MAIN-DOOR FRAME RUBBER SEAL - REPAIR

EFFECTIVITY: ALL

1. General

   A. This section gives the procedures to repair the rubber trim seals of the main door frame and service door frame.

   B. The procedures in this section are given in the sequence below. The tasks identified with (♦) are part of the Scheduled Maintenance Requirements Document (SMRD).

TASK NUMBER	*DESCRIPTION*	*EFFECTIVITY*
53-21-01-300-801-A	RUBBER TRIM SEAL - REPAIR	ALL

TASK 53-21-01-300-801-A
EFFECTIVITY: ALL

2. RUBBER TRIM SEAL - REPAIR

A. General

(1) This task gives the instructions to repair the rubber trim seals of the main door frame and service door frame.

B. References

REFERENCE	*DESIGNATION*
AMM SDS 52-10-00/1	
AMM SDS 52-18-00/1	
AMM SDS 52-43-00/1	
AMM TASK 21-31-00-860-801-A/200	PROCEDURE TO PRESSURIZE THE AIRCRAFT FOR MAINTENANCE
AMM TASK 21-31-00-860-802-A/200	PROCEDURE TO DEPRESSURIZE THE AIRCRAFT FOR MAINTENANCE
AMM TASK 53-21-01-000-801-A/400	MAIN-DOOR FRAME RUBBER SEAL - REMOVAL
AMM TASK 53-21-11-000-801-A/400	SERVICE-DOOR FRAME RUBBER SEAL - REMOVAL
IPC 53-21-00	CENTRAL I
SRM 51-20-01-PR	-

C. Zones and Accesses

ZONE	*PANEL/DOOR*	*LOCATION*
811		Airstairs main door
811		Side-hinged main door
821		Service door

D. Tools and Equipment

ITEM	*DESCRIPTION*	*PURPOSE*	*QTY*
Commercially available	Workstand	To get access to the doors	
Commercially available	Acrylic spatula	To remove the rubber trim seal	
Commercially available	Cutter	To cut the rubber trim seal	

E. Auxiliary Items

ITEM	*DESCRIPTION*	*PURPOSE*	*QTY*
Commercially available	Protective Gloves	For protection of technician's hands	1

(Continued)

ITEM	DESCRIPTION	PURPOSE	QTY
Commercially available	Safety Goggles	For protection of technician's eyes	1

F. Consumable Materials

SPECIFICATION (BRAND)	DESCRIPTION	QTY
TT-M-261	Methyl Ethyl Ketone - (MEK)	AR
MIL-F-38249, TYPE I	Sealant RTV-157 (gray)	AR
AMS 3374 MIL-S-38249 Type I	Sealant RTV 230 A/B CTG	AR
Commercially available	Detergent	AR
Manufacturer - Dunlop U.K. - P/N PRF91/ B452LG	Silicon rubber-impregnated Terylene cloth or equivalent	AR

G. Expendable Parts

ITEM	IPC REFERENCE (VENDOR REFERENCE)	QTY
Rubber trim seal	IPC 53-21-00	AR

H. Persons Recommended

QTY	FUNCTION	PLACE
1	Does the task	In the workshop or on the aircraft, as applicable

I. Preparation

SUBTASK 841-002-A

(1) Make sure that the aircraft is safe for maintenance.

(2) Open the airstairs door (AMM SDS 52-10-00/1), or side-hinged door (AMM SDS 52-18-00/1), or service-door (AMM SDS 52-43-00/1) on which the damaged rubber trim seal is installed.

J. Rubber Trim Seal - Path Repair (Figure 801)

SUBTASK 350-002-A

(1) The path repair is applicable only to sections where the damage is a longitudinal tear of 101.6 mm (4 in) maximum or the a transverse tear and does not get the rubber frame seal surface corners (curved areas).

NOTE: In sections where the damage is different from that written above (holes and larger tear), repair the rubber frame seal with the insertion repair.

WARNING: BE CAREFUL WHEN YOU USE SOLVENTS BECAUSE THEY ARE A HEALTH AND FIRE HAZARD. USE SAFETY GOGGLES AND PROTECTIVE CLOTHING WHEN YOU HANDLE THEM. DO NOT BREATHE THEIR GASES AND WORK IN A WELL VENTILATED AREA.

(2) With a cloth soaked in MEK, clean the surface.

