Title: Structural Repair Manual – Airbus A320
Revision: Rev. 5 – Effective: 20 Nov 2024

Section 1 – Introduction

This manual defines the structural repair criteria for primary and secondary structures of the A320 family.
It includes:

- Allowable damage limits.
- Inspection procedures.
- Approved repair methods.
- Rework and corrosion prevention guidelines.

Use of Manual:
SRM repairs may be carried out without engineering approval only within published limits. Any repair outside these limits requires an approved Repair Scheme (RS).

Section 2 – Damage Assessment

Damage Type	Description	Allowable Limit	Repair Method
Dent	Depth ≤ 1.5 mm	Blend-out	SRM 53-30-01
Scratch	Depth ≤ 10% of material thickness	Polish	SRM 51-75-02
Crack	Length ≤ 5 mm	Stop-drill	SRM 51-30-00

Section 3 – Example Repair: Fuselage Skin Dent

Procedure:

1. Clean surface with approved solvent (MEK).
2. Mark the damaged area with a fine-tip marker.
3. Use depth gauge to measure dent.
4. Blend with fine-grit emery cloth until smooth.
5. Apply Alodine 1200 and primer PR-143.
6. Refinish per SRM 51-75-00.

Inspection:
Confirm no residual deformation via visual and NDT check (Eddy current).

Section 4 – Composite Structure Repair

Composite components (fairings, radomes, and access panels) require vacuum bag and controlled temperature curing.

Curing Cycle Example:

- Temperature: 120°C ± 5°C
- Time: 2 hours
- Pressure: 14 psi

Section 5 – Corrosion Control

Apply corrosion inhibiting compound (CIC) every 24 months or after any wet assembly disassembly.
Approved compounds:

- BMS 3-23 Type II
- Dinitrol AV30

Appendix – Repair Drawing Index

Drawing No Description

SRM-53-301 Frame Repair Doubler Installation

SRM-54-210 Horizontal Stabilizer Panel Patch

SRM-56-110 Wing-to-body Fairing Rework

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