



TMS Upper Monoball Subframe/Control Arm Bushings

PART # TSU9980006

TMS rear subframe bearings are designed to limit rear control arm movement relative to the subframe. The stock BMW subframe bushings are made out of rubber, which allows variance in suspension position due to deformation and compression. A race car needs to have all suspension points remain in place for proper setup. By using high grade aircraft aluminum alloy and high performance race bearings, the TMS bushing replacements are both lightweight and strong. The casing is designed so that if maximum motion occurs, the load will be evenly distributed throughout the casing.

Our flanges are designed to spread the load on the subframe and limit movement. The bearing we use is an extra wide race bearing to distribute the load over a broader area. Each piece is anodized or nickel plated to withstand corrosion. These bushings are a perfect compliment to the TMS lower camber arms.

Parts list for kit: 2 upper monoball assemblies
 -2 casings,
 -2 bearings
 -4 extensions (2 long, 2 short)

Install time: 3 hours

Directions:

1. Properly lift and support the car to access the rear suspension.
2. Remove rear upper control arms
 -Note how they are oriented and placed in the subframe (which side is which).
3. Remove stock bushing.
 -A press will most likely be needed.
 -Be careful to not damage the control arm or bearing surface when pressing the bushing out or monoball fit could be compromised.
4. Install monoball
 -Remove rust and re-paint as needed.
 -The monoball needs to be pressed in from the front of the control arm to take full advantage of the design.
 E36 only
 -For passenger side arms, look for the R on the inner part of the control arm, and press in from that side.



- For driver side arms, look for the L on the inner part of the control arm, and press in from the **opposite** side.
- Press in until the monoball shoulder is completely flush against the control arm. (Due to manufacturing tolerances on the control arm, it may have to be supported underneath to have the monoball shoulder be completely flush.)



Figure 1 E36 Passenger side arm

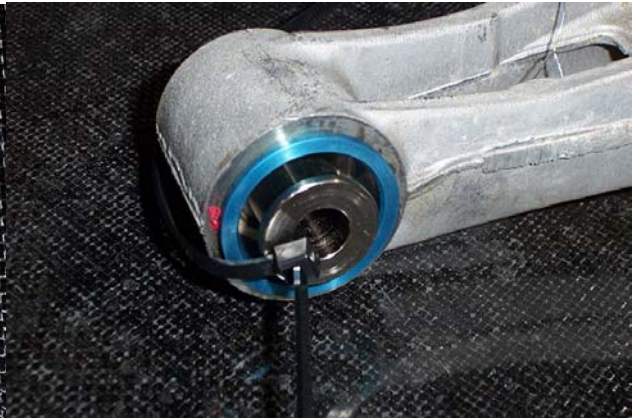


Figure 2 E46 Driver side arm

5. Next slide the extensions into place.
 - The longer extensions go into the rear of the control arm, and the short extensions in the front.
6. Reinstall the control arms.
 - Torque inner bolt to: 77 N*m (57 ft*lb)
 - Torque outer bolt to: 110 N*m (81 ft*lb)