

INSPECT CONTENTS
OF THE KIT PRIOR
TO INSTALLATION

VERSION 1.1

10004864



kelderman.

AIR SUSPENSION SYSTEMS

2686 Highway 92 - Oskaloosa, IA 52577
phone: 641.673.0468 email: info@kelderman.com
www.kelderman.com

2019+ Ram 2500 Factory Rear Coil Spring 5-6" Rear Lift Kit Installation Instructions



1. Before doing anything, place the truck on a level surface and use an angle finder to measure the pinion angle. Write the measurement here _____.
It is highly recommended to remove the truck box for the installation. These install instructions are written as if the box is removed. Jack the truck up from the frame. You will also need to put a floor jack under the rear axle. Place jack stands under the frame while you work. It will be easiest for installation if the truck is approximately 10-12" off the floor.
2. The rear coil springs need to be removed. To do this, remove the bottom shock bolts and unhook the sway bar end links from the sway bar. Drop the axle down with the floor jack. **NOTE: WATCH THE-BRAKE LINES. DO NOT STRETCH AND DAMAGE THEM.** You will remove the rubber mounts that the springs sit in also. Remove the top shock nuts. The shocks will not be reused, but the bottom shock bolts will be. You will also be removing the factory rear track bar as well as the 4 trailing arms, panhard bar sway bar and sway bar end links. It works well to throw a strap over the front of the axle/driveshaft in order to keep the axle from rotating out of position.

