

G5 Dodge coil replacement mechanical height control valve instructions

Rear



Tools needed

drill

3/16" and 1/4" drill bits

1/4-20 and 5/16-18 taps

Center punch

Paint marker

Basic wrenches

1. Hold the Haldex height control valve up on the passenger side frame rail just behind the round tube cross member. Place the valve so that the bottom hole is just about 3/4" up off the bottom edge of the frame. This way the rotating lever has room to go up without hitting the bottom of the box.

2. Use a marker to make where to drill and tap the holes.


helderman.
AIR SUSPENSION SYSTEMS



3. Use a center punch to locate where to drill. Once you center punch hold the height control valve back in position to make sure your center punch marks are accurate. Next drill the two 3/16" holes. Once the holes are drilled tap the holes with a 1/4-20" tap.



4. Locate the height control valve. Before installing, rotate the lever 360 degrees each direction about 6 times. Now fasten the height control valve to the frame with the two 1/4x1" bolts. Now locate the linkage. Place it on the end of the ball on the lever and drop it straight down to see where to locate the ball that gets installed on the trailing arm. NOTE: MAKE SURE THE AIR BAGS ARE AT 8" (RIDE HEIGHT)! Also the plumbing of the valve is this: top=exhaust (clear line) middle= out to airbags (use a T fitting to split the air line) bottom= air supply from air tank



5. The linkage should be 5 1/4" long. Double check that the air bags are at 8" (measure in between the mounting brackets). Now use a center punch and mark your drill location. Drill the hole with a 1/4" drill bit. Next tap the hole with a 5/16-18 tap. Install the ball and linkage. Look closely at the linkage and you will see a wire "keeper". Remove the keeper, slide the linkage on and install the rod on the balls. Reinstall the keepers.





D2RX-2-14
D2R4-2-14

2014+ Ram HD Rear Coil Replacement Installation Instructions



NOTE: The installation of this kit is fairly straightforward. The most difficult part will be installing bolts in the upper bag mounts. We recommend removing the box or lifting the box up several inches to make more space for working with the hardware.

1. The rear coil springs need to be removed. To do this, remove the bottom shock bolts and unhook the sway bar end links from the sway bar. Now lift the truck up from the frame until the coil springs can be removed. NOTE: MAKE SURE TO WATCH THE BRAKE LINES AND NOT STRETCH AND DAMAMGE THEM. You will remove the rubber mounts that the springs sit in also.



2. Locate the upper air bag mounts (part# 19106DS and 19107PS). They fasten into the upper coil mounts with the 1/2" and 3/4" nut mounts (part# 19113 and 19114). Fasten the upper bag mounts in place and torque the 1/2" bolts to 85 ft/lbs and the 3/4" bolts to 125 ft/lbs.



3. Locate the air bags (part# 5323) and the lower air bag mounts (part# 19110PS and 19111DS). The air bag fastens to the lower air bag mounts with the 1/2x3" bolt. You will want to put the assembly in place and make sure the air bag studs line up with the upper bag mount before you tighten the bolt. Once you get the correct orientation of the air bag tighten the 1/2" bolt to 35 ft/lbs. Next, place the assembly on the axle. Drill holes into the factory mount on the axle using a 15/32" drill bit and fasten into place with the 7/16x1 1/2" bolts. Torque these bolts to 55 ft/lbs. Lower the truck down and fasten the top of the bag to the upper air bag mount with the 1/2" and 3/4" nuts and washers. Torque these nuts to 35 ft/lbs. Insert the air fitting in the air port. Tighten it finger tight then one complete turn with a wrench.



4. Now that the air suspension is installed, reconnect the factory end links to the sway bar and reconnect the lower shock bolt.

