Damper Preload Adjustment Procedure

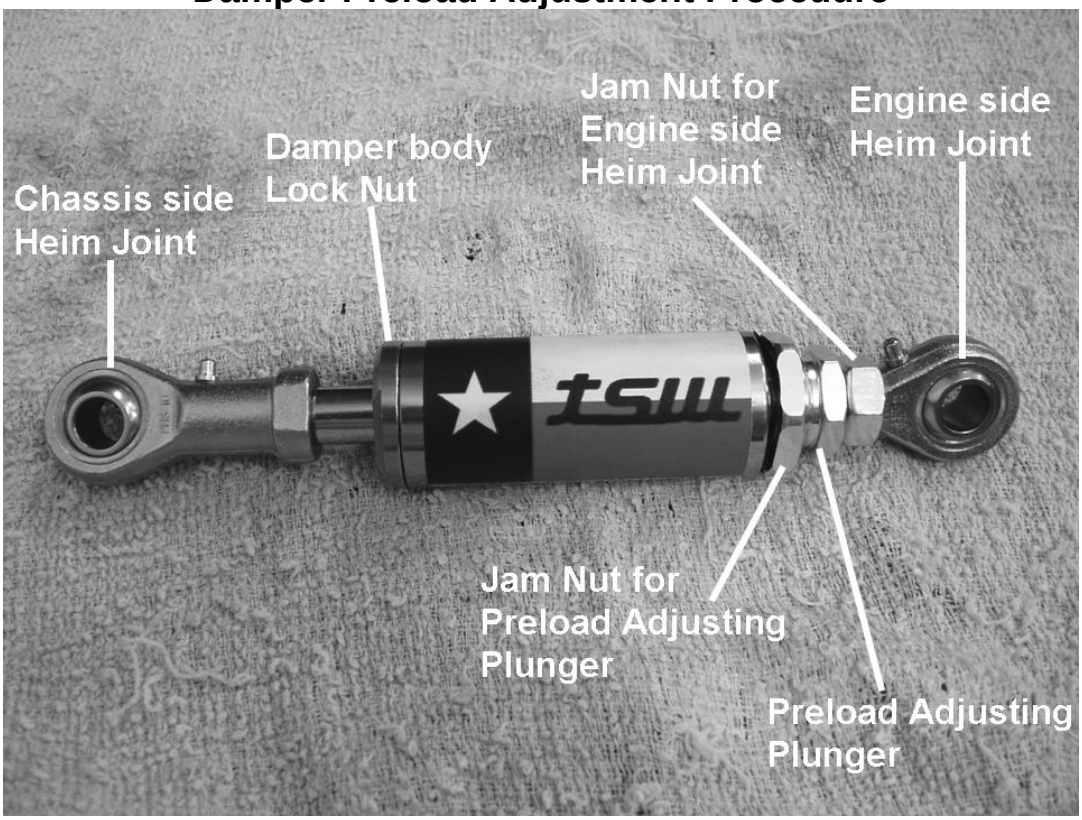

Figure 1

DO NOT MAKE THIS ADJUSTMENT UNLESS THE ENGINE SIDE MOUNT IS DISCONNECTED FROM THE BRACKET (BOLT OUT)

1. **TSW has already pre-set the preload on the damper for a street-friendly setting – however if you are a hardcore racer, follow the steps below if you wish to change preload.**
2. **Loosen the jam nut for the preload adjusting plunger using a 1-1/16" wrench or Crescent wrench while holding the preload adjusting plunger with a 21mm wrench.**
3. **Loosen the jam nut for the engine side adjustable mount using a 17mm wrench while holding the preload adjusting plunger with a 21mm wrench.**
4. **Grab the damper body, and rotate - thread the preload adjusting plunger out (counter-clockwise) for less preload and in (clockwise) for more preload. Do not make changes more than 1 full turn at a time. Do not adjust to more than 3/8" between bottom of preload adjusting plunger and top of jam nut. Ensure you have no more than ½" of thread between top of adjustable mount jam nut and base of adjustable mount showing. Note that adding more preload will potentially introduce more vibration into the cabin. Less preload is generally better for street-driven cars.**
5. **Tighten the jam nut for the preload adjusting plunger first. Do NOT over-tighten, snug is fine. Over-tightening may damage the nut or damper.**
6. **Tighten the jam nut for the engine side adjustable mount. Do not over-tighten, or you may damage the threads or adjustable mount.**

