

INSTRUCTION GUIDE

ADJUSTING SIGNATURE PIVOTING CANTILEVER ARMRESTS



INTRODUCTION

This guide provides step-by-step instructions for adjusting the PIVOTING CANTILEVER ARMRESTS on an Alltrack power wheelchair equipped with a Signature FIXED BACKREST or power or manual RECLINING BACKREST. It provides comprehensive instructions for adjusting height, vertical angle, and horizontal angle adjustments for fixed back and reclining configurations.

BEFORE STARTING

Important safety precautions and tech tips for easier adjustments

- Make sure the seat is securely supported during the adjustment process.
- Check that all tools are in good working condition before use.
- Keep all fasteners organized to prevent loss and ensure easy reassembly.

Note all fasteners are *metric*, and both cap-head and button-head bolts are used and referenced in this document.

- All references made to the left- or right-hand side in this document are made from the perspective of someone sitting in the power wheelchair unless otherwise noted.
- It is recommended that you adjust one side at a time, starting with the left-hand side.

Tools and equipment required

- 3 mm Allen key
- 5 mm Allen key
- 8 mm open-end wrench
- 10 mm open-end wrench
- 2.5 mm Allen key (for locking bolt)

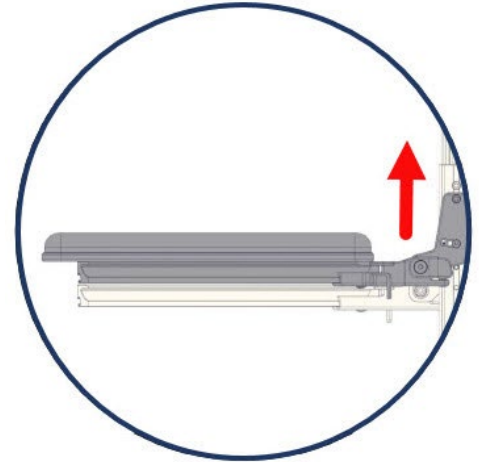
AVAILABLE ADJUSTMENTS

In this guide:

Section 1: Height Adjustment for Reclining Backrest

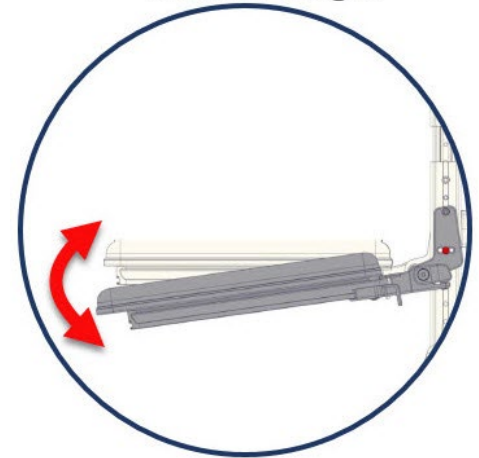
Section 2: Height Adjustment for Fixed Backset

Height



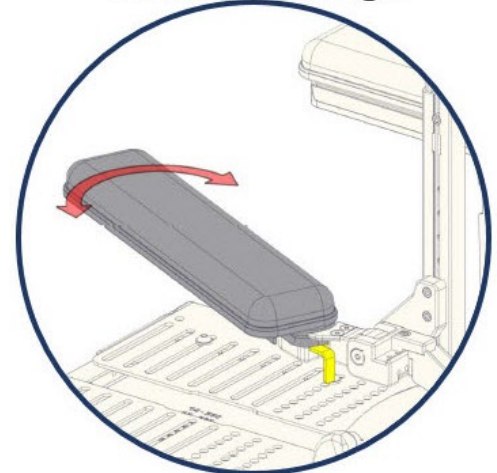
Section 3: Vertical Angle Adjustment

Vertical Angle



Section 4: Horizontal Angle Adjustment

Horizontal Angle



ADJUSTING SIGNATURE PIVOTING CANTILEVER ARMRESTS (cont'd)

SECTION 1: HEIGHT ADJUSTMENT – RECLINING BACKRESTS

Overview

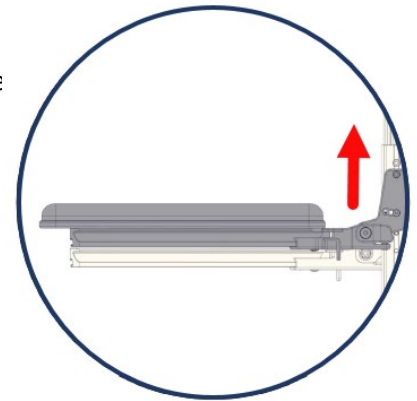
- Armrest height is measured from the seat pan to the top of the armrest (260 mm) to 16 ¼" (415 mm) in 1" increments

