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2019 Ram 3500 stock & 2-3” 4-Link Rear (factory air ride and leaf) Installation Instructions



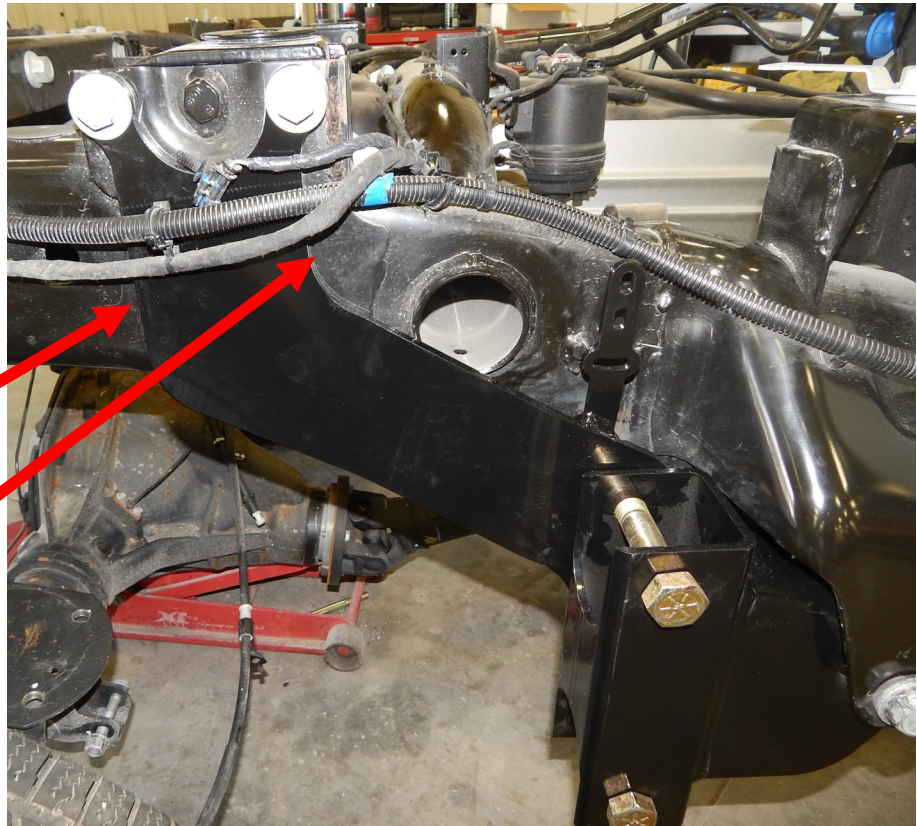
Installation

1. Measure the pinion angle and write the angle down. This is important because you will need to put the axle back to this measurement after the installation. Also, take a measurement from the front of the axle to a location on each side of the frame. Write these measurements here. Pinion angle _____. Right side _____ Left side _____ **NOTE: All the bolts in this kit use a flat washer on each side of the bolt.** It is required to remove the bed.

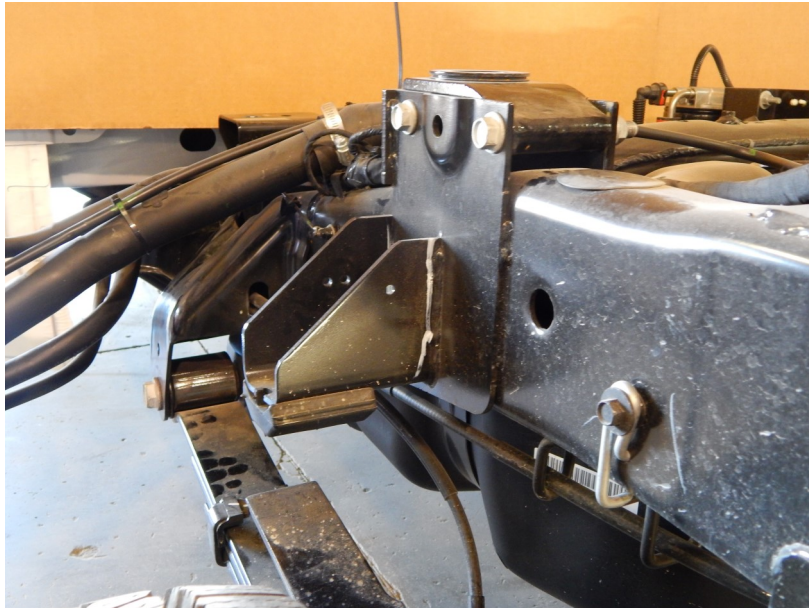
2. Jack up the rear of the frame so that most of the tension is off the leaf springs. Place a set of jack stands under the frame, block the tires so the axle won't move and place a jack stand under the pinion so it doesn't rotate. Remove the airbags. Next pop off the air ride sensor linkage off the lower linkage mount. You will be able to use the Ram air management system or the Kelderman system once the install is complete. Now remove the leaf springs

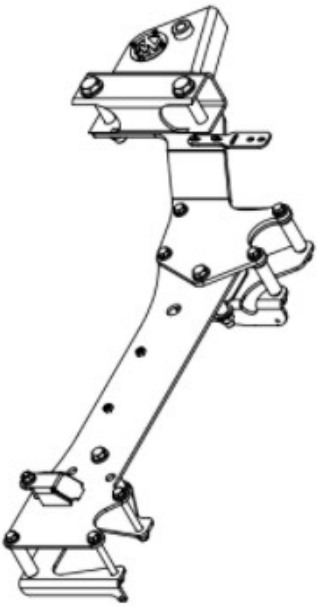
3. You can install both sides at the same time if you have 2 people working on the truck. Locate the trailing arm mounts (part# 4410DS and 4514PS) and the side plates (part# 5576DS and 5604PS) and the inner side plate clamps (part# 5434DS rear and 5442 front). The trailing arm mounts fasten to the forward OEM leaf spring perch with the OEM front leaf spring bolt and the side plates fasten to the OEM front hitch mounts. IF YOUR TRUCK HAS OVERLOAD PADS ON THE FRAME SEE THE NEXT PAGE. You will fasten the side plate to the hitch mount with the factory 14mm bolts (if it doesn't have factory bolts use the 1/2x5.25" bolts and bushings (part# 4891) The front of the side plates overlap the trailing arm mount. Use the exploded views on page 4-7.

Once trailing arms are installed you will weld on each side of the bracket



NOTE: If your truck has factory overload perches welded to the frame, the front perches will need to be removed. Use a cut off wheel on a grinder to cut the welds.



