

INSTALLATION INSTRUCTIONS

2019-2022 DODGE RAM 2500 4WD

5" KIT W/ COILS

FTS23217 - RADIUS ARM KIT WITH COILS

NOTE: TO ORDER WEARABLE REPLACEMENT COMPONENTS DO NOT USE PART NUMBERS SHOWN ON THIS INSTRUCTION SHEET. GO TO FABTECH WEBSITE AND LOOK UP WEARABLE REPLACEMENT PARTS TO FIND THE PROPER PART NUMBER TO ORDER.

	FTS23216	COMPONENT BOX 1
1	FT44512	TRACK BAR BRACKET
1	FT44298BK	LOWER SPRING PERCH (DRIVER)
1	FT44299BK	LOWER SPRING PERCH (PASSENGER)
2	FT44316BK	FRONT COIL SPRING
2	FT44268BK	REAR BUMP STOP SPACER
1	FT44449	RADIUS ARM (DRIVER)
1	FT44450	RADIUS ARM (PASSENGER)
1	FT44515	ESC MOUNT (DRIVER)
1	FT44518	BUMP STOP MOUNT DRIVER
1	FT44519	BUMP STOP MOUNT PASSENGER

	FTS23217	COMPONENT BOX 2 W/DIRT LOGIC SS SHOCKS
2	FT1599-2-4	5" SWAY BAR LINK CLEAR ZINC
1	FT44513	REAR TRACK BAR BRACKET
2	FT44279BK	REAR COIL SPRING
1	FT44524	HARDWARE SUBASSEMBLY
1	FT44172	PITMAN ARM
2	FT44356BK	COIL RETAINER
1	FT44523	HARDWARE KIT

	ET44504	HADDWADE CUDACCEMBLY
	FT44524	HARDWARE SUBASSEMBLY
8	FT1004	SWAY BAR LINK BUSHING HALF
4	FT1006	BUSHING C1500 L.T. LOWER
2	FT102	SLEEVE 1.000 X .732 X 3.280
1	FT23214i	INSTRUCTIONS
4	FT404739	SWAY BAR LINK SLEEVES
2	FT44135	BUMP STOP MOUNT TAB
1	FT44239	WASHER 4.250 X .510 X .250
2	FT44245	BRAKE LINE EXT
2	FT44258	1/4 NUT TAB
2	FT44317	LOWER SPRING PERCH NUT TAB
1	FT605	SLEEVE 1.000 X .563 X 1.855
1	FT606	SLEEVE .750 X .515 X .780
1	FT70136	REAR TRACK BAR BRACKET NUT TAB
1	FTAS12	STICKER FT BLUE 10X4
1	FTAS16	DRIVER WARNING DECAL
1	FTREGCARD	REGISTRATION CARD
1	FTLUBE	URETHANE LUBE PACKET
2	FT84	GREASE FITTING

		SHOCK OPTIONS
2	FTS7343	PERFORMANCE SHOCK (FRONT)
2	FTS7344	PERFORMANCE SHOCK (REAR)
2	FTS6236	STEALTH MONOTUBE (FRONT)
2	FTS6344	STEALTH MONOTUBE (REAR)
2	FTS801032	DIRT LOGIC 2.25 RESI (FRONT)
2	FTS811042	DIRT LOGIC 2.25 N/R (REAR)

