



Installation Instructions



6" LONG ARM LIFT SYSTEM

2003 – 2008 DODGE RAM 2500 & 3500 4WD

2006 – 2008 2500 MEGA CAB 4WD

Fabtech Motorsports
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**6" LONG ARM LIFT SYSTEM
2003 – 2008 DODGE RAM 2500 & 3500 4WD
2006 – 2008 2500 MEGA CAB 4WD**

| FT44159 Hardware Kit - | | |
|-------------------------------|-------------------------------------|--------------------|
| Qua | Description | Location |
| 4 | 7/16" – 14 X 1" Hex Bolt | Swy Bar Drop Brkt. |
| 4 | 7/16" - 14 C-Lock Nut | |
| 8 | 7/16" SAE Flat Washer | |
| 4 | 7/16" - 14 X 1 1/4" Hex Bolt | End Link Brkt. |
| 1 | 7/16" -14 C-Lock Nut | |
| 4 | 7/16" SAE Flat Washer | |
| 2 | 1/2"-13 x 3" Bolt | Swy Bar End Link |
| 2 | 1/2"-13 C-Lock Nut | |
| 4 | 1/2" SAE Flat Washer | |
| 2 | 1/2"-13 x 3" Button Head Bolt | |
| 4 | 1/2" - 13 X 1 1/4" Hex Bolt | Brake Line Brkts. |
| 4 | 1/2" - 13 C-Lock Nut | |
| 8 | 1/2" SAE Flat Washers | |
| 6 | 1/2" - 13 X 4 1/2" Hex Bolt | Frame Pockets |
| 4 | 1/2" - 13 C-Lock Nut | |
| 10 | 1/2" SAE Flat Washer | |
| 2 | 1/2" - 13 X 1 1/4" Button Head Bolt | Frame Pockets |
| 2 | 1/2" SAE Flat Washer | |
| 4 | 1/4"-28 90 degree grease fitting | |

| FT44159 Hardware Kit - | | |
|-------------------------------|------------------------------|--------------------|
| Qua | Description | Location |
| 4 | 14MM - 2.0 X 180MM Hex Bolt | Trans. Crossmember |
| 4 | 14MM - 2.0 C-Lock Nut | |
| 8 | 14MM Flat Washer | |
| 4 | 3/4"- 10 X 4 1/2" Hex Bolt | Link Arms |
| 4 | 3/4" - 10 C-Lock Nut | |
| 8 | 3/4" SAE Flat Washer | |
| 1 | 9/16" - 12 X 3" Hex Bolt | Trac Bar |
| 1 | 9/16" - 12 C-Lock Nut | |
| 2 | 9/16" SAE Flat Washer | |
| 1 | 14mm - 2.0 X 80mm Hex Bolt | |
| 1 | 14mm Flat Washer | |
| 1 | 7/16" - 14 X 1 1/4" Hex Bolt | Trac Bar Bracket |
| 1 | 7/16" SAE Flat Washer | |
| 1 | 7/16" Split Lock Washer | |
| 2 | 5/16"-18 X 3" Hex Bolt | Bump Stop Mount |
| 2 | 5/16"-18 C-Lock Nut | |
| 4 | 5/16" Flat Washer | |
| 2 | 1/2"-13 X 1 1/4" Hex Bolt | Bmp Stop Supp.Tube |
| 2 | Flat Washer | |
| 2 | Split Lock Washer | |

YOU MUST INSTALL THE PROPER TRANSMISSION BRACKET WITH THIS KIT. SEE LIST BELOW FOR PROPER APPLICATION. CONTACT FABTECH FOR BRACKET AVAILIBLTY.

| | | | |
|-----------------|-----------------------------------|-----------------|-----------------------------|
| FTS93003 | Diesel (5.9L) 06-07 Auto 2500 4wd | | |
| FTS93004 | Gas 03-05 Auto 2500 4wd | FTS93007 | Gas 06-07 Auto 2500 4wd |
| FTS93005 | Diesel 03-05 Auto 2500 4wd | FTS93008 | Diesel (6.7L) 2007 Auto 4wd |



**6" LONG ARM LIFT SYSTEM
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2006 – 2008 2500 MEGA CAB 4WD**

TOOL LIST: (NOT INCLUDED)

- FLOOR JACK
- JACK STANDS
- ASSORTED METRIC AND S.A.E SOCKETS, & ALLEN WRENCHES
- PITMAN ARM PULLER
- GREASE GUN
- DIE GRINDER WITH CUT OFF WHEEL
- DRILL w/ ASSORTED DRILL BITS

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

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

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.

THIS KIT MUST BE INSTALLED WITH A FABTECH 6" LIFT COIL SPRING KIT, FRONT SHOCKS AND, REAR SHOCKS, OR DIRT LOGIC COILOVER CONVERSION AND REAR SHOCKS.

THIS SYSTEM COMES WITH A 4" LIFT BLOCK FOR THE REAR, DUE TO DIFFERENT CAB & MOTOR CONFIGURATIONS YOU MAY NEED TO CONTACT YOUR FABTECH DEALER TO PURCHASE A LARGER BLOCK TO LEVEL YOUR TRUCK. MOST MODELS REQUIRE A 4" LIFT BLOCK TO LEVEL THE TRUCK.

