Field Installation and Usage Instructions
Part No. TMS-045-90
Side Rail Hinge & Latch Assembly
Installation with Adjustment Procedures

For all TMM Series Chairs
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IMPORTANT NOTES ABOUT THIS MANUAL
This Field Installation and Usage Instruction manual is intended to assist you with installation of your TransMotion Medical Product. Carefully read this manual before using the equipment or doing service / maintenance on it. If you are unable to understand the WARNINGS, CAUTIONS, and instructions, contact TransMotion Medical Customer Service before attempting to operate or service the equipment. Otherwise, personal injury or property damage may result.

To ensure safe operation of this device, it is essential that methods and procedures be established for educating and training staff on the safe and effective operation of the product.

TransMotion Medical reserves the right to change specifications without notice.

The information contained in this document is subject to change without notice.

Specifications listed are nominal, and operation may vary slightly from unit to unit due to tolerance variations.

Figures contained within this document may not depict exactly the model you have. This document may cover many closely related models.

SPECIAL NOTES - SIGNAL WORDS
Signal words are used in this manual and apply to hazards which could result in injury or property damage. The following is a definition of those signal words as used in this document:

⚠️ DANGER ⚠️
Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

⚠️ WARNING ⚠️
Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

⚠️ CAUTION ⚠️
Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices or potential property damage hazards.

⚠️ NOTICE ⚠️
Provides important information, makes special instructions clearer, or provides service personnel information to make maintenance easier.

**CAUTION** WEAR APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT WHILE PERFORMING SERVICE TASKS!!
TOOLS REQUIRED

Either a 5/32 Allen wrench or a 3/8 drive ratchet and 5/32 bit, 7/16 socket and a 7/16 open end wrench are required for installation of the Side Rail Hinge & Latch.

The use of SURGICAL GLOVES is recommended when performing this installation.
### PARTS INCLUDED IN TMS-045-90 KIT

**A**
![Field Installation and Usage Instructions](image1)

**B**
![Screw](image2)

**C**
![Spiralock Flange Nut](image3)

**D**
![Shoulder Screw](image4)

**E**
![Loctite 242 Safety Data Sheet](image5)

**F**
![Loctite 242](image6)

**G**
![Rail Latch Casting Assembly](image7)

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### PARTS LIST FOR TMS-045-90 RAIL HINGE LATCH

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>IM TMS-2404-90 SIDE RAIL HINGE &amp; LATCH ASSEMBLY INSTRUCTIONS</td>
<td>1</td>
</tr>
<tr>
<td>B</td>
<td>TMM-114-04 SCREW, 1/4-20 X 1.25 B.H.C.</td>
<td>10</td>
</tr>
<tr>
<td>C</td>
<td>HNTFL-04CXX-SZ SPIRALOCK FLANGE NUT 1/4-20</td>
<td>4</td>
</tr>
<tr>
<td>D</td>
<td>TMM-047-04 SHOULDER SCREW, 5/16X 1-3/4</td>
<td>4</td>
</tr>
<tr>
<td>E</td>
<td>230718 LOCTITE 242 SAFETY DATA SHEET</td>
<td>1</td>
</tr>
<tr>
<td>F</td>
<td>TMM-2439-04 LOCTITE 242, 0.02 FL/OZ</td>
<td>1</td>
</tr>
<tr>
<td>G</td>
<td>TMM-1288-90 RAIL LATCH CASTING ASSEMBLY</td>
<td>2</td>
</tr>
</tbody>
</table>
PREPARING CHAIR FOR SIDE RAIL HINGE & LATCH INSTALLATION

1) Side Rail Hinge & Latch may be installed while the chair is in the seated or supine configuration depending on application.

2) Remove the pad as shown for easier access.

⚠️ If old hinge and latch have been removed, proceed to installation instructions on page 11.

3) Use ratchet to remove (2) ¼-20 screws shown (A) and discard.

Note: Ensure that the Allen wrench/socket is seated properly in fasteners prior to loosening. This will keep fastener’s head from rounding out due to FACTORY APPLIED thread-locking compound.
4) Repeat with opposite side, turning counter clockwise.

5) Remove top ¼-20 screw (A)
6) Lift the arm rail off of the chair.

7) Pull the red release lever to disengage the lock.
8) Swing the rail hinge down.

9) Using the 7/16 wrench, remove 1/4-20 lock nut (C) by turning counter clockwise.

10) Turn the ratchet counter clockwise to remove the shoulder bolt (B).

