



MM540 Installation Instructions

IMPORTANT SAFETY INSTRUCTIONS - SAVE THESE INSTRUCTIONS

Please read this entire manual before you begin.

Do not unpack any contents until you verify all requirements on PAGE 4.
If you have any questions, visit MantelMount.com or call (800)-897-9755.

! WARNING!

This product contains small parts that can be a choking hazard. *Do not* let children play with any of these small parts! Keep children away from the work area during installation.

! CAUTION:

This product is intended to be installed by professional installation contractors, or persons familiar with the tools and methods required for this installation. If you are not sure about your ability to perform this installation, you must contact a professional. MantelMount is not responsible for damage or injury caused by incorrect installation or improper use.

! CAUTION:

Do not let children operate, pull on, or hang from MantelMount. Do not let children push MantelMount upward to the top position - this will cause the mount to slam against the wall due to the upward force of the springs. Only a person tall enough to control the mount all the way to the top should operate MantelMount.

! CAUTION:

Do not use this product in any way, or for any purpose, that is not specifically described in these instructions. MantelMount is not responsible for damage or injury caused by incorrect installation or improper use.

IMPORTANT:

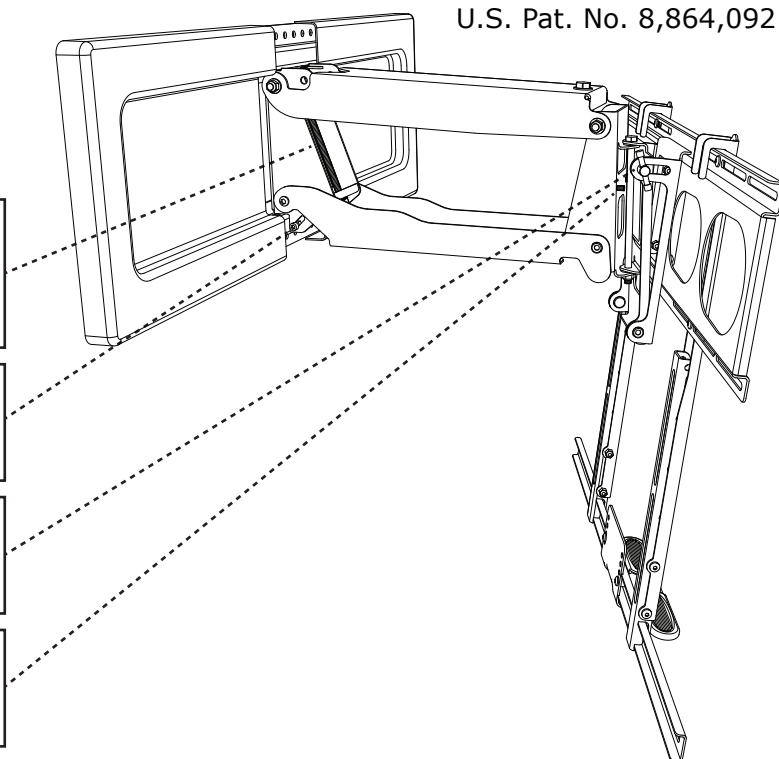
MantelMount has four different adjustments that must be made after the installation is complete in order to operate properly.

The main bolt adjusts the lifting force to accommodate different TV weights. All TVs within the weight range should stay in the UP and DOWN positions when adjusted properly

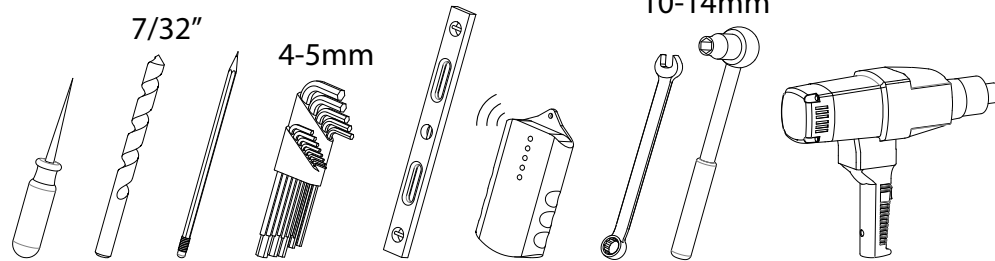
The bottom travel stop is adjusted with two screws and locknuts so the TV and mount do not lower all the way into the mantel.

Several degrees of tilt in any position can be added or removed by adjusting two knobs, one on each side the swivel mechanism.

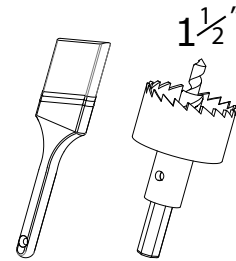
The side-to-side swivel stops are adjusted with two screws and locknuts so that the TV does not swivel into the mantel.



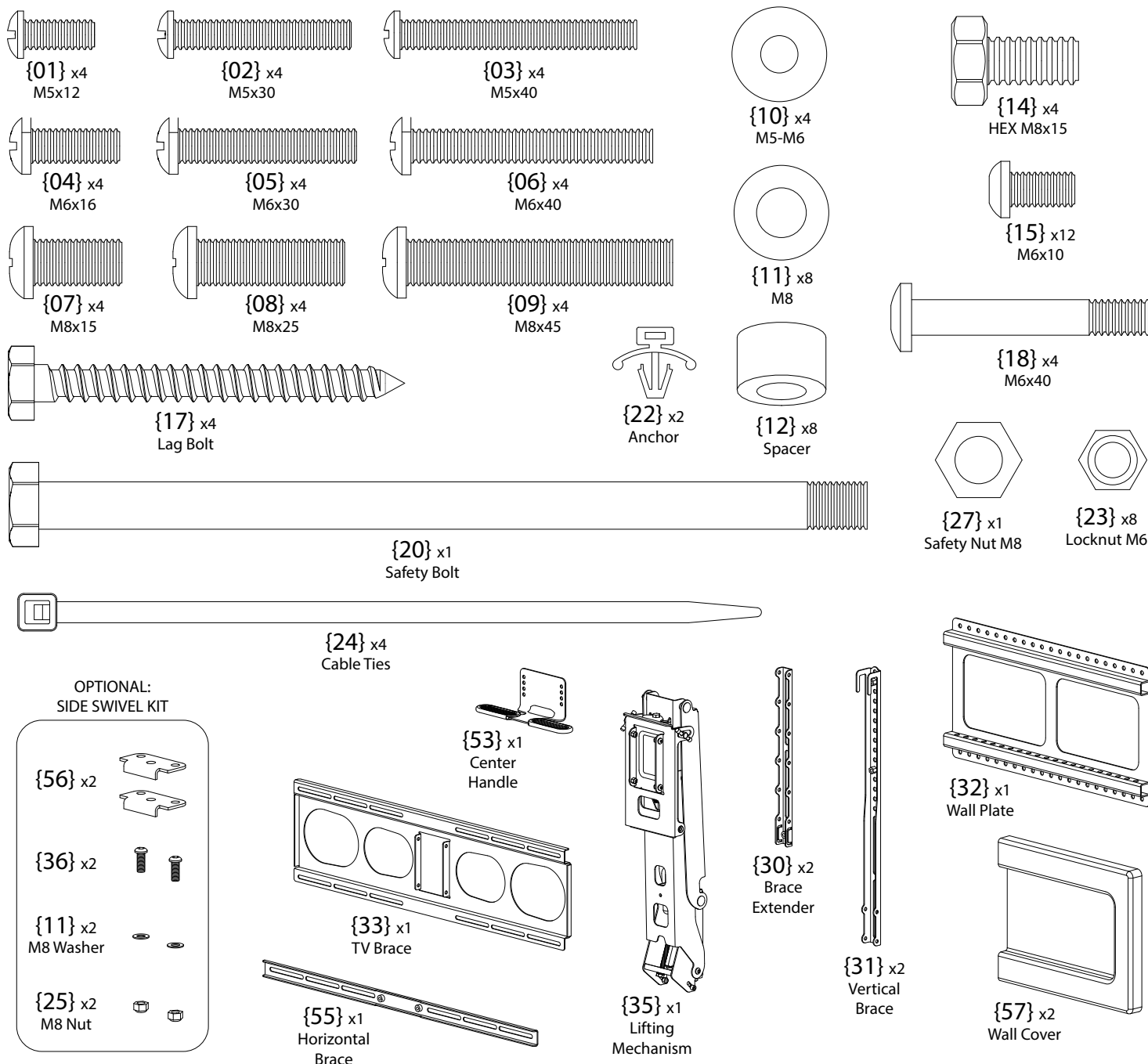
Required Tools



Optional Tools



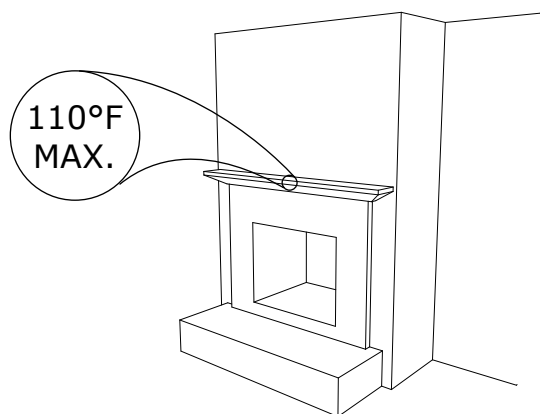
Before you begin, please verify that all components are included and undamaged. If any parts are missing or damaged, contact MantelMount. Never proceed with missing or damaged parts! Lay out all components and make sure you identify that each one has a match in the diagram. Some of the parts included will not be used during installation. Do not proceed if you do not understand and identify all of the components.



Please verify that your installation meets all of these CRITICAL requirements:

A

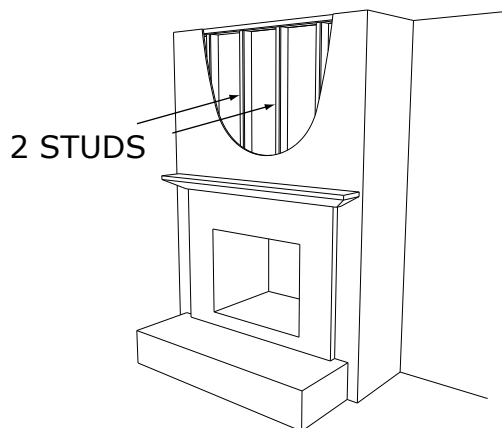
MantelMount is designed for use only with decorative fireplaces that are not the primary heat source for a house. Temperature at the front edge of mantle should never exceed 110° F.



B

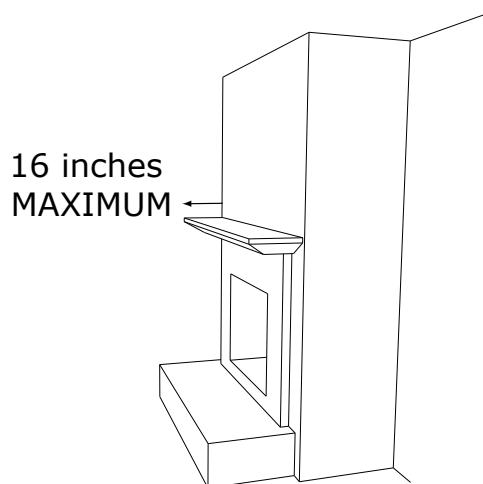
Wall must be WOOD STUD FRAME only. There must be at least 2 studs available for mounting. Wall covering must not exceed 5/8 inch thick.

