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2007 - 09 GM 1500 4WD – 2WD SUV REAR SYSTEM

FTS21051BK REAR AUTO RIDE COIL SPRING SYSTEM

FTS21052BK REAR Non /AUTO RIDE COIL SPRING SYSTEM

THIS INSTRUCTION SHEET COVERS THE INSTALLATION OF VEHICLES WITH AND WITHOUT AUTO RIDE SUSPENSION. VERIFY THAT YOU HAVE THE CORRECT KIT FOR YOUR APPLICATION.

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

CHECK ALL 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

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

WARNING: FABTECH RECOMMENDS THAT YOU EXERCISE EXTREME CAUTION WHEN WORKING WITH COIL SPRINGS TO AVOID ANY POSSIBILITY OF INJURY.

THIS KIT NOT RECOMMEND FOR 2WD SUBURBAN.

TOOL LIST: (NOT INCLUDED)

- **FLOOR JACK**
- **JACK STANDS**
- **EXTERNAL COIL SPRING COMPRESSOR**
- **ASSORTED METRIC AND S.A.E SOCKETS, & ALLEN WRENCHES**
- **DRILL WITH 7/16" BIT**
- **DIE GRINDER WITH CUT OFF WHEEL**



2007 - 09 GM 1500 SUV REAR SYSTEM

FTS21051BK REAR AUTO RIDE COIL SPRING SYSTEM FTS21052BK REAR Non /AUTO RIDE COIL SPRING SYSTEM

	FTS21051BK	SUV Box 4 Coil Spring Rear "Auto Ride ONLY"
2	FT1599-2BK	2007 SUV Auto Ride Rear Coil
1	FT20292BK	Trac Bar Bracket
1	FT20307BK	Trac Bar Bracket Support
1	FT1599-2-2DBK	Driver Shock Drop Bracket
1	FT1599-2-2PBK	Pass Shock Drop Bracket
1	FT20360BK	Drv. Rear Upper Link
1	FT20361BK	Pass. Rear Upper Link
2	FT20362BK	Lower Link D/P
2	FT1599-2-4	Rear sway Bar End Link
8	FT1004	Sway Bushing Half
4	FT404739	Sway Bar Sleeve
1	FT20319BK	Rear Bump Stop Bracket Drv.
1	FT20320BK	Rear Bump Stop Bracket Pass
1	FT20349	Brake Line Bracket
4	FT20351	Auto Ride Frt. Shock Inserts
1	FT20299	Bushing & Sleeve Kit
4	12008007100	8" Black Zip Tie
4	12001407100	14" Black Zip Tie
1	FT20309	Hardware Kit
2	FT21051i	Instruction Sheet

	FTS21052BK	SUV Box 4 Coil Spring Rear "Non Auto Ride ONLY"
2	FT1599-4BK	2007 SUV Non Auto Ride Rear Coil
1	FT20292BK	Trac Bar Bracket
1	FT20307BK	Trac Bar Bracket Support
1	FT1599-2-2DBK	Driver Shock Drop Bracket
1	FT1599-2-2PBK	Pass Shock Drop Bracket
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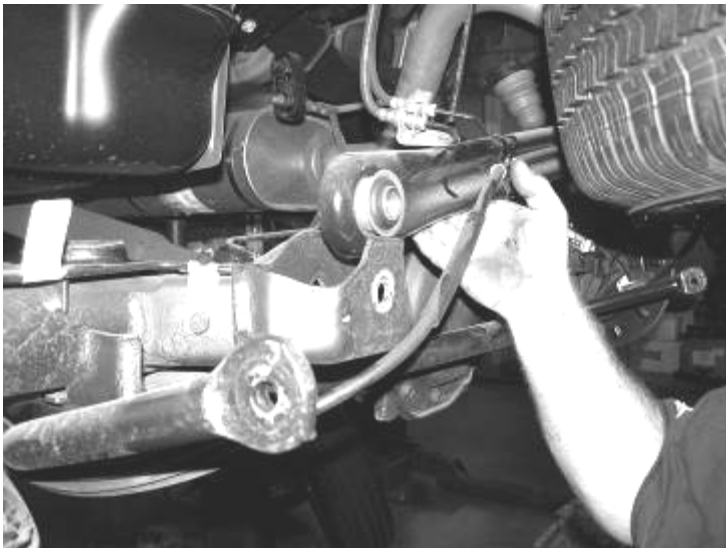
Qty.	Hardware Kit Description	FT20309 Location	Qty.	Description	Location
1	9/16"-12 x 4" Bolt	Rear Trac Bar Bracket	1	5/16"-16 x 1" Bolt	Rear Brake Line Drop
1	9/16"-12 C-Lock Nut		1	5/16"-16 C-Lock	
2	9/16" SAE Flat Washers		2	5/16" SAE Flat Washer	
2	7/16"-14 x 2 1/4" Bolt		4	3/8"-16 x 1 1/4" Bolt	Bump Stop Brk.
1	7/16"-14 x 1 1/2" Bolt		4	3/8"-16 C-Locks	
3	7/16"-14 C-Locks		8	3/8" SAE Flat Washer	
6	7/16" SAE Flat Washer		2	1/4"-20 x 1" Bolt	Auto Ride Drop Brk.
2	12mm x 1.50 x 75mm Bolt	Rr Sway Bar Links @ bar	2	1/4"-20 C-Lock	
2	12mm C-Lock Nut		4	1/4" SAE Flat Washer	
4	1/2" USS Flat Washer		8	1/4 Grease Fitting	Zerc Fitting
2	9/16"-12 x 3" Bolt	Rear Shock @ Drop Brkt	1	FTLube	Bushing Lube
2	9/16"-12 C-Lock Nut				
4	9/16" SAE Flat Washers				

INSTRUCTIONS:

1. Disconnect the negative terminal on the battery. Jack up the rear end of the truck and support the frame rails with jack stands. **NEVER WORK UNDER AN UNSUPPORTED VEHICLE!** Remove the rear tires.
2. Disconnect the sway bar end links from the frame and sway bar, discard the endlinks, save the hardware. Remove the bolt securing the brake line support tab to the differential housing and save. Remove the ABS wiring from the frame mounts on both sides. Save all the hardware. SEE PHOTO BELOW.



