wing Escape Slide Access Door Identification Figure 1 (Sheet 2 of 2)

IDENTIFICATION 13
Page 2

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IDENTIFICATION 14 - MECHANISM ACCESS DOOR



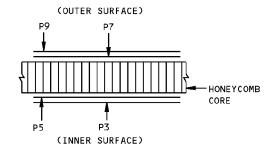
ITEM	DESCRIPTION	GAGE	MATERIAL	EFFECTIVITY
1	DOOR PANEL SKIN CORE		ARAMID/GRAPHITE/EPOXY HONEYCOMB SANDWICH SEE DETAIL II NOMEX HONEYCOMB PER BMS 8-124, CLASS IV, TYPE V, GRADE 3.0	

LIST OF MATERIALS FOR DETAIL I

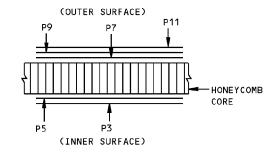
Off-Wing Escape Slide Mechanism Access Door Identification Figure 1 (Sheet 1 of 2)

IDENTIFICATION 14
Page 1
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SECTION THRU HONEYCOMB PANEL G



SECTION THRU HONEYCOMB PANEL F

ITEM NO.	PLY NO.	MATERIAL	PLY ORIENTATION A
	Р3	E	OPTIONAL
1	P5,P7,P9	С	OPTIONAL

PLY TABLE B G

ITEM NO.	PLY NO.	MATERIAL	PLY ORIENTATION A	
	P3	E	OPTIONAL	
1	P5,P7,P9	С	OPTIONAL	
	P11	٥	OPTIONAL	

PLY TABLE B F

DETAIL II

NOTES

- A PLY ORIENTATION CONVENTION, DEGREES INDICATED IS PARALLEL TO THE FABRIC WARP DIRECTION
- B MATERIAL AND PLY ORIENTATION SHOWN FOR FIELD AREAS ONLY. SEE BOEING DRAWINGS FOR EDGE BANDS AND AREAS WITH DOUBLERS
- C ARAMID/EPOXY FABRIC PER BMS 8-219, STYLE 285, 250°F (121°C) CURE
- D FIBERGLASS/EPOXY FABRIC PER BMS 8-79, TYPE 120, CLASS III, GRADE 1, 250°F (121°C) CURE

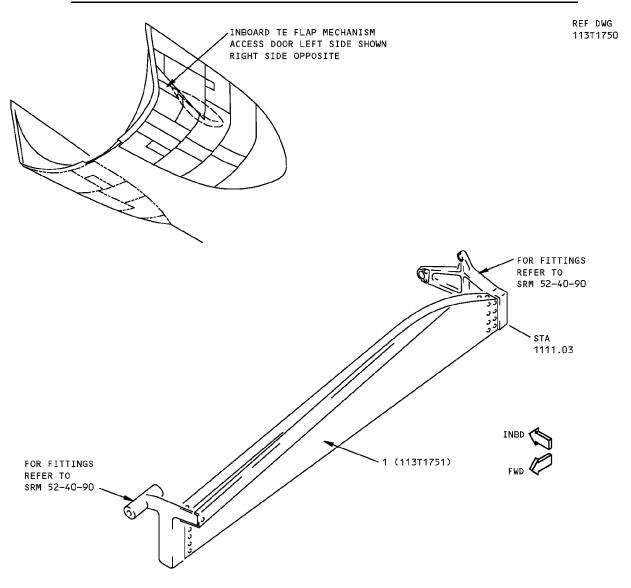
- E ARAMID/EPOXY FABRIC PER BMS 8-219, STYLE 120, 250°F (121°C) CURE
- F FOR CUM LINE NUMBERS: 212 AND ON
- G FOR CUM LINE NUMBERS: 1 THRU 211

Off-Wing Escape Slide Mechanism Access Door Identification Figure 1 (Sheet 2 of 2)

52-40-02



IDENTIFICATION 15 - INBOARD TRAILING EDGE FLAP MECHANISM ACCESS DOOR



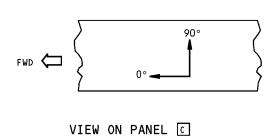
ITEM	DESCRIPTION	GAGE	MATERIAL	EFFECTIVITY
1	DOOR PANEL OUTER SKIN INNER SKIN UPPER CHANNEL LOWER CHANNEL ANGLE	0.063 0.063 0.020	ARAMID/FIBERGLASS LAMINATE SEE DETAIL I SEE DETAIL I CLAD 7075-T62 CLAD 7075-T62 CLAD 7075-T62	

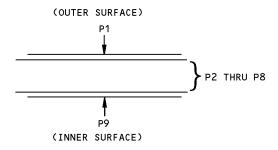
LIST OF MATERIALS

Inboard Trailing Edge Flap Mechanism Access Door Identification Figure 1 (Sheet 1 of 2)

IDENTIFICATION 15
Page 1
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SECTION THRU PANEL

ITEM NO.	PLY NO.	MATERIAL	PLY ORIENTATION A
	P1, P9	E	0° OR 90°
1	P2, P3, P4 P5, P6, P7 P8	D	0° OR 90°

PLY TABLE B

DETAIL I

NOTES

- A PLY ORIENTATION CONVENTION, DEGREES INDICATED IS PARALLEL TO THE FABRIC WARP DIRECTION
- B MATERIAL AND PLY ORIENTATION SHOWN FOR FIELD AREAS ONLY. SEE BOEING DRAWINGS FOR EDGE BANDS AND AREAS WITH DOUBLERS
- C DIAGRAM OF PLY ORIENTATION, SEE PLY TABLE FOR PLY ORIENTATION AND MATERIAL

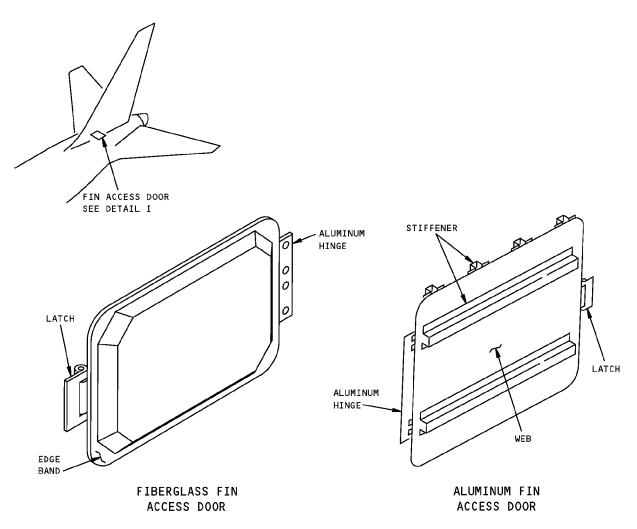
- D ARAMID/EPOXY FABRIC PER BMS 8-219, STYLE 285, 250°F (121°C) CURE
- E FIBERGLASS/EPOXY FABRIC PER BMS 8-79, CLASS III, GRADE 1, STYLE 120, 250°F (121°C) CURE

Inboard Trailing Edge Flap Mechanism Access Door Identification Figure 1 (Sheet 2 of 2)

52-40-02



ALLOWABLE DAMAGE 1 - FIN ACCESS DOOR



DETAIL I

LOCATION	CRACKS	NICKS, GOUGES AND CORROSION	DENTS	HOLES	DELAMINATION
FIBERGLASS FIN ACCESS DOOR	В	C	D	E	F
ALUMINUM FIN ACCESS DOOR					
WEB	G	Н	M	I	
STIFFENER	JL	K	NOT ALLOWED	Ī	
HINGE/LATCH	NOT ALLOWED	N	NOT ALLOWED	NOT ALLOWED	

Fin Access Door Allowable Damage Figure 101 (Sheet 1 of 4)

ALLOWABLE DAMAGE 1

52-40-02



NOTES

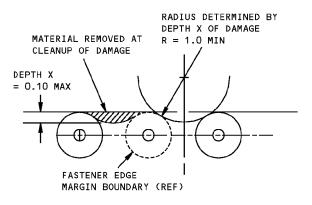
- THESE ALLOWABLE DAMAGE LIMITS ARE FAA APPROVED CONTINGENT ON ACCOMPLISHMENT OF THE INSPECTIONS AT THE INTERVALS CONTAINED HEREIN
- REFER TO SRM 51-10-02 FOR INSPECTION AND REMOVAL OF DAMAGE
- REFINISH REWORKED AREAS AS GIVEN IN AMM 51-21
- DAMAGE TO PANEL EDGES MAY BE CONFINED TO DELAMINATION OR MAY TAKE A FORM WHICH RESULTS IN DAMAGE TO FIBERS AND A LOSS OF EFFECTIVE CROSS-SECTIONAL AREA. THIS TYPE OF DAMAGE SHOULD BE REMOVED AND THE LIMITATIONS GIVEN FOR CRACKS APPLIED
- A REMOVE MOISTURE FROM DAMAGE AREA. USE OF VACUUM AND HEAT (MAX OF 125°F (52°C)) TO REMOVE MOISTURE FROM HONEYCOMB CELLS IS RECOMMENDED. PROTECT DAMAGE FROM ENTRANCE OF WATER, SUNLIGHT OR OTHER FOREIGN MATTER BY SEALING WITH ALUMINUM FOIL TAPE (SPEED TAPE). RECORD THE LOCATION AND INSPECT EACH AIRPLANE "ALUMINUM FOIL TAPE IF ANY PEELING OR DETERIORATION IS EVIDENT. REPAIR NO LATER THAN NEXT AIRPLANE "C" CHECK
- B 0.50 INCH (13 mm) MAXIMUM LENGTH FOR EACH SQUARE FOOT OF AREA IS PERMITTED IN THE HONEYCOMB AREA. MINIMUM OF 6.0 INCHES (150 mm) FROM ANY OTHER CRACK. EDGE CRACKS MUST BE REMOVED AS GIVEN IN DETAILS II AND VI. MAINTAIN EDGE MARGIN SHOWN. REFINISH OR A.
- C DAMAGE IS PERMITTED ON SURFACE RESIN ONLY.

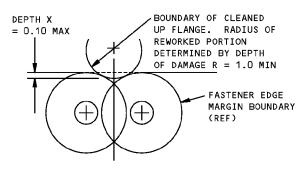
 DAMAGE TO FIBERS IS NOT PERMITTED. CLEAN UP
 EDGE DAMAGE AS GIVEN IN DETAILS II AND VI. A
- D DENTS GENERALLY RESULT IN FIBER DAMAGE OR DELAMINATION. HOWEVER, IF THERE IS NO FIBER DAMAGE OR DELAMINATION, DENTS UP TO 2.25 INCHES (56 mm) DIAMETER MAXIMUM ARE PERMITTED. ONE DENT FOR EACH SQUARE FOOT OF AREA IS PERMITTED. IT MUST BE A MINIMUM OF 6.00 INCHES (150 mm) FROM ANY OTHER DAMAGE, FASTENER HOLE, OR PANEL EDGE. IF THERE IS FIBER DAMAGE OR DELAMINATION, REFER TO THE APPLICABLE DAMAGE DATA IN THE TABLE.

- E 0.50 INCH (13 mm) MAX DIA PERMITTED PROVIDED DAMAGE IS MIN OF 2.5 D FROM OTHER DAMAGE, NEAREST HOLE, OR MATERIAL EDGE. DO NOT CLEAN UP DAMAGE EXCEPT TO REMOVE RESIN BURRS EXTENDING INTO SURFACE CONTOUR. A
- F 0.50 INCH (13 mm) MAX DIA IS PERMITTED IN HONEYCOMB AREA. A MAXIMUM OF 0.10 INCH (2.5 mm) DELAMINATION FROM EDGE IS PERMITTED. REPAIR DELAMINATION IN HONEYCOMB AREA AS GIVEN IN SRM 51-70 NO LATER THAN THE NEXT AIRPLANE "C" CHECK. PROTECT EDGE DAMAGE AS GIVEN IN A.
- G CRACKS ARE NOT PERMITTED EXCEPT FOR EDGE CRACKS WHICH MUST BE REMOVED AS GIVEN IN DETAILS II, III AND VI
- H REMOVE DAMAGE AS GIVEN IN DETAILS II, III, V AND VI
- CLEAN OUT DAMAGE UP TO 0.25 INCH (6 mm)
 MAX DIA AND NOT CLOSER THAN 1.0 INCH
 (25 mm) TO FASTENER HOLE, MATERIAL EDGE,
 OR OTHER DAMAGE. FILL HOLE WITH 2117-T3
 OR T4 ALUMINUM RIVET INSTALLED WET WITH
 BMS 5-95 SEALANT. ALL OTHER HOLES TO BE
 REPAIRED
- J FOR EDGE CRACKS SEE DETAIL II AND VII. FOR RADIUS CRACKS NOT EXCEEDING 1.00 INCH (25 mm) SEE DETAIL VII
- REMOVE DAMAGE AS GIVEN IN DETAILS II, III, V AND VII
- ACCUMULATED LENGTH OF CRACKS MUST NOT EXCEED 10% OF FLANGE LENGTH. DISTANCE BETWEEN STOP HOLES OF ADJACENT CRACKS MUST NOT BE LESS THAN 4.0 INCHES (100 mm)
- M DEPTH OF DENT MAY NOT EXCEED 0.125 INCH
 (3 mm) AND MAY NOT EXTEND TO OR INCLUDE A
 STIFFENER. SEE DETAIL IV

Fin Access Door Allowable Damage Figure 101 (Sheet 2 of 4)



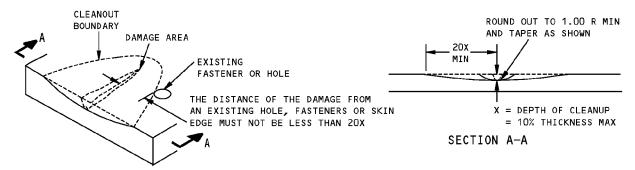




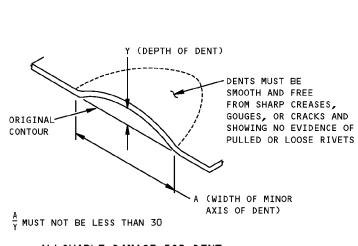
DAMAGE CLEANUP OF EDGES WHERE FASTENER EDGE MARGINS DO NOT OVERLAP

DAMAGE CLEANUP OF EDGES WHERE FASTENER EDGE MARGINS OVERLAP

DETAIL II



REMOVAL OF NICK, GOUGE AND SCRATCH DAMAGE ON A SURFACE DETAIL III



X = DEPTH OF CLEANUP = 10% OF THICKNESS MAX SMOOTH BLENDOUT RADIUS 0.50 INCH MINIMUM.

ALLOWABLE DAMAGE FOR DENT DETAIL IV

CORROSION CLEANUP AROUND ANY THREE FASTENERS IN TEN IS PERMITTED TO MAX DEPTH SECTION B-B

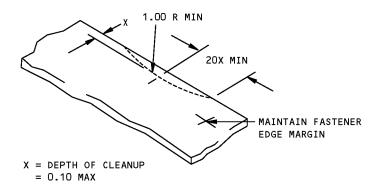
SECTION B-B CORROSION CLEANUP DETAIL V

Fin Access Door Allowable Damage Figure 101 (Sheet 3 of 4)

ALLOWABLE DAMAGE 1

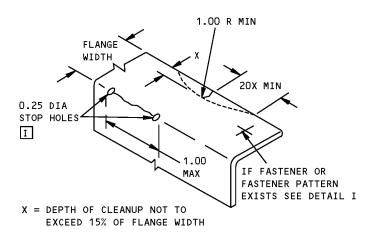
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REMOVAL OF NICK OR CRACK DAMAGE ON AN EDGE

DETAIL VI



FORMED MEMBER

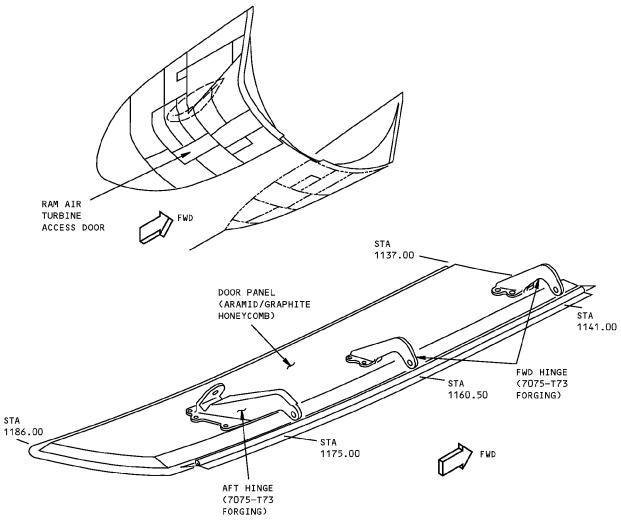
DETAIL VII

Fin Access Door Allowable Damage Figure 101 (Sheet 4 of 4)

ALLOWABLE DAMAGE 1
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ALLOWABLE DAMAGE 2 - RAM AIR TURBINE ACCESS DOOR



ITEMS	CRACKS	NICKS, GOUGES, AND SCRATCHES	DENTS	PUNCTURES AND HOLES	DELAMINATIONS
DOOR PANEL	А	c	G	E	ONE SQUARE INCH ALLOWED IN HONEYCOMB AREAS ONLY.
FWD HINGE STA. 1141.00 AND STA. 1160.00	D	FOR CORNER DAMAGE SEE DETAIL II FOR OTHERS B	NOT ALLOWED	NOT ALLOWED	
AFT HINGE STA. 1175.00	D	FOR CORNER DAMAGE SEE DETAIL II FOR OTHERS B	NOT ALLOWED	NOT ALLOWED	

Ram Air Turbine Access Door Allowable Damage Figure 101 (Sheet 1 of 3)

ALLOWABLE DAMAGE 2
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52-40-02



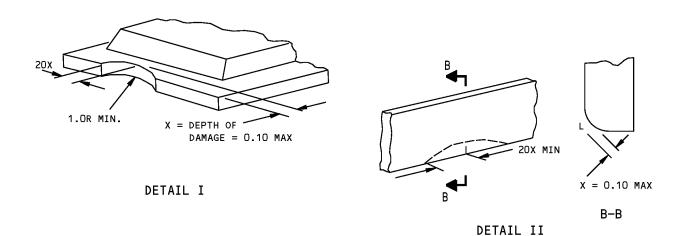
NOTES

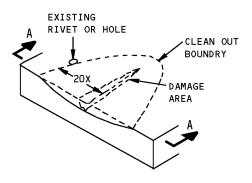
- THESE ALLOWABLE DAMAGE LIMITS ARE FAA APPROVED CONTINGENT ON ACCOMPLISHMENT OF THE INSPECTIONS AT THE INTERVALS CONTAINED HEREIN
- REFER TO SRM 51-10-02 FOR INSPECTION AND REMOVAL OF DAMAGE
- RESTORE DAMAGED ALUMINUM FLAME SPRAY OR CONDUCTIVE COATING AS GIVEN IN SRM 51-70-14
- REFER TO SRM 51-10-01 FOR AERODYNAMIC SMOOTHNESS REQUIREMENTS. WHERE THE DAMAGE IS MORE THAN THE LIMITS SHOWN IN SRM 51-10-01, CONSIDERATION SHOULD BE GIVEN TO THE LOSS OF PERFORMANCE INVOLVED
- REFINISH REWORK AREAS AS GIVEN IN AMM 51-20
- DAMAGE TO PANEL EDGES MAY BE CONFINED TO DELAMINATION OR MAY TAKE A FORM WHICH RE-SULTS IN DAMAGE TO FIBERS AND A LOSS OF EFFECTIVE CROSS-SECTIONAL AREA. THIS TYPE OF DAMAGE SHOULD BE REMOVED AND THE LIMITATIONS GIVEN FOR CRACKS APPLIED
- A NONE ALLOWED EXCEPT FOR EDGE CRACKS WHICH ARE AT LEAST 2.5 INCHES (63 mm) DIA'S FROM FASTENER HOLES. CLEAN UP EDGE DAMAGE AS GIVEN IN DETAIL I
- B NICK, GOUGE, OR SCRATCH DAMAGE REMOVED ACCORDING TO DETAIL III IS ALLOWED
- C DAMAGE IS PERMITTED ON SURFACE RESIN ONLY.
 DAMAGE TO FIBERS ARE NOT PERMITTED | H
- D CLEAN UP CORNER CRACKS AS GIVEN IN DETAIL II.
 ALL OTHER CRACKS MUST BE REPAIRED

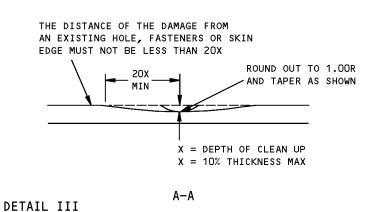
- E HOLES AND PUNCTURES CLEANED UP TO 0.19 INCH
 (4.8 mm) DIA MAXIMUM ALLOWED PROVIDED
 THERE IS 2.5 INCHES (63 mm) DIA'S OF SOUND
 MATERIAL BETWEEN THE NEAREST ADJACENT HOLE
 OR MATERIAL EDGE
- F SHOT PEEN OR FLAP PEEN ALL REWORKED SURFACES EXCEPT BORE AS GIVEN IN SRM 51-20-06. SHOT PEEN INTENSITIES WILL VARY WITH THE THICKNESS LEFT OVER AFTER REWORK
- G DENTS GENERALLY RESULT IN FIBER DAMAGE OR DELAMINATION. HOWEVER, PROVIDED THAT THERE IS NO FIBER DAMAGE OR DELAMINATION, DENTS UP TO 2.25 INCHES (56 mm) DIA MAX ARE PERMITTED. ONE DENT PER SQUARE FOOT OF AREA PERMITTED WHICH MUST BE A MINIMUM OF 6 INCHES (150 mm) FROM ANY OTHER DENT, PUNCTURE OR DELAMINATION. SEE DETAIL IV. DENTS ALLOWED IN HONEYCOMB AREAS ONLY
- H REMOVE MOISTURE FROM DAMAGE AREA. USE OF VACUUM AND HEAT (MAX OF 125°F [52°C]) TO REMOVE MOISTURE FROM HONEYCOMB CELLS IS RECOMMENDED. PROTECT DAMAGE FROM ENTRANCE OF WATER, SUNLIGHT OR OTHER FOREIGN MATTER BY SEALING WITH ALUMINUM FOIL TAPE (SPEED TAPE). RECORD THE LOCATION AND INSPECT EACH AIRPLANE "A" CHECK. REPLACE THE ALUMINUM FOIL TAPE IF ANY PEELING OR DETERIORATION IS EVIDENT. REPAIR NO LATER THAN NEXT AIRPLANE "C" CHECK

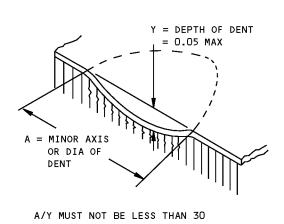
Ram Air Turbine Access Door Allowable Damage Figure 101 (Sheet 2 of 3)











DETAIL IV

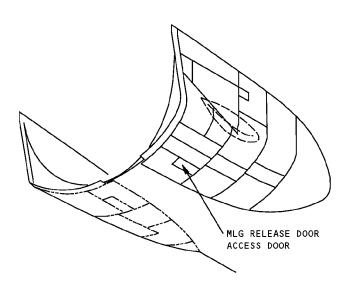
Ram Air Turbine Access Door Allowable Damage Figure 101 (Sheet 3 of 3)

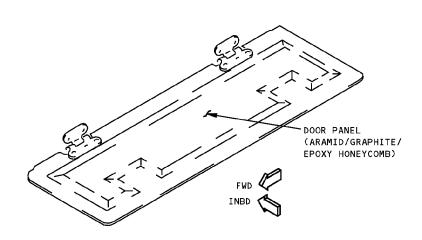
ALLOWABLE DAMAGE 2
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ALLOWABLE DAMAGE 3 - MLG DOOR RELEASE ACCESS DOOR

REF DWG 149T7613



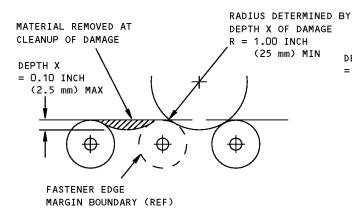


ITEM	CRACKS	NICKS AND GOUGES	DENTS	HOLES AND PUNCTURES	DELAMINATION
DOOR PANEL	В	С	D	E	규

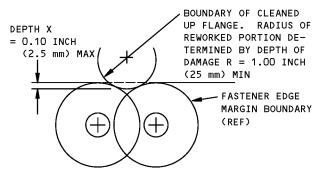
MLG Door Release Access Door Allowable Damage Figure 101 (Sheet 1 of 2)

ALLOWABLE DAMAGE 3
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DAMAGE CLEANUP OF EDGES WHERE FASTENER EDGE MARGINS DO NOT OVERLAP



DAMAGE CLEANUP OF EDGES WHERE FASTENER EDGE MARGINS OVERLAP

DETAIL I

NOTES

- THESE ALLOWABLE DAMAGE LIMITS ARE FAA APPROVED CONTINGENT ON ACCOMPLISHMENT OF THE INSPECTIONS AT THE INTERVALS CONTAINED HEREIN
- REFER TO SRM 51-10-02 FOR INSPECTION AND REMOVAL OF DAMAGE
- RESTORE DAMAGED ALUMINUM FLAME SPRAY OR CONDUCTIVE COATING AS GIVEN IN SRM 51-70-14
- REFER TO SRM 51-10-01 FOR AERODYNAMIC SMOOTHNESS REQUIREMENTS. WHERE THE DAMAGE IS MORE THAN THE LIMITS SHOWN IN SRM 51-10-01, CONSIDERATION SHOULD BE GIVEN TO THE LOSS OF PERFORMANCE INVOLVED
- REFINISH REWORKED AREAS AS GIVEN IN AMM 51-20
- DAMAGE TO PANEL EDGES MAY BE CONFINED TO DELAMINATION OR MAY TAKE A FORM WHICH RESULTS IN DAMAGE TO FIBERS AND A LOSS OF EFFECTIVE CROSS-SECTIONAL AREA. THIS TYPE OF DAMAGE SHOULD BE REMOVED AND THE LIMITATIONS GIVEN FOR CRACKS APPLIED
- A REMOVE MOISTURE FROM DAMAGE AREA. USE OF VACUUM AND HEAT (MAX OF 125°F [52°C]) TO REMOVE MOISTURE FROM HONEYCOMB CELLS IS RECOMMENDED. PROTECT DAMAGE FROM ENTRANCE OF WATER, SUNLIGHT OR OTHER FOREIGN MATTER BY SEALING WITH ALUMINUM FOIL TAPE (SPEED TAPE). RECORD THE LOCATION AND INSPECT EACH AIRPLANE "A" CHECK. REPLACE THE ALUMINUM FOIL TAPE IF ANY PEELING OR DETERIORATION IS EVIDENT. REPAIR NO LATER THAN NEXT AIRPLANE "C" CHECK

- B 2.0 INCHES (50 mm) MAX LENGTH IN HONEYCOMB AREA IS PERMITTED FOR EACH SQUARE FOOT OF AREA AND MINIMUM OF 6.0 INCHES (150 mm) FROM ANY OTHER CRACK. CLEAN UP EDGE CRACKS AS GIVEN IN DETAIL I. CRACKS THROUGH CONSECUTIVE FASTENERS OR THROUGH THE PANEL EDGE-BAND ARE PERMITTED PROVIDED DAMAGE DOES NOT EXCEED 10% OF EDGEBAND LENGTH FOR EACH SIDE. A
- DAMAGE IS PERMITTED ON SURFACE RESIN ONLY.

 DAMAGE TO FIBERS NOT PERMITTED. CLEAN UP
 EDGE DAMAGE AS GIVEN IN DETAIL I. A
- D DENTS GENERALLY RESULT IN FIBER DAMAGE OR DELAMINATION. HOWEVER, PROVIDED THAT THERE IS NO FIBER DAMAGE OR DELAMINATION, DENTS UP TO 1.50 INCHES (38 mm) DIA MAX ARE PERMITTED. ONE DENT FOR EACH SQUARE FOOT OF AREA PERMITTED WHICH MUST BE A MINIMUM OF 6 INCHES (150 mm) FROM ANY OTHER DAMAGE, FASTENER HOLE, OR PANEL EDGE. IF FIBER DAMAGE OR DELAMINATION IS PRESENT REFER TO APPLICABLE DATA IN TABLE
- E 1.0 INCH (25 mm) MAX DIA PERMITTED IN
 HONEYCOMB AREA ONLY PROVIDED DAMAGE IS MIN
 OF 2.5 D FROM OTHER DAMAGE, NEAREST HOLE,
 OR MATERIAL EDGE. DO NOT CLEAN UP DAMAGE
 EXCEPT TO REMOVE RESIN BURRS EXTENDING INTO
 SURFACE CONTOUR. A
- F 1.0 INCH (25 mm) MAX DIA IS ALLOWED IN HONEYCOMB AREA. A MAXIMUM OF 0.10 INCH (2.5 mm) DELAMINATION FROM EDGE IS PERMITTED. REPAIR DELAMINATION IN HONEYCOMB AREA AS GIVEN IN SRM 51-70 NO LATER THEN THE NEXT "C" CHECK. PROTECT EDGE DAMAGE AS GIVEN IN A

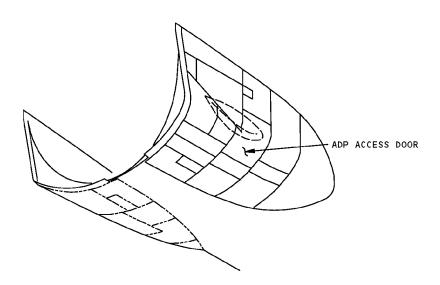
MLG Door Release Access Door Allowable Damage Figure 101 (Sheet 2 of 2)

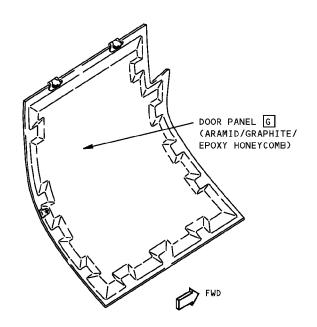
ALLOWABLE DAMAGE 3
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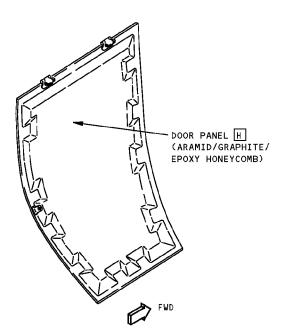


ALLOWABLE DAMAGE 4 - ADP ACCESS DOOR

REF DWG 149T7608 149T7610





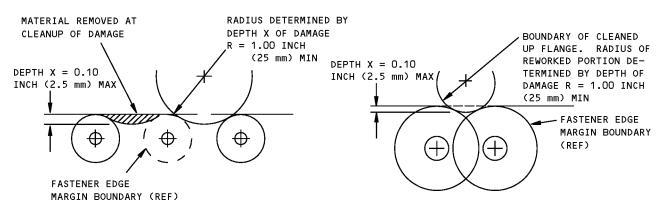


ITEM	CRACKS	NICKS AND GOUGES	DENTS	HOLES AND PUNCTURES	DELAMINATION
DOOR PANEL	R	С	٥	E	F

ADP Access Door Allowable Damage Figure 101 (Sheet 1 of 2)

ALLOWABLE DAMAGE 4
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DETAIL I

DAMAGE CLEANUP OF EDGES WHERE FASTENER EDGE MARGINS DO NOT OVERLAP

DAMAGE CLEANUP OF EDGES WHERE FASTENER EDGE MARGINS OVERLAP

NOTES

- THESE ALLOWABLE DAMAGE LIMITS ARE FAA APPROVED CONTINGENT ON ACCOMPLISHMENT OF THE INSPECTIONS AT THE INTERVALS CONTAINED HEREIN
- REFER TO SRM 51-10-02 FOR INSPECTION AND REMOVAL OF DAMAGE
- RESTORE DAMAGED ALUMINUM FLAME SPRAY OR CONDUCTIVE COATING AS GIVEN IN SRM 51-70-14
- REFER TO SRM 51-10-01 FOR AERODYNAMIC SMOOTHNESS REQUIREMENTS. WHERE THE DAMAGE IS MORE THAN THE LIMITS SHOWN IN SRM 51-10-01, CONSIDERATION SHOULD BE GIVEN TO THE LOSS OF PERFORMANCE INVOLVED
- REFINISH REWORKED AREAS AS GIVEN IN AMM 51-20
- DAMAGE TO PANEL EDGES MAY BE CONFINED TO DELAMINATION OR MAY TAKE A FORM WHICH RESULTS IN DAMAGE TO FIBERS AND A LOSS OF EFFECTIVE CROSS-SECTIONAL AREA. THIS TYPE OF DAMAGE SHOULD BE REMOVED AND THE LIMITATIONS GIVEN FOR CRACKS APPLIED
- A REMOVE MOISTURE FROM DAMAGE AREA. USE OF VACUUM AND HEAT (MAX OF 125°F [52°C]) TO REMOVE MOISTURE FROM HONEYCOMB CELLS IS RECOMMENDED. PROTECT DAMAGE FROM ENTRANCE OF WATER, SUNLIGHT OR OTHER FOREIGN MATTER BY SEALING WITH ALUMINUM FOIL TAPE (SPEED TAPE). RECORD THE LOCATION AND INSPECT EACH AIRPLANE "A" CHECK. REPLACE THE ALUMINUM FOIL TAPE IF ANY PEELING OR DETERIORATION IS EVIDENT. REPAIR NO LATER THAN NEXT AIRPLANE "C" CHECK

- B 2.0 INCHES (50 mm) MAX LENGTH IN HONEYCOMB
 AREA IS PERMITTED FOR EACH SQUARE FOOT OF
 AREA AND MINIMUM OF 6.0 INCHES (150 mm)
 FROM ANY OTHER CRACK. CLEAN UP EDGE CRACKS
 AS GIVEN IN DETAIL I. CRACKS THROUGH
 CONSECUTIVE FASTENERS OR THROUGH THE PANEL
 EDGE-BAND ARE PERMITTED PROVIDED DAMAGE
 DOES NOT EXCEED 10% OF EDGEBAND LENGTH FOR
 EACH SIDE. A
- DAMAGE IS PERMITTED ON SURFACE RESIN ONLY.

 DAMAGE TO FIBERS NOT PERMITTED. CLEAN UP
 EDGE DAMAGE PER DETAIL I. A
- D DENTS GENERALLY RESULT IN FIBER DAMAGE OR DELAMINATION. HOWEVER, PROVIDED THAT THERE IS NO FIBER DAMAGE OR DELAMINATION, DENTS UP TO 1.50 INCHES (38 mm) DIA MAX ARE PERMITTED. ONE DENT FOR EACH SQUARE FOOT OF AREA PERMITTED WHICH MUST BE A MINIMUM OF 6 INCHES (150 mm) FROM ANY OTHER DAMAGE, FASTENER HOLE, OR PANEL EDGE. IF FIBER DAMAGE OR DELAMINATION IS PRESENT REFER TO APPLICABLE DATA IN TABLE
- E 1.0 INCH (25 mm) MAX DIA PERMITTED IN HONEYCOMB AREA ONLY PROVIDED DAMAGE IS MIN OF 2.5 D FROM OTHER DAMAGE, NEAREST HOLE, OR MATERIAL EDGE. DO NOT CLEAN UP DAMAGE EXCEPT TO REMOVE RESIN BURRS EXTENDING INTO SURFACE CONTOUR. A
- F 1.0 INCH (25 mm) MAX DIA IS ALLOWED IN HONEYCOMB AREA. A MAXIMUM OF 0.10 INCH (2.5 mm) DELAMINATION FROM EDGE IS PERMITTED. REPAIR DELAMINATION IN HONEYCOMB AREA AS GIVEN IN SRM 51-70 NO LATER THEN THE NEXT "C" CHECK. PROTECT EDGE DAMAGE AS GIVEN IN A
- G FOR CUM LINE NUMBERS: 1 THRU 29
- H FOR CUM LINE NUMBERS: 30 AND ON

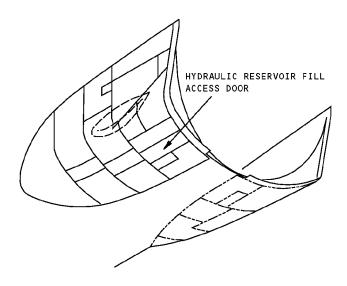
ADP Access Door Allowable Damage Figure 101 (Sheet 2 of 2)

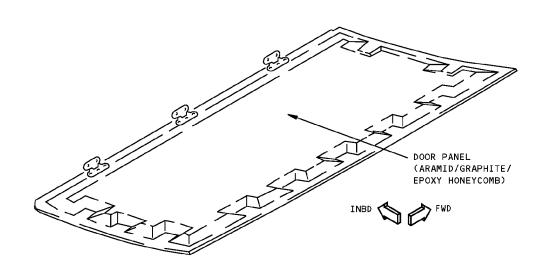
ALLOWABLE DAMAGE 4
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ALLOWABLE DAMAGE 5 - HYDRAULIC RESERVOIR FILL ACCESS DOOR

REF DWG 149T7611



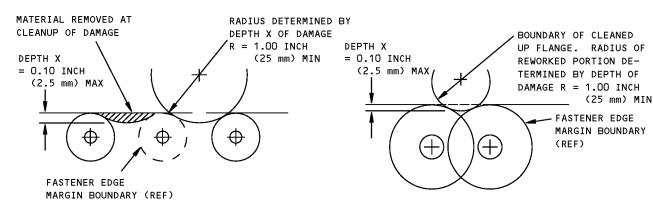


ITEM	CRACKS	NICKS AND GOUGES	DENTS	HOLES AND PUNCTURES	DELAMINATION
DOOR PANEL	В	C	D	E	F

Hydraulic Reservoir Fill Access Door Allowable Damage Figure 101 (Sheet 1 of 2)

ALLOWABLE DAMAGE 5
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DAMAGE CLEANUP OF EDGES WHERE FASTENER EDGE MARGINS DO NOT OVERLAP

DAMAGE CLEANUP OF EDGES WHERE FASTENER EDGE MARGINS OVERLAP

DETAIL I

NOTES

- THESE ALLOWABLE DAMAGE LIMITS ARE FAA APPROVED CONTINGENT ON ACCOMPLISHMENT OF THE INSPECTIONS AT THE INTERVALS CONTAINED HEREIN
- REFER TO SRM 51-10-02 FOR INSPECTION AND REMOVAL OF DAMAGE
- RESTORE DAMAGED ALUMINUM FLAME SPRAY OR CONDUCTIVE COATING AS GIVEN IN SRM 51-70-14
- REFER TO SRM 51-10-01 FOR AERODYNAMIC SMOOTHNESS REQUIREMENTS. WHERE THE DAMAGE IS MORE THAN THE LIMITS SHOWN IN 51-10-01, CONSIDERATION SHOULD BE GIVEN TO THE LOSS OF PERFORMANCE INVOLVED
- REFINISH REWORKED AREAS AS GIVEN IN AMM 51-20
- DAMAGE TO PANEL EDGES MAY BE CONFINED TO DELAMINATION OR MAY TAKE A FORM WHICH RESULTS IN DAMAGE TO FIBERS AND A LOSS OF EFFECTIVE CROSS-SECTIONAL AREA. THIS TYPE OF DAMAGE SHOULD BE REMOVED AND THE LIMITATIONS GIVEN FOR CRACKS APPLIED
- A REMOVE MOISTURE FROM DAMAGE AREA. USE OF VACUUM AND HEAT (MAX OF 125°F [52°C]) TO REMOVE MOISTURE FROM HONEYCOMB CELLS IS RECOMMENDED. PROTECT DAMAGE FROM ENTRANCE OF WATER, SUNLIGHT OR OTHER FOREIGN MATTER BY SEALING WITH ALUMINUM FOIL TAPE (SPEED TAPE). RECORD THE LOCATION AND INSPECT EACH AIRPLANE "A" CHECK. REPLACE THE ALUMINUM FOIL TAPE IF ANY PEELING OR DETERIORATION IS EVIDENT. REPAIR NO LATER THAN NEXT AIRPLANE "C" CHECK

- B 2.0 INCHES (50 mm) MAX LENGTH IN HONEYCOMB AREA IS PERMITTED FOR EACH SQUARE FOOT OF AREA AND MINIMUM OF 6.0 INCHES (150 mm) FROM ANY OTHER CRACK. CLEAN UP EDGE CRACKS AS GIVRN IN DETAIL I. CRACKS THROUGH CONSECUTIVE FASTENERS OR THROUGH THE PANEL EDGE-BAND ARE PERMITTED PROVIDED DAMAGE IS NOT MORE THAN 10% OF EDGEBAND LENGTH FOR EACH SIDE. A
- DAMAGE IS PERMITTED ON SURFACE RESIN ONLY.

