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PRODUCT
INSTALLATION MANUAL

JL/JT BALL JOINTS

2018-2026 JL/JT DANA 30 & 44

D-JLBLJNT-01

TOOLS REQUIRED

- Ball Joint Press Tool
- T30 Torx Tool
- #5 Allen Tool
- 10mm wrench
- 10mm, (12 point) 13mm, 21mm sockets
- Mallet/Hammer
- Steel Wool
- Safety Glasses

SKILL LEVEL

- Novice/Intermediate
- 1 (you) to 2 persons

Little skill level required, you can easily install it by yourself however, additional help will be useful

TIME REQUIRED

- 4-6 Hours

Time to install this should only take about four to six Hours

WARNINGS/CAUTIONS BEFORE STARTING INSTALLATION

Before you install this kit — Read and understand all instructions, warnings, cautions, and notes contained in this installation instruction guide. Consult your vehicle owner's manual for proper disconnection of electrical and lifting of vehicle if required for installation of this product.

This install may require some technical skills and knowledge of basic mechanical work. If you do not feel that you are capable of performing this install please take this product to a trained professional.

After reading this guide please contact us with any questions or concerns before installing product.
Customer Service: 855-680-9595

DV8 Offroad is not responsible for any bodily injury or harm to you or your vehicle as a result of an improper install.

Proper installation of this kit required knowledge of the factory recommended procedures for removal and installation of original equipment components. We recommend that the factory shop manual and any special tools needed to service your vehicle be on hand during the installation. Installation of this kit without proper knowledge of the factory recommended procedures may affect the performance of these components and the safety of the vehicle

• *Always wear eye protection when operating power tools*

Inspect all contents of this package to make sure product is not damaged and all installation hardware has been included. If parts are missing from kit, please be prepared to provide the following information

1. Name of purchase location
2. Bar Code on side of box
3. Date above bar code
4. Date inside box cover

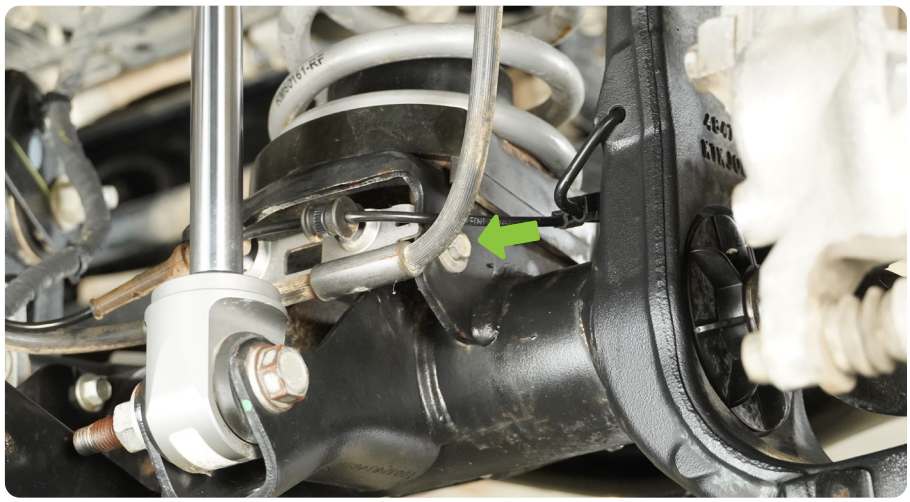
INSTALLATION MANUAL

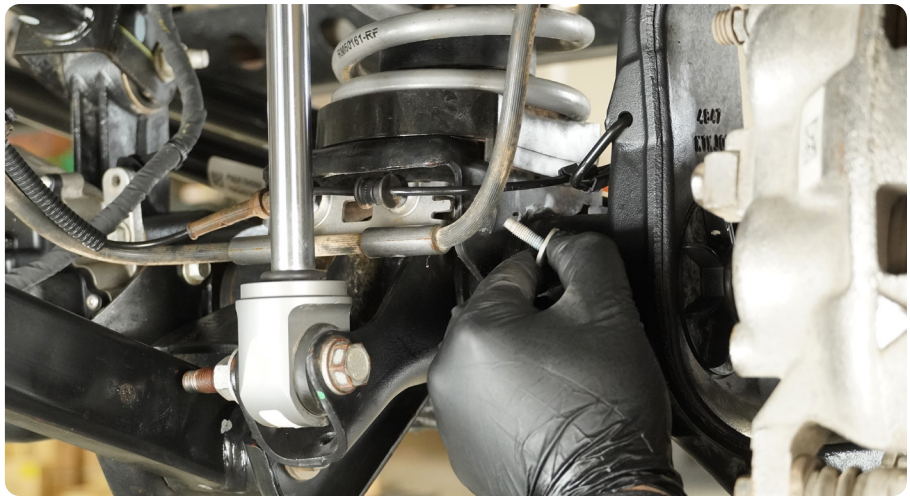
Begin by unpacking all items and inspecting for missing pieces or damage. If you have any concerns, please contact the company the product was purchased from. Extra hardware may be included with the product.

