



## **SERVICE CAMPAIGN**

L SERIES TRUCKS HOOD SERVICE

GROUP: 0-GENERAL  
CAMPAIGN NO: M0390  
DATE: 12-7-2022

**SUBJECT VEHICLES:** Certain 2023 Model Year L-Series hoods may need to have a fiberglass repair performed.

## OVERVIEW

The subject vehicles may need to have a fiberglass repair performed on the truck.

## PARTS:

Part Name	Quantity
1.5 Ounce Fiberglass Mat	As needed
SMC Fiberglass Resin	As needed
SMC Fiberglass Resin Hardener	As needed
80 Grit Sand Paper	As needed
Tack Cloth	As needed
Mixing cup	As needed
2 inch Flat Chip Brush	As needed
1.5 inch Masking Tape	As needed
Loctite Power Grab Heavy Duty Construction Adhesive (or similar)	As needed

**Note:** The Resin must be SMC (sheet molding compound). You must also use the correct cream hardener for the resin. See below for an example.

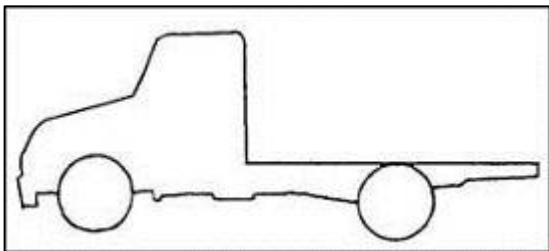


## BEFORE YOU BEGIN:

- Read and understand all instructions and procedures before you begin the work.
- Read and follow all **NOTICES** and **WARNINGS** set forth in this publication. These alerts help to avoid damage to components, serious personal injury, or both.
- Park the vehicle on a flat, level and solid surface.
- Turn off the engine and remove the key from the ignition switch.
- Always wear safety glasses or goggles to protect your eyes.
- Place wheel chocks in front of and behind all wheels to prevent the vehicle from moving

## VEHICLE PREPARATION:

1. Park the vehicle on a level and solid surface. Confirm the engine is stopped, the starter switch is in the off (LOCK) position, and the key is removed.



2. Apply the parking brake. Chock all of the wheels.



**Notice:** Inspect the paint on the hood to make sure there are not any defects or damage.

## REPAIR PROCEDURE:

**WARNING:** Never work under the hood unless the hood is properly supported. Serious personal injury can occur.

1. Following the cab section of the Chassis Workshop Manual, remove the hood from the vehicle and place the hood upside-down.

**Note:** take appropriate steps to ensure that the paint on the hood is not damaged while resting upside-down.

Use a padded blanket or cushion to protect the hood.



**2.** Remove the left and right hood hinge brackets and left and right rubber baffles from inner grille area.



**3.** Relocate the wiring harness by removing the harness retainer clips to allow the harness to lie on the top of the hood.



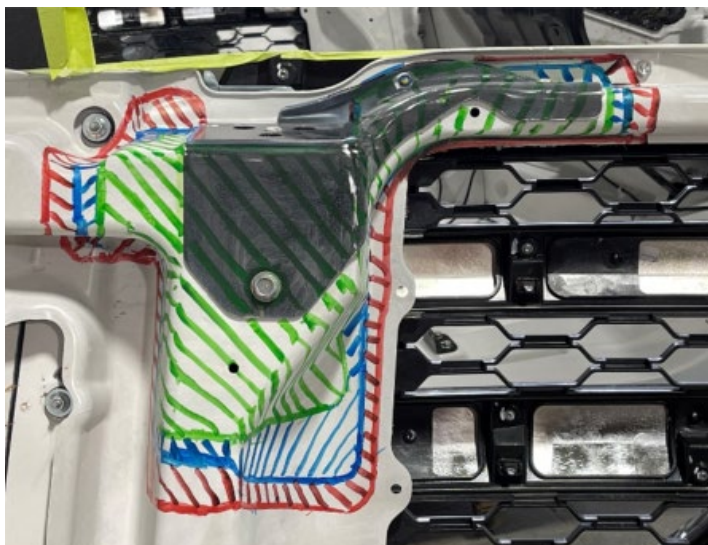
4. Remove the left and right hood support brackets.



**WARNING:** ALWAYS wear eye protection, a face mask, gloves and protective clothing when grinding, drilling, and sanding fiberglass, epoxy resin and adhesive materials. Fiberglass materials may cause mouth, nose, throat, skin and eye irritation. Epoxy resin and adhesive materials may cause skin irritation and eye irritation.

