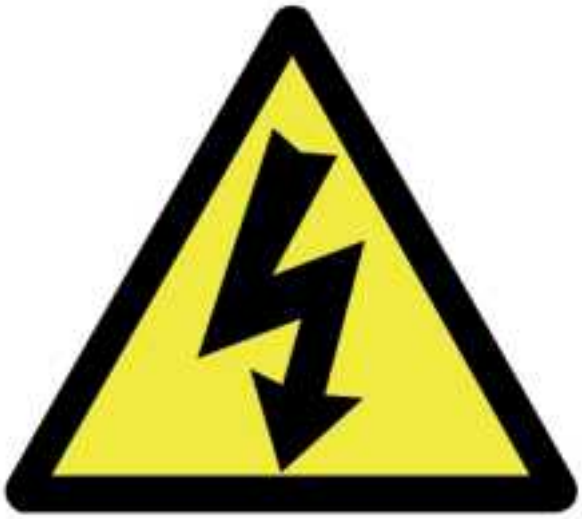
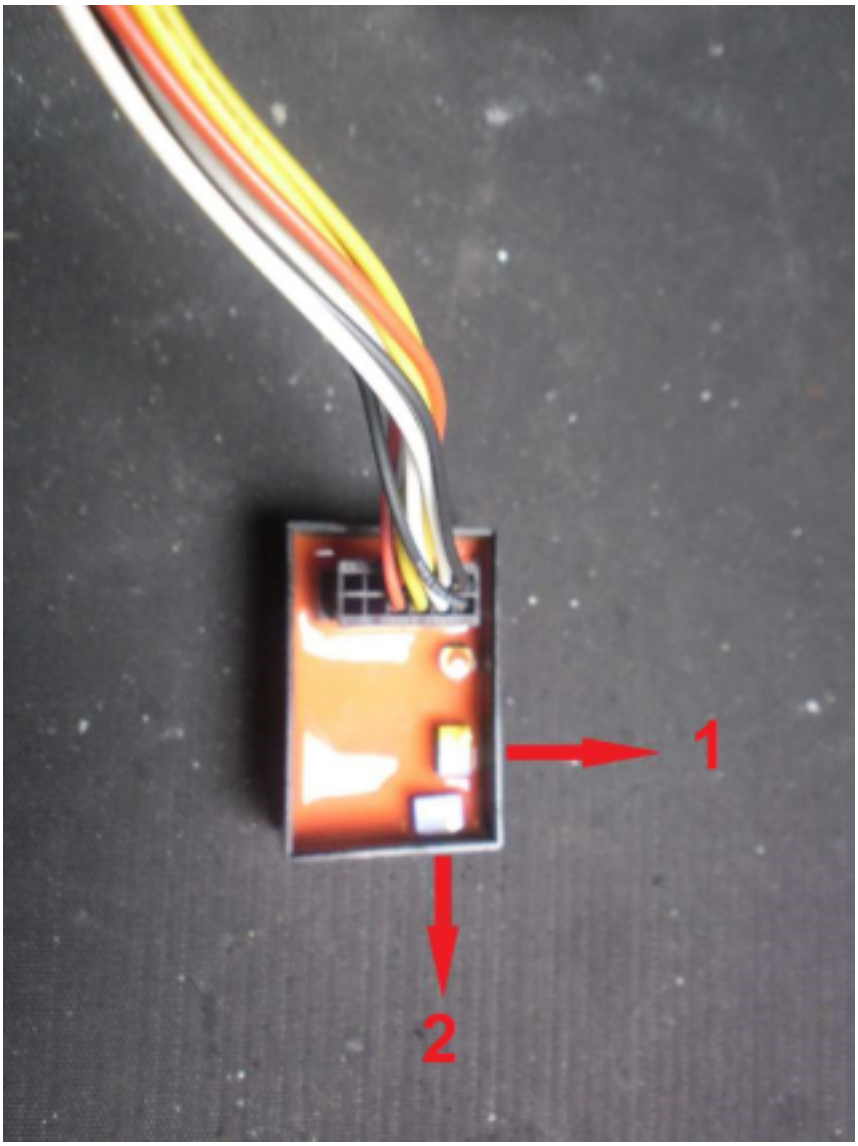
Manual
Torque Limiter



The torque limiter has two purposes:

1- It can weaken the torque signal coming from the sensor, so that the assistance from the powersteering unit, will be less over the complete range.

2- At units which are difficult to recalibrate to their centrer position, the torque limiter can finetune this.



There are two small poteniometers at the torque limiter.

No.1: This can be used to adjust the centerposition from the unit.

No.2: This can be used to adjust the torquesignal.

There are 4 wire colours, red, yellow, white and black.

Red: positive
Black: negative
White: sensor signal wire
Yellow: sensor signal wire

1a. When the limiter is used only to weaken the signals from the torque sensor, first be sure that the unit is adjusted corrrectly to the centerpostion. Sensor voltage (2.5v +/- 0.05v) must be measured to earth. Normallly this is the white wire. Measure this at the sensor side from the limiter first, 2nd measure this at the ECU side. The 2nd measurent must be the same as at the sensor side. If not adjust the potentiometer (1) with a small screwdriver untill the signals are similar so that the limiter doens't affect these signals.

1b. Once that is sorted you can now use the limiter to adjust the amount of assistance from the unit by adjusting the potentiometer (2) with a small screwdriver. Turn left to go back to original specs. When turning it right, you'll start decreasing the support from the unit. NOTE: sometimes you'll need to make quite some revolutions before you can notice a difference. This is OK and how it's suppose to work.

2a. When the torque limiter is used to finetune the centerposition from the torquesensor, first be sure that the limiter doesn't affect the torque signals. To do this use a small screwdriver to turn the potentiometer (2) fully anti clockwise so that the limiter doesn't affect these anymore.

2b. Once that is sorted you can now use the limiter to finetune the centerposition from the sensor. First measure the torquesensor signals (normally the white wire) on the sensor side to earth, once if the voltage already is 2.5V (+/- 0.05v), it is not needed to use the limiter. 2nd measure these signals at the ECU side from the limiter. The value measured to earth must be: 2.5V (+/-0.05v). at the ECU side.

3. If needed it's possible to do both adjustments offcourse.