



INSTRUCTION SHEET

SQUARING THE FRONT CASTER HOUSINGS

i 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)

- All models

Tool(s) and materials required

- 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)

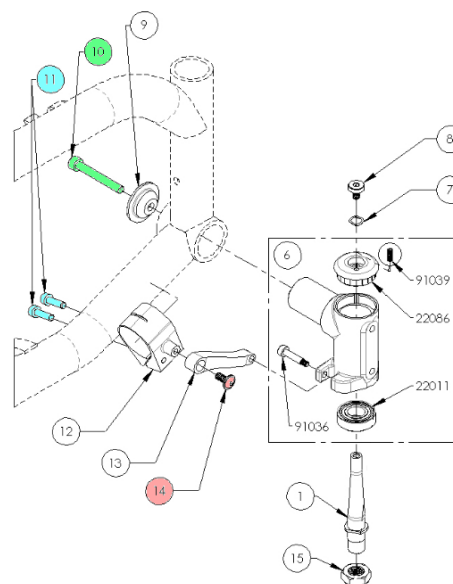
SQUARING THE FRONT CASTER HOUSINGS WITH A CLAMP SYSTEM

Models: HELIO C2/A7/KIDS

- 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 **caster housing** (#6) should **rotate freely**, and the **bushing** (#12) should **slide along** the **frame tube**
 - The **pivot screw** that holds the **connecting rod** should allow does not need to be loosened.





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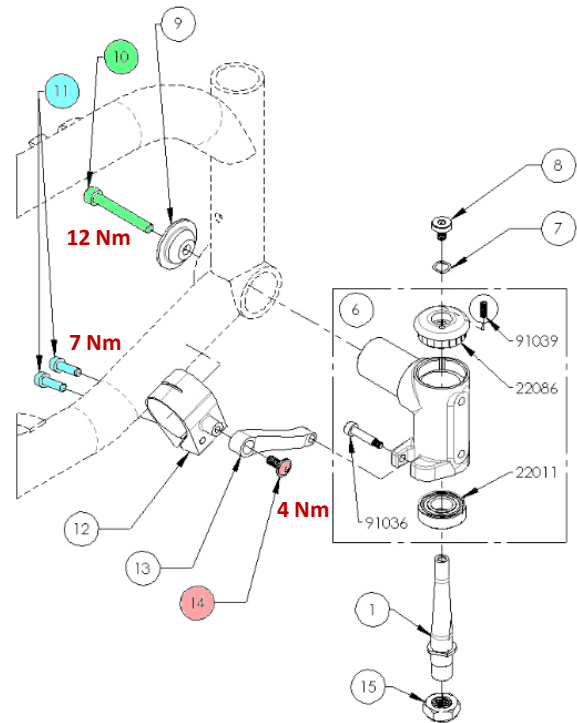
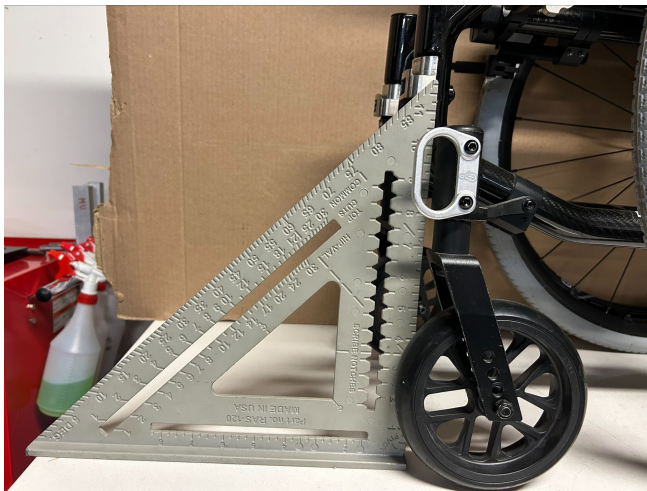
SQUARING THE FRONT CASTER HOUSINGS

STEP 2:

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

STEP 3:

- 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:

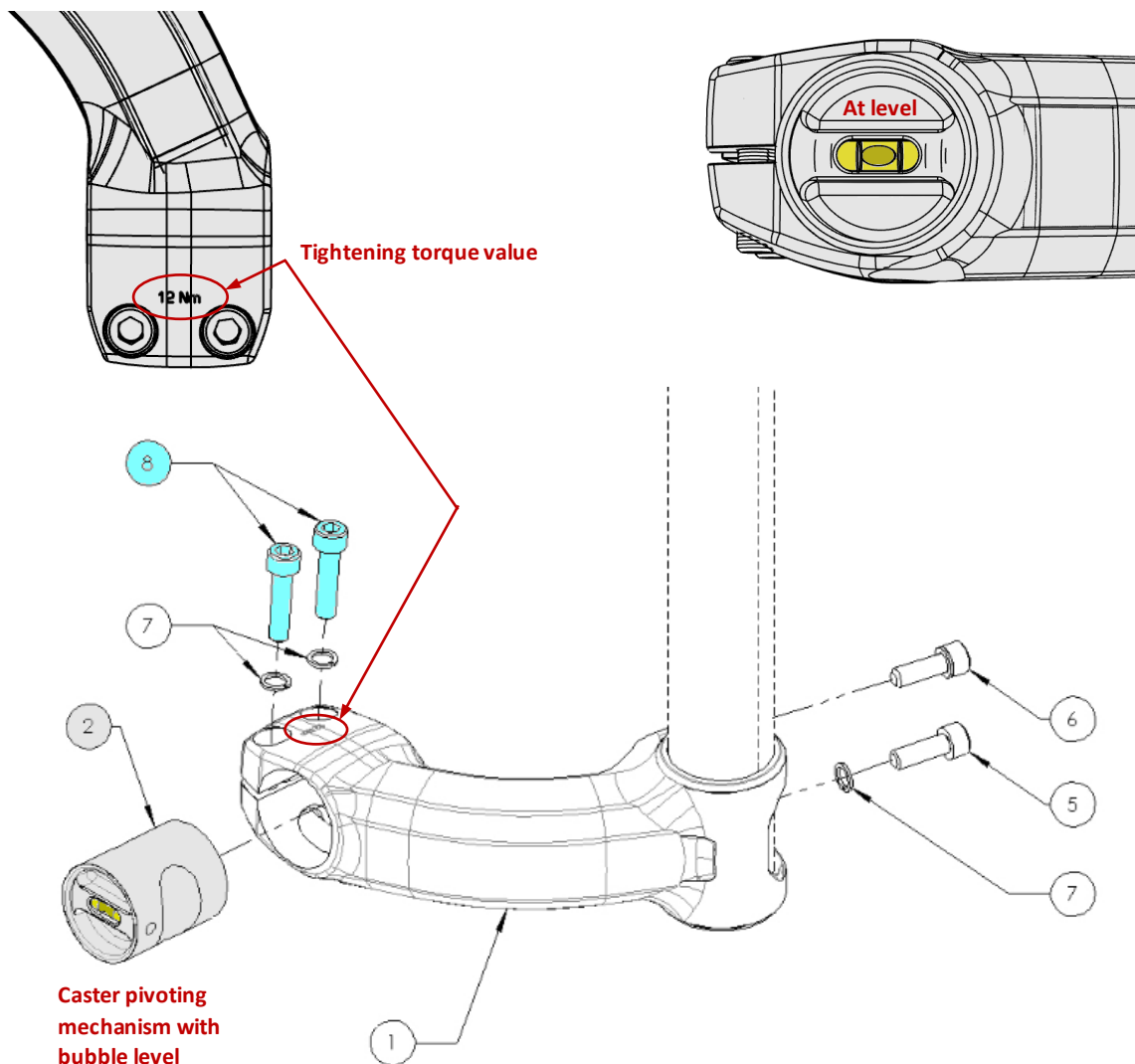
- Place the chair on a **straight and level work surface**
- **Loosen the two (2) screws (#8, 5 mm hex key) of the caster mount pivoting mechanism.**

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

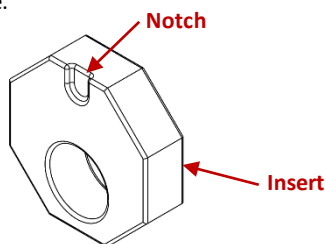
- **Models:** HELIO A6 - MOVE
- This system allows an adjustment of the front caster housing on **7 positions**.

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 **ECCENTRIC WASHERS (#3)** are free to move.
- Place roll of tape on opposite side to suspend the side you're working on.

STEP 2:

- Refer to the **adjustment angle chart** on the **next page** to **select the angle** that will **best align the caster housing** as close to **90 degrees** from the floor in relation to the **desired seat slope**.
- The **notches** on the top and bottom (#3) serve as **markers** to place the caster housing (#2) at the desired angle.