HARDWARE INCLUDED

(4) Flush Zerk Fitting
(4) Standard Zerk Fittings
(4) Cotter-pins
(2) Upper Ball Joint Collar

STEP 1 | To start the knuckle disassembly process, disconnect the brake line bracket using a 10 mm wrench.

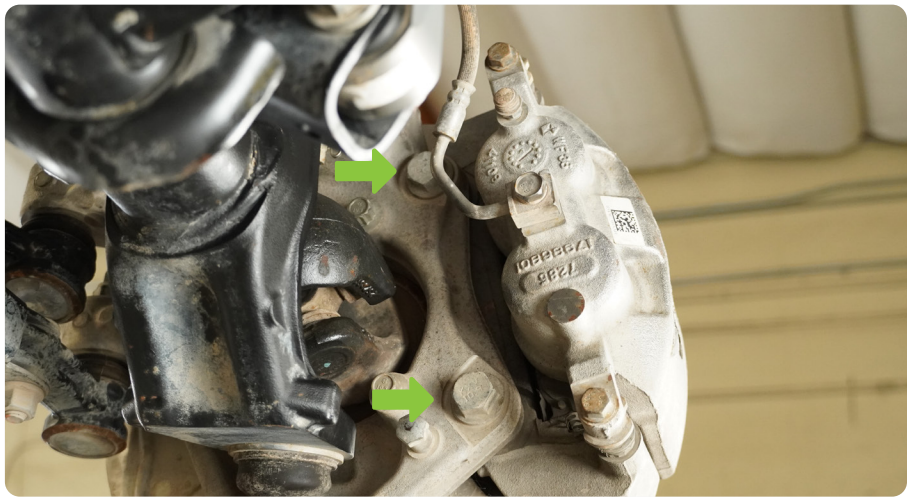




STEP 2 | Using a 21mm socket, remove the two brake caliper/caliper bracket bolts.

Hang the caliper from the frame rail using a tie strap.

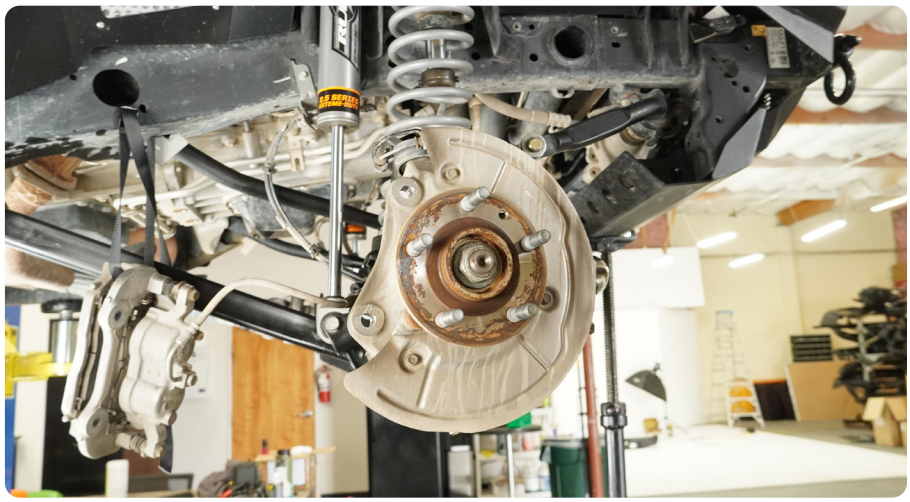
DO NOT HANG CALIPER FROM BRAKE LINE*



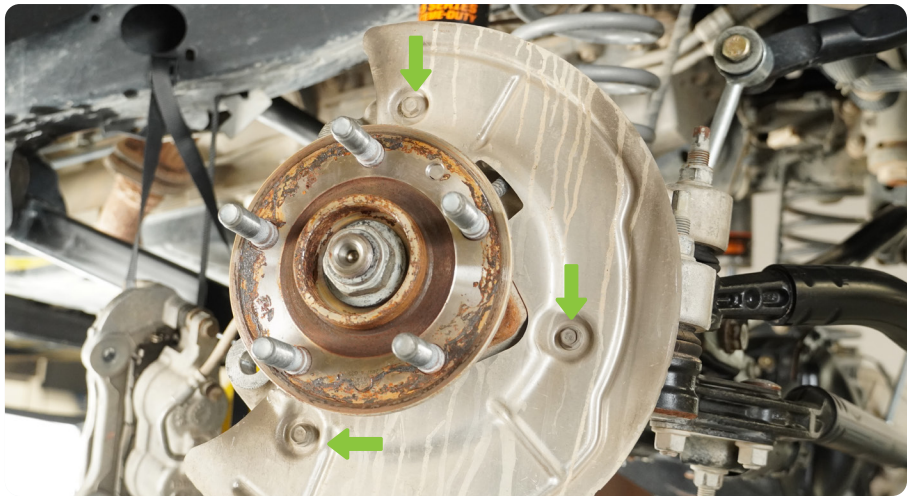
STEP 3 | Using a T30 torx bit, remove the brake rotor screw.

STEP 4 | Remove the brake rotor from the wheel hub.

