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## **INSTALLATION INSTRUCTIONS**



### **6" PERFORMANCE SUSPENSION SYSTEM**

**2006-07 Dodge 2wd 6" Performance Kit**

**Non ESP Models Only**

**Fabtech Motorsports 4331 Eucalyptus Ave. Chino, Ca. 91710**  
**Tech Line 909-597-7800 Fax 909-597-7185 Web [www.fabtechmotorsports.com](http://www.fabtechmotorsports.com)**



**4331 EUCALYPTUS AVE. ~~ CHINO, CA 91710**  
**909-597-7800 FAX 909-597-7185**  
**2006-07 DODGE 2WD NON ESP MODELS ONLY**  
**6" PERFORMANCE SUSPENSION KIT**  
**FTS23012BK & FTS23013BK**

	FTS23012BK	06 Dodge 2wd Box 1
Qu a	Part #	Description
1	FTS44083D	Drive Spindle
1	FT44083P	Pass. Spindle
2	FT44066	Tie Rod End
2	FT44003BK	6" Coil Spring
2	FT44009	Coil Spring Isolator
2	FT44075	Sway Bar End Link
1	FT44128	Hdwr Sub-Assembly Kit
2	FT44073	Lower Sway Bar Mount

	FT44128	Hdwr Sub-Asmby Kit
Qu a	Part #	Description
2	FTS98003	3/4" Heim
4	FTS43	Mis-Alignments
2	FT23012i	Instruction Sheet
1	FTAS12	Fabtech Sticker
1	FTAS16	Driver Warning
1	FTREGCARD	Reg. Card

	FTS23013BK	06 Dodge 2wd Box 2
Qu a	Part #	Description
1	FT44088BK	Front Xmember 2/4wd 06'
1	FT44089BK	Rear Xmember 2/4wd 06'
2	FT44086BK	Frnt. Bump Stop
2	FT20023BK	Impact Tube
2	FT30064BK	Impact Tube Bracket
2	FTBK3	Lift Blocks
4	FT734U	U-Bolts
1	FT44119	Hdwr Sub-Assembly Kit
1	FT44101	Hardware Kit
2	FT44008BK	Rear Bumpstop Drop Brkt

	FT44119	Hdwr Sub-Assembly Kit
Qu a	Part #	Description
1	FT44069	Impact Nut Tab Drv
1	FT44070	Impact Nut Tab Pass
1	FT44071	Frnt. Brake Line Tab Drv
1	FT44072	Frnt. Brake Line Tab Pass
1	FT44101	Hardware Kit
1	FT1044	Bushing Kit
1	FT90084	Sway Bar Bushing Kit
1	FT916H	U-Bolt Hardware

	FT44101	Hardware Kit	Qu a	Description	Location
Qu a	Description	Location			
4	5/8"-11 x 5 1/2" Bolt	Front Crossmembers	2	1/4"-20 x 3/4" Bolt	Frnt Brk Line Drop Brkt
4	5/8"-11 C-Lock Nut		2	1/4"-20 C-Lock Nut	
8	5/8" Washer		4	1/4" SAE Flat Washer	
2	1/2"-13 x 1 1/4" Bolt	Frnt Bumpstop Mounts	4	7/16"-14 x 3 1/2" Bolt	Impact Struts
2	1/2" Washer		4	7/16"-14 C-Lock Nut	
2	1/2" Split Washer		8	7/16" SAE Flat Washer	
2	1/2"-13 x 2 3/4" Bolt	Sway Bar End Links	2	7/16"-14 x 1 1/4" Bolt	Impact Strut Bracket
2	1/2"-13 C-Lock Nut		2	7/16" SAE Flat Washer	
4	1/2" SAE Flat Washer		2	7/16" Split Washer	(use with nut tab)
2	3/4"-16 Jam Nut		2	1/4"-20 x 3/4" Bolt	Front ABS @ Knuckle
2	1/2"-13 x 3" Btn Bolt		2	1/4" SAE Flat Washer	
2	3/8"-16 C-Lock Nut	Sway Bar Bracket	2	1/4" Split Washer	
2	3/8" Washer		2	1/4" x 1/4" Adel Clamp	
4	8" Zip / Cable Ties	Zip Ties	1	FTLOCK	Thrd-Locking Cmpnd



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2006-07 DODGE 2WD NON ESP MODELS ONLY  
6" PERFORMANCE SUSPENSION KIT  
FTS23012BK & FTS23013BK

**DO NOT ALTER THE FINISH OF THESE COMPONENTS, EXAMPLE- CHROMING, ZINC PLATING OR PAINTING. CHANGING THE FINISH CAN CAUSE STRUCTURAL FATIGUE OF COMPONENTS.**

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

**READ ALL INSTRUCTIONS THOROUGHLY FROM START TO FINISH BEFORE BEGINNING INSTALLATION! IF THESE INSTRUCTIONS ARE NOT PROPERLY FOLLOWED, SEVERE FRAME, SUSPENSION AND TIRE DAMAGE MAY RESULT TO THE VEHICLE.**

