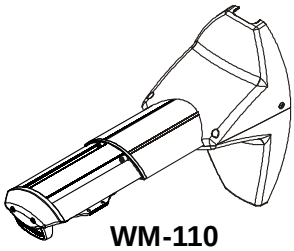
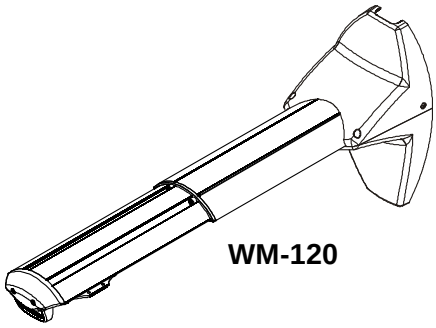
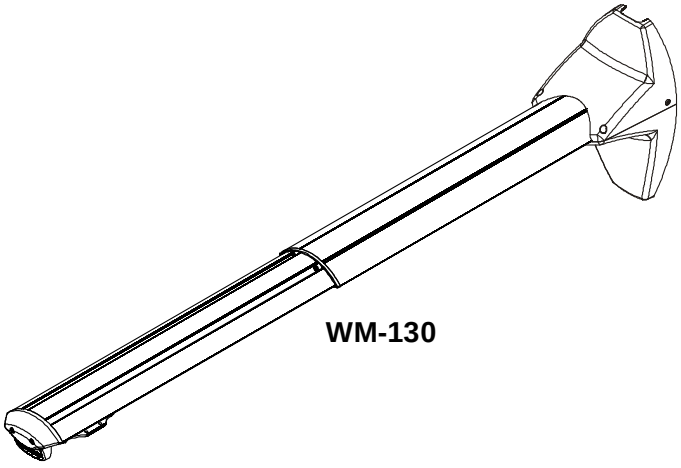
# INSTALLATION INSTRUCTIONS



WM-110



WM-120



WM-130

## Single Stud Short Throw Wall Mounts

CHIEF®
Our Mounts. **Your Vision.**

# WM110S-120S-130S

## DISCLAIMER

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## IMPORTANT SAFETY INSTRUCTIONS

**WARNING:** A WARNING alerts you to the possibility of serious injury or death if you do not follow the instructions.

**CAUTION:** A CAUTION alerts you to the possibility of damage or destruction of equipment if you do not follow the corresponding instructions.

**WARNING:** Failure to read, thoroughly understand, and follow all instructions can result in serious personal injury, damage to equipment, or voiding of factory warranty! It is the installer's responsibility to make sure all components are properly assembled and installed using the instructions provided.

**WARNING:** Failure to provide adequate structural strength for this component can result in serious personal injury or damage to equipment! It is the installer's responsibility to make sure the structure to which this component is attached can support five times the combined weight of all equipment. Reinforce the structure as required before installing the component.

**WARNING:** Exceeding the weight capacity can result in serious personal injury or damage to equipment! It is the installer's responsibility to make sure the combined weight of all components attached to the WM110S/120S/130S mounts up to (and including) the projector does not exceed 50 lbs (22.68 kg) for the WM110S or the WM120S; or 25 lbs (11.34 kg) for the WM130S.

**WARNING:** Use this mounting system only for its intended use as described in these instructions. Do not use attachments not recommended by the manufacturer.

**WARNING:** Never operate this mounting system if it is damaged. Return the mounting system to a service center for examination and repair.

**WARNING:** Do not use this product outdoors.

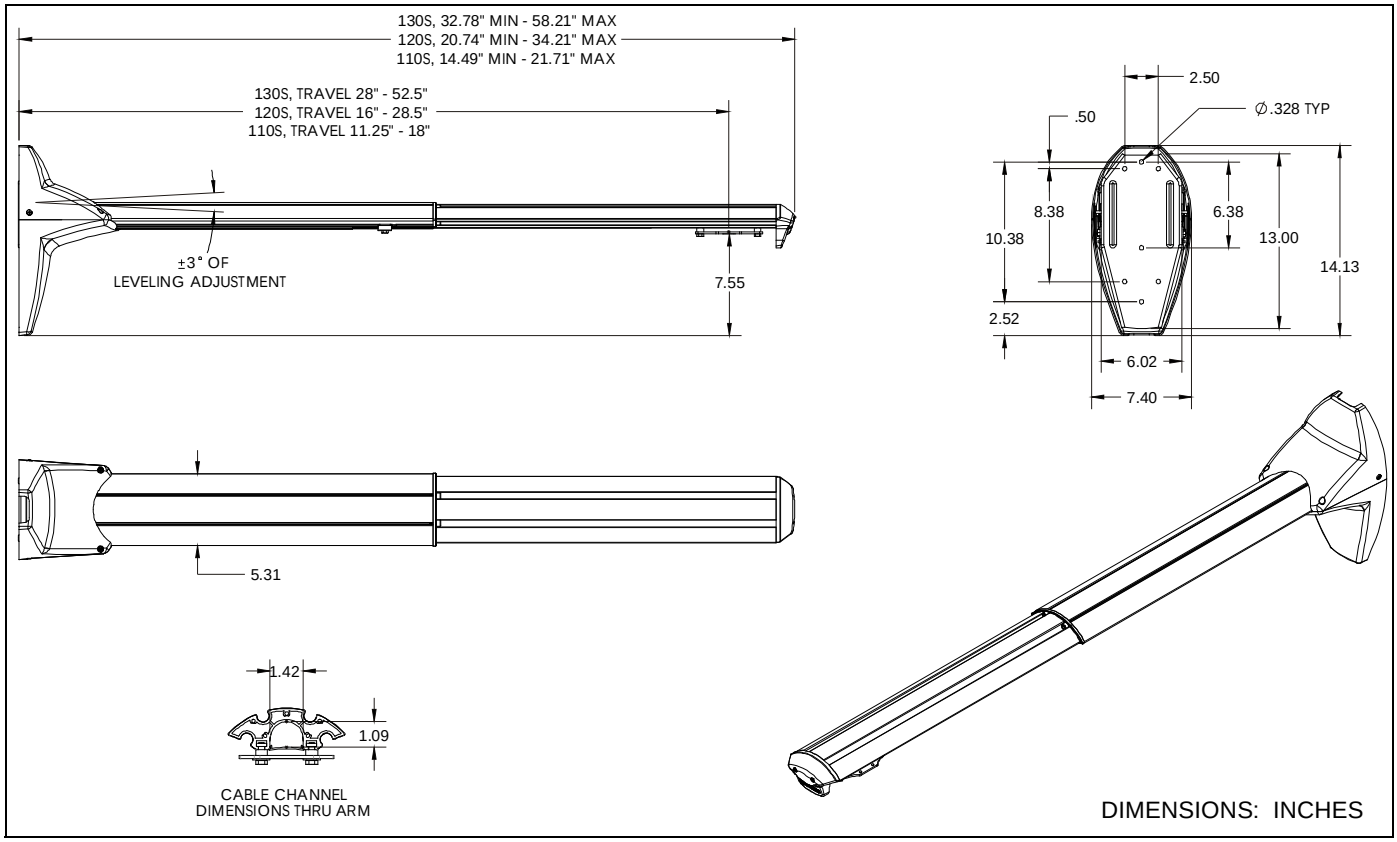
**IMPORTANT ! :** The WM110S/120S/130S mounts are designed to be mounted to:

- a bare 8" concrete or 8"x8"x16" concrete block wall;
- a 2" x 4" wood stud (16" on center) wall with a maximum drywall thickness of 5/8" (1.6cm); or
- a 2" x 4"-25ga minimum steel studs wall with a minimum drywall thickness of 1/2" (1.3cm).

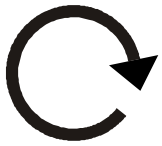
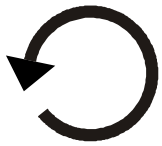
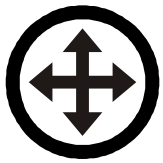
**NOTE:** The WM110S/120S/130S mounts are required to use Listed Chief accessories [projector interfaces--Models RPM, RPA, RSM or RSA (not included)] in order to complete the mounting system.

