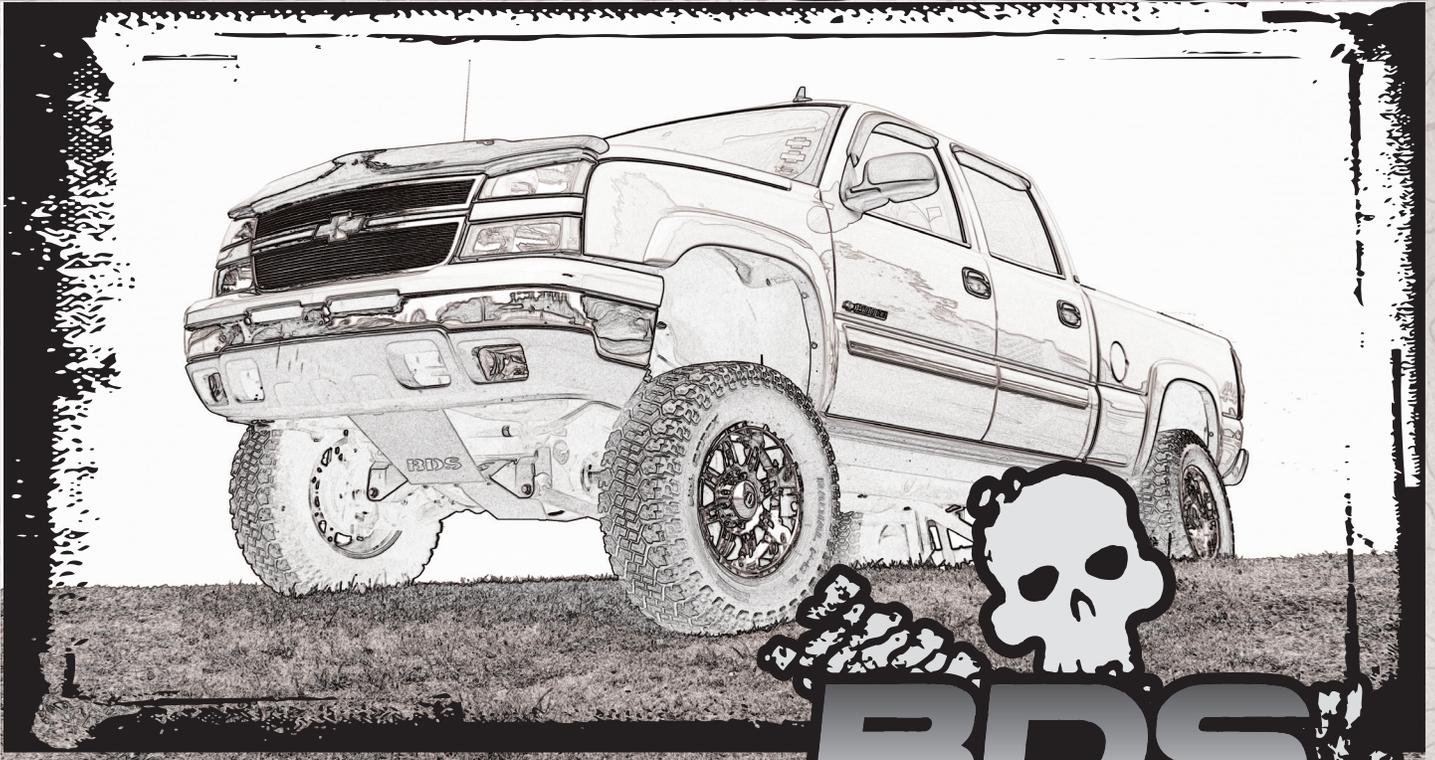


INSTALLATION GUIDE



Part#: 121407, 123409



HARDCORE LIMITED LIFETIME WARRANTY

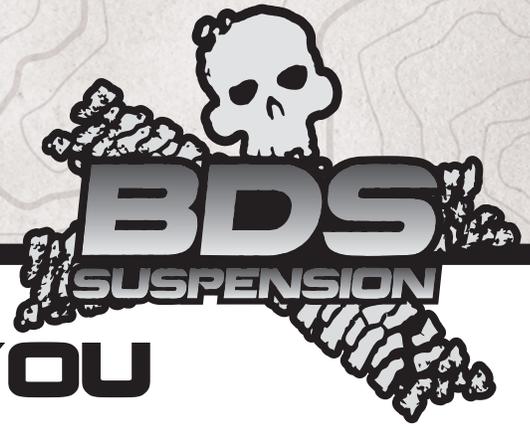
**Chevy 2500 Recoil
Traction Bar System**

