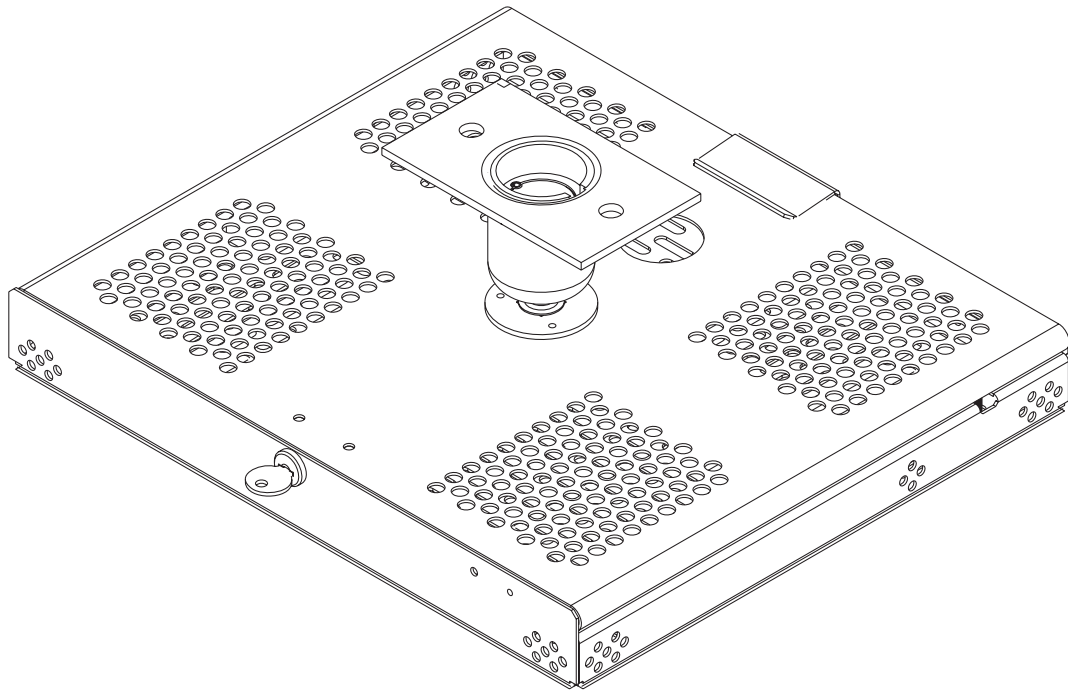


## Installation and Assembly: Tray Style Projector Mount

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**Models:** PSM-UNV, PSM-UNV-S, PSM-UNV-W



Max Load Capacity: 30 lb (13.6 kg)

**Note:** Read entire 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, please call Peerless customer service at 1-800-729-0307.
- 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 of 30 lb (13.6 kg).
- If mounting to wood ceiling joists, make sure that mounting screws are anchored into the center of the joists. 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.

## **Accessories**

- Lightweight Adjustable Suspended Ceiling Kit (CMJ 500)
- Lightweight Suspended Ceiling Kit (CMJ 455)
- Accessory Pack for CMJ 455 (ACC 455)
- Lightweight Cathedral Ceiling Plate (ACC 912)
- Unistrut or Structural Ceiling Plates (CMJ 300, CMJ 310)
- Anti-Vibration Ceiling Plates (ACC 845)
- I-Beam Clamps (ACC 558, ACC 559)
- Truss Ceiling Adapter (ACC 557)
- Unistrut Adapter (ACC 550)
- Escutcheon Ring (ACC 640)
- Round Ceiling Plate (ACC 570)
- Cord Wrap (ACC 852, ACC 852W, ACC 852S)
- 3/4" Pipe Reducer (ACC 913)
- Fixed Length 1 1/2" Extension Columns (EXT models)
- Adjustable Length 1 1/2" Extension Columns (ADJ models)
- Extension Column Stabilizer Kit (ACC 050)
- Extension Column Connector (ACC 109)
- 1/2" Threaded Rod (ACC 820)
- Threaded Rod Adapter (ACC 810)

## **Tools Needed for Assembly**

- stud finder ("edge to edge" stud finder is recommended)
- phillips screwdriver
- drill with 1/4", 3/8", and 5/32" drill bits

