# STEERING DAMPER MOUNTING KIT

for

# SUZUKI SV650N Model 1999 - 2002<

MK-SU06-T002 PART LIST			
SD stroke 75	1	Washer M6 Ø 12	1
Tube Clamp TYPE 3	1	Washer M8⊅16	4
O-Ring	2	-	-
CNC Fork Bracket	1	-	-
CNC Tank Bracket	1	-	-
M8x30 Button head	1	-	-
M6x25 Low head	1	-	-
M6x50	2	-	-

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Use standard "chromed"

plastic caps for finishing

DAMPING ADJUSTER KNOB:

- turn CW to increase damping
- turn CCW to decrease damping
NEVER USE MAXIMUM SETTING !!!

13 Damper

Distance X = 63 mm

©7 M6x25 Low head--Clamp bolt M6(15)(B) M8x30(14)A Button head (6) Clamp TYPE 3 Standard bolt (2x) Damper 13 balljoint  $\langle A \rangle (9)$ (5) O-Ring-O-Ring(12) (4) Washer M6 $\emptyset$ 12 Standard washer (2x) (8) Washers  $\langle C \rangle (3) M6x50$ M8 Ø 16 (4x)(11)Fork bracket (10)

(A) 14-17Nm / 124-150Lbs.ln / 10.3-12.5Lbs.Ft (C) 5-9Nm / 44-80Lbs.ln / 4.0-6.4Lbs.Ft

 $-M6x50(3)\langle C \rangle$ 

-Tank bracket (2)

-Standard Washers (2x) (1)

Tank mounting points

B 6Nm / 53Lbs.In / 4.4Lbs.Ft

See WWW.HYPERPRO.COM for the latest pictures, modifications, specs. and e-drawings of this steering damper kit.



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#### **MK-SU06-T002 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 specificly 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-skies, snowmobiles, ATV's, aircraft, hovercrafts, bicycles or any other vehicel and/or purpose than the one motorcycle stated on this manual. 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 contactcleaner 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 movent 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.
- NEVĖR USE MAŽIMUM SETTING, ALWAYŠ 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: installing the tank bracket

- 2x Standard M6 washers (1)
- 2x Bolt M6x50 (3)
- Tank Bracket (2)

Remove the 2 standard M6x25 bolts and standard washers (1) from the front tank mounting points. Install the tank bracket (2), using the 2 supplied M6x50 bolts (3) and place the standard M6 washers (1) underneath the bracket for support as shown on page 1. Tighten the bolts with a torque of approx. 5-9Nm/44-80Lbs.ln/4.0-6.4Lbs.Ft

#### Step 2: tank bracket assembly

- Tank bracket (2), already installed on bike.
- Washer M6 Ø 12 (4)
- 1x O-Ring (5)
- Tube clamp TYPE 3 (6)
- Bolt M6x25 Low head (7)

Put the assembly together as shown on page 1: Place the washer (4), the O-ring (6) and the tube clamp (7) inline on top of the M6 hole in the tank bracket and put the M6 bolt (8) through all the parts and screw it into the thread of the bracket. Tighten the bolt with a torque of approx. 5-9Nm/44-80Lbs.In/4.0-6.4Lbs.Ft.

### Step 3: installing the fork bracket

- Fork bracket (10)
- Standard handlebar clamp bolts, washers and chromed plastic caps (8+9)

Loosen and remove the 2 M8 bolts and washers (8+9) of the righthand handlebar clamp. This can be done by removing the "chromed" plastic caps out of the bolt (use a small screwdriver or similar) and then using an ALLEN KEY#8. Exchange the standard clamp for the fork bracket and use the standard M8 bolts and washers (8+9) again. TIGHTEN THE BOLTS EVENLY with a torque of approx. 14-17Nm/124-150Lbs.ln/10.3-12.5Lbs.Ft.

#### Step 4: installing the steering damper

- Steering damper (13)
- 1x O-ring (12)
- 4X Washer M8 Ø 16 (11)
- Bolt M8x25 button head (14)

Ensure that the clamp bolt of the tube clamp is pointing forward. Shove the damper (14). with the end knob-side first, through the clamp untill the ball joint can be fitted to the fork bracket. Use the washers (11), O-ring (12) and M8 bolt (14) to fixate the balljoint to the fork bracket and tighten with a torque of approx. 14-17Nm/124-150Lbs.In/10.3-12.5Lbs.Ft. Position the damper tube untill the distance "X" (=63mm) stated on page 1 is reached, then tighten the M6 clamp bolt (15) with a torque of approx. 6Nm/53Lbs.In/4.4Lbs.Ft.

Check if the damper is level horizontally and aligned to the bike. Check VERY CAREFULLY if the damper does not touch anything (e.g. tank) when steering from left to right. Check if the bike can make it's full steering angle from left to right.

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