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Squire Fitting Instructions

First and most important

Thanks for buying this Gusset Squire chain tensioner.

It is a simple, strong and effective method of maintaining tension on the chain if there are no means of adjustment, and it should stop the chain jumping off if you ride over bumps. Ideal for use where the cassette cogs and derailleur have been removed and replaced by a single cog, as in the Gusset I-er single speed conversion kit.

It is set up with a spring that pushes the chain upwards, but we also include in the pack a spring that can be used if you would prefer to have pull down tension. See **figs 1 and 2**.

TOOLS REQUIRED:

2.5mm, 4mm 5mm hex keys.
Small flat blade screwdriver.
Thin nosed pliers and protective eyewear.

IMPORTANT:
Due to the unpredictable nature of springs and small circlips that are contained in this item, please ensure that you are wearing protective eyewear whilst carrying out any servicing or adjustments to this product.

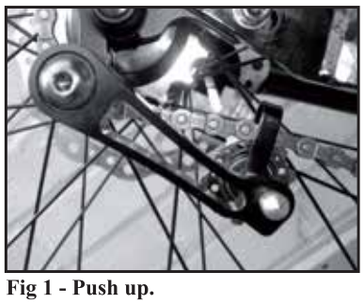

Fig 1 - Push up.

Fig 2 - Push down.

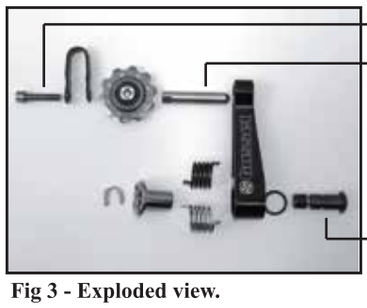

Fig 3 - Exploded view.

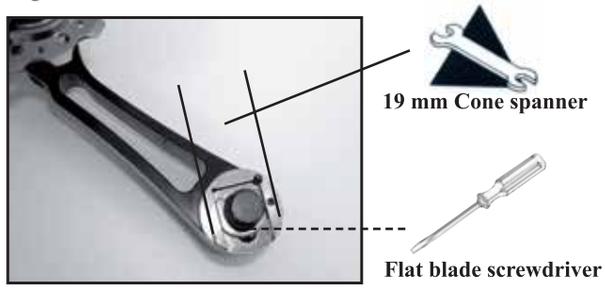

Fig 4 - Spring carrier end plate.

For standard operation (push up, **fig 1**), use a 5mm hex key on the mounting bolt (**A**) to attach the Squire to the dropout as shown in **figs 1 & 2**. Put a little grease on the threads, and tighten only lightly finger tight to start with because of tensioning up later on.
Use a 4mm hex key to remove the bolt (**B**) holding the jockey wheel and hoop to the adjustment shaft. Fit the hoop over the top of the chain, fit the jockey wheel into it under the chain and refit the bolt. The hoop should be at right angles to the chain and you should be able to hold it in position as you finally tighten the bolt.
Viewed from the back of the bike, the jockey wheel should be directly in line with the cog. If it is not, undo the grub screw holding the adjustment shaft (**C**) in place with a 2.5mm hex key and slide it to where it needs to be. Re-tighten the grub screw.

BE GENTLE WITH THE NEXT OPERATION

To put tension on the jockey wheel to push the chain up, take a 19mm cone spanner (any 19mm spanner but it must be at as thin as a cone spanner) and slip it onto the flats on the end plate of the spring carrier, (see **fig 4)** which will now be right next to the frame dropout. Make sure the mounting bolt is loose enough for the spanner to move easily (it will be a sloppy fit because the flats are 18.24mm) and turn it gently anti-clockwise. You will feel and see the chain move upwards under the influence of the spring, and the further you move the cone spanner the greater the tension. Tighten the mounting bolt with the 5mm hex key. There should be no need to go any further than 90°, and if you do there is a danger of pulling the tail of the spring out of it's retaining hole in the body of the Squire, which will cause damage and stop it working. You will almost certainly have to replace the spring.

CHANGING THE SPRING FOR PUSH DOWN TENSION.

Remove the flat sided circlip from the end of the mounting bolt by inserting the flat blade of a small screwdriver between the closed end of the circlip and the mounting bolt (see **fig 4**) and twisting it sideways. It will slide out quite easily. You can then pull the bolt out one way and the spring carrier the other. The spring should stay in place on the carrier because it's tail is in the locating hole in the end plate, and you can take it off the carrier by simply pulling it out. If it is too tight to pull out by hand, use the flat blade of the small screwdriver again to gently lever it out. You can now see all the parts at that end as in **fig 3**. Take the other spring, which should be black and is wound in the opposite direction, and notice that one tail is shorter than the other. The long end fits into the middle one of the three holes in the spring carrier end plate, you can see there is only one hole for the other tail in the housing body.
Slide the spring and carrier into the housing, making sure that you locate the short tail in the hole. It won't go all the way home because the spring will need compressing slightly, which will happen when you put the mounting bolt with washer in place, hold the whole lot together with your fingers and slip the circlip back into the groove in the mounting bolt If it is tight, you might need to use the thin nosed pliers to push into place.
Now fit it onto the bike as before, only this time the hoop goes under the chain and jockey wheel on top of chain, and tension is produced by twisting the 19mm spanner clockwise. Try not to put too much tension on the chain by turning the spanner through more than about 90°, as doing so can cause irreparable damage to the spring.