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Rough Country 90501 Installation Instructions

2-Inch Lift Kit with Loaded Struts for 2014-2018 Subaru Forester

Part number: 90501

trailfortress.com/rough-country-2-inch-lift-kit-90501

Scan for fitment, price and install help

921905000

ROUGH COUNTRY SUSPENSION SYSTEMS®

90500BAG

2014-2018 Subaru Forester 2” Lift

Thank you for choosing Rough Country for all of your suspension needs.

Rough Country recommends that a certified technician install this system. In addition to these instructions, professional knowledge of disassemble/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 all the instructions before beginning the installation. Check the kit hardware against the ‘’Kit Contents’’ list below. 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. Check and retighten wheels at 50 miles and again at 500 miles. Periodically check all hardware for tightness. Be sure you have all the needed parts and understand where they go. Also, please review the “Tools Needed” list to be certain you have the necessary tools to complete the installation.

PRODUCT USE INFORMATION

⚠WARNING As a general rule, the taller a vehicle is the easier it will roll. We strongly recommend that seat belts and shoulder harnesses be worn at all times. Braking performance and capabilities are decreased when significantly larger/ heavier tires and wheels are used. Do not add, alter, or fabricate any factory or after-market parts which increase vehicle height over the intended height of the Rough Country product purchased. 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.

TIRE FITMENT

This kit was developed using a 225/65r17 for a no rub on a 17 x 8, +15 to +48 offset. Due to differences in manufacturing, dimension and inflated measurements, tire and wheel combinations should be test fit prior to installation.

NOTICE TO DEALER AND VEHICLE OWNER

⚠NOTICE Any vehicle equipped with any Rough country product must have the “Warning to Driver” decal installed on the sun visor or dash. The decal is to 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 to forward these installation instructions on too the vehicle owner for review and to be kept in the vehicle for its service life.



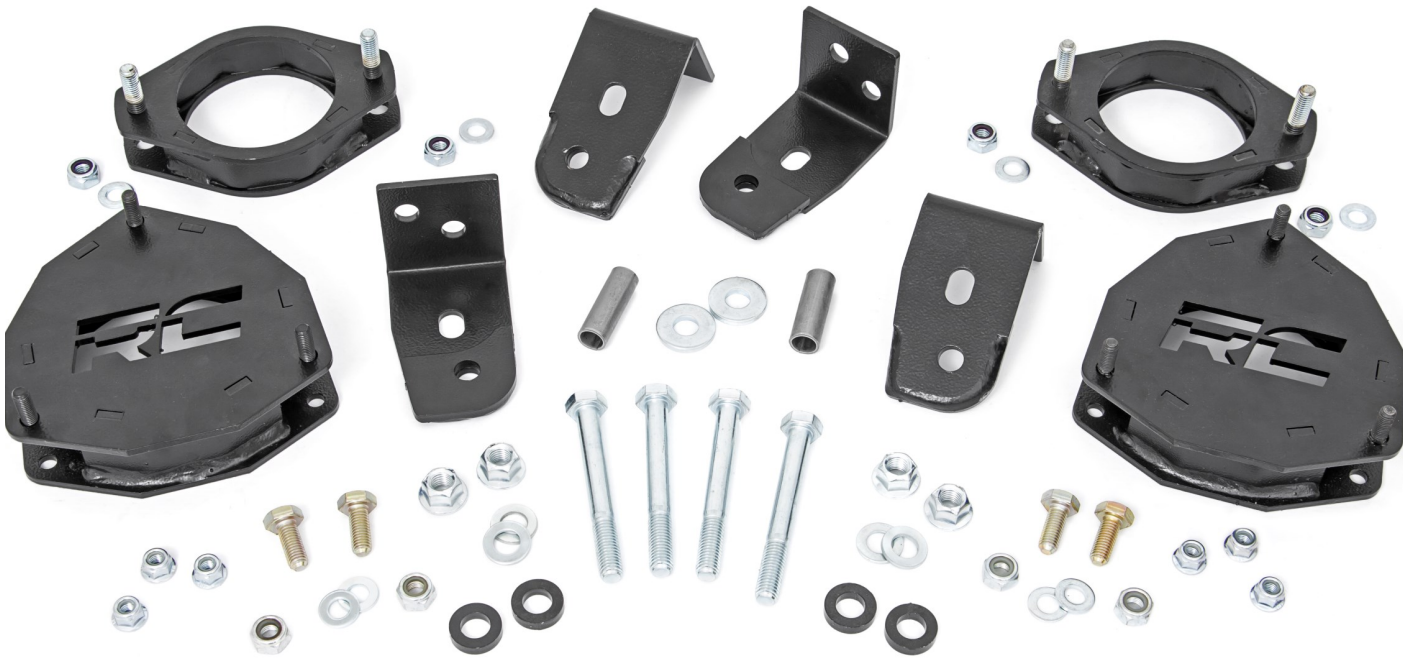
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2014-2018 Subaru Forester 2” Lift

TOOLS NEEDED:
Jack
Safety Stands
Wheel Chocks
Cutting Tool
Metric Wrench/Socket
12mm
13mm
15mm
17mm
18mm
19mm

KIT CONTENTS:
Front Strut Extensions (2)
Rear Strut Extensions (2)
Driver Outer Rear Bracket (1)
Driver Inner Rear Bracket (1)
Pass Outer Rear Bracket (1)
Pass Inner Rear Bracket (1)
Black Thick Spacer (4)
Silver Thick Spacer (2)
Crush Sleeve (2)
Rear Brake Line Bracket (2)

