# 2003-2018 TOYOTA 4RUNNER/2007-2014 FJ CRUISER 4WD INSTRUCTIONS 3" SUSPENSION LIFT KIT P/N 40023

**WARNING!!!! PRODUCT SAFETY LABEL MUST BE INSTALLED INSIDE THE CAB OF THE VEHICLE IN PLAIN VIEW OF ALL OCCUPANTS! READ AND UNDERSTAND ALL INSTRUCTIONS BEFORE PROCEEDING. MAKE SURE THAT YOU HAVE ALL TOOLS AND PARTS BEFORE BEGINNING THE INSTALLATION.**

**SPECIAL TOOLS REQUIRED:**
Branik Model 7400 Spring Compressor or equivalent
Factory manual to reference torque specs.

**REVTEK SUSPENSION RECOMMENDS USING RED LOCTITE ON ALL FASTENERS UNLESS OTHERWISE NOTED. ALSO, HAVE THE FRONT END ALIGNMENT CHECKED AFTER INSTALLATION. YOU WILL ALSO NEED TO ADJUST YOUR HEADLIGHTS.**

## KIT CONTENTS INCLUDE

- INSTRUCTIONS INCLUDING PARTS LIST
- PRODUCT SAFETY LABEL (YELLOW)
- DECALS
- WARRANTY

## PARTS LIST INCLUDED IN KIT

| FRONT | QTY |
|---|---|
| INTEGRATED FRONT SPACER | 2 |
| 10MM X 1.5MM X 50MM STUD | 6 |
| 10MM X 1.5MM FLANGE NUT | 6 |
| M8 FLAT WASHER | 4 |
| M8 X 35MM BOLT | 4 |
| TALL SKID PAN SPACER | 2 |
| SHORT SKID PLATE SPACER | 2 |
| O-RING | 2 |
| 1/2-13 FLANGE NUT | 2 |
| 1/2-13x6" HEX BOLT | 2 |
| DIFF DROP SPACER | 2 |
| BOX 1 OF 2 | 1 |

**REAR**

| | |
|---|---|
| REAR SPACER | 2 |
| REAR BRAKE LINE DROP BRACKET | 1 |
| M8X1.25X50MM HEX BOLT | 1 |
| M8 NYLOCK NUT | 1 |
| M8 FLAT WASHER | 1 |
| REAR SHOCK EXTENSIONS | 2 |
| SHOCK EXTENSION BOLT | 2 |
| SHOCK EXTENSION NUT | 2 |
| SHOCK EXTENSION WASHER | 4 |
| SHOCK EXTENSION LARGE WASHER | 2 |
| TUBE SPACERS | 2 |

## FRONT OF 4RUNNER/ FJ CRUISER

1. Park vehicle on level concrete surface.
2. Center and lock the steering wheel.
3. Block the rear wheels of the vehicle to prevent vehicle from moving in either direction.
4. Jack up the vehicle from the center front cross member.
5. Support the vehicle with jack stands on both sides of the frame, just behind the front tires.
6. Remove the front wheels.
7. Remove the sway bar end link nut from the top of the sway bar end link, using a 17mm socket (both sides). **See Figure 1.** If your vehicle has KDSS, you will remove the bolts holding the straps over the sway bar at the lower control arm. **For vehicles equipped with the KDSS system, it is recommended to "strap" the solenoids tight before continuing.**
8. Remove all sections of the front skid plate. Start by removing the plastic push snaps (be careful removing these, they will be re-used later). Then remove the upper plastic shield in front of the skid pan using a 10mm socket and finally remove the skid pan using a 12mm socket.
9. For NON-KDSS vehicles, remove the sway bar from the frame by removing the 4 bolts that hold the sway bar to the vehicle using a 14mm socket, then set the sway bar aside for later install. **See Figure 2**.
10. Remove the lower strut bolt using a 19mm socket. **See Figure 3.**
11. Remove the cotter key and nut from the outer tie rod end and use a tie rod end puller to remove the tie rod from the steering knuckle. **See Figure 4.**
12. Disconnect the XREAS hydraulic line just rear of the shock on the frame **(See Figure 5.)** Be sure you remove the disconnect point and not the banjo bolt! You may see a few drops of fluid as this will be normal.
13. Be sure to remove the ABS and brake lines to avoid damage.
14. Take a marking pen, and mark the alignment of the coil to the shock, and also mark if this is the driver strut or passenger strut. **See Figure 6.**

15. Remove the three nuts at the top of the strut using a 14mm wrench. (DO NOT REMOVE CENTER NUT ON STRUT).
16. Remove the strut from the vehicle.

