

Homework 4

ENGL 361

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Introduction:

I am writing this document to inform an average car owner of how to change a tire. My relationship to the audience is a subject matter expert who is giving them a list of steps to change their tire. I expect that they have at least a basic mechanical knowledge like how to use a jack.

Instructions: How to change a car tire

CAUTION! Before you begin,

- ☐ Ensure that the vehicle is on a flat and level surface.
- ☐ Ensure that the area is safe. If on the side of the road, make sure the vehicle is out of the way of the road and your hazard lights are on.
- ☐ Ensure that the parking brake is engaged, and if an automatic transmission car, make the car is in park

Tools Needed:

1. Tire iron or lug wrench
2. Car Jack
3. Spare Tire

Steps:

1. Break the lug nuts on the wheel free, DO NOT REMOVE YET
2. Place the car jack under the closest jack point

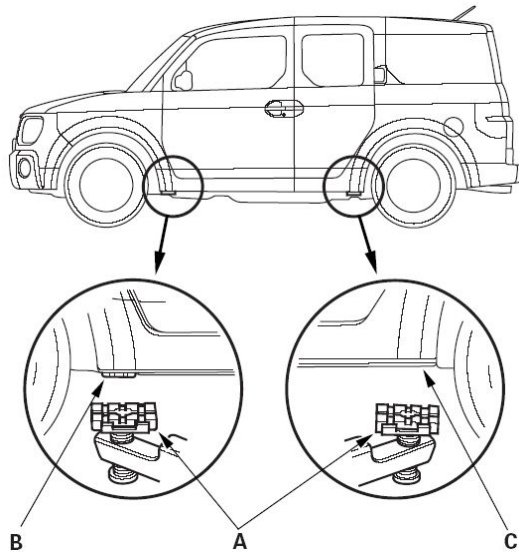


Figure 1: Typical location of jack points ¹

3. Jack up the car up until the tire is off the ground.
4. Remove all of the lug nuts, and pull the wheel off the car.
5. Put the spare tire on the hub, where you just removed the wheel.
6. Install lug nuts in star-pattern, tighten to hand-tight (see: Figure 2)



Figure 2: Star-pattern Tightening Pattern ²

7. Lower car onto the ground with the jack slowly
8. Tighten lug nuts in star-pattern until they are as tight as you can get them

CAUTION!

- ❑ Be sure to re-tighten the lug nuts after 50-100 miles

Sources Cited:

[1] http://www.skidmore.edu/~pdwyer/e/images/jack_points01.gif

[2] http://www.tirerack.com/images/wheels/tech/torque_diagram.jpg