



Gusset GS Derailleur Bicycle Chain – User Manual

General Safety

Using incorrectly installed, adjusted or maintained bicycle components can cause serious accidents.

Component assembly on any bicycle is best carried out by a qualified bicycle mechanic.

If you are unsure about any of the procedures to install, adjust or maintain any of the components on your bicycle, we strongly recommend you consult a qualified bicycle mechanic for advice and guidance, or better, take your bicycle to a professional bicycle workshop to have any work carried out.

Introduction to derailleur drivetrains

If your bicycle uses a derailleur drivetrain, it relies on the chain to transfer power from your pedals to the rear wheel while allowing smooth gear changes by moving across the different size cogs. Proper installation, operation, and maintenance of the chain are essential for safe and efficient riding.

Chain Safety Information

Keep fingers, clothing, and loose items away from the chain, chainrings, and derailleurs when the cranks or rear wheel are in motion.

Wear protective gloves when handling the chain to avoid cuts and grease contact.

Do not ride if the chain is damaged, excessively worn, or incorrectly installed.

Do not attempt to lengthen a chain using a conventional chain link and rivet pin. Consult an expert.

Chain Compatibility

Check that you have purchased the correct chain for your bicycle.

For multi-gear derailleurs bicycles, it is important that the chain is compatible with the number of sprockets in the rear cassette. It is also important to check that you have selected a compatible chain type for the other components you are using, as some high-performance gear systems require unusual specifications.

Note: If replacing a worn chain:

A severely worn chain may cause premature wear to the other components on a bicycle. It is not uncommon for a new chain not to 'mesh' correctly with existing worn sprockets. Apparent 'skipping' is a common symptom where a new chain is fitted to worn sprockets. If you find such issues after installing a chain, it's likely that your sprockets may need replacing also. Best to consult a professional bicycle workshop for advice.

Assembly instructions

1) Tools required:

- Chain link extractor tool (and/or 'quick-link' *pliers)
- Gloves
- Clean rag and bike-specific chain lube

**Some modern chains include a 'Quick-Link', which may or may not require specific chain link pliers to open and close the link. Note: Gusset GS series chains include a re-useable Quick Link that can be closed without pliers, but does require pliers to open. We recommend replacing the Quick Link if re-opened and closed more than 5 times.*

2) Cut the chain to the correct length:

Safety Note: Your new chain should be the same or longer than your old chain and will usually need to be cut down in length. If your new chain is too short, never attempt to lengthen a chain.

A) If replacing an existing worn chain without changing any gear ratios:

- i) Place the gears into the smallest sprocket sizes to reduce the spring tension from the rear gear mechanism. Carefully note where the chain runs amongst the gear shifters and pulleys.
- ii) If possible, drop the chain from the front chain wheel to completely remove any spring tension.
- iii) Break the chain by using a chain tool and removing one of the chain pins (or, if the chain has a Quick Link, use chain pliers to open the Quick Link). Remove the 2nd pin on the outer link plates, so that you will have removed 1 outer link and 2 pins in total (i.e. the equivalent of a Quick Link)
- iv) Lay the old chain out alongside the new chain.
- v) Cut the new chain to match the number of links in the old chain (note: The new chain may appear slightly shorter overall, due to the wear factor.)

Or

B) If fitting a chain to a new bicycle or if using revised gear ratios:

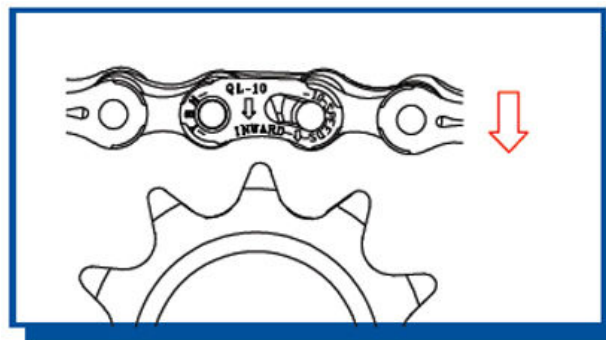
please refer to the dealer manual of the derailleur for the method to check the length.

3) Installing the New Chain

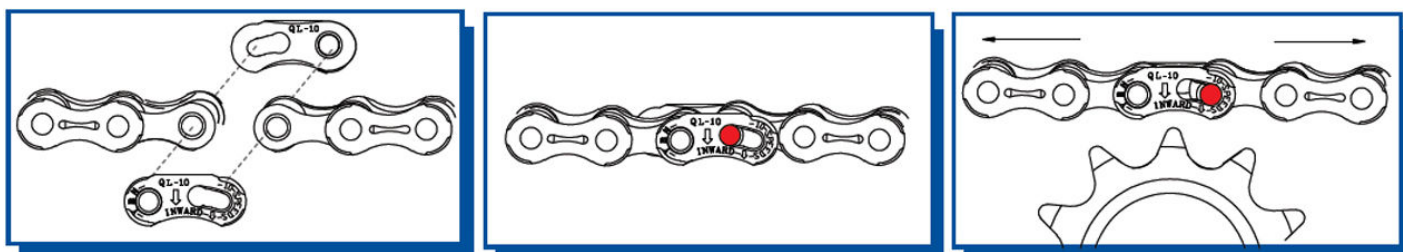
Note: To avoid premature contamination of the new chain, take the opportunity to ensure that the sprockets, gear pulleys and chainwheel are clean, before installing the new chain.

- A) Thread the new chain from the lower side through the gear mechanisms and onto the sprockets and chainwheels and back round to be joined under the lower side using the Quick Link joiner. (you may need an extra hand to hold the 2 ends of the chain whilst under spring tension from the rear gear mechanism, alternatively – you may be able to temporarily drop the chain off of the front chainwheel)

IMPORTANT: Check the correct orientation of the Gusset Quick Link compared to the sprockets.



- B) Install the new chain's Quick-Link, being careful to ensure that both plates and pins are fully inserted.



- C) The Quick Link pins will now need to be pulled apart to fully engage into the outer plates, usually with an audible click. (Several chain plier tools have a function to do this.)

Note: To do this without using a plier tool: apply the rear wheel brake and use pedalling force to tension and pull the chain. This should pull the Quick Link pins into their fully engaged position.

Important:

Check that the Quick Link pins are fully engaged before riding your bicycle.

Chain care

The chain is one of the most important parts of a bicycle to keep clean. It attracts dirt and grime because it is exposed on the bottom of your bike where it is close to the ground. Because it comes into contact with other parts of the bike, it can spread dirt around causing parts to wear out prematurely. If the chain has a lot of mud or dirt caked on, rinse it off with water and allow to dry before re-lubricating.

To maximise the life of your bicycle chain and minimise the harmful effects of dirt and detritus on other parts, give your chain a simple clean and lubrication each time you ride.

We recommend a deeper cleaning on a monthly basis.

Despite your best efforts at keeping the chain clean, eventually a bicycle chain will wear out. Riding with a worn chain will cause your cogs and chain rings to wear out faster and these too will need replacing in time. It is usually more economic to replace a chain than to replace the cogs and chainrings, it is therefore recommended that you replace the chain at the first sign of wear.

Specialist chain wear indicator tools are available. These can be purchased at several different price levels. Most good bike shops will have chain wear indicator tools and can offer helpful advice.



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