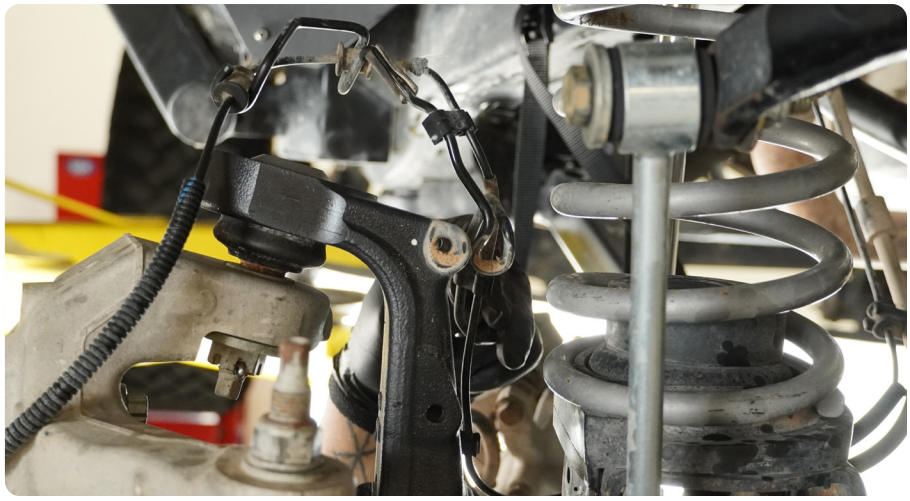
Tech tip: If the brake rotor is stuck in place due to surface rust build up, use a rubber mallet to free the brake rotor.



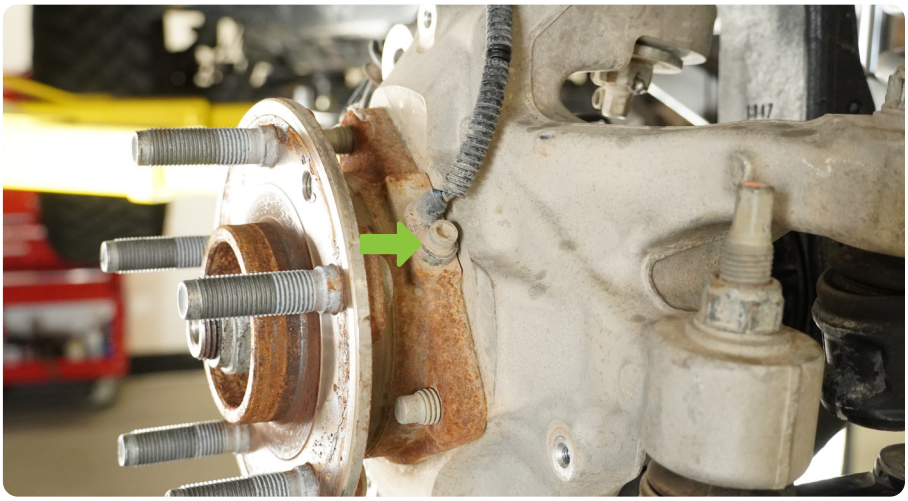
STEP 5 | Using a 10mm socket remove the brake dust shield.



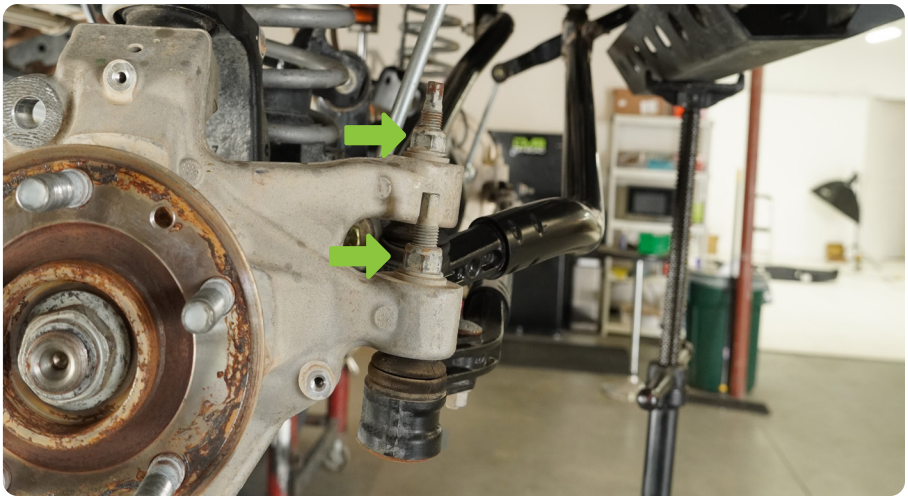
STEP 6 | Using a 13mm socket, disconnect the ABS line bracket from the axle.

