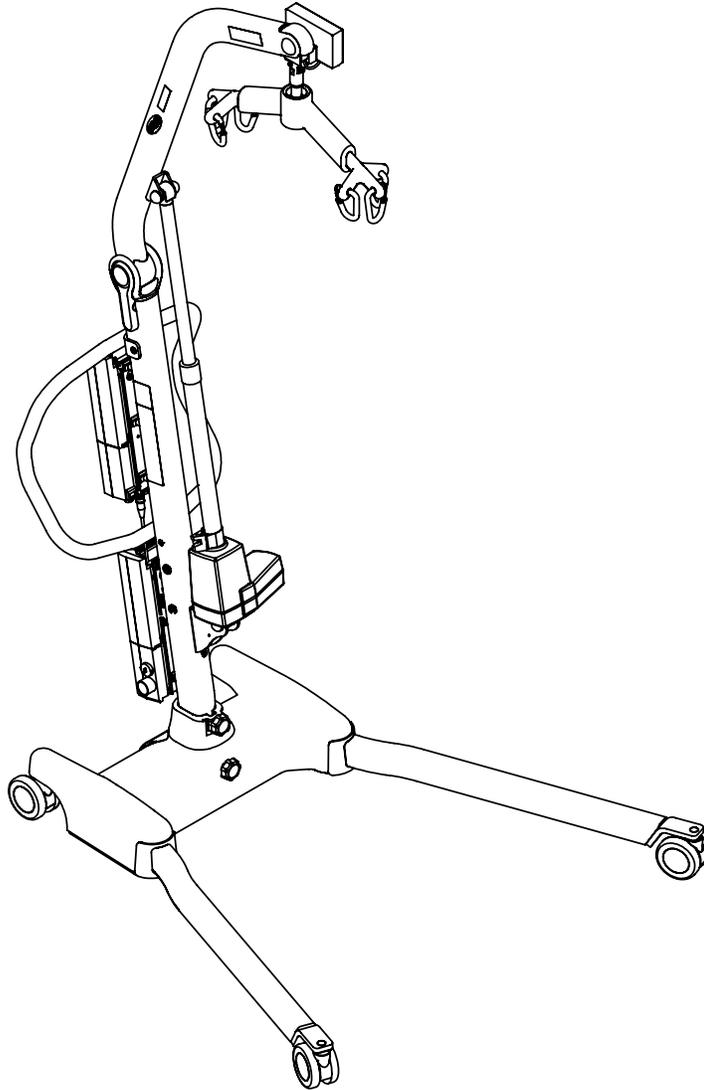


Jasmine™ Patient Lift



DEALER: This manual **MUST** be given to the user of this product.

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



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.

ACCESSORIES 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.

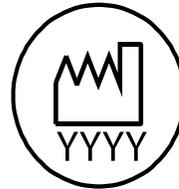
SYMBOL LEGEND



"ATTENTION, see instructions for use".

CAUTION - Pinch Points, fingers could be pinched.

WARNING - When positioning Lift, be aware of the position of the Swivel Bar and the patient. Injury could occur.



"Date of Manufacture"



Device contains Lead Acid batteries. **DO NOT** dispose of batteries in normal household waste. They **MUST** be taken to a proper disposal site. Contact your local waste management company for information.

EMERGENCY Mechanical Lowering - Pull UP on EMERGENCY Button. Push DOWN on Boom.

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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 or minor injury or both.

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.s

LABEL LOCATION

⚠ WARNING

Most pivot **MUST** be tight to ensure safe use of your patient lift. Bolt **MUST** be checked at least every six (6) months in conjunction with periodic maintenance. See Owner's Manual.

P/N 1130200 Rev. B

Sling Sizes

				
Small Navy	Medium Purple	Large Green	XL Blue	XXL Black

⚠ WARNING
USE ONLY INVACARE SLINGS and LIFT ACCESSORIES.
1154553 REV. A

⚠ WARNING



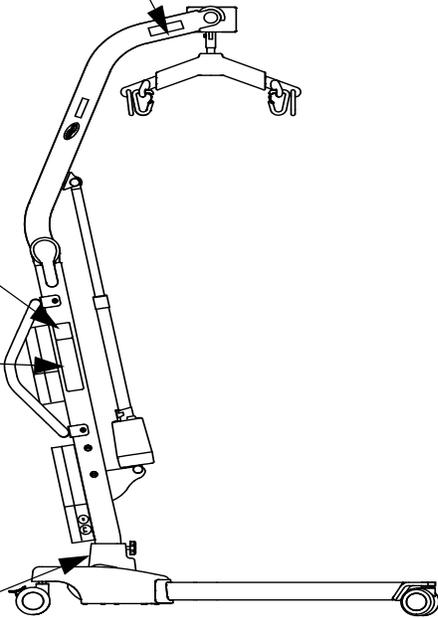
BEFORE using the Patient Lift, **READ** and **UNDERSTAND** the Owner's Manual for proper operation and safety procedures.

⚠ WARNING

WEIGHT LIMITATION 500 lbs.
The Invacare Patient Lift is **NOT** a transport device.
DO NOT roll casterbase over any uneven surfaces that may cause the Patient Lift to tip over.
DO NOT lock the casters of the Patient Lift when lifting an individual. Casters **MUST** be left unlocked to allow the Patient Lift to stabilize during lifting procedures.
USE ONLY INVACARE SLINGS and LIFT ACCESSORIES.
USE ONLY the appropriate Patient Lift components for maintenance and replacement. Refer to Owner's Manual for periodic maintenance procedures.
Customer Service:
1154555 REV. B

⚠ WARNING Risk of injury or damage. Only use the Jasmine mast with this base.

P/N 1171781 Rev A



PRODUCT PARAMETERS

Jasmine Patient Lift

Height at Sling Hook-up - MAX.:	74.6 inches
Height at Sling Hook-up - MIN.:	16.4 inches
Base Width OPEN:	46.7 inches
Base Width CLOSED:	25.8 inches
Base Height (Clearance):	4.8 inches
Base Length:	49 inches
Caster Size (FRONT/REAR):	4.0 inches
Weight Capacity:	500 lbs
Weight Out of Carton:	98 lbs
Battery:	24V DC (RECHARGEABLE)
Charger Input:	100-240V AC
Charger Output/Charging Time:	29.5V DC Max 6 hours
Audio Low Battery Alarm:	Yes
Motor Safety Devices:	Anti-Entrapment
*Approx. Lifts per Charge:	*100-200 Cycles per charge
Limited Warranty Lift/Electronics:	5 Years/2 Years
Emergency Stop Button:	Yes

*NOTE: Varies depending upon load and stroke.

Jasmine Scale JLS5

Weight Range:	Up to 500 lbs (226.7 Kg)
Resolution:	+/- 0.2 lbs (0.1 Kg)
Display:	Liquid Crystal Digital
Automatic Power Down:	Two (2) minutes
Size:	5-3/4 L X 3-5/8 W X 4 H
Weight:	.55 lbs
Power:	Nine (9) Volt Alkaline battery (included)
Battery Life:	Approximately 1500 readings
Temperature Range:	50° To 104°F (10° To 40°C)

SECTION I—GENERAL GUIDELINES

⚠ WARNING

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

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

The Invacare patient 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).

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.

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

If the patient lift is used in the area of a shower or bath, ensure that the patient lift is wiped clean of any moisture after use. DO NOT store the lift in a damp area or in a damp condition. Periodically inspect all components of the patient lift for signs of corrosion. Replace all parts that are corroded or damaged.

Assembling the Lift

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

Weight Limitation

DO NOT exceed the maximum weight limitation of the patient lift. The weight limitation for the Jasmine Patient Lift is 500 lbs.

Using the Sling

The Jasmine Patient Lift can be used with the standard swivel bar or an optional cradle attachment. The tilting cradle attachment enables a single caregiver to more easily position a patient in an upright and seated position.

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 patient 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.

Operating the Lift

Although Invacare recommends that two assistants be used for all lifting preparation, transferring from and transferring to 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.

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

Lifting the Patient

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

Before transferring a patient from a stationary object (wheelchair, commode or bed), slightly raise the patient off the stationary object and check that all sling attachments are secure. If any attachment is not correct, lower the patient and correct the problem, then raise the patient and check again.

During transfer, with patient suspended in a sling attached to the lift, DO NOT roll caster base over uneven surfaces that would create an imbalance of the patient lift and could cause the patient lift to tip over. Use steering handle on the mast at ALL times to push or pull the patient lift.

Transferring the Patient

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

Before transferring a patient from a stationary object (wheelchair, commode or bed), slightly raise the patient off the stationary object and check that all sling attachments are secure. If any attachment is not correct, lower the patient and correct the problem, then raise the patient and check again.

Before transferring, check that the product that you are transferring the patient to can withstand the patient's weight.

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

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 the bed or chair.

The mast pivot bolt MUST be tight to ensure safe use of the patient lift. The bolt MUST be checked at least every six months in conjunction with periodic maintenance.

Performing Maintenance

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

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. Perform this inspection every six months thereafter.

Casters and axle bolts require inspections every six months to check for tightness and wear.

SECTION 2—ASSEMBLY

Assembling the Patient Lift

Assembling the Mast Assembly to the Base

NOTE: The mast assembly may be removed from the base for storage or transporting. The mast assembly MUST be properly secured to the base assembly before use.

NOTE: For this procedure, refer to FIGURE 2.1.

1. Put the base on a level surface so all casters make contact with the floor.
2. Lock the rear casters. Refer to Detail "A".
3. Unscrew the top knob and remove it from the base.
4. Loosen the bottom knob, but leave it screwed into the base.
5. Connect the mast assembly cable (not shown) to the base cable (not shown).
6. Put the tube of the mast assembly into the hole in the base.
7. While supporting the mast assembly, tighten the bottom plastic knob.
8. Screw the top plastic knob into the hole in the base.

