

- 1.) Please disassemble the coilover until only the inverted damper remains.



- 2.) Please see the bottom of the cylinder. There should be a tightened hex nut.



- 3.) Unscrew the hex nuts with the Allen key and hex wrench.



- 4.) Pull out the inner cylinder gently. The bump stopper will appear. Separate the inner cylinder from the outer cylinder.



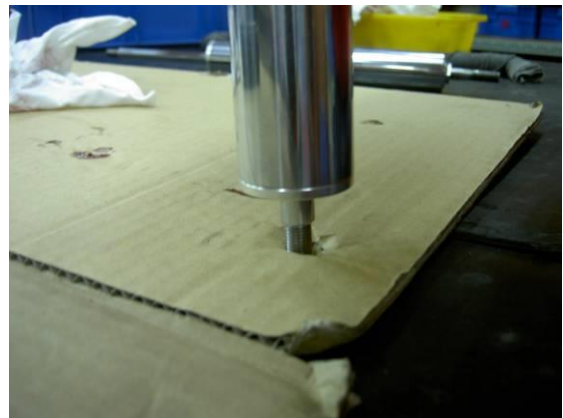
- 5.) Remove the bump stopper from the inner piston rod.



- 6.) Use cleaning agents to clean the grease off the entire inner cylinder surface or you may wipe off the grease with a clean rag. Make sure the surface is thoroughly cleaned.



- 7.) Test the function of inner cylinder by pressing the piston rod downward against flat surface. (Recommend to adjust the damper to full soft for this test). Please repeat this step for 3 times. If there is no oil sludge appearing and end of piston rod is around 1cm after press down (exclude the threaded part), then it means the inner cylinder is still well functional.



- 8.) But if when doing the checking on the inner cylinder, there are oil sludge appearing and the end of piston rod is  $> 2\text{cm}$  after press down (exclude the threaded part), then it means the inner cylinder is broken. Please offer or sell your customer a new inverted damper.



- 9.) If the inner cylinder is well functional, then in order to reduce the noise, it is recommend to replace the lubricating oil (grease) inside the outer cylinder. Please follow the repairing step to change new oil inside the outer cylinder. Take the outer cylinder. Looking inside the cylinder, you can see there are many oil residues.



- 10.) Please take clean cloths, and a long stick. Place the cloth on the stick then insert into the outer cylinder to clean the oil off. (Recommend pouring some cleaning agent on the cloth for easier oil remove). Repeat the above step many times to assure there is no old grease or oil sludge left inside the outer cylinder.



- 11.) It is normal for the old oil sludge to be black colour.





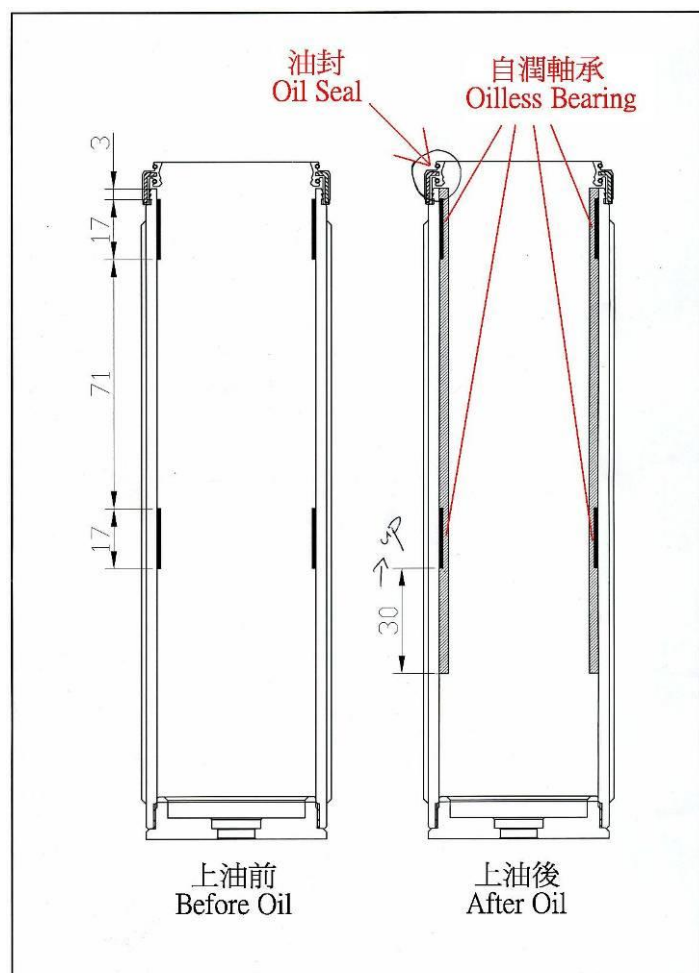
- 12.) Please take out the grease that we sent to you. This type of oil is specialized high temperature resistant oil. Please make sure the oil is correct type for the purpose. And find a long flat stick. (Steel ruler is a good choice).



- 13.) Use the flat stick to scoop some new grease then apply to inside of the outer cylinder.



- 14.) **NOTE** Please ensure the new lubricating oil or grease is **well covering** the inside surface of cylinder in order for maximum performance of shock. The new oil should cover entirely over all 4 Oilless Bearings inside the tube. And need to be about 30mm extend below the bottom oilless bearings. And apply large chunk of lubricating oil at the oil seal opening.



- 15.) Install the bump stopper back to inner cylinder. Place the outer cylinder against flat surface for stabling. Gently and slowly insert the inner cylinder back into the outer cylinder. Be careful not touching the inside surface of outer cylinder.



- 16.) Insert the inner cylinder until the striated tip is through the outer cylinder. Then screw the hex nuts and washer back to original place.