WARNING: BE CAREFUL WHEN YOU USE SEALANTS. FOR HAZARD, PROTECTION AND HANDLING OF MATERIAL, REFER TO ITS MATERIAL SAFETY DATA SHEET.

(3) Apply sealant RTV-157 and put the surfaces back to normal slowly. Refer to (SRM 51-20-01-PR).

NOTE:
- The excess of sealant can result in difficulty to close the door.
- RTV 230 A/B CTG sealant can be used as alternative for RTV-157 sealant.

(4) Use an acrylic spatula to finish the RTV-157 sealant (Figure 801; DET. D).

NOTE: To get a better finishing of the sealant, wet the fingers in a water-detergent solution and mold the sealant that is applied.

(5) Install a layer of Terylene cloth of approximately 20 mm (0.8 in) in width, on each side, away from the edges of the damaged area overlapping internal and external sides of seal (Figure 801; DET. F).

NOTE: The surface of the Terylene cloth that you must bond to the repaired area is the silicon rubber-impregnated surface.

(6) The aircraft can be dispatched according to the sealant cure time.

NOTE: The sealant cure time changes with the environmental conditions. Refer to (SRM 51-20-01-PR).

K. Rubber Trim Seal - Insertion Repair (Figure 802)

SUBTASK 350-002-B

(1) The number of repairs shall not exceed 03 (three) per door frame seal.

NOTE: If the number of repairs exceeds 03 (three) repairs per door frame seal, it is necessary to replace the frame rubber seal. Refer to (AMM TASK 53-21-01-000-801-A/400 or AMM TASK 53-21-11-000-801-A/400).

(2) Cut the damaged area of the rubber trim seal at 90 degrees and remove the damaged area (Figure 802; DET. B).

NOTE: Be careful to prevent damage to the frame door structure avoiding scribe in the frame during cutting procedure.

(3) With an acrylic spatula, remove the old sealant from the door frame.

WARNING: BE CAREFUL WHEN YOU USE SOLVENTS BECAUSE THEY ARE A HEALTH AND FIRE HAZARD. USE SAFETY GOGGLES AND PROTECTIVE CLOTHING WHEN YOU HANDLE THEM. DO NOT BREATHE THEIR GASES AND WORK IN A WELL VENTILATED AREA.

(4) With a cloth soaked in MEK, clean the surface.

(5) Cut a frame rubber seal piece of the same size and specification of the old (removed) frame rubber seal piece.

WARNING: BE CAREFUL WHEN YOU USE SEALANTS. FOR HAZARD, PROTECTION AND HANDLING OF MATERIAL, REFER TO ITS MATERIAL SAFETY DATA SHEET.

(6) Bond the rubber seal to the main door frame or service door frame structure with sealant RTV-157. Refer to (Figure 802; SECTION F-F), to visualize the thickness of the sealant (maximum 1.0 mm).

NOTE: The excess of sealant can result in difficulty to close the door.

(7) Apply sealant RTV-157 to the lateral interfaces. Refer to (Figure 802; DET. C).

NOTE: RTV 230 A/B CTG sealant can be used as alternative for RTV-157 sealant.

(8) Use an acrylic spatula to finish the RTV-157 sealant (Figure 802; DET. C).

NOTE: To get a better finishing of the sealant, wet the fingers in a water-detergent solution and mold the sealant that is applied.

(9) Make the repaired section stronger with RTV-157 sealant and a layer of Terylene cloth of approximately 20 mm (0.8 in) in width, on each side, away from the edges of the damaged area (Figure 802; DET. D).

NOTE: The surface of the Terylene cloth that you must bond to the repaired area is the silicon rubber-impregnated surface.

(10) The aircraft can be dispatched according to the sealant cure time.

NOTE: The sealant cure time changes with the environmental conditions. Refer to (SRM 51-20-01-PR).

L. Follow-on

SUBTASK 842-002-A

(1) Close the airstairs door (AMM SDS 52-10-00/1), or side-hinged door (AMM SDS 52-18-00/1), and/or service-door (AMM SDS 52-43-00/1).