DODGE 3/4 TON TRUCKS COME WITH TWO DIFFERENT REAR U-BOLT SIZES. THEY DIFFER DEPENDING ON IF YOUR MODEL IS A GAS OR DIESEL. THE U-BOLTS ARE SUPPLIED IN THE COIL SPRING BOX KIT.

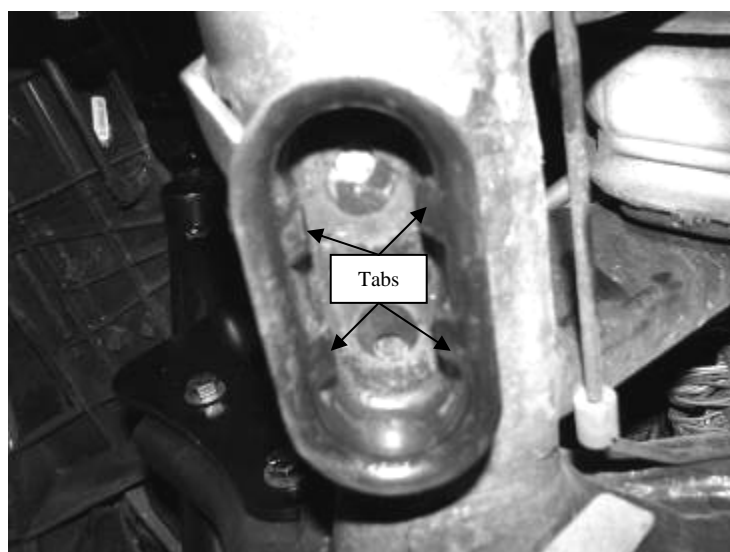
THIS KIT ALLOWS THE USE OF 37X12.50R17 TIRES ON A 17X9 RIM W/ 5" BACK SPACING. SOME MINOR TRIMMING MAY BE REQUIRED ON SOME MODELS.

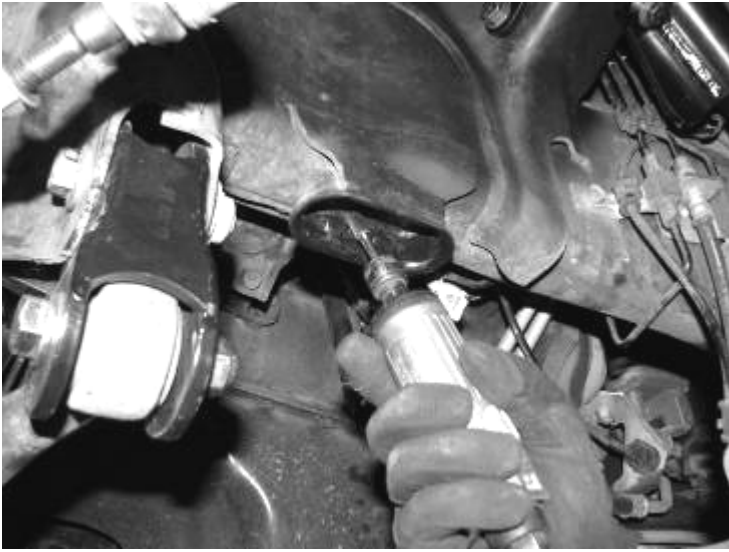
LONG BED MODELS MAY REQUIRE LENGTHENING OF REAR DRIVELINE.

FRONT INSTRUCTIONS:

1. Disconnect the negative terminal on the battery. Jack up the front end of the truck and support the frame rails with jack stands. **NEVER WORK UNDER AN UNSUPPORTED VEHICLE!** Remove the front tires.
2. Support the front axle with 2 floor jacks. Remove the bolts attaching the brake line tabs to the front axle. Remove the front sway bar end links from the axle mount. Remove the bolts securing the sway bar mounts to the frame and set the sway bar aside, save all sway bar hardware.
3. Remove the hardware attaching the drag link to the pitman arm and separate the tie rod end from the pitman arm. Save the hardware.
4. Remove the nut securing the track bar to the frame and separate. Save the track bar hardware.
5. Remove the top nuts on the front shocks and then the lower bolts securing the shock to the axle. Leave the shock loose inside the factory coil spring at this time. Save the lower hardware and discard the upper.
6. Loosen the bolts securing the link arms to the frame and front axle, **DO NOT REMOVE THE BOLTS**. Lower the jacks supporting the front axle and remove the coil springs. Save the upper rubber insulator and discard the coil springs and shocks. **USE EXTREME CARE WHEN WORKING WITH COILS THAT ARE UNDER LOAD!**
7. Locate FT44198BK Track Bar bracket and install into the factory frame track bar mount, (**2008 model trucks will need to drill out the two holes in the drop trac bar bracket to 5/8"**). Attach the new bracket to the original frame hole using the original hardware and leave loose at this time. Using the supplied FT44045 nut tab along with the supplied 7/16" x 1 1/4" bolt, flat washer and split washer attach to the inboard hole of the new track bar bracket to the frame. (**Note on some models this hole will need to be drilled.**) Torque the 7/16" bolt to 83 ft-lbs. and the 9/16" bolt to 184 ft-lbs.
8. Remove the nut securing the pitman arm to the steering box. Using a pitman arm puller, remove the pitman arm from the steering box. Slide the new FT44039 pitman arm onto the steering box shaft, making sure to line up the splines properly. Reinstall the original lock washer and nut and torque to 220 ft-lbs.
9. Remove the original rubber bumpstops from the frame, and locate the factory bumpstop mounting cup on the frame.

