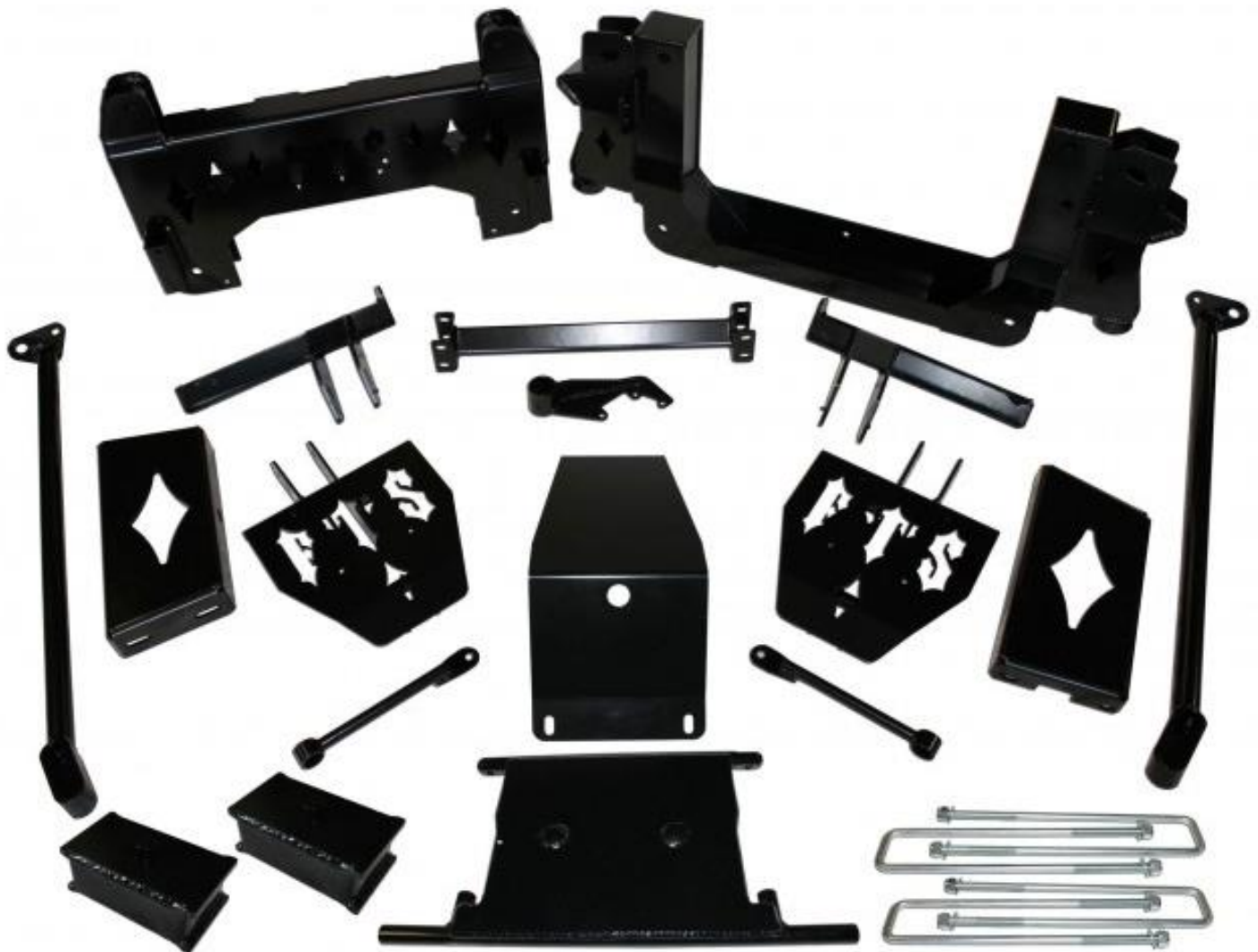


49104



2011-2015 CHEVY/GMC 2500HD/3500HD 15" 4WD Kit

- Complete Drop Down Kit And 100% Bolt On
- Structural Cross members Constructed Of $\frac{1}{4}$ " Thick Steel For Superior Strength
- Impact Struts To Distribute Suspension Impact Throughout The Frame
- Additional Support Added To Front Differential To Turn Those Huge Tires
- Does Not Extend Track Width Or Require Any Special Wheel Offset
- Heavy Duty Semi-Gloss Black Powder For Long Life And Great Looks
- Steering Is Dropped A Full 15" For Flat Tie Rod Angles
- Dual Steering Supports For Superior Steering Control
- Front Differential Dropped Full 15" For Flat C/V Angles
- C/V Front Driveshaft To Eliminate Vibration
- Minor Trimming Of Your Factory Frame



49104

2011-2015 CHEVY/GMC 2500HD/3500HD 15" 4WD Kit

C4900-1 Component Box 1

- (1) Rear X Member
- (1) Driver Torsion Bar Drop
- (1) Passenger Torsion Bar Drop
- (2) Torsion Bar Support Rods
- (1) Steering Bar Drop

C4900-4 Component Box 2

- 1) Front X Member
- 1) Front Lower X Member
- 1) Left Compression Strut
- 1) Right Compression Strut
- (1) Right Upper A Arm Drop
- (1) Left Upper A Arm Drop

C4900-7 Component Box 3

- (2) 4" Tapered Blocks
- (4) 3/4" X 3 1/4" X 15" Square U Bolts
- (8) 3/4" Fine Nuts

C4900-8 Component Box 4

- (1) Driver Diff Drop
- (1) Pass Diff Drop
- (1) Center Diff Support
- (1) Skid Plate
- (1) U Bracket
- 4 Wheel drive Hardware
- (2) MO3852 bushings
- (1) Sleeve S32852
- (2) 1/2" X 3 1/2" Bolts
- (2) 1/2" Nylock Nuts
- (4) 1/2" Washers
- (2) 12mm X 25mm Allen
- (1) 5/8" X 2" Bolts
- (1) 5/8" Nylock Nuts
- (2) 5/8" Washers
- (1) 1/2" X 4" Bolts
- (2) 1/2" X 1 1/2" Bolts
- (3) 1/2" Nylock Nuts
- (6) 1/2" Washers
- (4) 7/16" X 1 1/4" Bolts
- (4) 7/16" Nylock Nuts
- (8) 7/16" Washers

C4900-5 Hardware Kit

- Lower A Arm Hardware
- (2) 18mm X 130 Bolts
- (2) 18mm X 150 Bolts
- (4) 18mm Nylock Nuts
- (8) 18mm Washers

Front Lower / Compression Struts

- (12) 7/16" X 1 1/4" Bolts
- (12) 7/16" Nylock Nuts
- (24) 7/16" Washers
- (2) 1/2" X 1 1/2" Bolts
- (2) 1/2" Nylock Nuts
- (4) 1/2" Washers

A Arm drop Hardware

- (4) 1/2" X 1 1/2" Bolts
- (4) 1/2" Nylock Nuts
- (8) 1/2" Washers
- (2) 5/8" X 6" Bolts
- (2) 5/8" Nylock Nuts
- (4) 5/8" Washers
- (4) 7/16" X 1 1/4" Bolts
- (4) 7/16" Nylock Nuts
- (8) 7/16" Washers

Steering Hardware

- (2) 5/8" X 2" Bolts
- (2) 5/8" X 2 1/2" Bolts
- (2) 5/8" Nylock Nuts
- (2) 5/8" Washers
- (4) 5/8 RH Heim Joints
- (4) 5/8"-18 Jam Nuts
- (2) 5/8" Coupling Nut
- (6) .150 Spacers S625150

Torsion Bar Drop Sway Bar

- (2) 9/16" X 4" Bolts
- (2) 9/16" Nylock Nuts
- (4) 9/16" Washers
- (4) 3/8" X 1.0" Bolts
- (4) 3/8" X 1 1/4" Bolts
- (8) 3/8" Nuts
- (16) 3/8" Washers
- (2) 1/2" X 1 1/2" Bolts
- (2) 1/2" X 3" Bolts
- (4) 1/2" Nylock Nuts
- (8) 1/2" Washers
- (2) 2201 Bushings
- (2) Sleeves S56250

49132 Front /Rear Steel Braided Brake Lines

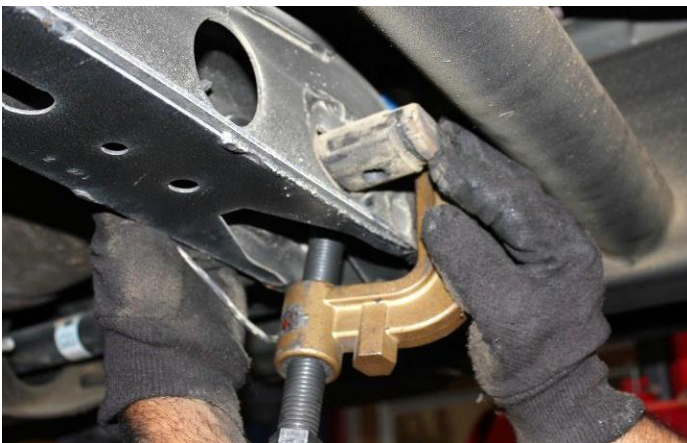
- CVDL40 40" CV Front Drive Shaft

Disassembly

1) With the vehicle on level ground set the emergency brake and blocks the rear tires. Disconnect the negative battery cable from the battery (Note that some vehicles have 2 or more batteries you will need to disconnect the negative cables from all batteries). Jack up the front end of the truck and support the frame rails with jack stands. Remove front wheels and tires.

NEVER WORK UNDER AN UNSUPPORTED VEHICLE!