For other types of walls or other types of installations please visit the FAQ section at www.MantelMount.com.



C

Mantle must not extend from mounting surface more than 16 inches. MantelMount can not extend past a mantle larger than 16 inches. Larger mantels will also reduce the amount of side-to-side swivel.

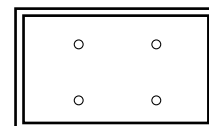
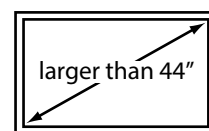
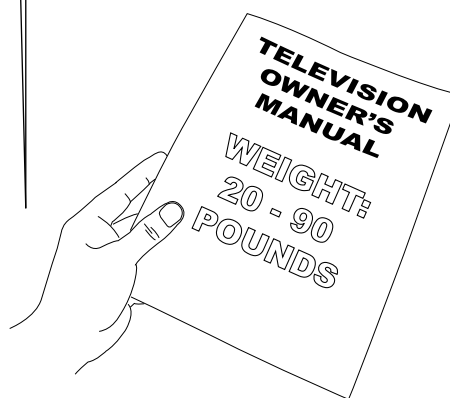


D

TELEVISION REQUIREMENTS:

1. Weight must be between 20 - 90 pounds.
2. Screen size larger than 44 diagonal inches.
3. Mounting screw holes are VESA compliant.

For non-VESA hole patterns, please visit the FAQ section at www.MantelMount.com.



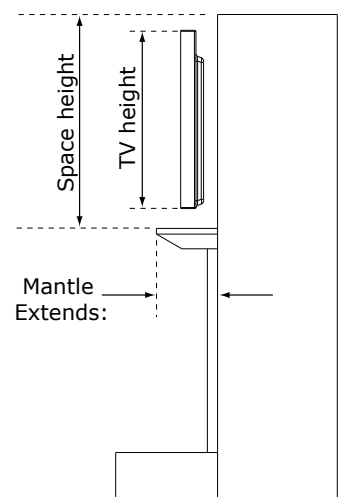
VESA

Width: 200-700mm
Height: 100-500mm

E

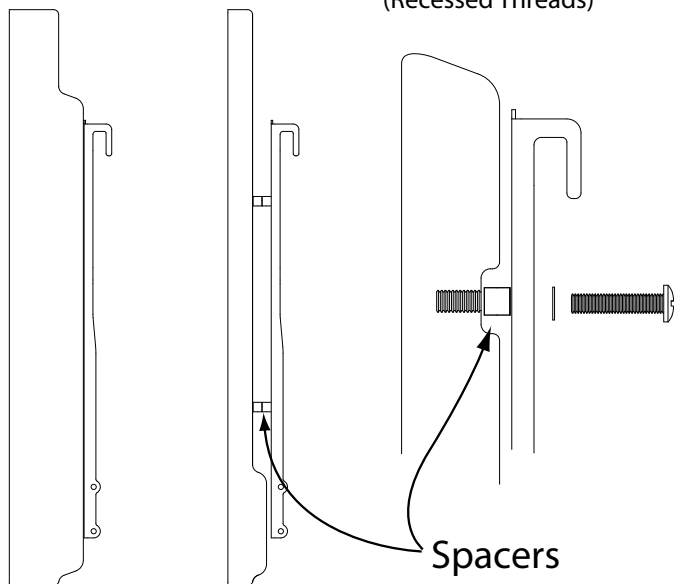
The space above the mantle must be taller than the TV. The required space depends on how far out the mantle extends. Refer to chart below and add this additional height to the TV height to determine if space is tall enough.

If mantle extends:	This is required space height:
Less than 8 inches	TV height plus 5 inches
8 - 10 inches	TV height plus 6 inches
10 - 12 inches	TV height plus 7 inches
12 - 16 inches	TV height plus 9 inches



- 1 Use a Vertical Brace {31} to determine if your television is a flat back or an irregular back. An irregular back will require spacers and longer screws to fill any spaces between the Vertical Brace and the TV. The Braces must be parallel to your television screen.

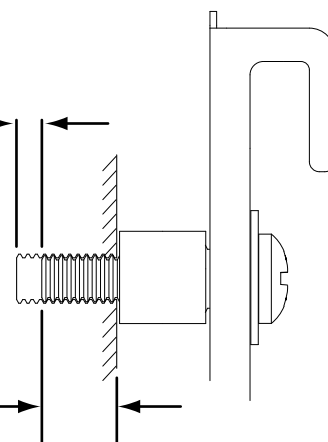
Flat Back Irregular Back Irregular Back (Recessed Threads)



- 2 Choose the correct screw diameter and length for the TV. Hand-thread screw combination into the TV to ensure there is adequate thread engagement without hitting the bottom of threaded insert. Use only minimum amount of spacers (if required).

Must leave a gap in threaded TV insert

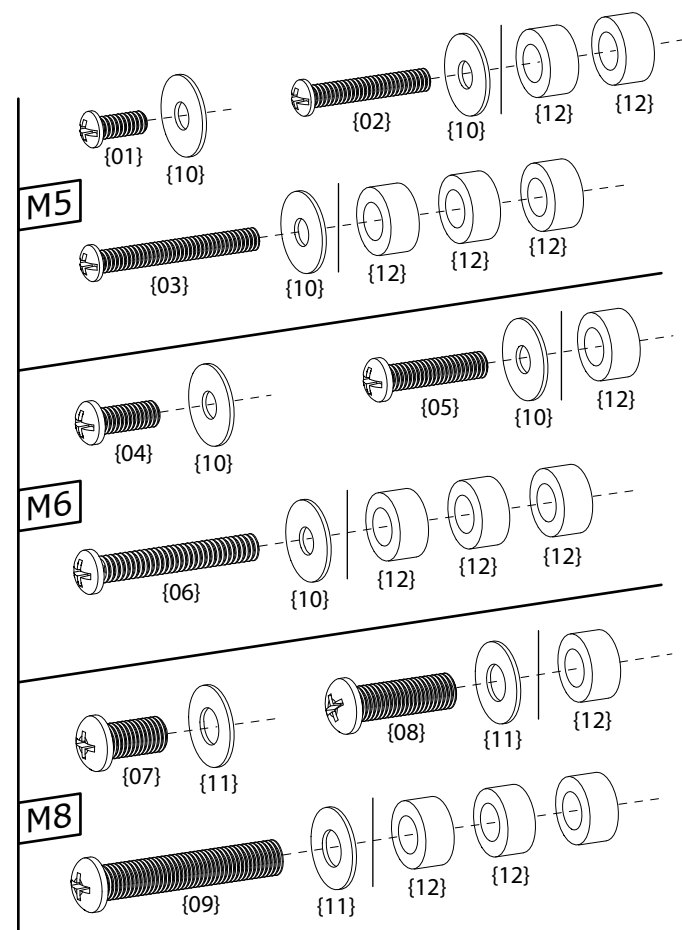
7-10 threads minimum engagement



CAUTION:

Do Not use screws that are too long for the threaded inserts of Television. This can damage internal components.

- 3 Possible Screw Combinations shown with **maximum** spacer usage (if spacers are required).



- 4 IMPORTANT INFORMATION: The Vertical Braces {31} are a fixed distance (3 inches) higher than the bottom of the Wall Plate {32}. This relationship can be used to calculate unusual mounting situations such as centering the TV in an alcove or mounting to a specific height on the wall.

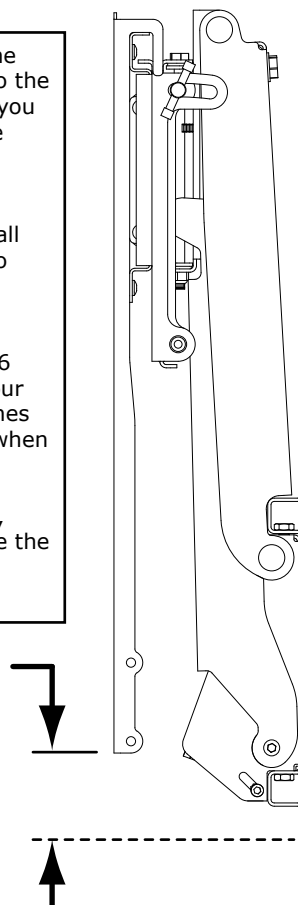
If you measure the distance from the bottom of your TV (or Sound Bar) to the bottom of the Vertical Braces {31} you will automatically know the distance from the bottom of your TV to the bottom of the Wall Plate {32}.

You can use this information to install the Wall Plate on the wall in order to locate the height of your TV to any specific height you desire.

Example: If the Vertical Braces are 6 inches higher than the bottom of your TV, then the Wall Plate will be 3 inches higher than the bottom of your TV when the installation is complete.

If you are installing above a mantel, then your installation must still have the additional clearance for downward motion stated in the chart in Step 9

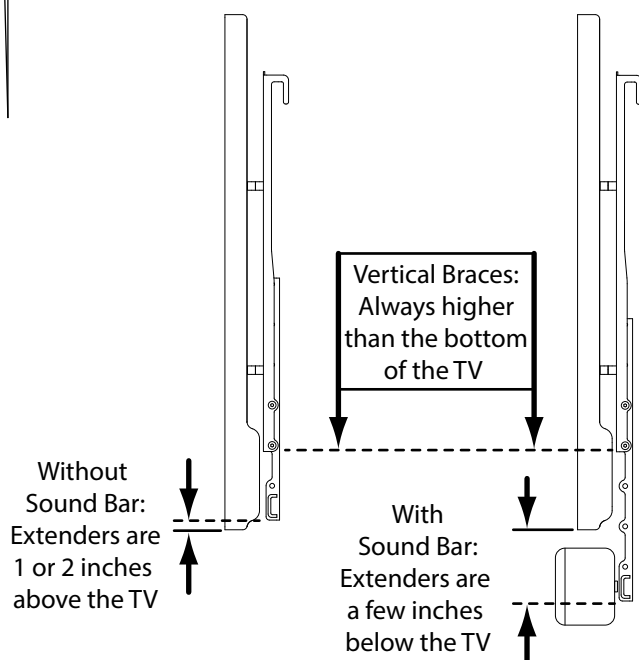
THREE INCHES Fixed Distance



- 5 The Vertical Braces {31} are always mounted higher than the bottom of the TV. However, the Brace Extenders {30} will be mounted one of two ways:

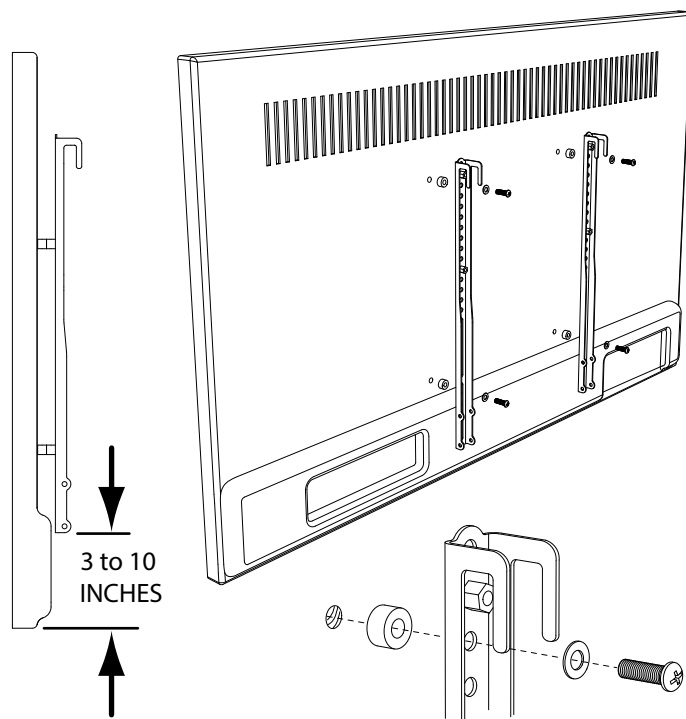
Without a Sound Bar - The Brace Extenders are installed within a few inches **above** the bottom of the TV.

