ICON Vehicle Dynamics 67810EP Installation Instructions

Front 2.5 VS RR CDEV Shock Pair for Ford Super Duty, 4.5 in.

Part number: 67810EP

trailfortress.com/icon-vehicle-dynamics-17-22-fsd-4wd-4-5-front-2-5-vs-rr-cdev-pair-67810ep

Scan for fitment, price and install help

ICON VEHICLE DYNAMICS®
7929 Lincoln Ave. Riverside, CA 92504
Phone: 951.689.ICON | Fax: 951.689.1016

67810EP INSTALLATION INSTRUCTIONS

5-12-2022 REV.A

PART #	DESCRIPTION
67810EP	05-UP FSD 4WD 4.5" FRONT 2.5 VS RR CDEV PAIR

COMPONENTS INCLUDED

(2) 164944E-AL 05-UP FSD 4.5" FRONT AL RR CDEV (2) 160085 05-UP FSD RESI MT COIL BUCKET (1) 255604-06 EXTENSION HARNESS COIL IIC CONTROLLER 6-FT	(1) 255604-14 EXTENSION HARNESS COIL IIC CONTROLLER 14-FT (2) 611006 9/16" HD STEM BUSHING KIT (1) 611051 #40 2 1/16-3" HOSE CLAMP KIT

HARDWARE INCLUDED

N/A	
611006 HARDWARE KIT	
(2) HEAVY DUTY 9/16 ID STEM BUSHING (1) HEAVY DUTY 9/16 ID STEM WASHER (1) HEAVY DUTY 12MM ID STEM WASHER	(1) M12-1.25 NUT (1) M12-1.25 JAM NUT
611051 HARDWARE KIT	
(4) 605931 1/2 X 2 1/16-3 ID #40 SS HOSE CLAMP	

TOOLS REQUIRED

JACK JACK STANDS PLIERS DRILL 11/32" DRILL BIT TORQUE WRENCH	5/16" SOCKET / WRENCH 9/16" SOCKET / WRENCH 17MM SOCKET / WRENCH 18MM SOCKET / WRENCH 19MM SOCKET / WRENCH

TECH NOTES

1. YOUR ICON SHOCK ASSEMBLIES COME FACTORY CHARGED TO 250 PSI. RELEASING NITROGEN PRESSURE MAY LEAD TO SHOCK MALFUNCTION AND REDUCED RIDE QUALITY. FAILURE CAUSED BY LOW NITROGEN PRESSURE IS NOT COVERED UNDER ICON'S WARRANTY POLICY.



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.*

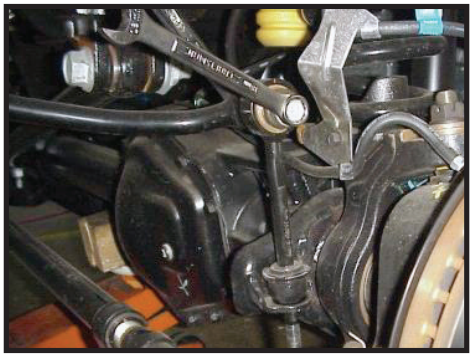
INSTALLATION

1. 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.

2. Use a jack to support the axle and then remove the factory shock using a 17mm and 18mm socket/wrench.

3. Remove the sway bar links from the sway bar using an 18mm socket/wrench. Leave them connected to the differential. **[FIGURE 1]**

FIG.1



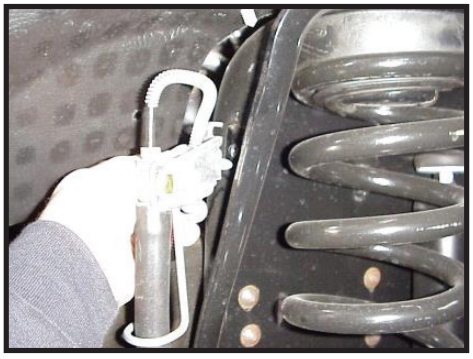


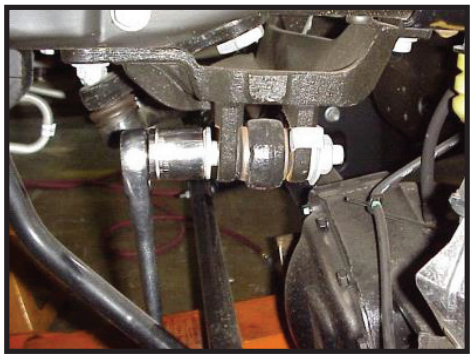
FIG.2

4. Disconnect the upper brake line brackets from the frame using a 13mm socket/wrench and lower brake line brackets from the differential using a 10mm socket/wrench. **[FIGURE 2]**

trailfortress.com/icon-vehicle-dynamics-17-22-fsd-4wd-4-5-front-2-5-vs-rr-cdev-pair-67810ep

