# Tire Change Station



# What Tools Will You Need?

# Jack



# Torque Wrench



# Gloves



# Why Jacking up the car shouldn’t necessarily be your first step!

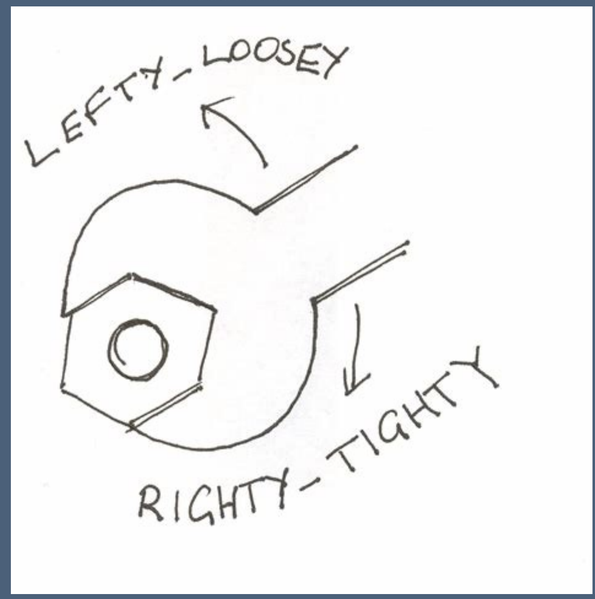


The wheel probably hasn’t been removed for quite some time so the lug nuts will be extremely tight.

If the wheel is off the ground then it will start to rotate as you attempt to loosen the lug nuts.

# Before jacking up the car, loosen all of the nuts by 1/2 of a turn.





# Why only 1/2 of a turn?

Potential damage could occur if the entire weight of the car is resting on the loosened lug nuts and threads.

# Jack Placement

Look under the car to determine the suggested jack location. A recessed notch is provided so that the jack doesn’t slip or shift when weight is applied.



Jack up the car so that the wheel is off the ground by approximately 3” (basically the height of a pop can).

Proceed to loosen and remove all of the lug nuts as well as the wheel.



Automotive repair shops take this opportunity to remove rust and debree build-up on the hub. This is an important procedure as the rust will prevent the newly installed rim and tire from having a safe and secure mounting surface. This is why some wheels have been known to come loose when driving down busy roads!

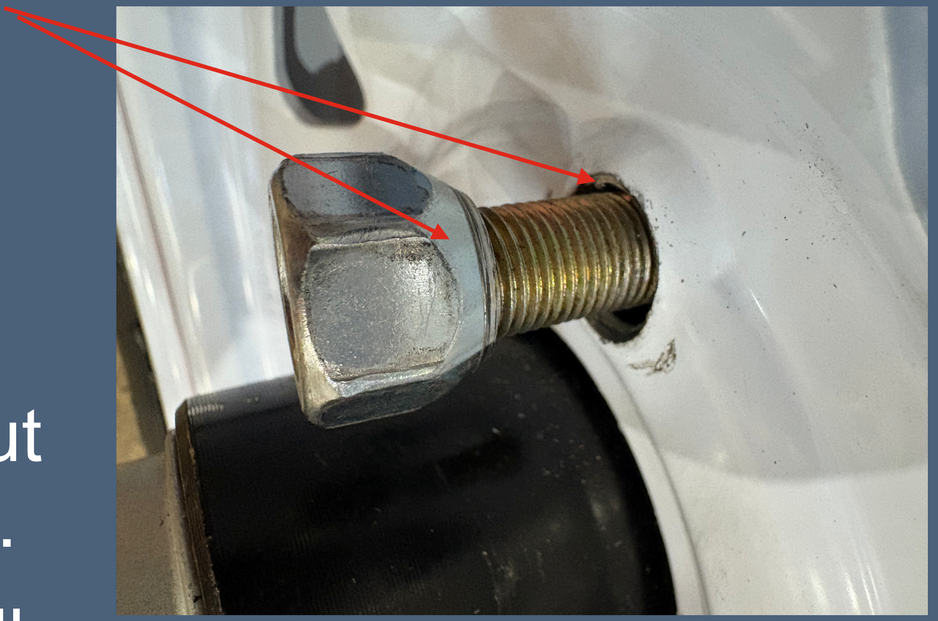


Mount the tire and reinstall the lug nuts. At this point it is crucial that each lug nut is only tightened by hand!



# Why only hand tightened?

- Each lug nut is tapered or shaped to match the rim.
- Each lug nut must be given the opportunity to locate itself individually.
- This ensures that the rim will be correctly centred on the hub. As well as that each lug nut will have the same clamping force applied to it.
- This procedure will ensure that the lug nuts will not come loose while driving.



# Correct Tightening Procedure

- Safely lower the car back down to the ground
- Decide which lug nut you'd like to tighten first.
- Now choose another lug nut that is directly opposite of your first one.
- Continue this same selection method until you have basically followed a star-shaped pattern.



# Good Job! Tire Change Completed!

- Be sure to put away all tools.

# Quiz Yourself

# True/False

It’s not important to follow all the recommended steps. As long as the lug nuts are all tight there is absolutely no way that the wheel could come loose and fall off.

# True/False

To loosen a lug nut, the wrench needs to be rotated in a clockwise (righthand) direction?

# True/False

In order for the wheel to be correctly mounted, it is best to begin by tightening the lug nuts by hand?

True/False

Lug nuts can be installed two different ways?

# True/False

No need to worry about the jack slipping because the weight of the car will prevent it from shifting or moving.

# True/False

Jacking up the car is always the first step in changing a tire?

True/False

The final tightening procedure follows basically the same pattern shape as a star?

True/False

A poorly installed wheel can be a very serious safety concern?