



Part # KLM16650

Part # KLM16650AL

## 1999+ Ford F-350/450/550 Chassis Cab 2-Stage Rear Air Suspension System Installation Instructions



1. Place the vehicle on a flat surface. Jack the frame up so the wheels are just off the ground and place a jack stand on each side of the frame in front of the axle. Now remove the rear shackle hanger and tail light bracket. Keep the lower shackle bolt as it will be reused in step 4!



Remove these brackets

2. Locate the air suspension top frame. It fastens to the four holes on each side of the frame with the 1/2x1 1/2" bolts (use flat washers on each side of the bolt). Use the adjustable mounts (part# 30616 PS and 30615 DS) and 1/2x 1 1/2" bolts to connect the rear of the upper framework to the back portion of the truck frame. Insert the bolts from inside out. Go ahead and torque the bolts to 85 ft/lbs. If the frame has an extension welded to the end, you may have to drill the rear four holes. The adjustable mounts are slotted where they attach to the upper framework just for this situation.

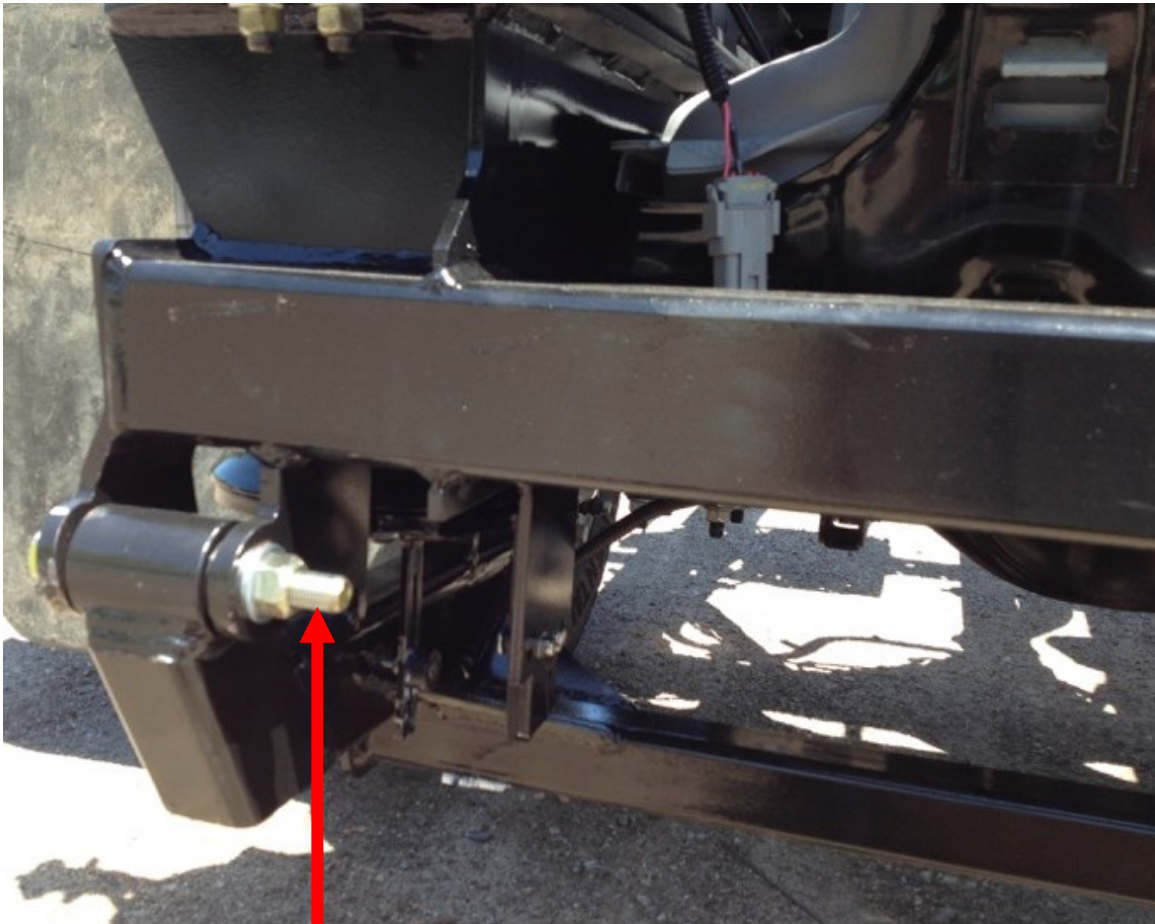




3. Locate the 5770 air bags (part# 10589-F550). The fasten into the upper framework with the 1/2 and 3/4" flat/lock washers and nuts. Torque the nuts to 35 ft/lbs. Now locate the air fitting. Insert the fitting into the air bag and tighten finger tight. Use a wrench to turn it one full turn.



4. Locate the lower swing arm (part# 11489). The back (pivot point) fastens into the upper frame work with the 5/8x5 1/2" bolts. Insert the bolts from the outside in. Use a flat washer on each side. Do not torque this bolt yet. Next connect the bottom of the air bag to the swing arm with the 5/8" nut, flat and lock washer. Torque this nut to 35 ft/lbs. DO NOT OVERTIGHTEN. THIS BOLT IS MOLDED INTO THE RUBBER ON THE AIR BAG. IF OVERTIGHTENED IT COULD RIP THE AIR BAG. Fasten the front of the swing arm to the leaf spring shackle with the OEM shackle bolt that was removed in Step 1. Once this bolt is connected, torque it to 135 ft/lbs and torque the 5/8" pivot bolt also to 135 ft/lbs.



