

KLM15629



kelderman
AIR RIDE SUSPENSION SYSTEMS

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2008 & Newer Dodge
4500/5500 HD Cab Chassis
2-Stage Rear
Installation Instructions



Installation

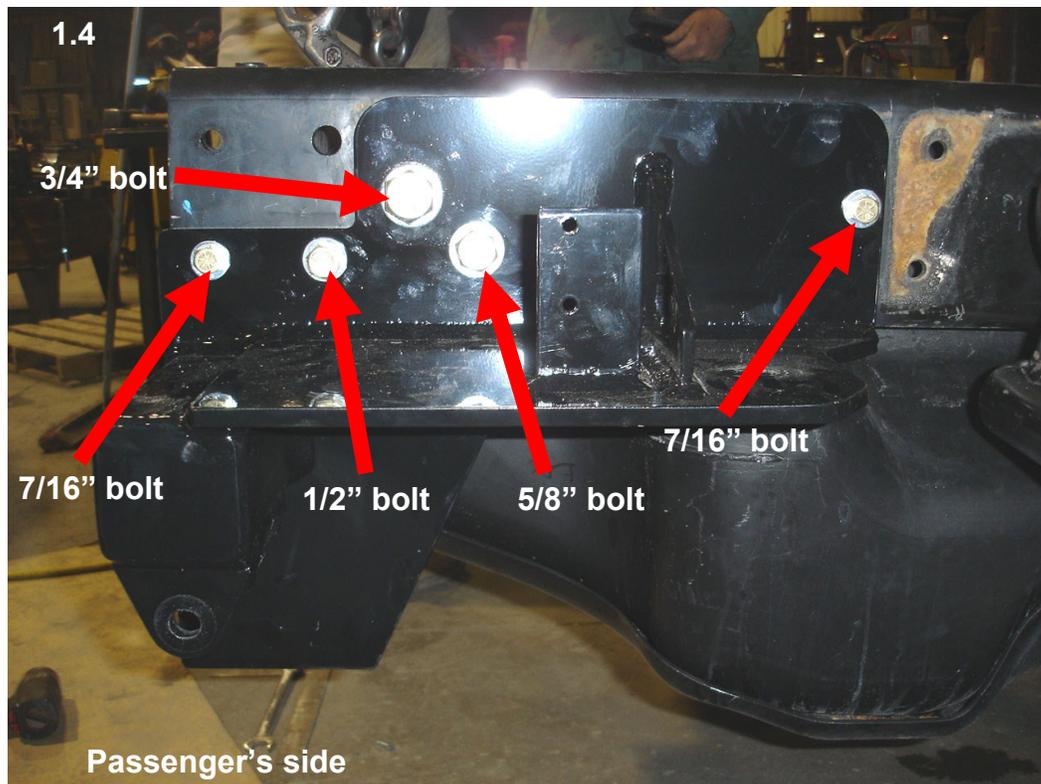
1. Place the truck on a flat surface and chock the front wheels. Jack up the rear of the truck so the rear wheels are about 1/4" off the ground. Place a jack stand under each side of the frame in front of the rear wheels.
2. Remove the lower shackle bolt that connects the shackle to the shackle hanger. Use a rivet buster or large hammer and chisel to knock the heads off the rivets that connect the shackle hanger to the frame. There are four rivets on the side of the frame and two rivets on the bottom of the frame. Make sure to wear eye protection. Also remove the rear overload pad. There are four rivets that hold these in place **(1.1 & 1.2)**.



