Rough Country 51034RED Installation Instructions

Red Forged Upper Control Arms for Ford F-150 (2009-2020)

Part number: 51034RED

trailfortress.com/red-forged-aluminum-upper-control-arms-ford-f150-rough-country-51034red

Scan for fitment, price and install help

ROUGH COUNTRY SUSPENSION SYSTEMS®

Ford 2009-20 F-150 Forged Aluminum Upper Control Arms

Thank you for choosing Rough Country for all 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.

⚠NOTICE Please read instructions before beginning installation. Check the kit hardware against the parts list on the next page. Be sure you have all needed parts and know where they go. Also, please review tools needed list and make sure you have the 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 34” or 295/70R18-295/60R20, tire on 9” wheels with a +12 offset. Factory wheels and tires can be used. If using a larger tire on the factory wheel, wheel spacers are required. **Note** if wider tires are used, offset wheels will be required and trimming will be required.

⚠WARNING This vehicle will require the EPAS (Electronic Power Assist Steering) plugs to be disconnected prior to beginning installation of this kit. See installation instructions. Failure to disconnect these plugs may result in damage to the EPAS module resulting in an error message being displayed, which will require replacement of the EPAS module.

DEALER AND VEHICLE OWNER

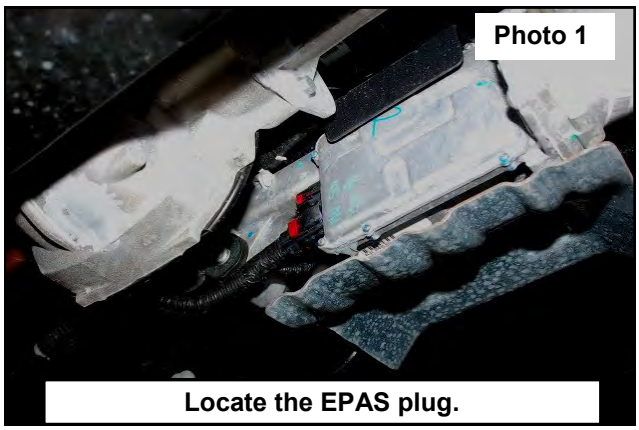
⚠NOTICE Any vehicle equipped with any Rough Country product should have a “Warning to Driver” decal installed on the inside of the windshield or on the vehicle’s dash. The decal should act as a constant reminder for whoever is operating the vehicle of its unique handling characteristics.

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 life.

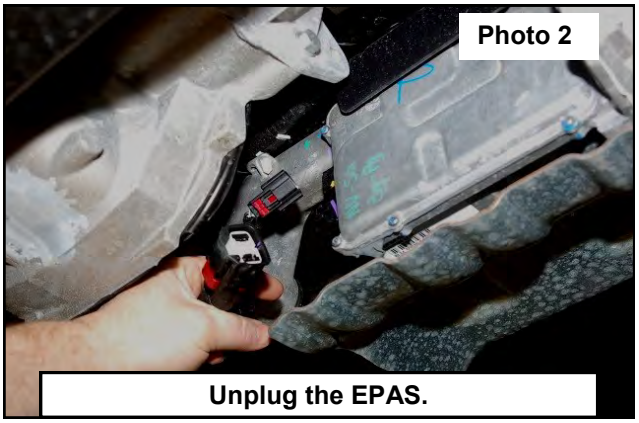
⚠NOTICE Note to installer : Before installation begins we recommend that a test drive be performed. While driving check for uncommon sounds and/or vibrations . What you feel and hear during the test drive will only magnify once lift kit is installed. Advise you to discuss possible issues identified from drive with customer before proceeding to install this kit.

INSTALLATION INSTRUCTIONS

1. Jack up the front of the vehicle and support the vehicle with jack stands, so that the front wheels are off the ground. Next, remove the front tires/wheels, using a 21mm deep well socket.
2. Using a 15mm socket remove the front skid, if the truck is equipped with a full front skid.
3. Disconnect the EPAS (Electronic Power Assist Steering) Plugs as shown located on the steering assembly by the front differential. **See Photo 1 & 2.** **This must be done BEFORE installation is started.**

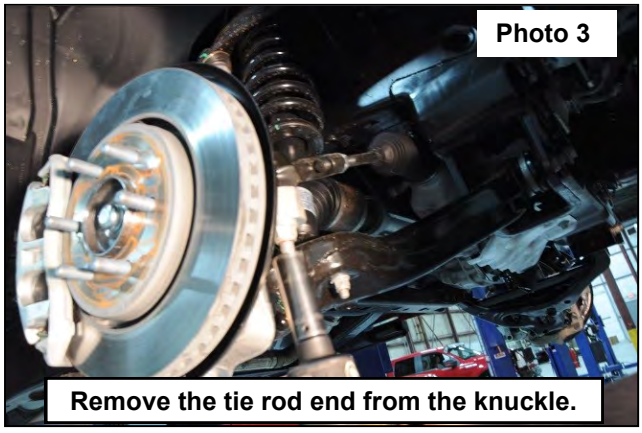


Locate the EPAS plug.