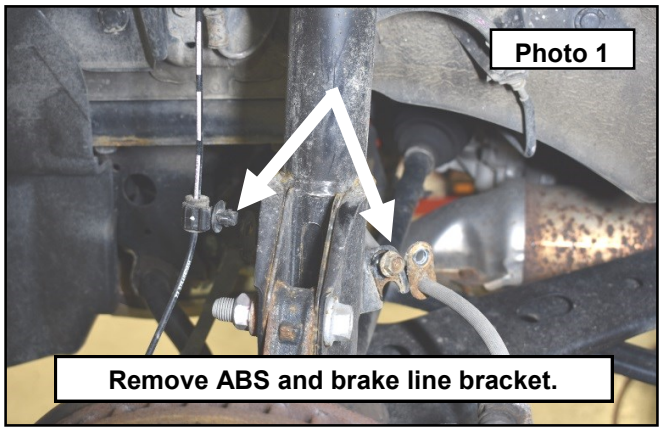
HARDWARE INCLUDED:
8mm Bolt (2)
8mm Washer (4)
8mm Flange Nut (8)
10mm Bolt (4)
10mm Washer (8)
10mm Nut (8)
12mm Bolt (4)
12mm Washer (4)
12mm Flange Nut (4)

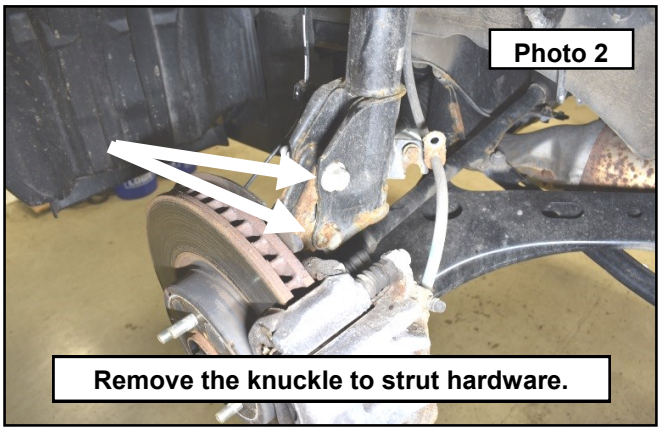


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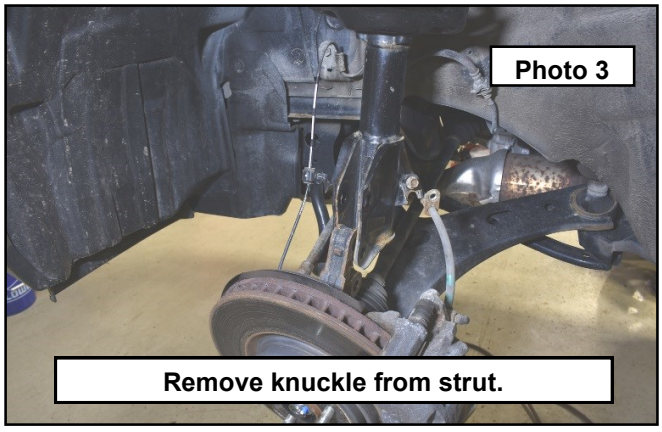
Front Installation

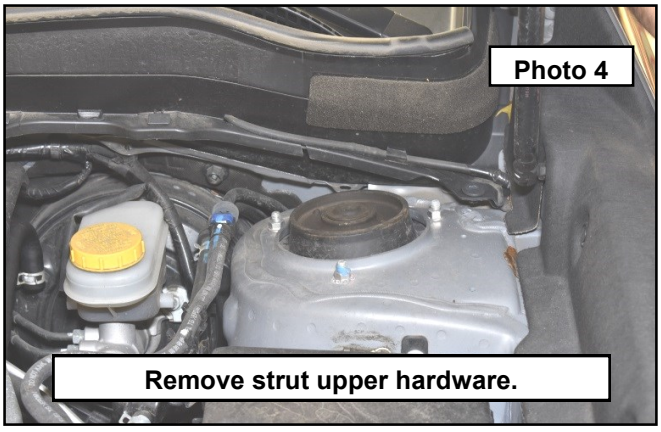
1. Park your vehicle on a clean flat surface, engage the parking brake and block the rear tires.
2. Jack the front of the vehicle up and place safety stands at the indicated lift points for the frame in the service manual. Remove the front wheels and set aside.
3. **Save all hardware removed from the vehicle unless otherwise noted.**
4. Open the hood and disconnect the negative terminal on the battery.
5. In the wheel well, locate the ABS wire and brake line bracket on the strut. Remove the ABS by prying the retainer from the strut. Remove the brake line bracket using a 12mm socket. **Photo 1**
6. Remove the upper and lower strut to knuckle hardware using a 19mm socket and wrench. The upper is a cam bolt while the lower is a standard bolt. Keep all hardware together for both upper and lower so that you can reinstall at a later step in the same orientation as removed. **Photo 2**



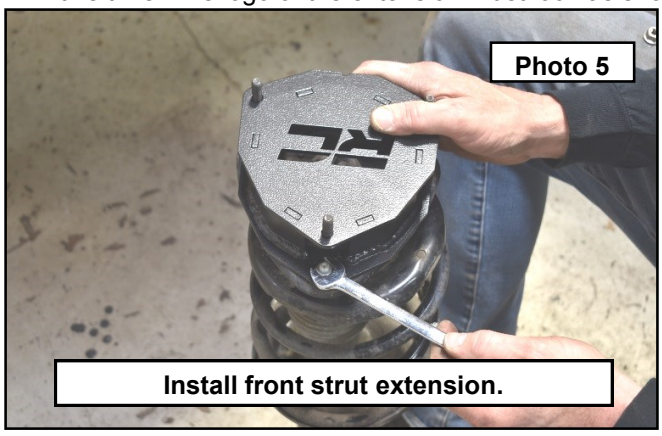


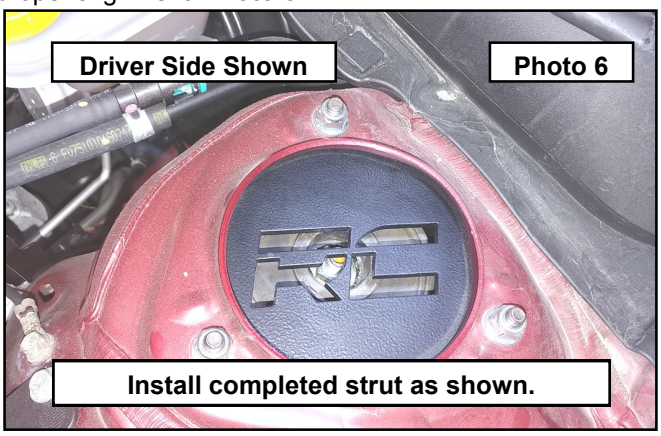
7. Remove the knuckle from the strut and let all hang out of the way. Make sure to support the knuckle to keep the cv axle from overextending and popping out of socket. **Photo 3**
8. Using an assistant to hold the strut in the wheel well, remove the three upper strut mounting hardware using a 12mm socket. **Photo 4**





