



PRACTICAL QUALITY SYSTEMS  
*Fast Custom Manufacturing - Nationwide Installation Services*

## PRODUCT MANUAL FOR *UNDER COUNTER* SERIES ASSEMBLIES

---

*Under Counter Mount w/ 8" arm, and a Screen Pan and Tilt Head* PN 80200

*Under-Counter Mount w/8" arm, and a Universal Printer Mounting Tray* PN 80201

*Under-Counter Mount w/2- 8" arms, a Screen Pan and Tilt Head and a Universal Printer Mounting Tray* PN 80204

TABLE OF FIGURES.....	3
1.1 Identifying, configuring and locating the mount for your application.....	4
1.2 Basic installation steps.....	4
2.1 Installing the <i>Under Counter Mounting Plate</i> .....	4
2.2 Reattaching the arms to the <i>Under Counter Mounting Plate</i> .....	4
3.1 Basic steps for installing a screen with VESA standard mounting holes: .....	4
3.2 Attaching the VESA pan and tilt head to a VESA standard flat panel monitor, touch screen or terminal.....	5
3.4 Basic steps for installing a <i>Universal Printer Mounting Tray</i> : .....	5
4.1 Attaching a pan and tilt head or printer tray to the end of the arm .....	5
4.2 Adjusting the side to side position of a pan and tilt head or <i>UPMT</i> .....	5
4.3 Adjusting the up and down position of the pan and tilt head .....	6
5.1 Locking the pan and tilt head position for the long term .....	6
6.1 Adjusting the side to side position of the arms.....	6
6.2 Locking the arm position for the long term .....	6
7.1 Installing and adjusting the <i>Universal Printer Mounting Tray</i> .....	7
7.2 Printer tray cabling tips.....	7
7.3 Monitor or touch screen cabling tips.....	7

## TABLE OF FIGURES

---

Figure 1 - Under Counter Mount w/ 8" arm, and a Screen Pan and Tilt Head (PN 80200) .....	8
Figure 2 - VESA pan and tilt head on an 8" arm.....	8
Figure 3 - UPMT on an 8" arm.....	9
Figure 4 -Mounting the UC underneath a countertop .....	9
Figure 5 - Under Counter Mount w/ 8" arm, and a Screen Pan and Tilt Head (PN 80200) .....	10

### 1.1 Identifying, configuring and locating the mount for your application.

**PLEASE NOTE:** these instructions are for multiple *Under Counter (UC)* assemblies, refer to the “List of Figures” page to locate an exploded view of the assembly that you are using.

All of these assemblies include the *UC mounting plate* which supports either one or two arms (See Figure 1).

### 1.2 Basic installation steps

1. Preassemble the mount with the pan and tilt head and/or printer tray attached but without the equipment installed (See Figure 1).
2. Hold the assembly with the mounting plate against the mounting surface to determine its best location.
3. Pivot the arm(s) so that they can be rotated through their entire range of motion and do not conflict with the surrounding surfaces. Be sure to take into consideration the additional space that the equipment will need once it is attached to the end of the arm(s).
4. Once the mounting location has been determined, mark the locations for the fasteners through the holes on the mounting plate. Follow the installation instructions that are appropriate for your application.

### 2.1 Installing the *Under Counter Mounting Plate*

1. The *Under Counter (UC) Mounting Plate* features three patterns of ¼”-20 threaded holes for the insertion of the four mounting screws that attach the SB (Stand Off) brackets and arms to the mounting plate (See Figure 5). The mounting screw pattern allows the SB bracket(s) and arm(s) to be removed and remounted to the plate. The SB bracket(s) provide the first pivot point for the arm(s) allowing a full range of side to side motion.
2. Remove the pan and tilt head(s) and/or printer tray from the arm(s).
3. Remove the arm(s) with the SB brackets from the mounting plate.
4. Securely attach the mounting plate to the underside of the mounting surface with several fasteners that are appropriate for the mounting surface material (See Figure 5).

### 2.2 Reattaching the arms to the *Under Counter Mounting Plate*

1. The SB brackets should still be attached to the ends of the arms. Hold the arm so that the five point knob is on top of the SB bracket and align the holes in the SB bracket with one of the patterns of threaded holes on the mounting plate (See Figure 1).
2. Loosely install the four ¼”-20 Philips securing screws through the SB bracket and into the threaded holes in the P3 mounting plate. Do not fully tighten the screws until all of the screws are threaded into the plate.

