



POWER-POSITIONING SYSTEMS

A detailed 3D line drawing of the LNX Power Centermount Legrest assembly. It shows a central vertical support structure with a horizontal bar at the top. Two large, rectangular legrests are attached to the sides of the central support. The legrests have a contoured shape with rounded corners. The central support has various adjustment points and a base plate.

LNX Power Centermount Legrest

Installation, Set-Up & Adjustment User Manual





POWER-POSITIONING SYSTEMS

i Important!

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 LNX Centermount Legrest must only be performed 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 Representative. 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 for the installation/ set-up of the LNX Legrest:

Wrenches: 7/16", 1/2"

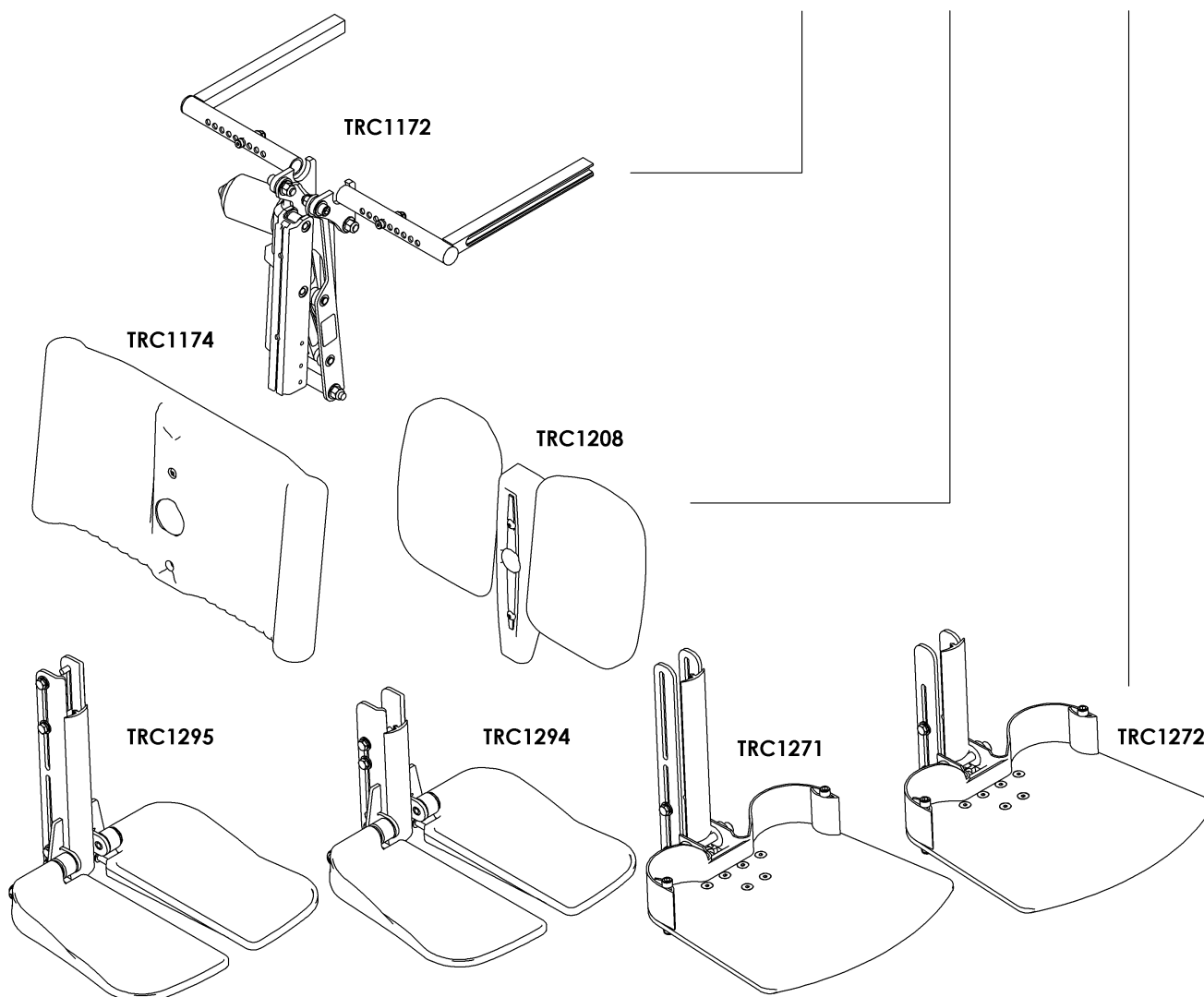
Socket wrenches: 7/16", 1/2"

Allen keys: 3/16", 1/4", 1/8"

Screw Drivers

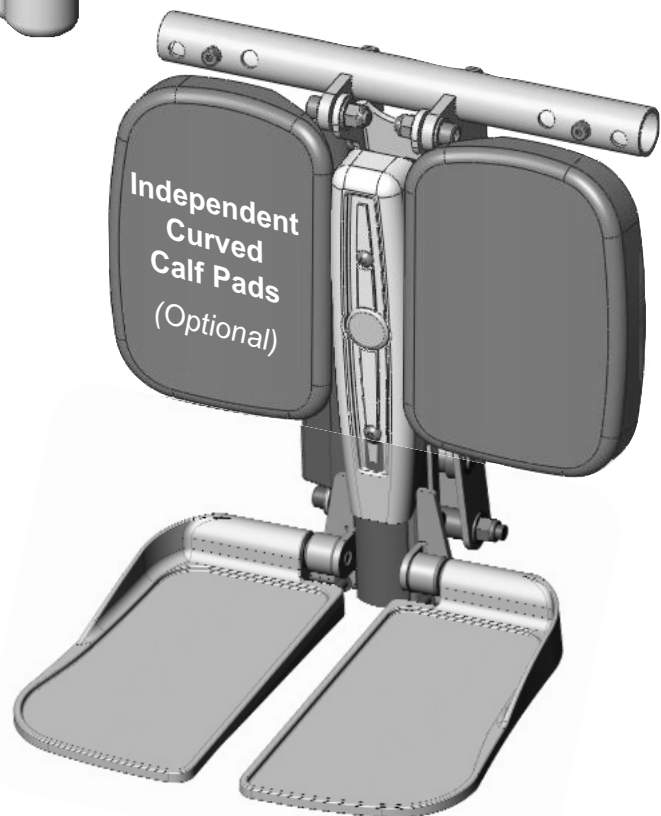
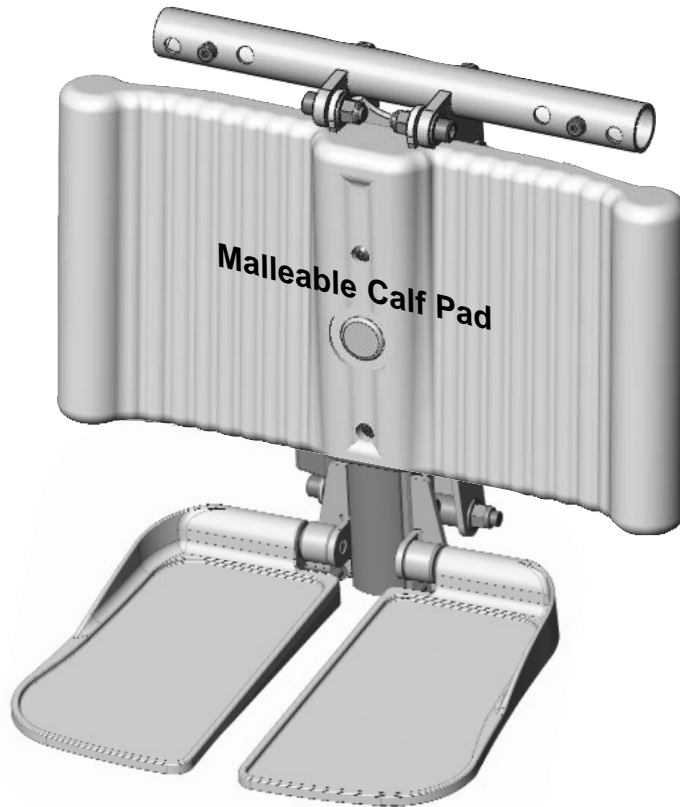
1.0 - Assembly Overview Drawings