With a Sound Bar - The Brace Extenders are installed **below** the TV with enough room to install the Sound Bar onto the Horizontal Brace {34}.

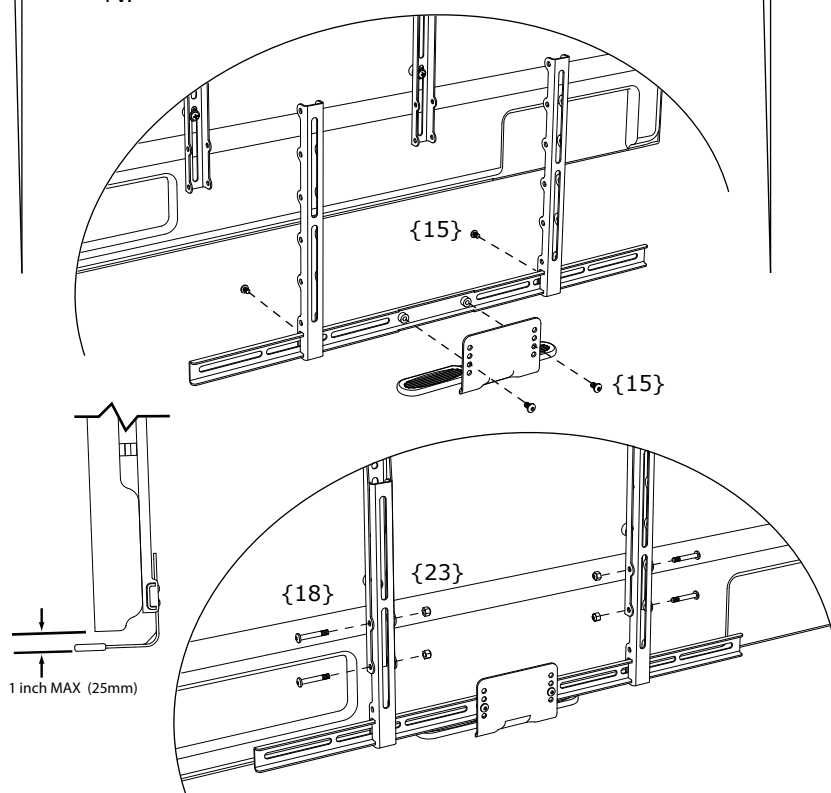


- 6 Attach the Vertical Braces {31} to the TV so the bottoms of the Vertical Braces are at least a few inches higher than the bottom of the TV. Centered on the TV is ideal.

Installing the Vertical Braces higher on the TV will allow more downward travel because it allows more clearance between the Lifting Mechanism {35} and the mantel.

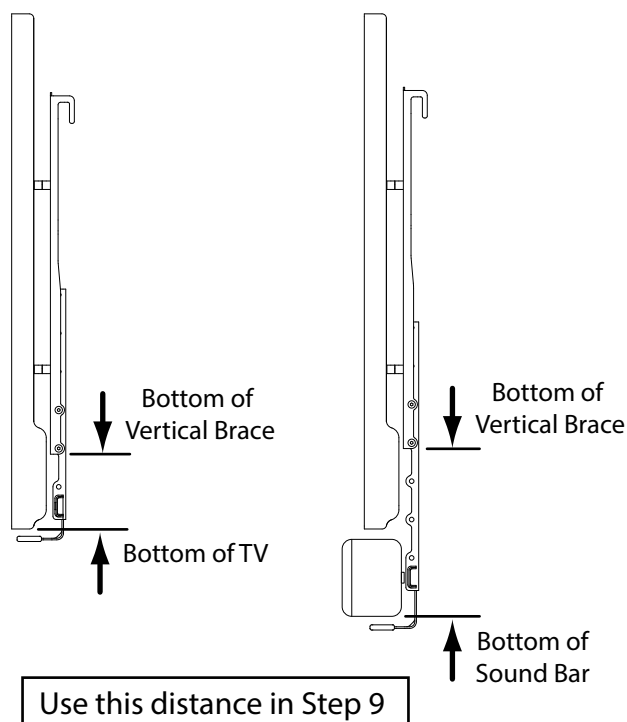


- 7 Attach the Extenders with Screws {18} and Nuts {23}. Attach the Horizontal Brace {55} with Screws {15}. Attach the Center Handle {53} with Screws {15}, making sure the Handle is within one inch from the bottom of the TV.



- 8 Measure the distance from the bottom of the Vertical Braces {31} (not the Extenders) to the bottom of television or Sound Bar (not the Center Handle).

Write down this distance to use in Step 9.



9 Determine the Vertical Position of the Wall Plate:

The image at right shows that the further out a mantle extends, it can interfere with the arc of the lowering TV. MantelMount must be installed a minimum distance above the mantle. This distance is additional to the distance from step 8. See the chart below for the additional height required above the mantle. This dimension will be used in Installation Step 12.

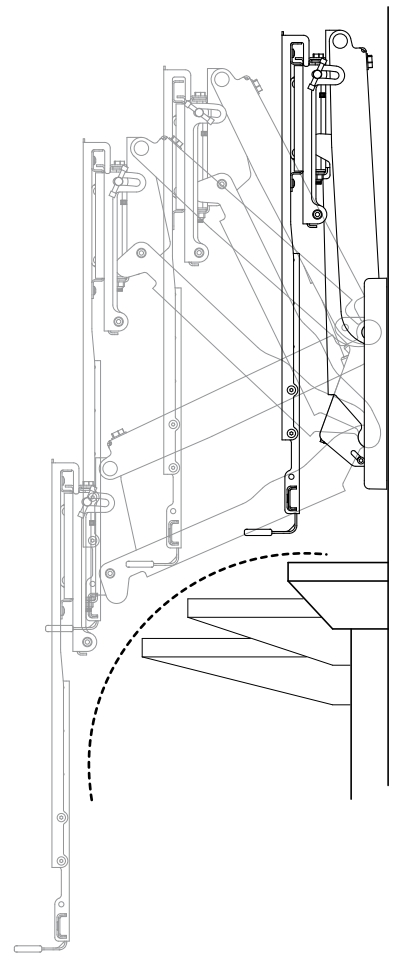
NOTE: If the available wall space above the mantle is close to the required space in the table from "Requirement E" (due to the ceiling, for example) then it is important to use the exact dimensions from this chart. However, if the available wall space above the mantle is much taller than required, then these heights are only *minimum* requirements.

USE THIS CHART FOR INSTALLATION STEP 12:

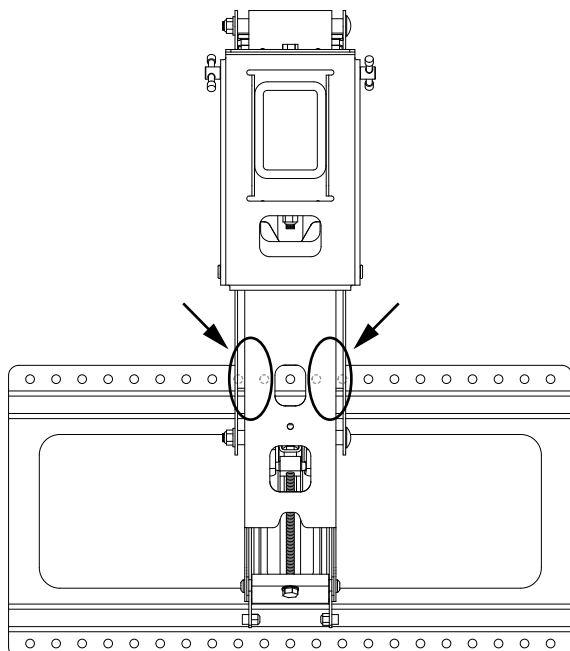
If your mantle extends:

Required Installation Height:

Less than 8 inches	Add 2 inches to the distance from Step 8
8 - 10 inches	Add 3 inches to the distance from Step 8
10 - 12 inches	Add 4 inches to the distance from Step 8
12 - 16 inches	Add 6 inches to the distance from Step 8

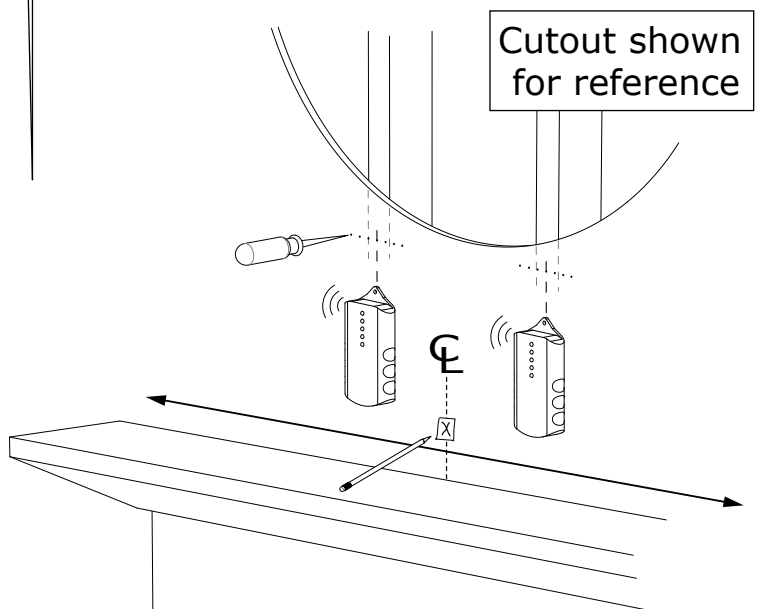


- 10** There are four lag bolt holes in the Wall Frame that can not be accessed while the Lifting Mechanism is in the up position. These holes are next to the center hole. If an installation requires access to these holes, the mount must be temporarily installed using other holes so that the mechanism can be pulled down and locked in place with the Safety Bolt and Safety Nut. See step 23. The mount can then be relocated to the correct area.



- 11** Measure the centerline of the mantle. Mark with tape on the wall.

