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VICTOR'S CORSA

 **Ratio**  
2x12SH

*Check below for your kit and reference the blue squares to find out what your kit should include.*

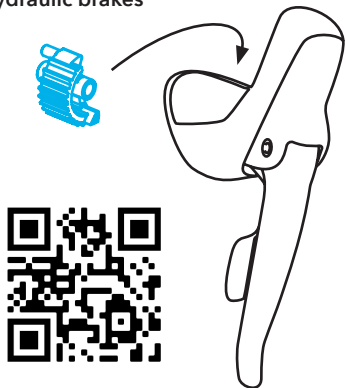
	12SH Ratchet + M2.5 screw	12SH Jockey Wheels	Emergency Kendal Mint Cake
			
2x12SH Upgrade Kit			
12SH Ratchet			
12SH Jockey Wheels			

# 1. SHIFTER RATCHET REPLACEMENT

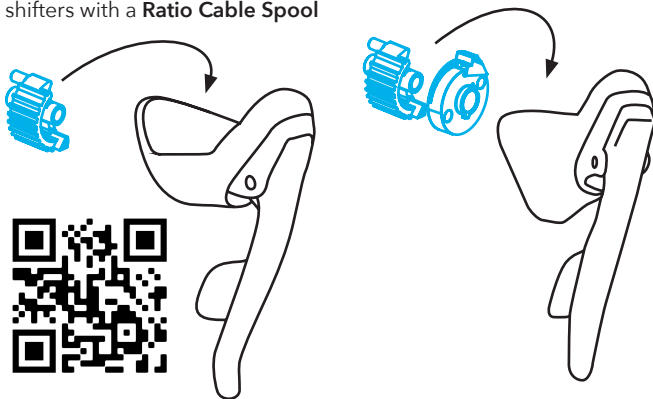


Fit the 12SH ratchet to your shifter. Scan the QR code for your shifter type or visit [ratiotechnology.com](https://ratiotechnology.com) to view our video guide. Make sure that you follow the correct guide.

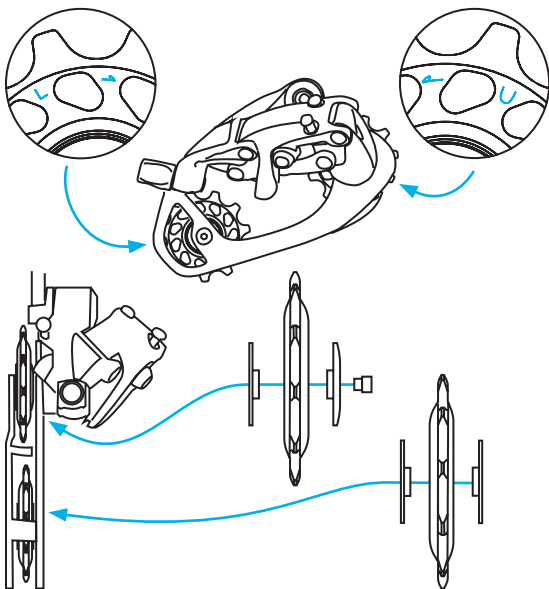
SRAM 11 speed shifters for  
hydraulic brakes



SRAM 11 speed shifters for **cable brakes** or SRAM 10 speed shifters with a **Ratio Cable Spool**



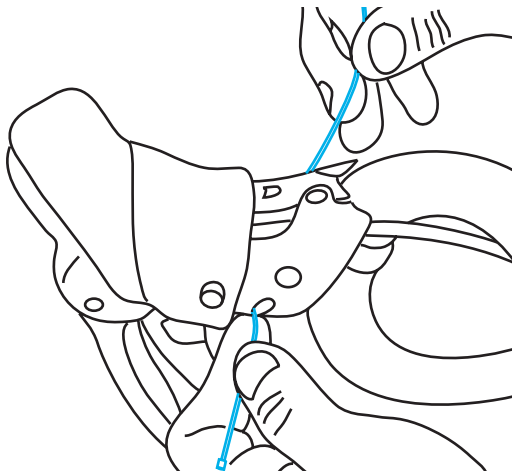
## 2. JOCKEY WHEEL REPLACEMENT



The 2x12SH kit is compatible with SRAM **Exact Actuation** 2x-specific derailleurs including Red, Force, Rival and Apex. These derailleurs may be 11 or 10 speed. Check that your chosen cassette doesn't exceed the **maximum capacity** of your derailleur as recommended by SRAM. For example, SRAM's WiFLi models have 32t capacity.