**--SAVE THESE INSTRUCTIONS--**

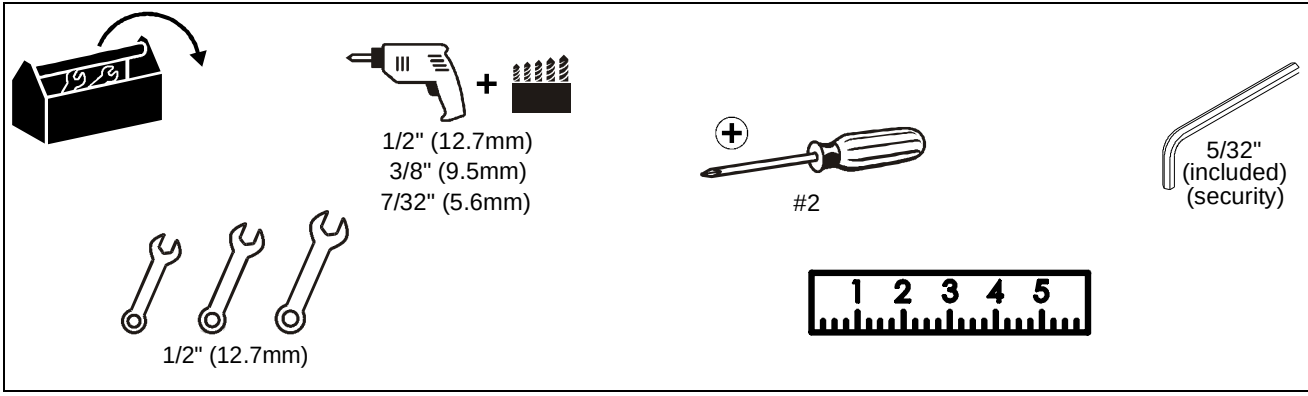
## DIMENSIONS


130S, 32.78" MIN - 58.21" MAX
120S, 20.74" MIN - 34.21" MAX
110S, 14.49" MIN - 21.71" MAX
130S, TRAVEL 28" - 52.5"
120S, TRAVEL 16" - 28.5"
110S, TRAVEL 11.25" - 18"
±3° OF
LEVELING ADJUSTMENT
7.55
5.31
1.42
1.09
CABLE CHANNEL
DIMENSIONS THRU ARM
2.50
.50
Ø.328 TYP
8.38
6.38
10.38
13.00
14.13
2.52
6.02
7.40
DIMENSIONS: INCHES

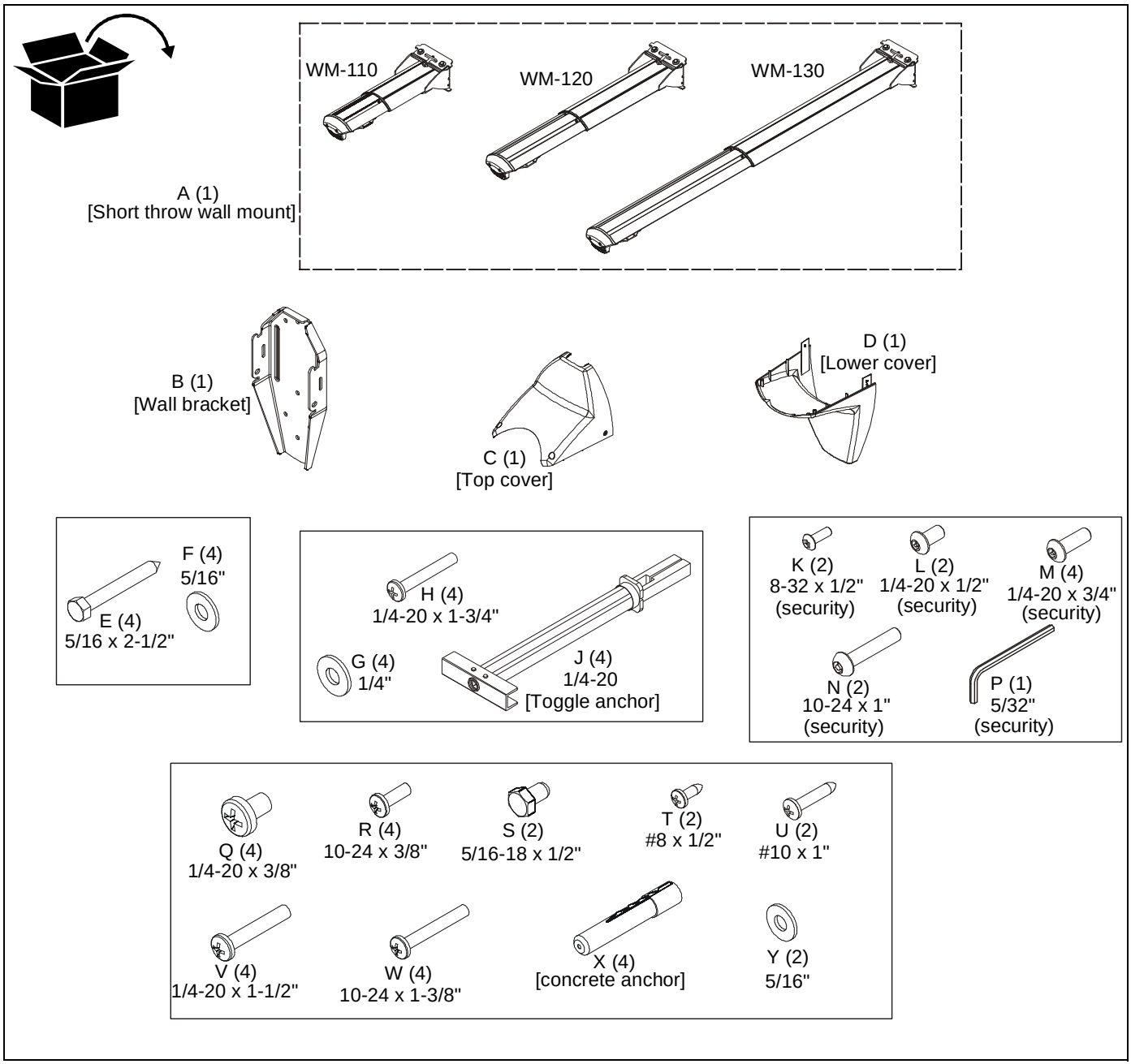
## LEGEND

| | |
|---|---|
|  | Tighten Fastener<br>Apretar elemento de fijación<br>Befestigungsteil festziehen<br>Apertar fixador<br>Serrare il fissaggio<br>Bevestiging vastdraaien<br>Serrez les fixations |
| | Pencil Mark<br>Marcar con lápiz<br>Stiftmarkierung<br>Marcar com lápis<br>Segno a matita<br>Potloodmerkteken<br>Marquage au crayon |
|  | Loosen Fastener<br>Aflojar elemento de fijación<br>Befestigungsteil lösen<br>Desapertar fixador<br>Allentare il fissaggio<br>Bevestiging losdraaien<br>Desserrez les fixations |
| | Drill Hole<br>Perforar<br>Bohrloch<br>Fazer furo<br>Praticare un foro<br>Gat boren<br>Percez un trou |
| | Phillips Screwdriver<br>Destornillador Phillips<br>Kreuzschlitzschraubendreher<br>Chave de fendas Phillips<br>Cacciavite a stella<br>Kruiskopschroevendraaier<br>Tournevis à pointe cruciforme |
|  | Adjust<br>Ajustar<br>Einstellen<br>Ajustar<br>Regolare<br>Afstellen<br>Ajuster |
| | Open-Ended Wrench<br>Llave de boca<br>Gabelschlüssel<br>Chave de bocas<br>Chiave a punte aperte<br>Steeksleutel<br>Clé à fourche |
| | Remove<br>Quitar<br>Entfernen<br>Remover<br>Rimuovere<br>Verwijderen<br>Retirez |
| | By Hand<br>A mano<br>Von Hand<br>Com a mão<br>A mano<br>Met de hand<br>À la main |
| | Optional<br>Opcional<br>Optional<br>Opcional<br>Opzionale<br>Optie<br>En option |
| | Hex-Head Wrench<br>Llave de cabeza hexagonal<br>Sechskantschlüssel<br>Chave de cabeça sextavada<br>Chiave esagonale<br>Zeskantsleutel<br>Clé à tête hexagonale |
| | Security Wrench<br>Llave de seguridad<br>Sicherheitsschlüssel<br>Chave de segurança<br>Chiave di sicurezza<br>Veiligheidssleutel<br>Clé de sécurité |

