



Flip-Down Mount Hardware

OWNERS MANUAL



Flip-Down (FDM) Hardware

Stealth's User and Installation Manual for the TWB Flip-Down (FDM) Hardware

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 products. You may reach us at:



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CE

General

Read and understand all instructions prior to the use of the product. Failure to adhere to instructions and warnings in this document may result in property damage, injury, or death. Product misuse due to failure of the following instructions will void the warranty.

Immediately discontinue use if any function is compromised, parts are missing, loose, or shows signs of excessive wear. Consult with your supplier for repair, adjustment, or replacement.

If this document contains information you do not understand, or there are concerns about safety or operation, contact your supplier.

Important Information!

All persons responsible for fitting, adjustment, and daily use of the devices discussed in these instructions must be familiar with and understand all safety aspects of the devices mentioned. In order for our products to be used successfully, you must:

- Read and understand all instructions and warnings.
- Maintain our products according to our instructions on care and maintenance.
- Devices should be installed and adjusted by a trained technician.

Supplier Reference

Supplier:	
Telephone:	
Address:	
Purchase Date:	

Model:	

Before you install or begin using this product, it is important that you read and understand the content of these installation and operating instructions. The installation instructions will guide you through the options and possibilities with the product.

Instructions are written with the expressed intent of use with standard configurations. They also contain important safety and maintenance information, as well as describe possible problems that can arise during use. For further assistance, or more advanced applications, please contact your supplier or Stealth Products at (512) 715-9995 or toll free at 1-800-965-9229.

Always keep the operating instructions in a safe place so they may be referenced as necessary.

All information, pictures, illustrations, and specifications are based on the product information that was available at the time of printing. Pictures and illustrations shown in these instructions are representative examples and are not intended to be exact depictions of the various parts of the product.

Ordering Documentation

You can download additional copies of this Owner's Manual on the Stealth website:

https://stlpro.site/stealth-docs

and search: Flip-Down Mount Hardware Owners Manual

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: 2 years

Hardware: 5 years

Electronics: 3 years

In Case of Product Failure

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.

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Warning Labels

6.1

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.

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

Limited Liability

6.2

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.

Stealth Products does not hold responsibility for final integration of final assembly of product to end user. Stealth Products is not liable for user death or injury.

Testing

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

The FDM hardware should be installed and tested following the instructions in this owners manual.

The following safety precautions should be taken when adjusting the flip-down mount hardware:

A CAUTION

Ensure the red flip-down sleeve freely rotates. If the flip-down sleeve does not rotate, the hardware will not work properly.

▲ CAUTION

When tightening screws, turn loosely until the screws stop, then tighten one quarter turn more. Overtightening screws may cause product malfunction and irreversible damage.

NOTICE

The sleeve should make an audible 'click' when moved back in the vertical position.

SAFETY

Move hands from sleeve area when bringing back to a vertical state. The sleeve could pinch when moving and cause injury.

NOTICE

There should be minimal lateral movement of the hardware once it has been installed.

SAFETY

Add Blue Loctite to the set screws on the triangle after adjustment is complete.

Intended Use

The Flip-Down hardware offers a sleek design, strong resistance and an easy flip-down mechanism which allows the headrest to flip down while staying attached to the chair, eliminating misplacement. This has the added benefit of helping to improve mobility related issues and transfers.

The 'link' style hardware has also been introduced to some of the flip-down mount hardware. This hardware provides limitless adjustment for Stealth's headrests. Multiple planes of adjustment allow critical adjustment of anterior, posterior, and angle. Separate links isolate adjustment planes and angles, while individual link adjustment achieves the most complex head support solutions.

The stop collar allows the technician to easily and properly set the height necessary for the hardware to be determined and prevents any unwanted movement while in use. The FDM hardware makes positioning your head support and positioning systems easy and rigid. Adjust it to the exact spot you need and it will hold fast the position.

