



Yes, you can.<sup>®</sup>

## Flo-tech Evo Back Fitting Instructions

## USE AND CARE INSTRUCTIONS

**NOTE:** Please read the following instructions carefully prior to assembly.

**This item should be fitted by an experienced clinician or technician. This document contains important information that must be passed on to the user at delivery.**

Before assessing for the appropriate positioning of the backrest, ensure that the user is sitting in the wheelchair in an optimum position with their bottom as far back in the seat as possible.

### LIMITATIONS OF USE

The Invacare Evo Backrests are designed to provide the important benefits of a posterior back support for a wide variety of users. They are also designed to provide simple, comfortable and effective lateral support to help maximise function and increase sitting tolerance, providing they do not reduce or limit the function of the wheelchair.

The backrest is suitable for use on most wheelchairs, tube sizes 19/20mm, 22mm and 25mm.

### MAINTENANCE

**Before each use:** Undertake a visual check for missing/loose screws or worn screws and fittings.

**Periodically:** Ensure the product is inspected for loose/worn fastenings and that the torque settings are checked by a suitably qualified and competent person. Should you notice any fault in the product, notify your dealer. For heavier and high impact users, the period between inspections should be reduced accordingly.

The expected product life-cycle for this product is 5 years.

### TRANSPORTATION

The Invacare Flo-tech Evo Backrests are in transport when fitted to a wheelchair which is suitable for transportation. Invacare recommend that the Evo headrest and shoulder support are used during transportation. When travelling in a motor vehicle, it is general practice for wheelchair users to where feasible, transfer to a vehicle seat. Please follow the wheelchair manufacturer's guidelines on transportation. Invacare recommends that an individual risk assessment is carried out, taking into account the full combination of wheelchair, seat, user and tie-down system.

### TRAINING

Should you require additional training regarding the assembly of this hardware, please contact Invacare at the number listed below, for free advice and support.

### COMPATIBILITY

This device is compatible with a wide range of wheelchair systems and offers tube sizes of 19/20mm, 22mm and 25mm. Please consult the wheelchair manufacturer's user guide or contact Invacare who will be happy to advise on appropriate usage.



Yes, you can.®

## Flo-tech Evo Back Fitting Instructions

## USE AND CARE INSTRUCTIONS

### QUALITY

In keeping with Invacare's policy of continuous improvement, we reserve the right to modify designs without prior notice. All rights reserved.

### CLEANING AND CARE

The cover must be cleaned with a neutral detergent and hot water and / or a single use wipe. Alternatively, it may be laundered to a maximum of 80°C.

Cleaning agents including Alcohols and Phenols should **not** be used.

The cover should be drip-dried before re-fitting to the back cushion/mesh back. Do NOT tumble dry. Please follow the instructions on the washing label.

The Flo-tech Evo Backrest hardware may be cleaned with common household cleaners and a soft cloth.

Should the cover become contaminated, please ask your Infection Control Officer for advice. Alternatively, contact Invacare for their information on decontamination protocol. Store in a dry environment.



### CAUTION



- Installing a back support on a wheelchair may affect the centre of gravity of the wheelchair and may cause the wheelchair to tip backwards, potentially resulting in injury.
- Always assess for the potential need for wheelchair anti-tippers.
- Use of this Backrest in conjunction with a reclining or semi-reclining back will exaggerate the centre of gravity shift rearward.
- Please ensure that you have confirmed that the back system you are fitting is compatible to the wheelchair it is being fitted to.

**INSTRUCTIONS FOR ASSEMBLY**

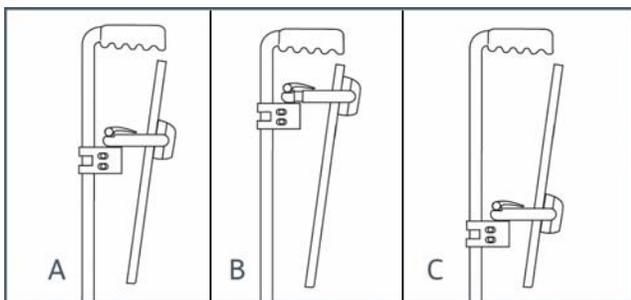
STEP 1— Remove the backrest from its packaging and ensure all components are present and correct. (See figure 1, 2 & 3).

