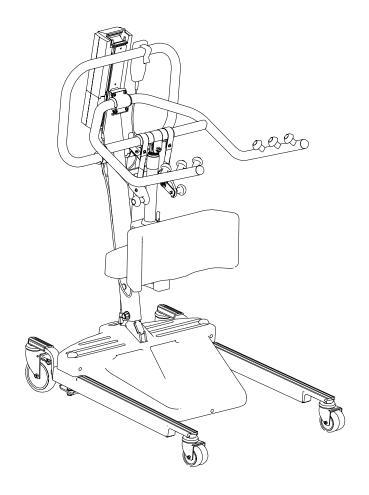
Owner's Operator and Maintenance Manual

Stand Up Lift Model RPS350-2



DEALER: This manual MUST be given to the user of the patient lift.

USER: BEFORE using this patient lift, read this manual and save for future reference.

For more information regarding Invacare products, parts, and services, please visit www.invacare.com



Yes, you can:

⚠ WARNING

DO NOT OPERATE THIS EQUIPMENT WITHOUT FIRST READING AND UNDERSTANDING THIS MANUAL. IF YOU ARE UNABLE TO UNDERSTAND THE WARNINGS, CAUTIONS AND INSTRUCTIONS CONTACT A QUALIFIED DEALER OR INVACARE TECHNICAL SUPPORT BEFORE ATTEMPTING TO USE THIS EQUIPMENT - OTHERWISE INJURY OR DAMAGE MAY RESULT.

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.

NOTE: Updated versions of this manual are available on www.invacare.com.

TABLE OF CONTENTS

SPECIAL NOTES	7
SPECIFICATIONS	8
Patient Lift	8
SECTION I—GENERAL GUIDELINES	9
Assembling the Lift	9
Operating the Lift	9
Using the Sling	10
Lifting/Transferring the Patient	11
Performing Maintenance	12
Electrical - Grounding Instructions	12
Pinch Points	13
SECTION 2— INSTALLATION	14
Introduction	14
Assembling the Mast to the Base	14
Assembling the Mast Actuator	15
Installing the Leg Actuator to the Base	
Mounting the Battery Charger	
SECTION 3—OPERATING THE STAND UP LIFT	
Introduction	
Using the Pendant Buttons	
Raising/Lowering the Stand Up LiftOpening/Closing the Legs	
Performing an Emergency Stop	19
Charging the Battery	20
SECTION 4—LIFTING THE PATIENT	21
Introduction	21
Positioning the Stand Up Lift	21
Lifting the Patient	22
Moving the Patient	24
SECTION 5—TRANSFERRING THE PATIENT	
Introduction	25
Transferring to a Commode	26
Transferring to a Wheelchair	27
Transferring to a Bed	
SECTION 6— TROUBLESHOOTING	30

TABLE OF CONTENTS

SECTION 7— MAINTENANCE	3 I
Maintenance Safety Inspection Checklist	31
Lubricating the Lift	32
Detecting Wear and Damage	32
Cleaning the Sling and the Lift	32
Adjusting the Base	33
Adjusting the Knee Pad Height	33
Replacing the Knee Pad	
Replacing the Padded Cover	34
Replacing the Mast Actuator	35
Replacing Casters/Forks	36
Replacing Rear Casters	
Replacing Front Casters	36
Replacing Forks	
LIMITED WARRANTY	

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- 2. Ensure long term maintenance and servicing of your purchase.
- 3. Receive updates with product information, maintenance tips, and industry news.
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- 5. It will enable Invacare to improve product designs based on your input and needs.

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Any registration information you submit will be used by Invacare Corporation only, and protected as required by applicable laws and regulations.



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particular medical condition If yes, please list any condition	on sent to you about Invacare products that may be available for a on? The Yes No on(s) here and we will send you information by email and/or mail about cts that may help treat, care for or manage such condition(s):	Fold here
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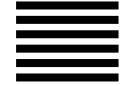


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SPECIAL NOTES

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

SIGNAL WORD	MEANING
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.

NOTICE

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

RADIO FREQUENCY INTERFERENCE

Most electronic equipment is influenced by Radio Frequency Interference (RFI). CAUTION should be exercised with regard to the use of portable communication equipment in the area around such equipment. If RFI causes erratic behavior, PUSH the Red Power Switch OFF IMMEDIATELY. DO NOT turn the Power Switch ON while transmission is in progress.

MAINTENANCE

Maintenance MUST be performed ONLY by qualified personnel.

⚠ WARNING

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.

SPECIFICATIONS

Patient Lift

Height at Sling Hook-up - MAX.	66 inches	
Height at Sling Hook-up - MIN.	40 inches	
Base Width OPEN	37 inches	
Base Width CLOSED	26 inches	
Base Height (Clearance)	4.5 inches	
Base Length	35.5 inches	
Overall Height	49 inches	
Overall Length	39 inches	
Overall Width	25.8 inches	
Caster Size FRONT REAR	3 inches 5 inches	
Sling Options	Standing or Transport	
Sling Material	Polyester	
Standing Sling Width Length	36 inches 13 inches	
Transport Sling Width Length	38.5 inches 36 inches	
Weight Capacity	350 lbs	
Weight IN Carton	135 lbs	
Weight OUT of Carton	108 lbs	
Battery	24V DC (RCHBL)	
Charger Input	100-240VAC	
Charger Output/Charging Time	29.5V DC Max 6 hrs	
Audio Low Battery Alarm	Yes	
Motor Safety Devices	Anti-Entrapment	
*Approx. Patient Lifts per Charge	*100-200 Cycles per Charge	
Warranty Electronics	l Year	
Emergency Stop Button	Yes	

^{*}NOTE: Varies depending upon load and stroke.

SECTION I—GENERAL GUIDELINES

△ WARNING

SECTION I - GENERAL GUIDELINES contains important information for the safe operation and use of this product. 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.

DO NOT move a person suspended in a sling any distance. The Invacare lift is NOT a transport device. It is intended to transfer an individual from one resting surface to another (such as a bed to a wheelchair). Otherwise, injury or damage may occur.

DO NOT dispose of batteries in normal household waste. Device contains lead acid batteries. They must be taken to a proper disposal site. Contact your local waste management company for information.

