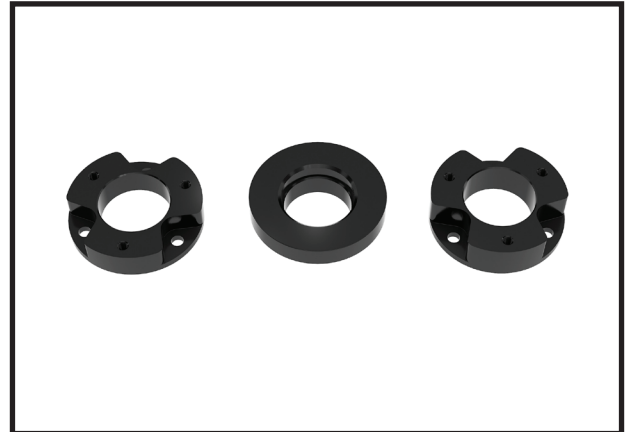


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PART #	DESCRIPTION
IVD4300	21-UP FORD BRONCO SPACER KIT

COMPONENTS INCLUDED		
(2) 147003 BRONCO FRONT C/O SPACER (4) 147004 BRONCO COIL SPRING SPACER	(2) 147009 BRONCO REAR C/O SPACER	
HARDWARE INCLUDED		
(12) 605101 3/8-16 X 1.000 HHCS GR8 YZINC (12) 605131 3/8 SPLIT LOCK WASHER GR8 YZINC (12) 605133 3/8 SAE FLAT WASHER GR8 YZINC (4) 605205 7/16-14 X 2.750 HHCS GR8 YZINC	(4) 605220 7/16-14 NYLOCK NUT GR8 YZINC (8) 605230 7/16 SAE FLAT WASHER GR8 YZINC (4) 605231 WASHER 1.00 X .469 X .125 BOXIDE	
TOOLS REQUIRED		
RATCHET EXTENSIONS TORQUE WRENCH SPRING COMPRESSOR GRINDER OR CUT OFF WHEEL 6MM HEX KEY	15MM SOCKET / WRENCH 18MM SOCKET / WRENCH 21MM SOCKET / WRENCH 24MM SOCKET / WRENCH 9/16" SOCKET / WRENCH 5/8" SOCKET / WRENCH	
TECH NOTES		
BRONCO SPACER LIFT		
	SASQUATCH	NON-SASQUATCH
FRONT	1" TOP LOAD & 3/4" PRELOAD SPACER	1" TOP LOAD & 3/4"
PART#	147003, 147004	147003, 147004
REAR	1-1/4" TOP LOAD	1-1/4" TOP LOAD & 3/4" PRELOAD SPACER
PART#	147009	147004, 147009



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.**

FRONT INSTALLATION

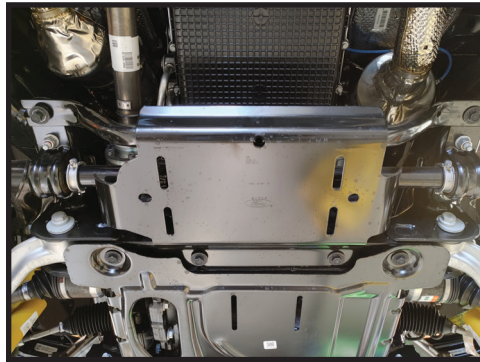
1. Lift vehicle and securely place heavy duty jack stands under the manufacturer recommended lifting locations for the front of the vehicle. Take care when lifting the vehicle, and allow 3-4" of ground clearance from the tire. Remove front tires. NEVER WORK UNDER AN UNSUPPORTED VEHICLE. Remove the wheels.
2. Disconnect sway bar from both lower control arms using a 6mm and 21mm wrench. Rotate sway bar and links up away from the lower arm. [FIGURE 1]

FIG.1



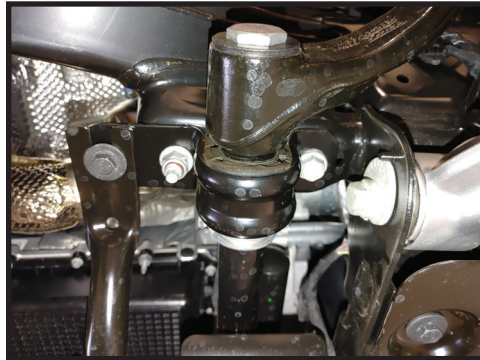
- 3.** Remove the sway bar skid plate to gain access to the sway bar brackets. 4 x 15mm bolts. **[FIGURE 2]**

FIG.2



- 4.** Remove one side of the sway bar from the frame to gain access to the lower control arm bolts. **[FIGURE 3]**

FIG.3



- 5.** Support the lower control arm and remove the cam bolts to free the lower control arm from the frame.