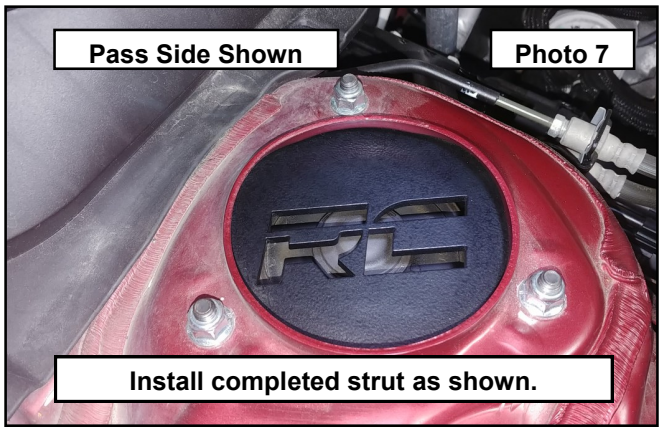
9. Install the front strut extensions to the strut top hats using the factory hardware and 12mm wrench. Torque to 15 ft-lbs. **Photo 5**
10. Using an assistant, install the completed strut assembly using the provided 8mm hardware. Do not fully tighten at this time. The logo of the extension must look as shown for proper alignment. **Photo 6**

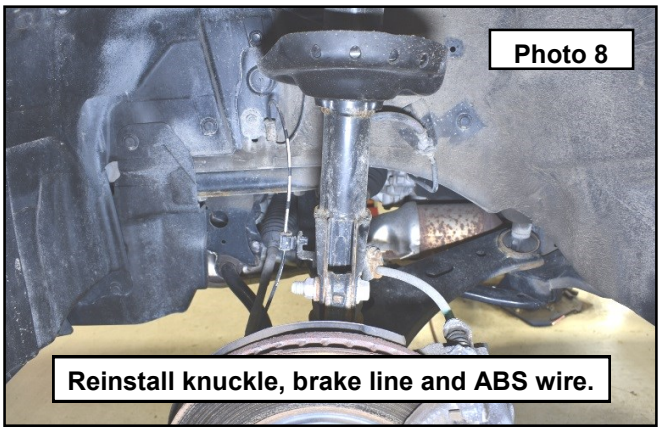




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11. Pass side shown for orientation of the strut extension. These spacers are offset to correct camber and caster and the RC Logo must be orientated as shown for proper alignment of the wheels on both sides of the vehicle. You will be able to read the logo properly when standing at the wheel and looking into the engine bay. **Photo 7**
12. Install the knuckle to the strut using the factory hardware in the same orientation as removed using a 19mm socket and wrench. Torque both to 110 ft-lbs initial torque. Final torque to be set by alignment technician. Reinstall the ABS wire harness and the brake line bracket to the strut using the factory hardware and 12mm socket. Torque to 5 ft-lbs. **Photo 8**

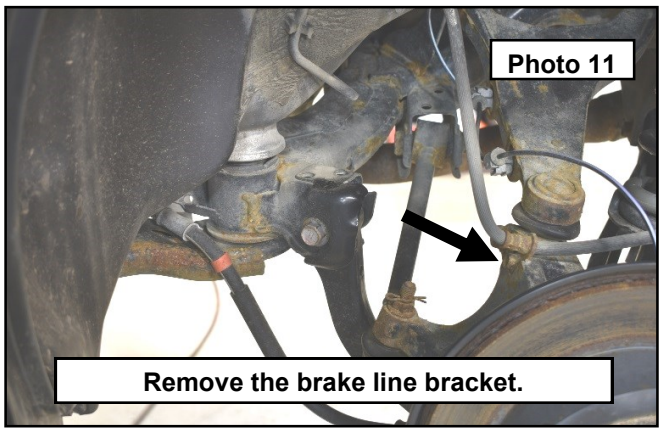


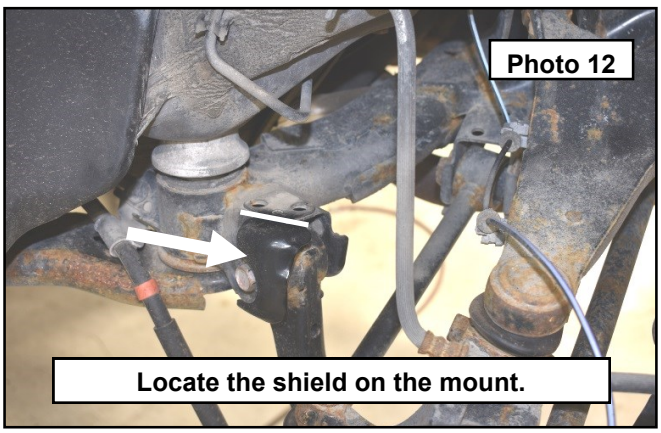


13. Install the wheels and lower the vehicle to the ground.
14. Torque the lug nuts to the wheel manufacturers specs.
15. Jounce the suspension and rotate the wheels from lock to lock while making sure the proper clearances between the steering components, body, and tires are good. Adjust as necessary.
16. Torque the upper strut mounts to 15 ft-lbs.

