



## **INSTALLATION INSTRUCTIONS**

# **2019-2023 DODGE RAM 1500 4WD/2WD 3" BALL JOINT UPPER CONTROL ARM KIT FTS23202**

**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** | 4331 Eucalyptus Ave. Chino, CA 91710

**Tech Line:** 909-597-7800 | **Fax:** 909-597-7185 | **Web:** [www.fabtechmotorsports.com](http://www.fabtechmotorsports.com)

| FTS23202 3" RAM 1500 BJ UCA KIT |         |                               |
|---------------------------------|---------|-------------------------------|
| 1                               | FT44539 | BJ UPPER CONTROL ARM (DRIVER) |
| 1                               | FT44540 | BJ UPPER CONTROL ARM (PASS)   |
| 1                               | FT44484 | HARDWARE SUBASSEMBLY          |
| 1                               | FT44495 | REAR COIL SPACER (DRIVER)     |
| 1                               | FT44496 | REAR COIL SPACER (PASS)       |

| FT44484 HARDWARE SUBASSEMBLY |               |                              |
|------------------------------|---------------|------------------------------|
| 8                            | FT1037        | UPPER CONTROL ARM BUSHING    |
| 2                            | FT20538       | BALL JOINT                   |
| 2                            | FT97150-6-106 | SLEEVE 1.250 X .625 X .400   |
| 4                            | FT194         | UPPER CONTROL ARM SLEEVE     |
| 1                            | FT23202i      | INSTRUCTIONS                 |
| 1                            | FT44509       | HARDWARE KIT                 |
| 1                            | FTAS12        | STICKER FT BLUE 10X4 DIE CUT |
| 1                            | FTAS16        | DRIVER WARNING DECAL         |
| 1                            | FTREGCARD     | REGISTRATION CARD            |
| 1                            | FTLUBE        | URETHANE LUBE PACKET         |

| FT44509 - HARDWARE KIT |                           | LOCATION    |
|------------------------|---------------------------|-------------|
| 8                      | 5/16-18 X 1-1/4" HEX BOLT | BALL JOINT  |
| 16                     | 5/16 SAE WASHER           |             |
| 8                      | 5/16-18 C-LOCK NUT        |             |
| 6                      | 3/8-16 NYLOCK NUT         | REAR SPACER |
| 6                      | 3/8 SAE WASHER            |             |
| 4                      | 1/4-28 GREASE FITTING     |             |
| 1                      | THREAD LOCKING COMPOUND   |             |
| 4                      | BLACK ZIP TIE             |             |

| FTS23204 RAM 1500 SPACER KIT |         |                                       |
|------------------------------|---------|---------------------------------------|
| 2                            | FT44498 | LOWER SPRING PERCH SPACER (NON-REBEL) |
| 2                            | FT44508 | UPPER SHOCK SPACER                    |
| 1                            | FT44511 | HARDWARE KIT                          |

| FTS23205 RAM 1500 SPACER KIT (REBEL) |         |                                   |
|--------------------------------------|---------|-----------------------------------|
| 2                                    | FT44507 | LOWER SPRING PERCH SPACER (REBEL) |
| 2                                    | FT44508 | UPPER SHOCK SPACER                |
| 1                                    | FT44511 | HARDWARE KIT                      |

| FT44511 - HARDWARE KIT |                         | LOCATION |
|------------------------|-------------------------|----------|
| 6                      | M10-1.25 PRESS FIT STUD |          |
| 6                      | M10-1.25 NYLOCK NUT     |          |
| 6                      | M10 FLAT WASHER         |          |
| 1                      | THREAD LOCKING COMPOUND |          |

| K3167 3" BALL JOINT KIT W/ PERFORMANCE |          |                                 |
|----------------------------------------|----------|---------------------------------|
| 1                                      | FTS23202 | 3" RAM 1500 BALL JOINT UCA KIT  |
| 1                                      | FTS23204 | 3" SHOCK SPACER KIT (NON REBEL) |
| 2                                      | FTS7188  | PERFORMANCE SHOCK               |

