

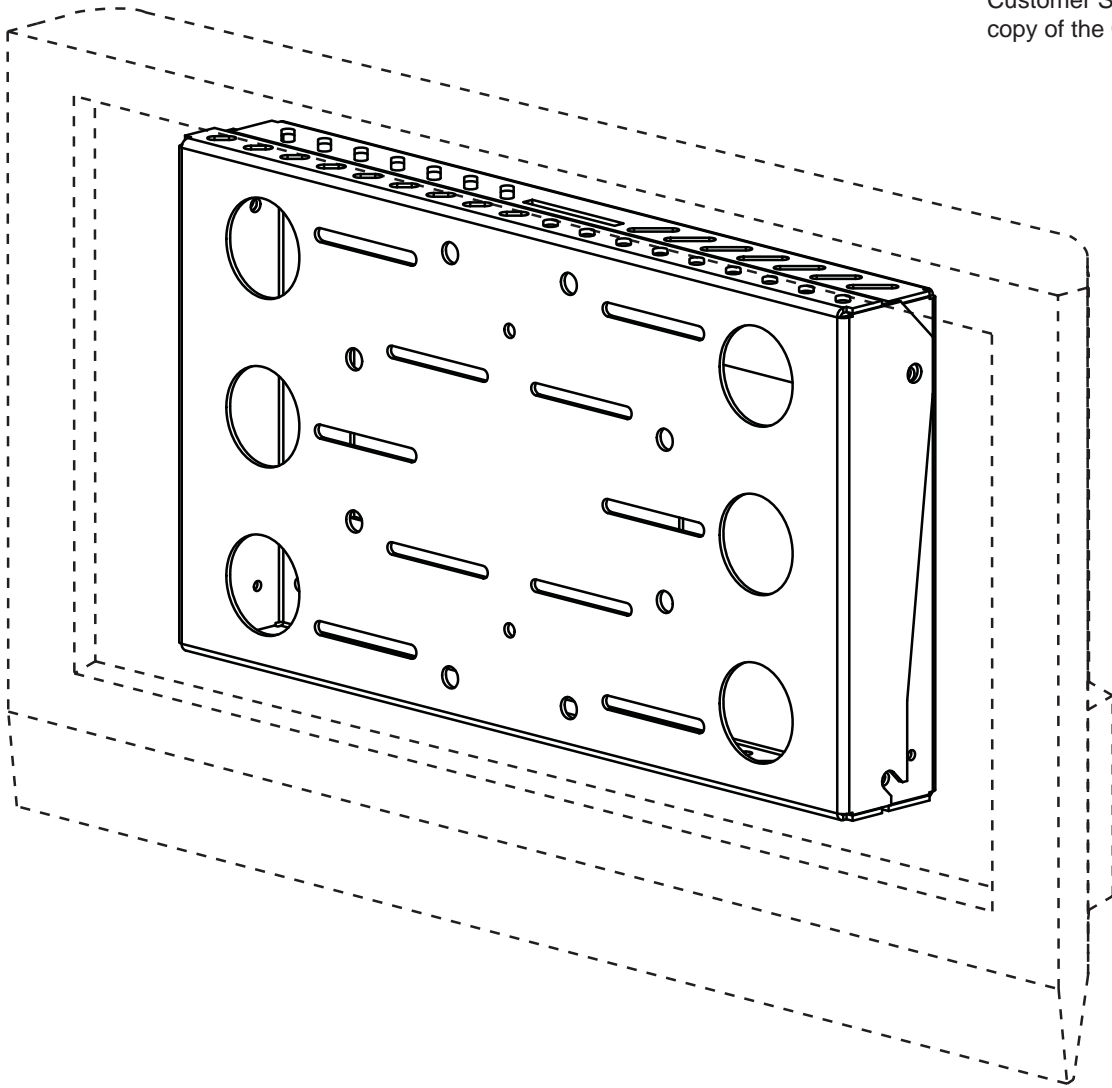
# peerless-AV™

## Installation and Assembly

Model: DS509

# b

For OSHPD installations,  
please contact Peerless  
Customer Service for a  
copy of the OPA.



**Maximum Load Capacity:**  
200 lb (90.7 kg)

**IMPORTANT! Read instruction sheet before you start installation and assembly.**

## **⚠ WARNING**

- Do not begin to install your Peerless product until you have read and understood the instructions and warnings contained in this Installation Sheet. If you have any questions regarding any of the instructions or warnings, for US customers please call Peerless customer care at 1-800-865-2112, for all international customers, please contact your local distributor.
- This product should only be installed by someone of good mechanical aptitude, has experience with basic building construction, and fully understands these instructions.
- Make sure that the supporting surface will safely support the combined load of the equipment and all attached hardware and components.
- Never exceed the Maximum Load Capacity. See page one.
- If mounting to wood wall studs, make sure that mounting screws are anchored into the center of the studs. Use of an "edge to edge" stud finder is highly recommended.
- Always use an assistant or mechanical lifting equipment to safely lift and position equipment.
- Tighten screws firmly, but do not overtighten. Overtightening can damage the items, greatly reducing their holding power.
- This product is intended for indoor use only. Use of this product outdoors could lead to product failure and personal injury.
- This product was designed to be installed on the following wall construction only;

