

# HYPHERPRO

## STEERING DAMPER MOUNTING KIT

for

### Honda CBR 650 R Model 2019-

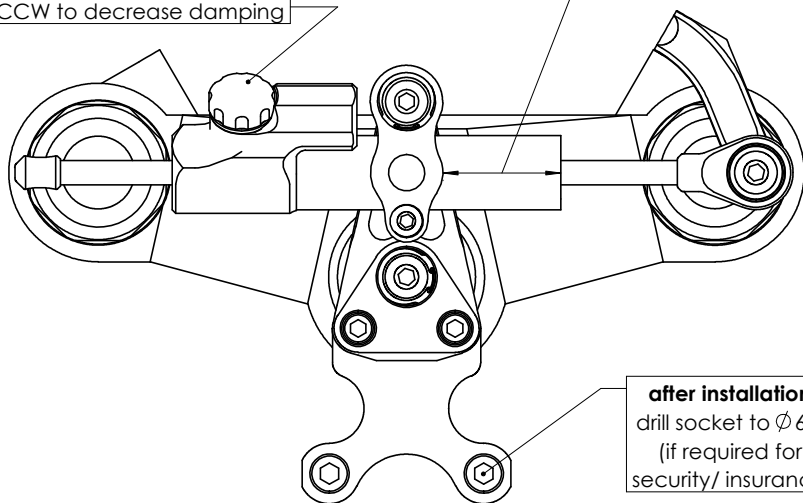
#### MK-H006-T012 PART LIST

SD stroke 75 REVERSED	1	Bolt M6x12	2
Damper Clamp [DB018235]	1	Bolt M8x30 button head	2
O-Ring 10x2	2	Bolt M8x50 low head 8.8	2
Fork Bracket [MP-FOMK104]	1	Bolt M8x60 button head	1
Tank Bracket [MP-TAMK91-1]	1	Bolt M8x90	2
Tank Bracket [MP-TAMK91-2]	1	Washer M8 $\phi$ 16	3
Tank Bracket [MP-TAMK91-3]	1	Spacer D14.8 d8.2 L6.5	2
Tank Bracket [MP-TAMK91-4]	1	-	-

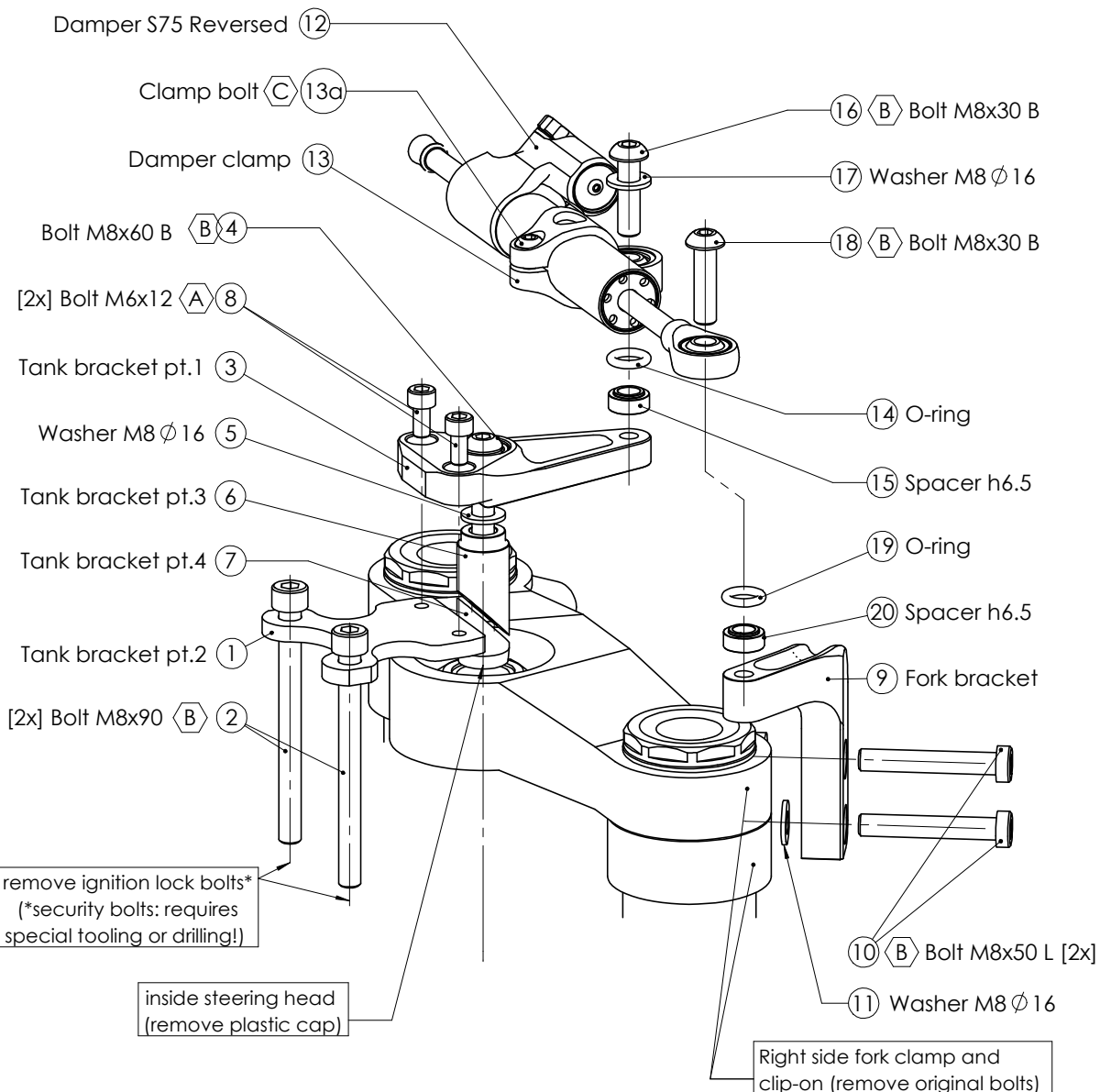
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Damping adjustment knob  
- turn CW to increase damping  
- turn CCW to decrease damping

