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5. DAESSY Rear Folding Mount – DRFM6

5.1 Applications and Restrictions

The DAESSY Rear Folding Mount – DRFM6 allows a mounted device to be folded away and stored behind the backrest of the wheelchair. Storage in this location does not increase the “footprint” of the wheelchair, and reduces the chance that the mounted device will be bumped into walls and doors.



The DAESSY Rear Folding Mount DRFM6 in its In-Use and Folded positions.

This mount consists of two stainless steel tubes, a Side Tube and a Horizontal Tube, connected by an Elbow Rotate Head with Rotate Head Tube Mount (ELRH+RTHTM) which allows the Horizontal Tube to form a right angle with the Side Tube or rotate to an extended straight out position. A Frame Clamp Assembly consisting of a Frame Clamp Inner Piece (UFCxxxIP), optional Offset Links (O3L) and a Rear Folding Adapter and Rotate Head Tube Mount (RFA+RTHTM) permanently attaches the tube structure to the side of the wheelchair. The lower end of the Side Tube is clamped into the RFA+RTHTM and rises at an angle of about 45° forward with the Horizontal Tube passing across in front of the user. The Offset Links allow the Rear Folding Adapter to be positioned approximately halfway down the side of the wheelchair and a few inches below the seat level regardless of the location of attachment of the Frame Clamp Inner Piece on the frame of the wheelchair. The mounted device is held in an adapter or bolted to a plate that allows the device to be quickly attached or detached from a Quick Release Base.

There are three steps to the rear folding motion. In the first movement the Horizontal Tube is rotated through 90° at the Elbow Rotate Head to an extended position in line with the Side Tube. Next, the complete tube structure is rotated at the Rear Folding Adapter back through a 90° angle. Finally, the Horizontal Tube is folded in behind the wheelchair in a motion that reverses the first rotation at the Elbow Rotate Head. Reversing the order of these steps returns the device to its In-Use position

Caution:

The screen of a laptop computer or similar device should be closed before folding the DRFM6 behind the wheelchair backrest.

The DAESSY Rear Folding Mount is most suitable for power wheelchairs.

The Rear Folding Adapter must be mounted in a central location along the side of the wheelchair. This makes the DRFM6 unsuitable for self-propelled manual wheelchairs with large wheels.

The Device and Side Tube must be held and guided through all the steps of the folding motion. The Side Tube must not be allowed to drop suddenly onto the forward or rearward stops. As the Side Tube passes down the side of the wheelchair during the folding action the user must keep their arm and hand clear.

The DAESSY Rear Folding Mount – DRFM6 is not appropriate for mounting on a tilting seat system. The DAESSY Lockable Rear Folding Mount – DLRFM8 is a similar mount that can be used in a tilting application.

The DAESSY Rear Folding Mount – DRFM6 can be adapted to be easily removable from the wheelchair with an additionally purchased Removable Frame Clamp Assembly (RFCI+RFCR). Adding these components to the DRFM6 will increase distance between the Rear Folding Adapter and the wheelchair by about 1 3/4". The standard DRFM6 supplied without the Removable Frame Clamp Assembly is permanently attached to the wheelchair and cannot be removed except by uninstalling the mount.

5.2 Parts of the DAESSY Rear Folding Mount – DRFM6

The standard parts of the DAESSY Rigid Mount and common variations are listed below; Parts which may differ from situation to situation are indicated with a *.

Part Code	Part Name
*UFCxxxxIP	Frame Clamp Inner Piece
O3L	Offset Link
RFA+RTHTM	Rear Folding Adapter with Tube Mount
ELRH+RTHTM	Elbow Rotate Head with Tube Mount
*TUSB	Total Quick Release Base.
STR16	Horizontal Tube. Straight 16" (Other lengths are available)
*STR22	Side Tube. Straight 22" (Other lengths are available)
*RFCR-RFCI	Optional additional Removable Frame Clamp Assembly

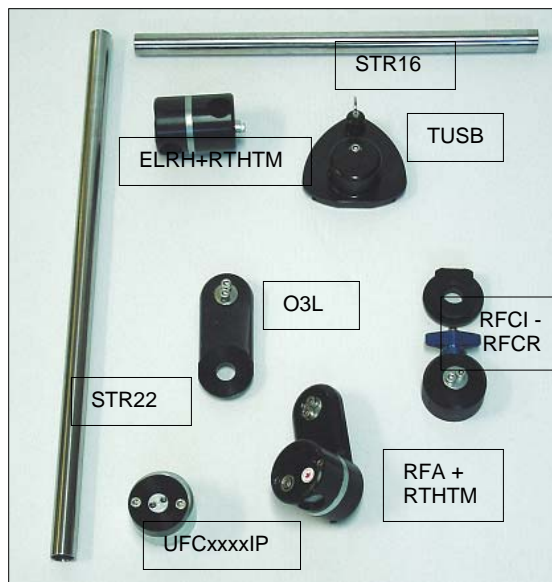


Figure 5.2-1 The standard parts of the DAESSY Rear Folding Mount, plus the optional additional Removable Frame Clamp Assembly.

The size and shape of the required Frame Clamp Inner Piece must be specified with the order of a standard mount. **1.3 Attaching and Positioning DAESSY – Frame Clamps** provides comprehensive information on DAESSY Frame Clamp options.

