

MantelMount™

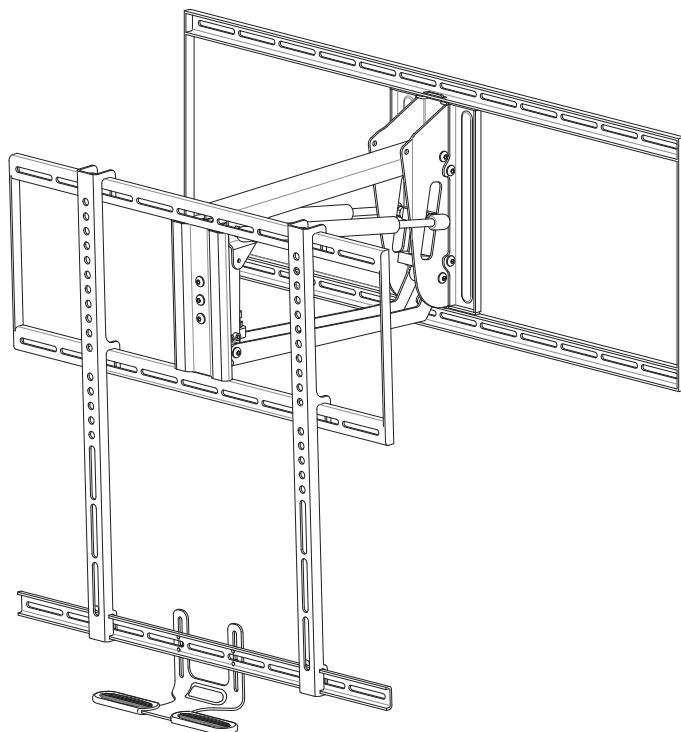
TM1A Installation Instructions

IMPORTANT SAFETY INSTRUCTIONS - SAVE THESE INSTRUCTIONS

Thank you for choosing the MantelMount television wall mount. Please read this entire manual before you begin. Do not unpack contents of this package until you verify all of the requirements on PAGE 4.

! 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: 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.

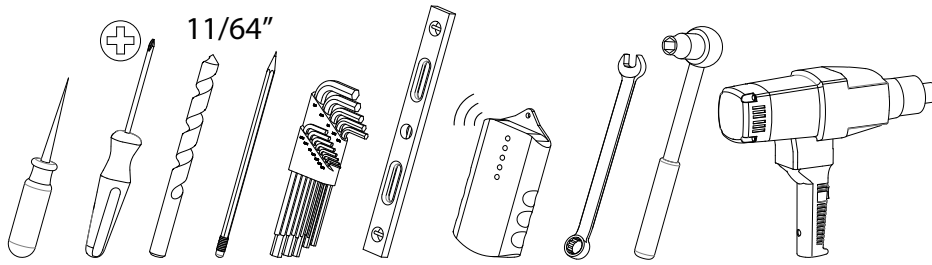


! CAUTION: This product is intended to be installed by professional installation contractors, or persons familiar with the tools and methods required for this installation. If you are not sure about your ability to perform this installation, you must contact a professional. MantelMount is not responsible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

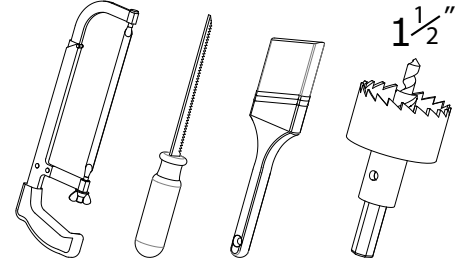
! CAUTION: Do not use this product in any way, or for any purpose, that is not specifically described in these instructions. MantelMount is not responsible for damage or injury caused by incorrect installation or improper use.

www.MantelMount.com

Required Tools

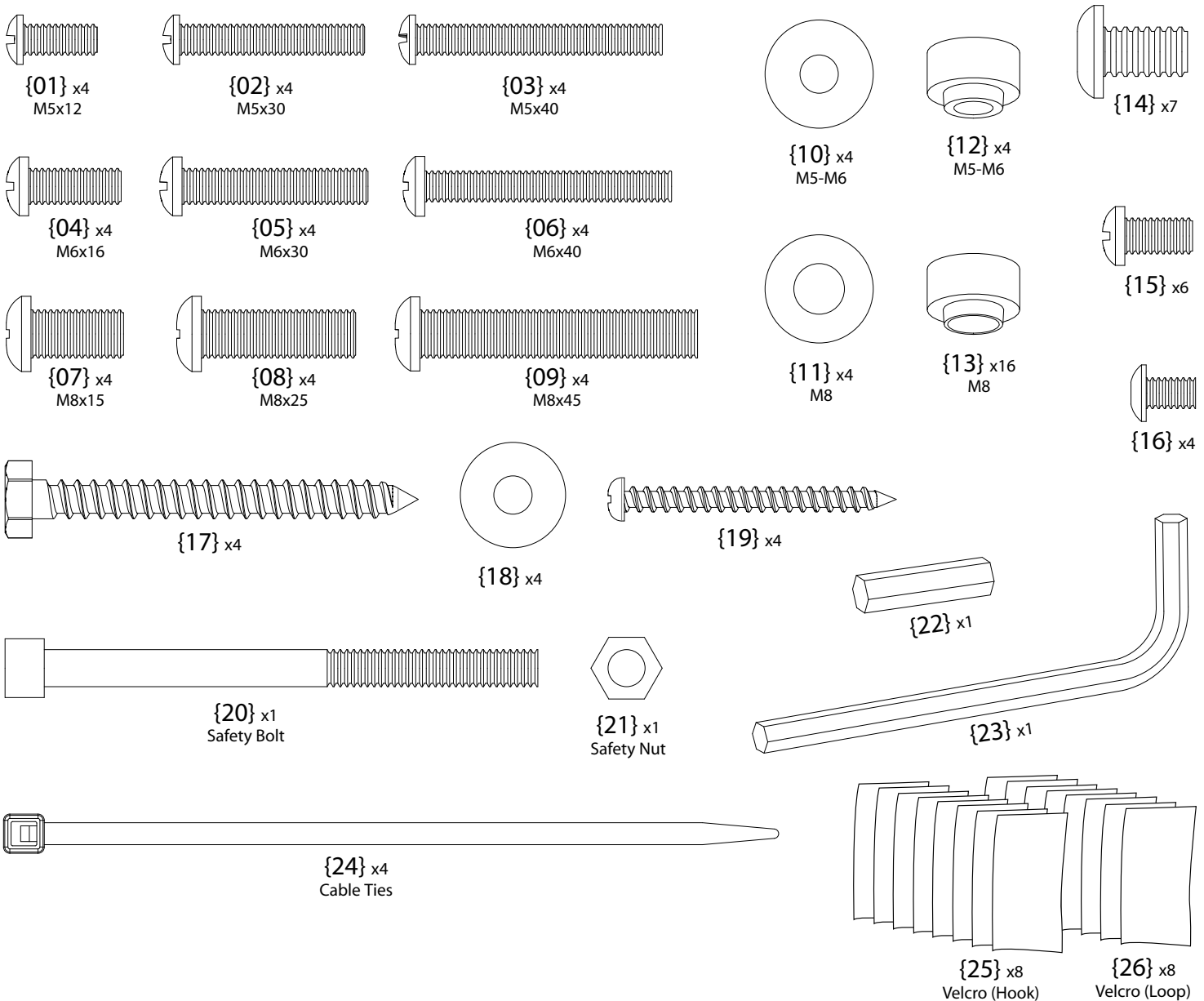


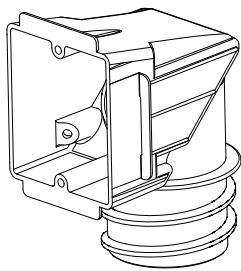
Optional Tools



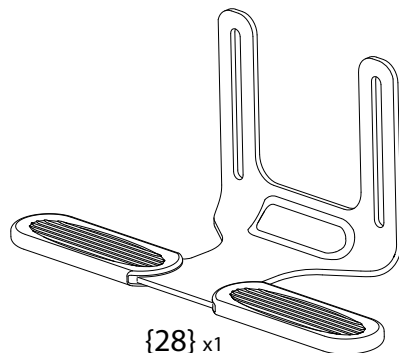
Before you begin, please verify that all components are included and undamaged. If any parts are missing or damaged, contact MantelMount. Never proceed with missing or damaged parts!

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.

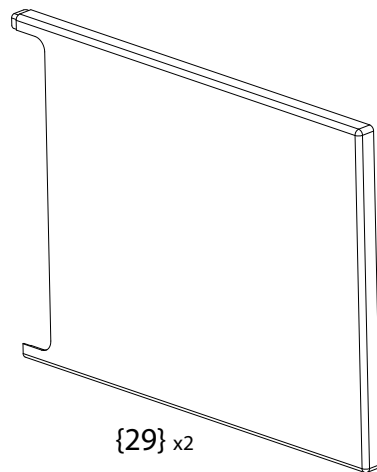




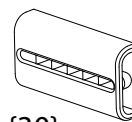
{27} x2



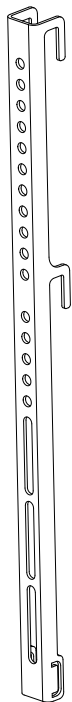
{28} x1



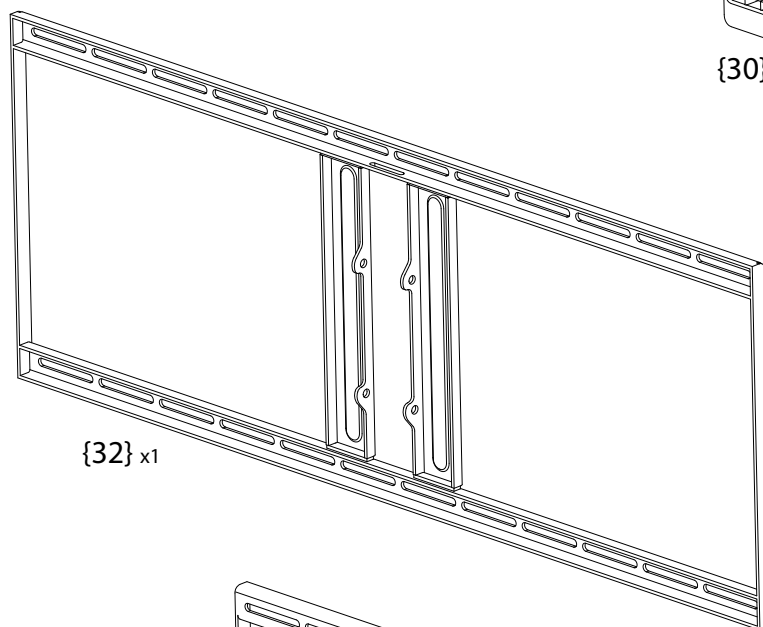
{29} x2



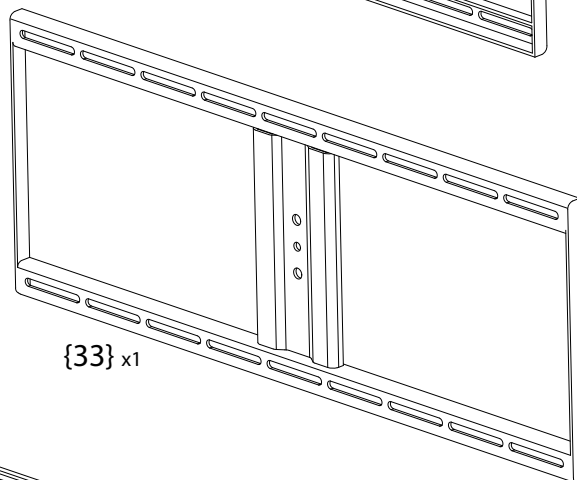
{30} x1



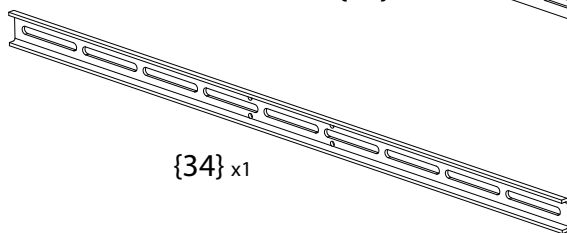
{31} x2



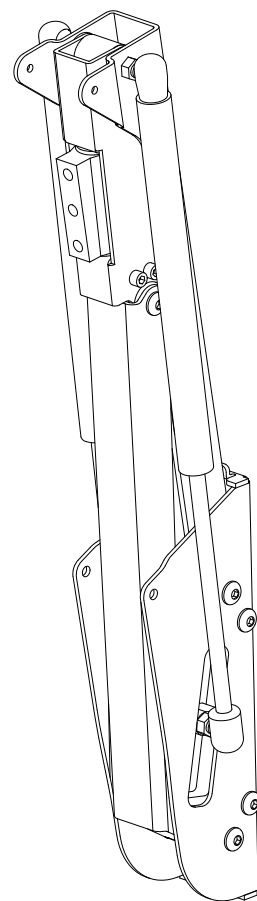
{32} x1



{33} x1



{34} x1



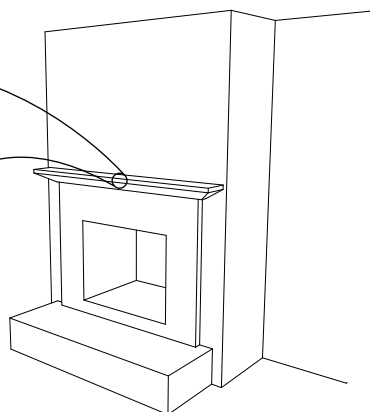
{35} x1

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.

