



kelderman

AIR RIDE SUSPENSION SYSTEMS

2686 Highway 92 - Oskaloosa, IA 52577

phone: 641.673.0468 - fax: 641.673.4168

www.kelderman.com

2009 and up Dodge 1500 Rear Install Instructions

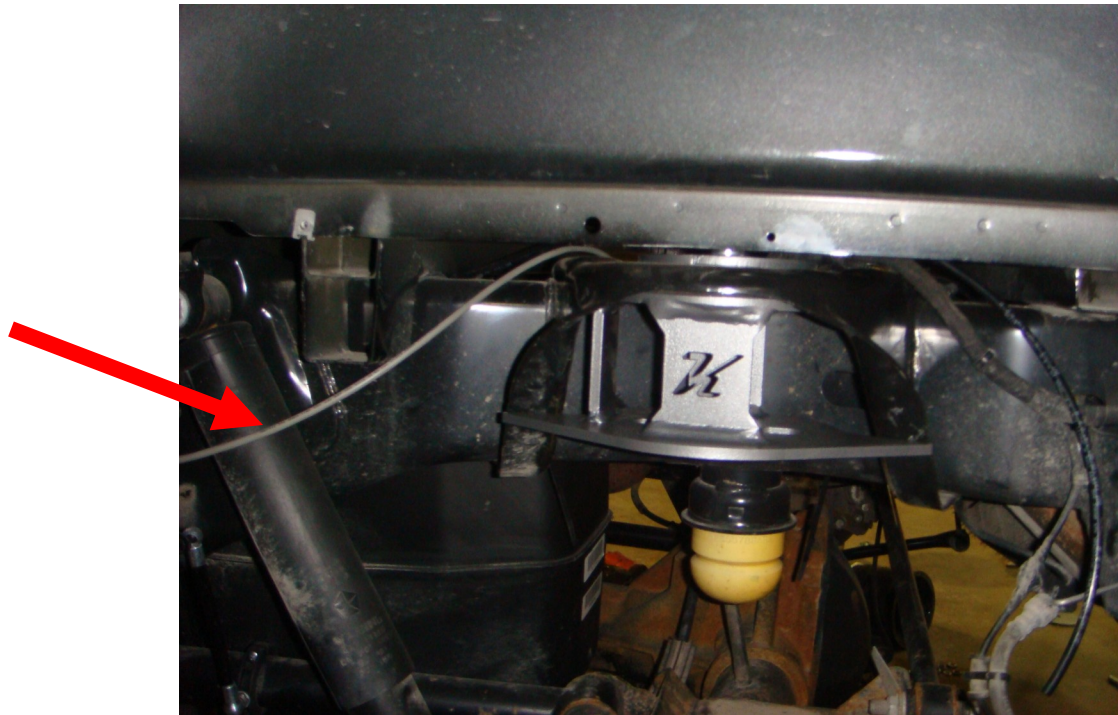


1. Place the truck on a level concrete surface. Measure the height of the rear of the truck from the bottom of the hitch to the ground. Record the measurement here _____. This measurement will be used to set the ride height once the install is complete.
2. Place a floor jack under the rear axle. Raise the truck up so that the rear wheels can be removed. Place a jack stand under the frame on each side just in front of the four link mounts. Remove the rear wheels and remove the plastic splash shield.



3. Remove the lower shock bolt and disconnect the shock. Lower the axle down until the brake lines are tight. The coils should be loose enough to pull out by hand. Next remove the rubber bump stops. Also remove the plastic mounting tab that holds the wiring for the wheel sensor from the axle.
4. Locate the upper bag mount (part # 50117) It installs in the upper spring coil bucket. It mounts with the tabs on the outside. Locate the 4 1/2" disk (part #50788) with the 1/2" hole in it. Place it on top of the spring bucket. Use the 1/2" lock washer and nut to fasten in place. Torque to 65 ft/lbs.





5. Locate the lower air bag mounts (part # 50801 drivers side and 50802 pass side) and 5323 air bag (part#10019-x-3). Locate the 1/2 4" bolt, lock washer and nut. Snug the air bag to the mounting bracket. Make sure to look at the orientation of the upper bag mounting holes. Make sure to rotate the air bags so that the studs on top of the bag line up with the holes on the upper bag mount. Now you can torque the 1/2" bolt to 30 ft/lbs.



