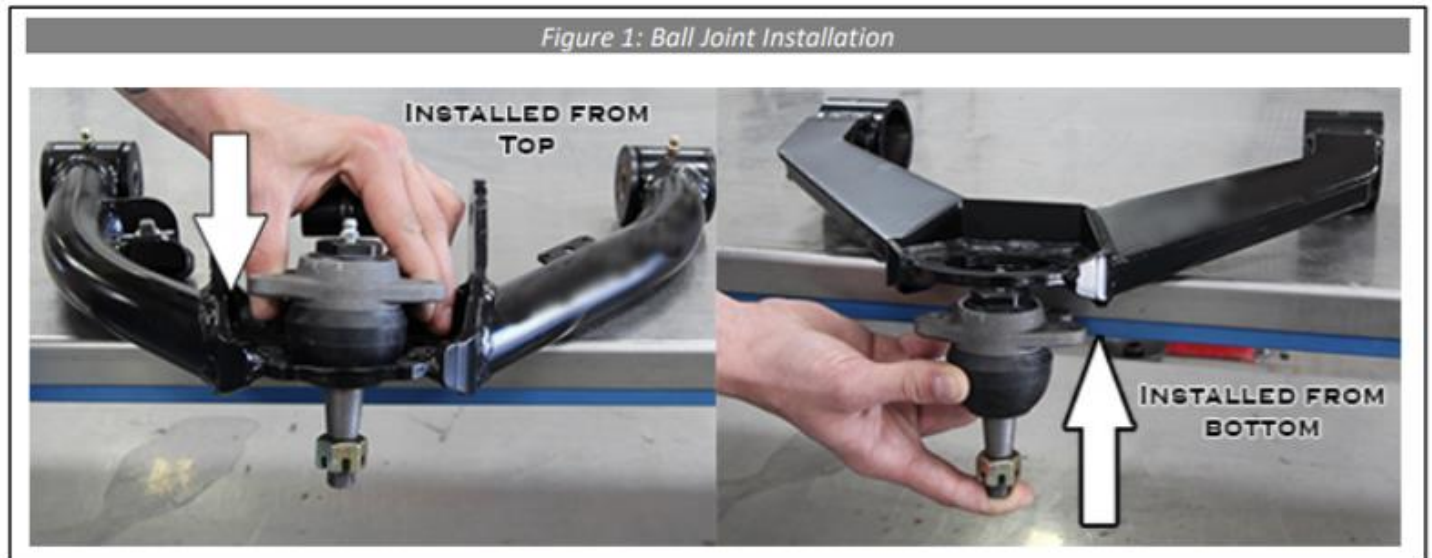


INSTALLATION

1. The Upper control arm kit is a direct replacement of the factory upper control arms on lifted vehicles with a spindle/knuckle replacement lift kit. If you have purchased and are replacing the torsion bar adjuster keys along with the leveling kit, unload the torsion bars now, and remove the factory torsion adjuster keys from the vehicle. Replace with the new torsion bar keys and reload the torsion bars lightly.
2. Remove the factory upper control arms by supporting the lower control arms with a floor jack or some kind of stand used in a safe fashion. Loosen the ball joint nut of the upper control arm enough until you can spin the nut with your fingers, but do not remove totally, and use a pickle fork to separate the ball joint from the spindle, or tap on the side of the spindle next to the ball joint stud. When the tapered seat of the ball joint breaks loose, you may then remove the ball joint nut, and separate the factory upper control arms from the spindles.
3. Remove the factory bolts and eccentric washers that connect the control arm to the frame, but retain them for future use. Place them aside in order so they can be re-installed in the same place they came off. The plastic inserts will need to be removed and discarded from the eccentric washers.
4. Mount the bump stops to the bump stop tabs of the upper control arms. Use a 3/8" flat washer, then lock washer, then nut to secure the bump stop to the control arm. Tighten to 15 ft-lbs of torque.
5. Mount the supplied ball joints with the 5/16" bolts, flat washers, and locknuts provided in Hardware Package 9033 to either the top or bottom of the ball joint pocket of the upper control arms depending on your application, see figure 1 and the chart below to determine. *If installing with a lift kit (i.e. 4"-6" lift kit) the low point of the lift kit is 4"-4.75" of lift, and the high point of the lift kit is 5"-6" of lift. Use anti-seize lubricant on the threads. Tighten all hardware in this step to 22 ft-lbs. of torque.



Vehicle	Stock	Leveling Kit	*Low Point of Lift	*High Point of Lift
01-10 HD	Top	Bottom	Top	Bottom

6. From the hardware package, insert the polyurethane bushings, crush sleeves, and grease fittings into the ends of the Upper control arms. Use WD-40 to aid installation of bushings and use grease to aid installation of sleeves. See figure 2 below.

Figure 2: Bushing and Crush Sleeve installation



7. Mount the upper control arms to the frame with the factory nuts, bolts, and eccentric washers as previously removed. The bump stop tabs on the arms go toward the rear of the vehicle. Figure 1 shows the passenger side control arm installed on the truck. Torque alignment nuts to 100 ft-lbs.
8. Mount the ball joint to the spindle with supplied hardware. Use the 9/16" flat washers supplied if the castle nut needs to be spaced in order for the cotter pin to engage, and tighten to 60 ft-lbs. of torque. Figure 3. You may have to chase the small end of the tapered hole with a 9/16" drill bit because the factory ball joint is a metric thread and the aftermarket ball joint is an American thread. Grease the ball joint until the dust boot starts to swell. Also, grease the upper control arm pivot bushings. If you do not grease these items, premature wear will result! We highly recommend greasing the ball joints and pivot bushings every 3-5K miles.
9. If there were factory lines mounted to the factory upper control arms such as ABS or brake lines, they must be restrained as to avoid binding and contact with any moving parts of the vehicle. Use the 1/4" hardware provided to fasten the factory brake line bracket to the upper control arm. If necessary, slide the brake line through the bracket to obtain a suitable mounting situation.
10. Remove the abs line clip from the top of the frame shock pocket and use the cable ties to restrain the abs line to the brake line as shown in Figure 3. Double check the clearance of both the brake lines and the abs lines after the install while the truck is on the ground through the complete steering cycle. Be sure there is no rubbing or loose cables anywhere.

Figure 3: Passenger side



11. Install front wheels, torque lugs to manufacturers' specification. Have the vehicle's front end professionally aligned using these front-end alignment guidelines:

Some upper control arms have added caster built into them to increase drivability performance, therefore it's important to be sure the correct control arm is installed on the correct side of the vehicle. It's also important to make your alignment shop aware that if caster is high, that is the intention by design.

Cross caster is important in making your vehicle track straight down the road. Most roads have crown to them, high in the middle for water runoff. This crown will make your vehicle want to pull to the right. Vehicles with stock tires on them have a narrow contact patch on the ground and are not as affected as a vehicle having larger wider tires. With larger wider tires it's important to have cross caster proper in order for the vehicle to track straight on these roads. Trucks with dual rear wheels have more tire on the ground and require more cross caster. The length of the wheelbase will also affect cross caster needed.