5. Using 80 Grit sand paper, sand the left and right hinge mount areas identified with the striped markings as seen below. You will only sand to take the sheen off of the affected areas. It is not necessary to remove a lot of material.

**Notice:** you will also sand on the metal bracket only in the areas noted in the picture. It isn't necessary to sand where the hinge bracket bolts to the hood bracket.



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6. Using 80 grit sand paper, sand around the hood support bracket mount as identified with the striped markings in the picture below.

**Note:** if there is any excessive adhesive from when the hood was manufactured present at that joint, it will need to be sanded down until smooth.



Clean all sanded areas by blowing off all dust and using a tack cloth to remove all fine dust particles.

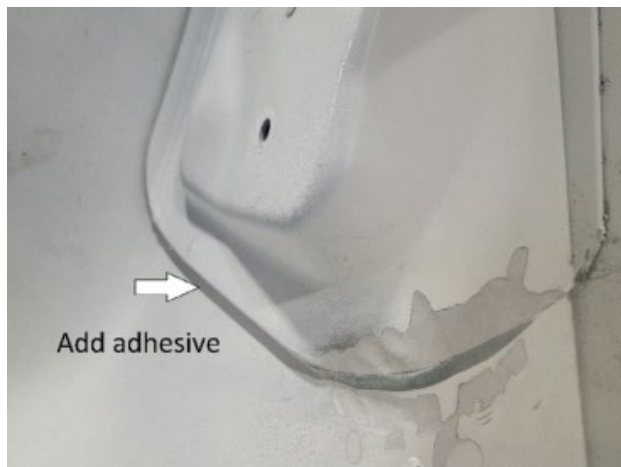
**7.** Use Loctite Power Grab heavy duty construction adhesive (or similar) around the hood hinge mount bracket. Run a lite bead of adhesive and smooth out to create a beveled edge where the yellow lines indicate as shown below. **Do not use an excessive amount of adhesive.**

**Notice:** This beveled edge is intended to reduce the possibility for air to be trapped at the joint when the fiberglass is applied.



If necessary, use Loctite Power Grab heavy duty construction adhesive (or similar) at the joint between the hood support bracket mount and the hood.

**Notice:** If there isn't a smooth transition between the two, use the adhesive to create the beveled edge similar to when applied to the hood hinge bracket.





8. Use masking tape to protect the hood paint around the hood support bracket area.



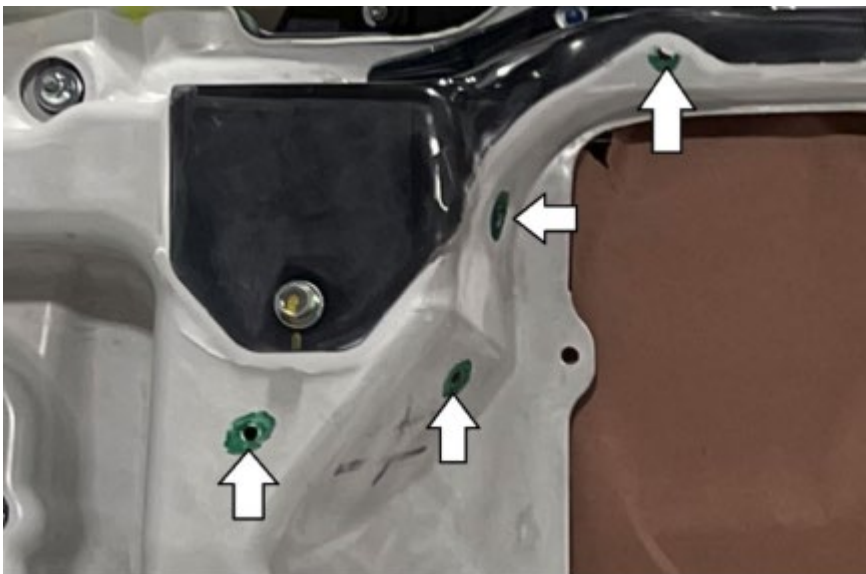
9. Use paper to cover inside of the grille to protect the grille from resin drips.



**10.** Use masking tape and paper to protect the front of the hood/grille from any damage or resin drips.



**11.** Mark with a permanent pen all wire harness retaining clip holes that will be covered with fiberglass. There are 4 holes to mark on each side of the hood.



## Apply fiberglass to hood support bracket mount

**12.** Prepare strips of fiberglass to be used for the left and right side support bracket mount as identified below. The green area will consist of strips of 30mm wide fiberglass and the blue area will consist of strips of 50mm wide fiberglass. Make sure that the strips are long enough to overlap whenever there is a change in direction.



