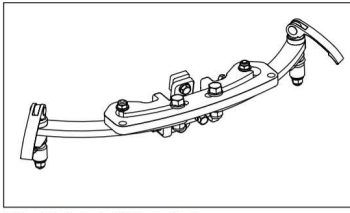


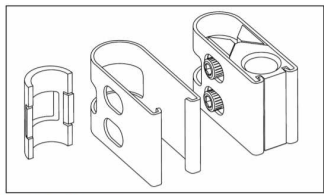
Central Mounting Assemblies (CMA) complete with Universal Central Mount (CMU)



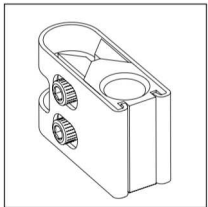
V-Trak Original- CMA- Including arms

PRODUCT CODE	DESCRIPTION	WIDTH RANGE between canes	Recommended Wheelchair
CMA100	Assembly with 100mm arms	24cm - 41cm	11" 12" 13" 14"
CMA125	Assembly with 125mm arms	29cm - 46cm	15"
CMA150	Assembly with 150mm arms	33cm - 49cm	16" 17"
CMA175	Assembly with 175mm arms	37cm - 52cm	18"
CMA200	Assembly with 200mm arms	40cm - 57cm	19" 20"
CMA225	Assembly with 225mm arms	43cm - 61cm	21"
CMA250	Assembly with 250mm arms	49cm- 67cm	22" 23" 24"

The CMA has Arms which attach to the Mounting Blocks at the ends, and the central part attaches to the Matrix T-Track (see page 2), which attaches to the Matrix back support. Product codes and sizes are shown above.



MBR-UE - 19/22/25 mm



MBR - 16/20/22/25/32

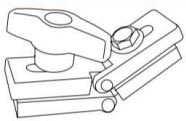
Mounting Blocks (for round wheelchair canes), sold as a pair

PRODUCT CODE	DESCRIPTION
Universal Mounting Blocks For Round Section Canes - Diameters 19-25mm (3/4"-1")	
MBR-UE	Mounting Blocks Universal - configured for Europe - 19/22/25 mm
MB-UN	Mounting Blocks, Universal - Etac/Netti
MBR-US	Mounting Blocks, Universal - configured for USA- 1"- 7/8"- 3/4" inches (19/22/25 mm)
Mounting Blocks for specific diameter round section canes	
MBR-16	Mounting Blocks, 16mm dia inc spacer
MBR-20	Mounting Blocks, 20mm dia
MBR-22	Mounting Blocks, 22mm dia
MBR-25	Mounting Blocks, 25mm dia
MBR-32	Mounting Blocks, 32mm dia

The Mounting Blocks attach to the wheelchair tubing / frame, and they hold the Arms. Product codes and sizes are shown above.

The MBR-UE is a pair of universal Mounting Blocks which can be used for multiple sizes, and is used when the exact diameter of the wheelchair back tubing is not known in advance. If tubing sizes are larger, i.e. 25 or 32mm, then the MBR25 or MBR32 is needed.

The above options are for round tubing. If some other shape is needed, i.e. square tubing or product specific, please contact us (there are over 32 different types of Mounting Blocks available).

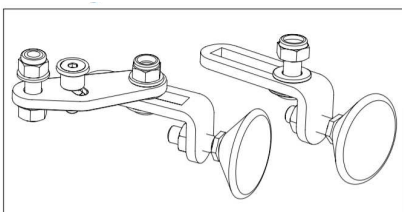


SHSD

HARDWARE AND CONNECTING HINGE (SH SD)

PRODUCT CODE	DESCRIPTION
SH SD	Track and hardware connecting hinge

The Shell Hinge (code SHSD) connects the top and bottom halves of the Matrix T-Tracks (codes MTT 1 to MTT5) so they can fit to a Matrix Back more cosmetically or fit into a clinical feature such as spinal lordosis or kyphosis.

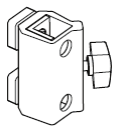


BMSTX / BMSTA

Shell Stabilizers to prevent/regulate shell flexing.

