



**2008 - 09 FORD F-250/350 SUPER DUTY 4WD
FTS22096 FRONT DUAL SHOCK SYSTEM**

FTS22096BK Multi Shock Hoop Kit		
Qua	Part #	Description
1	FT30167BK	Upper Hoop Driver
1	FT30168BK	Upper Hoop Pass.
1	FT30282BK	Drv. Side Hoop Mount Plate
1	FT30283	Hardware Kit
2	FT30292BK	Shock Mount Front
1	FT30179BK	Drv Lower Rr Shock Mnt
1	FT30180BK	Pass Lower Rr Shock Mnt
1	FT30314	Hdwr Sub-Assembly Kit
1	FT30294	Sway Bar Reloc. Brk Drv
1	FT30298	Sway Bar Reloc. Brk Pass
2	FT30170	Sway Bar End Link
1	FT30185BK	Driver Side Bump Stop
1	FT30186BK	Pass. Side Bump Stop

FT30312 Hdwr Sub-Assembly Kit		
Qua	Part #	Description
2	FT30187	Brake Line Bracket (lower)
4	FTS98003	3/4" Heim Joint
8	FTS43	Heim Mis-Alignments
3	FT30182	Sway Bar/Hoop Nut Tab (pass)
1	FT30297	Sway Bar Plate Nut Tab (pass)
2	FT57-1	Large Washer
1	FTAS12	Sticker
1	FTREGCARD	Registration Card
2	FT22096i	Instruction Sheet
2	FT30303	Brake Line Bracket (upper)
2	FT30293	Frame Nut Tab (hoop) rear legs

FT30283 Hardware Kit		
Qua	Description	Location
8	1/2"-13 x 3" Bolt	Shock Bolts
16	1/2" SAE Flat Washer	
8	1/2"-13 C-Lock Nut	
4	8mm-1.25 x 30mm	Frt Lower Mount
4	8mm Flat Washer	
2	1/2"-13 x 5" Bolt	Rear Lower Mount
6	1/2" SAE Flat Washer	w/ Sway Bar Link
2	1/2" Split Washer	
2	1/2"-13 x 3" Bolt	Sway Bar to Link
6	1/2" SAE Flat Washer	
2	1/2" C-Lock Nut	
4	3/4" -16 RH Jam Nut	Heims @ Sway Bar Link
8	7/16"-14 x 1 1/2" Bolt	Sway Bar Frame Bracket
15	7/16" SAE Flat Washer	
7	7/16"-14 C-Lock Nut	
1	7/16" Split Washer	
4	3/8"-16 x 1 1/2" Bolt	Hoop
8	3/8" SAE Flat Washer	
4	3/8"-16 C-Lock Nut	
5	1/2"-13 x 1 1/2" Bolt	Hoop To Frame & Bucket
8	1/2" SAE Flat Washer	
3	1/2"-13 C-Lock Nut	
3	1/2" Split Washer	
2	1/4"-20 x 3/4" Bolt	Brake Line Bracket
4	1/4" SAE Flat Washer	(lwr. Shk Mnts)
2	1/4"-20 C-Lock Nut	
2	Adel Clamp	
2	5/16"-18 x 1"Bolt	
2	5/16"-18 C-Lock Nut	
4	5/16" SAE Flat Washer	
4	7/16"-14 x 2 1/4" Bolt	Bumpstop Drop Bracket
4	7/16" SAE Flat Washer	
8	7/16"-14 C-Lock Nut	
2	5/16"-18 x 1" Bolt	Brake Line Bracket
2	5/16"-18 C-Lock Nut	(@frame)
4	5/16" SAE Flat Washer	
2	5/16"-18 x 1"	Thread-Forming Bolt
1	10mm x 1.50 x 25mm	(drv. side)
1	10mm Flat Washer	
2	14mm x 2.0 x 130mm	Hoop Mounting Plate

TOOL LIST:

- Floor Jack (s)
- Jack Stands
- Assorted Metric & S. A. E. Wrenches & Sockets
- Air Hammer
- Drill With 3/8" + 1/2" Bit
- Die grinder w/ a cut off wheel



2008 – 09 FORD F-250/350 SUPER DUTY 4WD FTS22096 FRONT DUAL SHOCK SYSTEM

CHECK PARTS INCLUDED IN THIS KIT TO THE PARTS LIST ABOVE BEFORE BEGINNING INSTALLATION OF THE KIT. IF ANY PIECES ARE MISSING, CONTACT FABTECH AT 909-597-7800

READ ALL INSTRUCTIONS THOROUGHLY FROM START TO FINISH BEFORE BEGINNING INSTALLATION.

THIS KIT MUST BE INSTALLED WITH FABTECH FRONT SHOCKS, NOT INCLUDED WITH THIS KIT.

THIS IS DESIGNED TO BE INSTALLED ALONG WITH FABTECH'S 6", 8", OR 10" COIL SPRING LIFT SYSTEMS.

THIS KIT IS DESIGNED TO ONLY FIT DIESEL ENGINE MODEL TRUCKS. IT WILL NOT FIT THE 6.8L V-10 OR 5.4L V-8 MODEL TRUCKS

INSTRUCTIONS:

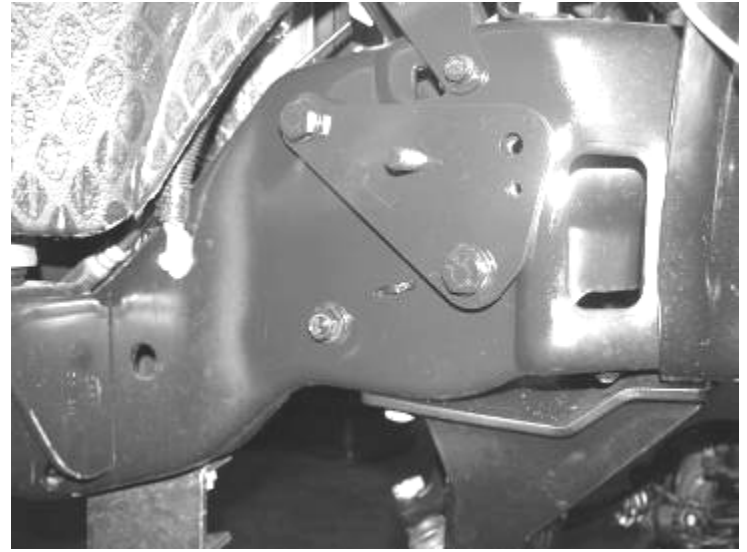
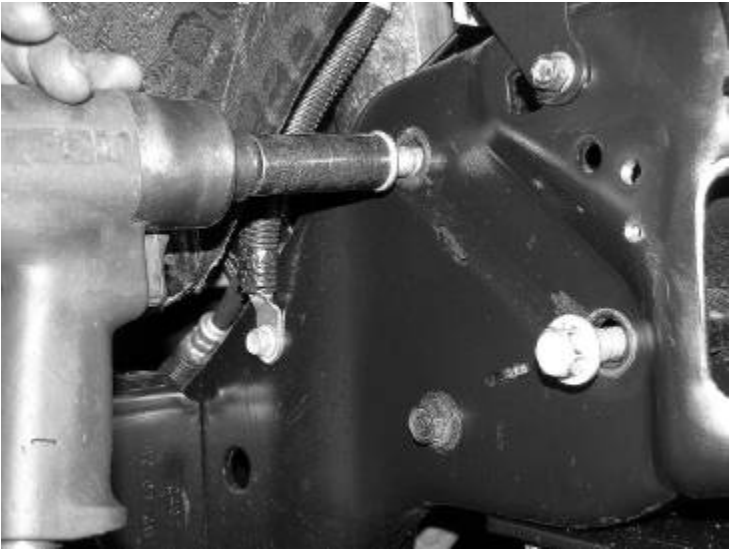
1. Disconnect the negative terminal on the battery. Jack up the front end of the truck and support the front axle with jack stands. **NEVER WORK UNDER AN UNSUPPORTED VEHICLE.** Remove the front tires.
2. Working from both sides of the truck, remove the front sway bar from the truck and save the sway bar and the U-shaped frame mounts with bushings (**take note of how it was removed**). Discard the end links. You will also need to discard the Fabtech sway bar frame drop included with the suspension kits. Take note on how the sway bar is mounted before removing it. It will be re-installed in a different position later in the install.
3. Locate the brake line and ABS line mounts on the lower coil perch. Disconnect both lines from the front and back of the coil perch and save the hardware. Disconnect the ABS sensors at the connection point at the bottom of the inner wheel well and from the mounting bracket on the radius arm / or four link bracket. Remove and discard the Fabtech Brake Line Drop Brackets w/ the hardware.
4. Working from both sides of the truck, support the front axle with two floors jacks and remove the front shocks from the truck and discard along with hardware. Carefully lower the jacks enough to remove the coil springs. Save the isolators. If removing Fabtech coils that have been driven on prior to the installation of this kit, mark them driver and passenger, they will be re-installed. If removing factory coils, discard them.
5. Locate and remove the factory front bump stops and save. These can be removed by pulling on the bump stop itself free from the cup. Remove the factory mounting cup from the Fabtech Bump Stop extensions (FT30143 and FT30144) and save the hardware. Locate FT30185 and FT30186 front bump stop drop brackets provided with this kit and install in

the same location (if your truck is stock and has not had the Fabtech bumpstops installed, refer to the main instructions provided with the lift kit for the proper bumpstop assembly. Just make sure that the FT30185 + FT30186 are used from this kit). Attach the factory bump stop cup to the new bracket using the previously removed 5/16" x 1 1/4" bolt, flat washer, and split washer. Press the factory bump stop back into the cup. SEE PHOTO BELOW.

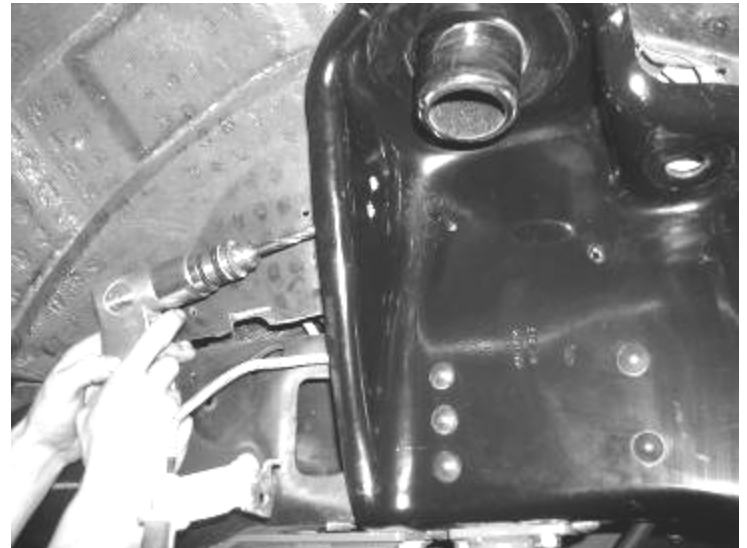


Picture shown without bump stop

6. Working from the driver side of the truck, locate FT30282 Drv. Side Hoop Mount Plate and the supplied 14mm x 2.0 x 130mm bolts w/ washers. Remove the top and rearward bolt from the steering box and discard. Position the mount plate onto the frame and install the 14mm bolts, split, and flat washers (use supplied thread-locking compound) into the steering box. Install the 10mm bolt into the frame where the stock brake line brake bolt was originally. Leave loose. SEE PHOTOS ON NEXT PAGE



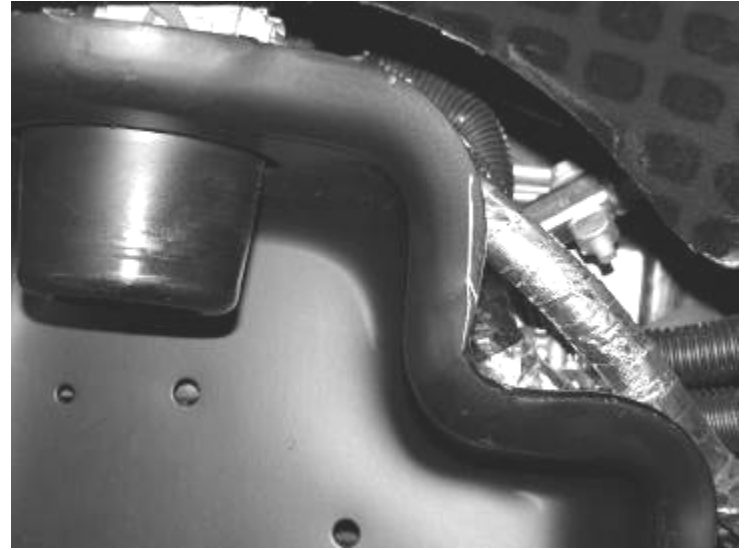
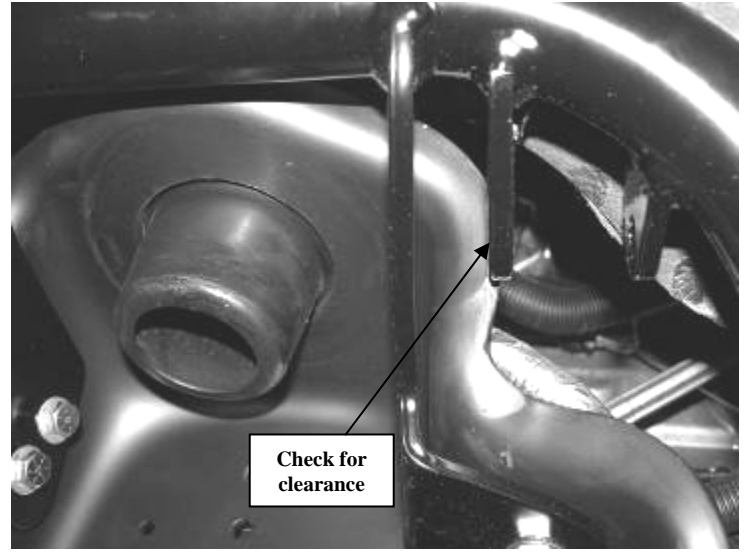
7. Locate the two holes in the front side of the coil bucket. With a drill and 3/8" drill bit, drill out the two holes in the front side of the coil bucket. SEE PHOTO BELOW