Tools required

- 5 mm Allen key
- 10 mm open-end wrench

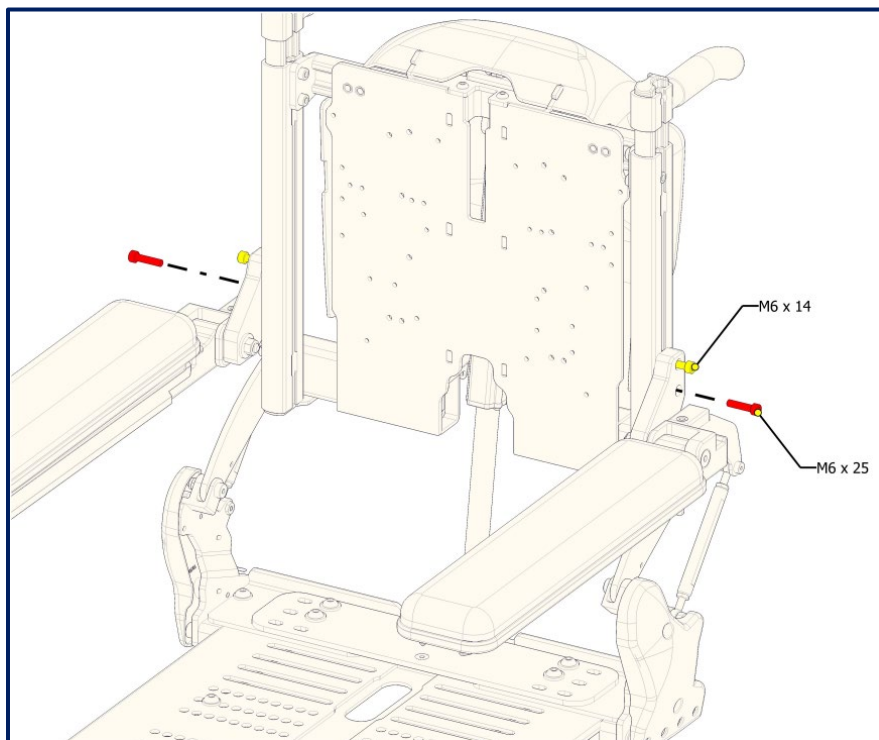
Components

- M6 x 14 mm threaded bolt (yellow, to be loosened)
- M6 x 25 mm threaded bolt (red, to be removed)
- M6 x 3.2 adjustment nuts (on turnbuckle, yellow to be loosened)



1. Loosen and remove hardware

- 1.1. Locate the M6 x 14 mm bolts on either side (yellow).
- 1.2. Using a 5 mm Allen key, loosen the bolts but do not completely remove.
- 1.3. Using a 5 mm Allen key, remove the M6 x 25 mm (red) and set aside.

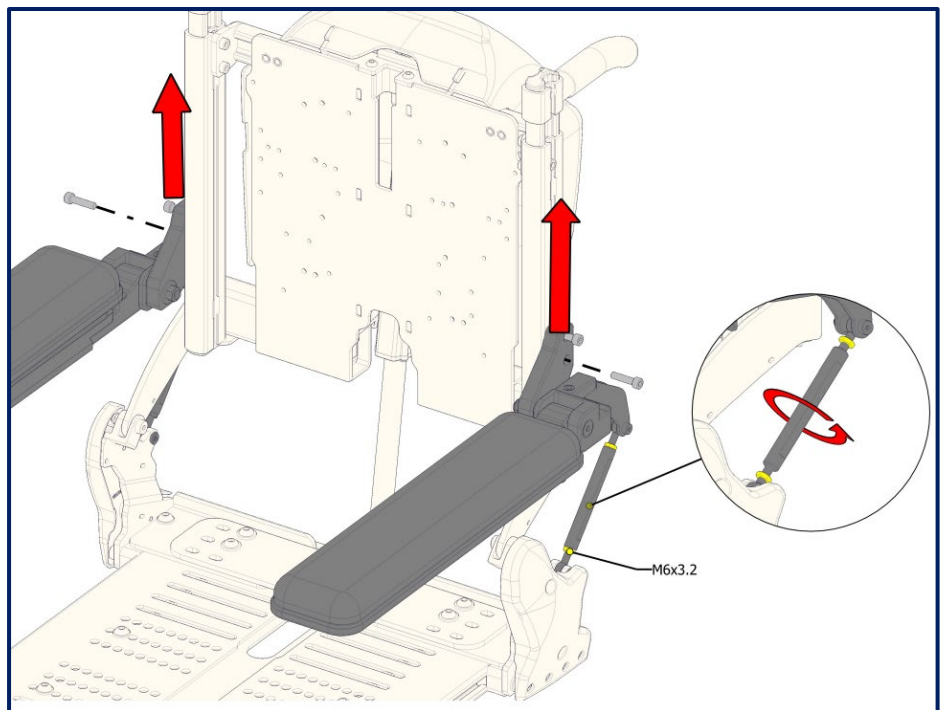
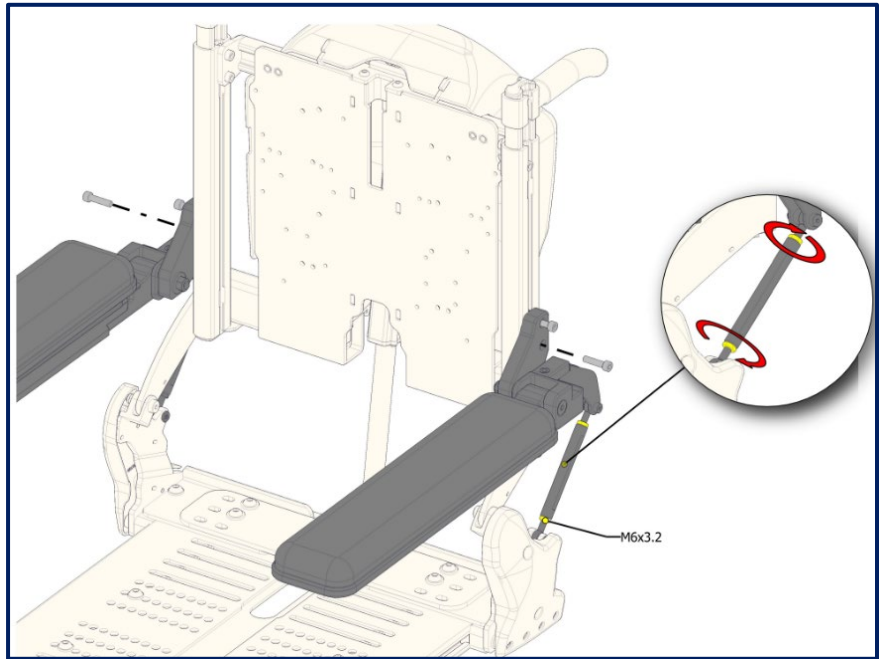