 DAMAGE TO FIBERS NOT PERMITTED. CLEAN UP
 EDGE DAMAGE AS GIVEN IN DETAIL I. A
- D DENTS GENERALLY RESULT IN FIBER DAMAGE OR DELAMINATION. HOWEVER, PROVIDED THAT THERE IS NO FIBER DAMAGE OR DELAMINATION, DENTS UP TO 1.50 INCHES (38 mm) DIA MAX ARE ALL PERMITTED ONE DENT FOR EACH SQUARE FOOT OF AREA PERMITTED WHICH MUST BE A MINIMUM OF 6 INCHES (150 mm) FROM ANY OTHER DAMAGE, FASTENER HOLE, OR PANEL EDGE. IF FIBER DAMAGE OR DELAMINATION IS PRESENT REFER TO APPLICABLE DATA IN TABLE
- E 1.0 INCH (25 mm) MAX DIA IS PERMITTED IN HONEYCOMB AREA ONLY PROVIDED DAMAGE IS MIN OF 2.5 D FROM OTHER DAMAGE, NEAREST HOLE, OR MATERIAL EDGE. DO NOT CLEAN UP DAMAGE EXCEPT TO REMOVE RESIN BURRS EXTENDING INTO SURFACE CONTOUR.
- F 1.0 INCH (25 mm) MAX DIA IS PERMITTED IN HONEYCOMB AREA. A MAXIMUM OF 0.10 INCH (2.5 mm) DELAMINATION FROM EDGE IS PERMITTED. REPAIR DELAMINATION IN HONEYCOMB AREA AS GIVEN IN SRM 51-70 NO LATER THAN THE NEXT "C" CHECK. PROTECT EDGE DAMAGE AS GIVEN IN A

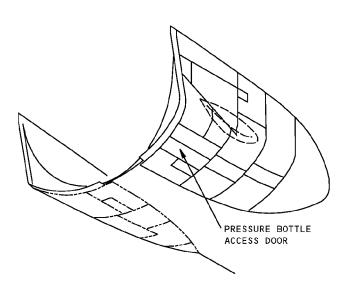
Hydraulic Reservoir Fill Access Door Allowable Damage Figure 101 (Sheet 2 of 2)

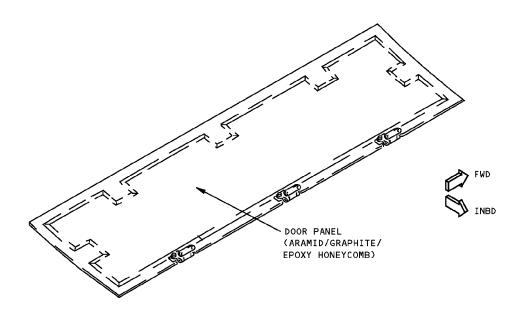
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ALLOWABLE DAMAGE 6 - PRESSURE BOTTLE ACCESS DOOR

REF DWG 149T7612





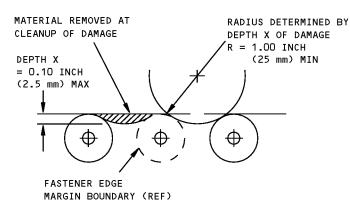
ITEM	CRACKS	NICKS AND GOUGES	DENTS	HOLES AND PUNCTURES	DELAMINATION
DOOR PANEL	В	٥	D	E	F

Pressure Bottle Access Door Allowable Damage Figure 101 (Sheet 1 of 2)

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52-40-02





DAMAGE CLEANUP OF EDGES WHERE FASTENER EDGE MARGINS DO NOT OVERLAP

DEPTH X
= 0.10 INCH
(2.5 mm) MAX

DEPTH X

DEPTH X

DUP FLANGE. RADIUS OF REWORKED PORTION DETERMINED BY DEPTH OF DAMAGE R = 1.00 INCH
(25 mm) MIN

FASTENER EDGE MARGIN BOUNDARY
(REF)

DAMAGE CLEANUP OF EDGES WHERE FASTENER EDGE MARGINS OVERLAP

DETAIL I

NOTES

- THESE ALLOWABLE DAMAGE LIMITS ARE FAA APPROVED CONTINGENT ON ACCOMPLISHMENT OF THE INSPECTIONS AT THE INTERVALS CONTAINED HEREIN
- REFER TO SRM 51-10-02 FOR INSPECTION AND REMOVAL OF DAMAGE
- RESTORE DAMAGED ALUMINUM FLAME SPRAY OR CONDUCTIVE COATING AS GIVEN IN SRM 51-70-14
- REFER TO SRM 51-10-01 FOR AERODYNAMIC SMOOTHNESS REQUIREMENTS. WHERE THE DAMAGE IS MORE THAN THE LIMITS SHOWN IN SRM 51-10-01, CONSIDERATION SHOULD BE GIVEN TO THE LOSS OF PERFORMANCE INVOLVED
- REFINISH REWORKED AREAS AS GIVEN IN AMM 51-20
- DAMAGE TO PANEL EDGES MAY BE CONFINED TO DELAMINATION OR MAY TAKE A FORM WHICH RESULTS IN DAMAGE TO FIBERS AND A LOSS OF EFFECTIVE CROSS-SECTIONAL AREA. THIS TYPE OF DAMAGE SHOULD BE REMOVED AND THE LIMITATIONS GIVEN FOR CRACKS APPLIED
- A REMOVE MOISTURE FROM DAMAGE AREA. USE OF VACUUM AND HEAT (MAX OF 125°F [52°C]) TO REMOVE MOISTURE FROM HONEYCOMB CELLS IS RECOMMENDED. PROTECT DAMAGE FROM ENTRANCE OF WATER, SUNLIGHT OR OTHER FOREIGN MATTER BY SEALING WITH ALUMINUM FOIL TAPE (SPEED TAPE). RECORD THE LOCATION AND INSPECT EACH AIRPLANE "A" CHECK. REPLACE THE ALUMINUM FOIL TAPE IF ANY PEELING OR DETERIORATION IS EVIDENT. REPAIR NO LATER THAN NEXT AIRPLANE "C" CHECK

- B 2.0 INCHES (50 mm) MAX LENGTH IN HONEYCOMB
 AREA IS PERMITTED FOR EACH SQUARE FOOT OF
 AREA AND MINIMUM OF 6.0 INCHES (150 mm) FROM
 ANY OTHER CRACK. CLEAN UP EDGE CRACKS FOR
 EACH DETAIL I. CRACKS THROUGH CONSECUTIVE
 FASTENERS OR THROUGH THE PANEL EDGE-BAND
 ARE PERMITTED PROVIDED DAMAGE IS NOT MORE
 THAN 10% OF EDGEBAND LENGTH FOR EACH SIDE.
 A
- DAMAGE IS PERMITTED ON SURFACE RESIN ONLY.

 DAMAGE TO FIBERS IS NOT PERMITTED. CLEAN

 UP EDGE DAMAGE AS GIVEN IN DETAIL I. A
- D DENTS GENERALLY RESULT IN FIBER DAMAGE OR DELAMINATION. HOWEVER, PROVIDED THAT THERE IS NO FIBER DAMAGE OR DELAMINATION, DENTS UP TO 1.50 INCHES (38 mm) DIA MAX ARE PERMITTED. ONE DENT FOR EACH SQUARE FOOT OF AREA PERMITTED, WHICH MUST BE A MINIMUM OF 6 INCHES (150 mm) FROM ANY OTHER DAMAGE, FASTENER HOLE, OR PANEL EDGE. IF FIBER DAMAGE OR DELAMINATION IS PRESENT, REFER TO APPLICABLE DATA IN TABLE
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- F 1.0 INCH (25 mm) MAX DIA IS PERMITTED IN HONEYCOMB AREA. A MAXIMUM OF 0.10 INCH (2.5 mm) DELAMINATION FROM EDGE IS PERMITTED. REPAIR DELAMINATION IN HONEYCOMB AREA AS GIVEN IN SRM 51-70 NO LATER THAN THE NEXT "C" CHECK. PROTECT EDGE DAMAGE AS GIVEN IN

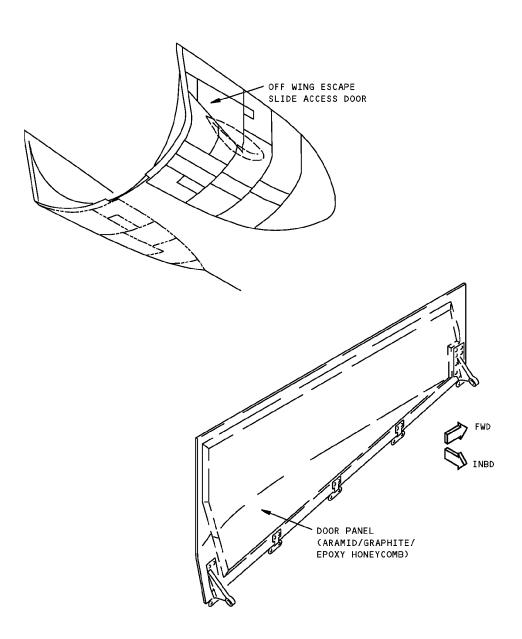
Pressure Bottle Access Door Allowable Damage Figure 101 (Sheet 2 of 2)

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ALLOWABLE DAMAGE 7 - ACCESS DOOR

REF DWG 416T2010

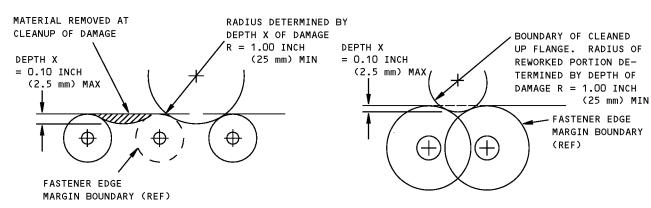


ITEM	CRACKS	NICKS AND GOUGES	DENTS	HOLES AND PUNCTURES	DELAMINATION
DOOR PANEL	В	C	D	E	F

Off-Wing Escape Slide Access Door Allowable Damage Figure 101 (Sheet 1 of 2)

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DAMAGE CLEANUP OF EDGES WHERE FASTENER EDGE MARGINS DO NOT OVERLAP

DAMAGE CLEANUP OF EDGES WHERE FASTENER EDGE MARGINS OVERLAP

DETAIL I

NOTES

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- REFINISH REWORKED AREAS AS GIVEN IN AMM 51-20
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- A REMOVE MOISTURE FROM DAMAGE AREA. USE OF VACUUM AND HEAT (MAX OF 125°F [52°C]) TO REMOVE MOISTURE FROM HONEYCOMB CELLS IS RECOMMENDED. PROTECT DAMAGE FROM ENTRANCE OF WATER, SUNLIGHT OR OTHER FOREIGN MATTER BY SEALING WITH ALUMINUM FOIL TAPE (SPEED TAPE). RECORD THE LOCATION AND INSPECT EACH AIRPLANE "A" CHECK. REPLACE THE ALUMINUM FOIL TAPE IF ANY PEELING OR DETERIORATION IS EVIDENT. REPAIR NO LATER THAN NEXT AIRPLANE "C" CHECK

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- DAMAGE IS PERMITTED ON SURFACE RESIN ONLY.

 DAMAGE TO FIBERS NOT PERMITTED. CLEAN UP
 EDGE DAMAGE AS GIVEN IN DETAIL I. A
- D DENTS GENERALLY RESULT IN FIBER DAMAGE OR DELAMINATION. HOWEVER, PROVIDED THAT THERE IS NO FIBER DAMAGE OR DELAMINATION, DENTS UP TO 1.50 INCHES (38 mm) DIA MAX ARE ALL PERMITTED ONE DENT FOR EACH SQUARE FOOT OF AREA PERMITTED WHICH MUST BE A MINIMUM OF 6 INCHES (150 mm) FROM ANY OTHER DAMAGE, FASTENER HOLE, OR PANEL EDGE. IF FIBER DAMAGE OR DELAMINATION IS PRESENT REFER TO APPLICABLE DATA IN TABLE
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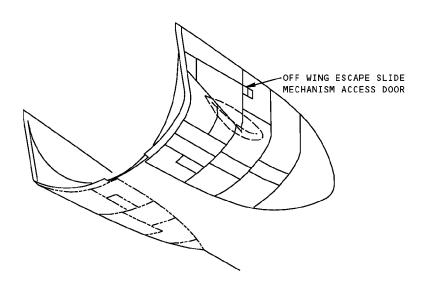
Off-Wing Escape Slide Access Door Allowable Damage Figure 101 (Sheet 2 of 2)

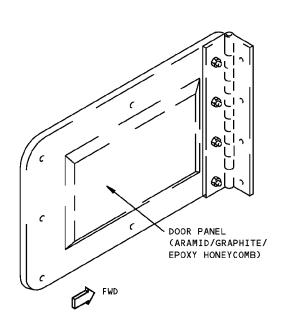
ALLOWABLE DAMAGE 7
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ALLOWABLE DAMAGE 8 - MECHANISM ACCESS DOOR

REF DWG 416T2012



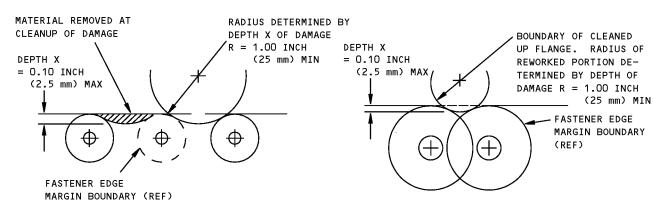


ITEM	CRACKS	NICKS AND GOUGES	DENTS	HOLES AND PUNCTURES	DELAMINATION
DOOR PANEL	В	С	D	E	F

Off-Wing Escape Slide Mechanism Access Door Allowable Damage Figure 101 (Sheet 1 of 2)

> ALLOWABLE DAMAGE 8 Page 101 52-40-02 Apr 01/2005





DAMAGE CLEANUP OF EDGES WHERE FASTENER EDGE MARGINS DO NOT OVERLAP

DAMAGE CLEANUP OF EDGES WHERE FASTENER EDGE MARGINS OVERLAP

DETAIL I

NOTES

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- DAMAGE IS PERMITTED ON SURFACE RESIN ONLY.

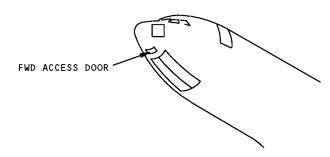
 DAMAGE TO FIBERS NOT PERMITTED. CLEAN UP
 EDGE DAMAGE AS GIVEN IN DETAIL I. A
- D DENTS GENERALLY RESULT IN FIBER DAMAGE OR DELAMINATION. HOWEVER, PROVIDED THAT THERE IS NO FIBER DAMAGE OR DELAMINATION, DENTS UP TO 1.50 INCHES (38 mm) DIA MAX ARE ALL PERMITTED ONE DENT FOR EACH SQUARE FOOT OF AREA PERMITTED WHICH MUST BE A MINIMUM OF 6 INCHES (150 mm) FROM ANY OTHER DAMAGE, FASTENER HOLE, OR PANEL EDGE. IF FIBER DAMAGE OR DELAMINATION IS PRESENT REFER TO APPLICABLE DATA IN TABLE
- E 1.0 INCH (25 mm) MAX DIA IS PERMITTED IN HONEYCOMB AREA ONLY PROVIDED DAMAGE IS MIN OF 2.5 D FROM OTHER DAMAGE, NEAREST HOLE, OR MATERIAL EDGE. DO NOT CLEAN UP DAMAGE EXCEPT TO REMOVE RESIN BURRS EXTENDING INTO SURFACE CONTOUR.
- F 1.0 INCH (25 mm) MAX DIA IS PERMITTED IN HONEYCOMB AREA. A MAXIMUM OF 0.10 INCH (2.5 mm) DELAMINATION FROM EDGE IS PERMITTED. REPAIR DELAMINATION IN HONEYCOMB AREA AS GIVEN IN SRM 51-70 NO LATER THAN THE NEXT "C" CHECK. PROTECT EDGE DAMAGE AS GIVEN IN A

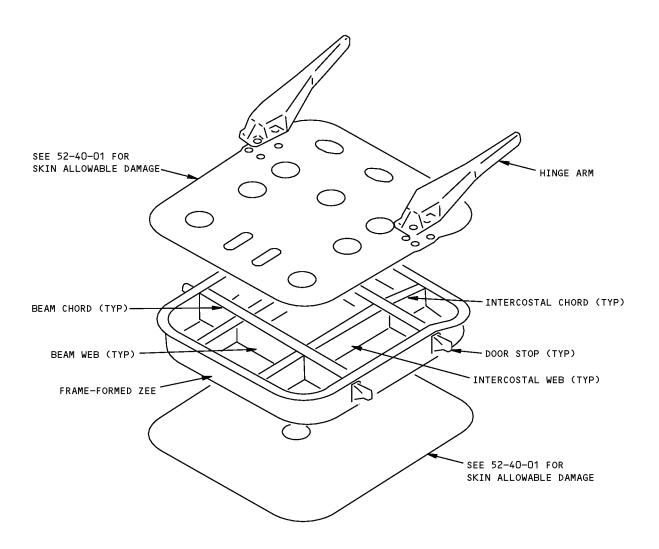
Off-Wing Escape Slide Mechanism Access Door Allowable Damage Figure 101 (Sheet 2 of 2)

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ALLOWABLE DAMAGE 9 - FORWARD ACCESS DOOR STRUCTURE





MATERIAL: ALUMINUM

Forward Access Door Structure Allowable Damage Figure 101 (Sheet 1 of 5)

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DESCRIPTIO	DESCRIPTION		NICKS, GOUGES AND CORROSION	DENTS	HOLES AND PUNCTURES
	CHORD	А	E	NOT PERMITTED	I
BEAM	WEB	С	G	SEE DETAIL III	I
INTERCORTAL	CHORD	Α	E	NOT PERMITTED	I
INTERCOSTAL	WEB	С	G	SEE DETAIL III	I
ED AME	FLANGE	В	F	SEE DETAIL III	I
FRAME	WEB	С	G	SEE DETAIL III	I
DOOR STOP		A D	Η D	NOT PERMITTED	NOT PERMITTED
HINGE ARM		A D	Н D	NOT PERMITTED	NOT PERMITTED

NOTES

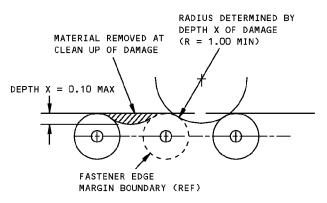
- REFINISH REWORKED AREAS AS GIVEN IN AMM 51-20
- A CRACKS ARE NOT PERMITTED EXCEPT FOR EDGE CRACKS WHICH MUST BE REMOVED AS GIVEN IN DETAILS I AND VI
- B FOR EDGE CRACKS SEE DETAILS I AND VII.
- C 1.00 INCH (25 mm) MAX LENGTH SURFACE CRACKS ARE PERMITTED, PROVIDED CRACKS ARE WITHIN LIMITS SHOWN IN DETAIL IX, REMOVE EDGE CRACKS AS GIVEN IN DETAILS I AND V
- D SHOT PEEN REWORKED AREAS AS GIVEN IN CMM 20-10-03 . REFER TO SRM 51-20-06 FOR REQUIRED SHOT NUMBER AND INTENSITY FOR THE MINIMUM THICKNESS OF THE AREA AFTER REWORK
- E REMOVE DAMAGE AS GIVEN IN DETAILS I, II, IV
- F REMOVE DAMAGE AS GIVEN IN DETAILS I, II, IV
 AND VII
- G REMOVE DAMAGE AS GIVEN IN DETAILS I, II, V, IX AND X

- H FOR EDGE DAMAGE SEE DETAILS I AND VI, FOR LUG DAMAGE, SEE DETAIL VIII. FOR OTHER DAMAGE, SEE DETAIL II. DAMAGE NOT PERMITTED IN VICINITY OF BUSHINGS
- I CLEAN OUT DAMAGE UP TO 0.25 INCH (6 mm) MAX
 DIA AND NOT CLOSER THAN 1.0 INCH (25 mm) TO
 FASTENER HOLE, MATERIAL EDGE, OR OTHER
 DAMAGE. FILL HOLE WITH 2117-T3 OR T4
 ALUMINUM RIVET INSTALLED WET WITH BMS 5-95
 SEALANT. ALL OTHER HOLES TO BE REPAIRED
- J 1.50 INCHES (38 mm) MIN TO EDGE OF INITIAL FASTENER HOLE, TO EDGE OF FLANGED HOLE, OR TO EDGE OF CUTOUT

Forward Access Door Structure Allowable Damage Figure 101 (Sheet 2 of 5)

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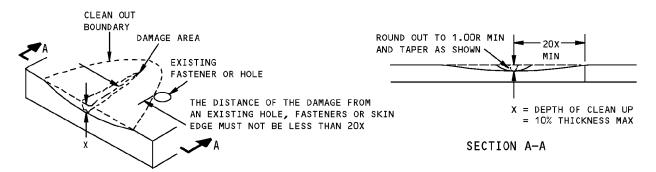


DAMAGE CLEAN UP OF EDGES WHERE FASTENER EDGE MARGINS DO NOT OVERLAP

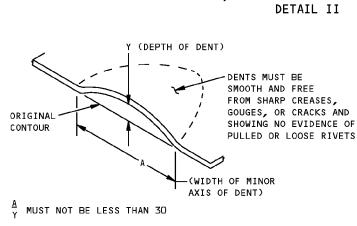
BOUNDARY OF CLEANED UP FLANGE. RADIUS OF DEPTH X = 0.10 MAX REWORKED PORTION DETERMINED BY DEPTH OF DAMAGE (R = 1.00 MIN) FASTENER EDGE \mp MARGIN BOUNDARY (REF)

> DAMAGE CLEAN UP OF EDGES WHERE FASTENER EDGE MARGINS OVERLAP

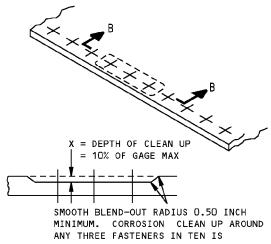
DETAIL I



REMOVAL OF NICK, GOUGE AND SCRATCH DAMAGE ON A SURFACE



ALLOWABLE DAMAGE FOR DENT DETAIL III



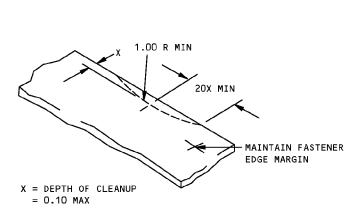
PERMITTED TO MAX DEPTH SECTION B-B

CORROSION CLEANUP DETAIL IV

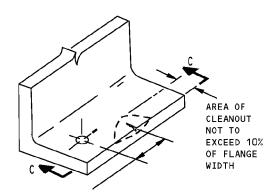
Forward Access Door Structure Allowable Damage Figure 101 (Sheet 3 of 5)

> ALLOWABLE DAMAGE 9 Page 103 Apr 01/2005

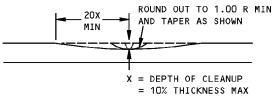




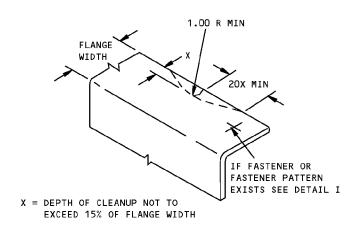
REMOVAL OF NICK OR CRACK
DAMAGE ON AN EDGE
DETAIL V



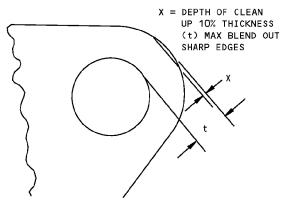
THE DISTANCE OF THE DAMAGE FROM AN EXISTING HOLE, FASTENERS OR EDGE MUST NOT BE LESS THAN 20X



SECTION C-C
REMOVAL OF NICK OR CRACK
DAMAGE ON AN EDGE
DETAIL VI



FORMED MEMBER DETAIL VII



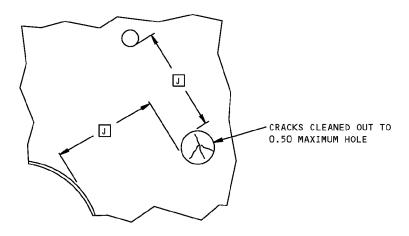
X = DEPTH OF CLEANUP 10% THICKNESS (t) MAX. BLEND OUT SHARP EDGES

DAMAGE CLEANUP FOR EDGES OF LUG
DETAIL VIII

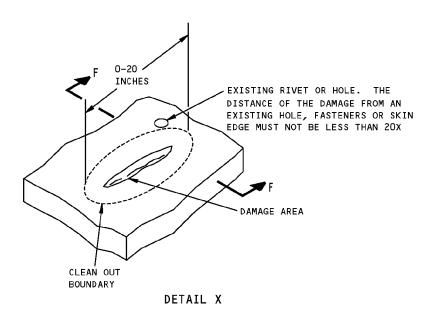
Forward Access Door Structure Allowable Damage Figure 101 (Sheet 4 of 5)

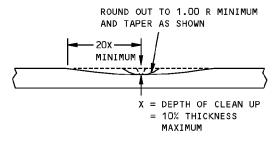
ALLOWABLE DAMAGE 9
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SURFACE CRACKS
DETAIL IX





SECTION F-F

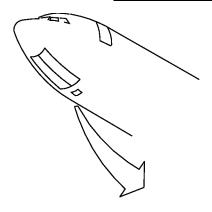
Forward Access Door Structure Allowable Damage Figure 101 (Sheet 5 of 5)

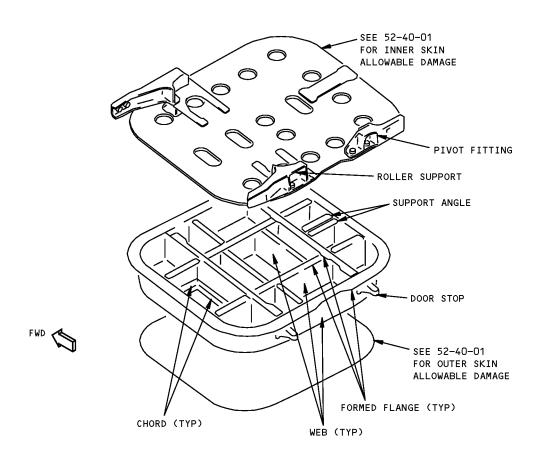
ALLOWABLE DAMAGE 9 **52-40-02**Page 105

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ALLOWABLE DAMAGE 10 - ELEC/ELEX ACCESS DOOR STRUCTURE





MATERIAL: ALUMINUM

Elec/Elex Access Door Structure Allowable Damage Figure 101 (Sheet 1 of 5)

ALLOWABLE DAMAGE 10
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DESCRIPTION	CRACKS	NICKS, GOUGES AND CORROSION	DENTS	HOLES AND PUNCTURES
CHORD	Α	E	NOT PERMITTED	Н
WEB	С	G	SEE DETAIL III	Н
FORMED FLANGE	В	F	SEE DETAIL III	Н
SUPPORT ANGLE	С	E	NOT PERMITTED	Н
DOOR STOP	Α	E D	NOT PERMITTED	NOT PERMITTED
PIVOT FITTING	Α	E	NOT PERMITTED	NOT PERMITTED
ROLLER SUPPORT	A D	E D	NOT PERMITTED	NOT PERMITTED

NOTES

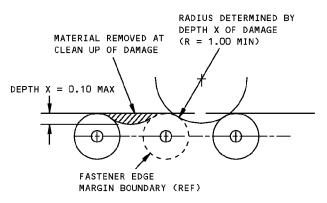
- REFINISH REWORKED AREAS AS GIVEN IN AMM 51-20
- A CRACKS ARE NOT PERMITTED EXCEPT FOR EDGE CRACKS WHICH MUST BE REMOVED AS GIVEN IN DETAILS II AND VII
- B FOR EDGE CRACKS SEE DETAILS I AND VII.
- C 1.00 INCH (25 mm) MAX LENGTH SURFACE CRACKS ARE PERMITTED, PROVIDED CRACKS ARE WITHIN LIMITS SHOWN IN DETAIL VIII, REMOVE EDGE CRACKS AS GIVEN IN DETAILS I AND V
- D SHOT PEEN REWORKED AREAS AS GIVEN IN CMM 20-10-03 . REFER TO SRM 51-20-06 FOR REQUIRED SHOT NUMBER AND INTENSITY FOR THE MINIMUM THICKNESS OF THE AREA AFTER REWORK
- E REMOVE DAMAGE AS GIVEN IN DETAILS I, II, IV AND IX
- F REMOVE DAMAGE AS GIVEN IN DETAILS I, II, IV AND VII
- G REMOVE DAMAGE AS GIVEN IN DETAILS I, II, IV, AND V

- H CLEAN OUT DAMAGE UP TO 0.25 INCH (6 mm) MAX
 DIA AND NOT CLOSER THAN 1.0 INCH (25 mm) TO
 FASTENER HOLE, MATERIAL EDGE, OR OTHER
 DAMAGE. FILL HOLE WITH 2117-T3 OR T4
 ALUMINUM RIVET INSTALLED WET WITH BMS 5-95
 SEALANT. ALL OTHER HOLES TO BE REPAIRED
- 1.50 INCHES (38 mm) MIN TO EDGE OF INITIAL FASTENER HOLE, TO EDGE OF FLANGED HOLE, OR TO EDGE OF CUTOUT

Elec/Elex Access Door Structure Allowable Damage Figure 101 (Sheet 2 of 5)

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DAMAGE CLEAN UP OF EDGES WHERE FASTENER EDGE MARGINS DO NOT OVERLAP

DEPTH X = 0.10 MAX

BOUNDARY OF CLEANED

UP FLANGE. RADIUS OF

REWORKED PORTION

DETERMINED BY DEPTH

OF DAMAGE (R = 1.00 MIN)

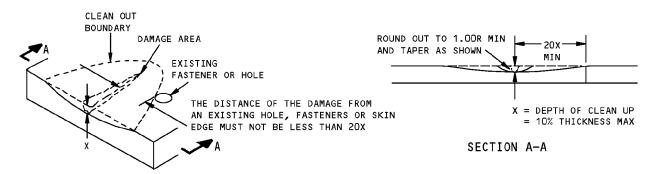
FASTENER EDGE

MARGIN BOUNDARY

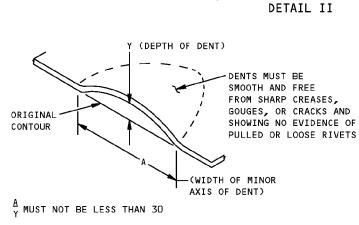
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DAMAGE CLEAN UP OF EDGES WHERE FASTENER EDGE MARGINS OVERLAP

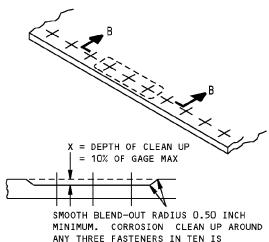
DETAIL I



REMOVAL OF NICK, GOUGE AND SCRATCH DAMAGE ON A SURFACE



ALLOWABLE DAMAGE FOR DENT DETAIL III



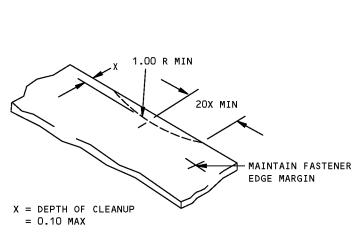
MINIMUM. CORROSION CLEAN UP AROUND ANY THREE FASTENERS IN TEN IS PERMITTED TO MAX DEPTH SECTION B-B

CORROSION CLEANUP DETAIL IV

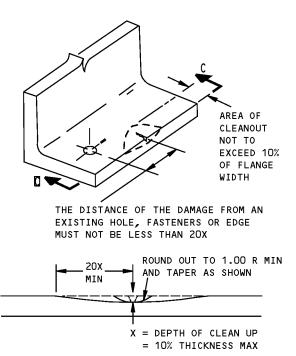
Elec/Elex Access Door Structure Allowable Damage Figure 101 (Sheet 3 of 5)

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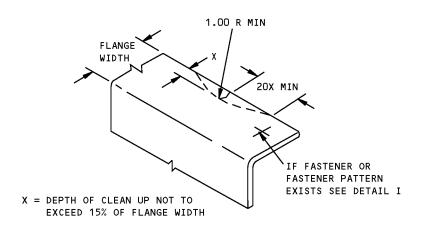


REMOVAL OF NICK OR CRACK DAMAGE ON AN EDGE DETAIL V



SECTION C-C

REMOVAL OF NICK OR CRACK DAMAGE ON AN EDGE DETAIL VI

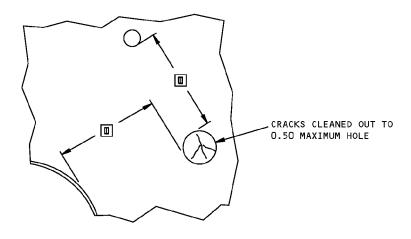


FORMED MEMBER
DETAIL VII

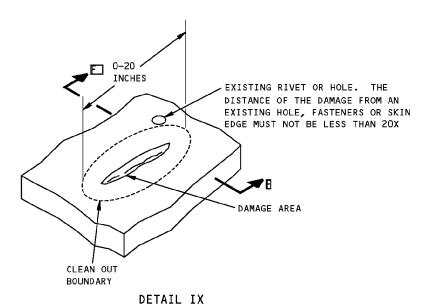
Elec/Elex Access Door Structure Allowable Damage Figure 101 (Sheet 4 of 5)

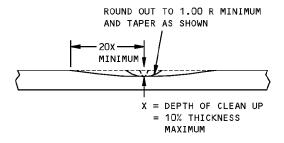
ALLOWABLE DAMAGE 10
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SURFACE CRACKS
DETAIL VIII





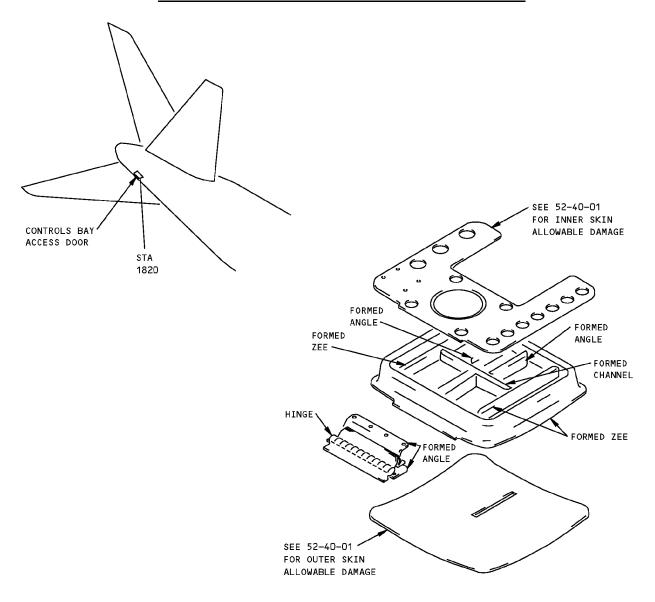
SECTION F-F

Elec/Elex Access Door Structure Allowable Damage Figure 101 (Sheet 5 of 5)

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ALLOWABLE DAMAGE 11 - CONTROLS BAY ACCESS DOOR



ITEM	CRACKS	NICKS, GOUGES AND CORROSION	DENTS	HOLES AND PUNCTURES
FORMED FLANGE	В	E	SEE DETAIL III	G
WEB	С	F	SEE DETAIL III	G
HINGE	Α	D	NOT ALLOWED	NOT ALLOWED

Controls Bay Access Door Allowable Damage Figure 101 (Sheet 1 of 4)

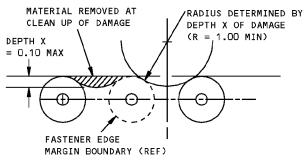
> **ALLOWABLE DAMAGE 11** 52-40-02

NOTES

- REFINISH REWORKED AREAS AS GIVEN IN AMM 51-20
- A CRACKS ARE NOT PERMITTED EXCEPT FOR EDGE CRACKS WHICH MUST BE REMOVED AS GIVEN IN DETAILS I AND VI
- B FOR EDGE CRACKS SEE DETAILS I AND VIII. FOR RADIUS CRACKS NOT EXCEEDING 1.00 INCH (25 mm) SEE DETAIL VIII
- C 1.00 INCH (25 mm) MAX LENGTH SURFACE CRACKS
 PERMITTED, PROVIDED CRACKS ARE WITHIN
 LIMITS SHOWN IN DETAIL IX, REMOVE EDGE
 CRACKS AS GIVEN IN DETAILS I AND V
- D REMOVE DAMAGE AS GIVEN IN DETAILS I, II, IV AND VI
- E REMOVE DAMAGE AS GIVEN IN DETAILS I, II, V
- F REMOVE DAMAGE AS GIVEN IN DETAILS I, II, IV, V AND VII
- G CLEAN OUT DAMAGE UP TO 0.25 INCH (6 mm) MAX DIA AND NOT CLOSER THAN 1.0 INCH (25 mm) TO FASTENER HOLE, MATERIAL EDGE, OR OTHER DAMAGE. FILL HOLE WITH 2117-T3 OR T4 ALUMINUM RIVET INSTALLED WET WITH BMS 5-95 SEALANT. ALL OTHER HOLES TO BE REPAIRED
- H ACCUMULATED LENGTH OF CRACKS MUST NOT BE MORE THAN 10% OF FLANGE LENGTH. DISTANCE BETWEEN STOP HOLES OF ADJACENT CRACKS MUST NOT BE LESS THAN 4.0 INCHES (100 mm)
- 1 1.50 INCHES (38 mm) MIN TO EDGE OF INITIAL FASTENER HOLE, TO EDGE OF FLANGED HOLE, OR TO EDGE OF CUTOUT

Controls Bay Access Door Allowable Damage Figure 101 (Sheet 2 of 4)





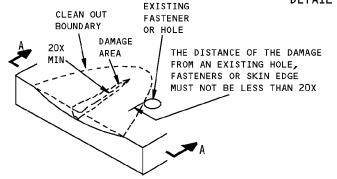
DAMAGE CLEAN UP OF EDGES WHERE FASTENER EDGE MARGINS DO NOT OVERLAP

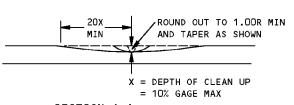
BOUNDARY OF CLEANED UP
FLANGE. RADIUS OF REWORKED
PORTION DETERMINED BY DEPTH
OF DAMAGE R = 1.0 MIN

