TRx Pivot Plus
Manual Elevating Legrests
with Cam-Lock

Installation and Set-Up Manual

NOTE: This installation manual contains important information related to set-up and adjustments. Please forward to the Dealer, together with the TRx system, in order to properly address the specific needs of the client.
The most important link in the delivery chain is the end user. The user must be satisfied with the product in terms of function, safety and aesthetics. No sale is complete unless the end user receives thorough training in all aspects of the care and use of the system. A complete instruction session with your customer is essential.

Only the dealer and the health care professional can ensure that the system is set up properly and safely for the specific needs of the individual user.

**Training**

Installation and set-up of the TRx Pivot Plus Manual Elevating Legrests must only be done by a trained technician or healthcare professional. If you are not certified as an installer, please arrange immediately for training by a Motion Concepts technician or sales agent who has been certified to teach installation and set-up of the Pivot Plus Manual Elevating Legrests. Every effort will be made to meet your training needs.

**Note:** Before proceeding with the installation/ set-up, please ensure that no pages are missing from this manual.

**Tools**

The following tools are required to complete the installation/ set-up:

- Wrenches: 7/16", 1/2"
- Socket wrenches: 7/16", 1/2"
- Allen keys: 3/16", 1/4", 1/8"
- Screw Drivers
1.0 Assembly Overview Drawings

<table>
<thead>
<tr>
<th>PART NUMBER</th>
<th>CALF PAD CONFIGURATION</th>
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<tr>
<td>TRC1249-1</td>
<td>STD. PAD</td>
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<tr>
<td>TRC1249-2</td>
<td>LARGE PAD</td>
</tr>
<tr>
<td>TRC1249-3</td>
<td>CURVED PAD</td>
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</table>

**Note:** Left Legrest Assembly Shown

**NOTES:**
1. N/S = NOT SHOWN
2. LARGER CALF PAD - ITEM 5B (NOT SHOWN) - IS USED FOR SYSTEMS WITH WIDTHS GREATER THAN 12” AND/OR WHEN LONG EXTENSION TUBES ARE USED IN FOOTPLATE ASSY (TRCD468). USE ITEM 118 TO FASTEN ITEM 5B

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<thead>
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<th>ITEM NO.</th>
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<th>DESCRIPTION</th>
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<td>FOOTPLATE ASSY, LEFT</td>
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<td>1</td>
<td>TRC0946</td>
<td>CALF PAD BRACKET ASSY, LEFT</td>
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<td>1</td>
<td>TRC1247</td>
<td>DOWNTUBE ASSY, LEFT, MANUAL</td>
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<td>TRX5937</td>
<td>PAD, LEFT</td>
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<td>5A</td>
<td>1</td>
<td>TRM0496</td>
<td>CALF PAD</td>
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<tr>
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<td>1</td>
<td>TRM0249</td>
<td>P210 CALF PAD</td>
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<td>5A N/S</td>
<td>1</td>
<td>TRM0671</td>
<td>CURVED CALF PAD</td>
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<td>2</td>
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<td>8</td>
<td>4</td>
<td>TRH0113</td>
<td>3/8&quot; HI COLLAR LOCK WASHER</td>
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<td>9</td>
<td>2</td>
<td>TRH0201</td>
<td>3/8-20 NYLOC NUT, BZ</td>
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<td>TRH0207</td>
<td>5/16-18 SHALLOW NYLOC NUT, BZ</td>
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1.0 Assembly Overview Drawings

- Pivot Block
- Calf Pad
- Swivel Bracket
- Foot Plate
- Depth & Height Adjustable Calf Pad Bracket
- Length adjustable in 1” increments. 3 extension tube sizes available:
  - Short- 12-16”
  - Long- 15-19”
  - X-Long- 18-21”
- Extension Tube
- Cam-Lock Mounting Pin
- Manual Angle Adjustment Lever
- Swing-Away Calf Pad Ass’y
- Adjustable Pin Depth
- Adjustable Clamping Block
- Adjustable Heel Strap Position
- Adjustable Foot Plate Position

TRx Manual Pivot Plus Elevating Legrest w/ Cam-Lock

TRD0288, TRx Manual Pivot Plus ELR with Cam-Lock, Installation & Set-Up, Rev 1.0 - May 11, 2010
1.0 Assembly Overview Drawings

