

2008-2015

Version 1.1

Ram 4500-5500

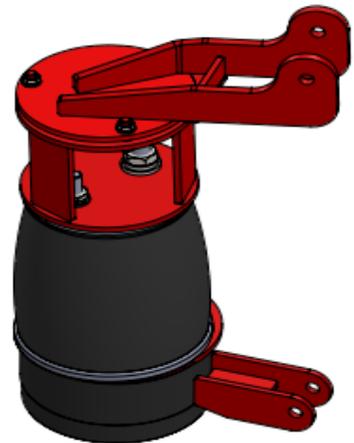
KLM17500

Front Install Instructions



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641-673-5396



1. Place the truck on a flat smooth surface. Measure the height of the truck from the center of the fender to the top of the tire. Record the measurement here _____.
2. Place a jack under the front differential. Remove the wheels. Place a jack/jack stand under the frame rail beside the radiator.



3. Remove the sway bar end link nut and pull off the rubber bushing.



4. Remove the factory shocks. There is one bolt on the bottom of the axle and a mounting bracket on top of the spring bucket. Remove the three nuts that hold the upper shock mount. Keep the lower bolt and nut as it will be used to fasten the lower air bag mount in place.

Passenger side shown below



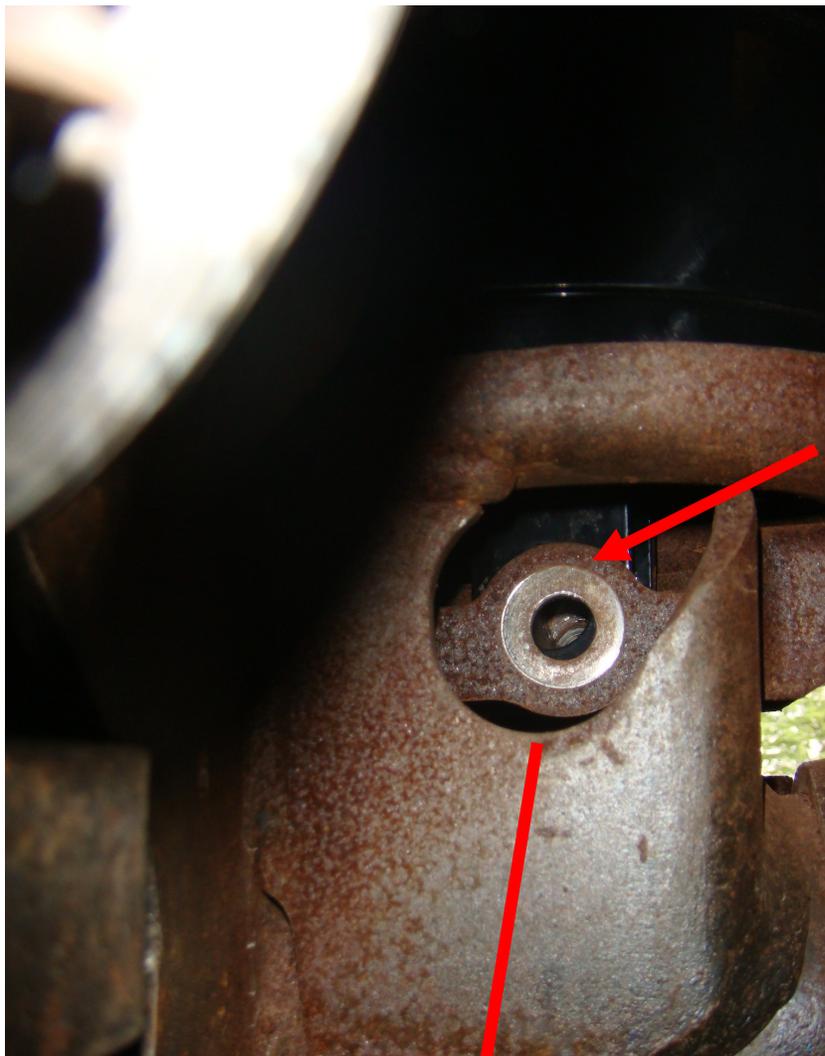
5. Locate the upper air bag mount and shock mount. The upper bag mount fits in the spring bucket. The shock mount fastens to the 3/8" studs sticking up through the spring bucket. Make sure shock mount is pointing towards the front of the truck. Install the lock washers and nuts and torque to 35 ft./lbs. NOTE: The upper bag mount should be orientated so the large hole will be away from the frame (closest to the tire).