## TOOLS REQUIRED FOR INSTALLATION

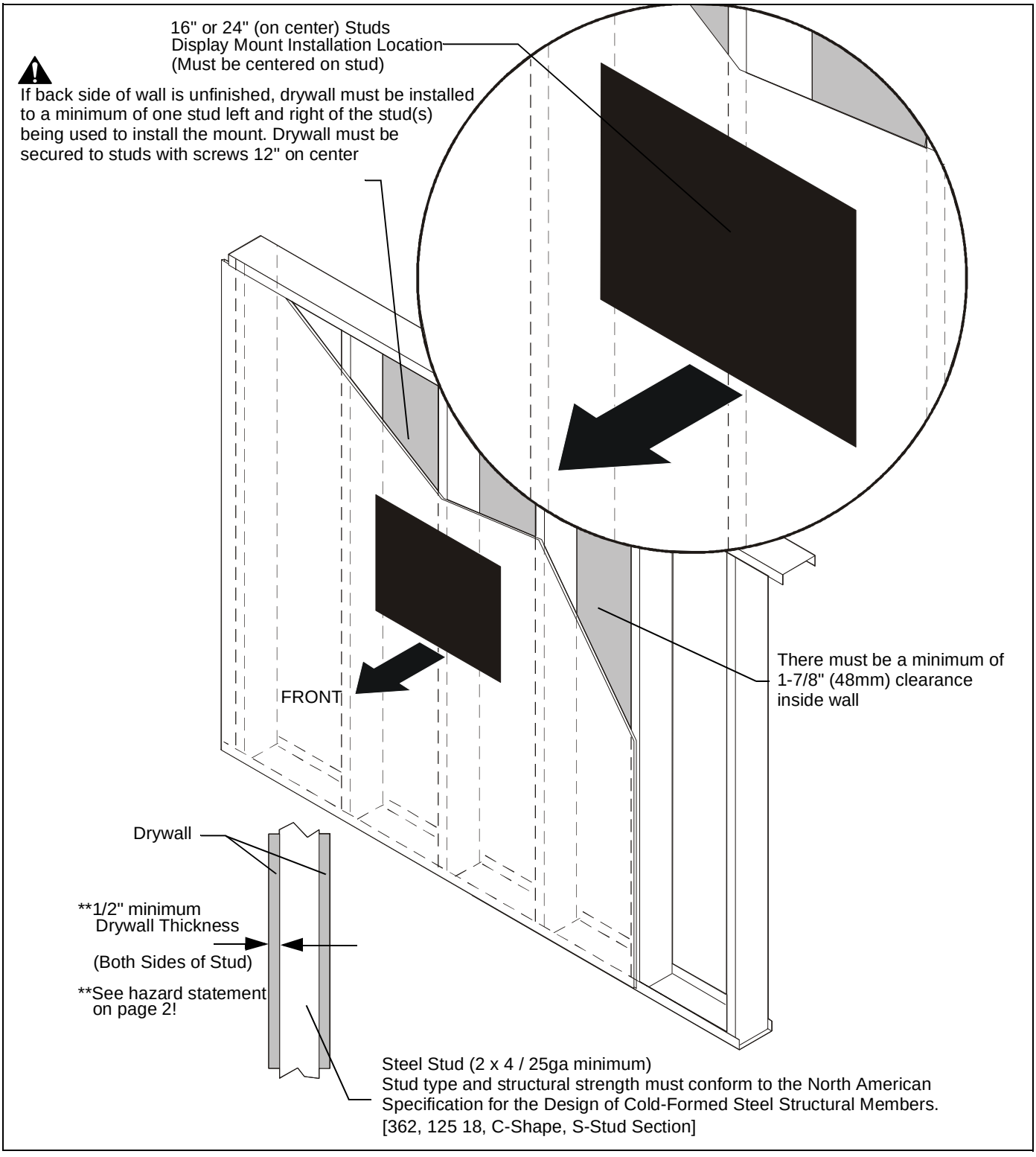



## PARTS



## Site Requirements

**WARNING:** IMPROPER INSTALLATION CAN LEAD TO EQUIPMENT FALLING CAUSING SERIOUS PERSONAL INJURY OR DAMAGE TO EQUIPMENT! The figure below identifies the minimum requirements for installation of display mounts onto a steel stud structure. If the structure or its components do not meet these requirements contact the mount manufacturer for specific instructions before attempting installation. It should also be noted that no other equipment should be mounted to the same stud.



## ASSEMBLY AND INSTALLATION

### Installing Mounting Bracket

**WARNING:** ELECTRICAL SHOCK HAZARD! CUTTING OR DRILLING INTO ELECTRICAL CORDS OR CABLES CAN CAUSE DEATH OR SERIOUS PERSONAL INJURY! ALWAYS make certain area behind mounting surface is free of electrical wires and cables before cutting, drilling, or installing fasteners.

**WARNING:** EXPLOSION AND FIRE HAZARD! CUTTING OR DRILLING INTO GAS PLUMBING CAN CAUSE DEATH OR SERIOUS PERSONAL INJURY! ALWAYS make certain area behind mounting surface is free of gas, water, waste, or any other plumbing before cutting, drilling, or installing fasteners.

### Mounting Wall Bracket

Proceed to the wall type to which the mount is being attached.

#### Concrete or Concrete Block

1. Determine mounting location on wall.
2. Using mounting bracket (B) as a template, mark four holes at the outer holes in bracket. (See Figure 1)
3. Drill four 3/8" x 3-3/8" deep holes at marked locations in wall. (See Figure 1)

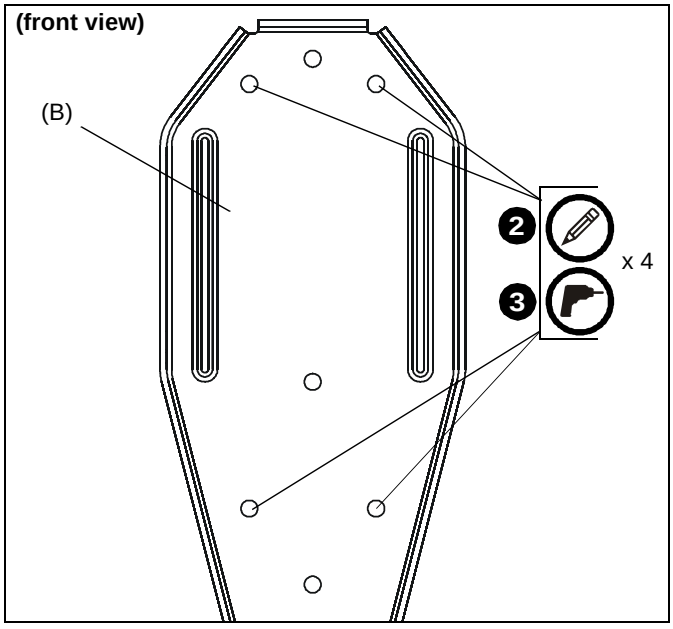



**Figure 1**

4. Install four concrete anchors (X) into drilled holes. (See Figure 2)
5. Install four 5/16 x 2-1/2" hex head lag screws (E) through four 5/16" washers (F), outer holes of wall bracket (B) and into concrete anchors (X). (See Figure 2)

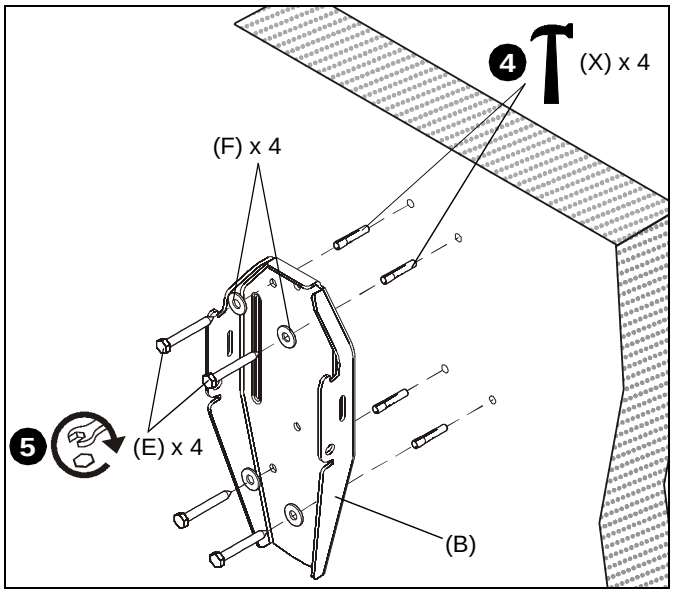



**Figure 2**

#### Wood Studs

1. Determine mounting location on wall. Use a stud finder to locate studs.
2. Line up inner three holes on wall bracket (B) with center of stud at desired mounting location. (See Figure 3)
3. Using wall bracket (B) as a template, mark three holes at inner three holes in bracket. (See Figure 3)
4. Drill three 7/32" x 2-1/2" deep holes at locations marked in Step 3. (See Figure 3)

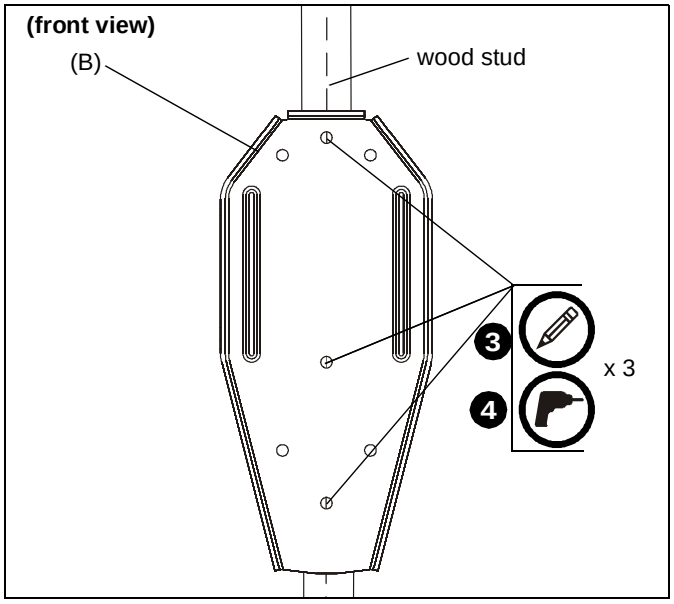



**Figure 3**

5. Install three 5/16 x 2-1/2" hex head lag screws (E) through three 5/16" washers (F), inner holes of mounting bracket and into drilled holes. (See Figure 4)

