



## RS66903R9 – LEVEL IT System

Fits: 2020-2005 Toyota Tacoma 4WD/2WD 6-Lug\*  
 2020-2003 Toyota 4Runner 4WD\*  
 2014-2007 Toyota FJ Cruiser 4WD\*

Sway Bar spacer not compatible with Kinetic Dynamic Suspension System (KDSS)

## RS66905R9-1 – 2.5" Suspension System (Box 1 of 3)

Fits: 2020-2005 Toyota Tacoma 4WD/2WD 6-Lug\*

\*Excludes TRD PRO and 5-Lug Models

**READ ALL INSTRUCTIONS THOROUGHLY FROM START TO FINISH BEFORE BEGINNING INSTALLATION  
 IF INSTALLING RS66905R9K OR ANY ADDITIONAL COMPONENTS READ ALL ADDITIONAL INSTRUCTIONS  
 BEFORE BEGINNING INSTALLATION**

RS66903R9 Fits 265/70R17 or 255/75R17 tires on OE or 17x8 wheel with 4.5-5.0" of backspacing.

May require trimming for proper clearance.

Before installing any other size tire, consult your local tire and wheel specialist.

**⚠ WARNING: Carefully read, understand and follow the instructions provided in this manual, and keep it in a safe place for future reference. If you have any doubt whatsoever regarding the installation or maintenance of your Rancho suspension system, please see your retailer for assistance or advice. Failure to follow the warnings and instructions provided herein can result in the failure of the suspension system, or can cause you to lose control of your vehicle, resulting in an accident, severe personal injury or death.**

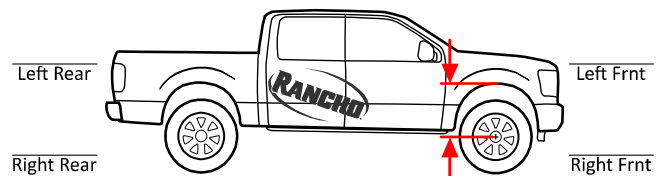
**These instructions should remain in the vehicle glove box for future reference**

### Parts List

P/N	DESCRIPTION	QTY.
RS999760UMM	Rancho quickLIFT	2
RS176782	0.70" Slotted Sway Bar Spacer	2
RS860816	Hardware Kit	1
RS7898	HHCS, M10-1.25X50MM	4
RS770064	Washer, M12	4
RS94180	Information Pack	1
RS89903	Instructions	1

### STRUT REMOVAL

1) Park the vehicle on a level surface. Set the parking brake and chock rear wheels. Measure and record the distance from the center of each wheel to the top of the fender opening. Record these measurements in the space provided.



2) Raise the front of the vehicle and support the frame with jack stands. Remove the front wheels and set them aside.

3) Remove front skid plate if equipped. See Illustration 1

4) Sway Bar Removal: NON-KDSS Models Only:

- Remove sway bar end links from steering knuckle. See Illustration 2 and Illustration 3.
- Mark driver side of sway bar. Remove sway bar mounts at frame. Remove sway bar and set aside. See Illustration 3.

5) Remove brake hose brackets from steering knuckle and frame. Remove ABS wire bracket from upper control arm. See Illustration 2.

6) Remove cotter pin and loosen outer tie rod stud nut. Using appropriate puller, separate then remove tie rod stud from steering knuckle. See Illustration 3.



