

KT160 – Yamaha R1 from 2020 - Throttle grip housing installation.

Inner housing



Outer housing



Clamp



Wire guard



Parts list

- 1 x Outer housing
- 1 x Inner housing
- 1 x Clamp
- 2 x Wire guards
- 1 x O ring
- 1 x 2.4 x 100mm Cable tie
- 2 x M5 x 16 cap screw
- 3 x M4 x 10 cap screw
- 2 x M2.5 x 12 cap screw
- 1 x Manual

1 – Remove the standard twist grip and switch assembly from the bike.

2 – Strip off the outer layer of insulating tape which holds the two sets of wiring together. When finished your parts should look like this image.

No wire cutting is needed.

Start at the end nearest the connector and look for the overlap of the tape.



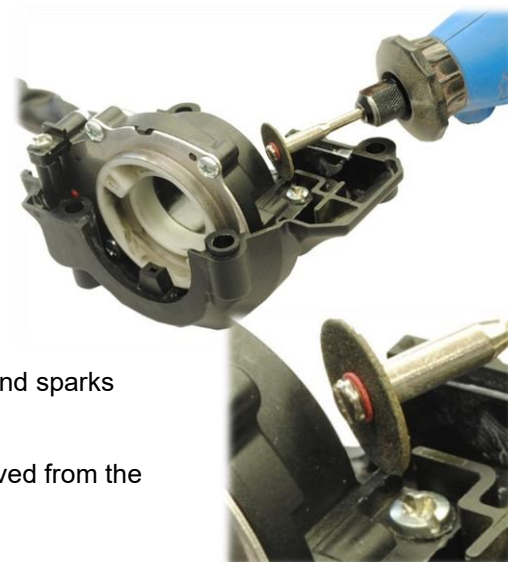
3 – The twist grip sensor is held in place with 2 security screws. Our recommend way to remove these is using a high speed cutter and drill as shown in the image (always use eye protection)

Cut a slot in each screw. They are then easy to remove with a normal flat blade screwdriver.



Remember that grinding creates heat and sparks
Take care at this stage.

The twist grip sensor can now be removed from the original housing.



4 – Fit the original twist grip tube into the new outer housing and rotate into the closed throttle position as seen in this image. The grip assembly is quite loose at this stage.

Note that the tube is hard up against the closed throttle stop as circled in the image.



5 – Fit the sensor into position within the outer housing. This is a very exact fit but only a small amount of pressure is needed to locate this. **DO NOT FORCE**, when aligned correctly it drops neatly into position – Push in straight and not at an angle.



When fitted correctly you will see the sensor mounting hole and the threaded hole aligned perfectly (yellow circle), if not, move the sensor slightly and push back in straight. **DO NOT FORCE**,



If it doesn't fit at all, check section 4 above to make sure the grip is in the closed throttle position.

Now use one of the M2.5 screws and fit loosely into the hole. Do not tighten at this stage



6 - Slide original outer wire sleeve up towards the sensor and fix in place using the cable tie as seen here.



7 – Slide the inner housing into position and fix in place using the 3 x M4 screws.

Fit the remaining M2.5 screw in the inner housing, again ensuring that it is perfectly aligned with the housing. Both of the M2.5 screws can be tightened at this stage. But only minimal torque is needed as you are compressing plastic.



8 – Stretch the rubber O Ring over the main connector and slide it up near the twist grip housing. Now fit the wire exit guard as seen in these images and hold them together using the O ring.



Note: Stretching the O ring over the connector can need an extra pair of hands.

Alternatively you can use any cable tie to hold these two wire guards together.



9 - Fit the clamp loosely with the 2 x M5 screws and slide the new assembly over the end of the handlebar and into position.

You are free to rotate the assembly into any position but our recommended angle for the standard brake lever and master cylinder has the two arrows pointing towards the brake lever. If using an aftermarket brake product choose your own angle taking care that brake lever range is not restricted.

Now tighten using the 2 x M5 clamp screws ensuring that the assembly cannot rotate or slide off. Remember that riders put a lot of force through the grip.

IMPORTANT – Always ensure that the parts you fit do not obstruct full brake lever movement, rotate the housing as needed to achieve clearance.



10 – Now fit your choice of handlebar switch

- Our products 5B-11 or 5BC-11 (recommended to use [5BC-11](#) as this creates more handlebar space)
- A standard right switch from a 2015 > 2019 R1
- A competitor's aftermarket race switch.