ADJUSTING SIGNATURE PIVOTING CANTILEVER ARMRESTS (cont'd)

2. Height adjustment

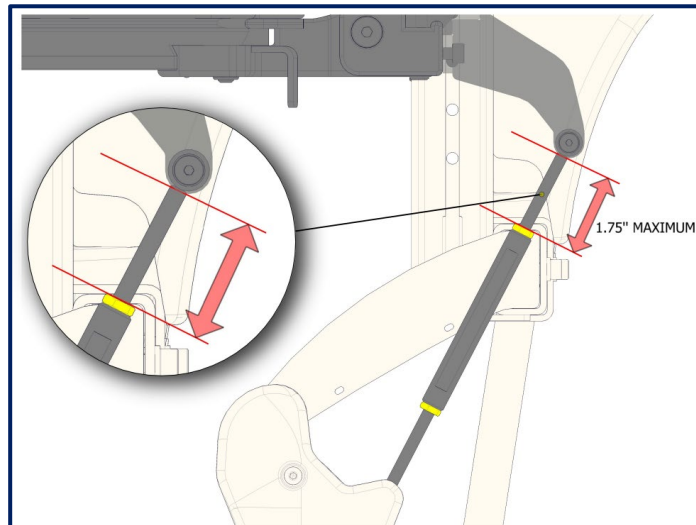
IMPORTANT: While lifting the armrest, turn the two nuts on the turnbuckle in the **OPPOSITE** direction to adjust the height.

- 2.1 Use 10 mm open-end wrench to loosen the M6 x 3.2 nuts to free the rotation of the turnbuckle.
- 2.2 Once the turnbuckle nuts have been loosened the turnbuckle can be adjusted by spinning in either direction by hand. If it is difficult to turn by hand, gently lift on the front of the armrest – be sure to follow the disclaimer just below to ensure safety while adjusting.



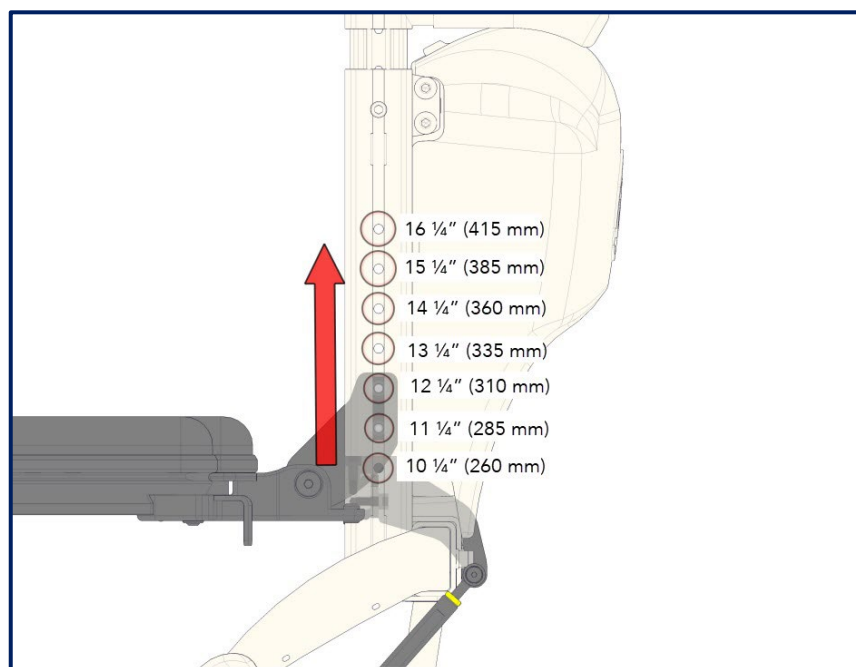
ADJUSTING SIGNATURE PIVOTING CANTILEVER ARMRESTS (cont'd)

- 2.3 When adjusting the turnbuckle, ensure that the maximum permitted length of each side of the turnbuckle is respected.



- 2.4 There are two height ranges available when ordering a powerchair. The following are the height positions available per range:

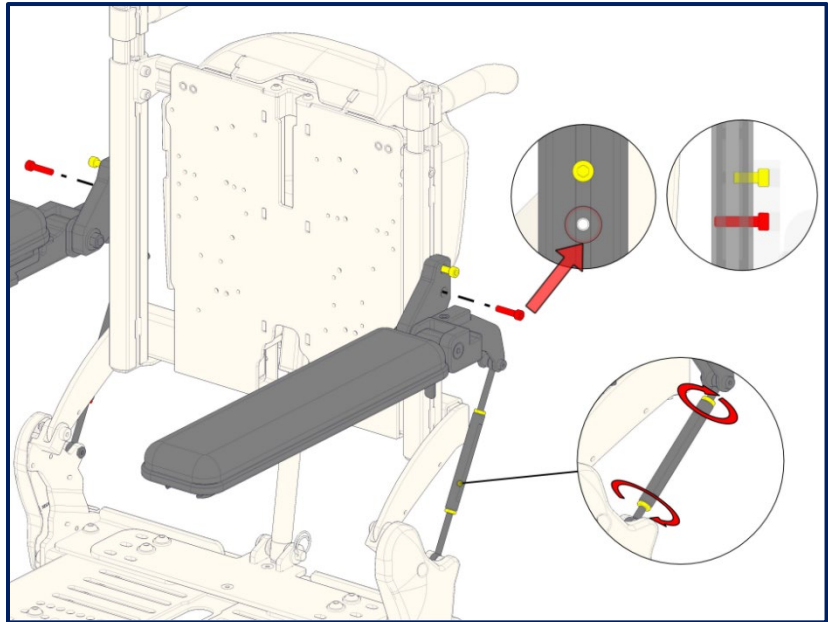
For the low range	For the high range
10 ¼" (260 mm)	13 ¼" (335 mm)
11 ¼" (285 mm)	14 ¼" (360 mm)
12 ¼" (310 mm)	15 ¼" (385 mm)
13 ¼" (335 mm)	16 ¼" (415 mm)



