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Rough Country 502166 Installation Instructions

M1 Loaded Strut Pair for 2010–2024 Toyota 4Runner 4WD

Part number: 502166

trailfortress.com/rough-country-m1-loaded-strut-pair-502166

Scan for fitment, price and install help

Toyota 2005-19 Tacoma 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:
5mm Allen Wrench
12mm Wrench or Socket
14mm Wrench or Socket
17mm Wrench or Socket
19mm Wrench or Socket
21mm Wrench or Socket

HARDWARE INCLUDED:
Top of Strut Nuts x 6

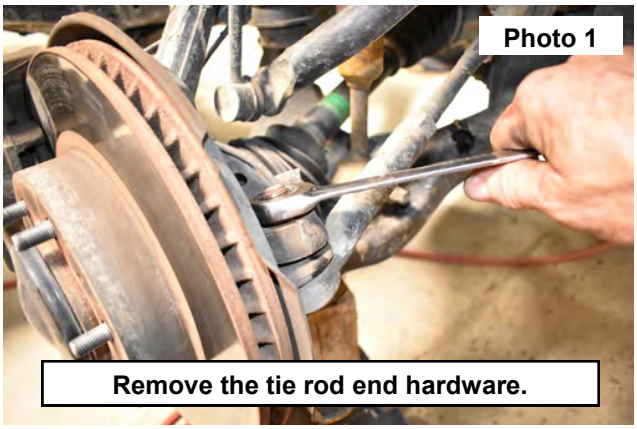


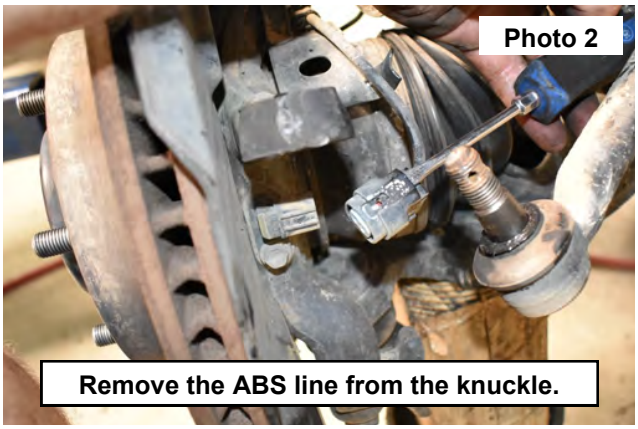
Torque Specs:

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

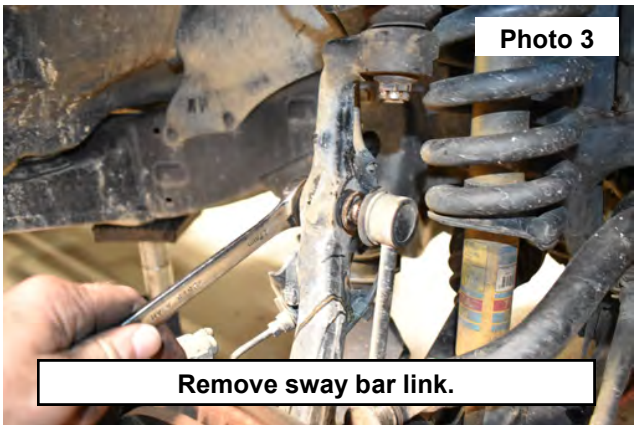
INSTALLATION INSTRUCTONS

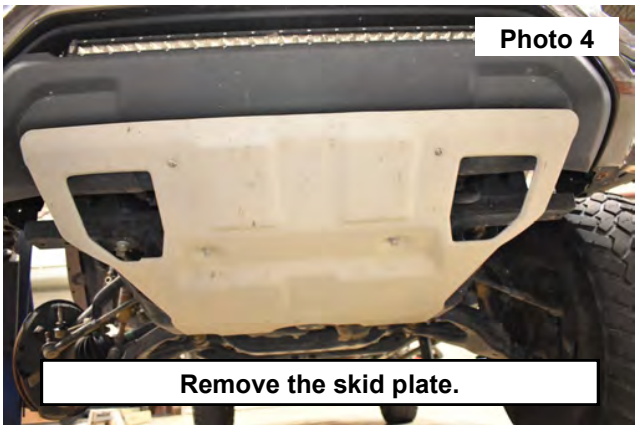
1. Using a jack lift the front of the vehicle up and place jack stands under the frame rails.
2. Remove the front wheels and tires from the front of the vehicle using a 21mm socket.
3. Remove the OE clip from the tie rod end. Then loosen the nut using a 19mm wrench. Retain clip for reuse. **See Photo 1.**
4. Use a hammer to unseat the taper from the knuckle. Remove the nut and the tie rod from the knuckle. Retain the nut for reuse.
5. Remove the ABS plug from the sensor and the wiring harness bracket from the knuckle using a 12mm socket. **See Photo 2.**