### 3.1 Basic steps for installing a screen with VESA standard mounting holes:

1. Remove the pan and tilt head from the end of the arm.
2. Remove the arm assembly from the mounting plate.
3. Install the mounting plate and reattach the arm(s).
4. Install the VESA pan and tilt head to the back of the screen.
5. Install the pan and tilt head and the screen together as a unit onto the end of the arm.

### 3.2 Attaching the VESA pan and tilt head to a VESA standard flat panel monitor, touch screen or terminal

1. Place the unit with the screen facing down on a smooth flat surface and remove the VESA mounting screws from the back of the monitor. If the screws are not present, refer to the unit manual or contact the manufacturer to obtain the correct type and length of screws.
2. Lay the VESA pan and tilt head flat on top of the back of the screen and align the four holes in the VESA pan and tilt head with the pattern of four threaded holes on the back of the screen.
3. Loosely install the four screws through the VESA pan and tilt head and into the threaded holes on the back of the screen. Do not fully tighten the screws until all of the screws are threaded into the back of the screen.

### 3.4 Basic steps for installing a *Universal Printer Mounting Tray*:

1. Remove the *Universal Printer Mounting Tray (UPMT)* from the end of the arm.
2. Remove the arm assembly from the *mounting plate*.
3. Install the *mounting plate* and reattach the arm.
4. Install the *UPMT* on the end of the arm (See Figure 3).
5. Install the printer on the printer tray.

### 4.1 Attaching a pan and tilt head or printer tray to the end of the arm

1. Lay the silicone anti-slip washer on the top of the end of the arm (See Figure 5).
2. Check that the bottom of the pan and tilt head is flat and that the four point tilt knobs are tightened enough so that the pan and tilt head cannot move easily.
3. Carefully lift the monitor or *UPMT* and center the bottom hole of the pan and tilt head or tray over the hole in the end of the arm.
4. Gently lower the monitor until the bottom of the pan and tilt head is resting slightly on the end of the arm. Do not release your grip on the monitor or *UPMT*.
5. Hold the five pointed knob so that the threaded shaft is pointing up and it is under the end of the arm. Guide the knob shaft up through the hole in the end of the arm, and through the silicone anti-slip washer until it contacts the center of the threaded hole in the bottom of the pan and tilt head or *UPMT*.
6. Carefully turn the knob to thread it into the bottom of the pan and tilt head or tray until the bottom of it is pulled snugly against the top of the end of the arm.
7. Verify that the end of the threaded shaft of the knob can be seen inside of the nut on the bottom of the pan and tilt head or *UPMT*. Do not release your grip on the monitor until you have verified that the pan and tilt head or *UPMT* is correctly attached to the end of the arm.

### 4.2 Adjusting the side to side position of a pan and tilt head or *UPMT*

1. Carefully and firmly grasp the monitor or printer at the top center of the unit to support its entire weight.
2. Slightly loosen the large five point knob below the end of the arm just enough so that the pan and tilt head or *UPMT* will turn (See Figure 2).
3. While still firmly holding the monitor or printer, slowly rotate it to the desired position and then tighten the locking knob securely.

### 4.3 Adjusting the up and down position of the pan and tilt head

1. Carefully and firmly grasp the monitor at the top center of the screen to support its entire weight.
2. Slightly loosen both of the four point knobs on both sides of the tilt head just enough so that the monitor can be moved up and down slightly (See Figure 2).
3. While still firmly holding the monitor, slowly raise or lower it to the desired position and then tighten both of the locking knobs securely.

### 5.1 Locking the pan and tilt head position for the long term

In most cases, firm tightening of the three locking knobs on the tilt head will sufficiently hold the desired side to side and up and down position of the screen. If your application requires additional security to hold the desired screen position, the pan and tilt head can be more securely locked by slightly tightening the pan and tilt head locking screws.

**PLEASE NOTE:** if the factory setting of the locking screws is changed, they must be reset to return the pan and tilt head to normal function.

#### Follow the steps below to lock the pan and tilt head in place for the long term:

1. Adjust the pan and tilt head as described in the instructions to hold the screen at the desired position.
2. Tighten the three locking knobs as firmly as possible using only your hands (See Figure 2).
3. Using a standard Philips screwdriver, gently tighten the two locking screws on the sides of the pan and tilt head and the single locking screw on the end of the arm under the bottom of the pan and tilt head.

