

INSTALL INSTRUCTIONS

2019-2024 RAM 2500/3500 5-6" Front Lift Kit



KIT# 10004537 & 10006031

1/2"-20", 3/8"-24" and 5/16"-18" taps are required for installation.

Welding is also required.

kelderman



KELDERMAN MANUFACTURING

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KIT NUMBERS

- THIS INSTALLATION MANUAL COVERS THE FOLLOWING AIR RIDE KITS.

KIT NUMBER	DESCRIPTION
10004537	KIT - 2019-2024 RAM 2500/3500 PICKUP - CONTROL ARM - 6" LIFT FRONT - TRANSMISSION: 68RFE 6-SPEED
10006031	KIT - 2019-2024 RAM 2500/3500 PICKUP - CONTROL ARM - 6" LIFT FRONT - TRANSMISSION: AISIN AS69RC 6-SPEED



2019 RAM 3500 MEGA CAB SHOWN

INTRODUCTION

IMPORTANT

- ♦ IT IS IMPORTANT THAT THE ENTIRE INSTALLATION INSTRUCTIONS BE READ THOROUGHLY BEFORE PROCEEDING WITH INSTALLATION.
- ♦ IF YOUR KIT WAS ORDERED RAW, OPEN EVERY BOX AND LOCATE ALL PARTS. THERE ARE SEVERAL SMALLER BUSHING PIECES AND BOLTS THAT ARE PACKAGED SEPARATELY INSIDE THE MAIN BOX.

PRODUCT INSTALLER RESPONSIBILITIES

- ♦ INSTALLER IS RESPONSIBLE FOR INSTALLING THIS PRODUCT IN ACCORDANCE WITH KELDERMAN MFG. INC. SPECIFICATIONS AND INSTALLATION INSTRUCTIONS.
- ♦ INSTALLER IS RESPONSIBLE FOR PROVIDING PROPER INSTALLATION OF VEHICLE COMPONENTS AND ATTACHMENTS AS WELL AS REQUIRED OR NECESSARY CLEARANCE FOR SUSPENSION COMPONENTS, AXLES, WHEELS, TIRES, AND OTHER VEHICLE COMPONENTS TO ENSURE A SAFE AND SOUND INSTALLATION AND OPERATION OF THIS PRODUCT.

DEFINITION OF TERMS

- ♦ **WARNING:** INDICATES A POTENTIALLY HAZARDOUS SITUATION WHICH, IF NOT AVOIDED, COULD RESULT IN DEATH OR SERIOUS INJURY.
- ♦ **CAUTION:** A POTENTIAL HAZARDOUS SITUATION MAY RESULT IN PROPERTY DAMAGE.
- ♦ **NOTE:** PROVIDE INFORMATION OR SUGGESTIONS THAT HELP CORRECTLY PERFORM A TASK.
- ♦ **TORQUE:** WHEN ITALICIZED "TORQUE" ALERTS THE INSTALLER TO TIGHTEN FASTENERS TO A SPECIFIED VALUE.

BOLT TORQUE CHART

BOLT SIZE	GRADE 5 TORQUE	GRADE 8 TORQUE
1/4"-20	8 <i>FT-LB</i>	12 <i>FT-LB</i>
3/8"-16	31 <i>FT-LB</i>	44 <i>FT-LB</i>
3/8"-24	35 <i>FT-LB</i>	49 <i>FT-LB</i>
1/2"-13	75 <i>FT-LB</i>	106 <i>FT-LB</i>
1/2"-20	85 <i>FT-LB</i>	120 <i>FT-LB</i>
9/16"-18	121 <i>FT-LB</i>	171 <i>FT-LB</i>
5/8"-11	150 <i>FT-LB</i>	212 <i>FT-LB</i>
5/8"-18	170 <i>FT-LB</i>	240 <i>FT-LB</i>
3/4"-16	297 <i>FT-LB</i>	420 <i>FT-LB</i>
7/8"-14	474 <i>FT-LB</i>	669 <i>FT-LB</i>

SAFETY

YOUR SAFETY AND THE SAFETY OF OTHERS IS VERY IMPORTANT.

- ◆ READ AND UNDERSTAND ALL SAFETY PRECAUTIONS AND INSTRUCTIONS BEFORE INSTALLING THIS PRODUCT.

CAUTION: TRUCKS EQUIPPED WITH PARKING SENSORS OR OTHER LIKE DEVICES.

- ◆ RELOCATION OF THESE DEVICES WILL ALTER THE FIELD OF VIEW. IT IS THE RESPONSIBILITY OF THE OWNER TO UNDERSTAND HOW THESE CHANGES AFFECT THE OPERATION OF THESE SYSTEMS.

WARNING: COMPONENTS UNDER PRESSURE.

- ◆ BLEED ALL PRESSURE FROM THE AIR SYSTEM BEFORE PERFORMING ANY MAINTENANCE OR SERVICE. SERIOUS INJURY COULD OCCUR IF COMPONENTS ARE REMOVED WHILE SYSTEM IS PRESSURIZED.

WARNING: CARELESS INSTALLATION CAN RESULT IN SERIOUS INJURY OR PROPERTY DAMAGE

- ◆ WEAR EYE PROTECTION.
- ◆ DISCONNECT THE BATTERY BEFORE DOING ANY WORK ON THE VEHICLE.
- ◆ WORK ON FLAT LEVEL GROUND.
- ◆ ENSURE TRUCK IS PROPERLY SUPPORTED BY JACK STANDS. NEVER WORK UNDER A VEHICLE SUPPORTED ONLY BY HYDRAULIC JACKS.
- ◆ TAKE PRECAUTIONS WHEN LIFTING PRODUCT. DUE TO THE SIZE AND WEIGHT OF THIS PRODUCT TWO PEOPLE ARE RECOMMENDED FOR INSTALLATION.
- ◆ NEVER WORK DIRECTLY UNDER THE PRODUCT UNTIL IT HAS BEEN SECURELY FASTENED TO THE VEHICLE.
- ◆ AVOID SHARP, HOT, AND MOVING COMPONENTS WHEN ROUTING ELECTRICAL CABLES AND AIR LINES.
- ◆ IF DRILLING, INSPECT BOTH SIDES OF THE SURFACE AND REMOVE/RELOCATE ANY OBJECTS LOCATED IN THE WAY.
- ◆ ENSURE ALL BOLTS ARE PROPERLY TIGHTENED BEFORE DRIVING.

PRODUCT OWNER RESPONSIBILITIES

- ♦ PRODUCT OWNER IS SOLELY RESPONSIBLE FOR PRE-OPERATION INSPECTION, PERIODIC INSPECTIONS, MAINTENANCE, AND USE OF THE PRODUCT AS SPECIFIED BY KELDERMAN MFG. INC. OF PARTICULAR IMPORTANCE IS THE RE-TORQUE OF FASTENERS.
- ♦ THIS RE-TORQUE MUST BE PERFORMED WITHIN 2500 MILES OF THIS PRODUCT BEING PUT INTO SERVICE.
- ♦ THE KELDERMAN AIR SUSPENSION IS FULLY AUTOMATIC IN CONTROLLING THE HEIGHT OF THE CHASSIS WHEN PROPERLY INSTALLED.
- ♦ NO MANUAL INTERVENTION TO CONTROL AIR PRESSURE OR RIDE HEIGHT IS NEEDED DURING THE COURSE OF NORMAL OPERATION.
- ♦ PRODUCT OWNER IS RESPONSIBLE FOR “*DOWN TIME*” EXPENSES, CARGO DAMAGE, AND ALL BUSINESS COSTS AND LOSSES RESULTING FROM A WARRANTABLE FAILURE.

SERVICE INTERVALS

FIRST 2,500 MILES

- ♦ CHECK RIDE HEIGHT $\pm 1/4$ ”
- ♦ CHECK FOR AIR LEAKS AROUND FITTINGS.
- ♦ CHECK FOR ANY LOOSE OR RUBBING HOSES AND WIRES.
- ♦ RE-TORQUE ALL HARDWARE.

EVERY 30,000 MILES

- ♦ CHECK RIDE HEIGHT $\pm 1/4$ ”
- ♦ CHECK FOR AIR LEAKS AROUND FITTINGS.

