



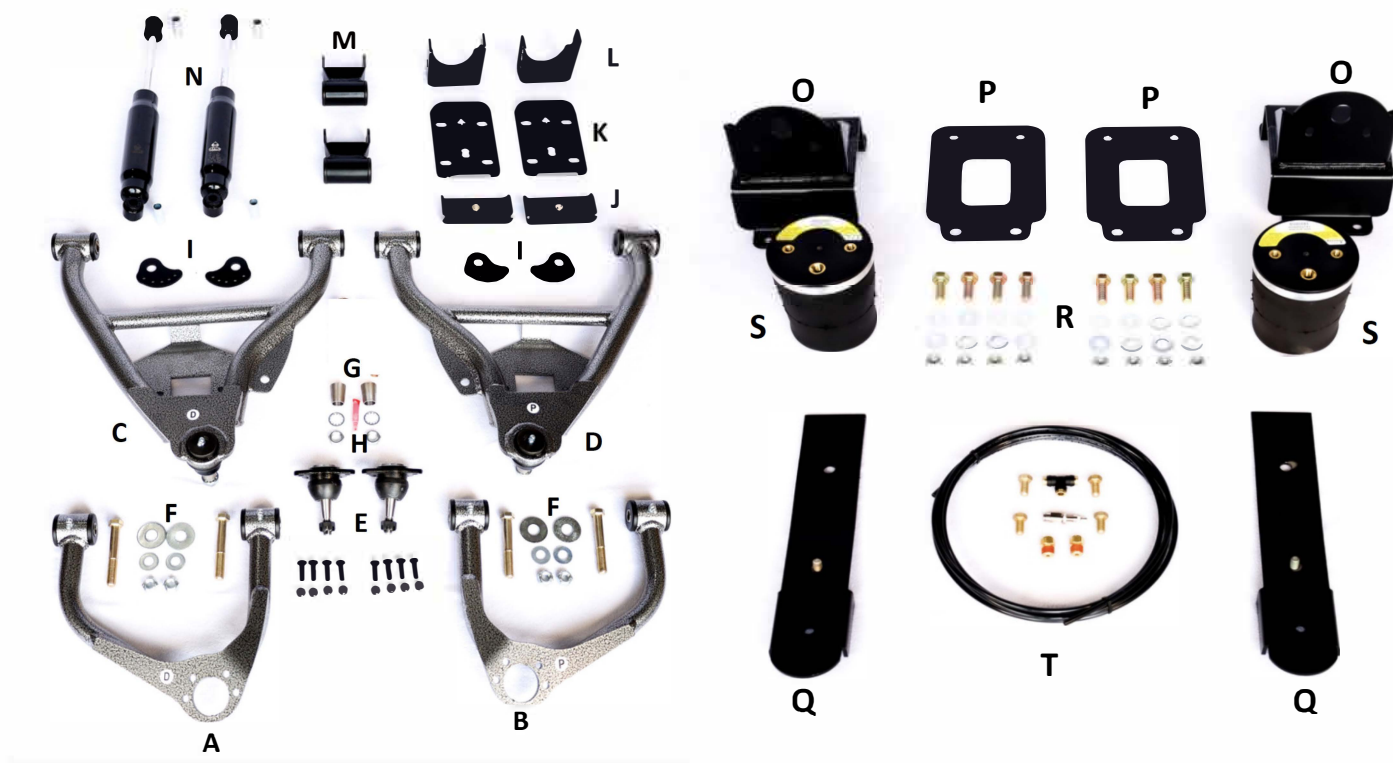
2019-2021 GM 1500 3/5 LOWERING KIT WITH HELPER BAGS



BEFORE YOU BEGIN INSTALLATION:

- Check all parts with the those listed above before beginning installation.
- If any parts are missing, contact IHC Suspension at 956-424-6901 and a replacement part will be sent to you immediately.
- Thoroughly read all instructions from start to finish before beginning the installation.
- If these instructions are not properly followed, then severe frame, driveline, and/or suspension damage may occur.
- Check your local city and state laws prior to the installation of this system for legality.
- Do not install if not legal in your area.
- Prior to the installation of this suspension system, perform a front-end alignment and record. Do not install this system if the vehicle alignment is not within factory specifications.
- Check for frame and suspension damage prior to installation.
- The installation of this suspension system should be performed by two professional mechanics.
- Do not combine this suspension system with any other drop device or parts.
- **MAKE SURE TO HAVE ALL PARTS BEFORE STARTING INSTALLATION.**

2019-2021 GM 1500 PART CHECK LIST



FRONT LOWERING PARTS

- Upper Control Arms A. Driver B. Passenger
- Lower Control arms C. Driver D. Passenger
- Upper Ball joints E. K6292 X2
- Upper Control Arm Hardware F. X2
- Lower Ball joint Sleeve and Hardware G. X2

HELPER BAG KIT

- Top Outer Bracket O. X2
- Top Inner Bracket P. X2
- Lower Bag Bracket Q. X2
- Top Bracket Hardware R. X2
- Air bags S. X2
- Air Fitting, Lines, Shrader Valve T.

