

Invacare® Jymni™ Pediatric Series Wheelchair

9000 Standard Weight

9000 Light Weight

9000 Light Weight Recliner

User Manual

EN

This manual MUST be given to the user of the product.

BEFORE using this product, read this manual and save for future reference.



Yes, you can.®

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I General

I.I Symbols

Warnings

Signal words are used in this manual and apply to hazards or unsafe practices which could result in personal injury or property damage. See the information below for definitions of the signal words.



DANGER

Danger indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.



WARNING

Warning indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.



CAUTION

Caution indicates a potentially hazardous situation which, if not avoided, may result in property damage or minor injury or both.



IMPORTANT

Indicates a hazardous situation that could result in damage to property if it is not avoided.



Gives useful tips, recommendations and information for efficient, trouble-free use.

1.2 Limited Warranty

PLEASE NOTE: THE WARRANTY BELOW HAS BEEN DRAFTED TO COMPLY WITH FEDERAL LAW APPLICABLE TO PRODUCTS MANUFACTURED AFTER JULY 4, 1975.

This warranty is extended only to the original purchaser who purchases this product when new and unused from Invacare or a dealer. This warranty is not extended to any other person or entity and is not transferable or assignable to any subsequent purchaser or owner. Coverage under this warranty will end upon any such subsequent sale or other transfer of title to any other person.

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

Invacare warrants the side frames and cross members of this product when purchased new and unused to be free from defects in materials and workmanship for a period of five (5) years from the date of purchase from Invacare or a dealer, with a copy of the seller's invoice required for coverage under this warranty. Invacare warrants the upholstered materials (seat, back and armrests of the arm assembly) and remaining components of this product when purchased new and unused to be free from defects in materials and workmanship for a period of thirteen (13) months from date of purchase from Invacare or a dealer, with a copy of the seller's invoice required for coverage under this warranty. If within such warranty periods any such product shall be proven to be defective, such product shall be repaired or replaced, at Invacare's option. This warranty does not include any labor or shipping charges incurred in replacement part installation or repair of any such product. Invacare'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 Invacare product. In the event you do not receive satisfactory warranty service, please write directly to Invacare at the address at the bottom of this page. Provide dealer's name, address, the product model number, 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 INVACARE'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 INVACARE, OR TO A PRODUCT DAMAGED BY CIRCUMSTANCES BEYOND INVACARE'S CONTROL, AND SUCH EVALUATION WILL BE SOLELY DETERMINED BY INVACARE. THE WARRANTY SHALL NOT APPLY TO NORMAL WEAR AND TEAR OR FAILURE TO ADHERE TO THE PRODUCT INSTRUCTIONS.

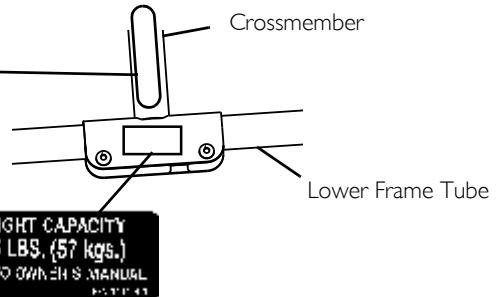
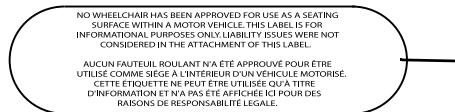
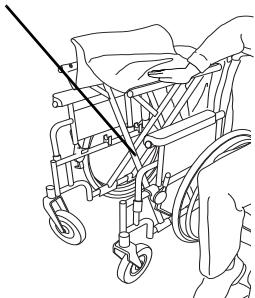
THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IN LIEU OF ANY OTHER WARRANTIES WHATSOEVER, WHETHER EXPRESS OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, AND THE SOLE REMEDY FOR VIOLATIONS OF ANY WARRANTY WHATSOEVER, SHALL BE LIMITED TO REPAIR OR 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. INVACARE SHALL NOT BE LIABLE FOR ANY CONSEQUENTIAL OR INCIDENTAL DAMAGES WHATSOEVER.

SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGE, OR LIMITATION OF HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE EXCLUSION AND LIMITATION MAY NOT BE APPLICABLE.
THIS WARRANTY SHALL BE EXTENDED TO COMPLY WITH STATE/PROVINCIAL LAWS AND REQUIREMENTS.

2 Overview

2.1 Label Locations

Serial Number Label is located on the cross brace on the left side of the chair



On all adjustable
anti-tippers



Models with Quick-Release Axles Only

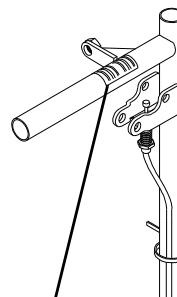
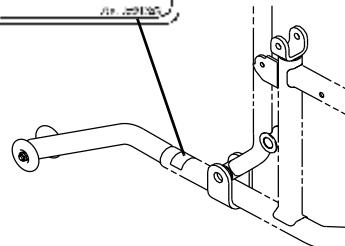
WARNING

DETENT BALLS MUST BE SECURELY SEATED IN RECESSED AREAS OF AXLE BUSHINGS. ENSURE THAT PLUNGER PIN IN HEAD END OF AXLE IS FULLY RELEASED. KEEP DETENT BALLS CLEAN.

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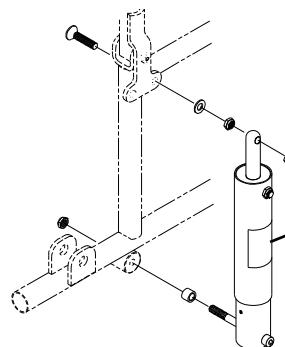
Part No 1100868

Jymni Recliner Models Only



CAUTION
DO NOT recline without occupant. When the chair is not occupied the back will raise abruptly. Keep clear of the chair back when raising or lowering to avoid injury.

1023096



CAUTION
SERVICE OF SPRING LIFT MECHANISM TO BE PERFORMED BY PROPERLY TRAINED AUTHORIZED SERVICE PERSONNEL ONLY.

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2 OVERVIEW

2.2 Typical Product Parameters

9000 JYMNI STANDARD AND LIGHT WEIGHT WHEELCHAIRS			
OVERALL WIDTH	18 or 23 inches	REAR AXLE	Permanent* and quick-release
OVERALL DEPTH (WITH RIGGINGS)	32 to 34½ inches	HANDRIMS	Composite* and aluminum, steel
SEAT WIDTH	10, 12 and 14inches	WHEEL LOCKS	Toggle lock -push or pull
SEAT DEPTH	10, 12 and 14inches	CASTER SIZE	6 x 1-inch Urethane in light or dark gray*
**SEAT-TO-FLOOR 14-INCH DEEP: 10 AND 12-INCH DEEP:	15, 16 and 17 inches 15 and 16 inches	UPHOLSTERY	Standard Weight - Black vinyl*, midnight blue vinyl or black nylon Light Weight - Black nylon*
BACK STYLE	Adjustable* - 1 inch increments; adjustable angle - 5° to 20° in 5° increments	***WEIGHT	31 lbs (Jymni Standard Weight) 30 lbs (Jymni Light Weight)
BACK HEIGHT	14 or 15 inches	WEIGHT LIMIT	125 lbs (57 kg)
ARM STYLES (FLIP BACK)	Space Saver* - Desk* or full length in fixed* or adjustable height Conventional - Desk or full length in fixed or adjustable height	SHIPPING WEIGHT (APPROX.)	40 lbs (Jymni Standard Weight) 39 lbs (Jymni Light Weight)
FRONT RIGGINGS	Swingaway footrests and elevating legrests	REAR WHEELS	20, 22*-inch composite; Urethane*, pneumatic or pneumatic-flat free insert
FRAME COLORS:	Standard Weight - Chrome Light Weight - Chrome, Silver Vein, Wet Black, Red, Deep Purple Sunny Yellow, Electric Red, Electric Purple, Royal Blue w/Grape, Lavender, Electric Teal, Midnight Blue		

9000 JYMNI RECLINER WHEELCHAIRS

OVERALL WIDTH	19 or 23 inches	REAR AXLE	Permanent*
OVERALL DEPTH (WITH RIGGINGS)	35½ to 39¼ inches	HANDRIMS	Aluminum
SEAT WIDTH	10, 12 and 14inches	WHEEL LOCKS	Toggle lock - push or pull
SEAT DEPTH	10, 12 and 14inches	CASTER SIZE	6 x 1-inch Urethane in light or dark gray*
**SEAT-TO-FLOOR 14-INCH DEEP: 10 AND 12-INCH DEEP:	15, 16 and 17 inches 15, 16 and 17 inches	UPHOLSTERY	Black nylon*
BACK STYLE	Reclining 95° to 160°	***WEIGHT	40 lbs
BACK HEIGHT	16 inches or 27 inches with headrest	WEIGHT LIMIT	125 lbs (57 kg)
ARM STYLES (FLIP BACK)	Conventional - Desk or full length in fixed or adjustable height	SHIPPING WEIGHT (APPROX.)	49 lbs
FRONT RIGGINGS	Swingaway footrests and elevating legrests	REAR WHEELS	20, 22*-inch composite; Urethane*, pneumatic or pneumatic-flat free insert
FRAME COLORS:	Chrome, Silver Vein, Wet Black, Red, Deep Purple Sunny Yellow, Electric Red, Electric Purple, Royal Blue w/Grape, Lavender, Electric Teal, Midnight Blue		



* These options are standard for this model.

** The seat-to-floor heights are based on urethane tires. If wheelchair is equipped with pneumatic (properly inflated) or solid rubber tires, add ¼-inch to the measurements listed above. These heights can vary +/- ¼-inch due to tire wear and manufacturing tolerances.

*** 12 x 12-inch Seat Frame with standard armrest and 90° footrest. Jymni Recliner includes headrest extension and pillow.

2 OVERVIEW

2.3 Component Identification



3 Safety

The safety section contains important information for the safe operation and use of this product.

3.1 General Guidelines



WARNING

DO NOT use this product or any available optional equipment without first completely reading and understanding these instructions and any additional instructional material such as owner's manuals, service manuals or instruction sheets supplied with this product or optional equipment. If you are unable to understand the warnings, cautions or instructions, contact a healthcare professional, dealer or technical personnel before attempting to use this equipment - otherwise, injury or damage may occur.

A qualified technician MUST perform the initial set up of this wheelchair. also, a qualified technician must perform all procedures specifically indicated in the manual.



ACCESSORIES WARNINGS

Invacare products are specifically designed and manufactured for use in conjunction with Invacare accessories. Accessories designed by other manufacturers have not been tested by Invacare and are not recommended for use with Invacare products.



NOTICE

THE INFORMATION CONTAINED IN THIS DOCUMENT IS SUBJECT TO CHANGE WITHOUT NOTICE.

Check all parts for shipping damage and test before using. In case of damage, DO NOT use. Contact Invacare/Carrier for further instruction.

3 SAFETY

3.2 Operating Information

Anti-tippers



WARNING

Anti-tippers are specific to the different seat-to-floor angles and/or seat-to-floor heights. Refer to [Anti-tippers/Wheel Locks](#) on page 54 for correct usage and adjustment. If these requirements cannot be achieved, DO NOT use the wheelchair. Contact a qualified technician. If changing the seat-to-floor height with or without a change to seat-to-floor angle, the correct anti-tippers MUST be used to maintain a 1½ to 2-inch ground clearance.

Seat-to-floor angle of 0° or 3°: If so equipped, anti-tippers MUST be attached at all times. Inasmuch as the anti-tippers are an option for 0° or 3° on this wheelchair (you may order with or without the anti-tippers), Invacare strongly recommends ordering the anti-tippers as a safeguard for the wheelchair user.

Seat-to-floor angle of 6°: If changing the seat-to-floor angle to 6°, anti-tippers MUST be installed.

Anti-tippers MUST be fully engaged and release buttons fully protruding out of the adjustment holes.

Ensure both anti-tippers are adjusted to the same mounting hole.

ALWAYS use anti-tippers. When outdoors on wet, soft ground or on gravel surfaces, anti tippers may not provide the same level of protection against tipover. Extra caution MUST be observed when traversing such surfaces.

Non-recliners Only - Inasmuch as anti-tippers are an option on this wheelchair (You may order non-recliners with or without the anti-tippers), Invacare strongly recommends ordering anti-tippers as an additional safeguard for the wheelchair user. If so equipped, anti-tippers MUST be attached and pointing down towards ground/floor at all times.

Recliners and Wheelchairs with 1-inch Forward Rear Wheel Positioner Only - Anti-tippers MUST be attached at all times.

General Warnings



WARNING

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

Avoid storing or using the wheelchair near open flame or combustible products. Serious injury or damage to property may result.

DO NOT stand on the frame of the wheelchair.

DO NOT use the footplate as a platform. When getting in or out of the wheelchair, make sure that the footplates are in the upward position.

ALWAYS use the handrims for self-propulsion. Inasmuch as the handrims are an option on this wheelchair (you may order with or without the handrims), Invacare strongly recommends ordering the handrims as an additional safeguard for the wheelchair user.

Invacare recommends that a non-folding device be installed to keep the wheelchair from being folded when left unoccupied in a public place.

DO NOT operate on roads, streets or highways.

