



# ***STELLAR LEAP***

MANUAL TILT WHEELCHAIR

Owner's Operation and Maintenance Manual

**DEALER** This manual must be given to the user of the wheelchair.

**USER** Before using this wheelchair read this entire manual and save it for future reference.

**Attendant/Assistants:** Before assisting the user of this wheelchair, you must read this manual and save for future reference.

For more information regarding PDG products, parts and service, please visit [www.pdgmobility.com](http://www.pdgmobility.com)



WHEELCHAIRS FOR FUNCTION AND INDEPENDENCE  
WWW.PDGMOBILITY.COM

## Serial Number

### **WARNING**

Do not operate this equipment without first reading and understanding this manual. If you are unable to understand the warnings and instructions, contact a health care professional such as a doctor or therapist who is familiar with this type of product before attempting to use this equipment. Otherwise, injury or damage may result.

Refer to this manual regularly for maximum safety and performance.

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## 1 SPECIAL NOTES

**WARNING/CAUTION** - Notices as used in this manual apply to hazards or unsafe practices, which could result in personal injury or property damage.

All wheelchair set-up and adjustments must be performed by a qualified technician.

**NOTE** – THE INFORMATION CONTAINED IN THIS DOCUMENT IS SUBJECT TO CHANGE WITHOUT NOTICE. An updated version of this owner’s manual may be available at [www.PDGMobility.com](http://www.PDGMobility.com)

**INDICATIONS FOR USE** – The Stellar LEAP Manual Tilt Wheelchair is intended to provide mobility to persons restricted to a seated position.

### **CONTRAINDICATIONS:**

- Does not have the required ability to adequately manage the functions of a manual tilt-in-space wheelchair and does not have a capable caregiver for the required assistance
- Cannot tolerate prolonged periods in a seated position
- Cannot tolerate prolonged periods in a seated position with posterior tilt
- Cannot tolerate prolonged periods in a seated position with a reclined back position<sup>1</sup>
- Is susceptible to significant skin shear due to the relative movement of a reclining backrest<sup>1</sup>
- Cannot tolerate an anterior seated position<sup>1</sup>
- Highly agitated occupants

<sup>1</sup>*For dynamic recline backrest and anterior tilt options only*

**WHEELCHAIR USER** - As a manufacturer of wheelchairs, PDG endeavors to supply a wide variety of wheelchairs to meet the many needs of the end user. However, final selection of the type of wheelchair to be used by an individual rests solely with the user and his/her health care professional capable of making such a selection.

**WHEELCHAIR TIE-DOWN RESTRAINTS AND SEAT RESTRAINTS** – Wheelchair users are NOT to be transported in vehicles of any kind while in wheelchairs. If transportation in a vehicle in the wheelchair is required, the wheelchair must be equipped with PDG factory installed Transport-Ready Tie-down mounting points. The wheelchair must be restrained from movement using a government approved wheelchair tie-down system and the vehicle must be equipped with government approved anchor points.

Users of wheelchairs should be transferred into appropriate seating in vehicles for transportation and use should be made of the restraints made available by the auto industry. PDG cannot and does not recommend wheelchair transportation systems.

**RESTRAINT DEVICES and SEAT BELTS - IT IS THE OBLIGATION OF THE HOME DEALER, THERAPISTS AND OTHER HEALTH CARE PROFESSIONALS TO DETERMINE IF A SEATING RESTRAINT IS REQUIRED TO ENSURE THE SAFE OPERATION OF THIS EQUIPMENT BY THE USER. SERIOUS INJURY CAN OCCUR IN THE EVENT OF A FALL FROM A WHEELCHAIR.**

## SAVE THIS MANUAL FOR FUTURE REFERENCE

### 2 SAFETY SUMMARY

#### Operating Information Warning

To determine and establish particular safety limits, practice bending, reaching and transferring activities in several combinations in the presence of a qualified health professional BEFORE attempting active use of the wheelchair.

- ◆ **DO NOT** attempt to reach objects if you have to move forward in the seat.
- ◆ **DO NOT** attempt to reach objects if you have to pick them up from the floor by reaching down between your knees.
- ◆ **DO NOT** lean over the top of the back upholstery to reach objects from behind as this may cause the wheelchair to tip over.
- ◆ **DO NOT** shift your weight or sitting position toward the direction you are reaching as the wheelchair may tip over.
- ◆ **DO NOT** tilt the wheelchair without assistance.
- ◆ **DO NOT** use an escalator to move a wheelchair between floors. Serious bodily injury may occur.
- ◆ **DO NOT** attempt to stop a moving wheelchair with the wheel locks. WHEEL LOCKS ARE NOT BRAKES.
- ✓ Before attempting to transfer in or out of wheelchair, every precaution should be taken to reduce the gap distance. Turn both casters towards the object you are transferring onto. When transferring to and from the wheelchair, ALWAYS ENGAGE BOTH WHEEL LOCKS.
- ◆ **DO NOT** operate on roads, streets or highways.
- ◆ **DO NOT** attempt to move up or down an incline that is wet, icy or contains an oily film.
- ◆ **DO NOT** attempt to ride over curbs or obstacles. Doing so may cause your wheelchair to turn over and cause bodily harm or damage to the wheelchair.
- ◆ **DO NOT** use unauthorized parts, accessories, or adapters other than those authorized by PDG.
- ◆ **DO NOT** attempt to lift wheelchair by any removable (detachable) parts.
- ◆ **DO NOT** stand on the frame of the wheelchair.
- ✓ For products supplied with anti-tippers, anti-tippers must be attached at all times.
- ✓ **DO NOT** use the footplate as a platform when getting in or out of the wheelchair.
- ✓ Use seat restraint as recommended by home dealers, therapists, and other healthcare professionals.
- ✓ The Stellar LEAP transfer assist should only be brought into the transfer assist (anterior tilt) position on stable, level ground.
- ✓ The Stellar LEAP transfer assist should only be brought into the transfer assist position with the wheel locks engaged.
- ✓ The anterior tilt mechanism should only be operated when the wheelchair is occupied to avoid risk of accident or injury.
- ◆ In the case of strong and/or sudden spasms, cramps or similar the user should only go to anterior tilt under supervision of a care giver.
- ◆ Improper use of the anterior tilt feature could cause the user to fall forward, possibly resulting in injury or death. Anterior tilt should only be used when recommended by a licensed healthcare professional.

- ✓ Positioning belts should be considered to meet the user's specific safety requirements.

### **Tire Pressure**

- ◆ If pneumatic tires are supplied, DO NOT use your wheelchair unless it has the proper tire pressure (psi). DO NOT over inflate the tires. Failure to follow these suggestions may cause the tire to explode and cause bodily harm.

### **Weight Training**

- ◆ **PDG DOES NOT** recommend the use of this wheelchair as a weight training apparatus. PDG wheelchairs have NOT been designed or tested as a seat for any kind of weight training. If the occupant uses said wheelchair as a weight training apparatus, PDG shall NOT be liable for bodily injury and the warranty will be voided immediately.

### **Weight and Age Limitations**

The Stellar LEAP Wheelchair has a weight limitation of 250 lbs, unless otherwise specified by PDG. Further, the Stellar LEAP is not to be used by persons under the age of 12 years.

## **3 SAFETY/HANDLING OF WHEELCHAIRS**

“Safety and Handling” of the wheelchair requires the close attention of the wheelchair user as well as the assistant. This manual points out the most common procedures and techniques involved in the safe operation and maintenance of the wheelchair. It is important to practice and master these safe techniques until you are comfortable in maneuvering around frequently encountered architectural carriers.

Use this information only as a basic guide. The techniques that are discussed on the following pages have been used successfully by many.

Individual wheelchair users often develop skills to deal with daily living activities that may differ from those described in this manual. PDG recognizes and encourages each individual to try what works best in overcoming architectural obstacles that they may encounter. Techniques in this manual are a starting point for the new wheelchair user and assistant with “safety” as the most important consideration for all.

### **3.1 Stability and Balance**

To assure stability and proper operation of your wheelchair, you must at all times maintain proper balance. Your wheelchair has been designed to remain upright and stable during normal daily activities as long as you do not move beyond the center of gravity.

Virtually all activities which involve movement in the wheelchair have an effect on the center of gravity. PDG recommends using seat restraints for additional safety while involved in activities that shift your weight.

- ◆ **DO NOT** lean forward out of the wheelchair any further than the length of the armrests. Make sure the casters are pointing in the forward position whenever you lean forward. This can be achieved by advancing the wheelchair and then reversing it in a straight line.

### **Coping with Everyday Obstacles**

Coping with the irritation of everyday obstacles can be alleviated somewhat by learning how to manage your wheelchair. Keep in mind your center of gravity to maintain stability/balance.

## A Note to Wheelchair Assistants

When assistance to the wheelchair user is required, remember to use good body mechanics. Keep you back straight and bend your knees whenever tilting the wheelchair or traversing curbs, or other impediments.

Be aware of any removable (detachable) parts. These must NEVER be used for hand-held or lifting supports, as they may be inadvertently released, resulting in possible injury to the user and/or assistant(s)

When learning a new technique, have an experienced assistant help before attempting it alone.

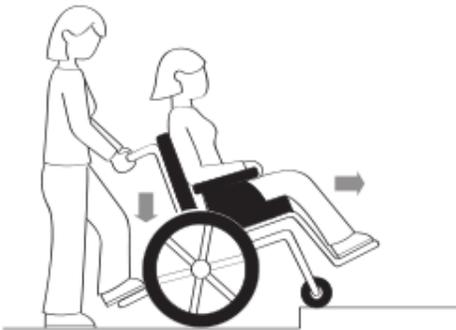
### 3.2 Tilting

- ◆ **WARNING: DO NOT** tilt the wheelchair without assistance.

When tilting the wheelchair, an assistant should grasp the back of the wheelchair on a non-removable (non-detachable) part. Inform the wheelchair occupant before tilting the wheelchair and remind him/her to lean back. Be sure the occupant's feet and hands are clear of all wheels.

#### Tilting – Curbs

After mastering the techniques of tilting the wheelchair, use this procedure to tackle shallow curbs, short stairs, etc.



**Figure 3.1:** Assistant positioning for climbing curbs, for wheelchair with step tubes



**Figure 3.2:** Assistant positioning for climbing curbs, for wheelchair without step tubes

#### METHOD 1 – Wheelchair with Step Tubes

Apply a continuous downward motion until the balance point is achieved and the front casters clear the curb. At this point, the assistant will feel a difference in the weight distribution.

Roll the wheelchair forward and slowly lower the wheelchair in one continuous movement. Do not let the wheelchair drop the last few inches to the ground. This could result in injury to the occupant. Push the wheelchair forward until the rear wheels roll up and over the curb.

#### METHOD 2 – Wheelchairs without Step Tubes

Unless the first assistant has exceptional upper body strength, it is recommended that METHOD 2 use two (2) assistants. The second assistant should be positioned at the front of the wheelchair lifting upward on a non-removable (non-detachable) part of the wheelchair frame when lifting the wheelchair and stabilizing the wheelchair when the wheelchair is being lowered to the ground. The first assistant should stand on the sidewalk and turn the wheelchair so that the rear wheels are against the curb. The wheelchair should be tilted back to the balance point and, in one continuous downward movement, the rear wheels should be pulled up and over the curb. DO NOT return the front casters to the ground until the wheelchair has been pulled

backward far enough for the front casters to clear the edge of the curb.

