Land Rover Standard Operating Procedure

Aluminium coating process for new replacement parts

Aluminium Parts

Increasing numbers of Land Rover vehicles have aluminium body panels that require careful handling when being replaced or repaired. New parts are delivered with a protective coating (e-coat) which should not be removed. The following processes MUST be used. Failure to use the correct process will invalidate the warranty of the part and vehicle. Always refer to the product Technical Data Sheets (TDS) where applicable.

01. New non-damaged replacement part preparation

- Clean part according to TDS.
- Use a lint free cloth to clean the part. Do not allow product to dry on the surface.
- Wipe dry with a clean lint free cloth.
- Sand the part according to TDS.

- Do not break through the e-coat.
  If the e-coat is broken through go to step 02.
- Clean according to TDS.
  Go to step 05.

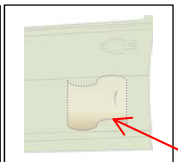
02. New damaged replacement part preparation Part A

- Clean part according to TDS.
- Use a lint free cloth to clean the part. Do not allow product to dry on the surface.
- Wipe dry with a clean lint free cloth.
- Identify the extent of the damage. For dents, scratches or breaks in the e-coat prepare with tools dedicated to aluminium processing.

- Prepare and clean the damaged area according to TDS.
  Go to step 03.

03. New damaged replacement part preparation Part B

- **Caution**
  Do not apply polyester stopper or body filler direct to aluminium.
- <u>All exposed bare aluminium</u> must be coated with an approved Epoxy Primer <u>Before</u> applying stopper or filler.



- Mix Epoxy Primer and apply to the damaged area according to TDS.
- Dry and sand the Epoxy Primer according to TDS. **Do not break through**. For **polyester repairs** go to step 04.
- Clean according to TDS.
  Go to step 05.

04. New damaged replacement part preparation Part C

- Clean part according to TDS.
- Mix and apply the polyester material to the sanded primer.

- **Caution**
  Do not apply the polyester stopper or body filler direct to aluminium.
- Dry and sand the polyester material according to TDS.
- Clean according to TDS.
  Go to step 05.

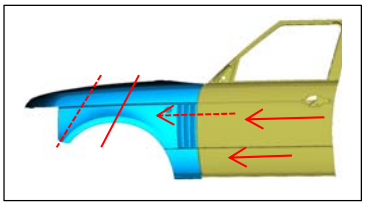
05. New or repaired replacement part priming

- Repaired or new parts with sanded e-coat can be primed with an approved 2K primer or surfacer.
- Mix 2K primer or 2K surfacer and apply to the entire part or repair zones.

- Dry and sand the primer according to TDS.
- Clean the primer according to TDS. Reinstate sealer as required.
  Go to step 06.

06. Basecoat colour for primed and sanded blend areas

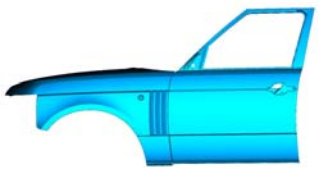
- Clean according to TDS.
- Primed and sanded parts can now be painted with approved basecoat material.
- Mix and apply the basecoat colour according to the TDS.



- Dry according to TDS.
  Go to step 07.

07. Clear coat for base coated or fine sanded blend areas

- After drying the base coat the approved clear coat can be mixed and applied.
- Mix and apply the clear coat according to TDS.



- Dry according to TDS.