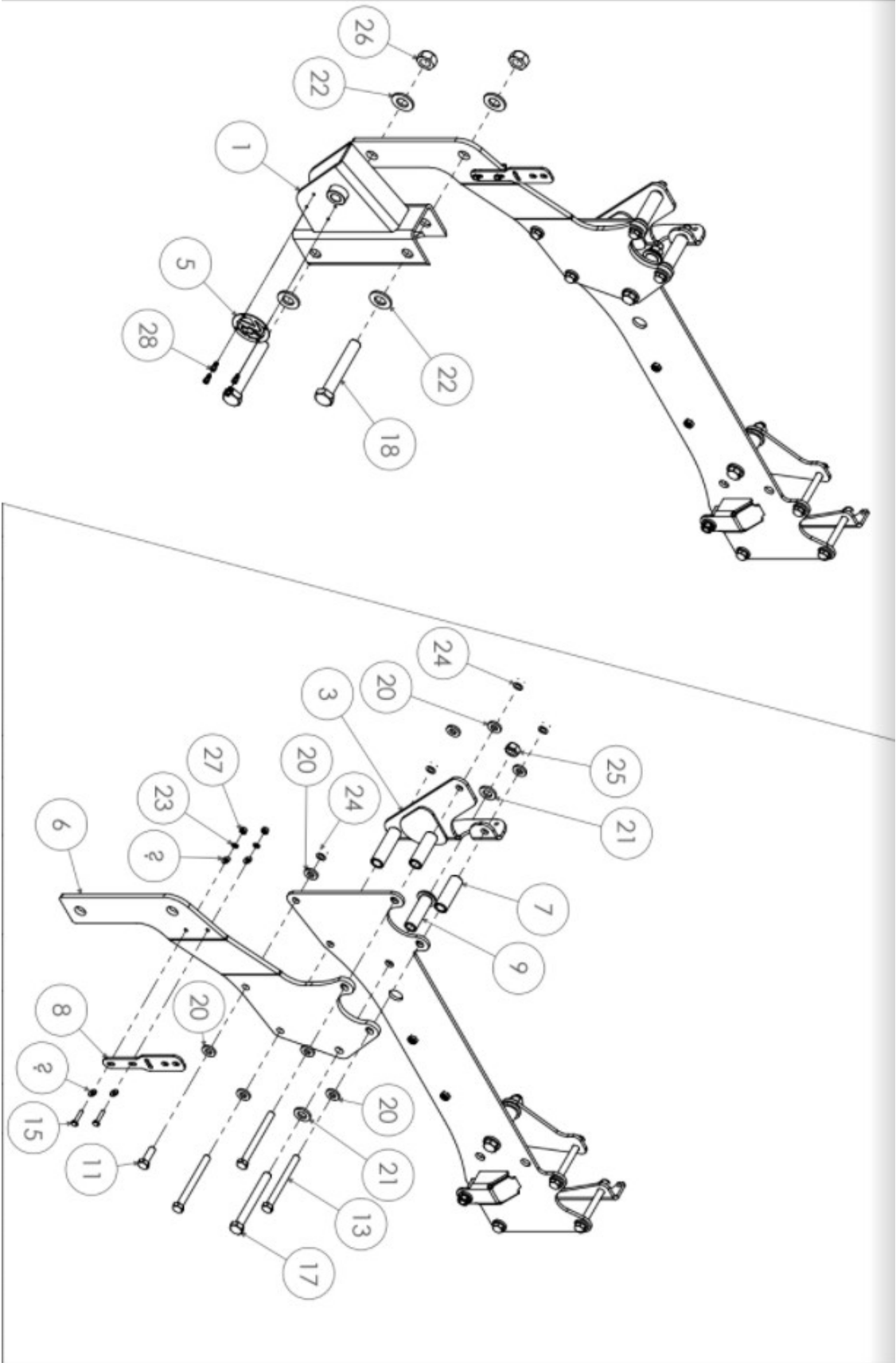


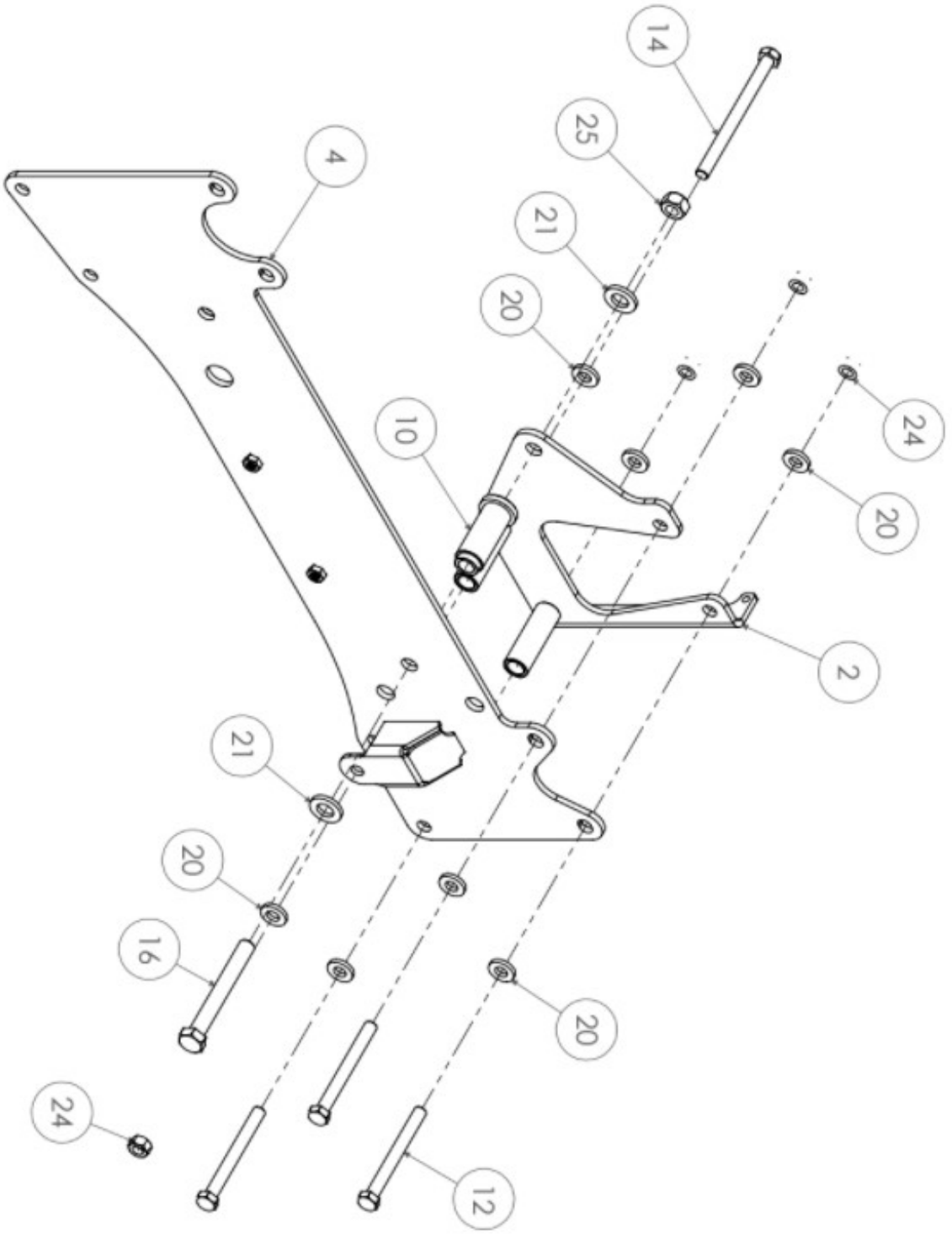
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	10004407	Weldments Weldment - (DS) Perch Mount	1
2	10005434	Weldment - Side Plate Frame Clamp - Rear (DS)	1
3	10005442	Weldment - Side Plate Frame Clamp - Front (DS)	1
4	10005576	Weldment - DS Side Plate <i>Parts</i>	1
5	10004408	Plate - 14ga. - Kelderman Bodge - 2.635" Bolt Circle	1
6	10004410	Plate - 3/8" - (DS) Frame/Perch Support	1
7	10004891	Tube - 1" OD x 0.687" ID x 3' L - Fifth Wheel Ear Anti-Crush Bushing	2
8	10005159	Plate - 7ga - Height Control Sensor Bracket - Key	1
9	10005405	DOM - 1-1/2" OD x 5/8" ID x 3.161" - Top Hat Bushing Frame Anti-Crush, Front	1
10	10005488	DOM - 1-1/2" OD x 5/8" ID x 3.166" - Top Hat Bushing Frame Anti-Crush - Rear	1
Hardware			
11	12007	Bolt - 1/2"-20 X 1 1/2" Gr.8 YZ	1
12	12035	SCREW-HCS-.50-20X4.75-GR8-YZ	3
13	12039	SCREW-HCS-.50-20X5.25-GR8-YZ	3
14	12047	SCREW-HCS-.50-20X6.25-GR8-YZ	1
15	12112	Bolt - 1/4"-20 x 1 1/4" - Gr.8	2
16	12435	Bolt - 5/8"-18 X 5" Gr.8 YZ	1
17	12439	BOLT - GR8 - 5/8"-18 X 5 1/2"- YZ	1
18	12633	Bolt - 7/8"-14 x 5 1/2" Gr. 8 YZ	2
19	90126A029	Flat Washer SAE - 1/4" - GR8 - YZ	4
20	13024	Washer - 1/2" Flat SAE Washer	16
21	13026	Washer - 5/8" Flat SAE Washer	4
22	13030	Washer - 7/8" Flat SAE Washer	4
23	13042	1/4" Lock Washer	2
24	13124	1/2"-20 Lock Nut	8
25	13126	Lock Nut - 5/8" - 18 Gr. - 8 YZ	2
26	13130	Lock Nut - 7/8"-14 Gr. 8 YZ	2
27	13140	1/4"-20 Hex Nut	2
28	14017	1/4"-20 x 1/2" SS Socket Head Cap Screw	4

REV	ICN	CHANGE DESCRIPTION	ISSUE #	DATE	BY	3RD ANGLE PROJECTION	UNLESS SPECIFIED DIMS. IN INCHES	STANDARD TOLERANCES X.XX ± .005 X.XXX ± .010 X.XXX ± .015	DATE	APPROPRIATE WEIGHT = lbs	DATE	DESIGN BY: Tony Anderson	DATE	4/22/2021	DATE	4/22/2021	DATE	4/22/2021	DATE	4/22/2021

