

# 4.5" LIFT BOX KIT 2009 – 2013 DODGE RAM 2500 & 3500 4WD DIESEL ENGINE ONLY FTS23031





	FTS23031	Comp. Box 1
Qty	Part #	Description
2	FT44036BK	Upper Link
2	FT44037BK	Lower Link
1	FT44198BK	Track Bar Bracket
2	FT3400-111	Front Bump Stops
1	FT44043	Sway Bar Drop Driver
1	FT44044	Sway Bar Drop Pass.
1	FT44172	Pitman Arm
2	FTBK21	Block 3/4" Pin
4	FT738U	U-Bolt
1	FT44176	Hdwr Sub-Assembly Kit
1	FT44058	Hardware Kit

	FT44058 Hardware Kit	
Qty	Description	
1	9/16"-12 x 3" Hex Bolt	
1	9/16"-12 Nylok Nut	
2	9/16" SAE Flat Washer	
5	7/16"-14 x 1 1/4" Hex Bolt	
4	7/16"-14 Nylok Nut	
9	7/16" SAE Flat Washer	
1	7/16" Split Washer	
1	14mm-2.0 x 150mm Hex Bolt	
1	14mm-2.0 C-Lock Nut	
2	14mm Flat Washer	

	FT44176	Hdwr Sub-Assembly Kit
Qty	Part #	Description
1	FT44045	Track Bar Bracket Nut Tab
1	FT90112	Bushing Kit
4	FT76	Sleeve 1.00 x .563 x 2.230
2	FT77	Sleeve 1.00 x .630 x 2.620
12	FT1038	Bushing Half Large
4	FT1037	Bushing Half Small
2	FTLUBE	Lube
2	FT186	Sleeve 1.00 x .719 x 2.620
1	FT916H	U-Bolt Hardware
8	FT84	Grease Fittings
1	FTLOCK	Thread Lock
2	FT23031i	Instruction Sheet
1	FTAS16	Driver Warning
1	FTAS12	Fabtech Sticker
1	FTREGCARD	Reg. Card

# TOOL LIST: (NOT INCLUDED)

- FLOOR JACK
- JACK STANDS
- ASSORTED METRIC AND S.A.E SOCKETS, & ALLEN WRENCHES
- PITMAN ARM PULLER
- GREASE GUN



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

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

VEHICLES THAT WILL RECEIVE OVERSIZED TIRES SHOULD CHECK BALL JOINTS, TIE RODS ENDS AND IDLER ARM EVERY 2500-5000 MILES FOR WEAR AND REPLACE AS NEEDED

THIS KIT MUST BE INSTALLED WITH A FABTECH 4.5" LIFT COIL SPRING KIT, FRONT SHOCKS AND REAR SHOCKS

### **FRONT INSTRUCTIONS:**

- Disconnect the negative terminal on the battery. Jack up the front end of the truck and support the frame rails with jack stands. <u>NEVER WORK UNDER AN</u> UNSUPPORTED VEHICLE! Remove the front tires.
- 2. Support the front axle with 2 floor jacks. Remove the bolts attaching the brake line tabs to the front axle. Remove the front sway bar end links from the axle mount. Remove the bolts securing the sway bar mounts to the frame and set the sway bar aside, save all sway bar hardware.
- 3. Remove the hardware attaching the drag link to the pitman arm and separate the tie rod end from the pitman arm. Save the hardware.
- 4. Remove the nut securing the track bar to the frame and separate. Save the track bar hardware.
- 5. Remove the top nuts on the front shocks and then the lower bolts securing the shock to the axle. Leave the shock loose inside the factory coil spring at this time. Save the lower hardware and discard the upper.
- 6. Loosen the bolts securing the link arms to the frame and front axle, DO NOT REMOVE THE BOLTS. Lower the jacks supporting the front axle and remove the coil springs. Save the upper rubber insulator and discard the coil springs and shocks. USE EXTREME CARE WHEN WORKING WITH COILS THAT ARE UNDER LOAD!
- 7. Locate FT44036 upper link arms. (This link is 17 1/4" from the center of the barrel to the center of the barrel). Press one FT1037 small bushing and one large FT1038 bushing into

- each end of the upper link arms. **Be sure to check the offset of the bushing so that the zerk fitting is not covered**. Locate FT76 upper link arm sleeve and press one into each end of the link arms. Use the supplied FTLUBE on the surfaces of the bushings and sleeves before installing. Install one of the supplied FT84 grease fitting into each barrel on the link arms.
- 8. Remove the bolts attaching the upper link arms to the front axle and then the frame. Save the factory bolts and discard the links. Locate FT44036 upper link arms. Attach the link arms to the axle mounts first then to the factory frame pocket using the original hardware. Note: Both factory upper link arms will need to be removed before installing the Fabtech links. Also when installing the upper links make sure the gussets are facing up. Leave the link arm bolts loose at this time. ON PASS. SIDE OF THE TRUCK THE UPPER LINK ARM BOLT AT THE FRAME MOUNT WILL NEED TO BE CUT OUT FOR EASY OF REMOVAL, A NEW 14MM BOLT NUT AND WASHER IS SUPPLIED FOR THAT MOUNT.
- 9. Locate FT44037BK lower link arms. (This link is 19" from the center of the barrel to the center of the barrel). Press two FT1038 large bushings into each end of the links arms. Locate FT77 and FT186 lower link arm sleeves and press one into each end of the lower link arms. Use the supplied FTLUBE on the surfaces of the bushings and sleeves before installing. Install one of the supplied FT84 grease fitting into each barrel on the link arms.
- 10. Remove the bolts attaching the lower link arms to the front axle and then the frame. Save the factory bolts and discard the links. Locate FT44037 lower link arms. Attach the link

arms to the axle mounts first than to the frame mounts using the original hardware. The end of the link arm with the FT186 sleeve should be used at the axle mounts.

