

# Tire Change How-To

By Mr. catbed



## Tools Needed:

- Wrenches – 17mm, 12mm, 14mm, 24mm
- Torque Wrench – Mine is a Craftsman Digitorque click style.
- Tire Irons – I got some old style ones that are a round piece of steel with a slightly curved flat part.
- Rim Protectors – Don't want to ruin those precious wheels! I used a cut up HDPE bottle. To be specific, Old Spice Body Wash. Pure Sport flavor.
- Bead Breaker – C-Clamps work well as I hear but I used a couple pieces of 2x4s.
- High-Tech tire changing stand (5 gallon bucket)
- Air Compressor
- Tire lube – Ru-Glyde from NAPA has a good reputation I hear. I used soapy water.
- New Tires of course.

## 1. Step One: Remove front wheel.

Jack up the front of the motorcycle. To do this, I used a car jack and a 4x4 in between the #2 and #3 cylinders while the motorcycle was on the center stand. There is a ledge from the engine mount here and is a perfect jack point.



The front wheel is held on by 2 axle holders and the axle nut. Loosen the axle holders, no need to remove them all the way, and remove axle nut. I used an old screwdriver to hold the axle from turning as I removed the nut.



Now the axle should slide right out.





To get the wheel all of the way out, I had to remove one of the calipers. I removed the two “7” marked bolts from the fork.



After that, I was able to wiggle the front wheel past the other caliper and under the front fender.



As you can see from the last picture, one of my brake pads fell out. I have no idea why but I'm glad it did now and didn't somehow jam when I was riding. Also, keep track of that spacer that you see next to my axle. It goes on the side opposite the speedometer gear.

## **2. Step 2: Remove Rear Wheel**

Please see BassCliff's [Rear Wheel Removal Guide by clicking here](#).

## **3. Break the Bead**

Time to break the bead on the old tires. This was pretty hard to do with my 20 year old tires. First thing to do is to let all of the air out. Removing the valve core is ideal but I didn't have a valve core remover. I just let it all out with a pressure checker.



Here is the set-up I used to break the bead. Eventually I moved to the trailer hitch on my Honda (Honduh?) Pilot. This proved to work a little better with the rear wheel. Just press down on the long 2x4 with a foot or some weight on the tire side closest to you. **Note:** There is a slight bevel on the 4x4 that puts pressure on the bead (circled in red). It is facing the *wrong way* in this picture. Be sure to elevate the tire to protect the discs!



Eventually you will hear a soft pop and if you look at the tire, you will see something like this. Do this for both sides.





## 4. Step Four: Removing Old Tire

Get out your trusty tire changing stand, or 5 gallon bucket, and place your tire on top. Whip out your tire irons and rim protectors while you're at it.



Place a rim protector in between the rim and tire. Stick your tire iron in between the protector and tire and wedge it against the rim.



If your tire iron has a curved part like mine, make sure it curves towards the tire. Make sure the iron has a good bite on the tire and push the iron towards the rim, making the tire come up and over the rim. If the iron still has a good bite at this point, you can put the handle of the iron under your brake disk to hold it in place while you use the other. **Warning:** Don't ever stick your fingers in between the bead and rim. The beads are made out of very high tensile wire and the rim is metal. Ouch.



Insert your other tire iron with rim protector about 2 inches away from the first one and do the same motion. The other tire iron should feel a little loose now. Even if it doesn't, pull the first one out and put it in with a rim protector about 2 inches away from the other one. Again, with the same motion, pull the tire over the rim. As you get more tire off the rim, you can gradually move from 2 inches between irons to about 6 or 8 inches until one bead is off.





Go ahead and flip the tire over and put a rim protector between the rim and tire. This time, instead of pulling the tire OVER the rim, you're going to be pushing it BELOW the rim. Insert tire iron between the rim protector and push down. Make sure the rim protector is protecting the underside of the rim.



