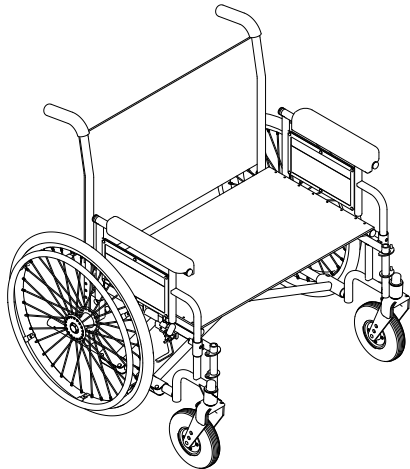


Invacare® 9000 Topaz™ Wheelchair



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.1 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 three 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 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.

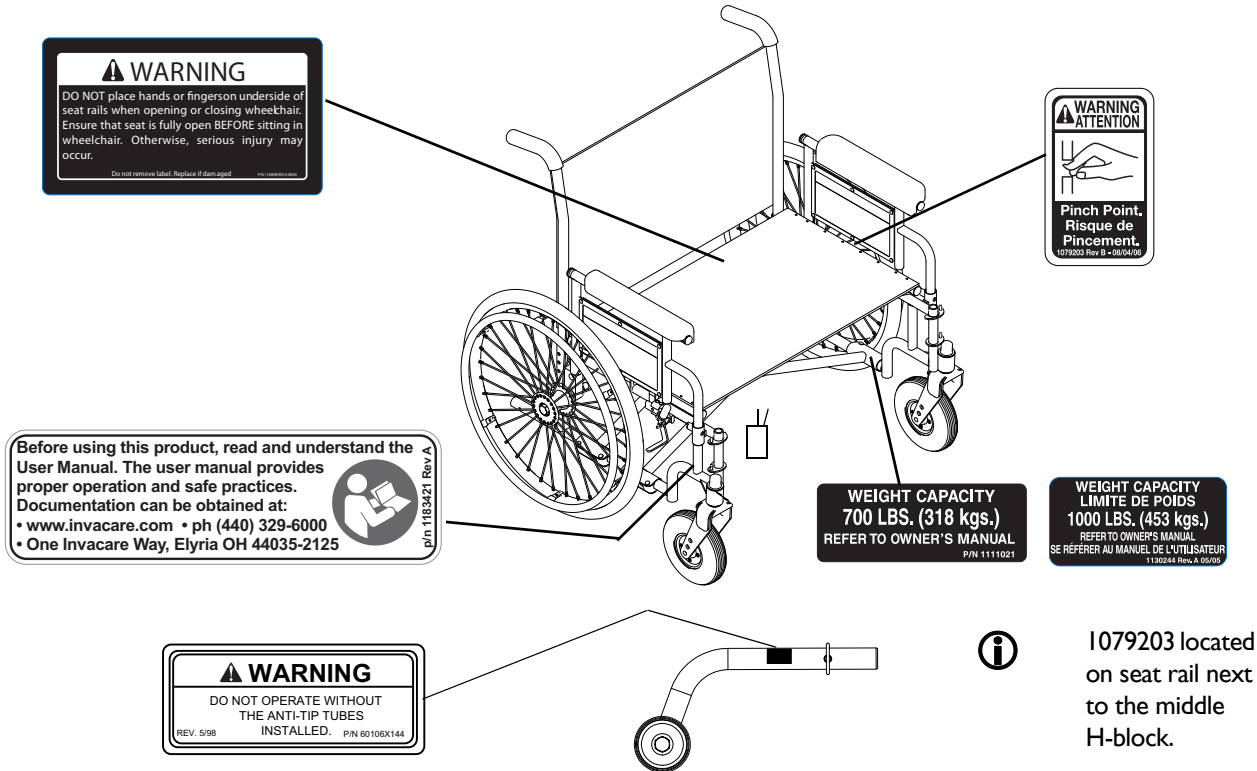
For warranty service, please contact the dealer from whom you purchased your Invacare product. In the event you do not receive satisfactory warranty service, please write directly to Invacare at the address at the bottom of this page. Provide dealer's name, address, the product model number, date of 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.

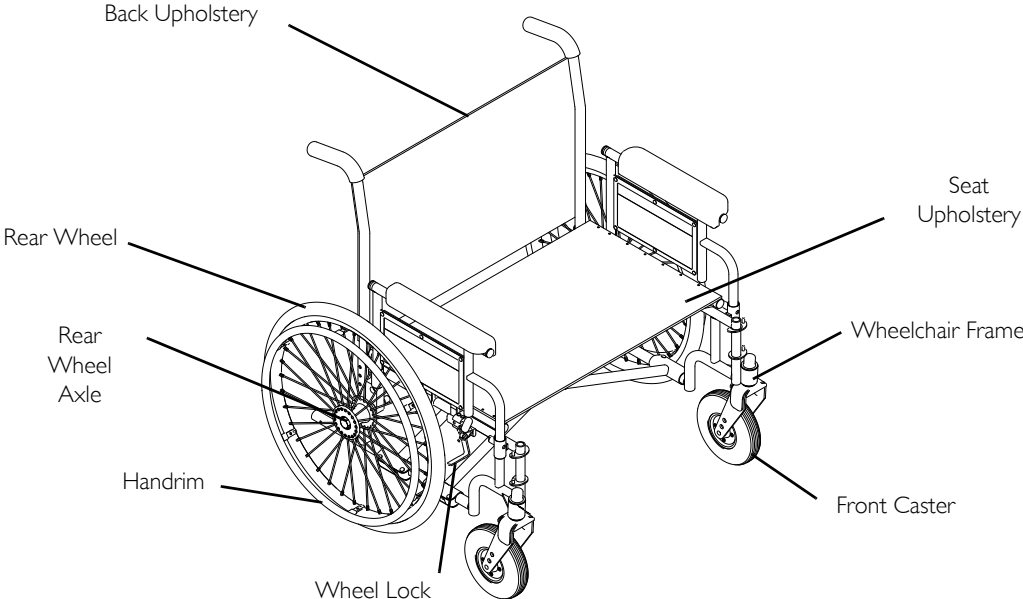
2 OVERVIEW

2 Overview

2.1 Label Location




2.2 Component Identification



2 OVERVIEW

2.3 Specifications

9000 TOPAZ				
SEAT WIDTH	20, 22, 24, 26, 28 or 30 inches		HANDRIMS	700 lb version (Chrome steel or aluminum) 1000 lb version (Aluminum)
OVERALL WIDTH	Seat width plus 8 1/2 inches		WHEEL LOCKS	Toggle lock - push or pull
SEAT DEPTH	18, 20 inches		CASTER SIZE	700 lb version (6 x 2 inch Urethane, 8 x 1 3/4 inch Semi-pneumatic); 1000 lb version (8 x 2 inch)
OVERALL DEPTH (WITH RIGGINGS)	49 inches		UPHOLSTERY	Black nylon, black vinyl, or blue vinyl
SEAT-TO-FLOOR	19 1/2, 17 1/2, 15 1/2 inches		FRAME COLORS	Silver Vein or Wet Black
BACK STYLE	Adjustable in 1 inch increments		WEIGHT*	700 lb version (82 lbs); 1000 lb version (86 lbs)
BACK HEIGHT	16, 17 and 18 inches		SHIPPING WEIGHT**	700 lb version (117 lbs); 1000 lb version (121 lbs) (Approx.)
ARM STYLES	Conventional, desk/full length fixed/adjustable height		WEIGHT LIMIT	700 lbs 1000 lbs with heavy duty frame
FRONT RIGGINGS	Swingaway footrests and elevating legrests			
REAR AXLE	Permanent		* Chair only without footrest (30-inches wide X 20-inches deep)	
REAR WHEELS	700 lb version (24 inch solid or 20 inch pneumatic with flat-free insert); 1000 lb version (24 inch solid)		**Chair with footrest (30-inches wide X 20-inches deep)	

3 Safety

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

3.1 General Guidelines



WARNING

Risk of Serious Injury or Damage

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.

Use of non-Invacare accessories may result in serious injury or damage.

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.

DO NOT use non-Invacare accessories.

To obtain Invacare accessories, contact Invacare by phone or at www.invacare.com.

3 SAFETY



DANGER

Risk of Death, Serious Injury or Damage

Use of incorrect or improper replacement (service) parts may cause death, serious injury, or damage.

Replacement parts **MUST** match original Invacare parts.

ALWAYS provide the wheelchair serial number to assist in ordering the correct replacement parts.



DANGER

Risk of Death, Serious Injury, or Damage

Lighted cigarettes dropped onto an upholstered seating system can cause a fire resulting in death, serious injury, or damage.

Wheelchair occupants are at particular risk of death or serious injury from these fires and resulting fumes because they may not have the ability to move away from the wheelchair.

DO NOT smoke while using this wheelchair.



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.

3.2 Intended Use

The intended use for the manual (mechanical) wheelchair is to provide mobility to persons who may be restricted to a sitting position. The manual wheelchair is intended for ongoing daily use. The models offer a wide range of customization which allows for a better fit for the end user resulting in comfort, lightweight, easier propelling, transferring, and smooth ride. The manual wheelchair is intended for indoor and outdoor use on firm surfaces free of climbing obstacles. All other uses are prohibited.

3.3 Wear and Tear Items



Normal wear and tear items and components include but are not limited to: all upholstery items including seat and back upholstery, arm and calf pads, cushions, wheels, tires and casters.

Invacare reserves the right to ask for any item back that has an alleged defect in workmanship. See Warranty policy shipped with the product for specific warranty information.

Refer to User Manual for proper preventative maintenance schedule and use of the product.

This is just a general guideline and does not include items damaged due to abuse and misuse. Useful life is dependant upon many factors.

PRODUCT TYPE	PRODUCT WEAR AND TEAR PART
WHEELCHAIRS:	Wheels • Brake Assembly/Wheel Locks • Hand grips
UPHOLSTERY AND SEATING:	Arm Pads • Seat Cushion Foam • Seat Cushion Covers • Back Cushion Foam • Back Cushion Covers • Headrest Foam • Headrest Covers • Footplate Covers • Calf Pad (if applicable) Foam and Cover

3.4 Repair and Service Information



WARNING

Unless otherwise noted, all service and adjustment should be performed while the wheelchair is unoccupied. After ANY adjustments, repair or service and BEFORE use, make sure all attaching hardware is tightened securely - otherwise injury or damage may result.

