

**SAVE THESE INSTRUCTIONS**

*NOTE: Check all parts for shipping damage. In case of shipping damage, DO NOT use. Contact carrier/dealer for further instruction.*

**Safety Summary**

To ensure the safe installation, operation and use of the seat, these instructions **MUST** be followed:

**⚠ WARNING**

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

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

If the seat and/or back does not fit the user properly, **DO NOT** use. Contact Invacare for proper instruction, otherwise injury to the user may occur.

The best way to avoid problems related to pressure sores is to understand their causes and your role in a skin management program.

Your therapist and physician should be consulted if you have any questions regarding weight relief, self-examination of skin, or individual limitations and needs.

All cushions used for the prevention or treatment of decubitus ulcers (pressure sores) should be selected carefully. Working with your therapist, physician and cushion supplier is the best way to assure that a cushion choice matches your individual needs.

As the needs of the client become more complex, the cushion evaluation becomes more important. Skin condition should be checked very frequently after the provision of any new seating system.

With regard to seat/chest positioning straps – it is the obligation of the DME dealer, therapists and other healthcare professionals to determine if a seat/chest positioning strap is required to ensure the safe operation of this equipment by the user. Serious injury can occur in the event of a fall from a wheelchair.

Stabilize from the ground up. A stable base, pelvis and footrests are requirements for any torso positioning system.

The position of back angle, rear wheels, seat depth and wheel locks are directly related to wheelchair stability. Any change to one or any combination of the four may cause the wheelchair to decrease in stability. Use extreme caution when using a new seating position.

**ALWAYS** make sure wheelchair is stable before reclining the back system. Refer to the Owner's Manual provided with the wheelchair.

To maintain the stability of the wheelchair when moving the rear wheels to **ANY** forward position, the amount of recline **MUST** be limited to prevent the wheelchair from tipping onto the anti-tippers.

The necessary back angle **MUST** be selected before repositioning rear wheels forward.

**⚠ 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.

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## Product Description

These Seating Systems are designed to fit a specific client based on seating and positioning simulation performed on the Shape Sensor.

This Instruction Sheet provides installation instructions for the Contour U and Silhouette Seating Systems.

## Dry Fitting the User

Follow the directions in the Shape Sensor Manual (part number 0900117) to dry fit the user.

## Use and Maintenance of the Seating System

### Back Cover

The cover is properly installed when the words "BOTTOM OF BACK" (marked on inside of cover) is at the bottom of the back.

### Seat Cushion Cover

The cover is properly installed when the zipper is at the back of the cushion. In addition, the back surface of the cushion is marked, "REAR OF SEAT".

### Maintaining the Covers

In the event of incontinence, some leakage may occur at the seam stitching, fastening straps or at the zipper, so the water repellent coating should be cleaned. Refer to [Cleaning](#).

### Inspection

*NOTE: In order to ensure that the seating system is working as designed, inspection of the seating system on a regular basis is necessary.*

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## **⚠ WARNING**

**DO NOT continue to use this product if any deformation, corrosion, breakage, wear and or compression is found. Corrective maintenance can be performed at or arranged through your equipment supplier.**

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Visually inspect all parts weekly, including hardware, upholstery materials, foams (if accessible), and plastics for deformation, corrosion, breakage, wear and/or compression.

### Cleaning

*NOTE: Weekly cleaning is recommended.*

The Seating System is available with several different covering options. Follow washing instructions attached to cover.

Keep all parts dry and away from chemicals or lubricants.

To clean the water repellent foam coating, use a soft cloth and wipe clean with warm water and a mild soap solution. Rinse off and dry.

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## **CAUTION**

**The cover is designed to protect the foam against a user's incontinence and to provide fire retardation, so the cushion must not be used without its cover. If the cover is torn, it must be replaced.**

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# Installing Back Cane Hardware Assemblies

## Kwik Fit Assemblies

NOTE: For this procedure, refer to FIGURE 1.

NOTE: The Kwik Fit assemblies must be installed on the rear of the back canes.

1. Determine the diameter tubing of the back canes (1-inch, 7/8-inch or 3/4-inch). Refer to Detail "B" of FIGURE 1 to determine which holes to use when attaching the straps to the clamp blocks.
2. Secure two straps to one side of each clamp block with two pan head screws.

NOTE: The other ends of the straps will remain loose until STEP 5.