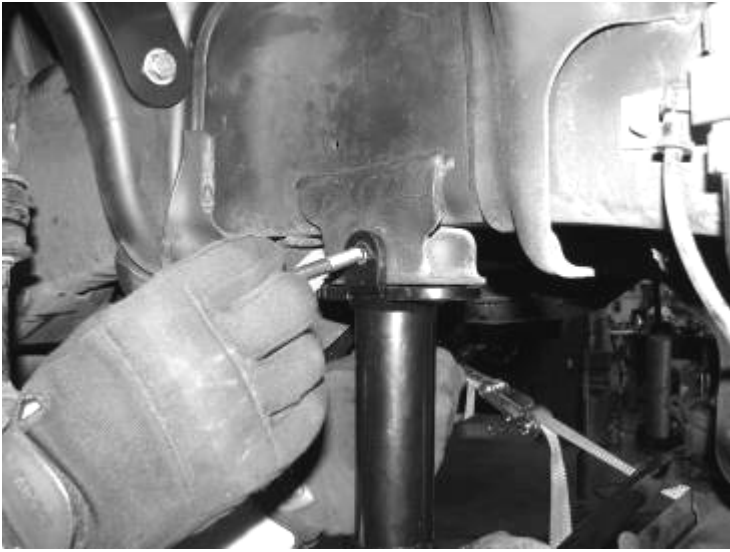
Using a die grinder, remove the retaining tabs on the inside of the mounting cup. SEE PHOTOS BELOW.



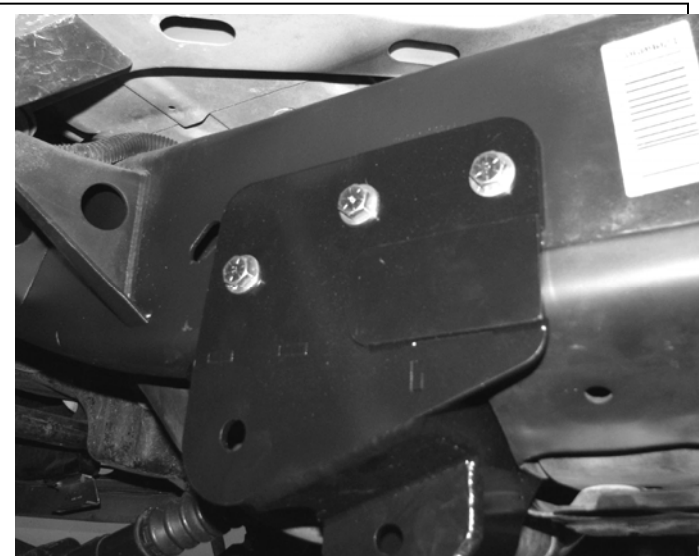
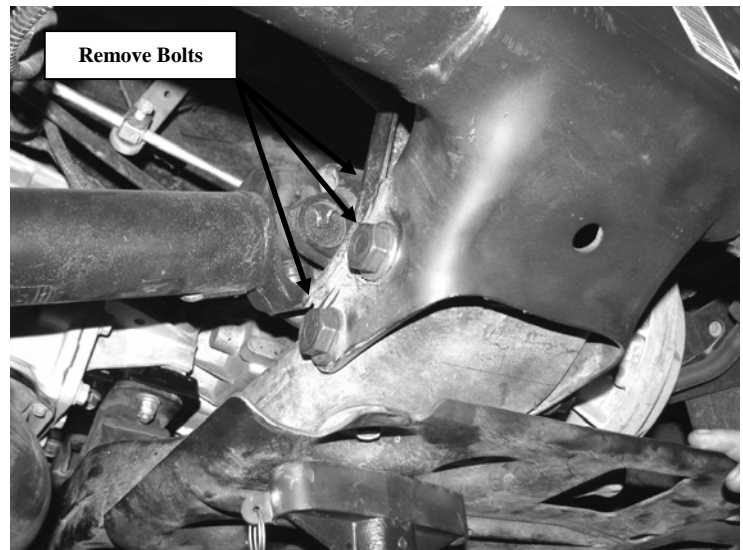


10. Locate FT44099BK Drv. Bump Stop Mount & the supplied 5/16" bolt & hardware and 1/2" x 1 1/4" bolt & hardware. Position the bump stop into the modified factory mounting cup and center the support tube flag centered onto the front crossmember. With the flag centered on the crossmember, mark the hole location in the flag to the crossmember & in the bump stop cup. With the bumpstop in the cup, drill a 5/16" hole all the way through the cup. Remove the bump stop and drill a 1/2" hole into the crossmember. Locate the FT44135 Nut Tab and attach the bumpstop to the crossmember & bump stop cup. Torque the 1/2" bolt to 127 ft-lbs and the 5/16" to **29 ft-lbs. Locate FTS88 bump stop and screw onto the new mount. SEE PHOTOS BELOW, IN NEXT COLUMN AND ON NEXT PAGE.





