

# Installation Instructions

Periscope - Version A.3 – Stelvio 8V

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# Introduction

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## Before you start

Please take a look at the following paragraphs before you start mounting the device.

**NOTE:**

Even if this instructions are quite simple and linear, you should have a minimal experience/practice in using tools and mounting motorcycle parts. If you're not sure then it is recommended to entrust the assembly to a workshop.

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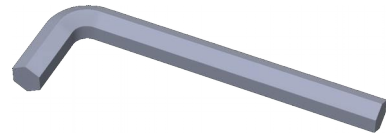
## Tools you need

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- 1 Hex key M4 (4mm)

- 2 Hex key M5 (5mm)

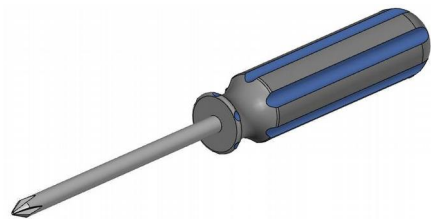
(Better would be a ratchet wrench with an hex bit.)



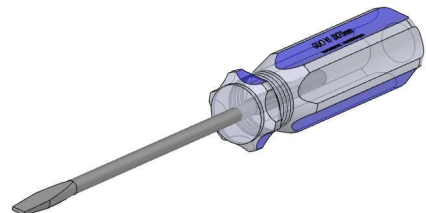
- 3 Small scissors



- 4 Cross screwdriver  
(medium/small size)

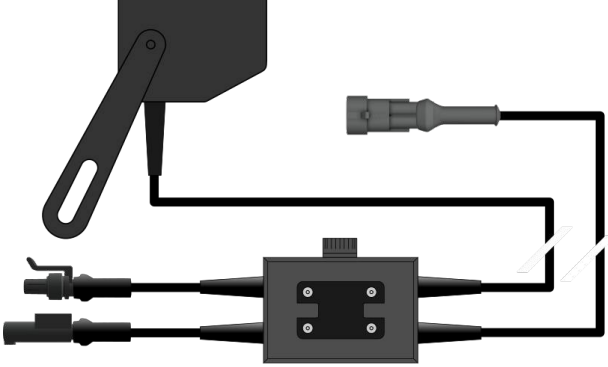


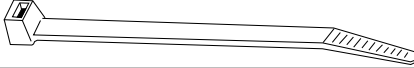


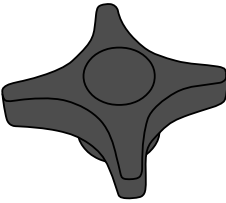



- 5 Flat screwdriver  
(big size, alternatively any tool with a big flat tip)



- 6 30-40 minutes of time!
-

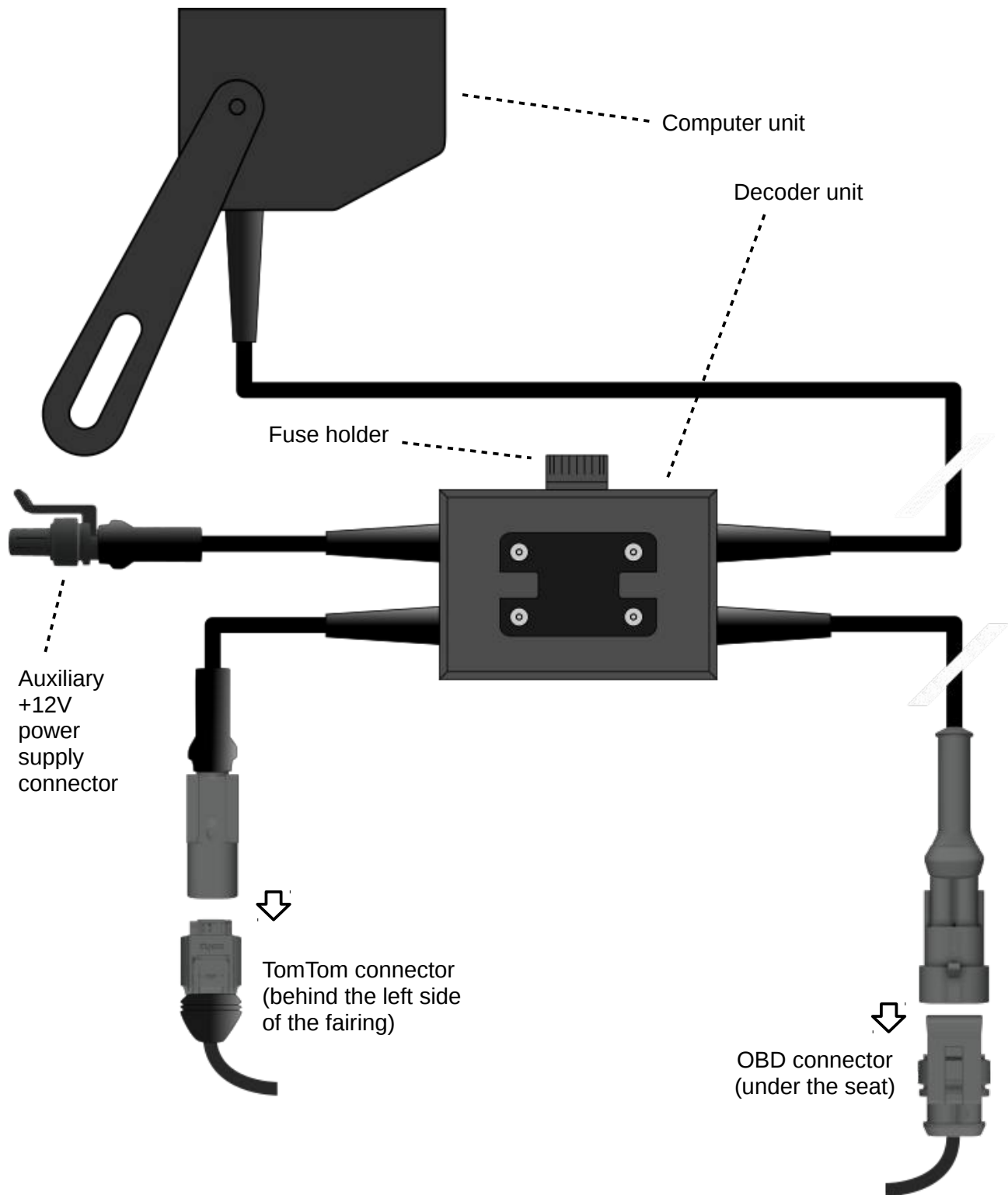
## Parts you need

Item	#	Description
	1	Periscope
	2	Rubber washer
	1	Metal washer
	2	Short cable tie (6.8 x 180 mm)
	6	Long cable tie (2.6 x 260 mm)
	1	Adhesive rubber pad (around 12 x 33 mm)
	2	Knob nut  (Note: this type of knob is easier to grab and tight than the original one due to his shape.)
	1	Knob spacer