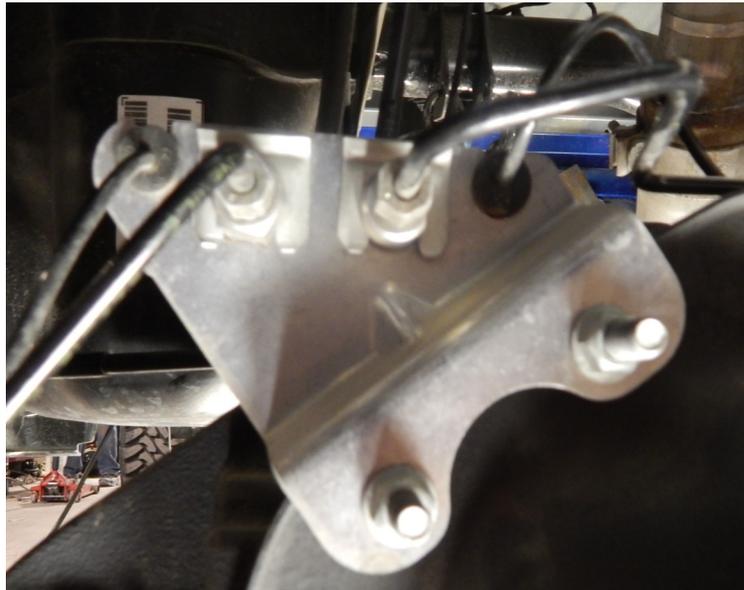
Coil springs shown removed from truck



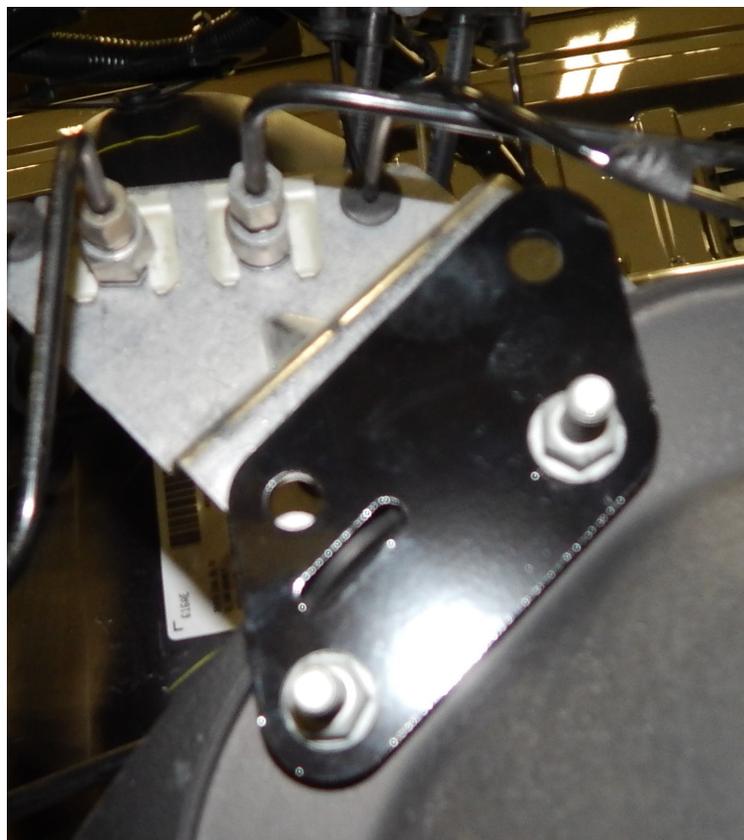
3.) Locate the upper air bag mounts (part # XXXXDS and XXXXPS). They fasten into the upper coil mounts with the 1/2" and 3/4" nut mounts (Part # 19113 and 19114). Fasten the upper bag mounts in place and torque the 1/2" bolts to 85 ft./lbs. and the 3/4" bolts to 125 ft./lbs. NOTE: The cut out for the air line fitting on the drivers side faces towards the center of the truck and the cut out on the passenger side faces towards the front/and passenger side frame rail.



4.) Locate the brake line relocation bracket (Part # 19046). Remove the two nuts off the mounting studs and slide the relocation bracket over the studs. Fasten with the factory nuts. Torque to 20 ft./lbs. Fasten the brake line bracket to the relocation bracket with the 1/4 x 1" bolts. Torque to 25 ft./lbs. Examine the brake lines along the axle. Once the install is complete, make sure the brake lines are not rubbing on anything. *New brake lines are not required for this kit.*



*Stock brake line
Bracket mount*



*Adaptor plate
attaches to the
differential cover
and raises the
brake line
bracket up*

5.) Locate the four trailing arms (Part # 19051 upper and 19052 lower). Adjust the two longer arms so there is 13" between the knuckles. These will be the bottom arms. Set the shorter arms at 11 1/8" (the top bars) between the knuckles. Insert the top bars first. Use the pictures on Page 7 to set the bolt orientation. The factory bolts and nuts will be reused. While the trailing arms are removed, unhook the emergency brake line on the passenger side. Use the pictures below and on Page 6 to see how to re-route the cable. It will fasten to the lower trailing arm forward pinch bolt with the supplied clamp. Once the trailing arms are installed, torque the bolts to 200 ft./lbs.



The lower trailing arms (longer ones) get the thicker walled bushings



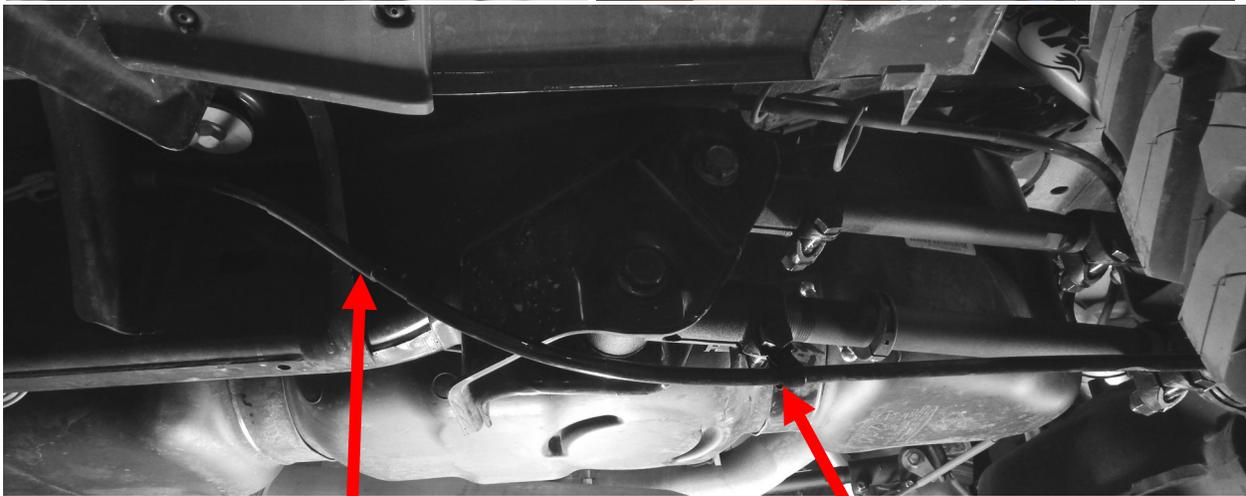
By setting the trailing arms at these measurements the pinion angle and axle centering should be close. Fine tuning may be required once install is complete.

