



Issue: Correct Installation of Jeep Wrangler JL/JLU and Gladiator JT Front Upper and Lower Ball Joints

Brand	Supreme	Product	Ball Joint	Date	October 2022
Part Number(s)	MS25574/MS25575				

To successfully install the ball joints, it is imperative to adhere to the following:

- Discard old ball joint nuts and cotter pins. Do not reuse hardware. Ensure to renew hardware.
- Ensure the ball joint is even and square on the proper install axis. Correct seating and alignment are critical to part life longevity. This may require more than one reset of the tool position during install.
- When pressing-in ball joints, ensure pressure is applied to the mounting flange.
- Do not use a heat source to aid in removal. This can warp/distort or otherwise damage the knuckle bore.
- Do not use a hammer or apply blunt force to aid in removal or installation. This can warp/distort or otherwise damage the knuckle bore and or ball joint.
- Only use a calibrated torque wrench for final fastening.

Before Installation of New Ball Joints

After removing old ball joint and before pressing-in new ball joint:

- Ensure to check press-in diameters and tapered hole/stud tolerances. Replace all damaged or out of specification mating components.
- Remove all rust, burrs and corrosion from mating components.
- If a broken, bent or loose ball joint stud is discovered, the knuckle must be replaced. If there is deformation, an out-of-round condition or damage to the tapered mating surfaces of the steering knuckle, it must be replaced. **See Figure 1.**

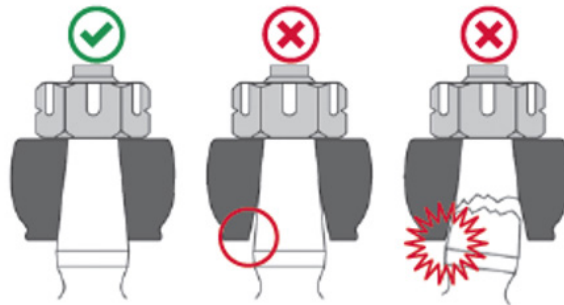


Figure 1

Confirm correct ball joint installation location before press-in. Ensure new upper ball joint is installed into upper bore. Ensure new lower ball joint is installed into lower bore.



Remove and inspect camber sleeve for signs of abnormal wear, enlargement, "out of roundness" and or other damage. **See Figure 2.**

- Remove all rust, burrs and other contaminants from camber sleeve.

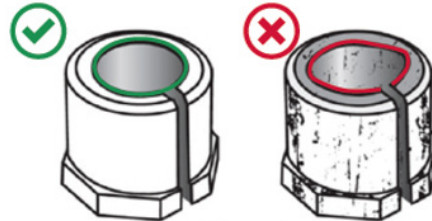


Figure 2

Ensure the camber sleeve moves freely and without restriction before proceeding to ball joint torque sequence.

Refer to the documentation included with Mevotech Supreme front lower ball joint MS25575 for correct installation orientation to ensure access for future relubrication service.

Installation Torque Sequence

Follow the torque sequence as outlined below and in Figure 3. It is recommended to perform this sequence with the steering knuckle in the straight-ahead position. This ensures steering knuckle is properly aligned to the axle assembly.

Identify steering knuckle type. If aluminum steering knuckle, use values in Chart A. If cast iron steering knuckle, use values in Chart B.

CHART A - Aluminum Steering Knuckle	CHART B - Cast Iron Steering Knuckle
A1 - Lower Ball Joint Nut - (15FT-LB/20N.M)	B1 - Lower Ball Joint Nut - (22FT-LB/30N.M)
A2 - Upper Ball Joint Nut - (55FT-LB/75N.M)	B2 - Upper Ball Joint Nut - (55FT-LB/75N.M)
A3 - Lower Ball Joint Nut - (59FT-LB/80N.M)	B3 - Lower Ball Joint Nut - (48FT-LB/65N.M)

Once final torque value is achieved, manually advance castle nut to the next castle opening for the cotter pin to be inserted, even if the hole is aligned when final torque is achieved. Install new cotter pin.

After installation and final torque sequence, confirm assembly moves freely and without restriction throughout entire range of sweep.

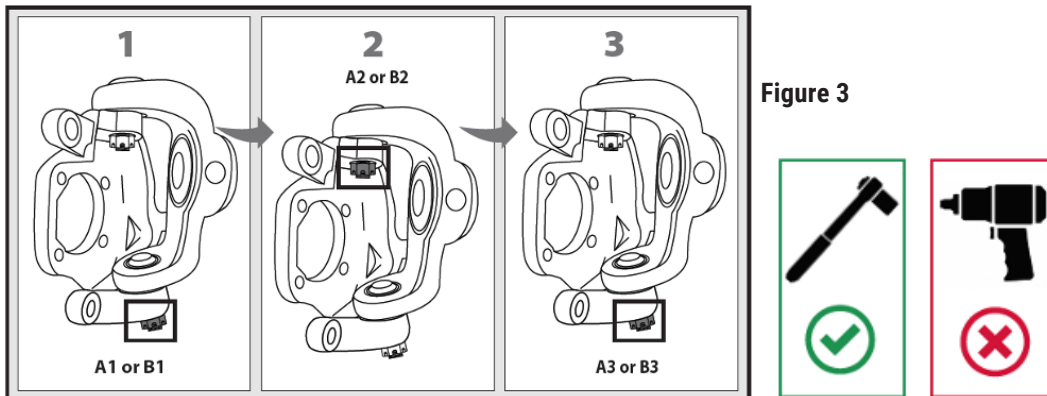


Figure 3