NOTE: Make sure the quick-lock brackets with locking tabs are installed towards the top of the back canes as shown in Detail "A" of FIGURE 1.

NOTE: Make sure the mounting brackets without the locking tabs are installed towards the bottom of the back canes as shown in Detail "A" of FIGURE 1.

3. Put the clamp block/strap assembly in place on the quick-lock bracket or mounting bracket. Put the assembly in place on the rear of the back cane.
4. Wrap the loose straps around the back cane.
5. Attach the loose straps to clamp block with two pan head screws.

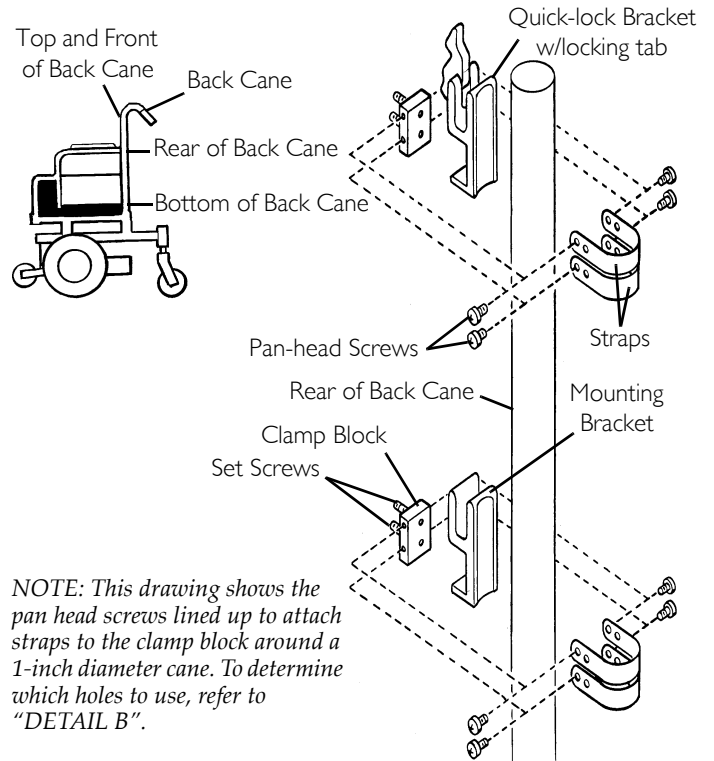
NOTE: The set screws in the clamp blocks are used to secure the assemblies to the back canes.

## CAUTION

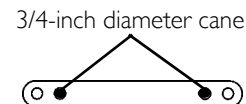
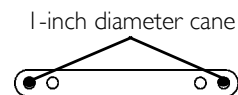
**DO NOT** overtighten the set screws.  
**Otherwise damage may occur.**

6. Slide the assembly to the desired position and tighten the set screws.
7. Repeat STEPS 3-6 to attach the other three Kwik Fit assemblies to the back canes.
8. Make sure that the assemblies at the top and bottom of the of the back canes are lined up horizontally.

## DETAIL "A" - KWIK FIT ASSEMBLIES (MOUNT ON REAR OF BACK CANE)



## DETAIL "B" - STRAP MOUNTING HOLES



**FIGURE 1** Installing Back Cane Hardware Assemblies - Kwik Fit Assemblies

## HWBAK Assemblies

NOTE: For this procedure, refer to FIGURE 2.

NOTE: The HWBAK assemblies must be mounted on the front of the back canes.

1. Remove the snap-lock clamps and snap-lock clamp bases from the HWBAK kit.
2. Attach a snap-lock clamp to each snap-lock clamp base with two screws.
3. Determine the diameter tubing of the back canes (1-inch, 7/8-inch or 3/4-inch). Refer to Detail "B" of FIGURE 2 to determine which holes to use when attaching the straps to the clamp blocks.
4. Secure two straps to one side of the each clamp block with two pan head screws.

NOTE: The other ends of the straps will remain loose until STEP 7.

NOTE: Make sure the mounting brackets without Snap-Lock clamps are installed towards the top of the back canes as shown in Detail "A" of FIGURE 2.

NOTE: Make sure the mounting brackets with Snap-Lock clamps are installed towards the bottom of the back canes as shown in Detail "A" of FIGURE 2.

5. Put the clamp block/strap assembly in place on the mounting bracket or snap-lock clamp base. Put the assembly in place on the front of the back cane.
6. Wrap the loose straps around the back cane.
7. Attach the loose straps to clamp block with two pan head screws.

