

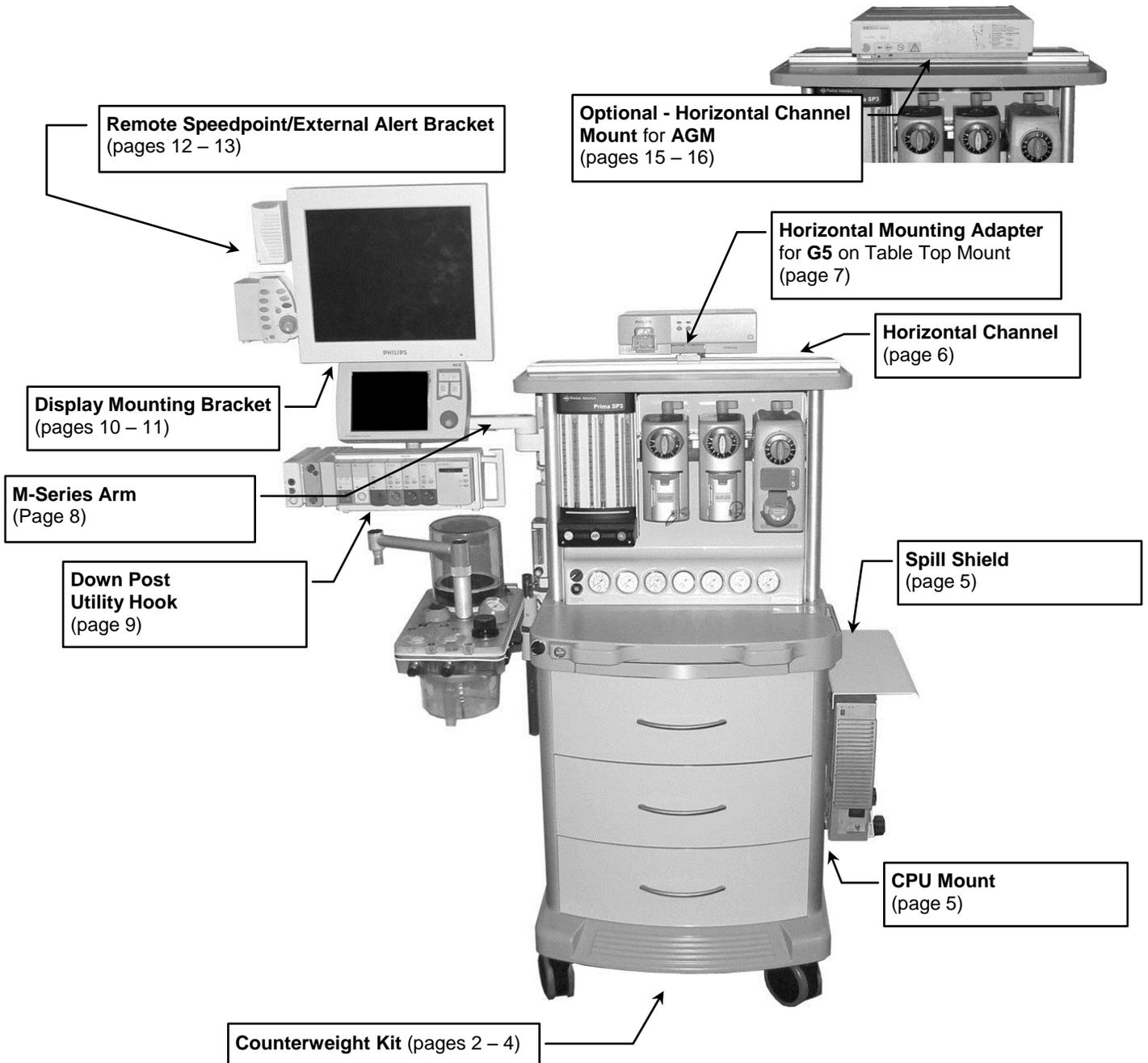
Installation Guide

Philips MP80/90 Installation Kit for Penlon Anesthesia Machine

The purpose of this guide is to describe mounting of MP90 equipment on the anesthesia machine.



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.



Installing the Counterweight on the Bottom of Anesthesia Machine

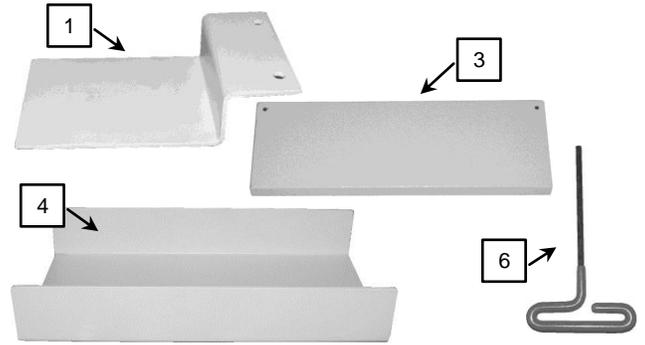


WARNING! The installation of the two (2) 30 lb. [13.6 kg] Weight Bars requires two (2) people. Failure to heed this warning could result in injury to personnel or damage to equipment. Both Weight Bars in this installation kit must be installed to prevent tipping of the anesthesia machine.

Parts Reference

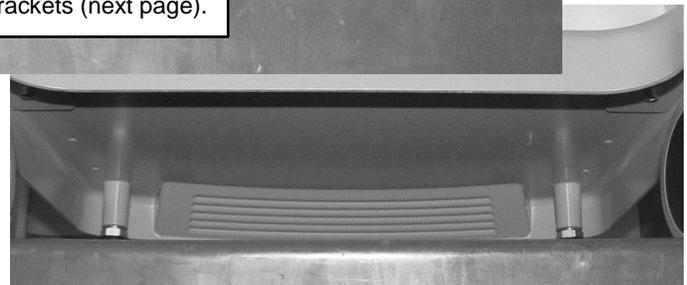
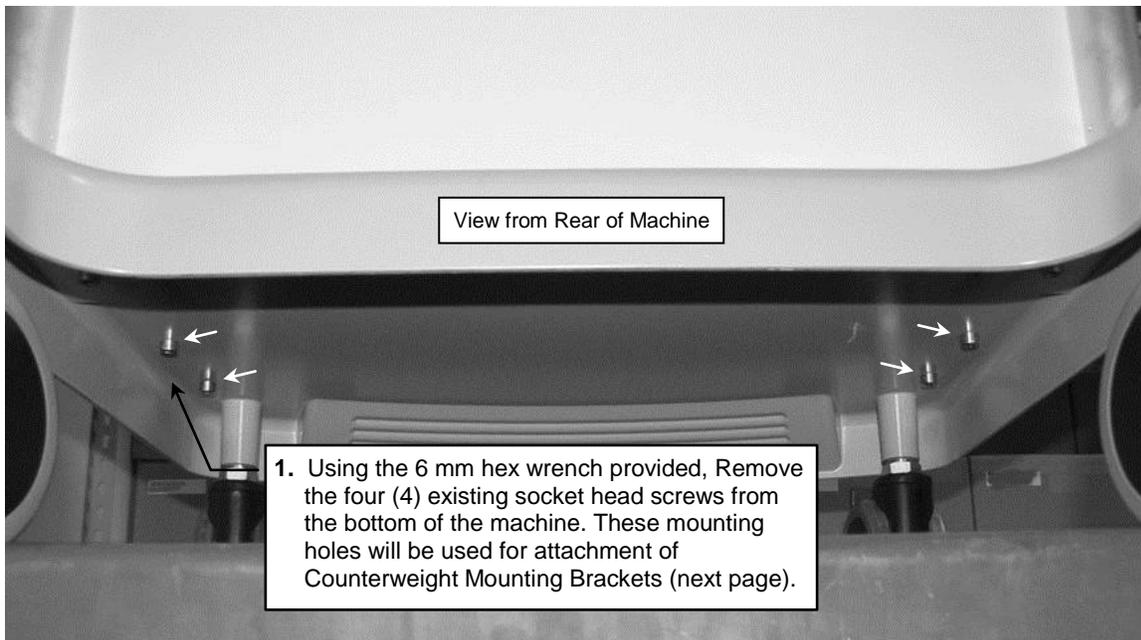
The following parts and hardware will be used in this installation (hardware not shown):