Replacement Parts

Part Number	Description
TWBM-LINK	3" Replacement Metric Link
TWBM-LIL-6	6" Replacement Metric Link
SBM400	Seat Back Mount for TWB480 Hardware
ТШВ-17ММВК	3 Piece 17mm Ball
TWB1″-B	1" Headrest Ball
ТWB-1″ВК	3 Piece 1" Ball Kit

Tools



Hardware Needed	Description
2.5mm T-Handle	Stop Collar & set screws on links
4mm T-Handle	All screws on triangle & links
5mm T-Handle	Screw Package for Seat Back Mount

Tools, anti-seize, and Blue Medium Strength Liquid Loctite Series 242 are not provided.

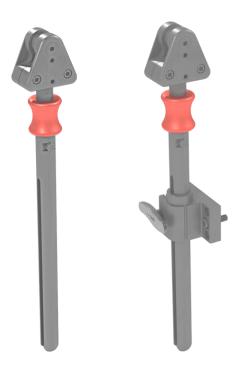
Torque Specs

9.3

Tightening screws to torque specifications is recommended but not required.

Screws	Torque Specification
M6 Socket Head Screw	20.3nM
M5 Socket Head Screw	12.0nM
M6 Flat Head Screw	12.0nM
M5 Flat Head Screw	6.9nM
M5 Set Screw	4.7nM
M8 Set Screw	17.8nM

FDM380 & TWB480-QFDM Flip-Down Headrest Hardware

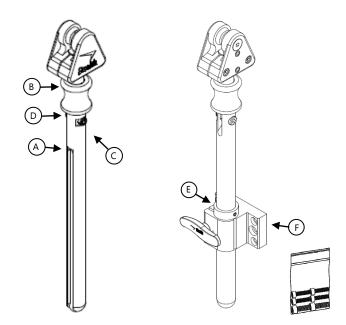


Features of the FDM380 & TWB480-QFDM 10.1

- 8 inches of height adjustment
- Easy flip-down mechanism
- Compatible with assemblies: -TWB480-17FDM
 - -TWB480-1FDM
 - -TWB480-TAB
- Short versions available (6 inch rod): -FDM380-S
 -TWB480-17FDMS
 - -TWB480-1FDMS

Part Number	Description
FDM380 & TWB480-QFDM	

Parts Included with the FDM380 & FDM480-QFDM 10.2

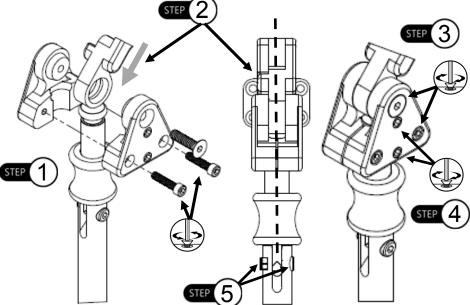


	Item	Description
Α	Vertical Bar*	3/4" Diameter Flip Down Rod
В	Flip Down Sleeve*	FDM Sleeve
С	Locknut*	M5 Locknut (1)
D	Shoulder Screw*	M5 x .8 x 18mm SHS (1)
Е	Stop Collar	Stop Collar Mount
F	SBM Clamp	Seatback Mount Clamp

*The FDM480-QFDM includes the same components as the FDM380.

Replacing the FDM380 & FDM480-QFDM

- **Step 1:** Loosen the set screws on the triangle mount with a 4mm T-Handle, but do not remove. Loosen the socket screws from the triangle allowing the thru triangle to be released from the mount.
- **Step 2:** Place the headrest hardware links in line with the thru and threaded triangles. The link attachment points must be aligned with the flip-down slot on the vertical bar to ensure correct movement of the flip-down sleeve.
- Step 3: Align triangles and tighten the socket head screws back into place.
- Step 4: Add Blue Loctite to set screws to prevent loosening. Tighten the set screws. Ensure they are snug but do not overtighten.
- Step 5: Tighten the screw and locknut on the vertical bar. There should be minimum lateral movement with the assembly.



▲ CAUTION

Ensure that all screws are tightened evenly on the hardware. Threads can strip out and cause damage to the hardware if not tightened properly.