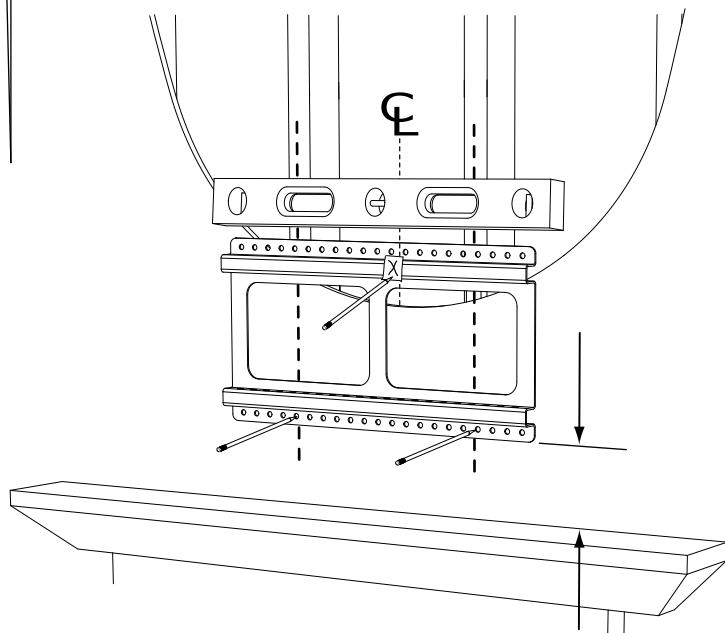
Locate at least two studs with a stud finder. Locate the center of these studs by using a sharp awl or finish nail poked through the drywall to locate each edge. Lag bolts must be installed into the CENTER of the studs.



- 12** Align the Wall Plate {32} to two studs above the mantle and position the height using the table in STEP 9. Level the Wall Plate. The Wall Plate might not be centered.

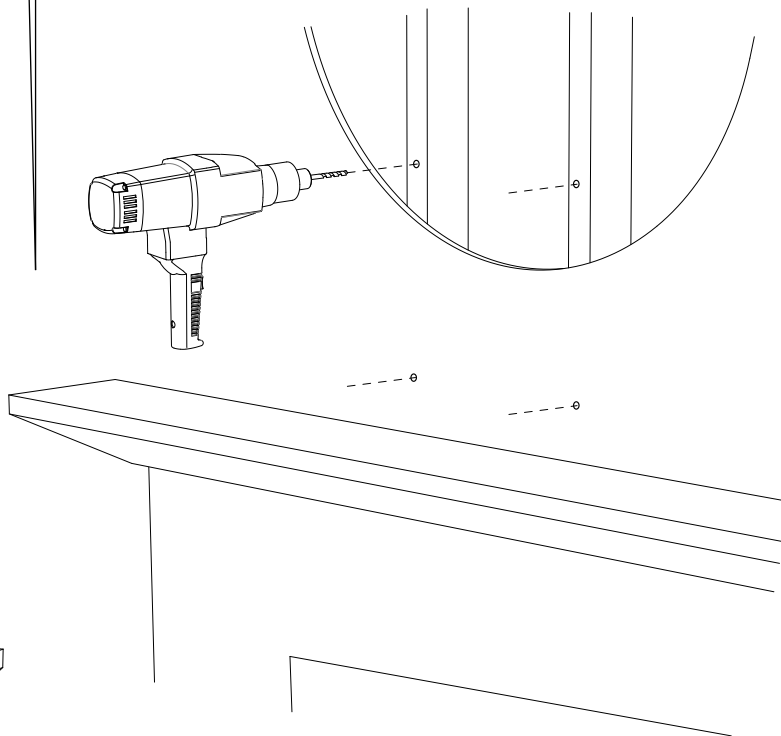
Mark the center line of the mantle onto the Wall Plate.

Mark the 4 spots for lag bolts directly onto the centers of the studs.

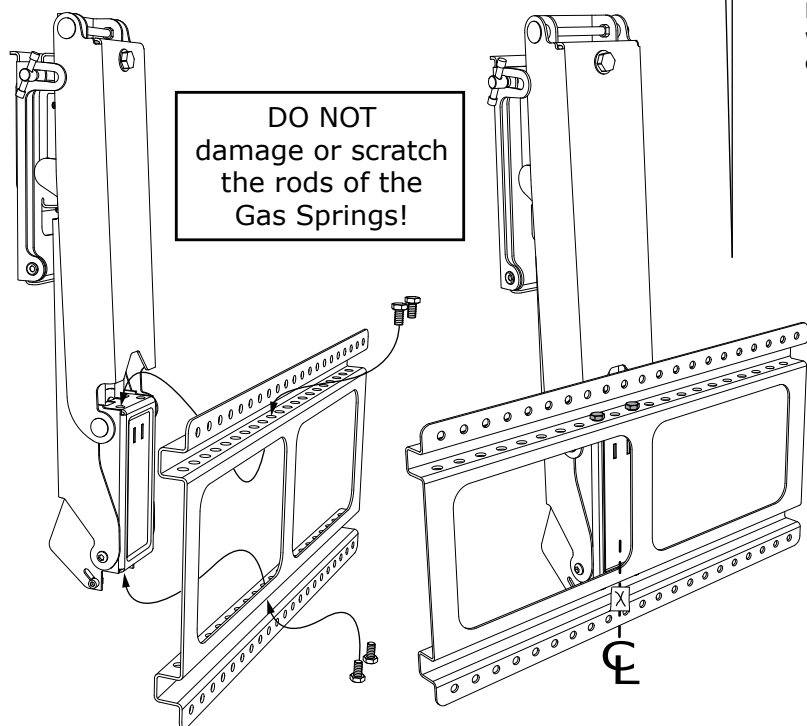


Minimum Height
from STEP 9

- 13** Pre-drill the 4 holes with 7/32" drill bit to a depth of 2.5 inches (65mm) including wall covering. Note: Wall covering (drywall) must not exceed 5/8" thickness.



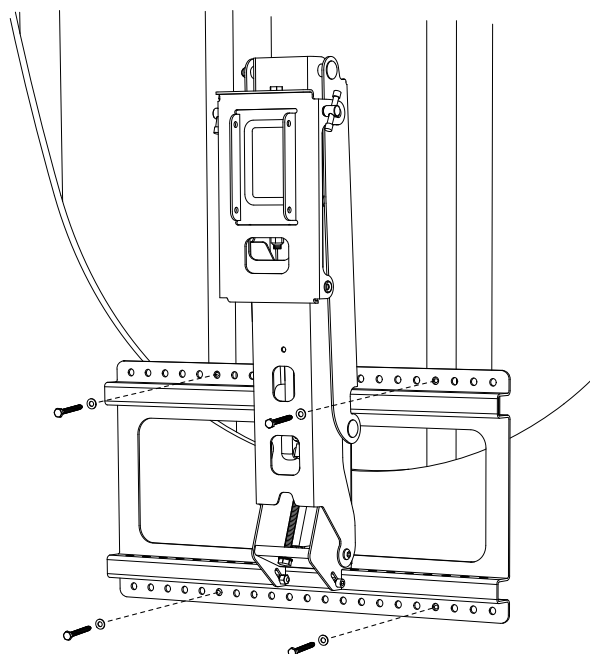
- 14** Align the center of the Lifting Mechanism {35} to the center mark on the Wall Plate {32}. Install 4 Bolts {14} through the back channels of the Wall Plate into the threaded holes of the Mechanism. Tighten Securely.



- 15** Attach the Wall Plate {32} using Lag Bolts {17} and Washers {11} directly into the centers of the studs.

⚠ CAUTION:

Do Not overtighten Lag Bolts {17}. Tighten only until the washers are firmly against the wall plate. Damage due to overtightening can cause property damage or injury.



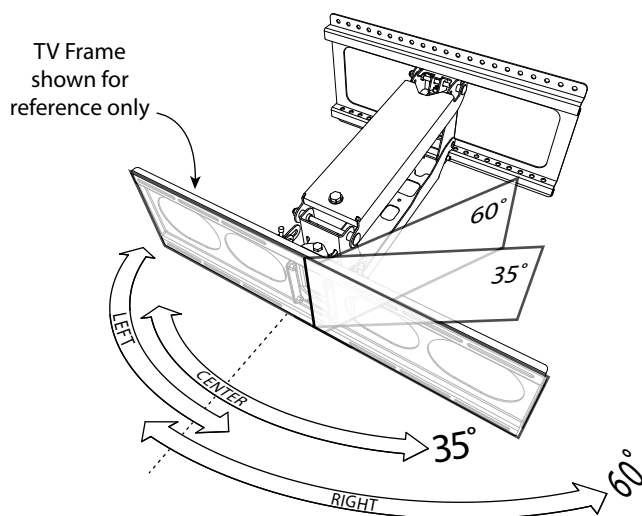
16 Determine the desired swivel setting:

MantelMount MM540 is designed to swivel 35° left and 35° right. Most TVs will reach the wall within this amount of swivel.

For situations where more swivel to one side is desired, MantelMount includes a Side Swivel Kit that will provide 60° of swivel in either the left or right direction, but not both. This situation is only for a small TV and a mounting situation that does not have a mantel.

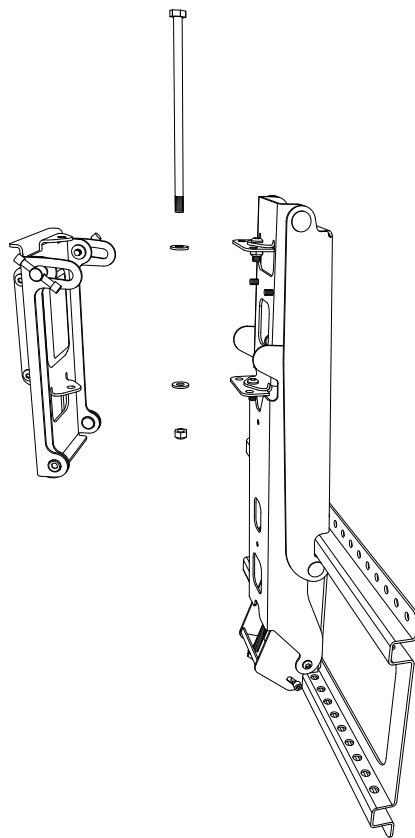
Note that the "Auto-Straightening" feature does not work with the Swivel Extenders; The TV will need to be manually flattened when raising it to the UP position.

If you do not need to add the Side Swivel Kit, skip ahead to Step 20.