The standard part list will be appropriate for many mounting situations. Variations in the standard list will be necessary for some situations. Common variations include changes in the length and shape of the Side Tube (STR22), additional Frame Clamp components to avoid obstructions with other wheelchair fittings, and different styles of the Quick Release Base. If the mounted device is scanning or head-pointer operated it may be preferable to substitute a Folding Quick Release Base (USBF) for the TUSB. The USBF may allow the device to be tilted to a more protected and configuration in its stored position behind the wheelchair backrest.

More information can be found in **1.4 Attaching and Positioning DAESSY –**

Tube Lengths and Shapes and **1.5 Attachment of Devices to DAESSY Mounts – The Quick Release System.**

The Fitting Procedure (**5.3 Fitting the DAESSY Rear Folding Mount DRFM6**) will identify what variations are necessary.

In addition to the standard and variation parts an adapter plate or device holder is necessary to complete the mount. **1.6 Attachment of Devices to DAESSY Mounts – Adapters and Holders** provides comprehensive information on DAESSY Adapters plates and Holders.

5.3 Fitting the DAESSY Rear Folding Mount – DRFM6

A communication device or laptop computer, when mounted on a wheelchair, must be correctly positioned to make it comfortably accessible to the user while In-use. When a device is mounted on a DAESSY Rear Folding Mount DRFM6 it may be stored in a Folded position behind the backrest.

The Fitting procedure for the DAESSY Rear Folding Mount determines what components are necessary to correctly position the device in both the In-Use and Folded positions.

Standard Mounting Assemblies and Fitting Exceptions

The standard Side Tube length of 22" is suitable for many situations when the device is mounted for direct access.

When the device to be mounted is scanning or head-pointer operated, or when the mount will be installed on a small wheelchair it is essential to follow the fitting procedure as the standard tube dimensions are not likely to be suitable. It may be that the DAESSY Rear Folding Mount is not suitable for these non-standard situations.

The Fitting procedure is important to determine the correct lengths of factory cut stainless steel tube. Tube should not be cut to length during installation.

Caution:

The ends of the stainless steel tube provided by Daedalus Technologies, Inc. are fully machined and chamfered to minimize sharp edges. Daedalus Technologies, Inc. strongly disapproves of the tube being cut to length by purchasers. Cutting the stainless steel tube by any method produces very sharp and hazardous edges.

Steps in the Fitting Procedure

- Selecting the Frame Clamp attachment location
- Determining the Frame Clamp size
- Determining the Location for the Rear Folding Adapter
- Determining the Offset Links required and the Side Tube length

5.3.1 Selecting the Frame Clamp attachment location

The DAESSY Rear Folding Mount – DRFM6 can be mounted on either the left or right side of a wheelchair as defined from the position of the person seated in the wheelchair. The Frame Clamp Inner Piece (UFCxxxxIP) requires slightly more than two inches of length and three-quarter inches of space above and below the wheelchair frame tube to which it will be clamped. There should be sufficient room for a hand to reach behind the behind the tube to tighten bolts. It does not matter how the wheelchair frame tube is oriented because the Swivel Clamps allow the Offset Links and Rear Folding Adapter to be rotated to any angle relative to the Frame Clamp Inner Piece.

Caution:

The selected location must be part of the wheelchair frame, not a removable armrest or footrest.

The Rear Folding Adapter must be located 2” to 5” below the seat of the wheelchair and partway down the side of the wheelchair at a point midway between the In-use and Folded positions of the mounted device. Offset Links are used to span the distance between the Frame Clamp Inner Piece (UFCxxxxIP) and the Rear Folding Adapter (RFA). When there are two or more possible locations the UFCxxxxIP should be placed as close as possible to the required location of the Rear Folding Adapter.

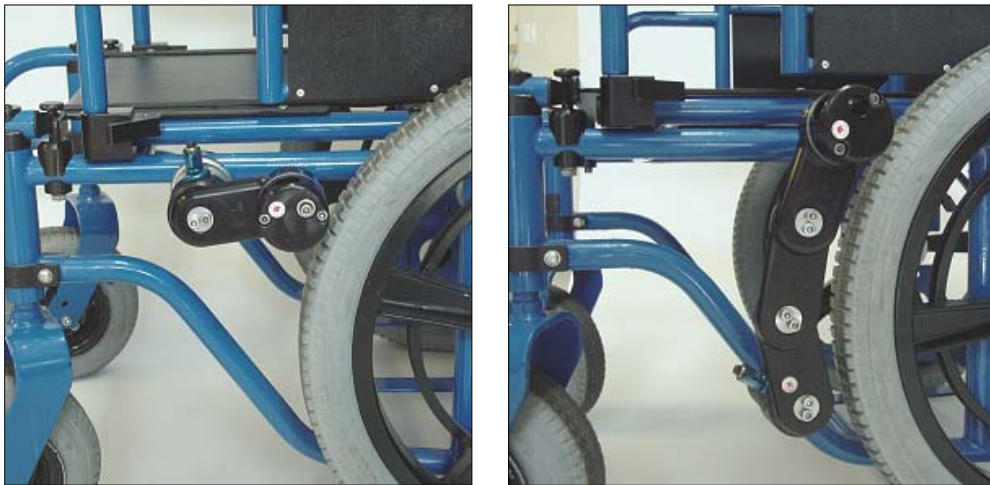


Figure 5.3-1 The Rear Folding Adapter must be located 2” to 5” below the seat of the wheelchair. Offset Links are used to span the distance between the Frame Clamp Inner Piece and Rear Folding Adapter.