### 3.3 Stairways and Escalators

**WARNING – DO NOT** use an escalator to move a wheelchair between floors. Serious bodily injury may occur.

**WARNING – DO NOT** attempt to lift a wheelchair by lifting on any removable (detachable) parts. Lifting by means of any removable (detachable) parts of a wheelchair may result in injury to the user or damage to the wheelchair.



**Figure 3.3:** Assistant positioning for climbing stairs

Extreme caution is advised when it is necessary to move an occupied wheelchair up or down the stairs. PDG recommends using two (2) assistants and making thorough preparations. Make sure to use ONLY secure, non-detachable parts for hand-held supports.

Follow this procedure for moving the wheelchair between floors when an elevator is NOT available:

1. After the wheelchair has been tilted back to the balance point, once assistant (in the rear) backs the wheelchair up against the first step, while securely grasping a non-removable (non-detachable) part of the wheelchair for leverage.
2. The second assistant, with a firm hold on a non-detachable part of the framework, lifts the wheelchair up and over the stair and steadies the wheelchair as the first assistant places one (1) foot on the next stair and repeats STEP 1.
3. The wheelchair should not be lowered until the last stair has been negotiated and the wheelchair has been rolled away from the stairway.

### 3.4 Transferring to and from Other Seats

**WARNING —** BEFORE attempting to transfer in or out of the wheelchair, every precaution should be taken to reduce gap distance. Turn both casters toward the object you are transferring onto. Also be certain the wheel locks are engaged to help prevent wheels from moving.

**CAUTION —** When transferring, position yourself as far back as possible in the seat. This will prevent damaged upholstery and the possibility of the wheelchair tipping forward.

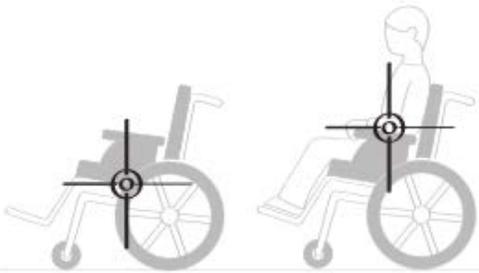
**NOTE —** This activity may be performed independently provided you have adequate mobility and upper body strength.



**Figure 3.4:** Transferring to and from other seats

1. Position the wheelchair as close as possible alongside the seat to which you are transferring, with the front casters pointing toward it. Engage wheel locks. Shift body weight into seat with transfer.
2. During independent transfer, little or no seat platform will be beneath you. Use a transfer board if at all possible.

### 3.5 Percentage of Weight Distribution



**Figure 3.5:** *Center of gravity location*

**WARNING** – DO NOT attempt to reach objects if you have to move forward in the seat or pick them up from the floor by reaching down between your knees.

Many activities require the wheelchair owner to reach, bend and transfer in and out of the wheelchair. These movements will cause a change to the normal balance, the center of gravity, and the weight distribution of the wheelchair. To determine and establish your particular safety limits, practice bending, reaching and transferring activities in several combinations in the presence of a qualified health professional BEFORE attempting active use of the wheelchair.

### 3.6 Reaching, Leaning, and Bending Forward

#### Functional Reach From a Wheelchair

Proper positioning is essential for your safety. When reaching, leaning, bending forward, it is important to use the front casters as a tool to maintain stability and balance.



**Figure 3.7:** *Reaching objects on the ground*

#### Bending Forward

Position the front casters so that they are extended as far as possible and engage wheel locks. DO NOT LEAN FORWARD OF THE ARMRESTS.

#### Bending Backward

**WARNING** — DO NOT lean over the top of the back upholstery. This will change your center of gravity and may cause you to tip over.

#### Reaching Objects on Ground

Position wheelchair as close as possible to the desired object. Point front casters forward to create the longest possible wheelbase. Reach back only as far as your arm will extend without changing your sitting position.



**Figure 3.6:** *Forward reach in wheelchair*

## 4 ENVIRONMENTAL CONDITIONS

### Warning

1. Use extra care if you must ride your chair on a wet or slick surface. If you are in doubt, ask for help.
2. Contact with water or excess moisture may cause your chair to rust or corrode. This could cause your chair to fail.
  - a. Do not use your chair in a shower, pool or other body of water. The chair tubing and parts are NOT water-tight and may rust or corrode from the inside.

- b. Avoid excess moisture (for example, do not leave your chair in a damp bathroom while taking a shower).
  - c. If your chair does get wet (from cleaning or otherwise), dry it as soon as possible.
- 3. Terrain
  - a. Your wheelchair is designed for use on firm, regular, even surfaces such as typical interior spaces, concrete or asphalt.
  - b. Operating your wheelchair in sand, loose soil or over rough terrain may damage wheels, the footrest, or other components of your wheelchair.

**NOTE** - Failure to heed these warnings could result in severe injury to yourself or others as well as damage your chair.

## 5 STANDARD FEATURES



**Figure 5.1:** *Standard Features*

- |   |                             |
|---|-----------------------------|
| 1 Lower Frame   | 9 Rear Axle Bolt            |
| 2 Upper Seat Frame                                    | 10 Wheel locks              |
| 3 Sub-Frame Assembly                                  | 11 Backrest                 |
| 4 Gas Strut Assembly (Yellow Spring)                  | 12 Plug-in Front Rigging    |
| 5 Removable – Adjustable Height Armrest – Single Post | 13 Composite Foot Plate     |
| 6 Front Caster  | 14 Tilt Activator (Trigger) |
| 7 Rear Wheel  | 15 Rear Anti-Tipper         |
| 8 Standard Hand Rims                                  |                             |

## 6 UNPACKING AND ASSEMBLY

**NOTE** – Unless the Stellar LEAP is to be assembled immediately, retain cartons and packing materials for use in storing the wheelchair until assembly is required

1. Check for any obvious damage to the carton or its contents. If damage is evident, notify your Dealer/Carrier immediately.
2. Remove all loose packing from the carton.
3. Carefully remove all components from the carton.

### 6.1 Inspection

Examine exterior of the PDG Stellar LEAP for nicks, dents, scratches or other damages. Inspect all components. If damage is evident, notify your Dealer/Carrier immediately.

### 6.2 Out of the Box Assembly Instructions

When unpacking a Stellar LEAP, you will need to assemble the armrests, backrest, rear wheels and, front rigging (if applicable), connect the cable from the strut to the tilt activator (trigger) and anti-tip tubes to complete the set-up.

#### Backrest

The seat frame has two bolts installed along the left and right side of the rear of the seat frame. Remove these bolts on each side and place the backrest subassembly into the back of the seat frame and replace bolts and fasten securely. To attach tilt actuator cable to the back post (trigger) follow instructions shown on page 30.

#### Front Rigging

Installing the front rigging depends on the type of front rigging included with chair – For plug-in front rigging, squeeze the front-rigging trigger and slide the front rigging into the rectangular cross-sections on the side of the upper frame until the latch aligns and engages with the upper frame hole and snaps into place.

#### Arm Assembly

Install the arm assembly by simply sliding the arms into the slotted arm receivers on the frame.

#### Anti-Tip Tubes

If anti-tip tubes are not already installed on the chair, locate them in the box and slide them into the receivers at the back underside of the frame so that the rollers are pointing downwards. These will prevent the chair from overturning if the centre of gravity moves too far rearward and are **mandatory for safety and warranty protection**.

**IMPORTANT** — with the user sitting in the chair, check to ensure the wheelchair is stable in all tilted/un-tilted positions before dispensing the wheelchair.

### 6.3 Storage

Store the repackaged PDG Stellar LEAP in a dry area and DO NOT place other objects on top of the repackaged wheelchair.

## 7 SAFETY INSPECTION CHECKLIST

**NOTE** — Twice a year take your wheelchair to a qualified dealer for a thorough inspection and servicing. Regular cleaning will reveal loose or worn parts and enhance the smooth operation of your wheelchair. To operate properly and safely, your wheelchair must be cared for just like any other vehicle. Routine maintenance will extend the life and efficiency of your wheelchair. Initial adjustments should be made to suit your personal body structure and preference. Thereafter follow these maintenance procedures:

ITEM	Initially	Inspect/Adjust Weekly	Inspect/Adjust Monthly	Inspect/Adjust Every 6 Months
<b>GENERAL</b>				
Wheelchair rolls straight (no excessive drag or pull to one side).	x			x
Ensure all hardware is tight.	x	x		
<b>WHEEL LOCKS</b>				
Do not interfere with tires when rolling.	x		x	
Pivot points free of wear and looseness.	x		x	
Wheel locks easy to engage.	x		x	
<b>CLOTHING GUARDS</b>				
Inspect for bent or protruding metal.	x			x
Ensure all fasteners are secure.	x			x
<b>SEAT/BACK UPHOLSTERY</b>				
Inspect for rips or sagging.	x			
Inspect fastening to ensure they are secure.	x		x	x
<b>REAR WHEELS</b>				
No excessive side movement or binding when lifted and spun.	x			x
Quick-release axles lock properly.	x	x		x
<b>FRONT CASTER</b>				
Inspect wheel/fork assembly for proper tension by spinning caster; caster should come to a gradual stop.	x		x	
Wheel bearings are clean and free of moisture.	x	x		
<b>CAUTION:</b> Wheels and tires should be checked periodically for cracks and wear, and should be replaced when necessary.	x		x	
<b>TIRES</b>				
Inspect for flat spots and wear.	x		x	

If pneumatic tires, check for proper installation.	x	x
Inspect rear tires for cracks and wear.	x	x
<b>CAUTION:</b> Wheels and tires should be checked periodically for cracks and wear, and should be replaced when necessary.	x	
<b>CLEANING</b>		
Clean and wax all parts.		x
Clean upholstery and armrests.		x
Inspect axles are free from dirt, lint, etc.		x
Inspect tilt slides and roller bearings are free from dirt, lint, etc.		x

## 8 TROUBLESHOOTING

Problems	Solution
<ul style="list-style-type: none"> <li>• Chair veers right</li> <li>• Chair veers left</li> <li>• Sluggish turn or performance</li> <li>• 3 of 4 wheels contacting ground surface</li> </ul>	If pneumatic, check tires for correct/equal pressure
<ul style="list-style-type: none"> <li>• Sluggish turn or performance</li> <li>• Casters flutter</li> <li>• Squeaks and Rattles</li> <li>• Looseness in chair</li> </ul>	Check for loose stem nuts and bolts
<ul style="list-style-type: none"> <li>• Chair veers right</li> <li>• Chair veers left</li> <li>• Sluggish turn or performance</li> <li>• Casters Flutter</li> </ul>	Check caster angle
<ul style="list-style-type: none"> <li>• Chair veers right</li> <li>• Chair veers left</li> <li>• Casters flutter</li> </ul>	Check that both casters contact the ground at the same time

## 9 MAINTENANCE

### 9.1 Adjustment Guide

The following instructions are intended to provide assistance in making wheelchair adjustments. It is important to note the initial wheelchair configuration prior to making changes. When making changes, dealers and users should do so under the guidance of a health care professional who is knowledgeable of the particular limitation of the wheelchair user. Be sure that when finished, all components are properly tightened and have

been completed in accordance with these instructions. DO NOT over tighten hardware attaching to the frame. This could cause damage to the frame tubing.