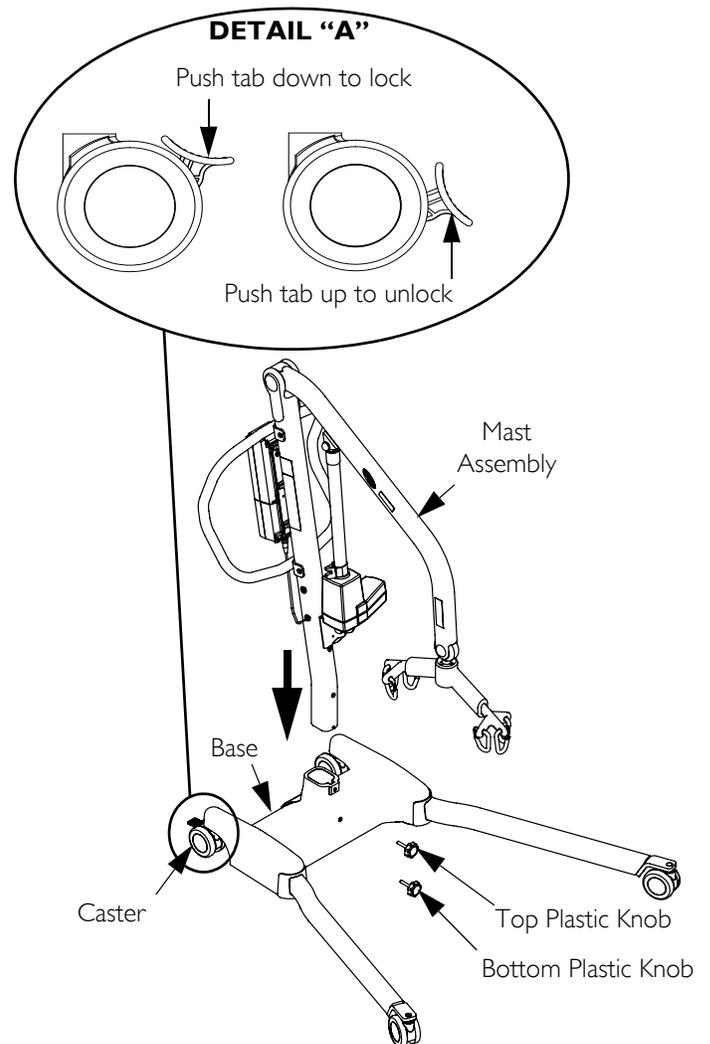


FIGURE 2.1 Assembling the Mast Assembly to the Base

Attaching the Battery Charger Mounting Bracket to the Wall

NOTE: For this procedure, refer to FIGURE 2.2.

1. Place the battery charger 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 a 1/8-inch gap between the screw head and the wall.
5. Put the battery charger mounting bracket onto the bottom mounting screw.
6. Drill the other two mounting holes.
7. Screw the mounting screws through the battery charger mounting bracket and into the wall. Tighten securely.

CAUTION

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

8. Put the battery charger in place on the mounting bracket.
9. Plug the battery charger into an electrical outlet.

NOTE: An LED will illuminate when power is applied to battery charger.

Attaching the Battery Charger to the Mast Assembly

⚠ WARNING

If the battery charger is attached to the mast assembly and is plugged into a wall outlet, make sure to unplug the battery charger from the wall outlet BEFORE using the patient lift. Failure to unplug the battery charger may result in injury or damage.

NOTE: For this procedure, refer to FIGURE 2.3.

1. Lock the rear casters to secure the lift in place while performing this procedure.
2. Remove the two mylar pieces covering the battery charger mounting holes on the back of the mast assembly.
3. Insert the hook screws into mounting holes.
4. Tighten the hook screws.
5. Mount the battery charger mounting bracket on the hook screws.
6. Charge the battery. Refer to [Charging the Battery](#) on page 13.

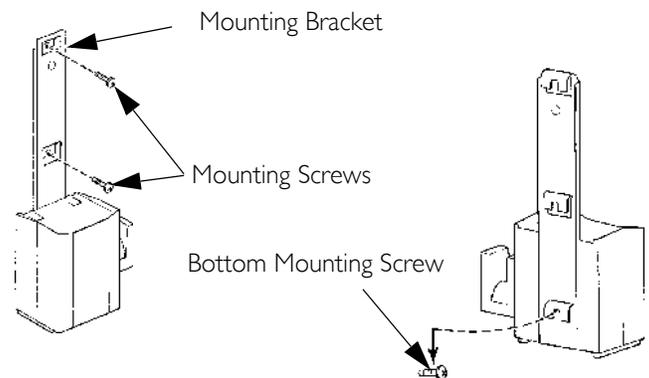


FIGURE 2.2 Attaching the Battery Charger Mounting Bracket to the Wall

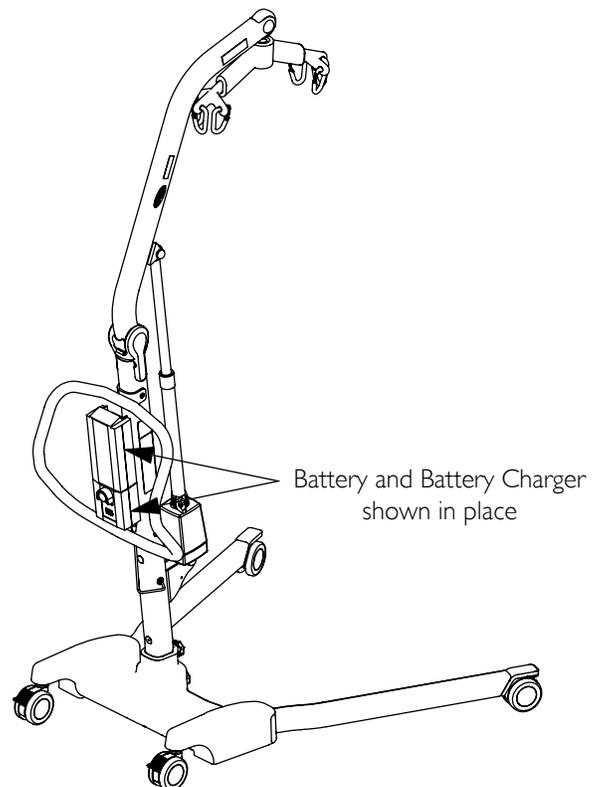


FIGURE 2.3 Attaching the Battery Charger to the Mast Assembly

SECTION 3—OPERATION

⚠ WARNING

DO NOT attempt to transfer 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 patient lift **MUST** be in the maximum open position for optimum stability and safety. If it is necessary to close the legs to maneuver the patient lift under a bed, close the legs only as long as it takes to position the patient lift over the patient and lift the patient off of the bed surface. When the legs of the patient lift are no longer under the bed, return the legs to the maximum open position.

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

Operating the Patient Lift

Locking/Unlocking the Rear Casters

NOTE: For this procedure, refer to DETAIL A.

- To lock the caster, push the tab down.
- To unlock the caster, push the tab up.

Raising/Lowering the Patient Lift

NOTE: For this procedure, refer to DETAIL B.

- To raise the patient lift, press the up button  on the hand control.

NOTE: If the patient lift is raised to the highest level, it may be necessary to pull down gently on the lift arms before the mast will begin to lower. Pull down gently on both arms at the same time to avoid making the lift unstable.

- To lower the patient lift, press the down button  on the hand control.

Closing/Opening the Legs

NOTE: For this procedure, refer to DETAIL B.

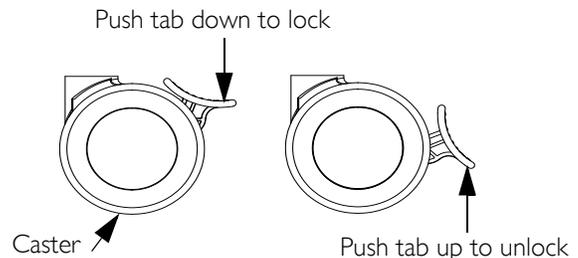
- To close the legs, press the close button  on the hand control.
- To open the legs, press the open button  on the hand control.

Using the Emergency Stop

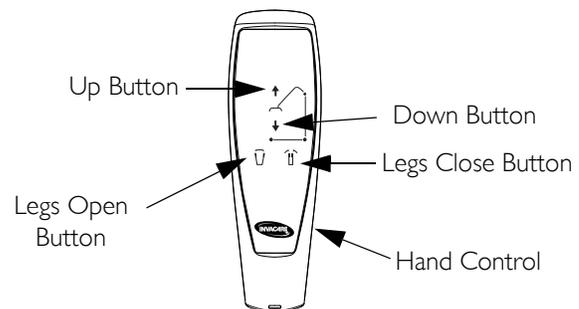
NOTE: For this procedure, refer to DETAIL C.

- Push the RED emergency button in to stop the lift arms from raising or lowering.
- To reset, turn the emergency button clockwise.

DETAIL “A” LOCKING/UNLOCKING THE REAR CASTERS



DETAIL “B” - HAND CONTROL DETAILS



DETAIL “C” - EMERGENCY STOP

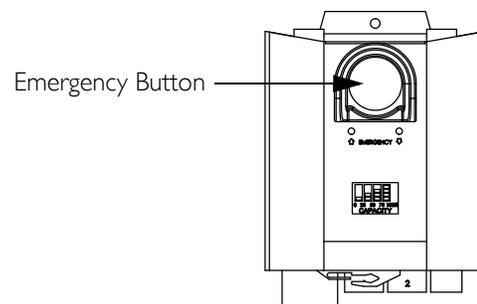


FIGURE 3.1 Operating the Patient Lift

Activating a Mechanical Emergency Release

Primary Emergency Release

NOTE: For this procedure, refer to FIGURE 3.2.

NOTE: This procedure will bring the boom down or lift it up if the hand control is not functioning properly.

To activate the primary emergency release, insert a pen into the hole labeled Emergency Up or Emergency Down on the control box.

Secondary Emergency Release

NOTE: For this procedure, refer to FIGURE 3.3.

NOTE: All patient lift actuators are equipped with a mechanical emergency release. The mechanical release will enable the actuator to retract without power.

NOTE: Use the primary emergency release first before using the secondary emergency release procedure. This procedure should only be used if the primary emergency release procedure is not functioning or is unreachable.