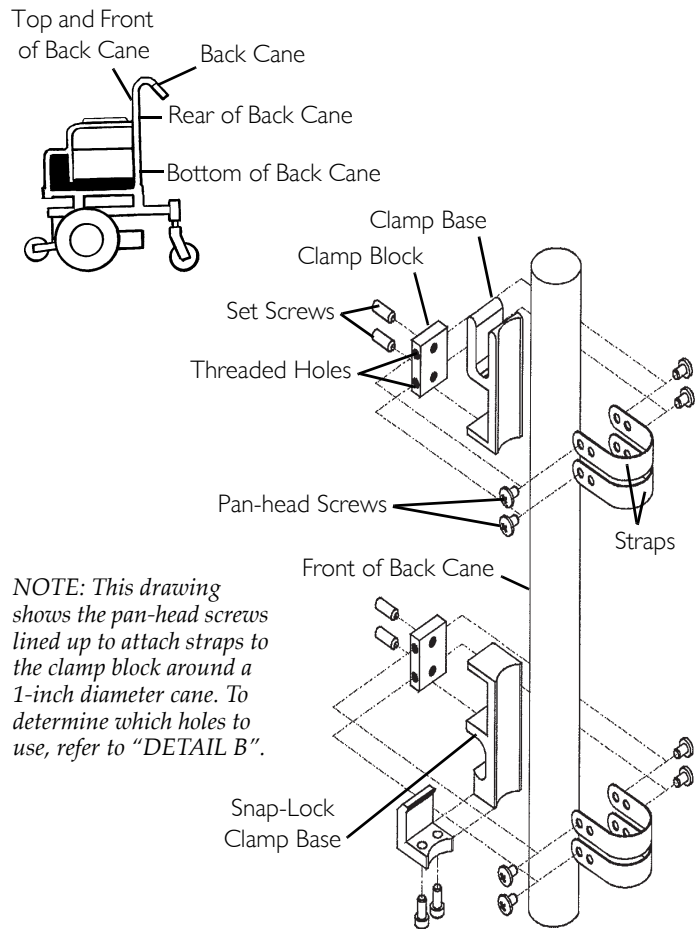
NOTE: The set screws in the clamp blocks are used to secure the assemblies to the back canes.

### **⚠ CAUTION**

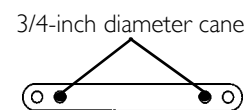
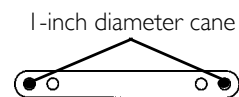
**DO NOT** overtighten the set screws. Otherwise damage may occur.

8. Slide the assembly to the desired position and tighten the set screws.
9. Repeat STEPS 5-8 to attach the other three HWBAK assemblies to the back canes.
10. Make sure that the assemblies at the top and bottom of the of the back canes are lined up horizontally.

### DETAIL "A" - HWBAK ASSEMBLIES (MOUNT ON FRONT OF BACK CANE)



### DETAIL "B" - STRAP MOUNTING HOLES



**FIGURE 2** Installing Back Cane Hardware Assemblies - HWBAK Assemblies

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# Installing a Back on the Wheelchair

Determine which type of back and hardware assemblies will be installed on your wheelchair (Kwik Fit or HWABK).

- If installing a Kwik Fit back, refer to Kwik Fit Assemblies on page 3 and Kwik Fit Back on page 5.
- If installing a Back Cushion Pan, refer to HWBAK Assemblies on page 4 and Back Cushion Pan on page 7.
- If installing a wood-mounted cushion, refer to HWBAK Assemblies on page 4 and Wood-mounted Back Cushion on page 8.

## Kwik Fit Back

### Installing the Adjustable Mounting Brackets to the Kwik Fit Back

*NOTE: For this procedure, refer to FIGURE 3 on page 6.*

*NOTE: To attach the Kwik Fit Back to the wheelchair, Kwik Fit assemblies must be installed on the back canes. Refer to Kwik Fit Assemblies on page 3 if the Kwik Fit assemblies are not in place on your wheelchair before starting this procedure.*

*NOTE: Always determine where the back will be positioned in relation to wheelchair frame and seat cushion before attaching the back to the wheelchair.*

*NOTE: To maintain the center of gravity (CG) of the wheelchair user, the Kwik Fit back will be placed between or behind the back canes.*

*NOTE: If necessary, an optional mounting spacer (part number 3002937) can be used to space out the adjustable mounting brackets at the top of the Kwik Fit back.*

1. Follow the procedures in the Shape Sensor Owner's Manual to determine where the Kwik Fit back will attach to the wheelchair back canes.