## Wiring (diagram)

Basically, in order to work, Periscope needs to be connected to

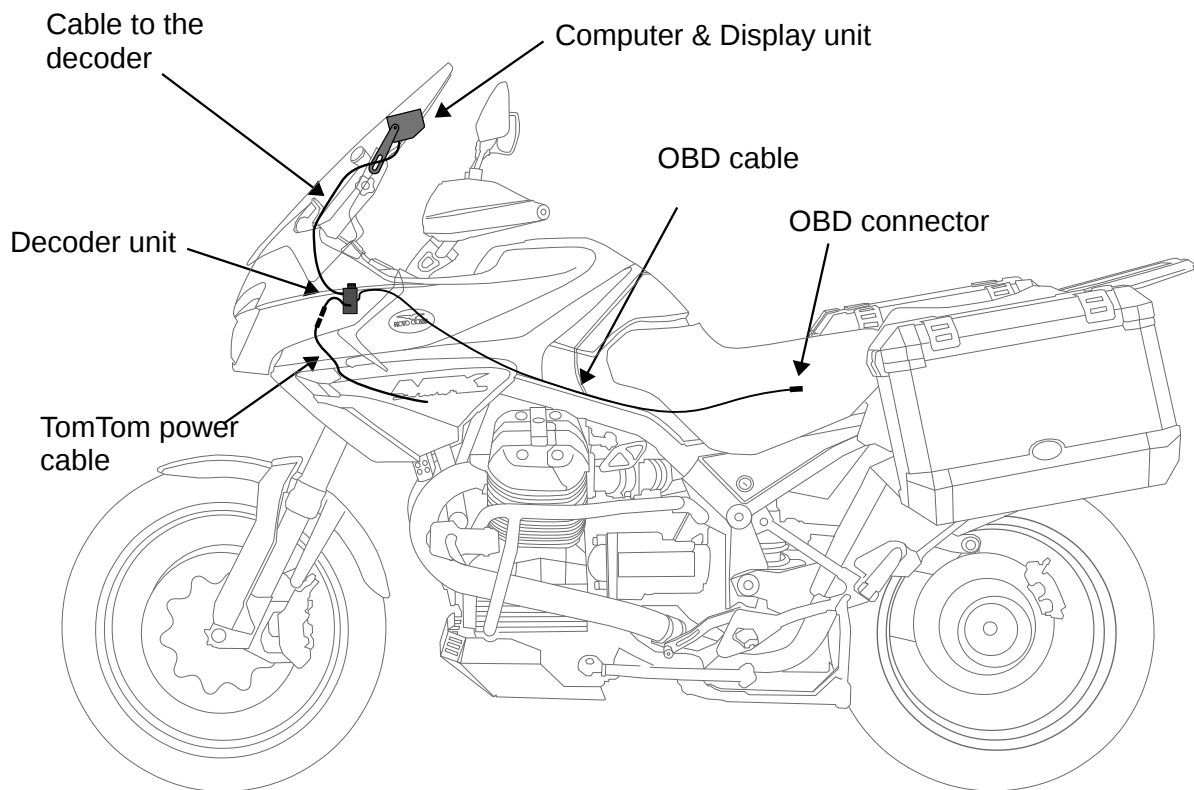
- a power source (+ 12V),
- the OBD interface of the motorcycle (ISO14230 / KWP2000).



## Mounting diagram

For mounting you will have to access to the following areas/zones of the motorcycle:

- the windscreen bracket (to mount the computer unit),
- below the dashboard (to fasten the decoder unit),
- behind the left side of the fairing (to grab the TomTom connector),
- below the seat (to plug the OBD connector).

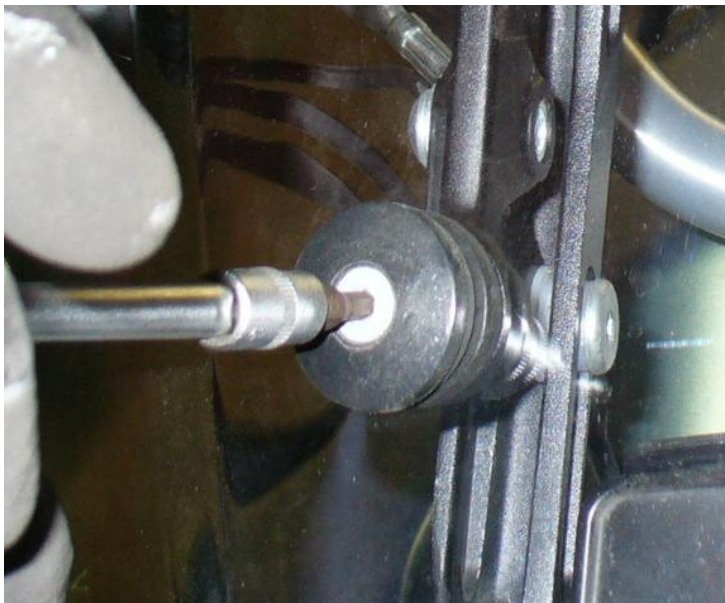
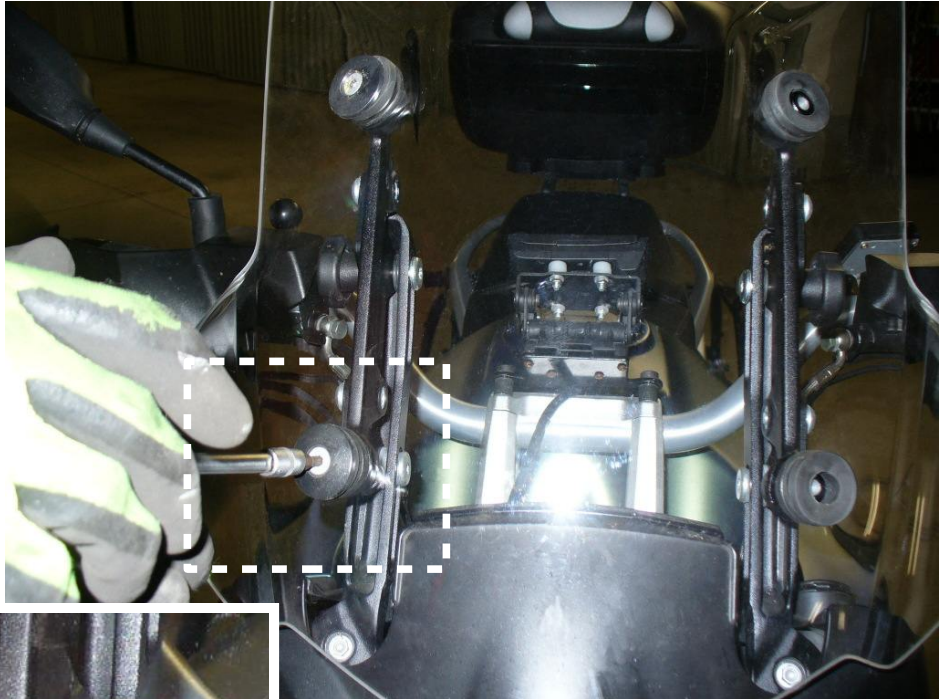


## Mounting

### Step 1/15: remove the windscreen

In order to work around the dashboard in a more comfortable way, it is highly suggested to unmount the windscreen.

- a. Unscrew the four screws holding the windscreen in position by using an hex-key.
- b. Remove the windscreen.





## Step 2/15: remove dashboard fixing screws

- a. Locate the screws holding the dashboard in position.



- b. Unscrew the four socket-screws. (Take care of the spacers, don't loose them!)