NOTE: The lift MUST be under a load for the mechanical release to function.

To activate the secondary emergency release, pull up on the RED emergency grip and pull down on the boom at the same time.

Charging the Battery

NOTE: For this procedure, refer to FIGURE 3.4.

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

NOTE: An audible alarm will sound when battery is low.

1. Lift up on the handle on the back of the battery.
2. Lift the battery up and away from the control box.

⚠ CAUTION

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

3. Place the battery on the battery charger. Push the top of the battery against the mounting bracket until there is an audible click.

NOTE: The charge LED will illuminate. When charged, the LED will stop illuminating.

NOTE: It will take approximately four hours to charge a battery that requires a full charge.

4. Lift up on the handle on the back of the battery.
5. Lift the battery up and away from the battery charger.

⚠ CAUTION

Make sure there is an audible click when mounting battery onto the control box to ensure proper mounting. Otherwise, injury or damage may occur.

6. Place the battery on the control box. Push the top of the battery against the mounting bracket until there is an audible click.

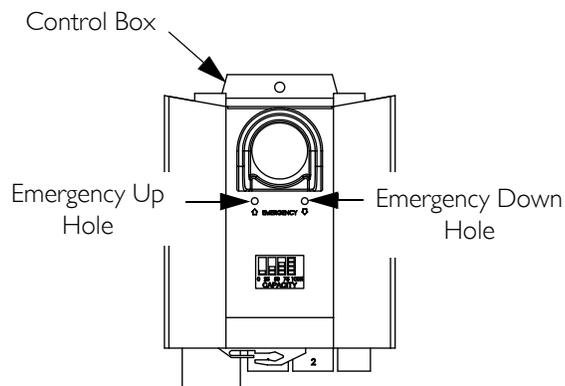


FIGURE 3.2 Primary Emergency Release

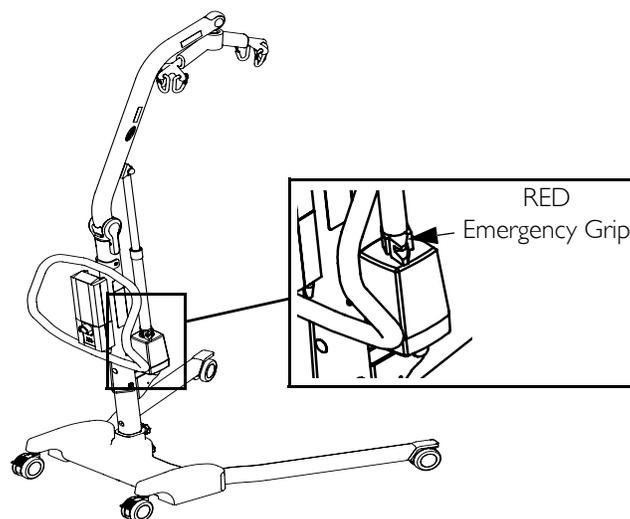


FIGURE 3.3 Secondary Emergency Release

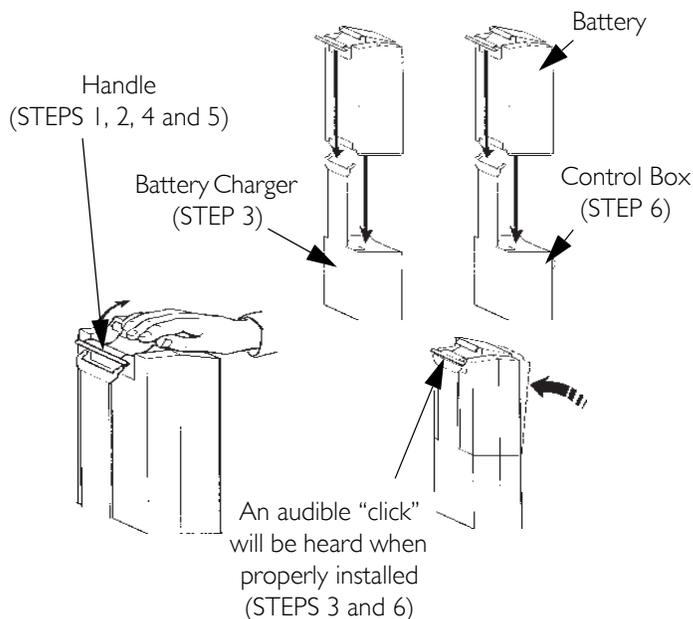


FIGURE 3.4 Charging the Battery

SECTION 4—LIFTING THE PATIENT

Preparing the Lift for Use

Positioning the Lift for Use

NOTE: For this procedure, refer to FIGURE 4.1.

NOTE: Refer to General Guidelines on page 8 in this manual before proceeding further and observe all warnings indicated.

NOTE: Before positioning the legs of the patient lift under a bed, make sure that the area is clear of any obstructions.

1. With the legs of the base open and locked, use the steering handle to push the patient lift into position.
2. Lower the patient lift for easy attachment of the sling.

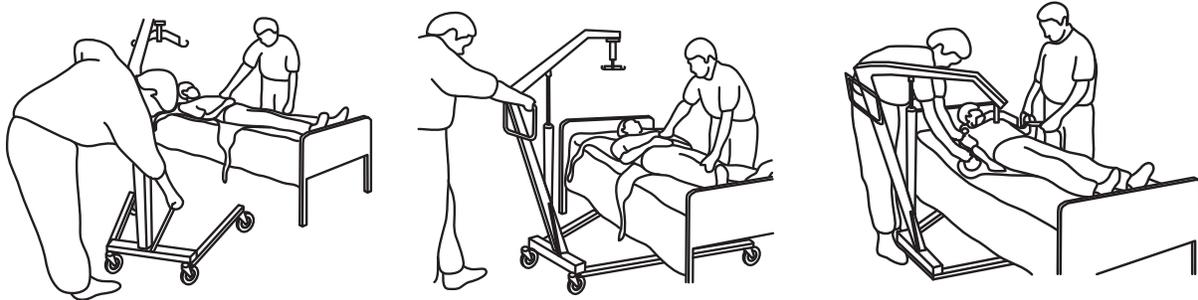


FIGURE 4.1 Positioning the Lift for Use

Attaching a Sling to the Swivel Bar

⚠ WARNING

The maximum weight capacity of the Jasmine Patient Lift is 500 lbs. **DO NOT** exceed the maximum weight capacity of the patient lift otherwise, injury or damage may occur.

Before using the sling, read and understand all operating instructions provided in the sling owner's manual.

Bleached, torn, cut, frayed or broken slings are unsafe and could result in injury. Discard **IMMEDIATELY**. **DO NOT** alter slings in any way.

Invacare slings are made specifically for use with Invacare Patient Lifts. For the safety of the patient, **DO NOT** use slings and patient lifts of different manufacturers.

NOTE: For this procedure, refer to FIGURE 4.2 on page 15.

1. Place the straps of the sling over hooks of the swivel bar.
2. Match the corresponding colors on each side of the sling for an even lift of the patient, refer to FIGURE 4.2.

NOTE: The Invacare Swivel Bars have three hookup points per side.

⚠ WARNING

The patient lift **MUST** be moved with the push handles on the mast assembly - otherwise, injury or damage may occur.

DO NOT move the patient outside the center of gravity achieved after the patient is suspended in the sling and the patient lift adjusts.

3. Lift the patient. Refer to Lifting/Moving the Patient on page 16.
-

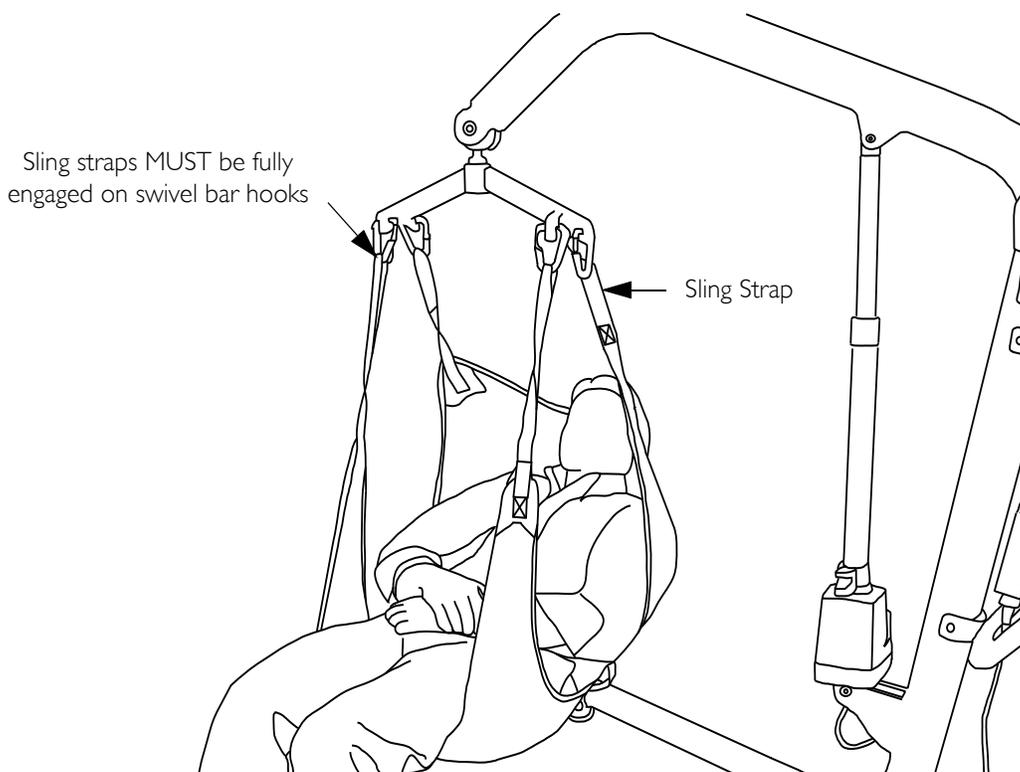


FIGURE 4.2 Attaching a Sling to the Swivel Bar

Attaching a Sling to the Optional Cradle Attachment

⚠ WARNING

The maximum weight capacity of the Jasmine Patient Lift is 500 lbs. **DO NOT** exceed the maximum weight capacity of the patient lift otherwise, injury or damage may occur.

