Version 1.4

New front driveshaft will be required.

This kit requires welding.

Electronics protection is Recommended.

Part #10003641
Part #10005987

Required Tools:
-90 degree drill
-1/4-20”, 3/8-24”, and 1/2-20” taps
-Welder

INSPECT ALL CONTENTS OF KIT PRIOR TO BEGINNING THE NSTALLATION

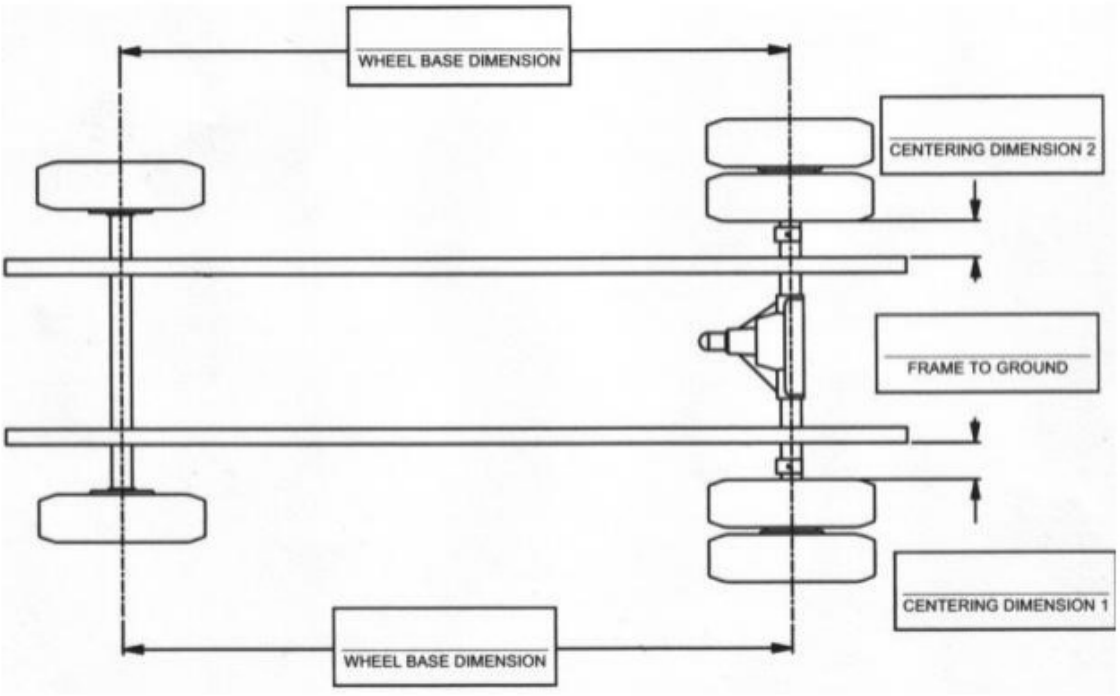
2686 Highway 92 - Oskaloosa, IA 52577
phone: 641.673.5396
www.kelderman.com

2019+ Ram 2500/3500 10-12” Front Lift Kit Installation Instructions

Bolt Fastening Torque Guide

BOLT DIAMETER	ft. lbs.
1/4"	10
5/16"	20
3/8"	37
7/16"	58
1/2"	90
9/16"	129
5/8"	180
3/4"	315
7/8"	501

1. Measure all dimensions below before any uninstalling or installing.



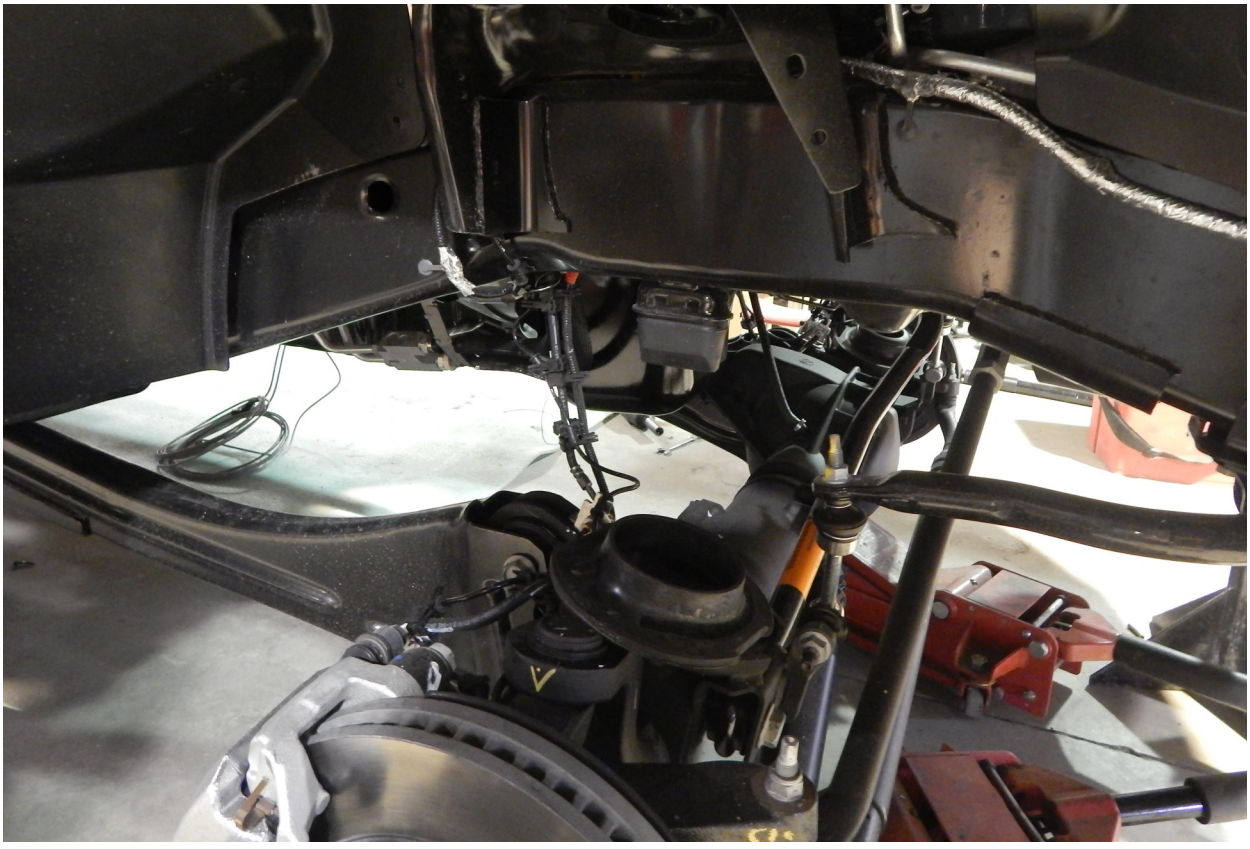
1. Measure the angle the front differential makes with the ground and take note of where on the differential the measurement took place.

2. To measure the angle, find a flat surface to attach angle gauge. Mark the location of your gauge with a marking pen or scribe. Record the angle on the gauge for future reference.

3. Write angle here ____.

Note: It may be necessary to remove gauge. Marking the position of the gauge is critical to ensure accurate angle readings during adjustment steps of the assembly of the suspension system.

1. If you are not using a lift, jack the truck up by the front axle and place jack stands under the front of the frame just behind the radiator. Remove the wheels. Remove the shocks and unhook the sway bar end links from the sway bar. Lower the jack down so the tension is off the coil springs and remove them. Since we will be welding on the chassis, disconnect all the battery cables or attach an electronics protection device on the battery.



2. Remove the transfer case. On the 2500/3500 single wheel trucks, you will have to remove the transmission crossmember to get the transfer case out. With 3500 dual rear wheel trucks, the DEF tank and crossmember need to be dropped 4-5” and pushed towards the rear of the truck.

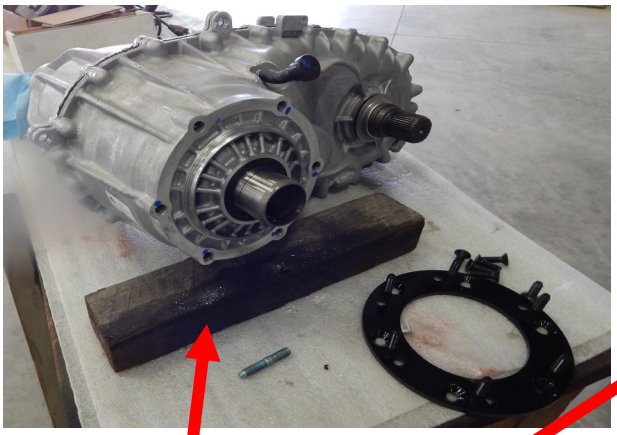
3. Remove the front and rear drive shafts. To remove the front driveshaft off the transfer case, the collar has to be spread apart and then the driveshaft will be slid forward. The easiest way to do that is with a pair of pliers like the ones shown below.

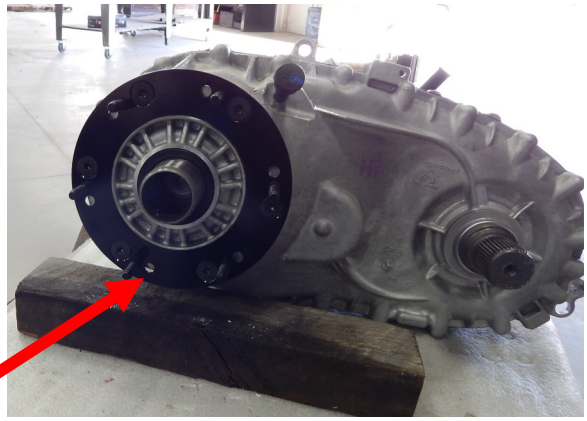
4. Place a jack under the transmission. Use a block to distribute the weight over the entire transmission pan. Remove the three nuts from the transmission mount where it fastens to the cross member. Remove the four bolts that hold the transmission crossmember in place. On the passenger side you will need a Sawzall to cut the bolts because they hit the exhaust. ***Note***: Later models no not need to cut bolts.

5. Remove the crossmember. Loosen the two bolts that fasten the control arms to the frame. Keep the nuts for the transmission mount. Unhook the wires that go to the transfer case and remove it.

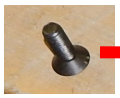
Shown: Snap-On Snap Ring Pliers #SRP2B

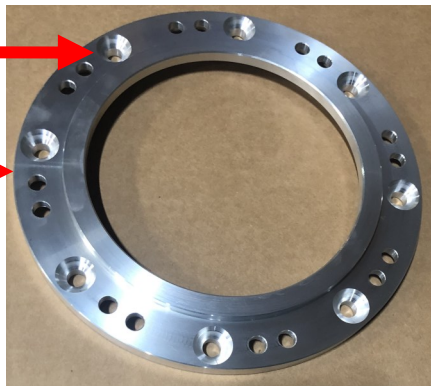
6. With the transfer case out, remove the bolts that held the transfer case in place. Locate the indexing plate. If the ARP studs are not installed, insert them in the hole furthest away from the countersunk hole. The hole closest to the countersunk hole is for the 5-6” lift. Use a vice grips to remove the studs in the transfer case. Use red Loctite, fasten the indexing plate to the transfer case with the countersunk bolts. Torque these bolts to 40 ft./lbs. Re-install the transfer case to the transmission. Use some red Loctite on the studs, and use the 3/8” nuts and washers and torque to 55 ft./lbs.





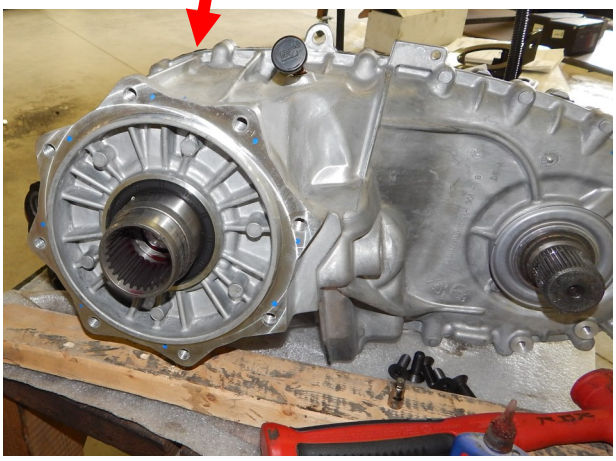
68RFE pictured above (6 bolt)
Steel Plate

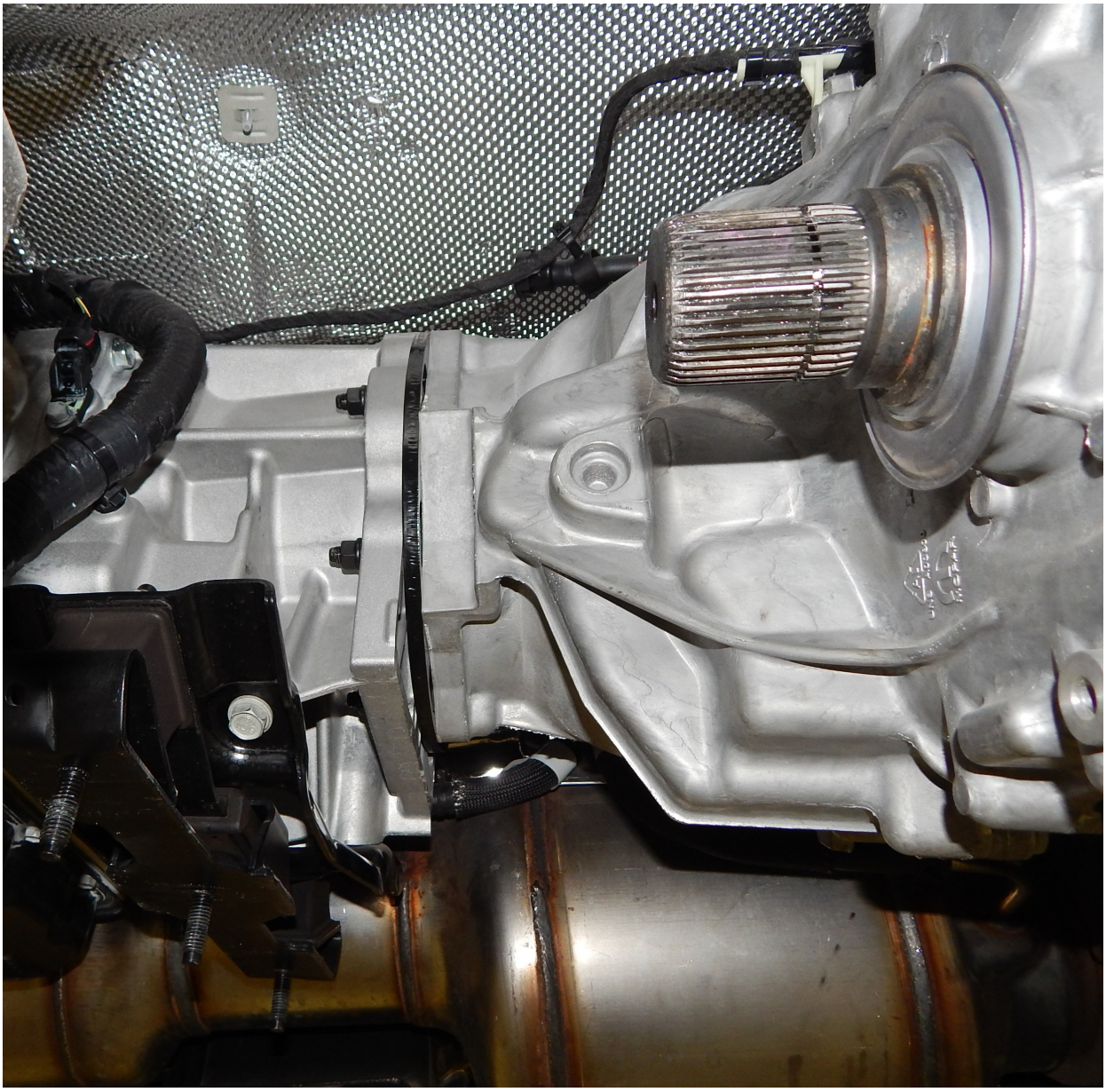




AISIN indexing ring
Aluminum Plate

AISIN 8 bolt transfer case pictured below





Indexing plate installed

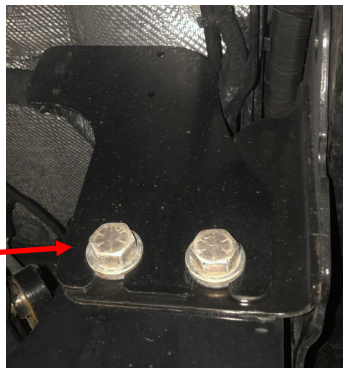
Note: *AISIN & 68RFE are different driveshafts.*
Verify your model
AISIN is 6” longer than 68RFE

7. Once the indexing plate is installed on the transfer case, locate the Crossmember (Part #10003645). It bolts to the factory mounts where the OEM transmission crossmember installed with the (4) 5/8”-18 x 8” bolts. Once the (4) crossmember bolts are installed, fasten the transmission to the crossmember with the factory nuts. Do not torque yet.