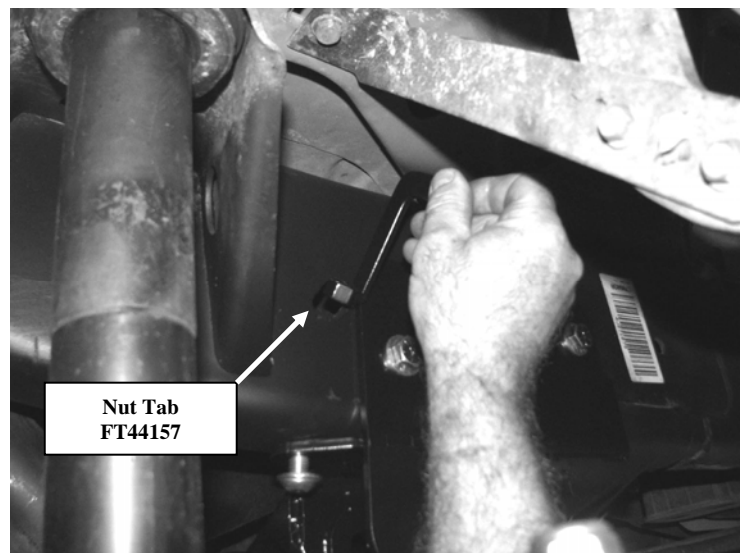
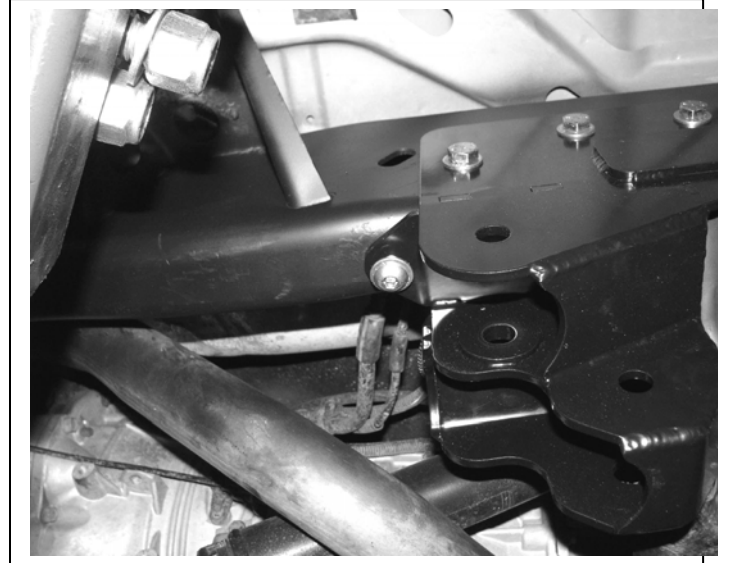
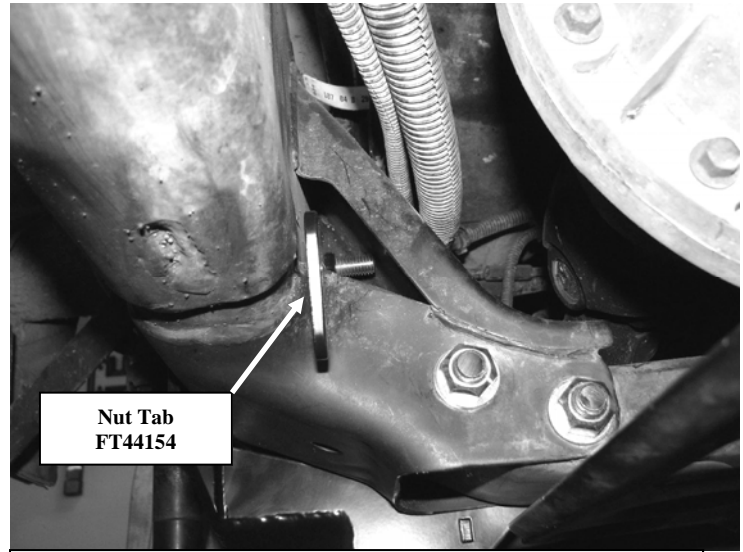
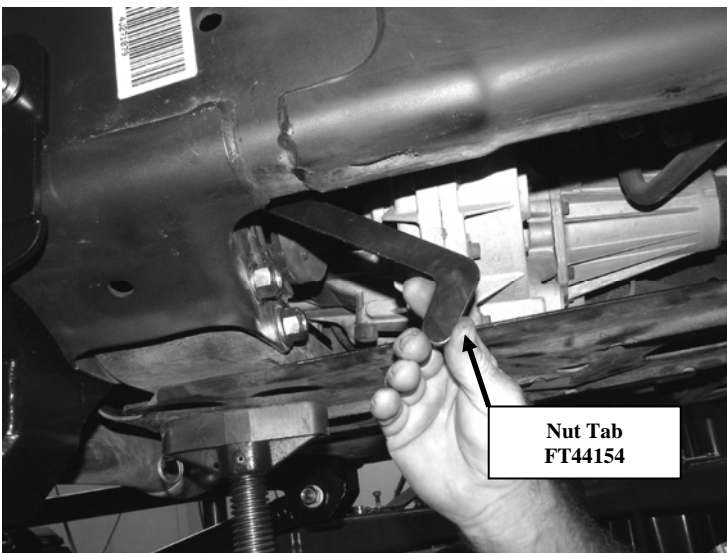
11. Remove the bolts attaching the lower link arms to the front axle and then the frame. Save the factory bolts from the axle mount and discard the bolts from the frame mount along with the links.
12. Remove the bolts attaching the upper link arms to the front axle and then the frame. Save the factory bolts from the axle mount and discard the bolts from the frame mount along with the links. **ON PASSENGER SIDE OF THE TRUCK, THE UPPER LINK ARM BOLT AT THE FRAME MOUNT WILL NEED TO BE CUT OUT FOR REMOVAL.**
13. Locate the factory Link Arm Mounts on the frame. Using a die grinder with a cut off wheel, remove the mount from the frame then clean up the area with a sanding disc and paint all bare metal areas.
14. Support the transmission crossmember and remove the two bolts that secure the crossmember to the frame. Discard the hardware. **SEE PHOTO IN NEXT COLUMN.**