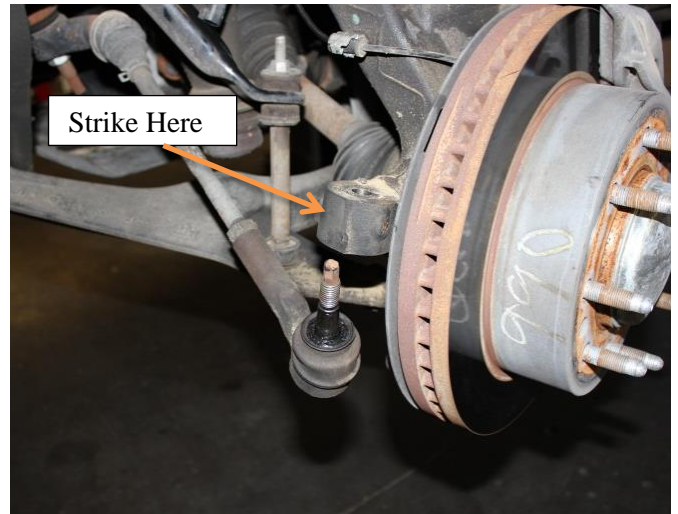
2. Locate the torsion bar adjusting cams and threaded bolts. Measure exposed threads of torsion bar adjusting bolts and record for reinstallation. Mark torsion bars indicating driver and passenger. Using a torsion bar removal tool unload the torsion bars and remove the cross member and bars. Retain the hardware for reinstallation. (NOTE- Do not attempt to unload or remove torsion bars without the proper torsion bar tool. Torsion Bars are under extreme tension)



3. Unplug the ABS brake connection from the frame and control arm. Remove the brake hose bracket from the side of the steering knuckle.



4. Remove the nut retaining the outer tie rod to the steering knuckle then disconnect the tie rod ends from the steering knuckle by striking the knuckle boss with a hammer to dislodge the tie rod end. Use care not to damage the tie rod end when removing.



5) Remove the brake caliper bolts, DO NOT let the caliper hang by the brake line.



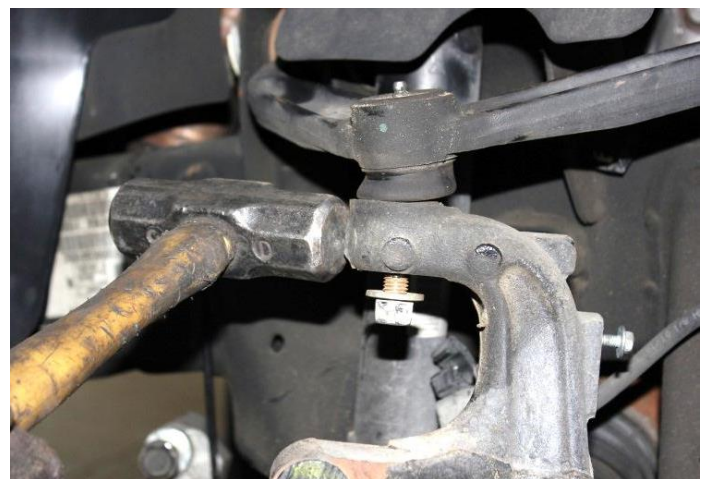
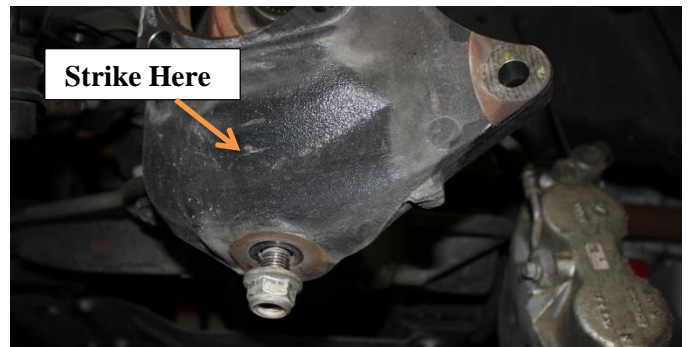
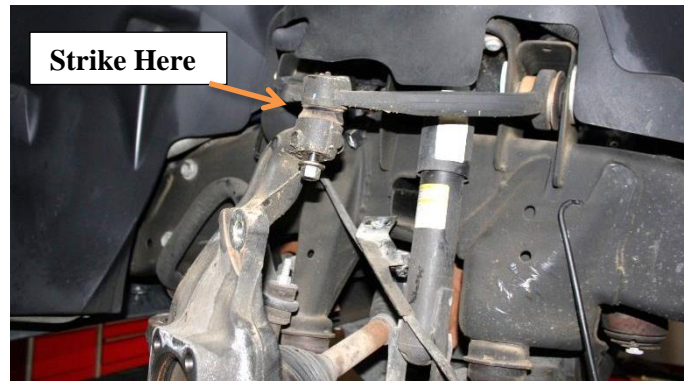
6) Remove the torx bolt holding the rotor to the hub. Remove brake rotor from the steering knuckle.



7) Remove the 36mm axle nut, washer as well as the 4 hub bolts on backside of knuckle. Remove hub bearing assembly.



8) Loosen the upper and lower ball joint nuts then disconnect the upper and lower ball joints from the steering knuckle by striking the knuckle with a large hammer next to each ball joint on the knuckle to dislodge the ball joints. Use care not to hit the ball joints when removing. Remove both upper and lower ball joint nuts and retain them for reassembly later.



Strick Knuckle As Shown Above



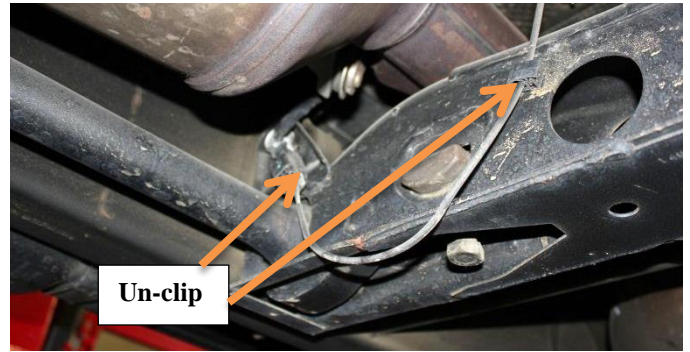
9) Remove the sway bar link ends from the sway bar and lower control arm. Set aside bushings and hardware for reassembly later.



10) Remove the stock front lower shocks bolt.



11) Remove the clips attaching wiring harness to torsion bar cross member.



12) Remove torsion bar cross member and torsion bars.



13) Remove the hardware attaching the upper and lower control arms. Retain the arms and all hardware for reassembly.





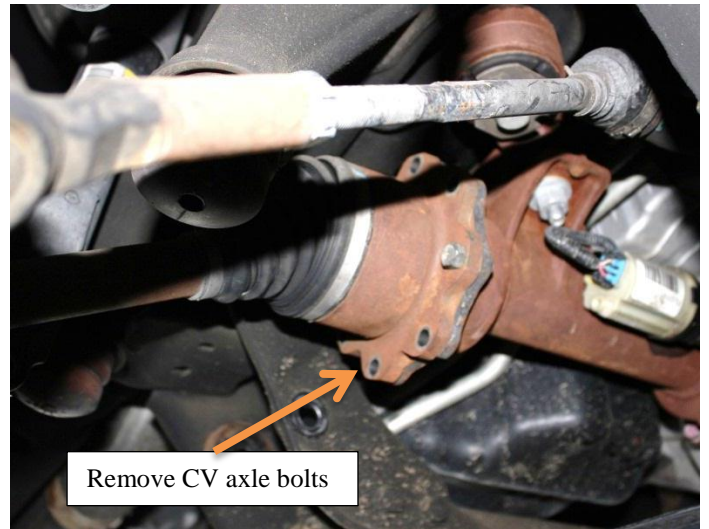
14) Remove the stock lower rubber bump stops from the frame and retain for reassembly later.



15) Remove the upper shock nuts, Remove shock.

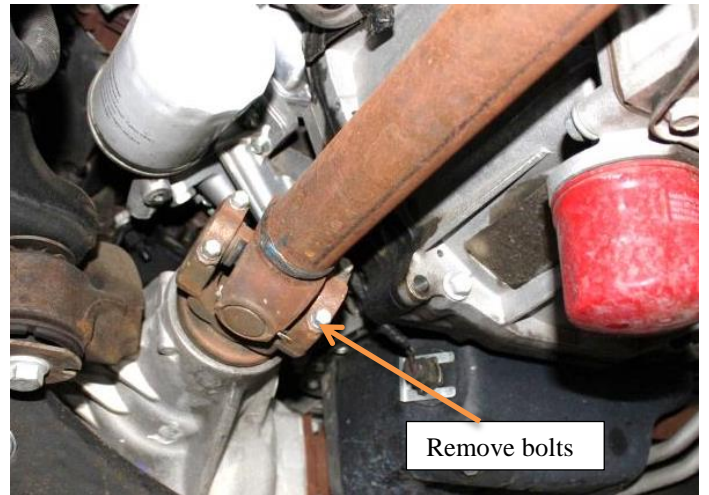


16) Remove all 8 CV axle bolts. Remove CV axle.



17) Repeat steps 3-16 on opposite side of the vehicle

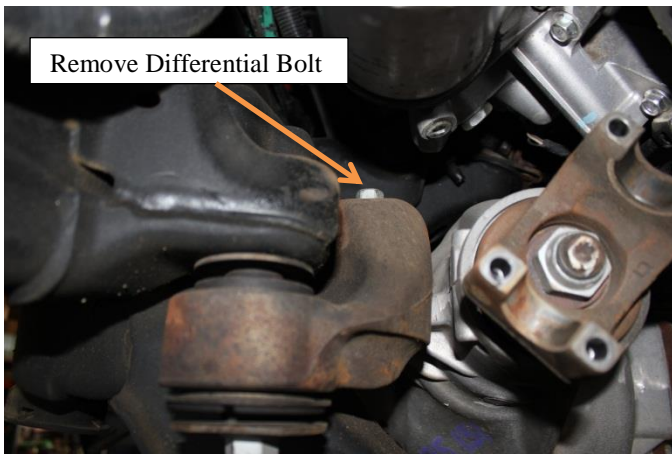
18) Remove the 4 bolts holding the drive shaft to the differential



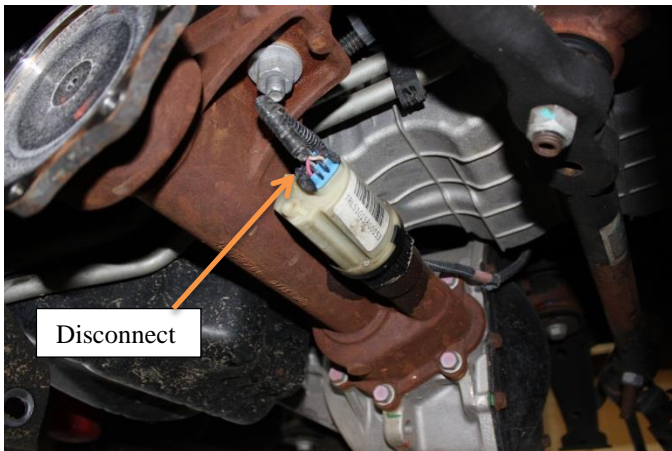
19) Using a small pry bar, Pop the drive shaft free from the yoke, Careful not to drop the u joint caps.