Before using the sling, read and understand all operating instructions provided in the sling owner's manual.

Bleached, torn, cut, frayed or broken slings are unsafe and could result in injury. Discard **IMMEDIATELY**. **DO NOT** alter slings in any way.

Invacare slings are made specifically for use with Invacare Patient Lifts. For the safety of the patient, **DO NOT** use slings and patient lifts of different manufacturers.

NOTE: For this procedure, refer to FIGURE 4.3 on page 16.

1. Place the straps of the sling over the pegs on the cradle attachment.
2. Match the corresponding colors on each side of the sling for an even lift of the patient.

NOTE: The Invacare Cradle Attachment has four hookups.

⚠ WARNING

The patient lift **MUST** be moved with the push handles on the mast assembly. **DO NOT** use the cradle attachment handle to move the patient lift - otherwise, injury or damage may occur.

DO NOT move the patient outside the center of gravity achieved after the patient is suspended in the sling and the patient lift adjusts.

3. Lift the patient. Refer to [Lifting/Moving the Patient](#).

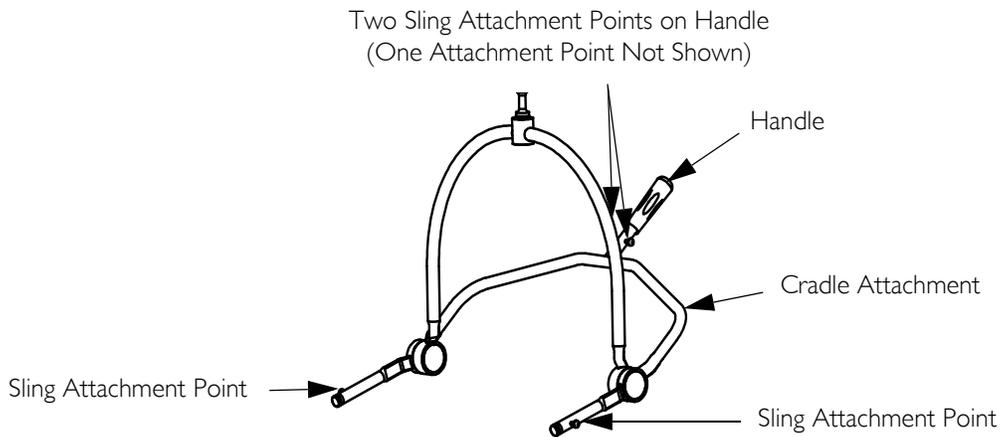


FIGURE 4.3 Attaching a Sling to the Optional Cradle Attachment

Lifting/Moving the Patient

⚠ WARNING

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

DO NOT move the patient if the sling is not properly connected to the hooks of the swivel bar. When the sling is elevated a few inches off the surface of the bed and before moving the patient, check again to make sure that the sling is properly connected to the hooks of the swivel bar. 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.

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

NOTE: For this procedure, refer to FIGURE 4.4 on page 17.

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

1. Press the up button on the hand control to raise the patient high enough to clear the bed surface. The patient's full body weight will be supported by the lift.

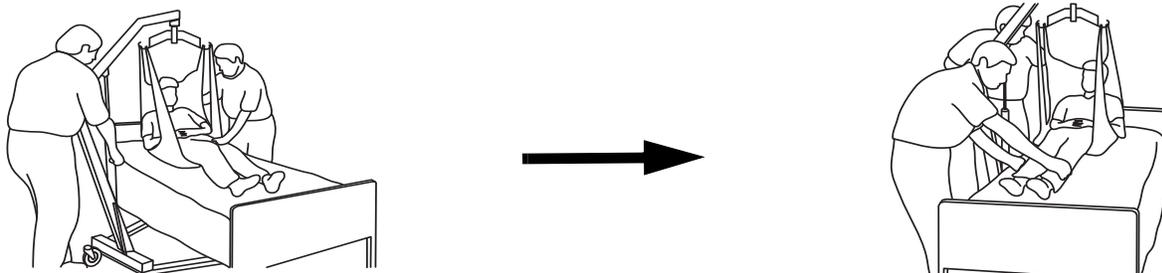
NOTE: The boom will stay in this position until the up or down buttons are pushed on the hand control.

2. Place the patient's arms inside of the sling.
3. When the patient is clear of the bed surface, swing their feet off the bed (Detail "B").
4. Using the handle, move the patient lift away from the bed.
5. Turn the patient so that he/she faces assistant operating the patient lift (Detail "C").
6. Press the down button to lower the patient so that his/her feet rest on the base of the lift, straddling the mast.

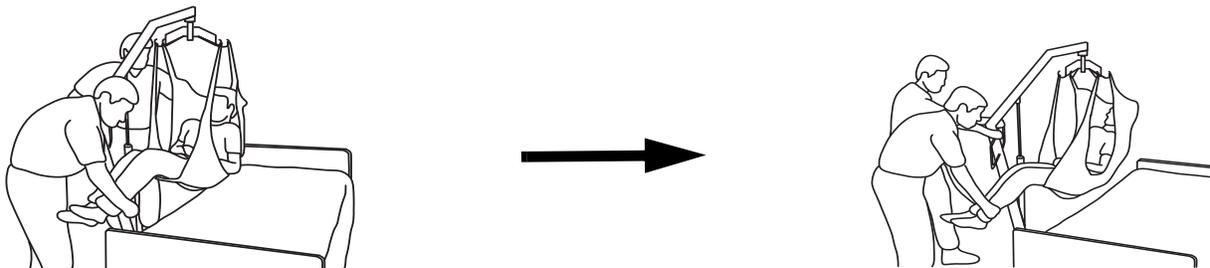
NOTE: The lower center of gravity provides stability making the patient feel more secure and the lift easier to move.

7. Push the lift with both hands firmly on the steering handle.

DETAIL “A” - LIFTING THE PATIENT



DETAIL “B” - MOVING THE PATIENT



DETAIL “C” - MOVING THE PATIENT LIFT AWAY FROM THE BED

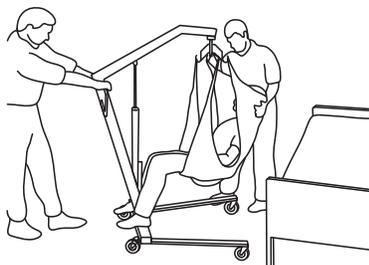


FIGURE 4.4 Lifting/Moving the Patient

SECTION 5—TRANSFERRING THE PATIENT

⚠ 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 hooks of the swivel bar. When the sling is a few inches off the surface of the bed and before moving the patient, check to make sure that the sling is properly connected to the hooks of the swivel bar. 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 patient lifts of different manufacturers. Invacare slings are made specifically for use with Invacare patient lifts. Otherwise, injury or damage may occur.

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

The legs of the patient lift **MUST** be in the maximum open position for optimum stability and safety. If it is necessary to close the legs to maneuver the patient lift under a bed, close the legs only as long as it takes to position the patient lift over the patient and lift the patient off the surface of the bed.

When the legs of the patient 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 bed or chair.

NOTE: The slings with commode openings are designed to be used with either a commode chair or standard commode. Invacare recommends that the sling remain connected to the swivel bar hooks during the patient's use of either the commode chair or standard commode.

NOTE: 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 Chair

NOTE: For this procedure, refer to FIGURE 5.1.

1. Lift the patient from the bed. Refer to [Lifting the Patient](#) on page 14.
2. Press the UP button on the hand control to elevate the patient high enough to clear the arms of the commode chair. Their weight will be supported by the patient lift.
3. Guide the patient onto the commode chair. This may require two assistants.
4. Press the DOWN button on the hand control to lower the patient onto the commode chair leaving the sling attached to the swivel bar hooks.
5. When complete, recheck the sling for correct attachments.
6. Press the UP button on the hand control to raise the patient off the commode chair.
7. When the patient is clear of the commode surface (using the steering handles), move the patient lift away from the commode chair.
8. To return the patient to bed, reverse the steps of [Lifting the Patient](#) on page 14.
9. To return or place the patient to a wheelchair, refer to [Transferring to a Wheelchair](#) on page 19.

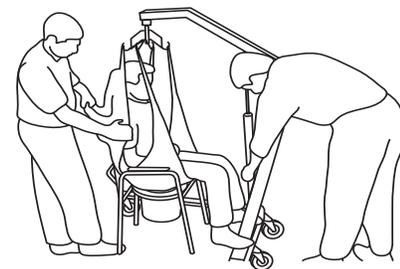
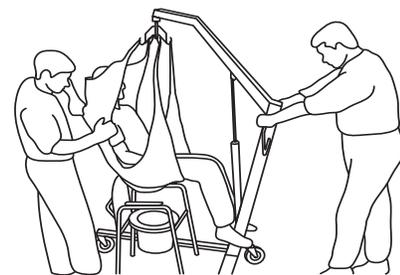


FIGURE 5.1 Transferring to a Commode Chair

Transferring to a Standard Commode

NOTE: The Invacare patient lift is NOT a transport device. If the bathroom facilities are not near the bed or if the patient lift cannot be easily maneuvered towards the commode, then the patient MUST be transferred to a wheelchair and transported to the bathroom facilities before using the patient lift again to position the patient on a standard commode. Refer to [Transferring to a Wheelchair](#) on page 19.

1. Use an empty patient lift to check if the patient lift can maneuver around the commode.
2. If the patient lift can maneuver around the commode, lift the patient from the bed. Refer to [Lifting the Patient](#) on page 14.
3. Move the patient to the commode.
4. Press the UP/DOWN buttons on the hand control to elevate the patient high enough to clear the commode. Their weight will be supported by the patient lift.
5. Guide the patient onto the commode. This may require two assistants.
6. Press the DOWN button on the hand control to lower the patient onto the standard commode leaving the sling attached to the swivel bar hooks.
7. When complete, recheck the sling for correct attachments.
8. Press the UP button on the hand control to raise the patient off the commode.
9. When patient is clear of the commode surface (using the steering handle), move the lift away from the commode.
10. To return the patient to bed, reverse the steps of [Lifting the Patient](#) on page 14.
11. To return or place patient to a wheelchair, refer to [Transferring to a Wheelchair](#).

