

TACOMA 3" FRONT & REAR LIFT

301346-1-KIT (BASIC LIFT FOR 2005-2014 TACOMA PRERUNNER/4WD)
300513-1-KIT (COMPLETE LIFT FOR 2005-2014 TACOMA PRERUNNER/4WD

KIT CONTENTS



Pictured Above: 301346-1-KIT

Pictured Below: 300513-1-KIT







RECOMMENDED TOOLS

Ratchet & Socket Set

Torque Wrench

Combination Wrench Set

Adjustable Wrench

Jack Stands

Floor Jack

Strut Compressor

Vise Grips

Large C-Clamps

Hacksaw

CAUTION

- 1. Read all instructions completely and carefully before you begin. If anything is not clear, please call our tech support line at 1.877.4X4.TOYS or 559.252.4950 before proceeding.
- 2. Check to make sure the kit is complete and that no parts are missing (refer to the Kit Contents Section on the first page of these instructions). If anything is missing, please contact Trail-Gear at 1.877.4X4.TOYS or 559.252.4950.
- 3. Park vehicle on a clean, dry, flat, level surface and block the tires so the vehicle cannot roll in either direction.
- 4. This kit is for off-road use only. It is recommended that the installation steps below be performed by a competent mechanic. Installation of this kit may change the handling characteristics of your vehicle. Buyers and users of this product hereby expressly assume all risks associated with the installation and use of this kit.

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TACOMA 3" FRONT & REAR LIFT

STEP 1

Park the vehicle on a hard, level surface. Place the vehicle securely on jack stands.

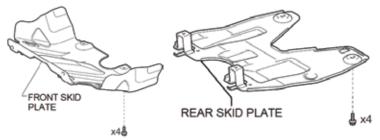
STEP 2

Remove both front wheels.



STEP 3

Using a 12mm socket, remove the (4) M8 bolts holding the Front Skid Plate to the Vehicle. Using the same 12mm socket, remove the (4) M8 bolts holding the Rear Skid Plate to the Vehicle. 4WD Vehicles: Save both Skid Plates and (4) of the stock M8 bolts for reinstallation. If you are installing the Complete Lift Kit, discard the other (4) stock M8 bolts. If you are installing the Basic Leaf Kit, retain all (8) stock M8 bolts. Prerunners: Save both Skid Plates and all of the stock M8 bolts for reinstallation.



STEP 4

Using a 17mm socket, remove the nut from the top of the sway bar link, and remove the sway bar link from the steering knuckle. Save the nuts for reinstallation. Repeat for the other side of the vehicle.



STEP 4 CONTINUED



STEP 5

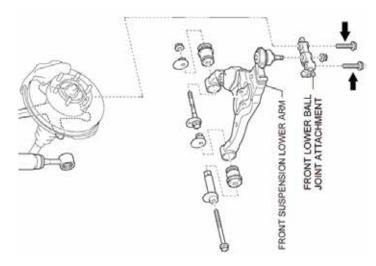
Using a 14mm socket, remove the bolts & support bracket from both sides of the front sway bar. Remove the sway bar from the vehicle. Save the bolts, support brackets, and sway bar for reinstallation.





STEP 6

Using a 19mm socket, remove the (2) screws holding the lower ball joint attachment to the spindle. Save the bolts for reinstallation. Repeat for the other side of the vehicle.



STEP 7

Using a 19mm socket, remove the bolt and nut holding the shock to the lower shock mount. Repeat for the other side of the vehicle. Save the bolts and nuts for reinstallation. Make sure to support the hubs with a jack stand to prevent excess travel of the CV Joints.



STEP 8

Using a 14mm socket, remove the (3) nuts holding the shock tower to the shock tower mount. Save the nuts for reinstallation. Repeat for the opposite side of the vehicle.





STEP 9

Remove the shock/coil spring assembly from the vehicle. Mark the bottom of the shock in relation to the top of the shock/coil spring assembly. The shock eyelet should be rotated 90° in relation to the stud on top of the strut that is nearest to the engine. Repeat for the opposite side of the vehicle.







WARNING – IT IS HIGHLY RECOMMENDED THAT STEPS 10 THROUGH 15 BE PERFORMED BY A COMPENTENT MECHANIC EXPERIENCED IN USING A STRUT COMPRESSOR. THE COIL SPRING IS UNDER COMPRESSION, AND INPROPERLY DISASSEMBLING THE COILOVER ASSEMBLY MAY RESULT IN INJURY OR DEATH. Many automotive repair shops and some auto parts stores provide this service for a nominal fee.

