

ROUGH COUNTRY

SUSPENSION SYSTEMS®

921737000

TOYOTA 2020 Highlander 2" Lift Kit

Thank you for choosing Rough Country for your suspension needs.

Rough Country recommends a certified technician install this system. In addition to these instructions, professional knowledge of disassembly/reassembly procedures as well as post installation checks must be known. Attempts to install this system without this knowledge and expertise may jeopardize the integrity and/or operating safety of the vehicle.

Please read instructions before beginning installation. Check the kit hardware against the parts list on this page and the product layout on the last page. Be sure you have all needed parts and know where they go. Also please review tools needed list and make sure you have needed tools.

PRODUCT USE INFORMATION

⚠ WARNING As a general rule, the taller a vehicle is, the easier it will roll. Seat belts and shoulder harnesses should be worn at all times. Avoid situations where a side rollover may occur.

Generally, braking performance and capability are decreased when larger/heavier tires and wheels are used. Take this into consideration while driving. Do not add, alter, or fabricate any factory or after-market parts to increase vehicle height over the intended height of the Rough Country product purchased. Mixing component brands is not recommended.

Rough Country makes no claims regarding lifting devices and excludes any and all implied claims. We will not be responsible for any product that is altered.

If questions exist we will be happy to answer any questions concerning the design, function, and correct use of our products.

This suspension system was developed using a Maximum tire size of 235/65R-18 tire on an 18x8 wheel with 38mm of backspacing. For aftermarket wheel and tire combinations consult your tire and wheel specialist.

⚠ NOTICE

NOTICE TO DEALER AND VEHICLE OWNER

Any vehicle equipped with any Rough Country product should have a "Warning to Driver" decal installed on the inside of the windshield or on the vehicle's dash. The decal should act as a constant reminder for whoever is operating the vehicle of its unique handling characteristics.

INSTALLING DEALER - it is your responsibility to install the warning decal and forward these installation instructions on to the vehicle owner for review. These instructions should be kept in the vehicle for its service





Kit Contents:

- 2-Front Strut Spacers
- 2-Front Swaybar Extension

- 2-Rear Coil Spacer
- 2-Rear Trailing Arm Drop Bracket
- 1-Rear Shock Relocation - Dr
- 1-Rear Shock Relocation - Pass
- 2-Rear Upper Control Arm

- 2-10MMSTUDBAG-2
- 6-10MMx1.25 Strut Spacer Studs
- 6-10MMx1.25 Flange Nut
- 1-M10x1.25 Hex Nut
- 1-1/2" Jam Nut

Hardware:

- 2-M12-1.75x35MM Hex Bolt
- 2-M12-1.75 Flange Lock Nut
- 2-M12 Flat Washer
- 4-M14-1.5x60MM Hex Bolt
- 4-9/16" Flat Washer

Tools Needed:

- 10 mm Wrench/Socket
- 14 mm Wrench/Socket
- 16 mm Wrench/Socket
- 17 mm Wrench/Socket
- 18 mm Wrench/Socket
- 19 mm Wrench/Socket
- 21 mm Wrench/Socket
- 22 mm Wrench/Socket
- Hammer
- Trim remover tool
- Paint pen or Sharpie
- Sander

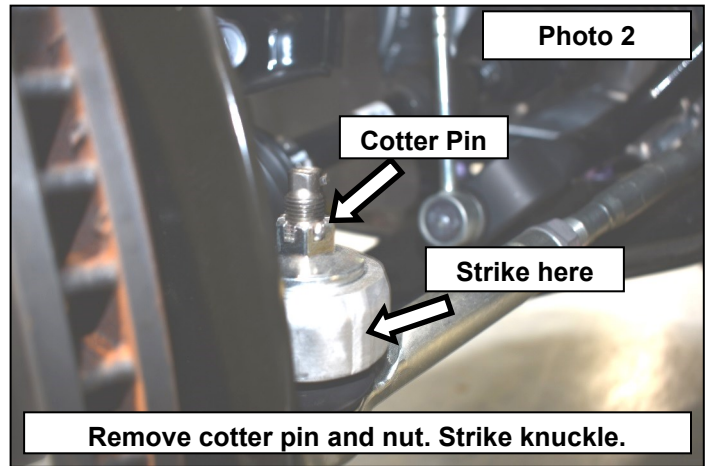
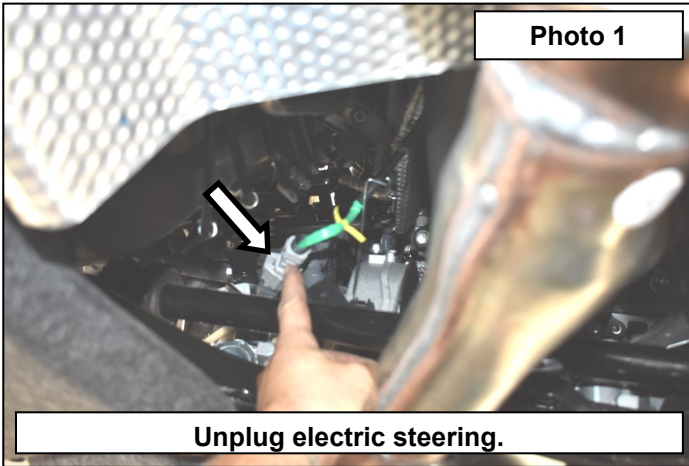
Torque Specs:

