

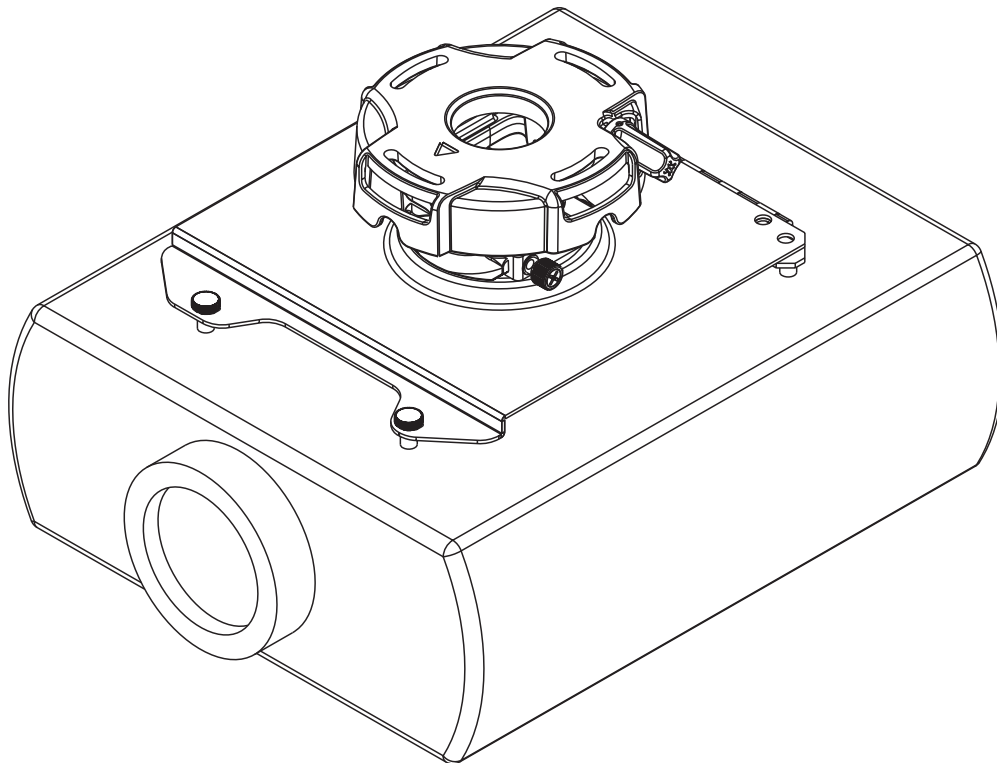


NEC Display Solutions of America, Inc.

## **Installation and Assembly Manual: Custom Ceiling Mount for NEC NP905, NP901W and VT800 Projectors**

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Model: NP900CM



**Maximum Load Capacity: 50 lb (22.7 kg)**

### **Features:**

- ImageLock™ alignment prevents picture sag or drift
- Wrench access slot for easier flush mount installations
- Exclusive aluminum track quick release

**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, call Peerless customer care 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.
- 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. See suggested torque values where applicable within these instructions.
- This product is intended for indoor use only. Use of this product outdoors could lead to product failure and personal injury.

## **CAUTION**

- It is the responsibility of the installer to ensure that the projector is properly ventilated.

## **Tools Needed for Assembly**

- stud finder ("edge to edge" stud finder is recommended)
- phillips screwdriver
- drill
- 1/4" bit for concrete surface
- 5/32" bit for wood studs
- open end wrench
- level

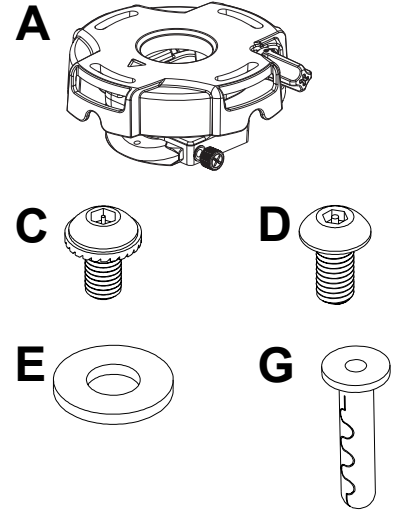
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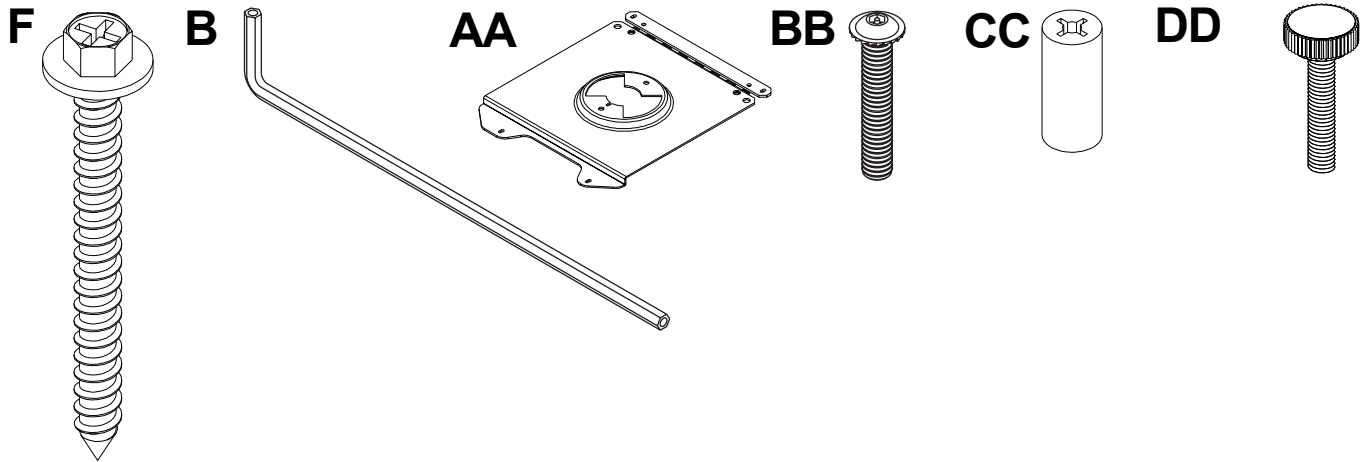
Before you start check the parts list to insure all of the parts shown are included.

