ICON Vehicle Dynamics 48711 Installation Instructions

Rear 2.5 VS RR Coilover Kit with Heavy Rate Springs, Bronco

Part number: 48711

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Scan for fitment, price and install help

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48711 INSTALLATION INSTRUCTIONS

7-17-2023 REV.A

PART #	DESCRIPTION
48711	21-UP BRONCO REAR 2.5 VS RR COILOVER KIT HEAVY RATE SPRING

COMPONENTS INCLUDED

(1) 144932RD 21-UP BRONCO REAR RR C/O 2.5 VS DRVR HEAVY RATE SPRING
(1) 144932RP 21-UP BRONCO REAR RR C/O 2.5 VS PASS HEAVY RATE SPRING
(1) 611051 #36 1.188-2.750 STAINLESS HOSE CLAMP KIT (4)

HARDWARE INCLUDED

(1) 140001 21-UP BRONCO STUD PLATE, REAR UPPER
(1) 140002 21-UP BRONCO REAR RESI MOUNT DRVR
(1) 140003 21-UP BRONCO REAR RESI MOUNT PASS
(2) 144005 21-UP BRONCO REAR RESI NUT PLATE
(1) 147010 21-UP BRONCO UPPER REAR C/O MOUNT
(4) 257172 HEIM SPACER COM12 X .500 X 1.250 CZINC
(4) 257194 HEIM SPACER COM14 X 20MM X 85MM CZINC
(4) 605053 1/4 SAE FLAT WASHER GR8 YZINC
(2) 605202 7/16-14 X 1.250 HHCS GR8 YZINC
(2) 605334 1/2-13 X 2.250 12 PT FLANGED CAP SCREW BLK ZINC
(4) 605876 1/4-20 X 1 HHCS GR8 YZINC
(4) 605881 M12-1.50 NYLOCK FLANGE NUT CZINC
(1) 605970 VIBRATITE ANTI SEIZE INDIVIDUAL USE TUBE

TOOLS REQUIRED

JACK
JACK STANDS
RATCHET, EXTENSIONS
TORQUE WRENCH
#2 PHILLIPS SCREWDRIVER
FLAT HEAD SCREWDRIVER
BODY PANEL CLIP REMOVAL TOOL
GRINDER/SANDER (OPTIONAL)
5/16" SOCKET / WRENCH
7/16" SOCKET / WRENCH
1/2 12PT SOCKET / WRENCH
5/8 SOCKET / WRENCH
15MM SOCKET / WRENCH
18MM SOCKET / WRENCH
27MM SOCKET / WRENCH

TECH NOTES

1. YOUR ICON COILOVER ASSEMBLIES COME FACTORY CHARGED TO 150 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.

2. YOUR ICON COILOVER ASSEMBLIES COME SHIPPED AT ICON'S RECOMMENDED RIDE HEIGHT. REDUCING DROOP TRAVEL WILL REDUCE RIDE QUALITY. DO NOT PRELOAD THE COIL BEYOND 5.75" OF EXPOSED THREADS BETWEEN THE BOTTOM OF THE TOP CAP AND THE TOP OF THE COIL ADJUSTER NUT. ADJUSTING PRELOAD BEYOND THIS SETTING WILL CAUSE THE COIL TO BIND AND DAMAGE WILL OCCUR TO COILOVER AND/OR VEHICLE.

3. RESERVOIR HOSE CLAMPS CAN BE PURCHASED FOR FACTORY TUBE LINKS, ICON TUBE LINKS OR COME STANDARD WITH ICON BILLET LINKS.

4. SPRING OPTION DIAGRAM ON PAGE 5.

5. ESTIMATED INSTALL TIME: 3-5 HOURS.



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. Lift vehicle and securely place heavy duty jack stands under the manufacturer recommended lifting locations for the front of the vehicle. Take care when lifting the vehicle, and allow 3-4" of ground clearance from the tire. Remove front tires. NEVER WORK UNDER AN UNSUPPORTED VEHICLE. Remove the wheels.

2. Remove Fender flare. Turn the 1/4 turn fasteners counter clockwise to release the flare. Then pull on flare and it will pop off the vehicle.

3. Remove inner fender liner. There are 10 plastic phillip head screw clips. 3 small phillip screws, 1 (driver side), 2 (passenger side) wing nuts to remove. **[FIGURE 1 & 2]**

FIG.1



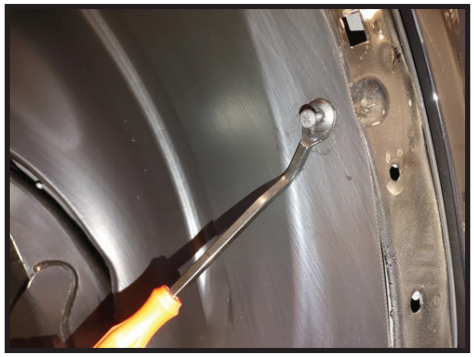

FIG.2

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4. Support the rear axle. Remove upper shock mount nuts (15mm). **[FIGURE 3]**

