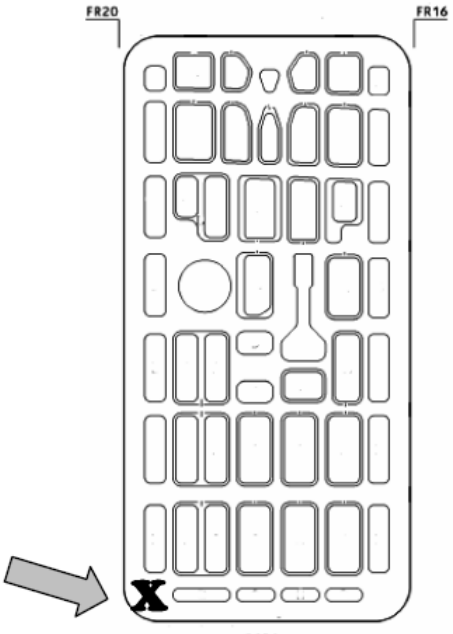
Lufthansa Technical Training

SRM – EXAMPLE

D-AISC
AIRBUS A321-200

Damage: Scratch on L/H Forward Passenger Outer Door Skin in lower aft corner.

Damage depth: 1,2mm / 0.047inch
Damage length: 25mm / 1inch



Obey the SRM-Guidelines and do all necessary steps to:

- Identify the affected Door Skin
- Find out the Allowable Damage Limits
- Find out (if applicable) the Repair Instructions

Note: For training purposes only!

AIRBUS®

A321

STRUCTURAL REPAIR MANUAL

SRM

APPROVED BY EASA

AIRBUS
Customer Services
Technical Data Support and Services
31707 BLAGNAC Cedex
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Reference: N SRM 004 Issue:Feb 07

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REVISION TRANSMITTAL SHEET

TO: All holders of the A321 Structural Repair Manual.

The ninety-sixth revision, dated Feb 01/12 is attached.

1. GENERAL INFORMATION FOR THE STRUCTURAL REPAIR MANUAL

Affected pages are listed in the List of Effective Pages.

R = revised
D = deleted
N = new

A. Reason for Issue

The attached Highlights describe the reason for issue.

2. GENERAL INFORMATION FOR THE ALPHANUMERICAL INDEX LIST

A. Reason for Issue

Updated in accordance with the ninety-sixth revision of the A321 SRM.

Printed in Germany

Aircraft	Weight Variant	Associated Modification
A321-200	011	

Weight Variant Exclusion List

Table 10

24. Airplane Allocation List

The information given in the Airplane Allocation List correlates AIRBUS Manufacturer's Serial Number (MSN), Weight Variant (WV), Model, Version, Customer, Customer Abbreviation and Registration Number.

NOTE: The weight variant listed in Table 11 reflects the status at the aircraft delivery. It is not necessarily the actual current status of the aircraft that needs to be confirmed using the weight variant information given in Paragraph 23.

A/C MSN	WV	Model	Version	Customer	Customer Abbreviation	Registration Number
0364	000	A321-131	OHY01 0002	ONUR AIR	OHY	TC-ONS
0385	000	A321-131	OHY01 0001	ONUR AIR	OHY	TC-ONJ
0412	000	A321-131	DLH02 0007	LUFTHANSA	DLH	D-AIRH
0434	000	A321-112	AZA01 0005	ALITALIA	AZA	EI-IXU
0458	000	A321-131	DLH02 0001	LUFTHANSA	DLH	D-AIRA
0468	000	A321-131	DLH02 0002	LUFTHANSA	DLH	D-AIRB
0473	000	A321-131	DLH02 0003	LUFTHANSA	DLH	D-AIRC
0474	000	A321-131	DLH02 0004	LUFTHANSA	DLH	D-AIRD
0477	000	A321-112	AZA01 0001	ALITALIA	AZA	I-BIXA
0484	000	A321-131	DLH02 0005	LUFTHANSA	DLH	D-AIRE
0488	000	A321-112	AZA01 0002	ALITALIA	AZA	I-BIXE
0493	000	A321-131	DLH02 0006	LUFTHANSA	DLH	D-AIRF
0494	000	A321-112	AZA01 0003	ALITALIA	AZA	EI-IXI
0495	000	A321-112	AZA01 0004	ALITALIA	AZA	EI-IXO
0498	004	A321-111	ITF02 0001	AIR FRANCE	AFR	F-GMZA
0502	000	A321-131	DLH02 0008	LUFTHANSA	DLH	D-AIRK
0505	005	A321-131	DLH02 0009	LUFTHANSA	DLH	D-AIRL
0509	004	A321-111	ITF02 0002	AIR FRANCE	AFR	F-GMZB
0513	000	A321-112	AZA01 0011	ALITALIA	AZA	I-BIXL
0514	000	A321-112	AZA01 0012	ALITALIA	AZA	I-BIXM

Airplane Allocation List

Table 11

A/C MSN	WV	Model	Version	Customer	Customer Abbreviation	Registration Number
1060	000	A321-231	AARO2 0001	SICHUAN AIRLINES	CSC	B-6285
1080	000	A321-231	DLHO4 0001	LUFTHANSA	DLH	D-AISB
1094	005	A321-211	EINO1 0003	AER LINGUS	EIN	EI-CPH
1133	000	A321-212	AFRO2 0004	AIR FRANCE	AFR	F-GTAH
1144	005 <1>	A321-111	SWRO1 0012	SWISS INTERNATIONAL AIR LINES	SWR	HB-IOL
1153	000	A321-231	BMAO1 0006	MONARCH AIRLINES	MON	G-OZBN
1161	000	A321-231	DLHO4 0002	LUFTHANSA	DLH	D-AISC
1174	000	A321-231	BMAO1 0007	ASIANA AIRLINES	AAR	HL8236
1185	002	A321-211	FINO1 0003	FINNAIR	FIN	OH-LZC
1188	000	A321-231	DLHO4 0003	LUFTHANSA	DLH	D-AISD
1195	000	A321-231	AEFO2 0005	JETSTAR	JST	VH-VWZ
1199	000	A321-231	AEFO2 0006	VYBORG AIRLINES	VBG	VQ-BLB
1202	000	A321-231	S2AO3 0001	MAHAN AIR	IRM	EP-AGB
1204	007	A321-231	ANAO2 0006	AIR ASTANA	KZR	P4-OAS
1207	000	A321-231	BMAO3 0003	MONARCH AIRLINES	MON	G-OZBO
1214	000	A321-231	DLHO4 0004	LUFTHANSA	DLH	D-AISE
1219	000	A321-211	G8EO4 0001	TURKISH AIRLINES	THY	TC-JME
1220	000	A321-112	AZAO1 0023	ALITALIA	AZA	I-BIXK
1227	007	A321-231	ANAO2 0007	ASIANA AIRLINES	AAR	HL7761
1233	000	A321-211	G8EO4 0002	TURKISH AIRLINES	THY	TC-JMF
1238	000	A321-211	G8EO4 0003	THOMAS COOK AIRLINES	TCX	G-DHJH
1241	002	A321-211	FINO1 0004	FINNAIR	FIN	OH-LZD
1250	000	A321-211	G8EO4 0004	THOMAS COOK AIRLINES	TCX	G-NIKO
1260	000	A321-231	DLHO4 0005	LUFTHANSA	DLH	D-AISF
1273	000	A321-231	DLHO4 0006	LUFTHANSA	DLH	D-AISG
1276	001	A321-231	JKKO1 0001	SPANAIR	JKK	EC-HPM
1293	000	A321-231	AARO2 0002	SICHUAN AIRLINES	CSC	B-6300
1299	000	A321-212	AFRO2 0005	AIR FRANCE	AFR	F-GTAI
1307	002	A321-211	TAPO3 0001	TAP PORTUGAL	TAP	CS-TJE
1333	001	A321-231	JKKO1 0002	SPANAIR	JKK	EC-HQZ

Airplane Allocation List

Table 11

51-00-01 Weight Variant Information Table Airbus Fleet (A320 Fam, A330, A340 & A380)

1. General

This chapter overrides the Weight Variant (WV) information provided by the Airplane Allocation List of the Airbus SRM Introduction for the above metioned fleets, as the SRM Airplane Allocation List is reflecting the heaviest WV of the A/C at its delivery only.
The WV may change in service by embodiment of certain SB's.
However, Airbus does NOT update the SRM Introduction Airplane Allocation List with regard to the WV due to legal reasons. It is operators responsibility to determine the heaviest WV an A/C ever has been operated in.
This chapter contains tables reflecting the heaviest WV per A/C which has been operated in order to ensure using the correct Allowable Damage Limit (ADL) or performing the correct rpair in acc. with the SRM. This is essential as the WV parameters have a certain influence on the fatgue life of the structural repairs and ADL's.
Based on the WV influence to the fatigue life of the A/C structure the Heaviest operated WV must be also considered of the Maintenance Schedule (MS).