Use a **2.5 mm** hex key to remove the original jockey wheels. The upper and lower screws are **different sizes**; take care to keep them separate.

Fit your 2x12SH jockey wheels. The upper jockey is marked with a **U** and the lower jockey is marked with an **L**; it is important that they are fitted in the correct positions. The arrows show the direction of rotation when the bike is pedalled **forwards**. The upper jockey should have a small **nylon spacer** and **one thick end cap** on the **outboard** side. The lower jockey should have **two thin end caps**.

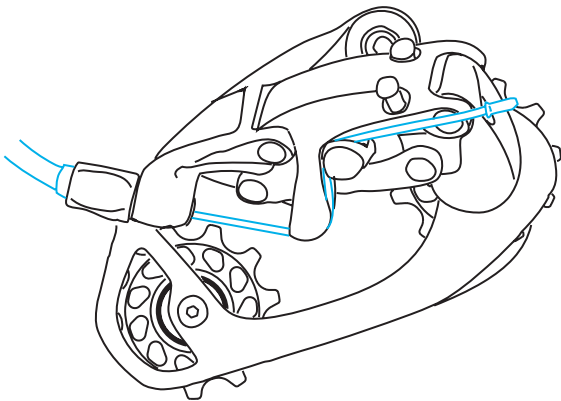


**Cable brakes only:** Pull the lever, then feed the brake cable through the hole and out of the shifter. Connect the brake and check that the operation is normal.

## Both brake types:

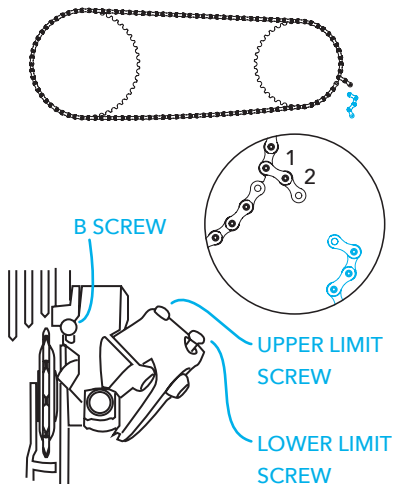
1. Shift the mechanism into the **smallest** sprocket
2. Roll the shifter hood back from the base
3. Feed the end of your new derailleur cable into the hole at the **bottom** of the shifter
4. Ensure that the cable passes through the **hole in the red (or Ratio) cable spool** inside the shifter
5. Pull the cable out of the top of the shifter until the end of the cable is **seated in the spool**
6. Fit an outer ferrule and then slide the inner cable into the outer housing

## 4. DERAILLEUR CABLE ROUTING



1. Fit a ferrule to the end of the outer cable
2. Thread the inner cable through the **cable adjuster** and the **cable fin**
3. Shift into the smallest sprocket, pull the cable tight and clamp it with the bolt (**3 Nm** maximum), ensuring that the cable is **seated in the groove** in the washer
4. Pull on the derailleur to bed the cable in, then re-tighten the cable in approximately the smallest sprocket position
5. Cut the cable to length and clamp an end cap in place

# 5. CHAIN LENGTH AND INDEXING



1. Wrap your 12 speed chain around the **big chainring** and the **largest sprocket**, missing the derailleur
2. Sit the chain on the chainring so that the two ends meet at a wide link and a narrow link with **as little slack** as possible
3. Count **two links** from the meeting point as shown and break the chain, ensuring that the chain **ends at an inner link**
4. Thread the chain through the derailleur and join it with a **quick link**
5. Adjust the **lower limit screw** until the upper jockey wheel is aligned with the centre of the **smallest** sprocket
6. Set the **B screw** - in the largest sprocket, there should be a **6 mm gap** between the sprocket teeth and the upper jockey wheel teeth
7. Use the clamp bolt and then the barrel adjuster to index the gears. If the shifts **inboard** are slow, turn the adjuster **anticlockwise**. If the shifts **outboard** are slow, turn it **clockwise**
8. Release the upper limit screw. In the largest sprocket, trying to shift to an easier gear should put you back into the **same sprocket**. Turn the limit screw **clockwise** until this doesn't happen, then release it around **half a turn**. It should **not** be possible to shift the chain **into the spokes**





**Ratio Technology** was founded in 2018 to develop groundbreaking drivetrain components. Since then, we've set our minds to creating the parts we want to ride on our own bikes, here in the Lake District, UK.

We hope you enjoy them.

All the best,

**The Ratio team**

**#madeinthelakes**

