

VERSION 1.3

INSPECT
CONTENTS
OF KIT PRIOR
TO BEGINNING
INSTALLATION



A 13/64" drill
bit and 1/4-20
tap is required.

7/8" drill bit is
required

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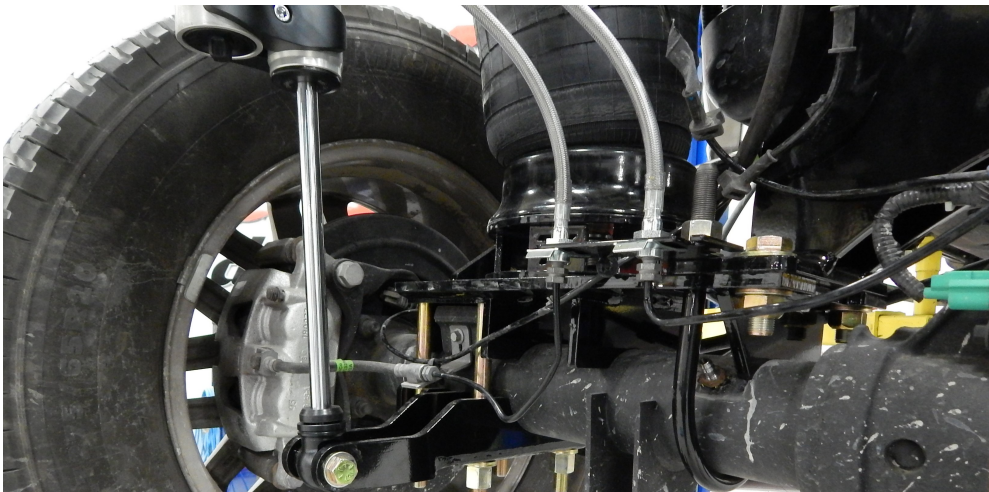
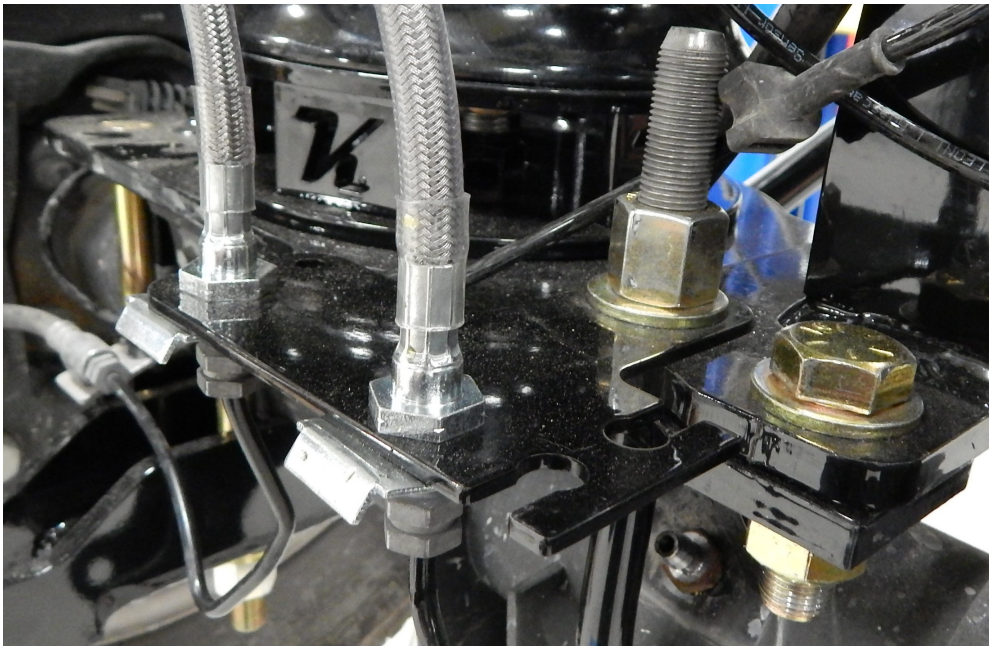
2017+ Ford F-250/350 4X4 Rear 6-8" Lift Kit Installation Instructions



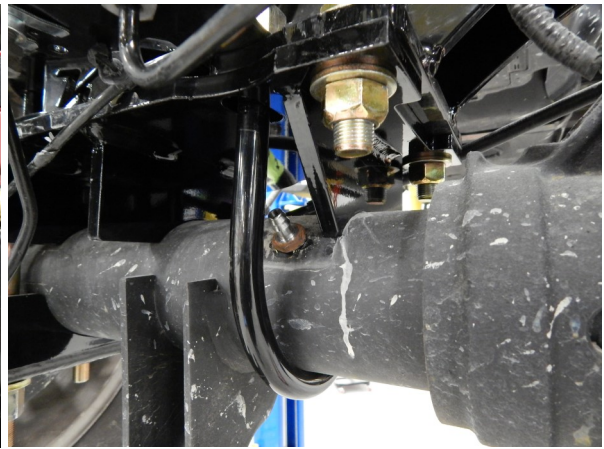
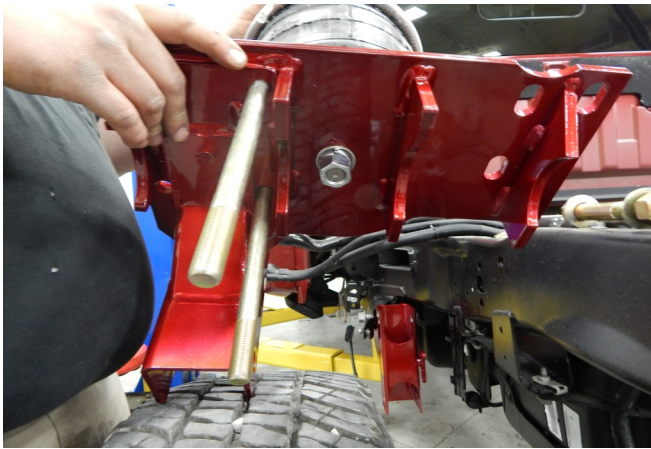
1. Before you remove anything off the truck, measure the pinion angle on the bottom of the differential. Make sure to record the measurement here _____. Once the kit is installed, it is required to put the axle back to this measurement. This will keep the correct pinion angle and should keep shutter upon take off and driveline vibration to a minimum.

2. Raise the truck enough to remove the leaf springs. Remove the bolts that hold the front of the leaf spring and rear shackle in place. The leaf springs and the shackles will not be reused. Remove the rear shocks, they will not be reused. On the driver side forward leaf spring bolt, you will have to lower the fuel tank a couple inches and move it inward to get the bolt out.

