

## INSTALLATION INSTRUCTIONS FOR 2005-2015 TOYOTA TACOMA 4 X 4 AND PRERUNNER, 2003-2015 4RUNNER, 2007-2014 FJ CRUISER 1.5'' FRONT LEVELING KIT PART NUMBER 415

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

**SPECIAL TOOLS REQUIRED:** FACTORY CERTIFIED SPRING COMPRESSOR

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 (orange)
- Window decal
- Warranty
- Differential Spacer Kit (see page 4 of instructions)

#### **TORQUE SPECIFICATIONS**

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

#### PARTS LIST INCLUDED IN KIT

<u>FRONT</u>	<u>QTY</u> .
PRELOAD SPACER	2
DIFFERENTIAL SPACER KIT	
DIFFERENTIAL DROP SPACERS	2
1/2 – 13 X 6 GRADE 5 HEX BOLT	2
(ZINC)	
1/2 - 13 NYLOCK NUT (ZINC)	2
M8 X 1.25 X 35MM HEX BOLT	4
(ZINC)	
SKID PAN SPACERS	6
M8 FLAT WASHERS (ZINC)	4

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

# FIG "E"



FIG "B."



FIG "A."

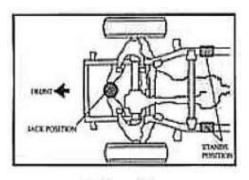


FIG "D."



FIG "C."



## 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 sway bar from frame using 14mm socket. (See Figure C). For vehicles equipped with the KDSS system it is recommended to "strap" the solenoids tight before continuing.3
- 9. Remove cotter key and 19mm nut from outer tie rod end, separate the rack & pinion tie rod ends utilizing a tie rod end puller.
- 10. Be sure to remove and secure the ABS and brake lines to avoid damage.
- 11. Loosen upper ball joint nut. Leave partially on to separate ball joint. Then remove nut and separate spindle from joint.
- 12. FOR VEHICLES WITH X-REAS: Disconnect the XREAS hydraulic line just rear of the shock on the frame (See Figure E.) Be sure you remove the disconnect point and not the banjo bolt. You may see a few drops of fluid this is normal.
- 13. Remove the three nuts (14mm) from the top of the strut. See Figure "B."
- 14. With a marking pen, mark the center of the strut facing toward you, where the spring connects to the top plate and the lower plate so that they line back up on re-assembly. See Figure "C."
- 15. Remove the strut from the vehicle, it will be necessary to separate outer tie rod end from knuckle, and remove front sway bar for more clearance when removing the strut.

## NOTE: AT THIS TIME, IF YOU DO NOT HAVE A SUITABLE SPRING COMPRESSOR, IT IS HIGHLY ADVISED TO TAKE THE STRUT TO A QUALIFIED SERVICE CENTER.

16. Compress strut assembly and remove the nut (17mm) on the top of the strut shaft.

- 17. Release the compressor.
- 18. Remove the spring top plate from the strut.
- 19. Remove and discard the rubber spacer. See Figure "D."
- 20. Install the PRELOAD SPACER between the spring and the spring top plate with the small diameter facing toward the coil spring.
- 21. Compress the strut assembly, making sure you center the strut shaft through the spring top plate hole. Make sure that the V on the Revtek logo is aligned with your center mark on the strut so that when it's re-assembled the logo will be facing the correct way on re- installation in the vehicle. Replace nut on the top of the strut shaft and torque to spec. (Torque specs can be found on page 1.)
- 22. Reinstall the strut by reversing the removal procedure; torque to spec. (Torque specs on page 1.)
- 23. Reconnect the X-reas hydraulic line.

- 24. When properly installed, Revtek logo should face outward. See Figure "D."
- 25. Replace the wheels; torque to spec.

# DIFFERENTIAL DROP SPACER KIT (MANDATORY TO MINIMIZE OR AVOID CV BOOT WEAR ON ALL MODELS)

- 1. Remove both skid plates under the front of the vehicle. Save the OEM bolts (total of nine (9) 12mm bolts).
- 2. Remove factory bolts and nuts, supporting the front differential. (See Figure 1). Save the OEM washers for step 3.
- 3. Install Revtek spacers RTDDS-1 between the two front differential supports and front crossmember. Fasten to cross-member using new ½ x 6" long bolts and nuts (making sure to reuse the factory washers). (See Figure 2.)
- 4. Place 2 small spacers 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 10MM bolts provided. If vehicle has optional differential skid plate then use one small spacer on each side and a longer bolt here as well.
  - 5. Install the FRONT skid plate using three (3) OEM bolts on the front and two (2) new M8 x 35mm bolts in the rear with the small tos-8 aluminum spacers between the skid pan and mounting point.
  - 6. Torque all skid plate bolts to specs.







Figure 2

# **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.



# **Limited Lifetime Warranty**

Revtek Suspension products are warranted to be free from material and workmanship defects for as long as the original retail purchaser owns the vehicle upon which such products were originally installed (proof of purchase required). The consumer will be responsible for removing from the vehicle and returning any defective item, freight prepaid, and for reinstallation. This warranty is non-transferable. Revtek Suspension's limit of liability under this warranty is to repair or replace the product at Revtek Suspension's option. Consequential costs such as, but not limited to labor fees, loss of use, loss of time or freight charges are not covered. Any product that has been abused, altered incorrectly installed, or used in competition is not covered. Product finish is excluded from this warranty is void if the "Warning to Driver" decal is not properly displayed on the vehicle. No other warranties are expressed or implied. We reserve the right to make changes in design, materials, and specifications without prior notice.

This warranty gives you specific legal rights and you may also have other rights which may vary from state to state. Some states do not allow limitations on how long an implied warranty lasts or allow the exclusion or limitation of incidental or consequential damages, the above limitation or exclusion may not apply to you.

Other than stated above, there are no warranties.

## SELLER DISCLAIMS ANY IMPLIED WARRANTY OF MERCHANTABILITY

# SELLER DISCLAIMS ANY IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE

This warranty to be free from material and workmanship defects shall not apply to any product which has been improperly installed modified or customized and does not apply to any components used for racing purposes or racing type activities.

To make a claim under this warranty to be free from material and workmanship defects, contact Revtek Suspension about the problem prior to removing any parts from the vehicle. If it appears that the part is warrantable, you will be given a Return Authorization (RA) number and asked to return the part freight prepaid. If the part is found to be warrantable, it will be repaired or replaced and returned to you. All freight charges are the customer's responsibility. If a replacement part is needed before the part in question can be returned, you must first purchase the replacement part. Then if the part in question is deemed warrantable, you will be credited / refunded.

Shocks and bushings are considered to be wear items. As such, they will be covered for a period of 12 months from the original installation. Any failure outside of 12 months will be considered typical wear.

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