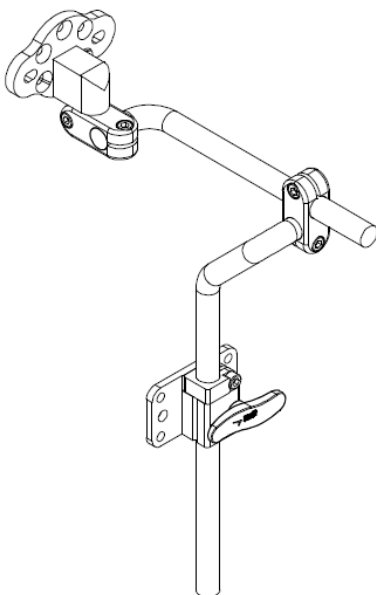




**Stealth Products**

Headrest Hardware

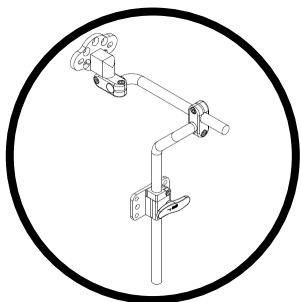
**Installation Manual**



**HMO500**

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**Stealth's Multi-Axis Headrest Hardware**



**INSTALLATION INSTRUCTIONS FOR  
Stealth Products HMO500 Hardware**

**Compatible with:** All Stealth Products Headrests

## Stealth Commitment

## 1.1

Stealth Products strives for 100% customer satisfaction. Your complete satisfaction is important. Please contact us with feedback or suggested changes that will help improve the quality and usability of our hardware. You may reach us at:



Stealth Products, LLC

104 John Kelly Drive, Burnet, TX 78611

Phone: (512) 715-9995

Toll Free: 1(800) 965-9229

Fax: (512) 715-9954

Toll Free: 1(800) 806-1225

info@stealthproducts.com

www.stealthproducts.com



MDSS GmbH

Schiffgraben 41

30175 Hannover, Germany



Installation Date: \_\_\_\_\_

Dealer: \_\_\_\_\_

Dealer Stamp:

Serial Number:

## Warning Labels

### 2.1

Warnings are included for the safety of the user, client, operator and property. Please read and understand what the signal words **SAFETY, NOTICE, CAUTION, WARNING** and **DANGER** mean, how they could affect the user, those around the user, and property.

<b>⚠ DANGER</b>	Identifies an <b>imminent</b> situation which (if not avoided) will result in <b>severe injury, death, and property damage.</b>
<b>⚠ WARNING</b>	Identifies a <b>potential</b> situation which (if not avoided) will result in <b>severe injury, death, and property damage.</b>
<b>⚠ CAUTION</b>	Identifies a <b>potential</b> situation which (if not avoided) will result in <b>minor to moderate injury, and property damage.</b>
<b>NOTICE</b>	Identifies important information not related to injury, but possible <b>property damage.</b>
<b>SAFETY</b>	Indicates steps or instructions for safe practices, reminders of safe procedures, or important safety equipment that may be necessary.

## Limited Liability

### 2.2

Stealth Products, LLC accepts no liability for personal injury or damage to property that may arise from the failure of the user or other persons to follow the recommendations, warnings, and instructions in this manual.

## Testing

### 2.3

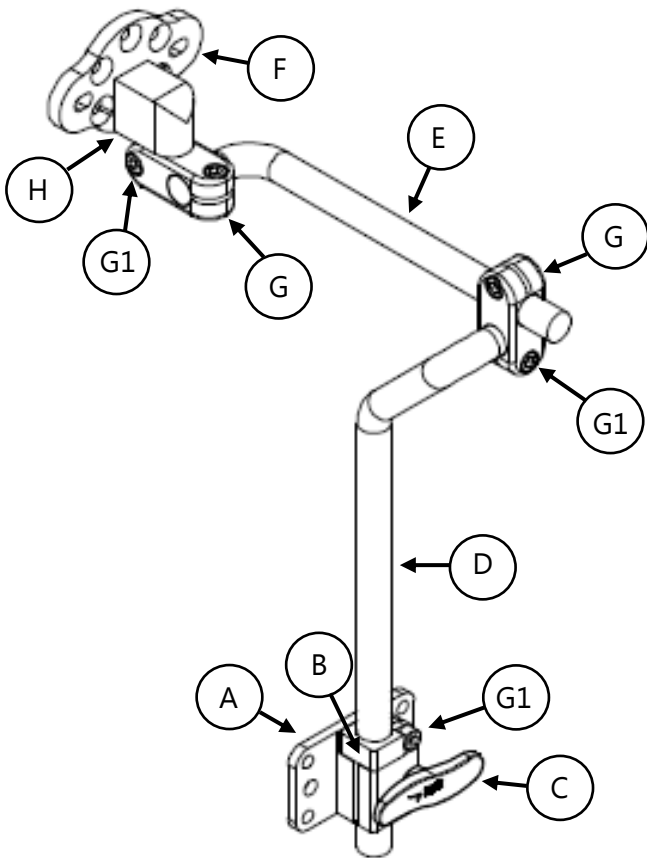
Initial setup and driving should be done in an open area free of obstacles until the user is fully capable of driving safely.

