

Click and Clack's Official Guide to Changing a Flat Tire

STEP 1: Find a Level Place to Stop and Find the Tool You'll Need

You can change a tire if you're parked on an incline, but it's much more difficult... and dangerous! So if you find yourself with a flat on a hill, DRIVE slowly to level ground. Put the transmission into "Park" (or put the gear shift into reverse if you have a manual transmission) AND SET THE HAND BRAKE. Now you're ready to go looking for the tools you'll need.

Tip: Here's an idea... when in doubt, take a minute and check your owner's manual. (Remember that? It's that shrink-wrapped, unread booklet that's been in your glove box since you drove your car off the lot.)

Tip: If, at any point in changing a flat tire, you feel like you're in over your head — don't sweat it. Just grab the nearest cell phone and call for help.

STEP 2: Chock a Wheel

To provide an extra degree of safety, it's a good idea to put something on either side of the wheel diagonally opposite the flat tire. Since our flat is the left rear tire, chock the right front. Chocking means to put something large, like a brick, a large rock, or a mother-in-law right in front of and right behind the tire to keep it from moving. This is an extra precaution, but it's one we recommend.

STEP 3: Lay Everything Out

Tip: Got a digital camera or a cell phone that can store photos? Snap a couple of pictures of how everything goes back together, and you can look at the screen for guidance when you're ready to put everything back in its right place when the time comes.

Or, if you're like Tommy... just throw it all in the backseat and worry about it in daylight!

STEP 4: Loosen the Damaged Tire's Lug Nuts

You probably won't be able to loosen the lug nuts by hand (since they were probably tightened by a mechanic with an impact or air-powered wrench.

But you CAN do it by foot. Find the lug wrench (the wrench that fits on the lug nuts). Put the wrench on any lug nut with the handle facing to the LEFT since you want to turn the wrench counter clockwise (remember righty tighty, lefty loosey). Then stand on the end of the wrench handle. You may have to bounce up and down a bit — especially if you're a lightweight. (If you're a heavyweight, don't worry, you won't break anything — except maybe your own foot.)

Once it moves you'll probably be able to turn the wrench by hand. If not, re-position the wrench and step on it again. Loosen all the nuts this way — BUT ONLY LOOSEN EACH OF THEM A COUPLE OF TURNS. DO NOT REMOVE ANY OF THE NUTS — YET.

STEP 5: Jack Up Your Car

Find the correct location on your car to place the jack. Your owner's manual will have a diagram.

(Remember the owner's manual?)

Tip: Expand the jack by hand, until it's as tall as it can be and still fit under the car. This'll save you work later — and who doesn't like avoiding work, right?

Tip: Now, you're about to raise the car — or at least one corner of it. Unless your name is Vin Diesel, you'll need the jack's handle. Now's the time to insert it into the jack according to the instructions.

Car Talk Warning: Keep everyone else clear of the car while it's on the jack. The car is not terribly stable while it's jacked up. Why do cars fall off jacks? We don't know. But it happens. So keep valuable friends and family members at a safe distance.

Start cranking. Take your time. There's no hurry. Before you know it, the corner of the car will be off the ground.

Tip: You don't need to go 20 feet off the ground. All you need to do is get the wheel off the pavement. Save your muscles for lifting the celebratory ice cream sundae you'll be buying yourself later.

STEP 6: Take Off the Damaged Tire

Now it's time to remove the lug nuts the rest of the way. Fortunately, you've already loosened them, so it should be easy.

Take the wheel off, and here's what you've got — the brake rotor, caliper, brake pads — you can even see the strut springs, control arms and brake lines.

Put the wheel down in a safe location away from traffic. Don't put it in the car just yet, either. (Your car is jacked up, remember? Don't toss anything heavy into it until it's firmly on the ground.)

Tip: Once you've removed the lug nuts, put them in a safe place where you know you'll be able to find them ten minutes from now. Your pocket is a good place. Inside the hubcap, if you have one, is a good place. Scattered around you on the road is NOT a good place.

Step 7: Install the Spare Tire

Remember that spare we found? Time to put it on.

Tip: Line the lugs up with the holes in the wheel and gently slide it on, being careful not to bang the threads on the lugs. The lugs are those 5 things that you're sliding the wheel onto. (AHA! That's why the nuts are called lug nuts.)

Tip: Check your owner's manual for the details. In most cases, you'll find a maximum speed and travel distance for the spare. Not all spare tires are labelled "Temporary Use Only" — but most are.

Now loosely screw on those nuts that you sensibly placed in one, safe location a few minutes ago.

We're not done tightening the lug nuts just yet — but we are taking a break to lower the car.

Now lower the jack and allow the corner of the car to come firmly back onto the ground. Now that the car is firmly on the ground, it's time to tighten the lug nuts. This has to be done in several steps.

Step 1: Tighten all 5 nuts by hand in no particular order (known in the trade as "hand tight").

Step 2: Tighten all 5 using the wrench and your hands only — also in no particular order.

Step 3: Now you're going to really tighten — and the order IS important. Pick any nut to start with. Put the wrench on the nut — as you did when removing the nuts — but this time with the handle facing to the right (Lefty loosey, RIGHTY TIGHTY!).

Stand on the end of the wrench and bounce up and down. If the wrench handle ends up in an almost vertical position (i.e., you fell off the wrench), reposition it so it's horizontal and bounce on it again. Continue until it doesn't move any more. OK, that nut is TIGHT.

Now you repeat the previous steps — BUT IN A PARTICULAR ORDER.

1. The second nut you tighten is the one that's "diagonally" opposite (there is no nut that is really diagonally opposite). There are two that are sort of diagonally opposite — pick either one. Follow the steps on the previous page.
2. The next one to tighten is the one that's (sort of) diagonally opposite from number two.
3. And the next is sort of diagonally opposite from number three, etc., etc., until you've done all five.
4. Then go around the circle one last time to make absolutely sure that they are ALL as tight as you can get them.

Now we're ready to REALLY tighten those lug nuts! You don't want them to come off when you're driving, do you? (We sure don't. We can't afford to lose any more listeners!) Here's how it's done...

Holding firmly onto the car, use your body weight to fully tighten each lug nut.

Tip: Take our advice, and don't try this in high heels. It'll wreck those Manolo Blaniks!

STEP 8:

Clean Up After Yourself!

Tip: Do yourself a favor, and don't toss everything in the trunk of your car. Put it back exactly the way you found it, so it's there the next time you need it — and so it doesn't rattle every time you go over a bump, and slowly, inexorably drive you totally bonkers.

Tip: Put your jack and tools back in the car, exactly where they're supposed to be, so they're there when you need them.