# The Kids Kot™

# 2019 - 2021 Sprinter Installation Instructions



Patent Pending 17/174,354

## **Tools necessary for installation**

- Drill
- Small ruler or tape measure
- #2 Phillips head bit
- **T20 Torx bit**
- **T45 Torx bit**
- 7/64" socket or wrench
- 3/32" or 1/8" drill bit
- 25/64" drill bit
- 19/64" drill bit
- 1-1/4" hole saw or large step-bit
- **Painters Tape**
- Rivet Nut installation tool with 1/4-20 and 10-24 mandrels **Optional**
- Small Step-bit (1/8 1/2", 13 increments)
- Set punch
- Loc-tite
- **Dremel Tool with sanding drum**

# Parts included in Installation Kit



Passenger B-pillar bracket (may have built in grab handle)



**Driver-side B-pillar Bracket** 



**Passenger Door Bracket** 



**Driver-side Door Bracket** 



**Rubber Pad** 



(4) Self Tapping Screw



(12) 1/4-20 Hex Bolt (2) 10-24 Flat head screw





(12) 1/4-20 rivet nuts



(2) 10-24 rivet nuts

### **Installation Steps**

#### 1. Remove black plastic covers on both B-pillars.

- a. Remove plastic covers from hanger/hooks near the top. A small flat head screw driver can help assist with pulling these off.
- b. Remove screw holding hanger/hooks with a T20 Torx bit.
- c. Remove lower D-ring hardware with T45 Torx bit.
- d. Remove lower seat belt anchor if applicable.
- e. Pull black plastic cover toward center of van until you feel the spring clips release. There are 3 sets of clips, start at the top for the 1<sup>st</sup> set, then move down about 22" for the 2<sup>nd</sup> set and another 20" for the 3<sup>rd</sup> set.
- f. Pull up and out to remove from the hooks at the bottom.

#### 2. Temporary locate B-pillar brackets

- a. Position the top edge of the passenger side B-pillar bracket 1" below the set of factory stamped holes (see fig. 1) that are closest to the bottom of the seatbelt track. Be sure the entire outside edge of the bracket is pressed up against the metal pinch weld and not the rubber edge gasket.
- b. Mark the center of one hole, drill a pilot hole and insert one self-tapping screw to hold the bracket in place.
- c. Recheck the position of the bracket to ensure it is located correctly (1" down from factory holes and full outside edge is pressed against the metal of the door frame or wall).



Figure 1

- d. In the bracket hole diagonally across from the one with the screw you just installed, mark the center, drill a pilot hole and insert a second self-tapping screw.

  Tip: using a set punch to mark the center will increase the accuracy of locating your hole and keeps your dill bit from walking around.
- e. Repeat steps "a" through "d" for the driver-side B-pillar bracket.
- f. With both B-pillar brackets temporarily secured in place with two self-tapping screws, it is possible to test alignment by taking the Kids Kot unit and installing the shorter of the two bars. Slide it into the driver-side bracket first then sliding back into the passenger bracket until it hits the stop. The

bar should be able to rotate freely without resistance within the bracket if aligned correctly. Make adjustments now if needed.

#### 3. Install rivet nut fasteners for securing B-pillar brackets

- a. With B-pillar brackets now aligned properly and temporarily secured in place, mark and drill a pilot hole in the center of the remaining two holes in each bracket. Be very careful to be directly in the center, using a set punch is very helpful for keeping your drill bit from walking out of center.
- b. Remove the brackets and enlarge only these last two holes you just made in each side to 25/64" and install ½-20 rivet nuts. tip: using a small step-bit can help ensure accuracy in enlarging the hole centered.
- c. Re-install both brackets using  $\frac{1}{4}$ -20 hex bolts.
- d. With both B-pillar bracket now secured in place with 2 hex bolts, inspect the location of the holes made by the self-tapping screws to ensure they are centered with the holes in the bracket. These are often times a little out of center and the hole can be adjusted toward center using incrementally larger drill bits, step-bits can be very helpful in this situation.
- e. Once the remaining two holes are properly aligned center with the bracket holes. You can remove the bracket, enlarge the holes to 25/64" and install 1/4-20 rivet nuts.
- f. Re-Install Brackets with all four hex bolts and test alignment.