Item #	Description	Qty
1	Mounting Bracket	2
2	M8 x 30 mm Socket Head Cap Screw (SHCS)	4
3	Weight Bar	2
4	Counterweight Cover	1
5	#10-32 Kep Nut	2
6	6 mm Hex Wrench	1

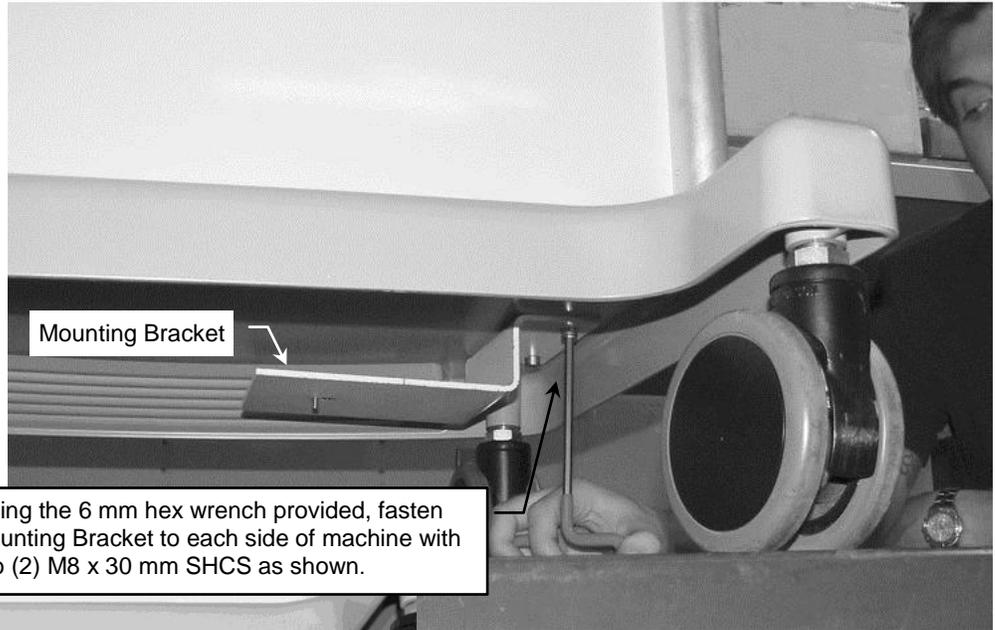


Tools Required: 6 mm Hex Wrench (provided), 3/8" wrench (not provided).

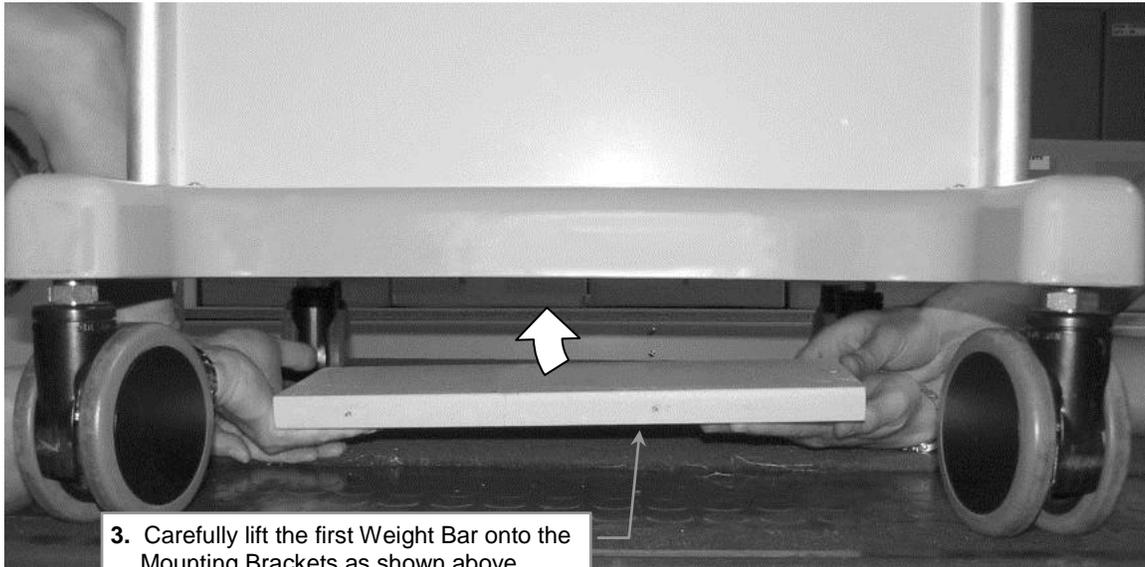
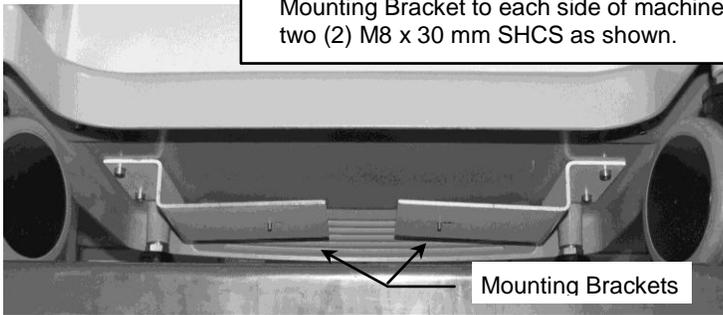
To install the Counterweight, follow instructions in callouts beginning below. Photos are taken from the bottom rear of the machine.



Mounting Bracket (x 2)



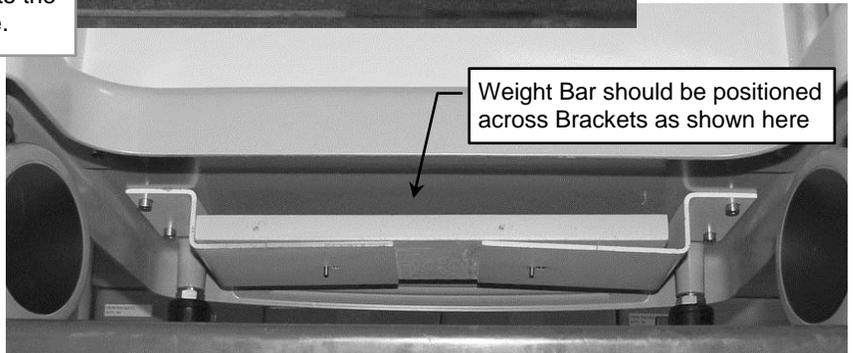
2. Using the 6 mm hex wrench provided, fasten Mounting Bracket to each side of machine with two (2) M8 x 30 mm SHCS as shown.

