51-75-12 PAINT REPAIR PROCEDURE DURING MAINTENANCE

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References

Data module / Technical publication	Title / Alternate title
None	

Description

Table 1

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Approval Document:	CRAS 00158525 / 001

1. General

This procedure contains information about paint repair requirements for aircraft outer surface paint repair during maintenance.

2. Definitions

A. Touch up repair

Touch up is defined as a repair method for paint damages with a size less than one square meter. This work can be performed with a usage of brushes or paint roll.

B. Partial repaint

Partial repaint is defined as repaint of paint delamination or damage on the aircraft outer surface on an area greater than one square meter like one entire skin panel or vertical stabilizer repaint. This work should be performed with the usage of air brush tools but can also be performed with brushes or paint roll if the usage of air brush tools is not possible (e.g. not allowed inside the hanger). The paint build up should be repaired according the paint build up already applied in this area.

3. Applicable paint repair

Find out the paint damage number in the Paint damage chart Fig 1 and Fig 2 by following the instructions:

A. Choose the applicable characteristic for each topic (Primer, Paint defect, Size, Surface Material) in the Paint damage chart.

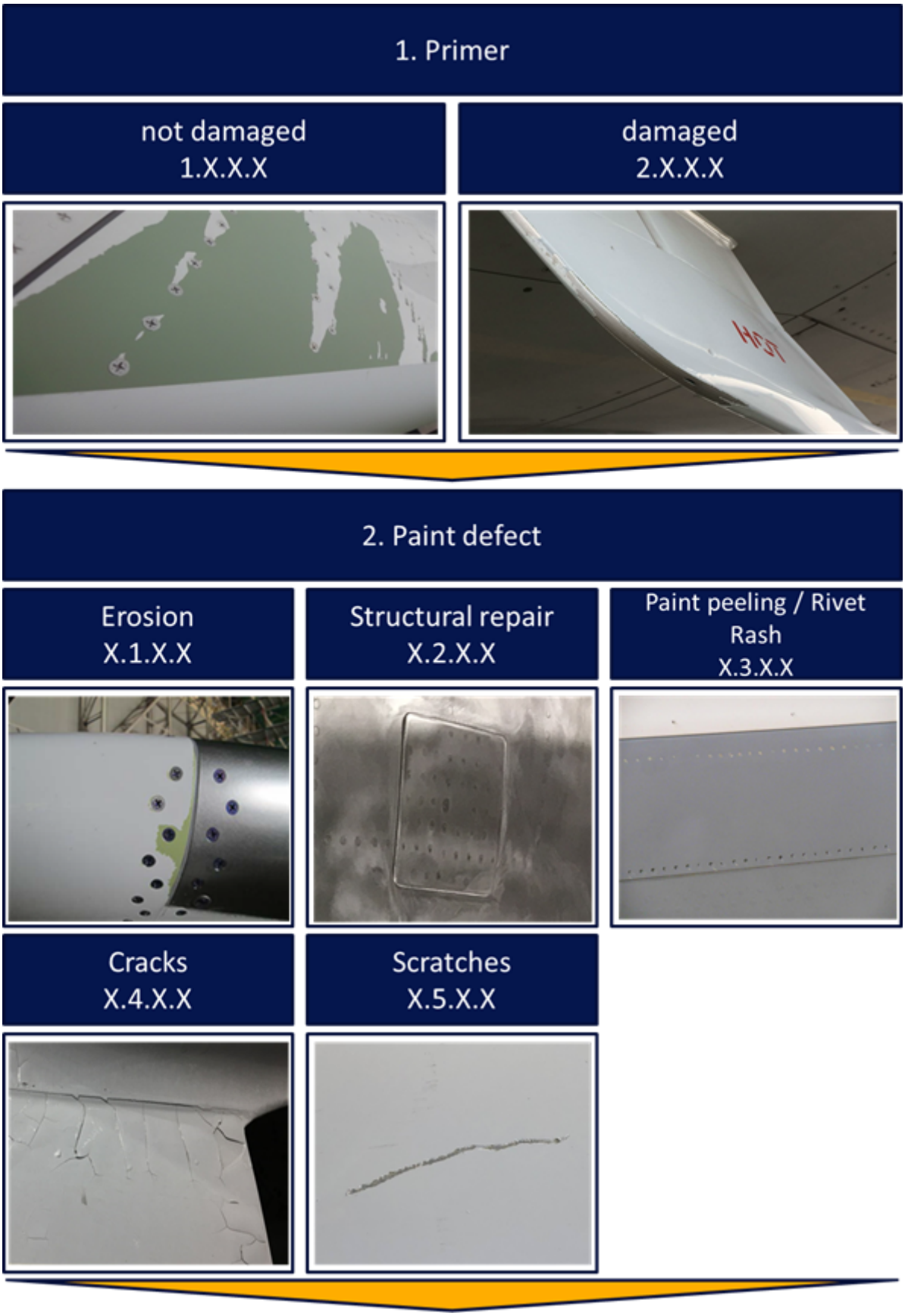

Fig 1 Paint damage chart

Applicable to: (CLH A319-112,A319-114,A320-271N,A320-251N,A321-211 or DLH A319-112,A319-114,A320-211,A320-214,A320-271N,A321-131,A321-231,A321-251NX,A321-271NX,A330-343,A340-313,A340-642,747-400,747-8,Boeing 777,777-200,777-200LR,777-300,777-300ER or EWG A319-112,A319-132,A320-214,A320-216,A320-251N,A321-211,A321-231,A321-251NX or EWL A319-112,A319-132,A320-214,A320-216,A320-251N,A321-211,A321-231 or GEC 777F or GWI A319-112 or LHX A319-112,A319-114,A320-271N,A320-251N,A321-211 or OCN A320-214,A330-203,A330-343)