| K3168 3" BALL JOINT KIT W/ PERFORMANCE |          |                                |
|----------------------------------------|----------|--------------------------------|
| 1                                      | FTS23202 | 3" RAM 1500 BALL JOINT UCA KIT |
| 1                                      | FTS23205 | 3" SHOCK SPACER KIT (REBEL)    |
| 2                                      | FTS7188  | PERFORMANCE SHOCK              |

| K3167M 3" BALL JOINT KIT W/ STEALTH |          |                                |
|-------------------------------------|----------|--------------------------------|
| 1                                   | FTS23202 | 3" RAM 1500 BALL JOINT UCA KIT |
| 1                                   | FTS23204 | 3" SHOCK SPACER KIT            |
| 2                                   | FTS6016  | STEALTH SHOCK                  |

| K3168M 3" BALL JOINT KIT W/ STEALTH |          |                                |
|-------------------------------------|----------|--------------------------------|
| 1                                   | FTS23202 | 3" RAM 1500 BALL JOINT UCA KIT |
| 1                                   | FTS23205 | 3" SHOCK SPACER KIT (REBEL)    |
| 2                                   | FTS6016  | STEALTH SHOCK                  |

## - TOOL LIST -

### *Required Tools (Not Included)*

|                                                       |                                        |
|-------------------------------------------------------|----------------------------------------|
| Basic Hand Tools                                      | Torque Wrench                          |
| Floor Jack                                            | Die Grinder w/ Cutoff Wheel or Sawzall |
| Jack Stands                                           |                                        |
| Assorted Metric and S.A.E sockets, and Allen wrenches |                                        |

## - 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
- Will not fit factory air suspension vehicles
- Does not fit 2019 Ram 1500 classic models
- Will not fit diesel models

## - 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 the factory transfer case skid plate.
3. Locate the sway bar and sway bar end links. Disconnect the end links from the lower control arms.
4. Working from the driver side of the vehicle, disconnect the tie rod end from the steering knuckle by striking the knuckle to dislodge the tie rod end. **SEE FIGURE 1**



5. Remove the brake line bracket bolt from the frame coilover perch. Save hardware. **SEE FIGURE 2**



6. Loosen the upper ball joint nut. Using a large hammer, strike the steering knuckle to dislodge the ball joint from the steering knuckle. Remove the factory nut, then remove the factory upper control arm from the truck saving the factory hardware. **SEE FIGURES 3-4**



**FIGURE 3 - STEP 6**



**FIGURE 4 - STEP 6**

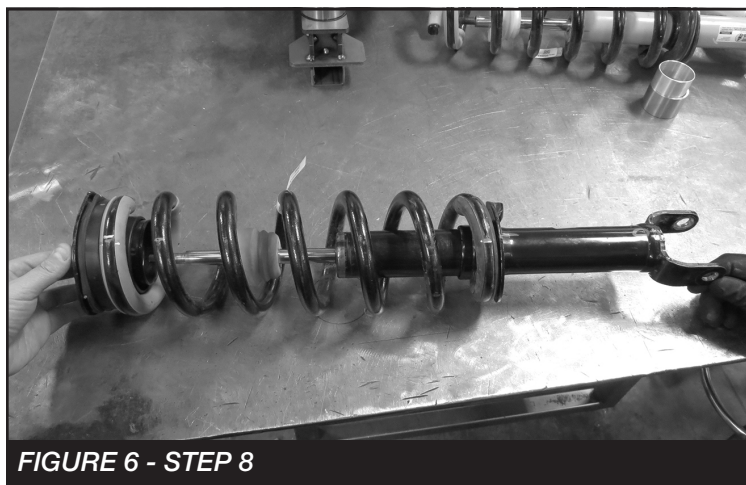


7. Remove the three upper shock assembly bolts. Remove the lower shock bolt. Save all hardware. Remove the shock assembly from the truck. **SEE FIGURE 5**



