

Down and Out Manual Mount Installation Directions

Mounting the Down and Out Manual Mount correctly takes a lot of thought and a lot of planning. Please read the directions thoroughly and plan out how the mount would be installed best for your use. Each Setup will be different and these directions cannot account for every situation. Failure to do so may result in Damage, Injury, or Death. Dynamic Mounting is not responsible for any damage, injury, or death resulting from improper mounting or use of the Down and Out Manual Mount.

These instructions are only a guide and the consumer is responsible for correct and secure mounting. The person installing the mount should be a competent person with experience mounting load bearing assemblies. For any questions or concerns, please contact Dynamic Mounting at Info@DynamicMounting.com.



CAUTION: This wall mount is intended for use only with the maximum weight of 125 lbs. Use with heavier than the maximum weights indicated may result in instability causing possible injury.

ATTENTION: Ce support mural est destiné à être utilisé uniquement avec le poids maximum de 56.7 kgs. Utiliser avec plus lourds que les poids maximaux indiqués peut entraîner une instabilité et provoquer des blessures.



Note: These instructions are for the non-swivel and swivel version of the Down and Out Manual Mount.

Specifications

- Fits most Flat and Curved Televisions 40 inches and larger to 125 lbs with Frame, 70 lbs as Single Stud (No Frame). Check television weight and mounting hole pattern for compatibility with your television.
- **Note for smaller televisions;** the mount may be wider or taller than the television. If this is the case then the mount may be visible in the top position. See Figure 1
- Handles televisions 20 to 125 lbs with Frame, 20 to 70 lbs as Single Stud (No Frame)
- Allowable television mounting pattern: 6.7in (170mm) to 27.1in (688mm) wide, up to 22.8in (579mm) high. Works with all VESA patterns in that range, See Figure 1 with Frame, Figure 3 without Frame.
- Product Dimensions: 29.0 x 23.6 x 3.6 to 4.6 inches. See Figure 1 with Frame, Figure 3 without Frame.
- Frame Weight: 5 lbs, Down and Out Fixed Weight: 26 lbs, Down and Out Swivel Weight; 28 lbs
- Tilts 7 degrees to Vertical in top position.
- Tilt can be fine-tuned Vertical +/-1 degree in out through bottom position.
- Swivel Version can be swiveled +/-30 degrees (Center Swivel), 60 degrees total, or 70 degrees one direction (Left/Right Swivel).

FAQ

- **Where do I mount over a shelf?** See the Above Shelf Mounting section on page 11.
- **Mount is really hard to move/actuate.** See the Adjusting the Counterbalance section on page 12.
- **The TV tilts down in the top position.** See the Setting the Tilt section on page 13.
- **The TV isn't level in the out and bottom positions.** The TV's Center of Gravity needs to be centered on the mount, if the stud spacing isn't allowing this to happen the [Ultra Wall Support](#) (sold separately) extends the mounts reach and would probably help.

CAUTION: These wall mounting instructions and hardware are for mounting to wood studs only. It is up to you to verify that the material supplied will work for your setup; other materials may need to be purchased by you. For concrete, brick or other mounting materials consult an expert.

Consult your TV's owner manual before mounting your television, it contains relevant information.

Tools Needed

- 7/16" open ended wrench
- 1/2" box or ratchet wrench
- 9/16" box or ratchet wrench
- 1/4" Drill Bit
- Drill
- Tape Measure
- Stud Finder
- Level
- Phillips Screwdrivers
- A friend or 2, depending on how heavy your television is



Various Items (All in One Bag)

- 4 3/8" by 3" long lag screw with washer
- 4 Lag Screw Cover
- 4 Washer for Lag Screw Cover
- 4 Zip Ties
- 1 #12 x 3" long Wood Screw
- 2 Sticky T-grips for covers
- 1 1/4" x 8" Bolt with Nut

Fasteners for Mounting the Television to the TV Hangers (All in One Bag)

- 4 M6 x 20 mm (.78") long Phillips head machine screw
- 4 M6 x 35 mm (1.38") long Phillips head machine screw
- 4 M8 x 20 mm (.78") long Phillips head machine screw
- 4 M8 x 35 mm (1.38") long Phillips head machine screw
- 4 1/4" tall plastic spacers
- 8 .1" tall plastic spacers
- 4 Steel M6 washers

Parts Included

- 1 Down and Out Fixed or Swivel Mount
- 1 Wall Frame (Excluded from Single Stud)
- 1 Swiveling Hook Plate (Swivel Version Only)
- 2 TV Hangers with #10 Washer and Screw
- 2 Paintable Plastic Covers (Excluded from Single Stud)

Fasteners for Attaching Swiveling Hook Plate (Swivel Version Only) (Assembled on the Left or Right Swivel Setting, remove if different setting needed)

- 1 5/16" diameter x 7" Hex Head Machine Screw (Swivel Pivot Bolt)
- 1 5/16" Nylock Nut (Swivel Pivot Nut)
- 2 5/16" Washers

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These Directions are for the Down and Out Fixed and Swivel Mount, on the Frame or Single Stud (No Frame) Version.

- Figure 1 is the overview with the Frame
- Figure 3 is the overview of the Single Stud
- Page 5 and 6 are for the Swivel Mount only
- Page 8 shows how to mount the Frame to the wall
- Page 9 shows how to mount the Single Stud, without Frame, to the wall.

Mount Overview Drawings

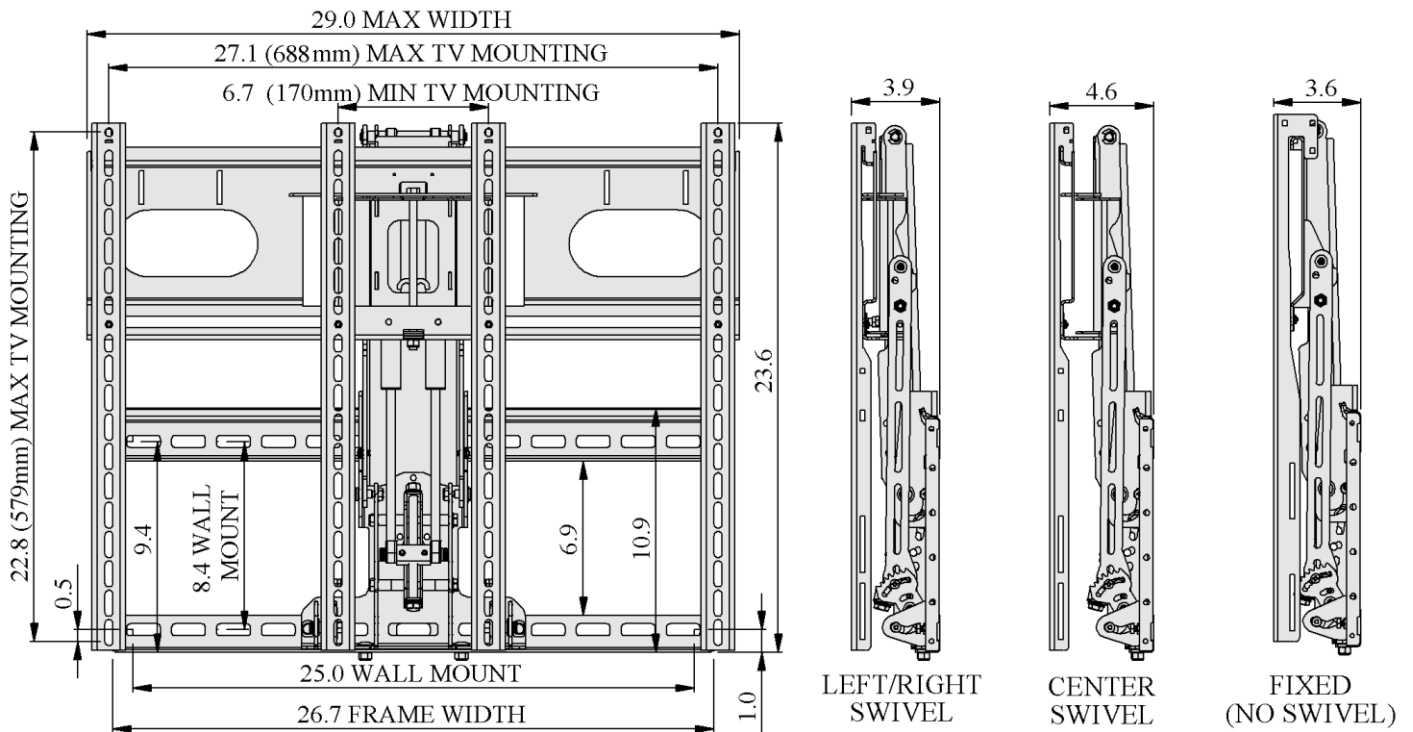


Figure 1, Mount Overall Size With Frame, Television Mounting Hole Pattern Range, Wall Mounting Hole Pattern Range
Note: Mount Only Comes with 2 television Mounting Arms, Not the 4 Shown

