



Patch Application Guidelines

CHEMICAL PATCH WITH FLOATER



Kwik Patch Pvt., Ltd.,

The Consumables for a Patch Repair



Kwik Patch Pvt., Ltd.,

GUIDELINES FOR PATCH REPAIR - CHEMICAL PATCH WITH FLOATER



- It is important to inspect the Tire thoroughly from both Internally and Externally ,to access the severity of the injury.
- Always use proper lighting while inspection.
- Do Not Repair if the tire has a Run Flat or if Tire cord or Steel belt is exposed or if the damage is on the shoulder area.

GUIDELINES FOR PATCH REPAIR - CHEMICAL PATCH WITH FLOATER

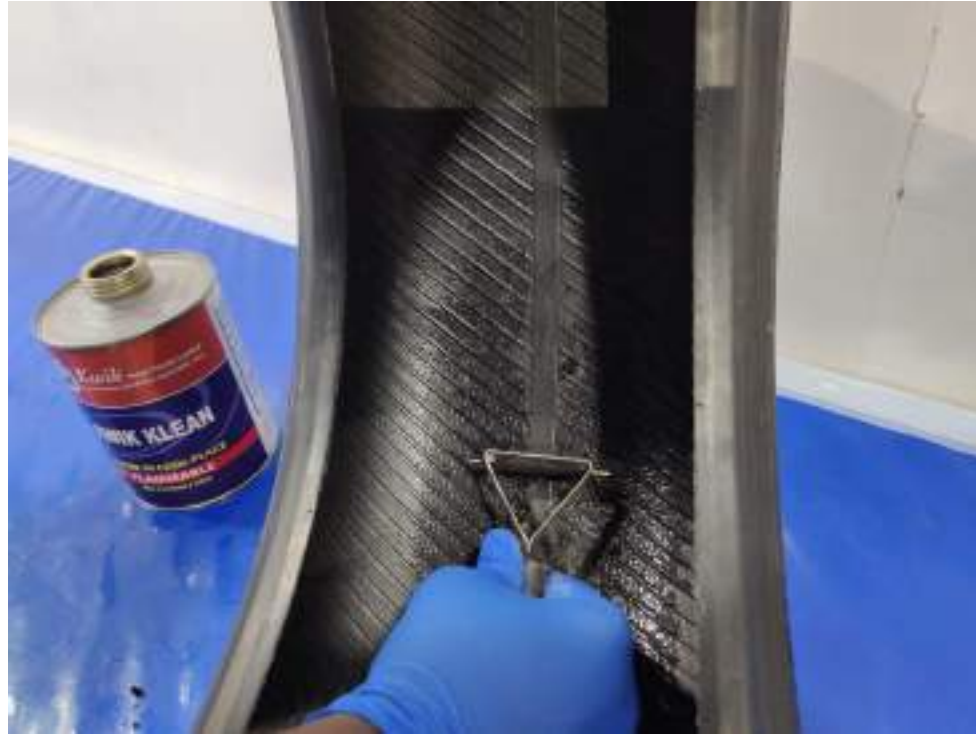


Bolt imbedded in tire



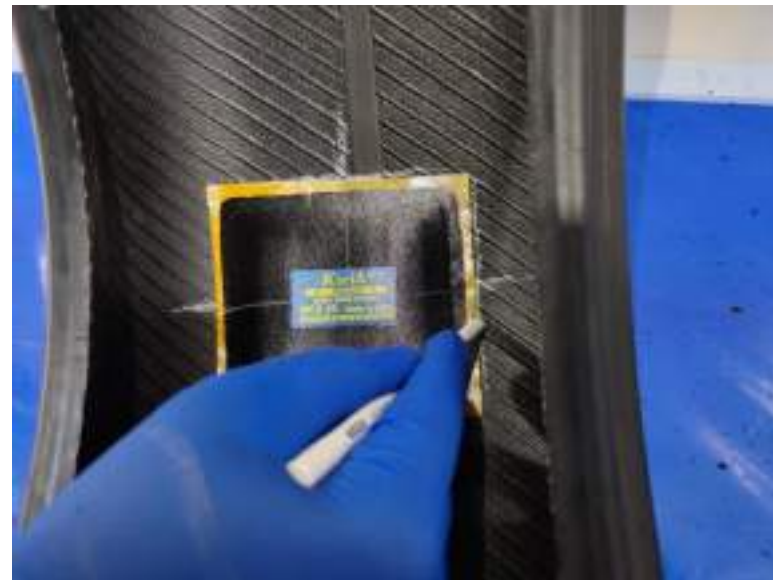
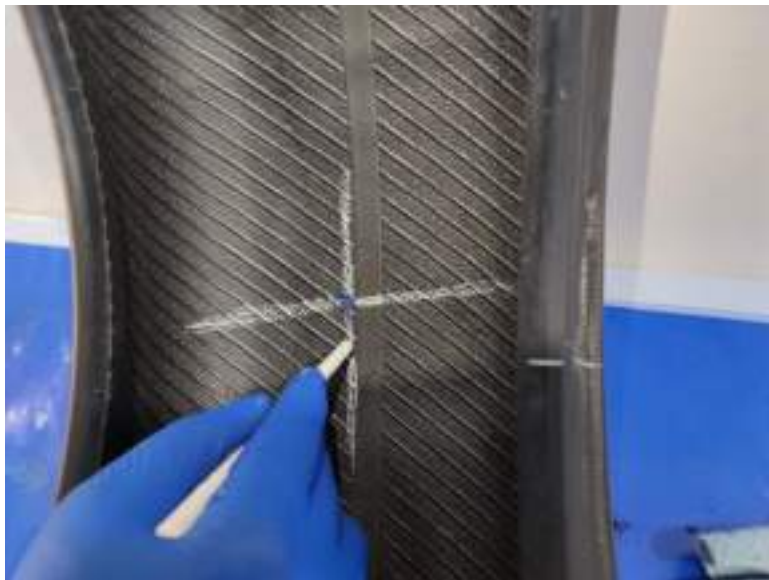
- Using a Plier or a Nail Puller remove the foreign material (Bolt) that is imbedded into the tire.