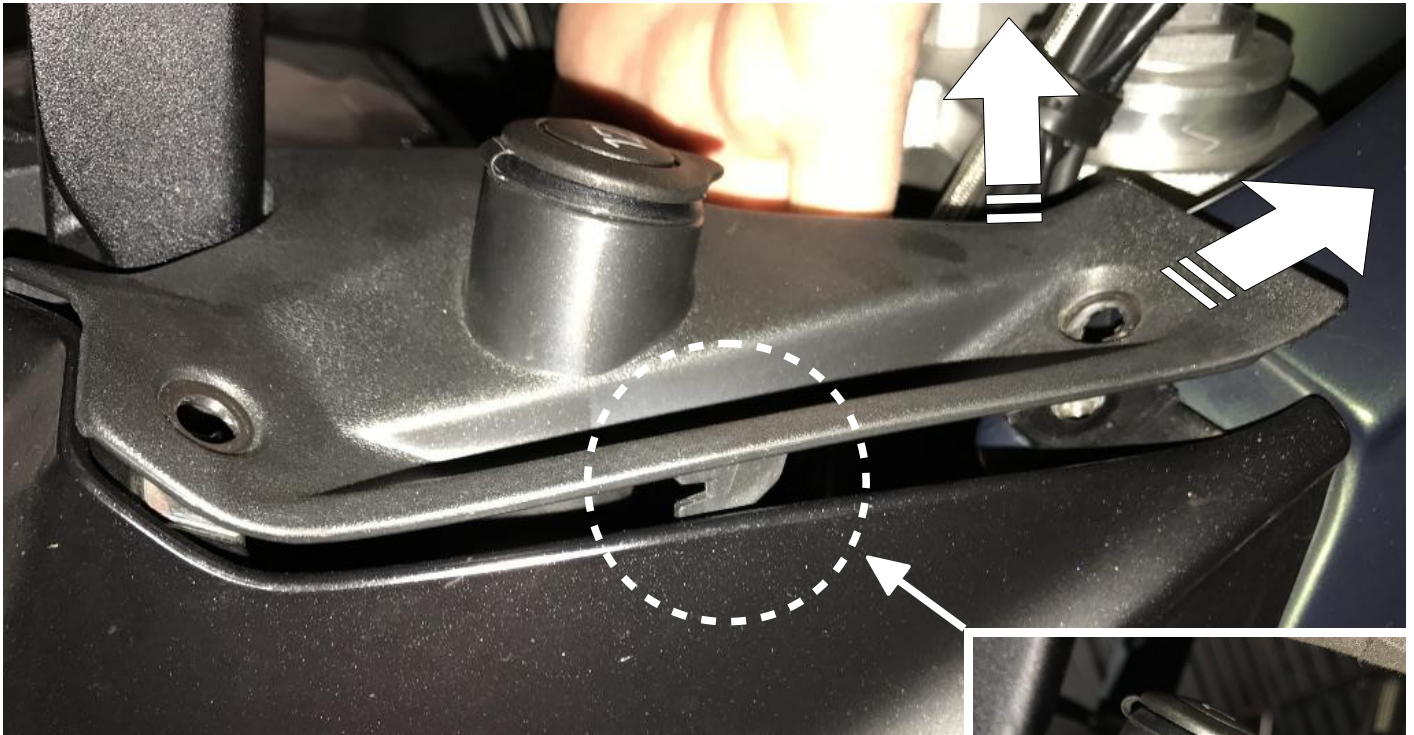


- c. Unscrew the two cross-screws.





## Step 3/15: detach the dashboard



a. Gently pull the dashboard toward the tank while lifting it a little, to unsnap the retaining tab under it.

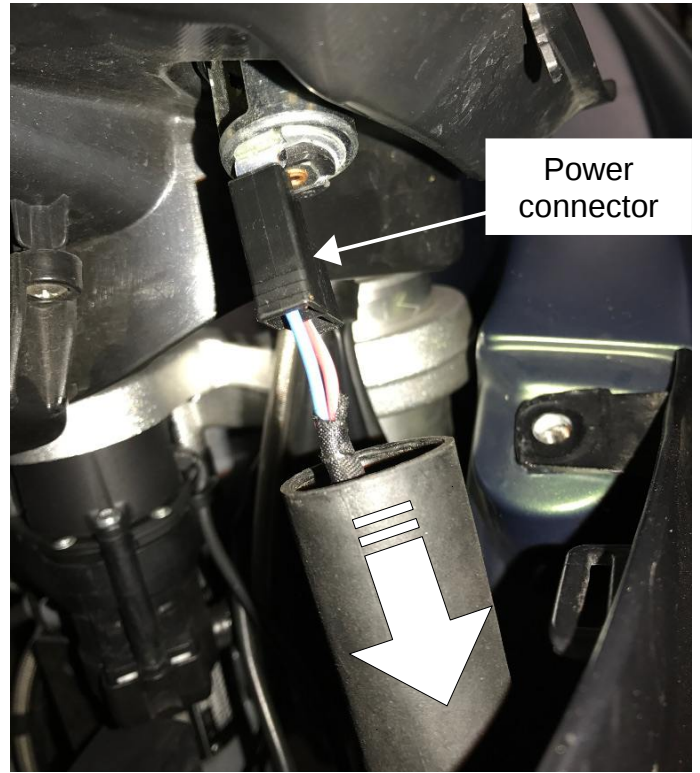
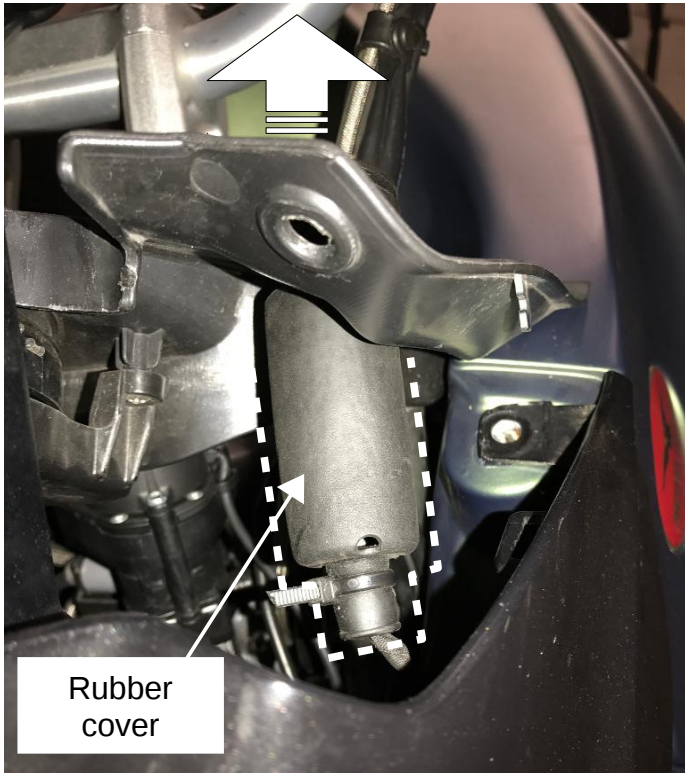


Be careful, the plastic material of the dashboard is very rigid; it can scratch the paint of your fairing very easily!



## Step 4/15: unplug the cigar lighter socket

- a. Keep the dashboard lifted up with one hand.    b. Slide away the rubber cover.



- c. Unplug the power connector.





## Step 5/15: remove the dashboard

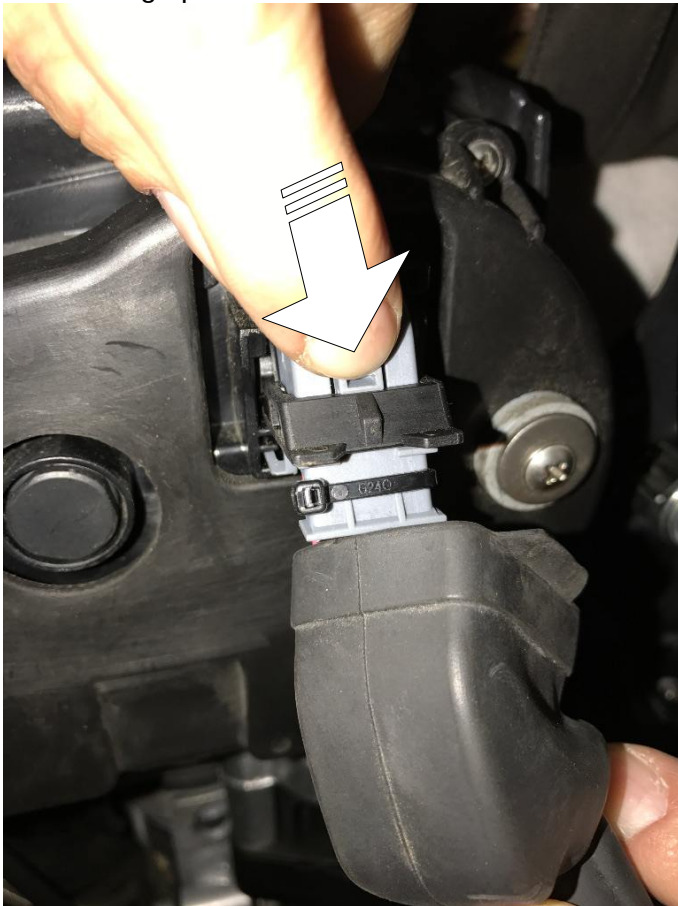
a. Lay a rag over the handlebar to prevent the dashboard from scratching the fairing (optional).



b. While keeping the dashboard vertical, pull out the rubber sleeve protecting the dashboard connector.