Hand Grips



WARNING

ALWAYS check hand grips for looseness before using the wheelchair. If loose and/or worn, replace IMMEDIATELY.

When cleaning rear cane or hand grip areas use only a clean towel lightly dampened with cool water. Verify that grips are dry prior to use. Use of soap or ammonia based cleaning solutions will result in the hand grips sliding off the cane assembly. Failure to observe this warning may result in injury to the user or bystanders.

If the wheelchair is exposed to extreme temperature (above 100°F or below 32°F), high humidity and/or becomes wet, prior to use, ensure that the handgrips DO NOT twist on the handle. Otherwise, damage or injury may occur.

3 SAFETY

Information for Healthcare Professionals/Assistants



WARNING

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

Make sure occupant's hands and body are clear of all pinch points before reclining back. Use caution, otherwise injury may occur.

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

Lifting



WARNING

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

Ramps, Slopes, Inclines and Obstacles



WARNING

DO NOT traverse, climb or go down ramps or slopes greater than 9°.

DO NOT attempt to move up or down an incline with a water, ice or oil film.

DO NOT attempt to ride over curbs or obstacles. Doing so may cause your wheelchair to tip over and cause bodily harm to you or damage to the wheelchair.

Repair and Service Information



WARNING

Unless otherwise noted, all service and adjustment should be performed while the wheelchair is unoccupied.

Seat Positioning Strap



WARNING

ALWAYS wear your seat positioning strap. Inasmuch as the seat positioning strap is an option on this wheelchair (you may order with or without the seat positioning strap), Invacare strongly recommends ordering the seat positioning strap as an additional safeguard for the wheelchair user. The seat positioning strap is a positioning strap only. It is not designed for use as a safety device withstanding high stress loads such as auto or aircraft safety belts. If signs of wear appear, strap MUST be replaced IMMEDIATELY.

With regards to seat/chest positioning straps - it is the obligation of the DME dealer, therapists and other healthcare professionals to determine if a seat/chest positioning strap 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.

Tire Pressure



WARNING

DO NOT use your wheelchair unless it has the proper tire pressure (p.s.i.). DO NOT overinflate the tires. Failure to follow these suggestions may cause the tire to explode and cause bodily harm. The recommended tire pressure is listed on the side wall of the tire.

Weight Limitation



WARNING

The 9000 Jymni wheelchairs have a weight limitation of 125 lbs (57 kg).

Weight Training



WARNING

Invacare does not recommend the use of its wheelchairs as a weight training apparatus. Invacare wheelchairs have not been designed or tested as a seat for any kind of weight training. If occupant uses said wheelchair as a weight training apparatus, Invacare shall not be liable for bodily injury or damage to the wheelchair and the warranty is void.

Wheel Locks



WARNING

DO NOT attempt to stop a moving wheelchair with wheel locks. Wheel locks are not brakes.

If the wheelchair is equipped with push to lock wheel locks, elevating legrests, and wheel lock extension handles, the wheel lock extension handles **MUST** be removed before swinging the elevating legrests to the side, otherwise injury or damage may result. Interference between the top of the elevating legrest and the wheel lock extension handle causes the wheel lock to disengage.

Wheelchair Tie Down Restraints



WARNING

Wheelchair users should **NOT** be transported in vehicles of any kind while in wheelchairs. As of this date, the Department of Transportation has not approved any tie-down systems for transportation of a user while in a wheelchair, in a moving vehicle of any type. It is Invacare's position that users of wheelchairs should be transferred into appropriate seating in vehicles for transportation and use be made of the restraints made available by the auto industry. Invacare cannot and does not recommend any wheelchair transportation systems.

Wheelchair User



WARNING

As a manufacturer of wheelchairs, Invacare endeavors to supply a wide variety of wheelchairs to meet 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 healthcare professional capable of making such a selection.

3.3 Safety/Handling of Wheelchairs

Safety and handling of the wheelchair require 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 the frequently encountered architectural barriers.

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. Invacare recognizes and encourages each individual to try what works best for him/her in overcoming architectural obstacles that they may encounter. However, all warnings and cautions given in this manual MUST be heeded. Techniques in this manual are a starting point for the new wheelchair user and assistant with "safety" as the most important consideration for all.

Stability and Balance



WARNING

The seat depth, back height/angle, seat angle, size/position of the front casters, seat-to-floor angle, position of the rear wheels, correct anti-tipper as well as the end user's disability or end user's physical condition and capabilities directly relate to the stability of the wheelchair. Any change to one or any combination may cause the wheelchair to decrease in stability. These adjustments MUST be performed by a qualified technician.

Seat-to-floor heights have specific positions depending on rear wheel size, rear wheel position, front caster size/position and seat-to-floor angle. These adjustments MUST be performed by a qualified technician.

Be aware that carrying heavy objects on your lap while occupying the wheelchair may adversely affect the stability of the wheelchair, resulting in serious bodily injury to the user, damage to the wheelchair and surrounding property.

This wheelchair has been designed to accommodate one individual. If more than one individual occupies the wheelchair this may adversely affect the stability of the wheelchair, resulting in serious bodily injury to the user, damage to the wheelchair and surrounding property.

(Recliner Models Only)

ALWAYS make sure that the wheelchair is stable before using the recliner option.

ALWAYS return the back to the upright position before lifting the wheelchair.

ALWAYS engage both wheel locks while reclining or inclining (sitting up) the wheelchair.

ALWAYS return the back to the upright position before lifting the wheelchair.

Ensure the spreader bar is attached and secured before using the Jymni Recliner.

3 SAFETY

		BACK HEIGHT	SEAT DEPTH	BACK ANGLE	SEATING SYSTEM	TIPT ANGLE	CASTER SIZE	CASTER POSITION	WHEEL SIZE	WHEEL POSITION	USER CONDITION	WHEEL LOCKS	ANTI-TIPPERS
BACK HEIGHT	•	✓	✓	✓	✓	✓	✓	✓	✓	✓	N/A	N/A	N/A
SEAT DEPTH	✓	•	✓	✓	N/A	✓	✓	✓	✓	✓	N/A	N/A	N/A
BACK ANGLE	✓	✓	•	✓	✓	✓	✓	✓	✓	✓	N/A	N/A	N/A
SEATING SYSTEM	✓	✓	✓	•	✓	✓	✓	✓	✓	✓	✓	N/A	N/A
TIPT ANGLE	N/A	N/A	✓	N/A	•	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
CASTER SIZE	✓	N/A	✓	N/A	N/A	•	✓	✓	✓	N/A	✓	✓	✓
CASTER POSITION	✓	N/A	✓	N/A	N/A	✓	•	✓	✓	N/A	✓	✓	✓
WHEEL SIZE	✓	N/A	✓	N/A	N/A	✓	✓	✓	•	✓	N/A	✓	✓
WHEEL POSITION	✓	N/A	✓	N/A	N/A	✓	✓	✓	✓	•	N/A	✓	✓
USER CONDITION	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	•	N/A	N/A
SEAT HEIGHT	✓	N/A	✓	✓	✓	✓	✓	✓	✓	✓	N/A	✓	✓

To assure stability and proper operation of your wheelchair, you MUST maintain proper balance at all times. 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. Invacare recommends using seat/chest positioning straps 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.

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 healthcare professional before attempting active use of the wheelchair.

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

Reaching, Leaning and Bending Forward or Sideways



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.

DO NOT attempt to reach or lift objects that would cause you to shift weight to one side of the wheelchair. Reaching or lifting objects on the side of the wheelchair can cause the chair to tip over sideways.

DO NOT lean over the top of the back upholstery to reach objects behind you, as this may cause the wheelchair to tip over.

Forward

Position the front casters so that they are extended as far forward as possible and engage wheel locks.

Backwards

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.

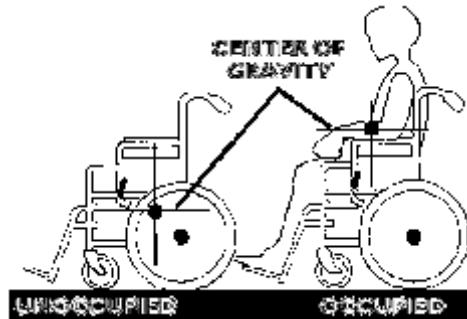


FIGURE 1 Percentage of Weight Distribution

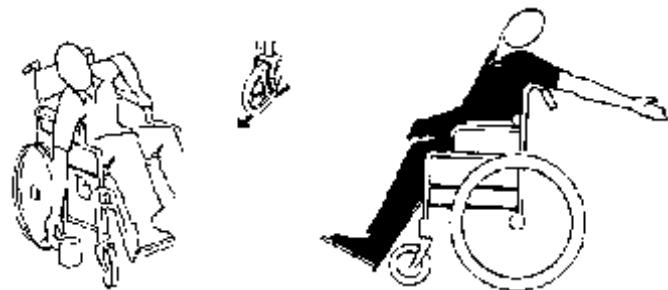


FIGURE 2 Reaching, Leaning and Bending Forward or Sideways

3 SAFETY

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 and balance.

Tipping



WARNING

DO NOT tip the wheelchair without assistance.

When lowering the front casters of the wheelchair, DO NOT let the wheelchair drop the last few inches to the ground. This could result in injury to the occupant and/or damage to the wheelchair.

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

After mastering the techniques of tipping the wheelchair, use one of the following methods to tackle curbs, short stairs, etc.

Method I - Wheelchair With Step Tubes



WARNING

When lowering the front casters of the wheelchair, DO NOT let the wheelchair drop the last few inches to the ground. This could result in injury to the occupant and/or damage to the wheelchair.

Place foot on the step tube and begin to tilt the wheelchair toward you. 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 front of the wheelchair in one continuous movement onto the sidewalk. Push the wheelchair forward until the rear wheels roll up and over the curb.

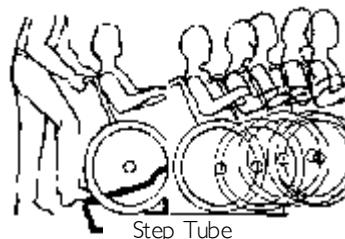


FIGURE 3 Method I - Wheelchair With Step Tubes

Method 2 - Wheelchair Without Step Tubes

This method requires two 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. Turn the anti-tippers so the anti-tip wheels are pointing up. The wheelchair should be tilted back to the balance point and, in one continuous upward 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.

Roll the wheelchair backward and slowly lower the wheelchair in one continuous movement. Turn the anti-tippers so the anti-tip wheels are facing down.

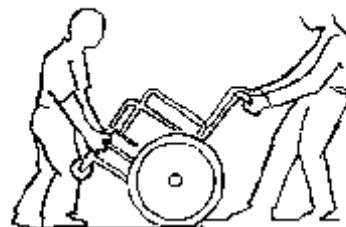


FIGURE 4 Method 2 - Wheelchair Without Step Tubes

Stairways



WARNING

Extreme caution is advised when it is necessary to move an occupied or unoccupied wheelchair up or down the stairs. Invacare recommends that, if possible, the user be removed from the wheelchair prior to moving. Invacare recommends using two 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:

3 SAFETY

Moving Up Stairs

1. If necessary, rotate the anti-tippers so the wheels are facing up.
2. One assistant (positioned behind the wheelchair), securely grasps a non-removable (non-detachable) part of the wheelchair for leverage and tilts the wheelchair back to the balance point.
3. After the wheelchair has been tilted back to the balance point, the assistant behind the wheelchair backs the wheelchair up against the first step.
4. The second assistant (positioned in the front of the wheelchair), with a firm hold on a non-detachable part of the framework, lifts the wheelchair up and on to the next stair above and steadies the wheelchair as the assistant behind the wheelchair places one foot on the next stair above and repeats process.
5. The wheelchair should not be lowered until the last stair has been negotiated and the wheelchair has been rolled away from the stairway.
6. If necessary, rotate the anti-tippers so the wheels are facing down.

Moving Down Stairs

1. If necessary, rotate the anti-tippers so the wheels are facing up.
2. One assistant (positioned behind the wheelchair), securely grasps a non-removable (non-detachable) part of the wheelchair for leverage and tilts the wheelchair back to the balance point.
3. After the wheelchair has been tilted back to the balance point, the assistant behind the wheelchair rolls the wheelchair up to the edge of the first step.
4. The second assistant (positioned in the front of the wheelchair), with a firm hold on a non-detachable part of the framework, lowers the wheelchair down and on to the next stair below and steadies the wheelchair as the assistant in the rear places one foot on the next stair below and repeats process.
5. The wheelchair should not be lowered until the last stair has been negotiated and the wheelchair has been rolled away from the stairway.
6. If necessary, rotate the anti-tippers so the wheels are facing down.

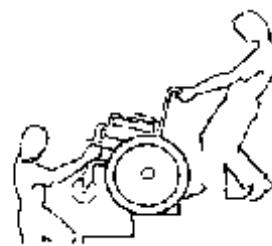


FIGURE 5 Stairways

Escalators



WARNING

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

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 the gap distance. Turn both casters parallel to the object you are transferring onto. Also be certain the wheel locks are engaged to help prevent the wheels from moving.



CAUTION

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

Position the wheelchair as close as possible alongside the seat to which you are transferring, with the front casters pointing parallel to it.

Remove or flip up the armrest. Engage wheel locks. Swing away or remove front rigging. Shift body weight into seat with transfer.