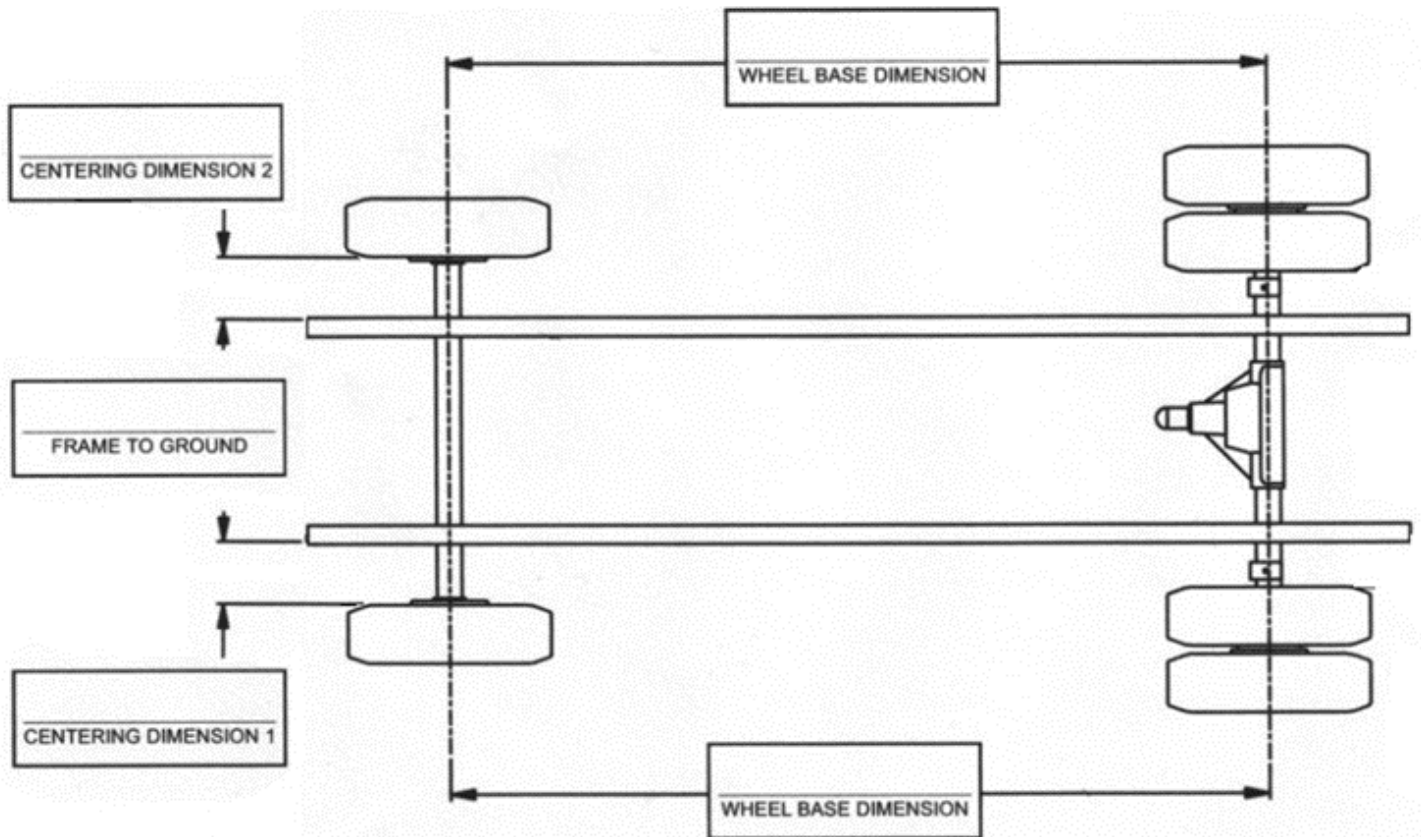
DISASSEMBLY

BEFORE DOING ANYTHING, MEASURE THE PINION ANGLE AND RECORD IT. THIS IS IMPORTANT BECAUSE YOU WILL NEED TO PUT THE AXLE BACK TO THIS MEASUREMENT AFTER INSTALLATION. SEE FIGURE 1.

PINION ANGLE _____



TAKE THE FOLLOWING MEASUREMENTS FOR FUTURE REFERENCE. THESE MEASUREMENTS WILL BE USED TO ADJUST THE SUSPENSION AFTER INSTALLATION.



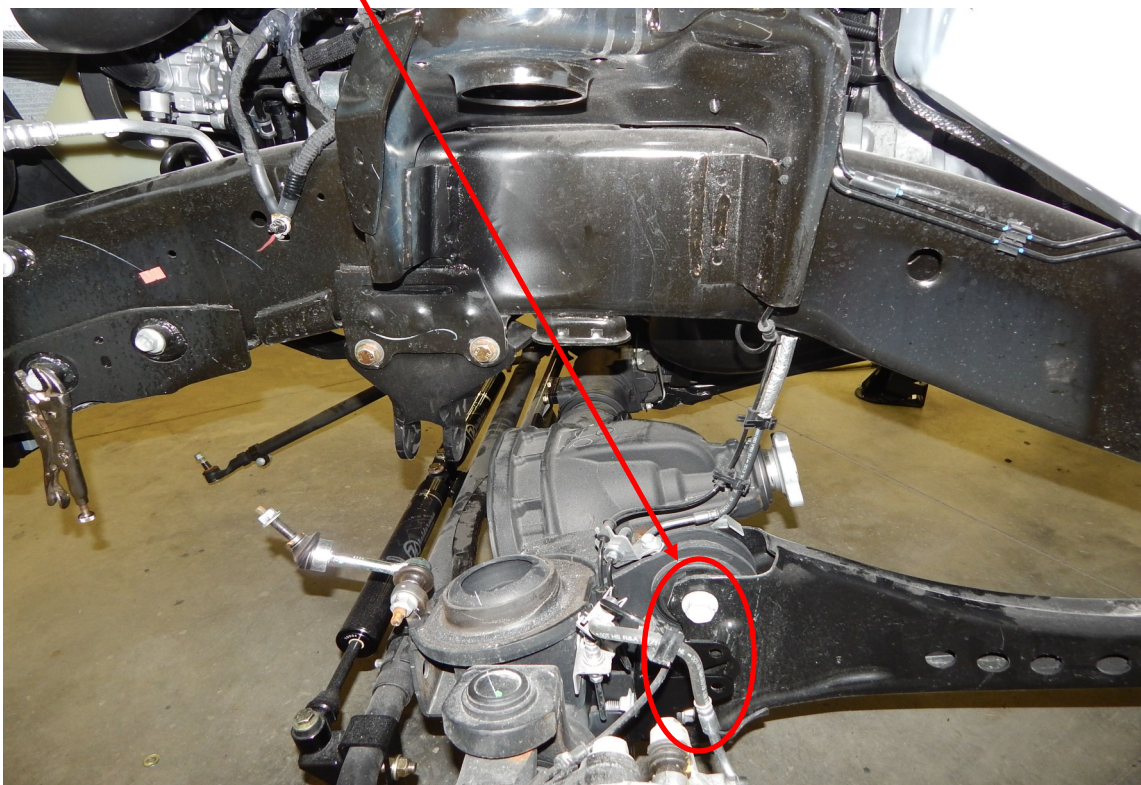
1. IF YOU DO NOT HAVE A VEHICLE HOIST/LIFT, JACK THE TRUCK UP AT THE FRONT AXLE AND PLACE JACK STANDS UNDER THE FRONT OF THE FRAME AND JUST BEHIND THE RADIATOR. REMOVE THE WHEELS AND REMOVE THE SHOCKS.

2. LOWER THE JACK DOWN SO THE TENSION IS OFF THE COIL SPRINGS AND REMOVE THE SPRINGS.

3. UNFASTEN THE STEERING ARM FROM THE PITMAN ARM AND UNBOLT THE PANHARD BAR FROM THE PANHARD BAR MOUNT. ***DO NOT UNHOOK THE SWAY BAR END LINKS.***



27MM WRENCH



4. REMOVE PITMAN ARM, PANHARD BAR DROP, COILS, SHOCKS AND RADIUS ARMS.

5. PLACE A JACK UNDER THE TRANSFER CASE. REMOVE THE THREE NUTS FROM THE TRANSMISSION MOUNT WHERE IT FASTENS TO THE CROSSMEMBER AND REMOVE THE FOUR BOLTS THAT HOLD THE TRANSMISSION CROSSMEMBER IN PLACE. YOU WILL HAVE TO CUT THE BOLTS ON THE PASSENGER SIDE WITH A SAWZALL UNLESS YOU REMOVE THE EXHAUST SYSTEM.

6. REMOVE THE FACTORY CROSSMEMBER. REMOVE THE TWO BOLTS THAT FASTEN THE CONTROL ARMS TO THE FRAME. KEEP THE NUTS FOR THE TRANSMISSION MOUNT. THE OTHER BOLTS WILL NOT BE USED.



15MM WRENCH



24MM WRENCH

27MM WRENCH



ASSEMBLY

1. THE FIRST STEP IN THE INSTALLATION OF THE KIT IS TO INDEX THE TRANSFER CASE. THERE ARE TWO DIFFERENT INDEXING PLATES: A (6) BOLT PLATE AND AN (8) BOLT PLATE THAT IS USED FOR THE AISIN TRANSMISSIONS. REMOVE THE FRONT AND REAR DRIVESHAFTS. 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 ONE SHOWN BELOW.