PRODUCT CODE	DESCRIPTION
BMSTA	Shell stabiliser (pair)
BMSTX	Extended shell stabiliser (pair)

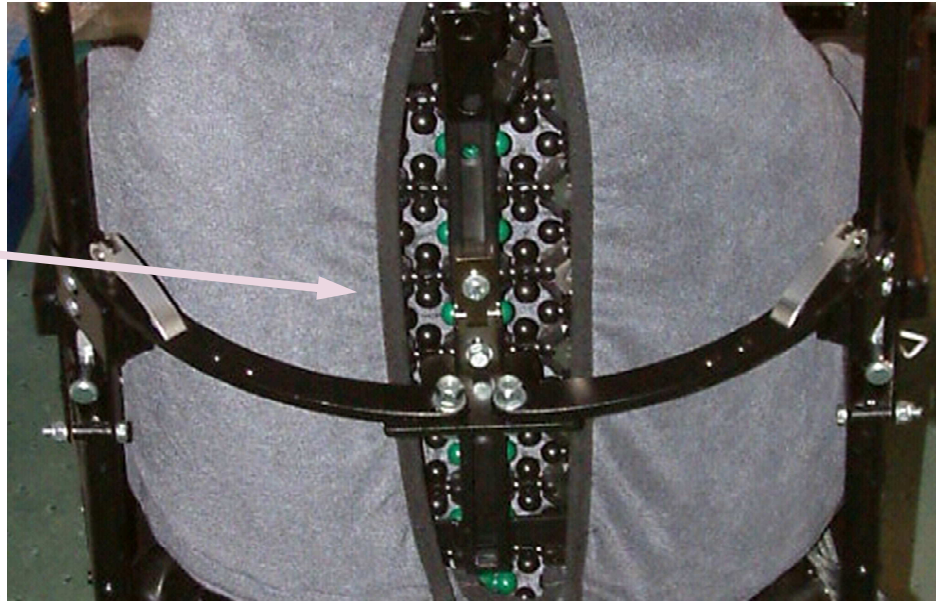
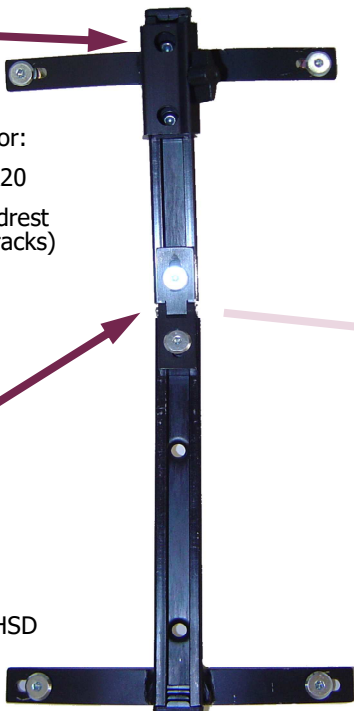
The BMSTX (on the left) and BMSTA attach to the Arm (CMA) and press up against the Matrix shell to reduce the flexion or movement of the Matrix shell (they act as reinforcement).



Headrest Adaptor:
HA14, HA17, HA20
(to attach a headrest
stem to the T-Tracks)








Shell Hinge: SHSD

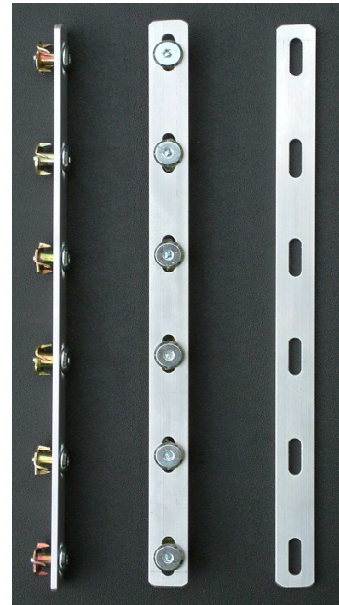


Matrix T-Tracks allow interfacing to the Matrix Back.