FASTENER EDGE
MARGIN BOUNDARY
(REF)

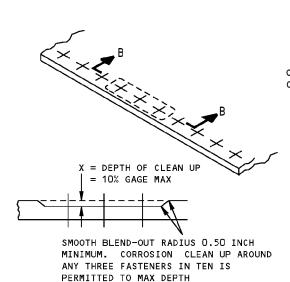
DAMAGE CLEAN UP OF EDGES WHERE FASTENER EDGE MARGINS OVERLAP

DETAIL I



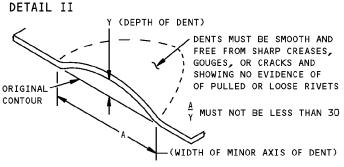


SECTION A-A

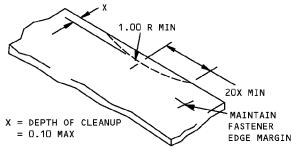


SECTION B-B

DETAIL IV



ALLOWABLE DAMAGE FOR DENT DETAIL III

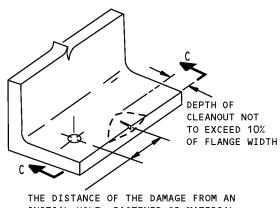


REMOVAL OF NICK OR CRACK DAMDGE ON AN EDGE DETAIL V

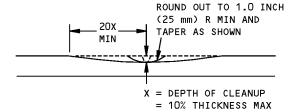
Controls Bay Access Door Allowable Damage Figure 101 (Sheet 3 of 4)

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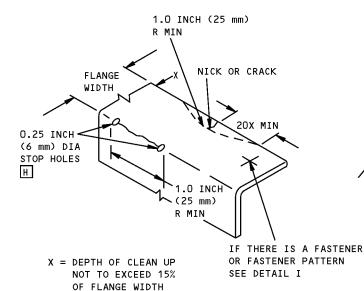


THE DISTANCE OF THE DAMAGE FROM AN INITIAL HOLE, FASTENER OR MATERIAL EDGE MUST NOT BE LESS THAN 20X

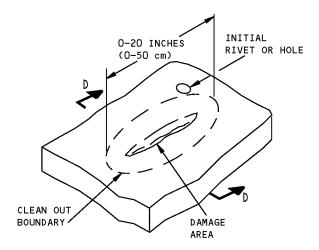


SECTION C-C

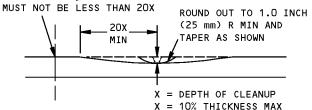
REMOVAL OF NICK OR CRACK DAMAGE ON AN EDGE DETAIL VI

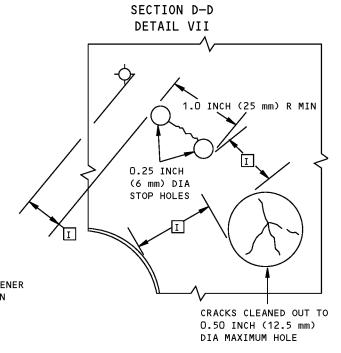


(FORMED MEMBER)
DETAIL VIII



THE DISTANCE OF THE DAMAGE FROM AN INITIAL HOLE, FASTENERS OR SKIN EDGE





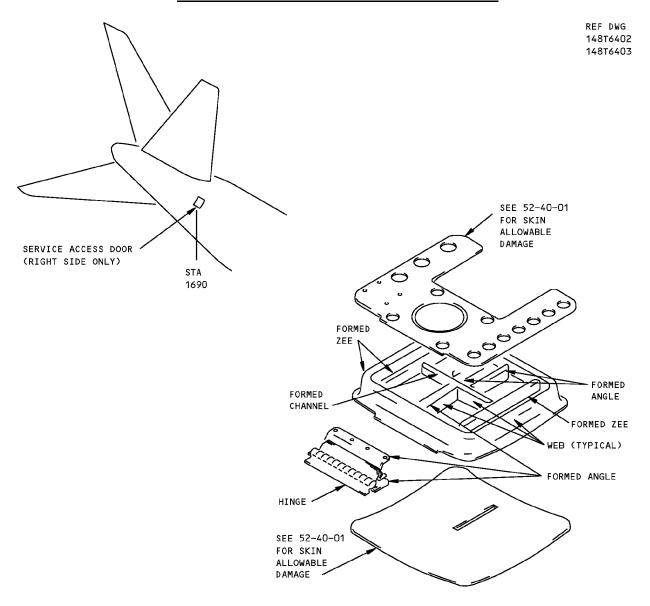
SURFACE CRACKS
DETAIL IX

Controls Bay Access Door Allowable Damage Figure 101 (Sheet 4 of 4)

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ALLOWABLE DAMAGE 12 - SERVICE ACCESS DOOR



ITEM	CRACKS	NICKS, GOUGES AND CORROSION	DENTS	HOLES AND PUNCTURES
FORMED FLANGE	В	E	SEE DETAIL III	G
WEB	С	F	SEE DETAIL III	G
HINGE	Α	D	NOT ALLOWED	NOT ALLOWED

Service Access Door Allowable Damage Figure 101 (Sheet 1 of 4)

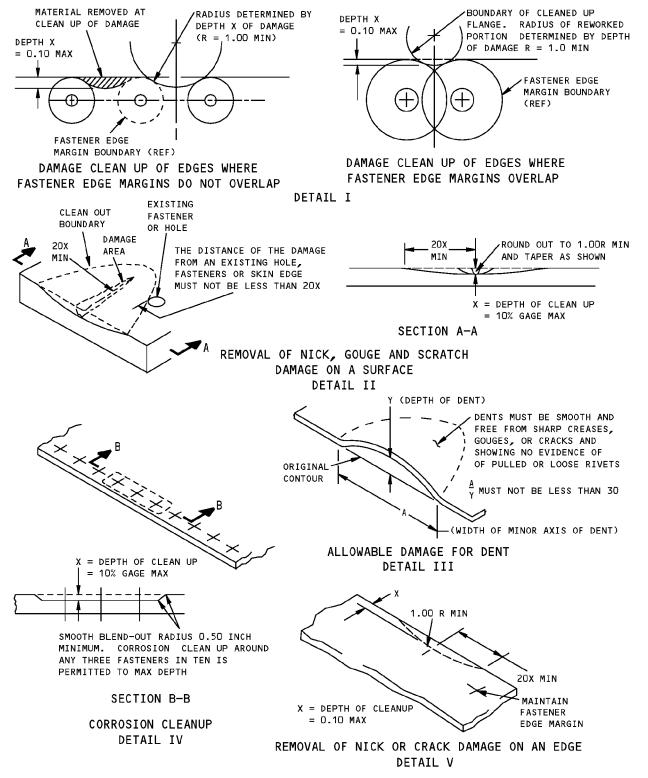
ALLOWABLE DAMAGE 12
Page 101
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NOTES

- REFINISH REWORKED AREAS AS GIVEN IN AMM 51-21
- A CRACKS ARE NOT PERMITTED EXCEPT FOR EDGE CRACKS WHICH MUST BE REMOVED AS GIVEN IN DETAILS I AND VI
- B FOR EDGE CRACKS SEE DETAILS I AND VIII. FOR RADIUS CRACKS NOT EXCEEDING 1.00 INCH (25 mm) SEE DETAIL VIII
- C 1.00 INCH (25 mm) MAX LENGTH SURFACE CRACKS ARE PERMITTED, PROVIDED CRACKS ARE WITHIN LIMITS SHOWN IN DETAIL IX, REMOVE EDGE CRACKS AS GIVEN IN DETAILS I AND V
- D REMOVE DAMAGE AS GIVE IN DETAILS I, II, IV
- E REMOVE DAMAGE AS GIVEN IN DETAILS I, II, IV
 AND VIII
- F REMOVE DAMAGEAS GIVEN INR DETAILS I, II, IV, V AND VII
- G CLEAN OUT DAMAGE UP TO 0.25 INCH (6 mm) MAX
 DIA AND NOT CLOSER THAN 1.0 INCH (25 mm) TO
 FASTENER HOLE, MATERIAL EDGE, OR OTHER DAMAGE.
 FILL HOLE WITH 2117-T3 OR T4 ALUMINUM RIVET
 INSTALLED WET WITH BMS 5-95 SEALANT. ALL
 OTHER HOLES TO BE REPAIRED
- H ACCUMULATED LENGTH OF CRACKS MUST NOT BE MORE THAN 10% OF FLANGE LENGTH. DISTANCE BETWEEN STOP HOLES OF ADJACENT CRACKS MUST NOT BE LESS THAN 4.0 INCHES (100 mm)
- 1.50 INCHES (38 mm) MIN TO EDGE OF INITIAL FASTENER
 HOLE, TO EDGE OF FLANGED HOLE, OR TO EDGE OF CUTOUT

Service Access Door Allowable Damage Figure 101 (Sheet 2 of 4)

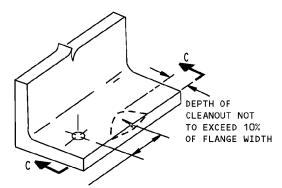




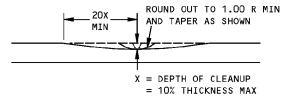
Service Access Door Allowable Damage Figure 101 (Sheet 3 of 4)

ALLOWABLE DAMAGE 12
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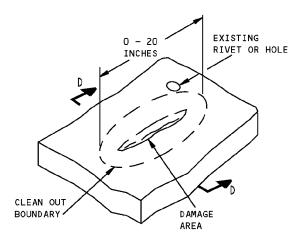


THE DISTANCE OF THE DAMAGE FROM AN EXISTING HOLE, FASTENER OR MATERIAL EDGE MUST NOT BE LESS THAN 20X

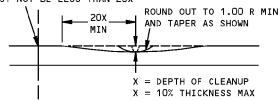


SECTION C-C

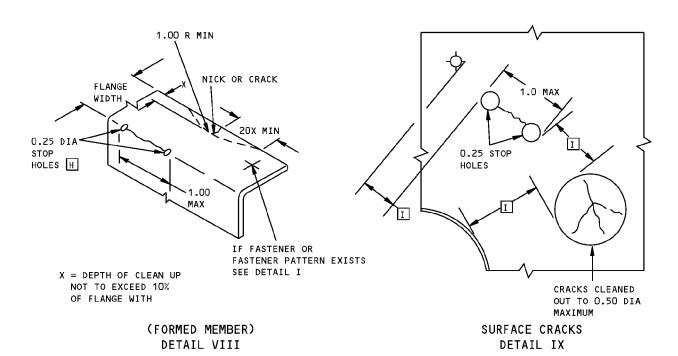
REMOVAL OF NICK OR CRACK DAMAGE ON AN EDGE DETAIL VI



THE DISTANCE OF THE DAMAGE FROM AN EXISTING HOLE, FASTENERS OR SKIN EDGE MUST NOT BE LESS THAN 20X



SECTION D-D DETAIL VII

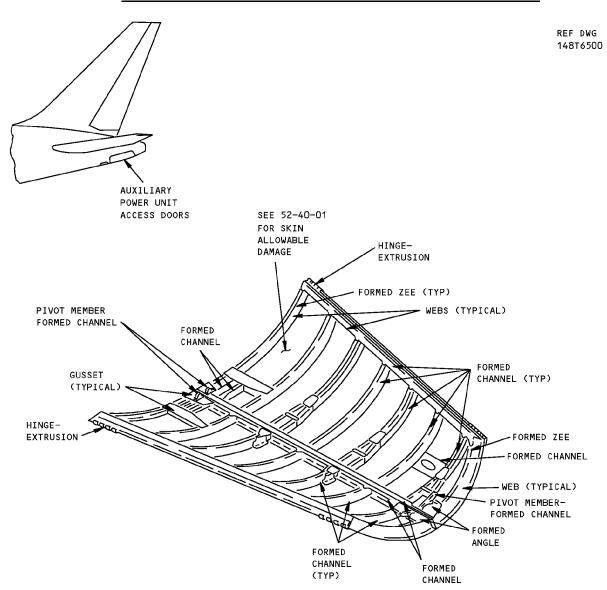


Service Access Door Allowable Damage Figure 101 (Sheet 4 of 4)

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ALLOWABLE DAMAGE 13 - AUXILIARY POWER UNIT ACCESS DOOR



ITEM	CRACKS	NICKS, GOUGES AND CORROSION	DENTS	HOLES AND PUNCTURES
FORMED FLANGE	В	E	SEE DETAIL IV	Н
WEB	С	F	SEE DETAIL IV	H
PIVOT MEMBER FORMED FLANGE	В	E G	SEE DETAIL IV	H
GUSSET	С	F	SEE DETAIL IV	H
HINGE	A	D	NOT ALLOWED	NOT ALLOWED

Auxiliary Power Unit Access Door Allowable Damage Figure 101 (Sheet 1 of 5)

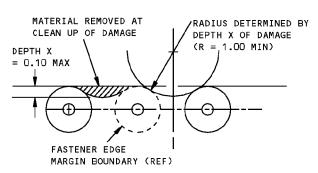
ALLOWABLE DAMAGE 13 **52-40-02**Page 101
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NOTES

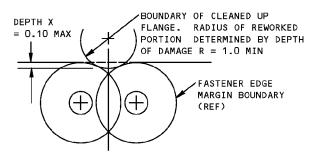
- REFINISH REWORKED AREAS AS GIVEN IN AMM 51-20
- A CRACKS ARE NOT PERMITTED EXCEPT FOR EDGE CRACKS WHICH MUST BE REMOVED AS GIVEN IN DETAILS I AND VI
- B FOR EDGE CRACKS SEE DETAILS I AND VIII. FOR RADIUS CRACKS NOT EXCEEDING 1.00 INCH (25 mm) SEE DETAIL VIII
- C 1.00 INCH (25 mm) MAX LENGTH SURFACE CRACKS
 ARE PERMITTED, PROVIDED CRACKS ARE WITHIN
 LIMITS SHOWN IN DETAIL IX, REMOVE EDGE
 CRACKS AS GIVEN IN DETAILS I AND III
- D REMOVE DAMAGE AS GIVEN IN DETAILS I, II, V
- E REMOVE DAMAGE AS GIVEN IN DETAILS I, II, V AND VIII
- F REMOVE DAMAGE AS GIVEN IN DETAILS I, II, III, V AND X
- G FOR LUG DAMAGE SEE DETAIL VII
- H CLEAN OUT DAMAGE UP TO 0.25 INCH (6 mm) MAX
 DIA AND NOT CLOSER THAN 1.0 INCH (25 mm) TO
 FASTENER HOLE, MATERIAL EDGE, OR OTHER DAMAGE.
 FILL HOLE WITH 2117-T3 OR T4 ALUMINUM RIVET
 INSTALLED WET WITH BMS 5-95 SEALANT. ALL
 OTHER HOLES TO BE REPAIRED
- ACCUMULATED LENGTH OF CRACKS MUST NOT BE MORE THAN 10% OF FLANGE LENGTH. DISTANCE BETWEEN STOP HOLES OF ADJACENT CRACKS MUST NOT BE LESS THAN 4.0 INCHES (100 mm)
- 1.50 INCHES (38 mm) MIN TO EDGE OF INITIAL FASTENER HOLE, TO EDGE OF FLANGED HOLE, OR TO EDGE OF CUTOUT

Auxiliary Power Unit Access Door Allowable Damage Figure 101 (Sheet 2 of 5)



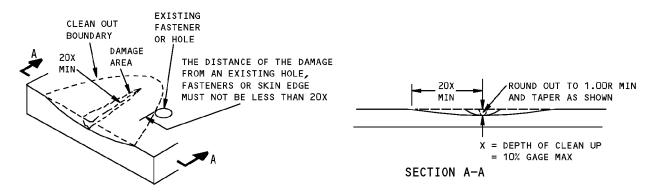


DAMAGE CLEAN UP OF EDGES WHERE FASTENER EDGE MARGINS DO NOT OVERLAP

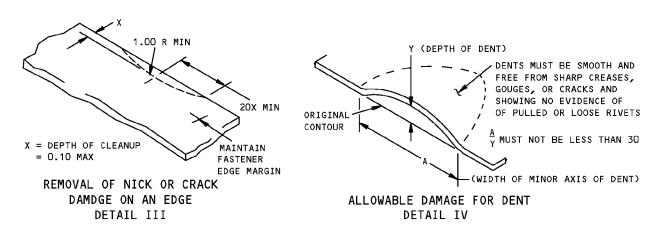


DAMAGE CLEAN UP OF EDGES WHERE FASTENER EDGE MARGINS OVERLAP

DETAIL I



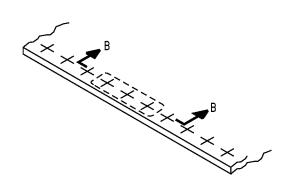
REMOVAL OF NICK GOUGES AND SCRATCH DAMAGE ON A SURFACE DETAIL II

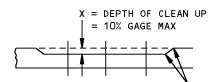


Auxiliary Power Unit Access Door Allowable Damage Figure 101 (Sheet 3 of 5)

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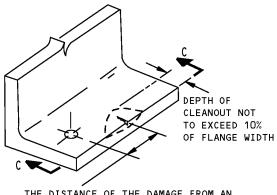




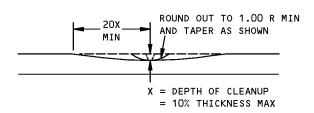
SMOOTH BLEND-OUT RADIUS 0.50 INCH MINIMUM. CORROSION CLEAN UP AROUND ANY THREE FASTENERS IN TEN IS PERMITTED TO MAX DEPTH

SECTION B-B

CORROSION CLEANUP DETAIL V



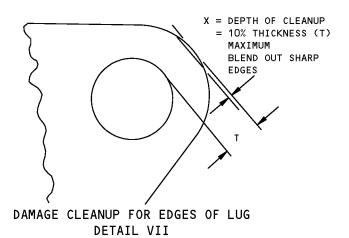
THE DISTANCE OF THE DAMAGE FROM AN EXISTING HOLE, FASTENER OR MATERIAL EDGE MUST NOT BE LESS THAN 20X



REMOVAL OF NICK OR CRACK DAMAGE ON AN EDGE

SECTION C-C

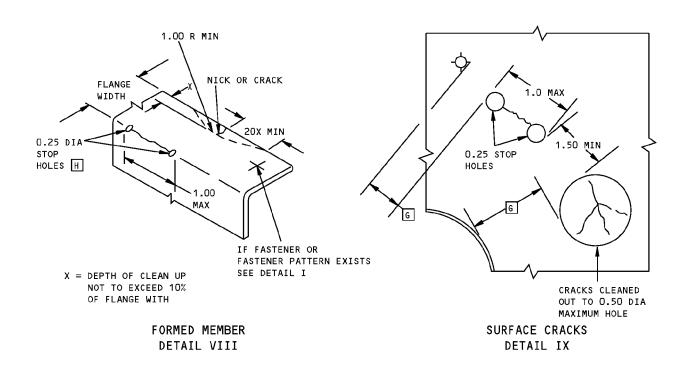
DETAIL VI

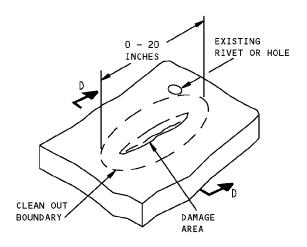


Auxiliary Power Unit Access Door Allowable Damage Figure 101 (Sheet 4 of 5)

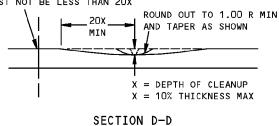
ALLOWABLE DAMAGE 13 **52-40-02**Page 104
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THE DISTANCE OF THE DAMAGE FROM AN EXISTING HOLE, FASTENERS OR SKIN EDGE MUST NOT BE LESS THAN 20X



DETAIL X

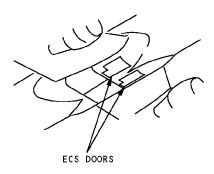
Auxiliary Power Unit Access Door Allowable Damage Figure 101 (Sheet 5 of 5)

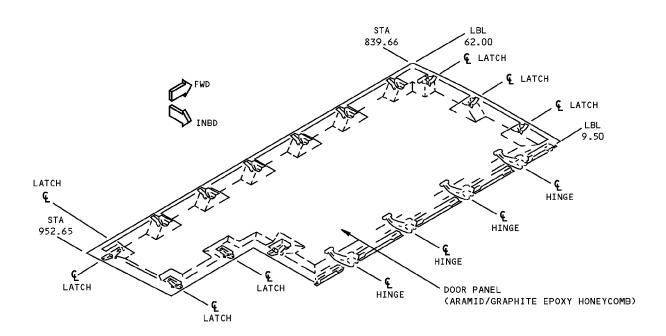
ALLOWABLE DAMAGE 13
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ALLOWABLE DAMAGE 14 - ECS DOOR

REF DWG 149T7210





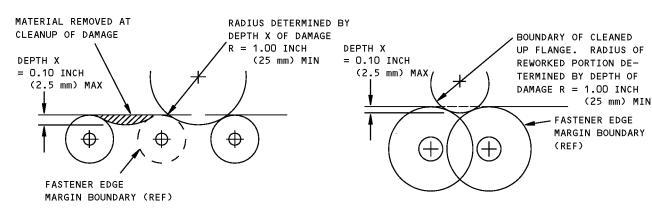
LEFT SIDE SHOWN RIGHT SIDE OPPOSITE

ITEM	CRACKS	NICKS AND GOUGES	DENTS	HOLES AND PUNCTURES	DELAMINATION
DOOR PANEL	R	С	D	E	F

ECS Door Allowable Damage Figure 101 (Sheet 1 of 2)

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DAMAGE CLEANUP OF EDGES WHERE FASTENER EDGE MARGINS DO NOT OVERLAP

DAMAGE CLEANUP OF EDGES WHERE FASTENER EDGE MARGINS OVERLAP

DETAIL I

NOTES

- THESE ALLOWABLE DAMAGE LIMITS ARE FAA APPROVED CONTINGENT ON ACCOMPLISHMENT OF THE INSPECTIONS AT THE INTERVALS CONTAINED HEREIN
- REFER TO SRM 51-10-02 FOR INSPECTION AND REMOVAL OF DAMAGE
- REFER TO SRM 51-10-01 FOR AERODYNAMIC SMOOTHNESS REQUIREMENTS. WHERE THE DAMAGE IS MORE THAN THE LIMITS SHOWN IN 51-10-01, CONSIDERATION SHOULD BE GIVEN TO THE LOSS OF PERFORMANCE INVOLVED
- REFINISH REWORKED AREAS AS GIVEN IN AMM 51-20
- DAMAGE TO PANEL EDGES MAY BE CONFINED TO DELAMINATION OR MAY TAKE A FORM WHICH RESULTS IN DAMAGE TO FIBERS AND A LOSS OF EFFECTIVE CROSS-SECTIONAL AREA. THIS TYPE OF DAMAGE SHOULD BE REMOVED AND THE LIMITATIONS GIVEN FOR CRACKS APPLIED
- A REMOVE MOISTURE FROM DAMAGE AREA. USE OF VACUUM AND HEAT (MAX OF 125°F [52°C]) TO REMOVE MOISTURE FROM HONEYCOMB CELLS IS RECOMMENDED. PROTECT DAMAGE FROM ENTRANCE OF WATER, SUNLIGHT OR OTHER FOREIGN MATTER BY SEALING WITH ALUMINUM FOIL TAPE (SPEED TAPE). RECORD THE LOCATION AND INSPECT EACH AIRPLANE "A" CHECK. REPLACE THE ALUMINUM FOIL TAPE IF ANY PEELING OR DETERIORATION IS EVIDENT. REPAIR NO LATER THAN NEXT AIRPLANE "C" CHECK

- B 2.0 INCHES (50 mm) MAX LENGTH IN HONEYCOMB
 AREA IS PERMITTED FOR EACH SQUARE FOOT OF
 AREA AND MINIMUM OF 6.0 INCHES (150 mm)
 FROM ANY OTHER CRACK. CLEAN UP EDGE CRACKS
 AS GIVEN IN DETAIL I. CRACKS THROUGH
 CONSECUTIVE FASTENERS OR THROUGH THE PANEL
 EDGE-BAND ARE PERMITTED PROVIDED DAMAGE IS
 NOT MORE THAN 10% OF EDGEBAND LENGTH FOR
 EACH SIDE. A
- C DAMAGE IS PERMITTED ON SURFACE RESIN ONLY.

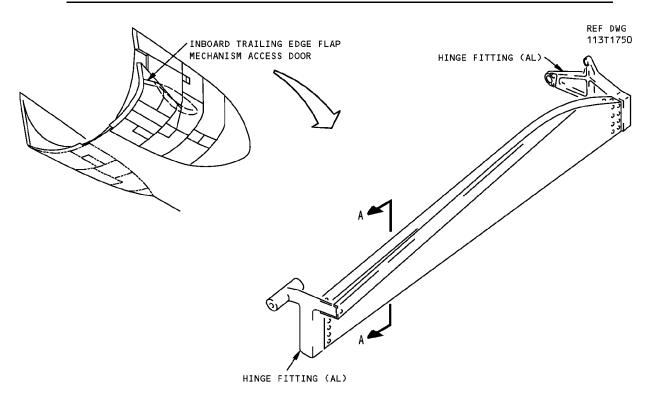
 DAMAGE TO FIBERS NOT PERMITTED. CLEAN UP
 EDGE DAMAGE AS GIVEN IN DETAIL I. A
- D DENTS GENERALLY RESULT IN FIBER DAMAGE OR DELAMINATION. HOWEVER, PROVIDED THAT THERE IS NO FIBER DAMAGE OR DELAMINATION, DENTS UP TO 1.50 INCHES (38 mm) DIA MAX ARE ALL PERMITTED. ONE DENT FOR EACH SQUARE FOOT OF AREA PERMITTED WHICH MUST BE A MINIMUM OF 6 INCHES (150 mm) FROM ANY OTHER DAMAGE, FASTENER HOLE, OR PANEL EDGE. IF FIBER DAMAGE OR DELAMINATION IS PRESENT REFER TO E OR F
- E 1.0 INCH (25 mm) MAX DIA IS PERMITTED IN HONEYCOMB AREA ONLY PROVIDED DAMAGE IS MIN OF 2.5 D FROM OTHER DAMAGE, NEAREST HOLE, OR MATERIAL EDGE. DO NOT CLEAN UP DAMAGE EXCEPT TO REMOVE RESIN BURRS EXTENDING INTO SURFACE CONTOUR.
- F 1.0 INCH (25 mm) MAX DIA IS PERMITTED IN HONEYCOMB AREA. A MAXIMUM OF 0.10 INCH (2.5 mm) DELAMINATION FROM EDGE IS PERMITTED. REPAIR DELAMINATION IN HONEYCOMB AREA AS GIVEN IN SRM 51-70 NO LATER THAN THE NEXT "C" CHECK. PROTECT EDGE DAMAGE AS GIVEN IN A

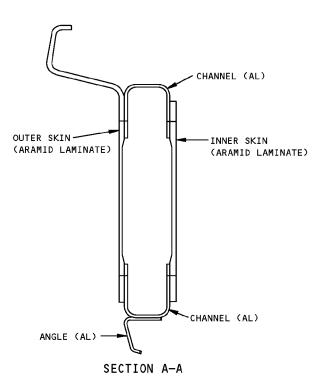
ECS Door Allowable Damage Figure 101 (Sheet 2 of 2)

ALLOWABLE DAMAGE 14 **52-40-02**Page 102
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ALLOWABLE DAMAGE 15 - INBOARD TRAILING EDGE FLAP MECHANISM ACCESS DOOR





Inboard Trailing Edge Flap Mechanism Access Door - Allowable Damage Figure 101 (Sheet 1 of 4)

ALLOWABLE DAMAGE 15 **52-40-02**Page 101
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DESCRIPTION	CRACKS	NICKS, GOUGES AND CORROSION	DENTS	HOLES AND PUNCTURES	PANEL DELAMINATION
SKIN PANELS	В	C	NOT PERMITTED	٥	E
CHANNELS	F	G	SEE DETAIL III	土	
ANGLE	F	G	SEE DETAIL III	H	
HINGE FITTINGS	J	I	NOT PERMITTED	NOT PERMITTED	

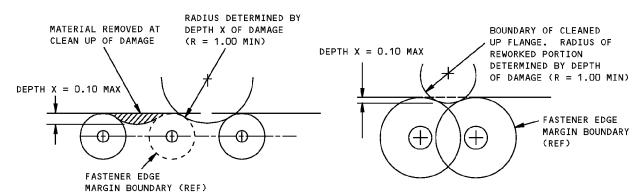
NOTES

- THESE ALLOWABLE DAMAGE LIMITS ARE FAA APPROVED CONTINGENT ON ACCOMPLISHMENT OF THE INSPECTIONS AT THE INTERVALS CONTAINED HEREIN
- REFER TO SRM 51-10-02 FOR INSPECTION AND REMOVAL OF DAMAGE
- RESTORE DAMAGED ALUMINUM FLAME SPRAY OR CONDUCTIVE COATING AS GIVEN IN SRM 51-70-14
- REFER TO SRM 51-10-01 FOR AERODYNAMIC SMOOTHNESS REQUIREMENTS. WHERE THE DAMAGE IS MORE THAN THE LIMITS SHOWN IN SRM 51-10-01, CONSIDERATION SHOULD BE GIVEN TO THE LOSS OF PERFORMANCE INVOLVED
- REFINISH REWORKED AREAS AS GIVEN IN AMM 51-20
- DAMAGE TO PANEL EDGES MAY BE CONFINED TO DELAMINATION OR MAY TAKE A FORM WHICH RESULTS IN DAMAGE TO FIBERS AND A LOSS OF EFFECTIVE CROSS-SECTIONAL AREA. THIS TYPE OF DAMAGE SHOULD BE REMOVED AND THE LIMITATIONS GIVEN FOR CRACKS APPLIED
- A REMOVE MOISTURE FROM DAMAGE AREA. USE OF VACUUM AND HEAT (MAX OF 125°F [52°C]) TO REMOVE MOISTURE FROM HONEYCOMB CELLS IS RECOMMENDED. PROTECT DAMAGE FROM ENTRANCE OF WATER, SUNLIGHT OR OTHER FOREIGN MATTER BY SEALING WITH ALUMINUM FOIL TAPE (SPEED TAPE). RECORD THE LOCATION AND INSPECT EACH AIRPLANE "A" CHECK. REPLACE THE ALUMINUM FOIL TAPE IF ANY PEELING OR DETERIORATION IS EVIDENT. REPAIR NO LATER THAN NEXT AIRPLANE "C" CHECK
- B 1.0 INCH (25 mm) MAX LENGTH FOR EACH SQUARE FOOT OF AREA AND A MIN OF 6.0 INCHES (15 mm) FROM ANY OTHER CRACK. CLEAN UP EDGE CRACKS AS GIVEN IN DETAIL I. CRACKS THROUGH CONSECUTIVE FASTENERS THROUGH THE EDGEBAND ARE PERMITTED PROVIDED DAMAGE DOES NOT EXCEED 10% OF EDGEBAND LENGTH FOR EACH SIDE. A
- C DAMAGE PERMITTED ON SURFACE RESIN ONLY.
 DAMAGE TO FIBERS NOT PERMITTED. CLEAN UP
 EDGE DAMAGE PER DETAIL I. A

- D 1.0 INCH (25 mm) MAX DIA PERMITTED
 PROVIDED DAMAGE IS 2.5 TIMES THE DAMAGE
 DIAMETER FROM OTHER DAMAGE, NEAREST HOLE,
 OR MATERIAL EDGE. DO NOT CLEAN UP DAMAGE
 EXCEPT TO REMOVE RESIN BURRS EXTENDING INTO
 SURFACE CONTOUR.
- E 1.0 INCH (25 mm) MAX DIA IS PERMITTED IN HONEYCOMB AREA. A MAXIMUM OF 0.10 INCH (25 mm) DELAMINATION FROM EDGE IS PERMITTED. PROTECT EDGE DAMAGE AS GIVEN IN A.
- F CRACKS NOT PERMITTED EXCEPT FOR EDGE CRACKS WHICH MUST BE REMOVED PER DETAILS I AND V.
- REMOVE DAMAGE AS GIVEN IN DETAILS I, II, IV AND V.
- H CLEAN OUT DAMAGE UP TO 0.25 INCH (6 mm)
 MAX DIA AND NOT CLOSER THAN 1.0 INCH
 (25 mm) TO FASTENER HOLE, MATERIAL EDGE,
 OR OTHER DAMAGE. FILL HOLE WITH 2117-T3
 OR T4 ALUMINUM RIVET INSTALLED WET WITH
 BMS 5-95 SEALANT. ALL OTHER HOLES TO BE
 REPAIRED.
- I FOR EDGE DAMAGE SEE DETAIL I. FOR LUG DAMAGE SEE DETAIL VII. FOR OTHER DAMAGE SEE DETAIL II. DAMAGE NOT PERMITTED IN VICINITY OF BUSHINGS.
- GRACKS NOT PERMITTED EXCEPT FOR EDGE CRACKS
 WHICH MUST BE REMOVED AS GIVEN IN DETAILS I
 AND VI.

Inboard Trailing Edge Flap Mechanism Access Door - Allowable Damage Figure 101 (Sheet 2 of 4)

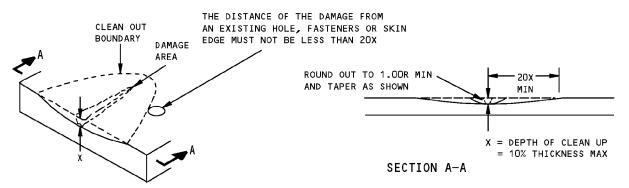




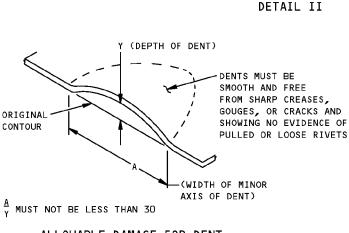
DAMAGE CLEAN UP OF EDGES WHERE FASTENER EDGE MARGINS DO NOT OVERLAP

DAMAGE CLEAN UP OF EDGES WHERE FASTENER EDGE MARGINS OVERLAP

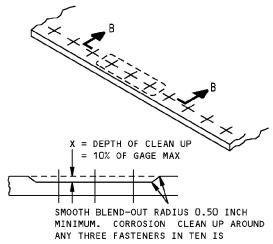
DETAIL I



REMOVAL OF NICK, GOUGE AND SCRATCH DAMAGE ON A SURFACE



ALLOWABLE DAMAGE FOR DENT DETAIL III



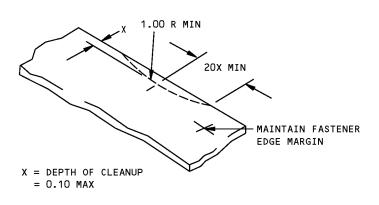
ANY THREE FASTENERS IN TEN IS
PERMITTED TO MAX DEPTH
SECTION B-B
DRROSION CLEANUP

CORROSION CLEANUP DETAIL IV

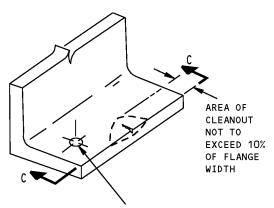
Inboard Trailing Edge Flap Mechanism Access Door - Allowable Damage Figure 101 (Sheet 3 of 4)

ALLOWABLE DAMAGE 15
Page 103
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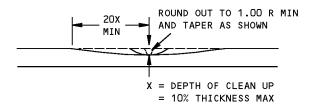




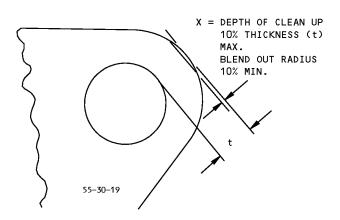
REMOVAL OF NICK OR CRACK DAMAGE ON AN EDGE DETAIL V



THE DISTANCE OF THE DAMAGE FROM AN EXISTING HOLE, FASTENERS OR EDGE MUST NOT BE LESS THAN 20X



SECTION C-C
REMOVAL OF NICK OR CRACK
DAMAGE ON AN EDGE
DETAIL VI



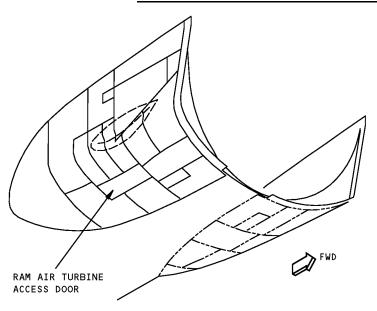
DAMAGE CLEAN UP FOR EDGES OF LUG
DETAIL VII

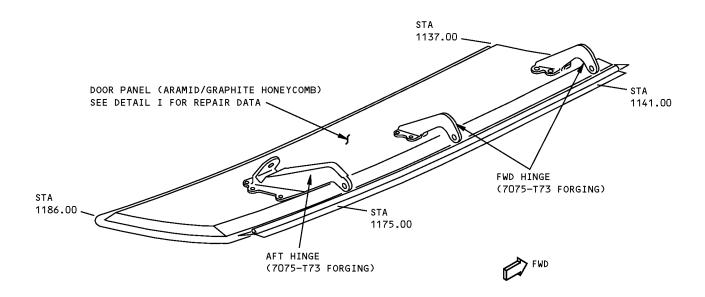
Inboard Trailing Edge Flap Mechanism Access Door - Allowable Damage Figure 101 (Sheet 4 of 4)

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REPAIR 1 - RAM AIR TURBINE ACCESS DOOR





Ram Air Turbine Access Door Repair Figure 201 (Sheet 1 of 2)

52-40-02



	INTERIM REPAIRS C		PERMANENT REPAIRS [A	
DAMAGE	WET LAYUP ROOM TEMP/150°F (66°C) CURE (SRM 51-70-03)	WET LAYUP 150°F (66°C) CURE (SRM 51-70-03)	WET LAYUP 200°F (93°C) CURE (SRM 51-70-17)	250°F (121°C) CURE (SRM 51-70-05)	
CRACKS	UP TO 4.0 INCHES (100 mm) LONG, REPAIR WITH PATCH AS GIVEN IN SRM 51-70-03, B	CLEAN UP DAMAGE AND REPAIR AS A HOLE	CLEAN UP DAMAGE AND REPAIR AS A HOLE	CLEAN UP DAMAGE AND REPAIR AS A HOLE	
HOLES	4.0 INCHES (100 mm) MAX DIA NOT TO EXCEED 30% OF SMALLEST DIMENSION OF HONEYCOMB PANEL AT THE DAMAGE LOCATION. FILL WITH BMS 5-28, TYPE 7 POTTING COMPOUND AND PATCH AS GIVEN IN SRM 51-70-03, B	8.0 INCHES (200 mm) MAX DIA NOT TO EXCEED 50% OF SMALLEST DIMENSION OF HONEYCOMB PANEL AT THE DAMAGE LOCATION. USE TWO EXTRA PLIES FOR EACH FACESHEET REPAIRED B	16.0 INCHES (400 mm) MAX DIA NOT TO EXCEED 50% OF SMALLEST DIMENSION OF HONEYCOMB PANEL AT THE DAMAGE LOCATION. USE TWO EXTRA PLIES FOR EACH FACESHEET REPAIRED	NO SIZE LIMIT	
DELAMI- NATION	CUT OUT AND REPAIR AS A HOLE				
NICKS AND GOUGES	IF THERE IS NO FIBER DAMAGE OR DELAMINATION, FILL NICKS OR GOUGES AS GIVEN IN SRM 51-70-03 IF THERE IS FIBER DAMAGE OR DELAMINATION, REPAIR AS A HOLE				
DENTS	UP TO 4.0 INCHES (100 mm) DIA WITH NO FIBER DAMAGE OR DELAMINATION, FILL WITH BMS 5-28, TYPE 7 POTTING COMPOUND AND PATCH AS GIVEN IN SRM 51-70-03 OVER 4.0 INCHES (100 mm) DIA OR WITH FIBER DAMAGE OR DELAMINATION, REPAIR AS HOLE				