STEP 2—Should this product reach you in an unsatisfactory condition, please contact the supplier.

STEP 3— Select the appropriate position for the mounting blocks. The optimum\*\* balance point is to fit the mounting block centrally on the backrest tubes (see figure A below). However if this is not possible installation in configuration as shown in B or C may be required. In this situation additional mounting hardware may be required if excessive forces are likely. If a headrest is fitted then configuration B is recommended. If a backrest extension and/or headrest are fitted the pivot point should be raised to reflect the change in backrest loading – see Figure C.

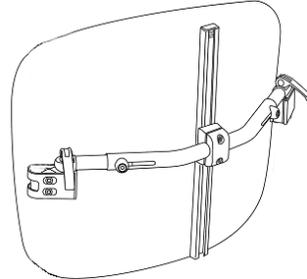
**It is recommended that all screws be tightened to 8.5Nm.**

**Figure A, B & C**

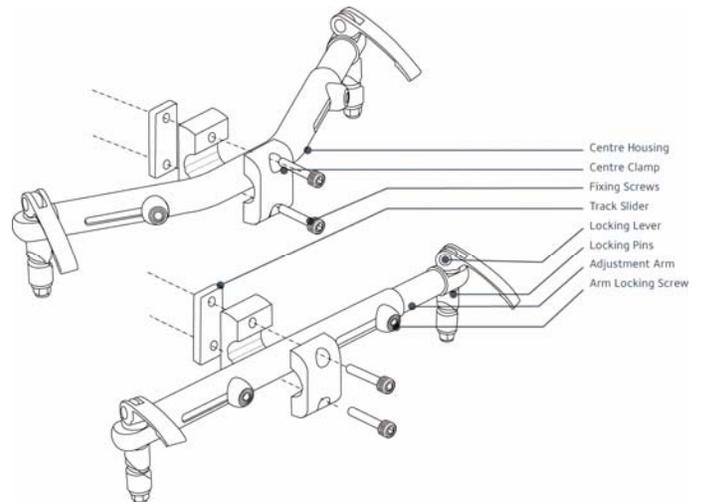


\*\* The optimum position is that which best balances the rotational forces generated in use.

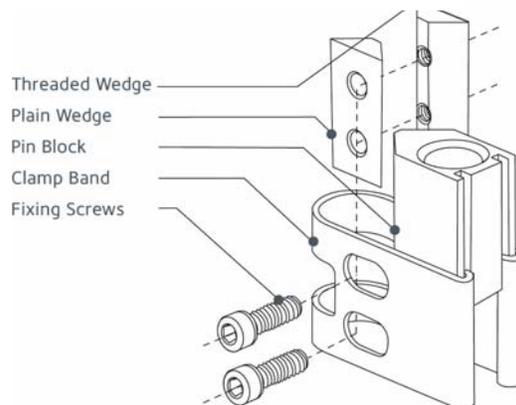
**Figure 1 – Evo Backrest**



**Figure 2 - Mounting System Components**



**Figure 3 – Mounting Blocks**



**INSTRUCTIONS FOR ASSEMBLY**

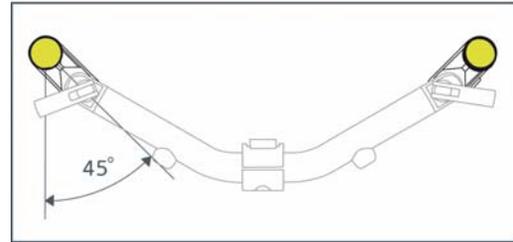
Note: The Mounting blocks are frequently installed to the rear of the canes at an angle of approximately 45 degrees – **Figure 4** - but any position around the backrest tube can be viable and **the final position will depend on the positioning requirements of the user.** In all cases, ensure that the securing screws are accessible for final tightening and/or adjustment