Assembling the Lift

DO NOT overtighten mounting hardware. This will damage mounting brackets.

Operating the Lift

Check all parts for shipping damage before using. In case of damage, DO NOT use the equipment. Contact the dealer for further instructions.

DO NOT attempt any transfer without approval of the patient's physician, nurse or medical assistant. Thoroughly read the instructions in this owner's manual, observe a trained team of experts perform the lifting procedures and then perform the entire lift procedure several times with proper supervision and a capable individual acting as a patient.

Use common sense in all lifts. Special care must be taken with people with disabilities who cannot cooperate while being lifted.

Invacare slings and lift accessories are specifically designed to be used in conjunction with Invacare lifts. Slings and accessories designed by other manufacturers are not to be utilized as a component of Invacare's lift system.

Although Invacare recommends that two assistants be used for all lifting and transferring procedures, our equipment will permit proper operation by one assistant. The use of one assistant is based on the evaluation of the health care professional for each individual case.

Make sure there is an audible click when mounting battery on the battery charger to confirm proper mounting. Otherwise, injury or damage may occur.

DO NOT exceed maximum weight limitation of the lift. The weight limitation for the RPS350-2 is 350 lbs.

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

Using the Sling

MARNING

Standing Slings - Individuals that use the standing sling MUST be able to support the majority of their own weight, otherwise injury can occur. Before lifting the patient, make sure the bottom edge of the standing sling is positioned on the lower back of the patient and the patient's arms are outside the standing sling. The belt MUST be snug, but comfortable on the patient, otherwise the patient can slide out of the sling during transfer, possibly causing injury.

Transport Slings - Before lifting the patient, make sure the bottom edge of the transport sling is at the base of the spine and the patient's arms are outside the transport sling. DO NOT raise the patient to a full standing position while using the transport sling, otherwise injury may occur.

DO NOT use any kind of material (such as a plastic back incontinence pad or seating cushion) between the patient and sling material that may cause the patient to slide out of the sling during transferring.

ALWAYS use the color coded strap on the standing sling closest to the patient while still maintaining patient stability and comfort.

Use an Invacare approved sling that is recommended by the individual's doctor, nurse or medical assistant for the comfort and safety of the individual being lifted.

After each laundering (in accordance with instructions on the sling), inspect sling(s) for wear, tears, and loose stitching.

Bleached, torn, cut, frayed, or broken slings are unsafe and could result in injury. Discard immediately.

DO NOT alter slings.

Be sure to check the sling attachments each time the sling is removed and replaced, to ensure that it is properly attached before the patient is removed from a stationary object (bed, chair or commode).

If the patient is in a wheelchair, secure the wheel locks in place to prevent the chair from moving forwards or backwards.

When connecting slings equipped with color coded straps to the lift, the shortest of the straps must be at the back of patient for support. Using long section will leave little or no support for patient's back. The loops of the sling are color coded and can be used to place patient in various positions. The colors make it easy to connect both sides of the sling equally. Make sure that there is sufficient head support when lifting a patient.

Lifting/Transferring the Patient

When using the stand up lift, the legs MUST be in the maximum Opened position before lifting the patient.

DO NOT move the patient if the sling is not properly connected to the attachment points of the stand up lift. Check that the sling is properly connected to the attachment points prior to lifting a patient. If any attachments are not properly in place, correct the problem. When the sling is elevated a few inches off the stationary surface and before moving the patient, check again to make sure that all sling attachments are secure. If any attachments are not properly in place, lower the patient back onto the stationary surface and correct this problem - otherwise, injury or damage may occur.

Adjustments for safety and comfort should be made before moving the patient. Patient's arms should be inside of the straps.

Invacare slings are made specifically for use with Invacare lifts. For the safety of the patient, DO NOT intermix slings and lifts of different manufacturers. Warranty will be voided.

During transfer, with patient suspended in a sling attached to the lift, DO NOT roll caster base over objects such as carpet, raised carpet bindings, door frames, or any uneven surfaces or obstacles that would create an imbalance of the lift and could cause the lift to tip over.

Before positioning the legs of the stand up lift around the patient, make sure the patient's feet are out of the way of the footplate, otherwise injury can occur.

Invacare recommends locking the rear swivel casters ONLY when positioning or removing the sling (standing or transport) from around the patient.

Invacare does not recommend locking of the rear casters of the lift when lifting an individual. Doing so could cause the lift to tip and endanger the patient and assistants. Invacare does recommend that the rear casters be left unlocked during lifting procedures to allow the lift to stabilize itself when the patient is initially lifted from a chair, bed or any stationary object.

Wheelchair wheel locks MUST be in a locked position before lowering the patient into the wheelchair for transport.

Before transferring, check that the wheelchair weight capacity can withstand the patient's weight.

Performing Maintenance

Refer to Maintenance on page 31 for a maintenance schedule and procedures.

Regular maintenance of lifts and accessories is necessary to assure proper operation.

After the first year of use, the attachment points and the mounting bracket of the lift arm should be inspected every three months to determine the extent of wear. If these parts become worn, replacement must be made.

DO NOT overtighten mounting hardware. This will damage mounting brackets.

Casters and axle bolts require inspections every six months to check for tightness, wear, debris (such as hair and dirt) and that they roll free.

After the first twelve months of operation, inspect all pivot points and fasteners for wear. If the metal is worn, the parts MUST be replaced. Make this inspection every six months thereafter.

Top bolt must be checked at least every six months in conjunction with periodic maintenance.

The electric motor is sealed at the factory and if service is required, the motor unit MUST be returned to the factory for repair. DO NOT attempt to open the motor or obtain local service as this will VOID the warranty and may result in damage and a costly repair. Consult your dealer or Invacare for further information.

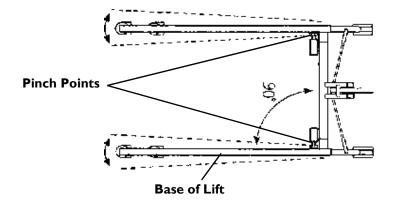
Electrical - Grounding Instructions

DO NOT, under any circumstances, cut or remove the round grounding prong from any plug. Some devices are equipped with three-prong (grounding) plugs for protection against possible shock hazards. Where a two-prong wall receptacle is encountered, it is the personal responsibility and obligation of the customer to contact a qualified electrician and have the two-prong receptacle replaced with a properly grounded three-prong wall receptacle in accordance with the National Electrical Code. If you must use an extension cord, use only a three-wire extension cord having the same or higher electrical rating as the device being connected. In addition, Invacare has placed RED/ORANGE WARNING TAGS on some equipment. DO NOT remove these tags. Carefully read battery/battery charger information prior to installing, servicing or operating your lift.