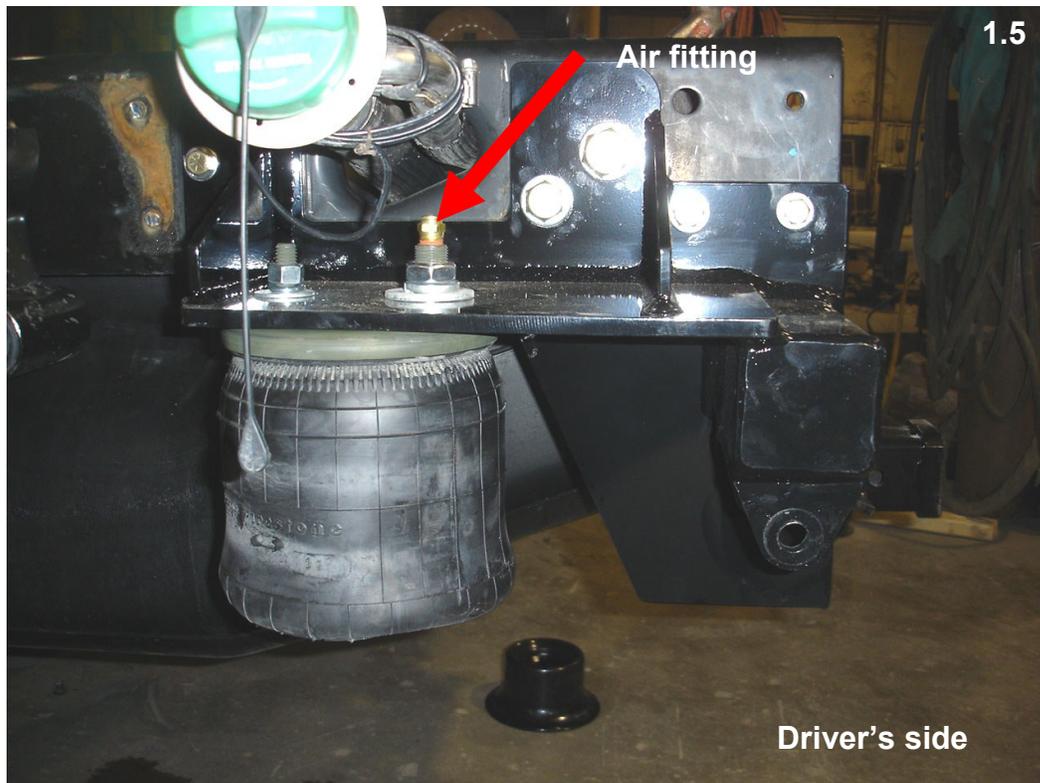
3. Locate the lower 3/8" rear hole in the frame. Use a 1/2" drill bit to drill out the hole in the frame **(1.3)**.



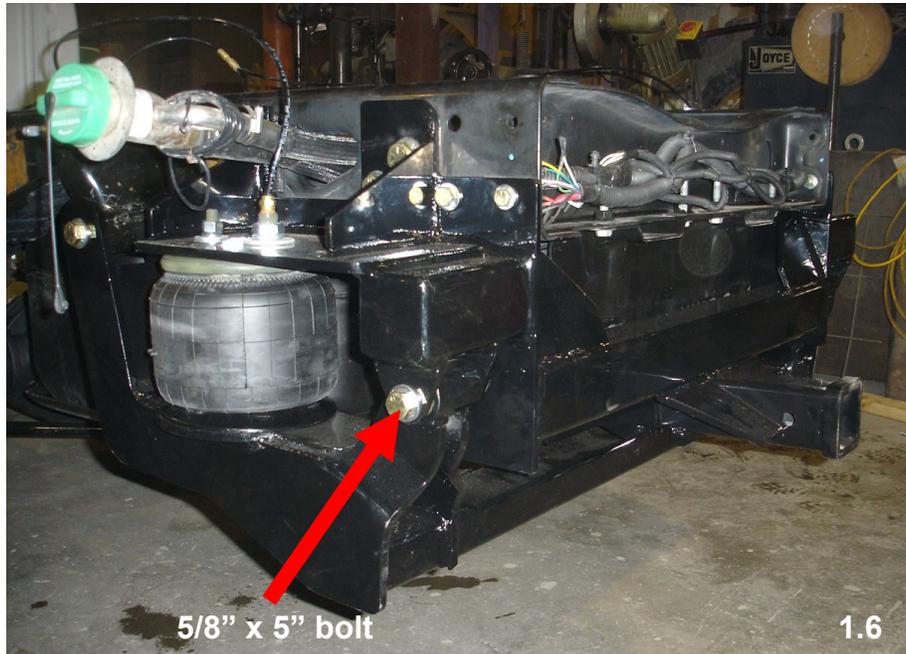
4. Locate the upper bag framework. Slide the framework in place coming from the bottom of the frame up. Use a 3/4" x 2" bolt on each side to fasten the unit in place. A flat washer goes on each side of the bolt. The hole in the frame is an oval so don't tighten the bolts yet. Locate the 5/8" x 2" bolts and fasten them in the hole next to the 3/4" bolts. Again use a flat washer on each side, but do not tighten. Next, locate the 7/16" x 1 1/2" bolts. You will have to lift up on the framework to get the holes to line up being that the two larger bolts are in the slotted holes of the frame. Once the 7/16" bolts are installed, go ahead and tighten all the bolts in the side of the frame (1.4).