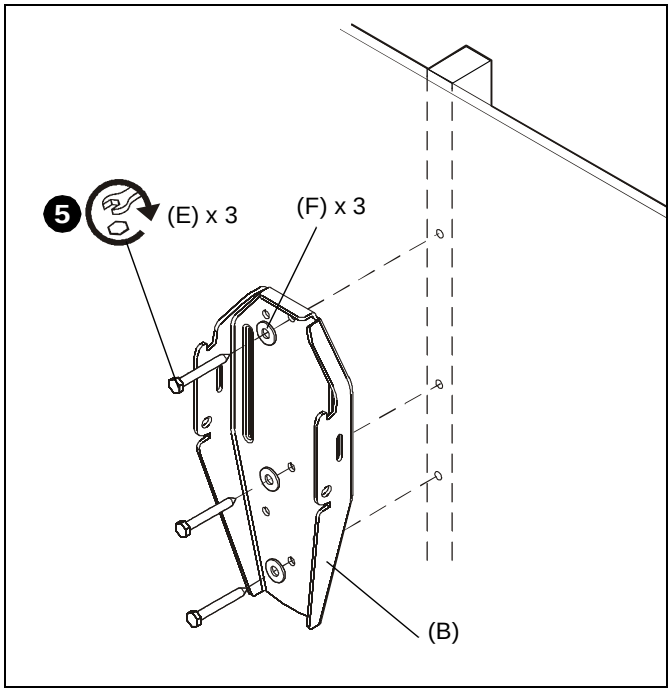



**Figure 4**

### Steel Studs

**IMPORTANT ! :** See **Site Requirements** section before proceeding with Steel Studs installation to ensure installation site meets requirements! The drywall must have a minimum thickness of 1/2"!

1. Determine mounting location on wall. Use stud finder to locate steel studs.
2. Line up inner three holes on wall bracket (B) with center of stud at desired mounting location. (See Figure 5)
3. Using wall bracket (B) as a template, mark three holes at inner three holes in bracket. (See Figure 5)
4. Drill three 1/2" holes at marked locations in wall. (See Figure 5)

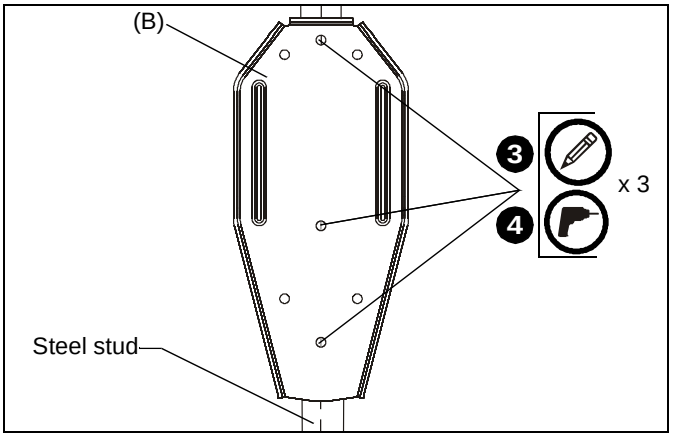



**Figure 5**

5. Hold metal channel on anchor (J) flat alongside plastic straps and slide channel through hole. (See Figure 6)

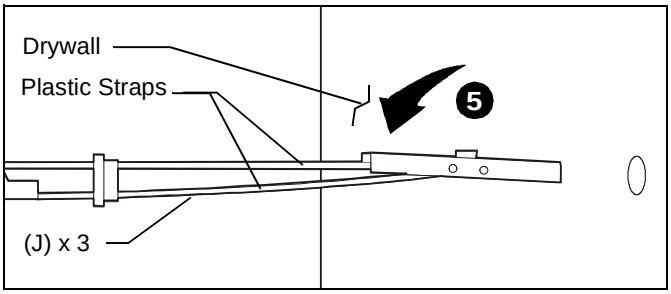



**Figure 6**

6. Holding plastic straps on anchor (J), pull anchor away from wall until channel rests flush behind wall making sure anchor channel is positioned vertically on stud. (See Figure 7)
7. Slide plastic cap on anchor (J) towards wall until flange of cap is flush with wall. (See Figure 7)

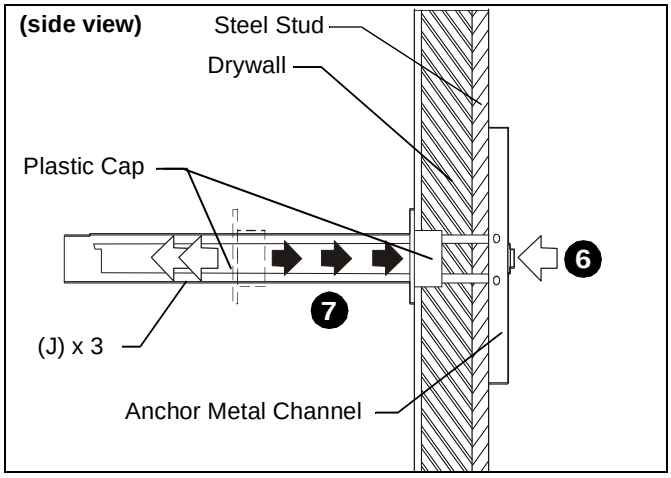



**Figure 7**

8. Snap off plastic straps on anchor at wall by pushing side to side, snapping off straps level with flange of plastic cap. (See Figure 8)
9. Repeat Steps 5 through 8 for each mounting hole.

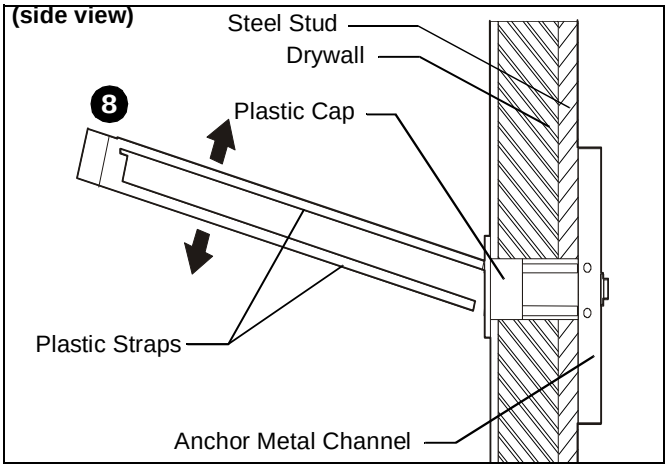



**Figure 8**

10. Place wall bracket over anchors and align mounting holes in display mount with holes in anchors. (See Figure 9)
11. Insert 1/4-20 x 1-3/4" Phillips pan head screws (H) through 1/4" washer (G), corresponding mounting hole on wall bracket and into anchor (J) and tighten until flush against mount. DO NOT over tighten! (See Figure 9)
12. Repeat Steps 10 through 11 for remaining 2 mounting holes.

**WARNING:** IMPROPER INSTALLATION CAN LEAD TO EQUIPMENT FALLING CAUSING SERIOUS PERSONAL INJURY OR DAMAGE TO EQUIPMENT! Over tightening of mounting hardware can damage the steel studs. DO NOT over tighten mounting hardware!