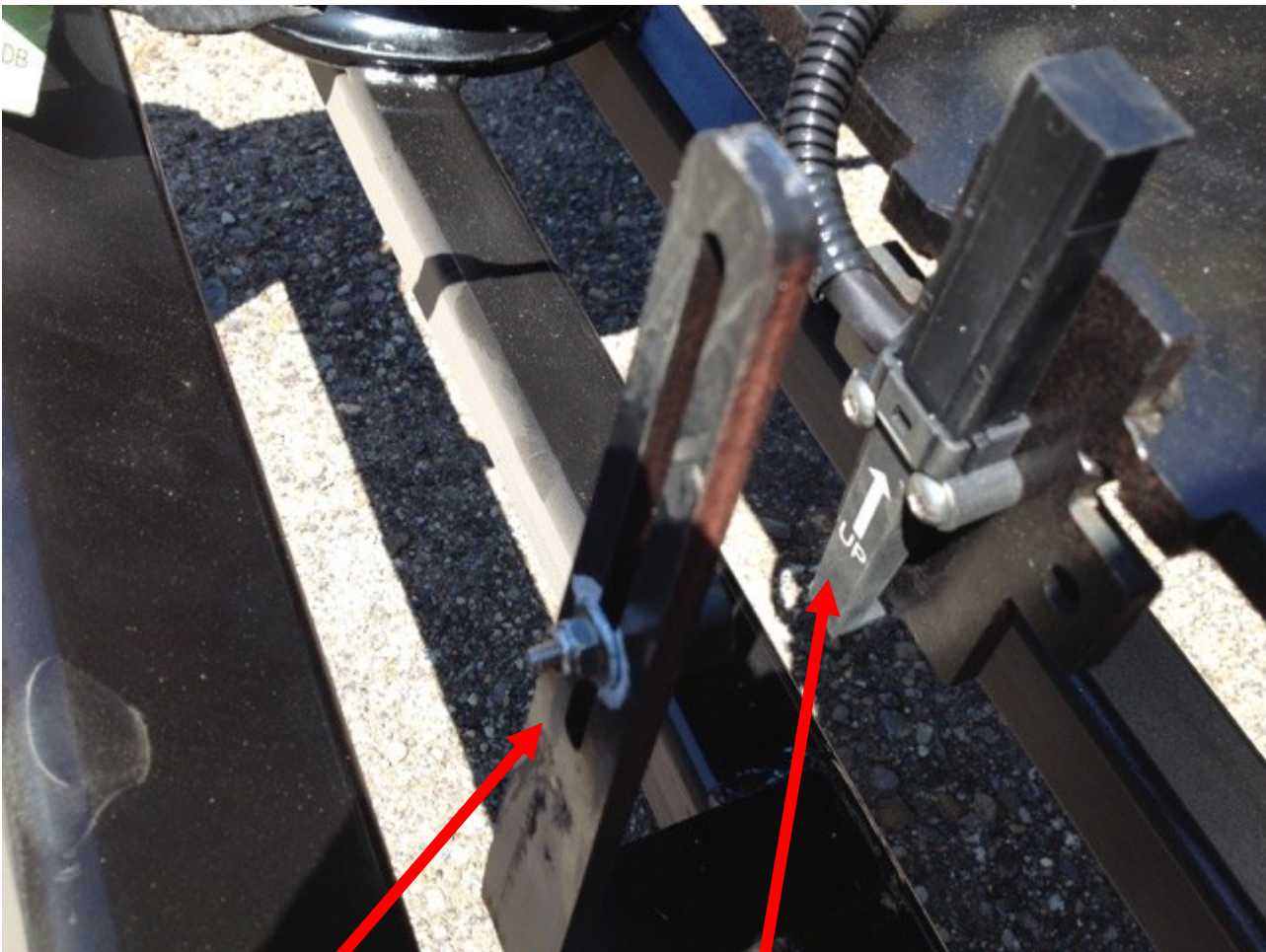
5/8x 5 1/2" bolt



OEM bolt

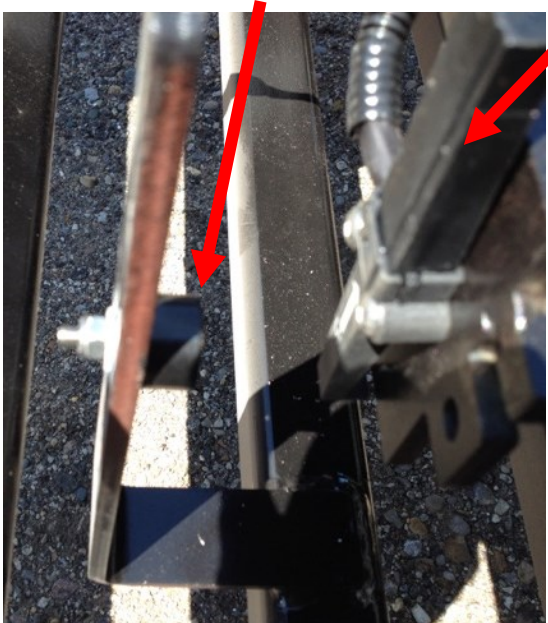


5. Locate the control system. There are two systems typically used, the Air Lift Wabco system and the AMK system. They both operate the same way, but the installation of the magnet is different. The sensor mounts to the flat plate on the upper frame work. The magnet fastens to the long slotted mount on the swing arm. The magnet on the Air Lift Wabco kit needs to be mounted directly across from the dotted line on the sensor, where as the AMK magnet mounts 1" below the solid line.



