

INSTALLATION INSTRUCTIONS



2019-2024 GM 1500 2WD 6" BASIC SYSTEM

FTS21272

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.

Fabtech Motorsports | 2213 Industrial Park Rd. Lancaster, SC 29720

Tech Line: 909-597-7800 | **Web:** www.fabtechmotorsports.com

- PARTS LIST -

FTS21272 COMPONENT BOX 1		
1	FT20841	FRONT CROSSMEMBER
1	FT20898	REAR CROSSMEMBER
1	FT20892	HARDWARE SUBASSEMBLY
1	FT20853	SWAY BAR FRAME BRACKET (DRIVER)
1	FT20854	SWAY BAR FRAME BRACKET (PASSENGER)
1	FT20858	HARDWARE KIT

FTS21251 COMPONENT BOX 2		
4	FT1500U-3	UBOLT SQ 9/16-18 X 12.50 X 2.63
1	FTS20840D	SPINDLE (DRIVER)
1	FTS20840P	SPINDLE (PASSENGER)
1	FT20851	HARDWARE SUBASSEMBLY
2	FTBK5	BLOCK 5.0 IN
1	FT20300	WHEEL SPACER (6-LUG)

FT20892 HARDWARE SUBASSEMBLY		
1	FT21272i	INSTRUCTIONS
1	FTAS12	STICKER FT BLUE 10X4
1	FTAS16	DRIVER WARNING DECAL
1	FTREGCARD	REGISTRATION CARD

FT20851 HARDWARE SUBASSEMBLY		
2	FT20857	TIE ROD END
2	FT20870	REAR BUMPSTOP SPACERS
1	FT20859	REAR BRAKE LINE BRACKET
1	FT20860	REAR BRAKE LINE BRACKET
2	FT20664	AXLE SPACER (4WD ONLY)

FTS21252 6" SHOCK EXT KIT		
4	FT20568BK	SHOCK BRACKET
2	FT20847	SHOCK EXTENSION
2	FT20848	SHOCK MOUNT TO ARM
2	FT20872	BOTTOM PLATE
1	FT20852	HARDWARE SUBASSEMBLY

FTS21264 4" SHOCK EXT KIT - TRAIL BOSS/ AT4		
4	FT20568BK	SHOCK BRACKET
2	FT20876	LOWER SHOCK BRACKET
1	FT20852	HARDWARE SUBASSEMBLY

FT20852 HARDWARE SUBASSEMBLY		
4	FT1036	BUSHING HALF
2	FT148	SLEEVE 1.250 X .530 X 2.400
4	FT20871	ALUMINUM SHOCK MOUNT BUSHING
1	FT20295	HARDWARE KIT
1	FTLUBE	GREASE PACKET

- PARTS LIST -

FT20858 - HARDWARE KIT		LOCATION
	BAG 1	
4	M18-2.5 X 120MM HEX BOLT 10.9	CROSSMEMBER
8	M18 FLAT WASHER	
4	M18-2.5 GRADE C LOCK NUT	
2	M14-2.0 X 100MM HEX BOLT 10.9	LOWER DIFF MOUNTS
1	M14-2.0 X 120MM HEX BOLT 10.9	PASS UPPER DIFF
6	M14 FLAT WASHER	
3	M14-2.0 C-LCOK NUT	
1	1/2-13 X 1-1/4 HEX BOLT	DRIVER DIFF NUT TAB
1	1/2" SAE WASHER	
1	1/2" SPLIT WASHER	
2	THREAD LOCKING COMPOUND 1 MIL	
	BAG 2	
2	7/16-14 X 1-1/2 HEX BOLT	SKID PLATE
4	7/16 SAE WASHER	
2	7/16-14 C-LOCK NUT ZINC	
1	1/2-13 X 1-1/2 HEX BOLT	SKID PLATE
2	1/2" SAE WASHER	
1	1/2-13 C-LOCK NUT	
4	3/8-16 X 1-1/2" HEX BOLT	SWAY BAR
8	3/8" SAE WASHER	
4	3/8-16 C-LOCK NUT	
2	1/4-20 X 3/4 HEX BOLT G5 ZINC	SPINDLE ABS
2	1/4 LOCK WASHER	
	BAG 3	
8	9/16-18 NYLOCK NUT	UBOLTS
8	9/16" SAE WASHER	
3	1/4-20 X 1" HEX BOLT	REAR BRAKE LINE
6	1/4 SAE WASHER	
3	1/4-20 C-LOCK NUT	
2	M10-1.5 X 70MM SOCKET HEAD BOLT	REAR BUMPSTOP

FT20295 - HARDWARE KIT		LOCATION
4	7/16"-14 X 2 1/2" HEX CAP BOLT	STRUT MOUNT BRACKET
4	7/16"-14 C-LOCKS	
8	7/16" SAE FLAT WASHER	
4	1/2"-13 X 4" HEX CAP BOLT	STRUT. EXT. TO BRACKET
2	1/2"-13 X 3 3/4" HEX CAP BOLTS	FRONT LOWER STRUT
6	1/2"-13 C-LOCKS	
12	1/2" SAE FLAT WASHER	
8	5/16"-18 X 1 1/2" HEX CAP BOLT	STRUT MOUNT BRACKETS
8	5/16"-18 C-LOCKS	
16	5/16" SAE FLAT WASHER	

- 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.