REPAIR DATA FOR 250°F (121°C) CURE ARAMID/GRAPHITE HONEYCOMB PANELS DETAIL I

NOTES

- REFER TO SRM 51-10-02 FOR INSPECTION AND REMOVAL OF DAMAGE
- RESTORE DAMAGED ALUMINUM FLAME SPRAY OR CONDUCTIVE COATING AS GIVEN IN SRM 51-70-14
- REFER TO SRM 51-10-01 FOR AERODYNAMIC SMOOTHNESS REQUIREMENTS. WHERE THE DAMAGE IS MORE THAN THE LIMITS SHOWN IN SRM 51-10-01, CONSIDERATION SHOULD BE GIVEN TO THE LOSS OF PERFORMANCE INVOLVED
- REFINISH REWORKED AREAS AS GIVEN IN AMM 51-21
- REFER TO SRM 52-40-02, IDENTIFICATION 7 FOR DOOR IDENTIFICATION
- REFER TO SRM 52-40-02, ALLOWABLE DAMAGE 2 FOR DOOR ALLOWABLE DAMAGE
- A DO NOT EXTEND GRAPHITE/EPOXY REPAIR PLIES INTO PANEL EDGEBAND

- B MINIMUM SPACING (EDGE TO EDGE) SHALL BE 6.0 INCHES (150 mm) BETWEEN CORE REPAIRS
- LIMITED TO REPAIR OF ONE FACESHEET SKIN AND HONEYCOMB CORE. INSPECT INTERIM REPAIR USING INSTRUMENTED NDT METHODS OR "TAP" TEST EVERY AIRPLANE "C" CHECK. FOR "TAP" TEST, USE A SOLID METAL DISK AND TAP THE REPAIR AREA LIGHTLY BUT FIRMLY. VOID AREAS WILL PRODUCE A DULL SOUND AS OPPOSED TO A SHARP RING ON A SOLID BONDED AREA. PERMANENT REPAIR IS REQUIRED IF ANY DETERIORATION IS EVIDENT. REFER TO SRM 51-70-03, PAR. 4.I. AND THE NONDESTRUCTIVE TEST MANUAL, D634T301. THIS REPAIR HAS FAA APPROVAL CONTINGENT ON ACCOMPLISHMENT OF THE INSPECTIONS AT THE INTERVALS CONTAINED HEREIN

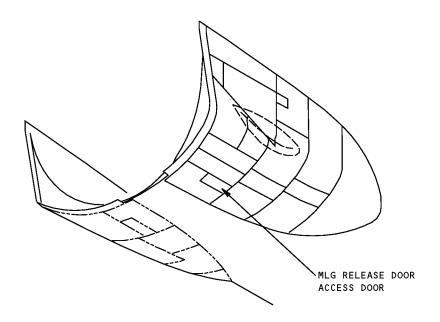
Ram Air Turbine Access Door Repair Figure 201 (Sheet 2 of 2)

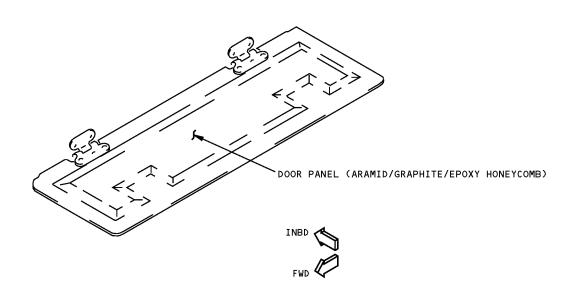
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REPAIR 2 - MLG DOOR RELEASE ACCESS DOOR

REF DWG 149T7613





MLG Door Release Access Door Repair Figure 201 (Sheet 1 of 2)

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	INTERIM REPAIRS C		PERMANENT REPAIRS [A	
DAMAGE	WET LAYUP ROOM TEMP/150°F (66°C) CURE (SRM 51-70-03)	WET LAYUP 150°F (66°C) CURE (SRM 51-70-03)	WET LAYUP 200°F (93°C) CURE (SRM 51-70-17)	250°F (121°C) CURE (SRM 51-70-05)	
CRACKS	UP TO 4.0 INCHES (100 mm) LONG, REPAIR WITH PATCH AS GIVEN IN SRM 51-70-03, B	CLEAN UP DAMAGE AND REPAIR AS A HOLE	CLEAN UP DAMAGE AND REPAIR AS A HOLE	CLEAN UP DAMAGE AND REPAIR AS A HOLE	
HOLES	4.0 INCHES (100 mm) MAX DIA NOT TO EXCEED 30% OF SMALLEST DIMENSION OF HONEYCOMB PANEL AT THE DAMAGE LOCATION. FILL WITH BMS 5-28, TYPE 7 POTTING COMPOUND AND PATCH AS GIVEN IN SRM 51-70-03, B	8.0 INCHES (200 mm) MAX DIA NOT TO EXCEED 50% OF SMALLEST DIMENSION OF HONEYCOMB PANEL AT THE DAMAGE LOCATION. USE TWO EXTRA PLIES FOR EACH FACESHEET REPAIRED B	16.0 INCHES (400 mm) MAX DIA NOT TO EXCEED 50% OF SMALLEST DIMENSION OF HONEYCOMB PANEL AT THE DAMAGE LOCATION. USE TWO EXTRA PLIES FOR EACH FACESHEET REPAIRED	NO SIZE LIMIT	
DELAMI- NATION	CUT OUT AND REPAIR AS A HOLE				
NICKS AND GOUGES	IF THERE IS NO FIBER DAMAGE OR DELAMINATION, FILL NICKS OR GOUGES AS GIVEN IN SRM 51-70-03 IF THERE IS FIBER DAMAGE OR DELAMINATION, REPAIR AS A HOLE				
DENTS	TYPE 7 POTTING COMPOUND	AND PATCH AS GIVEN IN S	MAGE OR DELAMINATION, FI SRM 51-70-03 AGE OR DELAMINATION, REP	ŕ	

REPAIR DATA FOR 250°F (121°C) CURE ARAMID/GRAPHITE HONEYCOMB PANELS

NOTES

- REFER TO SRM 51-10-02 FOR INSPECTION AND REMOVAL OF DAMAGE
- RESTORE DAMAGED ALUMINUM FLAME SPRAY OR CONDUCTIVE COATING AS GIVEN IN SRM 51-70-14
- REFER TO SRM 51-10-01 FOR AERODYNAMIC SMOOTHNESS REQUIREMENTS. WHERE THE DAMAGE IS MORE THAN THE LIMITS SHOWN IN SRM 51-10-01, CONSIDERATION SHOULD BE GIVEN TO THE LOSS OF PERFORMANCE INVOLVED
- REFINISH REWORKED AREAS AS GIVEN IN AMM 51-21
- REFER TO SRM 52-40-02, IDENTIFICATION 8 FOR DOOR IDENTIFICATION
- REFER TO SRM 52-40-02, ALLOWABLE DAMAGE 3 FOR DOOR ALLOWABLE DAMAGE
- A DO NOT EXTEND GRAPHITE/EPOXY REPAIR PLIES INTO PANEL EDGEBAND

- B MINIMUM SPACING (EDGE TO EDGE) SHALL BE 6.0 INCHES (150 mm) BETWEEN CORE REPAIRS
- LIMITED TO REPAIR OF ONE FACESHEET SKIN AND HONEYCOMB CORE. INSPECT INTERIM REPAIR USING INSTRUMENTED NDT METHODS OR "TAP" TEST EVERY AIRPLANE "C" CHECK. FOR "TAP" TEST, USE A SOLID METAL DISK AND TAP THE REPAIR AREA LIGHTLY BUT FIRMLY. VOID AREAS WILL PRODUCE A DULL SOUND AS OPPOSED TO A SHARP RING ON A SOLID BONDED AREA. PERMANENT REPAIR IS REQUIRED IF ANY DETERIORATION IS EVIDENT. REFER TO SRM 51-70-03, PAR. 4.I. AND THE NONDESTRUCTIVE TEST MANUAL, D634T301. THIS REPAIR HAS FAA APPROVAL CONTINGENT ON ACCOMPLISHMENT OF THE INSPECTIONS AT THE INTERVALS CONTAINED HEREIN

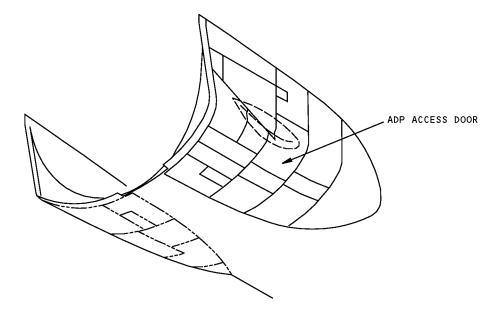
MLG Door Release Access Door Repair Figure 201 (Sheet 2 of 2)

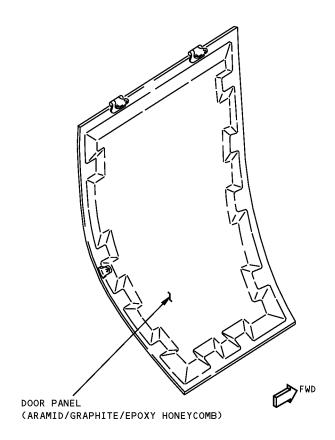
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REPAIR 3 - ADP ACCESS DOOR





ADP Access Door Repair Figure 201 (Sheet 1 of 2)

52-40-02

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	INTERIM REPAIRS C		PERMANENT REPAIRS [A	
DAMAGE	WET LAYUP ROOM TEMP/150°F (66°C) CURE (SRM 51-70-03)	WET LAYUP 150°F (66°C) CURE (SRM 51-70-03)	WET LAYUP 200°F (93°C) CURE (SRM 51-70-17)	250°F (121°C) CURE (SRM 51-70-05)	
CRACKS	UP TO 4.0 INCHES (100 mm) LONG, REPAIR WITH PATCH AS GIVEN IN SRM 51-70-03, B	CLEAN UP DAMAGE AND REPAIR AS A HOLE	CLEAN UP DAMAGE AND REPAIR AS A HOLE	CLEAN UP DAMAGE AND REPAIR AS A HOLE	
HOLES	4.0 INCHES (100 mm) MAX DIA NOT TO EXCEED 30% OF SMALLEST DIMENSION OF HONEYCOMB PANEL AT THE DAMAGE LOCATION. FILL WITH BMS 5-28, TYPE 7 POTTING COMPOUND AND PATCH AS GIVEN IN SRM 51-70-03, B	8.0 INCHES (200 mm) MAX DIA NOT TO EXCEED 50% OF SMALLEST DIMENSION OF HONEYCOMB PANEL AT THE DAMAGE LOCATION. USE TWO EXTRA PLIES FOR EACH FACESHEET REPAIRED B	16.0 INCHES (400 mm) MAX DIA NOT TO EXCEED 50% OF SMALLEST DIMENSION OF HONEYCOMB PANEL AT THE DAMAGE LOCATION. USE TWO EXTRA PLIES FOR EACH FACESHEET REPAIRED	NO SIZE LIMIT	
DELAMI- NATION	CUT OUT AND REPAIR AS A HOLE				
NICKS AND GOUGES	IF THERE IS NO FIBER DAMAGE OR DELAMINATION, FILL NICKS OR GOUGES AS GIVEN IN SRM 51-70-03 IF THERE IS FIBER DAMAGE OR DELAMINATION, REPAIR AS A HOLE				
DENTS	TYPE 7 POTTING COMPOUND	AND PATCH AS GIVEN IN S	MAGE OR DELAMINATION, FI SRM 51-70-03 AGE OR DELAMINATION, REP	ŕ	

REPAIR DATA FOR 250°F (121°C) CURE ARAMID/GRAPHITE HONEYCOMB PANELS

NOTES

- REFER TO SRM 51-10-02 FOR INSPECTION AND REMOVAL OF DAMAGE
- RESTORE DAMAGED ALUMINUM FLAME SPRAY OR CONDUCTIVE COATING AS GIVEN IN SRM 51-70-14
- REFER TO SRM 51-10-01 FOR AERODYNAMIC SMOOTHNESS REQUIREMENTS. WHERE THE DAMAGE IS MORE THAN THE LIMITS SHOWN IN SRM 51-10-01, CONSIDERATION SHOULD BE GIVEN TO THE LOSS OF PERFORMANCE INVOLVED
- REFINISH REWORKED AREAS AS GIVEN IN AMM 51-21
- REFER TO SRM 52-40-02, IDENTIFICATION 9 FOR DOOR IDENTIFICATION
- REFER TO SRM 52-40-02, ALLOWABLE DAMAGE 4 FOR DOOR ALLOWABLE DAMAGE
- A DO NOT EXTEND GRAPHITE/EPOXY REPAIR PLIES
 INTO PANEL EDGEBAND

- B MINIMUM SPACING (EDGE TO EDGE) SHALL BE 6.0 INCHES (150 mm) BETWEEN CORE REPAIRS
- LIMITED TO REPAIR OF ONE FACESHEET SKIN AND HONEYCOMB CORE. INSPECT INTERIM REPAIR USING INSTRUMENTED NDT METHODS OR "TAP" TEST EVERY AIRPLANE "C" CHECK. FOR "TAP" TEST, USE A SOLID METAL DISK AND TAP THE REPAIR AREA LIGHTLY BUT FIRMLY. VOID AREAS WILL PRODUCE A DULL SOUND AS OPPOSED TO A SHARP RING ON A SOLID BONDED AREA. PERMANENT REPAIR IS REQUIRED IF ANY DETERIORATION IS EVIDENT. REFER TO SRM 51-70-03, PAR. 4.I. AND THE NONDESTRUCTIVE TEST MANUAL, D634T301. THIS REPAIR HAS FAA APPROVAL CONTINGENT ON ACCOMPLISHMENT OF THE INSPECTIONS AT THE INTERVALS CONTAINED HEREIN

ADP Access Door Repair Figure 201 (Sheet 2 of 2)

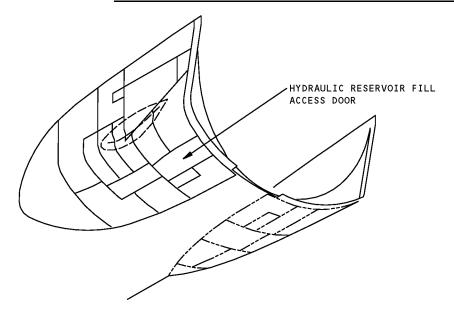
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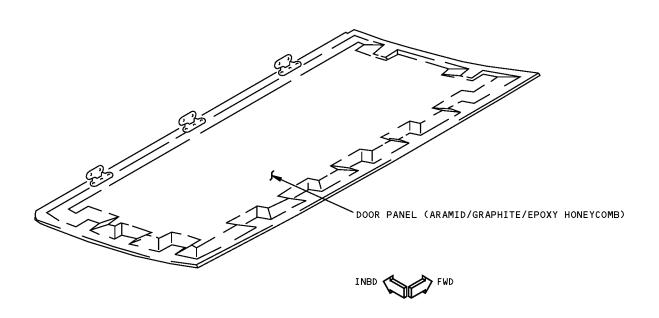
REPAIR 3 Page 202 Apr 01/2005



REPAIR 4 - HYDRAULIC RESERVOIR FILL ACCESS DOOR

REF DWG 149T7611





Hydraulic Reservoir Fill Access Door Repair Figure 201 (Sheet 1 of 2)

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REPAIR 4 Page 201 Apr 01/2005



	INTERIM REPAIRS C		PERMANENT REPAIRS [A
DAMAGE	WET LAYUP ROOM TEMP/150°F (66°C) CURE (SRM 51-70-03)	WET LAYUP 150°F (66°C) CURE (SRM 51-70-03)	WET LAYUP 200°F (93°C) CURE (SRM 51-70-17)	250°F (121°C) CURE (SRM 51-70-05)
CRACKS	UP TO 4.0 INCHES (100 mm) LONG, REPAIR WITH PATCH AS GIVEN IN 51-70-03, B	CLEAN UP DAMAGE AND REPAIR AS HOLE	CLEAN UP DAMAGE AND REPAIR AS HOLE	CLEAN UP DAMAGE AND REPAIR AS HOLE
HOLES	4.0 INCHES (100 mm) MAX DIA NOT TO EXCEED 30% OF SMALLEST DIMENSION OF HONEYCOMB PANEL AT THE DAMAGE LOCATION. FILL WITH BMS 5-28, TYPE 7 POTTING COMPOUND AND PATCH AS GIVEN IN SRM 51-70-03, B	8.0 INCHES (200 mm) MAX DIA NOT TO EXCEED 50% OF SMALLEST DIMENSION OF HONEYCOMB PANEL AT THE DAMAGE LOCATION. USE TWO EXTRA PLIES FOR EACH FACESHEET REPAIRED B	16.0 INCHES (400 mm) MAX DIA NOT TO EXCEED 50% OF SMALLEST DIMENSION OF HONEYCOMB PANEL AT THE DAMAGE LOCATION. USE TWO EXTRA PLIES FOR EACH FACESHEET REPAIRED	NO SIZE LIMIT
DELAMI- NATION	CUT OUT AND REPAIR AS H	OLE		
NICKS AND GOUGES	IF THERE IS NO FIBER DAMAGE OR DELAMINATION, FILL NICKS OR GOUGES AS GIVEN IN SRM 51-70-03 IF THERE IS FIBER DAMAGE OR DELAMINATION, REPAIR AS A HOLE			
DENTS	UP TO 4.0 INCHES (100 mm) DIA WITH NO FIBER DAMAGE OR DELAMINATION, FILL WITH BMS 5-28, TYPE 7 POTTING COMPOUND AND PATCH AS GIVENIN SRM 51-70-03 OVER 4.0 INCHES (100 mm) DIA OR WITH FIBER DAMAGE OR DELAMINATION, REPAIR AS HOLE			

REPAIR DATA FOR 250°F CURE ARAMID/GRAPHITE HONEYCOMB PANELS

NOTES

- REFER TO SRM 51-10-02 FOR INSPECTION AND REMOVAL OF DAMAGE
- RESTORE DAMAGED ALUMINUM FLAME SPRAY OR CONDUCTIVE COATING AS GIVEN IN SRM 51-70-14
- REFER TO SRM 51-10-01 FOR AERODYNAMIC SMOOTHNESS REQUIREMENTS. WHERE THE REPAIR IS MORE THAN THE LIMITS SHOWN IN SRM 51-10-01 CONSIDERATION SHOULD BE GIVEN TO THE LOSS OF PERFORMANCE INVOLVED
- REFINISH REWORKED AREAS AS GIVEN IN AMM 51-21
- REFER TO SRM 52-40-02, IDENTIFICATION 10 FOR DOOR IDENTIFICATION
- REFER TO SRM 52-40-02, ALLOWABLE DAMAGE 5 FOR DOOR ALLOWABLE DAMAGE
- A DO NOT EXTEND GRAPHITE/EPOXY REPAIR PLIES INTO PANEL EDGEBAND

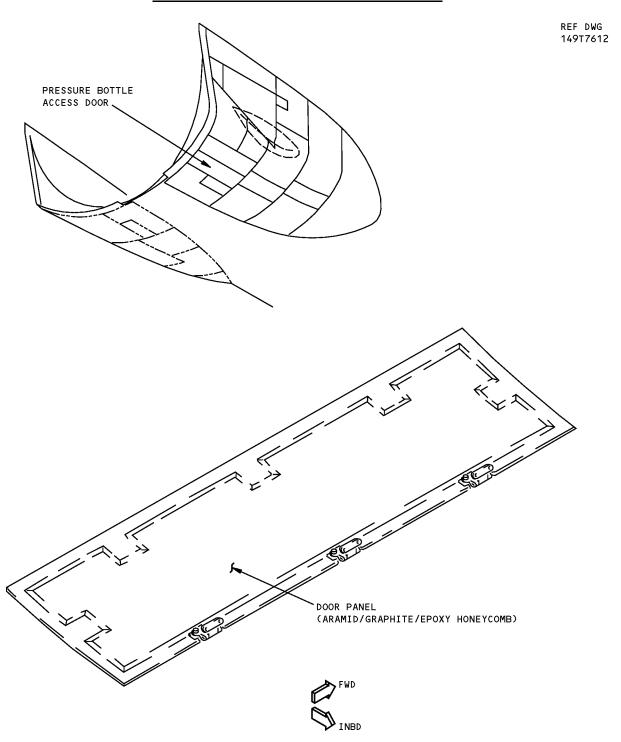
- B MINIMUM SPACING (EDGE TO EDGE) SHALL BE 6.0 INCHES (150 mm) BETWEEN CORE REPAIRS
- LIMITED TO REPAIR OF ONE FACESHEET SKIN AND HONEYCOMB CORE. INSPECT INTERIM REPAIR USING INSTRUMENTED NDT METHODS OR "TAP" TEST EVERY AIRPLANE "C" CHECK. FOR "TAP" TEST, USE A SOLID METAL DISK AND TAP THE REPAIR AREA LIGHTLY BUT FIRMLY. VOID AREAS WILL PRODUCE A DULL SOUND AS OPPOSED TO A SHARP RING ON A SOLID BONDED AREA. PERMANENT REPAIR IS REQUIRED IF ANY DETERIORATION IS EVIDENT. REFER TO SRM 51-70-03, PAR. 4.I. AND THE NONDESTRUCTIVE TEST MANUAL, D634T301. THIS REPAIR HAS FAA APPROVAL CONTINGENT ON ACCOMPLISHMENT OF THE INSPECTIONS AT THE INTERVALS CONTAINED HEREIN

Hydraulic Reservoir Fill Access Door Repair Figure 201 (Sheet 2 of 2)

52-40-02



REPAIR 5 - PRESSURE BOTTLE ACCESS DOOR



Pressure Bottle Access Door Repair Figure 201 (Sheet 1 of 2)

52-40-02

REPAIR 5 Page 201 Apr 01/2005



	INTERIM REPAIRS C		PERMANENT REPAIRS [A	
DAMAGE	WET LAYUP ROOM TEMP/150°F (66°C) CURE (SRM 51-70-03)	WET LAYUP 150°F (66°C) CURE (SRM 51-70-03)	WET LAYUP 200°F (93°C) CURE (SRM 51-70-17)	250°F (121°C) CURE (SRM 51-70-05)	
CRACKS	UP TO 4.0 INCHES (100 mm) LONG, REPAIR WITH PATCH AS GIVEN IN SRM 51-70-03, B	CLEAN UP DAMAGE AND REPAIR AS A HOLE	CLEAN UP DAMAGE AND REPAIR AS A HOLE	CLEAN UP DAMAGE AND REPAIR AS A HOLE	
HOLES	4.0 INCHES (100 mm) MAX DIA NOT TO EXCEED 30% OF SMALLEST DIMENSION OF HONEYCOMB PANEL AT THE DAMAGE LOCATION. FILL WITH BMS 5-28, TYPE 7 POTTING COMPOUND AND PATCH AS GIVEN IN SRM 51-70-03, B	8.0 INCHES (200 mm) MAX DIA NOT TO EXCEED 50% OF SMALLEST DIMENSION OF HONEYCOMB PANEL AT THE DAMAGE LOCATION. USE TWO EXTRA PLIES FOR EACH FACESHEET REPAIRED B	16.0 INCHES (400 mm) MAX DIA NOT TO EXCEED 50% OF SMALLEST DIMENSION OF HONEYCOMB PANEL AT THE DAMAGE LOCATION. USE TWO EXTRA PLIES FOR EACH FACESHEET REPAIRED	NO SIZE LIMIT	
DELAMI- NATION	CUT OUT AND REPAIR AS A HOLE				
NICKS AND GOUGES	IF THERE IS NO FIBER DAMAGE OR DELAMINATION, FILL NICKS OR GOUGES AS GIVEN IN SRM 51-70-03 IF THERE IS FIBER DAMAGE OR DELAMINATION, REPAIR AS A HOLE				
DENTS	TYPE 7 POTTING COMPOUND	AND PATCH AS GIVEN IN S	MAGE OR DELAMINATION, FI SRM 51-70-03 AGE OR DELAMINATION, REP	ŕ	

REPAIR DATA FOR 250°F (121°C) CURE ARAMID/GRAPHITE HONEYCOMB PANELS

NOTES

- REFER TO SRM 51-10-02 FOR INSPECTION AND REMOVAL OF DAMAGE
- RESTORE DAMAGED ALUMINUM FLAME SPRAY OR CONDUCTIVE COATING AS GIVEN IN SRM 51-70-14
- REFER TO SRM 51-10-01 FOR AERODYNAMIC SMOOTHNESS REQUIREMENTS. WHERE THE DAMAGE IS MORE THAN THE LIMITS SHOWN IN SRM 51-10-01, CONSIDERATION SHOULD BE GIVEN TO THE LOSS OF PERFORMANCE INVOLVED
- REFINISH REWORKED AREAS AS GIVEN IN AMM 51-21
- REFER TO SRM 52-40-02, IDENTIFICATION 11 FOR DOOR IDENTIFICATION
- REFER TO SRM 52-40-02, ALLOWABLE DAMAGE 6 FOR DOOR ALLOWABLE DAMAGE
- A DO NOT EXTEND GRAPHITE/EPOXY REPAIR PLIES
 INTO PANEL EDGEBAND

- B MINIMUM SPACING (EDGE TO EDGE) SHALL BE 6.0 INCHES (150 mm) BETWEEN CORE REPAIRS
- LIMITED TO REPAIR OF ONE FACESHEET SKIN AND HONEYCOMB CORE. INSPECT INTERIM REPAIR USING INSTRUMENTED NDT METHODS OR "TAP" TEST EVERY AIRPLANE "C" CHECK. FOR "TAP" TEST, USE A SOLID METAL DISK AND TAP THE REPAIR AREA LIGHTLY BUT FIRMLY. VOID AREAS WILL PRODUCE A DULL SOUND AS OPPOSED TO A SHARP RING ON A SOLID BONDED AREA. PERMANENT REPAIR IS REQUIRED IF ANY DETERIORATION IS EVIDENT. REFER TO SRM 51-70-03, PAR. 4.I. AND THE NONDESTRUCTIVE TEST MANUAL, D634T301. THIS REPAIR HAS FAA APPROVAL CONTINGENT ON ACCOMPLISHMENT OF THE INSPECTIONS AT THE INTERVALS CONTAINED HEREIN

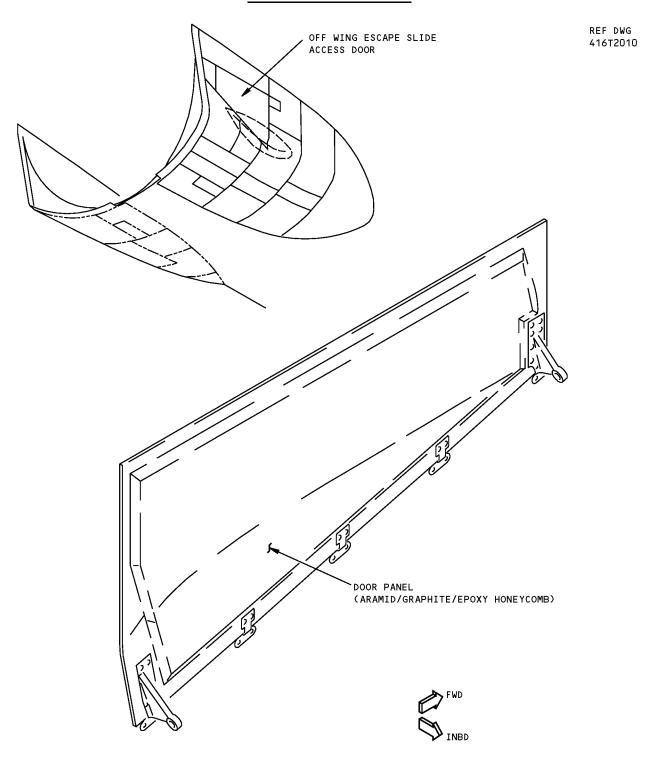
Pressure Bottle Access Door Repair Figure 201 (Sheet 2 of 2)

52-40-02

REPAIR 5 Page 202 Apr 01/2005



REPAIR 6 - ACCESS DOOR



Off-Wing Escape Slide Access Door Repair Figure 201 (Sheet 1 of 2)

52-40-02

REPAIR 6 Page 201 Apr 01/2005



	INTERIM REPAIRS C		PERMANENT REPAIRS [A	
DAMAGE	WET LAYUP ROOM TEMP/150°F (66°C) CURE (SRM 51-70-03)	WET LAYUP 150°F (66°C) CURE (SRM 51-70-03)	WET LAYUP 200°F (93°C) CURE (SRM 51-70-17)	250°F (121°C) CURE (SRM 51-70-05)	
CRACKS	UP TO 4.0 INCHES (100 mm) LONG, REPAIR WITH PATCH AS GIVEN IN SRM 51-70-03, B	CLEAN UP DAMAGE AND REPAIR AS A HOLE	CLEAN UP DAMAGE AND REPAIR AS A HOLE	CLEAN UP DAMAGE AND REPAIR AS A HOLE	
HOLES	4.0 INCHES (100 mm) MAX DIA NOT TO EXCEED 30% OF SMALLEST DIMENSION OF HONEYCOMB PANEL AT THE DAMAGE LOCATION. FILL WITH BMS 5-28, TYPE 7 POTTING COMPOUND AND PATCH AS GIVEN IN SRM 51-70-03, B	8.0 INCHES (200 mm) MAX DIA NOT TO EXCEED 50% OF SMALLEST DIMENSION OF HONEYCOMB PANEL AT THE DAMAGE LOCATION. USE TWO EXTRA PLIES FOR EACH FACESHEET REPAIRED B	16.0 INCHES (400 mm) MAX DIA NOT TO EXCEED 50% OF SMALLEST DIMENSION OF HONEYCOMB PANEL AT THE DAMAGE LOCATION. USE TWO EXTRA PLIES FOR EACH FACESHEET REPAIRED	NO SIZE LIMIT	
DELAMI- NATION	CUT OUT AND REPAIR AS A HOLE				
NICKS AND GOUGES	IF THERE IS NO FIBER DAMAGE OR DELAMINATION, FILL NICKS OR GOUGES AS GIVEN IN SRM 51-70-03 IF THERE IS FIBER DAMAGE OR DELAMINATION, REPAIR AS A HOLE				
DENTS	TYPE 7 POTTING COMPOUND	AND PATCH AS GIVEN IN S	MAGE OR DELAMINATION, FI SRM 51-70-03 AGE OR DELAMINATION, REP	ŕ	

REPAIR DATA FOR 250°F (121°C) CURE ARAMID/GRAPHITE HONEYCOMB PANELS

NOTES

- REFER TO SRM 51-10-02 FOR INSPECTION AND REMOVAL OF DAMAGE
- RESTORE DAMAGED ALUMINUM FLAME SPRAY OR CONDUCTIVE COATING AS GIVEN IN SRM 51-70-14
- REFER TO SRM 51-10-01 FOR AERODYNAMIC SMOOTHNESS REQUIREMENTS. WHERE THE DAMAGE IS MORE THAN THE LIMITS SHOWN IN SRM 51-10-01, CONSIDERATION SHOULD BE GIVEN TO THE LOSS OF PERFORMANCE INVOLVED
- REFINISH REWORKED AREAS AS GIVEN IN AMM 51-21
- REFER TO SRM 52-40-02, IDENTIFICATION 13 FOR DOOR IDENTIFICATION
- REFER TO SRM 52-40-02, ALLOWABLE DAMAGE 7 FOR DOOR ALLOWABLE DAMAGE
- A DO NOT EXTEND GRAPHITE/EPOXY REPAIR PLIES INTO PANEL EDGEBAND

- B MINIMUM SPACING (EDGE TO EDGE) SHALL BE 6.0 INCHES (150 mm) BETWEEN CORE REPAIRS
- LIMITED TO REPAIR OF ONE FACESHEET SKIN AND HONEYCOMB CORE. INSPECT INTERIM REPAIR USING INSTRUMENTED NDT METHODS OR "TAP" TEST EVERY AIRPLANE "C" CHECK. FOR "TAP" TEST, USE A SOLID METAL DISK AND TAP THE REPAIR AREA LIGHTLY BUT FIRMLY. VOID AREAS WILL PRODUCE A DULL SOUND AS OPPOSED TO A SHARP RING ON A SOLID BONDED AREA. PERMANENT REPAIR IS REQUIRED IF ANY DETERIORATION IS EVIDENT. REFER TO SRM 51-70-03, PAR. 4.I. AND THE NONDESTRUCTIVE TEST MANUAL, D634T301. THIS REPAIR HAS FAA APPROVAL CONTINGENT ON ACCOMPLISHMENT OF THE INSPECTIONS AT THE INTERVALS CONTAINED HEREIN

Off-Wing Escape Slide Access Door Repair Figure 201 (Sheet 2 of 2)

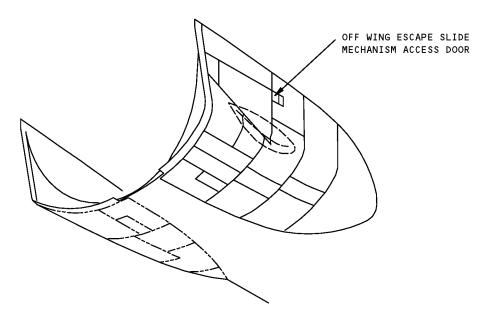
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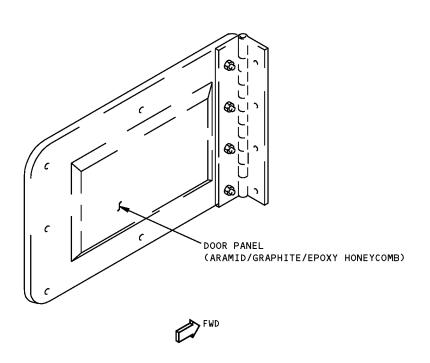
REPAIR 6 Page 202 Apr 01/2005



REPAIR 7 - MECHANISM ACCESS DOOR

REF DWG 416T2012





Off-Wing Escape Slide Mechanism Access Door Repair Figure 201 (Sheet 1 of 2)

52-40-02

REPAIR 7 Page 201 Apr 01/2005



	INTERIM REPAIRS C		PERMANENT REPAIRS [A	
DAMAGE	WET LAYUP ROOM TEMP/150°F (66°C) CURE (SRM 51-70-03)	WET LAYUP 150°F (66°C) CURE (SRM 51-70-03)	WET LAYUP 200°F (93°C) CURE (SRM 51-70-17)	250°F (121°C) CURE (SRM 51-70-05)	
CRACKS	UP TO 4.0 INCHES (100 mm) LONG, REPAIR WITH PATCH AS GIVEN IN SRM 51-70-03, B	CLEAN UP DAMAGE AND REPAIR AS A HOLE	CLEAN UP DAMAGE AND REPAIR AS A HOLE	CLEAN UP DAMAGE AND REPAIR AS A HOLE	
HOLES	4.0 INCHES (100 mm) MAX DIA NOT TO EXCEED 30% OF SMALLEST DIMENSION OF HONEYCOMB PANEL AT THE DAMAGE LOCATION. FILL WITH BMS 5-28, TYPE 7 POTTING COMPOUND AND PATCH AS GIVEN IN SRM 51-70-03, B	8.0 INCHES (200 mm) MAX DIA NOT TO EXCEED 50% OF SMALLEST DIMENSION OF HONEYCOMB PANEL AT THE DAMAGE LOCATION. USE TWO EXTRA PLIES FOR EACH FACESHEET REPAIRED	16.0 INCHES (400 mm) MAX DIA NOT TO EXCEED 50% OF SMALLEST DIMENSION OF HONEYCOMB PANEL AT THE DAMAGE LOCATION. USE TWO EXTRA PLIES FOR EACH FACESHEET REPAIRED	NO SIZE LIMIT	
DELAMI- NATION	CUT OUT AND REPAIR AS A	HOLE			
NICKS AND GOUGES	IF THERE IS NO FIBER DAMAGE OR DELAMINATION, FILL NICKS OR GOUGES AS GIVEN IN SRM 51-70-03 IF THERE IS FIBER DAMAGE OR DELAMINATION, REPAIR AS A HOLE				
DENTS	TYPE 7 POTTING COMPOUND	nm) DIA WITH NO FIBER DAM D AND PATCH AS GIVEN IN S n) DIA OR WITH FIBER DAM	SRM 51-70-03	ŕ	

REPAIR DATA FOR 250°F (121°C) CURE ARAMID/GRAPHITE HONEYCOMB PANELS

NOTES

- REFER TO SRM 51-10-02 FOR INSPECTION AND REMOVAL OF DAMAGE
- RESTORE DAMAGED ALUMINUM FLAME SPRAY OR CONDUCTIVE COATING AS GIVEN IN SRM 51-70-14
- REFER TO SRM 51-10-01 FOR AERODYNAMIC SMOOTHNESS REQUIREMENTS. WHERE THE DAMAGE IS MORE THAN THE LIMITS SHOWN IN SRM 51-10-01, CONSIDERATION SHOULD BE GIVEN TO THE LOSS OF PERFORMANCE INVOLVED
- REFINISH REWORKED AREAS AS GIVEN IN AMM 51-21
- REFER TO SRM 52-40-02, IDENTIFICATION 14 FOR DOOR IDENTIFICATION
- REFER TO SRM 52-40-02, ALLOWABLE DAMAGE 8 FOR DOOR ALLOWABLE DAMAGE
- A DO NOT EXTEND GRAPHITE/EPOXY REPAIR PLIES
 INTO PANEL EDGEBAND

- B MINIMUM SPACING (EDGE TO EDGE) SHALL BE 6.0 INCHES (150 mm) BETWEEN CORE REPAIRS
- LIMITED TO REPAIR OF ONE FACESHEET SKIN AND HONEYCOMB CORE. INSPECT INTERIM REPAIR USING INSTRUMENTED NDT METHODS OR "TAP" TEST EVERY AIRPLANE "C" CHECK. FOR "TAP" TEST, USE A SOLID METAL DISK AND TAP THE REPAIR AREA LIGHTLY BUT FIRMLY. VOID AREAS WILL PRODUCE A DULL SOUND AS OPPOSED TO A SHARP RING ON A SOLID BONDED AREA. PERMANENT REPAIR IS REQUIRED IF ANY DETERIORATION IS EVIDENT. REFER TO SRM 51-70-03, PAR. 4.I. AND THE NONDESTRUCTIVE TEST MANUAL, D634T301. THIS REPAIR HAS FAA APPROVAL CONTINGENT ON ACCOMPLISHMENT OF THE INSPECTIONS AT THE INTERVALS CONTAINED HEREIN

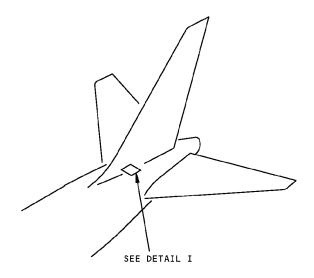
Off-Wing Escape Slide Mechanism Access Door Repair Figure 201 (Sheet 2 of 2)

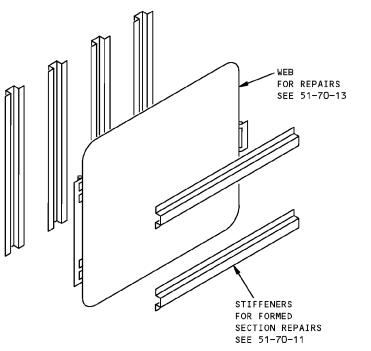
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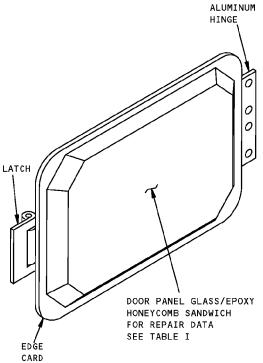
REPAIR 7 Page 202 Apr 01/2005



REPAIR 8 - FIN ACCESS DOOR







ALUMINUM FIN ACCESS DOOR

COMPOSITE FIN ACCESS DOOR

DETAIL I

Fin Access Door Repair Figure 201 (Sheet 1 of 2)

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REPAIR 8 Page 201 Apr 01/2005



	INTERIM REPAIRS C		PERMANENT REPAIRS [A	
DAMAGE	WET LAYUP ROOM TEMP/150°F (66°C) CURE (SRM 51-70-03)	WET LAYUP 150°F (66°C) CURE (SRM 51-70-03)	WET LAYUP 200°F (93°C) CURE (SRM 51-70-17)	250°F (121°C) CURE (SRM 51-70-05)	
CRACKS	UP TO 4.0 INCHES (100 mm) LONG, REPAIR WITH PATCH AS GIVEN IN SRM 51-70-03, B	CLEAN UP DAMAGE AND REPAIR AS A HOLE	CLEAN UP DAMAGE AND REPAIR AS A HOLE	CLEAN UP DAMAGE AND REPAIR AS A HOLE	
HOLES	4.0 INCHES (100 mm) MAX DIA NOT TO EXCEED 30% OF SMALLEST DIMENSION OF HONEYCOMB PANEL AT THE DAMAGE LOCATION. FILL WITH BMS 5-28, TYPE 7 POTTING COMPOUND AND PATCH AS GIVEN IN SRM 51-70-03, B	8.0 INCHES (200 mm) MAX DIA NOT TO EXCEED 50% OF SMALLEST DIMENSION OF HONEYCOMB PANEL AT THE DAMAGE LOCATION. USE TWO EXTRA PLIES FOR EACH FACESHEET REPAIRED B	16.0 INCHES (400 mm) MAX DIA NOT TO EXCEED 50% OF SMALLEST DIMENSION OF HONEYCOMB PANEL AT THE DAMAGE LOCATION. USE TWO EXTRA PLIES FOR EACH FACESHEET REPAIRED	NO SIZE LIMIT	
DELAMI- NATION	CUT OUT AND REPAIR AS A HOLE				
NICKS AND GOUGES	IF THERE IS NO FIBER DAMAGE OR DELAMINATION, FILL NICKS OR GOUGES AS GIVEN IN SRM 51-70-03 IF THERE IS FIBER DAMAGE OR DELAMINATION, REPAIR AS A HOLE				
DENTS	UP TO 4.0 INCHES (100 mm) DIA WITH NO FIBER DAMAGE OR DELAMINATION, FILL WITH BMS 5-28, TYPE 7 POTTING COMPOUND AND PATCH AS GIVEN IN SRM 51-70-03 OVER 4.0 INCHES (100 mm) DIA OR WITH FIBER DAMAGE OR DELAMINATION, REPAIR AS HOLE				

REPAIR DATA FOR 250°F CURE FIBERGLASS HONEYCOMB PANELS TABLE I

NOTES

- REFER TO SRM 51-10-02 FOR INSPECTION AND REMOVAL OF DAMAGE
- APPLY THE FINISH TO REWORKED AREAS AS GIVEN IN AMM 51-21.
- REFER TO SRM 52-40-02, IDENTIFICATION 4 FOR DOOR IDENTIFICATION
- REFER TO SRM 52-40-02, ALLOWABLE DAMAGE 1 FOR DOOR ALLOWABLE DAMAGE
- A DO NOT EXTEND FIBERGLASS/EPOXY REPAIR PLIES INTO THE PANEL EDGEBAND.
- B MINIMUM SPACING (EDGE TO EDGE) SHALL BE 6.0 INCHES (150 mm) BETWEEN CORE REPAIRS.