20) Remove the top rear differential bolt as shown.



21) Disconnect the electrical connector from the front differential actuator. Remove the wire from the three plastic wire retainers along the top of the differential. Disconnect the axle breather tube from the top of the driver's side of the differential



22) Remove all of the front differential mounting bolts/nuts. There are two nuts on the passenger's Side and three bolts on the driver's side two mount from the bottom up. Carefully lower the differential down.

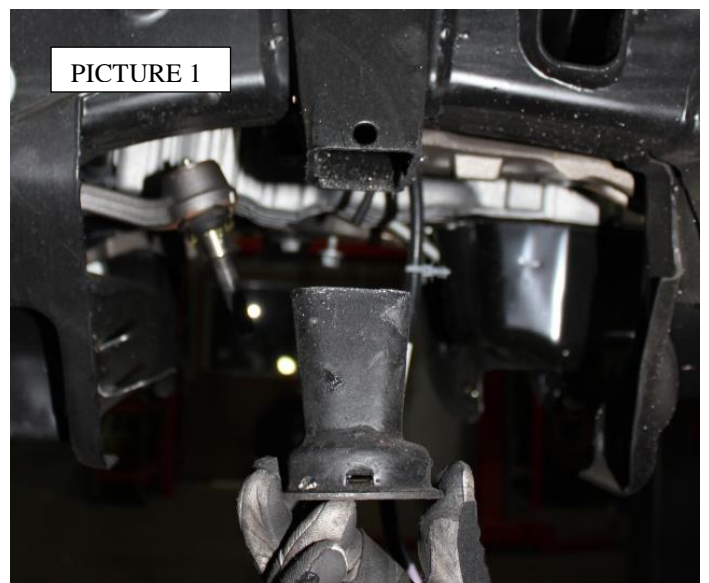


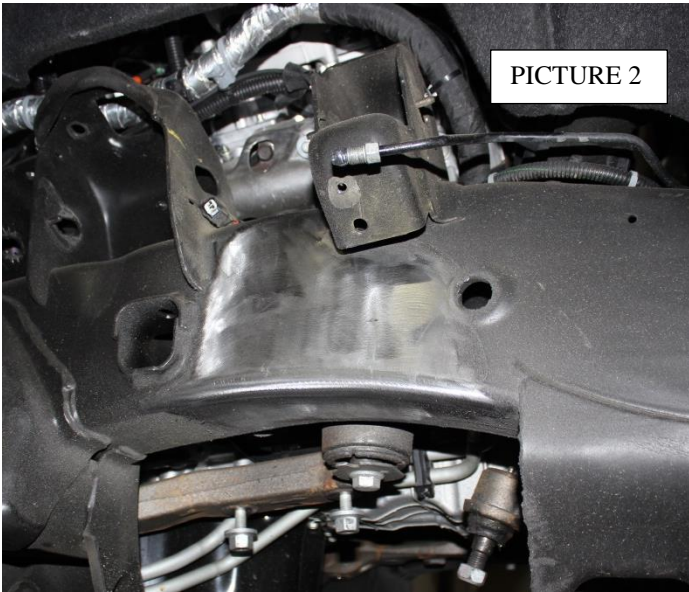
23) Remove the Stock Center Link and set aside.



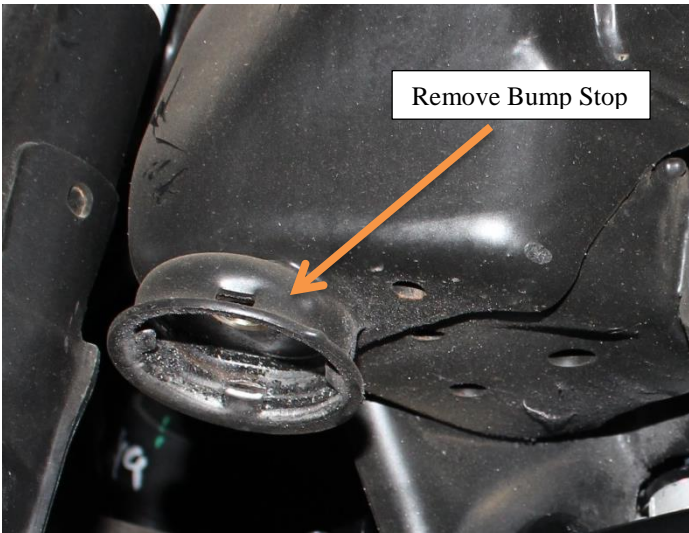
Preparation

25) Prior to the installation you will be required to cut the lower portion of the front bump stops shown in picture 1 or for a cleaner look remove the complete bump stop as shown in picture 2

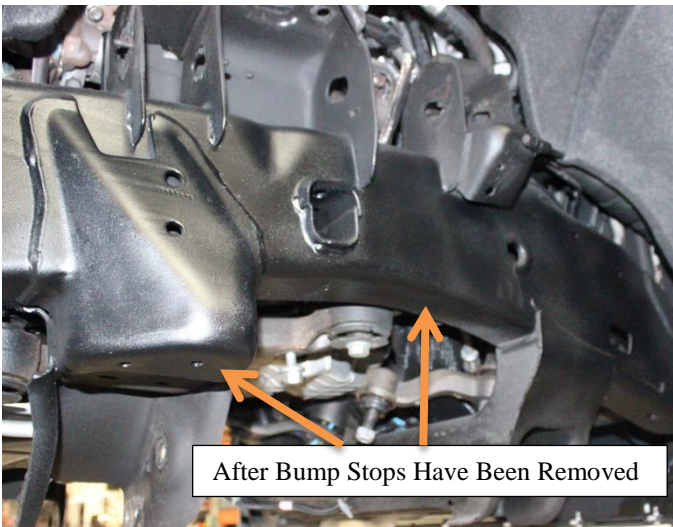




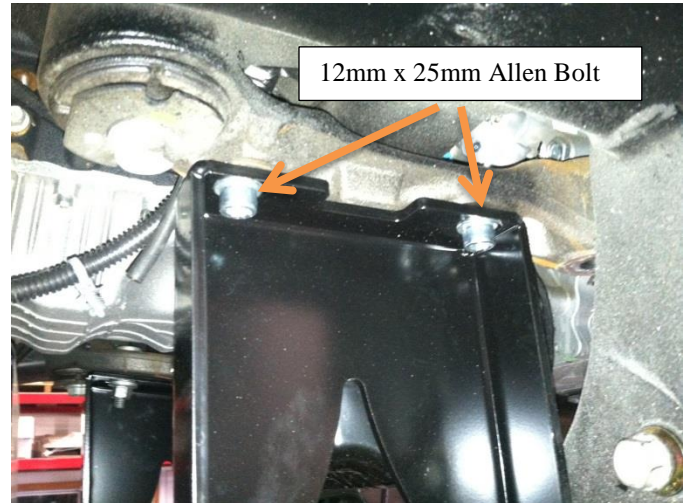
26) Remove The Rear Bump Stop.



27) This is a picture of the way it should look prior to starting the installation process shown below.



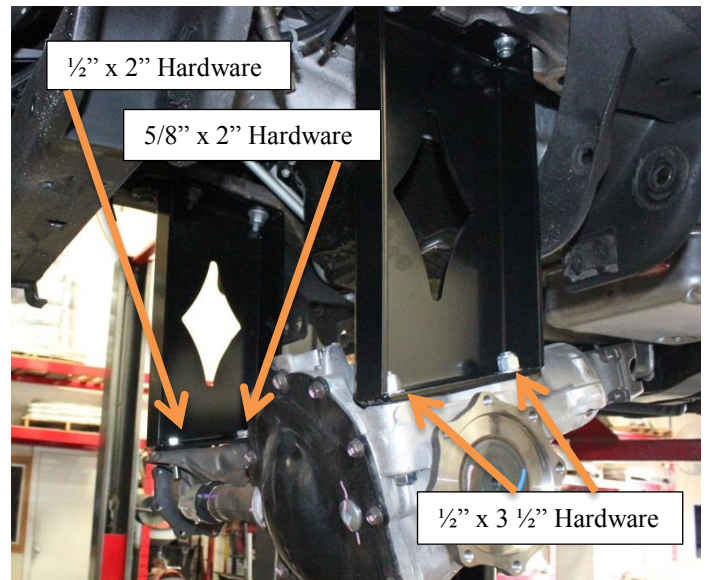
28) Install driver and passenger Install Driver diff drop using the 12mm x 25mm bolts as shown.