Pinch Points

⚠ WARNING

Pinch points exist at base of lift. Injury could occur.



SECTION 2— INSTALLATION

Introduction

MARNING

Use only Invacare parts in the assembly of this lift. The base legs, mast, and boom assembly and the swivel bar are manufactured to specifications that assure correct alignment of all parts for safe functional operation.

Assembling the Mast to the Base

⚠ WARNING

The mast may be removed from the base for storage or transporting. Each time the mast is removed and returned to the base, the mast MUST be properly secured to the base assembly.

NOTE: For this procedure, refer to FIGURE 2.1.

- 1. If locking-type casters are on the lift, lock them.
- 2. Remove the shoulder bolt, nut and washer, that secures the mast in the U-shape cutout of the base.
- 3. Position the mast in an upright position and place the mast into the U-shaped cut-out of the base.
- 4. Insert shoulder bolt with washers through the base and mast.
- 5. Secure with nut.

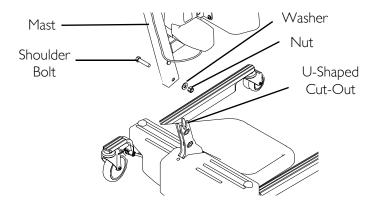


FIGURE 2.1 Assembling Mast to Base

Assembling the Mast Actuator

CAUTION

DO NOT overtighten the nut and bolt. This damages the mounting bracket.

NOTE: For this procedure, refer to FIGURE 2.2.

- 1. Remove the top nut, top bolt, bracket, and bushing from the mounting bracket on the mast.
- 2. Position the mast actuator in the lift arm mounting bracket.
- 3. Install the top nut, top bolt, bracket, and bushing into the mounting bracket and mast actuator.
- 4. Tighten securely.

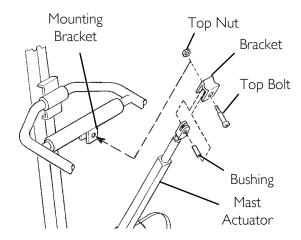


FIGURE 2.2 Assembling the Mast Actuator

Installing the Leg Actuator to the Base

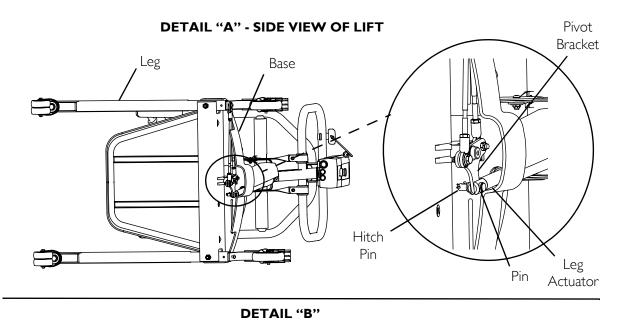
NOTE: For this procedure, refer to FIGURE 2.3 on page 16.

- 1. Slide the leg actuator into the slot in the base of the lift. See Detail "B".
- 2. Perform the following to secure the leg actuator to the pivot bracket (Detail "A"):

↑ WARNING

Ensure that there is sufficient room to turn lift on its side and that floor area is clear of debris. Otherwise, injury to personnel or damage to lift may occur.

- A. Turn the lift on its side.
- B. Position slot in leg actuator over the pivot bracket.
- C. Install the pin through the leg actuator and pivot bracket and secure with hitch pin.
- D. Return the lift to the upright position.
- 3. Perform the following to secure the leg actuator to the mast bracket (Detail "B"):
 - A. Position leg actuator between mast bracket.
 - B. Move the legs to align the holes in the leg actuator with the holes in the mast bracket.
 - C. Install the pin through the holes of the leg actuator and mast bracket and secure with hitch pin.
- 4. Plug the pendant control into the bottom of the control box.





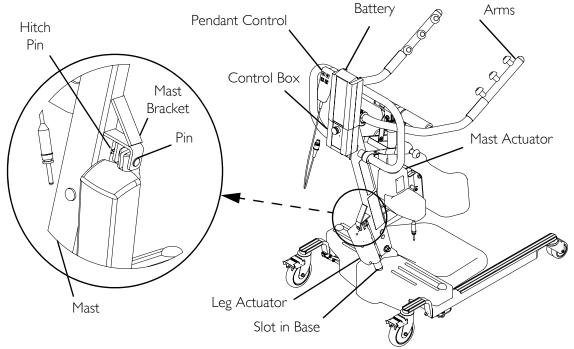


FIGURE 2.3 Lift Components

Mounting the Battery Charger

NOTE: For this procedure, refer to FIGURE 2.4.

NOTE: Refer to your local regulations concerning proper mounting procedures.

- 1. Place the battery charger with mounting bracket on the wall at the desired position.
- 2. With a pencil, mark the middle hole position.
- 3. Measure down 6½ inches from the pencil mark and drill one mounting hole.
- 4. Install the bottom mounting screw until there is an approximate 1/8-inch gap between the screw head and the wall.
- 5. Install the battery charger with mounting bracket onto the bottom mounting screw.
- 6. Drill the remaining two mounting holes.
- 7. Install the two remaining mounting screws through the mounting bracket and into the wall. Tighten securely.
- 8. Plug the battery charger into the wall electrical outlet.
- 9. Verify that On is illuminated.

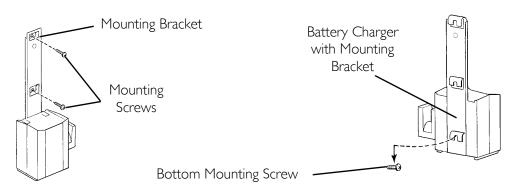


FIGURE 2.4 Mounting the Battery Charger

SECTION 3—OPERATING THE STAND UP LIFT

Introduction

A WARNING

DO NOT attempt any transfer of a patient without approval of the patient's physician, nurse, or medical assistant. Thoroughly read the instructions in this owner's manual, observe a trained team of experts performing the lifting procedures and then perform the entire lift procedure several times with proper supervision and a capable individual acting as a patient.