**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.**

**SUSPENSION SYSTEM MUST BE INSTALLED WITH FABTECH SHOCK ASBORBERS. FTS7242 (FRONT SHOCKS) FTS7240 (REAR SHOCKS)**

**FABTECH RECOMMENDS A 35/12.50R17 TIRE ON A 17X8 RIM WITH A 4 5/8" BACK SPACING BE USED WITH THIS KIT.**

**\*\* THIS KIT WILL NOT WORK ON STD CAB MODELS. \*\***

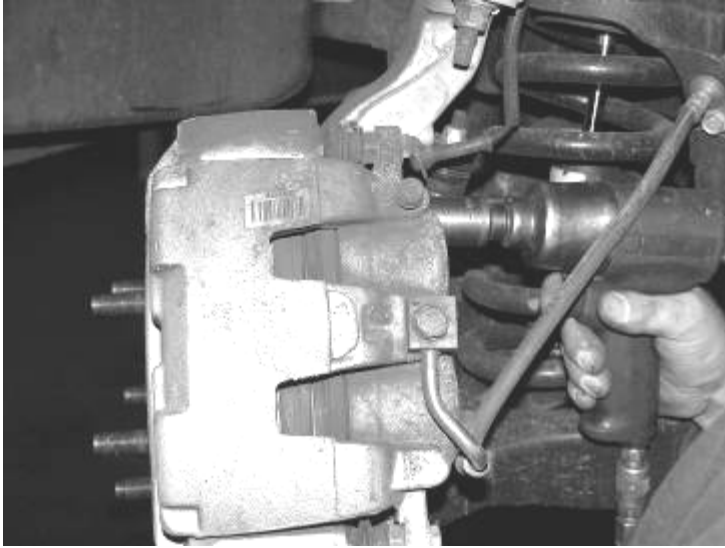
**\*\* THIS KIT WILL NOT WORK ON ESP MODELS. \*\***

**TOOL LIST: (NOT INCLUDED)**

- FLOOR JACK AND JACK STANDS
- ASSORTED METRIC AND S.A.E SOCKETS
- TORQUE WRENCH
- DRILL W/ ASSORTED DRILL BITS
- DIE GRINDER W/ CUT OFF WHEEL
- DIE GRINDER W/ SANDING DISC

**INSTALLATION INSTRUCTIONS:**

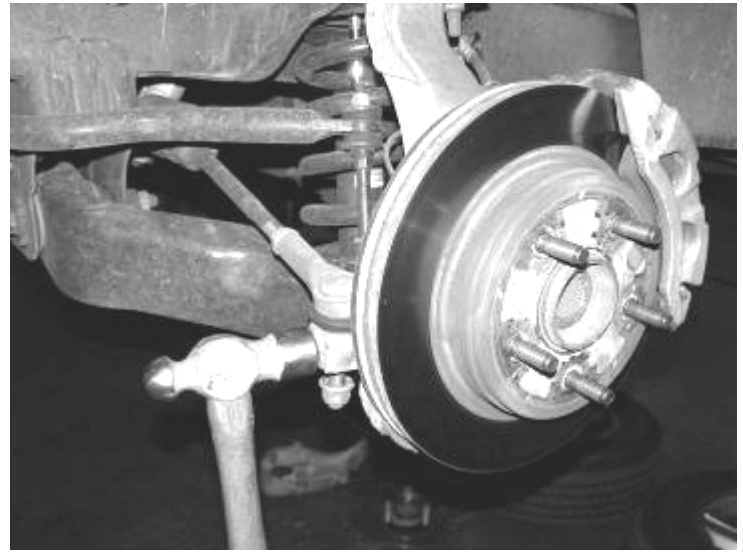
1. Disconnect the negative terminal on the battery. Jack up the front end of the truck and support the frame rails with jack stands. Remove the front tires. **NEVER WORK UNDER AN UNSUPPORTED VEHICLE!**
2. Working from both sides of the truck, disconnect the sway bar end links from the truck and discard with the hardware.
3. Remove the two bolts securing the brake caliper assembly to the spindle, save the bolts. Secure the brake caliper to the frame out of the way. **DO NOT ALLOW THE BRAKE CALIPER HANG FROM THE BRAKE LINE HOSE!** Remove the brake rotor and set aside. SEE PHOTO BELOW



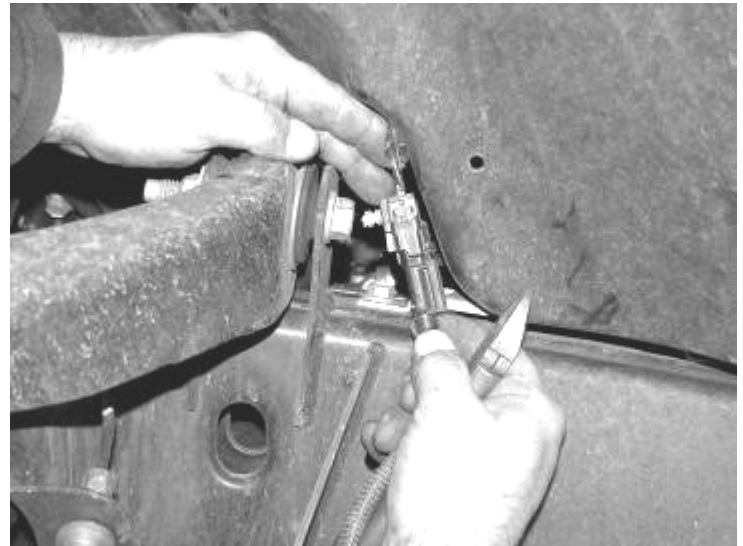
4. Working from the driver's side of the truck, support the lower control arm with a floor jack. Raise the lower control arm enough to compress the coil spring  $\frac{1}{2}$ ". Remove the front shock and discard. Save the lower hardware. SEE PHOTO BELOW



5. Remove the lock nut securing the tie rod end to the spindle. Using a large hammer strike the spindle to break loose the tie rod end. **USE-CARE TO NOT HIT THE THREADS OF THE TIE ROD END.** SEE PHOTO BELOW



6. If the truck is equipped with ABS, remove the ABS wire from under the upper control arm and unplug the ABS wire at the plug behind the fender well. **DO NOT REMOVE THE ABS SENSOR FROM THE HUB.** SEE PHOTO BELOW AND ON NEXT PAGE



7. With the lower control arm still supported by the floor jack, loosen the nuts securing the upper and lower ball

joints to the knuckle, do not remove at this time. With a large hammer strike the spindle next to the upper ball joint to break the ball joints loose from the spindle. Once loose remove the upper ball joint nuts and tilt the spindle outboard of the truck. Save the hardware. SEE PHOTO BELOW



8. Lower the floor jack supporting the lower control arm to relieve the tension on the coil spring. **EXERCISE EXTREME CAUTION WHEN WORKING WITH COIL SPRINGS UNDER LOAD!** Discard the coil spring and remove the upper coil spring insulator. **DO NOT DISCARD THE COIL ISOLATOR, IT WILL BE REINSTALLED ON THE NEW COIL.** SEE PHOTO IN NEXT COLUMN.