2. Weight Variant Information Tables:

A. A320 Fam

	A/C Registration	MSN	A/C Type	WV			A/C Registration	MSN	A/C Type	WV
1	D-AKNF	646	A319-112	001		9	D-AIBD	4455	A319-112	001
2	D-AKNG	654		001		10	D-AIBE	4511		003
3	D-AKNH	794		001		11	D-AIBF	4796		003
4	D-AKNI	1116		001		12	D-AIBG	4841		003
5	D-AKNJ	1172		001		13	D-AIBH	TBD		003
6	D-AIBA	4141		003		14	D-AIBI	TBD		003
7	D-AIBB	4182		003		15	D-AIBJ	TBD		003
8	D-AIBC	4332		003						

	A/C Registration	MSN	A/C Type	WV			A/C Registration	MSN	A/C Type	WV
1	D-AILA	609	A319-114	001		11	D-AILM	694	A319-114	001
2	D-AILB	610		001		12	D-AILN	700		001
3	D-AILC	616		001		13	D-AILP	717		001
4	D-AILD	623		001		14	D-AILR	723		001
5	D-AILE	627		001		15	D-AILS	729		001
6	D-AILF	636		001		16	D-AILT	738		001
7	D-AILH	641		001		17	D-AILU	744		001
8	D-AILI	651		001		18	D-AILW	853		001
9	D-AILK	679		001		19	D-AILX	860		001
10	D-AILL	689		001		20	D-AILY	875		001

(Continued)

51-00-01 Weight Variant Information Table Aibus Fleet (A320 Fam,A330, A340 & A380) (Continued)

	A/C Registration	MSN	A/C Type	WV			A/C Registration	MSN	A/C Type	WV
1	D-AIRA	458	A321-131	002		11	D-AIRN	560	A321-131	002
2	D-AIRB	468		002		12	D-AIRO	563		002
3	D-AIRC	473		002		13	D-AIRP	564		002
4	D-AIRD	474		002		14	D-AIRR	567		002
5	D-AIRE	484		002		15	D-AIRS	595		002
6	D-AIRF	493		002		16	D-AIRT	652		002
7	D-AIRH	412		002		17	D-AIRU	692		002
8	D-AIRK	502		002		18	D-AIRW	699		002
9	D-AIRL	505		002		19	D-AIRX	887		002
10	D-AIRM	518		002		20	D-AIRY	901		002

	A/C Registration	MSN	A/C Type	WV			A/C Registration	MSN	A/C Type	WV
1	D-AISB	1080		000		23	D-AIDA	4360	A321-231	000
2	D-AISC	1161		000		24	D-AIDB	4545		000
3	D-AISD	1188	A321-231	000		25	D-AIDC	4560		000
4	D-AISE	1214		000		26	D-AIDD	4585		000
5	D-AISF	1260		000		27	D-AIDE	4607		000
6	D-AISG	1273		000		28	D-AIDF	4626		000
7	D-AISH	3265		000		29	D-AIDG	4672		000
8	D-AISI	3339		000		30	D-AIDH	4710		000
9	D-AISJ	3360		000		31	D-AIDI	4753		000
10	D-AISK	3387		000		32	D-AIDJ	4792		000
11	D-AISL	3434		000		33	D-AIDK	4819		000
12	D-AISN	3592		000		34	D-AIDL	4881		000
13	D-AISO	3625		000		35	D-AIDM	4916		000
14	D-AISP	3864		000		36	D-AIDN	4976		000
15	D-AISQ	3936		000		37	D-AIDO	4994		000
16	D-AISR	3987		000		38	D-AIDP	5049		000
17	D-AIST	4005		000		39	D-AIDQ	5028		000
18	D-AISU	4016		000		40	D-AIDT	5087		000
19	D-AISV	4047		000		41	D-AIDU	TBD		000
20	D-AISW	4054		000		42	D-AIDV	TBD		000
21	D-AISX	4073		000		43	D-AIDW	TBD		000
22	D-AISZ	4085		000		44	D-AIDX	TBD		000

(Continued)