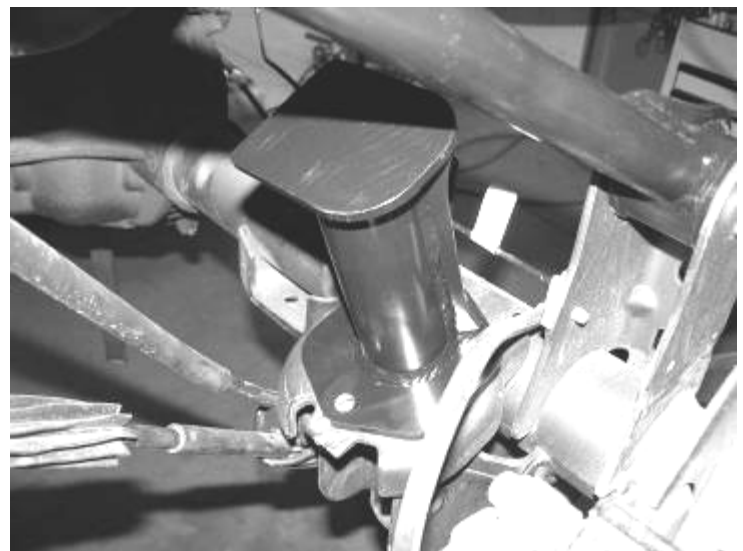
3. Using a floor jack, raise the differential just enough to slightly compress the rear shocks. Remove the bolts securing the top of the shocks to the frame (if equipped with the Auto Ride System, unplug the electric and air line connections). Remove the lower pivot bolt that attaches the track bar to the axle bracket and save. SEE PHOTO BELOW.



4. Lower the floor jack to release the coil springs. Remove the coil springs from the vehicle and save the rubber upper and lower coil insulators.
5. Support the rear axle with a floor jack and remove the factory lower links arms. Discard the links and save the hardware. SEE PHOTO BELOW.



6. Locate FT20319 (drv) & FT20320 (pass) Rear Bumpstop Brackets and the supplied 3/8"x1 1/4" hardware. Place the bump stop extension mounts onto the existing pads on the top of the differential. Using the 3/8" bolts, washers and C-lock nuts, secure the mount to the differential. There should be a flat washer on each side of the bolt. Do not fully tighten. Mark and drill the front 3/8" hole in the bumpstop and attach using the remaining 3/8" hardware on this new hole. Torque to 30 ft lbs. SEE PHOTO BELOW AND ON THE NEXT PAGE.





7. Locate FT20360 (drv.) & FT20361 (pass) Rear Upper Link, FT20362 Rear Lower Links, and FT20299 Bushing and Sleeve Kit. Using an arbor press, press the bushings and sleeves (use supplied bushing lube) into each end of the links and install the supplied zerk fittings. On the upper links, use 2ea. FT1037 bushings and a short sleeve at each end. On the lower links, use 1ea. FT1037, 1ea. FT1006 and a long sleeve.
8. Install the new Lower Link Arms into the factory rear axle mounts with the factory hardware. Then attach the arm to the frame mounts also with the factory hardware. Leave loose at this time. SEE PHOTO BELOW.



9. Support the rear axle with a floor jack and remove the factory upper links arms. **If the rear is equipped with Auto Ride, locate the Auto Ride sensors on both the driver side and passenger side of the vehicle on the upper link arms. Disconnect from the link arm and save with the hardware. DO NOT REMOVE FROM THE TRUCK.** Discard the links and save the hardware. Install the new Upper Link Arms into the factory rear axle mounts with the factory hardware. (install / match the driver and passenger links as they were removed). Then attach the arm to the frame mounts also with the factory hardware. Remove the Auto Ride bracket from the position sensor and

use a die grinder to remove the bottom of the bracket. Connect the auto ride brackets to the tabs on the upper links with the factory hardware. Leave the link arm bolts loose at this time. SEE PHOTOS BELOW