**FIGURE 5 - STEP 7**

- If installing Dirt Logic coilovers do so now with the instructions provided.
8. Use a paint pen to mark a line down the top cap, coil spring and strut body. Using a coil spring compressor. Carefully compress the coil spring until there is no pressure on the upper top cap. Loosen and remove the top cap nut and top cap. Next, remove the strut from the compressed coil spring. Then remove the foam bumpstop. **SEE FIGURES 6-8**



**FIGURE 6 - STEP 8**



**FIGURE 7 - STEP 8**



**FIGURE 8 - STEP 8**

9. Using a hammer, tap the strut dust cap and the lower spring perch until they come loose and remove. **SEE FIGURES 9-10**



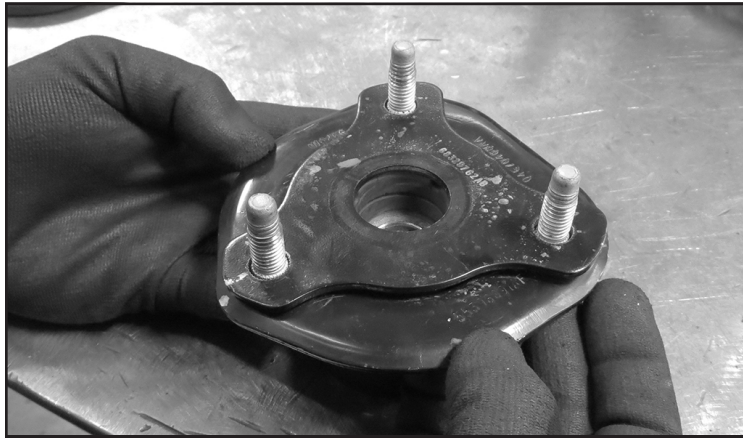
**FIGURE 9 - STEP 9**



**FIGURE 10 - STEP 9**



10. Locate the factory strut top cap. Using a press, press out the factory studs and discard. **SEE FIGURE 11**

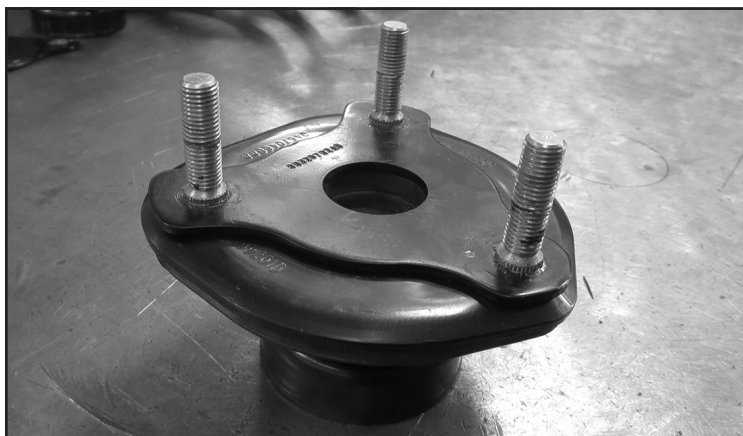


**FIGURE 11 - STEP 10**

11. Drill out the holes in both the top cap and the top cap plate using a 15/32" drill bit. Then, using a press, press the provided M10 studs into the top cap and plate. **SEE FIGURES 12-13**



**FIGURE 12 - STEP 11**



**FIGURE 13 - STEP 11**

12. **IF INSTALLING ON A REBEL EDITION TRUCK SKIP TO STEP 19.**

13. **NON-REBEL:** Install FT44498 (Lower perch spacer) onto the factory strut body until fully seated. **SEE FIGURES 14-15**



**FIGURE 14 - STEP 13**



**FIGURE 15 - STEP 13**

14. Reinstall the factory lower spring perch onto the new lower spacer. Then, fully install the dust cap. **SEE FIGURE 16**



FIGURE 16 - STEP 14

15. Reinstall the foam bumpstop, compressed coil spring, isolator and top cap using the factory nut. **NOTE: Make sure all your marks line up that were mark during step 8.** Torque the top nut to 35 ft-lbs. Then carefully release the pressure of the coil spring compressor and remove. **SEE FIGURE 17**