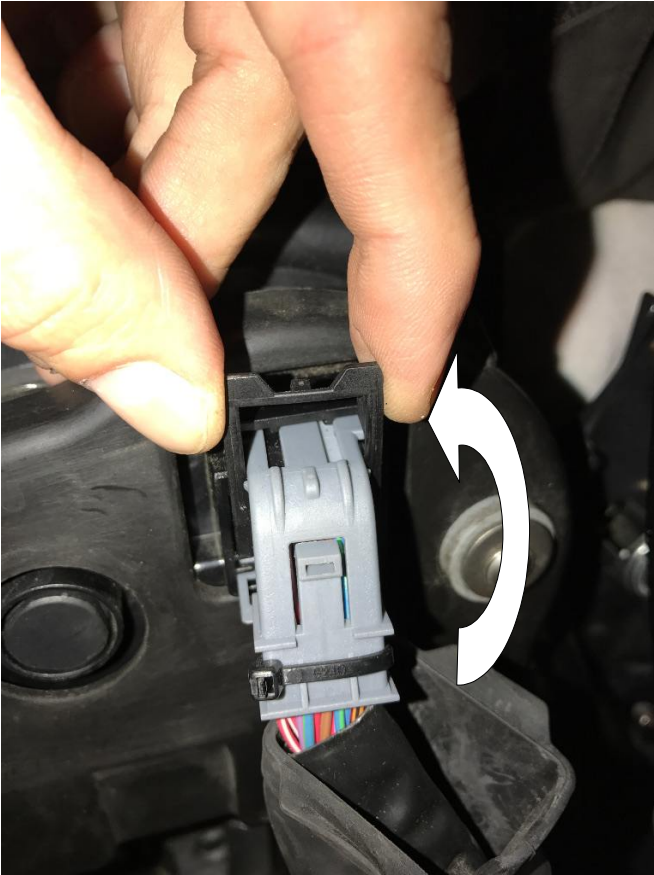
c. Keep pressed the tiny pin preventing the latch from raising up.



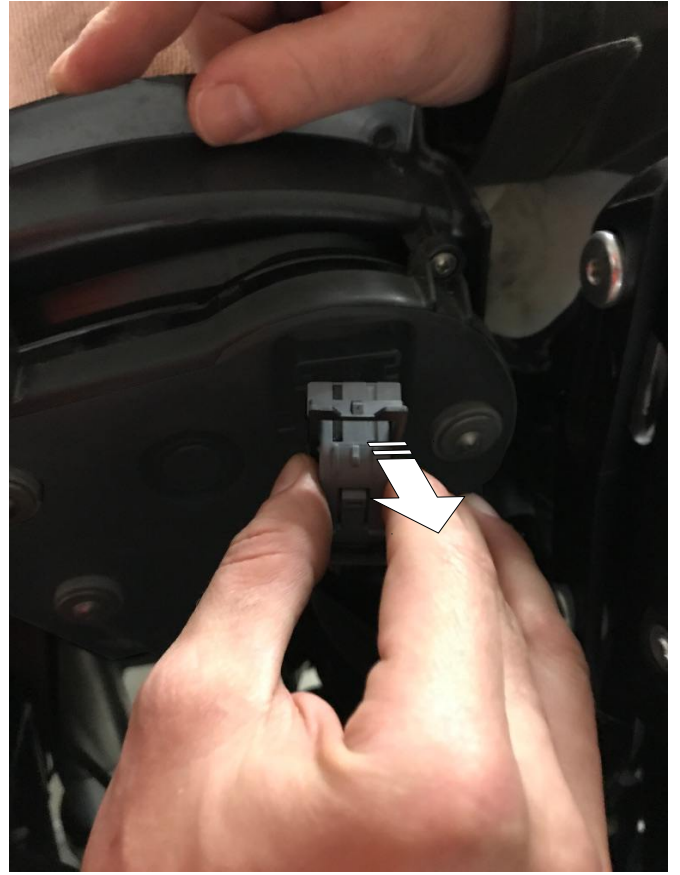
d. Raise up the latch.



**e.** Keep the latch in the upper position.



**f.** Slide/move away the connector very gently. (Do not pull, do not apply any force, just slide it out!)



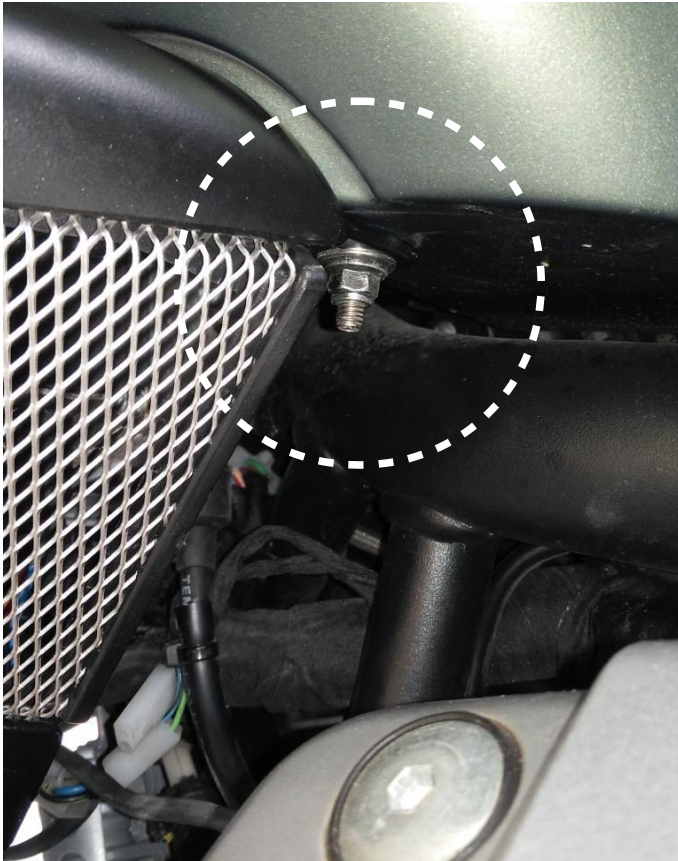
**g.** The connector is out.



