

# 2014 7" CHEVY / GMC 1500 4WD BASIC KIT

### THIS KIT FITS ONLY TRUCK WITH ALUMINUM SUSPENSION

#### C8550-4 COMPONENT BOX 1

- 1) 8508 Front X Member
- 1) 8509 Rear X Member
- 1) 8550 Left Compression Strut
- 1) 8551 Right Compression Strut
- 1) 8504L Left Sway Bar Drop Bkt
- 1) 8504R Right Sway Bar Drop Bkt
- 2) T538 Tie Rods
- 2) 8507 Sway Bar Extensions
- 1) 8512 Driver Diff Drop
- 1) 8513 Passenger Diff Drop
- 2) 8501 6 Bolt Axle Spacers
- 2) 8510 Strut Extensions (Large Bore)
- 1) Hardware

#### C8550 LH/RH STEERING KNUCKLE

- 1) 8500L Left Hand Knuckle
- 1) 8500R Right Hand Knuckle

#### CBK25-625T 6.25" REAR BLOCK / UBOLTS

- 2) 6.25" Tapered Blocks
- 4) 9/16-18 X 2.5" X 15.5" SQ U Bolts
- 8) 9/16-18 Nylock Nuts
- 8) 9/16 Washers

#### HARDWARE BAG 1

- 2) 5/8 X 5" Bolts
- 2) 5/8 X 6" Bolts
- 2) 5/8 X 2" Bolts
- 6) 5/8 Nylock Nuts
- 12) 5/8 Washers
- 2) 7/16 X 1 1/4" Bolts
- 2) 7/16 Nylock Nuts
- 4) 7/16 Washers
- 6) 3/8 X 1 1/2 Bolts
- 6) 3/8 Nylocks
- 16) 3/8 Washers
- 4) 10mm Nylock Nuts

#### HARDWARE BAG 2

- 2) 1/2 X 2 Bolts
- 2) 1/2 Nylocks
- 4) 1/2 Washers
- 2) 5/8 Nylock Nuts
- 2) 5/8 Washers
- 12) 10mm X 50mm Axle Bolts

#### HARDWARE BAG 3

- 5) 5/16 X 1" Bolts
- 5) 5/16 Nylocks
- 10) 5/16 Washers
- 2) 8511 Front Brake Line Bkts
- 1) 8512 Rear Brake Line Bkt



Use 35/1250R17 tires w/ 17x8 wheels w/ 5" BS w/ minor trimming
Use 325/65R18 tires w/ 18x9 wheels w/ 5" BS w/ minor trimming
Use 35/1250R20 tires w/ 20x 9 wheels w/ 5" BS w/ minor trimming

#### Before Installing This Kit Check You Suspension To Verify If Your Truck Has Aluminum A Arms And Spindles

ALTERING THE FINISH OF THESE COMPONENTS FOR EXAMPLE- CHROMING, ZINC PLATING OR PAINTING.

CHANGING THE FINISH CAN CAUSE STRUCTURAL FATIGUE OF COMPONENTS AND IS NOT RECOMMENDED.

VEHICLES THAT RECEIVE OVERSIZED TIRES SHOULD CHECK BALL JOINTS, TIE RODS ENDS AND IDLER ARM EVERY 2500-5000 MILES FOR WEAR AND REPLACE AS NEEDED

CHECK ALL PARTS INCLUDED IN THIS KIT TO THE PARTS LIST ABOVE BEFORE BEGINNING INSTALLATION OF THE KIT. IF ANY PIECES ARE MISSING, CONTACT UR DEALER

READ ALL INSTRUCTIONS THOROUGHLY FROM START TO FINISH BEFORE BEGINNING INSTALLATION! IF THESE INSTRUCTIONS ARE NOT PROPERLY FOLLOWED, SEVERE FRAME, DRIVELINE AND / OR SUSPENSION DAMAGE MAY RESULT.

NOTE- PRIOR TO THE INSTALLATION OF THIS SUSPENSION SYSTEM THE FRONT END ALIGNMENT MUST BE WITHIN FACTORY SPECIFICATIONS. CHECK FOR FRAME AND SUSPENSION DAMAGE PRIOR TO INSTALLATION.

THIS SUSPENSION SYSTEM DOES NOT REQUIRE WELDING FOR INSTALLATION. DO NOT WELD ANY OF THESE COMPONENTS.