ADJUSTING SIGNATURE PIVOTING CANTILEVER ARMRESTS (cont'd)

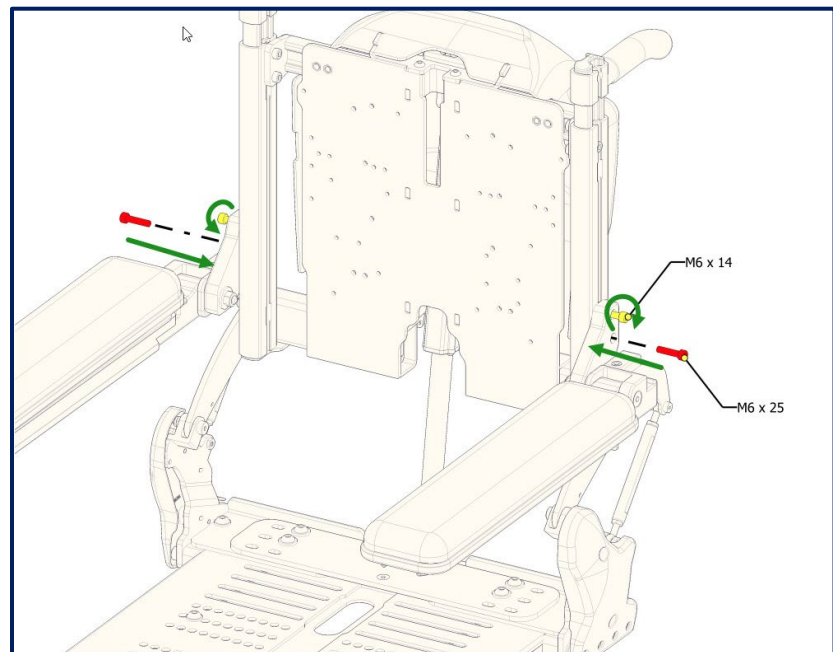
3. Setting final height

- 3.1 Ensure the position of the lower bolt coincides with one of the preset holes in the extrusion.
- 3.2 The lower bolt **MUST** align with and be fully threaded into a hole in the extrusion for safe and proper function.



4. Final tightening

- 4.1 Tighten the M6 x 14 mm bolt (yellow) that had been loosened and the M6 x 25 mm bolt (red) that had been removed.
- 4.2 Tighten both turnbuckle nuts (yellow) after height adjustment is complete.
- 4.3 Verify armrest is secure and functions properly.



ADJUSTING SIGNATURE PIVOTING CANTILEVER ARMRESTS (cont'd)