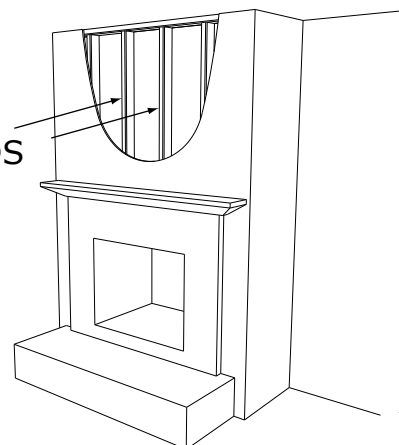
110°F
MAX.



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 inches thick.

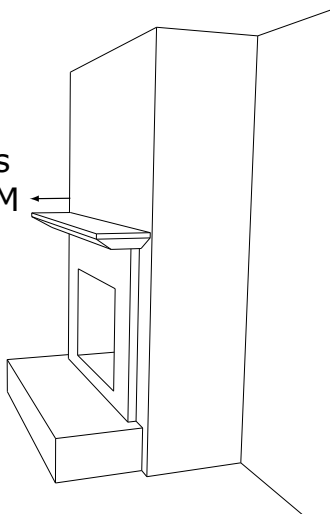
2 STUDS



C

Mantle must not extend from mounting surface more than 14 inches.

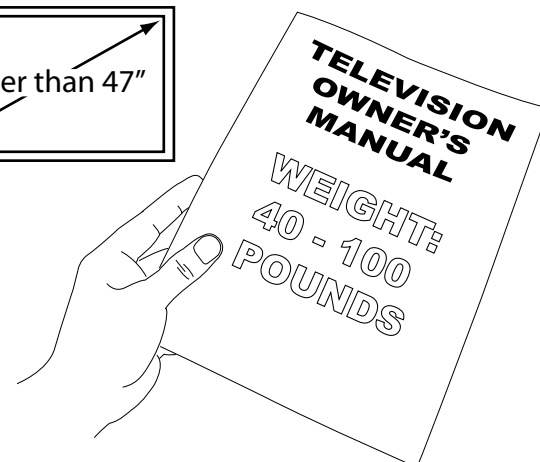
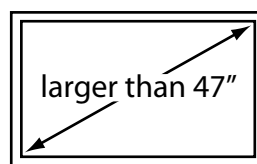
14 inches
MAXIMUM



D

TV weight must be between 40 - 100 pounds and have a screen size larger than 47 diagonal inches. Consult TV Owner's Manual for verification.

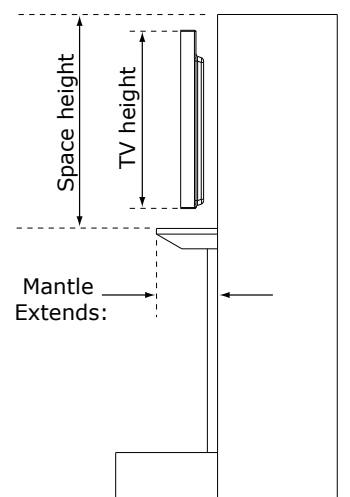
larger than 47"



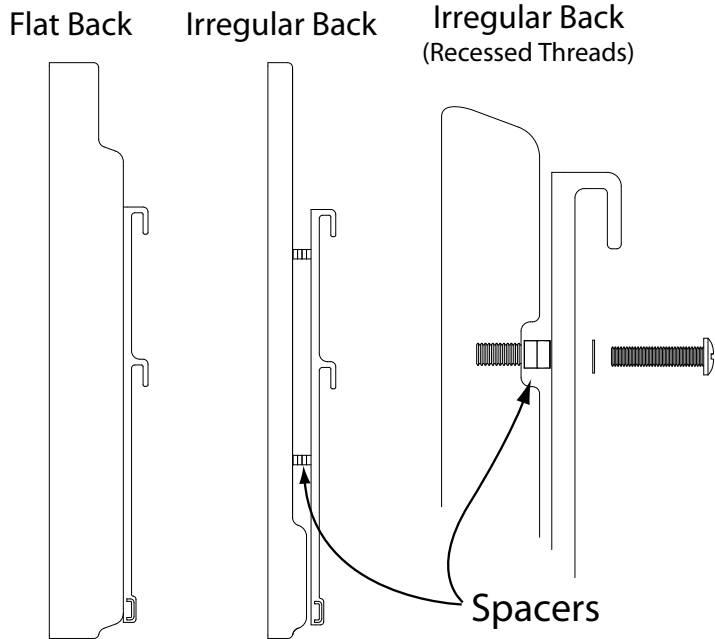
E

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 TV height to determine if space is tall enough.

If mantle extends:	This is required space height:
Less than 8 inches	TV height plus 2 inches
8 - 10 inches	TV height plus 4 inches
10 - 12 inches	TV height plus 5 inches
12 - 14 inches	TV height plus 7 inches



- 1 Use Vertical Brace {31} to determine if television is a flat back or an irregular back. An irregular back will require spacers and longer screws to fill the space between the Vertical Brace and the TV.



- 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).

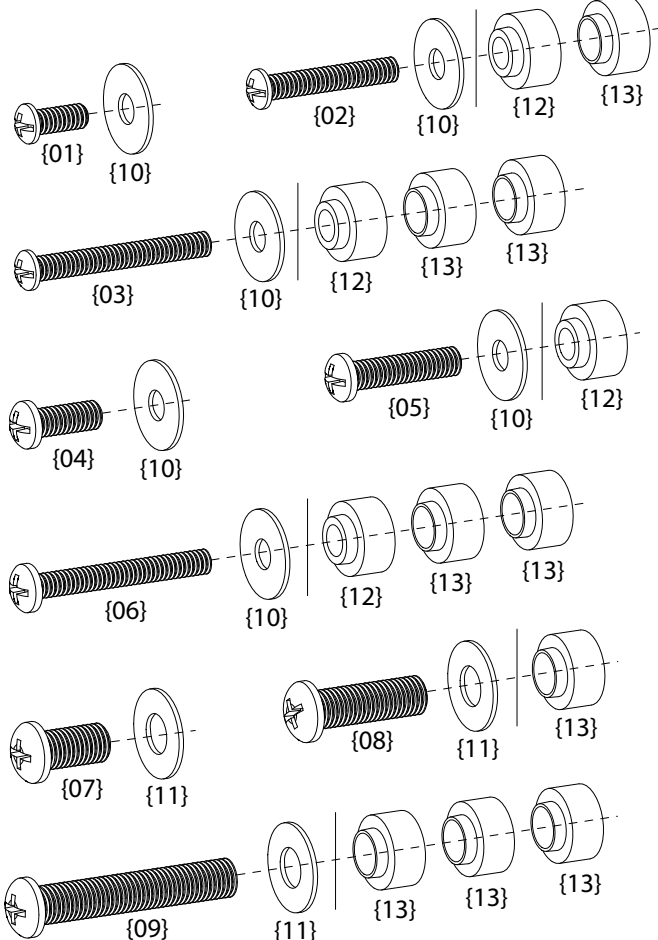
Must leave a gap in threaded TV insert

7-10 threads minimum engagement

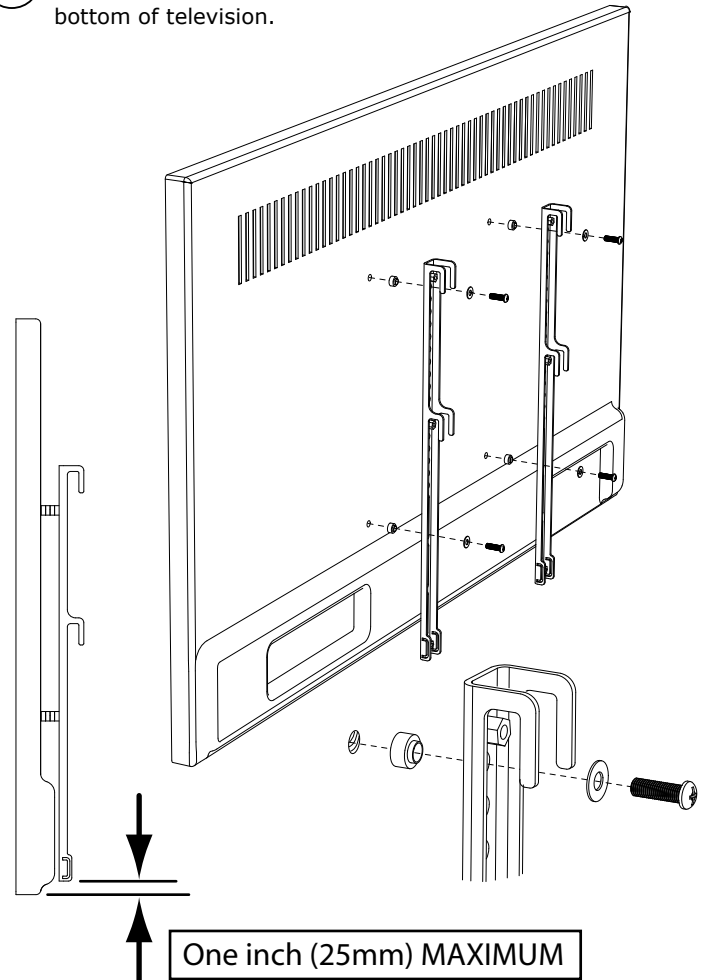
CAUTION:

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). Note: The sleeve on the Spacer always faces the Screw.



- 4 Mount Vertical Braces {31} making sure the bottom of the Brace is LESS THAN ONE INCH ABOVE the bottom of television.

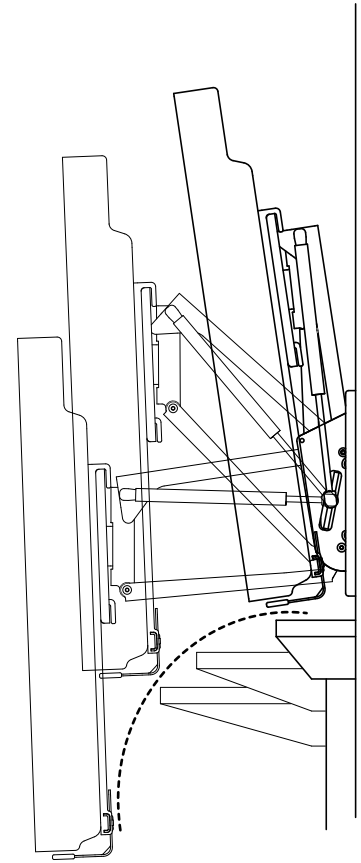


5 Determine Vertical Position of Wall Plate: The image at right shows that the further out a mantle extends, it can interfere with the arc of the lowering TV. MantelMount must be installed a minimum distance above the mantle, based on the same dimensions from "Requirement E". See the chart below for the height required above the mantle. This dimension will be used in Installation Step 9.

NOTE: If the available wall space above 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 mantle is much taller than required, then these heights are only *minimum* requirements.

USE THIS CHART FOR INSTALLATION STEP 9:

If mantle extends:	Required installation height:
Less than 8 inches	2 inches above mantle
8 - 10 inches	4 inches above mantle
10 - 12 inches	5 inches above mantle
12 - 14 inches	7 inches above mantle



6 Determine Horizontal Position of Wall Plate: Occasionally a television will have an unbalanced "Center of Gravity", meaning it is heavier on one side than the other. This can cause the television to lean to one side when hanging on a mount. To correct this, the television must be moved sideways slightly on MantelMount until it balances horizontally. However, this causes the television to be off-center from the mantle. By measuring this unbalance before installation, the Wall Plate {32} can be installed off-center by the same distance and the same direction to compensate.