#### To reset the original position of the pan and tilt head locking screws:

1. Support the entire weight of the screen. Doing one at a time, carefully loosen the locking screws until only three threads of the end of the screw shaft can be seen protruding through the metal next to the silicone anti-slip washer (See Figure 2).
2. The correct length of the protruding end of the locking screw is set when there is no weight on the tilt head, and the knob is tightened slightly until there is no space between the metal surfaces and the silicone anti-slip washers. With this knob pretension set, the protruding end of the locking screw should be set just back of where it would contact the opposing metal surface by approximately 1/32.”

### 6.1 Adjusting the side to side position of the arms

1. Slightly loosen the large five point knob on top of the *Support Bracket* enough so that the arm will move freely (See Figure 1).
2. Carefully move the equipment with the arm to the new position and then retighten the five point knob to secure the arm.

### 6.2 Locking the arm position for the long term

In most cases, firm tightening of the locking knob on the *Support Bracket* will sufficiently hold the desired side to side position of the arm. If your application requires additional security to hold the desired arm position, it can be more securely locked by slightly tightening the *Support Bracket* locking screw. If you have removed the *Support Bracket* brackets to install the mounting plate on top of a flat horizontal surface, this locking feature is not available.

**PLEASE NOTE:** if the factory setting of the locking screw is changed, it must be reset to return the arm to normal function.

**Follow the steps below to lock the arm position in place for the long term:**

1. Adjust the arm as described in the instructions to hold the arm at the desired position.
2. Tighten the *Support Bracket* locking knob as firmly as possible using only your hands.
3. Using a standard Philips screwdriver, gently tighten the locking screw on the bottom of the *Support Bracket* (See Figure 1).

**To reset the original position of the *Support Bracket* arm locking screw:**

1. Support the entire weight of the screen and carefully loosen the locking screw until only three threads of the end of the screw shaft can be seen protruding through the metal next to the silicone anti-slip washer.
2. The correct length of the protruding end of the locking screw is set when there is no weight on the pan and tilt head, and the knob is tightened slightly only until there is no space between the metal surfaces and the silicone anti-slip washers. With this knob pretension set, the protruding end of the locking screw should be set just back of where it would contact the opposing metal surface by approximately 1/32.”

### **7.1 Installing and adjusting the *Universal Printer Mounting Tray***

The width of the *Universal Printer Mounting Tray (UPMT)* will expand to support printers from 5” to 9 ½” wide. To extend or retract the sides of the tray, turn one of the small round knobs on either of the sides on the middle of the tray until the desired width is adjusted (See Figure 4).

The tray will tilt from the level position to 30 degrees forward. To adjust the forward tilt, carefully loosen the two three-pointed knobs which are on each side of the front of the tray. Raise or lower the rear of the tray to the desired tilt angle and tighten the knobs to secure the tilt position. Be advised, some types of printers will erroneously indicate that they are low on printing paper when they are tilted too far forward.

### **7.2 Printer tray cabling tips**

Route the data and power cables and connect them loosely to the printer. After testing your printer for correct operation, use small plastic cable ties, or hook and loop ties, to attach the cables to the metal tie loops at the rear of the printer tray, be sure that the cable connectors will not be strained when the printer is repositioned. Then with more ties, form the printer cables into a single bundle to create a cable leash that extends from a point near the mounting plate location to the rear of the printer tray. Be sure to leave enough slack cable so that the printer can be moved through its entire range of motion.

### **7.3 Monitor or touch screen cabling tips**

Route the data, power, and other cables and connect them loosely to the screen. After testing your screen for correct operation, use small plastic cable ties, or hook and loop ties, to attach the cables to the plastic roller behind the middle of the pan and tilt head so that the cable connectors will not be strained when the printer is repositioned. Then with more ties, form the cables into a single bundle to create a cable leash that extends from a point near the mounting plate location to the rear of the pan and tilt head. Be sure to leave enough slack cable so that the equipment can be moved through its entire range of motion.

