

## *MM Racing Rear Upper Shock Mount - IRS Bilstein (MMSM-7)*



*Read all instructions before beginning work. Following instructions in the proper sequence will ensure the best and easiest installation.*

Thank you for purchasing Maximum Motorsports' Racing Upper Shock Mount. This kit is manufactured specifically for IRS Bilstein shocks. There are many features you will find that make this product unique.

- Eliminates the vertical deflection caused by rubber at the top of the shock. This helps the shock perform at its peak.
- Performs a similar function as a rod end on the end of the shock, but does not reduce precious bump travel as happens when trying to fit a rod end under the shock tower.
- A solid aluminum block and steel doubler plate reinforce the shock tower for coil-over applications. May also be used without coil-overs.
- Relocates the shock 0.2" upward relative to the stock location. This helps restore some of the bump travel lost when lowering the vehicle.

**NOTE:** The installation of the upper shock mount is not easily reversible because welding is required to fill the holes drilled for installation.

1. Loosen, but do not remove, the lug nuts of the rear wheels.
2. Block the front wheels and jack up the rear of the car. Once raised, support the rear of the car with jack stands under the IRS subframe.
3. Remove the rear wheels.

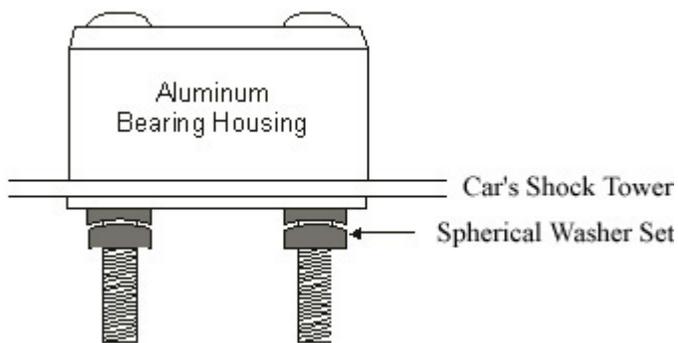
4. Place a floor jack underneath the outboard end of the driver side rear lower control arm. Raise the floor jack until the control arm begins to pivot upwards.
5. From inside the car, remove the driver side shock top nut, thrust washer, and rubber isolator. Save the shock top nut. Discard the thrust washer and rubber isolator.
6. Slowly lower the floor jack until the control arm is resting on the subframe.
7. Remove the lower shock-mounting bolt from the control arm. Save the lower shock-mounting bolt and nut.
8. Remove the shock from the car.
9. Check that the hole in the rear shock tower is at least 1" diameter. The size of this hole varies greatly, and it may need to be enlarged. Use a round file or a die grinder for this operation.
10. Set the steel Doubler Plate on top of the rear shock tower. Center the large center hole of the plate over the hole in the chassis where the shock came through. Align the Doubler Plate so it is parallel to the rear inner wheel well housing. You may need to remove seam sealer from the mounting area. The angled corners are positioned towards the center of the car.



11. Mark the position of the four mounting holes onto the shock tower. Remove the Doubler Plate.

Center punch the location of the hole centers. Drill four 1/8" pilot holes. Drill to the final size of 11/32". Deburr the holes.

12. Set the Aluminum Shock Mount into place, with the four mounting bolts protruding down through the four new holes in the shock tower.
13. From underneath the shock tower, place a Doubler Plate over the four mounting bolts, and push it up against the shock tower. The angled corners are positioned towards the center of the car.
14. Place a spherical washer set on each bolt—concave sides first (see illustration below), followed by a Nylock nut.

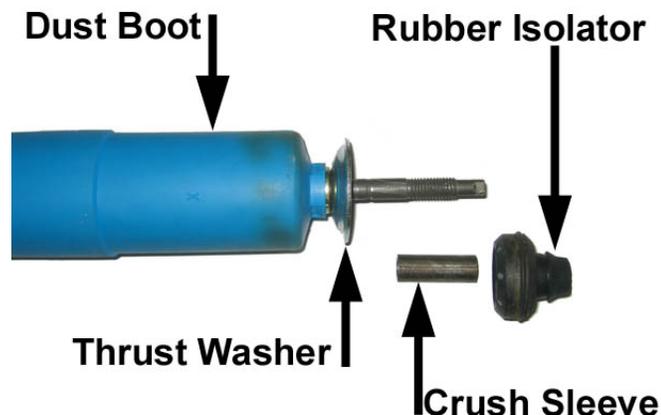


15. Torque each Nylock nut to 19 ft-lb.
16. Repeat Steps 4-15 to install the bearing housing on the passenger side of the car.