**IMPORTANT! Turn to the appropriate page for your ceiling installation.**

### **Installations:**

<b>To Wood Joist Finished Ceilings, Exposed Wood Joists, or Wood Beam Ceilings</b> .....	<b>page 4</b>
<b>To Concrete Ceilings</b> .....	<b>page 5</b>
<b>To Extension Column</b> .....	<b>page 6</b>

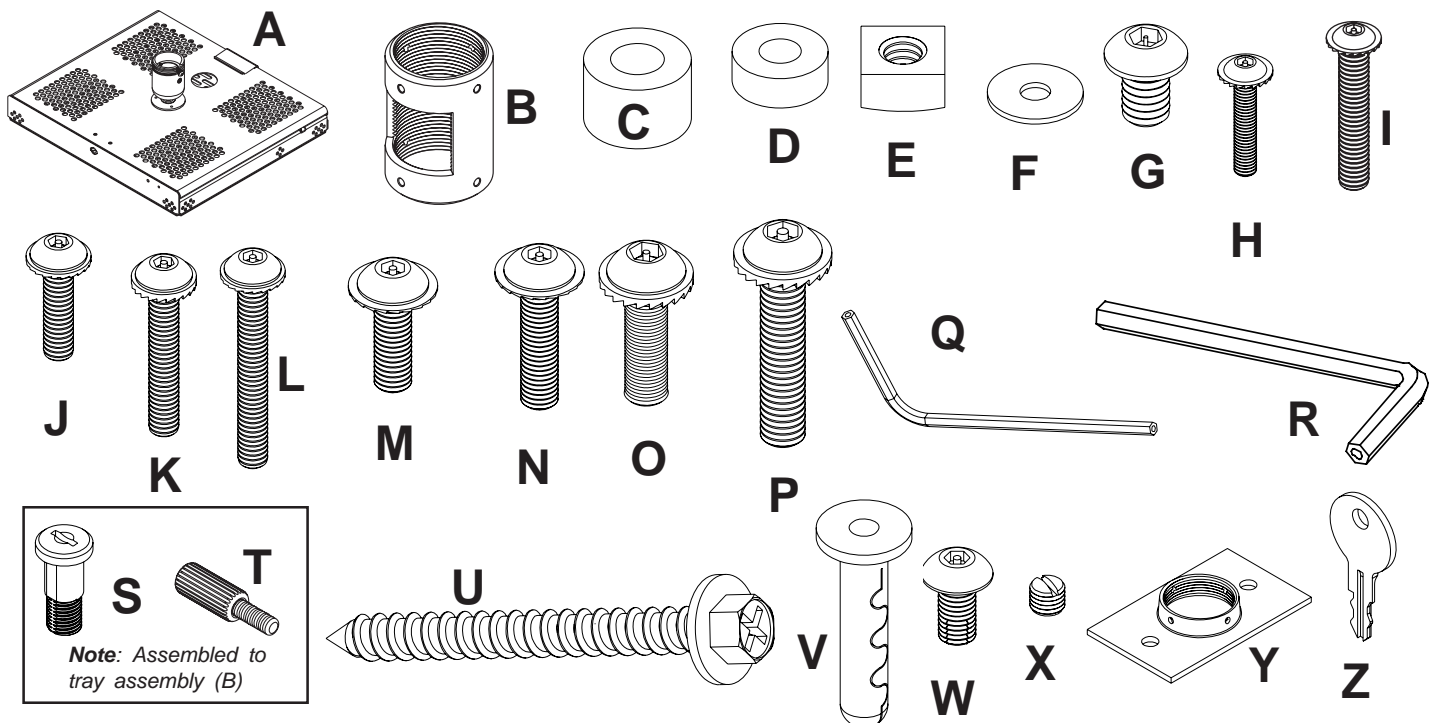
### **Projector Alignment:**

<b>Adjusting Roll Pitch and Yaw</b> .....	<b>step 8, page 9</b>
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**IMPORTANT!** Read entire instruction sheet before you start installation and assembly.

Before you start check the parts list below to make sure all of the parts shown are included.