FT44523 - HARDWARE KIT	LOCATION
BAG 1	
M14-2.0 C-LOCK NUT	TRACK BAR DROP BRACKET
M14 FLAT WASHER	
1/2-13 X 1-1/4 HEX BOLT G8 ZNC	BUMP STOP
1/2 SPLIT LOCK WASHER	
1/2 SAE WASHER G8 ZINC	
1/2-13 C-LOCK NUT ZINC	
1/2-13 X 4" HEX BOLT	COIL RETAINER
5/16-18 X 2-1/2 HEX BOLT G8 ZINC	BUMP STOP
5/16-18 X 1-1/4 HEX BOLT	COIL SPACER
5/16 SAE WASHER	
5/16 SPLIT LOCK WASHER	
5/16-18 C-LOCK NUT ZINC	
1/4-20 X 1 HEX BOLT G5 ZINC	BRAKE LINE EXTENSION
1/4 SAE WASHER G5 ZINC	
1/4-20 C-LOCK NUT ZINC	
1/4-20 X 2-1/2" HEX BOLT	BUMPST0P
THREAD LOCKING COMPOUND 2 MIL	
BAG 2	
7/16-14 X 1-1/4 HEX BOLT G8 ZC	REAR BUMP STOP
7/16 SAE WASHER G8 ZINC	
7/16-14 C-LOCK NUT ZINC	
1/2 USS WASHER G5 ZINC	SWAY BAR LINK
M12-1.75 X 70MM HEX BOLT G10.9	
NUT 12-1.75 NYLOK 10.9 Z1	
1/2-13 X 1-1/4 HEX BOLT G8 ZNC	REAR TRACK BAR BRACKET
1/2-13 X 2-1/4 HEX BOLT G8 ZNC	
1/2 SAE WASHER G8 ZINC	
1/2-13 C-LOCK NUT ZINC	
1/2" SPLIT LOCK WASHER	
9/16-18 X 3-3/4" HEX BOLT G8 ZC	REAR TRACK BAR BRACKET
9/16 SAE WASHER G8 ZINC	
9/16" -18 C LOCK NUT	
"40 V 4" TEV OODEW	
#10 X 1" TEK SCREW	
	M14-2.0 C-LOCK NUT M14 FLAT WASHER 1/2-13 X 1-1/4 HEX BOLT G8 ZNC 1/2 SPLIT LOCK WASHER 1/2 SAE WASHER G8 ZINC 1/2-13 C-LOCK NUT ZINC 1/2-13 X 4" HEX BOLT 5/16-18 X 2-1/2 HEX BOLT G8 ZINC 5/16-18 X 1-1/4 HEX BOLT 5/16 SAE WASHER 5/16 SPLIT LOCK WASHER 5/16 SPLIT LOCK WASHER 5/16-18 C-LOCK NUT ZINC 1/4-20 X 1 HEX BOLT G5 ZINC 1/4-20 X 1 HEX BOLT G5 ZINC 1/4-20 C-LOCK NUT ZINC 1/4-20 C-LOCK NUT ZINC 1/4-20 X 2-1/2" HEX BOLT THREAD LOCKING COMPOUND 2 MIL BAG 2 7/16-14 X 1-1/4 HEX BOLT G8 ZC 7/16 SAE WASHER G8 ZINC 7/16-14 C-LOCK NUT ZINC 1/2 USS WASHER G8 ZINC 1/2-13 X 70MM HEX BOLT G10.9 NUT 12-1.75 NYLOK 10.9 Z1 1/2-13 X 1-1/4 HEX BOLT G8 ZNC 1/2-13 X 2-1/4 HEX BOLT G8 ZNC 1/2-13 C-LOCK NUT ZINC 1/2-13 C-LOCK NUT ZINC

- TOOL LIST -

Required Tools (Not Included)

Basic Hand Tools Floor Jack

Jack Stands

Assorted Metric and S.A.E sockets, and Allen wrenches

Torque Wrench

Die Grinder w/ Cutoff Wheel or Sawzall

- PRE-INSTALLATION NOTES -

For technical assistance call: 909-597-7800 or e-mail: info@fabtechmotorsports.com

READ THIS BEFORE YOU BEGIN INSTALLATION -

Check all parts to the parts list above before beginning installation. If any parts are missing contact Fabtech at 909-597-7800 and a replacement part will be sent to you immediately.

Read all instructions thoroughly from start to finish before beginning the installation. If these instructions are not properly followed severe frame, driveline and / or suspension damage may occur.

