





Bicycle Maintenance and Repair Guide Booklet. v1



Keeping the right tire pressure will increase the life of the tube and tire. These pictures show how we remove or re-install a wheel on a bike using a *hule spanner* (1). When reinstalling the wheel it is important that appropriate chain tension is applied. Fit your *pump* (2)and fill tire until desired pressure is met.



A cut or hole on the side of the tire can cause the inner tube to burst. To fix this problem use a pair of *tire levers* (1) or the *hule* to separate the tire from the rim. Then carefully sew the cut with a *sharp needle* and a *strong thread* (2) and reinstall the tire on to the rim.



If your tube is always loosing air pressure it could be the valve (1), or a hole in the inner tube. Check if there is a hole by holding the tube under *water* (2) then use the patch (3) to close the hole. If the leak is at the valve, replace the rubber seal (4).



Every spoke in a wheel is very important. If one breaks it can cause the wheel to slightly or widely bend. The best solution to solve this problem is to replace the broken spoke with a new one. To replace a spoke you have to make sure that there is no air in the tire. It is best to completely remove the tire from the rim. Use the *key spoke* (1) to loosen the broken spoke. Then replace the broken spoke and use the key spoke to tighten it.



To avoid a loose axle (1) which can shorten the life of your bike you will need to service it regularly. First remove the nuts from the hub using the *hule* (2). Use a *flat screw driver* with *hammer* (3) to turn the freewheel anti-clockwise with force. See next page for instructions on how to remove the axle.



Simply use a *hule* to loosen and remove the nuts (1), remove the axel (2), clean and grease the bearings (3) and replace the bearings if needed. Put it back together and tighten the cone nut (4) so it is tight but still turns.



When a chain is too long or broken you need to cut it to the right length or remove the damaged section. Use a *shifting spanner* as a *hammer* and use a *steel nail* (1) to remove the pin (2) that connects the chain. After splitting it into its separate parts use the same procedure to reinstall the chain.



To service the bottom bracket of your bike use a *chisel* and a *hammer* (1) to unlock the ring that holds the cup and then use the *shifting spanner* (2) to remove the cups (3). Then check the bearing, replace if damaged or clean the existing one. Then clean the cups, apply grease on them. Then put every thing back together. Tighten cups until unwanted movement in axle (4) is gone.



Keeping the pedal body tight and bearings greased will extend the life of the pedal. Wiggle pedal to check if there is any extra movement. Remove dust the cap (1) then loosen and grease ball bearings (2). Tighten cone nut (3)until unwanted play is gone, reinstall dust cap.



For maintenance purposes you will often need to get access to the bottom bracket axle. Undo cotter pins (1) to remove the cranks (2), often a swift hit with a *hammer* (3) is needed to get them out. When removing and installing pedals be sure to remember that the left side pedal is threaded backwards (4).



For safe bicycle use be sure to service your brakes regularly. To adjust the pads loosen the nuts (1) holding the pads and align them parallel to the wheel. Then tighten the nuts again. Check that all fasteners (2) are tight through the complete braking system.





If the head-set is loose and you will need to tighten it. First remove the handle bars by loosening the bolt using your *hule* (1), then loosen the nuts on the head-set (2), apply grease to ball bearings (3) and put back together. Then tighten the head set until unwanted movement (play) goes away.



You can adjust the angle of your seat, and the height of the seat using your *hule spanner*. Simply loosen the bolts (1), put your seat at the wanted height and retighten the bolts. The seat should be at a height where you feel comfortable getting on and off the bike.