GUIDELINES FOR PATCH REPAIR - CHEMICAL PATCH & FLOATER



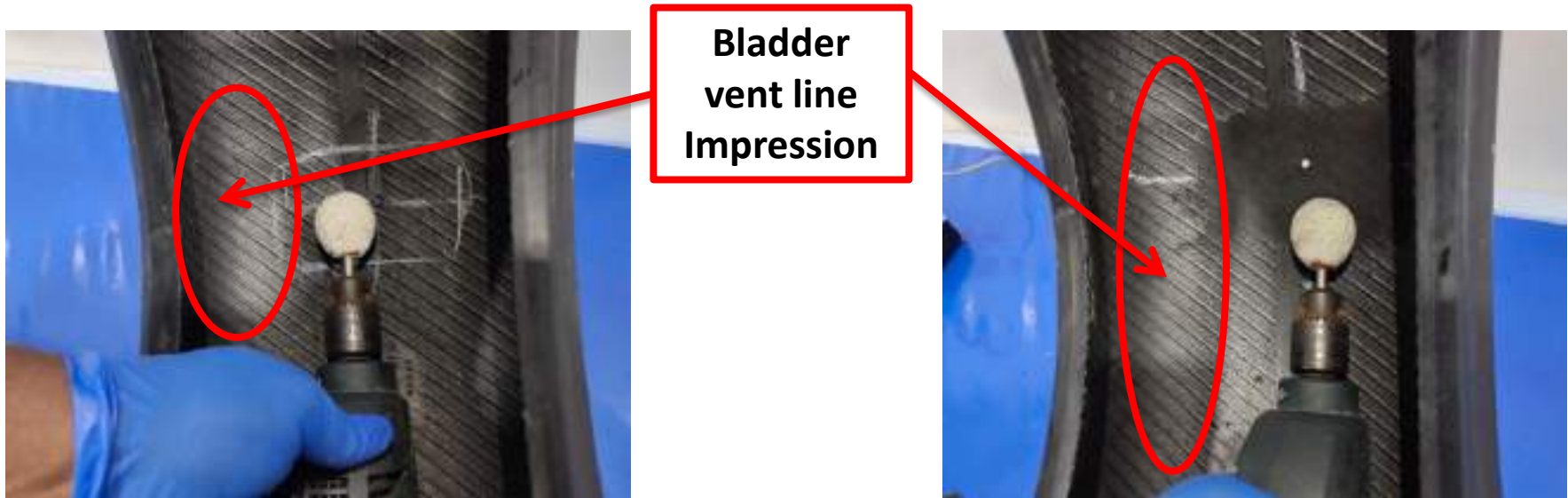
- **Mark the injury. Clean the injured area inside the tire, using Kwik Klean and a Tire scrapper.**
- **Scrap the inner surface around the injury thoroughly a few times.**
- **This is to ensure the removal of all traces of tire inner-liner lube and dirt.**

GUIDELINES FOR PATCH REPAIR - CHEMICAL PATCH WITH FLOATER



- From the center of the injury, mark two line at 90°. This is for centering the Patch. (as shown in the figure)
- Align and center the patch along the marked line so that the injury is aligned to the center of the patch. Make sure that the Bead Arrow is pointing towards the bead.
- Using a Tire Crayon or marking pencil, outline the area ½" larger than the patch. This is for facilitating buffing area.