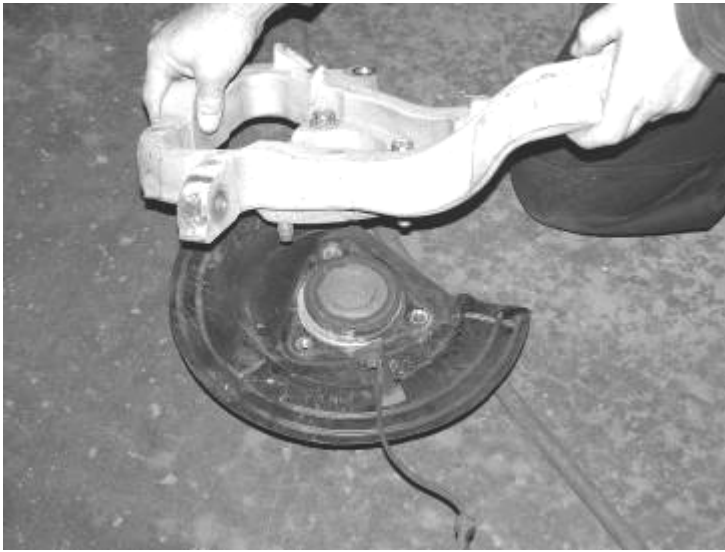
9. Remove the nut from the lower ball joint and strike the spindle with a large hammer to break loose the ball joint from the spindle. Remove and discard the spindle and save the hardware. SEE PHOTO BELOW.



10. Remove and discard the sway bar end link from the lower control arm (**do not remove the sway bar from the truck**). Remove the lower control arm from the truck and save with the hardware, as you will reuse it during installation. SEE PHOTO ON NEXT PAGE



11. Remove the three bolts attaching the hub bearing to the spindle and remove the hub along with the ABS wire if equipped from the truck. Save the hardware. Discard the dust shield. SEE PHOTO BELOW

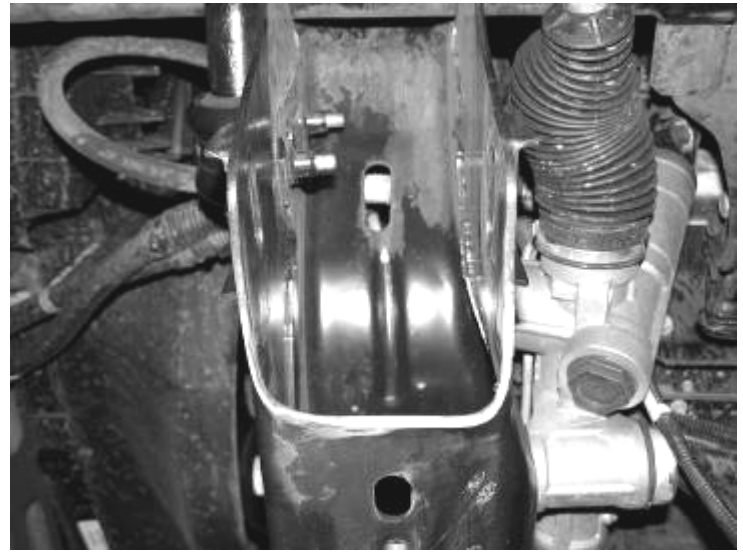


12. Locate the lower control arm bump stop on the frame.  
Remove and save the bump stop. SEE PHOTO BELOW.

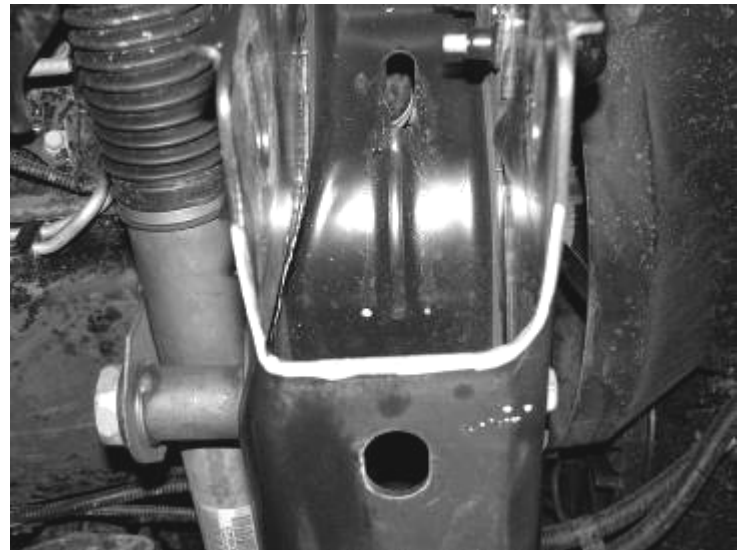


13. Locate the factory front lower control arm pockets. Grind  $\frac{1}{4}$ " section from both pockets as shown in the photo. SEE PHOTOS BELOW

**DUE TO VARIANCES IN EACH TRUCK,  
ADDITIONAL CUTTING / GRINDING MAY BE  
REQUIRED FOR PROPER FITMENT OF THE  
CROSSMEMBERS. USE THESE MEASUREMENTS  
AS A STARTING POINT AND CLEARANCE THE  
FRAME POCKETS AS NEEDED FOR PROPER  
FITMENT OF THE CROSSMEMBERS**