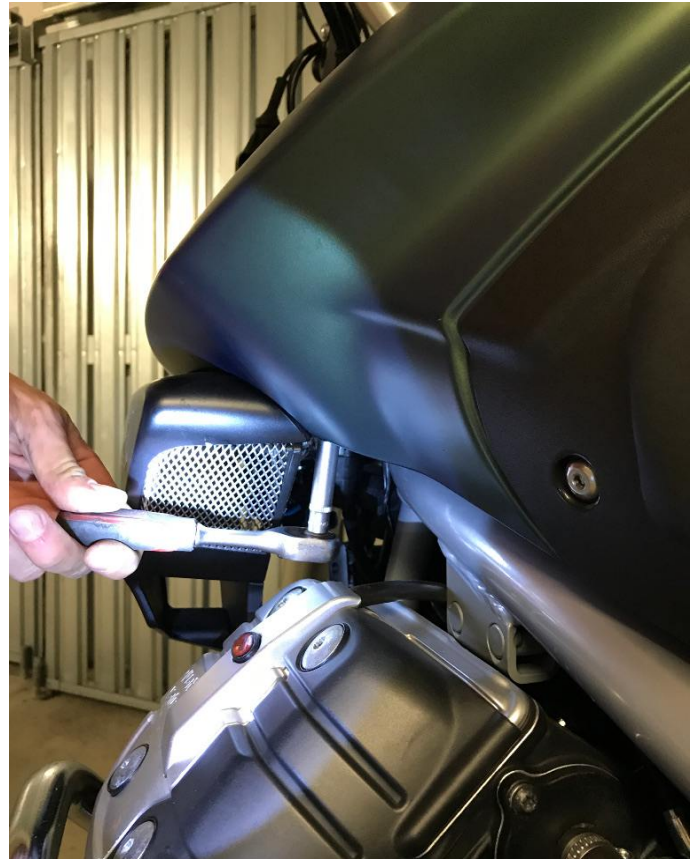


## Step 6/15: unmount out the left side of the fairing.

a. Locate the hex-socket screw below the tank.



b. Unscrew it and take care of the spacer.



c. Unscrew the hex-socket below the headlamps.



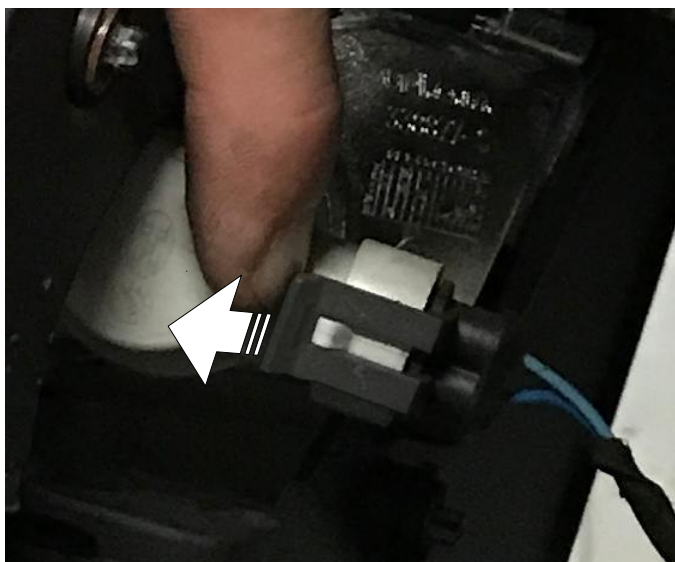
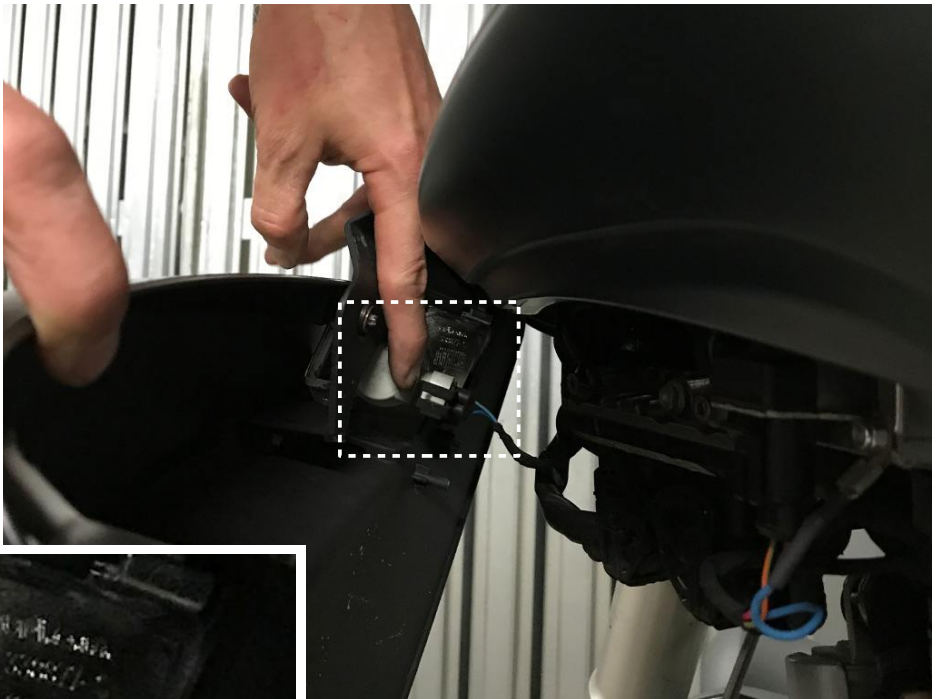
d. Unscrew the hex-socket on the side.



e. Gently pull the frontal part of the fairing towards you and slide the left part out.



f. Unsnap the retaining tab of the connector to light indicator and remove the fairing.





## Step 7/15: fix the computer/display unit.

- a. Remove the left knob and the original washer.
- b. Insert the Periscope bracket between the two rubber washers
- c. Insert the metal washer.
- d. Insert the knob provided with the Periscope and tighten it firmly.



The new knob is more easy to grab, so it can be tightened more firmly. It is suggested to substitute the original knob on the right too (by using the provided spacer).

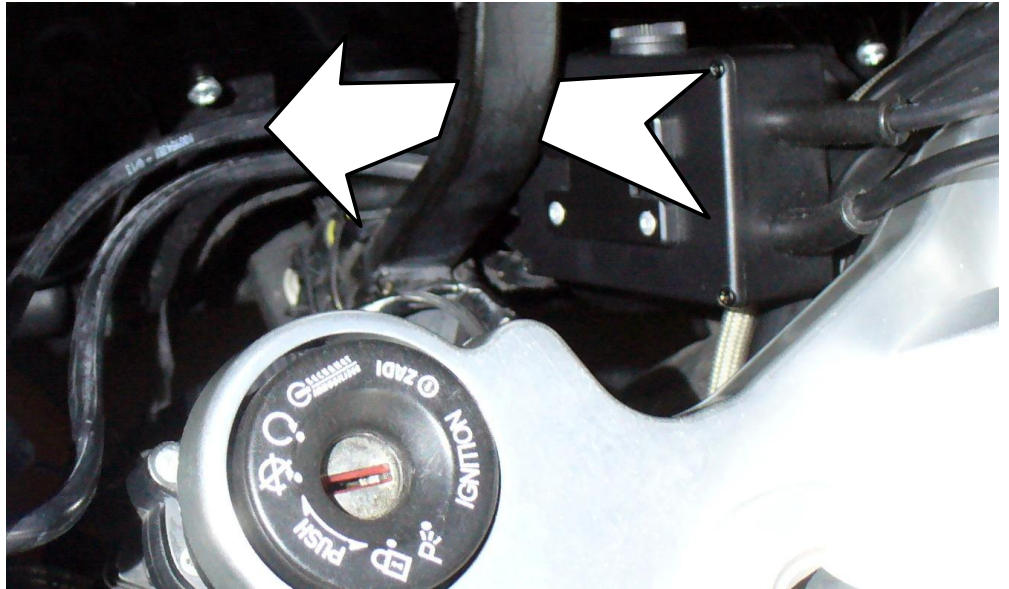


The display unit can be also mounted on the right bracket of the Stelvio. Look at the instructions in the appendix.

