



MM340 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:

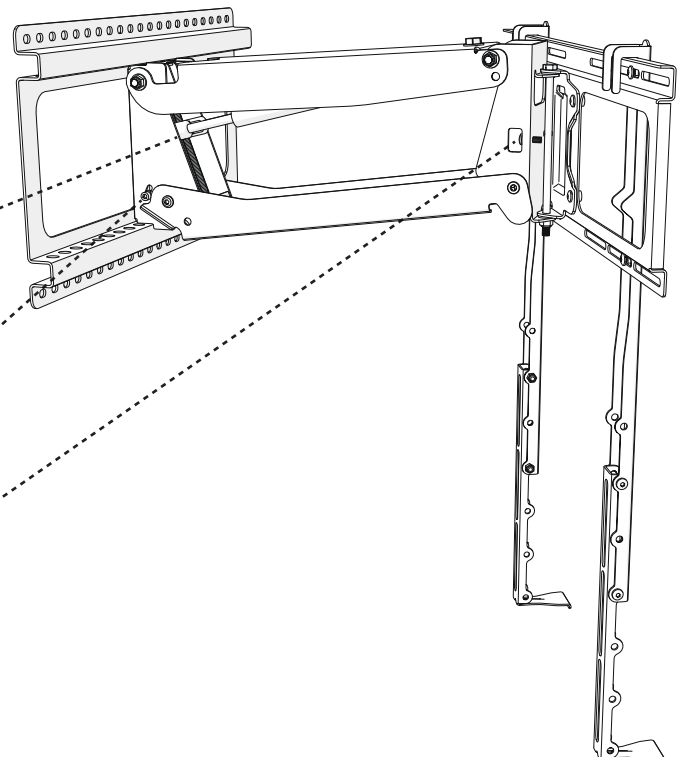
MantelMount MM340 has three different adjustments that must be made after the installation is complete in order to operate properly.

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

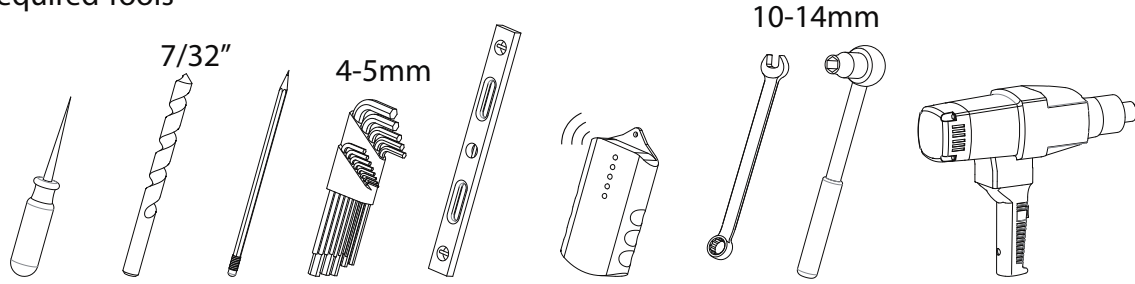
The bottom travel stop is adjusted with two screws and locknuts so the TV and mount do not lower all the way into the mantel.

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

U.S. Pat. No. 8,864,092



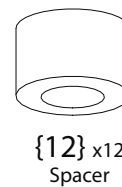
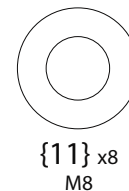
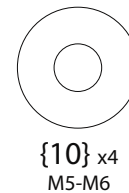
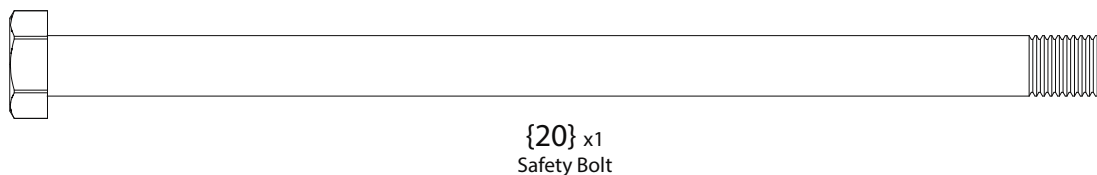
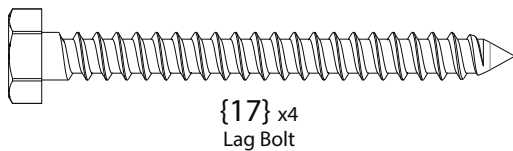
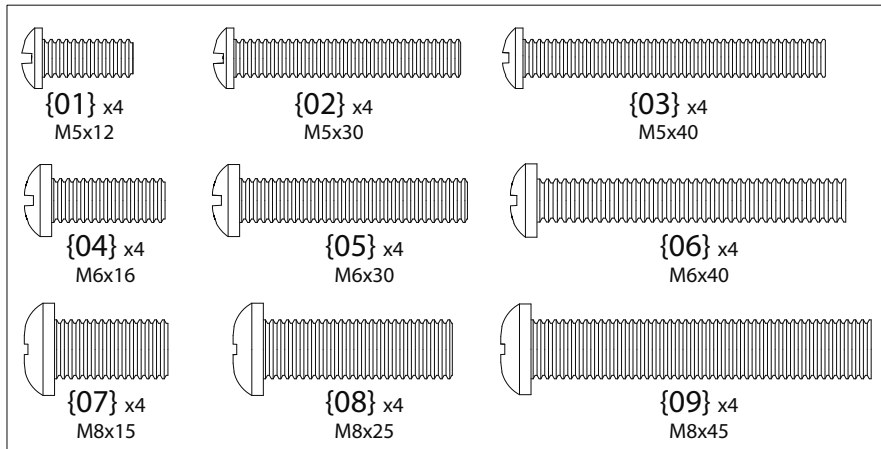
Required Tools



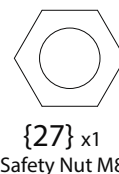
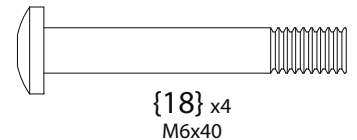
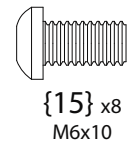
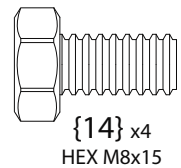
Before you begin, please verify that all components are included and undamaged. If any parts are missing or damaged, contact MantelMount. Never proceed with missing or damaged parts!

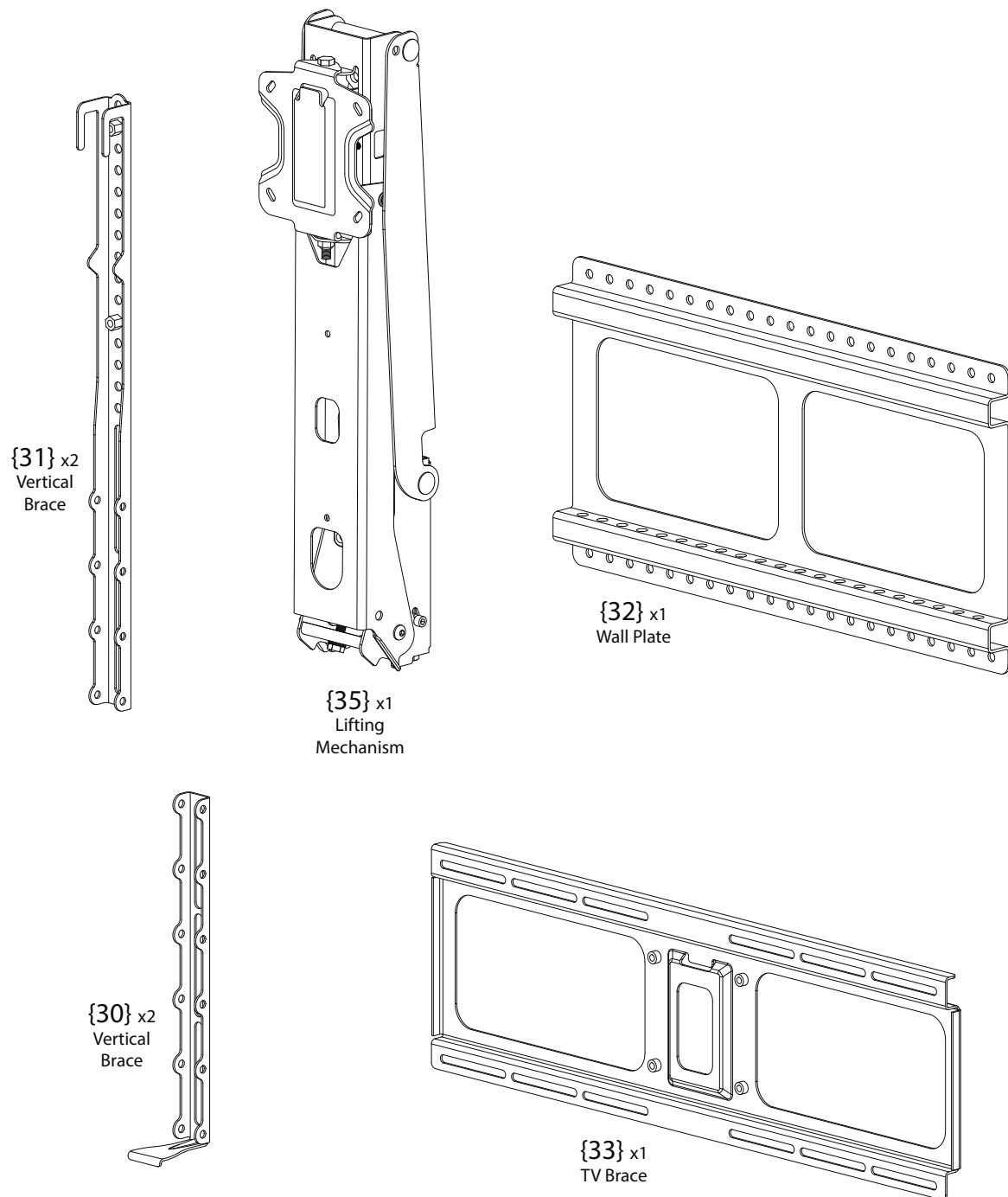
Lay out all components and make sure you identify that each one has a match in the diagram. Some of the parts included will not be used during installation. Do not proceed if you do not understand and identify all of the components.