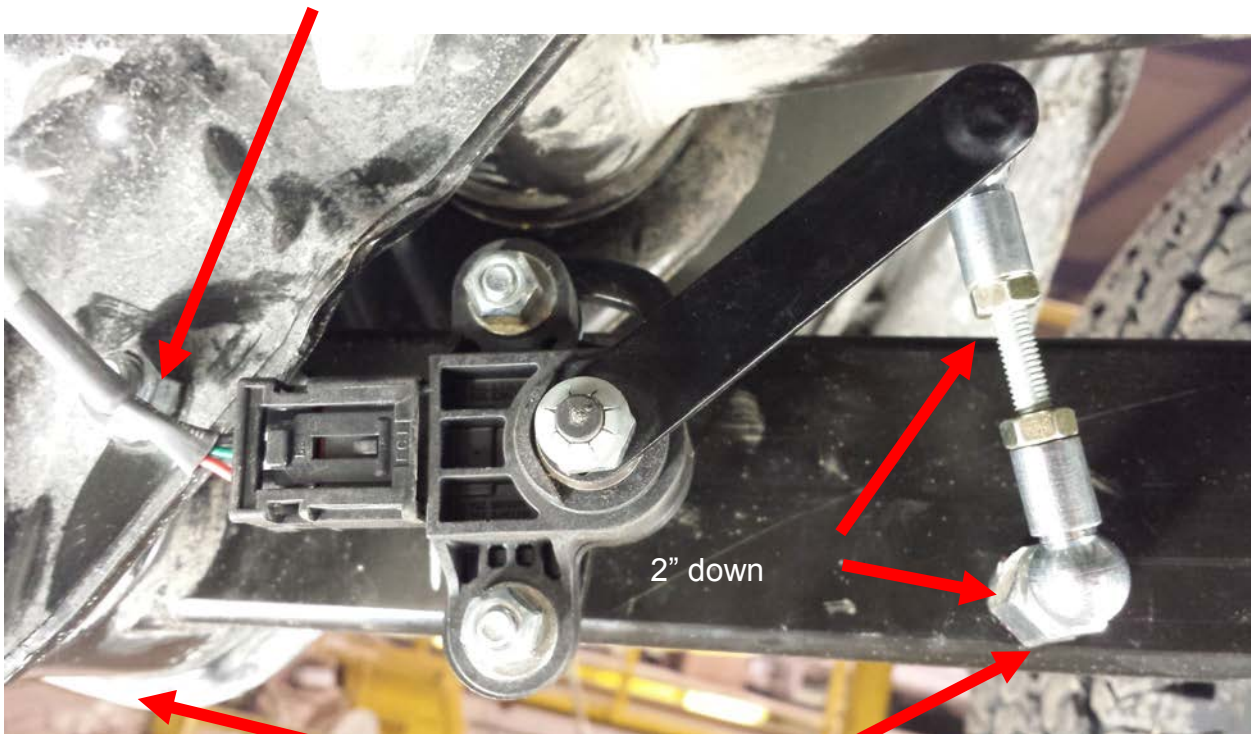


5. The ride height of the 5323 air bags is 8". Measure between the upper and lower air bag mounts. If you are using the wireless remote control set up, use the instructions supplied with the kit. If you are using the electronic self leveling kit, you will need to use those instructions. Step 6 will show the mounting position of the rear sensors. The front sensors are also shown in these instructions on page 8.

6. Measure down 2" from the top of the lower trailing arm, and 8 1/4" back from the center of the trailing arm bushing. Use a center punch and drill a 1/4" hole. Now use a 5/16-18 tap and thread the hole. Now locate the extended nut and ball and use Loctite when installing.

7. Locate the sensor mounting bracket. It fastens into the hole in the lower trailing arm spring perch with the 3/8x1" bolt. NOTE: USE A LOCK WASHER ON THE BOLT HEAD. THIS WILL KEEP THE BRACKET FROM ROTATING. Torque the 3/8" bolt to 35 ft/lbs.

