



SMC Panel Repair Guide

	SMC Repair	Finishing Cream
Work Time	60 minutes	3 minutes
Sand Time	10-15 minutes at 180°F	10-15 minutes
Paint Time	30 minutes at 180°F	30 minutes

* All data taken at 23°C (74° F)

Introduction:

PLIOGRIP by Valvoline SMC Repair is a two-component structural adhesive cartridge system intended for use in repair of rigid or fiber-reinforced plastics (e.g., SMC, fiberglass, carbon fiber and SRIM body panels). This document is intended as a general guide to making a successful repair. For detailed guidelines, refer to the specific OEM repair procedure.

NOTE: PLIOGRIP by Valvoline SMC Repair and Finishing Cream do not require use of a static mixer and may be dispensed on pallet board and mixed by hand with spreader. As an option, static mixer may be used.

Panel Preparation:

1. Vehicle should be at room temperature before beginning any repair. Applying heat to the damage area will ensure all moisture is out of the fibers.
2. Use wax and grease remover before sanding the repair area. **Note: Do not allow solvent to absorb into fibers.**
3. Sand the back side with 80-grit sandpaper. Blow off with clean, dry air.
4. Grind the front side, and open up the damage area. Round off the edges about one inch beyond the cracked area (see Illustration 1).
5. Blow off with clean, dry air.

Backer Patch:

1. Cut a piece of Fiberglass Reinforcing Cloth one inch larger than the damage area.
2. Place a piece of masking tape over the front side of repair area.
3. Remove the cap of the adhesive cartridge by prying the uppermost slot with a flat screwdriver. The cap may be retained for future storage.
4. Properly place the cartridge into the gun. Dispense a small amount of adhesive to ensure both sides flow evenly. Dispense the proper amount onto a mix pallet and mix by hand with a spreader.
5. Apply a generous amount of adhesive to the back side, and spread out smooth. Lay the pre-cut fiber reinforcement onto the adhesive and saturate with a spreader. Once smoothed out, apply a thin top coat, and spread smooth.
6. Apply heat with a heat gun or heat lamp for 10-15 minutes at 180° F.

Cosmetic Repair:

1. Remove the tape from the front side, and sand out any of the adhesive, tapering into the backing patch.
2. Build a pyramid reinforcing patch on the front side with a minimum of three layers. This step is very important as the repair area needs to simulate the original panel for expansion and contraction. This will eliminate halos and bulls-eyes.
3. Cut the first piece slightly smaller than outer edge of the repair area. The next two pieces need to be smaller than the first (see Illustration 2).

4. Apply a thin coat of adhesive to the repair area. Lay the smallest piece on first, and saturate with a spreader, making sure no air is trapped between the cloths. Next, apply another thin coat of adhesive, and lay the next larger piece in, and follow with largest piece. Apply a final top coat, and smooth out.
5. Apply heat with heat gun or heat lamp at 180° F for 10 minutes. Allow to cool.
6. Sand with 80-grit sandpaper, cutting slightly lower than the surface of the panel.
7. Apply a final coat of PLIOGRIP by Valvoline Finishing Cream, and feather out into panel.
8. Apply a heat lamp for 30 minutes at 180° F. This will prevent shrinkage after paint bake.
9. Allow to cool, and sand with 180-grit sandpaper, working finer.
10. Prime and paint per paint manufacturer's recommendation.

Illustration 1:

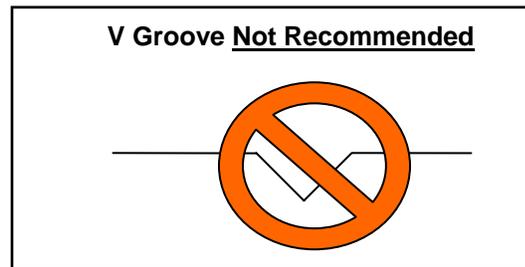
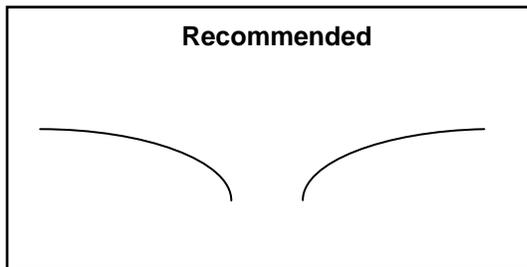
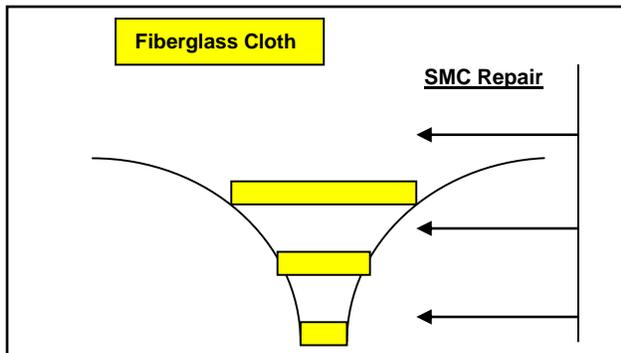


Illustration 2:



CAUTION: This product contains ingredients which could be harmful if mishandled. Contact with skin and eyes should be avoided, and necessary protective equipment and clothing should be worn. Do not breathe vapor or dust. Application of this product and all sanding activities should be performed in areas with adequate local exhaust ventilation, using ventilation equipment designed to reduce exposure to chemical vapors and dust.

IMPORTANT INFORMATION: Refer to the Material Safety Data Sheet (MSDS) for information on safety and handling before use. Ashland's cartridge system is sold as a kit, and performance has been verified using the kit content. Do not attempt to use other mixers in the application of this product. Additional mixers are available. This Repair Guide is incorporated as part of Ashland's Recommendations for Use of PLIOGRIP by Valvoline products. Failure to adhere to recommendations in this Repair Guide and the Instructions sold with the product voids the Lifetime Warranty.

1.800.PLIOGRIP www.PliogripbyValvoline.com

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