SMC Repair Procedures

Some Guidelines for SMC Repair

- Clean scuff and solvent wipe all areas to be repaired.
- For added strength and durability, V-groove and reinforce on at least one side of an SMC joint using a tacky mesh tape or equivalent.
- When partial panel replacement is performed, use two inch backing plates made from SMC or E-coated steel, as a reinforcement for all butt joints

Repairing Sheet Molded Compound Panels

1. Scuff area where repair is to be performed.
2. Clean bond area with lint-free rag using a water-based cleaner.
3. Cracks should be grooved and reinforced on at least one side of an SMC joint using a tacky mesh tape or equivalent.
4. Sectioning joints require backing strips 50mm (2 inch) wide, cut strips from leftover pieces of SMC.
5. Use US Chemical and Plastics System 2000 Structural Adhesive or equivalent (the US Chemicals customer service number is 1-800-321-0672). Apply ahesive to the entire 'joint' area extending across the cut lines and across the backer. Use tacky mesh tape or an equivalent reinforcement matting. Allow to cure according to adhesive manufacturer's recommendations.
6. Apply a thin coat of Goodwrench Structural Bonding Epoxy (P/N 12345726) or equivalent as a final coat to blend in the repair to resemble OEM appearance.

Bonding Undamaged SMC to Epoxy Coated Steel

1. Prime all bare metal areas with an anti-corrosion primer such as PPG's DP90, or equivalent. Some paint manufacturers recommend a pre-primer when bonding to epoxy. Always refer to paint manufacturer's recommendations. Do not combine paint systems.
2. Clean bond area with a lint-free rag using a water-based cleaner.
3. Scuff both surfaces to be bonded using a scuff pad such as 3M's Scotch-Brite "Red" scuff pad P/N 07447 or equivalent.
4. Ensure that the surface is clean and dry before applying adhesive. Use compressed air. Do not final wipe surface with hand or rag.
5. Determine whether adhesive is applied to the vehicle or the replacement panel. Refer to specific procedure of part being replaced.
6. Apply a consistent adhesive bond to prepared surfaces.
7. Mechanically retain panel in place to "wet out" adhesive along entire bonding surface.
8. Allow to cure according to adhesive manufacturer's recommendations.