

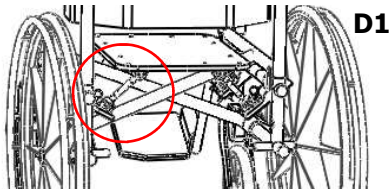
### 3.3. PIVOT INTERFACES FOR SEATING SUPPORT PRODUCTS

**3.3.1 Seat and Back Fitting:** The 3 slot, Stainless Steel interface is shown on the right. Two of these are usually mounted long side vertically (as shown) on the Matrix Back (with 3 screws, on each plate, on the left and right lateral aspects of the Back). Make a single bend in one or more of the arms to fit to the locked Matrix shape.

**3.3.2 Other interfaces:** There are 2 and 4 slot interfaces available for slimmer and smaller mounting footprints.



### 5. USING THE PIVOT TO POSITION A BODY SUPPORT SHELL:



**D1**

#### Drawing D1

These are usually fitted beneath the seating support using four Pivots. See User Guide 6.

### 6. FINAL POINTS TO REMEMBER

- ☑ Check all fasteners in Matrix Pivot periodically to see if they are tight.
- ☑ **Do not overtighten the four M6 bolts on the tube clamp** as the clamp will bow and not lock properly.
- ☑ **Do not overtighten any of the three M5 screws on the disc clamps** as this may bow the discs and reduce the interference fit locking design.
- ☑ If a wheelchair with the Pivot is used as a seat during transportation a risk assessment should be carried out.
- ☑ When fitting the Pivot to various supports make sure the correct interface is used.
- ☑ Check that this Guide is issued to, and understood by, the user and/or carers.

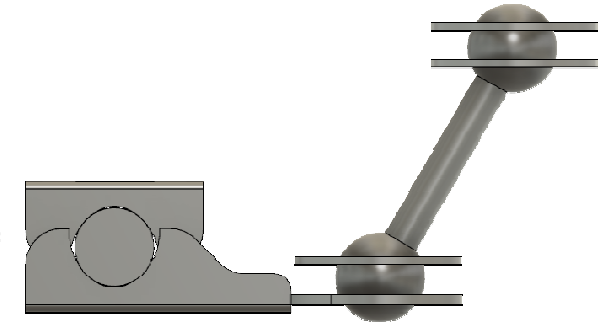
## USER GUIDE: Pivot, Fixed Type

### 1. GENERAL DESCRIPTION OF PARTS AND TOOLS:

#### 1.1 COMPLETE ASSEMBLY:



**PHOTO:**



**SCHEMATIC STYLE FOR THIS GUIDE:**

#### 1.2 TOOL REQUIRED:



4mm ball nose hex allen key



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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 Matrix Pivot. 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.

*Matrix Seating Limited (MSL) accepts no liability from mis-application of this product.*

## 2. INTRODUCTION:

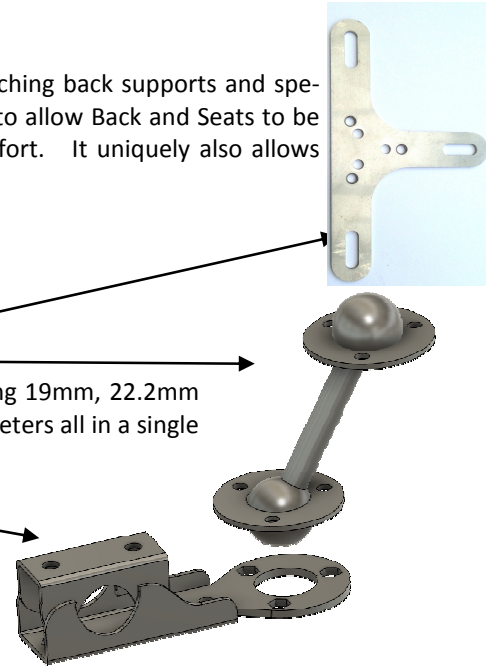
The Pivot is a simple modular mechanism for attaching back supports and special seating to wheelchairs. It can pivot and move to allow Back and Seats to be positioned for clinically optimal function and comfort. It uniquely also allows lateral tilt.

