

|              |                 |
|--------------|-----------------|
| Tech Tip No: | TT-14-021       |
| Group:       | 61-Cab and Body |
| Issue Date:  | 8/1/2014        |

## T E C H T I P

---

### 08MY-10MY Conventional-Cracked Hood Repair Procedure

**SUBJECT VEHICLES:**

2008MY-2010MY Conventional trucks

**Note:** This technical tip is provided as technical information and is not authorization for a warrantable repair.

**OVERVIEW:**

This procedure illustrates a worst case scenario repair procedure, the process and materials being used are the same for all repairs. Depending on the location of the repair, access may be limited in some cases. Ensure that the repair area extends at least 2 inches on either side of the cracked area.

The epoxy specifications follow this procedure.

All Materials used can be obtained from:

U.S. Composites <http://www.uscomposites.com>  
 5101 Georgia Avenue  
 West Palm Beach, FL 33405  
 Phone No. 561-588-1001  
 Fax No. 561-585-8583

**Materials Needed:**

| Quantity | Part Number | Description                         |
|----------|-------------|-------------------------------------|
| 2 Yards  | FG-7725-38  | 8.5 oz x 38 Twill FG Cloth          |
| 1 Quart  | EPOX-635312 | 635 Thin Epoxy with Medium Hardener |
| 5        | BR-TA20     | 2" Brush                            |
| 5        | CON-MM032   | 32 oz Mixing Tub                    |

|              |                 |
|--------------|-----------------|
| Tech Tip No: | TT-14-021       |
| Group:       | 61-Cab and Body |
| Issue Date:  | 8/1/2014        |

## TECH TIP

---

### REPAIR PROCEDURE:

**1.** Remove the four bolts and the hood hinge bracket in the area to be repaired.



**2.** Rough up the surrounding area of the crack at least 2 inches on either side of the crack.



**3.** Grind out all the loose material in the damaged area. Ensure a rough surface for proper repair adhesion.



|              |                 |
|--------------|-----------------|
| Tech Tip No: | TT-14-021       |
| Group:       | 61-Cab and Body |
| Issue Date:  | 8/1/2014        |

## TECH TIP

4. Thoroughly clean the area with wax and grease remover.



5. Lay the cloth on the area to be repaired and trim it for a proper fit.

**Note:** Use alignment marks on the cloth and the repair area to line up the cloth once the resin is applied.



6. Use the fitted piece as a template to cut two more pieces. Use 3 layers of cloth on the repair area.



|              |                 |
|--------------|-----------------|
| Tech Tip No: | TT-14-021       |
| Group:       | 61-Cab and Body |
| Issue Date:  | 8/1/2014        |

## TECH TIP

---

**7.** Mask the surrounding area to prevent damage to the hoods outer surface.

**Note:** If any bolt holes are to be covered, apply grease to the threads to prevent the resin from sticking to them.



**8.** Mix resin with the hardener and coat the repair area with resin.

**Note:** Mix resin in small batches (approximately 4 oz) to prevent curing.



**9.** Apply the first layer of cloth to the resin coated area. Press the cloth into the resin removing all of the air pockets.



|              |                 |
|--------------|-----------------|
| Tech Tip No: | TT-14-021       |
| Group:       | 61-Cab and Body |
| Issue Date:  | 8/1/2014        |

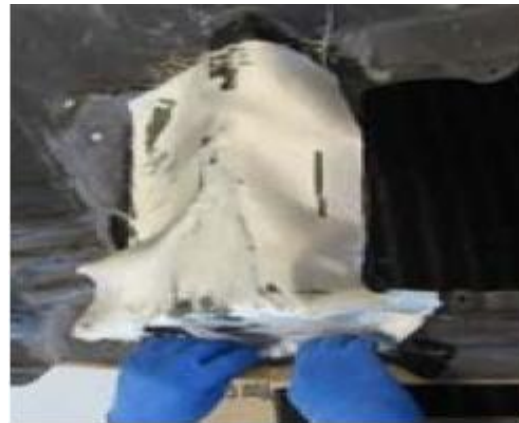
## TECH TIP

---

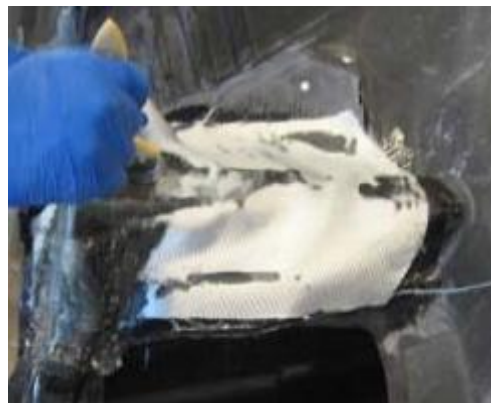
**10.** Fully saturate the applied cloth with a coat of resin.



**11.** Apply a second layer of the previously cut cloth removing the air pockets as previously.



**12.** Fully saturate the second layer of cloth with resin.



|              |                 |
|--------------|-----------------|
| Tech Tip No: | TT-14-021       |
| Group:       | 61-Cab and Body |
| Issue Date:  | 8/1/2014        |

## TECH TIP

---

**13.** Apply the third and final layer of cloth.



**14.** Fully saturate the final layer of cloth with resin removing all of the air pockets.



**15.** Repeat the same steps for the reverse side of the cracked area if the reverse side is accessible. Use 3 layers of cloth and resin as previously.



|              |                 |
|--------------|-----------------|
| Tech Tip No: | TT-14-021       |
| Group:       | 61-Cab and Body |
| Issue Date:  | 8/1/2014        |

## TECH TIP

**16.** Once the material fully cures, clean out all bolt and clip holes that may have been filled in during the repair.



**17.** Reassemble any brackets that were removed to complete the repair. Reinstall the hood.



### Specifications for the 635 Thin Epoxy with Medium Hardener

- **Mixing Ratio by Volume:** 3:1
- **Pot Life:** 20-25 Min @ 80F
- **Set Time:** 3-4 Hours
- **Drying Time:** 8-10 Hours

Times indicated can vary based upon the temperature and humidity level.