The HMO500 Headrest Hardware should be tested by the care givers and end user and adjusted specifically to their needs.

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# Mounting Hardware Parts

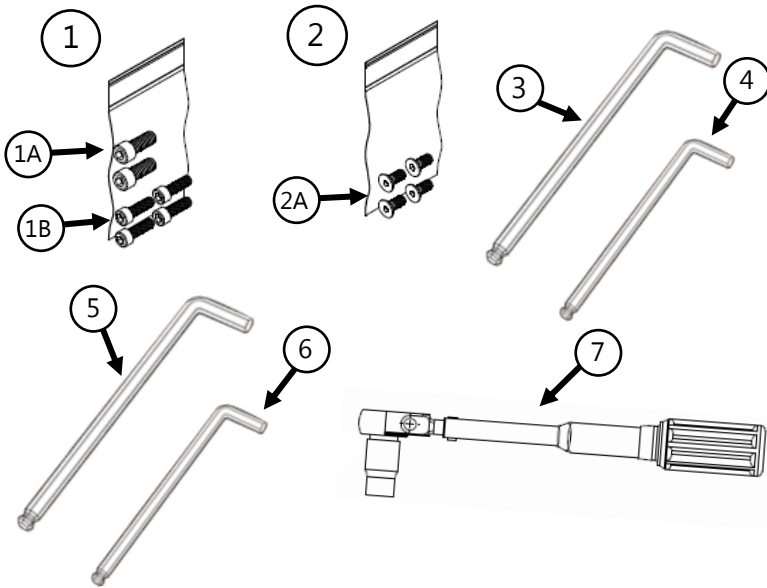
## 4.1



	Description		
A	Seat Back Mount		
B	Stop Collar		
C	Handle		
D	Vertical Bar		
E	Horizontal Bar		
F	Headrest Universal Adapter Plate		
G	Bar Clamp	G1	M5 x .8 x 12mm SHS (5)
H	Headrest Adapter Mount		

## Mounting Hardware Packages and Tools

### 4.2



Item	Description		
1	Hardware Package	1A	1/4-20 x 5/8 SHS (2)
		1B	10-32 x 5/8 SHS (4)
2	Hardware Package	2A	M5 x .8 x 12mm FHS (4)

Tools	
3	3mm Allen Wrench/T-Handle*
4	4mm Allen Wrench/T-Handle*
5	3/16 Allen Wrench/T-Handle*
6	5/32"mm Allen Wrench/T-Handle*
7	Torque Wrench*

