



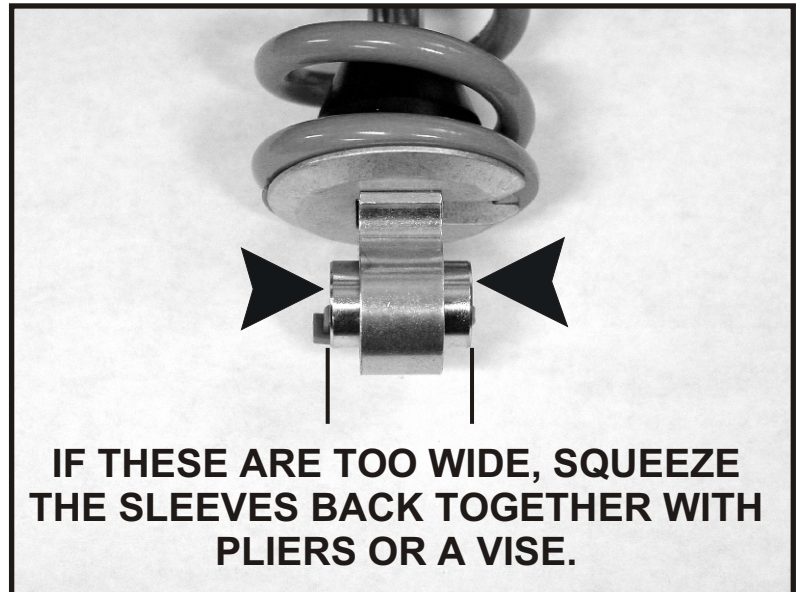
**WORKS PERFORMANCE PRODUCTS, INC.**  
 21045 Osborne St., Canoga Park, CA 91304  
 818.701.1010 fax 818.701.9043  
 www.worksperformance.com

## SPHERICAL BEARING SUPPLEMENT

#HEIM -- 04/18/03

Some Works Performance shocks are equipped with spherical bearings (sometimes referred to as "Heim" bearings) in the eyelet ends of the shocks. This bearing is fitted with two plated steel sleeves and rubber O-rings. The sleeves installed are specific to the vehicle make and model and vary by mounting width and bolt diameter. If you are unsure about whether your eyes are equipped with these bearings, measure the sleeve diameter. If it is 3/4-inch, it is a spherical bearing assembly.

The O-rings installed are thick so that they provide a good seal from grit, water and other hazards. The O-rings are captured between the bearing, the eye bore and the steel sleeve. So when you look at the eye, it may appear to be a steel sleeve stuck in a rubber housing, but it is a spherical bearing assembly. Because the O-ring is thick, it can sometimes push the sleeves out of the bearing during the time the shock is shipped or sits on a shelf.



When you begin to install your shocks, test fit the eyes in the shock mounts. If the sleeves seem to be too wide, simply squeeze them back in place with pliers or in a vise. Sometimes it helps to leave the zip tie (with which the shocks are shipped) in place until you get the sleeves partially in the channel, then cut the zip tie.

Since the load on these bearings is very high, it is also important to lubricate them regularly with a heavy bearing grease. This will protect the bearing and improve the bearing life. Also, just like a drive chain, avoid direct blasts from high pressure (car wash) sprayers as it imbeds grit and water into the bearing assembly.



**LUBRICATING METHOD #1.** If the sleeves pull out easily, remove them and the O-rings. Clean the eye, the sleeves and the O-rings in solvent. Turn the spherical ball sideways and apply the bearing grease to the inside and outside of the race. Reinstall the O-rings and sleeves.

**LUBRICATING METHOD #2.** Often the sleeves become stuck in the bearing. If this is the case, pry the O-rings out from between the sleeves and the eye with a pick. This is tough, but possible. Clean the bearings and races. Lubricate the ball and race as well as possible and re-fit the O-rings.

A certain amount of play is normal for this type of fractured race spherical bearing. Do not be alarmed if it seems loose when you remove the O-rings. This is acceptable. The O-rings will help take up some of this slack when they are installed. If replacement of the bearings, sleeves or O-rings is required at some point, all of these parts are available from Works.

Fig. 2-- Spherical bearings eyelets are fitted with steel sleeves that are 3/4-inch in diameter and look like this. It may be helpful during installation to leave the zip ties on until the eyes are partially centered in the channel.

Please refer to the General, Quad Shock, Single or other Individual guides for more information on your Works Performance shocks.