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Rough Country 502149 Installation Instructions

M1 Loaded Strut Pair for 2022–2025 Toyota Tundra 4WD

Part number: 502149

trailfortress.com/rough-country-m1-loaded-strut-pair-502149

Scan for fitment, price and install help

Toyota 2007-19 Tundra Strut Install

Thank you for choosing Rough Country for all your vehicle needs.

Please read instructions before beginning installation. Check the kit hardware against the kit contents shown below. Be sure you have all needed parts and know where they go.
If question exist, please call us @1-800-222-7023. We will be happy to answer any questions concerning this product.
Check all fasteners for proper torque. Check to ensure for adequate clearance between all components.
Periodically check all hardware for tightness.

KIT CONTENTS:
Loaded N3 Struts X 2

TOOLS NEEDED:
10mm Wrench or Socket
12mm Wrench or Socket
14mm Wrench or Socket
19mm Wrench or Socket
22mm Wrench and Socket

HARDWARE INCLUDED:
Top of Strut Nuts x 8

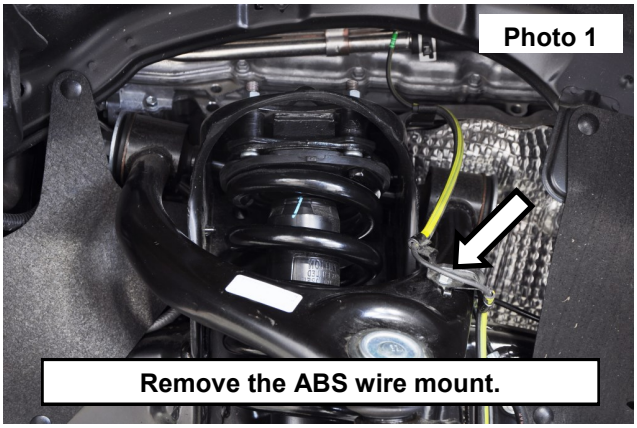


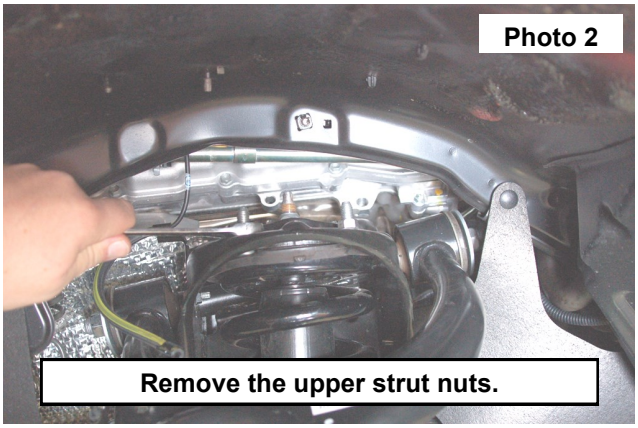
Torque Specs:

Size	Grade 5	Grade 8	Size	Class 8.8	Class 10.9
5/16”	15 ft/lbs	20ft/lbs	6MM	5ft/lbs	9ft/lbs
3/8”	30 ft/lbs	35ft/lbs	8MM	18ft/lbs	23ft/lbs
7/16”	45 ft/lbs	60ft/lbs	10MM	32ft/lbs	45ft/lbs
1/2”	65 ft/lbs	90ft/lbs	12MM	55ft/lbs	75ft/lbs
9/16”	95 ft/lbs	130ft/lbs	14MM	85ft/lbs	120ft/lbs
5/8”	135ft/lbs	175ft/lbs	16MM	130ft/lbs	165ft/lbs
3/4”	185ft/lbs	280ft/lbs	18MM	170ft/lbs	240ft/lbs