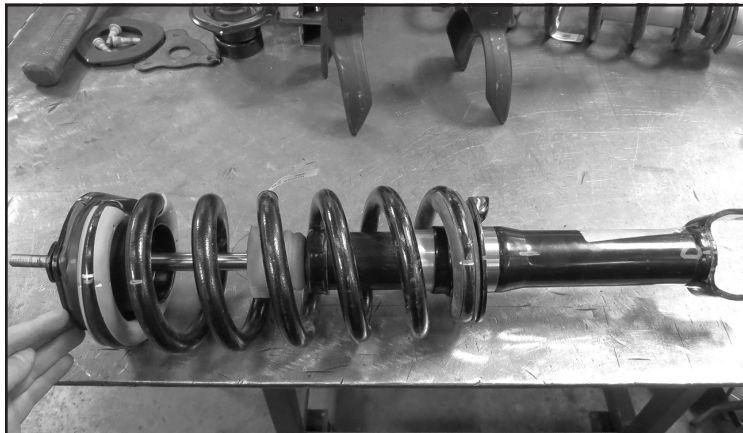


FIGURE 17 - STEP 15

16. Install FT44508 (Upper Spacer) onto the top of the factory coil over. **SEE FIGURE 18**

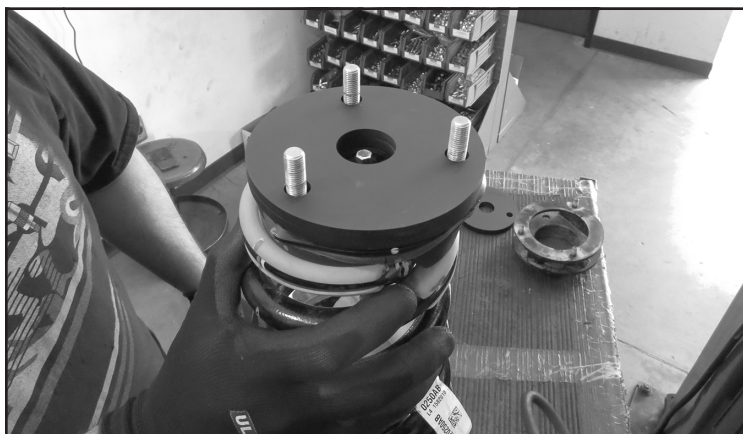


FIGURE 18 - STEP 16

17. Reinstall the coil over assembly into the vehicle using the supplied M10 nylock nuts and washers at the upper mount and the factory hardware for the lower. Torque the upper to 40 ft-lbs and the lower to 106 ft-lbs. Repeat steps on other side then **SKIP TO STEP 23.**

18. **REBEL EDITION:** Install FT44507 (Lower perch spacer) onto the factory strut body until fully seated. **NOTE:** The inside groove will fit over the factory snap ring. **SEE FIGURES 19-20**



FIGURE 19 - STEP 18

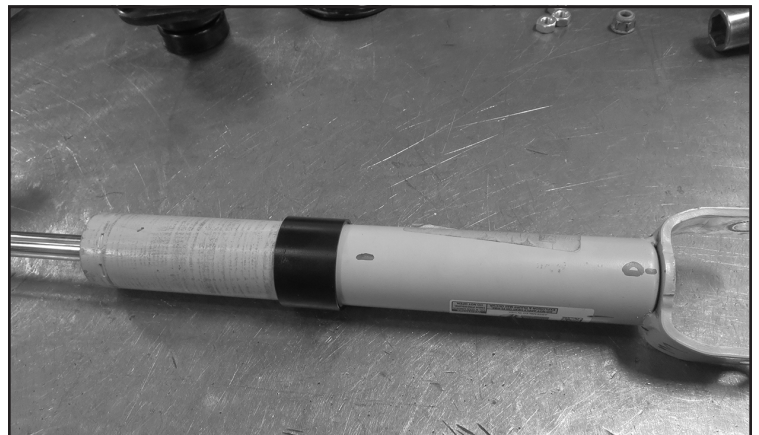


FIGURE 20 - STEP 18



19. Reinstall the factory lower spring perch onto the new lower spacer. Then, fully install the dust cap. **SEE FIGURES 21-22**

