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ICON Vehicle Dynamics 217704EP Installation Instructions

Rear 2.5 VS PB CDEV Shock Pair for Ram 2500, Coil & Air Ride

Part number: 217704EP

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217704EP INSTALLATION INSTRUCTIONS

5-27-2022 REV.A

PART #	DESCRIPTION
217704EP	14-UP RAM 2500 0" COIL, 3" AIRBAG LIFT REAR 2.5 VS PB CDEV PAIR

COMPONENTS INCLUDED

(2) 214947E 14-UP RAM 2500 0" REAR LIFT 2.5 VS PB CDEV (1) 214111 14-UP RAM HD REAR E BRAKE CABLE TAB	(2) 611006 9/16 HD STEM BUSHING KIT

HARDWARE INCLUDED

611006 CONTENTS

(2) 255200 STEM BUSHING 9/16 ID (2) 254200 9/16 STEM WASHER	(1) 605809 M12-1.25 JAM NUT (1) 605810 M12-1.25 NUT

TOOLS REQUIRED

JACK JACK STANDS TORQUE WRENCH	13MM SOCKET / WRENCH 19MM SOCKET / WRENCH 21MM SOCKET / WRENCH

TECH NOTES

1. THESE REAR SHOCKS REQUIRE THE USE OF ICON'S EMERGENCY BRAKE CABLE RELOCATION KIT (PN: 611068). THIS KIT IS INCLUDED IN ICON'S FRONT COIL SPRING KITS (PN: 214200 & PN: 214201) BUT CAN BE PURCHASED SEPARATELY AS WELL.

2. FAILURE TO USE THE SWAY BAR DROP BRACKETS SUPPLIED WITH THE ICON 2.5" DUAL RATE SPRING KIT (PART #214200) WILL CAUSE THE SWAY BAR LINKS TO OVER EXTEND AND WILL CAUSE PERMANENT DAMAGE. THESE BRACKETS ARE ONLY SOLD WITH THE SPRING KIT AND ARE NOT AVAILABLE SEPARATELY.

3. REFER TO OWNERS MANUAL BEFORE ATTEMPTING TO DEPRESSURIZE AIR SYSTEM ON VEHICLES EQUIPPED WITH AIRBAGS.



WARNING!

*** 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!*

*** ICON VEHICLE DYNAMICS RECOMMENDS THAT YOU EXERCISE EXTREME CAUTION WHEN WORKING UNDER A VEHICLE THAT IS SUPPORTED WITH JACK STANDS.*

*** ICON VEHICLE DYNAMICS RECOMMENDS ALL INSTALLATION TO BE PERFORMED BY A PROFESSIONAL SHOP/SERVICE TECHNICIAN. PRODUCT FAILURE CAUSED BY IMPROPER INSTALLATION WILL NOT BE COVERED UNDER ICON'S WARRANTY POLICY.*

INSTALLATION

STEPS 1 & 2 FOR AIRBAG EQUIPPED TRUCKS ONLY. SKIP TO STEP 3 FOR COIL SPRING APPLICATIONS.

1. Set the truck to transport mode via the dash menu and let all of the air out of the rear airbags. Refer to owners manual if unsure how to activate transport mode. Failure to remove air from bags may result in bag failure, injury, or both.

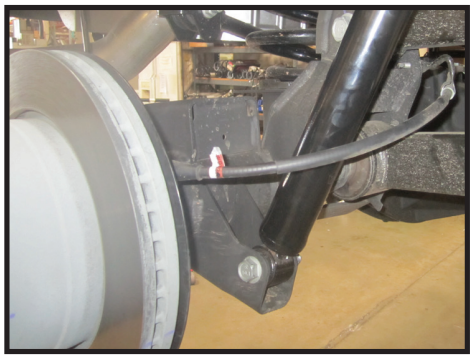
2. Remove the stock shocks using a 19mm socket/wrench for the upper mount, and a 21mm socket/wrench for the lower mount. Skip to step 5.