Silver Screws for back of TV



Black Parts for Mount





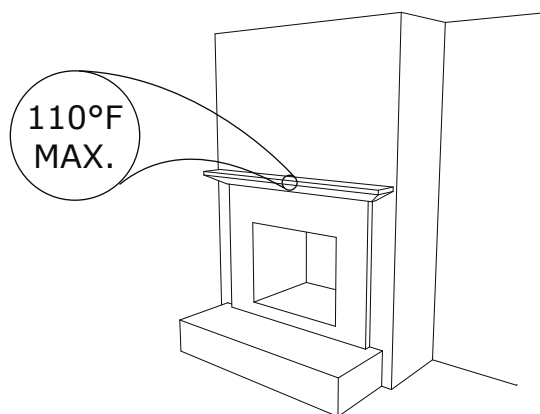
Full Manufacturer Warranty: MantelMount will replace or repair any product or part that proves defective due to improper workmanship or material during the warranty period. Visit www.MantelMount.com for details.

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.

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

A

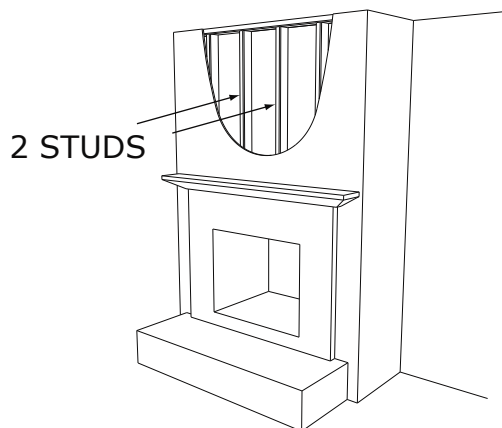
MantelMount is designed for use only with decorative fireplaces that are not the primary heat source for a house. Temperature at the front edge of mantle should never exceed 110° F.



B

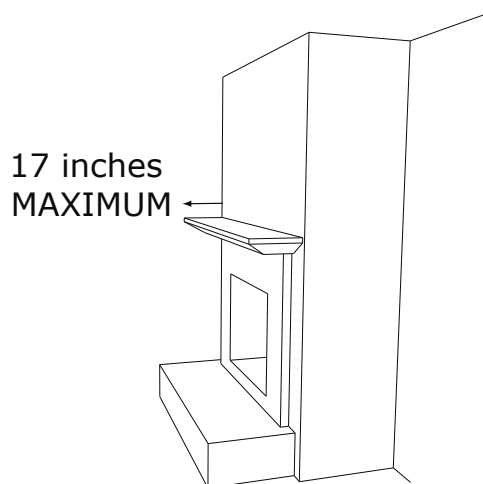
Wall must be WOOD STUD FRAME only. There must be at least 2 studs available for mounting. Wall covering must not exceed 5/8 inch thick.

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.

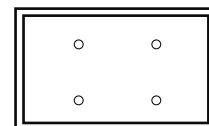
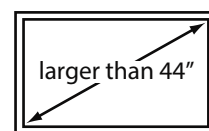
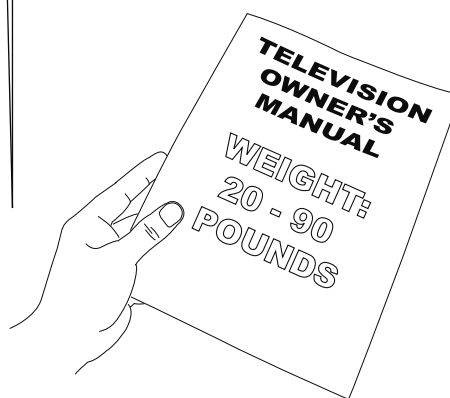


D

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

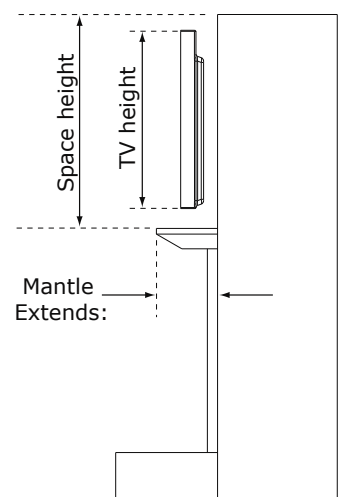
Width: 200-600mm
Height: 200-600mm

E

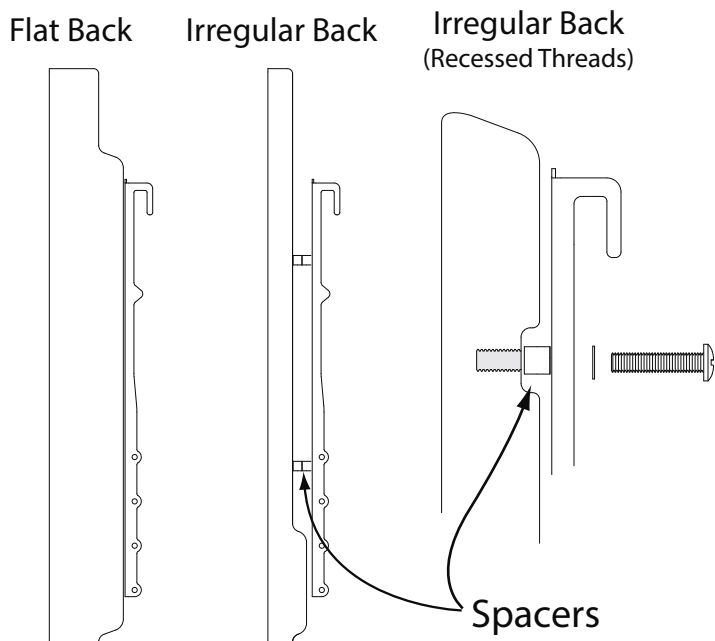
The space above the mantle must be taller than the TV. The required space depends on how far out the mantle extends. Refer to chart below and add this additional height to the TV height to determine if space is tall enough.

TV height must include the height of the Sound Bar if one is being used.

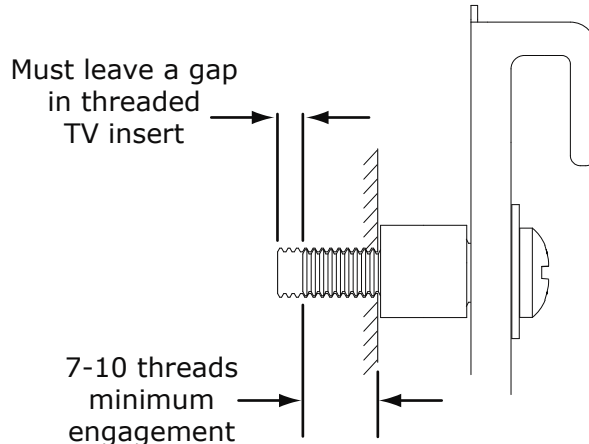
If mantle extends:	This is required space height:
Less than 9 inches	TV height plus 4 inches
9 - 11 inches	TV height plus 5 inches
11 - 14 inches	TV height plus 6 inches
14 - 17 inches	TV height plus 8 inches



- 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.



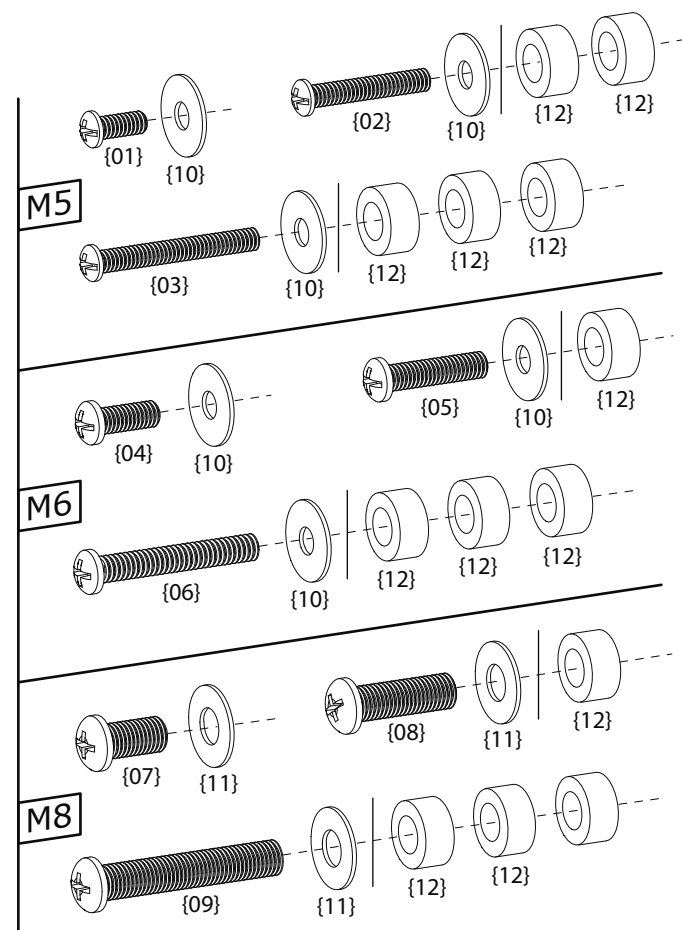
- 2 Choose the correct screw diameter and length for the TV. Hand-thread screw combination into the TV to ensure there is adequate thread engagement without hitting the bottom of threaded insert. Use only minimum amount of spacers (if required).



CAUTION:

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

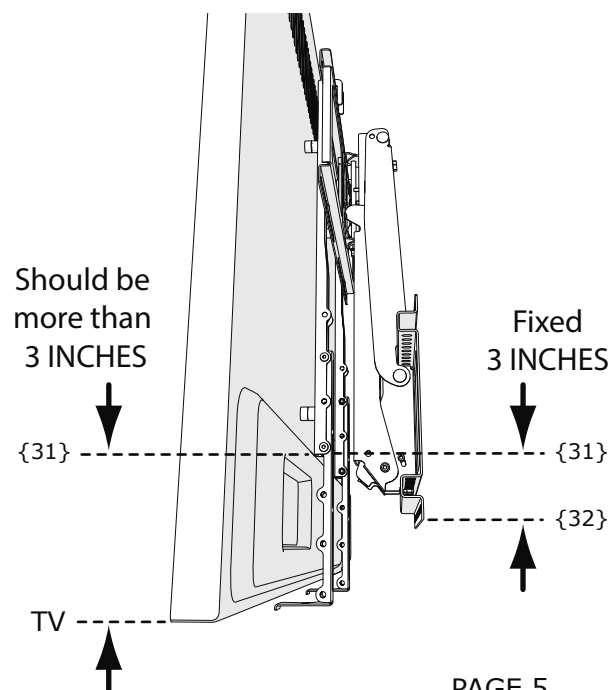
- 3 Possible Screw Combinations shown with **maximum** spacer usage (if spacers are required).