ASS'Y PART NUMBER	CENTER MOUNT FOOT PLATFORM CONFIGURATION	EXTENDING ASS'Y	CALF PAD ASS'Y	FOOT PLATFORM ASS'Y
TRC1175-1	Independent Flip-Up Medium Foot Plate Ass'y, One-Piece Calf Panel	TRC1172	TRC1174	TRC1295-1
TRC1175-2	Independent Flip-Up Short Foot Plate Ass'y, One-Piece Calf Panel	TRC1172	TRC1174	TRC1295-2
TRC1175-3	Independent Flip-Up Long Foot Plate Ass'y, One-Piece Calf Panel	TRC1172	TRC1174	TRC1295-3
TRC1175-4	Independent Flip-Up Medium Foot Plate Ass'y, Independent Calf Panel	TRC1172	TRC1208	TRC1295-1
TRC1175-5	Independent Flip-Up Short Foot Plate Ass'y, Independent Calf Panel	TRC1172	TRC1208	TRC1295-2
TRC1175-6	Independent Flip-Up Long Foot Plate Ass'y, Independent Calf Panel	TRC1172	TRC1208	TRC1295-3
TRC1175-7	Center Foot Plate Ass'y, One-Piece Calf Panel	TRC1172	TRC1174	TRC1271
TRC1175-8	Center Foot Plate Ass'y, Independent Calf Panel	TRC1172	TRC1208	TRC1271
TRC1175-9	Ind. Flip-Up Medium Foot Plate Ass'y, One-Piece Calf Panel, Limited KTH	TRC1172	TRC1174	TRC1294-1
TRC1175-10	Ind. Flip-Up Short Foot Plate Ass'y, One-Piece Calf Panel, Limited KTH	TRC1172	TRC1174	TRC1294-2
TRC1175-11	Ind. Flip-Up Long Foot Plate Ass'y, One-Piece Calf Panel, Limited KTH	TRC1172	TRC1174	TRC1294-3
TRC1175-12	Ind. Flip-Up Medium Foot Plate Ass'y, Independent Calf Panel, Limited KTH	TRC1172	TRC1208	TRC1294-1
TRC1175-13	Ind. Flip-Up Short Foot Plate Ass'y, Independent Calf Panel, Limited KTH	TRC1172	TRC1208	TRC1294-2
TRC1175-14	Ind. Flip-Up Long Foot Plate Ass'y, Independent Calf Panel, Limited KTH	TRC1172	TRC1208	TRC1294-3
TRC1175-15	Center Foot Plate Ass'y, One-Piece Calf Panel, Limited KTH	TRC1172	TRC1174	TRC1272
TRC1175-16	Center Foot Plate Ass'y, Independent Calf Panel, Limited KTH	TRC1172	TRC1208	TRC1272



1.0 - Assembly Overview Drawings

LNx Centermount Legrest Assembly *(shown with Individual (Split) Footplates)*



(Note: Legrest Receivers are not shown)

1.0 - Assembly Overview Drawings

LNX Centermount Legrest Assembly (shown with Centermount Foot Platform)



(Note: Legrest Receivers are not shown)

2.0 - LNX Legrest Installation Overview

i) LNX Centermount Legrest Installation Overview

The LNX Centermount Legrest is installed into the seat frame (*not shown*) of the upper seating system via the adjustable depth legrest receivers (**Figure 1.0**). The initial angle (fully retracted position) of the LNX Legrest can be set to one of three optional configurations. By changing the mounting holes used in the upper legrest mount (tube), the initial legrest angle can be varied (as indicated in **Figure 1.0** below).

The LNX Legrest may be configured with either individual (split) footplates (see **Figure 2.0**, p.8), or a centermount platform (**Figure 3.0**, p.8), and is designed to provide infinite knee-to-heel (KTH)¹ adjustment within the established range of the extension brackets. There are two sizes of extension brackets available:

SHORT (LIMITED) = 13" to 15-1/2" KTH range ; **LONG** = 13" to 19" KTH range

¹**note:** KTH height is measured from top of seat pan to the top of the footplate.

The unique design of the LNX legrest uses geometry instead of sliding tubes or complicated linkages to provide virtual articulation of up to 8.25". The overall range of travel (final legrest angle) can be adjusted to best meet the needs of the end user, and will vary depending on the initial legrest angle. Both footplate options allow adjustment to the footplate angle, while the split footplates also allow for offset positioning of the two footplates (i.e.; bi-level installation)

The sections that follow provide greater detail on the installation, assembly and proper set-up of the LNX Legrest.

