

Spohn Performance, Inc.

Part# M4-207-7998 – Adjustable Rear Lower Control Arms 1979-1998 Ford Mustang & Fox Body Cars

USE OF THIS PRODUCT IS ACCEPTANCE OF SELLER'S DISCLAIMER OF WARRANTY!

By their very nature, competition components are constantly pushed to their limits. While our components are designed to withstand intense race conditions, it is impossible to control the quality of installation or the varying conditions in which they are used. It is for this reason that absolutely no warranty or guarantee is either written or implied. Neither the seller nor the manufacturer will be liable for any loss, damage, or injury – direct or indirect – arising from the use of or inability to determine the use of any product. Before using, the user should determine the suitability of the product for its intended use, and the user shall assume all responsibility in connection therewith. Spohn Performance, Inc. makes no guarantee as to the legality for any specific class. Spohn Performance, Inc. makes no claims, nor does it intend its products to be used in street driven vehicles. Spohn Performance, Inc. reserves the right to make changes in design or add to or improve on their product without incurring any obligation to install the same on product previously manufactured. The Buyer agrees to indemnify and hold Spohn Performance, Inc. harmless from any claim, action or demand arising out of or incident to the Buyer's installation or use of products purchased from Spohn Performance, Inc.

INSTRUCTIONS

1. With the front wheels securely blocked, raise the rear of the vehicle to an adequate working height, then support the vehicle / chassis / body securely leaving the differential slightly supported with the jack. Place the jack under the rear axle to support but do not lift.
2. Remove the rear wheels and then remove the bolts that retain the lower shock absorber mounts. If you have a Quad-Shock equipped car remove the nuts on the frame side of the axle dampening shock and pull it from the pivot.
3. Gradually lower the differential as far as possible (be very careful not to over extend the flexible brake line that runs from the chassis to the rear end.). At this point there should be little or no tension on the rear springs so they can be easily removed from the car allowing the easiest and safest control arm installation possible. NOTE – pay attention to the position of the cutoff spring end and be sure to re-install the springs clocked in the same position as this will affect ride height and ride quality.
4. Unbolt the rear sway bar from the lower control arms and remove the sway bar.
5. Working on one side of the car at a time, remove the two trailing arm pivot bolts. The front pivot bolt has very limited clearance between the muffler and frame rail, but can be reached with a deep socket and ratchet combination. Remove the old control arm. Be sure to only remove and install one control arm at a time, failure to do so will let the rear end housing rotate and will make your installation much more difficult.

6. Clean the surface of the pivot points on the car checking to make sure there are no rough edges that may tear into the new bushings. Apply a light coat of grease to the outer surfaces of the rear bushings. Slide the forward Del-Sphere pivot jointed end of the Spohn control arm up into position and reinstall the front pivot bolt. The Del-Sphere end has two spacers on each side. This comes assembled and wire tied in place so you can see how the assembly is to be installed. **Note:** The Del-Sphere end is right hand threaded.

7. Slide the rear of the control arm into place, reinstall the mounting bolt and torque both bolts to 70 ft./lbs. Note – locating and aligning the rear pivot bolt is a little tougher and may require the use of a small pry bar or similar tool to line up the mounting holes correctly.

Repeat steps 5-7 on the opposite side of the vehicle

8. Reinstall the rear springs, making sure of proper position. (See note in step 3)

9. Raise the rear end assembly, reinstall the lower shock mounting bolts and the Quad-Shock mounts (if required). Reinstall the rear wheels. Road test and recheck all bolts after driving a few miles.

10. One end of the adjuster is left hand threaded and the other end is right hand threaded. To adjust the length of your LCAs simply put a wrench on the adjuster and turn it clockwise or counter-clockwise to lengthen or shorten the LCA. Jam nuts are known to work loose over time. To prevent this we recommend that after you have the LCAs set to your desired length you apply some REMOVABLE strength (blue) Loctite to the adjuster threads and then tighten up the jam nuts on each end of the adjuster. Note: The LCAs are shipped jig set at stock length.

