

596 Crane Street | Lake Elsinore | CA | 92530 (888) 992-2754 | Info@CarliSuspension.com

PAGE: 1

#### **INSTALLATION NOTES**

Please review the product instructions prior to attempting installation to ensure installer is equipped with all tools and capabilities necessary to complete the product installation. We recommend thoroughly reading the instructions at least twice prior to attempting Installation.

We recommend all fasteners that do not utilize a locking nut (Crimp-Lock or Nyloc), or reuse a lock nut (as these are technically one-time use), use a medium-strength thread-locker to ensure a good, mechanical connection. We use Loctite 243 in-shop. Further, all torqued bolts should be torque-striped/paint-marked for future inspections confirming hardware has not loosened.

Recheck all torque after the first 500 miles.

#### LIFETIME WARRANTY

Carli Suspension provides a limited lifetime product warranty against defects in workmanship and materials from date of purchase to the original purchaser for all products produced by Carli Suspension.

For full Warranty details, see: https://www.carlisuspension.com/warranty/

#### PARTS CHECKLIST

Before beginning disassembly of the vehicle, check to ensure you've received all parts necessary to complete installation to avoid potential down-time in correcting discrepancies. Any discrepancies will be handled by Carli Suspension and the correcting products will be shipped UPS Ground.

- □ (QTY 1) AS-BRRS-21-DRVR
  - □ (QTY 1) PC-BRRS-21-DRIVER Bronco Rock Slider, 2021+, DRIVER SIDE
  - □ (QTY 1) PC-BRRS-REC-DRVR Bronco Rock Slider, Frame Receiver, Driver Side
  - □ (QTY 1) AP-SELFTAP-1/4 Self Tapping Screws, Kit, 1/4"
  - □ (QTY 1) PC-BRRS-FUELCLIP Bronco Rock Slider, Fuel Clip/Wiring Harness Strap



□ (QTY 2) - PC-BRRS-FUELCLIP-REC — Bronco Rock Slider, Fuel Clip/Wiring Harness for weld-on Receiver (MIRRORED)





596 Crane Street | Lake Elsinore | CA | 92530 (888) 992-2754 | Info@CarliSuspension.com

□ (QTY 2) - PC-BRRS-FRMWSH-DBLPDL — Bronco Slider Passenger Captured Nut Bracket



□ (QTY 1) - PC-BRRS-FRMWSH-OFSTPDL — Bronco Slider Driver Rear Captured Nut Bracket



□ (QTY 1) - PC-BRRS-FRMWSH-PDL — Bronco Slider Driver Front Captured Nut Bracket





596 Crane Street | Lake Elsinore | CA | 92530 (888) 992-2754 | Info@CarliSuspension.com

- □ (QTY 4) MP-BGM12 Slider Bolt Guard, 12mm
- □ (QTY 4) MP-BRRS-FRAMECRUSH Bronco Rock Slider, Frame Crush Sleeve
- □ (QTY 1) AP-BRRS-21-HK Bronco Rock Slider Hardware Kit
  - □ (QTY 2) 5/8"-11 x 4-1/2" Grade 8 Yellow Zinc Finish Hex Cap Screw
  - □ (QTY 2) 5/8"-11 x 4-1/4" Grade 8 Yellow Zinc Finish Hex Cap Screw
  - □ (QTY 4) 5/8"-11 x 3-1/2" Grade 8 Yellow Zinc Finish Hex Cap Screw
  - □ (QTY 12) 5/8" SAE General Purpose Flat Washer
  - □ (QTY 4) 5/8"-11 Grade C Zinc Finish Steel Top Lock Nut
  - □ (QTY 4) M12-1.75 x 40mm DIN 933 Class 10.9 Yellow Zinc Finish Hex Cap Screw
  - □ (QTY 10) 8" 50lb Tensile UV Resistant Black Nylon 6.6 Power Phase® Locking Cable Tie
  - □ (QTY 1) 5/16"-18 x 1" Hex Type F Steel Thread Cutting Screw
- □ (QTY 1) AS-BRRS-21-PASS
  - □ (QTY 1) PC-BRRS-21-PASS Bronco Rock Slider, 2021+, DRIVER SIDE
  - □ (QTY 1) PC-BRRS-REC-PASS Bronco Rock Slider, Frame Receiver, Passenger Side

PAGE: 3



596 Crane Street | Lake Elsinore | CA | 92530 (888) 992-2754 | Info@CarliSuspension.com

- 1. Remove any existing step bars or rock sliders, factory or other. The First-Edition on which we performed this installation has the factory rock rails.
- 2. Use a 13MM to remove the vertical hardware, a 10MM to remove the lateral nuts and gently guide the studs out of the pinch weld to remove the rock rails.
- 3. Use a panel Popper to dislodge the wiring harness and brake-line brackets from the **Inside and Outside** of the Driver's side frame rail.