Remove the e-brake cable from this hole.



6.) Remove the drivers side e-brake cable from the metal loop that holds it in place. Unhook it from the connection on the side of the frame and push it back through the mounting brackets. It will now drop down and run up to the forward bracket. It will also tie into the lower forward trailing arm knuckle pinch bolt with the supplied clamp.

Remove drivers side e-brake cable from this loop



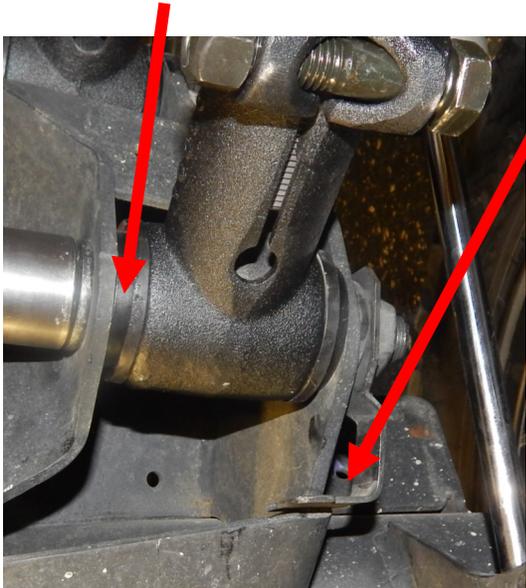
Brake cable now droops down below the rear mount that it originally was routed through