Illustration 1

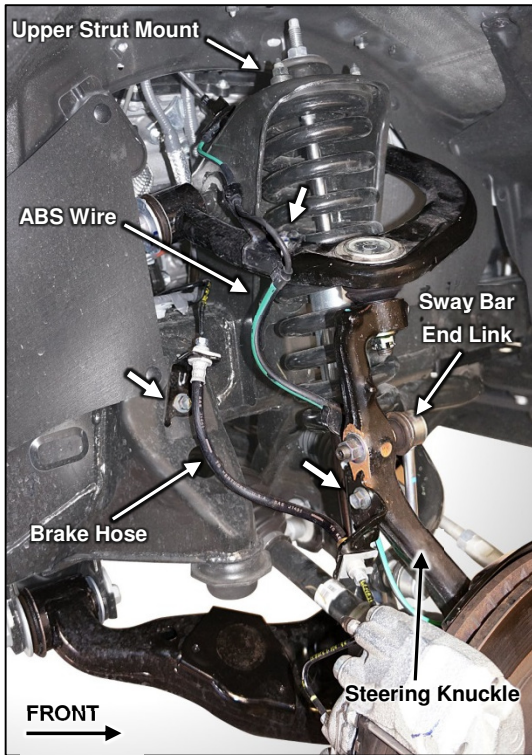


Illustration 2

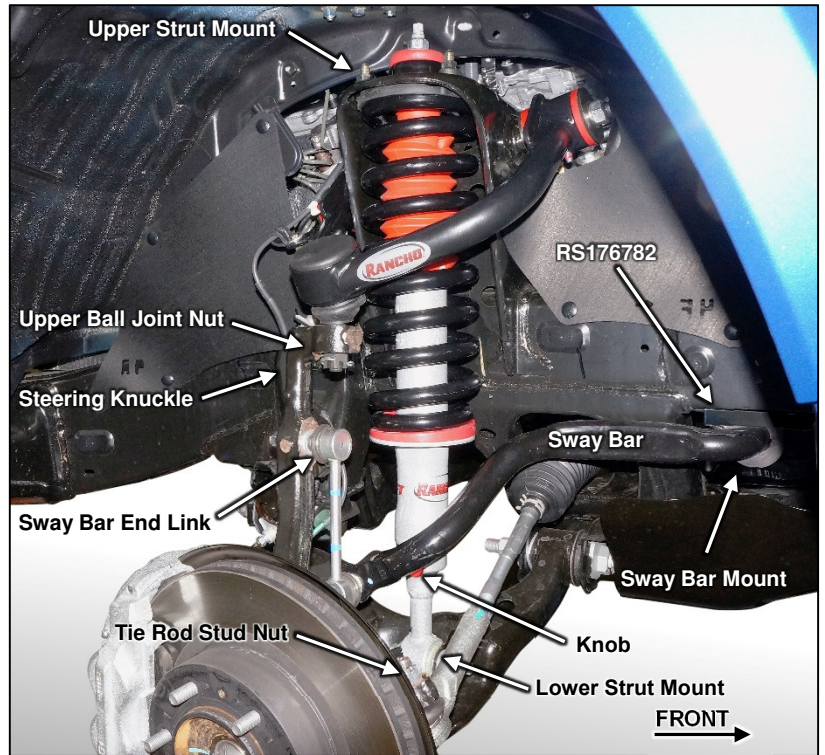


Illustration 3

7) Remove cotter pin and loosen upper ball joint stud nut. Using appropriate puller, separate then remove upper ball joint stud from steering knuckle. See 3 and Illustration 3.

**⚠ WARNING:** CONTROL ARM WILL SPRING UP WITH GREAT FORCE WHEN BALL JOINT SEPARATES FROM KNUCKLE. USE PRY BAR TO HOLD DOWN AND SLOWLY LIFT BALL JOINT STUD OUT OF KNUCKLE WHEN REMOVING BALL JOINT STUD NUT.

**MODELS EQUIPPED WITH KDSS SEE STEP 11**

8) Remove the three upper strut mounting nuts. See Illustration 2 and Illustration 3.

**CAUTION:** DO NOT TURN STRUT'S CENTER ROD NUT!

9) Remove lower strut mounting bolt. See Illustration 3.

10) Remove strut from vehicle.