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

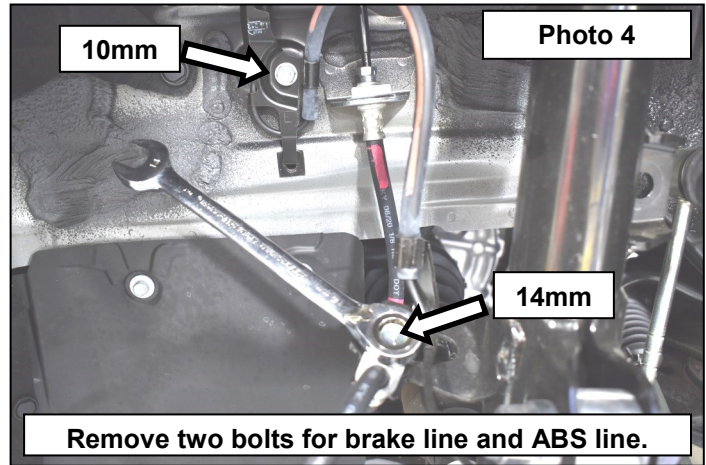
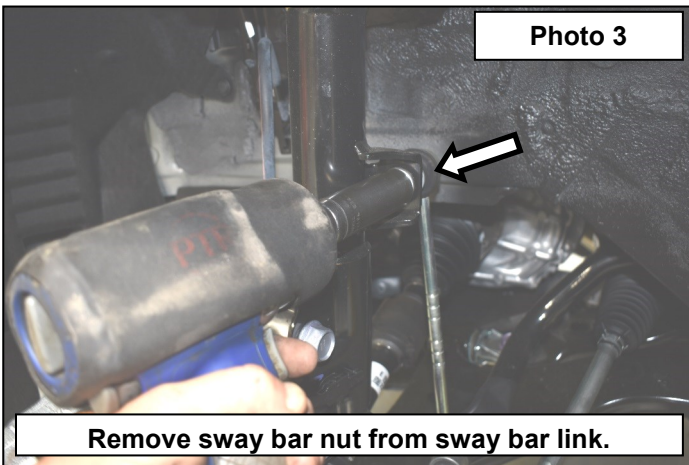


FRONT INSTALLATION

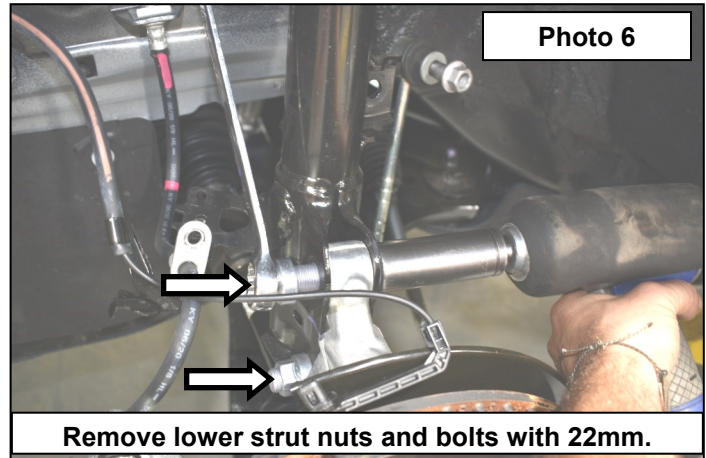
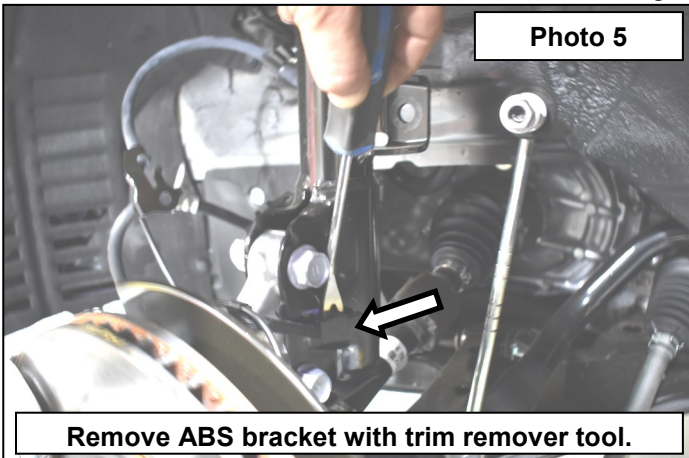
1. Jack up the front of the vehicle and support the vehicle with jack stands, so that the front wheels are off the ground
2. Remove the front tires/wheels using a 21mm deep well socket.
3. Unplug electric steering. **See Photo 1.**
4. Remove cotter pin from the outer tie rod end on the steering linkage. Using 17mm socket/wrench remove the nut. Using a hammer strike on the side of the cast knuckle to allow the tie rod end to separate from the knuckle. Remove the linkage from the knuckle. Push linkage forward to make room for installation. Retain factory nut & cotter pin. **See Photo 2.**