Transferring to a Wheelchair

NOTE: For this procedure, refer to FIGURE 5.2.

1. Lift the patient from the bed. Refer to [Lifting the Patient](#) on page 14.
2. Press the legs open button until the legs are in the maximum open position.
3. Move the wheelchair into position.
4. Engage the wheel locks of the wheelchair.

⚠ WARNING

The wheel locks MUST be engaged before lowering the patient into the wheelchair. Otherwise, injury may result.

5. Use the straps or handles on the side and the back of the sling to guide the patient's hips as far back as possible into the seat for proper positioning.
6. Position the patient over the seat with their back against the back of the chair.
7. Begin to lower the patient pressing the DOWN button on the hand control.
8. Use two assistants - One assistant stands behind the chair and the other operates the patient lift. The assistant behind the chair pulls back on the grab handle (on select models) or sides of the sling to seat the patient well into the back of the chair.

NOTE: This will maintain a good center of balance and prevent the chair from tipping forward.

9. Leave the sling in place unless a divided leg sling was used. Remove a divided leg sling.
10. Reverse [Lifting the Patient](#) on page 14 to return the patient to the seating surface of the wheelchair.

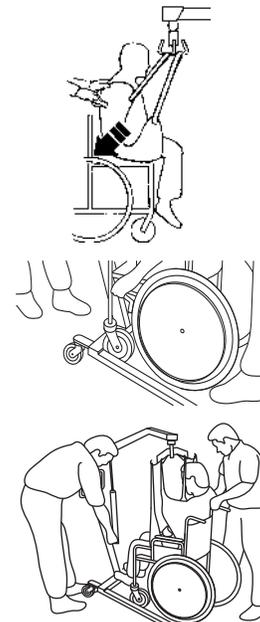


FIGURE 5.2 Transferring to a Wheelchair

SECTION 6—TROUBLESHOOTING

SYMPTOMS	FAULTS	SOLUTION
Patient Lift feels loose.	Mast/Base joint loose. Tie - Rods are loose.	Refer to <u>Replace the locknut.</u> on page 26.
Noisy or dry sound from pivots.	Needs lubrication.	Refer to <u>Lubricating the Lift</u> on page 22.
Electric actuator fails to lift when button is pressed.	Hand-control or actuator connector loose. Battery low. RED emergency stop button pressed IN. Battery not connected properly to control box. The connecting terminals are damaged. Electric actuator in need of service or load is too high.	Charge batteries. Refer to <u>Charging the Battery</u> on page 13. Rotate RED emergency stop button CLOCKWISE until it pops out. Reconnect the battery to the control box. Refer to <u>Charging the Battery</u> on page 13. Replace the battery pack. Refer to <u>Charging the Battery</u> on page 13. Refer to <u>Replacing the Boom Actuator</u> on page 22. Contact your Dealer.
Unusual noise from actuator.	Actuator is worn or damaged or spindle is bent.	Refer to <u>Replacing the Boom Actuator</u> on page 22.
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.
Lift arms will not lower during a power retraction.	Shoulder bolt at the junction of the boom and mast may not be properly installed.	Refer to <u>Replacing the Swivel Bar or Optional Cradle Attachment</u> on page 25.

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

SECTION 7—MAINTENANCE

Maintenance Safety Inspection Checklist

ITEM	INITIALLY	INSTITUTIONAL INSPECT/ADJUST MONTHLY	IN-HOME INSPECT EVERY SIX (6) 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.	X X X X	X X X X	X X X X
THE MAST Mast MUST be securely assembled to boom. Inspect for bends or deflections. Inspect pivot joints for wear.	X X X	X X X	X X X
THE BOOM Check all hardware and swivel bar supports. Inspect for bends or deflections. Inspect bolted joints of boom for wear. Inspect to ensure that the boom is centered 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 X X X	X X X X X X
THE SWIVEL BAR Check the bolt / hooks for wear or damage. Check sling hooks for wear or deflection. Inspect pivot joints for wear.	X X X	X X X	X X X
MAST AND BASE ELECTRIC ACTUATOR ASSEMBLIES Inspect hardware on mast, boom and base. Check for wear or deterioration. (IF DAMAGED, RETURN TO FACTORY) Cycle to ensure smooth quiet operation.	X X X	X X X	X X X
CLEANING 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

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

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

NOTE: Follow the maintenance procedures described in this manual to keep your patient lift in continuous service.

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

All parts of the Invacare 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 the casters, 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 him/her of your problem.

Lubricating the Lift

The Invacare lift is designed for minimum maintenance. However, a six (6) 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.

Refer to FIGURE 7.1 for lubrication points. Lubricate all pivot points. Wipe all excess lubricant from lift surface.

1. Swivel Bar
2. Boom Mounting Bracket
3. Boom/Mast Mount
4. Mast Mounting Bracket
5. Legs

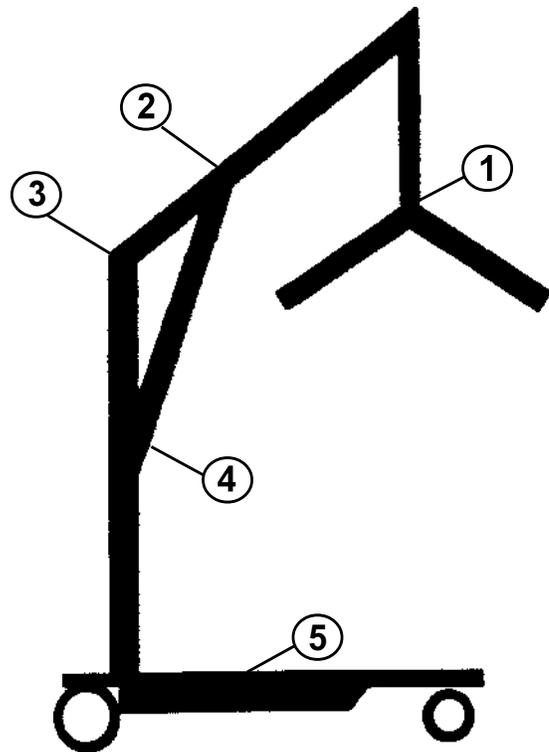


FIGURE 7.1 Lubricating the Lift

Detecting Wear and Damage

It is important to inspect all stressed parts, such as slings, swivel bar, cradle attachment 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. Refer to the sling owner's manual for instructions. A soft cloth, dampened with water and a small amount of mild detergent, is all that is needed to clean the patient lift. The lift can be cleaned with non-abrasive cleaners.

Replacing the Boom Actuator

NOTE: For this procedure, refer to FIGURE 7.2 on page 23.

NOTE: If possible, use an assistant while removing and replacing the boom actuator.

1. Unplug the boom actuator from the control box on the mast assembly. Thread the actuator lead through the actuator lead routing hole in the mast assembly.
2. Remove the hardware that secures the top of the boom actuator to the boom actuator mounting bracket.
 - A. Remove the rubber caps from the locknut and socket head screw.
 - B. Remove the socket head screw, washer, bearing, nylon washers, bushing, bearing, washer, flat washer and locknut.

NOTE: Lower the boom carefully to a resting position after the top of the boom actuator is removed from the boom actuator mounting bracket.

3. Remove the hardware that secures the bottom of the boom actuator to the boom actuator mast mounting bracket.
 - A. Remove the rubber caps from the locknut and socket head screw.
 - B. Remove the socket head screw, washer, bearing, nylon washers, bushing, bearing, washer, flat washer and locknut.

4. Reverse STEPS 1-3 to replace the boom actuator.

⚠ CAUTION

DO NOT overtighten the locknuts and socket head screws. This damages the mounting bracket.