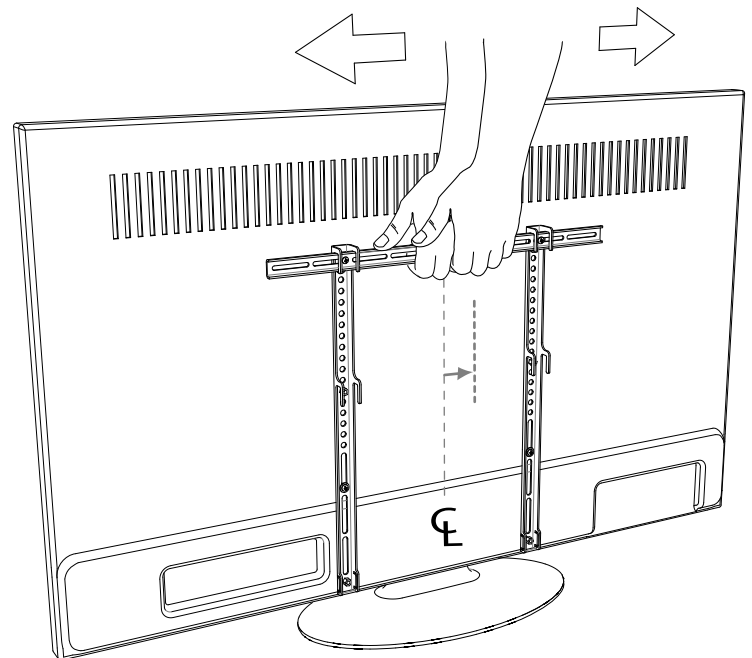
Example: If the true center-of-gravity is 1 inch to the left of the *front* TV centerline, then MantelMount should be installed 1 inch to the left of the mantle centerline.

To determine if TV is unbalanced, temporarily mount Horizontal Bar {34} as shown using 2 screws {15}. Use this bar as a handle and lift TV from the center. If TV is balanced, there is no need for compensation. If the TV leans to one side, move your point of lifting off-center and measure the distance required to obtain balance. This distance will be used in step 11 to install Wall Plate {32} off-center by the same amount.

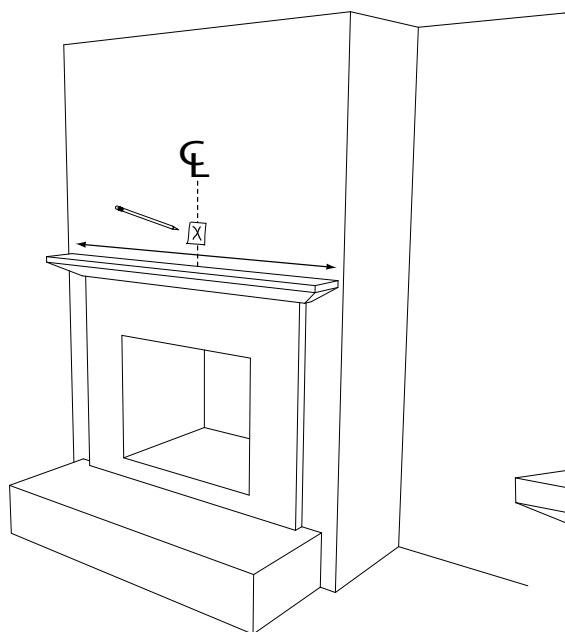
If you are unable to perform this step, you can proceed with installation, and if you discover an unbalance when you hang the TV, you can remove the TV and re-position the Wall Plate {32} to compensate.

When you are finished with this step, remove Horizontal Bar {34} and the 2 screws {15} for use later.

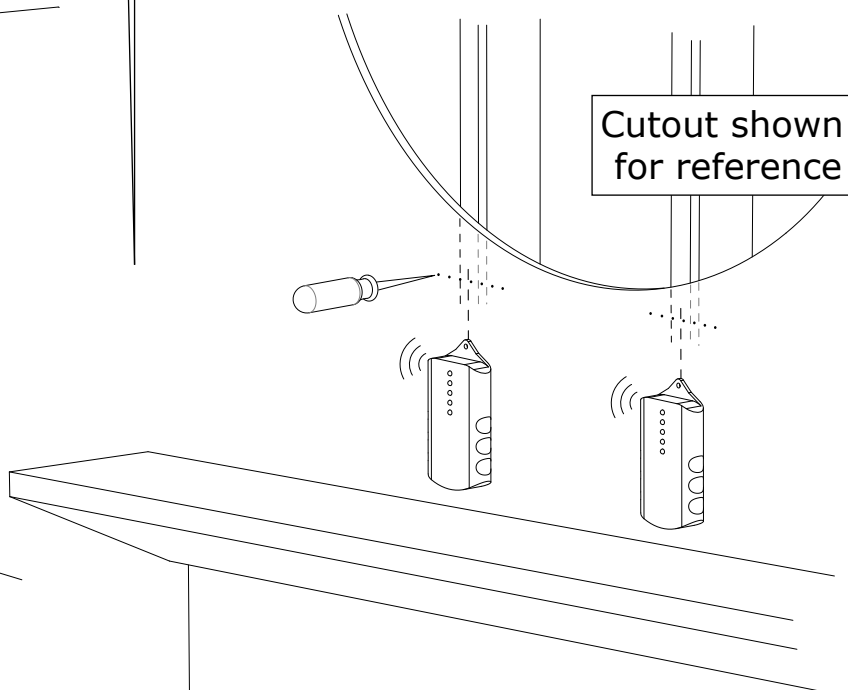
USE THIS INFORMATION FOR INSTALLATION STEP 11:



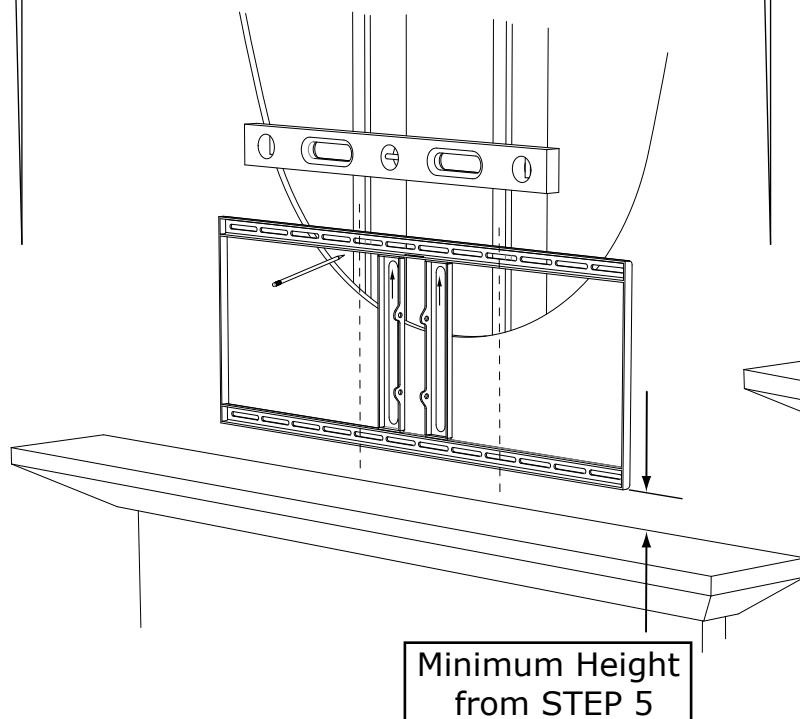
- 7 Measure the centerline of the mantle. Mark with tape on the wall.



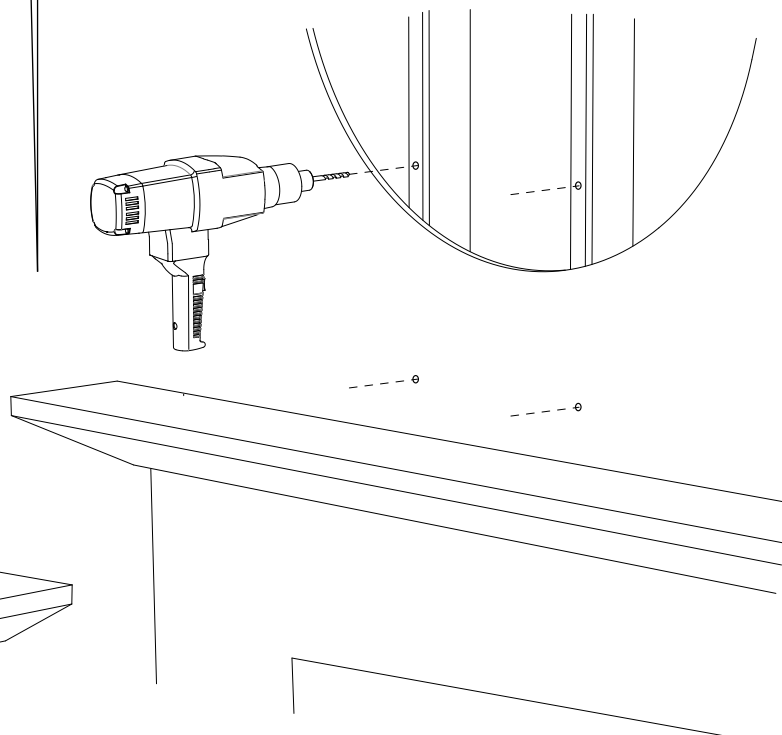
- 8 Locate at least two studs with a stud finder. Locate the center of these studs by using a sharp awl or finish nail poked through the drywall to locate each edge. Lag bolts must be installed into the CENTER of the studs.



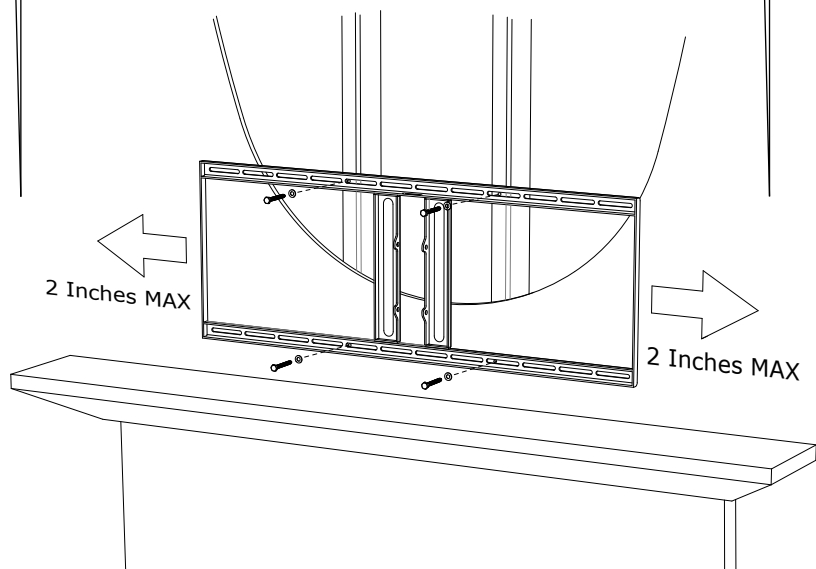
- 9 Align the arrows on the Wall Plate {32} pointing upward. Center and level the plate above mantle and position the height using the table in STEP 5. Mark the 4 spots for lag bolts directly on center of studs.



- 10 Pre drill the 4 holes with 11/64" drill bit to a depth of 2.5 inches (65mm) including wall covering. Note: Wall covering (drywall) must not exceed 5/8" thickness.

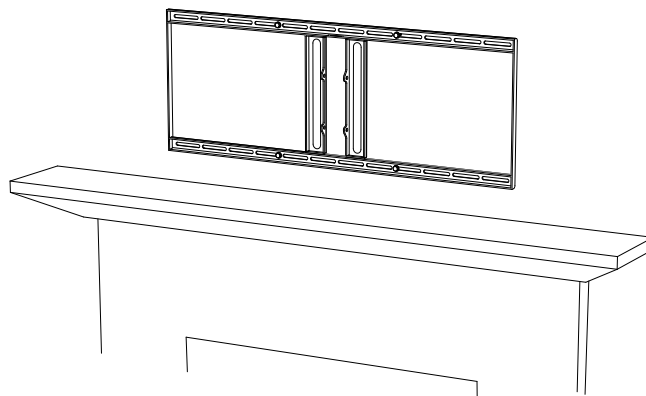


- 11** Adjust Wall Plate {32} horizontally, using the results of STEP 6, to compensate for an unbalanced television center-of-gravity, *up to a maximum of 2 inches left or right*. Move Wall Plate in the **SAME DIRECTION** as the offset from STEP 6. Loosely install Lag Bolts {17} and Washers {18}.

