

# Jeep Renegade Side Step Installation Instructions



#### SAFETY INFORMATION

The MADNESS product you have purchased is a high performance product. As such, it does present some risks of which you should be fully aware. Do not use this product until you have carefully read all the following safety information.

#### SAFETY GUIDELINES

- 1. Do not exceed legal speed limits on public streets. Use any performance speed capabilities of this product only in legally sanctioned racing environments expressly for this purpose.
- Some features may not function on all vehicle models. Check a newly installed device for all features you intend to use. Do not rely on their working without checking first.
- 3. Do not attempt to install the intake system while the engine is hot.

### Introduction:

Thank you for purchasing the MADNESS Autoworks Jeep Renegade Side Steps. The Jeep Renegade Side Steps have been developed and produced to ensure the best performance for the life of your vehicle. If you have any questions, please contact MADNESS Autoworks. We will be very happy to answer your questions about our complete product line.

#### **IMPORTANT:**

Read all Safety, Warranty, and Installation Instructions before installing this product. Read through these instructions completely so that you understand each step prior to installation.

Note: MADNESS Autoworks strongly recommends that this system be installed by a professional mechanic.

## **Tools Required:**

3/8" Drill Bit Drill Dremel 5/16" Socket Socket Ratchet

## **Supplied Items:**

- 1. MADNESS AUTOWORKS Side Step Pair
- 2. 6 Mount Brackets (3 per side)
- 3. 12 Aluminum Nut-Serts 5/16-18 Part no. 47271
- 4. 24 Allen Head Bolts 5/16-18
- 5. 1/4" Bolts (2)
- 6. 24 5/16 Flat Washers
- 7. 24 5/16 Lock Washers
- 8. 12 5/16-18 Nylock Nuts
- 9. 2 5/16-18 Hex Head Bolts
- 10 2 Zinc Plated thrust Washers



Take your side steps and clear enough workspace to place one on a flat lever surface. NOTE: The side steps are symmetrical and ARE interchangeable on either side!



Take 3 of the 90-degree mounting brackets as well as (6) Allen Head Bolts 5/16-18. (6) 5/16 Flat Washers, (6) 5/16 Lock Washers & (6) 5/16-18 Nylock Nuts over to the side step we will be assembling.

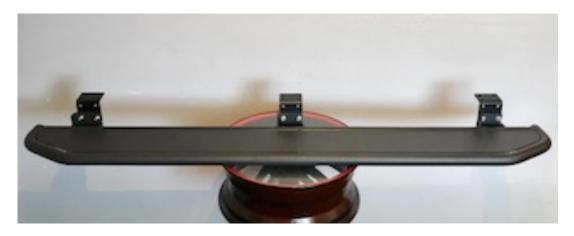


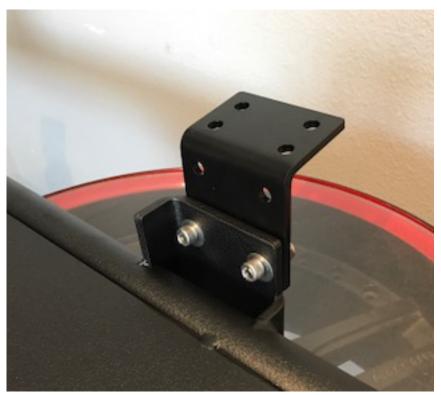
Place the flat washer over the end of the allen bolt and align the lower holes on the longer side of the bracket with the holes in the side step. Slide the bolt through both holes; place the lock washer on the end of the bolt. Take the nylock nut and tighten on the end s of the bolt loosely. Do the same for the remaining brackets.





After installing the three brackets to the first side step repeat the process for the second step. Tighten down the bolts/nuts so that the tops of the angle bracket sit level in reference to the length of the side step. They should now both look like this.





Take your Renegade and put it on jack stands making sure to place them out of the way where you will be installing the side steps as that would impede installation.

With the car off the ground enlist the help of a second person and your jack. Jack your side step up into place near the pinch weld of the underbody until the brackets make contact with the underside of the floor pan. Do not put too much pressure just enough to keep the

brackets in contact with the floor pan so they will hole their placement when you move them around.

Stand back and adjust the side skirts to the desired amount of poke from the underside of the car by pulling on the skirt.

Once the step is in the desired location slide under the vehicle and mark 2 of the holes on the upper bracket that is making contact with the floor pan. NOTE: only 2 bolts are used to attach the mounting bracket to the floor pan!

Now, mark the remaining 2 holes onto the pinch weld on the long bracket side.

With the bolt holes marked lower the side step down and put it away for sake keeping.

Drill a 3/8" hole on the locations marked for the mounting brackets. Before drilling place a piece of tape ½" from the end of the drill bit. This will be your guide for drilling depth.





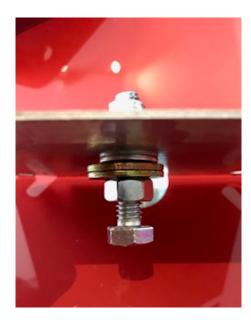
With the holes drilled get your 5/16-18 hex head bolt with jam nut and 2 zinc thrust washers as well at the 12 - Aluminum Nut-serts.

Place the Thrust washers on the end of the 5/16" bolt.



Coat the threads of the 5/16 bolt with anti-seize and thread 1 Aluminum Nut-Set onto the bolt making sure that you have full thread penetration on the nut set.

Take the Nut-Sert and place it in the 3/8" opening that you drilled earlier. Using a ratchet wrench with a 5/16 socket to bolt the head of the bolt and use a 5/16 wrench to hold the jam nut to the floor pan of the car.



Tighten the jam nut using the open end of the wrench while holding pressure with the socket preventing the bolt from turning in the Nut-Sert. Doing this will collapse the Nut-Sert. Repeat this on theremaining holes.

**Example of how Nut-Sert will crush on the floor pan.** 



With all of the holes fitted with the Nut-Serts loosely bolt the mounting brackets back to the side steps.

Position the side steps as you did previously where the step is jacked in place and can be moved around.

Take the 12 - 5/16 Allen Bolts and the 12 - Lock Washers and loosely thread the bolt/washer setup into the Nut-Serts in the floor pan of the Rengade. Do this on both sides



Take the remaining 12 - 5/16 Allen Bolts and secure the bracket to the pinch weld using the lock washer and the nylock nut.



Once everything is loose make your final adjustments by slowly tightening and adjusting the steps to sit as you desire.