3. Locate the supplied brake lines and the brake line mounting bracket (Part # 69444). Locate the mount and install the brake lines. The bracket will install on the U-bolt in step 6. **Bleed the brakes before the initial test drive.**



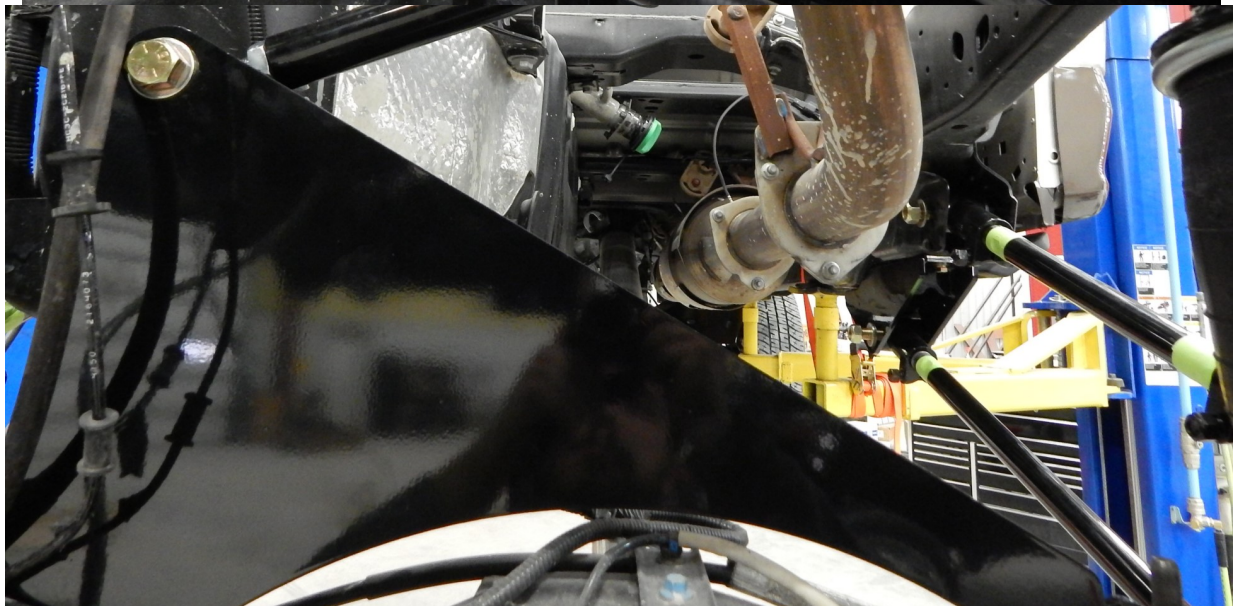
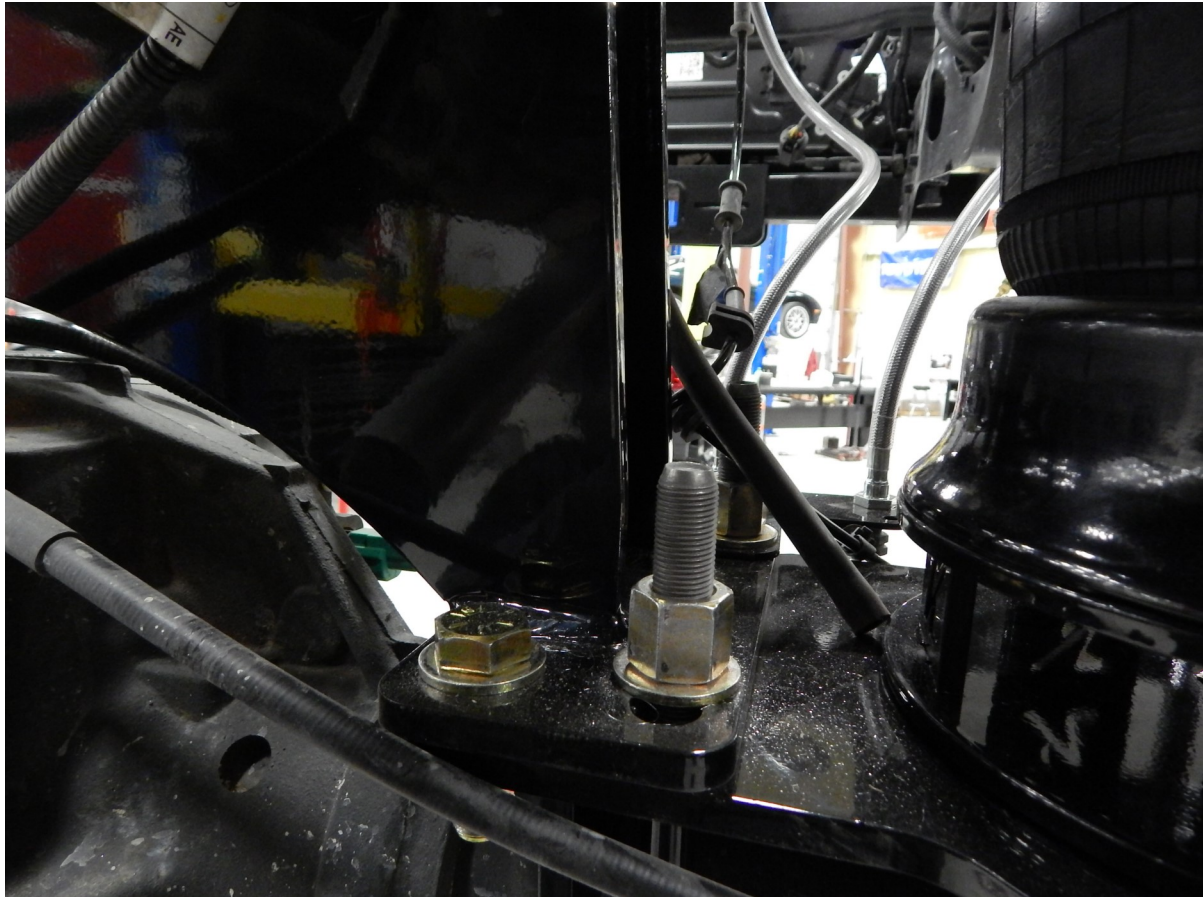
4. Locate the (2) 5748 air bags (Part # F5748), the (2) lower air bag risers (Part # 69254), lower air bag mounts (Part # 69257DS and 69256PS) and (4) 5/8 x 9" bolts. Locate the risers and fasten them to the bottom of the air bags. Torque the 3/4" nut on the bottom air bag stud to 35 ft./lbs. Locate the lower air bag mounts. Drop (2) 5/8 x 9" bolts down through the inner holes on the mount. Place the air bag and spacer on top of the lower air bag mount. Fasten the 3/4" nut on the welded stud to the bottom of the lower air bag mount. Snug this nut up, but don't torque yet. You will need to rotate the air bag to line up with the upper air bag mount in step 9.
5. Place the lower air bag mounts on top of the axle. Locate the axle clamps/shock mounts (Part # 69165DS and 69164PS). Drop the other (2) 5/8 x 8" bolts down through the lower air bag mount and attach the axle clamps. The shock mounts on the lower axle clamps must be mounted towards the inside of the frame. Snug up the 5/8 bolts, but do not torque yet.

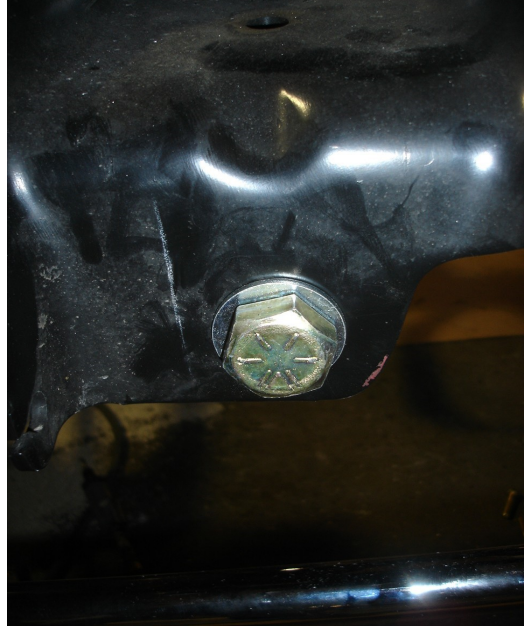


NOTE: There are several different rear axle sizes found in this truck. Double check that the lower airbag mounts and axle clamps you have are for the correct axle diameter. 3.5", 4", and 4.5" axles can be present in these trucks.