    **NOTE/DANGER: STRUTS ARE UNDER EXTREME PRESSURE!**

    **IF YOU DO NOT HAVE A SUITABLE SPRING COMPRESSOR, IT IS RECOMMENDED TO TAKE YOUR STRUTS TO A QUALIFIED SERVICE CENTER FOR THE FOLLOWING STEPS.**
17. Compress the coil assembly and remove the center nut using a 17mm wrench or socket. BE SURE NOT TO COMPRESS THE SHOCK, JUST THE SPRING.
18. Remove the factory top plate with rubber isolator. You will (**not)** be reusing the top plate or rubber isolator, but you will be reusing the factory shock bushing and steel washer located in the middle of your factory top plate.
19. Using a socket or punch; Drive the factory shock bushing and metal washer out of the middle of your factory top plate and slide the bushing and steel washer back onto the shock shaft. This will be reused. **See Figure 7.**
20. Install the small diameter of the Revtek PRO Integrated spacer down into the top of your coil spring, making sure to have the laser engraved Revtek PRO logo centered on your mark from step 14.
21. Slide the shock back through your coil, making sure you center the shock shaft through the Revtek PRO center spacer hole. Remember: There must be a shock bushing under the spacer and another one on top of this spacer with the factory shock bushing and washers on both sides!
22. With all the alignment marks lined up from step 14, tighten the center strut nut to factory specs using a 17mm wrench. There should be 4 to 5 threads sticking out above the top of the factory strut nut when tight.
23. Install the 3 Stainless Steel Allen headed studs using Loctite and torque to 10 Ft. lbs.
24. Reinstall the strut by reversing the removal procedure; Torque all factory hardware to factory specs, and torque the 3 new supplied retaining flange nuts for the top of the strut to 10 FT. Lbs. (**DO NOT** USE LOCTITE ON THESE).
25. Completed strut assembly will look like this! **See Figure 8.**
26. Reconnect the ABS and brake lines.
27. Reconnect the XREAS hydraulic lines.
28. Reinstall factory sway bar and sway bar end link. Torque to factory specs.
29. Reinstall tie rod ends, torque to factory specs.
30. Reinstall wheels and torque to wheel manufactures specs.
31. Remove the two factory bolts that are holding the differential to the frame on the front side of the differential. Install the two supplied Revtek PRO differential drop spacers between the factory cast mount, and the frame. Fasten to the cross-member using the new supplied 6” long bolts and nuts (making sure to reuse the factory large black washer against the head of the bolt. Tighten with the supplied nylock nut to 65 Ft Lbs. **See Figure 9.**

32. Place 1 tall skid plate spacer on each side of the rear of the front skid plate between plate and frame. This will allow additional clearance for relocated differential. Use the longer 8MM bolts provided. If vehicle has optional differential skid plate then use one small spacer on each side and a longer bolt here as well. **See Figure 10.**

