

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.

Our Del-Sphere™ pivot joints are 100% rebuild-able. 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 suspension performance to the next level. Our Del-Sphere™ pivot joint features a CNC machined 1020 DOM housing (weldable), a heat treated and hard chrome plated chrome moly spherical ball, Delrin bushing races, heat treated and zinc plated chrome moly threaded adjuster ring and an external grease fitting. 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
DS34B-250	2.50" O.D. x 0.325" Wall 1020 DOM Weldable Del-Sphere™ Assembly
DS34-W	Del-Sphere™ Adjustment Tool
DS34-TE	Del-Sphere™ Threaded Adjuster End
DS34-Bush	Del-Sphere™ Delrin Bushing (2 per assembly)
DS34-Ball	Del-Sphere™ Hard Chrome Plated Spherical Ball