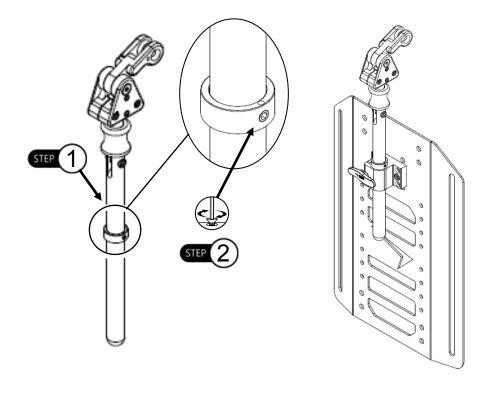
NOTICE

Tighten the set screws with the client in the chair and make any final adjustments necessary.

Stop Collar Adjustment

- **Step 1:** Position the stop collar along the vertical bar at the required height for the client.
- Step 2:
 When the height of the stop collar has been determined, tighten the set screw using a 2.5mm

 T-Handle.
 Add Blue Loctite to the set screw to prevent loosening.
- **Step 3:** Loosen the handle on the seat back mount slightly. Place the vertical bar through the seat back mount clamp. The stop collar will stop the bar from going past the mounting point.
- **Step 4:** Secure the rod in place by tightening the handle on the seat back mount.

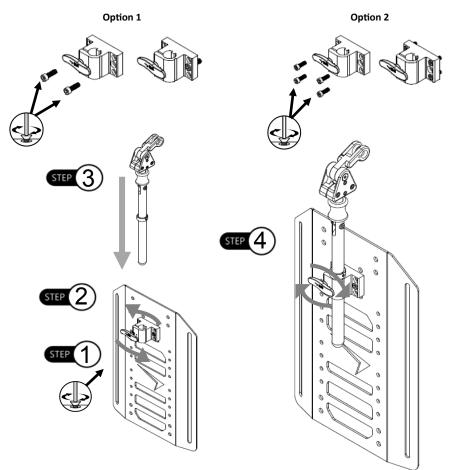


1 CAUTION	Ensure set screw is loose before trying to adjust the stop collar.	
🛦 warning	Overtightening of set screw may cause damage to hardware.	

9

Seat Back Mount Installation

- Step 1: Align the seat back mount to the back at the necessary height. With the necessary Socket Head Screws, secure the seat back mount to the back frame (See Option 1 or Option 2 below). Tighten with a 5mm T-Handle.
- Step 2: Loosen the seat back mount handle slightly for vertical bar clearance.
- Step 3: Insert vertical bar through seat back mount opening.
- Step 4: Secure vertical bar to the seat back mount by tightening the handle in a clockwise position.* Ensure the bottom of the stop collar is flush to the top of the seat back mount clamp.

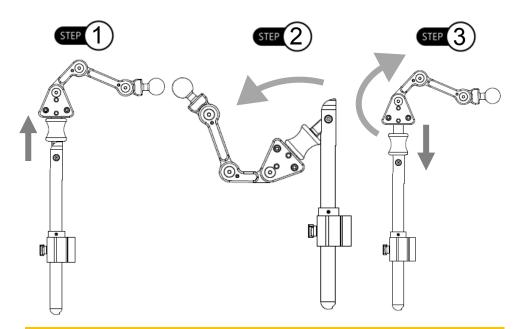


*Nucleus Back shown as reference.

▲ CAUTION

Ensure the Seat Back Mount screws and handle are fastened securely and properly.

- Step 2: Swing away the hardware in conjunction with the flip-down sleeve being pushed up.
- **Step 3:** To bring hardware back to the upright position, move links back to the vertical position. An audible 'click' should occur, indicating that the hardware is locked back into place.



▲ CAUTION

Ensure the red flip-down sleeve freely rotates 360°. If the flip-down sleeve does not rotate, the hardware will not work properly.

