

INSTALLATION INSTRUCTIONS



2013-2016 DODGE 3500 4WD 5" RADIUS ARM KIT W/ 4.0 COILOVERS

FT23185i

- PARTS LIST -

	K3077DL	
1	FTS23114	COMPONENT BOX 1
1	FTS23185	COMPONENT BOX 2
2	FTS835102	4.0 DLSS COILOVER W/ RESI

	FTS23114	COMPONENT BOX 1
1	FT44172	DODGE PITMAN ARM
1	FT44236BK	TRACK BAR BRACKET
1	FT44243BK	BUMP STOP MOUNT DRIVER
1	FT44244BK	BUMP STOP MOUNT PASSENGER
2	FT44279BK	REAR COIL SPRING
1	FT44311BK	UPPER COIL OVER MOUNT (DRIVER)
1	FT44312BK	UPPER COIL OVER MOUNT (PASS)
1	FT44314	ABS RELOCATION BRACKET
1	FT44390BK	RESI MOUNT (DRIVER)
1	FT44391BK	RESI MOUNT (PASS)
1	FT44394BK	UPPER BACKING PLATE (DRIVER)
1	FT44395BK	UPPER BACKING PLATE (PASS)
1	FT44424	HARDWARE SUBASSEMBLY
2	FT811042	2.25" DLSS NON RESI SHOCKS

	FTS23185	COMPONENT BOX 2
2	FTBK21	BLOCK 2.0"
4	FT738U	UBOLT ROUND 9/16-18 X 12.50 X 4.00
1	FT44449	RADIUS ARM (DRIVER)
1	FT444450	RADIUS ARM (PASS)
1	FT44432	HARDWARE SUBASSEMBLY
1	FT44433	HARDWARE KIT

	FT44432	HARDWARE SUBASSEMBLY
4	FT1006	BUSHING LOWER
2	FT102	SLEEVE 1.000 X .732 X 3.280
1	FT23185i	INSTRUCTIONS
2	FT44045	TRACK BAR NUT TAB
2	FT44135	BUMP STOP MOUNT TAB
2	FT44245	BRAKE LINE EXT
1	FT44246	TRACK BAR SUPPORT SPACER
2	FT44258	1/4 NUT TAB
1	FT44388	NUT TAB UPPER
2	FT44389	NUT TAB
1	FT44408	NUT TAB
2	FT86021	HARDWARE & BUSHING KIT 21
4	FT89016	#64 HOSE CLAMP
1	FTAS16	DRIVER WARNING DECAL
1	FTAS12	STICKER FT BLUE 10X4
1	FTREGCARD	REGISTRATION CARD
2	FTS88	BUMPSTOP 1 IN TALL LOW RND

	FT44424	HARDWARE SUBASSEMBLY
1	FT44381	LOWER SHOCK MOUNT TAB DRIVER OUTER
1	FT44382	LOWER SHOCK MOUNT TAB DRIVER INNER
1	FT44383	LOWER SHOCK MOUNT TAB PASS OUTER
1	FT44384	LOWER SHOCK MOUNT TAB PASS INNER
1	FT44385	LOWER SHOCK MOUNT SPACER TOOL
1	FT44386	LOWER SHOCK GUSSET TOP DRIVER
1	FT44387	LOWER SHOCK GUSSET TOP PASS

	FT44419 - HARDWARE KIT	LOCATION	
	BAG 1		
1	M18-2.5 X 90MM HEX BOLT	TRACK BAR DROP BRACKET	
2	M18 WASHERS		
1	NUT C-LOCK 18MM G10.9 ZINC		
2	1/2-13 C-LOCK NUT ZINC		
2	1/2-13 X 1-1/2 HEX BOLT G8 ZNC	TRACK BAR DROP BRACKET	
6	1/2 SAE WASHER G8 ZINC		
4	1/4 SAE WASHER G5 ZINC		
2	1/4-20 NYLOCK NUT		
2	1/4-20 X 1" HEX BOLT		
2	5/16-18 X 2-1/2 HEX BOLT G8 ZINC	BUMP STOP	
4	5/16 SAE WASHER G8 ZINC		
2	5/16-18 C-LOCK NUT ZINC		
2	1/2-13 X 1-1/4 HEX BOLT G8 ZNC	BUMP STOP	
2	1/4-28 GREASE FITTING		
	BAG 2		
10	7/16-14 X 1-1/2 HEX BOLT G8		
2	7/16 SPLIT LOCK WASHER		
1	7/16-14 X 1-1/4 HEX BOLT G8		
2	7/16 USS WASHER G8		
20	7/16 SAE WASHER G8 ZINC		
9	7/16-14 C-LOCK NUT		
6	5/8 SAE WASHER		
2	5/8-11 C-LOCK NUT		
2	5/8-11 X 3-1/4 HEX BOLT G8		
2	5/8-11 X 4 SOCKET HD BOLT		
4	3/8" SAE WASHER		
2	3/8-16 X 1-1/4" HEX BOLT		
2	3/8-16 C-LOCK NUT		
4	1/4-20 X 1 HEX BOLT G5 ZINC	BRAKE LINE EXTENSION	
2	1/4 SAE WASHER G5 ZINC		
2	1/4-20 C-LOCK NUT ZINC		
	BAG 3		
4	7/16-14 X 1-1/4 HEX BOLT G8 ZC	REAR BUMP STOP	
4	7/16-14 C-LOCK NUT ZINC		
8	9/16 SAE WASHER	UBOLTS	
8	9/16-18 NYLOCK NUT		