## Tools Required

Philips Screw Driver

Allen Key.....	<input type="checkbox"/> 1/8"	<input type="checkbox"/> 5/32"	<input type="checkbox"/> 3/16"
Adjustable or Open End Wrench.....	<input type="checkbox"/> 7/16"	<input type="checkbox"/> 1-1/4"	<input type="checkbox"/> 1-5/16"
Socket Head Driver with Socket Heads....	<input type="checkbox"/> 9/16"	<input type="checkbox"/> 3/4"	<input type="checkbox"/> 1-1/4"

## 9.2 Cleaning

Periodic cleaning of all surfaces will help keep your wheelchair looking good and operating properly. All surfaces can be cleaned using warm water and a mild soap solution. Do not use abrasive cleaners on any surfaces.

## 9.3 Suggested Maintenance Procedures

1. Before using your PDG Stellar LEAP, make sure all nuts and bolts are tight. Check all parts for damage or wear and replace them if necessary. Check all parts for proper adjustment.
2. Keep quick-release axles, if applicable, free of dirt and lint to ensure positive locking and proper operation. Refer to ADJUSTING THE QUICK-RELEASE AXLE in section 10.6 of this manual.
3. If applicable, oil quick-release axles at least once (1) a month (3-in-1 oil or equivalent).

**WARNING** – If pneumatic tires are used, do not use the wheelchair unless it has the proper tire pressure (psi). DO NOT over inflate the tires. Failure to follow these suggestions may cause the tire to explode and cause bodily harm.

4. If tires are pneumatic, recommended tire pressure is listed on the side wall of the tire.
5. The wheels and tires should be checked periodically for cracks and wear, and should be replaced when necessary at your authorized dealer or by a qualified technician.
6. For wheelchairs with hard rims, periodically check hand rims to ensure they are secured to the rear wheels.

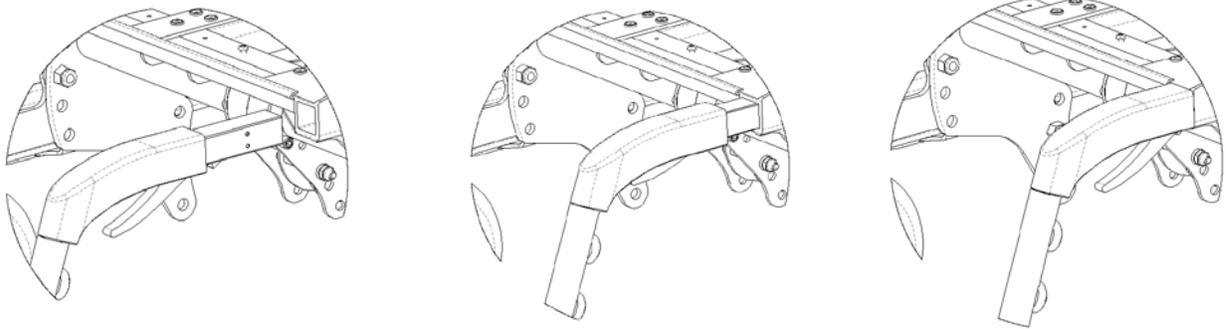
## 10 SET UP & ADJUSTMENTS

### 10.1 Front Rigging

**WARNING** – After making adjustments, always make sure that parts are properly replace and tightened BEFORE using the wheelchair.

#### Easy-Out™ Plug in 70° Front Rigging Footrest Assembly Installation

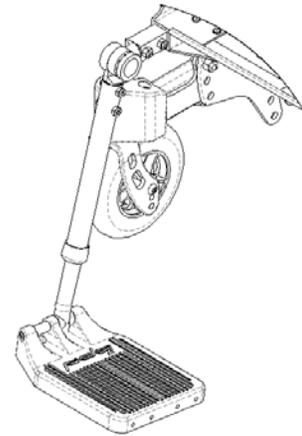
1. To mount the easy out plug-in front rigging, activate the lever located under the plug-in and slide the front rigging into the open square tube receiver (seat rail). The Front rigging will lock into position when the lever snaps through hole located on the bottom of the square receiver tube.
2. To release front rigging, activate the trigger to disengage the lever and slide the front rigging forward and out of the open square seat rail extrusion.



**Figure 10.1:** *Plug-in front rigging installation*

### Plug-In Adjustable Knee Angle Front Rigging (Optional)

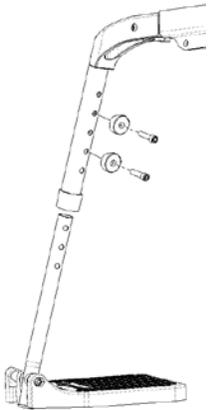
1. To mount the plug-in adjustable knee angle front rigging, slide the front rigging into the square receiver tube and press the snap button located on the outer side of the front rigging.
2. The front rigging will lock into position, when the snap button is depressed, through the hole located on the side of the square receiver tube.
3. To release front rigging, push the snap button on the front rigging and pull the front rigging out.



**Figure 10.2:** *Plug-in adjustable knee angle front rigging*

### Footrest Height Adjustment

Height adjustment is made to the desired length with the individual sitting in the wheelchair with their feet on the foot plates. The lowest point of the foot plates should be no less than 2" from the ground or floor.



**Figure 10.3:** *Adjusting footrest height*

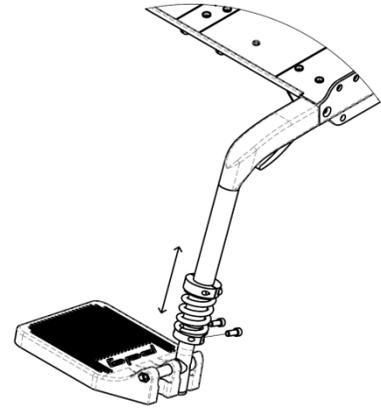
1. Remove the nut, bolt and covered washer and position the footrest assembly to a pre-determined height.
2. Line up mounting hole and the aluminum insert in the footrest tube, reinsert the bolt and securely tighten by hand. Be sure to replace covered washers as well.
3. Repeat the procedure for the other footrest.

**NOTE** – Check to ensure that desired front rigging adjustment does not cause pressure to legs at front of seat upholstery. Such a condition could cause injury to the occupant.

### Miller's Dynamic Footrest Mounts for Plug In Front Rigging (Optional)

#### To adjust mount height

1. Loosen the two lower clamping bolts with a 3/16" Hex Drive as shown in Figure 10.4.
2. Move the footrest to the desired height. Ensure correct orientation of the footplate.
3. Tighten the two lower clamping bolts.
4. Repeat the procedure for the other footrest.



**Figure 10.4:** *Adjusting mount height*

#### WARNING

**DO NOT ATTEMPT TO STAND ON FOOT PLATES.** Standing on the foot plates will cause the chair to tip forward abruptly and may result in an adverse fall to the individual.

**DO NOT ATTEMPT** to lift chair by the footrests or leg rests. These components are designed to separate from the wheelchair.

**FRONT RIGGING SHOULD BE REMOVED** when entering or exiting from the wheelchair.

**FRONT RIGGING SHOULD BE REMOVED** before entering anterior tilt.

## 10.2 Foot Plates

**WARNING** - NEVER use footplate flip-up functionality as an alternative to removing the front rigging during anterior tilt.

### Composite Footplates

The Stellar LEAP comes default with composite footplates. These composite footplates offer flip-up functionality. To flip up the footplate simply pull upwards on the footplate.

### Adjustable Angle Footplates (Optional)

Angle adjustable footplates allow the depth and the angle of the footplate to be adjusted. These angle adjustable footplates also offer flip-up functionality. To flip up the footplate simply pull upwards on the footplate.

#### Adjusting the Footplate Angle

1. Loosen the angle adjustable footplate adjustment bolts as shown in Figure 10.6.
2. Rotate the footplate until it is at the desired angle.
3. Tighten the bolts.
4. Repeat for other footplate if required.

#### Adjusting the Depth

1. Remove the angle adjustable footplate adjustment bolts as shown in Figure 10.6.
2. Align the footplate with the preferred holes.
3. Refasten the nuts and bolts.
4. Repeat for other footplate if required.

### One Piece Footplate (Optional)

One piece footplates come in two types: fixed and flip-up (See Figures 10.7 and 10.8). To flip up the one piece flip-up footplate, simply pull upwards on the footplate.

### Interlocking Adjustable Angle Footplates (Optional)

Angle adjustable interlocking foot plates allow the depth and the angle of the footplate to be adjusted. Additionally, these footplates have flip-up functionality. To flip up the footplate simply pull upwards on the footplate. When these footplates are not flipped up they are interlocked together. (See Figure 10.9)

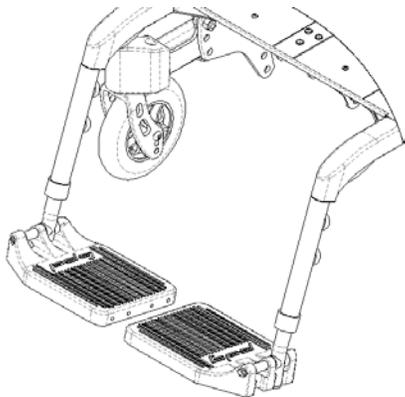
**NOTE-** When adjusting interlocking footplates, ensure they are locked together.

### Adjusting the Footplate Angle

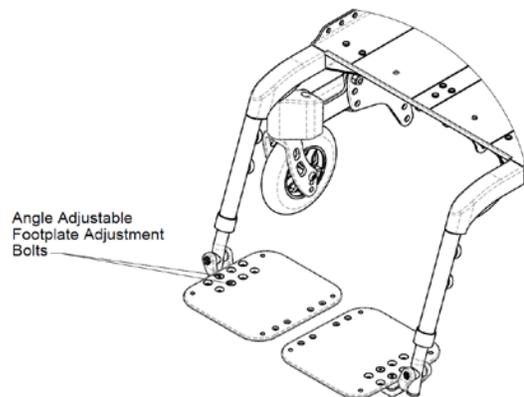
1. Loosen the angle adjustable footplate adjustment bolts (See Figure 10.6).
2. Rotate the footplates until they are at the desired angle.
3. Tighten the bolts.

### Adjusting the Depth

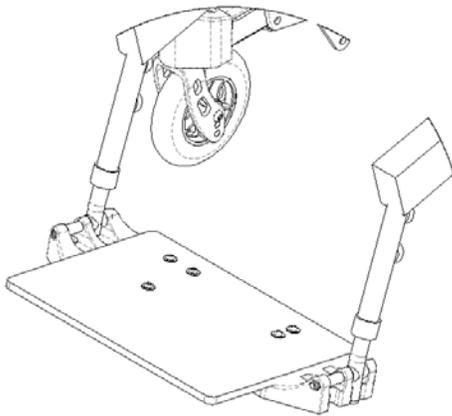
1. Remove the angle adjustable footplate adjustment bolts shown (See Figure 10.6).
2. Align the footplates with the preferred holes.
3. Refasten the nuts and bolts.