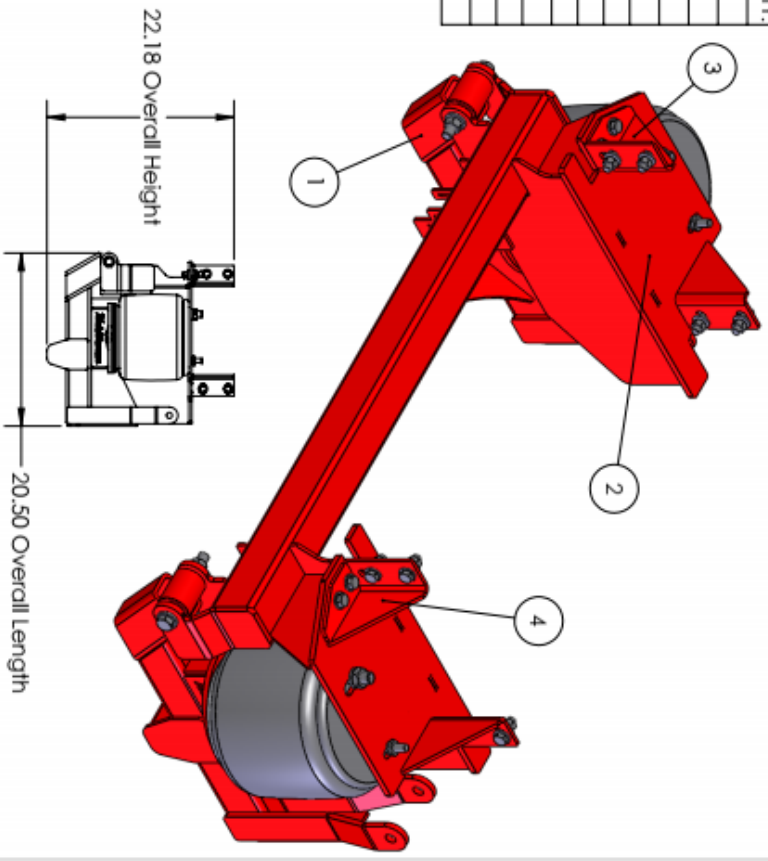
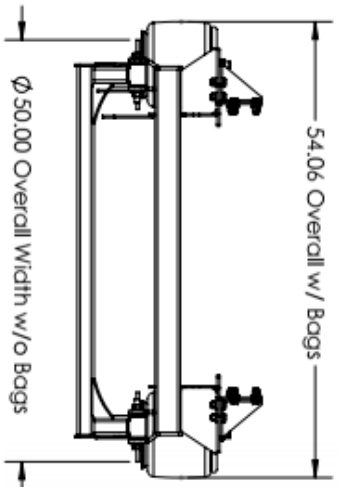
Magnet is fastened with this bolt