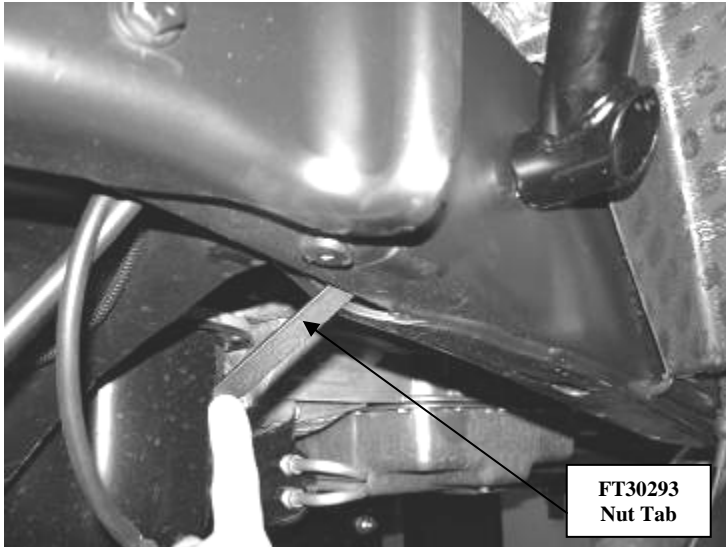
Driver side shown above



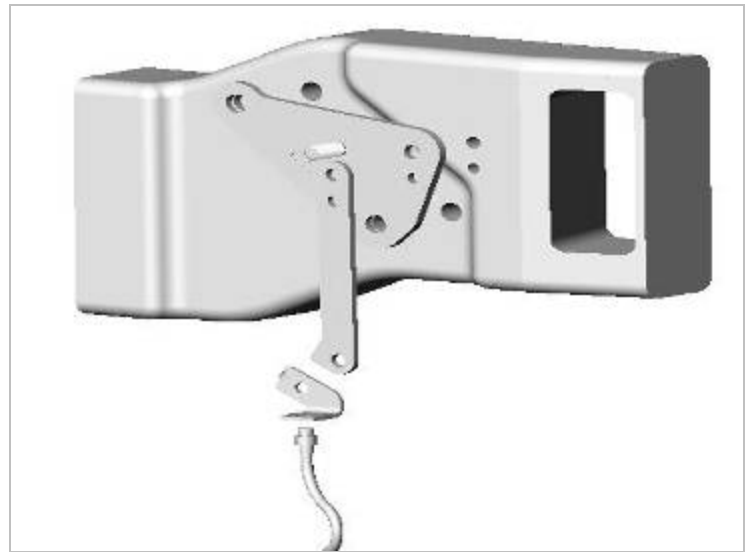
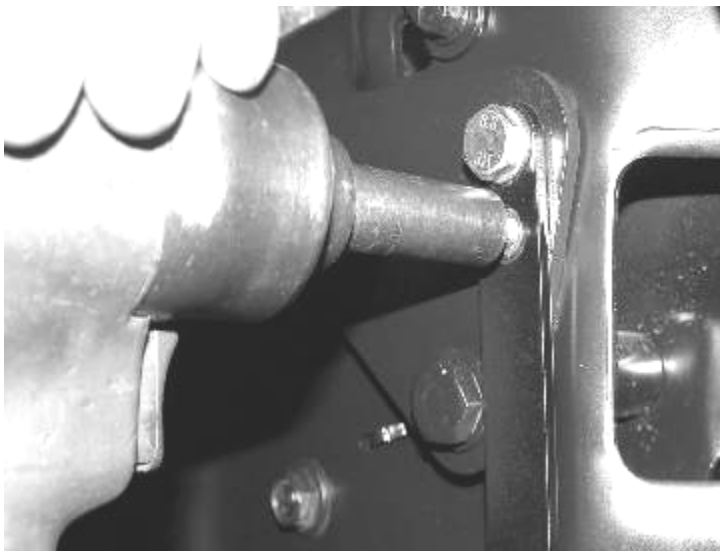
8. Locate FT30167 shock hoop. Place the front leg of the hoop onto the bolt / stud on the mounting plate and secure with a provided 1/2" C-Lock nut and washer. Leave loose. Then position the hoop inside the coil bucket and install the 3/8" x 1 1/2" bolts, SAE flat washers, and nylock nuts. Next, use a supplied 1/2" x 1 1/2" bolt, SAE flat washer, FT57-1 large washer, and nylock nut to bolt hoop where the factory shock was. Place the bolt with a SAE washer through the bottom of the hoop going upwards through the coil bucket. The FT57-1 washer will go on top of the coil bucket followed by a flat washer and nylock nut. Finger tighten at this time. **Note: Due to variances from truck to truck, some will need to have the coil bucket trimmed where the front shock mounting tab on the rear shock. If the hoop makes contact with the coil bucket, mark the coil bucket, remove the hoop, and use a grinder to remove excess material from the bucket. Re-install the hoop. SEE PHOTOS ON NEXT PAGE**



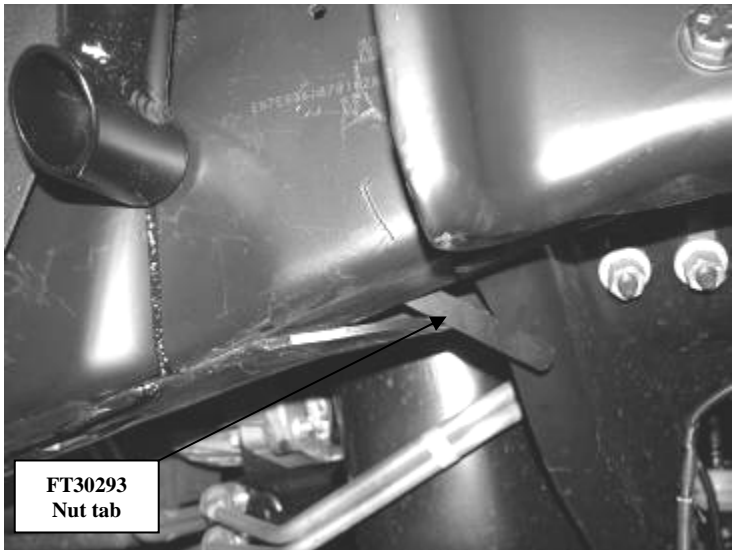
9. With the hoop in place on the bucket, use a center punch and mark the hole of the rear leg of the hoop to the frame. Using a drill and drill the new hole out to 1/2", (**start with a smaller size bit and work up to the 1/2" bit**). Locate FT30293 Frame Nut Tab and the supplied 1/2"x1 1/2" bolt w/ a flat and a split washer. Insert the nut tab into the bottom of the frame up to the back of the hoop and attach the hoop with the 1/2" bolt with both washers (use provided thread-lock on the bolt). Torque the 1/2" hardware to 75 lbs. and the 3/8" hardware to 30 lbs. SEE PHOTO BELOW