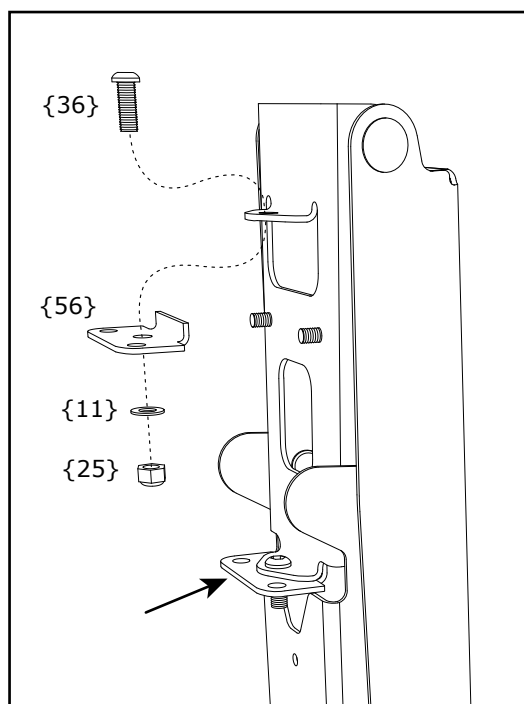


17 Installing the Side Swivel Kit:

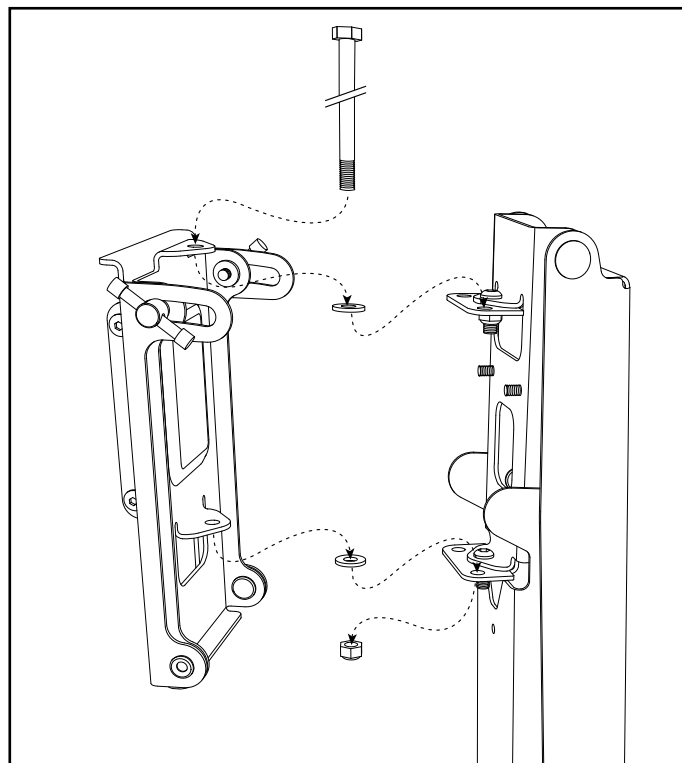
Remove the Swivel TV Plate (Item 34 in the Parts List). Save all of the hardware, it will be re-installed in the same order it is removed.



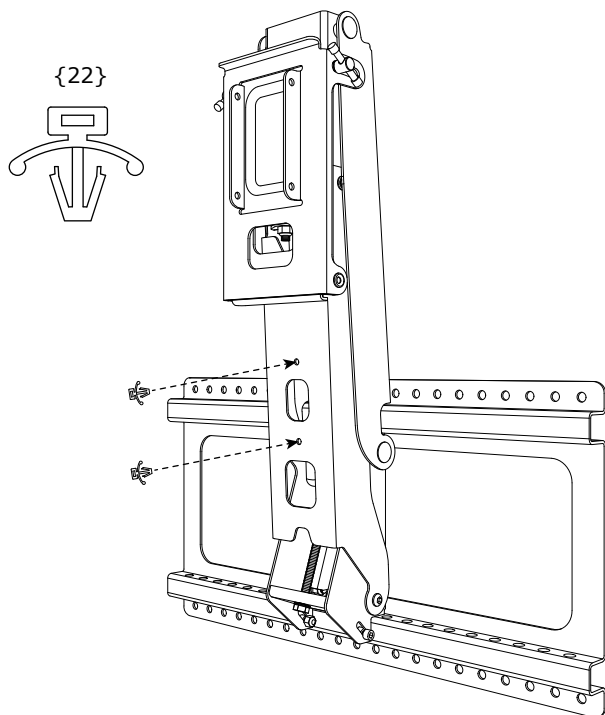
18 Install both Side Swivel Plates {56} onto the Lift Mechanism. The plates nestle underneath the existing tabs. The Screws {36} are installed in the center hole of each Side Swivel Plate.



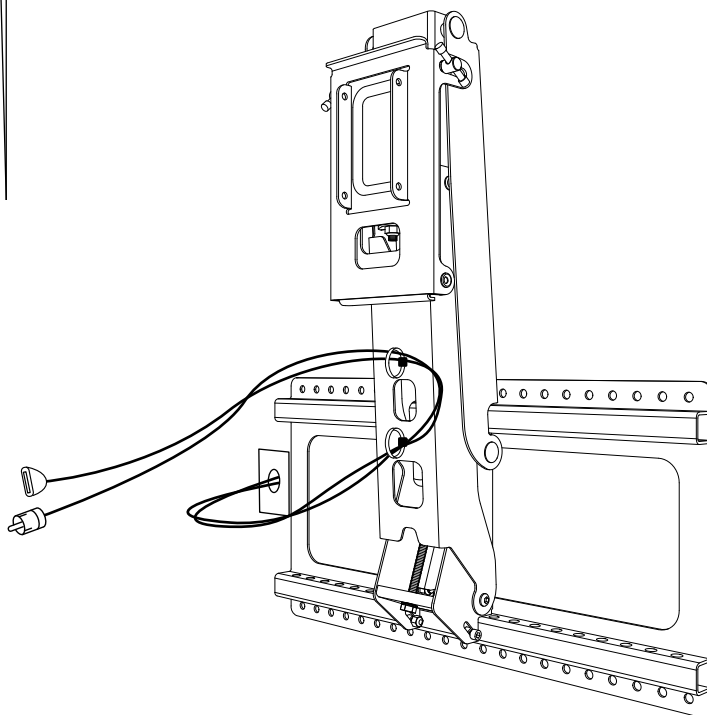
19 Re-attach the Swivel TV Plate onto the desired side of the Side Swivel Plates in the same order that each part came off.



- 20** Insert two Cable Tie Anchors {22} into the front holes in the Lower Arm of the Lifting Mechanism. Press firmly until flat.

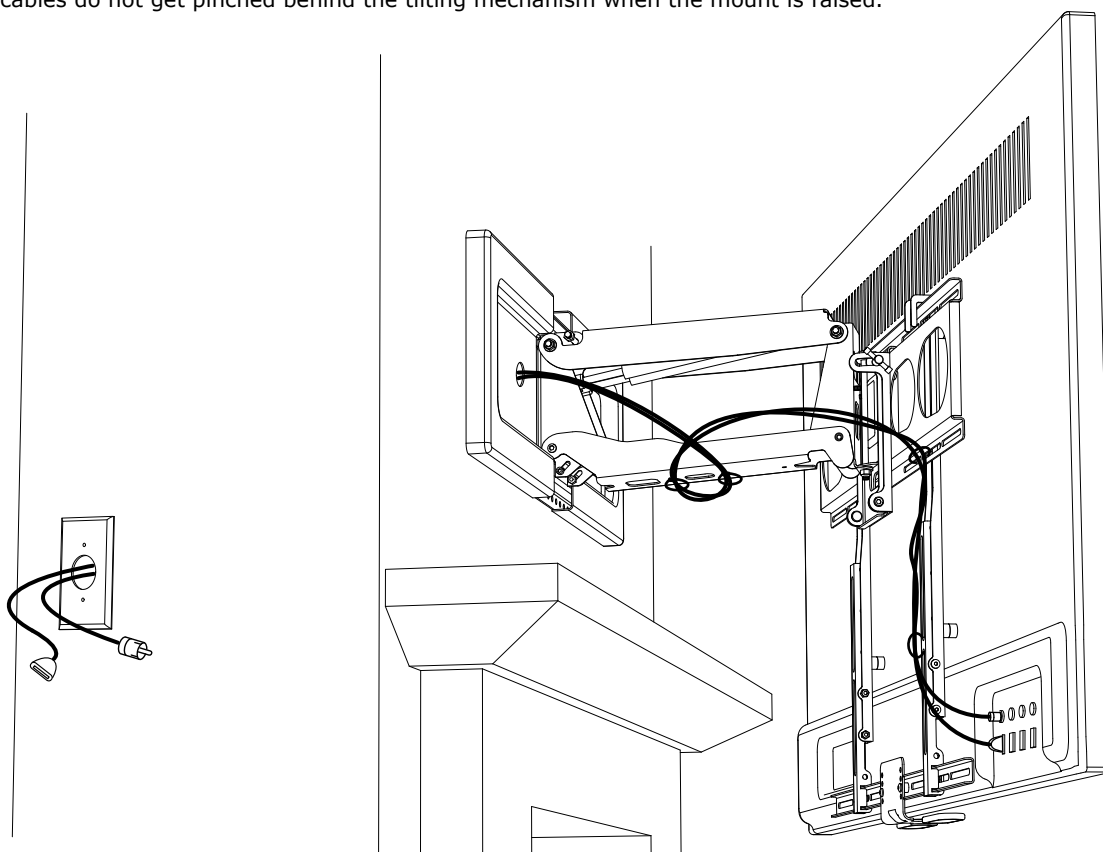


- 21** Shown below is the easiest way to attach cables. Use the included Cable Ties {24} to attach cables so they are sideways to the Lower Arm, making a gentle loop. Cables should be long enough to accommodate the extension and swivel of MantelMount. Check all ranges of motion before tightening the Cable Ties.



Reference Only: This is one possible configuration for the signal cables. Each segment of the cables has extra length so that the cables are not stressed or kinked when the mount is moved.

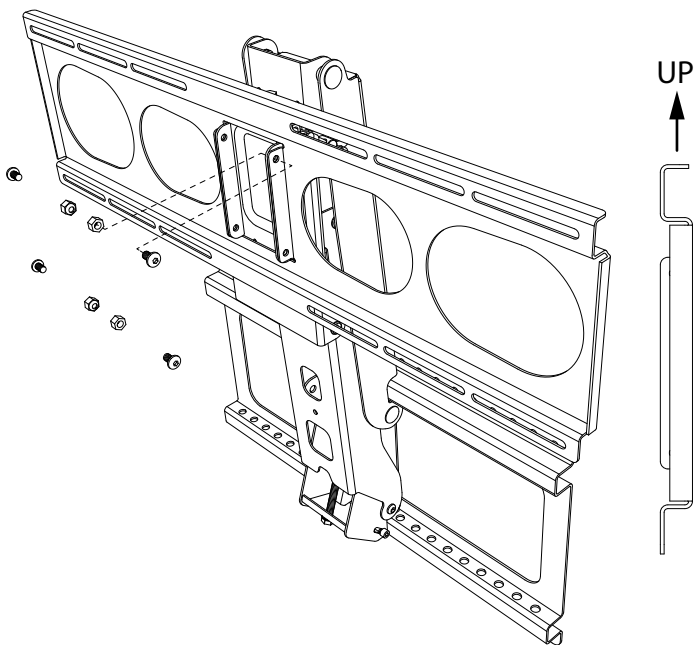
Ensure that cables do not get pinched behind the tilting mechanism when the mount is raised.



22

Install the TV Brace {33} to the Lifting Mechanism {35}.

Level the TV Brace and tighten the 4 screws {15} and Locknuts {23}.