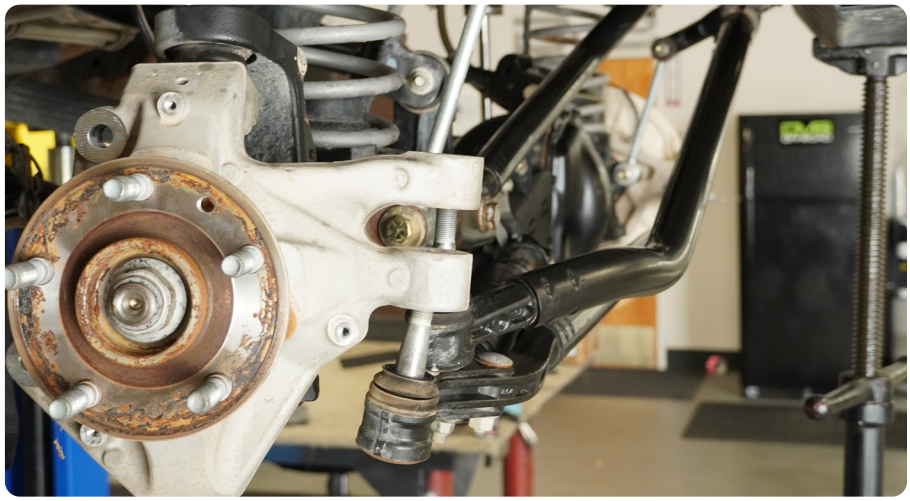


STEP 7 | Using a #5 allen tool, remove the wheel speed sensor from the wheel hub.

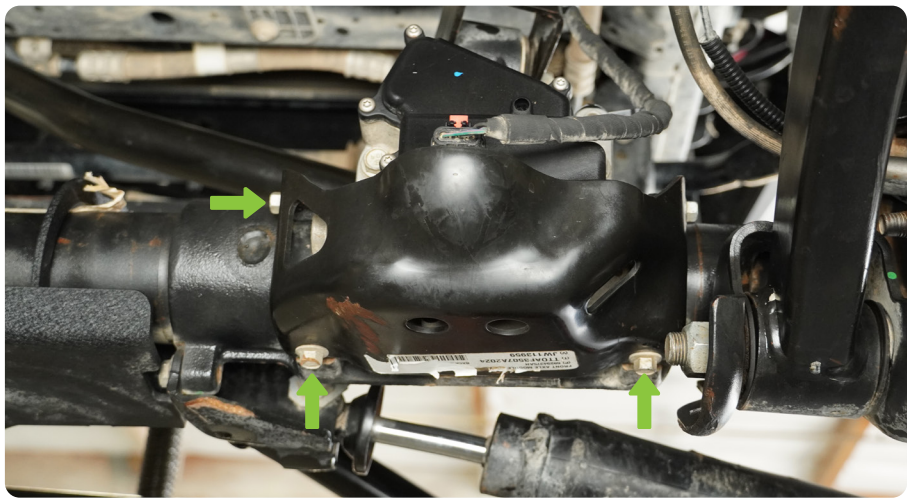


STEP 8 | Using a 21mm socket remove the drag link and tie rod from the knuckle.

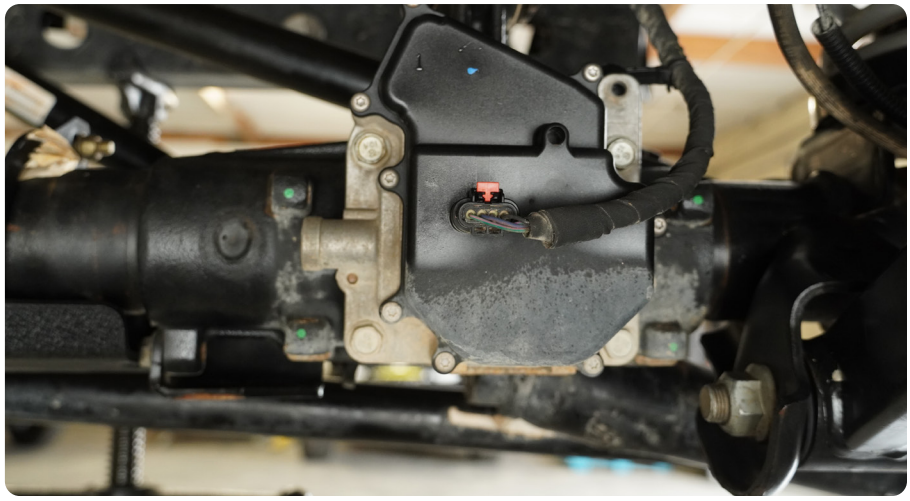


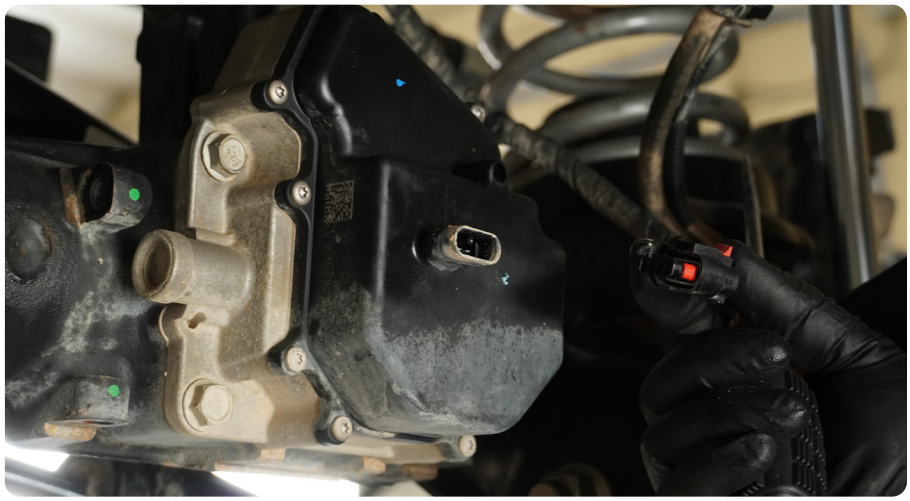


STEP 9 | If equipped with a front locker, use a 10mm socket or wrench to remove the front disconnect motor cover.