CHAPTER 52

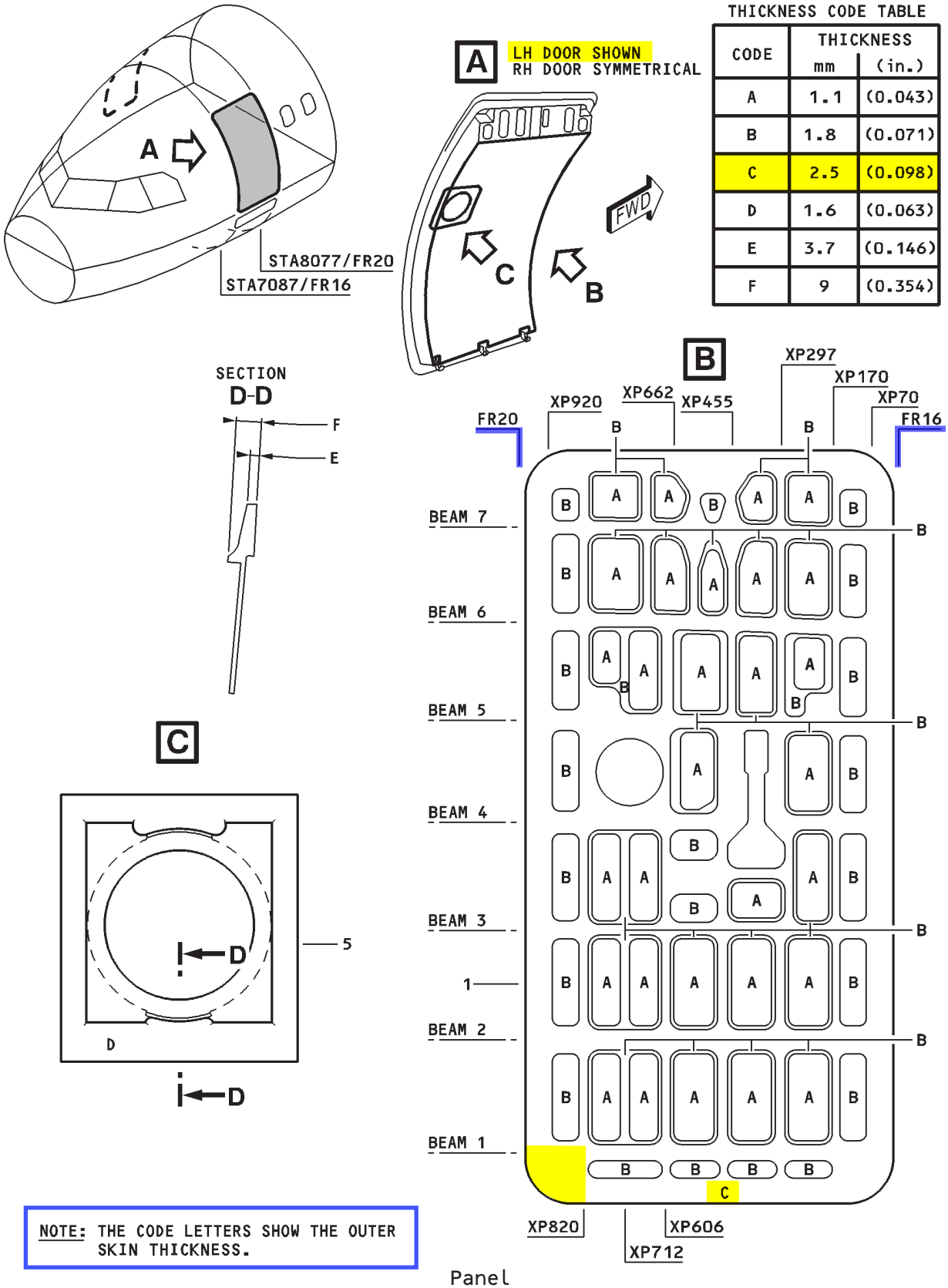
TABLE OF CONTENTS

FWD PASSENGER/CREW DOOR

1. FWD Passenger/Crew Door- Identification Scheme

ITEM	NOMENCLATURE	REFER TO
-	Panel	Figure 1
-	Cross Members	Figure 2
-	Beams and Junction Plates	Figure 3
-	Edge Members	Figure 4
-	Miscellaneous Structure	Figure 5

NOTE: Refer to Chapter 52-10-00 Pageblock 001 where you can find the Modification/Service Bulletin List.



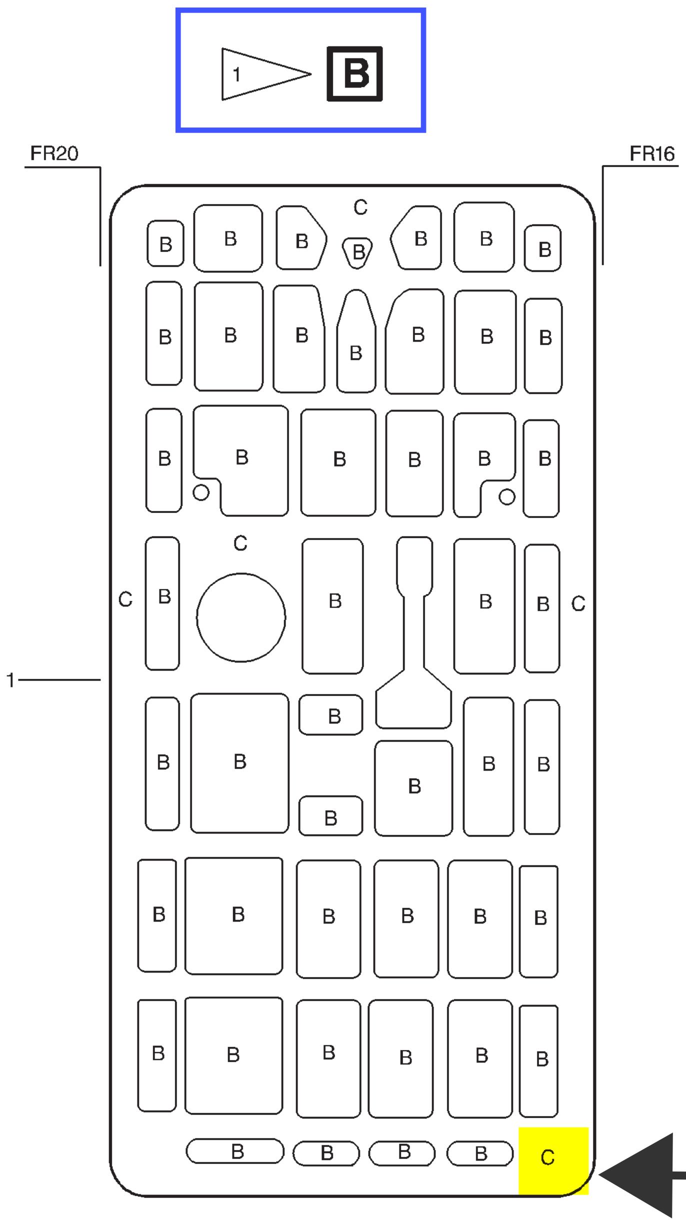
THICKNESS CODE TABLE

CODE	THICKNESS mm	(in.)
A	1.1	(0.043)
B	1.8	(0.071)
C	2.5	(0.098)
D	1.6	(0.063)
E	3.7	(0.146)
F	9	(0.354)

NOTE: THE CODE LETTERS SHOW THE OUTER SKIN THICKNESS.

NS5 52 11 00 0 AAM0 01 0

Panel
Figure 1 (sheet 1)



CODE	THICKNESS mm	THICKNESS (in.)
A	1.1	(0.043)
B	1.8	(0.071)
C	2.5	(0.098)
D	1.6	(0.063)
E	3.7	(0.146)
F	9	(0.354)

1 ▷ AFTER MOD.23010P2754

Panel
Figure 1 (sheet 2)

ITEM	NOMENCLATURE	SPECIFICATION AND/OR SECTION CODE	THICKNESS IN MM(IN.) AND/ OR PARTNUMBER	I C	ACTION OR REPAIR	STATUS (MOD/PROP) SB/RC
1	Skin	clad2024T42 ASN-A30038677	D52110415202 203		52-10-00	
1A	Skin	clad2024T42 ASN-A30038677	D52110850200 201		52-10-00	A23010P2754
1B	Skin	clad2024T4 ASN-A61298677	D52110819200 201		52-10-00	A27156P5621
5	Doubler Window	7175T7351 ASN-A30508870	D52110422200 201			
5A	Doubler Window	7175T7351 ASN-A30508870	D52110422202 203			A27998P5598
ASSY Dwg.: D52110416						

Key to Figure 1

PASSENGER/CREW

1. Modification/Service Bulletin List

This list shows the modifications and the MSN of the aircraft which have these modifications. Modifications with the same number, but with a different suffix letter show a different effectivity, refer to column 'S'.

MODIFICATION/ PROPOSAL	S	STD	EFFECTIVITY (MANUFACTURER SERIAL NUMBER)	SERVICE BULLETIN
20190P0429		A321	0364-9999	
20274P0382		A321	0364-9999	
20383P0552		A321	0364-9999	
20468P0904		A321	0364-9999	
20468P1411		A321	0364-9999	
20717P1043		A321	0364-9999	
21574K1902		A321	0364-9999	
21574P0901		A321	0364-9999	
21574P0903		A321	0364-9999	
21821P1885		A321	0364-9999	
22112P1696		A321	0364-9999	
22422P2455		A321	0364-9999	
23010P2754		A321	0468-9999	
24389P3597		A321	0364, 0385, 0513-0516, 0519-9999	
24389P3651		A321	0364, 0385, 0513-0516, 0519-9999	52-1057
24497P3624		A321	0364, 0385, 0513-0516, 0519-9999	
24990P3906		A321	0614-9999	

Modification 23010P2754 (related to ITEM 1A) is embodied from MSN 0468 to 9999.

The MSN of the affected Airplane is: 1161.

That means, that this Modification is embodied at the affected Airplane and that ITEM 1 is not installed.

MODIFICATION/ PROPOSAL	S	STD	EFFECTIVITY (MANUFACTURER SERIAL NUMBER)	SERVICE BULLETIN
25675P4398		A321	0725-9999	52-1085
25886P4494		A321	0777-9999	
25886P4494	A	A321	0614-0725	52-1090
25886P4494	B	A321	0385-0606	52-1090
26063P4586		A321	0364,0586, 0593, 0599, 0642-0775	
27081P5155		A321	1042-9999	
27141P4903		A321	0926-9999	
27156P5621		A321	1214-9999	
27998P5598		A321	1188-9999	
27998P5598	A	A321	1214-9999	
27998P5610		A321	1188-9999	
28893P6583		A321	1293-1425	
28920P6292		A321	1428-9999	
38894P11366		A321	4198-9999	

Modification 27156P5621 (related to ITEM 1B) is embodied from MSN 1214 to 9999.

The MSN of the affected Airplane is: 1161.