Parts List					
Description	Qty.	PSM-UNV	PSM-UNV-S	PSM-UNV-W	
A tray assembly	1	055-0724	055-0724-S	055-0724-W	
B cord management adapter	1	580-1025	580-4025	580-2025	
C spacer	12	540-9416	540-9416	540-9416	
D bushing	4	590-1116	590-1116	590-1116	
E square nut	4	530-1022	530-1022	530-1022	
F washer	4	540-1025	540-1025	540-1025	
G 1/4 x 3/8 socket pin screw	4	520-1109	520-1109	520-1109	
H M3 x 16mm serrated washer head socket pin screw	4	510-1083	510-1083	510-1083	
I M3 x 25mm serrated washer head socket pin screw	4	510-1127	510-1127	510-1127	
J M4 x 16mm serrated washer head socket pin screw	4	510-1087	510-1087	510-1087	
K M4 x 25mm serrated washer head socket pin screw	4	510-1082	510-1082	510-1082	
L M4 x 35mm serrated washer head socket pin screw	4	510-1097	510-1097	510-1097	
M M5 x 16mm serrated washer head socket pin screw	4	510-1161	510-1161	510-1161	
N M5 x 25mm serrated washer head socket pin screw	4	510-1122	510-1122	510-1122	
O M6 x 20mm serrated washer head socket pin screw	4	510-9554	510-9554	510-9554	
P M6 x 30mm serrated washer head socket pin screw	4	510-1067	510-1067	510-1067	
Q 2 mm allen wrench	1	560-1097	560-1097	560-1097	
R 4 mm allen wrench	1	560-9646	560-9646	560-9646	
S lock plug	1	3022-502	3022-502	3022-502	
T thumb screw	1	560-0106	560-0106	560-0106	
U wood screw	2	5S1-015-C03	5S1-015-C04	5S1-015-C04	
V alligator anchor	2	590-0097	590-0097	590-0097	
W M5 x 10mm socket pin screw	1	520-1164	520-2031	520-2031	
X 10-32 x 3/16 slotted set screw	1	520-1187	520-2187	520-2187	
Y ceiling plate	1	580-1042	580-4042	580-4042	
Z key	1	0000-322	0000-322	0000-322	



Note: Actual parts may appear slightly different than illustrated.

# Installation To Wood Joist Finished Ceilings, Exposed Wood Joists, or Wood Beam Ceilings

- 1** Drill two 5/32" (4 mm) dia. holes to a minimum depth of 2.5" (64 mm). Attach ceiling plate (Y) with two #14 x 2.5" (6 mm x 65 mm) wood screws (U) as shown using 3/8" (10 mm) socket wrench.

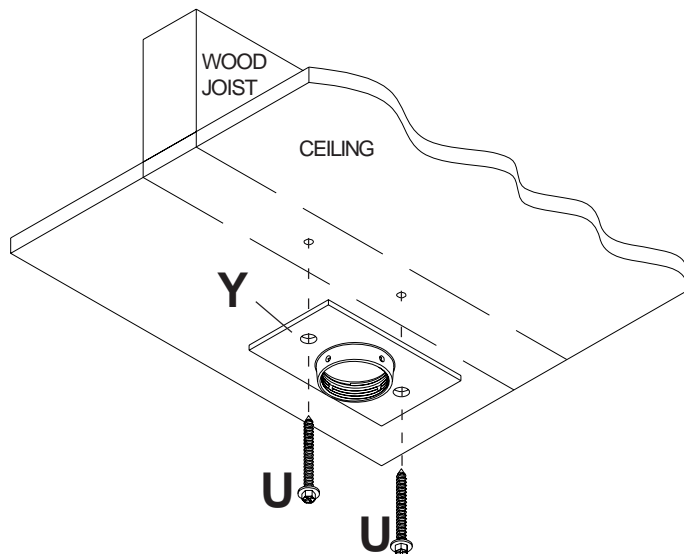
**Skip to step 2**

## ⚠ WARNING

- Tighten wood screws (F) so that ceiling 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 studs. The use of an "edge to edge" stud finder is highly recommended.

## ⚠ WARNING

- It is the responsibility of the installer to verify that the supporting surface will safely support the combined load of all attached hardware and components.



## ⚠ WARNING

- When installing Peerless wall mounts on concrete, verify that you have a minimum of 1 5/8" of actual concrete surface in the 1/4" diameter hole to be used for the concrete anchors. Do not drill into mortar joints! Concrete must meet ASTM C-90 specifications.
- 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.
- Never exceed the Maximum Load Capacity of 30 lb (13.6 kg).