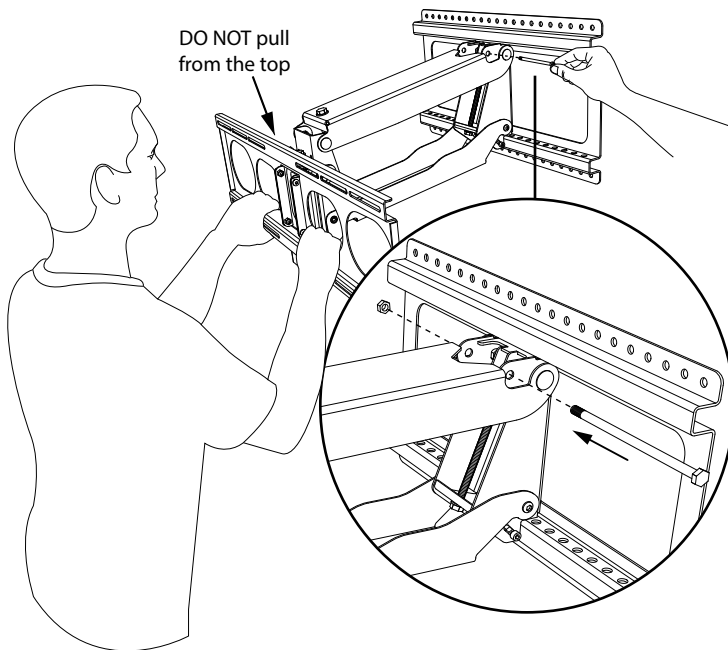


23



THIS STEP REQUIRES TWO PEOPLE

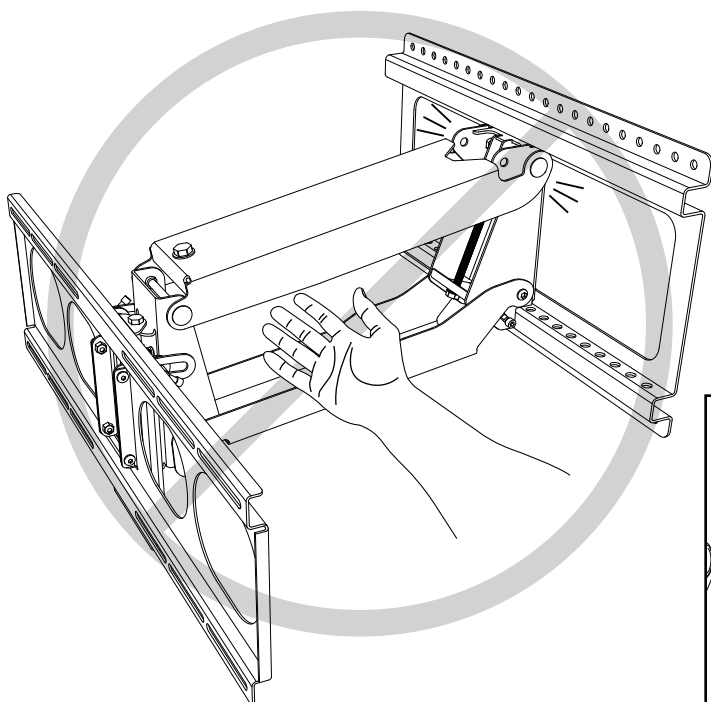
Firmly pull down the bottom of the TV Brace until the Lifting Mechanism is in a horizontal position. **DO NOT HIT THE MANTLE!** The second person must insert the Safety Bolt {20} through the Safety Hole in the Wall Bracket and install the Safety Nut {27}. Slowly release the TV Brace. The Lifting Mechanism should stay at a horizontal position.



24

⚠ WARNING:

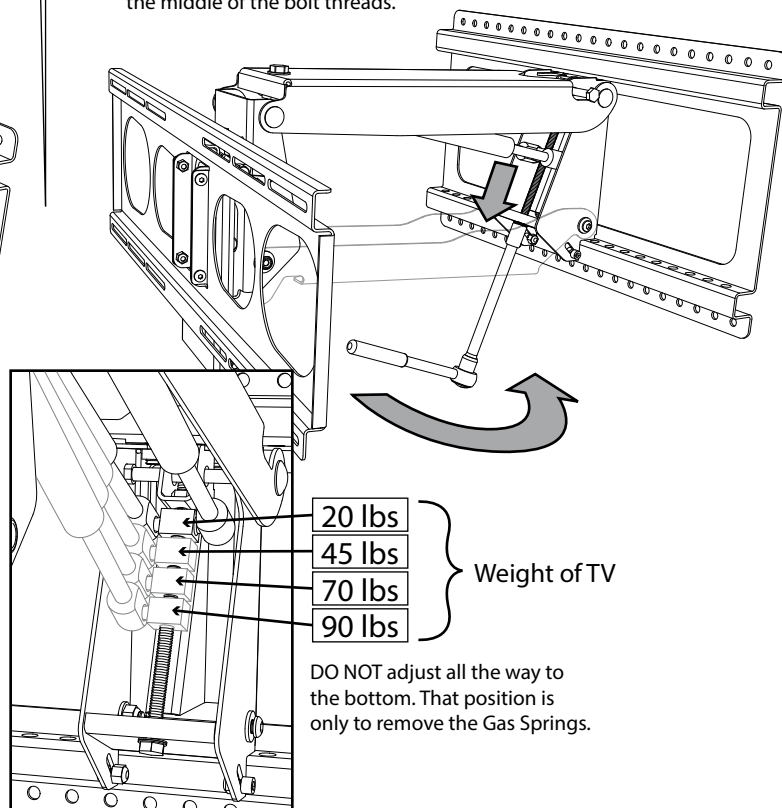
Do Not put hands into Lifting Mechanism without the Safety Bolt and Safety Nut installed. The power of the Lifting Mechanism can cause bodily injury!



25

PRE-SET THE LIFTING FORCE:

Turn the main bolt **CLOCKWISE** (while looking at the head of the bolt from underneath) as shown to pull the Gas Springs **DOWN** for heavy TVs. Rotate the bolt the other way for less lifting force for lighter TVs. See the diagram below for a Pre-Set estimate for the Gas Springs. The lightest lifting force is at the top, and the heaviest is down just below the middle of the bolt threads.



20 lbs

45 lbs

70 lbs

90 lbs

Weight of TV

DO NOT adjust all the way to the bottom. That position is only to remove the Gas Springs.

26



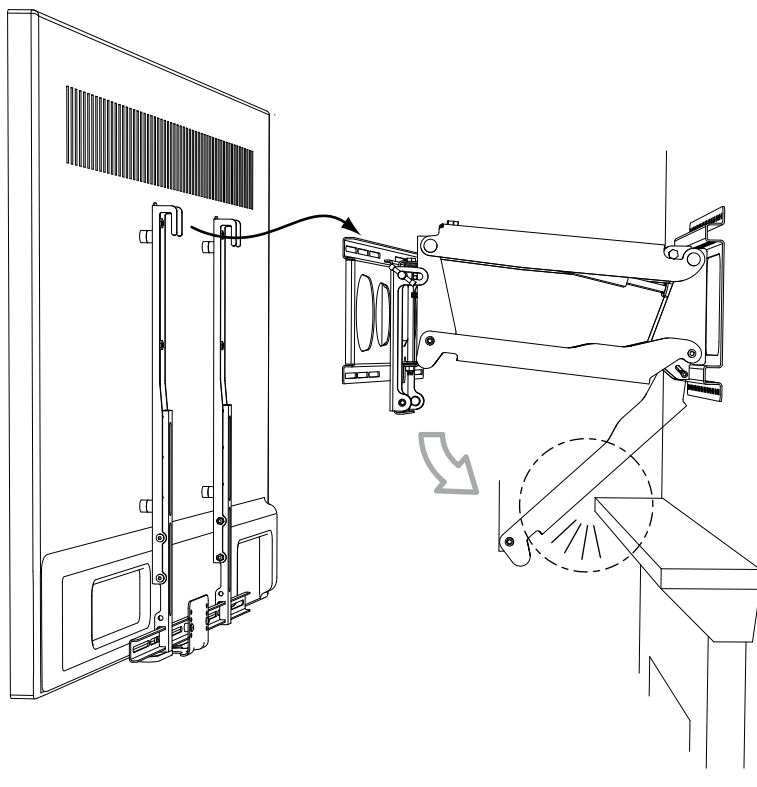
THIS STEP REQUIRES TWO PEOPLE

Carefully hang the Television onto the TV Brace making sure that all four hooks on the Vertical Braces {31} engage the TV Brace.

DO NOT allow the Television to drop far enough to cause the Lifting Mechanism {35} to hit the mantle.

MantelMount comes pre-adjusted to reduce the possibility of contacting the mantle, but you should always be prepared to remove the television at this stage to make the proper correction.

If the Lifting Mechanism {35} appears to be too close to the mantle, remove television. Go to STEP 29 and make an adjustment to the Bottom Stop position. Repeat this process until the Lifting Mechanism is a safe distance from the mantle when the TV is installed.

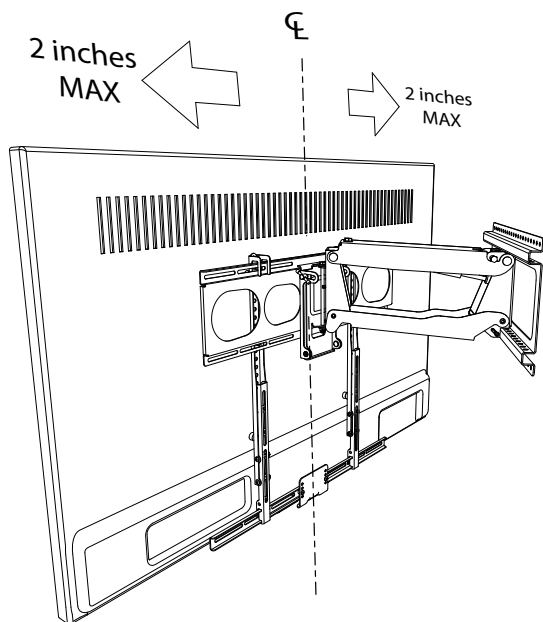


27

Center the TV on the TV Frame and check it with a level. Carefully slide the TV sideways, if required, until it is balanced and horizontal, up to a MAXIMUM OF 2 INCHES left or right.

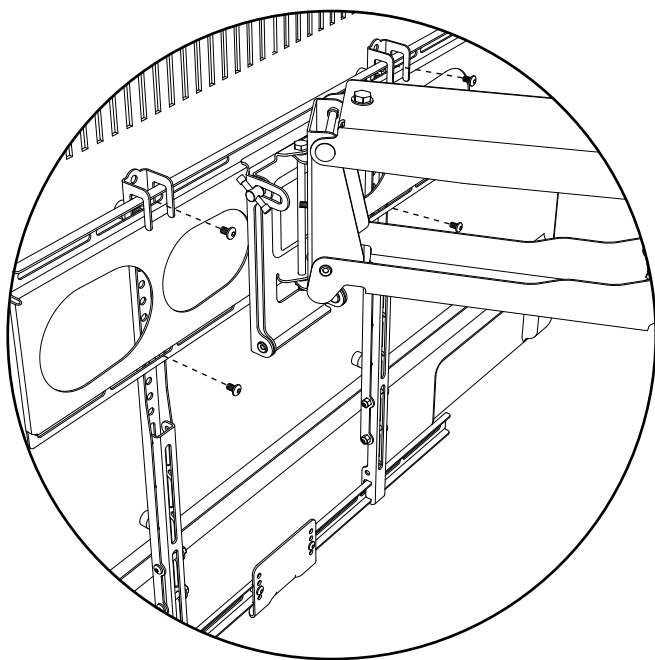
The TV would only need to be moved off-center if it has an unbalanced weight. These are usually older, heavier TVs.

If the TV needs to be moved sideways and is visually too much off-center above the mantle, remove the TV and relocate the Wall Plate {32} an equal distance but in the opposite direction of the TV in order to compensate.



28

Install 4 Screws {15} through the TV Brace {33} and into the Vertical Braces {31}.