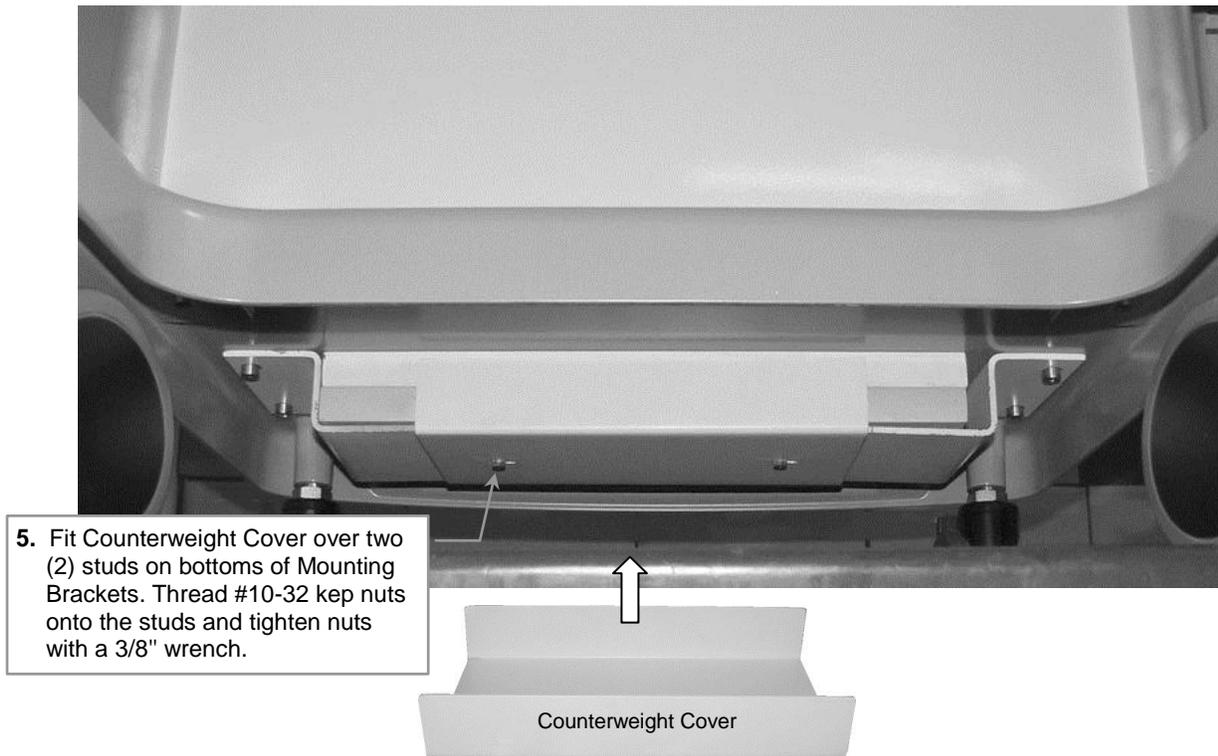
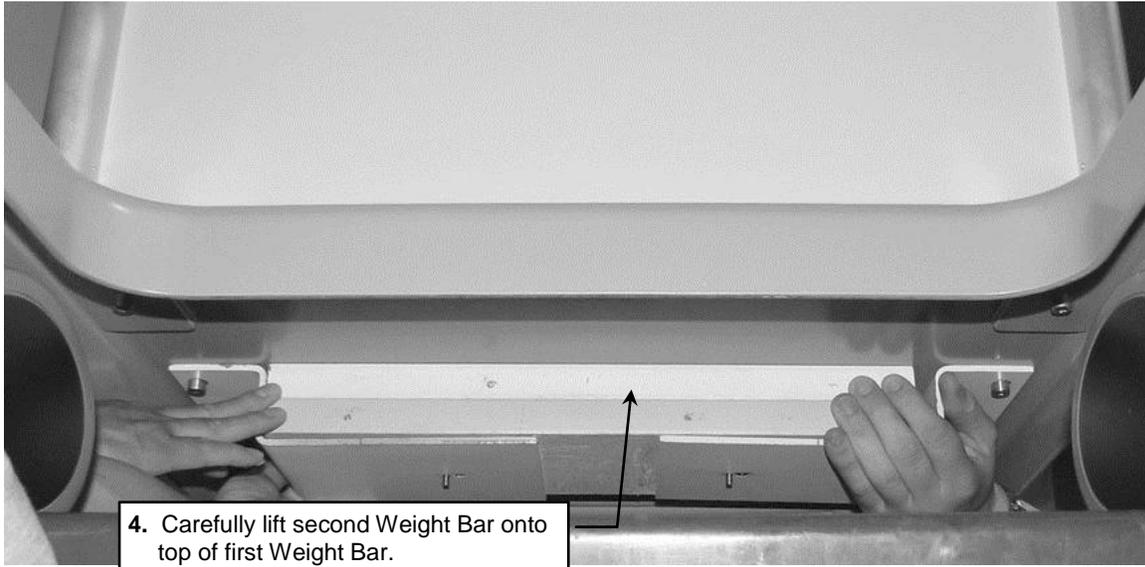


3. Carefully lift the first Weight Bar onto the Mounting Brackets as shown above.



Counterweight Bar





Mounting Spillage Shield and CPU on Right Side of Machine

Spillage Shield Parts Reference

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

Item #	Description	Qty
1	Spillage Shield	1
2	1/8" Hex Wrench	1

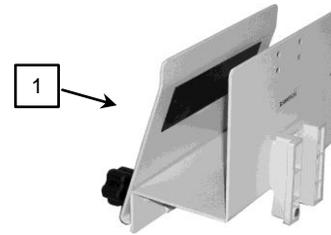


CPU Mount Parts Reference

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

Item #	Description	Qty
1	CPU Mount with Slide	1
2	Adjustable Stop	1
3	1/8" Hex Wrench	1
4	*1/4-20 Socket Head Cap Screw (SHCS)	2
5	*Flat Washer	2
6	*3/16" Hex Wrench	1

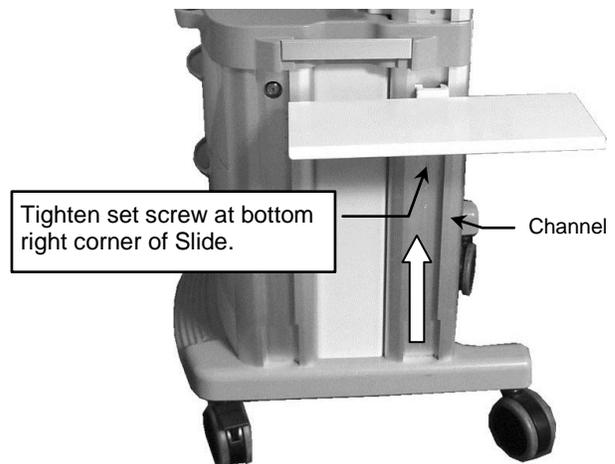
*See separate Installation Guide (DU-CPU-WM) for possible use of these parts



Tools Required: 1/8" hex wrench (provided).

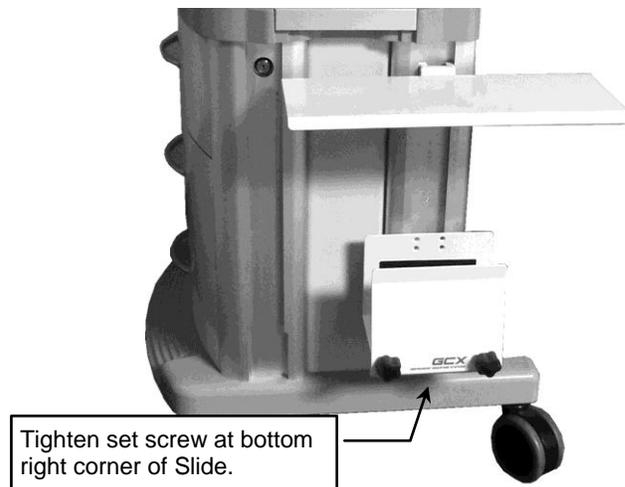
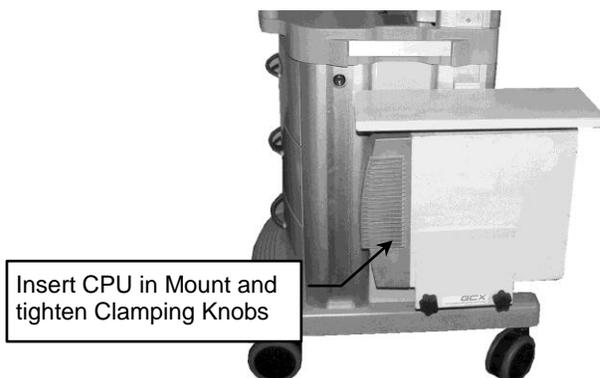
Mounting Spillage Shield in Channel

1. Insert Channel Slide in Channel and guide Shield to desired mounting position. Using the 1/8" hex wrench, tighten set screw at bottom of Slide.



Mounting CPU Mount in Channel

1. Insert Channel Slide in channel and guide CPU Mount to required mounting position. Using the 1/8" hex wrench, tighten set screw at bottom of Slide.