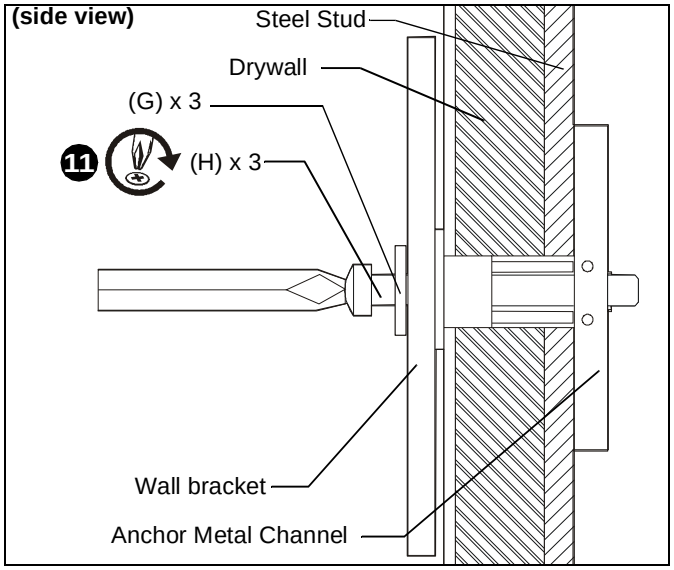



**Figure 9**

## Installation to Wall Bracket

1. Lift WM1XXS assembly (A) up to wall bracket (B) and hook upper plate over upper notches on bracket. (See Figure 10)
2. Slide lower plate into lower notches on bracket. (See Figure 10)

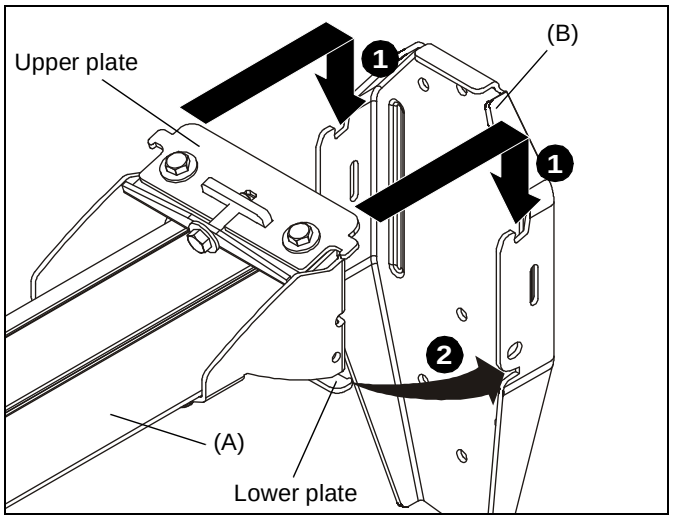



**Figure 10**

3. Fasten WM1XXS assembly (A) to wall bracket (B) using two 5/16 x 1/2" hex head cap screws (R) through two 5/16" washers (Y), the wall bracket and WM1XXS. (See Figure 11)

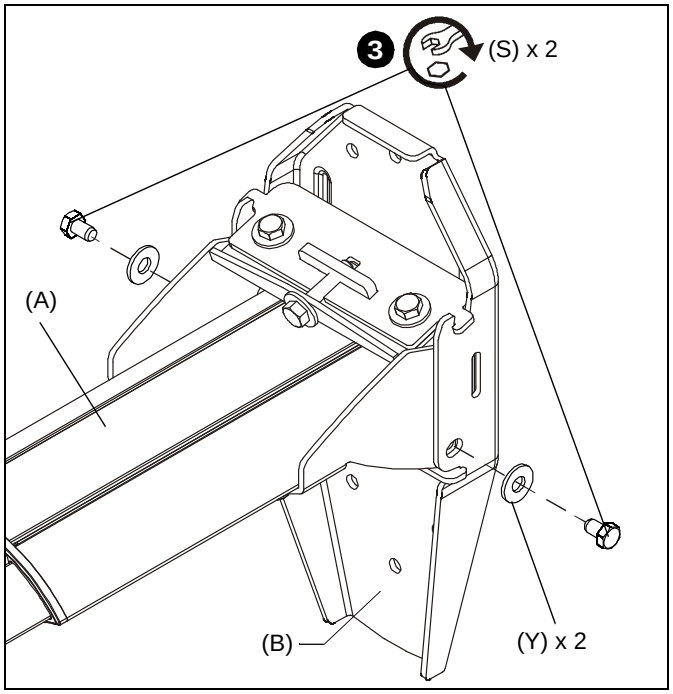



**Figure 11**

## Installing Mount Covers

1. Raise lower cover (D) up to WM1XXS. (See Figure 12)

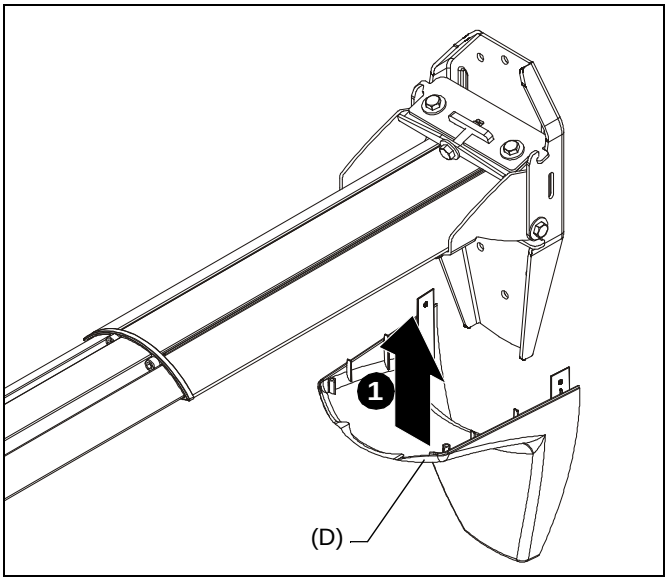



**Figure 12**

2. Lower top cover (C) onto WM1XXS. (See Figure 13)
3. Install two #10 x 1" Phillips pan head tapping screws (U) through holes on sides of covers. (See Figure 13)
4. Install two #8 x 1/2" Phillips pan head tapping screws (T) into top of top cover (C). (See Figure 13)

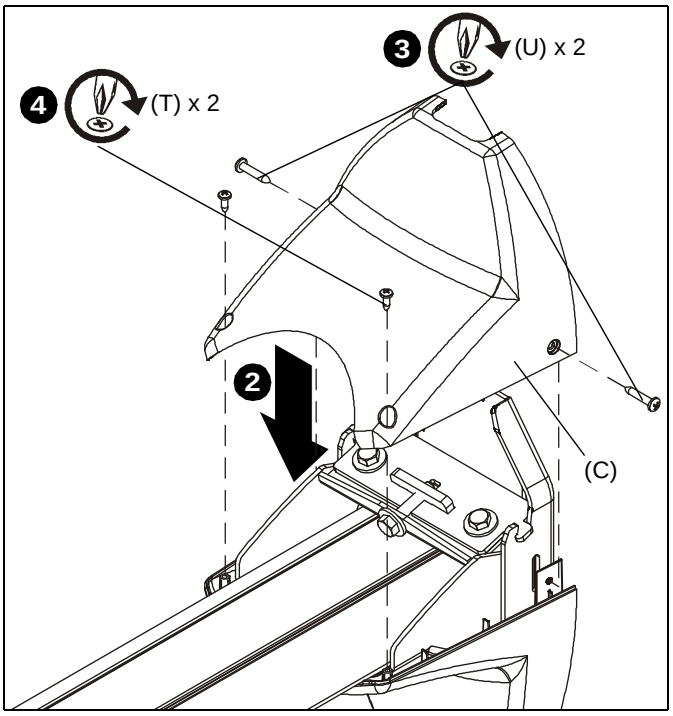



**Figure 13**

## PROJECTOR INSTALLATION

**WARNING:** Exceeding the weight capacity can result in serious personal injury or damage to equipment! It is the installer's responsibility to make sure the combined weight of all components attached to the short throw projector mounts up to (and including) the projector does not exceed 50 lbs (22.68 kg) for the WM110S or the WM120S or 25 lbs (11.34 kg) for the WM130S.

Determine hole configuration to use for each specific projector mount. (See Figure 14)

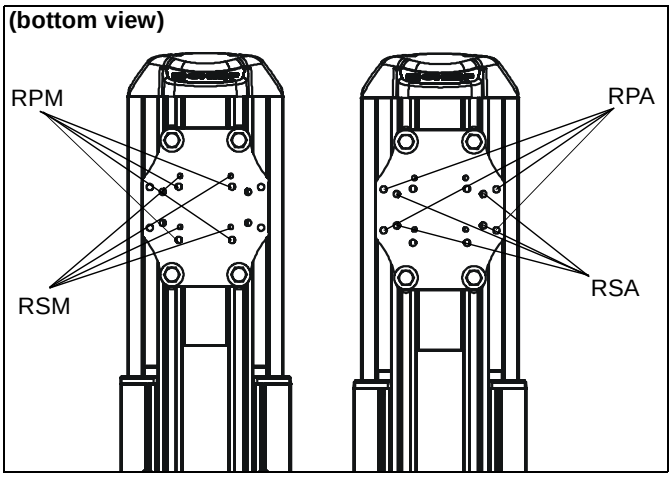



**Figure 14**

### Listed Chief RPM (not included) Installation

1. Line up mounting holes on RPM mount with corresponding holes on projector mounting plate. (See Figure 14)
2. Install four 1/4-20 x 1-1/2" Phillips pan machine screws (V) through RPM holes and into projector mounting plate. (See Figure 15)