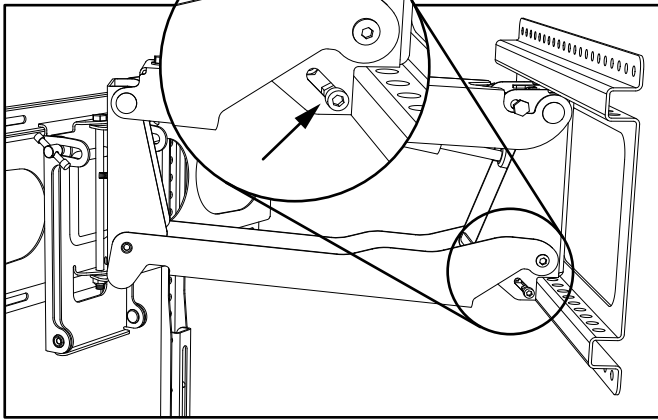
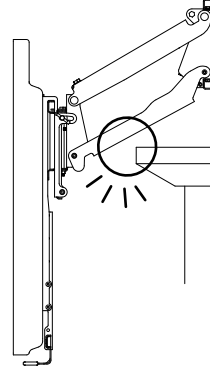


Adjusting for Travel Stops and Television Weight:

- 29 Adjusting the Bottom Stop Position:**
Loosen the Locknuts and adjust the Bottom Stop screws to the desired stopping position.

There is one screw on each side of the Lifting Mechanism. Make sure to balance both sides evenly so the TV is level in the DOWN position.

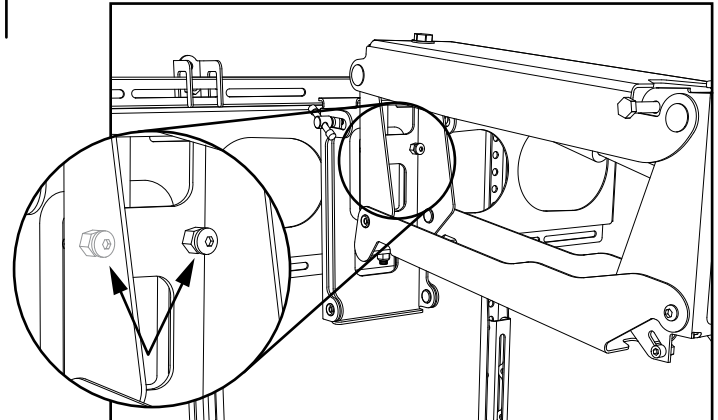
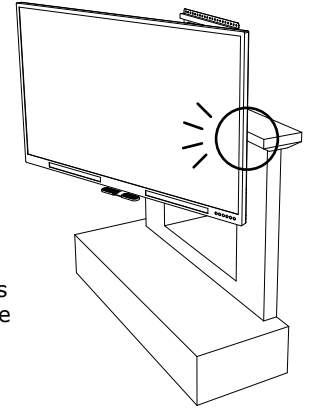
Tighten both locknuts after the adjustments are made.



- 30 Adjusting the Side Swivel Stop Positions:**
Loosen the Locknuts and adjust the Swivel Stop screws to the desired stopping positions, both left and right.

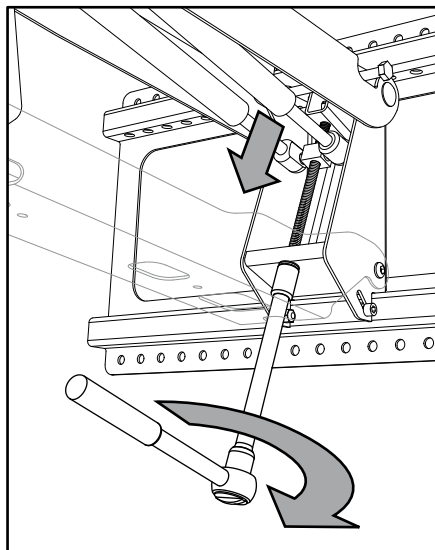
Tighten both locknuts after the adjustments are made.

Note: If no swivel is desired, it may be necessary to remove the locknuts and re-attach them on the other side of the Swivel Bracket so that the Screws can be threaded out to their maximum length.

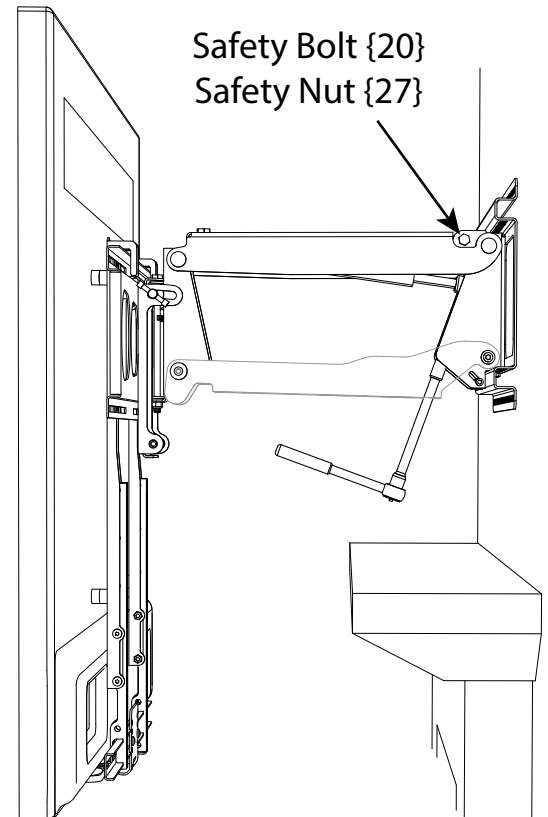


- 31 Adjusting for Television weight:** With Safety Bolt {20} in place, use a socket wrench with an extension to adjust the long bolt inside the Lifting Mechanism {35}. Turn the bolt clockwise (AS SHOWN BELOW) to pull the Gas Springs down and increase the lifting force for heavy TVs, or turn counter-clockwise for lighter TVs. This adjustment can take several turns. (Reference Step 25.)

Adjust the bolt until the TV gently stays in the lowered position. Move the TV up and down within the range below the Safety Bolt. The TV should almost stay up against the Safety Bolt, but should be easily lowered to the Bottom Stop.



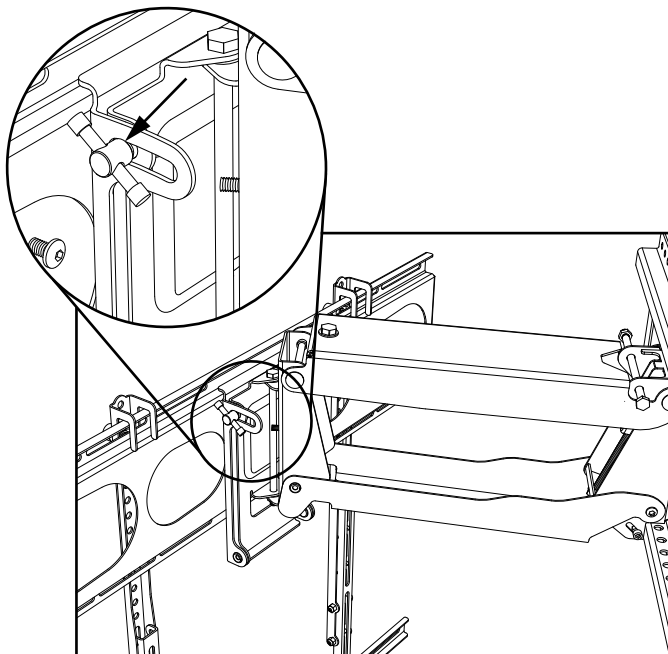
Safety Bolt {20}
Safety Nut {27}



32 Adjusting the Vertical Tilt Position:

There are two sliding knobs, one on each side of the Tilt Mechanism, used to set the tilt of the TV. Slightly loosen the knobs and position the TV to the desired tilt, then tighten the knobs.

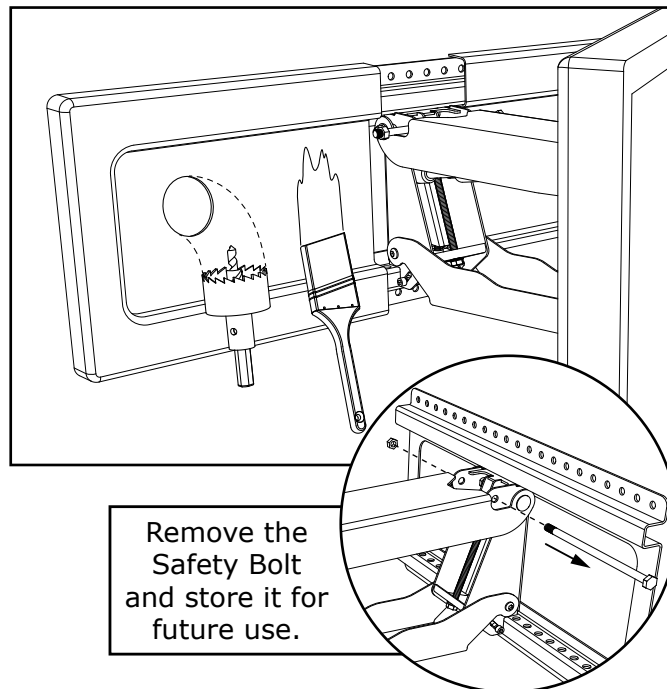
The tilt will stay at the same angle while the mount is raised and lowered, until it is manually changed.



33

For wiring inside the Wall Frame, use a Hole Saw drill bit to cut a hole through a Wall Cover {57}. Be careful not to damage the edge around the hole. For best results, support the Wall Cover with scrap wood behind the drilling area.

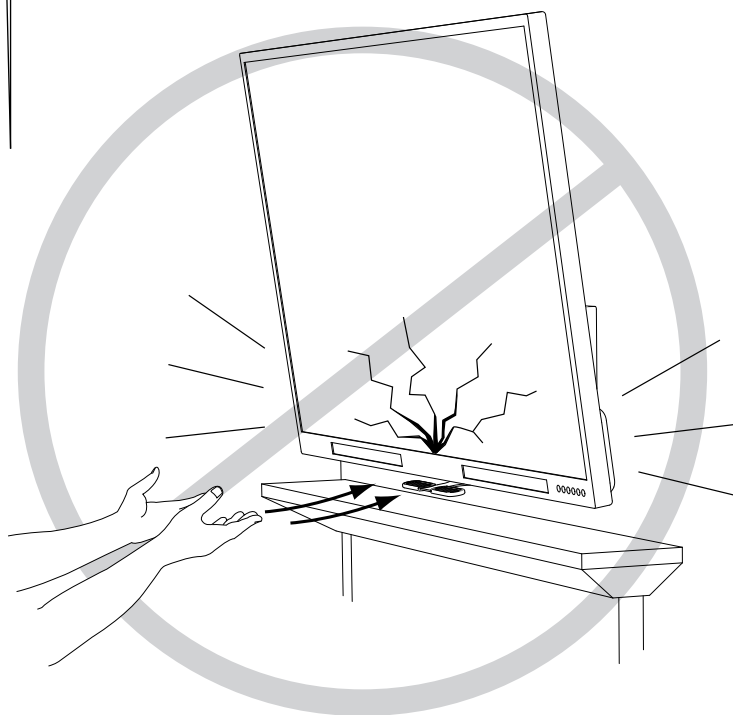
Paint the Wall Covers {57} if desired and then snap them onto the Wall Frame. The Safety Bolt can now be removed.