C LIMITED TO REPAIR OF ONE FACESHEET SKIN AND HONEYCOMB CORE. INSPECT INTERIM REPAIR USING INSTRUMENTED NDI METHODS OR "TAP" TEST EVERY AIRPLANE "C" CHECK. FOR "TAP" TEST, USE A SOLID METAL DISK AND TAP THE REPAIR AREA LIGHTLY BUT FIRMLY. VOID AREAS WILL PRODUCE A DULL SOUND AS OPPOSED TO A SHARP RING ON A SOLID BONDED AREA. PERMANENT REPAIR IS REQUIRED IF THERE IS DETERIORATION. REFER TO SRM 51-70-03, PAR. 4.I. AND THE NONDESTRUCTIVE TEST MANUAL, D634T301. THIS REPAIR HAS FAA APPROVAL CONTINGENT ON ACCOMPLISHMENT OF THE INSPECTIONS AT THE INTERVALS CONTAINED HEREIN.

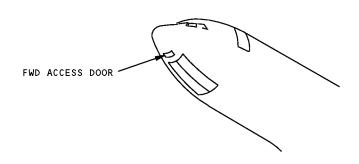
Fin Access Door Repair Figure 201 (Sheet 2 of 2)

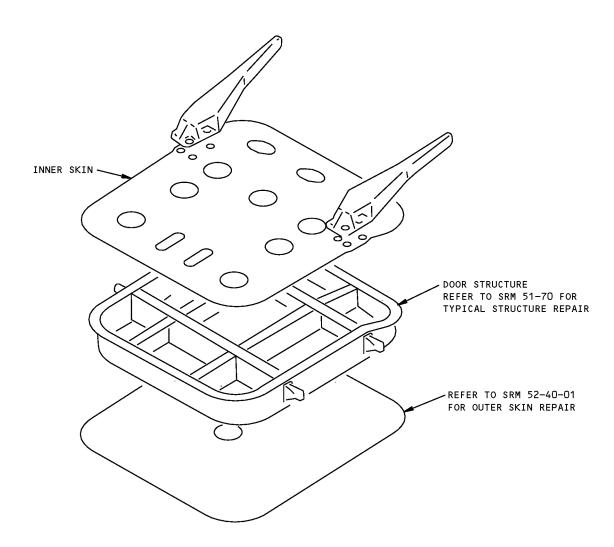
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REPAIR 9 - FORWARD ACCESS DOOR STRUCTURE

REFERENCE DRAWING 141T6401





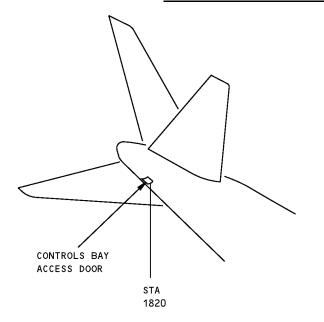
Forward Access Door Structure Repair Figure 201

52-40-02

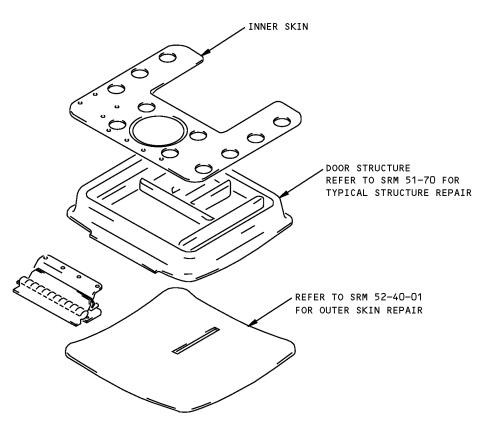
REPAIR 9 Page 201 Apr 01/2005



REPAIR 10 - CONTROLS BAY ACCESS DOOR STRUCTURE



REFERENCE DRAWINGS 148T6602 148T6404



Controls Bay Access Door Repair Figure 201

52-40-02

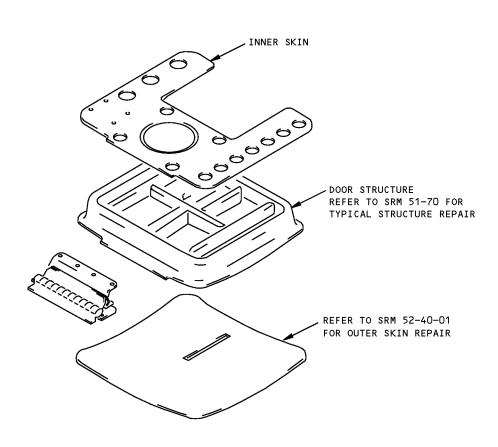
REPAIR 10 Page 201 Apr 01/2005



REPAIR 11 - SERVICE ACCESS DOOR STRUCTURE - STA 1690

SERVICE ACCESS DOOR
(RIGHT SIDE ONLY)
STA
1690

REFERENCE DRAWING 148T6402 148T6403



Service Access Door Structure Repair - Sta 1690 Figure 201

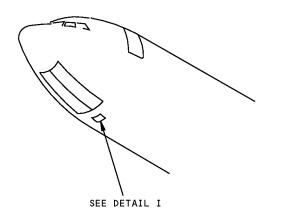
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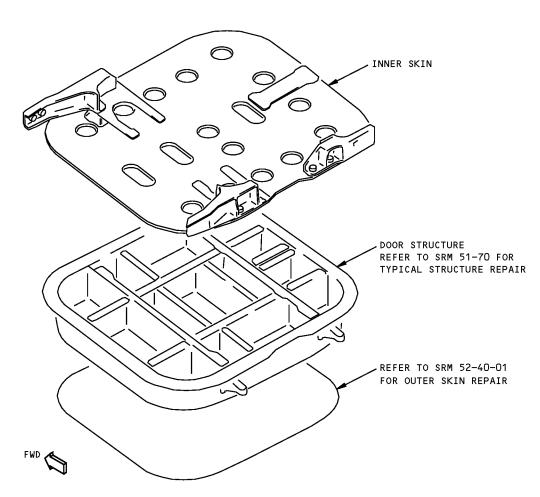
REPAIR 11 Page 201 Apr 01/2005



REPAIR 12 - ELEC/ELEX ACCESS DOOR STRUCTURE

REFERENCE DRAWING 141T6301





DETAIL I

Elec/Elex Access Door Structure Repair Figure 201

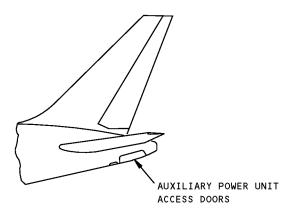
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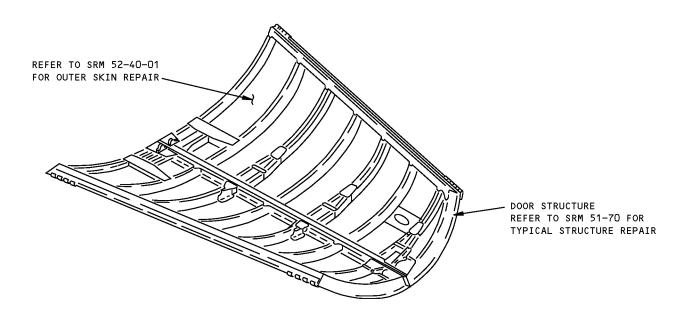
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REPAIR 13 - AUXILIARY POWER UNIT ACCESS DOOR STRUCTURE

REFERENCE DRAWING 148T6500





Auxiliary Power Unit Access Door Structure Repair Figure 201

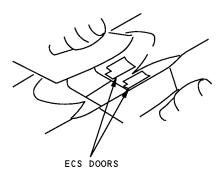
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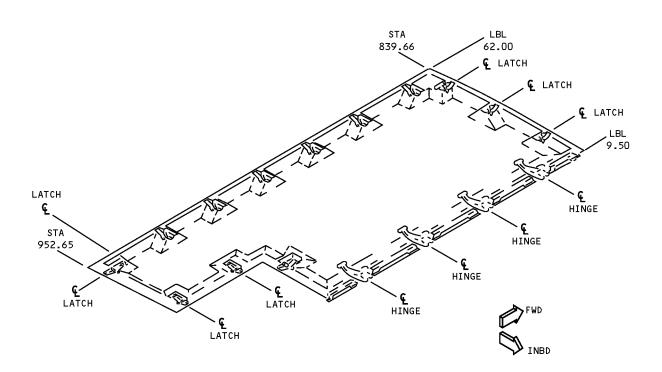
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REPAIR 14 - ECS DOOR

REF DWG 149T7210





LEFT SIDE SHOWN RIGHT SIDE OPPOSITE

ECS Door Repair Figure 201 (Sheet 1 of 2)

52-40-02

REPAIR 14 Page 201 Apr 01/2005



	INTERIM REPAIRS B		PERMANENT REPAIRS		
DAMAGE	WET LAYUP ROOM TEMP (SRM 51-70-03)	WET LAYUP 150°F (66°C) CURE (SRM 51-70-03)	WET LAYUP 200°F (93°C) CURE (SRM 51-70-17)	250°F (121°C) CURE (SRM 51-70-05)	
CRACKS	UP TO 4.0 INCHES (100 mm) LONG, REPAIR WITH PATCH AS GIVEN IN 51-70-03, A	CLEAN UP DAMAGE AND REPAIR AS HOLE	CLEAN UP DAMAGE AND REPAIR AS HOLE	CLEAN UP DAMAGE AND REPAIR AS HOLE	
HOLES	4.0 MAX INCHES (100 mm) DIA NOT TO EXCEED 30% OF SMALLEST DIMENSION OF HONEYCOMB PANEL AT THE DAMAGE LOCATION. FILL WITH BMS 5-28, TYPE 7 POTTING COMPOUND AND PATCH SA GIVEN IN SRM 51-70-03,	8.0 INCHES (200 mm) MAX DIA NOT TO EXCEED 50% OF SMALLEST DIMENSION OF HONEYCOMB PANEL AT THE DAMAGE LOCATION. USE TWO EXTRA PLIES FOR EACH FACESHEET REPAIRED C	16.0 INCHES (400 mm) MAX DIA NOT TO EXCEED 50% OF SMALLEST DIMENSION OF HONEYCOMB PANEL AT THE DAMAGE LOCATION. USE TWO EXTRA PLIES FOR EACH FACESHEET REPAIRED C	NO SIZE LIMIT	
DELAMI- NATION	CUT OUT AND REPAIR AS H	OLE			
NICKS AND GOUGES	IF THERE IS NO FIBER DAMAGE OR DELAMINATION, FILL NICKS OR GOUGES AS GIVEN IN SRM 51-70-03 IF THERE IS FIBER DAMAGE OR DELAMINATION EXISTS, REPAIR AS A HOLE				
DENTS	7 POTTING COMPOUND AND	PATCH AS GIVEN IN SRM 5	MAGE OR DELAMINATION, FI 1-70-03 E OR DELAMINATION, REPAI	ŕ	

REPAIR DATA FOR 250°F CURE ARAMID/GRAPHITE HOONEYCOMB PANELS

NOTES

- REFER TO SRM 51-10-02 FOR INSPECTION AND REMOVAL OF DAMAGE
- REFER TO SRM 51-10-01 FOR AERODYNAMIC SMOOTHNESS REQUIREMENTS. WHERE THE REPAIR EXCEEDS THE LIMITS SHOWN IN SRM 51-10-01 CONSIDERATION SHOULD BE GIVEN TO THE LOSS OF PERFORMANCE INVOLVED
- REFINISH REWORKED AREAS AS GIVEN IN AMM 51-21
- REFER TO SRM 52-40-02, IDENTIFICATION 12 FOR DOOR IDENTIFICATION
- REFER TO SRM 52-40-02, ALLOWABLE DAMAGE 14 FOR DOOR ALLOWABLE DAMAGE
- A LIMITED TO REPAIR OF DAMAGE TO ONE FACESHEET SKIN AND HONEYCOMB CORE. ONE REPAIR FOR EACH SQUARE FOOT OF AREA AND MINIMUM OF 6.0 INCHES (150 mm) (EDGE TO EDGE) FROM ANY OTHER DAMAGE, FASTENER HOLE, EDGE OF PANEL OR A MINIMUM OF 2.0 INCHES (50 mm) FROM TAPERED EDGE OF HONEYCOMB CORE
- B INSPECT INTERIM REPAIR USING INSTRUMENTED NDT METHODS OR "TAP" TEST EVERY AIRPLANE "2A" CHECK. FOR "TAP" TEST, USE A SOLID METAL DISK AND TAP THE REPAIR AREA LIGHTLY BUT FIRMLY. VOID AREAS WILL PRODUCE A DULL SOUND AS OPPOSED TO A SHARP RING ON A SOLID BONDED AREA. PERMANENT REPAIR IS REQUIRED IF ANY DETERIORATION IS EVIDENT. REFER TO SRM 51-70-03, PAR. 4.I. AND THE NONDESTRUCTIVE TEST MANUAL, D634T301. THIS REPAIR HAS FAA APPROVAL CONTINGENT ON ACCOMPLISHMENT OF THE INSPECTIONS AT THE INTERVALS CONTAINED HEREIN
- ONE REPAIR PER SQUARE FOOT OF AREA AND A MINIMUM OF 6.0 INCHES (150 mm) (EDGE TO EDGE) FROM ANY OTHER DAMAGE, FASTENER HOLE, EDGE OF PANEL, OR A MINIMUM OF 2.0 IN. (50 mm) FROM TAPERED EDGE OF HONEYCOMB CORE

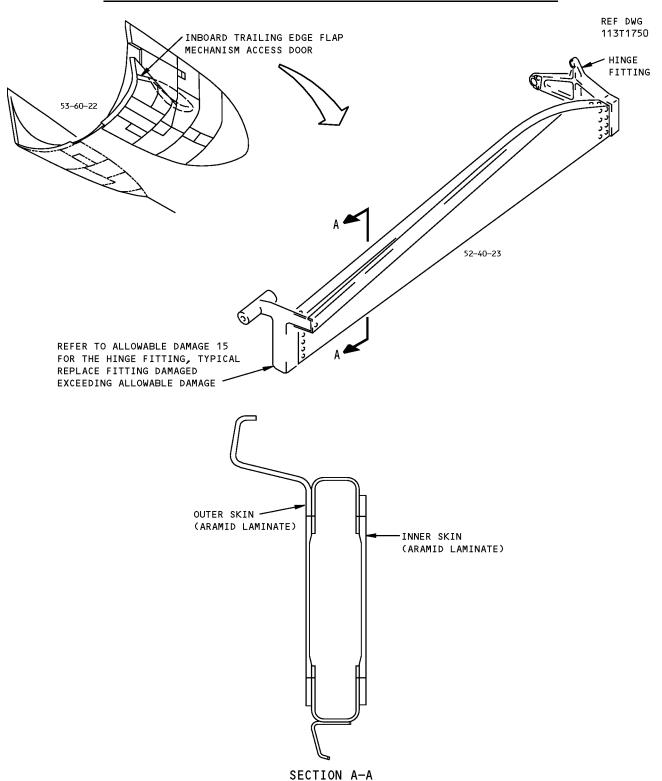
ECS Door Repair Figure 201 (Sheet 2 of 2)

52-40-02

REPAIR 14 Page 202 Apr 01/2005



REPAIR 15 - INBOARD TRAILING EDGE FLAP MECHANISM ACCESS DOOR



Inboard Trailing Edge Flap Mechanism Access Door Repair Figure 201 (Sheet 1 of 2)

52-40-02

REPAIR 15 Page 201 Apr 01/2005



	INTERIM REPAIRS B		PERMANENT REPAIRS		
DAMAGE	WET LAYUP ROOM TEMP/150°F (66°C) CURE (SRM 51-70-03)	WET LAYUP 150°F (66°C) CURE (SRM 51-70-03)	WET LAYUP 200°F (93°C) CURE (SRM 51-70-17)	250°F (121°C) CURE (SRM 51-70-05)	
CRACKS	UP TO 4.0 INCHES (100 mm) LONG, REPAIR WITH PATCH AS GIVEN IN SRM 51-70-03, A	CLEAN UP DAMAGE AND REPAIR AS A HOLE	CLEAN UP DAMAGE AND REPAIR AS A HOLE	CLEAN UP DAMAGE AND REPAIR AS A HOLE	
HOLES	4.0 INCHES (100 mm) MAX DIA NOT TO EXCEED 40% OF SMALLEST DIMENSION OF HONEYCOMB PANEL AT THE DAMAGE LOCATION. FILL WITH BMS 5-28, TYPE 7 POTTING COMPOUND AND PATCH AS GIVEN IN SRM 51-70-03, A	6.0 INCHES (150 mm) MAX DIA NOT TO EXCEED 40% OF SMALLEST DIMENSION OF HONEYCOMB PANEL AT THE DAMAGE LOCATION. USE TWO EXTRA PLIES FOR EACH FACESHEET REPAIRED A	12.0 INCHES (300 mm) MAX DIA NOT TO EXCEED 40% OF SMALLEST DIMENSION OF HONEYCOMB PANEL AT THE DAMAGE LOCATION. USE TWO EXTRA PLIES FOR EACH FACESHEET REPAIRED	NO SIZE LIMIT	
DELAMI- NATION	CUT OUT AND REPAIR AS HOLE				
NICKS AND GOUGES	IF THERE IS NO FIBER DAMAGE OR DELAMINATION, FILL NICKS OR GOUGES AS GIVEN IN SRM 51-70-03 IF THERE IS FIBER DAMAGE OR DELAMINATION, REPAIR AS A HOLE				
DENTS	CUT OUT AND REPAIR AS A	HOLE			

REPAIR DATA FOR 250°F (121°C) CURE ARAMID/GRAPHITE HONEYCOMB PANELS

NOTES

- REFER TO SRM 51-10-02 FOR INSPECTION AND REMOVAL OF DAMAGE
- RESTORE DAMAGED ALUMINUM FLAME SPRAY OR CONDUCTIVE COATING AS GIVEN IN SRM 51-70-14
- REFER TO SRM 51-10-01 FOR AERODYNAMIC SMOOTHNESS REQUIREMENTS. WHERE THE DAMAGE IS MORE THAN THE LIMITS SHOWN IN SRM 51-10-01, CONSIDERATION SHOULD BE GIVEN TO THE LOSS OF PERFORMANCE INVOLVED
- REFINISH REWORKED AREAS AS GIVEN IN AMM 51-21
- THIS REPAIR APPLICABLE TO INNER AND OUTER SKIN PANELS OF ACCESS DOOR.
- A MINIMUM SPACING (EDGE TO EDGE) SHALL BE 7.0 (175 mm) BETWEEN REPAIRS.

INSPECT INTERIM REPAIR USING INSTRUMENTED NDI METHODS OR "TAP" TEST EVERY AIRPLANE "C" CHECK. FOR "TAP" TEST, USE A SOLID METAL DISK AND TAP THE REPAIR AREA LIGHTLY BUT FIRMLY. VOID AREAS WILL PRODUCE A DULL SOUND AS OPPOSED TO A SHARP RING ON A SOLID BONDED AREA. PERMANENT REPAIR IS REQUIRED IF ANY DETERIORATION IS EVIDENT. REFER TO SRM 51-70-03, PAR. 4.I. AND THE NON-DESTRUCTIVE TEST MANUAL, D634T301. THIS REPAIR HAS FAA APPROVAL CONTINGENT ON ACCOMPLISHMENT OF THE INSPECTIONS AT THE INTERVALS CONTAINED HEREIN.

Inboard Trailing Edge Flap Mechanism Access Door Repair Figure 201 (Sheet 2 of 2)

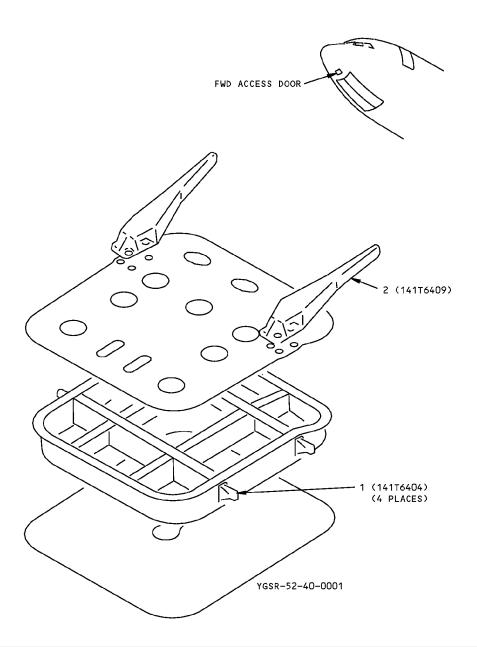
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REPAIR 15 Page 202 Apr 01/2005



IDENTIFICATION 1 - FORWARD ACCESS DOOR FITTINGS

REF DWG 141T6401



ITEM	DESCRIPTION	GAGE	MATERIAL	EFFECTIVITY
1	DOOR STOP FITTING		BAC1520-2215 2034-T3511	
2	HINGE ARM		FORGING 7075-T73	

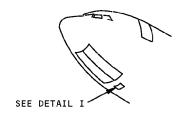
LIST OF MATERIALS

Forward Access Door Fittings Identification Figure 1

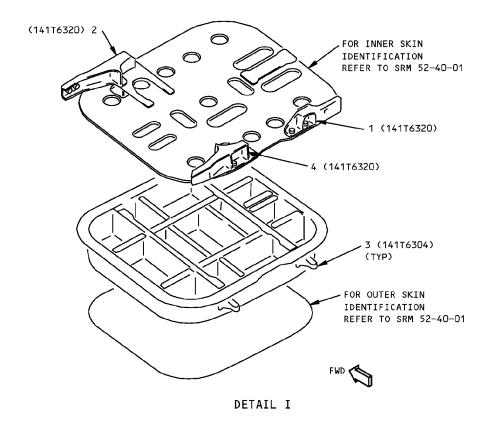
> **IDENTIFICATION 1** Page 1



IDENTIFICATION 2 - ELEC/ELEX ACCESS DOOR FITTINGS



REF DWG 141T6301



ITEM	DESCRIPTION	GAGE	MATERIAL	EFFECTIVITY
1	ROLLER	0.250	7075-T651 PLATE	
2	ROLLER FITTING	0.500	7075-T651 PLATE	
3	FITTING		BAC1520-2214 2024-T3511	
4	ROLLER FITTING	0.375	7075-T651 PLATE	

LIST OF MATERIALS FOR DETAIL I

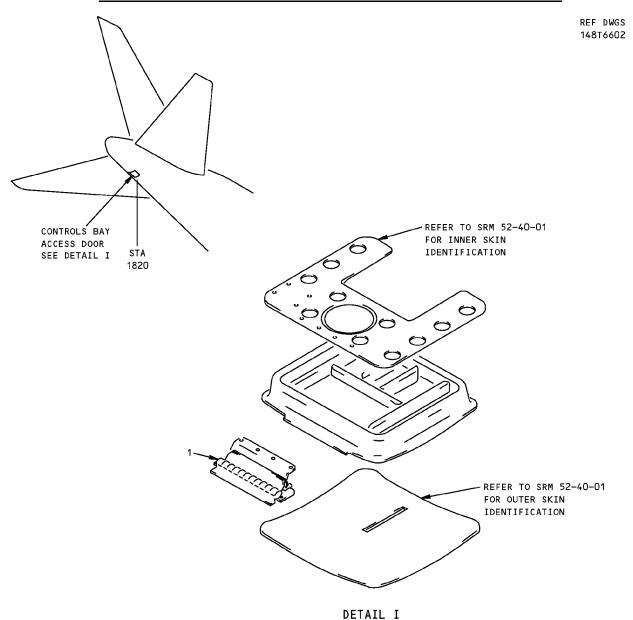
Elec/Elex Access Door Fittings Identification Figure 1

52-40-90

Page 1
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IDENTIFICATION 4 - CONTROLS BAY ACCESS DOOR STRUCTURE FITTINGS



ITEM	DESCRIPTION	GAGE	MATERIAL	EFFECTIVITY
1	HINGE ASSEMBLY ANGLE ANGLE HINGE	0.050 0.063	CLAD 7075-T62 CLAD 7075-T6 BAC3113-14 2024-T3511	

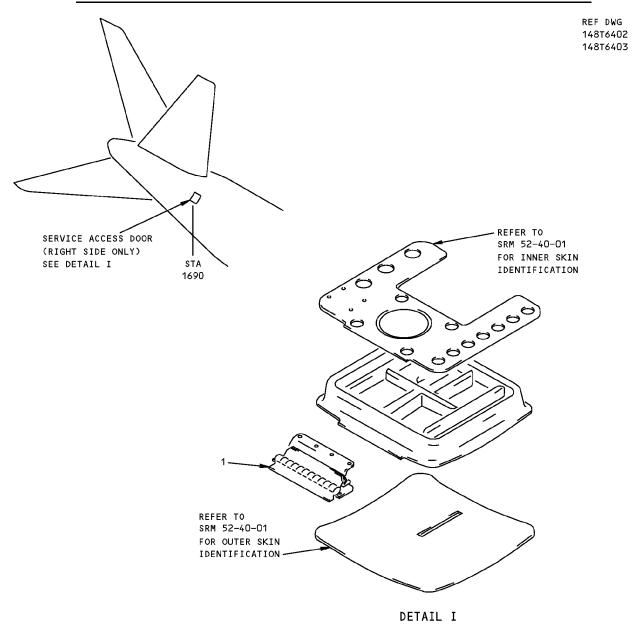
LIST OF MATERIALS FOR DETAIL I

Controls Bay Access Door Structure Fittings Identification Figure 1

IDENTIFICATION 4
Page 1
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IDENTIFICATION 5 - SERVICE ACCESS DOOR STRUCTURE FITTINGS - STATION 1690



ITEM	DESCRIPTION	GAGE	MATERIAL	EFFECTIVITY
1	HINGE ASSEMBLY ANGLE ANGLE HINGE	0.050 0.063	CLAD 7075-T62 CLAD 7075-T6 BAC3113-14 2024-T3511	

LIST OF MATERIALS FOR DETAIL I

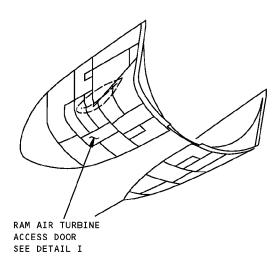
Service Access Door Structure Fittings Identification - Station 1690 Figure 1

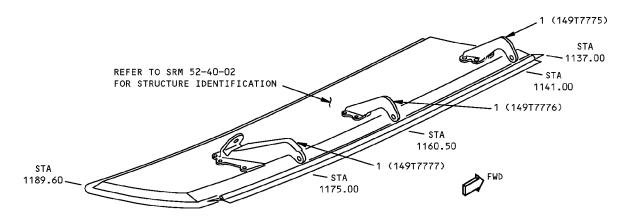
IDENTIFICATION 5
Page 1
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IDENTIFICATION 6 - RAM AIR TURBINE ACCESS DOOR FITTINGS

REF DWG 149T7771





DETAIL I

ITEM	DESCRIPTION	GAGE	MATERIAL	EFFECTIVITY
1	HINGE		FORGING 7075-T73	

LIST OF MATERIALS FOR DETAIL I

Ram Air Turbine Access Door Fittings Identification Figure 1

IDENTIFICATION 6
Page 1
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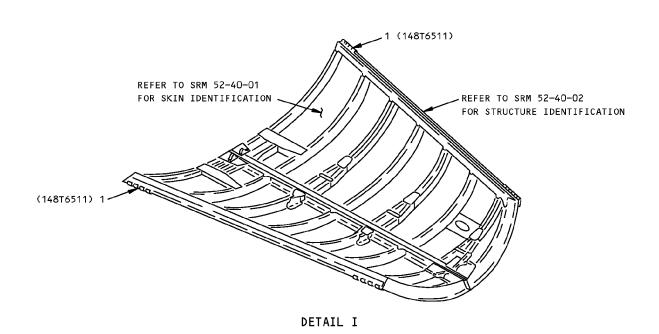


IDENTIFICATION 7 - AUXILIARY POWER UNIT ACCESS DOOR STRUCTURE FITTINGS

AUXILIARY POWER UNIT
ACCESS DOORS

SEE DETAIL I

REF DWG 148T6500



ITEM	DESCRIPTION	GAGE	MATERIAL	EFFECTIVITY
1	HINGE		BAC1514-2499 7075-T73511	

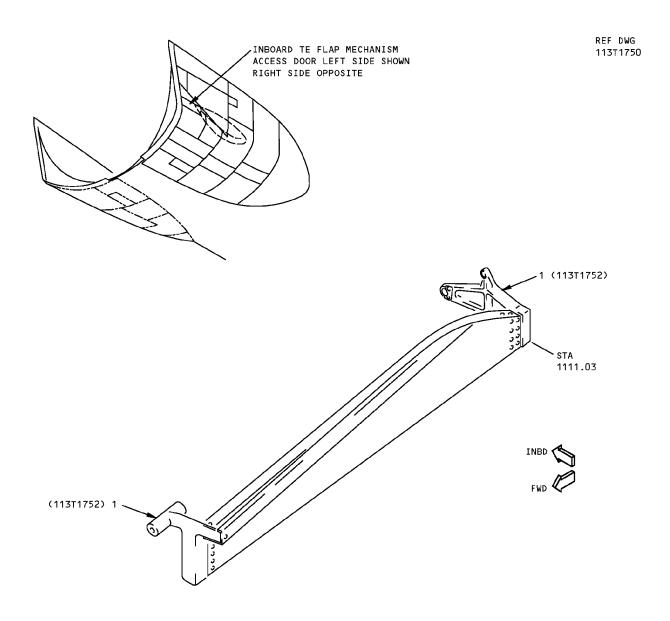
LIST OF MATERIALS FOR DETAIL I

Auxiliary Power Unit Access Door Structure Fittings Identification Figure 1

1DENTIFICATION 7 Page 1 Apr 01/2005



IDENTIFICATION 8 - INBOARD TRAILING EDGE FLAP MECHANISM ACCESS DOOR FITTINGS



ITEM	DESCRIPTION	GAGE	MATERIAL	EFFECTIVITY
1	HINGE FITTING		FORGING 7075-T73	

LIST OF MATERIALS

Inboard Trailing Edge Flap Mechanism Access Door Fittings Identification Figure 1

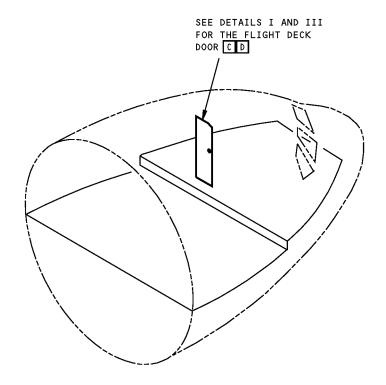
IDENTIFICATION 8
Page 1
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52-40-90



IDENTIFICATION 1 - FIXED INTERIOR DOOR

REFERENCE DRAWING 413T4210 232T2110



NOTES

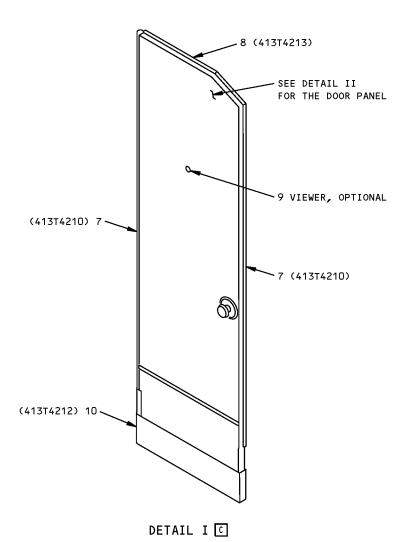
- ALL DIMENSIONS ARE IN INCHES
- A 320°F (160°C) CURE MATERIAL
- B 260°F (127°C) CURE MATERIAL
- FOR AIRPLANES WITHOUT AN ENHANCED SECURITY DOOR
- FOR AIRPLANES WITH AN ENHANCED SECURITY DOOR (REFERENCE: BOEING CONFIGURATION A AND B)

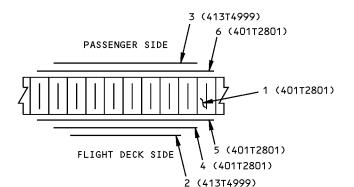
Flight Deck Door Identification Figure 1 (Sheet 1 of 6)

52-50-02

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(SECTION THRU DOOR)
DETAIL II

Flight Deck Door Identification Figure 1 (Sheet 2 of 6)

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Apr 01/2005



ITEM	DESCRIPTION	GAGE	MATERIAL	EFFECTIVITY
1	CORE		NONMETALLIC HONEYCOMB BMS 8-124, TYPE I, CLASS IV, GRADE 2.0	
2	DECORATIVE SURFACE		NOMEX PAPER PER BMS 8-143, TYPE 100	
3	DECORATIVE SURFACE		PREPREG GLASS FABRIC PER BMS 8-143, TYPE 181 A	
4	ACOUSTIC FABRIC		FLOW RESISTANT DACRON PER BMS 8-64, TYPE I	
5	SKIN	0.010	PREPREG GLASS FABRIC PER BMS 8-151, TYPE IV B	
6	SKIN	0.010	PREPREG GLASS FABRIC PER BMS 8-151, TYPE I B	
7	EDGE TRIM	0.032	6061-T4 ALUMINUM SHEET	
8	EDGE TRIM		6061-T6511 ALUMINUM EXTRUSION OPTIONAL: 6063-T5	
9	VIEWER		VENDOR: BALDWIN HARDWARE CORPORATION	
10	KICK PLATE	0.050	2024-T3 ALUMINUM SHEET	

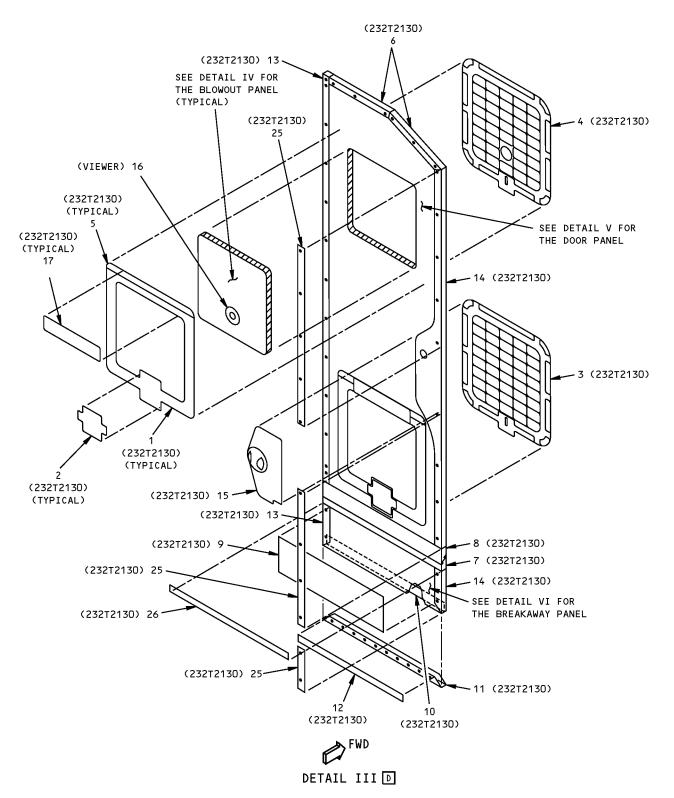
LIST OF MATERIALS FOR DETAILS I AND II

Flight Deck Door Identification Figure 1 (Sheet 3 of 6)