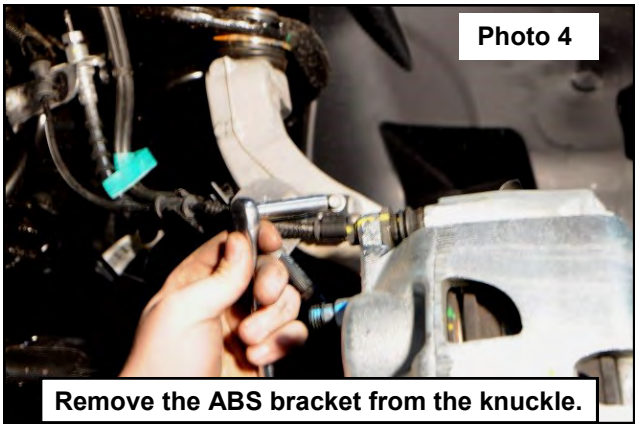


Unplug the EPAS.

4. Using a 21mm wrench remove the nut from the tie rod on the knuckle. Using a tie rod/ball joint puller, remove the tie rod from the knuckle. Push linkage forward to make room for installation. Retain factory hardware. **See Photo 3**.
5. Using a 8mm socket remove the ABS bracket from the knuckle and also remove the brake line bracket with a 10mm socket. **See Photo 4.**

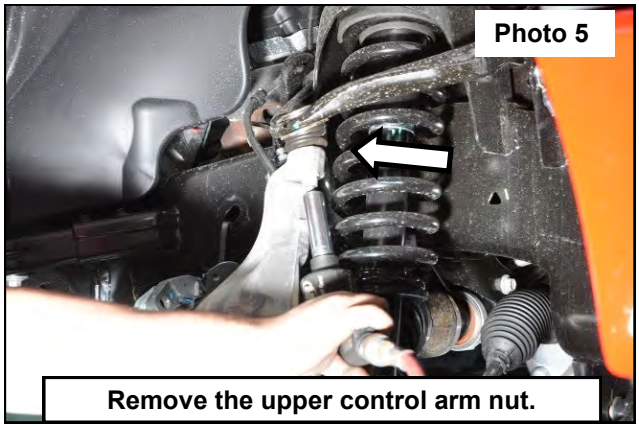


Remove the tie rod end from the knuckle.



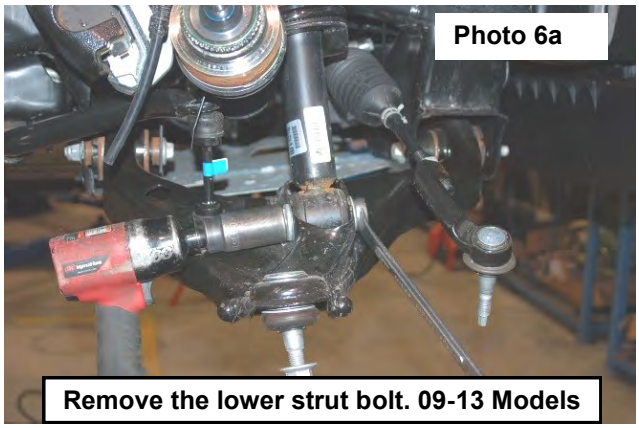
Remove the ABS bracket from the knuckle.

6. Place jack stand under the lower control arm for support. Loosen the upper ball joint nut using a 18mm wrench. Unseat the upper ball joint taper from the knuckle using a hammer, striking the knuckle. Then remove the upper ball joint nut and remove the upper ball joint from the knuckle. **See Photo 5.**

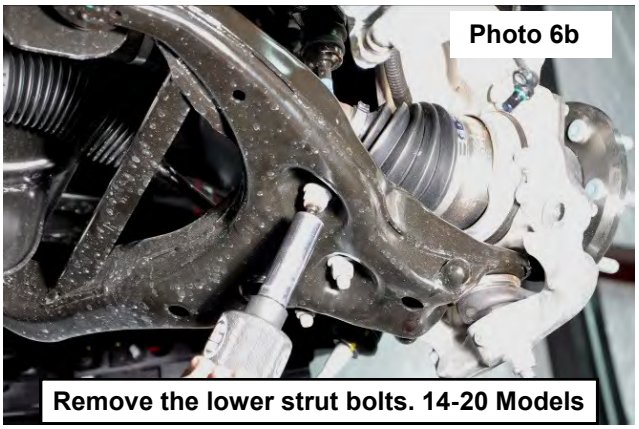


Remove the upper control arm nut.