#### 4. Cut holes in plastic B-pillar covers

- a. With both B-pillar brackets installed, place a strip of painters tape along the rubber edge gasket on the passenger side and on the wall on the driver-side (fig. 2 & 3)
- b. Using a ruler mark a line on the tape corresponding with the top, center and bottom of the piece of tubing extending out from B-pillar. (fig. 2 & 3)
- Using a ruler also mark the distance from the outside edge by:

   Passenger side:
   Mark a crosshatch 1.5" from center of tube on top and bottom lines, and 1.5" over from outside edge on center line. (fig. 3). (Use same technique for the bottom of built-in grab handle if applicable.)
  - + <u>Driver side</u>: Measure and record distance from the wall to the furthest point of tubing extending out from B-pillar (approx. 1-7/8") and the center of this tubing as well (approx. 1-1/4").



Figure 2 driver side

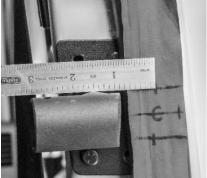


Figure 3 passenger side

- d. With the measurements and lines recorded you can now remove the brackets and replace the plastic B-pillar covers. It is not necessary to replace screws and other hardware at this time. Ensure though the covers are properly snaped into place with all spring clips.
- e. Transfer your markings over to the plastic B-pillar covers (Fig. 4 & 5).
- f. Remove covers and cut holes using a 1-1/4" holesaw or large step-bit. Remove the remaining portion with side-snips or

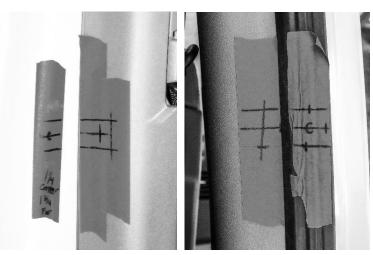


Figure 5 Driver side

Figure 4 Passenger side

- a jigsaw. A Dremel tool with drum sander can help fine tune and clean up the cut.
- g. You can now re-install the B-pillar brackets with the hex bolts and use loc-tite on the threads if desired.
- h. Remove the back cover and adhere the included rubber pad on to the driver side wall to protect the wall when the Kids Kot unit is inserted through the bracket.
- i. Re-install the plastic B-pillar covers. Be careful to properly align the seat belt cover button that moves up and down before setting the spring clips.
- j. Re-install all hardware you removed in Step 1.



Passenger side completed



Driver side completed

#### 5. Install door brackets

- a. Place strips of painters tape covering installation locations for protection and to make markings on.
- b. Mark a line 1-7/8" up from the highest point of the black plastic handle. (See fig. 6)
- c. Position the door bracket into place with the bottom edge of the bracket on the line and the outside edge pressed against the black rubber. Be sure you have the correct bracket with the small hole in the tube facing upward.
- d. Mark the center of the two larger holes with a sharp pencil and drill a pilot hole. tip: using a set punch will increase accuracy and help keep your drill bit from walking.
- e. Enlarge holes to 25/64, debur and paint raw edges, then install  $\frac{1}{4}$ -20 rivet nuts. tip: using a small step-bit can help ensure accuracy in enlarging the hole centered.
- f. Re-install bracket with  $\frac{1}{4}$ -20 hex bolts.
- g. Mark the center of and drill a pilot hole in the remaining side hole that is counter sunk.
- h. Remove bracket, enlarge hole to 19/64" and install the smaller (10-24) rivet nut.
- i. Check for proper fit with the Kids Kot unit. The longer bar should be able to rotate freely when doors are completely shut. If this is not the case you can adjust the brackets "camber" by using washers behind the side counter-sunk hole.
- j. Install bracket using loc-tite if desired.

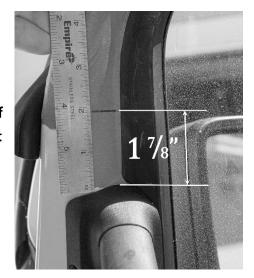


Figure 6



Completed Installation

If you have found any problems or have suggestions for these instructions please E-mail them to Greg@RigRacks.net.