6. Locate the lower crossmember (Part # 69258). It fastens to the lower air bag mounts with the (2) 5/8 x 2" bolts on each side and the (2) 4 1/2" U-bolts (the tall end goes on the drivers side). When installing the drivers side U bolts, make sure to slide the brake line bracket over the back U bolt stud that was installed in step 3. Torque the 5/8" bolts to 150 ft./lbs. and the U-bolts to 55 ft./lbs.





7. Before installing the upper trailing arm, the factory hole in the forward leaf spring perch will need to be drilled out to 7/8". Locate the upper trailing arms (Part # 52124) and the provided spacer bushing. The spacer will go on the outside of the trailing arm knuckle away from the frame. Adjust the distance between the knuckles to 17". The bars will install into the top hole on the lower air bag mount with the 7/8 x 5" bolts. The opposite end goes into the forward leaf spring perch with the 7/8 x 5 1/2" bolt.

8. Locate the lower trailing arms (part # 52136) and the lower trailing arm mounts (Part # 69321). Adjust the distance between the knuckles to 29 3/4". The rear portion of the lower trailing arm mounts will bolt to the bottom of the frame with the (2) 1/2 x 1 1/2" bolts, (use the nut insert Part # 69446). The front portion of the trailing arm mount will weld to the frame. The rear holes in the bottom of the frame/trailing arm mount must be drilled. The side with the 1/4" threaded holes goes on the outside to attach the Kelderman logo plate (Part # 69340).

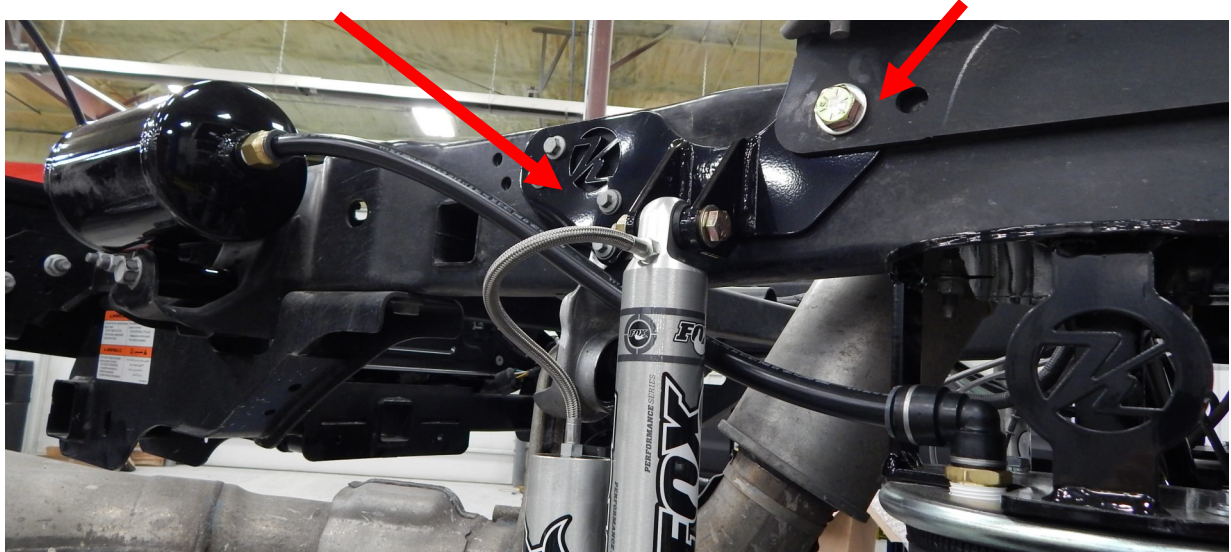
Weld the front of the bracket to the frame
and wrap the corners 1/2" back

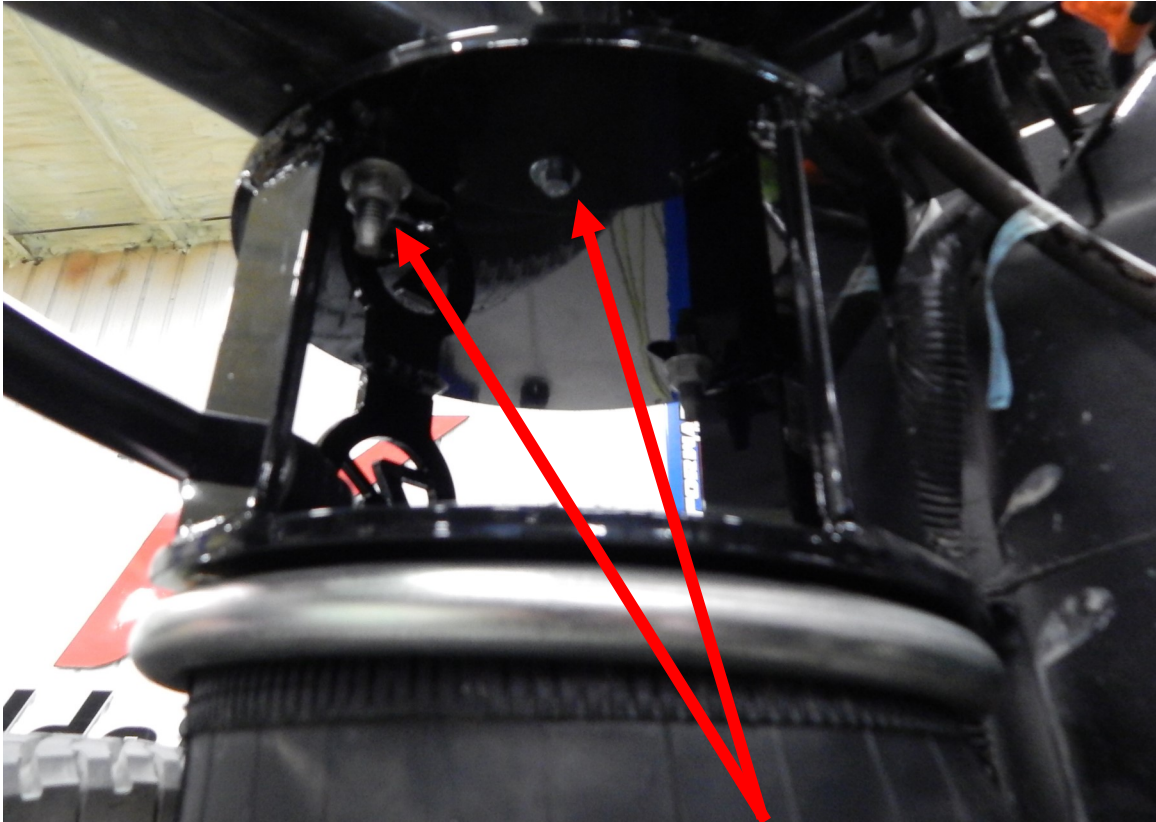


9. Locate the upper air bag mounts (Part # 69439DS and 69440PS). The passenger side has the upper panhard bar mount integrated into the bag plate). Locate the upper shock mounts (Part # 69316DS and 69319PS). Remove the bump stops from the bottom of the frame and keep the hardware. These bolts and nuts are used to bolt the upper air bag mounts to the bottom of the frame. Fasten the top of the air bag mounts to the factory hitch mount with the (2) 5/8" x 2" bolts. The side of air bag mounts fasten to the frame with the 5/8" x 4 1/2" bolts. The shock mount needs to be on the outside of the frame when installing the 5/8" x 4 1/2" bolt. The shock mount also shares the 5/8" x 4 1/2" bolt. To attach the passenger side shock mount, you will need to remove the factory exhaust hanger and cut off the outer bracket that bolts to the frame. Use the factory bolts that held the exhaust hanger in place to fasten the shock mount. If the truck has a 5th wheel hitch, the shock mount will fit behind it and will share the bolt. Use the supplied spacer on the front 5/8" bolt between the hitch and the frame. Torque the 5/8" bolts to 150 ft./lbs.

