



%Ratio

1x12 WIDE

UPGRADE KIT CONTENTS

%Ratio



1. 1x12 Wide **ratchet**
2. Derailleur **cable fin**
3. Derailleur **rear exit cable stop** OR **forward exit cable adjuster**
4. Spare **derailleur circlip**
5. Shifter **disassembly screw**
6. Cable **port plug** and **M4 fitting screw** (rear exit version only)
7. Emergency **mint cake**

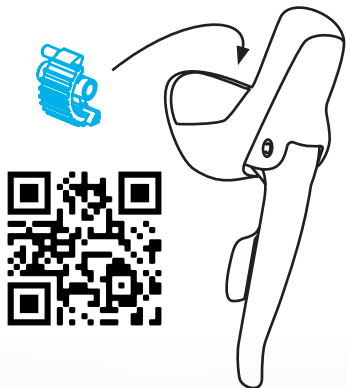
Contents of individual part kits will be a subset of those above

1. SHIFTER RATCHET REPLACEMENT

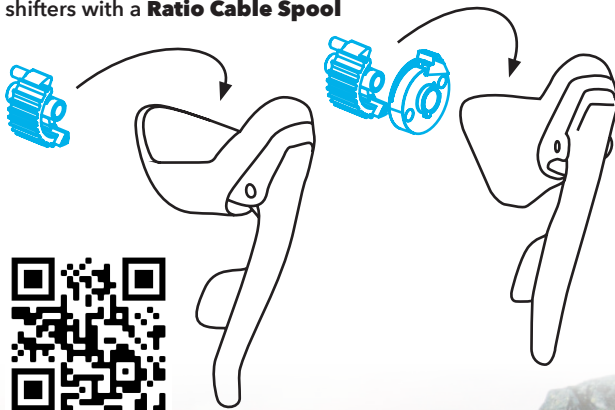


Fit the 1X12 Wide ratchet to your shifter. Scan the QR code for your shifter type or visit ratiotechnology.com to view our video guide. Make sure that you follow the correct guide.

SRAM 11 speed shifters for
hydraulic brakes



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

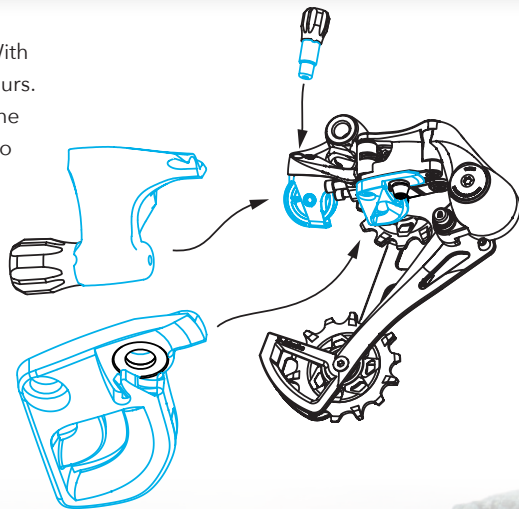


2. DERAILLEUR FIN REPLACEMENT

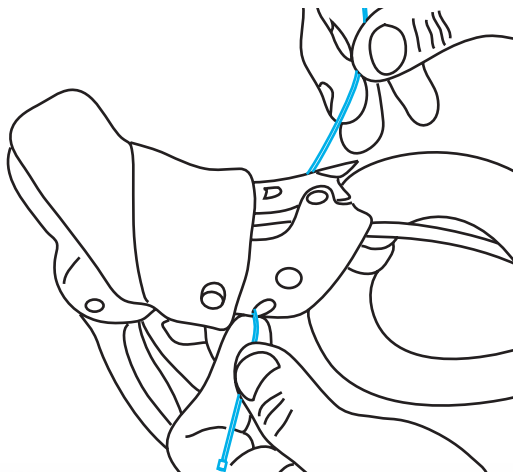
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Fit the Ratio cable fin to your Eagle™ derailleur. Your derailleur must be from the X01™ or XX1™ groups. With a forward cable exit kit, you can also use GX™ derailleurs. **SX™ and NX™ derailleurs are not compatible.** Scan the QR code or visit ratiotechnology.com to view our video guide.

If you have a rear cable exit kit, head to ratiotechnology.com/support to see how to fit the rear exit cable stop. Otherwise, fit the barrel adjuster.



3. SHIFTER CABLE ROUTING

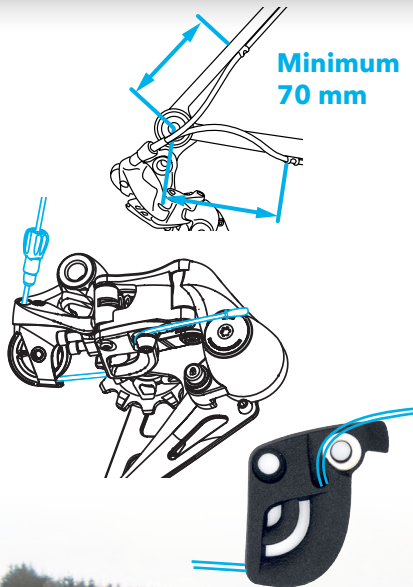


Cable brakes only: Pull the lever, then feed the brake cable through the hole and out of the shifter. Connect the brake and check that the operation is normal.

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

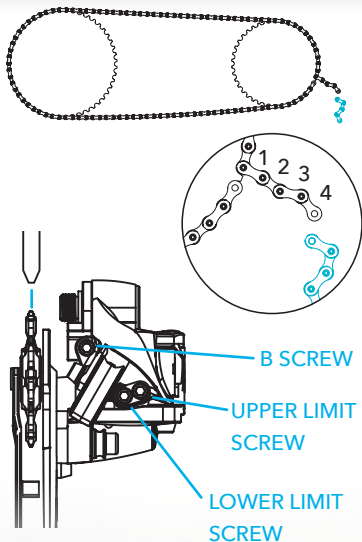
4. DERAILLEUR CABLE ROUTING



If you have a **forward cable exit** kit, check that your chainstay or seatstay cable stop is **at least 70 mm** from the centre of the dropout. **You cannot** fit forward exit kits to a bike that does not meet this requirement. If the cable stop is closer you will need a Ratio **rear exit cable stop**.

1. Fit a ferrule to the end of the outer cable
2. Engage the **cage lock** on the derailleur
3. Thread the inner cable through the **barrel adjuster** and **pulley wheel**/through the **cable stop** and the **cable fin**
4. 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
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 **chainring** and the **largest sprocket**, missing the derailleur
2. Sit the chain on the **narrow-wide teeth** of the chainring so that the two ends meet with **as little slack** as possible
3. Count **four 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. Use the guide provided with the derailleur to set the **B screw** - in the largest sprocket, there should be **14 mm** between the sprocket and the upper jockey wheel
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. We hope you enjoy them.

All the best,

Tom, Felix, Will and Louis

#ratiotechnology

Photography by Hugo Hunt www.hugoshootsfilm.com