THE INSTALLATION OF THIS SUSPENSION SYSTEM SHOULD BE PERFORMED BY A PROFESSIONAL MECHANIC. THIS LIFT RECOMMEND'S A 17X8 WHEEL WITH A 5" OR LESS BACK SPACING WITH A 35x12.50r17 TIRE BE SURE TO USE THREAD LOCKING COMPOUND ON ALL HARDWARE.

#### FRONT SUSPENSION INSTRUCTIONS:

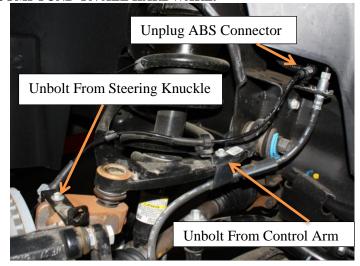
1. Disconnect the negative terminal on the battery. With the vehicle on level ground and the emergency brake set, block the rear tires. Jack up the front end of the truck and support the frame rails with jack stands. Remove the front tires.

#### NEVER WORK UNDER AN UNSUPPORTED VEHICLE

2) Disconnect the tie rod ends from the steering knuckle by striking the knuckle to dislodge the tie rod end. Use care not to damage the tie rod end when removing.



3) Unplug the ABS brake connection from the frame and control arm. Remove the brake hose bracket from the control arm. Remove the brake hose bracket from the coil bucket and save hardware.

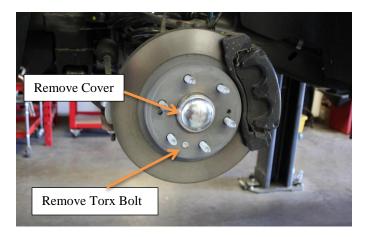


4) Remove the caliper from the steering knuckle and secure the brake caliper to the frame out of the way.

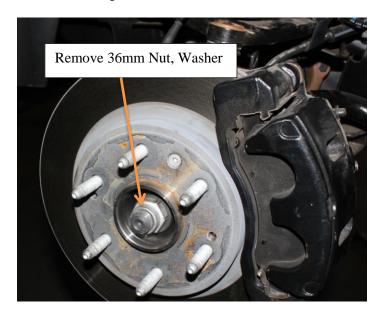


DO NOT ALLOW THE BRAKE CALIPER TO HANG FROM THE BRAKE LINE HOSE

5) Remove the wheel bearing nut cover and torx holding rotor to wheel bearing. Retain hardware for reinstallation.



6) Remove axle nut cover, axle nut, washer, and rotor with hub bearing. Retain hardware for reinstallation.



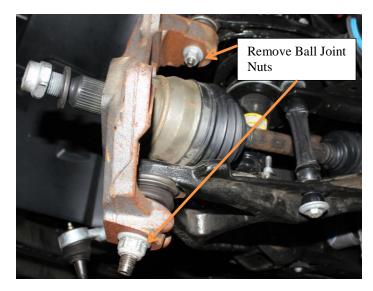
7) Remove the 3 bolts holding the wheel bearing to the steering knuckle. Retain hardware for reinstallation.



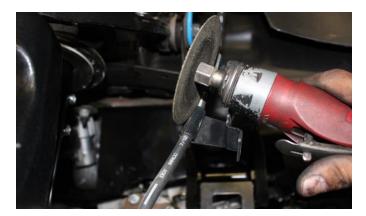
8) Remove the sway bar end links and sway bar (note the direction the sway bar came off the vehicle as it will need to be flipped over when it is re-installed)



9) Loosen the upper and lower ball joint nuts. 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. Save nuts and discard knuckle.



10) Remove and discard the factory brake line bracket from the brake hose that attached the hose to the upper control arm. Carefully not to cut into the brake hose.



11) Remove the bolts connection the strut to the lower control arm. Retain hardware for reinstallation.



12) Remove the lower control arms from the frame and retain with the hardware for reinstallation.



13) Disconnect and Remove CV axles from differential housing.



14) Remove factory skid plate if equipped and discard.



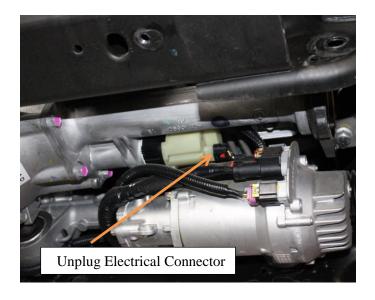
14) Remove, and discard the factory rear cross member with hardware.



15) Disconnect front driveshaft from differential housing and retain bolts and u joint clamps for reinstallation.