FIG.3



5. Remove lower shock bolt and nut using a 27mm and remove the factory coilover. **[FIGURE 4]**

FIG.4



6. Install the upper mount and stud plate as shown, the stud plate installs from under the frame mount, and the upper mount installed on top of the frame with the 2 studs/nuts accessible from the wheel well and the 7/16" bolt towards the inside (Driver side shown). Torque the 7/16 bolt to 65 ft-lbs. Torque the 12mm nuts to 65 ft-lbs. **[FIGURE 5 & 6]**

FIG.5





FIG.6

7. Install the reservoir mount to the frame above the lower link pivot. Use the supplied 1/4" nut plate and 1/4" bolts and washers. Grind any high spots in the factory weld to allow the reservoir mount to sit flush against the frame. **[FIGURE 6 & 7]**

FIG.6

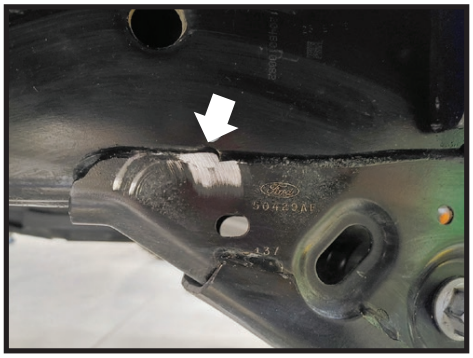




FIG.7

8. On the reservoir mount, mark the front hole and drill the frame to 7/32 then use the 1/4" self-tapping bolt to secure the front of the mount to the frame. **[FIGURE 8 & 9]**

FIG.8





FIG.9

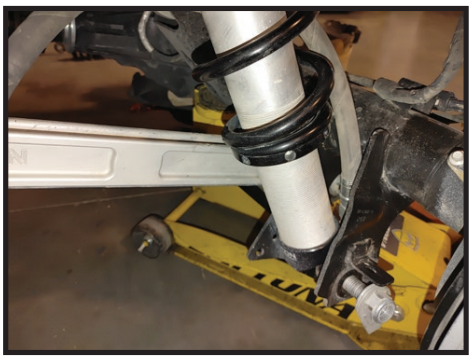
9. Install the Icon coilover into the upper mount with the 257172 spacers and 605334 1/2-13 12pt bolt (Apply a small amount of anti-seize to the spacers and bolt). Torque to 90 ft-lbs with a 1/2" 12pt socket. **[FIGURE 10]**

FIG.10



10. Install lower shock eyelet with 257194 spacers into the factory mount and torque the bolt to factory spec (Apply a small amount of anti-seize to the spacers before installing them into the rod end). **[FIGURE 11]**

FIG.11



11. Route the hose along the lower control arm and place on top of the reservoir mount, using the supplied stainless steel hose clamps to loosely secure it. Then secure the hose to the lower link with the clamps provided with the billet links, or the clamps purchased for the tube links. If non ICON or factory links are installed, cable ties are the next option. **[FIGURE 12 & 13]**

FIG.12



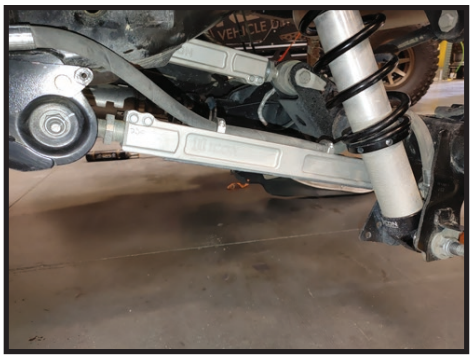


FIG.13

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12. Secure the reservoir hose clamps with the reservoir in the correct position, as shown. **[FIGURE 14 & 15]**

FIG.14



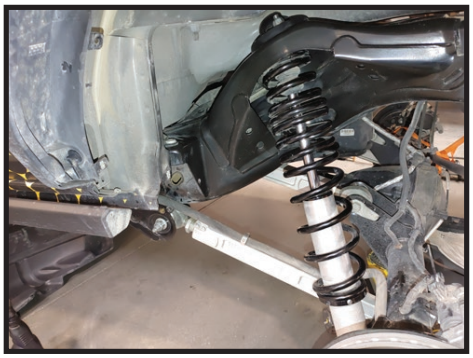

FIG.15

13. Repeat steps on passenger side.

14. Reinstall wheels/tires. Torque lug nuts. Lower vehicle back to the ground.

VERIFY ALL FASTENERS ARE PROPERLY TORQUED BEFORE DRIVING VEHICLE.

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

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ICON VEHICLE DYNAMICS®

2021-2023 FORD BRONCO OVERLAND SPRING

OPTION 1

1

SPRING INSTALLED AT THE LOWEST SETTING

IMAGE SHOWN WITH OVERLAND SPRING INSTALLED WITH NO ADDITIONAL WEIGHT



OPTION 2

2

SPRING SET IN THE LOWEST POSITION WITH A LEVELED STANCE

150 lbs
IN CARGO AREA



OPTION 3

3

SPRING SET IN THE LOWEST POSITION WITH A SLIGHTLY LOWER REAR

280 lbs
IN CARGO AREA

520 lbs
BACKSEAT



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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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