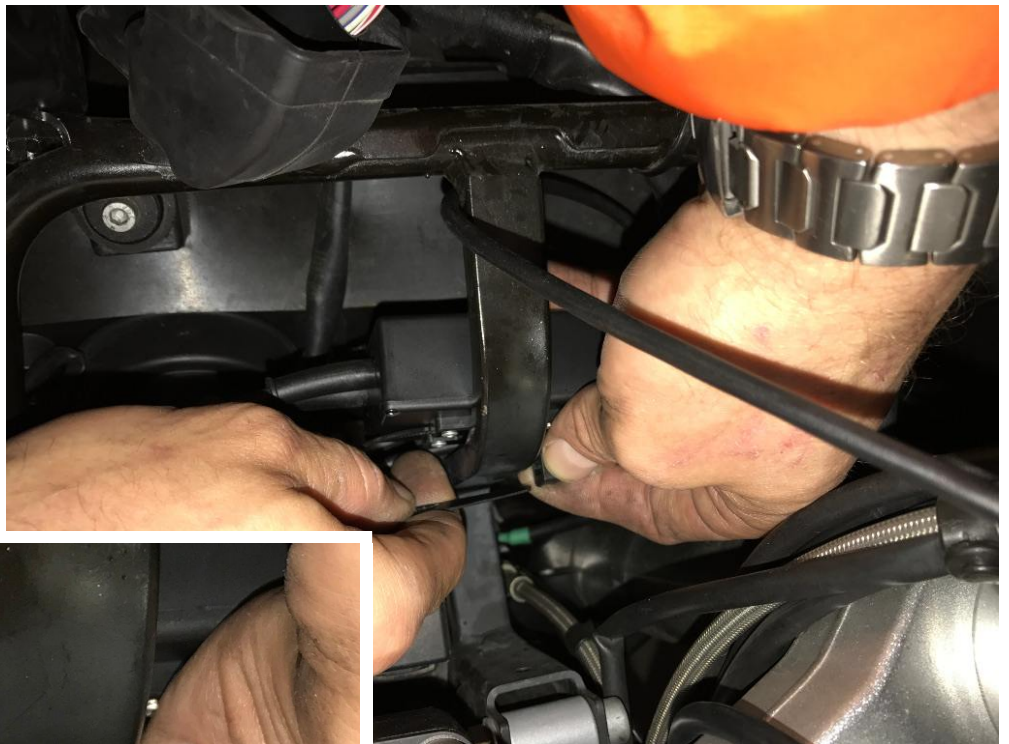
## Step 8/15: fasten the decoder unit

a. Slide the decoder unit behind the vertical pipe of the frame.

(The fuse holder has to be pointed upward.)



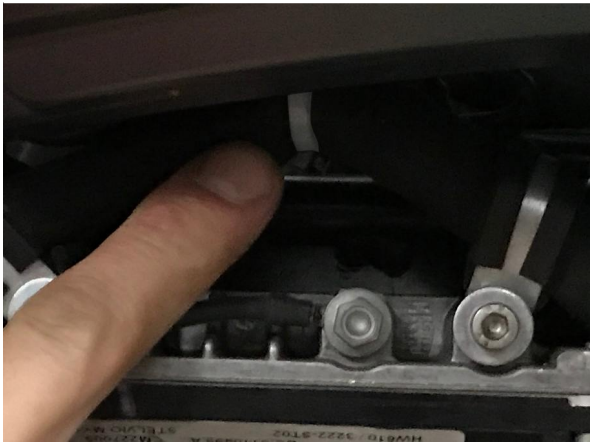
b. Fix the decoder unit by firmly tightening the cable tie.



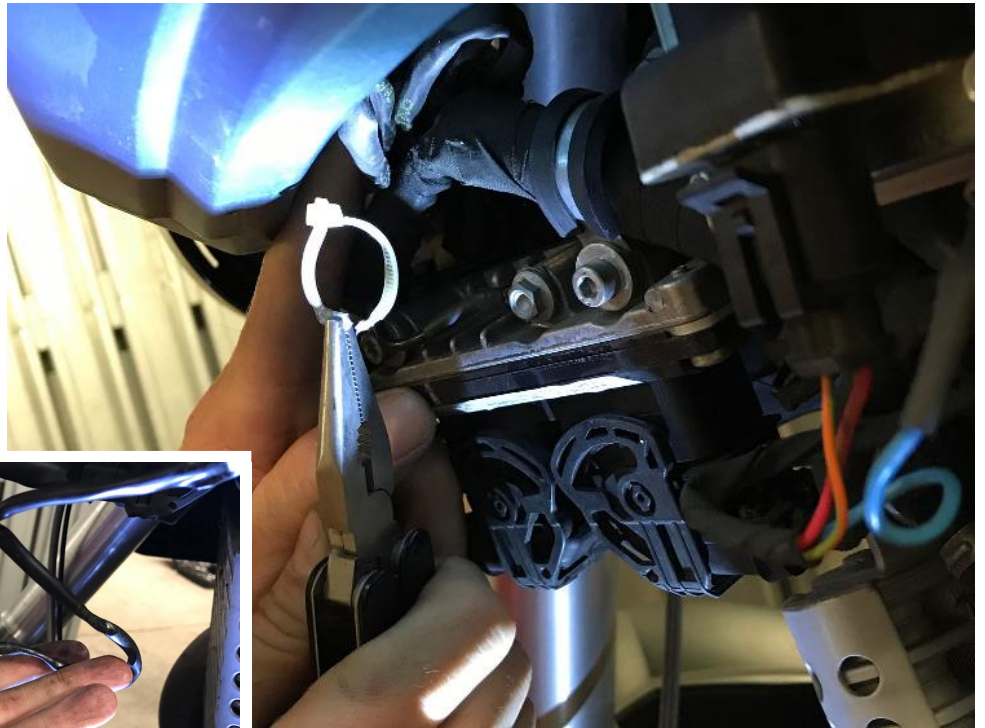


## Step 9/15: connect the TomTom rider cable.

a. Locate the TomTom cable.



b. Cut the cable tie by using small scissors (better would be a side cutter).  
Pay attention to not damage other cables around.



c. Route the cable upward through the frontal fairing.



d. Plug the connector to the male counterpart of the Periscope.

Verify that the retaining tab is correctly snapped.



