## How to Measure Your Shift Rod... for Appropriate Fitment with your New HM Quickshifter

When installing your new HM Quickshifter you will in most cases replace the existing shift rod with the strain guage sensor and a shorter shift rod. The combination of sensor + rod forms a new shift rod that should be very close to the length of the current shift rod on your bike.



## **Newer Sportbike Shift Rods**

Most modern sportbikes have a solid shift rod with an inside thread on each end where the rose joints screw into the shift rod. The picture below shows such a shift rod.



You can see the black rubber covers on each of the rose joints, the locking nuts, and the black shift rod between the two silver locking nuts.

- Step 1: Measure the length (in millimeters) of your current shift rod between the two nuts. In this case, the current shift rod is 160mm long.
- Step 2: Subtract 55mm (the length of the sensor) from the length of your current shift rod. In our case, 160mm minus 55mm equals 105mm. 105mm is the length of the new shift rod you will need to install your HM Quickshifter.

Now go find your new shift rod! If you've been around sportbikes for very long, you just might have it in your stockpile. This is one of the reasons we don't ship a shift rod with each HM Quickshifter... many customers already have the shift rod they need. If you find you don't have the size you need, we have several sizes available at www.hmquickshifter.com. And we'll even build you a custom-length shift rod if we don't have the size you need.

## **Older Shift Rods with Threaded Ends**

This type of shift rod uses inside-thread rose joints and a threaded shift rod that screws into the rose joints. The picture below shows a shift rod with threaded ends.



You can see that the shift rod screws directly into the rose joints. The likelihood of finding this style shift rod in the new length you will need is low. So each HM Quickshifter comes with a set of stub screws to use should you need to install a newer style shift rod like the one pictured in our first example above.

Measurement: There should be about 5mm of threads visible on the shift rod at each rose joint for adjustment. Measure the length (in millimeters) of your current shift rod BETWEEN the threads... the smooth part of the shift rod. This measurement MINUS 55mm for the HM Quickshifter is the length of the new shift rod you will need.

**NOTE:** If your current shift rod shows more than 5mm of visible thread on either end, the measurement above WILL NOT WORK for your installation. In this case, measure (in millimeters) between the inside edges of the lock nuts (all of the visible shift rod, both threaded and not threaded). From this measurement subtract 65mm (10mm for the adjustment thread + 55mm for the HM Quickshifter.) For example, if the total length of visible shift rod is 100mm, you will need a new 35mm shift rod.

When in doubt, take a picture of what you are looking at and email it (along with any information you think will help us) to <a href="mailto:sales@hmquickshifter.com">sales@hmquickshifter.com</a> and we will gladly help you figure it out.