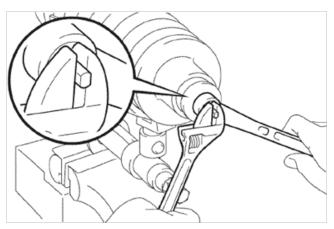
STEP 10

Verify that the strut is marked correctly and that the markings are still visible. Place the shock/coil spring assembly in a strut compressor and compress the coilover spring. Make sure to follow the instructions that came with the strut compressor.



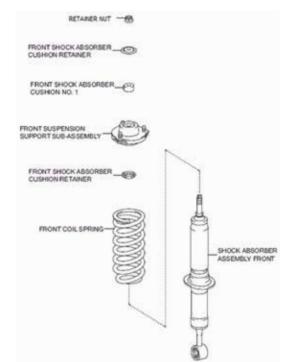
STEP 11

Remove the nut on the top of the shock/coil spring assembly. Make sure to hold the shock rod in place with an adjustable wrench when you are removing the nut. Save the nut for reinstallation.



STEP 12

In the following order, remove the Cushion Retainer, Cushion No. 1, Front Support Subassembly, & Cushion Retainer.



STEP 13

Disassemble the Front Suspension Support Subassembly. Press out the studs in the top plate and discard the studs. Replace the studs with (3) of the hex head bolts provided in the kit. Reassemble the support with one of the Lift Spacers between the steel plate & the rubber pad.



STEP 15

Repeat Steps 10 through 14 for the other shock/coil spring assembly.



STEP 14

Reassemble the shock/coil spring assembly in the reverse order of Step 12. Make sure that the top plate bolt is correctly aligned with the bottom of the shock during assembly.



STEP 16

Install the top spacer plate on top of the shock/coil spring assembly. Repeat for the other shock/coil spring assembly.



STEP 17

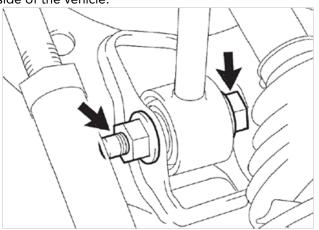
Install the shock/coil spring assembly back into the top mount, and secure to the shock/coil spring assembly to the mount using (3) of the nuts removed in Step 8. Make sure you orient the shock/coil spring assembly according to the markings applied in Step 9. Torque the nuts to 47 ft-lbs or to the torque specified in the Toyota Tacoma factory service manual. Repeat for the other side of the vehicle.





STEP 18

Secure the shock eyelet to the lower shock mount using the bolt & nut removed in Step 7. Torque the nut to 61 ft-lbs or to the torque specified in the Toyota Tacoma factory service manual. Repeat for the other side of the vehicle.

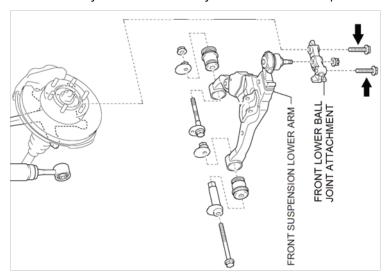


STEP 19

If needed, use a floor jack to raise the A-Arm. Use care to avoid excess strain or travel of the CV joints.

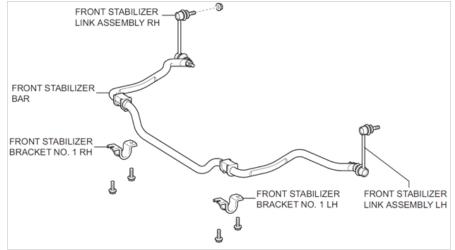
STEP 20

Reinstall the lower ball joint attachment to the spindle using the screws removed in Step 6. Torque the bolts to 118 ft-lbs or to the torque specified in the Toyota Tacoma factory service manual. Repeat for the other side of the vehicle.



STEP 21

Reinstall the sway bar support/stabilizer brackets using the clamps and bolts removed in Step 5. Torque the bolt to 30 ft-lbs or to the torque specified in the Toyota Tacoma factory service manual.





STEP 22

Reinstall the sway bar link onto the steering knuckle and secure using the nut removed in Step 4. Torque the nut to 52 ft-lbs or to the torque specified in the Toyota Tacoma factory service manual. Repeat for the other side of the vehicle



STEP 23

(4WD Vehicles Only) If you are installing the Complete Lift Kit, place a floor jack or jack stand under the differential to support the differential. If you are installing the Basic Lift Kit, skip this step.