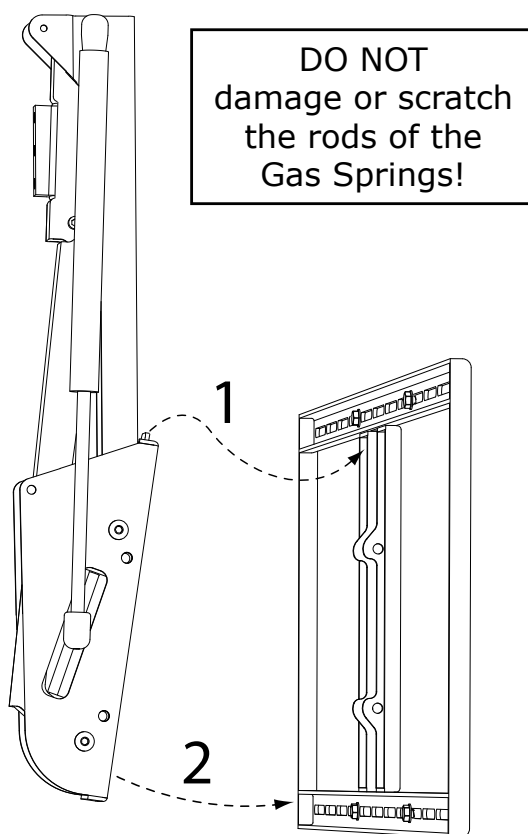


12 **! CAUTION:**

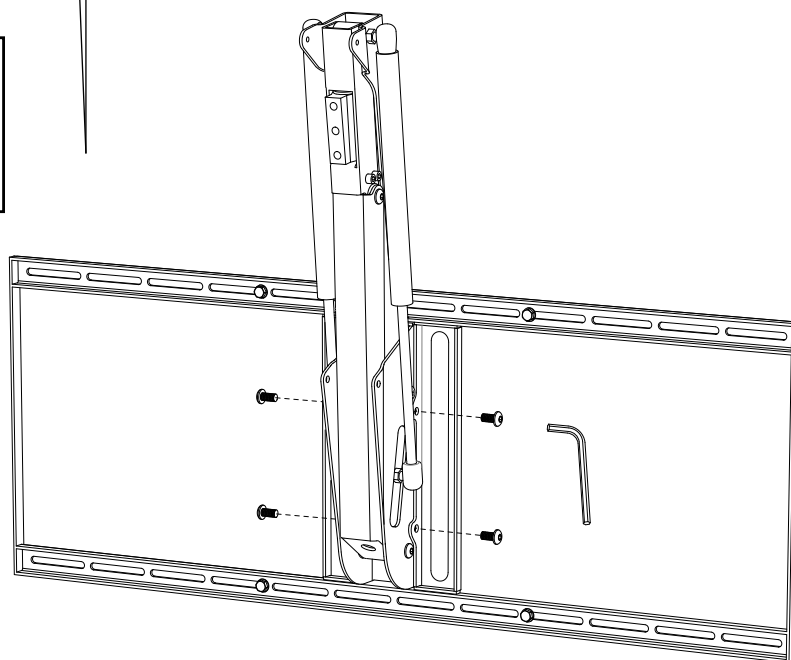
Do Not overtighten Lag Bolts {17}. Tighten only until the washers are firmly against the wall plate. Damage due to overtightening can cause property damage or injury.



- 13** Insert top tab of Lifting Mechanism {35} into the slot of Wall Plate {32} then slide bottom into position.



- 14** Align all four holes and install Screws {14}. Tighten with the supplied Wrench {23}.



OPTIONAL Signal Cable Routing Boxes {27}: If Signal Cables have already been routed to television location, please skip ahead to step 21. Also, if the mounting wall is an external wall, or if there is no hollow area behind mantle, please skip ahead to step 21.

The next several steps are for the use of optional Routing Boxes {27} included with MantelMount. These boxes allow signal cables (not power cables) to be run inside hidden metal conduit through the framed area enclosing the fireplace, in order to rout signal cables to a side wall. See the image below for a typical installation. Any installation must comply with all local building codes.

These boxes require the purchase of metal conduit, (2 inch I/D.), long enough for the desired location. When purchasing conduit, use the Routing Box to verify size, but do not screw it in very far because it can be difficult to remove. Conduit can be twisted or "unwound" slightly to help position or remove the Routing Box during test-fit or installation. Both ends of the conduit must be cut cleanly with a hacksaw before inserting the Routing Boxes.

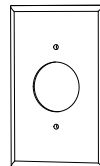
⚠ WARNING

You must verify with local building codes the minimum distance that the conduit must be located away from the fireplace components. See the image below. Failure to obey local building codes can result in property damage and even loss of life.

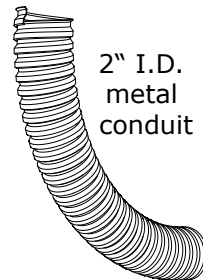
⚠ WARNING

Routing Boxes {27} are for signal cables only. Running power cables next to signal cables can cause signal noise that can affect audio and video performance. Also, your local building codes might not allow power cables to be run through conduit. Failure to obey local building codes can result in property damage and even loss of life.

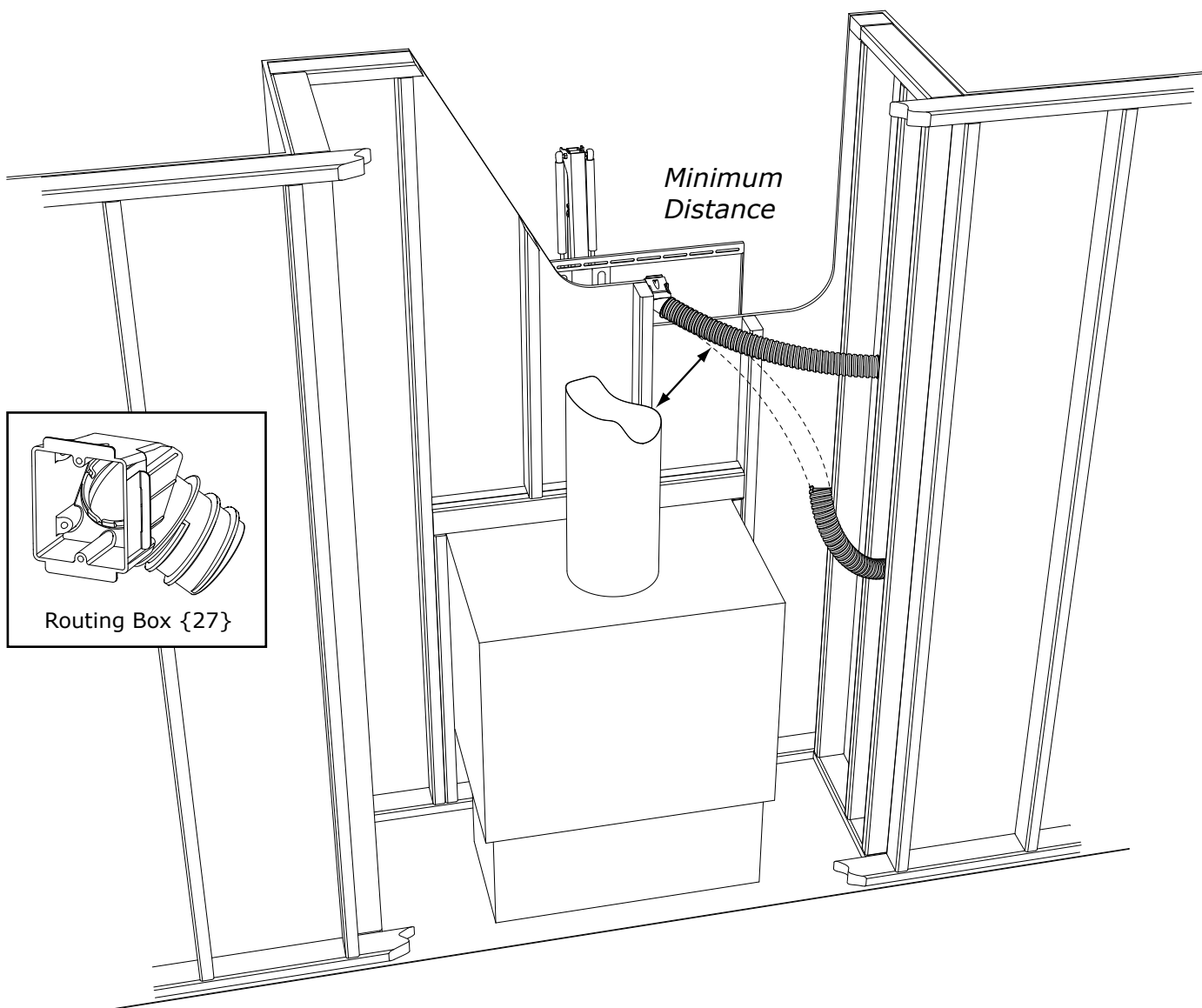
Parts not included:



Wall plate
with large hole

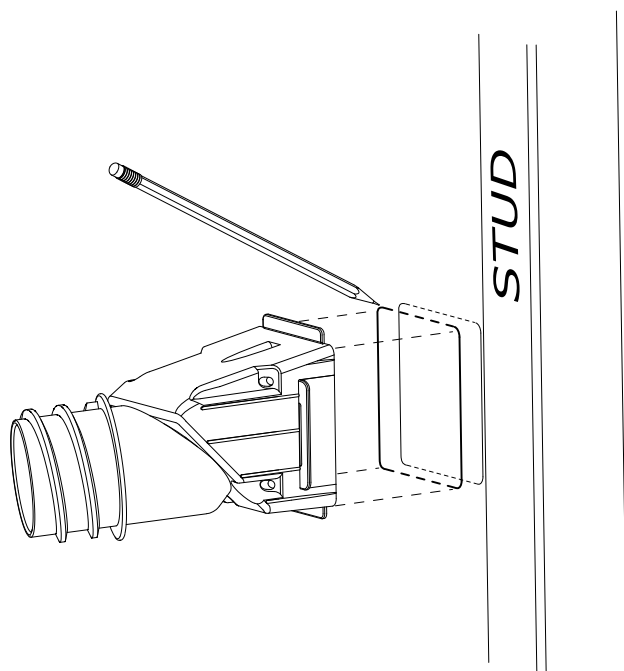


2" I.D.
metal
conduit

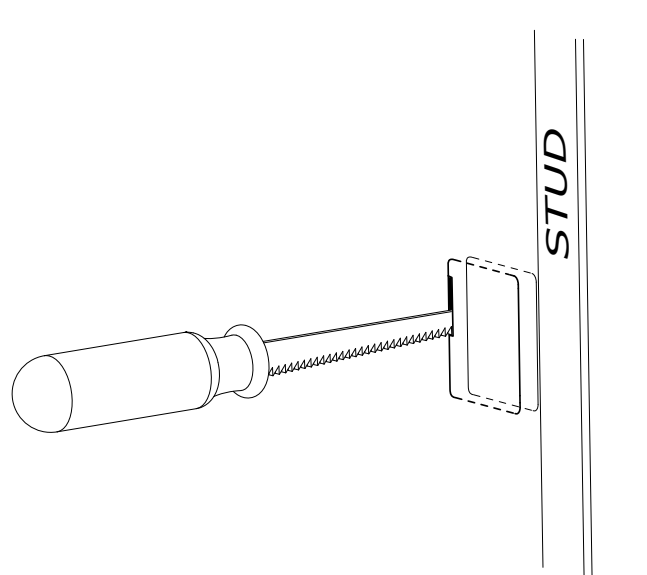


Routing Box {27}

- 15 Trace the Routing Box {27} (but not the tabs) for both desired locations onto the wall along the edge of a stud. Boxes must be mounted to studs.

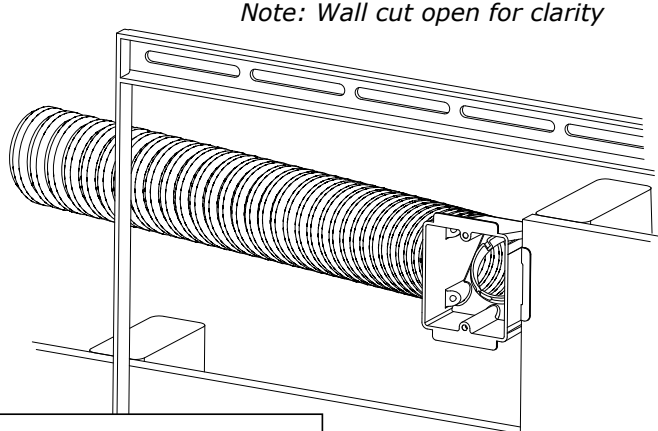


- 16 Cut out both openings through wall covering (drywall) along studs using a Keyhole Saw.

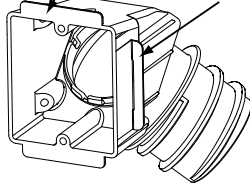


- 17 Attach CUT end of conduit to the box and install to stud using Screws {19}. If the box is located within the MantelMount Wall Frame {32} as shown below, then use the inner tabs so that the box will protrude out to the Wall Cover {29}. If the box is located outside the area of the Wall Frame then break off the inner tabs and mount flush to the wall using the outer tabs.