6. Set the lower air bag mounts on top of the axle. They fasten to the axle with the 3/8x 1 1/2", bolts (and spacer part# 50789), 3/8x1" bolt ends and 1/2x1 1/2" bolts.

The 3/8x 1" and 1/2x1 1/2" use the tab nuts, beings that there is no way to get a wrench on the nuts.

7. Torque the 3/8" bolts to 40 ft/lbs and the 1/2" nuts to 65 ft/lbs.

8. Install the plastic tab on the sensor wiring harness to the top hole in the lower air bag mounting bracket.



Spacer 3/8x 1 1/2"



1/2 x 1 1/2" bolt uses tab nut on bottom

3/8x 1 bolt uses tab nut on back side

9. Fasten the top of the air bag to the upper bag mount with the 1/2" and 3/4" lock washer and nuts. Insert the 90 degree fitting in the top of the bag and tighten.



Use the upper hole to relocate the plastic sensor





The following instructions are only used if the Kelderman automatic leveling kit is purchased.

10. Locate the sensor mounts. There is a right and left side. Hold the sensor mount up to the forward box mount. Hold the mount up so that it is flush with the bottom of the mount. Use a paint marker and mark the holes on the box mount. Use 5/16" drill bit to drill the holes. Fasten the sensor mounts to the box mount with the 1/4x1" bolts, lock washers and nuts.
11. Locate the sensors. They fasten to the sensor mounts with the 1/4x1" bolts. Use the rear set of holes. Locate the sensor link mounting collar. It goes about 4" from the end of the upper trailing arm where the bushing is welded to the trailing arm. Locate the linkage arm and connect the sensor to the collar.
12. Locate the air tank. There are 2 styles of air tanks. The one gallon tank mounts on the inside of the drivers side frame rail. The three gallon tank mounts up behind the front bumper. Use the supplied hardware to mount the air tank
13. Locate the compressor box. The box mounts in the inside of the drivers side frame rail. Use the clamp brackets and supplied 3/8" bolts to attach the compressor box.
14. Use the chart on the next page for wiring up the compressor box
15. Once the system is hooked up use the Accu Air install book to calibrate the system.