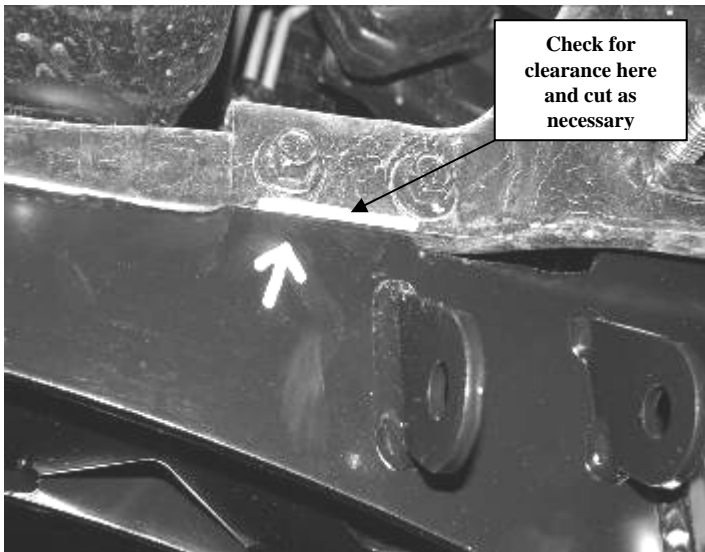
**Drivers Side (Front Crossmember)**



**Passenger Side (Front Crossmember)**

14. Repeat steps three through thirteen on the passenger side of the truck.
15. Locate FT44089 Rear Crossmember and install into the factory rear control arm pockets using the supplied  $\frac{5}{8}$ " x  $5\frac{1}{2}$ " bolt, nut, and washers. Leave Loose. **Note: due to inconsistencies from the manufacture, some trucks may have to have the rear crossmember trimmed on the rear passenger side. If your vehicle needs to have the crossmember cut, use a die grinder with a cut-off wheel and remove about a  $\frac{1}{4}$ " x 2" section away for clearance of the crossmember. Sand and paint any cut areas. SEE PHOTO BELOW**



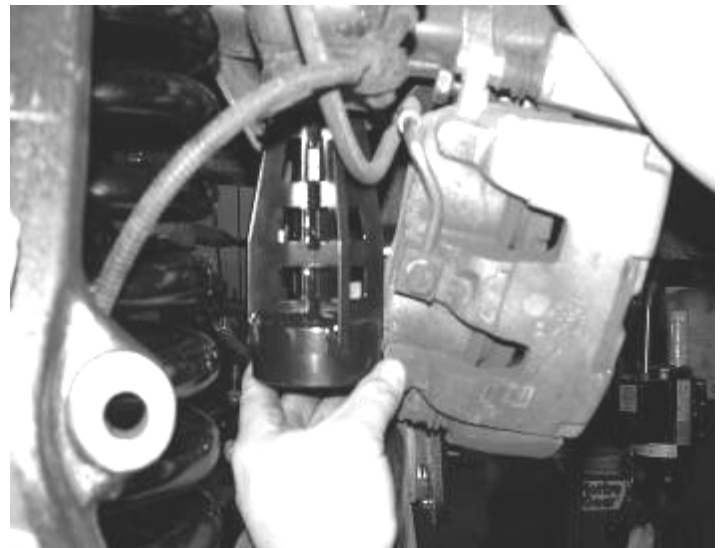


**This crossmember fits and does not require trimming**

16. Locate FT44088 Front Crossmember and install into the factory front control arm pockets using the supplied 5/8" x 5 1/2" bolt, nut, and washers. Leave loose. SEE PHOTO BELOW.

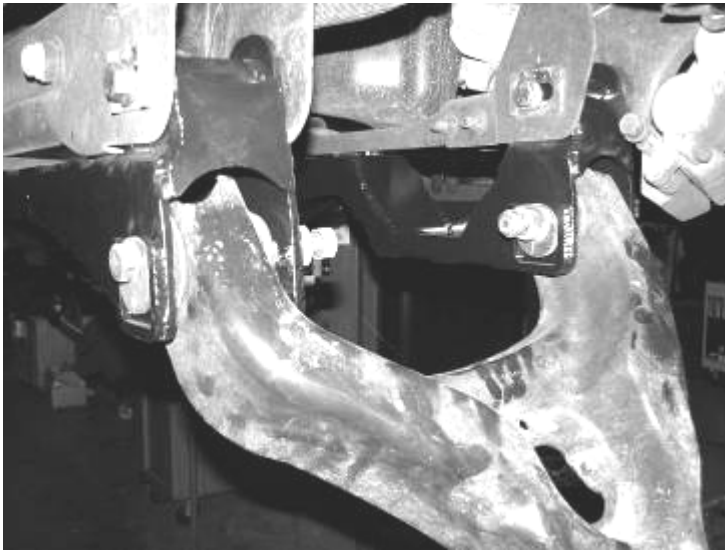


17. Locate the factory lower bump stop mount on the frame. Using a drill with a 1/2" drill bit, drill the hole out to 1/2". Locate FT44086 front bump stop mount and attach it to the frame using the supplied 1/2" x 1 1/4" bolt, split washer, and flat washer along with a small amount of the supplied thread lock compound. Torque bolt to 75 ft. lbs. Press the factory bump stop into the new bump stop bracket. SEE PHOTOS IN NEXT COLUMN

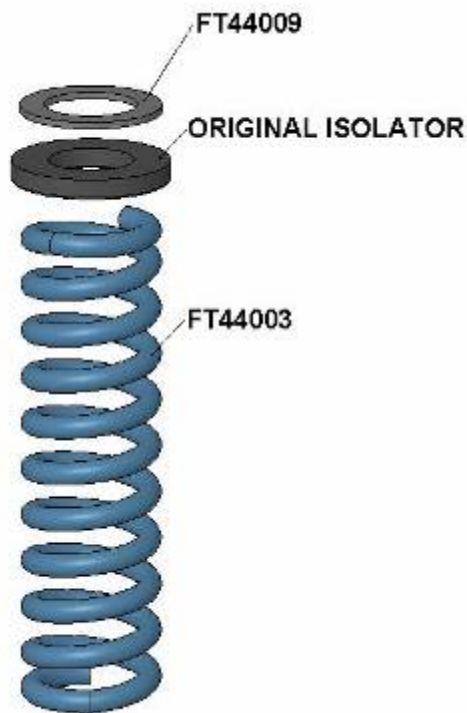


18. Working from the driver side of the truck, install the factory lower control arm to the Fabtech crossmembers using the factory hardware. Set the cams in the middle of their adjustment range. Leave loose. SEE PHOTO ON NEXT PAGE