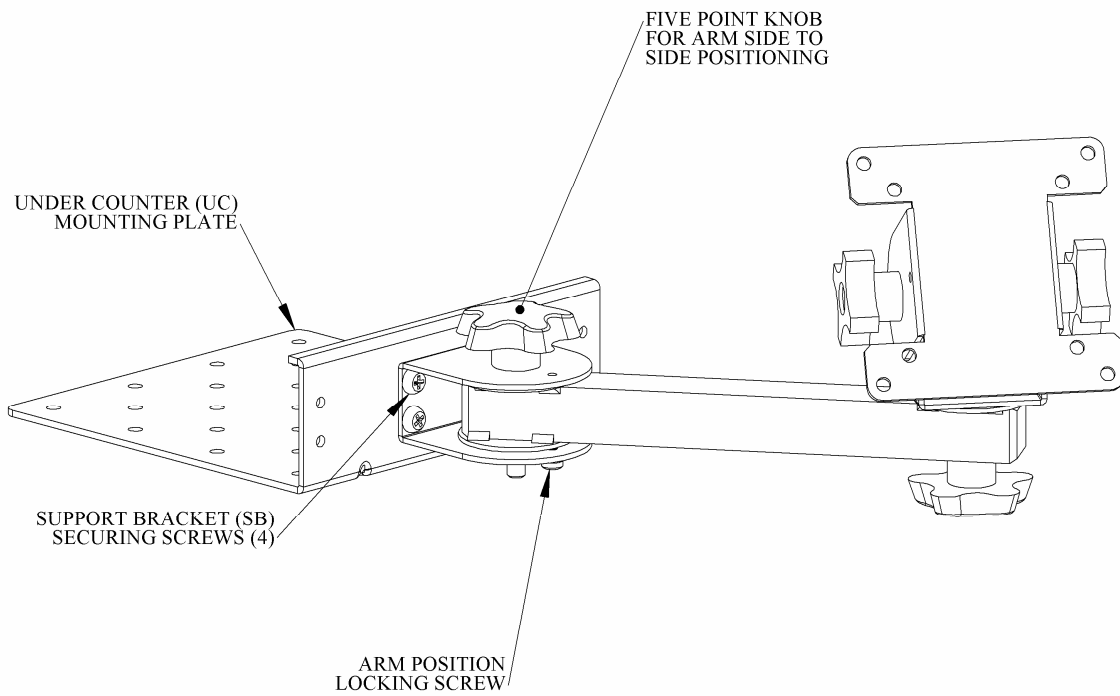


Figure 1 - Under Counter Mount w/ 8" arm, and a Screen Pan and Tilt Head (PN 80200)

