

Simple Guide on How to Change a Tire

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This guide is for people in need of simplified instructions on how to change a tire. Reasons include but are not limited to Changing from summer to winter tires, flat on the side of the road, tire is worn down and needs replacement. Note that is guide is for changing the whole tire and rim assembly as one unit.



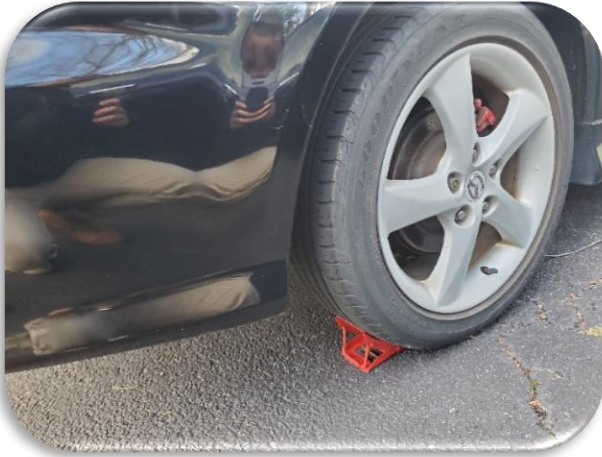
Step 1: Ensure you have the correct tools

Performing this guide, it is important to ensure that the user has all the required tools. These tools include

- Torque Wrench
- Breaker Bar
- Tire Iron
- Jack
- Jack Stand
- Tire Blocks

The tools above can be supplemented if the user doesn't own them. A Beaker bar can be replaced with a metal pole attached to the tire iron. The Jack can be replaced with the car-provided Scissor Jack. Tire Blocks can be replaced with wood blocks.

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Step 2: Place tire blocks behind vehicle

Place tire blocks behind each of the three remaining wheels to prevent the car from moving during the tire replacement procedure



Step 3: Locate Jack point Pinch weld

Manufacturers have designed vehicles with reinforced pinch welds. These welds are designed to support the weight of the vehicle. Most manufacturers designate the jack point location with bumps in the frame. More location information can be found in the owner's manual of the vehicle.

Warning: Improperly identifying the jack point can cause serious damage to the vehicle.



Step 4: Position jack evenly on jack point

Place the jack under the car and align the jacking point with the puck of the jack. Note do not jack the car up in the air yet.



Step 5: Loosen lug nuts from wheel

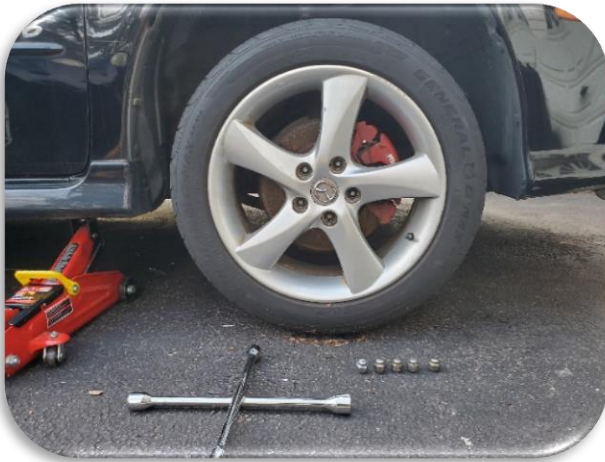
Using the breaker bar loosen the lug nuts $\frac{1}{4}$ turn on the wheel. Note do not remove the nuts from the car.



Step 6: Jack car in air

Lift the car into the air using the jack so the tire is lifted a minimum of a quarter inch above the floor

Warning: Vehicle stability after jacking into the air is reduce. User should be cautious and attentive



Step 7: Remove all lug nuts from the wheel

Remove the lug nuts using the tire iron. Ensure when using the tire iron to use the correct size socket



Step 8: Remove the wheel from the car

Remove the wheel from the studs attached to the vehicle. Note if the wheel does not dislodge itself from the car proceed to hit the back with increasing force on the back of the wheel opposite the visible rim. This is due to excessive brake dust collection and/or rust buildup.

Warning: Excess force can damage the wheel or studs. Please use caution



Step 9: Place new wheel back on the studs

To assist in placing the wheel the user may use their shoe to help elevate the wheel to the proper height



Step 10: Tighten lugnuts back onto the wheel studs

Tighten wheel lugs nuts back onto wheel with each successive nut being tighten opposite to the previous. Note this soul to set the wheel in place for lowering the vehicle



Step 11: Lower the vehical back onto the ground

When lowering the vehicle ensure to lower in a slow and consistent manner to ensure predictable movement.



Step 12: Set torque rating for wheel lug nuts on the torque wrench

Information regarding torque specifications can be found online or inside the owner's manual of the vehicle.



Step 13: Perform final tighten of lug nuts using torque wrench

Ensure when tightening to follow the pattern specified in the image provided. This ensures that the tire sits evenly on the car and will not loosen over time.



FINAL: Remove wheel blocks from the tires

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Now you have successfully changed the tire on your vehicle. You may now proceed to drive and use the vehicle as normal.

In case you are unable to perform actions listed above please contact a professional mechanic to help resolve the problem.