During independent transfer, little or no seat platform will be beneath you. Use a transfer board if at all possible.



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

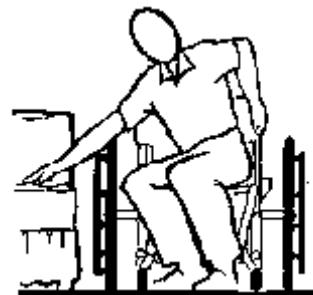


FIGURE 6 Transferring To and From Other Seats

3.5 Unfolding and Folding Wheelchair



WARNING

ALWAYS keep hands and fingers clear of moving parts to avoid injury.

DO NOT place hand or fingers on the underside of the seat frame rail when opening or closing the wheelchair.

DO NOT sit or transfer into the wheelchair unless it is fully open and the seat frame rails are fully seated into the side frame H-blocks.

Invacare recommends that a non-folding device be installed to keep the wheelchair from being folded when left unoccupied in a public place.

Unfolding Sling Seat

1. Grasp the push closest to you.
2. Tilt the wheelchair towards you (raising the opposite wheel and caster off the ground/floor).
3. Push downward on the seat rail closest to you where the seat upholstery is attached until the wheelchair is fully open.
4. Engage both wheel locks, open the footrest/legrest for clearance and transfer into the wheelchair.



FIGURE 7 Unfolding Sling Seat

Folding Sling Seat



If the wheelchair is equipped with carry straps, the wheelchair may be folded by pulling up on the straps.

1. Swing footrest/legrest in locked position to the front of the wheelchair.
2. Pivot footplates upward to vertical position.
3. With both hands, grasp the middle of the seat upholstery at the front and back edge and flip up. Or, tilt the wheelchair to one side and close by the push handles.



Unfolding/Folding Solid Seat Model Wheelchairs

1. From behind the wheelchair, grasp the right hand edge of the solid seat.
2. Raise the seat to the hinged side.
3. Swing footrest/legrest in locked position to the front of the wheelchair.
4. Pivot footplates upward to vertical position.
5. With both hands, grasp the middle of the seat upholstery at the front and back edge and lift up or tilt the wheelchair to one side and close by the push handles.

FIGURE 8 Folding Sling Seat

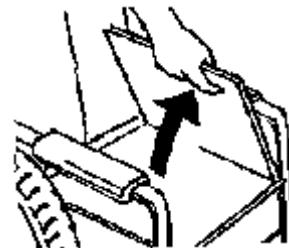


FIGURE 9 Unfolding/Folding Solid Seat Model Wheelchairs

4 Safety Inspection/Troubleshooting



Every six months or as necessary, take your wheelchair to a qualified technician 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.

4.1 Safety Inspection Checklist

Initial adjustments should be made to suit your personal body structure and preference. Thereafter follow these maintenance procedures:

Inspect/Adjust Initially

- Ensure that the wheelchair rolls straight (no excessive drag or pull to one side).
- Inspect for loose or missing hardware on frame and crossbraces.
- Inspect for bent frame or crossbraces.
- Check that the wheel locks DO NOT interfere with tires when rolling.
- Check that the wheel lock pivot points are free of wear and looseness.
- Check that the wheel locks are easy to engage.
- Ensure that the wheel locks prevent the wheelchair from moving when engaged.
- Inspect the seat and back for rips and sagging.
- Inspect the seat and back for loose or broken hardware.
- Inspect the back cane hand grips for wear/looseness/deterioration.
- Inspect seat positioning strap for any signs of wear. Ensure buckle latches. Verify hardware that attaches strap to frame is secure and undamaged. Replace if necessary.
- Inspect tires for flat spots and wear.
- Check pneumatic tires for proper inflation.



CAUTION

As with any vehicle, check the wheels and tires periodically for cracks and wear. Replace if damaged.

- If equipped, check that quick-release axles lock properly. Lubricate if necessary.
- Check that there is no excessive side movement or binding in the rear wheels when lifted and spun.
- Inspect rear wheels for cracked, bent or broken spokes.
- Ensure all spokes are uniformly tight.

- Inspect handrims for signs of rough edges or peeling.
- Inspect axle assembly for proper tension by spinning caster. Caster should come to a gradual stop.
- Adjust front casters/forks bearing system if wheel wobbles noticeably or binds to a stop.
- Ensure wheel bearings are clean and free of moisture.
- Check headtube locknuts for tightness.
- Inspect casters for cracks and wear.
- Inspect front casters for cracked, bent or broken spokes.
- Clean upholstery and armrests.

Inspect/Adjust Weekly

- Ensure that the wheel locks prevent the wheelchair from moving when engaged.
- Inspect tires for flat spots and wear.
- Check pneumatic tires for proper inflation.
- If equipped, check that quick-release axles lock properly. Lubricate if necessary.
- Inspect rear wheels for cracked, bent or broken spokes.
- Ensure all spokes are uniformly tight.
- Inspect axle assembly for proper tension by spinning caster. Caster should come to a gradual stop.
- Inspect front caster for cracked, bent or broken spokes.

Inspect/Adjust Monthly

- Ensure that the wheelchair rolls straight (no excessive drag or pull to one side).
- Check that the wheel locks DO NOT interfere with tires when rolling.
- Check that the wheel lock pivot points are free of wear and looseness.
- Inspect seat and back for loose or broken hardware.
- Inspect seat positioning strap for any signs of wear. Ensure buckle latches. Verify hardware that attaches strap to frame is secure and undamaged. Replace if necessary.
- Inspect back cane hand grips for wear/looseness/deterioration.
- Adjust front casters/forks bearing system if wheel wobbles noticeably or binds to a stop.
- Ensure wheel bearings are clean and free of moisture.
- Check headtube locknuts for tightness.

4 SAFETY INSPECTION/TROUBLESHOOTING

Inspect/Adjust Periodically

- Inspect frame and crossbraces for loose or missing hardware.
- Inspect for bent frame or crossbraces.
- Check that wheel locks are easy to engage.
- Inspect seat and backs for rips and sagging.
- Check that there is no excessive side movement or binding in the rear wheels when lifted and spun.
- Inspect handrims for signs of rough edges or peeling.
- Adjust front casters/forks bearing system if wheel wobbles noticeably or binds to a stop.
- Inspect casters for cracks and wear.
- Ensure that casters are free of debris.
- Ensure wheel bearings are clean and free of moisture.
- Clean upholstery and armrests.
- Check that all labels are present and legible. Replace if necessary.

4.2 Troubleshooting

Chair Veers Right/Left	Chair 3 Wheels	Sluggish Turn or Performance	Casters Flutter	Squeaks and Rattles	Looseness in Chair	Solutions
X	X	X	X			Check tires for correct and equal pressure
			X	X	X	Check for loose nuts and bolts.
X	X		X			Check caster headtube angle.
X	X					Check that rear wheels are equally spaced away from seat frame.

4.3 Maintenance

Maintenance Safety Precautions



WARNING

After any adjustments, repair or service and before use, make sure all attaching hardware is tightened securely. Otherwise injury or damage may result.

DO NOT overtighten hardware attaching to the frame. This could cause damage to the frame tubing.

Suggested Maintenance Procedures

1. Before using your Jymni Series wheelchair, make sure all nuts and bolts are tight.
2. Check all parts for damage or wear and replace.
3. Check all parts for proper adjustment.
4. Standard and Light Weight Models ONLY - Keep quick-release axles free of dirt and lint to ensure positive locking and proper operation. Refer to Adjusting the Quick-Release Axle on page 50.
5. Oil quick-release axles at least once a month (3-in-1 oil[®] or equivalent).



WARNING

DO NOT use the wheelchair unless it has the proper tire pressure (p.s.i.).

DO NOT overinflate the tires. Failure to follow these suggestions may cause the tire to explode and cause bodily harm.

The recommended tire pressure is listed on the sidewall of the tire.

CAUTION

As with any vehicle, check the wheels and tires periodically for cracks and wear. Replace if damaged. Refer to Replacing/Repairing Rear Wheel Tire/Tube on page 32 and Replacing/Repairing Caster Tire/Tube on page 33.

6. The rear wheels, casters and tires should be checked periodically for cracks and wear, and should be replaced by a qualified technician if damaged

4 SAFETY INSPECTION/TROUBLESHOOTING

7. Periodically adjust wheel locks in correlation to tire wear. Refer to [Adjusting Patient-Operated Wheel Locks](#) on page 58.



Tire wear is excessive if:

Pneumatic Tires - there is missing tread or the tires are bald.

Urethane Tires - there are cuts, surface defects or the tires are loose on the rims.

Rubber Tires - 30% or more of the tire has worn away.

Invacare recommends that tires and casters be replaced every five years.

8. Periodically check handrims to ensure they are secured to the rear wheels. If loose, have them tightened by a qualified technician.
9. Periodically check caster wheel bearings to make sure they are clean and free from moisture. Use a Teflon® lubricant if necessary.
10. Check upholstery for sagging, rips or tears.
11. Clean upholstery with mold soap and water.
12. Replace any labels that are missing, worn, or torn. Refer to [Label Locations](#) on page 8 for a listing of labels and their locations.



WARNING

When cleaning rear cane or hand grip areas use only a clean towel lightly dampened with cool water. Verify that grips are dry prior to use. Use of soap or ammonia based cleaning solutions will result in the hand grips sliding off the cane assembly. Failure to observe this warning may result in injury to the user or bystanders.

13. Hand grips should be checked monthly for wear/looseness/deterioration. Clean if desired. Replace if looseness or deterioration is found.

Replacing/Repairing Rear Wheel Tire/Tube



WARNING

Replacement of rear wheel tube must be performed by a qualified technician.

Replacing/Repairing Caster Tire/Tube



WARNING

Replacement of front caster tire or tube **MUST** be performed by a qualified technician.

As with any vehicle, the wheels and tires should be checked periodically for cracks and wear, and should be replaced when necessary.

For pneumatic tires, replacement of the tire or tube must be performed by a qualified technician.

4.4 Transporting the Invacare Jymni

1. Remove the seating system. Refer to the seating system Owner's Manual for installation and removal of the seating system.
2. Remove the footrests.
3. Remove the rear wheels.
4. Remove the armrests.
5. Remove the anti-tippers.

5 FRONT RIGGINGS

5 Front Riggings



WARNING

After any adjustments, repair or service and before use, make sure all attaching hardware is tightened securely. Otherwise injury or damage may occur.

5.1 Installing/Removing the Swingaway Footrest Assembly

Installing

1. Turn the swingaway footrest assembly to the side (so that the footplate is perpendicular to the wheelchair).
2. Install the hinge plates on the swingaway footrest assembly onto the hinge pins on the wheelchair frame.
3. Push the swingaway footrest assembly towards the inside of the wheelchair until it locks into place.
4. Repeat this procedure for the other footrest assembly.



The footplates will be facing each other when locked in place.

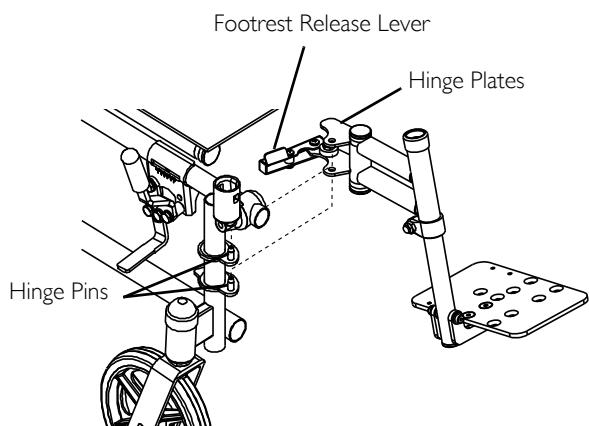


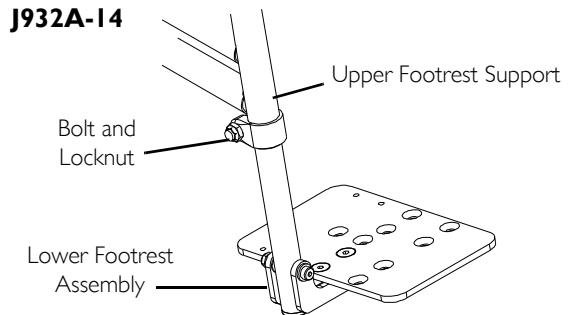
FIGURE I Installing/Removing the Swingaway Footrest Assembly

Removing

1. Push the footrest release lever toward rear of chair.
2. Rotate swingaway footrest assembly outward.
3. Lift the swingaway footrest assembly off of the hinge pins.