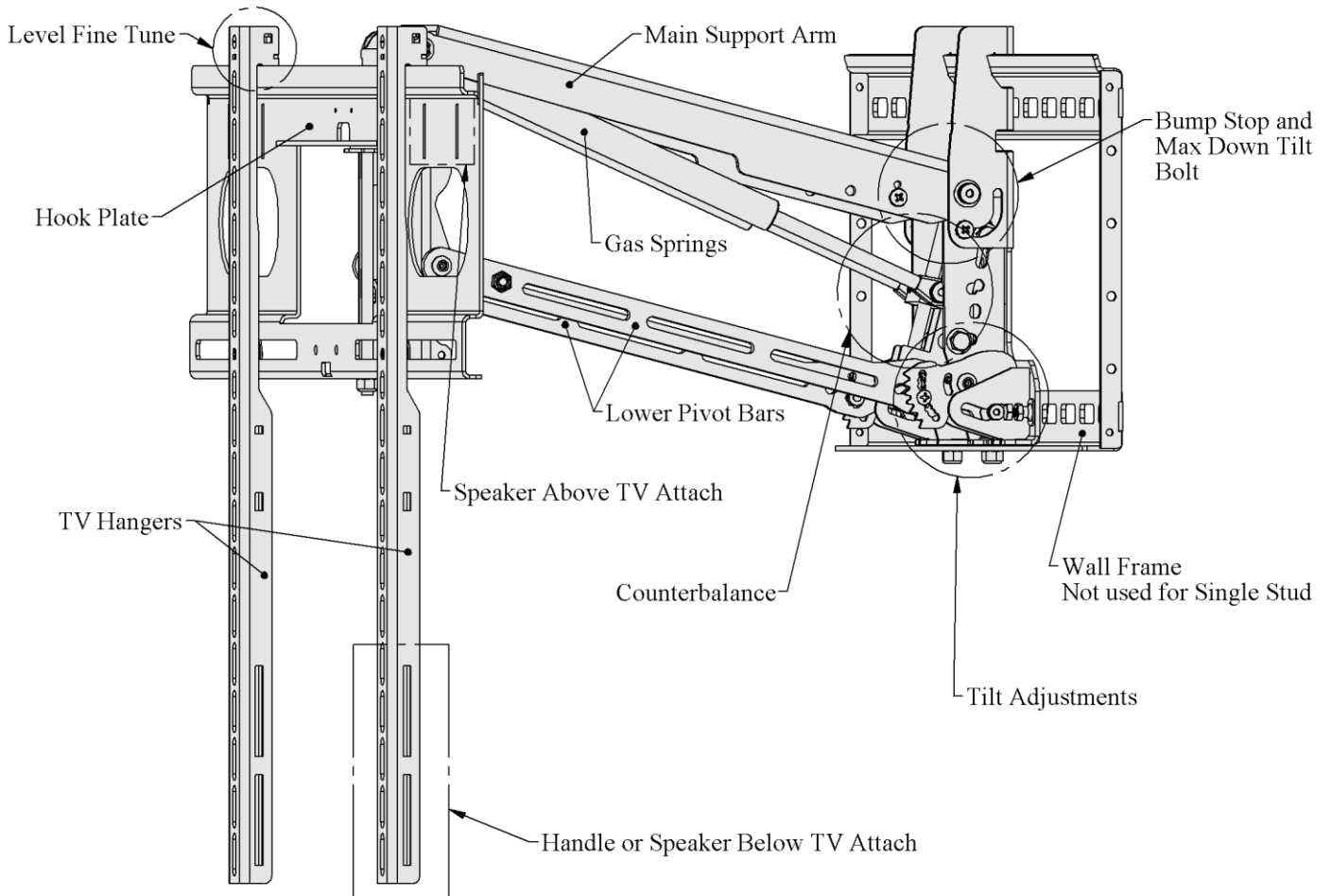


Figure 2, Overview of Mount Parts

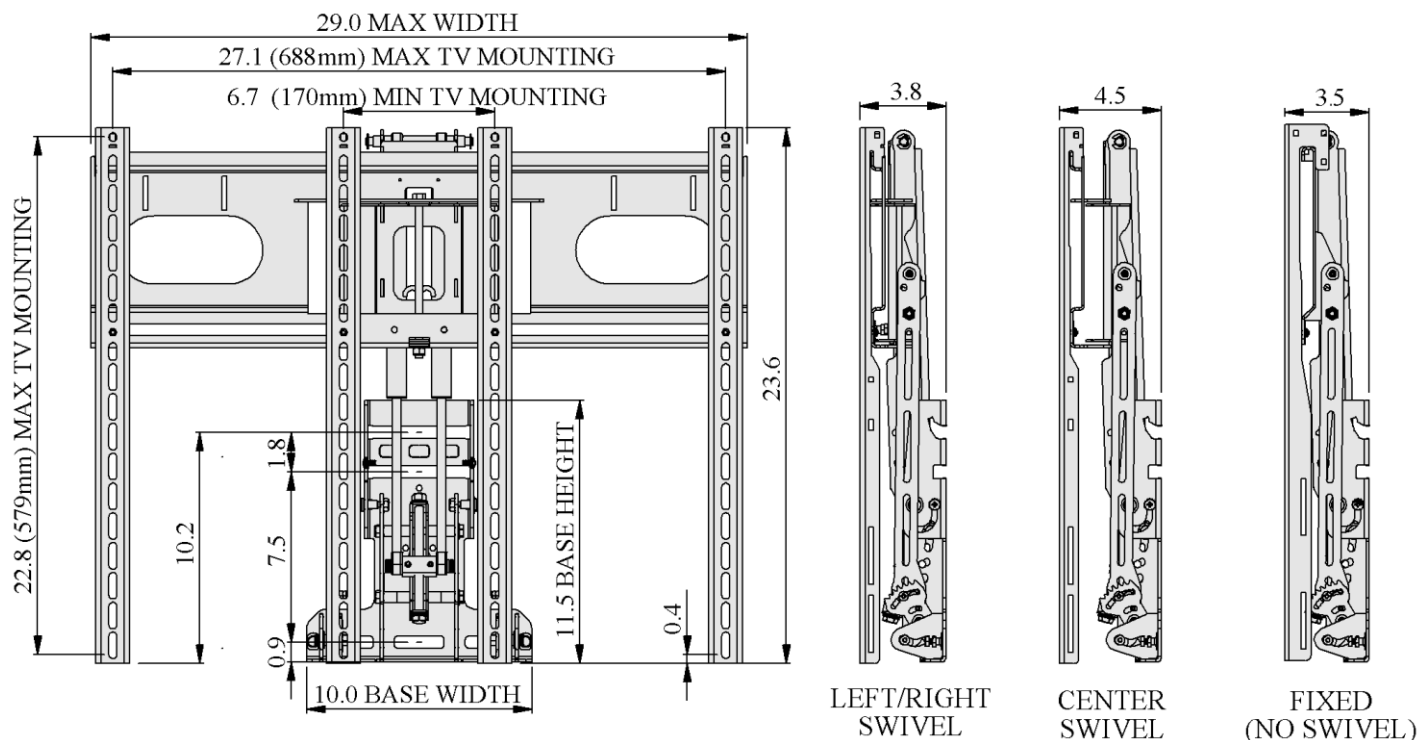


Figure 3, Mount Overall Size without Frame, Television Mounting Hole Pattern Range, Wall Mounting Hole Pattern Range
Note: Mount Only Comes with 2 television Mounting Arms, Not the 4 Shown

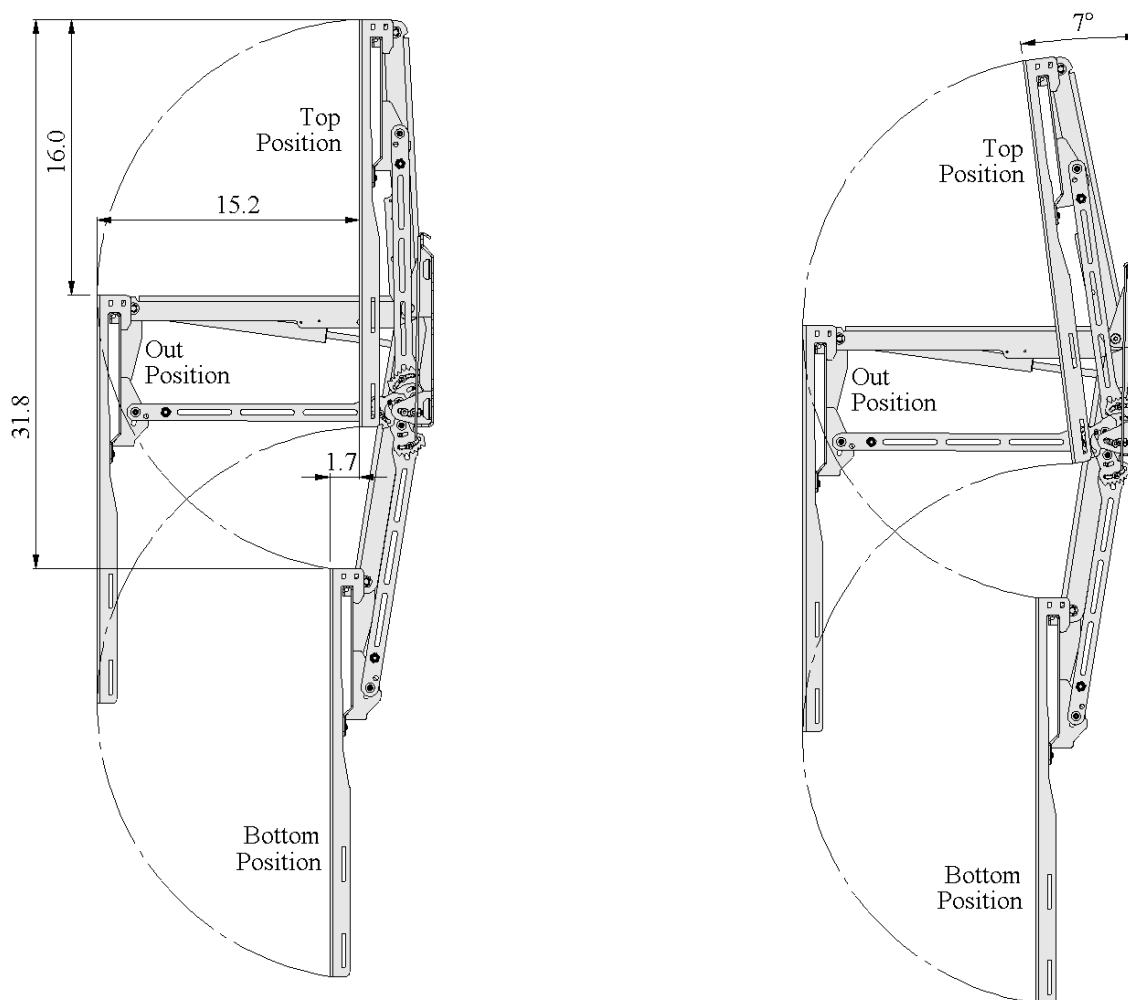


Figure 4, Vertical in Top Position

Vertical tolerance in Out and Bottom Positions is +/-1 degree.