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## CAUTION

**DO NOT overtighten the set screws. Otherwise damage may occur.**

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2. If necessary, adjust the position of the Kwik Fit assemblies on the back canes. Tighten the set screws when adjustments are complete.
3. Position the Kwik Fit back on the wheelchair in the position determined in STEP 1.
4. Determine the mounting positions of the four adjustable mounting brackets. Make note of which holes to use to best fit the user.

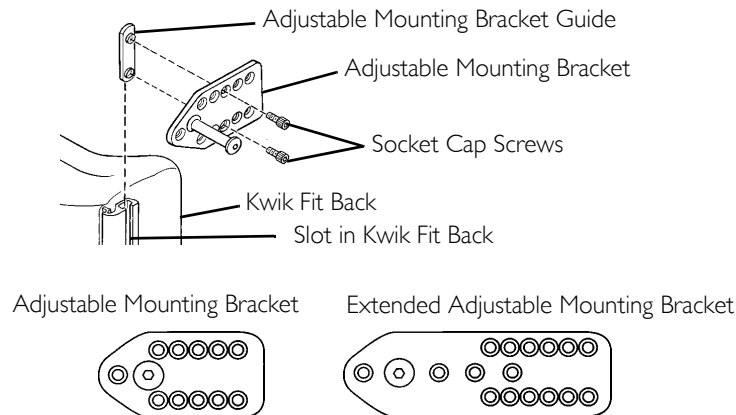
*NOTE: Refer to Detail "B" of FIGURE 3 for position options.*

5. Attach the adjustable mounting bracket guide to the adjustable mounting bracket with two socket cap screws. **DO NOT** tighten the socket cap screws.
6. Insert the adjustable mounting bracket guide into the slot on the side of the Kwik Fit back and slide the bracket into the position determined in STEP 3. Tighten socket cap screws.
7. Repeat STEPS 5 and 6 to install the other three adjustable mounting brackets.

*NOTE: When installed properly, there will be two adjustable mounting brackets on each side of the wheelchair.*

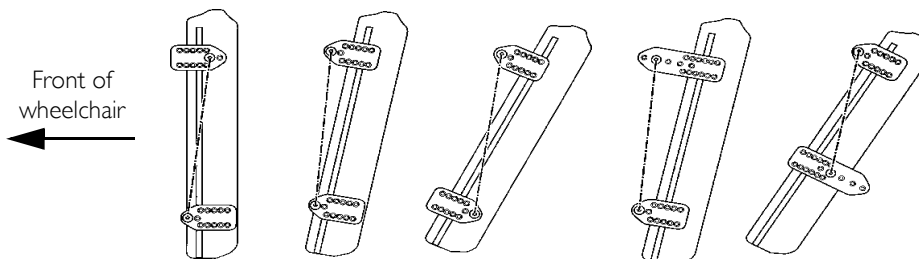
## Installing the Kwik Fit Back

1. Install the Kwik Fit back onto the adjustable mounting brackets as shown in Detail "A" of FIGURE 3.
2. Lock the Kwik Fit back into place by closing the Quick-Lock brackets on each side of the wheelchair.
3. Check for the following conditions:
  - The lock levers on the Quick-Lock brackets open and close without obstruction.
  - The Kwik Fit back hangs level.
  - The Kwik Fit back does not rattle.
4. Adjust the Kwik Fit assemblies as necessary until all conditions in STEP 3 are met.

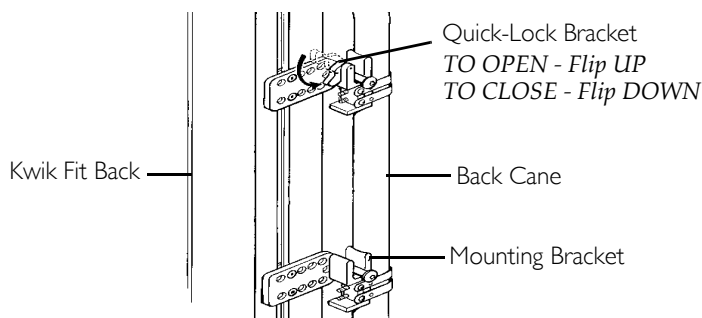


### DETAIL "A" - ADJUSTABLE MOUNTING BRACKET OPTIONS

NOTE: The dashed lines represent the back cane relative to the adjustable mounting bracket position.