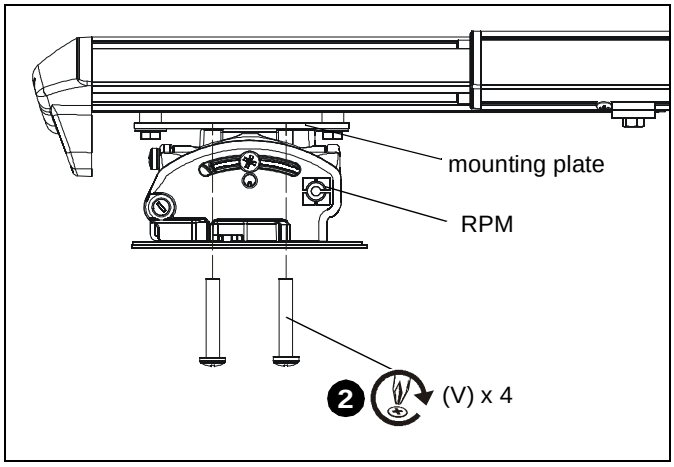



**Figure 15**

3. Install interface and projector to RPM according to RPM installation instructions.

## Listed Chief RSM (not included) Installation

1. Line up mounting holes on RSM mount with corresponding holes on projector mounting plate. (See Figure 14)
2. Install four 10-24 x 1-3/8" Phillips pan machine screws (W) through RSM holes and into projector mounting plate. (See Figure 16)

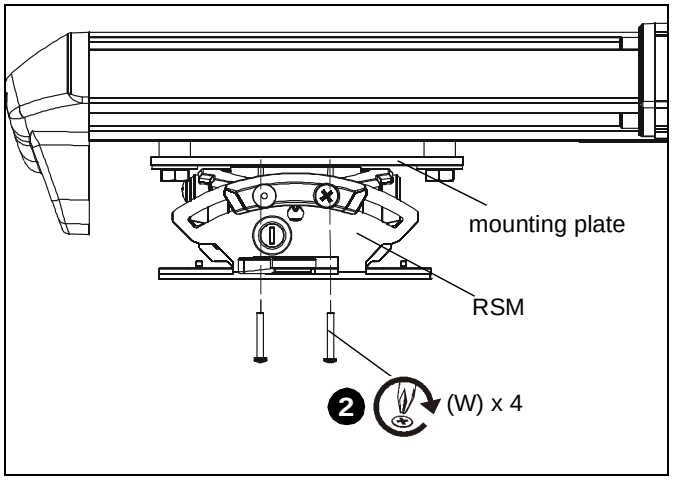



**Figure 16**

3. Install interface and projector to RSM according to RSM installation instructions.

## Listed Chief RPA (not included) Installation

1. Line up mounting holes on RPA mount with corresponding holes on projector mounting plate. (See Figure 14)
2. Install four 1/4-20 x 3/8" Phillips pan machine screws (Q) through RPA holes and into projector mounting plate. (See Figure 17)

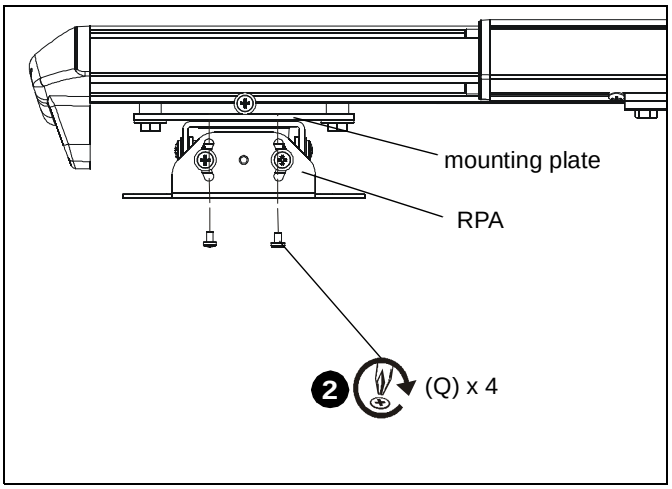



**Figure 17**

3. Install interface and projector to RPA according to RPA installation instructions.

## Listed Chief RSA (not included) Installation

1. Line up mounting holes on RSA mount with corresponding holes on projector mounting plate. (See Figure 14)
2. Install four 10-24 x 3/8" Phillips pan machine screws (R) through RSA holes and into projector mounting plate. (See Figure 18)

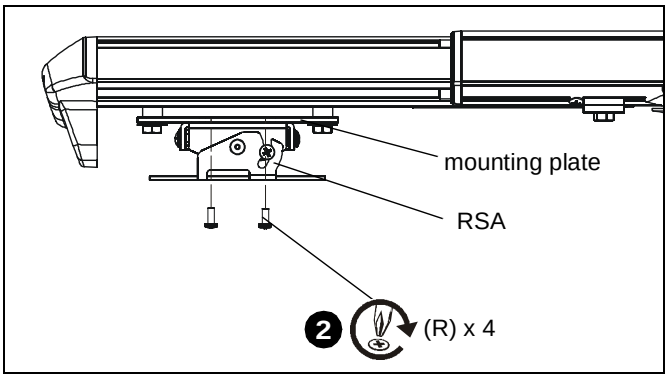



**Figure 18**

3. Install interface and projector to RSA according to RSA installation instructions.

## Removing Mount Covers

1. Remove two #8 x 1/2" Phillips pan tapping screws (T) and two #10 x 1" Phillips pan tapping screws (U) to free top cover (C) and expose pitch adjustment screw. (See Figure 19)
2. Remove lower cover (D) from WMA1S. (See Figure 19)

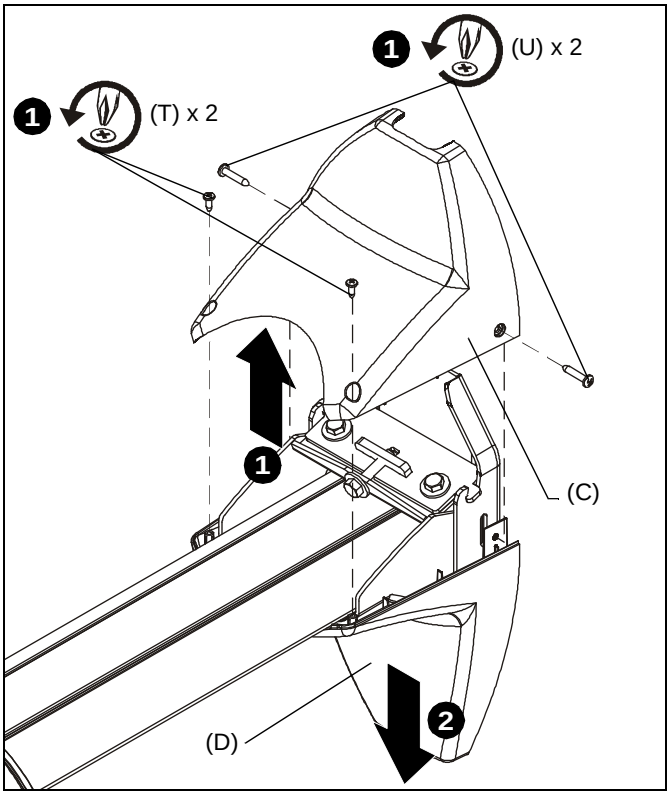



**Figure 19**

## Pitch Adjustment

1. Loosen two 5/16 x 1/2" hex head screws (S) (one on each side of wall bracket). (See Figure 20)
2. Loosen two bolts (one on each side of pitch adjustment screw). (See Figure 20)
3. Adjust pitch adjustment screw until mount is at desired pitch level.
   - Turn **clockwise** to raise mounting level.
   - Turn **counterclockwise** to lower mounting level. (See Figure 20)
4. Tighten two bolts (one bolt on either side of pitch adjustment screw). (See Figure 20)
5. Tighten two 5/16 x 1/2" hex head screws (S) (one on each side of mounting bracket). (See Figure 20)

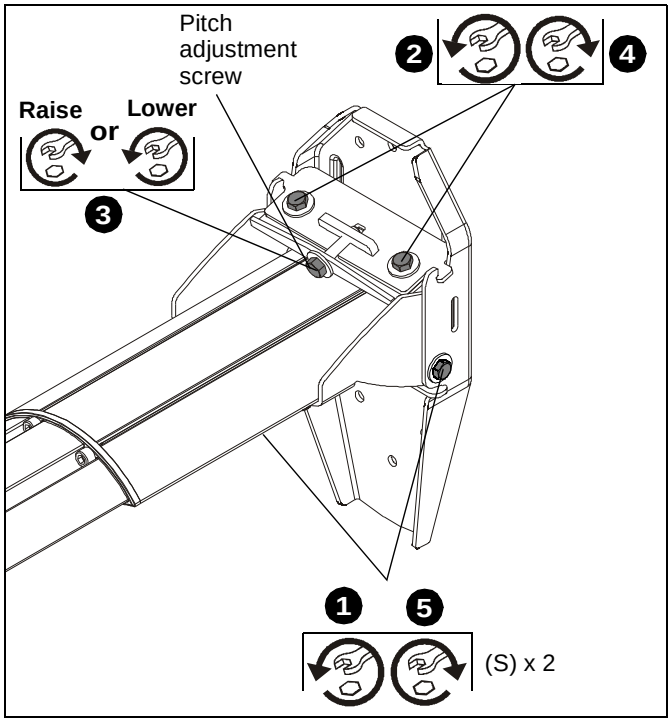



**Figure 20**

6. Return mount covers to the mount following instructions in **Installing Mount Covers** section.

## Cable Management (Optional)

**NOTE:** In most cases, the cable management cover will NOT need to be removed in order to route cables from projector to the wall mount. But for some thick cables, removing the cover may be necessary.