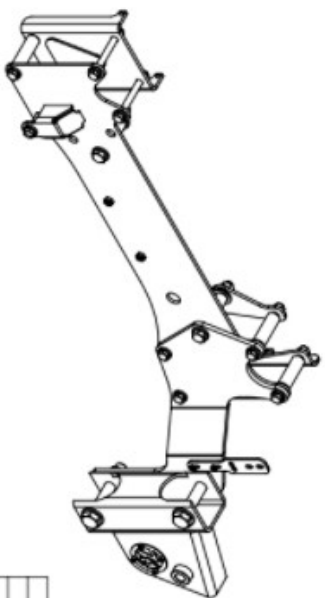


SHEET 1 OF 3

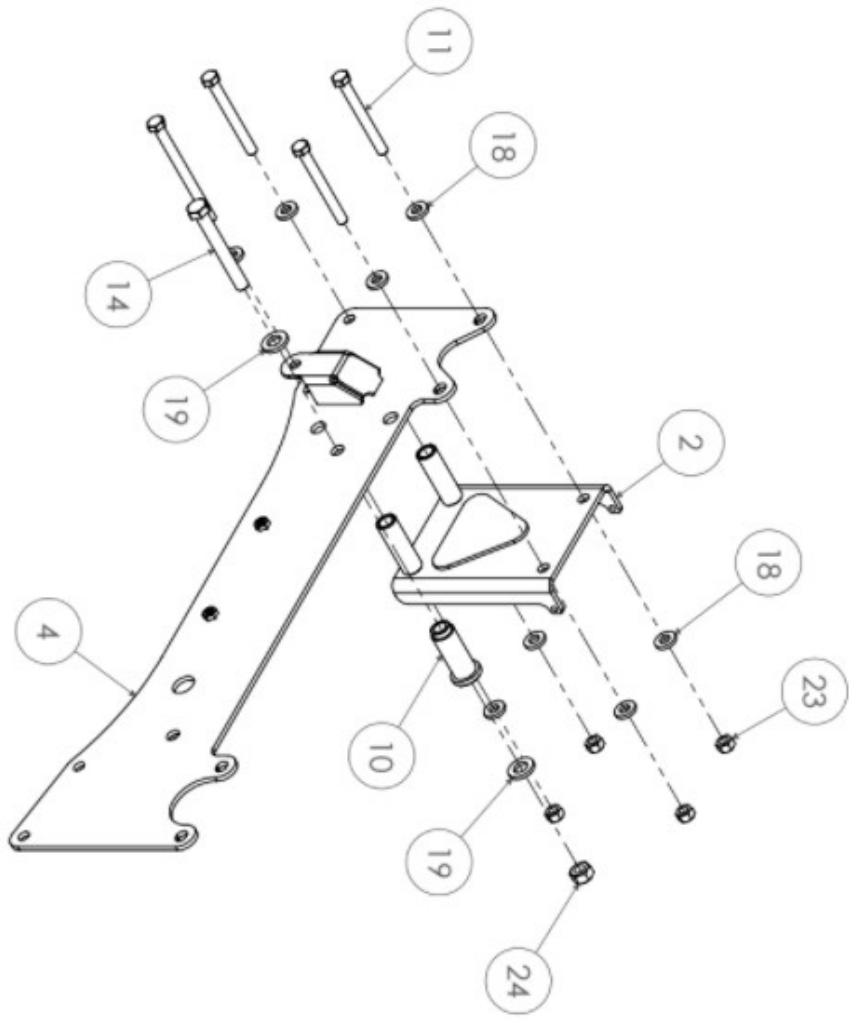




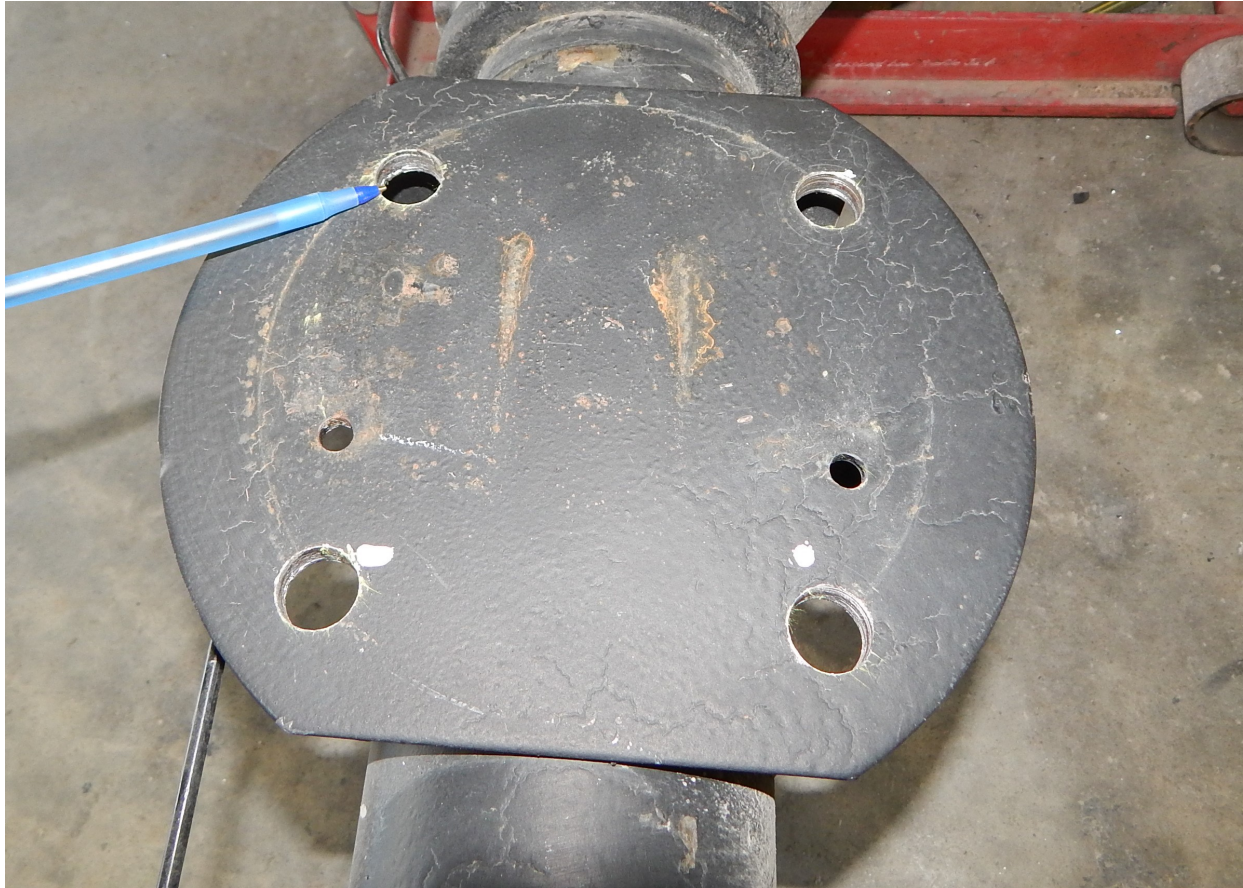
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
Weldments			
1	10004514	Weldment - (PS) Perch Mount	1
2	10005435	Weldment - Side Plate Frame Clamp - Rear (PS)	1
3	10005438	Weldment - Side Plate Frame Clamp - Front (PS)	1
4	10005604	Weldment - PS Side Plate	1
Parts			
5	10004408	Plate - 14ga. - Kelderman Bodge - 2.635" Bolt Circle	1
6	10004518	Plate - 3/8" - (PS) Frame/Perch Support - w/Bends	1
7	10004871	Tube - 1" OD x 0.687" ID x 3" L - Filth Wheel For Anti-Crush Bushing	2
8	10005159	Plate - 7ga - Height Control Sensor Bracket - Key	1
9	10005405	DOM - 1-1/2" OD x 5/8" ID x 3.161" - Top Hat Bushing Frame Anti-Crush, Front	1
10	10005488	DOM - 1-1/2" OD x 5/8" ID x 3.166" - Top Hat Bushing Frame Anti-Crush - Rear	1
Hardware			
11	12035	SCREW-HCS-.50-20X4.75-GR8-YZ	3
12	12047	SCREW-HCS-.50-20X6.25-GR8-YZ	1
13	12112	Bolt - 1/4"-20 x 1 1/4" - Gr.8	2
14	12435	Bolt - 5/8"-18 X 5" Gr.8 YZ	1
15	12439	BOLT - GR8 - 5/8"-18 X 5 1/2" - YZ	1
16	12633	Bolt - 7/8"-14 X 5 1/2" Gr. 8 YZ	2
17	90126A029	Flot Washer SAE - 1/4" - GR8 - YZ	4
18	13024	Washer - 1/2" Flot SAE Washer	16
19	13026	Washer - 5/8" Flot SAE Washer	4
20	13030	Washer - 7/8" Flot SAE Washer	4
21	12039	SCREW-HCS-.50-20X5.25-GR8-YZ	4
22	13042	1/4" Lock Washer	2
23	13124	1/2"-20 Lock Nut	8
24	13126	Lock Nut - 5/8" - 18 Gr. - 8 YZ	2
25	13130	Lock Nut - 7/8"-14 Gr. 8 YZ	2
26	13140	1/4"-20 Hex Nut	2
27	14017	1/4"-20 x 1 1/2" SS Socket Head Cap Screw	4

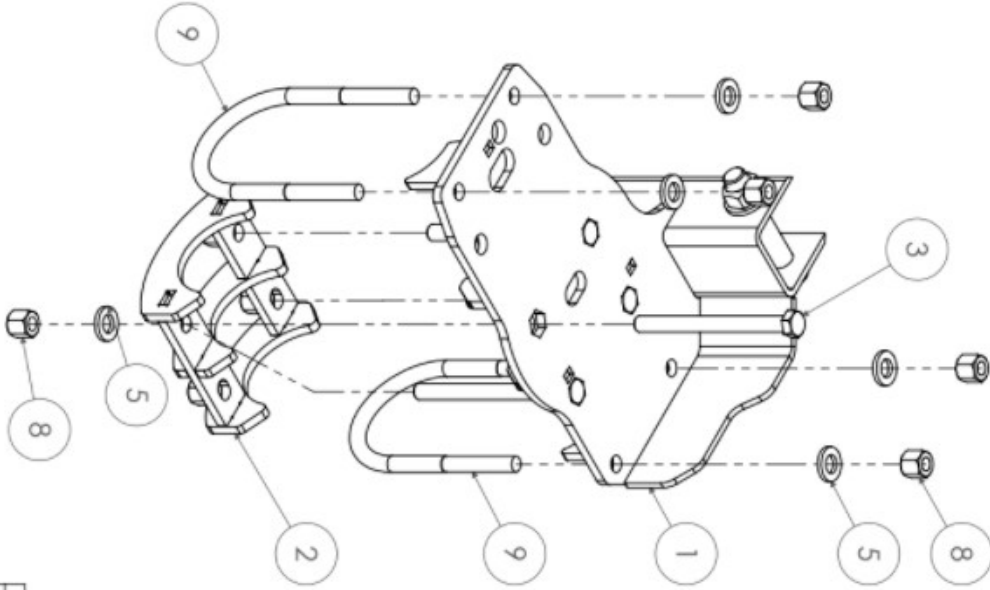


REV	EQN	CHANGE DESCRIPTION	ISSUED BY	DATE	 3D ANGLE PROJECTION	 DO NOT SCALE DIMENSIONS	1:20	APPROXIMATE WEIGHT = 18#
					OTHER NOTES: DIMENSIONS IN INCHES UNLESS OTHERWISE SPECIFIED TOLERANCES: FRACTIONS ±.010 DECIMALS ±.005 Holes ±.010 Chamfers 3:1	MATERIAL: 2017 ⁵⁴ Alum 3500 - 4-Link Rear - Shock Height	DATE: 6/22/2021	
					PART NUMBER: 10006115	DESIGN BY: Ray Anderson	DATE: 6/22/2021	
					TOTAL NUMBER OF SHEETS: 3 SHEET NUMBER: 1 OF 3		SHEET 1 OF 3	



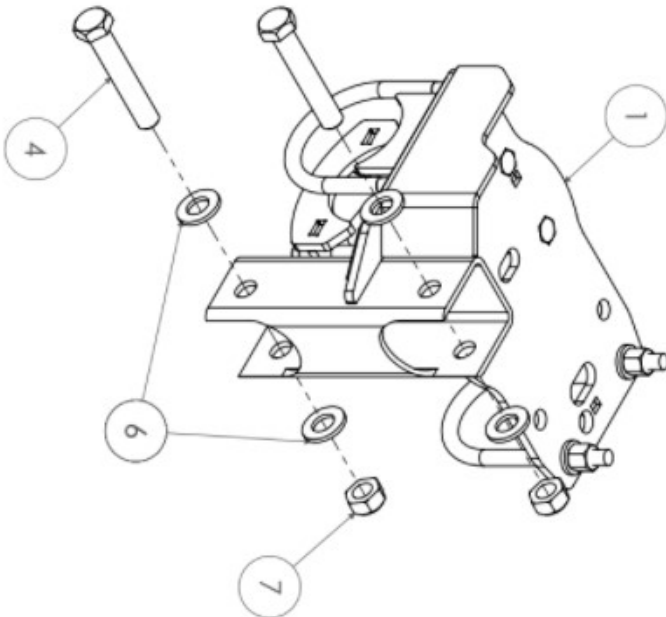
4. Non factory air ride models can skip this step. Locate the lower air bag mounts (part# 4557 DS and 5570PS). They will fit on the axle pad and the OEM air bag mount on the axle. On factory air ride equipped models, you will have to drill 4 holes in the lower bag mount. Set the lower bag mounts in place and mark where to drill on the lower OEM lower bag mounts. Drill these holes out to 3/4". You may have to use a die grinder to oblong the holes if the bolts don't drop straight down and slide into the lower axle clamps (part# 4647). Don't install the lower bag mounts yet.





Factory non air ride pictured. Factory air ride does not have inner axle tabs on the bottom Its flat where it mounts to OEM lower air bag mount

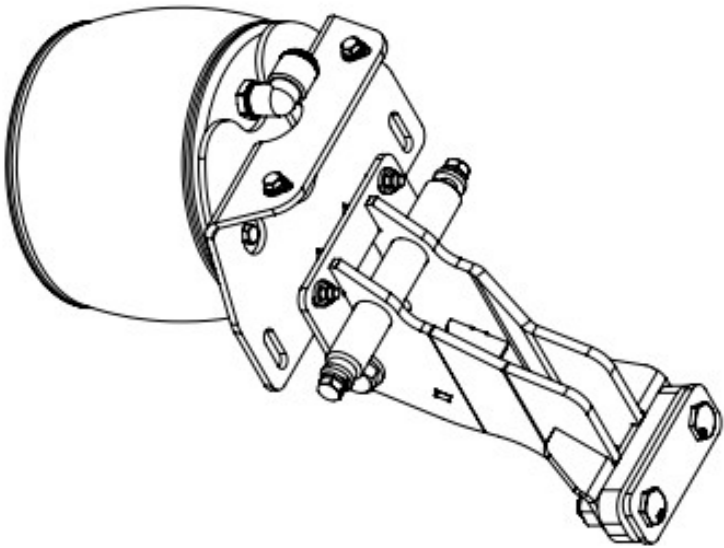
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	10005570	Weldments Weldment - (PS) Lower Bag/Axle Mount - 4.25	1
2	10004647	Weldment - 4.25 Lower Axle Clamp Hardware	1
3	12451	SCREW-HCS-.63-18X7.00-GR8-YZ	4
4	12629	Bolt - 7/8"-1.4 X 5" Gr. 8 YZ	2
5	13026	Washer - 5/8" Flg1 SAE Washer	8
6	13030	Washer - 7/8" Flg1 SAE Washer	4
7	13130	Lock Nut - 7/8"-1.4 Gr. 8 YZ	2
8	13179	NUT - HEX NUT -5/8"-18-GR8-PLN	8
9	14114	U-BOLT 5/8"-18 X 8 X 4.5 X 3/14 THREAD - PLAIN	2



REV	EDN	CHANGE DESCRIPTION	ISSUED BY	DATE

3RD ANGLE PROJECTION DIMENSIONS IN INCHES DIMENSIONS IN MILLIMETERS 3RD ANGLE PROJECTION DIMENSIONS IN INCHES DIMENSIONS IN MILLIMETERS 3RD ANGLE PROJECTION DIMENSIONS IN INCHES DIMENSIONS IN MILLIMETERS	A 1:10 Approximate weight = lbs
2017+ Kom 3500 - 4-Link Rear - Shock Height - Lead P/N: 10008100 DATE: 6/22/2021	

