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Toyota 4Runner 2010- Current OME Suspension Installation Instructions (Preliminary)
These instructions include details for KDSS and non KDSS equipped vehicles.

Qty	Part Included	Tools/ Materials Suggested
2	OME Front Coil Springs	Metric Sockets
2	OME Front Struts	Metric Wrenches
2	OME Rear Springs	Pry bar(s)
2	OME Rear Shocks	Mallet
1	OME Trim Packer (KDSS Only)	Air Tools
		Bottle Jack
		Red Loctite

Thank you for your purchase from Slee Off-Road! If you should you have any questions or concerns, please do not hesitate to contact us immediately at 1 888 4X4 SLEE or at info@sleeoffroad.com.

Slee Off Road strives to provide comprehensive installation instructions. However, in some circumstances minor inconsistencies may be encountered with instructions and or provided parts. If you encounter such an inconsistency, please notify us, as your input is important.

Disclaimer; the following suspension installation was completed with the use of an Automotive lift and wall mounted strut compressor. Always take necessary precautions when completing any automotive repair and or installation or serious injury and or death may occur. Slee Off-Road and Slee & Co under no circumstances will be held liable for any damages to the user(s) and or their equipment as a result of information obtained within these instructions. The following information is intended as general guide to assist the purchaser and isn't a replacement for a factory repair manual. If the user is unfamiliar and or uncomfortable with steps outlined in this manual, the user should seek out a professional for installation. *Insure all parts are present and are ready for installation prior to beginning the installation process.* Always torque all bolts and or nuts removed to OEM Toyota Torque Specifications. Also, always replace any damaged hardware as necessary with OEM parts.

Please Note; An Alignment and a Zero Point calibration are required immediately after the suspension has been installed.

1. Remove wheels.
2. Remove Cotter Pin (one per side) and Castle nut (one per side) for ball joint on Steering Rack end. Use caution as not to tear or damage ball joint boot.

Note; A ball joint tool may be necessary to remove the ball joint on the steering rack end.



Ball Joint removed (Step 2)

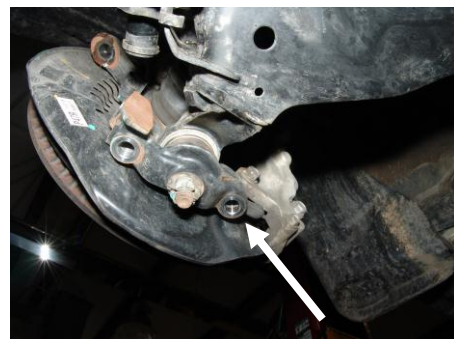
3. Remove the three nuts at the top of the strut assembly as shown.

Note; Do not remove the center nut as it holds the strut assembly together (could cause serious injury).



Removing the three nuts (Step 3)

4. Remove lower ball joint bolts (2 for each side) as shown.



Two ball joint bolts removed (Step 4)

5. Remove lower front shock bolt, washer and nut.



Lower shock nut and washer removed (Step 5)

- Using a large pry bar or similar, pry down on the Lower Control Arm to remove front strut and coil spring assembly.



Removing strut assembly (Step 6)

- Disassemble front struts and coil springs using a wall mounted Strut Compressor. Once safely compressed, remove top nut and pull strut out from the bottom of the assembly. Note the order and orientation of the washer and bushing.

Disclaimer; Use Caution as serious injury and or death could result from improper handling and or compression of strut assembly. For safety; we don't recommend using any other strut compressor than a wall mounted unit. Search out a professional repair facility to complete this step if necessary.



Wall Mounted Strut Compressor (Step 7)

- Retain strut top, washer and bushing as shown for assembly of OME coil spring and strut. Inspect bushing for any excessive wear and or damage and replace if necessary.

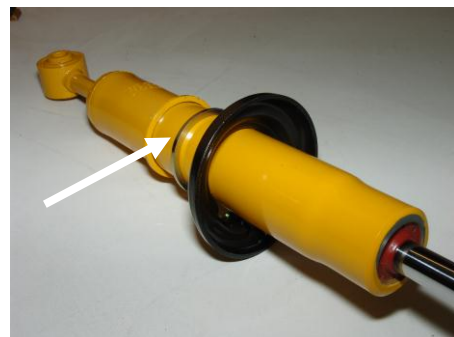


Parts to Retain (Step 8)

- Prepare to assemble OME strut and OME coil spring in reverse order of disassembly using retained parts in step 8. Insure the washer and bushings are in the correct order and orientation.

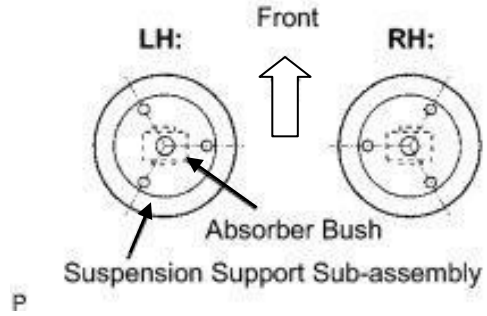
Install "cup (black)" that spring seats in facing up as shown in photo 9A.

Insure the correct coil spring and strut orientation as illustrated in 9B.



