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Vette



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FOR EVERY GENERATION

**CRUISING BOURBON
COUNTRY**
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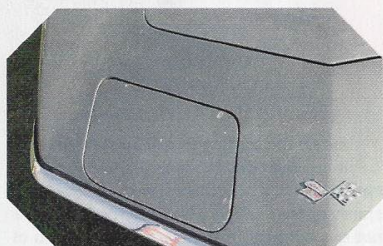
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**INCREDIBLE
TWIN-TURBO
'65 STREET CAR**

GIVING YOUR CORVETTE'S BODYWORK A FACELIFT CAN BE EASIER THAN YOU THINK

Since Corvette bodies are made of a different material than most other production cars, repairing minor damage can require alternative materials and techniques. While fiberglass and SMC (Sheet Molded Compound, which is found on later models) have the advantage of being rustproof, such composites are subject to their own sets of problems. These range from crazing (also called "spider webbing") to cracking, usually from a slight impact. More-severe or widespread body damage may require the complete replacement of large components - a job best left to pro - so we'll limit our focus on minor damage that can be repaired in your own driveway.



13 Fine crazing—also known as “spider-webbing”—can occur in older fiberglass due to age, weathering, and slight impacts.



14 Plastex can be used to repair just about any type of Corvette panel, from traditional fiberglass to urethane to SMC. (Highly flexible parts might require using another type of Plastex kit.) This particular fender panel had a slight crack, but we bent it open more for purposes of illustration.



15 To ensure a good bond, start by roughing up the inner surface of the area to be repaired.



16 Apply painter's tape to the outside area of the crack or hole.



17 The Plastex kit consists of three bottles of acrylic powder (clear, white and black, and colored additives are available for matching hues), a liquid hardener (methyl acrylate monomer), and a special untreated, non-reactive fiberglass cloth, which can be used on larger repairs.



18 Applying the powder can be done in a couple different ways, depending on the type of repair. For smaller damage, or vertical surfaces, first squeeze some powder into a small cup (provided in the kit).

We'll start with a slight surface imperfections. If polishing and waxing isn't producing the smooth finish you'd like to see on your beloved Corvette, consider using 3M Scratch Remover, which is designed to minimize defects that don't penetrate the clearcoat (assuming your vehicle has a two-part urethane paint). This product is fairly simple to use, requiring only three separate steps and common household drill. We tried the 3M product on a C5 that had

a few scratches on it, and they all but disappeared. For cracks or crazing (the latter is usually seen on older fiberglass bodies), a type of adhesive called Plastex can repair a wide range of materials. In addition to fixing fiberglass or SMC, it can be used to fabricate small components, or even metal (using a slightly different version of the repair kit). The inventor of Plastex, Tim Lewis of G.T. Motorsports, has some pretty impressive credentials in chemical engineering. In addition to being trained at the Northrop Institute of Technology, he's worked on the adhesive tiles used on NASA's space shuttle, and served as manager of Harrah's car collection. So he knows his way around composite materials and how to take care of fine automobiles. Using Plastex is a straightforward process, easier than working with resin and fiberglass. Unlike conventional resin and catalyst, for most repairs the mixing ratio doesn't have to be in precise proportions, as long as the powder is thoroughly saturated. Depending on the type of damage, Plastex powder can be used with or without the cloth included in the kit, and it dries very quickly in a variety of weather conditions, so that you can sand it and prep for paint in short order.

* Fine crazing - also known as "spiderwebbing" - can occur in older fiberglass due to age, weathering, and slight impacts. * Plastex can be used to repair just about any type of Corvette panel, from traditional fiberglass to urethane to SMC. (Highly flexible parts might require another type of Plastex kit.) This particular fender panel had a slight crack, but we bent it open more for purposes of illustration. * To ensure a good bond, start by roughing up the inner surface of the area to be repaired. * Apply painter's tape to the outside area of the crack or hole. * The Plastex kit consists of three bottles of acrylate powder (clear, white and black, and colored additives are available for matching hues), a liquid hardener (methyl acrylate monomer), and a special untreated, non-reactive fiberglass cloth, which can be used on larger repairs. * Applying the powder can be done in a couple of different ways, depending on the type of repair. For smaller damage, or vertical surfaces, first squeeze some powder into a small cup (provided in the kit). * Pour the hardener into a smaller bottle, and cap it with applicator tip. * Add a couple of drops of hardener to the powder, but don't saturate it completely, as you'll use the applicator tip to pick up a small droplet. * Place the droplet into the crack and let dry. * Alternatively, you can sprinkle the powder directly into the crack or hold to be repaired (as long as it can be laid horizontally, so the powder doesn't fall out). * Saturate the powder thoroughly. You don't need to measure the ratio; just make sure it's wetted completely. * Allow the mixture to dry, checking by touch after 15 minutes or so. * Remove the tape from the outer surface of the part. * Use the Dremel or other die grinder to create a groove in the surface. The following steps also apply to repairing crazing or surface cracks on fiberglass. * Apply powder (or wet droplets) to the groove in the outer surface. * Make sure the powder is completely saturated with hardener. * Use the spreader to force the