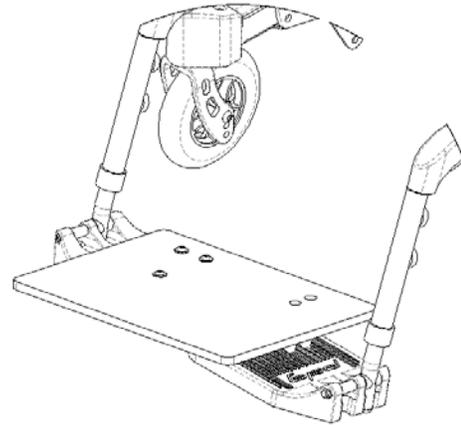
**Figure 10.5:** *Composite footplates*



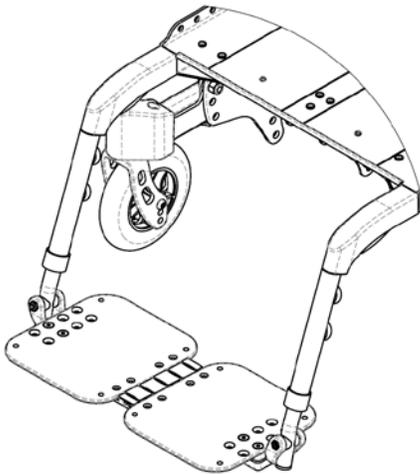
**Figure 10.6:** *Adjustable angle footplates*



**Figure 10.7:** *One piece fixed footplates*



**Figure 10.8:** *One piece flip-up footplates*



**Figure 10.9:** *Interlocking angle adjustable footplate*

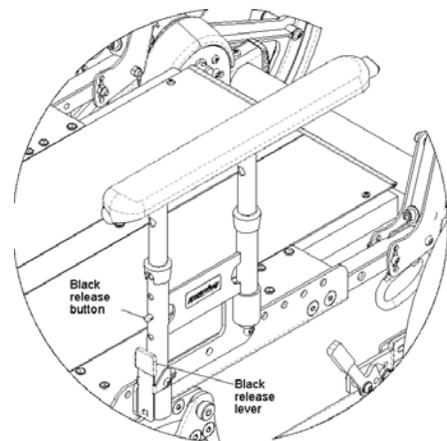
### 10.3 Armrests

#### Adjusting Armrest Height (Dual Post Arms)

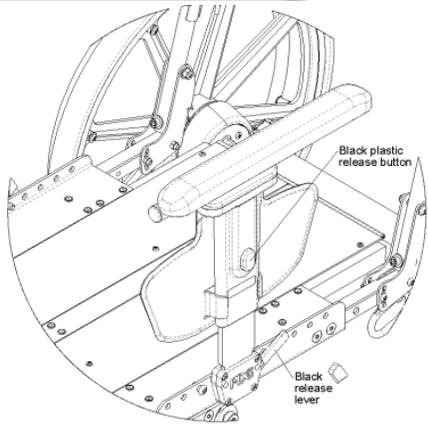
Unlock the arm by depressing the black release button on the upper front of the armrest while moving the armrest up or down (Refer to Figure 10.10). Adjust armrest to desired height. The armrest height will 'lock' when the release button pops out of one of the armrest height adjustment holes.

#### Removing Armrests (Dual Post Arms)

Release the arm assembly by depressing the black release lever on the front the armrest (just above the seat pan) while pulling the armrest up.



**Figure 10.10:** *Adjusting armrest height for dual post*



**Figure 10.11:** *Adjusting armrest height for single post arms*

### Adjusting Armrest Height (Single Post Arms)

Unlock the arm by depressing the black plastic release button on the side of the arm while moving the armrest up or down (Refer to Figure 10.11). Adjust armrest to desired height. The armrest height will 'lock' when the release button pops out of the side of the arm.

### Removing Armrests (Single Post Arms)

Release the arm assembly by lifting up on the black release lever of the arm receiver (mounted to the seat frame) while pulling the armrest up.

### Adjusting Armrest Angle (Locking Flip-up Armrest)

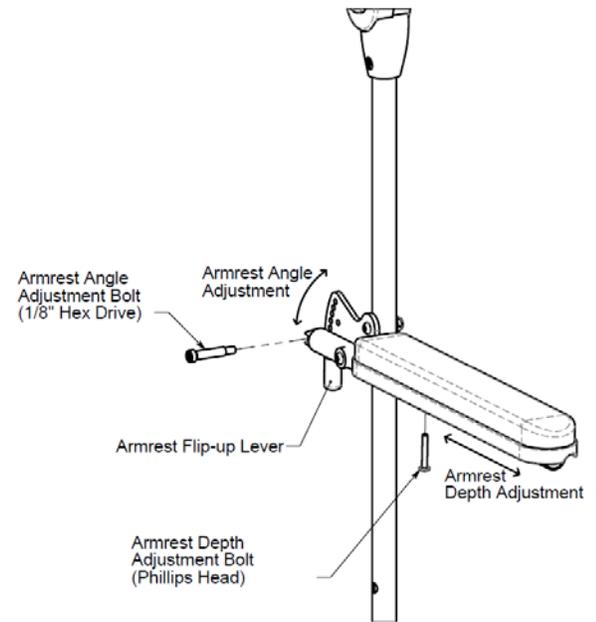
Armrest angle can be adjusted either up or down by repositioning the "Armrest angle adjustment bolt" (see Figure 10.12) along the array of holes located to the rear of the armrest.

### Adjusting Armrest Depth (Locking Flip-up Armrest)

Armrest depth can be adjusted by removing the "Armrest depth adjustment bolt" (see Figure 10.12) and sliding the armrest forward or rearward to the desired position. The "Armrest adjustment bolt" is then fastened back into place using a Phillips head driver.

### Flipping Armrests Back (Locking Flip-up Armrest)

Release the locking mechanism of the armrest by sliding the flip-up lever forward (see Figure 10.12). Then rotate the armrest upwards until it clears the backrest. To reset the armrest into the downward locked position, simply rotate the armrest downward until the flip-up lever locks into place.



**Figure 10.12:** *Adjustments for locking flip-up armrest*

### Armrest Pads

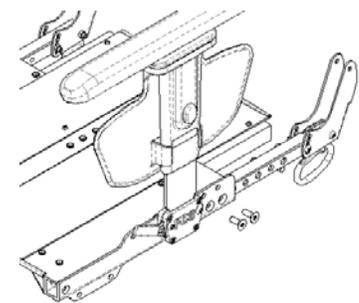
Check for rips or breaks. If these are present, replace immediately to maintain appearance and comfort. Armrest pad should sit flush against frame. If the pad is cracked or retaining screws are stripped, replace immediately.

## 10.4 Seat Depth

**WARNING** – After making adjustments, always make sure that parts are properly tightened BEFORE using the wheelchair.

### Adjusting the Seat Depth

1. The seat depth is adjusted by simply loosening and removing the two 5/16-18 flat head fasteners on each side (see Figure 10.13).



**Figure 10.13:** *Adjusting the seat depth*

2. Adjusting the rear seat depth insert to the desired position.
3. Retighten the fasteners.

## 10.5 Backrest

**WARNING** – After making adjustments, always make sure that parts are properly tightened BEFORE using the wheelchair.

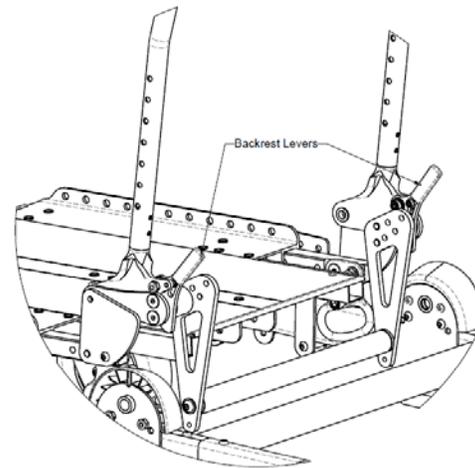
### Fold Down Backrest

The Stellar LEAP is equipped with a fold down backrest designed to facilitate chair storage and transport.

#### Folding Down the Backrest

**WARNING** - Ensure the chair is not occupied before folding down the backrest.

1. Remove the armrests from the armrest receivers (see section 10.2 for instructions).
2. Disengage both latches (see Figure 10.14), by pushing each lever towards the front of the chair. The latches do not have to be disengaged simultaneously.
3. Once both latches are disengaged, push the push bar forward to fold down the backrest.



**Figure 10.14:** *Fold down backrest*

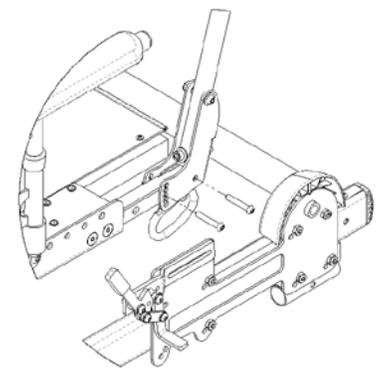
**WARNING** - Ensure backrest latches are properly engaged before use.

### Non-Fold Down Backrest

#### Adjusting the Back Angle

1. The seat-to-back angle may be set at a range of 90°-120°. Only two (2) bolts need to be removed from each side in order to change the angle.
2. Adjust the bracket to the desired angle and re-install the bolts
3. Retighten the nuts.

**NOTE** – The locknuts should be re-used no more than five (5) times to ensure locking material grips. If locknuts are worn, please replace.



**Figure 10.15:** *Adjusting the back angle for non-fold down backrest*

## 10.6 Rear Wheels

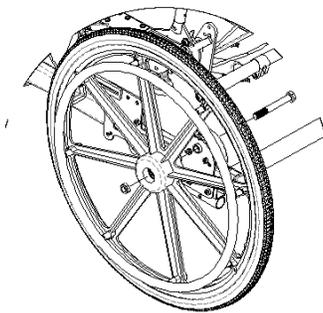
### Removing/Installing the Rear Wheels/Axles

1. Unless the product was ordered with quick-release axles, the rear wheels can be removed using a  $\frac{3}{4}$ " socket head and a  $\frac{3}{4}$ " crescent wrench (see Figure 10.16). If the chair is configured using axle bolts (not quick-release), the axle bolt heads must be located on the inside of the frame with the nuts located on the outside of the rear wheel hubs. If axle bolts are installed backwards, the seat frame may hit the end of the

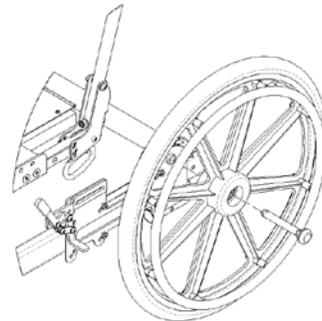
axle bolts when attempting to tilt the chair. During assembly, tighten the axle bolts so that the rear wheels are snug but not so much that the wheels are unable to spin freely. If quick-release axles have been supplied, push in the tip of the quick-release axle and pull the wheel off of the axle as shown in figure 10.17. Make sure the detent and locking pins of the quick-release are fully released BEFORE operating the wheelchair. The locking pins **MUST** be protruding past the outside of the rear wheel axle receiver for a positive lock. Keep locking pins clean.