AMK sensor pictured



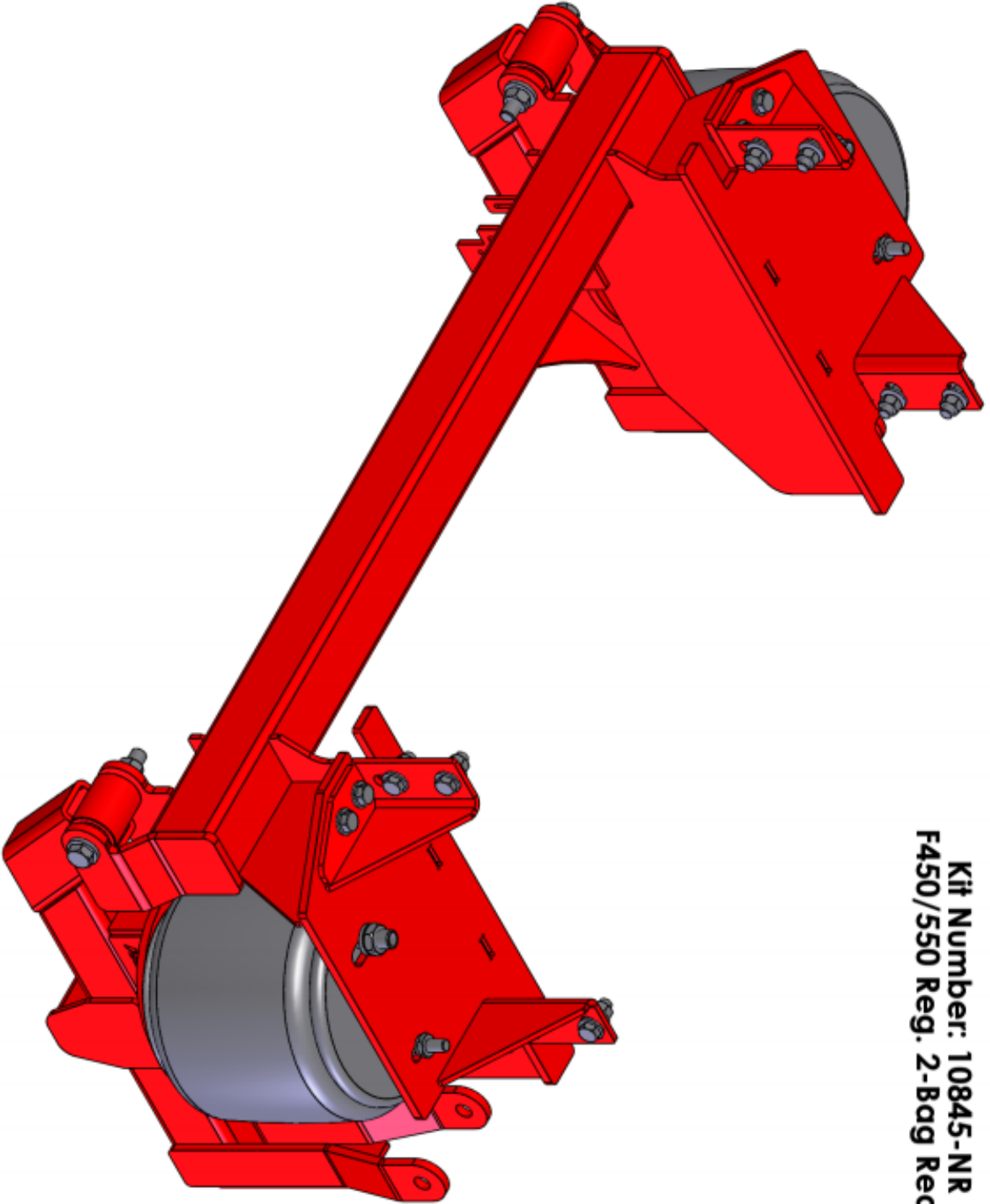
Monday, June 8, 2015 9:27:59 AM

ITEM NO.	PART NUMBER	DESCRIPTION	B1 QTY.
1	11489	Swing Arm	1
2	30617	Top Frame	1
3	30615	(DS) Top Frame / Frame Mount	1
4	30616	(PS) Top Frame / Frame Mount	1
5	10589-F550	BAG KIT - 5770(STD)	2
6	13006	5/8" Flat Washer	4
7	13004	1/2" Flat Washer	24
8	13126	Hex Lock Nut - 5/8"-18 - Gr.8	2
9	13124	Hex Lock Nut - 1/2"-20 Gr.8	12
10	12439	Boil - 5/8"-18 x 5 1/2" Gr.8	2
11	12007	Boil - 1/2"-20 x 1 1/2" Gr.8	12



UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES UNLESS NOTED:		Design By: Zach Beltz 2014	
FRACTIONAL: 1/32"		Shell # / Qty	
ANGULAR HATCH: 1 Ratio 2:1		Inventory	
TWO PLACE DECIMAL: 5.00		Run Qty:	
THREE PLACE DECIMAL: 1.000			
MATERIAL		<b>PROPRIETARY AND CONFIDENTIAL</b> THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF REIDERMAN MFG. INC. ANY REUSE OR REPRODUCTION OF THIS DRAWING WITHOUT THE WRITTEN PERMISSION OF REIDERMAN MFG. INC. IS PROHIBITED.	
FINISH		SIZE	DWG. NO.
WEIGHT 545.55		<b>A</b>	<b>10845-NR</b>
		SCALE: 1:1/6	DRAWN/SCALE/DRAWING SHEET 2 OF 2

5 4 3 2 1



**Kit Number: 10845-NR  
F450/550 Reg. 2-Bag Rear**