3 SAFETY

3.5 Operating Information

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.

DO NOT allow children to play on or operate the wheelchair.

DO NOT operate on soft surfaces such as sand, grass, or gravel.

Anti-Tippers



WARNING

Anti-tippers are specific to the different rear wheels and/or seat-to-floor heights. Refer to the chart in [Installing Anti-Tippers](#) on page 51 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. The correct anti-tippers **MUST** be ordered to maintain a 3.81 x 5.08 cm (1½ to 2 in) ground clearance.

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. Invacare strongly recommends that anti-tippers be used at all times.

The manual wheelchair is intended for indoor and outdoor use on firm surfaces. When outdoors on wet, soft ground or on gravel surfaces, anti-tippers may not provide the same level of protection against tip over. **DO NOT** operate on soft surfaces such as sand, grass or gravel.

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

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.

Engaging the wheel locks may not prevent the wheelchair from moving on all floor surfaces including those that may be wet or slick. **ALWAYS** exercise caution when transferring into or out of the wheelchair.

Seat Positioning Straps



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.

Wheelchair Tie Down Restraints



WARNING

Invacare recommends that wheelchair users 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.

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 on the sidewall of the tire.

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.

Weight Limitation



WARNING

Weight limitation is 700 lbs. Weight limitation with heavy duty frame is 1,000 lbs.

3 SAFETY

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.

Storage



WARNING

Risk of Serious Injury or Damage

Storing or using the wheelchair near open flame or combustible products can result in serious injury or damage.

Avoid storing or using the wheelchair near open flame or combustible products.

Storing the wheelchair in a damp area or when wet may cause rust or corrosion of wheelchair parts resulting in injury or damage.

DO NOT use the wheelchair in a shower, pool or other body of water.

DO NOT store the wheelchair in a damp or humid area.

Avoid extreme weather such as rain or snow when possible.

Avoid excessive moisture or humidity.


If exposed to water, dry the wheelchair as soon as possible.

Stability

**WARNING**

The back height, front caster position, caster size, 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 of the seven 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 position and seat-to-floor angle. These adjustments must be performed by a qualified technician.

 When changes to the left hand column occur, follow across the chart and refer to the X procedure to maintain the proper stability, safety and handling of the wheelchair.	BACK HEIGHT	SEAT-TO-FLOOR ANGLE	CASTER SIZE	CASTER POSITION	WHEEL POSITION	USER CONDITION	ANTI-TIPPERS
BACK HEIGHT	•	X	X	X	X	N/A	N/A
CASTER POSITION	X	N/A	X	•	X	N/A	X
CASTER SIZE	X	N/A	•	X	X	N/A	X
SEAT-TO-FLOOR ANGLE	N/A	•	N/A	N/A	N/A	N/A	N/A
WHEEL POSITION	X	N/A	X	X	•	N/A	X
USER CONDITION	X	X	X	X	X	•	N/A
ANTI-TIPPERS	N/A	N/A	N/A	N/A	N/A	N/A	•

3 SAFETY

Ramps, Slopes, Inclines, and Obstacles



WARNING

DO NOT traverse, climb or go down ramps or slopes greater than 4°.

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

NEVER leave an unoccupied wheelchair on an incline.

DO NOT attempt to stop the wheelchair while on a sloped surface.

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 tipping the wheelchair or traversing curbs, or other impediments.

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

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.

The intended use for this wheelchair is for the bariatric user.

3.6 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 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 followed. 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

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 and passenger and damage to the wheelchair and surrounding property.

To assure stability and proper operation of your wheelchair, you must at all times wear your seat positioning strap and 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. 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 user to reach, bend and transfer in and out of the wheelchair. These movements will cause a change to normal balance, center of gravity, and 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, bending forward, it is important to use the front casters as a tool to maintain stability and balance.

3 SAFETY

Reaching, Leaning and Bending



WARNING

DO NOT shift your weight or sitting position toward direction you are reaching as the wheelchair may tip over.
DO NOT attempt to reach objects if you have 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 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.

Backward

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.

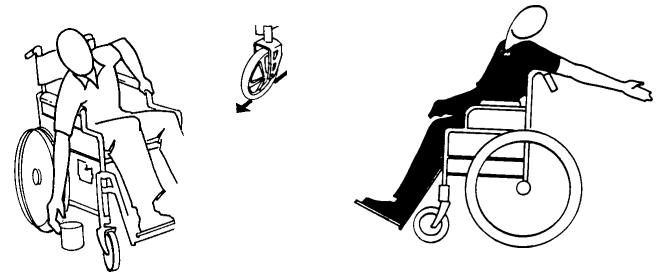


FIGURE 1 Reaching, Leaning and Bending

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 when occupied to traverse curbs or other such obstructions. Always use curb cuts. Otherwise, injury or damage may result.

Stairways



WARNING

Extreme caution is advised when it is necessary to move an unoccupied wheelchair up or down the stairs. Invacare recommends using two assistants and making thorough preparations. Make sure to use only secure, non-detachable parts for hand-hold supports.

DO NOT attempt to lift the wheelchair by 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.

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

Moving Up Stairs

1. Remove the occupant from the wheelchair.
2. If necessary, rotate the anti-tippers so the wheels are facing up.
3. 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.
4. After the wheelchair has been tilted back to the balance point, the assistant behind the wheelchair backs the wheelchair up against the first step.
5. 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.
6. The wheelchair should not be lowered until the last stair has been negotiated and the wheelchair has been rolled away from the stairway.
7. If necessary, rotate the anti-tippers so the wheels are facing down.

3 SAFETY

Moving Down Stairs

1. Remove the occupant from the wheelchair.
2. If necessary, rotate the anti-tippers so the wheels are facing up.
3. 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.
4. 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.
5. 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.
6. The wheelchair should not be lowered until the last stair has been negotiated and the wheelchair has been rolled away from the stairway.
7. If necessary, rotate the anti-tippers so the wheels are facing down.

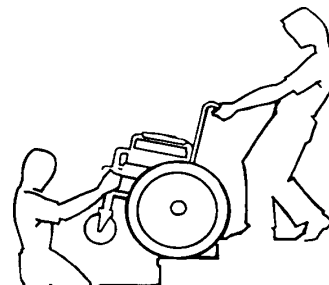


FIGURE 2 Stairways

Escalators



WARNING

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

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.



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

Position the wheelchair as close as possible along side the seat to which you are transferring, with the front casters pointing parallel to it. Remove or flip up the armrest. Engage wheel locks. 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.

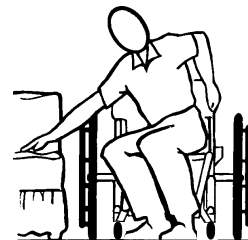


FIGURE 3 Transferring To and From Other Seats

3 SAFETY

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 rail when opening or closing the wheelchair.

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

Unfolding

1. Tilt the wheelchair toward you (raising the opposite wheel and caster off the ground/floor).
2. Place your hand on the top of the seat rail closest to you where the seat upholstery is attached.
3. Point your fingers and thumb to the inside of the wheelchair.
4. Press downward on the top of the seat rail until the wheelchair is fully open and the seat rails are fully seated in the H-blocks.
5. Engage both wheel locks, open the footrest/legrest for clearance and transfer into the wheelchair. Refer to [Transferring To and From Other Seats](#) on page 25.

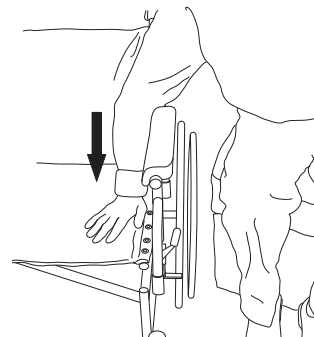
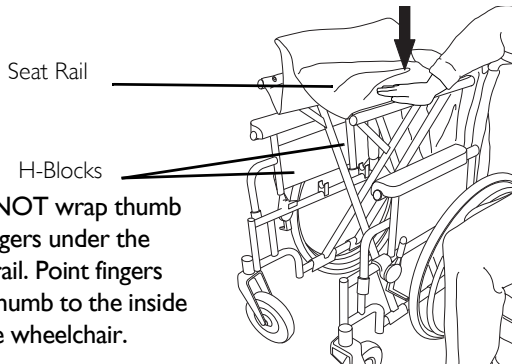


FIGURE 4 Unfolding

Folding Wheelchair

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 lift up.

**CAUTION**

DO NOT allow upholstery to hang between the cross braces.

4. Place excess seat upholstery over the armrest.

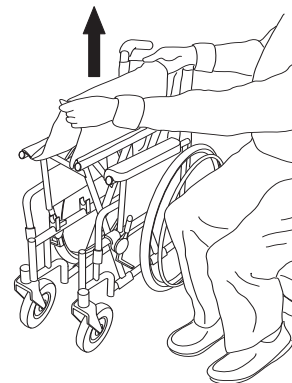


FIGURE 5 Folding Wheelchair

4 SAFETY INSPECTION/TROUBLESHOOTING.

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 Checklists

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 seat and back for rips and sagging.
- Inspect seat for damaged or missing warning label.
- Inspect seat and back for loose or broken hardware.
- Inspect 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.



CAUTION

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

- Check that there is no excessive side movement or binding in the rear wheels when lifted and spun.
- Inspect rear wheels for cracked, broken or loose 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.
- Inspect casters for cracks and wear.



CAUTION

Damage from Bleach

Clean upholstery with mild soap and water or spray disinfectant using a sponge. **DO NOT** use bleach or wash in a washing machine.

- Clean upholstery and armrests.
- Check that all labels are present and legible. Replace if necessary.

Inspect/Adjust Weekly

- Inspect tires for flat spots and wear.
- Inspect rear wheels for cracked, broken or loose spokes.
- Ensure all spokes are uniformly tight.
- Inspect axle assembly for proper tension by spinning caster. Caster should come to a gradual stop.

4 SAFETY INSPECTION/TROUBLESHOOTING.

Inspect/Adjust Monthly

- 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 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.
- Adjust front casters/forks bearing system if wheel wobbles noticeably or binds to a stop.
- Ensure wheel bearings are clean and free of moisture.

