D-SEAT Wheelchair Seating Unit

ASSEMBLY AND ADJUSTMENT MANUAL

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SEATING UNIT ASSEMBLY

Assemble the pre-assembled seat module and pre-assembled backrest module using the connecting metal brackets and the fasteners that have been already pre-assembled on the metal brackets.

Assemble the pre-assembled backrest module to the backrest panel. Use the fasteners that have been already pre-assembled on the metal bracket.
Place the pre-assembled abductor module in the abductor retainer under the seat panel. Tighten the safety knob.
The train rails have been pre-assembled on the tray top. Undo all the tray fasteners, rotate the tray rails, reposition them and tighten the fasteners in place.

Note: The tray rails can be assembled and adjusted in various locations and orientations.
Close view of the tray rails assembled in two different settings

Note:

There are other parts that are supplied with the product that do not need to be assembled on the product at this stage. Please keep all the remaining parts in a safe place for future use when the product is fitted to the user.
SEAT PAD ADJUSTMENT

The seat pad includes the following:
- SEAT FOAM
- PREISCHIAL SHELF
- SEAT BASE FOAM
- SEAT COVER

Mark all three foam layers at the desired seat depth

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Cut all three foam layers following the mark.

Mark the preischial shelf (middle foam layer) at the desired depth.
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Cut the preischial shelf following the line.

Place the three layers together.
Glue the three layers together at the front on depth of around 5cm (2 inches) to keep them together.
Wait for the glue to get dry.
Place the foam pad inside the seat cover

Fold and close the seat cover.
BACKREST PAD ADJUSTMENT

The backrest pad includes the following:
BACKREST FOAM
SIMPLIFIED SACRAL PAD
BACKREST COVER

Mark the backrest foam at the desired backrest height.
Cut the foam.
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Remove the cut-off foam

Place the backrest foam inside the backrest cover.
Shape the simplified sacral pad as required.

Note:
Additional foam may be used if needed.

Glue the simplified sacral pad to the backrest foam.

Fold and close the backrest cover.
BACKREST PANEL HEIGHT ADJUSTMENT

Parts needed:
BACKREST ASSEMBLY
BACKREST EXTENSION PRE-ASSEMBLY

NOTE:
The two panels can be mounted in various configurations. Some examples are shown below.

Example 1
Minimum backrest height. Backrest extension mounted in front of the backrest panel.

NOTES:
The minimum backrest height for each size can be also obtained by using the backrest panel without the backrest extension. Shorter backrest heights can be achieved by cutting the backrest panel shorter. The fasteners used for assembly can be placed in any suitable pre-drilled hole or additional holes may be drilled in the panels, as needed.
Example 2
Minimum backrest height. Backrest extension mounted behind the backrest panel.

NOTE:
The fasteners used for assembly can be placed in any suitable pre-drilled hole or additional holes may be drilled in the panels, as needed.

Example 3
Backrest height adjustment. Backrest extension mounted in front of the backrest panel.

NOTE:
The fasteners used for assembly can be placed in any suitable pre-drilled hole or additional holes may be drilled in the panels, as needed.
Example 3 - view from the other side of the assembly.

Example 4
Backrest height adjustment. Backrest extension mounted behind the backrest panel.

NOTE:
The fasteners used for assembly can be placed in any suitable pre-drilled hole or additional holes may be drilled in the panels, as needed.
SEAT DEPTH ADJUSTMENT

Parts needed:
SEAT ASSEMBLY
BACKREST ASSEMBLY
2 X LARGE BRACKET PRE-ASSEMBLY

NOTE:
The seat depth can be adjusted by sliding the seat panel forward or backwards. Tighten the fasteners after adjusting to the desired seat depth.
Minimum seat depth setup.

NOTE: Shorter seat depth can be achieved by cutting the seat panel to the desired length.

Minimum seat depth. Backrest pad placed on top of the seat pad.
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TRAY ASSEMBLY

The tray module contains the following:

TRAY ASSEMBLY
TRAY RAILS

Fasteners:
5- 15 PLAIN WASHER
M5X14 HEXAGON SOCKET COUNTERSUNK
BUTTON HEAD BOLT

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Adjust the tray guides according to the wheelchair width.
Tighten the fasteners.

Note:
The tray guides may be assembled in various settings, as presented below

Please see variation 1 on the left.