REAR LOWERING PARTS

- Flip Kit J. Top Plate K. Saddle L. Bottom Plate
- 1" lift shackles M. X2
- Drop shocks 919500 N. X2

VEHICLE BEFORE AND AFTER HEIGHT MEASUREMENTS

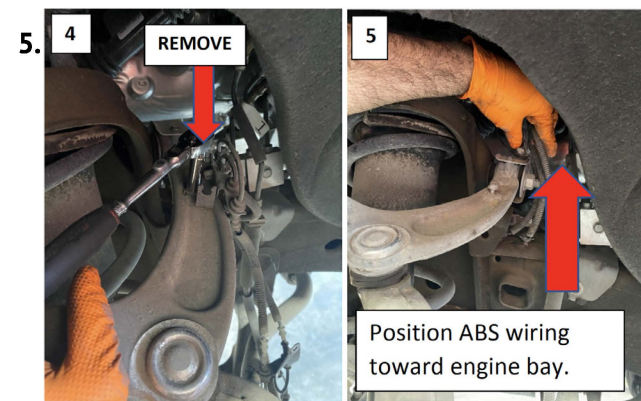
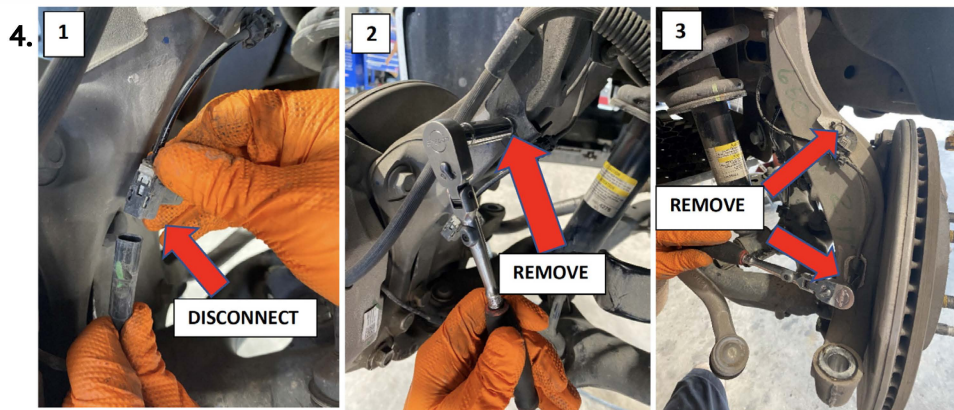
	DRIVER BEFORE	DRIVER AFTER	PASSENGER BEFORE	PASSENGER AFTER
FRONT				
BACK				

Installation Warning:

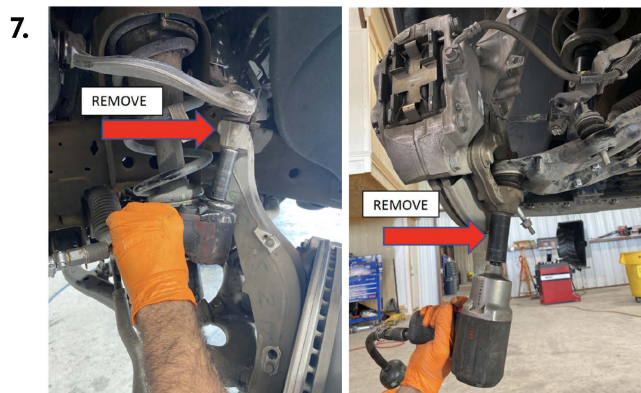
All steps and procedures described in these instructions were performed while the vehicle was properly supported on a two-post vehicle lift with safety jacks. Use caution during all disassembly and assembly steps to ensure suspension components are not over-extended, causing damage to any vehicle components and parts included in this kit. Included instructions are guidelines only for recommended procedures and are not meant to be definitive. Installer is responsible to insure a safe and controllable vehicle after performing modifications. IHC Suspension recommends the use of an OE Service Manual for model/year of vehicle when disassembly and assembly of factory and related components. Unless otherwise specified, tighten all bolts and fasteners to standard torque specifications listed within the OE Service Manual. Suspension components that use rubber or urethane bushings should be tightened with the vehicle at normal ride height. This will prevent premature wear or failure of the bushing and maintain ride comfort. Larger tire and wheel combinations may increase leverage on suspension, steering, and related components. Due to payload options and initial ride height variances, the amount of drop is a base figure. Final ride height dimensions may vary in accordance with original vehicle ride height. Always measure the vehicle ride height prior to beginning installation.