Driver's side rear shock mount will use the exhaust hanger bolts as shown

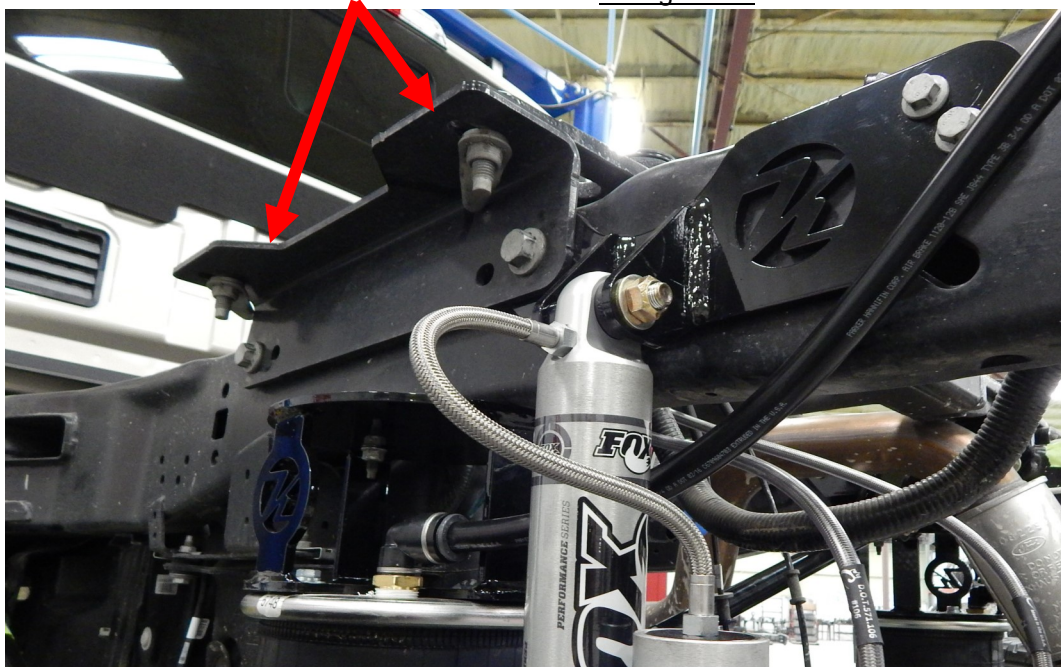
The forward portion of the shock mount will bolt to the 5th wheel hitch mount, if equipped





Factory hitch plate overlaps the shock mount

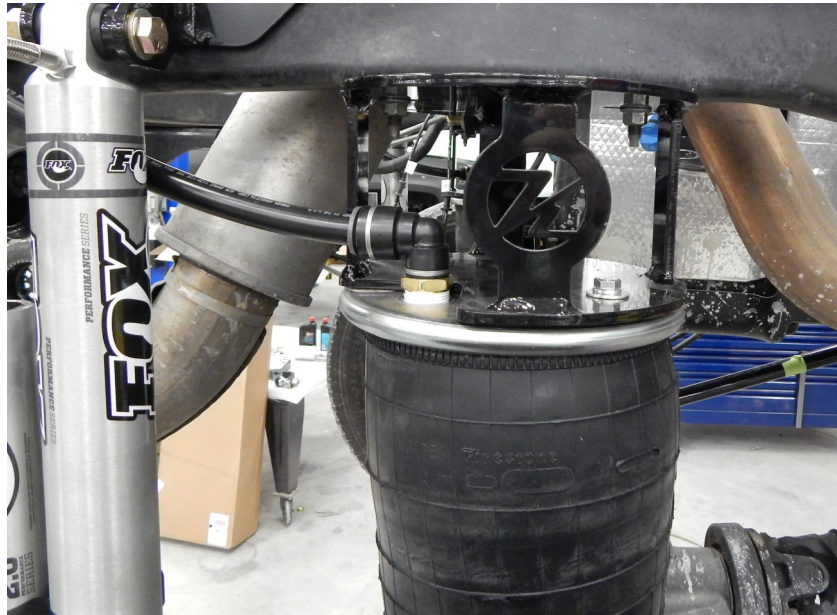
Factory bump stop bolts shown installed on upper airbag mount