2. PLACE A JACK STAND UNDER THE TRANSMISSION AND REMOVE THE FACTORY CROSSMEMBER. UNHOOK THE WIRES THAT GO TO THE TRANSMISSION. REMOVE THE BOLTS THAT HOLD THE TRANSFER CASE IN PLACE. LOCATE THE INDEXING PLATE (#8129-AISIN OR 8129-68RFE). IF THE ARP STUDS ARE NOT INSTALLED, INSERT THEM IN THE HOLE CLOSEST TO THE COUNTERSUNK HOLE 13 DEGREE HOLE. THE HOLE FURTHEST AWAY FROM THE COUNTERSUNK HOLE IS FOR THE 10-12" LIFT. USE VICE GRIPS TO REMOVE THE STUDS IN THE TRANSFER CASE. USE RED LOCTITE AND FASTEN THE INDEXING PLATE TO THE TRANSFER CASE WITH THE COUNTERSUNK BOLTS. TORQUE THESE BOLTS TO 40 FT./LBS. LOCATE THE SEAL ADAPTOR. RE-INSTALL THE TRANSFER CASE TO THE TRANSMISSION. USE RED LOCTITE ON THE STUDS, AND USE THE 3/8" NUTS AND WASHERS AND TORQUE TO 55 FT./LBS. SEE PHOTO ON THE NEXT PAGE.

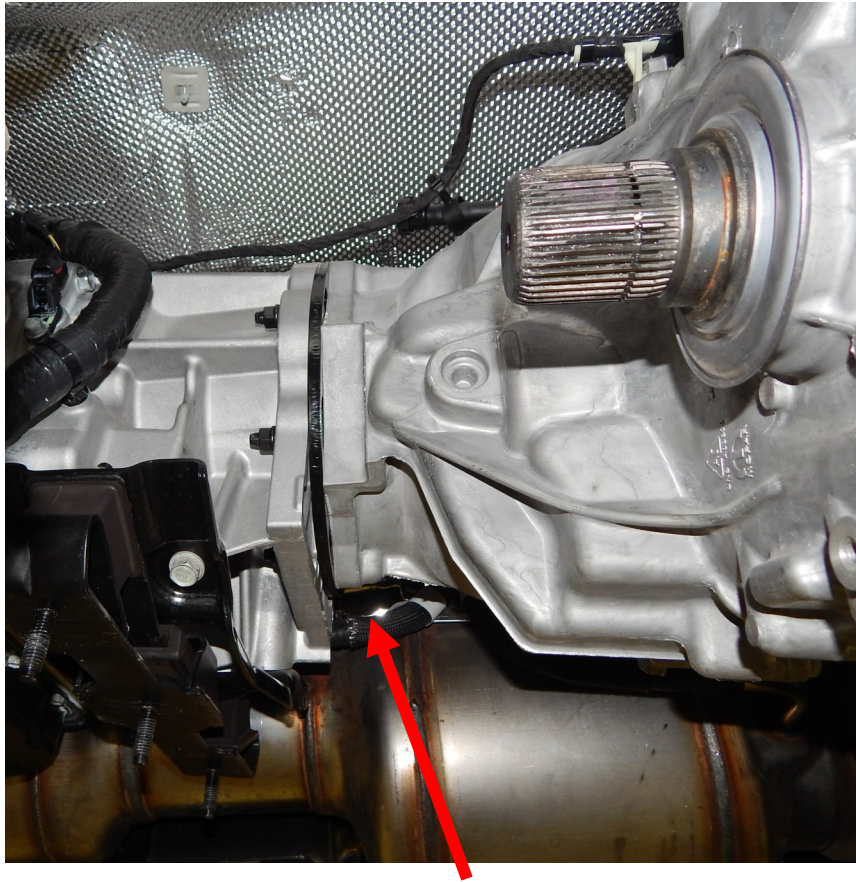


Use vice grips to remove studs from transfer case.

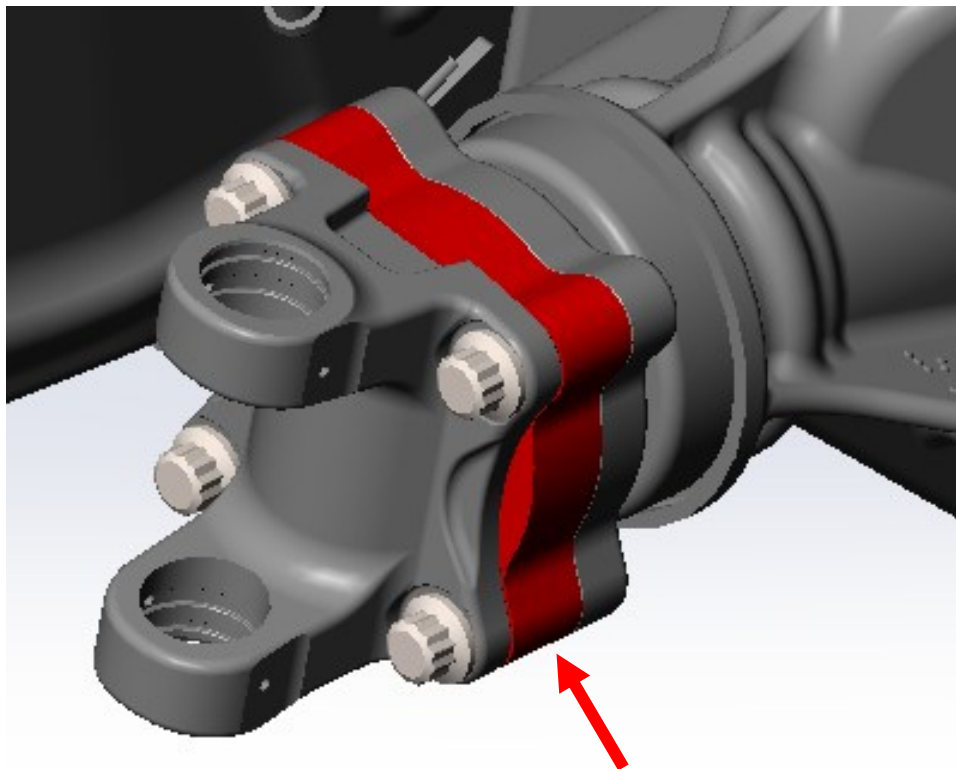
Red Loctite will be used for assembly.

68RFE pictured



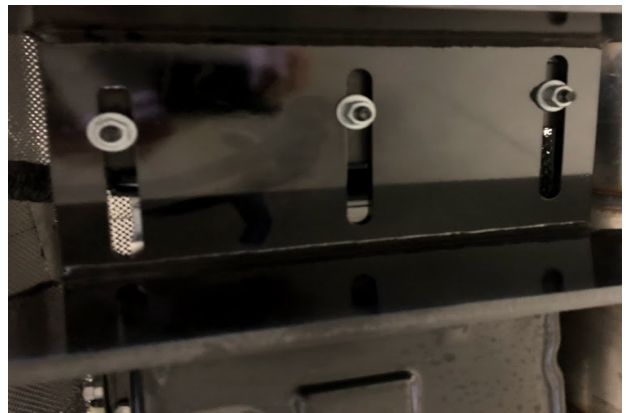


6BRFE TRANSFER CASE SHOWN RE-INSTALLED WITH INDEXING PLATE



WHEN REINSTALLING THE DRIVESHAFT, LOCATE THE SPACER (#10006015). IT FASTENS BETWEEN THE AXLE FLANGE AND THE DRIVESHAFT. USE THE PROVIDED M12-1.75 X 50MM 12 POINT BOLTS. TORQUE TO 110 FT/LBS.

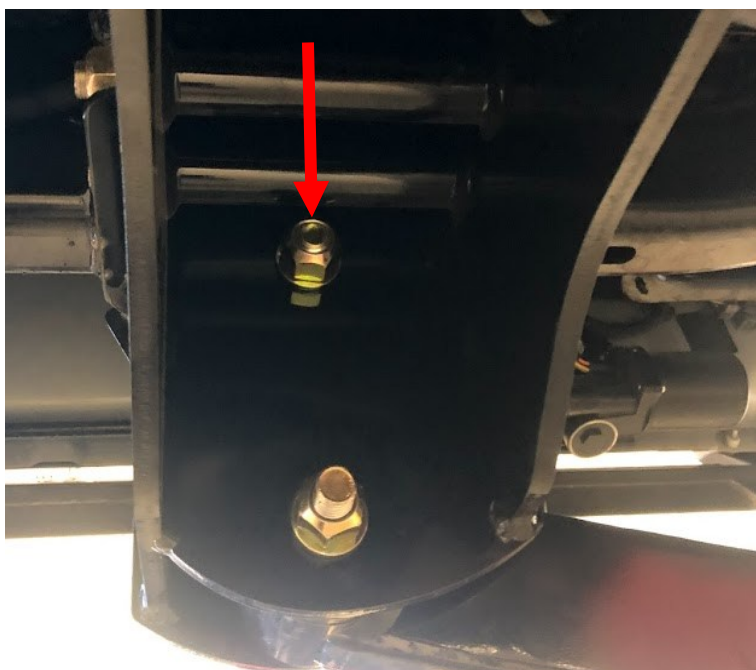
3. LOCATE THE CROSSMEMBER (#10005288). IT FASTENS INTO THE FACTORY CROSSMEMBER HOLES WITH THE (4) 5/8"-18 X 8" BOLTS. ALSO USE THE (2) M18-2.5MM X 50MM BOLTS TO FASTEN THE SIDE OF THE CROSSMEMBER INTO THE ORIGINAL CONTROL ARM MOUNTS. TORQUE THESE BOLTS TO 150 FT./LBS.
4. LOCATE THE (3) FACTORY TRANSMISSION NUTS AND FASTEN THEM TO THE CROSSMEMBER.



