6. DAESSY Lockable Rear Folding Mount – DLRFM8

6.1 Applications and Restrictions

The DAESSY Lockable Rear Folding Mount – DLRFM8 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.

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 a extended straight out position. A Frame Clamp Assembly consisting of a Frame Clamp Inner Piece (UFCxxxxIP), optional Offset Links (O3L) and a Locking Rear Folding Adapter and Rotate Head Tube Mount (LRFA+RTHTM) permanently attaches the tube structure to the side of the wheelchair. The lower end of the Side Tube is clamped into the LRFA+RTHTM and rises at an angle of about 45º forward with the Horizontal Tube passing across in front of the user. The Offset Links allow the Locking 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. A Lock Mechanism located at the Locking Rear Folding Adapter snaps around the Side Tube in its forward position. The Lock Mechanism secures the mount for use on a tilting seat system. 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 90º at the Elbow Rotate Head to an extended position in line with the Side Tube. Next, the complete tube structure is rotated at the Locking Rear Folding Adapter back through a 90º 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 DAESSY Lockable Rear Folding Mount can be used with tilting seat systems but is only suitable for power wheelchairs.

The screen of a laptop computer or similar device should be closed before folding the DLRFM8 behind the wheelchair backrest.

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 Lockable Rear Folding Mount – DLRFM8 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 DLRFM8 will increase distance between the Rear Folding Adapter and the wheelchair by about 1 3/4". The standard DLRFM9 supplied without the Removable Frame Clamp Assembly is permanently attached to the wheelchair and cannot be removed except by uninstalling the mount.

6.2 Parts of DAESSY Lockable Rear Folding Mount DLRFM8

The Standard DAESSY Lockable Rear Folding Mount DLRFM8 consists of the parts listed below

Part Code	Part Name
UFCxxxxIP or XXX / IPA	Frame Clamp Inner Piece appropriate to wheelchair
O3L	Offset Link
LRFA+RTHTM(L/R)	Locking Rear Folding Adapter and Tube Mount with Left or Right Lock Mechanism
STR-22	22" Straight Side Tube
STR-16	16" Straight Horizontal Tube
ELRH+RTHTM	Elbow Rotate Head and Tube Mount
TUSB	Total Quick Release Base

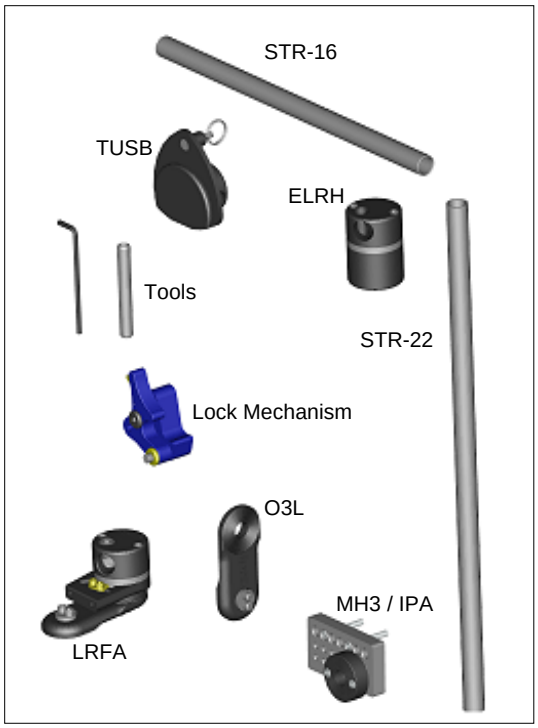


Figure 6.2-1 Standard Parts layout for the DAESSY Lockable Rear Folding Mount DLRFM8

The size and shape of the required Frame Clamp Inner Piece must be specified with the order of a standard mount. More detailed information on DAESSY Frame Clamp options can be found in the section ***1.3 Attaching and Positioning DAESSY – Frame Clamps***. The side of the chair on which the mount will be installed must also be specified with the order.

The standard part list will be appropriate from 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 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 (***6.3 Fitting the DAESSY Lockable Rear Folding Mount DLRFM8***) 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.