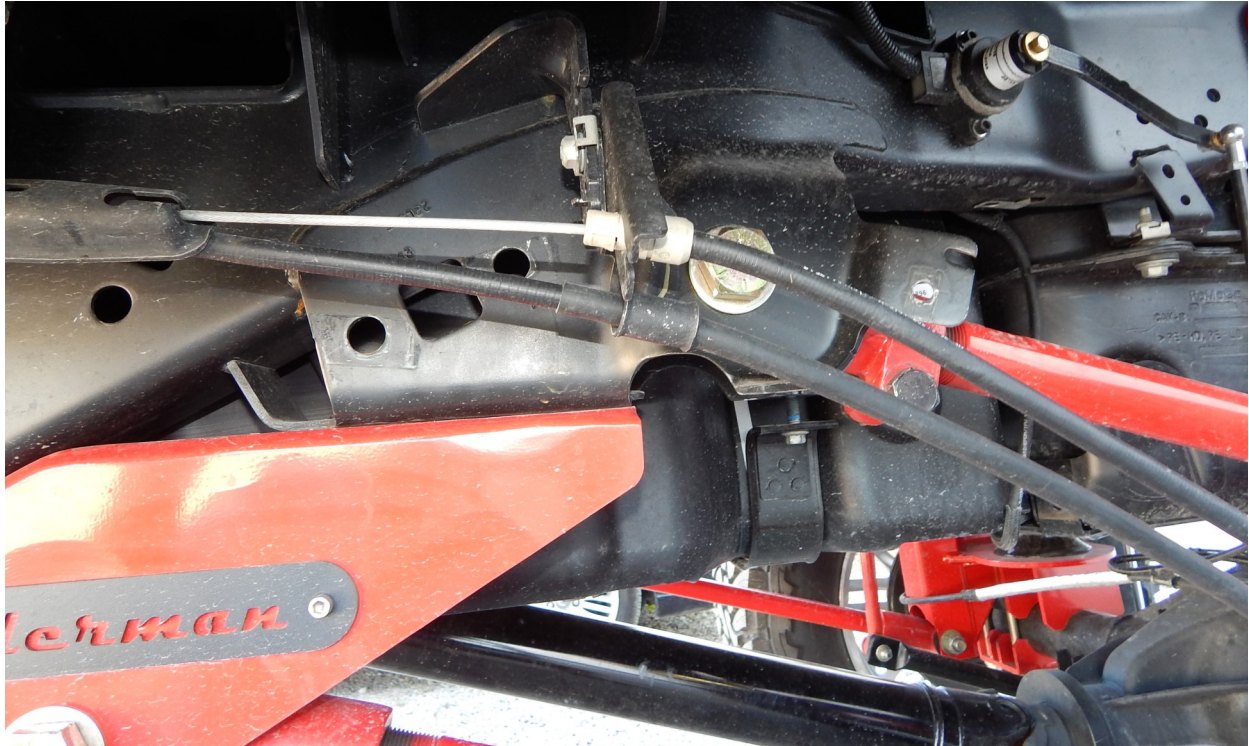
Drivers side shown

1/4" thick washers fit between hitch plate and frame

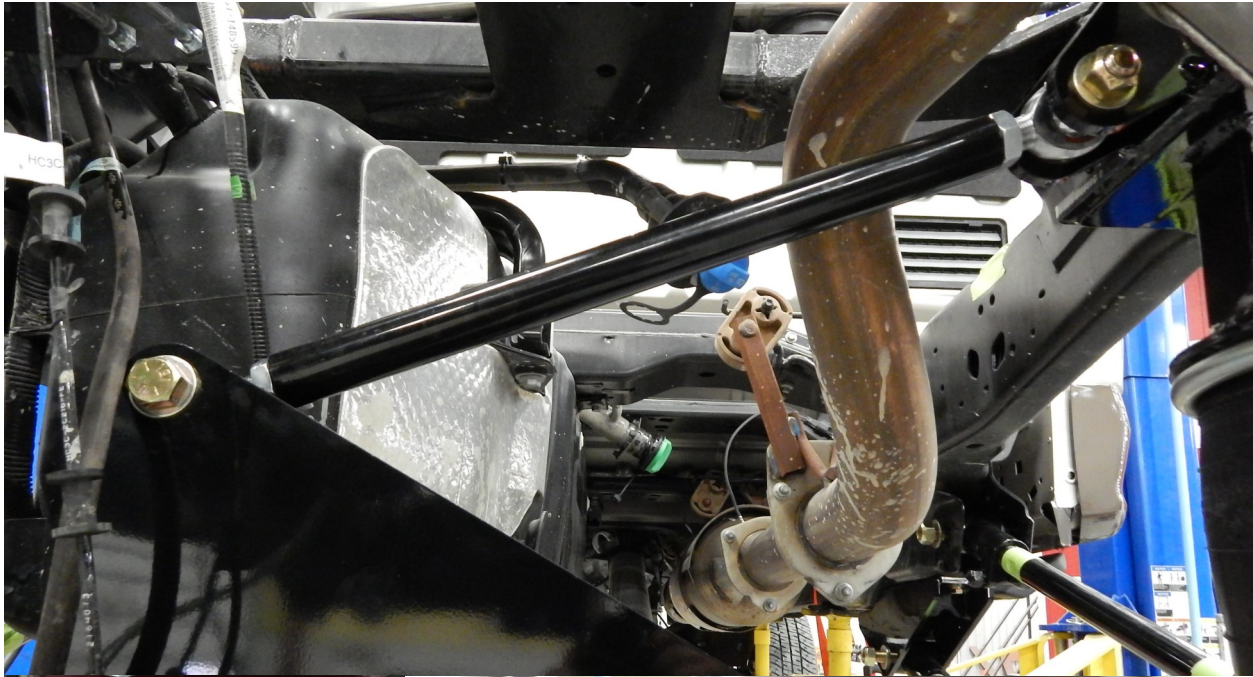
10. Locate the accumulator tanks (Part # 69150DS and 69150PS) and the 3/4" air line. Fasten the air bag into the upper air bag mounts with the 3/8" x 1" bolt. Torque the bolt to 35 ft./lbs. Torque the bottom bolt of the air bag to the spacer to 35 ft./lbs. The bottom bolt on the spacer that connects the spacer to the lower air bag mount can be torqued to 100 ft./lbs. Insert the air fitting and tighten to 35 ft./lbs. Make sure the fitting is pointing to the rear of the truck. Install the accumulator tank where the rear leaf spring shackle attached to the frame. Use the OEM leaf spring bolt to fasten the tank in place. Make sure the large port is facing towards the air bag. Torque the bolt to 135 ft./lbs.



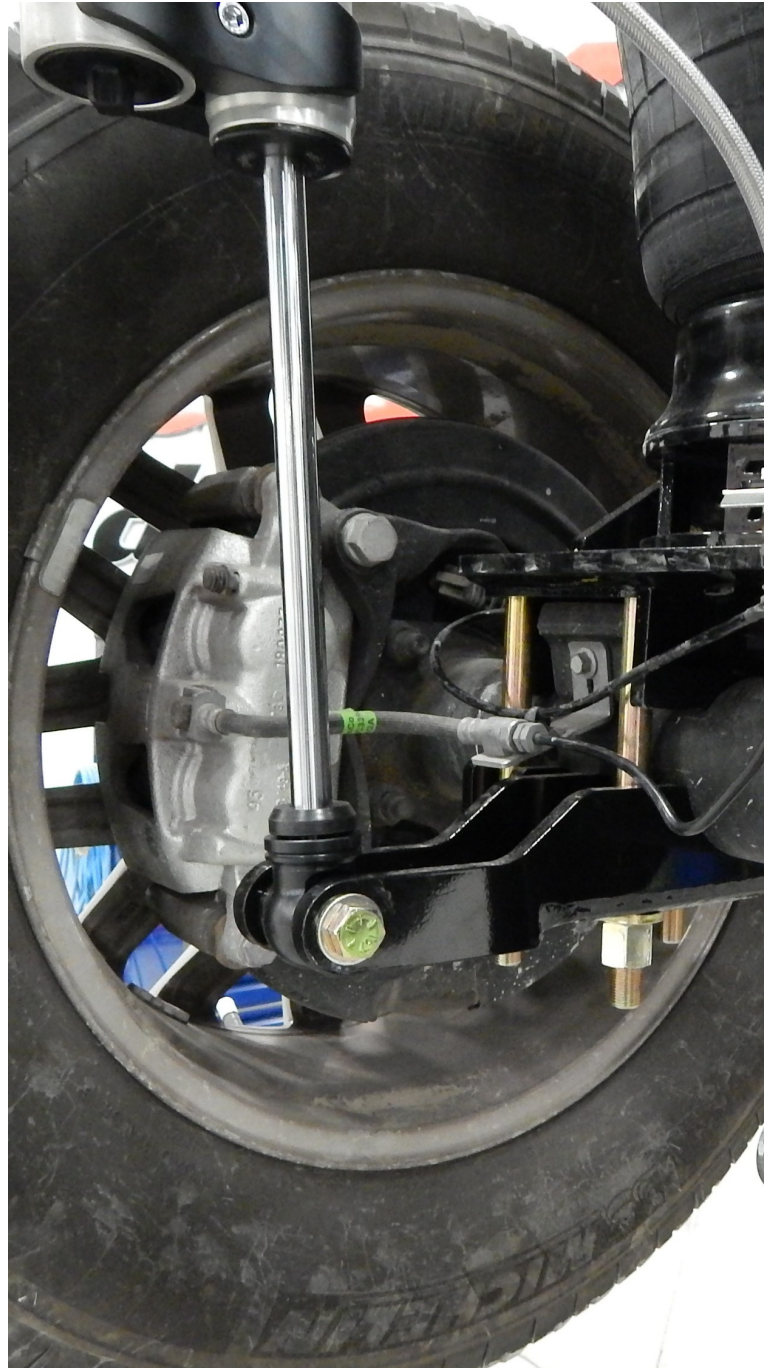
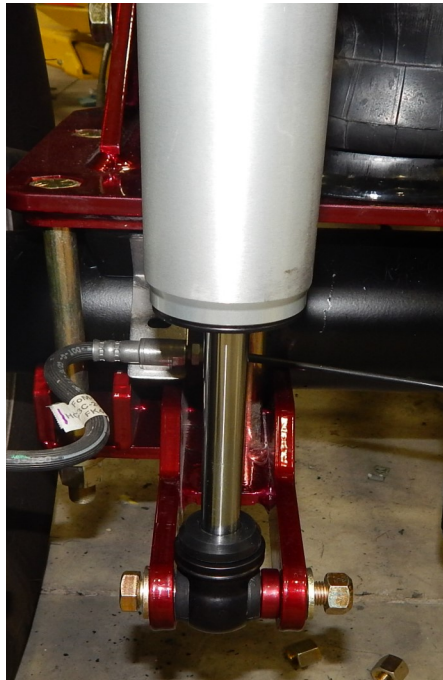
11. Locate brake line extension bracket. It fastens to the original parking brake location. Remove the lower cable from the factory mount and install the provided re-location bracket. Use the supplied 3/8" x 1" bolt to fasten the relocation bracket to the original factory mount. Shown below.