Use the provided thread locking compound on all hardware.

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 -

- Can not use OEM wheel and tire
- Fits crew cab, short bed models only
- Does not fit 2019 Silverado LD or 2019 Sierra Limited models. Use 2018 applications for these vehicles.
- Will not fit vehicles equipped with super cruise

TIRE & WHEEL SIZES -

- 35/12.50R18 tires w/18x9 wheels w/5" BS w/minor trimming
- 295/70R18 tires w/18x9 wheels w/5" BS w/minor trimming
- 35/12.50R20 tires w/20x9 wheels w/5" BS w/minor trimming
- 295/65R20 tires w/20x9 wheels w/5" BS w/minor trimming

- INSTRUCTIONS -

FRONT SUSPENSION

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. Remove and discard both the lower plastic cover and skid plate from the vehicle. **SEE FIGURES 1-2**

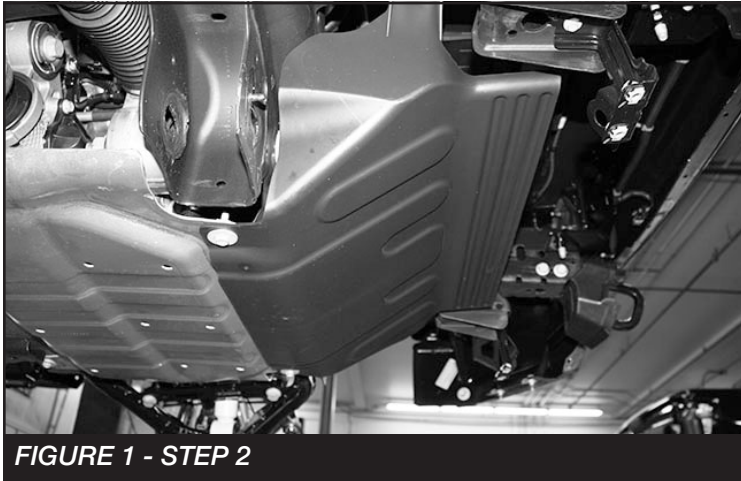


FIGURE 1 - STEP 2

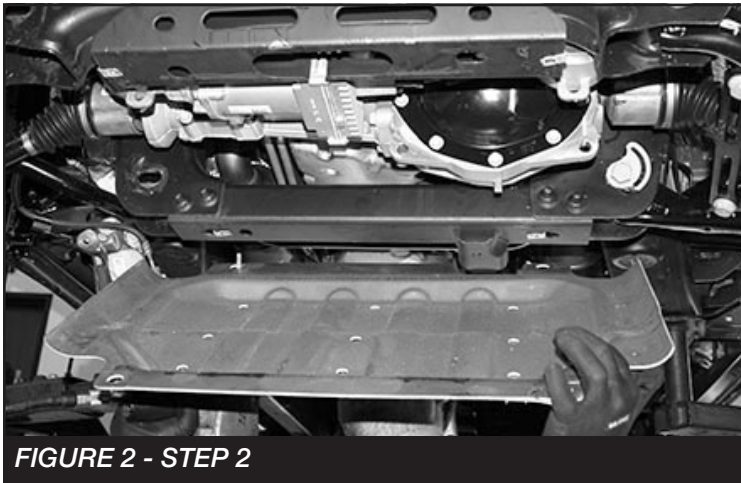


FIGURE 2 - STEP 2

3. Remove the tie rod end nut, then disconnect the tie rod end from the factory steering knuckle by striking the knuckle to dislodge the tie rod end. Repeat on the other side. **SEE FIGURES 3-5**