## Installation to Concrete Ceilings

- 1** Drill two 1/4" (6 mm) dia. holes to a minimum depth of 2.5" (64 mm). Attach ceiling plate (Y) using two concrete anchors (V) and #14 x 2.5" wood screws (U) as shown in **Illustration A** and **1, 2, and 3** (below). Tighten all fasteners.  
**Skip to step 2**

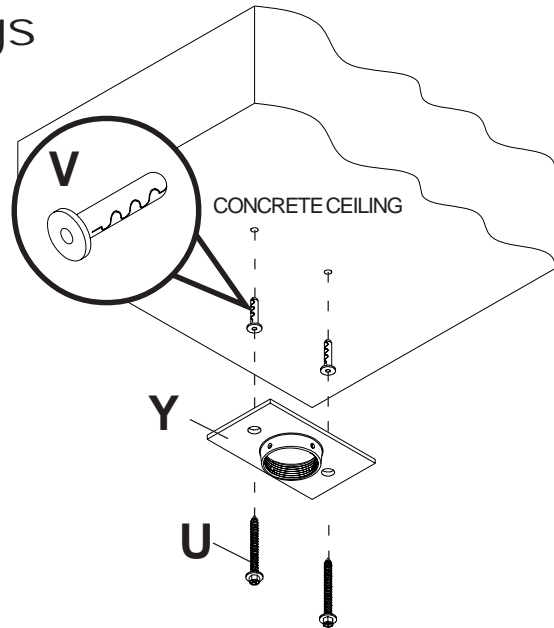
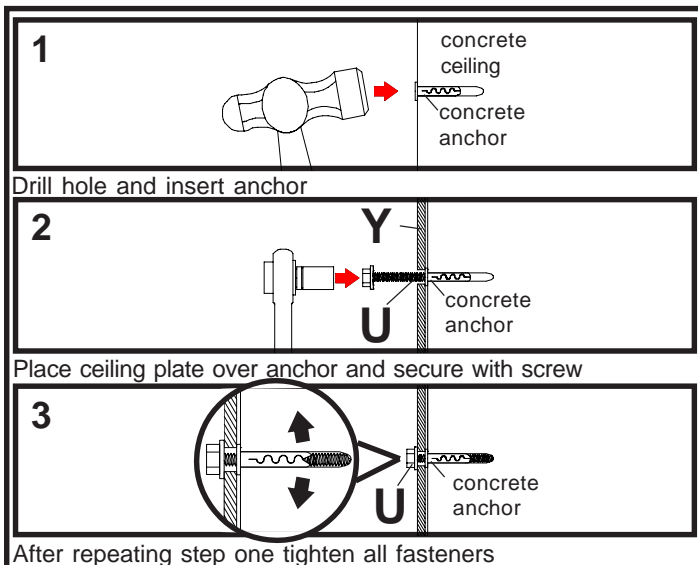


Illustration A

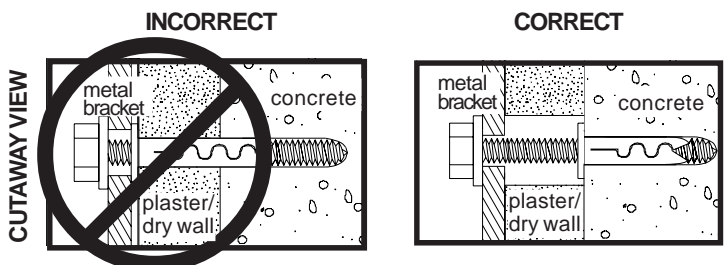
## ⚠ WARNING

- Tighten wood screws so that ceiling 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.).



## ⚠ WARNING

- Always attach concrete expansion anchors directly to load-bearing concrete.
- Never attach concrete expansion 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. If plaster/drywall is thicker than 5/8", custom fasteners must be supplied by installer.