FRONT SUSPENSION- DISSASSEMBLY

1. Disconnect the negative terminal on the battery. Jack up the front end of the truck and support the frame rails with jack stands. NEVER WORK UNDER AN UNSUPPORTED VEHICLE! Remove the front tires.
 2. Remove tie rod from the knuckle to allow more movement.
 3. Continue to disconnect the ABS wiring and brake line brackets from the knuckle.
- NOTE: DO NOT OPEN UP THE BRAKE LINES. REFER TO PICTURES 1, 2, 3, 4, and 5.**

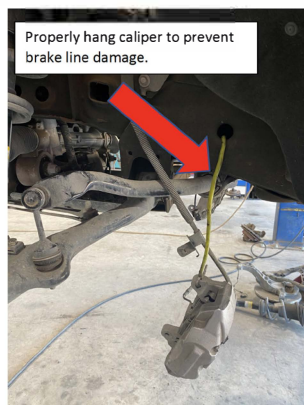
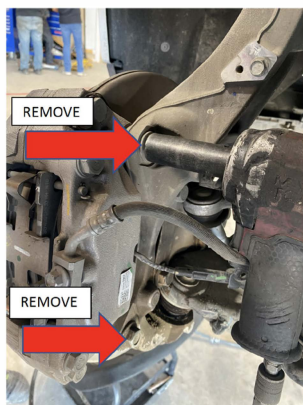


6. Continue to loosen the upper ball joints and lower ball joints. **NOTE: DO NOT REMOVE YET. REFER TO PICTURE.**



8. Remove the brake caliper mounting bolts and hang the caliper out of the way. **NOTE: Do not hang the caliper by the brake line. Retain factory hardware. Refer to PICTURE ON THE LEFT.**

9.



10. 4WD VEHICLE ONLY - Remove the axle nut. Press axle back through the hub to allow for greater misalignment and ease in the removal/installation process.

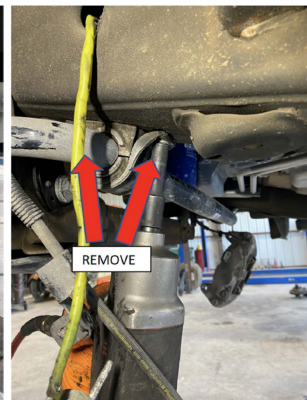
NOTE: It is imperative that the axle be pushed back through the hub assembly. Failure to do so can lead to damage to the CV boot or the CV joint itself. Care **MUST** be taken when handling these CV axles.

2WD SKIP TO STEP 11.

11. Remove spindle and rotor assemble.

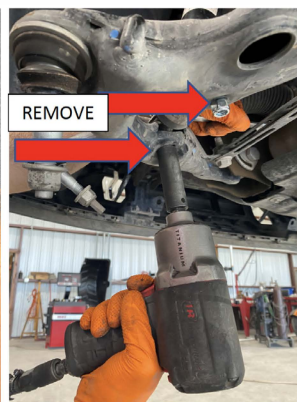
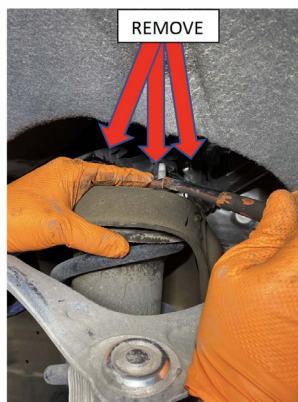
12. Remove the sway bar link from the lower control arm and sway bar from the frame. Refer to the picture on the right.

13.

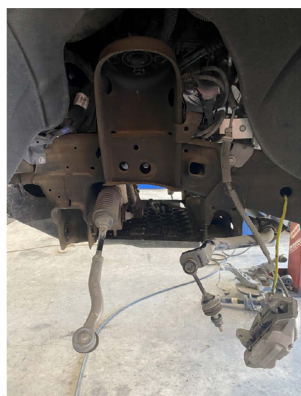


14. Remove the strut assembly. Refer to the picture on the right.

15.