### DETAIL "B" - INSTALLING THE KWIK FIT BACK ONTO THE WHEELCHAIR



**FIGURE 3** Installing the Kwik Fit Back

## Back Cushion Pan

### Installing the HWABK Back Brackets

*NOTE: The HWABK Back Brackets are used with HWABK Assemblies that attach to the back canes. Refer to [HWBAK Assemblies](#) on page 4 if the HWABK assemblies are not in place on your wheelchair before starting this procedure.*

*NOTE: For this procedure, refer to [FIGURE 4](#).*

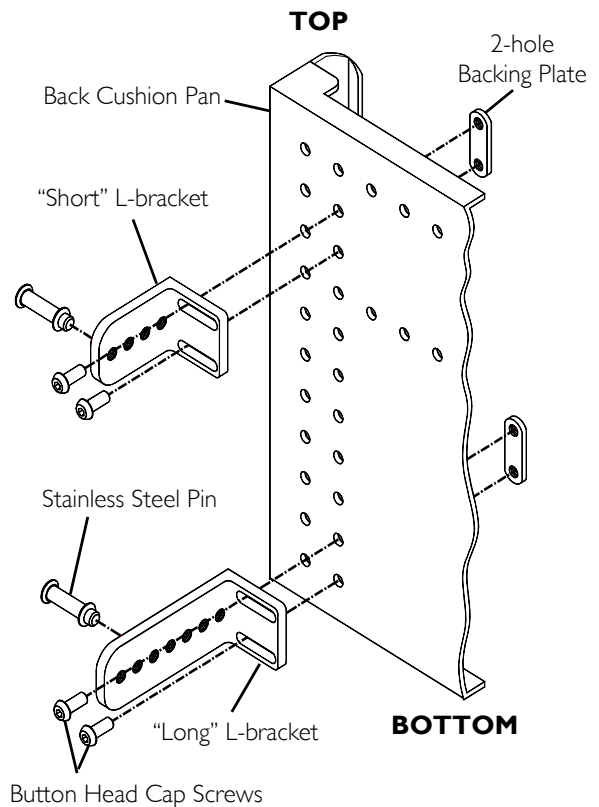
1. Put the back cushion pan onto the wheelchair and make note of the hole locations that best fit the user.
2. Put the L-brackets on the back cushion pan at the locations determined in STEP 1.
3. Put a 2-hole backing plate on the cushion side of the back cushion pan. Attach the L-bracket to the back cushion pan with two button head cap screws installed through the seat pan and the 2-hole backing plate. Use the 5/32 allen wrench supplied in the kit to tighten the screws.
4. Repeat STEP 3 to install the three remaining L-brackets onto the back cushion pan.
5. Put the back cushion pan onto the wheelchair. Line up the L-brackets with the clamp bases on the back canes.
6. Adjust/recline the back cushion pan until the desired back angle is reached. Make note of the holes in the L-brackets that line up with the clamp bases at the desired angle. Remove the back cushion pan from the wheelchair.
7. Thread one stainless steel pin into each L-bracket in the holes determined in STEP 6 using the 9/64 hex key wrench supplied in the kit.

### Installing the Back Cushion Pan

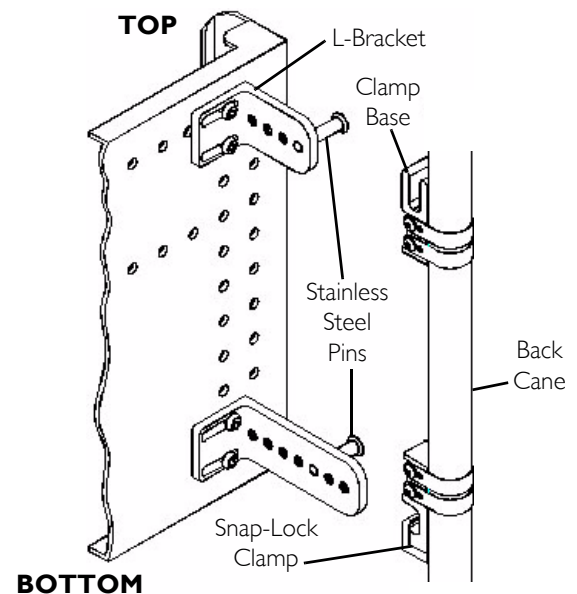
*NOTE: For this procedure, refer to [FIGURE 5](#).*