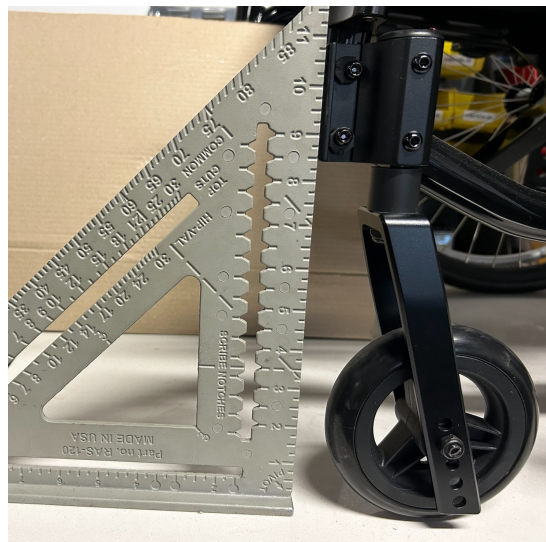


STEP 3:

- Apply medium strength thread locker (blue Loctite) at end of the threads of the screw.
- Retighten the bolts (#1) and apply torque:
 - 7 Nm for 4mm screws
 - 12 Nm for 5mm screws
- Check the angle with a level on the caster housing.

STEP 4:

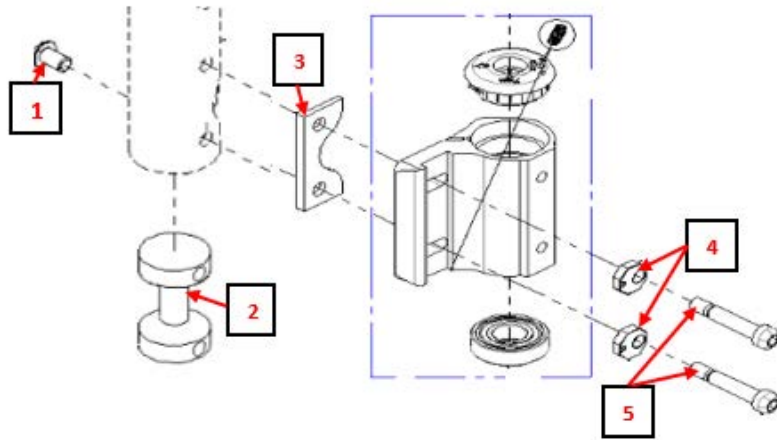
- **Repeat the operation** for the **other caster housing**.





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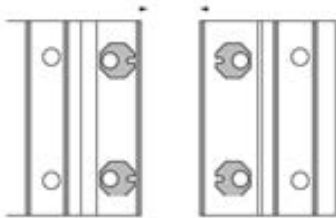
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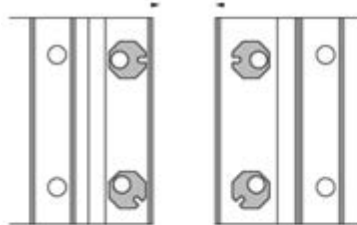
- 1 : Screw #4426
- 2 : Caster housing plug #22081
- 3 : Spacer #22082
- 4 : Insert #22080
- 5 : Screw #4427

- 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 know the **position of the inserts**, measure the **front and the rear floor-seat heights** and the **différence between the two** gives the **position of the inserts**.

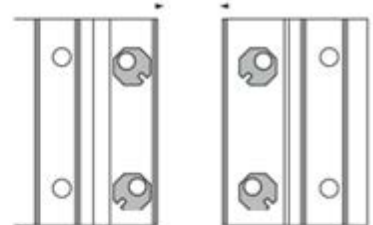
0" to 1/4" Slope



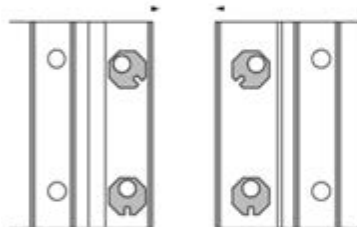
1/2" to 3/4" Slope



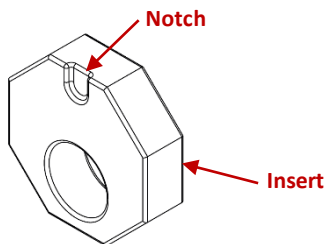
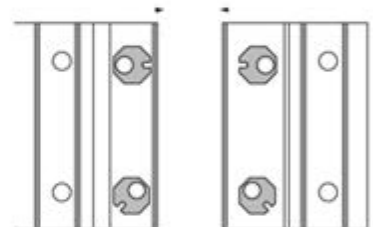
1 1/2" to 1 3/4" Slope



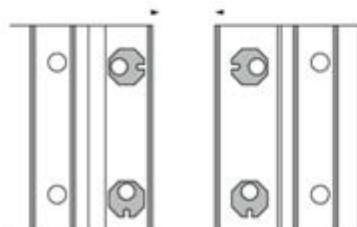
3/4" to 1" Slope



1 3/4" to 2" Slope



1 1/4" to 1 1/2" Slope



2" to 2 1/4" Slope