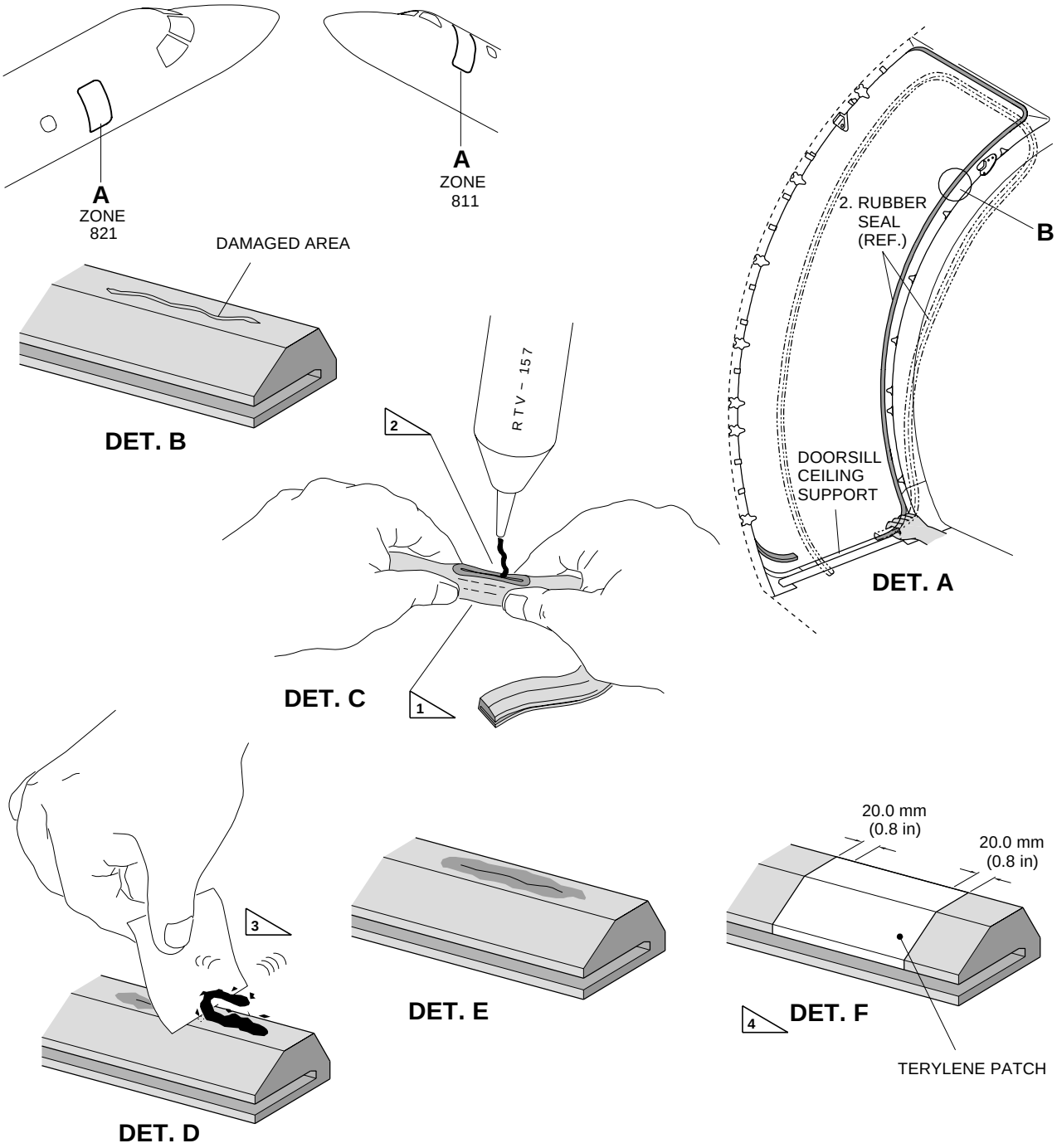
(2) Pressurize the cabin (AMM TASK 21-31-00-860-801-A/200).

(3) Make sure that there is no air leakage through the service-door or main-door contour. If leakage occurs, find its specific location. When the leakage is related to the service-door or main-door frame rubber seal, remove and install the rubber seal again in this region to remove the leakage. After this, do the functional test again.

(4) Depressurize the cabin (AMM TASK 21-31-00-860-802-A/200).