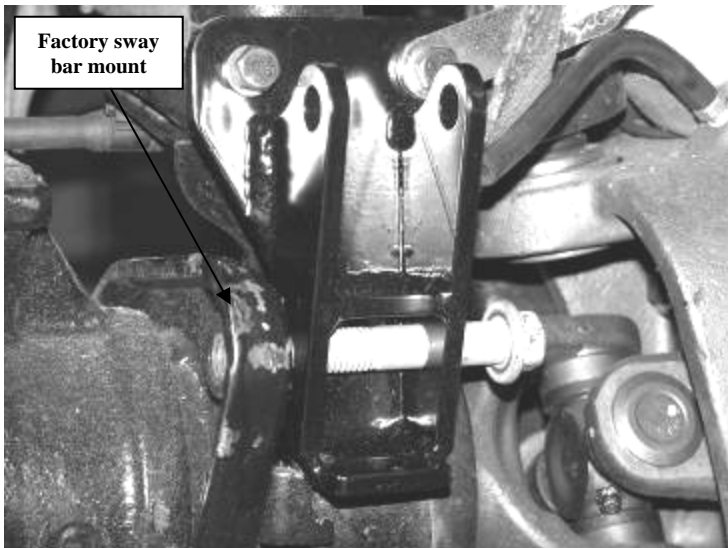
10. Locate FT30303 brake line bracket and the supplied 10mm x 25mm bolt and washer and the 5/16" thread forming bolt. Mount the new bracket to the hoop mounting plate in the factory brake line position with the new 10mm bolt (the top of the bracket has two holes). Next install the new thread-forming bolt into the bottom hole on the bracket. Attach the factory brake line bracket to the new drop bracket with the supplied 5/16" hardware. Torque to 20 lbs. (**if you are installing a brake line drop bracket for the first time with the lift kit, see the instructions included with the lift kit for installing the brake line extension and proper routing procedure**). SEE PHOTO AND DIAGRAM IN NEXT COLUMN



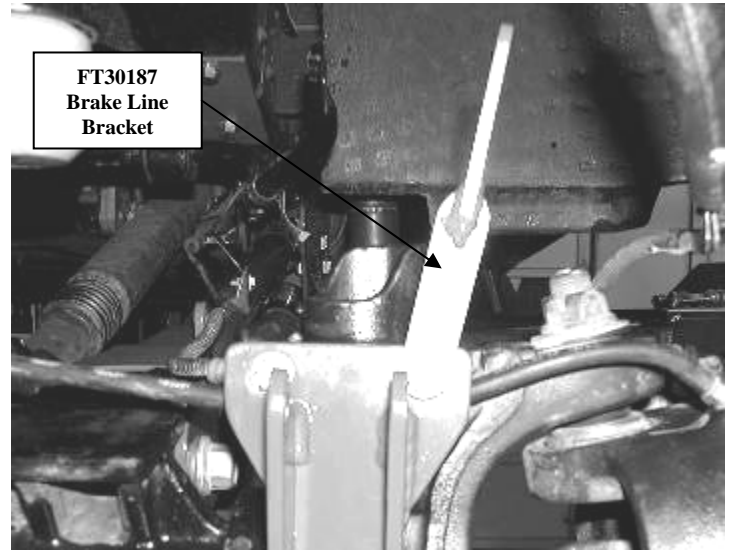
11. Working from the passenger side, locate the two holes in the front side of the coil bucket. With a drill and 3/8" drill bit, drill out the two holes in the front side of the coil bucket. Position the FT30168BK Shock Hoop inside the coil bucket and install the 3/8" x 1 1/2" bolts, SAE flat washers, and nylock nuts. Next, use a supplied 1/2" x 1 1/2" bolt, SAE flat washer, FT58-1 large washer, and nylock nut to bolt hoop where the factory shock was. Place the bolt with a SAE washer through the bottom of the hoop going upwards through the coil bucket. The FT58-1 washer will go on top of the coil bucket followed by a flat washer and nylock nut. Finger tighten at this time. **Note: Due to variances from truck to truck, some will need to have the coil bucket trimmed where the front shock mounting tab on the rear shock. If the hoop makes contact with the coil bucket, mark the coil bucket, remove the hoop, and use a grinder to remove excess material from the bucket. Re-install the hoop.**
12. With the hoop in place on the bucket, use a center punch and mark the hole of the front and the rear leg of the hoop to the frame. Use a drill and drill the new hole out to 1/2", (**start with a smaller size bit and work up to the 1/2" bit**). Locate FT30182 Frame Nut Tab and the supplied 1/2"x1 1/2" bolt w/ a flat and a split washer. Insert the nut tab into the bottom of the frame up to the front of the hoop and attach the hoop with the 1/2" bolt with both washers (use provided thread-lock on the bolt). Locate FT30293 Frame Nut Tab and the supplied 1/2"x1 1/2" bolt w/ a flat and a split washer. Insert the nut tab into the bottom of the frame up to the back of the hoop and attach the hoop with the 1/2" bolt with both washers (use provided thread-lock on the bolt). Torque the 1/2" hardware to 75 lbs. and the 3/8" hardware to 30 lbs. SEE PHOTO ON NEXT PAGE