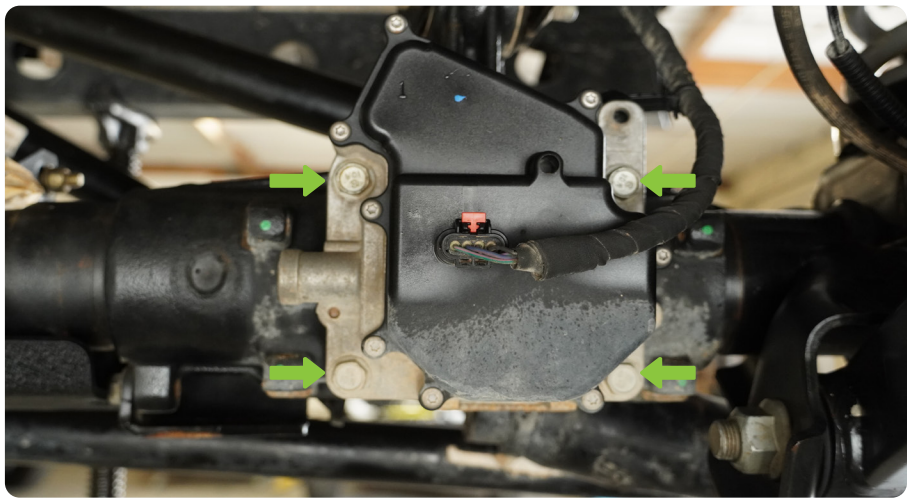


STEP 10 | Disconnect the motor wiring harness by pulling the red tab back and depressing the release tab.

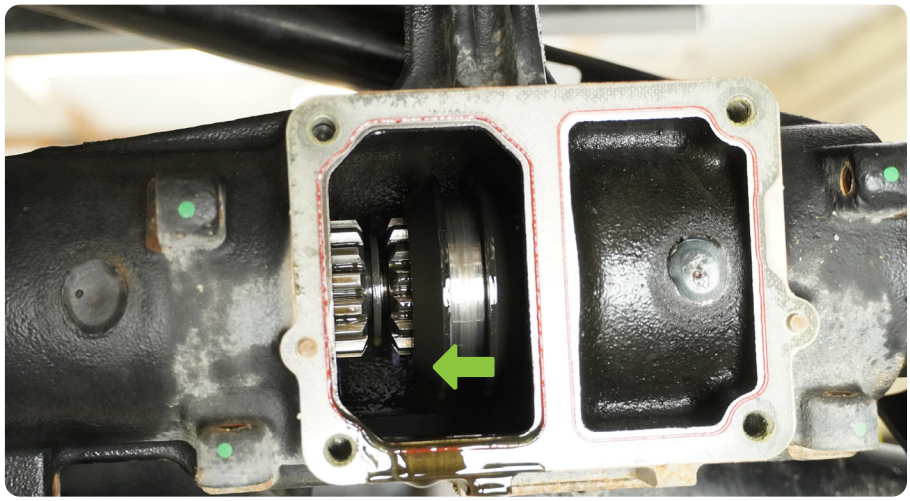


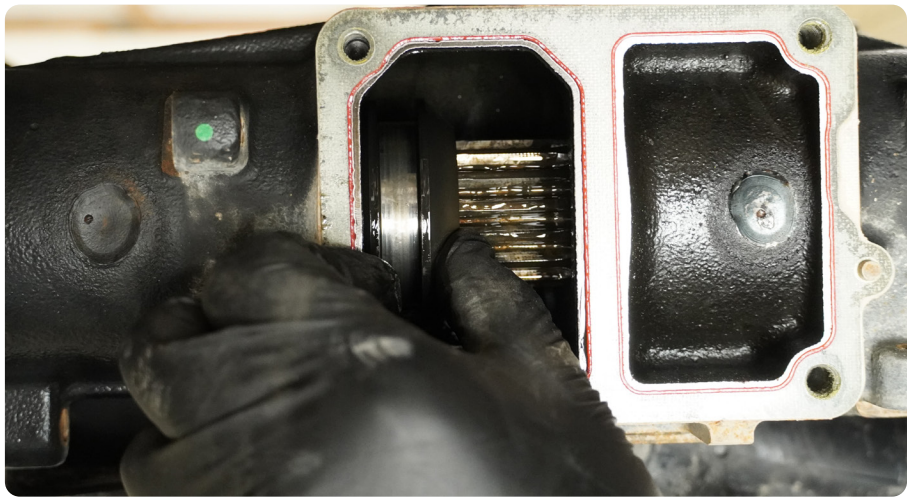


STEP 11 | Place a oil drip pan/bucket under the axle/motor. Using a 13mm socket, remove the four bolts that secure the motor to the axle. Be cautious as gear oil will drain out once the motor is removed.



