

Shifting cable exchange – grip or trigger shifter

In this manual we will present how to attach a new shifting cable to an Efneo GTRO gearbox with a grip or trigger shifter. To change the cable, the gearbox can be installed on a bike, you don't even need to take the chain away (we made photos with a gearbox put on a table, but this is not necessary).

We switch the gearbox to a 3rd gear. We rotate the black pipe, to have access to bolts. We loosen the bolt of the old steel wire in a splitter and take the wire out, together with the old housing:



We put a new shifting cable (steel wire should be longer than external housing by at least 5 cm / 2 inches; much longer is OK, too) into the shifter. The shifter has to be in a **3rd gear position**.

Important! If at any moment of this servicing operation, you change the housing, please, see the manual showing, how to [install the end caps](#) (black plastic cap on the photo below) properly. If you do not follow this manual, housing may not go till the very bottom of the cap – when housing gets deeper later on, you will need to adjust gear position again:



The grip shifter should have an adjustment barrel in the following position (in the middle of the range):



The trigger shifter should have an adjustment barrel in the following position (in the middle of the range):

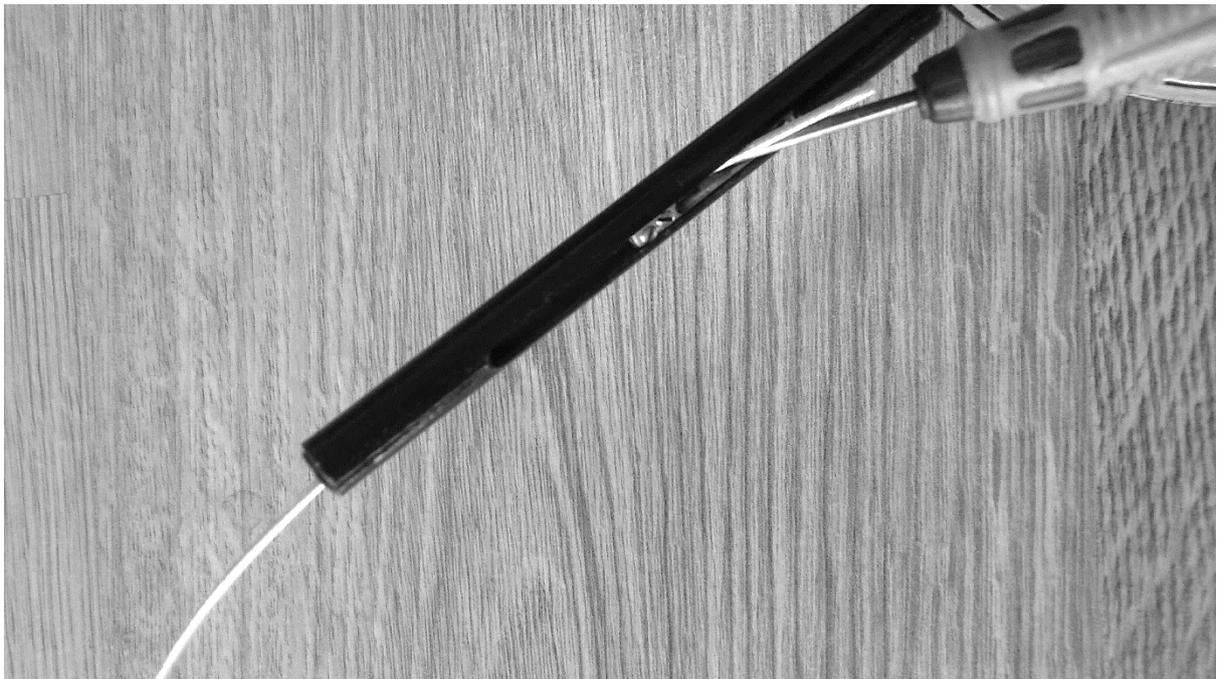


Putting adjustment barrel position to a middle of its range allows for later tuning in both directions!

