3875 Cypress Drive Petaluma, CA 94954 800.228.2555 707.773.1100 Fax 707.773.1180 www.gcx.com INSTRUMENT MOUNTING SYSTEMS

### Installation Guide

Installation Kit for Mounting Philips MP20/30/40/50 on Datex-Ohmeda Aisys Anesthesia Machine



### The purpose of this guide is to:

- 1. Describe mounting of Counterweight (page 2).
- 2. Describe mounting of Top Plate/Camlock Rails (page 4).
- 3. Describe mounting of Camlock Mounting Plate (page 6).
- 4. Describe mounting of VHM Arm in left side channel (page 9).
- 5. Describe attachment of table top mount to VHM Arm (page 11).
- 6. Describe counterbalance adjustment of Arm/monitor (page 12).



**WARNING**: USE OF MOUNTING HARDWARE AND MONITORING COMPONENTS OTHER THAN THOSE DESCRIBED IN THIS DOCUMENT MAY RESULT IN SERIOUS INJURY DUE TO TIPPING OF THE ANESTHESIA MACHINE.

# Installer: When installation is completed, provide these instructions and all related documentation to the end user for future reference.

### Mounting the Counterweight on the Aisys Anesthesia Machine

#### **Parts Reference**

The following parts and hardware are included with this installation kit (hardware not shown):

Item #	Description	Qty
1	Weight Bar, 30 lbs	
2	Mounting Bracket	1
3	#10-32 x 1/4" Flat Head Machine Screw (FHMS), 100°	
4	Counterweight Cover	
5	Channel Slide	1
*6	#10-32 x 5/8" Pan Head Machine Screw (PHMS)	4



\*Not used for mounting Counterweight on Aisys. See Installation Note below for additional parts required for mounting Counterweight on Aisys.

### **Tools Required**

Phillips screwdriver (not provided).

**Installation Note:** Additional hardware (not included in above Counterweight Kit) is required for mounting the Counterweight on the Aisys anesthesia machine. One (1) Slide Spacer, and four (4) #10-32 x 7/8" Pan Head Machine Screws (PHMS) are required for attaching the Channel Slide to the Mounting Bracket as follows:

1. Insert the Slide Spacer between the Channel Slide and the Mounting Bracket and fasten the assembly together with four (4) #10-32 x 7/8" PHMS as shown below.



2. Insert Mounting Bracket (Slide) in channel on right side of anesthesia machine and slide Bracket as far down the channel as possible. **Installation Note:** If Slide is difficult to move in Channel, it may be necessary to file a small amount of material off four (4) tabs on each side of the Slide (below center). File equal amount of material off each side.

Tabs (2 on Each Side)





Installation Note: Aespire anesthesia machine shown in procedure below. Procedure is same for Aisys installation.

 Carefully lift Counterweight (30 lbs/13.6 kg) onto bottom lip of Mounting Bracket and hold Counterweight in place (below left). Place Counterweight Cover over Counterweight and Bracket as shown below right. Align two (2) mounting holes on each side of Cover with corresponding threaded holes in Bracket and fasten Cover to Bracket with four (4) #10-32 x 1/4" FHMS (below right).



### Mounting Top Plate on Anesthesia Machine

### **Parts Reference**

The following parts and hardware are included with this installation kit (hardware not shown):

Item #	Description	
1	Top Plate/Camlock Rail Assembly	1
2	M5 x 12mm Flat Head Machine Screw (FHMS)	4



**Tools Required:** Phillips screwdriver.

1. Locate the four (4) threaded inserts shown in photo below. **Installation Notes:** It may be necessary to remove hole covers to expose threaded inserts. The right front mounting hole will be temporarily covered by the front Camlock Rail.



2. Align three (3) mounting holes in Top Plate with corresponding threaded inserts in top of machine. Fasten Top Plate to machine with three (3) M5 x 12mm FHMS. **Installation Note:** A fourth screw will be installed in step 3.



3. Unscrew and remove right and center screws from front Camlock Rail. Loosen left screw and rotate Rail enough to allow access to fourth mounting hole. Install M5 x 12mm FHMS in threaded insert. Return Rail to original mounting position, reinstall right and center screws, and tighten left screw in Camlock Rail.



### **Mounting Camlock Mounting Plate**

### **Parts Reference**

The following parts and hardware are included in this installation kit (hardware not shown).

Item #	Description	Qty
1	Camlock Mounting Plate	1
2	M6 x 10mm Flat Head Machine Screw (FHMS)	
3	M4 x 20mm PHMS	
4	#6-32 x 1/2" PHMS	1



### **Tools Required**

Phillips screwdriver.

Installation Note: Table Top Mount is supplied by Philips.

1. Fasten Table Top Mount to Camlock Mounting Plate with three (3) M6 x 10mm FHMS.



 Insert the four (4) feet (bottom of Camlock Mount) into the Camlock Rails (photo below left). Installation Note: Camlock Lever must be in the "unlocked" position when mounting feet in Rails. After inserting the feet, lock the Mount in place by moving the Camlock Lever from right to left.





3. To prevent the Camlock Lever from being unlocked, insert one (1) #6-32 x 3/8" PHMS in the threaded hole to the right of the Lever (below right). To further secure the Camlock Mount in the Rails, insert one (1) M4 x 20mm PHMS in each of the two (2) threaded holes at the rear corners of the Mount (below right). Stop tightening these screws when they make contact with the bottom of the Rail.