5.2 Swingaway Footrest Height Adjustment

1. Remove the swingaway footrest assembly. Refer to [Installing/Removing the Swingaway Footrest Assembly](#) on page 34.
- (i)** Lay the assembly on a flat surface to simplify this procedure.
2. Remove impact guards and/or calf strap, if necessary.
3. Perform one of the following:
 - A. Wheelchairs equipped with 80° swingaway footrest (Model J923A-14):
 - Loosen, but do not remove the bolt and lock nut that secure the lower footrest assembly to the upper footrest support.
 - Reposition the lower footrest assembly to the desired height.
 - Securely tighten the bolt and locknut.
 - B. Wheelchairs equipped with 70° swingaway footrest (Model Number J932A) OR 90° swingaway footrest (Model J933A):
 - Remove the bolt, locknut and four washers that secure the lower footrest assembly to the upper footrest support.
 - Align the mounting hole of the lower footrest assembly with the desired height adjustment hole in the lower footrest support.
 - Reinstall the bolt through the desired height adjustment hole in the lower footrest assembly and through the mounting hole in the lower footrest support. Securely tighten with the locknut and four washers.
4. Repeat this procedure for the other footrest, if necessary.
5. Replace impact guards and/or calf strap, if necessary.
6. Reinstall the swingaway footrest assembly. Refer to [Installing/Removing the Swingaway Footrest Assembly](#) on page 34.



J932A and J933A

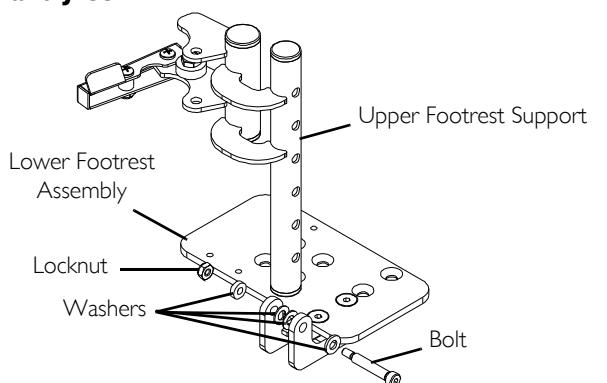


FIGURE 2 Swingaway Footrest Height Adjustment

5 FRONT RIGGINGS

5.3 Heel Loop Replacement

Swingaway Footrests/Elevating Legrest (J932A, J932A-14, J933A and J934A)

1. Remove the four mounting screws and washers that secure the heel loop to the BOTTOM of the footrest.
2. Remove the heel loop from the footrest.
3. Position the new heel loop as shown in FIGURE 3 and reverse STEPS 1-2 to reassemble.

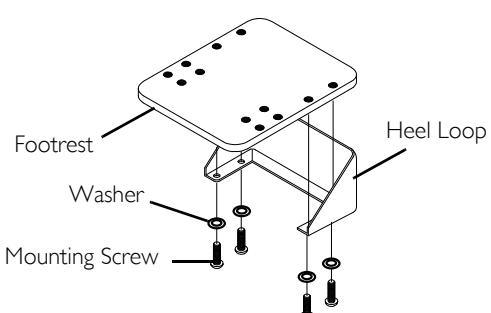
Elevating Legrest (J934A-14 ONLY)

1. Loosen, but do not remove the bolt and locknut that secure the lower half of the footrest to the swingaway footrest assembly.
2. Remove the lower footrest assembly.
3. Remove the mounting screw and locknut that secure the heel loop to the footrest.
4. Slide heel loop over cane of the footrest assembly.
5. Replace heel loop.
6. Reverse STEPS 1-4 to reassemble.



When securing the heel loop to the footrest assembly, tighten the mounting screw and locknut until the spacer is secure.

JA932A, JA932A-14, J933A, J934A



J934A-14

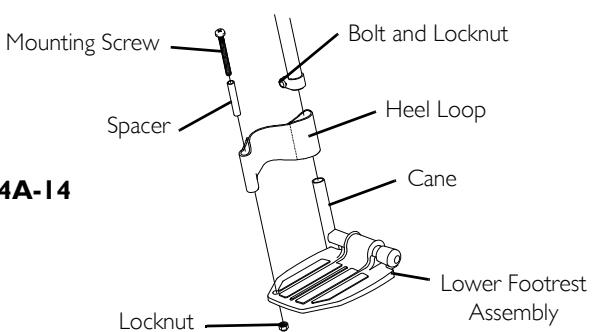


FIGURE 3 Adjusting the Elevating Legrest Assembly

5 FRONT RIGGINGS

5.4 Installing/Removing Elevating Legrest Assembly

Installing

1. Place elevating legrest assembly on the outside of the wheelchair and install the hinge plates onto the hinge pins on the wheelchair frame.
2. Rotate elevating legrest assembly toward the inside of the wheelchair until it locks in place.
3. Repeat this procedure for other legrest assembly.



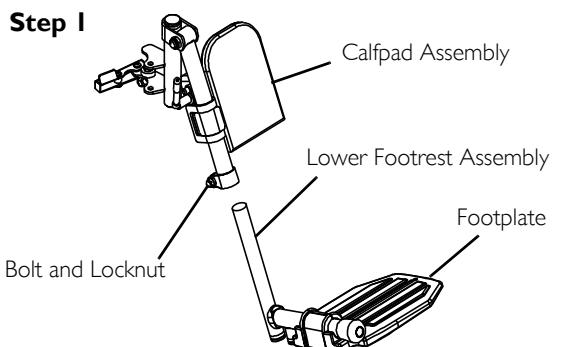
The footplates will be facing each other when locked in place.

4. After seated in wheelchair, adjust the legrest to correct height. Refer to Installing/Removing Elevating Legrest Assembly on page 37.

Removing

1. To release the elevating legrest assembly, push the legrest release handle toward the inside of the wheelchair (facing the front of the wheelchair) and swing the legrest assembly to the outside of the wheelchair.
2. Lift the elevating legrest assembly off of the hinge pins.

Step 1



Steps 2 & 3

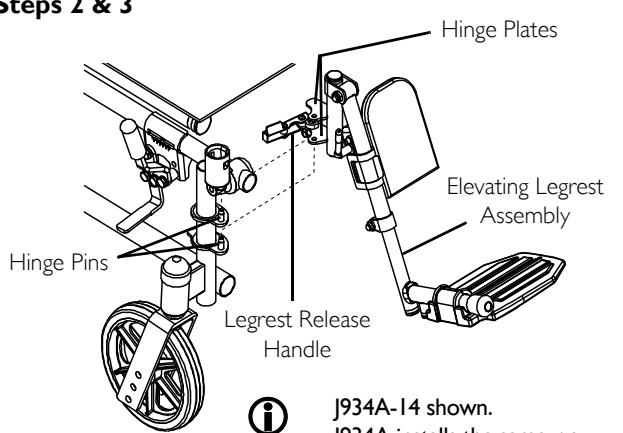


FIGURE 4 Installing/Removing Elevating Legrest Assembly

5 FRONT RIGGINGS

5.5 Adjusting the Elevating Legrest Assembly

Raising Legrest Assembly

1. Assistant should grab hold of the lower legrest assembly and raise elevating legrests until the desired height is obtained.

Lowering Legrest Assembly

1. Support user leg with one hand.
2. Perform one of the following:
 - Model J934A Elevating Legrest - Push release lever down with other hand.
 - Model J934A-14 Elevating Legrest - Push release lever forward with other hand.
3. Gently, lower user leg down and rest against the legrest.

Adjusting Calfpad

1. Remove the elevating legrest assembly from the wheelchair. Refer to [Installing/Removing Elevating Legrest Assembly](#) on page 37.
2. Remove the two mounting screws and washers securing the calfpad to the elevating legrest as shown in Detail "A".
3. Position the calfpad in one of the two height positions.
4. Reinstall the two mounting screws and washers securing the calfpad to the elevating legrest. Securely tight.

Adjusting Height

1. Adjust footrest to correct height by loosening the nut and sliding the lower legrest assembly up or down until desired height is achieved as shown in Detail "B".
2. Securely tighten nut.

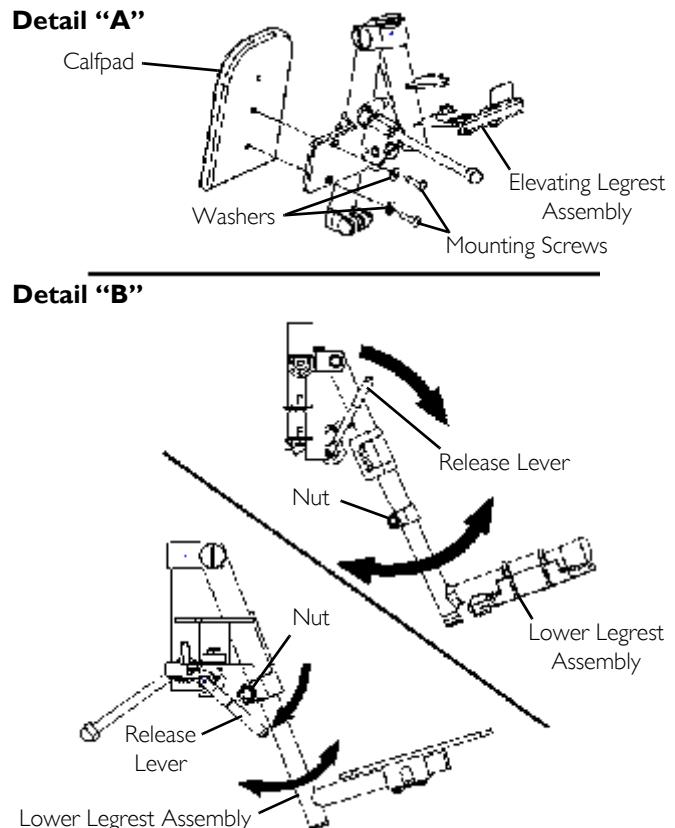


FIGURE 5 Adjusting the Elevating Legrest Assembly

6 Arms



WARNING

After any adjustments, repair or service and before use, make sure all attaching hardware is tightened securely. Otherwise injury or damage may occur.

6.1 Adjusting Armrest Height



WARNING

Make sure the height adjustment lever is in the locked position before using the wheelchair.

1. Unlock the armrest by flipping the height adjustment lever on the top front of the armrest to the up (horizontal) position.
 2. Adjust armrest to one of five positions.
-  Height adjustment lever MUST be in the unlocked position when placing armrest into the arm assembly.
3. Lock the armrest by pressing the height adjustment lever into the down (vertical) position when the desired armrest height is achieved.
 4. Repeat STEPS 1-3 for other armrest.

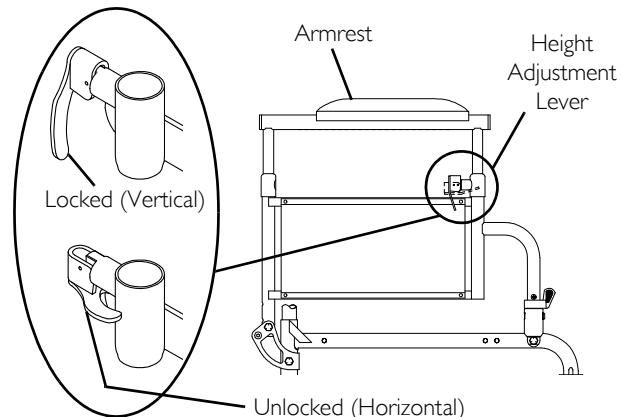


FIGURE I Adjusting Armrest Height

6.2 Using Swing-Back Arms



WARNING

Make sure the armrest release lever is in the locked position before using the wheelchair.

1. Unlock the swing-back arms by rotating the armrest release lever toward the outside of the wheelchair.
 2. Pull the front of the swing-back arm straight up/out of the arm socket and towards the rear of the wheelchair.
 3. To use the swing-back arm, push the swing-back arm towards the front of the wheelchair and then downward into the arm socket.
- i** Armrest release lever MUST be in the unlocked position when placing armrest into the arm sockets.
4. Lock the swing-back arms by rotating the armrest release lever towards the inside of the wheelchair.

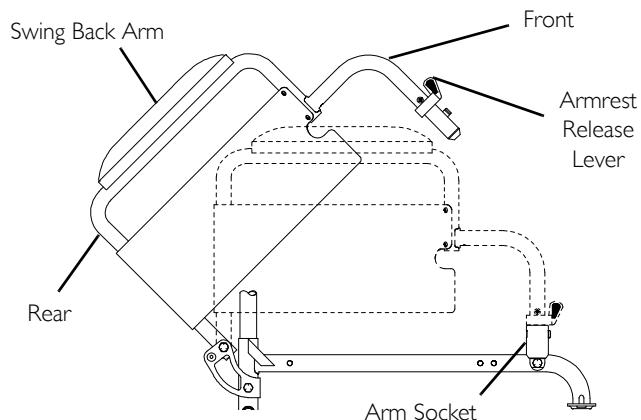


FIGURE 2 Using Swing-Back Arms

6.3 Removing or Replacing Armrest



WARNING

Make sure the armrest release lever is in the locked position before using the wheelchair.

Removing Armrests

1. Unlock the armrest by turning the armrest release levers towards the outside of the wheelchair.
2. Lift armrest completely out of arm sockets from the wheelchair.

Replacing Armrests



Armrest release lever MUST be in the unlocked position when placing armrest into the arm sockets.

1. Place armrest into arm sockets located on the side of the wheelchair.
2. Lock the armrest by turning the armrest release levers towards the inside of the wheelchair.