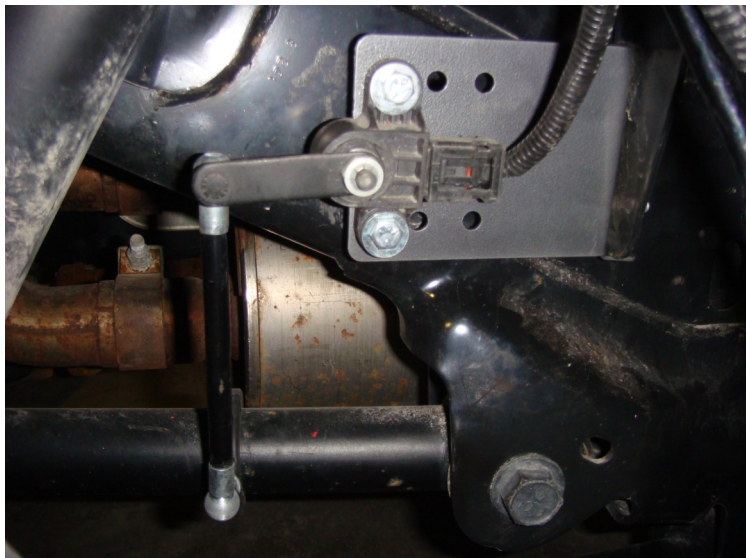
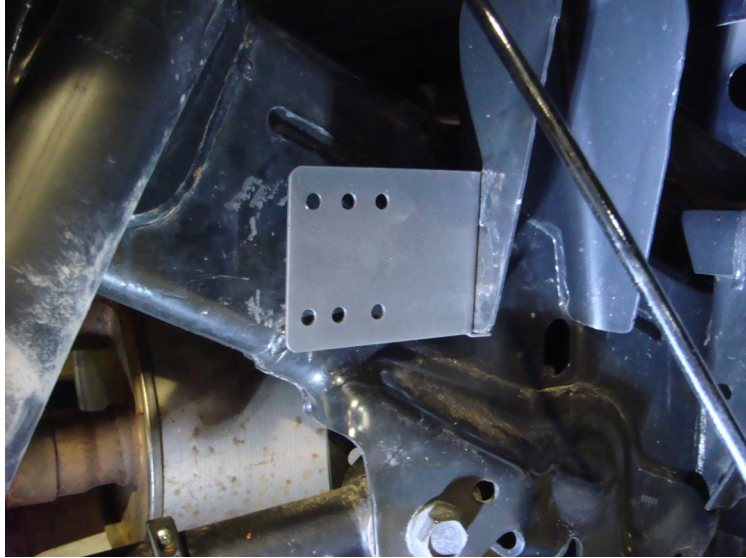
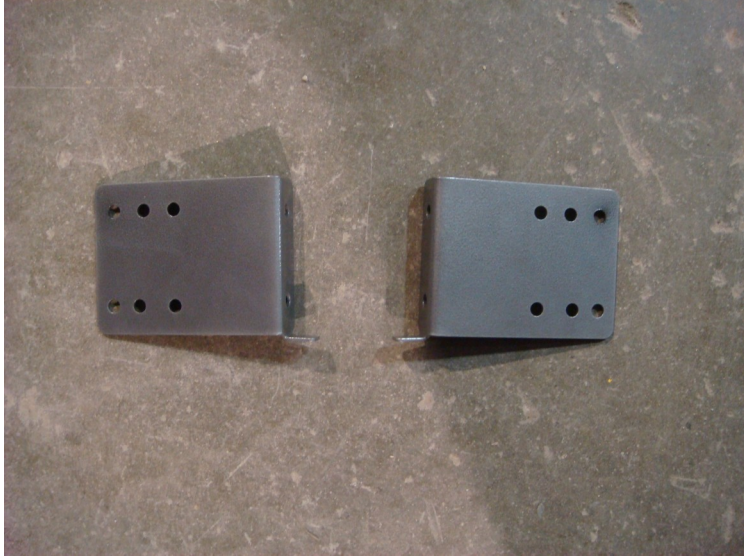
Wiring instructions for compressor box

| | |
|---------------------|--------------------|
| 12 gauge red wire | battery positive |
| 16 gauge red wire | battery positive |
| 12 gauge black wire | battery ground |
| 16 gauge orange | acc (switched key) |

