

# **HYPERPRO**

## **STEERING DAMPER MOUNTING KIT**

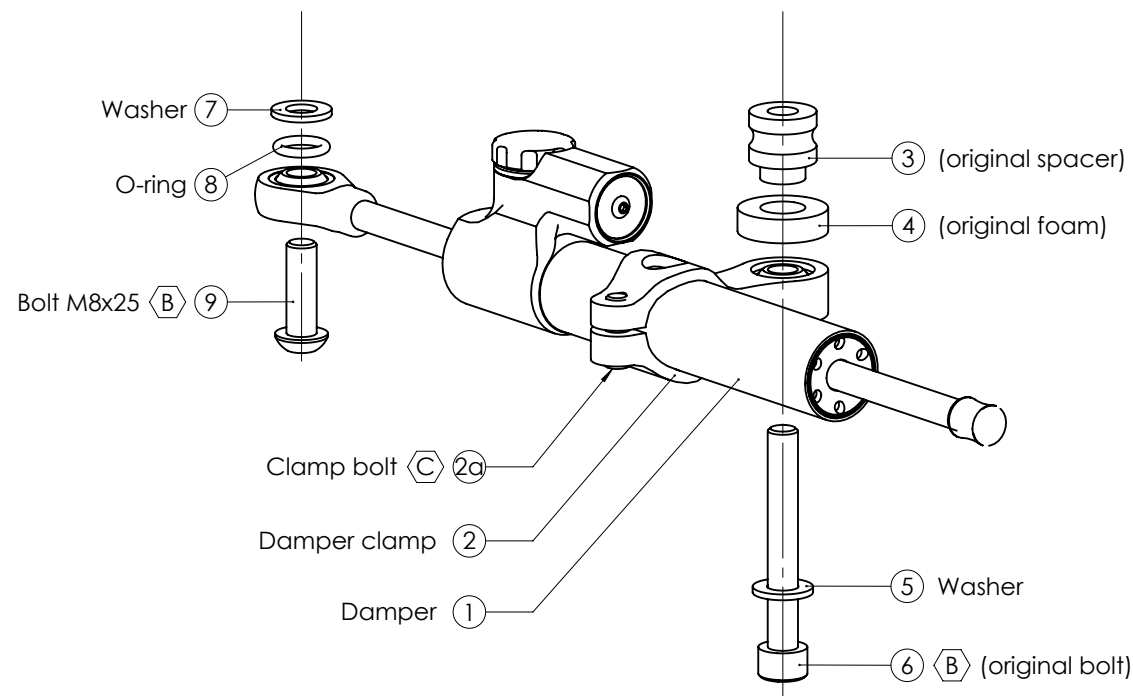
for

**BMW F850 GS**  
**Model 2018->**

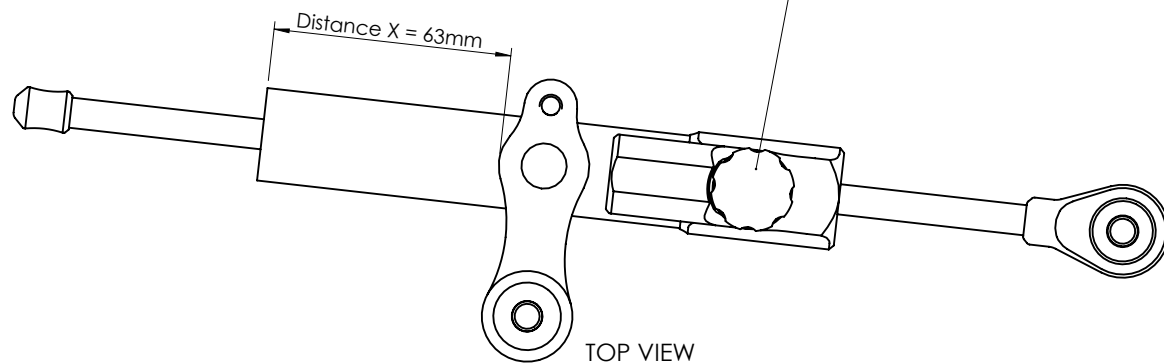
### **MK-BM08-0002 PART LIST**

|                       |   |   |   |
|-----------------------|---|---|---|
| SD stroke 100         | 1 | - | - |
| Damper Clamp [DB0010] | 1 | - | - |
| O-Ring                | 1 | - | - |
| M8x25 Button head     | 1 | - | - |
| Washer M8 Ø 16        | 2 | - | - |
| -                     | - | - | - |
| -                     | - | - | - |
| -                     | - | - | - |

ALL IDEAS, DESIGNS ARRANGEMENTS AND PLANS INDICATED OR REPRESENTED BY THIS DRAWING ARE OWNED BY HYPERPRO AND WERE CREATED, EVOLVED AND DEVELOPED FOR USE ON AND IN CONNECTION WITH THE SPECIFIC PROJECT. NONE SUCH IDEAS, DESIGNS, ARRANGEMENTS OR PLANS SHALL BE USED BY OR DISCLOSED TO ANY PERSON, FIRM OR CORPORATION FOR ANY PURPOSE WHATSOEVER WITHOUT THE WRITTEN PERMISSION OF HYPERPRO.