52-50-02

1DENTIFICATION 1 Page 3 Apr 01/2005



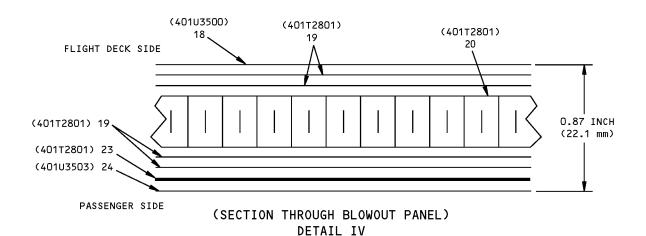


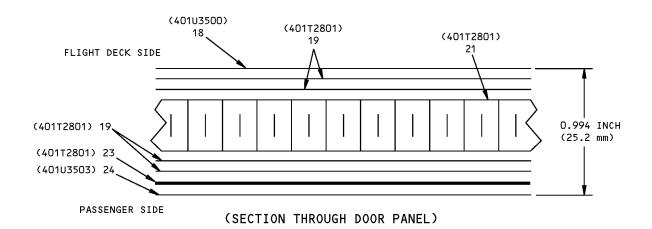
Flight Deck Door Identification Figure 1 (Sheet 4 of 6)

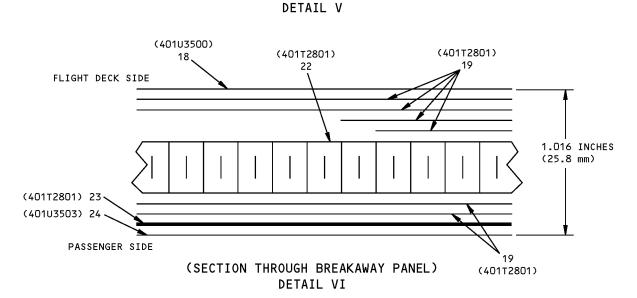
52-50-02

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Flight Deck Door Identification Figure 1 (Sheet 5 of 6)

> **IDENTIFICATION 1** 52-50-02

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ITEM	DESCRIPTION	GAGE	MATERIAL	EFFECTIVITY
1	TRIM RING	0.160	AMS-T-9046, Ti-6AL-4V, CONDITION A	
2	ARMOR PLATE	0.160	AMS-T-9046, Ti-6AL-4V, CONDITION A, PLATE	
3	LOWER GRILL	0.250	2024-T351 PLATE	
4	UPPER GRILL	0.250	2024-T351 PLATE	
5	ARMOR PLATE	0.160	AMS-T-9046, Ti-6AL-4V, CONDITION A, PLATE	
6	UPPER TRIM	0.050	7075-T62 BARE SHEET	
7	LOWER BREAKAWAY BRACKET		7075-T7351 PLATE	
8	UPPER BREAKAWAY BRACKET		7075-T7351 PLATE	
9	KICK PLATE	0.032	7075-T6 BARE SHEET	
10	LOWER INTERNAL ARMOR PLATE	0.100	AMS-T-9046, Ti-6AL-4V, CONDITION A, SHEET	
11	LOWER TRIM	0.050	7075-T62 BARE SHEET	
12	LOWER ARMOR PLATE	0.080	AMS-T-9046, Ti-6AL-4V, CONDITION A, SHEET	
13	HINGE CHANNEL	0.050	7075-T62 BARE SHEET	
14	LATCH CHANNEL	0.050	7075-T62 BARE SHEET	
15	COVER PLATE	0.500	AMS-T-9046, Ti-6AL-4V, CONDITION A, PLATE	
16	VIEWER		C AND D AEROSPACE	
17	HINGE		2024-T3511	
18	DECORATIVE SURFACE (FLIGHT DECK SIDE)		BMS 5-91, TYPE IV; BMS 8-254,TYPE V, CLASS IV; BMS 8-356, TYPE I, CLASS I, GRADE 0.7, FORM B, FILM	
19	SKIN		FIBERGLASS/PHENOLIC BMS 8-226, TYPE II, CLASS 3A	
20	CORE (BLOWOUT PANEL)	0.437	NON-METALLIC HONEYCOMB CORE, BMS 8-124, TYPE V, CLASS 4, GRADE 3.0	
21	CORE (DOOR PANEL)	0.550	NON-METALLIC HONEYCOMB CORE, BMS 8-124, TYPE V, CLASS 4, GRADE 3.0	
22	CORE (BREAKAWAY PANEL)	0.550	NON-METALLIC HONEYCOMB CORE, BMS 8-124, TYPE V, CLASS 4, GRADE 8.0	
23	KEVLAR BALLISTIC SHIELD	0.400	KEVLAR 745 LAMINATE, 20 PLIES	
24	DECORATIVE SURFACE (PASSENGER SIDE)		BMS 5-91, TYPE II; BMS 8-98, TYPE VII, CLASS 3.1, GRADE C, FORM A; BMS 8-254, TYPE IV; BMS 8-98, TYPE III, CLASS 2, GRADE A, FORM A, FILM	
25	PROTECTIVE BRACKET	0.500	7075-T7351 PLATE	
26	LOWER BREAKAWAY PLATE	0.100	AMS-T-9046, Ti-6AL-4V, CONDITION A, PLATE	

LIST OF MATERIALS FOR DETAILS III, IV, V, AND VI

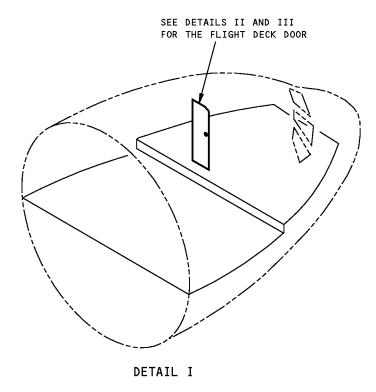
Flight Deck Door Identification Figure 1 (Sheet 6 of 6)

52-50-02

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ALLOWABLE DAMAGE 1 - FIXED INTERIOR DOOR



NOTES

- FOR THE DOORS IN DETAIL II, ANY AMOUNT OF DAMAGE TO THE STRUCTURE IS PERMITTED UP TO THE LIMITS SPECIFIED IN A, PROVIDED THAT THE FUNCTIONAL UTILITY OF THE DOOR IS NOT IMPAIRED B.
- FOR THE DOORS IN DETAIL III, NO DAMAGE TO THE STRUCTURE IS PERMITTED EXCEPT C AND D. ALSO, THE FUNCTIONAL UTILITY OF THE DOOR MAY NOT BE IMPAIRED B.
- REFER TO SRM 51-10-02 FOR THE INSPECTION AND REMOVAL OF DAMAGE.
- FOR REWORKED ALUMINUM SURFACES, APPLY A CHEMICAL CONVERSION COATING AS GIVEN IN SRM 51-20-01.
- REFINISH REWORKED AREAS AS GIVEN IN AMM 51-20-00.
- A REFER TO AMM 25-00-00 FOR THE REPAIR OF NICKS AND SCRATCHES; FOR GOUGES NOT EXCEEDING 1.5 INCHES (38 mm); AND FOR REPAIRS TO BMS 8-133 URETHANE FOAM.

- B MAINTAIN THE FOLLOWING FUNCTIONAL REQUIREMENTS: DEPRESSURIZATION FEATURE, EMERGENCY EXIT FEATURE, ELECTRIC AND KEYED DOOR LOCK FUNCTION. REFER TO AMM 52-51-00.
- C NICKS, GOUGES AND SCRATCHES ON THE EXTERNAL SURFACE AREAS AS SHOWN WITH SHADED AREAS IN DETAIL III ARE PERMITTED TO A MAXIMUM DEPTH OF 0.020 INCH (0.508 mm)
- D DAMAGE TO THE DECORATIVE LAMINATE IS PERMITTED. REFER TO AMM 25-00-00 FOR THE DECORATIVE LAMINATE REMOVAL/INSTALLATION INSTRUCTIONS. IF THE DECORATIVE LAMINATE IS REMOVED, BEFORE INSTALLATION OF THE NEW DECORATIVE LAMINATE, DO A DETAILED VISUAL INSPECTION OF THE KEVLAR BALLISTIC SHIELD TO MAKE SURE THAT NO OTHER DAMAGE HAS OCCURED. REPLACE THE DOOR IF THERE IS ANY DAMAGE TO THE BALLISTIC SHIELD.
- E DAMAGE IS NOT PERMITTED ON TITANIUM, KEVLAR AND SOME ALUMINUM COMPONENTS.

M59873 S0006822676 V3

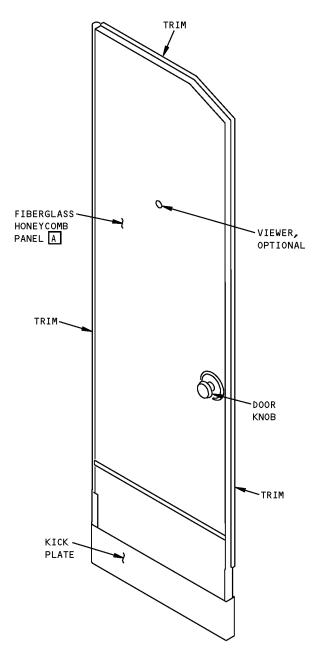
Dec 15/2007

Flight Deck Door Allowable Damage Figure 101 (Sheet 1 of 3)

ALLOWABLE DAMAGE 1
Page 101

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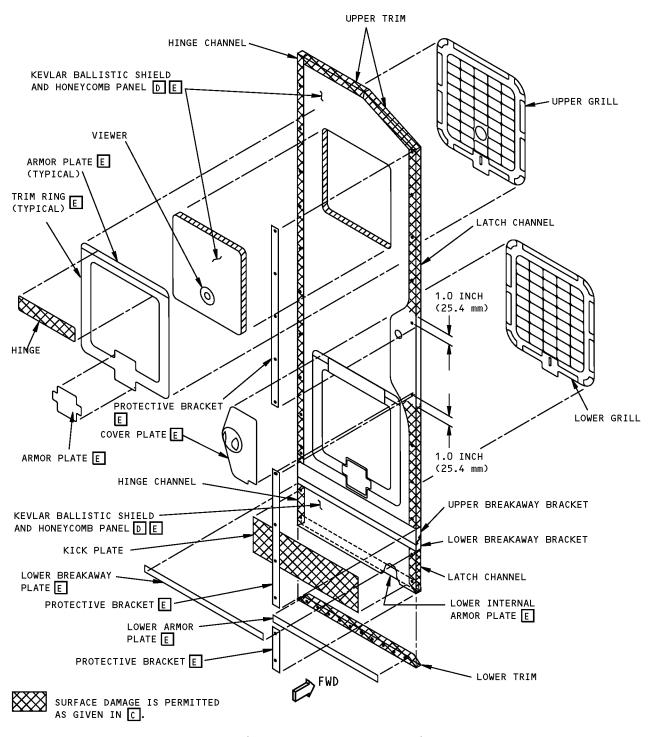


(TYPICAL FIBERGLASS DOOR)
DETAIL II

Flight Deck Door Allowable Damage Figure 101 (Sheet 2 of 3)

ALLOWABLE DAMAGE 1
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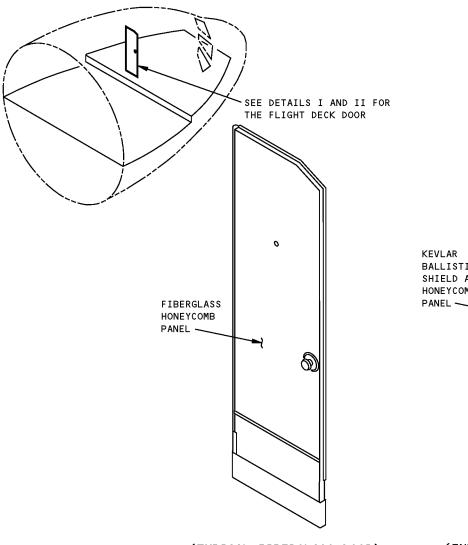
(ENHANCED SECURITY DOOR)
DETAIL III

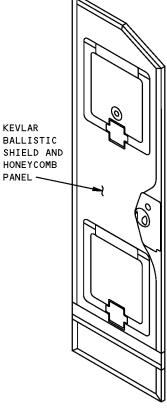
Flight Deck Door Allowable Damage Figure 101 (Sheet 3 of 3)

ALLOWABLE DAMAGE 1
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REPAIR 1 - FLIGHT DECK DOOR





(ENHANCED SECURITY DOOR)
DETAIL II

(TYPICAL FIBERGLASS DOOR) DETAIL I

 REFER TO REPAIR 2 FOR REPAIR OF THE DOORS IN DETAIL I

NOTES

• REPAIRS TO THE KEVLAR BALLISTIC SHIELD OF THE DOORS SHOWN IN DETAIL II ARE NOT PERMITTED. DAMAGE TO THE DECORATIVE LAMINATE IS PERMITTED. REFER TO AMM 25-00-00 FOR THE DECORATIVE LAMINATE REMOVAL/INSTALLATION INSTRUCTIONS. IF THE DECORATIVE LAMINATE IS REMOVED, BEFORE INSTALLATION OF THE NEW DECORATIVE LAMINATE, DO A DETAILED VISUAL INSPECTION OF THE KELVAR BALLISTIC SHIELD TO MAKE SURE THAT NO OTHER DAMAGE HAS OCCURED. REPLACE THE DOOR IF THERE IS ANY DAMAGE TO THE BALLISTIC SHIELD. CONTACT THE BOEING COMPANY FOR MORE INFORMATION.

Flight Deck Door Repair Figure 201

52-50-02



REPAIR 2 - FLIGHT DECK DOOR - FIBERGLASS PANELS

APPLICABILITY

THIS REPAIR IS APPLICABLE TO FLIGHT DECK DOORS WITHOUT THE KEVLAR SECURITY FEATURE.

REPAIR INSTRUCTIONS

- Refer to AMM 25-00-00 for the repair of nicks and scratches, for the gouges not exceeding 1.5 inches, and for the repairs to BMS 8-133 urethane foam.
- Refer to SRM 51-70-06, Figure 19 for the repair of cracks up to 6.0 inches. Restore the decorative surface as given in AMM 25-00-00.
- 3. Refer to Details II and III for the repair to BMS 8-143 and BMS 8-151 fiberglass plies and for the repair to NOMEX honeycomb core. Use BMS 9-3 Type H-2 or Type H-3 glass fabric. Extra plies are not required. Restore the decorative surface as given in AMM 25-00-00.

NOTE: The total repaired surface area must not exceed 100 square inch. If the repair area is larger than 100 square inch, you must replace the door panel.

If this repair is used on the acoustical side, the loss of acoustical attenuation property may result.

NOTES

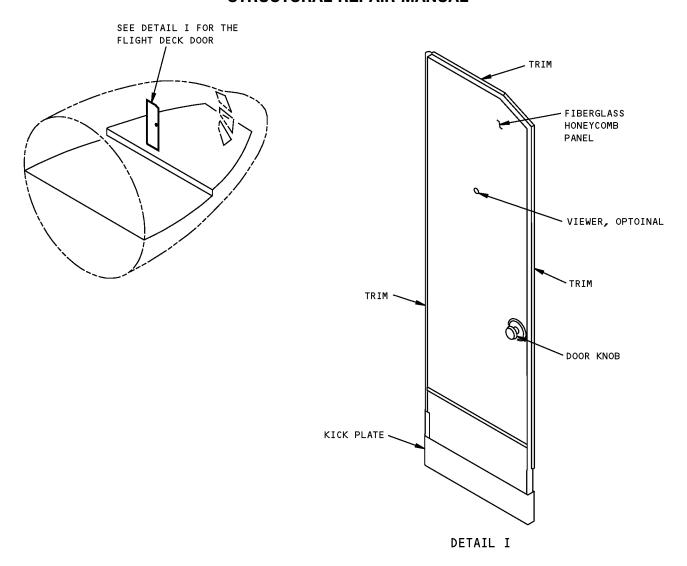
- REFER TO SRM 51-70-06 FOR THE CLEANUP OF DAMAGE AND THE WET LAYUP CURE PROCEDURE.
- A CELL WALLS MUST BE ALIGNED IN THE SAME DIRECTION AS THE ORIGINAL HONEYCOMB

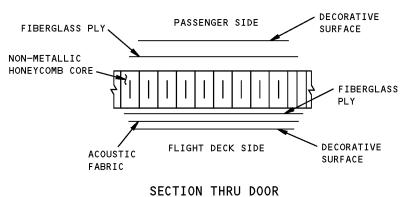
Flight Deck Door Repair - Fiberglass Panels Figure 201 (Sheet 1 of 4)

52-50-02

REPAIR 2 Page 201 Apr 01/2005



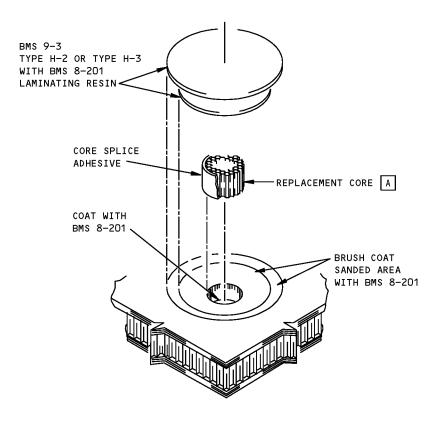




Flight Deck Door Repair - Fiberglass Panels Figure 201 (Sheet 2 of 4)

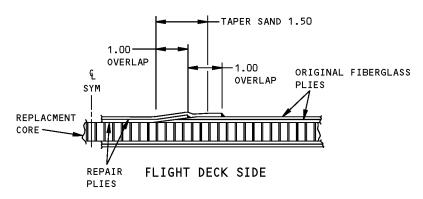
52-50-02





REPAIR OF DAMAGE TO ONE PANEL SIDE DETAIL II

PASSENGER SIDE



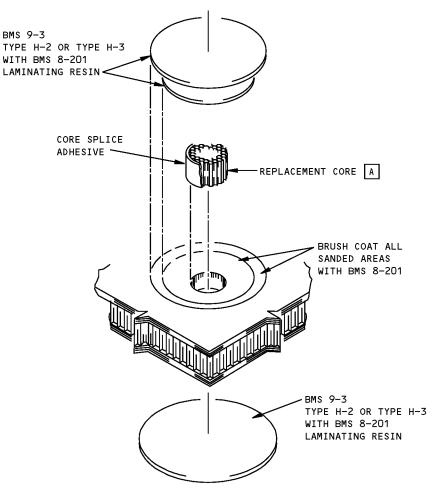
SECTION THRU REPAIR

Flight Deck Door Repair - Fiberglass Panels Figure 201 (Sheet 3 of 4)

52-50-02

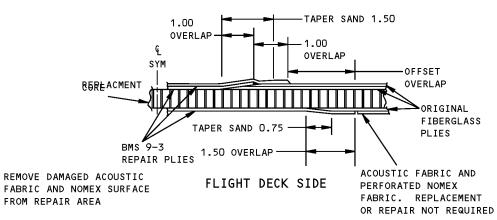
REPAIR 2 Page 203 Apr 01/2005





REPAIR OF DAMAGE TO BOTH PANEL SIDES
DETAIL III

PASSENGER SIDE



SECTION THRU REPAIR

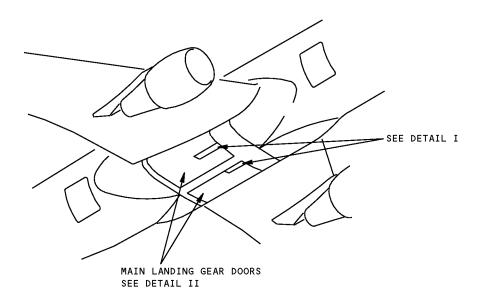
Flight Deck Door Repair - Fiberglass Panels Figure 201 (Sheet 4 of 4)

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REPAIR 2 Page 204 Apr 01/2005



IDENTIFICATION 1 - MAIN LANDING GEAR DOOR



NOTES

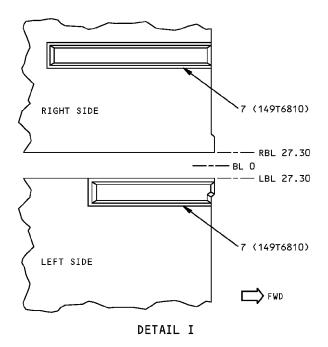
- A PLY ORIENTATION CONVENTION, DEGREES INDICATED IS PARALLEL TO THE FABRIC WARP DIRECTION
- B ARAMID/EPOXY FABRIC PER BMS 8-219, STYLE 120, 250°F (121°C) CURE
- C GRAPHITE/EPOXY FABRIC PER BMS 8-168, TYPE II, CLASS 2, STYLE 3K-70-PW, 250°F (121°C) CURE

Main Landing Gear Door Identification Figure 1 (Sheet 1 of 3)

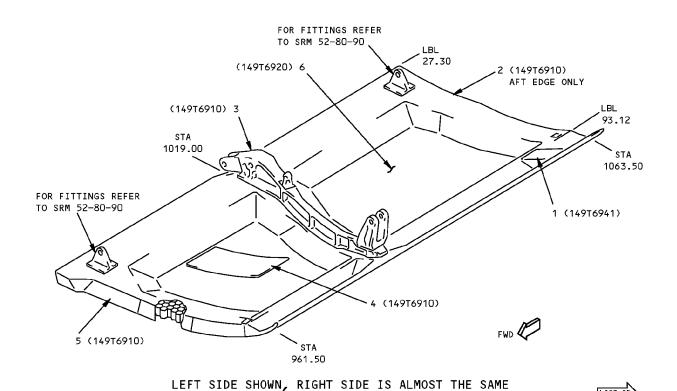
> **IDENTIFICATION 1** 52-80-02

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REF DWG 149T6910



Main Landing Gear Door Identification Figure 1 (Sheet 2 of 3)

DETAIL II

IDENTIFICATION 1

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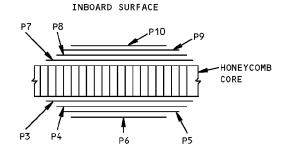
SKID BAR			
WEB AND FLANGE INTERCOSTAL	0.090	CLAD 2024-T3 AND10134-1006 2024-T3511	
EROSION PLATE	0.020	CLAD 2024-T3	
CENTER HINGE BEAM		FORGING 7075-T73	
VEAR PLATE	0.071	CLAD 2024-T3	
EROSION PLATE	0.060	CLAD 2024-T3	
DOOR PANEL SKINS CORE		ARAMID/GRAPHITE/EPOXY HONEYCOMB SANDWICH SEE DETAIL III NOMEX HONEYCOMB PER BMS 8-124, CLASS IV, TYPE V, GRADE 5.0	
INSULATION PANEL SKIN CORE CONDUCTIVE PLATE		FIBERGLASS/EPOXY HONEYCOMB SANDWICH FIBERGLASS FABRIC PER BMS 8-139, CLASS I, TYPE 120, 350°F (177°C) CURE NOMEX HONEYCOMB PER BMS 8-124, CLASS I, TYPE 1, GRADE 4.0 5052-H34 OPTIONAL: 6061-T62	
) 	ENTER HINGE BEAM EAR PLATE ROSION PLATE OOR PANEL SKINS CORE NSULATION PANEL SKIN CORE	ENTER HINGE BEAM EAR PLATE 0.071 ROSION PLATE 0.060 OOR PANEL SKINS CORE NSULATION PANEL SKIN CORE	FORGING 7075-T73 EAR PLATE O.071 CLAD 2024-T3 O.060 CLAD 2024-T3 ARAMID/GRAPHITE/EPOXY HONEYCOMB SANDWICH SKINS CORE NSULATION PANEL SKIN SKIN CORE NSULATION PANEL SKIN CORE CORE CORE CORE RIBERGLASS/EPOXY HONEYCOMB SANDWICH FIBERGLASS/EPOXY HONEYCOMB SANDWICH FIBERGLASS/EPOXY HONEYCOMB SANDWICH FIBERGLASS FABRIC PER BMS 8-139, CLASS I, TYPE 120, 350°F (177°C) CURE NOMEX HONEYCOMB PER BMS 8-124, CLASS I, TYPE 1, GRADE 4.0

LIST OF MATERIALS FOR DETAILS I AND II

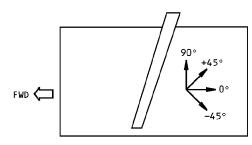
ITEM NO.	PLY NO.	MATERIAL	PLY ORIENTATION A
,	P3	В	90°
6	P4	С	±45°
	P5	С	±45°
	P6	В	±45°
	P7	В	90°
	P8	С	±45°
	Р9	С	±45°
	P10	В	±45°

MATERIAL AND PLY ORIENTATION SHOWN FOR FIELD AREAS ONLY. SEE BOEING DRAWINGS FOR EDGE BAND AND AREAS WITH DOUBLERS

TABLE I



SECTION THRU HONEYCOMB DOOR PANEL



PLY ORIENTATION DIAGRAM

DETAIL III

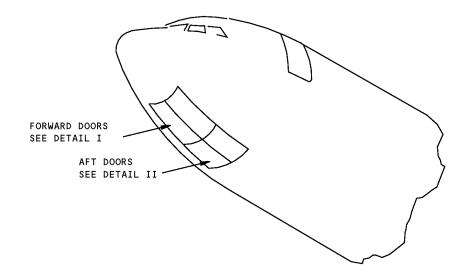
Main Landing Gear Door Identification Figure 1 (Sheet 3 of 3)

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IDENTIFICATION 2 - NOSE LANDING GEAR DOOR



NOTES

- A PLY ORIENTATION CONVENTION, DEGREES INDICATED IS PARALLEL TO THE FABRIC WARP DIRECTION
- B MATERIAL AND PLY ORIENTATION SHOWN FOR FIELD AREAS ONLY. SEE BOEING DRAWINGS FOR EDGE BAND AND AREAS WITH DOUBLERS
- FIBERGLASS/EPOXY FABRIC PER BMS 8-169, STYLE 120, 275°F (135°C) CURE
- D GRAPHITE/EPOXY FABRIC PER BMS 8-258, CLASS 2, STYLE 3K-70-PW, 275°F (135°C) CURE

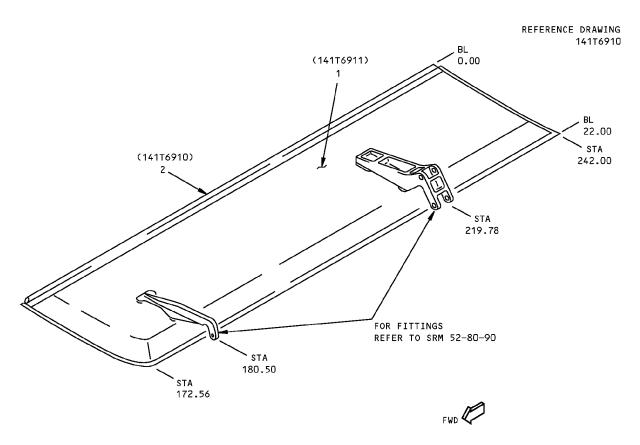
- FIBERGLASS/EPOXY FABRIC AS SHOWN IN BMS 8-79, CLASS 3, STYLE 220, 250°F (121°C) CURE.
- F GRAPHITE FABRIC AS SHOWN IN BMS 8-168 TYPE II, CLASS 2, STYLE 3K-70-PW, 250°F (121°C) CURE.
- G FOR CUM LINE NUMBERS: 1 THRU 877.
- H FOR CUM LINE NUMBERS: 878 AND ON.

Nose Landing Gear Door Identification Figure 1 (Sheet 1 of 5)

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Page 1
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LEFT SIDE IS SHOWN, RIGHT SIDE IS EQUIVALENT FORWARD DOOR DETAIL I

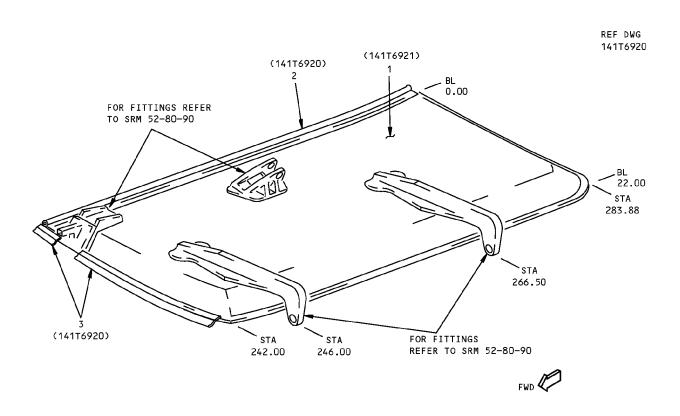
ITEM	DESCRIPTION	GAGE	MATERIAL	EFFECTIVITY
1	DOOR PANEL SKIN CORE		FIBERGLASS/GRAPHITE/EPOXY HONEYCOMB SANDWICH SEE DETAIL III NONMETALLIC HONEYCOMB AS GIVEN IN BMS 8-124, CLASS I, TYPE I, GRADES 4.0 AND 12.0	
2	SEAL ASSEMBLY SEAL SEAL RETAINER	0.040	BAC 1530-44 G , OR BAC 1530-212 H CLAD 2024-T42	σН

LIST OF MATERIALS FOR DETAIL I

Nose Landing Gear Door Identification Figure 1 (Sheet 2 of 5)

IDENTIFICATION 2





LEFT SIDE IS SHOWN, RIGHT SIDE IS EQUIVALENT AFT DOOR DETAIL II

ITEM	DESCRIPTION	GAGE	MATERIAL	EFFECTIVITY
1	DOOR PANEL SKIN CORE		FIBERGLASS/GRAPHITE/EPOXY HONEYCOMB SANDWICH SEE DETAIL IV NONMETALLIC HONEYCOMB AS GIVEN IN BMS 8-124, CLASS I,TYPE I, GRADES 4.0 AND 12.0	
2	SEAL ASSEMBLY SEAL SEAL RETAINER	0.040	BAC1530-44 CLAD 2024-T42 CLAD SHEET AS GIVEN IN QQ-A-250/5	
3	SEAL ASSEMBLY SEAL SEAL RETAINER	0.050	BAC1530-109 CLAD 2024-T3	

LIST OF MATERIALS FOR DETAIL II

Nose Landing Gear Door Identification Figure 1 (Sheet 3 of 5)

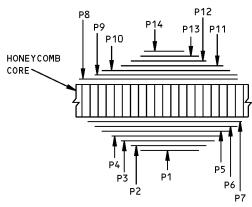
52-80-02

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90° +45° 0° -45° FWD

PLY ORIENTATION DIAGRAM



SECTION THRU HONEYCOMB DOOR PANEL

INNER SURFACE

ITEM NO.	PLY NO.	MATERIAL	PLY ORIENTATION A
1	P1	С	0°
	P2	D	+45°
	Р3	D	-45°
	P4	D	+45°
	P5	D	-45°
	P6	D	+45°
	P7	С	0°
	P8	C	0°
	Р9	٥	+45°
	P10	D	-45°
	P11	٥	+45°
	P12	D	-45°
	P13	D	+45°
	P14	С	0°

ITEM NO.	PLY NO.	MATERIAL	PLY ORIENTATION A
1	P1	E	0°
	P2	F	±45°
	Р3	F	±45°
	P4	F	±45°
	P5	F	±45°
	P6	F	±45°
	P7	F	0°
	P8	F	0°
	P9	F	±45°
	P10	F	±45°
	P11	F	±45°
	P12	F	±45°
	P13	F	±45°
	P14	E	0°

PLY TABLE B G

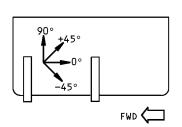
PLY TABLE B H

FWD NOSE LANDING GEAR DOOR PANEL DETAIL III

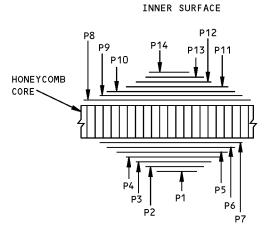
Nose Landing Gear Door Identification Figure 1 (Sheet 4 of 5)

IDENTIFICATION 2
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PLY ORIENTATION DIAGRAM



SECTION THRU HONEYCOMB DOOR PANEL

ITEM NO.	PLY NO.	MATERIAL	PLY ORIENTATION A
1	P1	С	0°
	P2	D	+45°
	Р3	٥	0°
	P4	Δ	-45°
	P5	۵	0°
	P6	Δ	+45°
	P7	U	0°
	P8	U	0°
	Р9	Δ	+45°
	P10	Δ	0°
	P11	Δ	−4 5°
	P12	٥	0°
	P13	٥	+45°
	P14	С	0°

ITEM NO.	PLY NO.	MATERIAL	PLY ORIENTATION A
1	P1	E	0°
	P2	F	+45°
	P3	F	0°
	P4	F	-45°
	P5	F	0°
	P6	F	+45°
	P7	F	0°
	P8	F	0°
	P9	F	+45°
	P10	F	0°
	P11	F	-45°
	P12	F	0°
	P13	F	+45°
	P14	E	0°

PLY TABLE B G

PLY TABLE BH

AFT NOSE LANDING GEAR DOOR PANEL DETAIL IV

Nose Landing Gear Door Identification Figure 1 (Sheet 5 of 5)

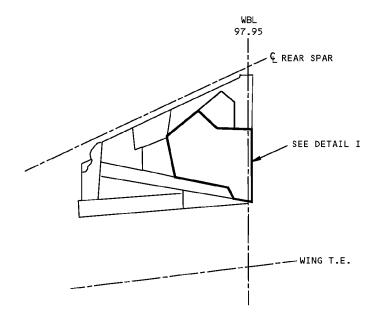
52-80-02

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IDENTIFICATION 3 - SHOCK STRUT DOOR

REF DWG 113T8201



NOTES

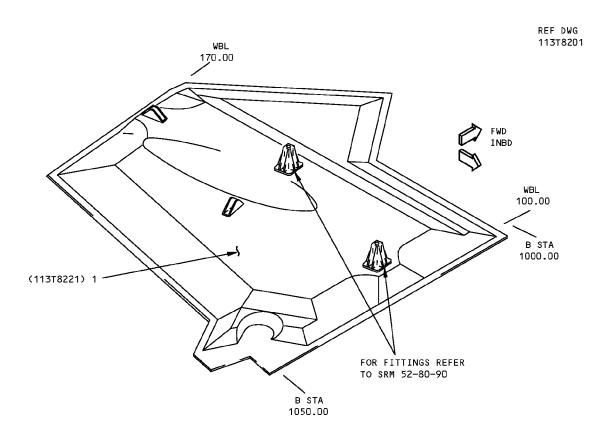
- A PLY ORIENTATION CONVENTION DEGREES INDICATED IS PARALLEL TO THE FABRIC WARP DIRECTION
- B MATERIAL AND PLY ORIENTATION SHOWN FOR FIELD AREAS ONLY. SEE BOEING DRAWINGS FOR EDGE BAND AND AREAS WITH DOUBLERS
- GRAPHITE/EPOXY FABRIC PER BMS 8-168, TYPE II, CLASS 2 STYLE 3K-70-PW, 250°F (121°C) CURE
- D GRAPHITE/EPOXY TAPE PER BMS 8-168, CLASS I, TYPE II, GRADE 190, 250°F (121°C) CURE
- FIBERGLASS/EPOXY FABRIC PER BMS 8-79, TYPE 120, 250°F (121°C) CURE
- F NONMETALLIC HONEYCOMB CORE PER BMS 8-124, CLASS I, TYPE I, GRADE 12.0

Shock Strut Door Identification Figure 1 (Sheet 1 of 3)

52-80-02

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DETAIL I

ITEM	DESCRIPTION	GAGE	MATERIAL	EFFECTIVITY
1	DOOR PANEL SKIN CORE		GRAPHITE/EPOXY, FIBERGLASS HONEYCOMB SANDWICH SEE DETAIL II NOMEX HONEYCOMB PER BMS 8-124, CLASS IV, TYPE V, GRADE 3.0 (EXCEPT WHERE INDICATED IN DETAIL II)	

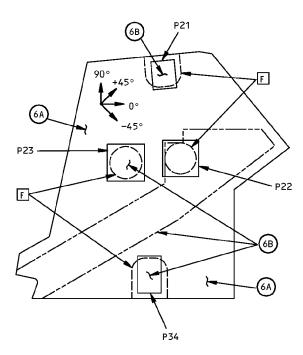
LIST OF MATERIALS FOR DETAIL I

Shock Strut Door Identification Figure 1 (Sheet 2 of 3)

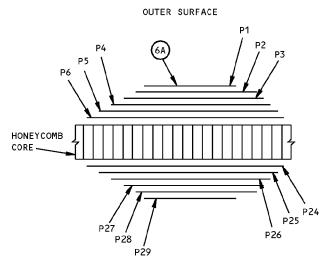
52-80-02

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INNER SURFACE

SECTION THRU HONEYCOMB DOOR PANEL ITEM NO. 6A

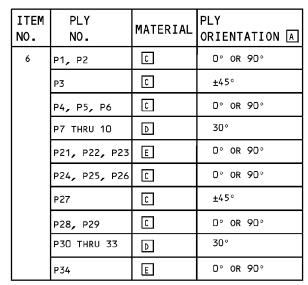
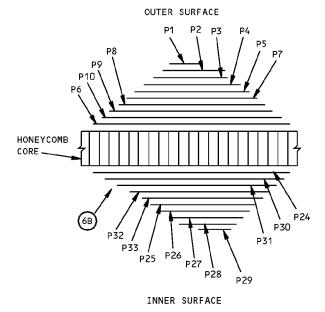


TABLE I B



SECTION THRU HONEYCOMB DOOR PANEL ITEM NO. 6B

SECTIONS THRU HONEYCOMB DOOR PANEL DETAIL II

Shock Strut Door Identification Figure 1 (Sheet 3 of 3)

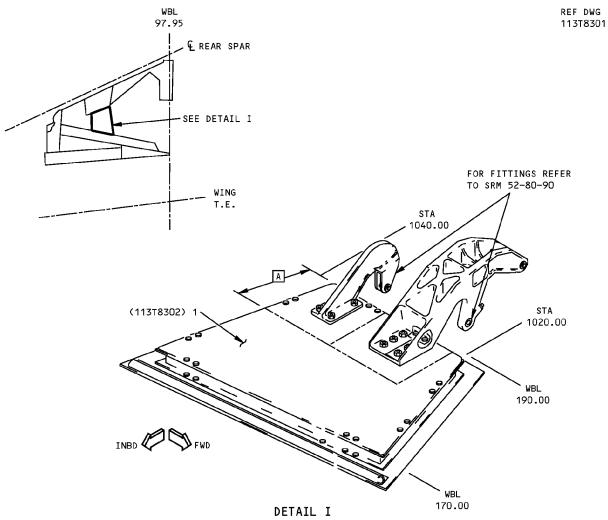
52-80-02

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IDENTIFICATION 4 - TRUNNION DOOR



NOTES

- A HEAVIER DENSITY HONEYCOMB CORES
 INSTALLED IN AREAS UNDER FITTINGS
- B THE SKIN IS CHEM-MILLED AND VARIES IN THICKNESS.
 REFER TO THE BOEING DRAWING TO DETERMINE THE LOCAL
 THICKNESS

ITEM	DESCRIPTION	GAGE	MATERIAL	EFFECTIVITY
1	DOOR PANEL ASSY OUTER SKIN CORE INNER SKIN	B 0.025	CLAD 2024-T3 ALUMINUM HONEYCOMB PER BMS 4-4, 3-15N, 3-20N, OR 3-30N 2024-T3	