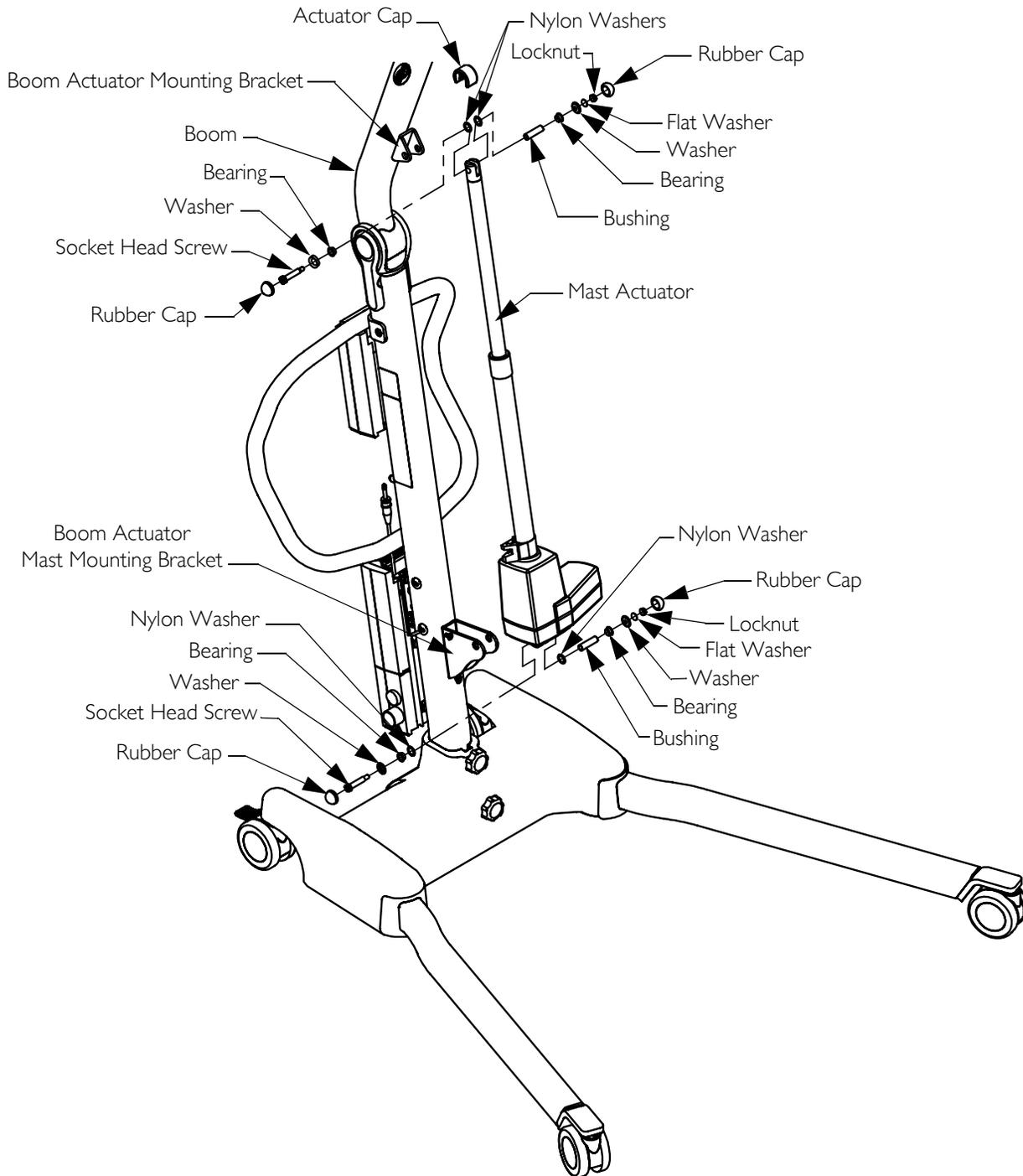


FIGURE 7.2 Replacing the Boom Actuator

Replacing the Leg Actuators

NOTE: For this procedure, refer to FIGURE 7.3.

NOTE: If the legs of the patient lift do not open and close properly, it may be necessary to replace one or both of the leg actuators.

1. Test the operation of the legs:
 - Press the close button on the hand control to close the legs.
 - Press the open button on the hand control to open the legs.
2. While holding on to the mast handles, carefully tip the patient lift back until it rests on the floor.

NOTE: It is necessary to remove both small base covers before removing the large base cover.

3. Remove the sixteen screws that attach the small base covers to the base.
4. Remove the eight pan head screws that attach the large base cover to the base.

NOTE: If the left or the right leg of the patient lift does not operate properly, perform the following steps on the side of the base necessary to replace the actuator. If both legs do not operate properly, perform this replacement procedure on both sides of the base.

5. Locate and disconnect the leg actuator lead wires.

NOTE: The actuator lead wires will be visible after the large base cover is removed.

6. Remove the socket head screw and washer that attach the leg actuator to the base.
7. At the other end of the actuator, remove the socket head screw and nut that attach the leg actuator to the leg bracket.
8. If necessary, repeat STEPS 5-7 on the opposite side of the base to remove the other leg actuator.
9. To replace the actuator(s), reverse STEPS 5-7.

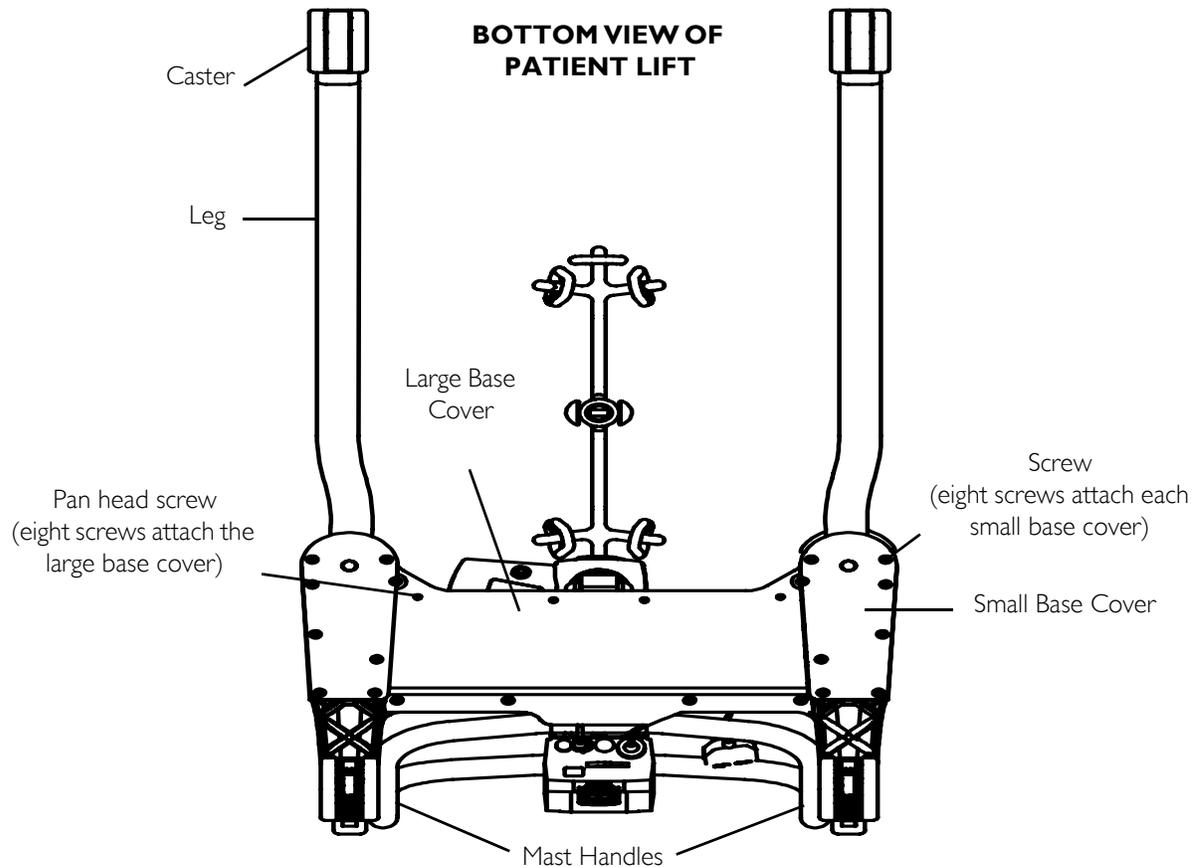


FIGURE 7.3 Replacing the Leg Actuators

Replacing the Swivel Bar or Optional Cradle Attachment

⚠ WARNING

After the first year of use, the hooks of the swivel bar and mounting brackets of the boom should be inspected every six months to determine the extent of wear. If these parts become worn, replacement **MUST** be made.

NOTE: For this procedure, refer to FIGURE 7.4.

1. Remove the side covers.

NOTE: Support the swivel bar or cradle attachment from underneath while removing the attaching hardware.

2. Remove the socket head screw, washer, bushings, nylon spacers, washer and nut that attach the swivel bar or cradle attachment to the boom.

NOTE: When the attaching hardware is removed, the pin, washer and o-ring will become loose.

3. To install the swivel bar, reverse STEPS 1-2.

⚠ CAUTION

DO NOT overtighten the nut and socket head screw. This damages the mounting bracket.

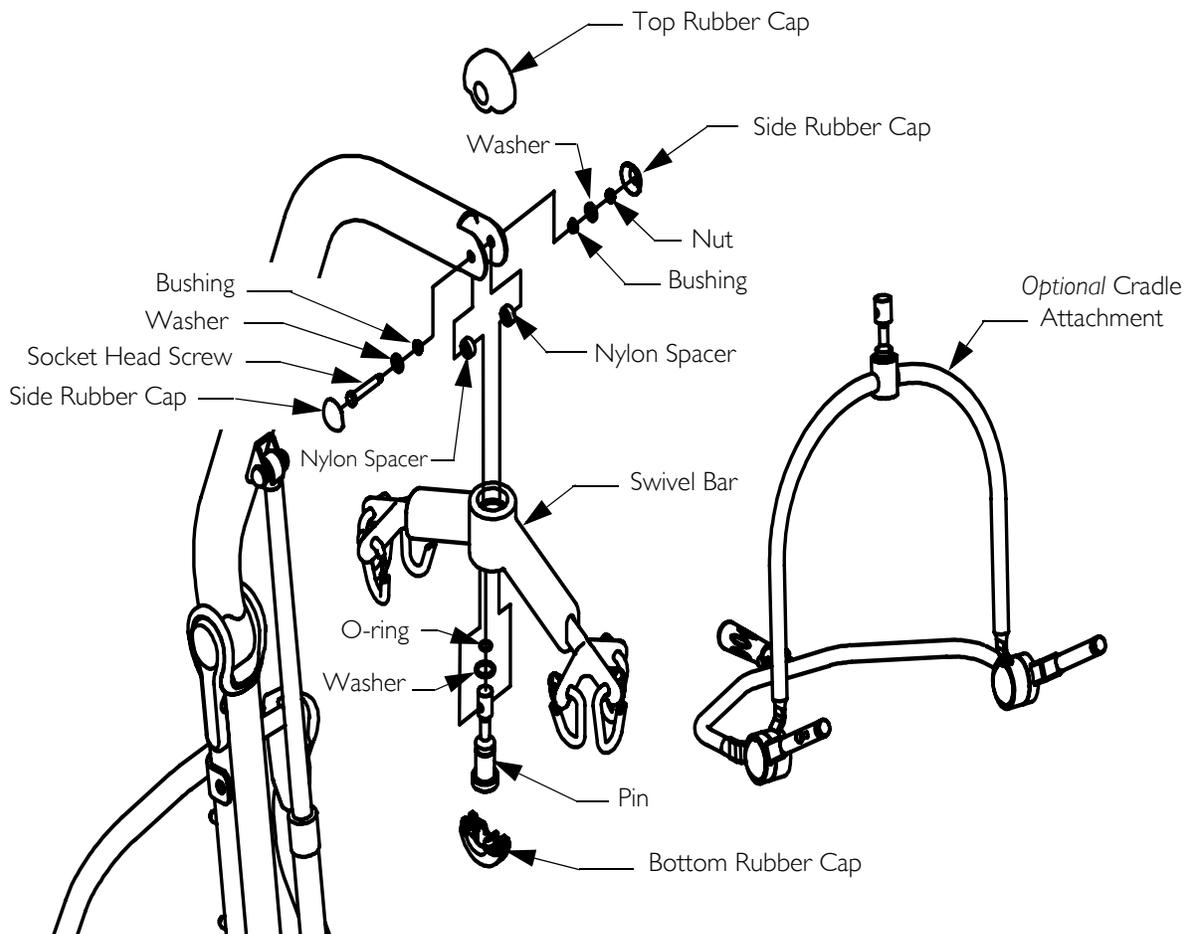


FIGURE 7.4 Replacing the Swivel Bar or Optional Cradle Attachment

Checking and Tightening Mast Pivot

NOTE: For this procedure, refer to FIGURE 7.5.