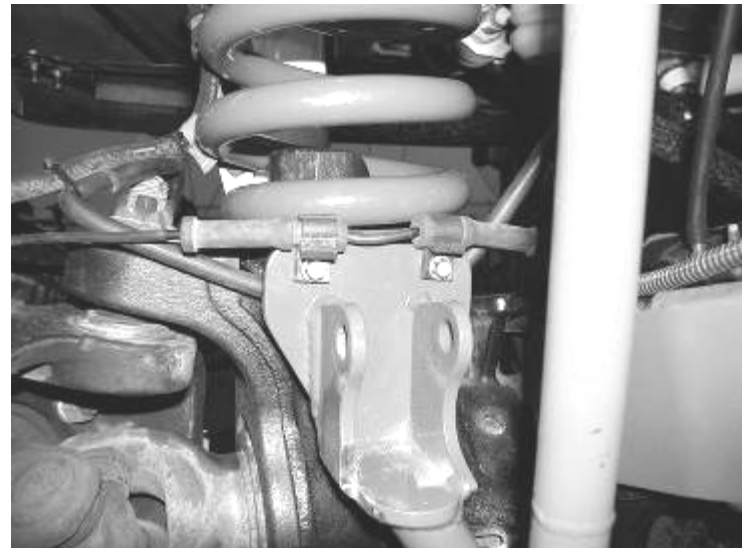
13. Working from both sides, locate FT30292 Lower Front Shock Mount and FT30187 Brake line Bracket. Locate the factory sway bar end link bolt and attach the lower mount to the factory sway bar mount. Leave loose. Using the supplied 8mm-1.25x30mm bolts and flat washers attach the new shock mount along with the brake line bracket back to the front of the coil perch. The brake line bracket will mount on the outer bolt. SEE PHOTO BELOW



Driver side shown in photo



14. Locate FT30179 Lower Rear Shock Mount. Position the shock mount into the factory lower shock mount on the axle. The plastic mounts that hold the ABS lines needs to be flipped over so that the line will mount on above the new shock mount. Using the original 6mm hardware attach the shock mount along with the ABS line mount back to the rear of the coil perch. Leave loose at this time. SEE PHOTO BELOW

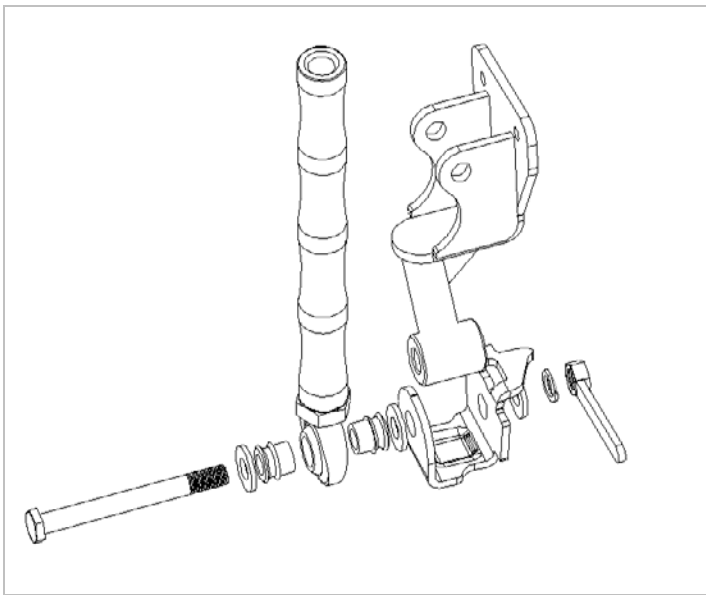


Picture shows coils already installed for proper ABS placement

15. Locate FT30170 Billet sway bar end links. Attach one FTS98003 heim joint and one Jam nut to each end of the end links. You will want to thread the jam nuts all the way down the heim joints and the heims all the way into the billet end links.
16. Position one end of the end link with two of the supplied FT43 mis-alignments against the rear lower shock mount. Using the supplied 1/2" -13 x 5" bolt, flat washers, split washer, and FT30182 nut tab and attach the end link to the factory lower shock mount. The split and flat washer will mount against the nut tab on the inside of the mount. SEE PHOTO AND DIAGRAM ON NEXT PAGE.

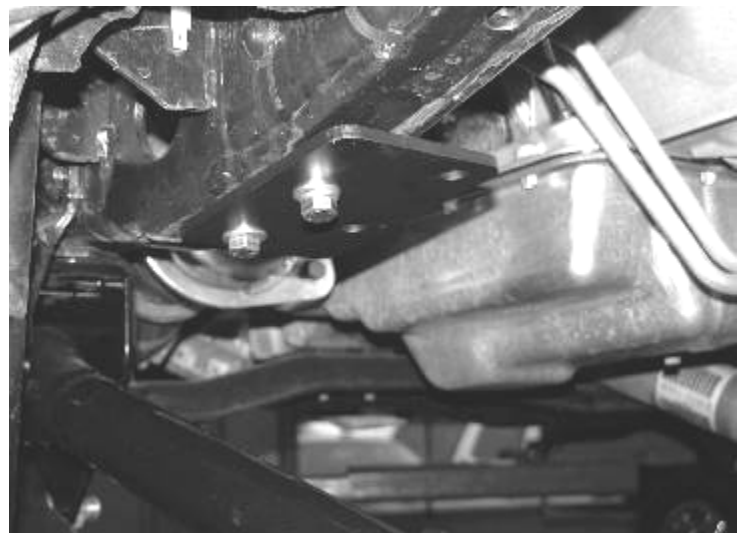


Driver side shown above



Passenger side shown

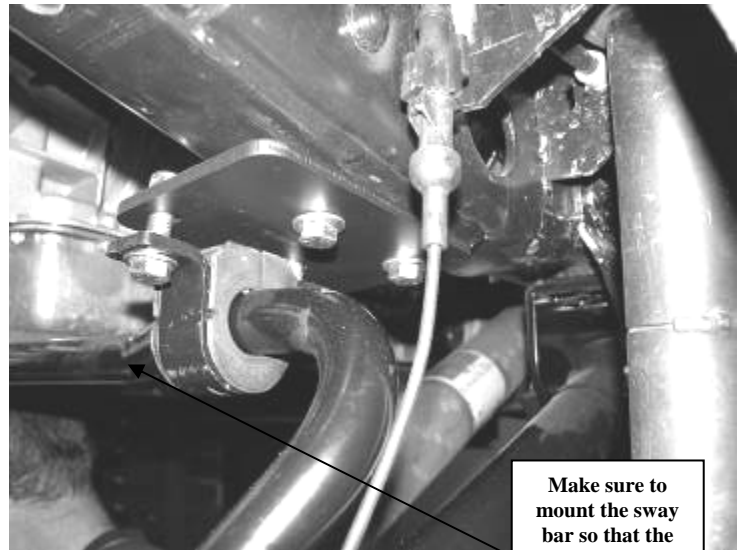
- Locate FT30294 (drv) & FT30298 (pass) Sway Bar Relocation Brackets. The brackets have two sets of mounting holes. The set of holes that are $2\frac{3}{4}$ " from center to center are the ones used to mount the bracket to the frame. The other set which are $3\frac{1}{4}$ " center to center are used to mount the sway bar to the bracket itself. Position the bracket on the frame so the $3\frac{1}{4}$ " sway bar mounting holes are inside the frame rail and 3" back of the oval hole in the bottom side of the frame. Use a paint pen or center punch and mark the holes ($2\frac{3}{4}$ " center to center) in the bracket to the frame. Use a drill and drill the new hole out to $\frac{7}{16}$ " (**start with a smaller size bit and work up to the $\frac{7}{16}$ " bit**). Using the supplied $\frac{7}{16}$ "-14 x 1 $\frac{1}{2}$ " bolts, flat washers, and C-Lock nuts, attach the bracket to the frame. Torque the bolts to 55lbs. The passenger front bracket will use FT30297 Sway Bar Plate Nut Tab on the front bolt with a split washer (use supplied thread-loc on this bolt). SEE PHOTOS IN NEXT COLUMN & PAGE