mixture into the groove and even out the surface. * After the mixture dries, sand the surface evenly until smooth, and then prep for paint.

Have you Tried PLASTEX Plastic Repair?

It has been around 16 years but most people still haven't heard about PLASTEX, an amazing moldable plastic repair kit that's used for everything from filling holes in wood, plastic, or glass to restoring damaged threads. "It becomes part of whatever you're fixing" says inventor Tim Lewis of G.T. Motorsports. Customers appreciate how easy it is to use. Though it comes in two parts, a powder and a liquid, there isn't a specific ratio and it sets up completely in an hour. Videos on the PLASTEX website show different ways to use it - putting the powder on a piece repaired, then adding the liquid to bend in, or mixing the liquid into the powder before applying it. To fabricate a new part, such as broken tab on a plastic part, warm the kit's reusable molding bar to 120 ° until it's like putty, and wrap it around another tab. Then let it harden before removing it. "It'll mold such detail that if paint has superficial scratch, it replaced that," Lewis says. "And the mold is reusable. We well larder sheets for bigger projects." To repair a stripped thread, coat a lubricated screw with PLASTEX and screw it in. Once it dries, remove the screw. "PLASTEX" doesn't shrink or expand so you get the same exact size," Lewis says. Originally marketed to the motorcycle and automotive markets, the repair kits are now used in hundreds of industries. PLASTEX can be used to fill to bridge gaps and repair pvc and irrigation pipe. It cures in cold temperatures to make repairs on snowmobiles. Plastex is available on the company's website as well as through distributors, Lewis says. It comes in black, white and clear and starts at \$13.95 for a small kit to make a tab or repair a 3-in crack. Several size kits and refills are available. Check out the website for details and how-to- videos.

[TECH] PLASTIC SURGERY



19 Pour the hardener into a smaller bottle, and cap it with an applicator tip.



20 Add a couple drops of hardener to the powder, but don't saturate it completely, as you'll use the applicator tip to pick up a small droplet.



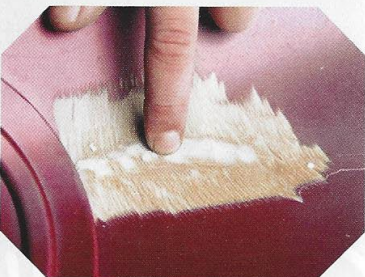
21 Place the droplet into the crack and let dry.



22 Alternatively, you can sprinkle the powder directly into the crack or hole to be repaired (as long as it can be laid horizontally, so the powder doesn't fall out).



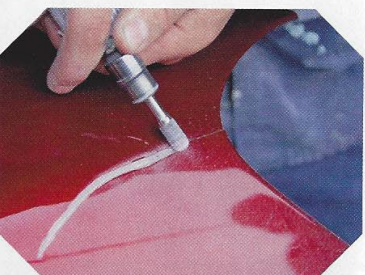
23 Saturate the powder thoroughly. You don't need to measure the ratio; just make sure it's wetted completely.



24 Allow the mixture to dry, checking by touch after 15 minutes or so.



25 Remove the tape from the outer surface of the part.



26 Use a Dremel or other fine grinder to create a groove in the surface. The following steps also apply to repairing crazing or surface cracks on fiberglass.



27 Apply powder (or wet droplets) to the groove in the outer surface.



28 Make sure the powder is completely saturated with hardener.



29 Use a spreader to force the mixture into the groove and even out the surface.



30 After the mixture dries, sand the surface evenly until smooth, and then prep for paint. **VETTE**