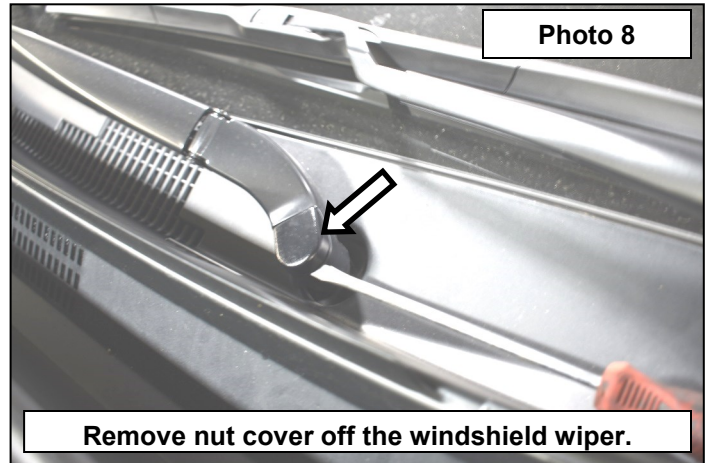
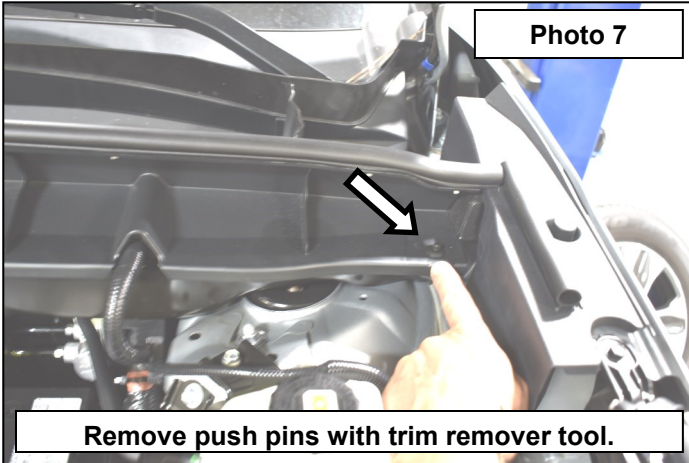
5. Using a 17mm wrench, remove the sway bar nuts at the top of the sway bar links. Let sway bar drop. **See Photo 3.**
6. Remove the two bolts for the brake line and ABS line using a 14mm wrench and 10mm wrench. **See Photo 4.**



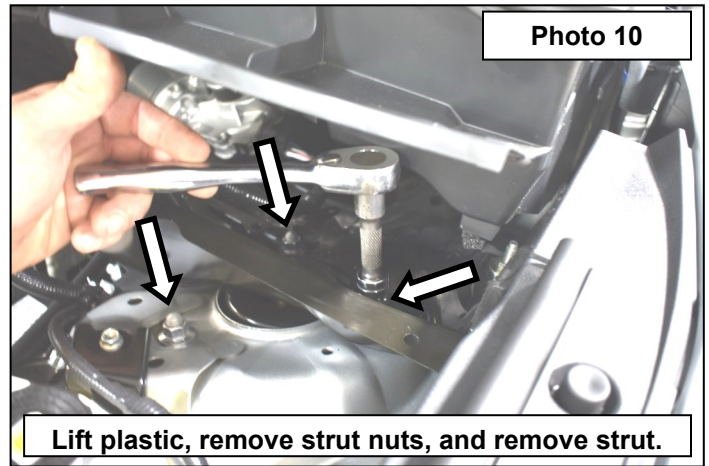
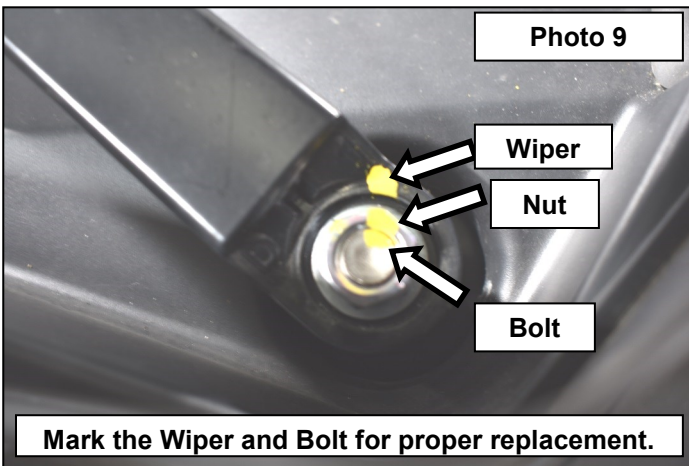
7. Using a trim remover tool, remove the ABS bracket on the lower strut. **See Photo 5.**
8. Remove both of the lower strut nuts and bolts using a 22mm socket/wrench. **See Photo 6.**



6. In order to access the upper strut nuts, the windshield wipers and plastic housing need to be removed.
7. Using a trim remover tool, remove the push pins on the plastic housing beneath the windshield wipers. **See Photo 7.**
8. Remove the nut covers off the windshield wipers. **See Photo 8.**



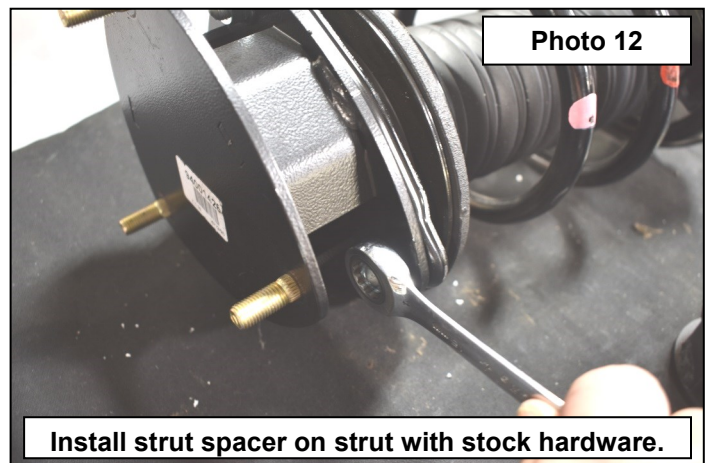
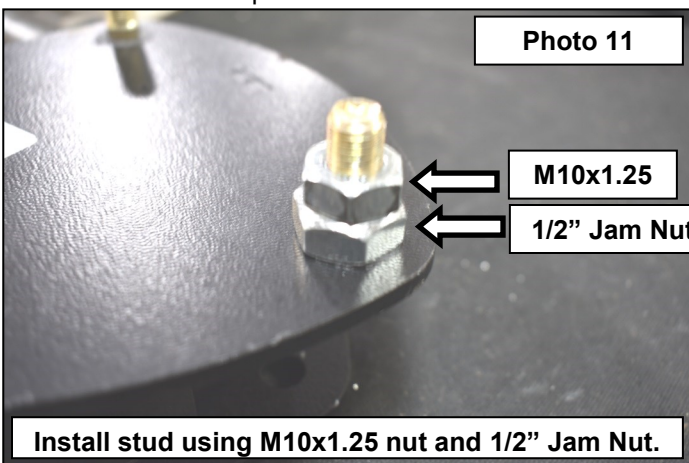
9. Mark the windshield wiper, and bolt with a paint pen so they can be replaced in the proper location. **NOTE: Make sure the bolt is marked and not just the nut.** Remove nut using a 14mm wrench and remove wiper. **See Photo 9.**
10. Lift the plastic housing, remove the 3 upper strut nuts using a 14mm socket/wrench, and remove strut from vehicle. **See Photo 10.**