6.3 Fitting the DAESSY Lockable Rear Folding Mount DLRFM8

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 Lockable Rear Folding Mount DLRFM8 it may be stored in a Folded position behind the backrest.

The Fitting procedure for the DAESSY Lockable 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 inches 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 Lockable Rear Folding Mount – DLRFM8 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 and Lock Orientation
- Determining the Frame Clamp size
- Determining the location for the Locking Rear Folding Adapter
- Determining the Side Tube length and the Offset Links required

6.3.1 Selecting the Frame Clamp attachment location

The DAESSY Lockable Rear Folding Mount – DLRFM8 can be mounted on either the left or right side of a wheelchair with left and right defined from the position of the person seated in the wheelchair. The mount must be attached to the tilting seat frame in order for it to remain in the same orientation relative to the user, independent of the tilt angle of the seat. The Frame Clamp Assembly must not interfere with the tilting motion of 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 Inner Piece cannot be located directly above the position for the Locking Rear Folding Adapter as there will not be enough space for correct operation of the Locking Mechanism and the Lock Mechanism may not be releasable to fold the mount behind the backrest.

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

The Locking Rear Folding Adapter must be located 2 to 5 inches 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 Locking Rear Folding Adapter (LRFA). When there are two or more possible locations the UFCxxxxIP should be placed as close as possible to the required location of the Locking Rear Folding Adapter however, the Inner Piece cannot be located directly above the position for the LRFA as there will not be enough space for correct operation of the locking mechanism.

Determining the Lock orientation

The Locking Rear Folding Adapter and Lock Mechanism are available in Right and Left hand version. The side of the chair on which the mount will be attached must be specified at the time of ordering. The Locking Rear Folding Adapter and Lock Mechanism must only be installed on the side of the chair for which it is designed.

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 DLRFM8 must not contact any part of the side of the wheelchair as it moves through the 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 topside 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.

6.3.2 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.***

6.3.3 Determining Locking Rear Folding Adapter (LRFA) location

The Locking Rear Folding Adapter (LRFA) 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 LRFA 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 90º 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.

Figure 6.3-1 The In Use position is determined by the needs of the User. The folded position behind the backrest must be chosen such that the device does not interfere with other wheelchair fittings.

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 DLRFM8 behind the wheelchair backrest.

Location of the Locking Rear Folding Adapter

When the In-Use and Folded positions for the device have been selected the required location for the Locking Rear Folding Adapter (LRFA) can be determined. The LRFA 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 Locking 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 LRFA to be mounted ahead of the halfway point. If there is an obstruction at the back of the wheelchair the LRFA may be moved behind the halfway point.

Clearance for the Lock Mechanism

There must be sufficient clearance around the lock mechanism to allow the lever to open and close freely.

6.3.4 Determining the Side Tube length and the Offset Links

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 LRFA and Side Tube away from the side of the wheelchair with Frame Clamp Spacers, or by adding an S-bend to the Side Tube. Adding a Removable Frame Clamp Insert and Receiver will also increase the clearance of the SideTube away from the side of the wheelchair.

Length of Side Tube – T

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

Figure 6.3-2 The length T should be specified in an order to obtain the correct length of Side Tube.

Offset Links required – L

The measurement L is the distance between the location of the Inner Piece (UFCxxxxIP or XXX / IPA) and the Locking Rear Folding Adapter (LRFA). This distance should be specified in orders to determine the number of Offset Links needed. The LRFA itself spans a distance of 3 inches and each additional Offset Link adds another 3 inches

