

10-20-2021 REV.A



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

PART #	DESCRIPTION	
44000	21-UP BRONCO BILLET REAR LOWER LINK KIT	

COMPONENTS INCLUDED		
(1) 144200 21-UP BRONCO BILLET REAR LOWER LINK, DRIVER (1) 144201 21-UP BRONCO BILLET REAR LOWER LINK, PASS	(1) 44000H 21-UP BRONCO BILLET REAR LINK HARDWARE KIT	
HARDWARE INCLUDED		
(4) 147024 HOSE CLAMP BILLET LINK (8) 60549 8-32 X .75 SHCS SS RAW	(1) 605969 RED THREAD LOCKER 2ML BULLET	
TOOLS REQUIRED		
FLOOR JACK JACK STANDS (4) TAPE MEASURE & FINE-TIP FELT MARKER CUT-OFF WHEEL	FUEL LINE DISCONNECT TOOL BODY PANEL REMOVAL TOOL TORQUE WRENCH 18MM SOCKET / WRENCH	

## SOFT DEAD BLOW HAMMER PRY BAR AND SPUD BAR

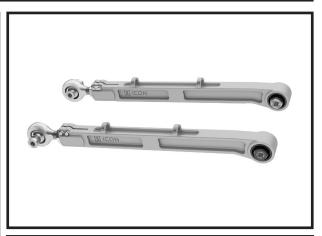
FLAT SCREWDRIVER

**TECH NOTES** 

1. INSTALLATION WILL REQUIRE LOWERING OF THE VEHCILE'S FUEL TANK, THEREFORE IT IS RECOMMENDED TO HAVE LESS THAN A 1/4 TANK OF FUEL WHEN PERFORMING THE INSTALLATION, TO LIGHTEN THE TANK AND MAKE HANDLING IT EASIER.

2. IF FUEL RETURN LINE RETAING CLIP IS BROKEN USE DORMAN 800-041.

3. DO NOT EXCEED 3.375" ADJUSTMENT FROM THE CENTER OF THE ROD END TO THE EDGE OF THE BILLET LINK. FAILURE CAUSED BY EXCESSIVE ADJUSTMENT WILL NOT BE 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. Ensure the vehicle is parked on a flat, level surface with the transmission in PARK (or in first gear if the vehicle is equipped with a manual transmission) the parking brake set and the engine turned off. Securely chock the front tires to prevent the vehicle from rolling forward or backward when the rear tires are lifted. Wear safety glasses from this point forward.
- 2. Use a floor jack under the rear differential to lift the rear of the vehicle and remove the rear tires.

24MM SOCKET / WRENCH 9/64" HEX KEY

T25 TORX

- 3. Place two heavy duty jack stands under the manufacturer's recommended lift points at the rear of the vehicle's frame (not under the axle or suspension components). Ensure that the vehicle is at a sufficient height to allow 3-4" of clearance between the floor and the wheel hubs/rotors with the suspension extended. Make sure that the vehicle's weight is securely supported on the jack stands with no wobbling or movement before proceeding. NEVER WORK UNDER AN UN-SUPPORTED VEHICLE.
- 4. Use a 24mm socket and ratchet or driver to remove the lower track bar pivot bolt from the rear-passenger side of the rear axle [FIGURE 1]. It may be necessary to attach a ratchet strap between the upper and lower track bar mounts to draw them together and relieve pressure, to remove the bolt. [FIGURE 2]



FIG.2

5. Install the passenger side lower link first, which will require lowering the fuel tank to access the frame-side pivot bolts. Begin by disconnecting the wiring harness from the rear of the fuel tank. The connector is located above the fuel filler hose.

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FIG.1

6. Use a flat screwdriver to loosen the hose clamp from the fuel filler hose where it attaches to the top-rear of the fuel tank [FIGURE 3]. Use a fuel line spring-lock tool to disconnect the fuel vent line [FIGURE 4].



FIG.3

FIG.5

FIG.7



FIG.4

**7.** Position two jack stands underneath the vehicle's fuel tank, one at each end of the tank. The following procedure will be easier using screw-jacks rather than notch-bar jack stands, to facilitate controlled lowering of the tank.

8. Use an 18mm socket and ratchet or driver to loosen the eight (8) bolts that secure the vehicle's fuel tank skid plate to the frame. Take care to ensure that the fuel tank's weight sits securely on to the jack stands before completely removing these bolts.





FIG.6

9. Slowly lower the fuel tank down a few inches, taking care to keep the tank as level as possible, until you can see and reach the fuel return line on the top of the tank. The line will be located along the side of the frame rail above the tank. The connector will have a white retaining clip on it [FIGURE 7]. Remove the retaining clip and disconnect the fuel line [FIGURE 8]. A small pick may be used to carefully pull the retaining clip.

NOTE: If retaining clip is broken please see tech note.