- To reinstall the rear wheel onto the wheelchair, reverse step 1.

**WARNING** – Do not use chair **UNLESS** you are sure both quick-release axles are locked. An unlocked axle may come off during use and can cause personal injury.



**Figure 10.16:** Removing rear wheels fastened with axle bolt.



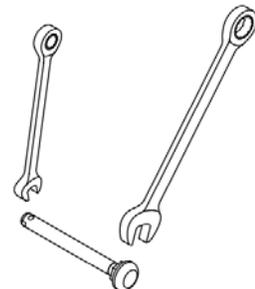
**Figure 10.17:** Removing rear wheels fastened with quick release axle.

### Rear Wheel Axle Nut Adjustment (For Quick-Release Axles)

The quick-release axle attaches the rear wheel to the axle receiver. When the axle is fully inserted into both the wheel and axle receiver the detent balls will lock the wheel assembly in place. By pushing the button on the quick-release axle the detent balls will be disengaged and wheel can be removed. If the wheel and axle will not lock or alternatively if it is locking into place but there is excessive play when the wheel hub is being pushed back and forth, the nut on the axle needs to be adjusted.

#### If the axle does not lock:

- Using a 7/16" open end wrench, securely hold the detent ball end of the axle. (See Figure 10.18)
- Use the 3/4" open-wide wrench to turn the axle nut counter clockwise.
- Turn the nut approximately in 1/2 turn increments.
- Try to lock the axle into the axle receiver.
- If it does not lock, repeat steps 3 and 4 until it locks securely.



**Figure 10.18:** Quick release axle adjustment

#### If the axle locks, but there is excessive play:

- Using a 7/16" open end wrench, securely hold the detent ball end of the axle. (See Figure 10.18)
- Use the 3/4" open-wide wrench to turn the axle nut clockwise.
- Turn the nut approximately in 1/2 turn increments.
- Insert the axle and test for play.
- Repeat steps 3 and 4 until the play has been eliminated and the detent balls are fully extended.

**IMPORTANT** – With the user sitting in the chair, check to ensure the wheelchair is stable in all tilted/un-tilted positions before dispensing the wheelchair.

### Adjusting the Rear Axle position

The rear wheel position may be adjusted forward or rearward.

1. There are bolts on each of the axle plates which hold the axle plates right onto the lower frame. To change the position of the rear wheels, loosen these bolts slightly, and slide the rear axles forward or rearward as desired. Before re-tightening, be sure both rear axles are in the same location as measured from the rear of the lower frame members. There are measuring indicators on the top of the lower frame members.
2. The anti-tipper tubes slide into receivers at the back of the frame so that the rollers prevent the chair from overturning if the centre of gravity moves too far rearward.

**IMPORTANT** – With the user sitting in the chair, check to ensure the wheelchair is stable in all tilted/un-tilted positions before dispensing the wheelchair.

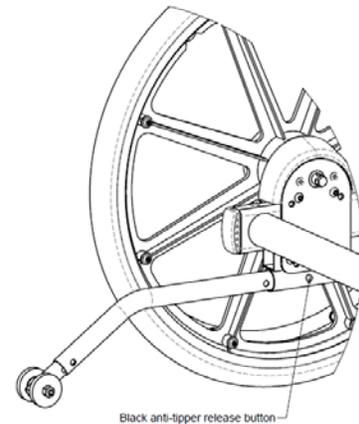
### 10.7 Anti-Tip Tubes

Your wheelchair is provided with anti-tip tubes designed to prevent the chair from tipping over backward in most normal conditions.

**WARNING** - Do NOT operate wheelchair without anti-tippers installed. Anti-tippers are mandatory for safety and warranty protection.

#### To install the anti-tip tubes:

1. Press and hold the release button on the anti-tip tube.  
(See Figure 10.19 )
2. Insert the anti-tip tube into the receiver as shown until it locks into position.

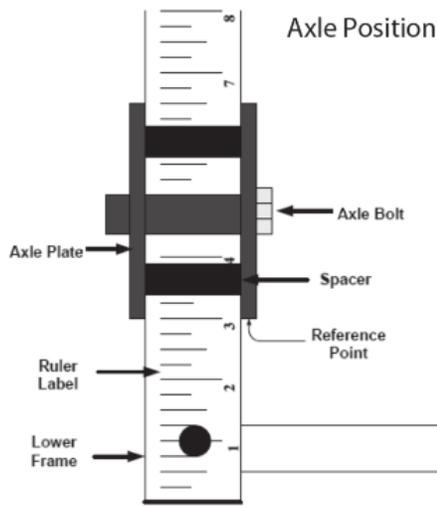


**Figure 10.19:** *Installing anti-tip tubes*

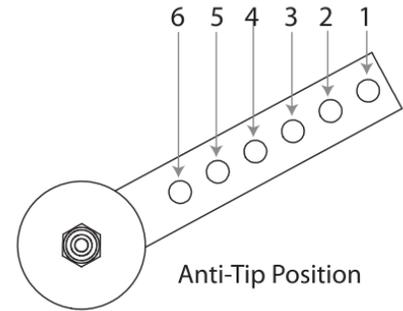
#### Setup of 16"/22"/24" Rear Wheel Anti-tipper Height

The hole position on the anti-tip tube is shown in Figure 10.20.

The extra positions on the anti-tipper (1 through 3) can be used to make the chair more stable, but it will reduce the caster clearance when tipped backwards.



Axle Position	Anti-Tip Wheel Position
3½" – 4½"	4
4¾" – 6¾"	5
7" – 8"	6



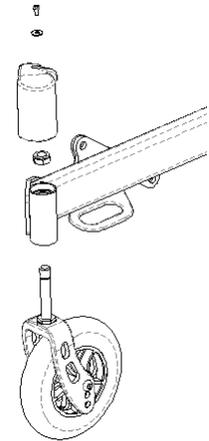
**Figure 10.20:** *Anti-tipper positioning*

### 10.8 Front Casters

**WARNING** – After making adjustments, always make sure that parts are properly replaced and tightened **BEFORE** using the wheelchair.

#### Installing/Replacing Caster Forks

1. Remove the cap on top of caster housing.
2. Loosen nut on caster stem using a ¾" socket wrench.
3. Slide out caster fork assembly.
4. Reassemble by reversing steps 1-3 (Be sure bearings are replaced if removed).
5. Test the wheelchair for maneuverability.



**Figure 10.21:** *Installing/Replace Caster Forks*

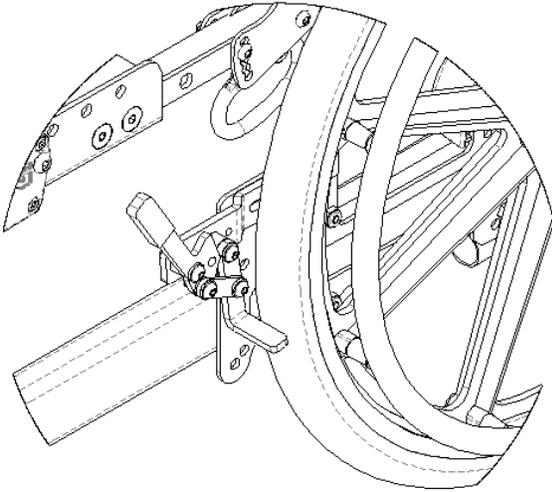
### 10.9 Wheel Locks

**WARNING** – Never attempt to engage wheel locks while the chair is in motion as it could cause you to lose control.

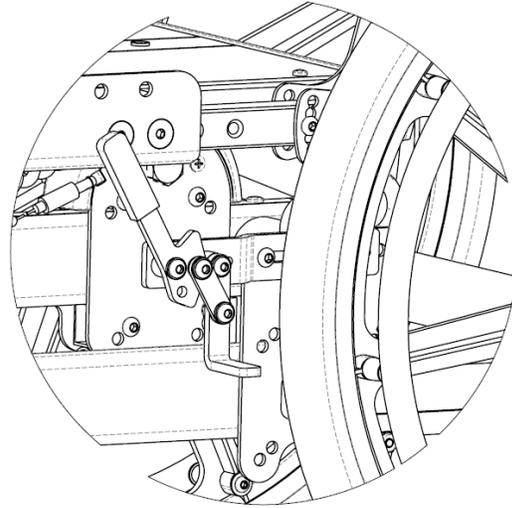
Wheel locks lock the rear wheels and prevent any undesirable movement of the wheelchair.

1. To engage the push to lock wheel lock (see Figure 10.22), push the lever forward, away from the wheel, until it locks into place.
2. To engage the pull to lock wheel lock (see Figure 10.23), pull the lever towards the wheel until it locks into place.
3. To engage the attendant wheel lock (see Figure 10.24), push the lever towards the wheel until it locks into place.
4. To engage the attendant wheel lock in the User and Attendant Wheel Lock option (see Figure 10.25), follow the step 3 instructions. To engage the user wheel lock in the User and Attendant Wheel Lock option (see Figure 10.25), follow the instructions corresponding to the user wheel lock type (ie. Push to Lock or Pull to Lock).

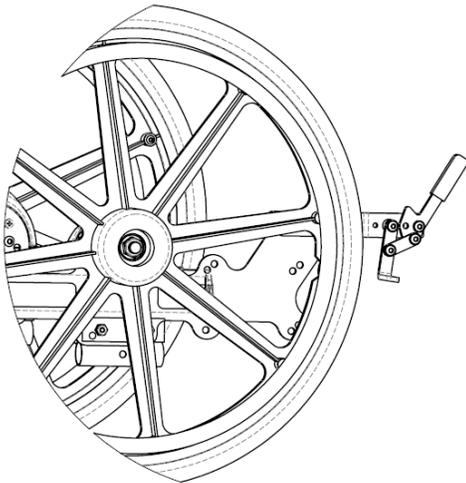
5. To engage the wheel locks with the anti-rollback device, follow the instructions corresponding to the wheel lock type (ie. Push to Lock or Pull to Lock).
6. To engage the anti-rollback device (Figure 10.26), push the anti-rollback cam into the down position.