STEP 25

(4WD Vehicles Only) If you are installing the Complete Lift Kit, lower the differential and install one of the 1" tall spacers between the rubber OEM mount and the crossmember. If you are installing the Basic Lift Kit, skip this step.



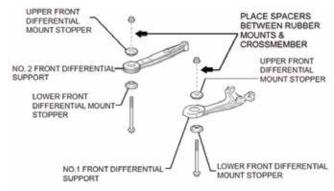
STEP 24

(4WD Vehicles Only) If you are installing the Complete Lift Kit, unbolt the (2) M14 bolts & nuts that secure the differential mount to the crossmember. Save the rubber OEM mounts for reinstallation. Discard the (2) M14 bolts & nuts. If you are installing the Basic Lift Kit, skip this step.



STEP 26

(4WD Vehicles Only) If you are installing the Complete Lift Kit, loosely install the provided $\frac{1}{2}$ -20 x 6" bolt, washer, and Toplock nut to secure the differential mount and spacer to the crossmember. Make sure that the rubber OEM mounts are in the proper position. If you are installing the Basic Lift Kit, skip this step.





STEP 27

(4WD Vehicles Only) If you are installing the Complete Lift Kit, repeat Steps 25 & 26 for the other differential mount. If you are installing the Basic Lift Kit, skip this step.

STEP 28

(4WD Vehicles Only) If you are installing the Complete Lift Kit, using a 3/4" socket and 3/4" wrench, tighten the (2) 1/2-20 x 6" bolts to 77 ft-lbs of torque. Remove the floor jack or jack stand from the differential. If you are installing the Basic Lift Kit, skip this step.

STEP 29

4WD Vehicles: If you are installing the Complete Lift Kit: Using 12mm & 13mm sockets, reinstall the Front Skid Plate using the (2) stock M8 bolts in the front and (2) of the new M8 bolts, washers, and ½" tall spacers in the rear. Tighten all (4) bolts to 22 ft-lbs of torque or to the torque value specified in the Toyota Tacoma Factory Service Manual. If you are installing the Basic Lift Kit: Using 12mm & 13mm sockets, reinstall the Front Skid Plate using the (4) stock M8 bolts Tighten all (4) bolts to 22 ft-lbs of torque or to the torque value specified in the Toyota Tacoma Factory Service Manual. Prerunners: Using 12mm & 13mm sockets, reinstall the Front Skid Plate using the (4) stock M8 bolts. Tighten all (4) bolts to 22 ft-lbs of torque or to the torque value specified in the Toyota Tacoma Factory Service Manual.



STEP 30

4WD Vehicles: If you are installing the Complete Lift Kit: Using 12mm & 13mm sockets, reinstall the Rear Skid Plate using the other (2) new M8 bolts, washers, and ½" tall spacers in the front & the other (2) stock M8 bolts on the rear of the Rear Skid Plate. Tighten all (4) bolts to 22 ft-lbs of torque or to the torque value specified in the Toyota Tacoma Factory Service Manual. If you are installing the Basic Lift Kit: Using 12mm & 13mm sockets, reinstall the Rear Skid Plate using the (4) stock M8 bolts. Tighten all (4) bolts to 22 ft-lbs of torque or to the torque value specified in the Toyota Tacoma Factory Service Manual. Prerunners: Using 12mm & 13mm sockets, reinstall the Rear Skid Plate using the remaining stock M8 bolts. Tighten all (4) bolts to 22 ft-lbs of torque or to the torque value specified in the Toyota Tacoma Factory Service Manual.

STEP 31

(4WD Vehicles Only) On some years and/or models, trimming of the Skid Plate(s) may be required. Trim as needed.

STEP 33

Make sure your jack stands are directly under the frame and are high enough to lift the rear wheels off of the ground. Chock the front tires.

STEP 32

Reinstall both front wheels. Torque the lug nuts to the torque specified in the Toyota Tacoma factory service manual or your Toyota Tacoma Owner's Manual.

STEP 34

Remove both rear wheels.



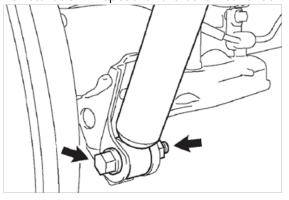
STEP 35

Using a floor jack under the center section of the rear axle, lift the rear axle and place a jack stand under each side of the axle for support.