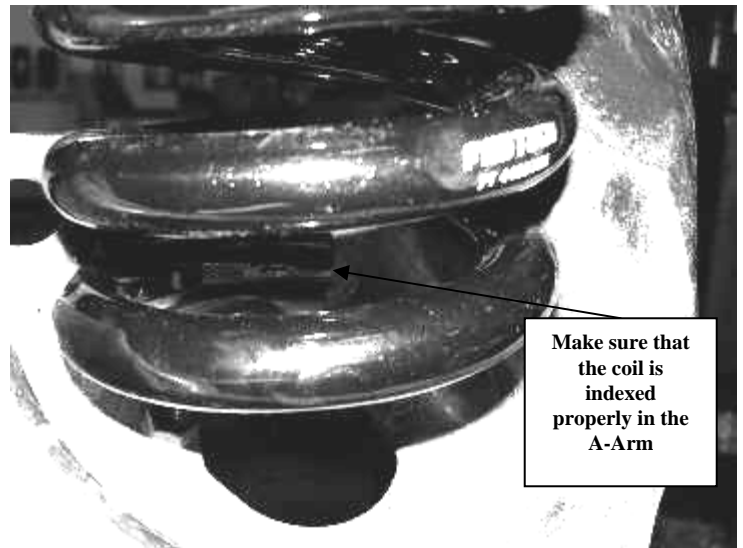




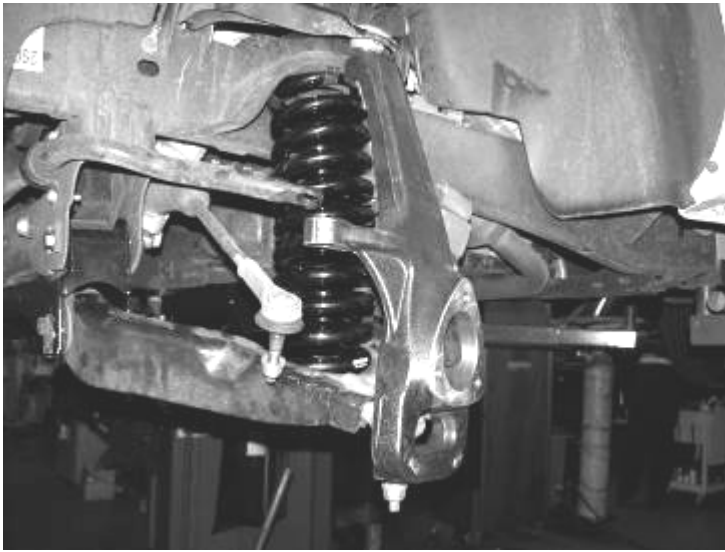
19. Locate the FT44009 coil spring spacer, FT44003 lift coil, and factory coil isolator. Stack the factory isolator onto the top of the coil followed by the supplied coil spacer. Use electrical tape to secure the isolator and spacer to the coil. SEE DRAWING BELOW



20. Using the FT44003 lift coil spring with factory isolator and coil spacer, place the coil spring first into the upper pocket, then into the lower control arm, making sure the coil is seated in the lower control arm pocket. Rotate the coil spring aligning the bottom of the coil spring with the timing pocket in the LCA. Using a floor jack raise the lower control arm up to compress the coil spring. **EXERCISE EXTREME CAUTION WHEN WORKING WITH COIL SPRINGS UNDER LOAD!** SEE PHOTOS IN NEXT COLUMN



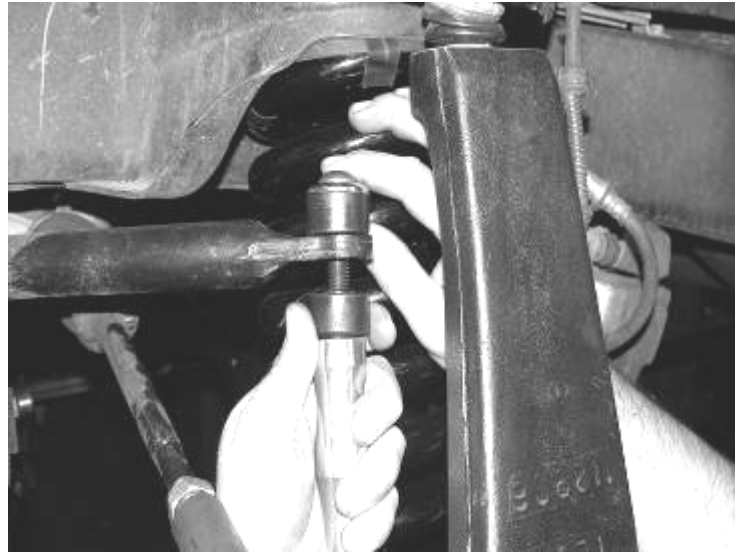
21. Locate the new lift spindle FT44007D. Attach the new spindle to the lower ball joint using the original nut. Torque to 60 ft. lbs. Holding the top of the spindle inboard slowly raise the floor jack to set the upper ball joint into the spindle. Attach the upper ball joint to the spindle using the factory nut. Torque to 55 ft. lbs. You may have to move the floor jack as far out as possible on the LCA to raise the LCA high enough. **DO NOT RAISE THE JACK HIGH ENOUGH TO LIFT THE TRUCK OFF THE JACK STANDS. USE EXTREME CAUTION WHEN WORKING WITH COIL SPRINGS TO AVOID ANY POSSIBILITY OF INJURY.** SEE PHOTO ON NEXT PAGE