Rev. 030520

491 W. Garfield Ave., Coldwater, MI 49036 • Phone: 517-279-2135

Web: www.bds-suspension.com • E-mail: tech-bds@ridefox.com

Read And Understand All Instructions And Warnings Prior To Installation Of System And Operation Of Vehicle.



THANK YOU

Your truck is about to be fitted with the best suspension system on the market today. That means you will be driving the baddest looking truck in the neighborhood, and you'll have the warranty to ensure that it stays that way for years to come. Thank you for choosing BDS Suspension!

BEFORE YOU START

BDS Suspension Co. 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.

FOR YOUR SAFETY

Certain BDS Suspension products are intended to improve off-road performance. Modifying your vehicle for off-road use may result in the vehicle handling differently than a factory equipped vehicle. Extreme care must be used to prevent loss of control or vehicle rollover. Failure to drive your modified vehicle safely may result in serious injury or death. BDS Suspension Co. does not recommend the combined use of suspension lifts, body lifts, or other lifting devices. You should never operate your modified vehicle under the influence of alcohol or drugs. Always drive your modified vehicle at reduced speeds to ensure your ability to control your vehicle under all driving conditions. Always wear your seat belt.

BEFORE INSTALLATION

Special literature required: OE Service Manual for model/year of vehicle. Refer to manual for proper disassembly/reassembly procedures of OE and related components.

Adhere to recommendations when replacement fasteners, retainers and keepers are called out in the OE manual.

Larger rim and tire combinations may increase leverage on suspension, steering, and related components. When selecting combinations larger than OE, consider the additional stress you could be inducing on the OE and related components.

Post suspension system vehicles may experience drive line vibrations. Angles may require tuning, slider on shaft may require replacement, shafts may need to be lengthened or trued, and U-joints may need to be replaced.

Secure and properly block vehicle prior to installation of BDS Suspension components. Always wear safety glasses when using power tools.

If installation is to be performed without a hoist, BDS Suspension Co. recommends rear alterations first.

Due to payload options and initial ride height variances, the amount of lift is a base figure. Final ride height dimensions may vary in accordance to original vehicle attitude. Always measure the attitude prior to beginning installation.

BEFORE YOU DRIVE

Check all fasteners for proper torque. Check to ensure for adequate clearance between all rotating, mobile, fixed, and heated members. Verify clearance between exhaust and brake lines, fuel lines, fuel tank, floor boards and wiring harness. Check steering gear for clearance. Test and inspect brake system.

Perform steering sweep to ensure front brake hoses have adequate slack and do not contact any rotating, mobile or heated members. Inspect rear brake hoses at full extension for adequate slack. Failure to perform hose check/ replacement may result in component failure. Longer replacement hoses, if needed can be purchased from a local parts supplier.