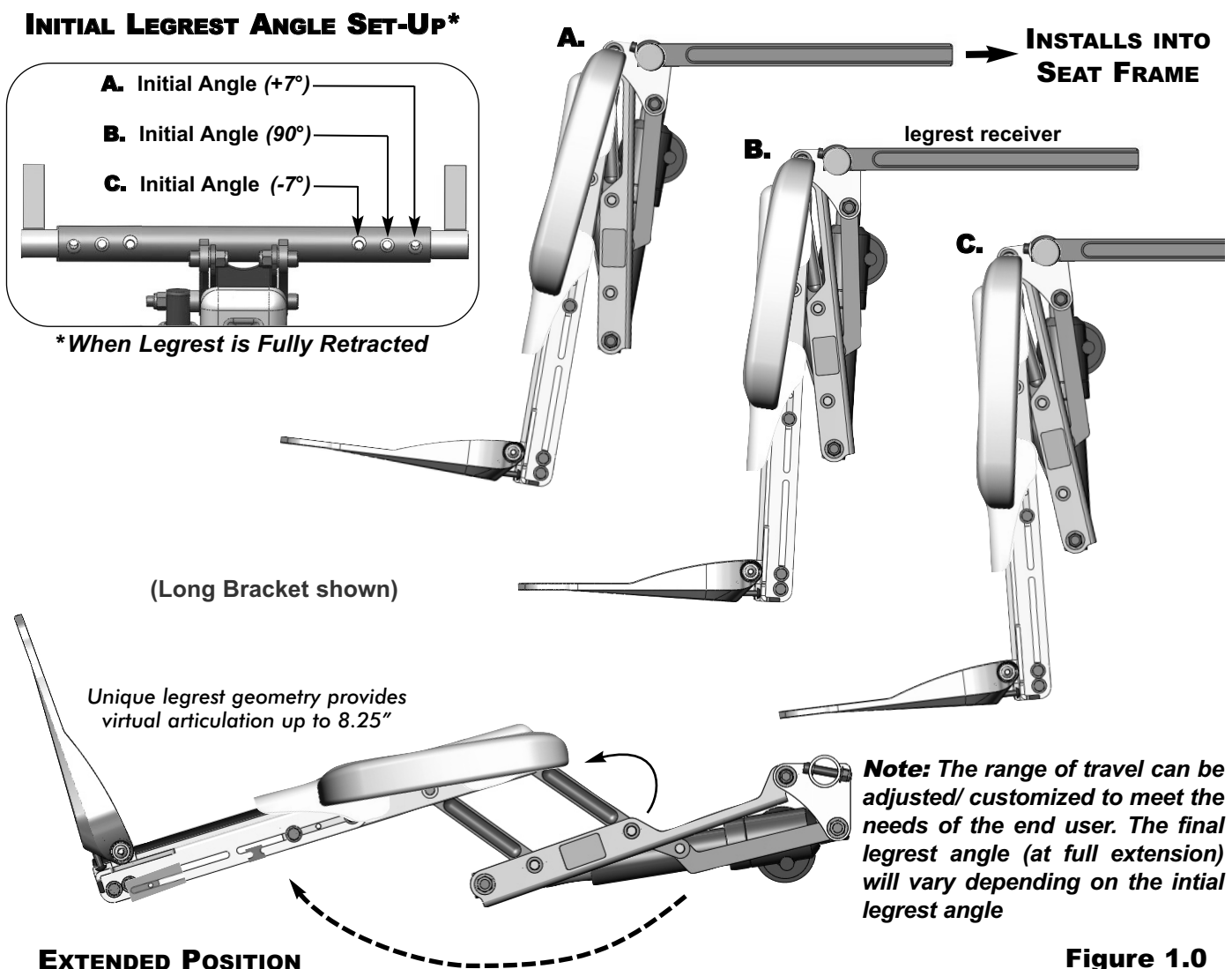


Figure 1.0

2.0 - LNX Legrest Installation Overview

Figure 2.0 LNX Legrest Assembly w/ Split Footplates

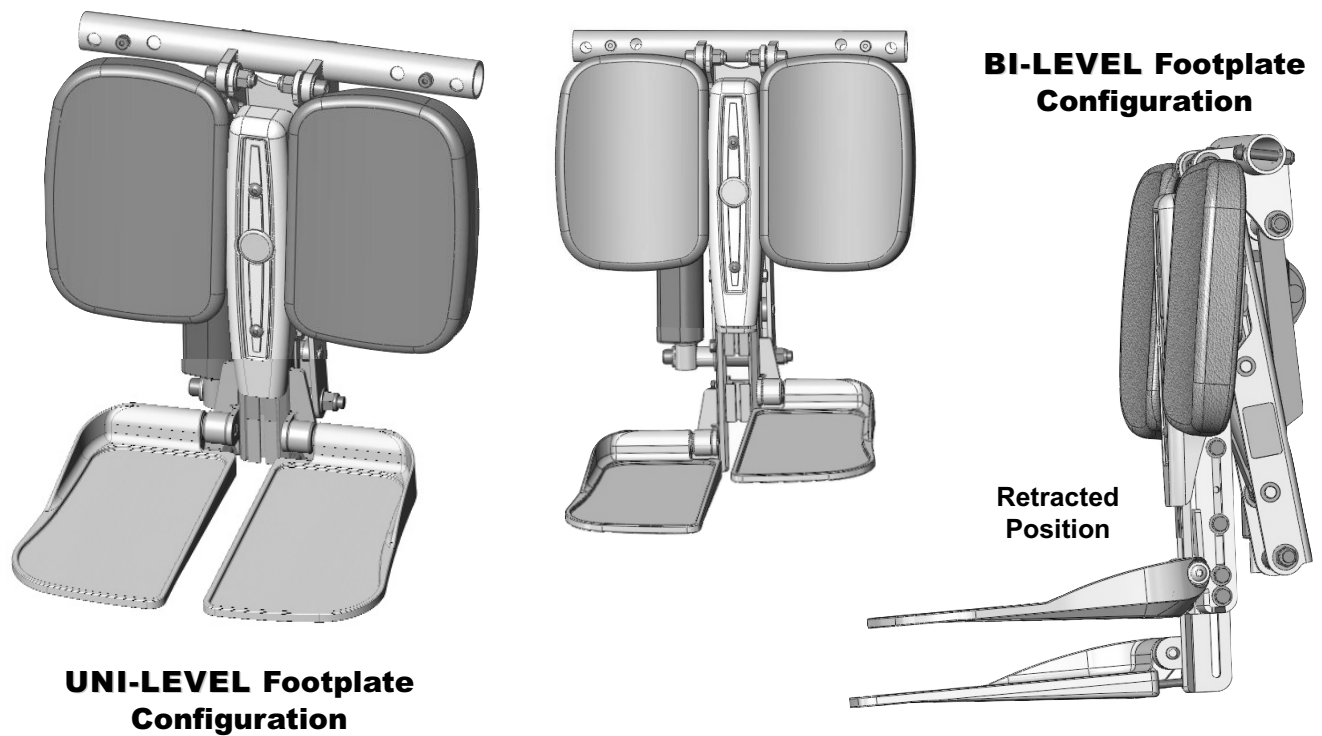
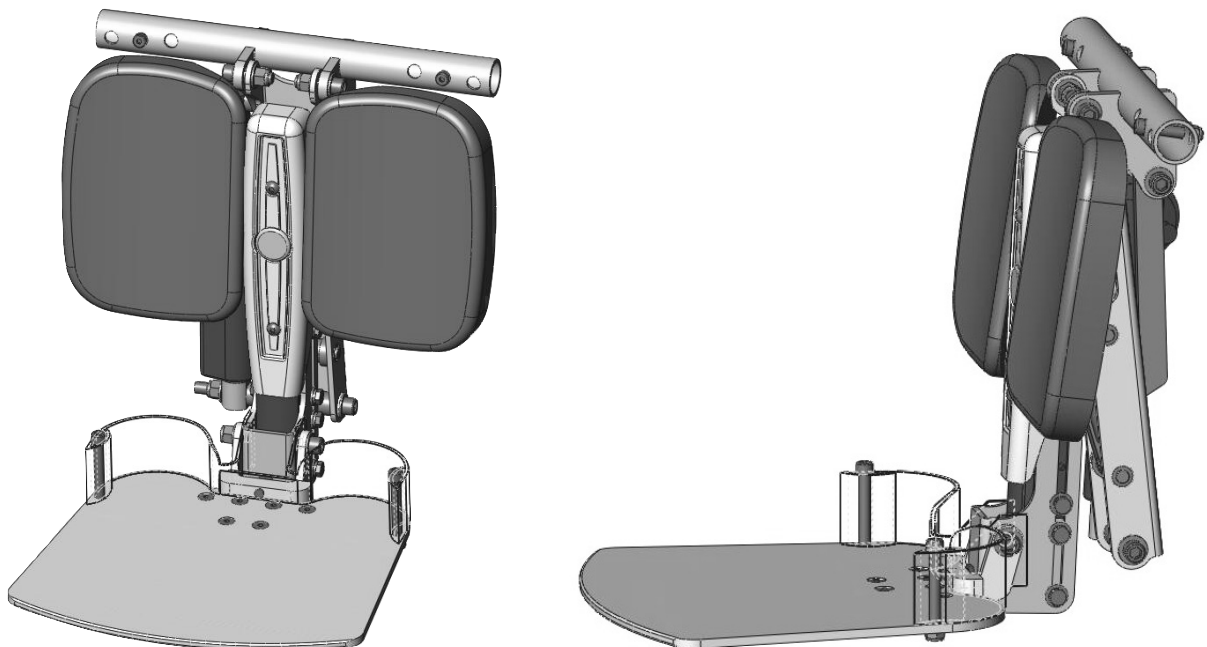


Figure 3.0 LNX Legrest Assembly w/ Centermount Platform



3.0 - LNX Legrest Set-Up and Adjustment

LNx LEGREST: Basic Set-Up & Adjustments

The basic set-up of the LNX Legrest can be performed in **two simple steps** (refer to **Figure 4** below):

Step A: With the client properly seated in the chair, adjust the knee-to-heel (KTH) of the legrest assembly to optimize the comfort/ positioning of the clients legs (refer to). Once the KTH is set, the legrest should then be **fully extended** with the client still seated in the chair. **Step B:** While extended, loosen the legrest receivers locking screws and carefully slide the entire legrest assembly inward or outward (as needed) so that the footplate just makes contact with the clients feet* (Refer to p.12 for additional Depth Adjustment instructions). Re-tighten the legrest receivers to secure the LNX legrest assembly into position.