16) Disconnect the electrical connection including the 2 retaining clamps and the vacuum line from differential housing.



17) Locate the rear driver lower control arm mount on the frame. Measure 3 ½" from the inside edge of the mount toward the frame and mark with a paint pen. Use a sawz-all and cut the mount from the frame as shown in picture below.



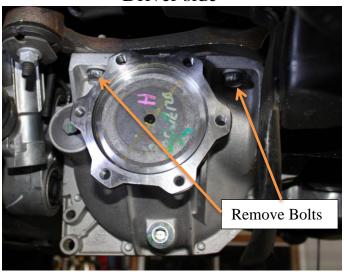


18) Remove differential housing assembly from vehicle. Retain hardware for reinstallation.

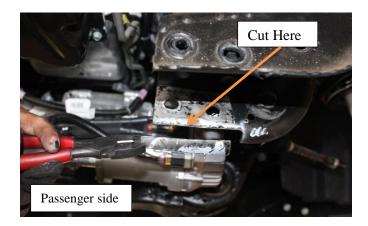
Passenger side



## Driver side



19) Locate the rear passenger lower control arm mount on the frame. Using a sawzall, trim frame as shown in picture below. Dress all cut edges with paint or undercoating.

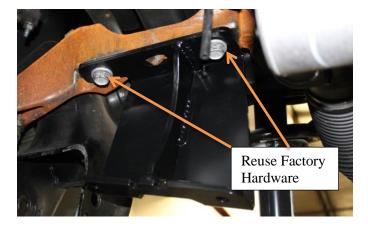


# **ASSEMBLY**

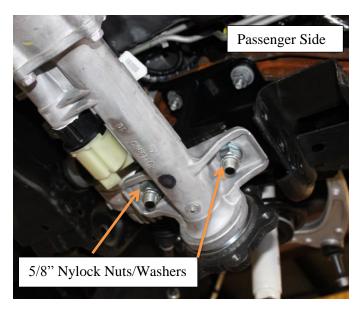
1) Locate 8513 Passenger side Differential bracket and the factory diff hardware. Install the brackets to the factory mounts with the taller part of the brackets to the front of the truck with the factory hardware.



2) Locate 8512 Driver side Differential brackets and the factory diff hardware. Install the brackets to the factory mounts with the taller part of the brackets to the front of the truck with the factory hardware.



3) Using the supplied ½"x 2" & 5/8"x 2" hardware. Install the diff onto the new drop brackets using ½" hardware on the driver side & 5/8 on the passenger side as shown in picture below. Torque the stock & ½" hardware to 75 ft. – lbs. & the 5/8 to 95 ft.- lbs.





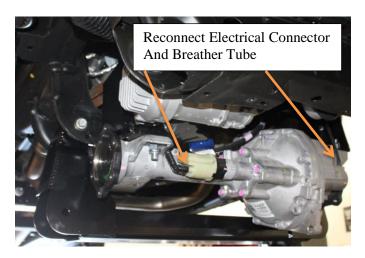
4) Re-connect the electrical and vacuum connections back onto the differential.

Check the clearance of the diff to the frame in sanded spots for adequate clearance to the frame and cross member.

**5**) Reattach the driveshaft to the differential yoke using the stock hardware and torque to 19 ft. - lb.



6) Locate front cross member 8508 & rear cross member 8509 and install into the factory lower control arm pockets using the stock hardware leave loose at this time. Check the clearance of the diff to cross member where it was sanded for adequate clearance to the frame and cross member.



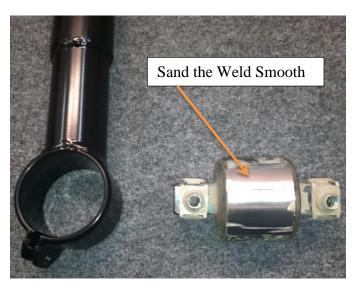


7) Using a Die grinder with Cutoff wheel. Cut the Stock Bushing off the lower shock body RIGHT ON THE WELDED. As shown in picture below.

