

INSTALL INSTRUCTIONS

2017+ FORD F250-450 PICKUP - STOCK HEIGHT/ LEVELING FRONT



KIT #'s:

F250/350 - KLM69003

F450 PICKUP - KLM69020

F450/550 CAB CHASSIS - KLM69500

kelderman



KELDERMAN MANUFACTURING

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KIT NUMBERS

- THIS INSTALLATION MANUAL COVERS THE FOLLOWING AIR RIDE KITS.

KIT NUMBER	DESCRIPTION
KLM69003	KIT - 2017-2022 / 2023+ FORD F250/350 PICKUP - STOCK HEIGHT / LEVELING KIT - CONTROL ARM FRONT - 4WD - 2-STAGE FRONT AIR SUSPENSION
KLM69020	KIT - 2017-2022 / 2023+ FORD F450 PICKUP - STOCK HEIGHT / LEVELING KIT - CONTROL ARM FRONT - 4WD - 2-STAGE FRONT AIR SUSPENSION
KLM69500	KIT - 2017-2022 & 2023+ FORD F450/F550/F600 CHASSIS CAB - STOCK HEIGHT - CONTROL ARM FRONT - 4WD - 2-STAGE FRONT AIR SUSPENSION

REQUIRED TOOLS

13/64", 17/64" & 13/32" & 1/4" DRILL BIT ARE REQUIRED.

1/4"-20 TAP & 5/16"-18 TAPS ARE REQUIRED

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	19 <i>FT-LB</i>	26 <i>FT-LB</i>
3/8"-24	21 <i>FT-LB</i>	30 <i>FT-LB</i>
1/2"-13	45 <i>FT-LB</i>	64 <i>FT-LB</i>
1/2"-20	50 <i>FT-LB</i>	70 <i>FT-LB</i>
9/16"-18	70 <i>FT-LB</i>	100 <i>FT-LB</i>
5/8"-11	90 <i>FT-LB</i>	125 <i>FT-LB</i>
5/8"-18	100 <i>FT-LB</i>	150 <i>FT-LB</i>
3/4"-16	175 <i>FT-LB</i>	250 <i>FT-LB</i>
7/8"-14	275 <i>FT-LB</i>	400 <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.

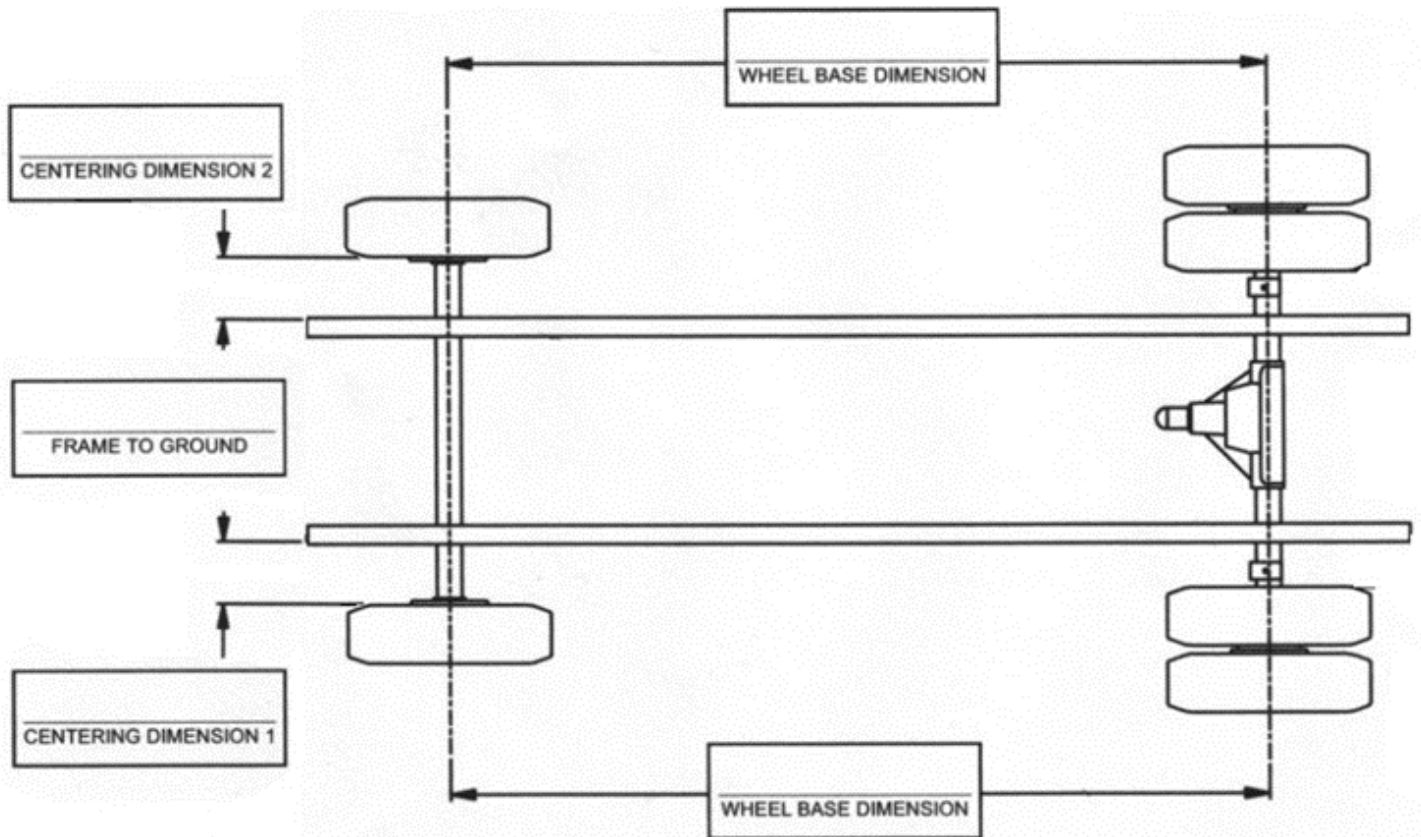
DISASSEMBLY

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.

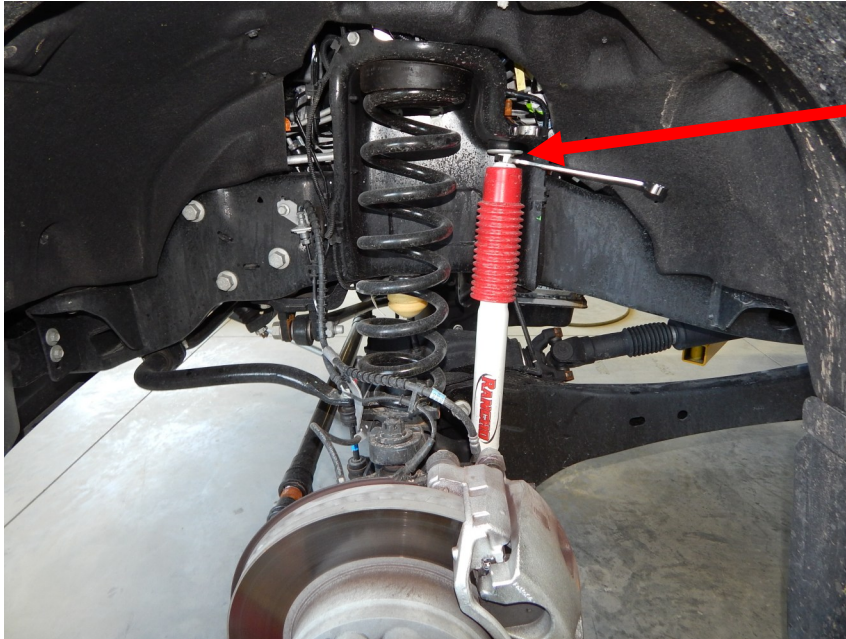
PINION ANGLE _____



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



1. JACK THE TRUCK UP BY THE FRAME AND REMOVE THE FRONT WHEELS. YOU WILL NEED TO PLACE FLOOR JACKS UNDER THE FRONT AXLE TO KEEP THE AXLE FROM DROPPING WHEN YOU REMOVE THE FRONT FACTORY SHOCKS. IF TWO PEOPLE ARE DOING THE INSTALLATION, BOTH SIDES CAN BE DONE AT ONCE.