Important! *when the legrest is fully extended, ensure the clients feet are supported at the heel by the footplate, in addition to the leg support provided by the calf pad.*

It may be necessary/ desirable to make additional adjustments to the legrest assembly to meet the specific needs of the client. Steps **C.** thru **E.** illustrate the additional adjustments available on the LNX Legrest.

A. Knee-to-Heel (KTH) Set-Up/ Adjustment:

KTH set-up is controlled via the legrest extension bracket. The split footplates utilize two individual extension brackets (to allow independent footplate adjustment), while the centermount foot platform utilizes a one-piece extension bracket. The slotted channel in the bracket allows for infinite KTH adjustability within the available channel length.

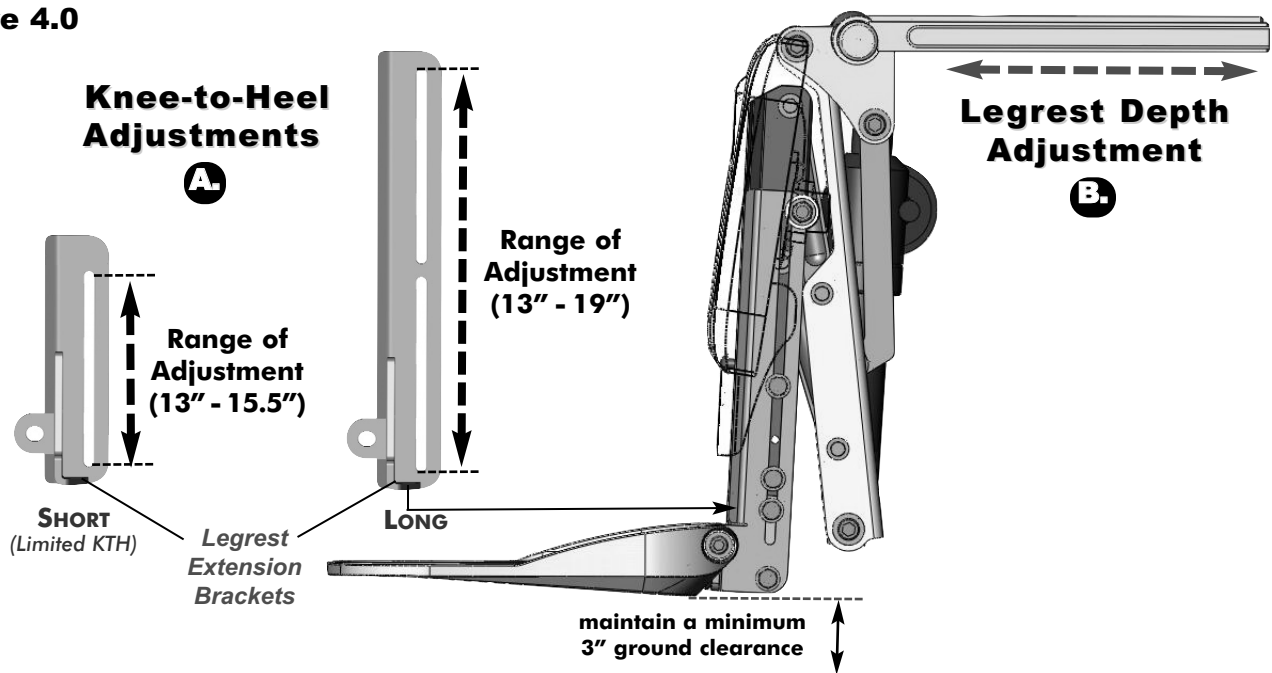
Extension Brackets: **SHORT KTH** = 13" to 15-1/2" ; **LONG KTH** = 13" to 19" - see **Figure 4.0** below

Note: KTH length is measured from top of seat pan to the top of the footplate.

Important! **ALWAYS** maintain a minimum of 3-inches between bottom of the front riggings and the floor/ground while the wheelchair is in motion to ensure proper ground clearance. If necessary, elevate the front rigging or tilt seat to achieve proper ground clearance.

Warning! **DO NOT** leave elevating legrests in the fully extended position when proceeding down ramps or slopes.

Figure 4.0



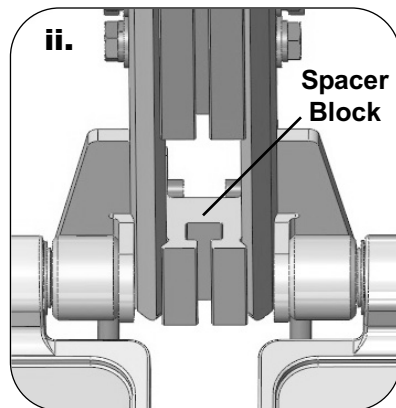
3.0 - LNX Legrest Set-Up and Adjustment

A. Knee-to-Heel Adjustments (... cont'd)

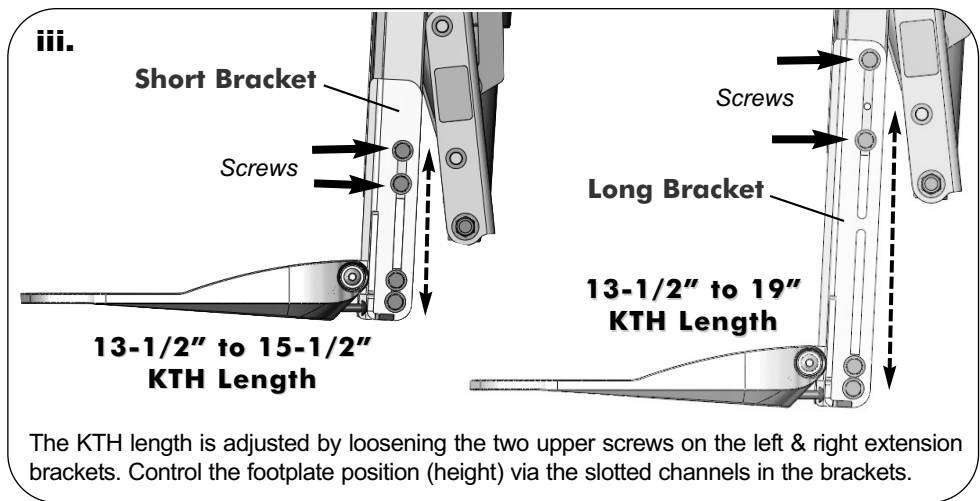
I. Split Footplate (Uni-Level Adjustments)

Each individual footplate is installed onto its own separate extension bracket. For the shortest KTH lengths (13" up to 13-1/2") the spacer block is not required, and only two sets of screws are required to install/adjust the footplates along the extension brackets (refer to **image i** and **ii**). For longer KTH lengths (13-1/2" to 19") the KTH length is adjusted via the upper 2 screws on the extension bracket (refer to **image i.**) To maintain strength and stability at longer KTH settings, the spacer block must be installed at the bottom of the extension bracket (*aligned between the footplates*).

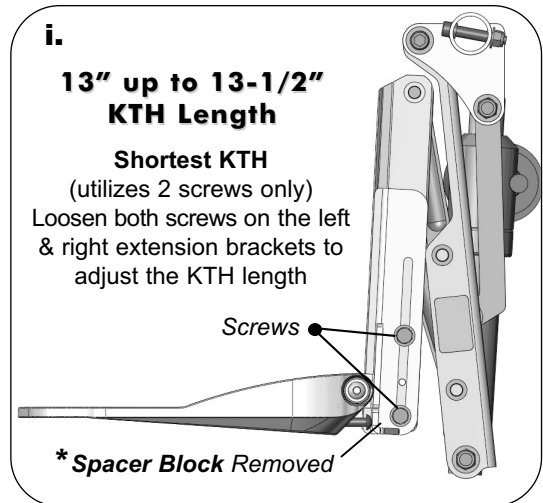
Note: Front shroud & calf pads are not shown for illustration purposes.