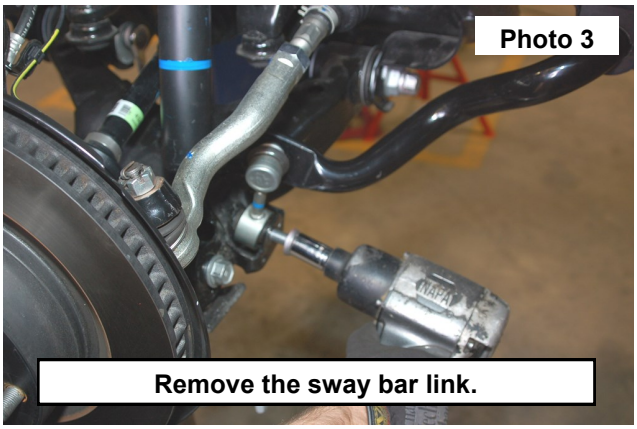
INSTALLATION INSTRUCTONS

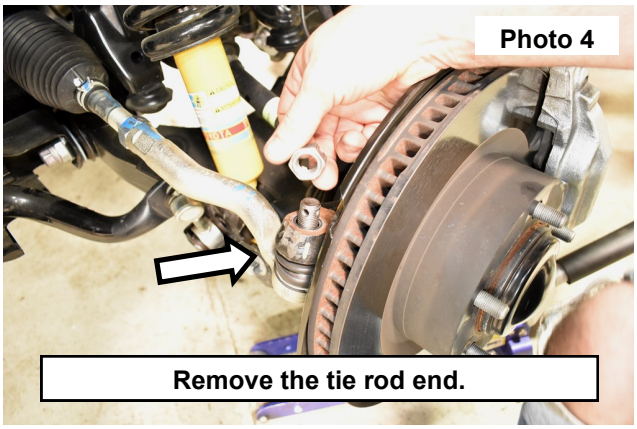
1. Park the vehicle on a level surface and chock the rear wheels.
2. Jack up the front of the vehicle using a floor jack. Place jack stands under the frame rails directly behind the lower control arms and lower the vehicle onto the jack stands.
3. Remove the tires and wheels.
4. Remove the sensor wire bracket as shown in **Photo 1** using a 10MM wrench. **Take care not to overextend or damage this wire.** Retain the hardware for reuse.
5. Remove the upper strut nuts as shown in **Photo 2** using a 14MM wrench. Retain hardware.



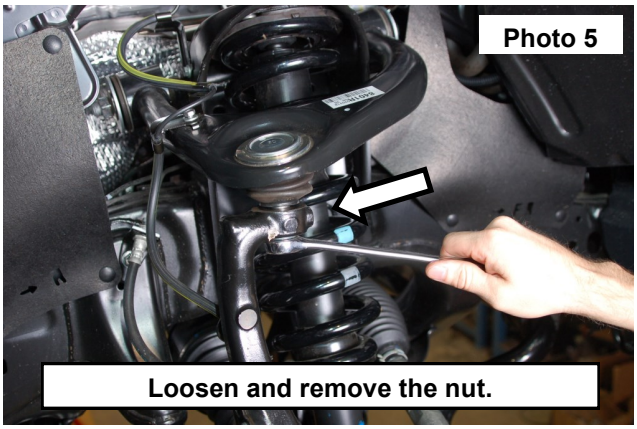


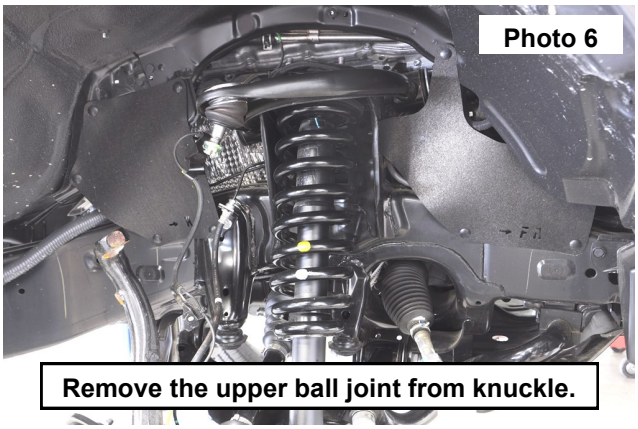
6. Remove the sway bar link from the lower control arms using a 19MM wrench. **See Photo 3**. Retain hardware.
7. Remove the tie rod end from the knuckle using a 19mm wrench. **See Photo 4.**
8. Remove the brake line bracket from the knuckle using a 12MM wrench.



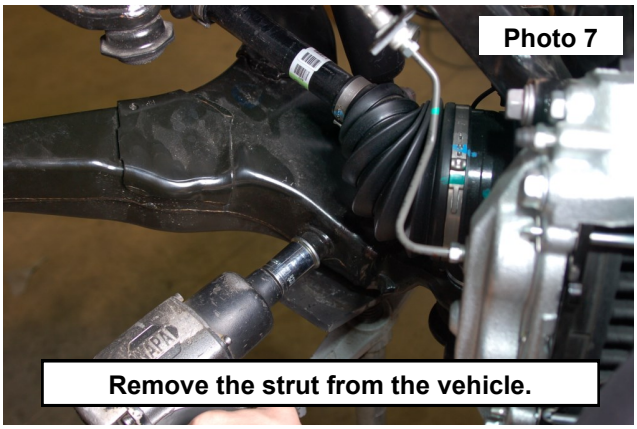


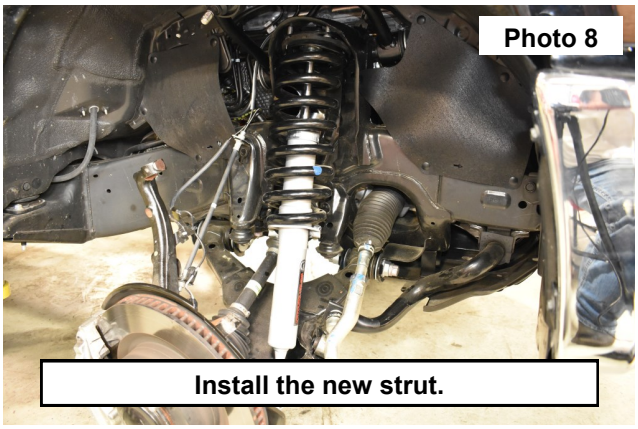
9. Loosen the upper ball joint nut using a 19MM wrench as shown in **Photo 5.** It may be necessary to hit side of the knuckle to break the taper lock loose then remove the nut.
10. Remove the knuckle from the ball joint. **Take care not to overextend or damage the ABS wire. See Photo 6.**