5. FIT THE OPTIONAL KELDERMAN RADIUS ARMS OR THE FACTORY RADIUS ARMS INTO THE NEWLY INSTALLED CROSSMEMBER. USE THE SUPPLIED M18-2.5MM X 130MM (LOWER) AND 150MM (UPPER) BOLTS, INSERTING THEM FROM THE OUTSIDE IN. TORQUE TO 150FT/LBS.

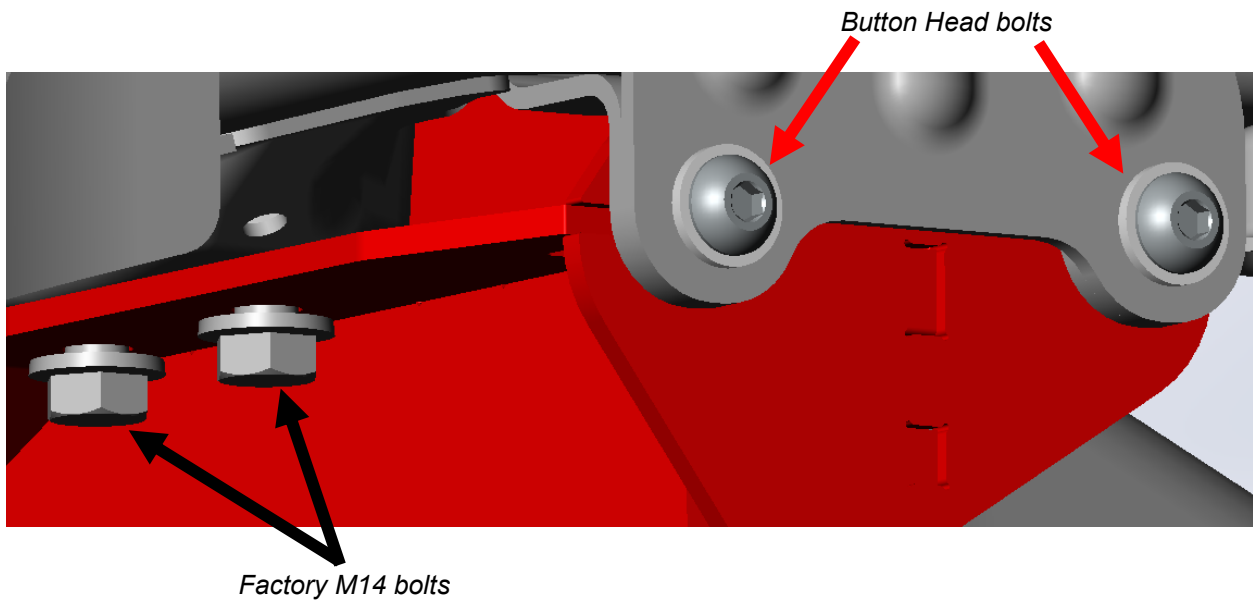


BOLTS SHOWN INSTALLED INTO FACTORY CROSSMEMBER MOUNTS. INSERT BOLTS FROM THE OUTSIDE IN.



6. REMOVE THE FACTORY PITMAN ARM, THE FACTORY PANHARD BAR DROP BRACKET, AND THE PANHARD BAR.

7. INSTALL THE NEW PANHARD BAR DROP (#10004649). IT FASTENS TO THE SIDE OF THE FRAME WITH THE (2) 1/2-13 X 1-1/2 BUTTON HEAD BOLTS AND THE OEM M14-2.0 X 34MM IN THE BOTTOM OF THE FRAME. YOU WILL NEED TO WELD THE OUTER TWO HOLES IN THE BOTTOM OF THE PAN HARD BAR MOUNT TO THE FRAME. IT WORKS BEST TO HOLD THE MOUNT IN PLACE AND MARK THE BOTTOM OF THE FRAME WHERE YOU ARE GOING TO WELD SO YOU CAN GRIND THAT AREA. GRIND THE POWDER COAT OFF THE MOUNT WHERE IT GETS WELDED TO THE BOTTOM OF THE FRAME. TORQUE THESE BOLTS TO 135 FT./LBS. NOTE: WHEN WELDING BE SURE TO USE A BATTERY SAVER OR ANTI-ZAPPER DEVICE TO PREVENT DAMAGE TO THE ELECTRONICS.



Pictures shown with panhard bar installed



8. LOCATE THE PROVIDED PITMAN ARM (#80269). IT LOOKS JUST LIKE THE OEM, BUT HAS BEEN REWORKED SO THE BALL JOINT COMES UP FROM THE BOTTOM INSTEAD OF THE TOP.

9. INSTALL THE PITMAN ARM AND TORQUE THE NUT TO 275 FT./LBS.

10. LOOSEN THE BALL JOINT ON THE STEERING ARM AND ROTATE THE BALL JOINT END OUT ABOUT HALFWAY OUT OF THE ADJUSTMENT SLEEVE.

11. ROLL THE BALL JOINT 180 DEGREES AND RUN IT BACK INTO THE ADJUSTMENT SLEEVE. INSERT THE BALL JOINT INTO THE PITMAN ARM AND TORQUE THE STEERING ARM NUT ON THE BALL JOINT TO 100 FT./LBS. NOTE: THE PITMAN ARM NEEDS TO BE RE-TORQUED AFTER 300 MILES.

12. ONCE THE INSTALLATION IS COMPLETE AND THE AIR BAGS ARE AT RIDE HEIGHT, USE THE ADJUSTMENT SLEEVE TO STRAIGHTEN THE STEERING WHEEL.

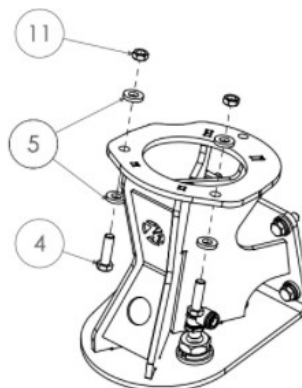


13. LOCATE THE UPPER BAG MOUNTS (#10003648-DS AND 10005191-PS). UPPER SHOCK RESERVOIR MOUNTS (#10004566) AND SPACER PLATES (10013536-DS AND 100 IF YOUR TRUCK IS RUNNING MONOTUBE SHOCKS YOU WILL NOT USE THE UPPER RESERVOIR MOUNTS).

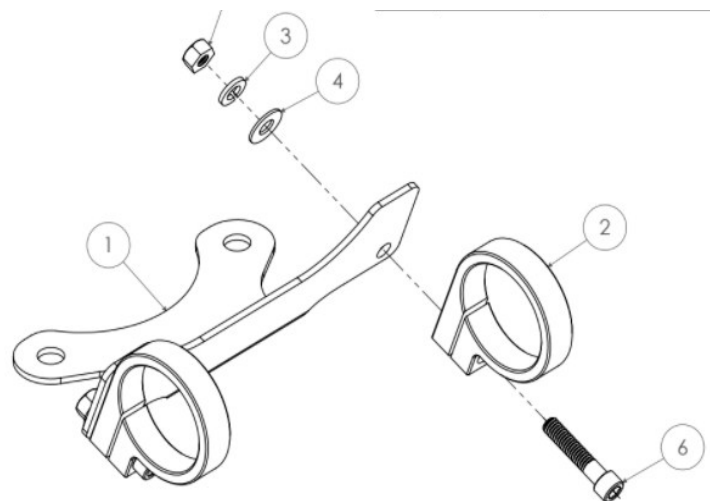
14. LINE UP THE HOLE IN THE SPRING PERCH WITH THE HOLE IN THE UPPER BAG MOUNT. HOLD THE UPPER BAG MOUNT IN PLACE AND MARK THE OTHER HOLE. REMOVE THE UPPER BAG MOUNT, CENTER PUNCH THE MARK AND DRILL BOTH HOLES TO 13/32".

15. ATTACH SPACER PLATE TO THE UPPER BAG MOUNT WITH 3/8"-24 x 1" BOLTS AND LINE UP THE HOLE IN THE SPRING PERCH WITH THE HOLE IN THE UPPER BAG MOUNT. HOLD THE UPPER BAG MOUNT IN PLACE AND TACK THE SPACER INTO PLACE. REMOVE THE UPPER BAG MOUNT, WELD AROUND THE SPACER. **NOTE:** WHEN WELDING AND TACKING, WOULD RECOMMEND COVERING THE POWDER COATED PARTS, TO KEEP SPARKS FROM DAMAGING THE POWDER COAT.

16. FASTEN THE UPPER BAG MOUNT IN PLACE BY INSTALLING THE (4) 3/8"-24 x 1" BOLTS IN THE SPACER PLATE (USE BLUE LOCTITE) AND ONLY SNUG UP WITH A RATCHET. **DO NOT USE AN IMPACT AS IT WILL STRIP THE HOLE.** TIGHTEN THE TOP (2) 3/8"-24 x 1-1/4" BOLTS IN THE TOP TO 35 FT./LBS.