- 4. Clean the side of the factory frame rail. The bracket will sit flush to it and you'll be inserting crush sleeves into the frame so it's important that nothing messes with factory tolerances here.
- 5. Once clean, use an air compressor to blow out the frame from the exposed holes and give it one final wipe down.
- 6. On the bottom of the frame, there are two threaded holes on each side. Ensure these threads are clean. We hit them with brake cleaner, then ran a tap in (M12-1.75) to ensure our bolt run in true, then an air compressor to blow out any debris. (Pass side, these are utilized by fuel tank skid in some applications)





596 Crane Street | Lake Elsinore | CA | 92530 (888) 992-2754 | Info@CarliSuspension.com

PAGE: 5

7. Check the bottom of the frame rail on both sides of the Bronco—there are welded seems that NEED to be inspected for excess weld build-up. These nodules will prevent the brackets from fully seating to the frame if not addressed. We hit them with a flap-disk to flatten them, then paint. The whole weld doesn't' need to be flattened, just the sections that are obviously excessive need to be leveled to the reset of the weld.



- 8. With the Frame prepped and wiring harnesses/brake lines loose, it's time to clean the area to which the front slider tower receiver will weld.
- 9. Measuring from the front body mount, mark at 2.5" and 8"
- 10. From the bottom of the frame rail, measure 5" up.
- 11. Box in this area with a Paint Marker; this will be the area to take to bare metal.





596 Crane Street | Lake Elsinore | CA | 92530 (888) 992-2754 | Info@CarliSuspension.com

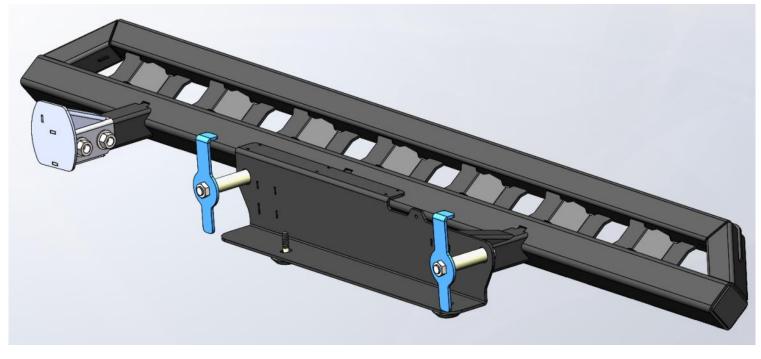
PAGE: 6

Bolt the front weld-on towers to the sliders (loosely) with the provided 5/8" x 3.5" Bolts, washers and nuts.
Put the bolt guards on the M12-1.75 x 40mm bolts and use them to secure the slider to the bottom of the frame rail (into the threaded holes) to secure the sliders hand-tight. Have an assistant clear the brake lines and wiring harness on the frame rail out of the way while installing to ensure nothing gets pinched.



14. Secure the sliders laterally by inserting the 5/8" hardware with the included crush sleeves (install from the outsidein) into the frame holes though the slider brackets. (driver uses 4.5" long bolts, passenger uses 4.25" long)

The Passenger side will use the two nut-brackets that are the same. The 90° portion sits to the top of the frame.

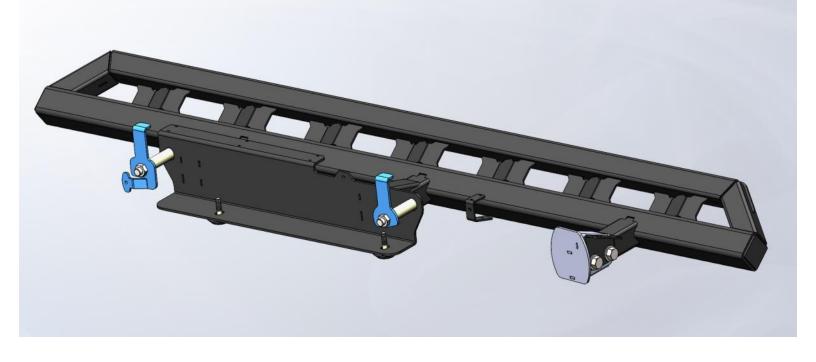




596 Crane Street | Lake Elsinore | CA | 92530 (888) 992-2754 | Info@CarliSuspension.com

PAGE: 7

The Driver will use the unique nut brackets. The forward bracket is clearance for the exhaust hanger, the rear has an offset tab with a hole in it to resecure the dislodged brake line bracket at the end of the installation.



15. On the Passenger side, on models equipped with the fuel skid, you'll need to remove the factory hardware securing the fuel tank skid as the sliders install between the tank skid and frame.





596 Crane Street | Lake Elsinore | CA | 92530 (888) 992-2754 | Info@CarliSuspension.com

PAGE: 8

16. With the hardware securing the rock sliders to the frame, ENSURE they are properly seated. With the bolts in the bottom and side, the crush sleeves need to be seated flat to the inside of the frame (there should be no space under the washers or bolt-heads). Hand tighten all hardware to locate the slider.