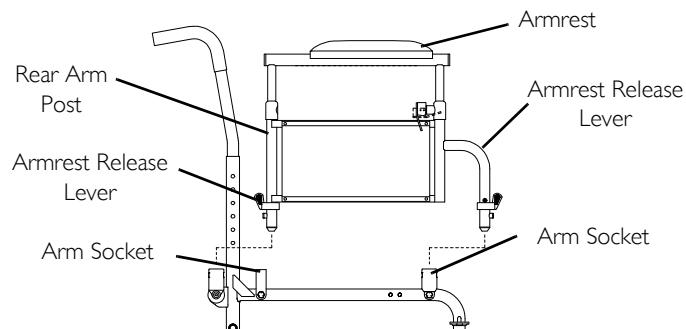


FIGURE 3 Removing or Replacing Armrest

6.4 Replacing Desk/Full Length Armrest Pad (Fixed Height Arms Only)

1. Remove the mounting screws that secure the armrest pad to the armrest assembly.
2. Replace armrest pad and securely tighten with the existing mounting screws.

6.5 Replacing Clothing Guards (Fixed Height Arms Only)

1. Remove the four mounting screws that secure the existing clothing guard to the armrest assembly.
2. Install new clothing guard and securely tighten with the existing mounting screws.

6.6 Converting Between Space Saver and Conventional Arms



Space Saver arms DO NOT work with the following:

- Adjustable angle back option
- Jymni Recliner



For this procedure, refer to FIGURE 5 on page 43.

1. Remove the arms from the wheelchair. Refer to [Removing or Replacing Armrest](#) on page 41.
2. Remove the locknut and hex screw that secure the arm socket to the wheelchair frame.
3. Repeat STEP 2 for the opposite side of the wheelchair.
4. Reposition the arm socket to one of two positions:
 - A. For conventional arms - position arm socket on outside of frame.
 - B. For space saver arms - position arm socket on inside of frame.

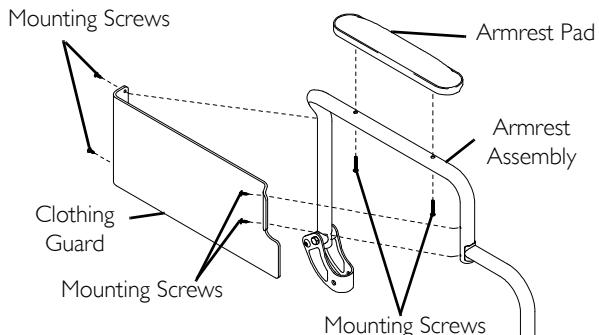


FIGURE 4 Replacing Desk/Full Length Armrest Pad (Fixed Height Arms Only)



Make sure arm sockets sit flush against the wheelchair frame.

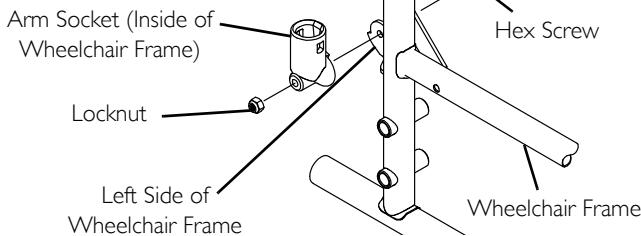
5. Reinstall the hex screw and locknut that secure the arm socket to the wheelchair frame and securely tighten.
6. Repeat STEP 5 for the opposite side of the wheelchair.



The rear wheel axle spacer is needed conventional arms. It is not needed for spacer saver arms.

7. Refer to the following to determine the rear wheel axle spacer needed:
 - A. Conventional - 5/8-inch
 - B. Space Saver - 1/8-inch
8. To install the rear wheel axle spacer, refer to [Removing/Installing Rear Wheels](#) on page 48.
9. Install the new arms onto the wheelchair. Refer to [Removing or Replacing Armrest](#) on page 41.

Space Saver Arm Position



Conventional Arm Position

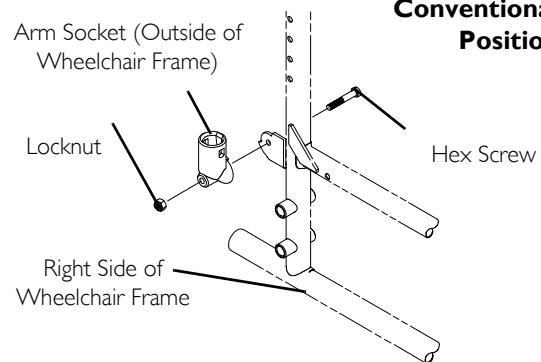


FIGURE 5 Converting Between Space Saver and Conventional Arms

7 Seat and Back



WARNING

After any adjustments, repair or service and before use, make sure all attaching hardware is tightened securely. Otherwise injury or damage may occur.



The procedures in this section apply to non-recliner models only. For recliner models, refer to [Recliner](#) on page 59.

7.1 Replacing Seat Upholstery

1. Remove the mounting screws that secure the existing seat upholstery to the seat rails.



10 and 12 inch seat depth has 8 mounting screws and 14 inch seat depths have 10 mounting screws.

2. Remove the existing seat upholstery from the seat rails.
3. Install new seat upholstery by reversing STEPS 1-2.

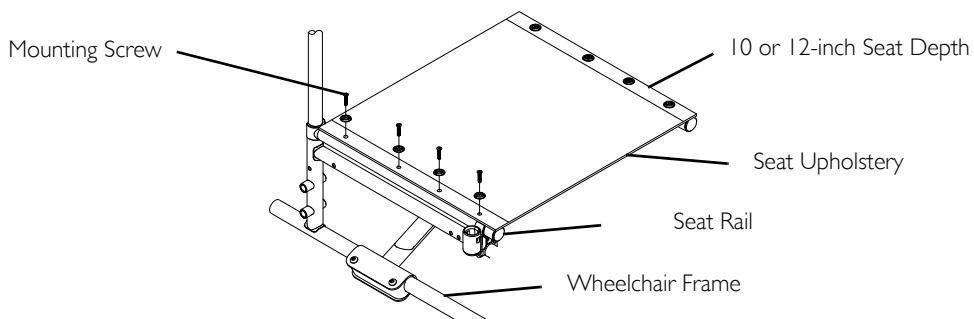


FIGURE I Replacing Seat Upholstery

7.2 Replacing Back Upholstery

1. Remove the two mounting screws and washers that secure the existing back upholstery to the back canes (Detail "A").
 2. Remove the two mounting screws and locknuts that secure one back cane to the wheelchair frame (Detail "B").
- i** It is necessary to remove only one back cane to replace the back upholstery.
3. Pull the loose back cane out of the existing back upholstery.
 4. Pull the existing back upholstery up and over the mounted back cane.
 5. Install the new back upholstery over the mounted back cane.
 6. Slide the loose back cane through the new back upholstery.
 7. Secure the back cane to the wheelchair frame with the two mounting screws, spacers and locknuts.
 8. Secure the new back upholstery to the back canes with the existing mounting screws and washers.

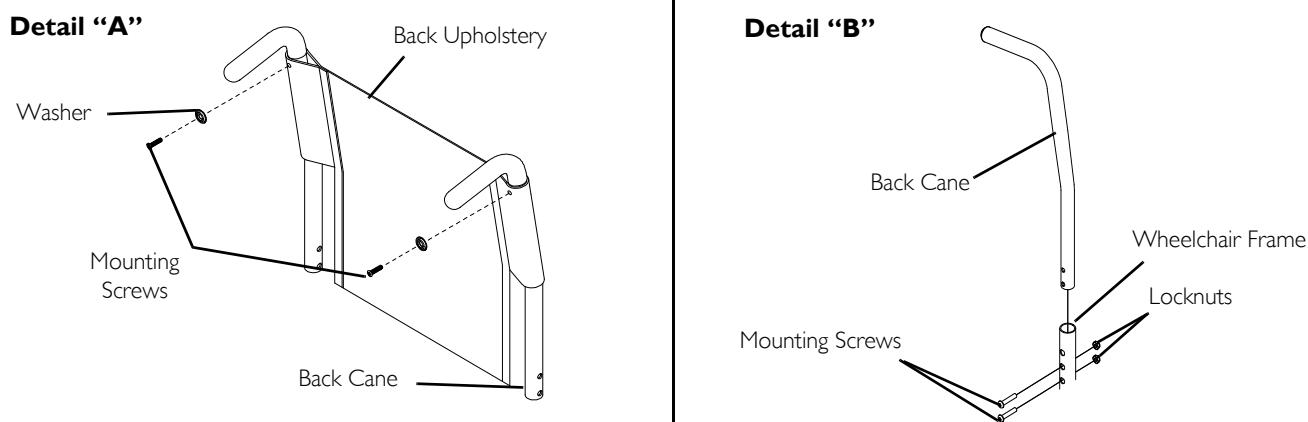


FIGURE 2 Replacing Back Upholstery

7.3 Adjusting Back Height



WARNING

The seat depth, back height/angle, seat angle, size/position of the front casters, size/position of the rear wheels, anti-tipper model, as well as the user condition directly relate to the stability of the wheelchair. Any change to one or any combination of these may cause the wheelchair to decrease in stability. These adjustments must be performed by a qualified technician.



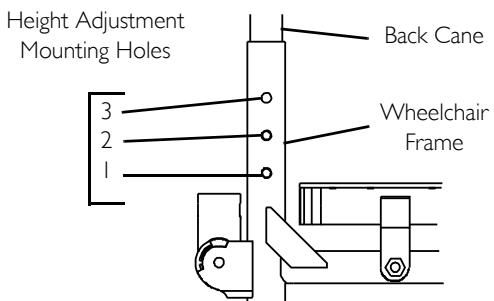
Back canes MUST be adjusted to the same height.

1. Remove the two mounting screws and locknuts that secure the two back canes to the wheelchair frame.
2. Reposition the back canes to one of the two height adjustment mounting holes.
 - 14 inch - Mounting holes* 1 and 2
 - 15 inch - Mounting holes* 2 and 3



Mounting holes numbered from bottom to top for reference only. (There are no numbers on the back canes or wheelchair frame.)

3. Reinstall the two allen screws and locknuts that secure the back canes to the wheelchair frame and securely tighten.



The two mounting screws and locknuts that secure the back cane to the wheelchair frame are not shown for clarity.

FIGURE 3 Adjusting Back Height

7.4 Adjusting Back Angle - Standard/Light Weight Adjustable Angle Back Model Only



WARNING

The back angle directly relates to the stability of the wheelchair. Any change may decrease the wheelchair's stability. Adjusting Back Angle MUST be performed by a qualified technician.

7.5 Adjusting Seat Width and Depth



WARNING

The seat depth directly relates to the stability of the wheelchair. Any change may decrease the wheelchair's stability. Adjusting Seat Width and Depth MUST be performed by a qualified technician.

8 Rear Wheels



WARNING

After any adjustments, repair or service and before use, make sure all attaching hardware is tightened securely. Otherwise injury or damage may occur.



Except where noted, the procedures in this section apply to non-recliner models only. For recliner models, refer to [Recliner](#) on page 59.

8.1 Removing/Installing Rear Wheels



WARNING

Only a qualified technician may change the size of the rear wheel or the seat-to-floor height.

Permanent Axles



If replacing the same size rear wheel, note the mounting position on the wheelchair frame for proper reinstallation of the new rear wheel.

1. Remove the dust cap (if applicable), mounting screw and locknut that secure the rear wheel and axle spacer to the wheelchair.
2. Repeat STEP 1 for the opposite rear wheel.
3. To reinstall the rear wheel onto the wheelchair, reverse STEPS 1-2.

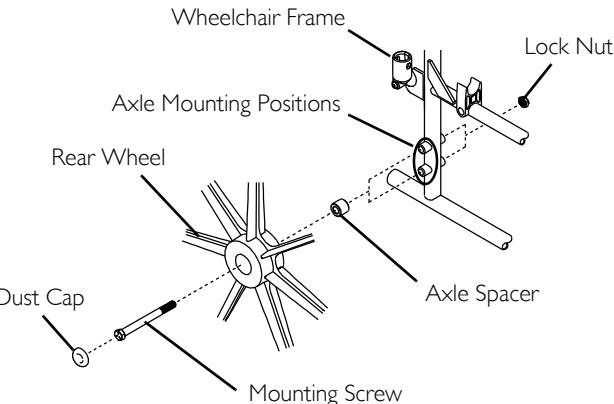


FIGURE I Removing/Installing Rear Wheels - Permanent Axles

Quick-Release Axles



WARNING

NEVER use quick-release axles on the recliner.



If replacing the same size rear wheel, note the mounting position on the wheelchair frame for proper reinstallation of the new rear wheel.

1. Push the detent pin in the tip of the quick-release axle (with wheel) and pull the axle out through the opening in the center of the rear wheel and axle spacer.
2. Push the detent pin in the tip of the quick-release axle again and pull the axle out of the rear wheel.
3. Repeat STEPS 1-2 for the opposite rear wheel.
4. To reinstall the rear wheel onto the wheelchair, reverse STEPS 1-3.



WARNING

Make sure the detent pin and detent balls of the quick-release axle are fully released before operating the wheelchair.

The detent balls MUST be protruding past the inside of the rear wheel axle bushing for a positive lock (Detail "A").

Keep detent balls clean.

Invacare recommends inserting quick-release axles with the detent pin to the inside of the wheelchair to prevent accidental release during contact activities.

5. If the detent balls are not protruding past the inside of the axle bushing or there is too much side-to-side movement of the rear wheel assembly, refer to [Adjusting the Quick-Release Axle](#) on page 50.