**Figure 1.**

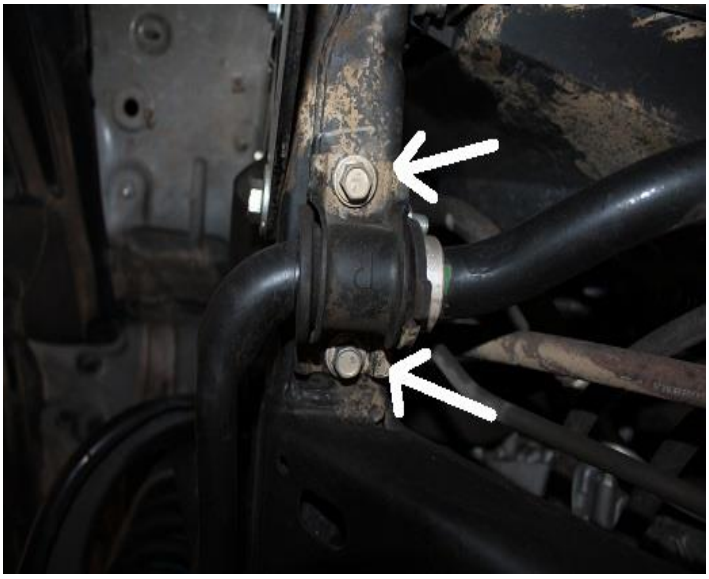

**Figure 2.**

**Figure 3.**

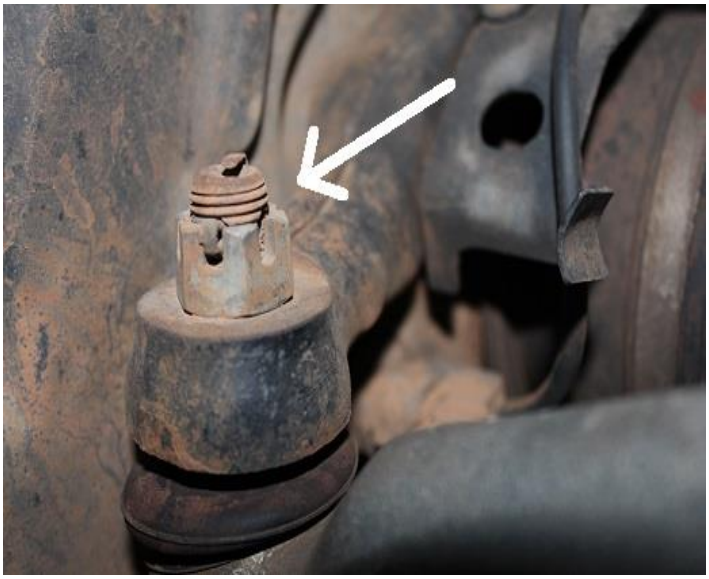

**Figure 4.**

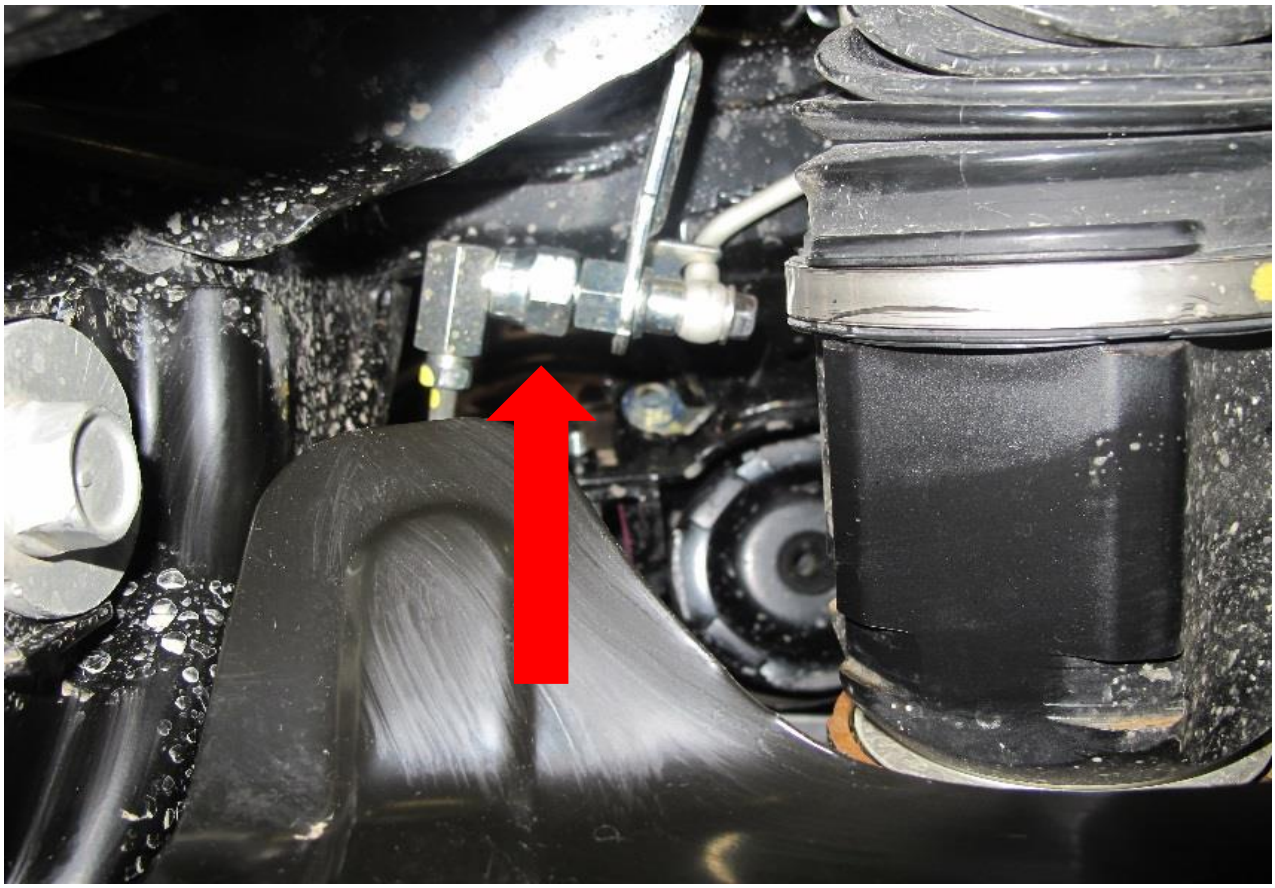

**Figure 5.**

**Figure 6.**

**Figure 7.**

**Figure 8.**

**Figure 9.**

**Figure 10**

## REAR OF 4RUNNER/FJ CRUISER

1. Place vehicle on level concrete surface.
2. Block front wheels to prevent vehicle from moving in either direction.
3. Make sure parking brake is off.
4. Lift the truck from the center of the rear differential housing, leaving the jack in place to support the differential.
5. Support the vehicle with jack stands on both sides of the frame just in front of the rear tires. Do not lower the axle yet!
6. Remove the rear axle lower track bar bolt. (Save bolt for reinstallation.)
7. Remove rear wheels.
8. Remove the shock mounting hardware and remove the shock from the vehicle.
9. Remove the rear sway bar end link nut, washer and bushing using a 12mm wrench. This will allow more down travel while trying to install your rear lift spacers. **See Figure 11.** (Save hardware for re-installation).
10. Install new M8x50mm hex head bolt, washer and two (2) aluminum tube spacers between upper ABS line bracket and frame tube. Leave the frame mount push clip undone allowing extra travel. **(See Figure 12).**
11. Remove the upper shock mount nut. Do not remove the shock or disconnect the XREAS line. Secure the shock so it does not overextend the XREAS line.