### **WALL CONSTRUCTION**

### **HARDWARE REQUIRED**

- |                    |                                |
|--------------------|--------------------------------|
| • Wood Stud        | Included                       |
| • Wood Beam        | Included                       |
| • Solid Concrete   | Included                       |
| • Cinder Block     | Included                       |
| • Metal Stud       | Included                       |
| • Brick            | Contact Qualified Professional |
| • Other or unsure? | Contact Qualified Professional |

## **Tools Needed for Assembly**

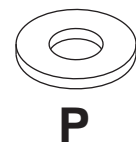
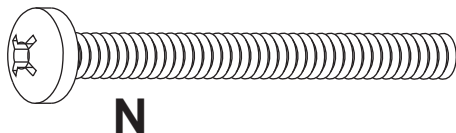
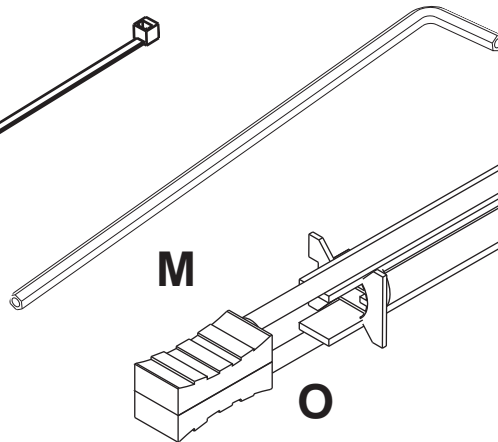
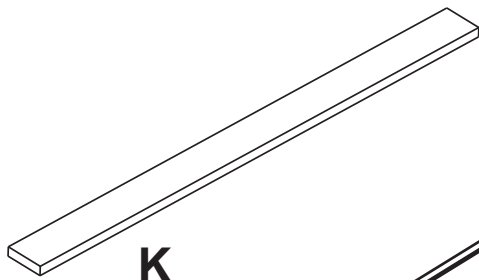
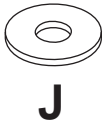
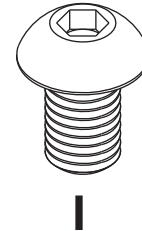
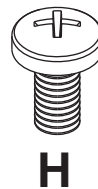
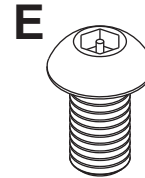
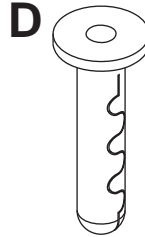
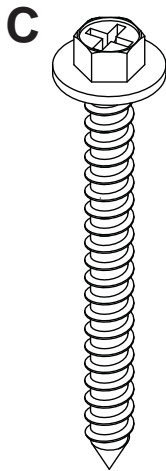
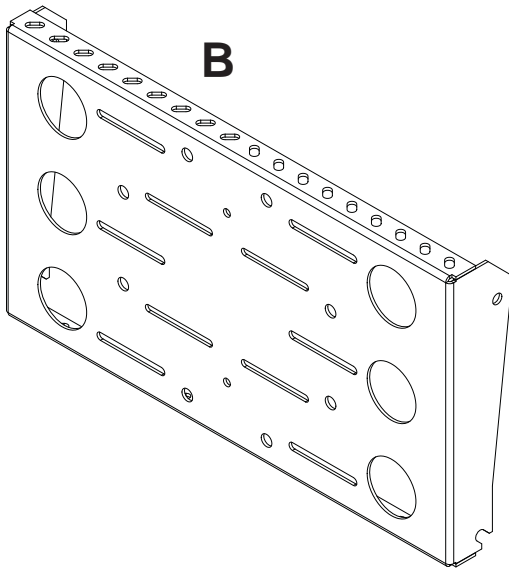
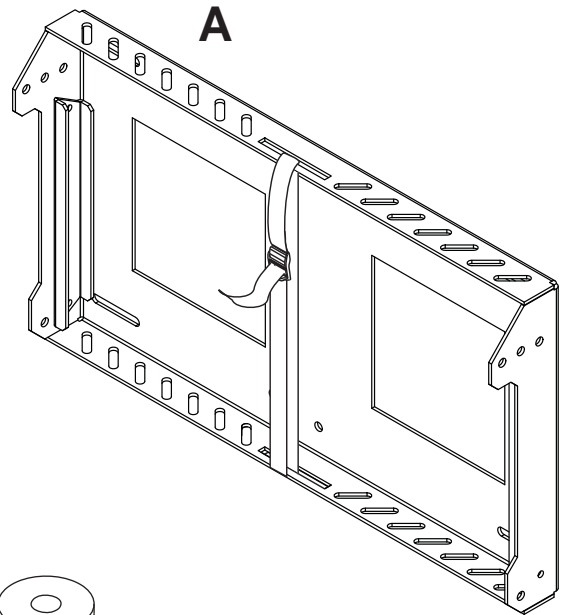
- stud finder ("edge to edge" stud finder is recommended)
- phillips screwdriver
- drill
- 1/4" (6 mm) bit for concrete and cinder block wall
- 5/32" (4 mm) bit for wood stud wall
- level
- 6 mm allen wrench

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Before you begin, make sure all parts shown are included with your product.  
 Parts may appear slightly different than illustrated.

