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## **Shackle Flip Instructions**

- 1.) The first thing you will notice is that you have two different shackle flip brackets. The brackets are designed to move your shackle mounting point forward for the proper shackle angle, the bolt through our bracket will be further forward and the shackle will be leaning towards the front of the truck. Make sure you put them on the correct side of your truck, see the picture on the next page.
- 2.) Be sure to have all the accessory items at hand for installing your kit. For example, you may need new U-bolts if you are replacing a block in your rear suspension. Other items to keep in mind: an extended brake line, relocated emergency brake cables, longer shocks, etc. Also, keep in mind that drive shaft and exhaust modifications may be necessary.
- 3.) For Blazers/Jimmys and Suburbans, the fuel tank is in the way. You can either remove the fuel tank (see your factory manual) or you can remove the rear bumper and snake the bolts in from the back.
- 4.) Now to actually begin the work. The first priority is safety, think safe while you are installing this kit. Wear protective clothing, gloves and safety glasses. Put the rear of the frame up on solid jack stands and block the front tires. You will want it fairly high if you are lifting the truck so use strong stands on sturdy parts of the truck. Remove the tires and put the floor jack under the axle. Remove the stock shackle and leaf spring from the rear hanger. You may need to separate the spring and axle to do this. You may even need to remove the spring from the front mount. Be sure that there is no weight on any of the components when you remove the bolts.

- 5.) Once the springs and shackle are out of the way, you are ready to start removing the stock spring hangers. There are several methods to removing the rivets holding them on. An air chisel will cut the heads off or they can be ground with a grinder or cut with a torch. Sometimes drilling the rivet before you try to chisel it will help. If you use heat make very sure there is nothing flammable or heat sensitive in the area you will be working. Roasting your tail light wiring would be bad enough without burning down the truck. Check the inside of the frame. After the rivet heads are removed, drive the shank through the frame and you are done. Now on to the install.
- 6.) You will have to drill out the existing holes to 7/16" in order to install the supplied hardware. You should have a washer on both the head of the bolt and under the nut. In some applications, you will have to drill the new bolt pattern. The bolt patterns are symmetric, so center our bracket right at the center of where the stock bracket used to be.
  - 7.) Mount the Shackle Flip bracket with the shackle mount toward the front of the truck as pictured below, in this picture the front of the truck is towards the right.



- 8.) Torque the mounting bolts that go through the frame to 38 ft lbs, the proper way to torque a nut/bolt is to put the torque wrench on the nut rather than the bolt. We use a high quality matched nut/bolt combination (a touch better than grade 8) that are plated and lubricated, so the torque spec is lower than you'll find in some generic charts. The top lock nut is good for 5 applications before its locking feature wears out.
- 9.) With a stock GM shackle the open side of the shackle can face either the front or the back. With the ORD Super Shackle the closed side MUST face the rear.
- 10.) Install u-bolts, wheels and tires

11.) You may have to shim the pinion to correct the drive shaft angle, but there isn't a cut and dry answer for if or how much because things like wheelbase, lift height, and driveshaft type have different pinion angle needs. For information regarding drive shaft angles please visit Tom Wood's Custom Drive Shafts tech page for diagrams. <u>www.4xshaft.com</u>.

If you have any questions, don't hesitate to call. 970-945-7777