Attaching Horizontal Channel to Top of Machine

Parts Reference

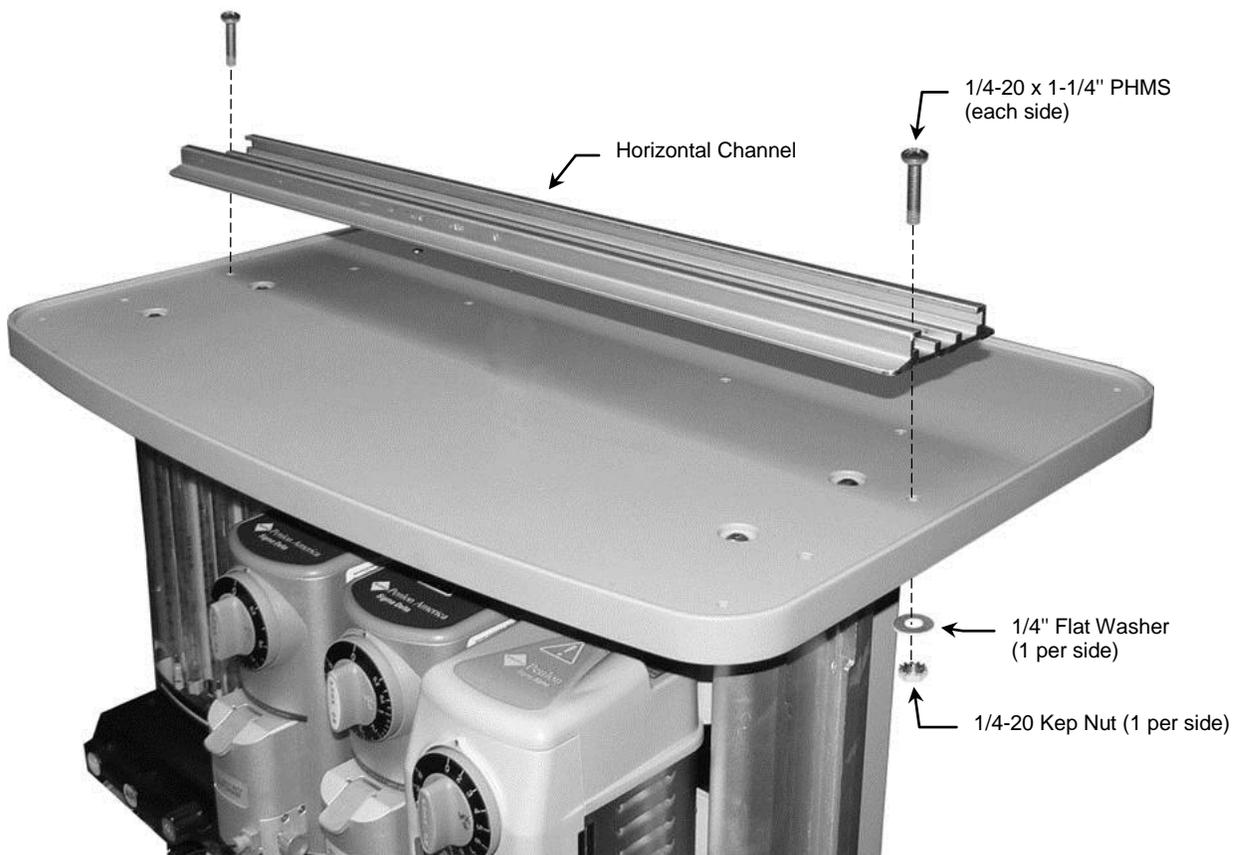
The following parts and hardware are included in this installation kit (parts shown below in Step 1):

Item #	Description	Qty
1	Channel	1
2	1/4-20 x 1-1/4" Pan Head Machine Screw (PHMS)	2
3	1/4-20 Kep Nut	2
4	1/4" Flat Washer	2

Tools Required

Phillips screwdriver (not provided), 7/16" wrench (not provided).

1. Align Channel with mounting holes shown below and fasten Channel to top of machine with hardware called out below.

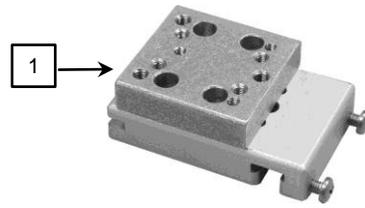


Mounting G5 in Channel

Parts Reference

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

Item #	Description	Qty
1	Horizontal Mount Adapter	1
2	M6 x 10mm Flat Head Machine Screw (FHMS)	3

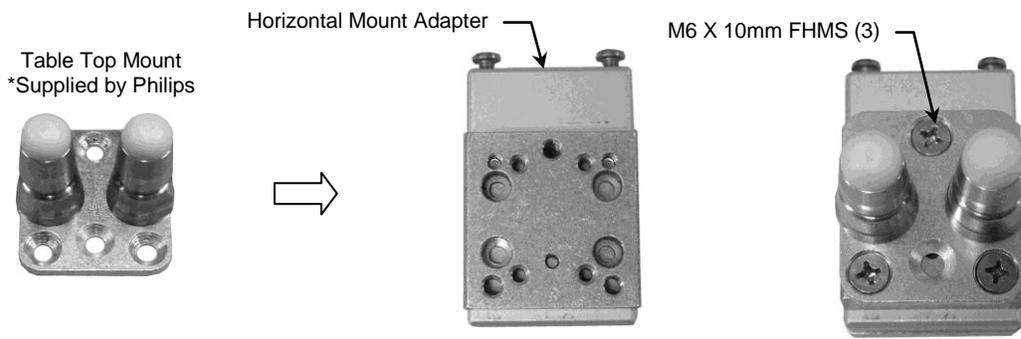


Tools Required

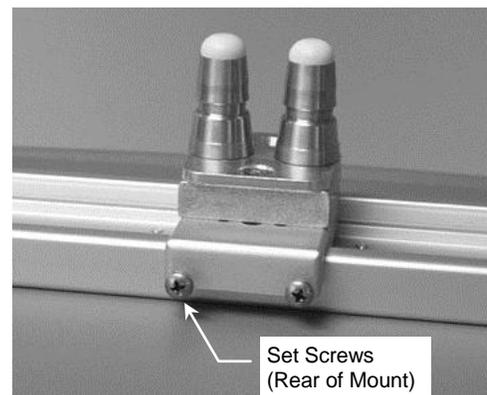
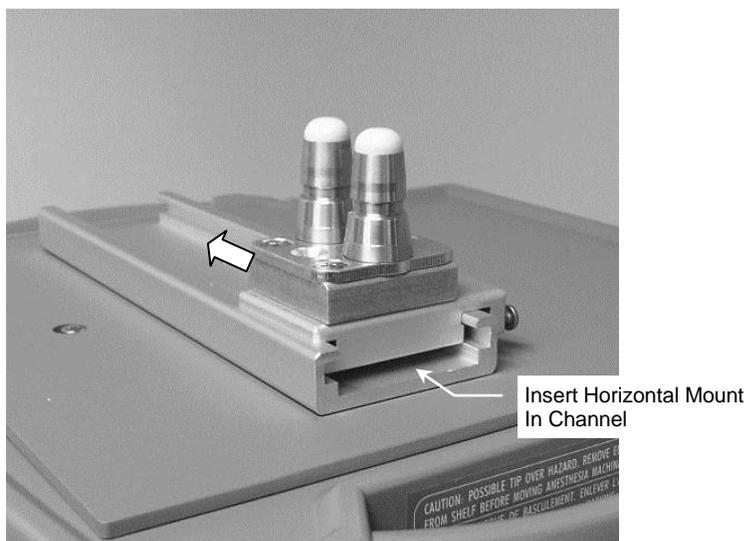
Phillips screwdriver (not provided).

Attaching *Philips Table Top Mount to Horizontal Mount Adapter

1. Fasten the Philips-supplied Table Top Mount to the Mounting Adapter with three (3) M6 x 10mm.



2. With two (2) set screws facing oriented toward the rear of the application, slide Horizontal Mount into Channel and move Mount to desired instrument-mounting position (below left).
3. Tighten two (2) set screws at rear of Horizontal Mount to prevent movement of Mount (below right).



4. Mount G5 in accordance with Philips mounting instructions.

Attaching M-Series Arm, Down Post and Utility Hook

This procedure requires parts from three separate installation kits (M-Series Arm, Utility Hook Kit + Down Post Kit). Use only the 6" Post from the Down Post Kit, and use the #10-32 x 3/4" SHCS (3) to fasten Hook to M-Series Arm.

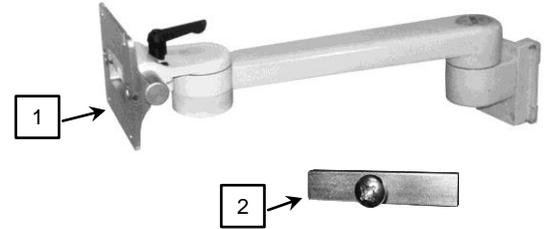
Installing M-Series Arm in left side Channel

Installation Note: Disconnect and remove the Penlon vent display and vent display arm in accordance with the manufacturer's instructions.