## Torque Specifications

### 4.3

Item	Torque Requirement
1A	45 in-lbs
1B	45 in-lbs
2A	40 in-lbs
G1	70 in-lbs

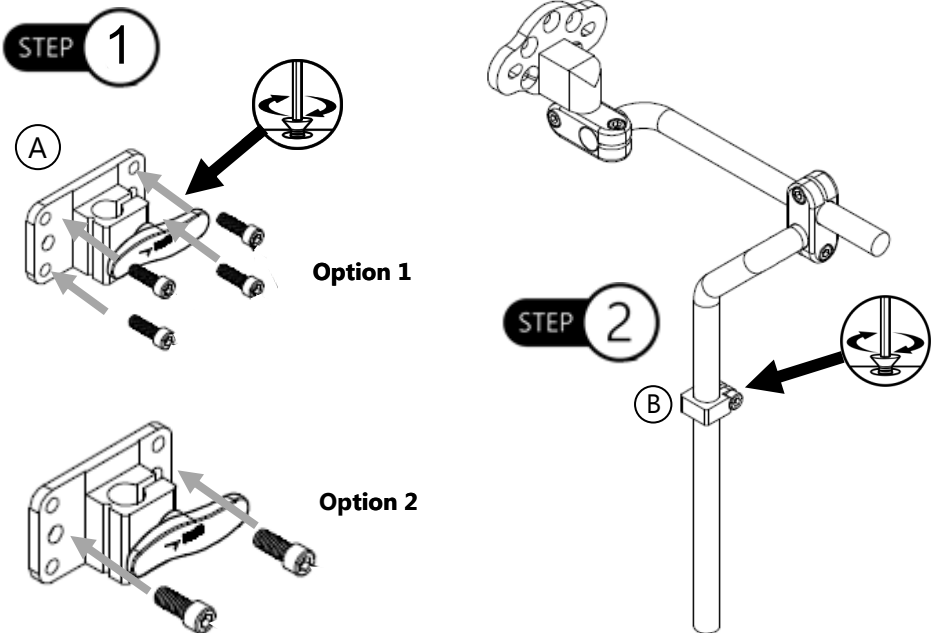
\* Tools not included

## Height Adjustment

### 5.1

**Step 1:** Determine the necessary screws in order to properly install the seat back mount to the chair. Position Seat Back Mount (A) on backrest at desired height. Secure with corresponding screws provided in hardware pack (1).

**Step 2:** Position Stop Collar (B) on vertical bar and secure screws. Tighten screws. Refer to *Section 4.3* for proper torque specifications.



Option 1 requires the 5/32 T-Handle/Allen Wrench.

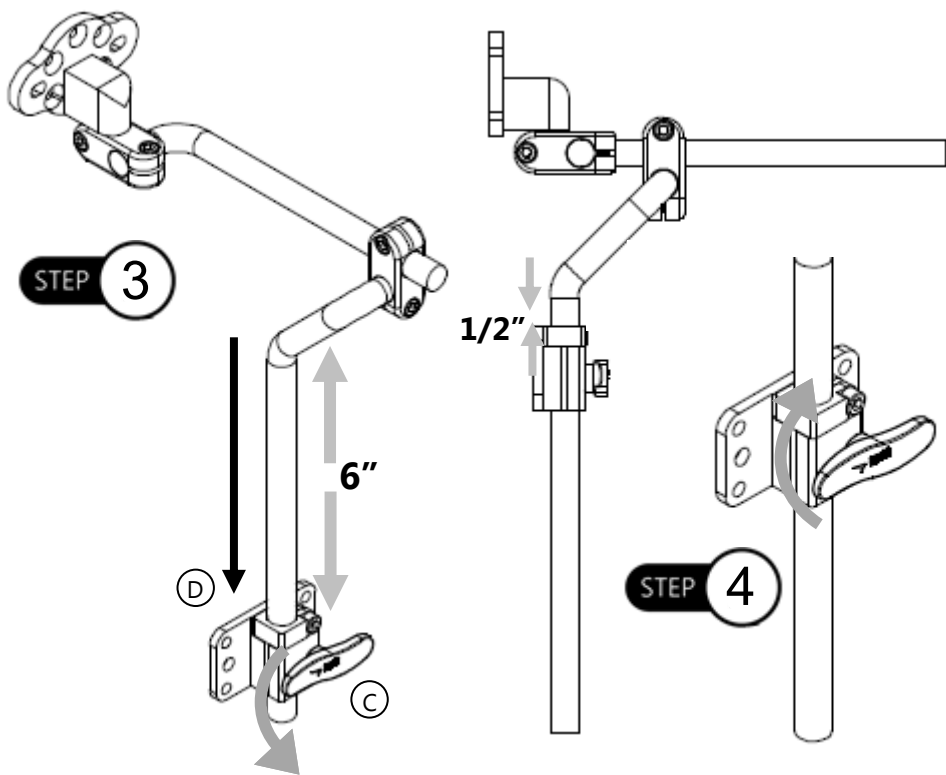
Option 2 requires the 3/16 T-Handle/Allen Wrench.

#### **NOTICE**

#10-32 Socket Head Screws (1B) are provided for Option 1 (4 screws), 1/4-20 Socket Head Screws (1A) are provided for Option 2 (2 screws).

#### **NOTICE**

Reference minimum and maximum height adjustment recommendations before installation of Option 2.



**Step 3:** Ensure handle (C) has been turned counterclockwise before sliding onto vertical bar. Insert vertical bar (D) into seat back mount. Ensure stop collar is flush with seat back mount.

**Step 4:** Turn the handle clockwise and tighten seat back mount handle to lock into position.

### SAFETY

It is recommended that the seat back mount is moved no more than 6 inches from the top of the vertical bar, and no less than a 1/2 inch from the top of the bar.



