

PART #	DESCRIPTION
91820C	2014-UP FORD EXPEDITION 4WD FRONT 2.5 VS RR CDCV COILOVER KIT

COMPONENTS INCLUDED	
(1) 194956RCD EXPEDITION CDCV CLVR (DRVR) (1) 194956RCP EXPEDITION CDCV CLVR (PASS) (2) 250002 7.50 UNIVERSAL RESI MT PLATE (2) 605131 3/8 SPLIT LOCK WASHER	(2) 605144 3/8-12 X .750 SELF TAP BOLT (1) 611019 COILOVER HARDWARE KIT (1) 611051 HOSE CLAMP KIT (1) 611052 LOWER HARDWARE KIT
HARDWARE INCLUDED	
611019 COILOVER HARDWARE KIT	
(6) 605101 3/8-16 X 1.000 BOLT	(6) 605131 3/8 SPLIT LOCK WASHER
611051 HOSE CLAMP HARDWARE KIT	
(4) 605931 1/2 X 2 1/16 - 3 ID #40 SS HOSE CLAMP	
611052 LOWER COILOVER HARDWARE KIT	
(4) 605201 7/16-14 X 3.000 BOLT (4) 605230 7/16 FLAT WASHER	(4) 605231 WASHER 1.00 X .469 X .125
TOOLS REQUIRED	
JACK JACK STANDS HAMMER TORQUE WRENCH CENTER PUNCH DRILL 11/32" DRILL BIT	15MM SOCKET / WRENCH 18MM SOCKET / WRENCH 21MM SOCKET / WRENCH 5/16" SOCKET / WRENCH 9/16" SOCKET / WRENCH 5/8" SOCKET / WRENCH
TECH NOTES	
<p>1. THE SHOCKS SHIP AT ICON'S RECOMMENDED RIDE HEIGHT. ICON DOES NOT RECOMMEND PRE-LOADING THE COIL BEYOND 1.00" OF THREADS BETWEEN THE BOTTOM OF THE TOP CAP AND THE TOP OF THE COIL NUT. INCREASING PRELOAD BEYOND THE FACTORY SETTING WILL REDUCE RIDE QUALITY.</p> <p>2. YOUR NEW COILOVER ASSEMBLIES COME CHARGED WITH THE CORRECT AMOUNT OF NITROGEN. DO NOT RELEASE PRESSURE FROM THE CHARGE PORT, AS THIS CAN CAUSE THE SHOCK TO MALFUNCTION.</p>	



WARNING!
<p>** 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!</p> <p>** ICON VEHICLE DYNAMICS RECOMMENDS THAT YOU EXERCISE EXTREME CAUTION WHEN WORKING UNDER A VEHICLE THAT IS SUPPORTED WITH JACK STANDS.</p> <p>** 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.</p>

INSTALLATION

- Using a properly rated jack, raise the front 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 the front wheels.
- Disconnect the sway bar from the links using an 18mm and an 8mm socket/wrench. [FIGURE 1]

FIG.1



FIG.2



- Remove the nuts from the lower bar pin studs on the factory coilover using an 18mm socket/wrench. [FIGURE 2]

4. Use a hammer to push the studs out of the bar pin. [FIGURE 3]

FIG.3

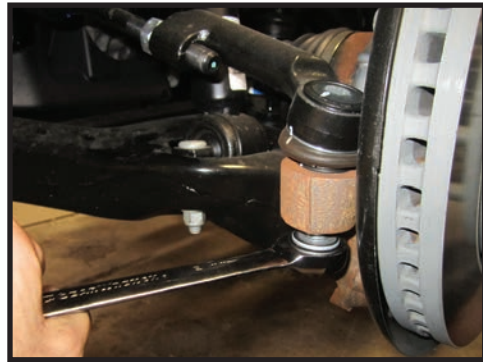


FIG.4

5. Loosen the nut connecting the steering knuckle to the tie rod using a 21mm and a 10mm socket/wrench. [FIGURE 4]

6. Using a hammer or a ball joint separator, separate the taper from the knuckle, remove the nut and disconnect the tie rod.

7. Loosen the nut connecting the steering knuckle to the UCA using a 18mm socket/wrench. [FIGURE 5]

FIG.5



8. Using a hammer or a ball joint separator, separate the taper from the knuckle. Remove the nut and disconnect the UCA from the knuckle.

9. Tie the steering knuckle close to the frame to prevent over extending the CV joints on the axles. [FIGURE 6]

FIG.6

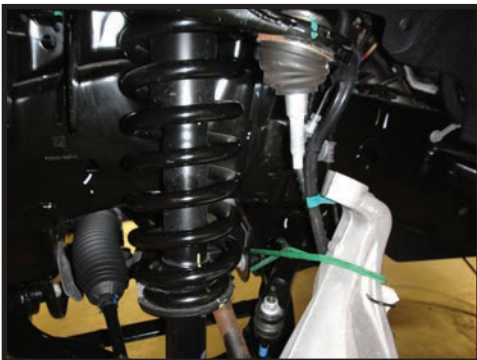


FIG.7

10. Using an 18mm socket/wrench, remove the 3 nuts from the upper shock mount and remove the factory coilover. [FIGURE 7]

11. Install the coilover using the supplied 3/8" hardware. Bolt the upper mount to the coil bucket and tighten with a 9/16" socket/wrench [Torque to 30 ft-lbs]. The reservoir hose points forward out of the top cap of the shock with the hose coming down close to the frame rail. [FIGURE 8]

FIG.8



12. Install the 7/16" hardware from the bottom of the lower A-arm and connect to the bar pin using a 5/8" socket/wrench [Torque to 50 ft-lbs]. The bar pin is installed to offset the shock forward to increase axle clearance.

13. Connect the UCA to the knuckle using a 18mm socket/wrench. [Torque to factory spec]

14. Connect the tie rod to the knuckle using a 21mm and a 10mm socket/wrench. [Torque to factory spec] [FIGURE 9]

FIG.9



15. Connect the sway bar to the sway bar links using an 18mm and an 8mm socket/wrench. [Torque to factory spec]

16. Hold the reservoir bracket in position as shown. Mark and center punch the bolt hole location. Use a 11/32" drill bit and drill the bolt hole. Then use the supplied self-tapping screws to mount the reservoir bracket using a 9/16" socket/wrench. [FIGURE 10]

FIG.10

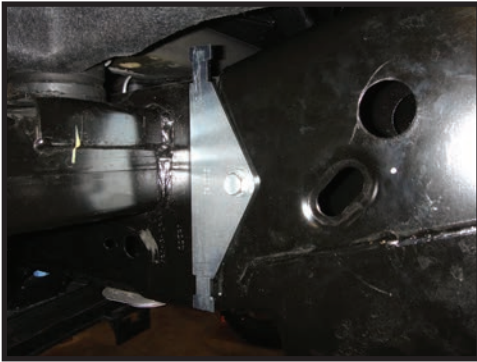


FIG.11



17. Mount the reservoir to the reservoir bracket using the supplied hose clamps and a 5/16" socket/wrench. [FIGURE 11]

18. Repeat steps for passenger side.

19. Install the front wheels and lower the vehicle to the ground. [Torque to factory spec]

20. Have the vehicle professionally aligned.

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.



ICON VEHICLE DYNAMICS®
PERFORMANCE SUSPENSION SYSTEMS AND SHOCK ABSORBERS