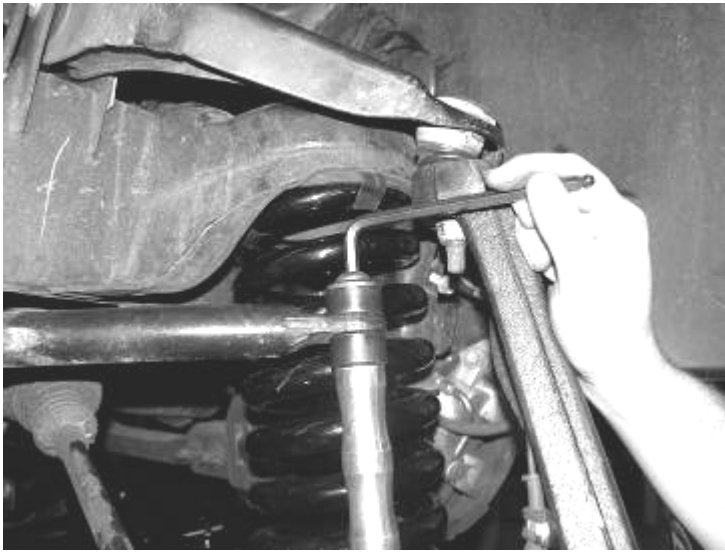


22. Locate the factory hub bearing assembly, install the hub in the original position to the new lift spindle using the factory hardware along with a small amount of the supplied thread lock compound. Torque hub bolts to 120 ft. lbs. SEE PHOTO BELOW

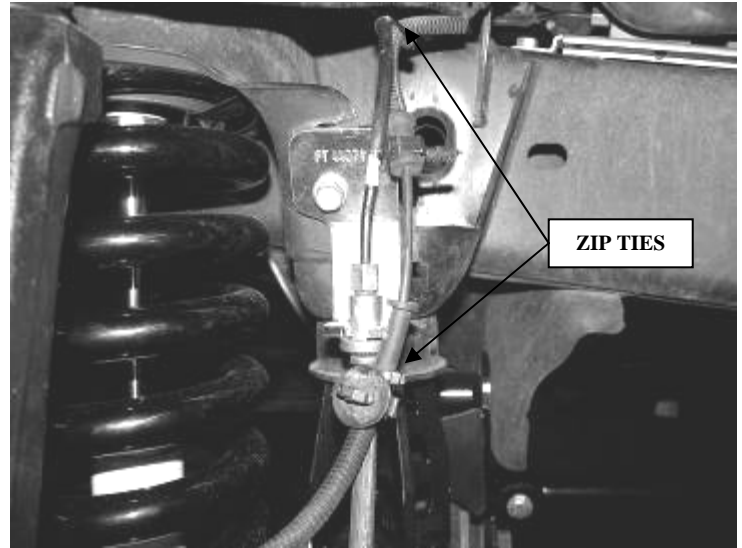
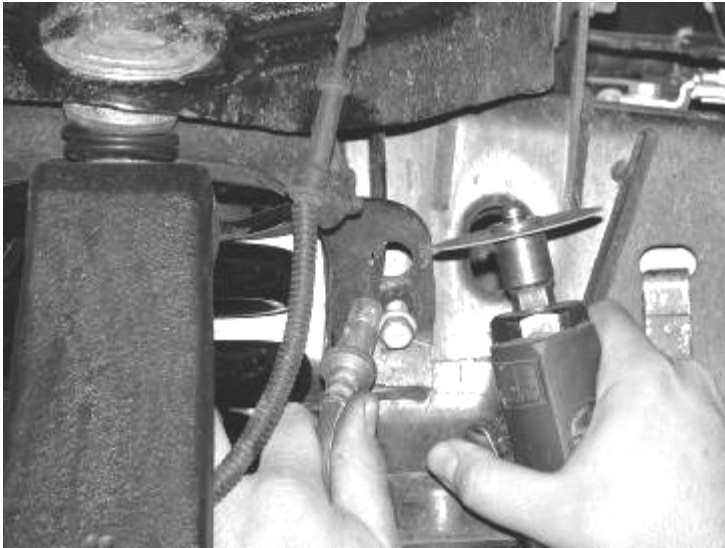


23. Locate both FT44075 Billet Sway Bar End Links and both of the supplied FTS98003 heim joints along with the supplied jam nuts. Thread the jam nuts all the way onto the heim joints, then thread the heim joints into the large end of the end links. Leave the jam nuts loose at this time. Locate the supplied 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 factory sway bar, leave loose at this time. Attach the other end of the link using the supplied FT43 mis-alignments and supplied 1/2" x 2 3/4" hardware to the new mount on the lower arm. Torque upper and lower hardware to 60 ft. lbs. **At times this may be easier to attach when the truck is completed and on the ground.** SEE PHOTOS IN NEXT COLUMN.