GUIDELINES FOR PATCH REPAIR - CHEMICAL PATCH WITH FLOATER



Bladder
vent line
Impression

- Using a 2500 rpm low speed buffing tool, buff the outlined inner liner area to a RMA 1 buffing texture. (refer the reference)
- Ensure that the bladder vent lines are completely removed.
- Be careful not the buff through the inner liner.

GUIDELINES FOR PATCH REPAIR - CHEMICAL PATCH WITH FLOATER



RMA 1/BT 1



RMA 2/ BT 2

REFERENCE IMAGES

- **RMA1/BT1** : Smooth, velvet- like texture appropriate for inside tire surfaces repairs.
- **RMA2/BT2** : Smooth, velvet- like texture appropriate for inside tire heat cure repairs and retreading.

GUIDELINES FOR PATCH REPAIR - CHEMICAL PATCH WITH FLOATER



- **After rasping the area, clean the buffed dust with a nylon brush or vacuum the dust thoroughly.**

GUIDELINES FOR PATCH REPAIR - CHEMICAL PATCH WITH FLOATER



- Rasp the injury from the outside of the tire using a low speed buffer of around 2500 rpm and with a 36 grit pencil rasp.
- Rasp the mouth of the injury in such a way so as to form a conical shape at the opening (funnel shape). Also using a carbide cutter clean the injury hole thoroughly
- Once the injury is rasped and cleaned, measure its widest point to ascertain the injury size. Using the patch selection chart, select the right size of the patch.

GUIDELINES FOR PATCH REPAIR - CHEMICAL PATCH WITH FLOATER



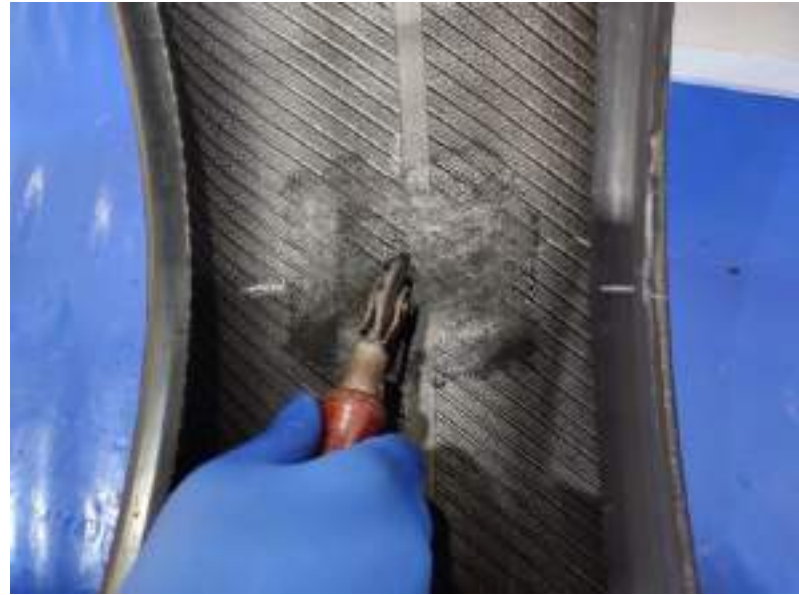
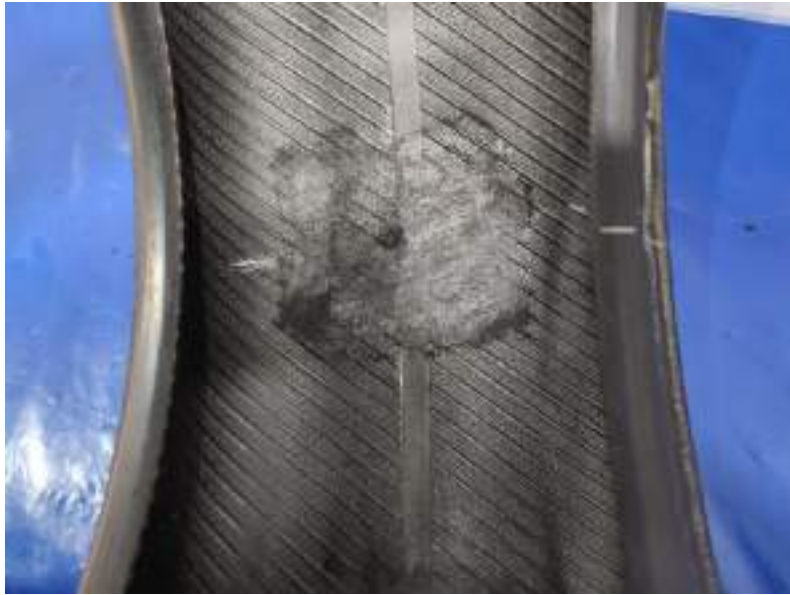
- Apply one coat of Black Vulcanizing Cement (BVC) on the injury from the outside and the inside of the tire. Ensure that the injury hole is also properly cemented.
- Allow 10 to 15 mins for drying of the BVC