The legs of the stand up lift must be in the maximum open position for optimum stability and safety. If the patient is in a sling and it becomes necessary to move through a narrow passage, close the legs of the stand up lift only as long as it takes to move through the passage. When the stand up lift is through the passage, return the legs to the maximum open position.

If it is necessary to close the legs to maneuver the stand up lift under a bed, close the legs only as long as it takes to position the stand up lift over the patient and lift the patient off the surface of the bed. When the legs of the stand up lift are no longer under the bed, return the legs to the maximum open position.

Invacare recommends that two assistants be used for all lifting preparation and transferring to/from procedures; however, the stand up lift can be operated with one assistant. The use of one assistant is based on the evaluation of the health care professional for each individual case.

Using the Pendant Buttons

⚠ WARNING

DO NOT lock the rear casters of the stand up lift when lifting an individual. Locking the rear casters could cause the stand up lift to tip and endanger the patient and assistants.

NOTE: For this procedure, refer to FIGURE 3.1 on page 19.

The pendant is used to raise/lower the stand up lift or to open/close the legs of the base for stability when lifting a patient.

Raising/Lowering the Stand Up Lift

To raise the stand up lift, press the up arrow button to raise the lift arms and the patient.

To lower the stand up lift, press the down arrow button to lower the lift arms and the patient.

NOTE: If the stand up lift is in the full Up position, it may be necessary to pull down slightly on the lift arms before the lift arms will lower.

Opening/Closing the Legs

To open the legs, press the legs open button.

To close the legs, press the legs closed button.

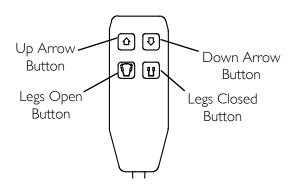


FIGURE 3.1 Pendant Buttons

Performing an Emergency Stop

NOTE: For this procedure, refer to FIGURE 3.2.

Press the RED emergency button on the control box to stop the boom assembly and patient from raising or lowering.

Rotate the RED emergency stop button clockwise to disengage the emergency stop.

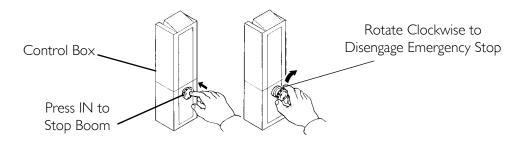


FIGURE 3.2 Performing an Emergency Stop

Charging the Battery

NOTE: For this procedure, refer to FIGURE 3.3.

NOTE: Invacare recommends the battery be recharged daily to prolong battery life.

NOTE: An audible alarm will sound (horn will beep) when battery is low.

- 1. Lift up on the handle on the back of the battery.
- 2. Lift the battery up and out of the control box.

CAUTION

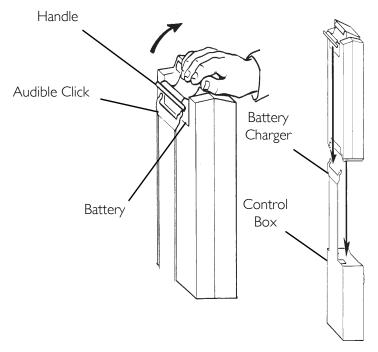
Make sure there is an audible click when mounting the battery on the battery charger to confirm proper mounting. Otherwise, injury or damage may occur.

3. Place the battery on the battery charger. Make sure there is an audible click.

NOTE: The charge LED will illuminate. When charging is complete, charge LED will stop illuminating.

NOTE: A battery needing to be fully recharged will take approximately four hours.

- 4. Lift up on the handle on the back of the battery.
- 5. Lift the battery up and out of the battery charger.
- 6. Reinstall the battery onto the control box. Make sure there is an audible click.



NOTE: The battery mounts to the control box and battery charger as shown.

FIGURE 3.3 Charging the Battery

SECTION 4—LIFTING THE PATIENT

Introduction

Invacare recommends that two assistants be used for all lifting preparation and transferring to/from procedures; however, our equipment will permit proper operation by one assistant. The use of one assistant is based on the evaluation of the health care professional for each individual case.

Refer to the patient sling owner's manual for complete lifting preparation information.

Refer to <u>General Guidelines</u> on page 9 in this manual before proceeding further and observe all warnings indicated.

Positioning the Stand Up Lift

⚠ WARNING

The legs of the stand up lift MUST be in the maximum open position for optimum stability and safety. If it is necessary to close the legs to maneuver the stand up lift under a bed, close the legs only as long as it takes to position the stand up lift over the patient and lift the patient off the surface of the bed. When the legs of the stand up lift are no longer under the bed, return the legs to the maximum open position.

NOTE: For this procedure, refer to FIGURE 4.1.

NOTE: Before positioning the legs of the stand up lift, make sure the area is clear of any obstructions.

- 1. Press the legs open button on the pendant to open the legs of the stand up lift to maximum.
- 2. Position the stand up lift using the mast handle.
- 3. Press the down arrow button on the pendant to lower the lift arms for easy attachment of the sling.

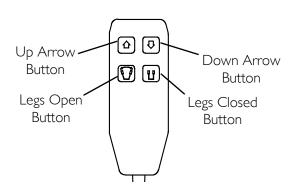


FIGURE 4.1 Pendant Buttons

Lifting the Patient

⚠ WARNING

DO NOT lock the rear casters of the stand up lift when lifting an individual. Locking the rear casters could cause the stand up lift to tip and endanger the patient and assistants. Leaving the rear casters unlocked during lifting procedures allows the lift to stabilize itself when the patient is initially lifted from a chair, bed or any stationary object.

DO NOT move the patient if the sling is not properly connected to the attachment points of the stand up lift. Check that the sling is properly connected to the attachment points prior to lifting a patient. If any attachments are not properly in place, correct the problem. When the sling is elevated a few inches off the stationary surface and before moving the patient, check again to make sure that all sling attachments are secure. If any attachments are not properly in place, lower the patient back onto the stationary surface and correct this problem - otherwise, injury or damage may occur.