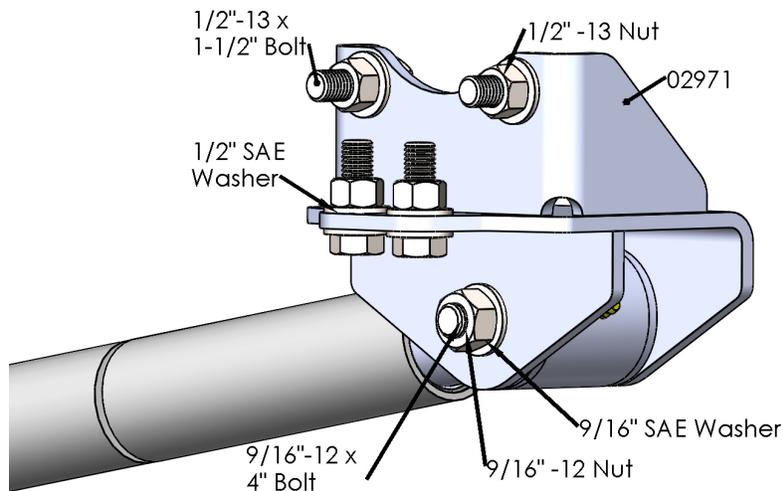
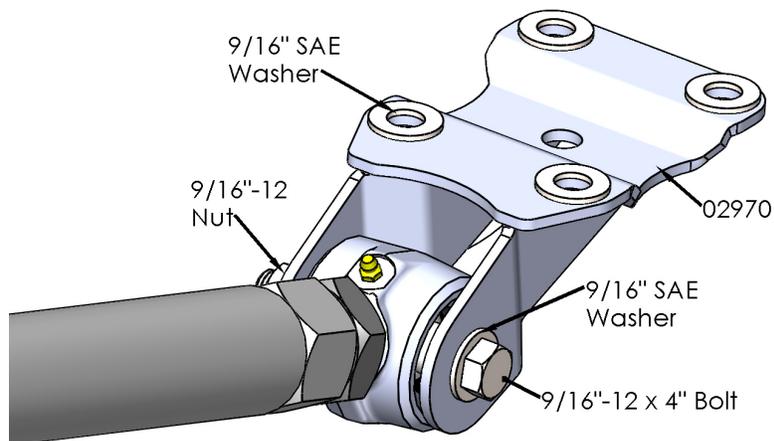
Perform head light check and adjustment.

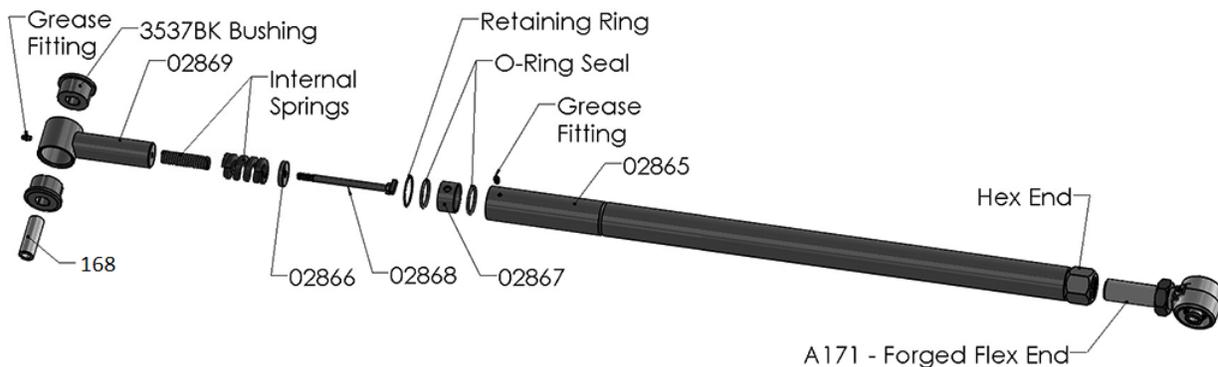
Re-torque all fasteners after 500 miles. Always inspect fasteners and components during routine servicing.

CONTENTS OF YOUR KIT

| Box Kit 121407 | | |
|----------------|-----|-----------------------------------|
| Part # | Qty | Description |
| 02970 | 2 | GM 2500 Axle Mount |
| 02971 | 2 | GM 1500 Frame Mount |
| 02910 | 2 | Jam Nut Wrench |
| B1166 | 1 | Bag Kit |
| W96S | 8 | 9/16" SAE Washer |
| 964 | 1 | Bolt Pack (Traction Bar Hardware) |
| | 4 | 9/16"-12 x 4" Bolt Grade 8 |
| | 4 | 9/16"-12 Prevailing Torque Nut |
| | 8 | 9/16" SAE Washer |
| 958 | 1 | Bolt Pack Frame Mount |
| | 8 | 1/2"-13 x 1-1/2" Bolt Grade 8 |
| | 8 | 1/2"-13 Prevailing Torque Nut |
| | 16 | 1/2" SAE Washer |