Use a lock washer on the bolt head side of the bracket

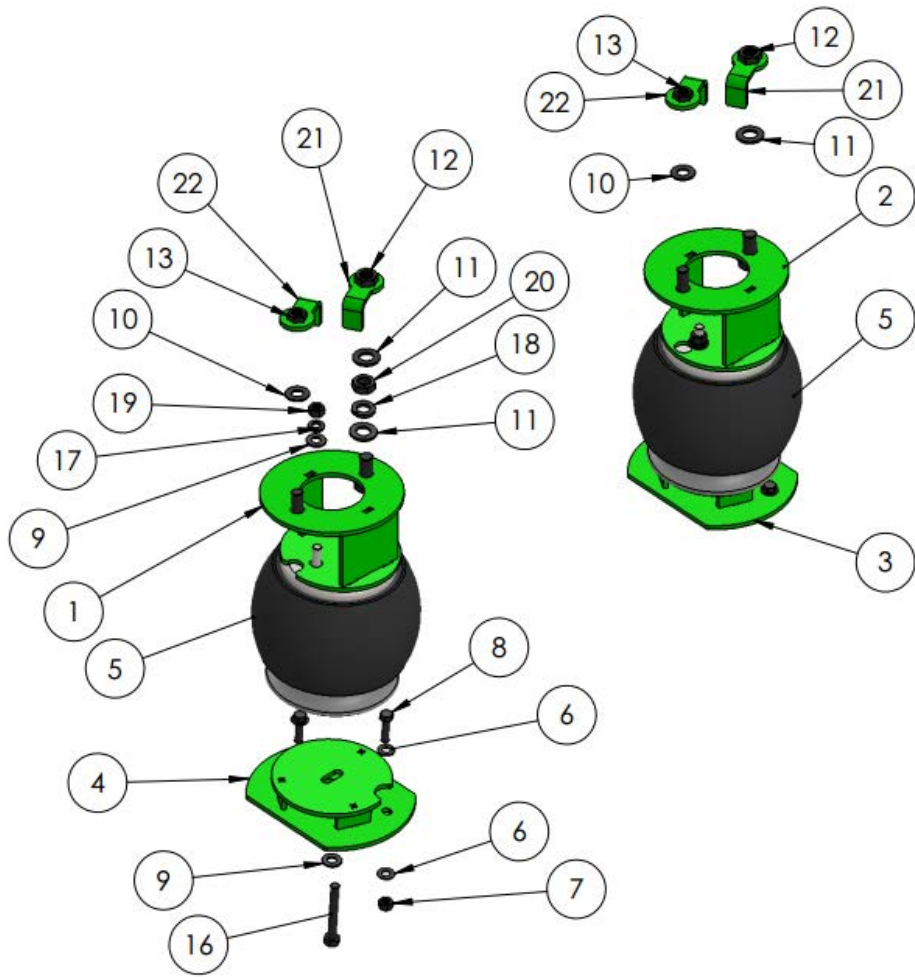
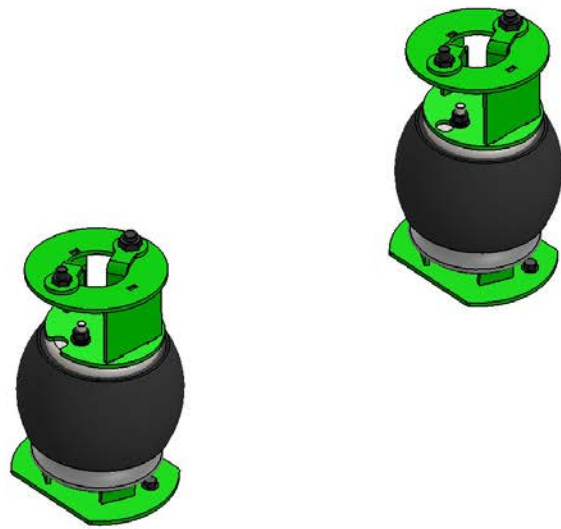


Measure 8 1/4" from the center of the bushing back

8. The sensor fastens to the sensor mount with the two 3/8x1" bolts. The sensor needs to be rotated all the way forward in the slot. The sensors have a "dead band" the last little bit of travel, so the sensor and sensor mount need to be adjusted so there is 1/8" of gap between the sensor arm and sensor stop when all the air is out of the bags. The linkage length between ball socket to ball socket will be around 2 1/4". This measurement can vary. Just make sure the sensor is not in the dead band when the air is all the way dumped. Shorten the linkage if needed. Now use the wiring instructions from the control system purchased to finish the installation.

The sensor has a dead band and does not send any signal from his position and counter clockwise until it hits the stop. Same thing goes for the other way (clockwise)





ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	19106	(DS) Upper Bag Mount	1
2	19107	(PS) Upper Bag Mount	1
3	19110	(PS) Lower Bag Mount	1
4	19111	(DS) Lower Bag Mount	1
5	5323-1	Firestone 5323	2
6	Preferred Narrow FW 0.4375		8
7	HNUT 0.4375-20-D-S		4
8	HBOLT 0.4375-20x1.5x1.125-N		4
9	Preferred Narrow FW 0.5		4
10	Preferred Narrow FW 0.625		4
11	Preferred Narrow FW 0.75		6
12	HNUT 0.7500-16-D-S		2
13	HNUT 0.6250-18-D-S		2
14	HBOLT 0.7500-16x1.5x1.5-N		2
15	HBOLT 0.6250-18x1.5x1.5-N		2
16	HBOLT 0.5000-20x3.5x3.5-N		2
17	Regular LW 0.5		2
18	Regular LW 0.75		2
19	HNUT 0.5000-13-D-S		2
20	HJNUT 0.7500-10-D-N		2
21	19113	3/4" Bolt Tool	2
22	19114	5/8" Bolt Tool	2