Adjustments for safety and comfort should be made before moving the patient.

DO NOT use slings and stand up lifts of different manufacturers. Invacare slings are made specifically for use with Invacare stand up lifts. Injury or damage may occur.

NOTE: For this procedure, refer to FIGURE 4.2 on page 24.

NOTE: When the patient is lifted from a bed (with the patient's head supported by the sling and/ or an assistant), he/she will be raised to a sitting position.

- 1. Instruct patient to hold onto the hand grips on both sides of the stand up lift. Refer to Detail "A".
- 2. Instruct the patient to lean back into the standing or transport sling.

△ WARNING

Standing Slings - Before lifting the patient, make sure the bottom edge of the standing sling is positioned on the lower back of the patient and the patient's arms are outside the standing sling.

Transport Slings - Before lifting the patient, make sure the bottom edge of the transport sling is at the base of the spine and the patient's arms are outside the transport sling.

- 3. Ensure the following:
 - A. Patient's knees are secure against the knee pad.
 - B. Patient's feet are positioned on the footplate.
 - C. The bottom edge of either the standing sling is positioned on the lower back or the transport sling is at the base of the patient's spine.
 - D. The patient's arms are outside of the standing or transport sling.
 - E. The rear casters are unlocked.
 - F. The legs are in the maximum open position.

⚠ WARNING

If transferring from a wheelchair, the wheelchair wheel locks MUST be in the locked position before lowering the patient into the wheelchair. Otherwise, injury may occur.

- 4. If transferring from a wheelchair, lock the wheel locks on the wheelchair. Refer to Detail "B".
- 5. Press the up arrow button to raise the patient above the surface (bed, wheelchair, or commode). The patient's weight will be fully supported by the stand up lift. Refer to Detail "C".

NOTE: The lower center of gravity provides stability making the patient feel more secure and the lift easier to move.

NOTE: The lift arms will stay in position until the down arrow button is pressed.

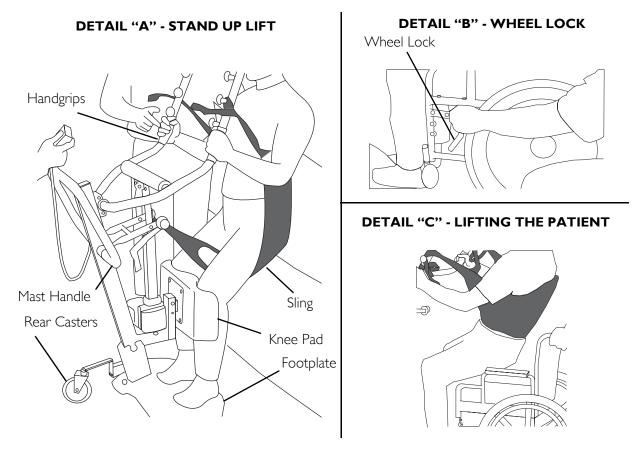


FIGURE 4.2 Lifting the Patient

Moving the Patient

△ WARNING

The legs of the stand up lift MUST be in the maximum open position for optimum stability and safety. If the patient is in a sling and it becomes necessary to move through a narrow passage, close the legs of the stand up lift only as long as it takes to move through the passage. When the stand up lift is through the passage, return the legs to the maximum open position.

DO NOT, during transfer of a patient suspended in the lift sling, roll caster base over objects such as carpet, raised carpet bindings, door frames, or any uneven surfaces or obstacles that would create an imbalance of the lift. This could cause the lift to tip over. Use the mast handle at all times to push or pull the lift.

NOTE: For this procedure, refer to Detail "C" of FIGURE 4.2.

- 1. Ensure the legs of the stand up lift are in the maximum open position. If not, press the open legs button on the pendant to move the legs to the maximum open position.
- 2. Move the stand up lift away from the surface.
- 3. Slowly move the patient to the desired surface.

SECTION 5—TRANSFERRING THE PATIENT

Introduction

A WARNING

DO NOT attempt any transfer of a patient without approval of the patient's physician, nurse, or medical assistant.

DO NOT move the patient if the sling is not properly connected to the attachment points of the stand up lift. Check that the sling is properly connected to the attachment points prior to lifting a patient. If any attachments are not properly in place, correct the problem. When the sling is elevated a few inches off the stationary surface and before moving the patient, check again to make sure that all sling attachments are secure. If any attachments are not properly in place, lower the patient back onto the stationary surface and correct this problem - otherwise, injury or damage may occur.

Adjustments for safety and comfort should be made before moving the patient. The patient's arms should be inside the straps.

DO NOT use slings and stand up lifts of different manufacturers. Invacare slings are made specifically for use with Invacare stand up lifts. Otherwise, injury or damage may occur.

DO NOT lock the rear casters of the stand up lift when lifting an individual. Locking the rear casters could cause the stand up lift to tip and endanger the patient and assistants.

The legs of the stand up lift MUST be in the maximum open position for optimum stability and safety. If the patient is in a sling and it becomes necessary to move through a narrow passage, close the legs of the stand up lift only as long as it takes to move through the passage. When the stand up lift is through the passage, return the legs to the maximum open position. If it is necessary to close the legs to maneuver the stand up lift under a bed, close the legs only as long as it takes to position the stand up lift over the patient and lift the patient off the surface of the bed. When the legs of the stand up lift are no longer under the bed, return the legs to the maximum open position.

Be sure to check the sling attachments each time the sling is removed and replaced to ensure that it is properly attached before the patient is removed from a surface.

Invacare recommends that two assistants be used for all lifting preparation and transferring to/from procedures; however, our equipment will permit proper operation by one assistant. The use of one assistant is based on the evaluation of the health care professional for each individual case.

Transferring to a Commode

NOTE: For this procedure, refer to FIGURE 5.1.

A WARNING

Invacare recommends locking the rear swivel casters only when positioning or removing the sling from around the patient.