15. Locate FT44184BK driver side link arm pocket and supplied 14mm hardware. Slide the pocket onto the frame so that it butts up against the crossmember and fits over the weld on the frame. Tighten the hardware to snug the pocket to the frame and crossmember. Mark and drill the four holes in the frame to 1/2". Remove the pocket and drill the front side of the three holes in the side of the frame out to 1". Do not drill this 1" hole all the way through the frame. **CHECK THE INSIDE OF THE FRAME RAIL BEFORE DRILLING. USE CARE NOT TO HIT ANY LINES OR WIRES.** SEE PHOTO BELOW.

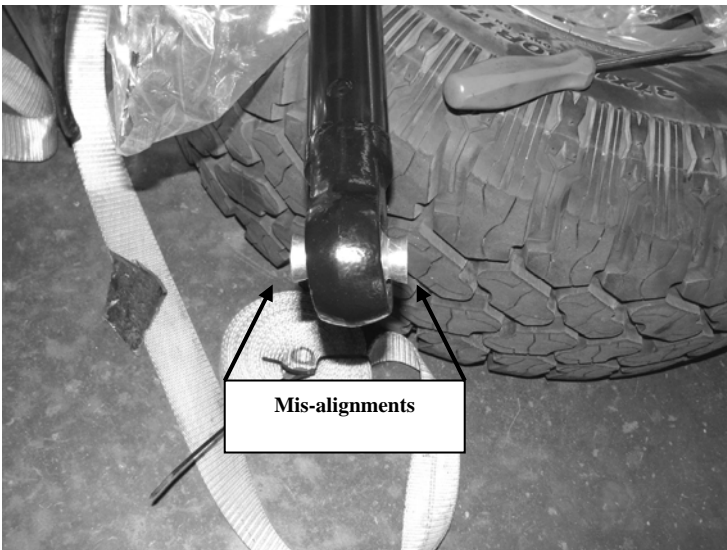
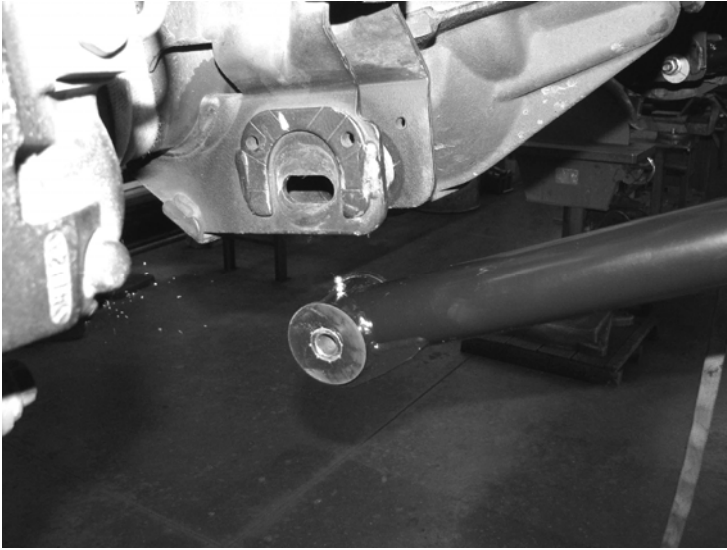


16. Locate and insert the three FT177 frame sleeves into the three holes in the side of the frame. Re-install the pocket using the supplied 1/2" hardware. The rear bolt uses a flat washer on the bolt on both sides of the frame and nut tab FT44154. The front of the pocket gets the 1/2" button head bolt with one flat washer and nut tab FT44152. Torque the 1/2" hardware to **127 ft-lbs and the 14mm hardware to **215 ft-lbs. SEE PHOTOS ON NEXT PAGE.