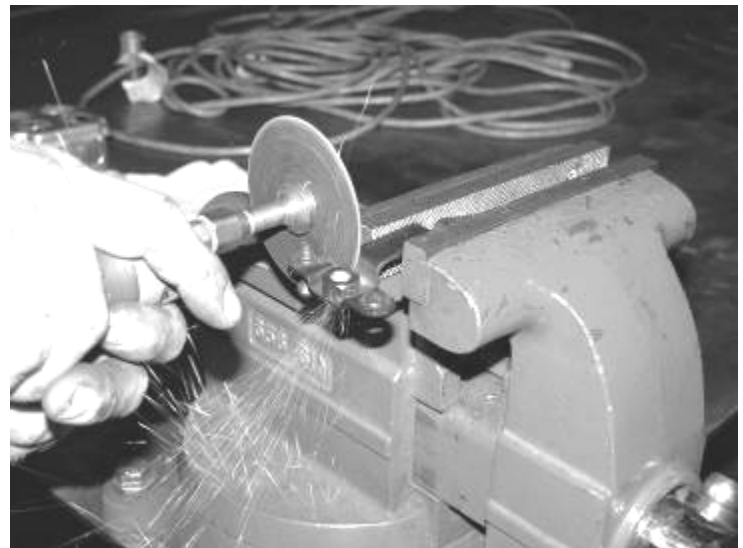
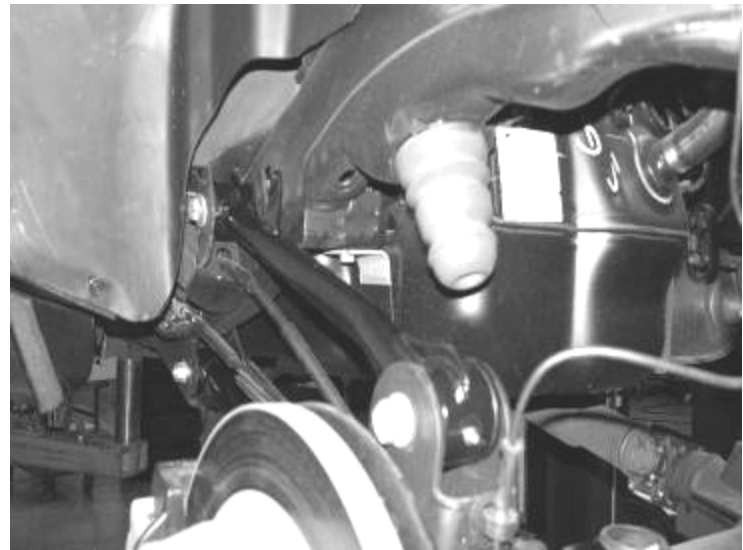
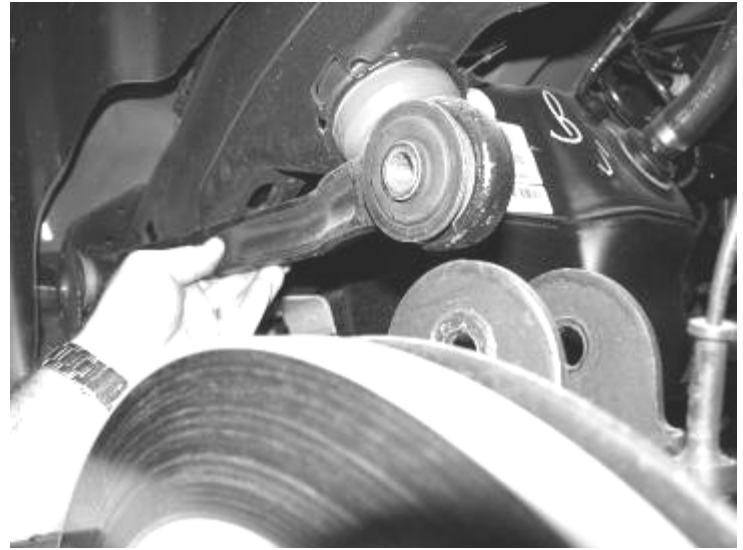
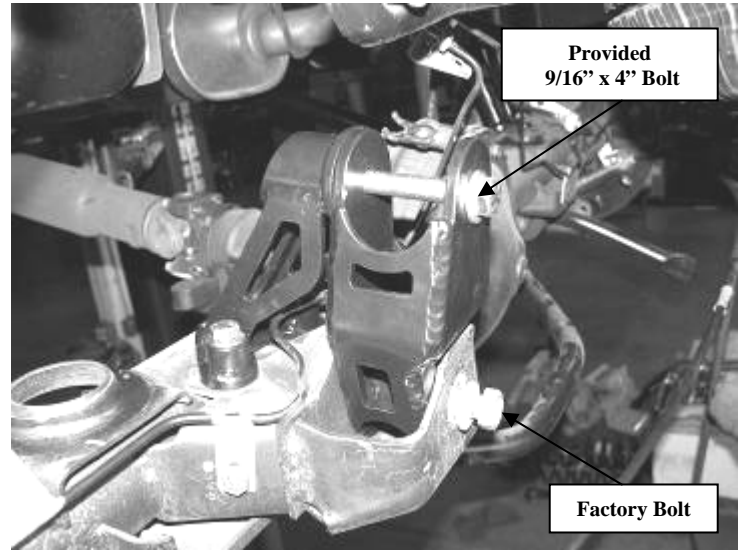