16. Remove the upper and lower control arms. Refer to the picture on the right.



17. Front suspension should look like the picture on the left.

18. You are now complete with disassembly. Continue with assembly.

FRONT SUSPENSION ASSEMBLY

19. Continue to lubricate the upper and lower control arms, bushing walls, and frame pocket. This will prolong bushing life and prevent noises.

NOTE: IF THIS STEP IS SKIPPED, NOISES MAY OCCUR.
Refer to the pictures below.

20.

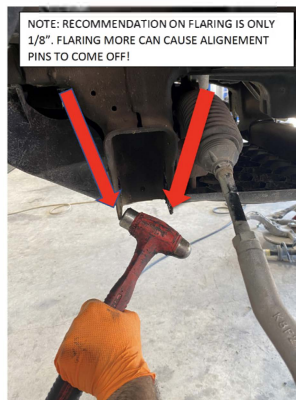


21.



22. NOTE: GENERAL MULTIPURPOSE GREASE IS BEING USED IN PICTURE

23. NOTE: FLARING OUT THE LOWER CONTROL ARM FRAME POCKETS 1/8" ON EACH SIDE WILL HELP DURING INSTALLATION. REFER TO THE PICTURE ON THE RIGHT.

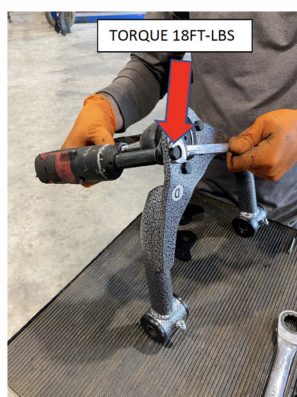
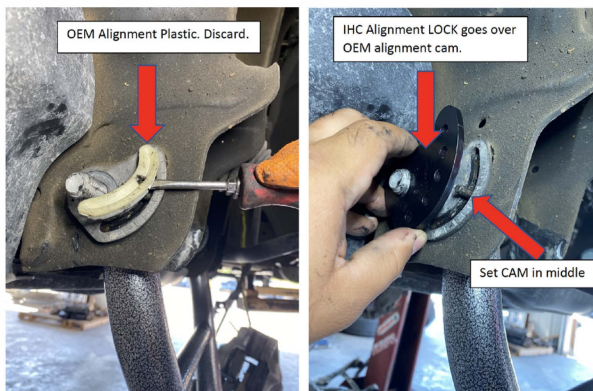


24. Install the lower control arm. Refer to picture on the right.

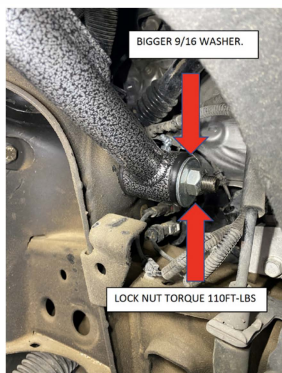
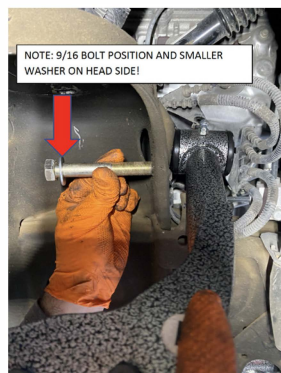


25. Install the OEM bolts. Remove and discard the alignment plastic from OEM alignment CAM. Install the IHC Alignment LOCK over the OEM alignment CAM **ON THE NUT SIDE. DO NOT TIGHTEN BOLTS AT THIS TIME.**

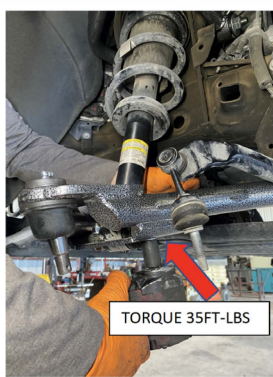
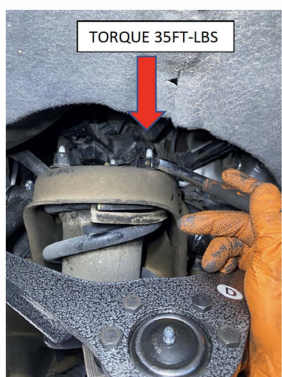
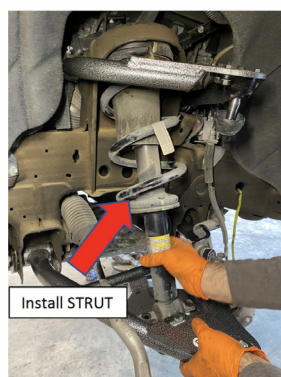
NOTE: IT'S RECOMMENDED TO SET THE ALIGNMENT IN THE MIDDLE MARK. THIS WILL ALLOW FOR EASIER COMPUTER ALIGNMENT. REFER TO PICTURES ON THE RIGHT.