- 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 -

Read this before you begin installation-

Check all parts to the parts list above before beginning installation.

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.

RECOMMENDED TIRE/WHEEL SIZES -

Use 37x12.50/R17 tire w/ 17x9 wheels w/ 5" BS w/ minor trimming

Use 37x12.50/R18 tire w/ 18x9 wheels w/ 5" BS w/ minor trimming

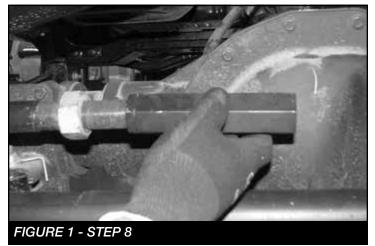
Use 37x13.50/R20 tire w/ 20x9.5 wheels w/ 5" BS w/ minor trimming

Use 37x13.50/R22 tire w/ 22x11 wheels w/ 5" BS w/ minor trimming

- INSTRUCTIONS -

FRONT SUSPENSION

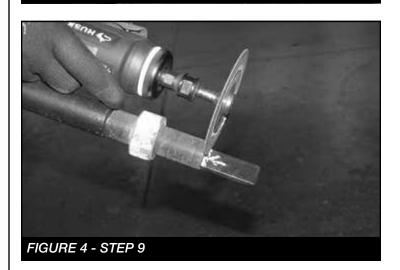
- Disconnect the negative terminal on the battery. Jack up the front end of the truck and support the frame rails with jack stands. NEVER WORK UNDER AN UNSUPPORTED VEHICLE! Remove the front tires.
- **2. DRIVER SIDE ONLY** Starting on the driver side, remove the driver side fender liner.
- 3. Remove the factory shock and discard. Retain factory lower hardware.
- 4. Disconnect factory sway bar links.
- 5. Remove factory coil spring and rubber isolator. Retain these parts for later use.
- 6. Remove the factory pitman arm and discard. Keep 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 factory drag link at the adjuster sleeve and remove adjuster sleeve. **SEE FIGURE 1**



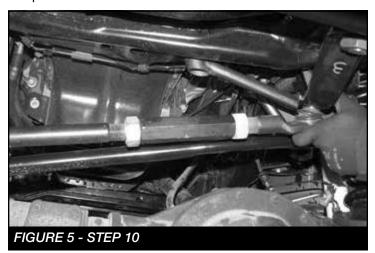
9. Using a die grinder remove the flat nonthreaded section from both ends of the drag link. This will allow you to rotate the drag link and line it up with the pitman arm. **SEE FIGURES 2-4**







10. Reassemble the drag link and connect it to the new pitman arm. SEE FIGURE 5

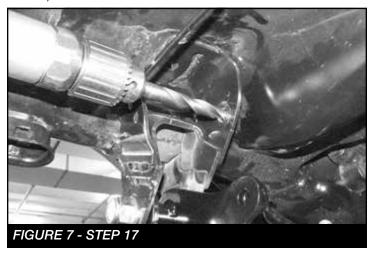


- 11. Torque the drag link to 83 ft-lbs.
- 12. Remove the track bar from the frame side of the vehicle.
- 13. Locate the FT44236BK track bar bracket and M18-2.5 x 90mm bolt.
- 14. Slide the track bar bracket into the factory mount and insert the M18 bolt into the factory pivot hole. **SEE FIGURE 6**



- 15. Rotate the bracket up until the end of the bracket is flush with the crossmember under the motor.
- 16. Using the Fabtech bracket as a guide, mark the factory mount for the upper driver side mounting hole.