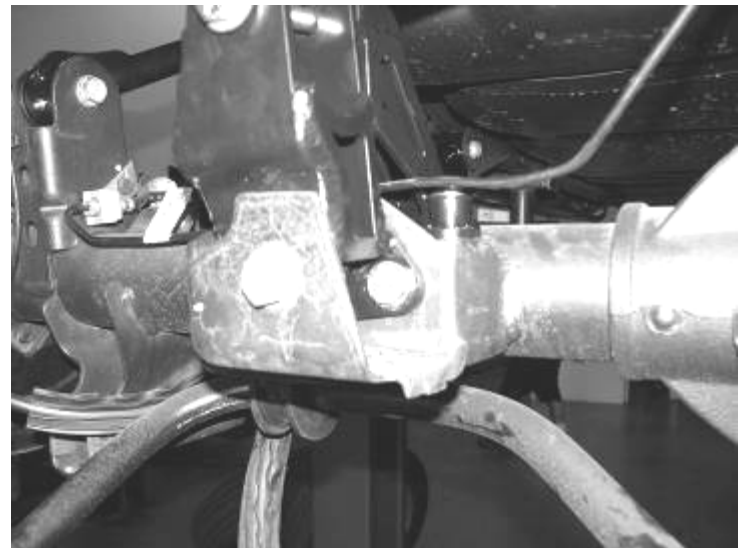
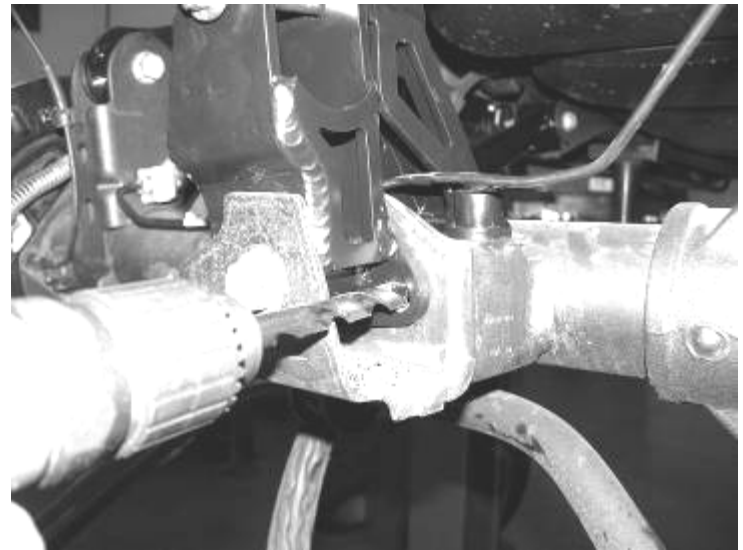
Photo shows cutting of factory bracket



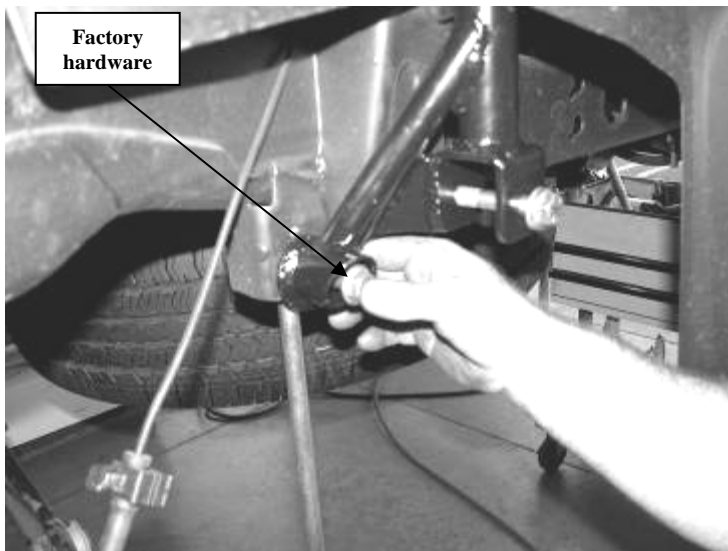
10. Locate FT20292 Trac Bar Bracket, FT20307 Trac Bar Bracket Support, and the 7/16" & 9/16" hardware. Position the trac bar bracket into the factory mount on the axle and install with the factory bolt and hardware. Leave loose. Locate the two factory holes just forward of this mount, Using a drill with a 7/16" bit, drill these two holes out to 7/16" (carefully bend the brake line back from the inner hole). Position the support bracket over the two new holes and install with the 7/16" x 2 1/4" bolts and hardware. Insert the 9/16" x 4" bolt into the trac bar bracket and support bracket (tighten just enough to make the bracket and support make contact, over tightening without the trac bar installed will collapse the bracket) Torque the 7/16" bolts to 50 lbs. SEE PHOTOS BELOW AND IN NEXT COLUMN



11. Using a drill with a 7/16" bit, drill the hole on the new trac bar bracket to the factory mount. Use 7/16 x 1 1/2" bolt and hardware to attach the bracket to the mount and torque to 50 lbs. SEE PHOTOS BELOW