## Parts List

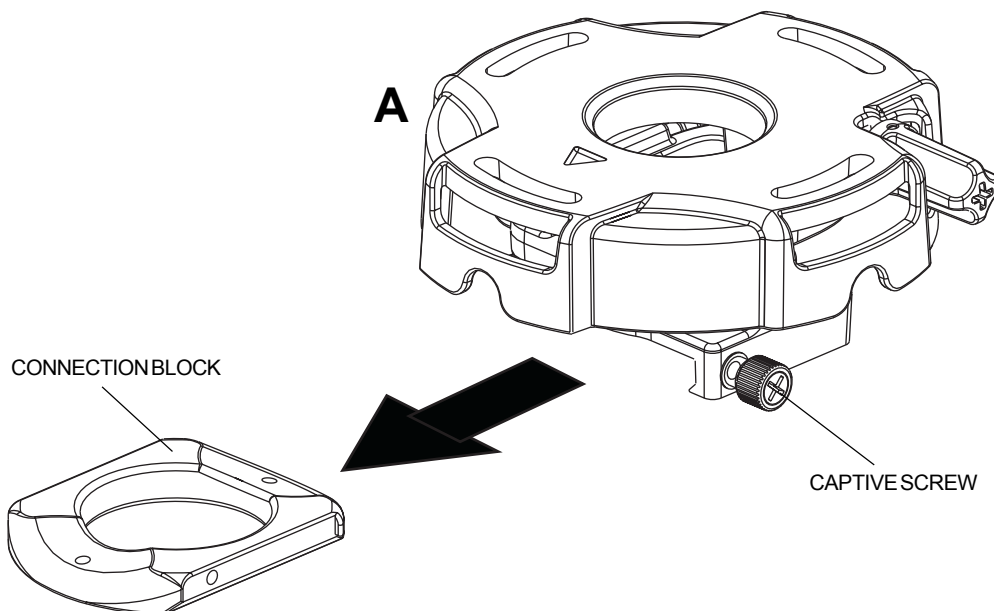
	Description	Qty.	Part #
<b>A</b>	projector mount assembly	1	055-2804
<b>B</b>	4 mm security allen wrench	1	560-9646
<b>C</b>	#10-32 x 3/8" serrated washer head socket pin screw	2	520-2151
<b>D</b>	#10-32 x 1/4" socket pin screw	1	520-2196
<b>E</b>	flat washer	2	540-1078
<b>F</b>	#14 x 2.5 phillips hex head wood screw	2	5S1-015-C04
<b>G</b>	concrete anchor	2	590-0097
<b>AA</b>	adapter plate	1	055-2815
<b>BB</b>	M3 x 25 mm serrated socket pin screw	2	510-2127
<b>CC</b>	retaining spacer	4	590-2300
<b>DD</b>	M3 x 25 mm knurled knob	2	560-7139



**NOTE:** Actual parts may appear slightly different than illustrated.



**1** Disengage connection block from projector mount assembly (**A**) by unscrewing captive screw and sliding out connection block as shown.