17. Swing the bracket back out of the way. Using a 1/2" drill bit, drill out the marked hole. SEE FIGURE 7



- 18. Locate one FT44246 sleeve and two 1/2"-13 x 1-1/2" bolts, nuts and washers.
- 19. Rotate the track bar bracket back into place and bolt together using 1/2"-13 x 1-1/2" bolt and the sleeve. **SEE FIGURES 8-9**

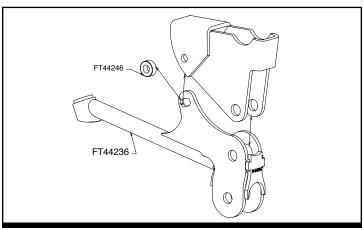


FIGURE 8 - STEP 19



FIGURE 9 - STEP 19

20. Using the Fabtech bracket as a guide, drill a 1/2" hole in the cross member under the motor. Next, mount using 1/2"-13x1.5" and washer. **SEE FIGURE 10**



21. Remove the factory coil springs and lower rubber isolators. **SEE FIGURE 11**

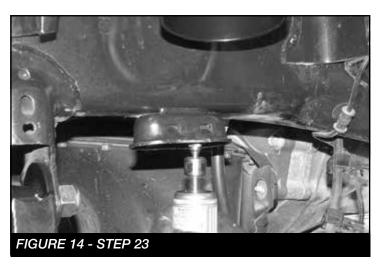


- IF INSTALLING DIRT LOGIC 4.0 COILOVERS REFER TO THE COILOVER CONVERSION INSTRUCTIONS AT THIS TIME.
- 22. Locate and remove the factory rubber bump stop. **SEE FIGURE 12**

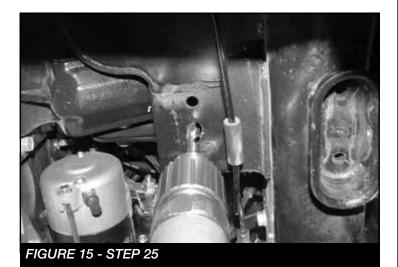


23. Using a die grinder, grind out the stamped in tabs on the inside of the bump stop housing. **SEE FIGURES 13-14**

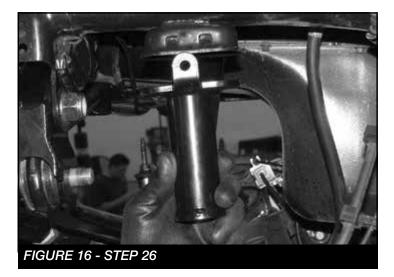


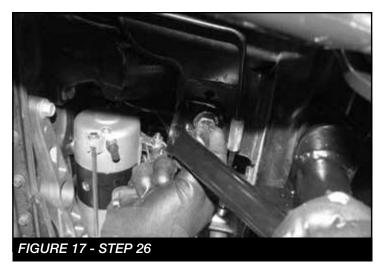


- 24. Locate the FT44243BK driver front bump stop and the FT44135 nut tab.
- 25. Using a 1/2" drill bit, drill out the hole in the factory crossmember inline with the factory bump stop mount. **SEE FIGURE 15**



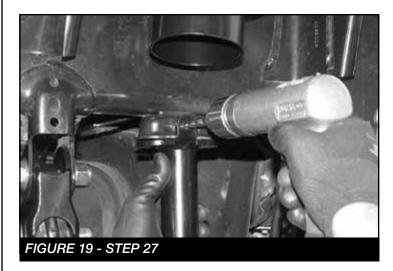
26. Slide the bump stop into the factory bump stop mount. Using a 1/2"-13 x 1-1/4" bolt and the FT44135 (nut tab), bolt the bump stop to the crossmember. Torque the 1/2" bolt to 90 ft-lbs. **SEE FIGURES 16-18**



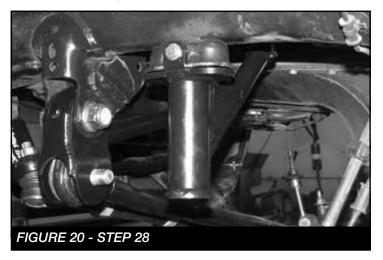




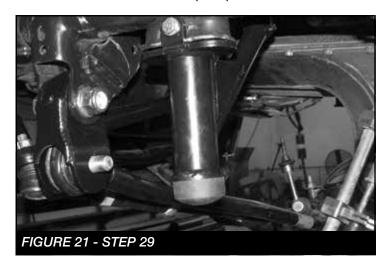
27. Using the outer tab on the bump stop as a drill guide, drill a 5/16" hole all the way through the factory bump stop mount. **SEE FIGURE 19**



28. Locate a 5/16"-18 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 20

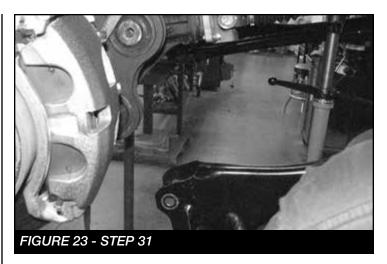


29. Locate the FTS88 bump stop pad and thread it into the bottom of the Fabtech bump stop. SEE FIGURE 21



- 30. Repeat steps 2-29 on the passenger side.
- 31. Secure the front diff. Remove the factory driver and passenger side Radius arm. Retain Hardware. **SEE FIGURES 22-23**