SHEET 1 OF 1

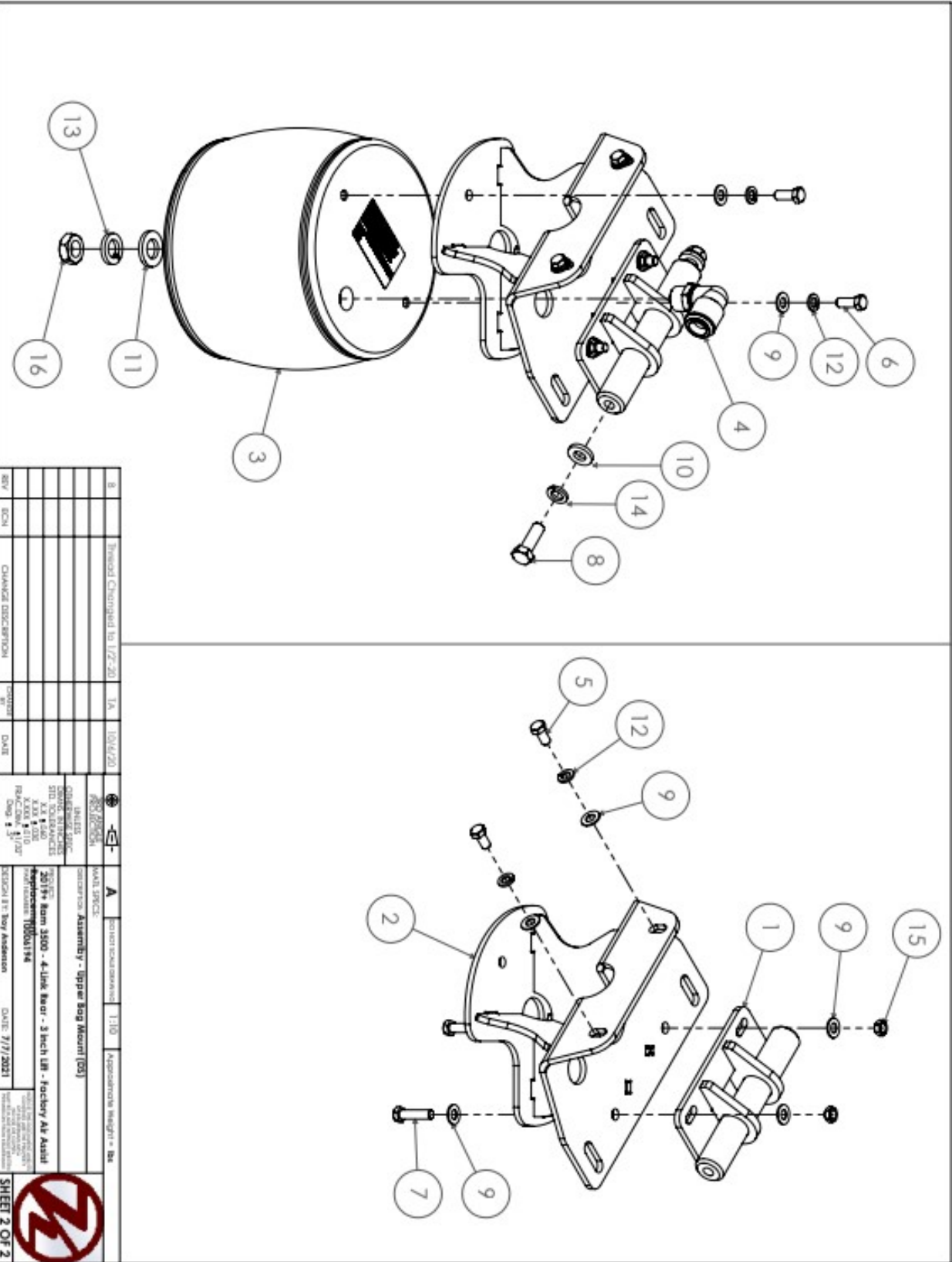


ITEM NO.	PART NUMBER	DESCRIPTION	REV. C - 5-26- 21/REV 8 - 5-26- 21/QITV
1	10004553	Weldments Weldment - Mounting Bracket Bolt Extender	1
2	10005602	Weldment - Upper Bog Plate	1
3	10009640	Weldment - PHB Drop - Stock Height - 3/4" Bolt	1
4	10004890	Plate - 3/4" - PHB Drop Frame Spacer - Non Fills Wheel Purchased Parts	1
5	80012-5748	5748 Freestone AB Bag	1
6	80143	90° Male Connector, Union, SAE Flare, 3/4" x 3/4" - 1.4 NPT (Sedantl)	1
		Hardware	
7	12007	Hex Bolt - 1/2"-20 x 1-1/2" - GR8 - YZ	2
8	12208	Hex Bolt - 3/8"-16 x 3/4" - GR5 - Z	4
9	12217	Bolt - 3/8"-24 X 1.5" Gr. - 8 YZ	2
10	12533	Hex Bolt - 3/4"-16 x 4-1/2" - GR8 - YZ	1
11	13002	Washer - 3/8" Flot STRL Washer	2
12	13022	Washer - 3/8" - Flot SAE Washer	2
13	13024	Washer - 1/2" Flot SAE Washer	2
14	13028	Washer - 3/4" - Flot SAE Washer	3
15	13046	Spill Lock Washer - 3/8" - YZ	2
16	13050	Spill Lock Washer - 1/2" - GR8 - YZ	2
17	13056	Lock Washer - 3/4"	1
18	13122	Lock Nut - 3/8"-24 Gr. - 8	2
19	13128	Lock Nut - 3/4"-16 Gr. 8 YZ	1
20	13208	Jam Nut - 3/4"-16 Gr. 5	1
21	14061	Top Lock Nut: M18-2.5 Class 10 - Z	2
22	14092	M18 Flot Washer	2

B	Thread Changed to 1/2"-20	1A	10/6/20																	
C	Delivery Load PHB Conversion	1A	5/26/21																	
REV	ECN	CHANGE DESCRIPTION	DATE	BY	CHKD	APP'D	DATE	REV	DESCRIPTION	DATE	BY	CHKD	APP'D	DATE	REV	DESCRIPTION	DATE	BY	CHKD	APP'D

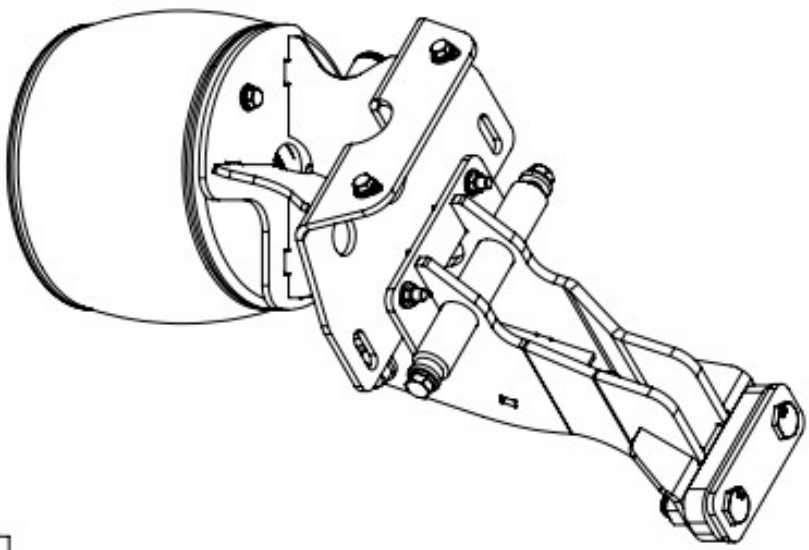


SHEET 1 OF 2



REV	DATE	DESCRIPTION	BY	CHKD
8	10/16/20	Revised Drawing to 1/27/20	TA	TA
<p> DATE PLOTTED: DATE PRINTED: SCALE: UNIT: ORIGIN: SCALE: DATE: DESIGNER: DWG NO.: REV: </p>				
PROJECT: DESCRIPTION: DATE:		SCALE: DATE:	APPROVAL: DATE:	
2019a Rom 3500 - 4-Link Rior - 3 Inch LH - Factory Alt Avail Part Number 10008114 20201117 Boy Assembly DATE: 2/7/2021				

