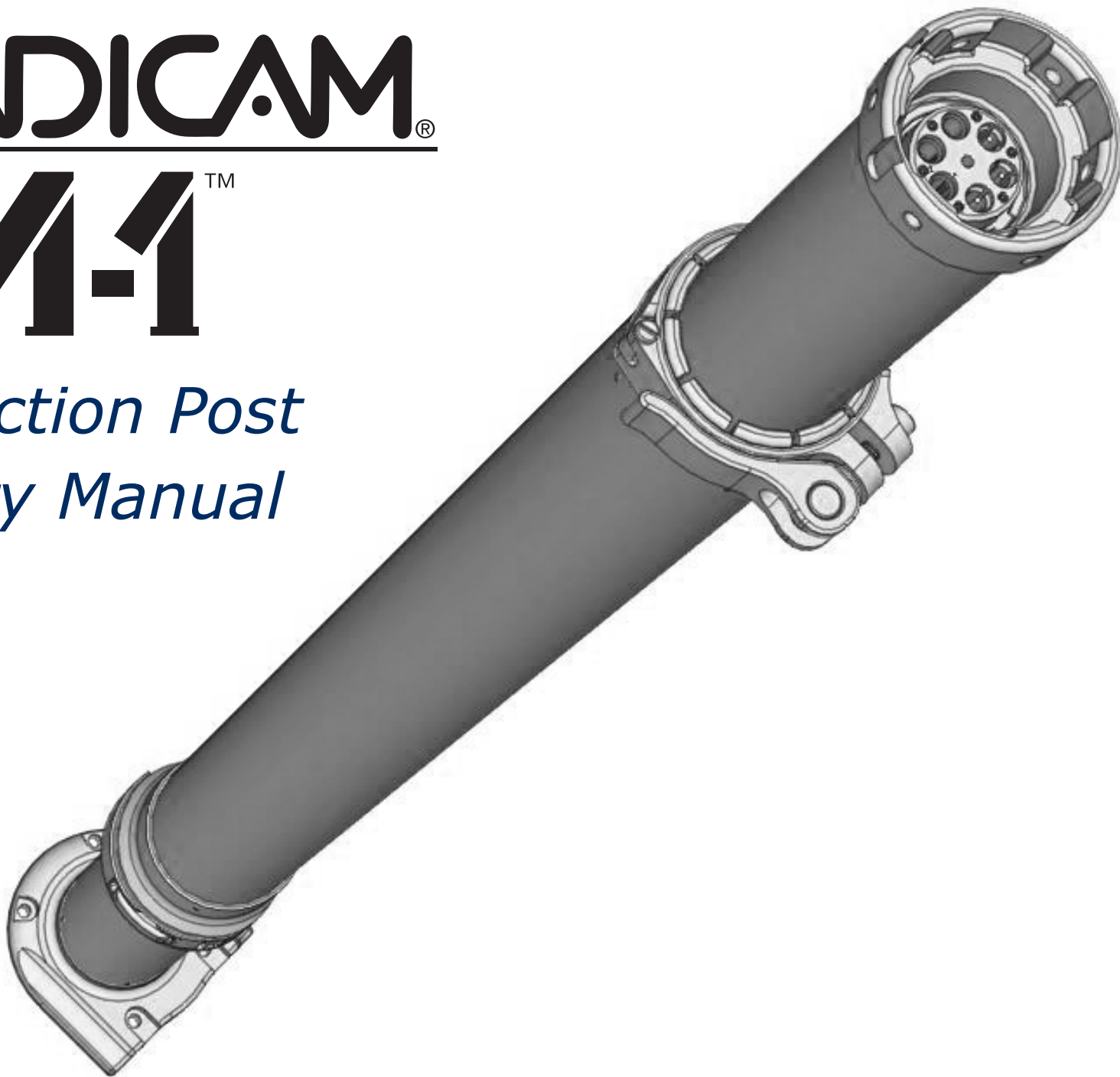


STEADICAM®

M-1™

*Three-Section Post
Accessory Manual*



LIT-815760

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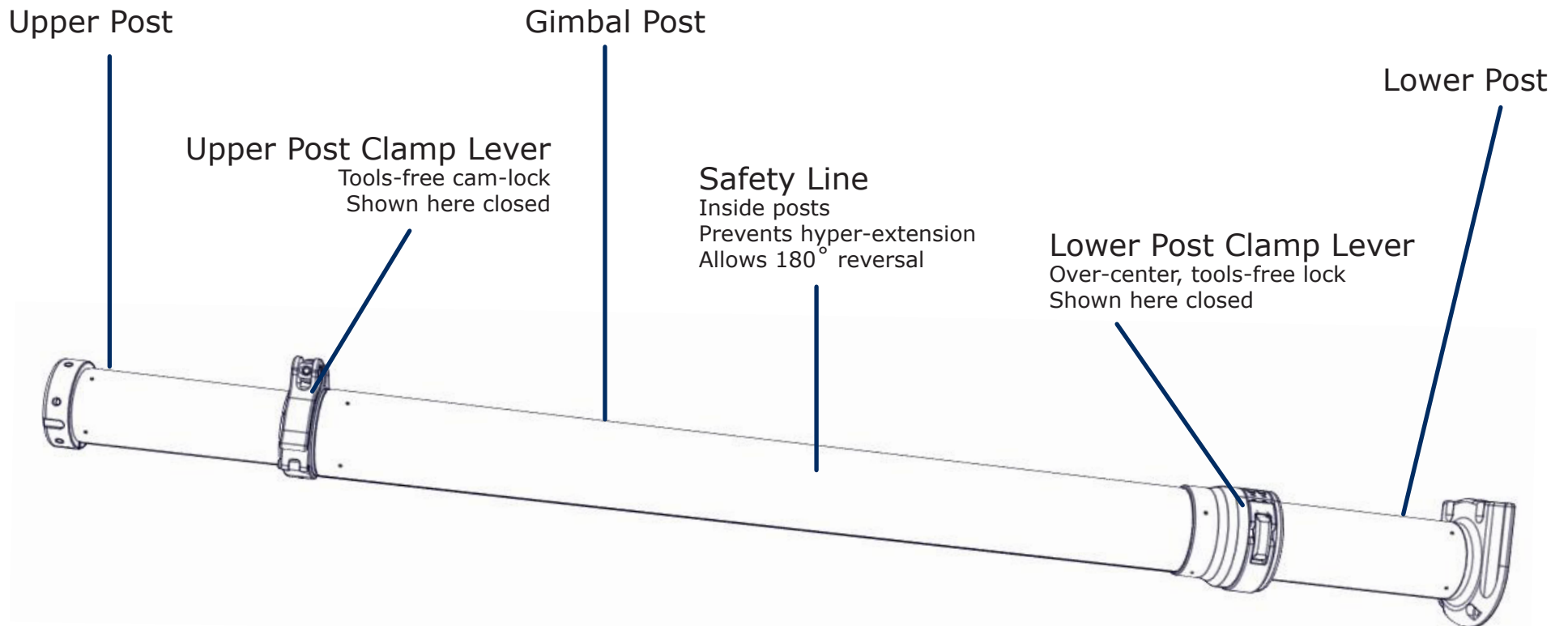


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The Post

The 3-section Post:

Adding the 3-section Post to an M1 enables the same compact length as the 2-section Post when collapsed, but enables super high mode and super low mode at full extension. The two Posts are similar in construction, have identical connectors, plus the same internal wiring and safety line. But there are a few differences. Let's take a look:



Components

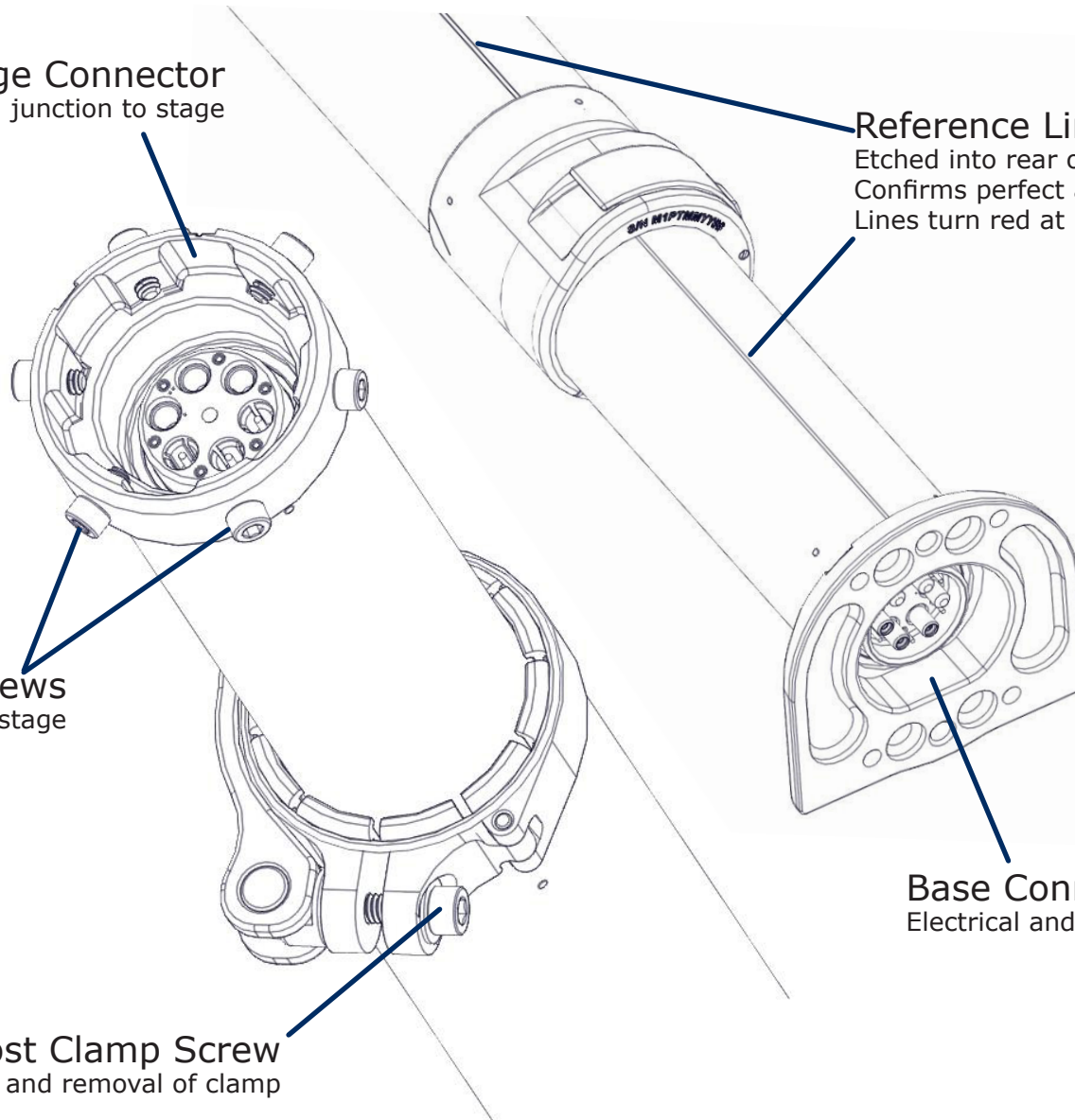
Stage Connector
Electrical and mechanical junction to stage

Reference Lines
Etched into rear of all three posts
Confirms perfect alignment
Lines turn red at maximum extension

High Strength Screws
Lock the post to the stage

Base Connector
Electrical and mechanical junction to base

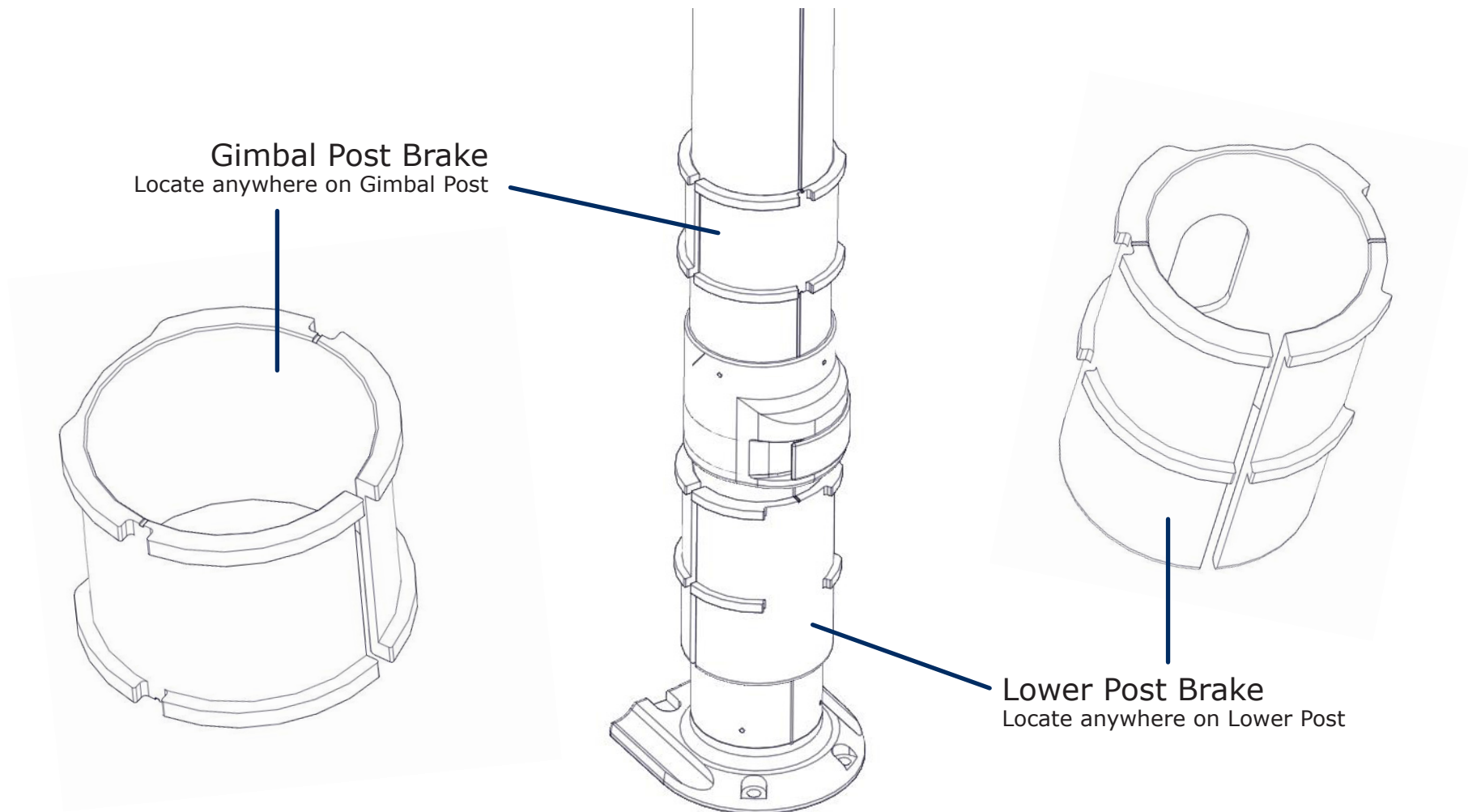
Upper Post Clamp Screw
Allows adjustment and removal of clamp