Adjustable Depth Cam-Lock Legrest Receivers

**STRAIGHT** Cam-Lock Receiver
(left side shown)

**OFFSET** Cam-Lock Receiver
(left side shown)

<table>
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<td>TRX4879</td>
<td>CAM RECEIVER WLD., LEFT</td>
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<td>1</td>
<td>TRX4960</td>
<td>HANDLE SPACER</td>
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<td>4</td>
<td>1</td>
<td>TRX5353</td>
<td>JOGGED HANDLE, LEFT</td>
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<tr>
<td>5</td>
<td>1</td>
<td>TRH0779</td>
<td>HANDLE SLEEVE</td>
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<tr>
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<td>1</td>
<td>TRH0154</td>
<td>DISC SPRING, 0.588 x 0.731 x 0.009</td>
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<td>7</td>
<td>1</td>
<td>TRH0344</td>
<td>5/16-18 x 1/4&quot; BUTTON SOCKET CAP SCREW</td>
</tr>
</tbody>
</table>

**Important!** Ensure the locking lever is installed as indicated.

*Correct! Handle hard stops at approx. 45° orientation*

*Incorrect! Handle hard stops at approx. vertical orientation (Wrong handle used)*

**Both Receivers shown in Unlocked State**
2.0 Legrest Installation & Set-Up

2.1 Installing the TRx Manual Pivot Plus Legrests with Cam-Lock

Place the lever in the upright (unlocked) position as indicated in images i. and ii. below. Insert the notched mounting pin into the legrest receiver with the notches facing forward. Ensure the legrest pin is fully inserted into the receiver and lower the cam lever to lock the legrest into position (per image iii. below). The notches on the face of the mounting pin serve to stabilize the legrest and lock it into position.
2.0 Legrest Installation & Set-Up

2.2 Legrest Depth Adjustment

The cam-lock legrest receivers are available in straight or offset styles (refer to the Assembly Overview Drawings, p.6). The left and right receivers can be adjusted independently as required to achieve the desired depth. The slotted design (channel) in the receivers allows for infinite adjustability along the length of the channel. Refer also to Section 2.3- Knee Pivot Adjustments.

![Depth Adjustable Cam-Lock Legrest Receivers](image)

2.3 Legrest Extension (Knee-to-Heel Adjustments)

1. The legrest extension bar is adjustable to accommodate various knee-to-heel (KTH) lengths, ranging from 11” to 21”. There are three lengths of extension bars available to achieve the range of KTH lengths:

   Short (11”-15”), Long (14”-18”) and X-Long (17”-21”)

   (note: the extension bars are adjustable in 1” increments).

2. To adjust the KTH length, remove the two screws from the down tube and re-position the extension bar. Align the holes in the down tube with the holes in the extension bar and re-fasten the screws in the new position—see Figure 1.0 below.

![Knee-to-Heel Adjustments](image)

*note: Footplate Assembly and Calf Pad Assembly are not shown
2.0 Legrest Installation & Set-Up

2.3 Knee Pivot Adjustments

**Important!** The proper alignment of the legrest pivot axis and the pivot axis of the knee is critical to the set-up of the TRx Manual Pivot Plus Legrests and to their overall performance and comfort.

The knee pivot point on each Pivot Plus Legrest must be adjusted to optimize the legrest performance for the end user. Both the Depth and Height of the legrest pivot point can be adjusted incrementally (as required) to align the pivot point of the Pivot Plus Legrest with the clients actual knee pivot position (refer to Figure 2.0).

**Figure 2.0 - Knee Pivot Point Adjustments**

- **A) HEIGHT ADJUSTMENT**
  - **UP**
    - Raising the pivot point reduces jamming of the legs when elevated
  - **DOWN**
    - Lowering the pivot point prevents footplate-to-foot separation

- **Adjustable Stop Bolt**
  Adjust stop bolt to set the desired retracted angle of the legrest- (see also Section 2.4)

- **Adjustable Mounting Pin**
  (adjusts the pin position inside the pivot block to raise or lower the pivot point)

- **B) DEPTH ADJUSTMENT**
  - **IN**
    - Moving the legrest in prevents footplate-to-foot separation
  - **OUT**
    - Moving the legrest out prevents jamming of the legs when elevated

**Height Adjustments** are made via the mounting pin (in 1/2” increments)- see Figure 2.0 (A). The pin height is adjusted via the adjustment bolt in the pivot block (the bolt is accessed thru a hole in the legrest pad). Select the mounting hole position that best aligns the legrest pivot point with the clients knee pivot point.