1. Remove the wheelchair canvas according to the manufacturer’s recommended procedures.
2. Remove the Mounting Blocks from their packing and dismantle. (see page 8 for further information on spacer selection – depending on cane tube width).
3. Place one Clamp Band around a wheelchair cane – **Figure 5**.
4. Insert the Pin Block and hold in place
5. Insert the Plain Tightening Wedge in line with the screw slots and the Threaded Tightening Wedge on the opposite side – **Figure 6**.
6. Insert the screws and tighten loosely
7. Position this Mounting Block at the optimum height for the backrest
8. Tighten the fixing screws enough to hold the block in place

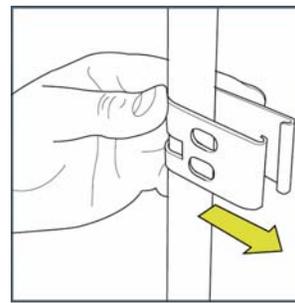
Do not over tighten at this stage. Allow the Mounting Block to rotate under moderate pressure

9. Install the second Mounting Block approximately 50mm (2”) below the first – **Figure 7**.
10. Take the Central Hardware Assembly and loosen the 2 Arm Locking Screws to allow the Adjustment Arms to slide in the Centre Housing
11. Insert one Locking Pin in the first Mounting Block
12. Adjust the Centre Housing and Adjustment arms so that the second Locking Pin is aligned with the receiving hole in the second Mounting Block – **Figure 8**.
13. Close the first Locking Lever and tighten the Arm Locking Screws. The installation should now be horizontal
14. Move the second (lower) Mounting Block upwards until the second Locking Pin is fully engaged; then close the Locking Lever and tighten all screws – **Figure 9 & 10**.

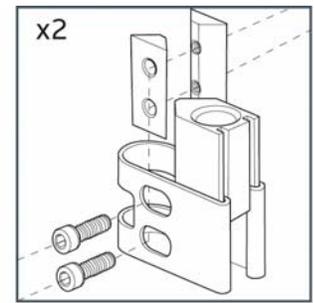
**Figure 4**



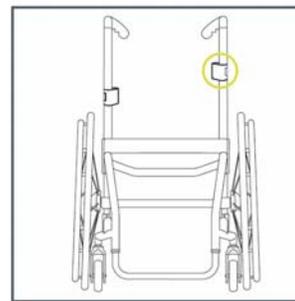
**Figure 5**



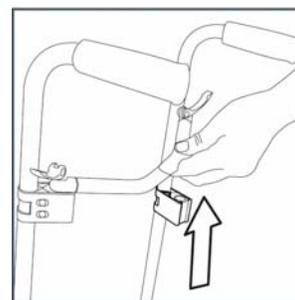
**Figure 6**



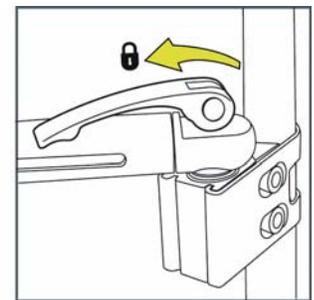
**Figure 7**



**Figure 8**



**Figure 9**



**INSTRUCTIONS FOR ASSEMBLY**

Check that the mechanism can be removed and replaced easily when both Locking Levers are opened. If it cannot, the Mounting Blocks may not be level or the Locking Pins may not be correctly aligned. Continue adjustments until removal and replacement is smooth and easy.

**Note:** if necessary, the above installation procedure can also be achieved by lowering the first Pin Block and the hardware assembly to meet the second Mounting Block

Universal Mounting Blocks include a selection of Spacers and Clamp Bands to suit different cane diameters. Observe the correct position for any Spacers which must not be in contact with the Tightening Wedges (★) – **Figure 11**.

If in doubt please refer to fitting instructions that come with the Mounting Blocks.