Remove the Safety Bolt and store it for future use.

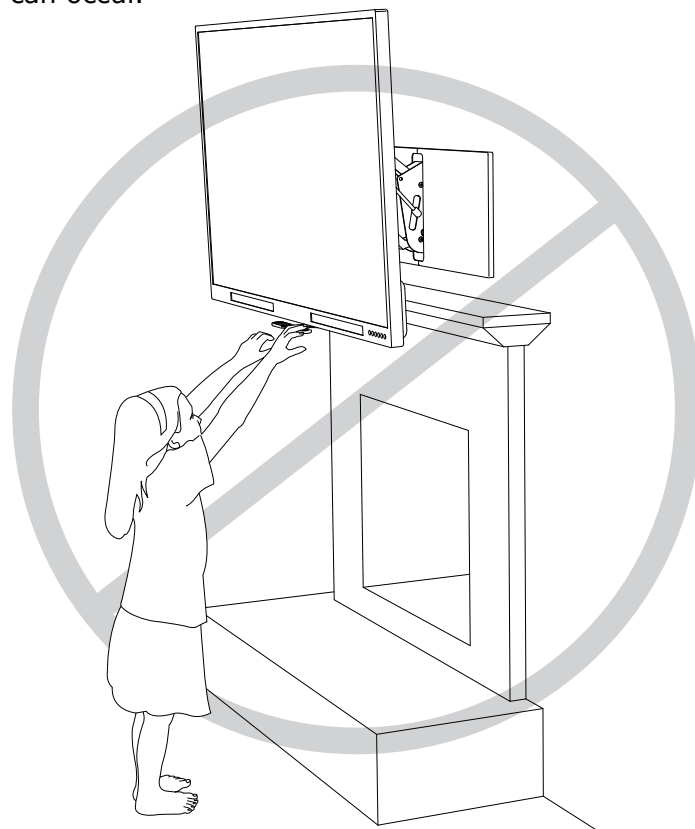
! CAUTION:

Never release the handle before it is fully upright. MantelMount is strongest in the top position, and allowing it to slam closed can damage televisions. Always control the lifting process.



! CAUTION:

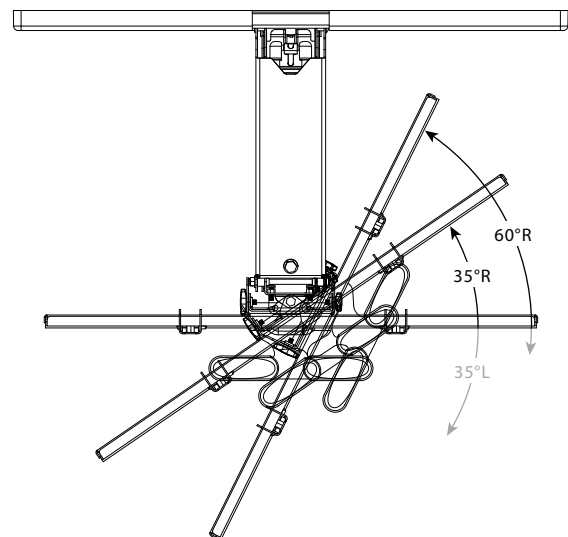
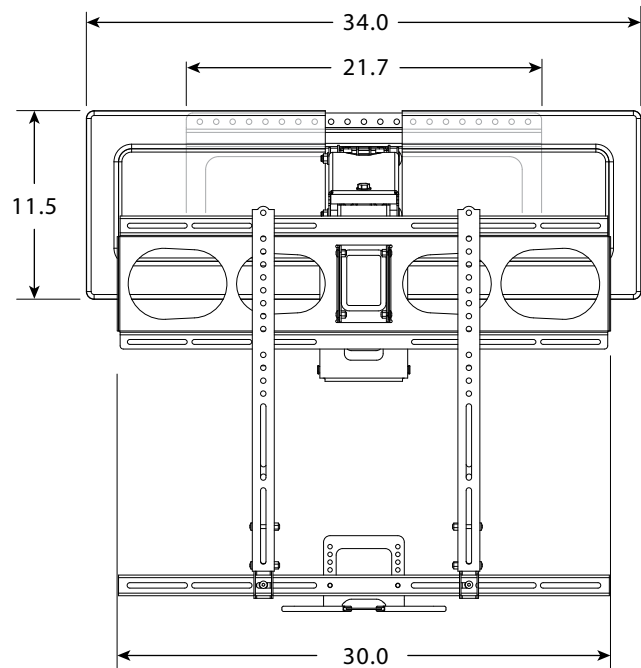
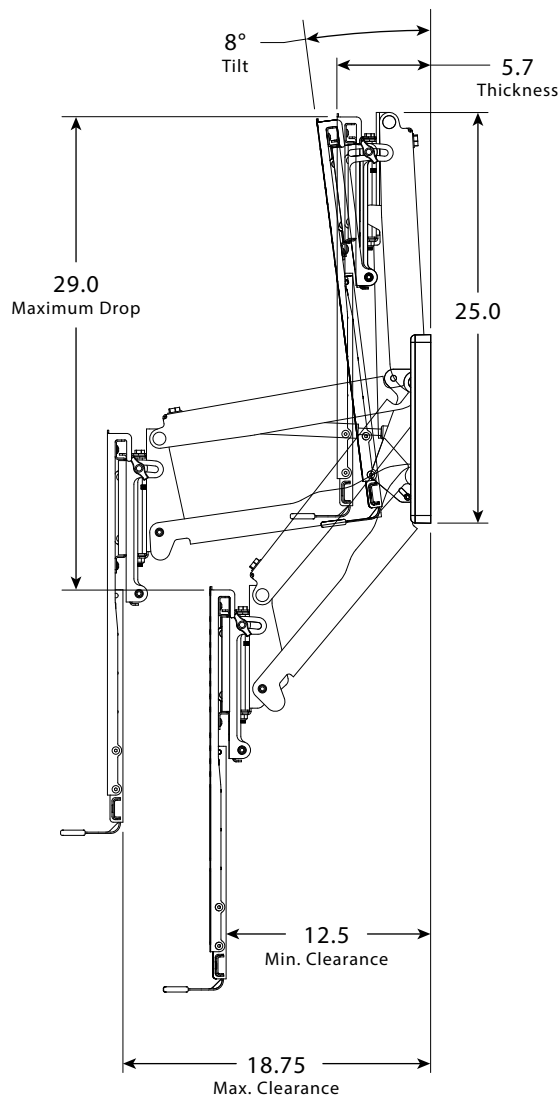
Never allow children to play around or operate MantelMount. Property damage or personal injury can occur.



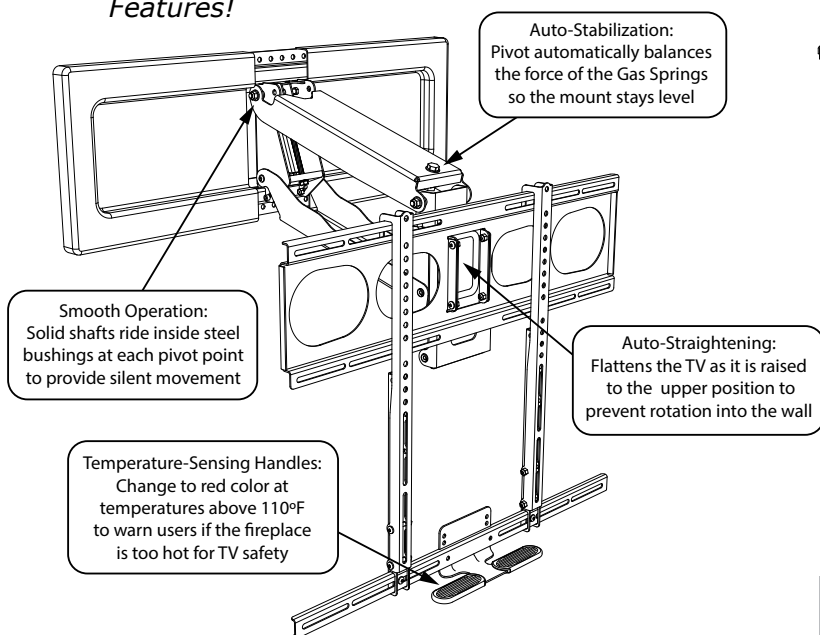
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
31	14038	TV Vertical Brace	2
32	14010	Wall Frame	1
33	14030	TV Frame	1
34	14049	Swivel TV Plate	1
35	14036	Wall Bracket, Welded	1
36	12179	Round Screw M8 x 20	4
37	14120	Spacer Bushing	2
38	12160	Gas Spring	2
39	14043	Upper Arm, Welded	1
40	14018	Lower Arm	1
41	14142	Hex Bolt M8 x 150, Drilled	1
42	14115	Sliding Block	1
43	13033	Pivot Spring Mount	1
44	12257	Pivot Spring Shaft	1
45	12247	Disk Spring Washer M8	2
46	14130	Hex Bolt M10 x 30	1
47	12185	Nut M6	2
48	12253	Round Screw M6 x 20	2
49	12240	Tilt Knob M6	2
50	14051	Tilting Swivel TV Plate	1
51	14155	Tilt Nut	2
52	12261	Rivet 10 x 5	2
53	14062	Center Handle	1
54	12222	Handle Rubber, Temp Change	2
55	14060	TV Horizontal Brace	1
56	14047	Side Swivel Extender Plate	2
57	14152	Wall Cover	2
58	14118	Sleeve	1
59	MM500M	Instruction Manual	1

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	12189	M5 x 12	4
2	12190	M5 x 30	4
3	12191	M5 x 40	4
4	12193	M6 x 16	4
5	12194	M6 x 30	4
6	12195	M6 x 40	4
7	12197	M8 x 15	4
8	12198	M8 x 25	4
9	12199	M8 x 45	4
10	12166	Washer M6	6
11	14126	Washer M8 x 2	16
12	12122	Spacer	8
13	14137	Washer M8 x 1 x 12	1
14	14135	Hex Bolt M8 x 15	4
15	12178	Round Head Screw M6 x 10	12
16	14132	Carriage Bolt M8 x 120	2
17	12154	Lag Bolt M8 x 60	4
18	12255	Round Head Screw M6 x 40	4
19	14112	Flange Bushing	4
20	12283	Hex Bolt M8 x 175	2
21	12174	Cap Screw M6 x 10	2
22	14110	Cable Tie Anchor	2
23	12183	Locknut M6	10
24	12162	Cable Tie	4
25	12187	Locknut M8	7
26	14025	Swivel Bracket	1
27	12186	Nut M8	2
28	12250	Rivet 10 x 7	2
29	14128	Washer M10	5
30	14056	Brace Extender	2

Customer Service:
(800)-897-9755
www.MantelMount.com



Exclusive MantelMount Features!



Full Manufacturer Warranty:
MantelMount will replace or repair any product or part that proves defective due to improper workmanship or material during the warranty period. Visit www.MantelMount.com for details.

This Installation Manual is available for download as a PDF document at www.MantelMount.com. The PDF version can be used to see larger images or to zoom in for much greater detail.