Parts List		
Description	Qty.	Part #
A wall plate	1	145-1055
B tilt plate	1	145-1053
C #14 x 2.5" wood screw	4	5S1-015-C03
D concrete anchor	4	590-0097
E M8 x 15 mm socket pin screw	4	520-1068
F M4 x 12 mm phillips screw	4	504-9013
G M5 x 12 mm phillips screw	4	520-1027
H M6 x 12 mm phillips screw	4	520-1128
I M10 x 15 mm socket screw	4	520-9262
J #8 SAE flat washer	4	540-1001
K 3/4" x 3/16" x 10" adhesive strip	2	570-1029
L cable tie	4	560-9711
M 4 mm allen wrench	1	560-9646
N 1/4" - 20 x 2.5" phillips screw	4	520-9521
O toggler	4	560-9708
P 1/4" flat washer	8	540-9440



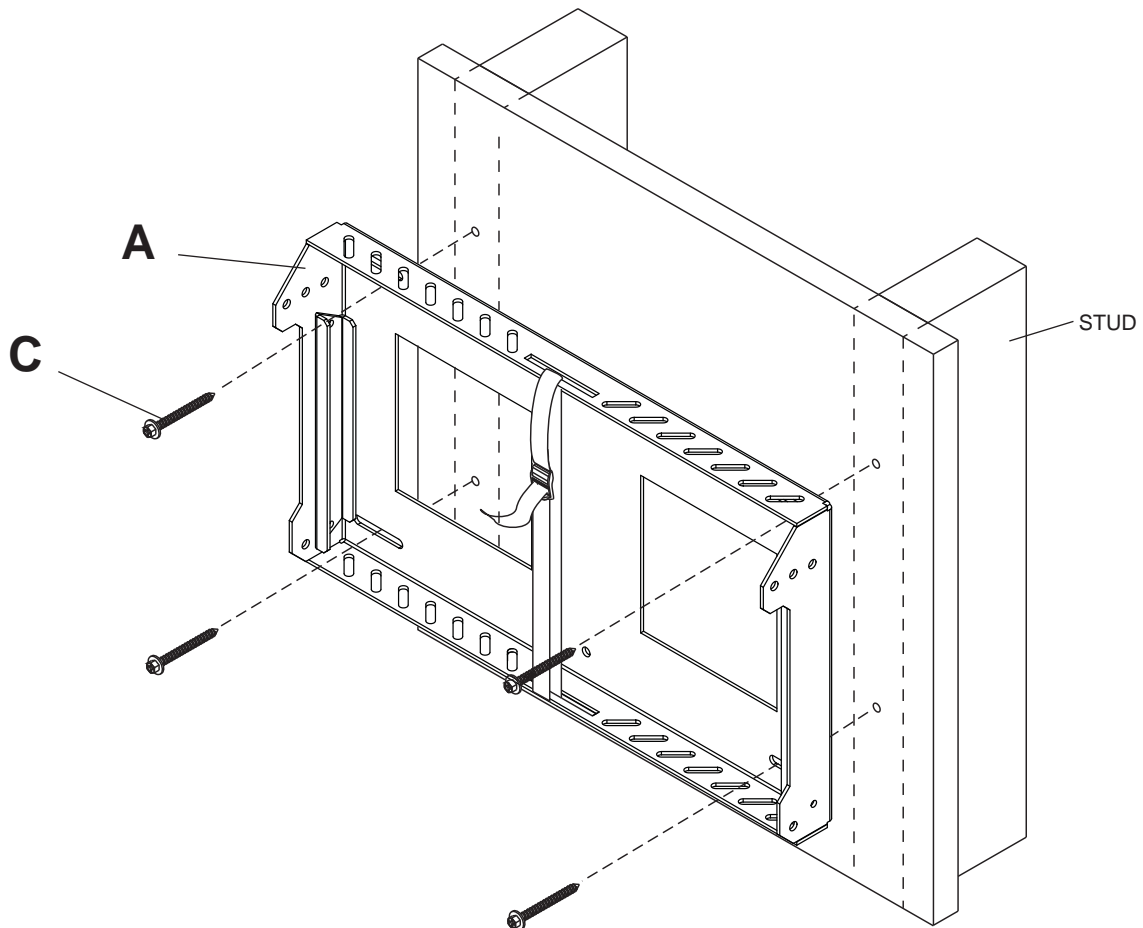
## Installation to Double Wood Stud Wall

