

Failure to carefully read, understand and follow these instructions could result in severe injuries or death. Please read and understand these instructions before beginning the installation.

Before beginning the installation, make sure that all the parts are included. Below is an illustration showing what should be included in the Transit Bracket Kit.



Figure 1: Front bracket (2 included)



Figure 2: Rear bracket (2 included)



Figure 3: Required bolts and Hardware for Rear



Figure 4: Required Bolts and Hardware for Front



Figure 5: Decal Mount Location

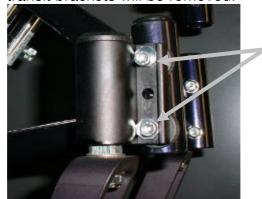
The required tools to install the Zippie Transit Bracket Kit are listed below

- 1. 7/16" Socket & Ratchet
- 2. 5/32" Allen Wrench
- 3. 3/16" Allen Wrench
- 4. Torque Wrench



To Install the Front Transit Bracket

1. Please position the wheelchair back in the "home" position before continuing. Working on one front wheel at a time, using the 7/16" socket and ratchet, remove the two (2) bolts and nuts that are holding the front wheel mount in place. (Note: Observe orientation of eccentric washer (**Figure 5**) before removing hardware to ensure proper installation in later steps, plus observe orientation of the caster barrel for later steps.) By doing this, the wheel mount will come off; as will the saddles and all that will be left will be the frame. Place these parts, and the nuts off to one side, as you will be using these parts in the following steps. Although the bolts will not be used in the mounting of the transit brackets, they should be kept in a safe place, in the case the transit brackets will be removed.



Remember Orientation of Eccentric Washer to help in the reinstallation in later steps.

Note: Not all chairs use same orientation for eccentric washer.

Figure 5: Orientation of Eccentric Washer

2. Take the ½-28 x 2-1/8" C/S CLR ZN bolt, which is pictured below (**Figure 6**) and place the eccentric washer that was included in the kit, on it (**Figure 7**). Do this same process again on another bolt, as two (2) of these will be needed when mounting the front wheel mount and front transit bracket.



Figure 6: Bolt for front bracket mount



Figure 7: Bolt and washer

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3. Take the wheel mount and insert the two (2) bolts and washer sets into the caster barrel. The caster barrel has a flat side, and on the other side, there is a cut out. The bolt and washer set must be inserted such that the washer comes to rest "within" the cut out section. From above, the current setup should look very much like what is shown in **Figure 8**. (Note: Place eccentric washer in same orientation as recorded in step 1.)



Caster Barrel

Figure 8: Washer within "cutout" of wheel mount

4. Now the front transit bracket must be placed on the setup from step 3. The bracket should be placed so that the transit bracket is facing toward the rear of the chair but the caster barrel can be leading (facing forward) or trailing (facing rearward) the caster barrel should be reassembled the same way it was oriented in step 1. This setup can be seen in **Figure 9**. (Note: The caster barrel is depicted in the trailing position in **Figure 9**).



Figure 9: Bracket attached to wheel mount

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- 5. Prior to attaching the wheel mount and bracket to the frame, the saddles have to be placed on the bolt. These saddles serve to protect the frame from metal on metal contact. The flat side of the saddle should be placed against the transit bracket and the curved side will be placed against the frame.
- 6. Insert the bolts through the front wheel mount holes as shown below (**Figure 10**). Position the saddles so that they rest comfortably against the frame (curved sides should be resting against the frame, NOT THE FLAT SIDE). Once the bolts have passed through the frame, fasten the nuts that were removed in step one using the 3/16" allen wrench. The bolts and nuts must be tightened to 8-9ft-lbs of torque. This can be done using a torque wrench. After assembly, affix the Transit Mount Location Decal as seen in **Figure 11**.



Figure 10: Setup placed on frame

Notice the saddles flush against the frame.

Transit Mount Location Decal



Figure 11: Transit Mount Location Decal Placement

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7. Do steps 1-6 again for the other front wheel. The final setup should look like **Figure 12** or **Figure 13** located on the next page.



Figure 12: Final Setup with Caster Barrel Leading



Figure 13: Final Setup with Caster Barrel Trailing

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To Install the Rear Transit Bracket

- 1. Working on the rear, install the transit mounts one side at a time. (Note: The rear wheels may need to be removed to allow easier assembly.)
- 2. Take one of the ½-28 x 1 3/4" Hex bolt, (**Figure 2**) and insert the bolt into the Rear Transit Bracket (**Figure 3**), repeat this step with another bolt in the second hole of the transit bracket.



Figure 2: Bolt for rear mount



Figure 3: Rear Transit Bracket

3. This step is for rigid frames only. Using the 5/32" Allen wrench remove the hardware that attaches the rear strut tube to the side frame. The Rear Strut Tube and Hardware can be seen in **Figure 4**.



Figure 4: Rear Strut Tube & Hardware

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4. Next insert the assembly created in step 2 into the side frame by inserting the hardware from the outside of the chair into the top hole in the side frame. The rear transit bracket should be oriented so that the bracket extends out the rear of the chair (view **Figure 6** for reference). When doing this if it is a Rigid Frame the top hardware will insert into the rear strut tube and place a ¼" washer and ¼-28 Nylock Nut on the exposed Bolt (The final assembly can be seen in **Figure 5**). If it is a Folding frame place one ¼" washer on each bolt, and place one ¼-28 Nylock Nut on each bolt (The final assembly can be seen in **Figure 6**). The bolts and nuts must be tightened to 8-9ft-lbs of torque.



Figure 5: Rigid Frame Assembly



Figure 6: Folding Frame Assembly

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5. Finally affix the Transit Mount Location Decal to the Rear Transit Bracket as pictured in Figure 7.

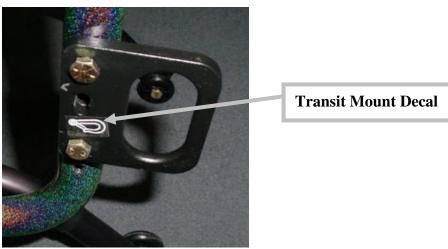


Figure 7: Transit Mount Location Decal

6. Do steps 1-8 again for the other rear transit bracket.

Please note that while in ANY form of transportation, have the seat in "home position." Home position refers to the seat being flush with the frame of the wheelchair. With the seat in the tilted position, any amount of abrupt braking might result in severe injury or even death.

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