5. On the driver side of the track bar, remove the nut and the upper track bar bolt using (2) 30mm socket/wrenches. **[FIGURE 3]**

FIG.3

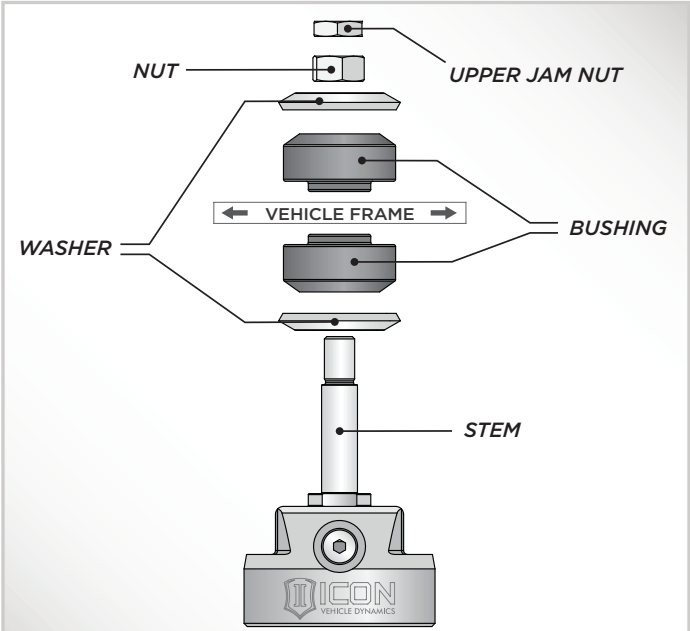


6. Slowly lower the axle, the coils will unload from the mounts and can be removed. Be careful not to stretch or damage any lines connected to the axle or radius arms.

7. Lower the axle enough to install the reservoir mount (PN 160085) between the coil bucket and the coil isolator.

8. Raise the axle using a floor jack

9. Install stem hardware as seen in diagram. Install (605810) tall nut and fasten bushing assembly until 3-4 threads are exposed for the (605809) jam nut. Install (605809) nut and torque to 50 ft-lbs while holding (605810) with a 19mm wrench. Do not overtighten bushing assembly as this can lead to premature bushing wear. Failure caused by incorrect installation of bushings is not covered under ICON's warranty policy. Install the wide heim spacer so that it orients the shock further away from the frame and then install the factory lower bolt using an 18mm socket/wrench. [Torque to factory spec] **[SEE DIAGRAM]**



HD STEM BUSHING DIAGRAM

trailfortress.com/icon-vehicle-dynamics-17-22-fsd-4wd-4-5-front-2-5-vs-rr-cdev-pair-67810ep

10. If installing coilover conversion, use the doubler reservoir mount (supplied in coilover kit) for mounting both reservoirs as shown. **[FIGURE 4]**

FIG.4



11. Mount the reservoir to the bracket using a 5/16" nut driver and the supplied (605931) hose clamps. **[FIGURE 5]**

FIG.5



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

13. Reconnect the upper brake line bracket to the frame using a 13mm socket/wrench and the lower bracket using a 10mm socket/wrench [Torque to factory spec]. Depending on the year of the truck, the brake line may need to be manipulated down to not overextend at full droop.

14. Reconnect the track bar using (2) 30mm socket/wrenches. [Torque to factory spec]

15. Install wheels and lower vehicle to the ground. [Torque lugs to factory spec]

16. Refer to IIC install instructions for wire installation.

17. 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.

trailfortress.com/icon-vehicle-dynamics-17-22-fsd-4wd-4-5-front-2-5-vs-rr-cdev-pair-67810ep

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/

ICON VEHICLE DYNAMICS®
PERFORMANCE SUSPENSION SYSTEMS AND SHOCK ABSORBERS

7929 Lincoln Ave. Riverside, CA 92504 Phone: 951.689.ICON Fax: 951.689.1016
www.iconvehicledynamics.com

FOLLOW US ON FACEBOOK!

trailfortress.com/icon-vehicle-dynamics-17-22-fsd-4wd-4-5-front-2-5-vs-rr-cdev-pair-67810ep