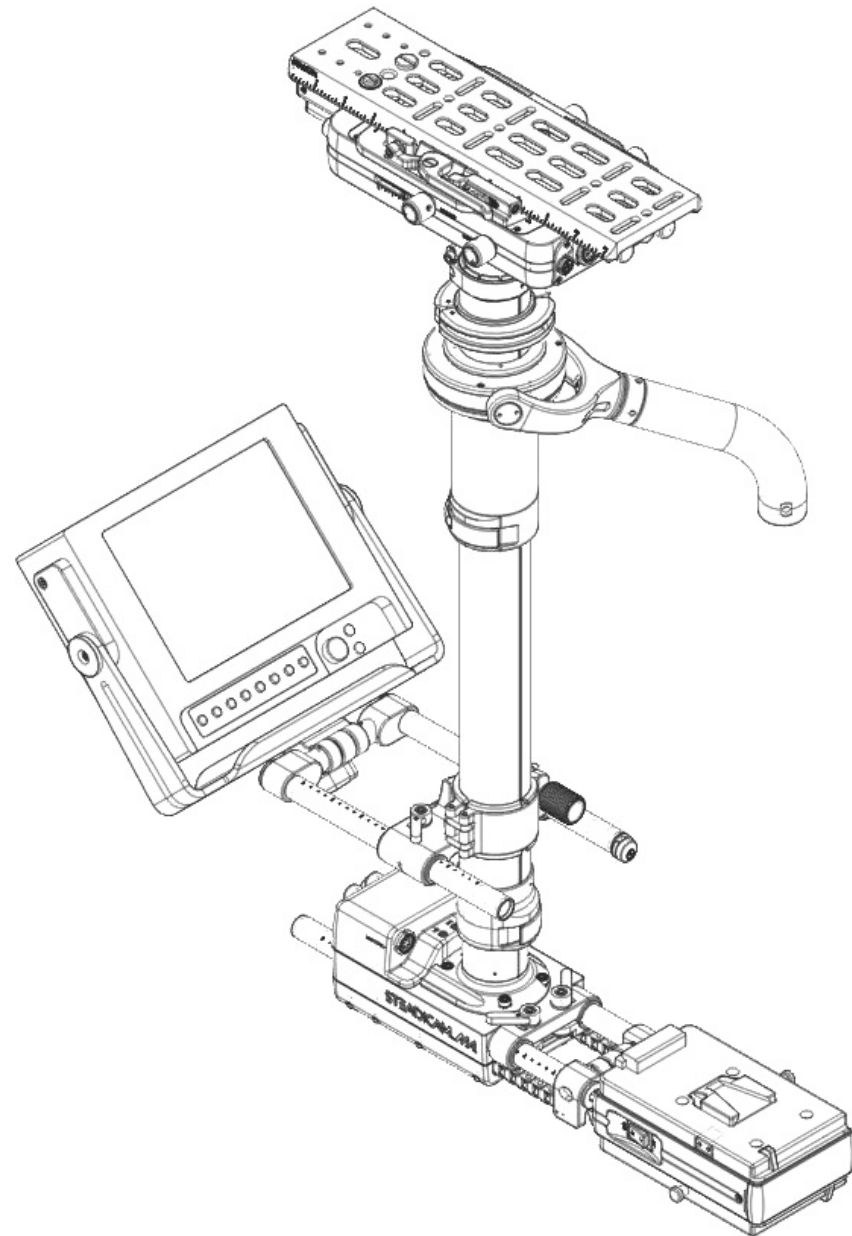
The Post

The Brakes:

The gimbal and lower post each have a specific collar, called a brake, for the M1 monitor mount. They are intended to stay on each post to allow for quick repositioning of the monitor in the field. Unlike the 2-section post brakes, the lower post brake is not indexed to the post. Both brakes must be aligned to the 3-section post by eye using the reference lines and index marks.



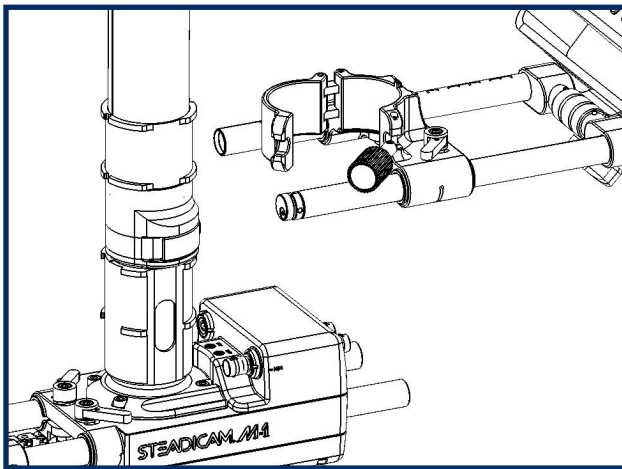
Components



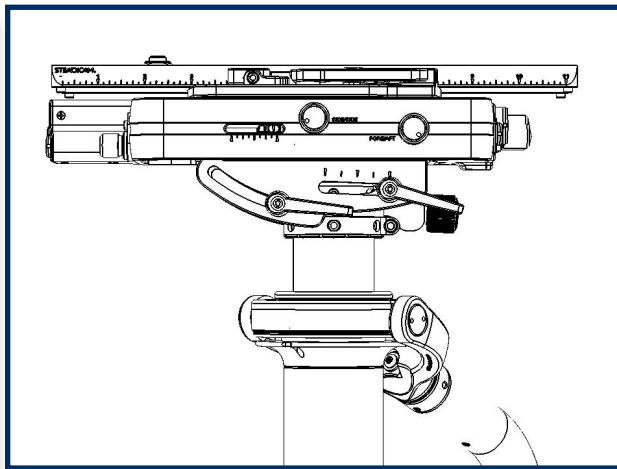
Swapping Posts

Installing the 3-section Post

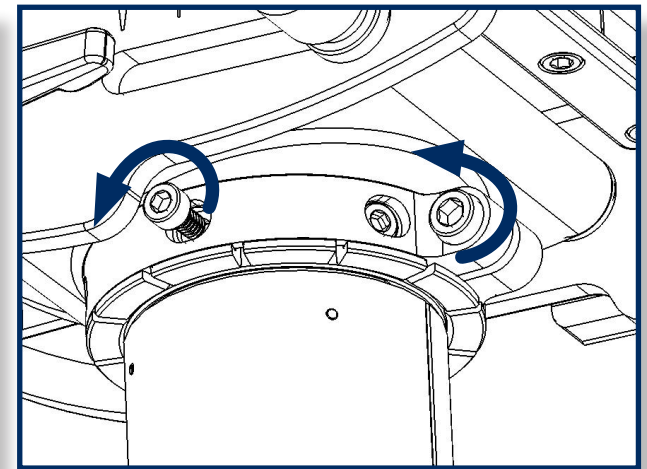
If you have an M1 with the 2-section post installed, it's easy to swap to the 3-section post. We'll be removing the stage, base, monitor and gimbal from the original setup and installing them onto the new post. Take care of the separate components while they're loose.



Remove the monitor mount, accessories and any cables. Set them aside for now.

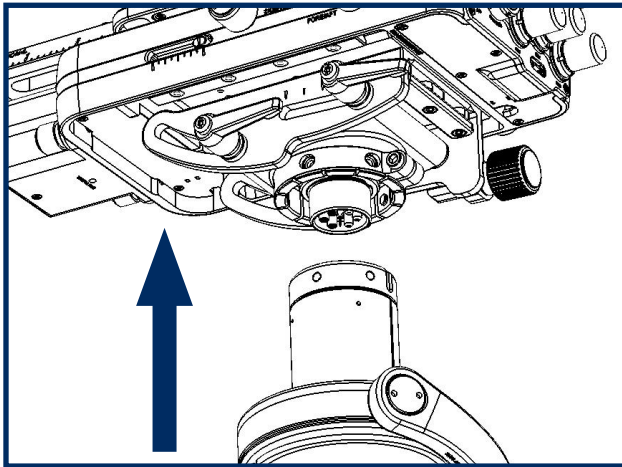


To remove the stage from the post, start with the tilt set square, which allows access to all screws.

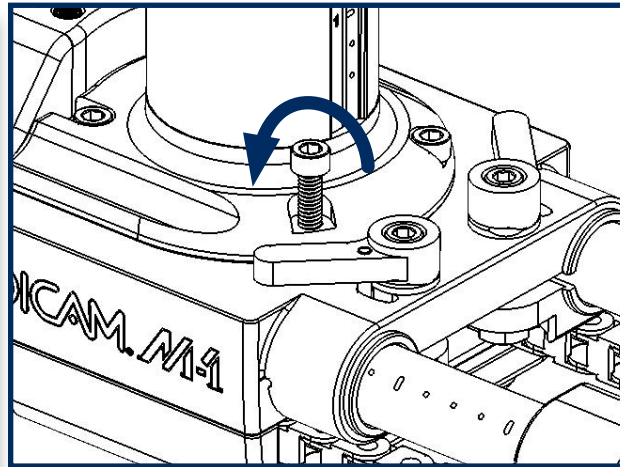


Use a 7/64" Allen wrench to loosen (but not remove) the post band clamp screw. Then, use the same wrench to remove all six screws from the post connector.

