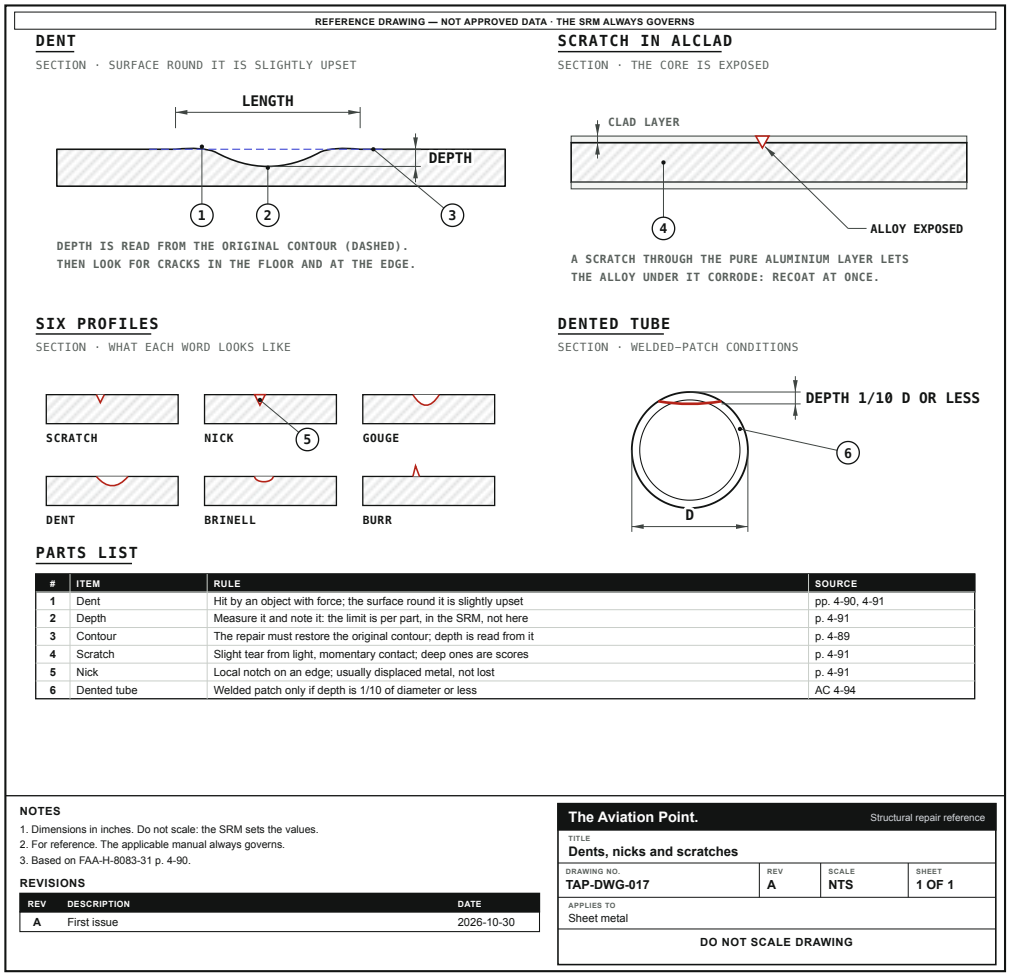
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Dents, Nicks and Scratches: What Smoothing Can Fix and What It Cannot

Dent · nick · scratch · gouge · what the SRM decides



After FAA-H-8083-31 pp. 4-87 to 4-91 and AC 43.13-1B 4-94. Typical only: the SRM gives the limits.

What to do with each

Damage	Inside the SRM limit	Beyond it
Scratch	Smooth or blend it out; recoat bare Alclad at once	Patch, or replace
Nick	Smooth out the notch so no sharp corner is left	Patch, or replace
Dent	Smooth, sand or hammer out, without adding material	Patch, insertion or replace
Dent with a crack	Treat as a crack: stop hole, then reinforce	Patch, or replace
Gouge	Check whether metal is lost or only displaced; blend if the SRM permits	Patch, or replace
Dented tube	Welded patch only if depth is 1/10 of the diameter or less	Sleeve, or replace

Key points

- **Limits come from the SRM,** by part. Nothing is negligible by default.
- **Check for cracks** and abrasions first; a crack changes the class.
- **Alclad:** a scratch through the cladding exposes the alloy; recoat.
- **Blending removes metal:** stay inside the SRM depth.
- **Dented steel tube:** depth 1/10 of diameter or less for a welded patch.

Step by step

1. Clean and look at the whole load path.
2. Check the dent for cracks and abrasions.
3. Look up the negligible limit in the SRM.
4. Smooth, blend or hammer out inside it.
5. Restore the finish; inspect often.

SOURCES · FAA-H-8083-31, AMT Handbook — Airframe, Volume 1, Chapter 4 · AC 43.13-1B with Change 1 — Acceptable Methods, Techniques, and Practices

SCAN · OPEN THIS GUIDE
theaviationpoint.com/sheet-metal/dents/

Educational reference only, not approved data. Always consult the applicable SRM, AMM, or AC 43.13-1B and your certifying authority.

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