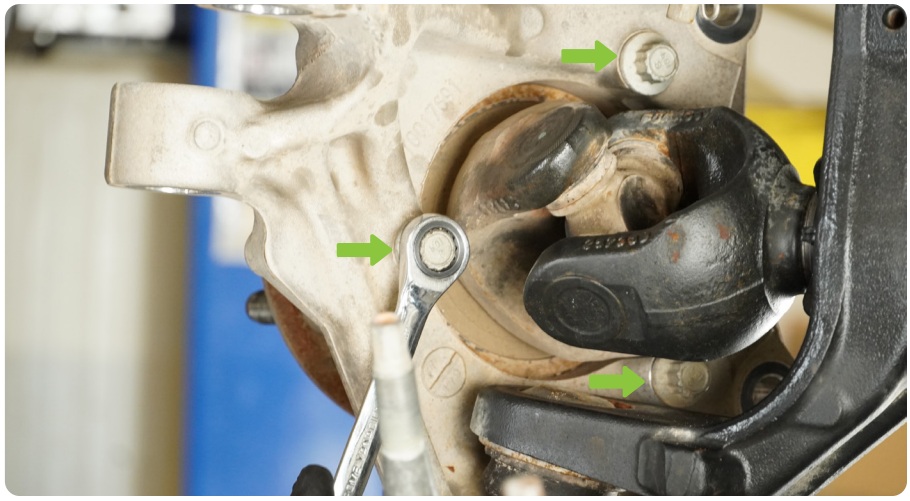
STEP 12 | Slide the axle collar to the inner axle shaft.





STEP 13 | Using a 12-point 13mm wrench or socket, remove the three bolts that secure the wheel hub to the knuckle.

NOTE: Be careful removing the wheel hub bolts, once the wheel hub bolts are removed the hub and axle can fall to the ground.

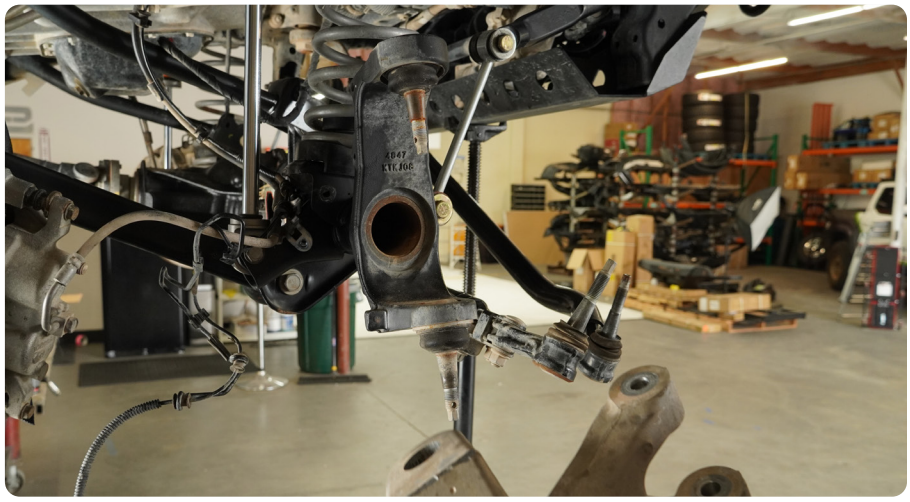


STEP 14 | Remove the wheel hub and axle. If the wheel hub is stuck in place due to surface rust, use a hammer to tap the hub out of the knuckle.

STEP 15 | Remove the ball joint cotter pins.

STEP 16 | Using a 22mm socket remove the ball joint castle nuts.

STEP 17 | Use a mallet/hammer to tap the knuckle off the ball joints.



STEP 18 | Using a ball joint removal tool to remove the upper ball joint fist.

Tech Tip: Ensure the tool is properly aligned on the ball joint to prevent damage to the axle.

STEP 19 | Use the removal tool to press out the bottom ball joint.

STEP 20 | Using steel wool or scouring pad, prepare the axle for the DV8 ball joints.






STEP 21 | The DV8 ball joints are marked UPR (Upper) and LWR (Lower). Insert the lower ball joint into the axle first.

Upper ball joint grease zerk should be pointed towards the center OR rear of the vehicle.

The lower ball joint should have the DV8 logo facing forward with the grease zerk pointed the rear of the vehicle.

Using a ball joint press tool to press the lower ball joint into place.

Tool size will vary based on brand, but we used a 51mm or Maddox #9 cup for install.

STEP 22 | Ensure the DV8 ball joint is fully seated.

Tech Tip: While the ball joints come pre-greased, DV8 recommends topping off the ball joints with grease.

STEP 23 | Insert the upper ball joint into the axle. Using a ball joint press tool install the ball joint.

STEP 24 | Ensure the ball joint is fully seated into place.

Tech Tip: While the ball joints come pre-greased, DV8 recommends topping off the ball joints with grease.