Parts Reference

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

Item #	Description	Qty
1	M-Series	1
2	Adjustable Stop	1

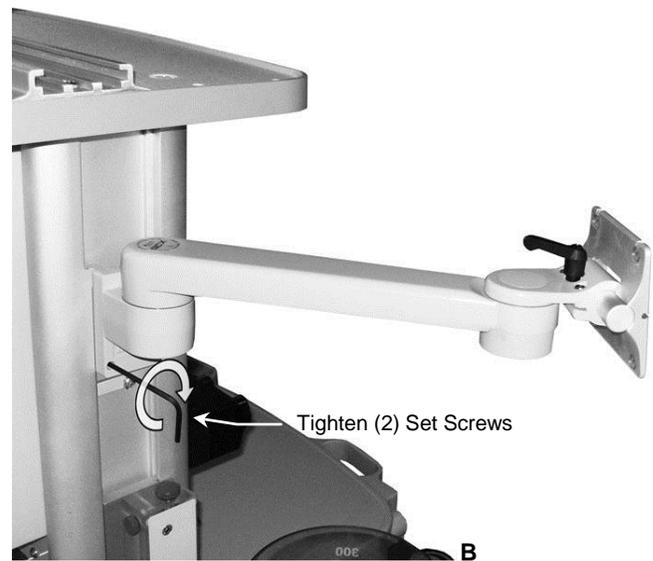
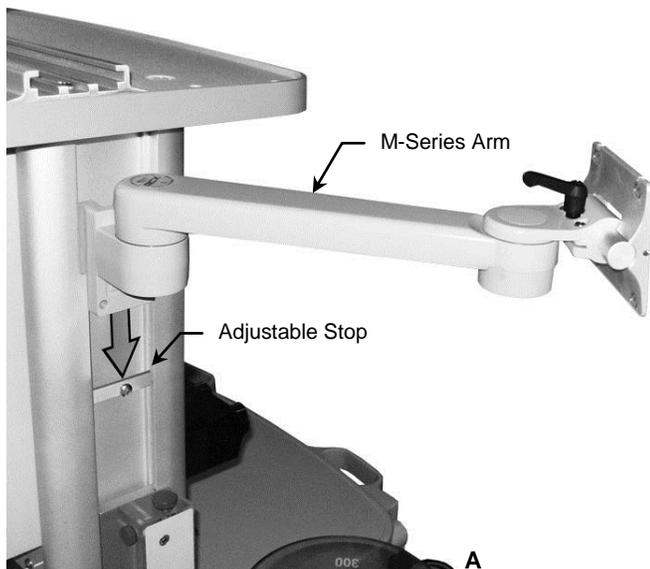


Tools Required:

1/8" hex wrench (provided).

Phillips screwdriver (not provided).

1. Install Adjustable Stop in top of Channel, slide to desired mounting position. Using a Phillips screwdriver, tighten center screw to secure position (A).
2. Guide the Slide (rear of Arm) into the top of the Channel and move down to mounting position (A).
3. Using a 1/8" hex wrench, tighten the (2) Set Screws in the Slide to secure Arm position (B).



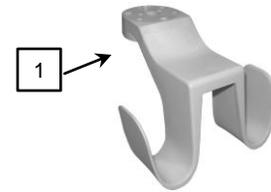
Attaching Down Post and Utility Hook to M-Series Arm

This procedure requires parts from two separate installation kits (Utility Hook Kit + Down Post Kit). Use only the 6" Post from the Down Post Kit, and use the #10-32 x 7/16" SHCS (3) to fasten 6" Post and Utility Hook to M-Series Arm.

Utility Hook Parts Reference

The following parts and hardware are provided for this procedure:

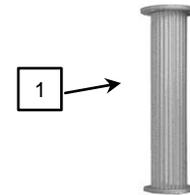
Item #	Description	Qty
1	Utility Hook	1
2	#10-32 x 3/4" SHCS	3
3	5/32" Hex Wrench	1



6" Down Post Parts Reference

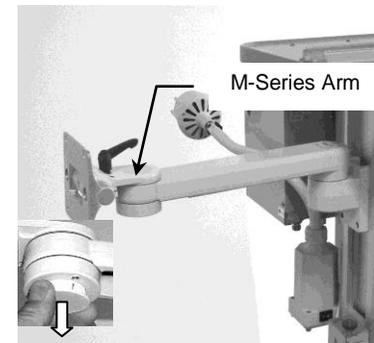
The following parts and hardware are provided for this procedure:

Item #	Description	Qty
1	Down Post, 6"	1
2	#10-32 x 7/16" SHCS	3

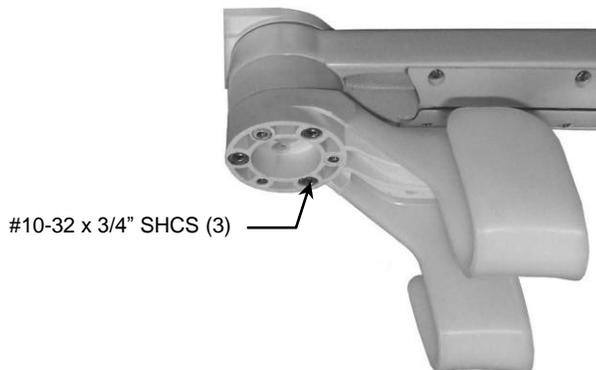


Tools Required: 5/32" hex wrench (provided).

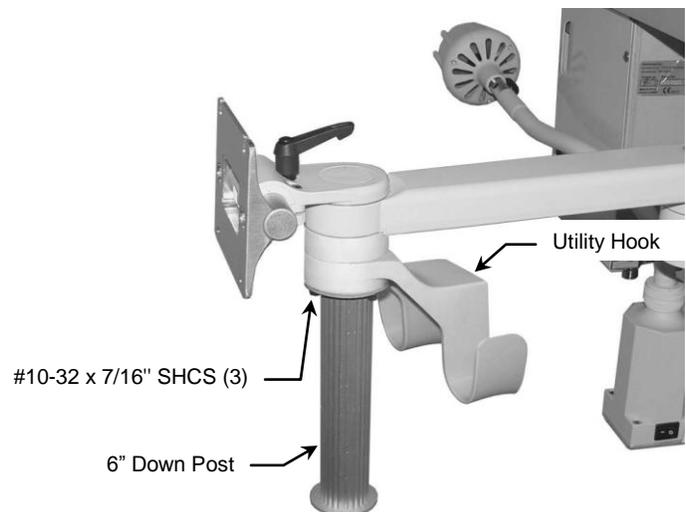
1. Remove plastic bolt cap from Swivel Cup.



2. Using the 5/32" hex wrench provided, fasten Utility Hook to Swivel Cup with three (3) #10-32 x 3/4" SHCS as shown (below left).