11) To remove strut on models equipped with KDSS remove driver side strut first, (steps 8-10) then use a jack under driver side sway bar mount to push up on sway bar and relieve tension on passenger side control arm. See Illustration 4

**STRUT REPLACEMENT**

**⚠ WARNING:** Follow instructions and warnings supplied with strut.

1) Follow instructions supplied with strut to install supplied spring seat, and/or isolator on new Rancho strut.

2) Reference mark top mount, coil spring and strut. See Illustration 5

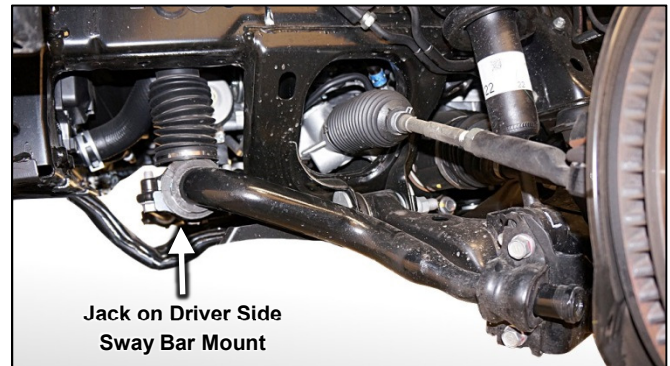


Illustration 4

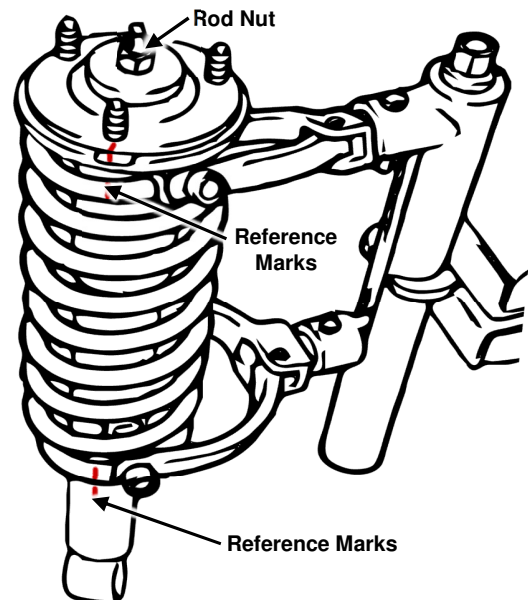


Illustration 5

**⚠ WARNING:** SPRING IS UNDER COMPRESSION LOAD WHEN INSTALLED. ATTEMPTS TO REMOVE SPRING WITHOUT PROPERLY RESTRAINING THIS LOAD MAY RESULT IN INJURY. NEVER REMOVE THE CENTRAL LOCK NUT OF THE UPPER MOUNTING PARTS BEFORE THE SPRING IS COMPRESSED.

IF A SUITABLE SPRING COMPRESSOR TOOL IS NOT AVAILABLE, OR A QUALIFIED OPERATOR IS NOT AVAILABLE, MOST REPAIR SHOPS CAN SWAP THE STRUT FOR A SMALL CHARGE.

3) Using a suitable spring compressor tool, compress spring slightly to relieve initial tension.

4) With initial spring tension relieved, loosen rod nut slightly. Compress spring until loose from lower spring seat and then completely remove nut. See Illustration 5

5) Remove all upper mounting parts and spring from strut assembly; save for reuse. Note position of all parts as removed to ensure proper installation of replacement parts. Inspect all original parts as removed for wear and damage. Obtain replacements when necessary.

6) Install strut on spring and upper mount assembly using reference marks to align components. Spring may need to be compressed more to fit new Rancho strut. Tighten center rod nut to OE specifications.

**⚠ WARNING:** DO NOT OVER TIGHTEN ROD NUT. EXCESSIVE TORQUE CAN DAMAGE THE THREADS ON THE NUT OR PISTON ROD. USE TORQUE VALUE FROM OE MANUFACTURER.