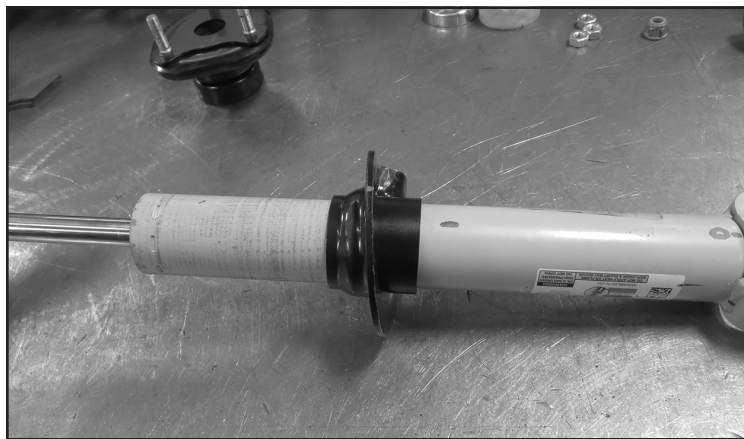


FIGURE 21 - STEP 19



FIGURE 22 - STEP 19

20. Reinstall the foam bumpstop, compressed coil spring, isolator and top cap using the factory nut. **NOTE: Make sure all your marks line up that were mark during step 8.** Torque the top nut to 35 ft-lbs. Then carefully release the pressure of the coil spring compressor and remove. **SEE FIGURES 23-24**



FIGURE 23 - STEP 20

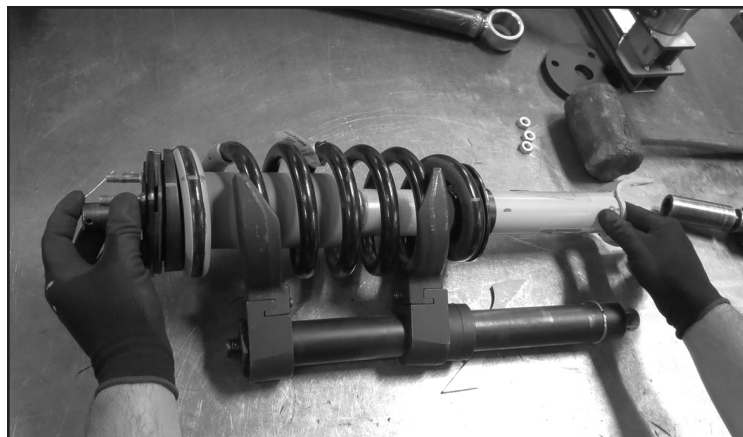


FIGURE 24 - STEP 20

21. Install FT44508 (Upper Spacer) onto the top of the factory coil over. **SEE FIGURE 25**



FIGURE 25 - STEP 21

22. Reinstall the coil over assembly into the vehicle using the supplied M10 nylock nuts and washers at the upper mount and the factory hardware for the lower. Torque the upper to 40 ft-lbs and the lower to 106 ft-lbs. Repeat steps on other side.
23. Install the FT1037 (Bushings), FT194 (Sleeves) and zerk fittings into both of the new Fabtech upper control arms. Then install the FT20538 (Ball Joint) to the upper control arm using the supplied 5/16" hardware. Torque to 23 ft-lbs.