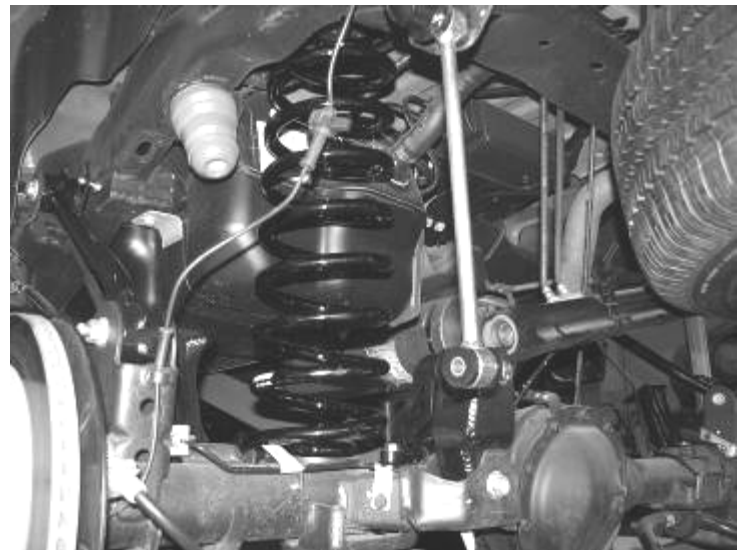
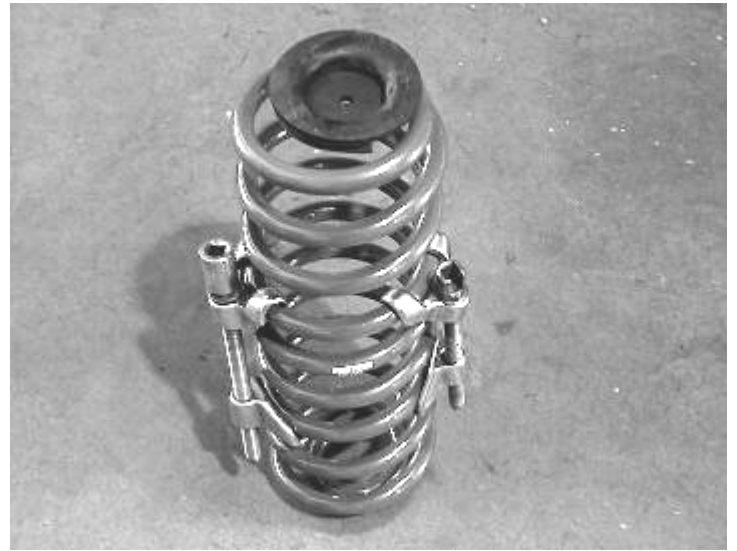


12. Working from the driver's side, locate FT1599-2-2D Shock Drop Bracket. Slide the shock mount extension into the original frame mount and insert one of the factory shock bolts and hardware through the original shock mount side and hand tighten. Take one of the new sway bar links and insert 2 bushing halves and a sleeve into each end (use the supplied lube). Install one end of the end link into the frame mount and insert the original bolt through the sleeve, **(the factory hole may have to be drilled out with a 1/2" drill bit to align properly)** securing the shock mount drop bracket. Torque the factory bolt to 75lbs and the upper bolt shock bolt to 85lbs. SEE PHOTOS ON NEXT PAGE.



IF YOU ARE INSTALLING DIRT LOGIC REAR SHOCKS, YOU WILL NOT USE THE FABTECH SHOCK DROP BRACKETS. THE DIRT LOGIC SHOCKS WILL MOUNT DIRECTLY INTO THE FACTORY UPPER AND LOWER SHOCK MOUNTS

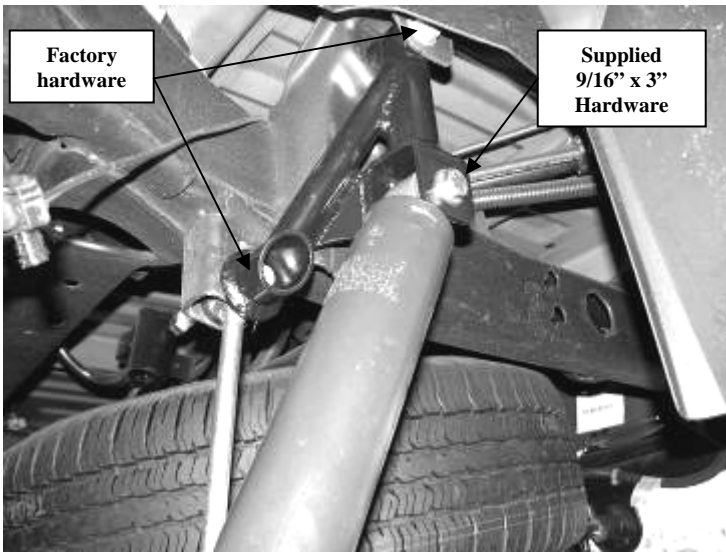
13. Repeat step twelve on the passenger side of the truck.
14. Place a floor jack under the rear axle. Attach your coil spring compressor onto the new rear coil spring and compress the coil 1"-2". Set the upper coil insulator on top of the coil spring and position the top of the coil into the frame pocket. Push the bottom of the coil spring onto the axle pad and raise the floor jack under the axle to hold the coil spring in position. Remove the coil spring compressors. Repeat this with the opposite coil spring. **USE CAUTION WHEN WORKING WITH COIL SPRING COMPRESSORS, THEY CAN BE UNDER EXTREME LOAD. SEE PHOTOS BELOW**



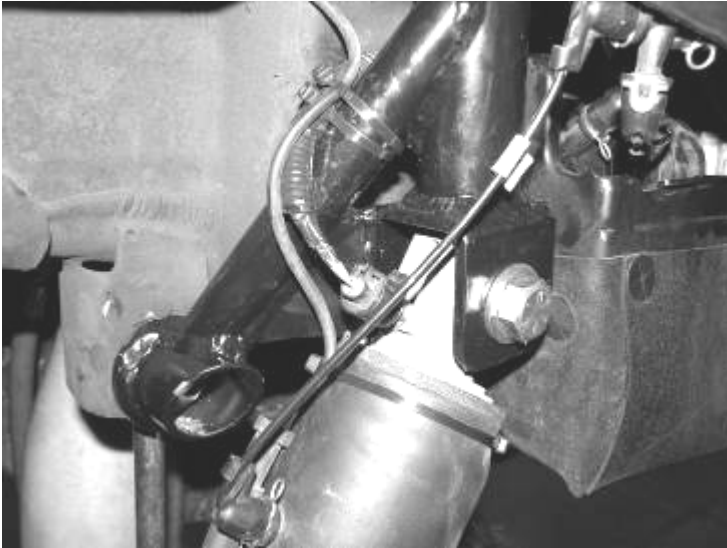
TRUCKS EQUIPPED WITHOUT AUTORIDE, FOLLOW STEP FIFTEEN, SKIP STEP SIXTEEN - EIGHTEEN