NOTE: when installing the link arms onto the truck make sure the gussets on the lower arms facing down.

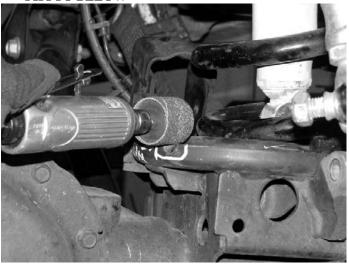
Also when reinstalling the alignment cam bolts in the lower axle pivot make sure they are set in the center of their adjustment. Both factory lower link arms will need to be removed before installing the Fabtech links. Leave the link arm bolts loose at this time.

- 11. Locate FT44198BK Track Bar bracket and install into the factory frame track bar mount. (2009-2012 model trucks will need the two 9/16" holes in the track bar bracket drilled out to 5/8") Attach the new bracket to the original frame hole using the original hardware. Leave loose at this time. Using the supplied FT44045 nut tab along with the supplied 7/16" x 1 ¼" bolt, flat washer and split washer attach to the inboard hole of the new track bar bracket to the frame. (Note: on some models this hole will need to be drilled.)Torque the 7/16" bolt to 50 ft-lbs. and the 9/16" bolt to 100 ft-lbs.
- 12. Remove the nut securing the pitman arm to the steering box. Using a pitman arm puller, remove the pitman arm from the steering box. Slide the new FT44172 pitman arm onto the steering box shaft, making sure to line up the splines properly. Reinstall the original lock washer and nut and torque to 220 ft-lbs.
- 13. Remove the original rubber bumpstops from the frame and install the supplied FT3400-111 urethane bump stops. SEE PHOTO BELOW.



14. Take one of the new coil springs FT44035P and FT44035D for driver and passenger and locate the top of the coil spring (smaller diameter end). Locate FTS7237 front shocks and place one shock inside each coil spring **BEFORE INSTALLING ON THE TRUCK.** The shocks must be placed inside the coil spring before it is installed. Place the original coil spring insulator on top of the coil spring and place the coil spring onto the front axle. Align the coil spring in the upper and lower pockets and raise the jacks supporting the front axle. Raise the axle just enough

to compress the coil spring 1/4". USE CARE TO NOT LIFT THE TRUCK OFF OF THE SUPPORT STANDS. Note: On some vehicles, the lower coil bucket must be notched for track bar bracket clearance. SEE PHOTO BELOW





15. Connect the track bar to the new drop bracket using the supplied 9/16" x 3" bolt, nut, and washers. **NOTE: This may need to be done when the truck is back on the ground.** SEE PHOTO BELOW.



16. Connect the drag link to the new drop pitman arm. Torque the original nut to 45 ft-lbs. SEE PHOTO BELOW.



17. Starting on the driver's side of the truck, attach the sway bar drop bracket (FT44043 Driver) to the frame in the original sway bar mounting holes using the original bolts. Repeat this on the opposite side using the passenger's side bracket (FT44044). Do not tighten the bolts. Mount the sway bar to the drop brackets in the same direction it was removed, use the supplied 7/16" bolts, washers and nuts. Attach the sway bar end links to the front axle using the factory hardware. Once the sway bar is centered, tighten all of the hardware. SEE PHOTO IN NEXT COLUMN.



- 18. Attach the brake line tab back to the original mount using the original hardware. You may need to pull the factory hose through the bracket to gain some slack. Repeat this on the opposite side of the truck.
- 19. Attach the front shocks to the upper and lower mounts. You will used the supplied hardware for the upper mount and factory lower hardware. Torque the upper hardware to 35 ft-lbs and the lower hardware to 60 ft-lbs

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

## **REAR INSTRUCTIONS**

- 21. 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.
- 22. Locate and install the 2" rear lift blocks, the factory block will be positioned on top of the new Fabtech block, with the short center pin of both blocks facing down to the axle. Using the supplied FT738U u-bolts, nuts and washers align axle, lift blocks, and springs and torque to u-bolts to 90 ft-lbs.
- 23. Install new Fabtech shocks FTS7333 with the factory hardware and torque upper and lower bolts to 65 ft-lbs.
- 24. Recheck all bolts for proper torque. Recheck brake hoses and lines for proper clearances.
- 25. Install tires and wheels and torque lug nuts to wheel manufacturer's specifications. Turn front tires left to right and check for appropriate tire clearance. Note- Some tires may require trimming of the front plastic bumper valance
- 26. Check front-end alignment and set to factory specifications. Re-adjust headlights.
- 27. Recheck all the hardware on the suspension that was used for correct torque.

### 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 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 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.

Instruction Sheet Part #- FT23031i

12/11/13 JP