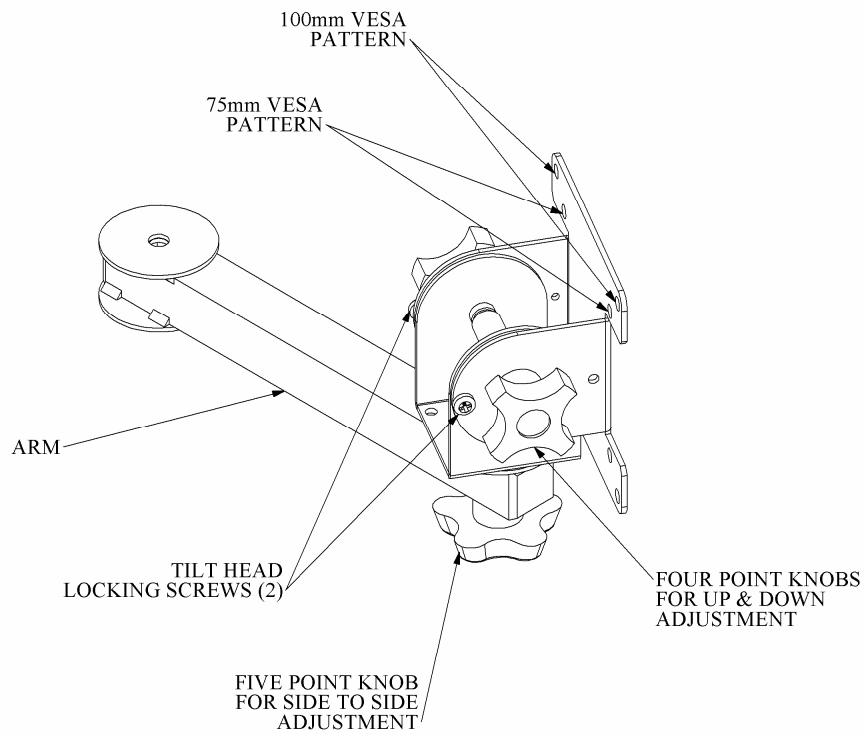


Figure 2 - VESA pan and tilt head on an 8" arm

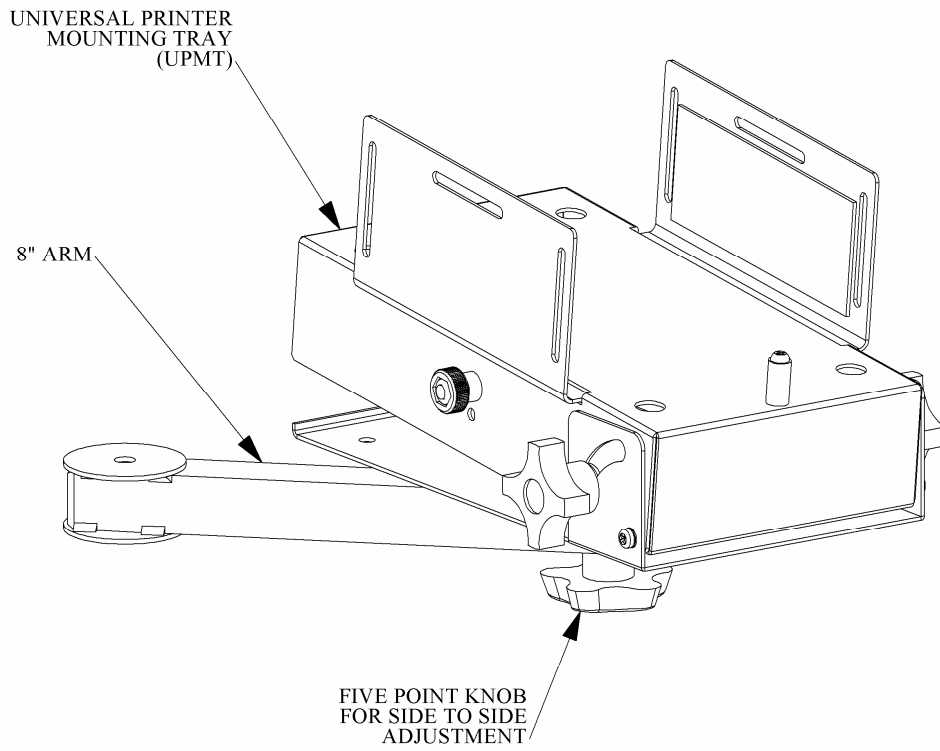


Figure 3 - UPMT on an 8" arm

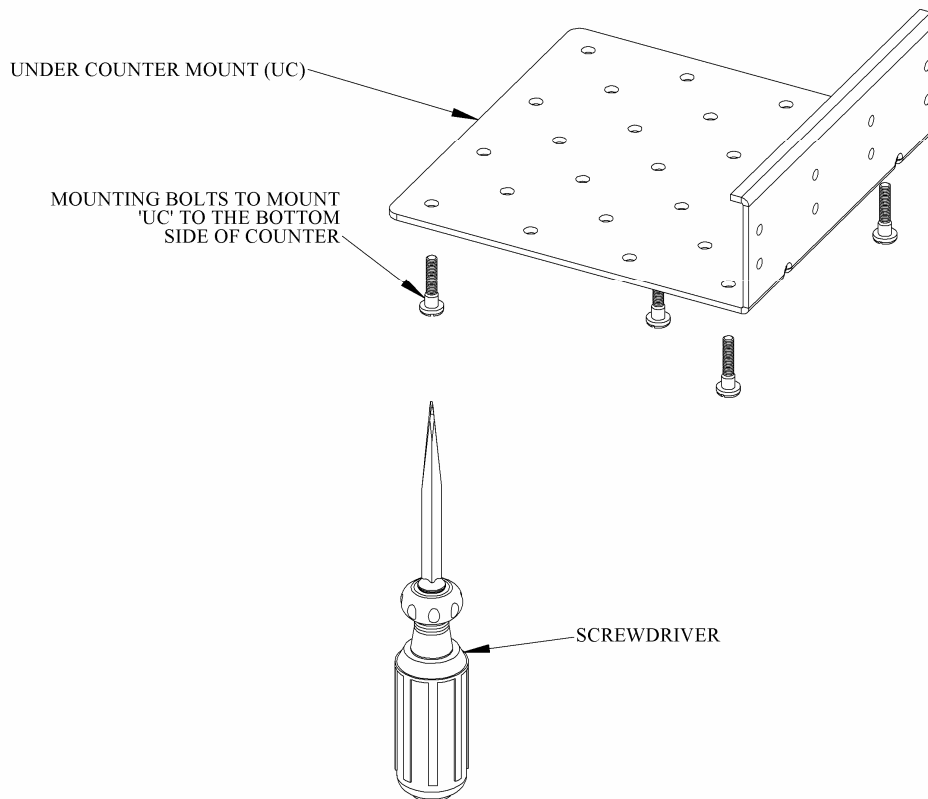


Figure 4 -Mounting the UC underneath a countertop

**UVHM-UC-VESA: PN 80200**

A single position under counter mounting plate with one 8" arm and a VESA tilt head