8. Locate item #3 (threaded bushings) on the exploded view diagram below. These threaded bushings will be welded to the frame. Slide the bushing between the frame and crossmember and bolt the bushing to the side plate of the crossmember. Install crossmember in place using the (4) 5/8”-18 x 8” bolts. Use a marker and mark a circle around the bushing. Remove the (4) 5/8”-18 x 8” bolts and drop the crossmember out. Weld (2) bushings to the frame (See Figure 2 on Page 9). Clean up the area and coat the welded area with paint, undercoating, etc.. Re-install the crossmember. Install the (4) 5/8”-18 x 8” crossmember bolts and the (2) 5/8”-18 x 1” side plate bolts. Locate wire loom bracket part# (18474) bolt-on to front of crossmember using the (2) driver side 5/8”-18 x 8” bolts, see figure 1.

9. Re-install the rear driveshaft and then install the *NEW* front driveshaft.

Figure 1



Wire Loom Bracket

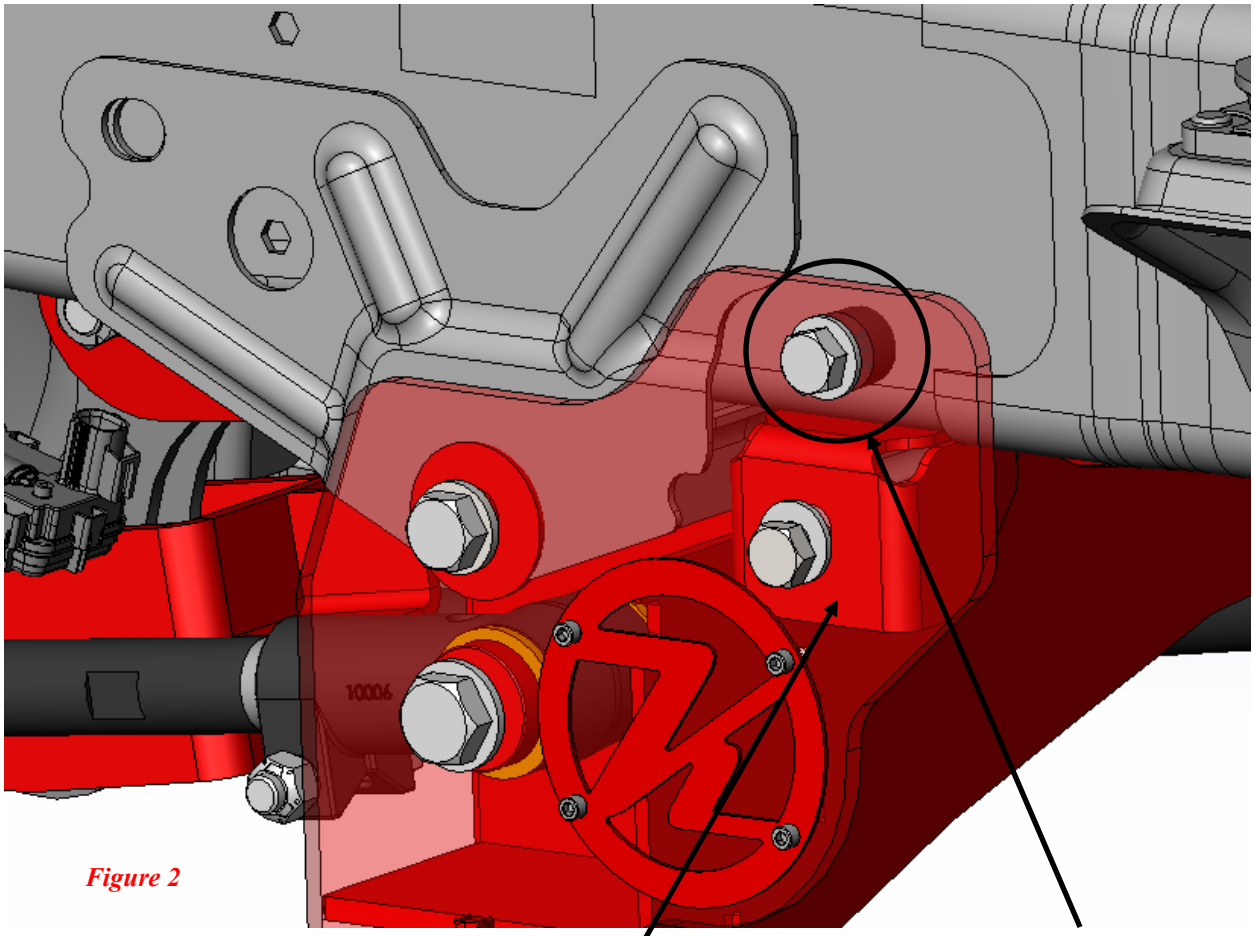
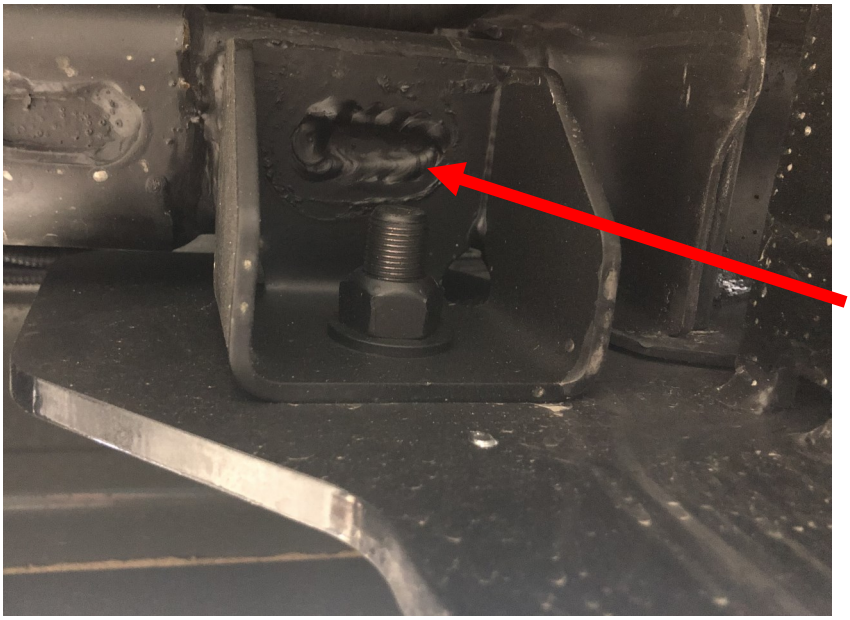


Figure 2

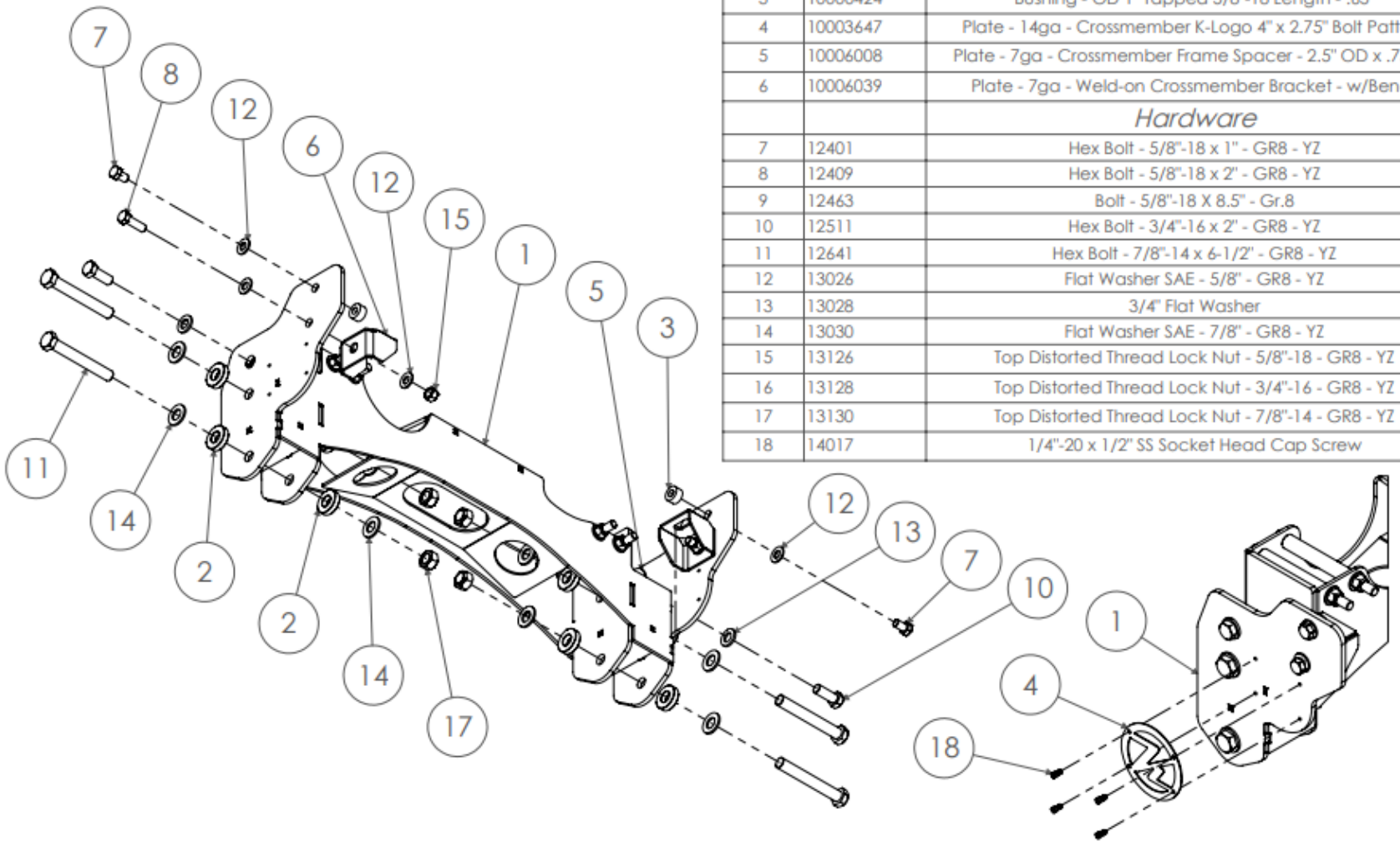
Bushing Location

Crossmember Bracket Location



Locate (Part #10006039) and bolt brackets to crossmember and mark inside slot with marker on both sides of the frame. Weld the bracket to the underside of the frame. Weld inside the slot on the bracket.

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
		Weldments	
1	10003645	Weldment - 4-Link Drop Transmission Crossmember	1
		Parts	
2	18929	Plate - 1/2" - Bushing - OD - 2" ID - 15/16" Length - 1/2" Spacer	8
3	10000424	Bushing - OD 1" Tapped 5/8"-18 Length - .65"	2
4	10003647	Plate - 14ga - Crossmember K-Logo 4" x 2.75" Bolt Pattern	2
5	10006008	Plate - 7ga - Crossmember Frame Spacer - 2.5" OD x .75" ID	2
6	10006039	Plate - 7ga - Weld-on Crossmember Bracket - w/Bends	2
		Hardware	
7	12401	Hex Bolt - 5/8"-18 x 1" - GR8 - YZ	2
8	12409	Hex Bolt - 5/8"-18 x 2" - GR8 - YZ	2
9	12463	Bolt - 5/8"-18 X 8.5" - Gr.8	4
10	12511	Hex Bolt - 3/4"-16 x 2" - GR8 - YZ	2
11	12641	Hex Bolt - 7/8"-14 x 6-1/2" - GR8 - YZ	4
12	13026	Flat Washer SAE - 5/8" - GR8 - YZ	14
13	13028	3/4" Flat Washer	4
14	13030	Flat Washer SAE - 7/8" - GR8 - YZ	8
15	13126	Top Distorted Thread Lock Nut - 5/8"-18 - GR8 - YZ	6
16	13128	Top Distorted Thread Lock Nut - 3/4"-16 - GR8 - YZ	2
17	13130	Top Distorted Thread Lock Nut - 7/8"-14 - GR8 - YZ	4
18	14017	1/4"-20 x 1/2" SS Socket Head Cap Screw	8



REV	ECN	CHANGE DESCRIPTION	CHANGE BY	DATE

3RD ANGLE PROJECTION

UNLESS OTHERWISE SPEC.
DIMS. IN INCHES
STD. TOLERANCES
X.X ±.060
X.XX ±.030
X.XXX ±.010
FRAC. DIM. ±1/32"
Deg. ± .5°

A | DO NOT SCALE DRAWING | 1:20 | Approximate Weight = lbs

MATL SPECS:

DESCRIPTION: **Assembly - 4-Link Transmission Crossmember Drop (12")**

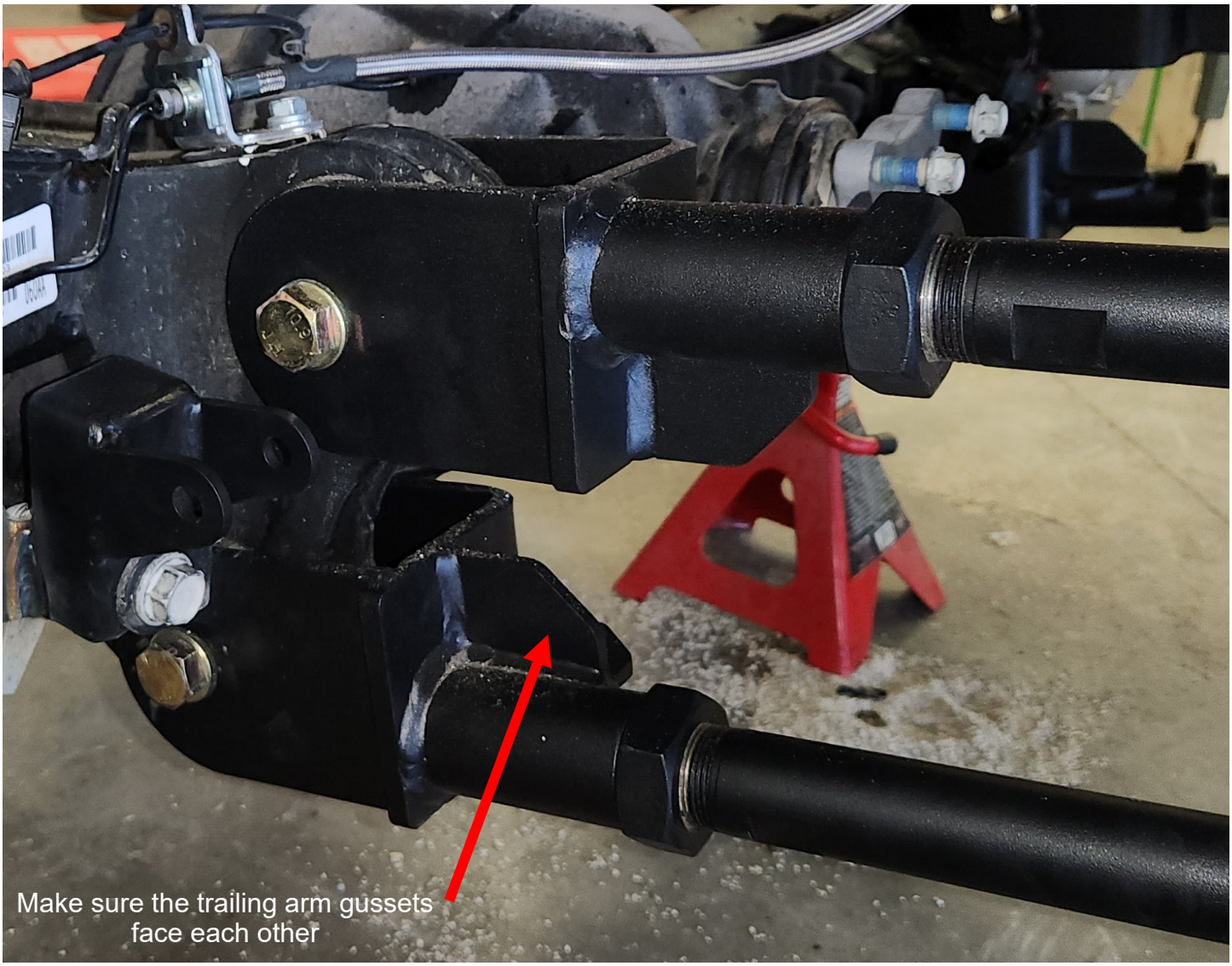
PROJECT: **2019+ Ram 2500/3500 - 4-Link Front - 12 inch Lift**

PART NUMBER: **10003644**

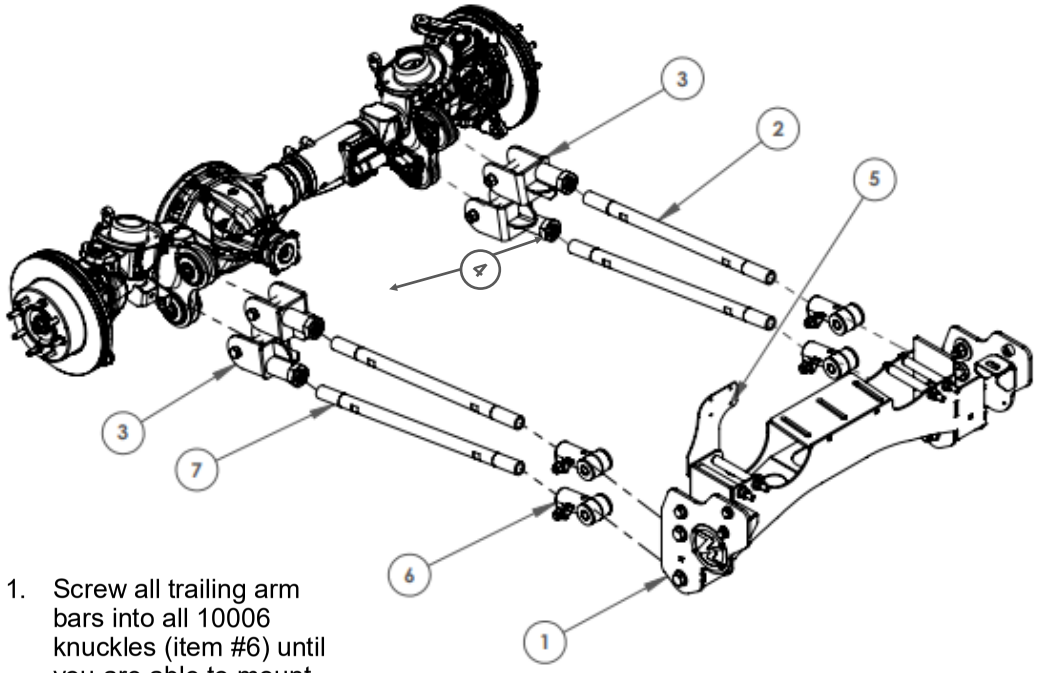
DESIGN BY: **Justin Christensen** DATE: **12/9/2021**

SHEET 1 OF 1

10. Install the trailing arms so the fabricated knuckles are spaced towards the tire. The knuckles also should be positioned so the female threaded portions are furthest away from each other.