7. Do not allow the knuckle to pull out far enough that it pulls the shaft out of the differential.
8. Remove the lower strut bolt using a 30mm socket and 27mm wrench for 09-13 models and 18mm socket for 14-20 models. **See Photos 6a&b.** Retain hardware for reuse.



Remove the lower strut bolt. 09-13 Models

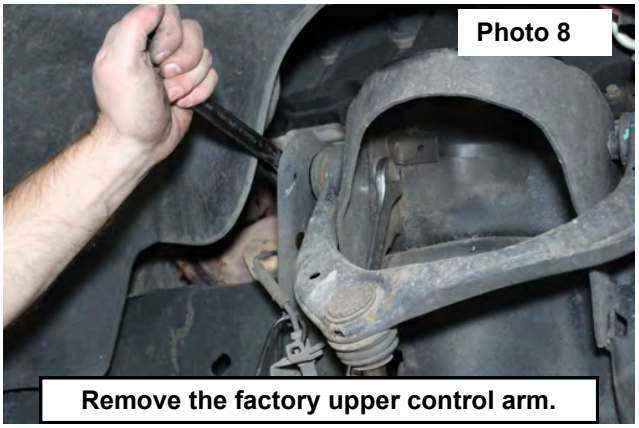


Remove the lower strut bolts. 14-20 Models

9. Using an 18mm wrench, remove the nuts on the upper strut tower that holds the assembly in place. **See Photo 7.**
10. Lower the jack to let the lower control arm and knuckle swing down so the strut can be removed.
11. Remove the upper control arm using a 21mm and 22mm wrench. Retain hardware for reuse. **See Photo 8.**



Remove the upper strut nuts.

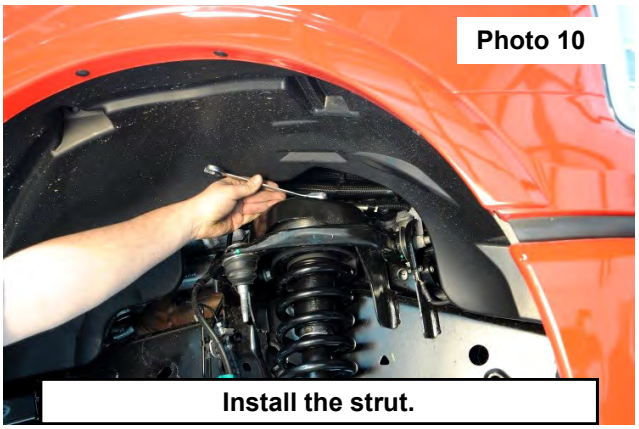


Remove the factory upper control arm.

12. Install the new upper control arm using the retained hardware. Do not tighten at this time. **See Photo 9.**
13. Install the strut into the upper mount using the factory hardware. Tighten with an 18mm wrench. **See Photo 10.**

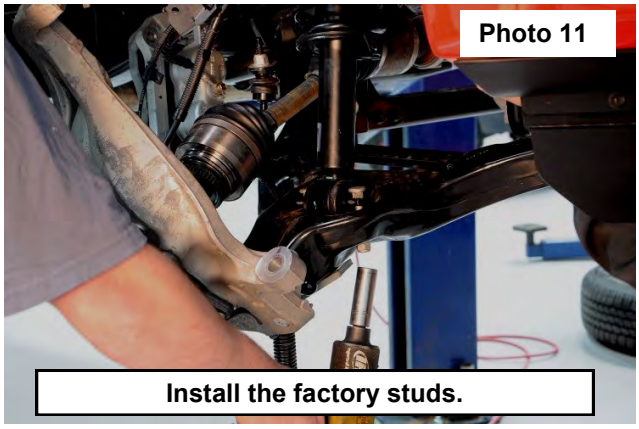


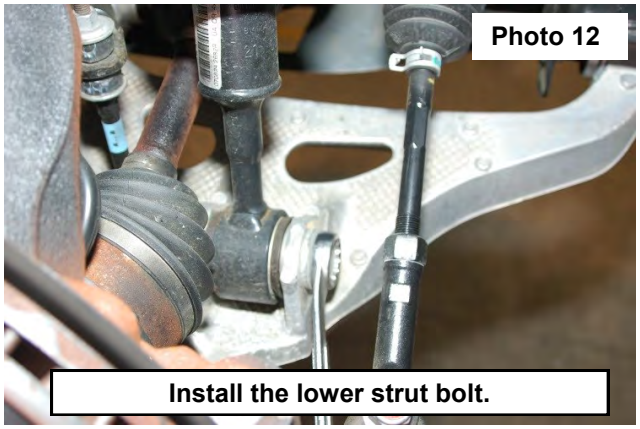
Install the supplied control arms.