REMOVE THE
FACTORY/EXISTING
SHOCKS

2. REMOVE THE NUT FROM THE TOP OF THE FACTORY SWAY BAR END LINK AND REMOVE THE FACTORY SHOCKS AND LOWER COIL BRACKET.

UNHOOK THE SWAY BAR
END LINKS FROM THE
FACTORY SWAY BAR



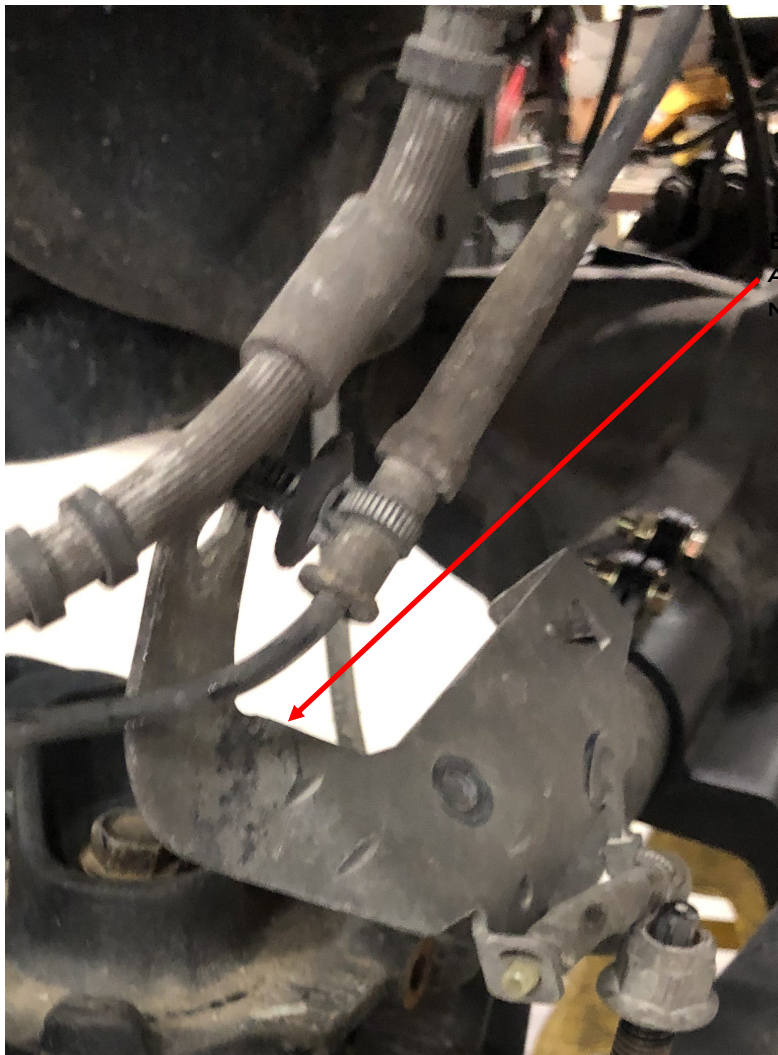
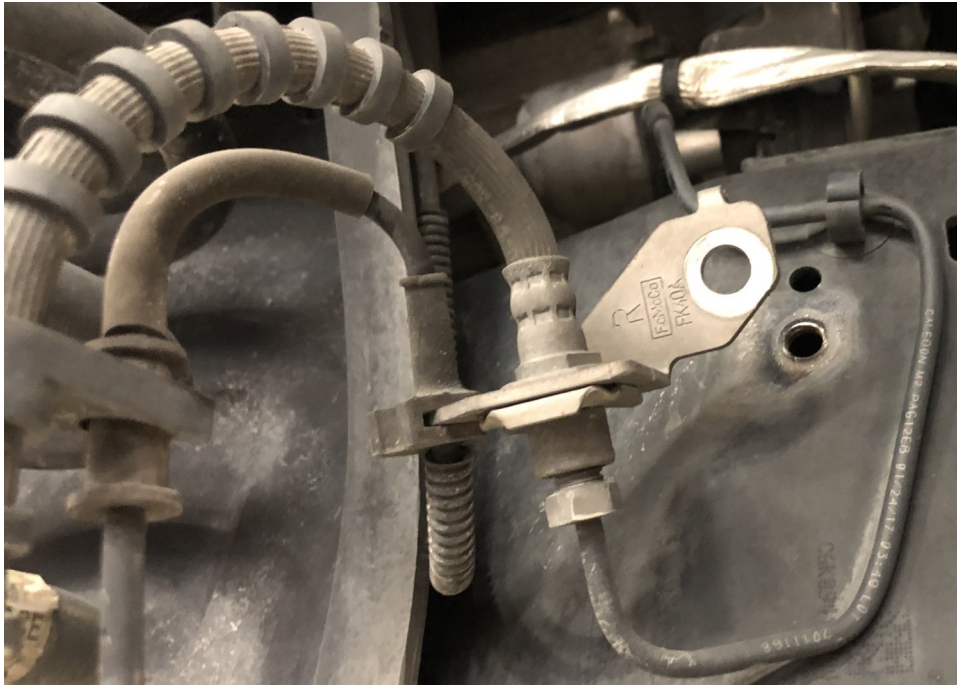
3. REMOVE BRACKET FOR PAN HARD BAR AND UN-INSTALL FACTORY PAN HARD BAR.



4. DROP THE AXLE AND REMOVE THE COIL SPRING AND REMOVE THE BOLT THAT HOLDS THE BRAKE LINE MOUNT TO THE LOWER SPRING MOUNT CASTING.



5. REMOVE BOLT FOR BRAKE LINE TAB AND BEND BRAKE LINE TAB BACK SO IT WILL CLEAR THE LOWER BAG MOUNT. POP OFF VACUUM LINE FROM DRIVERS SIDE BEFORE REMOVING COIL SPRING.



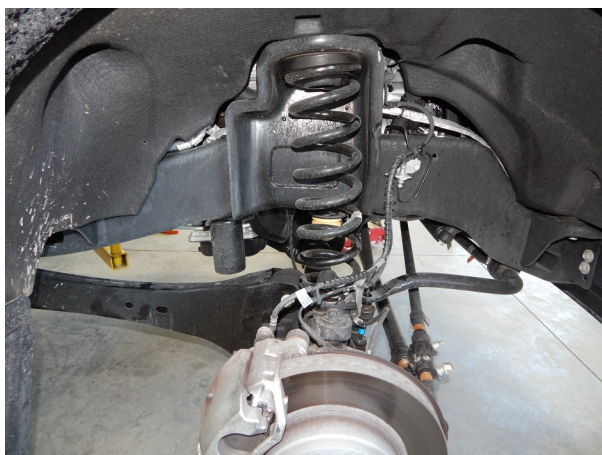
**BEND TAB TO MOVE IT
AWAY FROM LOWER BAG
MOUNT DURING INSTALL**

6. REMOVE BOTH BUMPS STOPS BEFORE STARTING INSTALLATION. FAILURE TO REMOVE THE STOPS WILL CAUSE THEM TO RUB ON THE AIR BAGS. REMOVE RUBBER AND UN-BOLT METAL STOP.



ASSEMBLY

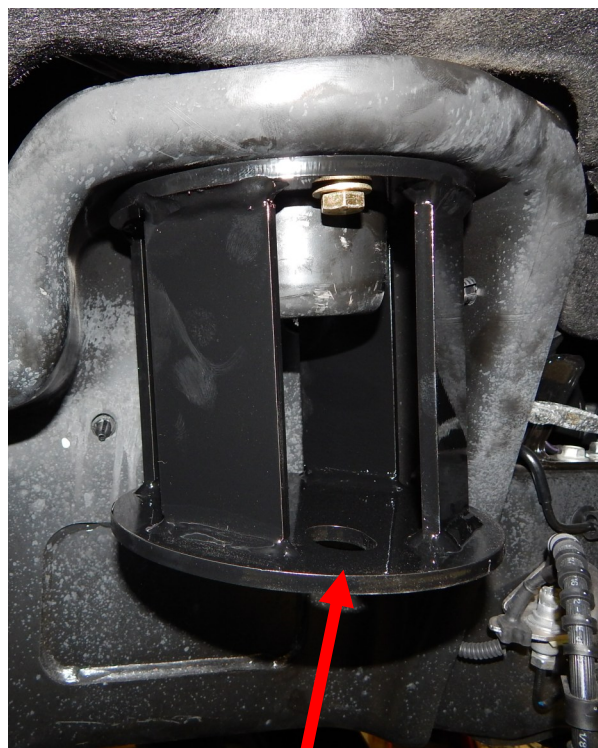
1. LOCATE THE UPPER AIR BAG MOUNTS (#69067-DS AND 69072-PS). THESE MOUNTS FASTEN TO THE UPPER SPRING PERCH WITH THE (2) 3/8"-24 X 1-1/2" BOLTS. YOU WILL NEED TO DRILL THESE HOLES. PUT THE UPPER AIRBAG MOUNT IN PLACE SO THE LARGE HOLE FOR THE AIR BAG IS FACING OUT (TOWARDS YOU) AND MARK THE HOLES. PULL THE BRACKET TOWARDS YOU WHEN MARKING WHERE TO DRILL THE HOLES (THERE IS ABOUT 1/8"- 3/16" OF PLAY. PULLING IT AWAY FROM THE FRAME WILL KEEP THE AIR BAG FROM RUBBING ON THE INSIDE OF THE FRAME). DRILL THE HOLE TO 13/64" THEN 17/64" THEN 13/32" AND FASTEN THE UPPER MOUNT IN PLACE. MAKE SURE NOT TO DRILL INTO WIRES BEHIND UPPER COIL BUCKET. TORQUE THE 3/8" BOLTS TO 40 FT./LBS.