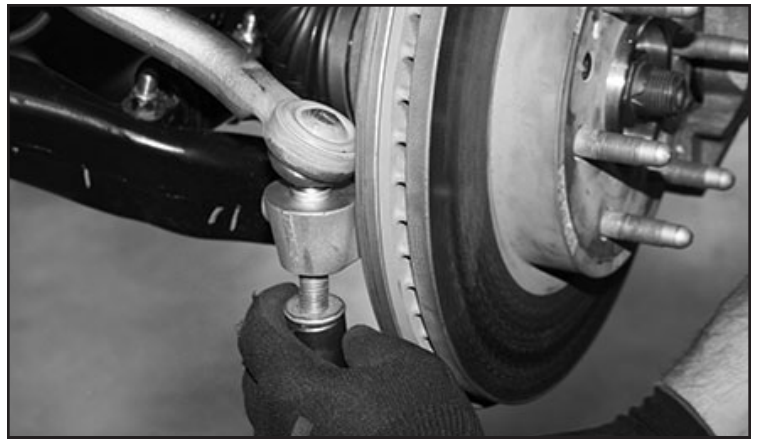


FIGURE 3 - STEP 3

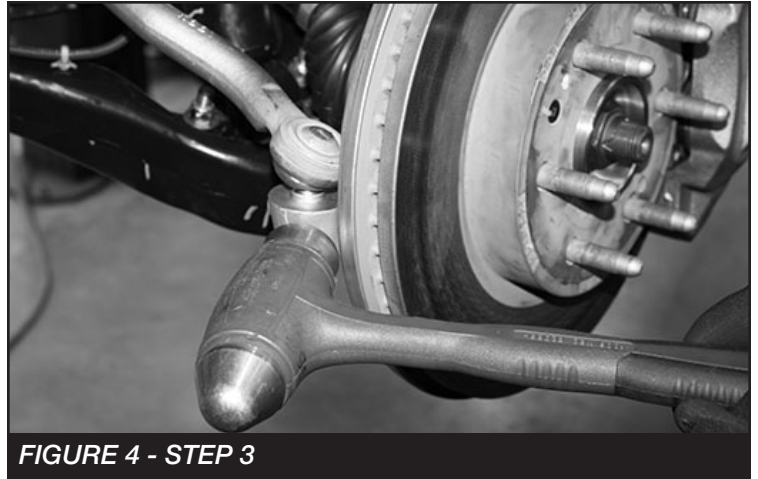


FIGURE 4 - STEP 3



FIGURE 5 - STEP 3

4. Disconnect the sway bar end links from the factory knuckle on both sides. Save hardware. **SEE FIGURE 6**



FIGURE 6 - STEP 4

5. Remove the sway bar completely from the frame and set aside. Save hardware for re-installation.

6. **Driver side:** Disconnect the ABS wire bracket from the upper control arm and the brake line bracket from the knuckle. Save hardware. **SEE FIGURES 7-8**

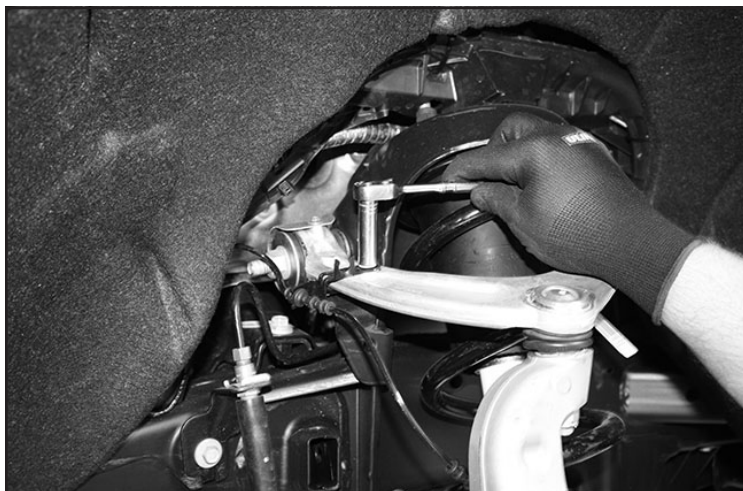


FIGURE 7 - STEP 6



FIGURE 8 - STEP 6

7. Remove the ABS sensor from the factory knuckle. Save hardware. **SEE FIGURE 9**



FIGURE 9 - STEP 7

8. Remove the brake caliper and secure it to the frame. **DO NOT ALLOW THE BRAKE CALIPER TO HANG FROM THE HOSE. SEE FIGURES 10-11**