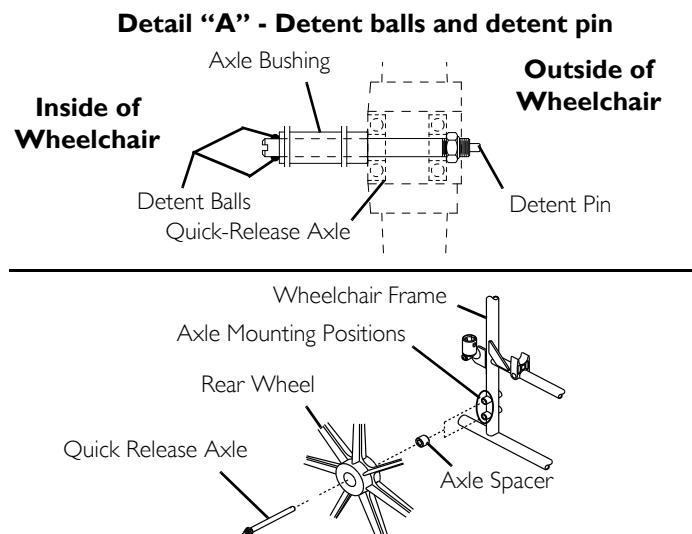


FIGURE 2 Removing/Installing Rear Wheels - Quick-Release Axles

8 REAR WHEELS

8.2 Adjusting the Quick-Release Axle



WARNING

Never use quick-release axles on recliner wheelchairs.

1. Remove rear wheel and quick-release axle from the wheelchair. Refer to [Removing/Installing Rear Wheels](#) on page 48.
2. Depress detent pin in the quick-release axle and slide axle through the rear wheel hub.
3. Release detent pin ensuring that the detent balls are fully released.
4. Increase or decrease end play by adjusting the locknut on the end of the quick-release axle.



WARNING

Make sure the detent pin and detent balls of the quick-release axle are fully released before operating the wheelchair.

Keep detent balls clean.

5. Reinstall rear wheel onto the wheelchair. Refer to [Removing/Installing Rear Wheels](#) on page 48.

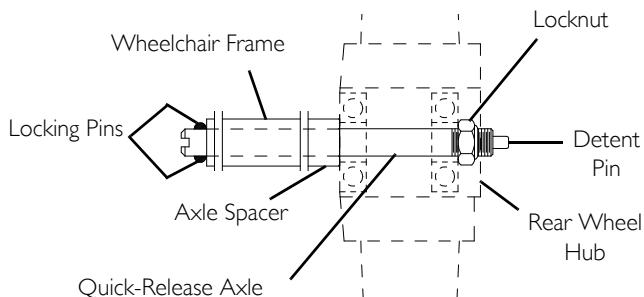


FIGURE 3 Adjusting the Quick-Release Axe

8.3 Replacing Rear Wheel Handrim



WARNING

If the wheelchair is equipped with permanent axles, this procedure must be performed by a qualified technician.

1. Remove the rear wheel from the wheelchair. For non-recliner models, refer to [Removing/Installing Rear Wheels](#) on page 48.
2. Remove the mounting screws that secure the handrim to rear wheel.
3. Remove the existing handrim.
4. Install the new handrim by reversing the preceding steps.



WARNING

Make sure detent pin and detent balls of the quick-release axles are fully released before operating the wheelchair.

5. Reinstall rear wheel to the wheelchair. Refer to [Removing/Installing Rear Wheels](#) on page 48.
6. If the detent balls of the quick-release axles (if applicable) are not protruding past the inside of the axle bushing or there is too much movement of the rear wheel assembly in a back and forth position, refer to [Adjusting the Quick-Release Axle](#) on page 50.
7. Repeat STEPS 1-6 for the opposite rear wheel if necessary.

8.4 Replacing/Repairing Rear Wheel Tire/Tube



WARNING

Replacement of rear wheel tire or tube MUST be performed by a qualified technician.



CAUTION

As with any vehicle, the wheels and tires should be checked periodically for cracks and wear, and should be replaced.

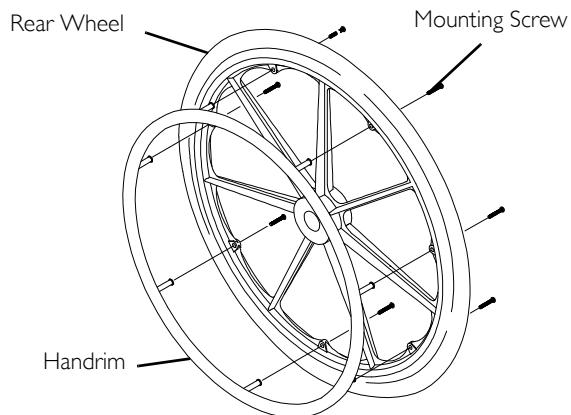


FIGURE 4 Replacing Rear Wheel Handrim

9 Front Casters



WARNING

After any adjustments, repair or service and before use, make sure all attaching hardware is tightened securely. Otherwise injury or damage may occur.

9.1 Installing/Replacing Front Casters and Forks

1. Remove the dust cover.
2. Remove the locknut that secures the fork to the caster headtube.
3. Drop the front caster and fork out of the caster headtube.
4. Slide in the new front caster and fork.
5. Reassemble by reversing STEPS 1-3.
6. Repeat STEPS 1-5 for the opposite front caster.
7. To properly tighten caster journal system and guard against flutter, perform the following check:
 - A. Tip back of wheelchair to floor.
 - B. Pivot both forks and casters to top of their arc simultaneously.
 - C. Let casters drop to bottom of arc (wheels should swing once to one-side, then IMMEDIATELY rest in a straight downward position).
 - D. Adjust locknuts according to freedom of caster swing.
8. Test wheelchair for maneuverability.
9. Readjust locknuts if necessary, and repeat STEPS 7-8 until correct.
10. Snap dust cover over the locknut and stem.

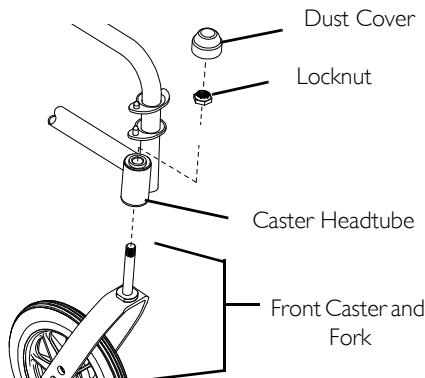


FIGURE I Installing/Replacing Front Casters and Forks

9.2 Replacing/Repairing Front Caster Tire/Tube



WARNING

Replacement of front caster tire or tube MUST be performed by a qualified technician.



CAUTION

As with any vehicle, the wheels and tires should be checked periodically for cracks and wear, and should be replaced.

9.3 Adjusting Front Caster Mounting



WARNING

Front caster mounting adjustments MUST be performed by a qualified technician.

10 Anti-tippers/Wheel Locks



WARNING

After any adjustments, repair or service and before use, make sure all attaching hardware is tightened securely. Otherwise injury or damage may occur.



The procedures in this section apply to non-recliner models only except where noted. For the recliner model, refer to [Recliner](#) on page 59.

10.1 Installing/Adjusting Anti-tippers



WARNING

Anti-tippers are specific to the different seat-to-floor angles and/or seat-to-floor heights. Refer to the chart in this section of the manual for correct usage and adjustment. If these requirements cannot be achieved, DO NOT use the wheelchair. Contact an Invacare dealer or qualified technician. Any changes to the seat-to-floor angle or seat-to-floor height may require different anti-tippers.

If changing the seat-to-floor height with or without a change to seat-to-floor angle, the correct anti-tippers MUST be used to maintain a 1-1/2 to 2-inch ground clearance.

Seat-to-floor height (which includes changing rear wheel size): If changing the seat-to-floor height with or without changing the rear wheel size, the correct anti-tippers MUST be ordered to maintain a 1-1/2 to 2-inch ground clearance.

Non-recliners Only - Inasmuch as the anti-tippers are an option on this wheelchair (You may order with or without the anti-tippers), Invacare strongly recommends ordering the anti-tippers as an additional safeguard for the wheelchair user.

Recliners and Wheelchairs with 1-Inch Forward Rear Wheel Positioners Only - Anti-tippers MUST BE attached at all times.

Anti-tippers MUST be fully engaged. Ensure that the release buttons of the anti-tipper fully protrudes out of the hole on the bottom of the wheelchair frame and out of hole in the adjustment tube.

Ensure both anti-tippers are adjusted to the same height.

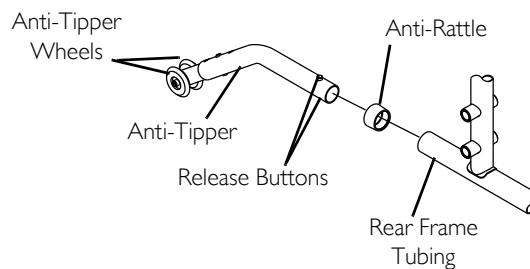
Installing Anti-Tippers



To ensure the correct model anti-tipper is used refer to the Anti-tipper Identification Chart below. Measurements for anti-tippers are approximate and are taken with extension tube in top hole position Detail "A".

REAR WHEEL SIZE	ANTI-TIPPER LENGTH	ANTI-TIPPER PART NUMBER
20 inch	9 inches	1101959
22 inch	9-5/8 inches	1058752

1. Depress the release buttons and insert the anti-tippers with the anti-tipper wheels pointing toward the ground/floor into the wheelchair frame tubing as shown in FIGURE I.
2. Measure the distance between the bottom of the anti-tipper wheels and the ground/floor.
- Information icon** A 1½ to 2-inch clearance between the bottom of the anti-tipper wheels and the ground/floor MUST be maintained at all times.
3. If the distance between the bottom of anti-tipper wheels and the ground/floor is not 1½ to 2-inches, adjust anti-tippers. Refer to **Adjusting Anti-Tippers** on page 56.
4. If necessary, reverse STEPS 1-2 to remove the anti-tippers.



Detail "A"

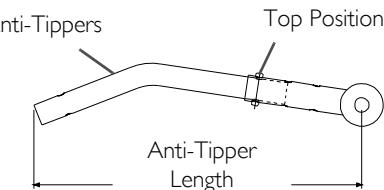


FIGURE I Installing Anti-Tippers

Adjusting Anti-Tippers



A $1\frac{1}{2}$ to 2-inch clearance between the bottom of the anti-tipper wheels and the ground/floor MUST be maintained at all times.

- I. Place the wheelchair on a flat, level surface.



On recliner models, ensure back canes are in the upright position before determining $1\frac{1}{2}$ to 2-inch clearance.

2. Press the release buttons on the wheeled portion of the anti-tipper and slide it up or down to achieve the $1\frac{1}{2}$ to 2-inch clearance (Detail "A").
3. Check to make sure that the release buttons are fully engaged in adjustment holes and ensure both anti-tippers are adjusted to the same height.
4. Check to make sure that a $1\frac{1}{2}$ to 2-inch clearance between the bottom of the anti-tipper wheels and the ground/floor has been achieved BEFORE using the wheelchair.
5. Repeat STEPS I-3 until $1\frac{1}{2}$ to 2-inch clearance is achieved.

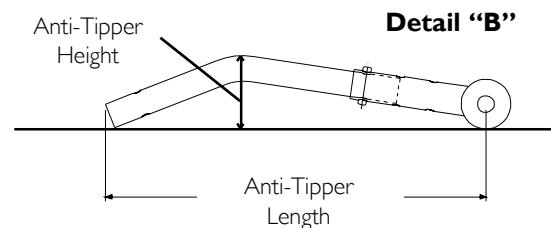
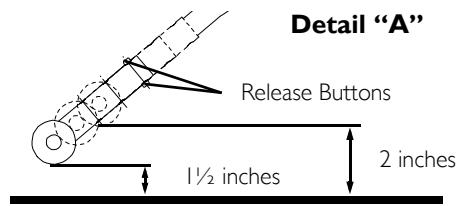


FIGURE 2 Adjusting Anti-Tippers

10.2 Using Patient Operated Wheel Locks



WARNING

After any adjustments, repair or service and before use, make sure all attaching hardware is tightened securely. Otherwise injury or damage may occur.



WARNING

DO NOT attempt to stop a moving wheelchair with wheel locks. Wheel locks are not brakes.



Position wheelchair on a flat, level surface to perform this procedure.

1. Ensure the wheelchair is not moving before engaging the wheel locks.
2. Depending on the model of wheel lock installed on the wheelchair, perform one of the following:
 - Push-to-Lock - To engage, push the wheel lock handle forward.
 - Pull-to-Lock - To engage, pull the wheel lock handle backward.
3. Disengage the wheel locks by reversing STEP 2.