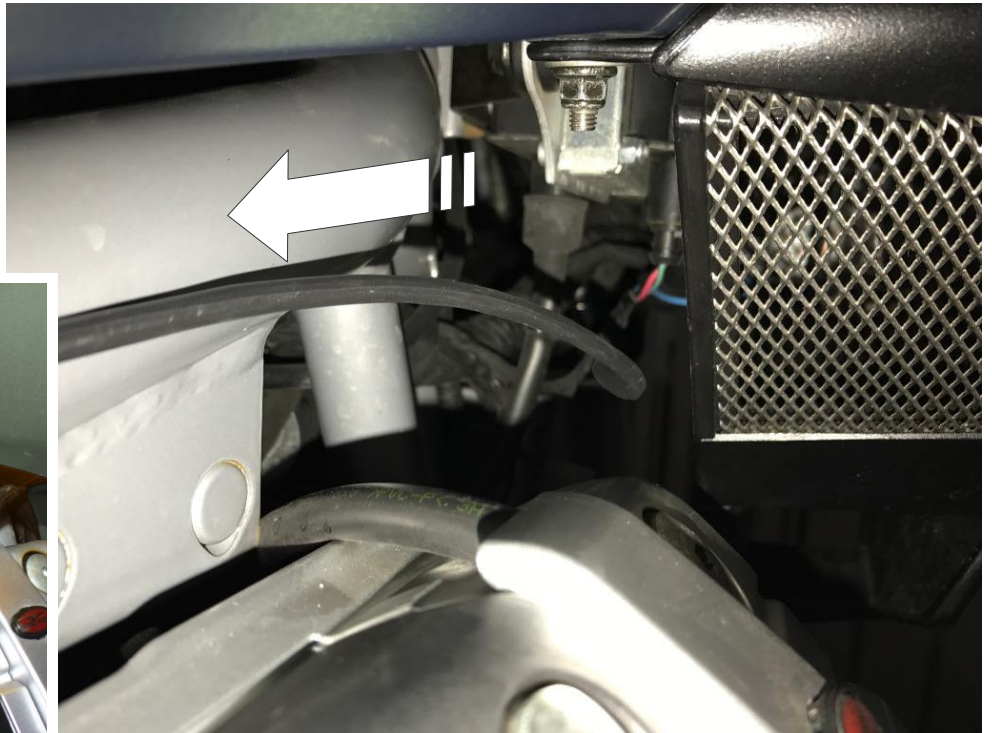


## Step 10/15: route the OBD cable

a. route the OBD cable behind the pipe of the metal frame.



b. grab the the cable from below and route it through the right side of the fairing, just above the cylinder head.



c. take the OBD connector to the zone under the driver seat.



Wait before fixing/fastening the cable. It is better to test the Periscope before (see next steps.)

## Step 11/15: plug the OBD connector

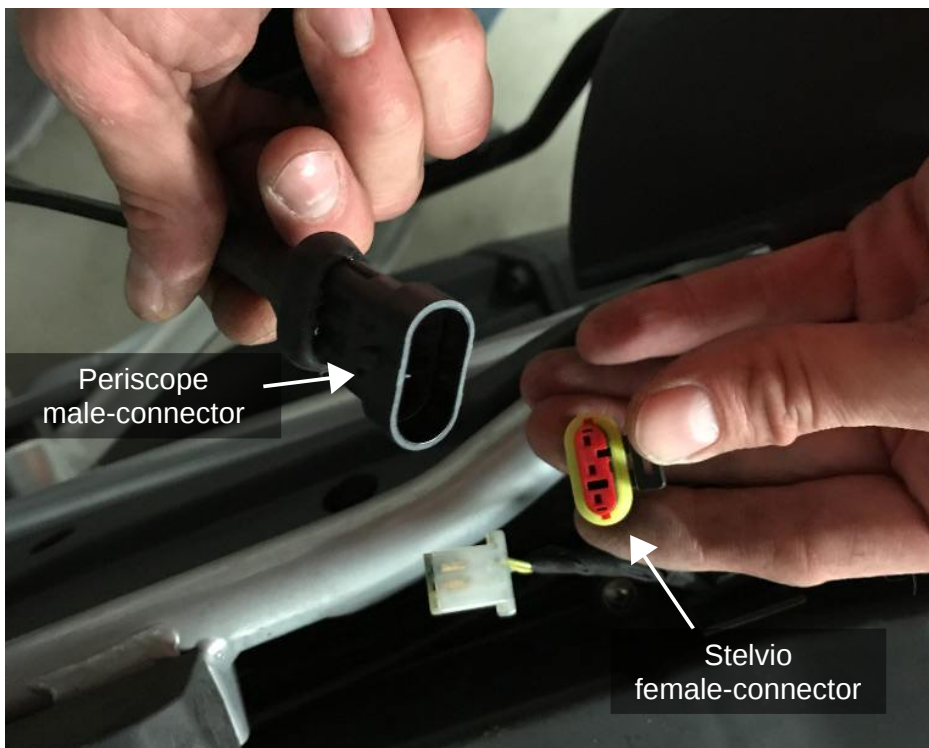
a. Locate the motorcycle OBD connector.



b. Get out the cap by unsnapping it.



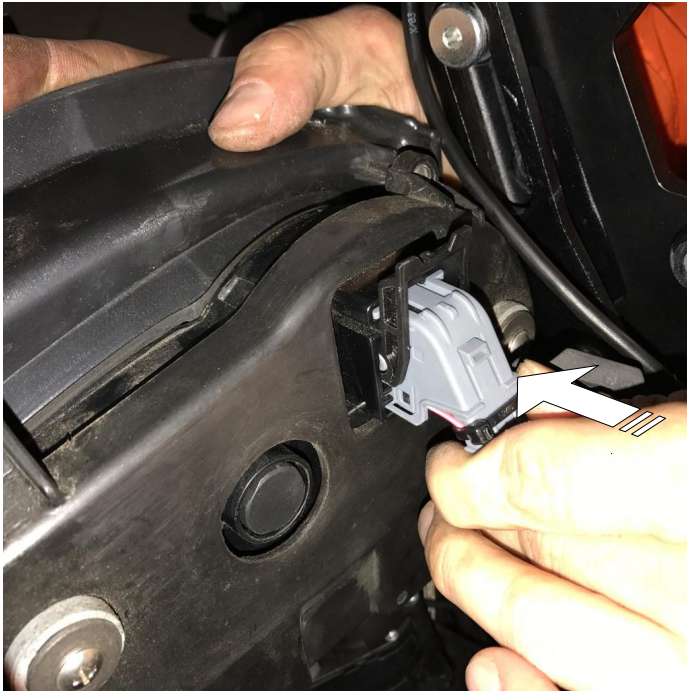
c. Plug the Periscope male connector into the OBD receptacle by snapping it in.





## Step 12/15: plug back the dashboard

- a. Slide the connector very gently toward the plug in the dashboard. Do not push, do not force, just move it into the plug.
- b. Pull down the latch.



- c. Rotate down the latch until the retaining pin pops out.
- d. Plug the rubber cover and... (see next page).



**e.** Push the “wings” of the cover inside the dashboard by using the tip of a flat screwdriver.



**f.** route the cable going to the display between the frontal fairing and the dashboard.



## Step 13/15: test Periscope

- a. Switch the ignition key to the 'ON' position.
- b. The display of the computer unit should turn on immediately. It should show:
  1. "Decoder ready" message.
  2. "Decoder connected" message.
  3. The main screen indicating '0' as current gear (or '-' if you parked the motorcycle with the gear engaged).
- c. If the test is successful then switch the ignition key to the 'OFF' position.
- d. If the message "Decoder not ready" is displayed then there is a communication problem between the computer box and the decoder one. Check the cable and the display for evident damages. Contact *Gimpo Garage*.
- e. If the message "Decoder not connected" is displayed the check
  1. if the OBD connector is properly connected,
  2. if the OBD cable is damaged.

Contact *Gimpo Garage* if the problem persists.
- f. Remount the dashboard.