That means, that this Modification is not embodied at the affected Airplane and that ITEM 1B is not installed.

ITEM 1A is originally installed.

FWD PASSENGER/CREW DOOR

1. General

This topic contains allowable damage data for the FWD passenger/crew door. For the general definition of allowable damage refer to Chapter 51-11-11 - ALLOWABLE DAMAGE.

2. Allowable Damage

Compare the damage in question with Table 101- Damage Criteria, given in Chapter 52-10-00 Page Block 101 - PASSENGER/CREW.

PASSENGER/CREW DOOR

1. General

CAUTION: HIDDEN DAMAGE CAN LEAD TO A FAILURE OF THE REPAIR OR SURROUNDING STRUCTURE.

A. This topic contains allowable damage data for the passenger/crew doors. Allowable damage is damage for which a structural repair is not necessary. You must remove the damage down to a smooth contour and compare with the allowable damage limits given in the relevant Chapter.

B. After rework the damaged area must be checked to make sure that the allowable limits have not been exceeded. When the limits are exceeded a repair is necessary. Refer to the column "ACTION OR REPAIR" in the identification page block.

C. For the general repair procedure refer to :

- Chapter 51-73-00 Repair of Minor Damage
- Chapter 51-74-00 Repair of Corroded Areas

NOTE: For definition of allowable damage refer to Chapter 51-11-11 .

NOTE: For detailed definition of Repair Categories refer to Chapter 51-11-14 .

NOTE: For Damage/Repair Data Recording refer to Chapter 51-11-15.

2. Allowable Damage

CAUTION: FOR ALLOWABLE DAMAGE EFFECTIVITY RELATED TO AIRCRAFT TYPE, REFER TO PARAGRAPH 3, GIVEN IN THE INTRODUCTION OF THE SRM.

CAUTION: OBEY THE ALLOWABLE DAMAGE EFFECTIVITY PER WEIGHT VARIANT AND AIRCRAFT TYPE GIVEN IN RELEVANT PARAGRAPH.

CAUTION: OBEY THE GIVEN INSPECTION INSTRUCTION REFERENCE WHICH LEADS TO THE APPLICABLE INSPECTION PROGRAM DEFINED IN THE STRUCTURAL REPAIR INSPECTIONS, IF NECESSARY.

A. Refer to Figure 101 to determine the allowable damage data for rework limits of the passenger/crew doors.

B. Refer to Figure 106 to determine the allowable damage data for dent limits of the passenger/crew doors.

C. Refer to Para.4.C. to determine the allowable limits for dent dress-out.

D. This allowable damage data caused by lightning strike is applicable to passenger/crew doors.

NOTE: For DESCRIPTION and CRITERIA of allowable damage given in this Chapter, refer to Table 101.

3. Allowable Damage Description/Criteria

DESCRIPTION	CRITERIA/ TYPE	PARAGRAPH	REPAIR CATEGORY	INSPECTION INSTRUCTION REFERENCE
Passenger/Crew Door Skin	Rework	4.A.	Refer to diagrams 101 and 102 and Figures 104 and 105	52-10-00-1-002-00
	Dents *	4.B.	Refer to diagram 103	52-10-00-1-001-00
	Dents **	4.B.	Refer to diagram 104	52-10-00-1-001-00
Allowable Limits for Dent Dress-out	Dents	4.C.	B	52-10-00-1-003-00
Skin Plates - Temporary Allowable Damage Limits for Lightning Strike	Burn Marks	4.D.	C	-
Forward and Rear Pax Door Cover Plates	Allowable Distortion	4.E.	A, C	52-10-00-1-005-00
Forward and Rear Pax Door Cover Plates	Allowable Crack	4.F.	A	-
Forward and Rear Pax Door Cover Plates	Allowable Crack	4.G.	C	52-10-00-1-004-00

Table 101

* Fulfilling "nearness/form" Criterion.

** Out of "nearness/form" Criterion.

NOTE: Refer to each allowable damage paragraph to determine the applicability.

4. Passenger/Crew Doors - Allowable Damage

CAUTION: THIS ALLOWABLE DAMAGE MUST BE INSPECTED AT DEFINED INTERVALS. THE INSPECTION INSTRUCTION REFERENCE IS 52-10-00-1-002-00 AND IS DESCRIBED IN THE STRUCTURAL REPAIR INSPECTIONS (SRI) SECTION OF THE SRM. INFORM YOUR PLANNING DEPARTMENT AND PROVIDE THEM WITH THE NECESSARY INFORMATION.

CAUTION: OBEY THE ALLOWABLE DAMAGE EFFECTIVITY PER WEIGHT VARIANT AND AIRCRAFT TYPE GIVEN IN TABLE 102.

CAUTION: THE ALLOWABLE DAMAGE LIMITS GIVEN IN THIS PARAGRAPH ARE ONLY APPLICABLE TO THE TYPE OF DAMAGE SPECIFIED. IF YOU HAVE THIS TYPE OF DAMAGE TOGETHER WITH A DIFFERENT TYPE OF DAMAGE, FOR EXAMPLE DENT PLUS SCRATCH, CONTACT AIRBUS. IF ANY OF THE DAMAGES ARE WITHIN THE 51-73-11 LIMITS, THEY DO NOT NEED TO BE TAKEN INTO ACCOUNT IN THE ASSESSMENT.

A. Passenger/Crew Doors Skin - Allowable Rework

NOTE: This allowable damage is valid as shown in Table 102.

AIRCRAFT	WEIGHT VARIANT
A321-100	000, 002, 003, 004, 005, 006, 007, 008
A321-200	000, 001, 002, 003, 004, 005, 006, 007, 008, 009, 010, 011

Effectivity per Weight Variant and/or Aircraft Type

Table 102

NOTE: Refer to paragraph 23 'Weight Variant Information' in the INTRODUCTION of the SRM. Tables in the subparagraphs give necessary data about all weight variants and their required information for allowable damage and repair applicability.

(1) This allowable damage data is applicable for the passenger/crew doors panel.

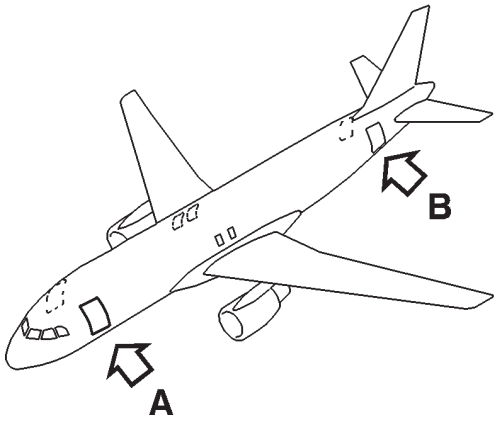
(2) Compare the rework in accordance with Figure 101.

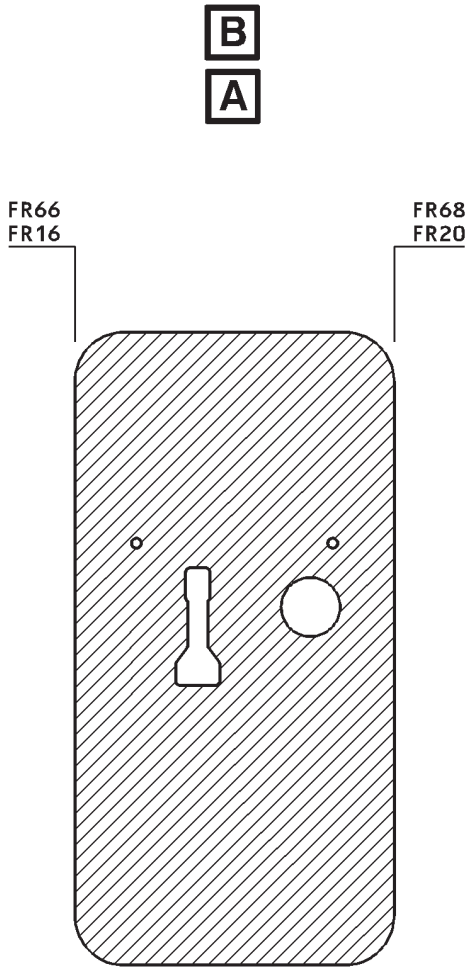
(a) Allowable reworks for scratches, marks or corrosion on skin for riveted areas (B ≤ 15 mm (0.59 in.)). (Refer to Diagram 101).