- 6.** Remove the 15mm nuts from the top of the coilover. **[FIGURE 4]**

FIG.4



- 7.** Remove the 18mm nuts from the bottom of the coilover. **[FIGURE 5]**

FIG.5



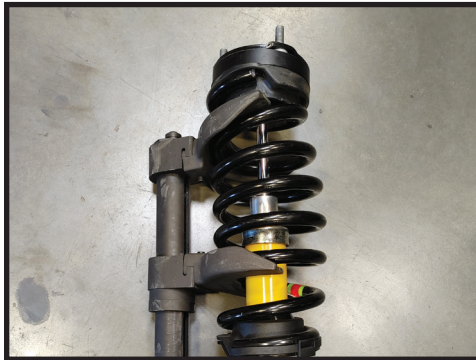
8. Lower the arm down so the coilover can be removed. [FIGURE 6]

FIG.6



9. With a spring compressor, compress the spring so the shaft nut can be safely removed. Before removing the nut, mark the spring and perch on the body to be sure they go back together in the same orientation. (The end of the spring needs to be 180° away from the reservoir or inside of the shock on non-sasquatch models) [FIGURE 7]

FIG.7



10. With the spring removed from the coilover, now is a good time to remove the OEM lower studs using press or hammer. Removing them and using the supplied 7/16" hardware will make assembly easier.

11. With the factory upper mount removed, remove the rubber isolator and install it onto the preload spacer (147004). [FIGURE 8]

FIG.8



12. Installing the top load spacer (147003): Sasquatch and non-Sasquatch. Place spacer on to coilover and mark the factory studs for cutting. Cut the marked area of the coilover studs, use a paint pen on the exposed metal surface. [FIGURE 9]

FIG.9



13. Install the coil spring, and spacer assembly back onto the coilover using the factory shaft nut. Make sure the upper mount shock body and spring is orientated correctly by referring the marking made at step 12. [FIGURE 10]

FIG.10

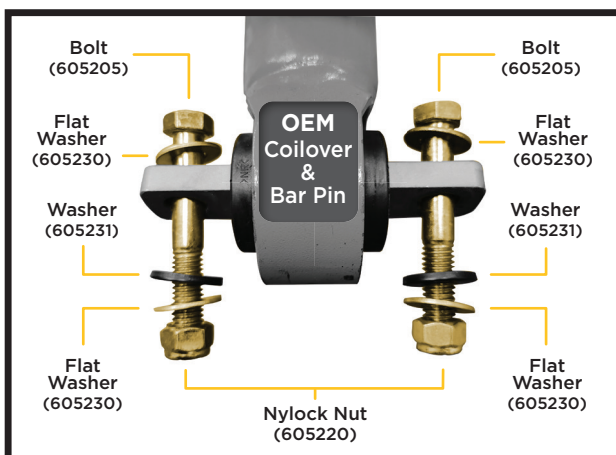


14. Reinstall coilover back into coil bucket using supplied 3/8" hardware (x3) 605101 & (x3) 605131. [Torque to 35 ft lbs]

15. Install lower arm back into frame mounts and lower shock pocket. Leave the factory bolts snug. Torque to factory spec once the vehicle is back on its own weight.

16. Use supplied 7/16" hardware to secure lower shock bar pin to the lower arm (x2) 605205, (x2) 605231, (x4) 605230 and (x2) 605220. [Torque to 50 ft lbs] [FIGURE 11]

FIG.11



17. Install sway bar back onto the frame.

18. Repeat steps on opposite side.

19. Install skid plate back into place.

REAR 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, and 1(driver side) 2(passenger side) wing nuts to remove. [FIGURE 12 & 13]

FIG.12



FIG.13



4. Support the rear axle housing.

5. Remove upper shock mount nuts (15mm). [FIGURE 14]

FIG.14



6. Remove lower shock bolt/nut (27mm). [FIGURE 15]

FIG.15



7. For sasquatch models: only the 1.25" top load spacer needs to be used (147009). Install spacer onto factory studs and torque nuts to factory spec.

8. Rotate the top mount so the mount is positioned as shown. [FIGURE 16 & 17]

FIG.16



FIG.17



9. For non-sasquatch models: Using a spring compressor, compress the spring and remove the shaft nut holding the top mount onto the shaft. 18mm. Before removing the nut, mark the spring and perch on the body to be sure they go back together in the same orientation.

10. The factory mount will need to be sanded down so the preload spacer fits flush. [FIGURE 18]

FIG.18



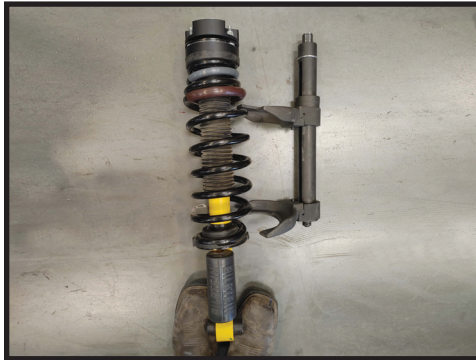
11. Press the rubber isolator onto the ICON preload spacer (147004) and reinstall them onto the factory mount. [FIGURE 19]

FIG.19



12. Reinstall the top mount, spacer and rubber isolator onto the coilover assembly. Being sure the top mount is clocked correctly in relation to the lower mount. Refer to marking in step 12 in the FRONT INSTALLATION section. [FIGURE 20]

FIG.20



13. Install coilover into the coil bucket using supplied 3/8" hardware (x3) 605101& (x3) 605131. [Torque to 35 ft lbs]

14. Install lower eyelet into factory mount on axle using the factory hardware. [Torque to Factory spec]

15. Reinstall fender liner and fender flare.

16. Reinstall wheels/tires and torque to factory spec.

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.

ICON VEHICLE DYNAMICS LIMITED LIFETIME WARRANTY

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.

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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.



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