Rear Installation

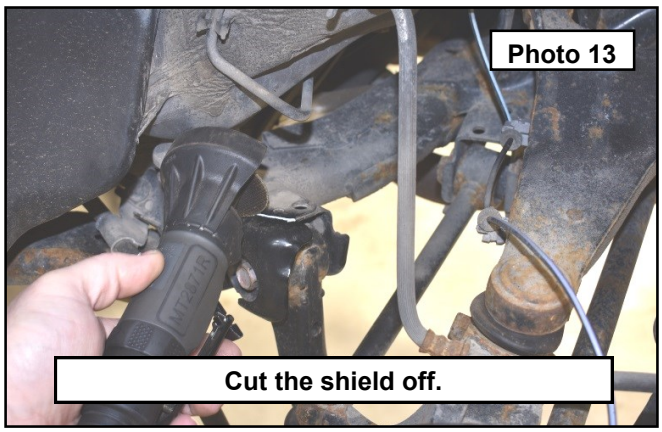
1. Place wheel chocks under the front wheels.
2. Jack the rear of the vehicle up and place safety stands at the indicated lift points for the frame in the service manual. Remove the rear wheels and set aside.
3. Remove the brake line bracket from the knuckle using a 12mm socket. Let hang out of the way. **Photo 11**
4. Locate the lower front trailing arm mount on the sub frame. There is a metal shield on this mount that will need to be removed. Mark a line as shown on the top of the shield. **Photo 12**

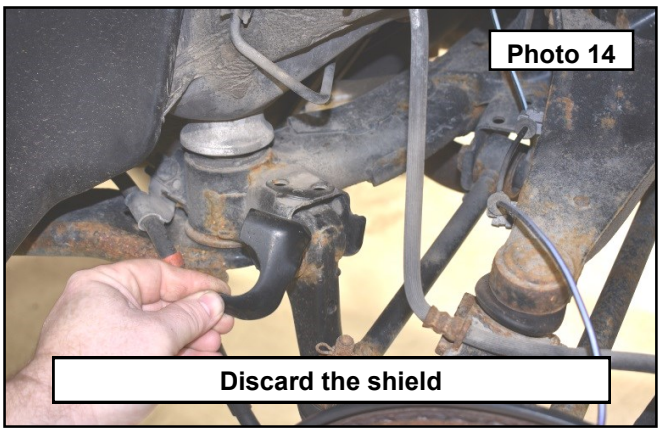




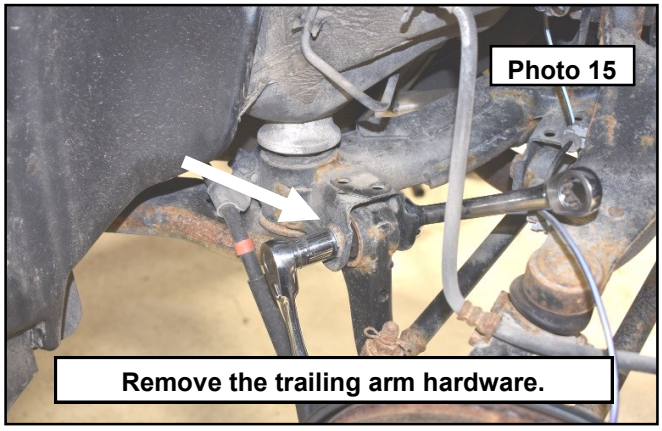
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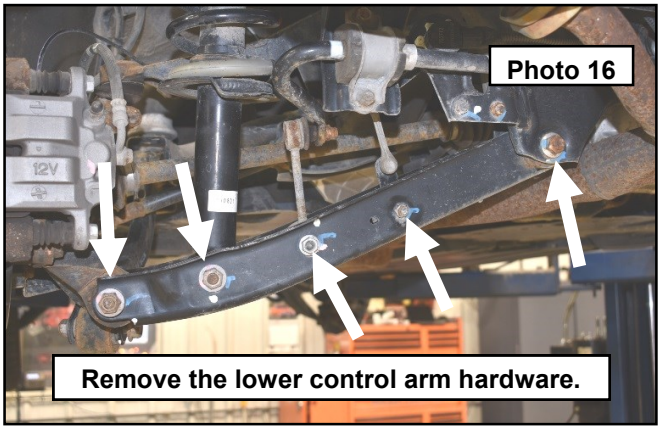
5. Use a suitable cutting tool to remove the marked shield (cut off disc shown). **Photo 13**
6. Discard the shield. Sand any burrs off the mount and paint the exposed metal with a quality rust preventative paint. **Photo 14**