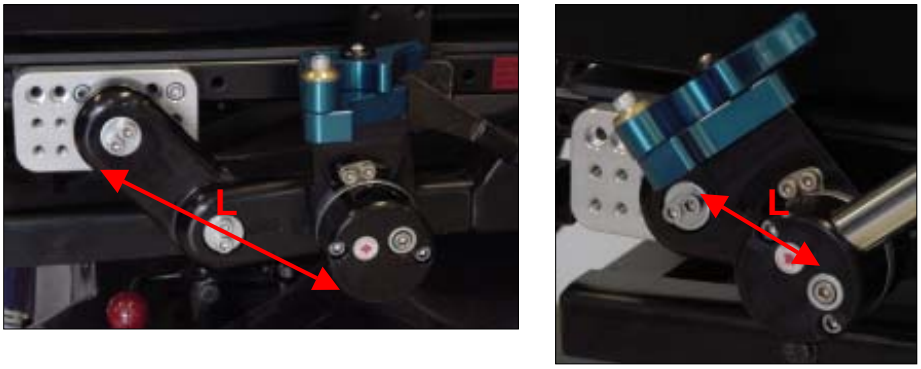


Figure 6.3-3 The distance between the location of the Inner Piece and the Locking Rear Folding Adapter determines the number of Offset Links required.

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

6.4 Installing the DAESSY Lockable Rear Folding Mount – DLRFM8

Steps in the Installation Procedure

- Identify the parts
- Install the Frame Clamp Assembly and Side Tube.
- Install the Elbow Connector and Horizontal Tube
- Install the Quick Release Base
- Set the Front and Rear Stops in the Locking Rear Folding Adapter
- Final adjustments and Checklist

6.4.1 Identify the Parts of the DAESSY Lockable Rear Folding Mount – DLRFM8

All the black anodised aluminum components have a part code stamped into the metal; these should be identified and laid out as shown in the picture.

Quantity	Part Code	Part Name	Notes
1	**UFCxxxxIP or XXX/IPA**	Frame Clamp Inner Piece	Style will depend on wheelchair.
2	**O3L**	Offset Link	
1	**LRFA+RTHTM(L/R)**	Locking Rear Folding Adapter and Tube Mount with Locking Mechanism	Left or Right hand
1	**ELRH+RTHTM**	Elbow Connector	
1	**STR-22**	Straight Tube 22”	Side Tube. Other lengths are available.
1	**STR-16**	Straight Tube 16”	Horizontal Tube. Other lengths are available
1	**TUSB**	Total Quick Release Base	Other styles are available
1	**DMSTools**	Assembly Tools	3/16” and 5/32” Allen Keys
		Installation Instructions	

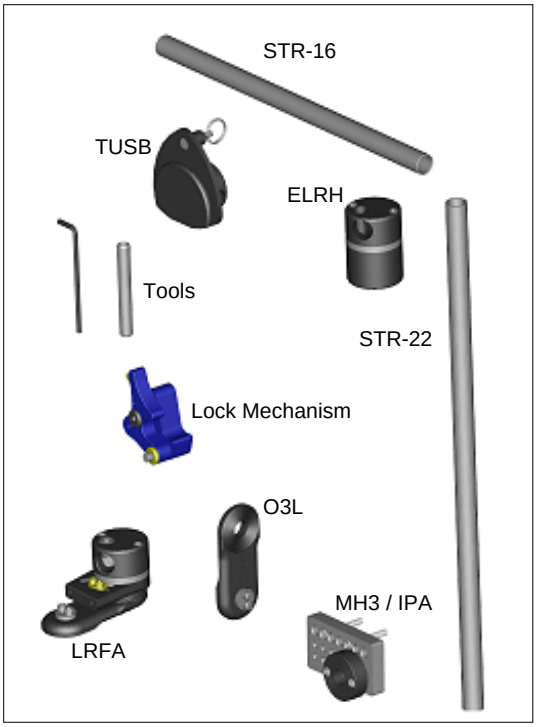
Caution:

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 assembling the Frame Clamp Assembly are fastened into the holes on the Locking Rear Folding Adapter LRFA and Offset Links (O3L). The Pinch Clamps for securing the stainless steel tubes into the components are pre-installed into their holes within each component and retained by plastic plugs. When the plastic plug is removed the Pinch Clamp can fall out. Do not remove the plastic plug until it is time to install the stainless steel tube.