Note: Ensure that the Allen wrench/socket is seated properly in fasteners prior to loosening. This will keep fastener’s head from rounding out due to FACTORY APPLIED thread-locking compound.
11) Repeat on opposite side.

12) Removal of the shoulder bolt (B).
INSTALLING THE SIDE RAIL HINGE & LATCH

**USE LOCTITE 242 (Provided) ON ALL REPLACEMENT HARDWARE**

Apply small drops of the Loctite product onto the thread engagement area of the fastener, as shown below. (Only a small amount is required)

1) Position the rail hinge as shown. Slide shoulder bolt (B) through both holes in the hinge and other casting. Thread into the seat pan. Repeat on left side.
2) Secure the shoulder bolt (B) by turning the ratchet clockwise until it is snug.

3) Repeat on left side.
4) Thread the ¼-20 lock nut (C) on the back of the bolt. Secure with the 7/16 wrench and hold fastener with ratchet until tight. Repeat on the right side.

5) Lift the rail hinge up to the upright position and snap into place.
6) Slide the arm rail over the hinge.

7) Firmly hold the rail in place as you locate the top hole.
8) After applying LOCTITE slide the \( \frac{1}{4} \)-20 screw (A) in the hole and turn it a few times clockwise to start thread engagement.

**APPLY LOCTITE TO ALL FASTENERS**

9) Do not tighten completely.
10) Insert the ¼-20 screw (A) on the right side by turning them clockwise, partially threading them in to aid in proper alignment.

**APPLY LOCTITE TO ALL FASTENERS**

11) Repeat on left side.

12) Once all ¼-20 screw (A) are threaded and aligned, tighten all (5) ¼-20 screw (A) until they are snug. DO NOT OVER TIGHTEN.
PREPARING FOR SIDE RAIL HINGE ADJUSTMENT

Use a 7/16” socket to make adjustments. Access nuts through cutouts in the seat pan when making adjustments.

IF THE BELOW CONDITION EXISTS, ADJUSTMENT TO SIDE RAIL ANGLE TO VERTICAL POSITION IS REQUIRED.

To adjust outward, rotate the top jam nut clockwise making sure the bottom jam nut is loose enough to accommodate the required movement of the arm to the vertical position.

To adjust inward, rotate the top jam nut counter clockwise making sure to leave the top jam nut engaged at least 2 threads on the adjustment bolt.
Once vertically aligned, ensure that bottom jam nut is snug against the seat frame and then tighten top jam nut. Use the 7/16” open end wrench.

⚠️ **NOTICE:**

DO NOT OVERTIGHTEN JAM NUTS.

Reattach cushion.
IF THE RAIL REQUIRES TOO MUCH OR TOO LITTLE FORCE TO ENGAGE LATCH, THEN FOLLOW ADJUSTMENT PROCEDURES BELOW.

Close side rail to observe latch engagement against bumper

**If no adjustment necessary, chair is ready for use**

If adjustment is necessary, proceed to instructions below. Rotate side rail into lowered position until the rail is firmly held by catch.
Loosen rubber bumper jam nut with 7/16" wrench. Bring the arm rail up into the upright position. (Use the rail as a means for gauging resistance when latching)

If resistance to engage latch is too low, rotate bumper as shown above.

If resistance to engage latch is too great, rotate bumper as shown above.
Once adjusted, raise side rail into upright position until latch is fully engaged. Repeat steps above if further adjustment is necessary.

When resistance is acceptable, tighten jam nut to lock rubber bumper into place.

Now chair is ready for use.
CAUTIONARY USAGE INSTRUCTIONS

⚠️ CAUTION ⚠️

IF THIS UNIT IS EXPOSED TO BODILY SUBSTANCES, CLEAN THOROUGHLY TO PREVENT THE SPREAD OF DISEASES.

⚠️ CAUTION ⚠️

ENSURE FINGERS ARE NOT PINCHED DURING SIDE RAIL OPERATION.

PREVENTIVE MAINTENANCE

To ensure proper operation, this unit should be maintained as described below.