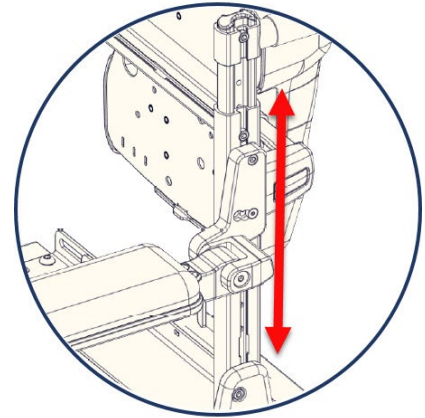
SECTION 2: HEIGHT ADJUSTMENT - FIXED BACKREST

Tools required

- 3 mm Allen key
- 5 mm Allen key
- 8 mm open-end wrench

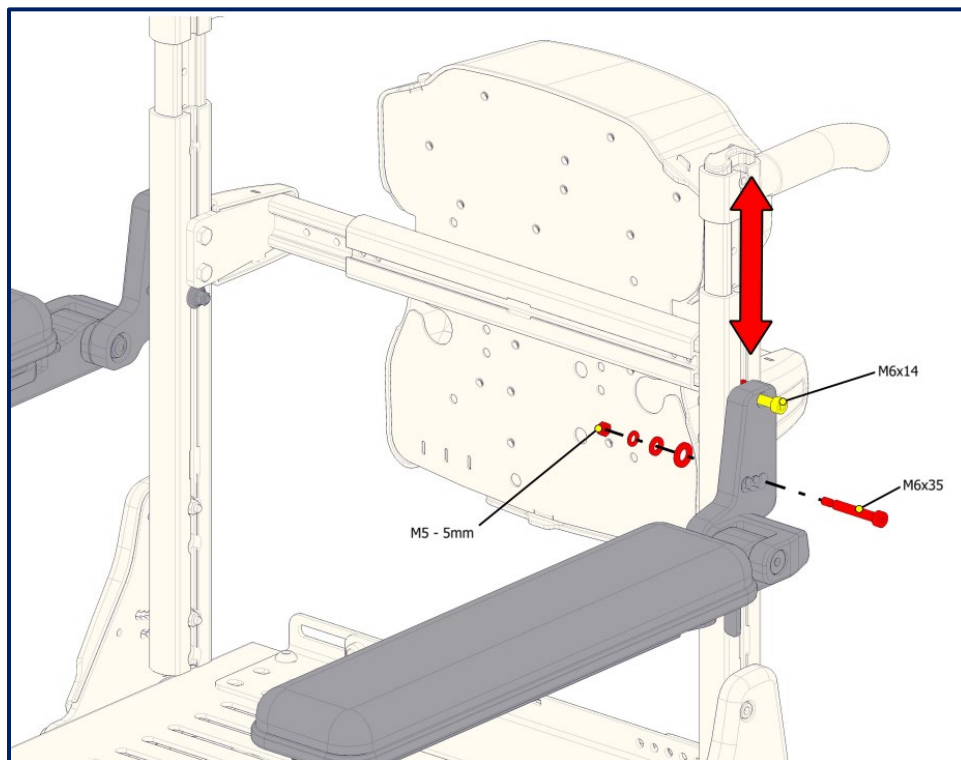
Components

- M6 x 14 mm bolts
- M6 x 35 mm bolts
- M5 x 5 mm nut and washers



1. Loosen and remove hardware

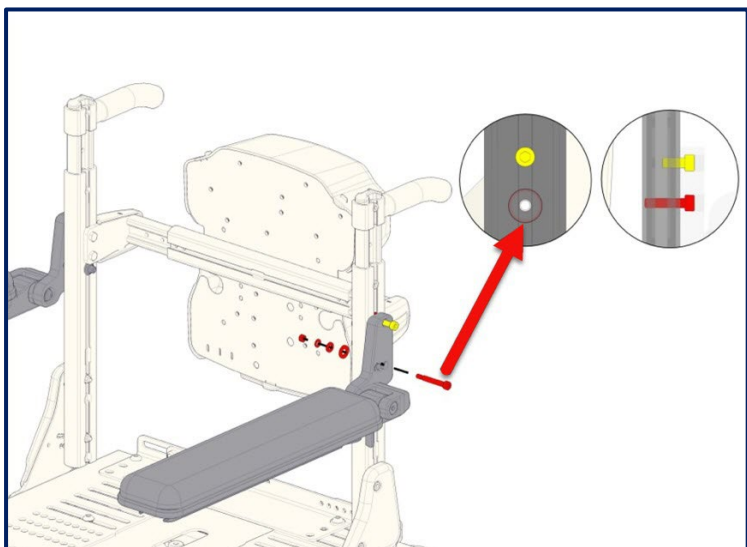
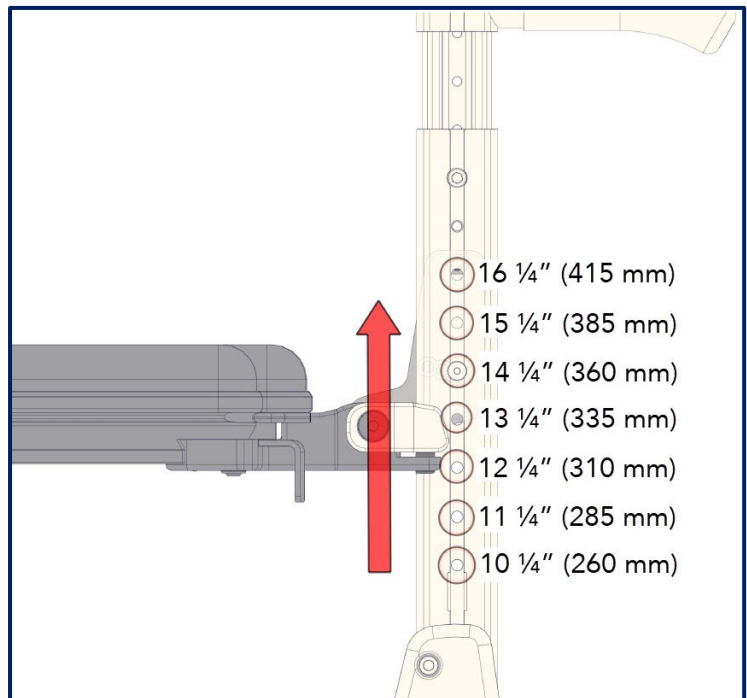
- 1.1 Using a 3 mm Allen key, loosen M6 x 14 mm bolt at top of bracket (yellow) but do not completely remove.
- 1.2 Using an 8 mm open-end wrench and 5 mm Allen key remove the M6 x 35 mm bolt (red) and make sure to keep washers and nut for reassembly.



ADJUSTING SIGNATURE PIVOTING CANTILEVER ARMRESTS (cont'd)

2. Setting final height and reassembly

- 2.1 Height positions are the same as the cantilever armrest for the reclining back: 10 ¼" (260 mm) to 16 ¼" (415 mm) in 1" (25 mm) increments.
- 2.2 Position the lower screw to coincide with desired hole in extrusion by sliding the armrest up or down within the extrusion.
- 2.3 Push the M6 x 35 mm bolt (red) through bracket and extrusion, note multiple holes for armrest angle (Section 3 below) and return to original angle.
- 2.4 Reinstall washers and M5 x 5 mm nut (red) and tighten.
- 2.5 Tighten the M6 x 14 mm bolt (yellow) that had been loosened
- 2.6 Verify armrest height and ensure all hardware is tightened securely