STEP 25 | Install the provided collar into the knuckle for the upper all joint.

Ensure the properly aligned with the slit facing out towards the wheel hub.

Tech Tip: Applying anti seize onto the tapered ball joints will help prevent surface rust.

STEP 26 | Install the knuckle onto the DV8 ball joints. Loosely thread the lower ball joints castle nut onto the ball joint to hold the knuckle in place. Do not tighten the lower ball joint castle at this time.

STEP 27 | Loosely thread the upper ball joints castle nut onto the ball joint.

STEP 28 | Using a torque wrench torque the lower ball joint to 15 ft. lbs. Then torque the upper ball joint to 55 ft. lbs.

Lastly, torque the lower ball joint to 35 ft. lbs.

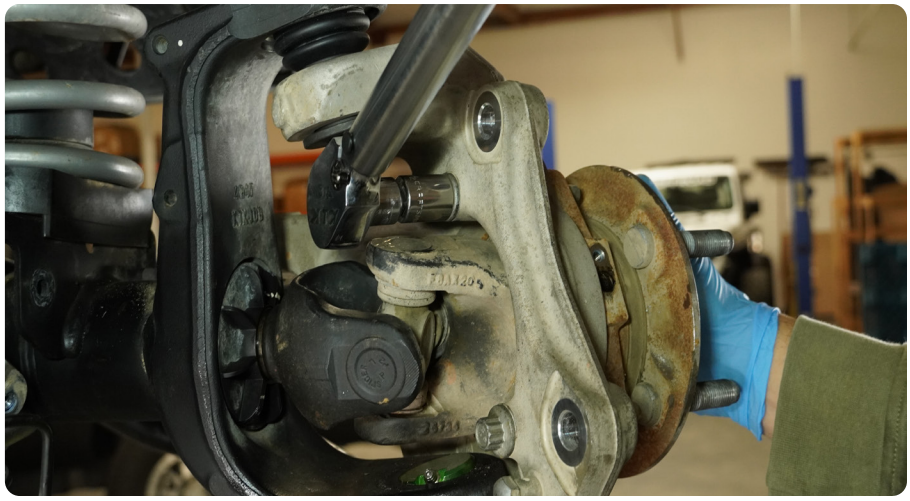
*Tech Tip: if the castle nut is not aligned with the cotter pin hole, continue tightening the castle nut until the cotter pin hole is aligned. ***Never loosen the castle nut to align the cotter pin hole.****

STEP 29 | Install the provided cotter pins through the castle nuts to prevent the castle nuts from backing off.

STEP 30 | With the knuckle secured to the axle, re-install the axle and wheel hub using the three factory 12 point head bolts.

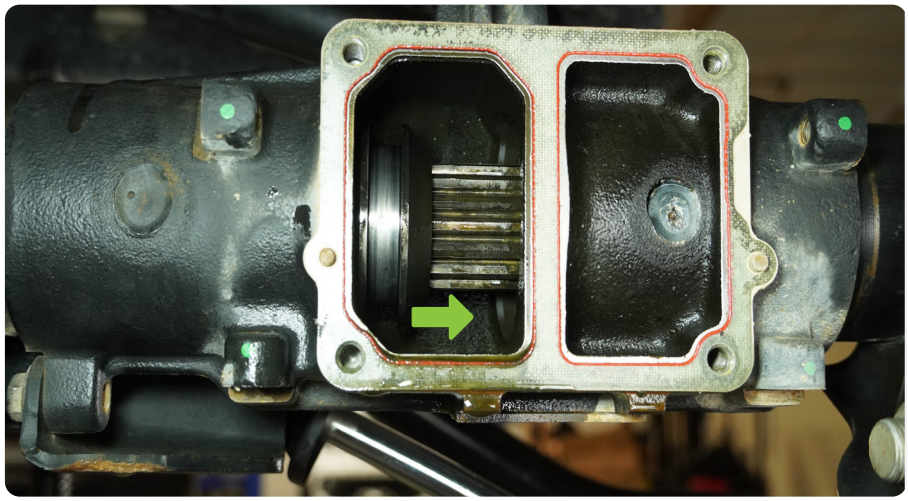
Tech Tip: Applying anti-seize to the hub bore on the knuckle will help prevent surface rust.

STEP 31 | Using a torque wrench and an 12 point 13mm socket, torque the wheel hub bolts to 7 ft. lbs.



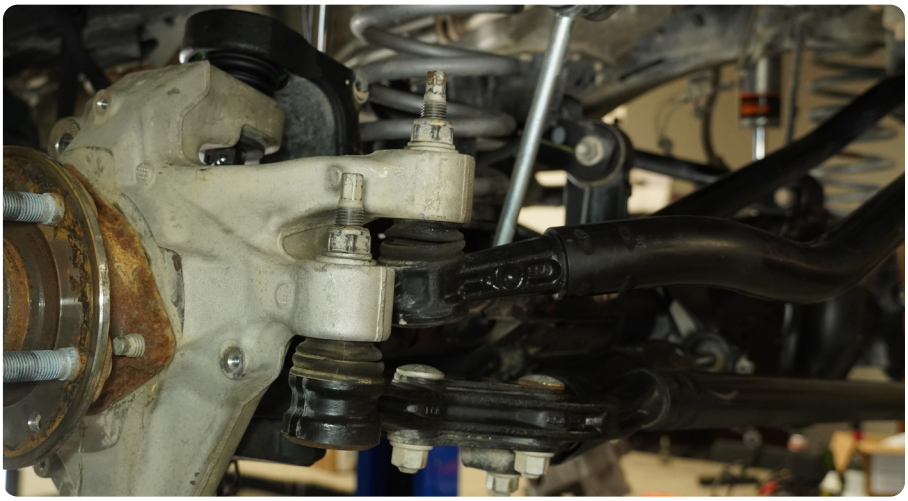
STEP 32 | Slide the axle collar back to the right.