## Installation to Extension Column / Ceiling Plate

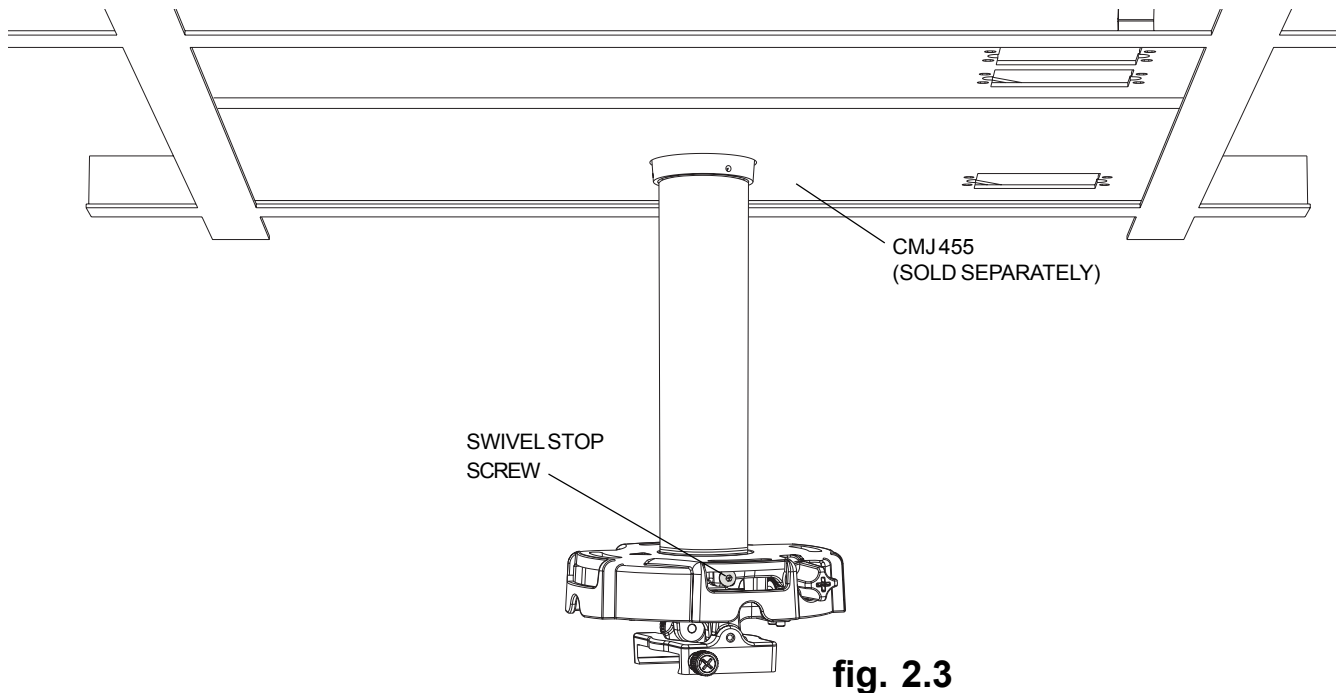
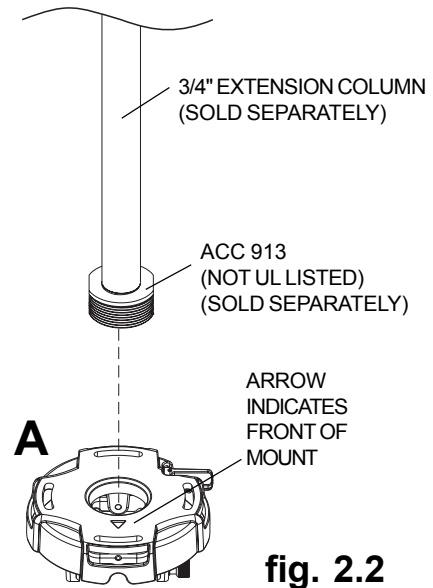
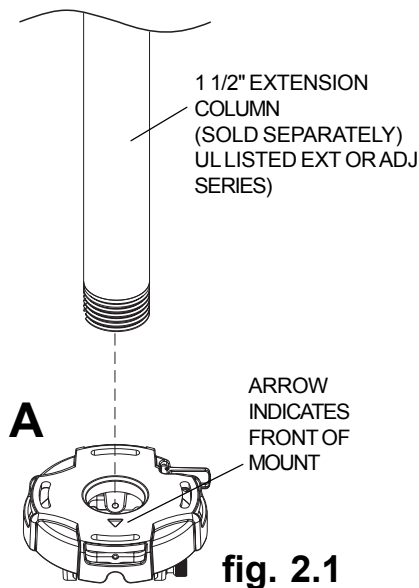
**2** **NOTE:** Refer to accompanying instructions with ceiling plates (sold separately) for installing these models to ceiling.

Screw projector mount assembly (**A**) onto extension column as shown in figure 2.1.

**NOTE:** For 3/4" extension columns, reducer **ACC 913** (not included) will be required as shown in figure 2.2. Tighten swivel stop screw against extension column, flush mount tube or reducer using 4 mm security allen wrench (**B**) as shown in figure 2.3.

**NOTE:** Swivel stop screw is used to jam against threads of extension column, flush mount tube or reducer to prevent any excess movement of projector mount assembly (**A**). Do not overtighten screw; overtightening screw will damage threads making it difficult to separate products.

