

2022 CHEVROLET CORVETTE SERVICE MANUAL

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Tire Repair

Warning:

- Tire changing can be dangerous and should be done by trained professionals using proper tools and procedures. Always read and understand any manufacturer's warnings contained in their customers literature or molded into the tire sidewall.
- Serious eye and ear injury may result from not wearing adequate eye and ear protection while repairing tires.
- NEVER inflate beyond 275 kPa (40 pounds) pressure to seat beads.
- NEVER stand, lean or reach over the assembly during inflation.

Warning:

To avoid serious personal injury, do not stand over tire when inflating. The bead may break when the bead snaps over the safety hump. Do not exceed 275 kPa (40 psi) pressure when inflating any tire if beads are not seated. If 275 kPa (40 psi) pressure will not seat the beads, deflate, relubricate the beads and reinflate. Over inflation may cause the bead to break and cause serious personal injury.

Warning:

Approved safety glasses and gloves should be worn when performing this procedure to reduce the chance of personal injury.

Warning:

Wear gloves when inspecting the tires in order to prevent personal injury from steel belts sticking through the tire.

Note:

- For Run Flat Tire Repairs, refer to the manufacturer's recommended repair procedure.
- NEVER repair tires worn to the tread indicators 1.6 mm (2/32 in) remaining depth.
- NEVER repair tires with a tread puncture larger than 6 mm (0.25 in).
- NEVER substitute an inner tube for a permissible or non-permissible repair.
- NEVER perform an outside-in tire repair (plug only, on the wheel).
- Every tire must be removed from the wheel for proper inspection and repair.
- Regardless of the type of repair used, the repair must seal the inner liner and fill the injury.
- Consult with repair material supplier/manufacturer for repair unit application procedures and repair tools/repair material recommendations.

Three basic steps for tire puncture repair:

1. Remove the tire from the wheel for inspection and repair.
2. Fill the injury (puncture) to keep moisture out.
3. Seal the inner liner with a repair unit to prevent air loss.

External Inspection

1. Raise and support the vehicle. Lifting and Jacking the Vehicle
2. Remove the tire and wheel assembly. Tire and Wheel Removal and Installation
3. Prior to dismounting, inspect the tire surface, the valve stem and the wheel for the source of the leak by using a water and soap solution.

Mark the injured area with a tire crayon.



4.
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5. Repairs are limited to the tread area only as shown in repairable area (a).
6. Punctures that fall outside of the repairable area (a) must not be repaired. The tire must be replaced.

Internal Inspection

1. Dismount the tire from the wheel. [Tire Dismounting and Mounting](#)



2.
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3. Place the tire in an appropriate, well-lighted tire spreader.
4. Spread the beads and mark the puncture with a tire crayon.
5. Inspect the inner tire for any signs of unrepairable damage. Replace the tire if necessary.
6. Remove the puncturing object, noting the direction of the penetration.
7. Probe the injury with a blunt awl in order to determine the extent and direction of the injury.
8. Remove any loose foreign material from the injury.
9. Punctures exceeding 6 mm (0.25 in) should not be repaired.

Cleaning

1. Inspect the tire pressure indicator sensor for damage due to driving on an underinflated/deflated tire and the sensor porthole for debris. If the sensor is damaged or the debris cannot be cleared from the porthole, the sensor must be replaced. [Tire Pressure Indicator Sensor](#)

Replacement

2. Note:

Refer to information on the tire sealant Material Safety Data Sheet and follow guidelines for handling and disposal.

3. If a tire sealant product was used/found within the tire, and the tire is repairable, use a mild dish soap, clean water and shop cloths to remove the sealant residue.
4. If a confirmed GM approved tire sealant product has been used/found within the tire, use a mild dish soap, clean water and shop cloths to remove the sealant residue from the tire pressure indicator sensor.
5. If a tire sealant product has been used/found within the tire, and it cannot be confirmed that a GM Approved product was used, replace the tire pressure indicator sensor. Tire Pressure Indicator Sensor Replacement
6. Clean the area around the puncture thoroughly in accordance with the manufacturer instructions provided with the repair kit being used. This step serves to remove dirt, mold and/or debris to ensure proper adhesion.

Repairing the Injury

1. Prepare the injury in accordance with the manufacturer instructions provided with the repair kit being used.
2. Patch the injury in accordance with the manufacturer instructions provided with the repair kit being used.

Final Inspection

1. Mount the tire to the wheel. Tire Dismounting and Mounting
2. After mounting and inflating the tire, check both beads, the repair and the valve stem with a water and soap solution in order to detect leaks.
3. If the tire continues to lose air, the tire must be dismounted and inspected again.
4. Balance the tire and wheel assembly. Tire and Wheel Assembly Balancing - Off Vehicle
5. Install the tire and wheel assembly. Tire and Wheel Removal and Installation
6. Remove the support and lower the vehicle.

For additional tire puncture repair information, contact:

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