HOLES WILL BE DRILLED FOR THE UPPER AIRBAG MOUNT TO INSTALL INTO THE SPRING PERCH.

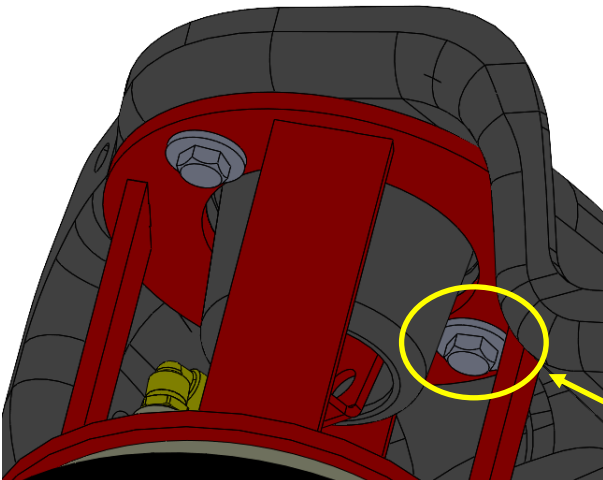
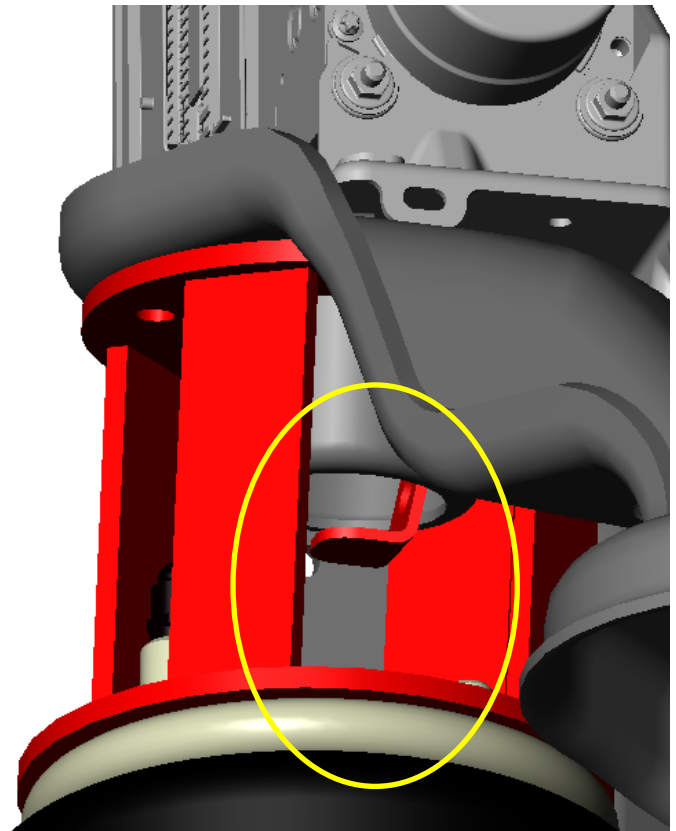
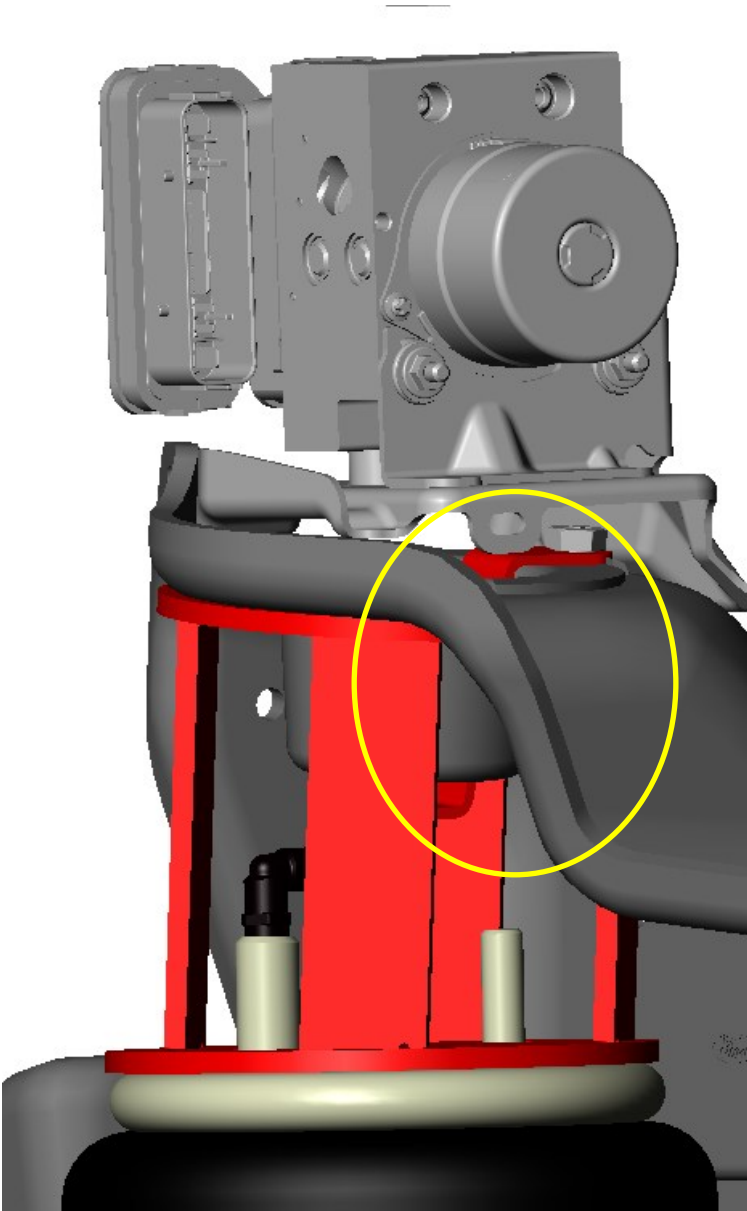


USE THE UPPER AIRBAG MOUNT AS A TEMPLATE BEFORE DRILLING THE HOLES FOR THE 3/8"-24 X 1-1/2" BOLTS



LARGE HOLE IN BOTTOM PLATE FACES AWAY FROM THE FRAME

3. LOCATE THE ANTI SPIN FLAG WELDMENT (#10015294). YOU WILL USE THIS WHEN YOU INSTALL THE BOLT TOWARD THE BACK OF THE SPRING BUCKET. YOU WILL USE 3/8"-24 X 1-1/2" BOLTS. POSITION FLAG INSIDE THE SPRING BUCKET AND INSTALL BOLT INTO THE REAR HOLE FROM THE BOTTOM.



3/8"-24 X 1-1/2" BOLT AND WASHER

2. LOCATE THE LOWER AIR BAG MOUNTS (#69376 AND 69372). THESE FASTEN TO THE AXLE WITH THE M14 X 25 BOLTS AND THE 3/8" BOLTS. YOU WILL HAVE TO DRILL THE HOLES FOR THE 3/8" BOLTS. THERE ARE (2) HOLES IN THE LOWER PLATE. THE PASSENGER SIDE USES THE HOLE FURTHEST AWAY FROM THE FRAME AND THE DRIVERS SIDE USES THE HOLE CLOSEST TO THE FRAME. DRILL THE HOLE WITH A 1 3/64" THEN 1 7/64" THEN 1 3/32" DRILL BIT. FASTEN THE BRAKE LINES TO THE FRONT OF THE MOUNT WITH THE 1/4"-20 X 1" BOLT.