17. SLIDE RESERVOIR MOUNT BETWEEN THE UPPER COIL BUCKET AND THE UPPER BAG MOUNT. ATTACH SPLIT CLAMPS WITH 5/16"-18 X 1-1/2" SOCKET HEAD CAP SCREWS.



18. LOCATE LOWER BAG MOUNTS (#10005081-DS AND 10006065-PS) AND THE AIR BAGS (#80012-5323). FASTEN THE AIR BAG TO THE LOWER AIR BAG MOUNT WITH THE 1/2"-20 X 3-1/2" BOLT. DO NOT TORQUE YET. THE AIR BAG WILL NEED TO BE TURNED TO LINE UP WITH THE UPPER AIR BAG MOUNTS.

19. FIND THE HOLES IN THE BOTTOM OF THE SPRING BUCKET. THE HOLE TOWARDS THE REAR OF THE TRUCK WILL BE TAPPED TO 1/2-20". ONCE THAT HOLE IS TAPPED, DROP THE LOWER BAG MOUNT IN FASTEN WITH THE 1/2"-20 X 1" BOLT.

20. LOCATE THE 3/8" HOLE IN THE SIDE OF THE AIR BAG MOUNT. DRILL A 21/64" HOLE INTO THE LOWER SPRING PERCH, USING THE 3/8" HOLE GUIDE. TAP THIS HOLE TO 3/8-24".

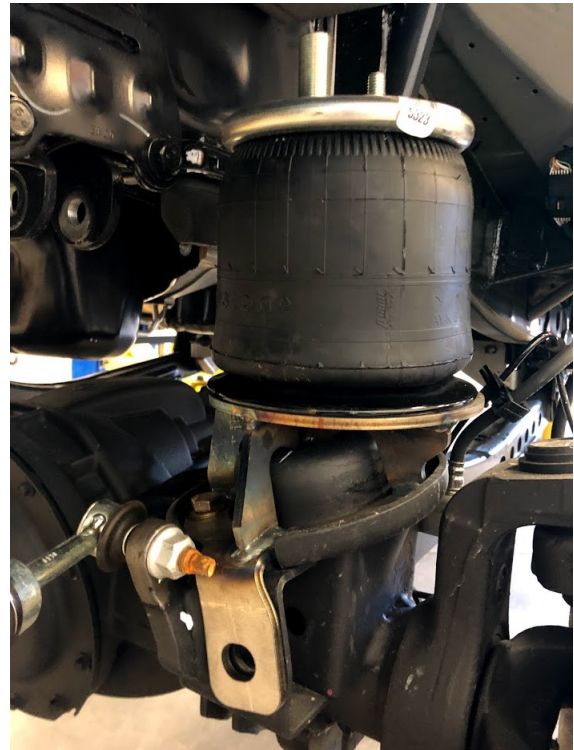
21. INSERT THE 3/8"-24 X 1-1/2" BOLT AND TORQUE BOTH BOLTS TO 35 FT./LBS. THE PASSENGER SIDE ALSO USES THE PAN HARD BAR TO HOLD THE LOWER BAG IN PLACE. TORQUE THE LOWER AIR BAG BOLT TO 35 FT./LBS.

22. INSTALL THE ICON TRACK BAR (#80251) WITH M18-1.5MM X 90MM BOLTS. TIGHTEN THE BOLTS ON BOTH ENDS TO 175 FT./LBS. THE DRIVERS SIDE USES THE 5/8"18 X 1-1/2" BOLT ON THE FRONT TO HOLD THE LOWER BAG MOUNT.

PASSENGER SIDE



DRIVERS SIDE



DRILL AND TAP



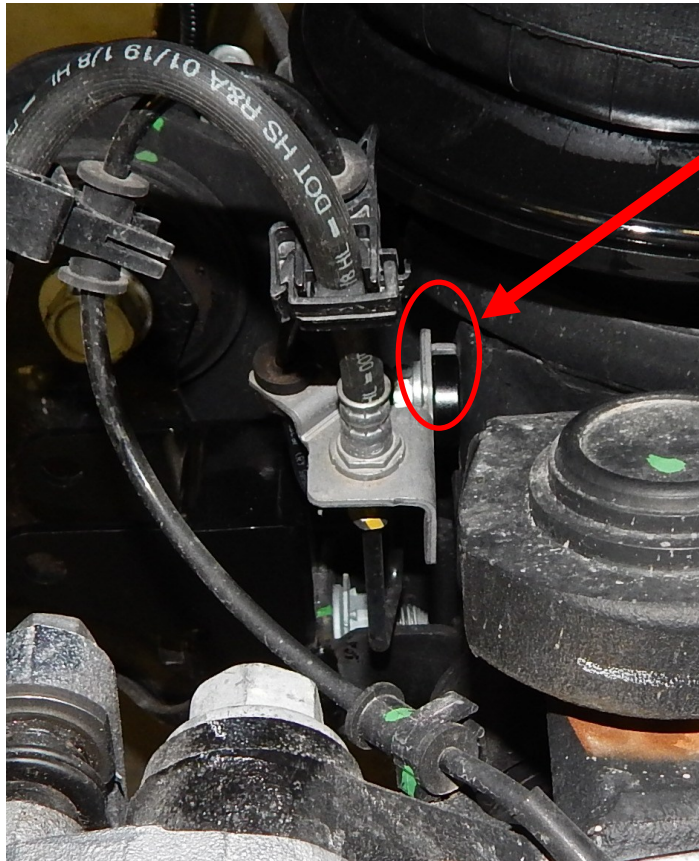
**NOTE: ICON TRACK BAR
HEIM MUST BE ALL THE WAY
IN FOR PROPER ADJUSTMENT**

23. FASTEN THE AIR BAGS INTO THE UPPER AIR BAG MOUNTS. USE THE 3/4" AND 1/2" NUTS AND LOCK WASHERS ON THE TOP AND THE 1/2"-20 X 3-1/2" BOLT ON THE BOTTOM (WITH FLAT WASHER AND LOCK WASHER). TIGHTEN ALL THE NUTS AND BOLTS TO 35 FT./LBS.

24. LOCATE THE AIR FITTING AND INSTALL INTO THE AIR PORT ON TOP OF THE BAG. TIGHTEN FINGER TIGHT THEN ONE COMPLETE TURN AFTER THAT.



25. LOCATE THE BRAKE LINE SPACER (#10005158). IT IS A SMALL PLATE. INSTALL IT BETWEEN THE BRAKE LINE MOUNTING BRACKET AND THE AXLE WITH M8-1.25MM X 35MM BOLTS. THIS WILL PREVENT THE BRAKE LINE FROM RUBBING ON THE LOWER AIR BAG MOUNT.



26. LOCATE THE LOWER SHOCK MOUNTS (#18336-DS AND 18314-PS). THEY FASTEN INTO THE LOWER OEM SHOCK MOUNTS WITH THE FACTORY SHOCK BOLT. A DOWN HAND WELD IS ALSO REQUIRED TO ADD ADDITIONAL STRENGTH TO THE SHOCK MOUNT.



27. LOCATE THE SHOCKS (#10092/10094) AND LOWER SHOCK MOUNTS (#18378). KELDERMAN-RAPTOR SHOCKS HAVE RH AND LH SHOCKS. THE DIFFERENCE IS THE REMOTE RESERVOIR STICKER LOCATION. 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. DEPENDING ON WHICH SHOCK YOU USE, IT MAY BE NECESSARY TO USE A WASHER IN BETWEEN THE LOWER SHOCK EARS IF THE SPACING IS OVER 3/16" WIDE. TORQUE THIS BOLT TO 125 FT./LBS.

28. LOCATE THE RUBBER BUSHINGS AND STEEL CUPS. PLACE A CUP (DISH SIDE UP) ON THE SHOCK AND THEN SLIDE A BUSHING (LARGE RING UP) OVER THE SHOCK AND SLIDE INTO THE FACTORY SHOCK MOUNT.



29. PLACE A BUSHING OVER THE SHOCK SHAFT SO THE LARGE RING IS DOWN. INSTALL THE WASHER DISH DOWN. THREAD ON THE LOCK NUT UNTIL IT BOTTOMS OUT. FASTEN THE REMOTE RESERVOIRS TO MOUNTS.

30. IF USING THE KELDERMAN-RAPTOR SHOCKS, USE THE BILLET CLAMPS.



CORRECT INSTALLATION

SHOULD BE INSTALLED LIKE THE PICTURE ON THE LEFT. RUBBER BUSHING SHOULD GO IN BETWEEN THE FACTORY SHOCK MOUNT LOCATION. WITH A WASHER DOWN ON THE SHOCK ON THE LOWER PORTION AND WASHER ON TOP OF THE BUSHING FOR THE UPPER PORTION.

DO NOT STACK THE BUSHINGS UNDERNEATH THE SHOCK MOUNT LOCATION.



