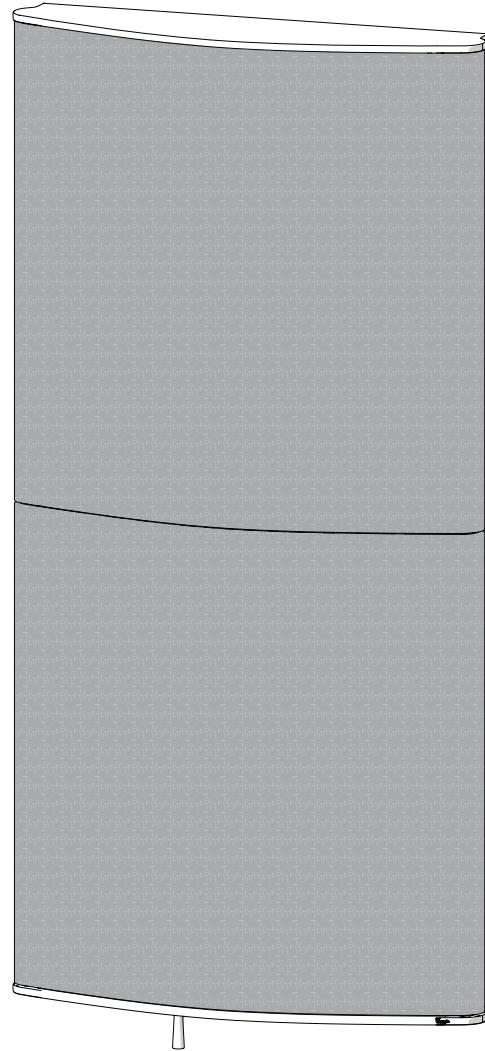
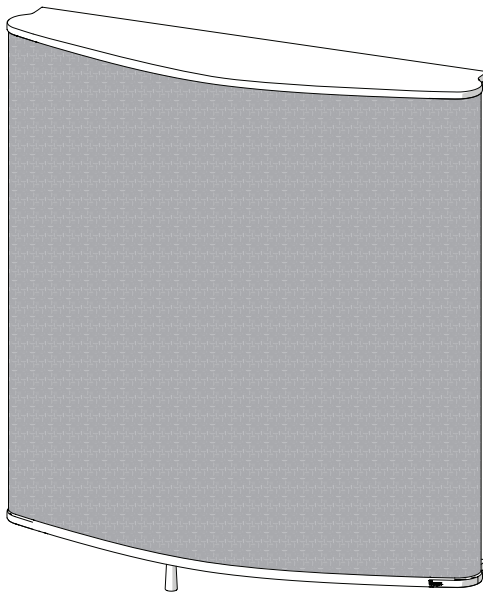


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Visit the Tunable Acoustical Panels web page at www.wengercorp.com for detailed instructions and videos.

Note: Please read and understand the instructions before starting the assembly or installation.
Note: If you need additional information, contact Wenger Corporation using the information below.

Important User Information

General

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Printed and bound in the United States of America.

The information in this manual is subject to change without notice and does not represent a commitment on the part of Wenger Corporation. Wenger Corporation does not assume any responsibility for any errors that may appear in this manual.

In no event will Wenger Corporation be liable for technical or editorial omissions made herein, nor for direct, indirect, special, incidental, or consequential damages resulting from the use or defect of this manual.

The information in this document is not intended to cover all possible conditions and situations that might occur. The end user must exercise caution and common sense when assembling or installing Wenger Corporation products. If any questions or problems arise, call Wenger Corporation at 1-800-887-7145.

Manufacturer

The Tunable Acoustical Panels are manufactured by:

Wenger Corporation
555 Park Drive
Owatonna, MN 55060
1-800-4WENGER (493-6437) • 1-507-455-4100
www.wengercorp.com

Intended Use

- This product is designed to diffuse and/or absorb sounds for vocal or instrumental groups.
- This product is intended for indoor use in normal ambient temperature and humidity conditions.
- This product is intended to be used only as described in these instructions.

Warranty


This product is guaranteed free of defects in materials and workmanship for five full years from date of shipment. A full warranty statement is available upon request.


Safety Precautions

Throughout this manual you will find cautions and warnings which are defined as follows.

- **WARNING** means that failure to follow the instruction may result in serious injury or death.
- **CAUTION** means that failure to follow the instruction may result in serious injury or damage to property.

Read all of these safety instructions before installing the Acoustic Panel System.