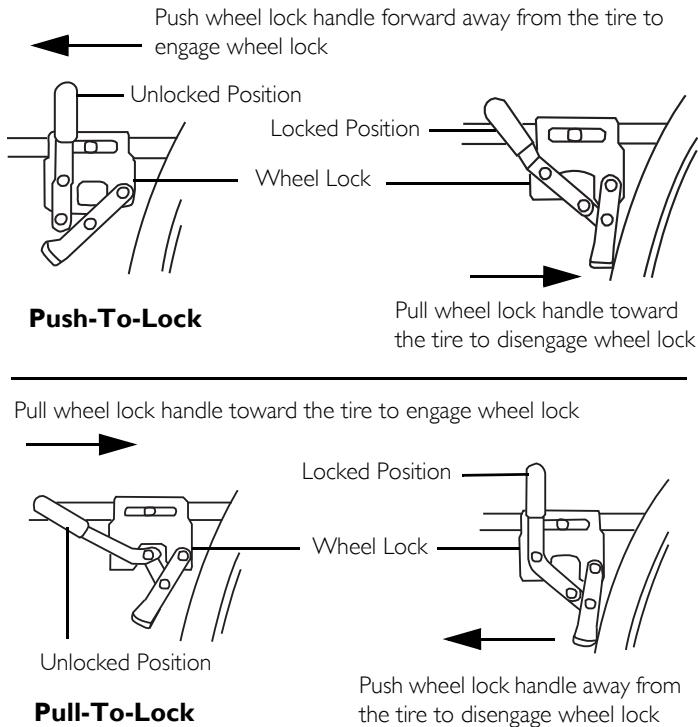


FIGURE 3 Using Patient Operated Wheel Locks

10.3 Adjusting Patient-Operated Wheel Locks



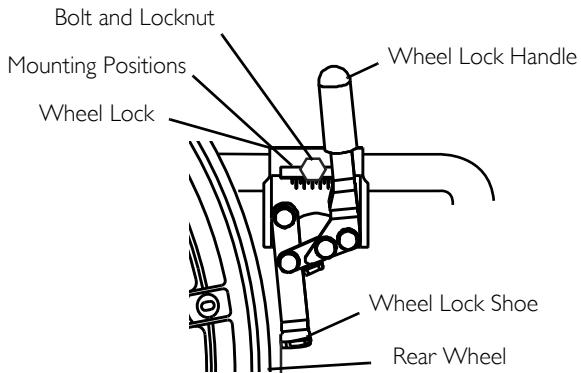
If wheels are pneumatic, before adjusting or replacing the wheel lock assemblies, ensure that the tires are inflated to the recommended psi on the side wall of tire. The recommended tire pressure is located on the side wall of the tire.

1. Disengage the wheel locks.
 2. Loosen the bolt and locknut that secure the wheel lock to the wheelchair frame.
 3. Reposition the wheel lock so that when engaged, the wheel lock shoe embeds the tire 1/8-inch (3/16-inch for pneumatic tires) and holds the occupied wheelchair in place when pushed.
 4. Securely tighten the bolt and locknut or socket screws securing the wheel lock to the wheelchair frame.
 5. Engage the wheel lock.
 6. Measure the distance the wheel lock is embedded into the tire.
- (i)** Any wheel lock adjustment should embed the wheel lock shoe at least 1/8-inch (3/16-inch if pneumatic tire) into the tire when engaged.
7. Repeat STEPS 1-6 until the wheel lock shoe embeds the tire 1/8-inch (3/16-inch for pneumatic tires) and holds the occupied wheelchair in place when pushed.
 8. If the measurement of 1/8-inch (3/16-inch for pneumatic tires) can not be achieved, remove the bolt and locknut that secure the wheel lock to the wheelchair frame and mount the wheel lock in the remaining mounting position.
 9. Repeat STEPS 1-8 for the opposite wheel lock.
 10. Engage both wheel locks and ensure the occupied wheelchair is held in place when pushed.



WARNING

If wheel locks DO NOT hold the occupied wheelchair in place, contact a qualified technician. Otherwise injury or damage may occur.



Detail “A”

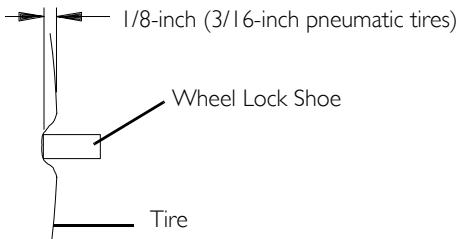


FIGURE 4 Adjusting Patient-Operated Wheel Locks

II Recliner



WARNING

After any adjustments, repair or service and before use, make sure all attaching hardware is tightened securely. Otherwise injury or damage may occur.

II.1 Operating Recliner



WARNING

ALWAYS make sure that the wheelchair is stable before using the recliner option.

ALWAYS engage both wheel locks while reclining or inclining (sitting up) the wheelchair.

ALWAYS wear your seat positioning strap. Inasmuch as the seat positioning strap is an option on this wheelchair (you may order with or without the seat positioning strap), Invacare strongly recommends ordering the seat positioning strap as an additional safeguard for the wheelchair user. The seat positioning strap is a positioning strap only. It is not designed for use as a safety device notwithstanding high stress loads such as auto or aircraft safety belts. If signs of wear appear, strap MUST be replaced IMMEDIATELY.

Ensure the spreader bar is attached and secured before using the Jymni Recliner.

TO HEALTHCARE PROFESSIONALS/ASSISTANTS:

Make sure occupant's hands and body are clear of all pinch points before reclining back. Pinch Points exist between spreader bar and recliner mechanism. Use caution, otherwise injury may occur.

Keep clear when reclining or inclining chair back to avoid injury.

Make sure the patient is properly positioned in the wheelchair before reclining or inclining (reverse recline) to maintain maximum stability and safety. Refer to Safety/Handling of Wheelchairs on page 19.

Before using the recliner option, make sure the anti-tipper wheel assemblies are in the lowest adjustment hole (adjustment hole closet to the ground/floor).



WARNING

When returning the occupant of the wheelchair to the full upright position, more body strength will be required for approximately the last twenty degrees of incline (reverse recline). Make sure to use proper body mechanics (use your legs) or seek assistance if necessary to avoid injury.

1. Unfold wheelchair. Refer to Safety/Handling of Wheelchairs on page 19.
2. Attach spreader bar. Refer to Storing/Replacing Spreader Bar on page 63.
3. Adjust the tightness of the headrest/back upholstery. Refer to Adjusting Headrest/Back Upholstery Tension on page 63.
4. Make sure wheelchair is occupied and on a level surface before reclining.
5. Engage the wheel locks. Refer to Using Patient Operated Wheel Locks on page 57.
6. Inform the occupant of the wheelchair that the wheelchair is about to be reclined.
7. Make sure occupant's hands and body are clear of all pinch points.
8. Stand behind the wheelchair and grasp both push handles firmly.
9. Squeeze release handles.
10. Slowly pull back on the back assembly while squeezing the release handles.
11. When the back reaches the desired angle, slowly let go of the release handles.
12. To return the back to the full upright position, reverse STEPS 8-11 keeping in mind proper body mechanics.

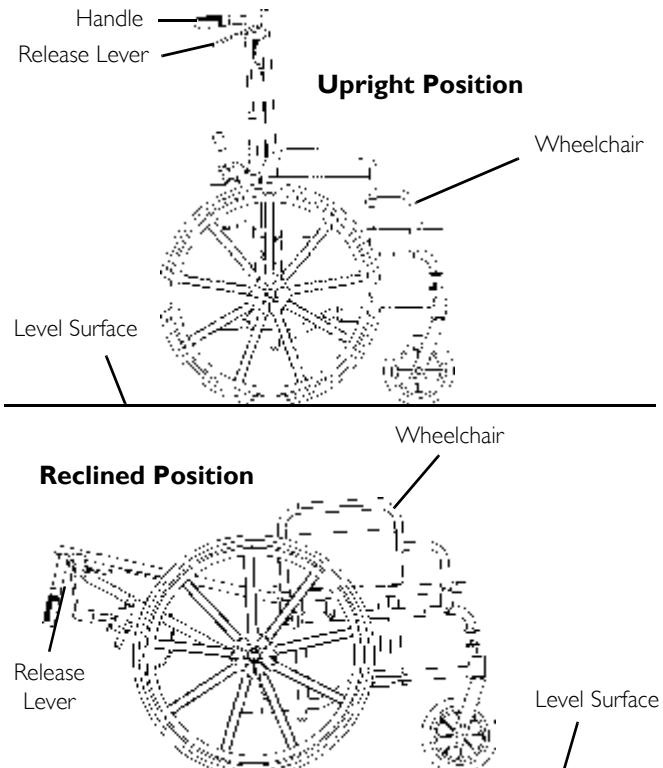


FIGURE I Operating Recliner

II.2 Installing/Removing Headrest Extension

Installing

1. Insert headrest extension tubes into back canes.
2. Position the two headrest extension tubes so that the mounting holes in the back canes align with the mounting holes in both headrest extensions and secure with two detent pins.
3. Ensure the two detent pins pass completely through the mounting holes in the two back canes and the headrest extension tubes

Removing

1. Remove the detent pins that secure the headrest extension tubes.
2. Remove the headrest extension tubes.

II.3 Replacing Headrest Pillow

1. Unfasten straps of headrest pillow from behind headrest upholstery.
2. Secure straps of the new headrest pillow onto fastening strips located on back of headrest upholstery.

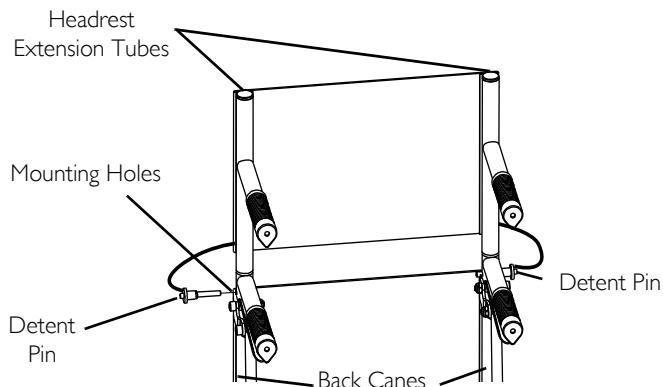


FIGURE 2 Installing/Removing Headrest Extension

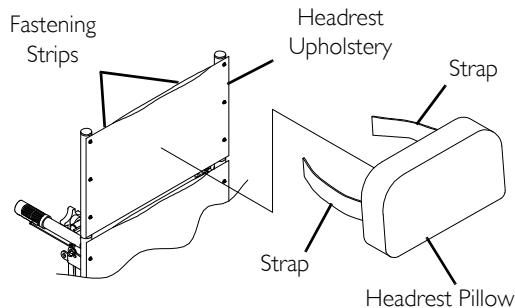


FIGURE 3 Replacing Headrest Pillow

II RECLINER

II.4 Replacing Headrest/Back Upholstery

Headrest Upholstery

1. Remove the headrest pillow. Refer to [Replacing Headrest Pillow](#) on page 61.
2. Remove the six mounting screws that secure the headrest upholstery to the headrest extension tubes.
3. Secure new headrest upholstery onto headrest extension tubes with the existing six mounting screws.
4. Install headrest pillow. Refer to [Replacing Headrest Pillow](#) on page 61.

Back Upholstery

1. Unthread one knob on either side of the spreader bar and loosen the opposite knob.
2. Remove the eight mounting screws that secure the back upholstery to the back canes.
3. Secure the new back upholstery to the back canes with the existing eight mounting screws. Securely tighten.
4. Secure the knob of spreader bar to side frame. Securely tighten both knobs.

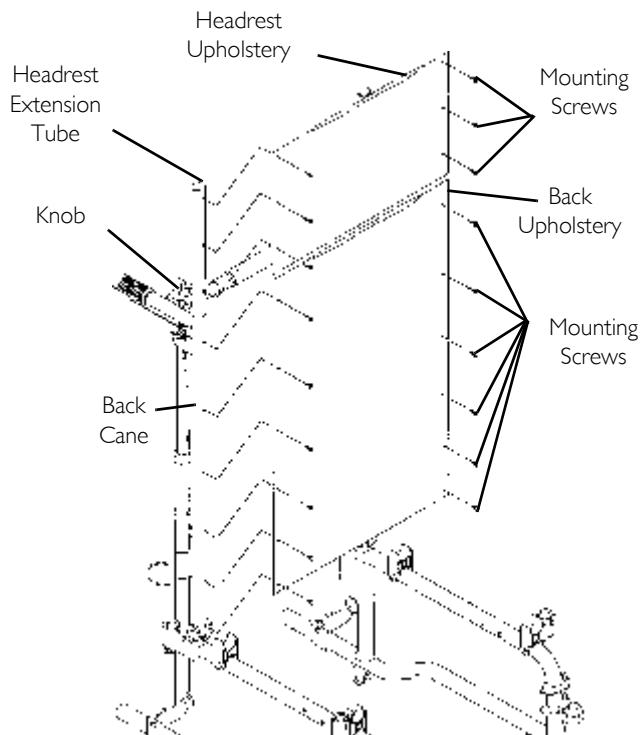


FIGURE 4 Replacing Headrest/Back Upholstery

Adjusting Headrest/Back Upholstery Tension

1. Rotate the spreader bar in one of the following directions:
 - Counterclockwise (away from back upholstery) to loosen back/headrest upholstery.
 - Clockwise (towards back upholstery) to tighten back/headrest upholstery.