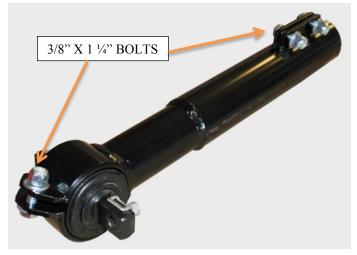
DO NOT DISGAURD BUSHING IT WILL BE NEEDED FOR INSTALATION



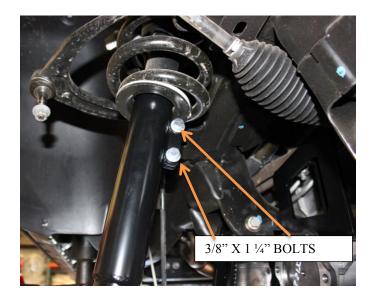




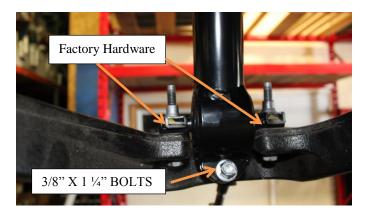




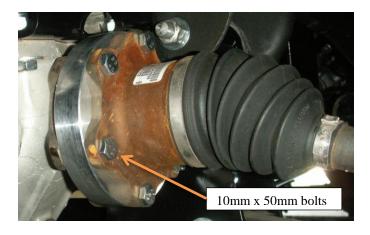
8) Slide shock extensions over body of factory shocks with the clamping tabs towards the inside of the truck using supplied 3/8" x 1 1/4" hardware install into clamping tabs do not tighten at this time.



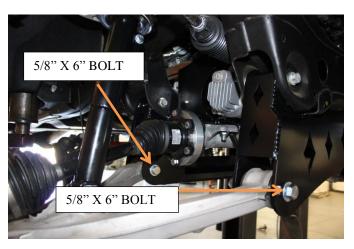
9) Using the stock hardware connect shock extensions to lower control arms and tighten. Using a jack or stand under the lower control arm load the coil over and Torque 3/8" Hardware to 30 ft.- lbs. as shown in picture below.



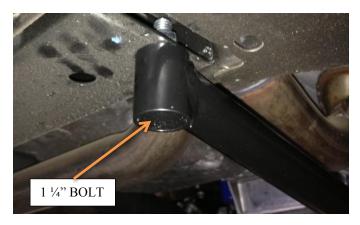
10) Connect CV axles to front differential using the 8501 CV spacers between the CV axle and the differential housing with supplied 10mm x 50mm hardware and torque to 45 ft lbs. in a cross pattern as shown in picture below.



11) Install lower control arms into the new cross members using the 5/8"x5" hardware in the front hole and 5/8"x6" into the rear hole. Insert the bolts from the front side with the threads to the rear of the truck. Don't tighten



12) Install 8550 and 8551 compression struts to the back side of the lower control arm 5/8" bolt and connect to the bottom of the transmission cross member with 7/16" x 1 ½" hardware. Leave loose at this time.

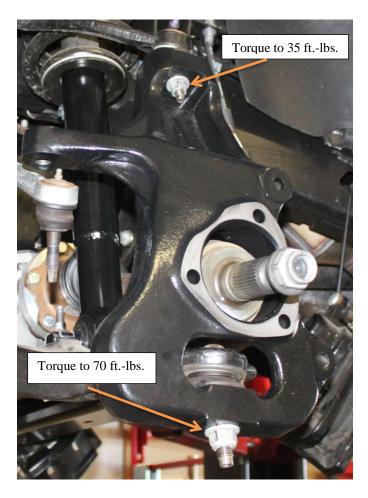




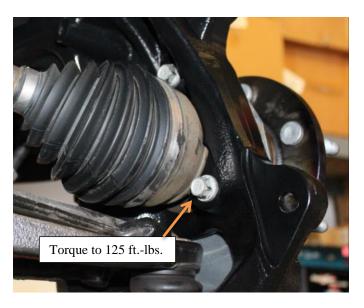
13) Torque the cross member frame pocket bolts to 125 ft



14) Locate the steering knuckle 8500R & 8500L. Attach the lower control arm to the knuckle using the stock hardware and torque to 70 ft.- lbs. Attach the upper control arm to the new knuckle using the factory hardware and torque to 35 ft.- lbs. as shown in picture below.



15) Reinstall the hub bearing assembly using the stock hardware and torque flange bolts to 125 ft lbs. and the axle nuts to 150 ft lbs. Then install bearing cover.



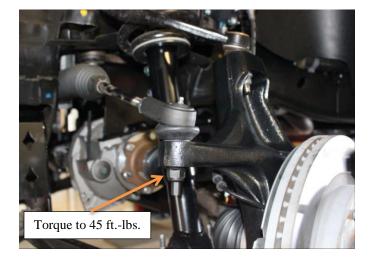
16) Install brake rotor on to factory hub assembly, Install Torx screw and torque to 15 ft.- lbs.