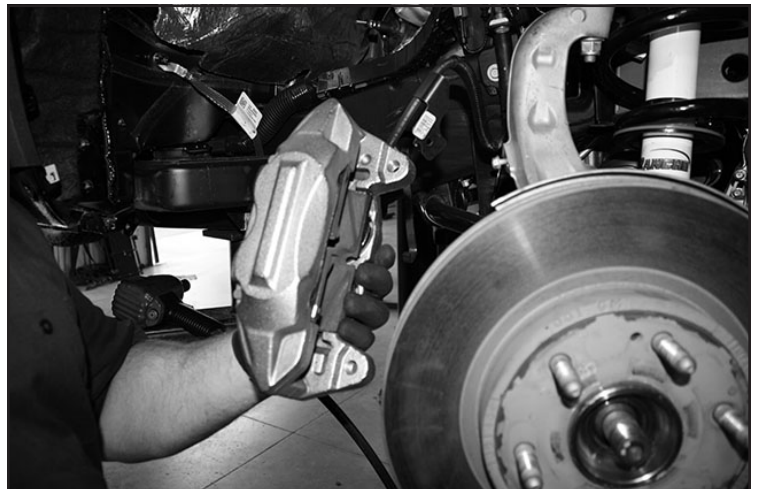


FIGURE 10 - STEP 8

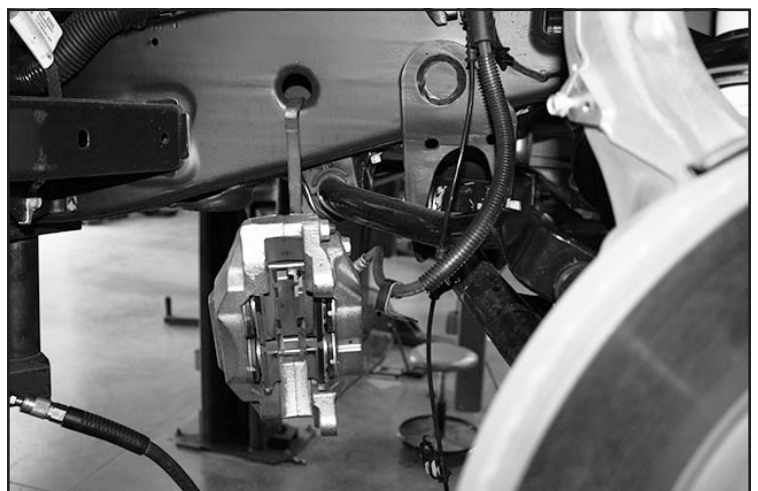


FIGURE 11 - STEP 8

9. Remove and save the positioning screw from the brake rotor. Then, remove the rotor and set aside. **SEE FIGURES 12-13**

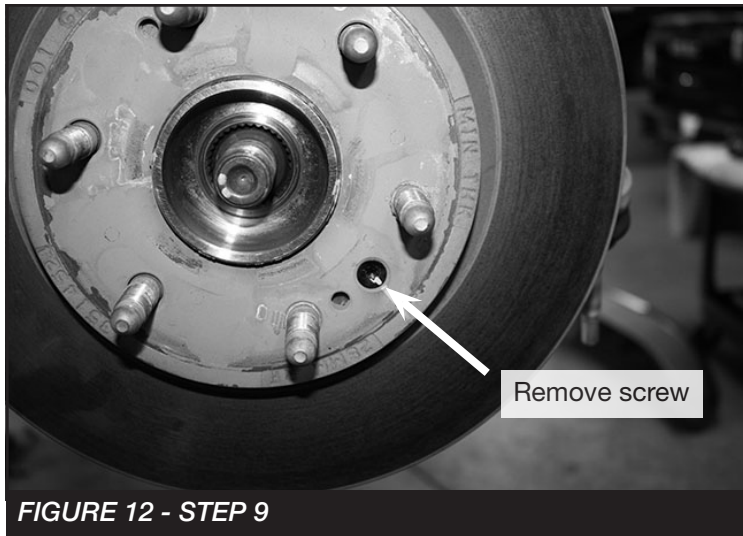


FIGURE 12 - STEP 9

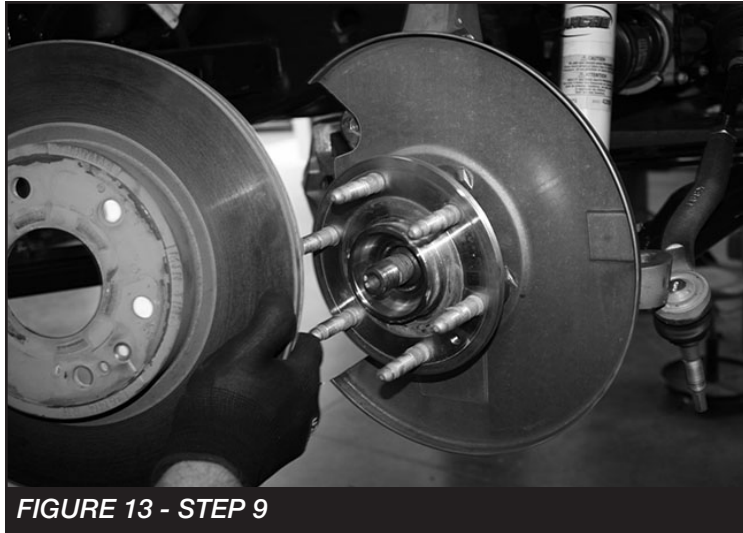


FIGURE 13 - STEP 9

10. Loosen the upper and lower ball joint nuts. Using a large hammer, carefully strike the spindle at the ball joint to dislodge the ball joint. Use care not to hit the ball joints when removing. **SEE FIGURES 14-15.** Remove and save the nuts. Discard the factory spindle.

