

The Elbow Orthosis Series from Anatomical Concepts, Inc.

- Low Profile
- Simple fast fit designs
- Wrap-around closure
- Infinite ROM positioning 0° to 110°
- No medial upright impingement
- Decreased fitting time
- Single dorsal upright

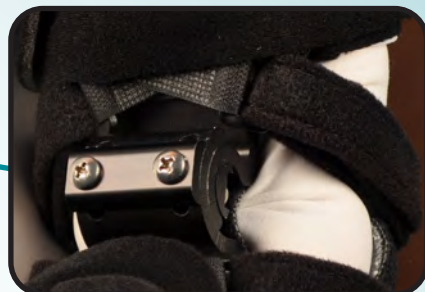
Three Functional Alternatives

EMO

Elbow Management Orthosis

EMO Indications & Applications:

- Static progressive stretching
- Musculoskeletal injury immobilization
- Post Botox or serial cast management
- CVA, TBI, SCI, CP and MS
- Radial head injury

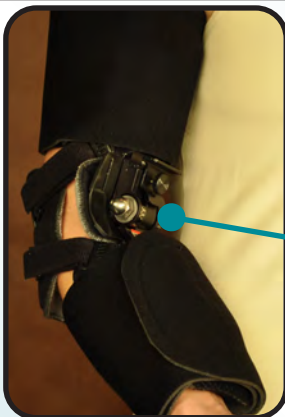


QUAD

Ratchet & ROM Joint System

QUAD Indications & Applications:

- Dynamic ratchet style passive stretch
- Bi-directional stretching
- Musculoskeletal injury immobilization
- Post Botox or serial cast management
- CVA, TBI, SCI, CP and MS
- Post Op Radial head injury

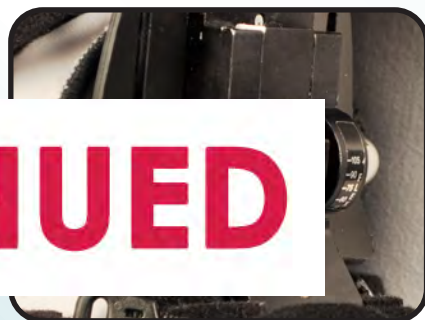


E-ROM

ROM J
E-ROM

DISCONTINUED

- Bi-direc
- Muscul
- CVA, TB
- Post Op radial head injury



Patents

7,122,016 6,464,659 5,944,679 6,302,858
7,662,119 5,908,398 7,112,181

European Patent: EP 0 931 525



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QUAD™ Elbow Orthosis

Variable Range of Motion Hinged Elbow Brace with Ratchet Lock

Wear and Care Instructions

Hinged elbow orthoses –

- Can be worn while in bed or when upright. Follow application instructions for proper positioning.

Recommend wearing schedule –

- As requested 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 –

- **EMO™ Orthosis** is recommended for those patients who need the knee immobilized in a fixed position within a range of 0° to 110°.
- **E-ROM™ Orthosis** is recommended for those patients who need either the flexion and or extension Range of Motion (ROM) of the elbow limited to a specific range. It can be used for post operative or contracture management.
- **QUAD™ Orthosis** has the same capabilities of the E-ROM with the addition of a ratchet lock mechanism that can enhance capabilities when working with contractures by allowing extension while blocking flexion. Additionally it can be used for stabilizing the elbow of the neuro rehabilitating patient.

Care –

- The liners on the forearm and upper arm along with the elbow pad are removable. They can be machine 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.
 - *Seek further assistance from your local orthotist to customize the system to meet the needs of you and your patient.*



QUAD™ Elbow Orthosis

Variable Range of Motion Hinged Elbow Brace

Fitting Instructions

The QUAD™ elbow orthosis is an anterior (dorsal) fitting single jointed elbow orthoses that will stabilize, limit or block flexion or extension ROM throughout a range of 0° of extension to 110° of flexion. Each design has its own unique qualities to match your patient's needs.

