

4th Gen 4Runner/GX470 Sliders Installation Guide



Safety:

Please note that this work should be done by a competent mechanic. If you feel you are not confident to do this work please have a professional mechanic do this installation. <u>Metal-tech Cage, LLC is not responsible for any modifications you make to your vehicle. These instructions are meant to be a guide to assist a competent mechanic.</u>

#1 Always were safety glasses

#2 Always chock the opposite end of wheels when working on a vehicle. (ie. Chock the rear when working on the front, and vice versa.)

1. Removal and Prep

- 1.1. Clean off any large chunks of dirt or debris off the frame.
- 1.2. Remove stock running boards or steps if equipped.
- 1.3. Lay each slider next to your truck and visualize where each mount will go on the frame.
- 1.4. Clean out the 8mm x 1.25mm factory threaded holes on the frame for the top of the front slider feet. Make sure threads are clean!

- 1.5. Drilling new/bigger holes is necessary for both lower bolts on the front feet of both sliders and the middle foot of the passenger side slider. This ensures a stronger and better slider mount.
- 1.6. Both slider front feet need a 1/2" hole to sink the provided 3/8" rivet nut. If a hole is not already present from the factory measure 3 1/2" down from center of the top hole using the side edge of the large hole as a guide to mark. (See Figure A)
- 1.7. Drill new or enlarge the existing holes to 1/2".

3/8-16 Rivet Nuts Installation

- 1.8. Assemble rivet nut tool for the front slider feet, (holes drilled from previous step), using the following in order: a 3/8-16x1 1/4" bolt, a 3/8-16 washer, a 1/2-13 nut, a 3/8-16 washer, and a 3/8-16 rivet nut. (See Figure B)
- Place Rivet nut tool assembly, rivet nut end first, in to the 1/2" hole you just drilled. Make sure rivet nut flange is flush against frame, may take a few light taps to get it to seat.
- 1.10. Use a 19mm wrench to hold steady the 1/2-13 nut. Use a 9/16 wrench to turn the 3/8-16x1 1/4" bolt which will slowly draw in the rivet nut and mushroom it out inside the frame. Once the rivet nut is seated and doesn't spin in place, simply unthread the



1.11. Repeat steps 1.8-1.10 for the opposite side front foot. Don't worry, if you mess up a rivet nut we've got you covered. We included in the bolt kit a spare rivet nut of both sizes, just in case.

1/2-13 Rivet Nut Installation

- 1.12. Passenger side slider middle foot requires a 5/8" hole in the bottom of the frame to sink the 1/2" rivet nut. There is an existing hole that needs to be enlarged.
- 1.13. Drill the existing hole to 5/8".
- 1.14. Assemble rivet nut tool for the passenger side middle foot, (hole drilled from previous step), using the following in order: a 1/2-13x2" bolt, a 1/2" washer, a 5/8-11 nut, a 1/2" washer, and a 1/2-13 rivet nut. (See Figure C)
- 1.15. Place Rivet nut tool assembly, rivet nut end first, in to the 5/8" hole you just drilled. Make sure rivet nut flange is flush against frame, may take a few light taps to get it to seat.
- 1.16. Use a 24mm wrench to hold steady the 5/8-11 nut. Use a 19mm wrench to turn the 1/2-13x2³⁷⁷ bolt which will slowly draw in the rivet nut and mushroom it out inside the frame just like before. Once the rivet nut is seated and doesn't spin in place, simply unthread the bolt out of the rivet nut along with the two washers and set aside. Congrats, the last rivet nut is installed!
- 1.17. Once the three rivet nuts are in place, (one for each front foot and one for the passenger side middle foot), you are ready for final slider installation.



Fig B

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2. Driver Side Slider Installation

- 2.1. *IF EQUIPPED: CAREFULLY pull any XREAS or KDSS lines away from the outside of the frame to make room for slider feet to fit between the lines and frame. GREAT CARE is needed not to kink any of the hydraulic lines. Some brackets may also need to be loosened or removed. The KDSS manifold/pump will need to be temporarily loosened from its frame mount also for slider foot clearance and to gain enough slack in lines.
- 2.2. Use a 12mm socket and wrench to remove the E-brake line bracket from frame allowing the rear slider foot to slide under neath it snugly against the frame.





- 2.3. Lift slider up into place bolting the back foot on to the frame first using a provided u-bolt around the frame from the backside. It's easier to slide the u-bolt up between the gas tank and frame then rotate it in to place. Use two 7/16 washers and two 7/16-14 nuts to loosely install the u-bolt to the slider foot. Make sure slider foot is under the e-brake line against the frame.
- 2.4. Loosely install the front slider foot using an 8mm-1.25x40mm bolt, washer, and lock washer for the side hole. Use a 3/8-16x1 1/4" bolt with 3/8 washer and 3/8 lock washer for the bottom hole threading into the rivet nut you previously installed.
- 2.5. Tighten all hardware up evenly ensuring slider is snug to the frame.
- 2.6. Verify slider is not touching the body. If needed, loosen bolts slightly to adjust, then retighten.
- 2.7. Verify XREAS or KDSS lines are clearing the slider feet and not rubbing against anything. Reattach KDSS manifold/pump and any other brackets holding the lines in place. Reattach E-brake bracket back to the frame.

3. Passenger Side Slider Installation

- 3.1. Use a 12mm socket and wrench to remove the E-brake line bracket from frame allowing the rear slider foot to slide under neath it snugly against the frame.
- 3.2. Lift slider up into place bolting the back foot on to the frame first using a provided u-bolt around the frame from the backside. It's easier to slide the u-bolt up between the exhaust and frame then rotate it in to place. Use two 7/16 washers and two 7/16-14 nuts to loosely install the u-bolt.



- 3.3. Loosely install the front foot using an 8mm-1.25x40mm bolt, washer, and lock washer for the side hole. Use a 3/8-16x1 1/4" bolt with 3/8 washer and 3/8 lock washer for the bottom hole threading into the rivet nut you previously installed.
- 3.4. Loosely install mid slider foot in place using a 1/2-13x5.5" bolt, 1/2" washer, large flat washer on back side of frame, along with a 1/2" washer, 1/2" lock washer, and 1/2-13 nut. Under neath use a 1/2-13x2" bolt, 1/2" washer, and 1/2" lock washer threading into the last rivet nut previously installed.
- 3.5. Tighten all hardware up evenly ensuring slider is snug to the frame.
- 3.6. Verify slider is not touching the body. If needed, loosen bolts slightly to adjust, then retighten.



3.7. Reattach E-brake bracket back to frame and enjoy.

Please contact our technical support if you have any install questions or need any help. Call 503-822-1111 or email <u>info@metaltech4x4.com</u>.

Thank you for your business and enjoy your new sliders! After a short time on the road or trail be sure to check all hardware and tighten if needed.