11. Install the studs in the strut spacer using the M10x1.25 Hex Nut, the 1/2" Jam nut, and a 17mm wrench on the top nut. Place the jam nut over the stud first, then tighten the hex nut over the top. Tighten until the stud is pull up flush to the strut spacer. **See Photo 11.**

▲ NOTICE DO NOT use an impact on the hex nut to install the studs. This could strip the studs in the strut spacer.

12. Install the strut spacer on the strut with stock hardware. **See Photo 12.**



13. Install the strut with the strut spacer back in the vehicle and tighten upper strut with the supplied 10mm x 1.25 Flange Nuts. Tighten the bottom with stock hardware. **See Photo 13.**
14. Install the supplied swaybar extension bracket on the strut with the supplied 12mm-1.75x35mm hex bolt, flange nut, and washer. Attach swaybar link in the top hole using stock hardware. **See Photo 14.**

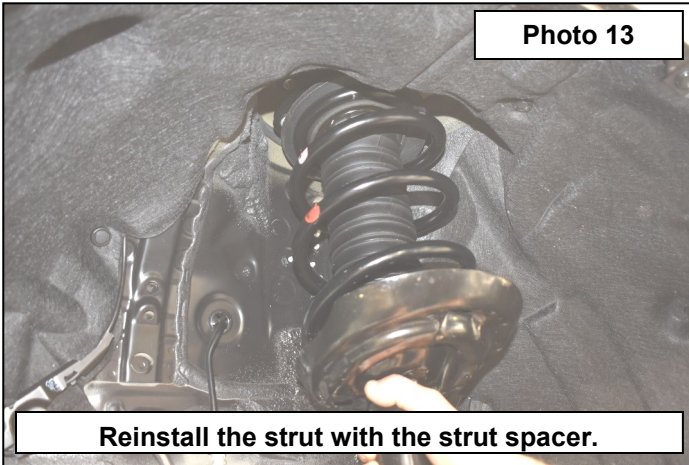


Photo 13

Reinstall the strut with the strut spacer.

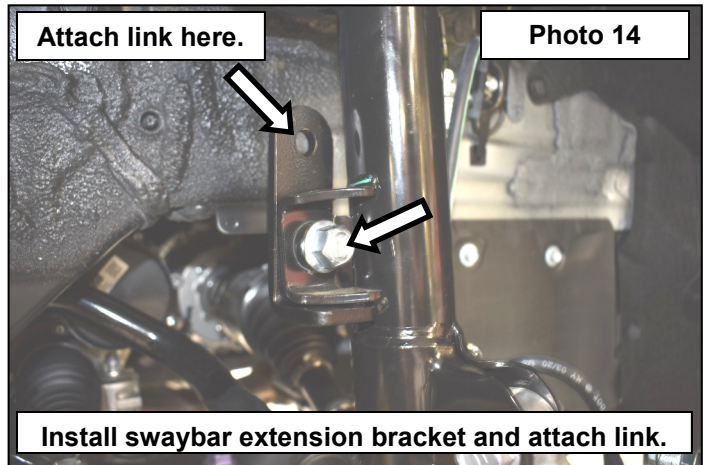


Photo 14

Install swaybar extension bracket and attach link.

15. Reinstall the ABS and brake lines in the factory locations.
16. Reinstall and tighten tie rod end with factory hardware. Reinsert the cotter pin.
17. Reinstall wipers and plastic housing.
18. Plug electric steering back up.
19. Install tires and lower.

REAR INSTALLATION

1. Jack up the rear of the vehicle and support the vehicle with jack stands, so that the rear wheels are off the ground
2. Remove the rear tires/wheels using a 21mm deep well socket.
3. Remove the lower swaybar nut and bolt using a 14mm socket/wrench. **See Photo 1.**
4. Put the jack under the lower control arm. **See Photo 2.**

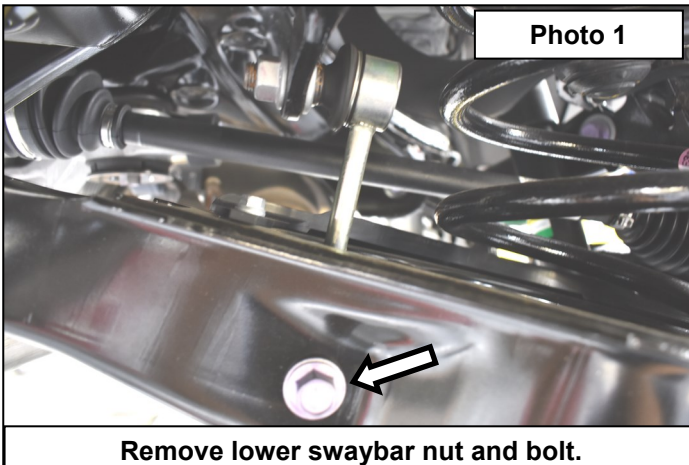


Photo 1

Remove lower swaybar nut and bolt.

