

MM Racing Rear Upper Shock Mount - Koni (MMSM-5)



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 Koni shocks. There are many features that you will find that make this product unique.

- Eliminates the vertical deflection of any rubber at the top of the shock. This helps the shock perform at it's peak.
- Performs a similar function as a rod end on the end of the shock, but does not reduce precious bump travel 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.

NOTE: The installation of the upper shock mount is not easily reversible. Due to the drilled holes, the shock tower will be too weak if the shock is run in stock configuration without welding the holes closed.

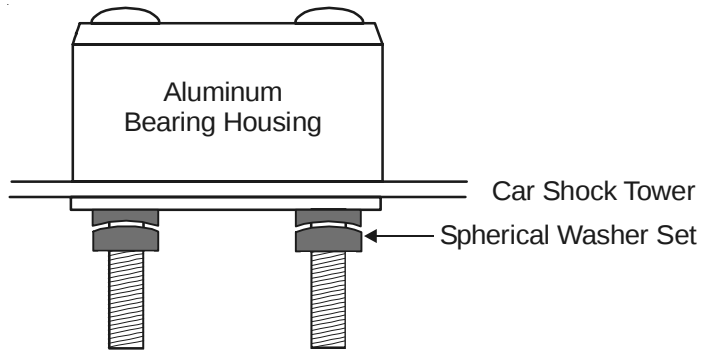
1. Loosen, but do not remove, the lug nuts of the rear wheels.
2. Block the front wheels and jack up the rear of the car. Once raised, support the rear of the car with jack stands under the subframes or torque boxes. With the shocks just short of full extension, support the axle or IRS control arms on jack stands.
3. Remove the rear wheels.
4. From inside the car, remove the shock top nut, thrust washer, and shock rubber isolator. Save the shock top nut. Discard the thrust washer and rubber isolator.

5. Remove the bottom shock bolt from the lower shock mount. Save the lower shock bolt and nut. Remove the shock from the car.
6. 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.
7. 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.



8. 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.
9. Set the Aluminum Shock Mount into place, with the four mounting bolts protruding down through the four new holes in the shock tower.
10. 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.

11. Place a spherical washer set on each bolt--concave sides first (see below), followed by a nylock nut.



12. Torque each nylock nut to 19 ft-lb.
13. Repeat steps 4-12 to install the bearing housing on the other side of the car.
14. On non coil-over cars remove and discard the lower rubber isolators, thrust washers, and the dust boots. On cars with a MM Coil-Over kit, remove and discard the Delrin pivot ball, and aluminum pivot cup.
15. 94+ Koni shocks have bumpstops on the shock shaft. It is recommended that '79-'93 shocks be upgraded with a bumpstop. The soft progressive design of the bumpstop on the shock shaft provides far better performance than the hard rubber block on the frame rail. MM has bumpstops available to upgrade early model shocks (MM Service-5). Once the shock has been equipped with a bumpstop, the '79-'93 hard bumpstop should be removed from the frame rail.
16. Position the bumpstop so it is just below the welded shoulder on the shock shaft. If you are using coil-overs, skip to step 18.



17. For non coil-over applications with bumpstops, place a 9/16" flat washer over the shock shaft and on top of the bumpstop. If you are not using a bumpstop you will not need to install this washer. Skip to step 19.



18. For coil-over applications, place the spring perch over the shock shaft and on top of the bump stop.
19. Place a Thrust Cone onto the shock shaft with the small diameter of the Thrust Cone toward the top of the shock. The large diameter of the Thrust Cone will be resting on either the bumpstop thrust washer, the coil-over upper spring perch, or the welded shoulder.





Non Coil-Over Application without bumpstop

20. Place a Shock Shaft Reducer onto the shock shaft with the larger diameter on the bottom.



Non Coil-Over Applications with bumpstop



All Coil-Over Applications



Non Coil-Over Application without bumpstop

You have now completed one shock assembly. Repeat steps 14-20 for the second shock.

21. On the passenger side of the car, position the shock shaft through the spherical bearing hole in the Aluminum Shock Mount.
22. Solid axle cars: Insert the OEM 12mm lower shock bolt through the lower shock mount and the shock's metal crush sleeve. Torque to 70 ft-lb.
23. Using a jack, raise the axle to seat the Shock Shaft Reducer in the bottom of the spherical bearing.
24. From inside the car, on top of the spherical bearing, place a Shock Top Spacer over the shock shaft. Thread the Koni shock top nut onto the shock shaft. Use an open end wrench to keep the shock shaft from spinning. Torque the shock top nut to 16 ft-lb.



25. Repeat steps 21-24 to install the completed shock assembly on the other side of the car.
26. Reinstall the wheels and torque the lug nuts to factory specs.
27. Remove the jack stands and lower the car.
28. 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 Shaft Reducers
- 2 Shock Top Spacers
- 2 9/16" USS Flat Washers