(b) Allowable reworks for scratches, marks or corrosion on skin for unriveted areas (B > 15 mm (0.59 in.)). (Refer to Diagram 102).

(c) Zoning of excluded areas for 100% rework (on riveted area) (Refer to Figure 102).

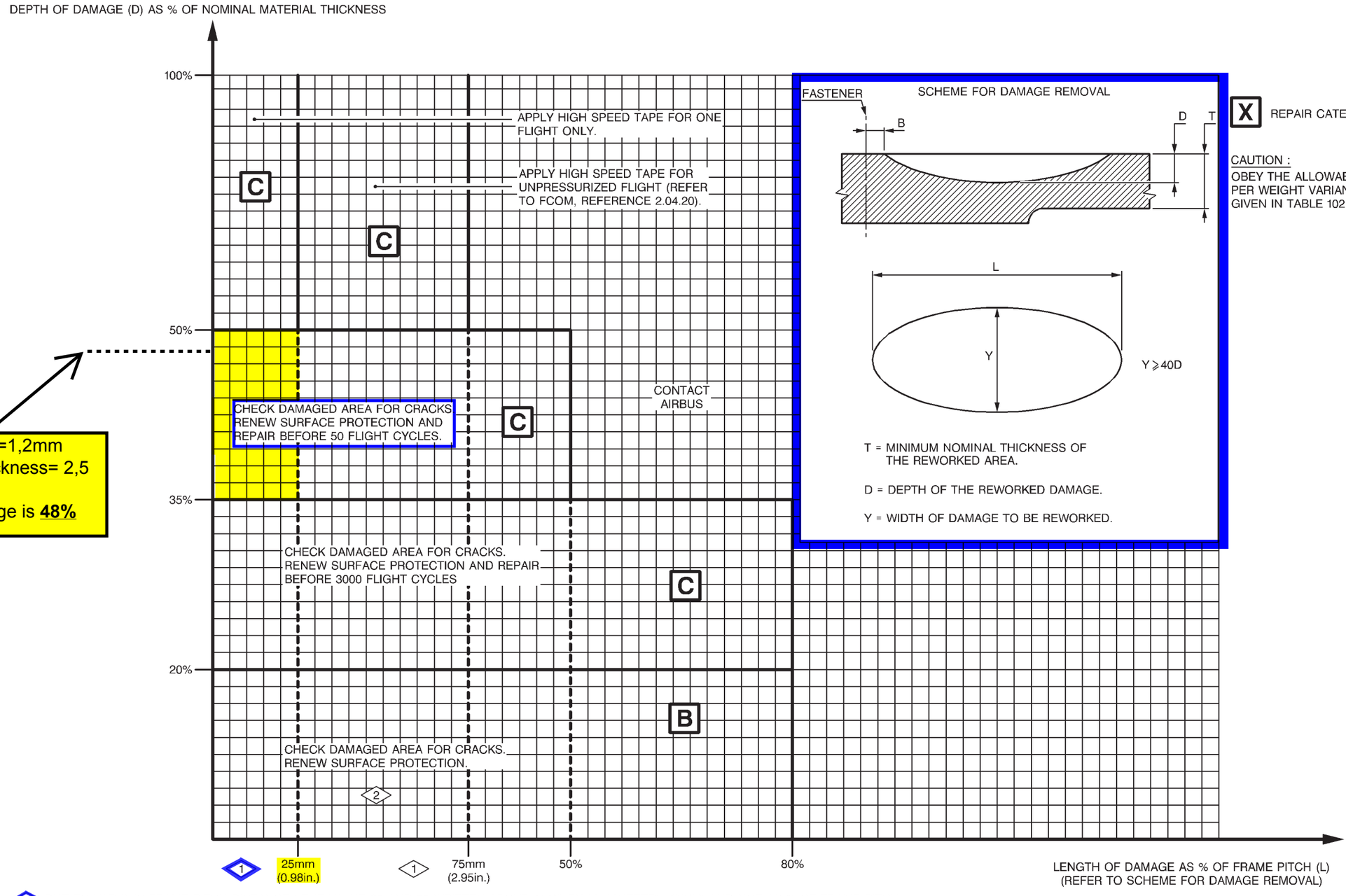
(3) This specific allowable damage data is applicable for the passenger/crew doors panel edge.





NS5 52 10 00 1 AAM0 02 0

Passenger/Crew Doors Allowable Damage and Rework Limits
Figure 101



Damage Depth=1,2mm
Skin Panel Thickness= 2,5

Depth of Damage is **48%**

1 DUE TO VARIOUS FRAME PITCH DISTANCES THE VALUE 25 AND 75 WRITTEN ABOVE IS GIVEN MILLIMETERS (INCH) AND NOT AS % OF FRAME PITCH.

2 THIS ALLOWABLE DAMAGE MUST BE INSPECTED AT DEFINED INTERVALS. THE INSPECTION INSTRUCTION REFERENCE IS 52-10-00-1-002-00 AND IS DESCRIBED IN THE STRUCTURAL REPAIR INSPECTIONS (SRI) SECTION OF THE SRM. INFORM YOUR PLANNING DEPARTMENT AND PROVIDE THEM WITH THE NECESSARY INFORMATION.

Allowable Rework in Unriveted Areas of the Skin
Diagram 102

NS5 52 10 00 1 AEMB 00 0

PASSENGER/CREW DOOR

1. General

These repairs are applicable for passenger/crew doors. The general repairs are listed in Table 201, the specific repairs are listed in Table 202. The appropriate repairs are described in more detail in the relevant Chapter.

NOTE: For Damage/Repair Data Recording refer to Chapter 51-11-15 .

NOTE: For detailed definition of Repair Categories refer to Chapter 51-11-14 .

2. Safety Precautions

WARNING: OBEY THE MANUFACTURER'S INSTRUCTIONS WHEN YOU USE CLEANING AGENT, BONDING AND ADHESIVE COMPOUND, SEALANT, SPECIAL MATERIAL AND STRUCTURE PAINT. THESE MATERIALS ARE DANGEROUS.

CAUTION: THERE MUST BE A MINIMUM DISTANCE OF FOUR FASTENER SPACINGS BETWEEN THE OUTER ROWS OF ADJACENT REPAIR.

CAUTION: USE ONLY SPECIFIED CLEANING AGENTS AND SOLUTIONS OR THEIR EQUIVALENTS. THE SURFACE PROTECTION COULD BE DAMAGED IF UNSPECIFIED MATERIALS ARE USED. IT IS IMPORTANT THAT THE MANUFACTURER'S MIXING, APPLICATION AND TREATMENT INSTRUCTIONS ARE FOLLOWED.

CAUTION: TO PREVENT DAMAGE TO THE SURFACE PROTECTION, MECHANICAL AND ELECTRICAL SYSTEM, THE AREA SURROUNDING THE REPAIR MUST BE COVERED WITH PLASTIC FOIL AND MASKING TAPE.

CAUTION: OBEY THE INSPECTION INSTRUCTIONS GIVEN IN THE RELEVANT REPAIR.

CAUTION: FOR REPAIR EFFECTIVITY RELATED TO AIRCRAFT TYPE, REFER TO PARAGRAPH 3, GIVEN IN THE INTRODUCTION OF THE SRM.

CAUTION: HIDDEN DAMAGE CAN LEAD TO A FAILURE OF THE REPAIR OR SURROUNDING STRUCTURE.