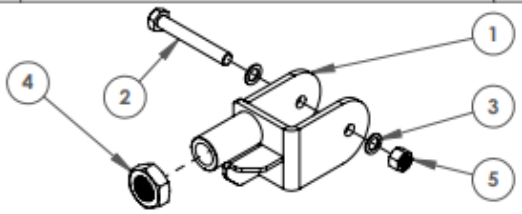


ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	10003644	Assembly - 4-Link Transmission Crossmember Drop (12")	1
2	11119	Tube - Threaded -1 1/2" - 12" ID - 1" Length - 28 1/2" Trailing Arm	2
3	18326	Assembly - (PS) Upper / (DS) Lower Trailing Arm Knuckle (RHT)	2
4	18330	Assembly - (DS) Upper / (PS) Lower Trailing Arm Knuckle (RHT)	2
5	18474	Plate - 11ga - Wiring Harness Bracket (DS)	1
6	18498	Assembly -Trailing Arm Knuckle 10006 (LHT)	4
7	52131	Tube - Threaded - 1 1/2" - 12 ID 1" Length - 31" Trailing Arm	2

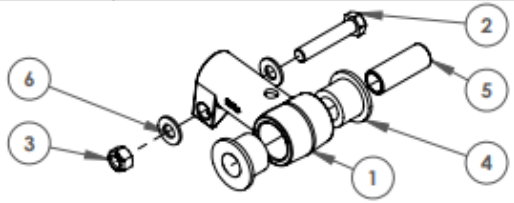


1. Screw all trailing arm bars into all 10006 knuckles (item #6) until you are able to mount items #3 & #4 to axle on DS & PS. The shorter bars on top.
2. Screw jam nuts onto all (4) trailing arm bars.
3. Screw all trailing arms into items #3 & #4 on DS & PS.

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	10000438	Weldment - (DS) Upper / (PS) Lower Trailing Arm Knuckle (RHT)	1
2	13882	BOLT - M18 X 2.5 X 130mm X 114mm - Gr. 10.9	1
3	13892	Washer - M18 Flat Washer	2
4	13219	Jam Nut RHT - 1-1/2"-12 - GR8 - YZ	1
5	14061	Top Lock Nut: M18-2.5 Class 10 - Z	1



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	10006	Purchased Parts - TORQUE ARM END (LHT)	1
2	12420	Hex Bolt - 5/8"-11 x 3-1/4" - GR5 - Z	1
3	13106	Top Distorted Thread Lock Nut - 5/8"-11 - GR5 - Z	1
4	80136	Purchased Parts - Bushing - OD 1.79" ID - 1 1/8" Length - 1 7/16"	2
5	20093	Bushing - OD - 1 1/8" ID - .88" Length - 3"	1
6	13026	Flat Washer SAE - 5/8" - GR8 - YZ	2



REV	ECN	CHANGE DESCRIPTION	CHANGE BY	DATE

THIRD ANGLE PROJECTION

UNLESS OTHERWISE SPEC. DIMNS. IN INCHES

STD. TOLERANCES X.X ±.060 X.XX ±.030 X.XXX ±.010 FRAC.DIM. ±1/32" Deg. ± .5°

A | DO NOT SCALE DRAWING | 1:15 | Approximate Weight =231.95 lbs

MATL SPECS:

DESCRIPTION: Kit - 4-Link Front - 12 inch Lift - Transmission AISIN AS69RC 6-Speed

PROJECT: 2019+ Ram 2500/3500 - 4-Link Front - 12 inch Lift - Transmission: AISIN AS69RC 6-Speed

PART NUMBER: 10005987

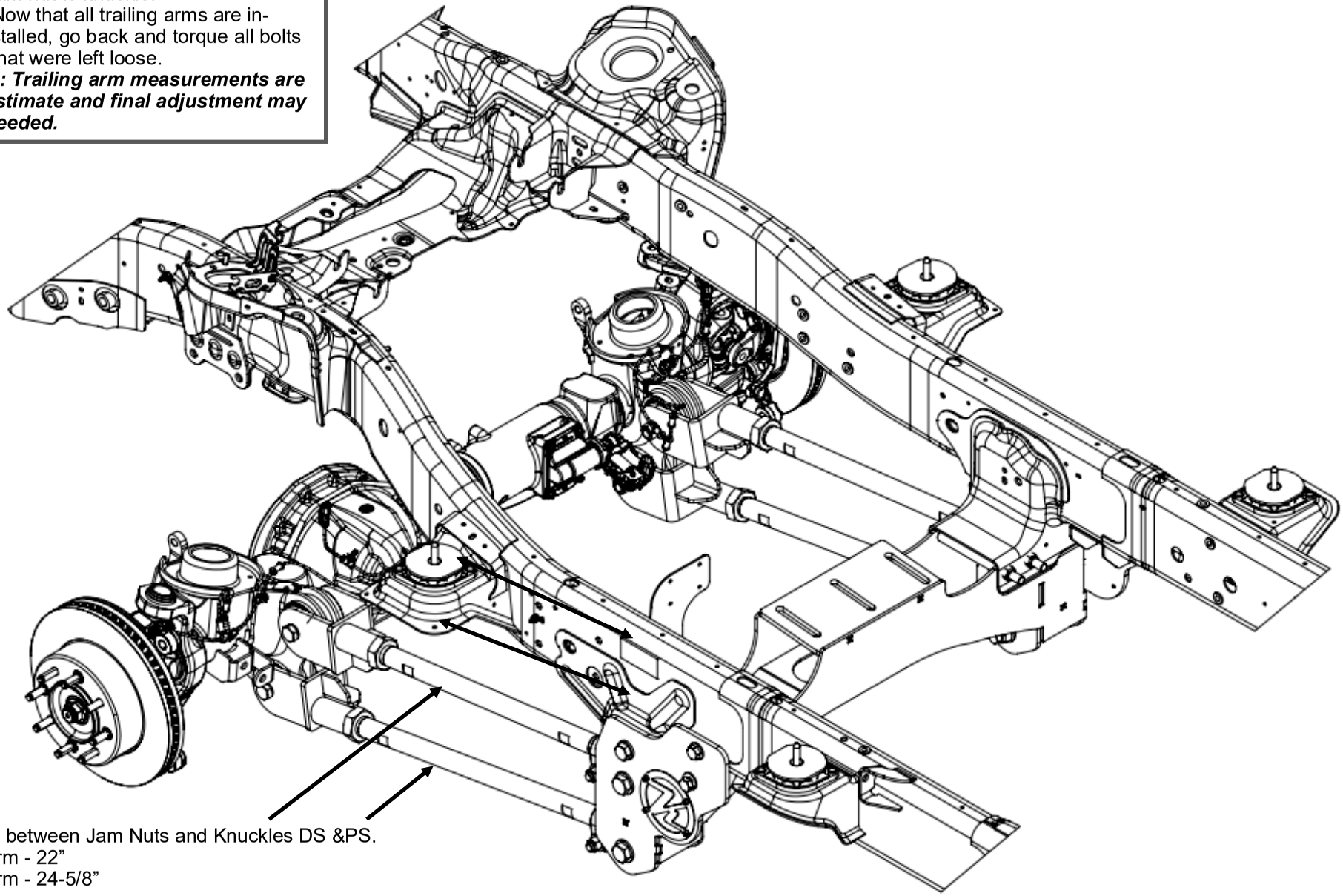
DESIGN BY: DATE: 12/9/2021

SHEET 1 OF 1

10. Once the trailing arms are assembled with the supplied knuckles, install the trailing arms into the crossmember using the 7/8” x 6-1/2” bolts. Make sure to use the supplied spacers (part # 18929) on each side.

1. Be sure equal threading is showing on both side of all trailing arm bars.
2. Measure on the uppers 22” from jam nut to knuckle.
3. Measure on the lowers 24-3/4” from jam nut to knuckle.
4. Now that all trailing arms are installed, go back and torque all bolts that were left loose.

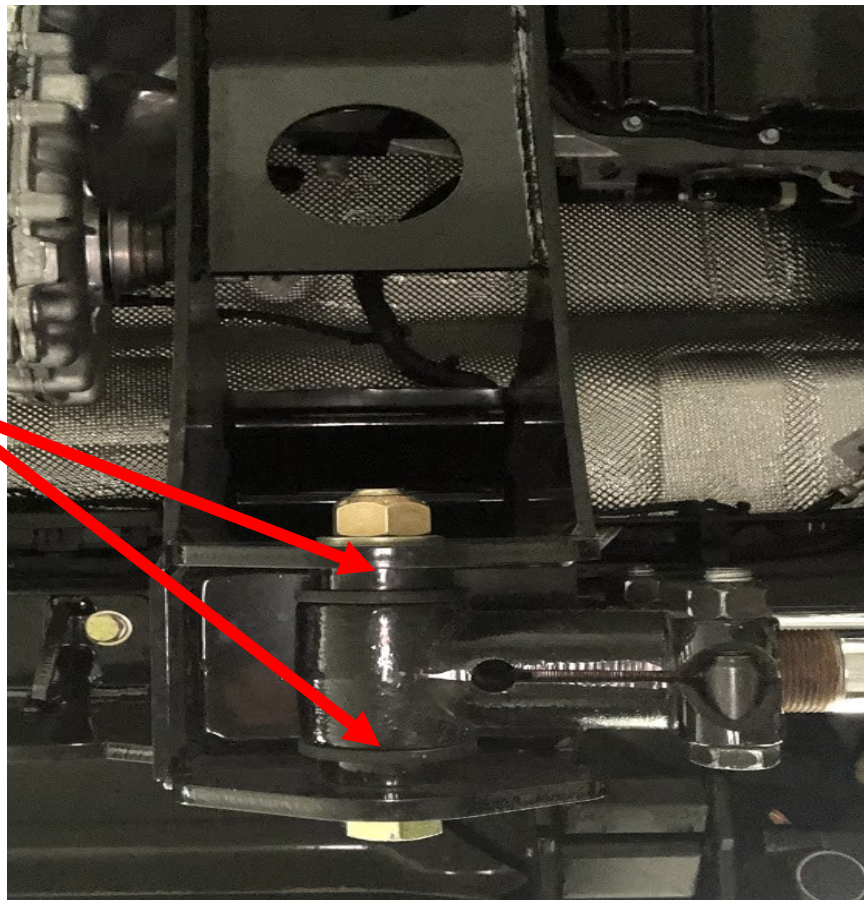
Note: Trailing arm measurements are an estimate and final adjustment may be needed.



Distance between Jam Nuts and Knuckles DS &PS.
Upper Arm - 22”
Lower Arm - 24-5/8”

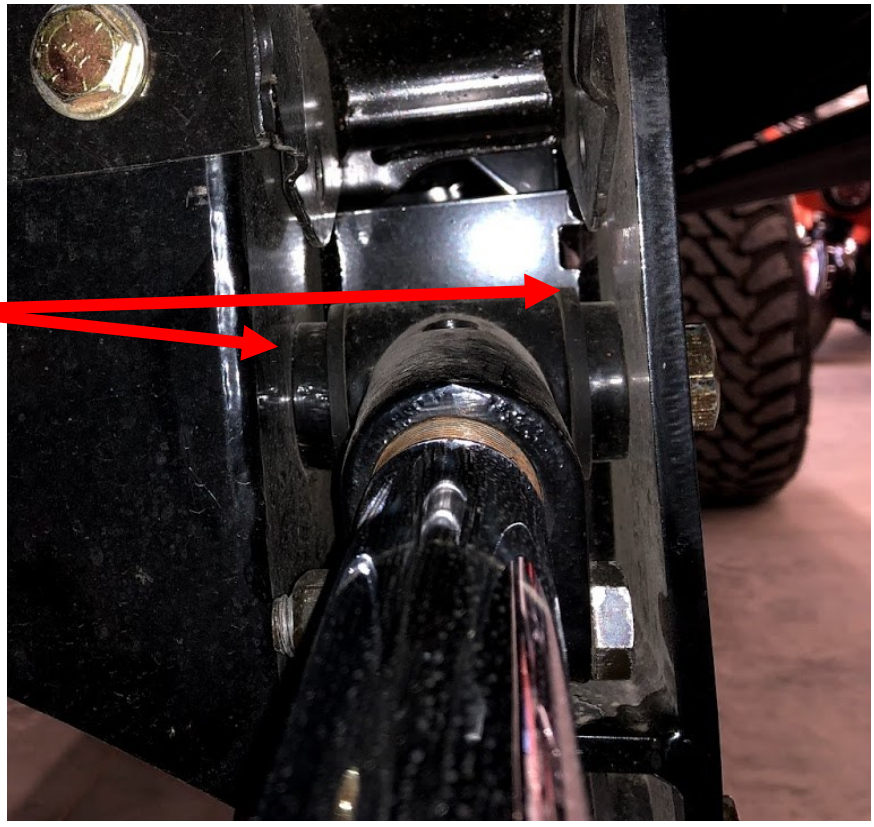
Drivers side bottom knuckle

Spacer on each side of knuckle



Drivers side Top knuckle

Spacer on each side of knuckle



11.Locate the lower pan hard bar mount (Part #10000546 & 10000474). It fastens to the axle where the OEM pan hard bar mounts. Use the OEM lower pan hard bar bolt and two 7/16”-20 x 1-3/4” bolts to fasten the two halves together. Use the spacer (Part #10000477) in between the axle mount where the pan hard bar mounts. Once the upper pan hard bar is installed, use the 3/4” bolt and spacers on the pan hard bar Heim ends to fasten in place.

12. Locate the pitman arm. You will use the OEM nut to seat the pitman arm. Tighten to 300 ft./lbs. once the truck is drivable. Turn the steering wheel lock to lock 4-5 times. Retighten the OEM nut. Repeat this step after each initial test drive. It may take 3-4 times to get the pitman arm fully seated. Once seated, install the extended nut (Part #3077) and pillow block bearing (Part #0482).