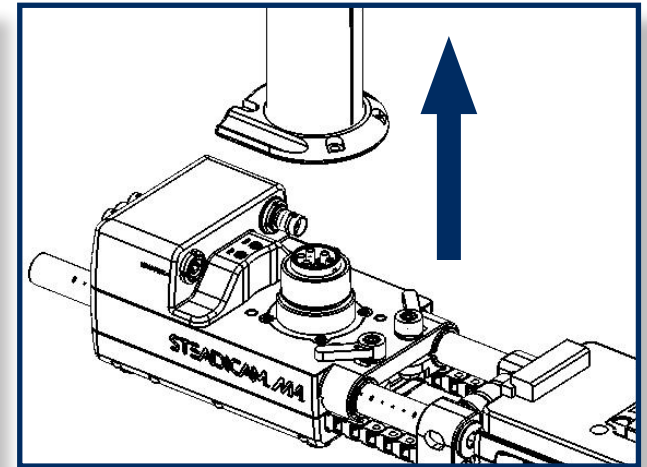
Separating Components



Pull the stage STRAIGHT up off the post. It may take a firm pull, but do not force anything.



To remove the base, use a 9/64" Allen wrench to remove the four screws from the base connector.

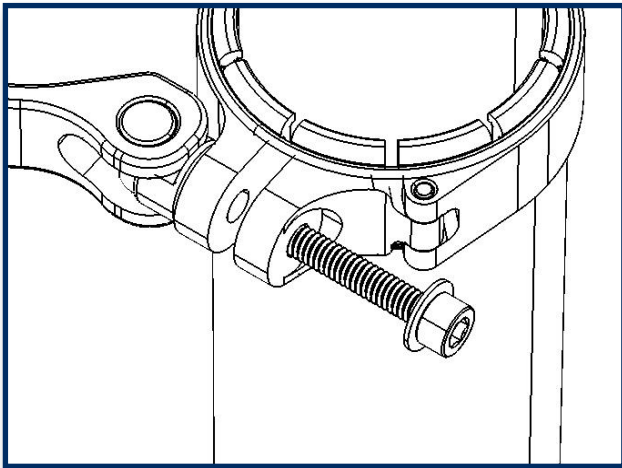


Pull the post STRAIGHT up off the base. It may also take a firm pull, but don't force anything.

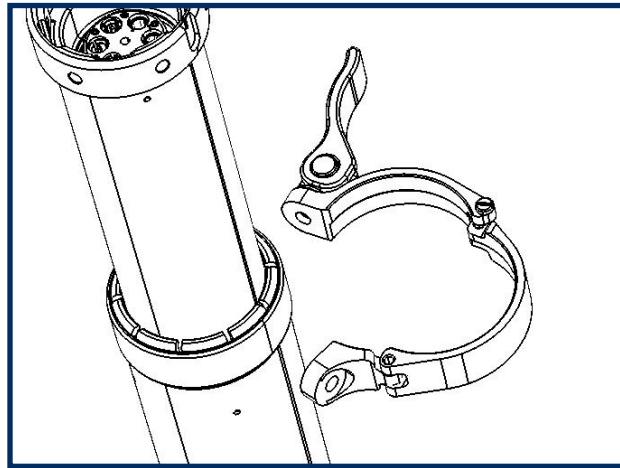
Swapping Posts

Swap the Gimbal:

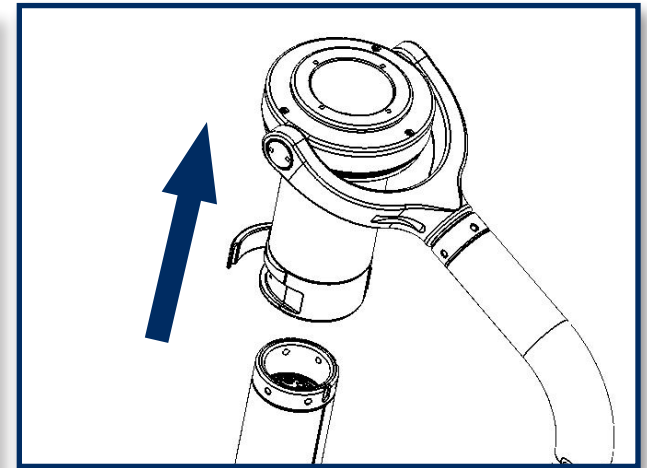
The 2-section post does not have an upper post clamp, so removing or installing the gimbal is easy. However, the added upper post on the 3-section post requires removal of the upper post clamp in order to slide the gimbal on or off.



With the upper post clamp open, use the included 9/64" Allen wrench to remove the post clamp screw.



Remove the upper post clamp completely from the post.

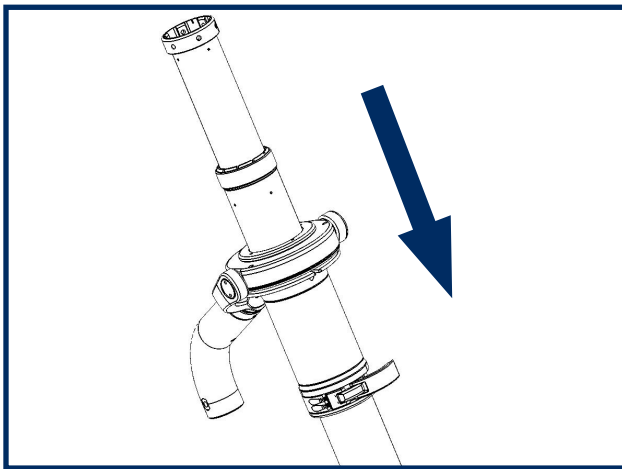


Open the gimbal clamp and slide the gimbal assembly off the 2-section post.

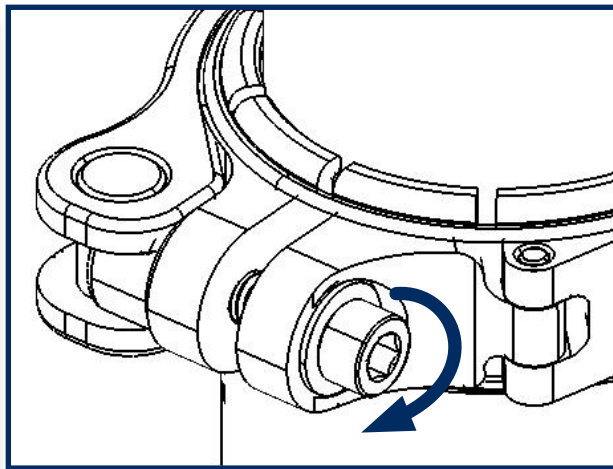
Note:

You may also remove the upper post clamp by unscrewing the small slotted screw using the supplied screwdriver.

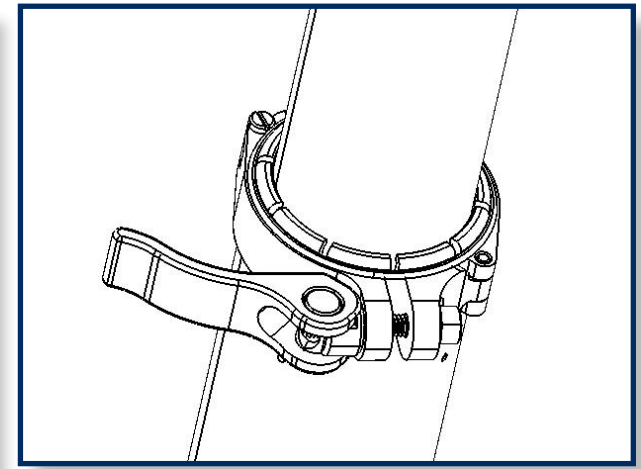
Swapping the Gimbal



Carefully slide the gimbal over the stage connector and top of the gimbal post of the 3-section post. Close the gimbal clamp.



Replace the upper post clamp by wrapping it around the post and reinstall the screw with the lever in the closed position.



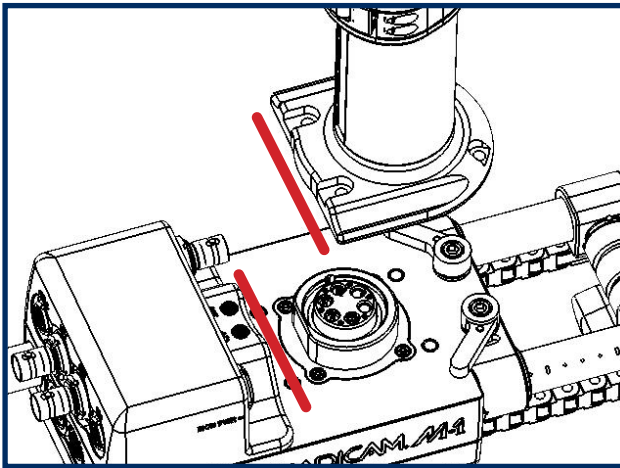
Adjust the tension of the upper post clamp. Make small adjustments to the screw until it holds the post securely and the lever operates smoothly.