12. Locate the track bar (Part # 69470) and the spacers (Part # 18785 and 18786). Fasten the track bar into the passenger side lower air bag mount with the 3/4" x 3-1/2" bolts. Use a spacer on each side to center up the heim end. The other end of the track bar fastens into the pan hard bar drop on the drivers side upper air bag mount with a 3/4" x 3-1/2" bolt. Use the spacers to center up the heim. Set the center to center measurement 34-1/4" and torque the 3/4" bolts to 200 ft./lbs. Once the install is complete, measure each side of the frame to the tire to make sure the axle is centered. If not, shorten or lengthen the bar as needed.



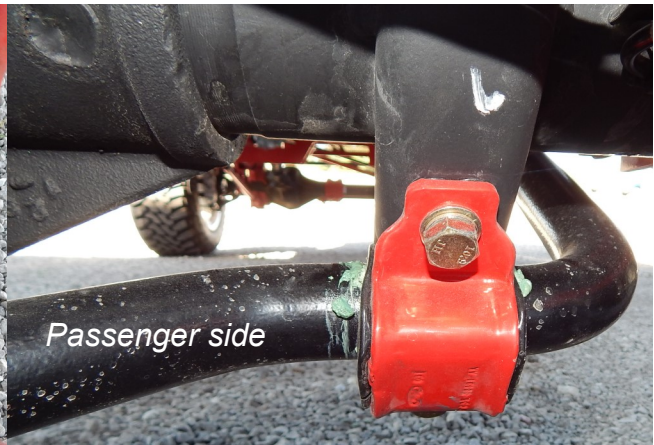
13. Locate the shocks. They mount in the upper shock mount with the 1/2 x 3" bolt and into the lower axle clamp with the 1/2 x 3" bolts. Depending which shock you have, it may or may not require spacers (Part # 18769). Torque the 1/2" bolts to 85 ft./lbs.



14. Locate the upper sway bar end link mounts (Part # 69335DS and 69338PS) and sway bar (Part # 1139-182KLD). These mount to the frame with D rings (Part # 80140) and 1/2 x 1 1/2" bolts. Torque these bolts to 85 ft./lbs. Locate the 19" end links. They fasten to the upper end link mount with the 1/2 x 3" bolts and to the sway bar with the 1/2 x 3" bolts. Use the factory clamp to fasten to the sway bar and use the new poly bushing for the larger diameter sway bar. Torque the 1/2" bolts to 85 ft./lbs. Make sure the large washer on the bottom end link goes against the poly bushing.



Make sure thick washer goes against the poly bushing on end link



15. Locate the (optional) Hadley sensor and mount it to the frame just behind the rectangle opening as shown in the picture below. Drill the holes in the frame with a 13/64" hole and thread the holes to 1/4-20" with a tap. Mount the sensor to the frame. Place the collar on the top bar 10" from the front knuckle. This should set the linkage straight up and down.

16. Hook the linkage up to the sensor and collar. The linkage should be around 8 3/8" center to center. There is a lock pin that needs to be removed when installing or removing the linkage from the balls on the collar and sensor.