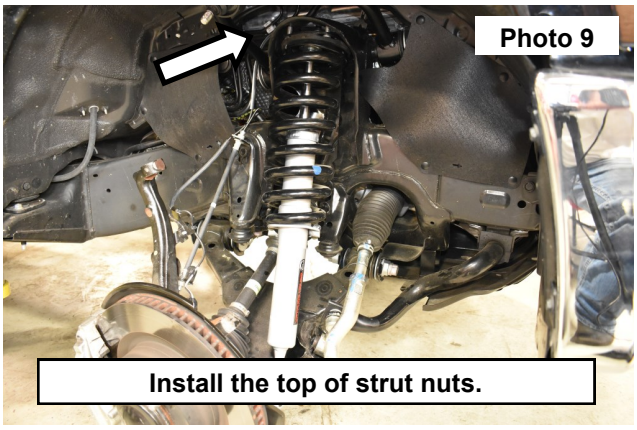


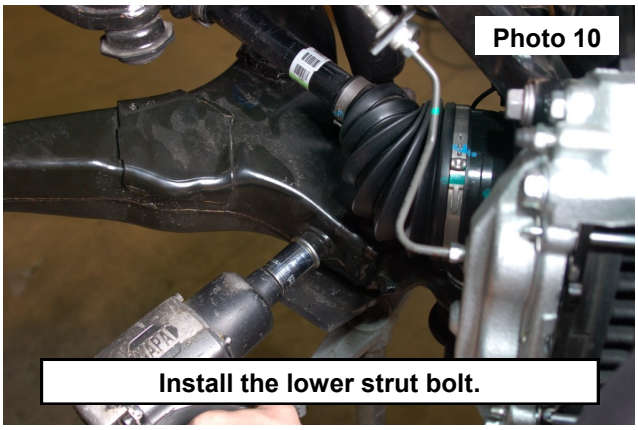
11. Remove the lower strut bolts as shown in **Photo 7** using a 22MM socket and wrench. Remove the strut from the vehicle.
12. Install the new strut into the upper mount on the vehicle. **See Photo 8.**



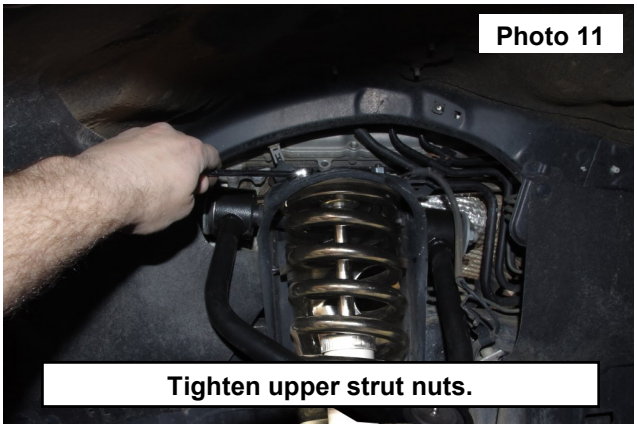


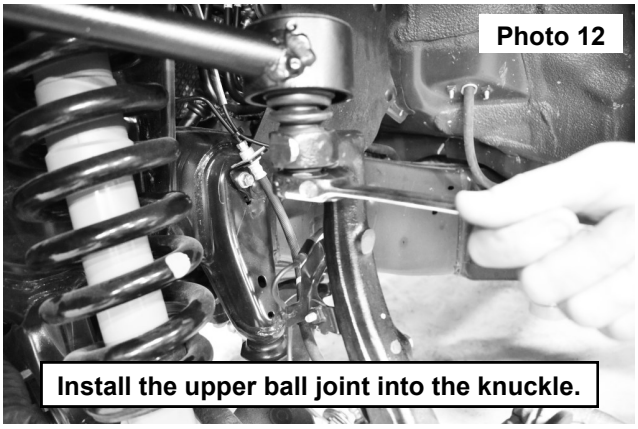
13. Install the nuts on top of the strut. Hand tighten. **See Photo 9.**
14. Install the lower strut bolt in the original position that it was removed. **See Photo 10. This will be tighten when the vehicle is on the ground.**





15. Tighten the nuts on the top of the strut using a 14mm wrench. **See Photo 11.**
16. Connect the upper ball joint to the knuckle using the retained hardware. Tighten using a 19mm wrench. Then install the locking pin to lock the nut. **See Photo 12.**
17. Install the ABS line onto the knuckle and the upper control arm using a 10mm socket.
18. Install the sway bar link into the lower control arm using the retained bolt. Tighten using a 19mm socket.





19. Install the tie rod end onto the knuckle using the retained nut use a 19mm wrench to tighten. Then install the locking pin into the nut.
20. Install the front wheels and tires.
21. Jack up the front of the vehicle and remove the jack stands.
22. Lower the vehicle onto the ground. It may be necessary to roll the vehicle forward and to settle the suspension.
23. **Tighten the lower strut bolts using a 22mm wrench and socket.**

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