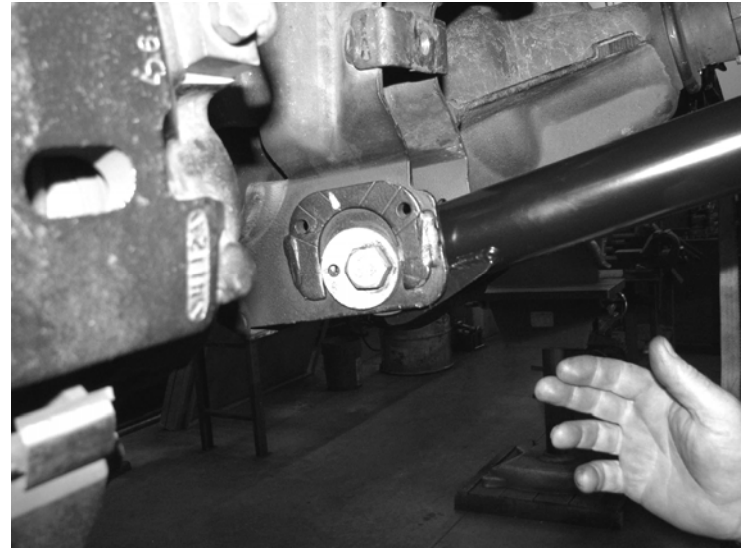
17. Repeat steps nine through sixteen on the passenger side of the truck.
18. Locate FT44148BK upper link arms. (**This link is shorter than the lower link**). Press two FT1037 small bushings into the end of the upper link arm. Locate FT76 upper link arm

arm sleeve and press into the bushings. Use the supplied FTLUBE on the surfaces of the bushings and sleeves before installing. Install one of the supplied grease fitting into each barrel on the link arms. Locate two of the FTS43 misalignments and insert into the uni-ball. SEE PHOTOS ON NEXT PAGE.

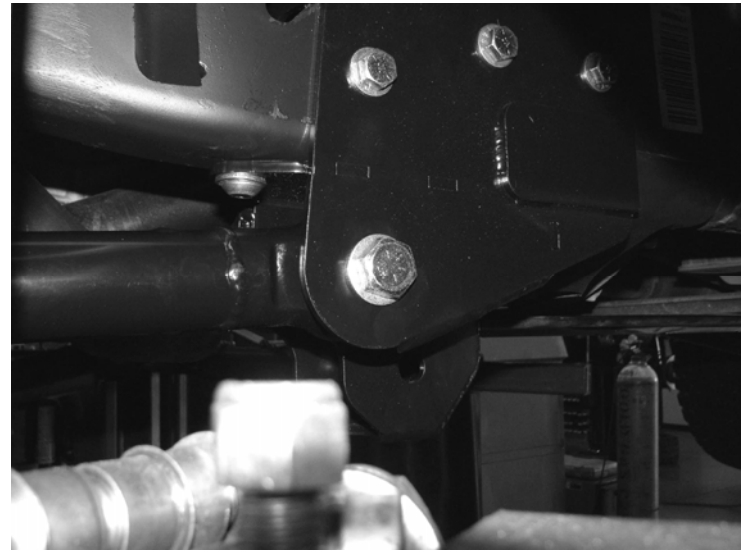


19. Locate FT44149BK lower link arms. (**This link is longer than the upper link**) Press two FT1038 large bushings into the end of the lower link arms. Locate FT77 lower link arm sleeve and press into the bushings. Use the supplied FTLUBE on the surfaces of the bushings and sleeves before installing. Install one of the supplied grease fittings into each barrel on the link arms. Locate the remaining two FTS43 mis-alignments and insert them into the uni-ball.
20. Locate the assembled FT44149BK lower link arms. Attach the link arms to the axle mount first, using the original hardware, then to the new frame pockets using the supplied 3/4" hardware. The uni-ball goes into the new frame pocket. **NOTE: When installing the link arms onto the truck, make sure the gussets on the lower arms facing down. Also when reinstalling the alignment cam bolts in the lower axle pivot, make sure they are set in the center of**

of their adjustment. Leave the link arm bolts loose at this time. SEE PHOTO IN NEXT COLUMN.



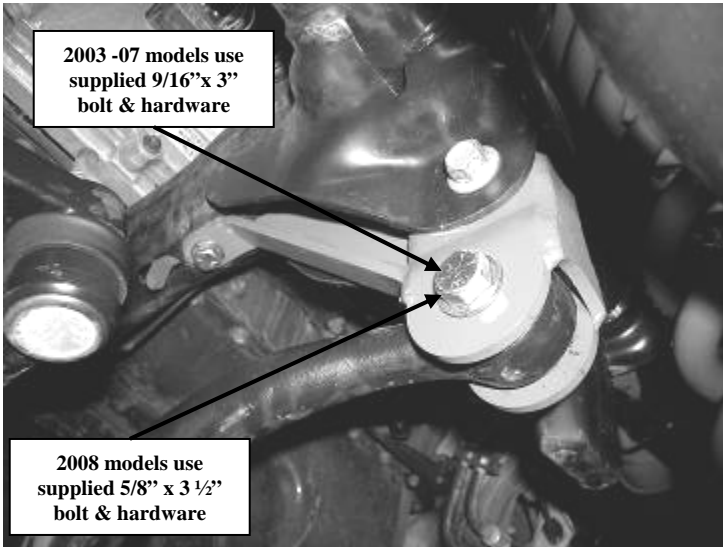
21. Locate the assembled FT44148BK upper link arms. Attach the link arms to the new frame pocket using the supplied 3/4" hardware (DO NOT ATTACH TO AXLE MOUNT AT THIS TIME). The uni-ball goes into the new frame pocket. **Note: When installing the upper links, make sure that the gussets are facing up.** Leave the link arm bolts loose at this time. SEE PHOTO BELOW.