Clamp to the pinch bolt on the lower front knuckle

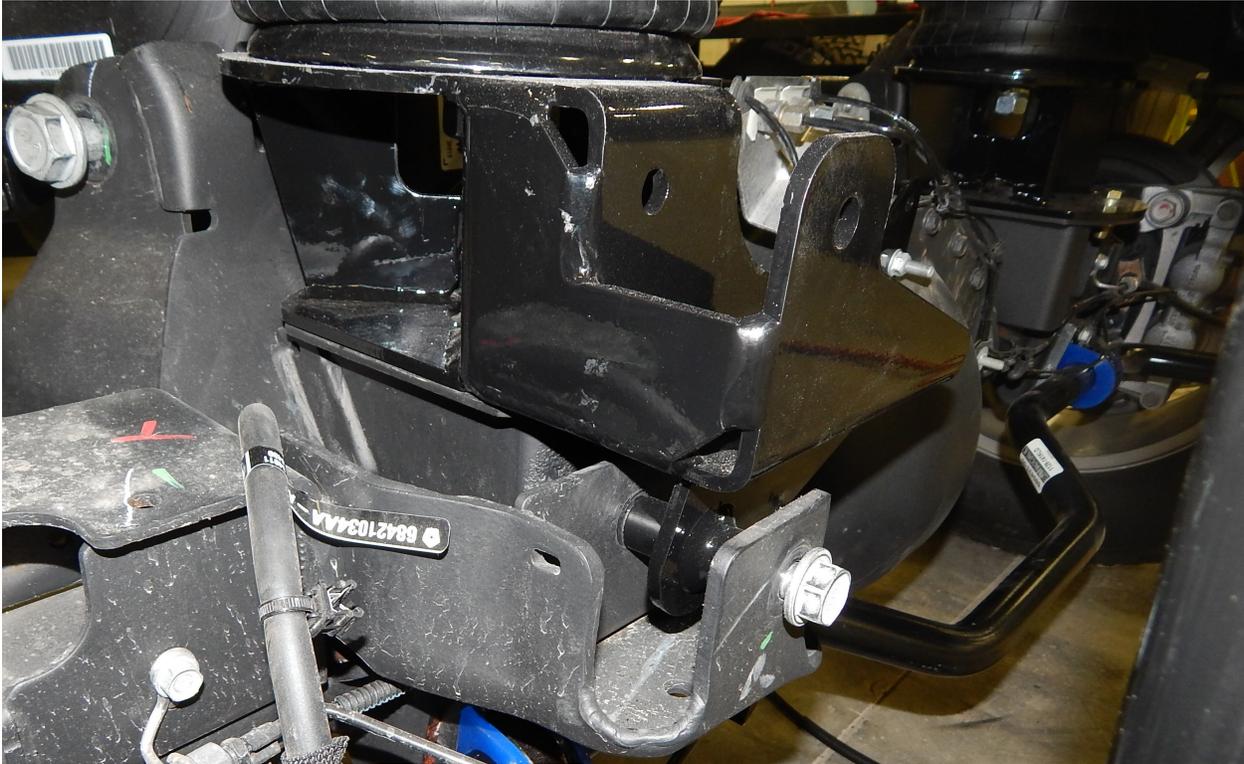


The lower trailing arms use the thicker walled bushings.

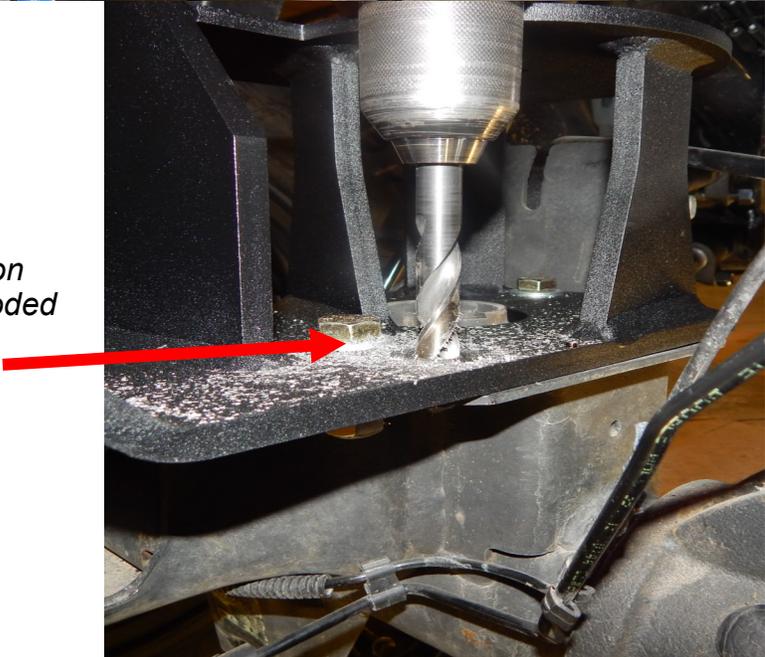
This tab needs to be bent so it will catch on the trailing arm mounting bracket.



7.) Locate the lower bag mounts (Part # xxxx DS and xxxxPS). Beginning with the driver side, place the bag mount on the axle. It fastens with the three 1/2 x 1 1/2" bolts (one hole gets drilled) and the factory panhard bar bolt into the factory panhard bar mount. Once all the bolts are installed, torque the 1/2" bolts to 85 ft./lbs. and the factory panhard bar bolt to 120 ft./lbs.