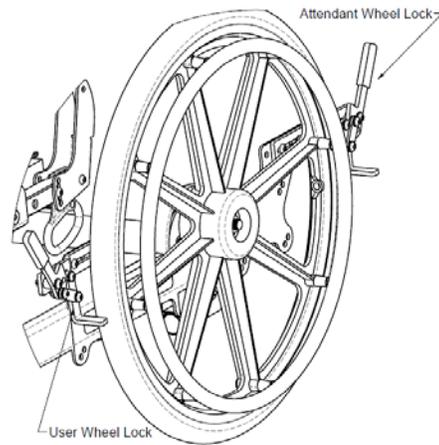
**Figure 10.22:** *Push to Lock Wheel Locks (Standard)*



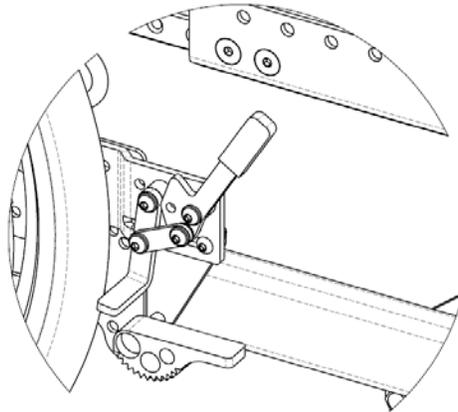
**Figure 10.23:** *Pull to Lock Wheel Locks*



**Figure 10.24:** *Attendant Wheel Lock (Push to Lock)*



**Figure 10.25:** *User Wheel Locks and Attendant Wheel Locks*



**Figure 10.26:** *Wheel Lock with Anti-Rollback Device*

### 10.10 Seat-To-Floor Height

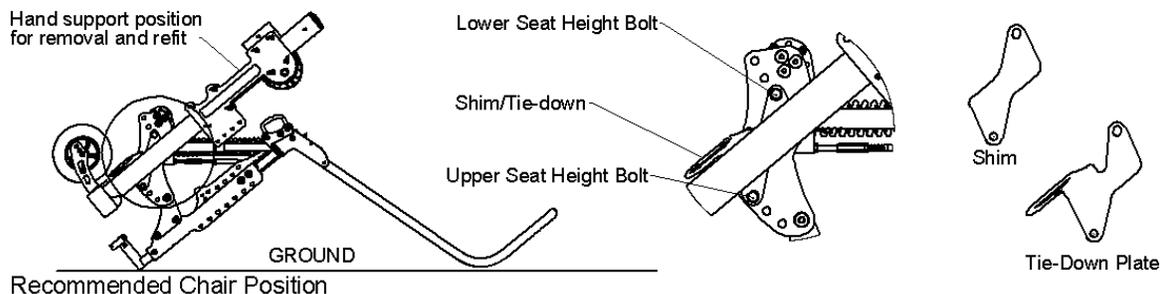
**WARNING** – After making adjustments, always make sure that parts are properly replaced and tightened BEFORE using the wheelchair.

The seat to floor height on Stellar LEAP can be adjusted 13” to 18” depending on front caster and rear wheel combinations. The frame consists of 3 main components: the upper frame, sub-frame and lower frame. Additionally, a shim, or tie down plate, will be present between the lower frame and sub-frame.

#### Adjusting Seat to Floor Height

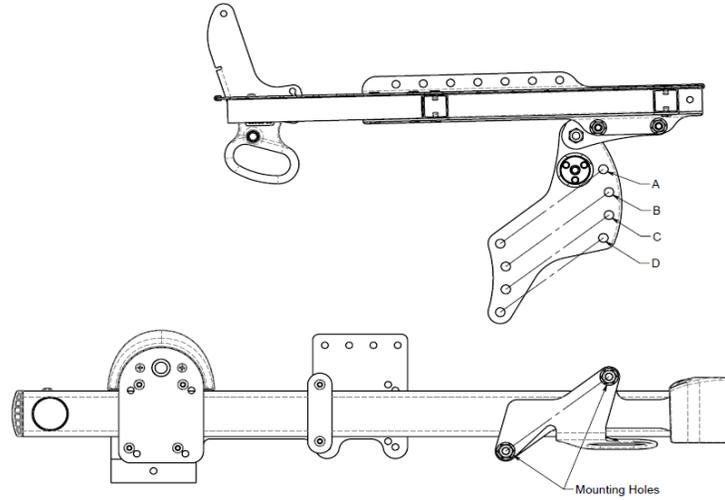
1. Remove the wheels, front rigging, and arms from the chair. Tip it forward so that it is resting on the back post and front rigging receivers as shown in Figure 10.27.
2. Remove the nuts from the seat height adjustment bolts; they are two 3/8” hex bolts of each side of the frame, as shown.
3. Remove the four hex bolts while supporting the lower frame with your other hand.

**CAUTION** – When the four hex bolts are removed, the lower frame and upper frame will be disconnected and will drop apart.



**Figure 10.27:** *Recommended chair position*

4. Reposition the sub frame onto the lower frame. There are multiple seat height options for each chair. Refer to Figure 10.28 and Table 10.1. Once the holes on the sub frame, lower frame, and shim are lined up, insert the lower seat height bolt on each side of the frame, this will help with the alignment of the frames. Then the upper seat height bolt can be refit.
5. Fit and tighten washers and nuts.
6. Test the wheelchair to ensure the seat pan can be positioned approximately level when the gas strut is fully extended. Check to ensure all screws and nuts are assembled securely.



**Figure 10.28:** *Chair positions*

**Table 10.1:** *Sub frame hole positioning chart*

Seat Height	Wheel Size				
	12"	16"	20"	22"	24"
13"	A	-	A	-	-
14"	B	-	B	A	-
15"	C	A	C	B	A
16"	D	B	D	C	B
17"	-	C	-	D	C
18"	-	D	-	-	D

**10.11 Seat Tilt**

**WARNING** – After making adjustments, always make sure that parts are properly replaced and tightened BEFORE using the wheelchair.

**Adjusting Seat Tilt: Operating Instructions**

The tilting struts make it possible to set the suitable seat angle within the operating range. To adjust the tilt angle, activate the tilting lever located on the side of the push handle or on the armrest, depending on how the wheelchair has been configured. Allow the seat to be lowered to the desired posterior tilt level and release the tilt lever. The seat should ‘lock’ at desired tilt angle.

**NOTE-** Depending on configuration, the tilt lever may be mounted onto the left or right side of the backrest push bar OR on the left or right armrest.

**WARNING** – When tilting chair, attendant must hold push handle securely so that seat does not drop too quickly.

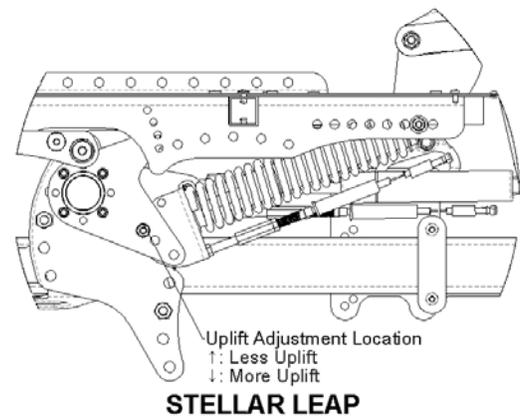
### Adjusting Seat ‘Uplift’ Force

This procedure may be used to increase or decrease the ‘uplift’ force required to raise an occupant from a tilt position to a level seat position. Adjustment is made to the lower end of the Gas Strut Assembly, positioning the end of the Gas Strut upward or downward of its initial attachment point on the sub frame.

If the wheelchair occupant feels ‘heavy’ when attempting to restore the wheelchair to a seat level position, the gas strut attachment points should be moved down. (See Figure 10.29)

If the wheelchair occupant feels ‘too light’ or if the attendant has to use force to push the Seat Assembly in to tilt when activating the tilt mechanism, the gas strut attachment points should be moved up. (See Figure 10.29)

1. Determine whether you wish to move the gas strut upward or downward (see Figure 10.29). Determine if the desired adjustment is possible (you may have already set the chair at maximum or minimum ‘lift’.
2. Carefully remove the nut and bolt from the lower end of the gas strut. Note that the spring is held in compression by a separate pin and will not extend when the bolt is removed.
3. Re-assemble the gas strut ends to the desired attachment points on the ‘lower frame strut mount’.
4. Reinstall locknuts and tighten securely.



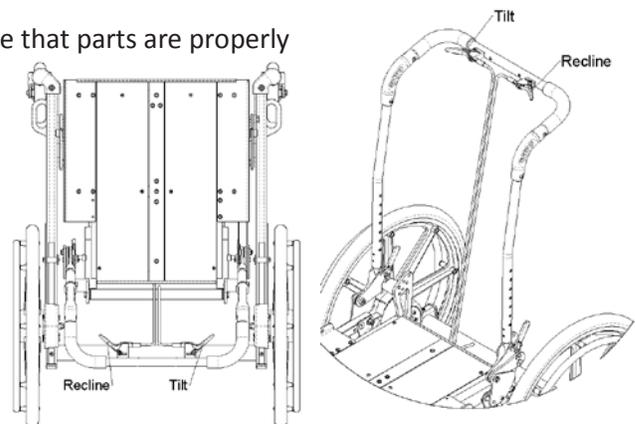
**Figure 10.29:** *Uplift adjustment*

### 10.12 Anterior Tilt (Optional)

**WARNING** – After making adjustments, always make sure that parts are properly replaced and tightened BEFORE using the wheelchair.

**WARNING** - NEVER use the anterior tilt functionality without an operational damper installed and NEVER remove the factory installed damper. Failure to heed these warnings could result in severe injury to yourself or others.

**ATTENTION** - The anterior tilt should only be adjusted on a firm, level surface to avoid any potential risk of injury (tipping over)



**Figure 10.30:** *Operating anterior tilt*

#### Adjusting Anterior Tilt: Operating Instructions

The seat can be angled forward by following the steps below:

1. Be sure the chair is on a solid level surface and secure it using the wheel locks.

2. Squeeze the tilt lever located on the push handle or on the armrest depending on how the wheelchair has been configured. The seat will begin to moving into anterior tilt.
3. For self-tilt while the trigger is activated the occupant has to lean slightly forward in order for the seat to go into anterior tilt.
4. Release the tilt lever at the desired height.
5. When going into anterior tilt, when the neutral position is approached a damper engages and the chair will continue to go into anterior tilt slowly.

**WARNING - If there is no notable change in tilting speed, the damper may not be functioning properly, please do not use the chair and contact your dealer immediately.**

6. How much the seat can be tilted forward may vary depending on the chair configuration.

**WARNING** – Remove front rigging before attempting to enter anterior tilt. NEVER enter anterior tilt with front rigging still attached.

**WARNING** – Raise and lower seat slowly to avoid any potential risk of tipping and resultant injury.

Improper operation of the anterior tilt feature could result in the occupant

to fall forward causing injury. Please consult your Stellar LEAP Dealer or other authorized representative for detailed instructions on raising seat height. It is advised that the anterior tilt feature be ONLY used when recommended by a licensed clinical professional and/or ATP. It is highly recommended that the occupant's safety needs be addressed with the aid of positioning components such as lap belts, chest straps, and knee blocks. Use caution when adjusting the anterior tilt; ensure that clothing and body parts are clear of any moving parts of the wheelchair to protect yourself and accompanying persons from possible injury.



**Figure 10.31: Anterior tilt**

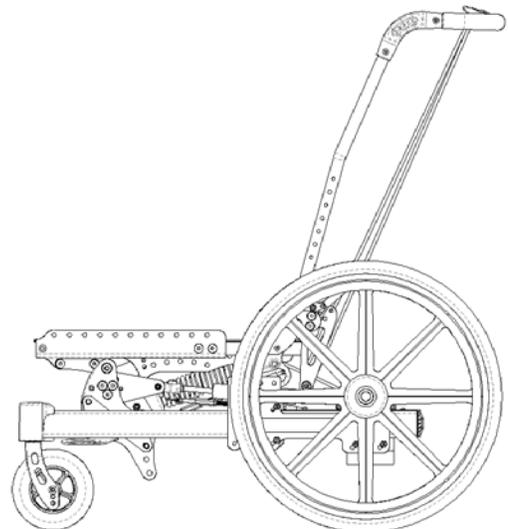
### 10.13 Dynamic Backrest Recline (Optional)

**ATTENTION** - The backrest recline should only be adjusted on a firm, level surface to avoid any potential risk of injury (tipping over).

