



Ball Joint Replacement Instructions

Read and understand all instructions and warnings prior to installation of product and operation of vehicle.

Zone Offroad Products recommends this system be installed by a professional technician. In addition to these instructions, professional knowledge of disassembly/ reassembly procedures and post installation checks must be known.

INSTALLATION INSTRUCTIONS

1. Park the vehicle on a clean, flat surface and block the rear wheels for safety.
2. Raise the front of the vehicle and support with jack stands at each frame rail behind the lower control arms.
3. Remove the front wheels.
4. Support the knuckle assembly.
5. Remove the cotter pin if equipped and nut from the ball joint the knuckle.
6. Loosen but do not remove the upper ball joint nuts. Unseat the ball joints from the knuckle, refrain from hitting the steering knuckle, use appropriate tool to separate ball joints, avoid damaging the knuckle.

Note: Although not required, the upper control arm can be removed at this time

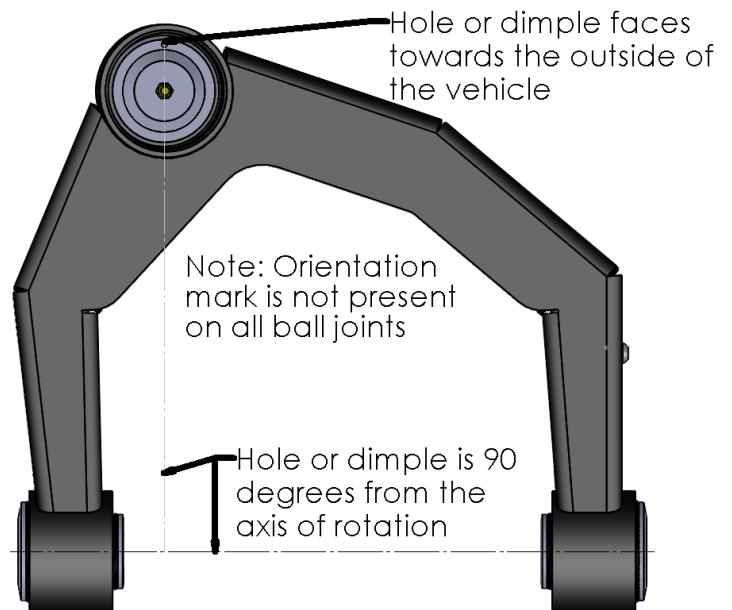
7. Remove the ball joint snap ring.
8. Remove the cap from the ball joint
9. Using an appropriate ball joint press, remove the ball joint from the control arm.
10. Remove the ball joint boot from the new ball joint, this will prevent any punctures of the joint when installing.

Important: Some ball joints are orientation specific. There will be a dimple or hole to indicate which direction the ball joint has more range of motion. This hole needs to face either towards the inside of the vehicle, or outside of the vehicle. Improper installation can cause premature failure.

11. Install new ball joint with ball joint press.
12. Install the new ball joint snap ring.
13. Install the ball joint boot, a ball joint press may be helpful to install the boot for press on style boots. Be careful not to puncture the ball joint boot.
14. Reattach the ball joint to the steering knuckle and torque to specification listed based on application. If a cotter pin is used, do not loose the nut to line up the cotter pin hole.
15. Install the grease fitting into the ball joint. Grease the ball joints at this time.

16. Reinstall ball joint cap, lightly greasing the O-ring will help to install the cap.
17. Reinstall wheels / tires with lugnuts.
18. Lower the vehicle to the ground and torque lug nuts to factory specifications.
19. An alignment is highly recommend after replacing any steering components.

Application	Kit #	Torque Spec
2007-13 GM 1500	ZONC8201 & ZONC8211	37 ft-lbs
2014-18 GM 1500	ZONC8201 & ZONC8211 ZONC8202 & ZONC8212	37 ft-lbs 37 ft-lbs + 90-110 deg
2019+ GM 1500	ZONC8202 & ZONC8212	26 ft-lbs + 60-75 deg
2020+ GM 2500	ZONF8202 & ZONF8212	37 ft-lbs + 90-110 deg
2011-19 GM 2500	ZONC8203 & ZONC8213	37 ft-lbs
2001-10 GM 2500	ZONC8203 & ZONC8213	37 ft-lbs
2004+ F150	ZONF8202 & ZONF8212	46 ft-lbs
2006+ Ram 1500	ZOND8301 & ZOND8311	40 ft-lbs + 200 deg
2007+ Tundra	ZONT8301 & ZONT8311	81 ft-lbs



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