***Note:** to set the lowest KTH length (13" up to 13-1/2") the spacer block (and hardware) must be removed.



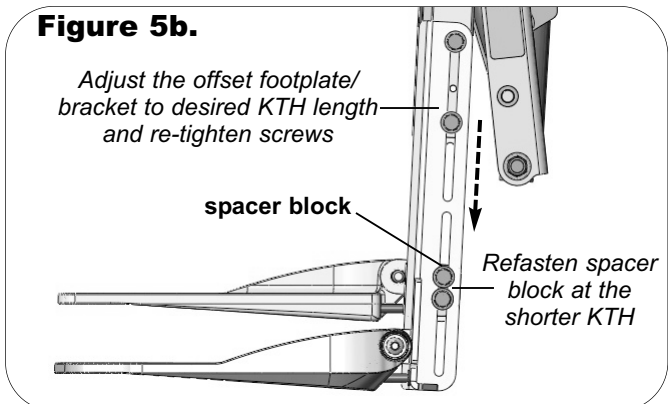
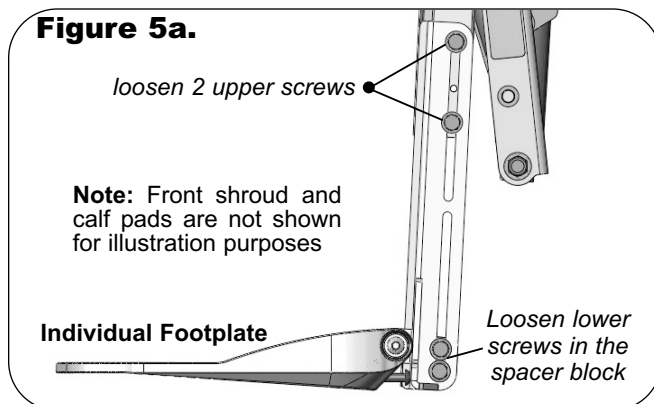
The KTH length is adjusted by loosening the two upper screws on the left & right extension brackets. Control the footplate position (height) via the slotted channels in the brackets.



II. Split Footplate (Bi-Level Adjustments)

The separate extension brackets allow each footplate to be adjusted independently for **bi-level (offset) configurations**. For bi-level set-up, it is recommended that the footplates be first set to the shortest KTH height. With the shorter KTH set, adjust the applicable footplate to the longer KTH position by loosening all 4 screws (see **Figures 5a** and **5b**). Slide (adjust) the footplate/extension bracket to the desired KTH length and re-tighten all 4 screws to secure the footplate into place.

Important! In a bi-level configuration, the spacer block should remain aligned with the higher footplate (i.e.; shortest KTH)- as indicated in **Figure 5b**.



3.0 - LNX Legrest Set-Up and Adjustment

A. Knee-to-Heel Adjustments (... cont'd)

III. Centermount Foot Platform

The centermount foot platform is installed onto a one-piece extension bracket. For the shortest KTH lengths (13" up to 13-1/2") the spacer block is not required, and only two sets of screws are required to install/adjust the footplates along the extension brackets (refer to **Figure 6a**). For longer KTH lengths (13-1/2" to 19") the upper set of screws is used to adjust the extension bracket/ KTH length (see **Figure 6b**).

Note: Front shroud and calf pads are not shown for illustration purposes.

Figure 6a

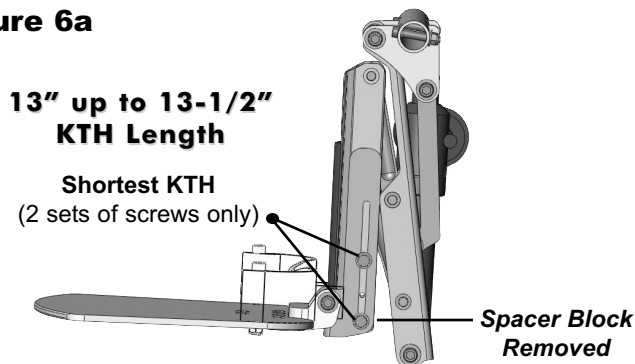
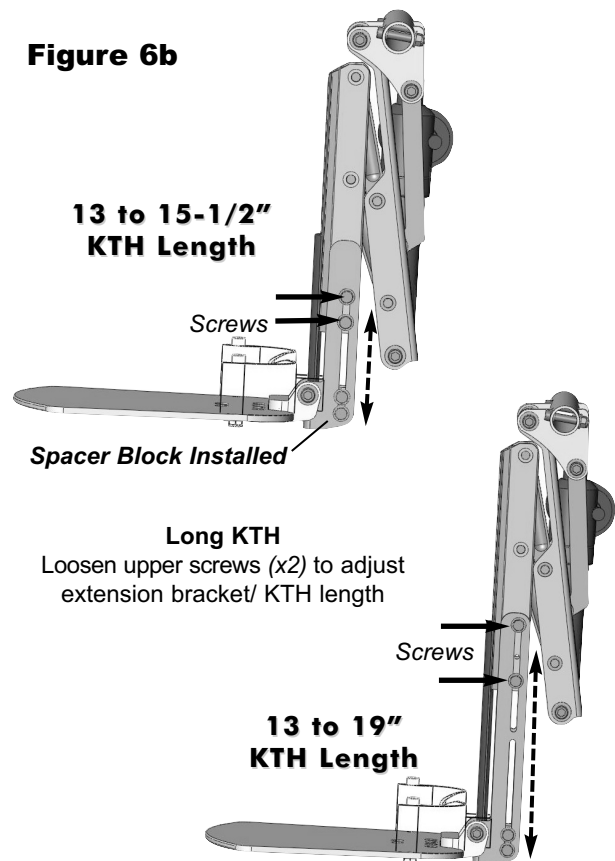


Figure 6b



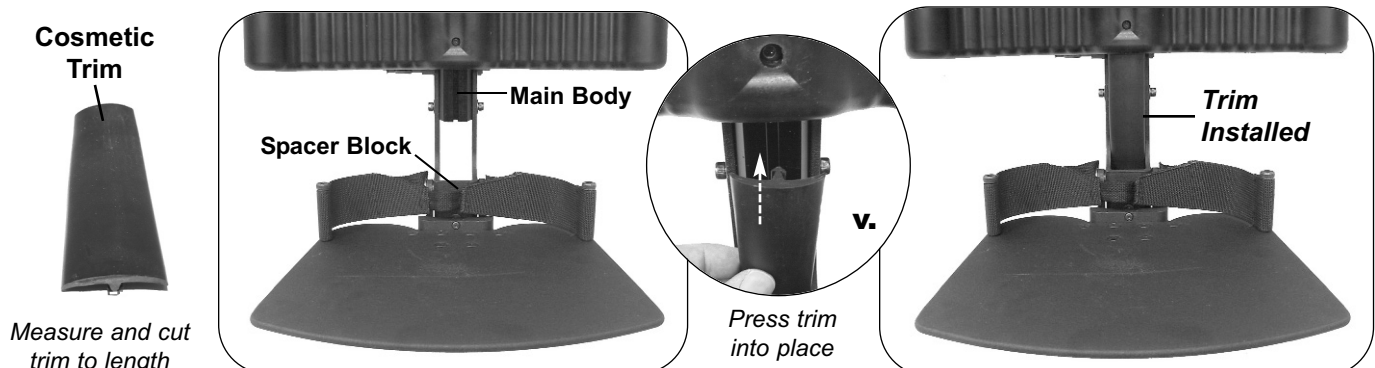
Important! ALWAYS maintain a minimum of 3-inches between bottom of the front riggings and the floor/ground while the wheelchair is in motion to ensure proper ground clearance. If necessary, elevate the front rigging or tilt seat to achieve proper ground clearance.

Warning! DO NOT leave elevating legrests in the fully extended position when proceeding down ramps or slopes.

IV. Cosmetic Trim

Each LNX legrest comes with a strip of **Cosmetic Trim** that can be installed in order to cover the exposed edges along the extension bracket, and improve the overall aesthetics of the LNX legrest.