**Skip to step 3.**



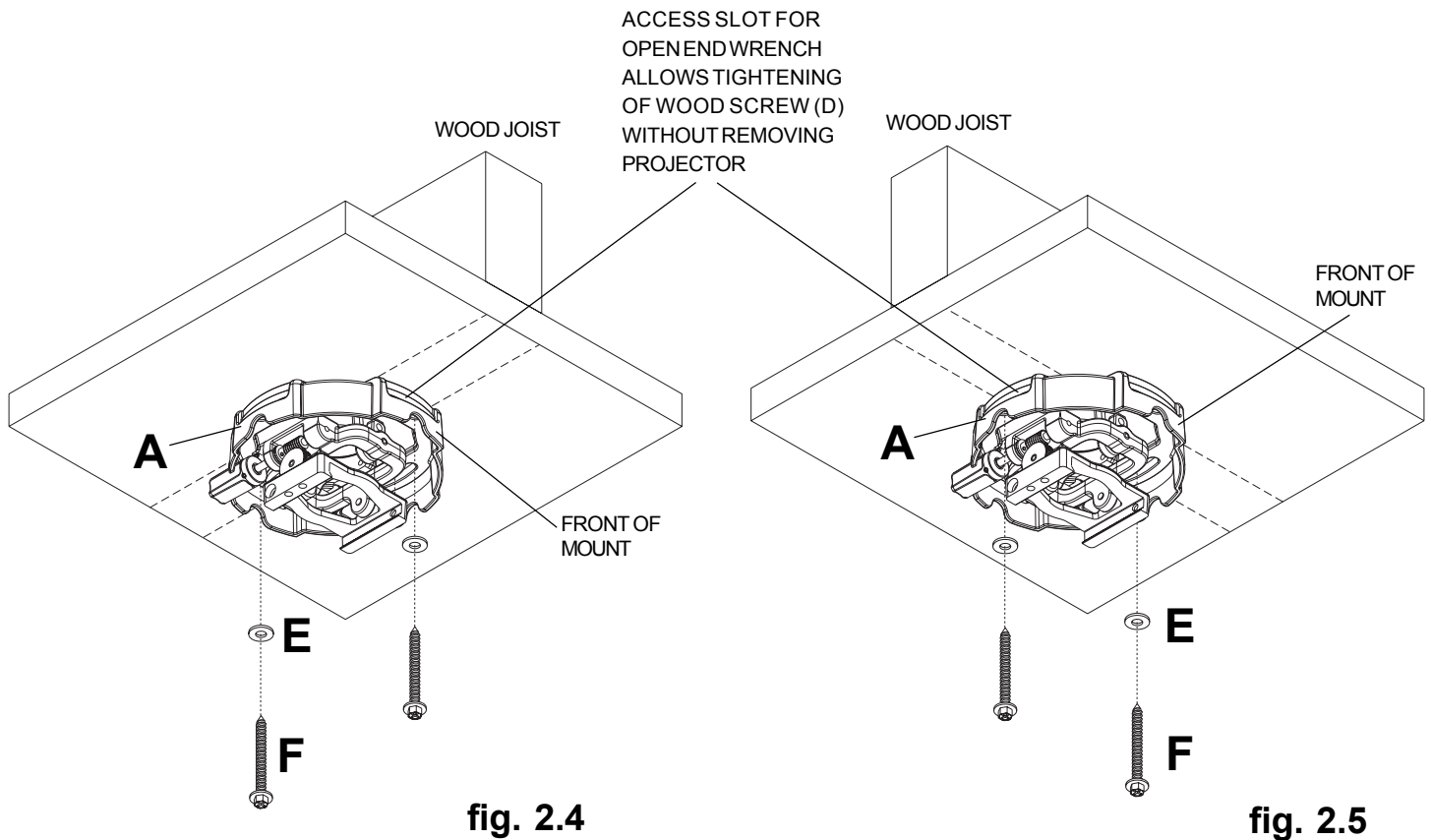
# Installation To Wood Joist Ceilings

## ⚠ WARNING

- Tighten wood screws so that projector mount assembly 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.

**2** Place projector mount assembly (**A**) on ceiling as a template and mark the center of the two mounting holes. Make sure that the mounting holes are in the center of the wood joist. Drill two 5/32" (4 mm) dia. holes to a minimum depth of 2.5" (64 mm). Attach projector mount assembly (**A**) with two #14 x 2.5" (6 mm x 65 mm) wood screws (**F**) and two flat washers (**E**) as shown in figure 2.4 or figure 2.5 depending on joist orientation. Tighten wood screws (**D**) using 3/8" (10 mm) socket wrench, phillips screwdriver or 10mm open end wrench until projector mount assembly (**A**) is firmly attached.

**Skip to step 3.**



# Installation to Concrete Ceilings

## ⚠ WARNING

- Tighten wood screws firmly, 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.).

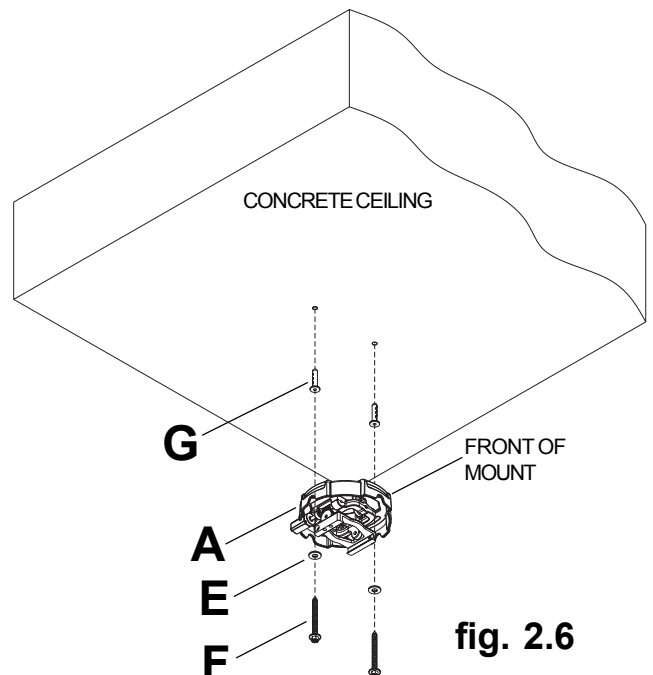
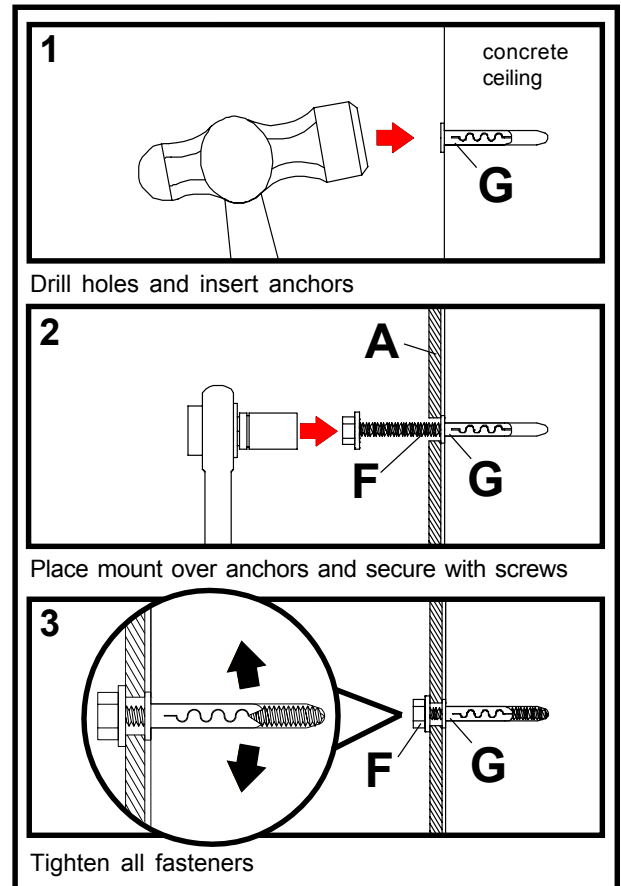
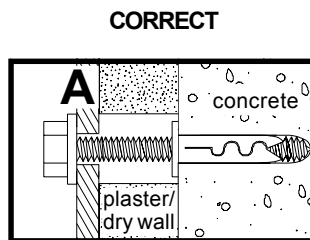
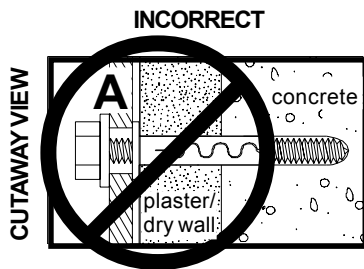
**2** Place projector mount assembly (A) on ceiling as a template and mark the center of the two mounting holes. Drill two 1/4" (6 mm) dia. holes to a minimum depth of 2.5" (64 mm). Attach projector mount assembly (A) using two concrete anchors (G), two flat washers (E), and two #14 x 2.5" wood screws (F) as shown in fig. 2.6 and 1, 2 and 3 (right). Tighten wood screws (F) using 3/8" (10 mm) socket wrench, phillips screwdriver or 10mm open end wrench until projector mount assembly (A) is firmly attached.