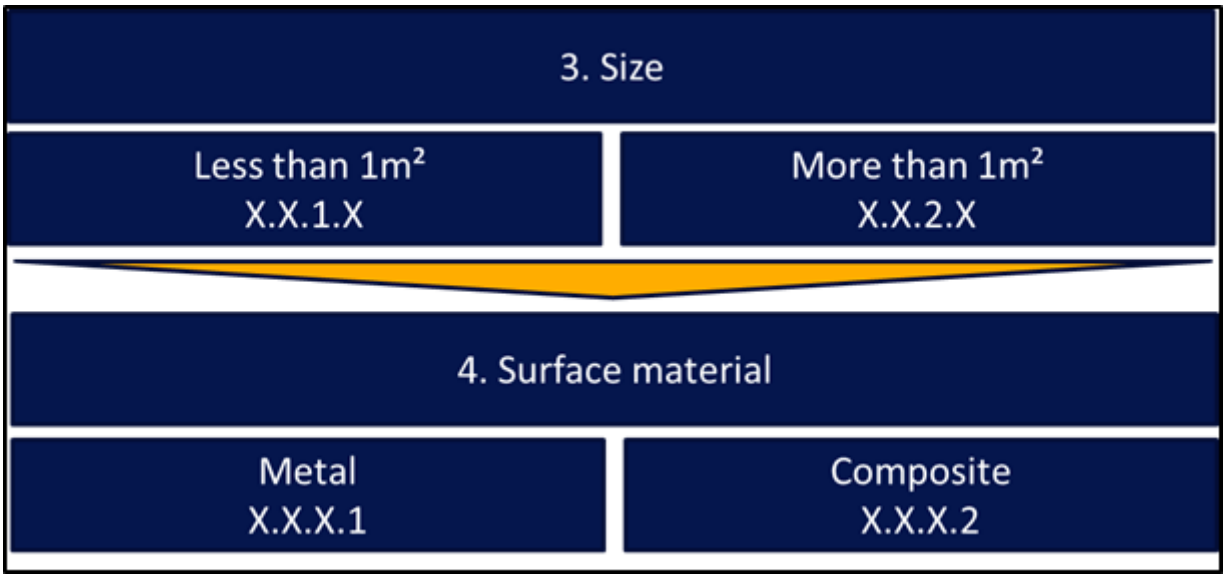

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Fig 2 Paint damage chart

B. Note the number, which is given under the chosen damage characteristic of each topic.

C. To get the paint damage number write the number for each topic one after another and eliminate the “X”. For example: (1.X.X.X)+(X.1.X.X)+(X.X.1.X)+(X.X.X.1)=(1.1.1.1)

D. Find the applicable repair and the time limit in 2 by using the paint damage number.

Table 2 Allocation table for applicable paint repair

Paint damage number:	Applicable repair:	Repair within:
1.1.1.1 1.1.1.2 1.3.1.1 1.3.1.2 1.5.1.1 1.5.1.2	Perform a Touch up repair according 4.A	6 months
2.1.1.1 2.3.1.1 2.5.1.1	Perform a Touch up repair according 4.B	30 days
2.1.1.2 2.3.1.2 2.5.1.2	Perform a Touch up repair according 4.C	30 days
1.1.2.1 1.1.2.2 1.3.2.1 1.3.2.2 1.5.2.1 1.5.2.2	Perform a Partial repaint according 4.A	6 months
1.2.1.1 1.2.2.1 2.1.2.1 2.2.1.1 2.2.2.1 2.3.2.1 2.5.2.1	Perform a Partial repaint according 4.B	30 days
1.2.1.2 1.2.2.2 1.4.1.2	Perform a Partial repaint according 4.C	30 days

Paint damage number:	Applicable repair:	Repair within:
1.4.2.2 2.1.2.2 2.2.1.2 2.2.2.2 2.3.2.2 2.4.1.2 2.4.2.2 2.5.2.2		

4. Paint material and application

There are three application procedures that can be used for paint repairs during routine maintenance

A. Reapplication of topcoat

This procedure can be used for touch up and partial repaint work if only the topcoat is damaged and the primer is completely undamaged.