Obstructions

In addition to spanning the distance between the Frame Clamp Inner Piece attachment location and the required position of the Rear Folding Adapter, Offset Links and Frame Clamp Spacers may be used to avoid obstructions and interference with other wheelchair fittings. It is important that no part of the Frame Clamp Assembly interferes with movable parts of the wheelchair such as caster wheels or brake levers. The Side Tube of the DRFM6 must not contact any part of the side of the wheelchair as it moves through its folding sequence.

Quick Check

A quick check for a suitable location for the Frame Clamp Inner Piece is to find a part of the wheelchair frame tube which has enough space to be gripped by three fingers when reaching from inside the wheelchair frame.

Unusual Situations

Some wheelchairs do not have any tubing freely accessible on the frame or may not have a tube frame. When a seat pan restricts access to the upper edge of the wheelchair frame tubing, it may be possible to use a Side Mount Frame Clamp Inner Piece, which requires no clearance on the top side of the tube and only 1 1/4" clearance on the bottom side. When the wheelchair does not have a tube frame it may have boltholes or other possible attachment methods in a suitable location. In some cases Bolt-on Adapter may be substituted for the Inner Piece.

5.3.2 Determining the Frame Clamp size

Comprehensive information for determining the correct Frame Clamp size can be found in **1.3 Attaching and Positioning DAESSY – Frame Clamps**.

5.3.3 Determining the Location for the Rear Folding Adapter (RFA)

The Rear Folding Adapter (RFA) must be located partway down the side of the wheelchair between 2 and 5 inches below the seat level. The front-to-back location of the RFA depends on the In-Use and Folded positions for the mounted device.

The In-Use and Folded Positions

The In-Use position will be determined by the needs of the user and the type of device being mounted. Devices that are operated with scanning or head-pointer function may be higher and farther away than devices that are operated by direct access.

The Folded position is behind the backrest of the chair where the device is in a protected and unobtrusive location that does not interfere with other items.

The folding motion results in the device being tilted through 90° from the In-Use to the Folded position. This is an important consideration as it affects the clearance between the device and the backrest of the wheelchair, as well as any other fittings or items located on the back of the wheelchair. The Folded position of the device should be selected so that the device clears any obstructions.

Protecting the device in the Folded Position

A non-standard component, the Folding Quick Release Base (USBF), may be desirable in some situations, as it allows the device to be rotated on the Horizontal Tube. With the USBF it may be possible to configure the device in the Folded position so that the screen is facing inwards and the device is between the Horizontal Tube and the backrest. More details on the Folding Quick Release Base are found in **1.5 Attachment of Devices to DAESSY Mounts – The Quick Release System**.

Caution:

The screen of a laptop computer or similar device should be closed before folding the DRFM6 behind the wheelchair backrest.

Location of the Rear Folding Adapter

When the In-Use and Folded positions for the device have been selected the required location for the Rear Folding Adapter (RFA) can be determined. The RFA should be no further than 2” to 3” inches from the halfway point between the In-use and Folded positions.

When the device is mounted for direct access with a folded position close behind the backrest of the wheelchair the Rear Folding Adapter will be close to the halfway along the side of the wheelchair. A device mounted high and forward for scanning or head-pointer access will require the RFA to be mounted ahead of the halfway point. If there is an obstruction at the back of the wheelchair the RFA may be moved behind the halfway point.

When the DAESSY Quick Release System is used to attach the device to the Horizontal Tube the centerline of most devices is between 1” and 3” forward of the Horizontal Tube. For very precise horizontal positioning contact Daedalus Technologies, Inc. for more information.

5.3.4 Determining the Side Tube length and the Offset Links required

Complete information on the range of options available for non-standard tubes is found in **1.4 Attaching and Positioning DAESSY – Tube Lengths and Shapes.**

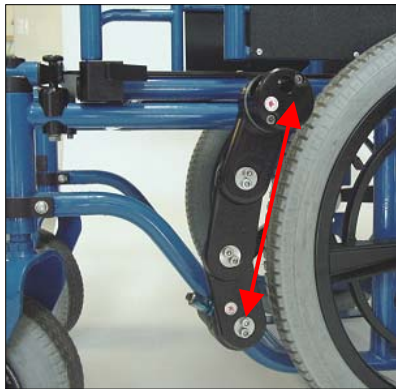
Obstructions to movement of the Side Tube

As the Side Tube moves along the side of the wheelchair during the folding sequence it must not contact or interfere with any other fittings on the wheelchair. Obstructions may be avoided by moving the RFA and Side Tube away from the side of the wheelchair with Frame Clamp Spacers, or by adding an S-bend to the Side Tube.

Length of Side Tube – T

The length of the Side Tube is measured from the intended location of the Rear Folding Adapter (RFA) to the required location of the Horizontal Tube supporting the device. This is the measurement T that should be specified in orders.