Sensor wires go sensor one drivers side and sensor two passenger side

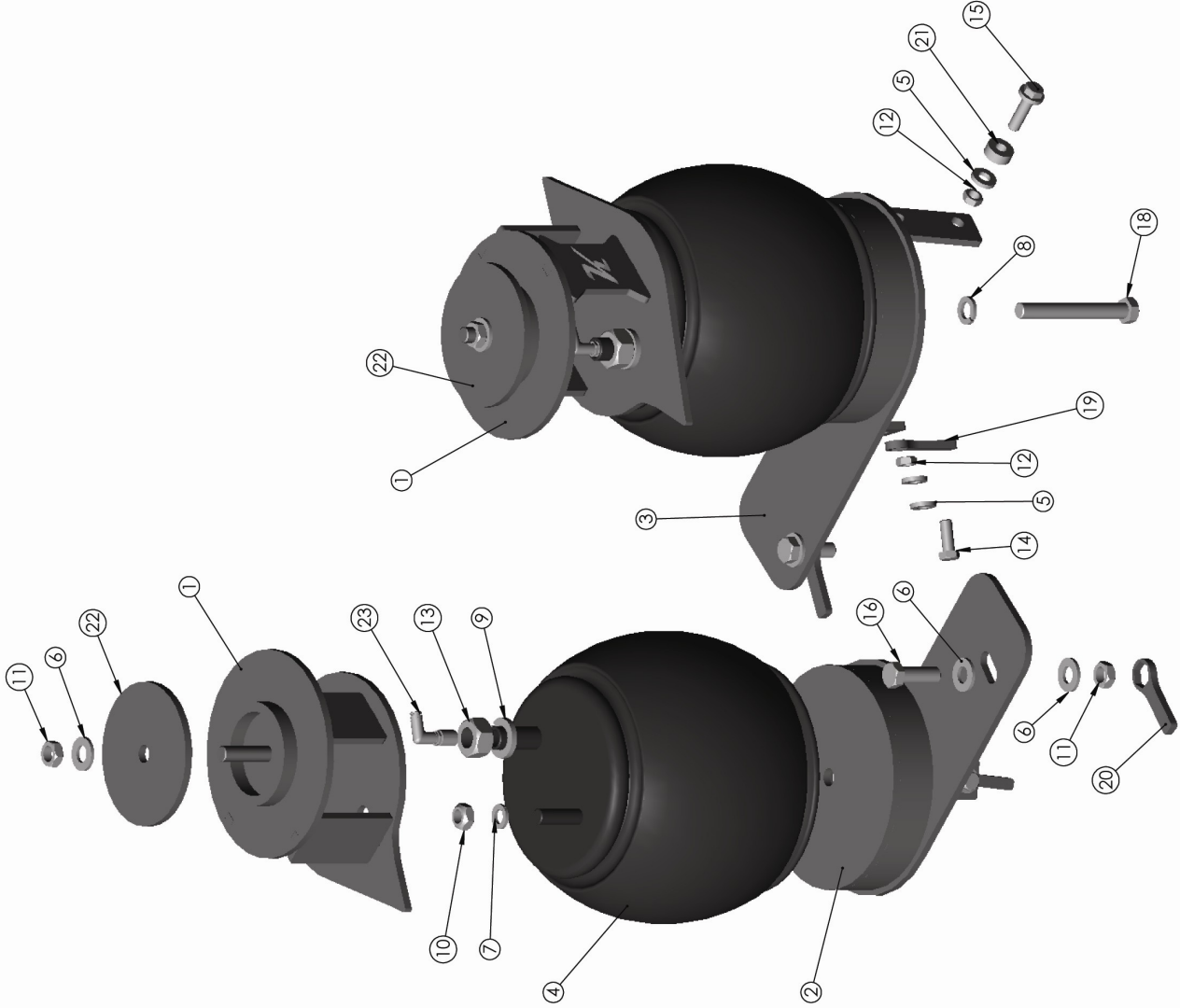
Calibration

Use the Accu Air instruction manual to calibrate the system. The air bag should run around 7 1/2 to 8" for the smoothest ride





Dodge 1500 KLM-50800



| ITEM NO. | PART NUMBER | DESCRIPTION | QTY. |
|----------|-------------|---------------------------------------|------|
| 1 | 50117 | TOP BAG PLATE | 2 |
| 2 | 50801 | Driver Side Assembly(lower bag plate) | 1 |
| 3 | 50802 | Pass. Side Assembly(lower bag plate) | 1 |
| 4 | 10019-X-3 | FIRESTONE AIR BAG - 5323 | 2 |
| 5 | 13002 | 3/8" FLAT WASHER | 8 |
| 6 | 13004 | 1/2" FLAT WASHER | 6 |
| 7 | 13048 | 3/8" LOCK WASHER | 2 |
| 8 | 13050 | 1/2" LOCK WASHER | 2 |
| 9 | 13056 | 3/4" LOCK WASHER | 2 |
| 10 | 13203 | HEX NUT - 3/8"-24 GR2 | 2 |
| 11 | 13144 | HEX NUT - 1/2"-13 GR8 | 4 |
| 12 | 13142 | NUT-TLHEX-75-10-C-YZ | 4 |
| 13 | 13148 | NUT-TLHEX-38-24-C-YZ | 2 |
| 14 | 12211 | BOLT - 3/8"-24 X 1" GR8 | 2 |
| 15 | 12217 | BOLT - 3/8"-24 X 1 1/2" GR8 | 2 |
| 16 | 12007 | BOLT - 1/2"-20 X 1 1/2" GR8 | 2 |
| 17 | 12011 | BOLT - 1/2"-20 X 2" GR8 | 2 |
| 18 | 12028 | BOLT - 1/2"-20 X 4" GR8 | 2 |
| 19 | 50128 | 3/8" KEY | 2 |
| 20 | 50127 | 1/2" Key | 2 |
| 21 | 50789 | Spacer | 2 |
| 22 | 50788 | 4 1/2" Spacer | 2 |
| 23 | 50803 | Air Line Filling | 2 |

Electronic Plumbing & Wiring Diagram with Air Dryer



Position Select Switch

Program Button

OFF ON

IGN

IGN_12V