17) Install brake caliper using factory hardware.



18) Locate T538 outer tie rods. Loosen the jam nut and remove the factory outer tie rods and discard, leaving the factory jam nut on the inner tie rod. Install the new outer tie rod onto the inner tie rod until it makes contact with the jam nut. Attach new tie rod end to the knuckle with the supplied nut and torque to 45 lbs.

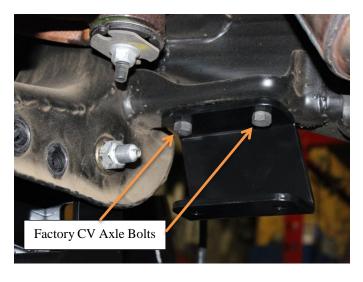


# (A final alignment must be performed upon completion of suspension system)

19) Then Torque the 5/8 lower control arm bolts to 110 ft. lbs.



20) Locate 8504L Driver, 8504R Pass Sway Bar Frame Bracket, and four 10mm stock CV axle bolts with supplies washers. Position the frame bracket on the frame so that sway bar will be farther back from the suspension and attach with the 10mm hardware.

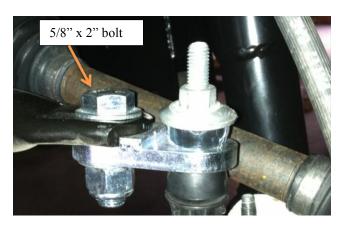


21) Locate the factory sway bar with the factory mounts and attach to the new brackets using the Stock bolts and supplied nuts (sway bar must be flipped over) and torque to 35ft lbs. as shown in picture below.

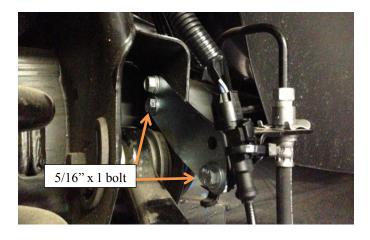




22) Locate 8507 Sway Bar Extension Mounts and the supplied 5/8"x2" hardware. Position the Sway Bar Mount so that it is on the bottom of the sway bar with the SHORTER side of the mount against the stop plate end of the mount. Attach with the 5/8 hardware and torque to 135 ft- lbs. Locate the factory sway bar end links and attach to the new mount and the lower control arm. As shown in picture below.



23) Locate 8511 Brake Line Bracket and 5/16"x 1" hardware. Position the new bracket into the factory brake line bracket location and attach with the factory hardware and the 5/16" hardware. Attach the factory brake line bracket to the new bracket. **Carefully** bend the hard brake line and attach with the supplied 5/16" hardware. Torque to 15 ft. lbs. As shown in picture below.



24) Re-route the brake hose and the ABS Line to the steering knuckle using a zip tie to the back of the steering knuckle. Route the ABS line next to the brake hose. Re-connect the ABS line to the harness in the wheel well. Using zip ties secure line to the hose and away from the tire and wheel.





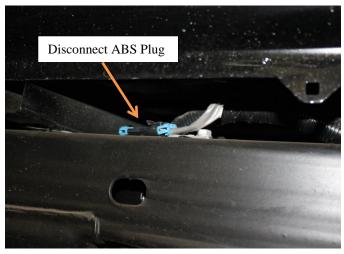
#### **REAR P/U SUSPENSION INSTRUCTIONS:**

- 1) Jack up the rear end of the vehicle and support the frame rails with jack stands.
- 2) Disconnect the brake line bracket at the differential and save the hardware.

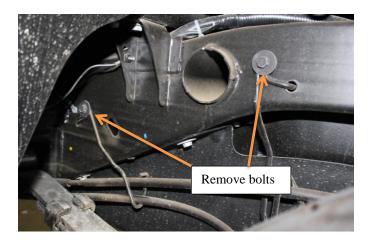


3) Remove the ABS line clip from the top of the frame and at the axle.

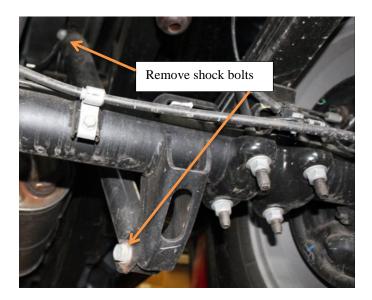




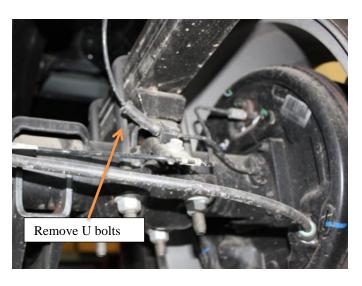
4) Remove the e-brake cable bracket on the driver's side of the frame and save the hardware.