SECTION 3. VERTICAL ANGLE ADJUSTMENT

1. Adjusting Vertical Angle for Reclining Backrest Pivoting Cantilever Armrest

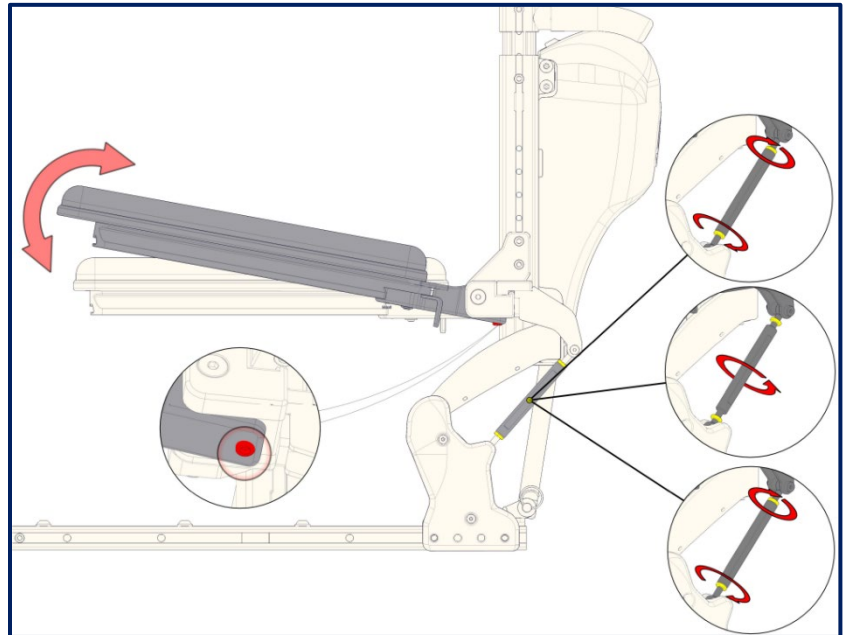
Tool required: 10 mm wrench

CAUTION: Do not adjust the specified bolt circled in red in the image below.

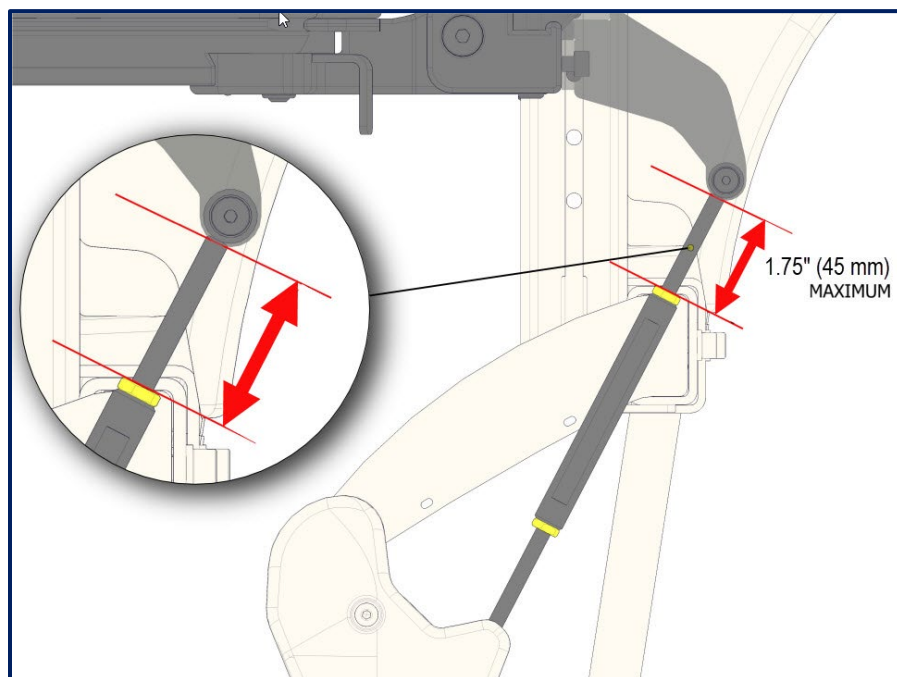
- 1.1 Use a 10 mm open-end wrench to loosen nuts at either end of the turnbuckle (yellow).
- 1.2 Rotate turnbuckle by hand to obtain desired armrest angle, if it is difficult to turn by hand, gently lift on the front of the armrest

NOTE: Setting this angle will alter the angle of the armrest during the recline cycle

- 1.3 Once desired angle has been reached, re-tighten both turnbuckle nuts (yellow)



NOTE: To ensure security during adjustment and wheelchair use, respect the maximum lengths of the turnbuckle – see image below

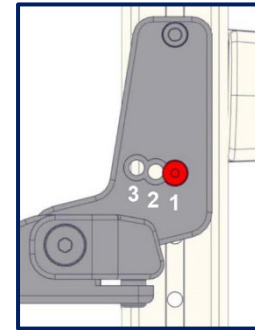
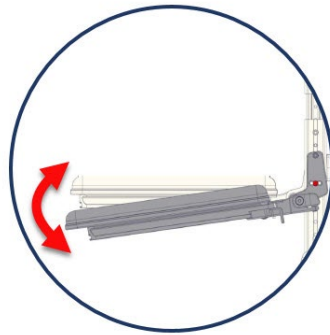


ADJUSTING SIGNATURE PIVOTING CANTILEVER ARMRESTS (cont'd)
2. Adjusting Vertical Angle for Fixed Backrest Cantilever Armrest
Tools required

- 3 mm Allen key
- 8 mm open-end wrench

Available positions

- **Position 1:** 0° (neutral)
- **Position 2:** 8° downward
- **Position 3:** 16° downward



2.1 Using an 8 mm open-end wrench and 5 mm Allen key remove the M6 x 35 mm bolt (red) and take care to keep washers and nut.