Inspect/Adjust Periodically

- Ensure that the wheelchair rolls straight (no excessive drag or pull to one side).
- Inspect frame and crossbraces for loose or missing hardware.
- Inspect for bent frame or crossbraces.
- Check that wheel locks are easy to engage.
- Ensure that casters are free of debris.
- Inspect seat and backs for rips and sagging.
- Inspect seat for damaged or missing warning label.
- Check that there is no excessive side movement or binding in the rear wheels when lifted and spun.
- Clean upholstery and armrests.
- Check that all labels are present and legible. Replace if necessary.

4 SAFETY INSPECTION/TROUBLESHOOTING.

4.2 Troubleshooting

Chair Veers Right	Chair Veers Left	Sluggish Turn or Performance	Casters Flutter	Squeaks and Rattles	Looseness in Chair	Solutions
		X	X	X	X	Check for loose fork stem nuts and bolts.
X	X		X			Check that both casters contact the ground at the same time.

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.

Replace any labels that are missing, worn, or torn. Refer to [Label Location](#) on page 6 for a listing of the labels and their locations.

CAUTION

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

1. Before using your wheelchair make sure all nuts and bolts are tight.
2. Check all parts for damage or wear and replace.

4 SAFETY INSPECTION/TROUBLESHOOTING.

3. Check all parts for proper adjustment.



CAUTION

As with any vehicle, check the wheels and tires periodically for cracks and wear. Replace if damaged. Replace as recommended, refer to [Replacing/Repairing Rear Wheel Tire/Tube](#) on page 33 and [Replacing/Repairing Caster Tire/Tube](#) on page 33.

4. The rear wheels, casters and tires should be checked periodically for cracks and wear, and should be replaced by a qualified technician if damaged.
5. Periodically adjust wheel locks in correlation to tire wear. Refer to [Using/Adjusting Wheel Locks](#) on page 53.



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.

6. Periodically check handrims to ensure they are securely attached to the rear wheels.
7. Periodically check caster wheel bearings to make sure they are clean and free from moisture. Use a Teflon[®] lubricant if necessary.
8. Check upholstery for sagging, rips or tears.
9. Clean upholstery with mild soap and water.
10. Replace any labels that are missing, worn, or torn. Refer to [Label Location](#) 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.

11. 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 solid urethane tires is not recommended. If the solid urethane tire needs repaired, Invacare recommends replacing the complete wheel assembly.

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

Replacing/Repairing Caster Tire/Tube



WARNING

Replacement of solid urethane or semi-pneumatic tires is not recommended. If the solid urethane or semi-pneumatic tires need replaced, Invacare recommends replacing complete caster assembly.

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

4.4 Cleaning Instructions



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.

For upholstery that is severely stained or surface finish that is badly damaged, contact the seating system manufacturer for further information.

Cleaning Upholstery, Cloth, Vinyl



CAUTION

Damage from Bleach

Clean upholstery with mild soap and water or spray disinfectant using a sponge. **DO NOT** use bleach or wash in a washing machine.

If necessary, for cleaning cushion upholstery, refer to the seating user manual shipped with the product.

4 SAFETY INSPECTION/TROUBLESHOOTING.

Cleaning Metal Surfaces

Hot water and a mild detergent on soft cloth should be used for cleaning metal surfaces. Wipe down with damp cloth. Dry surface by wiping down with dry cloth.

Car polish and soft wax can be used to remove abrasions and restore gloss (Follow manufacturer's instructions).

Cleaning Plastic Surfaces

Plastic surfaces should be cleaned with soft cloth, mild detergent, and hot water. Rinse surface with clean water. Dry surface with soft cloth. Solvents or kitchen cleaners must not be used on plastic surfaces.

Cleaning I.V. Rod/O₂ Holder



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.

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 Swingaway Footrest Assembly

Installing

1. Turn the swingaway footrest assembly to the side (open footplate is perpendicular to 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 toward the inside of the wheelchair until it locks into place.
4. Repeat STEPS 1-3 for the other footrest assembly.



The footplate will be on the inside of the wheelchair when locked in place.

Removing

1. Push the footrest release lever inward.
2. Rotate swingaway footrest assembly outward.
3. Lift the swingaway footrest assembly off the hinge pins.
4. Repeat STEPS 1-3 for the other side.

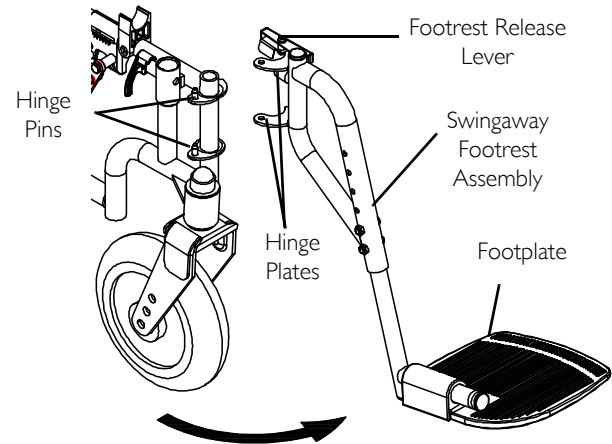


FIGURE I Installing/Removing Swingaway Footrest Assembly

5 FRONT RIGGINGS

5.2 Swingaway Footrest Height Adjustment

1. Remove the swingaway footrest assembly. Refer to [Installing/Removing Swingaway Footrest Assembly](#) on page 35.
i Lay the assembly on a flat surface to simplify this procedure.
2. Remove the two bolts and locknuts that secure the lower footrest assembly to the upper footrest support.
3. Reposition the lower footrest assembly to the desired height.
4. Install and securely tighten the two bolts and locknuts.
5. Repeat STEPS 1-4 for the other footrest.
6. Reinstall the swingaway footrest assembly. Refer to [Installing/Removing Swingaway Footrest Assembly](#) on page 35.

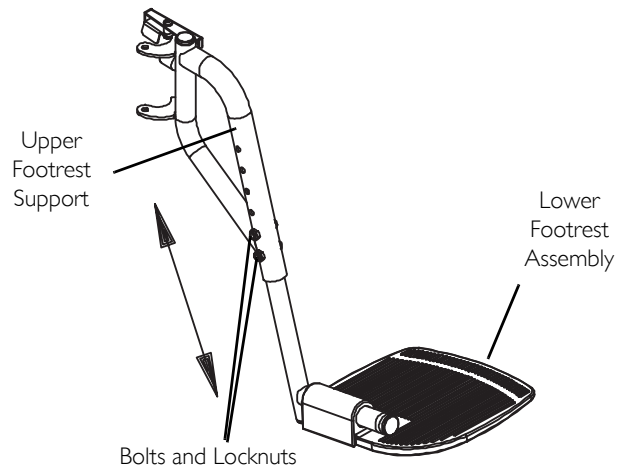


FIGURE 2 Swingaway Footrest Height Adjustment

5.3 Installing/Removing Elevating Legrest Assembly

Installing

- i** For this procedure, refer to FIGURE 3 on page 37.
 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 STEPS 1 and 2 for the other legrest assembly.
- i** The footplates will be facing each other when locked in place.

4. While sitting in the wheelchair, adjust the legrest to the correct height. Refer to [Adjusting Elevating Legrest Assembly](#) on page 37.

Removing

1. Ensure the elevating legrest is in the lowered position. Refer to [Adjusting Elevating Legrest Assembly](#) on page 37.
2. 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.
3. Lift the elevating legrest assembly off the hinge pins.

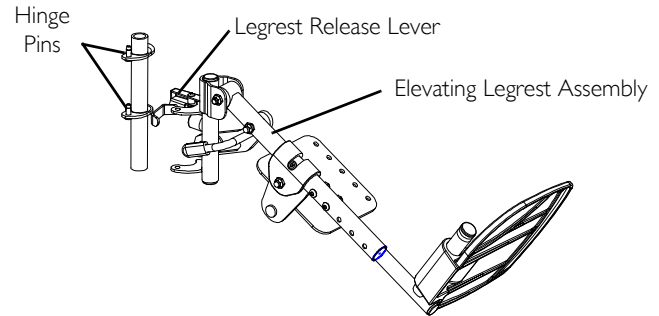


FIGURE 3 Installing/Removing Elevating Legrest Assembly

5.4 Adjusting Elevating Legrest Assembly



For this procedure, refer to [FIGURE 4](#) on page 38.

Adjusting Footrest Height

1. While sitting in the wheelchair, remove the two bolts and locknuts securing the lower footrest assembly to the elevating legrest assembly and move the lower footrest assembly up or down until the desired height is achieved.
2. Secure the lower footrest assembly to the elevating legrest assembly with the two bolts and locknuts. Securely tighten.
3. Repeat STEPS 1-2 on remaining legrest assembly.

Adjusting Calfpad

1. Remove the two mounting screws securing the calfpad to the calfpad support of the elevating legrest assembly.
2. Slide the Calfpad up or down until the desired position is obtained.

5 FRONT RIGGINGS

3. Secure the calfpad to the elevating legrest assembly with the two mounting screws. Securely tighten.
4. Repeat STEPS 1-3 to adjust remaining calfpad.

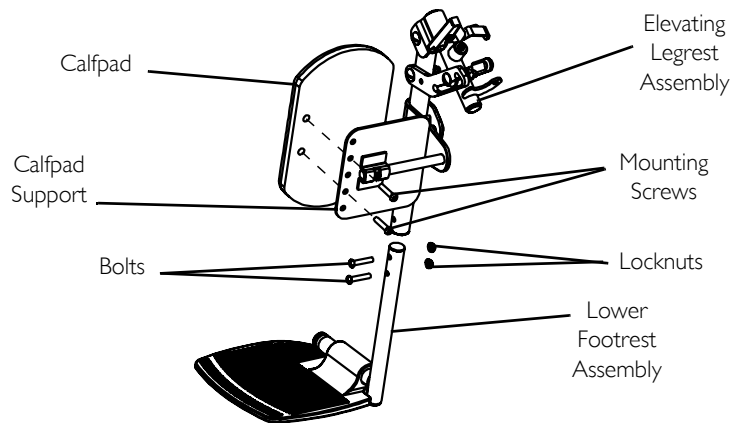


FIGURE 4 Adjusting Footrest Height - Adjusting Calfpad

5.5 Raising/Lowering Elevating Legrest Assembly



For this procedure, refer to FIGURE 5 on page 39.

Raising Elevating Legrest Assembly

1. An assistant should hold the lower legrest assembly and raise the elevating legrests until one of three desired height positions is obtained.