Install the strut.

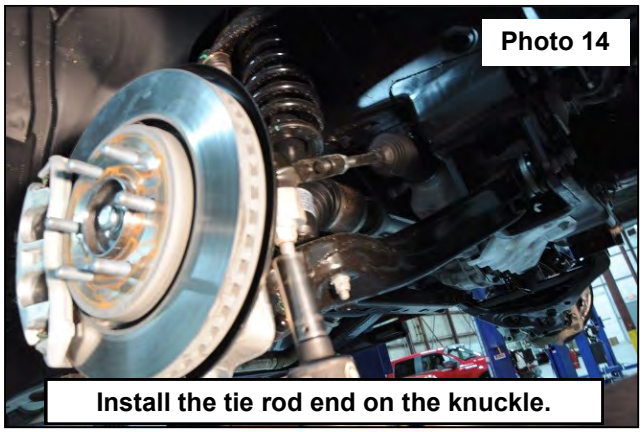
14. **2014-20 Models.** Install the factory studs back into the lower control arm using the factory nuts. Torque to factory specs using an 18mm socket. **See Photo 11.**
15. **2004-13 models** install the lower strut bolt in the original position that it was removed. Using a 29mm socket, and 1 1/16" wrench, torque to factory specs. **See Photo 12.**



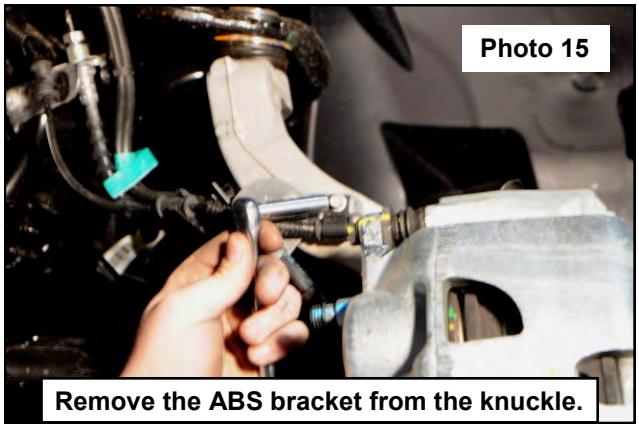


16. Using a floor jack, raise the lower control arm and connect the upper ball joint on the upper control arm to the spindle. **Use the supplied 1/2" washer from 54531BAG2, place between knuckle and nut. See Photo 13. Ball joint must be greased before use and checked every 3000 miles.**
17. Reinstall the tie rod nut using a 21mm socket. **See Photo 14.**





18. Using a 8mm socket install the ABS bracket on the knuckle and also install the brake line bracket with a 10mm socket. **See Photo 15.**



19. Verify free rotation of the hub with **NO** CV shaft rotation. No clicking or grinding noise should be present
20. Install the wheels / tires, using a 21mm deep well socket.
21. Reconnect the EPAS plugs.
22. Jack up the vehicle and remove the jack stands. Lower the vehicle to the floor and torque all bolts to factory specifications.
23. Tighten the upper control arms using a 21mm and 22mm socket.
24. Vehicle will have to have a front-end alignment.

POST INSTALLATION INSTRUCTIONS

1. Check all fasteners for proper torque. Check to ensure there is adequate clearance between all rotating, mobile, fixed and heated components. Check steering for interference and proper working order. Test brake system.
2. Perform steering sweep. The distance between the tire sidewall and the brake hose must be checked closely. Cycle the steering from full turn to full turn to check for clearance. Failure to perform inspections may result in component failure.
3. Re-torque all fasteners after 500 miles. Visually inspect components and re torque fasteners during routine vehicle service.
4. Readjust headlights to proper settings.

MAINTENANCE INFORMATION

It is the ultimate buyers responsibility to have all bolts/nuts checked for tightness after the first 500 miles and then every 1000 miles. Wheel alignment steering system, suspension and driveline systems must be inspected by a qualified professional mechanic at least every 3000 miles

Upper control arm orientation.



Thank you for purchasing a Rough Country Suspension System.

By purchasing any item sold by Rough Country, LLC, the buyer expressly warrants that he/she is in compliance with all applicable Federal, State, and Local laws and regulations regarding the purchase, ownership, and use of the item. It shall be the buyers responsibility to comply with all Federal, State and Local laws governing the sales of any items listed, illustrated or sold. The buyer expressly agrees to indemnify and hold harmless Rough Country, LLC for all claims resulting directly or indirectly from the purchase, ownership, or use of the items.