*KEEP LOWER BRACKET EDGE
FLUSH WITH AXLE MOUNT*

PASSENGER SIDE SHOWN



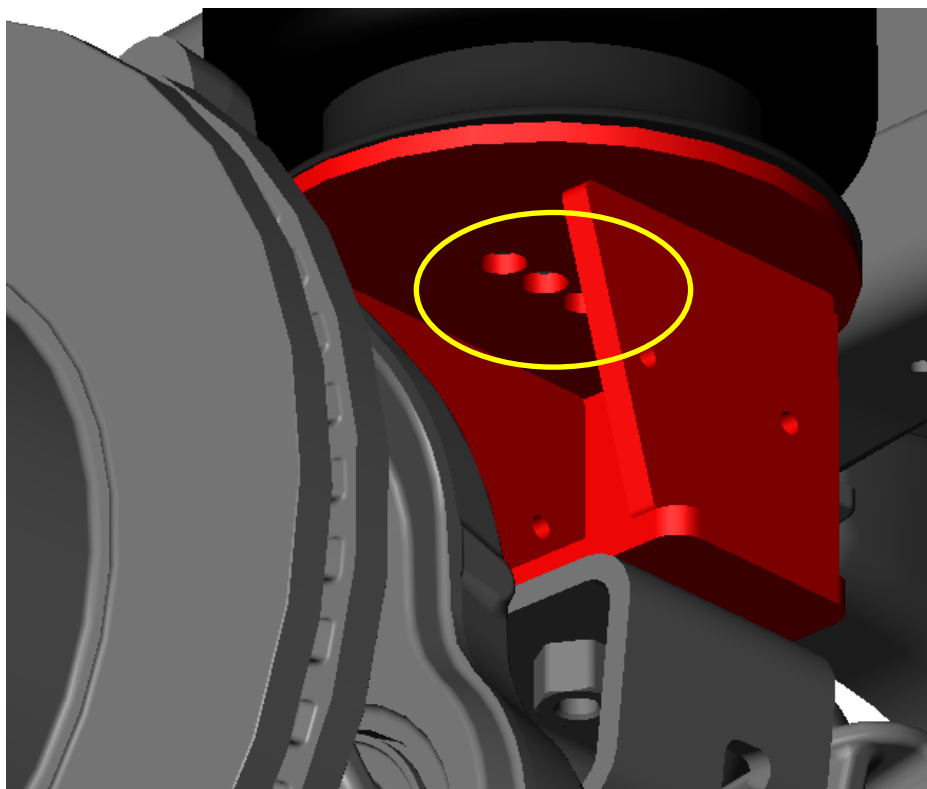
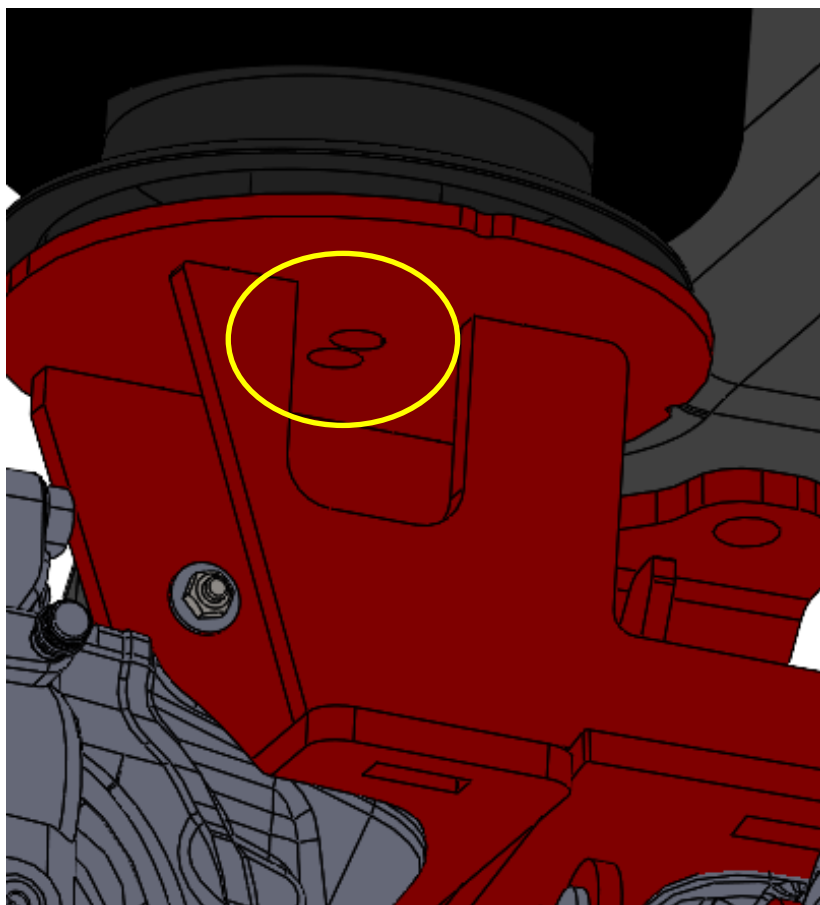
*PASSENGER SIDE USES
THE HOLE CLOSEST TO THE
TIRE.*

*DRIVERS SIDE USES THE
HOLE CLOSEST TO THE
ENGINE.*

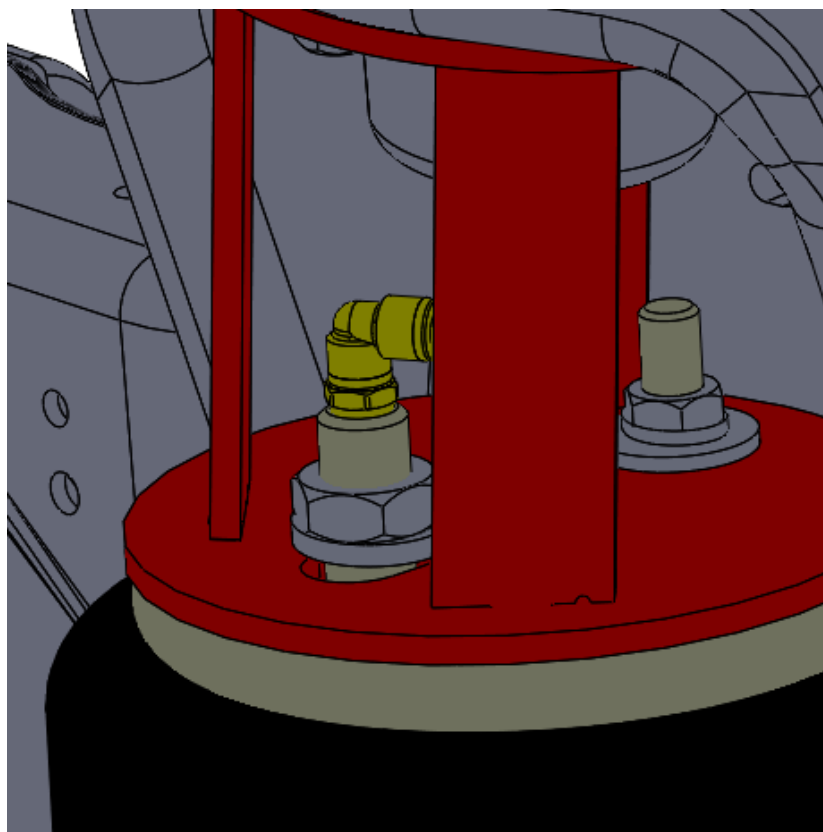
NOTE:
THE F-450 PICKUP ONLY
USES THE 14MM BOLT TO
FASTEN TO THE AXLE.

*THE LOWER AIR BAG PART
NUMBERS ARE 15107-DS
AND 19905-PS.*

NOTE: THERE ARE (2) HOLES IN THE LOWER BAG PLATE FOR THE F250/350 AND (3) HOLES ON THE 450/550, PUT THE BAG IN PLACE AND CHECK THAT THE BAG IS LEVEL WITH THE LOWER BAG MOUNT. AFTER ATTACHING BAGS, ATTACH THE SWAY BAR BACK TO THE TRUCK WITH FACTORY HARDWARE.



3. LOCATE THE #F5323 AIRBAGS. THE AIRBAGS FASTEN TO THE UPPER AIRBAG FRAMEWORK WITH THE 1/2" AND 3/4" NUTS AND LOCK WASHERS. TORQUE THESE NUTS TO 35 FT./LBS. THE BOTTOM OF THE AIRBAG FASTENS TO THE LOWER AIR BAG MOUNT WITH THE 1/2"-20 X 3-3/4". MAKE SURE THE STAR WASHER SITS AGAINST THE LOWER AIRBAG MOUNT. TORQUE THIS BOLT TO 35 FT./LBS. THIS WILL PREVENT THE AIR BAG FROM SLIDING AROUND ON THE PLATE. LOCATE THE AIR FITTING AND INSERT INTO THE AIR BAG. PUT THE AIR FITTING IN FINGER TIGHT AND THEN TURN ONE COMPLETE TURN.



4. LOCATE THE PROVIDED SHOCKS AND THE LOWER SHOCK MOUNTS. (**NOTE: F450-550 DOES NOT USE LOWER SHOCK MOUNTS**) (#69157). INSTALL USING THE STOCK SHOCK BOLT ON BOTTOM. THE STANDARD SHOCK OPTION FOR THIS KIT IS A RANCHO 9000 SERIES ADJUSTABLE. USING THE RED KNOB ON THE SHOCK ITSELF, TURN THE KNOB TO ADJUST THE VALVING ACCORDING TO YOUR APPLICATION. TYPICALLY SETTING #3 WORKS THE BEST WITH THE AIR SUSPENSION ON THESE TRUCKS. IF USING RAPTOR SHOCKS (#10124), GRINDING BETWEEN THE SHOCK MOUNT AND COIL BUCKET. THE SHOCK RESERVOIR MOUNTS BETWEEN UPPER BAG MOUNT AND COIL BUCKET.