**Depth Adjustments** are made independently via the adjustable depth legrest receivers. (see Figure 2.0 (B)).

With the client seated in the chair, check the pivot point of the clients knee in relation to the pivot point on the leg-rest. In a proper set-up, both pivot points should align so that they rotate around the same axis (refer to Figure 3.0).
2.4 Manual Legrest Angle Adjustment

With the knee pivot adjustment properly set-up, the legrest angle is controlled manually via the lever-lock assembly. By holding down the cam lever, the legrest can be positioned manually to the desired angle. Releasing the lever will lock the legrest in position. (refer to images i, ii, and iii below)

The **positive stop bolt** (see image iv.) is designed to establish the legrest angle at full retraction. As the legrest retracts, the pivot block comes in contact with the positive stop bolt. The bolt can be adjusted inward or outward to control the final angle of the legrest when it reaches the down position.

**Note:** If necessary, a longer bolt may be used in order to achieve the desired stop angle.

2.5 Calf Pad Adjustments:

The calf pads on the Manual Pivot Plus Legrest offer a wide range of adjustability to ensure a high level of comfort for the end user. The calf pad position may be adjusted on the mounting bracket to vary the overall height, depth and angle of the pad (see Figure 4.0 and 5.0, p.11), while the the calf pad mounting bracket and swivel mechanism may also be adjusted for both height and depth- refer to Figure 6A and 6B, p.12.

Each calf pad has also been designed with a push-button release mechanism that allows the calf pad to swivel on the legrest in order to prevent interference during transfers in and out of the wheelchair- refer to Figure 7A and 7B, p.12.
2.0 Legrest Installation & Set-Up

2.5 Calf Pad Adjustments (... cont’d)

Figure 4.0

Calf Pad Adjustment (Sample Configurations)

Figure 5.0

Extended Position (maximum)  Lowered Offset  Raised Offset  Angled
2.0 Legrest Installation & Set-Up

2.5 Calf Pad Adjustments (... cont’d)

**Depth Adjustments** to the calf pad may be made via the calf pad mounting bracket. The mounting bracket is secured to the swivel plate in one of two positions with an adjustment range of 1/2” (see Figure 6A below). The calf pad mounting bracket may be also be inverted* (rotated 180 degrees) if necessary to provide additional depth adjustment- refer to Figure 6B.

**Height Adjustments** to the entire calf pad assembly can be made via the swivel mechanism, where it fastens to the mounting plate. There are two optional mounting positions (heights) available on the mounting plate- see Figure 6A.

*note: for the inverted bracket configuration, the calf pad must be removed and re-installed on the opposite side of the mounting bracket

**Calf Pad Release Mechanism**- the calf pad assembly can be released from its fixed position, allowing it to swivel on the legrest and provide added clearance when needed during transfers in and out of the wheelchair. The calf pad is released from its locked position via a push button on the swivel mechanism.

*Note: The calf pad will automatically lock into place when it is returned to its original position.*
2.0 Legrest Installation & Set-Up

2.6 Footplate Adjustment

The footplates can be adjusted independently in several areas, depending on the client's needs. Please refer to Figure 8.0 and additional images below for an illustration of the wide range of footplate adjustments.

Figure 8.0

1. The clamping block can be fastened to the underside of the footplate. By altering the mounting position of the clamping block, the footplate can be adjusted back and forth along the length of the footplate in 1” increments. **Note:** the clamping block can also be inverted (rotated 180 degrees), in order to achieve a variation in fore and aft adjustment, if necessary.

2. By loosening the clamping block, the entire footplate can be move in and out (in relation to the extension tube) along the cylindrical post on the pivot bracket- see image i. below

3. The heel strap can also be adjusted front to back as required along the length of the footplate; Heel strap adjustments are in 1” intervals- see image ii. below.

4. The angle of the footplate may be altered by adjusting the nylon set-screw inside the pivot bracket. With the set screw fully inserted, the footplate will rest at 90 degrees (perpendicular to the legrest extension tube). Loosening the set screw will gradually decrease the footplate angle (less than 90 degrees)- see images ii & iii.