Lowering Elevating Legrest Assembly

1. Use one hand to fully support the weight of the user leg and elevating legrest.
2. Pull release lever upward with the other hand.

3. Gently, lower user leg and elevating legrest down to desired position.
4. Repeat STEPS 1-3 for remaining elevating legrest.

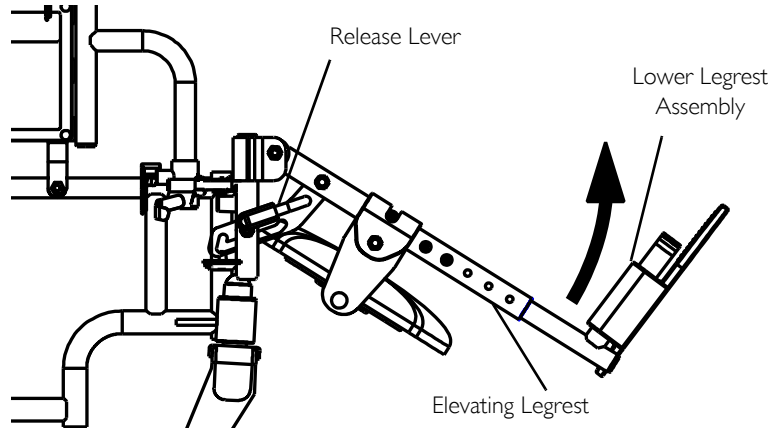


FIGURE 5 Raising/Lowering Elevating Legrest Assembly

5.6 Installing Calf Strap

1. Remove calf strap from packaged container if it is not already secured to the footrest.
2. Secure one side of the calf strap around each footrest.

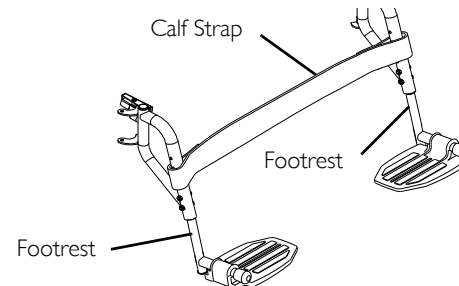


FIGURE 6 Installing Calf Strap

5 FRONT RIGGINGS

5.7 Heel Loop Replacement

1. Remove the two bolts and locknuts that secure the lower footrest assembly to the upper footrest support.
2. Remove the lower footrest assembly.
3. Remove the mounting screw, spacer and locknut that secure the existing heel loop to the footrest.
4. Slide existing heel loop over the slide tube of the lower footrest assembly.
5. Install new 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.

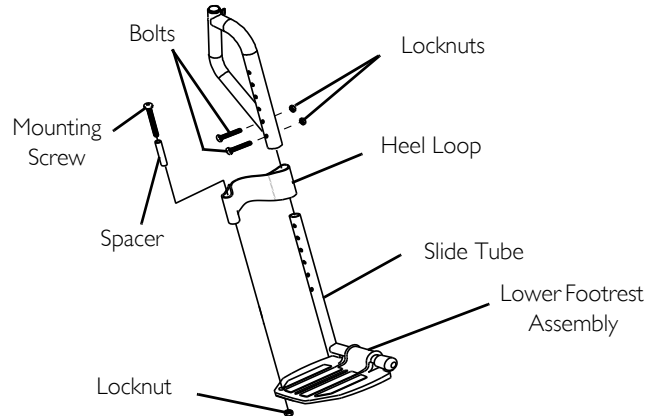


FIGURE 7 Heel Loop Replacement

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.



For this procedure, refer to FIGURE 1 on page 42.

1. Unlock the armrest by performing the following:
 - A. Flip the height adjustment lever on the front of the armrest to the up (horizontal) position.
 - B. Pull the height adjustment lock knob on the rear of the armrest and twist $\frac{1}{4}$ turn into the unlocked position.
2. Adjust armrest to one of five positions.



The height adjustment lever and lock knob **MUST** be in the unlocked position when placing armrest into the arm assembly.

3. Lock the armrest by performing the following:
 - A. Flip the height adjustment lever on the front of the armrest to the down (vertical) position.
 - B. Pull the height adjustment lock knob on the rear of the armrest and twist $\frac{1}{4}$ turn into the locked position.
4. Repeat STEPS 1-3 for other armrest.

6 ARMS

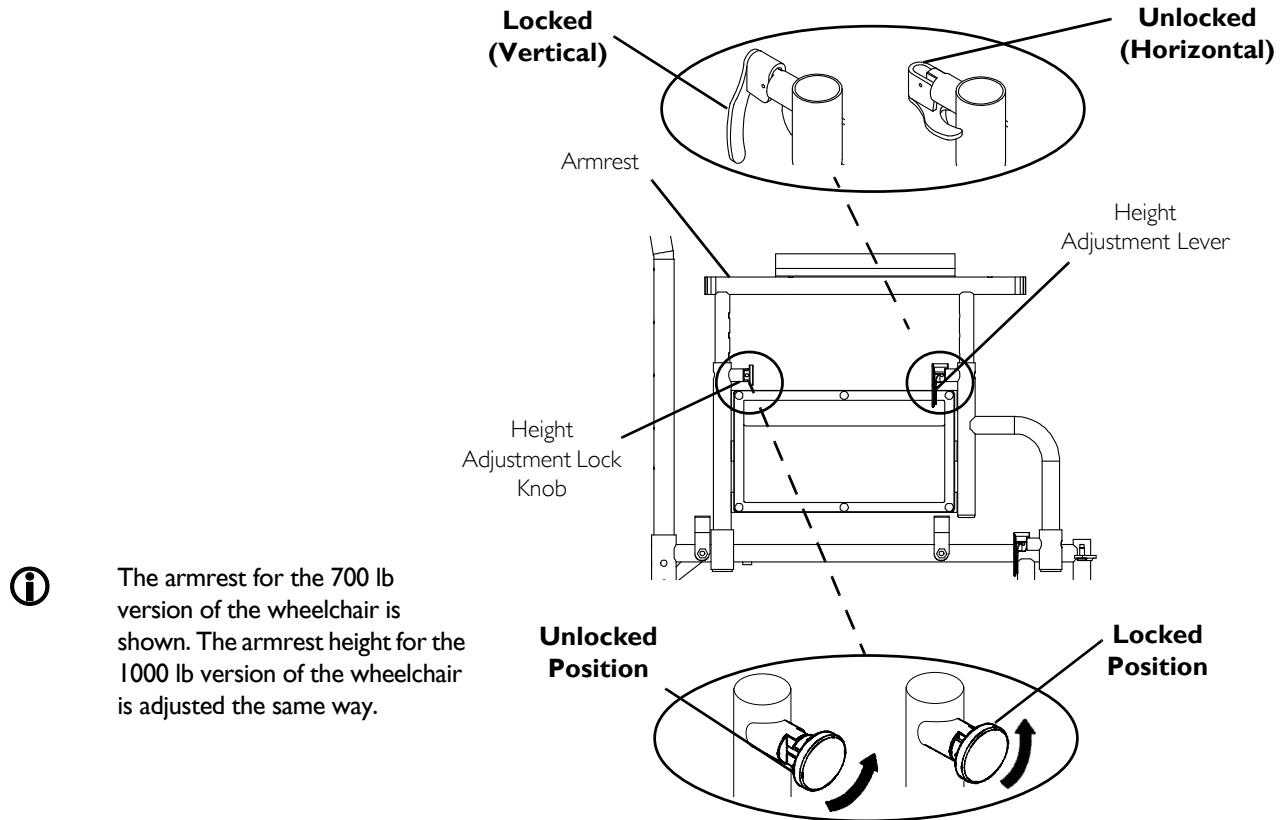


FIGURE I Adjusting Armrest Height

6.2 Replacing Desk/Full Length Armrest Pad

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.



The armrest for the 700 lb version of the wheelchair is shown. The armrest height for the 1000 lb version of the wheelchair is replaced the same way.

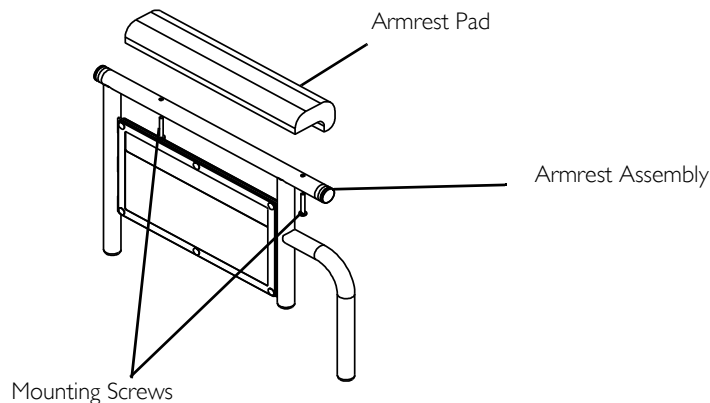


FIGURE 2 Replacing Desk/Full Length Armrest Pad

6.3 Removing or Replacing Armrest



WARNING

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



For this procedure, refer to FIGURE 3 on page 44.

6 ARMS

Removing Armrests

1. Unlock the armrest by flipping the armrest release lever to the up (horizontal) position.
2. Lift armrest completely out of arm sockets from the wheelchair.

Replacing Armrests

i Armrest release levers **MUST** be in the unlocked position when placing armrests into the arm sockets.

1. Place armrest into arm sockets located on the side of the wheelchair.
2. Lock the armrest by flipping the armrest release lever to the down (vertical) position.

i The armrest for the 700 lb version of the wheelchair is shown. The armrest height for the 1000 lb version of the wheelchair is removed/replaced the same way.

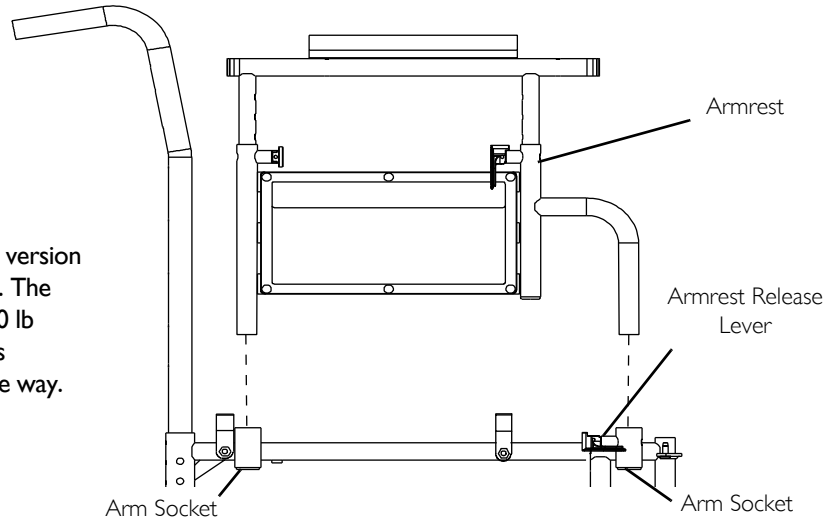


FIGURE 3 Removing or Replacing Armrest

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.