5. ONCE THE AIR RIDE IS INSTALLED, ITS TIME TO HOOK UP THE AIR LINES. IF THE SYSTEM IS A MANUAL FILL (NO ONBOARD AIR), JUST ROUTE THE AIR LINES UP UNDER THE HOOD AND ZIP TIE SOMEWHERE FOR EASY ACCESS. EACH AIRBAG WILL NEED A SCHRADER VALVE. INFLATE THE AIRBAGS TO 8" AND RECORD YOUR PRESSURES FOR FUTURE REFERENCE. THE PRESSURE WILL TYPICALLY BE IN THE LOW 70 PSI RANGE AT RIDE HEIGHT. DON'T BE ALARMED IF ONE SIDE IS A FEW PSI HIGHER THAN THE OTHER.



THIS PICTURE SHOWS THE SCHRADER VALVE OR MANUAL FILL. THIS PLACEMENT IS FOR MOCK UP ONLY. THE AIR LINE NEEDS TO BE RUN UP UNDER THE HOOD CLOSE TO THE FRONT FOR EASY ACCESS.

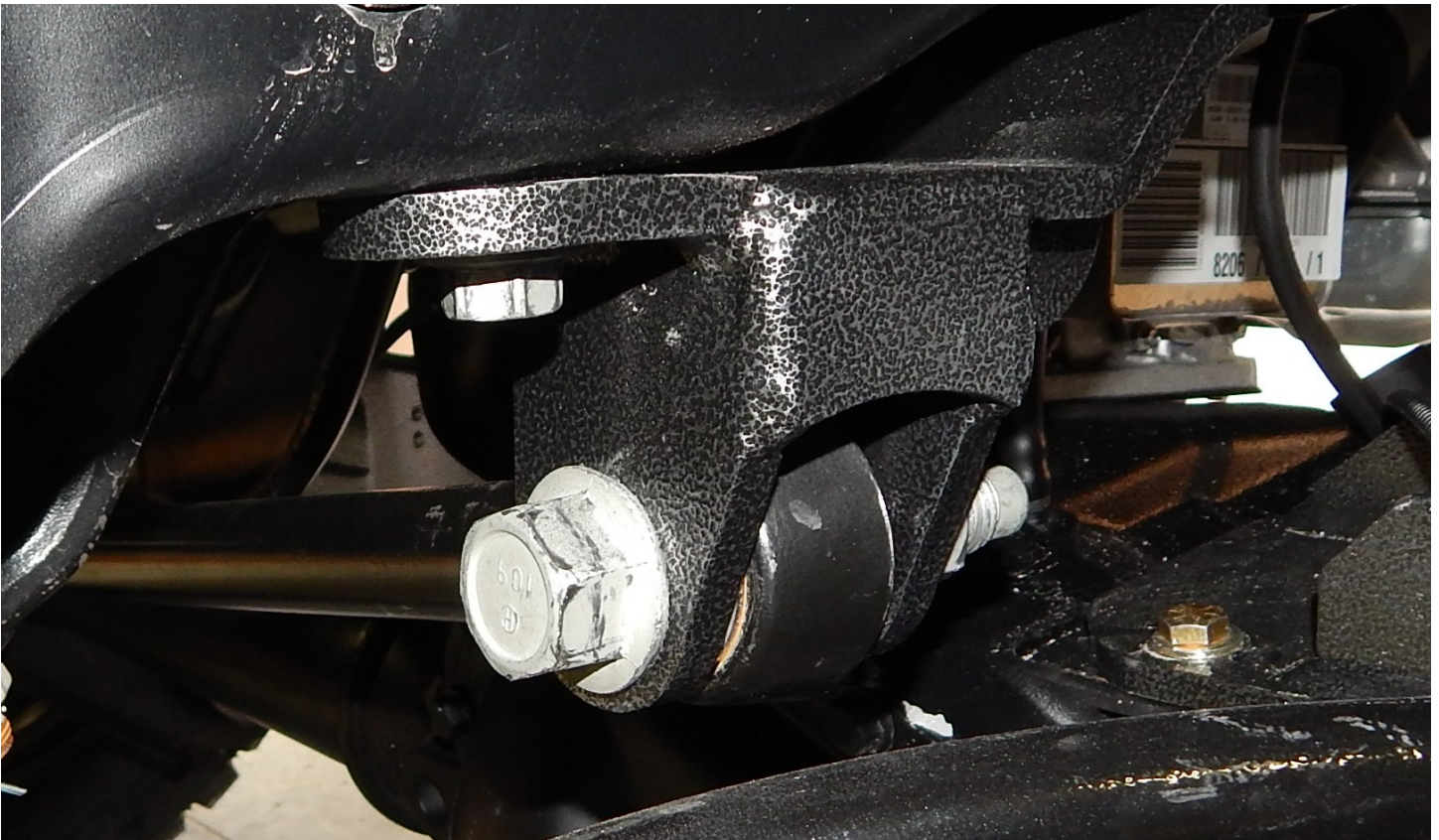
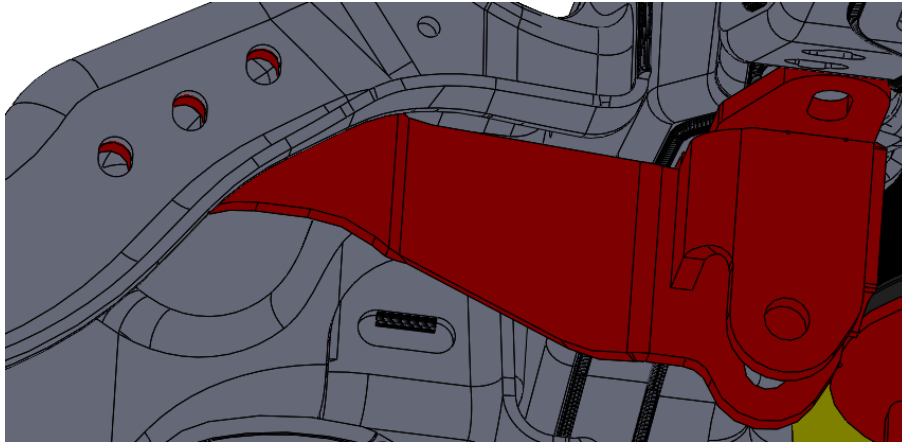
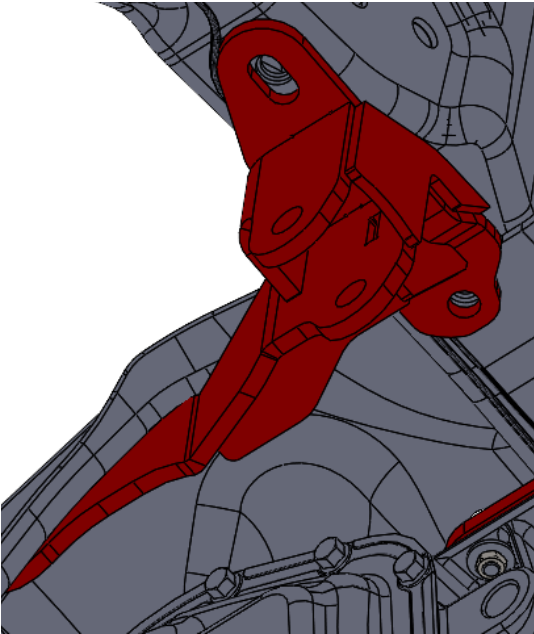
IF PLUMBING TO AN ONBOARD SUPPLY, RUN THE AIR LINE THROUGH THE HOLE IN THE UPPER SPRING BUCKET. MAKE SURE IT IS AWAY FROM ANYTHING SHARP OR HOT.

THE AIR BAG OPERATES AT 8" TALL. MEASURE BETWEEN THE UPPER AND LOWER AIR BAG MOUNTS.

THE 2017 F-450 USES A LOWER AIR BAG LIKE THE ONE PICTURED HERE. IT ONLY USES THE 14MM BOLT TO FASTEN TO THE AXLE.