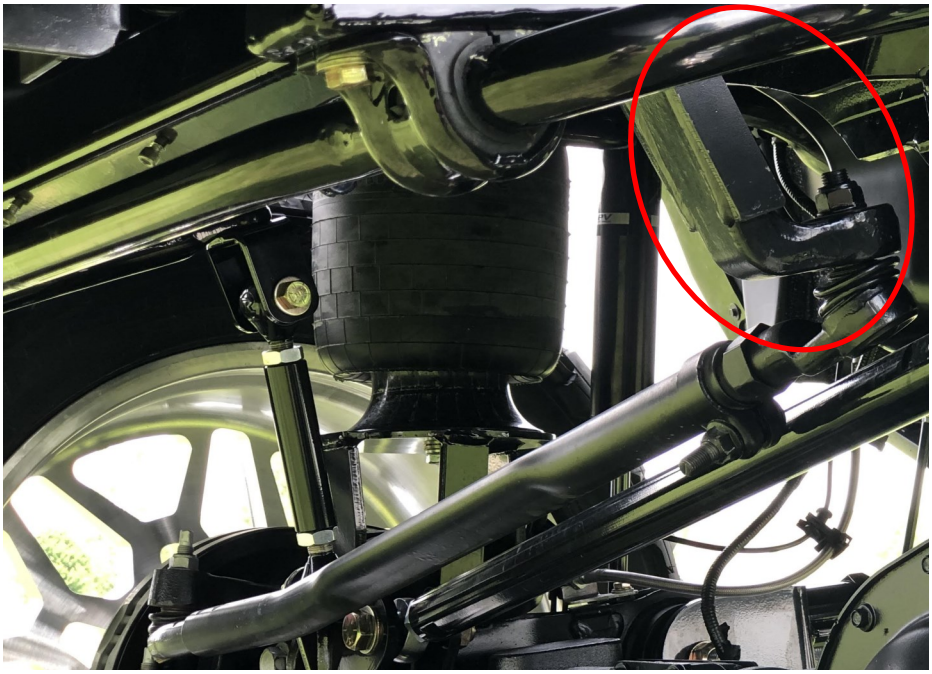
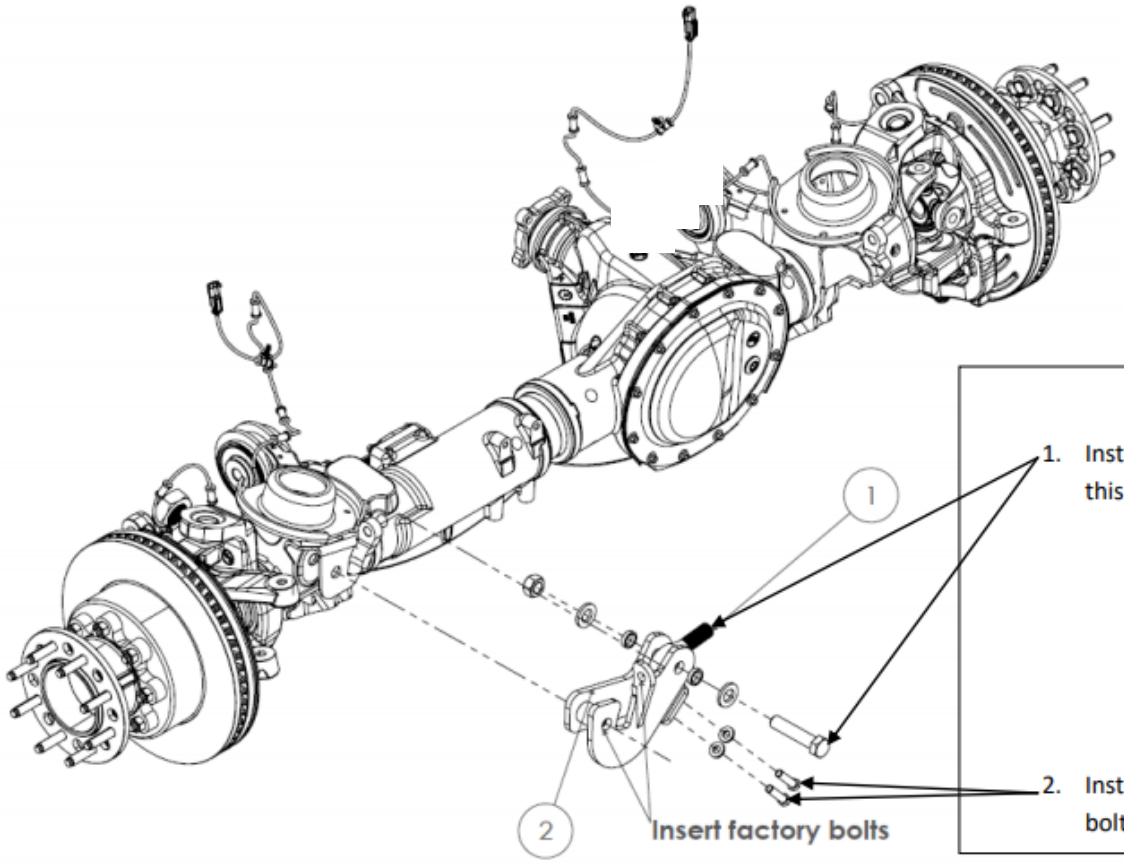


Figure 3

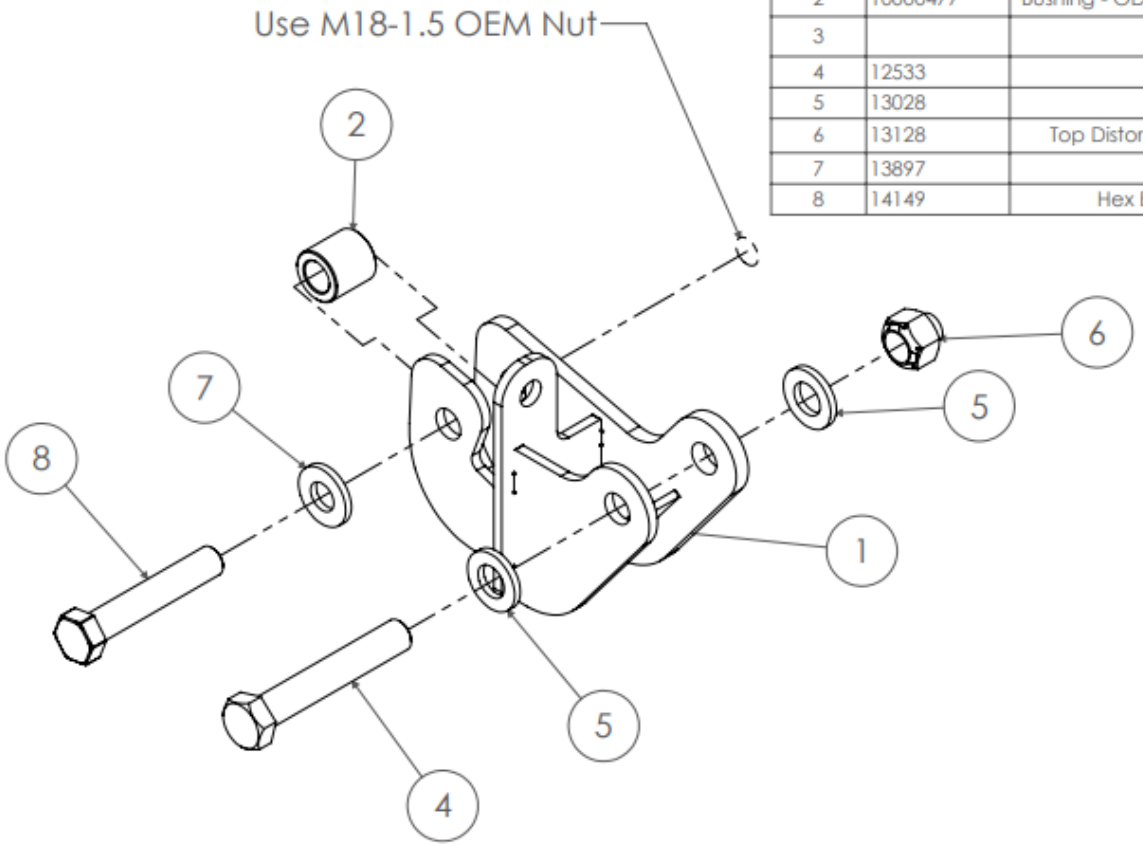
Front Lower Pan Hard Bar (PHB) Axle Mount Installation

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	80111	Purchased Parts - Heim - 7/8"-14" RH Male Shank, 3/4" Ball ID, 1 7/8" Long Thread	1
2	10000472	Assembly - PanHard Bar (PHB) Axle Mount	1



Front Lower Pan Hard Bar (PHB) Axle Mount Hardware

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
		Weldments	
1	10007567	Weldment - PanHard Bar (PHB) Axle Mount	1
		Parts	
2	10000477	Bushing - OD - 1 1/4" ID - .76" (3/4" Bolt) Length - 1.2583"	1
3		*Hardware*	
4	12533	Bolt - 3/4"-16 x 4 1/2" GR8	1
5	13028	3/4" Flat Washer	2
6	13128	Top Distorted Thread Lock Nut - 3/4"-16 - GR8 - YZ	1
7	13897	M18 FLAT WASHER	1
8	14149	Hex Bolt - M18-1.5 x 100mm Class 8.8 - Z	1

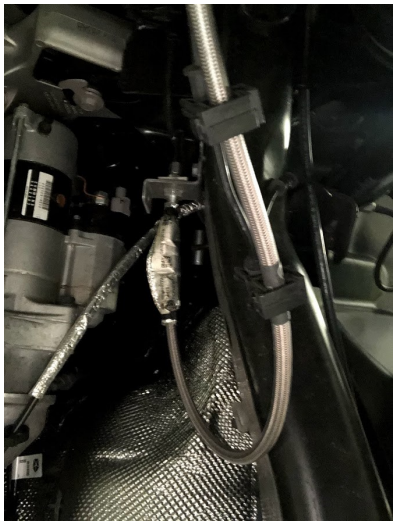


13. Locate the front brake lines. There is insulation on the top end of the OEM brake lines. Peel that insulation back and do not discard it. It will be re-used on the new brake lines.

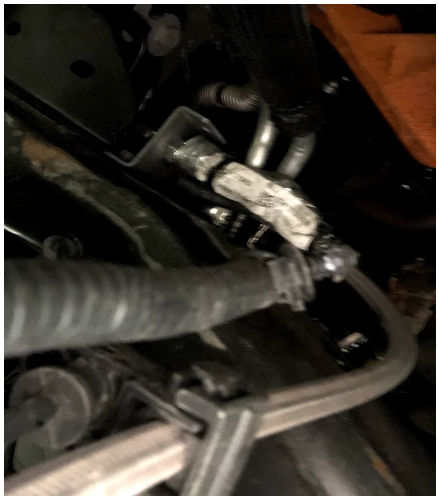
14. Remove the OEM brake lines and install the longer braided lines. Grind off tab on brake line bracket so it works with provided braided lines.

Drivers side lower

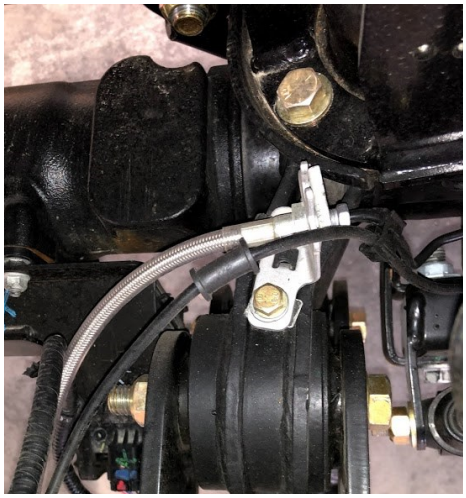
Drivers side upper



Passenger side upper



Passenger side lower



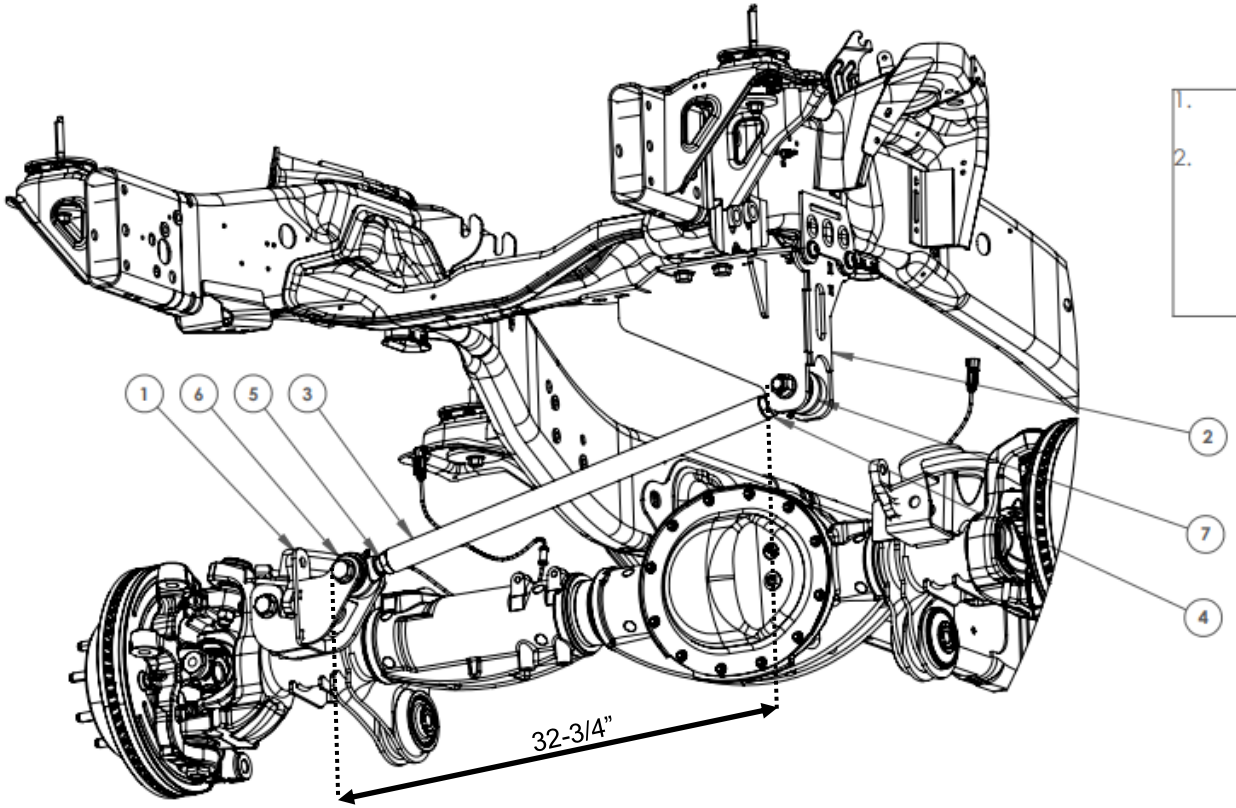
Grind off tab

15. Locate the upper track bar drop (Part #10004727). It fastens to and is welded where the OEM bracket was. Fasten the side of the bracket with the 1/2”-20 x 1-1/2” Allen head bolts.

16. The bottom of the bracket fastens to the bottom of the engine crossmember with the factory 14mm bolts. The end of the pan hard bar drop bracket needs to be welded around the edges, as well as in the circle cut outs.

17. Locate the Panhard Bar (Part #10005847). It fastens to the upper and lower panhard bar mounts with the 7/8”-14 x 4-1/2” bolts. Once the kit is installed and the air bags are at ride height, you will adjust the jam nuts to center the axle from side to side.

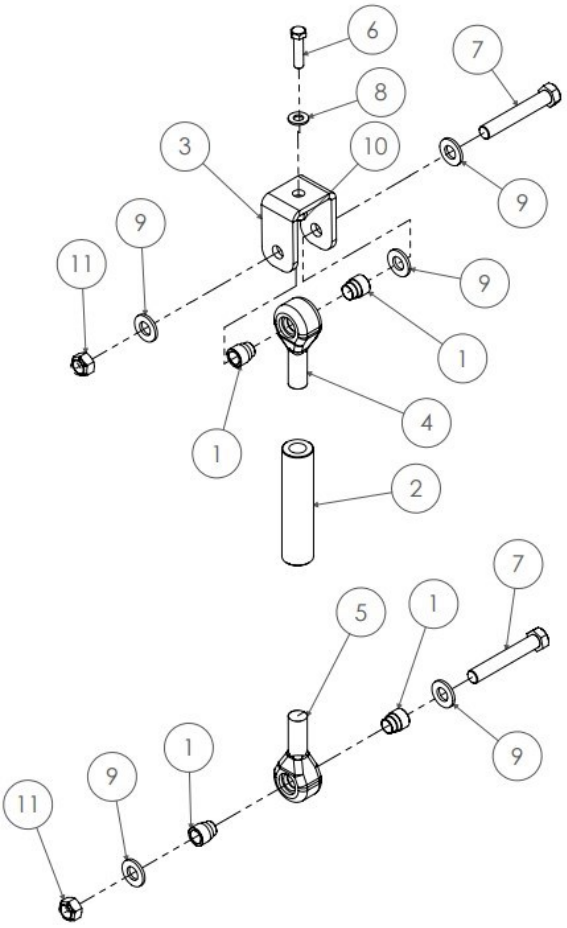
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	10007566	Assembly - PanHard Bar (PHB) Axle Mount	1
2	10005848	Assemlby - Front Panhard Bar Drop	1
3	10007558	Tube - Pan Hard Bar (PHB) - OD - 1 1/2" Tapped (Both Ends LHT/RHT) - 7/8" - 14 Length - 27.5"	1
4	13210	Jam Nut RHT - 7/8"-14 - GR5 - Z	1
5	13211	Jam Nut LHT - 7/8"-14 - GR5 - Z	1
6	80281	2.5" Johnny Joint Narrow, 7/8"-14 RHT, Ball Center 3/4" Hole 2.365 OAW Heim End - Rebuildable	1
7	80282	2.5" Johnny Joint Narrow, 7/8"-14 LHT, Ball Center 3/4" Hole 2.365 OAW Heim End - Rebuildable	1