# Installation to Extension Column

1

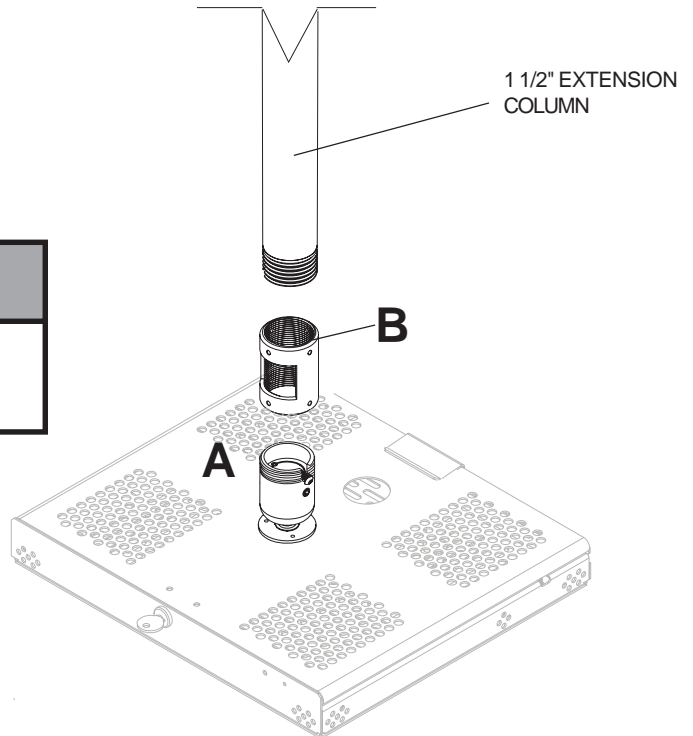
Thread tray assembly (A) into cord management (B) to extension column (sold separately) as shown.

**Note:** Slotted set screw (X) is used to jam against threads of extension column to prevent any excess movement of projector mount assembly (A).

Skip to step 2

**⚠ WARNING**

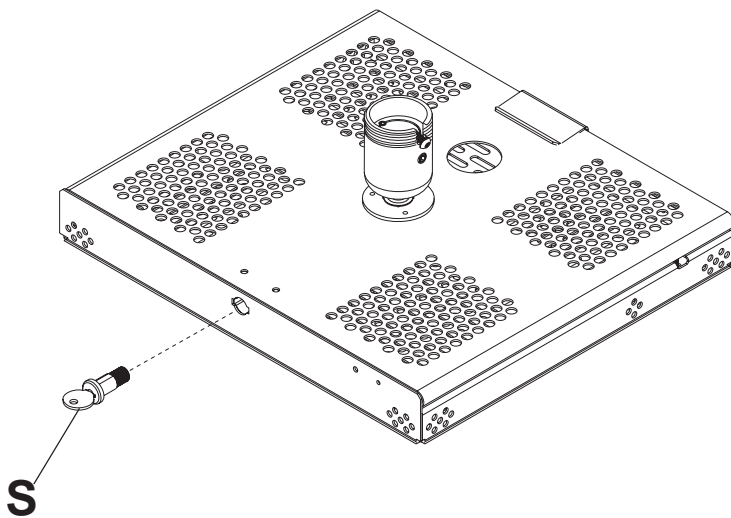
- Do not overtighten! Overtightening may cause permanent damage to the projector. Torque to 26-35 in • lb (30-40 kg • cm).



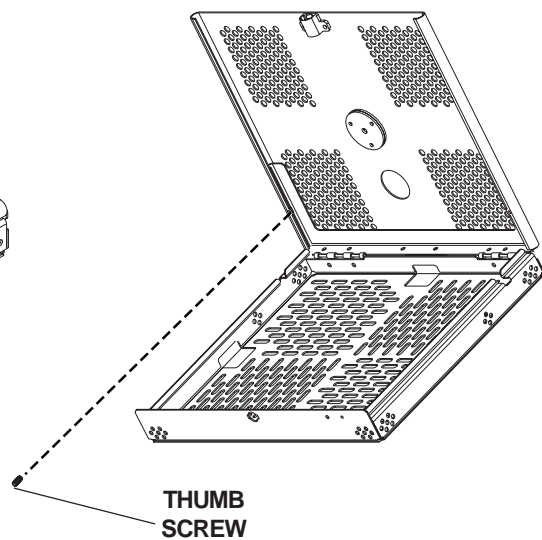
2

Remove the lock plug (S) by using key to unscrew it from the assembly as shown in **detail 2.1**. Open the mount and remove thumb screw as shown in **detail 2.2**.