26. Install the upper ball joint onto the IHC upper control arm with the hardware provided. **TORQUE 18FT-LBS.** Refer to the picture on the left.



27. Install the IHC upper control arm. **NOTE: Install the 9/16 smaller washer towards the head of the bolt and the 9/16 bigger washer toward the nut side.** Refer to the picture below.
TORQUE TO 110 FT-LBS



28. Install the strut assembly. Torque the upper and lower strut bolts to **35 FT-LBS.**

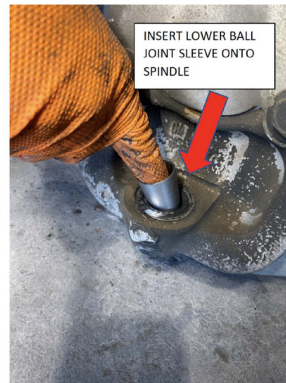
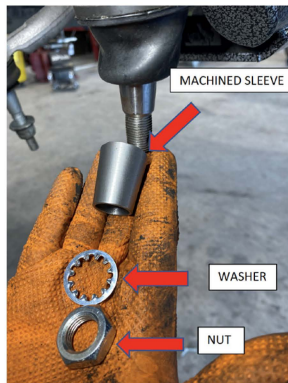
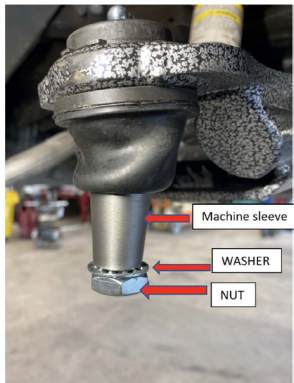
Refer to the picture on the left.

29. Continue to tighten the lower control arms. **TORQUE TO 150 FT-LBS.** Refer to the picture on the right.

NOTE: HOLD THE HEAD WITH A WRENCH WHEN TORQUING TO PREVENT ALIGNMENT PIN DAMAGE!



30. Install the sway bar. **TORQUE TO 35FT-LBS** and install the sway bar link **TORQUE TO 45 FT-LBS.** Refer to pictures on the left.



31. **NOTE: LOWER BALL JOINT COMES WITH MACHINES SLEEVE MUST BE REMOVED AND INSERTED ONTO THE SPINDLE! IF THIS STEP IS SKIPPED, DAMAGE TO VEHICLE WILL OCCUR!** Refer to the pictures above.

32. Install the spindle assembly to lower control arms. REFER TO PICTURE 4WD VEHICLE. READ NOTES! 2WD vehicles, continue with step 33 picture.

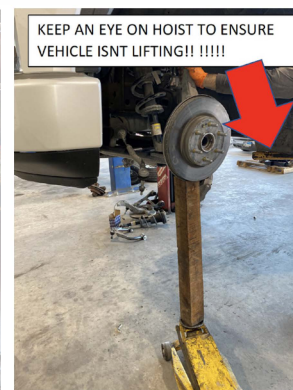
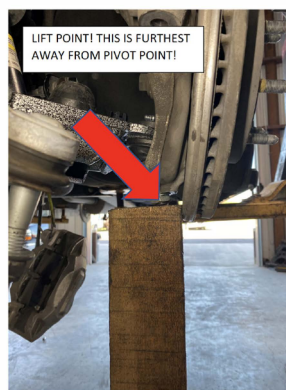
NOTE: 4WD VEHICLES. Install the complete spindle assembly to the lower ball joint using the IHC-provided hardware while guiding the CV axle through the hub. Ensure that the CV axle is properly inserted into the hub assembly. Install and tighten the axle nut. Torque the axle nut to 160 ft-lbs.

NOTE: It is important that the axle nut is fully seated and tightened prior to tightening the upper control arm ball joint. Non-compliance will potentially pinch the outer CV boot, causing damage and/or failure to the half-shaft assembly.