INCORRECT INSTALLATION

MAY NEED A WASHER IN BETWEEN SHOCK AND SHOCK MOUNT EARS



31. LOCATE THE DUAL STEERING STABILIZER KIT. LOCATE THE CENTER “K” BRACKET (#18393) AND SPACER (#18399). REMOVE THE CENTER (2) BOLTS OFF THE DIFFERENTIAL COVER. REMOVE THE OEM FACTORY STEERING SHOCK AND STABILIZER BRACKET OFF THE BOTTOM OF THE AXLE. ONLY THE BOLTS WILL BE RE-USED. PLACE THE CENTER “K” BRACKET ON THE FRONT OF THE AXLE. USE THE M10 AND M8 BOLTS TO ATTACH THE TOP OF THE BRACKET TO THE AXLE AND OVER THE DIFF COVER. IF USING THE STOCK DIFFERENTIAL COVER, MAKE SURE TO PLACE THE SPACER BETWEEN THE DIFF COVER AND BRACKET. LOCATE THE OEM BOLTS THAT HELD THE FACTORY STEERING SHOCK IN PLACE AND USE THOSE BOLTS TO ATTACH THE “K” BRACKET TO THE BOTTOM OF THE AXLE. TORQUE ALL THE BOLTS TO 20 FT./LBS.



32. LOCATE THE CENTER PLATE (#20227), STABILIZER SHOCKS, AND OUTER SHOCK MOUNTS (#18400-PS AND 10015301/18409-DS). THE DRIVER SIDE OUTER SHOCK MOUNTS FASTEN TO THE TIE ROD WITH THE OEM BOLT AND THE 1/2"-20 X 2-1/2" BOLT.



THE PASSENGER SIDE OUTER SHOCK MOUNT ATTACHES TO THE TIE ROD WITH THE OEM BOLTS THAT HELD THE OEM SHOCK BRACKET IN PLACE.



USE THE 1/2"-20X 2-1/2" BOLTS TO FASTEN THE BODY END OF THE SHOCKS TO THE K BRACKET.

THE TIE PLATE GOES ON TOP.

THE SHAFT END OF THE SHOCKS ATTACH TO THE OUTER SHOCK MOUNTS WITH THE 1/2"-20 X 2-1/2 BOLTS.

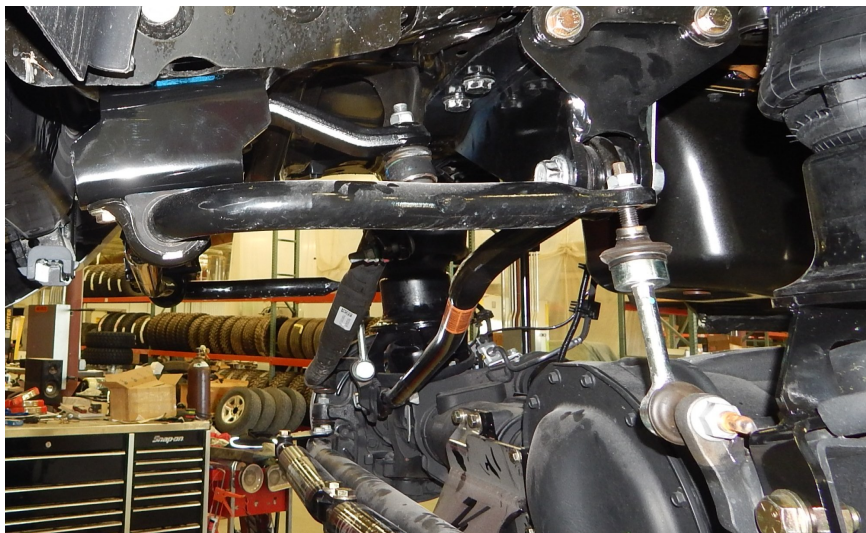
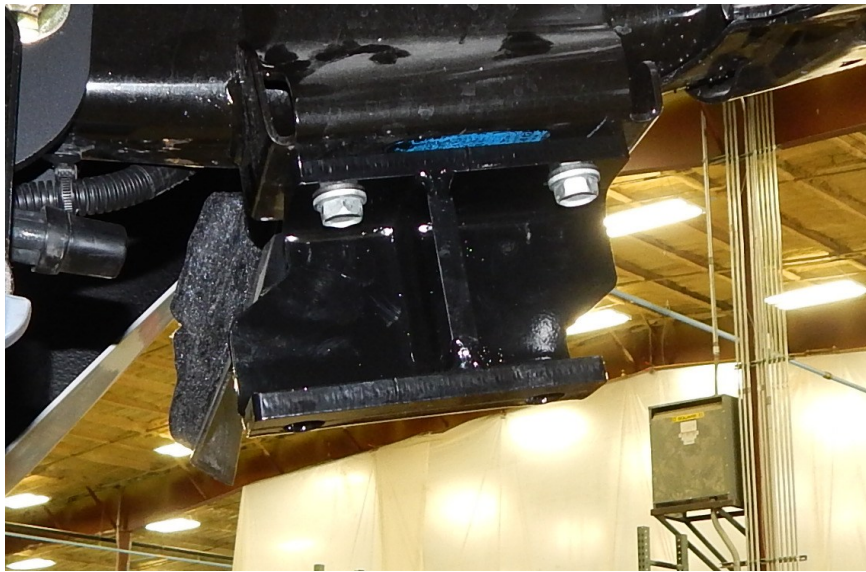
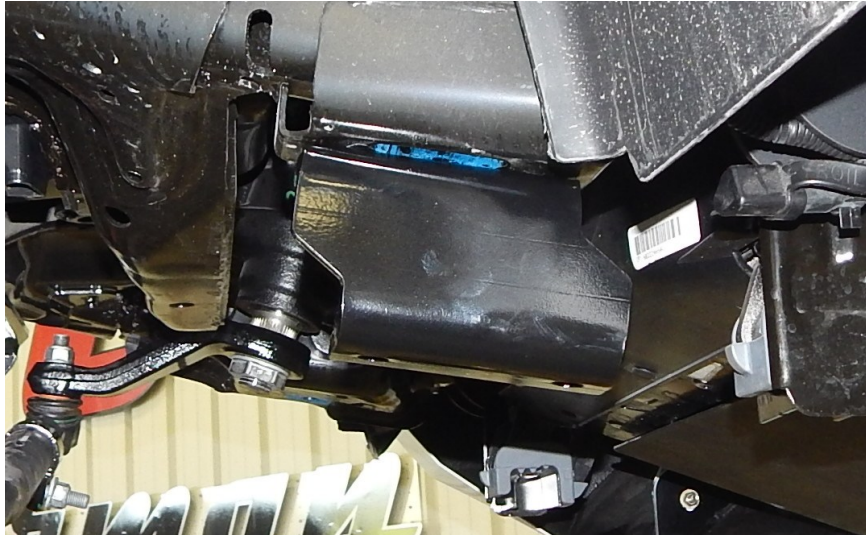
SEE PICTURES ON THE NEXT PAGE FOR COMPLETED ASSEMBLY.

COMPLETED STABILIZER ASSEMBLY SHOWN



33. LOCATE THE SWAY BAR DROPS (#18314-PS AND 18336-DS). THEY ATTACH TO THE BOTTOM OF THE FRAME WITH THE FACTORY SWAY BAR BOLTS.

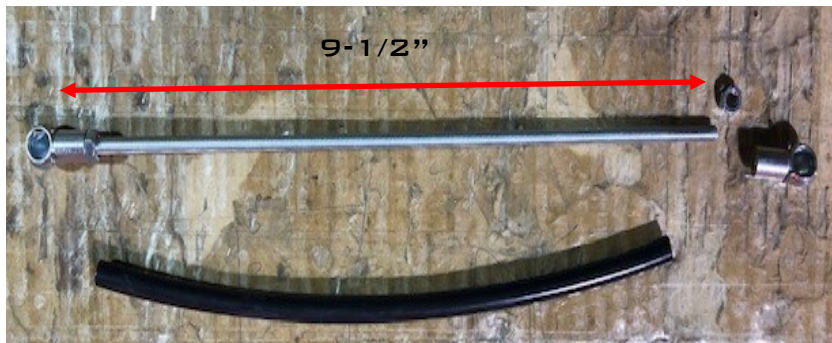
34. THE SWAY BAR ATTACHES TO THE BOTTOM OF THE SWAY BAR DROPS WITH THE 7/16"-20 X 1-1/2" BOLTS. TORQUE ALL THE BOLTS TO 55 FT./LBS.