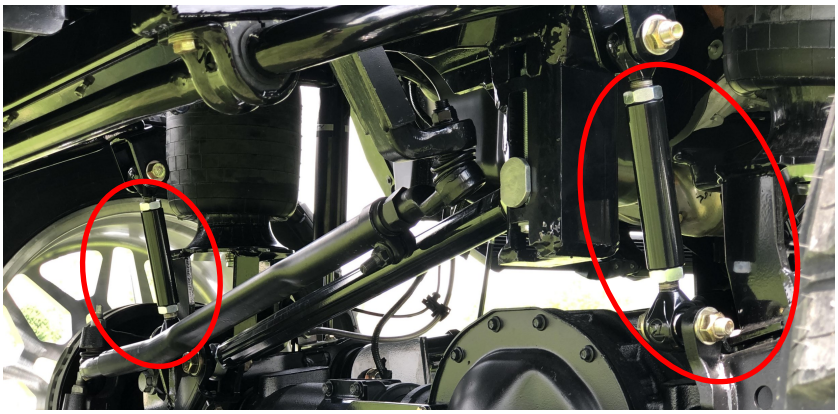


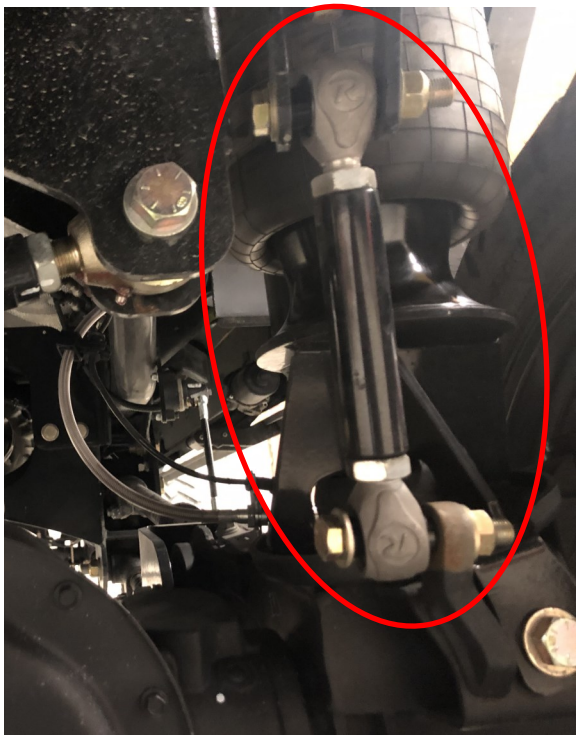
1. Install panhard bar into item #1.
2. Set a length of 32-3/4" from center to center of the heims.
   Note: this is an estimated measurement, final adjustment may be needed.

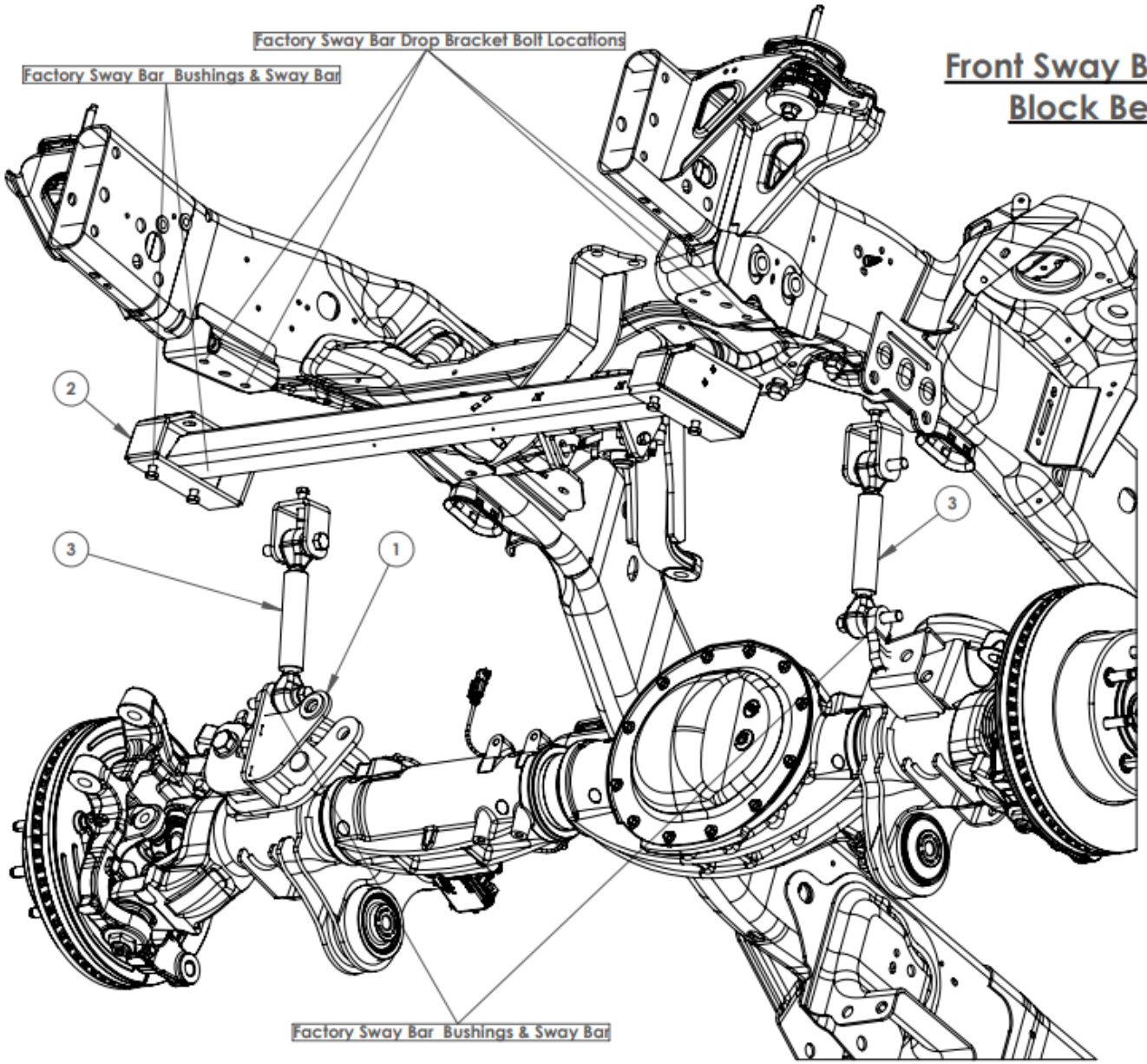
18. Install the sway bar end links (Part #10000488) & attach front sway bar (Part #10000486) to sway drop crossmember (Part #10003682) with 3/8”-24 x 1-1/4” bolts and end links (See page 24 for hardware). You will reuse factory sway bar bushing mounts.

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
		Parts	
1	10000489	Bushing - Stepped Bushing - 3 OD's - .8" .72" .624" ID - .5725" (9/16" Bolt) Length - .8695" - Fits Ride Tech Heim	4
2	10000492	Tube - End Link - Tapped (Both Ends / RHT & LHT) - 3/4" -16 X 1 1/8" OD - 1 1/4"Length - 5 1/4"	1
3	10000493	Plate - 1/4" - Sway Bar/End Link Bracket w/ Bend	1
		Purchased Parts	
4	10000490	Purchased Parts - R-Joint 3/4" - 16 Threaded Shaft w/ 5/8" hole RHT	1
5	10000491	Purchased Parts - R-Joint - 3/4"-16 Threaded Shaft w/ 5/8" hole LHT	1
		Hardware	
6	12217	Hex Bolt - 3/8"-24 x 1-1/2" - GR8 - YZ	1
7	12323	Hex Bolt - 9/16"-18 x 3-1/2" - GR8 - YZ	2
8	13022	Flat Washer SAE - 3/8" - GR8 - YZ	2
9	13025	Flat Washer SAE - 9/16" - GR8 - YZ	5
10	13122	Top Distorted Thread Lock Nut - 3/8"-24 - GR8 - YZ	1
11	13125	Top Distorted Thread Lock Nut - 9/16"-18 - GR8 - YZ	2







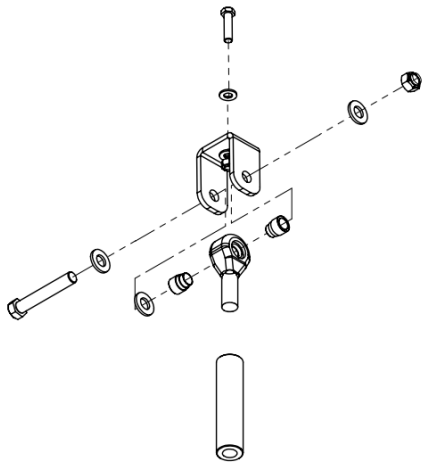


Front Sway Bar, End Links & Pillow Block Bearing Installation

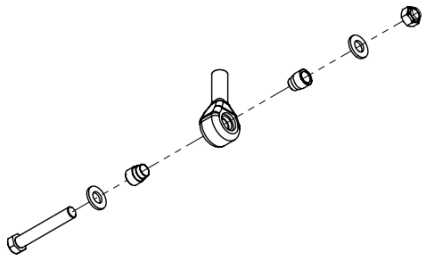
1. Install item #2 to the bottom of the frame using pre-exsisting factory sway bar bushing holes and bolts.

2. Fasten item #3 (end links) to the axle. On the PS Item #3 will be fastened to the axle and item #1.

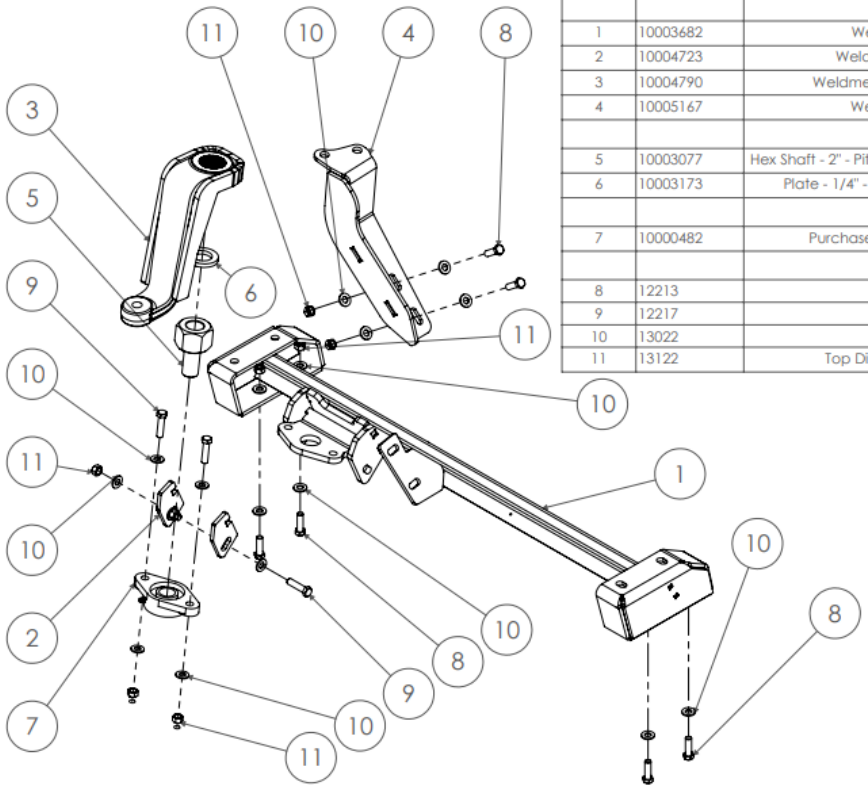
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	10007566	Assembly - PanHard Bar (PHB) Axle Mount	1
2	10003705	Assemlby - Sway Bar Drop & Pitman Arm Brace	1
3	10000488	Assembly - End Link - 8-3/8" Long - Heim Ends	2



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
		PARTS	
2	10000490	Purchased Parts - R-Joint 3/4" - 16 Threaded Shaft w/ 5/8" hole RHT	1
3	10000492	Tube - End Link - Tapped (Both Ends / RHT & LHT) - 3/4" -16 X 1 1/8" OD - 1 1/4"Length - 5 1/4"	1
4	10000491	Purchased Parts - R-Joint - 3/4"-16 Threaded Shaft w/ 5/8" hole LHT	1
5	10000493	Plate - 1/4" - Sway Bar/End Link Bracket w/ Bend	1
		HARDWARE	
7	10000489	Bushing - Stepped Bushing - 3 OD's - .8" .72" .624" ID - .5725" (9/16" Bolt) Length - .8695" - Fits Ride Tech Heim	4
8	12323	Hex Bolt - 9/16"-18 x 3-1/2" - GR8 - YZ	2
9	12217	Hex Bolt - 3/8"-24 x 1-1/2" - GR8 - YZ	1
10	13025	Flat Washer SAE - 9/16" - GR8 - YZ	5
11	13125	Top Distorted Thread Lock Nut - 9/16"-18 - GR8 - YZ	2
12	13022	Flat Washer SAE - 3/8" - GR8 - YZ	2
13	13122	Top Distorted Thread Lock Nut - 3/8"-24 - GR8 - YZ	1



Front End Link, Sway Bar Drop Crossmember and Pillow Block Bushing Weldments, Parts and Hardware

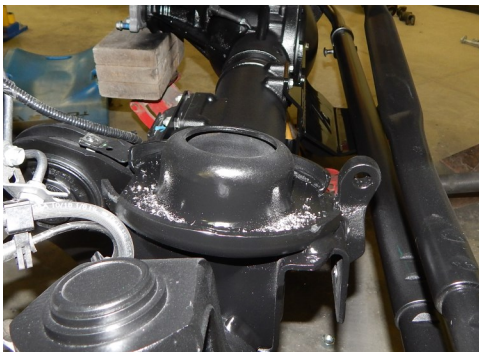


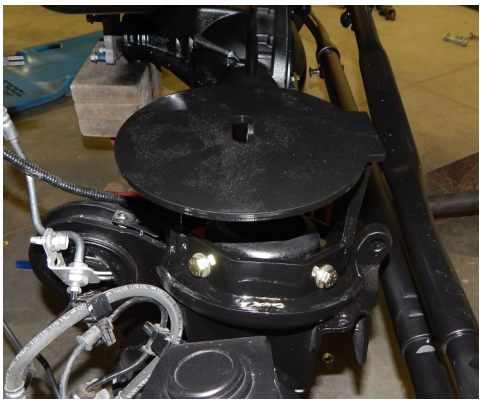
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
		Weldments	
1	10003682	Weldment - Sway Bar Drop Crossmember	1
2	10004723	Weldment - Drop Pitman Arm Bearing Bracket	1
3	10004790	Weldment - Pitman Arm 9-1/4" - 8" and Larger Lift Kits	1
4	10005167	Weldment - Steering Box Case Brace - 12"	1
		Parts	
5	10003077	Hex Shaft - 2" - Pitman Arm Stabilizer Nut w/shaft - Tapped M30-1.5mm	1
6	10003173	Plate - 1/4" - Pitman Arm Bushing (Spacer) ID - 1 1/4" x OD - 2"	1
		Purchased Parts	
7	10000482	Purchased Parts - Bearing - 2-Bolt Flange - 1" Dia Shaft	1
		Hardware	
8	12213	Hex Bolt - 3/8"-24 x 1-1/4" - GR8 - YZ	6
9	12217	Hex Bolt - 3/8"-24 x 1-1/2" - GR8 - YZ	4
10	13022	Flat Washer SAE - 3/8" - GR8 - YZ	20
11	13122	Top Distorted Thread Lock Nut - 3/8"-24 - GR8 - YZ	10

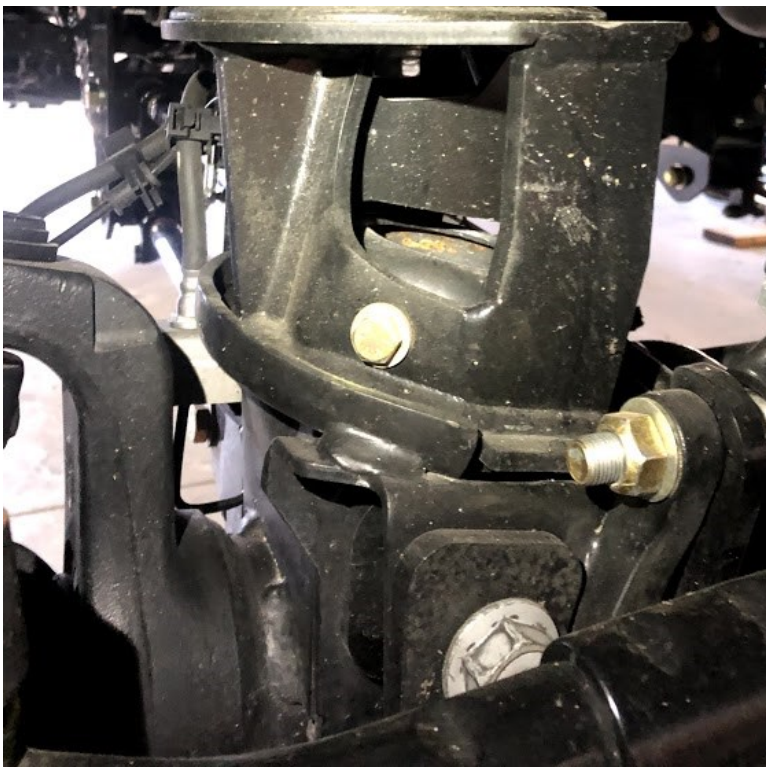
19. Locate the lower bag mounts (Part # 10004327-DS and 10004324-PS). Install lower bag mounts and mark for holes. Drill 25/64” for the holes in the side of the spring bucket. Fasten with 3/8-24” x 1-1/2” bolts. Mark holes for tapped holes in the bottom of the spring bucket. Drill 25/64” or 13/32”, tap the holes with 1/2”-20 tap and fasten with 1/2”-20 x 1-1/2” bolts.