Install Video at www.DynamicMounting.com/Install

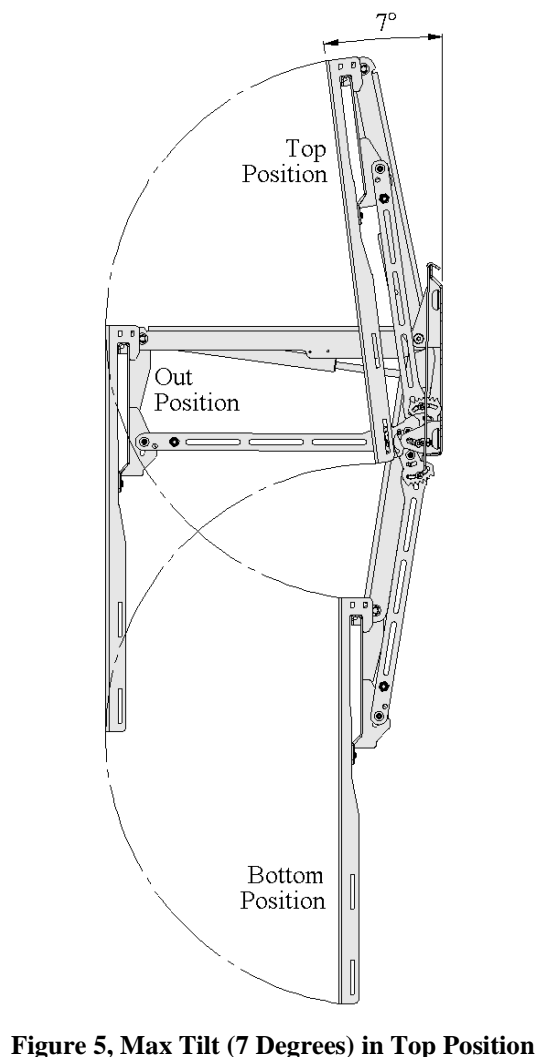


Figure 5, Max Tilt (7 Degrees) in Top Position

Deciding the Swivel Setting (Swivel Version Only)

Before attaching the Swiveling Hook Plate you need to decide which swivel setting is best for you. There are 3 different swivel settings which are shown in Figure 5, Max Tilt (7 Degrees) in Top Position. Each setting has its own advantages. The Center Swivel gives you a lot of travel in each direction but has the thickest profile (See Figure 1 for Profile Thicknesses). The Left and Right Swivels are the lowest profile and can swing the farthest either to the right or the left, but not both.

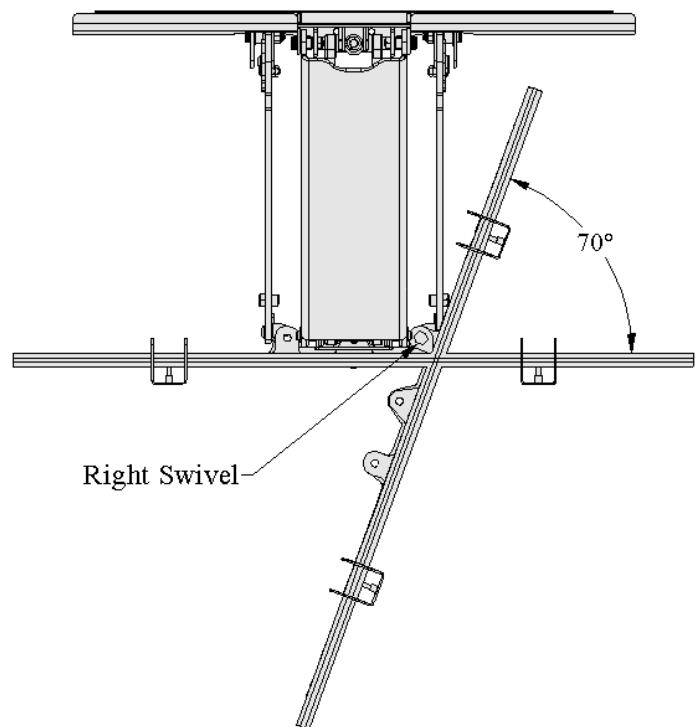
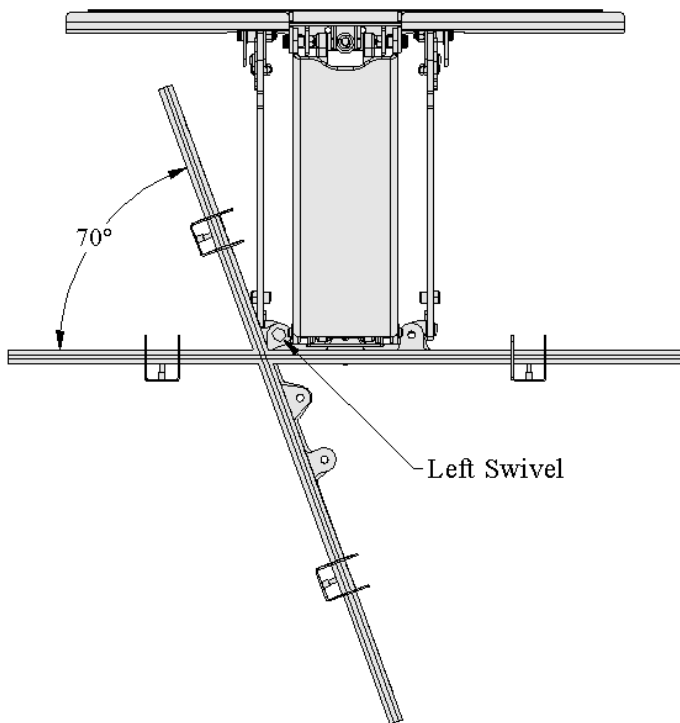
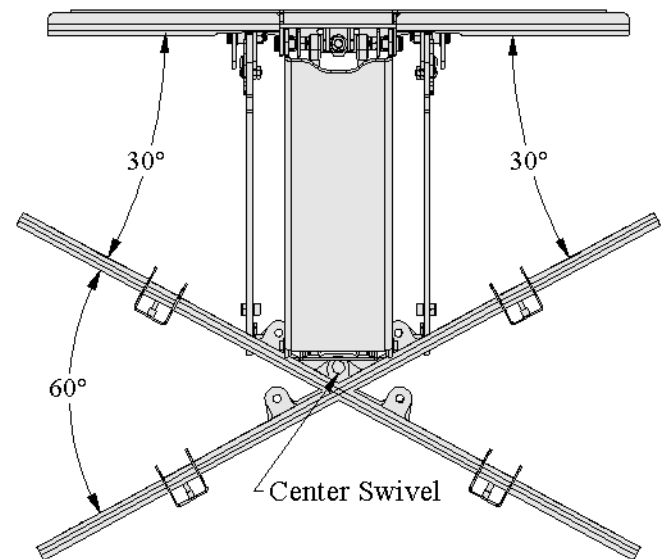


Figure 3, Maximum Travel of the 3 different Swivel Settings

Attaching Swiveling Hook Plate to Mount (Swivel Version Only)

1. The Swiveling Hook Plate needs to be attached to the Mount before anything else can be done. Once you have decided which swivel setting would be the best for you, find the corresponding Swivel Holes as shown in Figure 6.
2. The Fasteners for Attaching the Swiveling Hook Plate come assembled on the Right or Left Pivot, if a different swivel setting is needed, simply remove the bolt.
3. Once you know the holes that you will use, slide the Swivel Pivot Bolt through the holes and washers from the top as shown in Figure 7
 - o Do it from the top so that even if the nut comes off, the Bolt cannot slide out because of gravity.
 - o Some holes may be tight, if so gently hammer the bolt through.
4. Tighten the Swivel Pivot Nut down with a 1/2" wrench on the top and bottom until all the parts are compressed together and the Swivel Hook Plate takes a little effort to turn, you can adjust this effort after the TV is mounted on the wall.

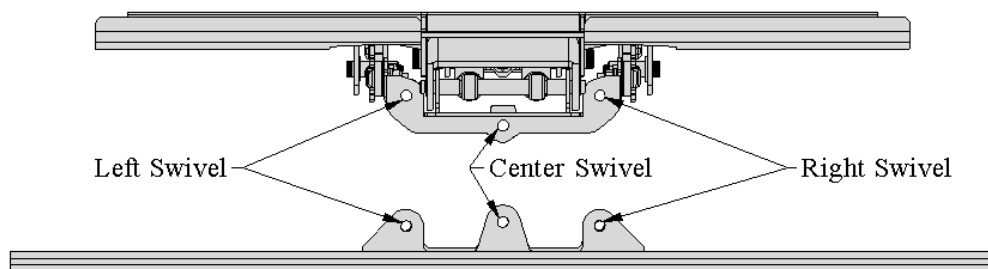


Figure 6 Swivel Holes (Top View of Mount)

Adjusting the Swivel Tension (Swivel Version Only)

After everything is mounted to the wall; the TV is hung on the mount; and the counterbalance and tilt are set, the amount of effort it takes to swivel the TV may need to be adjusted. You do this by tightening or loosening the Swivel Pivot Nut on the Swivel Pivot Bolt. Access is easiest when the mount is in an out position. Do NOT over-tighten; if it takes a lot of force to turn the nut then the pivot is as tight as it can be, if you tighten more you will start to bend the mount. For all swivel settings, if the TV doesn't stay in the wanted swivel position, even after the pivot is tightened, the mount may be tilted too much, adjust tilt nearer to vertical.