| Box Kit 123409 | | |
|----------------|-----|----------------------------|
| Part # | Qty | Description |
| A255 | 2 | Traction Bar Assembly |
| 02865 | 1 | Traction Bar |
| 02866 | 1 | Spacer Washer |
| 02867 | 1 | Bushing |
| 02868 | 1 | Guide Bolt |
| 02869 | 1 | Traction Bar Slider End |
| 033001 | 1 | Heavy Rate Spring |
| 033002 | 1 | Lite Rate Spring |
| 9452K63 | 2 | O-Ring |
| 91985A231 | 1 | Internal Retaining Ring |
| 3537BK | 2 | Bushings |
| 168 | 1 | Sleeve |
| 4138209 | 2 | Flush Mount Grease Fitting |
| A171 | 1 | Forged Flex Joint End |



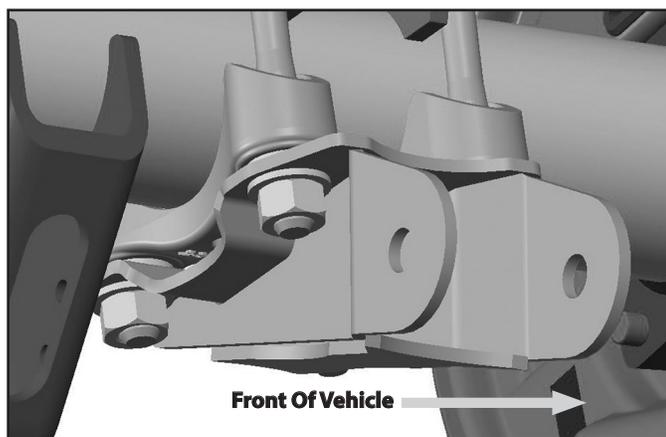


INSTALLATION INSTRUCTIONS

AXLE BRACKET INSTALLATION INSTRUCTIONS

1. Park the vehicle on a clean, flat surface and block the rear wheels for safety.
2. Measure the length of thread on the U-bolt showing past the end of nut. A minimum of 0.25" of thread must be showing past the end of the nut in order to install the axle bracket. If not enough thread is showing, new / longer u-bolts will be required before the installation is completed!
3. Starting on the driver side, raise the rear axle with a jack and support with a jack stand.
4. Remove the driver's side U-bolt nuts and washers. If replacing U-bolts, remove old and install new now.
5. With the OE U-bolt plate in place, install a 9/16" SAE washer on each of the U-bolts followed by the new traction bar axle mount bracket (02970). Make sure the mounting tabs on the bracket are to the front of the vehicle. Fasten the bracket with the U-bolt (new or used) nuts and washers (Fig 1). Torque U-bolts to 100-120 ft-lbs.

FIGURE 1

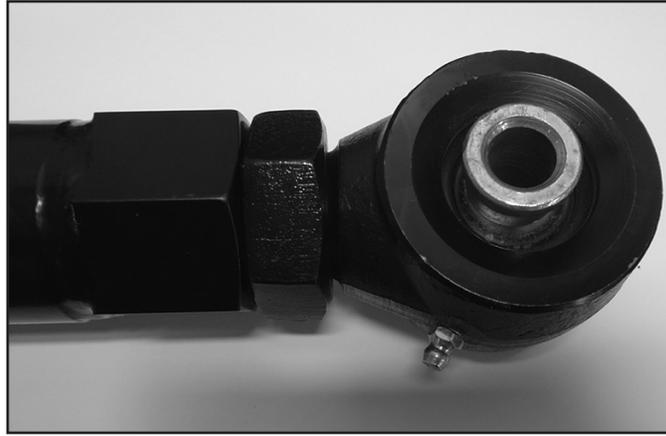


6. Lower the driver side axle to the ground and repeat the installation on the passenger side. After both sides are completed, lower the rear axle to the ground.