Drivers side shown

Tap this hole to 1/2-20”

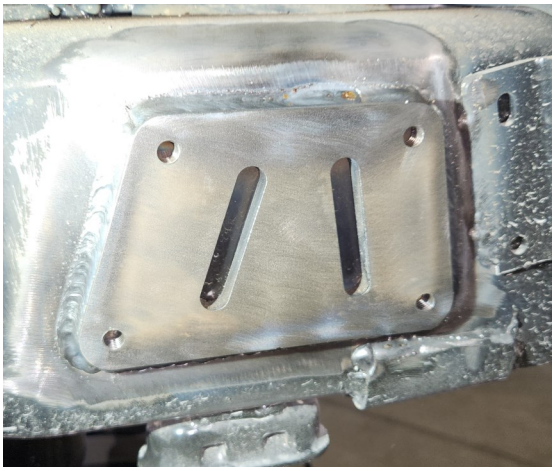


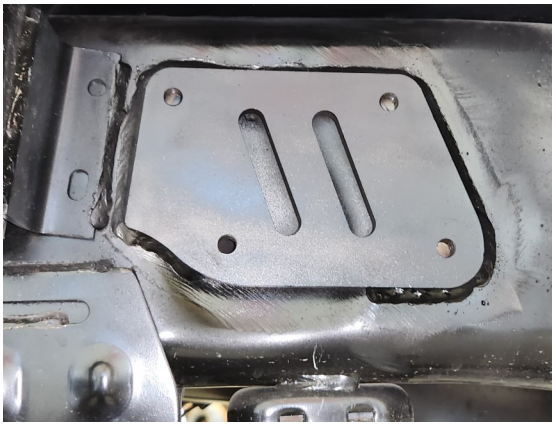




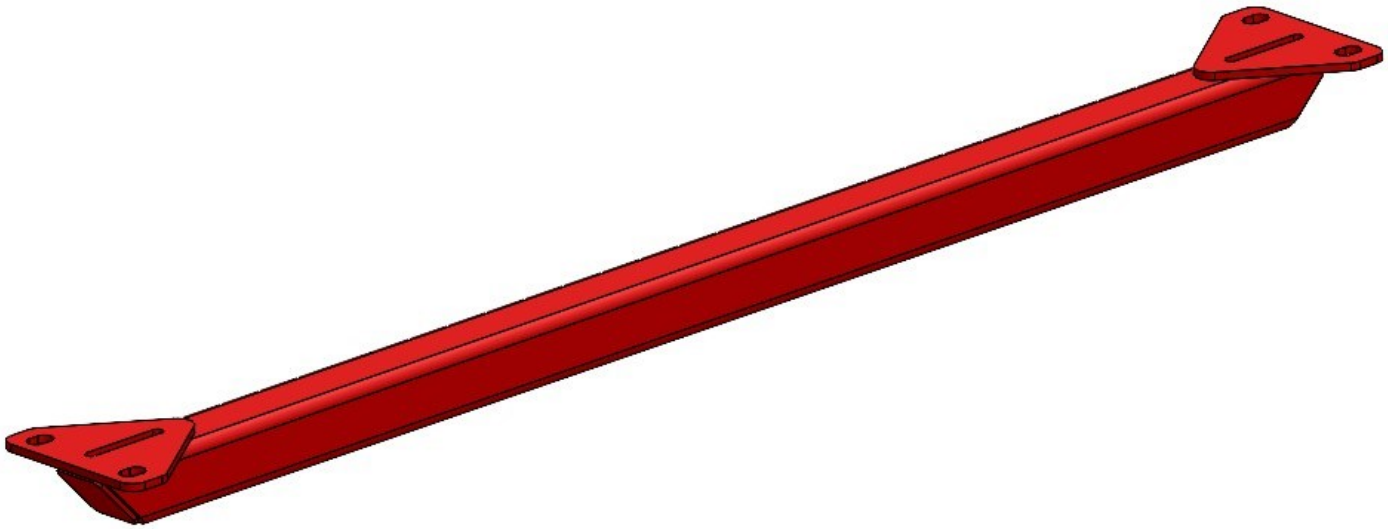
20. Locate the upper bag mounts (Part #10012912-DS and 10012920-PS) and the remote reservoir brackets (Part #10004566). The upper air bag mounts have (4) bolts that fasten to threaded weld in plates. Do not use inner top hole on bag mount as this will interfere with the ABS module. Make sure to grind off the frame paint before proceeding to next step.

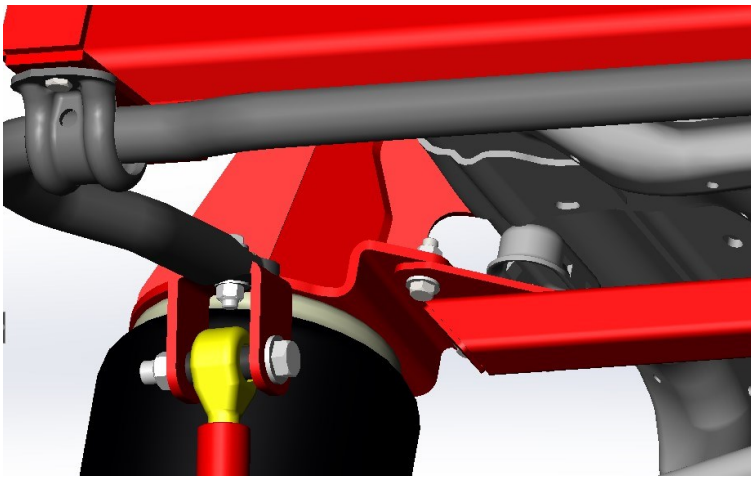
21. Bolt the bag mounts to the upper spring bucket and then bolt the lower bag mount to the weld on threaded plate. Tighten upper bag bolts and threaded plate bolts. Tack the weld on plate into position and remove bolts from upper bag mount. Weld around plate as shown in image below and spray with paint to avoid rusting. Install remote reservoir bracket before re-installing bolts and torque down the hardware

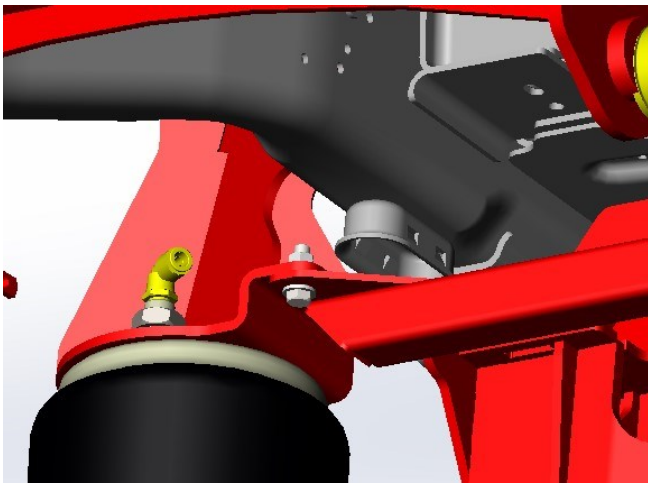




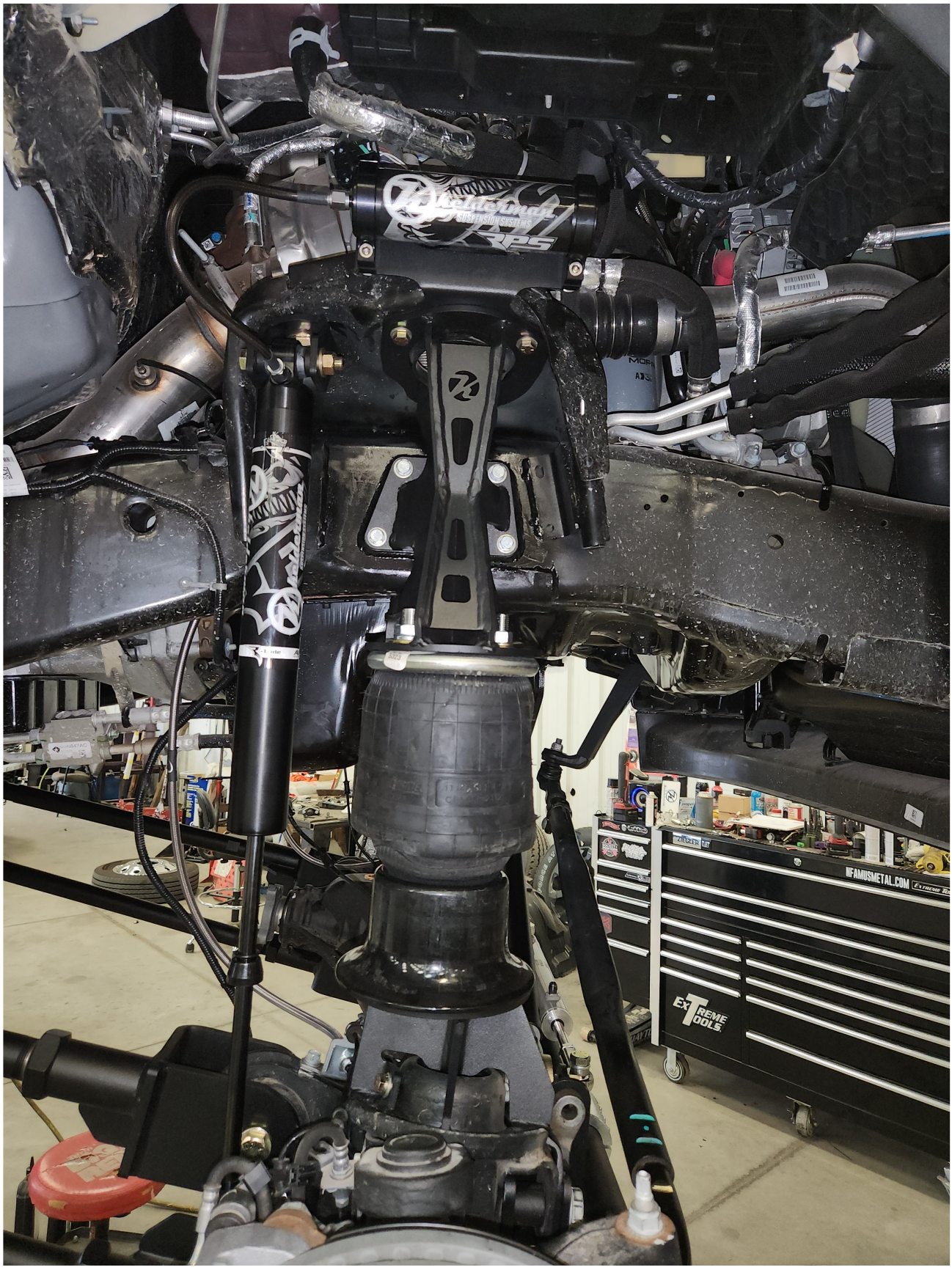
22. Locate the Upper Bag Crossmember (Part #10012928). Attach to the DS & PS upper bag mounts with 3/8”-24 x 1-1/4” bolts. Torque bolts to 37 ft./lbs.



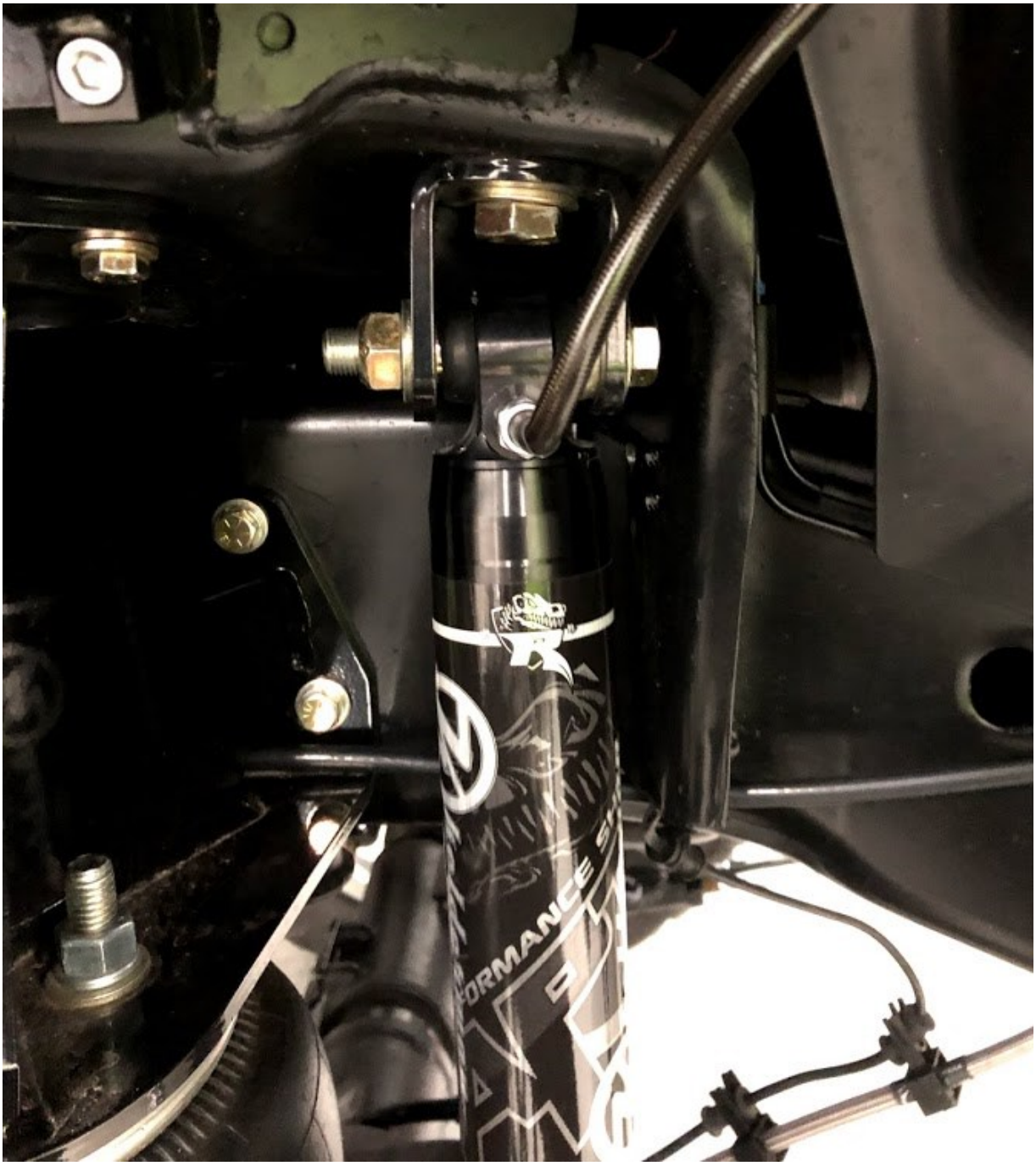




23. Locate the Air Bags (Part #80012-5323).They fasten to the upper air bag mounts with the 1/2” and 3/4” nuts and washers. The bottom fastens to the lower air bag mount with the 1/2”-13 x 4” bolts. Torque these bolts and nuts to 35 ft./lbs.