The size and shape of the Frame Clamp Inner Piece (UFCxxxxIP or XXX / IPA) will depend on the type of wheelchair and the attachment location, may not be exactly as shown in the diagrams. An extra Offset Link or other parts 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

Figure 6.4-1 Standard Parts Layout for the DAESSY Lockable Rear Folding Mount.

The Lock Mechanism for the Locking Rear Folding Adapter LRFA is anodised blue and is only stamped L for Left Hand or R for Right Hand. The Lock consists of a body and a latch with a non-coloured trigger. The latch moves through about 30 degrees and in the locked position it creates a partial circle. The side tube of the mount is held within this partial circle when locked in front of the wheelchair for use. The trigger must be depressed to release the lock when the mount is to be folded behind.

The Lock may be pre-assembled on the end of the LRFA body or it may be packed separately. Use the two bolts supplied with the Lock to attach it at the flat end of the Locking Rear Folding Adapter where two threaded boltholes can be found. The partial circle should be located above the tube hole within the Tube Mount RTHTM on the Locking Rear Folding Adapter.

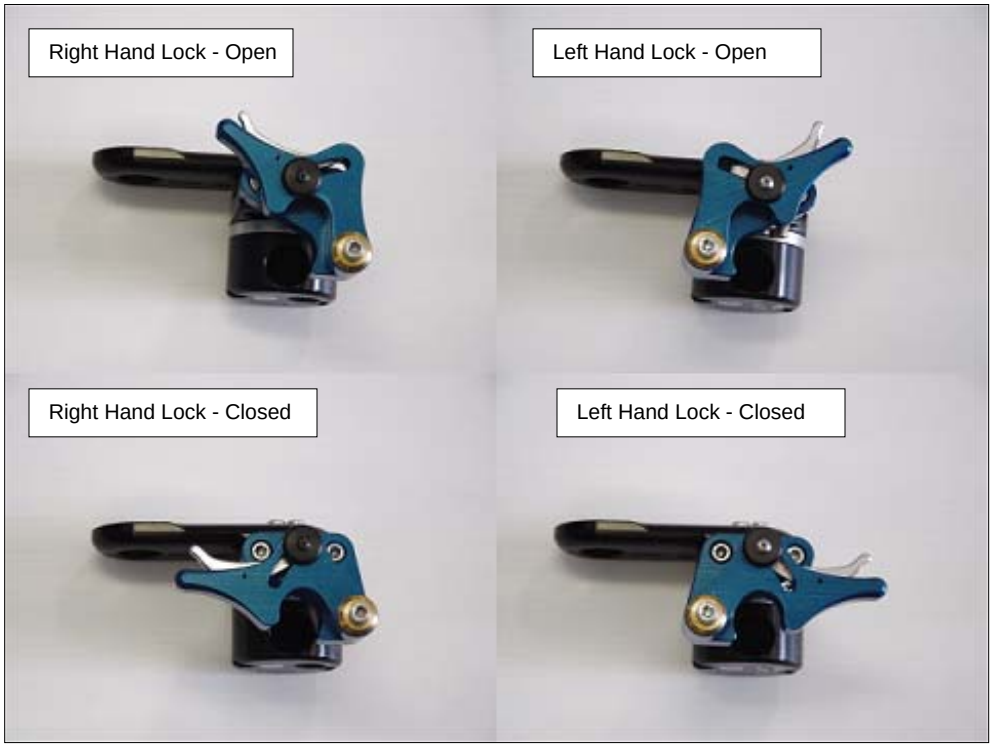


Figure 6.4-2 Left and Right Lock Mechanisms installed on the LRFA.

The Locking Rear Folding Adapter body has an adjustable stop for setting the folded location. The two bolts securing the stop should be loosened so the stop can move freely during the installation procedure.

