

The application/fitting instructions for this Carbon Based, LLC product are for the use of and by certified, qualified orthopedic professionals only. Patients are not to attempt to apply or adjust any brace unless expressly instructed to do so by the orthopedic professional responsible for the prescription and/or initial fitting of the orthosis. All questions should be referred to the orthopedic professional and not to the manufacturer. The manufacturer warrants only that the enclosed orthosis has been inspected for quality and can be effective for certain indications, but final decisions and ongoing monitoring must be made by the orthopedic professional(s) prescribing and /or fitting the orthosis to determine its effectiveness for an individual patient. Patient compliance is an integral part of the entire orthotic protocol and must be adhered to in order to avoid problems and to maximize the effectiveness of the prescribed treatment.

### Fitting the P4CO

The P4CO should be worn against the skin. The fabric socks covering the sternal and thoracic pads eliminate the need for clothing to be worn under the P4CO ( Fig. 1 ). This method reduces orthotic migration. If a “T” shirt is worn under the P4CO care must be taken to avoid wrinkles in the shirt under the sternal and thoracic pads. In addition, slack in the shirt must be maintained at the shoulders prior to tightening the P4CO. Drawing the shirt down, then tightening the P4CO can cause upward migration of the P4CO when the arms are raised.

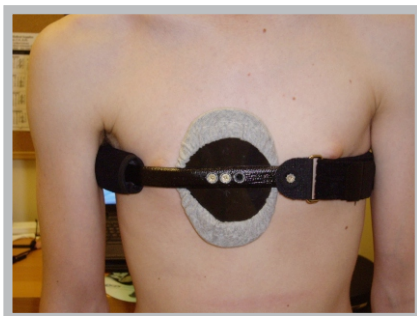


Fig. 1

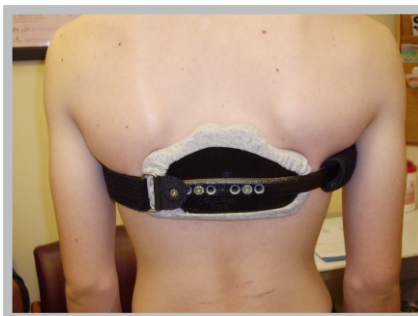


Fig. 2



Fig. 3

The P4CO sternal pad should be located over the apex of the chest prominence. The thoracic pad should be between the scapulae ( Fig. 2 ). The “ V ” groove in the Thoracic pad should be centered over the spinous processes ( Fig. 3 ). The thoracic pad should not contact either scapula. The sternal pad may be slightly superior to the thoracic pad when viewed from the side. Ideally the sternal and thoracic pads will be opposite each other( Fig. 4 ).

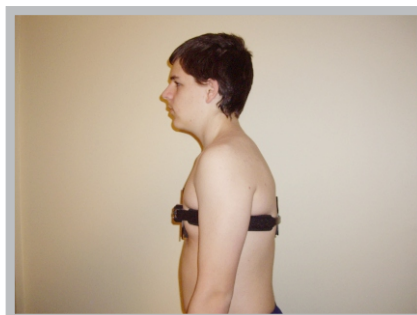


Fig. 4

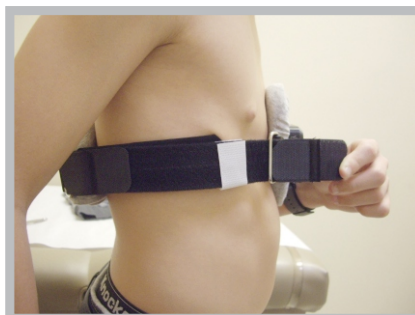


Fig. 5

There will be mild compression of the ribs under the axilla when the P4CO is tightened. CAUTION: over compression in this area will cause changes to the rib cage and chest walls. To index the proper strap tension for the patient, place the white Velcro strip ( supplied ) on the axilla strap immediately before the loop in the chafe ( Fig 5 ).

## How to Fit and Deliver a P4COft (Fixed Tension) and P4COsa (Self Adjustable) Read All Instructions Prior to Fitting Patient

### Fitting the P4CO (cont'd)

The patient will put the axilla strap through the chafe loop and tighten the strap to the white Velcro marker. If excessive compression is suspected, examine the sternal and thoracic pads for proper location on the body. The axilla strap is designed to maintain the carbon fiber hoop against the opposite chest wall. There should be no gapping between the skin and the pad covered carbon fiber. In addition, the axilla strap is NOT intended to increase sternal pad pressure.

### Adjusting Sternal Pad Pressure

#### P4COft

If additional sternal pressure is desired a Spacer Kit is available from Carbon Based. Simply insert one 1/8" spacer between the plastic and carbon fiber with the longer flat head screws and truss nuts supplied with the Spacer Kit.

Tension of the sternal pad is fixed by the manufacturer and may be adjusted by the means described above. The patient should feel mild to moderate compression of the prominence at initial fitting. Gradual tightening of the device should be discussed with the ordering physician and performed as described above.

#### P4COsa

To increase compression on the sternal prominence beyond the factory setting, insert the supplied 4mm Allen wrench into the center bolt on the PACU and, from the patient's perspective, rotate the wrench counter clockwise to tighten the bolt ( Fig. 6 ). This will cause the PACU to increase compression. The PACU has a maximum travel of 3/8". If the PACU has reached its maximum travel distance and additional sternal pressure is desired, 1/8" spacer kits are available to be inserted between the plastic sternal plate and the PACU. ( also see P4COsa ADJUSTING THE STERNAL PAD LOCATION document ).

Tension of the sternal pad is fixed by the manufacturer and may be adjusted by the means described above. The patient should feel mild to moderate compression of the prominence at initial fitting. Gradual tightening of the device should be discussed with the ordering physician and performed as described above.

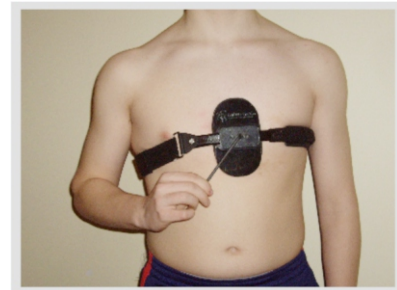


Fig. 6

### Adjusting the P4CO Orthosis

- The Sternal pad may be moved left or right to better center the pad over the prominence. See "Adjusting the Sternal Pad Location" document for the specific brace ordered.
- The Thoracic Pad may be moved in the same manner as the Sternal pad.
- Padding may be applied to the Carbon Fiber Hoop as needed, however padding must not interfere with movement of the Axilla Strap into the Chafe.
- To heat and adjust carbon: select a 2"-3" area on the carbon hoop where the adjustment will occur. Heat the area with a flameless heat gun for 5 minutes, moving the heat gun around the area to heat both sides of the carbon hoop. Working time after heating is less than one minute.

**DO NOT ATTEMPT MORE THAN A 10 DEGREE BEND IN THE CARBON BAR.**