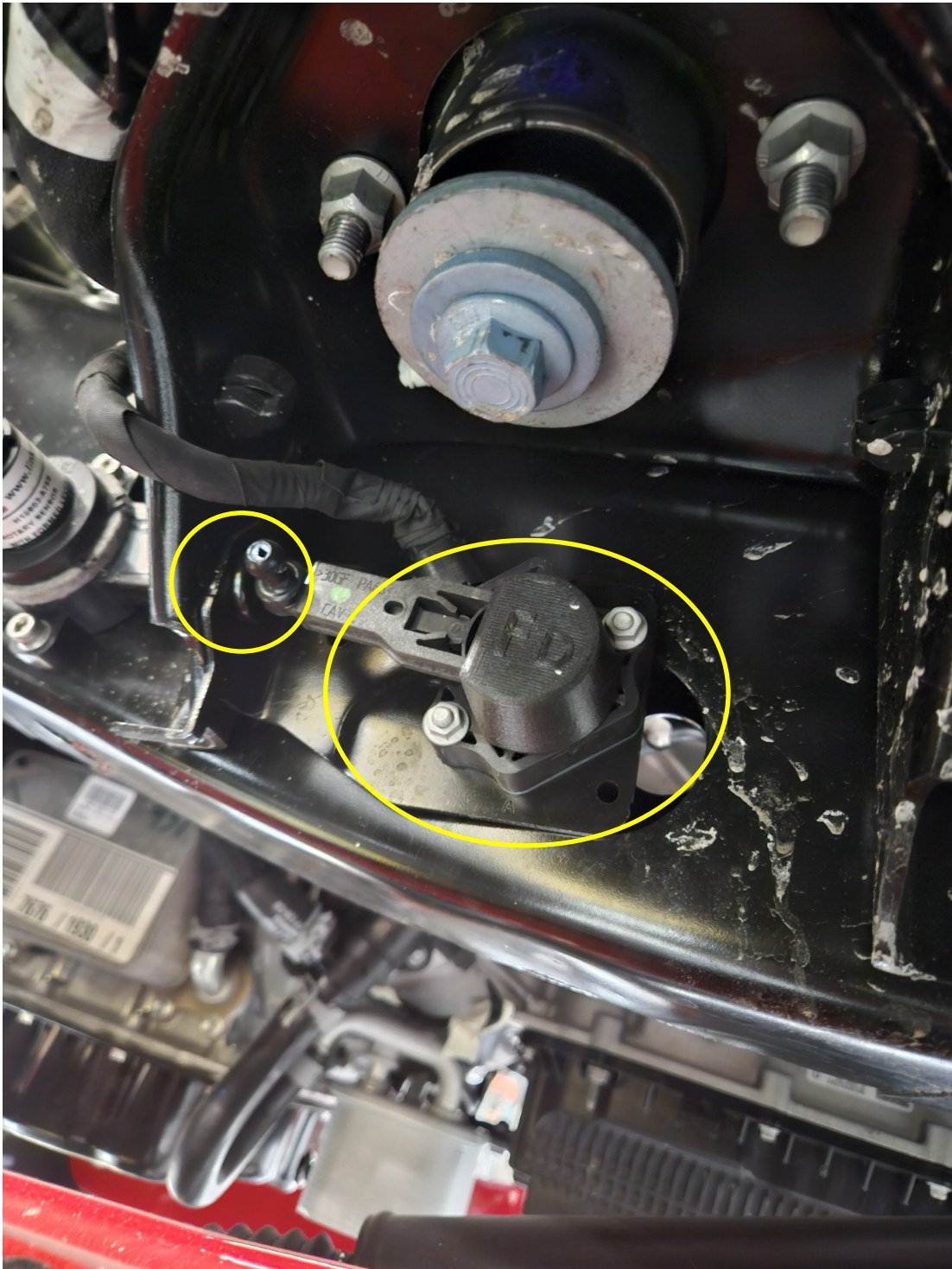
TRACK BAR DROP BRACKET INSTALLATION

5. FOR F250-350 ONLY, LOCATE THE PAN HARD BAR DROP BRACKET (#96381). THIS BRACKET REPLACES THE OEM PAN HARD BAR BRACKET. THE BOLTS FROM THE FACTORY PAN HARD BAR BRACKET WILL BE RE-USED. TORQUE THE 14MM BOLTS TO 125 FT./LBS. AND THE 18MM BOLT TO 175 FT./LBS.



FOR 2023+ FORD PICKUPS ONLY

9. INSTALL FRONT SENSOR LOCK BRACKETS (#10029766). YOU WILL HAVE TO DISCONNECT AND UN-BOLT THE SENSOR AND BRACKET. YOU WILL INSTALL SENSOR LOCK OVER THE FACTORY SENSOR AND THEN FLIP THE BRACKET REARWARD USING THE EXISTING HOLE WHERE IT WAS MOUNTED FROM FACTORY.



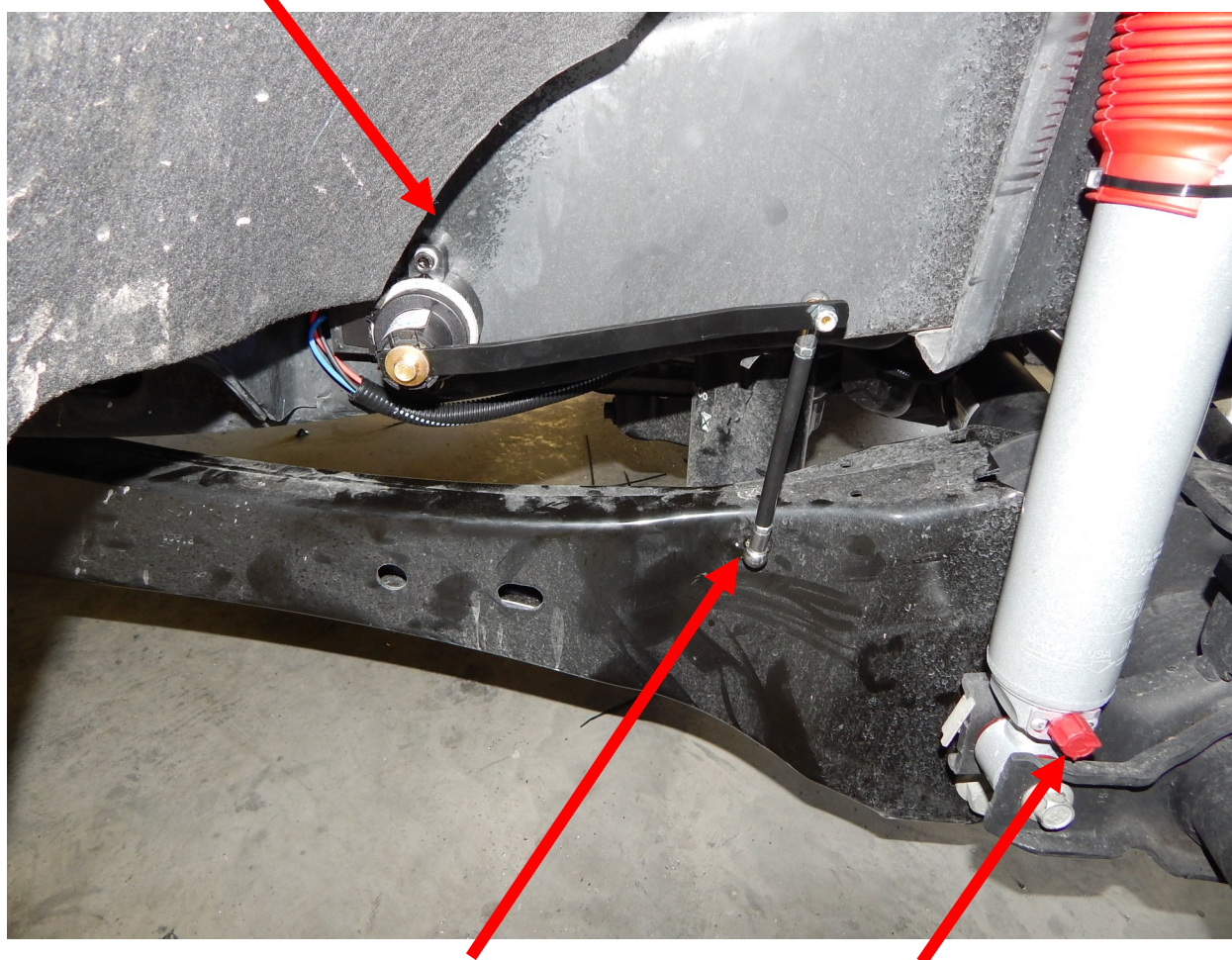
HADLEY RIDE HEIGHT SENSOR MOUNTING

6. IF YOU ARE INSTALLING AN ELECTRONIC CONTROL SYSTEM, USE A 13/64" DRILL BIT TO DRILL AND TAP THE FRAME FOR THE 1/4-20 BOLTS. THE MOUNTING HOLES NEED TO BE STRAIGHT UP AND DOWN. THE PICTURE BELOW SHOWS WHERE TO LOCATE THE SENSOR AND WHERE TO DRILL AND TAP THE TRAILING ARM FOR THE BALL STUD. THE SENSOR NEEDS TO BE STRAIGHT OUT AT RIDE HEIGHT. THERE IS NO AIR IN THE AIR BAGS IN THE PICTURE BELOW.