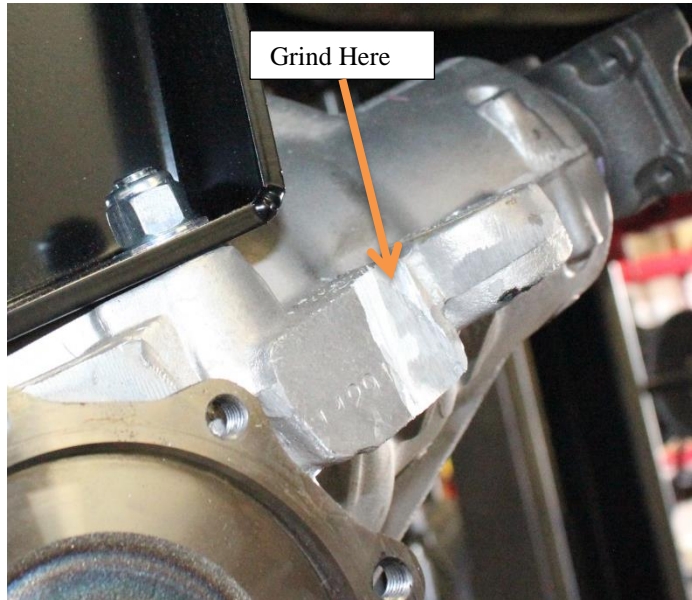
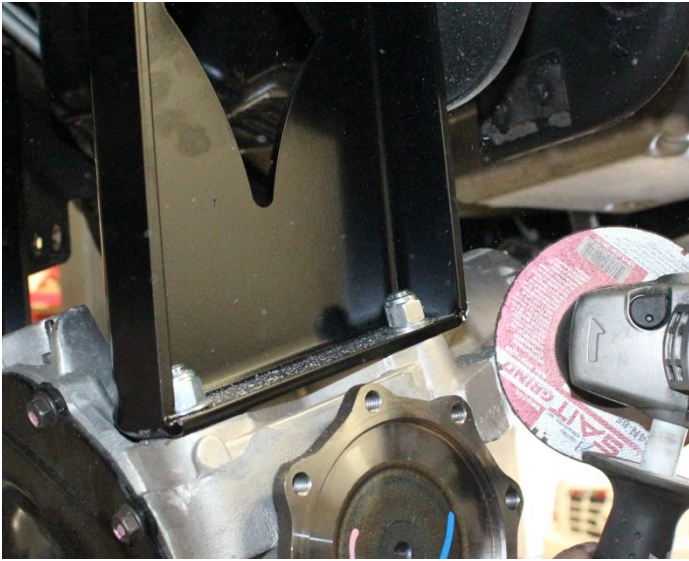
29) Install Passenger side differential drop using the OEM hardware.



30) Install differential using 1/2" x 2" and 5/8" x 2" on the passenger side and the 1/2" x 3 1/2" on the driver side as shown.



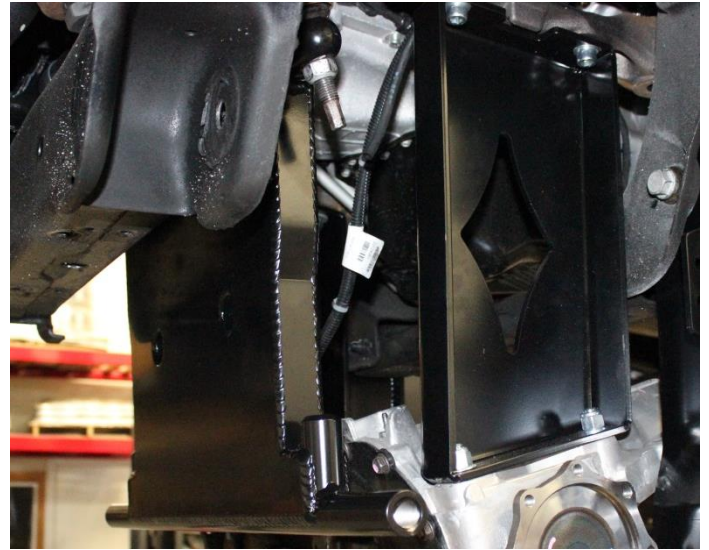
31) Grind differential housing as shown in pic below.



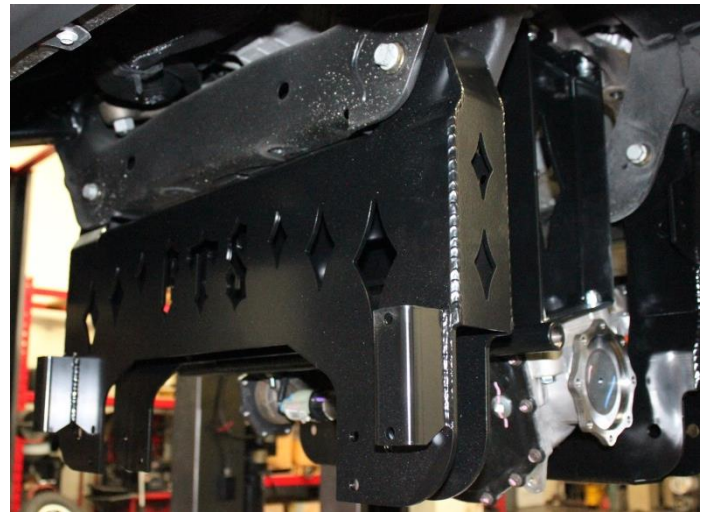
32) Install the FTS rear cross member into the rear lower control arm pockets with the factory control arm hardware. Run the bolts from front to the rear.



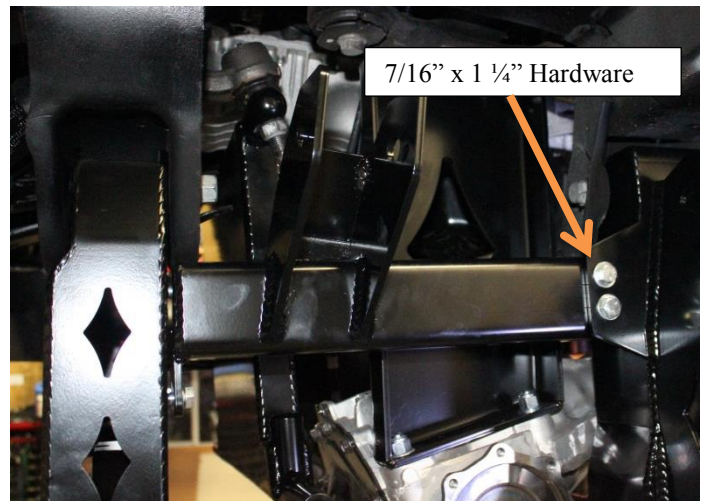
33) Install the FTS steering drop bracket as shown below using the factory hardware. Use Loctite on threads



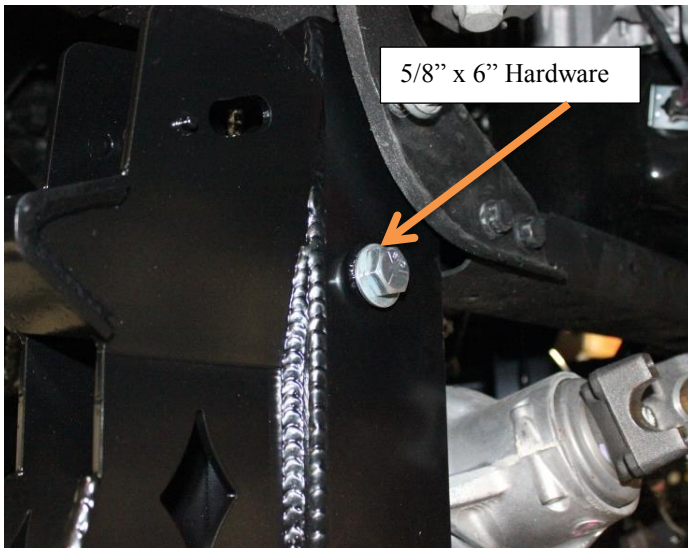
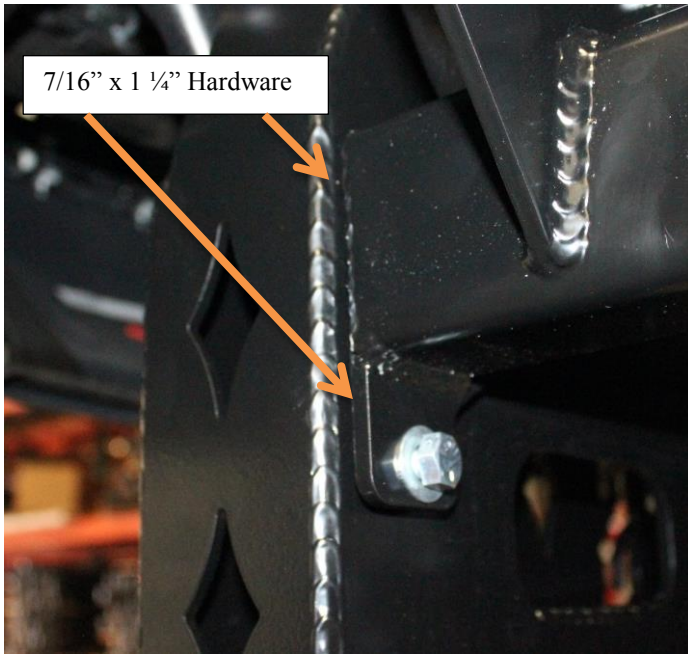
34) Install the FTS front cross member into the front lower control arm pocket with the factory control arm bolts/nuts. Run the bolts from front to rear.



35) Install the FTS upper control arm drop brackets.



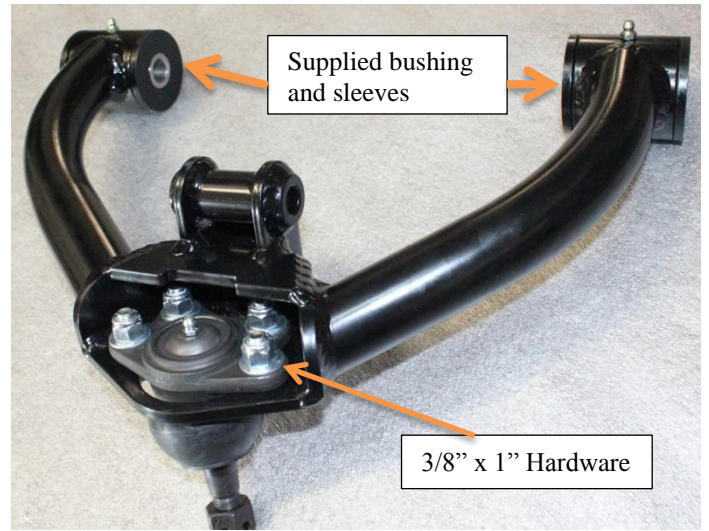
35) Continued



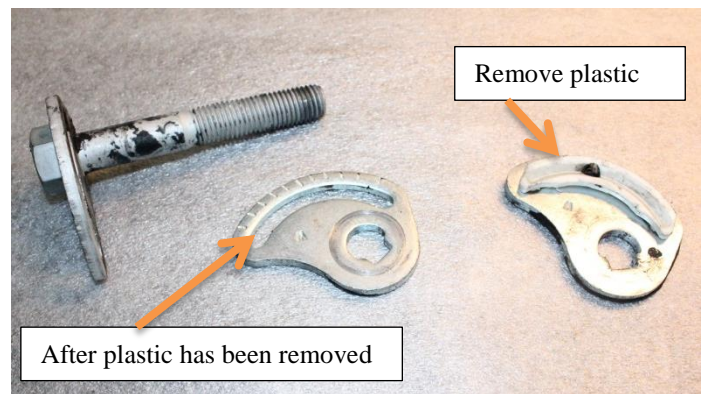
36) Install the lower control arms using the 18mm x 130mm thru the front and the 18mm x 150mm in the rear lower. Do not tighten at this time.