Offset Links required – L



The measurement L, which should be specified in orders for the number of Offset Links (O3L), required is the distance between the location of the Frame Clamp Inner Piece (UFCxxxxIP) and the Rear Folding Adapter (RFA). The RFA itself spans a distance of 3 inches and each additional Offset Link adds another 3 inches.

Distance between UFCxxxxIP and RFA	Number of O3L required
0” to 3 “	none
3” to 6”	1
6” to 9”	2
More than 9”	Check with DAESSY

5.4 Installing the DAESSY Rear Folding Mount – DRFM6

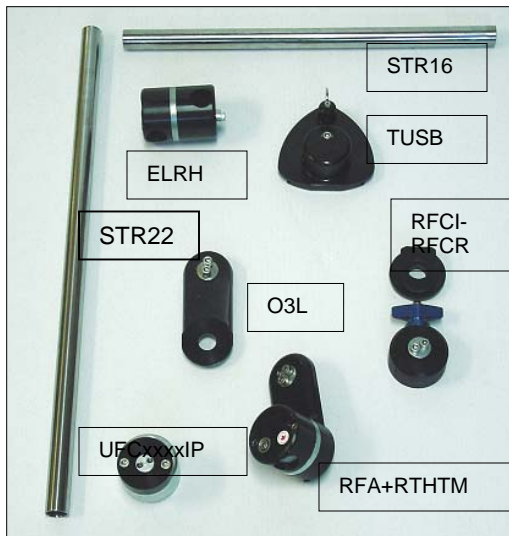
Steps in the Installation Procedure

- Identify the Parts
- Install the Frame Clamp Assembly
- Install the Rear Folding Adapter and Side Tube
- Install the Elbow Rotate Head and Horizontal Tube
- Install the Quick Release Base
- Set the Stop Pins in the Rear Folding Adapter
- Final Adjustments and Checklist

5.4.1 Identify the Parts of the DAESSY Rear Folding Mount – DRFM6

The standard parts of the DAESSY Rear Folding Mount are listed below. Parts which may differ from situation to situation are indicated with a *.

Part Code	Part Name
*UFCxxxIP	Frame Clamp Inner Piece
O3L	Offset Link
RFA+RTHTM	Rear Folding Adapter with Tube Mount
ELRH+RTHTM	Elbow Rotate Head with Tube Mount
*TUSB	Total Quick Release Base.
STR16	Horizontal Tube. Straight 16" (Other lengths are available)
*STR22	Side Tube. Straight 22" (Other lengths are available)
DMSTools	Assembly Tools
	Installation Instructions
*RFCR-RFCI	Optional additional Removable Frame Clamp Assembly



All the black anodized aluminium components have a part code stamped into the metal. These should be identified and laid out.

The Frame Clamp Inner Piece (UFCxxxIP) may not be exactly as shown, and additional Offset Links may be included.

The RFCR-RFCI Removable Frame Clamp Assembly is an optional additional component.

Figure 5.4-1 Parts layout for DAESSY Rear Folding Mount with additional Removable Frame Clamp Assembly.

Caution:

It is very important that all packaging be thoroughly inspected for loose parts and instruction papers. All the mount components must be identified and checked against the standard parts list, and the order list BEFORE any packaging is thrown away.

The Swivel Clamps for joining the Rear Folding Adapter (RFA), Offset Links (O3L) and Frame Clamp Inner Piece (UFCxxxxIP) are normally fastened into the holes in the RFA and O3L. The Pinch Clamps for securing the tubes into the Tube Mounts (RTHTM) and the Total Quick Release (TUSB) are normally installed in their holes and retained by plastic plugs.

More than one Offset Link (O3L) may be included, or there may be no Offset Link. A Frame Clamp Spacer may be included.

Specific installation instructions may be supplied with components, especially components that vary from the standard parts list. In the case of contradictory instructions, component specific instructions provided with the mounting components will supersede the installation procedures outlined in this document

5.4.2 Install the Frame Clamp Assembly, Rear Folding Adapter and Side Tube

The DAESSY Rear Folding Mount - DRFM6 can be mounted on either the left or right side of a wheelchair as defined from the position of the person seated in the wheelchair.

Find the location on the wheelchair to attach the Frame Clamp Inner Piece. This should have been chosen during the Fitting Procedure as described in **5.3.1 Selecting the Frame Clamp attachment location**.

It does not matter how the wheelchair frame tube is oriented because the Swivel Clamp allows the Rear Folding Adapter to be rotated to any angle relative to the Frame Clamp Inner Piece.

Assemble the Frame Clamp Pieces



The pieces of the Frame Clamp Assembly must be connected together before the Frame Clamp is installed on the wheelchair frame. These pieces will include a Frame Clamp Inner Piece (UFCxxxxIP) or Removable Frame Clamp Insert (RFCI), a Rear Folding Adapter (RFA), and any additional Offset Links and/or Frame Clamp Spacers.

Figure 5.4-2 Frame Clamp Assembly.

When the Inner Piece has a Cap and Body fastened with two screws, the Cap must be removed so that the threaded end of the Swivel Clamp can be fitted in the long hole through the Inner Piece. Some Inner Pieces have integrated threaded holes for the Swivel Clamp bolts and do not use the threaded end.