Re-install the motor and reconnect the motor wiring harness. Install the motor cover.



STEP 33 | Re-install the tire rod and drag link onto the knuckle.

Using a 21mm socket and torque wrench, torque the drag link and tie rod nuts to 47 ft. lbs.



STEP 34 | Reinstall the brake rotor dust shield using the factory hardware and a 10mm socket.

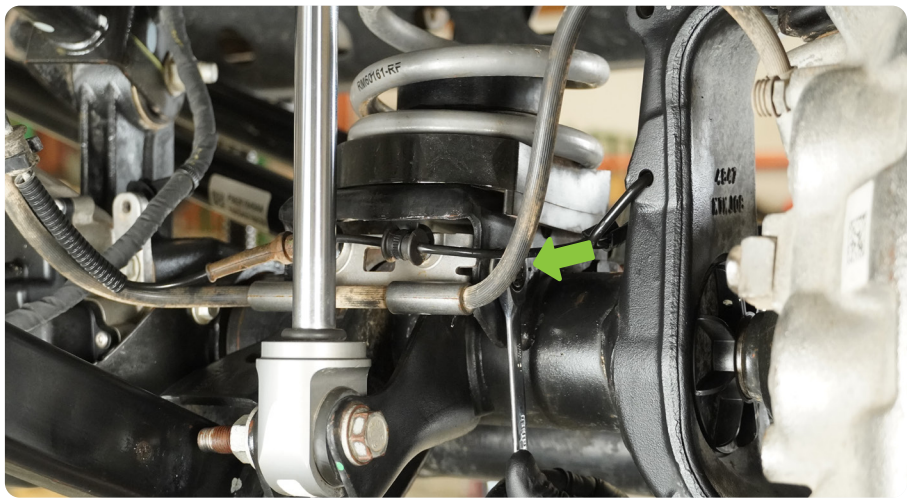
STEP 35 | Using the factory hardware and a #5 allen tool, re-install the wheel speed sensor in to the wheel hub. Torque the speed sensor bolt to 5 ft. lbs.

Secure the wheel speed sensor harness to the axle using a 13mm socket and the factory hardware removed on step 6.

STEP 36 | Re-install the brake rotor. Secure the rotor to the wheel hub using the factory set screw. Torque the set screw to 15 ft. lbs.

Re-install the brake caliper using the factory hardware. Torque the caliper bracket hardware to 147 ft. lbs. Using a 21mm socket.

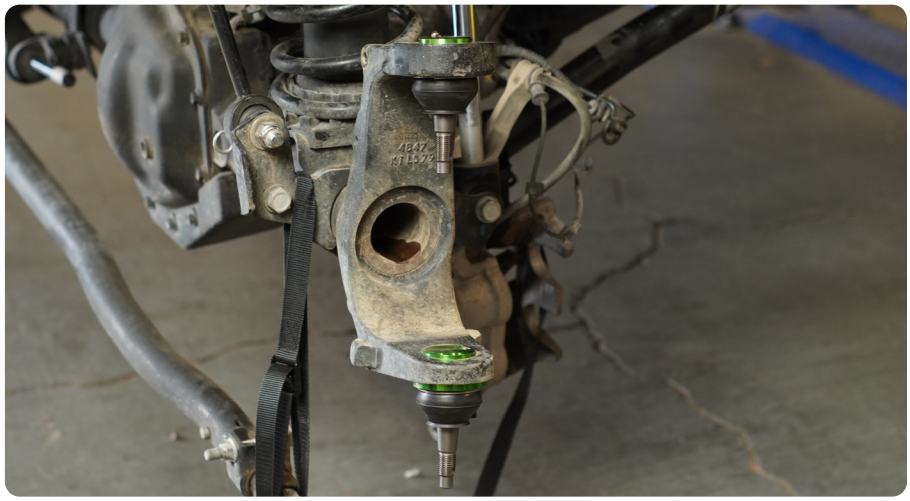
STEP 37 | Secure the brake line bracket to the axle using the factory hardware and a 10mm wrench.



STEP 38 | Secure the ABS line bracket using a 13mm socket.

STEP 39 | Double check that all hardware is secure. Congratulations, installation of the DV8 Ball Joints is now complete.

It is highly recommend to have your Jeep professionally aligned after a fresh set of ball joints.



STEP 40 | We provide flush and standard zerk fitting. Either style can be ran on either ball joint. For our install we used the flush on the lower and standard on the upper.