OME Trim Packer for KDSS and "Spring Cup" (Step 9A)

Note; Install one OME 5mm Trim packer (as shown in 9A) on the passenger side strut, only if the vehicle is equipped with KDSS. Vehicles without KDSS don't require an OME 5mm Trim Packer.



Proper coil spring and strut orientation (**Step 9B**)

10. Once safely compressed, hold the top of the strut shaft on the two flats with Vise Grips (figure 10A). Manually tighten strut top nut until threads end, be cautious as not to over tighten. Air tools in this step aren't recommended.



Tightening top strut nut (**Step 10A**)



View of assembled strut top (**Step 10B**)

11. Once the strut and coil assembly are correctly assembled (as described in figure 9B), install in the reverse order as it was removed. Thread top three nuts to hold shock body assembly in place first. Install lower shock bolt, washer and nut in the same orientation as it was removed.
Note; If necessary, shock can be rotated with upper mount in place by inserting 3/8 socket extension into lower shock eyelet.



Coil spring and strut assembly installed (**Step 11**)

12. Install two lower ball joint bolts that were removed in step 4 with red Loctite. Inspect all components to insure a complete and proper installation, with all bolts and nuts torqued to factory specifications.

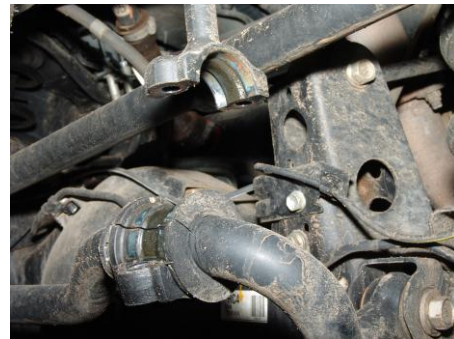
The front suspension installation is now complete.

13. Properly support rear axle housing to complete the rear spring and shock installation.
14. Vehicles *without* KDSS disconnect both sway bar brackets (4 bolts total to remove two brackets).

Note; Vehicles with KDSS disconnect only the passenger side sway bar bracket (Pictures in 14A and 14B are of 4Runner equipped with KDSS).



Remove sway bar bolts (**Step 14A**)



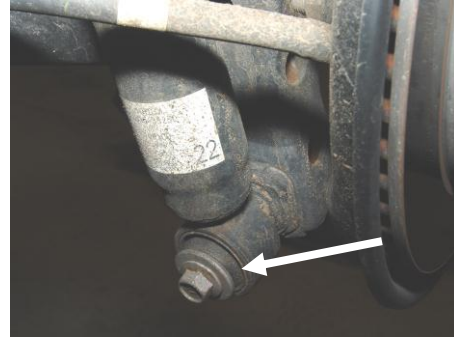
Bracket removed (**Step 14B**)

15. Remove shocks, starting with the removal of the shock top nut. It may be necessary to hold the shock, so it doesn't rotate as you remove the top nut.



Remove rear shock top nut (**Step 15A**)

Remove lower bolts and remove shocks.
Note original washer and bushing
orientation.



Remove shocks (**Step 15B**)

16. Allow the rear axle to safely droop enabling the removal of the coil springs. If necessary, pry or pull down the rear axle for the spring to be unseated in perch. The springs should be removed with minimal effort.



Remove springs (**Step 16**)

17. Transfer the bump stops from the original springs to the OME springs.



OME spring with bump stop (**Step 17**)

18. Use a bottle jack (as shown in 18A) placed between the rear axle housing and the frame to push the axle down, allowing the OME spring to be installed.

Note; Use caution as not to overly extend and or damage any ABS or Brake lines.



Using bottle jack (**Step 18A**)

Coils must be seated correctly in the lower and upper spring perches (as shown 18B), rotate if necessary.

Note; Coil springs aren't side specific.



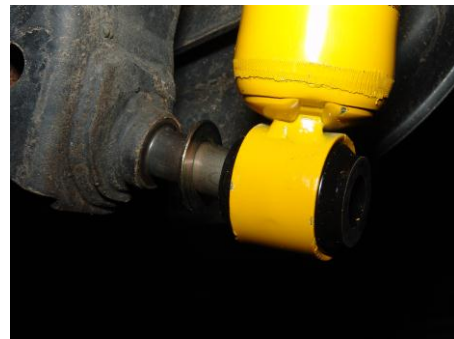
Spring seated correctly **(Step 18B)**

19. Install OME shocks in the reverse order in which they were removed. Follow OME guidelines for bushing and washer orientation or duplicate as originally installed. The index washer must be properly seated in the mounting hole.

It may be necessary to use a jack to raise the rear axle to properly align the shock eyelets (Step 19B).



Tightening top nut of shock **(Step 19A)**



Installing shock **(Step 19B)**

20. Install sway bar and bracket(s). It may be necessary to use a jack to lift sway bar into the proper location.



Install sway bar bracket **(Step 20)**

21. Install wheels and torque to factory specifications.
22. Verify the entire installation and insure all bolts and nuts have been properly torqued.
23. An Alignment and a Zero Point calibration are required immediately after the suspension has been installed.

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