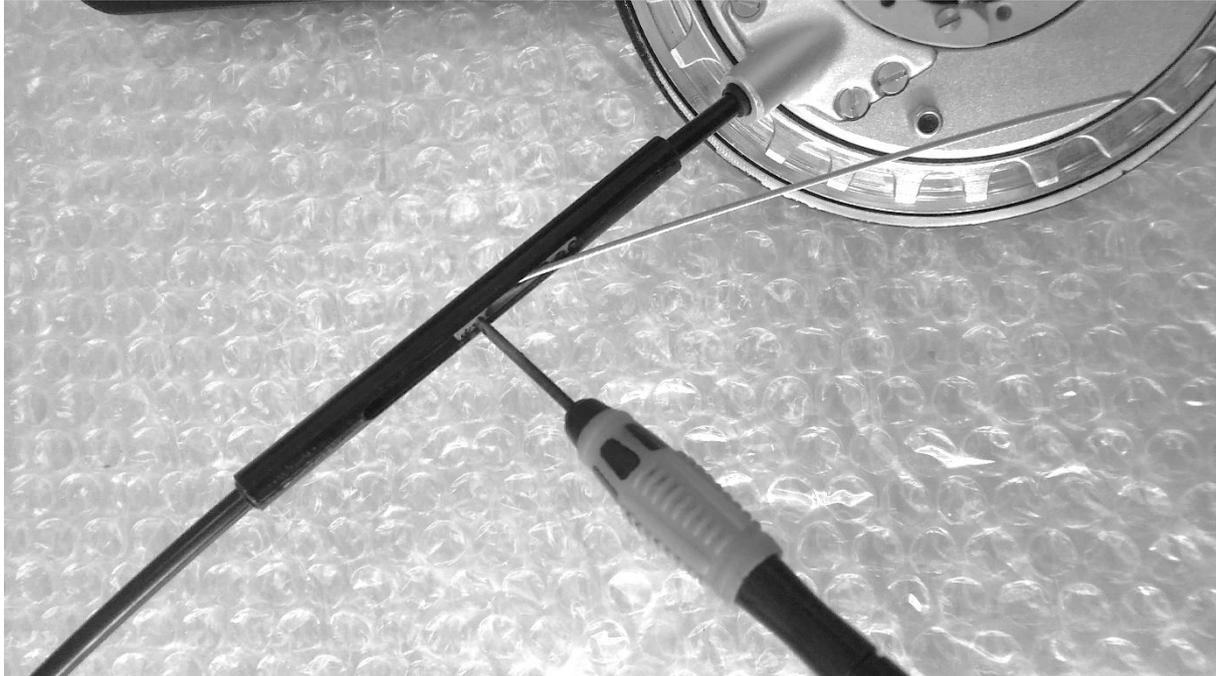
We put the steel wire into the separator pipe. We can see the wire through a long cutout:



Next, we put the wire into the splitter. We can use a flat screwdriver as a tool, to help get wire out:



Please, pull the wire coming from the shifter strongly, to make sure it is not loose somewhere on the way, for example in the shifter adjustment barrel. Now, we bolt the wire in a splitter:



Finally, we test the gears. For fine tuning the shifter **adjustment barrel** can be used:

- When gearbox is in the 1st gear, we can move the round aluminium case cover in both directions freely. No resistance.
- When gearbox is in the 2nd gear, clockwise rotation of the aluminium cover causes counterclockwise rotation of the chainring.
- When gearbox is in the 3rd gear, clockwise rotation of the aluminium cover causes counterclockwise rotation of the chainring, only **faster** than in the 2nd gear. Please, switch between gears 2nd and 3rd few times, to make sure, they are different!

If all the gears work properly, the assembly is over. However, please, **do not cut** the excess of steel wire before you make a **road test**; leave at least few cm. After you make a road test, you can cut the steel wire. If gears still do not have correct positions, you may want to check [this manual](#).

Lastly, rotate the separator in a way that the separator cutout faces towards the bicycle frame (so that dirt from the front wheel does not get inside and for higher aesthetics) or downwards (if no dirt from the front wheel can get inside). Check, if gears work properly again. If switching gears is a problem, you may need to cut some of the steel wire fibers or rotate the pipe to a different position.

If you experience any problem in the process of cable change, please, ask a professional workshop for help or contact us at wiktor@efneo.com (if photos would make communication easier, please, put them into email).