37) Assemble upper control arm as shown below. Prior to installing the bushing Use the supplied grease to lube only the inside hole of the bushing where the steel sleeve rides, DO NOT Grease the outer part of the bushing or the inside of the control arm.



38) Remove the plastic bushing from the alignment cams as shown below.



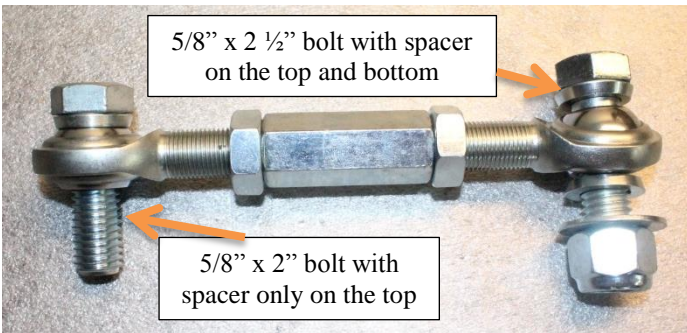
39) Install the upper control arms using OEM hardware in the same direction they were from the factory as shown below. Do not tighten at this time.



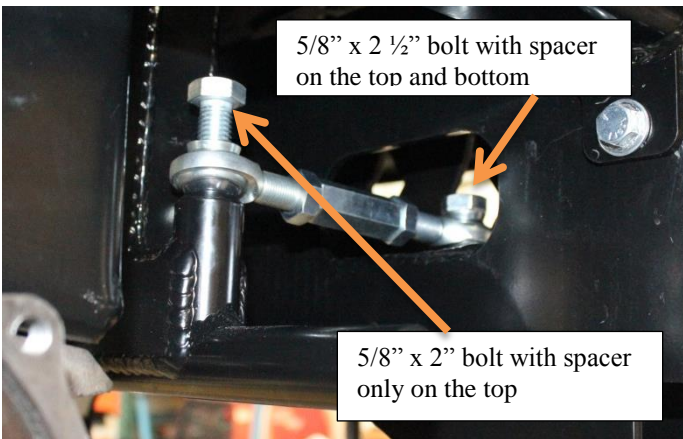
40) Assemble the third idler as shown below. Use a 6 1/2" center to center as a starting point.



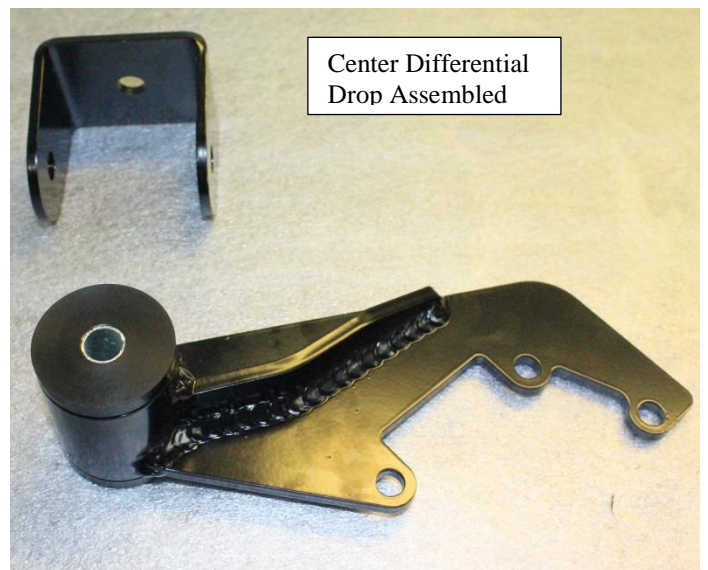
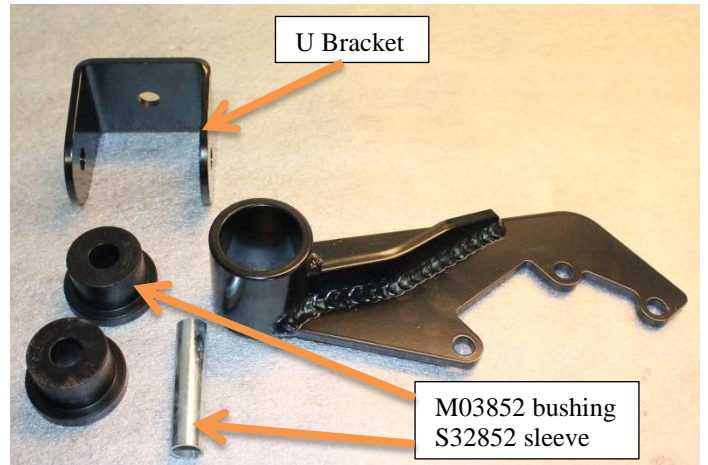
41) Use the supplied bolts and spacer shown below.



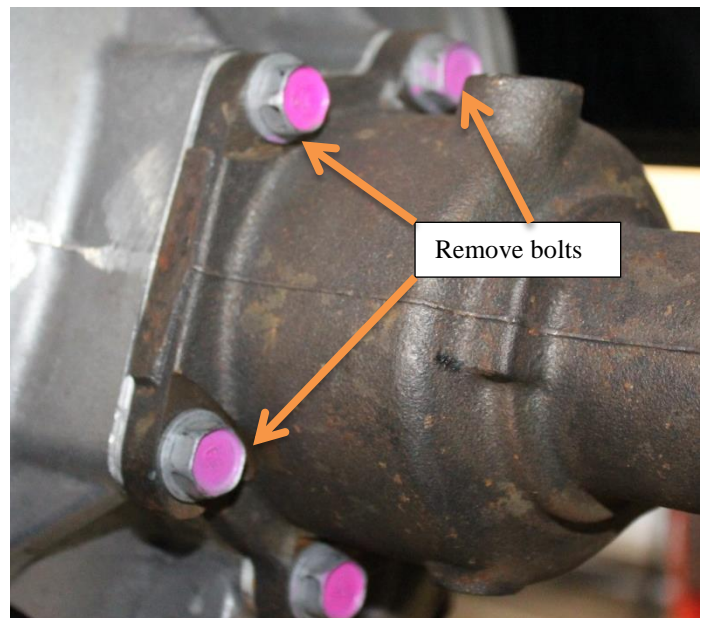
42) Install the heim's link as shown below using the 5/8" x 2" into the steering drop and the 5/8" x 2 1/2" thru the support bracket in the front cross member.



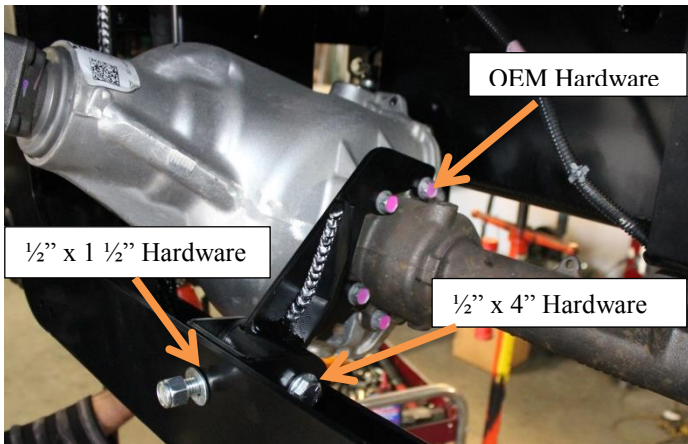
43) Assemble center differential support bracket as shown below



44) Remove the 3 bolts as shown below to install center differential support bracket



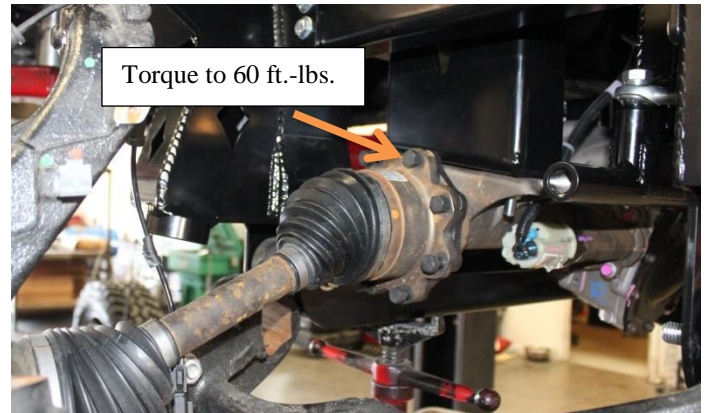
45) Install the center differential support bracket as shown in picture below using the 1/2" x 1 1/2" bolt thru the U bracket to the rear cross member and the 1/2" x 4" bolt thru the bushing and U bracket. Use Loctite on threads



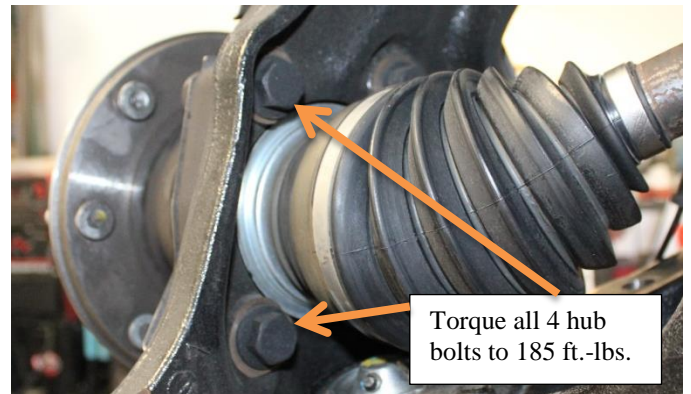
46) Install the OEM steering knuckles. Install the appropriate knuckle on the lower control arm and fasten with the original lower ball joint nut. Swing the knuckle up and attach to the upper ball joint with the supplied nut. Torque the upper ball joint nut to 55 ft.-lbs. and the lower ball joint nut to 100 ft.-lbs. Use Loctite on threads. Torque lower A Arm bushing to 200 ft.lbs.