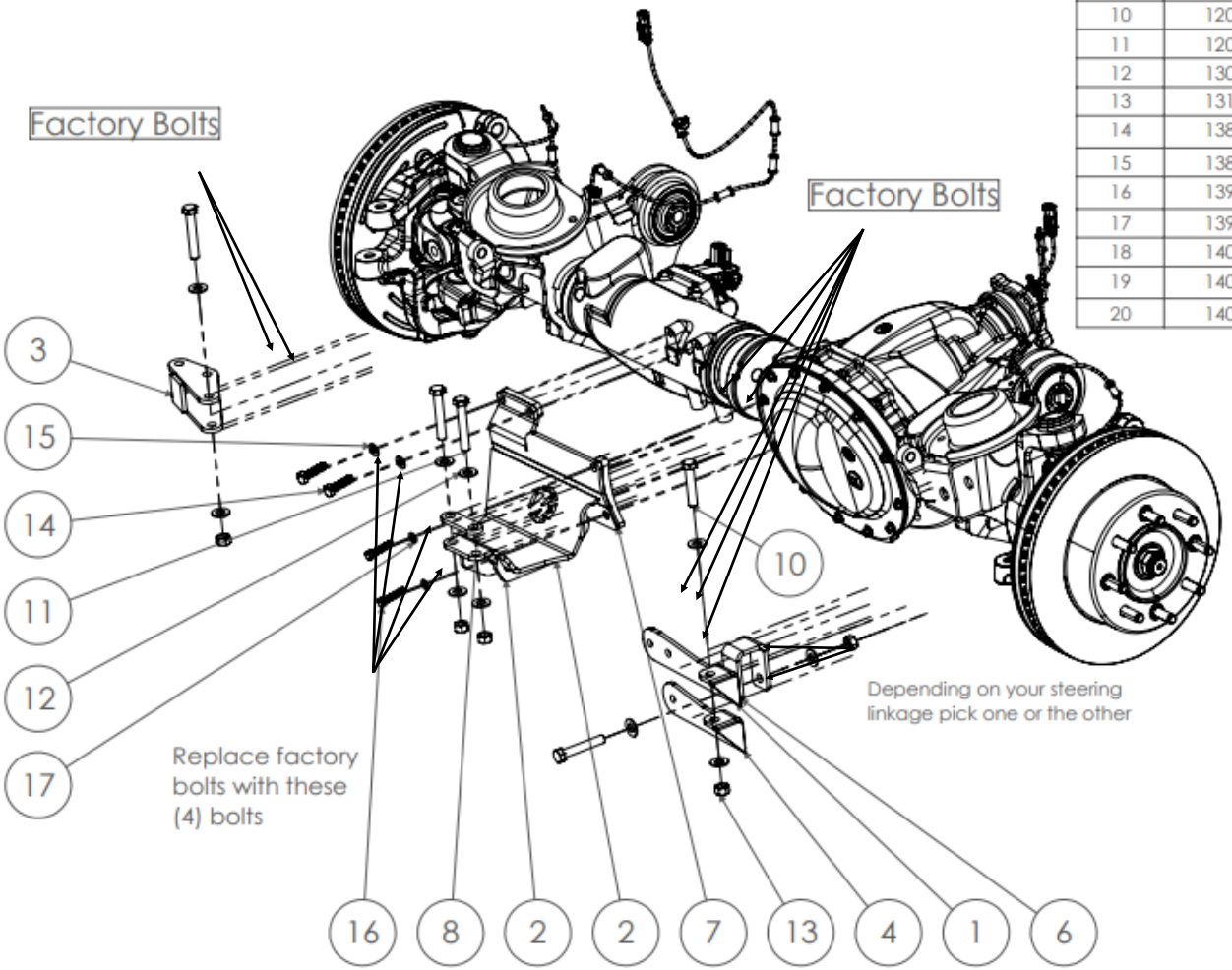


24. Locate the Shocks (Part #10096LH & 10096RH), Upper Shock Mounts (Part #10005835) and Lower Shock Mounts (Part #10004628). The upper shock mounts install into the OEM upper shock hole with the 5/8"-18 x 1-1/2" bolt. The top of the shock fastens into the upper shock mount with the 1/2”-20 x 3-1/2” bolt. The remote reservoirs attach to the reservoir mount with the billet clamps. Fasten the lower end of the shock into the shock mount with the 1/2-20” x 3” bolt and slide the round end of the mount in the factory shock location on the axle. Torque this bolt to 125 ft./lbs.



Steering Stabilizer Installation

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
		Weldments	
1	18389	(DS) Shock Bracket	1
2	18393	Steering Stabilizer "K" Bracket	1
3	18400	Weldment - (PS) Steering Stabilizer Shock Bracket	1
4	18409	(DS) Shock Bracket	1
		Parts	
5	18396	Plate - 3/8" - Steering Stabilizer Shim Spacer	1
6	18397	Plate - 1/4" - (DS) Axle Mounting Bracket	1
7	18399	Plate - 1/2" - Steering Stabilizer Shim Spacer	1
8	20227	Plate - 1/4" - Shock Strap	1
9	10008381	Plate - 16ga - Logo Backing Plate	1
		Hardware	
10	12017	Bolt - 1/2"-20 X 2 1/2" Gr.8	1
11	12021	Bolt - 1/2"-20 X 3" Gr.8	4
12	13024	1/2" Flat Washer	10
13	13124	1/2"-20 Lock Nut	5
14	13876	M10 x 1.50" Thread, 45mm Long	2
15	13886	M10 Flat Washer	2
16	13991	M8 x 1.25mm Thread, 40mm Long (Class 10.9)	2
17	13997	M8 Flat Washer	2
18	14062	#10 SAE Flat Washer	2
19	14086	#10 Split Lock Washer Stainless Steel	2
20	14097	Hex Nut: #10-24 - GR5 - Z	2

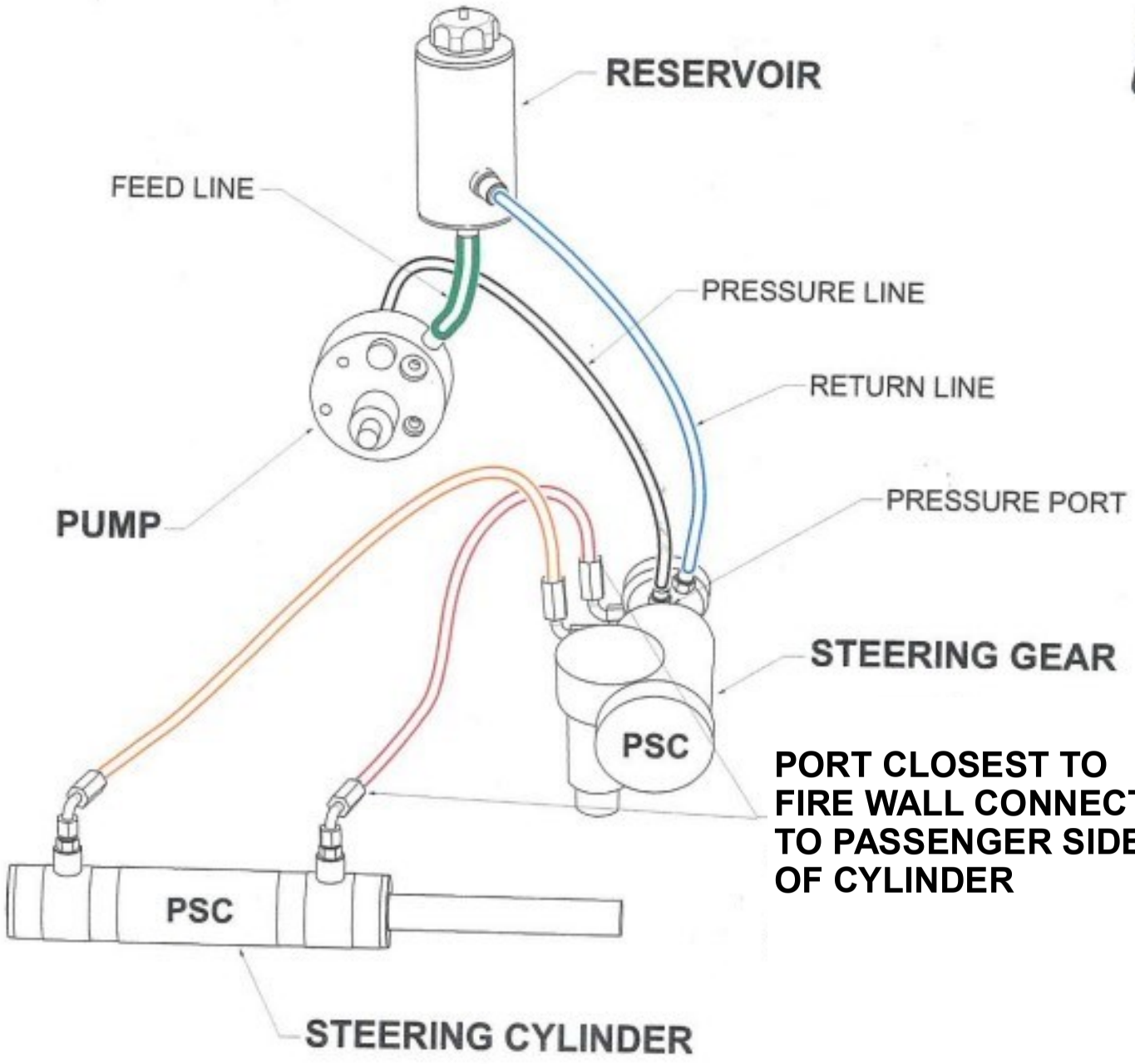


25. Locate the manufactured front differential cover and hydraulic cylinder assist kit. Measure 20” from the center hole of the mounting tabs on diff cover to the center of the bolt on the provided clamp. Make sure the clamp is straight up and down on the lower track bar. Attach cylinder to the clamp and diff cover using provided hardware. See page 33 for plumbing diagram.


PSC


PSC


PSC
PERFORMANCE STEERING COMPONENTS



PERFORMANCE STEERING COMPONENTS

817.270.0102

PORT CLOSEST TO FIRE WALL CONNECTS TO PASSENGER SIDE OF CYLINDER

26. The best location for mounting the air control system is in the factory spare tire location. The spare tire carrier needs to be removed before mounting air control system, if not already removed. For additional information on the process of installing controls and other tips, find our tutorial on our YouTube page. Link below.

https://www.youtube.com/watch?v=s_963Fdfkvl

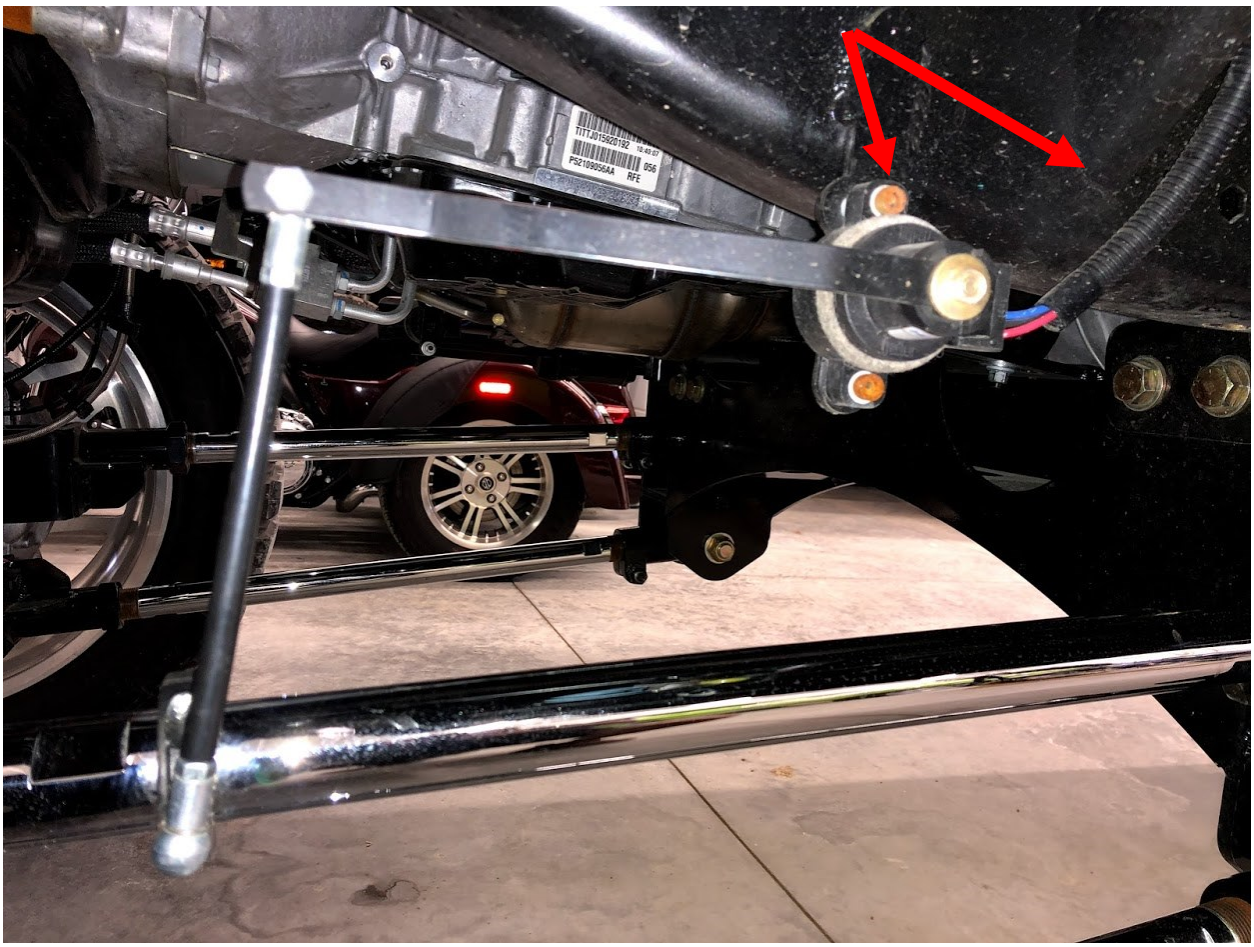
27. Once the kit is installed, go back through and make sure all the bolts are tightened to the supplied torque specs. You can do the final set up now, or wait until the controls are installed.

Suggested mounting location for optional ESLK3H2 Controls System

28. Pictured on this page are the Hadley sensors used with the 3H air management system. Locate the mounting key (Part #14837). The key will weld to the side of the frame. Measure 2-1/2” from the front of the body mount. Make sure when placing the sensor mount in position that it is far enough down to attach the nut on the slotted key. The linkages are 8” long and the collar installs 2-1/4” away from the end of the jam nut.

The linkage is threaded rod with a piece of air line over it. Unthread the ball end and cut the threaded rod to length. The female end has a clip on it to keep it on the ball stud. Use the picture to the left to see how the clip works.

Edge of sensor mount is 2-1/2” away from the body mount



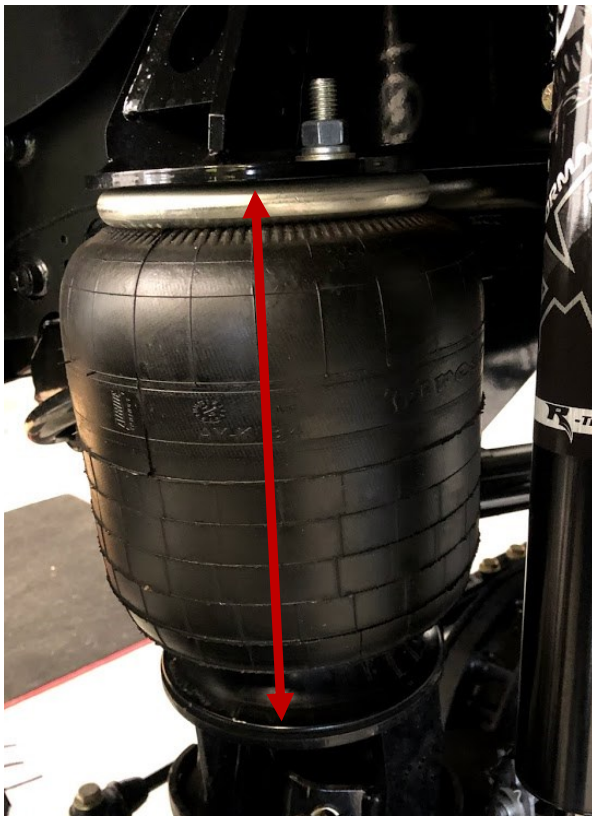
29. When programing the control system, use shop air with a check valve to inflate the front air bag to a ride height of 11-1/2” — 12-1/2.” When measuring the air bag, measure between the mounting brackets. Adjust the trailing arms to adjust the caster if needed. Adjust the pan hard bar to get the axle squared in the axle squared up with the chassis.

NOTE: Remember to bleed the brakes at this point.

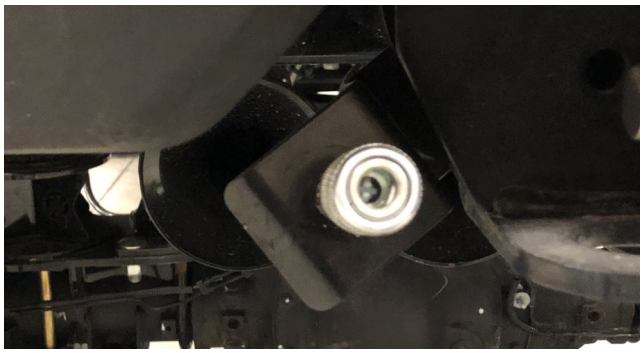
30. Inspect all the components of the kit and re-torque all the bolts if you have not done so. Once the truck has 300 miles on it, re-torque all the bolts.

31. Check the bolts at regular service (oil change) intervals after that.

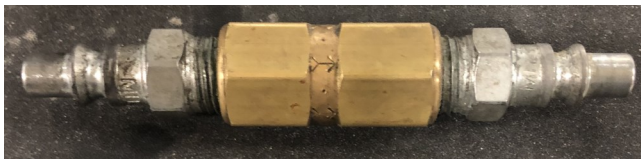
Designed ride height of the air bag is between 8”-9”.
Measure between the air bag mounting brackets shown below.