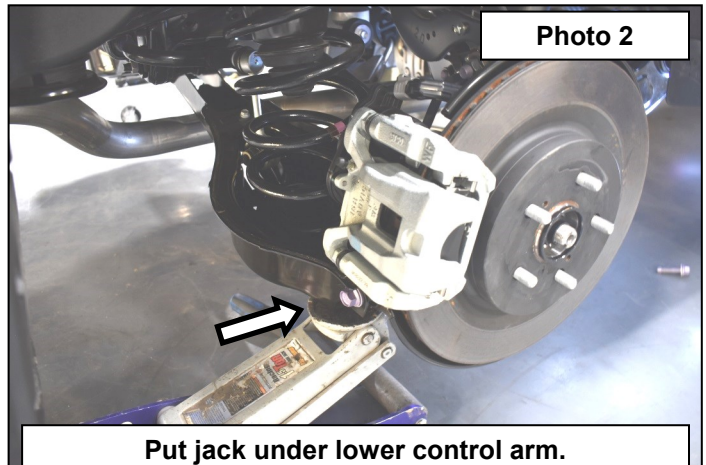
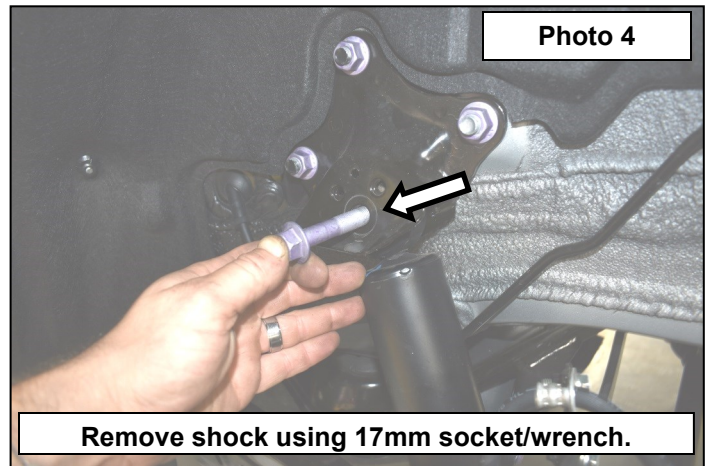
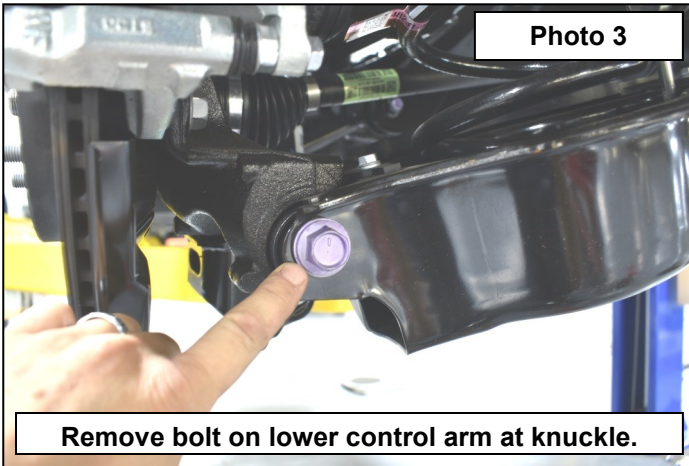


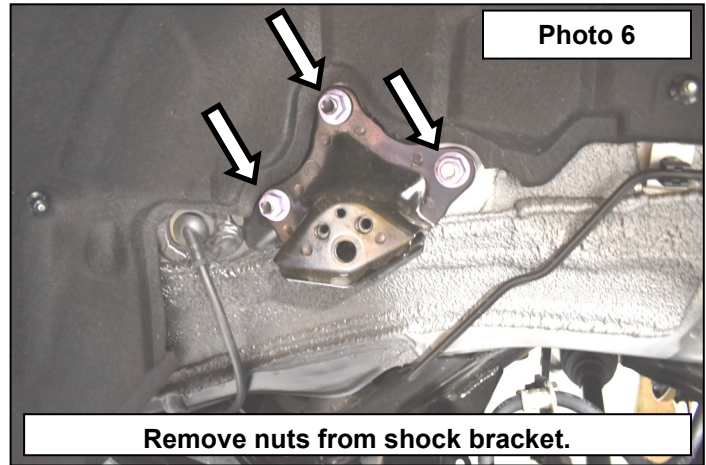
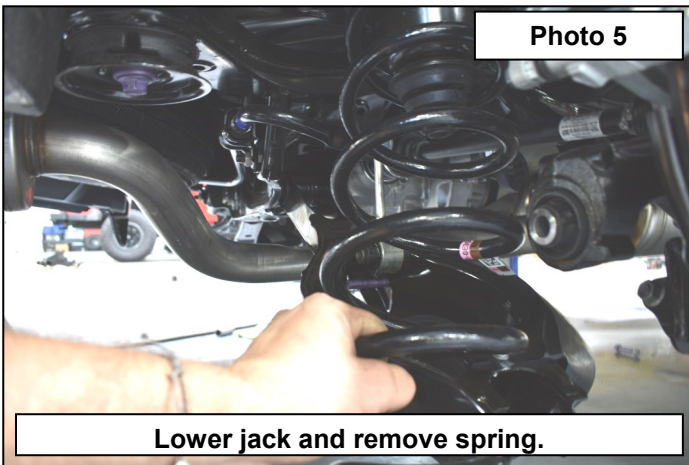
Photo 2

Put jack under lower control arm.