TRUCKS EQUIPPED WITH AUTORIDE, FOLLOW STEP SIXTEEN - EIGHTEEN AND SKIP STEP FIFTEEN

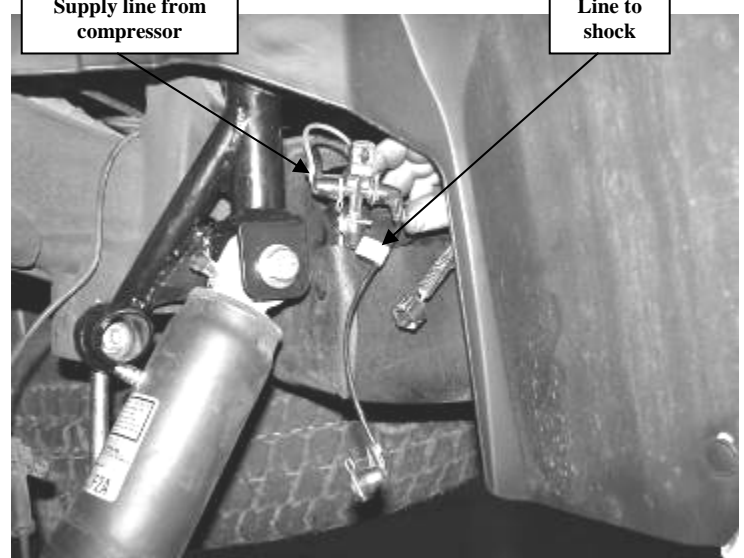
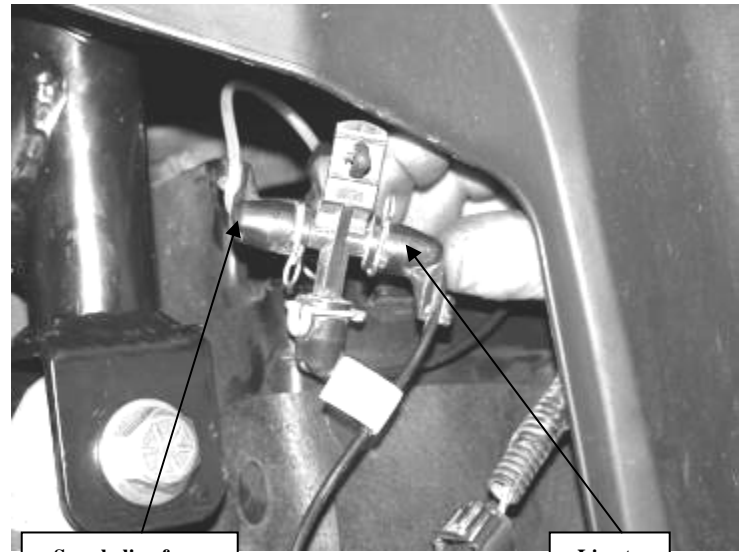
15. Reinstall the factory shocks onto the lower axle mounts with the factory hardware and into the new dropped upper mount using the supplied 9/16" x 3". Torque to 75 lbs. SEE PHOTO ON NEXT PAGE



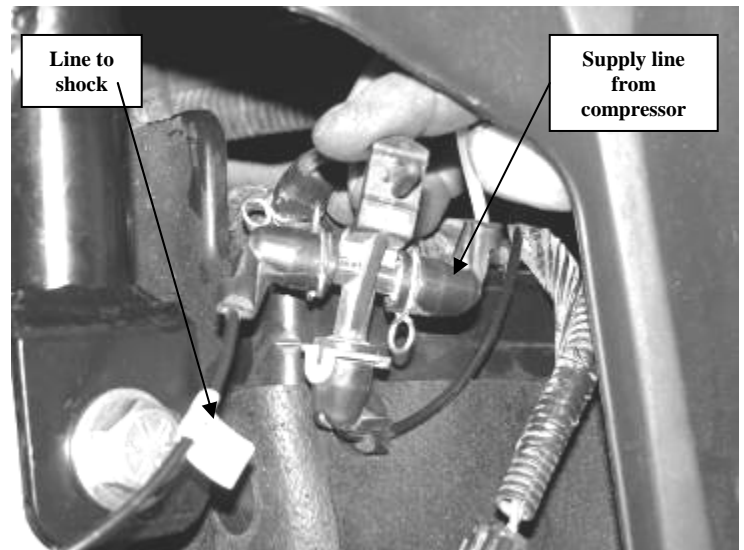
16. Working from the driver's side, electrical plug. Follow the electrical plug to the plastic loom, carefully open the loom and ONLY remove the ABS wires from it back approximately 10 inches. Route the plug and line down to the shock and plug in. SEE PHOTO BELOW