Mix resin with an appropriate amount of hardener and stir until fully combined.

Apply a light coat of resin with the brush to the blue area of the hood and lay the 30mm wide fiberglass over the joint. Apply resin to the fiberglass mat until the fiberglass is saturated, with no dry spots remaining and lying flat on all surfaces. Do not over apply the resin. Pat at the fiberglass to work any air bubbles out from under the fiberglass.

**Notice:** Make sure to keep the seam centered along the length of the fiberglass strip.

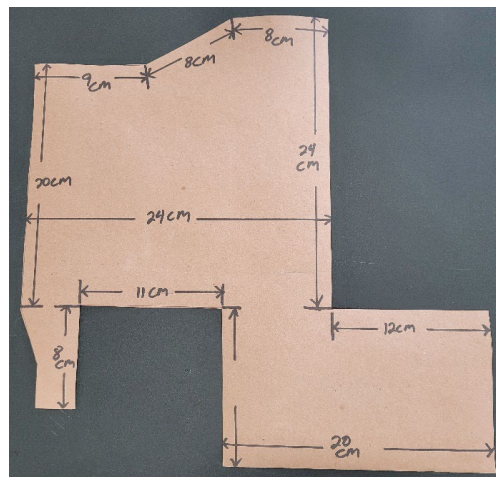
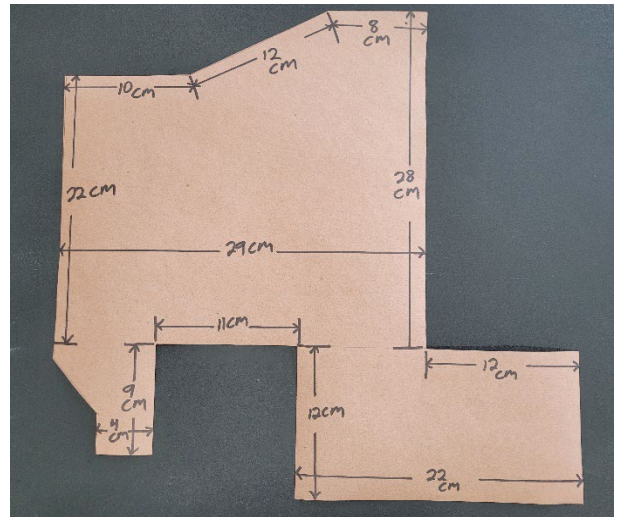
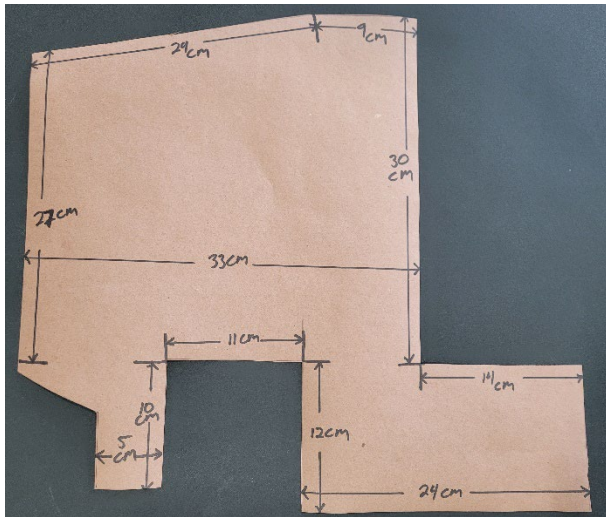
Lay the 50mm wide fiberglass and repeat the process of applying resin to the fiberglass until wet. Do not over apply the resin. Pat the fiberglass to smooth it out and make sure there isn't any air bubbles under the fiberglass.

**Notice:** Make sure to keep the seam centered along the length of the fiberglass strip.

Repeat this process on the other side.

### Apply fiberglass to the hood hinge support bracket area

13. Prepare fiberglass sheets to be used. Use the below pictures to cut out two sheets of fiberglass for each template provided.



**14.** Prior to applying the resin, lay the cut fiberglass sheet over the hood hinge area so that you can mark where the bolt head is so that it can be cut out. Also it may be necessary to make a few cuts to allow the fiberglass to lay properly over the multiple bends. Make your adjustments to the fiberglass prior to using the resin.

**Notice:** Make sure the fiberglass doesn't overhang the inner grille area where the rubber baffles mount when making adjustments.