Check your local city and state laws prior to the installation of this system for legality. Do not install if not legal in your area.

Prior to the installation of this suspension system perform a front end alignment and record. Do not install this system if the vehicle alignment is not within factory specifications. Check for frame and suspension damage prior to installation.

The installation of this suspension system should be performed by two professional mechanics.

This suspension must be installed with Fabtech shock absorbers.

Installation of all fasteners requires the use of provided thread locking compound with proper torque values as indicated throughout the installation. Apply thread locking compound upon the final torque of the fastener.

WARNING- Installation of this system will alter the center of gravity of the vehicle and may increase roll over as compared to stock.

Vehicles that receive oversized tires should check ball joints, uniballs, tie rods ends, pitman arm and idler arm every 2500-5000 miles for wear and replace as needed.

Verify differential fluid is at manufactures recommended level prior to kit installation. Installation of the kit will reposition the differential and the fill plug hole may be in a different position. (For example, if the manufacture recommends 3 quarts of fluid, make sure the diff has 3 quarts of fluid). Check your specific manual for correct amount of fluid.

FOOTNOTES -

- Does not fit standard cab models
- Will not fit gas motors
- Will not fit factory air suspension
- Does not fit power wagon models

TIRE & WHEEL SIZES -

37/12.50R17 tires w/17x9 wheels w/5" BS w/minor trimming 37/12.50R18 tires w/18x9 wheels w/5" BS w/minor trimming 37/13.50R20 tires w/20x9 wheels w/5" BS w/minor trimming

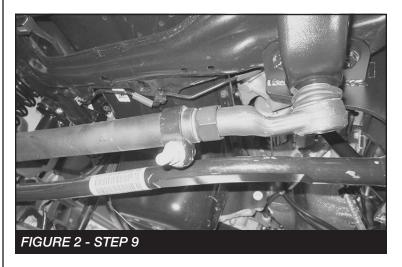
- INSTRUCTIONS -

FRONT SUSPENSION

- 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. Remove both the Driver and Passenger side inner fender liners. Save all hardware for re-installation.
- 3. With the front axle supported, remove and discard the front shocks. Save the lower hardware. Disconnect the brake line bracket from the axle.
- 4. Disconnect factory sway bar links from the sway bar. Save all hardware.
- Lower the front axle. Remove factory coil spring and rubber isolator. Save the rubber isolators for later use.
- Disconnect the draglink from the pitman arm. Then, remove and discard the factory pitman arm. Save hardware.
- Locate the new FT44172 Fabtech pitman arm and install. Do not reconnect the factory drag link at this time. Reinstall the factory lock washer plus thread locker. Torque to 220ft-lbs.
- 8. Unthread the end from the draglink. Using a cut-off wheel, remove the non threaded hex end. **SEE FIGURE 1**



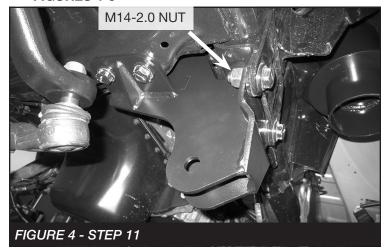
 Adjust the tie rod end nut all the way untill it bottoms out. Reinstall the rod end all the way into the draglink, then install the to the pitman arm from the bottom side using the factory nut. Torque to 83 ft-lbs. SEE FIGURE 2



 Disconnect the track bar from the track bar bracket, save hardware. Remove the five bolts attaching the bracket to the frame. Discard the bracket, save the hardware. SEE FIGURE 3



 Install FT44512 (Track Bar Bracket) using the factory bolts. Note: Use the supplied (2)M14-2.0 nuts and washers on the outer most factory bolts. Torque to 103 ft-lbs. SEE FIGURES 4-5





12. Locate the Electronic Stability Control unit on top of the driver side upper coil spring mount. Remove and save the factory bolt on the back side of the unit. **SEE FIGURE 6**