7.1 Replacing Seat Upholstery

1. Remove the mounting screws that secure the existing seat upholstery to the wheelchair frame.
2. Remove the existing seat upholstery from the wheelchair frame.
3. Install new seat upholstery by reversing STEPS 1-2.



The seat upholstery **MUST** be installed with the warning label facing up.

The following chart determines the number of mounting screws for each seat depth

SEAT DEPTH	NUMBER OF SCREWS
18 inch	16
20 inch	18

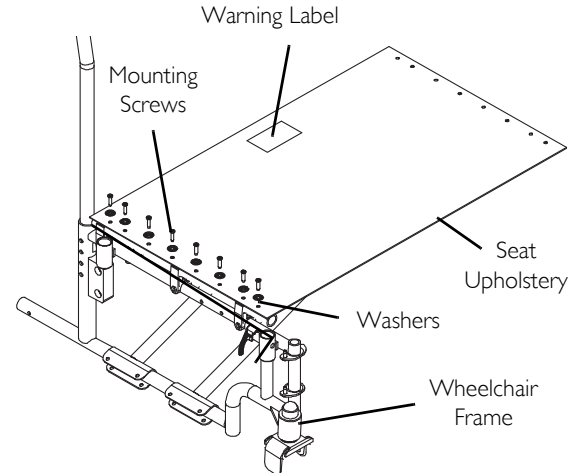


FIGURE I Replacing Seat Upholstery

7 SEAT AND BACK

7.2 Replacing Back Upholstery

1. Remove the eighteen mounting screws and washers that secure the existing back upholstery to the back canes.
2. Install and securely tighten the new back upholstery to the back canes with the eighteen mounting screws and washers starting with the top hole of the back cane.

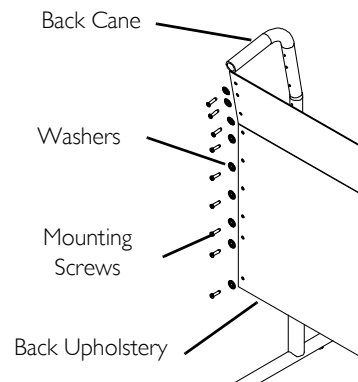


FIGURE 2 Replacing Back Upholstery

7.3 Adjusting Back Height

i For this procedure, refer to FIGURE 3 on page 47.

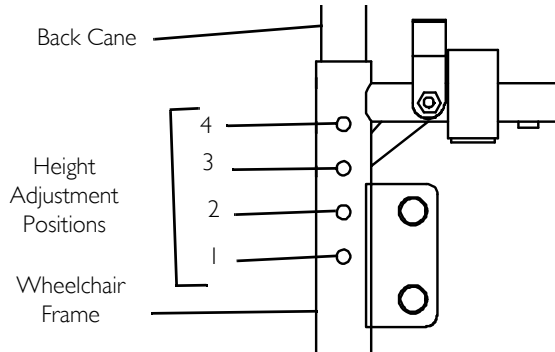
1. Remove the four mounting screws and locknuts that secure the two back canes to the wheelchair frame.
2. Remove the bottom two back upholstery mounting screws from the cane.
3. Reposition the back canes to one of three height adjustment positions:

HOLE NUMBER	1 & 2	2 & 3	3 & 4
BACK HEIGHT	16 inches	17 inches	18 inches

i Holes numbered from bottom to top for reference only. (There are no numbers on the back canes).
The mounting screws must be securely tightened into the threaded mounting holes of the wheelchair frame before installing the locknuts.

7 SEAT AND BACK

4. Reinstall the four (4) mounting screws through the threaded mounting holes of the wheelchair frame and the back cane. Securely tighten.
5. Reinstall the four locknuts. Securely tighten
6. Reinstall the two back upholstery mounting screws. 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 Seat Depth



WARNING

Adjusting the seat depth of the 9000 Topaz wheelchair must be performed by a qualified technician. Contact dealer/Invacare.

7.5 Adjusting Seat Width



WARNING

Adjusting the seat width of the 9000 Topaz wheelchair must be performed by a qualified technician. Contact dealer/Invacare.

8 REAR WHEELS

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.

8.1 Removing/Installing Rear Wheels



WARNING

Changing the rear wheel size or changing the seat-to-floor height **MUST** be performed only by a qualified technician.



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

1. Place the wheelchair frame up on blocks so that the rear wheels are off the ground.



Rear wheel mounting hardware may include two washers for each wheel. If washers are present, note the location and ensure the washers are installed when reinstalling the rear wheel.

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



Make sure axle spacer is between rear wheel and wheelchair frame.

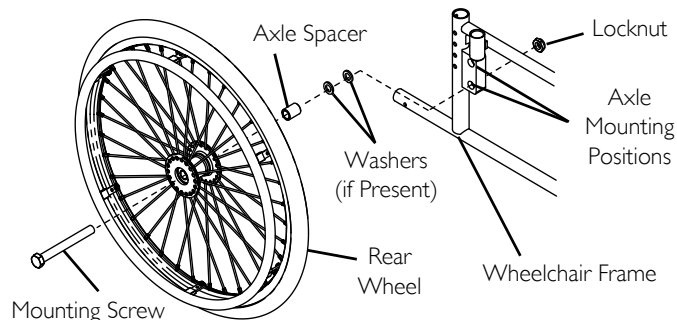


FIGURE I Removing/Installing Rear Wheels

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 Six or Eight-inch Front Casters and Forks



WARNING

If converting from six-inch caster to an eight-inch caster or vice versa, there are seat-to-floor height adjustments that must be made. Therefore, this procedure **MUST** be performed by a qualified technician.



For this procedure, refer to FIGURE 1 on page 50.



This procedure can be performed if replacing the exact same size front caster.

1. Remove the dust cover.
2. Remove the locknut and washer 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 1-2.
6. Repeat STEPS 1-5 for the opposite front caster.

9 FRONT CASTERS

7. To properly tighten caster journal system and guard against flutter, perform the following check:
 - A. Tip back of wheelchair to floor.
 - B. Simultaneously pivot both forks and casters to the top of their arc.
 - C. Let casters drop to the bottom of their 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.
10. Repeat STEPS 7-9 until correct.
11. Snap dust cover over the locknut and stem.

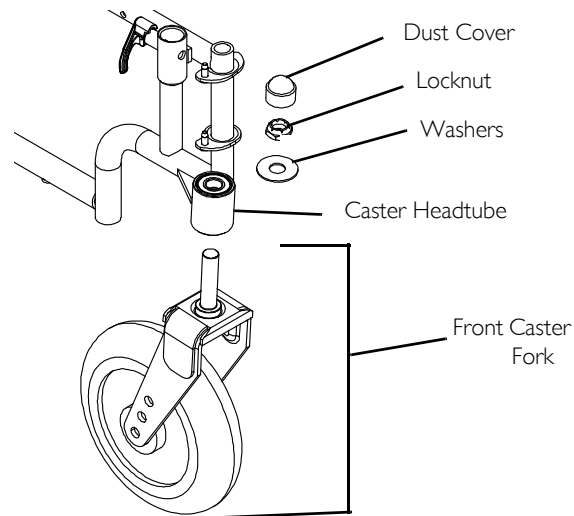


FIGURE I Installing/Replacing Six or Eight-inch Front Casters and Forks

9.2 Front Caster Mounting Adjustments



WARNING

Adjusting front caster mountings **MUST** be performed by a qualified technician. Contact dealer/Invacare.

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.

10.1 Installing Anti-Tippers



WARNING

Anti-tippers are specific to the different rear wheels and/or seat-to-floor heights. Refer to the chart in [Installing Anti-Tippers](#) on page 51 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. The correct anti-tippers MUST be ordered to maintain a 3.81 x 5.08 cm (1½ to 2 in) ground clearance.

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. Invacare strongly recommends that anti-tippers be used at all times.

The manual wheelchair is intended for indoor and outdoor use on firm surfaces. When outdoors on wet, soft ground or on gravel surfaces, anti-tippers may not provide the same level of protection against tip over. DO NOT operate on soft surfaces such as sand, grass or gravel.



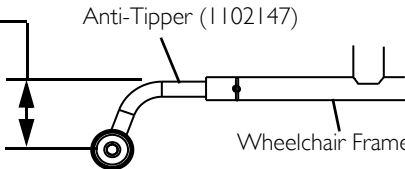
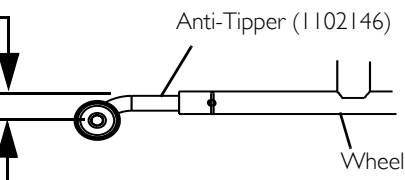
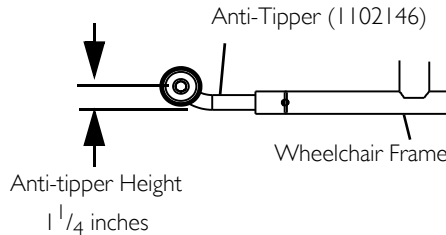

For this procedure, refer to FIGURE 1 on page 53.



To ensure the correct model anti-tipper is used refer to the following chart. Measurements for anti-tippers are approximate.

10 ANTI-TIPPERS/WHEEL LOCKS

I. Insert the anti-tippers with the anti-tipper wheels positioned according to the following chart:

Wheelchair Seat-to-Floor Height (inches)	ANTI-TIPPER WHEEL POSITION	
19½	Anti-tipper Height $3\frac{3}{8}$ inches	
17½	Anti-tipper Height $1\frac{1}{4}$ inches	
15½		 <p>When installing/using anti-tipper 1102146 on the 9000 Topaz wheelchair with a seat-to-floor height of 15½ inches, the anti-tipper wheels must be pointed up away from the ground/floor.</p>

10 ANTI-TIPPERS/WHEEL LOCKS

2. Secure the anti-tipper to the wheelchair frame with the locking pin.
3. Ensure that the locking pin protrudes through both the anti-tipper and the wheelchair frame.
4. Repeat STEPS 1-3 to install the remaining anti-tipper.

