

COLLISION REPAIR INFORMATION

FOR THE TOYOTA DEALER

TITLE: REPAIR PROCEDURES FOR
RUST-RESISTANT SHEET METAL

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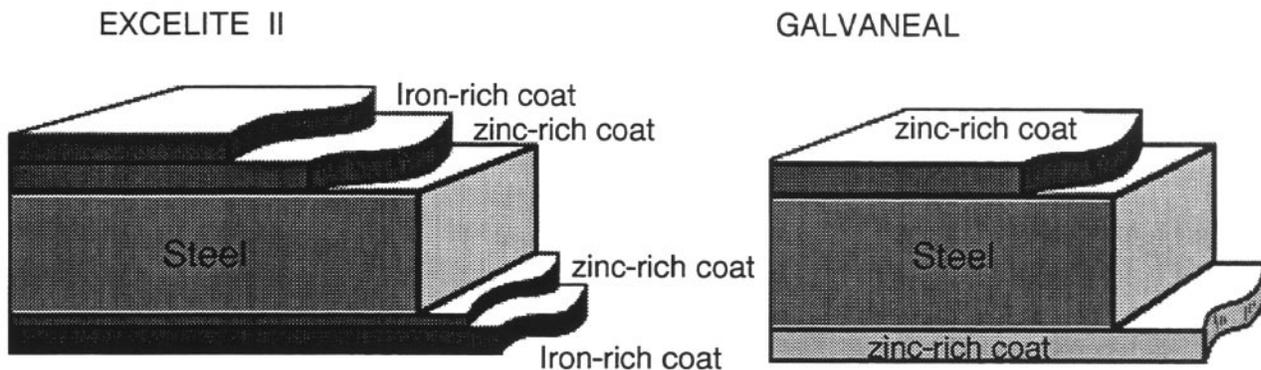
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MODELS: ALL

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Toyota continues using advanced technology to prevent outer body panel rust-through. A new sheet metal coating process increases protection from rust and corrosion. This coating is a two stage process. The first stage is a galvanized layer with a high concentration of zinc. The second stage is a galvanized layer with a high concentration of iron. This type of rust-resistant sheet metal is called Excelite II. The second type of sheet metal used is called Galvaneal. It has a single zinc-rich coating on both sides.



NOTE: To find out which coating is used on a panel, refer to the Repair Manual For Collision Damage appropriate to the model.

Advantages of Excelite II are:

- The inner layer (zinc-rich coat) provides excellent adhesion to the base steel and excellent rust and corrosion protection.
- The outer layer (iron-rich coat) provides excellent paint adhesion, plus the low zinc content bonds very well with the first layer.

SHEET METAL (cont'd)

CAUTION: Body fillers and two component polyputties applied over bare Excelite II or bare Galvaneal metal substrates will not adhere adequately. Blistering or peeling may result from this practice. An epoxy primer must first be applied to the bare metal before application of body filler. See illustration B. When using a wash primer over Excelite II or Galvaneal, you must also use epoxy primer before applying body filler. See Illustration C.