3. Attach 6" Down Post to Utility Hook with (3) #10-32 x 7/16" SHCS using the 5/32" hex wrench (below right).

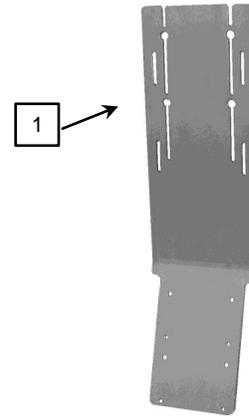


Mounting the Display Mounting Bracket and Ventilator Display

Parts Reference

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

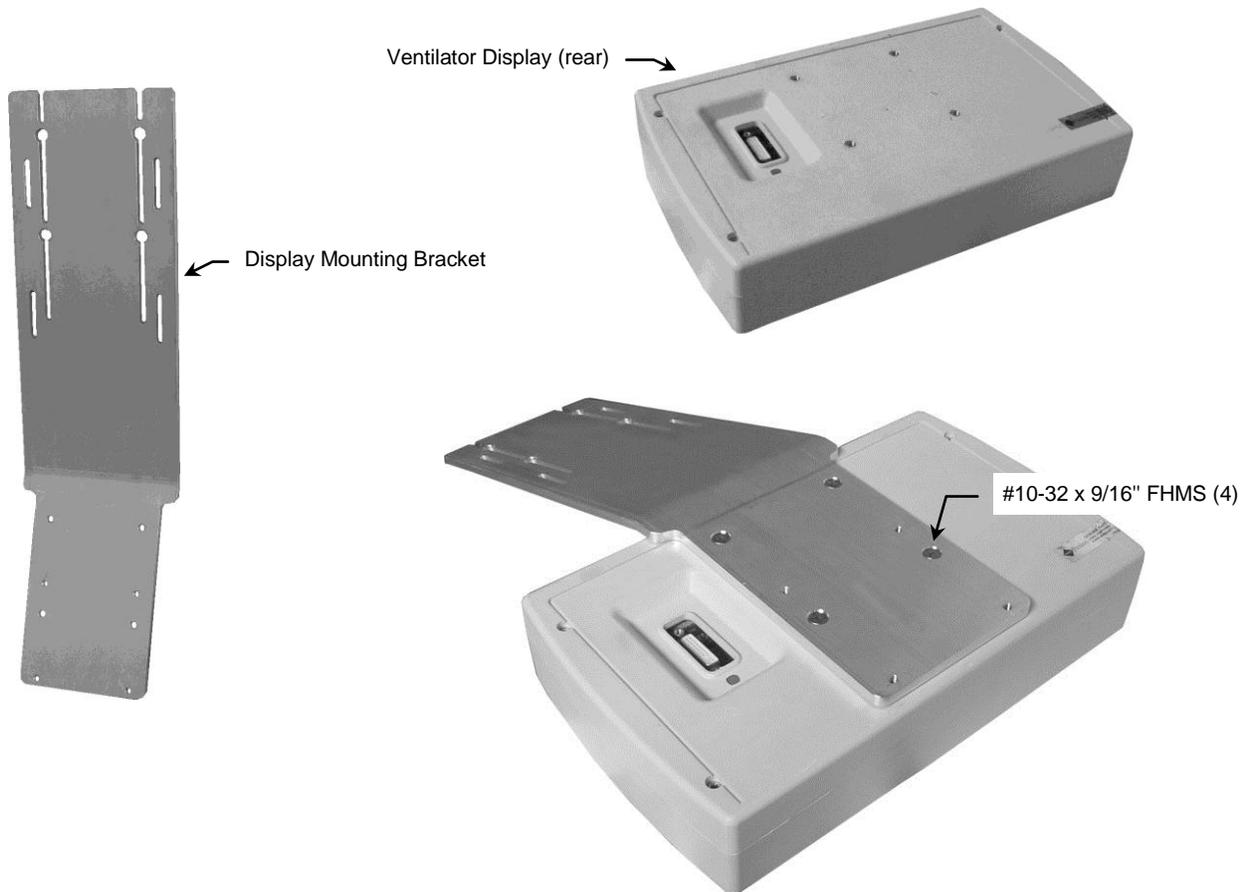
Item #	Description	Qty
1	Display Mounting Bracket	1
2	#10-32 x 9/16" FHMS	4
3	#10-32 x 3/8" PHMS	4



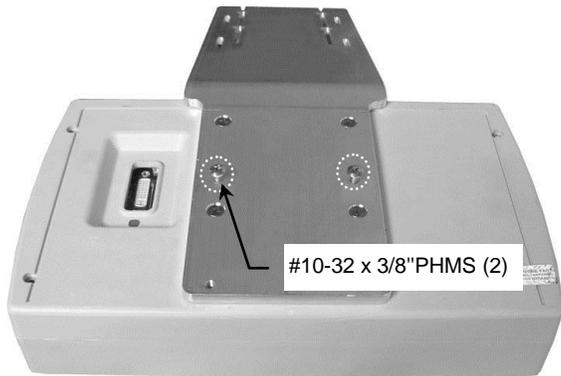
Tools Required

Philips screwdriver (not provided).

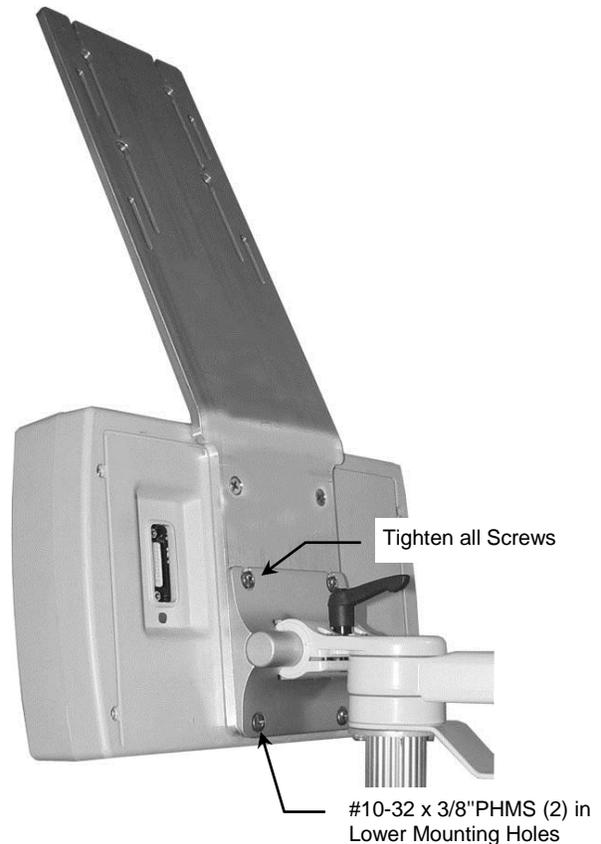
1. Fasten Display Mounting Bracket to rear of ventilator display with four (4) #10-32 x 9/16" flat head machine screws (FHMS) as shown below.



2. Thread two (2) #10-32 x 3/8" PHMS into mounting holes shown below, leaving enough thread exposed to allow screws to fit into slots in top of Mounting Plate at end of M-Series Arm.
3. Hang Display Mounting Bracket in upper slots of Mounting Plate as shown below right but do not tighten mounting screws.



4. Install two (2) #10-32 x 3/8" PHMS into lower mounting holes (shown below) and tighten all four (4) mounting screws.

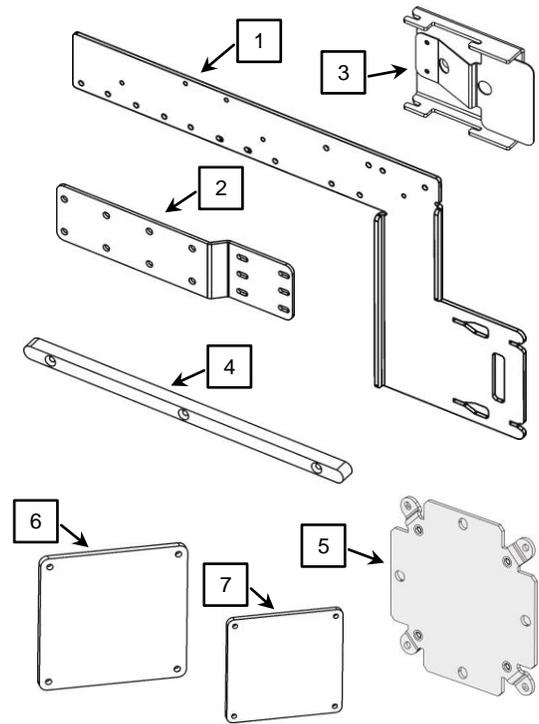


Mounting the Philips Display on the Display Mounting Bracket

Parts Reference

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

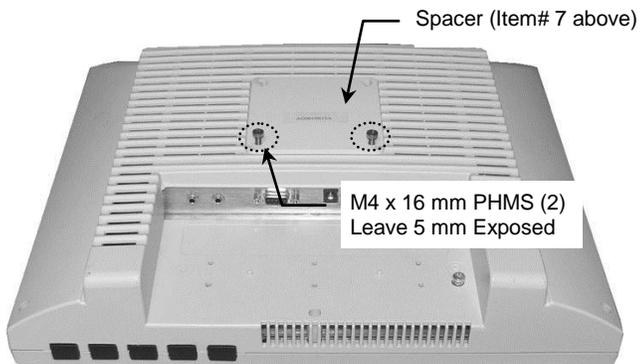
Item #	Description	Qty
1	Remote Bracket	1
2	Alert Bracket	1
3	Remote Speedpoint Adapter	1
4	Reinforcing Bar	1
5	VESA Mounting Adapter, 100mm to 75mm	1
6	Spacer, 17" Display Mounting (P/N AG0019S22A)	1
7	Spacer, 15" Display Mounting (P/N AG0019S15A)	1
8	M4 x 6mm Flat Head Machine Screw (FHMS)	2
9	M4 x 8mm Pan Head Machine Screw (PHMS)	10
10	M4 x 10mm PHMS	2
11	M4 x 12mm PHMS	4
12	M4 x 16mm PHMS	2
13	M4 x 16mm FHMS	3
14	M4 x 20mm FHMS	2
15	M4 x 25mm PHMS	4
16	M4 x 40mm PHMS	2
17	Alert Spacer, 1.25" Aluminum	2
18	Spacer, 1/2" Nylon	2
19	#8 Retention Washer	2