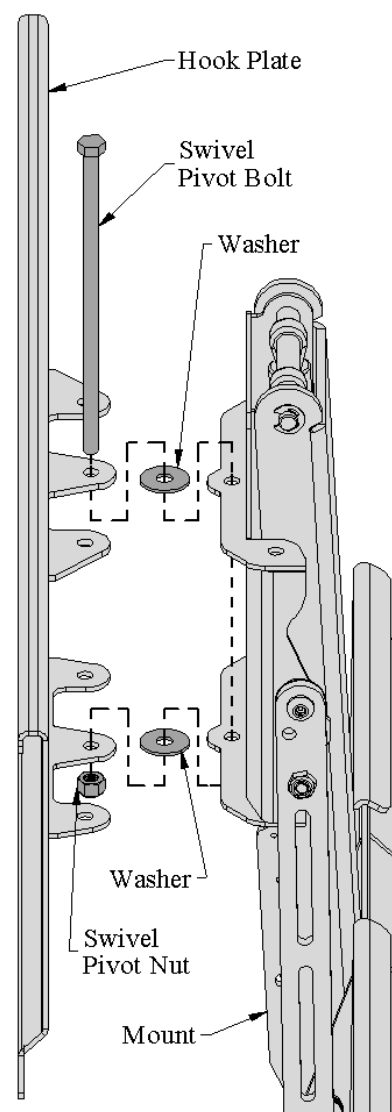


Figure 7, Swivel Bolt (Side View of Mount)

Determining Where to Put Mount

1. Extra thought and planning is needed when mounting over a shelf; see the Above Shelf Mounting section on page 11 for more details and relevant dimensions. Find the needed distances [H] and [C] for your shelf depth [D].
2. To find out how the mount relates to the television you should do a test fitting on the ground.
3. If attaching a soundbar lay that out also with the soundbar bracket.
4. Figure 8 shows the important things to look for and measure.
5. Figure 1 and Figure 3 show important dimensions of the mount.
6. The bottoms of the TV Hanger, Mount, and Frame, are the same height. We recommend attaching the TV Hangers (Figure 9) to the TV and measuring from the bottom of the TV Hanger.
7. If mounting over a shelf, make sure the [H] and [C] minimum distances are satisfied.

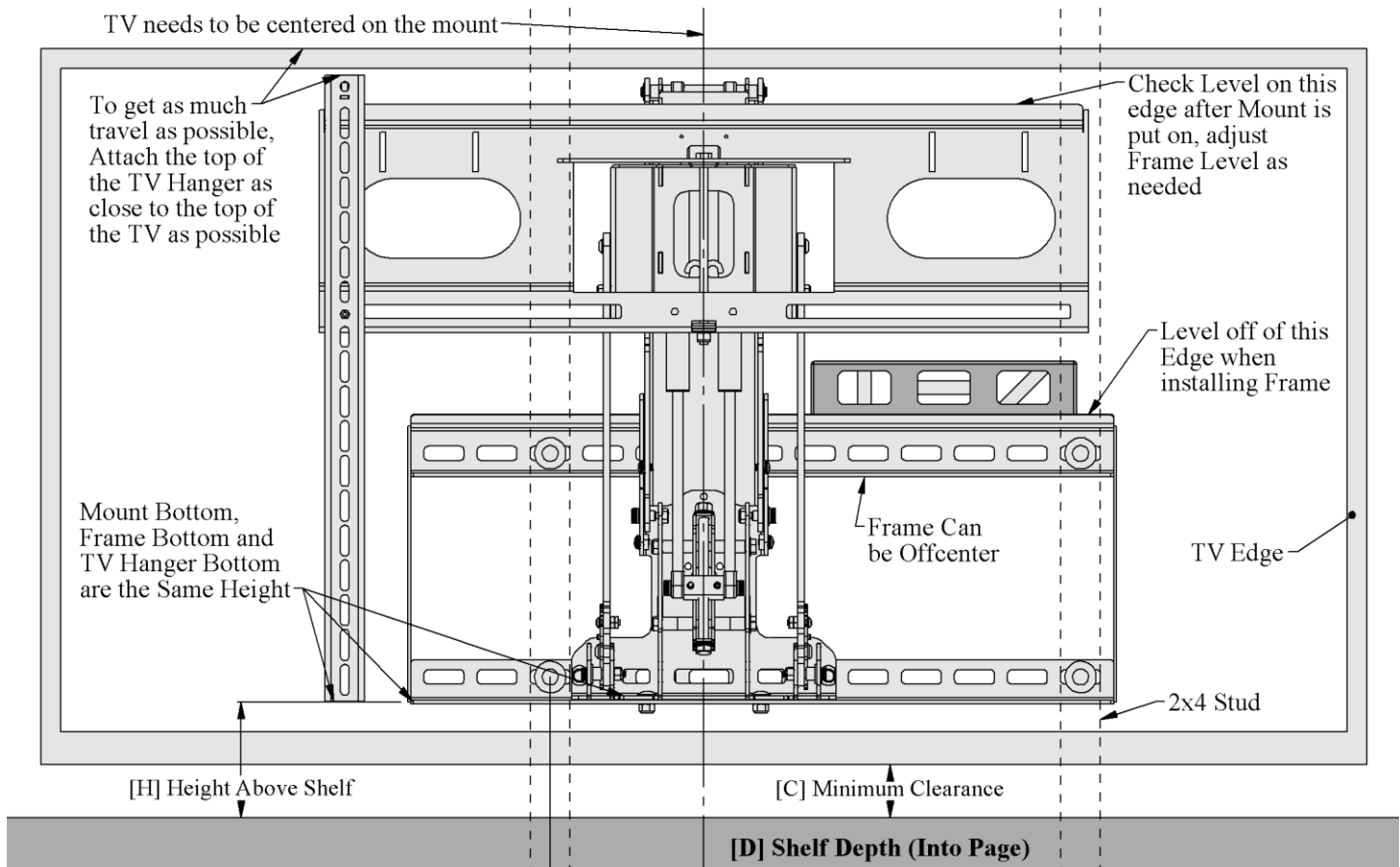


Figure 8, Positioning Mount on the Wall

Attaching TV Hangers to Television

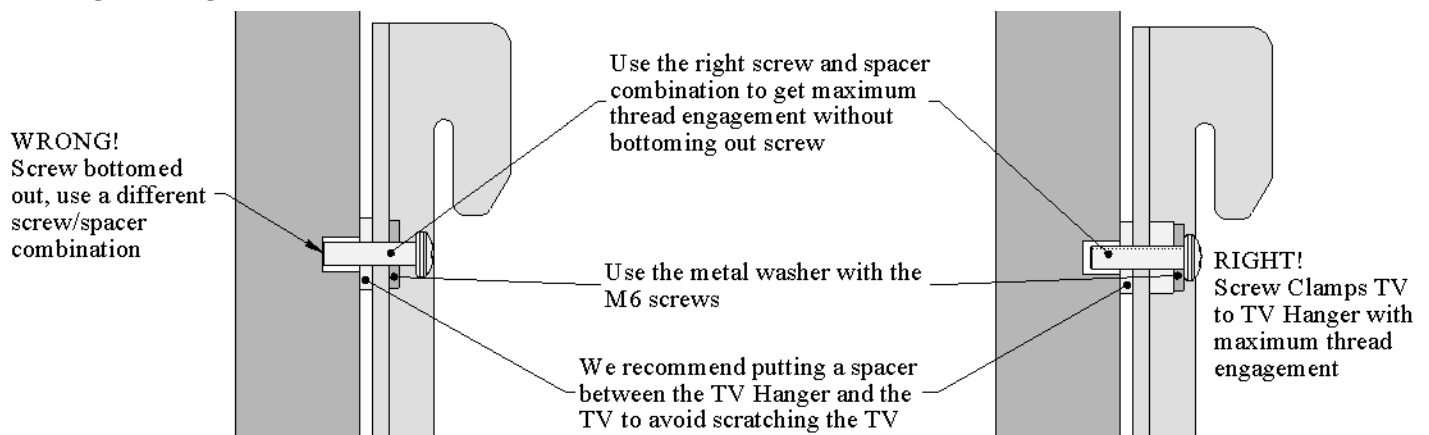


Figure 9, Attaching TV Hangers to TV

This Page is for attaching the Frame Mount to the wall, see next page for Single Stud Mounting.

Conditions for Mounting the Frame to the Wall

1. The TV must be centered on the mount to avoid leaning.
2. The mount is designed to attach to standard 2 x 4 or larger wall studs. If the wall isn't sturdy enough then more support will need to be added, consult an expert.
3. The mount must be securely fastened to a structure that can support 4 times the total weight of the television and mount. Dynamic Mounting assumes no responsibility for damage from an improperly installed mount.
4. The mounting holes need to be in the center of the studs, use a stud finder as needed.
5. 2 lag screws are needed in the top slots of the mount and 2 in the bottom slots.
6. 2 lag screws need to be on each side of the center of the mount and the center of gravity of the television.

Important: The TV needs to be centered on the mount to avoid leaning

Mounting Frame to Wall

1. The television should be centered on the mount, if not the television will sag to one side. The heavier the TV and the more off center, the more unlevel the TV will be through its range of motion.
2. Mark the locations of the mounting holes by Using the Frame as a template.
3. Once you know your location, pre-drill 1 of the top row of mounting holes 2.5in deep using the 1/4in drill bit.
4. Figure 10 shows the correct order to put on the lag screw.
5. Use a 9/16in wrench to install the lag screw; do not tighten all of the way up yet.
6. Level the mount as shown in Figure 8.
7. Mark and drill the other 3 holes 2.5in deep.
8. Install the lag screws and tighten until the mount is firmly pressed against the wall. Do NOT over tighten.
9. In some situations the mount will interfere with a lag screw,
 - Remove the lag screw.
 - Follow the directions in the Attaching Mount to Frame Section Below.
 - Put the Lag Screw through the Mount and Frame.

Attaching Mount to Frame

1. Figure 10 shows how to attach the Mount to the Frame.
2. Hook Mount over the top of the Frame.
3. Swing Bottom in.
4. Ensure Mount is on the Centerline of the TV.
5. Use the 5/16" Carriage Bolts and Locknuts to lock in the bottoms of the frame and mount together.