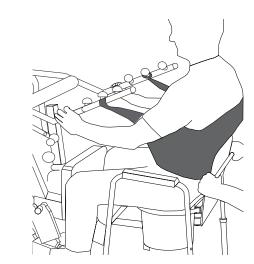
- 1. Lift the patient from the bed. Refer to <u>Lifting the Patient</u> on page 21.
- 2. Press the boom up button to elevate the patient high enough to clear the arms of the commode chair. Their weight will be supported by the stand up lift. Refer to Detail "A".
- 3. Guide the patient onto the commode chair. This may require two assistants.
- 4. Press the down arrow button to lower the patient onto the commode chair.
- 5. Lock the rear swivel casters on the stand up lift.
- 6. Perform one of the following (refer to Detail "B"):
 - Standing Sling unhook the standing sling from the attachment points on the stand up lift.
 - Transport Sling
 - i. Unhook the transport sling from the bottom attachment points on the stand up lift.
 - ii. Lift up on the patient's legs and remove the thigh supports from underneath the patient.
 - iii. If desired, unhook the transport sling from the top attachment points on the stand up lift.

NOTE: The patient can remain in the upper portion of the transport sling while using the commode.

DETAIL "A" - POSITIONING PATIENT



DETAIL "B" - UNHOOKING SLING



DETAIL "C" - UNHOOKING SLING AND STRAPS

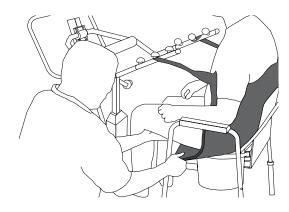


FIGURE 5.1 Transferring to a Commode

- 7. Instruct or assist the patient in lifting their feet off the footplate.
- 8. Remove the sling from around the patient.
- 9. Pull the stand up lift away from the commode.
- 10. When complete, recheck the sling for correct attachments.
- 11. To lift the patient from the commode, refer to Lifting the Patient starting on page 21.

Transferring to a Wheelchair

NOTE: For this procedure, refer to FIGURE 5.2 on page 28.

- 1. Ensure the legs of the lift with the patient in the sling are in the open position. Press the legs open button until in maximum open position.
- 2. Move the wheelchair into position. Refer to Detail "A".
- 3. Engage the rear wheel locks of the wheelchair to prevent movement of the chair. Refer to Detail "B".

MARNING

DO NOT place the patient in the wheelchair if the locks are not engaged. The wheelchair wheel locks MUST be in a locked position before lowering the patient into the wheelchair for transport. Otherwise, injury may result.

- 4. Position the patient over the wheelchair.
- 5. Press the down arrow button and lower the patient into the wheelchair. Refer to Detail "C".

A WARNING

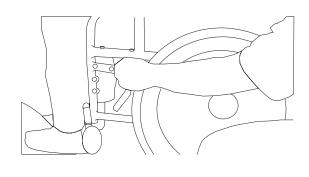
Lock the rear swivel casters ONLY when positioning or removing the sling (standing or transport) from around the patient. Otherwise, injury may occur.

- 6. Lock the rear swivel casters.
- 7. Unhook the sling from all attachment points on the stand up lift. Refer to Detail "D".
- 8. Instruct patient to lift their feet off the footplate. Assist the patient if necessary.
- 9. Remove the sling from around the patient.
- 10. Pull the stand up lift away from the wheelchair.

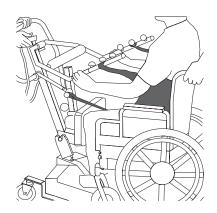
DETAIL "A" - UNHOOKING SLING AND STRAPS



DETAIL "B" - LOCKING THE WHEELCHAIR



DETAIL "C" - LOWERING
PATIENT



DETAIL "D" - UNHOOKING SLING



FIGURE 5.2 Transferring the Patient to a Wheelchair

Transferring to a Bed

NOTE: For this procedure, refer to FIGURE 5.3 on page 29.

NOTE: The lower center of gravity provides stability making the patient feel more secure and the lift easier to move.

NOTE: The lift arms will stay in position until the down arrow button is pressed.

1. Position the patient as far over the bed as possible.

NOTE: If patient is being transferred from a surface that is lower than the bed, press the up arrow button to raise the patient above the surface of the bed. The patient should be elevated just high enough to clear the bed with their weight fully supported by the lift.

2. Press the down arrow button and lower the patient onto the bed.

⚠ WARNING

Invacare recommends locking the rear swivel casters ONLY when positioning or removing the sling from around the patient.

- 3. Lock the rear swivel casters.
- 4. Unhook the standing or transport sling from all attachment points on the stand up lift.
- 5. Instruct the patient to lift their feet off of the footplate.

NOTE: Assist the patient if necessary.

- 6. Remove the standing or transport sling from around the patient.
- 7. Pull the stand up lift away from the bed.

DETAIL "A" - LOWERING THE PATIENT

DETAIL "B" - UNHOOKING THE SLING

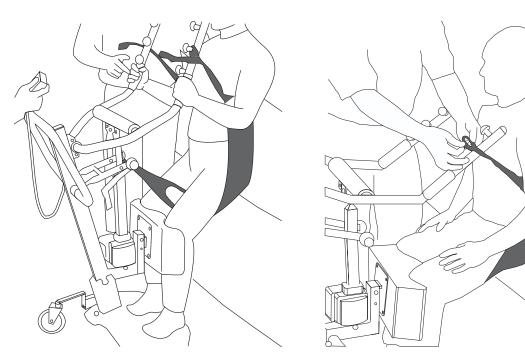


FIGURE 5.3 Transferring the Patient to a Bed

SECTION 6— TROUBLESHOOTING

SYMPTOMS	FAULTS	SOLUTION
Stand up lift feels loose.	Mast/base joint loose. Tie-rods are loose.	Tighten the bolt, washer and locknut that secure the mast to the base. Refer to Assembling the Mast to the Base on page 14 or Adjusting the Base on page 33.
Casters/brakes noisy or stiff.	Fluff or debris in bearings.	Refer to Replacing Casters/Forks on page 36.
Noisy or dry sound from pivots.	Needs lubrication.	Refer to Lubricating the Lift on page 32.
Actuator fails to lift or legs fail to open when button is pressed.	Hand-control or actuator connector loose.	Check connections.
	Battery low.	Charge batteries. Refer to Charging the Battery on page 20.
	RED emergency stop button pressed IN.	Rotate RED emergency stop button Clockwise until it pops out.
	Battery not connected properly to control box.	Reconnect the battery to the control box. Refer to Charging the Battery on page 20.
	The connecting terminals are damaged.	Replace the battery pack. Refer to Charging the Battery on page 20.
	Actuator in need of service or load is too high.	Refer to Replacing the Mast Actuator on page 35 or Installing the Leg Actuator to the Base on page 15. Contact your dealer.
Unusual noise from actuator.	Actuator is worn or damaged or spindle is bent.	Refer to Adjusting the Base on page 33 or Installing the Leg Actuator to the Base on page 15. Contact your dealer.
Lift arms will not lower in uppermost position.	Lift arms require a minimum weight load to lower from the uppermost position.	Pull down slightly on the lift arms.