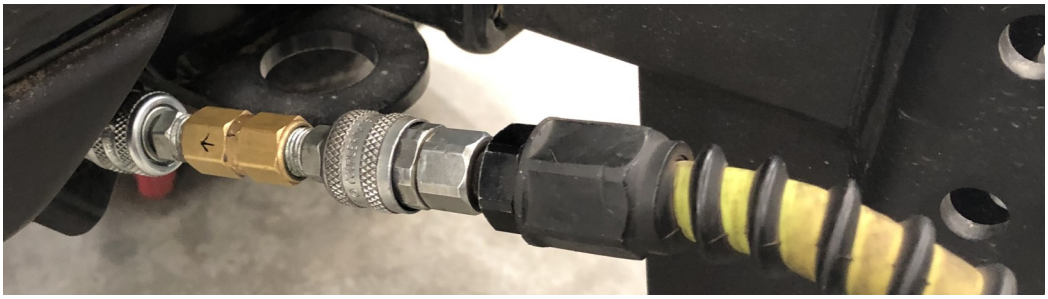
Fill Port



Check Valve

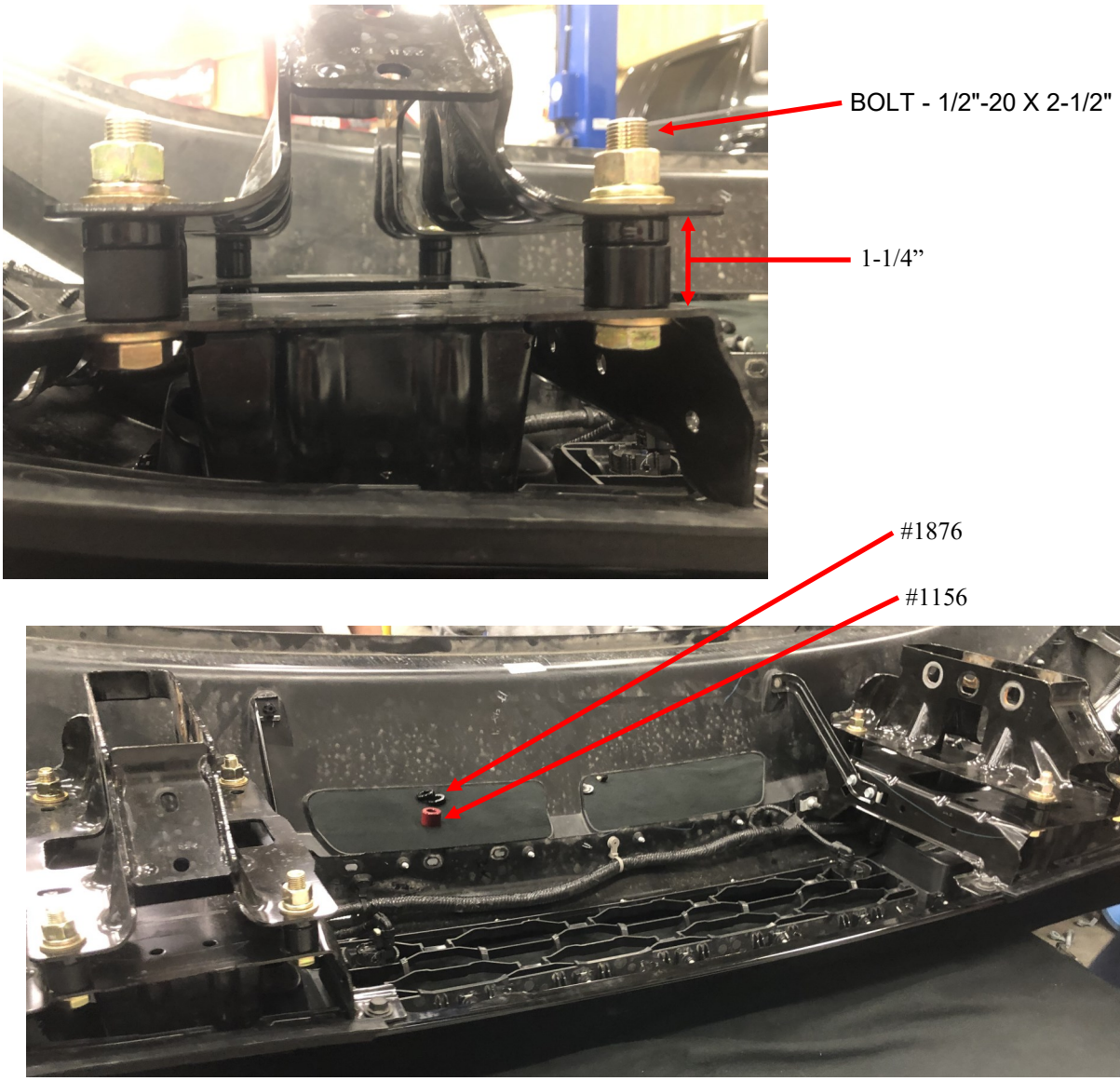


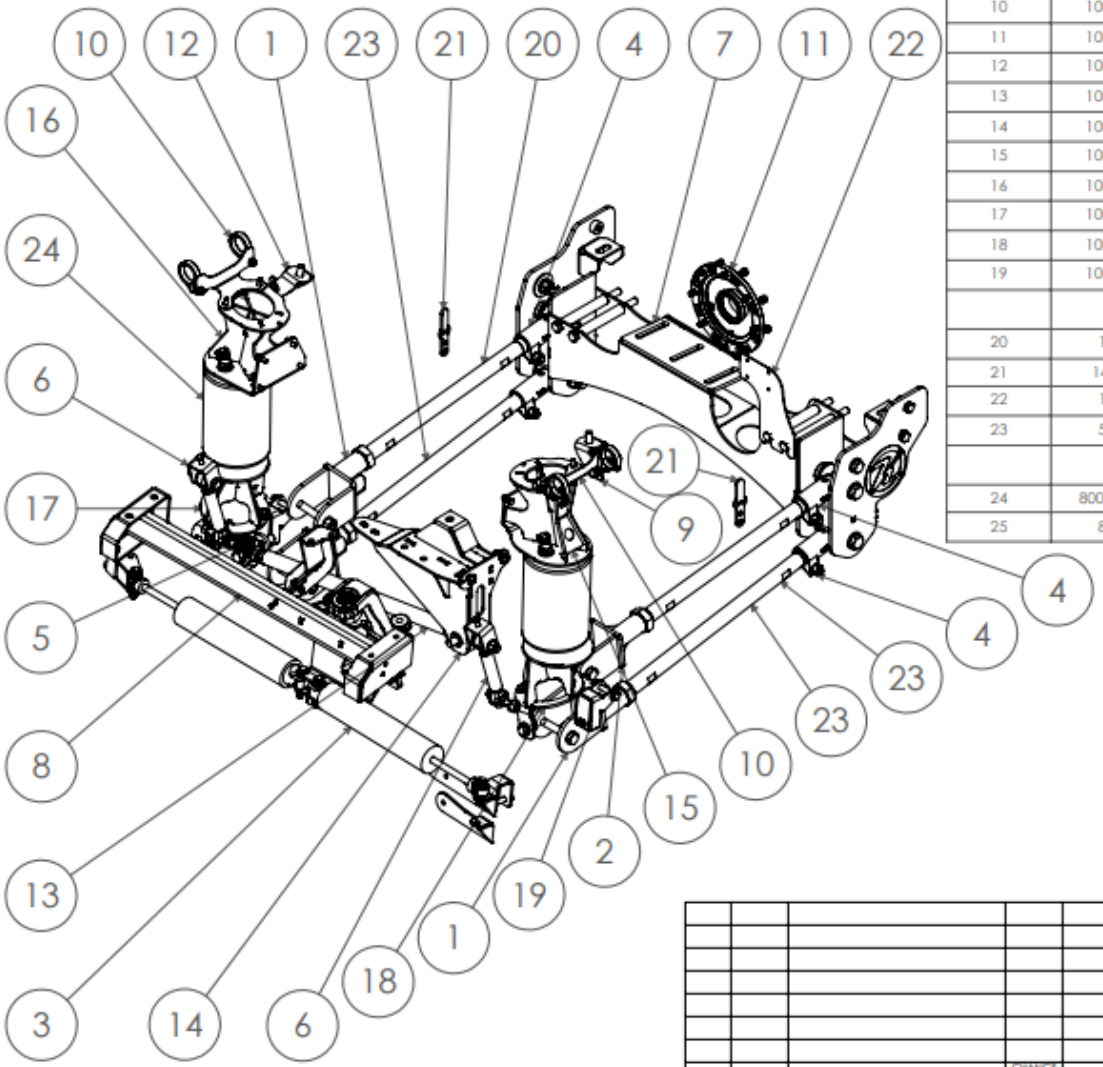
Check Valve Orientation



32. Check tire clearance if not using after market bumper. If using 40-42” tires, the bumper will require spacers to move the bumper away from the tires. Trim the lower plastic valence and make sure to turn tires left and right to check clearance with the bumper.

If bumper spacers are required, find Spacers (Part #11565) and (Part #18769) and Hex Bolts (Part #12017), Flat Washer (Part #13024) and Hex Nut (Part #13164).





ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
		Assemblies	
1	18326	Assembly - (PS) Upper / (DS) Lower Trailing Arm Knuckle (RHT)	2
2	18330	Assembly - (DS) Upper / (PS) Lower Trailing Arm Knuckle (RHT)	2
3	18401	Steering Stabilizer	1
4	18498	Assembly -Trailing Arm Knuckle 10006 (LHT)	4
5	10007566	Assembly - PanHard Bar (PHB) Axle Mount	1
6	10000488	Assembly - End Link - 8-3/8" Long - Heim Ends	2
7	10003644	Assembly - 4-Link Transmission Crossmember Drop (12")	1
8	10003705	Assemlby - Sway Bar Drop & Pitman Arm Brace	1
9	10004512	Assemlby - Upper Shock Drop Bracket (DS)	1
10	10004545	Assemlby - Raptor Shock Reservoir Bracket	2
11	10005080	Assemlby - Transfercase Index Ring - 13°or 22° - Transmission: Aisin AS69RC 6-Speed	1
12	10005834	Assemlby - Upper Shock Drop Bracket (PS)	1
13	10005847	Assemlby - Panhard Bar - 7/8" Heim Joints - 28.5" Bar Length	1
14	10005848	Assemlby - Front Panhard Bar Drop	1
15	10005850	Assembly - Upper Bag Mount - DS	1
16	10005851	Assemlby - Upper Bag Mount - PS	1
17	10005854	Assembly - Lower Bag Mount (PS)	1
18	10005856	Assemlby - Lower Bag Mount (DS)	1
19	10005858	Assembly - Lower Shock Mount Extension	2
		Parts	
20	11119	Tube - Threaded -1 1/2" - 12" ID - 1" Length - 28 1/2" Trailing Arm	2
21	14837-1	Plate - 1/4" - Sensor Mount	2
22	18474	Plate - 11ga - Wiring Harness Bracket (DS)	1
23	52131	Tube - Threaded - 1 1/2" - 12 ID 1" Length - 31" Trailing Arm	2
		Purchased Parts	
24	80012-8979	Firestone 8979	2
25	80264	Purchased - Vibration-Damping Loop Clamp - 1/2" ID	1

REV	ECN	CHANGE DESCRIPTION	CHANGE BY	DATE

3RD ANGLE PROJECTION

UNLESS OTHERWISE SPEC.
DIMNS. IN INCHES
STD. TOLERANCES
X.X ± .060
X.XX ± .030
X.XXX ± .010
FRAC. DIM. ± 1/32"
Deg. ± .5°

A | DO NOT SCALE DRAWING | 1:100 | Approximate Weight = lbs

MATL SPECS:

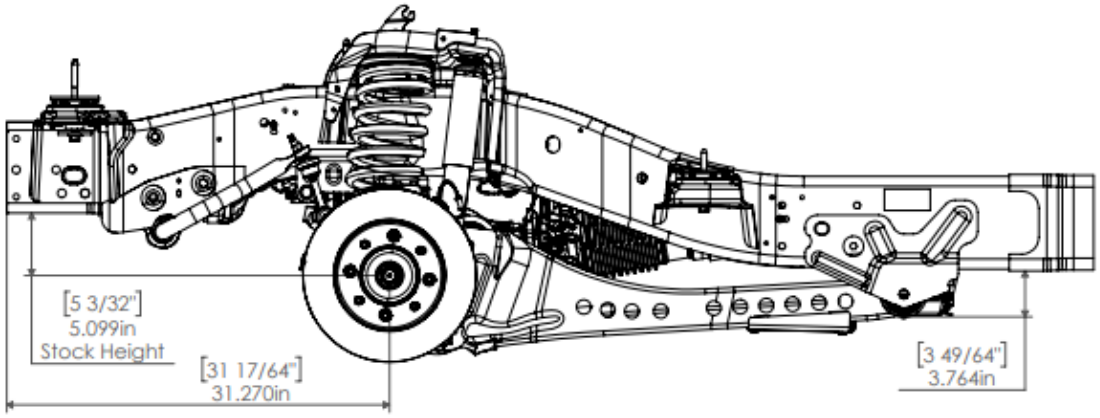
DESCRIPTION: **Kit - 4-Link Front - 12 inch Lift - Transmission AISIN AS69RC 6-Speed**

PROJECT: **2019+ Ram 2500/3500 - 4-Link Front - 12 inch Lift - Transmission: AISIN AS69RC 6-Speed**

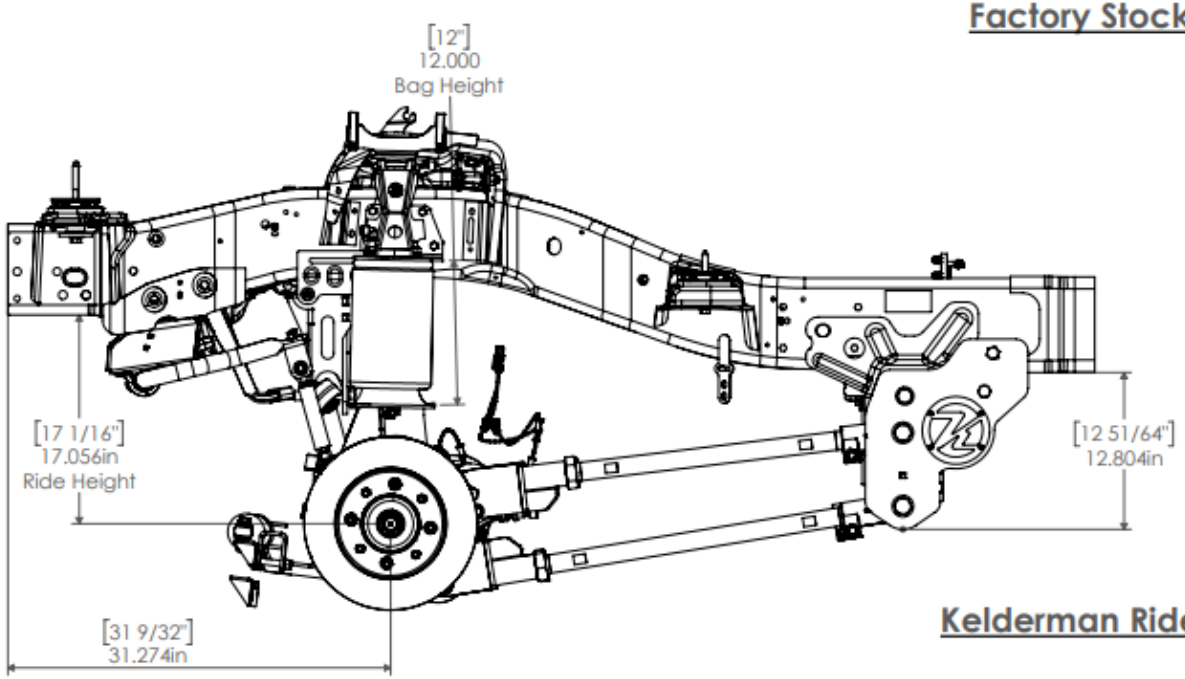
PART NUMBER: **10005987**

DESIGN BY: **Justin Christensen** DATE: **12/10/2021**

SHEET 1 OF 2



Factory Stock Height



Kelderman Ride Height

REV	ECN	CHANGE DESCRIPTION	CHANGE BY	DATE

3RD ANGLE PROJECTION

UNLESS OTHERWISE SPEC. DIMNS. IN INCHES
STD. TOLERANCES
X.X ±.060
X.XX ±.030
X.XXX ±.010
FRAC. DIM. ±1/32"
Deg. ± .5°

A | DO NOT SCALE DRAWING | 1:100 | Approximate Weight = lbs

MATL SPECS:

DESCRIPTION: **Kit - 4-Link Front - 12 inch Lift - Transmission AISIN AS69RC 6-Speed**

PROJECT: **2019+ Ram 2500/3500 - 4-Link Front - 12 inch Lift - Transmission: AISIN AS69RC 6-Speed**

PART NUMBER: **10005987**

DESIGN BY: **Justin Christensen** DATE: **12/10/2021**

SHEET 2 OF 2