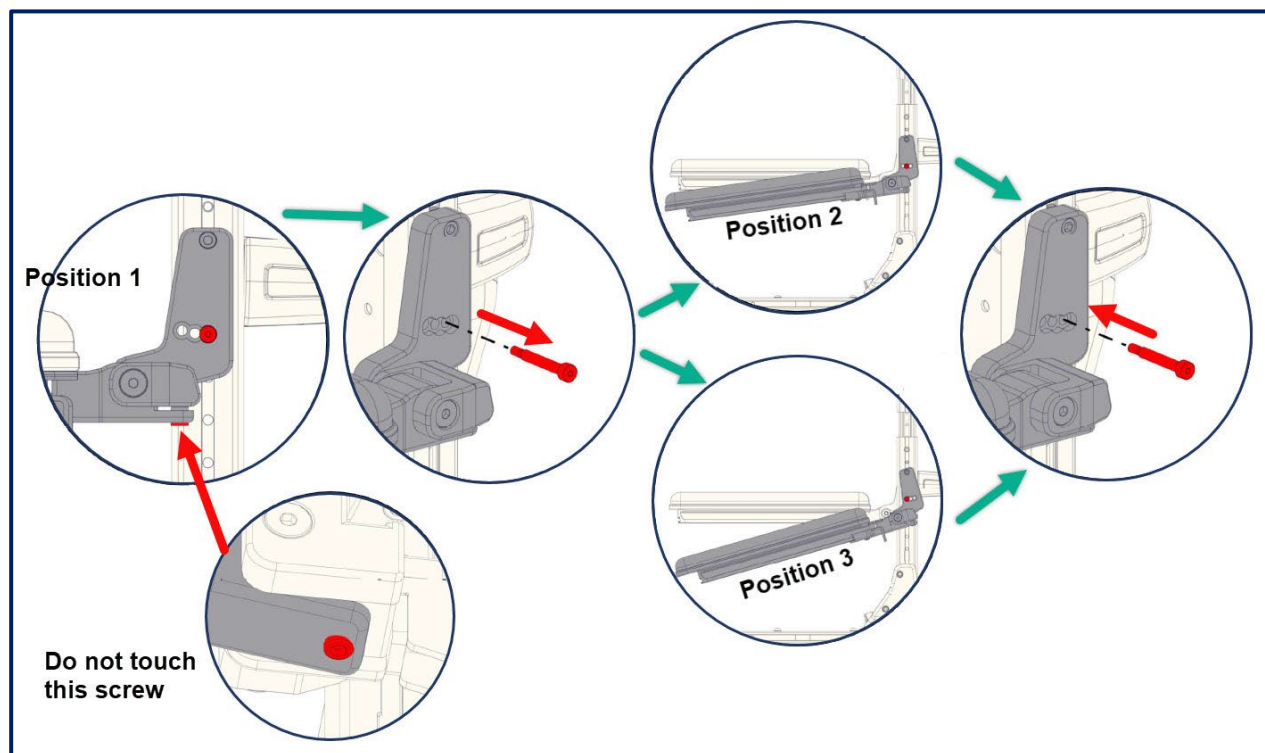
2.2 Position armrest to desired angle (using positions identified above) and insert M6 x 35 mm bolt (red) in to corresponding hole.

NOTE: Armrest angle settings are designed to provide flat surface if back angle is *opened*, there are no upward angle settings. If armrest does not pivot easily, use 5 mm Allen key and loosen top bolt but do not remove.

CAUTION: Do not adjust the specified screw shown in image below.

2.3 Replace washers and M5 x 5 mm nut.

2.4 Verify armrest angle and ensure all hardware is tightened securely.



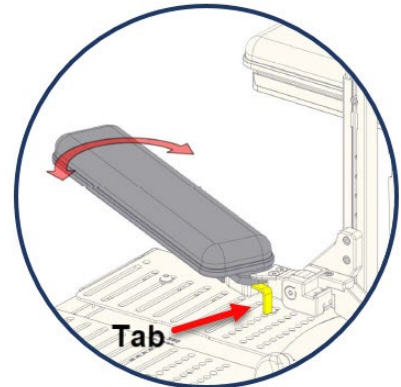
SECTION 4. HORIZONTAL ANGLE ADJUSTMENT

A key *standard* feature of the Pivoting Cantilever Armrest is its ability to rotate in a 30-degree range (in 5-degree increments) and lock in any desired position for optimal upper-extremity positioning and function. This toolless feature is available on systems with a fixed backrest or power recline.

Tool required: 2.5 mm hexagonal Allen key (for locking screw)