#### Adjusting the Dynamic Backrest Recline: Operating Instructions

The two backrest recline struts make it possible to set the suitable backrest angle allowing the consumer to set a recline angle as needed within the operating range.

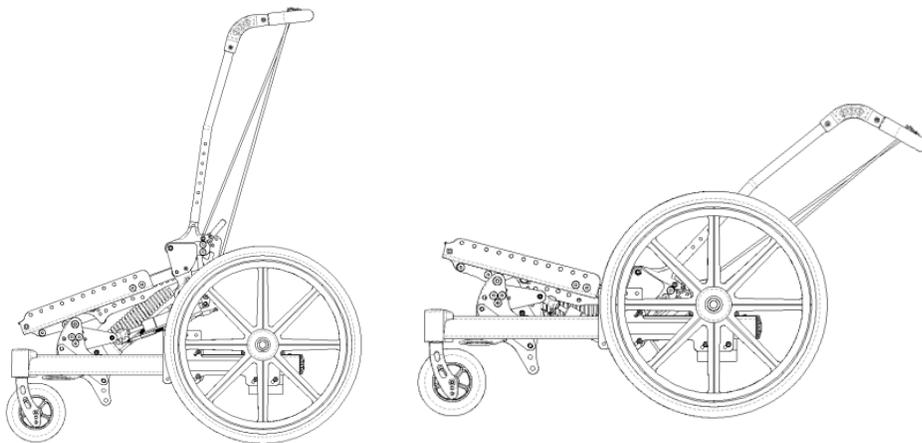
To adjust the backrest recline, activate the backrest recline trigger located on the push handle as illustrated in figure 10.32 or on the armrest, depending on how the wheelchair has been configured. Allow backrest to recline to desire level and release the recline trigger. The backrest should 'lock' at desired recline angle.



**NOTE** - The backrest recline trigger may be mounted onto the left or right side of the backrest push bar or on the left or right armrest.

**WARNING** - Caution should be taken when using the backrest recline seat function. Improper operation of the dynamic recline backrest feature could result in the occupant injury. Please consult your Stellar LEAP Dealer or other authorized representative for detailed instructions on raising seat height. It is advised that the dynamic backrest recline feature be ONLY used when recommended by a licensed clinical professional and/or ATP. It is highly recommended that the occupant's safety needs be addressed with the aid of positioning components such as lap belts, chest straps, and knee blocks. Use caution when adjusting the backrest recline range; ensure that clothing and body parts are clear of any moving parts of the wheelchair to protect yourself and accompanying persons from possible injury.

**Figure 10.32:** *Operating dynamic backrest recline*



**Figure 10.33:** *Dynamic backrest recline in combination with tilt*

## 10.14 GAS STRUT AND CABLE ASSEMBLY

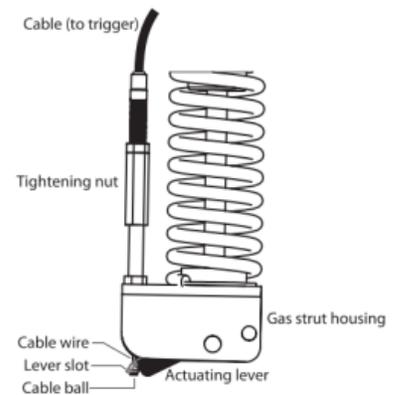
### Adjusting Cable Tension

Once receiving and assembling the chair, you may find that the chair tilts with user in it when the trigger is not actuated or chair will not tilt when trigger is actuated. This problem may also occur over time as the cable wire 'stretches'.

**IMPORTANT**– Before adjusting – be sure the steel ball (at bottom end of cable wire) is inserted into actuating lever slot and cable is properly attached to trigger.

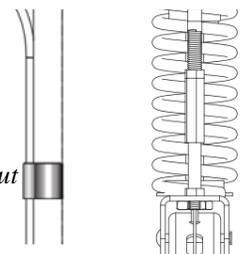
A simple procedure is needed to adjust the tension of the cable wire:

1. If the chair does not tilt when trigger is actuated – the cable wire is too loose and needs to be tightened. To do so, remove the rubber sleeve above the gas strut housing on the cable and turn the 'tightening nut' so less thread is showing above the nut.
2. If the chair tilts without actuation – the cable tension is too tight and needs loosening. Reverse the procedure from above, making more thread showing above the 'tightening nut'.



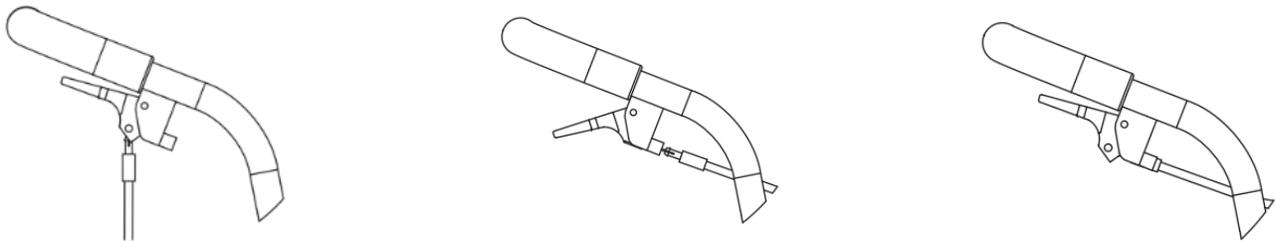
**Figure 10.34:** *Cable assembly*

**Figure 10.35:** *Gas strut actuator cable*



### Removing and Installing the Gas Strut Actuator Cable

1. Grab the cable just in front of the trigger. In one smooth motion, pull straight down until the cable releases from the end of the trigger. Pull the metal cable-end out from the side of the trigger.
2. Disconnect the opposite end of the cable from the strut, using a 7/16" and a 3/8" open end wrench.
3. To install the new cable, refit to the strut by reversing step 2. Be sure to connect the cable ball to the actuating lever.
4. Attach cable wire onto the strut, slide steel ball through slot on lever (so ball is underside of the lever).
5. Re-fit the metal cable end by inserting into the side of the trigger.
6. Feed the cable through to the front of the trigger place.



**Figure 10.36:** *Installing the cable*

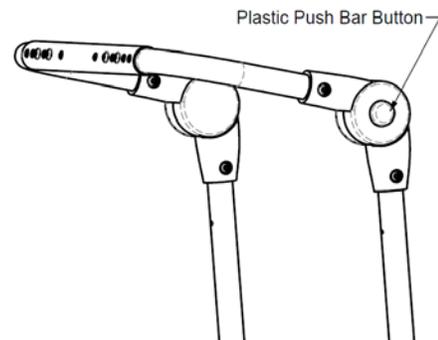
7. Feed the cable through to the front of the trigger place (see Figure 10.36).
8. Hold the plastic parts in place and press the trigger, the cable should snap in place, if not you may need to push it until it snaps.
9. Clip cable onto back post using plastic clips provided.

### 10.15 Adjustable Angle Push Bar Handle (Optional)

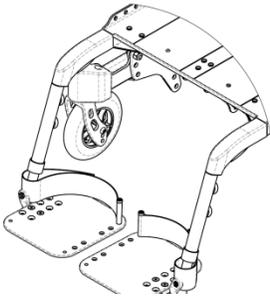
The Stellar LEAP may be purchased with an adjustable angle push bar handle. This handle allows an attendant to change the position of the push bar handle grip and even the tilting lever position, depending on the wheelchair's original configuration.

#### Adjusting Push Bar Angle

1. To adjust the push bar angle, simultaneously press both plastic push bar buttons located on the top of both backrest posts (see Figure below).
2. While the plastic push bar buttons are depressed, adjust the position of the push bar.
3. When the push bar is positioned to satisfaction, release the plastic push bar buttons.



**Figure 10.37:** *Adjustable push bar handle*

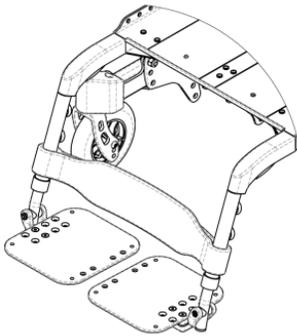


**Figure 10.38:** *Heel loops*

### 10.16 Heel Loops (Optional)

The heel loops are positioned behind the occupant's heels to prevent the feet slipping backwards. Adjust the hook-and-loop strap to obtain the desired length of strap to correctly position the feet on the footrest.

**WARNING** - Improper positioning of feet may result in accident or injury. Please consult your dealer for proper strap adjustment.



**Figure 10.39:** *Padded calf strap*

### 10.17 Padded Calf Strap (Optional)

The calf strap is positioned behind the occupant's lower calves to prevent the legs and/or feet slipping backwards. Adjust the hook-and-loop strap to obtain the desired length of strap to correctly position the feet on the footrest.

**WARNING**— Improper positioning of feet may result in accident or injury. Please consult your dealer for proper strap adjustment.

### 10.18 Headrest (Optional)

If your chair does not have a rigid backrest cushion, it may be fitted with a head rest mounting on the push bar handle. Otherwise, the head rest will be mounted directly to the rigid backrest.

#### Removing the Headrest

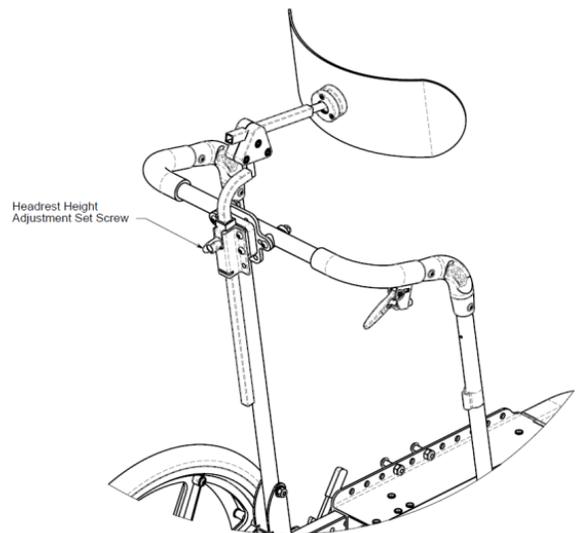
1. Loosen the "Headrest Height Adjustment Set Screw" and slide the head rest assembly upwards until it is free of the chair (see Figure 10.40).
2. To reinstall the headrest assembly, slide the headrest assembly back in to the desired position and retighten the "Headrest Height Adjustment Set Screw".

#### Adjusting the Headrest Position

1. Refer to the manufacturer's headrest manual to adjust the headrest position.

### 10.19 Postural Support Devices or Lap Belts (Optional)

**WARNING-** The lap belt is intended for use ONLY as a positioning aid for simple positioning needs, such as posterior pelvic tilt.