5. Remove the bolt on the lower control arm at the knuckle using a 19mm socket/wrench. **See Photo 3.**
6. Remove the shock using a 17mm socket/wrench. **See Photo 4.**



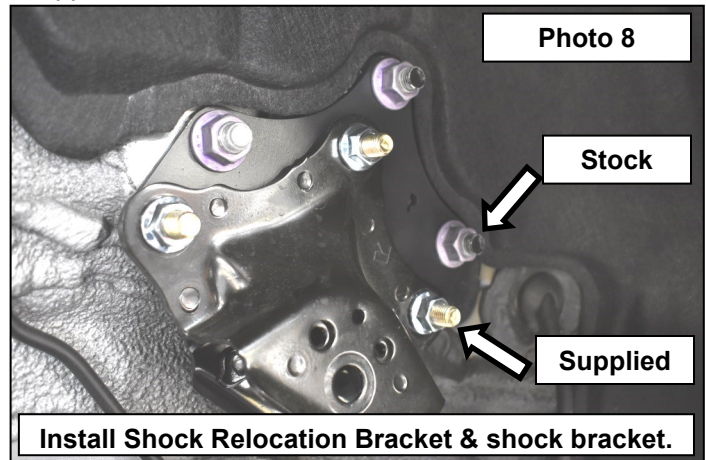
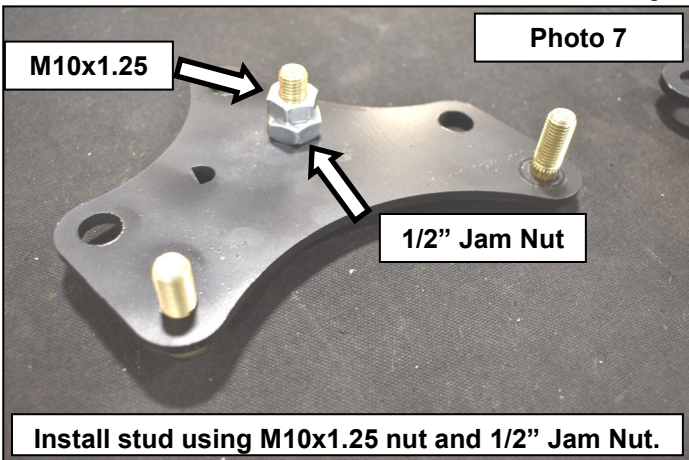
7. Lower the jack and remove the spring. **See Photo 5.**
8. Remove the three nuts from the shock bracket and remove bracket. **See Photo 6.**



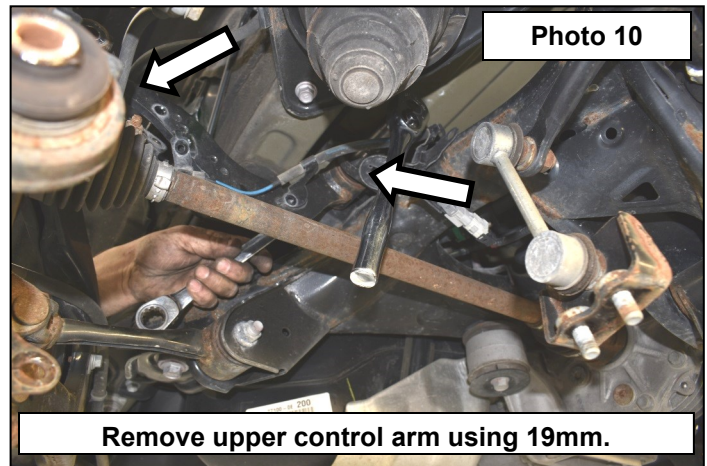
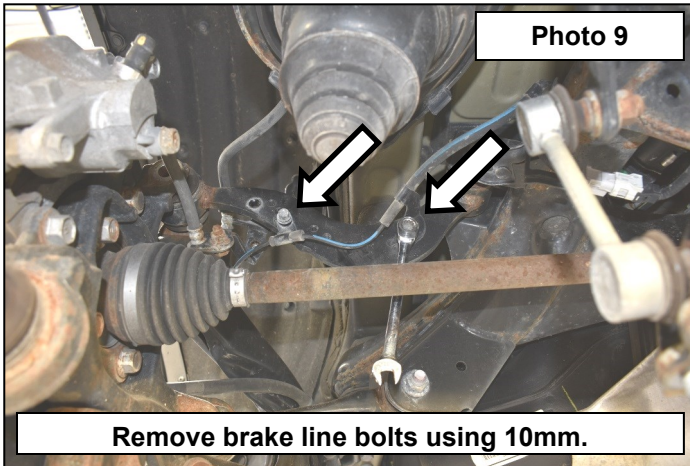
9. Install the studs in the Shock Relocation Bracket using the M10x1.25 Hex Nut, the 1/2" Jam nut, and a 17mm wrench on the top nut. Place the jam nut over the stud first, then tighten the hex nut over the top. Tighten until the stud is pull up flush to the strut spacer. **See Photo 7.**

▲ NOTICE **DO NOT use an impact on the hex nut to install the studs. This could strip the studs in the bracket.**