**Installing the Backrest:**

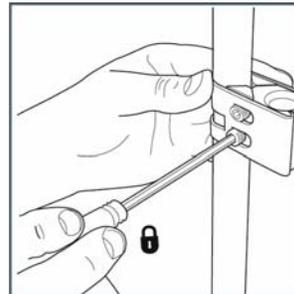
1. Remove the mounting system from the mounting blocks.
2. Remove the protective End Cap from one end of the Mounting Track – **Figure 12**.
3. Slacken the Centre Clamp Fixing Screws to allow the Track Slider to mount onto the backrest track
4. Insert the Track Slider into the track and move the assembly to the desired position – **Figure 13**. Ensure its orientation before clamping (Locking Pins should be facing down).
5. Secure in place with the Centre Clamp Fixing Screws.
6. Install the completed backrest in the wheelchair and secure by closing the Locking Levers.
7. Replace the protective End Cap.

**Adjustments:**

**Backrest Height:**

For **fine** adjustment of the backrest height, slacken the two Centre Clamp Fixing Screws – **Figure 14**. Move the backrest up or down to the desired position – **Figure 15** - and re-tighten the Fixing Screws. If this adjustment significantly alters the pivot position, it may be necessary to adjust the height by repositioning the mounting blocks on the wheelchair canes

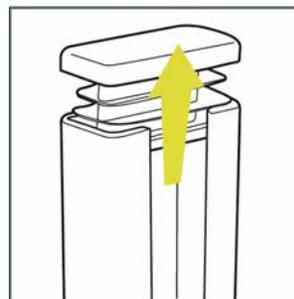
**Figure 10**



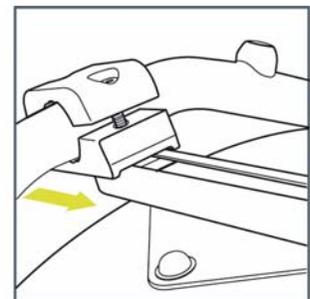
**Figure 11**



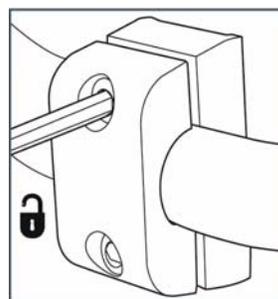
**Figure 12**



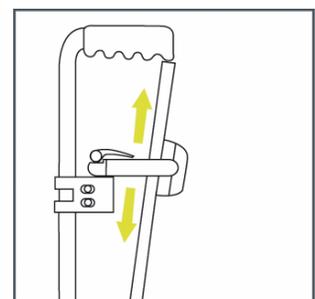
**Figure 13**



**Figure 14**



**Figure 15**



**INSTRUCTIONS FOR ASSEMBLY**

**Backrest Angle (pitch):**

Slacken the two Centre Clamp Fixing Screws – **Figure 14**. Angle the backrest forwards or backwards to the desired position – **Figure 16** and re-tighten both Fixing Screws.

**Seat Depth:**

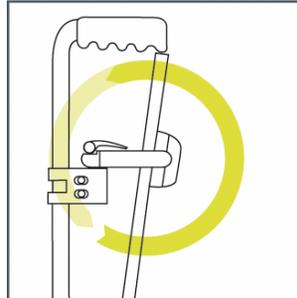
1. Raise both Locking Levers to the open position
2. Slacken both Arm Locking Screws
3. Slacken the Mounting Block screws sufficiently to allow the Mounting Blocks to rotate – **Figure 17**.
4. Rotate the Mounting Blocks until the desired position is reached – **Figure 18**.
5. Tighten the Arm Locking Screws and close the Locking Levers
6. Tighten the Mounting Block Screws
7. Check for easy removal/replacement of the backrest and adjust if necessary.

**Backrest Rotation & Offset:**

1. Proceed as for seat depth adjustment but rotate Mounting Blocks differently to achieve the angle required – **Figure 20**.
2. To change or reinstate the central position, slacken the Centre Clamp and slide sideways to the required position – **Figure 21**. Secure in position by tightening all fixing screws and closing the Locking Levers.

**Note:** The Central Clamp is designed to grip firmly to resist movement and may do so even when fixing screws have been slackened. Further movement of the hardware may be needed to disengage the clamp before adjustments can be made.