**NOTE:** Remove mount covers from the mount following instructions in **Removing Mount Covers** section.

1. Remove cable management covers (if necessary) from short throw projector arm. (See Figure 21)

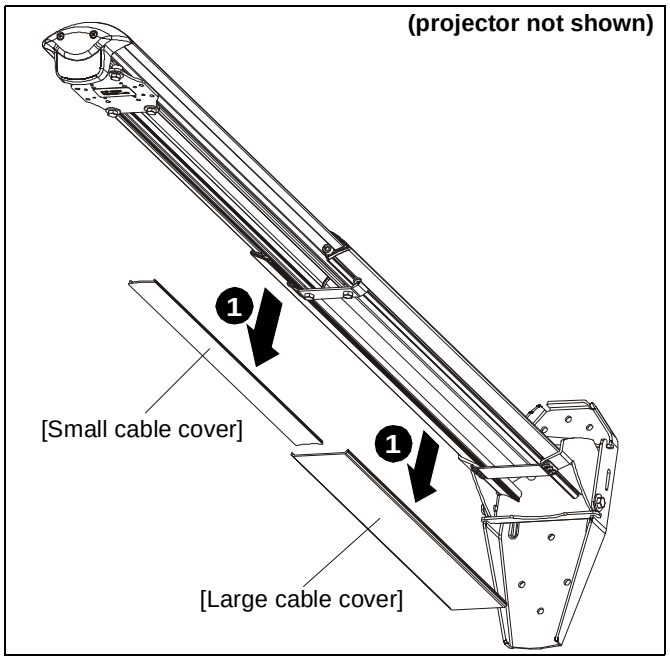



**Figure 21**

2. Route projector cable(s) under mount cover and through short throw projector arm tunnel. (See Figure 22)

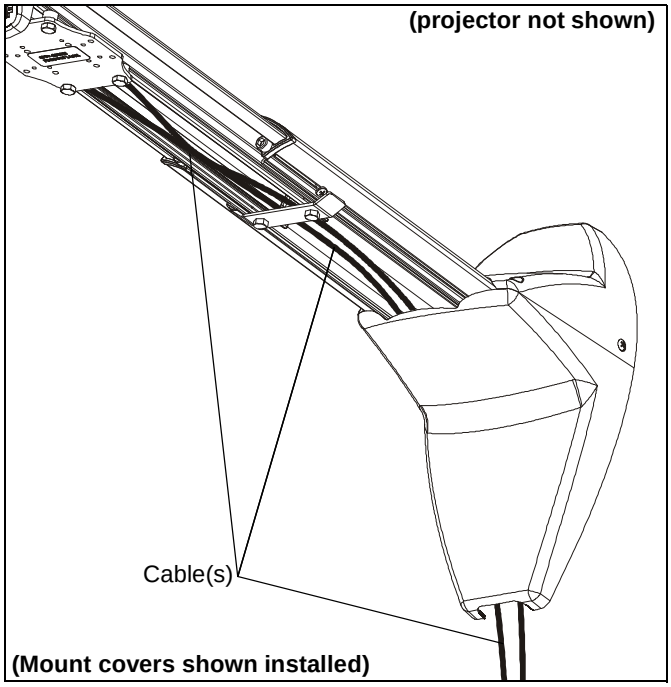



**Figure 22**

3. **(Optional)** Cables may be tied to inside of WM1XXS front cover using cable ties (not included). Route cables near front cover and wrap cable tie through slots on front cover and around cables. (See Figure 23)

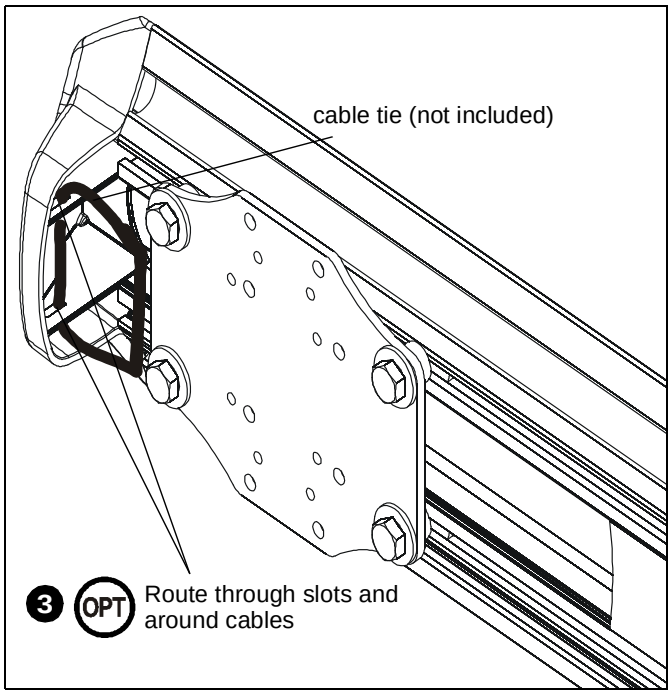



**Figure 23**

4. Replace removed cable management covers (if necessary). Insert one side of cover into groove and press firmly on the cover on the other side until it snaps into the other groove. (See Figure 24)

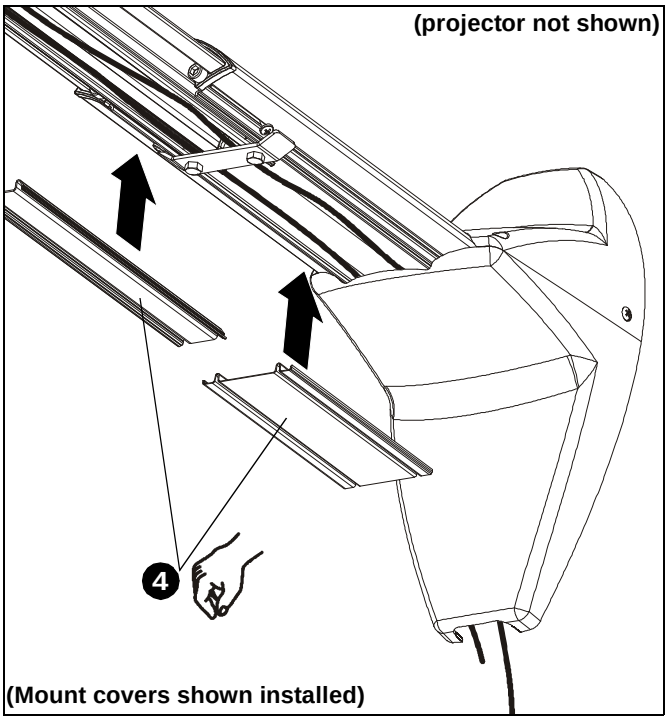



**Figure 24**

5. Return outer covers to the mount following instructions in **Installing Mount Covers** section.

## Extension Adjustment

1. Loosen two bolts holding stop bracket in place on underside of short throw projector mount. (See Figure 25)
2. Adjust mount to desired extension length. (See Figure 25)
3. Tighten two bolts holding stop bracket to secure mount in desired position. (See Figure 25)

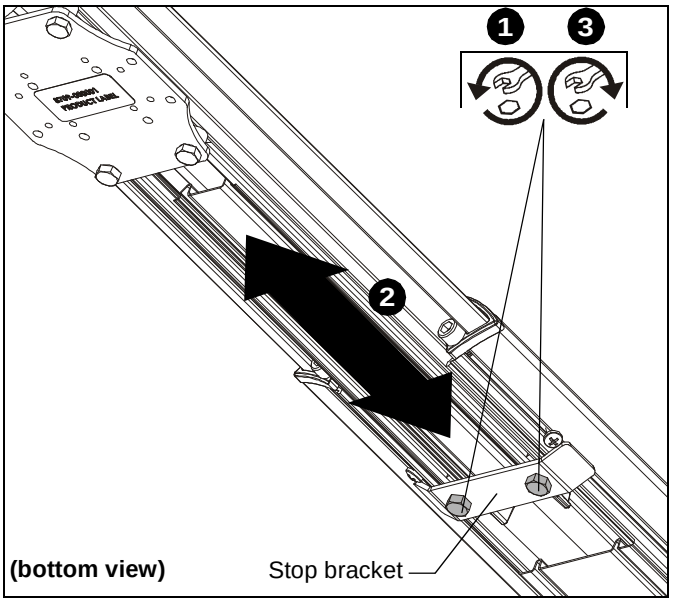



**Figure 25**

## Security Screw Installation (Optional)

1. Remove two #8 x 1/2" Phillips screws (T) and two #10 x 1" Phillips screws (U) from top and lower covers. (See Figure 26)
2. Install two 8-32 x 1/2" button head security screws (K) and two 10-24 x 1" button head security screws (N) into top and lower covers. (See Figure 26)

