



INFORMATION SHEET TORQUE SPECIFICATIONS

i This document provides various information on the **tightening torque values** to be applied to Motion Composites wheelchairs.

! It is **important** to **observe the** recommended tightening **torque values** to ensure the **proper functioning of the chair** and the **safety of the user**.

Wheelchair model(s):

- All models

Tool(s) and materials required:

- Torque wrench

GENERAL INFORMATION

TOOLS TO USE AND NOT TO USE:

- Always use a **torque wrench calibrated** according to the manufacturer's recommendations and use it according to the instructions



- **DO NOT USE** a **screwdriver** or **drill** to apply torque

TOLERANCES:

- The tolerance of a tightening torque for Motions Composites products is $\pm 7\%$.
 - **Do not apply excessive torque beyond the recommended values.** This could **damage** or **weaken components** and present a **safety hazard** to the user.

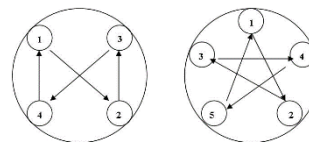
DEFAULT TIGHTENING TORQUES:

- The default torque values, unless otherwise specified, for **screws with hexagon socket heads** are as follows:
 - 3 mm: **4 Nm**
 - 4 mm: **7 Nm**
 - 5 mm: **12 Nm**



MULTIPLE TORQUES:

- When **several screws** are tightened to a given torque on the same element, **tighten them in a cross or star pattern**, i.e., alternate sides at each tightening



DRY TIGHTENING:

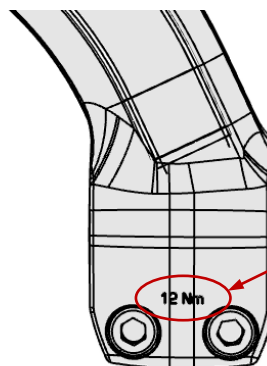
- The values given in the table below are for **dry tightening torque**. **Dry tightening should always be carried out** unless otherwise indicated.

THREAD-LOCKING ADHESIVE:

- Unless otherwise specified, **always** apply **medium strength thread-locking adhesive** (blue Loctite) to the threads

PRINTED TORQUE VALUE:

- When a **torque value is printed, engraved or stamped on a part, this value supersedes** any other value.



Torque printed 4 mm screw head.
Tightening torque is **12 Nm** instead of the default value of 7 Nm

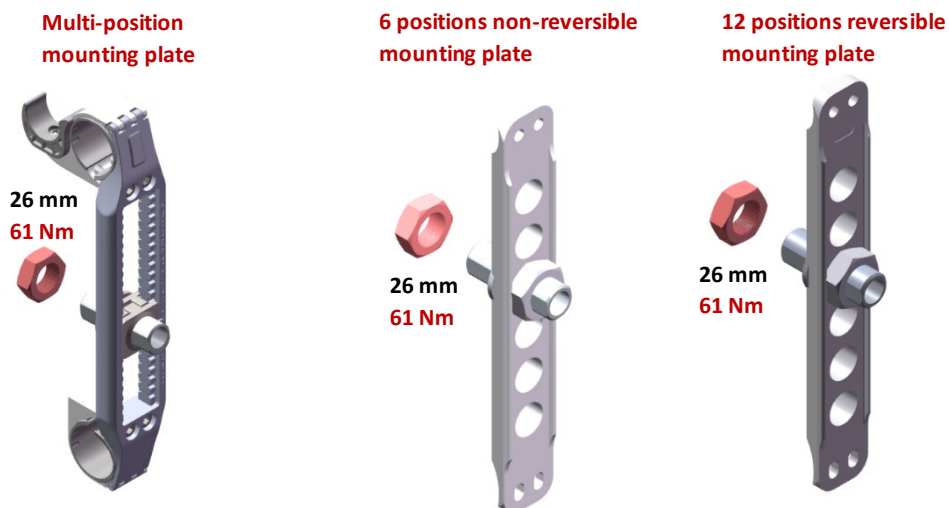


INFORMATION SHEET

TORQUE SPECIFICATIONS

TIGHTENING TORQUES FOR AXLE NUTS (FOLDING WHEELCHAIRS)

- Tightening torque for axle nuts for all types of folding chair mounting plates: **61 Nm**



FRONT WHEEL FORK NUT TIGHTENING TORQUES (FOLDING CHAIRS ONLY)

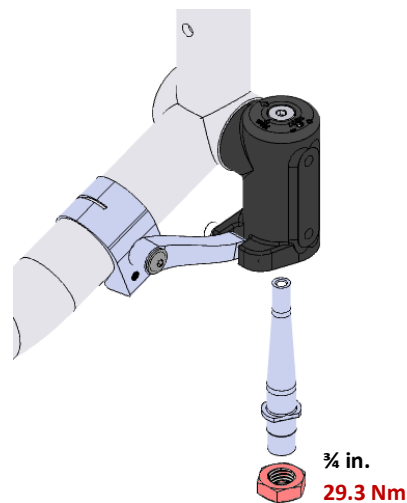
- Tightening torques for the fork nuts for all types of folding chair front frames: **29.3 Nm**

Caster housing with multi-position inserts



Fork + Front wheel

Caster housing with clamp system



Fork + Front wheel

- **Note** that for the APEX range of rigid wheelchairs, the fork nut is used to **adjust the wheel flutter**. There is no **particular** tightening torque.