**Notice:** Do this for all three sizes of fiberglass sheet.

**Notice:** Pay attention to the area that the largest size sheet covers as it will aid when you lay the light coat of resin prior to laying the first sheet of fiberglass.

**15.** Mix resin with an appropriate amount of hardener and stir until fully combined.

Apply a light coat of resin to the area that the largest layer will cover. Apply the largest sheet of fiberglass and apply resin to the fiberglass mat until the fiberglass is saturated, with no dry spots remaining and lying flat on all surfaces. **Do not over apply the resin.** Pat at the fiberglass to work any air bubbles out from under the fiberglass.

**Notice:** do not apply the next layer until you are certain all air is removed.



Repeat the process for each additional sheet of fiberglass.

**Notice:** The order of installation is Largest size first, medium size second and smallest size last.

Repeat the process on the other side of the hood.

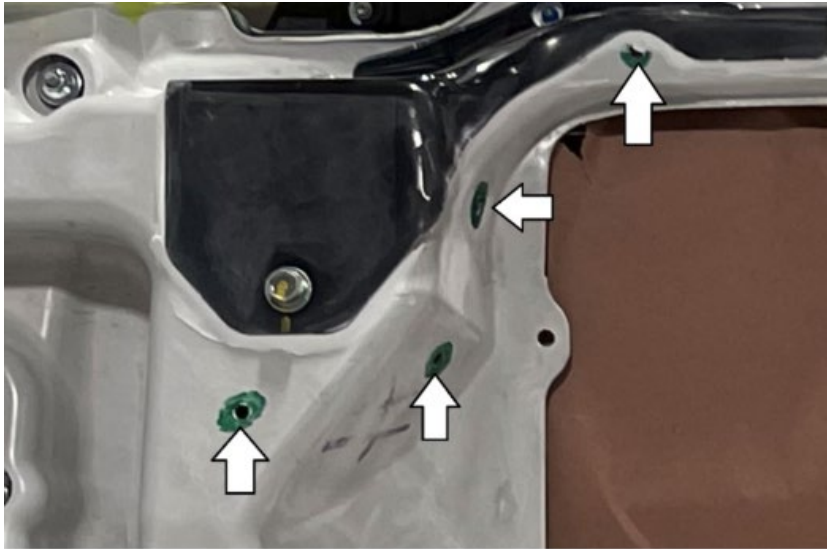
Allow the Fiberglass to set until there isn't any tacky feeling any more.



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**16.** Use 80 grit sand paper to sand over the dried fiberglass to knock down any high spots and loose glass. Do not sand to a smooth surface. If any glass is hanging over the inner grille area where the rubber baffles mount, remove with a die grinder and a sanding wheel.

Drill out the holes that were marked earlier using a 5/16 inch size drill bit.



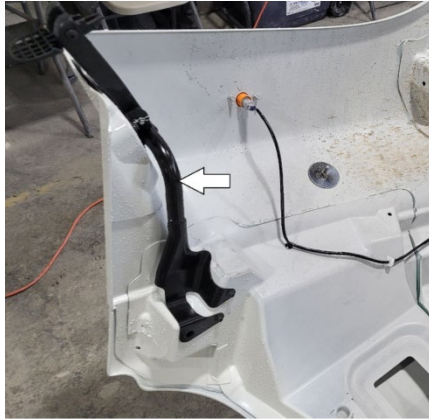
**Notice:** If you are unable to see the location of the holes, shine a flashlight from behind and you can then see the location of the holes.

**17.** Use spray paint to paint over all of the new fiber glass. Use paint that is similar in color to the underside of the hood. Allow paint to dry.

**18.** Remove all tape and protective paper.

**19.** Reinstall the left and right hood hinge brackets.

**20.** Reinstall the left and right hood support brackets.



**21.** Reinstall the left and right rubber baffles from the inner grille area.



**22.** Reinstall the wiring harness clips into their appropriate location.

**23.** Reinstall the hood. For additional information, refer to the cab section of the Chassis Workshop Manual.



## ***FINAL INSPECTION:***

1. To complete this procedure review and confirm the following:
  - Inspect the paint on the hood to make sure there wasn't any damage to the hood while performing this repair.

## ***CLAIM APPLICATION***

*Reimbursable in accordance within the terms and policies of the Hino limited warranties.*

### **Hood Repair:**

- a) Campaign No: M0390
- b) Labor Charge: 6.0 Hours
- c) Warranty Code: 71221
- d) Trouble code: 98
- e) Operation code: 71250AOT
- f) Original failed part: 9999999999