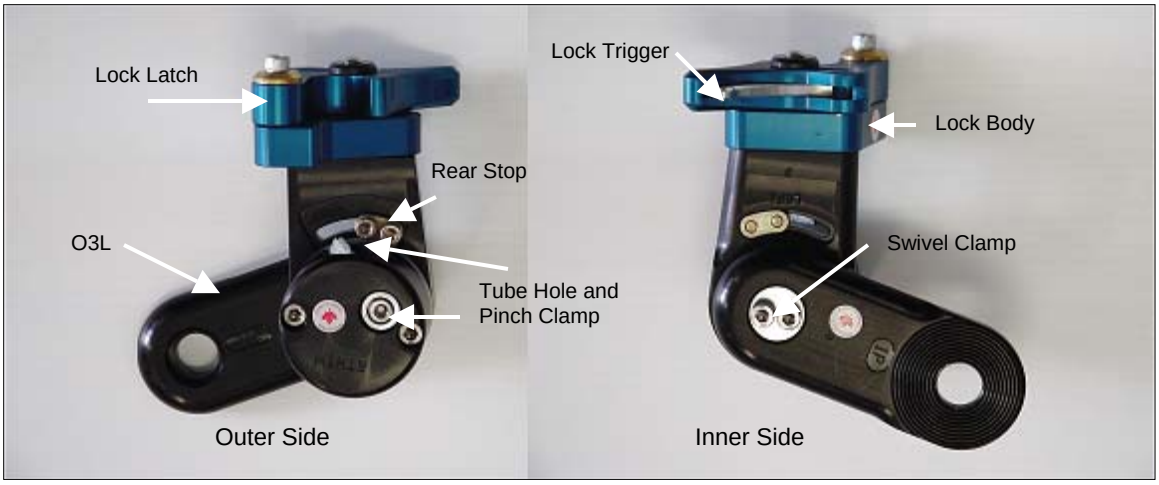


Figure 6.4-3 Parts of the Lockable Rear Folding Adapter

6.4.2 Install the Frame Clamp Assembly and Side Tube

The DAESSY Lockable Rear Folding Mount DLRFM8 can be mounted on either the left or right side of the wheelchair. The side is identified from the perspective of the wheelchair occupant. The mounting side should have been determined during fitting and specified on the order for the correct Lock Mechanism to be included.

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 ***6.3.1:Selecting the Frame Clamp attachment location***.

It does not matter how the wheelchair frame tube is oriented because the Swivel Clamp allows the Locking 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 an Inner Piece (UFCxxxxIP or XXX/IPA), a Locking Rear Folding Adapter (LRFA), and any additional Offset Links and/or Frame Clamp Spacers.

If the Inner Piece of the Frame Clamp is a custom bolt-on adapter, for example the Multi-hole 3" Inner Piece Adapter (MH3/IPA), it should not be connected to the Frame Clamp Assembly at this time, as the bolt heads will be obscured by the Offset Link. Specific installation instructions for these adapters are included with the component.

Figure 6.4-4 Unassembled and assembled Frame Clamp Assembly. The MH3/IPA bolt on adapter is first connected to the wheelchair frame, as the bolt heads may be obscured by the Offset Link of the 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.

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.

One Offset Link (O3L) may be pre-installed on the Locking Rear Folding Adapter (LRFA).

When one O3L is used to connect the Inner Piece and the LRFA 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 LRFA, 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.

If a Removable Frame Clamp Receiver and Removable Frame Clamp Insert (RFCR-RFCI) are included in the Frame Clamp Assembly these can be placed between any components of the Frame Clamp Assembly, taking care to correctly match the grooved faces. However it makes most sense to locate the RFCR-RFCI close to the wheelchair, so that removal of the mount leaves the minimum number of permanent components on 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. More information on Offset links and Spacers may be found in ***1.3.5 Connecting the Frame Clamp Inner and Outer Pieces***.

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.

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.

Attach the Frame Clamp Assembly

The location for the Frame Clamp should have been determined during the Fitting procedure. The Locking Rear Folding Adapter (LRFA) must be positioned partway down the side of the wheelchair and 2”-5” below the seat base. The location selected for the Inner Piece can be below, ahead or behind the LRFA position; the Offset Links span the distance between the location for the Inner Piece and the position of the Locking Rear Folding Adapter.

