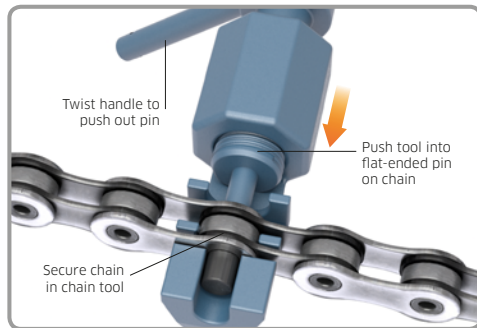


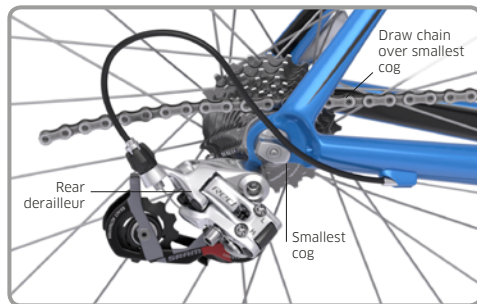
## ▶ REMOVING AND REPLACING A BIKE CHAIN

# Bicycle chains

Your bike chain takes a lot of wear and tear as it is constantly twisted and put under strain. It requires oil to work smoothly, which in itself attracts grit and grime. Slipping gears may be a sign that your chain needs replacing.



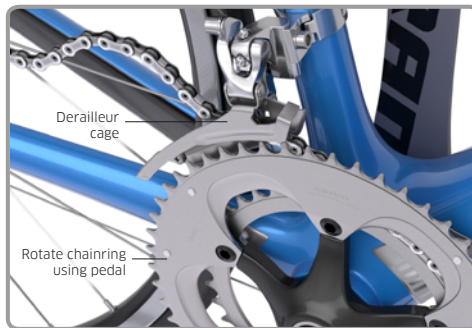
**1 Lift the chain** off the chain ring and onto the bottom bracket. Select a link on the lower length of chain, and locate the chain in the chain tool. Wind the handle to push the pin out, and remove the chain.



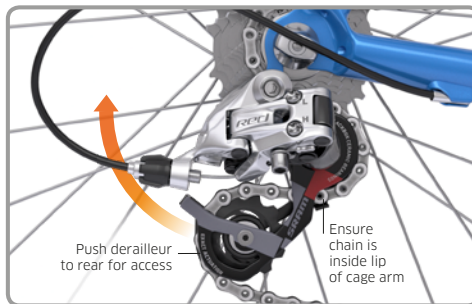
**3 Pull the other end** of the chain towards the rear derailleur so that it rests on the smallest cog of the cassette. It is now ready to be threaded through the rear derailleur.

**BEFORE YOU START**

- Ensure that the chain is on the smallest cog at the back and the smallest chainring at the front to provide enough slack
- Place a chain wear indicator onto the chain. The indicator pins should slot into the links; if not, the chain has stretched



**2 Thread one end** of the new chain through the front derailleur (mech) cage until it catches on the teeth of the chainring. Turn the pedals and draw the chain downwards.

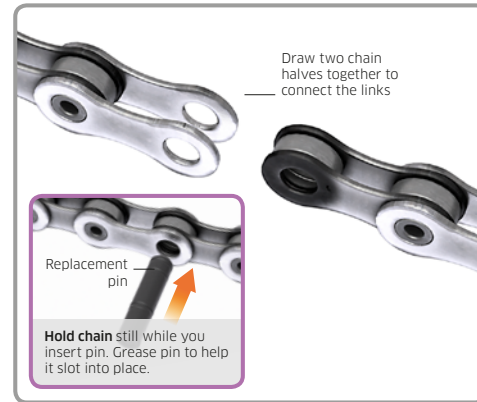


**4 Thread the new chain** through the rear derailleur. Feed the chain downwards carefully – clockwise over the top jockey wheel, and anti-clockwise over the bottom jockey wheel.

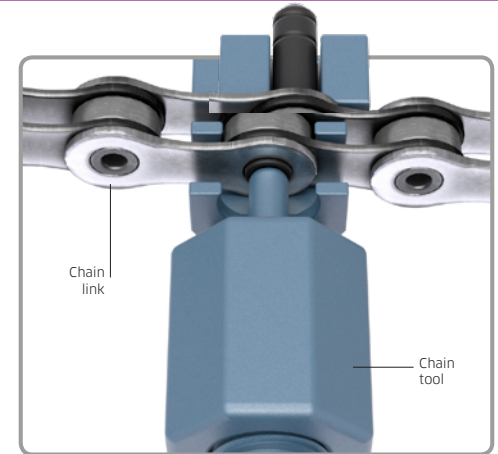
**TOOLS AND EQUIPMENT**

- Chain wear indicator
- Chain tool (ensure it is the correct size)
- Grease and oil
- Needle-nose pliers
- Chain links and pins

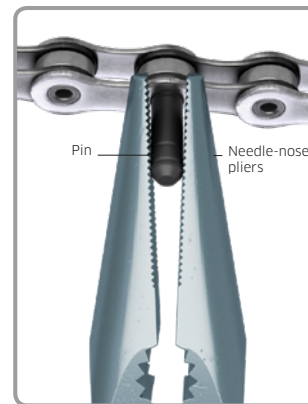
**Workshop tip:** A new chain may need to be shortened, as if it is too long, it may jump off the chainring. Chains vary in length. To find the optimum length, wrap the chain around the biggest cog at the back and the biggest front chainring at the front, and add two links.



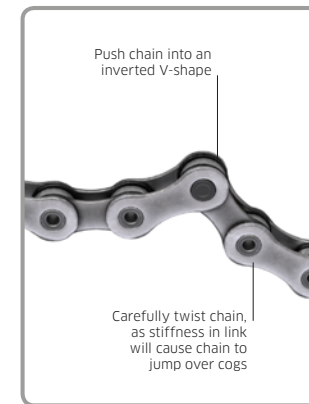
**5 Bring the two ends** of the chain together underneath the chainstay. Push the thin end of the replacement pin between the two links to hold the chain together.



**6 Slot the chain** into the guide on the chain tool. Twist the handle of the tool to push the replacement pin into the links, and securely join the lengths of chain together.



**7 Snap off the end** of the pin using needle-nose pliers. Some chain tools can also be used to shorten the chain pin.



**8 The chain will feel stiff** at the join. Apply oil to the link and manipulate the chain with your hands until the link moves freely.

**CHAIN LINKS**

Many manufacturers now make special chain connectors that mean you can remove and replace your chain easily – sometimes without tools.

- The SRAM “PowerLink” has two halves with an integrated pin. Snap the link into place and apply tension to secure it. The link can be released manually.
- Shimano chains feature a hardened connecting pin with a flared end for extra strength.
- Campagnolo’s Ultralink comes with a chain segment so several links can be replaced at once.