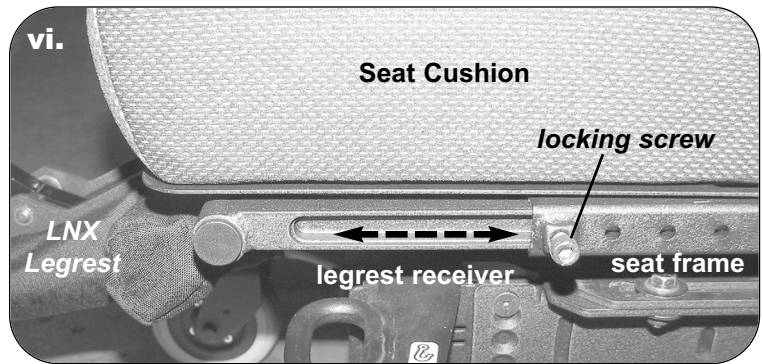
To Install: Once the final KTH length is determined, cut the cosmetic trim to the desired length and press the strip into the slots at the front of the spacer block and the main body (extrusion). Refer to **image v.** below.



3.0 - LNX Legrest Set-Up and Adjustment

B. Legrest Depth Adjustment:

Depth adjustment for the LNX Legrest assembly is controlled via the depth adjustable legrest receivers (x2). To adjust the legrest depth, loosen the locking screw on the seat side frame for each of the legrest receivers (left & right). The adjustable depth legrest receivers offer infinite depth adjustment within the available channel length on the legrest receiver (see **image vi.** at right).



C. Calf Pad Adjustments:

I. Malleable Calf Panel (Standard)

The malleable calf panel provides a greater level of support without the need for a multitude of adjustments. This unique one-piece calf panel utilizes a bendable steel 'inner skeleton' that is molded directly into the foam pad. The calf panel can be manipulated/shaped (by hand) to match the contour of the clients legs. The malleable calf panel installs in a fixed position on the legrest assembly. Refer to **Figures 7a & 7b**.

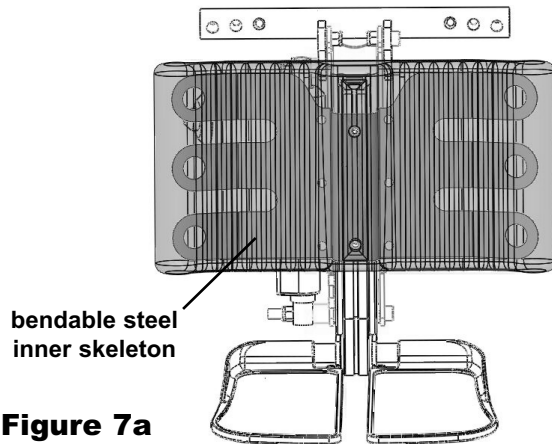


Figure 7a

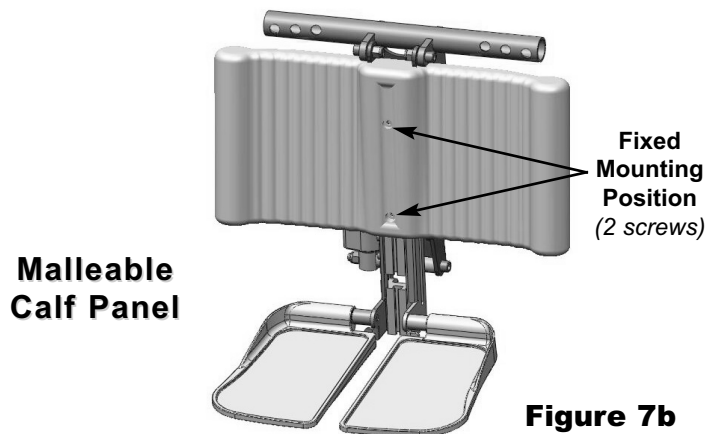


Figure 7b

II. Independent Curved Calf Pads (Optional)

The overall height/ position of the curved calf pads on the legrest assembly can be adjusted via the calf pad mounting plate (both pads are adjusted at once)- see **Figure 8.0** below. To adjust the mounting position of the calf pads, loosen the two mounting screws on the front shroud cover, and slide the calf pads up or down via the slot in the mounting plate. The mounting plate provides a 1-1/4" range of vertical adjustment.

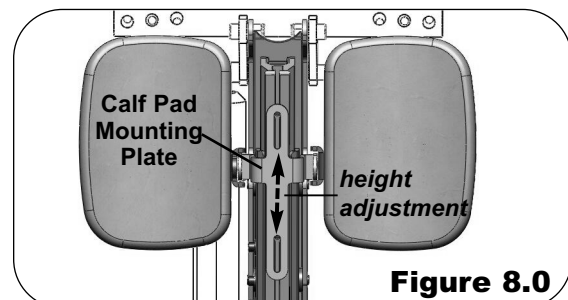
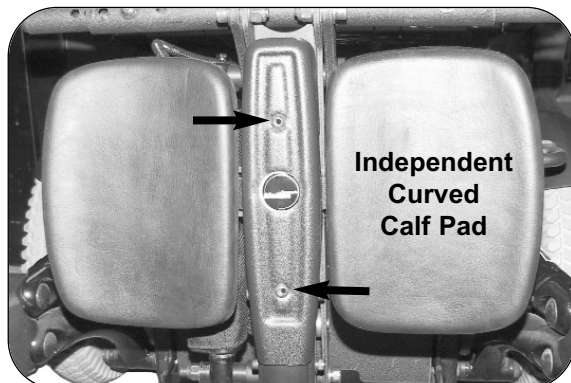


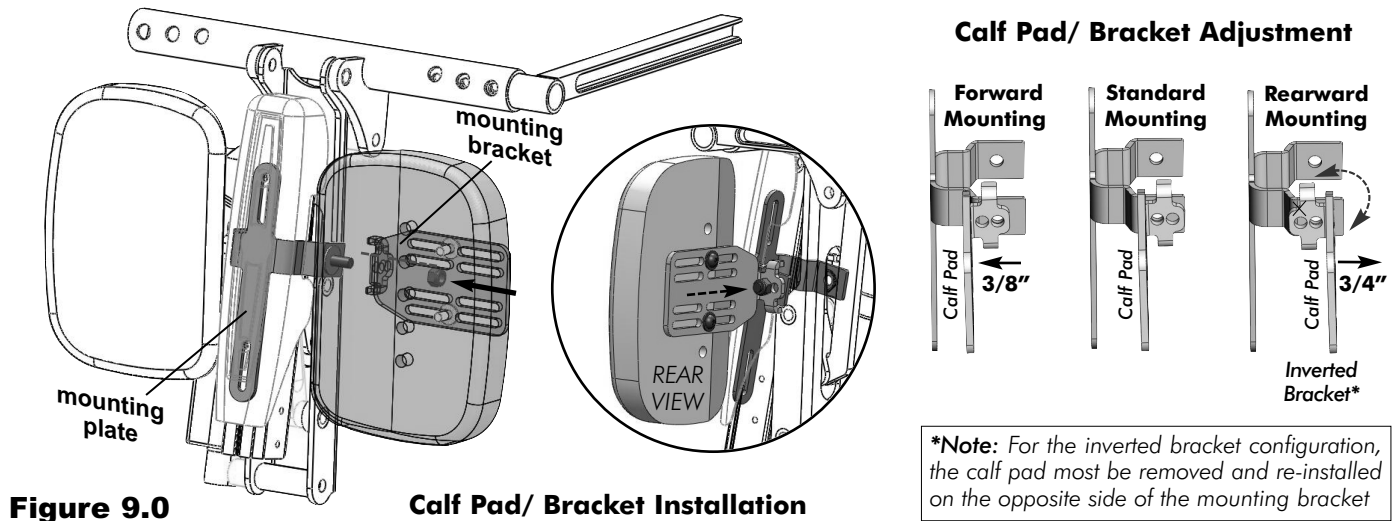
Figure 8.0

To adjust calf pad height, loosen both screws and slide the calf pad assembly into the desired position (both pads adjust simultaneously)

