

INSTRUCTION GUIDE

ADJUSTING KNEE SUPPORT AND CHEST STRAP



INTRODUCTION

Special attention should be given to the knee support's location on the leg. It must be aligned to allow comfortable deployment in the standing position while respecting the individual's biomechanical movement of the knee joint.

The goal is to secure and maintain the position of the tibia and allow the knee to extend and withstand the weight of the body.

As a guide, in a neutral sitting position, the knee support should be 1.5" to 2" in front of the shin, below the joint so that in the standing position, the knee support pad does not rest on the patella.



! WARNING

- A position too high may cause the kneecap to move when standing, which is undesirable.
- A position too low will reduce the effectiveness of the support and may allow the knee to flex when standing.
- A position too far from the knee may cause the knee to flex when standing.
- A position too close to the knee may cause hyperextension of the knee when standing.

USING THE KNEE SUPPORT

Once the knee support is adjusted, the strap must be fastened over the knee support for additional safety. When not in use, the knee supports can be swung-away and removed.

a) Removal: (Fig.1-3)

- To remove knee support, press quick-release lever (B).
- Rotate knee support outward (C) and lift (F).

b) Installation: (Fig.1-3)

- Place knee support pivot pin (D) into the locating hole on top of the receiver (E) with the knee support facing outward from frame.
- Rotate the knee support inward until latch plate locks into place.

! WARNING

- ALWAYS use the knee support for the standing function.
- ALWAYS fasten the magnetic knee support strap buckles together until a click is heard.
- Before operating the standing function, chest strap, pelvic belt, and knee support strap must be buckled up.

⊘ PROHIBITED!

NEVER use knee support without the chest strap and pelvic belt for the standing function.

Fig.1

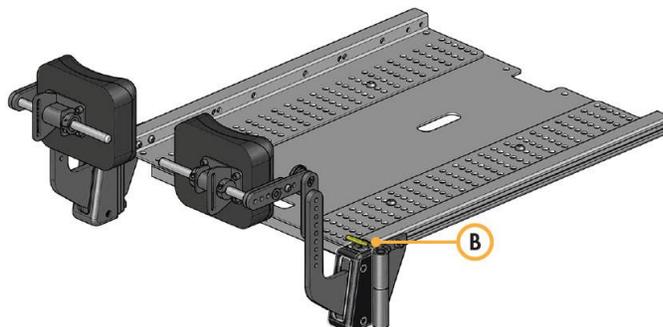


Fig.2

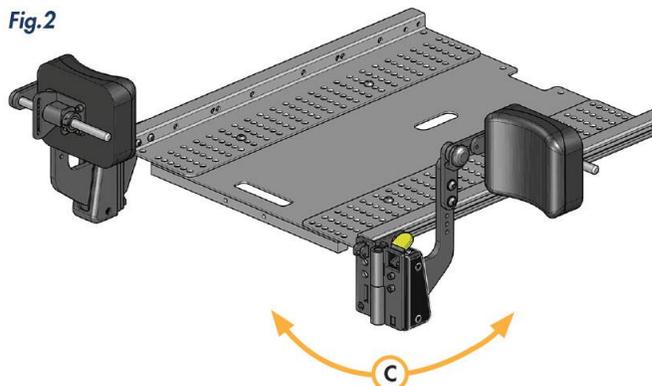
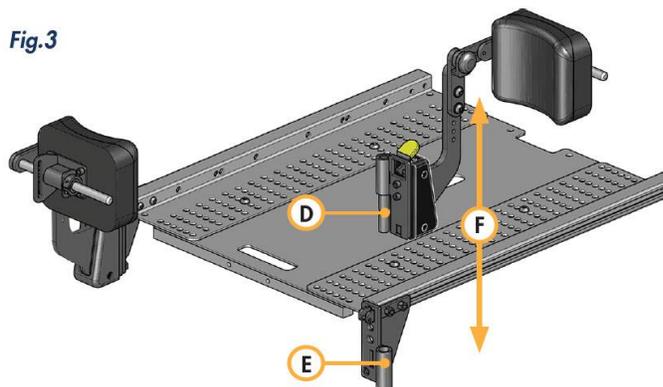


Fig.3



ADJUSTING THE KNEE SUPPORT

NOTE – The following adjustments are done on both sides. Refer to figures 4 through 8 for visual details.

