

# Spohn Performance, Inc.

## Part #107 – Adjustable Panhard Bar Poly/Del-Sphere Pivot Joint Combination - 1982-2002 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 or 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. Begin by jacking up the rear of the car, place jack stands under rear end housing.
2. Loosen and remove the bolts securing the stock lower panhard rod.
3. Remove the stock lower panhard rod.
4. The panhard bar is set to OEM length. If you're lowered you will need to lengthen the bar.
5. Install the panhard bar onto the car using the supplied spacers on either side of the del-sphere end. If the spacers are a tight fit, simply sand their ends until the assembly fits inside of your mounting brackets (the panhard bar ships with the spacers wire-tied on so you know how they are to be installed). Use the OEM bolts and make the nuts hand tight only at this time. Keep the adjuster/del-sphere end down and on the driver's side.
6. Lower the car to the ground. Measure the distance from the outside of your tire to the inside of the fender well. You should have the same distance on both sides of the vehicle.
7. If your rear is not centered you can now adjust your panhard bar. One end of the adjuster is left hand threaded, and the other end is right hand threaded, this allows for on car adjustment. Loosen both jam nuts, then put a wrench on the adjuster and turn it, this will move your rear to the left or to the right, depending on which way you turn the adjuster.
8. When you have your rear centered, tighten the jam nuts, and then tighten the mounting bolts to 60 ft/lbs.
9. The poly bushings come pre-lubed. DO NOT use petroleum-based grease on your poly bushings! Poly bushings must be lubricated with synthetic silicone based waterproof grease. These are the manufacturer's recommendations to prevent pre-mature 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.
10. Jam nuts are known to work loose over time. To prevent this we recommend that after you have the panhard bar set to your desired length you apply some REMOVABLE strength (Blue) Loctite to the threads and then tighten up the jam nuts.

**Note:** To check your rear for center drop a plumb bob off of the edge of your quarter panel and measure from the plumb string to the face of your rim edge. You want the same distance on both sides of the car.

## 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:**

<b>Part #</b>	<b>Description</b>
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