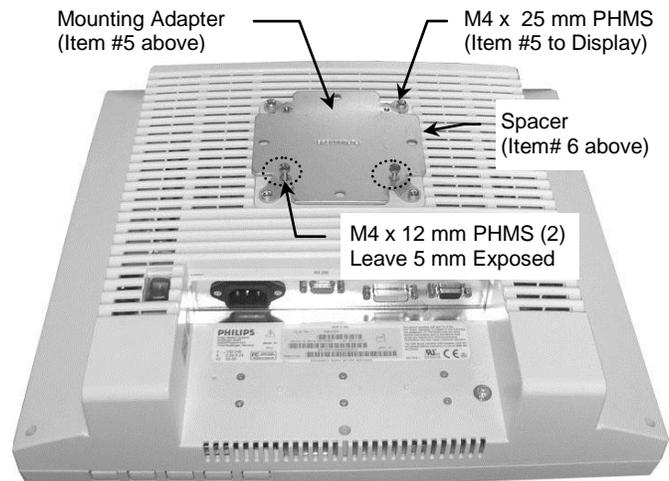
Tools Required: Philips screwdriver not provided).

1. Install parts and hardware as shown in callouts below.

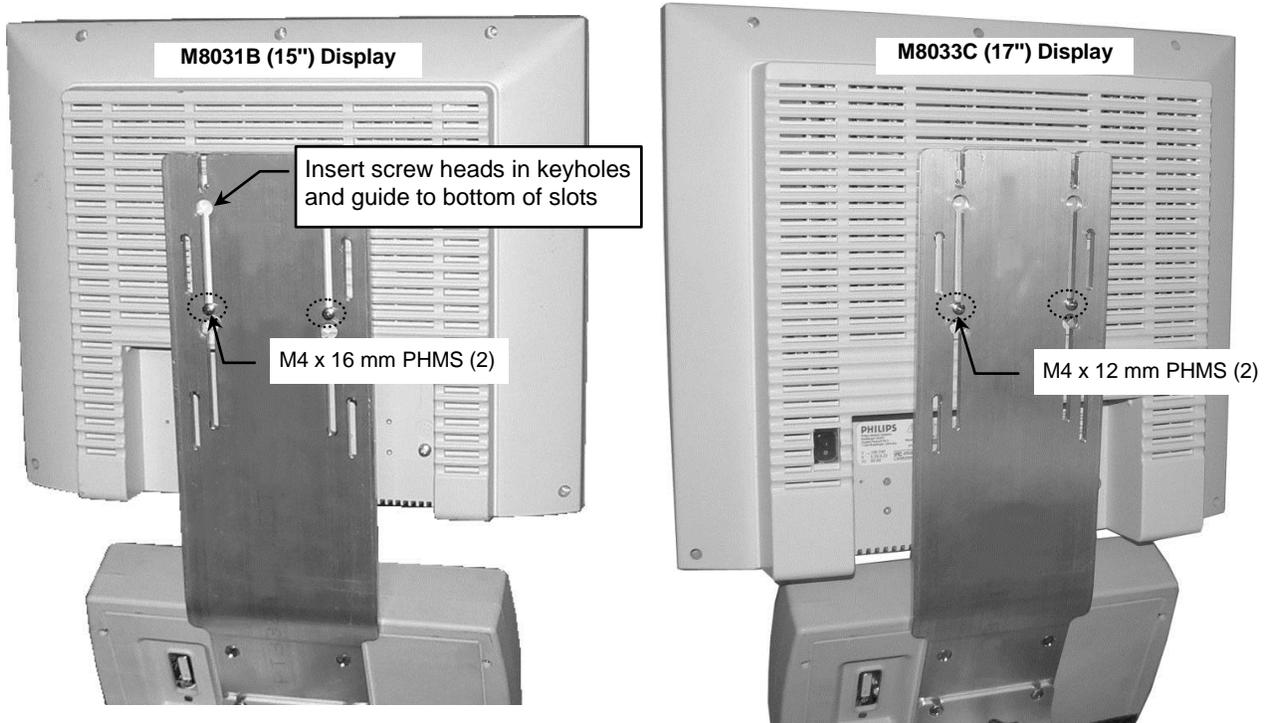
M8031B (15") Display



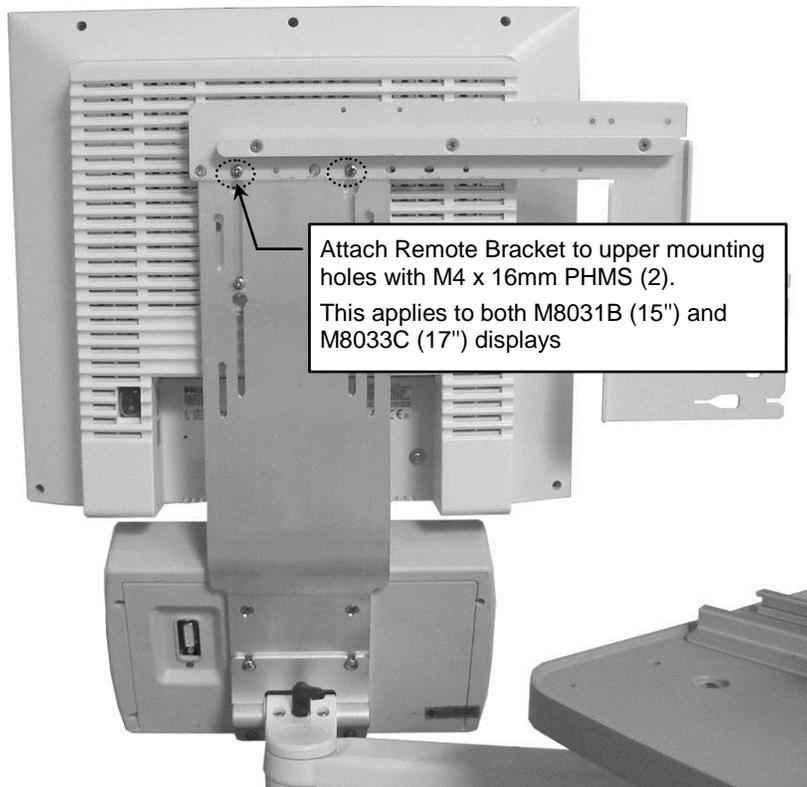
M8033C (17") Display



2. Mount display on Display Mounting Bracket as shown below.

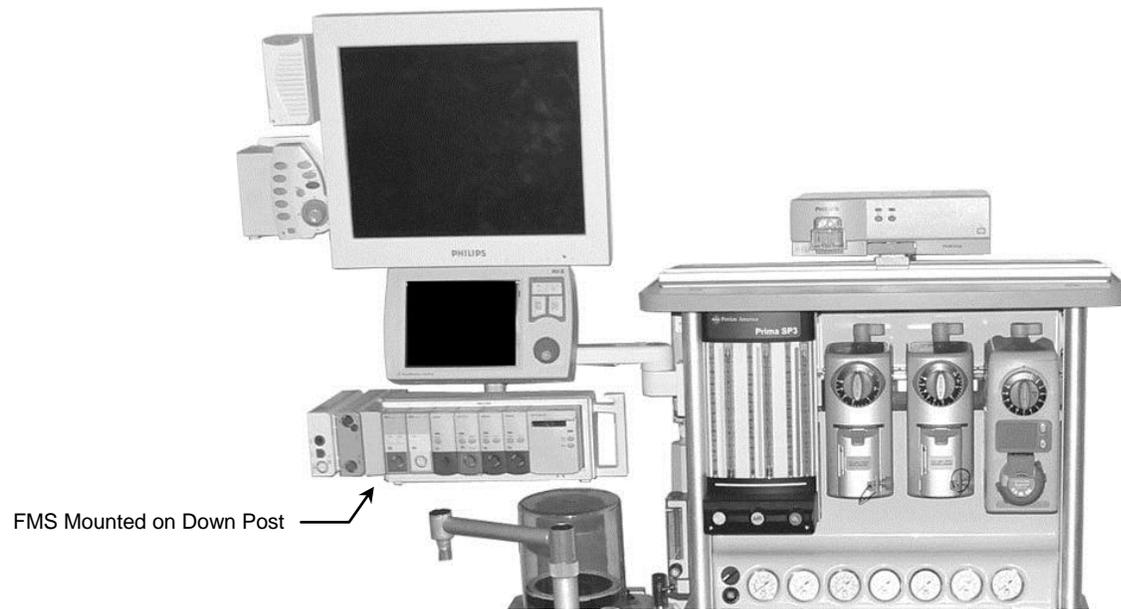


3. Fasten Remote Speedpoint Bracket to upper mounting holes as shown below. To mount the External Alert device and Remote Speedpoint, refer to installation guide (DU-AG-0019-80) included with Philips MP90 Mounting Kit for Flat Panel Displays, Remote Speedpoint and External Alert



Mounting FMS on Down Post

Follow Philips instructions for mounting FMS on Down Post. A Philips-supplied clamp is required for this installation.