22. Take one of the new coil springs FT44102P and FT44102D and locate the top of the coil spring (smaller diameter end). Locate FTS7189 front shocks (not supplied with this kit) and place one shock inside each coil spring **BEFORE INSTALLING ON THE TRUCK.** The shocks must be placed inside the coil spring before it is installed. Place the original coil spring insulator on top of the coil spring and place the coil spring onto the front axle. Align the coil spring in the upper and lower pockets and raise the jacks supporting the front axle. Raise the axle just enough to compress the coil spring 1/4". **USE CARE TO NOT LIFT THE TRUCK OFF OF THE SUPPORT STANDS.** Attach

STANDS. Attach the new upper link arm to the axle using the original hardware. Torque the all of the link arm bolts to 95 ft-lbs.

23. Connect the track bar to the new drop bracket using the supplied 9/16" x 3" bolt, nut, and washers (**2008 model trucks will need to drill out the two holes in the drop track bar bracket to 5/8" & use the supplied 5/8" x 3 1/2" hardware**). NOTE: This may need to be done when the truck is back on the ground. SEE PHOTO BELOW.

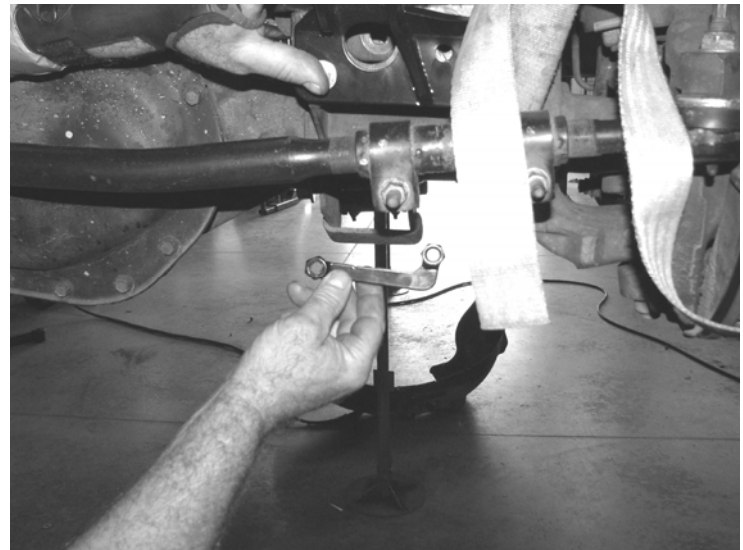


24. Attach the front shocks to the upper and lower mounts. You will use the supplied hardware for the upper mount and factory lower hardware. Torque the upper hardware to 35 ft-lbs. and the lower hardware to 60 ft-lbs.
25. Connect the drag link to the new drop pitman arm. Torque the original nut to 225 ft-lbs using thread locking compound. SEE PHOTO BELOW.

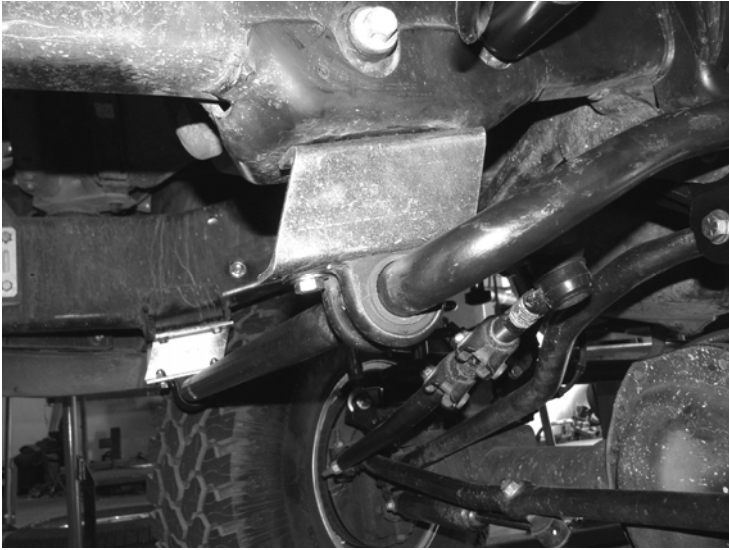


26. Using a die grinder with a cut off wheel remove the factory Sway Bar End Link mount from the lower coil spring mount. Using a sanding disc, clean up the area and then paint all bare metal areas.

27. Locate FT44155BK Sway Bar Mount, FT44157 Nut Tab, and 7/16" hardware. Attach the new Sway Bar Mount to the lower coil spring mount using the 7/16" hardware and the Nut Tab. Mark the outer hole, remove the new mount, drill out the remaining hole and re-install the mount. ** Torque to 83 ft-lbs. SEE PHOTOS BELOW



28. Locate FT3400-112D & FT3400-112P Sway Bar Drop Brackets and the factory sway bar hardware. Attach the new brackets in the factory location so the sway bar will be offset to the front of the truck with the factory hardware. Mount the Sway Bar to the new brackets using the supplied 7/16" hardware. **Torque to 83 ft-lbs. THE SWAY BAR SHOULD BE OFFSET TO THE FRONT OF THE TRUCK AND ADJUSTED SO THAT THE END LINKS CLEAR THE COIL SPRING. SEE PHOTOS ON NEXT PAGE.



factory mount on the axle and the brake line bracket to 1/2". Attach the Fabtech bracket to the factory mount on the axle with the 1/2" bolts. Attach the brake line bracket to the new Fabtech bracket. Torque to **127 ft-lbs. SEE PHOTOS BELOW & ON NEXT PAGE.



