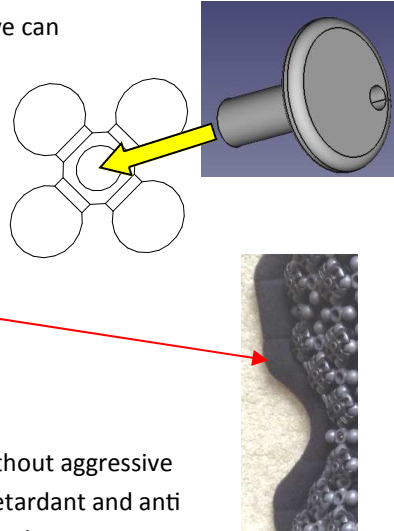


## 5. Covers:

Lower Backs are supplied with 'Pop-on', machine washable cloth covers that use an anti-microbial fabric.

These machine-washable covers are attached to the Smart Back using a black upholstery peg that fits into (pop-in) the centre of the 4ball unit.

These can be ejected from the 4ball using a special tool we can supply. Alternatively, if carefully done, the black upholstery pegs (on the back of the cover) can be pulled out by hand. Make sure when replacing a cover after washing that the pegs are located correctly (not off centre) in the 4balls so there is a uniform overlap, about 30mm, around the outside edge of the Matrix.

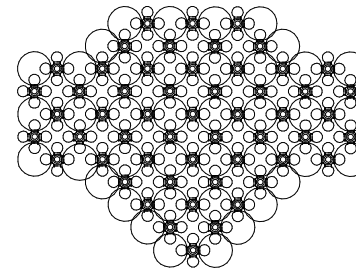


When washing these covers do so at low temperature without aggressive spinning. Air dry (do not tumble dry) to preserve flame retardant and anti microbial properties of the internal foam and cover material.

## USER GUIDE: Matrix Smart

### 1. Introduction:

Matrix Smart Backs arrive anatomically shaped and tightened ready for delivery. Below is the Lower Back shape (Matrix layout on the left) and on the right is the Lower Back with a 'Pop-on' cover. The table on the left gives the surface dimensions of the shapes (called 'Circumference') and in the right table the options are shown. In addition to covers the Backs can come with T-Trak or Pivot Mounting hardware.



Lower Back shape



Lower Back with 'Pop-on' Cover

Height x Width (Circumference)	Small	Medium	Large
Lower Back	280 x 400	360 x 510	430 x 580

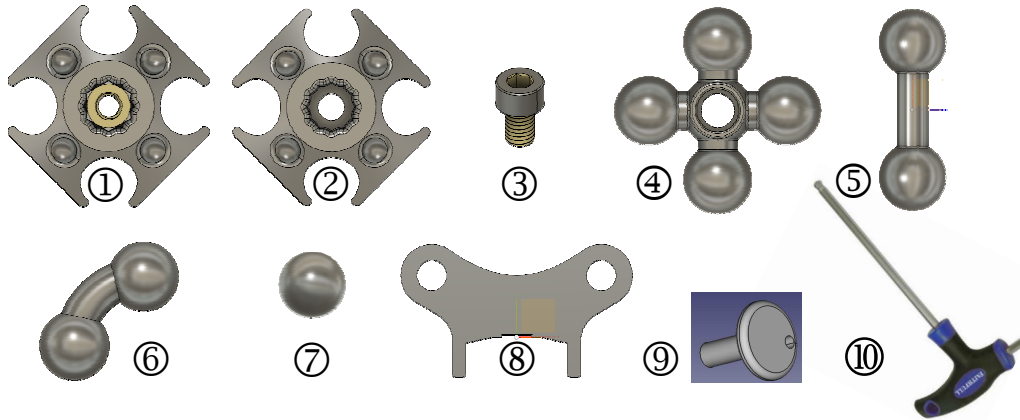
Matrix Smart Options:	
Pop-on Cover,	✓
V-Trak parts, or	✓
Pivot mount	✓



Website: [www.matrixseating.com](http://www.matrixseating.com)  
 Email: [sales@matrixseating.com](mailto:sales@matrixseating.com)  
 Phone: 01747 850022

## 2. Tools and part names

If the shape of the Back is to be changed during delivery, a 4mm Allen Key is needed. We recommend a ball nosed, T-handle version so access near wheelchair back upright canes is improved (ball nosed Allen Keys allow up to 30 degrees off centreline tightening).



Parts and Tools: 1. Bottom Clamp Half (threaded part), 2. Top Clamp Half, 3. M5x8mm socket screw, 4. 4ball, 5. 2ball, 6. Elbow, 7. Edge ball, 8. Matrix Key for rotation of clamp during live fittings, 9. Upholstery Peg removal tool, 10. 4mm T handle Ball Nosed Allen Key

## 3. Connecting a Back to the wheelchair:

Follow the User Guides supplied with the Pivot or T-Trak for connecting the Back to the wheelchair. Also, for Pivots, please see the 4 minute video on our website. This is in the Pivot pull down menu, bottom of the first page. The path to this video is:

<http://www.matrixseating.com/Pivot-wheelchair-interface-clamp.php>

Fitting of the V-Trak can be found on the V-Trak website:

<http://www.v-trak.com/products/specialist-seating/v-trak-lite>

## 4. Shape adjustment:

In most cases the Smart Back can be connected to the wheelchair and positioned appropriately for the client and locked in position (as per User Guides and video). If necessary some simple shape changes can be done in a few minutes to improve the fit or, for example, to make one side of the Back asymmetrically corrective. To do this you need to understand how the clamp, that holds the ball units (called 4balls) together, works.



The clamp is loosened with the 4mm Allen Key. Rotate the screw counter clockwise enough so the 4balls can move. If you overdo it the clamp may fall off so experiment with one to see how far you can turn the Allen key to ensure the clamp is loose but tight enough to hold the parts in place.

Once the small section of loosened Matrix is re-shaped to the client it can be tightened again. Tightening the hex screw controls Matrix structural strength. 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 as hard as you want with 4th Generation (hex screw)** and because of the high tightening torque limit you can use a ratchet screwdriver or powered screwdriver for extra speed.