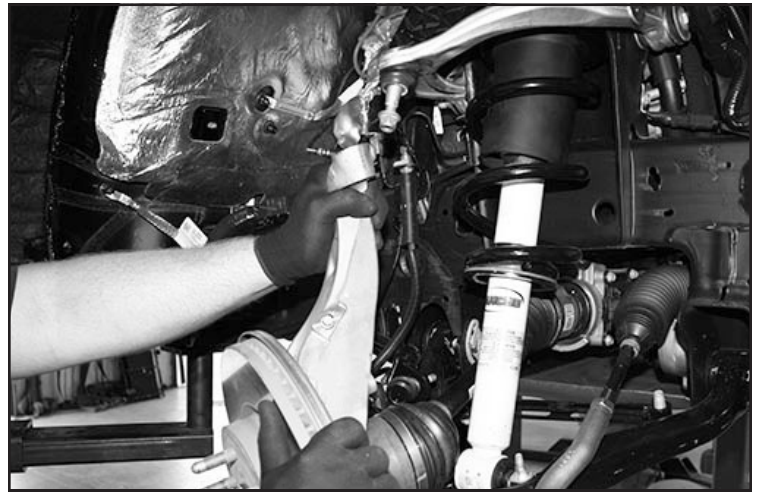


FIGURE 14 - STEP 10

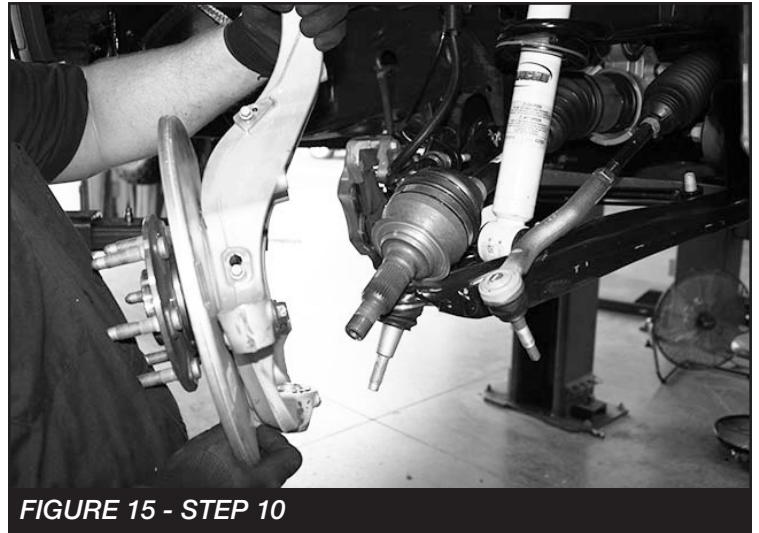


FIGURE 15 - STEP 10

11. Remove the lower bolts attaching the strut to the lower control arm. **SEE FIGURE 16**



FIGURE 16 - STEP 11

12. Next remove the upper three nuts attaching the strut to the frame mount. Then, remove the strut assembly from the vehicle. Save hardware. **SEE FIGURES 17**

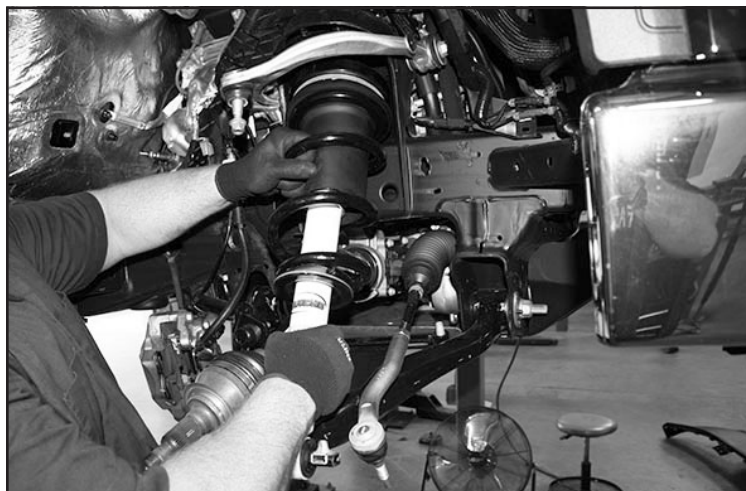


FIGURE 17 - STEP 12

13. Repeat steps 6-13 on the passenger side. **NOTE: To access the top three strut assembly nuts on the passenger side push up and back on the plastic wire harness channel to remove the nuts. SEE FIGURE 18**



FIGURE 18 - STEP 13

14. Remove both driver and passenger side lower control arms. Save arms and all hardware. **SEE FIGURE 19**



FIGURE 19 - STEP 15

15. Remove and discard the rear crossmember. **SEE FIGURES 20**



FIGURE 20 - STEP 15

16. Locate the driver side rear crossmember/control arm mount. Measure 2" from the inside end and mark a vertical line on both the front and back side of the mount. Using a sawzall cut the 2" part off of the mount. **SEE FIGURES 21-23**