A. Application -

- 1) Unfasten Velcro® wrap around straps on the lower and upper arm segments of the orthosis. Proceed with unfastening the 2 elbow pad straps that are on the outside (side facing you). Position the orthosis so the metal hinge is centered over the front of your arm (Figure 1) and the chrome locking nuts (Quad™ Orthosis only) for the ROM setting or in the case of the EMO™ Orthosis, the adjustment screws are placed inline with the center of the elbow when viewing it from the side (see figure 2 arrow and line).



Figure 1



Figure 2

- 2) Apply the orthosis by first securing the 4 Velcro® straps attached to the elbow pad (Figure 3). Adjust the elbow pad straps so the elbow pad is centered over the patients elbow. Next, proceed with securing the wrap around straps beginning with the lower arm first and finishing with the upper arm strap (Figure 4).



Figure 3



Figure 4

- 3) The EMO™, QUAD™ and E-ROM™ elbow orthoses when properly positioned will look like the photograph below (Figure 5)



Figure 5

QUAD™ Elbow Orthosis

Variable Range of Motion Hinged Elbow Brace with Ratchet Lock

1. Free Motion:

Function: Allows for free elbow range of motion from 0° (Fully Extended) to 110° (Flexion). The QUAD™ Orthosis is shipped in the Free Motion position.

2. Variable Range of Motion:

Function: Allows for independent limitation of both Flexion and Extension of the device.

Flexion Stop Adjustment: From the Free Motion position or with the Extension stop already set, the Flexion stop can be set by flexing the joint to the required degree corresponding to the red ROM indicator. Then with the enclosed wrench turn the chrome nut on the right side of the brace clockwise until tightened. (See Figure 1) To return the device back to the Free Motion position, reverse the previous procedure.



Figure 1

Extension Stop Adjustment: From the Free Motion position or with the Flexion stop already set, the Extension stop can be set by extending the joint to the required degree corresponding to the red ROM indicator. Then with the enclosed wrench turn the chrome nut on the left side of the brace clockwise until tightened. (See Figure 2) To return the device back to the Free Motion position, reverse the previous procedure.



Figure 2

3. Fixed Motion Lock:

Function: Sets both the Flexion and Extension limitations into one fixed position.

Adjustment: From the Free Motion position flex or extend the joint to the desired position corresponding to the red ROM indicator. Then turn both chrome nuts clockwise until tightened. This will lock the joint in the desired position eliminating any Flexion or Extension motion beyond the set position. (See Figure 3) To return the device back to the Free Motion position, reverse the previous procedure.



Figure 3

4. **Ratchet Lock:**

Function: Stops Flexion while allowing for unlimited Extension to 0°.

Adjustment: There are two mechanisms for this adjustment, the center knob (A) and the slide lever (B) (see figure 4) From the Free Motion position and the joint flexed, turn the center knob counterclockwise until it fully stops. Then as the joint is extended, the slide lever will drop down preventing flexion; however it will continue to allow active or passive extension. In doing so it allows extension but prevents flexion. It does this repeatedly until full extension is achieved. (See Figure 4)

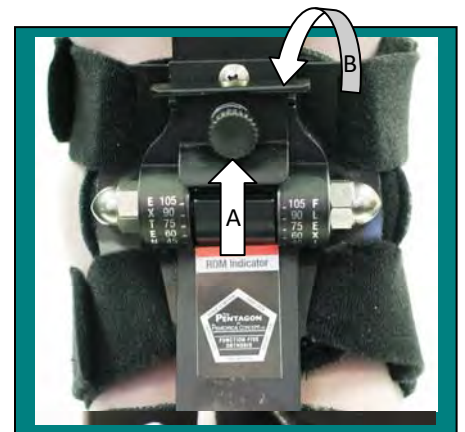


Figure 4

To permanently disengage (unlock) the Ratchet Lock function, and restore the Free Motion setting, lift slide lever upward. Turn center knob clockwise until it fully stops. (See Figure 5) This will lock the slide lever above the Ratchet mechanism allowing the Free Motion function.



Figure 5