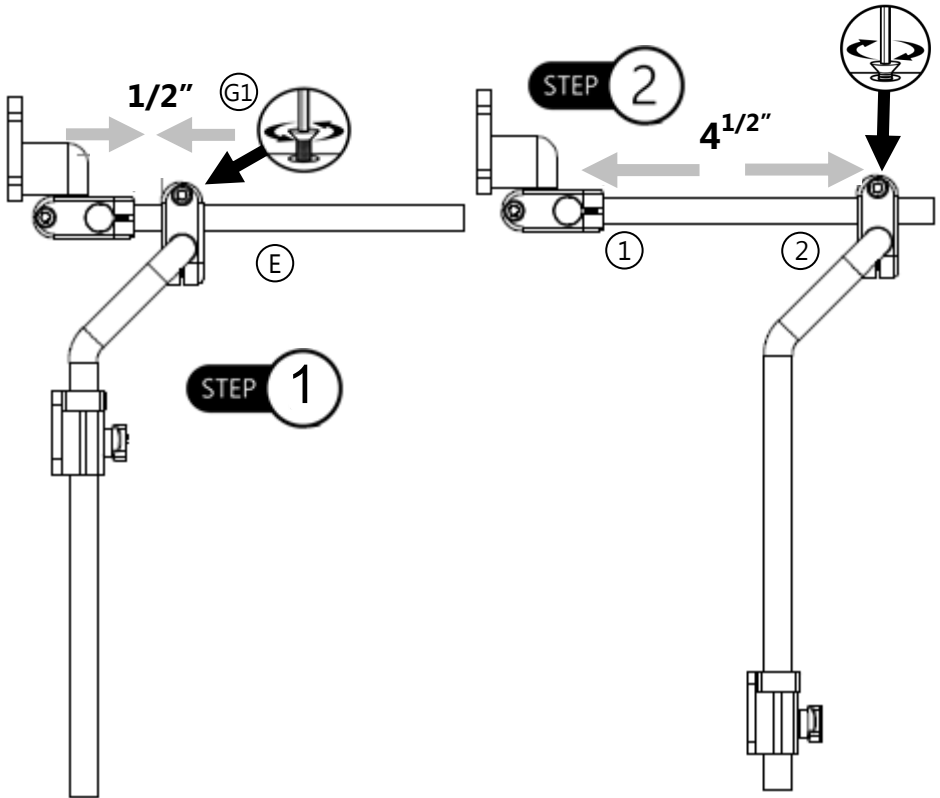
## Depth Adjustment

## 5.2

**Step 1:** Loosen the M5 (G1) screw on bar clamp with 4mm T-Handle/Allen Wrench.

**Step 2:** Slide horizontal bar (E) to desired depth.

**Step 3:** When bar has been adjusted to the desired depth, tighten the M5 screw to secure. Refer to *Section 4.3* for proper torque specifications.



### SAFETY

It is recommended the minimum depth adjustment is  $1/2''$  within the ends of the bar and a maximum of  $4^{1/2}''$  between reference points 1 and 2.