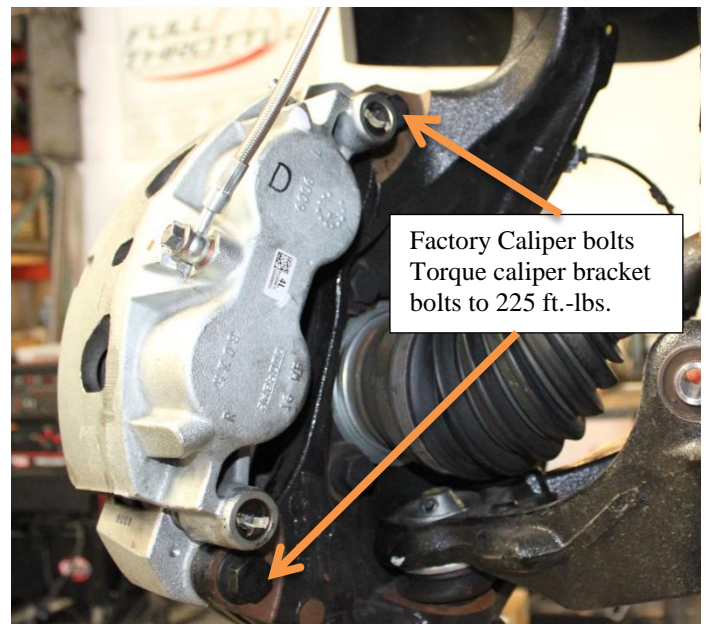
47) Install the CV using the OEM hardware as show below. Use Loctite on threads. Torque to 60 ft.-lbs.



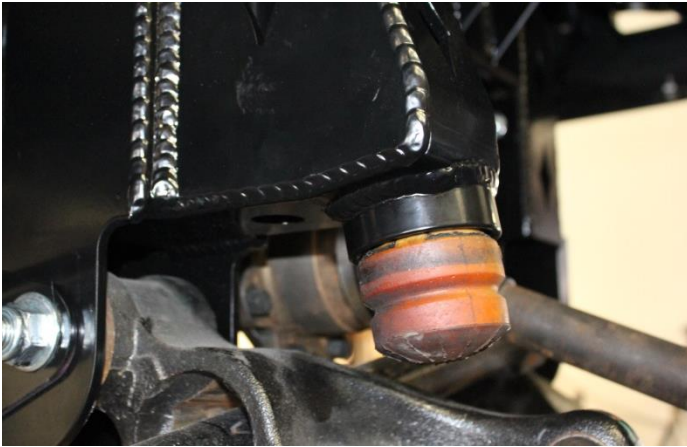
48) Install the factory hub assembly and dust shield into the appropriate steering knuckle. The ABS line will run out the top of the hub and behind the dust shield. Fasten the hub to the knuckle with the factory bolts. Apply Loctite to the threads And torque the bolts to 185 ft.-lbs. Install the outer CV axle nut Torque To 165 Ft.-Lbs.



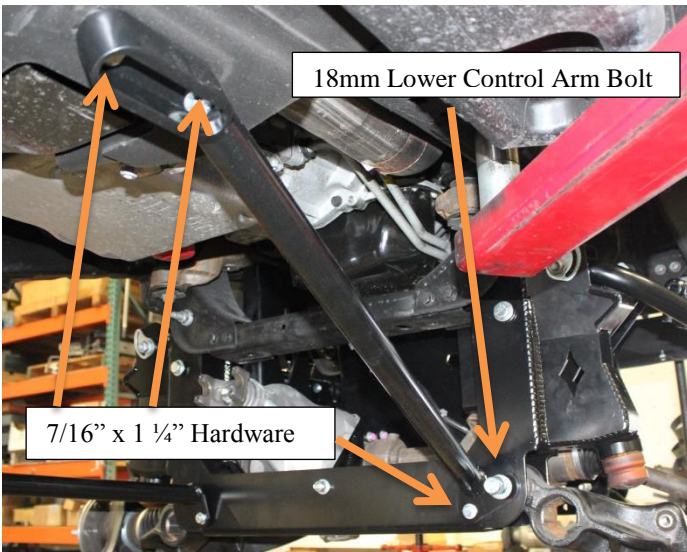
49) Install the factory brake rotor and caliper using the factory hardware and torque to 225 ft.-lbs. Use Loctite on threads



50) Install the factory rear lower bumps stops as shown below.



51) Install the compression struts as shown below using the 7/16" x 1 1/4" hardware supplied.

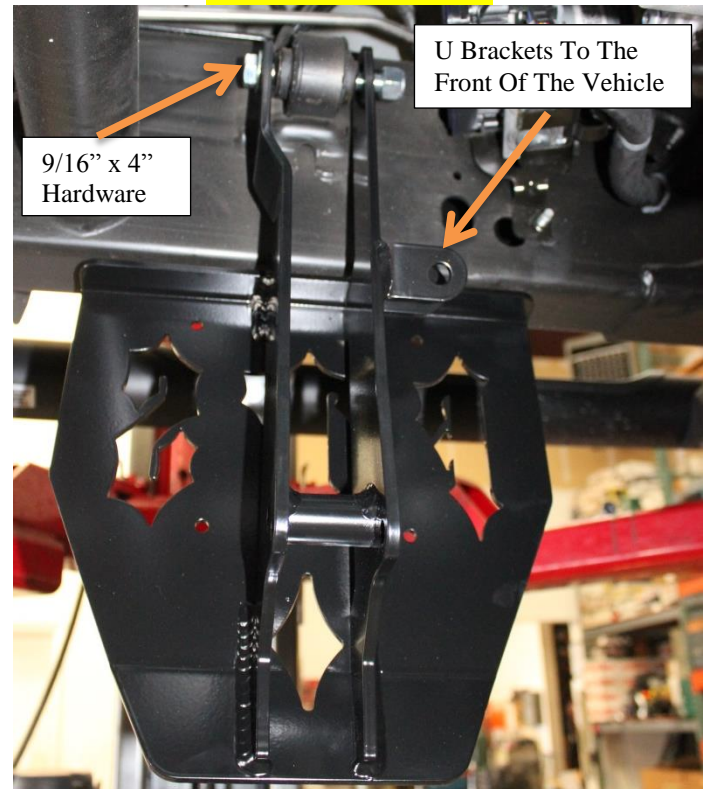


52) Install the bushing and sleeve into the torsion bar drop support rod as shown below.

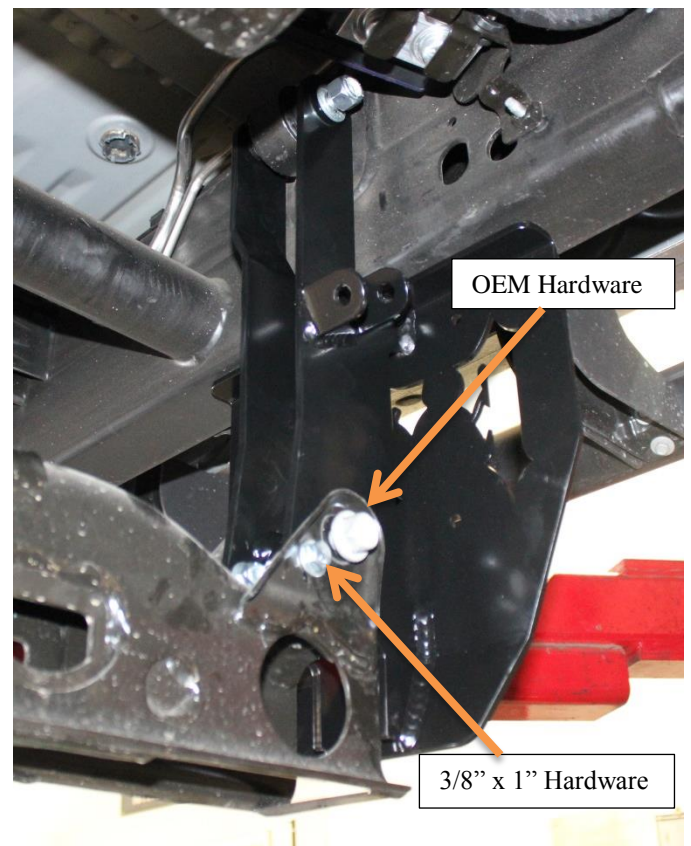


53) Install torsion bar drops as shown below. Note the position of the U bracket on the torsion bar drop.

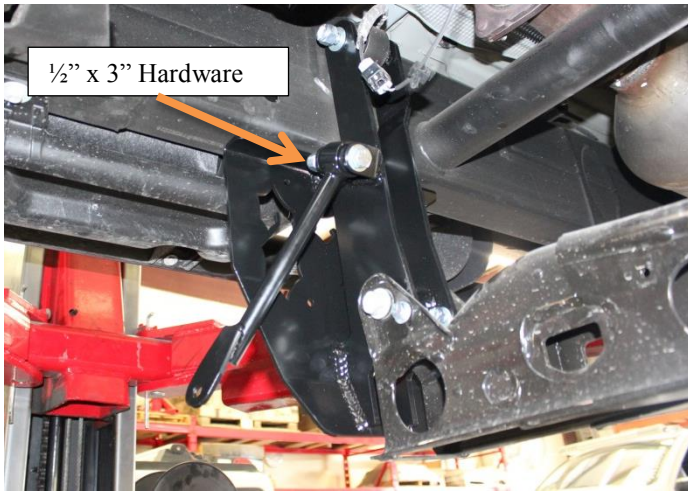
Driver side



54) Install the torsion bar cross member as shown using factory hardware and 3/8" x 1" hardware.