### ⚠ WARNING

- Installer must verify that the supporting surface will safely support the combined load of the equipment and all attached hardware and components.
- Tighten wood screws so that wall plate is firmly attached, but do not overtighten. Overtightening can damage the screws, greatly reducing their holding power.
- Never tighten in excess of 80 in. • lb (9 N.M.).
- Make sure that mounting screws are anchored into the center of the stud. The use of an "edge to edge" stud finder is highly recommended.
- Hardware provided is for attachment of mount through standard thickness drywall or plaster into wood studs. Installers are responsible to provide hardware for other types of mounting situations.

- 1 Wall plate (**A**) can be mounted to two studs that are 16" apart. Use a stud finder to locate the edges of the studs. Use of an edge-to-edge stud finder is highly recommended. Based on their edges, draw a vertical line down each stud's center. Place wall plate on wall as a template. Level plate, and mark the center of the four mounting holes. Make sure that the mounting holes are on the stud centerlines. Drill four 5/32" (4 mm) dia. holes 2-1/2" (64 mm) deep. Make sure that the wall plate is level, secure it using four #14 x 2.5" wood screws (**C**) as shown.

*Skip to step 2*



# Installation to Solid Concrete or Cinder Block

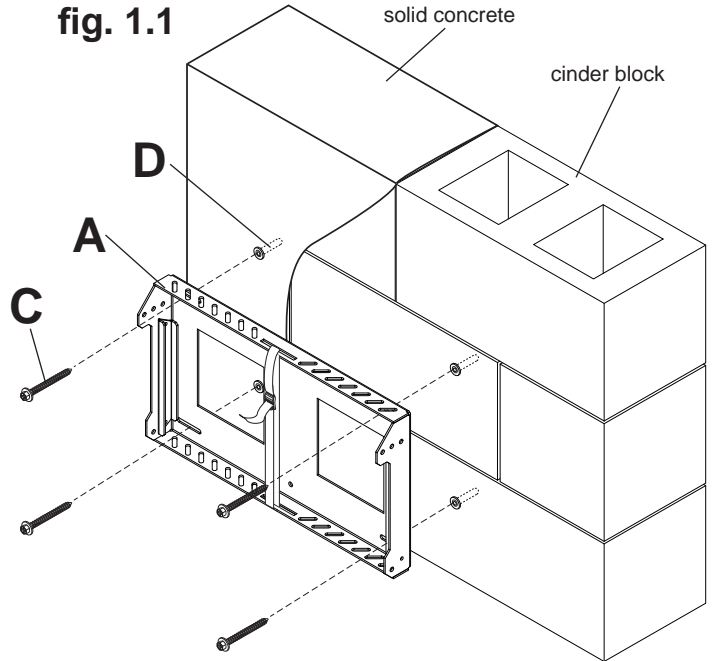
## ⚠ WARNING

- When installing Peerless wall mounts on cinder block, verify that you have a minimum of 1-3/8" of actual concrete thickness in the hole to be used for the concrete anchors. Do not drill into mortar joints! Be sure to mount in a solid part of the block, generally 1" minimum from the side of the block. Cinder block must meet ASTM C-90 specifications. It is suggested that a standard electric drill on slow setting is used to drill the hole instead of a hammer drill to avoid breaking out the back of the hole when entering a void or cavity.
- Concrete must be 2000 psi density minimum. Lighter density concrete may not hold concrete anchor.
- Make sure that the supporting surface will safely support the combined load of the equipment and all attached hardware and components.

**1** Make sure that wall plate (A) is level, use it as a template to mark four mounting holes. Drill four 1/4" (6 mm) dia. holes to a minimum depth of 2.5" (64 mm). Insert anchors (D) in holes flush with wall as shown in figure 1.2. Place wall plate over anchors and secure with #14 x 2.5" screws (C). Level, then tighten all fasteners.

*Skip to step 2*

fig. 1.1



## ⚠ WARNING

- Tighten screws so that wall plate is firmly attached, but do not overtighten. Overtightening can damage screws, greatly reducing their holding power.
- Never tighten in excess of 80 in. • lb (9 N.M.). • Always attach concrete anchors directly to load-bearing concrete.
- Never attach concrete anchors to concrete covered with plaster, drywall, or other finishing material. If mounting to concrete surfaces covered with a finishing surface is unavoidable, the finishing surface must be counterbored as shown below. Be sure concrete anchors do not pull away from concrete when tightening screws. If plaster/drywall is thicker than 5/8", custom fasteners must be supplied by installer.

