



KNEE MANAGEMENT ORTHOSIS

1. To CUSTOM FIT the length of the KMO™ or the KMO™ V/V:

- Measure the leg from the center of the popliteal area proximal to a distance 1 ½" to 3" distal to the perineum. Next measure distally from the popliteal area to the distal aspect or flare of the soleus. (As depicted in A.)
- Lengthen or shorten the KMO™ by removing the posterior screws and retainers on the plastic thigh and calf sections. Place the plastic thigh and calf sections at the desired length and replace the screws and retainers. (As depicted in B.) If it is necessary to shorten the KMO™, the uprights are designed with quick break off scores to make this task easier in the field. It is advisable to sand or smooth the edges following the break offs or you can apply layers of electrical or adhesive tape to protect the patient and surrounds.



2. To APPLY the KMO™ after following the steps above and for optimum results:

- The patient should be sitting or supine, with the affected extremity in the position requested by the managing physician, wither flexed to a specific degree or extended to a specific degree.
- After fully opening the KMO™ place the KMO™ Flexion/Extension joint against the popliteal area.
- Positioning the leg at the desired flexion/extension angle and gently tighten the screws of the KMO™ joint with a Phillips® screwdriver. To finish tightening remove the KMO™ from the leg and torque the screws to approximately 25 inch pounds. (As in depicted in C.)
- Replace the KMO™ on the leg and secure the proximal calf strap and then the distal thigh strap. Check to make sure the joint is still properly seated in the popliteal area. Secure the remaining thigh and calf straps following up the kneecap.
- Position loops and Velcro® to the desired position and trim all of you Velcro® straps, to the proper length, making sure you allow for changes in the patients extremity due to volume changes.



3. To CUSTOM FIT the liner system of the KMO™:

- You can either measure the maximum thigh circumference and the maximum calf circumference and trim the liner along the stitched trim lines to correctly size the liner for you patien, or you can pre-fit the thigh and calf areas and note the excess material. Proceed to trim the liner along the stitched trim lines to ensure the proper fit. (As depicted in D.)



4. To ADJUST the KMO™ V/V into varum/valgum:

- Loosen the (2) screws on the coronal hinge (As depicted in E.)
- Rotate the calf section of the KMO™ to the desired angle and torque the (2) coronal hinge screws to approximately 35 inch pounds.



5. To FINISH the fitting of the KMO™

- Carefully inspect the position of the patient's leg to make sure of the proper fit

Patents: 5,908,398 7,112,181
7,662,119 6,464,659 5,944,679
6,302,858 7,122,016
European Patent: EP 0 931 5251

Redesigned Orthosis for easier fit and function

We have redesigned the strap to;

- Be easily removed if you choose not to use it.
- Be placed in any position for optimal control
 - Examples include;
 - Distal and proximal to knee for anti flexion control
 - At the most proximal and distal ends of the thigh and calf cuffs for anti extension control.
 - Use straps only and no knee pad
- Thread through the slots in the cuff if preferred, to create consistent reproducible strap positioning for the patient.



We have redesigned the posterior padding and length adjustments to;

- Soften the posterior aspect and minimize irritating contralateral limb.
- Simplify and speed up the adjustment process of lengthening the thigh or calf thermoplastic cuffs.



KMO™ and PENTAGON® Orthoses

Wear and Care Instructions

- **Hinged knee orthoses –**
 - Can be worn while in bed or when upright. Follow application instructions for proper positioning.
- **Recommend wearing schedule –**
 - As instructed by ordering physician
 - In general to tolerance (determined by patients ability to wear without causing pressure, swelling or irritation).
 - For those patients who have compromised sensation, are at risk for skin breakdown or disruption of soft tissue surface - check skin after 1 hour of wear - if no concerns increase wearing time by 2 hour increments not to exceed 6 hours of wear without removal for 30 minutes to 1 hour, then reapply.
- **General –**
 - **KMO™ Orthosis** is recommended for those patients who need the knee immobilized in a fixed position within a range of 0° to 110°.
 - **PENTAGON® Orthosis** is recommended for those patients who need either the flexion and or extension Range of Motion (ROM) of the knee limited to a specific range with the addition of a separate ratchet lock and drop lock mechanism that enables the clinician to use in various applications. These applications include post operative, contracture management and when additional stabilization of the knee s necessary when managing the Neuro or Ortho rehabilitating patient.
- **Care –**
 - The liners on the thigh and calf along with the knee pad are removable. They can be machined washed using a mild laundry detergent on the delicate cycle or hand washed if desired. Make sure the liners and pad are rinsed well. Dry on low temperature setting or air dry.
 - The outer plastic shell can be wiped down with a mild laundry soap and water solution or rubbing alcohol.
 - *Seek further assistance from your local health care professional to customize the system to meet the needs of you and your patient.*