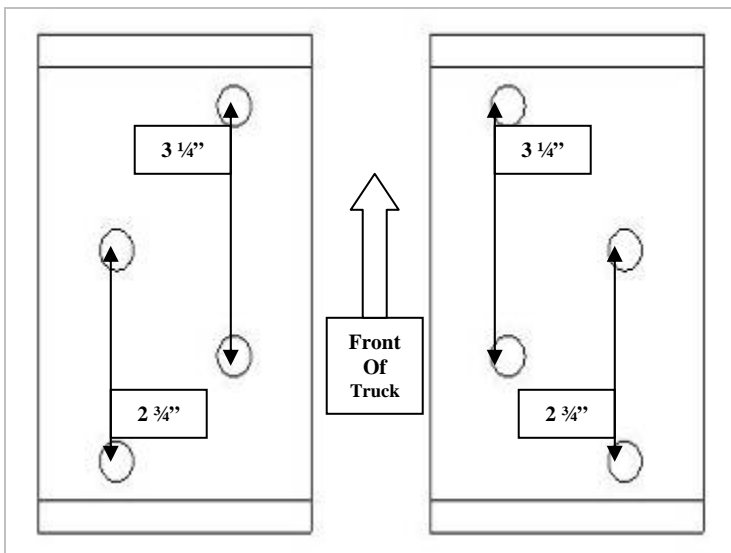
Passenger side shown in photo above



Passenger side shown in photo above



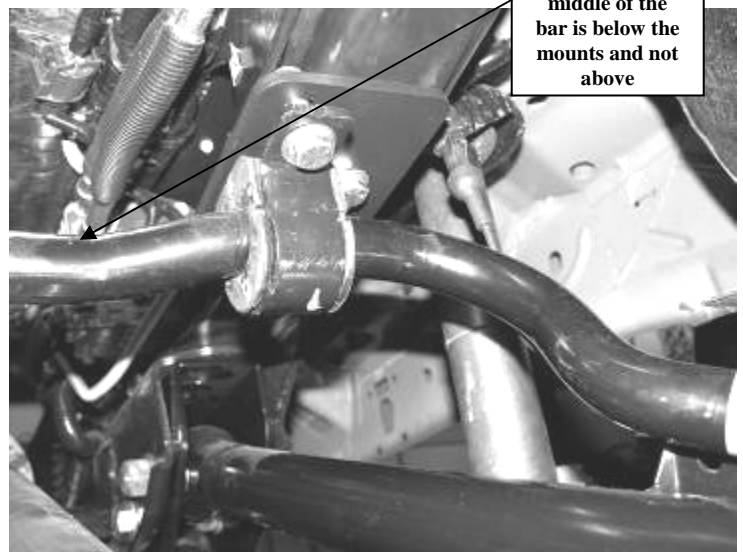
Make sure to mount the sway bar so that the middle of the bar is below the mounts and not above



Passenger

Driver

18. Locate the factory sway bar and sway bar frame mounts. Attach the sway bar to the previously installed frame brackets using the 7/16" x 1 1/2" bolts, flat washers, and nylock nuts as shown in the photo below (**the sway bar will need to be mounted as it was factory. DO NOT turn the bar upside down**). Do not connect the end links at this time. Torque the bolts 55 lbs. SEE PHOTOS IN NEXT COLUMN

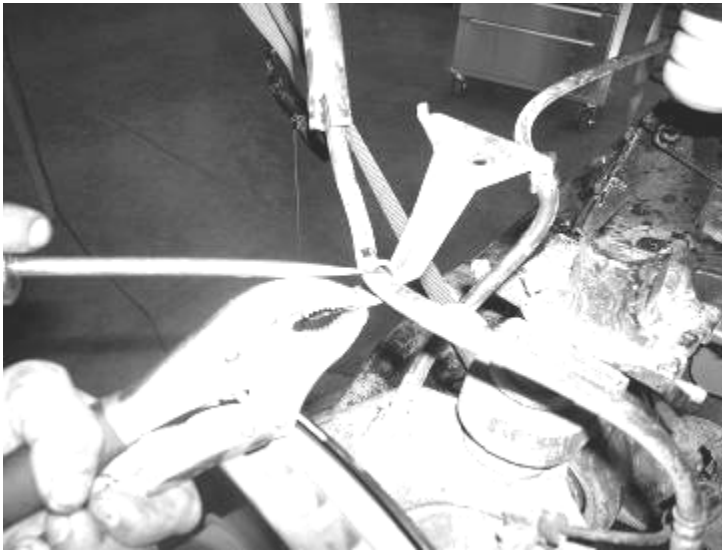


19. Locate the front coils and install them accordingly. Make sure to have the isolators on the top of the coils prior to putting them on the truck. SEE PHOTO BELOW

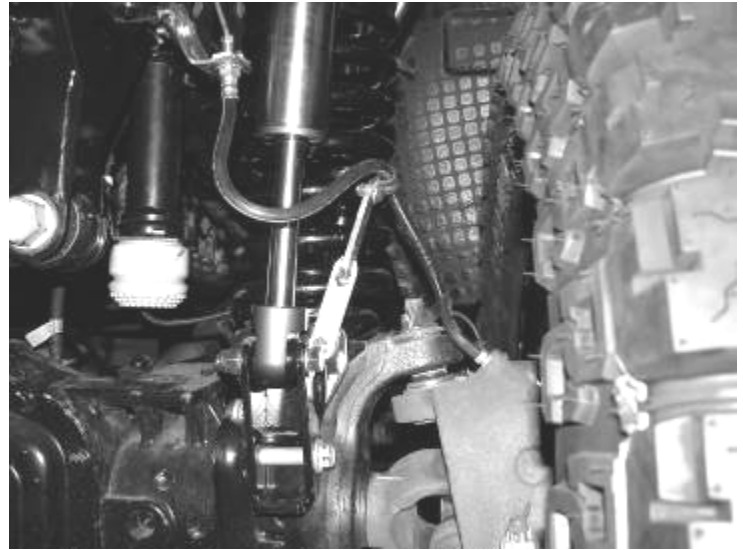


20. Using the floor jacks, raise the front axle enough to compress the front coils approx. 1". Locate the correct front shocks and install onto the truck use the supplied 1/2"-13 x 3" bolts, flat washers, and nylock nuts. Torque the bolts to 70lbs. If you are installing Fabtech Performance shocks, the white body of the shock must be mounted down with shafts of the shocks mounted at the hoop. If installing Fabtech Dirt Logic shocks, the body of the shock mounts on the hoop and the shafts mount on the lower brackets.