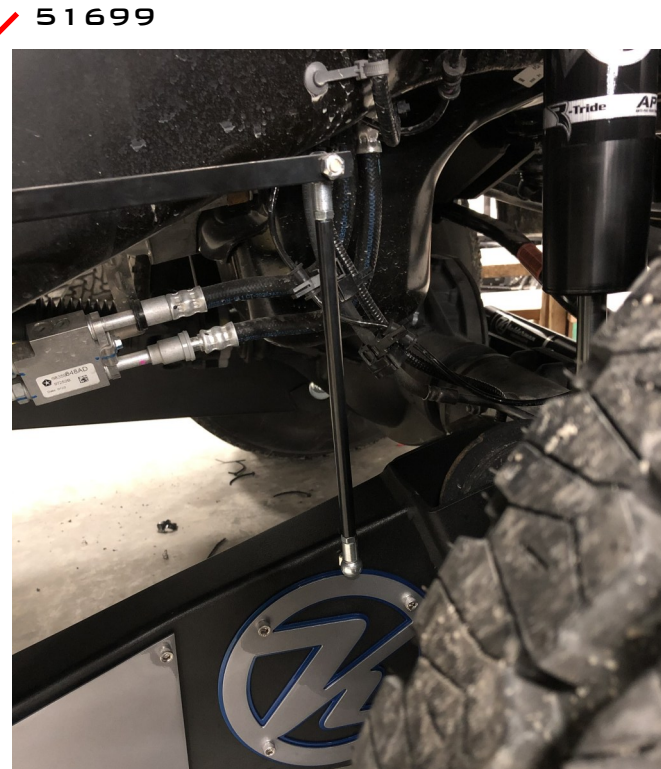
35. LOCATE THE OPTIONAL RIDE HEIGHT SENSOR, BALL STUD AND LINKAGE (9-1/2" L). THE SENSOR WILL MOUNT TO THE SIDE OF THE FRAME. THE INNER FENDER LINER WILL NEED TO BE TRIMMED AT THE BOTTOM INSIDE WHERE IT IS CLOSE TO THE FRAME. PLACE THE SENSOR AGAINST THE FRAME WITH THE MOUNTING HOLES STRAIGHT UP AND DOWN. MARK THE HOLES IN THE SENSOR TO LOCATE WHERE TO DRILL THE HOLES. USE A 1 3/64" DRILL BIT TO DRILL THE HOLES AND A 1/4-20 TAP TO THREAD THE HOLES. MOUNT THE SENSOR TO THE FRAME WITH THE 1/4"-20 X 1" BOLTS. ADJUST THE LINKAGE TO 10".

36. LOCATE THE BALL STUD. IT WILL THREAD INTO THE RADIUS ARM (FACTORY AND KELDERMAN). USE THE 1 7/64" DRILL BIT TO DRILL THE HOLE AND THREAD THE BALL STUD INTO THE HOLE.

37. REMOVE THE CLIP ON THE END OF THE LINKAGE AND ATTACH THE LINKAGE TO THE SENSOR AND CONTROL ARM. RE-INSTALL THE CLIP AND THE LINKAGE INSTALL IS COM-



THE SENSOR ARM MUST BE STRAIGHT OUT AT RIDE HEIGHT. THIS WILL ALLOW FOR EVEN UP AND DOWN SWEEP OF THE SENSOR. THIS IS REQUIRED FOR THE AIR MANAGEMENT SYSTEM TO CALIBRATE CORRECTLY.



38. WHEN PROGRAMING THE CONTROL SYSTEM, THE FRONT AIR BAG NEEDS TO BE AT A RIDE HEIGHT OF 7-1/2 TO 8-1/2.” WHEN MEASURING THE AIR BAG, MEASURE BETWEEN THE MOUNTING BRACKETS.

39. MOVE THE TRUCK IN AND OUT OF THE SHOP IN ORDER TO GET AN IDEA OF ADJUSTMENT REQUIRED FOR STRAIGHTENING THE STEERING WHEEL. USE THE ADJUSTMENT ON THE DRAG LINK TO SET THE WHEEL STRAIGHT AND CONDUCT A TEST DRIVE. IF THE TRUCK PULLS TO ONE SIDE OR THE OTHER, A CASTER ADJUSTMENT SHOULD BE MADE. TAKE THE TRUCK TO AN ALIGNMENT SHOP AND GET AN ALIGNMENT.

40. ONCE THE SUSPENSION HAS 300 MILES ON IT, RE-TORQUE ALL THE BOLTS.

41. INSPECT ALL COMPONENTS AND CHECK THE BOLTS AT REGULAR SERVICE INTERVALS AFTER THAT.

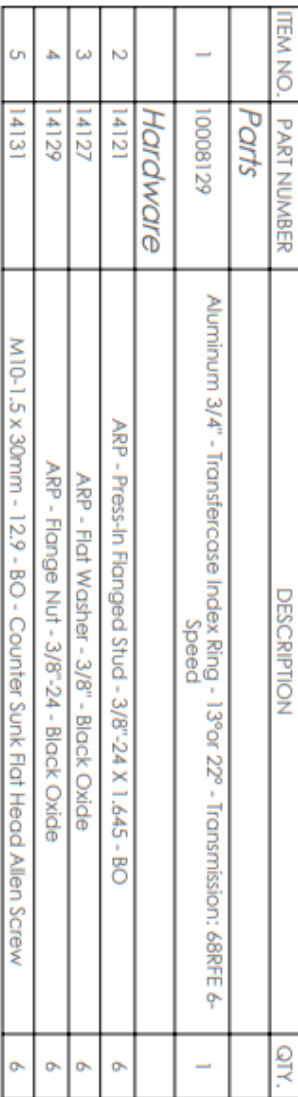
*RIDE HEIGHT OF
AIR BAG IS BETWEEN
7 1/2—8 1/2”*

MEASURE HERE

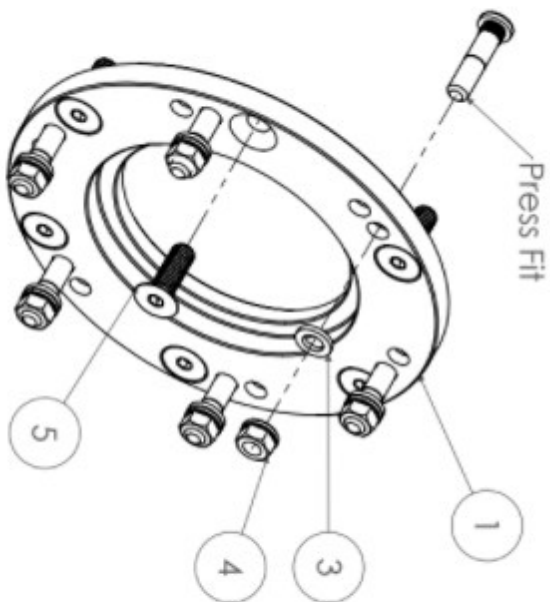


KIT DRAWINGS

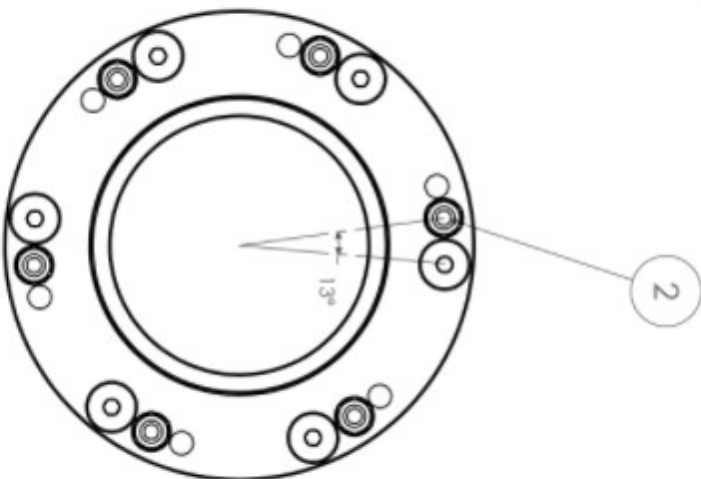
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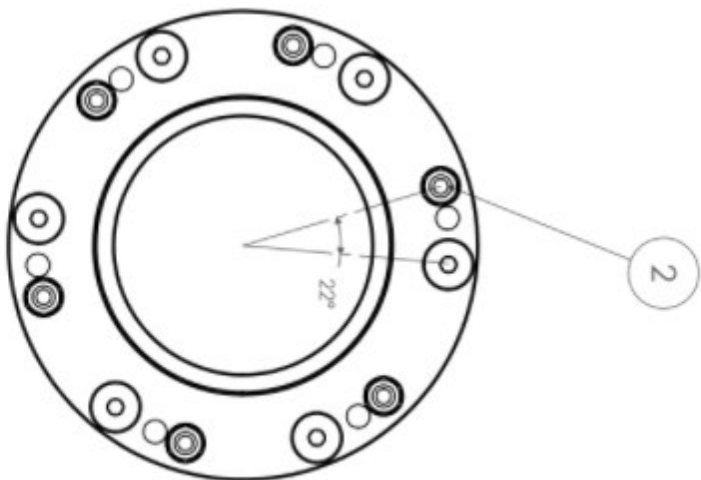
68RFE Transmission



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
	<i>Parts</i>		
1	10008129	Aluminum 3/4" - Transference Index Ring - 13" or 22" - Transmission; 68RFE 6-Speed	1
	<i>Hardware</i>		
2	14121	ARP - Press-In Flanged Stud - 3/8"-24 X 1.645 - 80	6
3	14127	ARP - Flat Washer - 3/8" - Black Oxide	6
4	14129	ARP - Flange Nut - 3/8"-24 - Black Oxide	6
5	14131	M10-1.5 x 30mm - 12.9 - 80 - Counter Sunk Flat Head Allen Screw	6