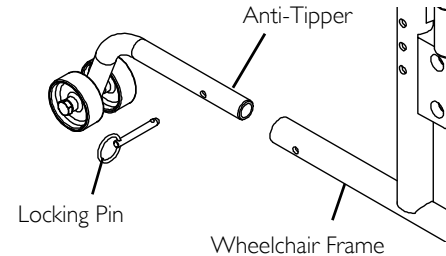


FIGURE 1 Installing Anti-Tippers

10.2 Using/Adjusting Wheel Locks

Using Wheel Locks



WARNING

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



For this procedure, refer to FIGURE 2 on page 54.



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 (1) 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.

10 ANTI-TIPPERS/WHEEL LOCKS

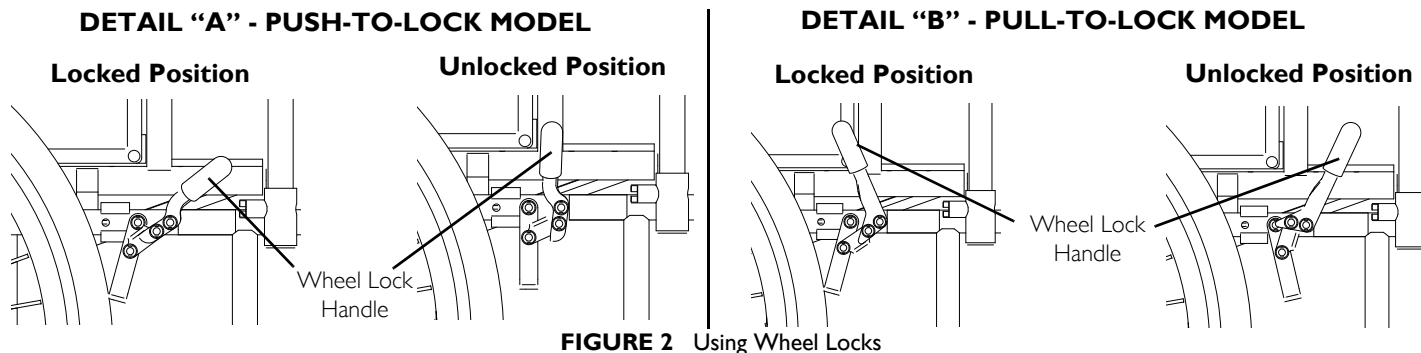


FIGURE 2 Using Wheel Locks

Adjusting Wheel locks



For this procedure, refer to FIGURE 3 on page 55.

1. Disengage the wheel lock.
2. Loosen the two socket screws that secure the wheel lock to the wheelchair frame.
3. Reposition the wheel lock and/or wheel lock clamp so that when engaged, the wheel lock shoe embeds the tire $\frac{3}{16}$ inch and holds the occupied wheelchair in place when pushed.
4. Securely tighten the two 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 (Detail "A").



Any wheel lock adjustment should embed the wheel lock shoe $\frac{3}{16}$ inch into the tire when engaged.

7. Repeat STEPS 1-6 until the wheel lock shoe embeds the tire $\frac{3}{16}$ inch and holds the occupied wheelchair in place when pushed.
8. Repeat STEPS 1-7 for the opposite wheel lock.

- 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" - WHEEL LOCK SHOE ENGAGEMENT

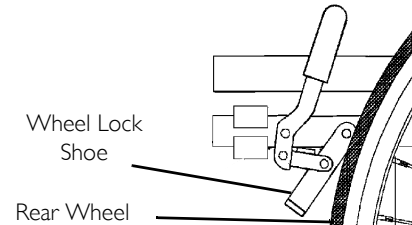
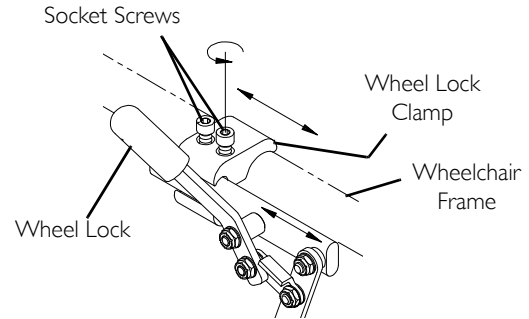
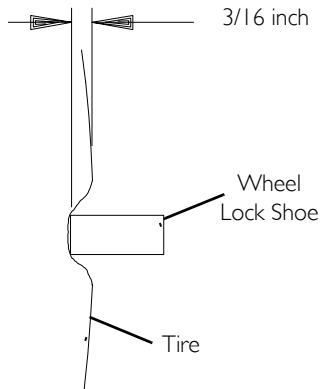


FIGURE 3 Adjusting Wheel locks

11 OPTIONS

11 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.

11.1 Installing Crutch and Cane Carrier

Installing

1. Slide the clamp with the base attached over the end of the step tube of the wheelchair.
2. Position the base parallel to the step tube.
3. Securely tighten the locknut that secures the base to the step tube of the wheelchair.
4. Remove the upper back upholstery screw and washer.
5. Align the strap with the back upholstery screws mounting hole.
6. Secure the strap to the wheelchair with the back upholstery screw and washer.

Safety and Maintenance

1. Check base weekly to assure proper placement.
2. Securely fasten strap while carrying items.
3. Never insert or remove items while wheelchair is moving.
4. Base should be parallel to step tube to avoid bending spokes when folding the wheelchair.
5. The base cleans easily with any chrome or glass cleaner. The strap can be cleaned with mild soap and water.

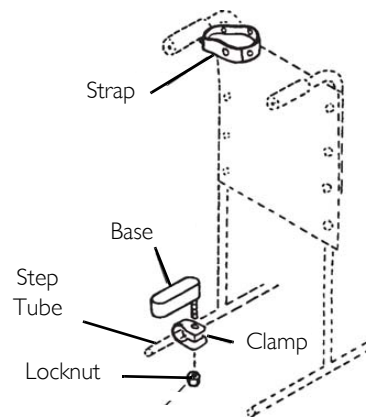


FIGURE 1 Installing Crutch and Cane Carrier

II.2 Installing Seat Positioning Strap

1. Remove the two existing back upholstery mounting screws and washer located second up from the bottom of both back canes. Discard back upholstery screws and washers.



The seat positioning strap may be installed with the locking/releasing buckle on the right or left side of the wheelchair back according to user preference.

2. Position the seat positioning strap around the outside of the back upholstery and back canes.
3. Secure the seat positioning strap and back upholstery to the back canes with the two new back upholstery mounting screws and washers. Securely tighten.

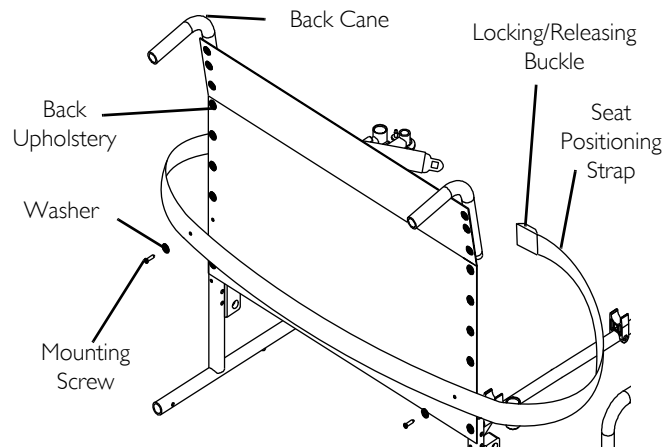


FIGURE 2 Installing Seat Positioning Strap

11 OPTIONS

11.3 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.

1. Remove the existing rubber tip from the wheel lock handle. Discard rubber tip.
2. Secure the wheel lock extension handle to the wheelchair frame by wrapping the elastic cord around the wheelchair frame.
3. Pass the wheel lock extension handle through the loop end of the elastic cord.
4. Slide the wheel lock extension handle on to the wheel lock handle.
5. Repeat STEPS 1-4 for the remaining wheel lock.

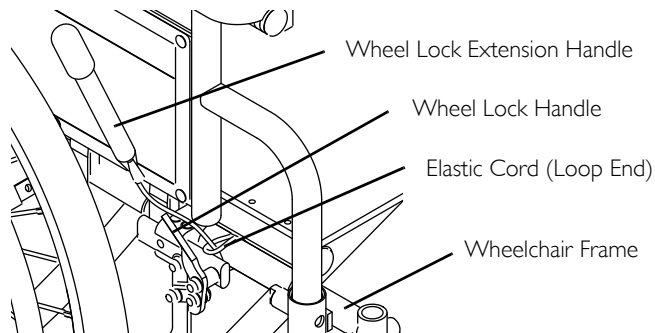


FIGURE 3 Wheel Lock Extension Handle

II.4 Installing/Removing Solid Seat Insert

Installing

1. 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

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

II.5 Installing/Removing Solid Back Insert

Installing

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

Removing

1. Release the two snaps securing the two fastening straps around the back canes.
2. Remove the solid back insert.

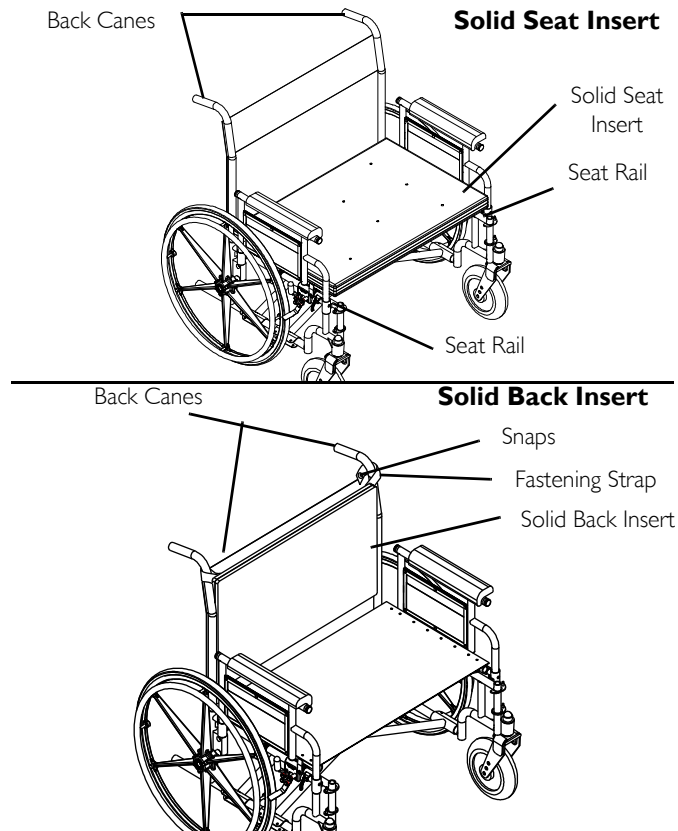


FIGURE 4 Installing/Removing Solid Seat Insert and Installing/Removing Solid Back Insert

11 OPTIONS

11.6 Installing O₂ Holder/Telescoping I.V. Rod with O₂ Holder

1. Slide the mounting bracket over the left side step tube of the wheelchair frame.
2. Secure the mounting bracket to the wheelchair frame with the hex screw, spacer and locknut.
3. Telescoping I.V. with O₂ holder only: Secure the top of the telescoping I.V. rod holder to the wheelchair frame with a tie wrap.

