

COMPATIBLE WITH A6-A7-C2-MOVE-VELOCE WHEELCHAIRS



- The parts you should have are:
 - Two Newton One wheels (#1 and #5) 24 inches with tires
 - The **wheel hub** on the **driving** side (#5) is a standard hub with **two bearings**
 - The driving wheel is the one with a handrim
 - Unless specifically requested, the driven wheel (#1) is the one without a handrim
 - If you have ordered a **driven wheel** with a **handrim**, it can be distinguished by the **keyway** on the **outer side of the hub** and a bearing on the inner side of the hub
 - Two mounts with shafts (#2 and #4)
 - The appearance of the wheel mount may vary depending on the type of mounting plate: V2B (shown) or T2
 - The mount with the longest shaft is the one on the driving wheel side.
 - One arm drive handrim (#6) assembled on a cross link
 plate
 - A drive shaft (#3)
 - The length of the shaft you received depends on the width of the chair

- orque wrench
- ocket wrench
- 26 mm open-end wrench or 26 mm hexagonal socket
- Hexagonal socket 19 mm
- 5/8" open-end wrench
- mm
- .



The **driving wheel** is the one that does the propulsion. It is the one **with** a **handrim**.

The **driven wheel** is the one that is driven by the driving wheel. It is the one **without a handrim**.



DISASSEMBLY

- Note the rear seat-to-floor height and the position of the original wheel mount on the mounting plate (letter or hole, depending on the mounting plate model)
- Remove the wheels and place the wheelchair on a stand
- Remove the wheel mounts but keep the mounting plates in place

INSTALL THE WHEEL MOUNTS

- There are two types of wheel mounts, as there are two main families of rear wheel mounting plates on the different models of Motion Composites folding chairs
- V2B rectangular wheel mounts for multi-positions mounting plates:
 - Wheelchair models: HELIO A7/C2/VELOCE
 - Multi-positions mounting plate
- Oblong wheel mounts T2 for 6 positions non-reversible mounting plates or for 12 positions reversible mounting plates:
 - Chair models: HELIO A6 MOVE





6 positions non-reversible mounting plate



• Make sure you have all the parts for the wheel and shaft assemblies shown below.





- Assemble the left and right wheel mounts to the rear wheel mounting plates using a 5 mm hex key
- Position the wheel assembly on the mounting plate in the same place as the previous wheel assembly
- Check the rear seat-to-floor height and adjust the height of the wheel mounts if necessary.
- Do not tighten the screws completely at this time



INSTALL THE AXLE SHAFTS

- Insert the two (2) axle shafts into the wheel assemblies with the threads to the outside of the chair
 - The long shaft is installed on the side of the driving wheel (the one, where there will be the One Arm Drive handrim)
 - The short shaft is installed on the driven wheel side
- Tighten the wheel mount screws. Apply a tightening torque of 12 Nm







• Insert three (3) washers on each shaft as shown





- Install the wheel with the handrim (#5) on the long shaft (#4), on the driving wheel side
- Insert the **One Arm Drive handrim** (#6) on the shaft (#4) on the **driving wheel side**
- Install the wheel without handrim (#1) on the short shaft (#2) on the driven wheel side





- Install the keys in the keyways on both sides:
 - On the driven wheel side, the key is installed into the wheel hub
 - On the driving wheel side, the key is installed into the center plate of the cross-shaped support of the One Arm Drive handrim
 - Use a flathead screwdriver and hammer and gently tap the key into the keyway (shown on the left)
 - Insert the key until flush with the surface (shown on the right)





Driving wheel side







- Assemble the two wheels to the shafts with a washer and a bolt
 - Socket wrench and hexagonal socket: **19 mm**
 - Driving wheel shown below. The procedure is the same for the driven wheel
- Tighten so that there is no axial play, but <u>not too much so</u> as not to restrict the wheel bearings and damage the bearings. There is no specific tightening torque to apply



ASSEMBLE THE DRIVE SHAFT AND TEST THE ONE ARM DRIVE MECHANISM

- Insert the end of the drive shaft onto the shaft of one of the wheels (#1)
- Compress the drive shaft and insert the other side of the drive shaft onto the shaft of the other wheel (#2)
- Make sure the shaft is securely installed before using the wheelchair
- Test the One Arm Drive system by going straight ahead and turning on both sides



INFORMATION! The drive shaft is retractable on 1 of 2 sides. It can be extended or shrinked to allow the installation on the wheel shaft.