# Spohn Performance, Inc. 494 E Lincoln Ave | Myerstown, PA 17067

1-888-365-6064 www.spohn.net

# Part# 743-DS - Tubular Upper A-Arms - Adjustable with Del-Sphere™ Joints 1993-2002 GM F-Body

#### **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. 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**

#### **Tools Required:**

Wrenches and sockets - 12mm, 13mm, 15mm, 18mm, 21mm Hydraulic jack and stands Grease gun Needle nose pliers

#### Installation:

1. Raise vehicle and support with jack stands. Remove both front wheels.

2. Using a 12mm socket, remove the two caliper retaining bolts and slide the caliper out of the way. There is no need to remove the brake line from the caliper.

3. Unplug the ABS sensor from the back of the hub. Remove the plastic wire retaining clips from the lower A-arm and position the ABS wire out of the way.

4. Using a 13mm wrench and a 15mm socket, remove both bolts/nuts on the lower shock mount.

5. Using needle nose pliers, remove the cotter pins from both the upper and lower ball joints. Remove the upper ball joint nut using a 15mm wrench. Using a pickle fork, knock the upper ball joint loose.

6. Loosen the lower ball joint nut using an 18mm wrench and knock the ball joint loose. Move the spindle/rotor assembly out of the way. If you want to completely remove the spindle, loosen the tie rod nut using an 18mm wrench and knock the tie rod loose.

7. Locate the shock mounting bolts in the engine bay. The rear two are bolts, the front two are studs. Remove the front two nuts using a 15mm wrench and the two rear bolts using a 13mm wrench. Pull the upper a-arm and the shock/spring assembly out of the wheel well.

8. Using a 15mm and an 18mm wrench, loosen the bolts that hold the upper a-arm into the factory mounting bracket. Remove the factory a-arm.

9. If you are re-using your factory upper ball joints, you must grind the factory rivets off of the ball joint and use ¼" bolts to mount it to our a-arm (new aftermarket ball joints are attached this way as well). Once a ball joint has been installed, keep the ball joint bolts loose, then bolt our a-arm in to the mounting bracket using the existing mounting hardware. When installing the a-arms, the curved section of the A-arm goes towards the front of the car with the ball joint mounting plate at an upward angle. Tighten the mounting bolts.

10. Tighten the ball joint mounting bolts.

11. We recommend that you take your vehicle for a front end alignment.

## Notes:

New heavy duty ball joints are available (Part# K6462).

New upper a-arm mounting hardware is available (Part# 985).

# Part# DS34TB-RH Del-Sphere<sup>™</sup> Pivot Joint Instructions & Notes

The Del-Sphere<sup>™</sup> pivot joints are slightly greased for assembly purposes. The bushings inside of the Del-Sphere<sup>™</sup> pivot joints are made of Delrin®, which is self-lubricating. We do <u>not</u> 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. Our Del-Sphere<sup>™</sup> 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. To disassemble the joint remove the snap ring using a snap ring pliers. Re-assembly will required the use of a press (or vise) to push the bushings in hard enough to be able to re-install the snap ring.

**Dimensions:** This Del-Sphere<sup>TM</sup> assembly must be mounted inside of a minimum 1-9/16" i.d. mounting bracket to insure the housing does not contact the bracket at full rotation. The joint will provide for 22° of articulation. The housing has a 2.05" outside diameter and is 1.20" wide. The ball is 0.875" wide and has a 0.75" through hole. The thread length is 2.50" and the size is 3/4"-16. The overall length of the joint end to end is 4.92". The length from the center of the ball hole to the start of the threads is 1.50". The length from the center of the ball hole to the end of the threads is 4.0".

What is a Del-Sphere<sup>™</sup> pivot joint? Think of the Del-Sphere<sup>™</sup> pivot joint as a Delrin® bushed spherical rod end. Designed and manufactured exclusively by Spohn Performance, we have taken suspension performance to the next level. This Del-Sphere<sup>™</sup> pivot joint features a one piece forged and heat treated 4130 chrome moly housing, a heat treated and hard chrome plated chrome moly spherical ball, Delrin® bushing races, heat treated retainer washer and snap 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 **22° 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<sup>™</sup> pivot joint application.

#### **Replacement Parts:**

#### Part # Description

DS34TB-RHForged Del-Sphere™ Assembly - 3/4"-16 RH x 3/4" BoreDS34TB-WashTrack Bar Del-Sphere™ End WasherDS34TB-SRTrack Bar Del-Sphere™ Snap RingDS34TB-BushTrack Bar Del-Sphere™ Delrin® Bushing (2 per assembly)DS34TB-BallTrack Bar Del-Sphere™ Hard Chrome Plated Spherical Ball