

Freecoaster Slack Adjustment

- Tools needed: two 19mm open-end wrenches, one 13mm open-end wrench and a plastic hammer.
1. Remove wheel from bike and remove the axle nuts off of the axle studs.
 2. Use two 19mm open-end wrenches to break loose the axle studs. Place the wrenches on the wrench flats of the studs and turn them both in a loosening motion. Only one axle stud will break loose.
 3. If the drive side breaks loose then unthread the drive side stud completely. Remove the colored washer that is just underneath the stud. Pay close attention to the removal of this washer because it will have to go back on exactly the way it came off. If the non-drive side axle stud comes loose then skip down to number 8 for axle removal instructions.
 4. Remove the center axle from the hub shell. To do this thread the drive side stud back in the center axle 3 or 4 full turns. Strike the end of the drive side stud with a plastic hammer so that it drives the axle out the non-drive side of the hub shell. Once the axle comes out of the as far as it can remove the drive side stud and pull the center axle out the rest of the way.
 5. Once the axle is out of the hub shell you will be able to see the non-drive side sealed bearing and a series of washers just underneath it.
 6. Remove the non-drive side axle stud and colored cone washer. Locate the 13mm wrench flat machined onto the drive side of the center axle and secure it with a 13mm open-end wrench. Use the 19mm open-end wrench to loosen the non-drive side stud. Remove the non-drive side stud completely and pull off the colored cone washer.
 7. Pull off the sealed cartridge bearing to expose the 3 small washers. These are the washers that need to be removed in order to create more slack in the hub. The more washers that are removed the more slack that is created. The more slack that is created the more of a pedal rotation it will take before the hub will engage. If you are ready to put your hub back together skip down to step 13.
 8. If the non-drive side stud comes loose then unthread the stud completely. Remove the colored cone washer that is just underneath the stud.
 9. Locate the 13mm wrench flat machined onto the silver center axle. Hold the 13mm wrench flat with the 13mm open-end wrench and break the drive stud loose with the 19mm open-end wrench. Unthread the drive side stud completely and remove the colored washer.
 10. Remove the center axle from the hub shell. To do this thread the drive side stud back in the center axle 3 or 4 full turns. Strike the end of the drive side stud with a plastic hammer so that it drives the axle out the non-drive side of the hub shell.

11. Once the axle is out of the hub shell you will be able to see the non-drive side sealed bearing and a series of washers just underneath it.
12. Pull off the sealed cartridge bearing to expose the 3 small washers. These are the washers that need to be removed in order to create more slack in the hub. The more washers that are removed the more slack that is created. The more slack that is created the more of a pedal rotation it will take before the hub will engage.
13. Once you have removed some of the small washers we can begin to reassemble the hub. To start this process we will slide the non-drive side cartridge bearing back onto the non-drive side of the center axle.
14. Slide the colored cone washer that was removed from the non-drive side back on the center axle the same way it was removed. Once this is done thread the non-drive side stud into the center axle.
15. Hold the 13mm wrench flat on the drive side of the center axle and tighten up the non-drive side stud with a 19mm open-end wrench.
16. Now we have the non-drive side of the center axle back together we can install it into the hub. Slide the drive side of the center axle into the hub from the non-drive side. It will only go so far by hand. Once it stops it will have to be tapped in the rest of the way with a plastic hammer while holding the driver on the drive side. Holding the driver will ensure that it does not come out of the hub shell.
17. The axle will have to be tapped into the hub until the non-drive side bearing is completely hidden and the center axle sticks out of the driver about ½mm.
18. Install the small colored washer back onto the drive side of the axle the same way it was removed.
19. Thread the drive side stud into the drive side of the center axle. Hold both wrench flats on both studs with a 2 19mm open-end wrenches and tighten them both at the same time.
20. With the hub/wheel in your hand, freewheel the hub to make sure it is working correctly. You now should have more slack than you had before.