Front side

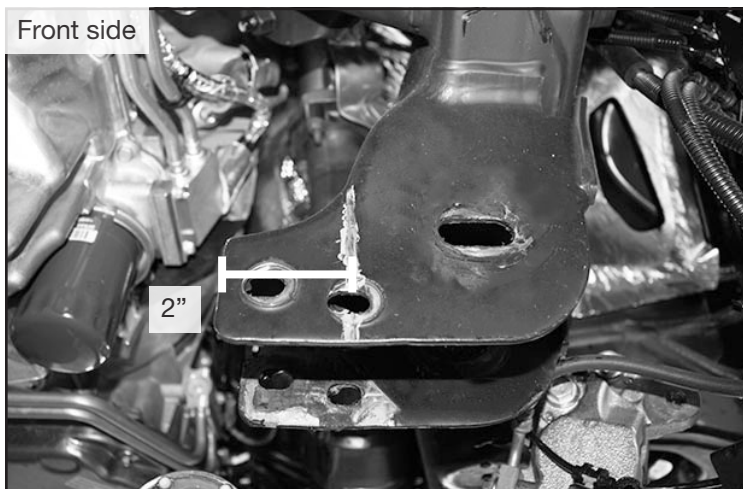


FIGURE 21 - STEP 16

Back side



FIGURE 22 - STEP 16



FIGURE 23 - STEP 16

17. Install the FT20898 (Rear crossmember) to the factory frame pockets using the supplied M18 x 120mm bolts, washers and nuts. Leave loose. Torque the driver and pass diff hardware to 148 ft-lbs. **SEE FIGURE 24**

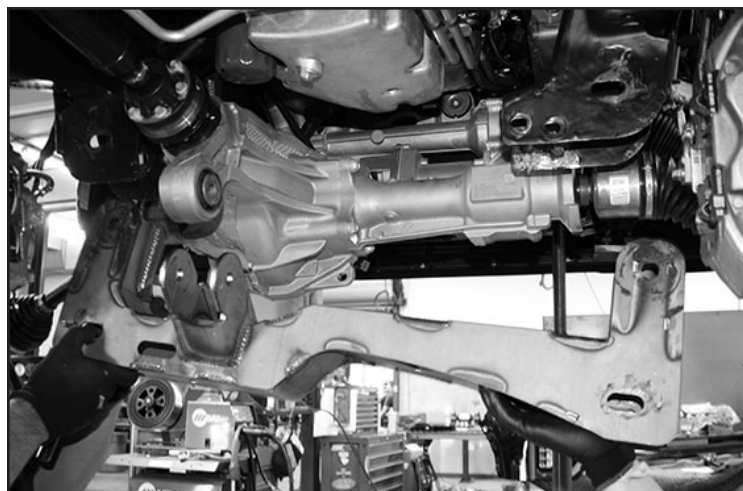


FIGURE 24 - STEP 17

18. Install FT20841 (Front crossmember) using the supplied M18 x 120mm bolts, washers and nuts. Leave loose. **SEE FIGURE 25**



FIGURE 25 - STEP 18

19. Install FT20853 & FT20854 (driver & pass sway bar drop brackets) using the factory hardware. Then install the factory sway bar to the new brackets using the supplied 3/8" x 1-1/2" hardware. **SEE FIGURES 26-27**

Driver side

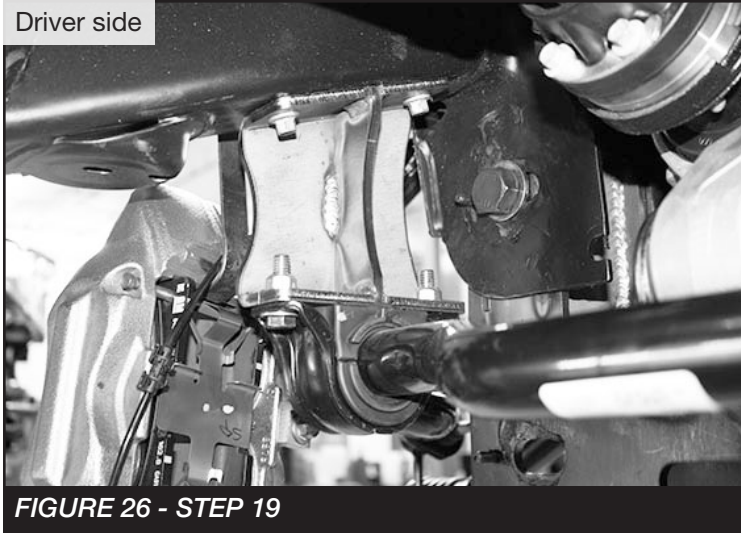


FIGURE 26 - STEP 19

Pass side



FIGURE 27 - STEP 19

20. Re-install the factory lower control arms to the pockets on the Fabtech crossmembers using the factory cam bolts. Torque the upper crossmember M18 hardware to 229 ft-lbs. Leave the lower control arm bolts loose. **SEE FIGURE 28**



FIGURE 28 - STEP 20

21. Locate the factory coilovers. Remove the nut clips from the cross-shaft and discard. Using a press, press out the cross-shaft and the bushing from the bottom of the coilover and discard. **SEE FIGURES 29-31**



