

# Freewheel

Manual / assembly instruction



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**Note:** Tools you may need: 3/16” and 5/32” allen wrenches, small phillips-head screwdriver, hack saw. For Panthera wheelchairs no hacksaw is needed.

## Intended use

Freewheel is an accessory for manual wheelchairs designed to be mounted on the footrest to improve accessibility for the wheelchair in everyday situations, on a base such as sand, snow, grass, etc.

NOTE! Not intended as sports equipment! And not to be driven at high speeds.

## Safety

On Panthera wheelchair a reinforced footrest must used. art.no. 36006xx\* or 36110xx\*

**Note!** The risk of tipping backwards in the wheelchair increase when you put the FreeWheel on the perch at the backrest.

For mounting on a wheelchair from another manufacturer, they must be contacted to approve the installation of Freewheel.

\*XX = chair width.

## Warranty

FreeWheel has a 2 year warranty. Invoice= warranty proof.

# Panthera instructions

Freewheel can be mounted on Panthera wheelchairs; **S2, S3, U2, U3, U2 light, U3 light, Panthera X.**

**NOTE! Reinforced footrest must be used** to ensure sustainability.

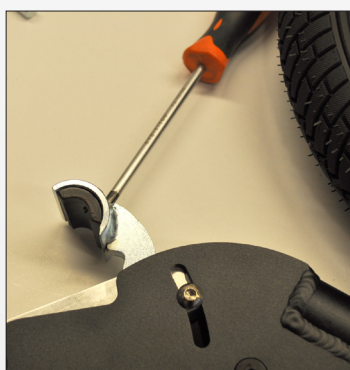
In the mounting hardware (image) are all the details included to mount FreeWheel on your wheelchair. Parts (1, 2, och 3) are specially adapted for Panthera wheelchairs.

**Part 1** is a "cup shim" adapted for Panthera footrest, see page 4.

**Part 2** is a thick "straight Shim", cut to 105 mm to fit Panthera footrest, see page 5.

**Part 3** is a "round perch" adapted for Panthera, see page 8.

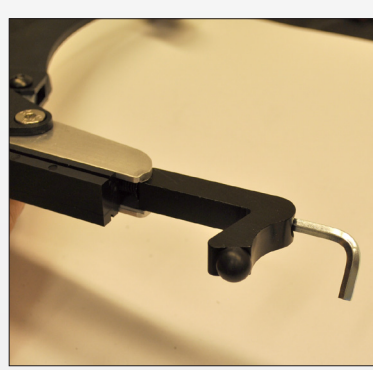
**Part 4** is a short "rear end" that should be used for Panthera footrest, see page 5.



Remove it preassembled cup shim. Screw the supplied "cup shim" (1) on the FreeWheel. **See page 4.**



Insert the "straight shim" (2) into dove-tail feature found in clamp base of FreeWheel. **See page 5.**



Mount the short "rear end" (4) on FreeWheel. **See page 6.**



QR link to homepage



Adjust the "rear end" by screwing in or out until the FreeWheel fits the footrest. **See page 6.**



QR link to assembly video for Freewheel std



QR link to assembly video for Bambino KIT

## How To Set-Up Your FreeWheel

There are 4 easy steps to setting up your FreeWheel to fit your wheelchair:

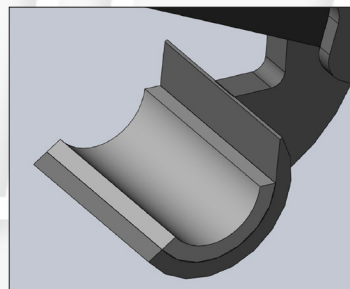
- 1) Determine whether you need a cup shim? (page 4)
- 2) Does it need a straight shim and if yes, what thickness? (page 5)
- 3) Should you use a short or long rear end? (page 6)
- 4) Adjusting the angle based on how high your footrest is from the floor and whether it is angled. This adjustment is to make sure the FreeWheel properly lifts the front casters off the ground (page 7)

### STEP 1: Cup Shim

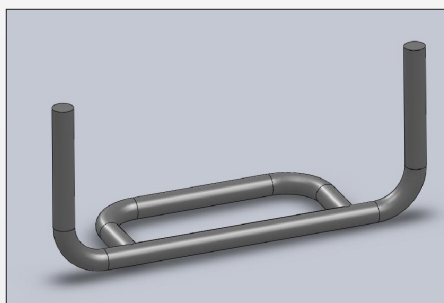
(FreeWheel comes with cup shim installed.)