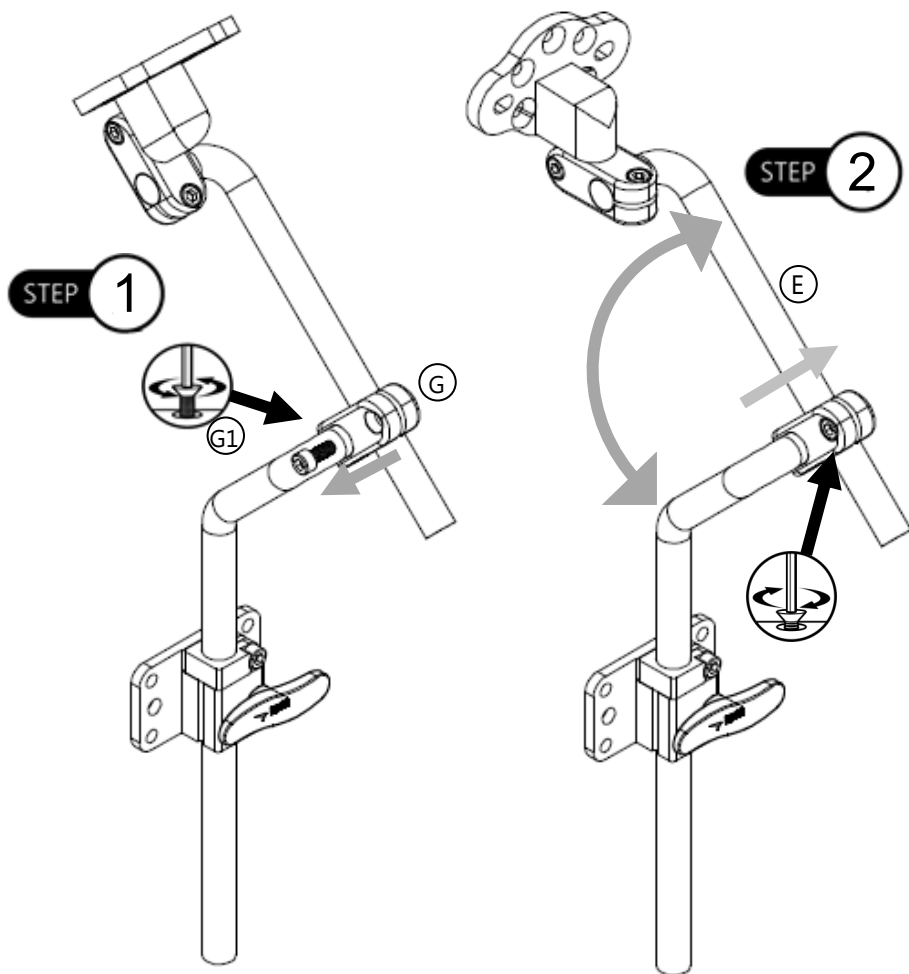
## Angle Adjustment

### 5.3

Two points of angle adjustment are available with the HMO500 hardware—the angle of the horizontal bar can be adjusted, as well as the angle of the headrest adapter plate.

**Step 1:** Loosen the M5 screw (G1) from the bar clamp (G) with the 4mm T-Handle/Allen Wrench.

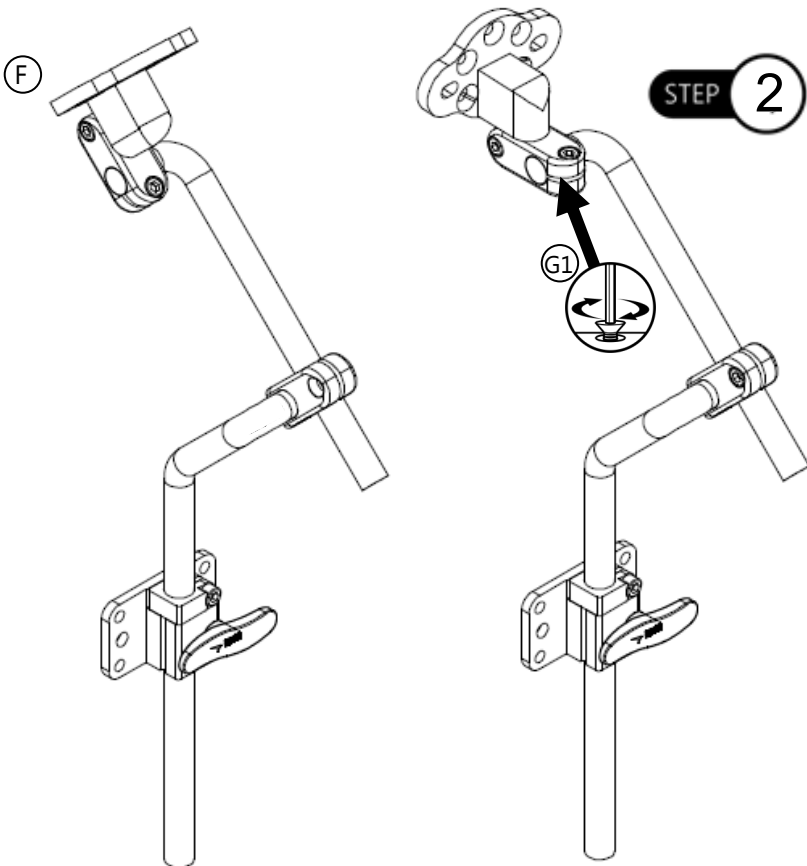
**Step 2:** Adjust horizontal bar (E) to desired angle. When desired angle is achieved, tighten M5 screws until secure. Refer to *Section 4.3* for proper torque specifications.



After the horizontal bar has been properly adjusted and is in the desired position, the angle adjustment of the adapter plate must be adjusted in order to mount flush with the headrest. Follow the steps below to adjust the adapter plate in the correct position.