12. Install the Revtek rear driver side brake line bracket that has two 90 degree bends in it, to the frame using the factory bolt in the stock location and re-attach the Toyota rear brake line bracket to the Revtek bracket using the factory bolt from the ABS wire mount and the new supplied nut. **(See Figure 13).**
13. Carefully lower the floor jack until the rear axle is fully dropped down making sure that your brake line, or any other lines are not too tight.
14. Compress the rear coil with a hook type spring compressor and place the new Spacer between the rubber bottoming cone, and the rear coil spring. Your spacer will be at the top of the factory rear coil. **See Figure 14.**
15. Release the coil spring compressor making sure that the cone, spacer and coil all locate properly back into position.
16. Repeat these steps on the other side.
17. Lower the vehicle to the ground so the rear axle is compressing the rear coils.
18. Re-install the rear sway bar hardware. Torque to factory specs.
19. Install the new upper shock extensions between the shock and the frame mounting point. Start the hardware on both the shock to extension and the extension to the frame. You will have a nylock nut, small washer, and a large washer on the top and a bolt and small washer from the bottom. **(See Figure 15 & 16.)** Be sure the tab pointing forward is over the edge of the new bracket to prevent the shock from spinning. It may even bend slightly as you tighten it down. That is normal. Tighten the top mount to the frame first. Then tighten the shock to the extension. **See Figure 17.**

20. Reinstall the lower track bar bolt and tighten using a 19mm socket. Torque to factory specs.
21. Replace the wheels; torque to wheel manufactures specs

