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PART #	DESCRIPTION
214210	14-UP RAM 2500 3.75" REAR AIR RIDE KIT

COMPONENTS INCLUDED	
(2) 217126 14+ RAM 2500 8.88 OAL X 5MX.8 LINKAGE ROD SS	
HARDWARE INCLUDED	
(4) 605840 8MM BALL CUP W M5X.8 THREAD (4) 605841 M5X.8 FINISH NUT GR8.8	(4) 605842 M10-1.50 X 10MM HHCS GR10.9
TOOLS REQUIRED	
JACK JACK STANDS TORQUE WRENCH	8MM SOCKET / WRENCH 13MM SOCKET / WRENCH 15MM SOCKET / WRENCH 17MM SOCKET / WRENCH
TECH NOTES	
<p>1. THIS KIT IS REQUIRED IF INSTALLING (214205) 4.5" KIT ON A 2500 RAM HD EQUIPPED WITH FACTORY AIR RIDE SYSTEM.</p> <p>2. DO NOT REMOVE FACTORY SHOCKS UNTIL ALL AIR IS REMOVED FROM THE BAGS AND COMPRESSOR</p> <p>3. REMOVE ALL AIR FROM SYSTEM USING THE RAM SERVICE MANUAL BEFORE BEGINNING REAR INSTALL OF KIT.</p>	



WARNING!
<p><b>** READ ALL INSTRUCTIONS THOROUGHLY FROM START TO FINISH BEFORE BEGINNING INSTALLATION! IF THESE INSTRUCTIONS ARE NOT PROPERLY FOLLOWED SEVERE FRAME, SUSPENSION AND TIRE DAMAGE MAY RESULT TO THE VEHICLE!</b></p> <p><b>** ICON VEHICLE DYNAMICS RECOMMENDS THAT YOU EXERCISE EXTREME CAUTION WHEN WORKING UNDER A VEHICLE THAT IS SUPPORTED WITH JACK STANDS.</b></p> <p><b>** ICON VEHICLE DYNAMICS RECOMMENDS ALL INSTALLTION TO BE PERFORMED BY A PROFESSIONAL SHOP/SERVICE TECHNICIAN. PRODUCT FAILURE CAUSED BY IMPROPER INSTALLATION WILL NOT BE COVERED UNDER ICON'S WARRANTY POLICY.</b></p>

## INSTALLATION

### REAR SUSPENSION:

1. Once all air is removed from the system (according to factory service manual), raise the rear of the truck and support the frame with jack stands. NEVER WORK UNDER AN UNSUPPORTED VEHICLE. Remove rear wheels.
2. Disconnect the rear sway bar links from the sway bar and the differential using an 8mm and 18mm socket/wrench.
3. Disconnect the plastic ball cup from the lower bump stop seat on the axle. Failure to disconnect this link before removing the shock can allow it to over travel and break the sensor or the link. [FIGURE 1]

FIG.1



4. Using a floor jack, raise the rear axle slightly to take the load off of the shocks.
5. Remove the rear shocks using an 18mm and 21mm socket/wrench.

**6.** After verifying that the airbags are discharged, remove the factory mounting hardware using a 13mm socket/wrench. [FIGURE 2] Once the airbag is unbolted from the lower coil seat it can be moved up out of the way so the (214105) coil spacer can be installed using the supplied hardware with a 5/8" socket/wrench [Torque to 50 ft-lbs]. Drilling may be required to get the supplied hardware to fit into axle seat. [FIGURE 2]



FIG.2



FIG.3

**7.** Install the rear shocks. If you are not using an proprietary ICON shock, be sure that the shock length does not exceed 25.18" or damage to the air bags will occur. The ICON coil spring (without air ride) 4.5" kit shocks do not work for this kit, they are too long.

**8.** Install the extended sway bar links supplied in the (214205) 4.5" Box Kit (214207).

**9.** Partially inflate the airbags with 3 - 5 PSI and place the upper bag mount into it's seat. Failure to do this may cause the airbag to buckle onto itself and damage the bag. If you have over extended the bag by drooping the axle too far or leaving air in the system when unloading them, it may accordion over one side and will need to be deflated and manipulated back onto itself in the center before reinflating.

**10.** Remove the factory bump stop with a 15mm socket/wrench. Install the supplied ICON bump stop spacer from the (214205) box kit with the factory block as shown. Use the supplied 10x100mm bolts (included in 214210 kit) and washers from the (214205) hardware kit using a 17mm socket/wrench. [Torque to 40ft-lbs] [FIGURE 4]



FIG.4

**11.** Install supplied air ride height control link. The link is set from ICON at 9.875" cup to cup which should allow the truck to sit level. If you wish to adjust this link longer to increase rear ride height it can be adjusted roughly .25" on each end for a total of 10.375" cup to cup length which equals .50" increase in ride height. The supplied aluminum ball cap has a keeper that must be removed prior to install and then dipped back in after ball is seated on stud.

**12.** Install wheels and lower vehicle to the ground. [Torque to factory spec]

**13.** Vehicle will be sitting on the bump stops in the rear. Verify that the airbags are seated in upper mount and all connections for air system are connected and tight.

#### **ON THE GROUND:**

**14.** Start vehicle. Let airbag compressor run to raise the rear end of the vehicle.

**15.** Once the compressor has stopped and the new ride height is achieved turn off the vehicle.

**16.** Loosen all (4) suspension link arms at each pivot to let the bushings reset to the new ride height, and then retorque all links to factory spec. Failure to do this will cause premature bushing wear and can affect ride/handling characteristics.

**17.** Check the torque on all hardware prior to test driving and check again after 1-2 miles.

**VERIFY ALL FASTENERS ARE PROPERLY TORQUED BEFORE DRIVING VEHICLE.**

**RETORQUE ALL NUTS, BOLTS AND LUGS AFTER 100 MILES AND PERIODICALLY THEREAFTER.**

## **ICON VEHICLE DYNAMICS LIMITED LIFETIME WARRANTY**

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# **ICON VEHICLE DYNAMICS**

PERFORMANCE SUSPENSION SYSTEMS AND SHOCK ABSORBERS

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