**Note:** The upper tray of the mount will now slide off of the lower tray.



DETAIL 2.1



THUMB SCREW

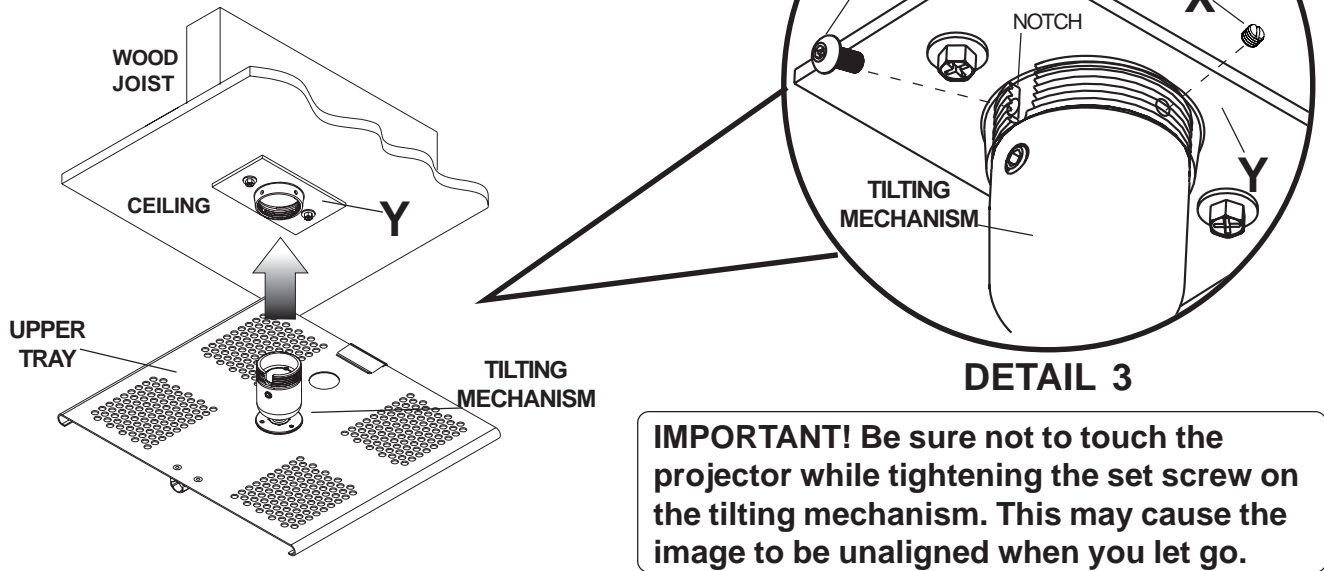
DETAIL 2.2



# Attaching Top Tray

**3** Thread tilting mechanism of top tray into ceiling plate (Y). Align the notch with one of the four holes of the ceiling plate (Y) and secure tilting mechanism with a M5 x 10 mm socket pin screw (W) using 4mm security allen wrench (R) as shown in **detail 3**.

**Note:** Slotted set screw (X) is used to jam against the threads of the tilting mechanism to prevent any excess movement of the upper tray. Do not overtighten screw; overtightening screw will damage threads making it difficult to separate the products.



**IMPORTANT!** Be sure not to touch the projector while tightening the set screw on the tilting mechanism. This may cause the image to be unaligned when you let go.