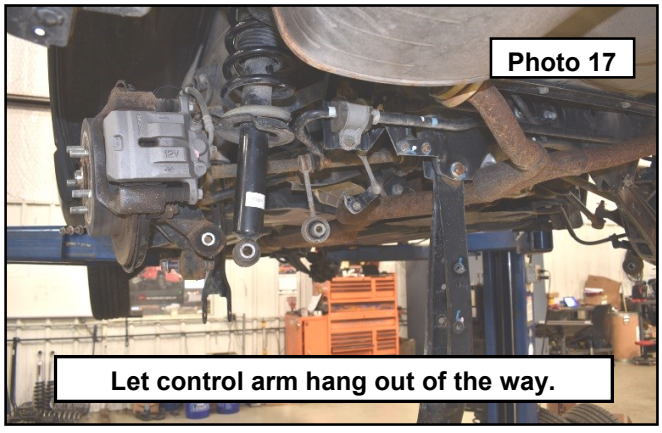


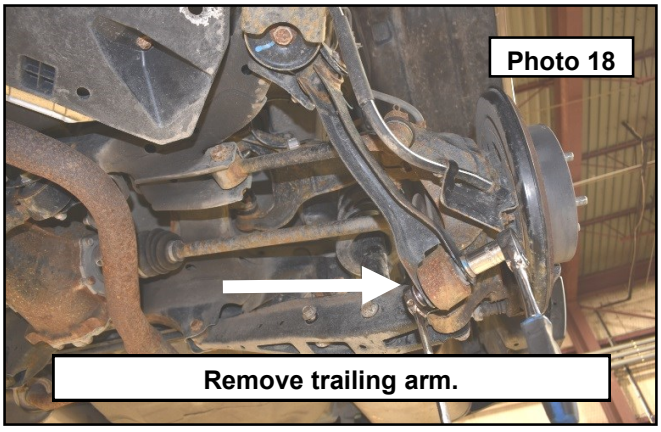
7. Remove the trailing arm hardware using a 17mm socket and wrench. **Photo 15**
8. On the rear control arm, remove the knuckle, strut, sway bar end link and sensor bracket (select models) hardware using 17mm, 14mm, and 10mm sockets. Loosen but do not remove the lower and upper control arms at the sub frame using the 17mm tools. **Photo 16**





9. Let the lower control arm hang out of the way. **Photo 17**
10. Remove the trailing arm at the knuckle using a 17mm socket and wrench. **Photo 18**

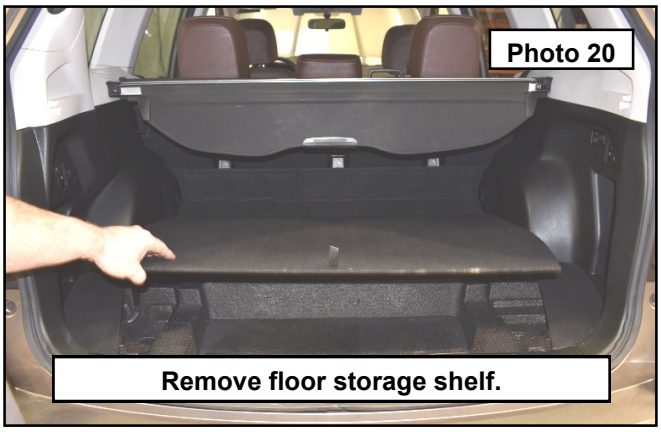




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11. Open the rear hatch door. Remove the rubber floor covering if installed. **Photo 19**
12. Lift up and remove the floor storage shelf. **Photo 20**



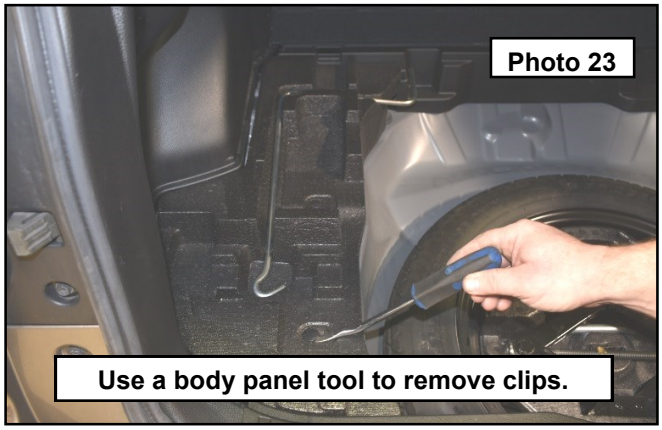


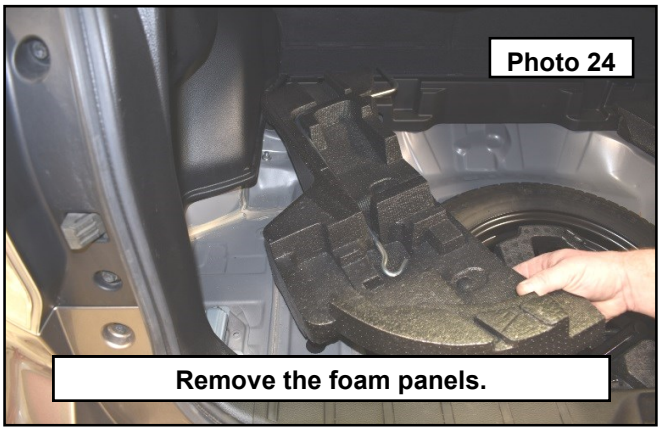
13. Lift up and remove the foam spare tire cover. **Photo 21**
14. Lift up and remove the side floor cover panels. **Photo 22**





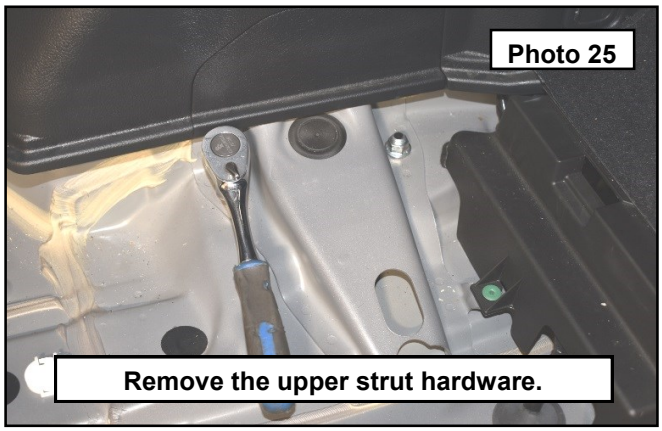
15. Use a body panel tool and remove the plastic clips holding the rest of the foam structure to the floor. **Photo 23**
16. Remove the foam panels to reveal the rear strut mounts. **Photo 24**