LIST OF MATERIALS FOR DETAIL I

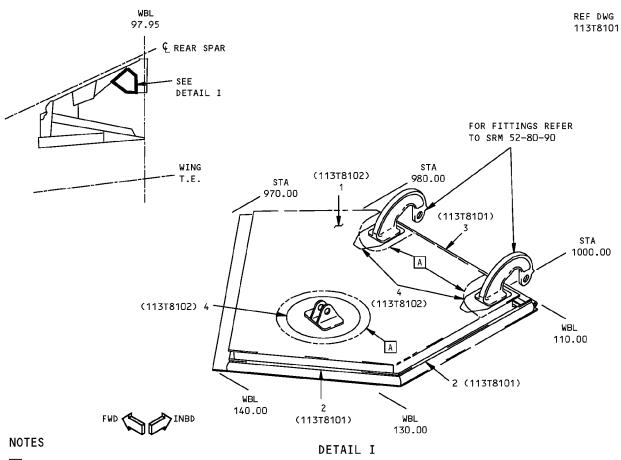
Trunnion Door Identification Figure 1

IDENTIFICATION 4
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IDENTIFICATION 5 - DRAG STRUT DOOR



A HEAVIER DENSITY HONEYCOMB CORES
INSTALLED IN AREAS UNDER FITTINGS

ITEM	DESCRIPTION	GAGE	MATERIAL	EFFECTIVITY
1	DOOR PANEL ASSY OUTER SKIN CORE	0.080	CLAD 2024-T3 ALUMINUM HONEYCOMB PER BMS 4-4 3-10N	
	INNER SKIN	0.025	2024-T3	
2	SEAL RETAINER		BAC1510-1074 2024-T3511	
3	SEAL RETAINER		BAC1512-330 2024-T3511	
4	DOUBLER	0.025	2024-T3	

LIST OF MATERIALS

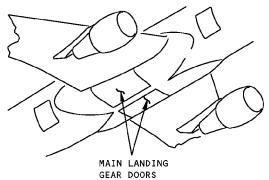
Drag Strut Door Identification Figure 1

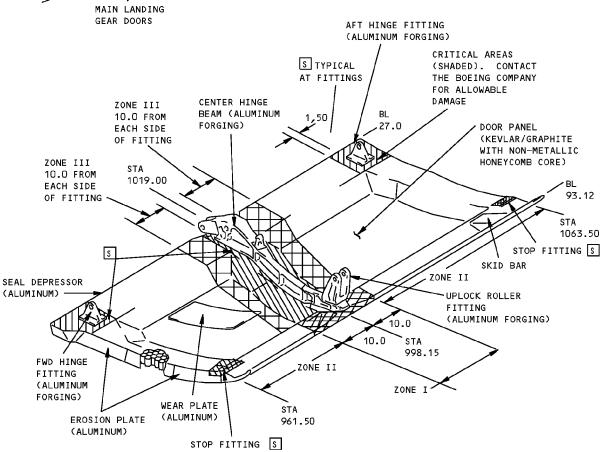
52-80-02

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ALLOWABLE DAMAGE 1 - MAIN LANDING GEAR DOOR





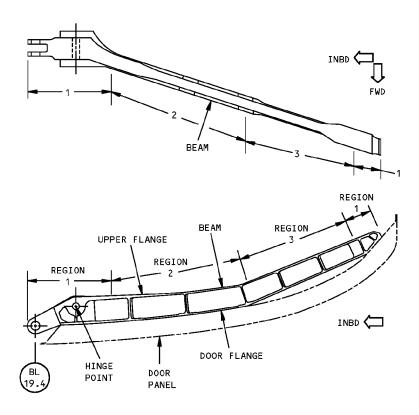
ITEMS		CRACKS	NICKS, GOUGES AND CORROSION	DENTS	HOLES AND PUNCTURES	DELAMINATION
DOOR PANEL OUTBD EDGE		А	В		٥	
	OTHER EDGES (NORMAL TO CORE)		В	С	D	E
	FACE SKIN	V	В		D	

Main Landing Gear Door Allowable Damage Figure 101 (Sheet 1 of 6)

ALLOWABLE DAMAGE 1

52-80-02





CENTER HINGE BEAM DETAIL I

ITEMS		CRACKS	NICKS, GOUGES AND CORROSION	DENTS	HOLES AND PUNCTURES
CENTER T HINGE BEAM (REGIONS DEFINED IN DETAIL I)	REGION 1	NOT ALLOWED	F		
	REGION 2	G	Н	NOT ALLOWED	NOT ALLOWED
	REGION 3	NOT ALLOWED	I		
FWD AND AFT HINGE		J	K	NOT ALLOWED	NOT ALLOWED
UPLOCK ROLLER FITTING T		J	L	NOT ALLOWED	NOT ALLOWED
EORSION PLATE		М	N	SEE DETAIL VIII	0
WEAR PLATE		M	NO RESTRICTIONS	SEE DETAIL VIII	NO RESTRICTIONS
SEAL DEPRESSOR		М	N	SEE DETAIL VIII	0
SKID BAR		M	P	Q	NO RESTRICTIONS

Main Landing Gear Door Allowable Damage Figure 101 (Sheet 2 of 6)

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NOTES

- THESE ALLOWABLE DAMAGE LIMITS ARE FAA
 APPROVED CONTINGENT ON ACCOMPLISHMENT OF
 THE INSPECTIONS AT THE INTERVALS CONTAINED
 HEREIN
- REFER TO SRM 51-10-02 FOR INSPECTION AND REMOVAL OF DAMAGE
- REFER TO SRM 51-10-01 FOR AERODYNAMIC SMOOTH-NESS REQUIREMENTS. WHERE THE DAMAGE IS MORE THAN THE LIMITS SHOWN IN SRM 51-10-01, CONSIDERATION SHOULD BE GIVEN TO THE LOSS OF PERFORMANCE INVOLVED
- REFINISH REWORKED AREAS AS GIVEN IN SRM 51-20
- DAMAGE TO PANEL EDGES MAY BE CONFINED TO DELAMINATION OR MAY TAKE A FORM WHICH RE-SULTS IN DAMAGE TO FIBERS AND A LOSS OF EFFECTIVE CROSS-SECTIONAL AREA. THIS TYPE OF DAMAGE SHOULD BE REMOVED AND THE LIMITATIONS GIVEN FOR CRACKS APPLIED
- A CRACKS ARE NOT PERMITTED EXCEPT FOR EDGE CRACKS WHICH MUST BE REMOVED PER DETAILS II AND VI. PROTECT EDGE FROM DAMAGE PER W
- B DAMAGE IS PERMITTED ON SURFACE RESIN ONLY.

 DAMAGE TO FIBERS NOT PERMITTED. CLEAN UP

 EDGE DAMAGE PER DETAILS II AND VI. W
- DENTS GENERALLY RESULT IN FIBER DAMAGE OR DELAMINATION. HOWEVER, PROVIDED THAT THERE IS NO FIBER DAMAGE OR DELAMINATION, DENTS UP TO 1.50 INCHES (38 mm) DIA MAX ARE PERMITTED. ONE DENT PER SQUARE FOOT OF AREA IS PERMITTED WHICH MUST BE A MINIMUM OF 6 INCHES (150 mm) FROM ANY OTHER DAMAGE, FASTENER HOLE, OR PANEL EDGE. IF FIBER DAMAGE OR DELAMINATION IS PRESENT, REFER TO APPLICABLE DAMAGE DATA IN TABLE

- THE FOLLOWING MAX DIA HOLES ARE ALLOWED PROVIDED DAMAGE IS MIN OF 2.5 D FROM OTHER DAMAGE, NEAREST HOLE, OR MATERIAL EDGE:

 0.19 INCH (4 mm) IN OUTBOARD EDGE

 0.25 INCH (6 mm) IN ALL OTHER EDGES

 0.40 INCH (10 mm) IN ZONE III

 1.00 INCH (25 mm) IN ALL OTHER AREAS

 DO NOT CLEAN UP DAMAGE EXCEPT TO REMOVE RESIN BURRS EXTENDING INTO SURFACE CONTOUR.
- E 1.0 INCH (25 mm) MAX DIA IS PERMITTED IN HONEYCOMB AREA. A MAXIMUM OF 0.10 INCH (2.5 mm) DELAMINATIONFROM EDGE IS PERMITTED. PROTECT EDGE DAMAGE AS GIVEN IN W
- F CLEAN UP CORNER DAMAGE PER DETAIL IX.
 OTHER DAMAGE IS NOT PERMITTED
- MO CRACKS PERMITTED ON UPPER FLANGE. CLEAN UP DAMAGE TO DOOR FLANGE PER DETAIL V
- H FOR UPPER FLANGE CLEAN UP CORNER DAMAGE
 PER DETAIL IX. FOR OTHER DAMAGE, CLEAN UP
 PER DETAIL III. FOR DOOR FLANGE CLEAN UP
 CORNER DAMAGE PER DETAIL IX. CLEAN UP
 OTHER DAMAGE PER DETAIL III OR V
- T FOR CORNER DAMAGE SEE DETAIL IX. CLEAN UP EDGE DAMAGE PER DETAIL V. NO OTHER DAMAGE IS PERMITTED
- J FOR EDGE CRACKS SEE DETAIL V. FOR CORNER CRACKS SEE DETAIL IX. OTHER CRACKS ARE NOT PERMITTED
- K CLEAN UP EDGE DAMAGE PER DETAIL V AND CORNER DAMAGE PER DETAIL IX. OTHER DAMAGE AS GIVEN IN DETAIL III
- L CLAN UP CORNER DAMAGE PER DETAIL IX. FOR FLANGE GOUGES SEE DETAIL III. NO OTHER DAMAGE IS PERMITTED
- M CLEAN UP CRACKS PER DETAIL IV AND EDGE CRACKS PER DETAIL II. CHECK UNDERLYING STRUCTURE FOR DAMAGE

Main Landing Gear Door Allowable Damage Figure 101 (Sheet 3 of 6)



NOTES (CONT)

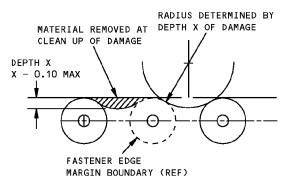
- N CLEAN UP EDGE DAMAGE PER DETAIL II. FOR OTHER DAMAGE SEE DETAIL III
- O HOLES OR PUNCTURES CLEANED UP TO 0.25 INCH DIAMETER MAXIMUM ARE ALLOWED. THEY MUST BE NO CLOSER THAN 1.0 INCH EDGE TO EDGE OF ADJACENT HOLE AND HAVE A 2D EDGE MARGIN. CHECK UNDERLYING STRUCTURE FOR DAMAGE
- P CLEAN UP EDGE DAMAGE PER DETAIL V, AND CORNER DAMAGE PER DETAIL IX
- Q CLEAN UP FLANGES ATTACHED TO DOOR PER DETAIL VIII. NO OTHER RESTRICTIONS
- PUNCTURES AND HOLES ARE ALLOWED. CHECK UNDERLYING STRUCTURE FOR DAMAGE
- NO DAMAGE ALLOWED IN AN AREA 1.50 AROUND FITTINGS. CONTACT THE BOEING COMPANY FOR ALLOWABLE DAMAGE
- T SHOT PEEN ALL REWORKED SURFACES PER
 51-20-06. SHOT PEEN INTENSITIES WILL VARY
 WITH THE THICKNESS LEFT AFTER REWORK
- U CRACKS NOT ALLOWED EXCEPT FOR EDGE CRACKS
 WHICH MUST BE REMOVED PER DETAILS II AND
 VII. PROTECT EDGE DAMAGE PER W
- THE FOLLOWING MAX LENGTH CRACKS IN HONEY—
 COMB AREA ARE ALLOWED IN A SQUARE FOOT OF
 AREA AND A MINIMUM OF 6 INCHES FROM ANY
 OTHER CRACK:
 0.40 IN ZONE III

1.00 IN ALL OTHER AREAS
CLEAN UP EDGE CRACKS PER DETAILS II AND VI

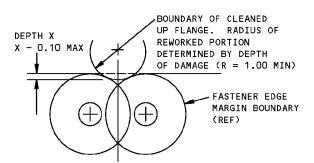
W REMOVE MOISTURE FROM DAMAGE AREA. USE OF VACUUM AND HEAT (MAX OF 125°F (52°C)) TO REMOVE MOISTURE FROM HONEYCOMB CELLS IS RECOMMENDED. PROTECT DAMAGE FROM ENTRANCE OF WATER, SUNLIGHT OR OTHER FOREIGN MATTER BY SEALING WITH ALUMINUM FOIL TAPE (SPEED TAPE). RECORD THE LOCATION AND INSPECT EACH AIRPLANE "A" CHECK. REPLACE THE ALUMINUM FOIL TAPE IF ANY PEELING OR DETERIORATION IS EVIDENT. REPAIR NO LATER THAN NEXT AIRPLANE "C" CHECK

Main Landing Gear Door Allowable Damage Figure 101 (Sheet 4 of 6)

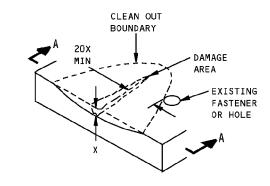




DAMAGE CLEAN UP OF EDGES WHERE FASTENER EDGE MARGINS DO NOT OVERLAP



DAMAGE CLEAN UP OF EDGES WHERE FASTENER EDGE MARGINS OVERLAP DETAIL II



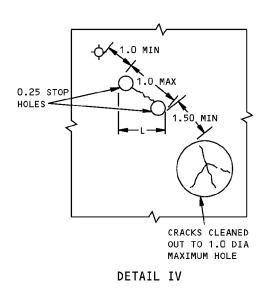
THE DISTANCE OF THE DAMAGE FROM
AN EXISTING HOLE, FASTENERS OR SKIN
EDGE MUST NOT BE LESS THAN 20X

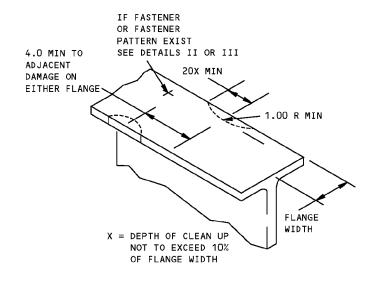
ROUND OUT TO 1.00R MIN
AND TAPER AS SHOWN

X = DEPTH OF DAMAGE AFTER
CLEANUP X = 10% OF

MAXIMUM THICKNESS

SECTION A-A
DETAIL III



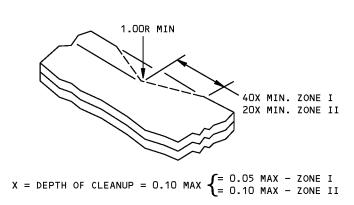


DETAIL V

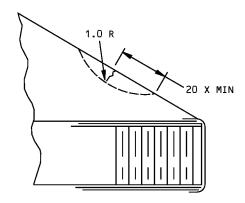
Main Landing Gear Door Allowable Damage Figure 101 (Sheet 5 of 6)

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DETAIL VI



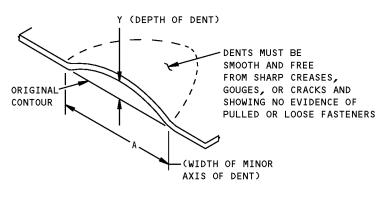
X = DEPTH OF CLEANUP = .10 MAX CLEANUP NOT ALLOWED TO RUN INTO FASTENER INSERTS

DETAIL VII

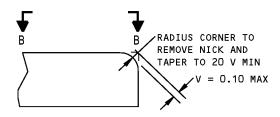
 $\frac{A}{\gamma}$ MUST NOT BE LESS THAN 30

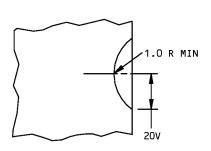
FOR WEBS Y = 0.125

FOR FLANGE OF SKID BAR ASSY, WEAR PLATE, AND SEAL DEPRESSOR Y = 0.02 MAX



DETAIL VIII





SECTION B-B

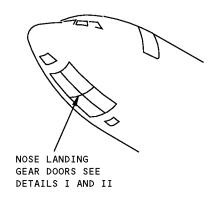
DETAIL IX

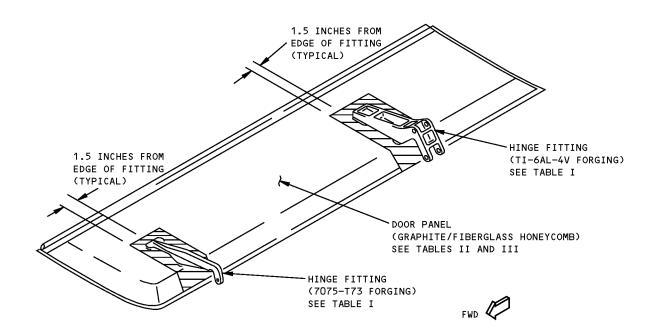
Main Landing Gear Door Allowable Damage Figure 101 (Sheet 6 of 6)

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ALLOWABLE DAMAGE 2 - NOSE LANDING GEAR DOOR





FORWARD NOSE LANDING GEAR DOOR DETAIL I

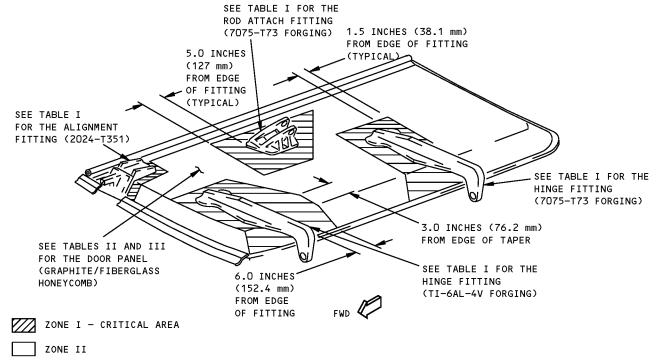
ZONE I - CRITICAL AREA

ZONE II

Nose Landing Gear Door Allowable Damage Figure 101 (Sheet 1 of 7)

ALLOWABLE DAMAGE 2
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AFT NOSE LANDING GEAR DOOR DETAIL II

ITEM		CRACKS	NICKS, GOUGES AND SCRATCHES	DENTS	PUNCTURES AND HOLES
FORWARD NOSE LANDING GEAR DOOR	HINGE FITTINGS	А	В	NOT PERMITTED	NOT PERMITTED
AFT	HINGE FITTINGS	А	В	NOT PERMITTED	NOT PERMITTED
NOSE LANDING GEAR DOOR	ROD ATTACH FITTINGS	A C	ВС	NOT PERMITTED	NOT PERMITTED
	ALIGNMENT FITTINGS	А	В	NOT PERMITTED	NOT PERMITTED

FITTING ALLOWABLE DAMAGE TABLE I

Nose Landing Gear Door Allowable Damage Figure 101 (Sheet 2 of 7)

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NOTES

- THESE ALLOWABLE DAMAGE LIMITS HAVE FAA APPROVAL IF THE INSPECTIONS SHOWN IN THIS FIGURE ARE COMPLETED AT THE SPECIFIED TIMES.
- REFER TO AMM 51-21 TO APPLY THE FINISH TO THE REWORKED AREA.
- REFER TO SRM 51-10-02 FOR THE INSPECTION AND REMOVAL OF DAMAGE.
- REFER TO SRM 51-10-01 FOR THE AERODYNAMIC SMOOTHNESS REQUIREMENTS.
- SCRATCHES ON THE SURFACE THAT DO NOT DAMAGE
 THE FIBERS, ARE PERMITTED. DAMAGE THAT IS MORE
 THAN THE ALLOWABLE DAMAGE LIMITS IN TABLES II
 AND III MUST BE REPAIRED AT THIS TIME.
- A CRACKS NOT PERMITTED. CLEAN UP EDGE
 DAMAGE PER DETAIL V AND CORNER DAMAGE AS
 GIVEN IN DETAIL VI. FOR DAMAGE AT A
 FASTENER LOCATION, SEE DETAIL III.
- B CLEAN UP EDGE DAMAGE PER DETAIL V AND CORNER DAMAGE PER DETAIL VI. FOR OTHER DAMAGE SEE DETAIL IV. FOR DAMAGE AT A FASTENER LOCATION, SEE DETAIL III.
- SHOT PEEN ALL REWORKED SURFACES PER SRM 51-20-06. SHOT PEEN INTENSITIES WILL VARY WITH THE THICKNESS LEFT AFTER REWORK.

SEE DETAIL IX FOR DAMAGE TO THE HONEYCOMB AREA OF THE	MAXIMUM D	IAMETER "D"	MINIMUM DISTANCE		
PANEL. DAMAGE TO ONE FACESHEET AND HONEYCOMB CORE IS PERMITTED ON EACH PANEL. DAMAGE TO BOTH FACESHEETS OF A PANEL MUST BE REPAIRED. DAMAGE IS NOT PERMITTED IN ZONE I FOR MORE THAN 300 FLIGHT HOURS IF THERE IS DAMAGE TO MORE THAN ONE FASTENER HOLE AT THE FITTING ATTACH FASTENERS.	VISIBLE DAMAGE	DELAMI- NATION	"a"	l '	E" LICABLE)
ZONE I	0.25 INCH (6 mm)	0.25 INCH (6 mm)	9D	3D	3d
ZONE II	1.0 INCH (25 mm)	1.0 INCH (25 mm)	3D	3D	3d

HONEYCOMB AREA OF THE PANEL - TABLE II

ALL ZONES

SEE DETAILS VII AND VIII FOR DAMAGE TO THE EDGE OF THE PANEL.

REMOVE ANY CONTAMINATION AND MOISTURE FROM THE DAMAGED AREA. USE A VACUUM AND HEAT (A MAXIMUM OF 125°F (52°F)) TO REMOVE THE MOISTURE FROM THE DAMAGED AREA. DO ONE OF THE STEPS THAT FOLLOW:

1. SEAL THE DAMAGED AREA WITH ALUMINUM FOIL TAPE (SPEED TAPE). KEEP A RECORD OF THE LOCATION AND MAKE AN INSPECTION EVERY "A" CHECK. REPLACE THE TAPE IF ANY DAMAGE IS FOUND. REPAIR THE DAMAGE AT THE NEXT "C" CHECK.

OR

APPLY A SEALING RESIN AS SPECIFIED IN SRM 51-70-03. EDGEBAND DELAMINATION IS PERMITTED IF IT IS:

- NOT MORE THAN 0.25 INCH (6.3 mm) WIDE
- BETWEEN TWO PLIES AND NO OTHERS
- NOT MORE THAN ONE FASTENER HOLE IN SIX AND IS NO MORE THAN 10% OF THE TOTAL LENGTH OF THE EDGEBAND ON A SIDE

NICKS, GOUGES, SCRATCHES, AND CRACKS ARE PERMITTED ON THE SURFACE OF THE PANEL IF THEY ARE:

- NOT MORE THAN 0.25 INCH (6.3 mm) WIDE
- A MAXIMUM OF ONE PLY IN DEPTH
- A MAXIMUM LENGTH OF 10% OF THE EDGEBAND.

EDGEBAND EROSION IS PERMITTED IF:

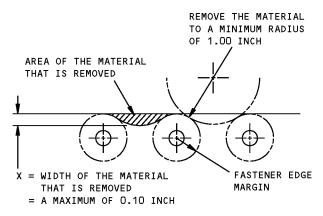
- NOT MORE THAN 0.5 INCH (12.7 mm) WIDE
- A MAXIMUM OF 2 PLIES IN DEPTH
- A MAXIMUM LENGTH OF 10% OF THE EDGEBAND.

EDGEBAND OR LAMINATE AREA OF THE PANEL - TABLE III

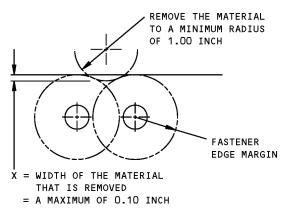
Nose Landing Gear Door Allowable Damage Figure 101 (Sheet 3 of 7)

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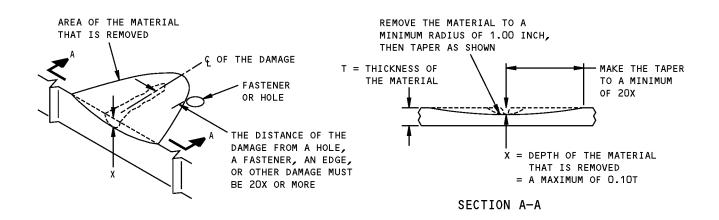


AT A LOCATION WHERE THE FASTENER EDGE MARGINS DO NOT HAVE AN OVERLAP



AT A LOCATION WHERE THE FASTENER EDGE MARGINS HAVE AN OVERLAP

REMOVAL OF DAMAGED MATERIAL ON AN EDGE DETAIL III

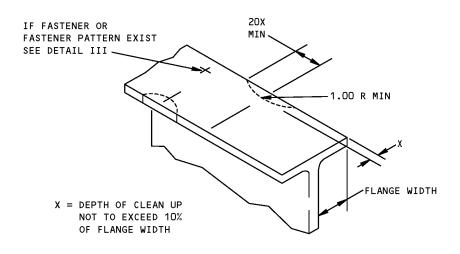


REMOVAL OF DAMAGED MATERIAL ON A SURFACE DETAIL IV

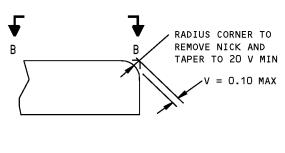
Nose Landing Gear Door Allowable Damage Figure 101 (Sheet 4 of 7)

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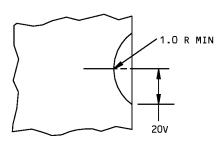




DETAIL V





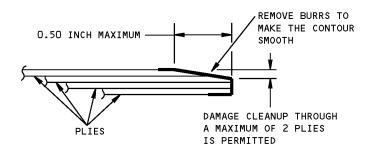


SECTION B-B

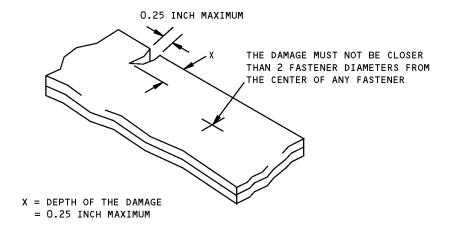
Nose Landing Gear Door Allowable Damage Figure 101 (Sheet 5 of 7)

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DAMAGE CLEANUP AND SEALING OF EDGE EROSION DETAIL VII



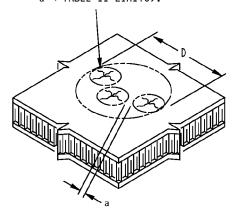
REMOVAL OF DAMAGE ON AN EDGE DETAIL VIII

Nose Landing Gear Door Allowable Damage Figure 101 (Sheet 6 of 7)

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MEASURE SMALL DAMAGE AREAS THAT ARE NEAR EACH OTHER AS ONE DAMAGE AREA. (FOR a < TABLE II LIMITS).

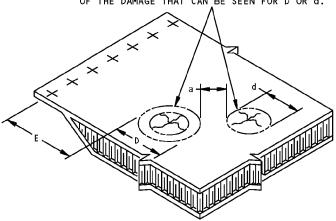


• FOR MANY SMALL DAMAGE AREAS (FOR EXAMPLE, DAMAGE CAUSED BY HAIL), FIND THE DAMAGE WITH INSTRUMENTED NONDESTRUCTIVE INSPECTION (NDI) PROCEDURES. MAKE THE INSPECTION ON AN AREA 3 DIAMETERS LARGER ALL AROUND THAN THE DAMAGE THAT CAN BE SEEN.

IF INSTRUMENTATION IS NOT AVAILABLE, USE THE TAP TEST. WITH A SMALL SOLID METAL OBJECT, HIT THE SURFACE LIGHTLY. THE SOUND WILL BE HIGH IN GOOD AREAS BUT LOW IN DISBONDED AREAS. THE TAP TEST IS NOT AN ACCURATE PROCEDURE TO FIND DAMAGE. WHEN POSSIBLE, USE THE NDI PROCEDURES.

- A DAMAGE AREA IS WHERE THERE IS A DENT, CRACK, DELAMINATION, PUNCTURE OR ANY OF THESE TOGETHER.
- MAKE A CIRCLE AROUND THE DAMAGED AREA.
 "D" IS THE DIAMETER OF THE CIRCLE. REFER
 TO TABLE II FOR THE MAXIMUM "D".
- "D" IS THE LARGER DIAMETER OF ANY TWO ADJACENT DAMAGE AREAS. MEASURE SMALL DAMAGE AREAS NEAR EACH OTHER (a < TABLE II LIMITS) AS ONE DAMAGE AREA.
- "d" IS THE SMALLER DIAMETER OF ANY TWO ADJACENT DAMAGE AREAS.
- "a" IS THE DISTANCE BETWEEN ANY TWO ADJACENT DAMAGE AREAS. REFER TO TABLE II FOR THE MINIMUM "a".
- "E" IS THE MINIMUM DISTANCE BETWEEN A DAMAGE AREA AND THE PANEL EDGE OR EDGE ATTACHMENT FASTENERS. REFER TO TABLE II FOR THE MINIMUM "E".

THESE DAMAGED AREAS HAVE DELAMINATION THAT IS LARGER THAN THE DAMAGE THAT CAN BE SEEN. USE THE DIAMETER OF THE DELAMINATION FOR D OR d. IF THERE IS NOT ANY DELAMINATION, THEN USE THE DIAMETER OF THE DAMAGE THAT CAN BE SEEN FOR D OR d.



- DAMAGE THAT EXCEEDS THE ALLOWABLE DAMAGE LIMITS IN TABLE II MUST BE REPAIRED AT THIS TIME. SUBSEQUENT DAMAGE TO THIS PANEL MUST BE A MINIMUM DISTANCE "a" AWAY FROM THE DAMAGE. FOR DAMAGE THAT DOES NOT EXCEED THE ALLOWABLE DAMAGE LIMITS IN TABLE II, REMOVE MOISTURE FROM THE DAMAGED AREA. USE A VACUUM AND HEAT (A MAXIMUM OF 125°F (52°C)) TO REMOVE MOISTURE FROM THE HONEYCOMB CELLS. DO ONE OF THE STEPS THAT FOLLOW:
 - 1. SEAL THE DAMAGED AREA WITH ALUMINUM FOIL TAPE (SPEED TAPE). KEEP A RECORD OF THE LOCATION. REPAIR THE DAMAGE NO LATER THAN THE NEXT STRUCTURES "C" CHECK. DO A VISUAL INSPECTION OF THE SPEED TAPE AT EVERY "A" CHECK. REPLACE THE TAPE IF ANY PEELING OR DETERIORATION OF THE TAPE IS FOUND. REPAIR ANY DAMAGE THAT HAS BECOME LARGER THAN WHAT THE ALLOWABLE DAMAGE LIMITS PERMIT.

OR

APPLY A BMS 8-301 CLASS II SEALING RESIN AS SPECIFIED IN SRM 51-70-03.

SIZE OF AND DISTANCE BETWEEN DAMAGE AREAS FOR COMPOSITE PANELS

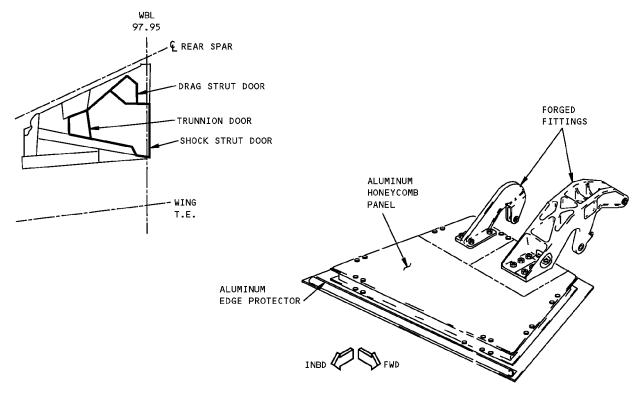
DETAIL IX

Nose Landing Gear Door Allowable Damage Figure 101 (Sheet 7 of 7)

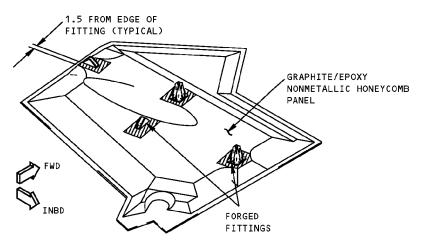
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ALLOWABLE DAMAGE 3 - WING LANDING GEAR DOOR



TYPICAL ALUMINUM HONEYCOMB PANEL DOOR



GRAPHITE/EPOXY NONMETALLIC HONEYCOMB
PANEL DOOR

NICKS, GOUGES AND SCRATCHES ARE PERMITTED THAT DO NOT DAMAGE THE FIBERS. ALL OTHER DAMAGE MUST BE REPAIRED.

Wing Landing Gear Door Allowable Damage Figure 101 (Sheet 1 of 5)

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D634T210



DESCRIPTION	CRACKS	NICKS, GOUGES AND CORROSION	DENTS	HOLES AND PUNCTURES	DELAMINATION
ALUMINUM HONEYCOMB PANEL DOOR					
OUTER SKIN	A	E	SEE DETAIL III	G	H
INNER SKIN	A	E	SEE DETAIL III	G	H
EDGE PROTECTOR	C	E	SEE DETAIL III	G	H
FORGED FITTING	B D	F D	NOT PERMITTED	NOT PERMITTED	_
GRAPHITE/EPOXY NONMETALLIC HONEYCOMB PANEL DOOR					
DOOR PANEL	٦	K	L	M	N
FORGED FITTING	B D	F D	NOT PERMITTED	NOT PERMITTED	_

NOTES

- THESE ALLOWABLE DAMAGE LIMITS ARE FAA APPROVED CONTINGENT ON ACCOMPLISHMENT OF THE INSPECTIONS AT THE INTERVALS CONTAINED HEREIN
 - REFER TO SRM 51-10-02 FOR INSPECTION AND REMOVAL OF DAMAGE
 - REFER TO 51-10-01 FOR AERODYNAMIC SMOOTH-NESS REQUIREMENTS. WHERE DAMAGE IS MORE THAN THE LIMITS SHOWN IN SRM 51-10-01, CONSIDERA-TION SHOULD BE GIVEN TO THE LOSS OF PERFORMANCE INVOLVED
 - REFINISH REWORKED AREAS AS GIVEN IN AMM 51-20
 - A CRACKS UP TO 2.0 INCHES (50 mm) MAX LENGTH
 2.0 INCHES (50 mm) OR MORE FROM EDGE OF
 FITTING ARE PERMITTED. DRILL 0.25 INCH (6 mm)
 CRACK STOP HOLES AT CRACK ENDS, CLEAN CRACK
 AREA FROM DIRT AND FOREIGN MATTER. 0 EDGE
 CRACKS MUST BE REMOVED PER DETAILS I AND V
- B CRACKS ARE NOT PERMITTED EXCEPT FOR EDGE CRACKS WHICH MUST BE REMOVED AS GIVEN IN DETAILS I AND V
- C FOR EDGE CRACKS, SEE DETAILS I AND VII.
 FOR RADIUS CRACKS NOT EXCEEDING 1.00 INCH
 (25 mm), SEE DETAIL VII
 - D SHOT PEEN ALL REWORKED SURFACES AS GIVEN IN SRM 51-20-06. SHOT PEEN INTENSITIES WILL VARY WITH THE THICKNESS LEFT AFTER REWORK
 - E REMOVE DAMAGE AS GIVEN IN DETAILS
 I,II,IV,V,VII,AND IX

- F FOR EDGE DAMAGE, SEE DETAILS I AND VI. FOR LUG DAMAGE, SEE DETAIL VIII. FOR OTHER DAMAGE, SEE DETAIL II. DAMAGE NOT PERMITTED IN VICINITY OF BUSHING
- G CLEAN UP DAMAGE TO 1.0 INCH (25 mm) MAX DIA IN HONEYCOMB AREA ONLY AND MIN OF 2.5 D FROM NEAREST HOLE FITTING OR MATERIAL EDGE. 0
- H EDGE BAND DELAMINATION NOT PERMITTED. DE-LAMINATION TO 3.0 INCHES (75 mm) DIA, PROVIDED VOID IS NOT WITHIN 1.0 INCH (25 mm) OF ANY ATTACHMENT OR EDGE OR FITTING
- ACCUMULATED LENGTH OF CRACKS MUST NOT BE
 MORE THAN 10% OF FLANGE LENGTH. DISTANCE BETWEEN STOP HOLES OF ADJACENT CRACKS MUST
 NOT BE LESS THAN 4.0 INCH (100 mm)
- J 0.50 INCH (13 mm) MAX LENGTH FOR EACH SQUARE FOOT OF AREA IS PERMITTED IN HONEYCOMB AREA. MINIMUM OF 6.0 INCH (150 mm) FROM ANY OTHER CRACK. CRACKS MUST BE REMOVED AS GIVEN IN DETAILS I AND V. MAINTAIN EDGE MARGIN SHOWN. REFINISH OR 0
- K DAMAGE PERMITTED ON SURFACE RESIN ONLY.
 TREAT DAMAGE TO FIBERS AS HOLE OR PUNCTURE
 DAMAGE. CLEAN UP EDGE DAMAGE AS GIVEN IN
 DETAILS I AND V. 0

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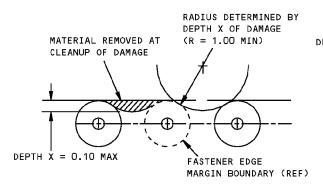
Wing Landing Gear Door Allowable Damage Figure 101 (Sheet 2 of 5)

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NOTES (CONT)

- DENTS GENERALLY RESULT IN FIBER DAMAGE OR DELAMINATION. HOWEVER, PROVIDED THAT THERE IS NO FIBER DAMAGE OR DELAMINATION, DENTS UP TO 1.10 DIA MAX ARE ALLOWED. ONE DENT PER SQUARE FOOT OF AREA IS ALLOWED WHICH MUST BE A MINIMUM OF 6 INCHES FROM ANY OTHER DAMAGE, FASTENER HOLE, OR PANEL EDGE. IF FIBER DAMAGE OR DELAMINATION IS PRESENT, REFER TO APPLICABLE DAMAGE DATA IN TABLE
- MI 0.50 MAX DIA ALLOWED PROVIDED DAMAGE IS MIN OF 2.5 D FROM OTHER DAMAGE, NEAREST HOLE, OR MATERIAL EDGE. DO NOT CLEAN UP DAMAGE EXCEPT TO REMOVE RESIN BURRS EXTENDING INTO SURFACE CONTOUR.
- N 0.50 INCH MAX DIA IS ALLOWED IN HONEYCOMB AREA. A MAXIMUM OF 0.03 INCH DELAMINATION FROM EDGE IS ALLOWED. REPAIR DELAMINATION IN HONEYCOMB AREA PER 51-70 NO LATER THAN THE NEXT AIRPLANE "C" CHECK. PROTECT EDGE DAMAGE PER 0
- REMOVE MOISTURE FROM DAMAGE AREA. USE OF VACUUM AND HEAT (MAX OF 125°F (52°C)) TO REMOVE MOISTURE FROM HONEYCOMB CELLS IS RECOMMENDED. PROTECT DAMAGE FROM ENTRANCE OF WATER, SUNLIGHT OR OTHER FOREIGN MATTER BY SEALING WITH ALUMINUM FOIL TAPE (SPEED TAPE). RECORD THE LOCATION AND INSPECT EACH AIRPLANE "A" CHECK. REPLACE THE ALUMINUM FOIL TAPE IF ANY PEELING OR DETERIORATION IS EVIDENT. REPAIR NO LATER THAN NEXT AIRPLANE "C" CHECK



DEPTH X = 0.10 MAX

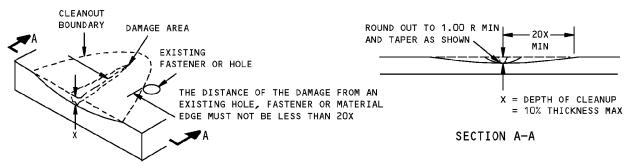
BOUNDARY OF CLEANED UP
FLANGE. RADIUS OF REWORKED
PORTION DETERMINED BY DEPTH
OF DAMAGE (R = 1.00 MIN)