Damping adjustment knob:  
- turn CW to increase damping  
- turn CCW to decrease damping



#### \* TORQUES

A: 5-9Nm / 44-80Lbs.In / 4.0-6.4Lbs.Ft  
B: 14-17Nm / 124-150Lbs.In / 10.3-12.5Lbs.Ft  
C: 6Nm / 53Lbs.In / 4.4Lbs.Ft

D: 8Nm / 70Lbs.In / 5.9Lbs.Ft  
E: 55Nm / 486Lbs.In / 40Lbs.Ft  
F: Factory torque (see owners manual)

# **HYPERPRO**

## **STEERING DAMPER MOUNTING KIT**

*for*

### **BMW F850 GS Model 2018->**

## **MK-BM08-0002 INSTALLATION INSTRUCTIONS**

### ***In general:***

HYPERPRO can not be held responsible in any way for any form of physical, material, financial or other damage arising from use, assembly or overhaul of HYPERPRO products. HYPERPRO reserves the right to make changes without prior notice.

This product is ONLY TO BE INSTALLED BY A PROFESSIONAL MECHANIC.

This product is only to be used for the motorcycle brand, model and year stated specifically on top of the pages of this manual.

DO NOT attempt to install this product on motorcycles from any different brand, model and/or year than stated on the pages of this manual.

DO NOT use this kit for cars, boats, jet skis, snowmobiles, ATV's, aircraft, hovercrafts or any other vehicle and/or purpose.

HYPERPRO steering dampers are FOR RACE USE ONLY, NOT FOR HIGHWAY USE!

### ***Before installation:***

- Please read the entire manual carefully before starting the installation!
- Check if you have all the tools required. Good tools are a must.
- Protect your bike at the most important places in and around the work area (e.g. tank, fairing, frame, etc.), with a blanket, towel or similar.

### ***During installation:***

- Check all operations and parts carefully before, during and after performing each step.
- Clean all surfaces that are required for fitting parts together or for applying self adhesives or loctite, thoroughly with contact cleaner or another degreaser, unless otherwise stated.
- Be carefull not to damage or scratch any part of your bike.
- ALWAYS work relaxed and concentrated!! It is very easy to damage something or make a mistake.

### ***After installation:***

- Check and make sure that there is no contact between any part of the steering damper kit and any part of the motorcycle. The kit should not hit anything. Steering movement should not be limited by the steering damper. If the steering movement is limited, adjust the position of the tube in the clamp untill steering movement is normal again. Do not forget to tighten the clamp bolt again!
- ALWAYS check the steering movement and feeling before each ride !
- FIRST RIDES: Start with the damper turned fully open (turn adjuster knob fully counter clockwise). Start adjusting in between rides with steps of MAX. 2 CLICKS (0.25 TURN) EACH TIME, untill the damper is working satisfactory for your riding style.
- NEVER USE MAXIMUM SETTING, ALWAYS OPEN AT LEAST 2 CLICKS (0.25 TURN).
- WARNING ! DAMPER HAS AN ACTIVE / SPEEDSENSITIVE DAMPING SYSTEM;
  - Steering with NORMAL MOVEMENT should be FREE !!
  - Steering with FAST MOVEMENT should be CONTROLLED BY DAMPER !!
- HYPERPRO uses a special seal to reduce friction. The seal uses an oil film to work properly. It is normal that some oil can appear on the pistonrod.
- Damper works with oil: DAMPING CAN BE HARDER AT LOWER TEMPERATURES!

### ***Step 1: remove the original steering damper***

Remove the plastic cover from under the lower triple clamp, exposing the steering damper. Remove the two M8 bolts that mount the original steering damper and remove it from the bike.

### ***Step 2: install the damper clamp***

Install the clamp to the steering damper using:

- Steering damper S100 (1)
- Damper clamp (2)

Put the assembly together as shown on page 1: Shove the clamp (2) correctly over the steering damper untill distance X is reached. Set the angle of the damper body as shown in the pictures and tighten the clamp bolt (2a) to a torque of approx. 5-9Nm/44-80Lbs.In/4.0-6.4Lbs.Ft

### ***Step 3: install the steering damper***

Install the steering damper using:

- Steering damper and clamp from Step 2
- 2x Washer M8  $\varnothing$  16 (5), (7)
- O-ring (8)
- Bolt M8x25 button head (9)

Clean the threads and apply Loctite (or similar) to the bolts.

Use the original bolt (6), foam washer (4) and spacer (3) to fit the damper clamp to the frame mount.

Use the M8x25 bolt (9), washer (7) and O-ring (8) to fit the ball-joint to the original fork mount.

Tighten the M8 bolts with a torque of approx. 14-17Nm/ 124-150Lbs.In/10.3-12.5Lbs.Ft.

Check if the damper does not touch anything (e.g. engine, fork) when steering from left to right.

Check if the bike can make it's full steering angle from left to right.

Adjust the position of the damper if necessary by loosening and retightening the clamp bolt (2a).