33. You will need to raise the lower control furthest away from the pivot point to be able to bolt up the upper ball joint to the spindle. **DO NOT RAISE FROM THE LOWER CONTROL ARM POCKET!** With the floor jack raised, lower the control arm a couple of inches to install the upper ball joint onto the spindle. Refer to the picture on the right.

NOTE: MAKE SURE YOU DO NOT RAISE VEHICLE OFF HOIST. DAMAGE OR SERIOUS INJURY MAY OCCUR!

34. ADD red loc-tite provided in the kit to the lower ball joint thread and nut. Refer to picture. Install the locking washer and **TORQUE TO 120 FT-LBS**

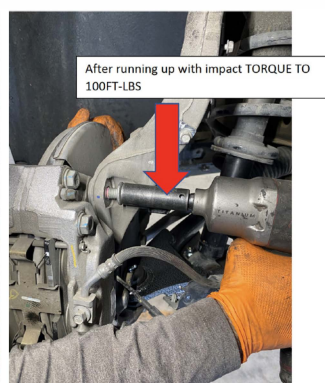
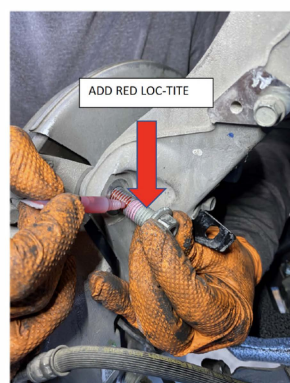


35. Install the upper ball joint castle nut and **TORQUE TO 65 FT-LBS**. Add the cotter pin. Refer to the picture on the right.



36. Install the brake caliper assembly. **TORQUE TO 100FT-LBS**. Refer to the picture on the right.

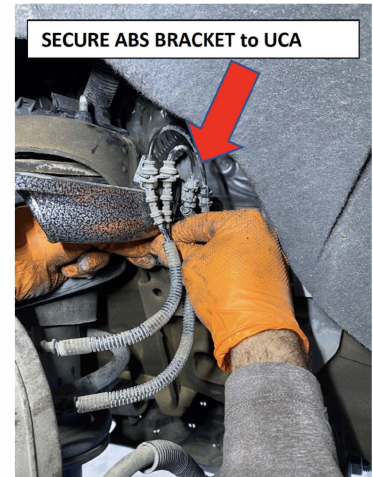
NOTE: RED LOC-TITE MUST BE ADDED. IF THIS STEP IS SKIPPED, DAMAGE OR SERIOUS INJURY MAY OCCUR.



37. Install all ABS brackets and TORQUE TO 80 INCH-LBS.

38. Install the ABS SENSOR onto the OEM spindle. TORQUE TO 80 INCH-LBS

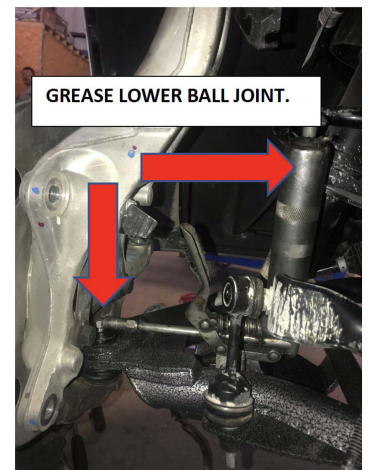
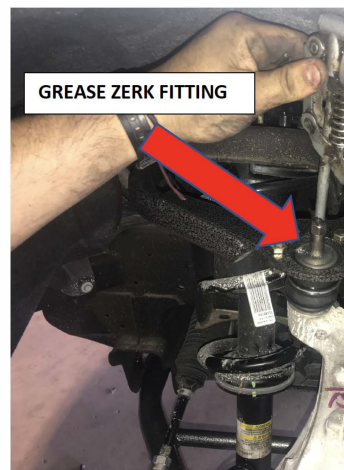
38. Bolt down the ABS wiring to UPPER control. Refer to the picture on the right.



39. With everything tightened and torqued to the specifications, install the front tires and lower the vehicle. With the steering wheel centered, turn the tie rod ends until the tires are straight.

40. NOTE: If the steering wheel is not centered properly, the ABS/traction control lights may activate. Turn the wheels from lock to lock and make sure the brake lines and ABS routing clears all suspension components adequately.

41. Reposition if necessary.



42. Using the appropriate tool, grease the upper ball and lower ball joint just until the boot starts to expand. Do not overgrease. Overgrease can cause premature wear. Refer to the picture on the right.

43. You are now complete with front installation.