5) Remove the rear shocks and disgard, Retain hardware for reinstallation.



6) Supporting the rear differential, Remove and discard the u bolts.

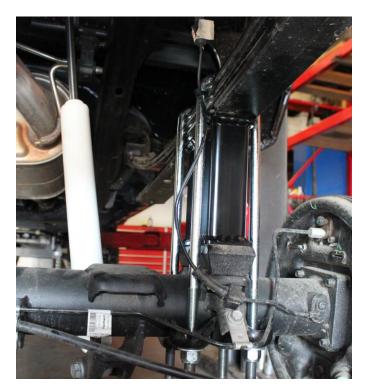


- 7) Lower axle down slowly. Use care not to over extend the brake hose.
- 8) Install the rear lift blocks on top of the factory block with the center pin on the bottom of the block. Using the provided 9/16" U bolts, nuts and washers, align the axle, lift blocks, and springs. Torque the U-Bolts to 90 ft lbs.

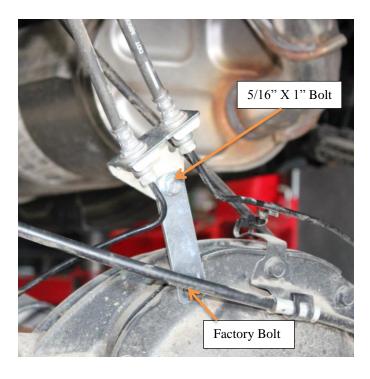


The Short Side Of The Block To The Front And The Tall
Portion To The Rear Of The Truck

9) Install the supplied shocks using the factory hardware and torque to 75 ft.-lbs.



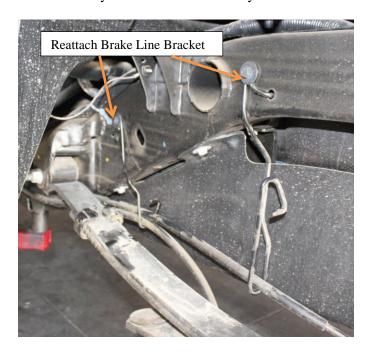
10) Locate 8512 Brake Line Bracket and the supplied 5/16" hardware. Attach the new bracket to the differential and attach the brake line to the new bracket. Torque to 20 ft.- lbs.



11) On the driver's side, insert the previously removed upper ABS line clamp into the existing hole on the inside of the frame. Re-insert the lower ABS line clamp back into the stock location. Use zip ties and attach the ABS line to the U-Bolt. Keep the line taught at the block and ensure that there is enough slack in the line for full travel of the rear axle.



- 12) On the passenger side, locate the original line clamp Hole in the top of the frame and measure 2" down the inside of the frame and drill a ¼". Insert the previously removed upper ABS line clamp into the new hole on the inside of the frame. Re-insert the lower ABS line clamp back into the stock location. Use zip ties and attach the ABS line to the U-Bolt. Keep the line taught at the block and ensure that there is enough slack in the line for full travel of the rear axle.
- 13) Remove the driver's side E-brake cable from the previously removed bracket. Position the passenger side cable into the bottom position of the bracket where the driver's side was originally. Re-install the bracket back into the factory location with the factory hardware.



- 14) Recheck all bolts for proper torque. Recheck brake hoses and lines for proper clearances. Check the fluid in the front differential and fill if need with factory specification differential oil.
- 15) Install tires and wheels and torque lug nuts to wheel manufacturer's specifications. Turn front tires left to right and check for appropriate tire clearance. Note-Some tires may require trimming of the front plastic bumper valance.
- 16) Check front end alignment and set to factory specifications. Re-adjust headlights.

RETORQUE ALL NUTS, BOLTS AND LUGS AFTER 50 MILES AND PERIODICALLY THEREAFTER.

## **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 Lifetime 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 inconstancies 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.

Full Throttle Suspension has a no refund return policy. Under special circumstances, returns might be accepted with prior written approval. All returned product will be shipped freight prepaid. Product returned is subject to a 40% restocking fee. No returns will be accepted after 30 days upon receipt of product.

Thank You for choosing Full Throttle Suspension
Tech support 559-271-8685 or send email to fts.dwgs@gmail.com