If the mount assembly requires a Bolt-on Adapter (for example the MH3/IPA) this component should be installed on the wheelchair first, as the installation bolts may be inaccessible once the complete Frame Clamp Assembly has been assembled. The remaining pieces of the Frame

Clamp Assembly will be connected together and finally bolted to the Inner Piece Adapter that has been pre-installed on the wheelchair.

The adjoining faces of all the parts for a Frame Clamp Assembly have circular grooves to give extra friction against movement when assembled. The grooves on an Inner Piece engage with the grooves on an Outer Piece but will not engage with the grooves on another Inner Piece. Offset Links and Frame Clamp Spacers have the letters IP stamped into the metal beside the grooves that attach to the Inner Piece and OP stamped into the metal beside the grooves that attach to the Outer Piece.

Caution:

All the grooved faces must be correctly matched and engaged before the Swivel Clamp bolts are tightened.

When one O3L is used to connect the UFCxxxIP and the RFA the unthreaded end of each Swivel Clamp is inserted into the holes in either end of the O3L. When more Offset Links are needed to correctly position the RFA, the IP end of one O3L is connected to the OP end of another with a Swivel Clamp. It is convenient to orient the Swivel Clamps so that the bolt heads are accessible from the outside of the wheelchair.

When a Frame Clamp Spacer (UFCSPCR) is needed to gain extra clearance away from the wheelchair frame it can be placed between any connection of the grooved faces, taking care to mate the IP and OP surfaces correctly. Longer Swivel Clamp bolts are provided with the UFCSPCR.

Note:

Offset Links displaying Serial Numbers greater than #406000 may be connected directly together or connected directly to the Rear Folding Adapter at any angle.

Offset Links that display a Serial Number less than #406000 or have no Serial Number must not be connected together or to the Rear Folding Adapter at an angle of less than 135°.

Two Offset Links connected with an intervening Frame Clamp Spacer can be connected at any angle. The Swivel Clamp connecting through the Spacer will require longer bolts.

The pieces of the complete Frame Clamp Assembly should be assembled and the Swivel Clamps moderately tightened to hold the unit in approximately the correct orientation before attaching the Frame Clamp Inner Piece to the wheelchair.



Remove the Stop Pins from the Rear Folding Adapter

On one side of the Rear Folding Adapter is a Screw-on Cover retained by a Locking Nut. Remove this nut and cover to access the Stop Pins. There is a hole in the rim of the Screw-on Cover that allows an Allen Key to be used as a lever to assist removal. The Stop Pins are removed at this step, however they must be reinstalled and the Screw-on Cover and Locking Nut replaced before a device is attached to the mount.

Figure 5.4-3 Unscrew the Locking Nut and Cover to remove the Stop Pins from the Rear Folding Adapter.

Attach and Align the Frame Clamp

There are three steps to attaching and aligning the Frame Clamp Assembly:

- Attach the Inner Piece and Position the Rear Folding Adapter
- Install the Side Tube into the Tube Mount of the Rear Folding Adapter
- Align the mount sideways

Attach the Frame Clamp Inner Piece and Position the Rear Folding Adapter

At the selected location fit the Cap and Body of the Frame Clamp Inner Piece around the tube. Replace the bolts but do not fully tighten them yet. The Cap should face towards the inside of the wheelchair and the Body, connected to the Offset Link, should face towards the outside.

Position the Rear Folding Adapter (RFA) at the chosen location midway down the side of the wheelchair and slightly below the seat level. Gently tighten the bolts on all the Swivel Clamps. These bolts may need to be loosened during the final adjustment of the mount location.



The Removable Frame Clamp Insert and Removable Frame Clamp Receiver (RFCI-RFCR) can be installed between the Frame Clamp Inner Piece and the first Offset Link to allow the entire Rear Folding Mount and outer components of the Frame Clamp Assembly to be easily removed from the wheelchair.

The latch of the RFCR can be oriented in any direction for access.

Figure 5.4-4 The RFCI-RFCR can be installed to allow easy removal of the mount.

Install the Side Tube into the Tube Mount of the Rear Folding Adapter

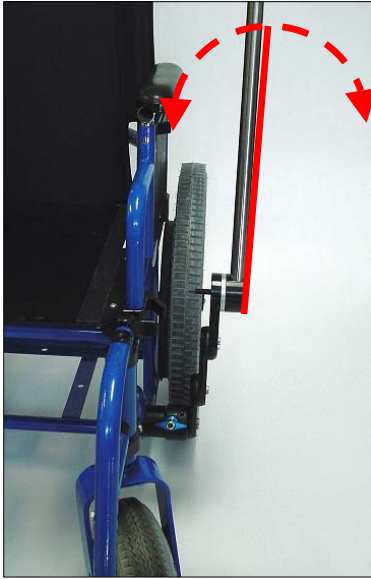
Remove the plastic plug holding the Pinch Clamp in its hole in the Tube Mount (RTHTM) on the RFA. Check the alignment of the Pinch Clamp inside the tube hole and insert the Side Tube. Refer to **1.7 Adjustment and Maintenance** if the Pinch Clamp is not aligned and the Side Tube will not enter the hole. Tighten the Pinch Clamp bolt.