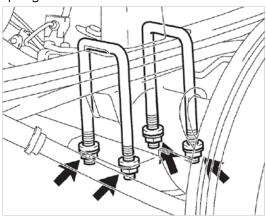
STEP 37

Using a 17mm socket, remove the nut, bolt, and washer from the lower shock mount. Separate the shock from the mount. Save the bolt, nut, & washer for reinstallation. Repeat for the other rear shock.



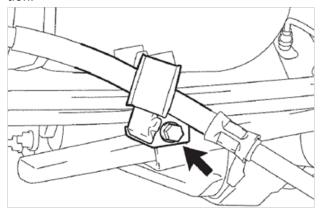
STEP 36

Loosen, but do not remove, the (4) nuts on the (2) leaf spring U-bolts. Repeat for the U-bolts on the other leaf spring.



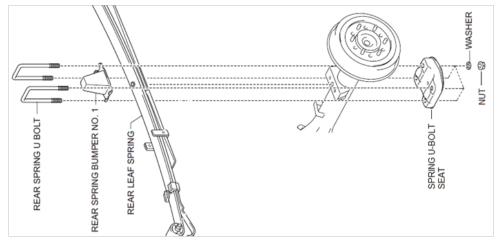
STEP 38

Using a 12mm wrench, remove the bolt from the parking brake cable mount. Save the bolt for reinstallation.



STEP 39

Remove the U-bolts, nuts, washers, U-bolt seat, & rear spring bumper from the leaf spring. Save the U-bolts, nuts, washers, U-bolt seat, & rear spring bumper for reinstallation. Repeat for the other leaf spring.



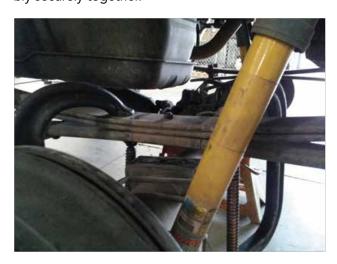


STEP 40

Lower the rear axle to move the leaf springs away from the axle. Use care to avoid stretching the brake lines.

STEP 41

Using (2) large C-clamps, clamp the leaf pack assembly securely together.



STEP 42

Using a 14mm socket, remove the spring center bolt and nut. Vise grips may be needed to keep the head of the bolt from rotating during removal of the nut. Discard the center bolt & nut.



STEP 43

Carefully loosen and remove the (2) C-clamps from the spring pack. Make sure to note the order of the individual leaves and the placement of any shims or dividers.



STEP 44

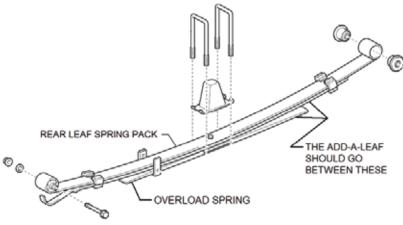
Apply wheel bearing grease to the plastic leaf spring pads..





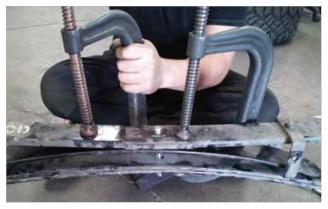
STEP 45

Insert the Add-A-Leaf into the spring pack. The leaves should be in order of length, with the longest leaf on top and the shortest (the overload spring leaf) on bottom. In most cases, the Add-A-Leaf will be placed between the overload spring and the rest of the spring pack. The end of the Add-A-Leaf with the longest distance between the end of the spring and the center pin hole should be facing the rear end of the truck. Under no circumstances should the Add-A-Leaf be below the overload spring.



STEP 46

Verify that the Add-A-Leaf is correctly oriented within the spring pack. Place the (2) C-clamps back onto the spring pack and slowly squeeze the leaf pack back together. Use one of the new center pin bolts provided with this kit as an alignment tool to help keep the center pin holes aligned.



STEP 48

Cut off the excess length of the center pin. Paint the cut surface to prevent corrosion

STEP 47

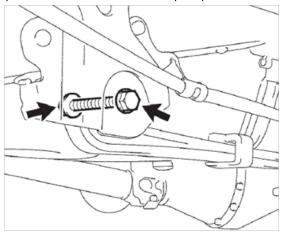
Make sure that any shims or dividers are reinstalled into the correct position and completely compress the leaf spring back together using the C-clamps. Install the new center pin into the spring pack and secure with one of the nuts provided with the kit. Torque the nut to 40 ft-lbs.