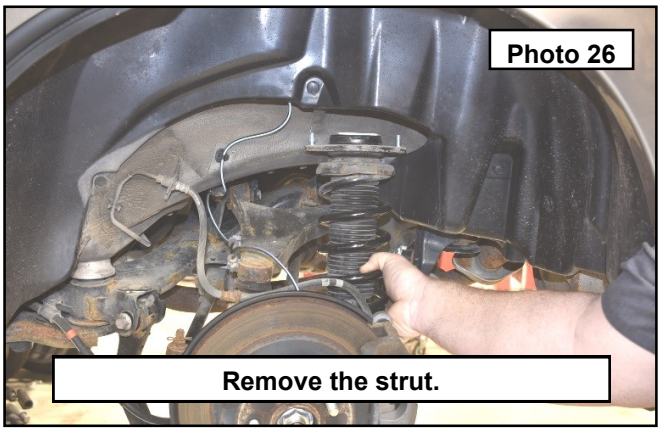




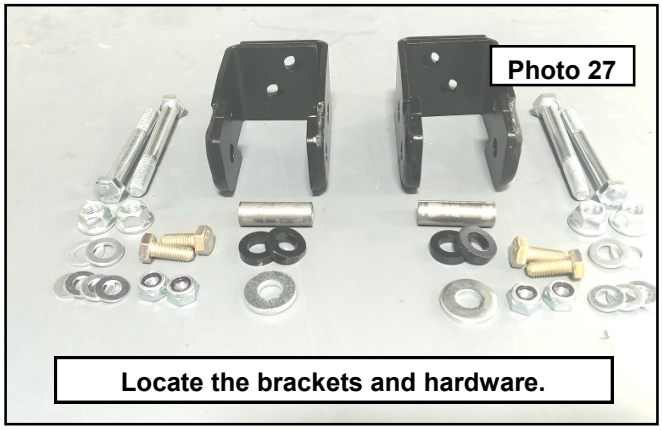
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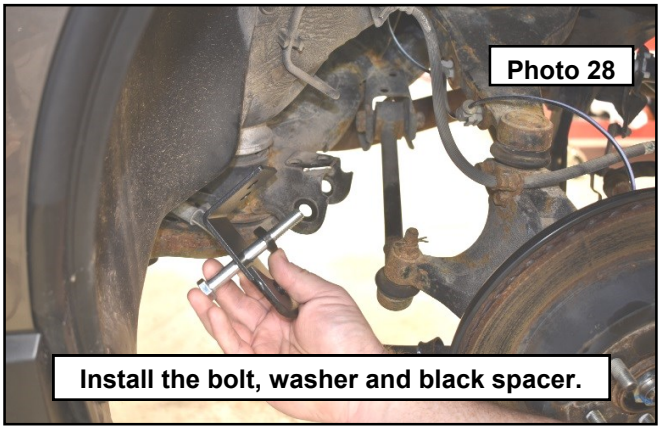
17. Use an assistant to hold the strut, remove the upper strut hardware using a 14mm socket. **Photo 25**
18. Remove the strut from the vehicle. **Photo 26**



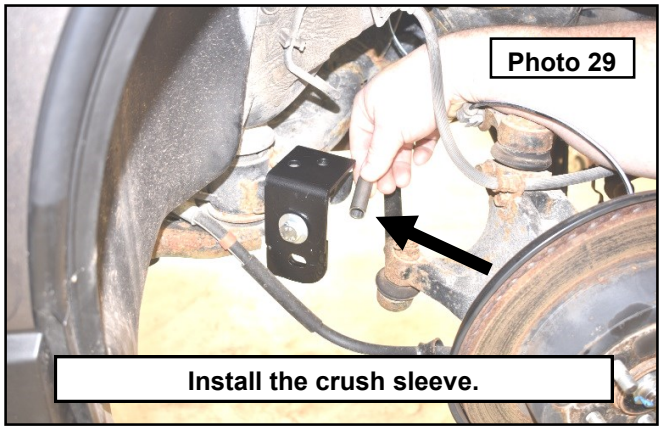


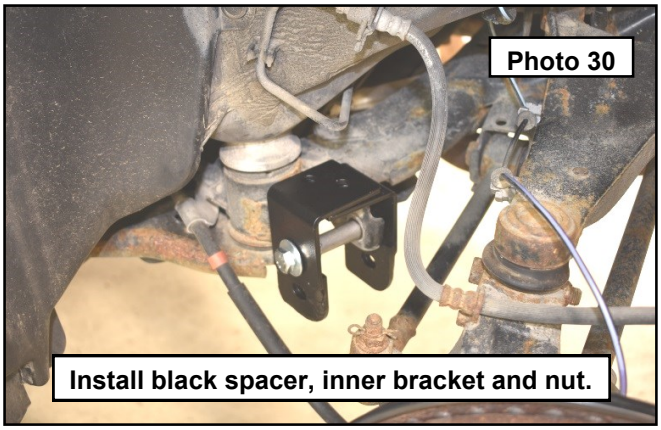
19. Locate the control arm drop brackets. There is an inside and outside bracket for both the driver and passenger sides. You will be able to tell the difference on these by the top mounting holes as they are canted opposite ways between the driver and passenger sides and will match the holes in the control arm pocket. There is also a longer and shorter of the two for each side. The taller one will be the top bracket when they are stacked in place. Driver side shown. **Photo 27**
20. Install the supplied 12mm bolt and washer to the upper hole on the bracket. Slide one of the black spacers onto the bolt. **Photo 28**





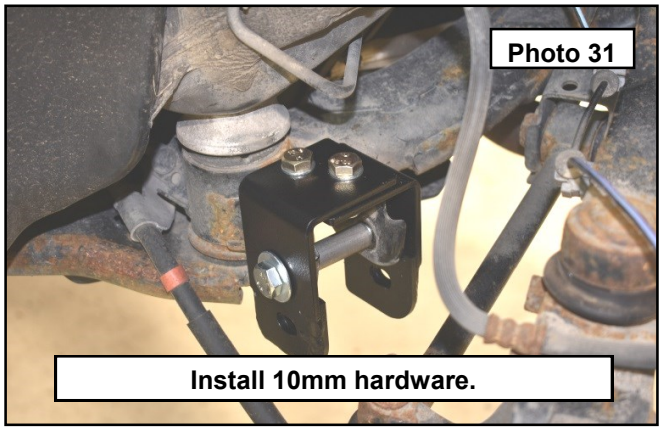
21. As you line up the bracket to the frame pocket, install the crush sleeve inside the pocket with the 12mm bolt passing through. **Photo 29**
22. Install another of the black spacers and then the inside bracket for the side you are working on and the 12mm flange nut. Do not tighten at this time. Note how the drop brackets sit on top of one another. **Photo 30**