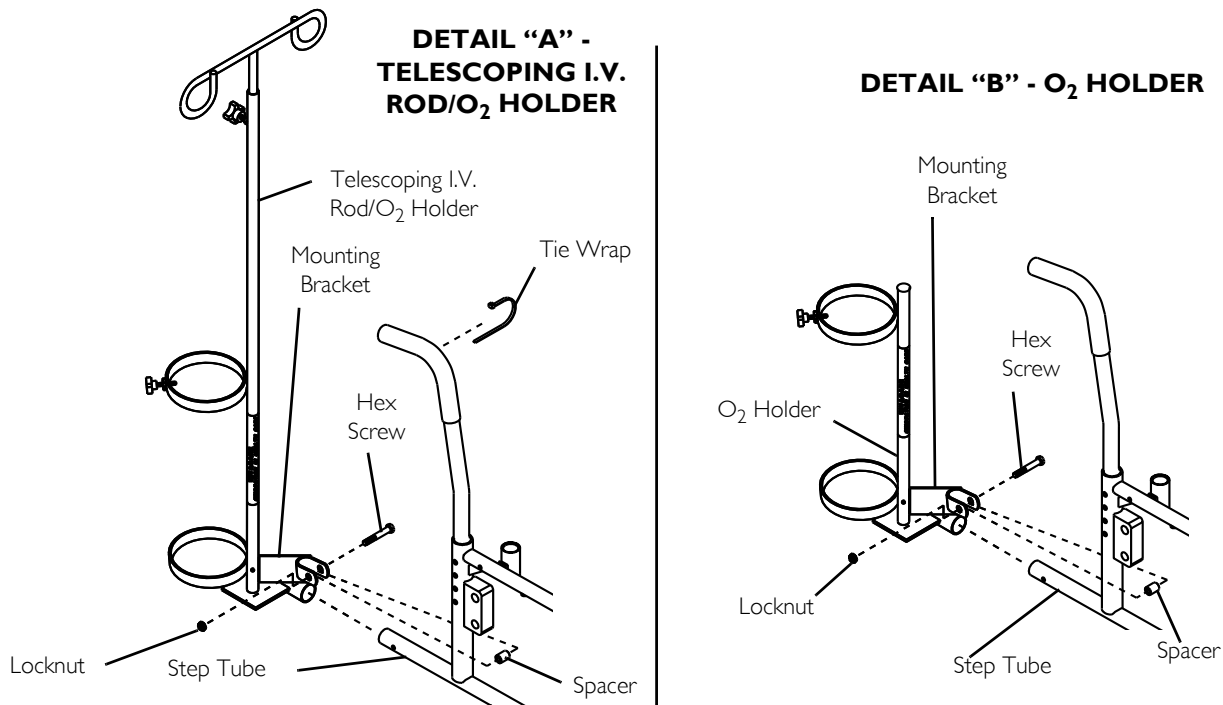




FIGURE 5 Installing O₂ Holder/Telescoping I.V. Rod with O₂ Holder

11.7 Installing Telescoping I.V. Rod

 For this procedure, refer to FIGURE 6 on page 62.

Mounting Instructions

 The telescoping I.V. rod is factory set for installation on the left side of the wheelchair. If necessary to install on the right side, refer to [Repositioning Upper Mounting Bracket](#) on page 63.

1. Loosely secure the two bracket plates to the lower mounting bracket using the short spacer, long spacer and two mounting screws and locknuts (Detail “A”).
2. Slide the lower mounting bracket over the left side step tube of the wheelchair frame, so that the step tube is positioned between the two spacers.
3. Remove the existing top left upholstery mounting screw and washer. Discard existing upholstery mounting screw and washer.
4. Secure the upper mounting bracket and back upholstery to the back cane using the new upholstery mounting screw and washer.

 Ensure the telescoping I.V. rod is vertical before securing the lower mounting bracket to the step tube.

5. Secure the lower mounting bracket to the wheelchair frame by securely tightening the two (2) hex screws and locknuts on the mounting bracket.
6. Loosen the adjustment knob and position the IV rod to the desired height and securely tighten the adjustment knob.

11 OPTIONS

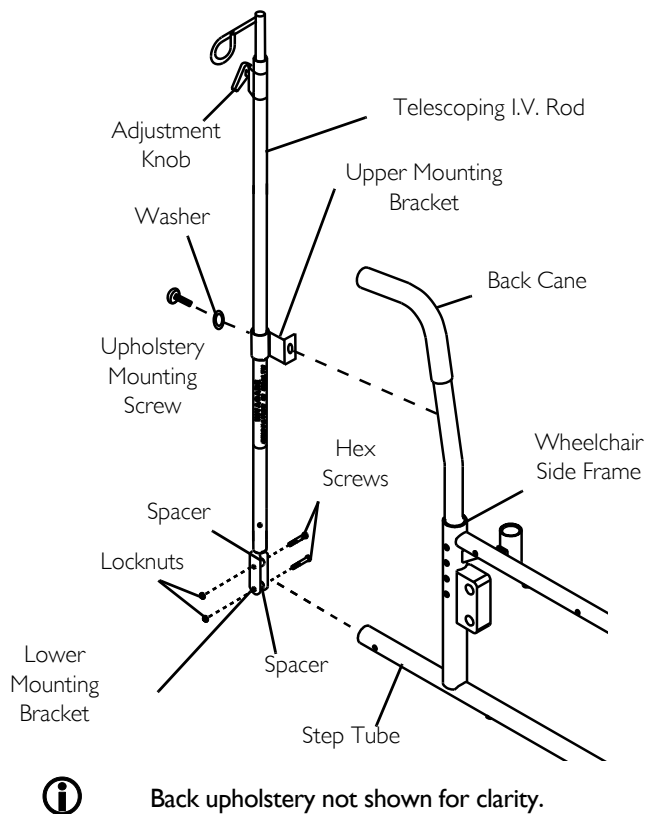
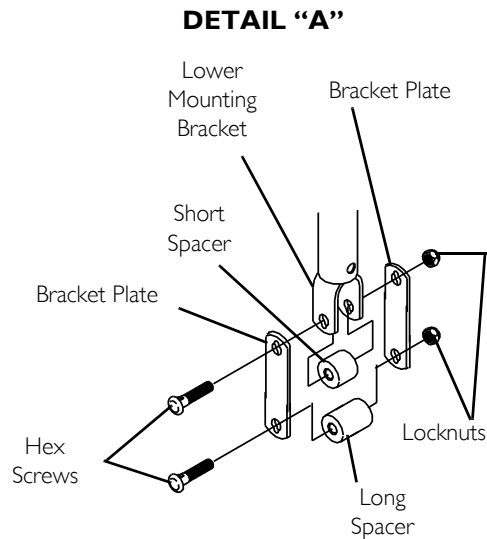


FIGURE 6 Installing Telescoping I.V. Rod - Mounting Instructions



Repositioning Upper Mounting Bracket



For this procedure, refer to FIGURE 7 on page 64.



This adjustment is required if the telescoping I.V. rod must be mounted on the right side of the wheelchair.

1. With the telescoping I.V. rod in the lowest position, align the hole of the outer tube with the phillips screw of the inner tube.
2. Remove phillips screw and set aside.
3. Remove the inner tube from the outer tube.
4. Firmly grasp the height adjustment assembly and pull to remove from the outer tube.
5. Slide the upper mounting bracket up off the outer tube.
6. Rotate the upper mounting bracket 180° and reinstall onto the outer tube.
7. Reverse STEPS 1-5 to reassemble the telescoping I.V. rod.

II OPTIONS

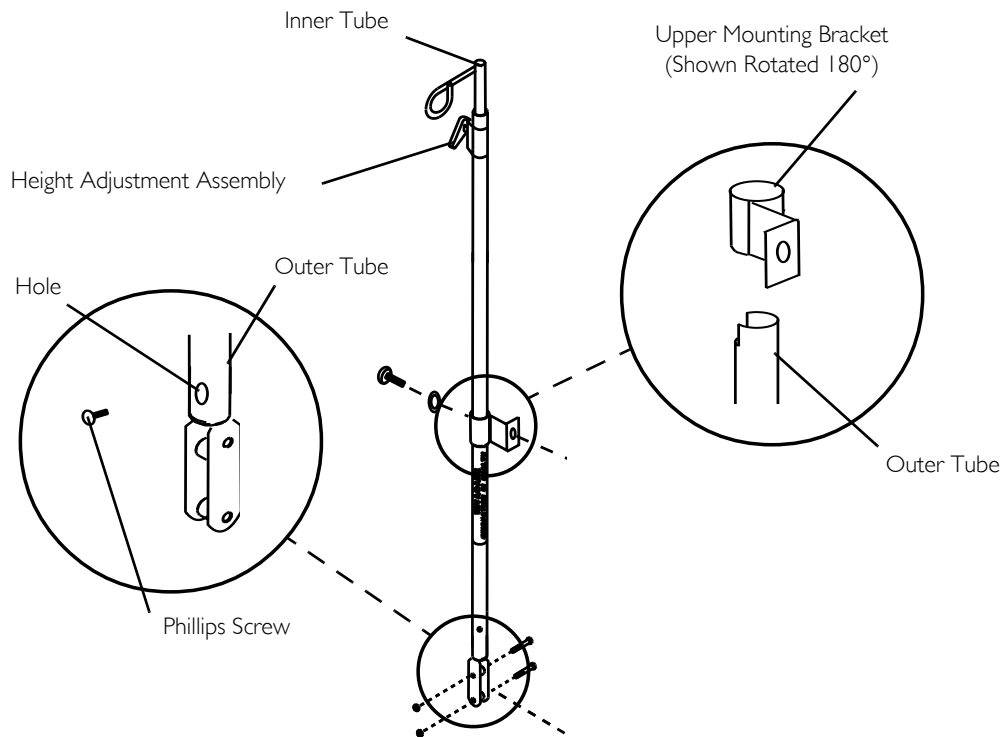


FIGURE 7 Installing Telescoping I.V. Rod - Repositioning Upper Mounting Bracket

Safety and Maintenance

1. Make sure the telescoping I.V. rod is tightly locked before placing I.V. medication on the rod.
2. The telescoping I.V. rod is designed for the specific purpose of supporting I.V. medication only. **DO NOT** use it to support objects other than I.V. medication.
3. Check weekly to make sure the telescoping I.V. rod/O₂ holder is tightly secured to the wheelchair frame. If there is any looseness whatsoever, **DO NOT** use until the corrective adjustments have been made.
4. The telescoping I.V. rod/O₂ holders clean easily with any household glass-type cleaner.