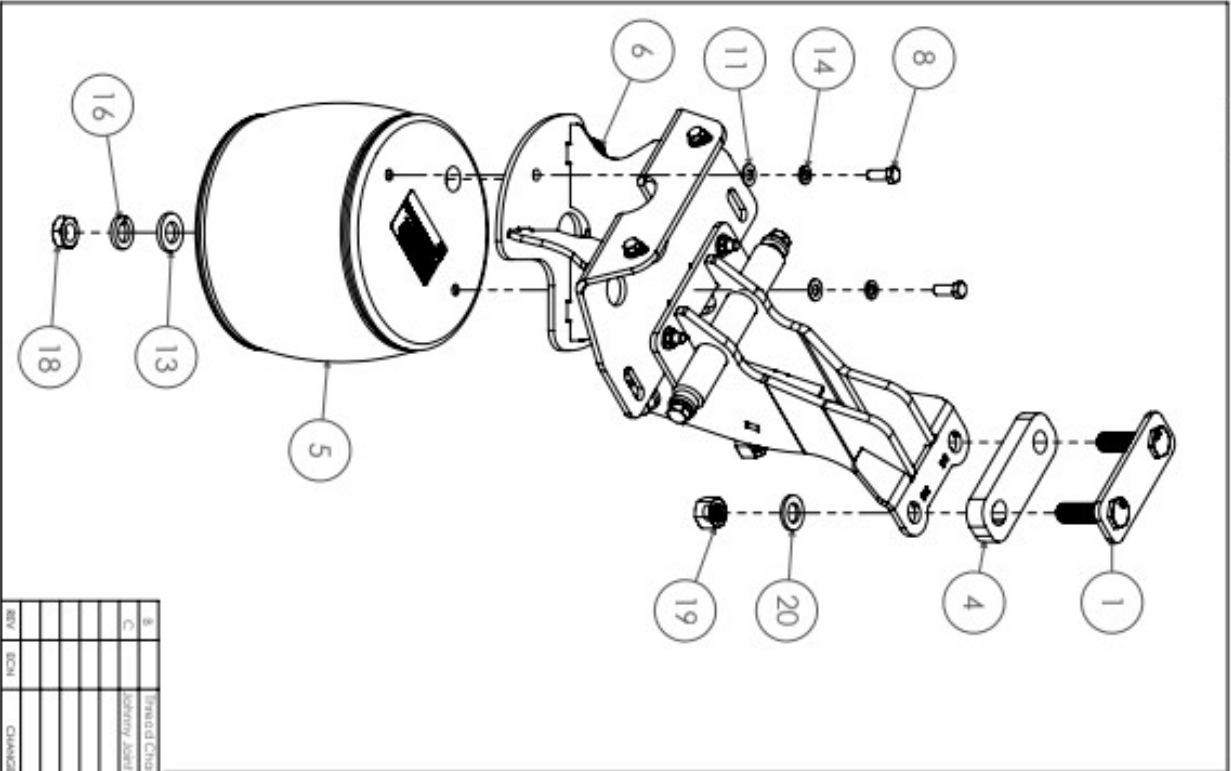




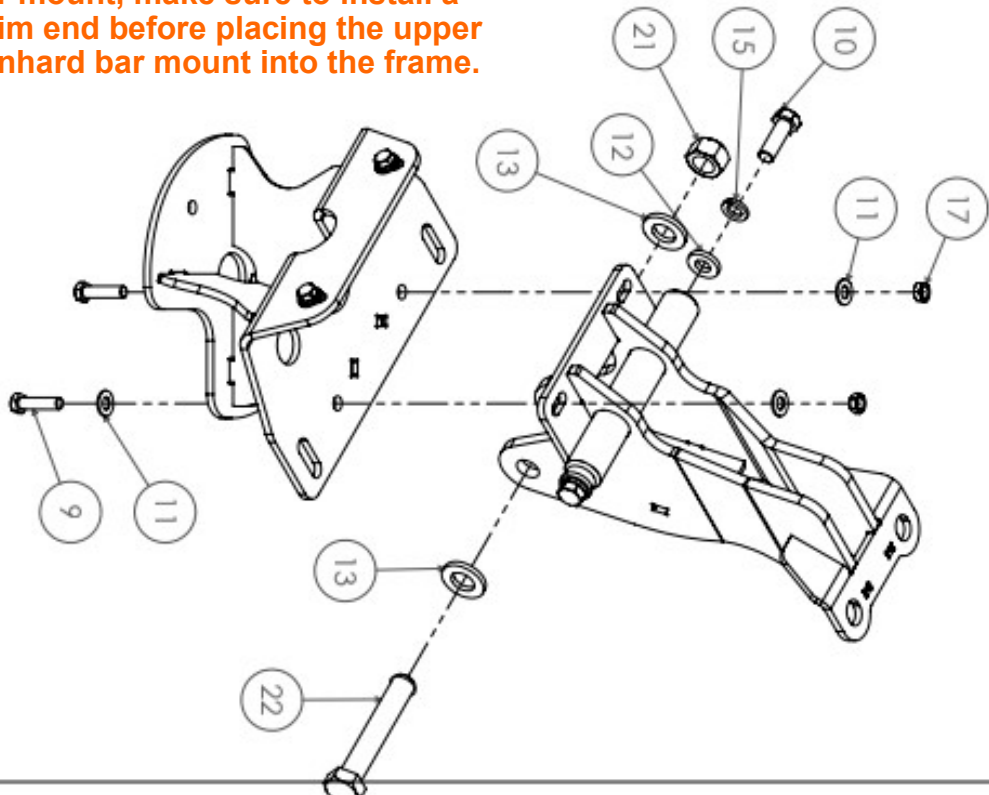
ITEM NO.	PART NUMBER	DESCRIPTION	REV/C
1	10004553	Weldments	5-26-21/GIT Y.
2	10005606	Weldment - Mounting Bracket Bolt Extender	
3	10009779	Weldment - Upper Bog Mount - Factory Air Assist	
4	10004890	Weldment - PH8 Drop - Rear - 3/4" Bolt	
5	80012-5748	Parts	
6	80143	Plate - 3/4" - PH8 Drop Frame Spacer - Non Fifth Wheel	
7	12208	Purchased Parts	
8	12211	5748 Frestone Air Bog	
9	12217	90° Male Connector, Union, SAE Flare, 3/4" x 3/4" -14 NPT (Sedant)	
10	12007	Hardware	
11	13002	Hex Bolt - 3/8"-1.6 x 3/4" - GR5 - Z	
12	13024	Hex Bolt - 3/8"-24 x 1" - GR8 - YZ	
13	13028	Bolt - 3/8"-24 X 1.5" Gr. - 8 YZ	
14	13046	Hex Bolt - 1/2"-20 x 1-1/2" - GR8 - YZ	
15	13050	Washer - 3/8" Flcl STRL Washer	
16	13056	Washer - 1/2" Flcl SAE Washer	
17	13122	Washer - 3/4" - Flcl SAE Washer	
18	13208	Washer - 1/2" - Flcl SAE Washer	
19	14061	Spill Lock Washer - 3/8" - YZ	
20	14092	1/2" Lock Washer	
21	13128	Lock Washer - 3/4"	
22	12533	Lock Nut - 3/8"-24 Gr. - 8	
		Lock Nut - 3/4"-16 Gr. 5	
		Top Lock Nut: M1 B-2.5 Class 10 - Z	
		M1 B Flcl Washer	
		Top Distorted Thread Lock Nut - 3/4"-1.6 - GR8 - YZ	
		Hex Bolt - 3/4"-1.6 x 4-1/2" - GR8 - YZ	

REV	BY	DATE	DESCRIPTION
8		10/6/20	Thread Changed to 1/2"-20
C		5/26/21	Library Joint PH8 Conversion

SHEET 1 OF 3



When installing the upper panhard bar mount, make sure to install a heim end before placing the upper panhard bar mount into the frame.

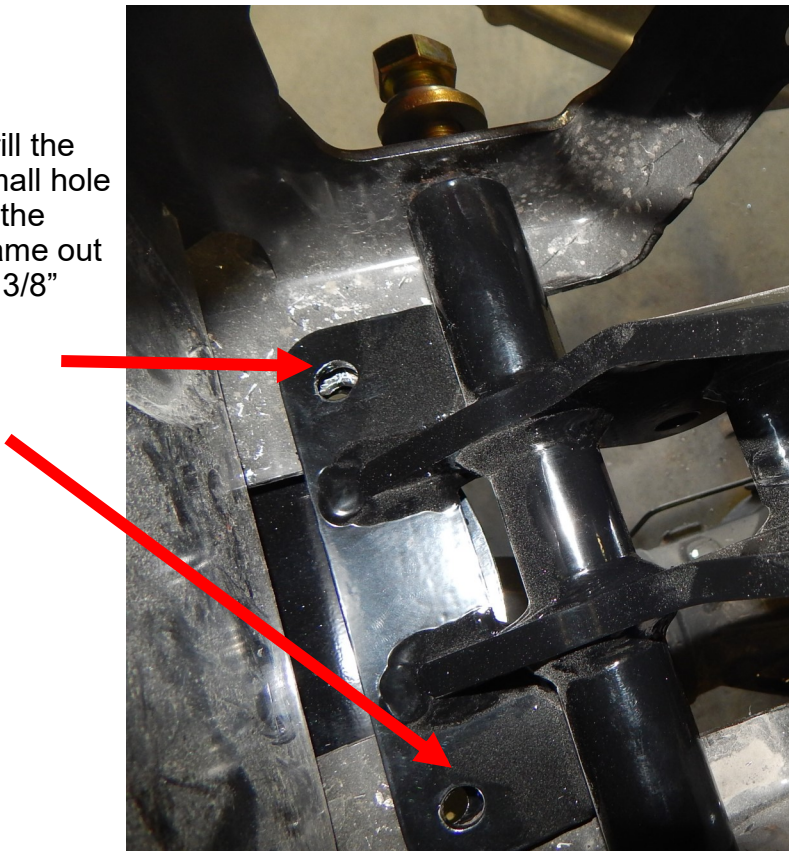


REV	SOIN	CHANGE DESCRIPTION	DATE	BY	CHKD	APP'D	DATE	BY	CHKD	APP'D	DATE
B		Standard Changed to 1/2"-20	10/6/20	JA							
C		SCHEMATIC THIS CONNECTION	1A	3/26/21							
<p>GENERAL SERVICE: 2019+ Farm 3500 - 4-Link New - 3 Inch Lift - Factory Air Assist REPLACEMENT: 1000177 1000177</p>											
<p>DATE: 7/7/2021</p>											
<p>SHEET 2 OF 3</p>											

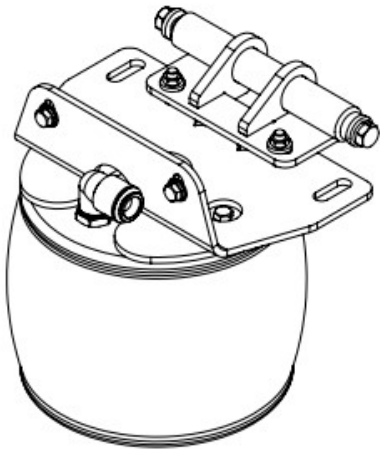
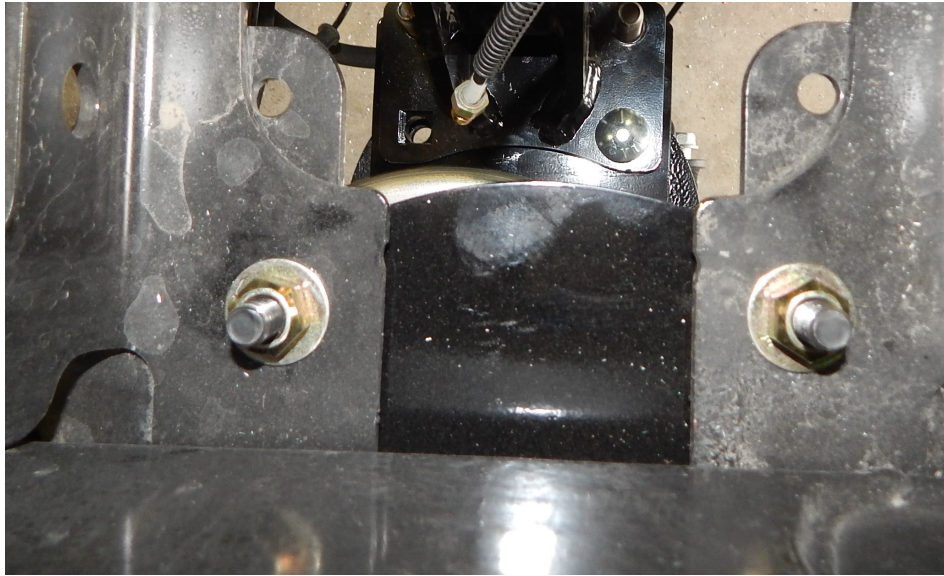
5. Locate the upper pan hard bar mount (part# 9640) and panhard bar bolt extender (part# 4553) and one heim end from the panhard bar (part#80281 or 80282). **You need to install one heim end into the panhard bar mount before installing the panhard bar mount in the frame. Make sure the threaded end of the bolt is pointing towards the rear of the truck. Use the 3/4x6 1/2 bolt to fasten the heim end into the panhard bar drop. The upper pan hard bar mount fastens inside the frame/hitch area on the passenger side.** Remove the passenger side bolt plate that fastens the hitch in place. Next, slide the mount up from the bottom and use the 1/2x1 1/2" and flat washers to fasten the lower part of the mount to the side of the frame. Now, slide the new bolt plate from the top down, Torque the bolt plate nuts to 150 ft/lbs and the 1/2" bolts to 85 ft/lbs. Next you will drill two 3/8" holes through the frame of the truck. You will see a couple holes that are just under 3/8". Drill up through the bottom of the frame. Be careful when drilling. You are going through the frame and

6. Locate the upper air bag mounts (part# 5602) and air bags (part# 5748). Attach the air bags to the upper bag mounts with the 3/8x 3/4" bolts so the large port sits in the cut out. Torque to 35 ft/lbs. The upper air bag mount fasten to the side plates on each side with two 3/8x3/4" bolts. On the passenger side you will need to line up the holes so they line up with the holes in the lower plate on the panhard bar bracket and fasten together with the 38/x1 1/2 bolts. Next use the factory bolts that held the OEM airbag in place to fasten the outer two holes in the air bag bracket to the frame. . Once all the bolts are in place, torque the inner bolts to 45 ft/lbs and the outer bolts to 85 ft/lbs. The drivers side installs the same way, minus fastening through the panhard bar mount.

Drill the small hole in the frame out to 3/8"