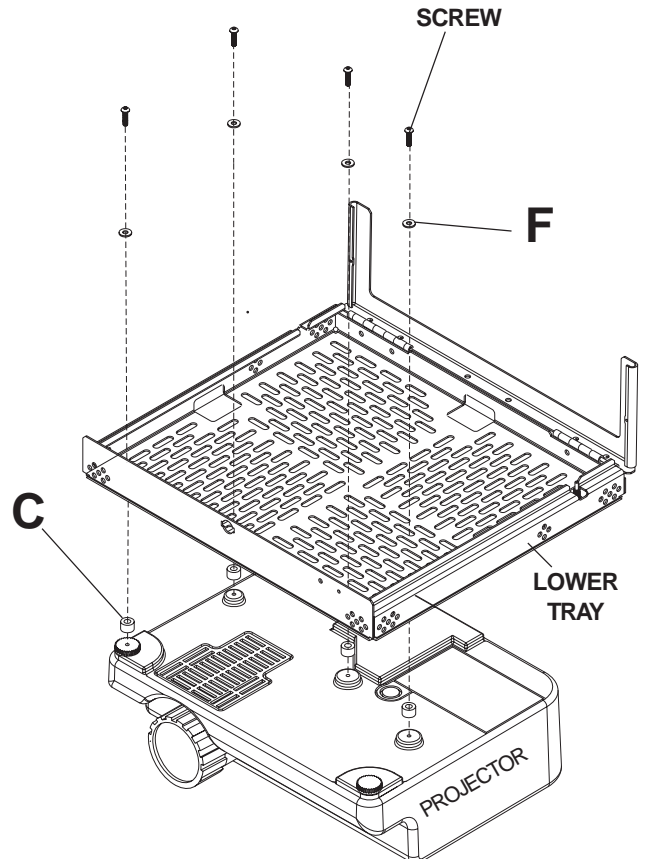
# Installation of Projector

**4** Flip projector upside down. Attach lower tray to the bottom of the projector using appropriate number of screws (H,I,J,K,L,M,N,O,P), washers (F) and spacers (C) as shown. Use 4 mm allen wrench (R) to tighten screws (H,I,J,K,L,M,N,O,P).

**Important:** If projector does not have at least three mounting holes, do not use this adapter plate.

**Note:** Some projectors have feet which can be removed and the corresponding threaded insert can be used for a mounting hole.

**Note:** Projector may differ slightly in appearance.

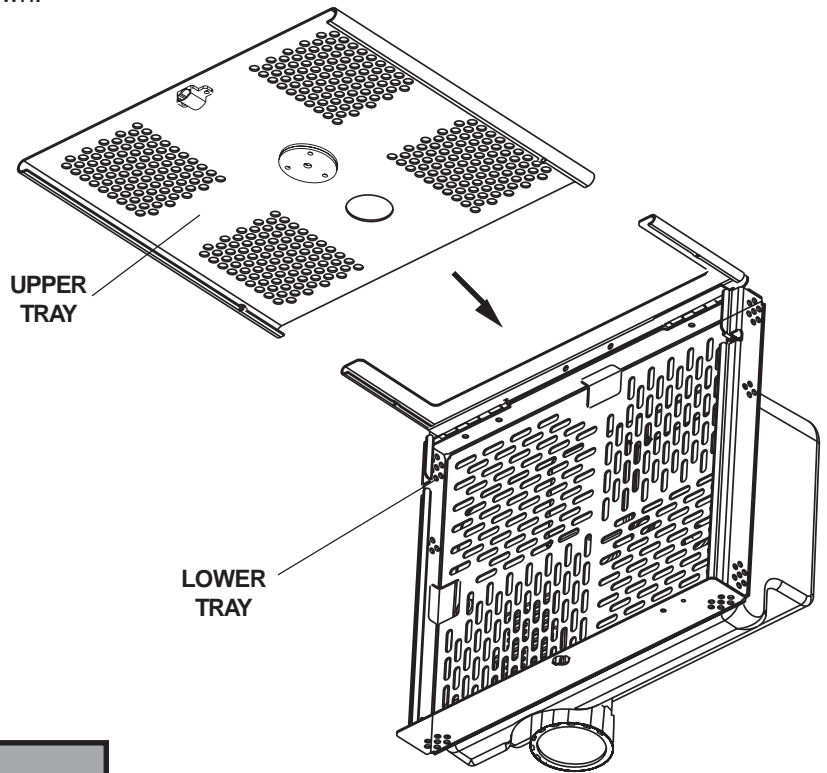


**⚠ WARNING**

- Do not overtighten! Overtightening may cause permanent damage to the projector. Torque to 26-35 in • lb (30-40 kg • cm).

5

Slide upper tray into the lower tray as shown.