11.8 Installing/Removing Push Bar



For this procedure, refer to FIGURE 8 on page 66.



The 9000 Topaz is folded for either storage or transporting. The push bar must be removed before folding the wheelchair.

Installing Push Bar

1. Insert one push bar support into one back cane handle.



It may be necessary to move the back cane side-to-side in order to align the remaining push bar support with the back cane handle.

2. Align the remaining push bar support with the remaining back cane handle.
3. Insert the push bar support into the back cane handle. Securely tighten both lock knobs.

Removing Push Bar

1. Completely unthread both lock knobs.
2. Firmly grasp both ends of the push bar and pull to remove the push bar from the back cane handles.

11 OPTIONS

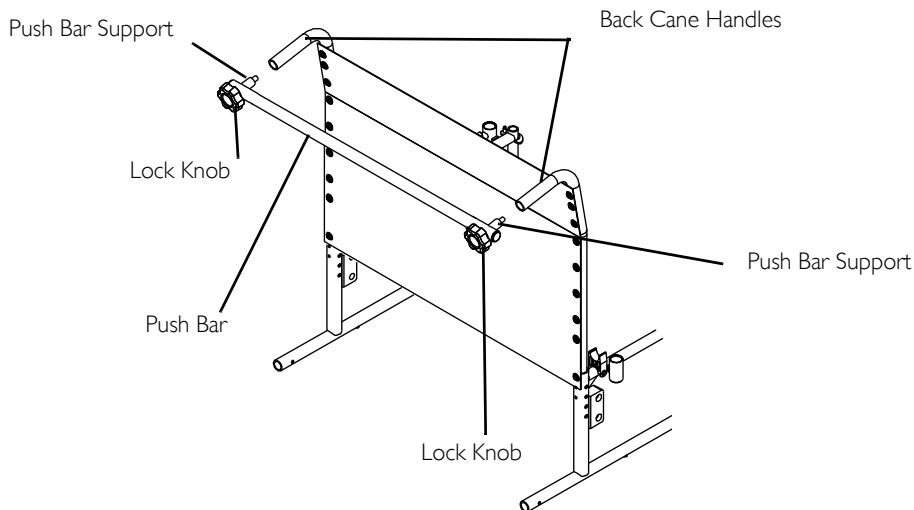


FIGURE 8 Installing/Removing Push Bar

11.9 Installing/Removing One-Piece Footboard



For this procedure, refer to FIGURE 9 on page 68.



Right and left sides of the wheelchair are determined from the occupant's position.

Only the right footboard support assembly is secured to the footboard.

When in the upright position, the footboard will be vertical and resting against the inside of the right footboard support assembly.

Installing

1. If necessary, remove the two existing swingaway footrest assemblies from the wheelchair by performing the following:
 - A. Push the footrest release lever inward.
 - B. Rotate swingaway footrest assembly outward.
 - C. Lift the swingaway footrest assembly off of the hinge pins.
 - D. Repeat STEPS A-C for the other footrest assembly.
2. With the footboard in the up position, pull the footboard support release lever and position the right footboard assembly support in front of the wheelchair.
3. Install the hinge plates on the footboard support assembly onto the hinge pins on the wheelchair frame.
4. Push the footboard support assembly towards the inside of the wheelchair until it locks into place.
5. Repeat STEPS 2-4 for the left footboard support assembly.
6. With both footboard support assemblies locked into position, lower the footboard into the down position and ensure the footboard clips securely hook over the left lower footboard support tube, behind the end cap.
7. If necessary, adjust the height of the footboard support assembly. Refer to [One Piece Footboard Height Adjustment](#) on page 69.

Removing

1. Lift the footboard into the up position.
2. Push the footboard support release lever inward.
3. Rotate the footboard support assembly outward.
4. Lift the footboard support assembly off of the hinge pins.
5. Repeat STEPS 2-4 for the other footboard support assembly.

II OPTIONS

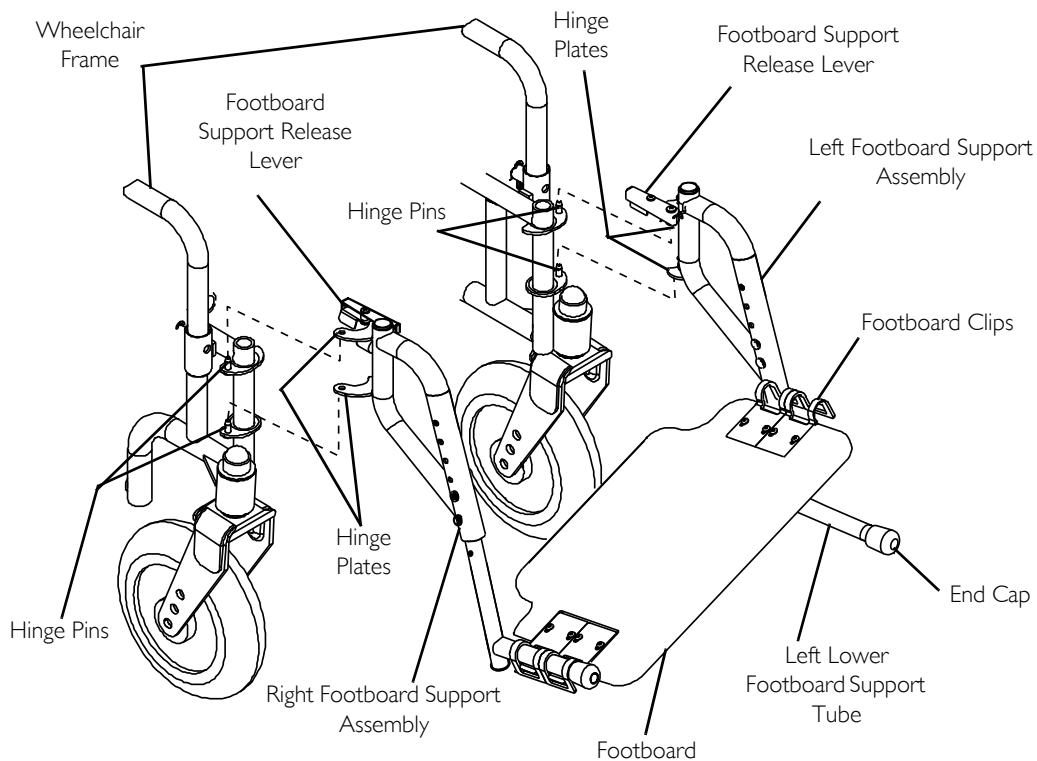




FIGURE 9 Installing/Removing One-Piece Footboard

II.10 One Piece Footboard Height Adjustment

 For this procedure, refer to FIGURE 10 on page 70.

1. Remove the footboard support assembly. Refer to [Installing/Removing One-Piece Footboard](#) on page 66.

 Lay the assembly on a flat surface to simplify this procedure.

2. Remove the two bolts and locknuts that secure the lower footboard support tube to the upper footboard support.
3. Reposition the lower footboard support tube to the desired height.
4. Using the two bolts and locknuts, secure the lower footboard support tube to the upper footboard support. Securely tighten.

 Ensure both footboard supports are adjusted to the same height.

5. Repeat STEPS 2-4 to adjust the remaining footboard support assembly.
6. Reinstall the footboard support assembly. Refer to [Installing/Removing One-Piece Footboard](#) on page 66.

II OPTIONS

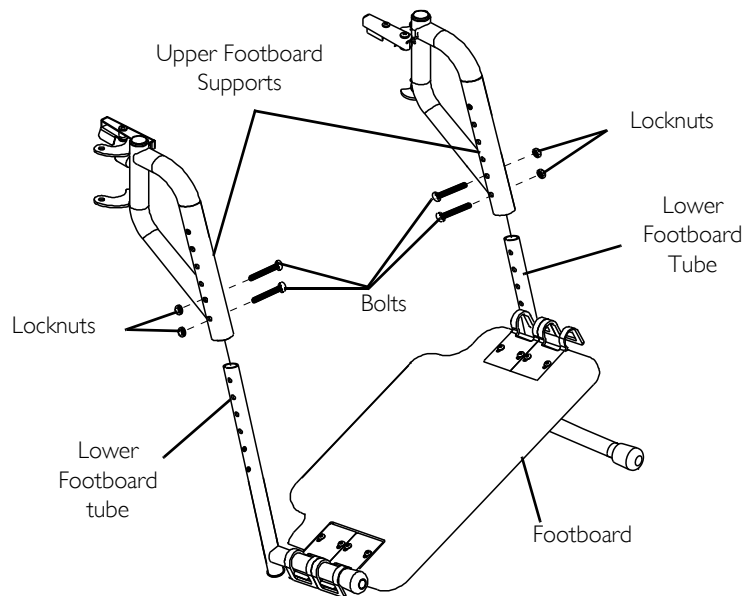


FIGURE 10 One Piece Footboard Height Adjustment

NOTES



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