



Aim: To try and raise the boys' awareness of the dangers of roads and also to help them to deal with those dangers

The subject of road safety is one that can come under many different categories and in this section the boys should look at all of them and try to not only understand in theory what is being asked of them but be able to put this knowledge into practice.

Equipment:

- Bike chain oil
- Highway Code book
- Green Cross Code book
- Tyre pump with pressure gauge
- Spanner

Basic bike mechanics

Below is an activity that could be run in small groups throughout the evening. Ask all boys who have bikes to bring them in. Discuss with the boys the advantages of having a well maintained bike especially referring to safety. This may be linked with a cycling proficiency course. Visit www.rospea.com for more information.

Frame

Begin by walking around the bike and closely examining the frame for dents and cracks. Stand over the front wheel, and nestle it between your knees. Then grab hold of the handlebars and wiggle them back and forth. They should feel solid and shouldn't "give," relative to the wheel. Check the "headset," or the steering tube – that's what steers the bike, and you don't want it coming loose during a ride or the results could be disastrous. Next, check all the bolts on your bike and tighten them. Two areas to focus on are the handlebar binder bolt, which holds the handlebars in place, and the seat binder bolt, which does the same for your seat. Exerting proper torque is important, particularly on more delicate road bike frame material, such as carbon and alloys, which can crack if you over-tighten bolts.

Tyres

Next, check the state of your tyres for any cuts and debris lodged in them. Make sure your tyres are pumped up to the proper pressure (which is indicated on the side of the tyre itself). Well-inflated tyres help you ride faster by reducing rolling resistance, and they reduce the incidence of flat tyres because harder tyres deflect debris better. Generally, road bikes require 90-120 pounds per square inch (psi); mountain bikes require 30-50 psi.

Brakes

Spin each wheel, then grab the brake levers and pull hard. Do they stop the wheel decisively? Spin the wheel again, and this time make sure that it's straight, or "true."



No maximum number depending on adequate supervision



One evening, easily split up to fill smaller segments of time on different evenings

Resources:

Green Cross Code booklet and Highway Code booklet. Possibly one each for the boys, these are available from all good book shops

Gears and chain

Now it's time to look over your "drivetrain", which comprises the chain, chain rings, freewheel and all those little moving parts near the derailleur (the gear shifter). Does everything look to be in good working order? Are there layers of dirt and grime? If so, clean your drivetrain, using a basic engine degreaser. Your bike will roll along more easily because when your bike's drivetrain becomes dry and gritty, friction is substantially increased. Now that your drivetrain is clean, it's time to oil your chain. Use a more viscous bike-specific lubrication, such as 'TriFlow', rather than 'WD-40', which can dry out the chain over time.

Visit

You could ask a local police officer to come and do a short talk or presentation on road safety. There is a possibility that when the police officer comes he can tag bicycles with an invisible ink pen that can only show up under certain light. This can help in the returning of a stolen bike.