GUIDELINES FOR PATCH REPAIR - CHEMICAL PATCH WITH FLOATER



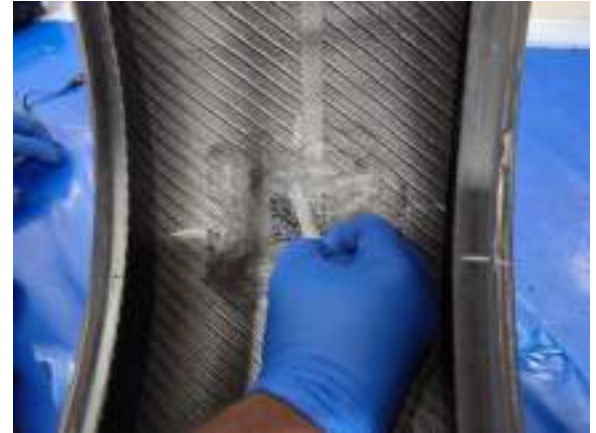
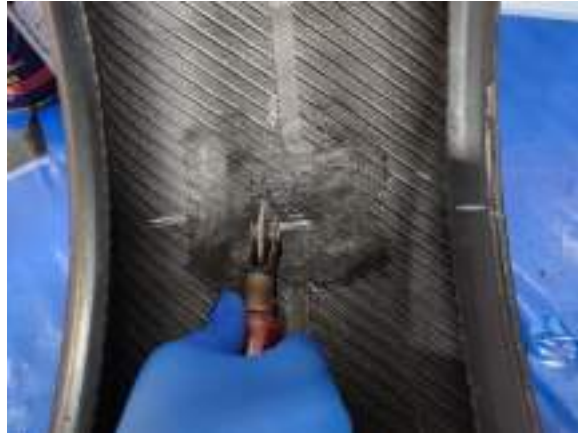
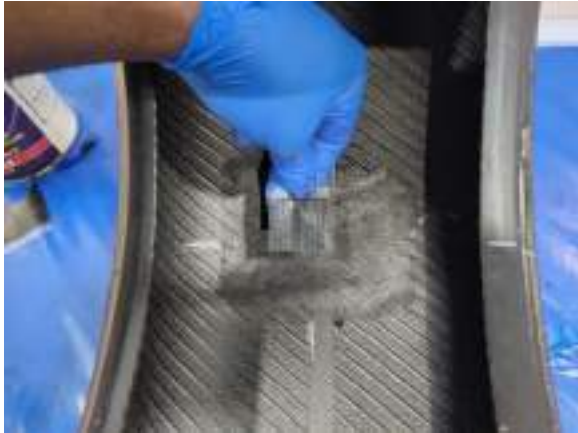
- Once the BVC is dried, fill the injury with strips of Cushion gum from the outside using a temp tool or a flat probe or use an extruder gun with rubber rope.
- Ensure that NO air gets trapped in the filling. Fill the injury so that a part of the gum comes out from the inside.

GUIDELINES FOR PATCH REPAIR - CHEMICAL PATCH WITH FLOATER



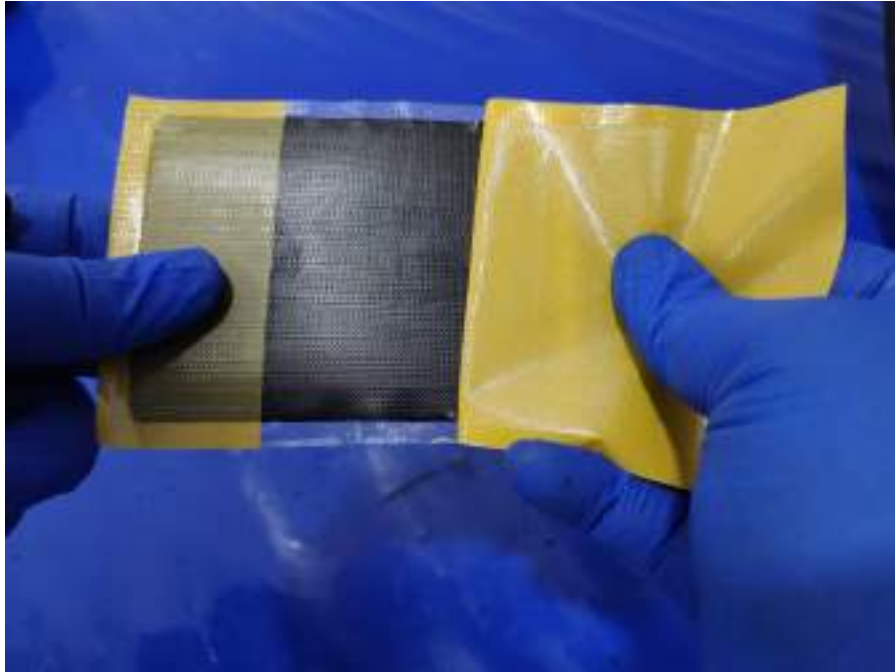
- **Stitch the protruding cushion gum from the inside firmly on to the inside of the tire using a 3 mm hand sticher.**
- **Ensure that the cushion gum is stitched properly and there is no excess cushion gum forming a mound inside the tire. (This will result in air trap between the tire and the patch after application of the patch)**