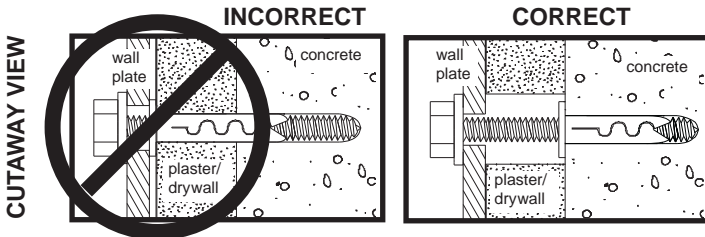
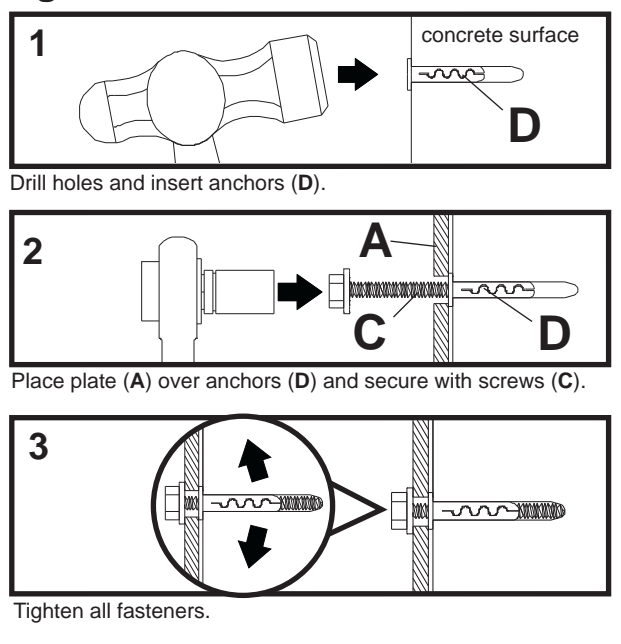


fig. 1.2



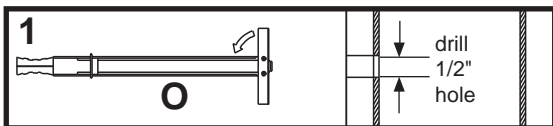
## Installation to Metal Studs

### ⚠ WARNING

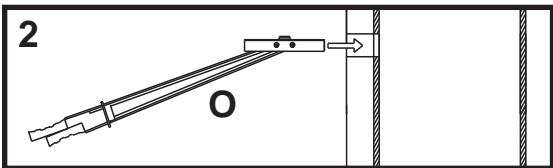
- Drywall must be 1/2" or thicker, and metal stud must be 24 gauge or thicker.
- Make sure that the wall will safely support the combined load of the equipment and all attached hardware and components.
- Make sure that togglers are anchored into the center of the studs. The use of an "edge to edge" stud finder is highly recommended.

- 1 Using a stud finder, locate and mark the edges of the metal stud used in mounting this product. Use of an edge to edge stud finder is highly recommended. Use a level to draw a level, vertical line down the center of the stud. Level wall plate, and mark the center of the four mounting holes. Make sure that the mounting holes are on the stud centerlines. Drill four 1/2" holes through drywall and metal studs. **NOTE:** It may be necessary to drill 5/32" pilot holes prior to drilling 1/2" holes. Install togglers (O) as shown in figure 1.3. Loosely fasten wall plate to wall using four 1/4-20 x 2-1/2" screws (N) and six 1/4" washers (P) as shown in figure 1.4. Level, hold, and then tighten all screws.

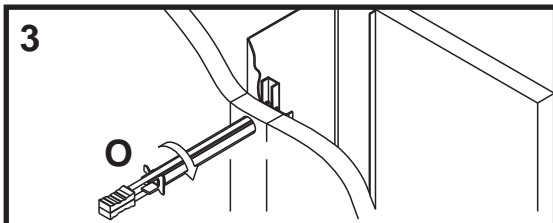
fig. 1.3



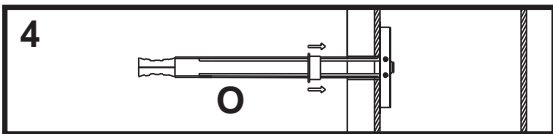
Pivot end of toggler (O).



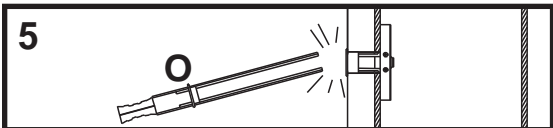
Push into hole.



Rotate toggler (O) clockwise to wedge it against inside walls of metal stud.