Caution:

The Inner Piece cannot be located directly above the position for the Locking Rear Folding Adapter as there will not be enough space for correct operation of the Locking Mechanism and the Lock Mechanism may not be releasable to fold the mount behind the backrest.

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

Position the Locking Rear Folding Adapter LRFA at the chosen location midway down the side of the wheelchair and a little below the seat level before gently tightening the bolts on the Swivel Clamps. These bolts may need to be loosened during the Final Adjustment.

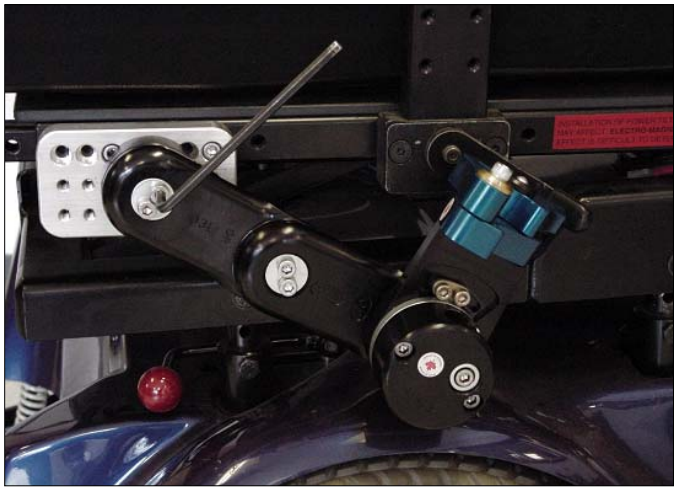


Figure 6.4-5 Install the Frame Clamp Assembly on the Inner Piece. The Swivel Clamps should be gently tightened to hold the components in place, however they may need to be loosened during the Final Adjustment.

Install the Side Tube

The Side Tube is installed in the Tube Mount (RTHTM) of the Locking Rear Folding Adapter (LRFA).

The Lock Mechanism should be unlocked for this step. Remove the plastic plug retaining the Pinch Clamp within the tube hole and check the alignment of the Pinch Clamp inside; insert the Side-Tube. Refer to ***1.7 Adjustment and Maintenance*** if the Pinch Clamp is not aligned or when the Side Tube will not fully enter the tube hole. Tighten the Pinch Clamp bolt.

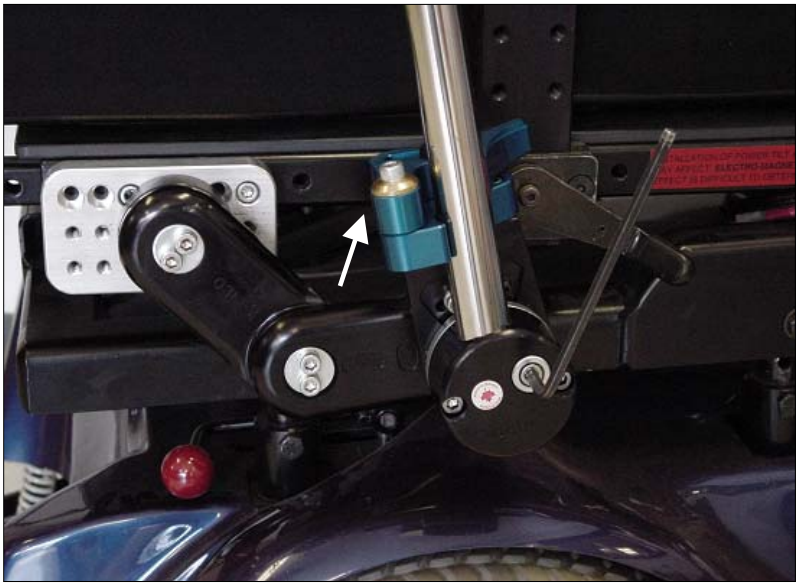


Figure 6.4-6 Install the Side Tube in the Tube Mount. The Side Tube should contact the Locking Mechanism body as indicated by the arrow. Tighten the Pinch Clamp to hold the Side Tube in place

The Side Tube should be resting against the curved part of the Locking Mechanism body. If it is not, rotate the Side Tube and Tube Mount until the Side Tube is in contact with the Locking Mechanism. Close the latch of the Locking Mechanism – it may be necessary to slightly loosen the bolts attaching the Lock to the Locking Rear Folding Adapter to do this. Fully tighten these bolts when the Side Tube is installed, secured with the Pinch Clamp and the latch of the Locking Mechanism is closed.