1. Put the back cushion pan onto the wheelchair. Put the top of the back cushion pan in place in the clamp bases at the top of the back canes.
2. Push the bottom of the back cushion pan toward the Snap-lock clamps on the bottom of the back canes. Lift the back cushion pan up about 1/2-inch and push down to "snap" the stainless steel pins in place in the Snap-lock clamps.

*NOTE: To remove the back cushion pan from the wheelchair, reverse STEPS 1 and 2.*



**FIGURE 4** HWBAK Back Brackets



**FIGURE 5** Installing the Back Cushion Pan

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## Wood-mounted Back Cushion

### Installing the Wood-mounted Back Cushion Hardware

*NOTE: The Wood-mounted Back Cushion Brackets are used with HWABK Assemblies that attach to the back canes. Refer to [HWBAK Assemblies](#) on page 4 if the HWABK assemblies are not in place on your wheelchair before starting this procedure.*

1. Put the back cushion onto the wheelchair.  
Determine the locations of the brackets. Mark the hole locations on the cushion with a pen or marker.

*NOTE: When installed properly, the L-brackets will line up horizontally and vertically. Install the Short L-brackets at the top of the cushion and the Long L-brackets at the bottom of the cushion.*

2. Drill two mounting holes in the back cushion for each L-bracket with a 11/32 drill bit.
3. Using a M6 hex key wrench, screw a threaded insert into each of the bracket mounting holes.

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### CAUTION

**DO NOT overtighten the threaded inserts. Damage to the cushion may result.**

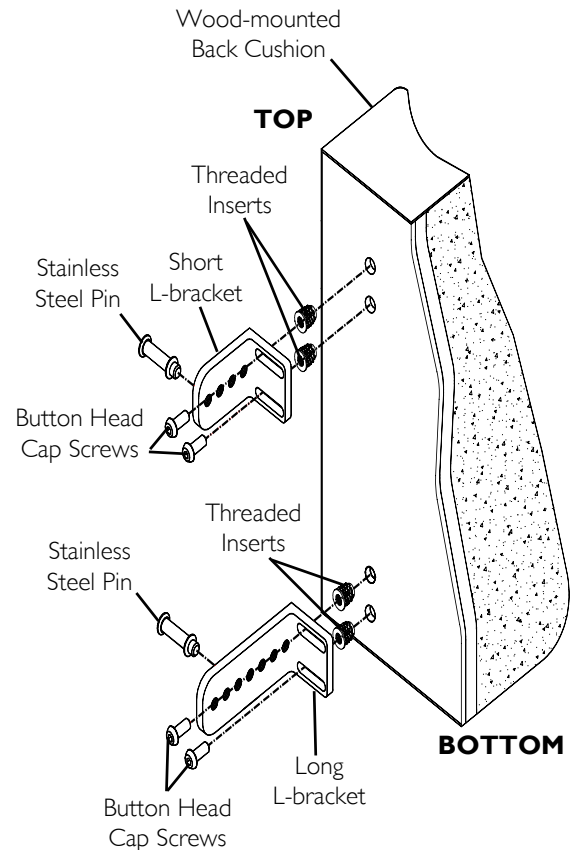
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4. Attach the L-brackets to the back cushion with two button head cap screws. Use the 5/32 allen wrench supplied in the kit to tighten the screws.
5. Put the back cushion onto the wheelchair. Line up the L-brackets with the clamp bases on the back canes.
6. Adjust/recline the back cushion until the desired back angle is reached. Make note of the holes in the L-brackets that line up with the clamp bases at the desired angle. Remove the back cushion from the wheelchair.
7. Thread one stainless steel pin into each L-bracket in the holes determined in STEP 6 using the 9/64 hex key wrench supplied in the kit.

### Installing the Wood-mounted Back Cushion

1. Put the stainless steel pins in the Short L-brackets onto the clamp bases.
2. Push the bottom of the back cushion toward the Snap-lock clamps on the bottom of the back canes. Lift the back cushion pan up about 1/2-inch and push down to “snap” the stainless steel pins in place in the Snap-lock clamps.