<table>
<thead>
<tr>
<th>COMPONENT</th>
<th>FREQUENCY</th>
<th>PROCEDURE</th>
<th>TOOL</th>
<th>COMMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adjustable arm rail hinge</td>
<td>Every three months</td>
<td>• Check for signs of fatigue or wear.</td>
<td>-</td>
<td>If rail cannot be adjusted as much as necessary, contact TMM Service for assistance.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Check arm rail angle, adjust if necessary.</td>
<td>Refer to this manual</td>
<td></td>
</tr>
<tr>
<td>Ball joint tightening nuts</td>
<td>Every three months</td>
<td>• Check nuts for looseness, tighten if necessary.</td>
<td>Refer to this manual</td>
<td></td>
</tr>
<tr>
<td>Rubber bumper</td>
<td>Every three months</td>
<td>• Check for side rail engagement resistance. If loose, tighten.</td>
<td>Refer to this manual</td>
<td>If resistance cannot be regained through adjustment, contact TMM Service for assistance.</td>
</tr>
</tbody>
</table>
**CLEANING INSTRUCTIONS**

*CAUTION* STEAM AND/OR PRESSURE CLEANING CHAIR WILL VOID WARRANTY

<table>
<thead>
<tr>
<th>COMPONENT</th>
<th>FREQUENCY</th>
<th>PROCEDURE</th>
<th>CLEANING AGENT *</th>
<th>COMMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Rails and Painted Metal</td>
<td>As required/in accordance with facility policies</td>
<td>Wipe with damp cloth and allow to air dry</td>
<td>Facility approved detergents, disinfectants &amp; water</td>
<td>Check for chipped paint/chrome</td>
</tr>
<tr>
<td>Base Cover</td>
<td>As required/in accordance with facility policies</td>
<td>Wipe with damp cloth and allow to air dry</td>
<td>Facility approved detergents, disinfectants &amp; water</td>
<td>Check for peeling or missing labels</td>
</tr>
<tr>
<td>Actuators and Battery Pack</td>
<td>As required/in accordance with facility policies</td>
<td>Wipe with damp cloth and allow to air dry</td>
<td>Facility approved detergents, disinfectants &amp; water</td>
<td>Clean exterior surfaces only with minimal water</td>
</tr>
<tr>
<td>Pendants</td>
<td>As required/in accordance with facility policies</td>
<td>Wipe with damp cloth and allow to air dry</td>
<td>Facility approved detergents, disinfectants &amp; water</td>
<td>Clean exterior surfaces only with minimal water</td>
</tr>
<tr>
<td>All Other Surfaces</td>
<td>As required/in accordance with facility policies</td>
<td>Wipe with damp cloth and allow to air dry</td>
<td>Facility approved detergents, disinfectants &amp; water</td>
<td>Check for damage</td>
</tr>
<tr>
<td>TransMotion Medical Accessories</td>
<td>As required/in accordance with facility policies</td>
<td>Wipe with damp cloth and allow to air dry</td>
<td>Facility approved detergents, disinfectants &amp; water</td>
<td>Check for damage</td>
</tr>
<tr>
<td>3rd Party Accessories</td>
<td>As required/in accordance with facility policies</td>
<td>Consult manual provided by accessory manufacturer.</td>
<td></td>
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</tr>
</tbody>
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* Use of Facility approved detergents and disinfectants must comply with the instructions provided by the manufacturer(s) of those products.
Upholstery Care & Cleaning Instructions

Proper care is essential in ensuring the durability and reliability of TransMotion Medical upholstery. In general, all products should be:

1. Cleaned
2. Disinfected (in accordance with facility policy)
3. Rinsed
4. Allowed to air dry

It is important to note that the terms “disinfecting” and “cleaning” should not be used interchangeably. Disinfectants alone will not provide adequate cleaning since they do not have the appropriate properties to cut grease or oil and remove grime, hair or skin oils. The appearance, feel and performance of your upholstery may diminish if not cleaned properly.

Cleaning:

Remove hair, grime and body oils. Your upholstery should be cleaned on a regular basis with a damp cloth soaked in a mild soap and water solution. Avoid harsh detergents or chemicals that could damage the finish of your product. If disinfecting with manufacturer approved chemicals or bleach, the upholstery MUST be wiped off using clean water on a damp cloth and allowed to air-dry as a final step. Failure to rinse upholstery with clean water can result in a build-up of residues that, over time, may lead to drying, cracking or other undesirable changes to appearance, feel and performance.

Retain all instructional tags for future use.

Contact the manufacturer of the fabric used in your upholstery for a current list of approved disinfectants. TransMotion Medical Customer Care can assist with identifying which upholstery was used with your Stretcher-Chair.

For customer supplied and non-standard materials, please refer to the individual manufacturer’s cleaning instructions.