**NOTE:** It is the responsibility of the installer to verify that the ceiling will safely support the combined load of all attached hardware and components.

*Skip to step 3.*

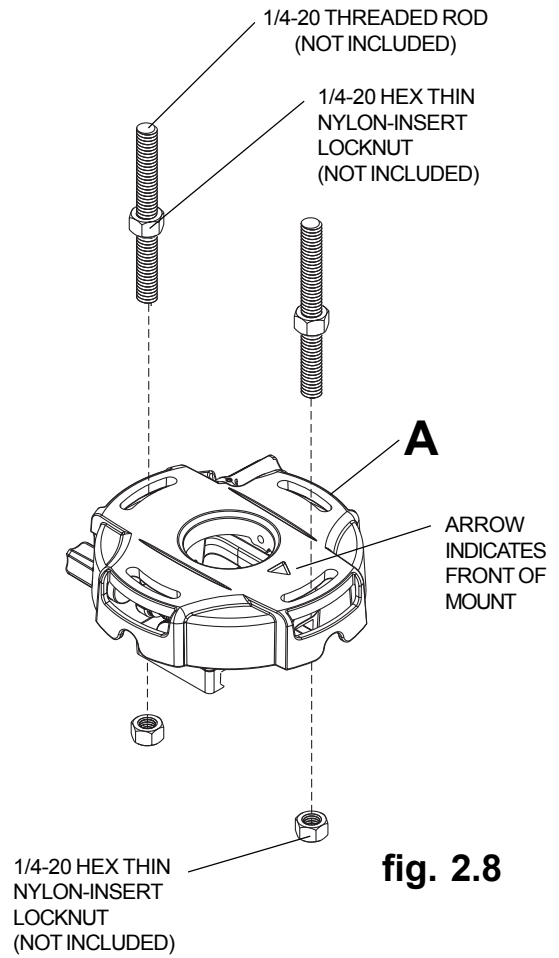
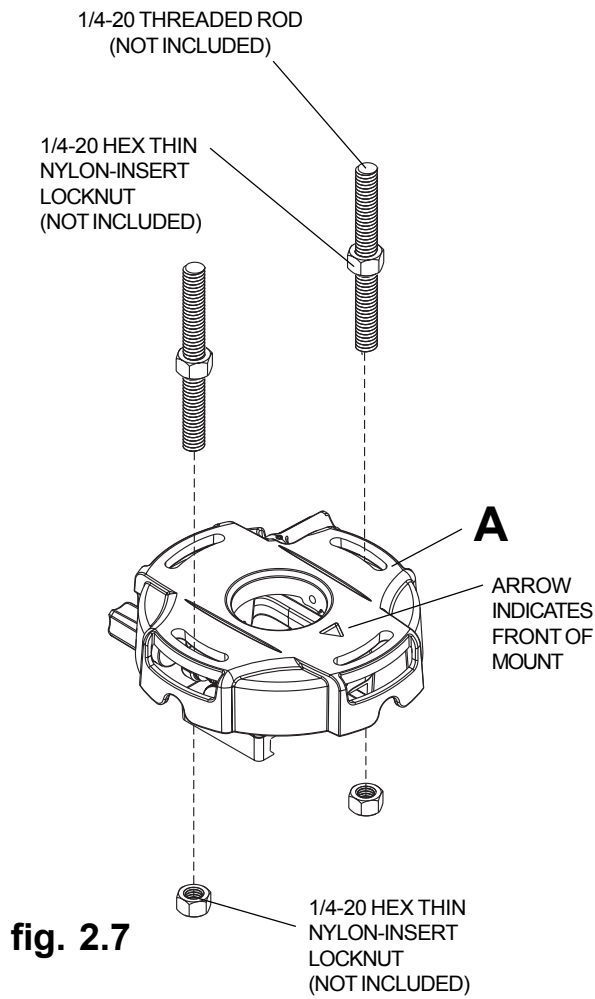
## ⚠ WARNING

- Concrete anchors are **not** intended for attachment to concrete ceiling covered with a layer of plaster, drywall, or other finishing material. If mounting to concrete ceiling covered with plaster/drywall is unavoidable, plaster/drywall (up to 5/8" thick) must be counterbored as shown below. If plaster/drywall is thicker than 5/8", custom fasteners must be supplied by installer.