- 4 IMPORTANT INFORMATION: The Vertical Braces {31} are a fixed distance (3 inches) higher than the bottom of the Wall Plate {32}. Always mount the Vertical Braces at least 3 inches up from the bottom of the TV so that the TV will hide the mount when it's in the UP position.

If you want to locate the TV at a specific height, you can use this relationship to calculate the exact location for the Wall Plate {32} on the wall. Simply subtract 3 inches from the distance you end up with when you attach everything to the TV - including a sound bar if one is attached.

EXAMPLE: If the Vertical Braces {31} are 8 inches above the bottom of the TV, then the Wall Plate {32} will be 5 inches higher on the wall than the TV will be.



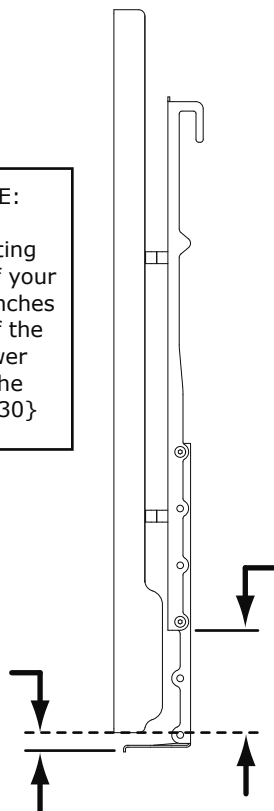
- 5** The Vertical Braces {31} are always mounted higher than the bottom of the TV.
The Brace Extenders {30} will be mounted so that the handles are slightly below the TV.

IMPORTANT NOTE:

If the lower mounting holes on the back of your TV are less than 3 inches from the bottom of the TV, attach the lower screws through the Brace Extenders {30}

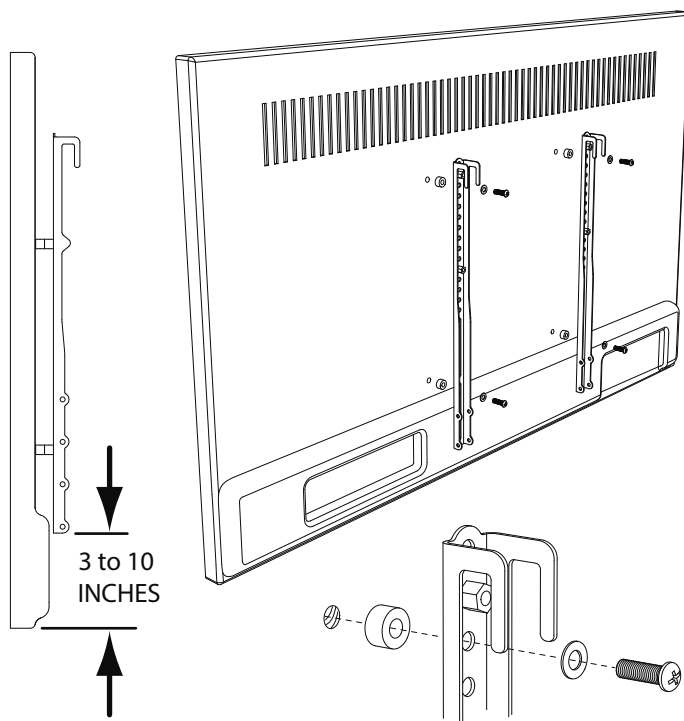
Extenders are installed so that the handles are 1" below the TV.

Vertical Braces: Always higher than the bottom of the TV

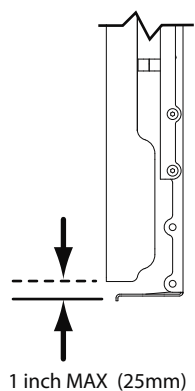


- 6** Attach the Vertical Braces {31} to the TV so the bottoms of the Vertical Braces are at least 3 inches higher than the bottom of the TV. Centered on the TV is ideal.

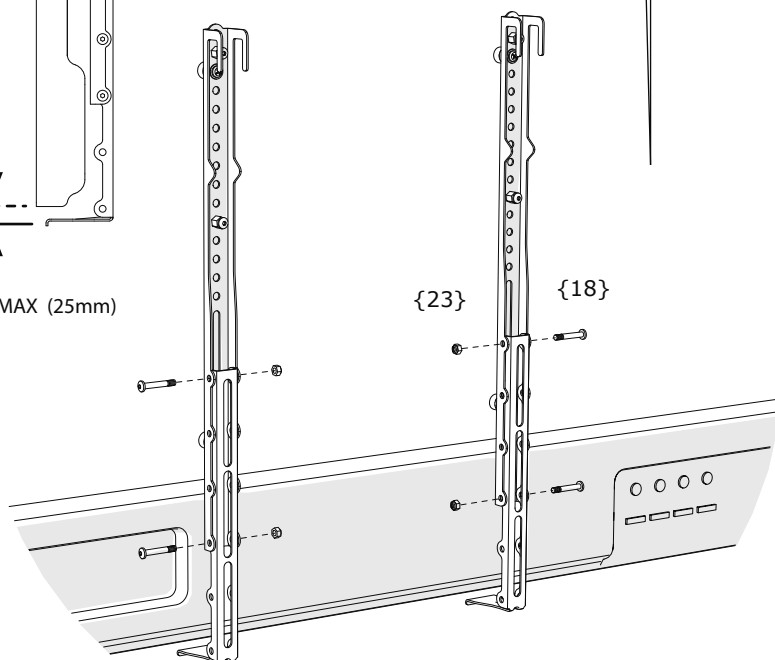
Installing the Vertical Braces at least 3 inches above the bottom of the TV will ensure that the TV covers the mount when the TV is in the raised position.



- 7** Attach the Extenders with Screws {18} and Nuts {23}, making sure the handles are within one inch from the bottom of the TV.

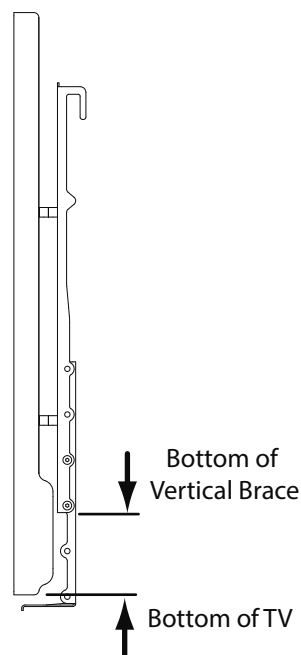


1 inch MAX (25mm)



- 8** Measure the distance from the bottom of the Vertical Braces {31} (not the Extenders) to the bottom of television (not the handles).

Write down this distance to use in Step 9.



Use this distance 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.

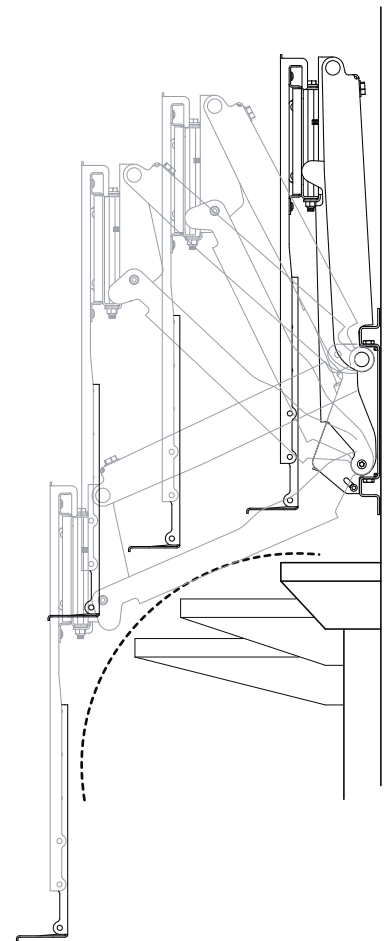
NOTE: If the available wall space above the mantle is close to the required space in the table from "Requirement E" (due to the ceiling, for example) then it is important to use the exact dimensions from this chart. However, if the available wall space above the mantle is much taller than required, then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

USE THIS CHART FOR INSTALLATION STEP 12:

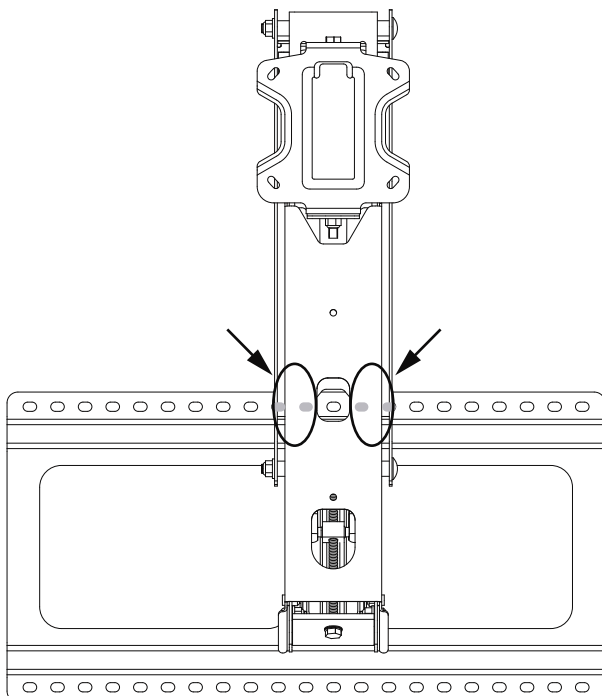
If your mantle extends:

Required Installation Height:

Less than 9 inches	Add zero to the distance from Step 8
9 - 11 inches	Add 1 inch to the distance from Step 8
11 - 13 inches	Add 2 inches to the distance from Step 8
13 - 15 inches	Add 4 inches to the distance from Step 8
15 - 17 inches	Add 7 inches to the distance from Step 8



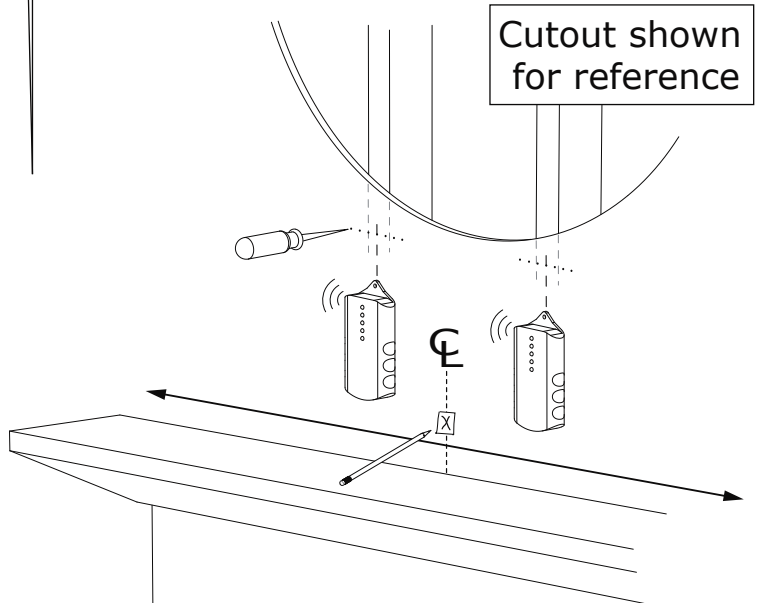
10 There are four lag bolt holes in the Wall Plate that can not be accessed while the Lifting Mechanism is in the up position. These holes are next to the center hole. If an installation requires access to these holes, the Wall Plate must be temporarily installed using other holes so that the mechanism can be pulled down and locked in place with the Safety Bolt and Safety Nut. See step 19. The Wall Plate can then be relocated to the correct area.