3. Repair Scheme for General Repairs

REPAIR PROCEDURE	CHAPTER	FIGURE	REMARKS
Skin Repair by Bushes	Chapter 52-00-00	204	For applicability refer to Chapter 52-10-00 Figure 210

Table 201

4. Repair Scheme for Specific Repairs

REPAIR PROCEDURE	PARAGRAPH	FIGURE	REPAIR CATEGORY	INSPECTION INSTRUCTION REFERENCE
Passenger/Crew Doors Sealing Channel Repair - PRINCIPLE I	5.A.	201	A	-
Passenger/Crew Doors Sealing Channel Repair - PRINCIPLE II	5.B.	202	A	-
Passenger/Crew Doors External Skin Repair on Lower Corners	5.C.	203	B	52-10-00-2-010-00
Passenger/Crew Doors Edge Members Repair	5.D.	204	B	52-10-00-2-011-00
Passenger/Crew Doors External Skin Repair on Lower and Lateral Areas	5.E.	205	B	52-10-00-2-005-00
Passenger/Crew Doors External Skin Repair Between Horizontal Beams and Vertical Cross Members	5.F.	206	B	52-10-00-2-006-00
Passenger/Crew Doors External Skin Repair at Horizontal Beams Level	5.G.	207	B	52-10-00-2-012-00
Passenger/Crew Doors - Temporary Skin Repair	5.H.	208	C	52-10-00-2-008-00
Conversion of Temporary Skin Repair into Final Skin Repair	5.I.	209	B	52-10-00-2-009-00
Doors Lightning Strike - Temporary Repair	5.J.	211	C	-
Doors Lightning Strike - Conversion of Temporary Repair into Permanent	5.K.	212	B	52-10-00-2-001-00
Doors Lightning Strike - Permanent Repair	5.L.	213	B	52-10-00-2-002-00

Table 202

5. Passenger/Crew Doors - Repairs

CAUTION: OBEY THE REPAIR EFFECTIVITY PER WEIGHT VARIANT AND AIRCRAFT TYPE GIVEN IN TABLE 203.

A. Passenger/Crew Doors Sealing Channel Repair - PRINCIPLE I

NOTE: This repair principle is applicable to the external flange of the channel section of the passenger/crew doors.

NOTE: This repair is valid as shown in table 203.

AIRCRAFT	WEIGHT VARIANT
A321-100	000, 002, 003, 004, 005, 006, 007, 008
A321-200	000, 001, 002, 003, 004, 005, 006, 007, 008, 009, 010, 011

Effectivity per Weight Variant and/or Aircraft Type

Table 203

NOTE: Refer to paragraph 23 'Weight Variant Information' in the INTRODUCTION of the SRM. Tables in the subparagraphs give necessary data about all weight variants and their required information for allowable damage and repair applicability.

(1) Repair Materials

ITEM	NOMENCLATURE	QTY	MATERIAL/REMARKS
1	Angle	1	Refer to Figure 201
2	Shim	1	Refer to Figure 201
-	Sealant	AR	Material No. 09-013 (Refer to Chapter 51-35-00)
-	Sealant	AR	Material No. 09-016B (Refer to Chapter 51-35-00)
-	Cleaning agent	AR	Material No. 11-003 (Refer to Chapter 51-35-00)
-	Polyurethane primer	AR	Material No. 16-001 (Refer to Chapter 51-35-00)
-	Polyurethane finish paint	AR	Material No. 16-018 (Refer to Chapter 51-35-00)
-	Wash primer	AR	Material No. 16-020 (Refer to Chapter 51-35-00)

(2) Repair Instructions (Refer to Figure 201)

(a) Drill out the rivets in the repair area.

CAUTION: THIS REPAIR MUST BE INSPECTED AT DEFINED INTERVALS. THE INSPECTION INSTRUCTION REFERENCE IS 52-10-00-2-010-00 AND IS DESCRIBED IN THE STRUCTURAL REPAIR INSPECTIONS (SRI) SECTION OF THE SRM. INFORM YOUR PLANNING DEPARTMENT AND PROVIDE THEM WITH THE NECESSARY INFORMATION.

CAUTION: OBEY THE REPAIR EFFECTIVITY PER WEIGHT VARIANT AND AIRCRAFT TYPE GIVEN IN TABLE 205.

C. Passenger/Crew Doors External Skin Repair on Lower Corners

NOTE: This repair principle is applicable to the skin of the passenger/crew doors.

NOTE: This repair is valid as shown in table 205.

AIRCRAFT	WEIGHT VARIANT
A321-100	000, 002, 003, 004, 005, 006, 007, 008
A321-200	000, 001, 002, 003, 004, 005, 006, 007, 008, 009, 010, 011

Effectivity per Weight Variant and/or Aircraft Type

Table 205

NOTE: Refer to paragraph 23 'Weight Variant Information' in the INTRODUCTION of the SRM. Tables in the subparagraphs give necessary data about all weight variants and their required information for allowable damage and repair applicability.

(1) Repair Materials

ITEM	NOMENCLATURE	QTY	MATERIAL/REMARKS
1	Doubler	1	Refer to Figure 203
2	Shim	1	Refer to Figure 203
3	Shim	1	Refer to Figure 203
-	Sealant	AR	Material No. 09-013 (Refer to Chapter 51-35-00)
-	Sealant	AR	Material No. 09-016B (Refer to Chapter 51-35-00)
-	Cleaning agent	AR	Material No. 11-003 (Refer to Chapter 51-35-00)
-	Polyurethane primer	AR	Material No. 16-001 (Refer to Chapter 51-35-00)
-	Wash primer	AR	Material No. 16-020 (Refer to Chapter 51-35-00)

(2) Repair Instructions (Refer to Figure 203)

(a) Drill out the rivets in the repair area.

(b) Cut out the skin as per drawing, remove and discard the damaged part.

NOTE: Remove the insulation blanket in damaged area (Refer to Figure 203) for doors valid after Modification 22116P2039, after SB52-1021 and before Modification 23010P2754.

(c) Remove the sealant from the repair area.

(d) Manufacture the repair parts (1) thru (3) and break sharp edges.

(e) Position and temporarily attach the repair parts (1) thru (3).

(f) Transfer the position of the existing holes, mark and drill the new holes (for rivet pitch and edge distance, refer to Chapter 51-47-00).

(g) Remove the repair parts (1) thru (3) and deburr the holes.

WARNING: CLEANING AGENT (MATERIAL NO. 11-003) IS DANGEROUS.

(h) Clean and degrease all parts with cleaning agent (Material No. 11-003).

WARNING: POLYURETHANE PRIMER (MATERIAL NO. 16-001) IS DANGEROUS.

WARNING: WASH PRIMER (MATERIAL NO. 16-020) IS DANGEROUS.

(i) Apply protective treatment (Refer to Chapter 51-23-00):

1 On the repair parts (1) thru (3):

a Chromic Acid Anodizing.

b Polyurethane primer (Material No. 16-001).

2 On cutout:

a Wash primer (Material No. 16-020).

b Polyurethane primer (Material No. 16-001).

3 In the holes, Wash primer (Material No. 16-020).

(j) Fill the existing countersinks of the skin with coutersunk repair washers (Refer to Chapter 51-71-15).

WARNING: SEALANT (MATERIAL NO. 09-013) IS DANGEROUS.

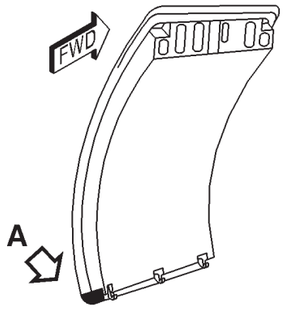
(k) Install the repair parts (1) thru (3) with interposition of sealant (Material No. 09-013) on contact surfaces (Refer to Chapter 51-76-11).

NOTE: Do not reinstall the insulation blanket for doors valid after Modification 22116P2039, after SB52-1021 and before Modification 23010P2754.

(l) Install the fasteners with sealant (Material No. 09-013) (Refer to Chapter 51-76-11).