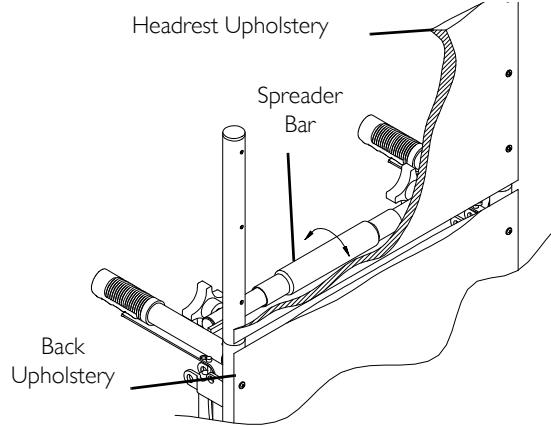


FIGURE 5 Adjusting Headrest/Back Upholstery Tension

II.5 Storing/Replacing Spreader Bar

Storing Spreader Bar



The Jymni Recliner is folded for either storage or transporting. One side of the spreader bar MUST be removed and placed in a vertical position alongside the recliner tube.

Removing From Stored Position

1. Rotate the end of the spreader bar 90° toward the opposite side frame.
2. Install threaded end of locking knob into locknut located on the opposite side frame. Securely tighten both knobs.

II RECLINER

Placing In Stored Position

1. Remove one locking knob from the spreader bar.
2. Loosen the remaining locking knob on the spreader bar.
3. Rotate detached end of the spreader bar 90° down toward floor.

Replacing Spreader Bar

1. Remove both locking knobs that secure the spreader bar to the side frames.
2. Remove existing spreader bar.
3. Secure new spreader bar to the side frames with the existing locking knobs. Securely tighten.

II.6 Adjusting the Seat Width and Depth



WARNING

The seat depth and width directly relates to the stability of the recliner. Any change may cause the recliner to decrease in stability. This procedure **MUST** be performed by a qualified technician.

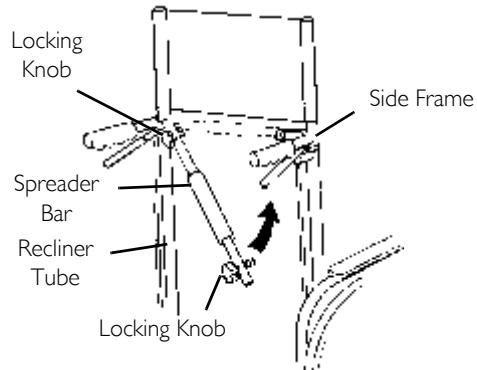


FIGURE 6 Storing/Replacing Spreader Bar

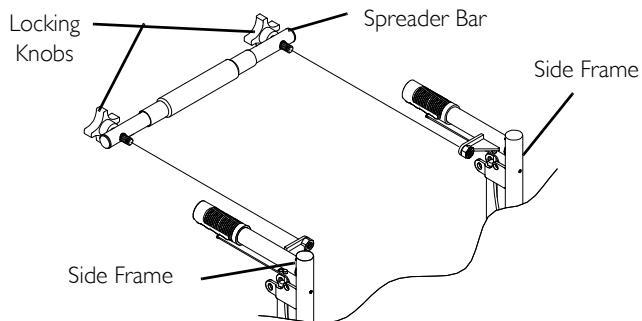


FIGURE 7 Replacing Spreader Bar

I2 Options



WARNING

After any adjustments, repair or service and before use, make sure all attaching hardware is tightened securely. Otherwise injury or damage may occur.



The options in this section refer to non-recliner models only. Refer to [Recliner](#) on page 59 for 9000XT Recliner options.

I2.1 Installing Telescoping I.V. Rod/O₂ Holders



For this procedure, refer to [FIGURE 1](#) on page 66.

Installing



WARNING

The telescoping I.V. rod/O₂ holder MUST be checked weekly to ensure it is tightly secured to the wheelchair frame. If there is any looseness whatsoever, tighten the attachment hardware securely before using.

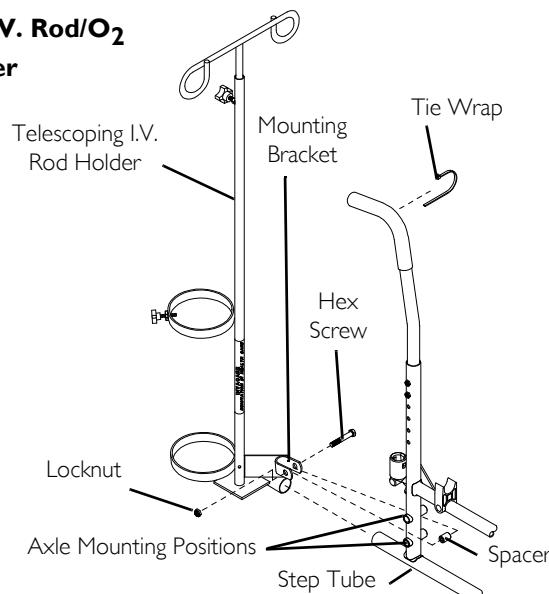
Make sure the telescoping I.V. rod is tightly locked before placing I.V. medication on the rod.

The telescoping I.V. rod is designed to support I.V. medication only. DO NOT use it to support objects other than I.V. medication. The telescoping I.V. rod/O₂ holders clean easily with any household glass type cleaner.

1. Slide telescoping I.V. rod/O₂ holder over the step tube of the wheelchair.
2. Secure telescoping I.V. rod/O₂ holder to the wheelchair frame with hex screw, spacer and locknut.
3. Telescoping I.V. Rod Holder Only - Secure the top of the telescoping I.V. rod holder to the wheelchair frame with a tie wrap.

12 OPTIONS

Detail "A" - I.V. Rod/O₂ Holder



Detail "B" - O₂ holder

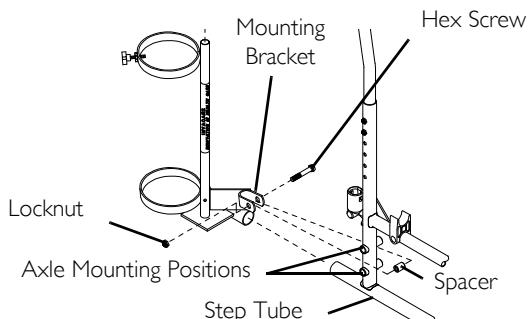


FIGURE I Installing Telescoping I.V. Rod/O₂ Holders

12.2 Cleaning



WARNING

The user and O₂ cylinder MUST be removed from the wheelchair when cleaning the O₂ holder. Otherwise, injury or damage may occur if cleaning agents come in contact with the O₂ regulator.

1. Remove the user, any I.V. medication and the O₂ cylinder from the wheelchair.
2. The telescoping I.V. rod/O₂ holders clean easily with any household glass type cleaner.
3. After the cleaning solution has dried, it is safe for the user to re-occupy the wheelchair.

12.3 Installing the 1-inch Forward Rear Wheel Positioner



WARNING

DO NOT use the 1-inch forward bracket on recliner wheelchairs OR adjustable angle back wheelchair. Otherwise injury or damage may occur.

Recliners and Wheelchairs with 1-Inch Forward Rear Wheel Positioner Only: Anti-tippers MUST BE attached at all times.

1. Remove both rear wheels from the wheelchair. Refer to [Removing/Installing Rear Wheels](#) on page 48.
2. Position the right hand 1-inch forward rear wheel positioner onto the right hand side of the wheelchair frame (FIGURE 2).
3. Secure the 1-inch forward rear wheel positioner to the wheelchair frame using the two mounting screws, spacers and locknuts.
4. Repeat STEPS 2-3 to install the left hand 1-inch forward wheel positioner.
5. Reinstall the rear wheels onto the 1-inch forward brackets. Refer to [Removing/Installing Rear Wheels](#) on page 48.
6. If necessary, install the anti-tippers. Refer to [Installing/Adjusting Anti-tippers](#) on page 54.

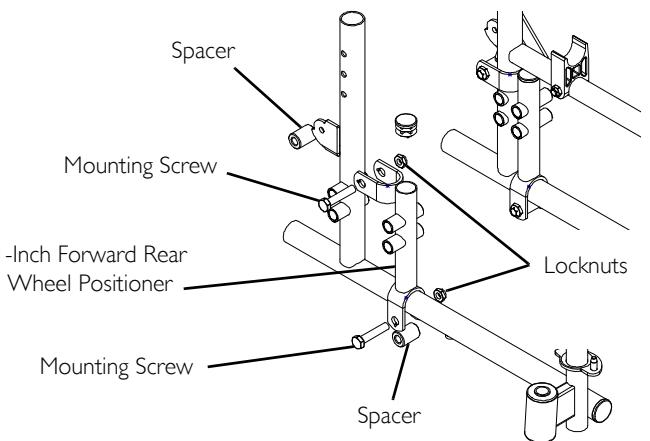


FIGURE 2 Installing the 1-inch Forward Rear Wheel Positioner

12 OPTIONS

12.4 Installing/Adjusting Stroller Handles

Removing

1. Remove the detent pin that secures one stroller handle to one of the back canes.
2. Remove the stroller handle.
3. If necessary, repeat STEPS 1-2 for the opposite stroller handle.

Installing

1. Perform one of the following:
 - 12-14-Inch Wide Wheelchairs - Insert one of the stroller handles into one of the back canes so that it is facing either toward or away from the inside of the wheelchair FIGURE 3.
 - 10-Inch Wide Wheelchairs - Insert one stroller handle into one of the back canes so that it is facing away from the inside of the wheelchair FIGURE 3.
2. Position the stroller handle so that the mounting hole in the back cane aligns with the desired height mounting hole in the stroller handle and secure with detent pin.
3. Ensure the detent pin passes through the mounting hole in the back cane and the desired height mounting hole in the stroller handle.
4. Repeat STEPS 1-3 for the opposite stroller handle.

Height Adjustment

1. Remove the detent pin that secures one stroller handle to one of the back canes.
2. Slide the stroller handle up or down until the desired height is reached, making sure the mounting hole in the back cane aligns with the desired height mounting hole in the stroller handle.
3. Reinstall the detent pin so that it passes through the mounting hole in the back cane AND the desired height mounting hole in the stroller handle.
4. Repeat STEPS 1 - 3 for the opposite stroller handle.



When closing a wheelchair with stroller handles, raise or lower one of the stroller handles two hole heights.



Stroller handles shown facing toward the inside of the wheelchair.

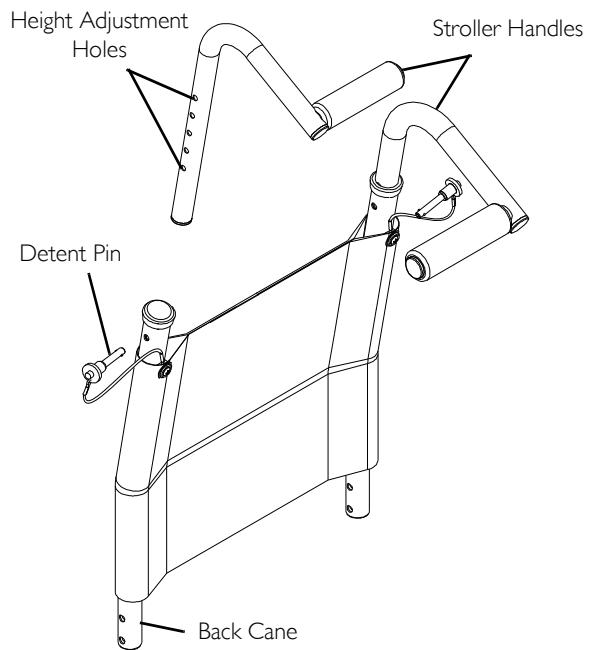


FIGURE 3 Installing/Adjusting Stroller Handles

12.5 Installing/Removing the Solid Seat Insert

Installing

- Position the solid seat insert so that it is fully supported by the seat rails and the back edge of the solid seat insert is touching the back canes.

Removing

- Firmly grasp the solid seat insert and lift it away from the seat upholstery.

12.6 Installing/Removing the Solid Back Insert

Installing

- Position the solid back insert between the back canes.
- Wrap the two fastening straps around the back canes. Securely fasten with the two snaps.

Removing

- Release the two snaps securing the two fastening straps around the back canes and remove the solid back insert.

12.7 Installing the Wheel Lock Extension Handle

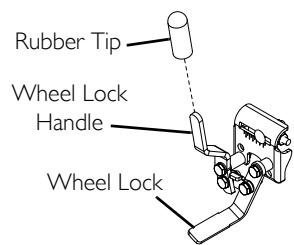


WARNING

If the wheelchair is equipped with push to lock wheel locks, elevating legrests, and wheel lock extension handles, the wheel lock extension handles MUST be removed before swinging the elevating legrests to the side, otherwise injury or damage may result. Interference between the top of the elevating legrest and the wheel lock extension handle causes the wheel lock to disengage.

- Remove the existing rubber tip from the wheel lock handle (Detail "A").
- Install the extension handle over the wheel lock handle (Detail "B").

Detail "A"



Detail "B"

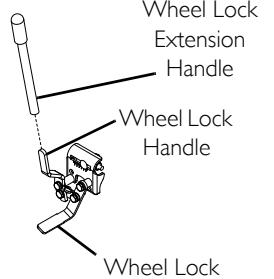


FIGURE 4 Installing the Wheel Lock Extension Handle