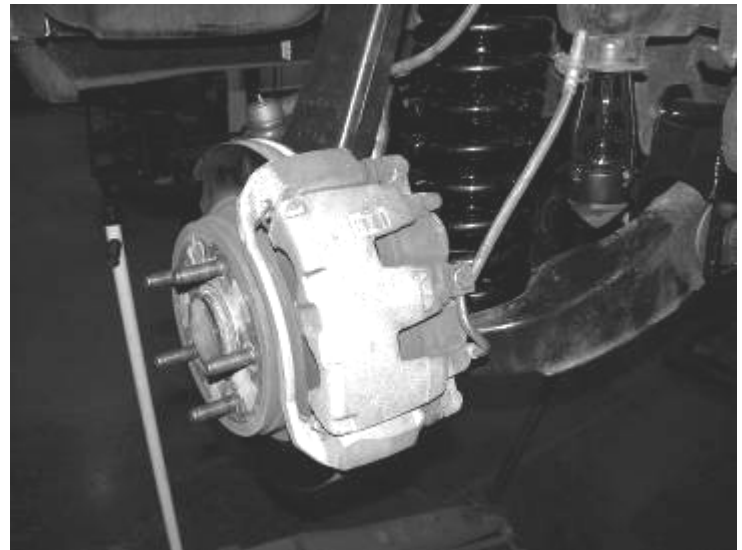




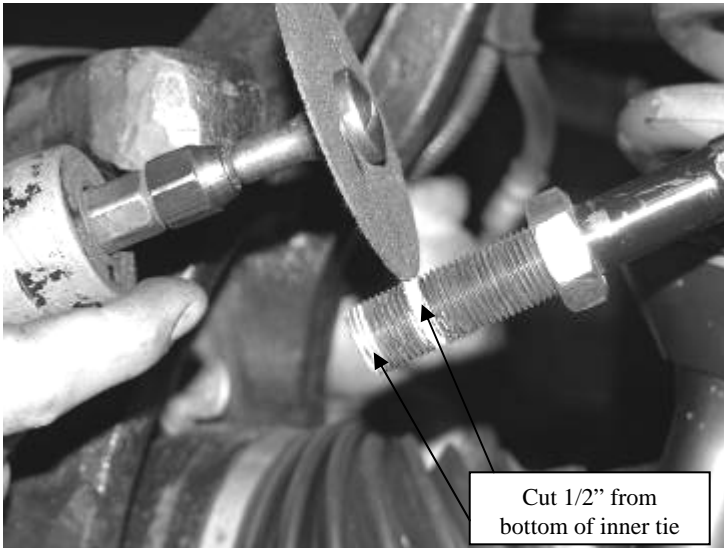
24. Locate the brake line tab where the soft line meets the hard line. Unbolt the bracket that attaches the line to the frame and save. Using a die grinder with a cut off wheel **CAREFULLY** cut the tab so the line can be removed from the mount. Locate FT44071 Brake Line Bracket (drv. side) and attach it to the factory brake line bracket. Use the supplied Zip Ties and attach the ABS line to the brake hose. **SEE PHOTOS BELOW AND IN NEXT COLUMN**



25. Install the factory rotor onto the hub assembly, followed by brake caliper. Attach the brake caliper using the factory hardware along with a small amount of the supplied thread lock compound. Torque the brake caliper bolts to 130 ft. lbs. On models with ABS, attach the brake line and ABS line together using the factory clips and the supplied zip ties. Plug the ABS wire back into the plug behind the fender well. **SEE PHOTO BELOW**

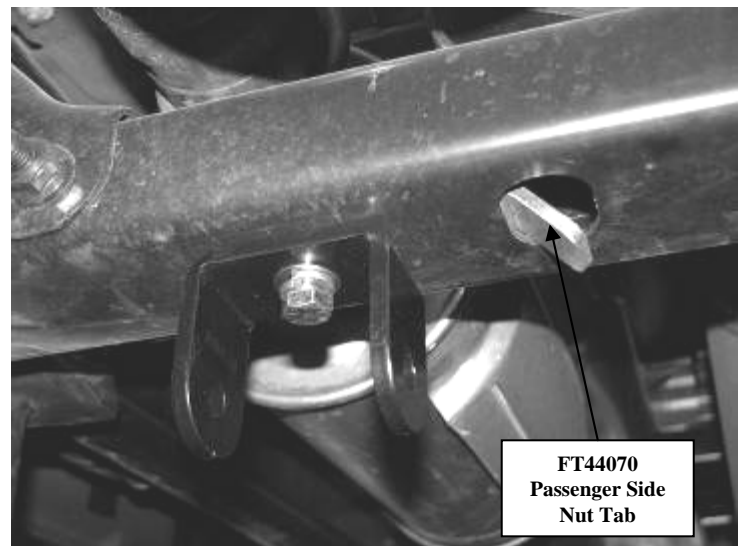
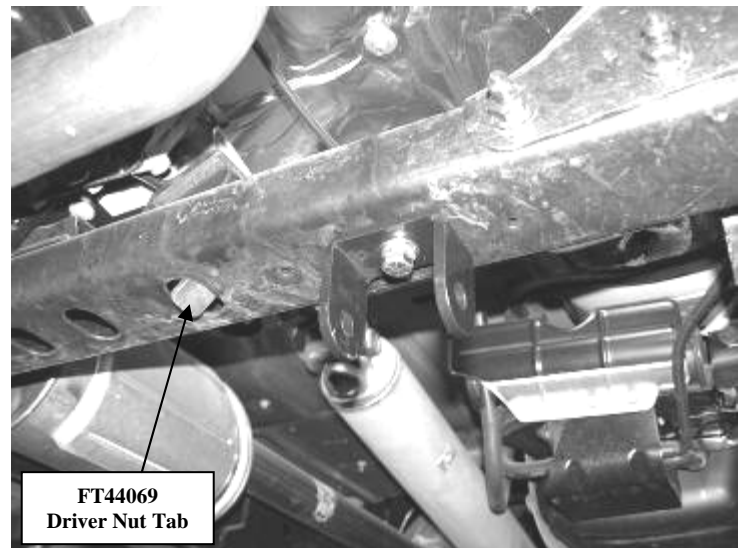
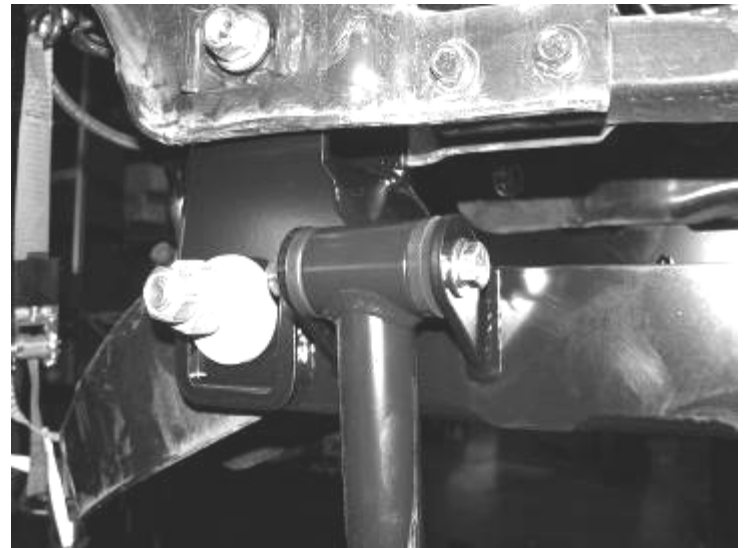