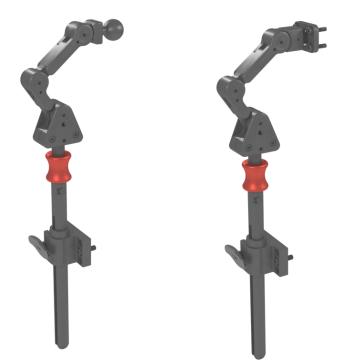
CAUTION

Ensure full engagement of the flip-down mount before use.

SAFETY

Move hands from the flip-down sleeve area when bringing it back to a vertical state. The sleeve could pinch when moving and could cause injury.

TWB480-17FDM & TWB480-1FDM Flip-Down Headrest Hardware



Features

- 8 inches of height adjustment
- Easy flip-down mechanism
- 1 standard 3" link assembled with FDM
- Short versions available (6 inch rod):
 - -FDM380-S
 - -TWB480-17FDMS
 - -TWB480-1FDMS

Mounting

17mm hardware compatible with:

- i2i
- i-Drive Head Array
- Combo
- Ultra
- Sub-Occipital
- Tone Deflector (TD100)

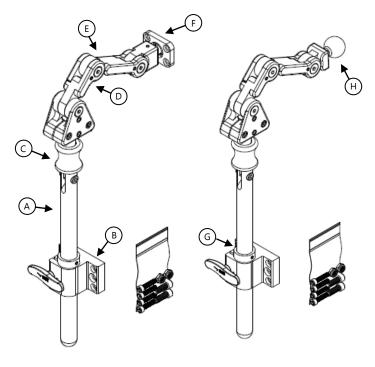
1" hardware compatible with:

- Comfort Plus
- Adjustable Comfort Plus
- Tri Comfort Plus
- Tone Deflector (TD101)

Part Number	Description
TWB480-17FDM & TWB480-1FDM	

11.1

Parts Included with the TWB480-17FDM & TWB480-1FDM

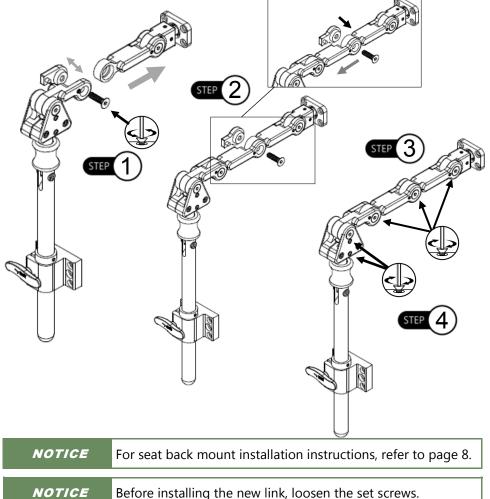


	Item
Α	3/4" Diameter Flip Down Rod*
В	SBM Clamp*
С	Flip Down Sleeve*
D	2" Offset Link*
E	TWB480 Inline Link*
F	17mm Ball Mount Kit
G	Stop Collar*
н	1" Ball Mount

*The TWB480-1FDM includes the same components as the TWB480-17FDM

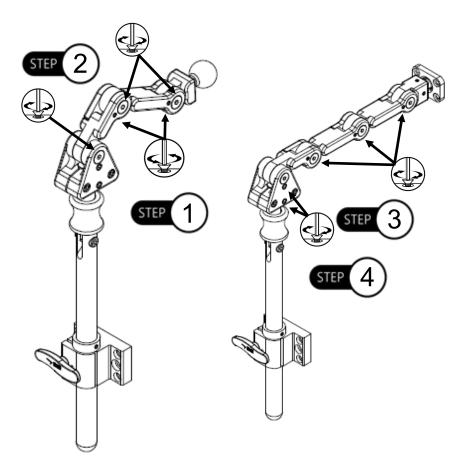
Link Addition/Replacement

- Step 1: Loosen the set screw on the offset link with a 4mm T-Handle, but do not remove. Remove the flat head screw from the offset link with a 4mm T-Handle, separating the offset link from the inline link and creating a gap for the new link to be installed.
- **Step 2:** Align the new link with the offset link. Align the inline link and ensure all drilled holes match up. Install the number of links necessary to achieve the desired length of the flip-down mount.
- Step 3: When the number of desired links have been added to the FDM, tighten all flat head screws and ensure all links are in the proper position. Add Blue Loctite to the set screws to prevent loosening. Tighten set screws, but do not overtighten.
- Step 4: Add Blue Loctite to set screws to prevent loosening. Tighten the set screws. Ensure they are snug but do not overtighten.