COIL SPRING EQUIPPED VEHICLES:

3. Using a properly rated jack, raise the rear of the vehicle and support the frame rails with jack stands. Ensure the jack stands are secure and set properly before lowering the jack. NEVER WORK UNDER AN UNSUPPORTED VEHICLE. Remove rear wheels (optional)

4. Support the rear axle with a jack and remove the driver and passenger rear shocks using a 21mm for the lower and 19mm for the upper. **[FIGURE 1]**

FIG.1



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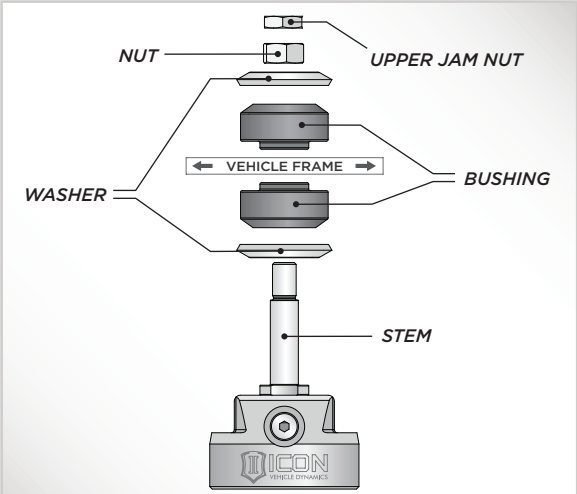
AIR RIDE EQUIPPED VEHICLES ONLY:

5. Using a propely rated jack, lift the rear of the vehicle from the hitch far enough to install new ICON shocks. DO NOT LIFT THE TRUCK HIGHER THAN THE LENGTH OF THE SHOCKS. The large spacer pushes the shock away from the the link arm.

AIR RIDE AND COIL SPRING EQUIPPED VEHICLES:

6. Install the shock using the 254200 stem washer on the stem, followed by a 255200 bushing and then inserting the shock stem into the factory mount. Install the supplied 255200 9/16 bushing and then a 254200 washer on top of the bushing followed by the taller M12 nut. Install the nut only a few turns so the upper assembly is loose. **[FIGURE 2]**

FIG.2



HD STEM BUSHING DIAGRAM (FRONT VIEW)

7. With the upper assembly loose, line up the lower shock mount to install the factory lower shock bolt with a 21mm socket/wrench [Torque to factory spec]. The wide spacer pushes the shock toward the tire, away from the link. **[FIGURE 3]**

FIG.3

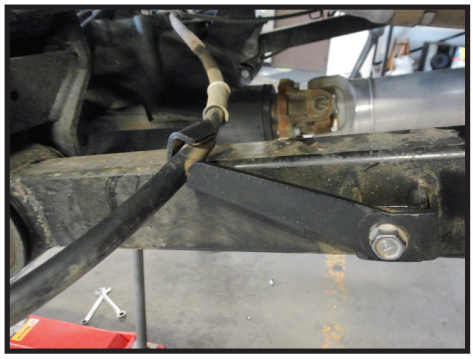


8. Fasten the supplied (605810) large nut until 4 threads are showing and then install the supplied (605809) thin jam nut to lock it against the tall nut. [Torque the jam nut to 50ft-lbs]

9. Remove the factory cable routing bracket on the rear passenger upper link. Bracket will not be reused. Use the supplied (214111) bracket and the factory bolt to route the cable to the link arm as shown. The factory mount is threaded already. The bracket will keep the reservoir from binding up the e-brake cable. Slack will have to be pulled from the driver side near the gas tank. **[FIGURE 4]**

NOTE: Failure to install bracket will cause damage to the shock and e-brake cable or both.

FIG.4



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10. If wheels were removed on coil spring application, reinstall now and lower vehicle to the ground. [Torque to factory spec]

AIR RIDE EQUIPPED VEHICLES ONLY:

11. Start the vehicle and let the airbags fill. Once the compressor stops running, turn off the vehicle.

12. Refer to IIC install instructions for wire installation.

VERIFY ALL FASTENERS ARE PROPERLY TORQUED BEFORE DRIVING VEHICLE.