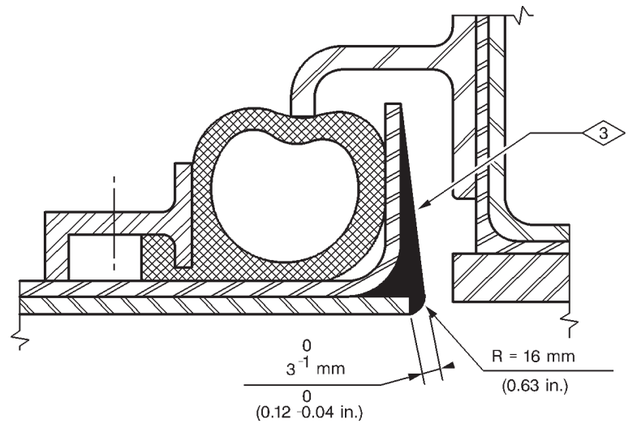
(m) Fill the gap between the existing channel and the repair part (1) with sealant (Material No. 09-013) (Refer to Chapter 51-76-11).

NOTE: Apply a bead of Material No. 09-016B on the forward edge of the forward passenger crew doors.



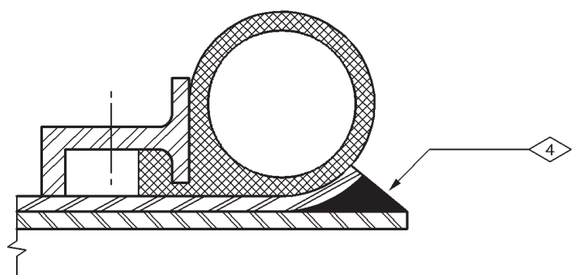
C

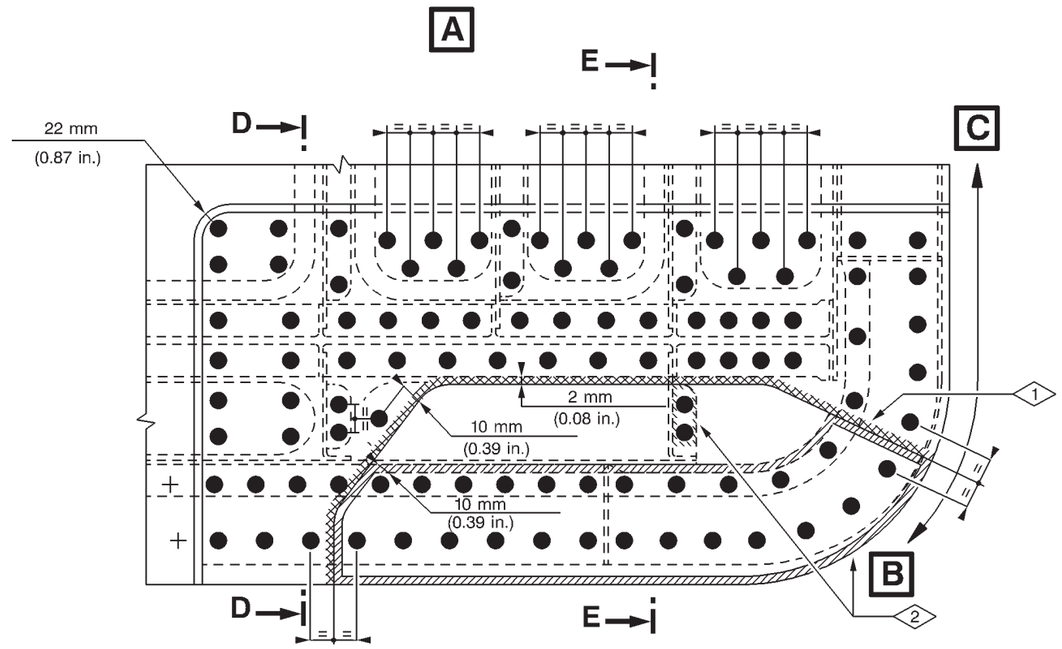
VALID ON FWD CHANNEL STRAIGHT
AREA ON FWD PAX DOORS ONLY



B

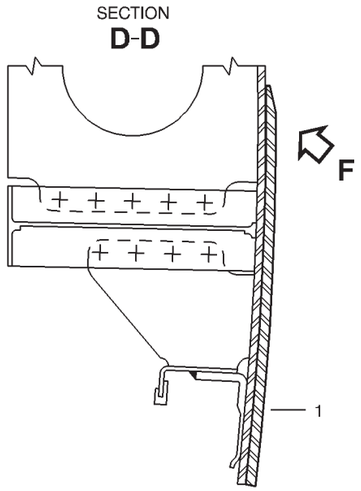
VALID ON FWD CHANNEL CORNER
ON FWD PAX DOORS ONLY

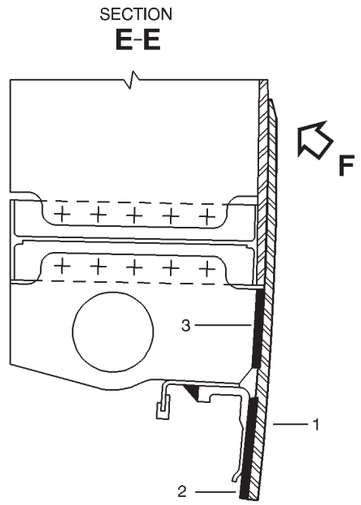




NOTE: FOR EXPLANATION OF <1> TO <4> REFER TO SHEET 2.

Passenger/Crew Doors External Skin Repair on Lower Corners
Figure 203 (sheet 1)





	REPAIR MATERIAL			
	ITEM	NOMENCLATURE	MATERIAL	THICKNESS mm (in.)
	1	DOUBLER	CLAD 2024T3 (REF.51-31-00)	3 (0.12)
6	2	SHIM	CLAD 2024T3 (REF.51-31-00)	2.5 (0.100)
6	3	SHIM	CLAD 2024T3 (REF.51-31-00)	2.5 (0.100)
	RIVET SYMBOL			
5	●	RIVET	MS20426D6 (REF. 51-40-00)	

<1> SHADED AREA : SKIN CUTOUT

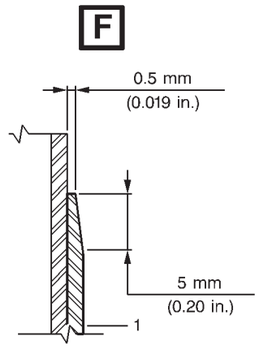
<2> HATCHED AREA : SHIMS CONTOUR

<3> APPLY A BEAD OF MATERIAL N0. 09-016B ON THE FORWARD EDGE OF THE FORWARD PASSENGER CREW DOORS.

<4> FILL WITH MATERIAL NO. 09-016B

<5> WITH HEAT TREATMENT

<6> THE mm (In.) CONVERSION FOR THE REPAIR PART THICKNESS CORRESPONDS TO THE US STANDARD ALUMINUM SHEET METAL GAGE AND IS NOT NECESSARILY THE EXACT CONVERSION.



CAUTIONS: - OBEY THE REPAIR EFFECTIVITY PER WEIGHT VARIANT AND AIRCRAFT TYPE GIVEN IN TABLE 205.

- THIS REPAIR MUST BE INSPECTED AT DEFINED INTERVALS. THE INSPECTION INSTRUCTION REFERENCE IS 52-10-00-2-010-00 AND IS DESCRIBED IN THE STRUCTURAL REPAIR INSPECTIONS (SRI) SECTION OF THE SRM. INFORM YOUR PLANNING DEPARTMENT AND PROVIDE THEM WITH THE NECESSARY INFORMATION.

NS5 52 10 00 2 AEMT 02 0

Passenger/Crew Doors External Skin Repair on Lower Corners
Figure 203 (sheet 2)

CHAPTER SRI

TABLE OF CONTENTS

Printed in Germany

PASSENGER/CREW DOOR

1. General

A. Each inspection instruction contains the necessary information about effectivity, area of applicability, inspection thresholds/intervals and inspection location/methods.

B. These inspection instructions give the necessary information to inspect repairs for Passenger/Crew Doors. The related details are given in Chapter 52-10-00 Pageblock 201 .