1. Adjusting angle and height of knee support

- The user must be seated properly in the wheelchair.
- Remove 4 screws (B) on protective cap using a Philips or Robertson #3 screwdriver, to have access to angle adjustment.
- The following adjustments are done alternatively to achieve the best position.
 - a) **Angle:** Using a ¼ Allen key and a 7/16 wrench, unscrew both screws/bolts (C) but only remove the bottom screw/bolt. Use bottom holes to select angle* (Fig.6).
Replace screws/bolts at desired angle without tightening firmly.
 - b) **Height:** Remove button-head screws/washers (A) from vertical adjustment bar with a 3/16 Allen key. Select 2 holes on the bar for desired height. Replace washers/screws without tightening firmly.
- Adjust angle and height alternatively until the desired position is achieved. Once achieved, tighten all screws and bolts (C & A) firmly.
- Reposition protective cap (B) screws. Tighten firmly.

* Below are possible positions for achieving the proper angle:

Position 1 & 2 will place the knee support furthest from the seat and position 1 & 4 will place the knee support closest to the seat.

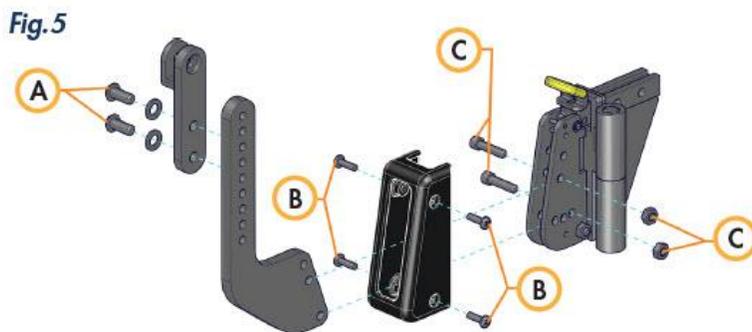
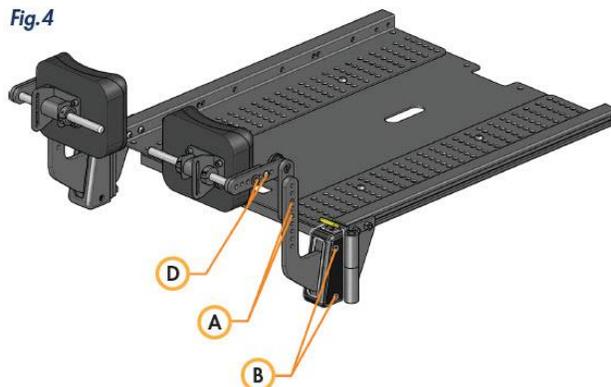
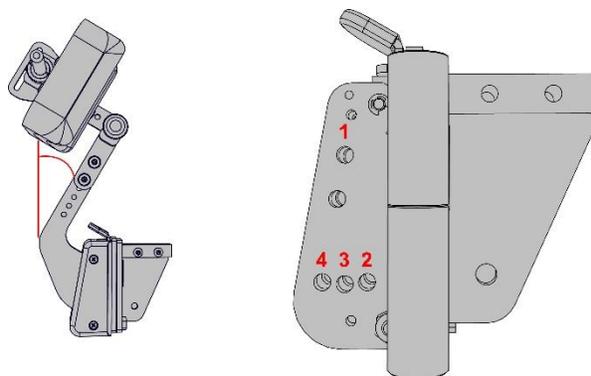


Fig.6

ALTERNATIVE POSITIONS	
HOLES	ANGLE
1-2	10°
1-3	20°
1-4	30°



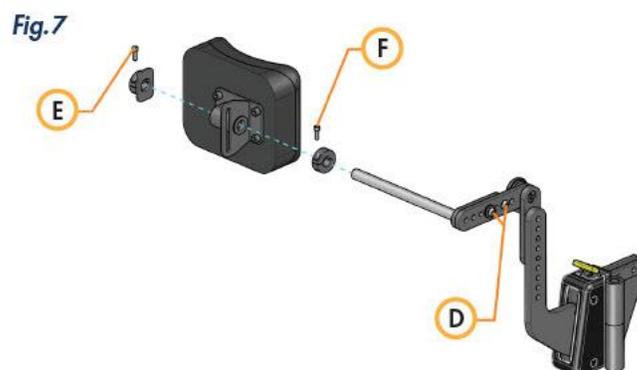
2. Adjusting width and angle of knee pads (Fig. 7 et 8)

The knee pads are adjustable in width to align with the neutral position of the shins. There is a vertical swivel of approximately 15 ° to allow the pad to fit snugly against the tibia and move freely when standing.

The user must be seated properly in the wheelchair.