NOTE: If problems are not remedied by the suggested means, please contact your dealer or Invacare.

SECTION 7— MAINTENANCE

Maintenance Safety Inspection Checklist

For individual home use, a full inspection is required prior to each new user.

Regular cleaning will reveal loose or worn parts, enhance smooth operation and extend the life expectancy of the lift.

Follow the maintenance procedures described in this manual to keep your stand up lift in continuous service.

ITEM	INITIALLY	INSTITUTIONAL INSPECT/ADJUST MONTHLY	IN-HOME INSPECT EVERY SIX MONTHS
THE CASTER BASE Inspect for missing hardware. Base opens/closes with ease. Inspect casters and axle bolts for tightness. Inspect casters for smooth swivel and roll. Inspect and clear wheels of debris.	X	X	X
	X	X	X
	X	X	X
	X	X	X
Inspect and clear wheels of debris. Inspect pivot joints for wear.	x	x	x
THE MAST Mast MUST be securely assembled to lift arms. Inspect for bends or deflections. Inspect pivot joints for wear.	X	X	X
	X	X	X
	X	X	X
THE LIFT ARMS AND LINKAGE Check all hardware and attachment points. Inspect for bends or deflections. Inspect bolted joints of lift arms for wear. Inspect to ensure that the lift arms are centered	x	x	x
	x	x	x
	x	x	x
between the base legs. Ensure that the bolt is tightly secured. Inspect pivot joints for wear.	X	x	x
	X	x	x
	X	x	x
ACTUATOR ASSEMBLY Check for wear or deterioration. (IF DAMAGED, RETURN TO FACTORY).	x	x	x
Cycle to ensure smooth quiet operation.	X	X	X
Whenever necessary.	x	x	x
SLINGS AND HARDWARE CHECK ALL SLING ATTACHMENTS each time it is used to ensure proper connection and patient safety. Inspect sling material for wear. Inspect straps for wear.	X	X	X
	X	X	X
	X	X	X

The Invacare Stand Up Lift is designed to provide a maximum of safe, efficient and satisfactory service with minimum care and maintenance.

All parts of the stand up lift are made of the best grades of steel, but metal to metal contact will wear after considerable use.

There is no adjustment or maintenance of either the casters or brakes, other than cleaning, lubrication and checking axle and swivel bolts for tightness. Remove all debris, etc. from the wheel and swivel bearings. If any parts are worn, replace these parts immediately.

If you question the safety of any part of the lift, contact your dealer immediately and advise them of the problem.

Lubricating the Lift

NOTE: For this procedure, refer to FIGURE 7.1.

The Invacare lift is designed for minimum maintenance. However, a six month check and lubrication should ensure continued safety and reliability.

Keep lift and slings clean and in good working order. Any defect should be noted and reported to your dealer as soon as possible.

The casters MUST swivel and roll smoothly. A light grease (waterproof auto lubricant) may be applied to the ball bearing swivel of the casters once a year. Apply more frequently if the casters are exposed to extreme moist conditions.

Lubricate all pivot points. Wipe all excess lubricant from lift surface.



FIGURE 7.1 Lubricating the Lift

Detecting Wear and Damage

It is important to inspect all stressed parts, such as slings, spreader bar and any pivot for slings for signs of cracking, fraying, deformation or deterioration. Replace any defective parts immediately and ensure that the lift is not used until repairs are made.

Cleaning the Sling and the Lift

The sling should be washed regularly in water temperature of 180°F (82°C) and a biological solution. A soft cloth, dampened with water and a small amount of mild detergent, is all that is needed to clean the stand up lift. The lift can be cleaned with non-abrasive cleaners.

Adjusting the Base

NOTE: For this procedure, refer to FIGURE 7.2.

- 1. Check that the legs are square when in the closed position.
- 2. Place a square on the inside of the legs and base to determine the 90° alignment.
- 3. Adjust the linkage rods until 90° alignment is achieved.

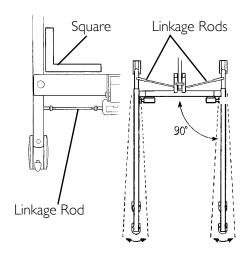


FIGURE 7.2 Adjusting the Base

Adjusting the Knee Pad Height

NOTE: For this procedure, refer to FIGURE 7.3.

1. Pick a height setting that will be comfortable to the patient and provide the necessary support.

NOTE: The knee pad should be positioned so that the knee portion of the leg contacts the pad.

- 2. Using both hands, pull both adjustment pins outward at the same time.
- 3. Position the knee pad to the desired height and release adjustment pins into the corresponding alignment holes.
- 4. Check to make sure that both pins are engaged.

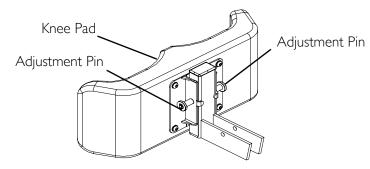


FIGURE 7.3 Adjusting the Knee Pad Height

Replacing the Knee Pad

NOTE: For this procedure, refer to FIGURE 7.4.

- 1. Remove the four button screws and washers that secure existing knee pad to the stand up lift.
- 2. Remove the existing knee pad from stand up lift.
- 3. Position the mounting holes in the new knee pad with the mounting holes in the stand up lift.
- 4. Using the existing hardware, secure the new knee pad to the stand up lift.