6. Locate the 5323 Firestone air bag. Locate the lower air bag/lower shock mount. Fasten the air bag to the bottom mount with the 1/2 x 3 1/2" bolt and lock washer. Before torquing the bolt, drop the assembly into place and jack up the axle to get the orientation of the top studs of the air bag with the top air bag mount. Once the bag location is determined, torque the 1/2 x 3 1/2" bolt to 35 ft./lbs.



7. Once you have the air bag tightened to the lower bag mount, drop the air bag and lower bag mount into place on top of the axle. Locate the original 14 mm lower shock mount and nut. Wiggle the mounting bracket in place so the holes line up and fasten in place, torquing the 14 mm bolt to 95 ft./lbs.



Line up holes and insert factory 14 mm bolt

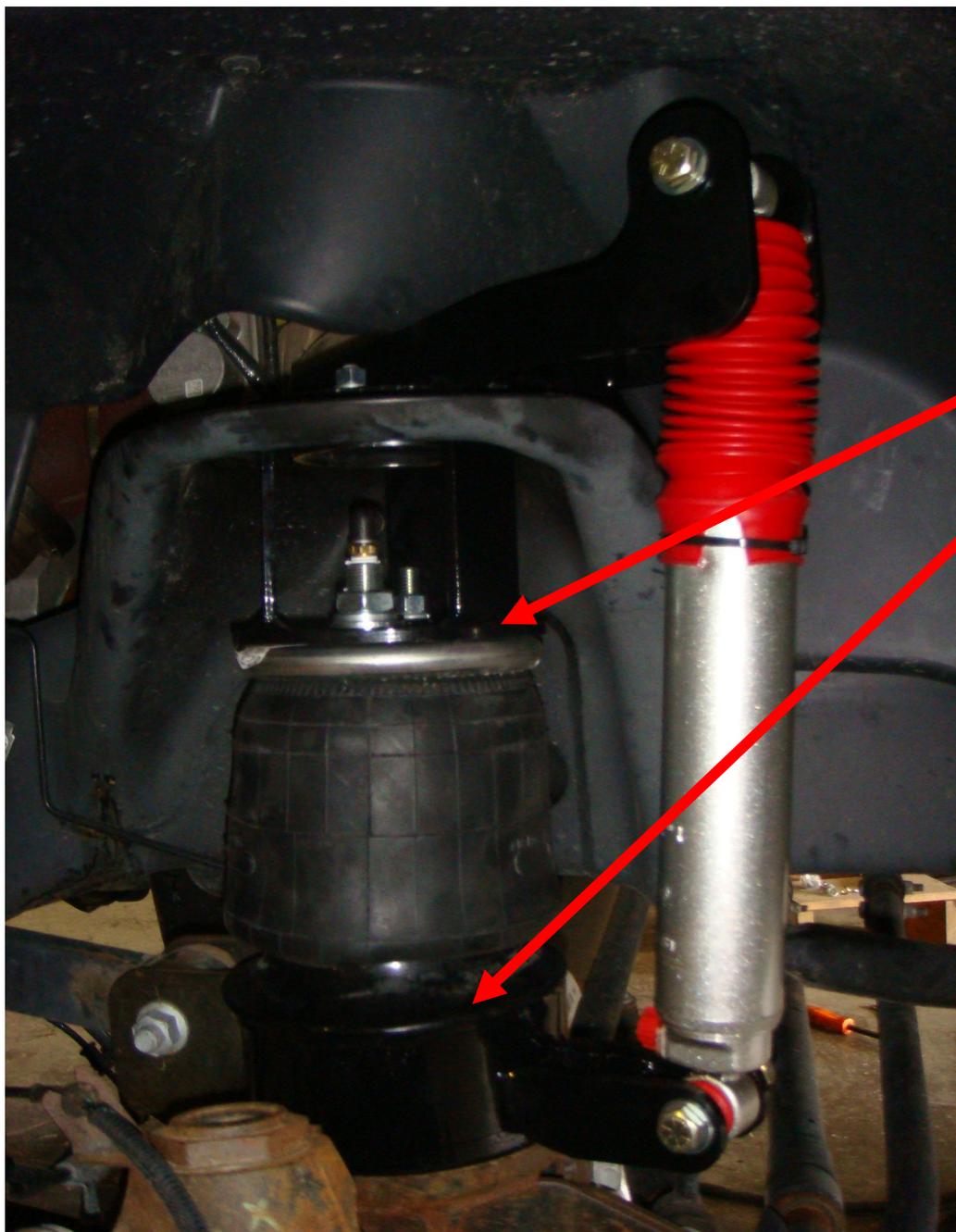


8. Once the lower air bag mount is fastened in place, jack the axle up and fasten the air bag to the upper air bag mount with the 1/2" and 3/4" nuts and lock washers. Torque the nuts to 35 ft./lbs. Locate the air fitting and place in the air port. If your fitting does not have any sealant already applied, apply Teflon tape to the fitting threads.
9. Go ahead and re-attach the sway bar end link to the sway bar.



10. Locate the Rancho 99113 shocks. Set the adjustment dial so it is on setting 3. It is up to personal preference as to installing the red boot on the shock. Normal highway use does not require it. Use the 1/2 x 4 1/2" bolts and spacers to fasten the top of the shock to the upper shock mount. Make sure to use a spacer on each side of the shock to center it in the shock mount. The bottom of that shock attaches to the lower air bag mount with the 1/2 x 3" bolt. There are no spacers used on the bottom. **NOTE: WHEN INSTALLING THE SHOCK MAKE SURE THE ADJUSTING DIAL IS POINTED IN TOWARDS THE AIR BAG. IF THE ADJUSTING DIAL IS FACING OUT THE TIRE WILL BREAK THE DIAL OFF WHEN TURNING.**