26. Using a measuring tape, measure the amount of threads showing from the tie rod end in. **RECORD THIS MEASUREMENT.** Loosen the jam nut holding the outer tie rod end on and remove the out tie rod end and discard. Leave the jam nut on the inner tie rod end.
27. Locate the inner tie rod ends. Mark a  $\frac{1}{2}$ " in from the end of the tie rod. Using a die grinder with a cutoff wheel, cut a  $\frac{3}{8}$ " off of the end of the inner tie rod. Next using a die grinder with a sanding disc, clean up the threads on the inner tie rod so that the outer tie rod threads on without any binding of the threads. **SEE PHOTOS ON NEXT PAGE**



28. Locate FT44066 tie rod end and thread it onto the factory inner tie rod end to the measurement recorded earlier. **Note: This is just a starting point, the toe adjustment will need to be set during the final alignment.** Tighten the jam nut up to the tie rod end. Attach the tie rod end to the spindle using the supplied 14mm nut. Torque to 85 ft lbs
29. Locate Fabtech Frt. Shocks FTS7242 (not included in kit) and install onto truck. Use the supplied upper hardware and factory lower hardware.
30. Repeat steps eighteen through twenty seven on the passenger side of the truck.
31. Torque the lower control arm pivot bolts to 150 ft lbs. Torque the crossmember to control arm pocket bolts to 150 ft lbs.
32. Locate the FT20023 Impact Strut Tubes and install two bushings and one sleeve from the supplied bushing kit into each end of the tubes.
33. Using the supplied 7/16" x 3 1/2" bolts, nuts and washers attach the impact tubes to the rear crossmember tabs. Leave bolts loose at this time.

34. Attach FT30064 impact tube mounts with the FT44069 (drv) & FT44070 (pass.) nut tabs to the crossmember using the supplied 7/16"x 1 1/2" hardware with split washers, torque to 50 lbs. Rotate the impact tubes up to the new brackets and attach using the supplied 7/16" x 3 1/2" bolts, nuts, and hardware, torque to 50 lbs. SEE PHOTOS BELOW







35. With both sides of the truck completely finished and the truck still off the ground, cycle the steering left to right from stop to stop. Make sure there is plenty of clearance between the ABS line and all other components.
36. Reinstall the tires onto the truck and torque the lugs to factory specifications, which can be found in the owner's manual. Set the truck back on the ground and cycle the steering left to right from stop to stop. Make sure there is plenty of clearance between the ABS line and all other components.

## **REAR SUSPENSION**

37. Jack up the rear end of the vehicle and support the frame rails with jack stands. Support the rear differential with a floor jack.
38. Remove and discard the rear shocks and u-bolts. Lower the axle down slowly. Use care, not to over extend the brake hose.
39. Locate the pair of lift blocks supplied with the kit. Using a die Grinder with a sanding wheel, you will need to sand the center pin down to 1/4" of total height. SEE PHOTO IN NEXT COLUMN.



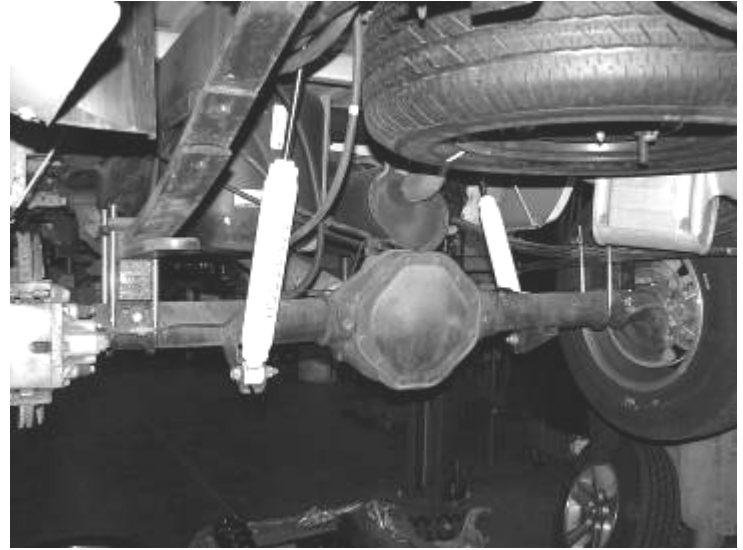
40. Locate and install the rear lift blocks with the shortened center pin on the bottom of the block, to the axle. The short end of the block should face to the front of the vehicle. Using the provided U bolts, nuts, and washers align axle, lift blocks, and springs and torque the U-Bolts to 90lbs. SEE PHOTO BELOW.



41. Locate the factory rear bump stop and remove. Attach the factory bump stop to the new FT44008 rear bump stop drop bracket using the supplied 3/8" x 1 1/4" bolt, nut, and washers. Attach the bump stop and bracket to the frame using the stock hardware. SEE PHOTO ON NEXT PAGE.



42. Install the new Fabtech FTS7240 shocks (not included with the kit) and Torque to 65 lbs using factory hardware on both upper and lower mounts. SEE PHOTO IN NEXT COLUMN



43. Recheck all of the nuts and bolts for proper torque tightness before driving.
44. Set the truck back on the ground.
45. Drive the truck for 50 miles and have it aligned to factory specifications. Re-adjust headlights.

**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.