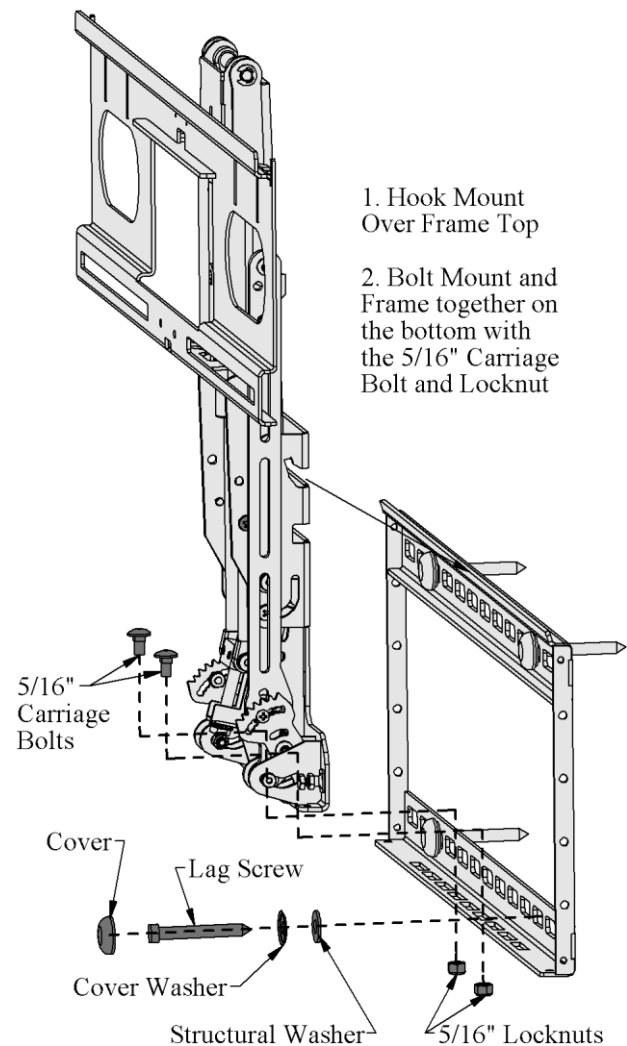


Figure 10, Frame Attach

This Page is for attaching the Single Stud to the wall (No Frame).

Note: The Single Stud Mount has a reduced Max Load of 70 lbs; this is because a single stud isn't strong enough to hold more, the mount is strong enough so if you are attaching to something stronger than a single stud, the mount can handle more weight.

Conditions for Mounting Single Stud to the Wall

1. The TV must be centered on the mount to avoid leaning.
2. The mount must be centered on the stud.
3. The mount is designed to attach to standard 2 x 4 or larger wall studs. If the wall isn't sturdy enough then more support will need to be added, consult an expert.
4. The mount must be securely fastened to a structure that can support 4 times the total weight of the television and mount. Dynamic Mounting assumes no responsibility for damage from an improperly installed mount.
5. The mounting holes need to be in the center of the studs, use a stud finder as needed.
6. 2 lag screws are needed in the top slots of the mount and 1 in the bottom slot.

Important: The TV needs to be centered on the mount to avoid leaning

Mounting Single Stud to the Wall

The top two lag screw slots are covered by the mount and needs to be actuated to be able to access them. Figure 11 show the steps to successfully attach to the wall.

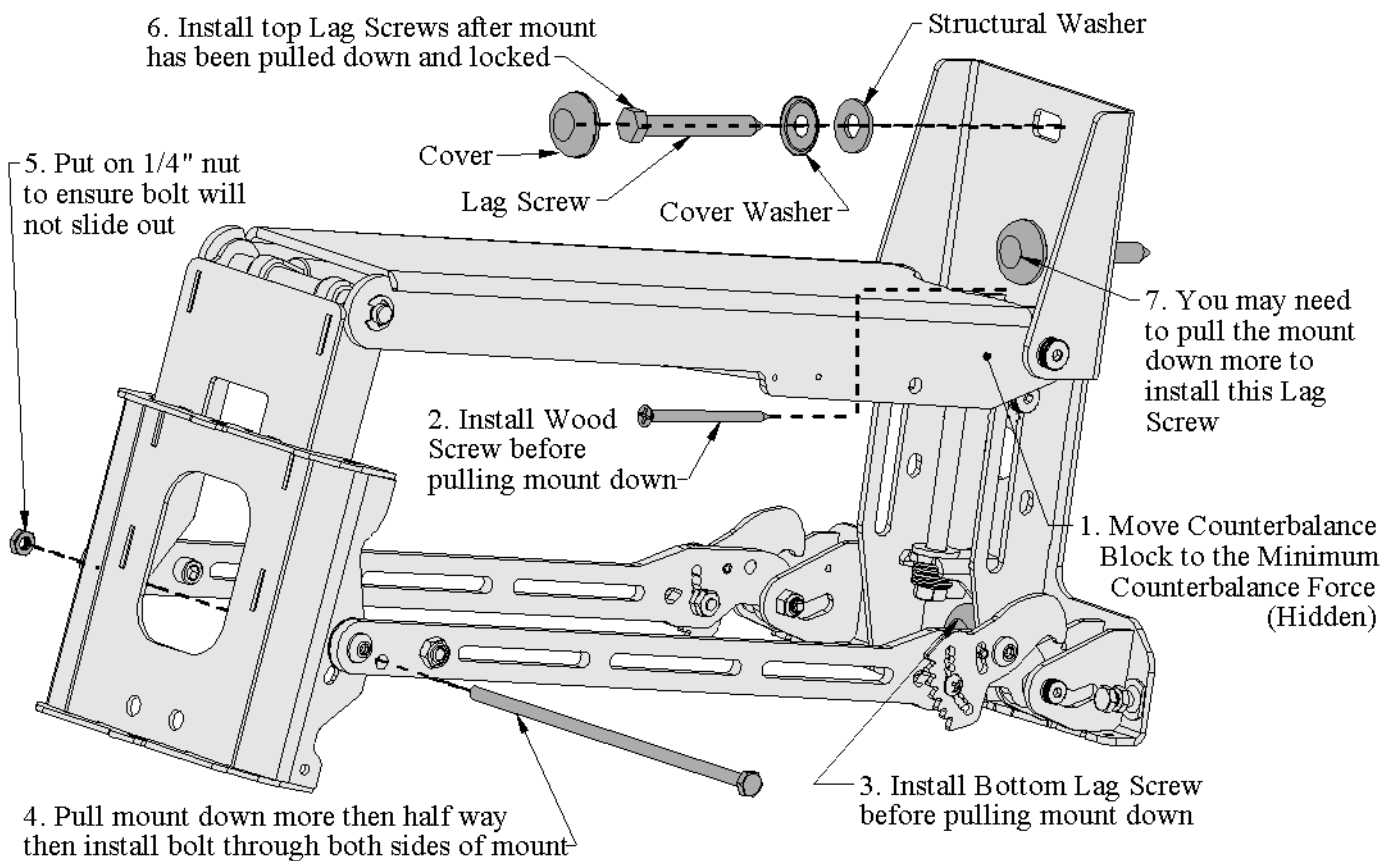


Figure 11, Mounting Single Stud to the Wall

Attaching the Television to the Mount

After the above steps are finished you are ready to put the television on the mount.

- See the Adjusting the Counterbalance section on page 12 for more details. If in doubt, error to the counterbalance supplying too much force. You can easily adjust force later.
- We recommend having someone help putting the TV on the mount.

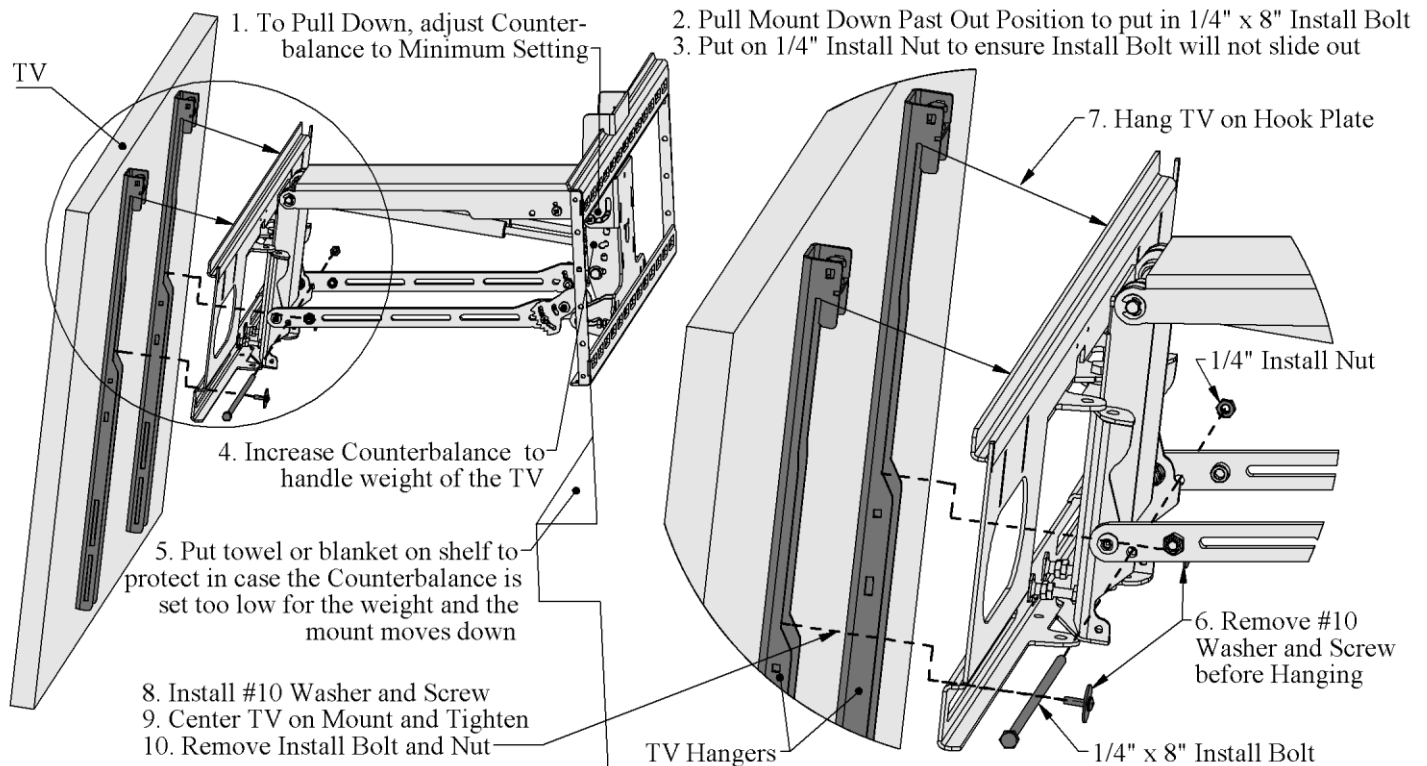


Figure 12, Attaching the Television

TV Level

The Level of the TV can be fine-tuned after it is put on the mount.