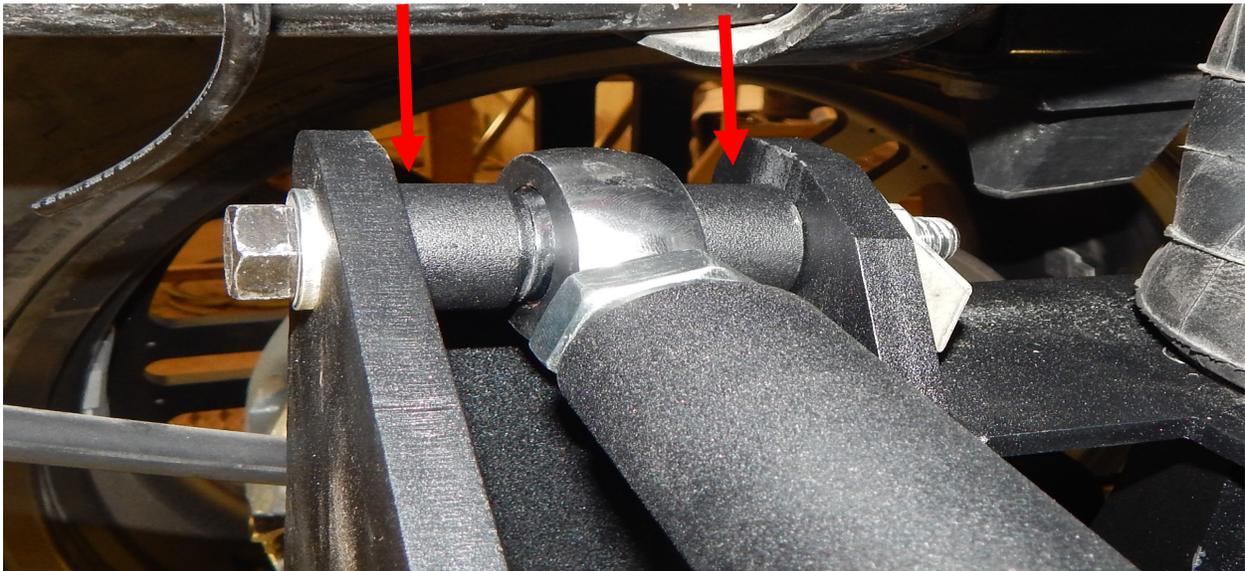
*Drill this hole 17/32"
(not sure if this is the same on
2019) will need to look at exploded
view when its done*