GUIDELINES FOR PATCH REPAIR - CHEMICAL PATCH WITH FLOATER



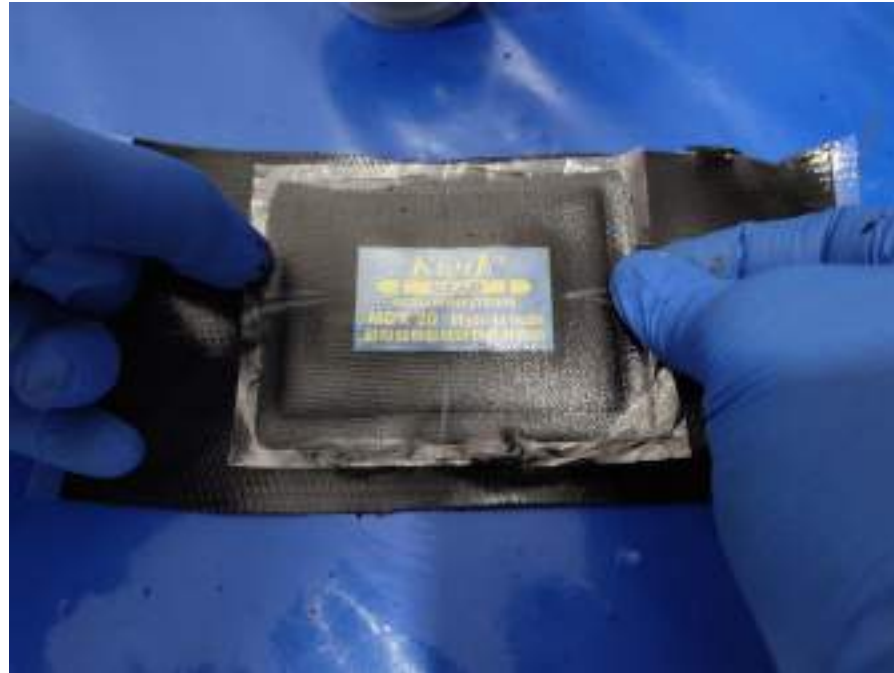
- **Apply a small piece of Cushion Gum on the filled area and stitch the same fully. This is to ensure that no air gets trapped at this area when the patch is applied.**
- **Ensure that the edges of this piece of cushion gum is stitched smoothly to the inner tire without any ridges. Remove the poly film**