#### Non Coil-Over Equipped Vehicles

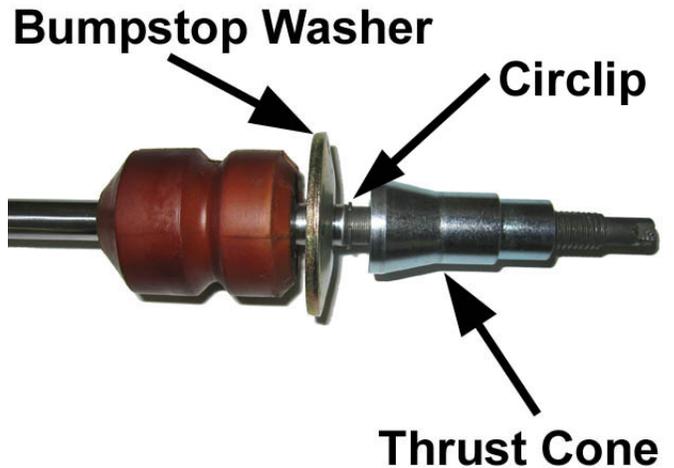
17. Remove and discard the following items from each shock shaft: rubber isolator, crush sleeve (if applicable), thrust washer, dust boot.

NOTE: Only the 2003-04 OEM Bilstein IRS shocks will have a crush sleeve located on the shock shaft.



18. Place a Thrust Cone onto each shock shaft with the small O.D. of the Thrust Cone toward the top of the shock. The counter bore in the large O.D. face will encapsulate the circlip.

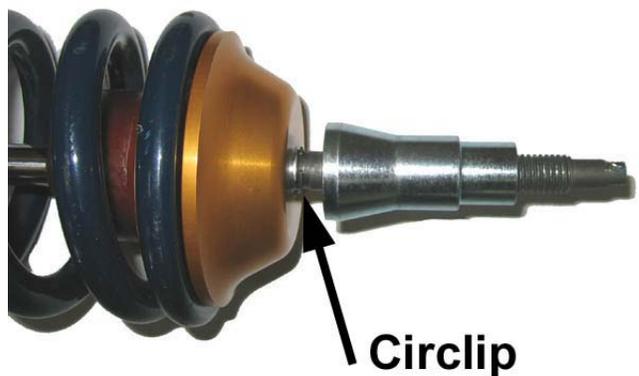
NOTE: There must be a bumpstop washer between the bumpstop and the Thrust Cone.



19. Skip to Step 22.

#### MM Coil-Over Equipped Vehicles

20. Remove and discard the Delrin Pivot Ball and Aluminum Pivot Cup from each shock.
21. Place a Thrust Cone onto each shock shaft with the small diameter of the Thrust Cone toward the top of the shock. The counter bore in the large diameter face will encapsulate the circlip.



22. On the driver side of the car, position the shock shaft through the spherical bearing hole in the Aluminum Shock Mount.

23. Insert the lower shock-mounting bolt through the shock eyelet and into the lower control arm.
24. Place the nut on the lower shock-mounting bolt and torque to 98 lb-ft.
25. Place a floor jack underneath the outboard end of the driver side rear lower control arm. Slowly raise the floor jack until the upper portion of the Thrust Cone is inserted into the spherical bearing.
26. From inside the car, on top of the spherical bearing, place a Shock Top Spacer over the shock shaft.
28. Repeat steps 22-27 to install the completed shock assembly on the passenger side of the vehicle.
29. Reinstall the wheels and torque the lug nuts to factory specs.
30. Remove the jack stands and lower the car.

Test drive and enjoy!

This kit includes the following:

- 2 Aluminum Shock Mounts
- 2 Doubler Plates
- 8 Spherical washer sets
- 8 5/16" Nylock nuts
- 2 Thrust Cones
- 2 Shock Top Spacers



27. Thread the Bilstein shock top nut onto the shock shaft. Use Vice-Grips or pliers to keep the shock shaft from spinning. Torque the shock top nut to 16 ft-lb.