- T-Tracks are made in five sizes to match the Back sizes. They are linked together with a hinge that will accommodate a kyphosis or lordosis. The mounting arms attach to the central assembly which slides in the T-Track for positioning.
- Product codes and sizes are shown in the table on the right.
- The hardware with the Matrix Back attached is easily removable from the wheelchair using the cam locks.
- A Headrest Adaptor is shown attached (Part # HA14 or 17 or 20). The segmented shell hinge is Part # SH-SD

Matrix T-Tracks					
Part #	MTT1	MTT2	MTT3	MTT4	MTT5
Overall	13.5"	15.5"	16.5"	17.5"	19.5"
Length	34cm	40cm	42cm	44cm	50cm

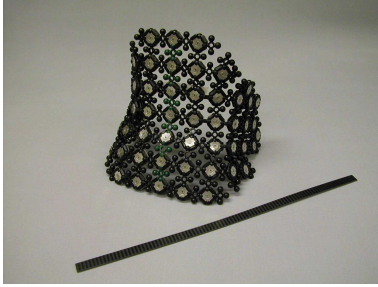
Cladding sub-components		
Part	Picture	Codes
12", (300 mm) Cladding		CA, CSS, CCF
Plated Special T-nuts (only use these modified T-nuts on the Matrix)		STN1
Large Head Hex Mounting Screws		LHB1
Spacers for T-nut Mounting		TNS1
Retaining washers to hold the mounting screws		TNR1



- Reinforcement Cladding is available in Aluminium (CA), Stainless Steel (CSS) and Thermoplastic Carbon Fibre (CCF).
- CA is light weight but not as stiff or strong as CSS or CCF. The CA strip is 46 grams (300mm long)
- CCF is as strong as CSS but lighter (31 grams for 300mm) and slightly less stiff. The CSS strip is 125 grams (300mm)
- CA and CSS cladding have 6 slots whereas CCF needs to be drilled to match up with the 4ball mounting holes once heat shaped.
- CA and CSS are mechanically cold bent to fit the Matrix shell at each of the 4ball/clamp ball joints. CCF is fitted by heat forming (see next page for details).
- CCF is made in 600mm lengths so gives a longer reinforcing length (on most back supports this will cover both laterals).

Carbon Fibre Cladding

Heat and Drape



Carbon Fibre can be used to reinforce the Matrix very effectively. Strips can be heated and draped to conform to many shapes. The strip shown on the left is .75" (19mm) wide and .125" (3.18mm) thick by 24" (600mm).

This material must be heated as evenly and thoroughly as possible to allow accurate shaping and to help maintain lamination integrity. Heating should be done preferably in an oven with the carbon fibre strip resting on a Teflon non-stick sheet (5-7 minutes @ 180C). The heated strip should then be handled with gloves, which can also be sprayed with Teflon to reducing sticking. Heat shrink wrap can be used to help prevent de-lamination (ordering code is HS1).



When hot, the strip is draped and pressed onto the Matrix in the desired location. Pressure should be applied on the carbon fibre cladding to prevent de-lamination or bulging of the surface. Cooling is rapid and so the forming should be done quickly. If the strip is hot enough, the central hole of the Matrix 4-Ball will leave a visible mark to aid in locating attachment points.

The carbon fibre strip is then drilled and attached to the Matrix using the special T-Nuts and screws, as with the aluminum cladding.

Examples are shown on the left. Re-shaping can be made by heating the strip with a heat gun. It should be removed for re-heating to avoid damaging the Matrix.



Initial overall heating of the strip may be done using a heat gun, in the absence of an oven. The strip should be laid on a metal strip and the heat gun run evenly along it, turning the strip periodically.

Note: Forming of the carbon fibre can occur as a low as 120C to as high as 240C. De-lamination and less accurate shaping will occur in the lower temperature range whereas degradation of the thermoplastic carbon fibre 'matrix' will occur at the higher end of the range. If the strips are to overlap or to crossover for extra strength, the temperature of the material has to be high enough for the surfaces to become sticky, to allow the strips to conform to each other. Heat shrink wrap can be used to help prevent de-lamination (ordering code is HS1) and loose fiber containment.

Note