*NOTE: To remove the wood-mounted back cushion from the wheelchair, reverse STEPS 1 and 2.*



**FIGURE 6** Wood-mounted Back Cushion Hardware



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## Installing a Seat onto the Wheelchair

Determine which type of seat and mounting hardware will be used on your wheelchair.

- If installing a wood mount board, Refer to [Attaching a Wood Mount Board to the Wheelchair Seat Rails](#).
- If installing a seat pan, refer to [Attaching a Seat Pan to the Wheelchair Seat Rails](#) on page 10.

### Attaching a Wood Mount Board to the Wheelchair Seat Rails

*NOTE: For this procedure, refer to FIGURE 7.*

1. Put the wood mount board onto the wheelchair seat rails.
2. Determine the mounting locations of the brackets. Mark the hole locations on the board with a pen or marker. Remove the board from the wheelchair.

*NOTE: When installed properly, the mounting brackets will not interfere with any other wheelchair parts.*

3. Drill two mounting holes in the board for each bracket with a 11/32 drill bit.
4. Using a M6 hex key wrench, screw a threaded insert into each of the bracket mounting holes.

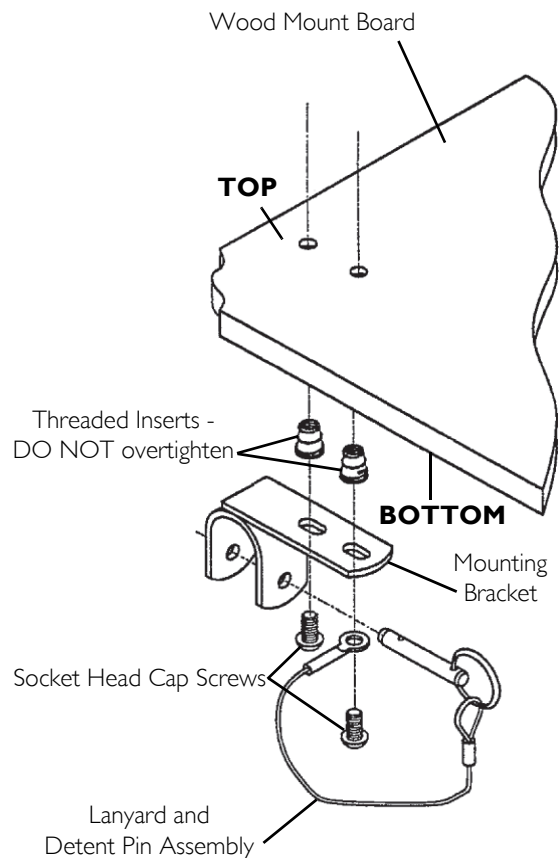
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#### **CAUTION**

**DO NOT overtighten the threaded inserts.**  
**Damage to the cushion may result.**

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5. For each mounting bracket, place the lanyard and detent assembly on one of the socket head cap screws.
6. At each location, attach the mounting bracket to the board with two socket head cap screws.



**FIGURE 7** Attaching a Wood Mount Board to the Wheelchair Seat Rails

## Attaching a Seat Pan to the Wheelchair Seat Rails

*NOTE: For this procedure, refer to FIGURE 8.*

1. Put the seat pan onto the wheelchair seat rails and make note of the hole locations that best fit the user.
2. Remove the seat pan from the wheelchair.

*NOTE: When installed properly, the mounting brackets will not interfere with any other wheelchair parts.*

3. Put the brackets on the seat rails at the locations determined in STEP 1.

*NOTE: When positioned properly, the protruding pins on the brackets will align with the outermost holes on the corners of the seat pan.*