FASTENER EDGE
MARGIN BOUNDARY
(REF)

DAMAGE CLEANUP OF EDGES WHERE FASTENER EDGE MARGINS DO NOT OVERLAP

DAMAGE CLEANUP OF EDGES WHERE FASTENER EDGE MARGINS OVERLAP

DETAIL I

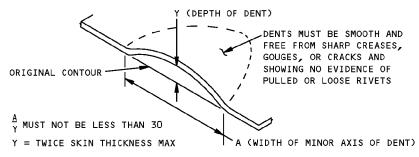


REMOVAL OF NICK, GOUGE AND SCRATCH DAMAGE ON A SURFACE DETAIL II

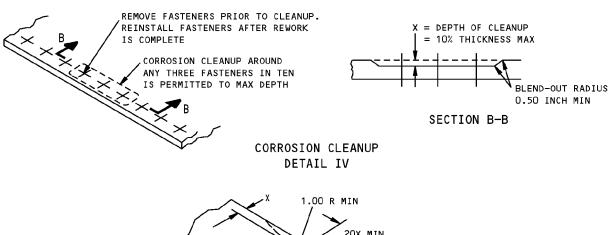
Wing Landing Gear Door Allowable Damage Figure 101 (Sheet 3 of 5)

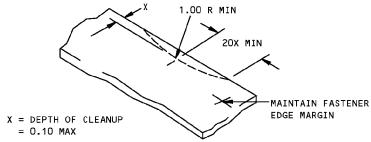
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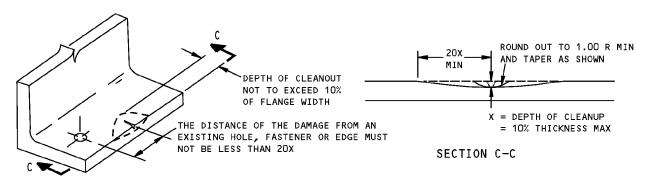


ALLOWABLE DAMAGE FOR DENT DETAIL III





REMOVAL OF NICK OR CRACK DAMAGE ON AN EDGE
DETAIL V

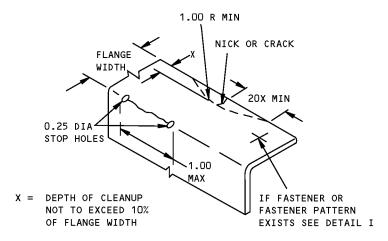


REMOVAL OF NICK OR CRACK DAMAGE ON AN EDGE DETAIL VI

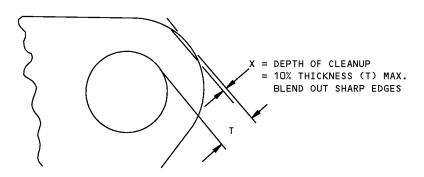
Wing Landing Gear Door Allowable Damage Figure 101 (Sheet 4 of 5)

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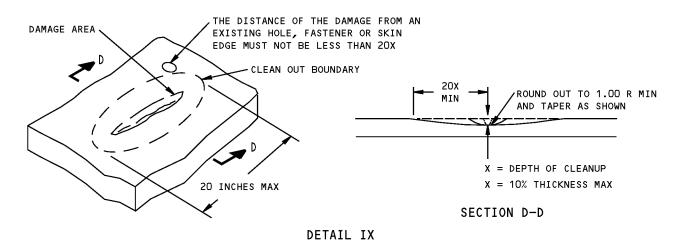




DETAIL VII (FORMED MEMBER)



DAMAGE CLEANUP FOR EDGES OF LUG DETAIL VIII



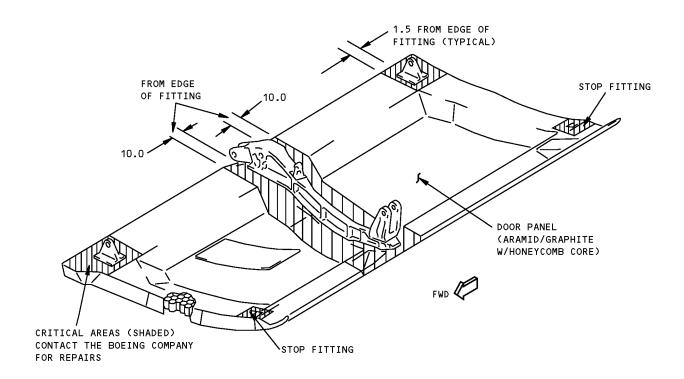
Wing Landing Gear Door Allowable Damage Figure 101 (Sheet 5 of 5)

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REPAIR 1 - MAIN LANDING GEAR DOOR

REF DWG 149T6910



Main Landing Gear Door Repair Figure 201 (Sheet 1 of 2)



	INTERIM REPAIRS B		PERMANENT REPAIRS				
DAMAGE	WET LAYUP ROOM TEMP CURE (SRM 51-70-03)	WET LAYUP 150°F (66°C) CURE (SRM 51-70-03)	WET LAYUP 200°F (93°C) CURE (SRM 51-70-17)	250°F (121°C) CURE (SRM 51-70-05)			
CRACKS	UP TO 3.0 INCHES (75 mm) LONG, REPAIR WITH PATCH AS GIVEN IN SRM 51-70-03 A.	CLEAN UP DAMAGE AND REPAIR AS HOLE.	CLEAN UP DAMAGE AND REPAIR AS HOLE.	CLEAN UP DAMAGE AND REPAIR AS HOLE.			
HOLES	3.0 INCHES (75 mm) MAX DIA NOT TO EXCEED 30% OF SMALLEST DIMENSION OF HONEYCOMB PANEL AT THE DAMAGE LOCATION. FILL WITH BMS 5-28, TYPE 7 POTTING COMPOUND AND PATCH AS GIVEN IN SRM 51-70-03, A.	6.0 INCHES (150 mm) MAX DIA NOT TO EXCEED 50% OF SMALLEST DIMENSION OF HONEYCOMB PANEL AT THE DAMAGE LOCATION. USE TWO EXTRA PLIES FOR EACH FACESHEET REPAIRED A.	12.0 INCHES (300 mm) MAX DIA NOT TO EXCEED 50% OF SMALLEST DIMENSION OF HONEYCOMB PANEL AT THE DAMAGE LOCATION. USE TWO EXTRA PLIES FOR EACH FACESHEET REPAIRED.	NO SIZE LIMIT			
DELAMI- NATION	CUT OUT AND REPAIR AS HOLE.						
NICKS AND GOUGES	IF THERE IS NO FIBER DAMAGE OR DELAMINATION, FILL NICKS OR GOUGES AS GIVEN IN SRM 51-70-03. IF THERE IS FIBER DAMAGE OR DELAMINATION, REPAIR AS A HOLE.						
DENTS	TYPE 7 POTTING COMPOUND	UP TO 3.0 INCHES (75 mm) DIA WITH NO FIBER DAMAGE OR DELAMINATION, FILL WITH BMS 5-28, TYPE 7 POTTING COMPOUND AND PATCH AS GIVEN IN SRM 51-70-03. OVER 3.0 INCHES (75 mm) DIA OR WITH FIBER DAMAGE OR DELAMINATION, REPAIR AS HOLE.					

REPAIR DATA FOR 250°F CURE ARAMID/GRAPHITE HONEYCOMB PANELS

NOTES

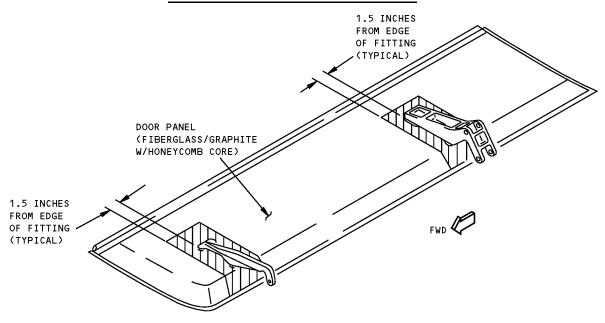
- REFER TO 51-10-02 FOR INSPECTION AND REMOVAL OF DAMAGE.
- REFER TO 51-10-01 FOR AERODYNAMIC SMOOTH-NESS REQUIREMENTS. WHERE THE REPAIR IS MORE THAN THE LIMITS SHOWN IN SRM 51-10-01 CONSIDERATION SHOULD BE GIVEN TO THE LOSS OF PERFORMANCE INVOLVED.
- REFINISH REWORKED AREAS AS GIVEN IN AMM 51-21
- A MINIMUM SPACING (EDGE TO EDGE) SHALL BE 6.0 INCHES (150 mm) BETWEEN CORE REPAIRS.

B LIMITED TO REPAIR OF ONE FACESHEET SKIN AND HONEYCOMB CORE. INSPECT INTERIM REPAIR USING INSTRUMENTED NDT METHOS OR "TAP" TEST EVERY AIRPLANE "C" CHECK. FOR "TAP" TEST, USE A SOLID METAL DISK AND TAP THE REPAIR AREA LIGHTLY BUT FIRMLY. VOID AREAS WILL PRODUCE A DULL SOUND AS OPPOSED TO A SHARP RING ON A SOLID BONDED AREA. PERMANENT REPAIR IS REQUIRED IF ANY DETERIORATION IS EVIDENT. REFER TO SRM 51-70-03, PAR. 4.I. AND THE NONDESTRUCTIVE TEST MANUAL, D634T301. THIS REPAIR HAS FAA APPROVAL CONTINGENT ON ACCOMPLISHMENT OF THE INSPECTIONS AT THE INTERVALS CONTAINED HEREIN.

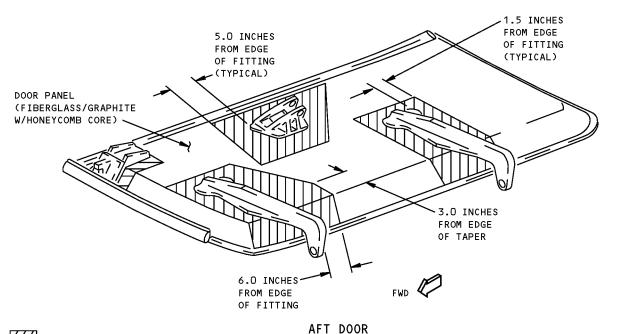
Main Landing Gear Door Repair Figure 201 (Sheet 2 of 2)



REPAIR 2 - NOSE LANDING GEAR DOOR



FORWARD DOOR



ZONE I - CRITICAL AREA
SEE TABLE I FOR REPAIRS TO THE HONEYCOMB
AREA. SEE TABLE II FOR REPAIRS TO THE
EDGEBAND AREAS

ZONE II
SEE TABLE III FOR REPAIRS TO THE
HONEYCOMB AREAS. SEE TABLE IV FOR
REPAIRS TO THE EDGEBAND AREAS

Nose Landing Gear Door Repair Figure 201 (Sheet 1 of 6)

NOTES

- NOSE LANDING GEAR DOOR SKINS ARE MADE FROM BMS 8-169 AND BMS 8-258 MATERIALS WHICH ARE 275°F (135°C) CURE MATERIALS. THESE CAN BE REPAIRED WITH 250°F (121°C) CURE MATERIALS, BMS 8-79 AND BMS 8-168.
- REFER TO SRM 51-10-01 FOR AERODYNAMIC SMOOTHNESS REQUIREMENTS. WHERE THE REPAIR EXCEEDS THE LIMITS SHOWN IN SRM 51-10-01, CONSIDERATION SHOULD BE GIVEN TO THE LOSS OF PERFORMANCE INVOLVED.
- REFER TO SRM 51-10-02 FOR INSPECTION AND REMOVAL OF DAMAGE
- FINISH REWORKED AREAS AS GIVEN IN AMM 51-21.
- THIS REPAIR HAS FAA APPROVAL CONTINGENT ON ACCOMPLISHMENT OF THE INSPECTIONS AT THE INTERVALS CONTAINED HEREIN.
- A LIMITED TO REPAIR OF DAMAGE TO ONE FACE—
 SHEET SKIN AND HONEYCOMB CORE. KEEP THE
 REPAIR A MINIMUM OF 6.0 INCHES (150 mm)
 (EDGE TO EDGE) FROM ANY OTHER DAMAGE OR
 REPAIRS.
- B INSPECT INTERIM REPAIR USING INSTRUMENTED NDT METHODS OR "TAP" TEST AT THE NEXT AIRPLANE "A" CHECK. CONTINUE TO INSPECT THE REPAIR AT EVERY SUBSEQUENT AIRPLANE "C" CHECK. FOR "TAP" TEST, USE A SOLID METAL DISK AND TAP THE REPAIR AREA LIGHTLY BUT FIRMLY. VOID AREAS WILL PRODUCE A DULL SOUND AS OPPOSED TO A SHARP RING ON A SOLID BONDED AREA. PERMANENT REPAIR IS REQUIRED IF ANY DETERIORATION IS EVIDENT. REFER TO SRM 51-70-03, PAR. 4.1. AND THE NONDESTRUCTIVE TEST MANUAL, D634T301.
- THE REPAIR LIMITS THAT FOLLOW ONLY APPLY IF BMS 8-301, CLASS 2, RESIN IS USED.
- D REFER TO SRM 51-20-01 FOR THE REPAIR OF FINISH CRACKS ON FIBERGLASS/GRAPHITE COMPOSITE PARTS.

Nose Landing Gear Door Repair Figure 201 (Sheet 2 of 6)



	INTERIM REPAIRS B	PERMANEN	T REPAIRS			
DAMAGE	WET LAYUP 150°F (66°C) CURE (SRM 51-70-03) €	WET LAYUP 200°F (93°C) CURE (SRM 51-70-17)	250°F (121°C) CURE (SRM 51-70-05)			
CRACKS D	CLEAN UP DAMAGE AND REPAIR AS A HOLE.	CLEAN UP DAMAGE AND REPAIR AS A HOLE.	CLEAN UP DAMAGE AND REPAIR AS A HOLE.			
HOLES AND PUNCTURES	FACESHEET THAT IS		NO SIZE LIMIT			
DELAMI- NATION	CUT OUT AND REPAIR AS A HOLE.					
NICKS AND	IF THERE IS NO FIBER DAMAGE OR DELAMINATION, FILL NICKS OR GOUGES WITH BMS 5-28, TYPE 7, POTTING COMPOUND AND PATCH AS GIVEN IN SRM 51-70-03, PAR. 5.L.					
GOUGES	IF FIBER DAMAGE OR DEL	AMINATION EXISTS, REPAI	R AS A HOLE.			
DENTS	UP TO 2.0 INCHES (50 mm) DIAMETER WITH NO FIBER DAMAGE OR DELAMINATION, FILL WITH BMS 5-28, TYPE 7, POTTING COMPOUND AND PATCH AS GIVEN IN SRM 51-70-03, PAR. 5.L.					
	OVER 2.0 INCHES (50 mm DELAMINATION, REPAIR A	n)DIAMETER OR WITH FIBER AS A HOLE.	DAMAGE OR			

REPAIR DATA FOR 275°F CURE FIBERGLASS/GRAPHITE HONEYCOMB PANELS - ZONE I TABLE I

Nose Landing Gear Door Repair Figure 201 (Sheet 3 of 6)

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	PERMANEN	PERMANENT REPAIRS				
DAMAGE	WET LAYUP 200°F (93°C) CURE (SRM 51-70-17)	250°F (121°C) CURE (SRM 51-70-05)				
HOLES AND PUNCTURES	REPAIR DAMAGE TO FASTENER HOLES AS GIVEN IN SRM 51-70-17, PAR. 4.K. FOR ALL OTHER DAMAGE UP TO 0.5 INCH REPAIR AS GIVEN IN SRM 51-70-17, PAR. 4.G.	REPAIR DAMAGE TO FASTENER HOLES AS GIVEN IN SRM 51-70-05, PAR. 5.K. FOR ALL OTHER DAMAGE, REPAIR AS GIVEN SRM 51-70-05, PAR. 5.G.				
DELAMI- NATION	CUT OUT AND REPAIR AS A HOLE.	CUT OUT AND REPAIR AS A HOLE.				
EDGE EROSION	FOR DAMAGE NOT EXCEEDING 15% OF EDGEBAND THICKNESS, REPAIR AS GIVEN IN SRM 51-70-03, PAR. 5.0. FOR GREATER DAMAGE, REPAIR AS GIVEN IN:					
EROOTON	SRM 51-70-17, PAR. 4.G.	SRM 51-70-05, PAR. 5.G.				
CRACKS	CLEAN UP DAMAGE AND REPAIR AS A HOL	E.				
NICKS AND	IF THERE IS NO FIBER DAMAGE OR DELAMINATION, FILL NICKS OR GOUGES WITH BMS 5-28, TYPE 7, POTTING COMPOUND AND PATCH AS GIVEN IN SRM 51-70-03, PAR. 5.L.					
GOUGES	IF FIBER DAMAGE OR DELAMINATION EXI	STS, REPAIR AS A HOLE.				

REPAIR DATA FOR EDGEBANDS OF 275°F CURE FIBERGLASS/GRAPHITE HONEYCOMB PANELS — ZONE I TABLE II

Nose Landing Gear Door Repair Figure 201 (Sheet 4 of 6)



	INTERIM REPAIRS B		PERMANENT REPAIRS	
DAMAGE	WET LAYUP ROOM TEMP CURE (SRM 51-70-03)	WET LAYUP 150°F (66°C) CURE (SRM 51-70-03) C	WET LAYUP 200°F (93°C) CURE (SRM 51-70-17)	250°F (121°C) CURE (SRM 51-70-05)
CRACKS	UP TO 3.0 INCHES (75 mm) LONG, REPAIR WITH PATCH AS GIVEN IN SRM 51-70-03, PAR 5.N A.		CLEAN UP DAMAGE AND REPAIR AS A HOLE.	CLEAN UP DAMAGE AND REPAIR AS A HOLE.
HOLES	FILL WITH BMS 5-28, TYPE 7 POTTING	6.0 INCHES (150 mm) MAX DIA NOT TO EXCEED 50% OF SMALLEST DIMENSION OF HONEYCOMB PANEL AT THE DAMAGE LOCATION. USE TWO EXTRA PLIES PER FACESHEET REPAIRED A.	12.0 INCHES (300 mm) MAX DIA NOT TO EXCEED 50% OF SMALLEST DIMENSION OF HONEYCOMB PANEL AT THE DAMAGE LOCATION. USE TWO EXTRA PLIES PER FACESHEET REPAIRED.	NO SIZE LIMIT
DELAMI- NATION	CUT OUT AND REPAIR AS A	HOLE.		
NICKS AND GOUGES	IF THERE IS NO FIBER DAMAGE OR DELAMINATION, FILL NICKS OR GOUGES AS GIVEN IN SRM 51-70-03. IF FIBER DAMAGE OR DELAMINATION EXISTS, REPAIR AS A HOLE.			
DENTS	TYPE 7 POTTING COMPOUND	AND PATCH AS GIVEN IN S	R DAMAGE OR DELAMINATION SRM 51-70-03, PAR. 5.L. DAMAGE OR DELAMINATION,	,

REPAIR DATA FOR 275°F CURE FIBERGLASS/GRAPHITE HONEYCOMB PANELS - ZONE II TABLE III

Nose Landing Gear Door Repair Figure 201 (Sheet 5 of 6)



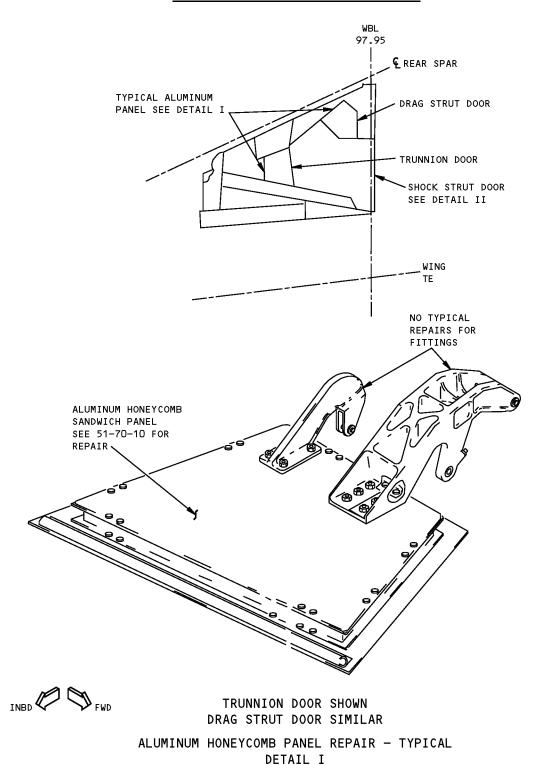
	INTERIM REPAIRS B	PERMANEN	T REPAIRS		
DAMAGE	WET LAYUP ROOM TEMP/ 150°F (66°C) CURE (SRM 51-70-03)	WET LAYUP 200°F (93°C) CURE (SRM 51-70-17)	250°F (121°C) CURE (SRM 51-70-05)		
HOLES AND PUNCTURES	REPAIR DAMAGE TO FASTENER HOLES AS GIVEN IN SRM 51-70-03, PAR. 5.K. FOR ALL OTHER DAMAGE UP TO 15% OF CROSS- SECTIONAL AREA THRU THE EDGEBAND OR 10% OF THE EDGEBAND LENGTH PER AFFECTED SIDE, REPAIR AS GIVEN IN SRM 51-70-03, PAR. 5.G.	REPAIR DAMAGE TO FASTENER HOLES AS GIVEN IN SRM 51-70-17, PAR. 4.K. FOR ALL OTHER DAMAGE, REPAIR AS GIVEN IN SRM 51-70-17, PAR. 4.G.	REPAIR DAMAGE TO FASTENER HOLES AS GIVEN IN SRM 51-70-05, PAR. 5.K. FOR ALL OTHER DAMAGE, REPAIR AS GIVEN IN SRM 51-70-05, PAR. 5.G.		
DELAMI- NATION	IF DELAMINATION FROM PANEL EDGE IS NO LESS THAN TWO FASTENER DIAMETERS FROM ANY FASTENER HOLE AND MORE THAN 0.5 INCH AWAY FROM THE HONEY-COMB CORE, REPAIR AS GIVEN IN SRM 51-70-03, PAR. 5.A.(2). ANY OTHER DELAMINATION MUST BE CUT OUT AND REPAIRED AS A HOLE.	CUT OUT AND REPAIR AS A HOLE.	CUT OUT AND REPAIR AS A HOLE.		
EDGE EROSION		FOR DAMAGE NOT EXCEEDIN THICKNESS, REPAIR AS GI PAR. 4.N. FOR GREATER GIVEN IN:	IVEN IN SRM 51-70-03,		
		SRM 51-70-17, PAR. 4.G.	SRM 51-70-05, PAR. 5.G.		
CRACKS D	CLEAN UP DAMAGE AND RE	PAIR AS A HOLE.			
NICKS AND GOUGES	IF THERE IS NO FIBER DAMAGE OR DELAMINATION, FILL NICKS OR GOUGES WITH BMS 5-28, TYPE 7, POTTING COMPOUND AND PATCH AS GIVEN IN SRM 51-70-03, PAR. 5.L. IF FIBER DAMAGE OR DELAMINATION EXISTS, REPAIR AS A HOLE.				
DENTS	DELAMINATION, FILL WIT PATCH AS GIVEN IN SRM	m) DIAMETER WITH NO FIBH H BMS 5-28, TYPE 7, POT 51-70-03, PAR. 5.L.) DIAMETER OR WITH FIBE	TING COMPOUND AND		
	DELAMINATION, REPAIR A		N DAMAGE OR		

REPAIR DATA FOR 275°F CURE FIBERGLASS/GRAPHITE PANEL EDGEBANDS - ZONE II TABLE IV

Nose Landing Gear Door Repair Figure 201 (Sheet 6 of 6)



REPAIR 3 - WING LANDING GEAR DOOR

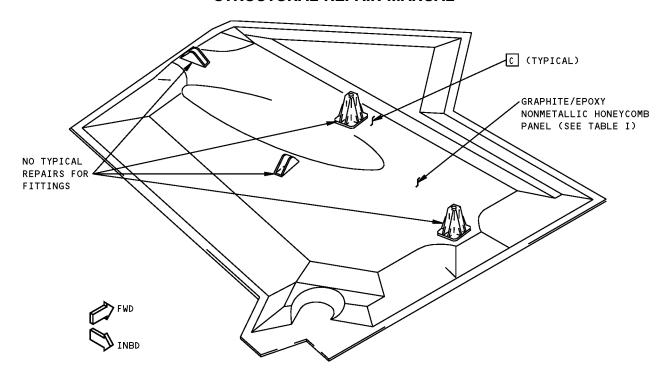


Wing Landing Gear Door Repair Figure 201 (Sheet 1 of 3)

52-80-02

REPAIR 3 Page 201 Apr 01/2005





SHOCK STRUT DOOR DETAIL II

NOTES

- REFER TO SRM 51-10-02 FOR INSPECION AND REMOVAL OF DAMAGE.
- REFER TO SRM 51-10-01 FOR AERODYNAMIC SMOOTHNESS REQUIREMENTS. WHERE THE REPAIR EXCEEDS THE LIMITS SHOWN IN SRM 51-10-01 CONSIDERATION SHOULD BE GIVEN TO THE LOSS OF PERFORMANCE INVOLVED.
- REFINISH REWORKED AREAS AS GIVEN IN AMM 51-20.
- A MINIMUM SPACING (EDGE TO EDGE), 6 INCHES (150 mm) BETWEEN CORE REPAIRS
- B LIMITED TO REPAIR OF ONE FACESHEET SKIN AND HONEYCOMB CORE. INSPECT INTERIM REPAIR USING INSTRUMENTED NDI METHOS OR "TAP" TEST EVERY AIRPLANE "C" CHECK. FOR "TAP" TEST, USE A SOLID METAL DISK AND TAP THE REPAIR AREA LIGHTLY BUT FIRMLY. VOID AREAS WILL PRODUCE A DULL SOUND AS OPPOSED TO A SHARP RING ON A SOLID BONDED AREA. PERMANENT REPAIR IS REQUIRED IF ANY DETERIORATION IS EVIDENT. REFER TO SRM 51-70-03, PAR. 4.I. AND NDT, D634T301. THIS REPAIR HAS FAA APPROVAL CONTINGENT ON ACCOMPLISHMENT OF THE INSPECTIONS AT THE INTERVALS CONTAINED HEREIN.

C DAMAGE FOUND IN TABLE I CLOSER THAN 1.5 INCHES (38 mm) TO A FITTING IS IN A CRITICAL AREA AND CAN ONLY BE REPAIRED WITH THE USE OF SRM 51-70-17, 200°F (93°C) WET LAY-UP REPAIR OR SRM 51-70-05, 250°F (121°C) PREPREG REPAIR AS GIVEN IN TABLE I. THESE AREAS HAVE DOUBLERS AND HIGH DENSITY CORE. TO REPAIR THE DAMAGE, REMOVE THE FITTINGS AND THE DAMAGED SKIN AND IF NECESSARY THE DAMAGED CORE. THESE AREAS HAVE A HIGH LOAD TRANSFER IN THE CORE AND DAMAGE TO THE CORE OR POTTING MATERIAL MUST ALSO BE REPAIRED. THIS INCLUDES CRACKS IN THE POTTED CORE. MAKE SURE THAT THE SAME MATERIALS OR MATERIALS OF EQUIVA-LENT STRENGTH ARE USED FOR THE REPAIR.

Wing Landing Gear Door Repair Figure 201 (Sheet 2 of 3)



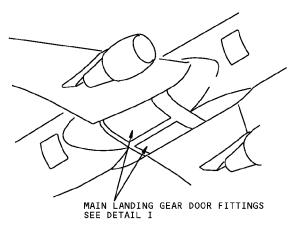
	INTERIM REPAIRS B		PERMANENT REPAIRS		
DAMAGE C	WET LAYUP ROOM TEMP CURE (SRM 51-70-03)	WET LAYUP 150°F (66°C) CURE (SRM 51-70-03)	WET LAYUP 200°F (93°C) CURE (SRM 51-70-17)	250°F (121°C) CURE (SRM 51-70-05)	
CRACKS	UP TO 3.0 INCHES (75 mm) LONG, REPAIR WITH PATCH AS GIVEN IN SRM 51-70-03 A	CLEAN UP DAMAGE AND REPAIR AS A HOLE.	CLEAN UP DAMAGE AND REPAIR AS A HOLE.	CLEAN UP DAMAGE AND REPAIR AS A HOLE.	
HOLES	3.0 INCHES (75 mm) MAX DIA NOT TO EXCEED 30% OF SMALLEST DIMENSION OF HONEYCOMB PANEL AT THE DAMAGE LOCATION. FILL WITH BMS 5-28, TYPE 7 POTTING COMPOUND AND PATCH AS GIVEN IN SRM 51-70-03 A.	6.0 INCHES (150 mm) MAX DIA NOT TO EXCEED 50% OF SMALLEST DIMENSION OF HONEYCOMB PANEL AT THE DAMAGE LOCATION. USE TWO EXTRA PLIES PER FACE— SHEET REPAIRED A.	12.0 INCHES (300 mm) MAX DIA NOT TO EXCEED 50% OF SMALLEST DIMENSION OF HONEYCOMB PANEL AT THE DAMAGE LOCATION. USE TWO EXTRA PLIES PER FACE— SHEET REPAIRED.	NO SIZE LIMIT	
DELAMI- NATION	CUT OUT AND REPAIR AS A	HOLE.			
NICKS AND GOUGES	IF THERE IS NO FIBER DAMAGE OR DELAMINATION, FILL NICKS OR GOUGES AS GIVEN IN SRM 51-70-03. IF FIBER DAMAGE OR DELAMINATION EXISTS, REPAIR AS A HOLE.				
DENTS	TYPE 7 POTTING COMPOUND	AND PATCH AS GIVEN IN	AGE OR DELAMINATION, FIL SRM 51-70-03. GE OR DELAMINATION, REPA	•	

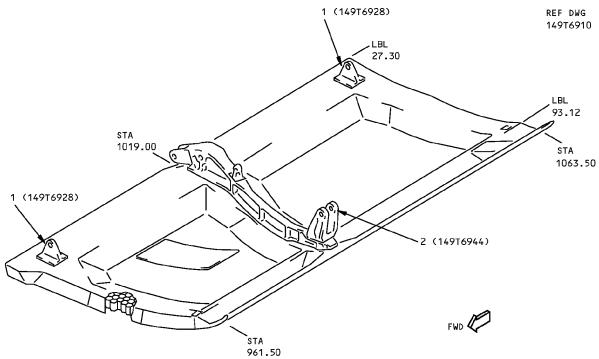
REPAIR DATA FOR 250°F CURE GRAPHITE HONEYCOMB PANELS TABLE I

Wing Landing Gear Door Repair Figure 201 (Sheet 3 of 3)



IDENTIFICATION 1 - MAIN LANDING GEAR DOOR FITTINGS





LEFT SIDE SHOWN RIGHT SIDE SIMILAR DETAIL I

ITEM	DESCRIPTION	GAGE	MATERIAL	EFFECTIVITY
1 2	HINGE FITTING UPLOCK FITTING		FORGING 7075-T73 FORGING 7075-T73	

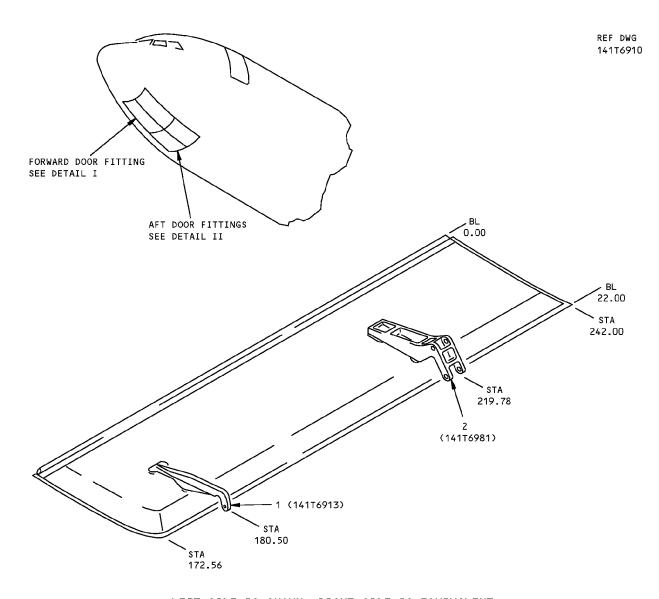
LIST OF MATERIALS FOR DETAIL I

Main Landing Gear Door Fittings Identification Figure 1

IDENTIFICATION 1



IDENTIFICATION 2 - NOSE LANDING GEAR DOOR FITTINGS



LEFT SIDE IS SHOWN, RIGHT SIDE IS EQUIVALENT FORWARD DOOR DETAIL I

ITEM	DESCRIPTION	GAGE	MATERIAL	EFFECTIVITY
1	HINGE		FORGING 7075-T73	
2	HINGE		FORGING TI-6AL-4V	

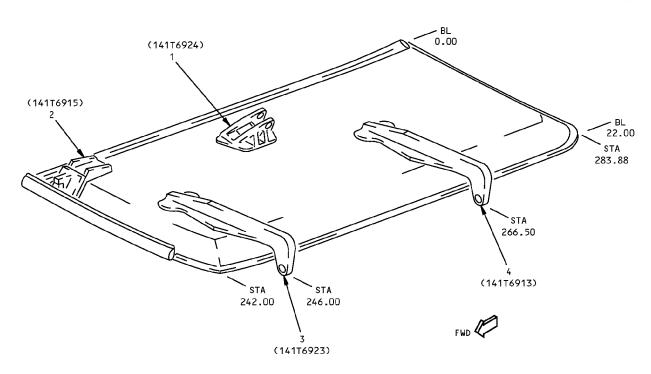
LIST OF MATERIALS FOR DETAIL I

Nose Landing Gear Door Fittings Identification Figure 1 (Sheet 1 of 2)

IDENTIFICATION 2
Page 1
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LEFT SIDE IS SHOWN, RIGHT SIDE IS EQUIVALENT

AFT DOOR

DETAIL II

ITEM	DESCRIPTION	GAGE	MATERIAL	EFFECTIVITY
1	FITTING		FORGING 7075-T73	
2	FITTING		2024-T351	
3	HINGE		FORGING TI-6AL-4V	
4	HINGE		FORGING 7075-T73	

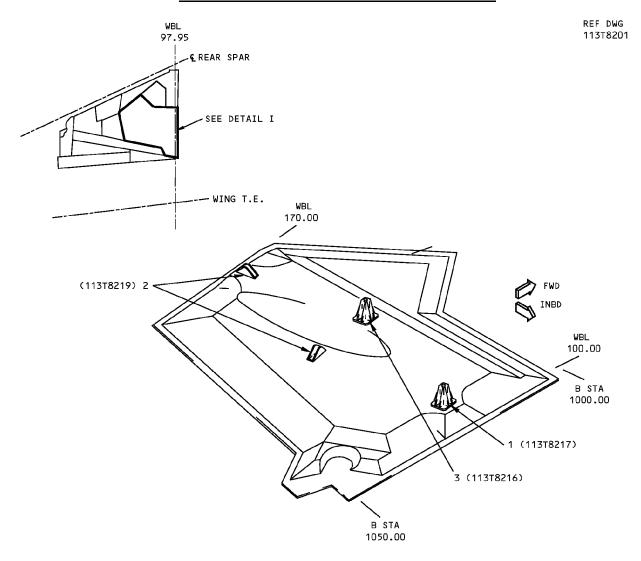
LIST OF MATERIALS FOR DETAIL II

Nose Landing Gear Door Fittings Identification Figure 1 (Sheet 2 of 2)

IDENTIFICATION 2
Page 2



IDENTIFICATION 3 - SHOCK STRUT DOOR FITTINGS



DETAIL I

ITEM	DESCRIPTION	GAGE	MATERIAL	EFFECTIVITY
1	FITTING		FORGING 7075-T73 OPTIONAL: 7075-T7351 PLATE	
2	FITTING		FORGING 7075-T73	
3	FITTING		CASTING 356-T6 OPTIONAL: 6061-T651 PLATE	

LIST OF MATERIALS FOR DETAIL I

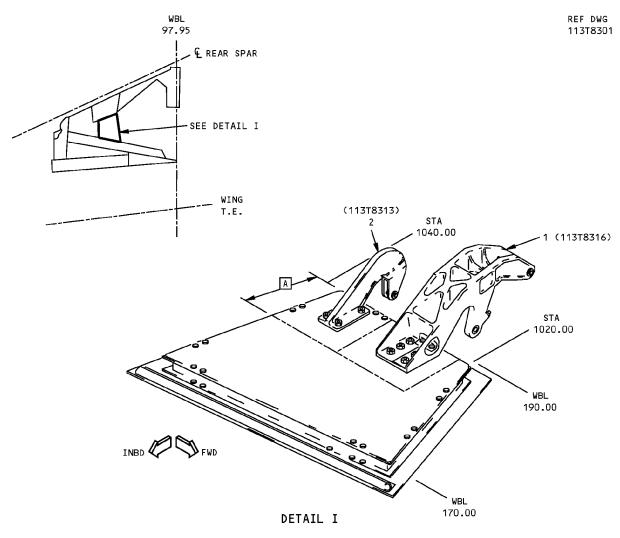
Shock Strut Door Fittings Identification Figure 1

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IDENTIFICATION 4 - TRUNNION DOOR FITTINGS



NOTES

A HEAVIER DENSITY HONEYCOMB CORES
INSTALLED IN AREAS UNDER FITTINGS

ITEM	DESCRIPTION	GAGE	MATERIAL	EFFECTIVITY
1	ACTUATOR FITTING		FORGING 7075-T73	
2	HINGE FITTING		FORGING 7075-T73	

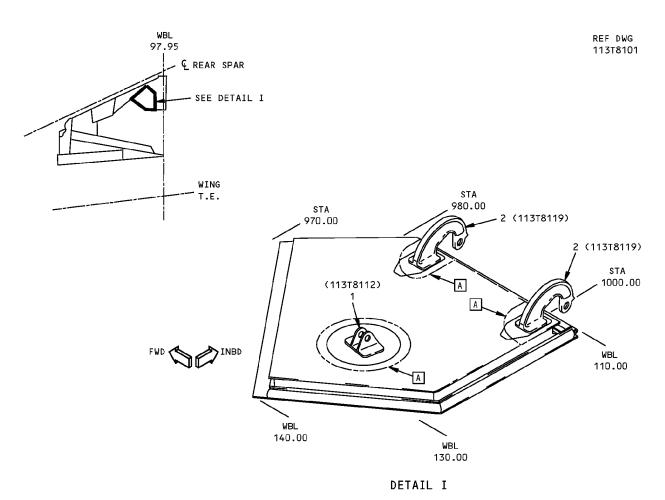
LIST OF MATERIALS FOR DETAIL I

Trunnion Door Fittings Identification Figure 1

1DENTIFICATION 4 Page 1 Apr 01/2005



IDENTIFICATION 5 - DRAG STRUT DOOR FITTINGS



NOTES

A HEAVIER DENSITY HONEYCOMB CORES INSTALLED IN AREAS UNDER FITTINGS

ITEM	DESCRIPTION	GAGE	MATERIAL	EFFECTIVITY
1	ACTUATOR FITTING		BAC1508-243 7075-T73511 OPTIONAL: FORGING 7075-T73	
2	HINGE FITTING		FORGING 7075-T73	

LIST OF MATERIALS FOR DETAIL I

Drag Strut Door Fittings Identification Figure 1

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DENTIFICATION 5
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