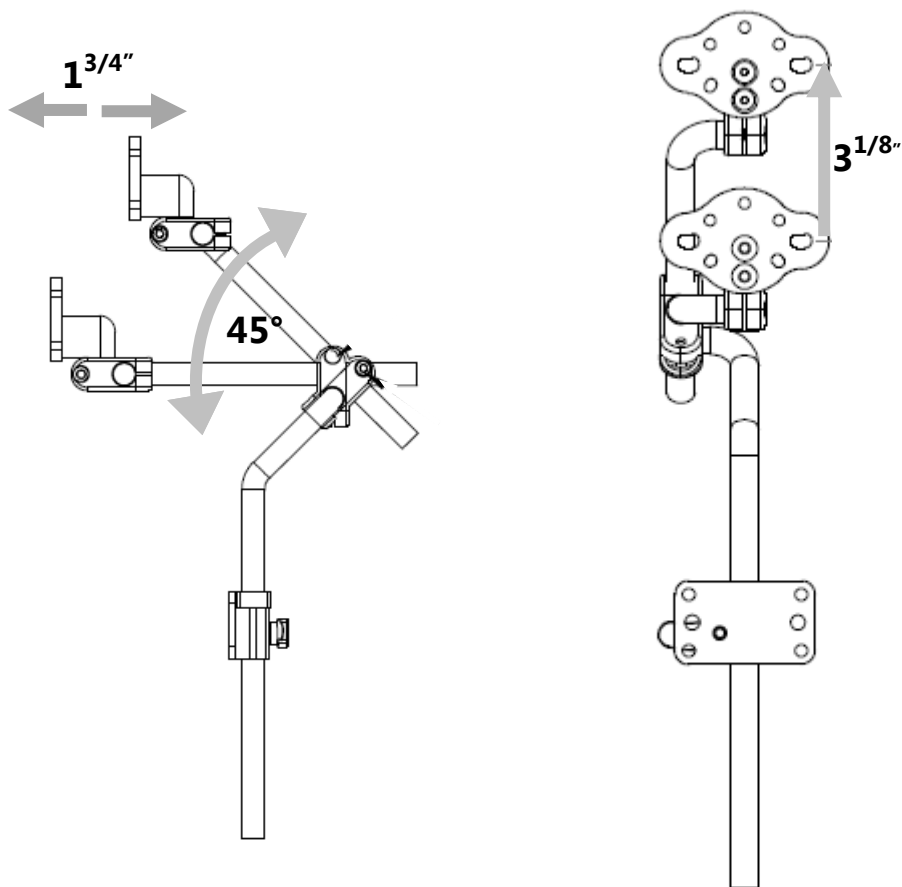
**Step 1:** To adjust the angle of the Adapter Plate (F) on the horizontal bar, loosen the M5 screw (G1) on the bar clamp via 4mm T-Handle/Allen Wrench.

**Step 2:** Angle the adapter plate assemble parallel with the seat back mount. Secure the M5 screw on the bar clamp.



### NOTICE

If the horizontal bar angle is adjusted, the headrest adapter plate angle must be adjusted in order to mount flush with the headrest it will be mounted to.

**NOTICE**

The height of the Universal Adapter Plate can move a maximum of  $3\frac{1}{8}$ " vertically when the angle of the horizontal bar is adjusted.

**NOTICE**

The horizontal bar should be adjusted no more than a maximum of  $45^\circ$ .

**NOTICE**

Up to  $1\frac{3}{4}$ " of height is added when the horizontal bar is adjusted.