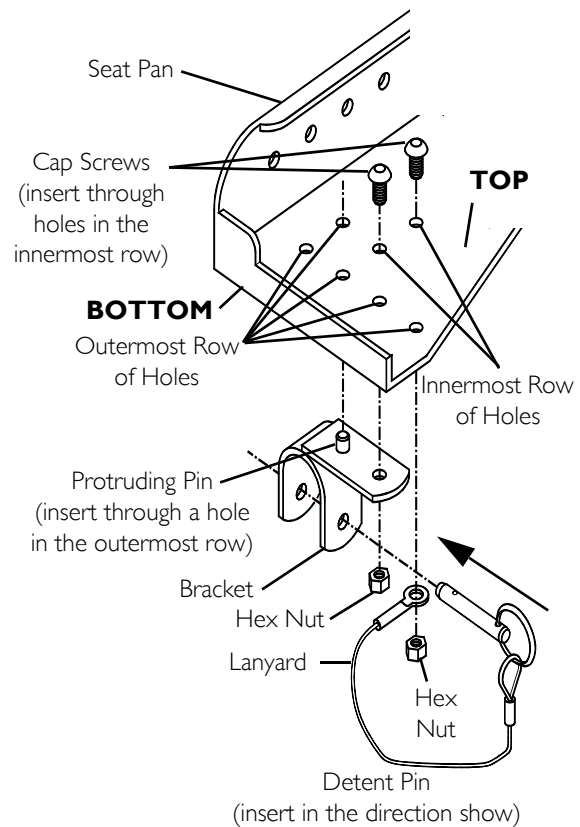
4. Put the seat pan on the mounting brackets.
5. Adjust the brackets as necessary until the protruding pins protrude through one of the outermost seat pan holes.

*NOTE: Use the innermost holes to attach the brackets to the seat pan.*

6. Insert a cap screw through one of the innermost holes of the seat pan and through the mounting hole of the bracket. Put a hex nut onto the cap screw. **DO NOT** tighten the hex nut.
7. From underneath the seat pan, insert the detent pin through the holes in the bracket.

*NOTE: Use the innermost holes to attach the lanyard to the seat pan. Make sure to attach the lanyard close to the mounting bracket.*

8. Attach the lanyard to the seat pan with a cap screw and hex nut.
9. Tighten the hex nuts.
10. Repeat STEPS 6 and 9 at each bracket location.



**FIGURE 8** Attaching a Seat Pan to the Wheelchair Seat Rails

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## Installing the Seat Cushion

*NOTE: For this procedure, refer to FIGURE 9.*

The cushion attaches to wheelchair seat upholstery using hook and loop fasteners on the bottom of cushion cover.

1. Determine whether the wheelchair seating surface has hook or loop attachment strips.
2. Perform one of the following:
  - If wheelchair has loop attachment strips, verify that double sided hook strips are securely attached to the loop attachment strips on the bottom of the cushion.
  - If the wheelchair has hook attachment strips, remove the double sided hook strips from the cushion.

*NOTE: If the wheelchair seating surface has neither hook or loop attachment strips, remove the double sided hook from the bottom of the cover.*

3. Align the front edge of the cushion with the front edge of seating surface.

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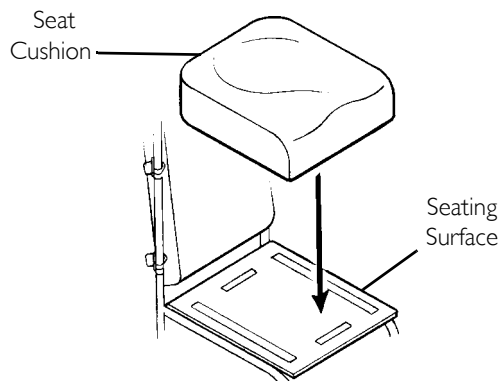
### **⚠ WARNING**

**Make sure the cushion is securely fastened to the wheelchair seating surface with the hook and loop fasteners before using. Exercise caution when transferring in and out of the wheelchair, especially if the wheelchair is not equipped with hook and loop fasteners.**

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4. Secure cushion to the seating surface, making sure that the hook and loop fasteners are securely attached to the seating surface and the cushion.

*NOTE: If the wheelchair seating surface has neither hook or loop attachment strips, remove the double sided hook from the bottom of the cover.*



**FIGURE 9** Installing the Seat Cushion

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# 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 its product to be free from defects in materials and workmanship for the period of two years of use by original purchaser except for the cover, which is warranted for a period of 90 days of use by the original purchaser. 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, model number, and the date of purchase, indicate nature of the defect and, if the product is serialized, indicate the serial number.

Invacare Corporation will issue a return authorization. The defective unit or parts must be returned for warranty inspection using the serial number, when applicable, as identification within thirty 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 SUBJECT TO NEGLIGENCE, ACCIDENT, IMPROPER OPERATION, MAINTENANCE OR STORAGE, COMMERCIAL OR INSTITUTIONAL USE, 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 THESE INSTRUCTIONS.**

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

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

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Yes, you can.



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