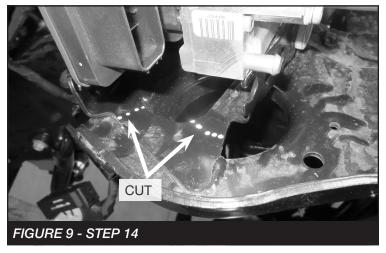


13. Disconnect the harness plug from the unit. Then, slide the unit forward to remove from the grommets. Remove and save the three rubber grommets. **SEE FIGURES 7-8**

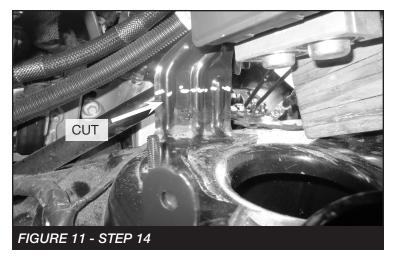




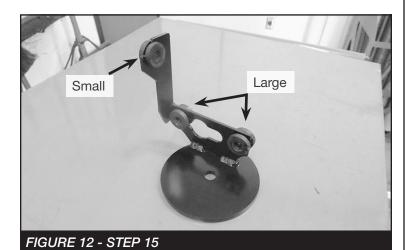
14. Prop the unit up enough to be able to reach underneath it. Be careful not to put to much strain on the hoses. Using a die grinder/cut off wheel. Cut the factory bracket out from the top of the coil spring mount. Sand all of the sharp edges. NOTE: Be careful not to damage any hoses or cables. SEE FIGURES 9-11







15. Install the three grommets onto the FT44515 (ESC Mount) SEE FIGURE 12. Install the new ESC mount to the top of the coil spring mount while inserting a supplied 1/2" x 4" bolt and washer. SEE FIGURE 13





16. Install the ESC module to the new bracket by pushing in into the 2 lower grommets and the factory bolt on the back side. Reconnect the wire harness. **SEE FIGURE 14**



17. Install FT44356BK (Coil Retainer) to the bottom of the upper coil spring mount using a 1/2" washer and c-lock nut. Torque to 106 ft-lbs. **SEE FIGURE 15**



18. PASSENGER SIDE: Install FT44239 (Washer), 1/2" X 4" bolt and washer on the top of the coil spring mount. Then, install the FT44356BK (Coil Retainer on the bottom side with a 1/2" washer and c-lock nut. Torque to 106 ft-lbs SEE FIGURES 16-17





19. Locate FT44298BK (Driver lower spring perch spacer), FT44317 (lower spring perch nut tab) and 5/16" X 1-1/4" bolt, lock and flat washer. Install the new spring spacer by lining up the existing rear hole. Use the 5/16" hardware and FT44317 nut tab. SEE FIGURE 18



20. Using the existing spacer hole as a guide, drill through the factory spring perch using a 11/32" drill bit and install the 5/16" X 1-1/4" bolt, washers and nut. Torque all 5/16" hardware to 29 ft-lbs. SEE FIGURES 19-20





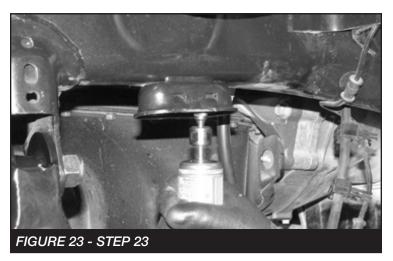
21. Repeat on steps on the Passenger side using FT44299BK (Pass lower spring perch spacer)

22. Remove and save the factory rubber bump stop. SEE FIGURE 21. Insert the factory rubber bumpstop into the new Fabtech bumpstop bracket (FT44518). Using a 1/4" drill, drill a hole through the factory rubber bumpstop using the new bracket as a guide. Then install the supplied 1/4" X 2-1/2" hardware. Torque to 14 ft-lbs. SEE FIGURE 22