## Adapter Plate Adjustment

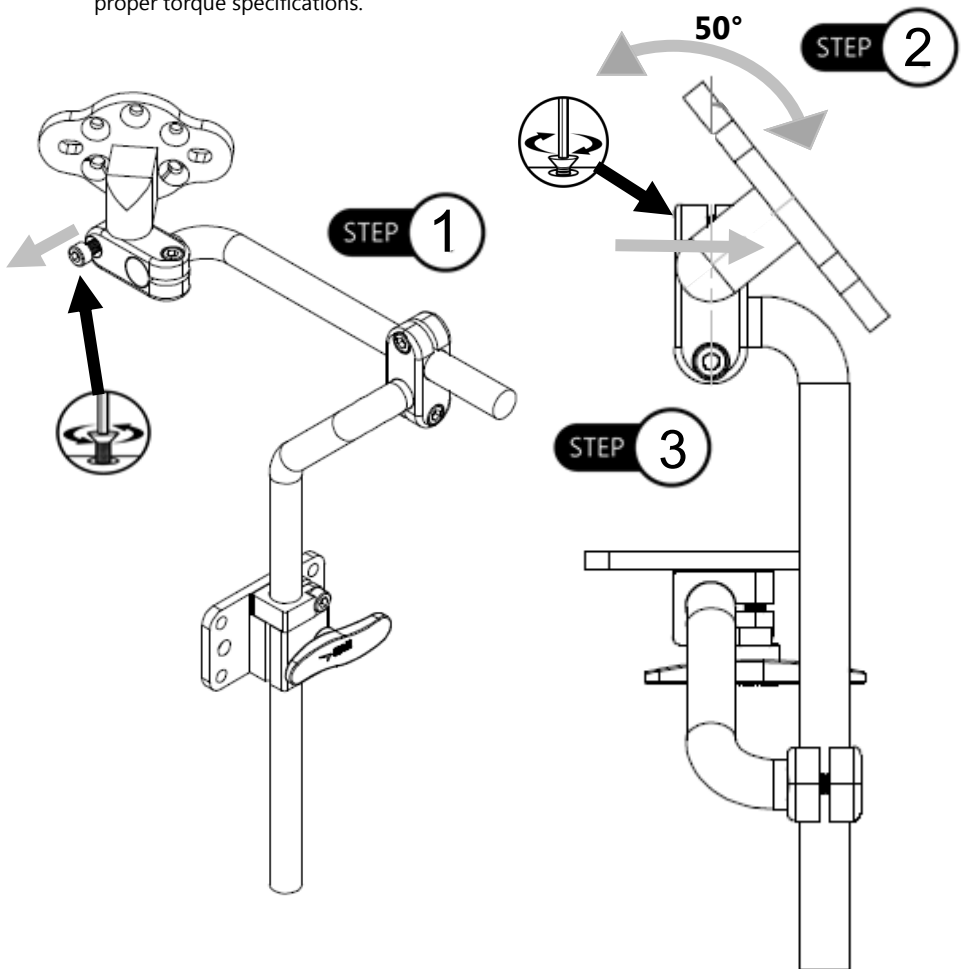
### 5.4

To adjust the position of the adapter plate and the direction in which it will mount to the headrest, follow the directions below:

**Step 1:** Loosen the M5 screw on the bar clamp with 4mm T-Handle/Allen Wrench.

**Step 2:** Move the adapter plate in the desired direction.

**Step 3:** When the adjustment is complete, tighten and secure the M5 screw. Refer to *Section 4.3* for proper torque specifications.



#### NOTICE

The headrest adapter plate should be angled no more than 50° to left or right sides.

## Headrest Installation

## 5.6

To install the HMO500 hardware onto a 3-hole pattern headrest, follow the steps below:

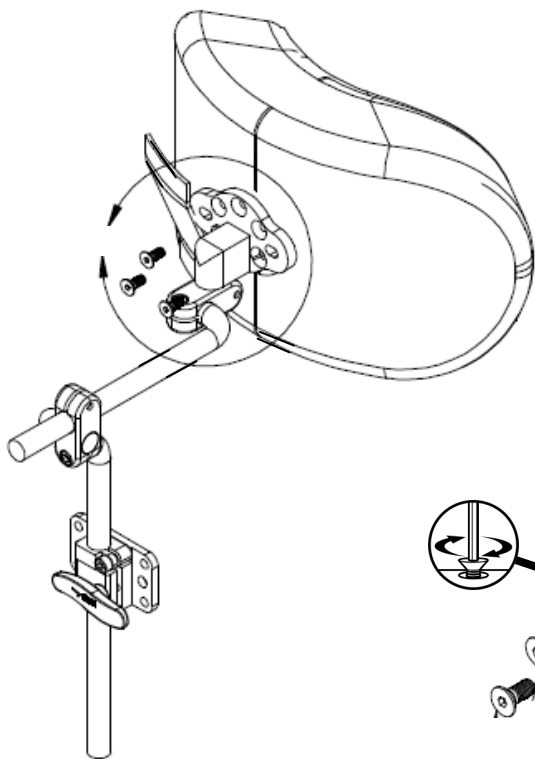
**Step 1:** Determine hole pattern required for proper headrest installation. Align headrest to universal adapter plate.

**Step 2:** Secure headrest to adapter plate with M5 screws. Use the 3mm T-Handle/Allen Wrench to tighten. Refer to *Section 4.3* for proper torque specifications.