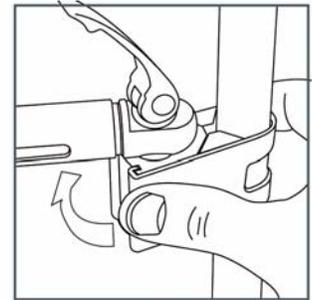
**Figure 16**



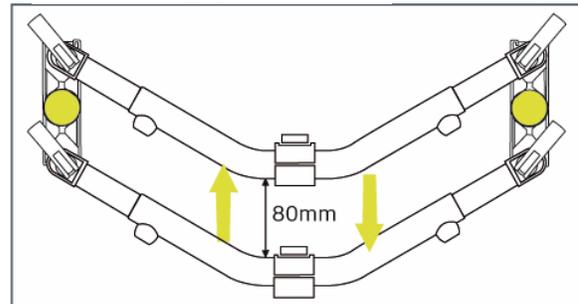
**Figure 17**



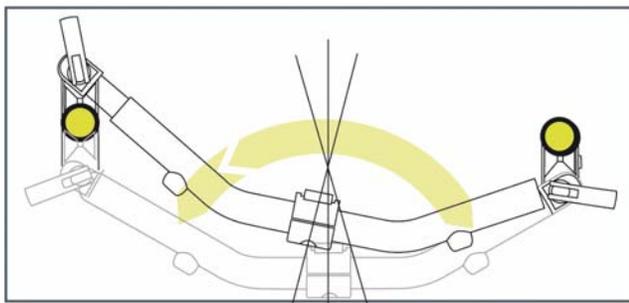
**Figure 18**



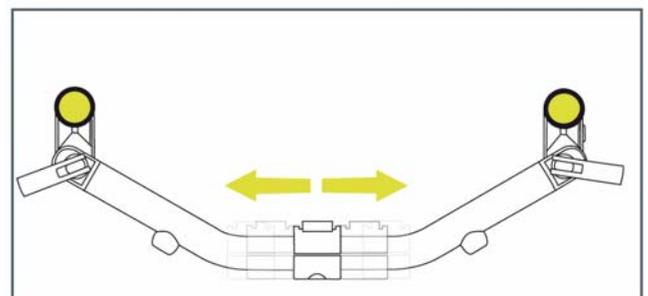
**Figure 19**



**Figure 20**



**Figure 21**



**INSTRUCTIONS FOR ASSEMBLY**

**Adjusting for different wheelchair widths:**

1. Proceed as for Seat Depth adjustment but rotate the Mounting Blocks equally to achieve the desired width.
2. Secure in position by tightening all fixing screws and closing the Locking Levers. See **Figures 22, 23, 24.**

**Removing the Backrest:**

1. Raise the Locking Levers at each side, past the vertical position to the *Unlocked* position.
2. With a hand under each side of the hardware, lift evenly upwards and clear of the Mounting Blocks.

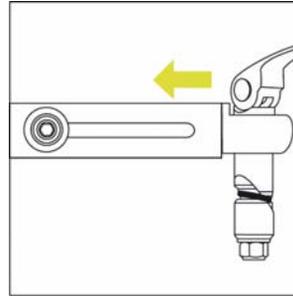
**Replacing the Backrest:**

1. Ensure both Locking Levers are in the *Unlocked* position.
2. With a hand under each end of the system, lower the Locking pins evenly into the Mounting Blocks on the wheelchair.
3. When both Locking Pins are located in the holes in the Mounting Blocks, push down firmly. Ensure that the Locking Pins are fully located before pressing the Locking Levers downwards until fully horizontal, in the *Locked* position. The system is now firmly attached to the wheelchair.