TRACTION BAR INSTALLATION

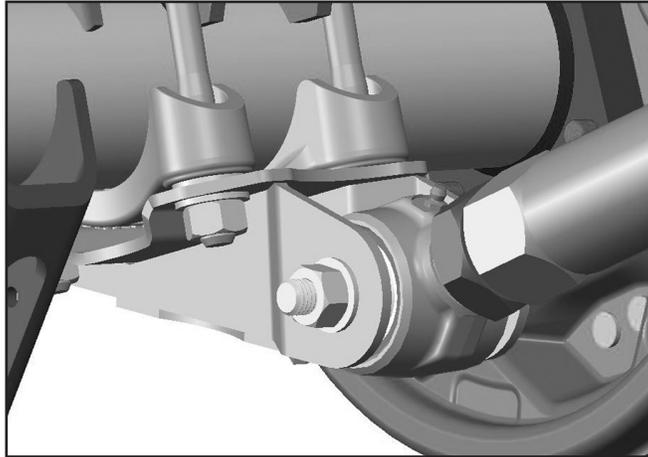
7. Check that the jam nut on the Forged Flex End (A171) is threaded in as far as it can go on the shaft of the Forged Flex End. Make sure the Forged Flex End is completely threaded into the Traction Bar (02865) up to the jam nut as shown in Figure 2.

FIGURE 2



8. Attach the Traction Bar to the axle bracket with a 9/16" x 4" bolt, 9/16" nut and 9/16" SAE washers from Bolt Pack 964. Install the traction bar so that the Forged Flex End (A171) is mounted to the axle bracket. Leave mounting hardware loose at this time

FIGURE 3



9. Measure the length of the bar from the center of the bolt at the axle to the center of the sleeve at the traction bar end (02869). The length should be approximately 59-3/4". If not, press firmly on the traction bar end to seat the springs.

FRAME BRACKET INSTALLATION

! Caution *After the axle bracket has been installed, the rest of the installation should be done with the weight of the vehicle on the rear axle.*

10. Starting on the driver's side, loosely attach the provided frame bracket (02971) with a 9/16" x 4" bolt, 9/16" nut and 9/16" SAE washer from Bolt Pack 964 to the Traction Bar End (02869).
11. Place the bracket up to the frame so that the "L" in the bracket mounts to the frame. Hold the bracket flush against the frame and using the four holes in the bracket as a template, mark the location to be drilled on the frame.

Note: The E-Brake Cable bracket may need to be relocated on some models depending upon rear lift height. This can be done by drilling a new hole and bolting the bracket in the new location, checking to be sure the cable does not interfere with the traction bar frame bracket.

FIGURE 4



Tip

When marking the location to drill the holes, make sure Forged Flex End is threaded all the way in, the traction bar slider end is seated firmly on the springs, and the length of the Recoil Traction Bar is approximately 59-3/4" +/-0.25" eye to eye.

12. Drill 1/2" holes in the frame at the four marks.
13. Place the bracket up to the frame and align the bracket holes with the previously drilled holes. Attach the bracket with the provided 1/2" bolt, 1/2" SAE Washers, and 1/2" prevailing torque nut (Bolt Pack 958). Torque the 1/2" bolts to 60 ft-lbs.
14. Lightly grease the slider end of the traction bar by hand to work grease into the O-ring seals. The traction bar slider end may need to be pulled out a bit and rotated so the grease can fully be worked into the O-rings.
15. Reattach the Recoil Traction Bar to the frame brackets using the 9/16" x 4" bolt, nut and 9/16" SAE washer. Torque to 90 ft-lbs at the frame and axle brackets.
16. Repeat the frame bracket and Recoil Traction Bar installation on the passenger side.
17. Grease all bushings and the Recoil Traction Bar before use. Do not over grease the Recoil Traction Bar, it is recommended to grease the Recoil Traction Bar one pump of grease every 10,000 miles.

Note: Traction bar frame end will need a needle nozzle to grease the flush mount grease fittings.

18. Check all hardware for proper torque.
19. Check hardware after 500 miles.

TRACTION BAR ADJUSTMENT

20. Loosen the jam nut at the axle end with the two provided wrenches. Utilize a 1/2" ratchet or breaker bar in the wrench if needed.

FIGURE 5



21. Use the levels on the wrench to gauge how much force is inputted into the Recoil Traction Bar. The wrench is designed to be used at the traction bar slider end as shown in Figure 6. Make sure the wrench is pressed firmly against the bushing / tube for an accurate measurement.