*The typical Periscope welcome screen*



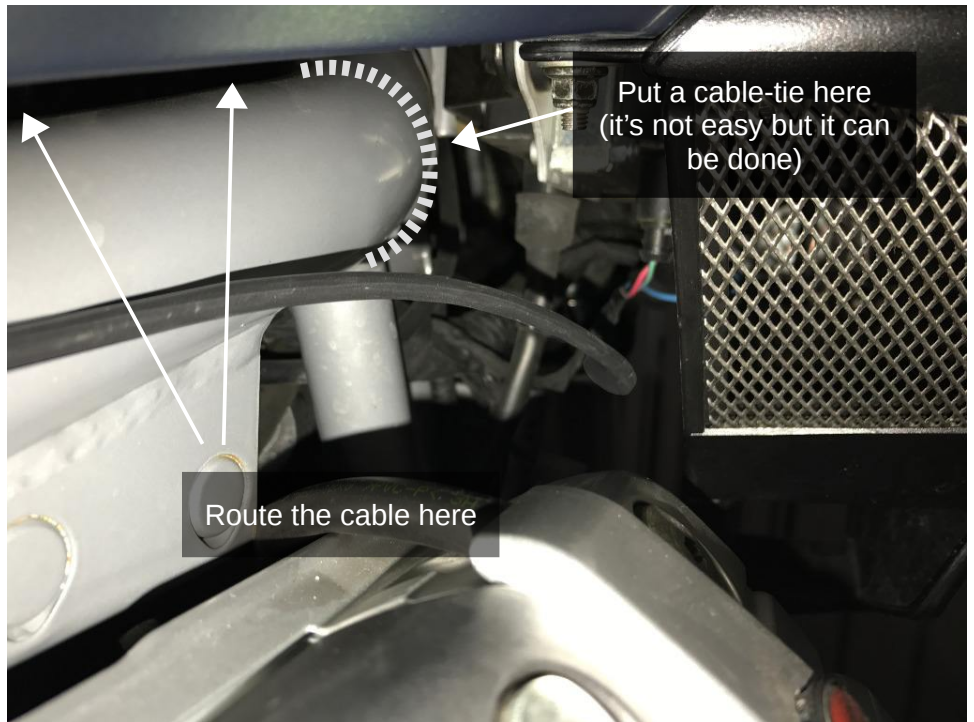
Do not start the engine during this test, or starts it just for few seconds. The OBD cable is still not fixed and could be damaged by the hot surface of the right cylinder!!! Be aware!!!



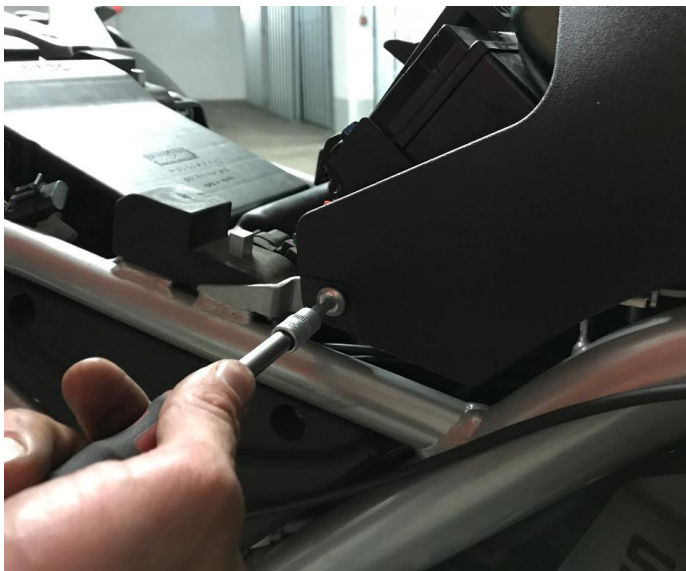
## Step 14/15: fix the cables

- a. Fix the OBD cable above the cylinder head as far away as possible from the hot surfaces. Fix it to the pipe of the frame by using a cable tie.

(Tip: try to bend the cable tie to a circular shape before inserting it around the pipe frame.)



- b. Pass the OBD cable behind the plastic cover on the right side (below the tank) and fix it with a cable tie.



- c. Use the remaining cable-ties at your discretion to provide a reliable fixing of all cables in a not dangerous position.

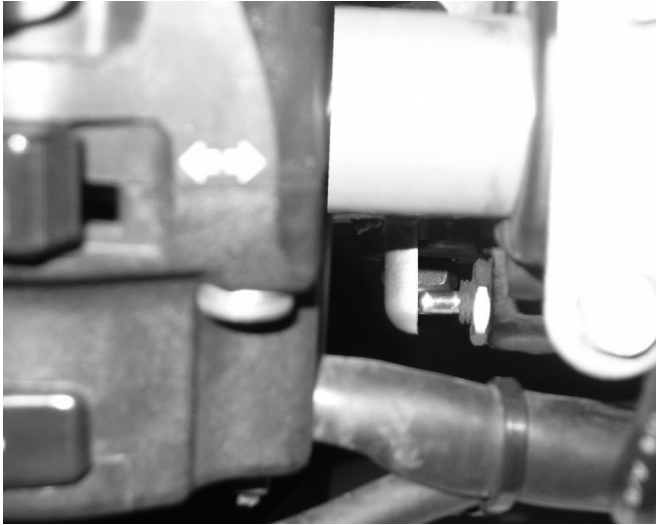


### **Double check the cables in the zone of the fork!**

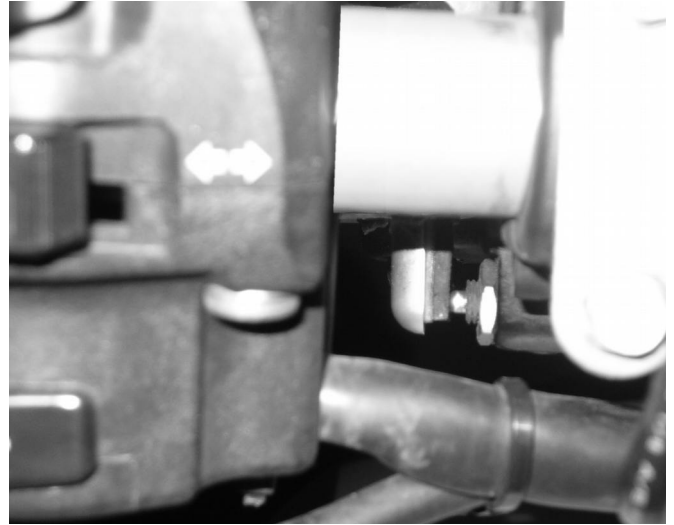
Be sure that the handlebar can rotate freely from left to right and no cable is touching/interfere with the head of the fork.

## Step 15/15: apply a rubber pad on the pin of the clutch lever

The micro-switch, used to detect the clutch position, switches only when the lever is almost completely pulled. This results in a noticeable delay of the Periscope feedback.



*The pin of the clutch lever barely touch the micro-switch, even when the lever is fully pulled.*



*After attaching the pad the micro-switch is activated more promptly and securely.*

To eliminate this delay is highly recommended to stick a rubber pad on the pin surface.

- a. Eliminate any trace of grease or dirt from the flat pin surface (use alcohol or any alcohol-based cleaning product).
- b. Cut a rectangular shape from the gummy pad (approximately 9x12mm) by using a scissor.
- c. Remove the protective film on the pad by using your finger nail.
- d. Firmly press it on the lever pin surface.



## Appendix

### Mount the display on the right side

You can mount the display unit on the right by simply switching the position of the bracket. All you need is an M3 hex-key.

- a. Unscrew completely the screw holding the display case.

**Note:** don't loose the little rubber washer placed between the bracket and the metal suncover.

- b. Unscrew the screw on the right (the suncover will get loose).

**Note:** the screw on the right is shorter than the one on the left.

- c. By using the longer screw, fix together the cover, the rubber washer, the bracket and the metal washer on the right side of the display unit.

**Note:** is not necessary to tighten the longer screw too much. One should be able to move/regulate the inclination of the display by applying a small force. The rubber washer will prevent the screw to get loose by vibrations.

- d. Tighten the shorter screw on the left side to firmly fix the cover.

### The auxiliary power connector

Accordingly to the numbering adopted by the manufacturer, the polarity is what follows:

Pin 1 = Ground

Pin 2 = +12 Volt

Please note that the voltage output is neither stabilized nor protected against load-dumps.  
Do not use the connector for devices requiring high power:

max power = 24 W

max current = 2 A