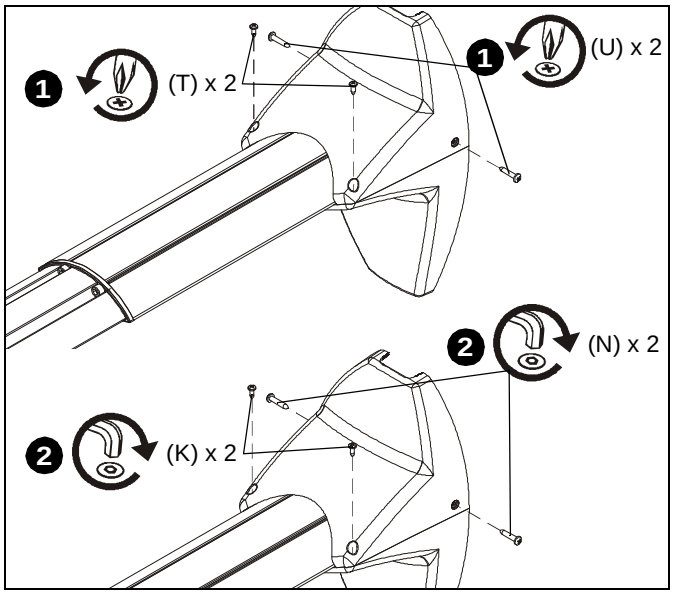



**Figure 26**

3. Remove two bolts holding stop bracket in place on underside of short throw projector mount. (See Figure 27)

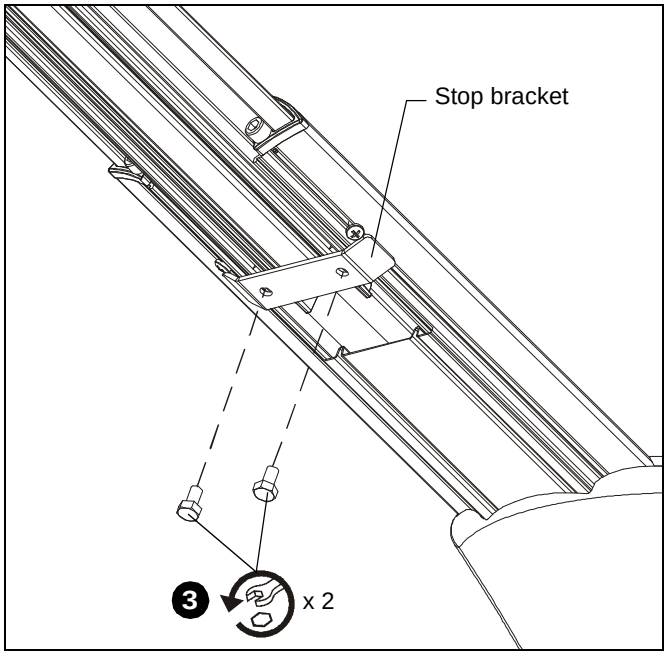



**Figure 27**

4. Install two 1/4-20 x 1/2" button head security screws (L) through holes in stop bracket and into holes in sliding nuts. (See Figure 28)

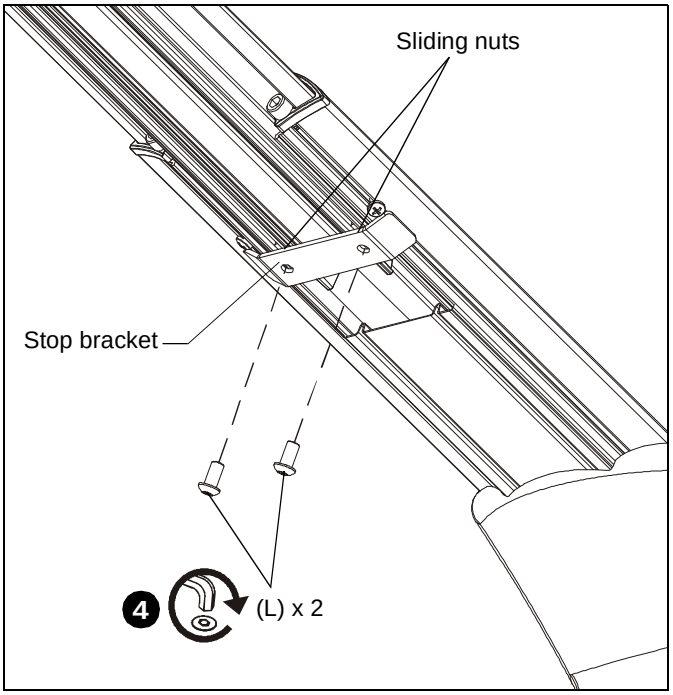



**Figure 28**

5. **(Optional)** Remove projector from WM1XXS according to projector interface instructions.

**NOTE:** For most projectors, it will be necessary to remove projector prior to install four security screws to projector bracket. For ease of installation, it is recommended to remove projector prior to performing the following steps.

6. Remove one of four bolts from adapter plate. (See Figure 29)

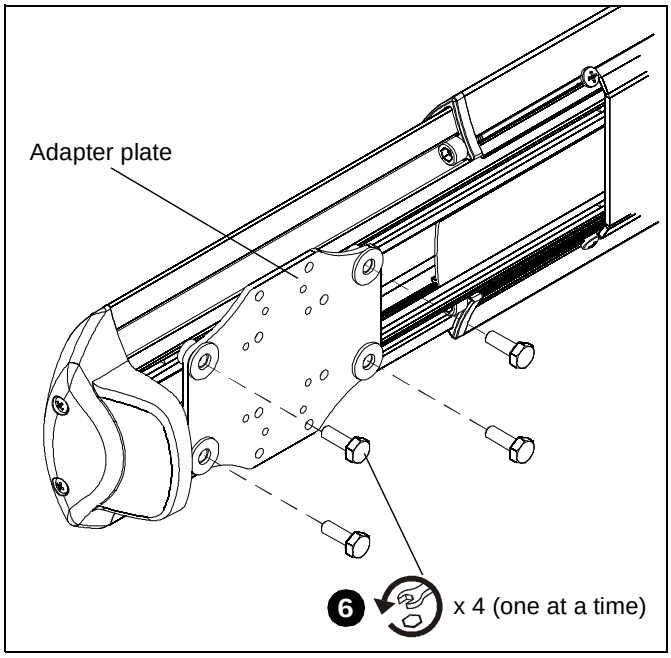



**Figure 29**

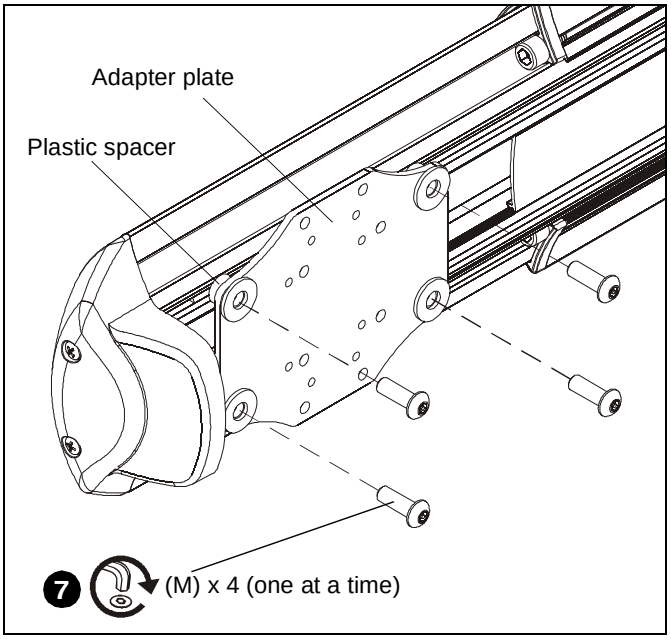



**Figure 30**

7. Install one 1/4-20 x 3/4" button head security screw (M) into hole vacated by removing bolt in Step 6 and into plastic spacer. (See Figure 30)
8. Repeat Steps 6-7 for remaining three bolts one bolt at a time.

**WARNING:** It is important to replace adapter plate bolts ONE AT A TIME or adapter plate could fall from mount during installation!

9. Reinstall projector according to interface instructions.

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**USA/International**
**A** 6436 City West Parkway, Eden Prairie, MN 55344
**P** 800.582.6480 / 952.225.6000
**F** 877.894.6918 / 952.894.6918

**Europe**
**A** Franklinstraat 14, 6003 DK Weert, Netherlands
**P** +31 (0) 495 580 852
**F** +31 (0) 495 580 845

**Asia Pacific**
**A** Office No. 918 on 9/F, Shatin Galleria
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