7) Using reference marks, align upper mount assembly, spring and strut with knob facing out and slowly decompress spring.

**NOTE:** If installing RS66905R9K or RS64901, refer to instruction RS89901-1 to install components from RS66905R9-2 or RS64901.

8) Loosely install strut in upper mount using OE hardware.

9) Pry lower strut bushing into position and attach to lower control arm using OE hardware. Tighten upper and lower strut mounting hardware to OE specifications.

10) Pry down upper control arm and attach upper ball joint stud to steering knuckle using OE hardware. Tighten hardware to OE specifications. Install NEW cotter pins, tightening ball joint nuts as needed to align castle nut with hole.

DO NOT LOOSEN BALL JOINT NUT TO INSTALL COTTER PIN!

11) Attach outer tie rod end to steering knuckle with OE hardware. Tighten hardware to OE specifications. Install NEW cotter pins, tightening ball joint nuts as needed to align castle nut with hole.

DO NOT LOOSEN BALL JOINT NUT TO INSTALL COTTER PIN!

12) Re-install brake hose and ABS wire brackets in original locations.

### **SWAY BAR SPACER INSTALLATION**

1) Loosely install sway bar and driver side sway bar mount with spacer RS176782 between mount and frame. Use supplied M10-hardware. See Illustration 3

2) Install passenger side sway bar mount with spacer RS176782 between mount and frame.

3) Torque hardware to OE specifications.

4) Reattach sway bar end links to steering knuckle using OE hardware. Torque to OE specifications

5) Install front wheels and lower vehicle to ground. Tighten lug nuts to specifications.

### **FINAL CHECKS & ADJUSTMENTS**

1) Turn the front wheels completely left then right. Verify adequate tire, wheel, and brake hose clearance. Inspect steering and suspension for tightness and proper operation.

2) With the suspension at maximum extension (full droop), inspect and rotate all axles and drive shafts.

3) Ensure that the vehicle brake system operates correctly.

4) Readjust headlamps and have vehicle aligned at a certified alignment facility.

### **General Recommended Alignment Specifications**

**NOTE:** Alignment specifications will vary with year and model. Have vehicle aligned to specifications specific to your vehicle

Tacoma:

Caster (degrees):  $2.00^\circ \pm .75^\circ$

Camber (degrees):  $+0.40^\circ \pm 0.75^\circ$

Sum Toe In (degrees):  $0.06'' \pm 0.08''$

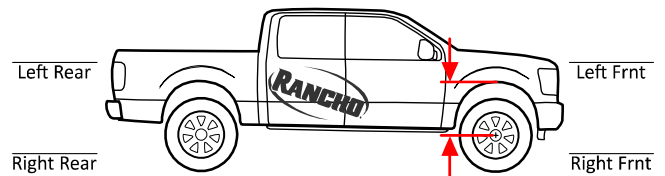
4Runner:

Caster (degrees):  $3.25^\circ \pm .75^\circ$

Camber (degrees):  $0.00^\circ \pm 0.75^\circ$

Sum Toe In (degrees):  $0.06'' \pm 0.08''$

5) Measure and record the distance from the center of each wheel to the top of the fender opening. Record these measurements in the space provided.



### Torque Specifications

Strut Rod Nut	20 lb-ft.
Upper Strut Mounting Nuts	47 lb-ft.
Lower Strut Mounting Bolt	61 lb-ft.
Tie Rod End Ball Stud Nut	67 lb-ft.
Upper Ball Joint Nut	81 lb-ft.
Sway Bar Mounting Bolts	30 lb-ft.

Sway Bar End Link to Steering Knuckle	52 lb-ft.
Sway Bar End Link to Sway Bar	52 lb-ft.
Brake Line Bracket to Steering Knuckle	21 lb-ft.
ABS Wire Bracket to Upper Control Arm	9 lb-ft.
Wheel Lug Nuts Aluminum Wheel	95 lb-ft.