GUIDELINES FOR PATCH REPAIR - CHEMICAL PATCH WITH FLOATER



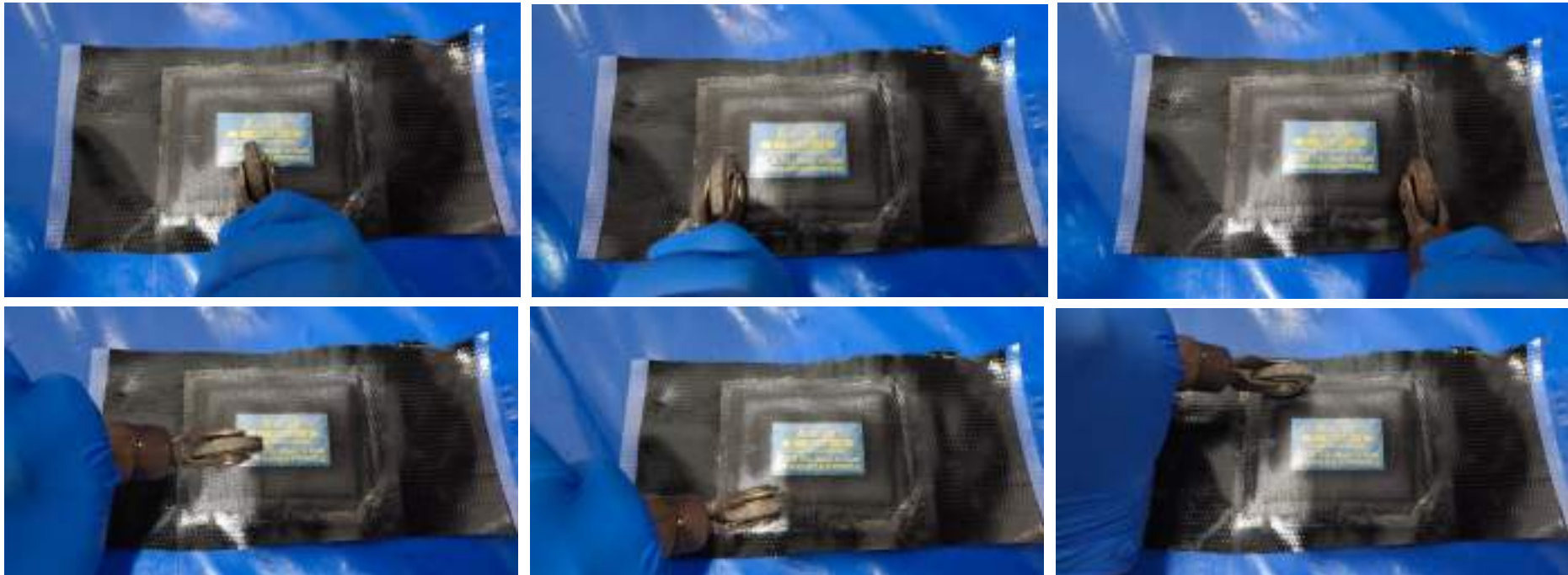
- Remove the poly film from the Chemical Patch and coat the surface with BVC.
- Allow the BVC to dry for about 10 to 15 mins.

GUIDELINES FOR PATCH REPAIR - CHEMICAL PATCH WITH FLOATER



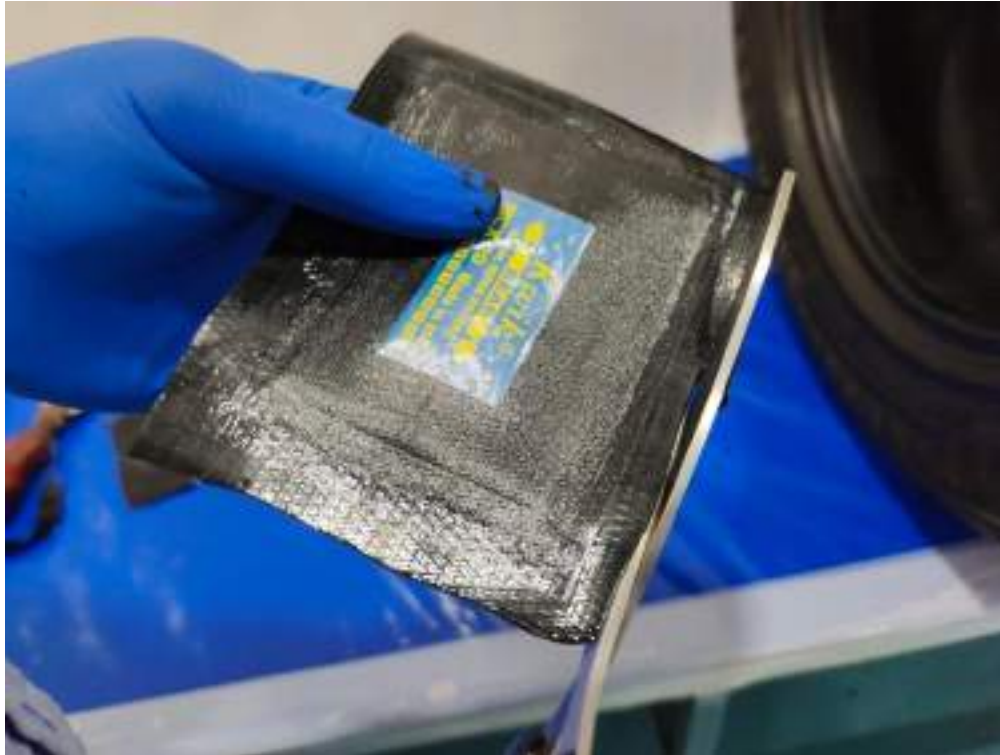
- Once the cement is dried, apply a layer of Cushion Gum (Floater) on to the patch.