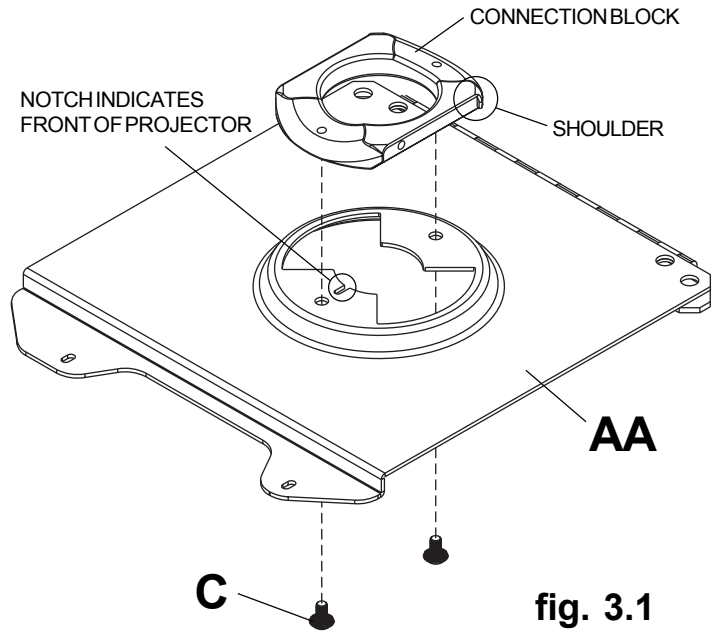
## Installation to Threaded Rod

- 2** Thread two 1/4-20 hex thin nylon-insert locknuts (not included) on two 1/4-20 threaded rods (not included) to the desired height of projector mount assembly. Attach projector mount assembly (**A**) to the two 1/4-20 threaded rods using two 1/4-20 hex thin nylon-insert locknuts as shown in figure 2.7 or figure 2.8.

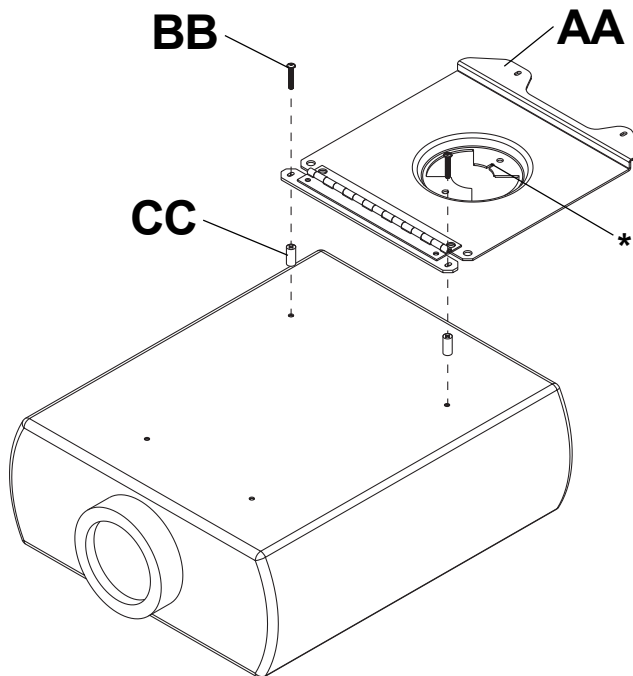


## Attaching Adapter Plate to Projector

- 3** Align shoulder on connection block opposite notch in adapter plate. Attach adapter plate to connection block from projector mount assembly (**A**) using two #10-32 x 3/8" serrated washer head socket pin screws (**C**) as shown in figure 3.1.

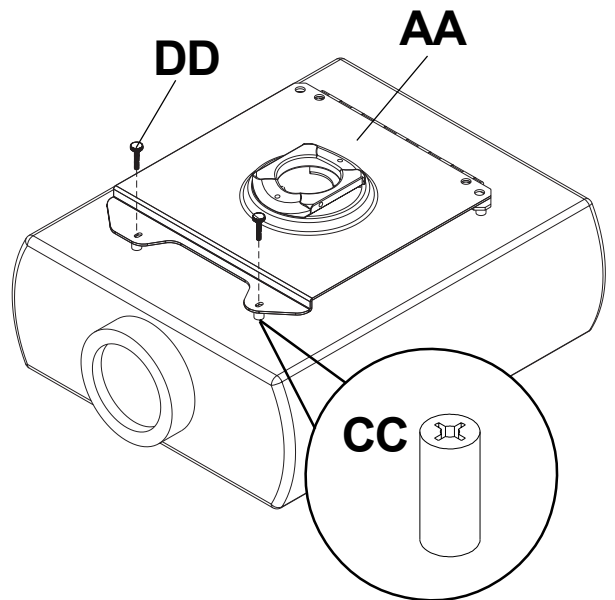


- 4** \*Notch indicates front of projector. Flip projector upside down and attach adapter plate (**AA**) using two serrated socket pin screws (**BB**) and retaining spacers (**CC**) as shown below. Tighten using 4 mm allen wrench (**DD**).