Link Adjustment

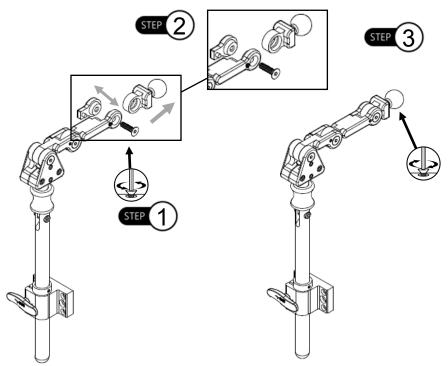
- Step 1: Loosen the set screw on the offset link with a 4mm T-Handle, but do not remove. Loosen the flat head screw from the offset link with a 4mm T-Handle.
- Step 2: Make any desired adjustments to the links necessary. Tighten all flat head screws and ensure all the links are in the desired position.
- Step 3: Before tightening the set screws, add Blue Loctite to prevent any loosening.
- Step 4: Tighten the set screws. Ensure they are snug but do not overtighten.



Ball Replacement for TWB480-17FDM & TWB480-1FDM

11.6

- **Step 1:** Loosen and remove the M6 Flat Head Screw from the link, creating a gap in between the offset link and offset link nut.
- **Step 2:** Replace the 1" or 17mm ball kit by aligning the ring of the ball kit in between the predrilled holes of the offset link and offset link nut.
- **Step 3:** Make any adjustments to links and position of ball kit. Tighten and secure the screws after the hardware is in the desired position.



NOTICE Follow the same instructions for replacing a 17mm Ball Kit.

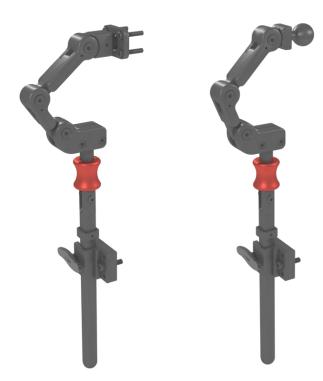
<u>A</u> CAUTION

If replacing/installing the 17mm Ball Kit, tighten the set screw properly.

NOTICE

Refer to page 10 for instructions on flipping down hardware.

TWB486-17FDM & TWB486-1FDM Flip-Down Headrest Hardware



Features

- 8 inches of height adjustment
- Easy flip-down mechanism
- Seat Back Mount provided with order
- 1 standard 3" link assembled with FDM

Mounting

17mm hardware compatible with:

- i2i
- Combo
- Ultra
- Sub-Occipital
- i-Drive Head Array
- Tone Deflector (TD100)

1" hardware compatible with:

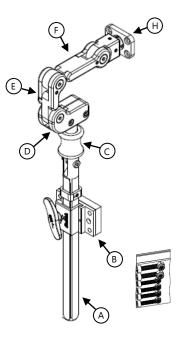
- Comfort Plus
- Adjustable Comfort Plus
- Tri Comfort Plus
- Tone Deflector (TD101)

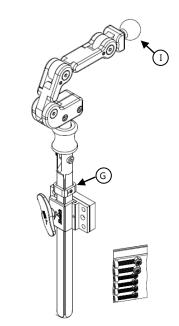
Part Number	Description
TWB486-17FDM & TWB486-1FDM	