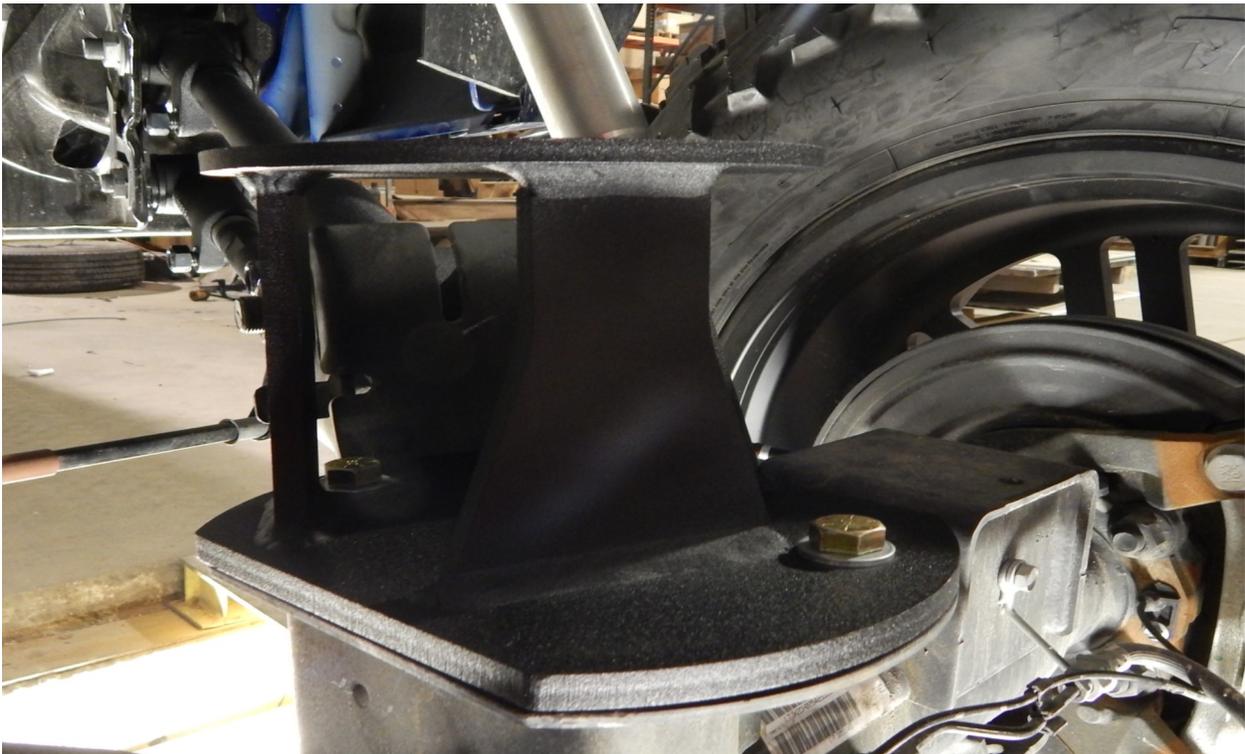
8.) Locate the panhard bar (Part # ssss). Adjust the bar/heim ends so they are 35 13/16" center to center. Locate the four spacers that go into each side of the heim ends. The two of the spacers are wider. These wider spacers go into the lower air bag mount. It fastens into the lower air bag mount in the drivers side with the 9/16 x 4" bolt and in the factory location with the factory bolt on the passenger side. Torque these bolts to 135 ft./lbs.

One spacer on each side of heim end.

The wide spacers go on this end.



9.) Locate the two holes in the top of the coil spring perch. Use a 17/32" drill bit to open up the holes. Locate the passenger side lower bag mount (Part # xxx) and fasten to the axle with the two 1/2 x 1 1/2" bolts. Torque to 85 ft./lbs.



10.) Locate the 5748 air bags. They fasten into the upper air bag mounts with the 3/8 x 1" bolt and lock washers. The bottom of the bag fastens to the lower air bag mounts with the 3/4" nut and lock washer. Torque the bolts and nuts to 35 ft./lbs. Locate the 90 degree 3/4" air fitting. Insert the fitting into the air bag and turn until it is finger tight. Use a wrench to turn it one complete turn.



11.) Locate the accumulator air tanks assembly (Part # XXXX). Install the straight 3/4" fitting in the one end and the 3/8" fitting in the other end. The mounting bracket welds to the crossmember that has the diesel fuel filter. The bracket fits between the fuel filter and exhaust hanger. Use the picture below for reference. The assembly will run downhill, otherwise it will hit on the truck bed when the bed is re-installed. Once the air tank bracket is installed, fasten the accumulator tanks to the bracket with the xx x xx bolts. Torque to xx ft./lbs. Locate the 3/4" air line fittings and install into the tank. Measure out how much 3/4" air line is required and connect the air tank to the air bag.

Weld here



12.) Locate the upper shock relocation brackets (Part # XXXX). They weld into the hole in the frame that the OEM shock went through. Before the upper shock mount is in place, grind away the paint on the frame and the powder coat around the edge of the upper shock mount. The best way to orientate the weld in piece is to use the OEM shock. Install a bolt in the bottom of the shock on the axle and slide a bolt in the new upper shock mount. Tack weld the upper shock in place. Remove the shock and weld the upper shock mount in place. Mask off the shock mount and frame with some tape and use some paint to cover up the weld.