3.0 - LNX Legrest Set-Up and Adjustment

C. Calf Pad Adjustments: (...cont'd)

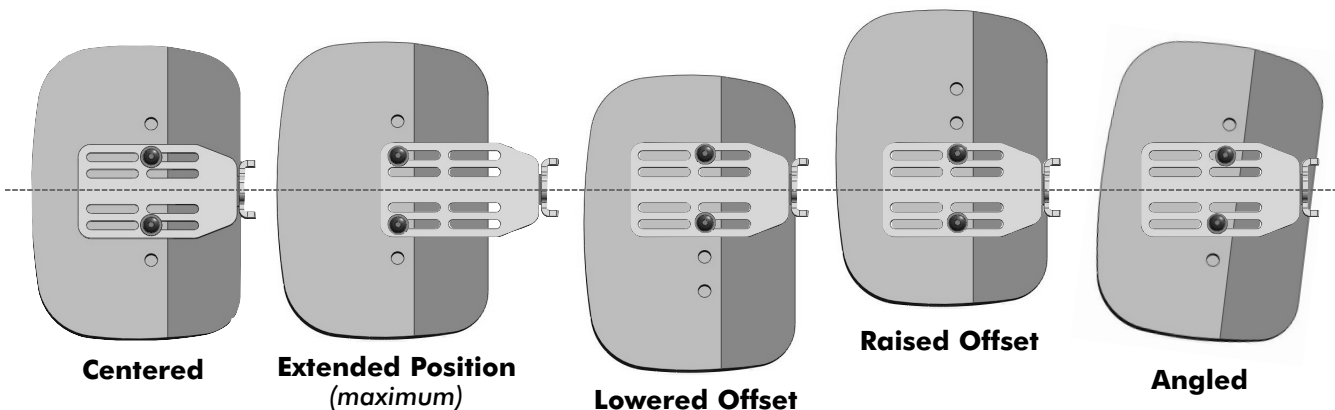
The independent curved calf pads are installed via a **mounting bracket** into the tab on the side of the calf pad **mounting plate**. The calf pads may be configured (*independently*) in one of three positions on the mounting plate: in the standard position; in a forward position, or in the rearward (*inverted*) position (*by rotating the mounting bracket 180degrees*) - refer to **Figure 9.0** below.



Curved calf pads may also be adjusted independently on their respective mounting bracket using the mounting screws at the rear of the calf pads. The calf pads may be mounted in numerous configurations to ensure a high level of comfort for the client- sample configurations are illustrated below in **Figure 10.0**.

Independent Calf Pad Adjustment (Sample Configurations)

Figure 10.0



D. Footplate Angle Adjustments

The Split Footplates (Bi-Level or Uni-Level) can be independently adjusted to set the desired footplate angle for each footplate. The angle of the Center Mount Platform is also adjusted via a set-screw at the rear of the foot platform. Once set, these footplate angles will remain consistent throughout the extension and retraction of the legrest assembly.

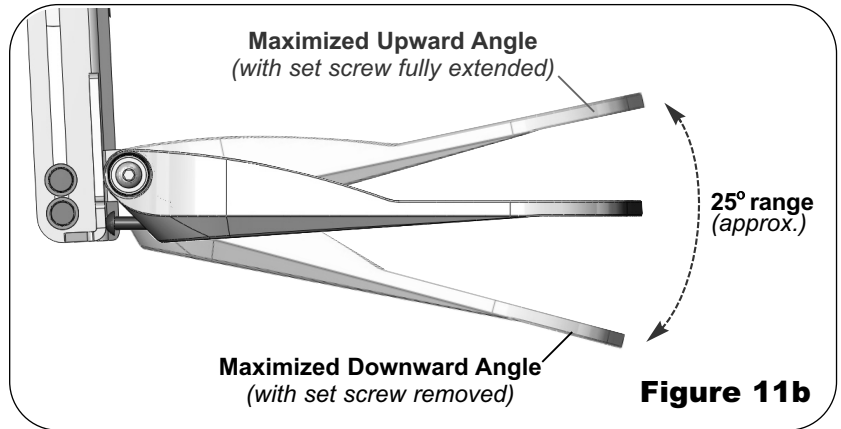
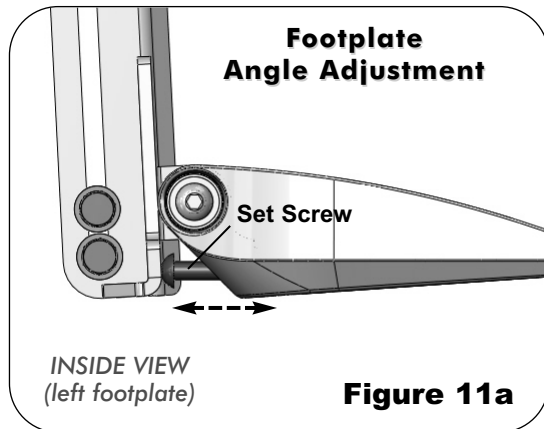
3.0 - LNX Legrest Set-Up and Adjustment

D. Footplate Angle Adjustments (...cont'd)

I. Split Footplate- Angle Adjustment

The angle* of each individual footplate is adjusted via the set screw in the mounting bracket at the rear of each footplate (Refer to **Figures 11a** and **11b**). To set the maximum upward footplate angle, fully extend the set screw (*ensure there is adequate screw thread remaining in the footplate to hold it in place*). To maximize the downward footplate angle, the set screw may be completely removed.

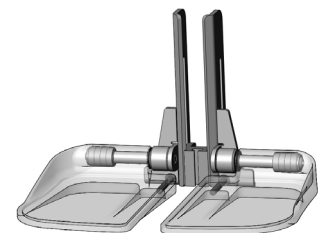
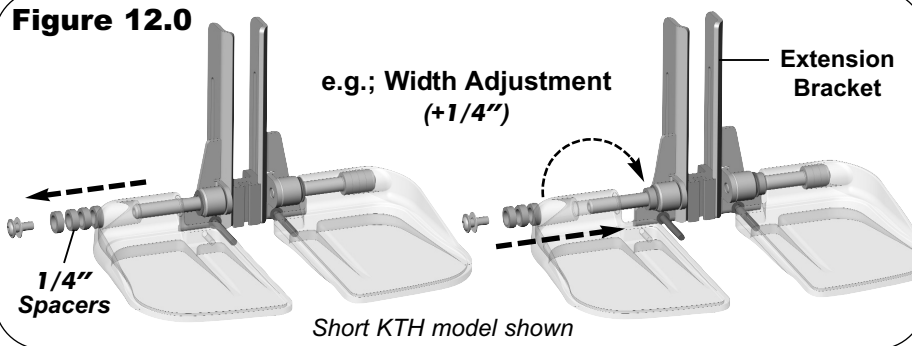
***Note:** The final attainable angle of the footplate will be dictated by the **initial angle set up** of the LNX Legrest - see **Section 2.0, p.7**



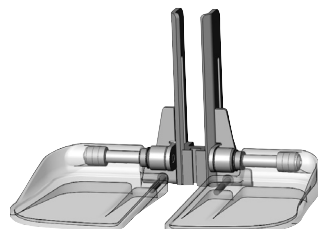
II. Split Footplate- Width Adjustment

The width of each individual footplate can be adjusted relative to its corresponding extension bracket by varying the orientation of the mounting hardware. The adjustable mounting hardware consists of a main bolt and four (4) 1/4" spacers (see **Figure 12.0**). Each footplate may be adjusted independently by changing the location/ position of the spacers along the mounting bolt- as illustrated in **images i. - v.** below.