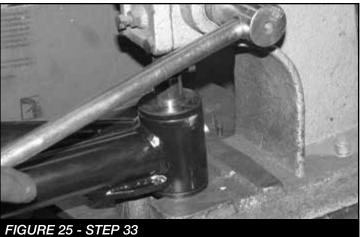




- 32. Locate the FT44449 Driver side radius arm, FT1006 bushing, FT102 sleeve, and zerk fitting.
- 33. Install two bushings, one sleeve, and the zerk fitting into the barrel of the radius arm. SEE FIGURES 24-26



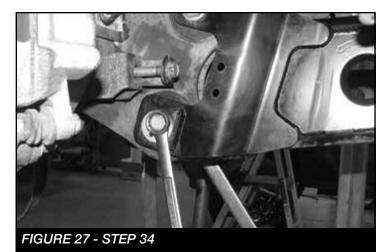
FIGURE 24 - STEP 33



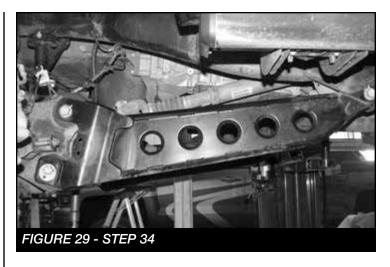


34. Install the new Fabtech radius arms into the factory frame pocket and onto the axle bushings using the factory hardware. Torque the factory bolts to 200 ft-lbs.

SEE FIGURES 27-29







35. REPEAT STEPS 31-34 ON THE PASSENGER SIDE.

36. Locate the FT44245 Brake line extension, FT44258 nut tab and two 1/4"-20 x 1" bolts. 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. Torque to 10 ft-lbs. Repeat this step on the passenger side. **SEE FIGURES 30-31**



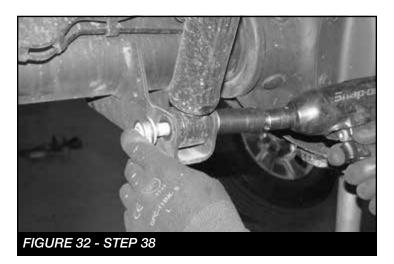
FIGURE 30 - STEP 36



37. Reconnect the factory sway bar. Torque to 29 ft-lbs.

REAR SUSPENSION

38. 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. SEE FIGURES 32-33





39. Locate the supplied 2" blocks FTBK21, FT738U u-bolts and 9/16" hardware. Install the block onto the axle with the small end of the taper to front of the truck. Using the supplied u-bolts, nuts and washers, align axle, lift block and springs and torque to u-bolts to 129 ft-lbs.

SEE FIGURES 34-37



FIGURE 34 - STEP 39



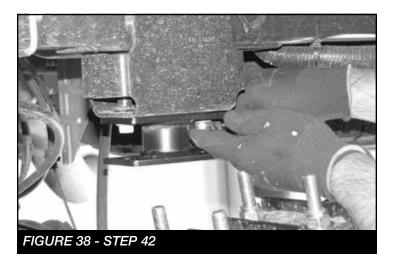




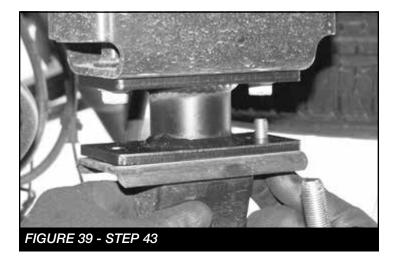
- 40. Install new Dirt Logic 2.25" (FTS835102) with the factory hardware and torque upper and lower bolts to 29 ft-lbs.
- 41. Remove driver and passenger factory bump stop. Retain Hardware.

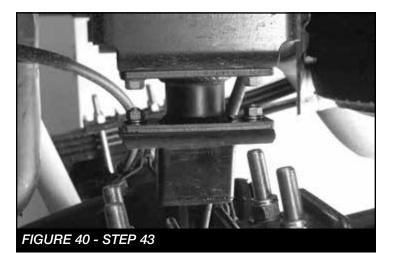
42. Install the new FT44242BK bump stop extension to the factory mount using the factory hardware and torque to 65 ft-lbs.

SEE FIGURE 38



43. Using 7/16"-14 x 1-1/4" bolt, nuts and washers, mount the factory bump stop to the extension. Torque to 59 ft-lbs. **SEE FIGURES 39-40**





- 44. 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.
- 45. Check front end alignment and set to factory specifications. Readjust headlights.
- 46. Recheck all bolts for proper torque.
- 47. Recheck brake hoses, ABS wires and suspension parts for proper tire clearance while turning tires fully left to right.
- 48. 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.
- 49. 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.