Check which footrest type you have and decide whether or not it needs a cup shim.

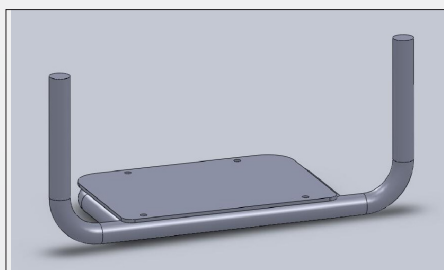
Panthera footrest  
**YES**, you need a cup shim. Mount the cup shim included in the mounting hardware adapted for Panthera, see page 3.



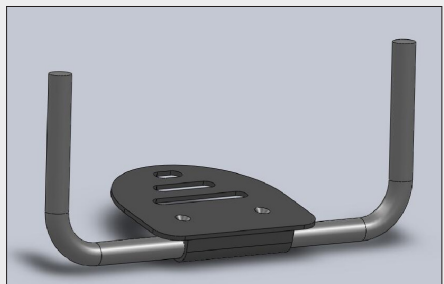
#### Footrest Types



**2 Tube: Yes**, you need a cup shim. Make no change and go to STEP 2.



**2 Tube with Plate: Yes**, you need a cup shim. Make no changes and go to STEP 2.



**Clamp Plate: No**, you do not need a cup shim. REMOVE CUP SHIM using small phillips –head screw driver to remove screws and GENTLY pry plastic cup shim out. Go to STEP 2.



## STEP 2: Which Straight Shim?

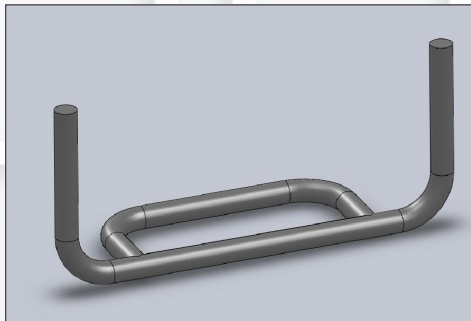
There are 4 separate straight shims with your FreeWheel package. Your foot rest type determines which shim to use, or whether you do NOT need a shim.



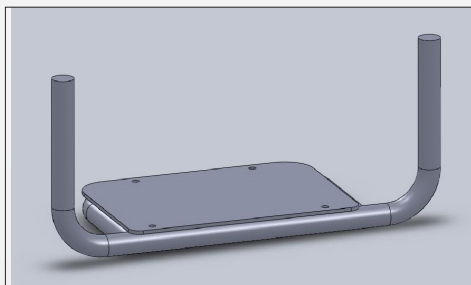
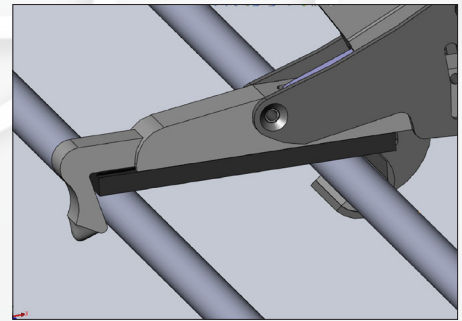
For **Panthera wheelchairs** use the included thick shim (cut to 105 mm). See page 3.