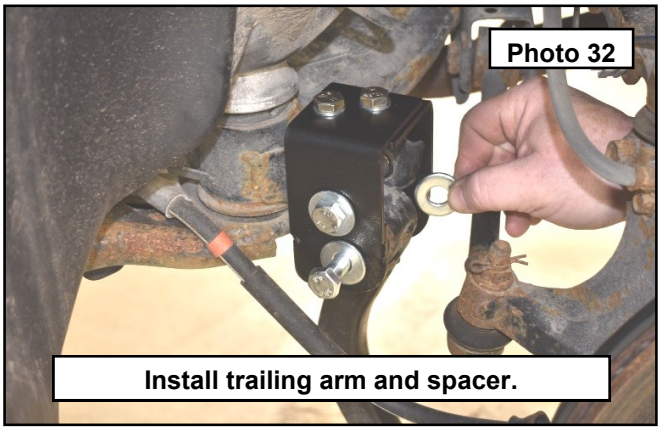




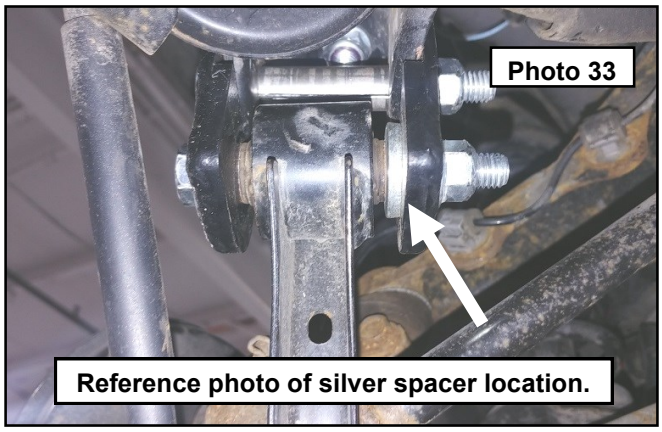
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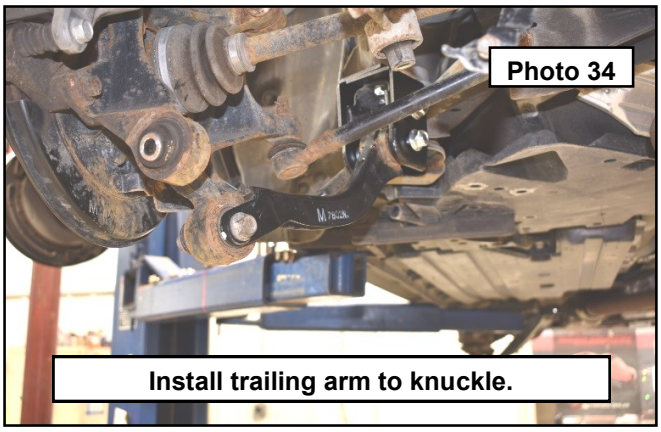
23. Install the supplied 10mm bolts, washers and nuts to the remaining upper holes. Do not tighten at this time. **Photo 31**
24. Install the trailing arm to the drop brackets lower mounting hole using the supplied 12mm bolts, washers, thick washer and flange nut. Make sure to install the silver spacer between the control arm bushing and inner bracket. Do not tighten at this time. **Photo 32**



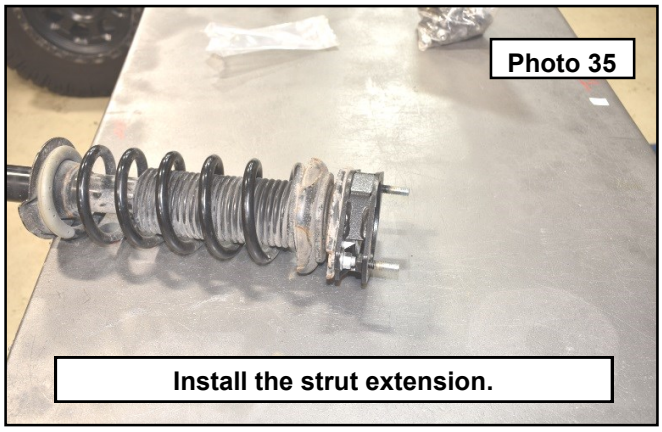


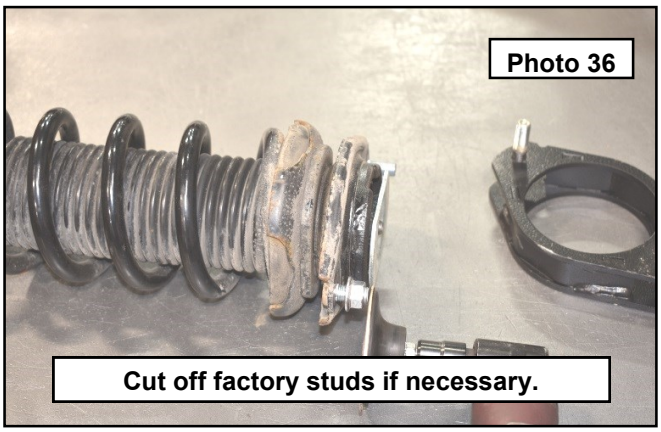
25. Photo shows how the silver spacers should be installed when all is done. **Photo 33**
26. Install the trailing arm to the knuckle using the factory hardware. Do not tighten at this time. **Photo 34**