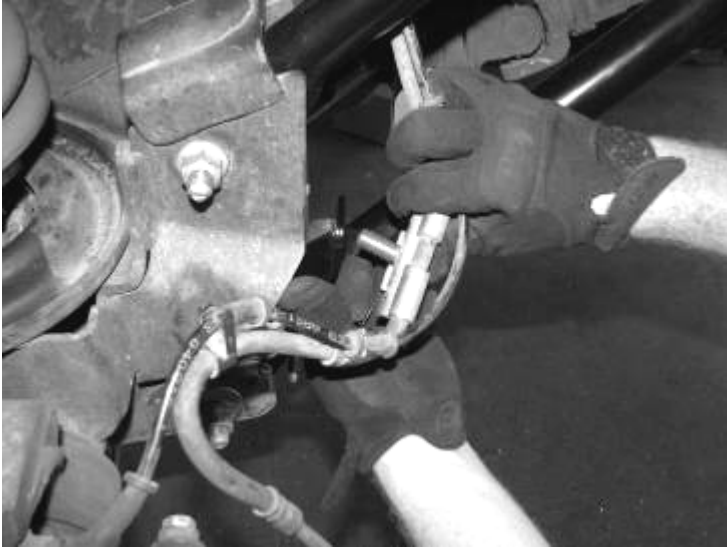
29. Locate FT20274 Billet Sway Bar End Links. Attach one FTS98003 heim joint and one jam nut to each end link. You will want to thread the jam nuts all the way down onto the heim joint and the heim all the way into the billet end link. Insert two of the supplied FTS43 misalignments into the heim, and the heim into the new sway bar end link mount. Attach using the supplied 1/2" -13 x 3" bolt, flat washers, and nut.



30. Locate the supplied 1/2" button head bolts and the sway bar bushing along with the cup washers. Attach the bushing end of the sway bar end links to the sway bar, leave loose at this time. **At times this may be easier to attach when the truck is completed and on the ground.** SEE PHOTO BELOW.



31. Working with both sides, locate FT44137 Brake Line Bracket & the supplied 1/2" x 1 1/4" hardware. Drill the



32. Reinstall the front tires and torque the lug nuts to factory specifications. The factory torque specifications can be found in your owner's manual. Set the truck back onto the ground. **WHILE TURNING THE STEERING WHEEL FULLY IN EACH DIRECTION, MAKE SURE THERE IS AMPLE CLEARANCE BETWEEN THE WHEELS, TIRES, LINK ARMS, BRAKE LINES AND ABS WIRES.**

Install appropriate transmission drop bracket (not included with this kit) at this time as per the instructions included with that kit.

REAR INSTRUCTIONS

33. Jack up the rear end of the vehicle and support the frame rails with jack stands. Supporting the rear differential remove and discard the rear shocks and u-bolts. Lower the axle down slowly. Use care not to over extend the brake hoses.
34. Locate the supplied 4" blocks and FT160 Block Pin Sleeve. Use a drill with a 3/4" drill bit and drill out the hole in the bottom of the block. Install the Pin Sleeve into the hole in the axle perch and install block with its locating pin into the new sleeve. Install with the integrated bump stop towards inside of vehicle. Using the supplied u-bolts, nuts and washers from the Coil Spring box, align axle, lift block, and springs and torque the u-bolts to 90 ft-lbs. The short end of the block should face to the front of the vehicle. SEE PHOTOS BELOW AND IN NEXT COLUMN.





NOTE:




The Dodge 3/4 Ton truck came with two different rear U-Bolt sizes. They differ depending on if your model is GAS or DIESEL. The appropriate U-Bolts are supplied in the Coil Spring Box Kit.

35. Install new Fabtech shocks Performance or Dirt Logic 2.25" (not supplied with this kit) with the factory hardware and torque upper and lower bolts to 65 ft-lbs.
36. Recheck all bolts for proper torque. Recheck brake hoses and lines for proper clearances.
37. 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.
38. Check front-end alignment and set to factory specifications. Re-adjust headlights.
39. Recheck all the hardware on the suspension that was used for correct toque.

**** USE THE SUPPLIED THREAD-LOCKING COMPOUND ON ALL HARDWARE.**

S.A.E. Bolt Torque Specification Chart

Grade 5 Grade 8 Metric

| Standard | | | Metric | | |
|----------|----------|----------|--------|-----------|------------|
| | Grade 5 | Grade 8 | | Grade 8.8 | Grade 10.9 |
| SIZE | ft. lbs. | ft. lbs. | SIZE | ft. lbs. | ft. lbs. |
| 1/4" | 10 | 14 | M-6 | 7 | 12 |
| 5/16" | 21 | 29 | M-8 | 17 | 29 |
| 3/8" | 37 | 52 | M-10 | 35 | 58 |
| 7/16" | 59 | 83 | M-12 | 65 | 100 |
| 1/2" | 90 | 127 | M-14 | 100 | 160 |
| 9/16" | 129 | 184 | M-16 | 150 | 240 |
| 5/8" | 179 | 254 | M-18 | 200 | 300 |
| 3/4" | 317 | 450 | M-20 | 300 | 400 |

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.

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.