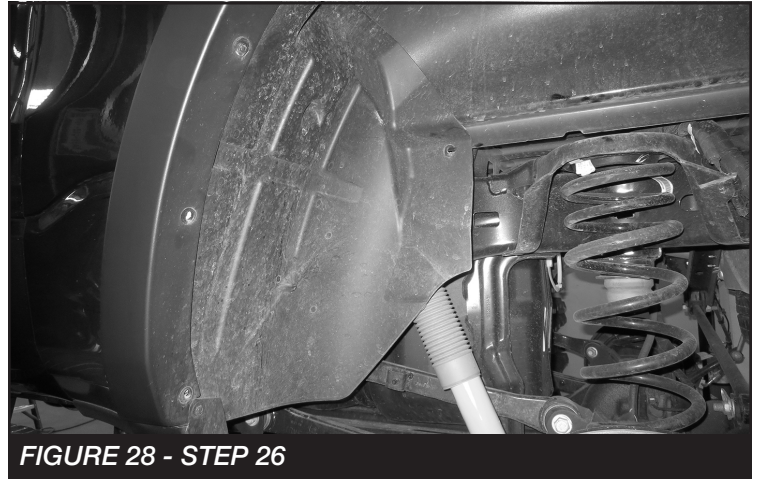
24. Install the FT44539 (Driver upper control arm) & FT44540 (Pass upper control arm) using the factory hardware. Install the ball joint to the factory knuckle. **NOTE: Install FT97150-6-106 spacer between the castle nut and knuckle.** Torque the control arm bolts to 148 ft-lbs and the ball joint to 35 ft-lbs. **SEE FIGURES 26-27**



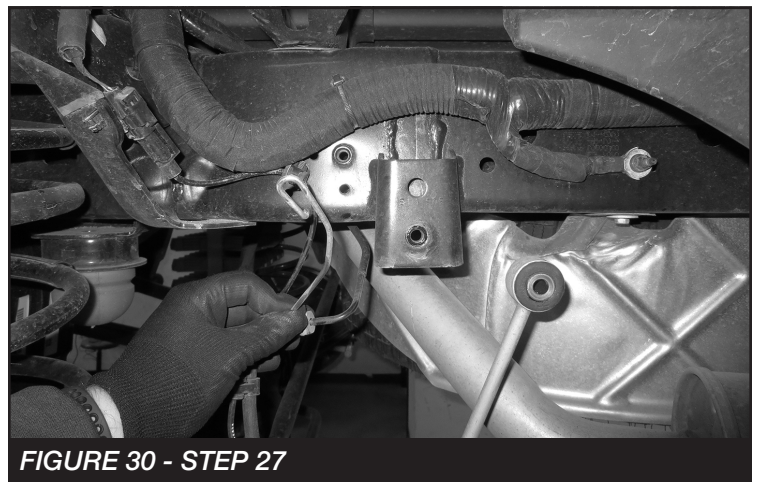
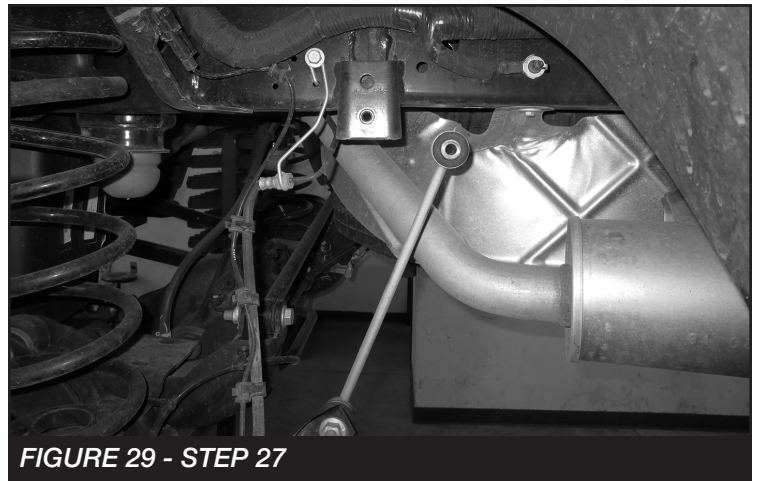
25. Reconnect the sway bar end links to the knuckle. Torque to 56 ft-lbs. Reconnect the tie rod ends to the knuckle. Torque to 35 ft-lbs.