See page 15 for details.

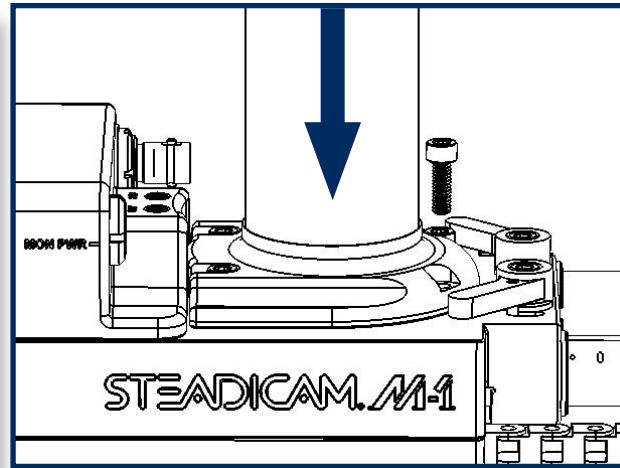
Caution:

Do not over tighten the post clamp! It is strong enough to distort the carbon fiber post sections but does not need to be that tight to hold. Use the MINIMUM clamping force while still holding securely.

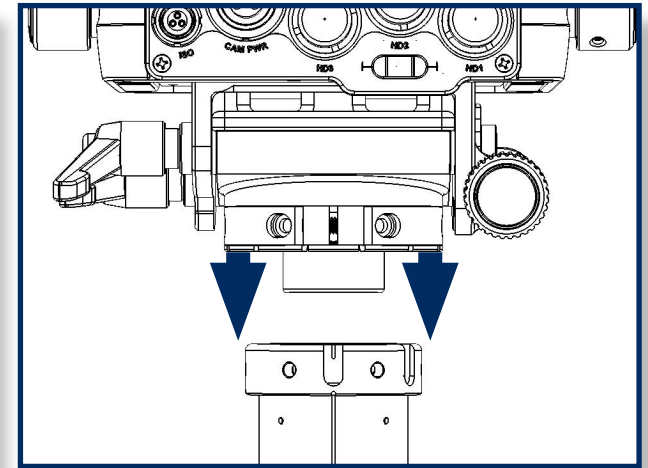
Swapping Posts



To install the base on the 3-section post, align the flat spot on the post connectors. The straight edge of the post foot should align behind the 12/24V LED's as indicated by the red lines in the image above.



Insert firmly until the post connector sits flush on the base and install the four screws with a 9/64" Allen wrench. Tighten with ample torque to secure the post.

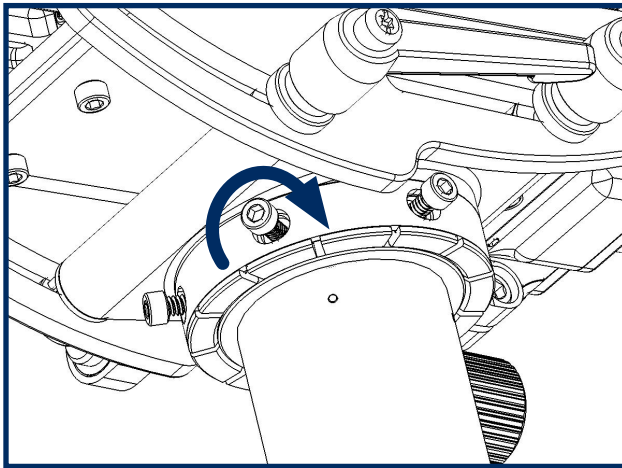


To install the stage on the 3-section post, align the post band clamp with the red line on the post connector. Insert firmly until the stainless ring is flush.

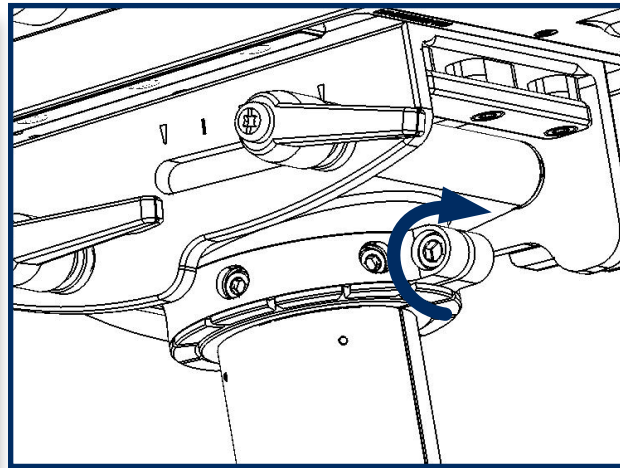
Note:

Only use the provided high strength screws for the base and stage connectors. Spares are provided with the 3-section post.

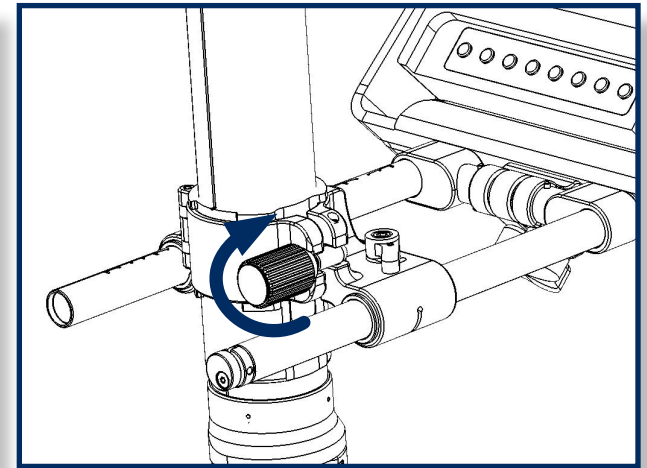
Reassembly



Reinstall all six screws finger tight. Tighten opposing pairs with the 7/64" Allen wrench to lock the stage.



Fully secure the stage by tightening the post band clamp screw.

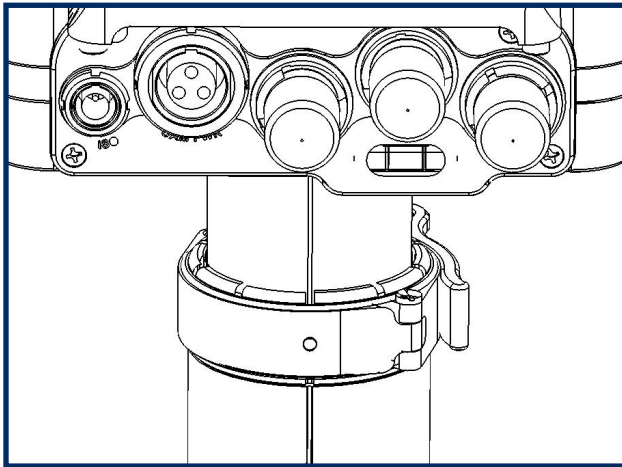


Re-install the monitor on either post brake depending on your upcoming shot.

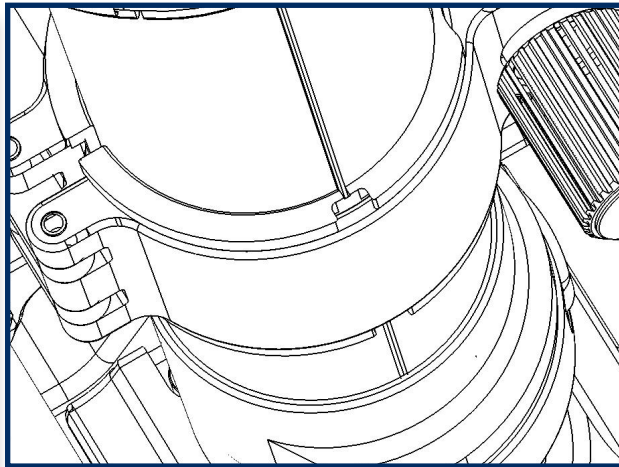
Swapping Posts

Alignment:

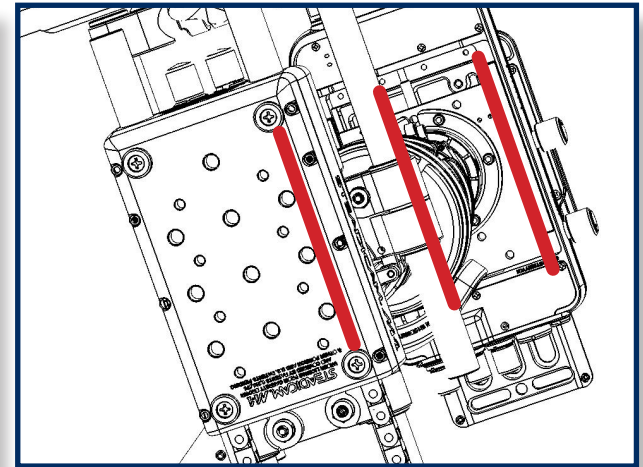
The 3-section post sections are not indexed, so use the etched reference lines to ensure the stage, base, and the monitor mount are all properly aligned before balancing.