EFFECTIVITY: ALL

Rubber Trim Seal Frame - Patch Repair
Figure 801



1 COMPRESS THE RUBBER TRIM SEAL TO SEE THE DAMAGE INTERNAL SURFACES.

2 APPLY THE "RTV 157" SEALANT.

3 WITH A PLASTIC SPATULA, DO THE FINISHING OF THE "RTV 157" REPAIR.

4 BOND THE PATCH TO THE REPAIRED SURFACE.

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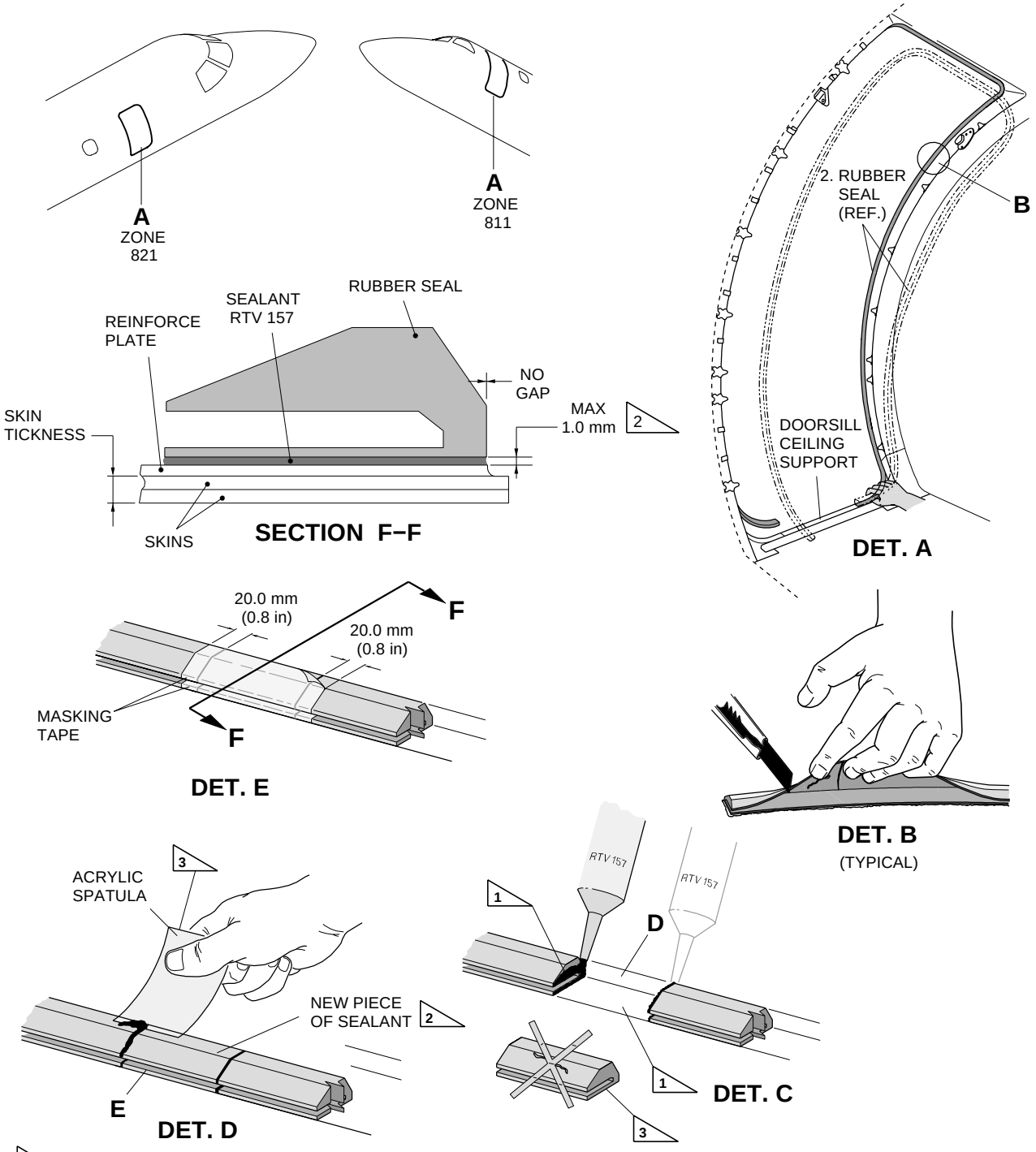
EFFECTIVITY: ALL

Rubber Trim Seal Frame - Insertion Repair
Figure 802



1 APPLY THE "RTV 157" SEALANT TO THE RUBBER TRIM SEAL SURFACES AND DO THE REPAIR

2 DO NOT EXCEED 1.0 mm OF SEALANT UNDER RUBBER SEAL. THE EXCESS OF SEALANT CAN RESULT IN DIFFICULTY TO CLOSE THE DOOR

3 REMOVE AND DISCARD

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