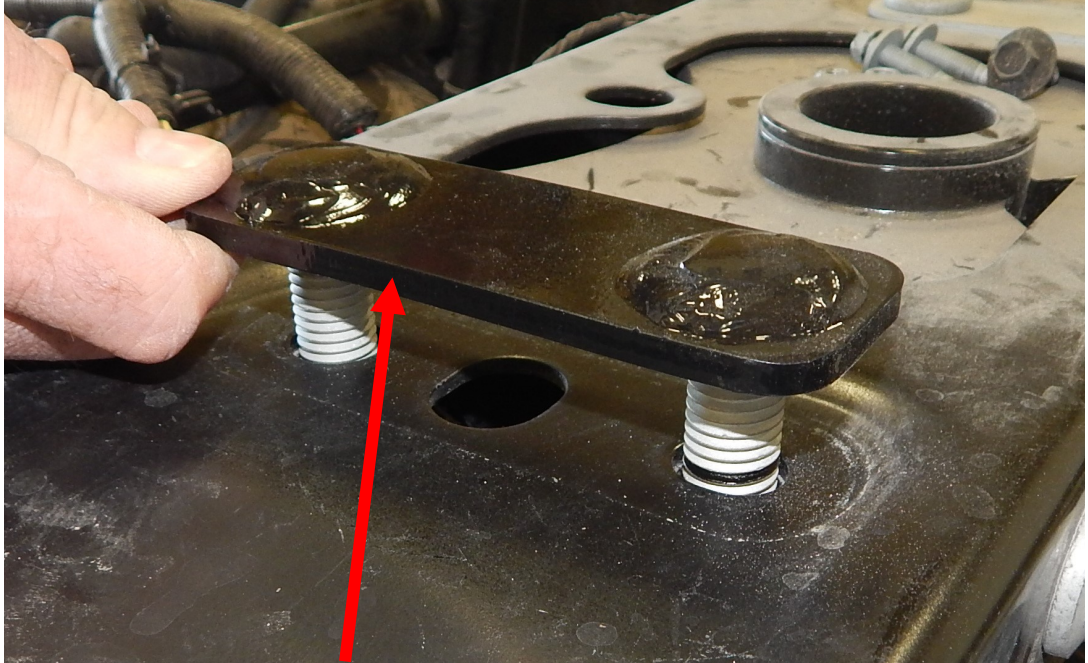


Drivers side upper
bag mount installed



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
<i>Weldments</i>			
1	10004892	Weldment - Bag Plate Crossmember Bracket (DS)	1
2	10005602	Weldment - Upper Bag Plate	1
<i>Purchased Parts</i>			
3	80012-5748	5748 Firestone Air Bag	1
4	80143	90° Male Connector, Union, SAE Flare, 3/4" x 3/4" -14 NPT (Sealant)	1
<i>Hardware</i>			
5	12208	Hex Bolt: 3/8"-1.6 X 3/4" - GR5 - Z	4
6	12217	Bolt - 3/8"-24 X 1.5" Gr. - 8 YZ	2
7	12007	Bolt - 1/2"-20 X 1 1/2" Gr.8 YZ	2
8	13002	Washer - 3/8" Flat STRL Washer	2
9	13022	Washer - 3/8" - Flat SAE Washer	2
10	13024	Washer - 1/2" Flat SAE Washer	2
11	13028	Washer - 3/4" - Flat SAE Washer	1
12	13046	Split Lock Washer - 3/8" - YZ	2
13	13050	Split Lock Washer - 1/2" - GR8 - YZ	2
14	13056	Lock Washer - 3/4"	1
15	13122	Lock Nut - 3/8"-24 Gr. - 8	2
16	13208	Jam Nut - 3/4"-16 Gr. 5	1

REV	SCN	CHANGE DESCRIPTION	DATE	 <small>UNLESS OTHERWISE SPECIFIED</small> <small>STANDARD DIMENSIONS</small> <small>FINISH: AS SUPPLIED</small> <small>FRAC. DIM. 1/32"</small> <small>DEC. DIM. 0.0005"</small>	A <small>DO NOT SCALE DRAWING</small> <small>1:10</small> <small>Approximate Weight = lbs</small>	<small>2019+ Ram 3500 - 4-Link Rear - Stock Height</small> <small>PART NUMBER: 10005591</small> <small>DESIGN BY: Troy Anderson</small> <small>DATE: 6/22/2021</small>	 SHEET 1 OF 2
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Panhard bar bolt plate re-places OEM bolt plate (passenger side)

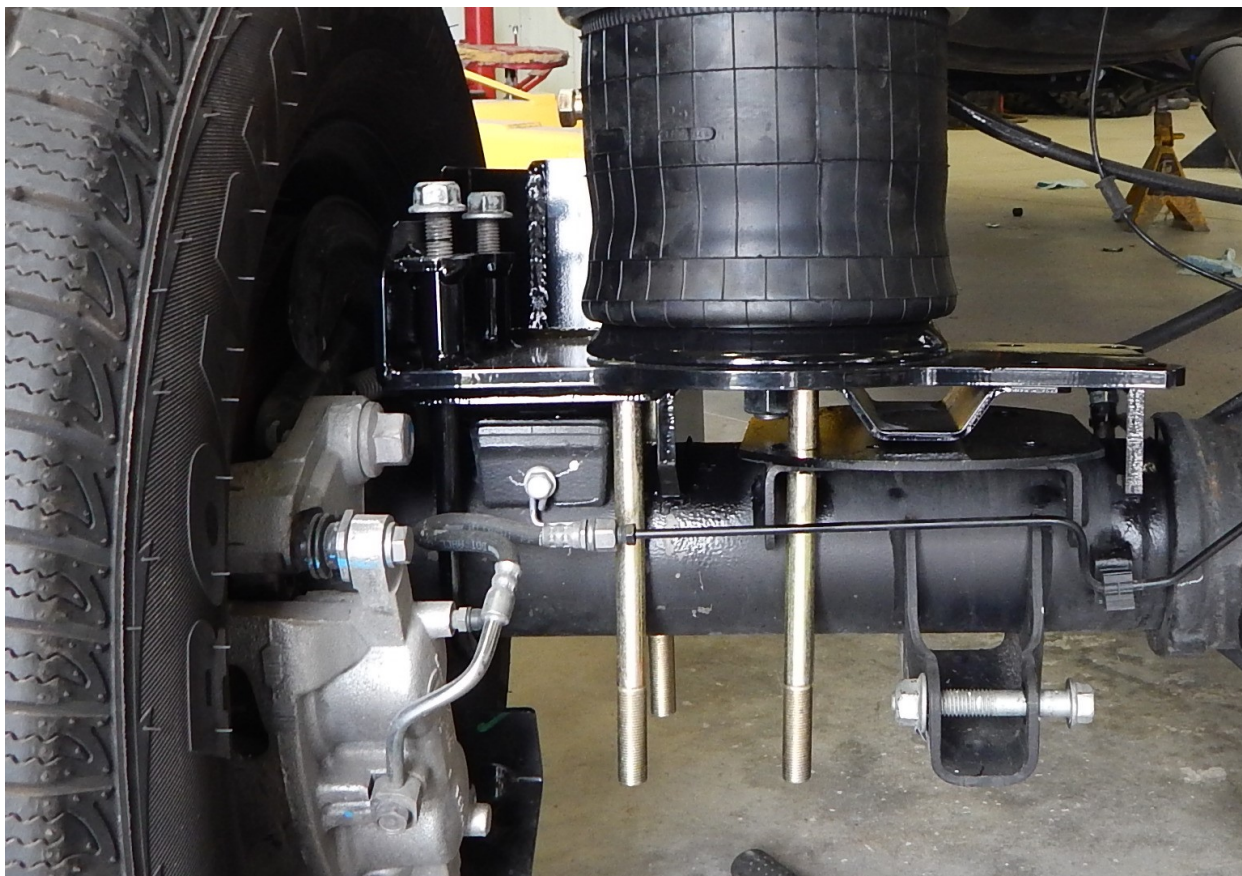
OEM bolt that held the factory air bag in place

Passenger side

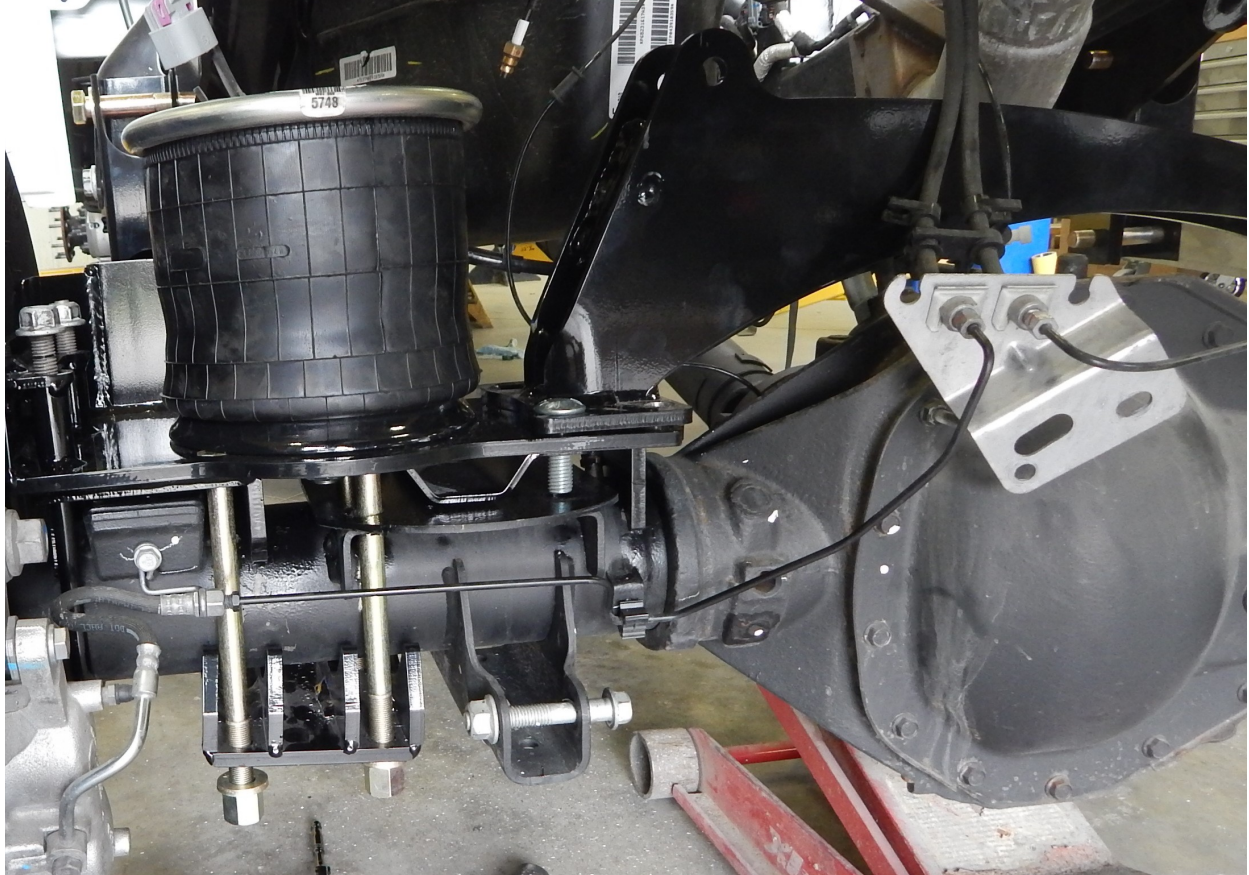


7. Locate the lower air bag mounts (part# DS and 4424PS), lower axle clamps (part# 4647), 2 factory U bolts (part# 14114). The lower air bag mount fasten on top of the leaf spring perch and clamps to the axle with the factory U bolt and four 5/8x 7" bolts. Drop the four 5/8" bolts through the lower bag mount. Next slide the air bag mount up to the air bag and fasten with the 3/4" nut and lock washer. You can torque the stud on the bottom of the air bag once the install is complete. It just needs to be snug for now. Do not torque the 5/8" bolts or U bolts until after the crossmember is installed in step 8. Just snug the nuts for now. Locate the air fitting for the air bag. Fasten it into the air bag so the large air fitting points towards the rear of the truck. You will connect the port to the accumulator tank in step 12.