Figure 5.4-5 Align the Pinch Clamp and insert the Side Tube into the tube hole of the RTHTM.



Figure 5.4-6 Tighten the Pinch Clamp bolt.



If the Frame Clamp Inner Piece (UFCxxxxIP) is attached to round tubing on the wheelchair the Side Tube will need to be aligned sideways. Use the Side Tube as a lever to move the UFCxxxxIP until the Side Tube is aligned parallel with the side of the wheelchair.

Check that the Side Tube can be rotated between the In-Use and Folded positions without contacting any part of the wheelchair.

Figure 5.4-7 Use the Side Tube as a lever to align the Frame Clamp assembly parallel to the side of the wheelchair.

Caution:

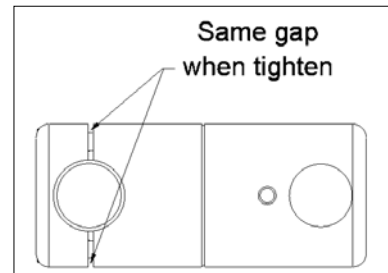
With the Stop Pins removed from the Rear Folding Adapter the Side Tube will rotate past the In-Use and Folded positions. The Stop Pins must be replaced before any device is attached to the mount.

If the Side Tube does contact the armrest or any other part of the wheelchair the Rear Folding Adapter can be moved further out from the wheelchair by using one or two Frame Clamp Spacers (UFCSPCR). Alternatively the Side Tube may lean slightly away from the wheelchair, or may incorporate an S-bend to avoid interference.

When the Frame Clamp Inner Piece is correctly aligned alternately tighten the bolts connecting the Cap and Body to clamp the wheelchair tube evenly.

Important Note:

When the bolts are fully tight and the tube is firmly gripped there should be a slight gap of 1/64" to 1/32" between the Cap and Body of the Frame Clamp Inner Piece. If the gap is wider than 1/16" the Frame Clamp Inner Piece is probably too small. If there is no gap and the wheelchair frame tube is not gripped firmly when the bolts are fully tight remove the Inner Piece and tightly wrap some aluminium foil around the wheelchair tube at the attachment location. There is some variation in the tube size on different wheelchairs so it is sometimes necessary to use the foil. Make sure the aluminium foil does not get caught between the Cap and Body when the UFCxxxxIP is replaced and the bolts are tightened. Do not use paper or plastic. Do not use more than four layers of aluminium foil; more than this probably means the UFCxxxxIP is too large. Adapter Sleeves (SLV) can be purchased to downsize an overlarge Frame Clamp Inner Piece.



5.4.3 Install the Elbow Rotate Head and Horizontal Tube

Remove the plastic plug holding the Pinch Clamp in its hole in the Tube Mount (RTHTM) on the Elbow Rotate Head (ELRH). Install the Horizontal Tube into one of the tube holes in the Elbow Connector (ELRH+RTHTM). It does not matter which tube hole is used for the Horizontal Tube. Slide the remaining tube hole in the ELRH+RTHTM onto the end of the Side Tube. Align the Horizontal Tube level across the wheelchair and tighten the Pinch Clamp holding the Side Tube.

Refer to **1.7 Adjustment and Maintenance** if the Pinch Clamp is not aligned and the Horizontal Tube will not enter the hole.

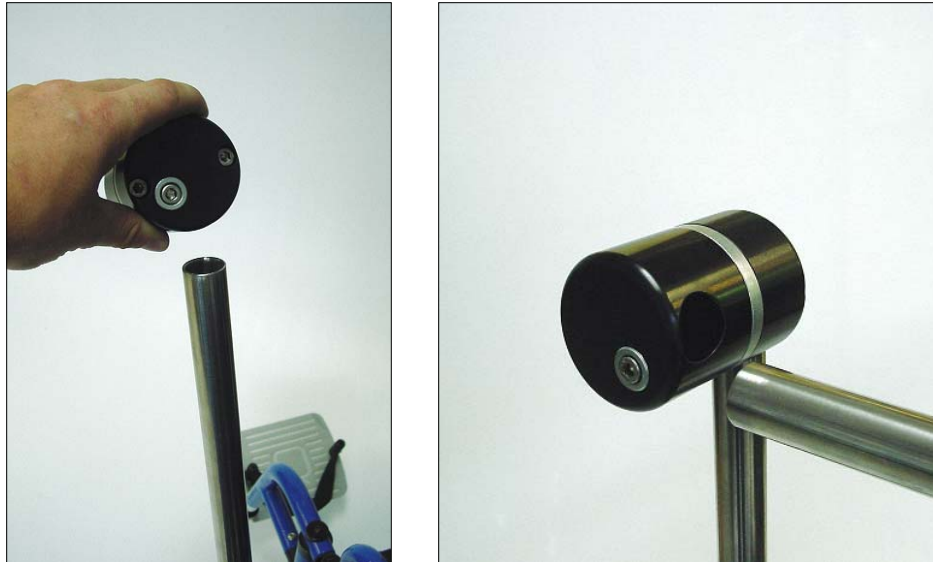


Figure 5.4-8 Slide the Side Tube and Horizontal Tube into the tube holes of the ELRH+RTHTM. Tighten the Pinch Clamps to hold the

Caution:

The bolts on the Pinch Clamps should not be excessively tightened. By design a Pinch Clamp does not provide an immovable grip. Extreme tightening of the Pinch Clamp bolt in an attempt to prevent the tube movement when very forcefully pushed will crush the tube and jam the Pinch Clamp. DAESSY mounting assemblies are designed to carry the weight of a computer or communication device and are not intended to resist a strong force exerted by the user.