Please see variation 2 on the left.
TRAY MOUNTING GUIDES ASSEMBLY

The tray arms assembly contains the following:

TRAY MOUNT ASSEMBLY R
TRAY MOUNT ASSEMBLY L
CLAMP ASSEMBLY 25‐19 or
CLAMP ASSEMBLY 22‐19

Mount the clamps on the armrest arms as shown, in preparation to mounting the tray arms on the wheelchair frame.
The lateral support assembly contains the following:

- LATERAL PAD ASSEMBLY (size S or L)
- BRACKET-LARGE (BRACKET-SMALL can be used as well if required)
- 5-15 PLAIN WASHERS
- M5X14 HEXAGON SOCKET COUNTERSUNK BUTTON HEAD BOLTS
- M5X25 CUP HEAD SQUARE NECK bolts
- 5mm flat washers
- M5 locknuts

Note:
The steel brackets are provided with 90 degree bends. If a different bracket angle is needed please bend the steel brackets at the desired angle.
Please note the orientation and the assembly order of the fasteners.

The lateral support pad and the steel bracket can be assembled using different variations according to the user need. Some examples of assembly variations are presented below.

Lateral support pad and steel bracket assembly-Variation 1
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Mounting assembled lateral support pads and brackets on the backrest panel.

The lateral supports will be used as lateral trunk support or pelvic support according to the user needs.

Assemble the lateral support pad and bracket assemblies on to the backrest panel, as shown.

Note:
Please use the holes provided in the panel. If additional holes are required please drill 5.5mm diameter holes in the desired location.

View from the rear of the backrest panel.

Note:
Please note the orientation and the assembly order of the fasteners.
Mounting assembled lateral support pads and brackets on the seat panel. They will be used as adductors according to the user needs.

Lateral support pads and brackets assembled on the seat panel. Top view.

Note:

Please use the holes provided in the panel. If additional holes are required please drill 5.5mm diameter holes in the desired location.

Lateral support pads and brackets assembled on the seat panel. Bottom view.

Note:

Please note the orientation and the assembly order of the fasteners.
HEADREST PAD ADJUSTMENT

Assemble the headrest and bracket assembly on to the backrest panel, as shown.
View from the rear of the backrest panel.

Note:
Please note the orientation and the assembly order of the fasteners.

View from the front of the backrest panel.
ABDUCTOR ADJUSTMENT

Mounting the abductor assembly on to the seat panel.

Note:
Please note the orientation and the assembly order of the fasteners.
The pads and brackets can be assembled in various settings.
Some examples are shown below.

Slide the abductor retainer bracket inside the abductor retainer.
Tighten the plastic knob.

Note:
The steel brackets are provided with 80 degree bends. If a different bracket angle is needed please bend the steel brackets at the desired angle.
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Abductor assembly-Variation 3

Abductor assembly-Variation 4

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MOUNTING STRAP ADJUSTMENT

Assemble the strap using the fasteners provided.

Please see images.

Note:
Please note the orientation and the assembly order of the fasteners.

LAP/ PELVIC STRAP ASSEMBLY

Note:
Please note the orientation and the assembly order of the fasteners.
THORACIC STRAP ADJUSTMENT

Thoracic strap assembled on to the backrest panel.
Front view.

Thoracic strap assembled on to the backrest panel.
Rear view.
The thoracic strap is provided with two different mounting location eyelets at each end. Please use the location eyelet that is suitable for your needs.

Note:

The shoulder strap webbing and velcro can be cut short for smaller users.
FOOT STRAP ASSEMBLY AND ADJUSTMENT

Assemble the foot strap on the wheelchair footplate.
Adjust the foot strap length by using the two sets of eyelets in the webbing and/or the adjustable webbing strap.
Secure the webbing strap with Velcro after adjustment.

Note:
The wheelchair footplate might need to be drilled before assembly.
Various foot strap mounting procedures may be used according to the wheelchair footplate type/model.
Place the wheelchair seating unit on the wheelchair base. Mount the foot straps on the footplates. Check all the settings and make final adjustments accordingly (seat depth, backrest height, footrest height).

Assemble the tray mounting guides on the wheelchair base, as shown.

Adjust the location and length of the D-Seat mounting straps. Tighten the strap under the seat.
Tighten the two straps behind the backrest panel.

Assemble the tray rails in the correct orientation. Rotate and assemble the tray rails on the tray top.
Adjust the height and width of the tray.
Tighten all fasteners.

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