## 3. HARDWARE:

The Matrix Pivot is made of three main parts:

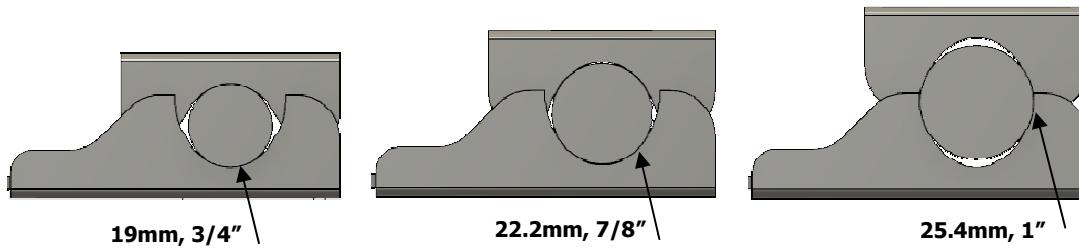
1. An interface to the seating product
2. Locking Ball and Socket unit (Dumbbell)
3. The wheelchair tube clamp accommodating 19mm, 22.2mm and 25.4mm (3/4, 7/8 or 1 inch) tube diameters all in a single clamp

NB: All drawings are schematic only



### 3.1. WHEELCHAIR TUBE CLAMP:

The **tube clamp** will fit automatically to 1", 7/8" or 3/4" (25.4mm, 22.2mm, 19.1mm) tubes: these will fit most wheelchairs. The two clamp halves are connected with two M6 mushroom head hex bolts. These are located in Picture 1 on the right, page 3, labelled, **A**. **Do not overtighten these bolts, just enough to lock to the tubing.**

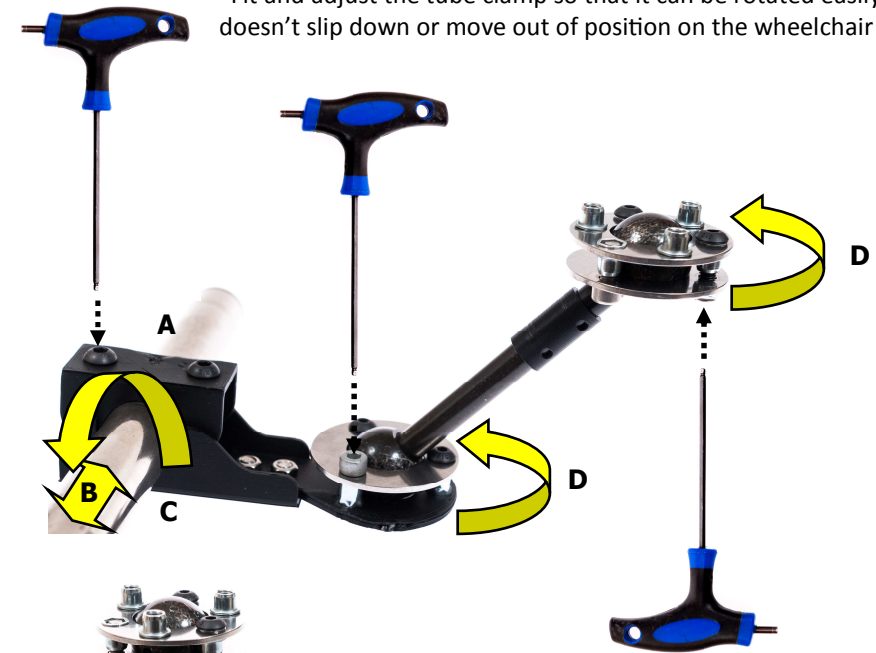


The arc contacts (above) between the clamp and tube are different for each different tube diameter. There will always be a 'gap' between the clamp halves and the tube as shown above. **Do not keep tightening to try and reduce these gaps**—they are meant to be there! So, for example, on the 1" tube there is a gap at the top and bottom, on the 3/4", on the sides. The arrows above point to the contact arcs for each of the 3 tube diameters.

**B** and **C** show the possible clamp movement on the wheelchair tube controlled by the M6 bolts. The **D** arrows signify a spherical joint (3 rotations possible) at each end of the Dumbbell.

**Picture 1**

Fit and adjust the tube clamp so that it can be rotated easily but doesn't slip down or move out of position on the wheelchair tube.



**Picture 2**



Using various rotations, the Pivot can be moved in multiple directions including front/back, side/side and rotation and up/down movement on the tube. Picture 2 show the result of a simple rotation of the top and bottom ball and socket joints.

### 3.2. BALL AND SOCKET JOINT

The two ball and socket joints (25.7mm diameter balls) lock by tightening the three M5 socket head cap screws using a 4mm ball nosed hex allen key. Once the three screws are adjusted so the clamp disc is snug (movement with a little force), the disc clamp can be locked by only tightening one cap screw—**do not overtighten**.



See how to fit an earlier version of the Pivot in a 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>