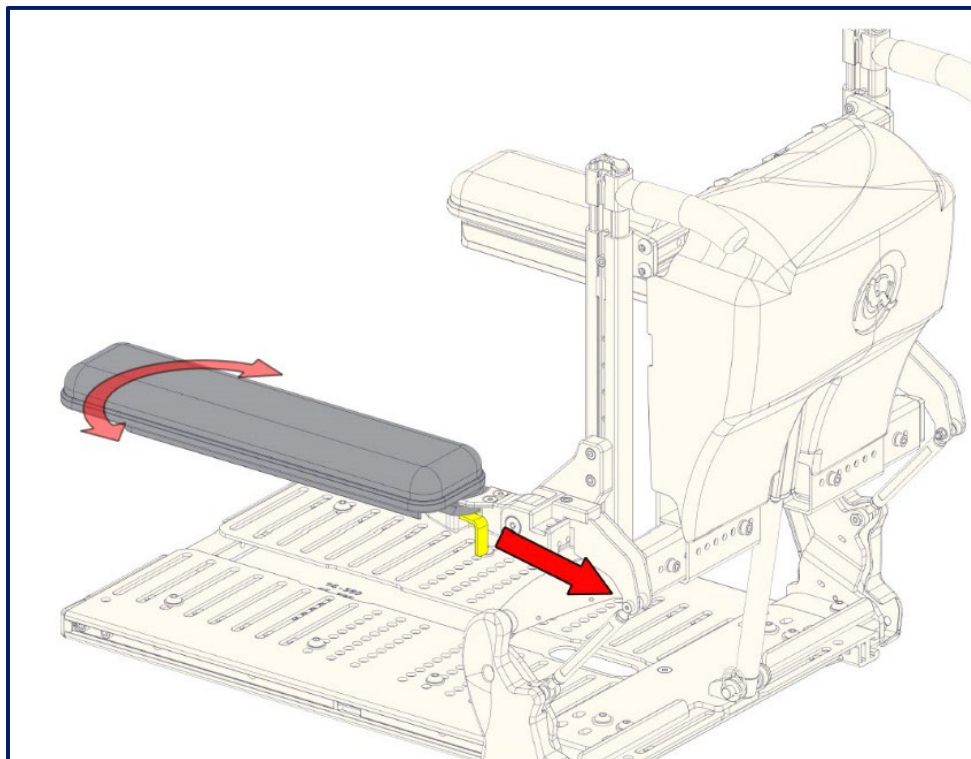
Components

- Rotation lock mechanism
- M3 x 10 locking screw
- Pull tab (yellow) for rotation



1. Angle adjustment to desired position

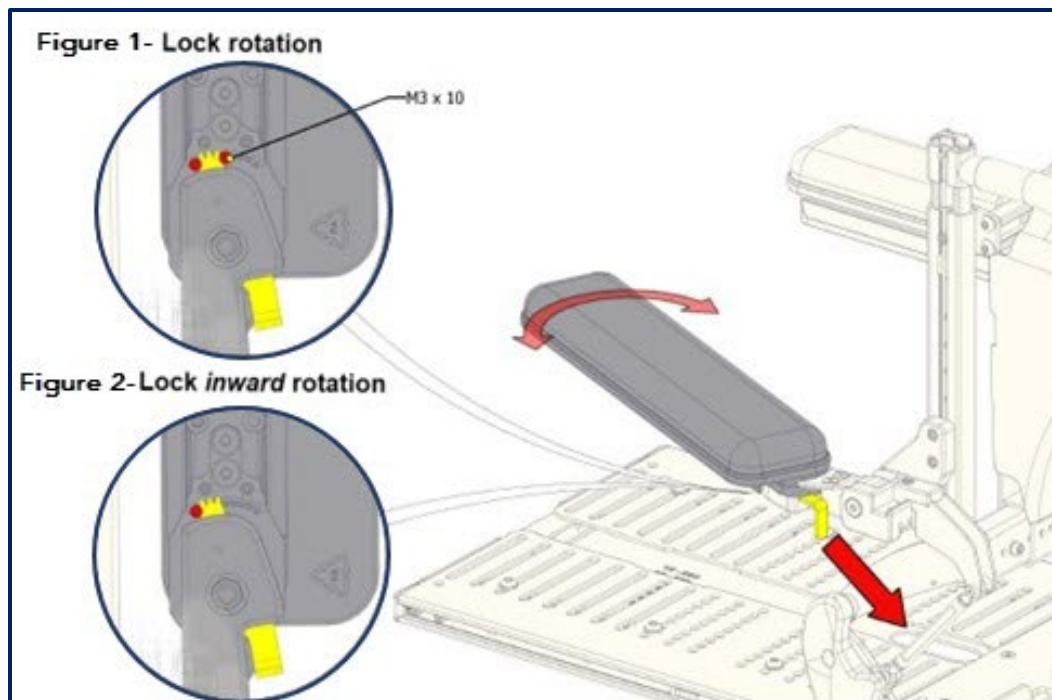
- 1.1 **Unlock Rotation:** Pull the yellow tab at the rear of the armrest to disengage the locking mechanism.
- 1.2 **Angle Adjustment:** While holding the pull tab, rotate the armrest to desired horizontal angle. Ensure smooth rotation without forcing.



ADJUSTING SIGNATURE PIVOTING CANTILEVER ARMRESTS (cont'd)

2. Lock Position

- 2.1 Release pull tab to engage the rotation lock at the desired position.
- 2.2 The internal/external rotation of the armrest can be locked in position or limited depending on user needs. Follow these instructions:
 - 2.2.1 To completely lock the position so the armrest cannot be pivoted inward or outward by moving the two M3 x 10 mm memory bolts seated above the locking mechanism to either side of the set position, see Figure 1 below. In this position, **if the armrest is rotated inward, it can no longer be flipped back**
 - 2.2.2 To limit the inward rotation of the armrest by moving one of the M3 x 10 mm memory bolts to the inside of the set position, limiting further inward rotation, see Figure 2 below. In this setting the armrest is still able to rotate outward and flip back but will not be able to rotate more inward than set.
- 2.3 The rotation of the armrest can also be limited within a range by using the two memory bolts which will allow rotation only between them.
- 2.4 Verify that the armrest is secure in the selected position.



QUALITY CONTROL & VERIFICATION

Final inspection checklist

- All height positions align with extrusion holes and bolts are fully tightened.
- Vertical angles are within 0°, 8°, or 16° positions.
- Horizontal rotation functions smoothly.
- All bolts are properly tightened.
- There is no extra hardware.
- No components are loose or damaged.
- Armrest supports the user safely.
- Verify power recline cycles completely (if equipped).

TROUBLESHOOTING

Issue	Solution
Armrest won't stay in position	Check that lower screw aligns with extrusion hole and bolt is present.
Rotation is stiff or binding	Verify that the pull tab mechanism is not damaged and lubricate if needed.
Height adjustment doesn't hold	Ensure both nuts are properly tightened, and threads are not stripped.

MAINTENANCE NOTES

- **Periodic Check:** Verify bolt tightness periodically.
- **Inspection:** Check for wear or damage during routine maintenance.
- **Replacement:** Use only approved Amylior replacement hardware.
- **Documentation:** Record any adjustments or maintenance performed.