MantelMount MM340

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

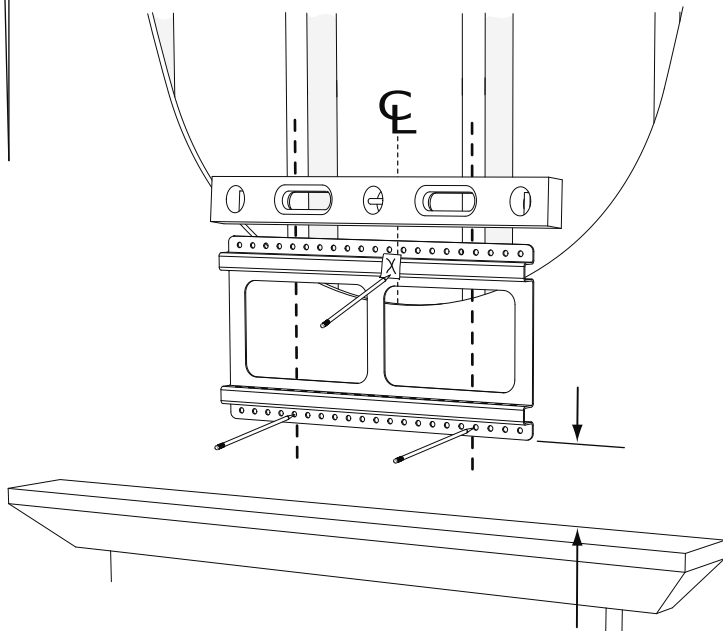
Locate at least two studs with a stud finder. Locate the center of these studs by using a sharp awl or finish nail poked through the drywall to locate each edge. Lag bolts must be installed into the CENTER of the studs.



- 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.

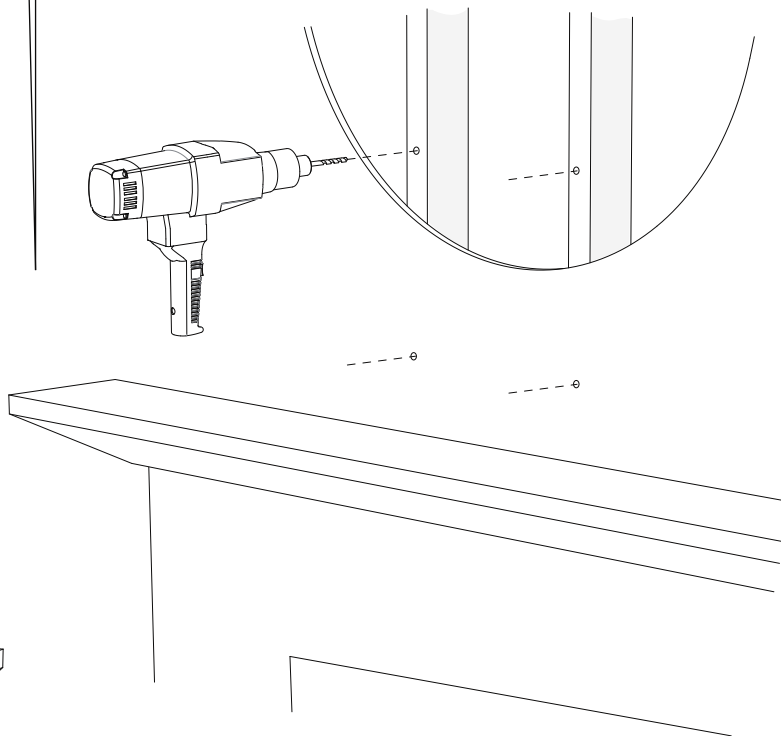
Mark the center line of the mantle onto the Wall Plate.

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

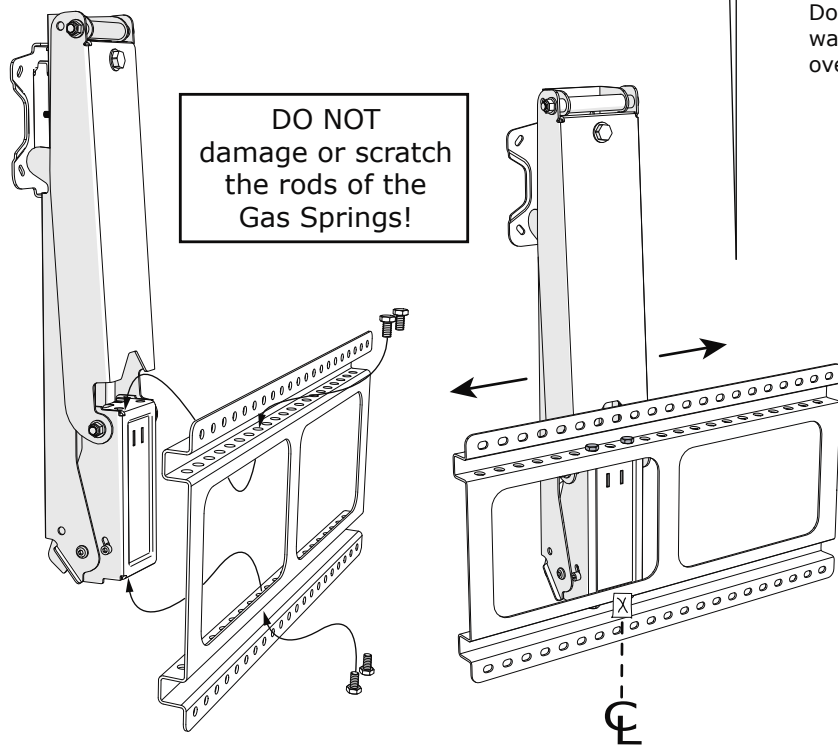


Minimum Height
from STEP 9

- 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.



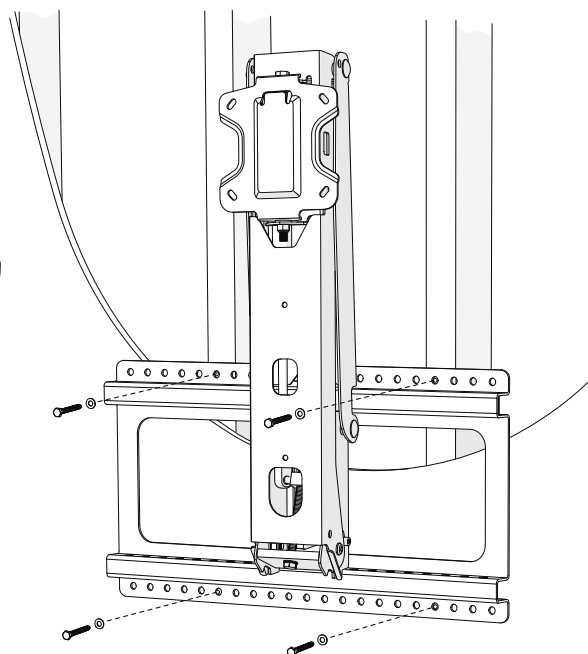
- 14** Align the center of the Lifting Mechanism {35} to the center mark on the Wall Plate {32}. Install 4 Bolts {14} through the back channels of the Wall Plate into the threaded holes of the Mechanism. Tighten Securely.



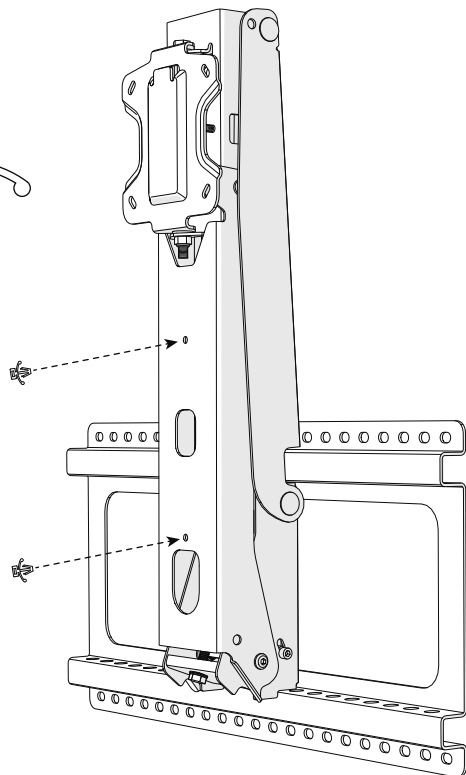
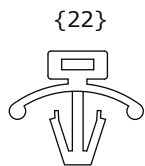
- 15** Attach the Wall Plate {32} using Lag Bolts {17} and Washers {11} directly into the centers of the studs.