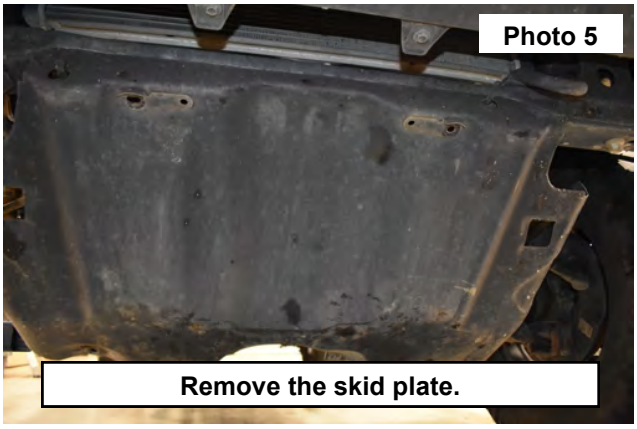


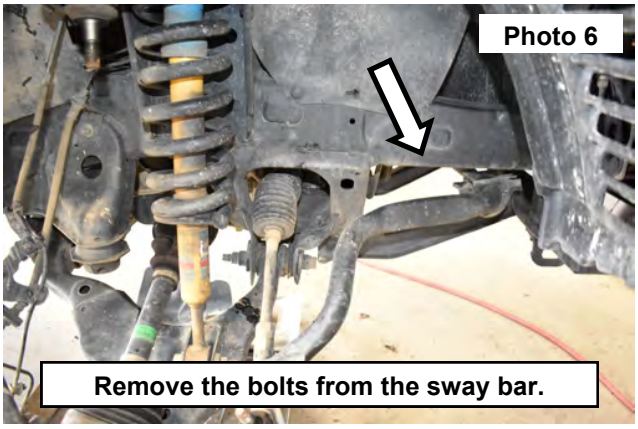
6. Remove the sway link nut using a 17mm wrench then remove the sway link from the knuckle. **See Photo 3.**
7. If equipped Remove the outer skid plate from the front of the vehicle using a 5mm allen wrench and a 12mm socket. Retain the skid plate and hardware for reuse. **See Photo 4.**



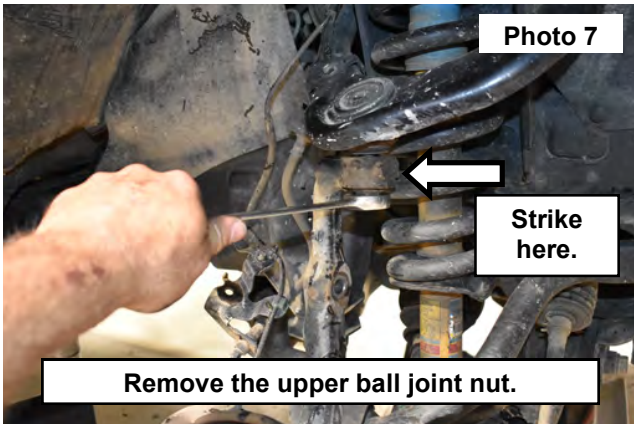


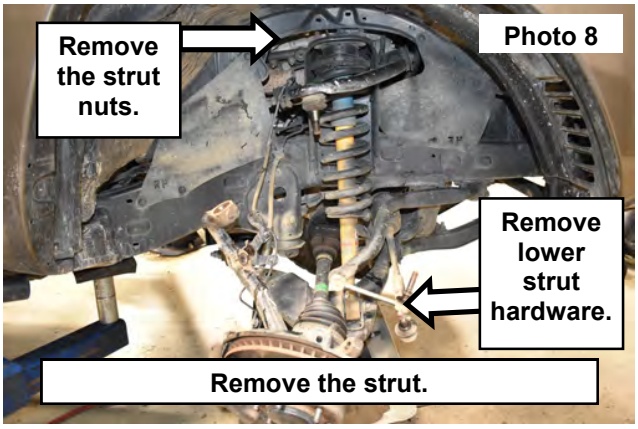
8. If the above skid plate is not installed on the vehicle remove the 4 bolts from the skid plate using a 12mm socket. Retain the skid plate and the hardware. Set aside for reuse. **See Photo 5.**
9. Using a 14mm socket remove the bolts from the sway bar frame mount and slide the sway bar back this will give needed clearance to remove the strut. **See Photo 6.**