FIGURE 29 - STEP 21

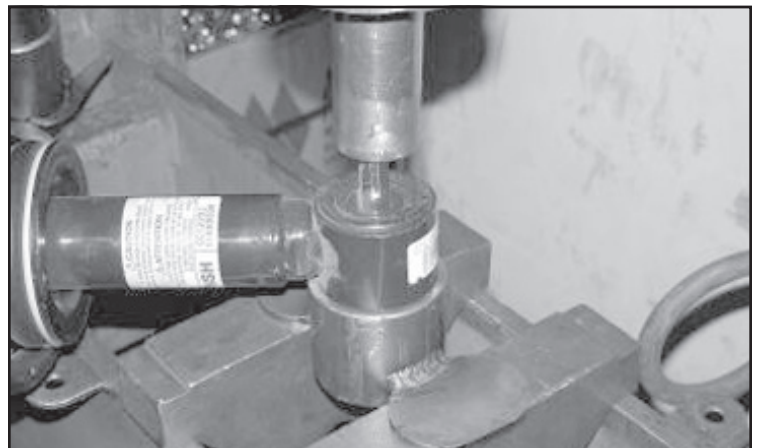


FIGURE 30 - STEP 21



FIGURE 31 - STEP 32

22. Install two FT20871 (Aluminum half bushing) into the factory lower strut. **SEE FIGURE 32**



FIGURE 32 - STEP 22

23. Install two FT20568BK (shock brackets) around the bottom of the factory shock making sure the holes are lined up (use a supplied 1/2" bolt to line to hold in place). Then, Install four 5/16" x 1-1/2" bolts and hardware to secure the brackets to the strut body. Torque to 25 ft-lbs. Then remove the 1/2" bolt. **SEE FIGURE 33-34**



FIGURE 33 - STEP 23



FIGURE 34 - STEP 23

24. Install two FT1036 (Bushings) into FT20847 (Shock extension) using the supplied grease. Then using a press. Press the FT148 (Sleeve) into the bushings. **SEE FIGURES 35-36**



FIGURE 35 - STEP 24



FIGURE 36 - STEP 24

25. Install the FT20847 (shock extension) onto the factory strut using the supplied 1/2" x 4" bolts and hardware. Torque to 106 ft-lbs. **SEE FIGURES 37-38**



FIGURE 37 - STEP 25



FIGURE 38 - STEP 25

26. Install FT20848 (Lower shock mount) & FT20872 (shock mount plate) to the lower control arm using the supplied 7/16" x 2-1/2" bolts and hardware. Torque to 70 ft-lbs. **SEE FIGURES 39-40**



FIGURE 39 - STEP 26



FIGURE 40 - STEP 26

27. Install the factory coilover to the upper mount using the factory hardware and to the new lower mount using the supplied 1/2" x 3-3/4" bolt and hardware. **SEE FIGURE 41**



FIGURE 41 - STEP 27

28. Locate the factory spindles. Disassemble the factory spindles from the hub assemblies by removing the 4 bolts on each spindle. **SEE FIGURES 42**

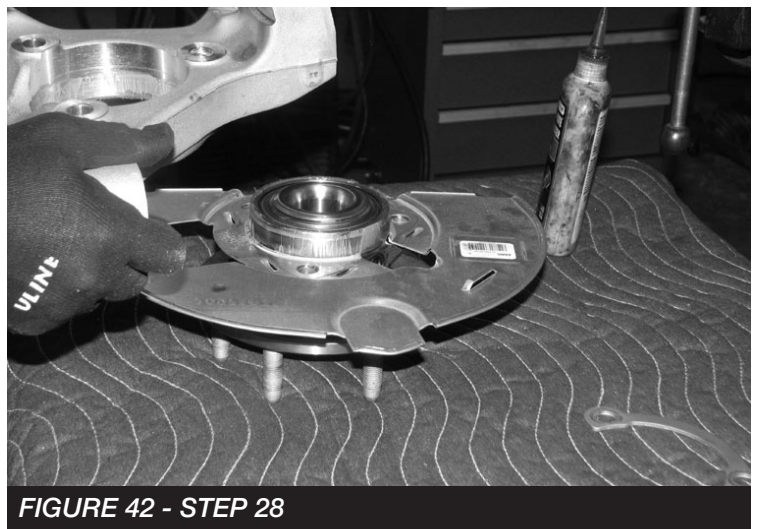


FIGURE 42 - STEP 28

29. Locate FT20840D (Driver spindle) & FT20840 (Pass spindle) assemble the new spindle on the hub assembly. Use thread lock on the factory hardware and torque to 125 ft-lbs. **NOTE: The shield on the back side will not be reused. SEE FIGURE 43**



FIGURE 43 - STEP 29

30. Install the new spindle onto the lower & upper control arms. Torque the upper ball joint to 37 ft-lbs and the lower ball joint to 87 ft-lbs. **SEE FIGURES 44-45**



FIGURE 44 - STEP 30



FIGURE 45 - STEP 43

31. Reinstall the locator screw, brake rotor and caliper. Torque the locator screw to 20 ft-lbs and the caliper mounting bolts to 74 ft-lbs. **NOTE: Tighten the lower crossmember/lower control arm cam bolts once the the vehicle is on the ground torque the cam bolts to 229 ft-lbs.**

32. Repeat steps on the Passenger side.

33. Locate the factory tie rod ends. Remove the factory tie rod. Using a die grinder or cut off wheel. Cut off 3/8" from the end of the factory threaded end. **SEE FIGURE 46**



FIGURE 46 - STEP 33

34. Locate the FT20857 (Outer Tie Rod), install the zerk fitting that is provided. Using thread locking compound, install the FT20857 (Outer Tie rod). Then, install to the factory tie rod to the spindle. Torque to 44 ft-lbs. **SEE FIGURE 47** Repeat on the passenger side.