**Figure 11.**

**Figure 12.**


**Figure 13.**

**Figure 14.**

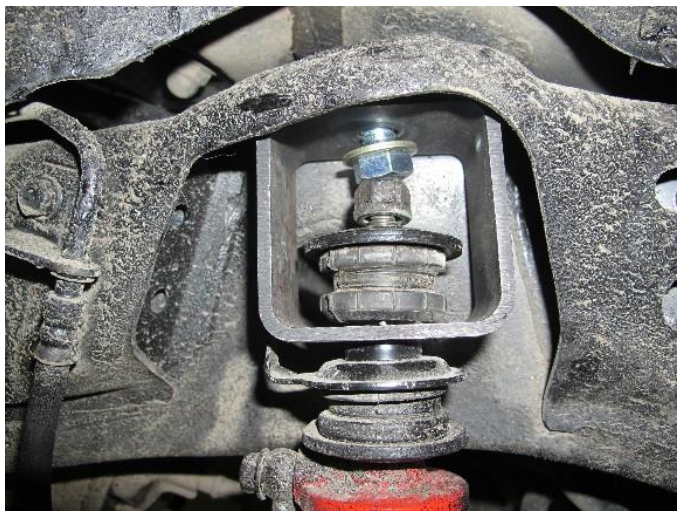

**Figure 15.**

**Figure 16.**

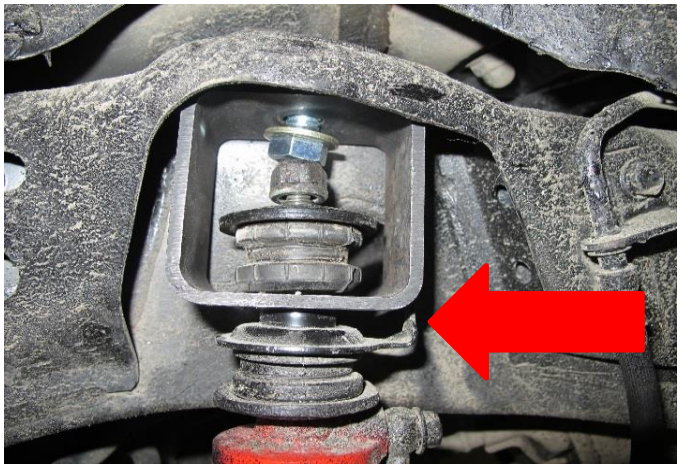

**Figure 17.**

# 4RUNNER/FJ CRUISER Installation Instructions

## Important Installation Notes:

- Manufacturing tolerances do create certain variations that we cannot fully account for. At times you may need to use a punch, or pry bar to get holes to line up. Also you may need to slightly enlarge a hole to create a proper alignment. These are all normal situations.
- Altering your suspension may change the way your vehicle handles. Care must be taken to operate your vehicle safely.
- Adding large wheels and tires, will change how your suspension operates. It may put extra strain on certain components causing them to wear sooner than normal.
- While every effort is made to design our kits to work within factory geometry, there are situations where additional alignment tools like adjustable or replacement components may be needed. This is normal.
- It is possible when changing the driveline angles that a vibration may occur, and require an adjustment to repair this situation.
- Other modifications may be needed due to optional equipment on the vehicle or other prior modifications that have been made.
- All fasteners should be checked and retightened after 500 miles. After the initial recheck, they should be checked and tightened as needed with every following service.
- Once the installation is complete a thorough road test should be performed to verify proper clearance of all items.
- Revtek Suspension kits are not designed for race applications.
- Altering the suspension on your vehicle may change the characteristics of some systems such as: fuel economy, transmission shift points, etc.
- While Revtek systems are designed to work within all factory specifications and tolerances, there are some situations where exceeding the capability of the vehicle such as load capacity or speed will result in some undesirable results. If you overload your vehicle it will not handle correctly. If you drive or turn with excessive speed your vehicle will handle differently and some onboard vehicle systems may detect this and take appropriate action.
- Our tire and wheel fitments are only a guideline. Different production times or tolerances will vary and this sizes should only be used as a starting point. Each vehicle is different and will need to be treated as such.
- Our lift heights can vary slightly based on manufacturing tolerances. Some vehicles will exhibit slightly different amounts of lift heights and different final heights. Every vehicle is not identical and every vehicle will not be perfectly the same at all four corners.
- Once your vehicle is lifted components may wear faster, this is normal. A lifted vehicle is exerting more stress on most components and therefor causing them to wear faster.
- After altering the height of your vehicle, you should aim the headlights for proper coverage.
- The use of Loctite on fasteners is highly recommended.