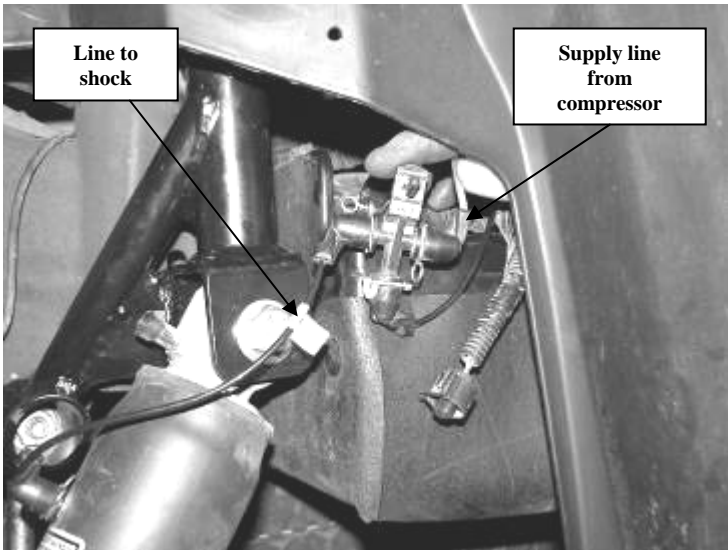


17. Remove the air line manifold from its connection point in the rear wheel well. Bring the manifold forward just behind the rear shock. The supply line needs to be swapped on the manifold with the line to the driver side shock. Remove the clips from the ends and swap the two lines. Use a drill with a 15/64" drill bit and drill a hole into the plastic liner and insert the manifold into it. Use two of the supplied 8" zip ties and attach the ABS & Electrical lines to the shock extension. Use two of the supplied 14" zip ties and attach the ABS line to the shock ABOVE THE SHOCK BLADDER. SEE PHOTOS