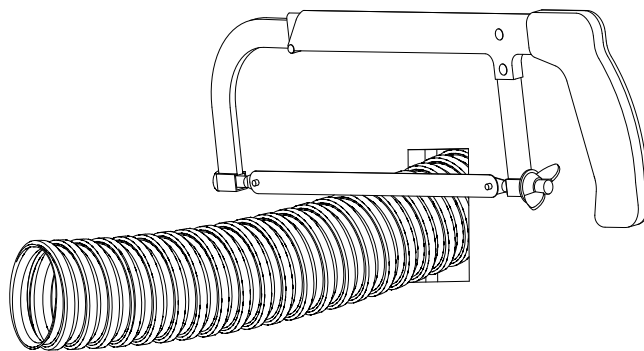
Note: Wall cut open for clarity



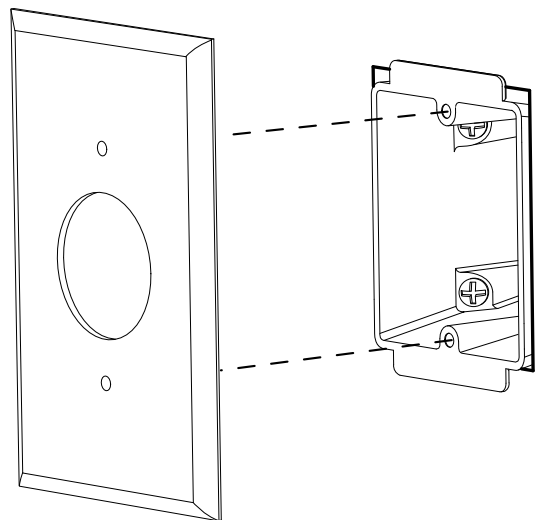
Outer Tabs
Inner Tabs



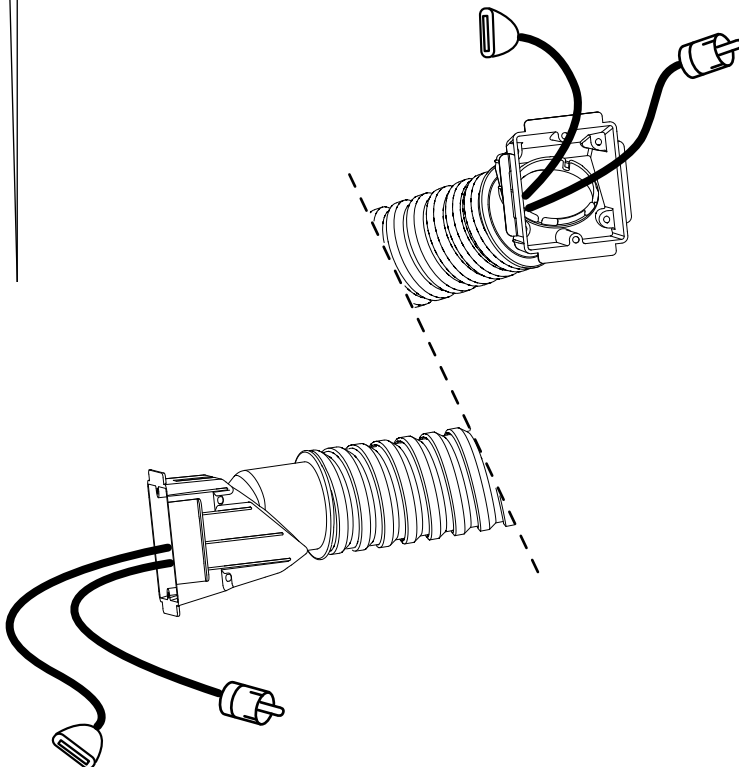
- 18 Feed the conduit through the other opening and cut the other end of conduit to length using a hacksaw.



- 19 Install the second box to stud using Screws {19}, and install a cover plate if available.

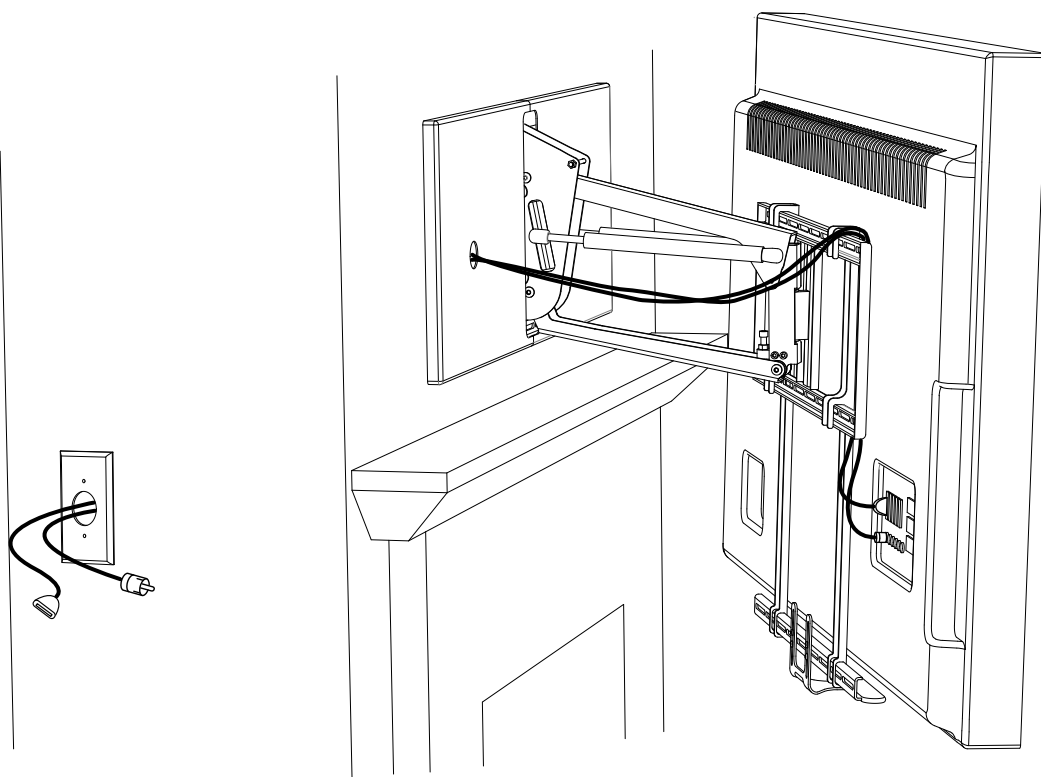


- 20 Signal Cables can usually be fed through the conduit simply by pushing them through from the higher opening to the lower opening.



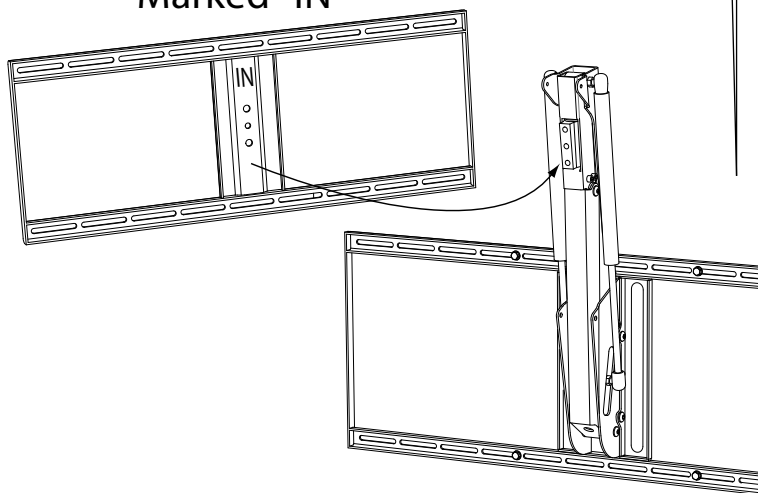
Reference Only: This will be the finished configuration for the signal cables. They must be long enough to accommodate the extension and swivel of MantelMount, and also have enough length to attach to the TV Brace {33} using the included Cable Ties {24}.

DO NOT attach cables to the central Lifting Mechanism {35}. Cables can get pinched in mechanism.

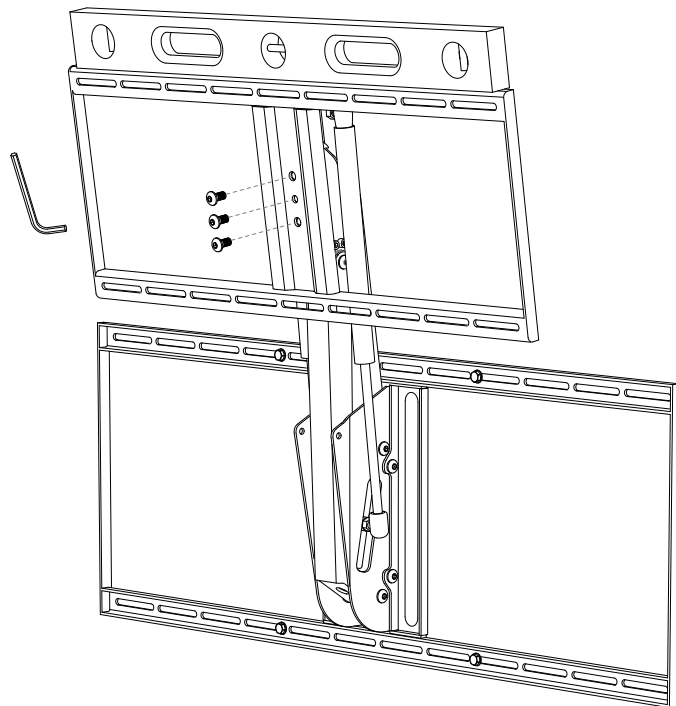


- 21** Install the TV Brace {33} to the Lifting Mechanism {35} while ensuring that the side marked "IN" is facing the Lifting Mechanism.

Marked "IN"

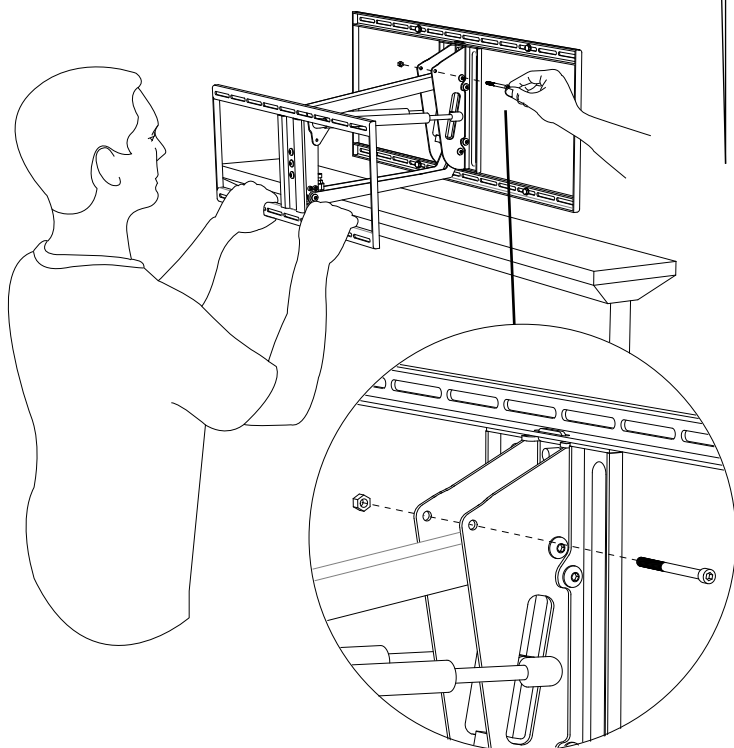


- 22** Level the TV Brace and tighten the 3 screws {14} using the supplied wrench {23}.



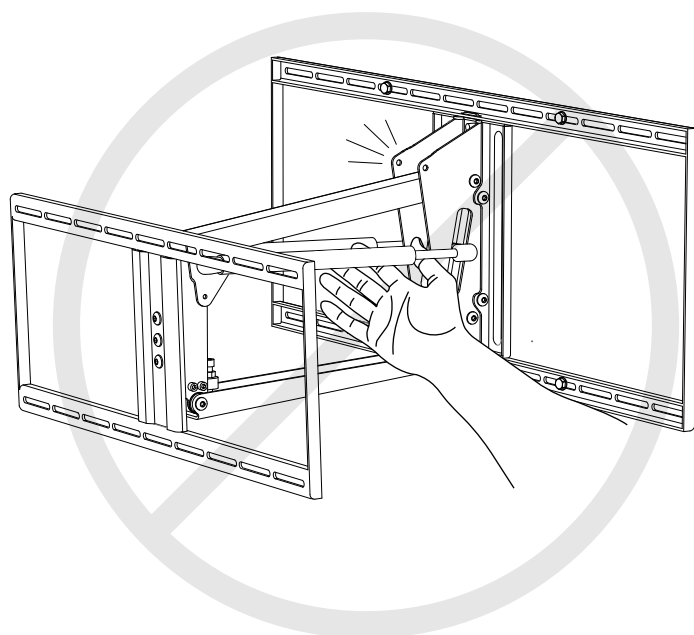
- 23**  THIS STEP REQUIRES TWO PEOPLE

Pull down the TV Brace until the upper arm is below the Safety Hole. DO NOT HIT MANTLE! Second person inserts Safety Bolt {20} and installs the Safety Nut {21}. Slowly release the TV Brace. Lifting Mechanism should be held at 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