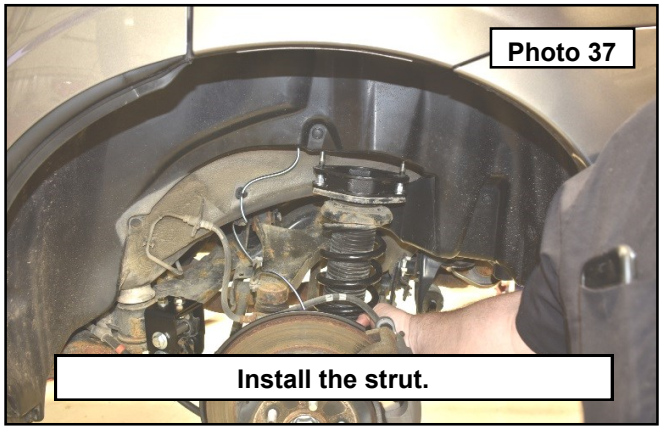
27. Install the rear strut extensions to the struts using the factory hardware. **Photo 35**
28. If the studs make contact with the welded bolts in the strut extension, remove the strut extension and install the factory nuts. Use a suitable cutting tool, remove enough of the factory stud to clear the welded bolt. Remove the nut and reinstall the strut extension using a 14mm wrench a drop of thread locker. **Photo 36**

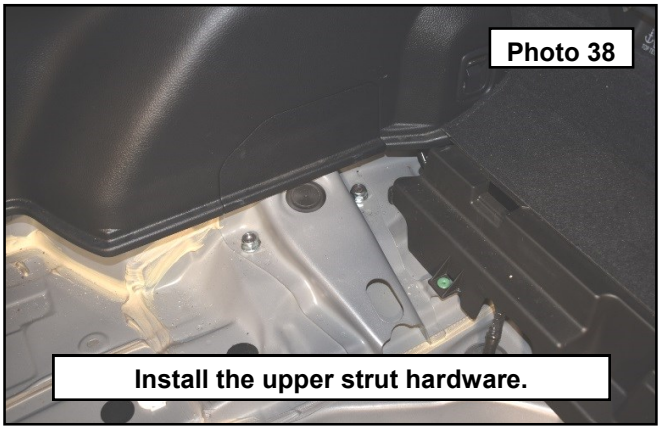




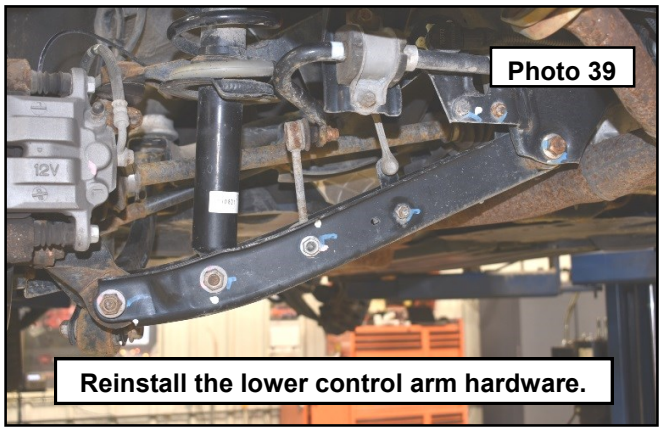
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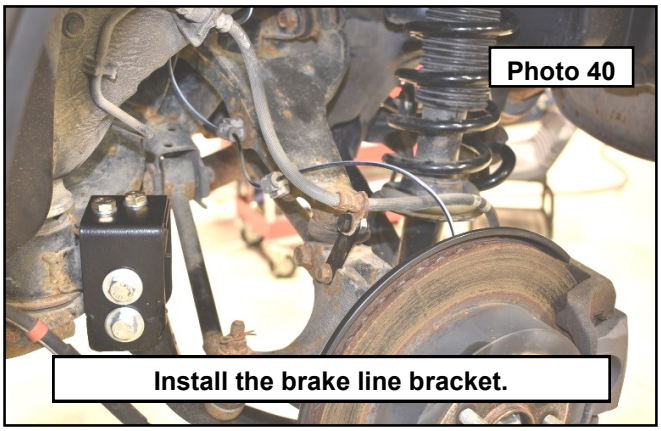
29. Use an assistant to install the completed strut into the vehicle. **Photo 37**
30. Install the strut using the provided hardware. Do not tighten at this time. **Photo 38**





31. Reinstall the lower control arm to the strut, knuckle, sway bar and sensor (select models) using the factory hardware. Do not tighten at this time. **Photo 39**
32. Install the brake line bracket to the knuckle using the factory hardware and the factory brake line bracket using the supplied hardware. Torque all to 5 ft-lbs. **Photo 40**





33. Install the wheels/tires and lower the vehicle to the ground.
34. Torque the lug nuts to the wheel manufacturers specs.
35. Jounce the suspension a few times, pull the vehicle forward and backwards a few feet to get the suspension to settle. This allows the rubber bushings in the control arms and struts to adjust to the new ride height. Drive the vehicle up on a set of ramps, 4 post lift, or use a jack under the lower control arm closest to the knuckle. You are trying to keep the weight of the vehicle on the bushings. You do not want to tighten any of the components with the suspension at full droop. This can lead to improper alignment and/or premature bushing wear as these mounting points would be under false preload. Check for proper clearances between the suspension components, body, and tires are good.
36. Torque the trailing arm, lower and upper control arm mounts and lower strut mount to 120 ft-lbs, the sway bar hardware and 10mm hardware on the drop brackets to 30 ft-lbs, and sensor (select models) to 5 ft-lbs.
37. Once all has been torqued to specs, have a reputable alignment shop set the alignment to the provided specs in this instruction booklet.

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FRONT	DRIVER	PASSENGER	TOLORANCE
CAMBER	+0.12	+.12	+/-0.5
CASTER	+4.90	+4.90	+-/0.5
TOE	+0.05	+0.05	+/-.05
REAR	DRIVER	PASSENGER	TOLORANCE
CAMBER	-1.5	-1.5	+/-0.75
TOE	+.00	+.00	+/-.05

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