



23420

Jeep Adjustable Ball Joint

Q1: In what way is the 23420 ball joint different than the previous 23410 ball joint?

A1: First some history: There was a very early ball joint released under 23410 P/N, which did not have sufficient travel for lifted vehicles, so it was pulled from the shelf not long after release. Another ball joint was re-released under the same P/N with a much improved design; however, because it kept the same part number, people still thought it would not work for lifted vehicles. With the release of the new 23420 ball joint, SPC has made several additional and important improvements.

First, the ball stud shaft has been shortened to eliminate the hex that protrudes below the castle nut after the ball joint is installed. This provides increased clearance to the tire, making it possible to run larger sizes without needing to cut off the stud.

Second, and perhaps most notably, the internals were changed from plastic only, to a steel seat design with a spring loaded top cap. The spring compensates for any wear of the ball joint, and keeps it tight at all times.

Third, the ball stud is now induction hardened on the surface to provide a 2x improvement in strength, as well as significantly improved wear resistance. This ball joint will likely outlast the rest of your vehicle if greased regularly.

Finally, all metal components of the ball joint now use a GEOMET ® zinc-flake coating, which is 35x more corrosion resistant than the previous used yellow zinc. This is the same type of coating used on most OE fasteners, and is also much more environmentally friendly than yellow zinc.

Q2: What about ball joint angles? The stock ball joint is binding on my lifted Jeep.

A2: Because of the short upper control arm, the stock Jeep ball joint runs out of travel with lift heights of more than about 1.5". When this happens, it wears quickly and can fail completely, often resulting in damage to the vehicle. The SPC 23420 Ball joint removes some angle from the upper control arm, and offers significantly more articulation travel. The results are a system that will handle any lift amount offered without fear of binding or failure of the upper ball joint. (Other OE components such as the lower ball joint, tie rod ends, and CV joints become the limiting factors to lift height.)

Q3: Can I use this ball joint on my stock height or lowered Jeep?

A3: The 23420 ball joint is not recommended for vehicles that have not been lifted. The stock height suspension uses nearly all of the available room in the wheel well when the suspension is bottomed. The 23420 ball joint is approximately $\frac{3}{4}$ " taller than the stock ball joint, and will make contact with the inner fender on stock height or lowered vehicles.

Q4: I find the grease fitting difficult to access, or hitting the inner fender, what should I do?

A4: For easier access, lift the front of the vehicle by the frame. As the suspension drops, the ball joints become easily accessible. Another solution is to replace the straight grease fitting with a 90° fitting. Use one with $\frac{1}{4}$ -28 threads. If contact is the problem, you can grease the ball joint well at installation, then remove the grease fitting and install a low profile $\frac{1}{4}$ -28 grease plug in its place. The ball joint will be fine so long as it has sufficient grease trapped inside. It should be re-greased any time the ball joint is submerged, or every 10-15,000 miles of street use in this case. Be certain to use grease with at least 3% Molybdenum. See FAQ on SPC recommended grease in FAQ-by subject.

Q5: How do I inspect the ball joint for wear?

A5: Unlike the OE ball joint, which becomes loose as it wears, the SPC design featuring spring loaded ball seats is designed to continuously compensate for wear. Compressing the upper control arm against the knuckle with sufficient force, some vertical movement can be detected as the spring is compressed - this is NOT wear! The ball joint should be checked for wear ONLY by lifting the vehicle by the lower control arm, then grasping the tire at 6 and 12 and trying to rock it in and out. If any radial play in the ball joint is detected, the ball joint is worn and should be replaced. Because of the spring loaded design, it would be very unlikely that a properly maintained ball joint would need replacing due to wear.