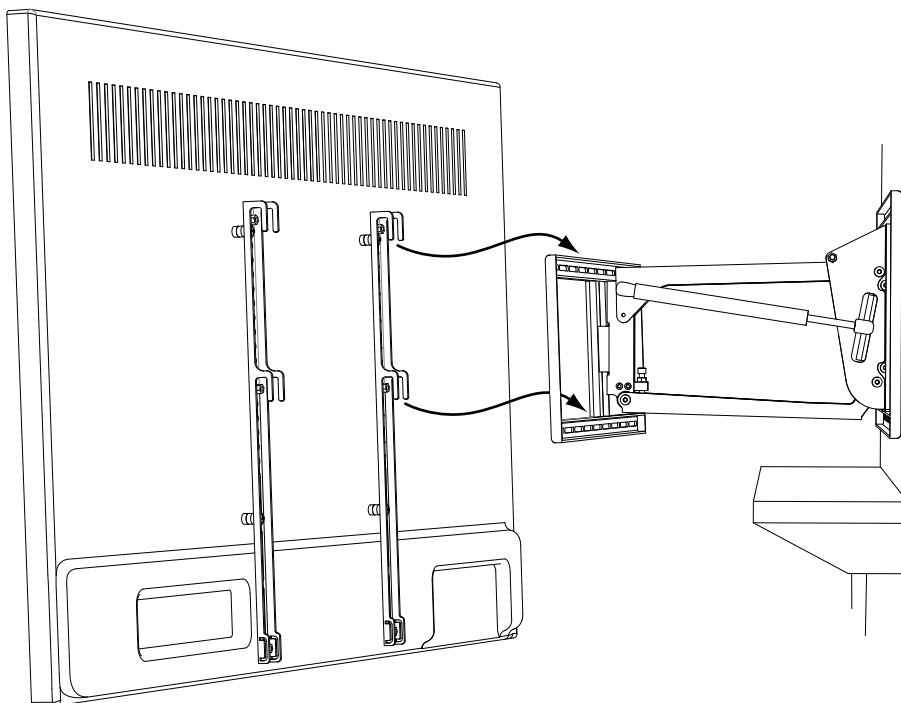


THIS STEP REQUIRES TWO PEOPLE

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

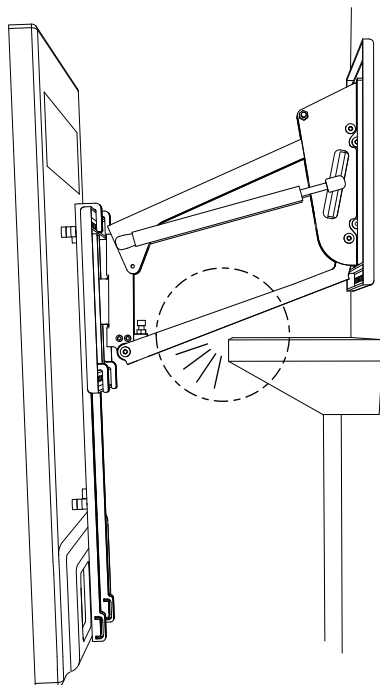
DO NOT allow the Television to drop far enough to cause the Lifting Mechanism {35} to hit the mantle.

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.



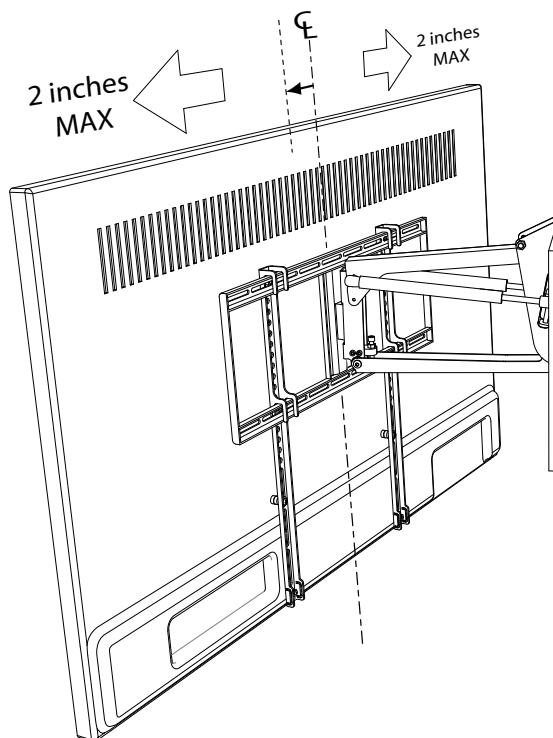
26

If the Lifting Mechanism {35} appears to be too close to the mantle, remove television. Go to STEP 31 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 in place.

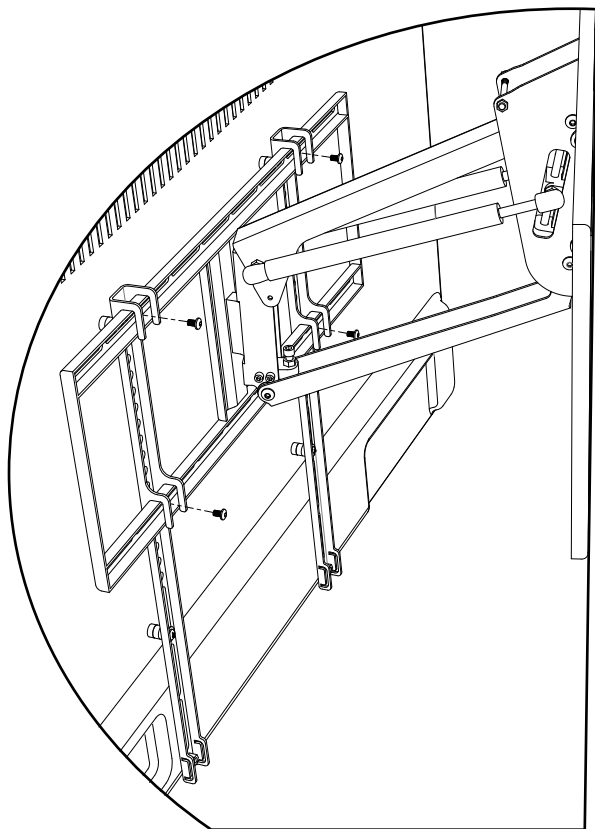


27

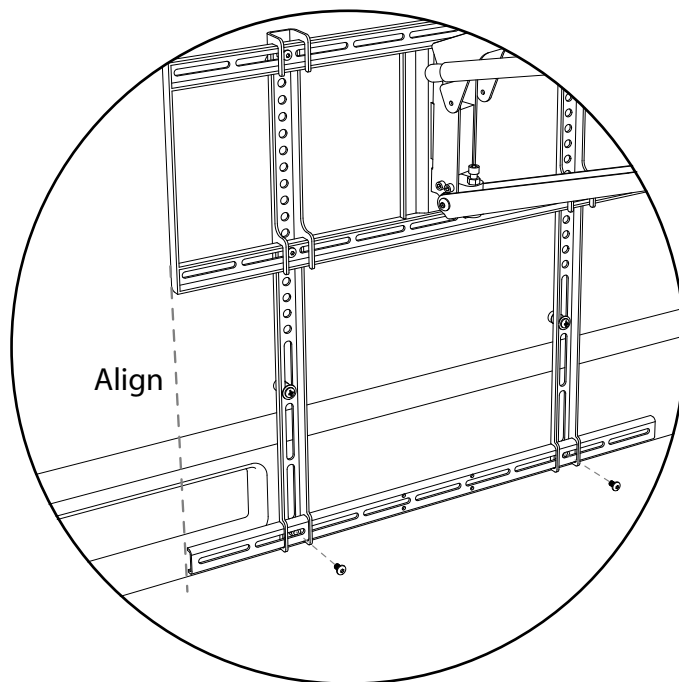
Check TV with a Level. Carefully slide the TV sideways, if required, until it is balanced and horizontal, up to a MAXIMUM OF 2 INCHES left or right. This distance should match the compensation distance used in STEP 11. If you did not make any compensation in STEP 11, but now you find that you need to, you should remove TV and repeat STEP 11 using this distance, but instead you must slide the Wall Plate {32} in the OPPOSITE direction than the direction you slid the TV for this step.



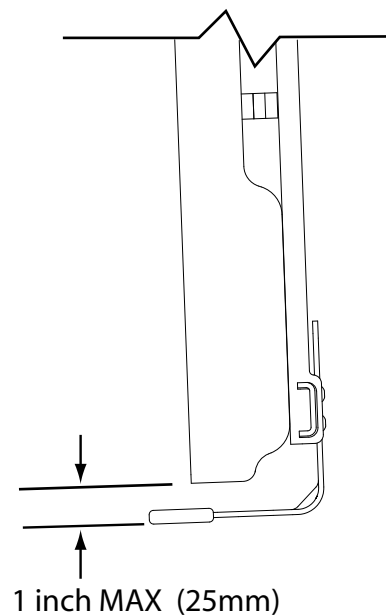
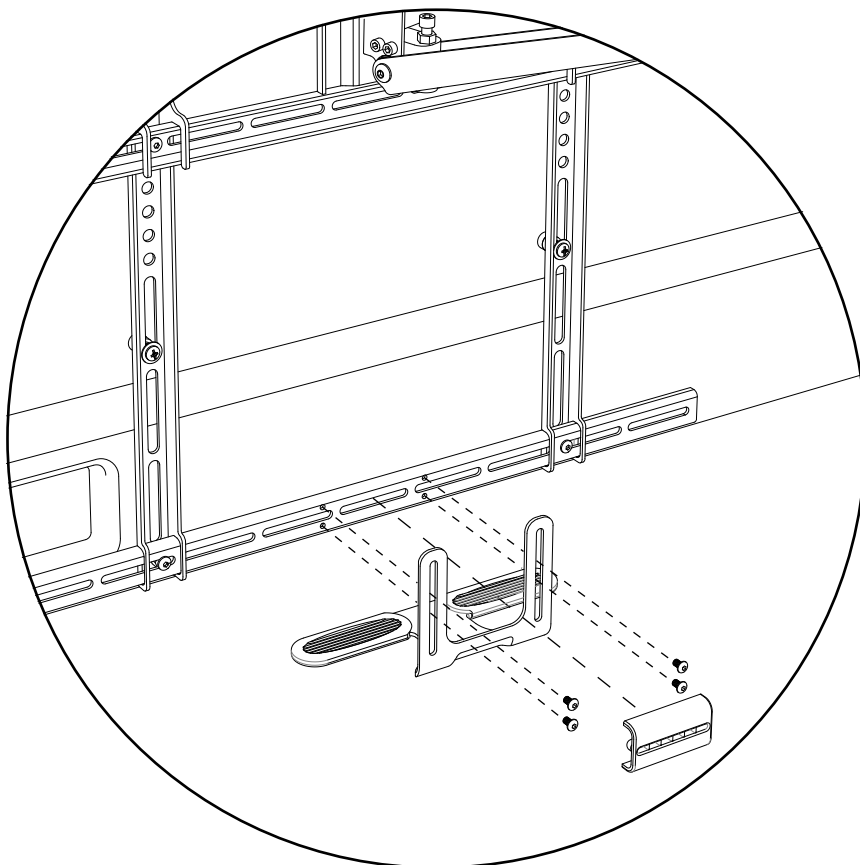
- 28** Install 4 Screws {15} through the TV Brace {33} and into the Vertical Braces {31}.



- 29** Install the Horizontal Bar {34} with Screws {15}. The Horizontal Bar MUST BE aligned with the end of TV Brace {33} or the Lifting Mechanism will not work properly.



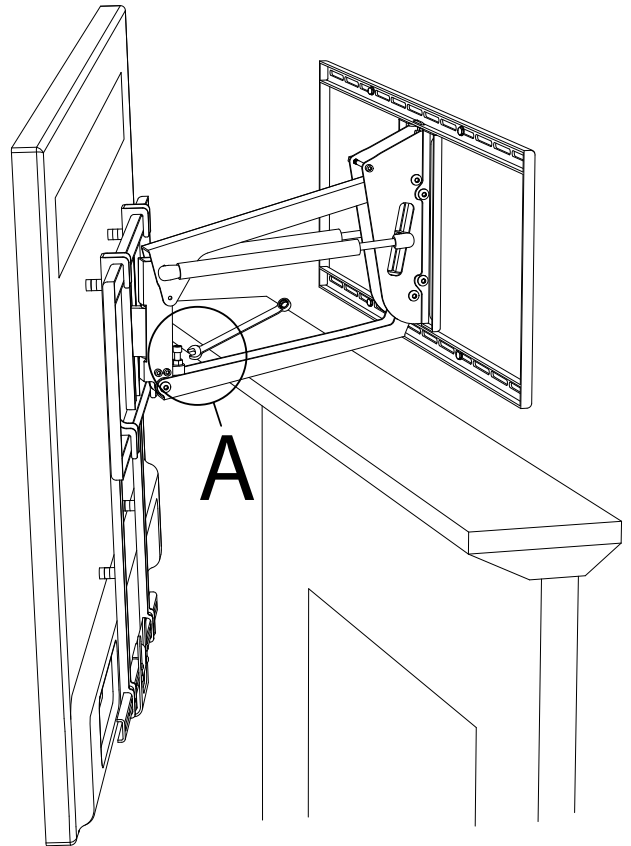
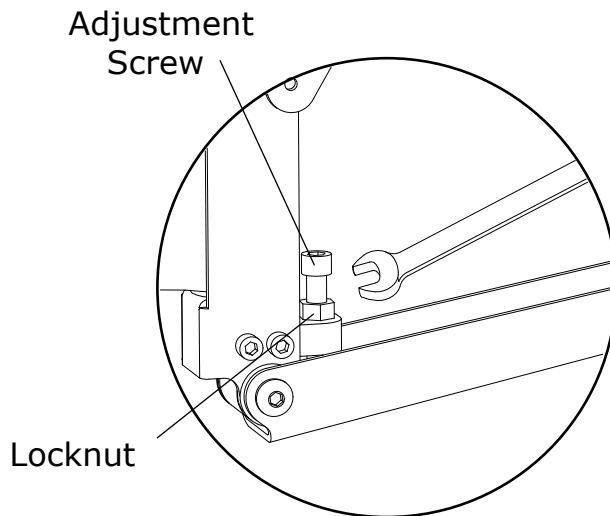
- 30** Install the Handle {28} with Screws {16} into the Horizontal Bar. Handle MUST be within one inch (1") of the bottom of the Television frame so that it does not hit the mantle. Firmly Insert the Rubber Bumper {30} into the center slot of the Horizontal Bar {34}.