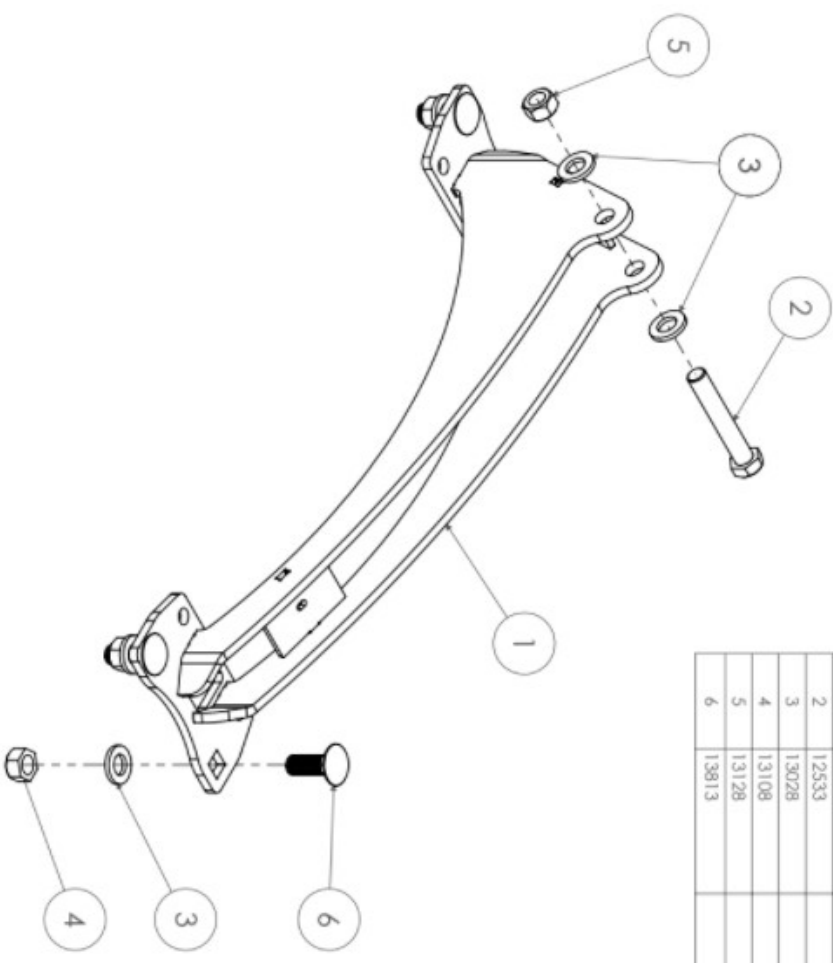
On the 2-3" rear, you will install a 2" spacer between the lower air bag and the lower air bag mount



8. Locate the lower panhard bar crossmember (part# 9769). It fastens to the lower air bag mounts with the 5/8" U bolt and four 3/4x2" carriage bolts. Torque the U bolts to 100 ft/lbs. Torque the 3/4" bolts to 105 ft/lbs. Now go back and torque the OEM U bolt on the outer ends of the lower bag mount to 125 ft/lbs and torque the 5/8x8 1/2" bolts to 150 ft/lbs.



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
		Weldments	
1	10009769	Weldment - Front Bar Crossmember - Short - 3/4" Bolt	1
		Hardware	
2	12533	Hex Bolt - 3/4" - 16 x 4-1/2" - GR8 - YZ	1
3	13028	Washer - 3/4" - Flat SAE Washer	6
4	13108	Lock Nut - 3/4" - 10 Gr. 5 YZ	4
5	13128	Lock Nut - 3/4" - 16 Gr. 8 YZ	1
6	13813	Carriage Bolt - 3/4" - 10 x 2 Gr. 5	4



B	Library Asset P/B Conversion	TA	5/21/21	REV	REV	CHANGE DESCRIPTION	CHGCD	DATE									
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SHEET 1 OF 2

9. Locate the trailing arms (part# 80246) Set the trailing arms so there is 9" between the knuckles. The trailing fasten into the forward trailing arm mounts and lower air bag mounts with the 7/8x5 1/2" bolts. **Insert the bolts on the front trailing arm mount from the outside in and the bolts from the inside out on the lower air bag mounts.** The lower drivers side rear knuckle pinch bolt will be used to attach the E brake cable with the E brake cable loop (Part# 17551).



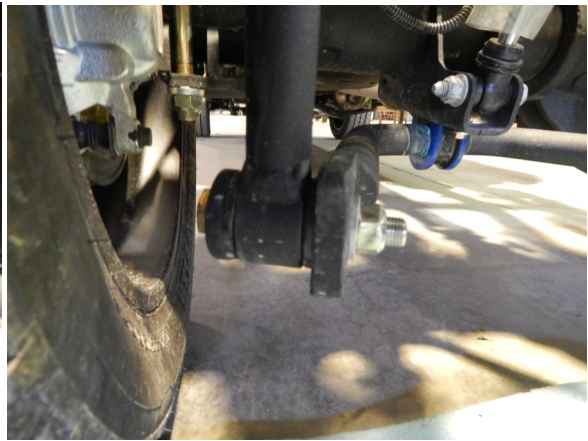


10. Locate the accumulator tanks (part# 5062PS and 5063DS). They fasten into the rear leaf spring perch. Make sure the large port faces towards the front of the truck. Fasten the tank in place with the rear leaf spring shackle bolt. Torque this bolt to 150 ft/lbs.

11. Locate the 3/4" air line. Lay the air line besides the fitting on the air bag and the accumulator tanks. Be sure to add a couple inches to this length. Remember that the air line will press into the fittings. Once the air line is cut, connect the accumulator tank to the air bag.



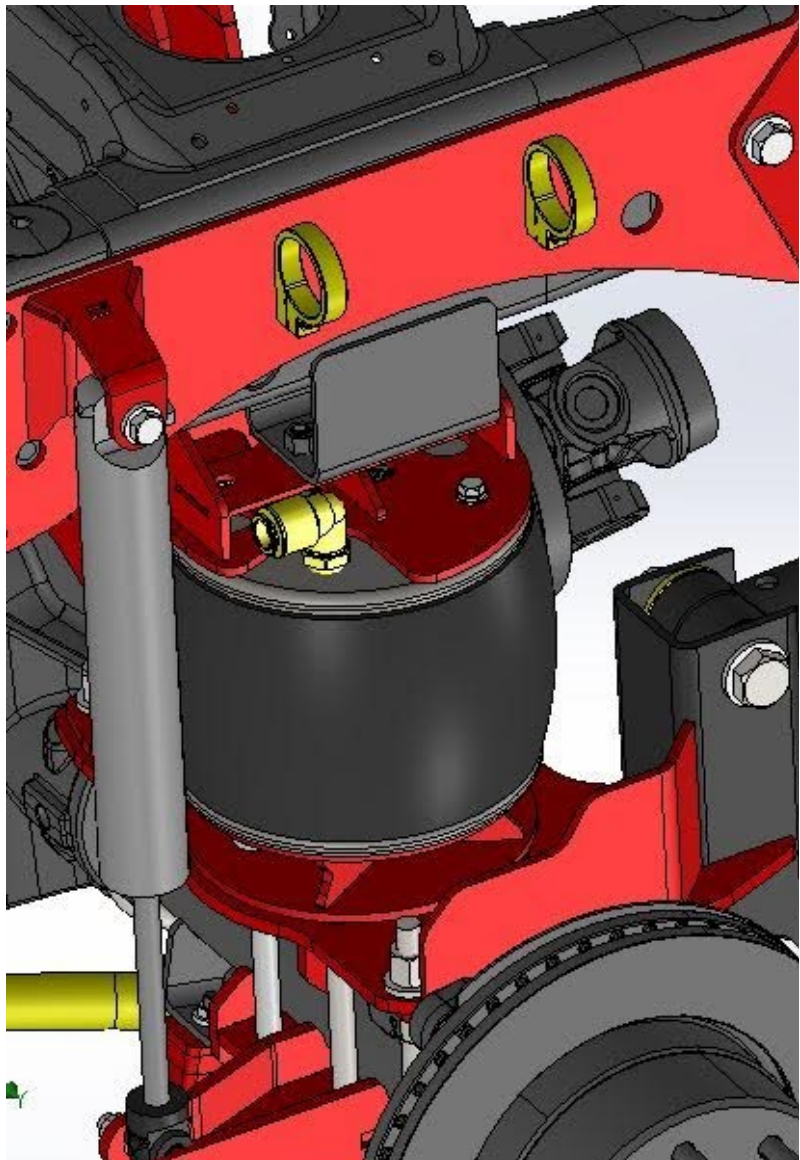
12. Locate the sway bar (part# 80246), endlinks (part# 17091), and the sway bar spacers (part# 4769 and 5463)The sway bar installs on the bottom of the shock mounts with the 1/2" sway drop spacers, sway bar bushing and d ring (part# 6124). Use the 3/8x2 1/2" bolts to fasten the stack to the bottom of the axle.



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
<i>Parts</i>			
1	10004769	Plate - 1/2" - Sway Bar Drop Spacer	2
2	10005463	Plate - 1/4" - Sway Bar Drop Spacer	1
<i>Hardware</i>			
3	80255	Purchased - Sway Bar Bushing - 1-3/8" ID (5347)	1
4	80258	Purchased - Sway Bar D-Ring Bracket - 5" Ball Spacing - 1.5" ID - 1.375" Wide	1
<i>Purchased Parts</i>			
5	12227	BOLT - 3/8"-24 X 2 1/2" GR8	2
6	13022	Washer - 3/8" - Flat SAE Washer	4
7	13122	Lock Nut - 3/8"-24 Gr. - 8	2

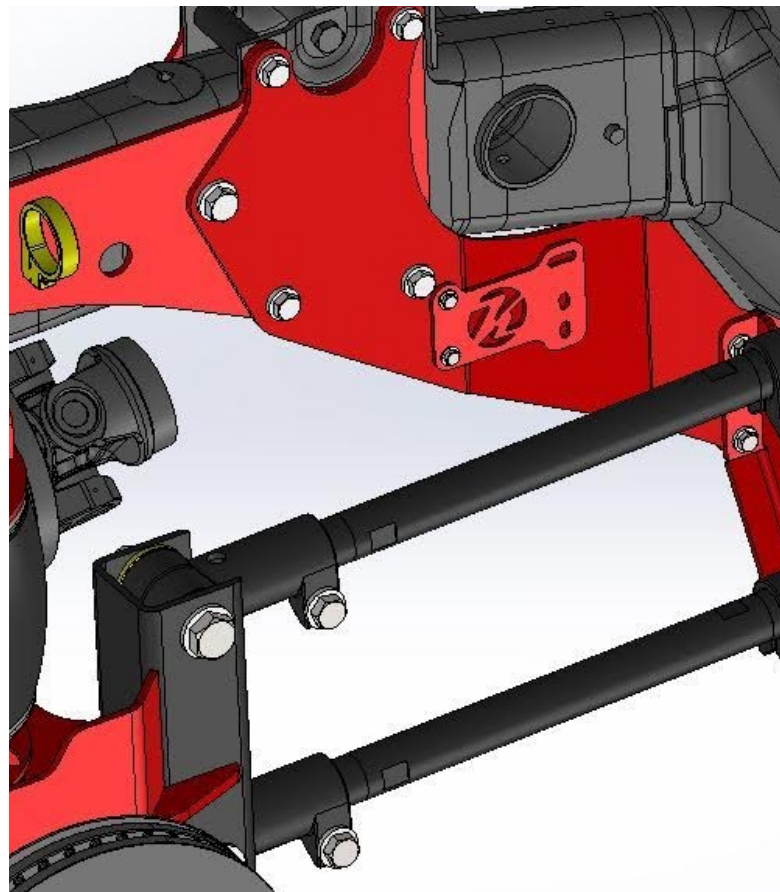
REV	BY	CHANGE DESCRIPTION	ISSUED BY	DATE	 <small>UNLESS OTHERWISE SPECIFIED: DIMENSIONS IN PARENTHESES X.XX ± 0.01 X.XXX ± 0.005 FRAC.DIM. ± 1/32"</small>	 <small>DO NOT SCALE DRAWING</small>	<small>1:5</small>	<small>Approximate Weight = lbs</small>	 SHEET 1 OF 1
<small>DESCRIPTION: Assembly - Sway Bar Bushing - 1-3/8" ID</small>					<small>2019+ Ram 3500 - 4-Link Rear</small>	<small>DESIGN BY: Toy Anderson</small>	<small>DATE: 7/7/2021</small>		

13. This is for the 3" kit only. Locate the rear shocks (part#) and rear shock remote reservoir clamps (part# 80227). The shocks fasten to the side plates with the 1/2x3" bolts and to the lower air bag mounts with the 1/2x7 1/2" bolts. The remote reservoir fastens to the side plate with the 1/2x1" bolts. Make sure the hose on the shock will not come in contact with the rear wheels when in operating height or when dumped.