Photos above show factory routing of air lines into manifold

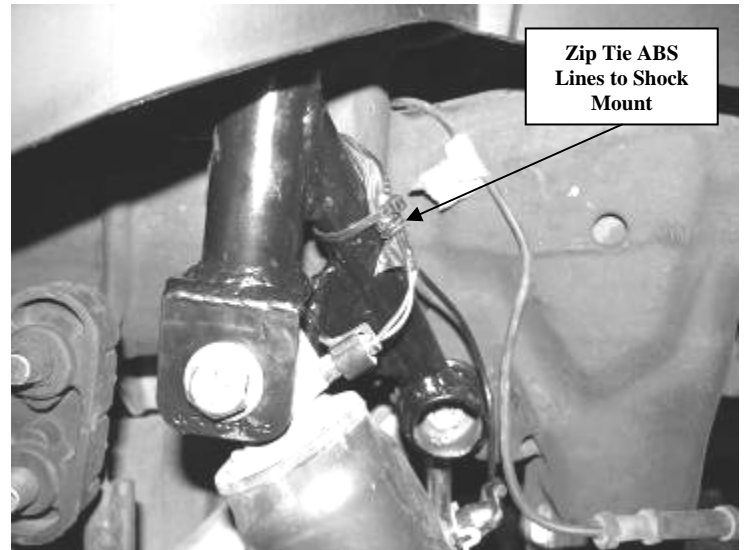




Line to shock

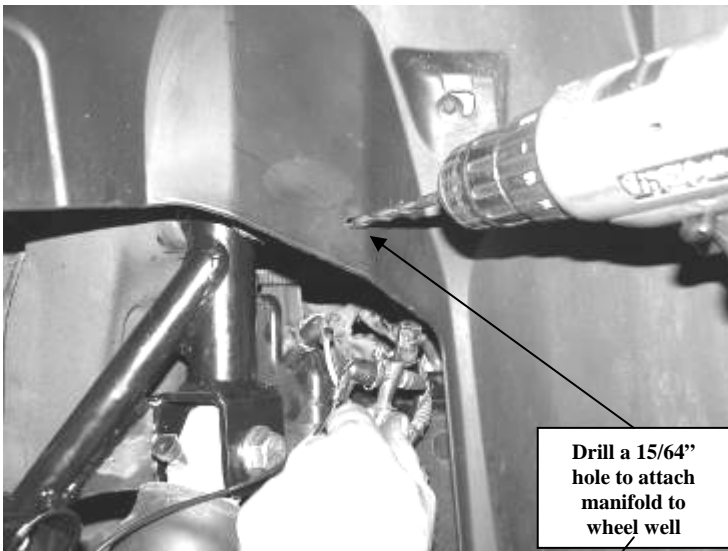
Supply line from compressor

Photos above show changed routing of air lines into manifold

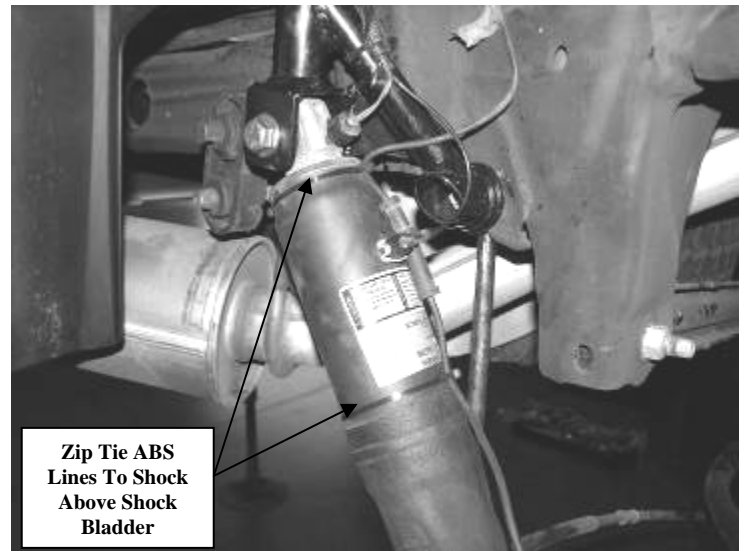


Zip Tie ABS Lines to Shock Mount

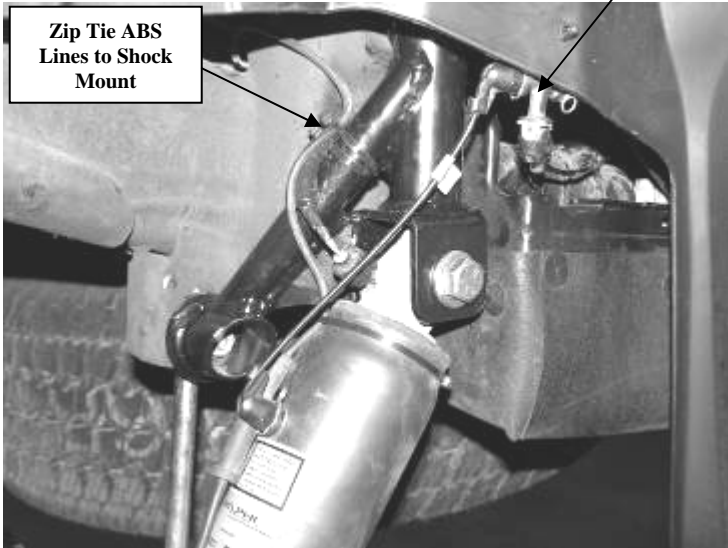
Passenger Side Shown above and below



Drill a 15/64" hole to attach manifold to wheel well



Zip Tie ABS Lines To Shock Above Shock Bladder

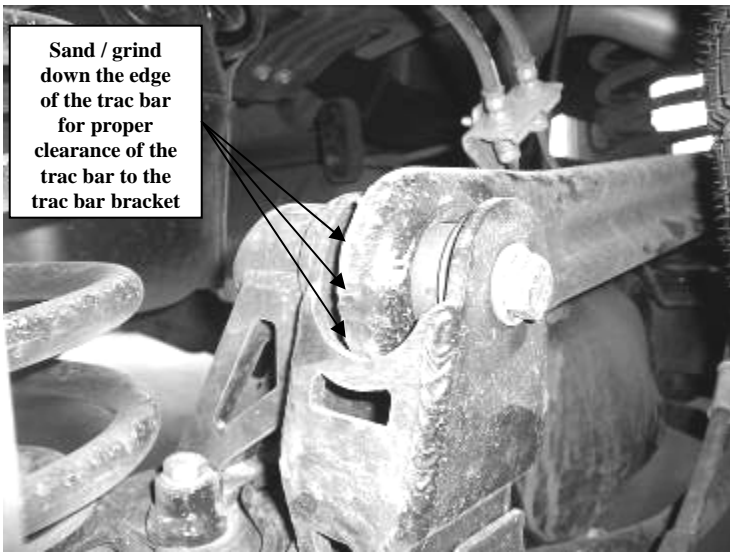


Zip Tie ABS Lines to Shock Mount

18. Repeat steps sixteen and seventeen on the passenger side (there is no air line manifold on the passenger side)

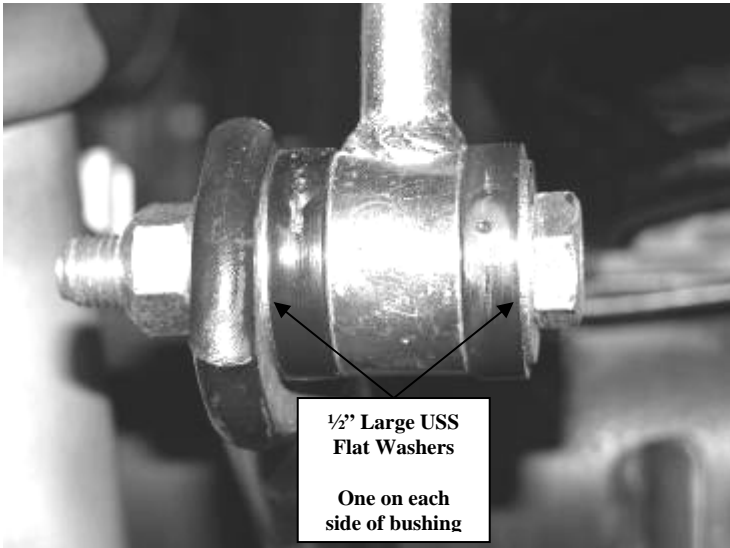
RESUME INSTALL OF ALL KITS

19. Remove the 9/16" x 4" bolt from the trac bar bracket and install the trac bar into the bracket (some trucks require sanding the edge / flashing off of the end of the trac bar for fitment into the new bracket). Torque to 75 lbs. SEE PHOTO ON NEXT PAGE



Sand / grind down the edge of the trac bar for proper clearance of the trac bar to the trac bar bracket

20. Connect the bottom of the sway bar end link onto the sway bar using the supplied 12mm-1.75 x 75 bolts, 1/2" large flat washers and nylock nuts. Install the brake line extension tab using the original bolt and the supplied 5/16" hardware. SEE PHOTOS BELOW AN IN NEXT COLUMN.



1/2" Large USS Flat Washers
One on each side of bushing



21. Reinstall the rear tires and torque the lugs to factory specifications. The factory torque specifications can be found in your owner's manual.
22. Remove the jack stands and set the truck back onto the ground. Torque the Upper and Lower Link arm bolts to 100 ft. lbs. Check the torque on all the rest of the fasteners.
23. Check front-end alignment and set to factory specifications.

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 manufacturers 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.

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