Align the yellow reference lines along the rear of all three posts.



Align the monitor mount index mark with the post.



Confirm exact alignment by sighting up the length of your rig from below. The base, monitor rods and stage should all be parallel.

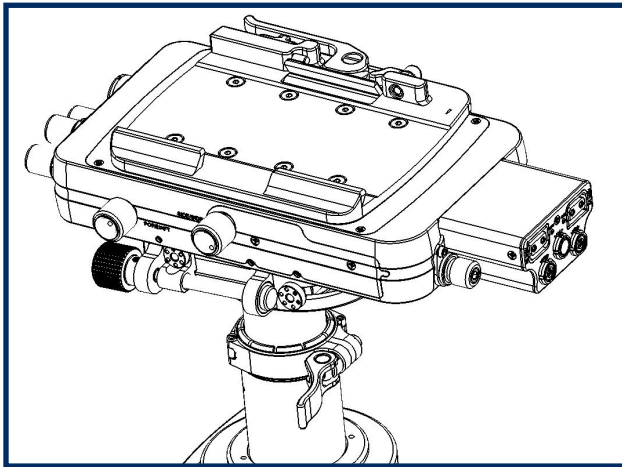
Caution:

Do not operate the M1 3-section post with any red reference line showing!

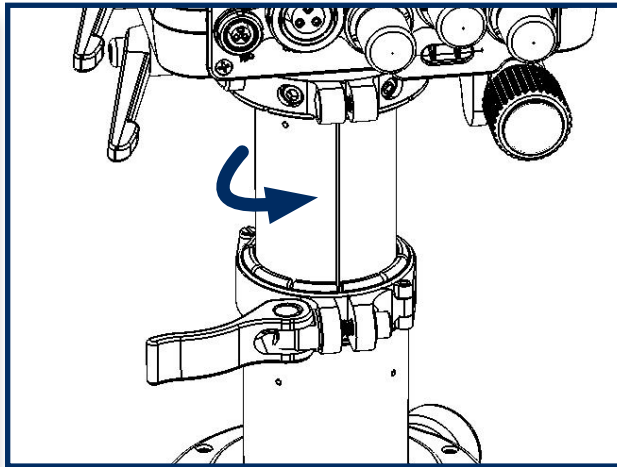
Adjustments and Maintenance

180° Post Reversal:

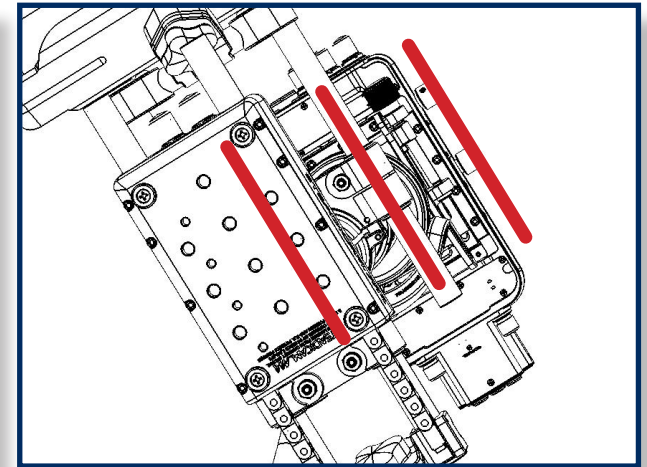
In some situations, you may benefit from having the stage turned to face the other direction. For example, to enable the tilt head to tilt the lens upward, or with large camera setups, like 3D, that need additional room directly in front of the stage. With the 3-section post, we suggest spinning the upper post because it maintains monitor and base alignment regardless of which post the monitor is on.



Without a camera on board, unlock the upper post clamp.



Rotate the upper post 180° inside the gimbal post until the stage is reversed. Use the space in the post clamp to aid alignment. Close the post clamp.

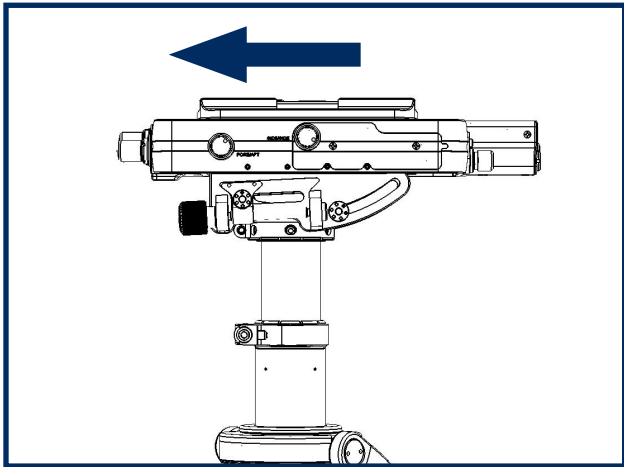


Confirm component alignment by sighting along the base, monitor rods and stage. Adjust if needed.

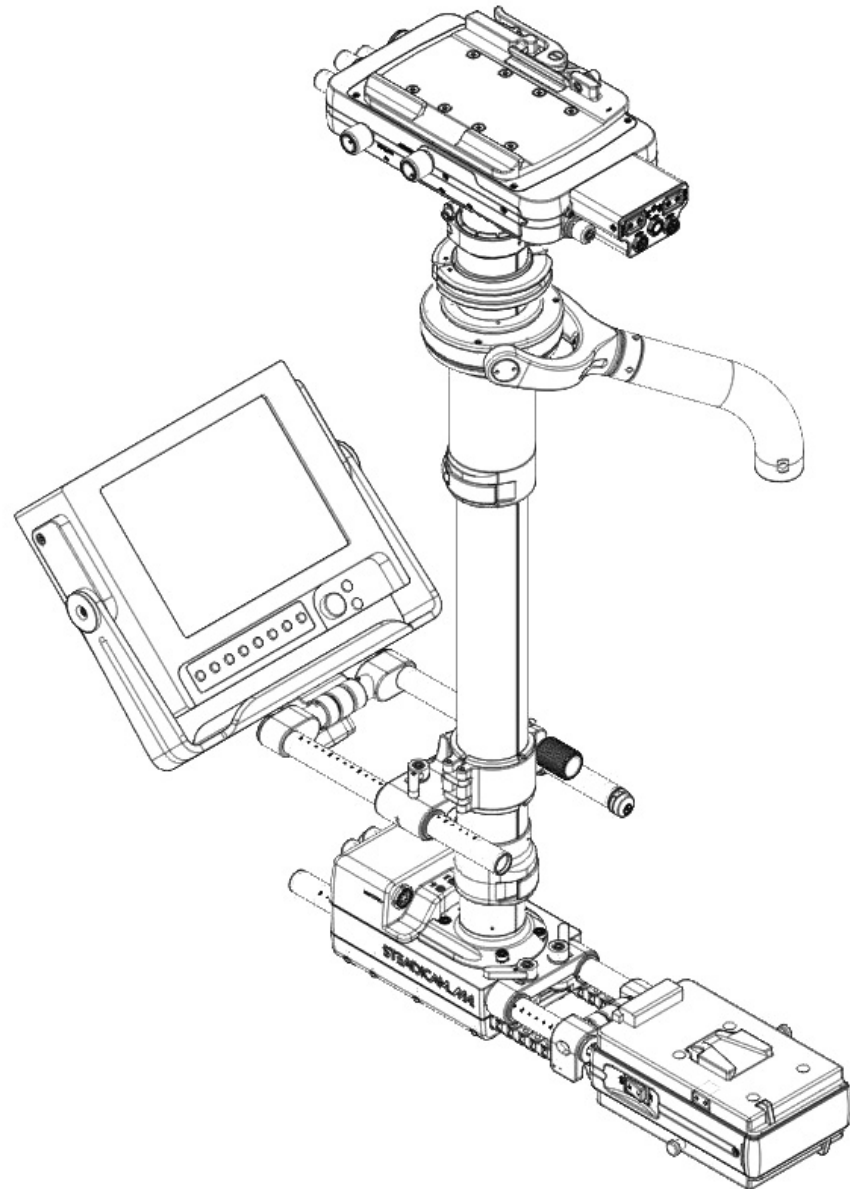
Caution:

To prevent damage to the cables inside the post, be careful not to twist the safety line past 360° by taking note of the direction you turn the post in this process. Try turning the upper post so the reference line always swings past the blue post clamp and then back again on the same side. Use your own system to remember or make marks.