- 5** Secure adapter plate with two knurled knobs (**DD**) and retaining spacers (**CC**) in remaining hole.

**NOTE:** Retaining spacers (**CC**) go between the projector and adapter plate (**AA**).



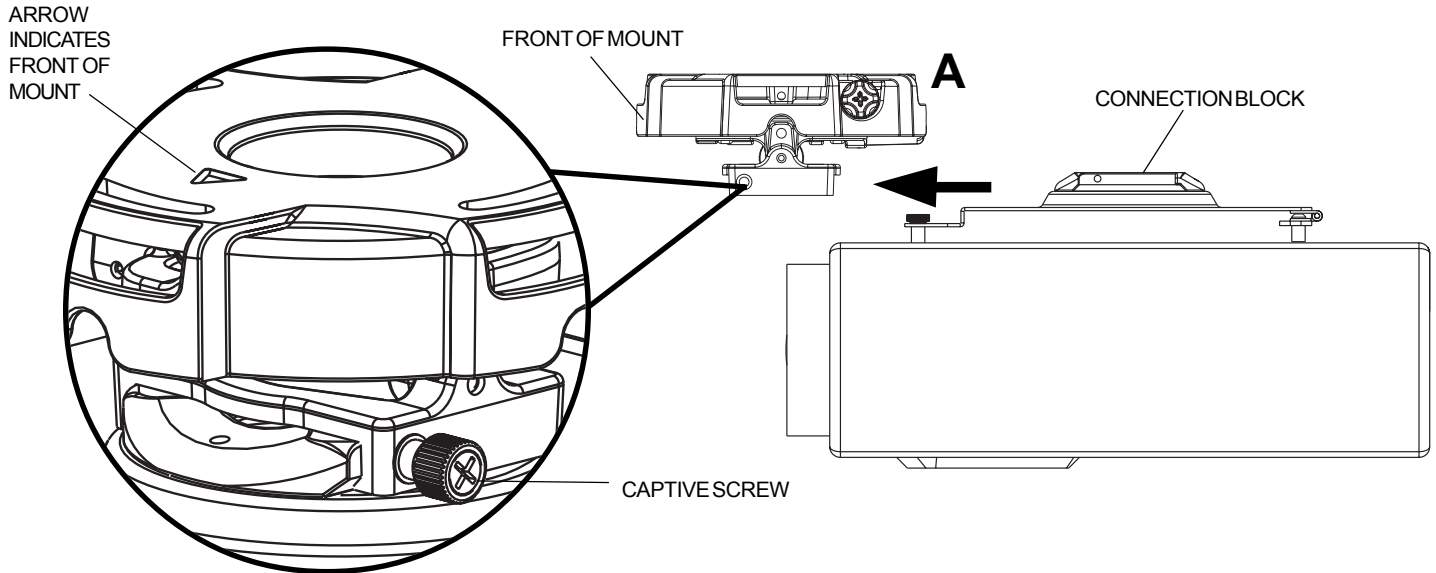


## Attaching Adapter Plate to Projector Mount

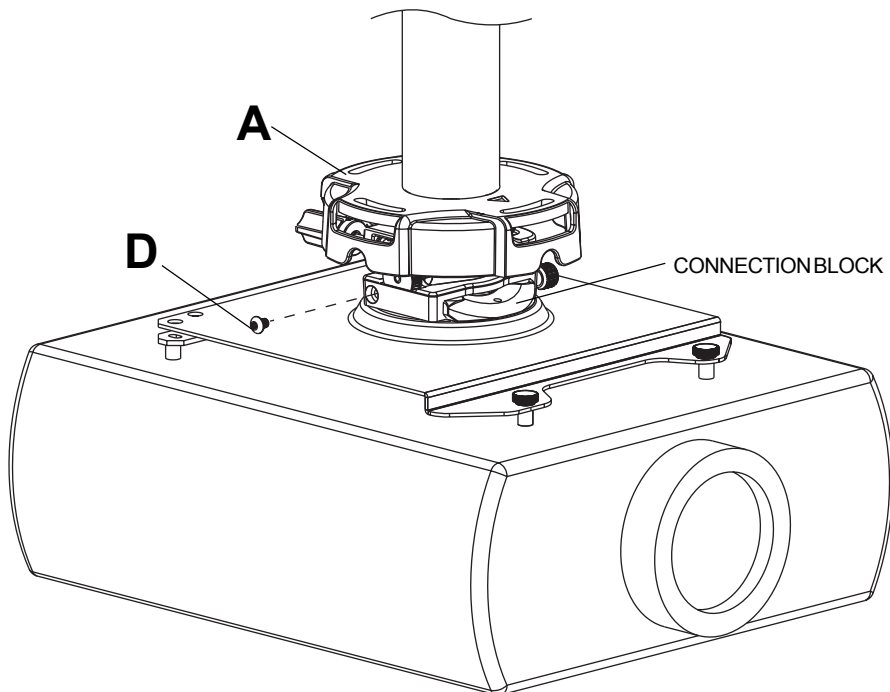
### ⚠ WARNING

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

**6** Slide connection block with projector into projector mount assembly (A) as shown. Tighten captive screw to secure projector to projector mount assembly (A).



**7 IMPORTANT:** For security installations, insert one #10-32 x 1/4" socket pin screw (D) through projector mount assembly (A) and into connection block as shown. Tighten screw using 4mm security allen wrench (B).