11. If the truck is a manual fill (no air compressor/tank), run the air lines from each side to a desired location. The air ride is designed to ride best at 8" tall. Measure the air bag ride height by measuring between the air bag mounting brackets. Check the air pressure once both air bags are at 8" and record these measurements for future reference.



8" between air bag mounts

12. If the air ride is using a 4 way electronic control system, front sensors will be needed to be installed. Locate the sensor mounting bracket. It has a slotted top hole and one bottom hole in it for 1/4" bolts. This bracket will need to be welded to the inside of the truck frame. It needs to be welded on an angle so the sensor arm is close to straight out at ride height. It is recommended to tack weld the bracket in place and run the sensor through the motions to make sure it does not bottom or top out when the air bags are deflated or fully extended. The sensor has a dead band all the way up and all the way down. The sensor needs to be positioned so that the arm does not hit the dead spots. Utilize the top slotted hole to fine tune the sensor mounting position. The linkage connects to a ball stud that gets mounted on the upper trailing arm. Use a 9/32" drill bit to drill the hole and tap the hole with a 5/16"-18 tap. The ball stud will be around 8" forward of the upper trailing arm rear attachment bolt. Once the sensor is hooked up and the system is at ride height, set the air bags at 8". When the air bag is at 8" the truck ride height should be very close to the measured height in step one.