DAMPER INSPECTION, LUBRICATION and REPAIR

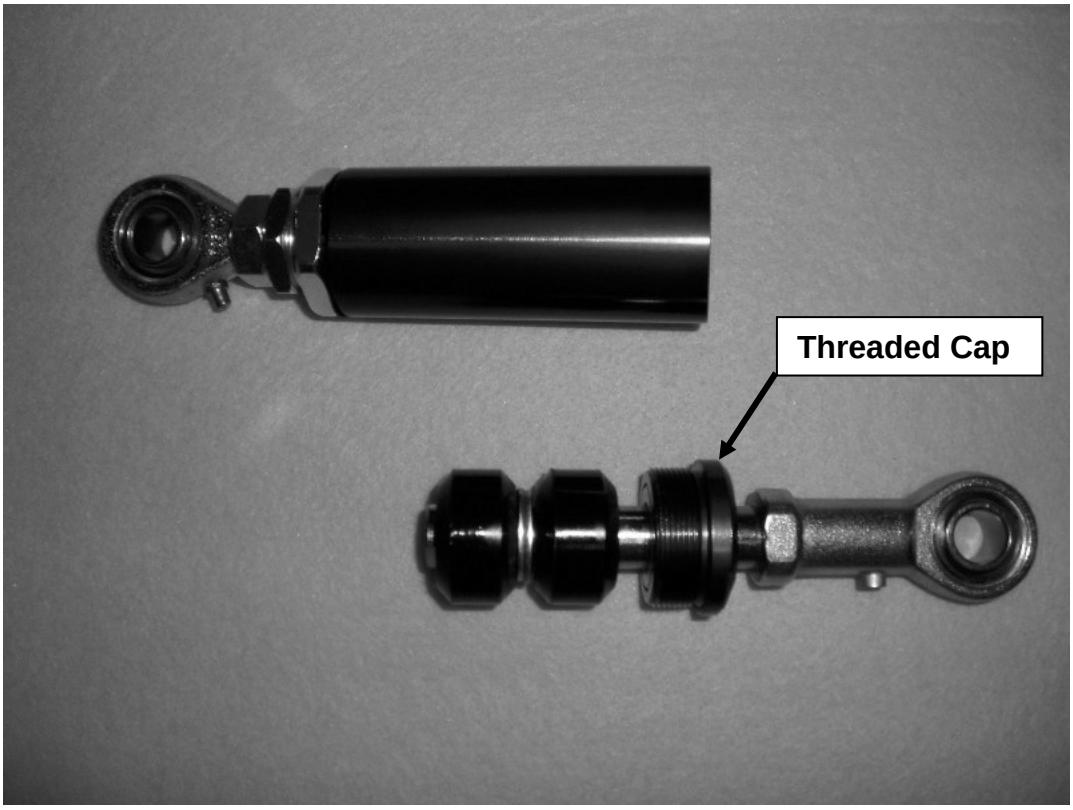

Figure 2

MAKE SURE THE DAMPER IS REMOVED FROM THE CAR BEFORE PROCEEDING

INSPECTION and LUBRICATION

1. **Remove the bolts, nuts and hardware from both mounting ends.**
2. **Remove the damper end cap (damper body lock nut in Figure 1) on the fixed mount end using a 15/16" or 24mm open end wrench. It is best to hold the damper vertically with the cap up, slide the wrench onto the flats, hold the damper cylinder tightly with one hand then turn the wrench counter clockwise.**
3. **Once the cap is loose it is easily removed with your fingers. When the cap is completely out of the damper tube, pull on the fixed mount end while holding the damper cylinder and the shaft along with the damper elements will come out of the damper tube (Figure 2).**
4. **Inspect the damper elements for wear, cracks and lubrication. Fine rubber particles are normal however there should not be an excessive amount of them. If the elements worn excessively or cracked order a replacement set from TSW.**
5. **If the elements are dry (no lubrication), first clean the inside of the damper cylinder with a dry cloth then lubricate the internal surface of the cylinder with a thin coat of grease. Use high load, extreme heat lithium grease for lubrication (tube or spray form). Coat the outside of the damper elements with grease as well.**
6. **Re-assemble the damper by pushing the assembly back into the damper cylinder making sure it is all the way down to the bottom then thread in the cap and hand tighten.**