ITEM#	PART#	DESCRIPTION	QTY.
1	70021	KNOB, 5/16-18 x 2.0" LG, 5 POINT STAR	2
2	50165	3 POSITION SIDE MOUNT PLATE	1
3	50046	UVHM STANDARD STANDOFF BRACKET	1
4	70000	BOLT, PHILLIPS 1/4-20x.50" LG, RND	4
5	70020	SCREW, PHILLIPS Bttn Hd, 10-32x1/4"	3
6	70022	SILICONE WASHER	5
7	70011	END PLUG	2
8	50048	UVHM - 8" ARM	1
9	70035	SLEEVE, 1/2" OD x 5/16" ID x 1-1/2" L	1
10	50030	VESA TILT HEAD	1
11	70023	4 POINT KNOB, 5/16-18 x 1.75" L	2
12	50028	TILT HEAD BASE	1

For other UVHM-UC assemblies please refer to the UVHM-UC product manual cover page.

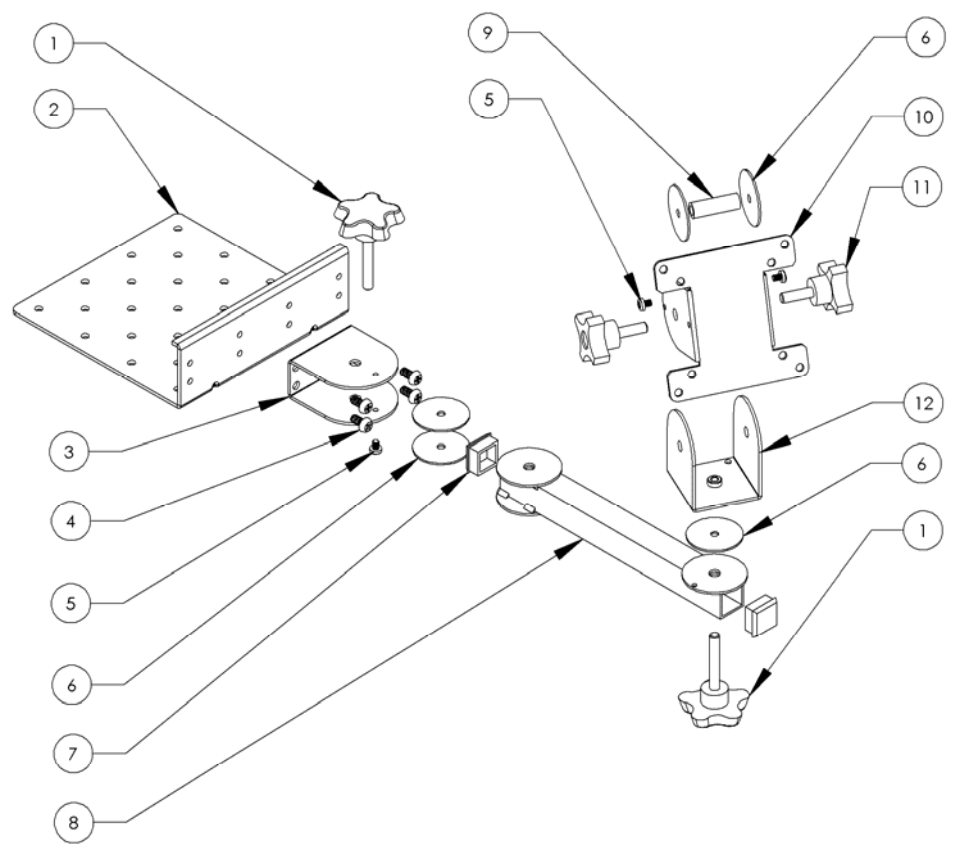


Figure 5 - Under Counter Mount w/ 8" arm, and a Screen Pan and Tilt Head (PN 80200)