FIGURE 47 - STEP 34

35. Locate the factory brake line bracket, using a cut off wheel. Cut the angled tab off and sand to a smooth finish. **SEE FIGURES 48-49**



FIGURE 48 - STEP 35



FIGURE 49 - STEP 35

36. Attach the factory brake line bracket to the back of the new spindle using the supplied 1/4" x 3/4" bolt and lock washer. Then, reinstall the ABS sensor into the spindle using the factory hardware. Torque both to 8 ft-lbs. **SEE FIGURE 50-51** Repeat on the passenger side.



FIGURE 50 - STEP 36

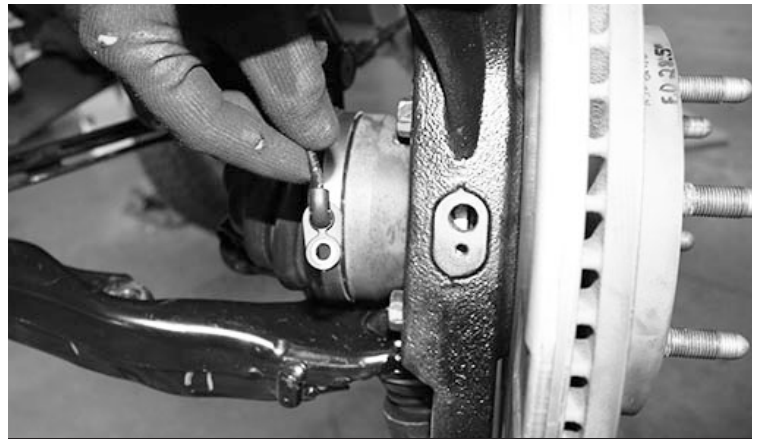


FIGURE 51 - STEP 36

- REAR SUSPENSION -

37. 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 ubolts. Disconnect the factory brake line brackets from the top of the diff and save the hardware.
38. Remove the factory bumpstop from the frame and discard the bolt. Install FT20870 (Bumpstop spacer) in between the factory bumpstop and the frame using the supplied M10 x 70mm socket head bolt. Torque to 53 ft-lbs **SEE FIGURE 52**

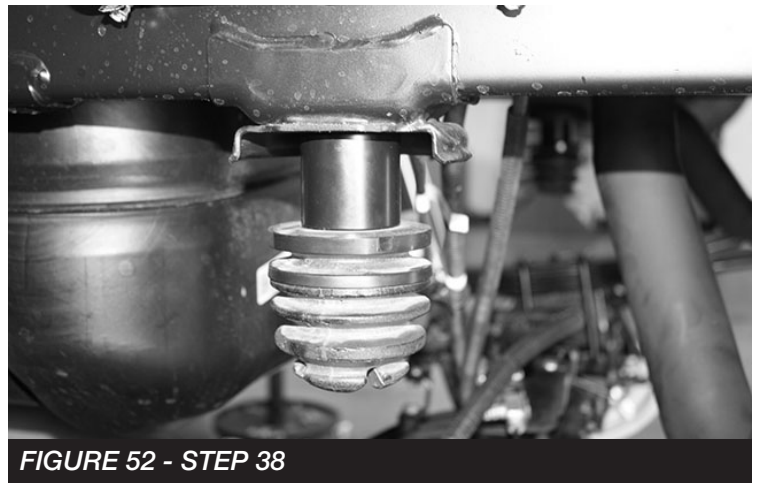


FIGURE 52 - STEP 38

39. Install FTBK5 (5" Block), FT1500U-3 (Ubolts) and 9/16" Hardware. Install the blocks with the new hardware, the short end of the block should be facing the front of the vehicle. Torque to 90 ft-lbs. **SEE FIGURE 53**



40. Install FT20859 & FT20860 (Rear brake line brackets) to the rear diff using the factory hardware. Then install the factory brackets to the new Fabtech brackets using the supplied 1/4" x 1" hardware. Torque all hardware to 12 ft-lbs. **SEE FIGURES 54-55**



41. 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.**
42. Check front end alignment and set to factory specifications. Readjust headlights.
43. Recheck brake hoses, ABS wires and suspension parts for proper tire clearance while turning tires fully left to right.
44. 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.**
45. 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.

RE-TORQUE 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 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 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