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.

Release the Lock latch and check that the Side Tube can be rotated between the 'In-Use' forward position and the 'Folded' back position without contacting any part of the wheelchair.

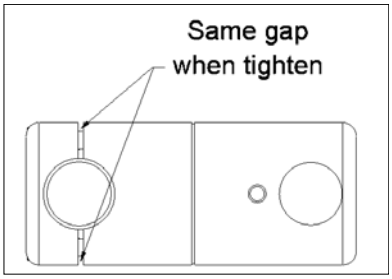
Figure 6.4-7 The Side Tube must not contact any part of the wheelchair as it rotates between the In-Use and Folded positions.

Caution:

If the Side-Tube contacts the armrest or other part of the wheelchair the Locking Rear Folding Adapter (LRFA) must be moved further out from the wheelchair by using one or two Frame Clamp Spacers (UFCSPCR). Alternatively an S-Bend Tube may be used for the Side Tube with the bend positioned to allow the tube to avoid obstructions.

When the Inner Piece is correctly aligned alternately tighten the bolts connecting the Cap and Body of the Frame Clamp Inner Piece 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 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.

All bolts should be tightened sufficient to hold the mounting assembly for the remaining procedures in the installation. The bolts will be fully tightened in the final installation step.

6.4.3 Install the Elbow Connector and Horizontal Tube

Remove the plastic plug retaining the Pinch Clamp within the tube hole of the Elbow Rotate Head (ELRH) and check the alignment of the Pinch Clamp inside. Insert the Horizontal Tube and tighten the Pinch Clamp bolt.

Remove the plastic plug retaining the Pinch Clamp within the tube hole of the Tube Mount (RTHTM) on the ELRH. Slide the tube hole in the 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 a Pinch Clamp is not aligned or when the tube will not fully enter the tube hole.

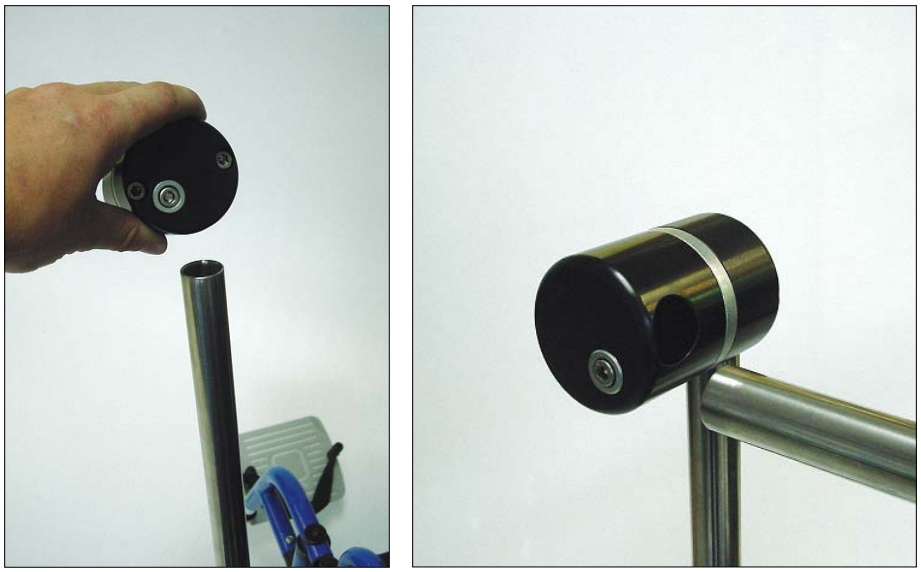


Figure 6.4-8 Slide the Side Tube and Horizontal Tube into the tube holes of the ELRH+RTHTM. Tighten the Pinch Clamps to hold the tubes in place.