1. Figure Out which TV Hanger is on the low side of the TV
2. Figure 13 shows the parts for Leveling
3. Loosen the #10 Washer and Screw in the TV Hanger
4. Move the Level Bolt Down Until Level
5. Lock Position with the Level Locknut
6. Tighten #10 Washer and Screw back down

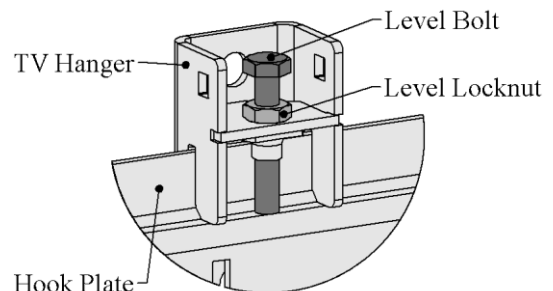


Figure 13, TV Level Fine Tuning (Detail from Figure 2)

Moving the Television Up and Down

If the counterbalance is set up correctly the TV should be able to be lifted all of the way up into the top/locked position with reasonable effort. To unlock from this position pull out on the bottom of the television. To get the television all the way to the bottom position you may need to push down on the television. If the TV pops back up from the desired bottom position, reduce the counterbalance force. Typically, the force to lift the TV all of the way up is approximately 20-30% of the weight of TV.

Warning! Do Not Let Go of the TV Until the Motion has stopped on its Own.

Above Shelf Mounting

To get the lowest possible bottom position when mounting above a shelf, it is very important that you put extra thought into the mounting process. The Mount can clear shelves up to 16" deep.

The TV Clearance Table shows the minimum clearance [C] needed between the shelf top and the bottom of the TV (or the bottom of an attached soundbar, whichever is lower) for the mount to swing around the shelf. To find the clearance needed, find the shelf depth [D], in this example 8", and go down the column and find the corresponding minimum clearance height [C], which is 2.5". Figure 8 shows where to measure [C] and [H].

Figure 14 and the Mount Travel Table shows you how much downward travel you will get with different shelf depths and heights above the shelf. For example, to find the downward travel [T] when you have an 8" shelf depth [D] and you attach the bottom of the mount 6" above the shelf [H]. First find the corresponding [D] and look down the column and find the closest [H], which in this case is 5.75". Now go left along the row and find the corresponding Travel [T]. In this case you will get a downward travel of approximately 26".

Tips to get the lowest possible bottom position

- Get the top of the mount and the top of the TV to be as close as possible.
- Typically you'll get the lowest bottom position by being near the minimum clearance shown in the TV Clearance Table.
- Getting the most travel possible out of the mount, doesn't mean you'll get the lowest possible bottom position.
 - For example, for an 8" shelf, to go from 28" of travel, to 30" of travel (2" more), you have to raise the mount up 6.5". So your new bottom position is actually 4.5" higher.

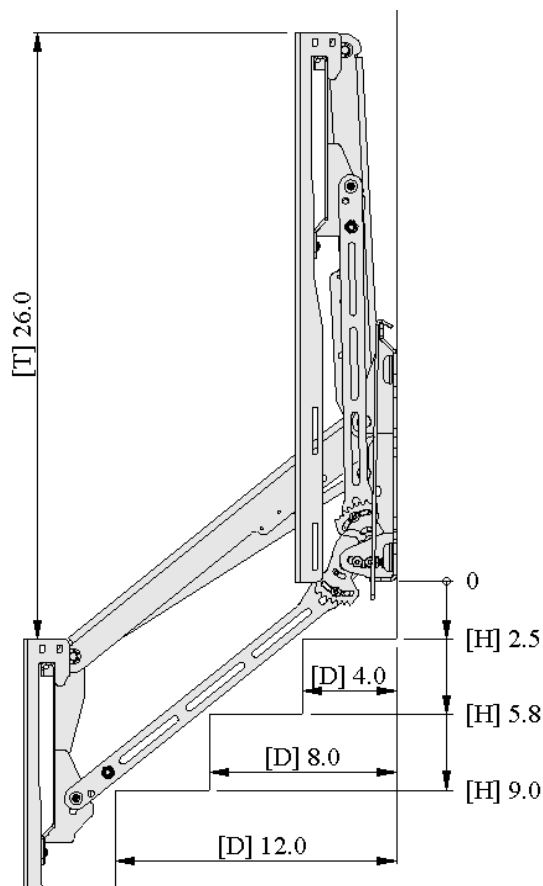


Figure 14, Shelf Clearance Drawing

TV CLEARANCE TABLE (OR SPEAKER/SOUNBAR CLEARANCE, WHICHEVER IS LOWER)

[D] SHELF DEPTHS (IN) (BOLD NUMBERS)																	
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
0	1	1.25	1.5	1.75	1.75	2	2.25	2.5	2.75	3	3.25	3.75	4.25	5	5.75	6.75	-
[C] MINIMUM CLEARANCE NEEDED BETWEEN SHELF TOP AND TV BOTTOM IN TOP POSITION (IN)																	

31.8 (IN) IS THE MAXIMUM POSSIBLE DOWNWARD TRAVEL

ALL MEASUREMENTS ARE APPROXIMATE, 16 INCHES IS THE MAXIMUM SHELF DEPTH THE MOUNT WILL WORK WITH

- MEANS IT IS POSSIBLE, BUT YOU WILL NOT GET ANYMORE DOWNWARD TRAVEL

MOUNT TRAVEL TABLE (DOWNWARD TRAVEL OF MOUNT VS. HEIGHT AND SHELF DEPTH)

		[D] SHELF DEPTHS (IN)																
		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
[T] DOWNWARD TRAVEL OF MOUNT (IN)	32	0	5	12	18	-	-	-	-	-	-	-	-	-	-	-	-	-
	30	0	0	2.25	4	5.75	7.75	9.5	11.25	14.75	15.5	-	-	-	-	-	-	-
	28	0	0	1.25	2.5	3.5	4.75	5.75	7	8.25	9.25	10.5	12.5	13.75	-	-	-	-
	26	0	0	1	1.75	2.5	3.25	4	5	5.75	6.5	7.25	8	9	11	11.75	-	-
	24	0	0	0.75	1.25	1.75	2.5	3	3.5	4	4.75	5.25	5.75	6.5	7	7.5	9.5	10
	22	0	0	0.5	0.75	1.25	1.75	2	2.5	3	3.25	3.75	4	4.5	5	5.25	5.75	7.5
[H] HEIGHT MOUNT IS ABOVE SHELF (IN) (UNBOLDED NUMBERS)																		

Adjusting the Counterbalance

The Mount comes out of the box set around the 65 LB TV setting and will need to be adjusted for the mount to work properly with your television. To adjust the counterbalance, turn the bottom of the counterbalance screw with a 9/16" box or ratcheting wrench, see Figure 15. This moves the Counterbalance Block up and down. The approximate counterbalance block settings for various television weights are shown in Figure 16. In Figure 16 the counterbalance is approximately set for a 65 Pound Television.

To be able to move the mount without a TV on it, you need to move the Counterbalance Block to the Minimum Counterbalance Force. At this setting it will still take 15 to 20 pounds of effort to move the mount which is harder than you think. You should secure it to something to get the mount to move. Once you put a TV on the mount, everything will work much better.

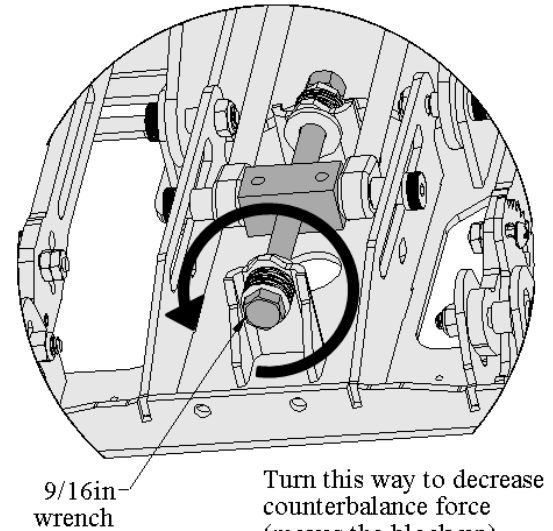


Figure 15, Adjusting Counterbalance (Detail from Figure 2)