7. ONCE THE SENSOR HOLES ARE TAPPED FASTEN THE SENSOR TO THE FRAME, SET THE AIR BAGS AT EIGHT INCHES TALL. THE ARM ON THE HADLEY SENSOR WILL NEED TO BE STRAIGHT OUT. FIND THE SPOT TO MOUNT THE BALL STUD TO THE FACTORY RADIUS ARM WHEN THE SENSOR ARM IS STRAIGHT OUT. YOU CAN SHORTEN THE LINKAGE ARM IF NEEDED. ONCE YOU GET THE BALL STUD LOCATION, DRILL THE SPOT WITH A 1/4" DRILL BIT AND TAP IT TO 5/16-18. INSTALL THE BALL STUD AND FASTEN THE LINAGE TO THE BALL STUD ON THE TRAILING ARM AND ON THE SENSOR. THERE IS A SMALL RETAINING CLIP ON THE LINKAGE THAT NEEDS TO BE REMOVED WHEN INSTALLING OR REMOVING THE LINKAGE.

THE HADLEY SENSOR MOUNTING
REQUIRES DRILLING INTO THE FACTORY
FRAME & RADIUS ARM

THE HADLEY SENSOR SHOULD BE
STRAIGHT OUT WHEN THE SYSTEM IS AT
RIDE HEIGHT. PHOTO BELOW IS AT THE
SYSTEM'S DUMPED HEIGHT.

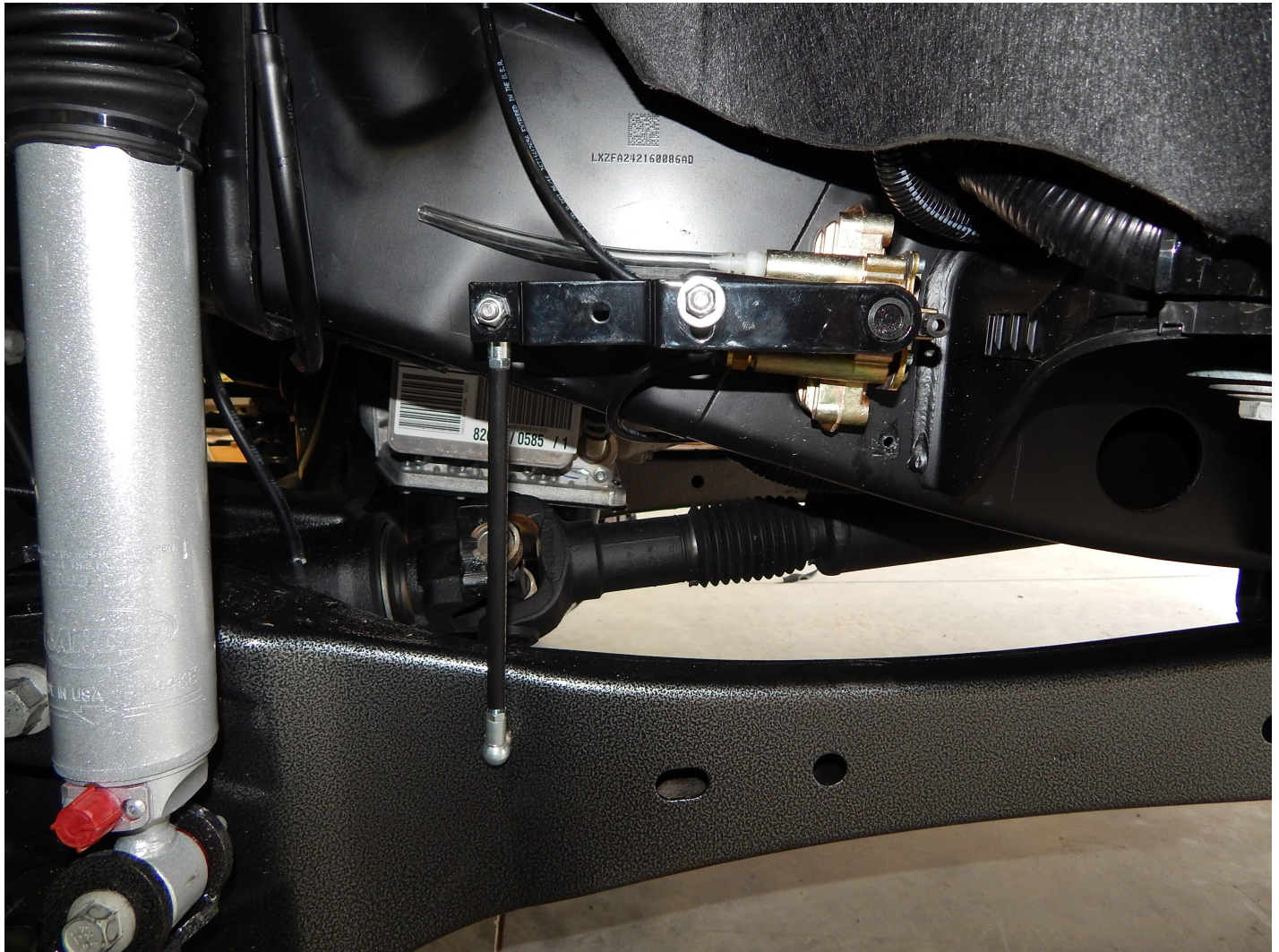


A BALL STUD IS MOUNTED INTO THE FACTORY
RADIUS ARM TO CONNECT THE LINKAGE TO
HADLEY SENSOR ITSELF.

THE RED KNOB WILL ALLOW ADJUSTMENT
TO THE VALVING ON THE SUPPLIED
RANCHO SHOCKS.

HALDEX HEIGHT CONTROL VALVE MOUNTING

8. IF YOU ARE INSTALLING THE MECHANICAL HALDEX HEIGHT CONTROL VALVE, USE A 13/64" DRILL BIT TO DRILL AND TAP THE FRAME FOR THE 1/4"-20 BOLTS. THE MOUNTING HOLES NEED TO BE STRAIGHT UP AND DOWN. THE PICTURE BELOW SHOWS WHERE TO LOCATE THE SENSOR AND WHERE TO DRILL AND TAP THE TRAILING ARM FOR THE BALL STUD. THE SENSOR NEEDS TO BE STRAIGHT OUT AT RIDE HEIGHT. THERE IS NO AIR IN THE AIR BAGS IN THE PICTURE BELOW. ONCE THE SENSOR HOLES ARE TAPPED, FASTEN THE SENSOR TO THE FRAME. INFLATE THE AIR BAGS TO 8" TALL. SET THE ARM ON THE SENSOR SO THAT IT IS STRAIGHT OUT. FIND THE LOCATION WHERE TO MOUNT THE BALL STUD TO THE TRAILING ARM SO THE SENSOR IS IN THE CORRECT POSITION. YOU CAN SHORTEN THE LINKAGE ARM IF NEEDED. ONCE YOU GET THE BALL STUD LOCATION, DRILL THE SPOT WITH A 1/4" DRILL BIT AND TAP IT TO 5/16"-18. INSTALL THE BALL STUD AND FASTEN THE LINAGE TO THE BALL STUD ON THE TRAILING ARM AND ON THE SENSOR. THERE IS A SMALL RETAINING CLIP ON THE LINKAGE THAT NEEDS TO BE REMOVED WHEN INSTALLING OR REMOVING THE LINKAGE.



F450-550 PICTURED

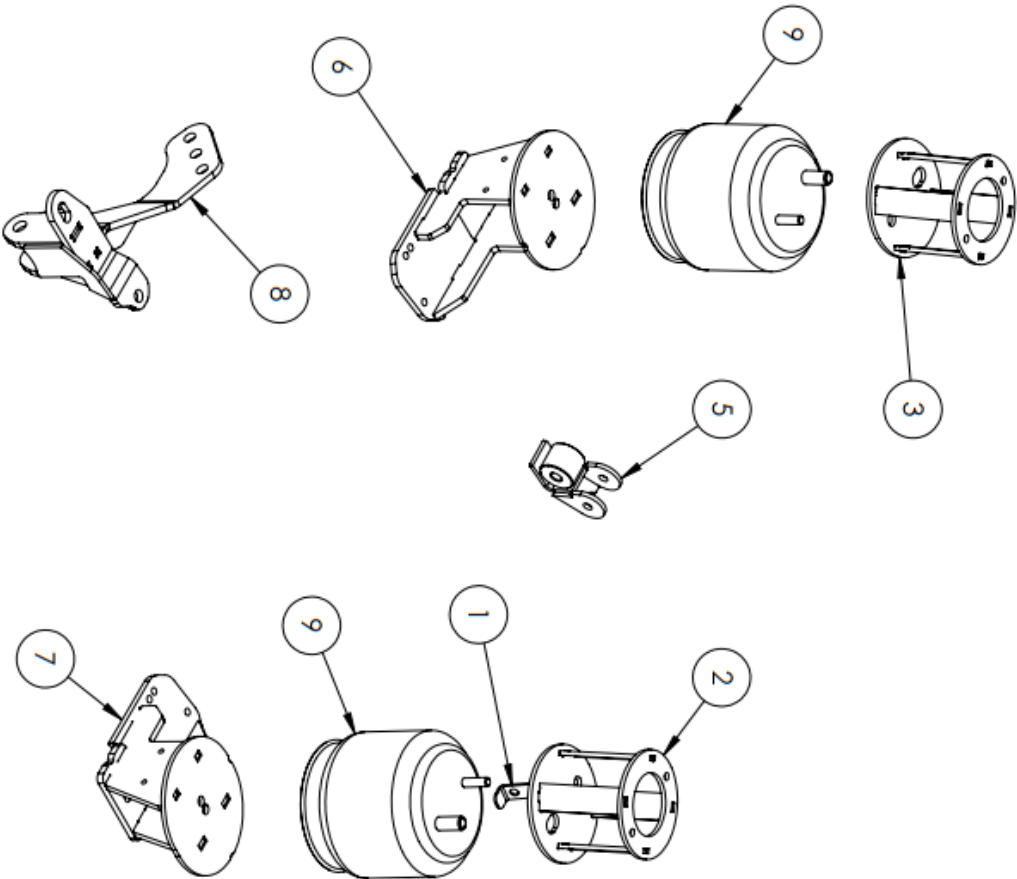
**FORD F450-550 CAB CHASSIS PICTURED
BELOW WITH HADLEY SENSORS
NOTE: NO SHOCK RELOCATION BRACKETS**