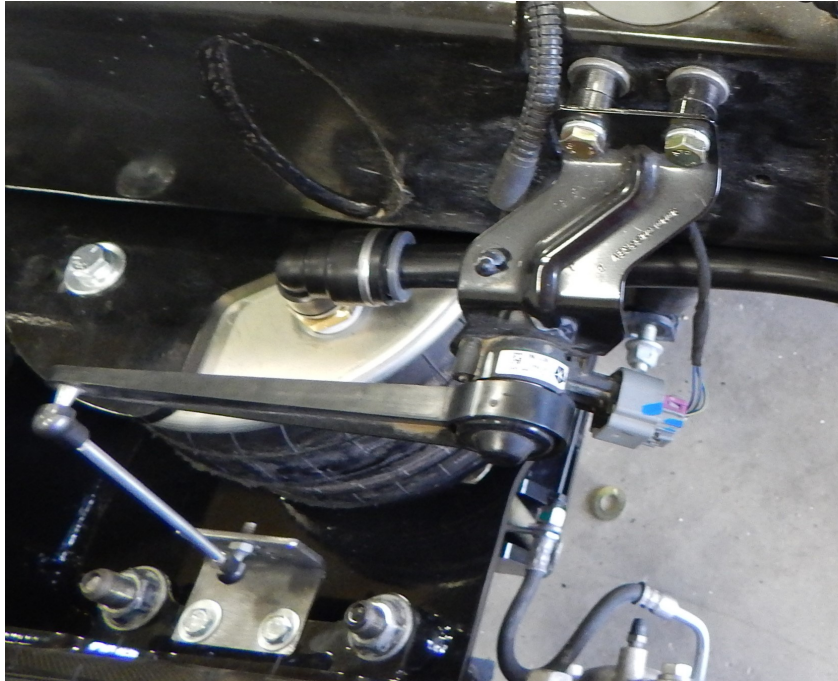


14. Locate your control box and air tank. There is not a best spot for the controls. If you not have retractable steps, the tank and compressor box and go on the outside of the frame. If you have a long box, you may be able to put the box on the passenger side behind the cab on the outside of the frame. Mega cab owners may be stuck installing the tank and compressor box where the spare tire went. There are 2 brackets that you will need to fasten to the frame. You can drill and tap the frame for the 3/8x1-24 bolts. Once our brackets are attached to the frame, attach the air compressor box to the brackets with the supplied 3/8x1" bolts and nuts. The best option for the tank is to drill and tap into the frame for the 3/8x1" bolts just like you did to mount the air compressor box mounting brackets.

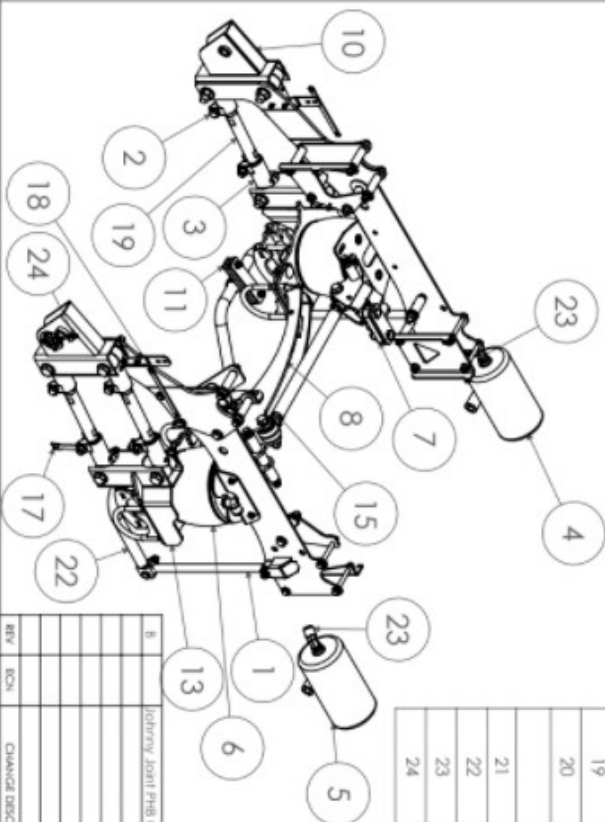
15. Once you have the air tank and air box mounted, locate the height control valves. They fasten to the sensor mounting brackets on the side plates with the 1/4" bolts. You will want to set the height control valve so the lever is straight out from the body when the air bag is at 7-8" . You will use a Phillips screwdriver to attach the collar to the upper trailing arm straight down under the end of the ball of the height control lever. Once you have the height controls installed, use the wiring and plumbing instructions provided with the air controls to finish the installation. Once completed, it will require some fine tuning to get the truck to set level side to side. Loosen the nut on the side of the lever and rotate up or down accordingly. A test drive will need to be done to get the final ride height determined. You will need to torque the 5/8" pinch bolts on the cast knuckles to 150 ft/lbs once the test drive is done and the truck is dialed in.



If you choose to run the factory air, you will need to space the factory sensor out away from the frame 3/4" with the provided spacers. You will also need to attach the lower end link bracket to the lower air bag mount. The ideal ride height for the air bag is 7". Ram trucks may or may not warranty any of their components once their factory system is removed.



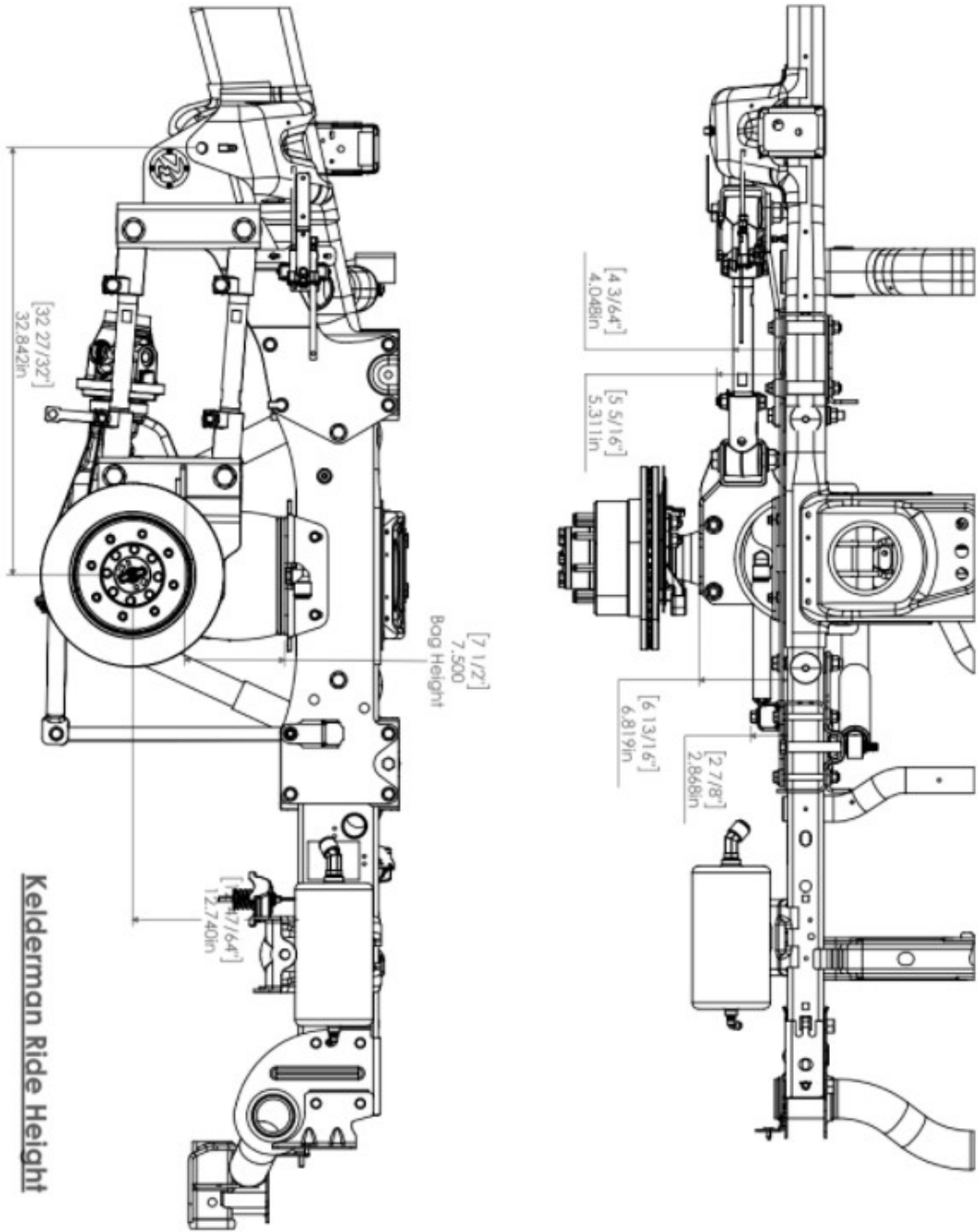
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
<i>Assemblies</i>			
1	17091	Assembly - 18.00" End-Link	2
2	18498	Assembly - Cast Knuckle 100006	4
3	18499	Assembly - Cast Knuckle 10005 - 1" ID	4
4	10005062	Weldment - Accumulator Tank - 1 gal. (DS)	1
5	10005063	Weldment - Accumulator Tank - 1 gal. (DS)	1
6	10005591	Assembly - Upper Bog Plate	1
7	10005603	Assembly - Upper Bog Mount & PHB Drop (PS)	1
8	10006097	Assembly - PHB Crossmember - Stock Height	1
9	10006105	Assembly - Side Plate (DS)	1
10	10006115	Assembly - Side Plate (PS)	1
11	10006124	Assembly - Sway Bar Bushing - 1-3/8" ID	2
12	10006125	Assembly - Brake Line Relocation Bracket (Bent) - 1-3/4" Extension	1
13	10006152	Assembly - Lower Bog Plate & Axle Clamp (DS)	1
14	10006153	Assembly - Lower Bog Plate & Axle Clamp (PS)	1
15	10009775	Assembly - Panhard Bar - 18" Bar Length - 3/4" Bolt	1
<i>Parts</i>			
16	11551	Plate - 1/4" - 1.5"OD x .53" ID x 1/4"	2
17	17551	Plate - 18ga - Wire/Hose/E-broke Cable Retainer	1
18	51707	Plate - 7ga - Sensor Arm - 7.5" - Straight	2
19	52116	16.00" Trailing Arm Bar	4
20	10004891	Tube - 1" OD x 0.687" ID x 3" L - Fifth Wheel For Anti-Crush Bushing	2
<i>Purchased Parts</i>			
21	80094	90° Male Elbow Tube 1/4" x 1/4-18 NPT	2
22	80246	Purchased - Sway Bar - 1-3/8" Dia	1
23	80261	45° Male Male Elbow, 3/4" x 3/4" - 14 NPT - Brass Fitting, Swivel	2
24	80264	Purchased - Vibration-Damping Loop Clamp - 1/2" ID	2



REV	ICON	CHANGE DESCRIPTION	CHANGED BY	DATE	APPROVED BY	DATE
B		JOINTLY JOINT PHB CONVERSION	TA	5/22/21		

<p>2019 Ram 3500 - 4 Link Rear - Stock Height - Factory Air Assist Replacement</p> <p>Part Number: 1000409</p>	<p>2019 Ram 3500 - 4 Link Rear - Stock Height - Factory Air Assist Replacement</p> <p>Part Number: 1000409</p>
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SHEET 1 OF 2



Compressor Box Self-Leveling Kit Wiring Diagram (ambulance prep package)