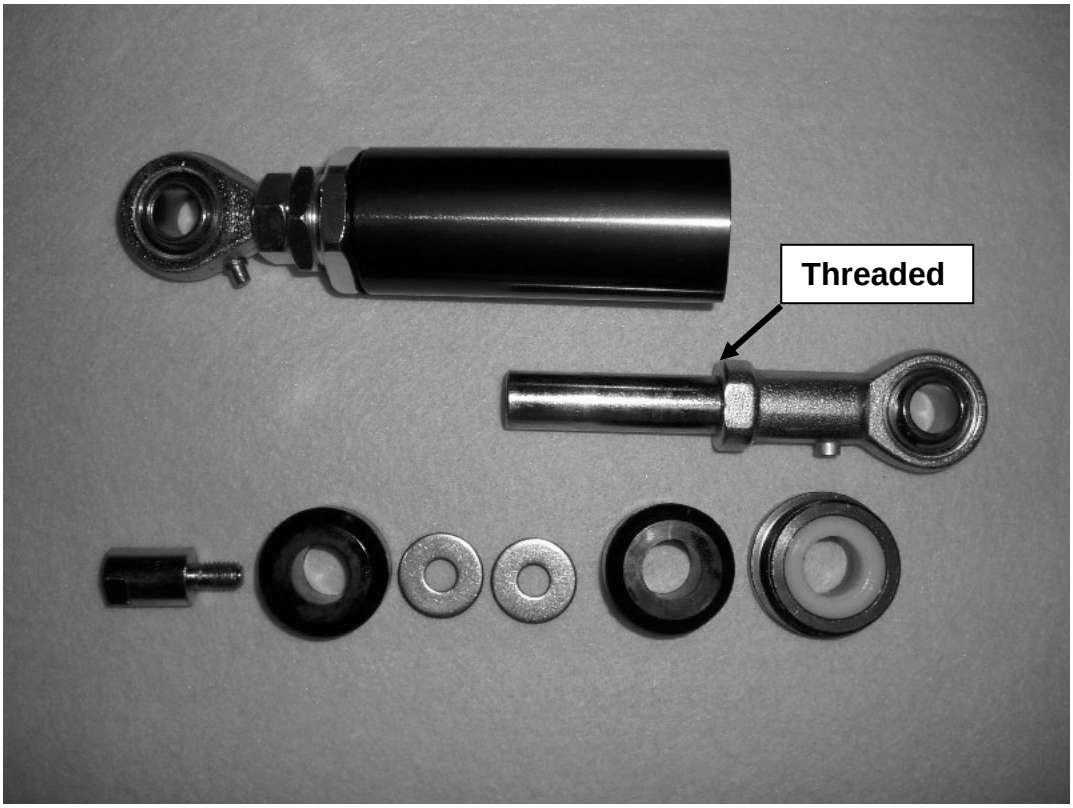

Figure 3

MAKE SURE THE DAMPER IS REMOVED FROM THE CAR BEFORE PROCEEDING

REPAIR

1. **Follow 1 – 4 instructions in the Inspection and Lubrication section above.**
2. **If the elements are worn or cracked you must replace them. First grab the element shown in figure 1 on the left side of the assembly and pull it off the shaft.**
3. **Figure 3 shows an exploded view all the assembly parts in the order they go on the shaft. Note there are two parts to the shaft. The small shaft part on the left has two flats that fit a 10mm open end wrench. The mount end has two flats that will fit a 17mm wrench. Using the two wrenches mentioned hold the mount end wrench and turn the shaft end wrench counter clockwise. Note the mount end shaft thread is not shown disassembled.**
4. **You either have to remove the mount end or the small threaded end of the shaft to get the other damper element off the shaft. Note there are two M6 fender washers between the two damper elements – make sure these are installed during re-assembly.**
5. **Slide the new element onto the main part of the shaft, add a bit of blue Loktite® to whichever threaded end is loose then tighten the shaft threads using the 10mm and 17mm wrenches. SNUG IS GOOD – DO NOT OVER TIGHTEN.**
6. **Clean the inside of the damper cylinder with a dry cloth then lubricate the internal surface of the cylinder with a thin coat of grease. Use high load, extreme heat lithium grease for lubrication (tube or spray form). Coat the outside of the damper elements with grease as well.**
7. **Re-assemble the damper by pushing the assembly back into the damper cylinder making sure it is all the way down to the bottom then thread in the cap and hand tighten.**