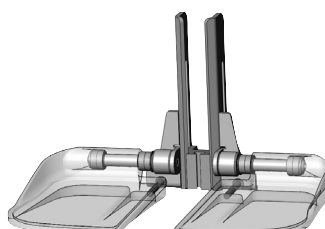
Figure 12.0



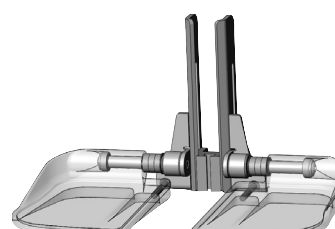
i. Standard (Narrow)



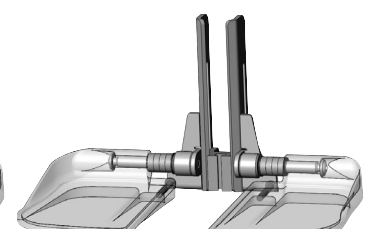
ii. Medium Narrow
(+1/4" per side)



iii. Medium
(+1/2" per side)



iv. Medium Wide
(+3/4" per side)



v. Wide
(+1" per side)

3.0 - LNX Legrest Set-Up and Adjustment

III. Centermount Platform- Angle Adjustment

The angle* of the centermount platform is determined by an adjustable set screw at the rear of the platform (Refer to **Figures 13a** and **13b**). To set the maximum upward footplate angle, fully extend the set screw (*ensure there is adequate screw thread remaining in the foot platform to hold it in place*). To maximize the downward foot platform angle, the set screw may be completely removed.

***Note:** the final angle of the foot platform will be dictated by the initial angle set up of the LNX Legrest- see **Section 2.0, p.7**

Figure 13a

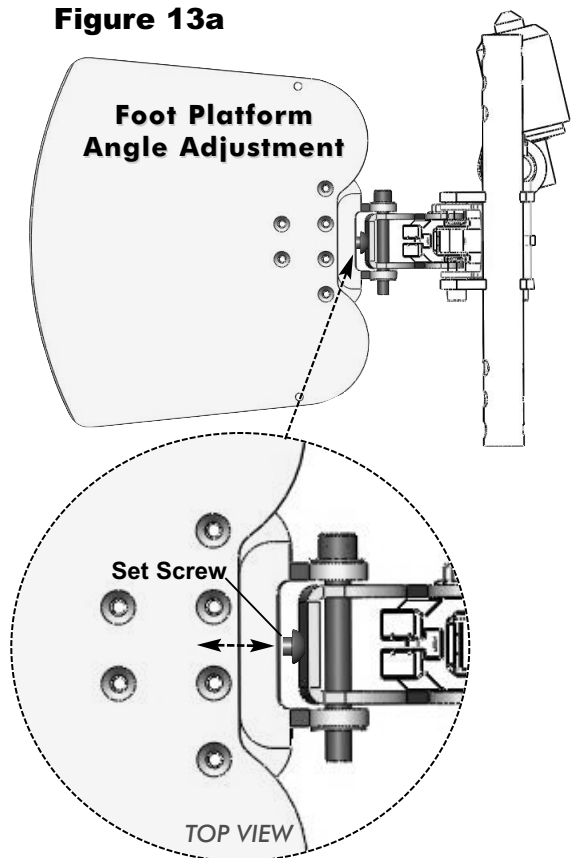
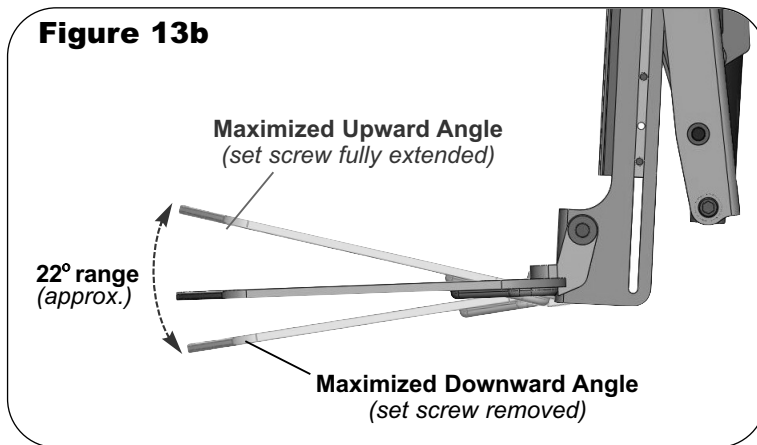


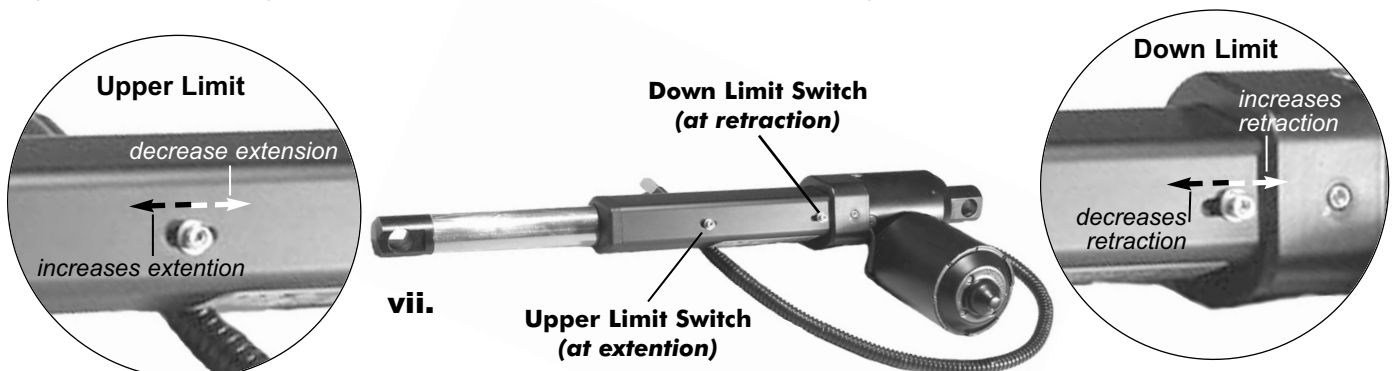
Figure 13b

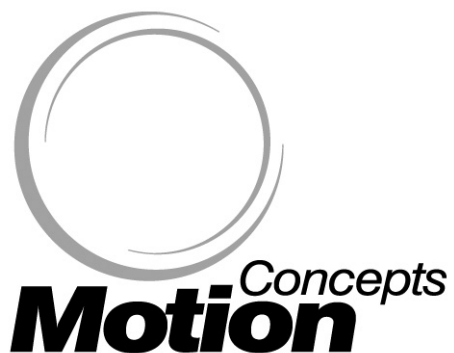


E. Legrest Actuator Limit Adjustments

The limit adjustments for the legrest actuator are intended for fine tune adjustments to the overall range of motion of the LNX Legrest. These minute adjustments can be used to eliminate potential interference issues when the legrest is fully retracted, or can be used to decrease the maximum extension if needed. The legrest actuator is equipped with two built-in limit sensors - refer to **image vii.** below. The upper sensor limit will allow for approximately 4° (degrees) of adjustment; while the lower (down position) limit allows for approximately 8° (degrees) of adjustment.

To Adjust: Using an allen key, loosen and slide the limit switch along its designated slot to adjust the limit (*as illustrated below*). **Note:** the limit adjustments are very sensitive; it is recommended to make a small adjustment and re-cycle the actuator to determine the extent of adjustment.





USA

700 Ensminger Rd. Suite 112
Tonawanda, NY, USA 14150
716-447-0050
888-433-6818

Canada

84 Citation Dr. Units 1-3
Concord, Ontario,
Canada L4K 1C9
905-695-0134

www.motionconcepts.com