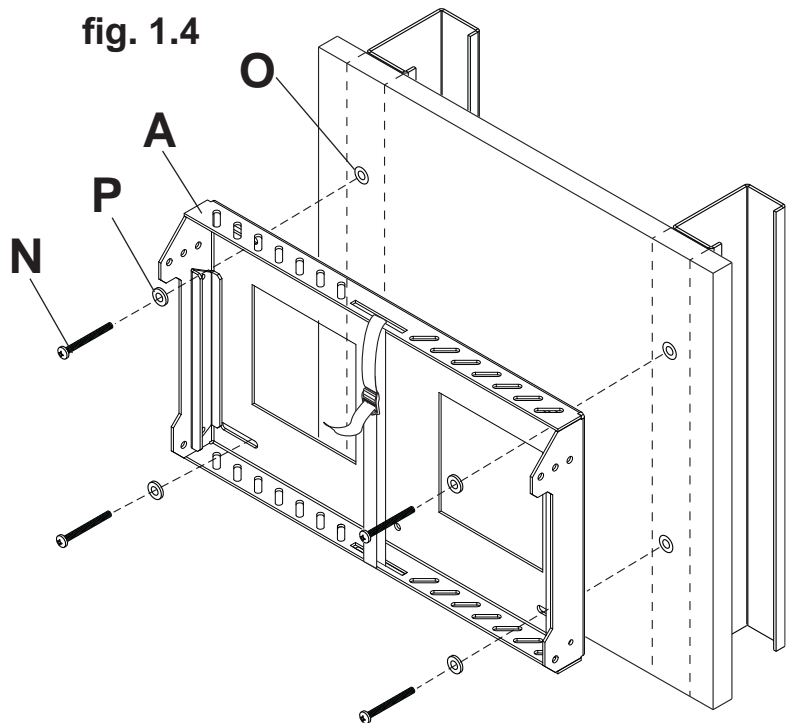


Slide plastic cap forward while pulling back firmly on ring.



Break off excess.

fig. 1.4



## Placement of Adhesive Strips

2 Place adhesive strips (K) on the wall plate (A) in location that will allow the most contact with CPU.

**Note:** Placement of adhesive strips will vary depending on size of CPU as shown in figure 2.2

fig. 2.1

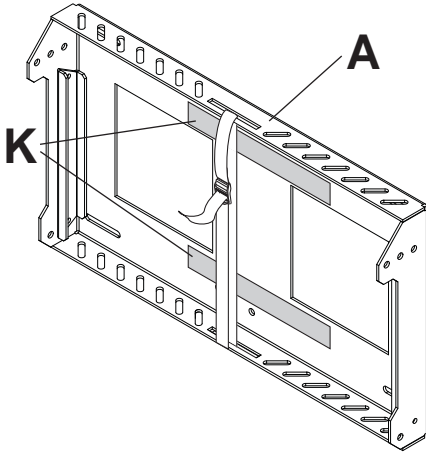
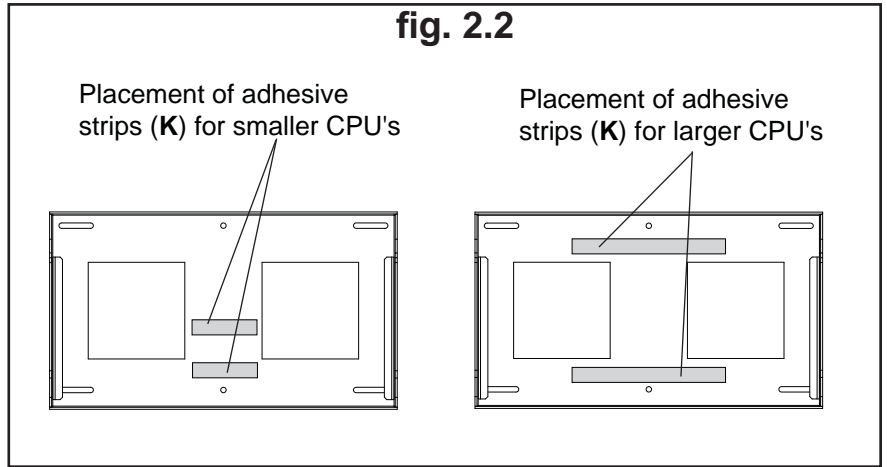


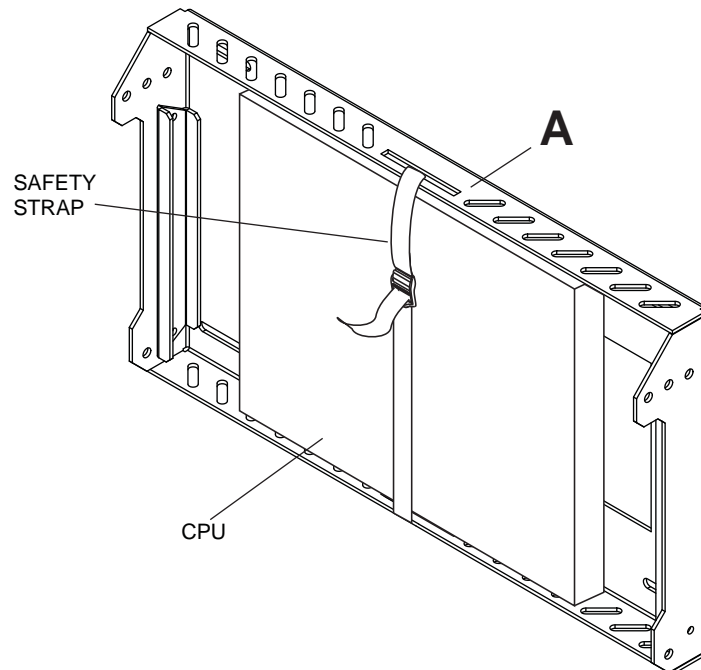
fig. 2.2



## Attach CPU to Wall Plate

3 **NOTE:** Safety belt may need to be loosened to attach CPU to wall plate (A).