Adjusting for Bottom Stop and Television Weight:

- 31 Adjusting for Bottom Stop Position:** Loosen the Locknut and adjust the Bottom Stop screw to the desired stopping position. Turning the screw clockwise will raise the Bottom Stop position, and turning the screw counter-clockwise will lower the TV closer to the mantle when the TV is in the lowered position.

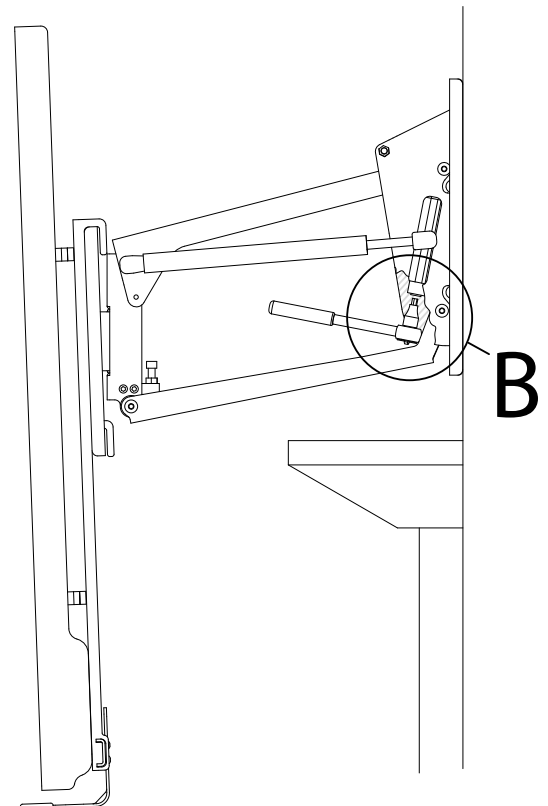
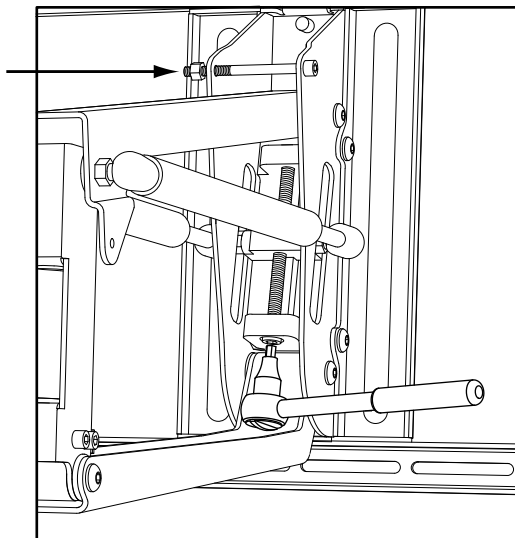
Tighten the locknut after adjustments are made.



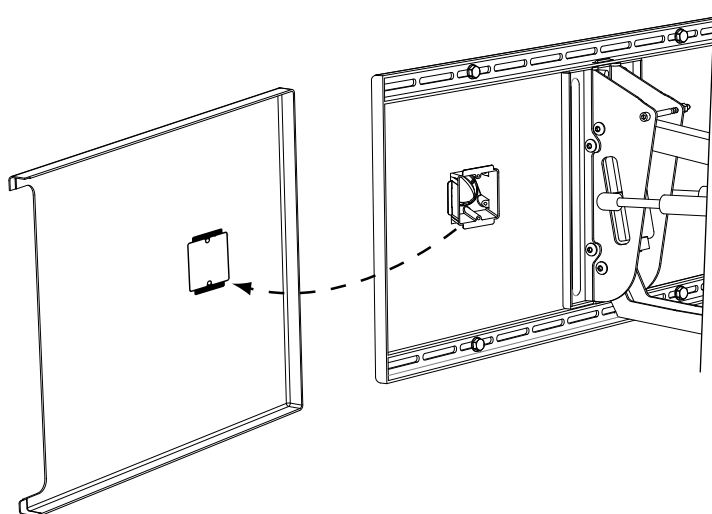
- 32 Adjusting for Television weight:** With Safety Bolt {20} in place, use the included Hex Tool {22} with a socket wrench to adjust the long bolt inside the Lifting Mechanism {35}. Turning this bolt increases or decreases the lifting force of the mechanism. Turn the bolt clockwise to increase the force for heavy TVs, or turn counter-clockwise for lighter TVs. This adjustment can take several turns.

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 slowly lower to the Bottom Stop.

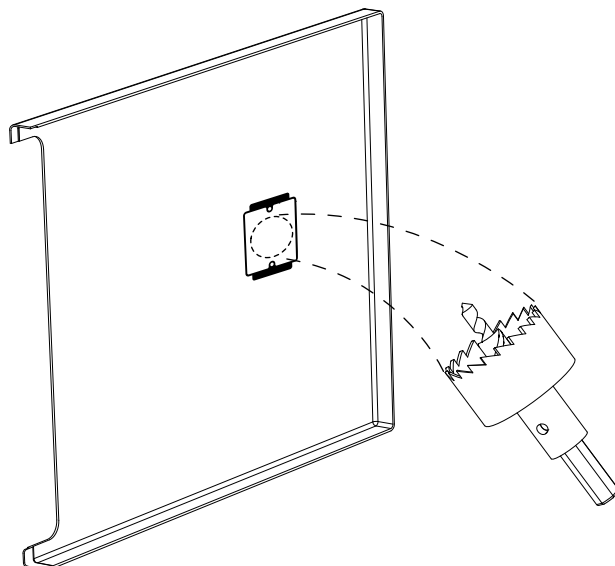
Safety Bolt {20}
Safety Nut {21}



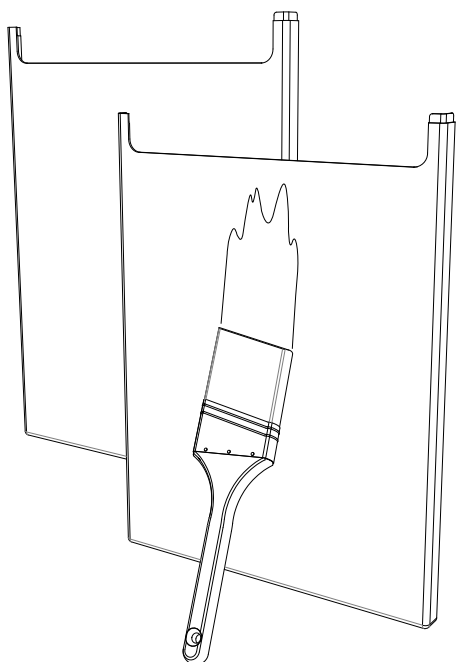
- 33 Measure carefully OR use transfer paint (similar to lipstick) to transfer the box location onto the Wall Cover {29}.



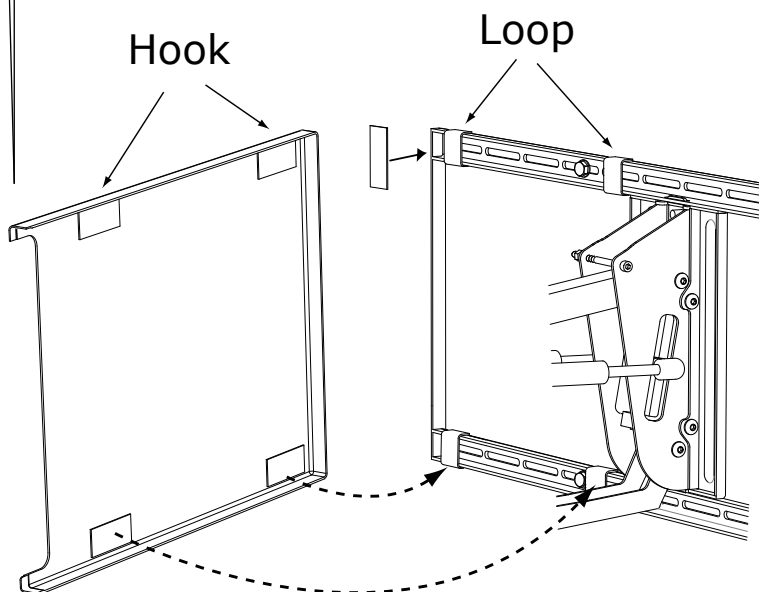
- 34 Use 1.5 inch Hole Saw drill bit to cut a hole through the Wall Cover {29} directly in the center of the marked area. Be careful not to damage the edge around hole.



- 35 Paint the Wall Covers {29} if desired.

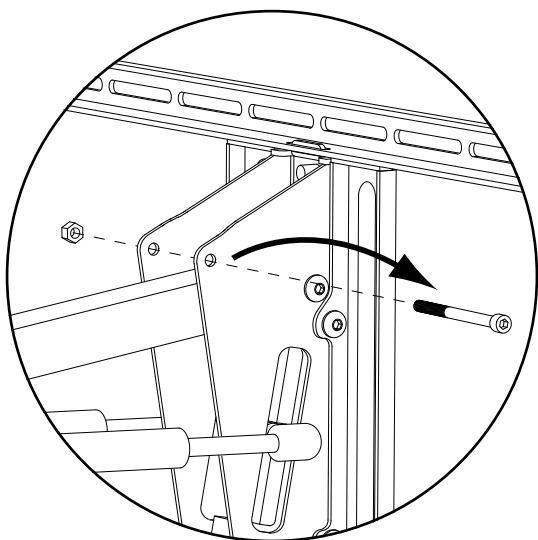


- 36 Install the Wall Covers using the included adhesive Velcro strips as shown below. Apply Loop {26} pieces to the Wall Frame, and the Hook {25} pieces to the Wall Covers.



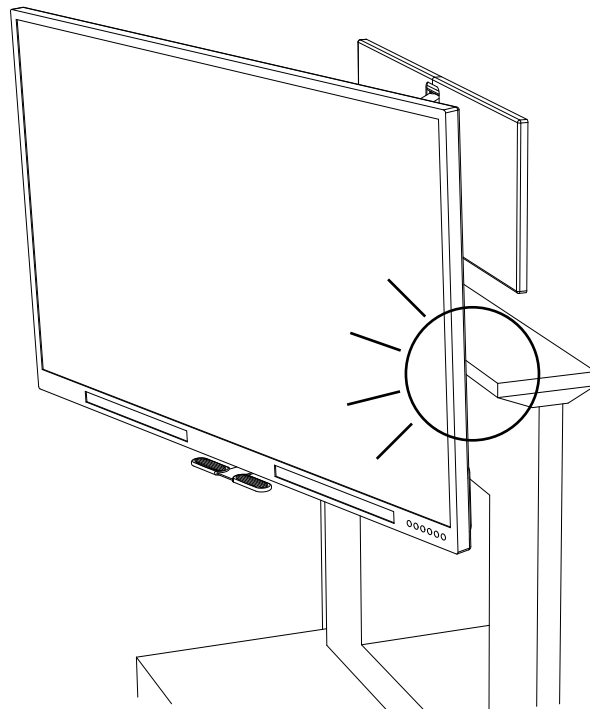
- 37 With the television in the lowered position, remove the Safety Nut {21} and Safety Bolt {20} from the Lifting Mechanism {35}.

KEEP THIS BOLT AND NUT in a safe place for use in the future. They are needed to remove the television or change the Gas Springs. Recommendation: Tape them to the inside of the Wall Cover {29}.



! CAUTION:

Never swing the television until it hits the mantle on either side.