⚠ CAUTION:

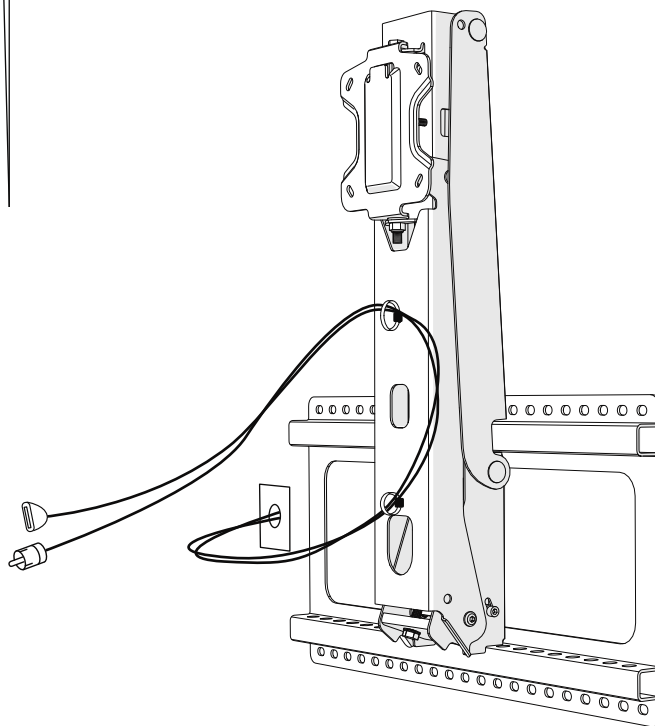
Do Not overtighten Lag Bolts {17}. Tighten only until the washers are firmly against the wall plate. Damage due to overtightening can cause property damage or injury.



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

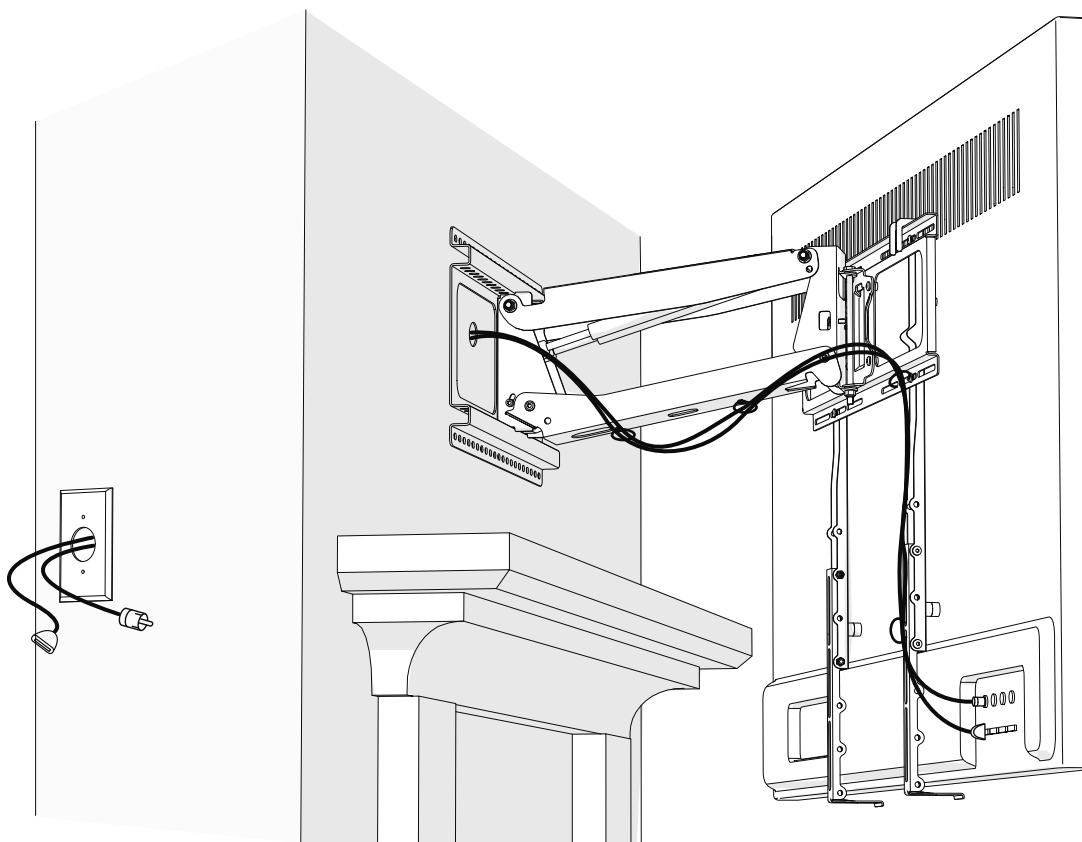


- 17** Shown below is the easiest way to attach cables. Use the included Cable Ties {24} to attach cables so they are sideways to the Lower Arm, making a gentle loop. Cables should be long enough to accommodate the extension and swivel of MantelMount. Check all ranges of motion before tightening the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

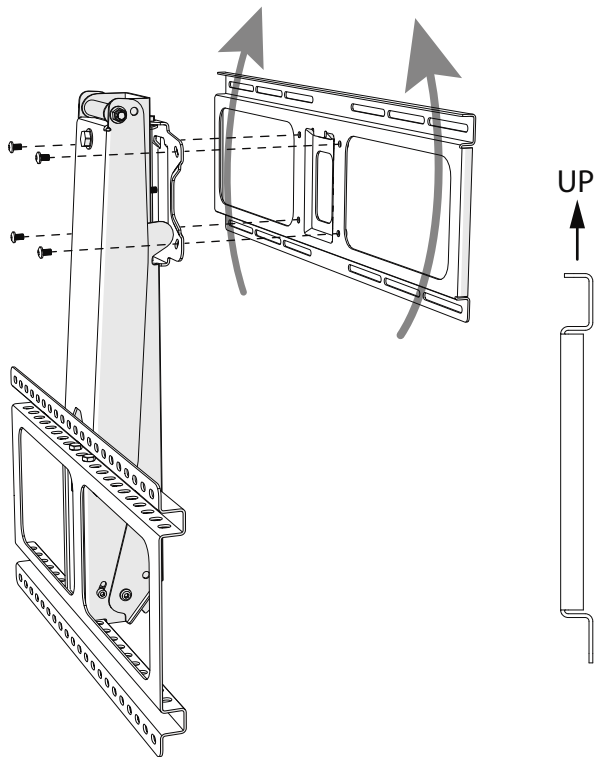
Ensure that cables do not get pinched behind the tilting mechanism when the mount is raised.



18

Hang the TV Brace {33} onto the Lifting Mechanism {35}.

Level the TV Brace and tighten the 4 screws {15}.
These screws can also be used to level the TV after installation.

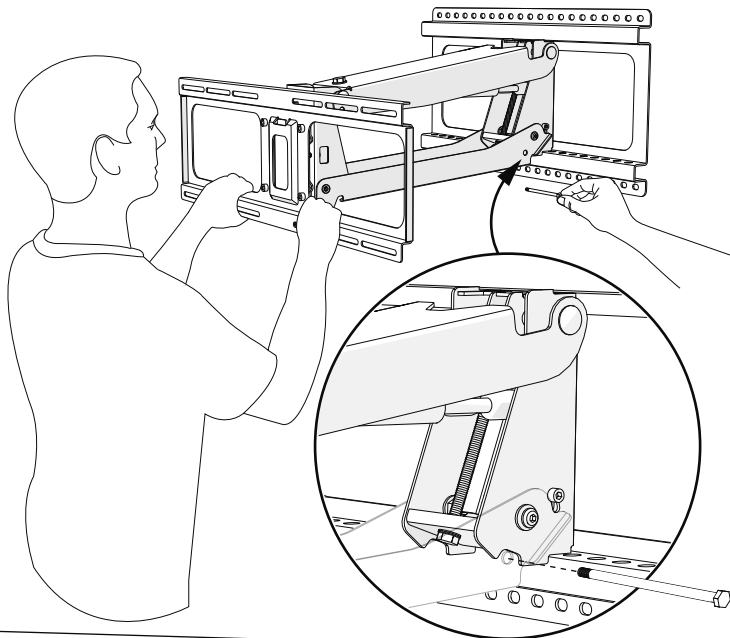


19



THIS STEP REQUIRES TWO PEOPLE

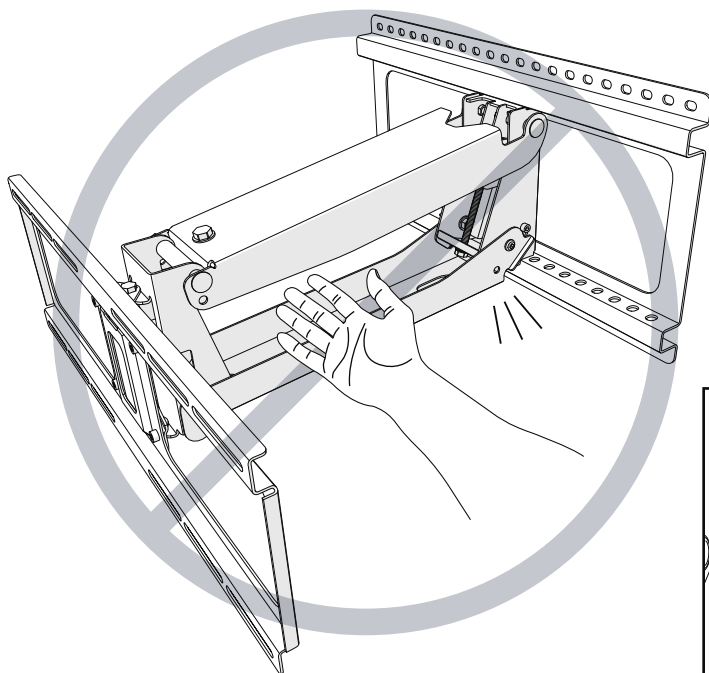
Firmly pull down the bottom of the TV Brace until the Lifting Mechanism is in a horizontal position. **DO NOT HIT THE MANTLE!** The second person must insert the Safety Bolt {20} through the Safety Hole in the Lower Arm and install the Safety Nut {27}. Slowly release the TV Brace. The Lifting Mechanism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



20

⚠ WARNING:

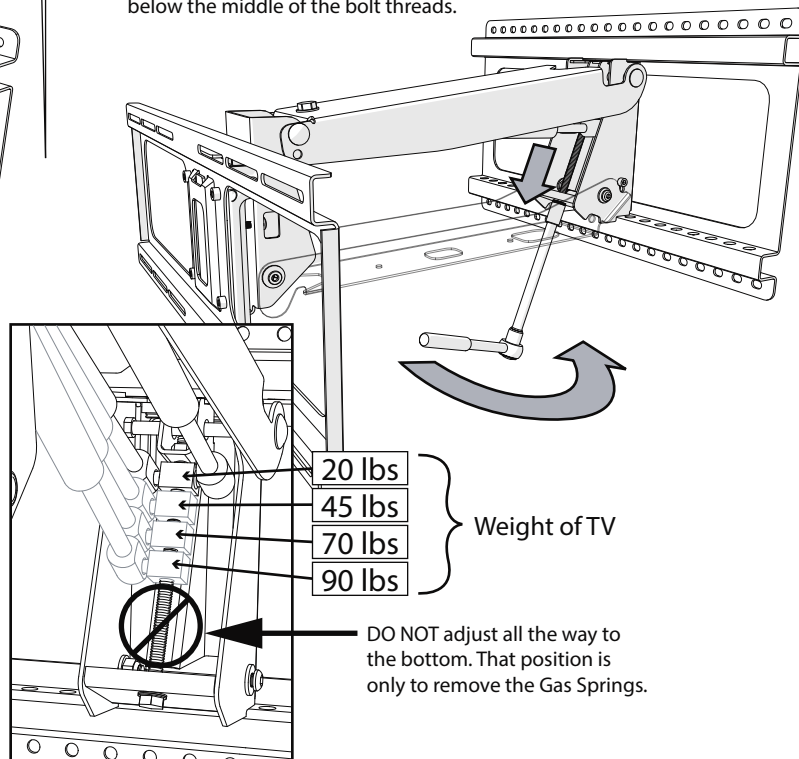
Do Not put hands into Lifting Mechanism without the Safety Bolt and Safety Nut installed. The power of the Lifting Mechanism can cause bodily injury!