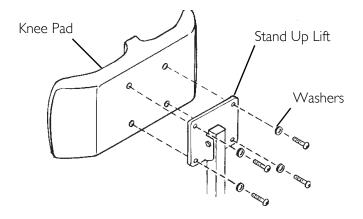


FIGURE 7.4 Replacing the Knee Pad

Replacing the Padded Cover

NOTE: For this procedure, refer to FIGURE 7.5.

- 1. Pull fastening strips on the existing padded cover apart.
- 2. Remove the existing padded cover from the lift arm.
- 3. Position the new padded cover around the lift arm.
- 4. Secure fastening strips on the new padded cover together.

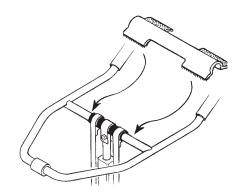


FIGURE 7.5 Replacing the Padded Cover

Replacing the Mast Actuator

CAUTION

DO NOT overtighten the nut and bolt. This damages the mounting bracket.

NOTE: For this procedure, refer to FIGURE 7.6.

- 1. Remove the bottom nut, washer and shoulder bolt that secure the mast actuator to the mast mounting bracket.
- 2. Rest the lift arm on your shoulder and remove the top nut, bolt, bracket and bushing from the lift arm mounting bracket.
- 3. Remove the mast actuator.
- 4. Reverse the above steps for installation of the new mast actuator.

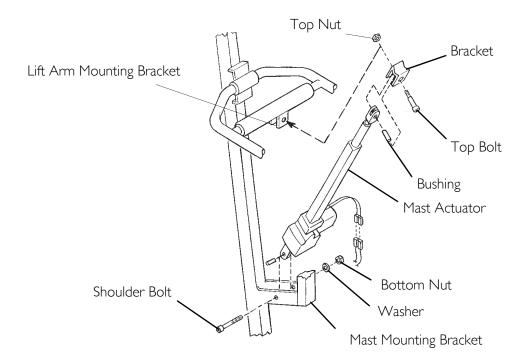


FIGURE 7.6 Replacing the Mast Actuator

Replacing Casters/Forks

Replacing Rear Casters

NOTE: For this procedure, refer to FIGURE 7.7

- 1. Place the lift on its side.
- 2. Remove the bolt and locknut that secure the existing rear caster to the fork.

NOTE: The bushing will be loose and may fall out of the caster.

NOTE: Existing bushing will be reused. Examine and replace if worn.

- 3. Install the new/existing bushing into the new rear caster.
- 4. Line up the mounting holes in the new rear caster and the fork.
- 5. Install the bolt through the fork and new rear caster and tighten securely with the locknut.

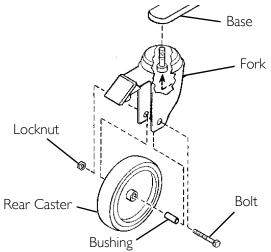


FIGURE 7.7 Replacing Rear Casters

Replacing Front Casters

NOTE: For this procedure, refer to FIGURE 7.8.

- 1. Place the lift on its side.
- 2. Remove the bolt and locknut that secure the existing front caster assembly to the fork.

NOTE: The front caster assembly consists of two casters and a washer in between.

NOTE: The washer will fall out from between the two casters.

NOTE: Washer will be reused. Examine and replace if worn.

- 3. Position the new/existing washer between the two new casters.
- 4. Line up the mounting holes in the new front caster assembly and the fork.
- 5. Install the bolt through the fork and the new front caster assembly and tighten securely with the locknut.

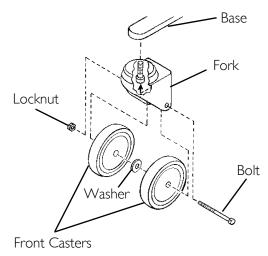


FIGURE 7.8 Replacing Front Casters

Replacing Forks

⚠ WARNING

Ensure that there is sufficient room to turn stand up lift on its side and that floor area is clear of debris. Otherwise, injury to personnel or damage to stand up lift may occur.

NOTE: For this procedure, refer to FIGURE 7.7 and FIGURE 7.8 on page 36.

- 1. Place the stand up lift on its side.
- 2. Remove the front or rear caster from the lift. Refer to <u>Replacing Casters/Forks</u> on page 36.
- 3. Unscrew the existing fork from the base.
- 4. Install the new fork onto the base.
- 5. Install the front or rear caster onto the stand up lift. Refer to <u>Replacing Casters/Forks</u> on page 36.
- 6. Stand the stand up lift back up.

NOTES

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/user of our products.

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

Invacare warrants the products manufactured to be free from defects in materials and workmanship for a period of three years on the lift and one year on the electric components from the date of purchase. If within such warranty period 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 on the back cover, provide dealer's name, address, date of purchase, indicate nature of the defect.

Invacare Corporation will issue a serialized return authorization. The defective unit or parts MUST be returned for warranty inspection using the serial number, when applicable as identification within 30 days of return authorization date. DO NOT return products to our factory without our prior consent. C.O.D. shipments will be refused; please prepay shipping charges.

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 PROBLEMS ARISING FROM NORMAL WEAR OR FAILURE TO ADHERE TO THE INSTRUCTIONS IN THIS MANUAL.

THE FOREGOING WARRANTY IS EXCLUSIVE AND IN LIEU OF ANY OTHER EXPRESS WARRANTIES. IMPLIED WARRANTIES, IF ANY, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, SHALL NOT EXTEND BEYOND THE DURATION OF THE EXPRESSED WARRANTY PROVIDED HEREIN AND THE REMEDY FOR VIOLATIONS OF ANY IMPLIED WARRANTY SHALL BE LIMITED TO REPAIR OR REPLACEMENT OF THE DEFECTIVE PRODUCT PURSUANT TO THE TERMS CONTAINED HEREIN. INVACARE SHALL NOT BE LIABLE FOR ANY CONSEQUENTIAL OR INCIDENTAL DAMAGES WHATSOEVER.

SOME STATES DO NOT ALLOW EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGE, OR LIMITATION ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE EXCLUSIONS AND LIMITATIONS MAY NOT APPLY TO YOU.

THIS WARRANTY SHALL BE EXTENDED TO COMPLY WITH STATE OR PROVINCIAL LAWS AND REQUIREMENTS.



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