Footrest Types

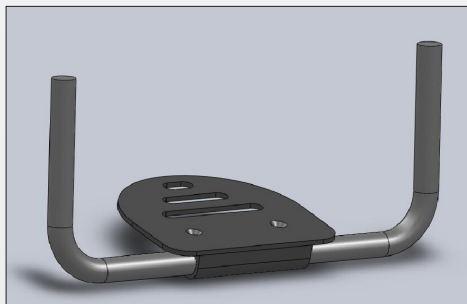
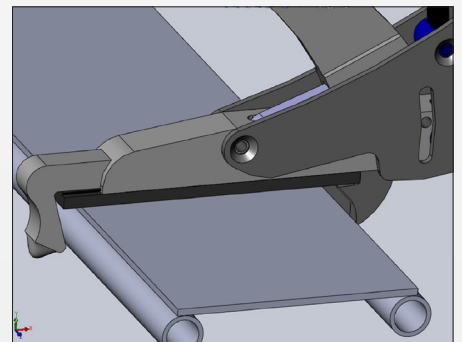
Shim Types



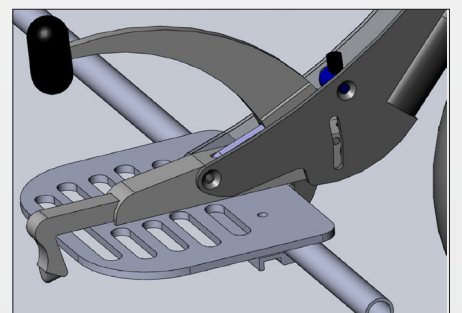
2 Tube: **Thick** Straight Shim.



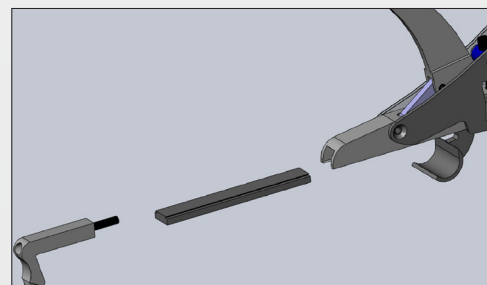
2 Tube with Plate: **Thinnest** Straight Shim



Clamp Plate: **NO** StraightShim



1. Insert straight shim into dove-tail feature found in clamp base.
2. Rear end should be removed



### STEP 3: Which Rear End?

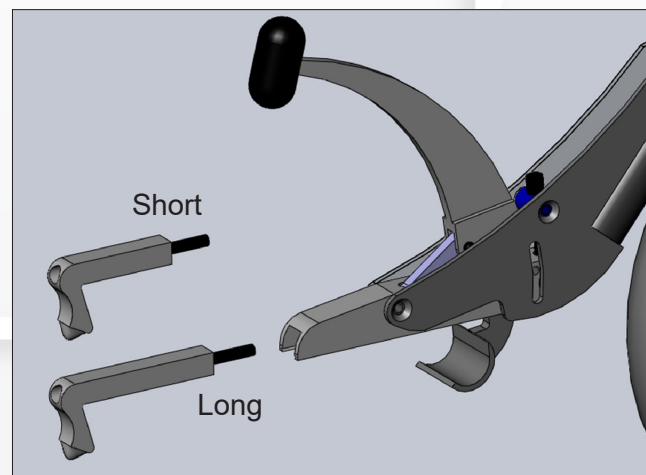
(ALL footrest types need a rear end.)

For **Panthera wheelchairs** use the short rear end.

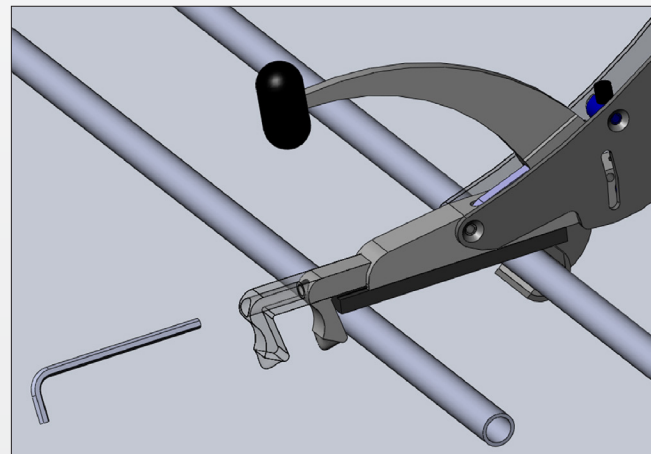
1. Measure from the front tube/plate to the back of the footrest to determine depth.

Footrest Depths up to 5" :  
Use **SHORT** Rear End

Footrest Depths from 5" to 6-7/8":  
Use a **LONG** Rear End



**WARNING!** Clamping the FreeWheel onto your footrest with the Rear End set too short can damage the Rear End. If the footrest sag when you mount FreeWheel it's set too tight. Make sure to follow Step 3 below!



2. Using a hack saw cut your straight shim the same length as the footrest depth.  
(Already precut to 105 mm for **Panthera**)
3. **Clamp FreeWheel on to footrest. If the footrest sag when clamping the FreeWheel it's set too tight.**
4. Using a 3/16" allen wrench (not included) adjust the rear end by tightening bolt so the rear end just touches the footrest tube/plate.

## STEP 4: Angle Adjustment

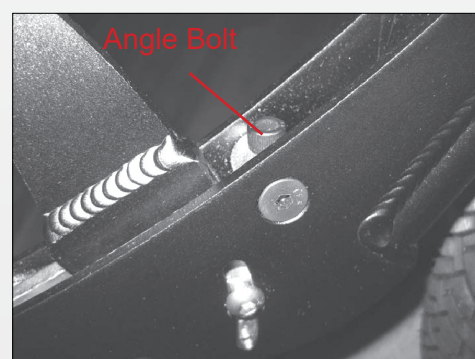
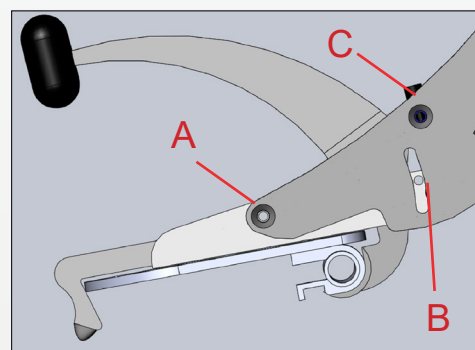
This adjustment is to make sure the FreeWheel properly lifts the front casters off the ground. The adjustment is based on the height of your wheelchair's footrest from the ground. Make sure you have completed the Set-up Guide STEPS 1 through 3, BEFORE you complete this step.



1. Find a flat/level floor. While holding the handle, arrange the FreeWheel in the “tail dragger” position (shown above).
2. Move your feet apart. The clamp requires 3/4” of space between your feet.
2. Lower the clamp over your footrest, hooking the rear end first, then setting it down with clamp cup just in front of the footrest tube.
3. Lock down by putting pressure on the handle. The locking action should feel very solid and secure.

The FreeWheel tire should be touching the ground. If it is NOT touching the ground, you will need to adjust the Angle Bolt.

1. Loosen bolts A, B and C, both sides. Do NOT REMOVE, just loosen.
2. Tighten Angle Bolt if wheel is off the ground. Loosen the Angle Bolt if the tire is too low..
3. Re-tighten BOTH SIDES of bolts A, B and C.



## Perch Set-up Guide (does not fit Panthera X)

Now that you have your FreeWheel adjusted for your specific footrest type and chair, you'll want to install the Storage Perch on the crossbar on the back of your chair.

Chose the perch post that matches your footrest set-up to make sure you pick the right combination so your FreeWheel securely clamps to your storage Perch.



**ROUND Perch Post** – Tube only footrest, with THICKEST straight shim and the cup shim has NOT been removed.

For **Panthera** see **part 3** in image in **page 3**.

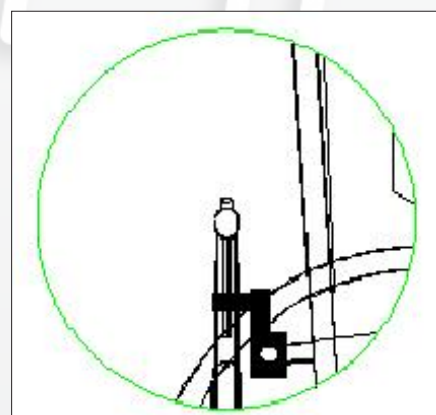
**SMALL D Perch Post** – Middle thickness straight shim and the cup shim has NOT been removed..

**MIDDLE D-Perch Post** – Thinnest straight shim and the cup shim has NOT been removed.

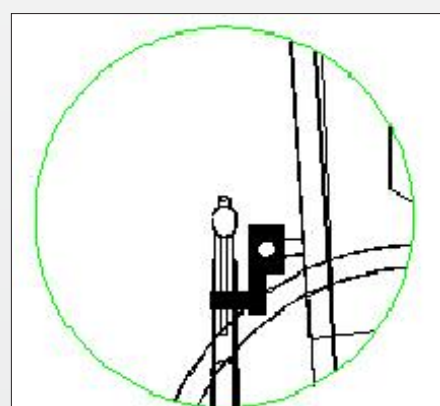
**BIG D-Perch Post** – NO straight shim and the cup shim has been REMOVED.



Perch



Low Cross Bar



High Cross Bar

With one hand cupping the clamp of the FreeWheel, hold the clamp to the perch while the other hand grips the handle and firmly close the clamp onto the perch.

### Bambino:

To attach the Freewheel on the **Bambino- backrest** when it is not in use, you need to use the D-shaped attachment. This because the round Panthera attachment is too thin when the Freewheel is adapted for Bambino with the thin shims.

QR link to info about  
Freewheel on Bambino  
backrest (pdf)





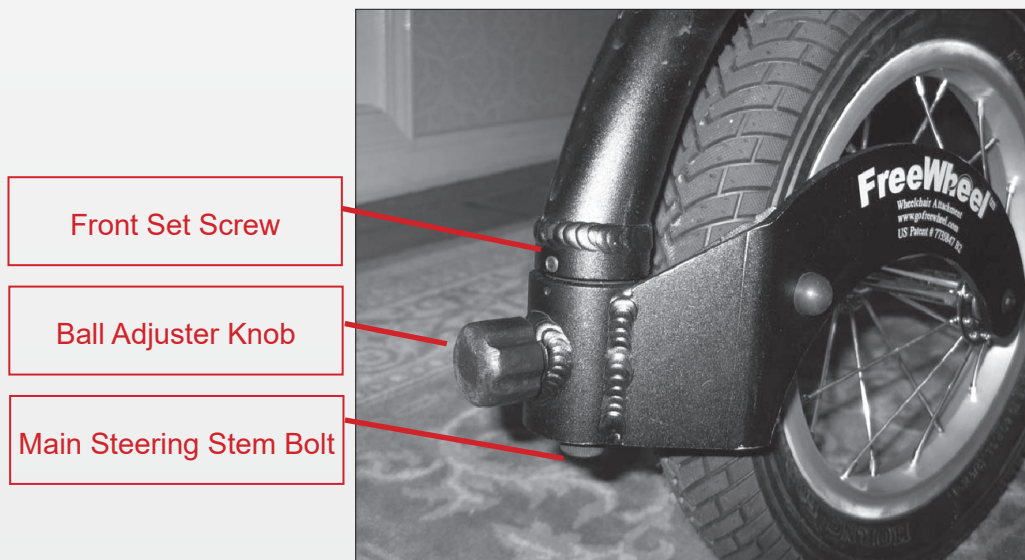
## How to Adjust for Steering

If your Freewheel is not tracking straight when coasting forward on level ground, the steering should be adjusted. To do this you need to adjust two separate fasteners:

Front Set Screw, and  
Main Steering Stem Bolt

1. The Front Set Screw holds the steering adjustment.
2. After loosening the Front Set Screw ( $3/32$ " allen or 2.5mm allen wrench) and Main Steering Stem Bolt, rotate the fork to adjust the steering straight.
3. If the internal bushing is not rotating relative to the frame, then tighten the ball adjuster knob to lock the fork to the internal bushing. Work the bushing loose from the frame. I like to re-grease this joint to keep it from binding.
4. Set the steering and then tighten the Front Set Screw
5. Finish by tightening the Main Steering Stem Bolt.
6. Test for straightness by coasting on a flat surface.

**Note!** The front ball adjuster knob can be backed off for light steering action or screwed in for heavier steering action.







# FreeWheel™

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