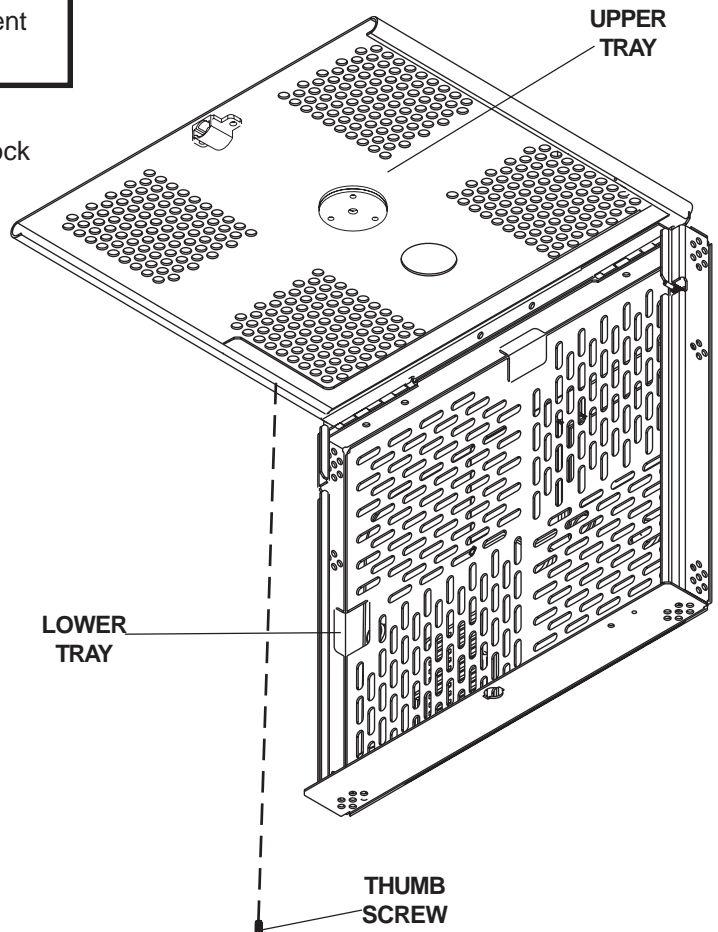


**⚠ WARNING**

- Do not lift more weight than you can handle! Use additional man power or mechanical lifting equipment to safely handle placement of the projector!

6

Attach thumb screw to mount as shown to lock the upper tray to the lower tray.



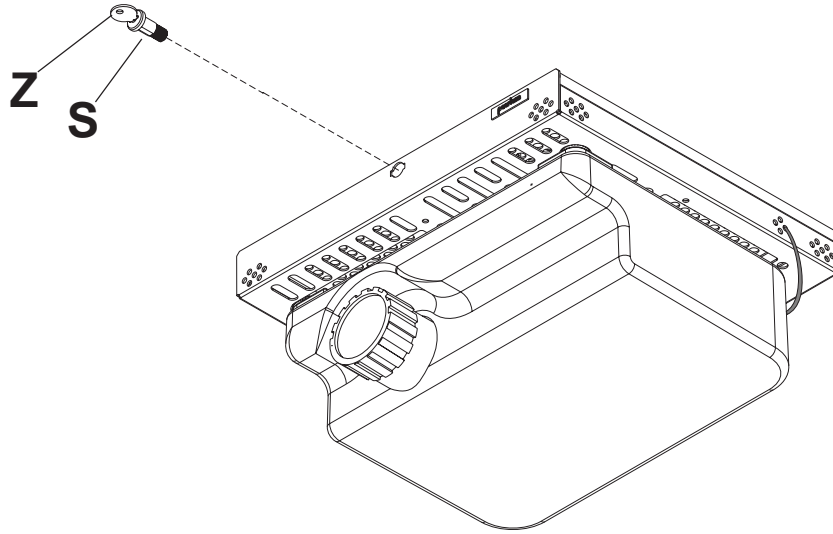


7

Close the mount and insert the lock plug (S) and key (Z) as shown.

**Note:** To remove key, slot must be in the horizontal position. This may require that you back off 1/4 turn.

**IMPORTANT: Key is necessary for projector removal. Store it in a safe place.**



8

To adjust roll, pitch, and yaw loosen the set screw (shown below) using security allen wrench (R) or standard 4 mm allen wrench. You should be able to just slightly loosen the screw so that your adjustments can be set without having to hold the projector. Move projector to desired position and slowly tighten set screw.

**Note:** Be sure not to touch the projector while tightening the set screw. This may cause the image to be unaligned when you let go.

**IMPORTANT: Allen wrench (R) is your key for projector removal. Store it in a safe place.**