(1) Remove the existing remaining damaged topcoat with a plastic scraper.

(2) Use adhesive tape to check the adhesion of the remaining paint.

(3) Mask off the adjacent area, which will not be treated, with masking tape and paper.

(4) Abrade the surface with emery cloth and chamfer the edges of the remaining paint around the damaged area. Take Fig 3 as an example.

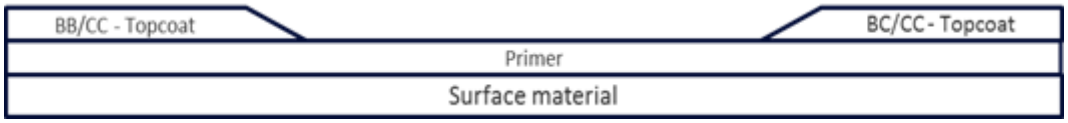

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Fig 3

(5) Remove the abrasive grit, clean and degrease the surface with cleaning agent.

(6) Apply the applicable paint that is compatible to the primer (TDS).

B. Reapplication of paint system on metal parts

This procedure can be used for touch up and partial repaint work if the whole paint buildup is damaged.

(1) Remove the existing remaining damaged paint and primer with a plastic scraper.

(2) Use adhesive tape to check the adhesion of the remaining paint and primer.

(3) Mask off the adjacent area, which will not be treated, with masking tape and paper.

(4) Abrade the surface with emery cloth and chamfer the edges of the remaining paint around the damaged area. Take Fig 4 as an example.

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Fig 4

(5) Remove the abrasive grit, clean and degrease the surface with cleaning agent.

(6) Apply the layers of primer and paint in accordance with the applicable technical data sheets.

C. Reapplication of paint system on composite parts

CAUTION

Do not damage the fibers, tedlar foil (where existent) or aluminum foil (where existent) during this process.

This procedure can be used for touch up and partial repaint on aircraft composite surfaces if the whole paint buildup is damaged.

(1) Remove any loose paint with a plastic scraper.

(2) Use an adhesive tape to check the adhesion of the remaining paint.

(3) Mask the surface around the damaged area leaving an overlap of approximately 10 mm (0.394 in.) with the existing paint.

(4) Abrade the surface where the paint has peeled off from the composite with emery cloth (320 grade) or abrasive aluminum powder 325 mesh or equivalent.

Note

In case of cracked filler paint sand down till the cracks are no longer visible.

(5) Smooth down the edges of the remaining paint if necessary with emery cloth (320 grade).

(6) In case of local reprotection of damaged anti-static coating, a stripe of antistatic paint 15 mm (0.591 in.) wide should be visible all around the area. This ensures a degree of conductivity sufficient to dissipate static charges. Take Fig 5 as an example.

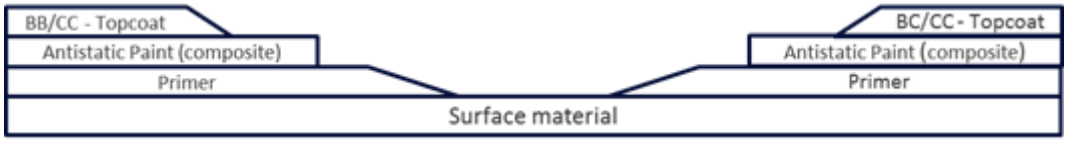

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Fig 5

Note

The use of antistatic paint is not necessary on Carbonfibre Reinforced Plastic (CFRP) components

(7) Rinse with water and carry out a water break test.

CAUTION

Do not cover the 15 mm (0.591 in.) wide strip of antistatic paint with primer

(a) Once the abrading process is complete, wash the area with water. If the water covers the area as an unbroken film, the area is clean.

(b) If the water forms small droplets on the surface this is an indication that the area is contaminated and that cleaning is not complete. In this case repeat the cleaning process.

(c) Dry the area with a clean cloth.

(8) Apply the layers of primer, antistatic paint and paint in accordance with the applicable technical data sheets.

D. Materials

Use the materials that are listed in the applicable AMM and/or SRM.

E. Repaint conditions

For touch up work it is allowed to deviate from the manufacturer requirements in regard to the application air temperature and humidity. Nevertheless it must be ensured that the new paint has an adequate adhesion to the aircraft structure after drying. For all partial repaint it is required to fulfill the manufacturer requirements in regard to the application air temperature and humidity.