GUIDELINES FOR PATCH REPAIR - CHEMICAL PATCH WITH FLOATER



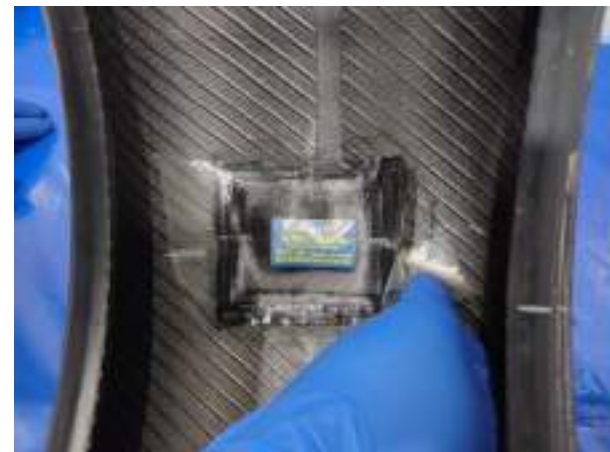
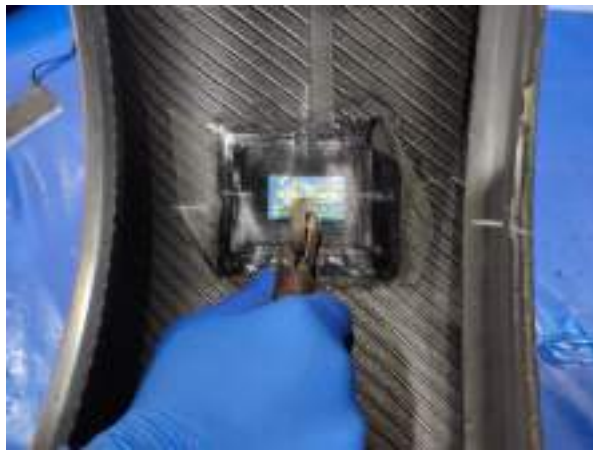
- **Stitch the patch firmly on to this Cushion Gum (Floater) firmly ensuring that there is no air traps.**
- **Stitch it from the center to the outer direction till the Cushion is properly stitched.**
- **Ensure that there is no air trapped between the patch and the Cushion Gum (Floater)**

GUIDELINES FOR PATCH REPAIR - CHEMICAL PATCH WITH FLOATER



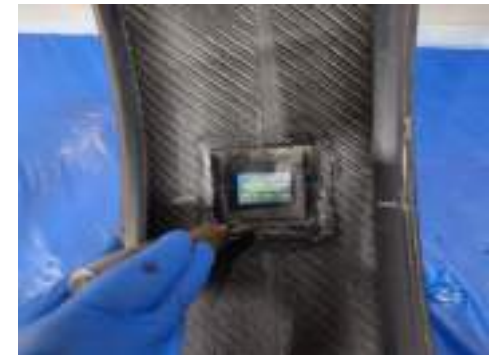
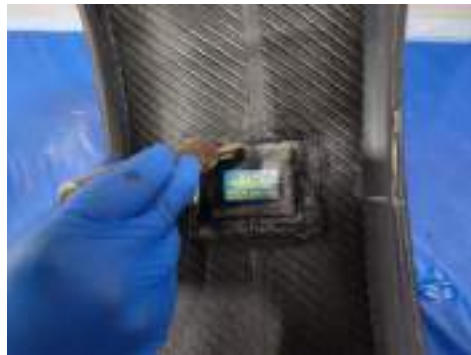
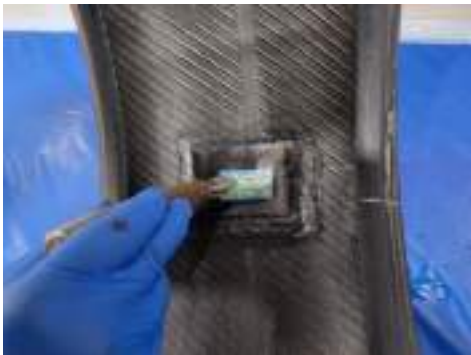
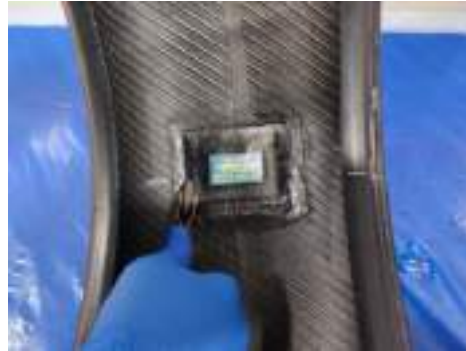
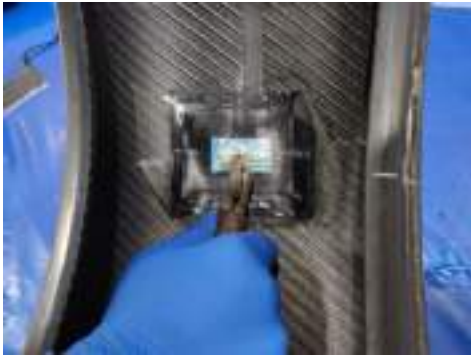
- Once the Cushion Gum is stitched on to the patch, cut/trim off the excess cushion leaving about 6mm ($\frac{1}{4}$ " inch) excess all around the patch.