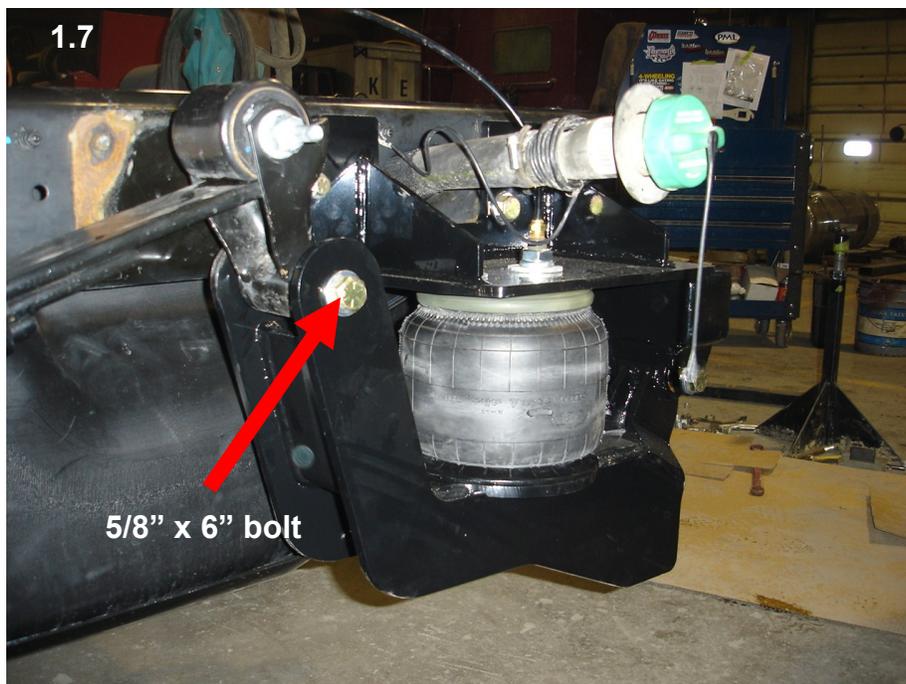
5. Once the top frame is fastened into place, it is required to drill one hole in the bottom of the frame on each side. Locate the hole in the bottom of the air ride framework and use a 1/2" drill bit to drill the hole. Once the holes are drilled insert the 1/2" x 1 1/2" bolts and tighten. Use a flat washer on each side of the bolt.
6. Locate the air bags. Fasten the top of the bag into the upper framework with the 1/2" nuts and washers, and 3/4" washers and jam nuts. Go ahead and thread in the air fitting (1.5).



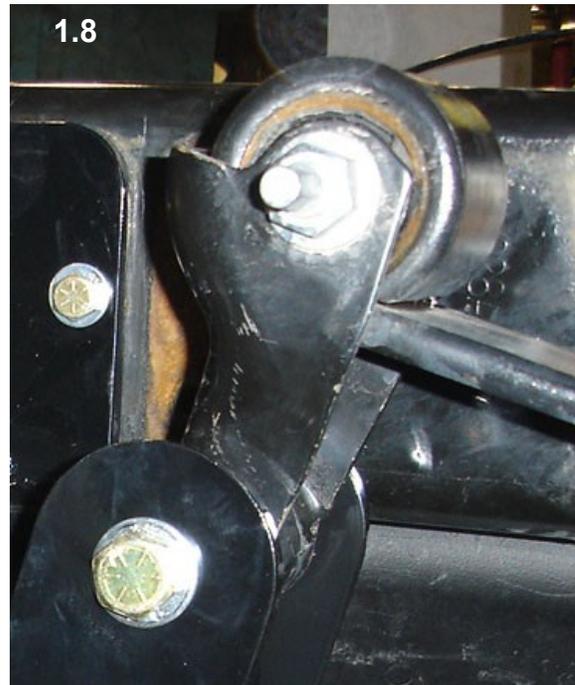
7. Locate the swing arm (lower framework). Place the end of the swing arm with the bushings in the tabs of the upper framework. Use the 5/8" x 5" bolts to fasten the swing arm in place. Use a flat washer on each side of the bolts (1.6). Do not tighten yet.



8. Swing the swing arm up and use the 1/2" x 3 1/2" bolt to fasten the bottom of the air bag to the swing arm. The bolt uses a lock washer and a flat washer (1.7).



9. Locate the 5/8" x 6" bolts. Use these bolts to fasten to the leaf spring shackle. Make sure you have a flat washer on each side. Snug up the bolts. Do not torque these bolts **(1.8)**. If you do the suspension system will bind and will not work correctly.



10. Go back and snug up the 5/8" x 5" bolt that holds the swing arm in place. As in step 9, do not torque or the suspension will bind.

11. Use the instructions provided if you are using a compressor kit or automatic kit. If you are using the standard manual fill, locate the air line. Decide where you are going to mount the Schrader valve (fill valve). Once you mount the fill valve, locate the "T" fitting. Run a short piece of air line to the "T". Now run a section of air line from the "T" to each bag. Make sure when cutting the air line to make a clean cut. We recommend using a razor blade knife to cut the air line **(1.9)**.



12. Operation. Inflate the air bags so that they are between 6 1/2-7" tall. The other indicator of operation height is to inflate the bags so that the bottom swing arm is level with the ground. As long as you keep these parameters, the truck will achieve the best ride. When adding a trailer or payload, just add air until the swing arm is level with the ground **(2.0)**.