Distance X = 39mm



**after installation:**  
drill socket to  $\phi$  6.5  
(if required for security/ insurance)



#### \* 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)

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for

### **Honda CBR 650 R Model 2019-**

## **MK-HO06-T012 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 careful 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 until 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, until 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: assemble and install tank bracket**

Remove the plastic cap from the top of the steering stem.

Remove the front tank cover, then remove the plastic ignition lock cover.

Remove the original ignition switch bolts (**security bolts, requires special tooling**).

Assemble and install the tank bracket using:

- Tank bracket pt 1 (3)
- Tank bracket pt 2 (1)
- Tank bracket pt 3 (6)
- Tank bracket pt 4 (7)
- 2x Bolt M6x12 (8)
- 2x Bolt M8x90 (2)
- Bolt M8x60 B (4)
- 1x Washer M8  $\phi$  16 (5)

Mount Tank bracket pt.1 (3) to pt.2 (1) using the M6x12 bolts (8), do not fully tighten yet.

Loosely mount pt.3 (6) and pt.4 (7) with a washer (5) to the spherical bearing of pt.1 (3) using bolt M8x60 B(4), do not tighten yet.

Slide pt.3 and pt.4 into the steering stem and mount the tank bracket assembly to the ignition switch using the 2 supplied M8x90 bolts (2). Make sure tank bracket pt.1 does not touch the top yoke and tighten the M8 bolts to a torque of approx. 14-17Nm/124-150Lbs.In/10.3-12.5Lbs.Ft. Finally tighten the M6 bolts to a torque of approx. 5-9Nm/44-80Lbs.In/4.0-6.4Lbs.Ft.

### **Step 2: install the fork bracket**

Remove the original pinch bolts from the Right side of the top yoke and the clip-on.

Make sure the fork legs are not raised through the top yoke more than original.

Install the fork bracket using:

- Fork bracket (9)
- 2x Bolt M8x50 L 8.8 (10)
- 1x Washer M8  $\phi$  16 (11)

Mount the fork bracket to the top yoke using the supplied M8x50 bolts (10) and washer (11)

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

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

Install the steering damper and damper clamp using:

- Steering damper, stroke 75 Reversed (12)
- Damper clamp (13)
- Bolt M8x30 button head (16), (18)
- 1x Washer M8  $\phi$  16 (17)
- 2x O-ring (14), (19)
- 2x Spacer h6.5 (15), (20)

Shove the damper (12) through the clamp (13) until the distance "X" stated on page 1 is reached.

Set the angle of the damper body approx. 45° up as shown in the picture, then tighten the M6 clamp bolt (13a) to a torque of approx. 6Nm/53Lbs.In/4.4Lbs.Ft.

Mount the damper clamp to tank bracket pt.1 using O-ring (14), spacer (15) M8 bolt (16) and washer (17). Mount the damper ball-joint to the fork bracket using O-ring (19), spacer (20) and M8 bolt (18). Tighten the bolts to a torque of approx. 14-17Nm/124-150Lbs.In/10.3-12.5Lbs.Ft.

**Cut the four notches from the bottom of the the ignition lock cover.**

Re-install the ignition lock cover and the tank cover.

Check if the damper is level horizontally and aligned to the bike. Check if the damper does not touch anything 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, do not forget to re-tighten the bolts.