FIGURE 6

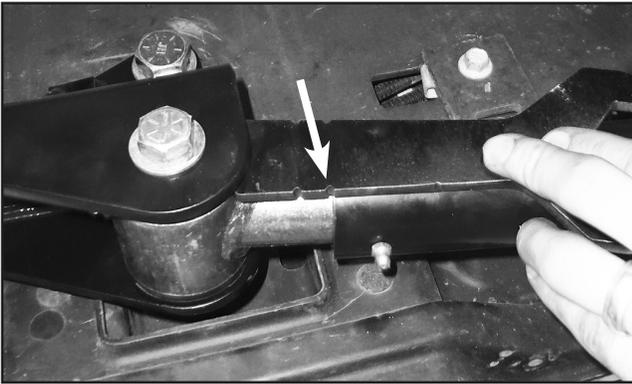
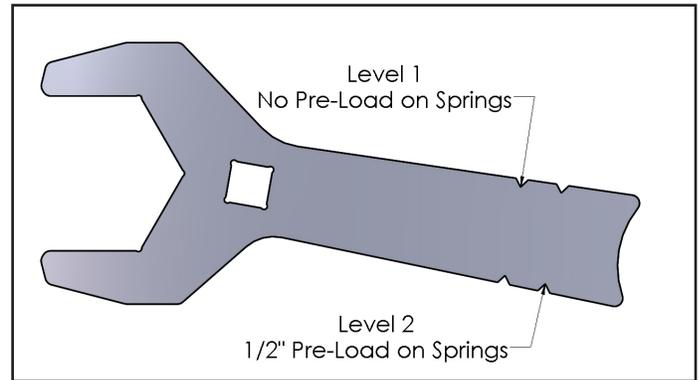
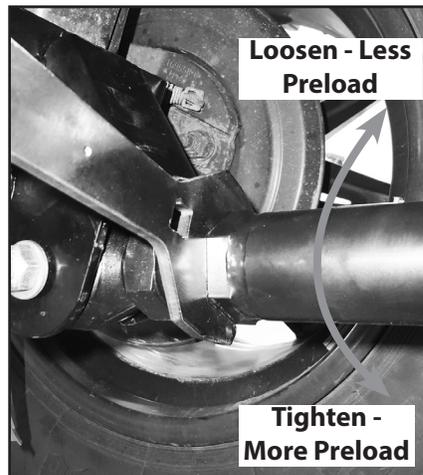


FIGURE 7



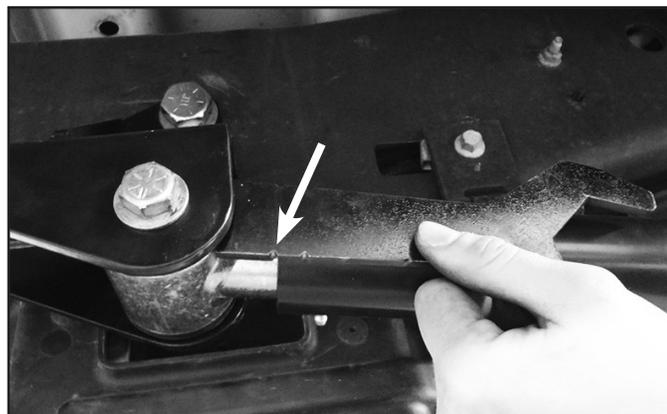
22. Utilizing the Levels on the wrench, spin the Recoil Traction Bar either clockwise to add more force into the dual coil springs setup to reduce axle wrap, or loosen the Recoil Traction Bar by spinning it counter clockwise in order to reduce the input the Recoil Traction Bar has on the suspension system. *Note: Depending upon lift height, the Recoil Traction Bar may need to unthreaded from the Forged Flex End until the First Level is reached on the wrench. At this point the dual coil spring setup are in contact and there is no preload in the springs.*

FIGURE 8



23. It is recommended when pulling or hauling heavy weights that Recoil Traction Bar be set at a minimum of the Second Level on the Jam Nut Wrench to help reduce axle wrap. The Second Level is 25% of the maximum force the springs output. The maximum amount of force that can be preloaded in the spring is 12 full rotations of the Recoil Traction Bar when starting at the First Level. This equals 1" of total preload in the dual coil spring setup in the Recoil Traction Bar. At this point, the dual coil spring setup creates a solid link between the frame and axle when in compression. **DO NOT** tighten the Recoil Traction Bar past this amount.