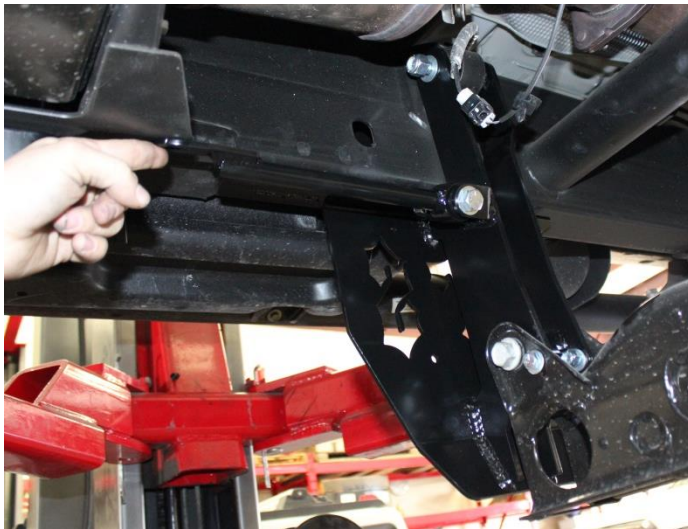
55) Install the torsion bar support struts using the 1/2" x 3" bolt.



57) Use the 7/16" x 1 1/4" hardware as shown below.

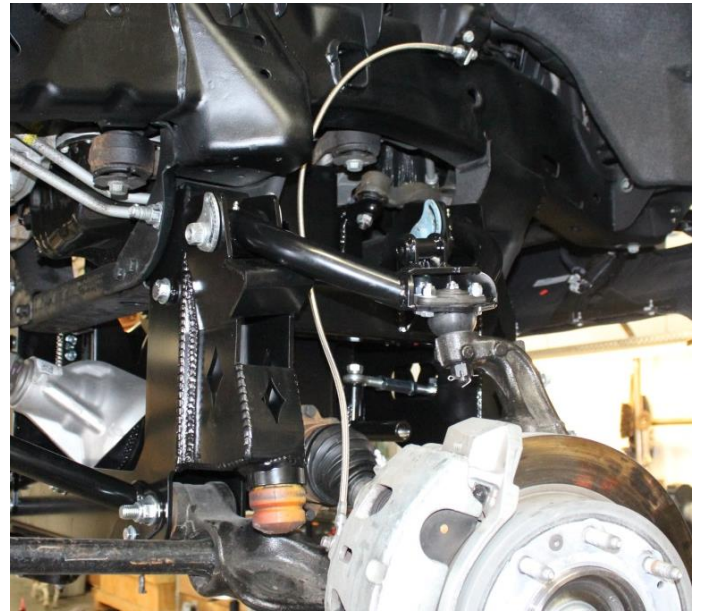


56) Rotate the support rod up to the frame, Mark and drill the frame to a 15/32" hole.



58) Install the CV front drive shaft at this time.

59) Install the supplied brake line as shown below.



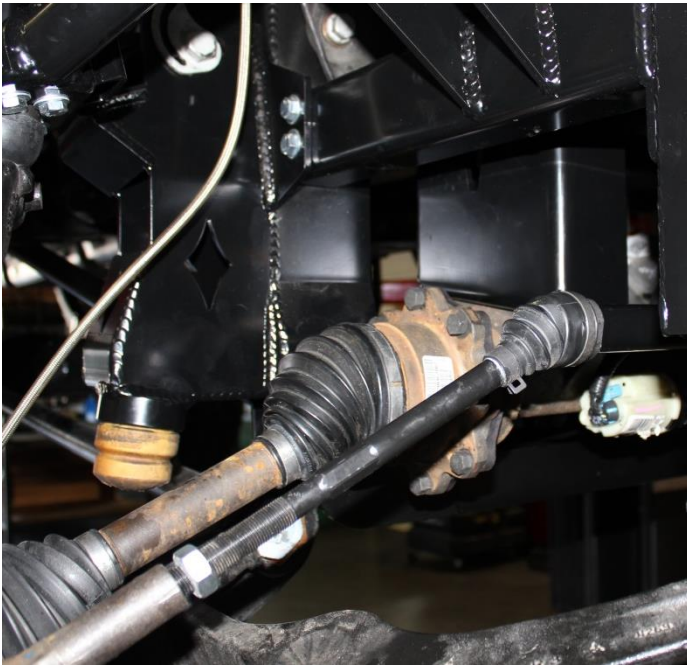
60) Remove the stock outer tie rods from the stock center link as shown below.



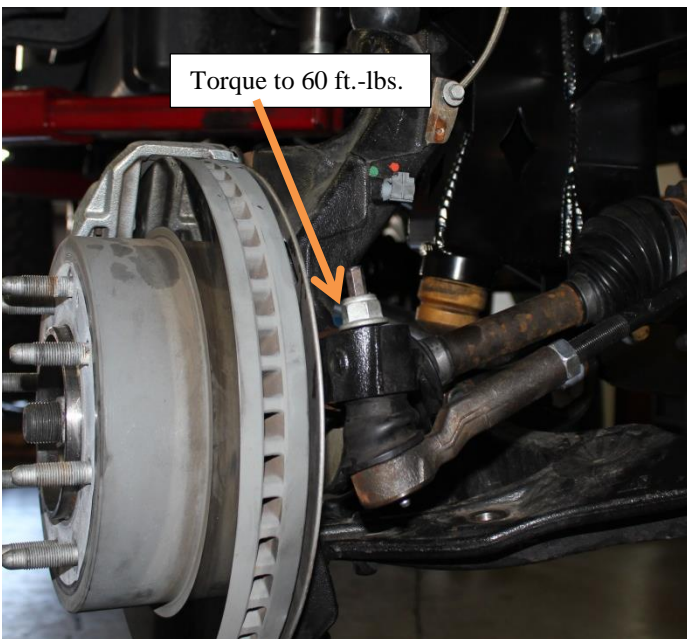
60) Continued



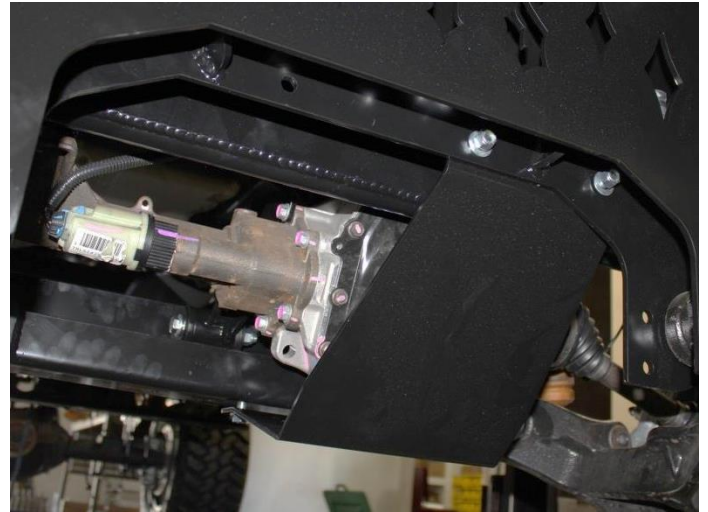
61) Install the OEM inner tie rod into the FTS drop steering bracket as shown below. Use Loctite on threads.



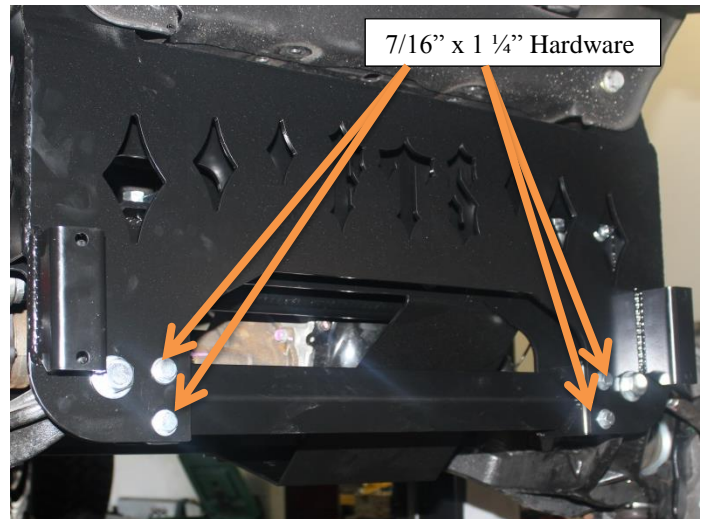
62) Install the OEM outer tie rod into the OEM steering knuckle, Torque to 60 ft.-lbs. Use Loctite on threads.



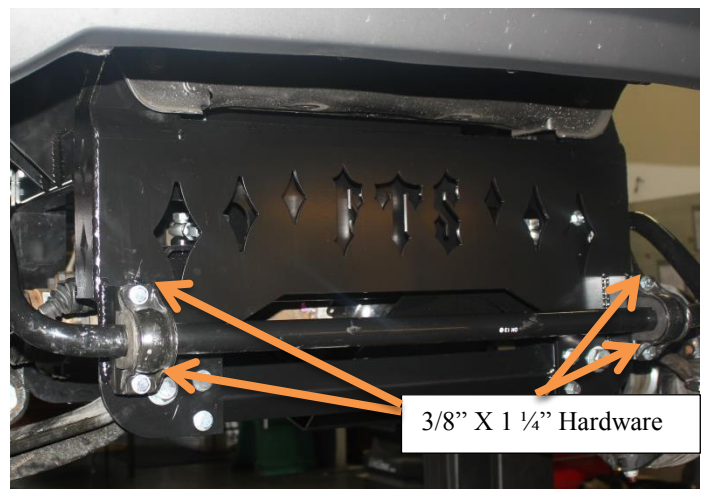
62) Plug In Front Differential Wiring Harness, Then Install skid plate using the 7/16" x 1/4" hardware supplied.