1. To gain access to the attaching hardware, remove the covers that are on either side of the mast.
2. Check that the locknut is tight and secure on the screw.
3. If needed, do one or more of the following:
 - Tighten locknut and back-off the locknut 1/8 of a turn.
 - Replace the locknut.

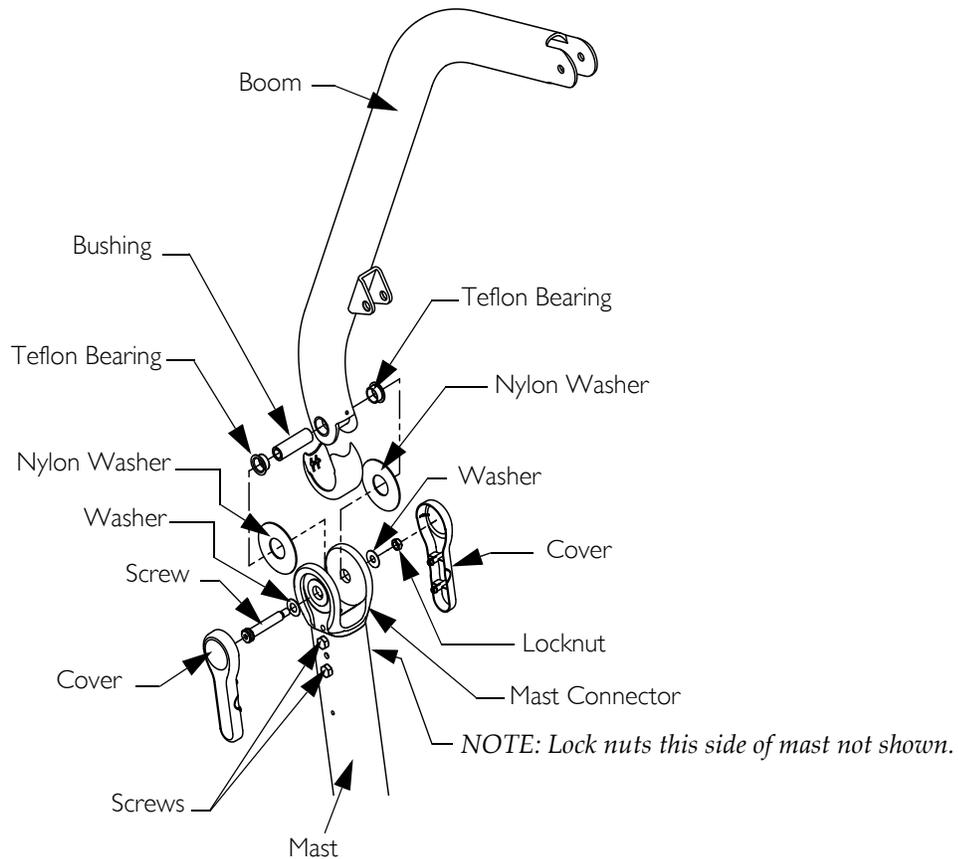


FIGURE 7.5 Checking and Tightening Mast Pivot

SECTION 8—ACCESSORIES

Jasmine Scale JLS5

The Jasmine Scale is a compact precision scale system designed specifically for the Invacare Patient Lift System.

Removing the Swivel Bar/Cradle Attachment

NOTE: For this procedure, refer to FIGURE 8.1.

1. Remove the side rubber caps.

NOTE: Support the swivel bar or cradle attachment from underneath while removing the attaching hardware.

2. Remove the socket head screw, washer, bushings, top rubber cap, nylon spacers, washer and nut that attach the swivel bar or cradle attachment to the boom.

NOTE: When the attaching hardware is removed, the pin, washer and o-ring will become loose.

NOTE: Save the socket screw, small steel washer and locknut to secure the Jasmine Scale to the boom.

NOTE: Save the remaining hardware for future use of the swivel bar or cradle attachment without the scale.

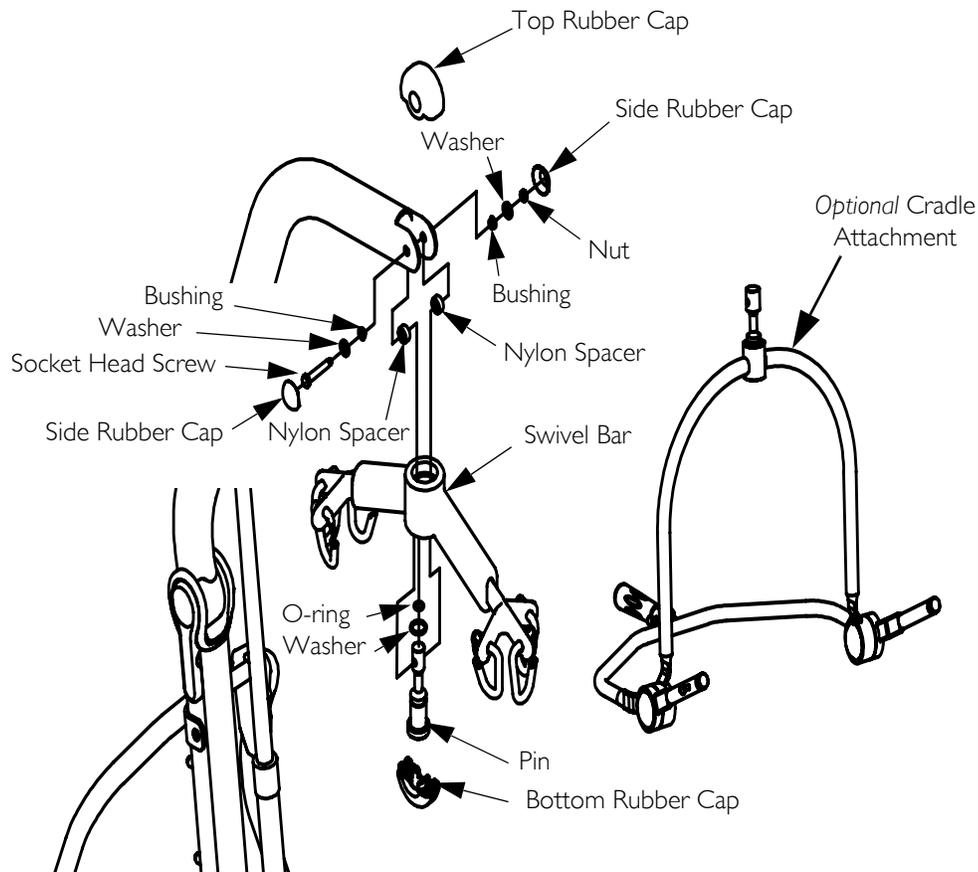


FIGURE 8.1 Removing the Swivel Bar/Cradle Attachment

Installing the Jasmine Scale

NOTE: For this procedure, refer to FIGURE 8.2, Detail "A".

⚠ WARNING

The Jasmine Scale **MUST** be installed in the orientation shown in FIGURE I. Otherwise, injury may occur.

NOTE: If the scale is installed incorrectly, the swivel bar or cradle attachment will not rotate freely, limiting patient movement during transfer.

1. Align the holes in the top rubber cap, the holes in the Jasmine scale mounting bracket and the nylon spacers with the holes in the boom mounting bracket. Refer to Detail "A" for hardware orientation.
2. Attach the Jasmine scale to the boom mounting bracket with a screw, washer, bearings, flat washer and locknut. Refer to Detail "A" for hardware orientation.

NOTE: Ensure the shaft of the screw passes through both sides of the boom mounting bracket.

Installing the Swivel Bar or Cradle Attachment

NOTE: For this procedure, refer to FIGURE 8.2, Detail "B".

NOTE: The cradle attachment attaches in the same way that the swivel bar attaches to the Jasmine Scale.

1. Put the washers on the swivel bar pin.
2. Insert the swivel bar pin through the swivel bar.
3. Align the holes in the swivel bar pin with the hole in the bottom of the Jasmine scale mounting bracket.
4. Attach the swivel bar pin to the Jasmine scale with a screw and locknut. Tighten securely.
5. Snap a side rubber cap into place on each side of the boom mounting bracket.

⚠ WARNING

After **ANY** adjustments, repair or service and **BEFORE** use, make sure all attaching hardware is tightened securely - otherwise injury or damage may occur.