### Mounting the Monitor

Mount the monitor in accordance with the Philips Table Top Mount instructions.





### Mounting VHM Arm on Left Side of Anesthesia Machine

### **Parts Reference**

The following parts and hardware are included with this installation kit (hardware not shown):

Item #	Description	Qty			
1	VHM Arm (16" Extension and 5" Extended Tilt Clamp)	1	2 million		
2	Locking Lever, Height Adjustment	1			
3	Cable Clip	2			
4	M6 x 8mm Flat Head Machine Screw (FHMS)	2			
5	M6 x 12mm FHMS	1			
6	5/32" Hex Wrench	1			
7	1/8" Hex Wrench	1			
8	1/2" Socket Wrench	1			
*9	Spacer, MP20/30	1			
*10	M6 x 16mm Pan Head Machine Screw (PHMS)	2			
*See "MP20/30 non-Table Top Mount" on p.11 for use of these parts.					

## Tools Required

1/8" hex wrench (provided), 1/2" nut driver or socket wrench (provided), Phillips screwdriver (not provided).

### VHM Arm Operation and Adjustment

After mounting the VHM Arm on the anesthesia machine, refer to *"Installation & Operation Manual for VHM™ Series Arms"* (DU-WS-0001). This installation guide is provided with the VHM installation kit.

1. While supporting the bottom of the Arm, guide the Slide (rear of 16" extension) into the bottom of the left side channel and move to desired mounting position. Using the 1/8" hex wrench provided, tighten four (4) socket head set screws in the Slide.





### Attaching Philips-supplied Table Top Mount to Mounting Adapter on VHM Arm

**Installation Note:** Do not attach the Table Top Mount to the Arm/Mounting Adapter if you will be mounting an MP20/30 monitor with the mounting interface shown in photo (right). See "MP20/30 with non Table Top Mount" (below) for instructions specific to this type of mounting interface.



1. Fasten Philips-supplied Table Top Mount to Mounting Adapter with one (1) M6 x 12mm FHMS and two (2) M6 x 8mm FHMS as shown below.

Do Not Attach Table Top Mount if MP20/30 Monitor Has This Mounting Interface



- 2. Mount monitor in accordance with Philips Table Top Mount instructions or follow procedure below for non-Table Top mount.
- 3. Perform counterbalance adjustment as describe on page 12.

### MP20/30 with non-Table Top Mount

- 1. Fit Spacer into recessed area on top of Mounting Adapter (below). Ensure Spacer remains between Mounting Adapter and monitor.
- 2. Insert two (2) M6 x 16mm PHMS through bottom of Mounting Adapter and thread into mounting holes in bottom of monitor (right).



### **Counterbalance Adjustment**

The VHM Arm must be adjusted to counterbalance the mounted instrument throughout the Arm's vertical range of motion. When properly counterbalanced, the VHM Arm will maintain its height when the Locking Lever is disengaged. Because instrument weights vary, some adjustment is required to achieve optimal performance.



Use Caution while performing this procedure. Do not attempt counterbalance adjustment unless the instrument and accessories are mounted on the Arm.

- 1. Grasp the Arm behind the mounted instrument(s) to prevent sudden upward motion. Carefully unlock the Arm and move it to a horizontal position that allows access to the Adjuster Cover (below left). Lock Arm in horizontal position.
- 2. Open the Adjuster Cover by inserting a flat blade screwdriver in the slot at the rear of the Cover and prying upward. If necessary unlock and readjust the Arm until the Counterbalance Adjuster bolt is accessible through the Adjuster Cover (below center). Lock Arm when Counterbalance Adjuster is accessible.
- 3. With the 1/2" [13mm] socket wrench on the Adjuster, carefully unlock the arm. Turn the Adjuster *counterclockwise* (*CCW*) to increase counterbalance force, or *clockwise* (*CW*) to decrease counterbalance force. Counterbalance is correctly adjusted when the mounted instrument can be moved up or down with minimal force and does not rise or fall after releasing the Arm. Close Adjuster Cover.



4. Check the pivot, tilt, and swivel functions for proper tension. If adjustments are required, refer to the "VHM Arm Operation & Adjustment" on pages 5 - 6.

### **Routine Maintenance**

Periodically check all mounting hardware. Tighten as necessary for optimal operation.

### **Cleaning the Mounting Assembly**

**CAUTION:** GCX makes no claims regarding the efficacy of the listed chemicals or processes as a means for controlling infection. Consult your hospital's infection control officer or epidemiologist. To clean or sterilize mounted instruments or accessory equipment, refer to the specific instructions delivered with those products.

- 1. The mounting assembly may be cleaned with most mild, non-abrasive solutions commonly used in the hospital environment (e.g. diluted bleach, ammonia, or alcohol solutions).
- 2. The surface finish will be permanently damaged by strong chemicals and solvents such as acetone and trichloroethylene.
- 3. Do not use steel wool or other abrasive material to clean the mounting assembly.
- Damage caused by the use of unapproved substances or processes will not be covered by warranty. We
  recommended that you test any cleaning solution on a small area of the mounting assembly that is not visible to verify
  compatibility.
- 5. Never submerge or allow liquids to enter the mounting assembly. Wipe any cleaning agents off of the mounting assembly immediately, using a water-dampened cloth. Dry the arm thoroughly after cleaning.