**Figure 10.40:** *Headrest*

This belt will not be sufficient for persons with more involved positioning needs. Only your health care advisor can determine the proper positioning products for your situation. If used improperly, lap belts can cause severe injury or even death. If your health care advisor has instructed you to use lap belts, make sure they instruct you on the proper usage of such belts, and such professional should supervise your use of such belts to ensure you can use them safely.

1. Belts must fit snugly in order to work properly. However, they must not be so snug they interfere with your breathing. Your health care advisor should be able to slide his or her open hand flat between the belt and your body.
2. Make sure you do not slide down in your chair while wearing a belt. If this should happen, you may suffer chest compression or be suffocated due to pressure from the belt.
3. Do not use a positioning or seat belt unless you are capable of removing the belts easily in an emergency. If you cannot do this, consult with your health care advisor for other options to help with your posture.
4. There are devices that help to keep you from sliding down in the seat of your wheelchair, such as a pelvic wedge. Consult with your health care advisor to find out if you need to use such a device in conjunction with lap belts to mitigate the risks described above.
5. NEVER use lap belts as a motor vehicle restraint. These types of belts are NOT intended to protect the wheelchair rider from the forces involved in a vehicle accident, and they may, in fact, cause you to be injured. PDG requires wheelchair users to ALWAYS transfer to appropriate motor vehicle seating when traveling in a motor vehicle.

**NOTE TO ATTENDANTS/ASSISTANTS** - NEVER use postural support (lap belt) as a patient restraint (a restraint requires a doctor's order) or on a wheelchair user who is comatose or agitated.

## 10.20 Tilt Range

### Adjusting the tilt range

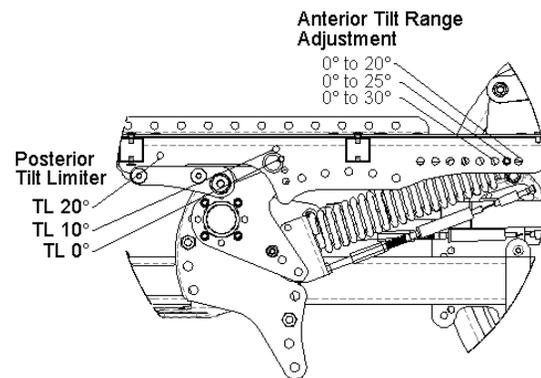
The Stellar LEAP has 3 different anterior tilt ranges, offering up to 30° of anterior tilt.

The 3 options are 20°, 25° or 30° of anterior tilt and their respective positions are shown in figure 10.40. It is easily adjusted with one bolt at the end of the gas strut.

### Adjusting the tilt limiter Stellar LEAP only

The Stellar LEAP factory setting standard is set at 20° of posterior tilt and 25° of anterior tilt. The posterior tilt can be limited to 0°, 10°, and 20°.

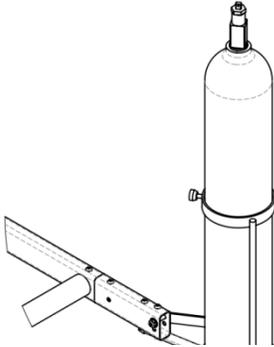
1. The tilt limiter is located underneath the seat pan on the upper frame.
2. Figure 10.40 shows the three (3) different positions, a pull pin can inserted in the frame to select the desired tilt stop.



**Figure 10.41:** Anterior tilt range adjustment

### 10.21 Oxygen (O<sub>2</sub>) Tank Holder (Optional)

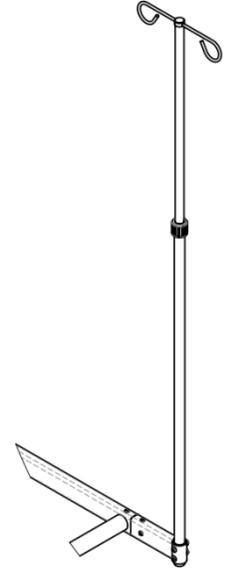
The Oxygen Tank Holder attaches to either the rear-right (shown) or rear-left corners of the lower frame. This option includes the Mount, Oxygen Tank Holder and all related hardware (the tank is not included).



**Figure 10.42:** Oxygen tank holder

### 10.22 IV (Intravenous) Pole Mount (Optional)

The IV Pole Mount attaches to either the rear-right (shown) or rear-left corners of the lower frame. This option includes the Mount, IV Pole and all related hardware.



**Figure 10.43:** IV pole mount

### 10.23 MOTOR VEHICLE USE

**WARNING** – Identify whether your chair has been manufactured with the Transit Tie-Down System (TTDS).

If your chair is NOT equipped with the Transit Tie-Down System (TTDS), this wheelchair DOES NOT meet federal standards for motor vehicles seating.

- 1 NEVER let anyone sit in this chair while in a moving vehicle.
- 2 ALWAYS secure the rider with proper vehicle restraints. In an accident or sudden stop the rider may be thrown from the chair. Wheelchair restraints will not prevent this and further injury may result from the belts and straps.
- 3 NEVER transport this chair in the front seat of a vehicle. It may shift and interfere with the driver.
- 4 ALWAYS secure this chair so that it cannot roll or shift.
- 5 Do not use any chair that has been involved in a motor vehicle accident.

If your chair is equipped with the Transit Tie-Down System (TTDS):

- 1 If possible and feasible, the rider should transfer to the Original Equipment Manufacturer vehicle seat and use the vehicle restraint.
- 2 Use only Wheelchair Tie Down and Occupant Restraint Systems (WTORS) which meet the requirements of SAE J2249 Recommended Practice - Wheelchair Tie Down and Occupant Restraint Systems for Use in Motor Vehicles. Do not use WTORS designed to rely on the wheelchair structure to transfer occupant restraint loads to the vehicle.
- 3 The rider must not weigh more than 250 lbs.
- 4 The wheelchair has been dynamically tested in a forward - facing mode for a 30 mph frontal impact test. The wheelchair must be forward facing during transport.
- 5 In order to reduce the potential of injury to vehicle occupants, wheelchair-mounted accessories, such as trays and respiratory equipment should be removed and secured separately.
- 6 Postural supports and positioning devices should not be relied on for occupant restraint.
- 7 Do not alter or substitute wheelchair frame parts, components or seating.
- 8 The figure above show the locations of the wheelchair securement points, front and back.
- 9 Use only with Wheelchair Tie Down and Occupant Restraint Systems (WTORS) that have been installed in accordance with the manufacturer's instructions and SAE J2249.
- 10 Attach WTORS to securement points in accordance with the manufacturer's instructions and SAE J2249.
- 11 Attach occupant restraints in accordance with the manufacturer's instructions and SAE J2249.

12 Sudden stops or impacts can structurally damage your chair. Chairs involved in such incidents should be replaced.

**CAUTION** - If you fail to heed these warnings, damage to your chair, a fall, tip-overs or loss of control may occur and cause severe injury to the rider or others.

## 11 CONTACTING YOUR SUPPLIER TO OBTAIN SERVICE

PDG has trained customer service representatives in many locations. To find your nearest Customer Service Center, visit our web site at [www.pdgmobility.com](http://www.pdgmobility.com) and click on CONTACTS. If you are uncertain about which CONTACT is most appropriate for your needs, contact PDG directly using telephone, fax, or e-mail contact information. Supply the serial number from the product you are attempting to service and we will be happy to inform you of the supplier who initially provided your product.

## 12 DAMAGE REQUIRING SERVICE BY QUALIFIED SERVICE AGENT

In some circumstances it may be required that your wheelchair be returned to a Qualified Service Agent for repairs. If any of the following conditions are observed, the wheelchair must be serviced by a Qualified Service Agent:

- Any part of the frame is cracked or broken
- Any weld is cracked or broken

Always contact your Service Agent prior to sending a wheelchair for repairs. For safe and secure shipping, the wheelchair must be boxed or fastened to a pallet to ensure it does not become damaged during shipping. Service agent will provide specific instructions for packaging and shipping your wheelchair. Alternatively, Qualified Service Agent may arrange for pick-up.

## 13 ISO TEST INFORMATION DISCLOSURE

**Table 13.1:** *Stellar LEAP wheelchair test configuration*

Seat Width	450mm
Seat Depth	500mm
Backrest Height	500mm
Wheelchair Weight	37.8 kg
Seat Sling	Solid seat pan
Back Upholstery	Sling fabric backrest
Wheels	24" urethane wheel
Casters	8" plastic rim with solid tire
Footrest	Plug-in front rigging with composite footplates
Other options	Fold-down backrest, anterior tilt
Mass of ATD	114kg (250lbs)
Max. User Weight	114kg (250lbs)

## 14 LIMITED WARRANTY

**PLEASE NOTE** – THE WARRANTY BELOW HAS BEEN DRAFTED TO COMPLY WITH FEDERAL LAW APPLICABLE TO PRODUCTS MANUFACTURED AFTER JULY 4<sup>th</sup>, 1975.

This warranty is extended only to the original purchaser/user of our products.

This warranty gives you specific legal rights and you may also have other legal rights, which vary from state to state.

PDG warrants its product, except for the seat cushion (which is not warranted), to be free from defects in materials and workmanship for a period of one (1) year from date of purchase. The side frames and cross members are warranted for the lifetime of the original purchaser/user. If within such warranty period any such product shall be proven to be defective, such product shall be repaired or replaced, at PDG's option.

This Warranty does not include any labor or shipping charges incurred in replacement part installation or repair of any such product. PDG's sole obligation and your exclusive remedy under this warranty shall be limited to such repair and/or replacement.

For warranty service, please contact the dealer from whom you purchased your PDG product. In the event you do not receive satisfactory warranty service, please write directly to PDG at the address on the back cover page, provide dealer's name, address, and date of purchase, indicate nature of the defect and, if the product is serialized, indicate the serial number. Do not return products to our factory without our prior consent. Limitations and exclusions: the foregoing warranty shall not apply to serial numbered products if the serial number has been removed or defaced, products subjected to negligence, accident, improper operation, maintenance or storage, products modified without PDG's express written consent including, but not limited to, modification through the use of unauthorized parts or attachments; products damaged by reason of repairs made to any component without the specific consent of PDG, or to a product damaged by circumstances beyond PDG's control, and such evaluation will be solely determined by PDG. The warranty shall not apply to problems arising from normal wear or failure to adhere to these instructions. The foregoing express warranty is exclusive and in lieu of any other warranties whatsoever, whether express or implied, including the implied warranties of merchantability and fitness for a particular purpose, and the sole remedy for violations of any warranty whatsoever, shall be limited to repair or replacement of the defective product pursuant to the terms contained herein. The application of any implied warranty whatsoever shall not extend beyond the duration of the express warranty provided herein. The manufacturer shall not be liable for any consequential or incidental damages whatsoever. This warranty shall be extended to comply with state/provincial laws and requirements.



**PDG PRODUCT DESIGN GROUP INC.**

#103- 318 East Kent Avenue South, Vancouver, BC V5X 4N6

Ph: (604) 323-9220 Fax: (604) 323-9097 E-mail: [info@pdgmobility.com](mailto:info@pdgmobility.com) [www.pdgmobility.com](http://www.pdgmobility.com)