GUIDELINES FOR PATCH REPAIR - CHEMICAL PATCH WITH FLOATER



- Remove the Poly film without touching the cushioned surface.
- Place the Patch on the injury centering it to the injury. (Use the reference line for centering)
- Once the patch is positioned on the injury, press the center of the patch to the injury and then remove the poly film from either sides.

GUIDELINES FOR PATCH REPAIR - CHEMICAL PATCH WITH FLOATER



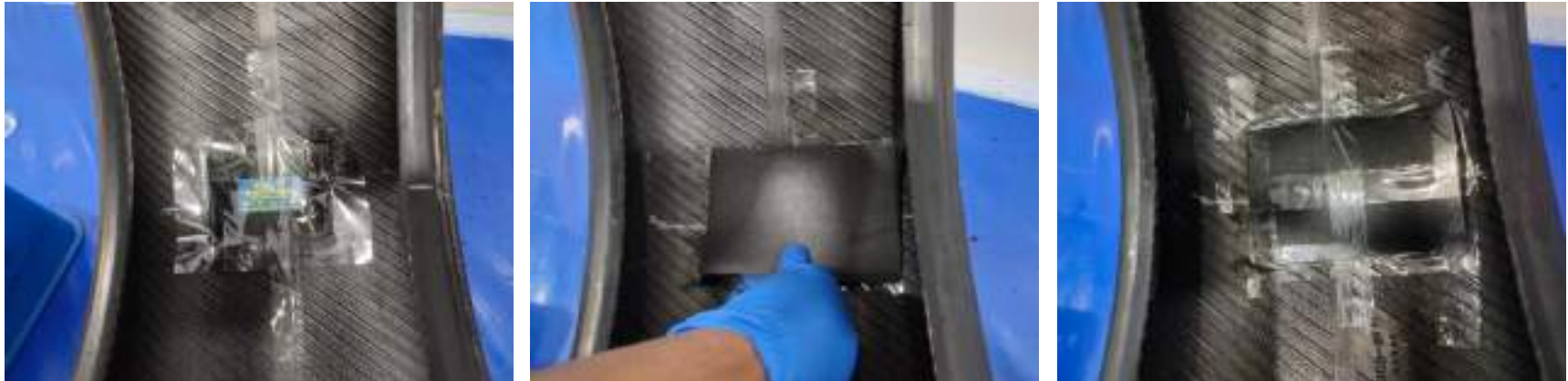
- **Stitch the patch from the center to either sides vigorously using a serrated 6mm hand stitcher. This is to ensure that there are no air trapped in between the patch and tire.**
- **Repeat this again in the opposite direction from the top to bottom.**

GUIDELINES FOR PATCH REPAIR - CHEMICAL PATCH WITH FLOATER



- Ensure that the patch is stitched firmly and there is no wrinkles on the edges of the patch.
- Remove the poly film and once again stitch the edges of the patch and the cushion properly.

GUIDELINES FOR PATCH REPAIR - CHEMICAL PATCH WITH FLOATER



- Apply a heat resistant film over the patch to completely cover the patch. Stick this film using a Heat Resistant adhesive tape so that it does not peel off from the patch.
- Place a thick rubber sheet to cover the entire patch area and properly sealed this rubber sheet on all the sides using a Heat Resistant adhesive tape.
- This will ensure that direct heat doesn't soften or peel the patch off during curing.

GUIDELINES FOR PATCH REPAIR - CHEMICAL PATCH WITH FLOATER



- After the tire is cured, inspect the patch.
- Once the tire is cooled to room temperature apply a coat of Repair Sealer around the patch and entire exposed buffed area.
- This is to improve the integrity to the inner liner of the tire.



Important Points to be Observed while Repairing Tire :

1. It is important to inspect the tire, both internal and external to determine if the tire can be repaired.
2. Check for run flat or weathering cracks of the Tire.
3. See that the repairable injury is only on the tread area.
4. Avoid inverting and excessive spreading of the beads in Radial Tires while inspecting.
5. Use only the proper size and type of carbide rasp to prepare the injuries.
6. While rasping the injury, be careful not to buff too deep and expose the tire cords.





Important Points to be Observed while Repairing Tire : Continued.....

- 7. Do not use compressed air to clean the buffed area. Preferably use a vacuum cleaner to clean the buffed area.**
- 8. Use a stippling motion to coat the cement. Do not use compressed air or hair dryer to dry the cement.**
- 9. While drying keep the injury of the tire at 12 o'clock position, to avoid any contamination to the repair area.**
- 10. When the patch is applied ensure that the bead is in the normal position (not spread).**
- 11. The tire is to be used only 24 hours after the tire is repaired and Retreaded.**





THANK YOU



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