180° Reversal



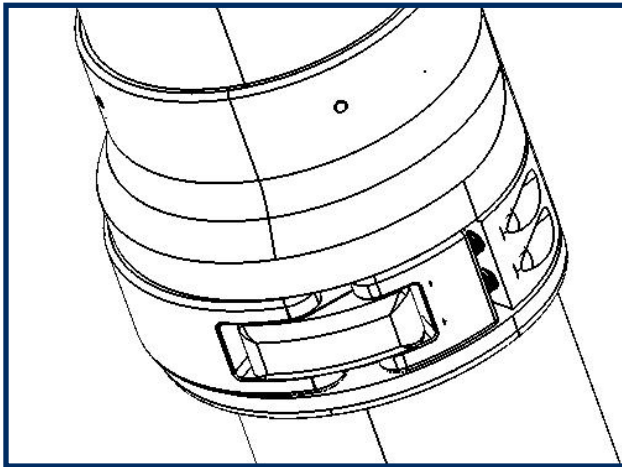
Mount your camera with the lens facing forward on the rig, which will be backwards on the stage.



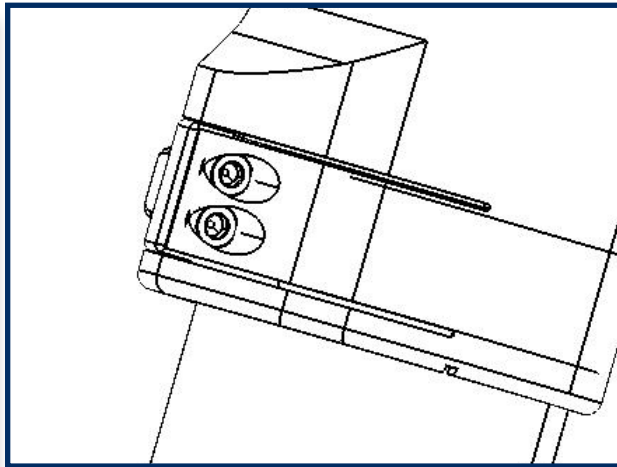
Adjustments and Maintenance

Post Locks:

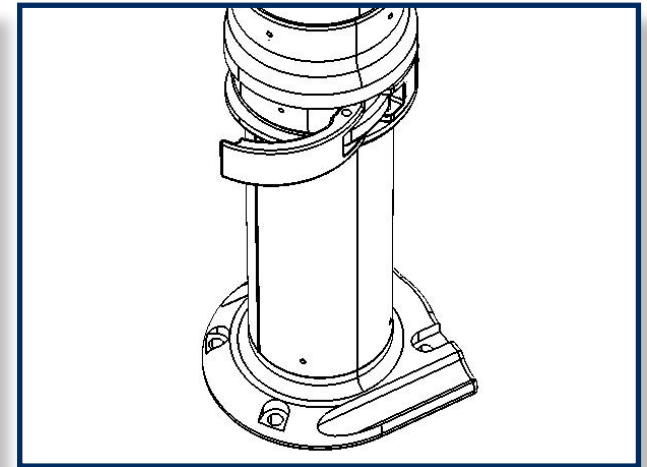
You should occasionally test to ensure the posts and gimbal are being clamped fully by trying to move components with the clamps closed. If the posts or gimbal slide with a camera on board, it will affect your drop time or balance. We recommend using Vibra-Tite VC-3 (www.vibra-tite.com) to secure the adjusting screws for all post and gimbal locks.



The over-center lock on the lower post is adjusted while the post clamp is closed.

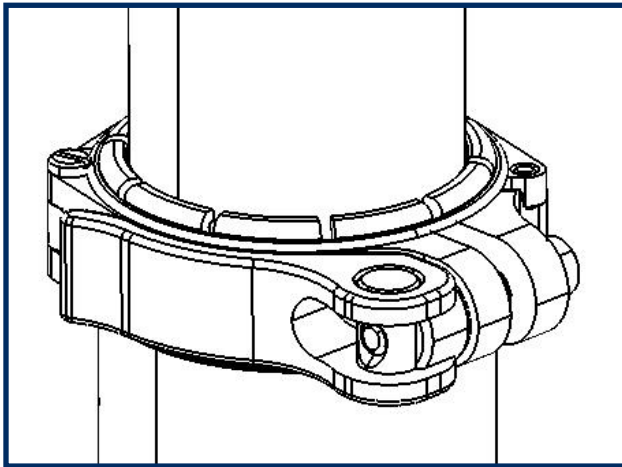


Use a 3/32" Allen wrench to turn each screw an equal, tiny amount. You don't want to over-tighten these, so take your time.

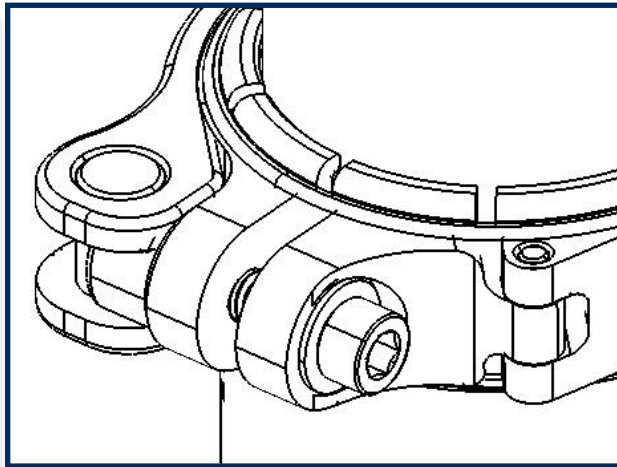


Test the action of the lever and the holding power of the clamp. Repeat if necessary.

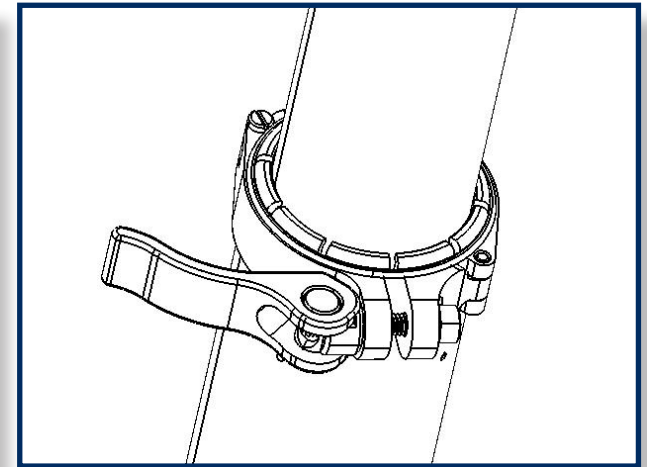
Adjust Post Clamps



The cam lock on the upper post is also adjusted while the post clamp is closed.



Use the 9/64" Allen wrench to turn the adjustment screw a tiny amount. You don't want to over-tighten this, so take your time.



Test the action of the lever and the holding power of the clamp. Repeat if necessary.