Insert your other tire iron 2 inches away and push down. Remember to use a rim protector. **Note:** Here I'm being paranoid and using 2 rim protectors. One is sufficient.



When you get about half-way off, you should be able to push it off using quick, powerful pushes.



Woo-hoo! The tire is off. If you are like me, you will probably have sweated enough to fill a small swimming pool.



Take the time now to clean the area on the rim that holds the bead with a Scotch-Brite. This will get all of the old rubber off and ensure a good seal with the bead.

## 5. Step Five: Installing the new tire

Take note of the direction arrow on the tire. Tires tend to rip apart if they are installed the wrong way. On the front tire, the arrow points the left when looking at the speedometer connection. On the back tire, the arrow points to the left when looking at the sprocket or splines.



Take your new tire and hold it at the sides and force it on the rim. You'll probably only be able to get it 1/3 to 1/2 on the rim. Take your tire iron and rim protector and insert it on one side. Push the tire iron down, forcing the bead around the rim. Hold the iron in the rim and insert the other one in the other side. Push down on that side so the bead goes over the rim. Take the first one out and move it down 2 inches and repeat the process. Keep alternating sides until the tire is on. Make sure one bead is on the rim when you do the first bead. If both are on the rim, it is almost impossible to get on.





The first bead is on. Now for the second bead. Make sure the first bead is in the groove in the middle of the rim so the tire can move more. Stick your tire iron and rim protector in the side opposite the side that has the bead in the groove. Push down on the iron and hold it there. Insert your other tire iron about 2 inches away from the other and push down. Keep pushing on the second one and remove the first one. Insert the first one about 2 inches away from the other one and push down. Continue doing this all the way around the tire until there is about 10 inches of tire left.



Now you are going to have to alternate sides of the tire because if you work one side, the other side will slip off, and you'll just be chasing yourself around the rim. Eventually you'll get that last little bit on.



## **6. Step Six: Setting the bead**

This is probably the easiest part of changing a tire. Lubricate the bead all the way around with tire lube or soapy water.



Now you need to inflate the tire, and quickly if you used soapy water. Set your compressor to about 60 psi even though you only go up to about 40. When I did my tires, I didn't have a good compressor tip that let a lot of air through. I should've used one that let more air through, like the one in the picture.



As you start to inflate your tires, you should see the bead moving along the rim. If all goes well, you should hear two satisfying pops at a low pressure, say around 30 psi. If all didn't go well and your beads didn't set at a pressure of about 45 psi, then let all of the air out of the tire, put some more lube on the bead, and try again. If it doesn't set the second time, hit the tire, not the rim, the tire where the bead is sticking with a rubber mallet. Hopefully that will persuade the beads to move. If not try bouncing the tire or wrapping a ratchet strap around it and tightening it while you inflate it. Anyway, once the bead is set, you're done, except for balancing.



## 7. Step Seven: Balancing

Balancing the tire is another easy part. Get two objects that you can put both ends of the axle on, such as two saw horses or jack stands. I used two sawhorses like this:



Here is a picture of bwringer's balancing stand:



So when you have your stand ready, place the axle across it and give the wheel a LITTLE nudge. The wheel will spin around (hopefully) and it will stop with the heavy spot on the bottom. Mark it with a dry erase marker or similar and spin it 2 more times. If it stops in the same spot all three times, add weight 180 degrees from the heavy spot and spin it again. Keep adding or removing weights until the wheel stops at different times when you spin it. If it doesn't stop in the same spot when you spin it without weights, you don't need any weights.

Reinstall the wheels in reverse order and torque 'em up. You're done! Take it easy for the first 100 miles on your new tires. There is a mold release agent on them that prevents them from sticking to their mold, and the street. After 100 miles are up, and you did some gradual leans and no hard braking, you should be good to go.

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My thanks to Mr. catbed of the [GS Resources Forums](#) for putting together this guide and allowing me to host it on my little [BikeCliff website](#). We hope you take the time to stop by and visit us.

Thank you for your indulgence,

BassCliff