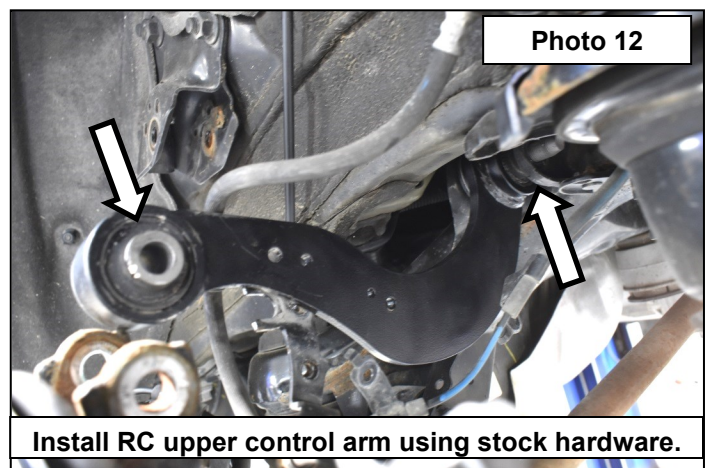
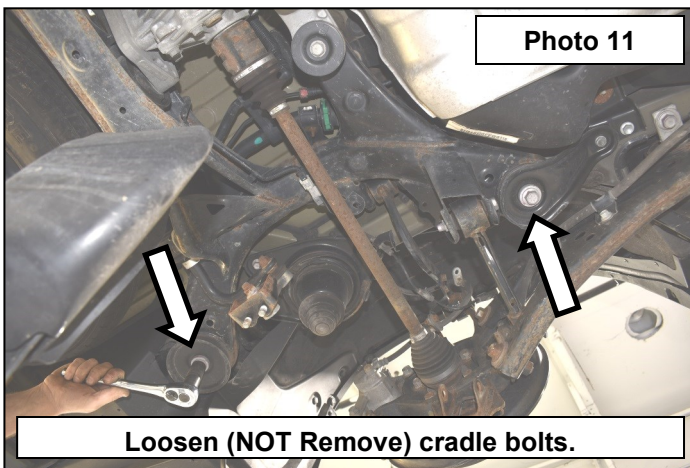
10. Install the Shock Relocation Bracket using stock hardware. **NOTE: P and D stamped through brackets for Passenger and Driver side.** Install the shock bracket using the 10mm Flange lock nuts from the 10mm Stud Bag. Tighten the stock nuts with 17mm socket/wrench and tighten the supplied nuts with 16mm socket/wrench. **See Photo 8.**



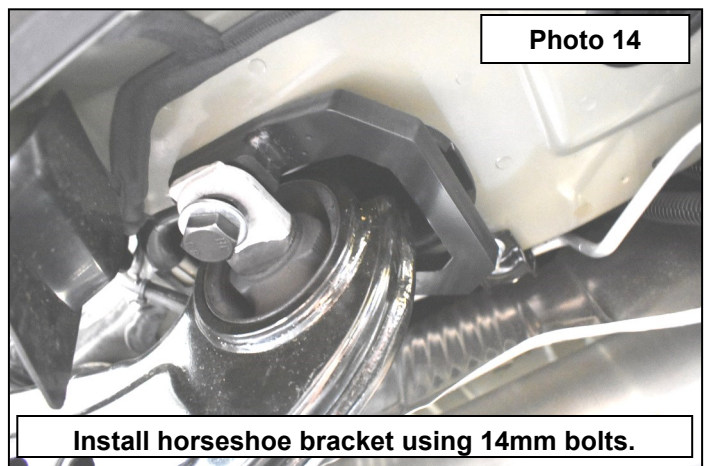
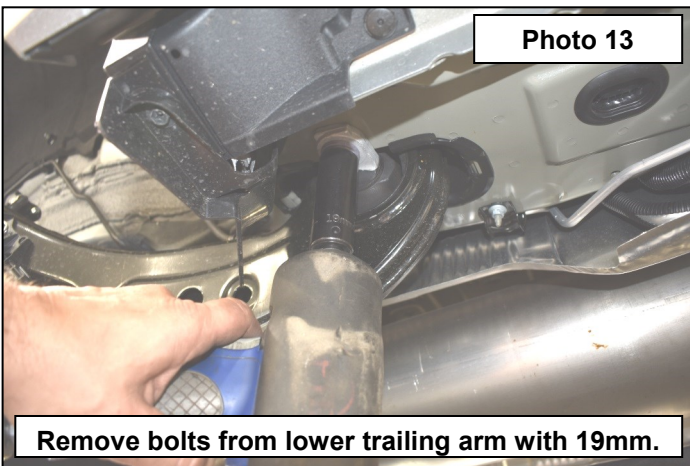
11. Remove the brake line bolts using a 10mm socket/wrench. **See Photo 9.**
12. Remove the upper control arm using a 19mm socket/wrench. **See Photo 10.**