Press CPU against adhesive strips on wall plate and tightly secure safety belt against CPU.

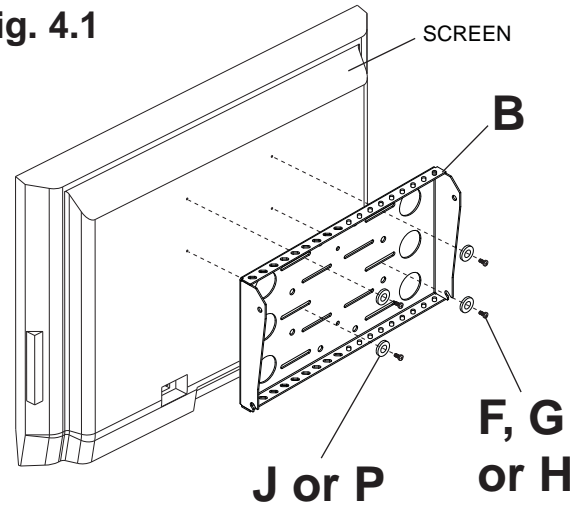


## Attaching Adapter Plate to Screen

### 4 Attaching adapter plate to screen with VESA hole pattern:

Choose hole pattern and fasteners shown in detail 2 for mounting screen with VESA mounting patterns. Hand thread screws (**F, G or H**) through washers (**J or P**) and adapter plate (**B**) into screen as shown in figure 4.1. Screw must make at least three full turns into the mounting hole and fit snug into place. Securely tighten screws.

fig. 4.1

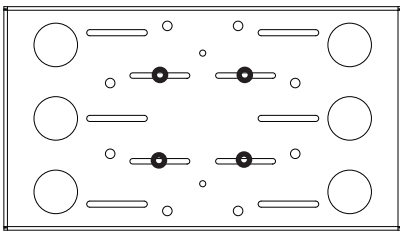


### ⚠ WARNING

- If screws don't get three complete turns in the screen inserts or if screws bottom out and bracket is still not tightly secured, damage may occur to screen or product may fail.

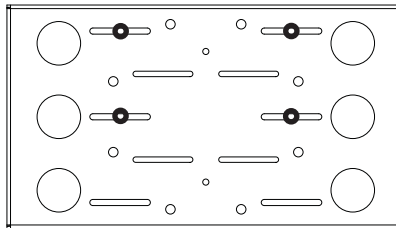
## MOUNTING PATTERNS

### VESA® 100 x 100



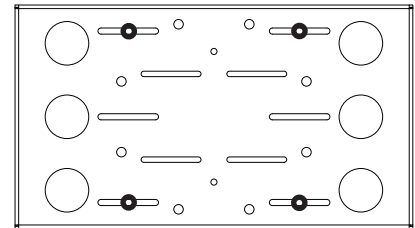
M4 x 12 mm screws (**F**) with #8 washers (**J**) or M5 x 12 mm screws (**G**) with 1/4" washers (**P**)

### VESA® 200 x 100



M4 x 12 mm screws (**F**) with washers (**J**), M5 x 12 mm screws (**G**) or M6 x 12 mm screws (**H**) with 1/4" washers (**P**)

### VESA® 200 x 200



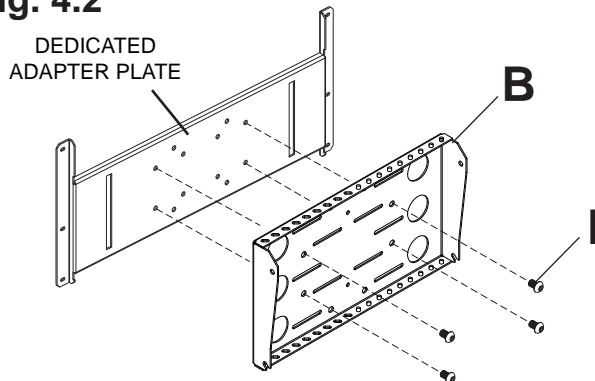
M5 x 12 mm screws (**G**) or M6 x 12 mm screws (**H**) with 1/4" washers (**P**)

### DETAIL 2

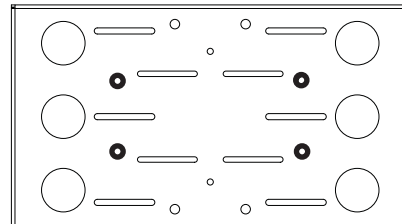
### Attaching adapter plate to dedicated adapter plates:

Using the hole pattern shown in detail 3, attach the adapter plate (**B**) to dedicated adapter plate with four M10 x 15 mm screws (**I**) as shown in figure 4.2. Tighten screws using 6 mm allen wrench (not included).

fig. 4.2



### MOUNTING PATTERN FOR DEDICATED ADAPTER PLATES



### DETAIL 3



## Attaching Adapter Plate to Wall Plate

- 5 Thread two M8 x 15 mm screws (E) into bottom holes of wall plate (A) leaving 1/8" space between head of screw and wall plate as shown in figure 5.1. Guide hook slots of adapter plate (B) onto screws (E), while supporting weight of screen, align top holes of wall plate and adapter bracket to the desired tilt angle and secure with two M8 x 15 mm screws (E). Tighten all screws securely.

fig. 5.1

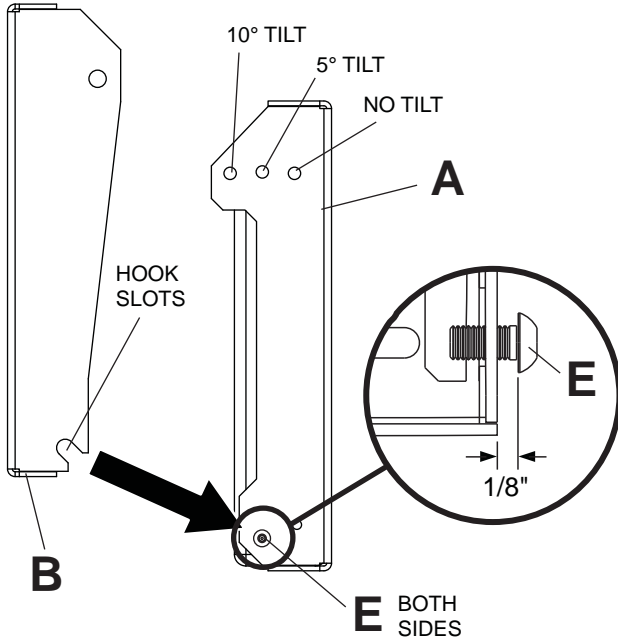
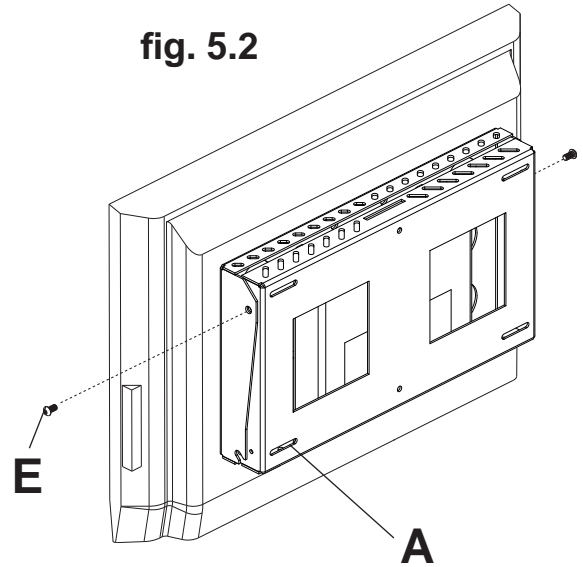


fig. 5.2



WALL NOT SHOWN FOR CLARITY

## Accessing CPU

- 6 Loosen top two M8 x 15 mm screws (E) 1/4 turn and temporarily remove bottom two M8 x 15 mm screws (E) on adapter plate (A) as shown in figure 6.1. Swing screen forward and swing support brackets downward into adapter plate (B) to brace screen in open position as shown in figure 6.2.

fig. 6.1

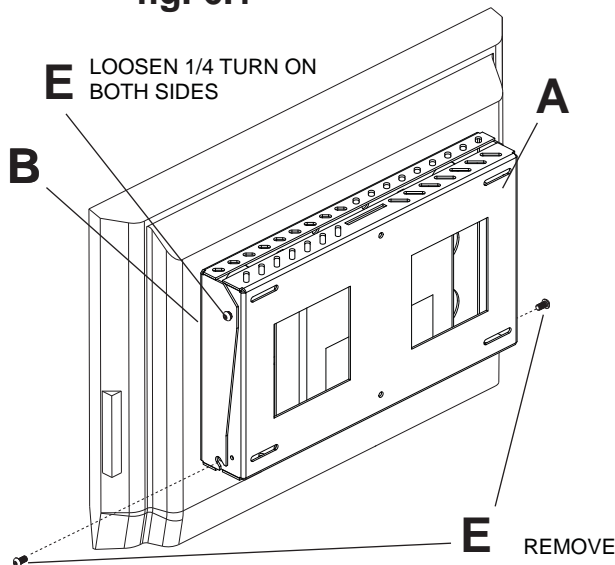


fig. 6.2