13.) With the shock mounts are installed, locate the shocks (Part # 10095 Raptor) and install. Use the xx bolts on top and OEM 14mm bolts on the bottom to fasten into place. Torque the bolts to 95 ft./lbs.

Rear shock mount shown welded in place.

14.) Locate the sway bar (part # XXXX), the “D” rings, end links and upper end link adaptor mounts (Part # XXXXX). The D-rings will attach to the bottom of the axle. There are four holes in the bottom shock mount on the axle. Use the closest one to the front of the truck, as well as the third closest to the front. Use the provided grease to lube up the poly bushing before installing. Use plenty of grease and then wipe the excess off once the install is complete. Failure to grease the poly bushing will result in a squeaking noise while driving. Fasten the sway bar to the axle with the factory sway bar bolts. Torque to 55 ft./lbs.

Rear sway bar assembly shown installed w/ bushings, d-rings, and grease



Use lots of grease and clean it up after the install is complete



15.) Locate the sway bar end links (Part # XXXX) and the upper end link mount adapters (Part # 19161). The upper end link adapters fasten to the factory end link mounts with the 1/2 x 3" bolts and the 3/8 x 1 1/4" bolts. Fasten the bottom of the end link to the sway bar with the 1/2 x 3" bolt. Make sure to use the large flat washer on the outside of the end link (against the poly bushing). Torque the 1/2" bolt 85 ft./lbs. and the 3/8" to 45 ft./lbs.

