

BLACK'S TIRE & AUTO SERVICE

TIRE REPAIR SERVICE ABSOLUTES

REV 6/10/25



- Wear your **PPE**, ie, Safety glasses, Safety Shoes etc.
- Use **SEAT COVERS** & **FLOOR MATS** Before Entering Vehicle
- **NOTATE** Damage, Warning Lights, & Abnormal Noises
- Utilizing the **ALI Lift Guide** Where Lift Points **ARE NOT Designated** or **Known** On the Vehicle (Scan QR Code for ALI Lift Guide or Go to GTX Navigator Page). Using the Lift or Floor Jack, Lift or Raise the Vehicle in a Safe Manner. Be Sure to Support the Weight of the Vehicle Using the Lift Locks or Jack Stands. **This is Non-Negotiable!**
- **ABSOLUTE FIRST STEP:** Visually inspect the Tire OFF the Rim For Any Damage That May Deem the Tire **UNSAFE** For Repair. **DO NOT Commit To ANY Repair Until This Is Done!**
- MAX Repair Puncture Diameter size is $\frac{1}{4}$ " (6mm) For Passenger Car & Light Truck Tires (Up To E Load Range)
- Assuming the Tire Is **Safely** Repairable, Mark the Point of Repair With Tire Crayon
- **1 Piece or 2 Piece Repair??** Examine the angle of the puncture. Use Your Awl if Unsure. Punctures Less Than 25 Degree Angle a 1 Piece Patch/Plug Combo Can Be Used. More Than 25 Degree Angle a 2 Piece Patch and Plug is Required. **NOTE:** A 2 Piece Patch / Plug Can be Used in Both Situations.
- Using **Pre-Buff Cleaner** and Proper Scraper Clean the Wound Area Inside the Tire
- Using a $\frac{1}{4}$ Carbide Bit (Prema CC6) On **LOW SPEED @ 1200 rpm's**, Ream the **Wound Channel** 3 Times On the Inside & 3 Times On the Outside. **DO NOT TRY TO "STRAIGHTEN" Out the PUNCTURE ANGLE!**
- **TIRE BUFFING DO's & DO NOT'S:** **DO**, If Using a 2 Piece Repair, Insert the Plug Portion Into the Wound Puncture Using a Small Amount of Rubber Cement PRIOR to Buffing the Wound Area. **DO**, Buff the Wound Area Using a Fine to Medium Coarse Stone, From Right to Left and Top to Bottom Using a Low Speed Buffer (Between 3500 & 5000 RPM'S). **DO**, Apply Slight Pressure While Buffing. **DO**, Create a RMA #1/#2 Light Velvet Texture on the Inner-liner. **DO NOT**, Buff Through the Inner-Liner Exposing ANY Cords. **DO NOT**, Use a Roloc Style Sanding Disc or Roloc Style Buffing Disc to Perform this Task!



TURN OVER →

- Using a Brass Brush, Brush Away Any Left-Over Debris From the Wound Area, From Top to Bottom.



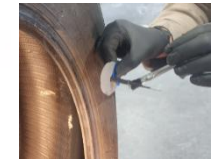
- **VACUUM OUT** Any Remaining Debris. **DO NOT** Directly Touch the Prepped Wound Area When Doing This. NOTE: **DO NOT** Use Shop Air to **"BLOW OUT"** the Area to Complete This Process.



- Apply a Small Amount of Vulcanizing Cement to the Patch Area in a Circular Motion. Making Sure We Cover the Area Where the Patch Will Rest. NOTE: At **NO** Point is Any Sort of **HEAT or FLAME Is To Be Used**. This Will Compromise the Chemical Vulcanization Between the Patch and the Tire.



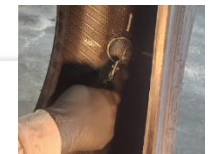
- **Allow the Cement To Dry** Before Installing the Patch. Apply a Very Small Amount of Cement To the Stem. Very Carefully Removing the Plastic Protectors From the Patch and **DO NOT TOUCH** the **Adhesive Area**. This Can Cause Adhesion Failure.



- **WITHOUT TOUCHING** the Patch/Plug **"GUM AREA"** Carefully Insert the Patch To the Inner Liner and Gently Pull the Patch Stem Through the Wound Channel, Leaving An Ever Slight Dimple In the Center of the Patch.



- **Stitching the Patch**, We Start From the **Center** and Work Our Way Out. We Do This Both **Vertically** and **Horizontally**.



- Once We Have Completed Our **Stitching Process**, **Remove** the Thin **Plastic Protector** From the Top Face of the Patch, and ReStitch.

- Using Your **INNER-LINER OVERBUFF SEALER** To Cover ANY Areas On the Inner Liner That Were Buffed Is **CRUCIAL** To Maintaining the Integrity of the Inner Liner. Using A Thin Coat of Sealer Is A Must, and **DO NOT USE TIRE BEAD SEALER** In Place Of This Step.



- Re-Install the Tire Onto the Rim Using Proper BTS/TIA Protocols To **NOT DAMAGE** the **TPMS SENSOR**. To **Avoid** a **Complaint** or **Comeback**, Take 2 More Minutes to **Re-Balance** the Tire.



For further context please refer to your BTS SOP Tire Repair Procedures using the [QR CODE](#). For additional training please reach out to your supervisor.