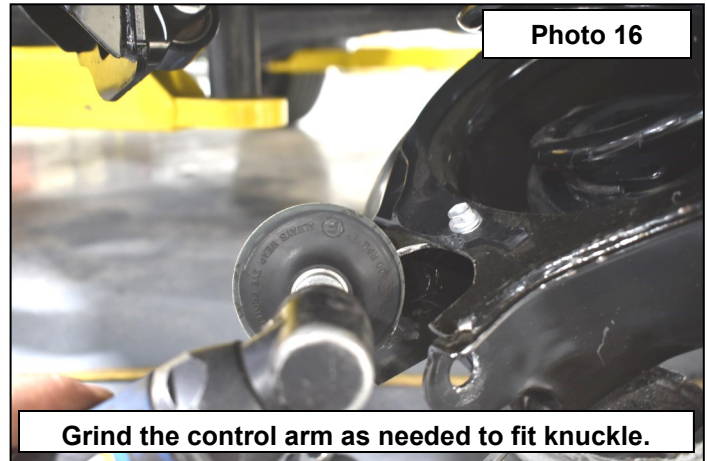
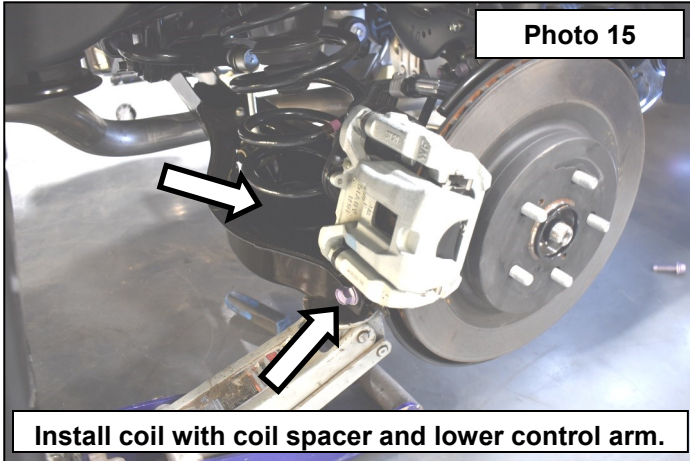
13. **NOTE: Loosening (NOT Removing) the cradle bolts may help remove and install some components. See Photo 11.**
14. Install the RC Upper Control arm using stock hardware. Hand tighten only. Tighten with a 19mm socket at the end of install. **See Photo 12.**



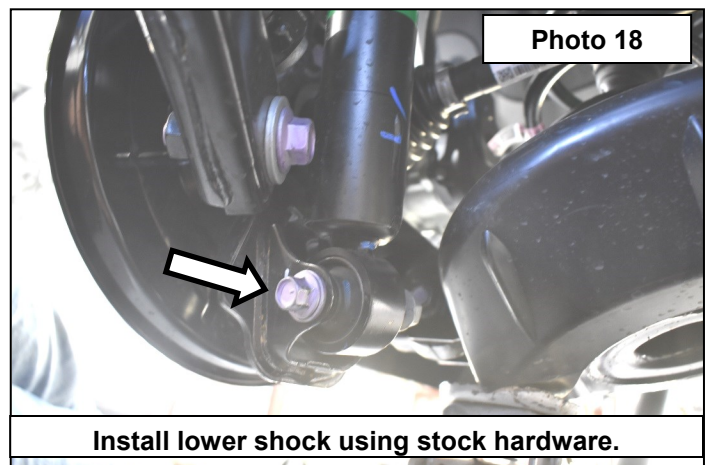
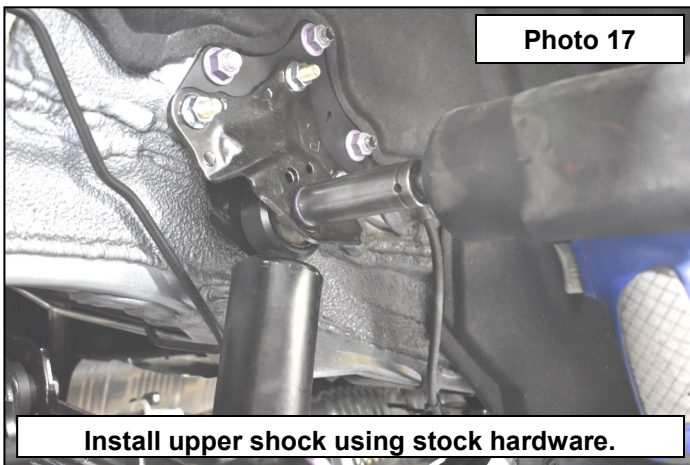
15. Remove the bolts for the lower trailing arm using a 19mm socket/wrench. **See Photo 13.**
16. Reinstall the lower trailing arm with the Trailing Arm Drop Bracket (horseshoe bracket) using the 14mm-1.5x60mm bolts, and 9/16" flat washer. Hand Tighten only. Tighten with 22mm socket/wrench at end of install. **See Photo 14.**



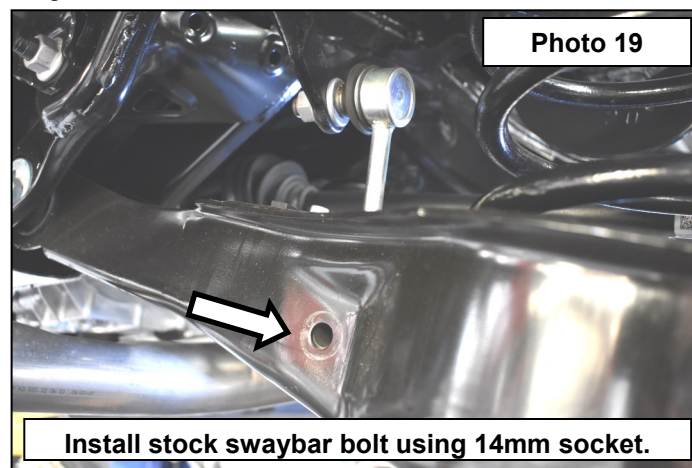
17. Install the coil with the coil spacer sitting in the lower control arm. Set the rubber isolator between the spacer and coil. Install lower control arm to knuckle. **See Photo 15.**
18. You may need to grind the control arm to get the knuckle to fit. **See Photo 16.**



19. Install upper shock in the shock bracket using stock hardware. Tighten using a 17mm socket/wrench. **See Photo 17.**
20. Install lower shock in the knuckle using stock hardware. Tighten using a 17mm socket/wrench. **See Photo 18.**



21. Install stock swaybar bolt using a 14mm socket/wrench. **See Photo 19.**



22. Tighten all nuts and bolts.
23. Install wheels and lower.

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