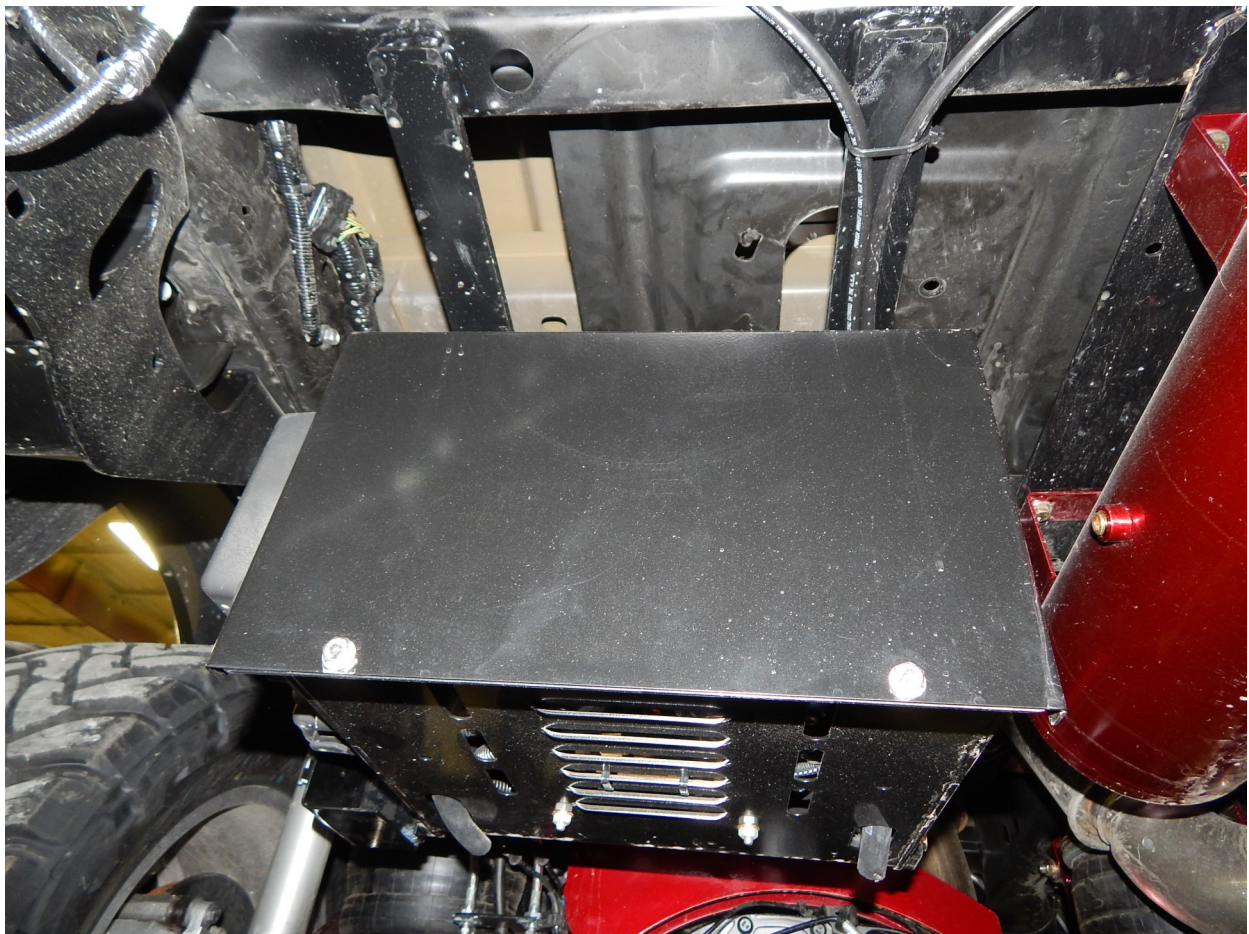


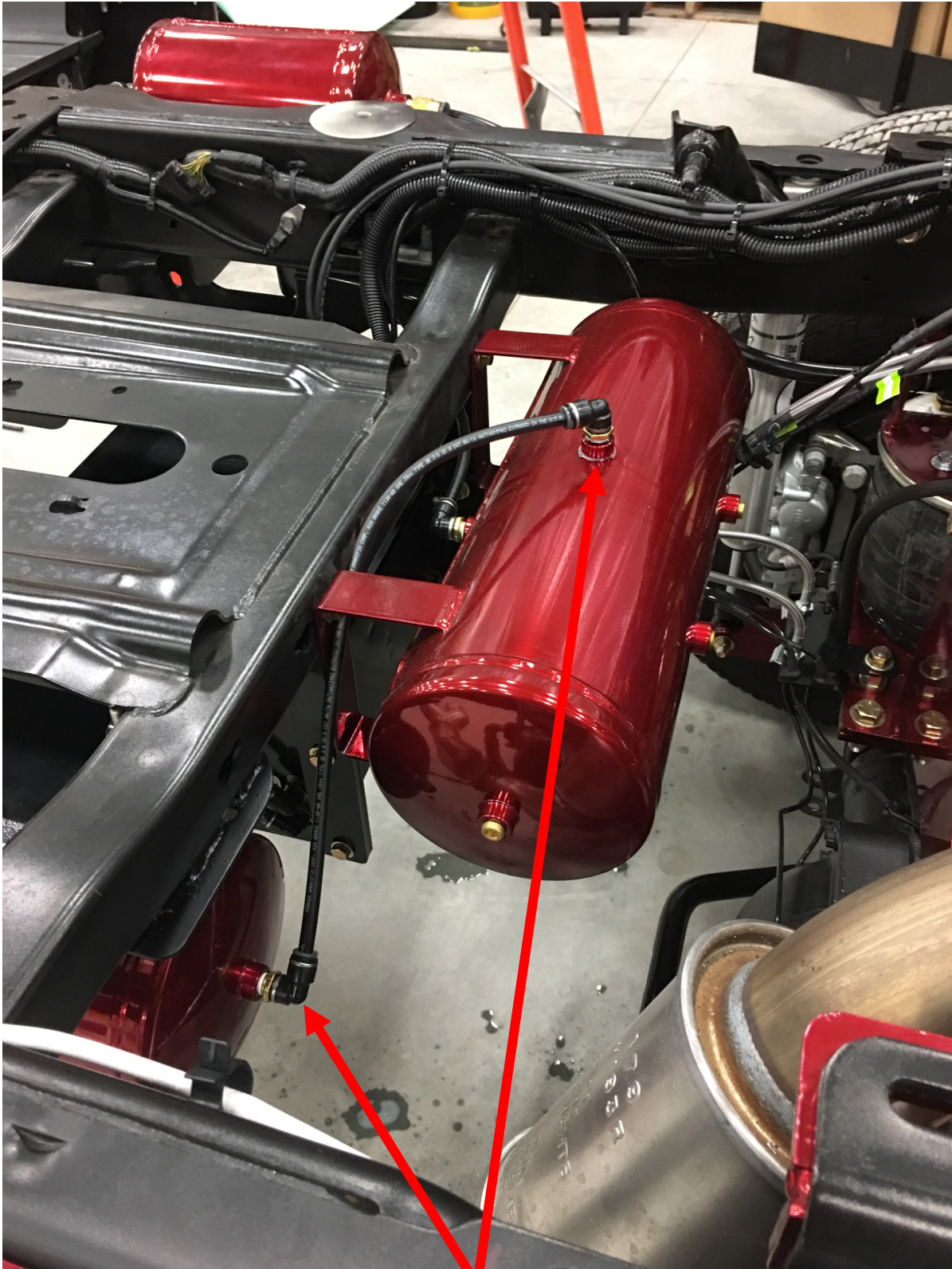
17. With the install is nearly complete, inflate the air bags to 8" (measure between the upper and lower air bag mounts). Adjust the upper trailing arm set to 17" between the knuckles and the lower trailing arms set to 29 3/4" between the knuckles. Adjust the track bar set to 34 1/4" center to center. If your truck is a long box, you will need to space the center carrier bearing down. Use the supplied shims to drop the carrier bearing 1 1/4".

18. The best place for the controls box and air tank is where the spare tire originally went. Use the supplied mounting tabs and weld them to the spare tire carrier. Make sure to use a battery protection device on the batteries or unhook the batteries before welding!

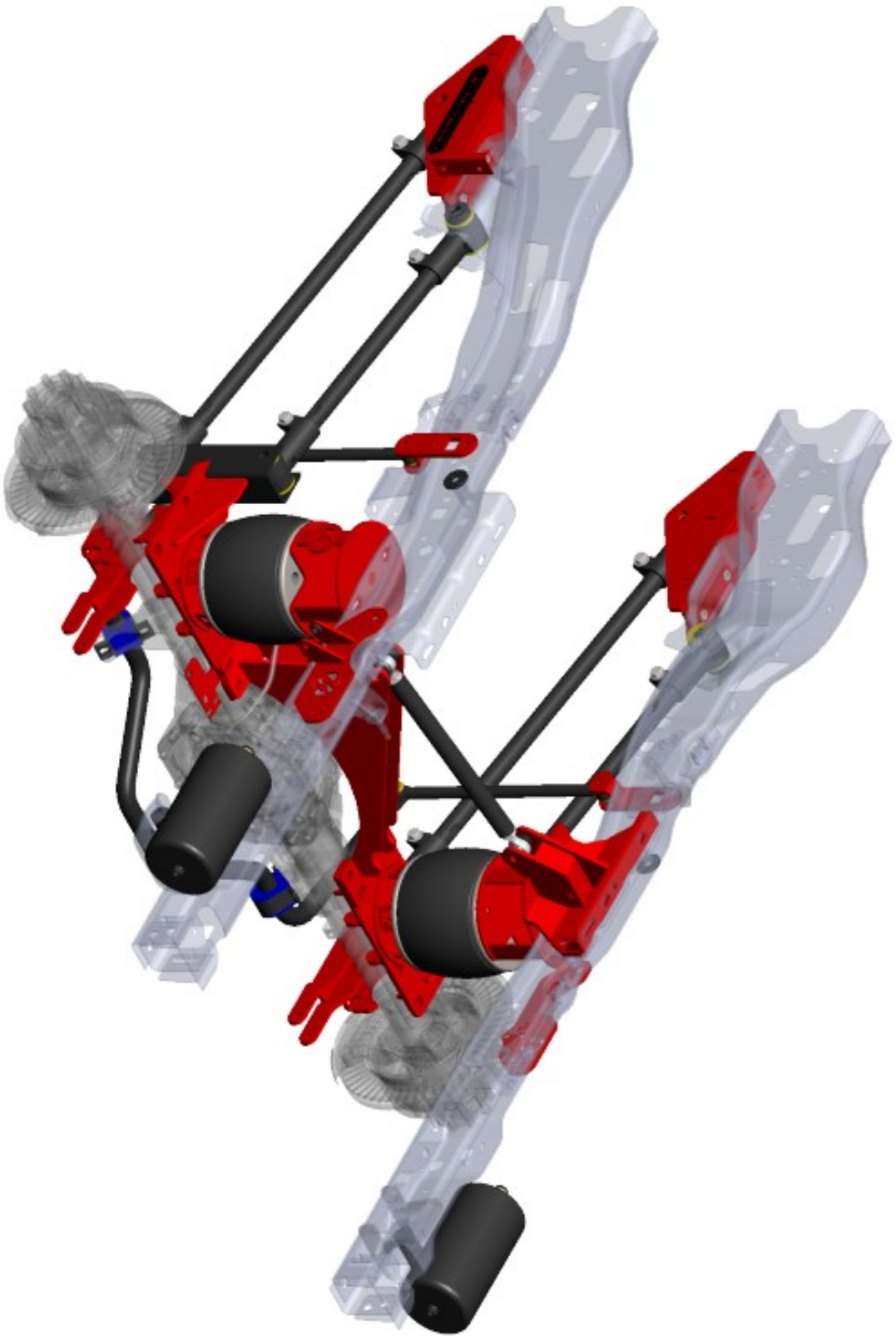
Mount one air tank beside the box and mount the other tank on the front side of the crossmember. Refer to the picture on the next page.