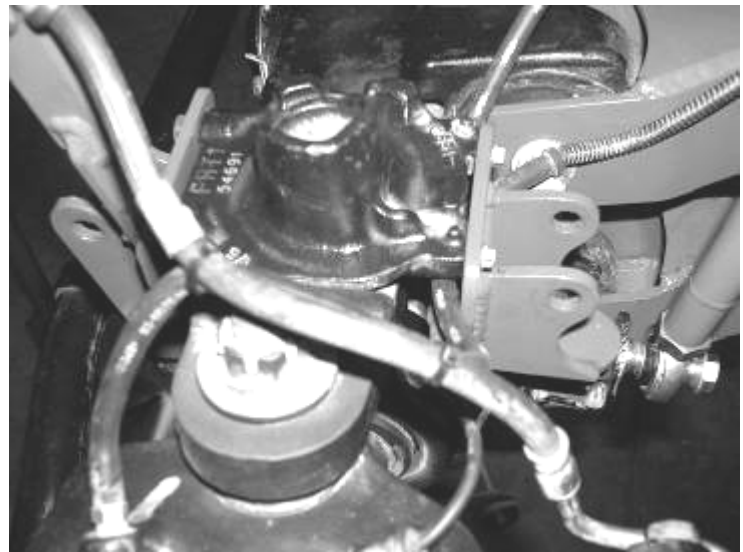
21. The factory brake line bracket will need to be removed and discarded. Carefully pry the tab open so the brake line can be removed from the bracket. Next, you will need to separate the vacuum line for the Automatic Locking Hubs for the 4wd system and remove it from the loop bracket on the differential and brake line bracket. SEE PHOTO BELOW



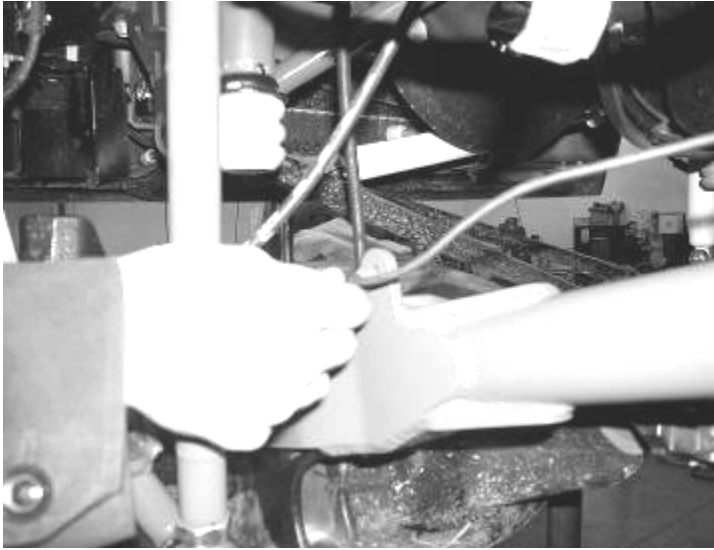
22. Locate the supplied adel clamp, 1/4" -20 x 3/4" bolt, washers, and nylock nut. Place the clamp around the brake hose and attach it to the FT30187 Brake Line Bracket. The FT30187 bracket will need to be as close to the coil as possible without making contact with it. This is done for maximum tire clearance. Route the 4wd vacuum line from the knuckle up to the brake line and down and behind the lower rear lower shock mount. Use the supplied zip ties and connect the vacuum line to the brake line. SEE PHOTOS IN NEXT COLUMN



Completed picture used to show brake line routing



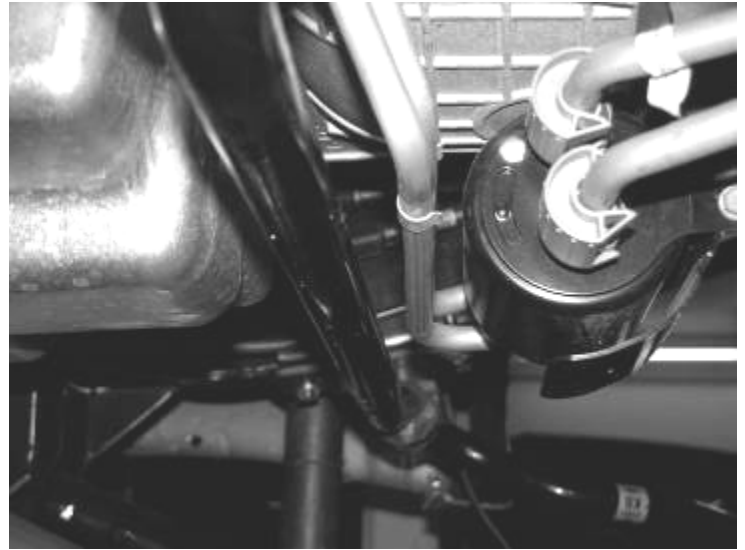
23. Route the ABS lines up the Radius / 4 Link arm and push the first ABS plastic clip into the tab at the front of the arm. Continue the line up to the next point where the factory tab is bolted to the arm that was removed from the stock radius arms. Make sure that the bracket is mounted up and with the opening facing outwards. Make sure to have some slack in the lines at all the connection points. The rubber sleeves on the lines are adjustable. If they need to be moved, use WD40 or a Silicone spray to lubricate the line so it will slide without damaging the line. Run the line the rest of the way up the arm and up to the fender well connection point. Make sure to run the line below the sway bar. SEE PHOTOS ON NEXT PAGE



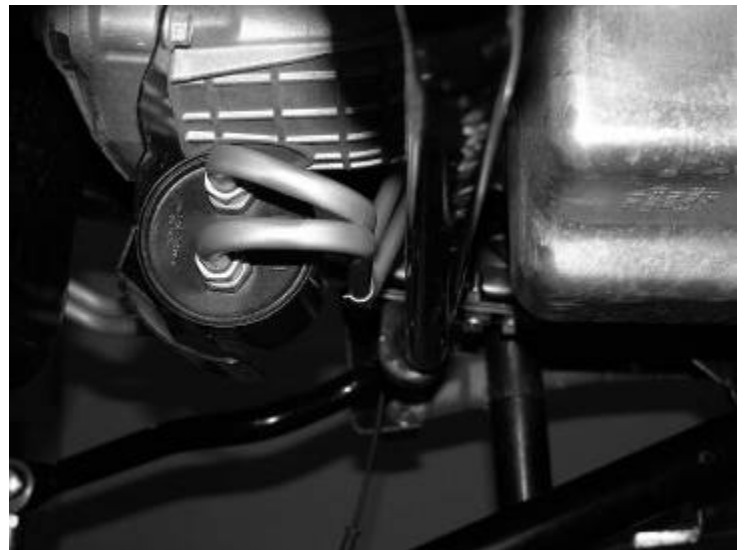
24. Locate the supplied 1/2"-13 x 3" bolts, SAE flat washers, split washers, nylock nuts, and mis-alignments and connect the sway bar end links to the sway bar. The end link mounts on the outside of the sway bar. Once the sway bar is connected, check the sway bar by the transmission lines and filter for adequate clearance. DO NOT let the bar make contact with the lines or filter. CAREFULLY bend the line where needed without kinking it. SEE PHOTOS BELOW & IN NEXT COLUMN



Driver Side Shown Off Truck.



