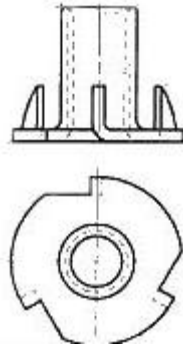


Drilling Roller Skate Plate Mounting Holes

by Dave VanBelleghem

How to drill holes in a quad roller skate so the plates can be mounted onto the boots. This article was written by the founder of QuadSkating.com, Canadian roller skater Dave VanBelleghem (aka "Rollerskater Dave").

Quad plates tend to come with four mounting holes. There are some with six. The holes will usually allow a three sixteenths inch diameter bolt to just pass through. The best and neatest bolting arrangement to use is with a "Tee Nut" type of bolt. (See diagram).



Tee Nut

The Tee Nut is inserted into the hole from the inside of the boot and the mounting bolt is inserted through the hole in the plate into the mounting holes in the boot sole that you will drill and threaded into the Tee Nut. The prongs in the nut grip into the inside surface of the sole to keep the nut from rotating as you tighten the bolt into it. If you are unable to obtain any Tee Nuts an alternative method is to take conventional flat headed three sixteenths inch diameter bolts and find washers that just barely keep the bolt head from passing through. In this setup the bolt head and washer are inside the boot and the nut is threaded on the other end to clamp the plate to the boot.

Make sure you have removed the laces and insoles from the boots. Pull the tongues back out of the way. It helps if you can rig up a little jig to hold the boot in a stable position while you work on it. A short (six or eight inches long) piece of two by four nailed into a "T" formation on the end of a longer two by four which is clamped in a vise or Workmate will do. With the plate in position on the sole of the boot take a sharp pointed instrument such as a scratch awl and make a definite dimple in the center of each mounting hole in the plate. Lift off the plate and double check that the marks are in the right position. When you're satisfied that the marks are correct take your sharp instrument and make the dimples a bit deeper. Then take a one eighth inch (1/8") drill bit and drill pilot holes all the way through the sole. Using the jig will help ensure you don't damage the uppers when the drill pops through. When the pilot holes are all drilled take a seven thirtyseconds inch (7/32") drill bit and drill the holes to size.

All that being done, you can now put the Tee Nuts into place. Put the plate back in position. Thread one bolt into the heel and one bolt into the front hole. Just snug them up a bit. They don't need to be super tight yet. Now you can measure how much of each bolt you will need to cut off. Add two or three extra threads to compensate for when you tighten everything up. The front bolts will all be one length. The heel bolts will all be one longer length. With all the bolts the proper length you can assemble everything together. Hand thread all the bolts in then use your allen wrench or screwdriver (depending on the bolt) to finish tightening. Tighten each just a little bit at a time as you go around to all the bolts to keep the pressure on the plate even. **DON'T OVERTIGHTEN** as you can easily strip the bolts. Your first couple of times on the skates check the bolts to make sure they stay seated evenly and give them a little tweak if needed.

If you have used the bolt and washer setup the same rules apply. Obviously you will be tightening the nuts on the outside. You will need to have a screwdriver or allen wrench holding the bolt head in place to keep it from rotating. You will be able to install all the bolts and tighten them up and then cutoff the excess bolt with this setup. Leave a couple of extra threads past the nut to allow you to rethread the nuts back on in case you ever need to remove the plates. If you cut things off flush with the nut while things are done up tight you'll never be able to push the bolt through far enough to get the nut back on. (Again learned from experience). It may be preferable to remove the trucks to hacksaw off the bolts, unless you own a Dremel type tool that you can use to quickly grind off the excess without risking damage to the trucks.

Copyright © Dave VanBellegem