There is also an install video on YouTube that shows how to dial the system in after it is installed. Our YouTube page can be found at [YouTube.com/User/Keldermantrucks](https://www.youtube.com/user/Keldermantrucks).

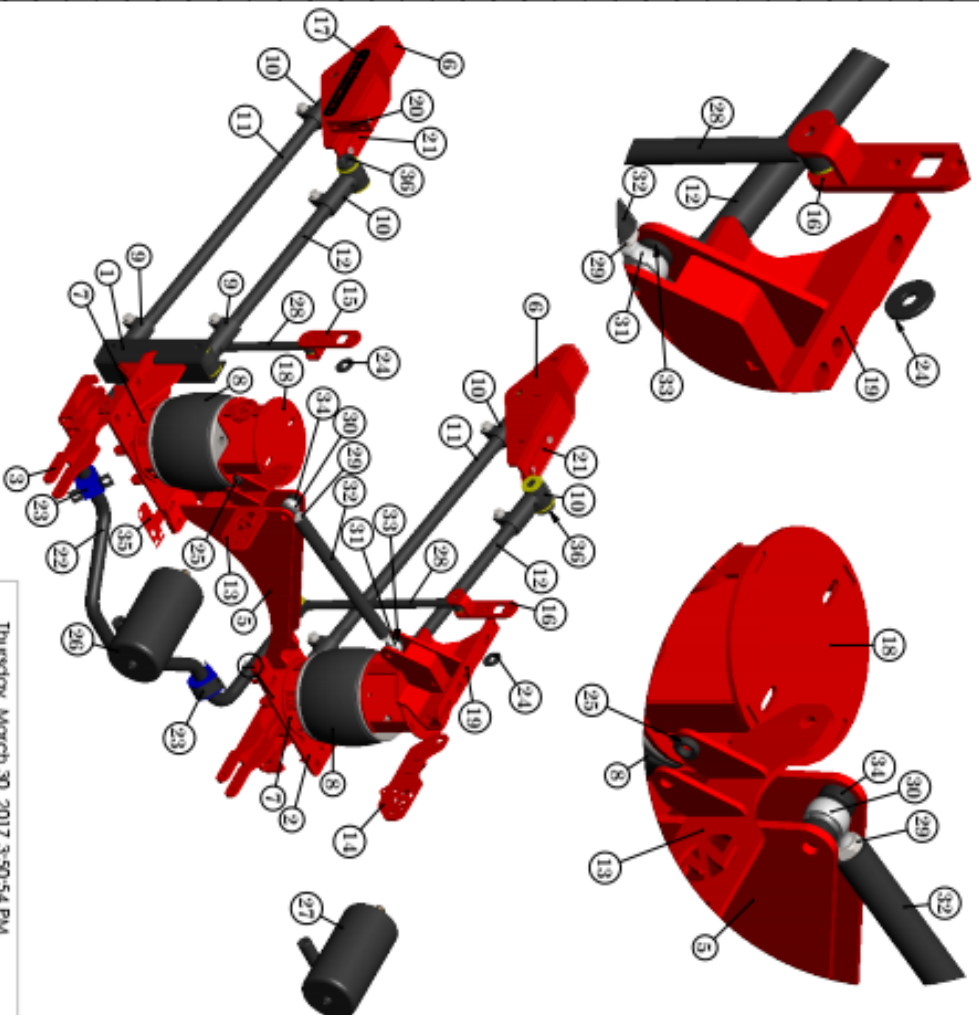




Two tanks plumbed together.
Tank shown mounted to front of spare tire mount/crossmember



ITEM NO.	PART #	DESCRIPTION	QTY.
1	69257	(D5) Lower Axle/Bag Mount 4.5" Axle	1
2	69256	(F5) Lower Axle/Bag Mount 4.5" Axle	1
3	69164	(D5) 4.5" Axle/Shock Bracket	1
4	69165	(F5) 4.5" Axle/Shock Bracket	1
5	69298	(F18) Crossmember	1
6	69321	Trailing Arm/Frame Mount	2
7	69254	2" Biter	2
8	5748	5748 Fastlane Air Bag	2
9	18498	Trailing Arm Knuckle 10006	4
10	18499	Trailing Arm Knuckle 10005	4
11	52136	3/4" Trailing Arm Bar	2
12	52124	21.5" Trailing Arm Bar	2
13	69316	(D5) Upper Shock Mount	1
14	69319	(F5) Upper Shock Mount	1
15	69335	(D5) End-Link Bracket	1
16	69338	(F5) End-Link Bracket	1
17	69340	Plate 14ga - Kelderman Badge	2
18	69439	(D5) Upper Bag/Frame Mount	1
19	69440	(F5) Upper Bag/Frame Mount	1
20	69444	Brake Reabsorption Bracket	1
21	69446	Perch Mounting Tab	2
22	1139-182KLD	1139-182KLD Sway Bar	1
23	80140	4139-180KLD	2
24	16955	(F18) Spooce (5/8" Bolt)	2
25	18769	Shock Bushing	2
26	69150	(D5) Accumulator Tank	1
27	69151	(F5) Accumulator Tank	1
28	16777	19" End Link	2
29	13208	Join Nut - 3/4"	2
30	80109	(R5) Bolt Johni Rod End 3/4x1.6 x 3/4"	1
31	80110	(LH) Bolt Johni Rod End 3/4x1.6 x 3/4"	1
32	69470	16.5" Panhard Bar	1
33	18786	Narrow Pan Hard Bar Reducer/Spooce 3/4" To 5/8" Bolt	2
34	18785	Wide Pan Hard Bar Reducer/Spooce 5/8" To 3/4" Bolt	2
35	69036	Rear Axle Brake Line Bracket	1
36	18788	Bushing - 2" OD x .875" ID x .5625" Thick	2



UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES TOLERANCES, UNLESS SPECIFIED FRACTIONAL ± 1/32" ANGULAR: MACH ± 5° TWO PLACE DECIMAL ± .03 THREE PLACE DECIMAL ± .010		DESIGN BY	ZPB	Project:	Thursday, March 30, 2017 3:50:54 PM
MATERIAL		NEW DXF		TITLE:	4-Link 6-8" Lift 4.5" Axle
		RUN QTY		DWG. NO.	KLM-69018
		PROPRIETARY AND CONFIDENTIAL		SCALE: 1:32	DO NOT SCALE DRAWING
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