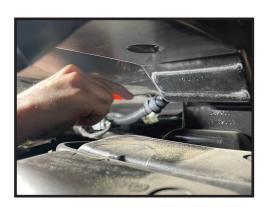


FIG.8

10. Disconnect the wiring harness from the top of the fuel tank. [FIGURE 9]



FIG.9

11. Near the top-front of the tank, use a body clip removal tool to pull the wiring harness retainer from the retaining hole in the tank (4-Door Bronco only) [FIGURE 10]. Dislodge the fuel line from the groove in the top of the tank. [FIGURE 11]



FIG.10

FIG.12

FIG.14



FIG.11

12. Carefully lower the fuel tank, taking care to keep it steady and secure on the jack stands as it is lowered. Lower the tank enough to allow access to the lower link bracket on the inboard side of the passenger side frame rail.

13. Note the sheet metal cover that covers the head of the lower link pivot bolt [FIGURE 12]. Use a T25 Torx bit and ratchet to remove the two screws that secure the bolt cover [FIGURE 13]. Set the cover aside.





FIG.13

14. Use a 24mm deep socket and ratchet or driver to remove the nut from the lower link pivot bolt, frame end [FIGURE 14]. Remove the bolt while taking care to secure the link with a bungee cord, ratchet strap or the hand of a friend, as it may fall out of the link pocket once the bolt is moved.

**NOTE:** Some images may depict the ICON lower link already in place, but are used for illustrative purposes only as the OE lower link would still be in place at this point in the procedure.

15. Use the 24mm socket and rachet to remove the front lower link pivot bolt and nut from the axle end of the lower link [FIGURE 15]. Remove the OE lower link and set it aside as it will not be re-used.





FIG.15

**16.** The rear lower link bolt nut has a long keeper tab, measure 1-1/4" from the end of the keeper tab and mark it. Use a cut-off wheel to cut at the mark. The result should be that the keeper tab (on the axle housing pivot bolt only) is 1-1/4" shorter, as shown on the left in. [FIGURE 16]



FIG.16

17. Install the passenger side lower link (144201), the wear strip faces down and bushing toward the axle housing. Insert the heim/spacer (147016) into the lower link mount on the vehicle's frame, with the longer heim spacer oriented toward the outboard side of the frame rail [FIGURE 17]. Re-install the OE lower link (frame end) bolt through the mount, heim and spacer. [FIGURE 18]



FIG.18

18. Insert the bushing end of the ICON link arm into the lower link mounts on the axle housing [FIGURE 19]. The passenger link will be offset in the axle housing, the wide spacer towards the center of the vehicle. It may be necessary to carefully tap the link into place using a soft dead-blow mallet to avoid marring the anodized finish of the arm. Re-install the modified pivot bolt (with the shortened retainer tab) and tap it into place. [FIGURE 20]



FIG.17



FIG.20

- 19. Re-install the OE lock nuts onto both the front and rear lower link pivot bolts. Use a 24mm socket and torque wrench to torque them to factory-recommended specifications.
- **20.** Use a T25 Torx driver to re-install the pivot bolt cover on the inboard side of the frame rail at the axle end pivot bolt, which was removed in a previous step.

**NOTE:** If installing 21-UP FORD BRONCO REAR UPPER BILLET LINK KIT (Part #44100) at the same time as this kit, switch to those instructions at this time to complete the upper arm installation before lifting the fuel tank back into place. After installing the upper control arms, return to these instructions to complete the installation of the lower control arms.

21. Re-connect all fuel tank lines and wires then lift the fuel tank back into place. Work backwards through the previous steps for disconnecting and lowering the fuel tank, to make sure all necessary connections are made. Be careful when lifting the tank back into place, taking care not to drop the tank off of it's jack stands or pinch any lines or wires while lifting it back.

**22.** Apply red thread locker compound (605969) to the threads of the OE fuel tank/skid plate mounting bolts and reinstall them. Use an 18mm socket and torque wrench to torque these fasteners to factory specifications.



**FIG.21** 



FIG.22

- 23. Reinstall fuel fill hose and reconnect the fuel vent line and electrical connection at the rear of the fuel tank.
- **24.** Move to the driver side and repeat the previous steps (minus lowering the fuel tank) to install the driver side lower link. At the frame end, remember to orient the long side of the heim spacer toward the outboard side of the vehicle. At the axle end, remember to trim 1-1/4" from the keeper tab on the pivot bolt for the axle end of the link. Torque both pivot bolts to factory specifications.
- 25. Reinstall the lower track bar pivot bolt into the track bar and bracket at the rear-passenger side of the rear axle. It may be necessary, again, to attach a ratchet strap between the upper and lower track bar mounts to draw them together and relieve pressure while re-installing the bolt [FIGURE 1]. Torque the lower track bar pivot bolt to factory specifications.
- **26.** If the vehicle is equipped with ICON coilover shocks, use the included Billet Hose Clamps (147024) to secure the shock reservoir hoses to the top of the Lower Control Arm. Use a 9/64" hex key and the included #8-32 X 3/4 SS Socket Head Cap Screws to secure the hose with two (2) clamps on each control arm. If the vehicle is not equipped with coilover shocks, the clamps are not used.
- 27. Reinstall the vehicle's wheels and tires. Tighten the wheel lug nuts to factory specifications.
- 28. If custom pinion angle is desired you can adjust this with the vehicle on the ground. Do not adjust further than 3.375" from the center of the rod end to the edge of the billet link.

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.

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.



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