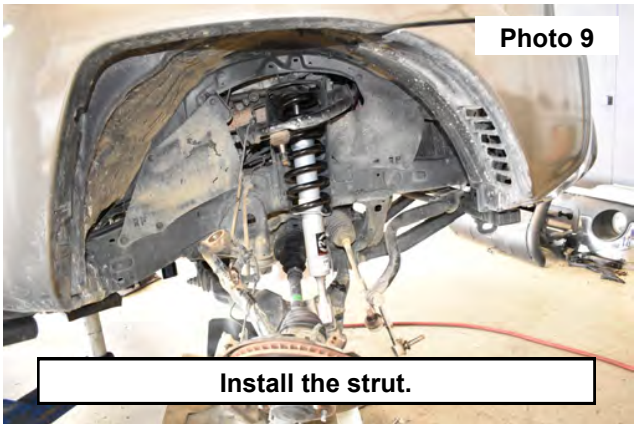


10. Remove the OE clip from the upper ball joint nut then loosen the nut using a 19mm wrench. Using a hammer unseat the taper from the ball joint and the knuckle by striking the front of the knuckle. Remove the nut and ball joint from the knuckle . Let the knuckle relax back . **See Photo 7.**
11. Remove the bolt in the lower strut mount on the lower control arm using a 19mm wrench and socket. Retain the hardware for reuse. **See Photo 8.**
12. Remove the 3 nuts from the top of the strut hat using a 14mm wrench and remove the strut. **See Photo 8.**



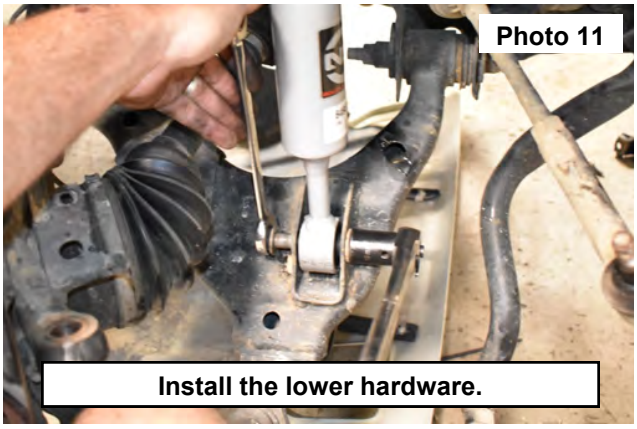


13. Install the new strut into the upper mount. **See Photo 9.**
14. Secure the strut using the supplied nuts on the top studs. Hand tighten. **See Photo 10.**





15. Install the retained bolt and nut into the lower control arm and the strut. Hand tighten, this will be tightened when the vehicle is set on the ground. **See Photo 11.**



16. Tighten the upper strut hardware using 14mm wrench and socket.
17. Install the upper ball joint into the knuckle secure with the retained nut and locking pin. Tighten using a 19mm wrench.
18. Install the sway bar links into the knuckles on each side of the vehicle using the retained nuts use a 17mm socket to tighten the nuts.
19. Install the sway bar onto the frame using the retained hardware. Tighten using a 17mm socket.
20. Connect the ABS line into the sensor and the clips along the knuckle.
21. Install the tie rod end into the knuckle using the retained nut and locking pin. Tighten using a 19mm wrench.
22. Install the one or both skid plates onto the vehicle using the retained hardware. **See Photo 15.**
23. Install the wheels and tires onto the front of the vehicle.
24. Using a jack raise up the front of the vehicle, removing the jack stands then lowering the vehicle onto the ground.
25. Once the vehicle is on the ground. Tighten the lower strut mount to the control arm using a 19mm wrench and socket. **See Photo 16.**



Photo 15

Install the skid plates.

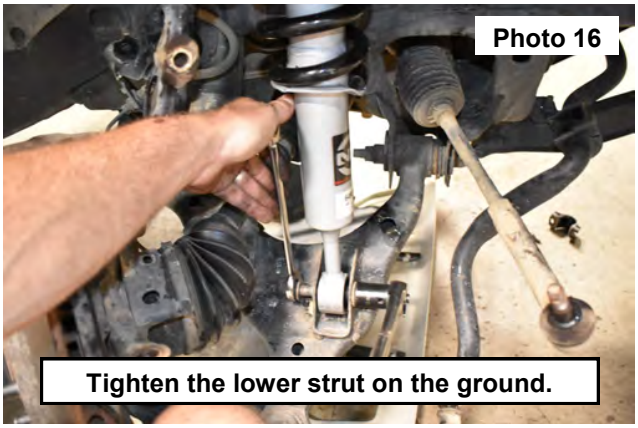


Photo 16

Tighten the lower strut on the ground.

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