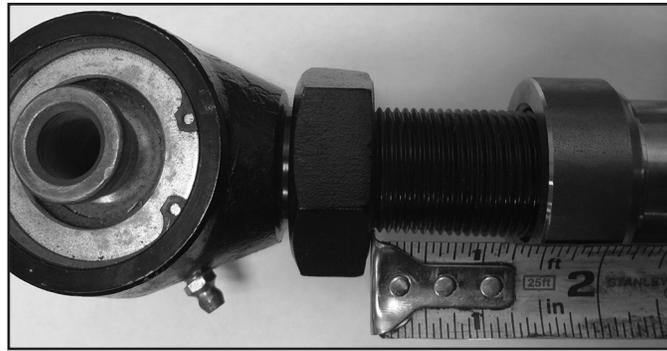
FIGURE 9



24. After the desired force is set, lock off the jam nut with the two provided Jam Nut Wrenches and repeat this process on the other Recoil

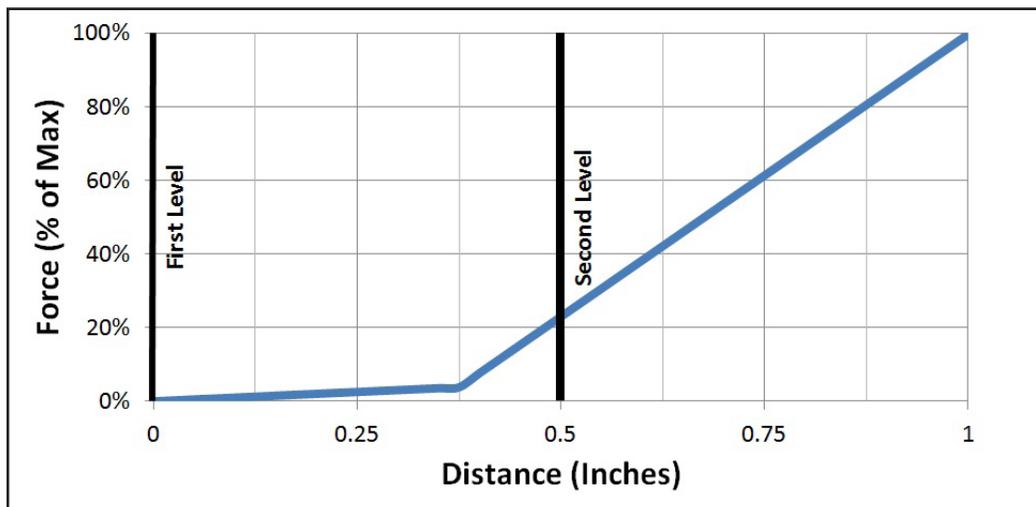
Traction Bar. Note: Never unthread the forged flex end past 1-1/2" of adjustment. This can cause thread damage and weaken the joint. See Figure 10.

FIGURE 10



25. The dual coil spring setup is utilized to always create contact between both ends of the Recoil Traction Bar. Having dual coil spring setup allows the Recoil Traction Bar system to not affect suspension performance at a lower force as seen at the First Level, allowing greater articulation and less affect on the suspension system. As the Recoil Traction Bar is adjusted and the dual coil spring setup is compressed, a higher force is exerted on the axle in order to reduce axle wrap. Each Level below corresponds to the levels on the wrench, representing different amounts of force in the Recoil Traction Bar system. Note: It is recommended to never fully compress the spring past the 1" of compression. This can be measured 1" from the First Level on the Jam Nut Wrench.

FIGURE 11



WE WANT TO SEE YOUR RIDE!

Grab photos of your BDS-equipped truck in action and send them in for a chance to be featured. Send it in to our Bad Ass Rides customer gallery at bds-suspension.com/bar and post them on the BDS Fan Page on Facebook at facebook.com/BDSSuspensions. Don't forget about your BDS swag! BDS offers t-shirts, hoodies, decals and more available on the BDS website or through your local BDS distributor.

TIME TO HAVE SOME FUN

Thank you for choosing BDS Suspension.

For questions, technical support and warranty issues relating to this BDS Suspension product, please contact your distributor/installer before contacting BDS Suspension directly.