Note 1: 1983-1985 vehicles with the original anti-hop slapper bars will require removal of these bars, however, due to the increased rear end stability accomplished by these control arms, traction and anti-hop ability will not suffer. For this same reason, Quad-Shocks may also be safely removed from cars so equipped for increased tire clearance.

Note 2: The Delrin bushings come pre-lubed. DO NOT use petroleum-based grease on your bushings! The bushings must be lubricated with synthetic silicone based waterproof grease. These are the manufacturer's recommendations to prevent premature bushing wear, and will keep things "squeak-free". You can order this grease from Spohn Performance using our Part #902. Do not over grease the bushings! You only need a couple pumps of grease. Over greasing will cause the bushings to balloon from the hydraulic pressure inside of the sleeve and they will fail.

Note 3: These adjustable LCAs do NOT have any provisions for mounting a factory rear sway bar. These are race inspired rear lower control arms that should be used in conjunction with an aftermarket rear sway bar or anti-roll bar that does not mount to the rear lower control arms.

Del-Sphere Pivot Joint Instructions & Notes

The Del-Sphere pivot joints are slightly greased for assembly purposes. The bushings inside of the del-sphere pivot joints are made of Delrin, which is self-lubricating. We do not recommend greasing the pivot joint any further than as it is supplied as further grease will only attract and retain dirt and grit. The pivot joints are equipped with grease fittings simply because we know certain customers would want/request them no matter what we say. You'll also note we have a second tapped grease fitting hole with a threaded plug installed so you can change the position of the grease fitting on the pivot end for better access if need be depending on your mounting set-up on the vehicle.

Our Del-Sphere pivot joints are 100% rebuildable. We doubt you will ever need to rebuild them, but they certainly can be. The delrin bushings should last the life of your vehicle. What you may find is after you have a lot of miles on the pivot joints the tolerances may slightly open. It is for this reason that we made the pivot joints adjustable. By tightening the threaded end retainer you can take up any slack and make the joint as tight as it was when new, it's that simple. This also allows you to vary the torque load applied to the pivot ball. If you want a very low friction joint you can loosen the threaded end retainer, etc. When making adjustments to the threaded end retainer you will need to loosen the set screw with an allen wrench. When making your adjustment align one of the threaded retainer end's slots with the set screw and re-tighten the set screw, this locks the threaded end retainer's position in to place and keeps it locked to your setting. Use our Part# **DS34-W** adjusting tool for easy adjustments.

What is a Del-Sphere pivot joint? Think of the Del-Sphere pivot joint as a Delrin bushed spherical rod end. Designed and manufactured exclusively by Spohn Performance, we have taken street suspension performance to the next level. Our Del-Sphere pivot joint features a one piece forged and heat treated chrome moly housing, a heat treated and chrome plated chrome moly spherical ball, Delrin bushing races, heat treated retainer washer and snap ring, heat treated and chrome plated chrome moly threaded adjuster ring, an external grease fitting and a beautiful silver zinc plated housing finish. The delrin bushing races absorb shock and road noise so you get the quiet and smooth ride of a bushing as well as **28 degrees of rotation!**

What is Delrin, and why did you choose to use it? Delrin is an acetal homopolymer made by DuPont. It is characterized as having an excellent combination of physical properties that make it suitable for numerous applications. With extremely low moisture absorption and a low coefficient of friction (self-lubricating), Delrin is uniquely tailored for wear applications in high humidity or moisture environments. Delrin will maintain constant physical properties under high moisture conditions and out-perform nylon or polyurethane under these conditions. Delrin has a 10,000 psi tensile strength and a 120 Rockwell Hardness rating making it ideal for our Del-Sphere pivot joint application.

Replacement Parts:

Part #	Description
DS34RH	Del-Sphere Assembly - 3/4"-16 RH x 3/4" Bore
DS34LH	Del-Sphere Assembly - 3/4"-16 LH x 3/4" Bore
DS34-Wash	Del-Sphere End Washer
DS34-W	Del-Sphere Adjustment Tool
DS34-TE	Del-Sphere Threaded Adjuster End
DS34-SR	Del-Sphere Snap Ring
DS34-Bush	Del-Sphere Delrin Bushing (2 per assembly)
DS34-Ball	Del-Sphere Spherical Ball