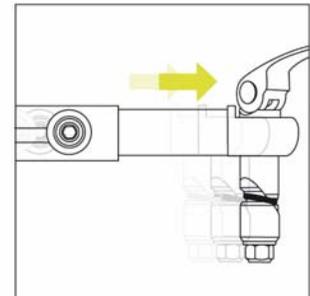
**Note:** It may be necessary to adjust the force required to lock and unlock the system to:

1. Suit the strength and/or dexterity of the user
2. Maximise the retention of the backrest.

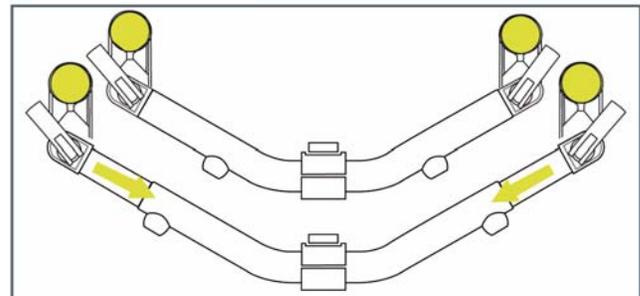
**Figure 22**



**Figure 23**



**Figure 24**



**Accessories:**

Once the Evo Back Hardware is in place, a head rest and shoulder support can be added very simply using the mounting track available.

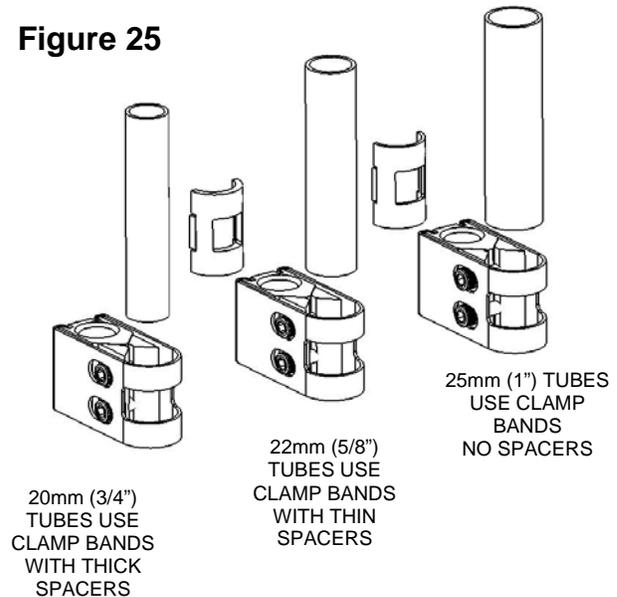
## INSTRUCTIONS FOR ASSEMBLY – MOUNTING BLOCKS

### Installing the Mounting Blocks:

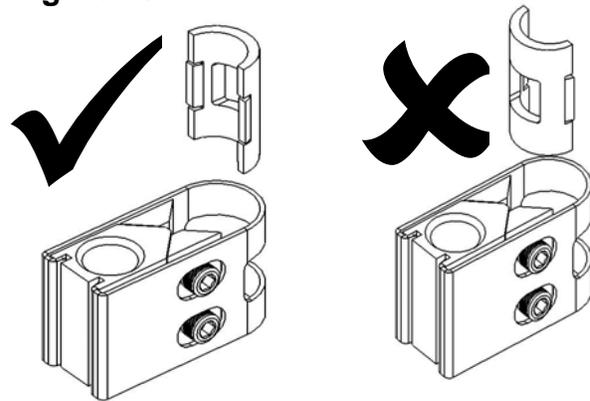
1. Dismantle the assembled blocks and remove the Shell Spacers.
2. Assemble and install. In most cases the pre-assembled mounting block will be suitable **without** the spacers. Occasionally it may be necessary to use the additional spacers to suit different cane diameters, as shown in **Figures 25**

**Please note:** Mounting Blocks are normally installed to the rear of the canes and angled inwards to align with the wheelchair arms. They can also be mounted in front of the canes but if so ensure the Clamping Screws remain accessible for the final adjustment and tightening.

**Figure 25**



**Figure 26**



## WARRANTY

The Flo-tech Evo Backs are covered by a warranty period of 24 months.

**Manufactured for Invacare Ltd by Performance Health Products Limited.**

Invacare Ltd  
 Pencoed Technology Park  
 Pencoed, Bridgend CF35 5HZ, UK  
 Tel: +44 (0) 1656 776222 Fax: +44 (0) 1656 776220  
 E-mail: uk@invacare.com Web: www.invacare.com



This product is manufactured to comply with the Medical Device Directive