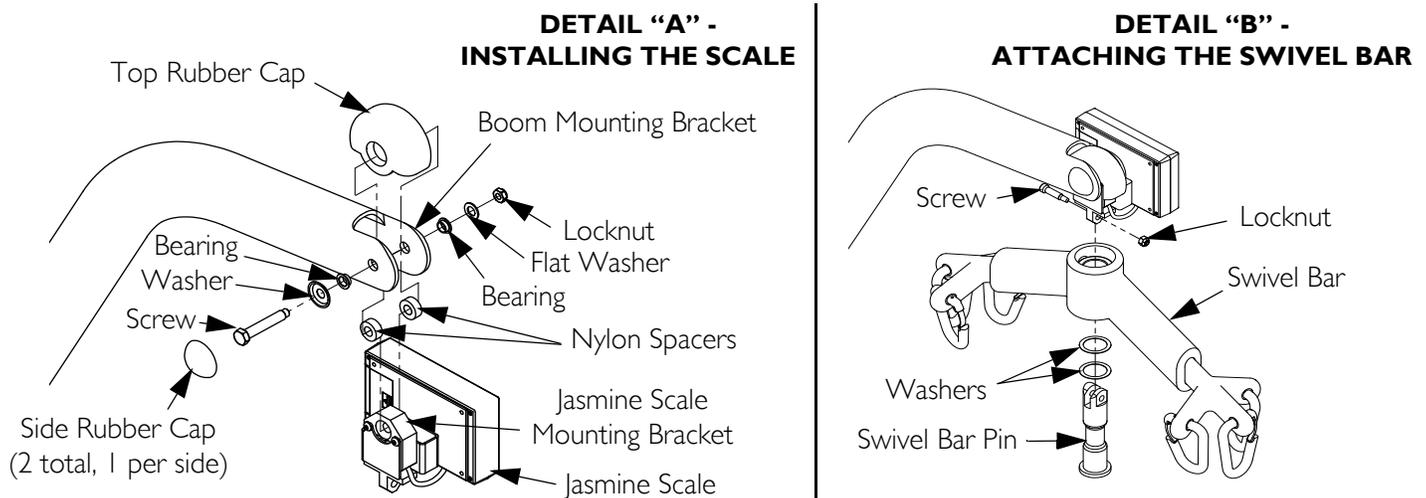


FIGURE 8.2 Installing the Jasmine Scale

Operating the Scale

Keypad Functions

KEY	INDICATOR DISPLAYED	INDICATOR LOCATION	DEFINITION
ON OFF	OFF	Center of Display Window	Pressing this key will apply power to the scale and turn the unit on. When the scale is already on, pressing the button will turn the unit off.
ZERO	ZERO	Lower Left Corner of the Display Window	Pressing this key when the scale is on will reset the weight shown in the display window to zero.
UNITS	lb or kg	Upper Right Corner of the Display Window	The function of this key is to change the unit of measurement from pounds (lb) to kilograms (kg).
LOCK UNLOCK	LOCK	Lower Right Corner of the Display Window	This key is used to LOCK or UNLOCK a weight value in the display window. NOTE: Weight displayed is a STORED weight and not the current weight when the key is used in the lock position.
N/A	LO BAT	Center of Display Window	Indicator is shown in the display window to notify when battery is low.

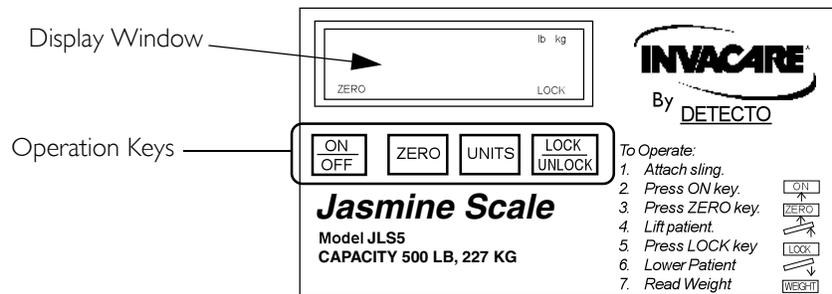


FIGURE 8.3 Operating the Scale - Keypad Functions

Weighing the Patient

⚠ WARNING

The weight capacity is limited to the lowest rated capacity of any one of the components in use (e.g. Patient Lift, Sling or Scale). The patient's weight **MUST NOT** exceed the lowest rated capacity of any component.

1. Attach sling straps to the swivel bar. For proper attachment instructions refer to [Attaching a Sling to the Swivel Bar](#) on page 14.

NOTE: For improved accuracy on the patient lift, attach all sling straps to the center hooks on both sides of the swivel bar. However, patient comfort may require a different configuration of sling straps.

2. Press the ON/OFF key.

⚠ WARNING

DO NOT operate key strokes with pointed objects (e.g. pencils, pens, fingernails, etc.) Otherwise damage to the key pad will result.

NOTE: The display will indicate the last weight that was measured. The word "LOCK" will be seen in the display box.

NOTE: The ZERO key is pressed in order to avoid capturing the weight of the sling and the hardware. If the ZERO key is not pressed the weight of the sling and the weight of the hardware will be included in the weight displayed. NOT ZERO-ING OUT WILL GIVE A FALSE READING OF THE USER'S TRUE WEIGHT.

3. Press the ZERO key. When the ZERO key is pushed the following will happen:
 - A. The scale will reset to zero and the word "ZERO" will appear in the display.
 - B. The lock function will then be turned off and the word "LOCK" will disappear from the display.

NOTE: The scale is now active and continually updating the weight display.

4. Place the patient in the sling. For patient placement instructions refer to Operation on page 12.
5. Activate the lift mechanism to raise the patient until they are completely supported by the lift. For patient lifting instructions, refer to Lifting the Patient on page 14.
6. Note the weight display.
7. When the weight display becomes stable press the LOCK button to lock the weight display. This will be indicated by the word "LOCK" appearing in the display window.

NOTE: Should it be necessary to unlock the weight while the patient is still supported by the lift, the UNLOCK button may be pressed. The weight will unlock and the word "LOCK" will disappear from the display window. The weight value will then be updated. Once the weight becomes stable the weight can be locked again by pressing the LOCK button.

NOTE: Stable being defined as the weight fluctuating two tenths (2/10) of a pound. For example, a patient weighing one hundred (100) lbs the scale will fluctuate between 99.8 and 100.2 until the LOCK key is pressed. Fluctuation of the weight displayed is normal as noted above. Press the LOCK button to lock the weight.

NOTE: The UNITS button can be pressed to toggle between units of pounds and kilograms. This is indicated by lb or kg appearing in the display window.

8. The lift may now be lowered and the sling removed from the patient.

NOTE: The patient's weight will continue to be seen in the display window. The display will turn off automatically after a two minute period of non-use [no changes in weight exceeding five (5) pounds (2 kilograms)]. You can NOT adjust the time delay for automatic shut off. After the display has turned off, the weight may be recalled by pressing the ON/OFF button. The unit can be turned off by pressing the ON/OFF button a second time.

Replacing the Battery

NOTE: For this procedure, refer to FIGURE 8.4.

NOTE: The scale is powered by a nine (9) volt alkaline battery that should provide approximately 1500 readings before needing replacement.

When battery replacement is needed, LO BAT will appear on the display. Perform the following:

1. Slide the battery door open in the direction of the arrow.
2. Remove existing battery.
3. Install the NEW battery.
4. Reinstall the battery door.

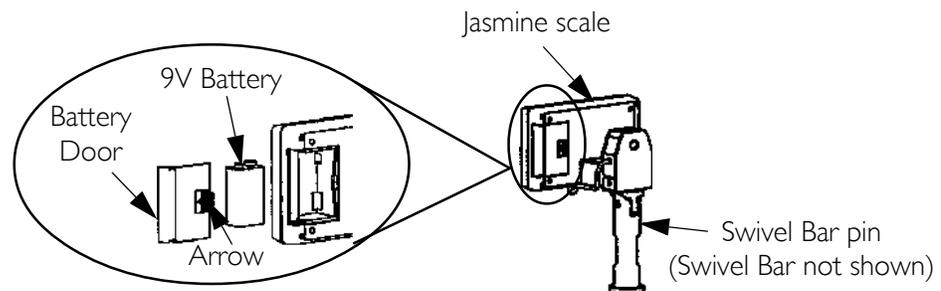


FIGURE 8.4 Replacing the Battery

Calibrating the Jasmine Scale

NOTE: The Jasmine Scale will be pre-calibrated at the factory with the load cell. Should it be necessary to re-calibrate the scale, follow the instructions outlined below.

1. The patient and the sling **MUST** be removed from the scale to properly calibrate the Jasmine Scale. For removing the patient instructions refer to Operation on page 12.
For sling detachment instructions refer to Lifting the Patient on page 14.
2. With the Jasmine Scale on, remove the four screws on the back of the enclosure and remove the front cover to expose the PC board.
3. Press the CAL button located on the PC board. The CAL switch is not labeled but is the only button on the PC board located in the lower right corner. Once the CAL button is pushed "CAL1" will be seen in the display window.

NOTE: CAL1 selects the calibration mode using 50 pounds of calibrated weight. CAL2 selects the calibration mode for use with 200 pounds of calibrated weight. Pressing the UNITS key toggles between CAL1 and CAL2.

4. When the desired calibration mode is displayed, press the LOCK/UNLOCK key.

NOTE: The display window will now show UnLd.

5. Ensure that there is no load on the scale and press the ZERO key.
6. The display window will show a dashed line (-----) scrolling across and then the word LOAD will appear in the display window.
7. Perform one (1) of the following:
 - A. FOR CAL1 OPTION - support 50 pounds of calibrated weight from the scale and press the ZERO key.
 - B. FOR CAL2 OPTION - support 200 pounds of calibrated weight from the scale and press the ZERO key.
8. The display window will show a dashed line (-----) scrolling across and then the word DONE will appear in the display window.
9. Remove the weight from the scale and press the LOCK/UNLOCK key.

NOTE: The unit will now be in a temporary test mode and will not lock the weight display. This will allow weight to be loaded and unloaded to check the calibration.

10. Turn the unit off by pressing the ON/OFF key.
11. Turn the unit on by pressing the ON/OFF key.

NOTE: Scale will now be in normal operation.

Troubleshooting

SYMPTOM	PROBABLE CAUSE	SOLUTION
Unit does NOT work properly.	Battery failure.	Check battery. Replace if necessary.
Battery has been replaced and unit still does NOT work properly.		

Display Codes

CAL

CALIBRATION REQUIRED - Indicates improper stored calibration data, calibration is necessary.

OCAP

OVER CAPACITY - Indicates a weight exceeding the capacity has been loaded on the scale.

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 five years on the lift and two years 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, with refurbished or new parts. This warranty does not include any labor or shipping charges incurred in replacement part installation or repair of any such product. Product repairs shall not extend this warranty - coverage for repaired product shall end when this limited warranty terminates. 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 ALL 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.