Caution:

The bolts on the Pinch Clamps should not be excessively tightened. By design a Pinch Clamp does not provide an immoveable 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.

6.4.4 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 tube will not enter the hole.

Figure 6.4-9 The TUSB slides onto the end of the Horizontal Tube and is held in place with 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.

Figure 6.4-10 The Folding Quick Release Base allows the device to be rotated around the Horizontal Tube and held at any of 5 angles by a spring-loaded lock pin.

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 DLRFM8 behind the wheelchair backrest.

6.4.5 Adjust In-Use Position and the Rear Stop

Setting the In-Use Position

Rotating the Locking Rear Folding Adapter (LRFA) with the Side Tube locked in position sets the In-Use position of the DAESSY Lockable Rear Folding Mount DLRFM8. The rotation can be at any of the Swivel Clamps between the Frame Clamp Inner Piece and LRFA. When the mount is in the correct position fully tighten all the Swivel Clamp bolts.

Figure 6.4-11 – With the Side Tube locked in place rotate the Locking Rear Folding Adapter at the Swivel Clamps connecting the Frame Clamp components to set the In-Use position.

Adjusting the Rear Folding Stop and Setting the Folded Position

The Locking Rear Folding Adapter body (LRFA) has an adjustable stop for setting the folded location. The two bolts securing the stop should have been loosened during the installation procedure. The Stop is installed in a sector shaped slot where it can be moved through about 20 degrees. By removing the two small bolts the Stop can be removed and inverted to displace the adjustable region about 10 degrees. The total adjustment possible is about 30 degrees. The Stop bears against a ledge within the rotating part of the Rear Folding Adapter.

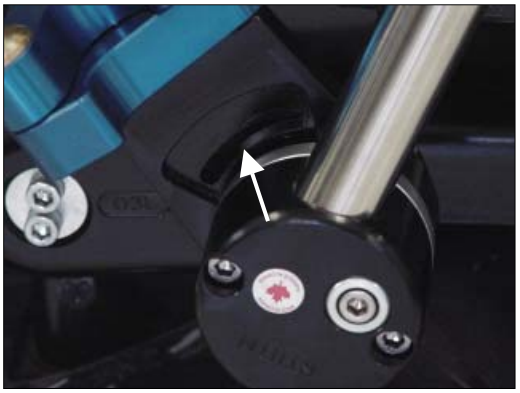


Figure 6.4-12 The Rear Stop slides in a sector shaped slot.

Figure 6.4-13 The Rear Stop can be removed and inverted to adjust the maximum rearward motion of the Side Tube.

With the Stop bolts loose, move the mount to the desired Folded position. If necessary the Stop may be turned over. With the mount held in the correct Folded position use the Allen key to pull the stop up to the ledge it contacts and tighten the bolts.

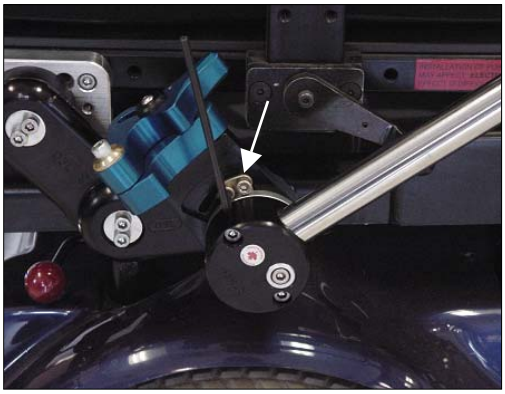


Figure 6.4-14 With the Side Tube in the correct folded position use the Allen key to pull the Rear Stop forward and tighten the bolts.

6.4.6 Final Adjustment and Checklist

Before attaching a device to the Lockable Rear Folding Mount check that the following steps in the installation procedure have been completed.

- Bolts on Frame Clamp Inner Piece fully tight
- Bolts on Swivel Clamp fully tight. Tighten these bolts alternately to get the most effective grip.
- Pinch Clamp bolts tight