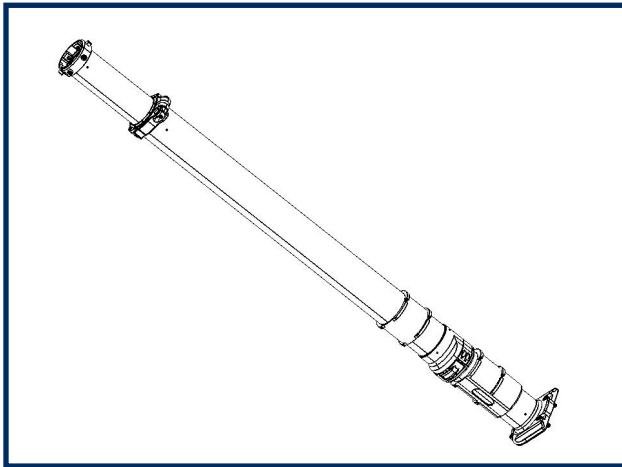
Caution:

Do not over tighten either of the post clamps! They are strong enough to distort the carbon fiber post sections but do not need to be that tight to hold. Use the MINIMUM clamping force while still holding securely.

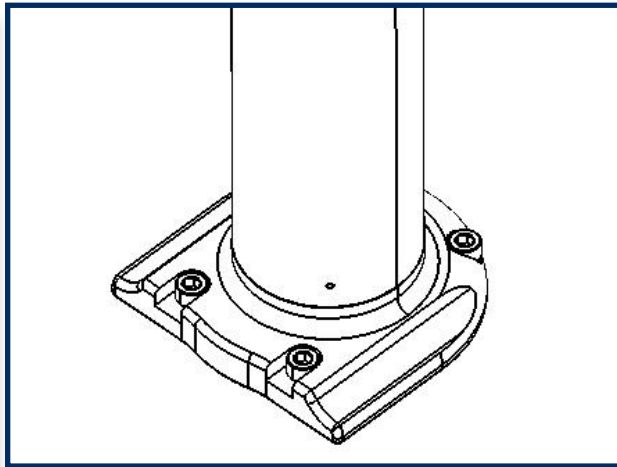
Cleaning

Cleaning the Post:

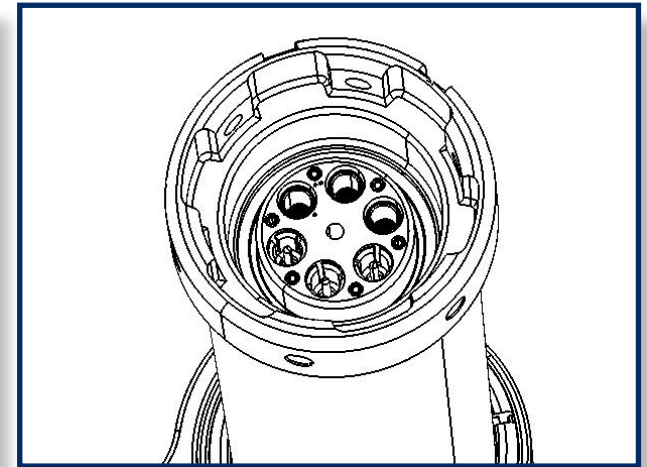
For a thorough cleaning, isopropyl alcohol is a suitable solvent on the M1's carbon fiber, aluminum and stainless steel components. However, household window cleaner misted on a lint-free cloth should remove most of the grime your 3-section post will collect in the field.



The carbon fiber post sections are extremely durable, but will slide better when kept clean.



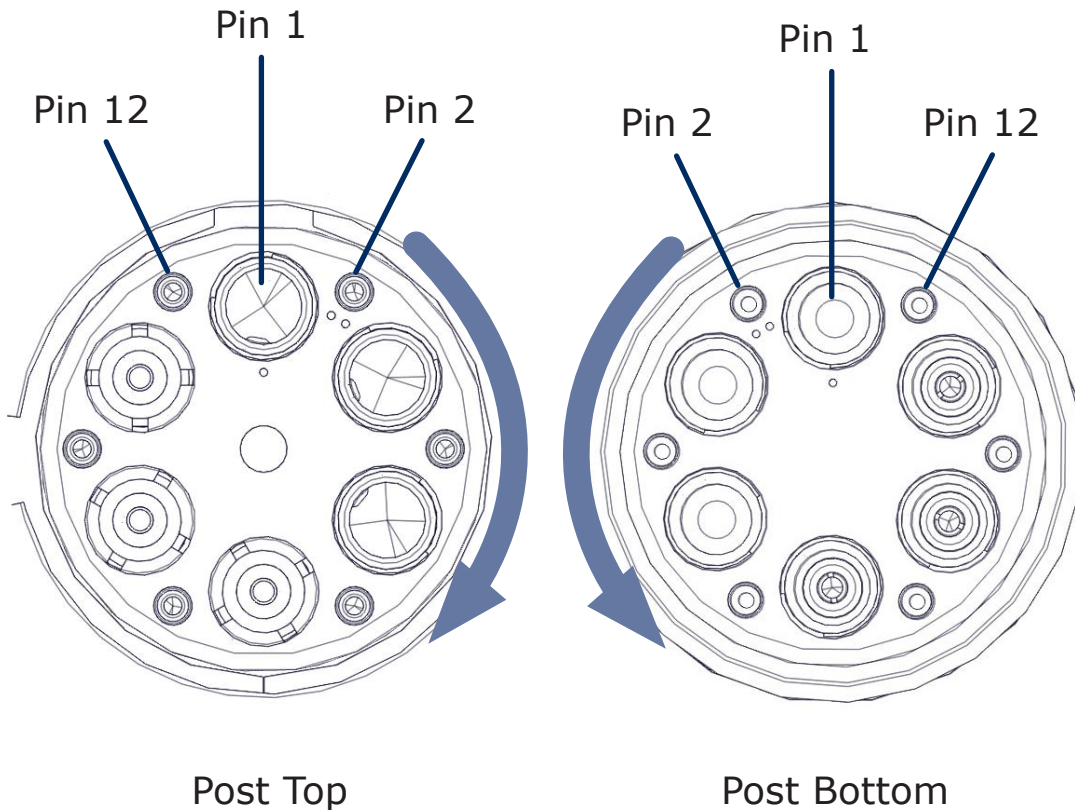
All of the aluminum and steel components can be cleaned to maintain a like-new appearance.



A clean brush or compressed air can remove dust or debris collected in the post connectors. Do not use solvents here.

Post Connectors:

These proprietary connectors carry power and video signals through the post but still allow the components to be disassembled easily. Because these connectors mate together, they are mirrors of each other, so be careful when determining pins. The 12 pins are counted in a circle starting at pin #1 with one dot, followed by #2 with two dots and continuing from there.



Stage, Base, and Post Connector Matrix			
Connector Type	Pin Location	Description	Tiffen P/N
Male Connector: Post Bottom, Stage	#1	PWR GND	PIN-250254
	#2	ISO GND	PIN-250267
	#3	(+) 12V	PIN-250254
	#4	ISO + 12V	PIN-250267
	#5	(+) 24V	PIN-250254
	#6	ISO + 24V	PIN-250267
	#7	HD3	PIN-250253
	#8	TALLY	PIN-250266
	#9	HD2	PIN-250253
	#10	RX	PIN-250266
	#11	HD1	PIN-250253
	#12	TX	PIN-250266
Female Connector: Post Top, Base	#1	PWR GND	SCT-138714
	#2	ISO GND	SCT-138717
	#3	(+) 12V	SCT-138714
	#4	ISO + 12V	SCT-138717
	#5	(+) 24V	SCT-138714
	#6	ISO + 24V	SCT-138717
	#7	HD3	SCT-138713
	#8	TALLY	SCT-138716
	#9	HD2	SCT-138713
	#10	RX	SCT-138716
	#11	HD1	SCT-138713
	#12	TX	SCT-138716

Parts List

M-1 3-section post components and accessories			
<i>Component</i>	<i>Description</i>	<i>Tiffen P/N</i>	<i>Qty</i>
Carrying bag	Padded cloth bag for M-1 post	815-7690	1
Top post brake	Monitor mount adaptor for gimbal post	815-7512-01	1
Bottom post brake	Monitor mount adaptor for lower post	815-7512-02	1
Stage screws	6-32 x 1/4" socket head cap screw	SCI-A008S11A0	12
Base screws	8-32 x 1/2" socket head cap screw	SCI-B016S1160	6
Flat screwdriver	3/16" slotted, slip resistant tip	MSC-180336	1
Allen keys	Allen key set, ball tip, folding	MSC-180335	1
Manual	3-section post user guide	LIT-815760	1
Complete Post	3-section post with included parts	815-7600-02	

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