12.1

Parts Included with the TWB486-17FDM & TWB486-1FDM

12.3



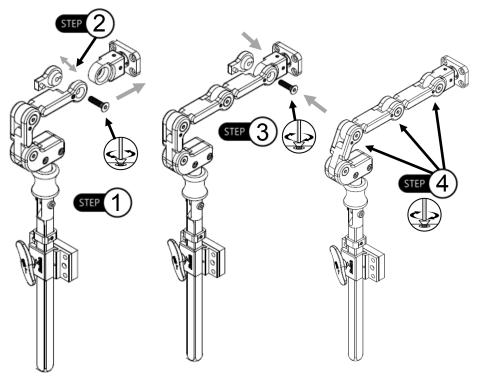


	Item	
Α	15mm Flip Down Rod*	
В	SBM Clamp*	
с	Flip Down Sleeve*	
D	Offset Link*	
E	2" Offset Link*	
F	Inline Link*	
G	Stop Collar*	
н	17mm Ball Mount	
I	1" Ball Mount	

*The TWB486-1FDM includes the same components as the TWB486-17FDM

Link Addition/Replacement

- **Step 1:** Loosen the set screw on the link, and remove the flat head screw from the offset link.
- Step 2: After removing the flat head screw from the offset link, separate the offset and inline link, creating a gap for the new link to be installed.
- Step 3: Install the number of links necessary to achieve the desired length of the flip-down mount. Align the predrilled holes on the links and secure with flat head screw.
- **Step 4:** When the number of desired links have been added to the FDM, tighten all flat head screws and ensure all links are in the proper position. Apply Blue Loctite to set screws to prevent loosening before tightening.



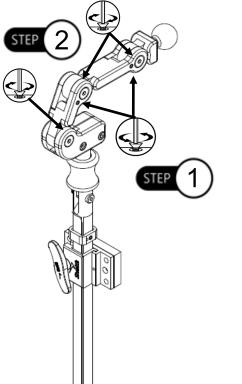
NOTICE

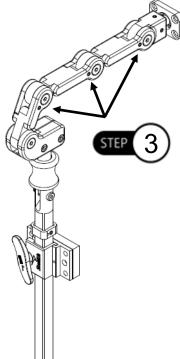
Tighten the set screws with the client in the chair and make any final adjustments necessary.

NOTICE	Refer to page 8 for seat back mount installation instructions.
NOTICE	Refer to page 10 for instructions on flipping down hardware.

Link Adjustment

- Step 1: Loosen the set screw on the offset link with a 4mm T-Handle, but do not remove. Loosen the flat head screw from the offset link with a 4mm T-Handle.
- Step 2: Make any adjustments to the links necessary. Tighten all flat head screws and ensure all the links are in the desired position.
- Step 3: Before tightening the set screws, add Blue Loctite to prevent any loosening.





Dealer Assistance

During first time use by the client, it is advised that the dealer or service technician assists and explains to the customer (the user and/or the attendant) how the hardware functions.

User Testing

It is important that the customer is fully aware of the installation of the Flip Down Hardware, how it functions, and if anything can be adjusted. As a dealer, proceed as follows:

• Explain and show the customer how you have executed the installation.

Have the user test the placement of the hardware after it has been installed.

Does the hardware hold the headrest in an optimal position for the user?

Conditions of Use

The flip-down hardware is intended for use as installed by the dealer, in accordance to the installation instructions in this manual.

- The foreseen conditions of use are communicated by the dealer or service technician to the user and/or attendant during the first time use.
- If the conditions of use change significantly, please contact your dealer or a qualified service technician to avoid excessive wear and tear or unintended damage.

13.2

Maintenance

- All parts should be checked on a regular basis and repaired, if necessary, by a service technician.
- Discontinue use after identifying loose or broken components.
- Periodically check the flip-down sleeve. Test that it engages properly and makes an audible "click" when back in the vertical position.
- Check the M5 bolt on the vertical bar. Tighten if it has become loose.
- To prevent screws from seizing, reapply copper anti-seize if necessary.
- If you are experiencing excessive lateral movement with the hardware, refer to Step 5 on page 7 for adjustment instructions.
- If you are experiencing difficulty adjusting the links, turn to the *Link Adjustment* section.

Cleaning

14.2

- Wipe clean with a damp cloth and mild, non-abrasive cleaner.
- Ensure any cleaners used to disinfect are approved for cleaning aluminum surfaces.

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