Class 6-8 Heavy Duty Truck SMC/Fiberglass Panel Repair Guide

	SMC Repair	Finishing Cream 8310	
Work Time	60 minutes	10 minutes	
Sand Time	10-15 minutes at 180°F	45 minutes or 3-5 @ 180F	
Paint Time	30 minutes at 180°F	30 minutes	

Introduction:

* All data taken at 23°C (74° F)

PLIOGRIP by Valvoline SMC repair products include SMC Repair, and Finishing Cream, each of which is a two-component adhesive sold in a cartridge system. These products are intended for use in repair of rigid or fiber-reinforced plastics (e.g., SMC, fiberglass, carbon fiber and Metton plastics). This document is intended as a general guide to making a successful repair. For detailed guidelines, refer to the specific OEM repair procedure.

Panel Preparation

1. Vehicle should be at room temperature before beginning any repair. Applying heat to the damaged area will insure 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 sand paper. 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**. (Note: Two layers may be needed for extra support)**
2. Cut a piece of the plastic release film that was attached to the reinforcing cloth two inches longer than the reinforcing cloth.
3. Place a piece of masking tape over the front side of repair area.
4. ***SMC Repair*** may be used for matting of the back-side of the repair. Remove the cap of the adhesive. The cap may be retained for future storage.
5. Properly place the cartridge into the gun. Prior to attaching the mixer, dispense two inches of adhesive to ensure both sides flow evenly.
6. Apply a generous amount of ***SMC Repair*** to the release film and spread smooth. Lay the pre-cut reinforcing cloth into the adhesive using a spreader saturating the cloth. Apply another layer of adhesive to the surface of the cloth and spread smooth.
7. Pick up release film and lay the cloth over the back-side of the damage area. Smooth out air pockets with spreader. Heat cure with heat gun or heat lamp @ 180F for 10 minutes.

Font-Side Repair

1. Remove the tape from the front side and sand out any of the adhesive, tapering into the backing patch.
2. ***SMC Repair*** adhesive is required for the front side. Build a pyramid reinforcing patch for the front side with ***SMC Repair*** adhesive and ***Fiberglass Reinforcing Cloth*** with a minimum of three layers. This step is very important as the repair area needs to simulate the original panel in order to withstand expansion and contraction. This method will eliminate halos and bulls eyes. See Illustration 2.
3. Cut the first piece of ***Fiberglass Reinforcing Cloth*** slightly smaller than outer edge of the repair area. Cut the next two pieces so that they are smaller than the first. See Illustration 2.
4. Remove the cap of the ***SMC Repair*** adhesive cartridge. Retain the cap for future storage. Properly place the cartridge into the gun. Prior to attaching the mixer, dispense a small amount of adhesive to ensure both sides flow evenly. Attach mixer and dispense two inches for proper mix.
5. Apply a thin coat of adhesive to the repair area. Lay the smallest piece of cloth in first and saturate with a spreader, making sure no air is trapped between the layers of cloth. Next apply another thin coat of adhesive and lay the next larger piece of cloth in. Follow with largest piece. Apply a final top coat of adhesive and smooth out.
6. Apply heat with heat gun or heat lamp at 180° F for 10-15 minutes. Allow to cool.
7. Sand with 80 grit sandpaper, cutting slightly lower than the surface of the panel.
8. Apply a final coat of PLIOGRIP by Valvoline ***Finishing Cream*** and feather out into panel.
9. Apply a heat lamp for 30 minutes at 180° F. This will prevent shrinkage after paint bake.
10. Allow to cool and sand with 180 grit sandpaper, working finer.
11. Prime and paint per paint manufacturer's recommendation.

Illustration 1:

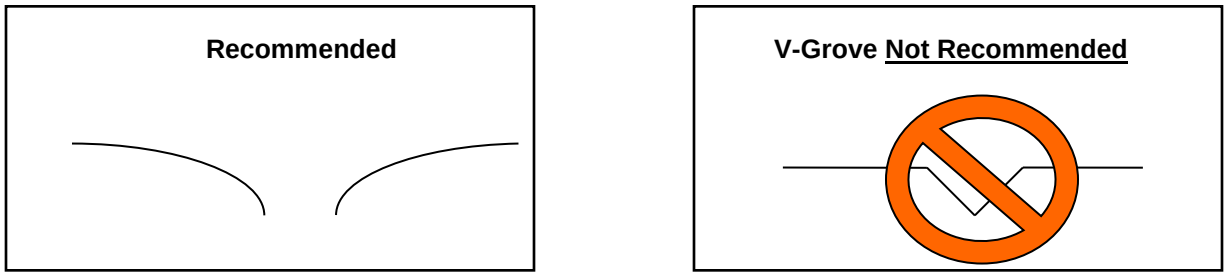
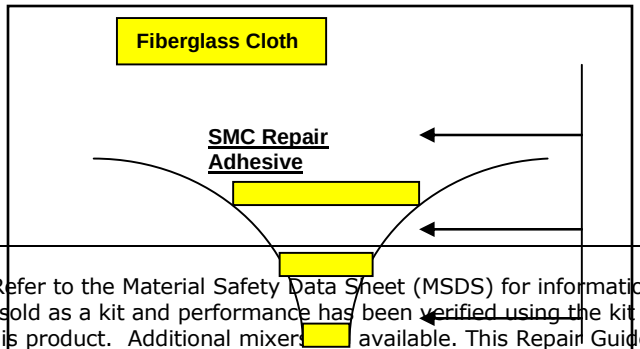


Illustration 2:



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.

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