# USER GUIDE: Matrix 4th Generation

## Mounting Backs and Sheets

Hardware call the 'Pivot' is used for mounting Backs and Sheets (top picture). V-Trak (third picture) hardware is used to mount Backs only. Please see the User Guides (and other information) for these products for guidance. These are on our website: www.matrixseating.com and V-Trak's website: www.v-trak.com

## MATRIX COVERS

Backs come with a pre-sewn cover (third and fourth pictures) but Sheets, for full body support, have custom made covers made by the local Matrix supplier.

<u>Back Cover Fitting</u>: The Cover is fitted and removed using diagonal lateral zippers for the Pivot cover and the Velcro at the bottom rear of the Matrix Shell for the V-Trak cover. The Back fabric forms three cover pouches that fit the two lateral (side) supports and the top of the Back. The open middle section of the cover allows for access to the central track of the V-Trak system. The Pivot cover completely covers the whole of the rear side of the Back.

<u>Back Cover Washing</u>: The Cover is made from open cell foam and the covering material is not waterproof.

The Matrix Back cover can be machine washed at low temperature, less than 40° C. Do not tumble dry the Matrix Back cover as the high temperature degrades the flame retardancy characteristics of the stretch cover and foam filling. A short spin cycle can be used followed by warm air drying.

Replacement and spare covers are available.











GENERAL DESCRIPTION OF PARTS AND TOOLS:

- (1) Bottom Clamp half (threaded part)
- 2) Top Clamp half
- 3) M5x8mm socket screw
- 4-ball, 2 options:
  2-ball, 2 options:
  2-ball, 2 options:
  black = standard; dark red = flexible
  black = standard; dark red = flexible
  black = standard; dark red = flexible
- $\bigcirc$  Edge ball to complete outer edges of Matrix
- 8 Matrix Key for rotation of clamp during live fitting (see bottom of page 2)
- (9) 4mm T-handle hex-key, ball nose



The user of this equipment, including carers and professionals who may adjust and handle it, should study these instructions. These instructions contain important information about the use and application of 4th generation. Because of the clinical and safety ramifications of misuse, injury to the user or others could result if you are unclear about how it works. Please keep these instructions to refer to later.



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## 4TH GENERATION: MASTER MATRIX

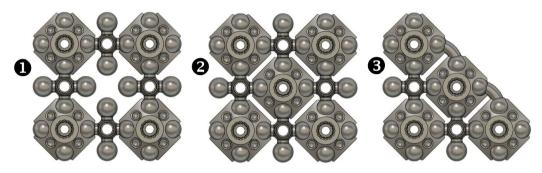


#### STANDARD MATRIX CONFIGURATIONS

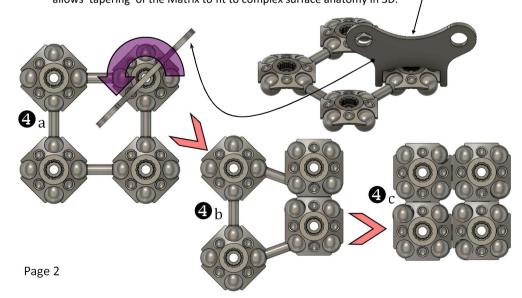
**1** Standard Matrix configuration

4

- 2 'Close weave' Matrix, stronger than **1** but slightly less 'shapeable'
- 3 'Close weave' using Elbows on outer edge useful, e.g., around trunk under axilla



Using 2-balls instead of 4-balls as in ①. Rotating the clamp, using the Matrix Key, allows 'tapering' of the Matrix to fit to complex surface anatomy in 3D.



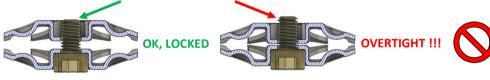
## HINTS FOR HANDLING MATRIX

Tightening the hex screw controls Matrix structural strength. When undone the clamp comes apart; when completely tightened the structure is locked in position. So . . .



- **Tightened a little**, the structure can be made as stiff as needed, eg., for a live back fitting when Matrix must hold its weight against gravity,
- Tighten to about 4.25 N-m (3.15 ft-lbs) to lock the structure but do not exceed about 5.0 N-m (3.7 ft-lbs). You can use a ratchet screwdriver or powered screwdriver for extra speed as long as the maximum Torque limit is not exceeded. When locked a small amount of thread (just proud of nut) will show above the nut - with 2 threads showing the clamp is overtightened.





Only **fully tighten (4.25 N-m or 3.15 ft-lbs)** when the final desired shape is obtained. Make this the **last action** after fitting to the client or on a cast.



#### USING FLEXIBLE COMPONENTS

All the main interconnecting parts, **4-balls and 2-balls**, can now be obtained in a flexible material. These are all **dark red** so at a glance they discretely locate the flexible areas within the Matrix structure.

**Soften the edges:** Using the flexible **dark red** parts at the edges can make them more compliant and be used creatively for position, pressure and spasm management, e.g., lateral hinges, soft lumbar shaped areas, softer pommels, etc.

Page 3