## REAR SUSPENSION

26. Remove the rear wheels/tires. Then, remove the inner fender liners. Save hardware. **SEE FIGURE 28**



27. With the rear axle supported. Disconnect the rear sway bar end links, brake line bracket and rear shocks. Save hardware. **SEE FIGURES 29-30**





28. Disconnect the rear track bar from the axle side bracket. Save hardware. **SEE FIGURE 31**



FIGURE 31 - STEP 28

29. Lower the axle and remove and save the factory coil springs. **SEE FIGURE 32**



FIGURE 32 - STEP 29

30. Install the FT44495 (Driver rear coil spacer & and FT44496 (Pass rear coil spacer) into the upper coil mount using the supplied 3/8" hardware. Torque to 44 ft-lbs. **SEE FIGURE 33**

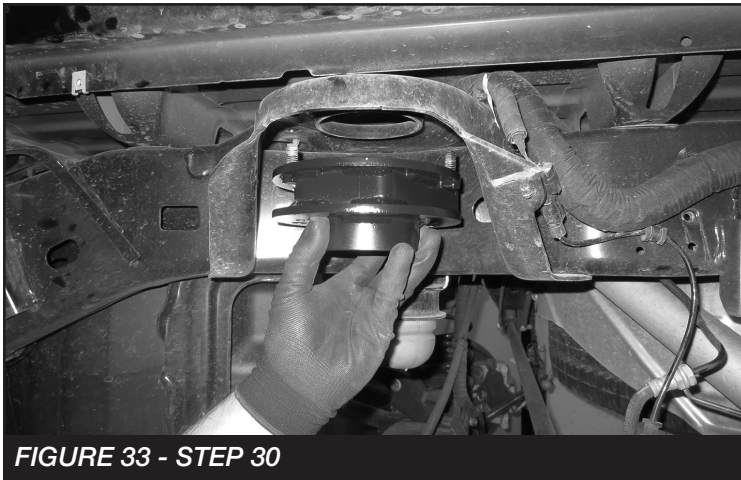


FIGURE 33 - STEP 30

31. Reinstall the factory coil springs and isolators. The rubber locators should line up to the holes in the new spacer. **SEE FIGURE 34**

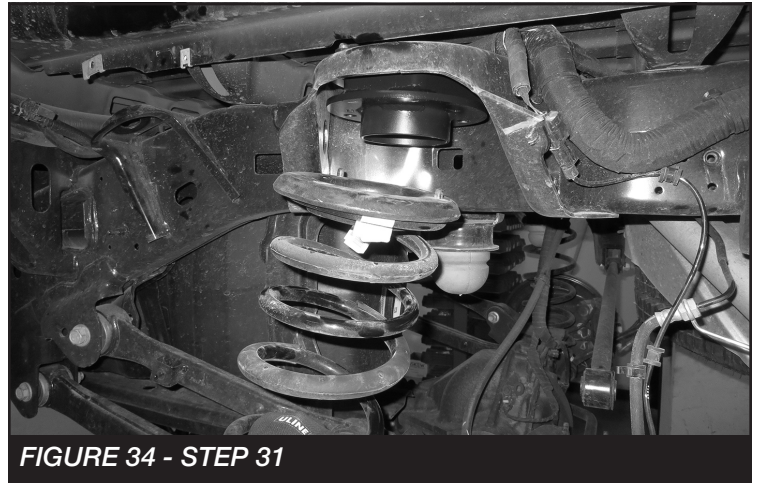


FIGURE 34 - STEP 31

32. Reconnect the track bar to the bracket. Torque to 160 ft-lbs. Reconnect the sway bar links to the frame. Torque to 90 ft-lbs. Reconnect the brake line bracket to the frame. Torque to 12 ft-lbs.
33. Install the rear shocks (See parts list for numbers) using the factory hardware. Torque the upper hardware to 35 ft-lbs and the lower to 90 ft-lbs.
34. Reinstall the inner fender liners using the factory hardware.
35. 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.**
36. Check front end alignment and set to factory specifications. Readjust headlights.
37. Recheck all bolts for proper torque.
38. Recheck brake hoses, ABS wires and suspension parts for proper tire clearance while turning tires fully left to right.
39. 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 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](http://www.fabtechmotorsports.com)