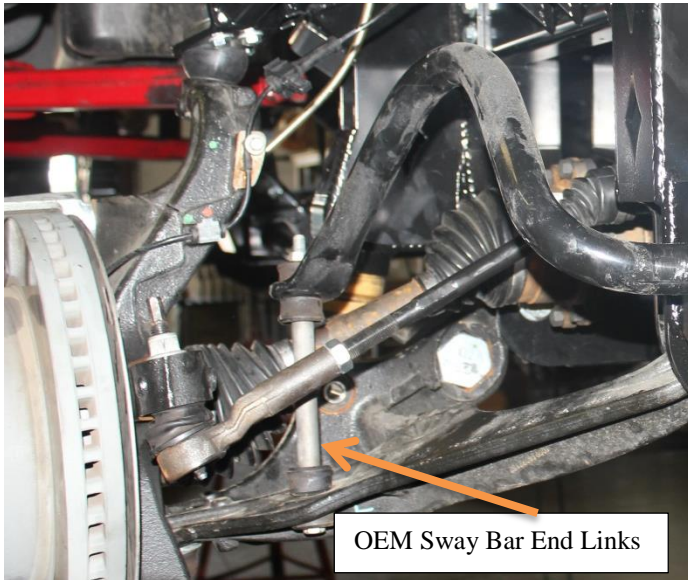
63) Install the front lower cross member using the 7/16"x 1/4" hardware as shown below.



64) Install the Sway bar to the Front cross member using 3/8" x 1/4" hardware.



65) Install the outer sway bar end links using factory hardware as shown below.



66) Reinstall the torsion bars as well as the torsion keys being sure that they are orientated just as they were originally removed from the vehicle. Load the torsion bars to the same height as they were set from the factory for a starting point.



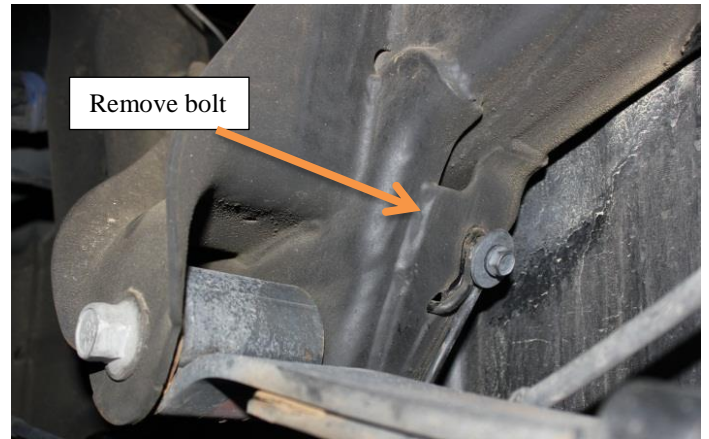
Final Check

- 1) The vehicle will need a complete front end alignment.
- 2) Check all hardware after 500 miles.
- 3) Adjust headlights.

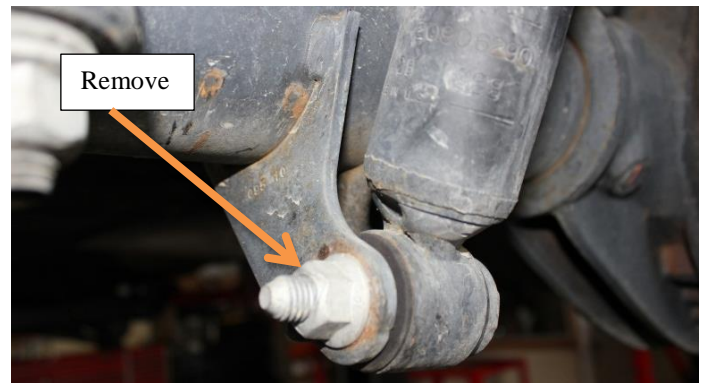
Rear Installation

- 1) Block the front wheels for safety. Raise the rear of the vehicle and support with jack stands under the frame rails, just ahead of the front leaf spring hangers.
2. Remove the wheels.
3. Raise rear of vehicle and support frame with Jack stands.

4. Support the rear axle with a hydraulic jack.



9) Remove upper and lower shock hardware, Remove and discard shocks. Save hardware for Reinstallation.



10) Remove lower axle saddle,



11) Remove Front spring hanger bolt and rear Shackle bolt.

12) Remove leaf spring.

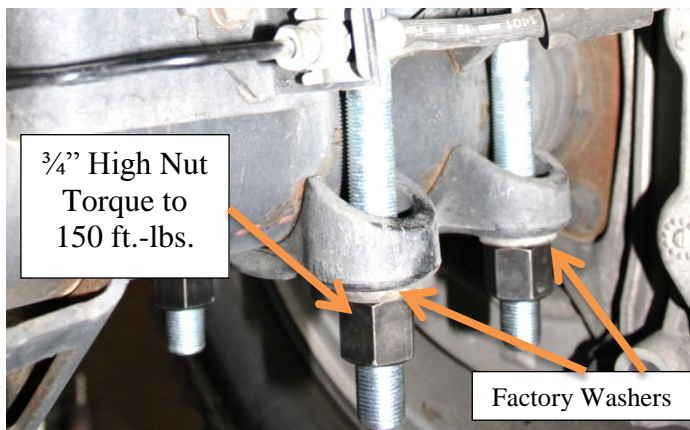
13) Install New Leaf spring.

14) Install lift block as shown below.

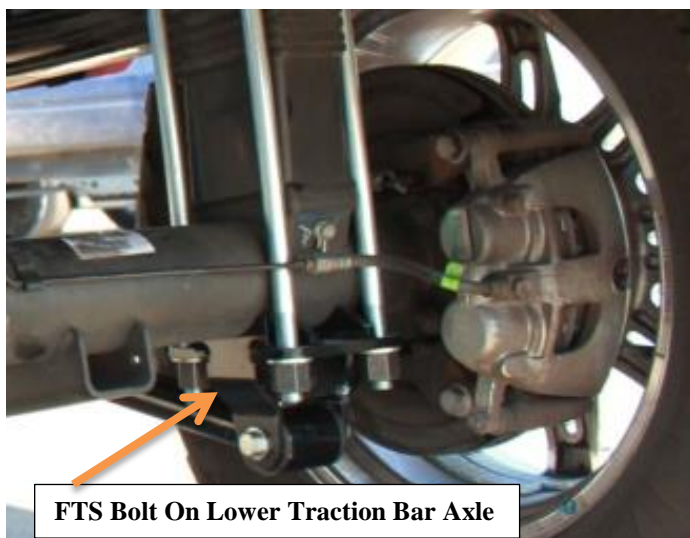


Skip Step 15 If Installing Traction Bars

15) Install the FTS supplied $\frac{3}{4}$ " x $3\frac{1}{4}$ " x 15.5" u bolts as shown. Use supplied $\frac{3}{4}$ " nuts with the FACTORY washers, Torque to 150ft.-lbs.



16) If installing traction bar with lift kit, discard lower axle saddle, Install the FTS supplied saddle as shown below.



17) Install Rear Shocks.

18) Install Rear Brake Line.

Product Warranty and Warnings-

FTS provides a Limited Lifetime Warranty to the original retail purchaser who owns the vehicle, on which the product was originally installed, for defects in workmanship and materials.

The Limited Lifetime Warranty excludes the following FTS items; bushings, bump stops, ball joints, tie rod ends, limiting straps, cross shafts, heim joints. These parts are subject to wear and are not considered defective when worn. They are warranted for 60 days from the date of purchase for defects in workmanship.

Reservoir shocks are considered a serviceable shock with a one year warranty on leakage only. Service seal kits are available separately for future maintenance. All other shocks are covered under our Limited Warranty.

FTS does not warrant any product for finish, alterations, modifications and/or installation contrary to FTS instructions. Alterations to the finish of the parts including but not limited to painting, powder coating, plating and/or welding will void all warranties. Some finish damage may occur to parts during shipping which is considered normal and is not covered under warranty.

FTS products are not designed nor intended to be installed on vehicles used in race applications or for racing purposes or for similar activities. (A "RACE" is defined as any contest between two or more vehicles, or any contest of one or more vehicle against the clock, whether or not such contest is for a prize). This warranty does not include coverage for police or taxi vehicles, race vehicles, or vehicles used for government or commercial purposes. Also excluded from this warranty are sales outside of the United States of America.

Installation of most suspension products will raise the center of gravity of the vehicle and will cause the vehicle to handle differently than stock. It may increase the vehicle's susceptibility to a rollover, on road and off road, at all speeds. Extreme care should be taken to operate the vehicle safely at all times to prevent rollover or loss of control resulting in serious injury or death.

FTS makes every effort to ensure suspension product compatibility with all vehicles listed in the catalog, but due to unknown auto manufacturer's production changes and/or inconsistencies by the auto manufacturer, FTS cannot be responsible for 100% compatibility, including the fitment of tire and wheel sizes listed. The Tire and Wheel sizes listed in FTS's catalog are only a guideline for street driving with noted fender trimming. FTS is not responsible for damages to the vehicle's body or tires.

FTS's obligation under this warranty is limited to the repair or replacement, at FTS option, of the defective product only. All costs of removal, installation or re-installation, freight charges, incidental or consequential damages are expressly excluded from this warranty. FTS is not responsible for damages and/or warranty of other vehicle parts related or non-related to the installed FTS product. This warranty is expressly in lieu of all other warranties expressed or implied. This warranty shall not apply to any product that has been subject to accident, negligence, alteration, abuse or misuse as determined by FTS.

FTS suspension components must be installed as a complete system including shocks as shown on our current website. All warranties will become void if FTS parts are combined and/or substituted with other aftermarket suspension products. Combination and/or substitution of other aftermarket suspension parts may cause premature wear and/or product failure resulting in an accident causing injury or death. FTS does not warrant products not manufactured by FTS.

Installation of FTS product may void the vehicles factory warranty; it is the consumer's responsibility to check with their local vehicle's dealer for warranty disposition before the installation of the product.

It is the responsibility of the distributor and/or the retailer to review all warranties and warnings of FTS products with the consumer prior to purchase.

FTS reserves the right to supersede, discontinue, change the design, finish, part number and, or application of parts when deemed necessary without written notice. FTS is not responsible for misprints or typographical errors within the catalog or price sheet.

Thank You for choosing Full Throttle Suspension

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