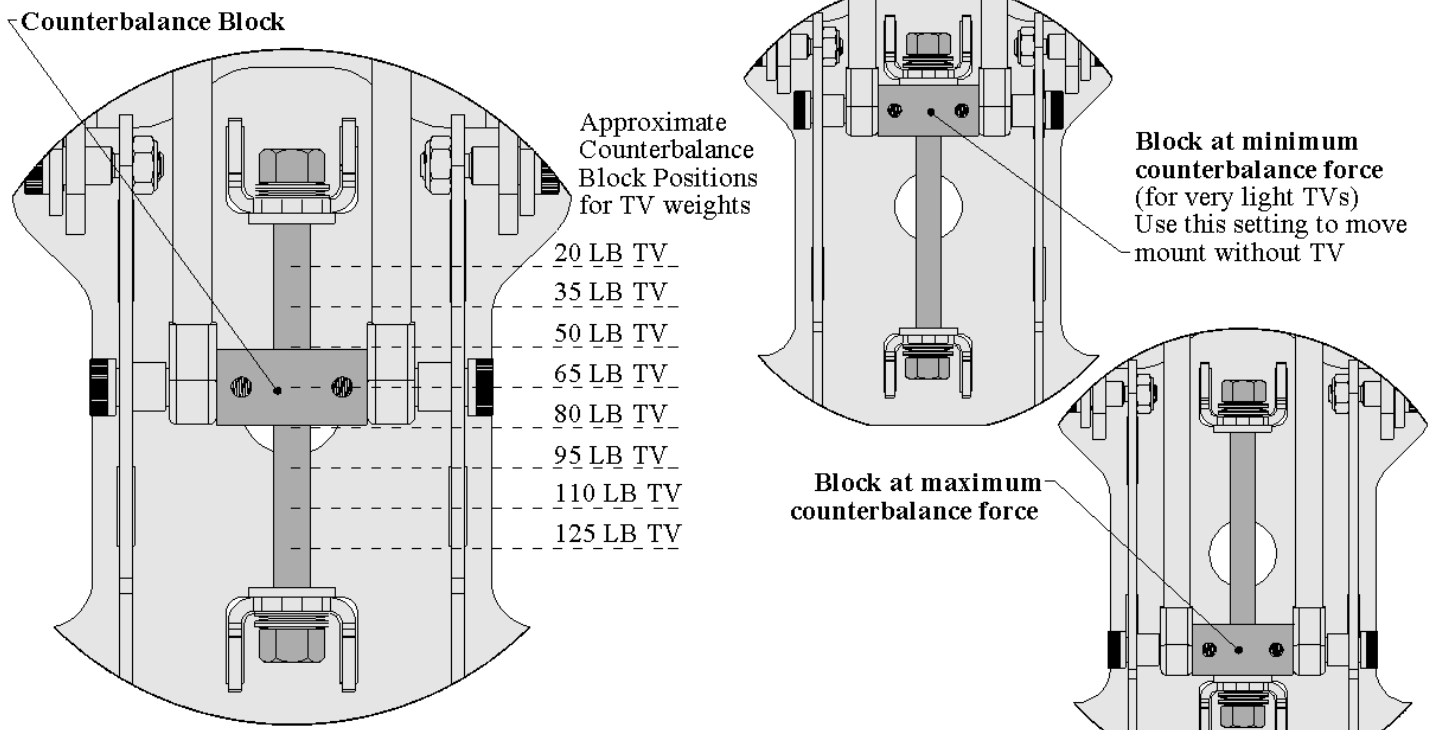


Figure 16, Counterbalance Settings (Detail from Figure 2)

Bump Stop

To help prevent the mount from over traveling, there is an adjustable Bump Stop on the mount. The Bump Stop is not made to hold any load, the counterbalance should be set to hold the load when in contact with the Bump Stop. To test this just lift the TV up a little above the Bump Stop and make sure the mount stays in position.

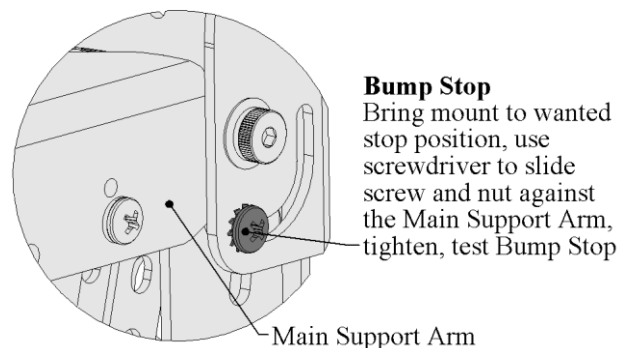


Figure 17, Bump Stop (Detail from Figure 2)

Setting the Tilt

In the top position the mount tilts from vertical to about 7 degrees (Figure 4 and Figure 5). To set the angle, put the mount in the Out Position for easier access and so there isn't any force on the cam.

Maximum Down Tilt in Top Position

The cam is set for Max Down Tilt out of the box, if more tilt is required adjust the Max Down Tilt Bolt to the Max Tilt Hole Shown in Figure 18.

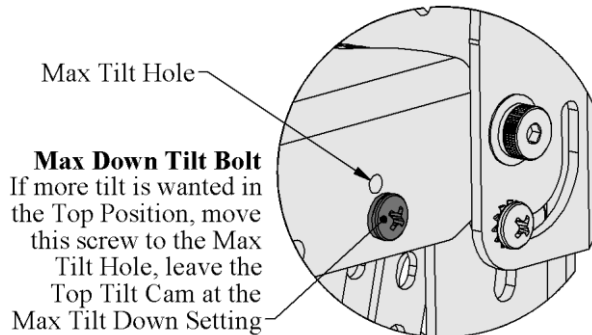


Figure 18, Max Down Tilt Bolt and Hole (Detail from Figure 2)

Vertical Tilt in the Top Position

1. The Max Down Tilt Bolt (Figure 18) comes out of the box in the Vertical Tilt Hole
2. Adjust the Top Tilt Cam by removing the top Tilt Adjustment Bolt (Figure 19)
3. Put the bolt into a different set of holes and hand tighten with one nut. Approximate tilt settings are shown in Figure 20. There is a cam on both sides of the mount, use the Top Tilt Alignment Marks and holes to ensure they are at the same position.
4. Move the mount up and see if the tilt is correct, if not change the position of the cams, it will probably take a few times to get the tilt perfect. If you get a lot of resistance when trying to push the mount to the Top position, the Cam is set for too much up tilt and you will need to lessen it.
5. Once you have the desired position, tighten both nuts with a 7/16" box wrench and Philips screwdriver.

Tilt in the Bottom and Out Positions

In the bottom and out position the mounts tilt can be set Vertical +/-1 degree. To adjust, loosen up the 2 Bottom Tilt Lock Nuts with a 7/16" box wrench. Next move the 2 Bottom Tilt Adjustment Bolts in and out with the 7/16" box wrench until the mount is at the desired tilt, lock down the locknuts when satisfied with the tilt.

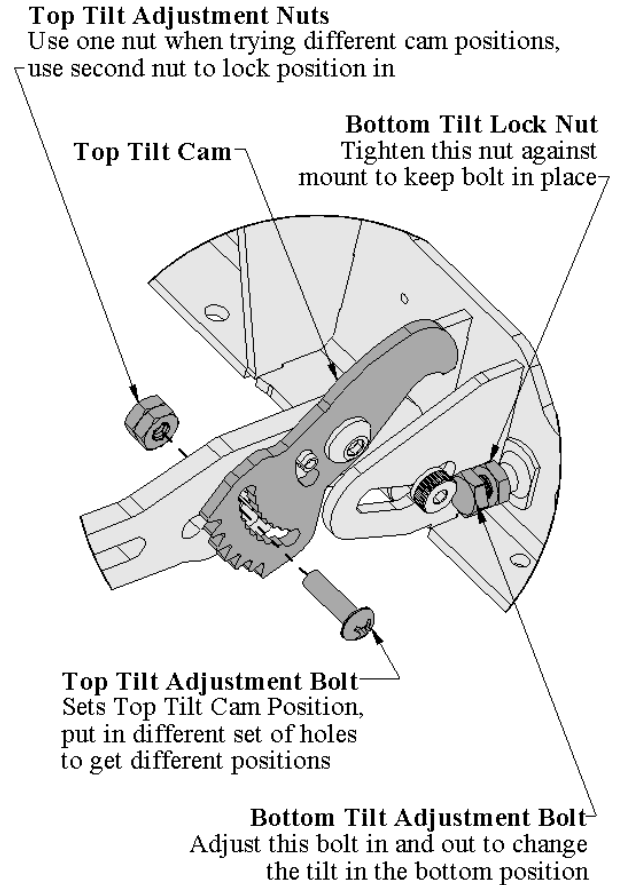


Figure 19, Tilt Adjust Hardware (Detail from Figure 2)

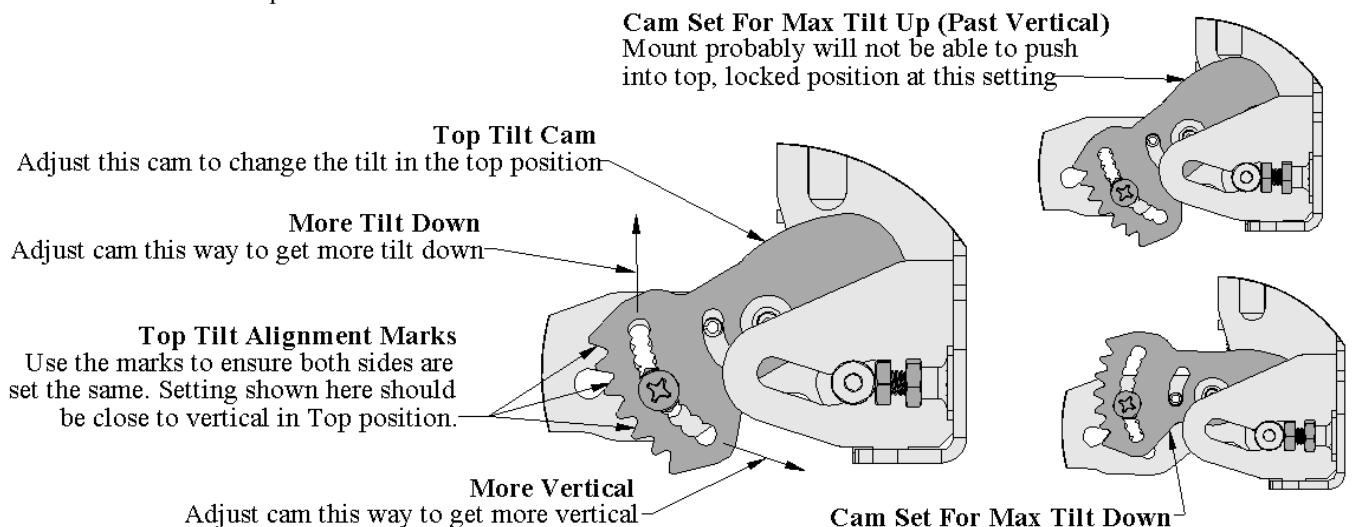


Figure 20, Top Tilt Cam Settings (Detail from Figure 2)

Paintable Plastic Covers

The Paintable Plastic Covers can be painted to match your wall or left as is to help the mount blend in. They simply hook over the Frame as shown in Figure 22. Sticky T-grips are included to stick the covers to the bottom of the Frame. Outlets can be installed under the covers and then the wires ran under them. You may need low profile wires or an indented outlet to get it to fit though.