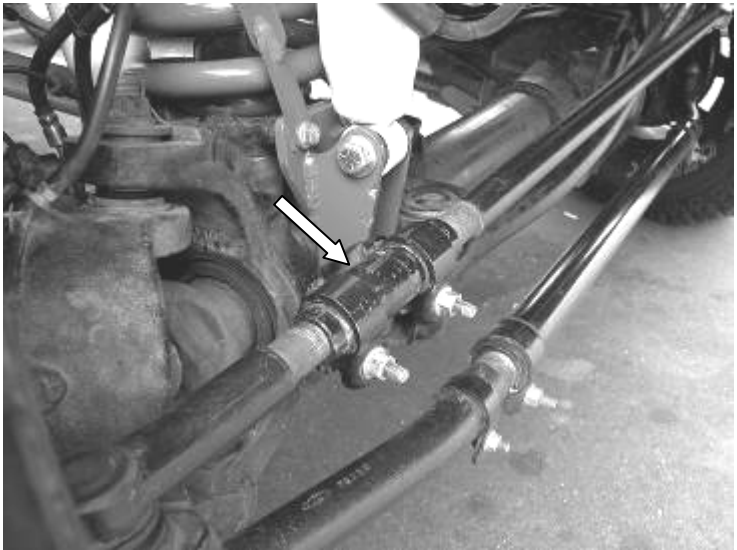
View from driver side



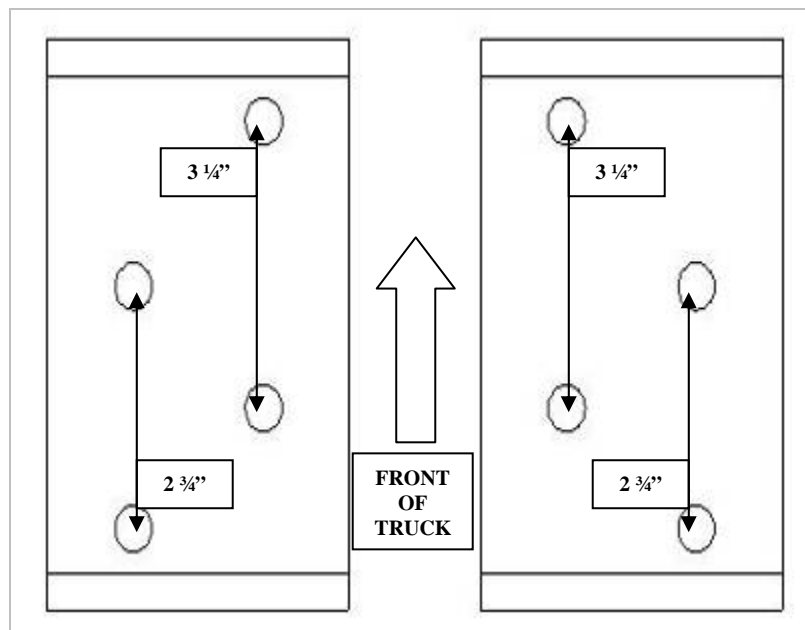
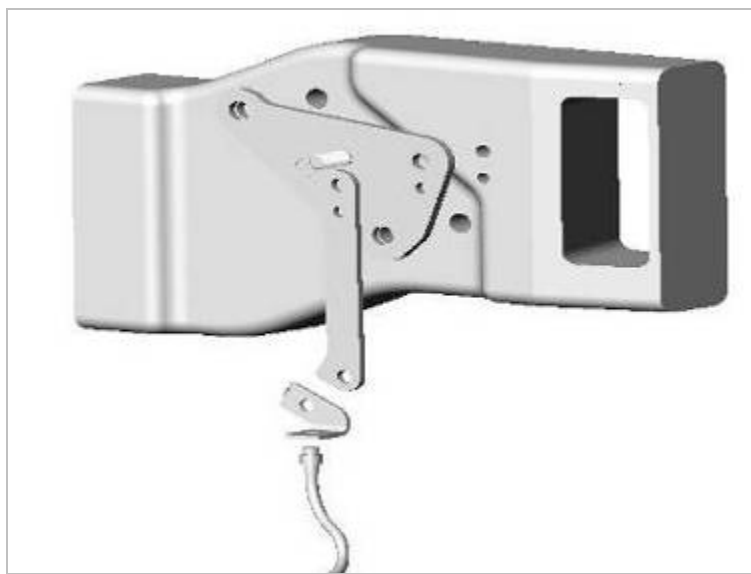
View from passenger side



25. Locate the adjuster on the drag link and adjust it so the bolts face towards the front of the truck. This is done for clearance of the Passenger front shock bracket. SEE PHOTO ON NEXT PAGE.



26. Re-install the front tires and set the truck back on the ground. Turning the steering wheel fully in each direction, check for contact between the tires and any newly installed components.
27. Check the front-end alignment and set to the factory specifications.



Passenger

Driver

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

For technical assistance call: 909-597-7800

Product Warranty and Warnings

Fabtech 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 Fabtech 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.

Take apart 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.

Fabtech does not warrant any product for finish, alterations, modifications and/or installation contrary to Fabtech's instructions. Alterations to the finish of the parts including but not limited to painting, powdercoating, 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.

Fabtech 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. Fabtech front end Desert Guards may impair the deployment or operation of vehicles equipped with supplemental restraining systems/air bag systems and should not be installed if the vehicle is equipped as so.

Fabtech 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, Fabtech cannot be responsible for 100% compatibility, including the fitment of tire and wheel sizes listed. The Tire and Wheel sizes listed in Fabtech's catalog are only a guideline for street driving with noted fender trimming. Fabtech is not responsible for damages to the vehicle's body or tires.

Fabtech's obligation under this warranty is limited to the repair or replacement, at Fabtech 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. Fabtech is not responsible for damages and/or warranty of other vehicle parts related or non related to the installed Fabtech 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 Fabtech.

Fabtech suspension components must be installed as a complete system including shocks as shown in our current catalog. All warranties will become void if Fabtech 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. Fabtech does not warrant products not manufactured by Fabtech.

Installation of Fabtech 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 Fabtech products with the consumer prior to purchase.

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