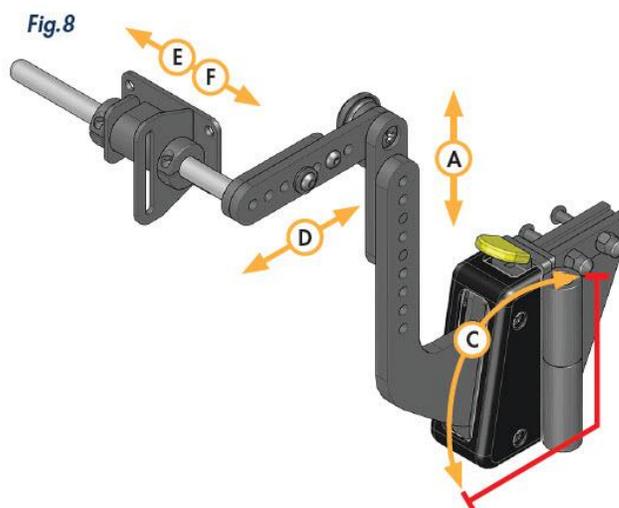
a) **Width:** Distance between both knee pads

- Loosen (without removing) 2 screws (E & F) of both shaft collars on either side of the pad, with 9/64 Allen key.
- Slide horizontally until desired width and tighten screws.
- Pads will have a slight vertical swivel to follow the user's knee movement while standing.



b) **Angle** of each knee pads.

- Loosen (without removing) screw (F) of the inside shaft collar only.
- Move pad up or down to the desired angle.
- Pads will have a slight vertical swivel to follow the user's shin movement while standing.
- Tighten screw firmly.



3. Adjusting depth of knee pads

Make sure the pressure of the pad on the shin is the same at the top and bottom of the pad throughout the standing motion.

If there is too much pressure in one area, this may mean that the swivel blocks at one point during its movement. To remedy this, loosen (without removing) the 2 screws (E & F) on both pads and let them pivot until the pressure of the pad is the same at the top and bottom, then tighten.

- The user must be seated properly in the wheelchair.
- Remove button-head bolts and washers (D) with a 3/16 Allen key.
- Use holes on the horizontal adjustment bar to select depth. Replace washers/screws and tighten firmly.

ADJUSTING THE KNEE SUPPORT STRAP

The knee support strap is part of the knee support system and must always be fastened to ensure additional safety when standing. The strap has magnetic buckles and when fastened, a click can be heard. Pull the “D” ring (A) at the end of the strap until snug.



! WARNING

- Height and depth adjustments of knee pads must be symmetrical on both sides.
- Knee support adjustment must be done under the supervision of a clinician, occupational therapist, physiotherapist, or healthcare professional.
- The standing function should never be activated without the knee supports properly positioned and blocked, with the strap securely fastened and snug, as well as the chest strap and pelvic belt properly buckled up.

BODY RESTRAINT SYSTEM

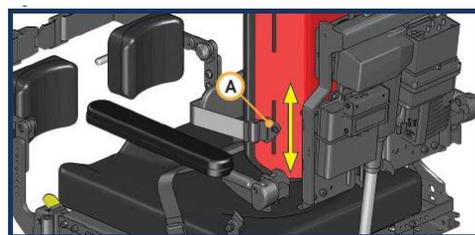
Body restraint systems are the various means of steadily maintaining the body in the seat. These include belts, straps and/or chest support added to the chair in addition to the knee supports to ensure that the body is maintained in a position that follows the seat movement as the different power options are activated.

! WARNING

- These restraints should not interfere with the movement of the body when any of the power seating/standing functions are deployed.
- Final adjustments of body restraints should be tested in front of a clinician where each of the power functions are deployed and retracted several times individually: Center mount, recline, tilt, elevate, and standing. While in movement, verify that each components and restraints are adjusted to maintain desired body position without any strain or any risk of interfering with joint movement and breathing.

ADJUSTING THE HEIGHT OF THE CHEST STRAP

- The user must be seated properly in the wheelchair.
- Loosen securing screws (A) on both sides with a 4 mm Allen key and a 10 mm wrench.
- Slide chest strap at the desired height.
- Tighten screws.



! WARNING

- To prevent choking hazards, the chest strap may not be adjusted too high/too low on the body.
- Make sure the user does not slide in the chair seat. If this occurs, the user may suffer chest compression or suffocate due to pressure from the chest strap.

NOTE – Ensure the chest strap position does not interfere with any other device attached to the wheelchair.