17. With the slider installed, The weld-on tower should be located in the middle of the prepped frame area. With these 5/8" bolts loose, slide the tower flat to the prepped space confirming the frame area is all prepped and tack weld the tower in place.

**NOTE:** Tack in SEVERAL places to ensure nothing shifts during removal of the slider for welding.





PAGE: 9

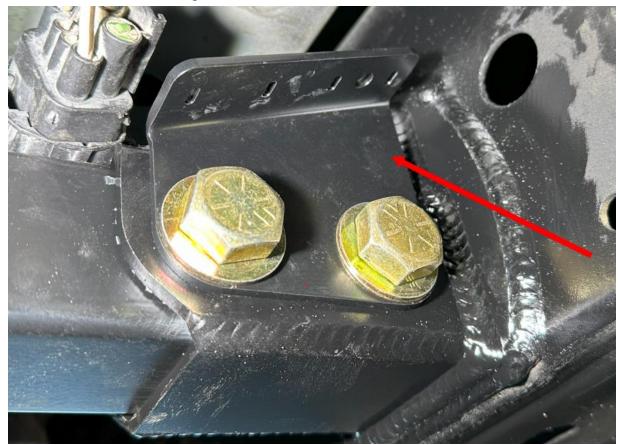
596 Crane Street | Lake Elsinore | CA | 92530 (888) 992-2754 | Info@CarliSuspension.com

18. Remove all hardware securing the slider and remove.

19. Finish weld and paint the weld-on tower.



20. Once dry, reinstall the rock slider. With the front, welded tower first. Loosely install the 5/8" x 3.5" Bolts, washers and nuts. You'll install the mirrored fuel line/wiring brackets to the FRONT of the weld on towers at this time.





596 Crane Street | Lake Elsinore | CA | 92530 (888) 992-2754 | Info@CarliSuspension.com

- 21. Reintall the vertical M12 Bolts and bolt-head protectors into the bottom the rock sliders on both sides. Coat these bolts in BLUE (medium strength) Loctite. Hand-Tight until all hardware is in.
- 22. Reinstall the 5/8" x 4.25" Hardware into the Passenger Side bracket ensuring the crush sleeves are properly seated into the frame and the captured nut brackets (the two that are the same on the passenger side, see below) and washers are all flush (no gap) to the frame when tight.



23. Reinstall the 5/8" x 4.5" Hardware into the Driver Side bracket ensuring the crush sleeves are properly seated into the frame and the captured nut brackets (the two that are unique, see below: left is the rear bracket, right is front bracket) and washers are all flush (no gap) to the frame when tight.





596 Crane Street | Lake Elsinore | CA | 92530 (888) 992-2754 | Info@CarliSuspension.com

PAGE: 11

- 24. With all hardware wrench-tight and confirmed to be properly seated, torque the M12 vertical hardware to 70 lb/ft. (lubricated torque spec as is was coated with blue Loctite).
- 25. Torque the 5/8" Hardware to 211 lb/ft.
- 26. Locate the below hole in your frame and drill to 17/64"
- 27. Use a 5/16-18 Tap to thread the hole.
- 28. The hardware provided is self cutting/tapping but it's always a good idea to predrill/tap if you have the tools.



29. Use the provided 5/16-18 self-cutting/tapping hardware to secure the u-shaped brackets to the tapped holes on the driver and passenger side. You'll mount the fuel lines to the bottom of the bracket and zip-tie the wiring harness to the top of the bracket.





596 Crane Street | Lake Elsinore | CA | 92530 (888) 992-2754 | Info@CarliSuspension.com

PAGE: 12

30. On the Driver's side, there are fuel lines and a wiring harness that now run above the legs of the rock sliders. Attach the fuel line push fitting to the inner hole of the bracket you secured to the front weld-on tower, then zip tie the wiring to the front holes.



31. On the Passenger side, there is only a small wiring harness, no brake lines. Zip tie this as well





596 Crane Street | Lake Elsinore | CA | 92530 (888) 992-2754 | Info@CarliSuspension.com

PAGE: 13

32. Both sides have provisions to zip tie the wiring harnesses to the top of the frame brackets to keep the wiring clean and protected.





596 Crane Street | Lake Elsinore | CA | 92530 (888) 992-2754 | Info@CarliSuspension.com

PAGE: 14

33. On the inside of the frame rail, with everything torqued, connect the brake line bracket push-fitting to the drilled hole in the "offset paddle" of the rear-most captured nut bracket.



34. Here is an additional, up-close view, of the brake line/wiring harness brackets that install to the drilled/tapped holes in the side of the frame. NOTE, it's MUCH easier to install the zip tie to the bracket and wiring harness loosely, then tighten the bracket to the frame, cinch the zip tie, then install the brake lines to the bottom.