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

2.5 VS SERIES SHOCK & COILOVER TECHNICAL INFORMATION

MAINTENANCE

ICON shock absorbers are a high quality rebuildable race style shock absorber designed for optimal performance. With a unit of this caliber on your vehicle, routine maintenance is required to keep them looking and operating in like new condition. Residual oil and assembly lube may be present at all seal paths from the factory out of the box and is considered normal. Pooling of oil however is not acceptable at any time and one should contact the ICON dealer where purchased.

BELOW ARE GUIDELINES BASED ON HOW YOU USE YOUR VEHICLE BUT YOUR MILEAGE MAY VARY:

STREET USE:

- Send in for factory servicing every 40,000 miles or if a leak develops, ride quality decreases, or they begin to make excessive noise.
- Remove any buildup of road salt, mud, or debris from shocks and coil springs anytime accrued
- Clean with mild soap and water with each oil change or anytime you notice build up.
- Wax the cylinders yearly with automotive wax to prevent corrosion.
- Check nitrogen pressure yearly. (252004 charge needle assembly available at any ICON distributor)
- Check bearings for excessive wear yearly.
- DO NOT apply any type of lube to the upper and lower bearings.

STREET/DIRT:

- Send in for factory servicing every 15,000 miles or if a leak develops, ride quality decreases, or they begin to make excessive noise.
- Clean with mild soap and water with each oil change, offroad trip, or anytime you notice build up.
- Wax the cylinders yearly with automotive wax to prevent corrosion.
- Check nitrogen pressure each dirt outing. (252004 charge needle assembly available at any ICON distributor)
- Check bearings for excessive wear yearly.
- DO NOT apply any type of lube to the upper and lower bearings.

DIRT USE:

- Send in for factory servicing every 1,000 miles.
- Check nitrogen pressure each outing. (252004 charge needle assembly available at any ICON distributor)
- Remove any buildup of mud or debris from shocks and coil springs after every outing.

SELF-SERVICE:

- Contact ICON for service kits & tools at (951) 689-4266.

PRODUCT REGISTRATION

Please visit: http://www.iconvehicledynamics.com/tech-support/registration/ to register your product.

ICON VEHICLE DYNAMICS SHOCK ABSORBER WARRANTY

This shock absorber has a 1 year warranty against any manufacturer's defects. If a shock fails within the initial year of ownership, the shock must be shipped to ICON Vehicle Dynamics for inspection and service. If a shock is inspected and it has been determined the shock failed due to neglect, damage caused by improper installation or any other reason besides "normal wear and tear", the owner of said shock is responsible for all service costs. This includes labor, parts, and shipping.

ICON Vehicle Dynamics warrants to the original retail purchaser who owns the vehicle on which the product was originally installed. ICON Vehicle Dynamics does not warrant the product for finish, alterations, modifications and/or installation contrary to ICON Vehicle Dynamics instructions. ICON Vehicle Dynamics products are not designed, nor are they intended to be installed on vehicles used in race applications, for racing purposes or for similar activities. (A "race" is defined as any contest between two or more vehicles, or a contest of one or more vehicles against the clock, whether or not such contest is for a prize). This warranty does not include coverage for police or taxi vehicles, race vehicles, or vehicles used for government or commercial purposes. Also excluded from this warranty are sales outside of the United States of America and Canada.

ICON Vehicle Dynamics' obligation under this warranty is limited to the repair or replacement, at ICON Vehicle Dynamics' discretion, of the defective product. Any and all costs of removal, installation or re-installation, freight charges and incidental or consequential damages are expressly excluded from this warranty. Items that are subject to wear are not considered defective when worn and are not covered.

ICON Vehicle Dynamics components must be installed as a complete kit as shown in our current application guide. Any substitutions or exemptions of required components will immediately void the warranty. Some finish damage may happen to parts during shipping and is not covered under warranty.

This warranty is expressly in lieu of all other warranties expressed or implied. This warranty shall not apply to any product that has been improperly installed, modified or customized subject to accident, negligence, abuse or misuse.

To send a shock in for warranty please visit our website http://www.iconvehicledynamics.com/tech-support/shock-service/

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