5.4.4 Install the Quick Release Base

Remove the plastic plug retaining the Pinch Clamp in its hole in the Total Quick Release (TUSB) and slide it onto the Horizontal Tube. The Pinch Clamp must be aligned in its hole so that it is even with the inside of the tube hole to allow the tube to slide through. Refer to **1.7 Adjustment and Maintenance** if the Pinch Clamp is not aligned and the Horizontal Tube will not enter the hole.



Figure 5.4-9. Slide the TUSB onto the Horizontal Tube and tighten the Pinch Clamp.

Quick Release Orientation

The Total Quick Release Base can be clamped at any location along the Horizontal Tube and may be rotated around the tube to place the mounted device at any angle. The normal orientation for the TUSB is with the Locking Pin positioned away from the user. Adapters and Holders that attach devices and computers onto the TUSB are assembled for this orientation.

A non-standard component, the Folding Quick Release Base (USBF), may be desirable in some situations, as it allows the device to be rotated on the Horizontal Tube. With the USBF it may be possible to configure the device in the Folded position so that the screen is facing inwards and the device is between the Horizontal Tube and the backrest. More details on the Folding Quick Release Base are found in **1.5 Attachment of Devices to DAESSY Mounts – The Quick Release System**.



Figure 5.4-10 The Folding Quick Release Base (USBF) allows the device to be rotated around the Horizontal Tube and held at any of 5 angles by a spring-loaded lock pin.

Caution:

The screen of a laptop computer or similar device should be closed before folding the DRFM6 behind the wheelchair backrest.

5.4.5 Set the Stop Pins in the Rear Folding Adapter

Setting the In-Use and Folded Positions

The In-Use and Folded positions of the DAESSY Rear Folding Mount are adjusted by varying the length of the Side Tube, the location of the Rear Folding Adapter (RFA) and the location of two Stop Pins in the RFA. Changing the length of the Side Tube or the location of the RFA will change the In-Use and Folded positions simultaneously. The Stop Pins can be used to adjust these positions independently; one pin stops the forward rotation at the In-Use positions and the other pin stops the rearward rotation at the Folded position.

Increments of Adjustment

Coarse Adjustment

The Stop Pins can be placed in any of 12 holes in the Rear Folding Adapter (RFA). Incrementing the Stop Pin location by one hole in the RFA will result in approximately 5 1/2" shift in the location of the Horizontal Tube for a Side Tube of length 22".

Fine Adjustment

The ends of the Stop Pins are a slightly oval shape where part of the round shaft of the pin has been machined back. Inside the Stop Pin holes in the RFA the Stop Pins can be set so that the stop is against either the inner machined side – I – of the pin end, or the opposite outer side – O – of the pin end. This fine adjustment results in about a 2" shift in the location of the Horizontal Tube for a Side Tube of length 22".

The final position of the Horizontal Tube can be adjusted by less than 2 inches by slightly rotating the entire Rear Folding Adapter. This is covered in **5.4.6 Final Adjustments**.



Figure 5.4-11 The slightly oval shape of the end of the Stop Pin shaft allows fine adjustment of the maximum movement of the Side Tube.

Installing the Forward – In-Use – Stop Pin

Rotate the Side Tube forward until the Horizontal Tube is in the In-Use position. In the back of the Rear Folding Adapter identify the Stop Pin hole that is in-line with the forward bolthole in the Tube Mount (RTHTM) holding the Side Tube on the Rear Folding Adapter.

Slightly rotate the Side Tube upwards and insert one Stop Pin in this hole with the I-side of the pin end facing toward the tube. Rotate the tube back down until the pin stops it. In this position the stop action is against the O-side of the oval pin.

If the Horizontal Tube is above the required position for use, raise it slightly and rotate the Forward Stop Pin 180° to allow the stop action to be against the I-side of the pin end.