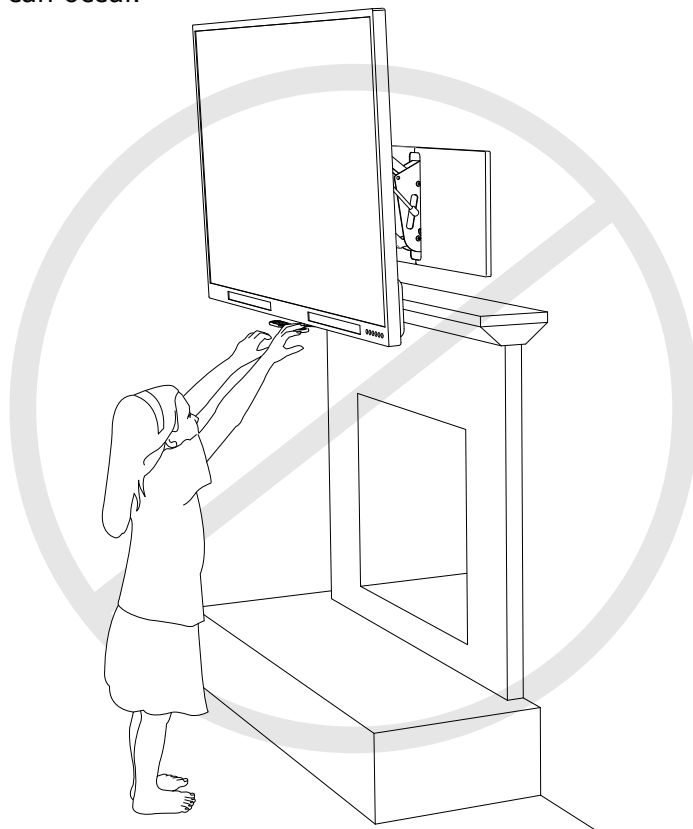
! CAUTION:

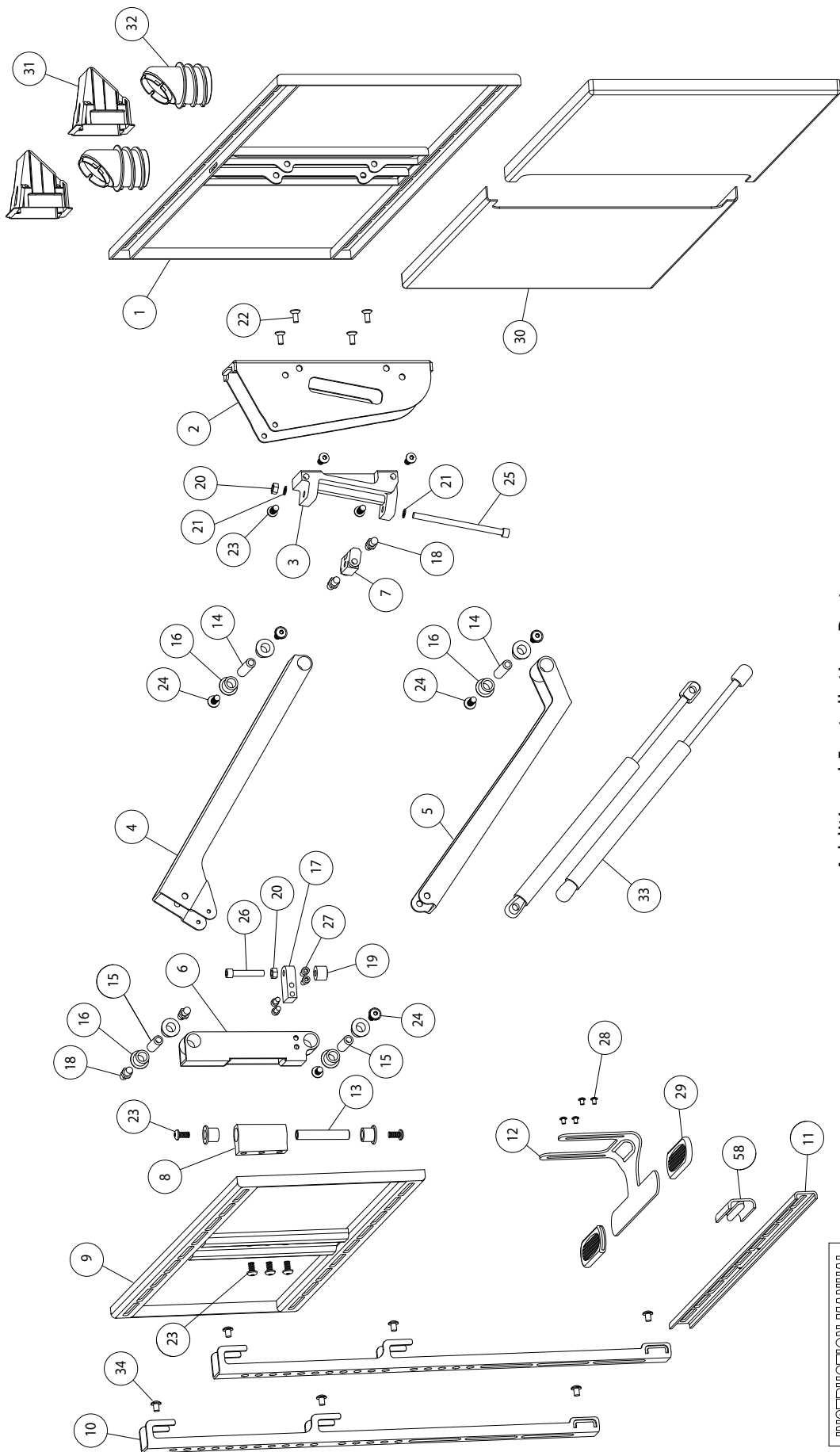
Never release the handle before it is fully upright. MantelMount is strongest in the top position, and allowing it to slam closed can damage televisions. Always control the lifting process.



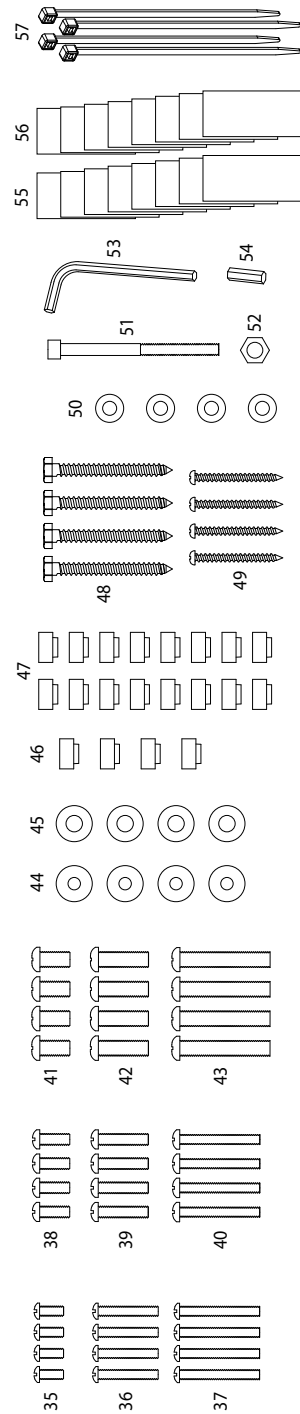
! CAUTION:

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



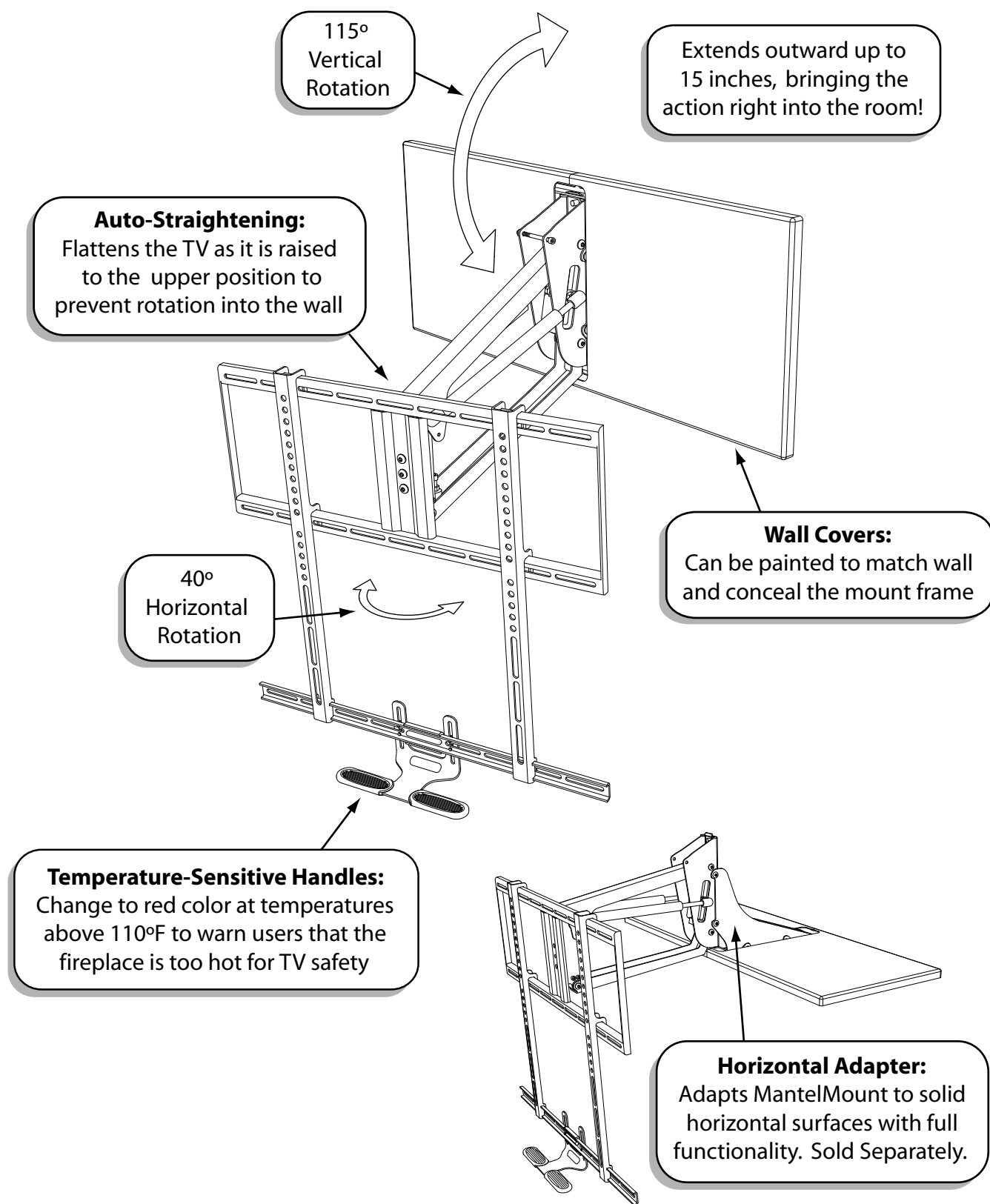


Additional Installation Parts



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	12010	Wall Frame	1
2	12015	Wall Bracket	1
3	12050	Adjustment Block	1
4	12028	Upper Arm	1
5	12032	Lower Arm	1
6	12020	Pivot Bracket	1
7	12055	Sliding Block	1
8	12065	Pivot Block	1
9	12025	TV Frame	1
10	12038	TV Vertical Brace	2
11	12042	TV Horizontal Brace	1
12	12035	Center Handle	1
13	12078	Shaft 74mm	1
14	12076	Shaft 57mm	2
15	12074	Shaft 45mm	2
16	12115	Bushing	10
17	12070	Depth Block	1
18	12150	Ball Post with Lock Washer	4
19	12165	Rubber Bumper M8	1
20	12186	Locknut M8	2
21	12164	Washer	2
22	12184	Flat Screw M6 x 16	4
23	12176	Round Head Screw M8 x 16	9
24	12182	Round Head Screw M8 x 16 w/ Washer	6
25	12170	Cap Screw M8 x 130	1
26	12172	Cap Screw M8 x 50	1
27	12174	Cap Screw M6 x 10	4
28	12180	Round Head Screw M5 x 8	4
29	12120	Handle Grip	2
30	12125	Wall Cover	2

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
31	12130	Electrical Box	2
32	12128	Electrical Swivel	2
33	12160	Gas Spring	2
34	12178	Round Head Screw M6 x 10	6
35	12189	M5 x 12	4
36	12190	M5 x 30	4
37	12191	M5 x 40	4
38	12193	M6 x 16	4
39	12194	M6 x 30	4
40	12195	M6 x 40	4
41	12197	M8 x 15	4
42	12198	M8 x 25	4
43	12199	M8 x 45	4
44	12166	Washer M6	4
45	12167	Washer M8	4
46	12116	Spacer M6	4
47	12118	Spacer M8	16
48	12154	Lag Bolt 60mm	4
49	12157	Wood Screw 50mm	4
50	12155	Washer, Lag Bolt	4
51	12151	M6 x 80 Cap Screw	1
52	12185	Locknut M6	1
53	12202	Allen Wrench M6	1
54	12203	Hex Tool M8	1
55	12139	Velcro Strip HOOK	8
56	12141	Velcro Strip LOOP	8
57	12162	Tie Wrap	4
58	12135	Rubber Bumper	1
59	TM1A	Instruction Manual	1



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