 CAUTION
<i>Make sure that anyone installing the Acoustic Panel System has read and understands these instructions.</i>


 CAUTION
<i>Make sure that anyone installing the Acoustic Panel System is capable of typical assembly procedures.</i>

 CAUTION
<i>Failure to comply with the Warnings and Cautions in this document can result in damage to property or serious injury.</i>

 CAUTION
<i>Always observe and comply with the Warnings and Cautions posted on the system equipment.</i>

 CAUTION
<i>Never modify or drill additional holes in the panels.</i>

 CAUTION
<i>Never attach the Acoustic panel System to a ceiling or horizontal surface.</i>

 CAUTION
<i>Always wear safety glasses and gloves when assembling and installing the Acoustic Panel System.</i>

Required Tools

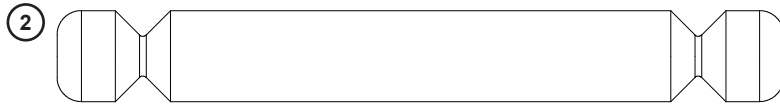
The following tools are required for installation:

- #2 Phillips Head Screwdriver
- 5/32" and 3/16" Hex Wrenches
- Tape Measure
- Level
- Pliers
- Work Gloves
- Goggles
- Drill and bits for mounting to wall

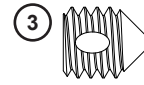
Fasteners



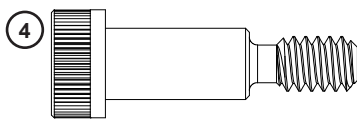
X003607
5/16-18 x 3.75 Hex Head Shoulder Bolt



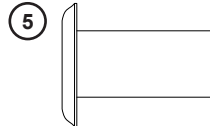
214A128
Coupler Pin



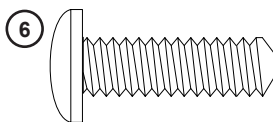
X003620
5/16-18 x 3/8
Set Screw



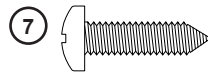
X003653
1/4 x 0.5 Shoulder Screw



250A510
10-24 Cap Nut



X003096
1/4-20 x 3/4 Socket Screw



X000121
#8-18 x 1/2 Screw

**Quantities may vary depending on model. Extra fasteners can be discarded.*

Because materials and construction of walls can vary, fasteners for attaching the Acoustical Panel System to the structure are not provided.

The installer must choose the appropriate fastener and follow the manufacturer's instructions.

All fasteners must be a minimum of 1/4" diameter.

A minimum of two fasteners are required per bracket and must be located at least 24" apart. Additional fasteners are recommended where possible.

Fastener guidelines:

- If the wall is wood stud-and-drywall construction, attachment should be by lag screws into every available stud. Fasteners must hit the center of the stud.
- If the wall is metal stud-and-drywall construction, attachment should be by toggle bolt (snap toggle) into every available stud. Toggle bolt to be used between studs.
- If the wall is concrete block construction, attachment should be by concrete screws, drive nail or toggle bolt.
- If the wall is poured concrete construction, attachment should be by concrete screw or wedge-type concrete anchors.

WARNING

Using inferior or improperly installed fasteners could cause the panel to fall.

Serious injury or damage may result.

Panel Descriptions

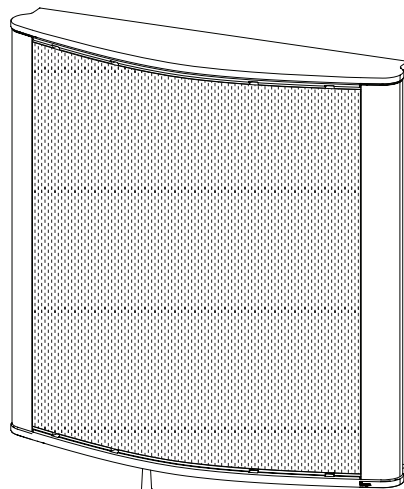
The Tunable Acoustical Panels are available in the following panel types:

Absorber Only Panel - Absorbs sounds only.

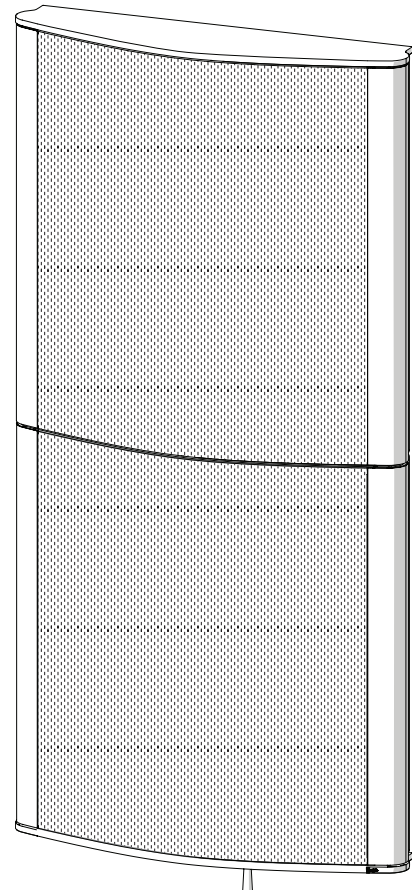
Diffuser Only Panel - Deflects sounds only.

Tunable Panel - