INSTRUCTION SHEET

SQUARING THE FRONT CASTER HOUSINGS

This document describes how to **square up the housings of all models of front caster**.

The **front wheel caster housings** must be **adjusted** when:

- The **center of gravity** of the chair is moved
- The **front** or **rear seat height** is changed
- **In some cases** when the **rear wheels camber** is modified

See also the following document:

- Replace Eccentric Inserts on Multi-position Anti-flutter Caster Housing (MC-MTKG-WI-0007)

Wheelchair model(s)	Tool(s) and materials required
• All models	• Hexagonal keys (Allen keys): 3 mm, 4 mm and 5 mm • Medium strength threadlocker adhesive (Blue Loctite) • Triangular squaring gauge • Angle gauge (physical device or smartphone application)

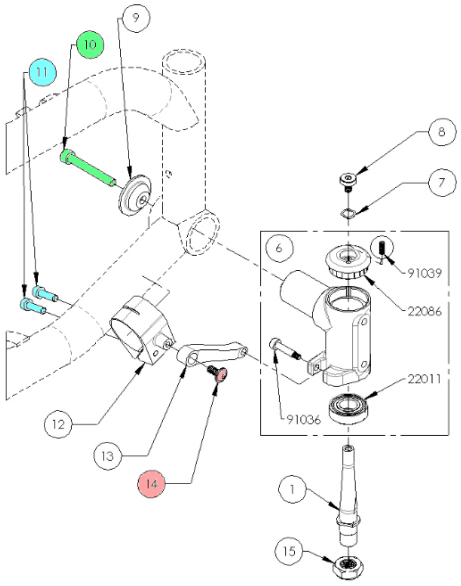
SQUARING THE FRONT CASTER HOUSINGS WITH A CLAMP SYSTEM

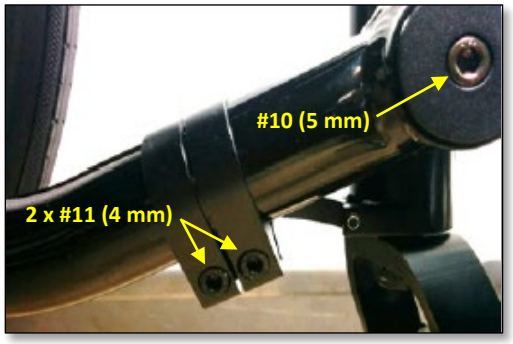
Models: HELIO C2/XC2/A7/Kids C2/K

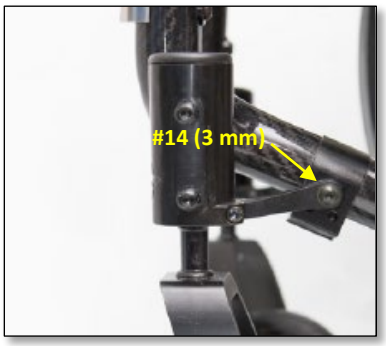
- This system allows for precise adjustment of the front caster housings squareness within their adjustment ranges.

STEP 1:

- Place the chair on a **level**, **straight work surface**.
- On **both sides**, loosen:
  - The **two screws** (#11, **4 mm** hex key) of the **clamp** (#12). The **screw heads** are towards the **inside of the chair**
  - The **screw** (#10, **5mm** hex key) in the **center** of the **caster housing pivot.** The **screw head** is towards the **inside of the chair**
  - **The pivot screw** (#14, **3 mm** hex key) that holds the **connecting rod** (#13) to the **clamp** (#12)
  - The caster housing (#6) should **rotate freely,** and the bushing (#12) should **slide along** the **frame tube**







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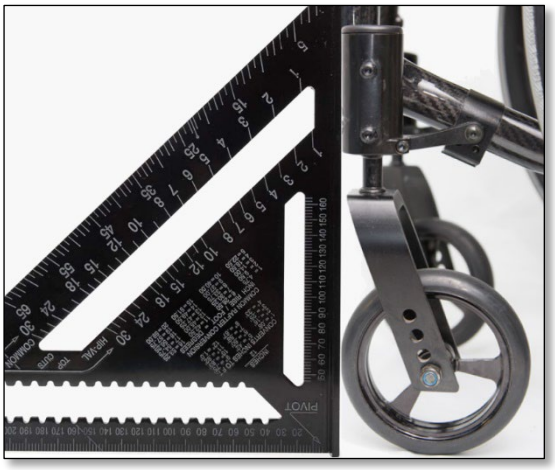
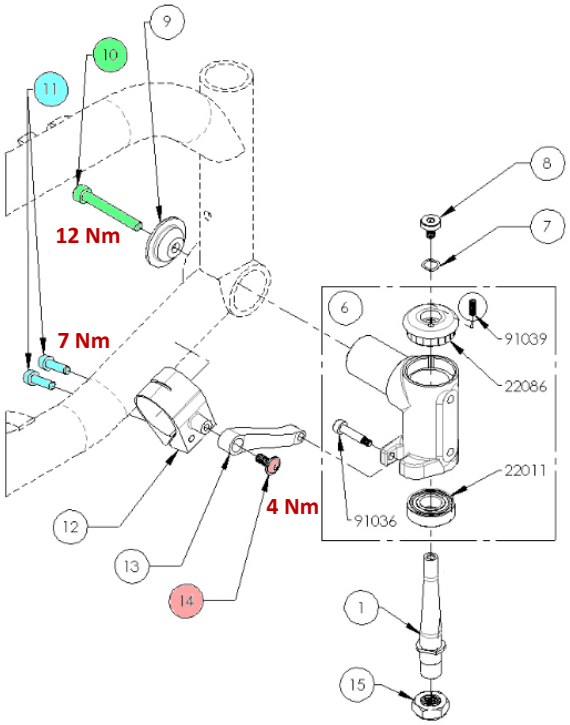
STEP 3:

- Using a **triangular squaring gauge,** position the two front caster housings **perpendicular to the ground**

STEP 4:

- While making sure the **caster housing remains perpendicular to the ground**, **tighten** the **4 screws** (2 x #11, #10 and #14) of **both front caster housing**
  - Apply **medium strength threadlocker adhesive** (blue Loctite) to the end threads of all screws
  - Apply the **standard tightening torque values** according to the size of the hexagonal key:
    - **3 mm** hexagonal key: **4 Nm**
    - **4 mm** hexagonal key: **7 Nm**
    - **5 mm** hexagonal key: **12 Nm**





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SQUARING THE FRONT CASTER HOUSINGS

SQUARING THE FRONT CASTER WITH A BUBBLE LEVEL SYSTEM

Models: VELOCE - APEX A/C/P

- This system allows precise adjustment of the front caster squareness within its adjustment range.

STEP 1:

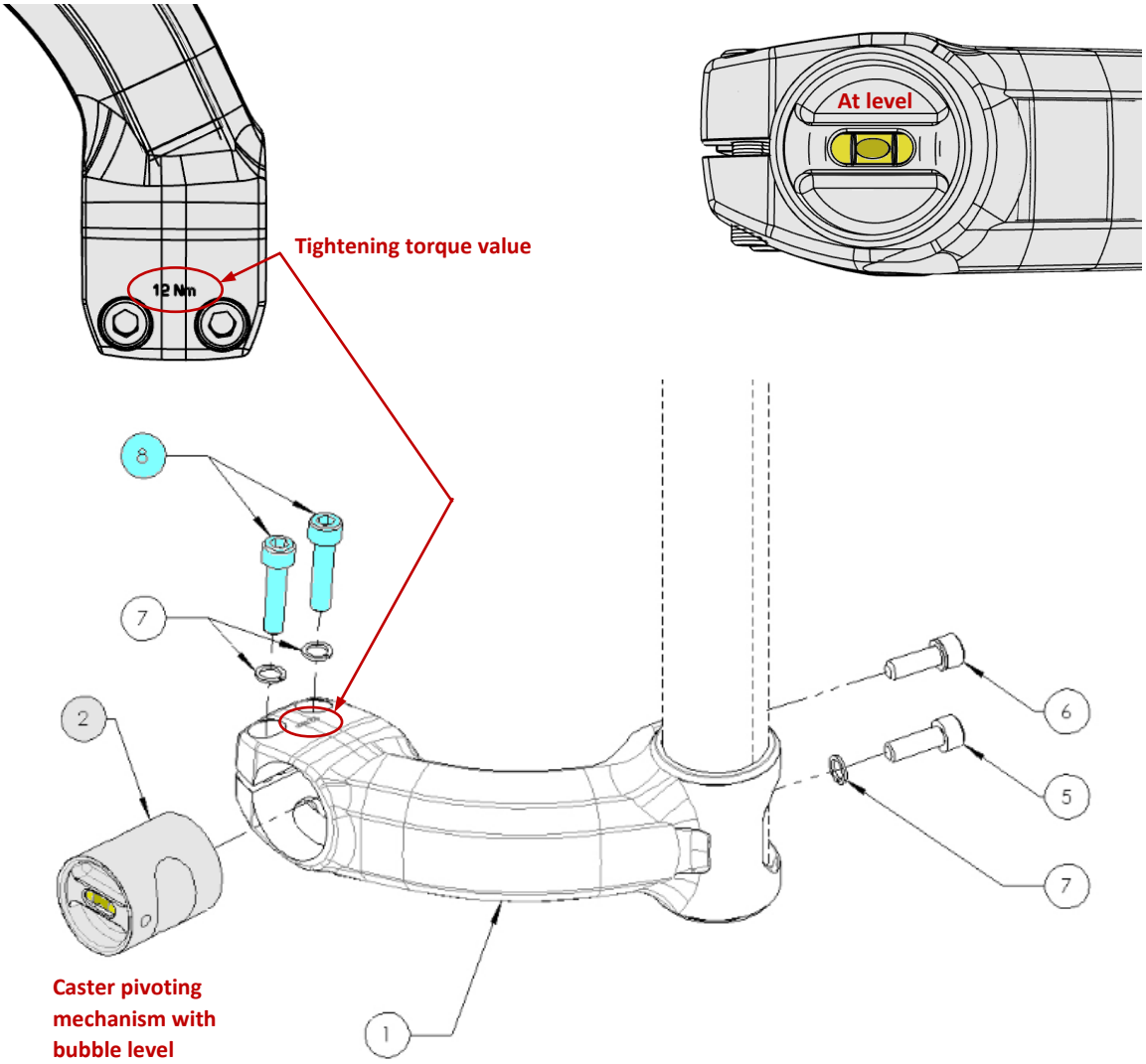
- Place the chair on a **straight and level work surface**
- **Loosen** the **two (2) screws** (#8, **4 mm** hex key) of the **caster mount pivoting mechanism**

STEP 2:

- Use the **built-in bubble level to** square the front caster (#2) with the ground by moving the fork forward or backward.
- The **bubble** should be **in the center of** the **two middle lines** (illustration on the right).

STEP 3:

- **Tighten** the **two screws**.
  - Apply **medium strength threadlocker adhesive** (blue Loctite) to the end threads of all screws
- **Apply** a tightening **torque** of **12 Nm** as shown on the caster mount (illustration on the left).



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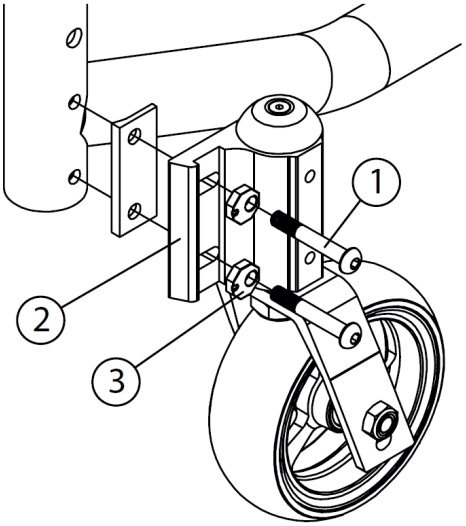
SQUARING THE FRONT CASTER HOUSINGS

SQUARING FRONT CASTER WITH A MULTI-POSITION INSERT SYSTEM

- Models: HELIO A6 - MOVE - CHRONOS - COBALT 1/2 - PLATINUM 1/2
- This system allows an adjustment of the front caster housing on **7 positions**

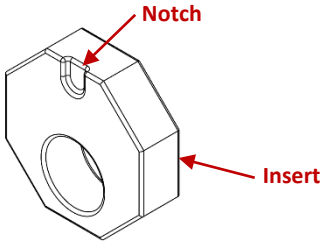


STEP 1:

- Place the chair on a level, straight work surface.
- **Loosen** the **bolts** (#1) on one of the **front caster housing** (#2) until the **inserts** (#3) are free to move

STEP 2:

- Refer to the adjustment angle chart on the next page to select the angle that will best align the caster housing with the floor in relation to the desired seat slope.
- The **notches** on the top and bottom **inserts** (#3) serve as **markers** to place the caster housing (#2) at the desired angle



STEP 3:

- Apply medium strength thread locker (blue Loctite) at the end of the threads of the screw.
- Retighten the bolts (#1) and apply a torque:
  - **7 Nm** for 40mm long* screws
  - **12 Nm** for 35mm long *screws

  * Length is measured **from the point at which the head sits flat with the surface, to the tip of the threads**

STEP 4:

- Repeat the operation for the other caster housing.

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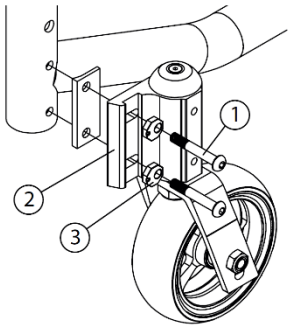
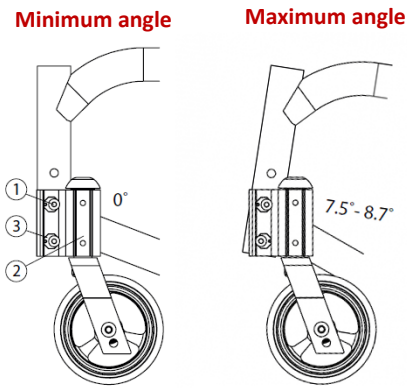
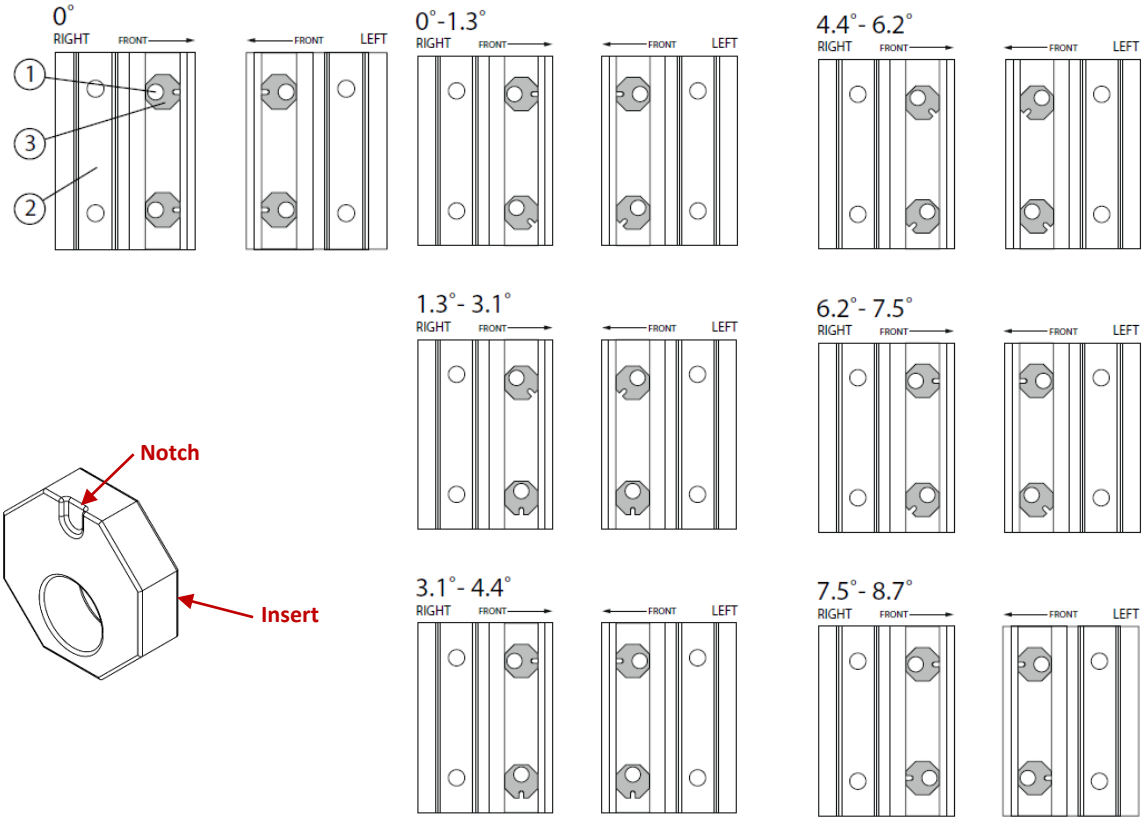




- The **angle ranges shown** are **seat angles** or seat slopes
  - Choose the desired **nearest inserts** configuration according to the seat angle
  - The **notch** is the **mark** to **position** the **insert** correctly.
- To **find out the seat angle**, make sure the **front and rear floor-seat heights are** at the **correct values** and then use **an angle gauge** or a smartphone **app** to **measure the seat angle**.
  - Take the measurement on the frame of the wheelchair (**see next page**).



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