

# INSTALLATION INSTRUCTIONS FOR 2003 - 2009 TOYOTA 4RUNNER & 2007-2009 FJ CRUISER 2WD & 4WD (NON-PRO, NON X-REAS) 3" COILOVER SUSPENSION KIT W/REAR COILS PART NUMBER 928

WARNING!!! READ AND UNDERSTAND ALL INSTRUCTIONS BEFORE PROCEEDING. MAKE SURE THAT YOU HAVE ALL TOOLS AND PARTS BEFORE BEGINNING THE INSTALLATION.

## **SPECIAL TOOLS REQUIRED:**

TIE ROD END PULLER

REVTEK SUSPENSION RECOMMENDS THAT RED LOCTITE BE USED ON ALL FASTENERS UNLESS OTHERWISE NOTED. IT IS ALSO RECOMMENDED TO HAVE THE FRONT END ALIGNMENT CHECKED AFTER INSTALLATION.

#### **KIT CONTENTS INCLUDE:**

- Instructions including parts list
- Product Safety Label
- Window decal
- Warranty
- Differential Spacer Kit

### **TORQUE SPECIFICATIONS**

8MM FASTENERS	17 LBS.
10MM FASTENERS	30 LBS.
12MM FASTENERS	55 LBS.
9/16" U-BOLT	75 LBS.
LUG NUTS	75 LBS.

### PARTS LIST INCLUDED IN KIT

FRONT & REAR	QTY
ADJUSTABLE COILOVERS	2
STAINLESS STUDS	6
FLANGE NUTS	6
SPANNER WRENCH	1
REAR COILS	2
M8 WASHERS	1
M8 HEX BOLT	1
REAR BRAKE LINE BRACKET	1
SPACERS	2
REAR SHOCKS	2
<b>DIFFERENTIAL SPACER KIT</b>	
DIFFERENTIAL DROP SPACERS	2
1/2 – 13 X 6 GRADE 5 HEX BOLT	2
(ZINC)	
1/2 – 13 FLANGE NUT (ZINC)	2
M8 X 1.25 X 35MM HEX BOLT	4
(ZINC)	
TALL SKID PAN SPACERS	2
SHORT SKID PAN SPACERS M8 FLAT WASHERS (ZINC)	2 4
MO FLAT WASHERS (ZINC)	4

PRODUCT SAFETY LABEL MUST BE INSTALLED INSIDE CAB IN PLAIN VIEW OF ALL OCCUPANTS.

#### FRONT OF VEHICLE

- 1. Park vehicle on level 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 lift point in Figure "A."
- 5. Support the vehicle with jack stands from the points in Figure "A."
- 6. Remove the front wheels.
- 7. Remove the nut (19mm) and bolt from the bottom of the strut.
- 8. Remove cotter key and (19mm) nut from outer tie rod end, separate the rack & pinion tie rod ends utilizing a tie rod end puller.
- 9. Be sure to remove and secure the ABS and brake lines to avoid damage.
- 10. Loosen the upper ball joint nut. Leave partially on to separate ball joint using a ball joint separating tool, then remove the nut and separate the upper A-arm from the spindle making sure not to over stretch your abs wires and brake lines.
- 11. Remove the three nuts (14mm) from the top of the strut. See Figure "B."
- 12. Remove the strut from the vehicle, it may be necessary to separate outer tie rod end from knuckle, and remove front sway bar for more clearance when removing the strut.
- 13. Your new supplied Revtek Adjustable coil over will come pre-assembled and set at a ride height of roughly 3" of lift. (**DO NOT EXCEED 3" OF LIFT OR WARRANTY IS VOID**). Every vehicle is different depending on accessories, so there might be more or less preload adjustment needed to sit at your desired height. We supply a spanner wrench and you will roughly achieve a 2 to 1 ratio on adjustment (Example: 1/4" of adjustment will equal 1/2" of lift). (If adjustment is made, make sure to lock the two adjustment rings together afterwards).
- 14. Example of assembled strut. See Figure "C"
- 15. Install the new supplied stainless studs into the top plate of your new shock using Loctite. Make sure they bottom out.
- 16. Reinstall the strut by reversing the removal procedure; Torque the new supplied top flange nuts to 10 ft. lbs. (**DO NOT USE LOCTITE ON THE FLANGE NUTS**)
- 17. Replace the wheels; torque to wheel manufacturer's specs.

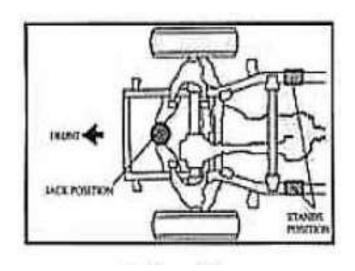




FIGURE A. FIGURE B.



FIGURE C.

### DIFFERENTIAL DROP SPACER KIT

- 1. Remove skid plate under the front of the vehicle. Save the OEM bolts.
- 2. Remove factory 19mm x 5" long bolts and nuts, supporting the front differential. (See Figure "1"). Save the OEM washers for step 3.
- 3. Remove the front cross member to radiator support bars.
- 4. Install the large Revtek spacers between the two front differential supports and front cross-member. Fasten to cross-member using new ½ x 6 ½" long bolts and nuts (making sure to reuse the factory washers), (See Figure "2".)
- 5. Place 1 tall 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 and washers provided. If vehicle has optional rear differential skid plate, then use the short spacer supplied on the front of the rear plate with the longer bolt with washers here as well. (See Figure "3")
- 6. Torque skid plate bolts to specs. (You may need to adjust the skid plate holes.)



FIGURE 1.



FIGURE 2.



FIGURE 3.

### 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.
- 6. Remove the rear wheels.
- 7. Remove the shock mounting hardware and remove the shock from the vehicle.
- 8. Remove the rear sway bar end link nut, washer and bushing. This will allow more down travel while trying to install your new rear coil springs. (Save hardware for reinstallation). (See Figure "6")
- 9. Install the new M8 X 50mm hex 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 "7" & "8").
- 10. Install the rear driver's 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 you removed from the ABS wire mount and the new supplied nut. (See Figure "9").
- 11. 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.
- 12. Remove the factory rear coil spring and bump stop cone and insert the factory bump stop cone back into your new Revtek coil spring and install into your 4Runner. Make sure the bottom eye is seated properly, and the upper hat is centered in its pocket.
- 13. Repeat these steps on the other side, then jack the axle back up and reinstall the new supplied rear shocks.
- 14. Reinstall the rear sway bar hardware. The nut will bottom out when tight.
- 15. Replace the wheels; Torque to wheel manufactures specs.





FIGURE 6. FIGURE 7.





FIGURE 8. FIGURE 9.

# **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.