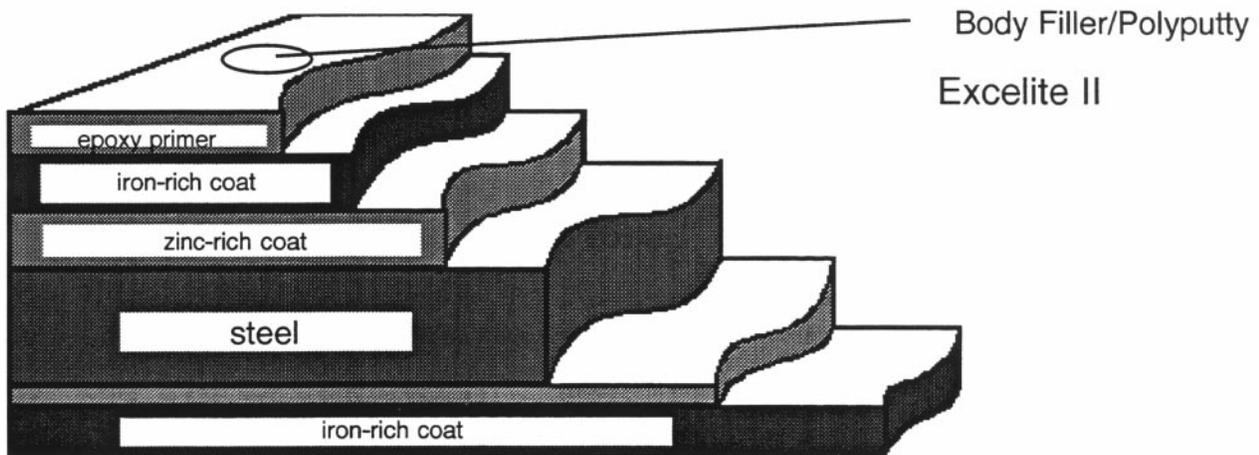


Illustration B.

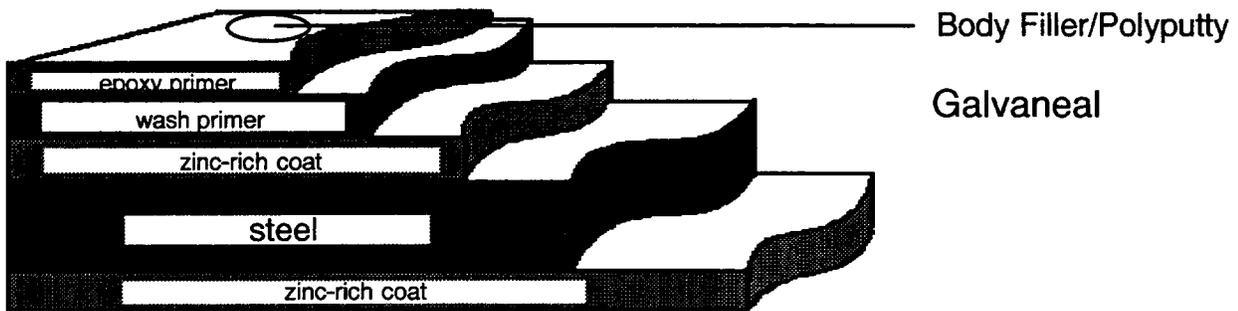


Illustration C.

SHEET METAL (cont'd)

The following repair procedure is recommended:

- Degrease the panel using wax and grease remover (follow VOC rules for your area).
- Prepare the sheet metal.
- Straighten as necessary.
- Apply epoxy primer or wash primer over bare metal. Do not apply body filler over bare metal.
- Apply body filler as recommended by the product supplier. Additional tips for body filler application are in a self-study video-based training course entitled Toyota Minor Body Panel Repair (PN 00415-10001). The complete course includes a 20 minute video, technician reference guide and a quick-reference job aid.
- Sand the body filler using progressively finer grades of sandpaper. Begin with 40 grit open coat dry sandpaper, followed by 100 grit open coat dry sandpaper, then finish with 220 grit open coat dry sandpaper.
- Use two-component (catalyzed) putty over the body filler only if necessary. This product is designed for filling minor imperfections in the filler and should be used sparingly.
- Apply epoxy-based primer or urethane-based wash primer. These products promote adhesion and provide protection against rust and corrosion. Follow the paint manufacturer's recommendations for flash time, solvent selection, dry time, etc.
- Apply two-component primer-surfacer (follow local VOC rules).
- Apply high quality urethane top coats. Follow the paint manufacturer's recommendation for reducer selection. Use a paint gun setup appropriate to material being applied. This includes the correct size needle, nozzle, air cap selection, and air pressure settings.

NOTE: It may be necessary to use heat to accelerate the dry time of plastic body filler. Exercise care to avoid overheating; the maximum sheet metal temperature recommended is 120°F. Excess heat causes blistering, peeling, and loss of adhesion.