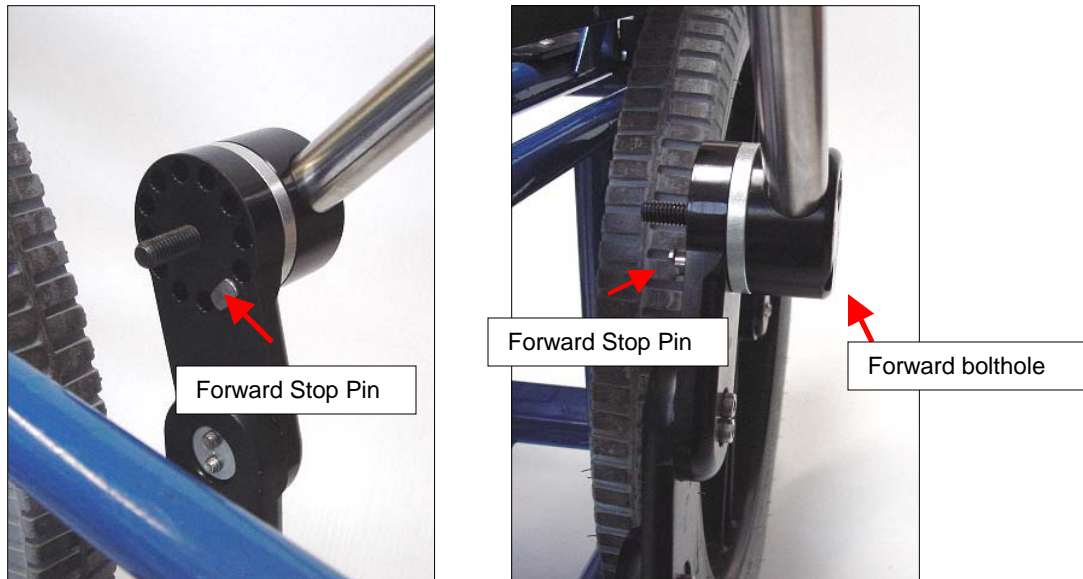


Figure 5.4-12 With the Side Tube held at the desired forward angle, the Front Stop Pin is inserted into the hole in line with the Forward bolthole on the RTHTM.

Proceed with installing the Rearward Stop Pin, even if the Horizontal Tube is not exactly at the required location.

Installing the Rearward - Folded - Stop Pin

Rotate the Side Tube rearward until the Horizontal Tube is in the Folded position. In the back of the Rear Folding Adapter identify the Stop Pin hole that is in-line with the rear bolthole in the Tube Mount (RTHTM) holding the Side Tube on the Rear Folding Adapter.

Slightly rotate the Side Tube upwards and insert one Stop Pin in this hole with the I-side of the pin end facing toward the tube. Rotate the tube back until the pin stops it. In this position the stop action is against the O-side of the oval pin.

If the Horizontal Tube is above the required position for use, raise it slightly and rotate the Forward Stop Pin 180° to allow the stop action to be against the I-side of the pin end.

A small amount of Vaseline may be used to hold the Stop Pins in place during the Final Adjustment procedure until it is time to replace the Screw-on Cover.

Caution:

The Stop Pins must be installed and the Screw-on Cover and Locking Nut must be replaced before any device is attached to the mount.

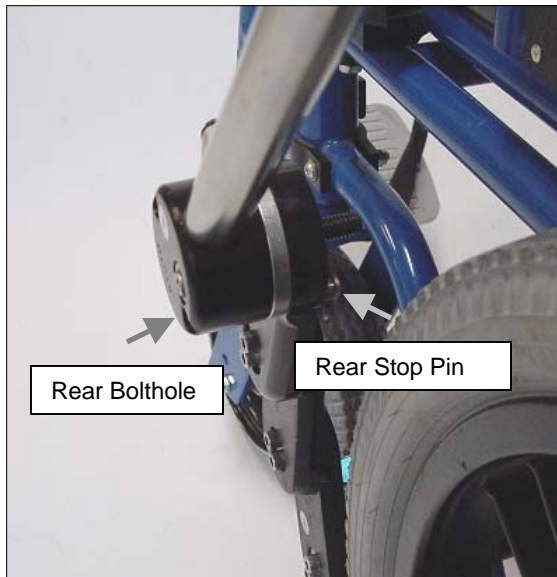


Figure 5.4-13 Rotate the Side Tube to the desired Folded position and locate the Stop Pin hole in line with the rear bolthole on the RTHTM. Insert the Rear Stop Pin in this hole.

Figure 5.4-14 The Front and Rear Stop Pins must be align to seat in the groove in the Screw-on Cover



5.4.6 Final Adjustments and Checklist

Final Position Adjustment



When the In-Use position of the Horizontal Tube needs further adjustment to obtain the best position for the mounted device this can be achieved by slightly rotating the Rear Folding Adapter around the Swivel Clamp that joins it to the Offset Link or Frame Clamp Inner Piece. This method of adjusting the position of the Horizontal Tube will change both the In-Use and Folded positions. Rotating the Rear Folding Adapter to raise the In-Use position of the Horizontal Tube will lower the Folded position and vice versa.

Figure 5.4-15 The Rear Folding Adapter can be rotated around the Swivel Clamp for final adjustment of the In-Use and Folded positions of the device.



It is sometimes possible to rotate the Rear Folding Adapter and re-adjust the Stop Pins to place the mounted device very close to the required position.

When the mount is in its final position replace the Screw Cover and Locking Nut.

Figure 5.4-16 The Allen Key can be used to tighten the Screw-On Cover.

Checklist

Before attaching a device to the **DAESSY Rear Folding Mount, DRFM6** the following steps in the installation procedure have been completed:

- Bolts on the Frame Clamp Inner Piece are fully tight.
- Bolts on the Swivel Clamps fully tight. Tighten these bolts alternately to get the most effective grip.
- Pinch Clamps bolts tight.
- Screw-on Cover for Stop Pins replaced and screwed down firm with the heads of the Stop Pins in the groove on the inside face of the cover.
- Locking Nut for Screw-on Cover replaced and screwed into moderate contact with cover. For some installations it will be necessary to remove the Rear Folding Adapter to replace the Screw-on Cover and Locking Nut.