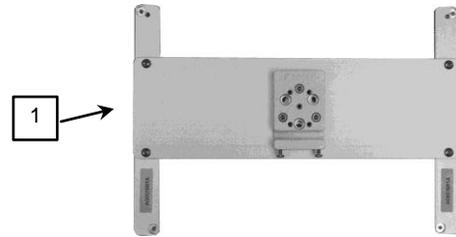
Mounting AGM in Horizontal Channel

Installation Note: This installation kit is provided only when ordered as an option to the MP90 kit.

Parts Reference

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

Item #	Description	Qty
1	Horizontal Channel Mount	1
2	M3 x 10mm Pan Head Machine Screws (PHMS)	4

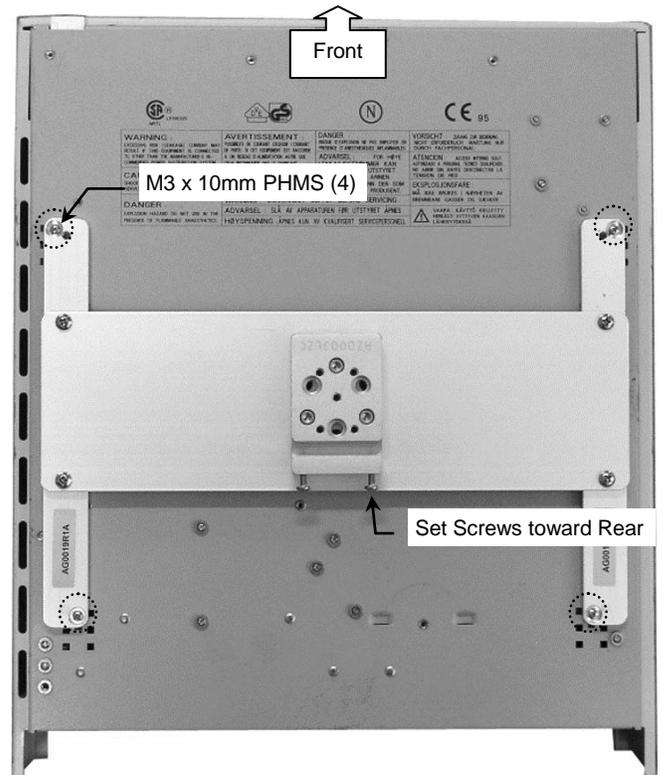
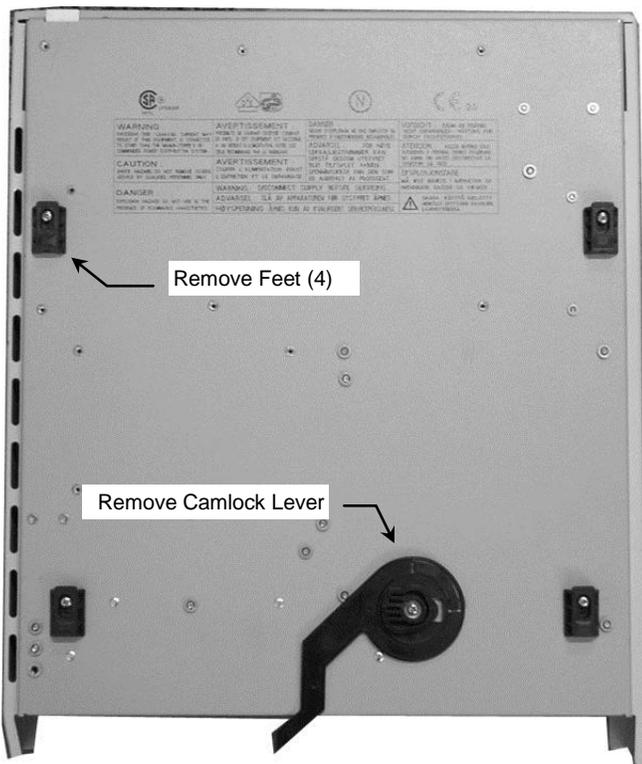


Tools Required: Phillips screwdriver (#1 tip).

Attaching Channel Mount to AGM

1. Unscrew and remove four (4) feet from bottom of monitor (below left). These mounting holes will be used for attachment of Horizontal Channel Mount. Unscrew and remove camlock lever.
2. Align four (4) mounting holes in Mount with mounting holes in bottom of AGM (below right) with two (2) set screws toward rear of Mount. Fasten Mount to AGM with four (4) M3 x 10mm PHMS.

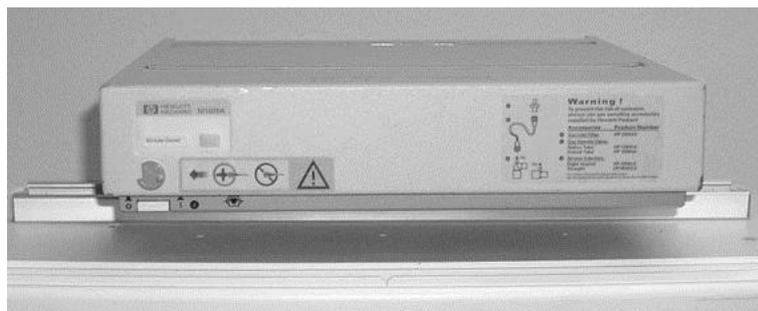
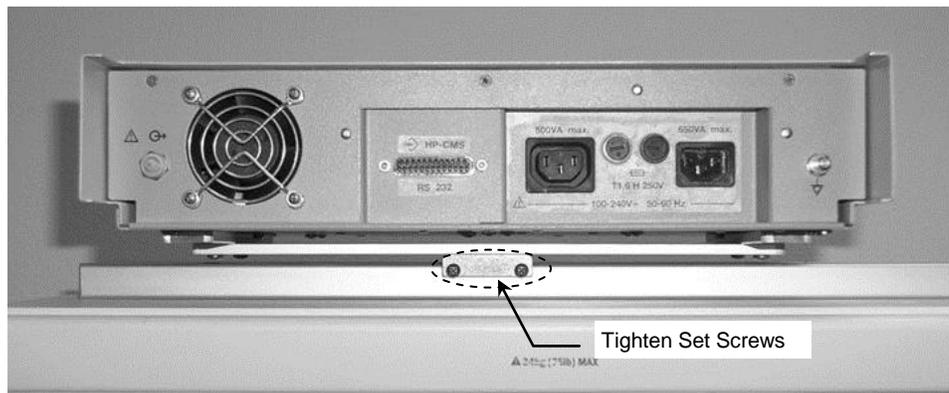
Installation Note: The Horizontal Channel Mount may be repositioned if the AGM extends too far forward from the top of the anesthesia machine. The Crossbar/Slide may also be rotated 180° if the set screws are not accessible from the rear. See page 2 for repositioning procedure.



1. Slide the Mount (bottom of AGM) into the Channel and move to desired mounting position (below left).



2. Tighten two (2) set screws in the Slide to prevent the AGM from moving in the channel (below). If the Crossbar was rotated (page 2), these screws will be accessed from the front of the AGM.



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.
4. Damage caused by the use of unapproved substances or processes will not be covered by warranty. We recommend that you test any cleaning solution on a small area of the arm that is not visible to verify compatibility.
5. Never submerge or allow liquids to enter the mounting assemblies. Wipe any cleaning agents off of the mounting assemblies immediately, using a water-dampened cloth. Dry mounting assemblies thoroughly after cleaning.