23. Using a die grinder, grind out the stamped in tabs on the inside of the bump stop housing. **SEE FIGURES 23-24**





24. Using a 1/2" drill bit, drill out the hole in the factory crossmember in-line with the factory bump stop mount. **SEE FIGURE 25**

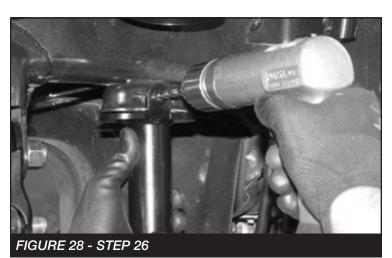


25. Slide the bump stop into the factory bump stop mount. Using a 1/2"-13 x 1-1/4" bolt, lock and flat washer, and the FT44135 (nut tab), bolt the bump stop to the crossmember. Torque the 1/2" bolt to 90 ft-lbs. **SEE FIGURES 26-27**





26. Using the outer tab on the bump stop as a drill guide, drill a 5/16" hole all the way through the factory bump stop mount. **SEE FIGURE 28**



27. Locate a 5/16" x 2-1/2" bolt, nut and washers. Using this bolt, secure the bump stop to the factory bump stop mount and torque to 29 ft-lbs. **SEE FIGURE 29**



- 28. Repeat steps on the passenger side using FT44519 (Pass bump stop bracket)
- 29. Secure the front diff. Remove the factory driver and passenger side Radius arm. Save Hardware. **SEE FIGURES 30-31**





30. Locate the FT44449 (Driver side radius arm), FT1006 (bushing), FT102 (sleeve), and zerk fitting. Install two of the bushings, one sleeve, and the zerk fitting into the barrel of the radius arm. **SEE FIGURES 32-34**

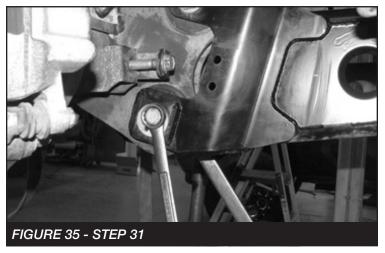




FIGURE 34 - STEP 30

31. Install the new Fabtech radius arms into the factory frame pocket and onto the axle bushings using the factory hardware. Torque the factory bolts to 200 ft-lbs.

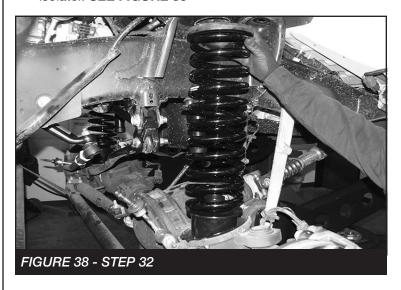
SEE FIGURES 35-37







32. Install the new coil springs (FT44316BK) on both driver and passenger side using the factory upper coil spring isolator. SEE FIGURE 38



33. Locate the FT44245 (Brake line extension bracket), FT44258 (nut tab) and 1/4" x 1" bolts, washers and nut. Attach the brake line extension to the axle using one bolt and the nut tab. Attach the factory brake line bracket to the Fabtech extension using a 1/4" X 1" bolt, nut and washers. Torque to 10 ft-lbs. Repeat this step on the passenger side. SEE FIGURES 39



34. Locate the FTS7343 (Performance), FTS6236 (Stealth) or the FTS811032 (Dirt Logic) shock and install into the factory shock mounts using the supplied bushings and sleeves in the shock box. If installing Dirt Logic use FT86008 hardware bag. The factory lower bolt and nut tab will be reused. Torque the upper mount to 14 ft-lbs and the lower 37 ft-lbs. **SEE FIGURES 40-41**





- 35. Reconnect the track bar to the track bar bracket. Torque to 171 ft-lbs.
- 36. Reconnect the factory sway bar links to the sway bar. Torque to 29 ft-lbs.
- 37. Reinstall the front inner fender liners using the factory hardware.