21

PRE-SET THE LIFTING FORCE (optional):

If you have a heavy TV you might need to pre-adjust the Gas Springs. Compare your TV weight to the chart below. If the Gas Springs appear close to your weight requirements then proceed to the next step. Otherwise, pre-adjust the Gas Springs as follows:
Turn the main bolt **CLOCKWISE** to pull the Gas Springs **DOWN** for heavy TVs. Rotate the bolt the other way for less lifting force for lighter TVs. The lightest lifting force is at the top, and the heaviest is down just below the middle of the bolt threads.



22



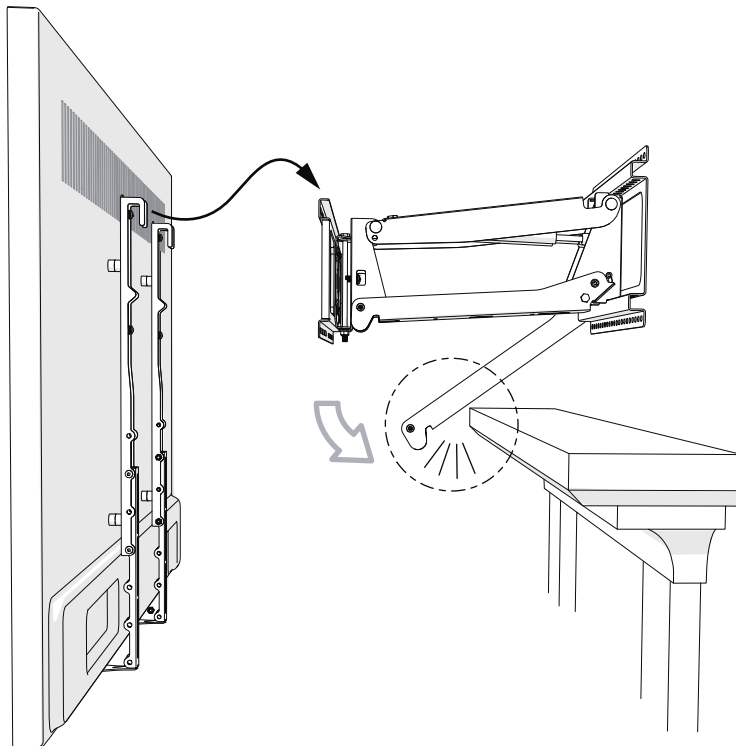
THIS STEP REQUIRES TWO PEOPLE

Carefully hang the Television onto the TV Brace making sure that all the 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 the television. Go to STEP 25 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.

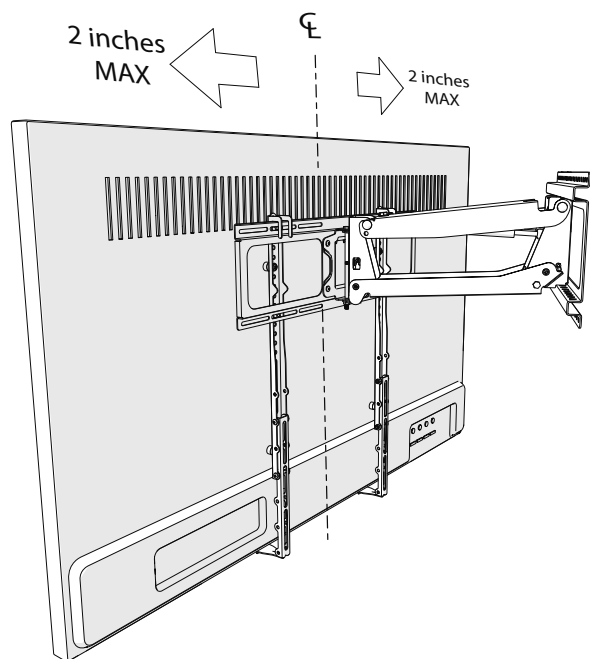


23

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.

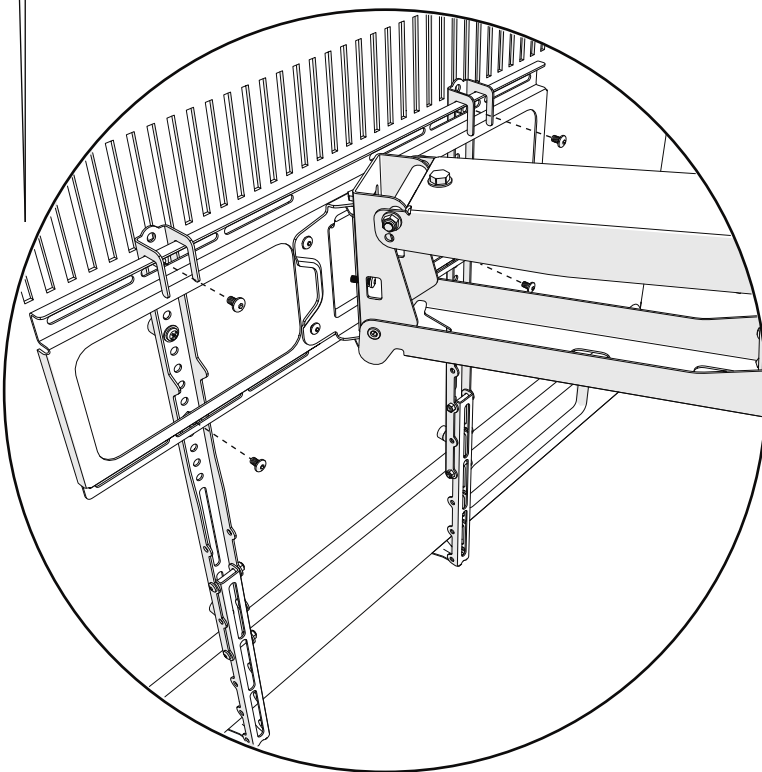
The TV would only need to be moved off-center if it has an unbalanced weight. These are usually older, heavier TVs.

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.



24

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



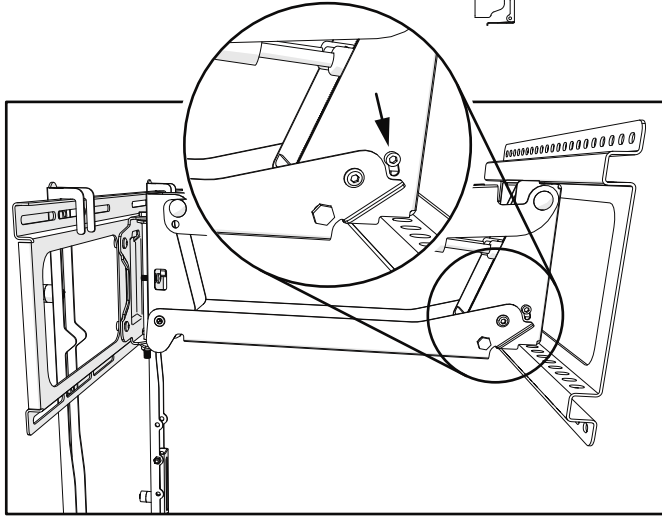
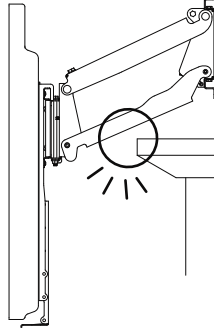
Adjusting for Travel Stops and Television Weight:

25 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.

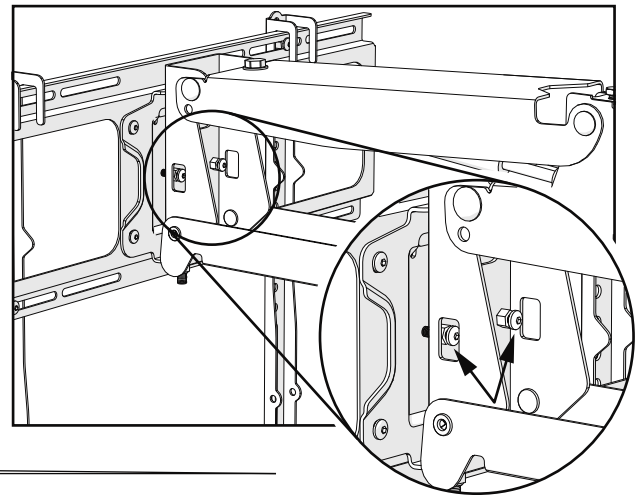
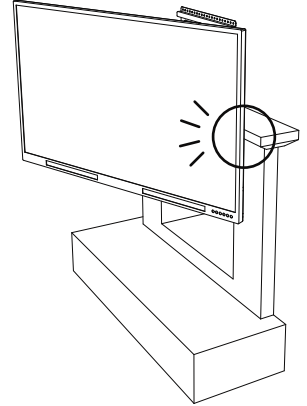


26 Adjusting the Side Swivel Stop Positions:

Loosen the Locknuts and adjust the Swivel Stop screws to the desired stopping positions, both left and right.

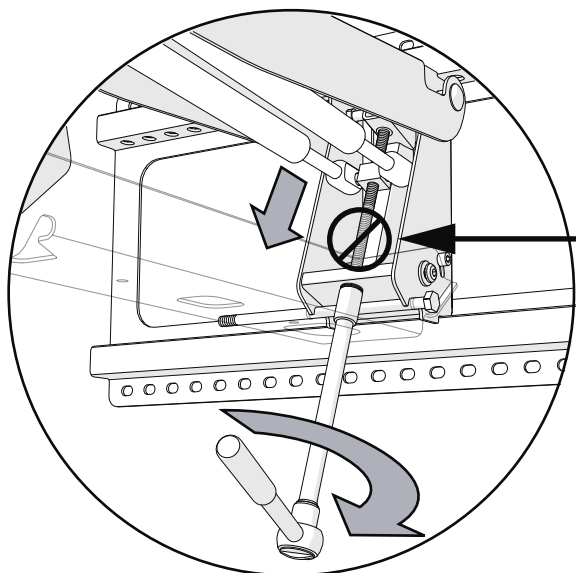
Tighten both locknuts after the adjustments are made.

