



**KRYPTONITE**  
HARD CORE STEERING ★ SUSPENSION PRODUCTS

## **2001-2010 2500HD/3500 UPPER CONTROL ARM KIT**

**IMPORTANT! READ THE INSTRUCTIONS BEFORE INSTALLATION!**

**A professional front end alignment will be required after installation is complete!**

It is important to read all instructions from start to finish beginning installation. If these instructions are not properly followed suspension and tire damage can result.

Vehicles with oversized tires should check ball joints, pitman and idler arms every 2500 to 5000 mile for excessive wear, replace as needed. We offer a wide range of heavy duty lifetime warrantied steering and suspension parts at [kryptoniteproducts.com](http://kryptoniteproducts.com).

**The parts in this kit are pre-greased at shipment, do not over grease!**  
**Damage to boots may occur. Damage resulting from improper installation will not be covered under warranty!**



### **Parts Included;**

- Kryptonite Upper Arms (Pair)
- Kryptonite "KR6292" Ball Joint X2
- Control Arm Bushing Set "KRBUCA10"
- Hardware Pack "KRUCA10H"
- Bump Stop "M21017-BK-01" x2

### **Tools Required;**

- Floor Jack and Jack Stands
- Torque Wrench
- Large Hammer
- 22mm Deep Socket
- 1/2" Open end wrench and Socket
- 5/16" Open end wrench
- 9/16" Socket

**Recommended Max Tire Size - 33"x11.5" on 8" wide rim with 4-5/8" backspace. Max Tire Size on stock rim 285/75/R16 or equivalent depending on rim diameter.**

1. Place wheel chocks, put the truck into park with the parking brake engaged. Jack the front of the truck off the ground and support properly with jack stands. **NEVER WORK ON AN UNSUPPORTED VEHICLE**
2. The Kryptonite Upper Control Arm Kit is a direct replacement for factory. If you have purchased and are replacing the torsion keys along with a Kryptonite Leveling Kit, Unload the torsion bars now, and remove the factory torsion keys from the truck. Replace with new Kryptonite Keys and reload the bars slightly.
3. Remove the factory upper control arms by supporting the lower control arms with a floor jack. Loosen the ball joint nut of the upper control arm enough until you can spin the nut by hand, do not remove completely. Now either use a pickle fork or tap the side of the spindle next to the ball joint stud with a hammer. When the tapered seat of the ball joint breaks loose, you may then remove the ball joint stud and separate the factory control arm from the spindle.
4. Remove the factory bolts and cam plates that hold the control arm to the frame. The plastic inserts will need to be removed and discarded from the cam plates. Keep hardware unless upgrading to Kryptonite Heavy Duty Cam Bolt Kit "KR0026".
5. Mount "KR6292" upper ball joints using supplied 5/16" bolts, flat washers, and locknuts. Mount the ball joint to the bottom of the control arm if your truck is adjusted above stock height. Mount the ball joint down through the top of the control arm if your truck is stock height, or if you have a 4" and up lift kit and are keeping torsion keys relaxed and control arm is flat. Torque ball joint hardware to 22 ft/lbs.

## Instructions Continued

6. Now insert the small poly bump stop up through the hole in the back side of the arm, secure using the silver nut and lock washer. Then insert polyurethane bushings, sleeves and grease fittings into the ends of the upper arms. If required grease may be used to aide in installation of the sleeves into the bushings. Pushing the bushings into the arms first. DO NOT Grease the bushing before pressing them into the arms. DO NOT over tighten grease fittings, tighten until snug.

7. The control arms are side specific. The "Kryptonite" Logo plate should always be towards the front of the truck. Instal your new arms into the frame pockets. It may be necessary to flare open the the frame pockets slightly during installation. Either reinstall factory bolts and cam plates, or now is the time to instal your new Kryptonite Cam Bolt Kit. Torque Cam bolts to 90 ft/lbs.

8. Mount the ball joint to the spindle with the supplied hardware. Use the large silver 9/16" flat washers supplied in the hardware bag if the ball joint castle nut needs to be spaced in order for the cotter pin to engage, and tighten to 50 ft/lbs. Insert and bend the cotter pin around the nut to secure.

9. Our upper ball joints "KR6292" come pre greased and only need a minimal amount of grease during service intervals to ensure a long life. Instal the provided grease fitting into the top of the ball joint. Do not over tighten. At this time you may add a small amount of grease to the control arm pivot bushings.

10. The ABS and brake line must be rerouted to avoid binding and contact with any moving parts. Use a zip tie to secure ABS and Brake line to the mount tab on the front underside of your new control arm. It may be necessary to bend, modify, or remove the factory brake line mounting bracket for a clean and secure fit under the control arm.

11. Be sure to double check the clearance of both the brake lines and the ABS lines after the install with wheels installed and at full droop, through a complete steering cycle. Be sure there is no rubbing or loose cables anywhere. Install front wheels, torque to manufacturers specification.

## 12. Have your truck professionally aligned using the below specifications!

The Kryptonite Upper Control Arm have additional positive caster built into them to increase drivability and performance. So it is important to be sure the control arms are installed on the correct side of the truck. It's also important to make your alignment technician aware that if caster is high, that is how the control arms have been designed.

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

Generally, crew cab short and long bed trucks perform best at .8 degrees of cross caster. Duallys at .9-1.0 degrees of cross caster. Your area might have roads that are crowned more or less than average so these numbers may change and your alignment tech should understand this. If your alignment technician is stating they can't align your truck, that usually means they are unable to get the truck within factory spec, and that's fine because your truck is no longer factory. A good tech will understand this and let caster run slightly out of factory spec. (Caster should always be above 2 degrees positive) while maintaining cross caster needed for the vehicle and roads. Enjoy your truck and new Kryptonite Upper Control Arms!

(Kryptonite No Fine Print Lifetime warranty)-Kryptonite steering and suspension components are warrantied for life to their original purchaser. This warranty is against any manufacturer defects, premature wear or breakage. Race it, jump it, off road it, sled pull it, wreck it, lift it, level it, lower it, I think you get it? We don't care. If you can break it we will replace it. Kryptonite products must be purchased from an authorized dealer.