Refer to the Inspection Instruction Reference List Table 201 where all inspection instructions are listed.

Use the Inspection Instruction Reference number (IIR) to get quick access to related information.

2. Inspection Instruction Reference List

REFERENCE (IIR)	RELATED REPAIR TITLE (SOURCE)	REFER TO PARAGRAPH
52-10-00-2-001-00	Doors Lightning Strike - Conversion of Temporary Repair into Permanent	3.A.
52-10-00-2-002-00	Doors Lightning Strike - Permanent Repair	3.B.
52-10-00-2-005-00	Passenger/Crew Doors External Skin Repair on Lower and Lateral Areas	3.C.
52-10-00-2-006-00	Passenger/Crew Doors External Skin between Horizontal Beams and Vertical Cross Members	3.D.
52-10-00-2-008-00	Passenger/Crew Doors - Temporary Skin Repair	3.E.
52-10-00-2-009-00	Conversion of Temporary Skin Repair into Final Repair	3.F.
52-10-00-2-010-00	Passenger/Crew Doors External Skin Repair on Lower Corner	3.G.
52-10-00-2-011-00	Passenger/Crew Doors Edge Members Repair	3.H.
52-10-00-2-012-00	Passenger/Crew Doors External Skin Repair at Horizontal Beams Level	3.I.

Inspection Instruction Reference List

Table 201

3. Passenger/Crew Doors

A. IIR 52-10-00-2-001-00

This inspection instruction gives the necessary information to inspect the converted temporary into permanent lightning strike repair on passenger/crew doors given in Chapter 52-10-00 Pageblock 201 , Figure 212.

G. IIR 52-10-00-2-010-00

This inspection instruction gives the necessary information to inspect the skin repair on lower corner on passenger/crew doors given in Chapter 52-10-00 Pageblock 201 , Figure 203.

(1) Location

For inspection instruction refer to table 211.

(2) Inspection Information Table

A/C	WEIGHT VARIANTS	FIRST INSPECTION AFTER REPAIR EMBODIMENT	SUBSEQUENT INSPECTIONS AT INTERVALS OF	INSPECTION METHOD	REMARKS
A321-100	000, 002, 003, 004, 005, 006, 007, 008	60000FC, FH not relevant	TBD	TBD	<1>
A321-200	000, 001, 002, 003, 004, 005, 006, 007, 008, 009, 010, 011	60000FC, FH not relevant	TBD	TBD	<1>

Table 211

<1> For Pax / Crew Doors after mod. 22116P2039, after SB52-1021 and before mod. 23010P2754, refer to table 212 for additionnal inspection information in SSI areas.

(3) Additional Inspection Information Table

PASSENGER/CREW

1. Modification/Service Bulletin List

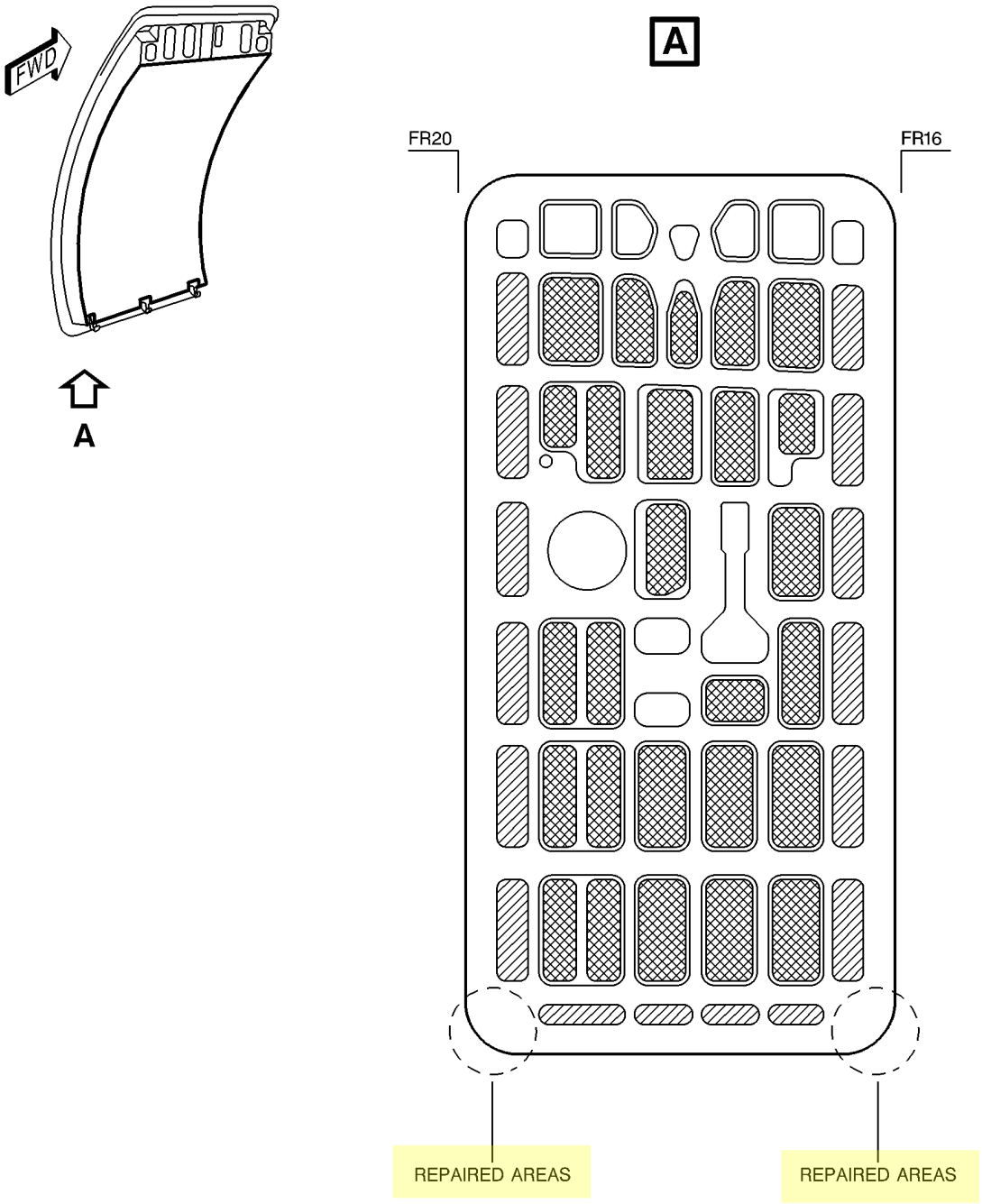
This list shows the modifications and the MSN of the aircraft which have these modifications. Modifications with the same number, but with a different suffix letter show a different effectivity, refer to column 'S'.

MODIFICATION/ PROPOSAL	S	STD	EFFECTIVITY (MANUFACTURER SERIAL NUMBER)	SERVICE BULLETIN
20190P0429		A321	0364-9999	
20274P0382		A321	0364-9999	
20383P0552		A321	0364-9999	
20468P0904		A321	0364-9999	
20468P1411		A321	0364-9999	
20717P1043		A321	0364-9999	
21574K1902		A321	0364-9999	
21574P0901		A321	0364-9999	
21574P0903		A321	0364-9999	
21821P1885		A321	0364-9999	
22112P1696		A321	0364-9999	
22422P2455		A321	0364-9999	
23010P2754		A321	0468-9999	
24389P3597		A321	0364, 0385, 0513-0516, 0519-9999	
24389P3651		A321	0364, 0385, 0513-0516, 0519-9999	52-1057
24497P3624		A321	0364, 0385, 0513-0516, 0519-9999	
24990P3906		A321	0614-9999	

Modification 23010P2754 (related to ITEM 1A) is embodied from MSN 0468 to 9999.

The MSN of the affected Airplane is: 1161.

That means, that this Modification is embodied at the affected Airplane and that ITEM 1 is not installed.



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Passenger/Crew Doors External Skin Repair on Lower Corner - Inspection of the Internal Structure
Figure 206