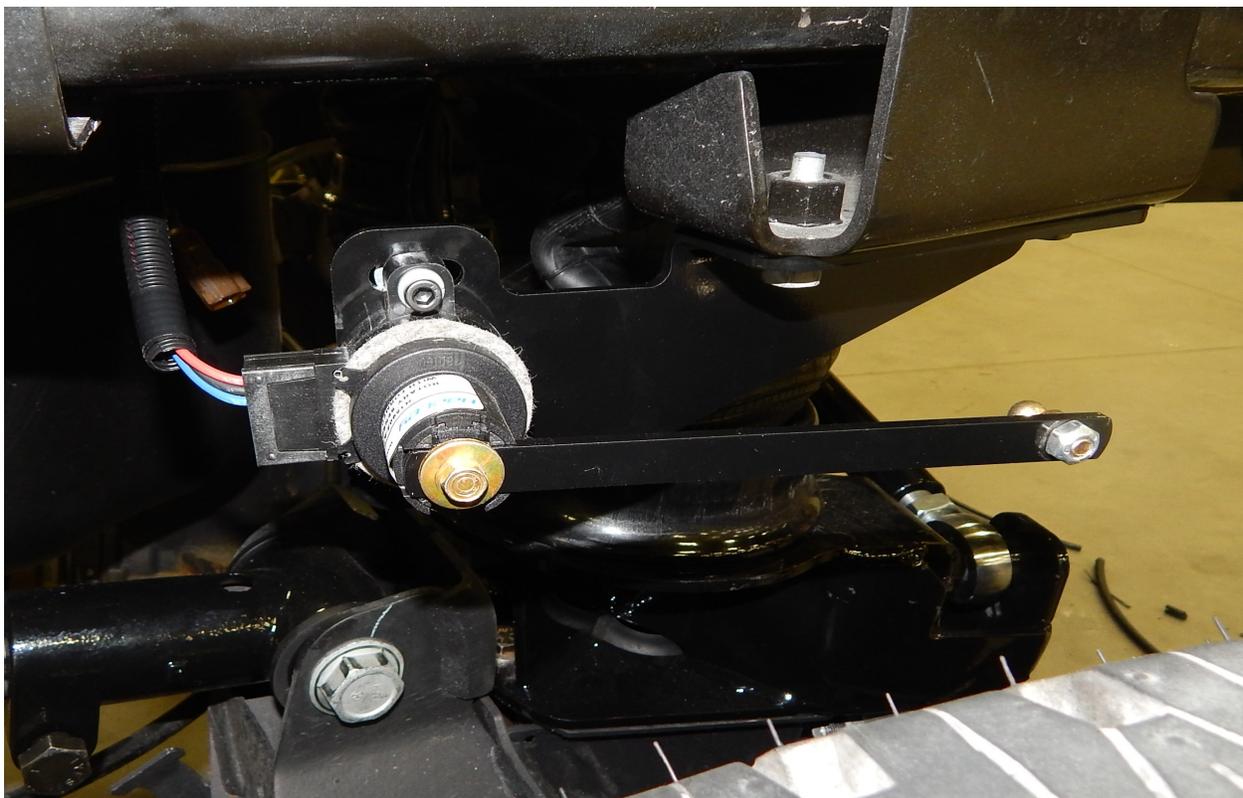
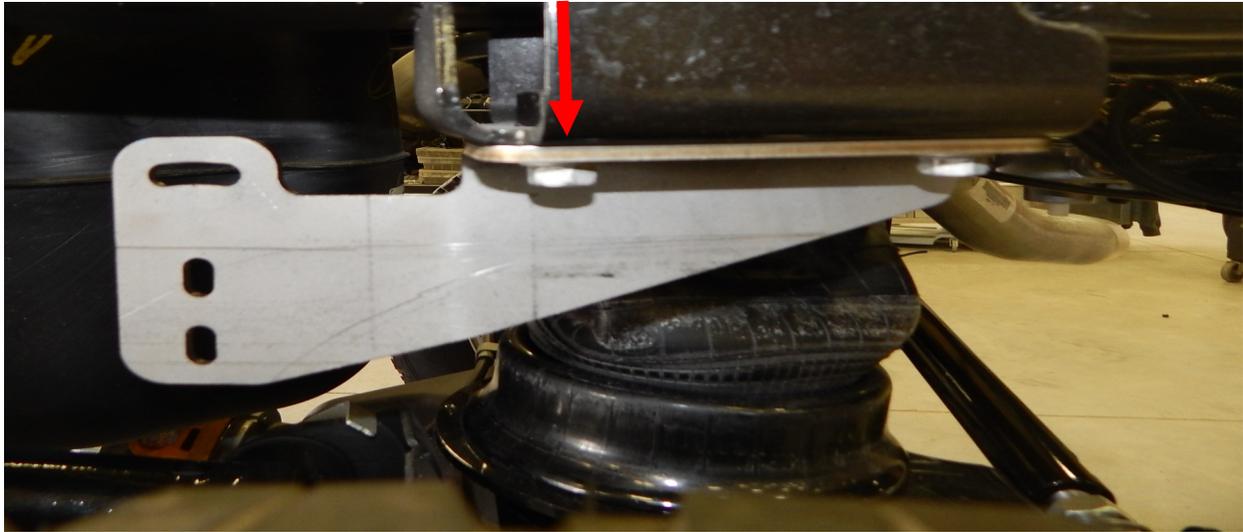


Large washer on the outside of the bottom end link



16.) Locate the two ride height sensors and sensor mounting brackets (Part # XXXX). The sensor mounting brackets fasten to the bottom of the factory bump stops on the frame. The pointed part of the mount faces the rear. Use the factory bolts to attach the brackets to the bump stop. The sensors fasten to the bracket with the 1/4 x 1" bolts. You can use the top slot to fine tune the sensor when going through the set-up process. *NOTE: There are videos on [YOUTUBE.COM/KELDERMANTRUCKS](https://www.youtube.com/channel/UCkELDERMANTRUCKS) that should be watched before doing the calibration procedure on the 3H.*

Sensor bracket attaches to bottom of the bump stop mount



17.) Locate the 3H air management system. The tanks and 3H box mount where the spare tire originally set. **[Check out YOUTUBE.COM/KELDERMANTRUCKS](https://www.youtube.com/KELDERMANTRUCKS) for a detailed description on how to install the air management system.**





Cad pic of kit installed here

Exploded view