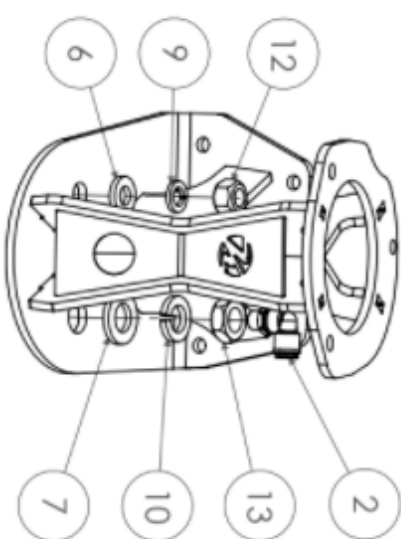


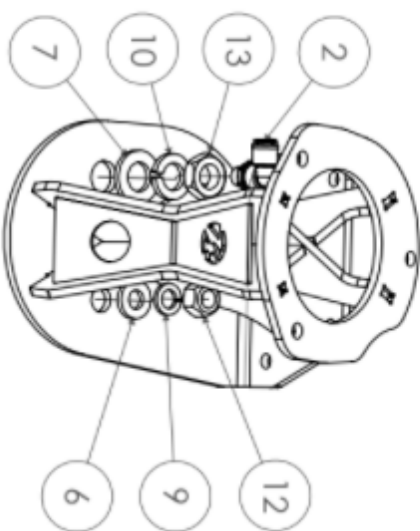
13° Indexing Ring



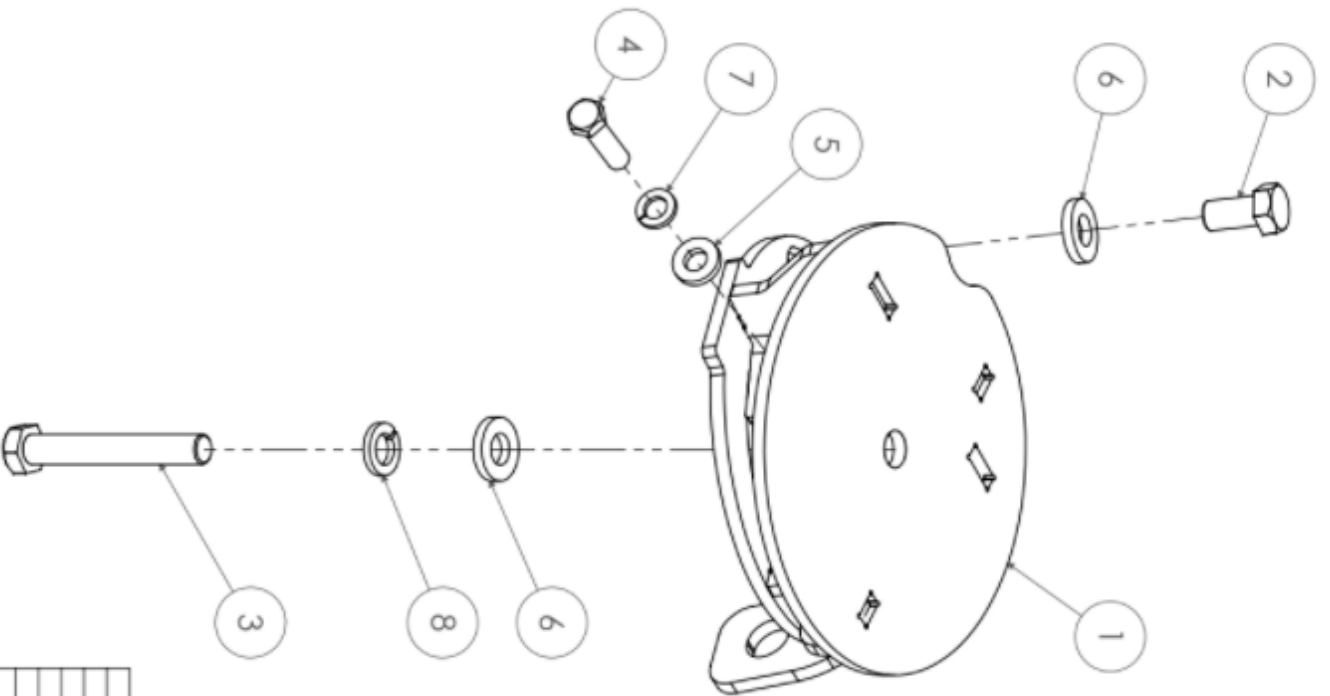
22° Indexing Ring

A	Ball Bearings in Case Performance	TA	5/12/20		A ISO 9001:2015 Certified	1.5	Approximate Weight = lbs
B	Ball Bearings per Bag	TA	9/14/20	MAIL SPEC: DIMENSIONS: 13" x 22"	Assembly - Transfer Case Indexing Ring - 13" or 22"		
C	Change in Material Addition - Indexing Ring	TA	10/6/20	(UNLESS OTHERWISE SPECIFIED) STD. TOLERANCES X.X ± .060 X.XX ± .020 X.XXX ± .010 FIN. DIMS. ± .0125"	Transmission: 68RFE 6-Speed 2010-2013 RAM 5-6 & 8-10" LH / 2014-2018 RAM 8-10" LH & 7987 RTR / 7005 RTR PART NUMBER: 7005 RTR		
REV					DESIGNED BY: Roy Anderson DATE: 1/4/2021		
ECN	CHANGE DESCRIPTION	CHANGED BY	DATE				

[illegible]

[illegible]

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
		Weldments	
1	10005065	Weldment - (PS) Axle / Lower Bag Mount	1
		Hardware	
2	12003	Bolt - 1/2"-20 x 1.00" - Gr 8	1
3	12024	BOLT - 1/2"-13 X 3 1/2" GR8	1
4	12217	Bolt - 3/8"-24 X 1.5" Gr. - 8 YZ	1
5	13022	Washer - 3/8" - Flat SAE Washer	1
6	13024	Washer - 1/2" Flat SAE Washer	2
7	13046	Split Lock Washer - 3/8" - YZ	1
8	13050	Lock Washer - 1/2"	1

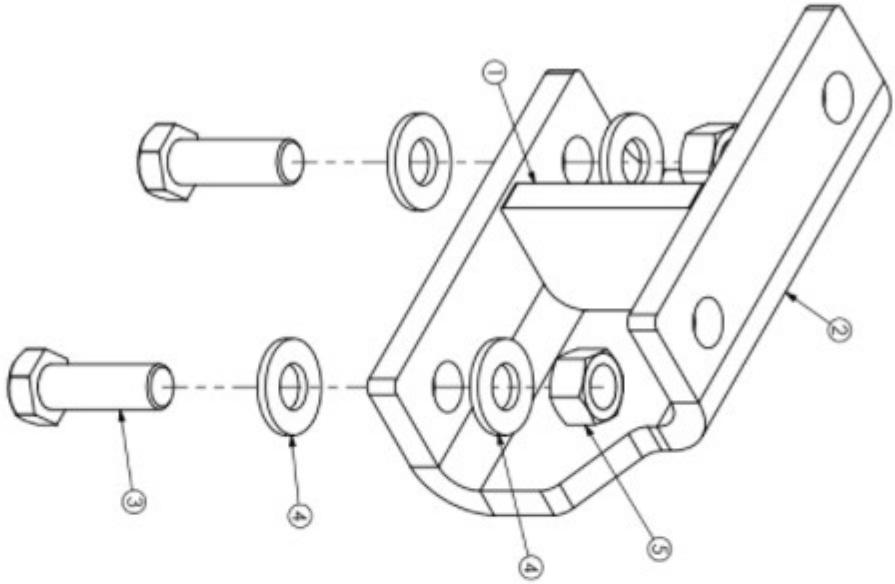


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7	18399	Plate - 1/2"
8	20227	
9	985-24-068	
10	10003382	Purchased From Stabilizer
11	10008381	Plate

[illegible]

ITEM NO.	PART NUMBER	DESCRIPTION	Hardware e/qty.
Parts			
1	18313	Sway Bar Support Gusset	1
2	18337	(DS) Sway Bar Plate w/ Bends	1
Hardware			
3	12007	Bolt - 1/2"-20 x 1.50" Gr.8	2
4	13004	1/2" Flat Washer	4
5	13164	Hex Nut - 1/2"-20 Gr.8	2



REV	ECN	CHANGE DESCRIPTION	DESIGNED BY	DATE																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
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NOTES

CONTACT INFORMATION

KELDERMAN MANUFACTURING APPRECIATES YOUR BUSINESS. WE STRIVE TO MEET THE NEEDS OF OUR CUSTOMERS BY PROVIDING THE HIGHEST QUALITY PRODUCTS. IF YOU HAVE ANY QUESTIONS CONCERNING OUR PRODUCTS PLEASE CALL OR EMAIL US AT THE FOLLOWING:

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OSKALOOSA, IOWA 52577
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EMAIL: INFO@KELDERMAN.COM

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