Wire Management

Figure 21 Shows the suggested wire route to keep the wires hidden with maximum flexibility and free from pinching.

The Cable Loop is black cord loop used to keep the wires in the correct place.

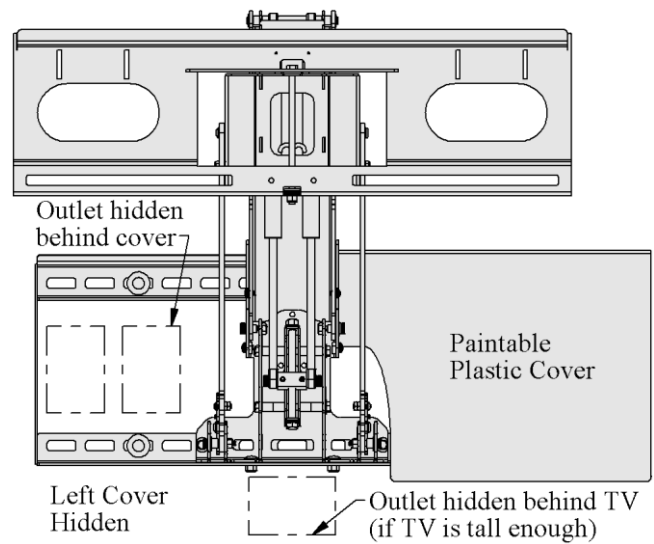
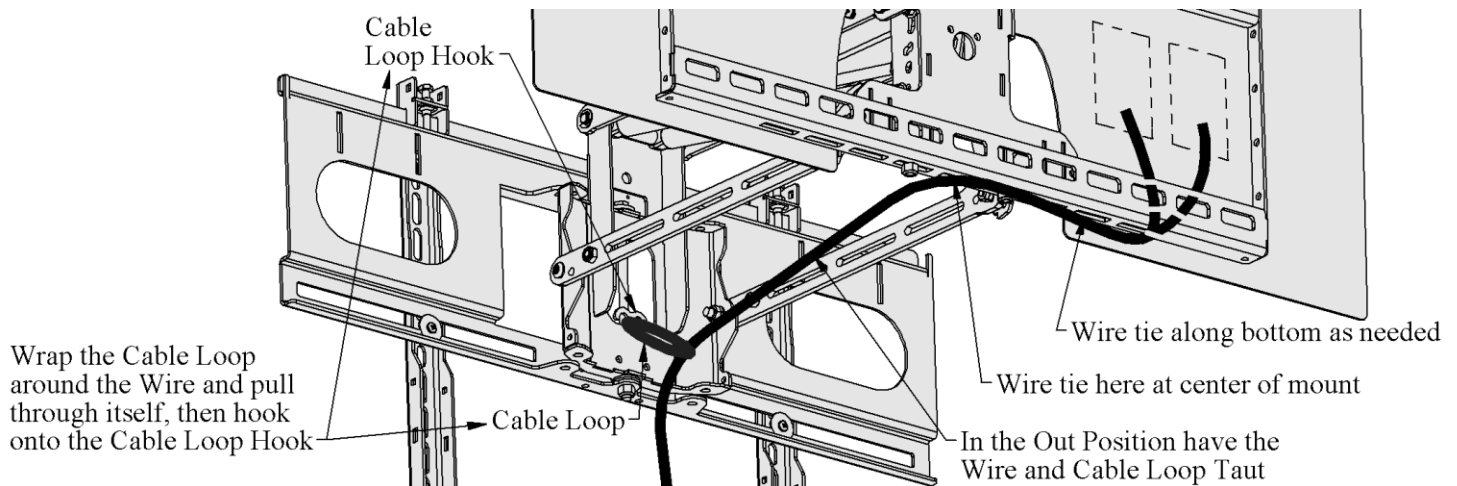


Figure 22, Ideal Outlet Placement and Plastic Cover

Figure 21, Wire Routing



Maintenance

To ensure the mount will work great for as long as possible follow these simple procedures;

1. Move the mount up and down at least twice a week, this keeps the seals in the gas springs oiled.
2. Lubricate all joints every 3 months. May need more, especially if outside
3. Visually check all bolts every 3 months to ensure nothing looks like it is coming loose.

Handle Accessory Assembly

This is an Accessory that may not be included with the mount.

Handle Parts

- 1 HandleBar
- 2 Vertical Support

- 4 #10 Carriage Screw
- 4 Plastic Retain Washer
- 4 #10 Nut

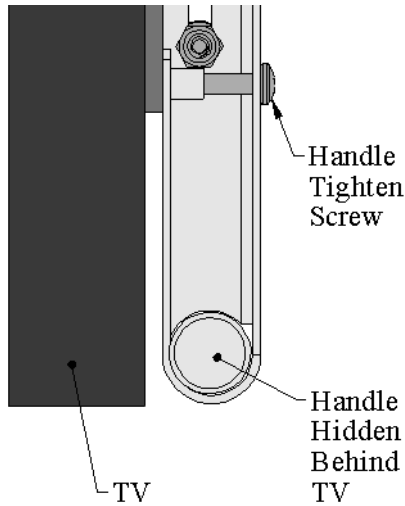


Figure 23, Side View of Handle Hidden

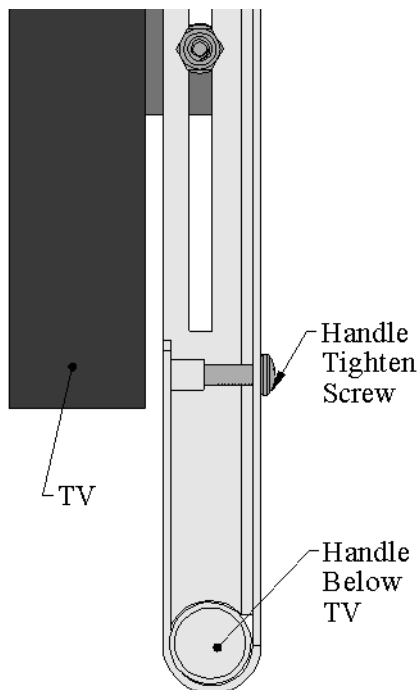


Figure 24, Side View of Handle Shown

Handle Install

Figure 25 shows how to install the Handle. We recommend laying everything out on the ground to figure out exactly how things fit together before attaching the mount to the wall. The handle is designed to stay hidden (Figure 23) or shown (Figure 24). The handle does not work with a soundbar bracket below the TV.

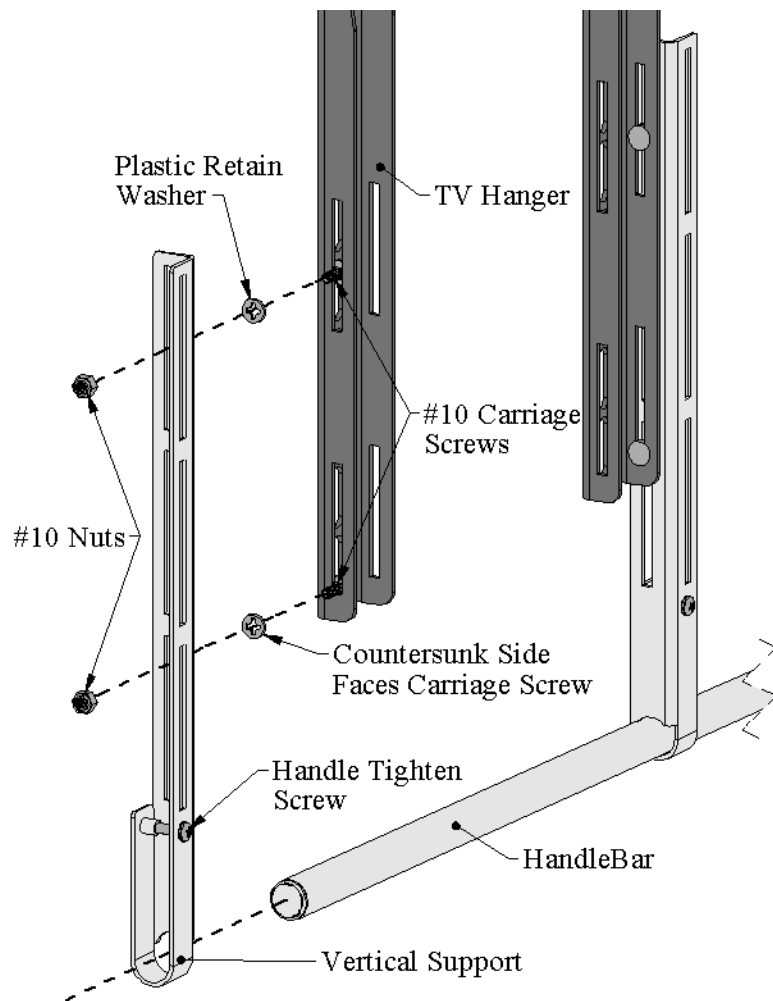


Figure 25, Handle Assembly

Maintenance

To ensure the mount will work great for as long as possible follow these simple procedures;

4. Lubricate all joints every 3 months. May need more, especially if outside.
5. Visually check all bolts every 3 months to ensure nothing looks like it is coming loose.

Lifetime Limited Warranty

The lifetime warranty covers all components besides powered components and gas springs. The power components and gas springs are guaranteed to be free of defects for a period of 5 years. The warranty period begins on the original date of shipping. The limited warranty is intended only for the original purchaser.

The warranty will be void if the mount is modified in any way or not installed correctly, including overloading, abuse, or use for any purpose other than specified in our directions. The Limited Lifetime Warranty is for indoor use. For outdoor use we Warranty the mount function for 5 years. Dynamic Mounting is not liable for any damage or injury caused from the use of or the inability to use our mount. To the maximum extent permitted by applicable law, Dynamic Mounting disclaims any responsibility for incidental or consequential damages.

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