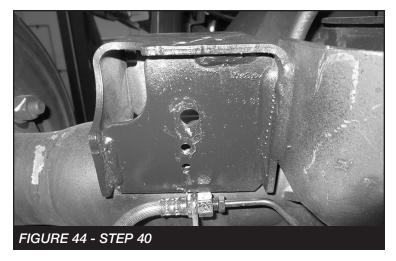
REAR SUSPENSION

38. Jack up the rear end of the vehicle and support the frame rails with jack stands. Remove wheels and tires. Remove and save the rear driver and passenger inner fender liners. **SEE FIGURE 42**



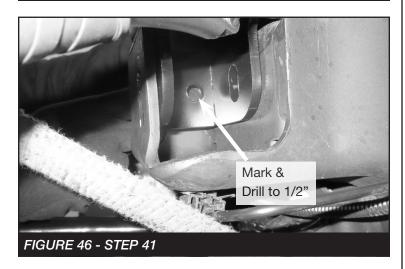
- 39. Disassemble the rear track bar from the axle side. Save hardware for re-installation. Remove and discard factory sway bar end links and shocks, save lower shock hardware for re-installation. Slowly lower the rear axle, remove the rear factory springs and rubber isolators. Save rubber isolators for re-installation. Remove bump stops and hardware from the vehicles frame and keep for re-installation.
- 40. Locate the rear side of the driver side bump stop pad. Remove the factory brake line bracket. Measure 2.50" from the left inside edge and 2" from the bottom edge and mark. Use a punch then drill using a 1/2" drill bit. NOTE: ONLY DRILL THROUGH BUMP STOP PAD, DRILLING TO FAR WILL RESULT IN DAMAGE TO AXEL TUBE. SEE FIGURES 43-44



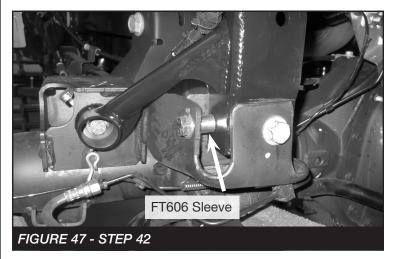


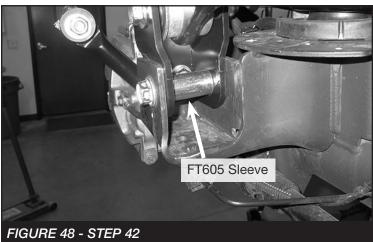
41. Install FT44513 (Rear track bar bracket) using the 1/2" X 1-1/2" bolt, washer and FT70136 (Nuttab) at the bumpstop location and the factory hardware to mount the new bracket to the factory mount. Using the inside hole on the new bracket as a guide. Use a punch to mark then remove the factory bolt and drill a 1/2" hole into the side of the factory track bar axle mount. **SEE FIGURES 45-46**





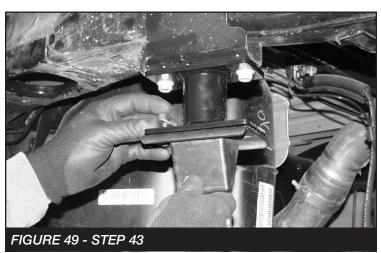
42. Install a 1/2" X 2-1/4" bolt, washers and c-lock nut through the factory mount and new bracket. **NOTE: Install FT606 (sleeve) between the mount and bracket as you install the 1/2" hardware.** Reinstall the factory bolt with the supplied FT605 (Sleeve) at the factory location. Torque all hardware to 106 ft-lbs. **SEE FIGURE 47-48**



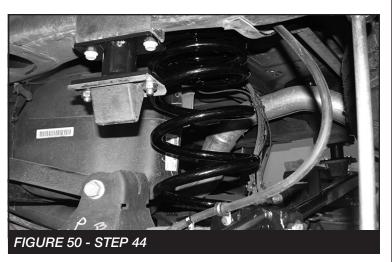


43. Install the FT44268BK (Bumpstop spacer) with the factory bolts that were removed during disassembly. Then, install the factory bump stop onto the spacer bracket using the supplied 7/16" X 1-1/4" hardware. Torque to 58 ft-lbs.

