



Series number 23000

## Camber/Caster Bushings

**Q1: How far should I screw in the bushing?**

**A1:** It must be at least below the surface of the housing. Position the slot for the desired correction without too much load on the ball joint itself.

**Q2: What is the tapered washer for?**

**A2:** The larger sizes need a tapered washer to create a flat surface for the ball joint nut. The bushing angles the ball joint stud and the thick part of the washer should be lined up with the slot in the bushing and then the ball joint castle nut tightened.

**Q3: Do I need a special tool to install this bushing?**

**A3:** Yes, the #4169 spanner socket is required to remove and install this type of alignment bushing.

**Q4: I can't remove the bushing. How can I get it out?**

**A4:** One tip is to make sure the tips of the spanner socket are dry to grab the slots in the bushing without slipping. Valve grinding compound will help the teeth grip. It may be necessary to break the taper on both ball joints. and drop the knuckle to remove the bushing.

**Q5: How do I decide which bushing to use?**

**A5:** You must know the size and position of the bushing currently installed in order to determine the correct bushing. The size is usually stamped on the bottom edge but can be hard to read. It may be necessary to install a zero degree bushing and check alignment angles to then determine the correct bushing needed.

**Q6: Do you have any hints for removing the old threaded bushing from my axle?**

**A6:** Yes. After a bushing sleeve is installed, it can be difficult to remove it because it is being held in place by the taper of the ball joint pushing outward on the threads. An easy way to relieve this pressure without disassembling the spindle or knuckle is to loosen the lower ball joint nut several turns, but do not remove it. Then break the friction of the upper and lower ball joint tapers by hitting the axle housing near each ball joint with a hammer or use a ball joint separator like SPC P/N 37990. This will allow the knuckle to drop about 1/4" and relieve the pressure on the threaded bushing. Now it should be easy to turn it out using the spanner socket tool. NOTE: Remember to re-



tighten the lower ball joint nut to factory spec before re-installing a new threaded bushing!

**Q7: My 23000 series bushings don't thread properly into the axle housing.**

**A7:** Some 23000 bushings were manufactured out of spec. Customer service should send out free replacements for the bushings that are not threading properly. The defective parts do not need to be returned to SPC.

*Related Parts: 23002,23004,23006,23008,23010,23012*