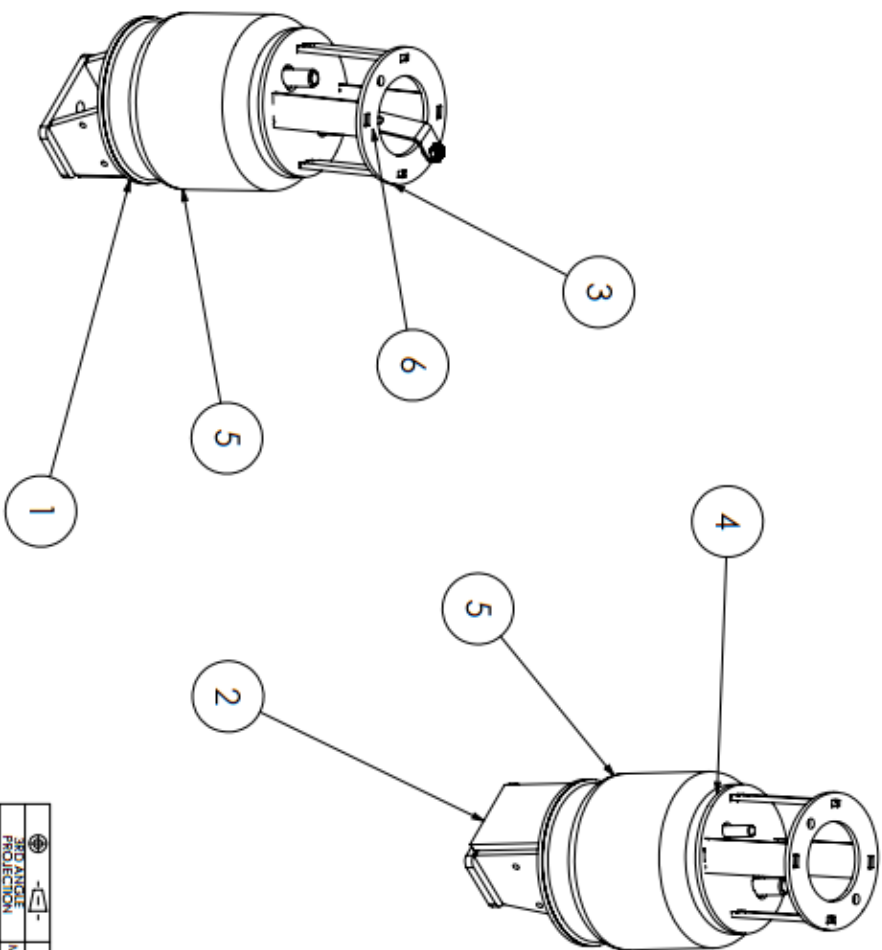
KIT DRAWINGS

KLM-69003

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	10015294	Weldment - 3/8"-24 Nut Tab - Anti Spin Flag	1
2	69067	(DS) Upper Frame/Bog Mount	1
3	69072	(PS) Upper Frame/Bog Mount	1
4	69157	Shock Relocation Bracket	1
5	69157	Shock Relocation Bracket	1
6	69372	(PS) Lower Bog Mount	1
7	69376	(DS) Lower Bog Mount	1
8	69540	Front Panhard Bar 0.625" Drop	1
9	80012-5323	Air Bog - Firestone 5323	2

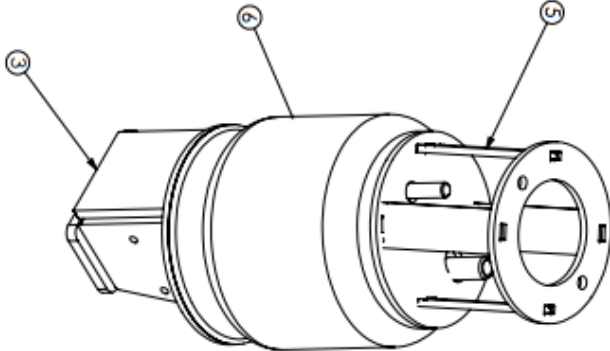
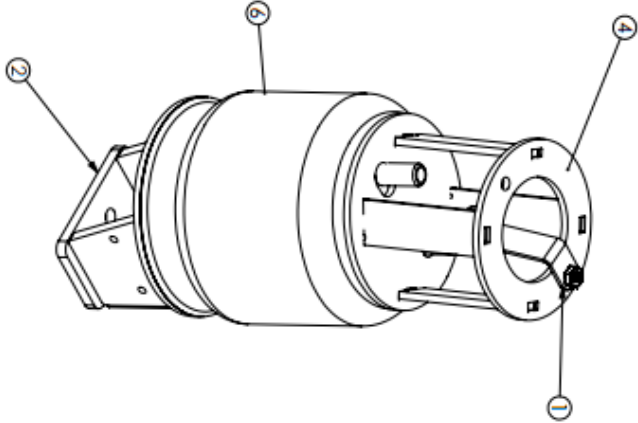


	PROJECTION	A	ISO FIRST ANGLE DRAWING	1:20	Approximate Weight = 55.49 lbs
	UNITS	MAT. SPECS.			
	OTHERWISE SPEC. DIMS. IN INCHES	DESCRIPTION:	KB - Control Arm Front - Shock Height / Leveling		
	STD. TOLERANCES	PROJECT:	2017-2022 & 2023+ Ford F250/350 Pickup - 4WD		
	PART NUMBER:	DATE:	12/13/2018		
	DESIGN BY:	DATE:	12/13/2018		
	SHEET 1 OF 2				



 ISO 15724 FIRST EDITION UNLESS OTHERWISE SPEC.	 A	DO NOT SCALE DRAWING	1:20	APPROXIMATE WEIGHT = 32.83 lbs	 SHEET 1 OF 1
	MAT. SPECS: DESCRIPTION KM - Stock Height - Control Arm Front				
DIMS. IN INCHES STD. TOLERANCES X.XX ±.030 X.XXX ±.010 FRAC./DIA. 1/32" Dwg. # 3					
PRODUCT: 2017-2022 & 2023+ Ford F450 Pickup - 4WD					
PART NUMBER: KLM-90020					
DESIGN BY: 2816					
DATE: 9/29/2016					
SPECIAL INSTRUCTIONS: THIS PART IS NOT TO BE USED IN THE FOLLOWING APPLICATIONS: (1) 2017-2022 F450 (2) 2023+ F450					

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	10015294	Weldment - 3/8"-24 Nut Tab - Anti Spin Flag	1
2	19904	Weldment - (DS) Lower Bag Mount	1
3	19905	Weldment - (PS) Lower Axle/Bag Mount	1
4	69067	(DS) Upper Frame/Bag Mount	1
5	69072	(PS) Upper Frame/Bag Mount	1
6	80012-5323	Air Bag - Firestone 5323	2



		A	DO NOT SCALE DRAWING	1:48	Approximate Weight = 32.83 lbs
PROJECTION	MATL. SPECS.	DESCRIPTION:	18" - Control Arm Front - Stock Height - 2-Stage Air Suspension		
UNLESS OTHERWISE SPEC'D, DIMS. IN INCHES	STD. TOLERANCES	PROJECT:	2017-2022 & 2023+ Ford F1450/550/600 - Chassis		
1/4" = 1.000	1/4" = 1.000	COD - 4WD			
1/8" = 1.000	1/8" = 1.000	PART NUMBER: KLM-69500			
FRACTION: 1/16"	Decg: .39"	DESIGN BY:	DATE: 3/8/2018		
				CHECKED BY: [Signature]	
				APPROVED BY: [Signature]	
				PART NUMBER: KLM-69500	
				SHEET 1 OF 3	

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
PHONE: 1-800-334-6150
EMAIL: INFO@KELDERMAN.COM

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