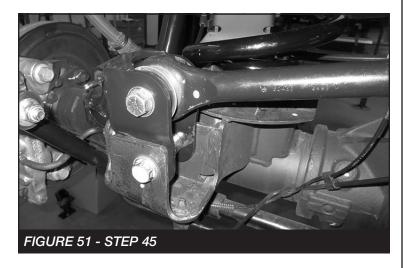
SEE FIGURE 49



44. Install (FT44279BK) Fabtech rear spring using the factory rubber isolators as shown. **SEE FIGURE 50**



45. Install the rear track bar into the new bracket using the supplied 9/16" x 3-3/4" bolt, washers and nut. Torque to 184 ft-lbs. **SEE FIGURE 51**



46. Install the FT1004 (Bushings) and FT404739 (Sleeves) into the FT1599-2-4 (5" zinc sway bar links). **SEE FIGURES 52-53**





47. Install the new end links with the supplied M12-1.75 x 70mm bolts, Nylok nuts and washers and torque to 100 ft-lbs. **SEE FIGURES 54-55**





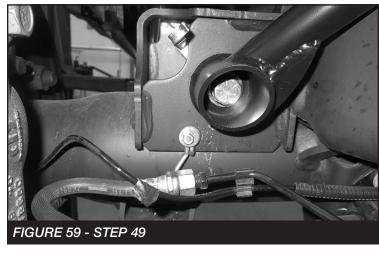
- 48. Install the shocks with the provided bushings, sleeves and the factory lower bolt. Torque to 65 ft-lbs. **SEE FIGURES 56-58** Part numbers are as followed:
 - FTS7344 Performance Shock
 - FTS6344 Stealth Shock
 - FTS811042 Dirt Logic Shock







49. Use the supplied #10 Tek screw and relocate the brake line bracket into the rear bumpstop pad. **SEE FIGURE 59**



- 50. Re-Install both inner fender liners.
- 51. 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 oversized tires may require trimming of the front bumper & valance.
- 52. Check front end alignment and set to factory specifications. Readjust headlights.
- 53. Recheck all bolts for proper torque.
- 54. Recheck brake hoses, ABS wires and suspension parts for proper tire clearance while turning tires fully left to right.
- 55. Check the fluid in the front and rear differential and fill if needed with factory specification differential oil. Note some differentials may expel fluid after filling and driving. This can be normal in resetting the fluid level with the new position of the differential/s.
- 56. Install Driver Warning Decal. Complete product registration card and mail to Fabtech in order to receive future safety and technical bulletins on this suspension.

Vehicles that will receive oversized tires should check ball joints, uniballs and all steering components every 2500-5000 miles for wear and replace as required.

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 and driveshafts. 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.

Dirt Logic and Performance Coilover 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, powder coating, plating and/or welding will void all warranties. Some finish damage may occur to parts during shipping, which is considered normal and is not covered under warranty.

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 on the website, but due to unknown auto manufacturer's production changes and/or inconstancies 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 website 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 is not responsible for premature wear of factory components due to the installation of oversized tires and wheels.

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 on our website. 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.

Depending on the condition of the factory suspension components retained after the installation of a Fabtech suspension not all vehicles may have the same ride stance front to rear as described in the website. The blue color of suspension components shown in all Fabtech photographs are for display purposes only. Majority of all Fabtech components will be black specifically where noted with part numbers ending in BK.

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. Some state laws may prohibit modification of suspension to a vehicle in whole or in part. It is the responsibility of the installer and consumer to consult local laws prior to the installation of any Fabtech suspension product to comply with such written laws.

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 super cede, 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 website or price sheet. For the most recent Product Warranty and Warnings visit our website www.fabtechmotorsports.com