### Option 1

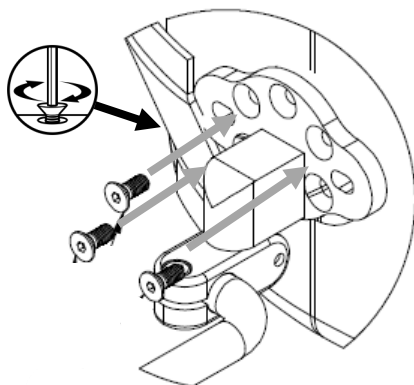
STEP 1

1



STEP 2

2

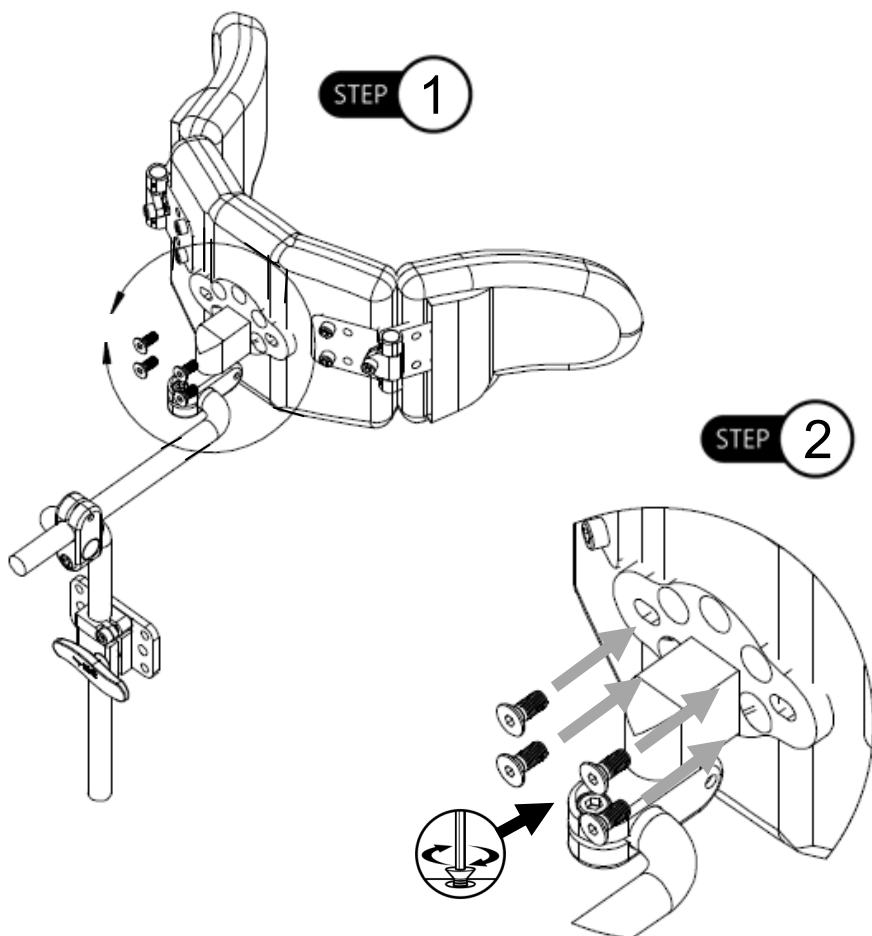


To install the HMO500 hardware on a 4-hole pattern headrest, follow the steps below:

**Step 1:** Align headrest to universal adapter plate.

**Step 2:** Secure headrest to adapter plate with M5 screws. Use a 3mm T-Handle/Allen Wrench to tighten. Refer to *Section 4.3* for proper torque specifications.

### Option 2



Our products are designed, manufactured, and produced to the highest of standards. If any defect in material or workmanship is found, Stealth Products will repair or replace the product at our discretion. Any implied warranty, including the implied warranties of merchantability and fitness for a particular purpose, shall not extend beyond the duration of this warranty. Stealth Products, LLC does not warrant damage due to, but not limited to:

- Misuse, abuse, or misapplication of products.
- Modification of product without written approval from Stealth Products, LLC.
- Any alteration or lack of serial number, where applicable, will automatically void this warranty.
- Stealth Products, LLC is liable for replacement parts only.
- Stealth Products, LLC is not liable for any incurred labor costs.

No person is authorized to alter, extend, or waive the warranties of Stealth Products, LLC.

Stealth Products warrants against failure due to defective materials or workmanship:

Covers: **EDDM**

Hardware: 5 years

Electronics: 3 years

## **In Case of Product Failure**

## **6.1**

In the event of product failure covered by our warranty, please follow the procedures outlined below:

1. Call Stealth at +1 (512) 715-9995 or toll free +1-800-965-9229.
2. Request the Returns Department or obtain an RA from the Returns Department and follow department or documentation instructions.











Stealth Products, LLC. • [info@stealthproducts.com](mailto:info@stealthproducts.com) • [www.stealthproducts.com](http://www.stealthproducts.com)  
+1(800) 965-9229 | +1(512) 715-9995 | 104 John Kelly Drive, Burnet TX 78611