# Projector Alignment

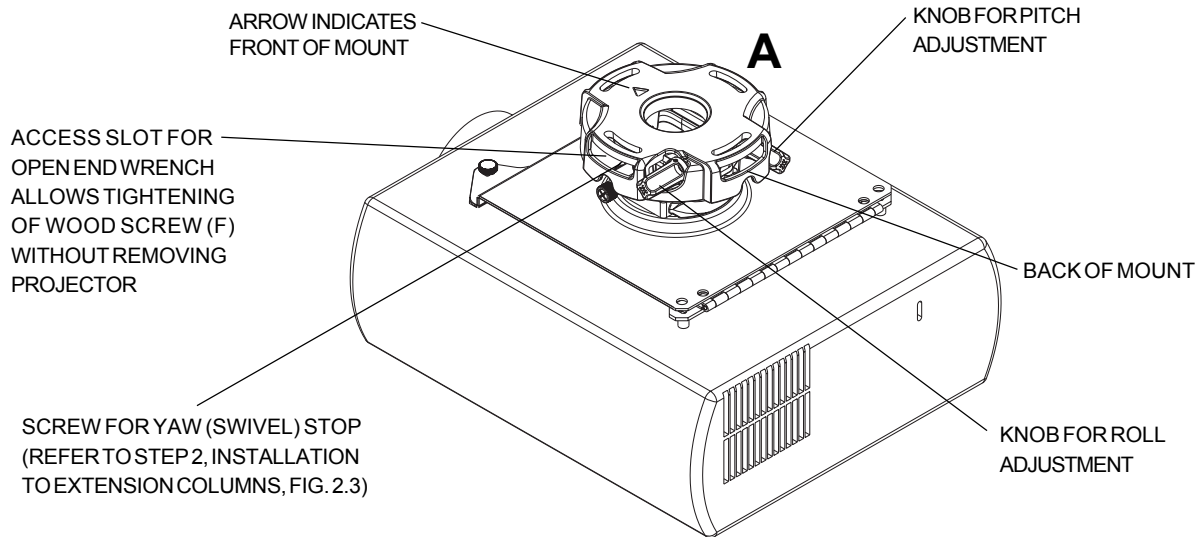
**8**

**To adjust yaw (swivel) for wood stud, concrete ceiling, and threaded rod mounting applications:** Loosen wood screws (F) if flush mounted to wood joists (step 3) or concrete ceilings (step 4), or loosen locknuts on threaded rods (step 5), until projector mount can be rotated. Rotate mount to desired position and retighten screws or locknuts.

**To adjust yaw (swivel) for extension column applications:** Loosen screw on projector mount assembly (A) indicated below until projector mount can be rotated. Rotate mount to desired position and retighten screw.

**To adjust pitch (forward and backward tilt):** Turn knob on back of mount as shown below. Pull knob out and turn by hand for easy adjustment or insert #2 phillips screwdriver in end of knob and turn.

**To adjust roll (side to side tilt):** Turn knob on side of mount as shown below. Pull knob out and turn by hand for easy adjustment or insert #2 phillips screwdriver in end of knob and turn.



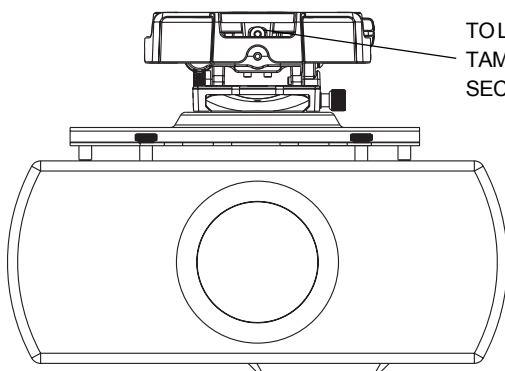
**8-1**

**To prevent tampering with the pitch and roll adjustments:** Tighten the two tamper resistant security screws on the projector mount assembly using 4 mm security allen wrench (B) to lock the pitch and roll adjustments as shown below.

**Note:** Tighten screws firmly, but do not overtighten. Overtightening can damage the mount.

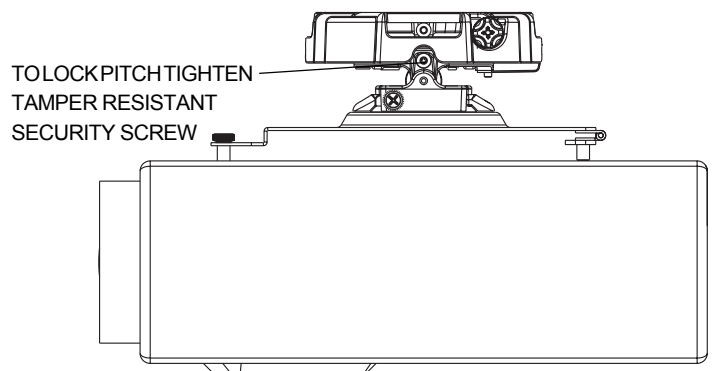
## CAUTION

- Do not adjust pitch or roll while tamper resistant security screws are fully engaged.
- Loosen the two tamper resistant security screws one complete turn before adjusting the projector mount assembly or damage may occur.



**FRONT VIEW**

TO LOCK ROLL TIGHTEN TAMPER RESISTANT SECURITY SCREW



**SIDE VIEW**

TO LOCK PITCH TIGHTEN TAMPER RESISTANT SECURITY SCREW