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.



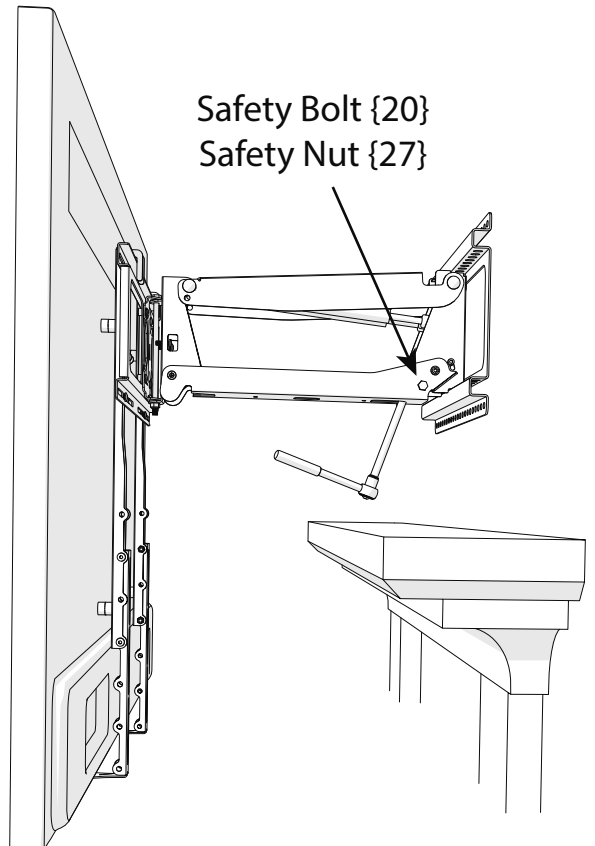
27 Adjusting for Television weight: With Safety Bolt {20} in place, use a socket wrench with an extension to adjust the long bolt inside the Lifting Mechanism {35}. Turn the bolt clockwise (AS SHOWN BELOW) to pull the Gas Springs down and increase the lifting force for heavy TVs, or turn counter-clockwise for lighter TVs. This adjustment can take several turns. (Reference Step 21.)

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.

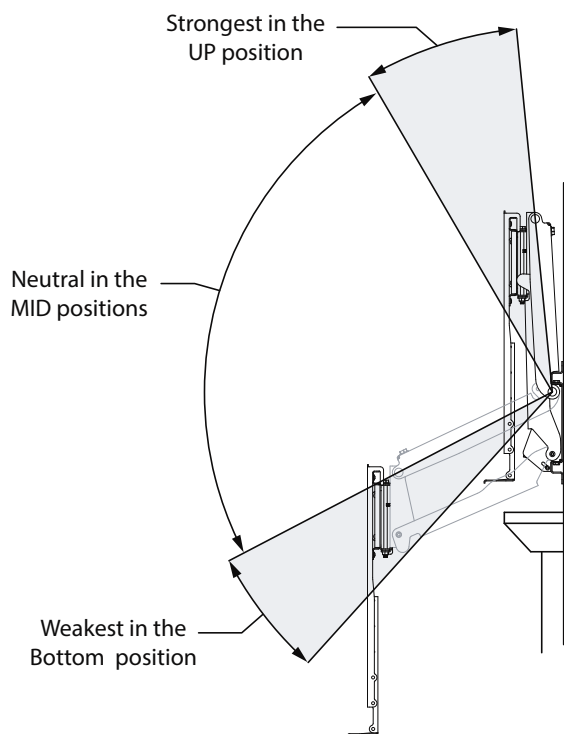


DO NOT adjust all the way to the bottom. That position is only to remove the Gas Springs.

Safety Bolt {20}
Safety Nut {27}

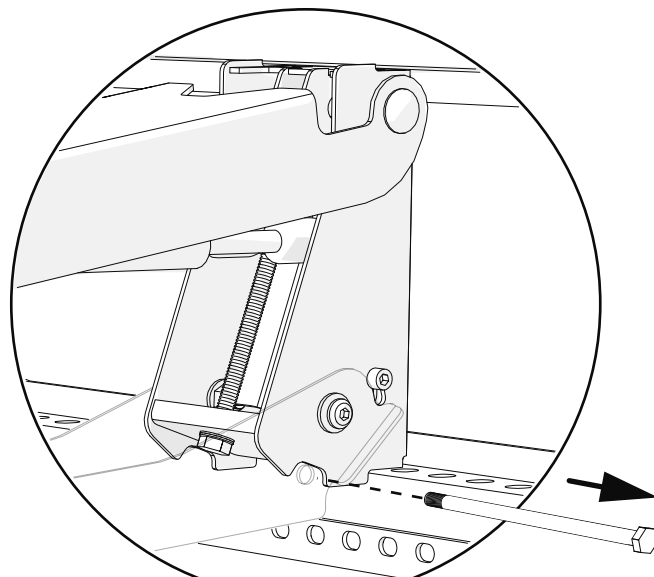


- 28 Verify the proper lifting performance:** MantelMount lifting force is designed to keep the TV securely in the up position while also allowing the TV to gently rest in the down position. See the diagram below for the correct lifting adjustment.



- 29** Remove the Safety Bolt {20} and Safety Nut {27}.

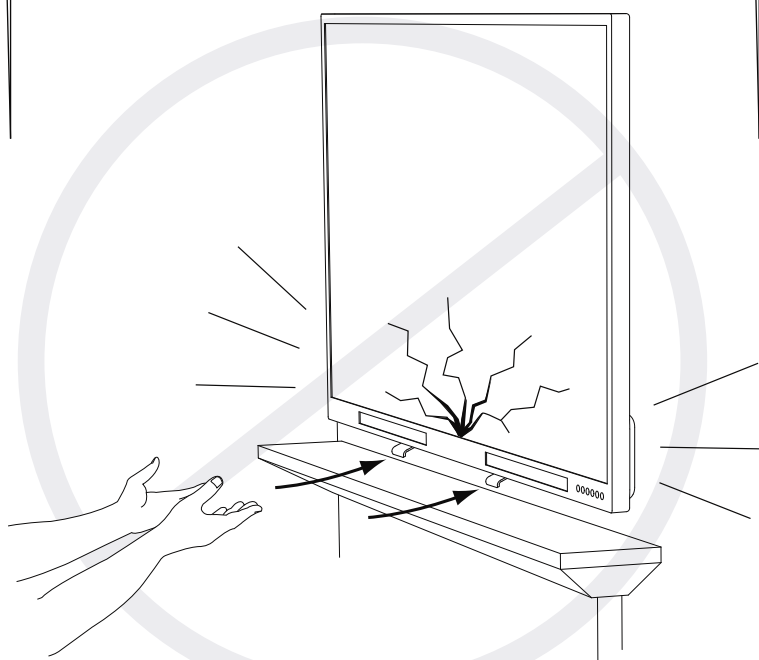
Store these parts for future use. The Safety Bolt and Nut are needed to remove the TV at any time in the future.



Remove the Safety Bolt and store it for future use.

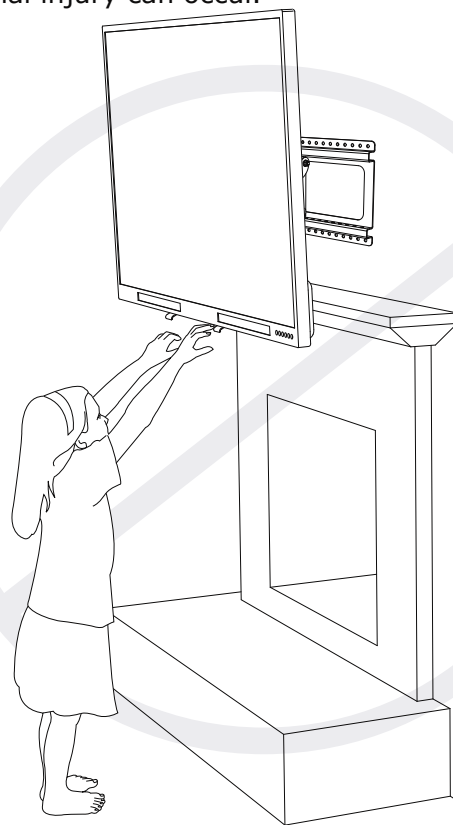
! CAUTION:

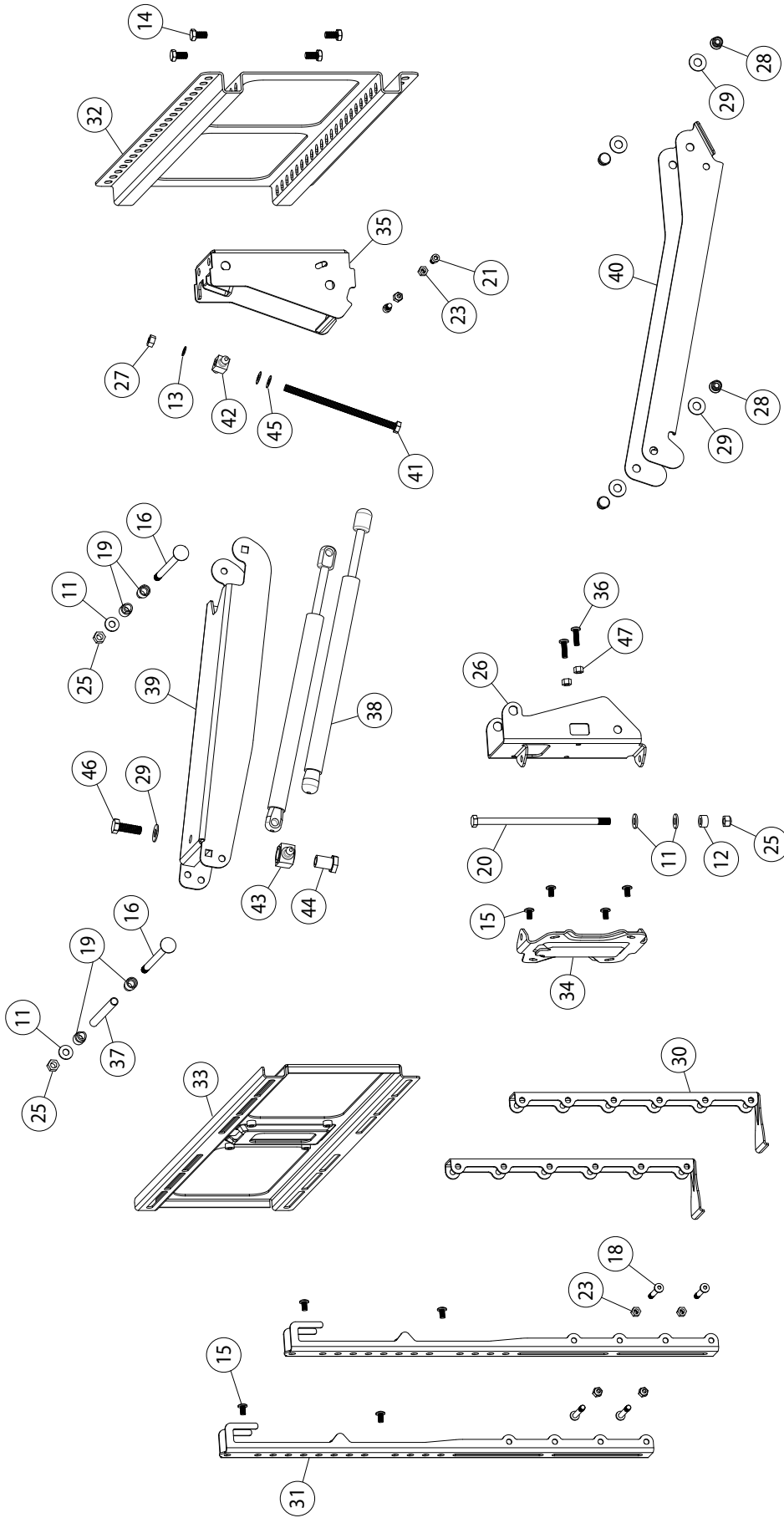
Never release the handle before it is fully upright. MantelMount is strongest in the top position, and allowing it to slam closed can damage televisions. Always control the lifting process.



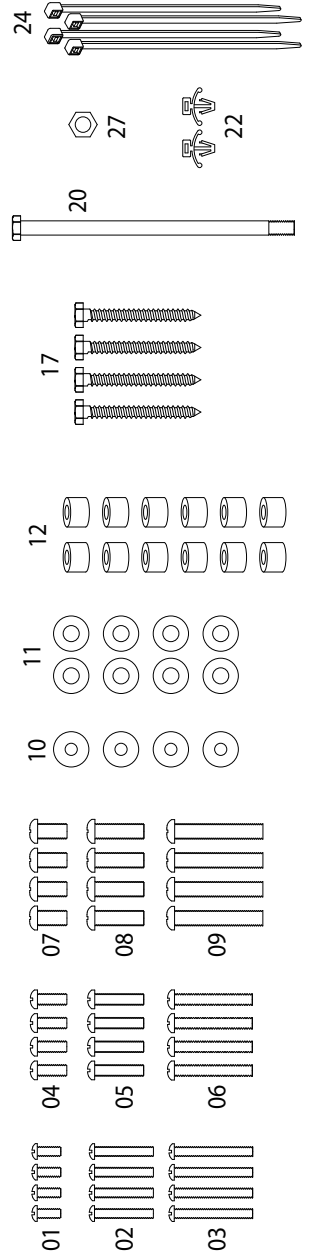
! CAUTION:

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





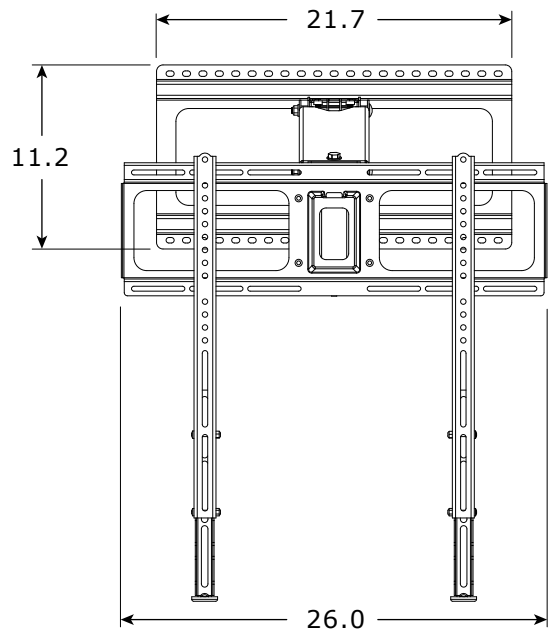
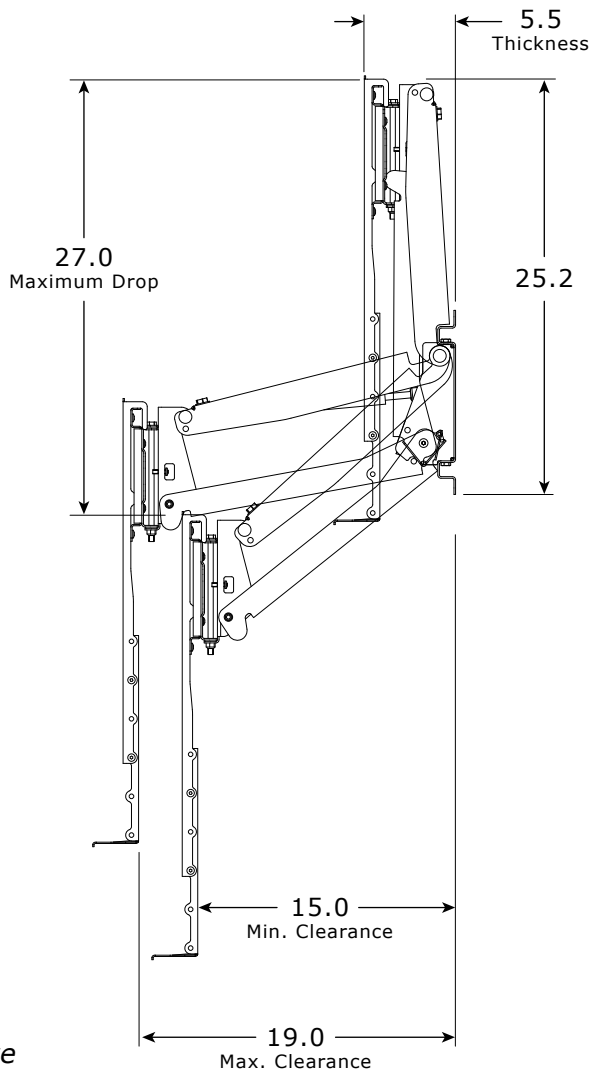
Additional Installation Parts



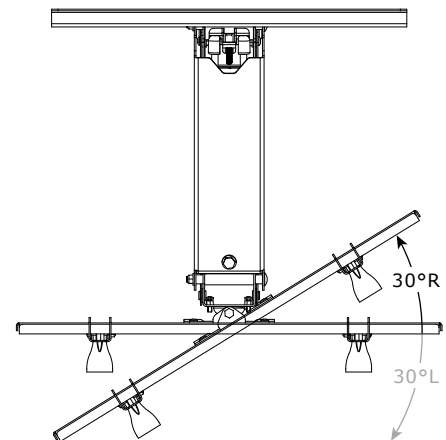
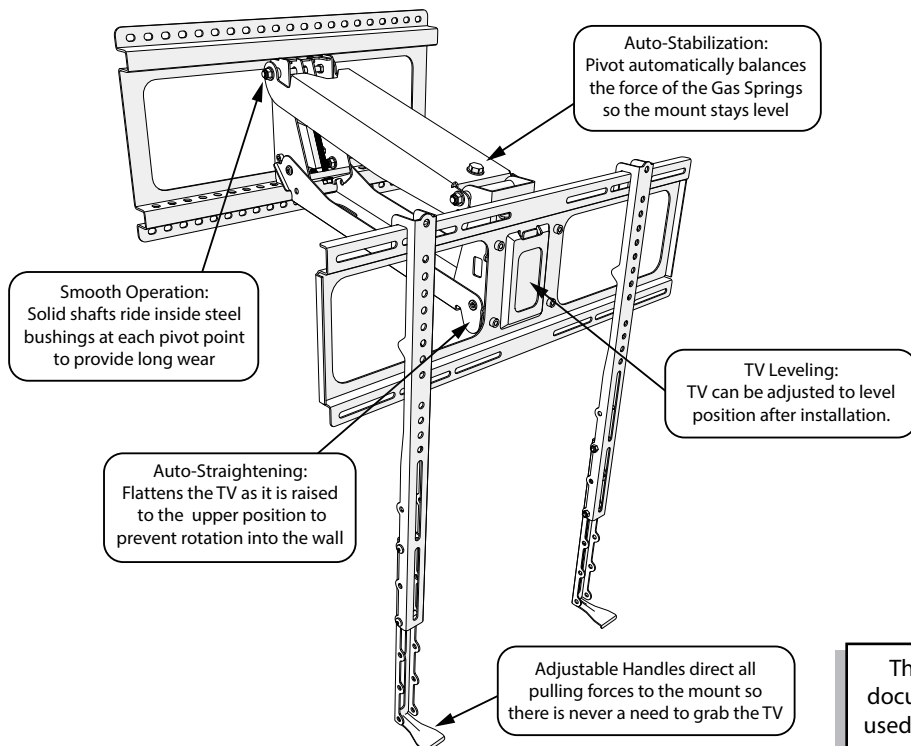
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	12189	M5 x 12	4
2	12190	M5 x 30	4
3	12191	M5 x 40	4
4	12193	M6 x 16	4
5	12194	M6 x 30	4
6	12195	M6 x 40	4
7	12197	M8 x 15	4
8	12198	M8 x 25	4
9	12199	M8 x 45	4
10	12166	Washer M6	4
11	14126	Washer M8 x 2	12
12	12122	Spacer	13
13	14137	Washer M8 x 1 x 12	1
14	14135	Hex Bolt M8 x 15	4
15	12178	Round Head Screw M6 x 10	8
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	6
24	12162	Tie Wrap	4
25	12187	Locknut M8	3
26	24025	Swivel Bracket	1
27	12186	Nut M8	2
28	12250	Rivet 10 x 7	4
29	14128	Washer M10	5
30	14040	Extending Handle	2

[illegible]

Customer Service:
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www.MantelMount.com



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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.

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