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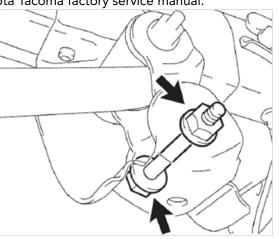
STEP 49

Repeat Steps 41 through 48 for the other leaf spring pack. Note: For the leaf spring pack on the Driver's side (the side with the rear hydraulic brake line), it may be easier to remove the spring pack from the vehicle to install the Add-A-Leaf. If so, remove the rear leaf spring rear mounting bolt, nut, and washer. Next, remove the leaf spring shackle mounting bolt, nut, & washer. After the leaf spring pack has been fitted with the Add-A-Leaf, reinstall the leaf spring into the vehicle. Install the shackle mounting bolt, nut, and washer, and torque to 89 ft-lbs or to the torque specified in the Toyota Tacoma factory service manual. Install the rear leaf spring rear mounting bolt, nut, and washer and torque to 89 ft-lbs or to the torque specified in the Toyota Tacoma factory service manual.



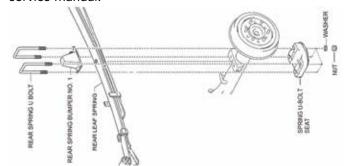
STEP 50

Carefully lift the axle back in place. Make sure the head of the center bolt pin is seated in the hole on the axle spring perch.



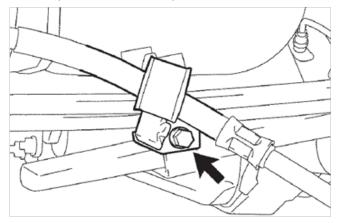
STEP 51

Reinstall the U-bolts, nuts, washers, U-bolt seat, & rear spring bumper. Torque the U-bolt nuts to 37 ft-lbs or to the torque specified in the Toyota Tacoma factory service manual.



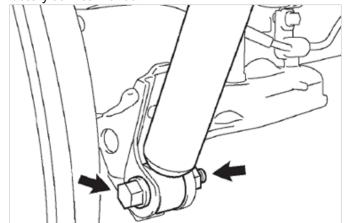
STEP 52

Reinstall the parking brake line support bracket. Torque the bolt to 9 ft-lbs or to the torque specified in the Toyota Tacoma factory service manual.



STEP 53

Reinstall the shock into the lower mount and reinstall the bolt, washer, and nut. Torque the nut to 74 ft-lbs or to the torque specified in the Toyota Tacoma factory service manual.



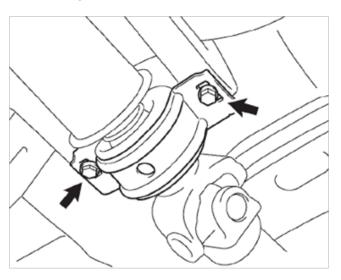


STEP 54

Reinstall the rear wheels. Torque the lug nuts to the torque specified in your Toyota Tacoma Owner's Manual or the Toyota Tacoma factory service manual.

STEP 56

If you are installing the Complete Lift Kit, loosen, but do not remove, the (2) M10 bolts holding the Center Drive Shaft Bearing to the frame crossmember. If you are installing the Basic Lift Kit, skip this step.



STEP 55

If you are installing the Complete Lift Kit, Step 56 through 59 are optional and only need to be done if there is excessive noise or vibration from the drive shaft. If you are installing the Basic Lift Kit, skip this step.

STEP 57

If you are installing the Complete Lift Kit, remove the stock M10 bolt from one side and discard. Place one spacer between the Center Drive Shaft Bearing flange and the frame crossmember. Install one of the new M10 bolts along with one lock washer and one flat washer. The lock washer should be installed between the bolt head and the flat washer. If you are installing the Basic Lift Kit, skip this step.

STEP 58

If you are installing the Complete Lift Kit, repeat Step 57 for the opposite side of the Center Drive Shaft Bearing. If you are installing the Basic Lift Kit, skip this step.

STEP 60

Lower the vehicle and make sure that both the front and rear suspension cycles. Take the vehicle for a short test drive. After the test drive, check the torque on all the hardware and tighten as necessary. Periodically recheck the torque on all of the hardware and tighten as necessary.

STEP 59

If you are installing the Complete Lift Kit, torque both M10 bolts to 27 ft-lbs or to the torque value specified in the Toyota Tacoma Factory Service Manual. If you are installing the Basic Lift Kit, skip this step.

STEP 61

A front-end alignment should be performed immediately after installation of this kit. Failure to properly align the front end will lead to premature and uneven wear on the tires, damage front suspension components, and may cause an unsafe driving condition.



SERVICE PARTS

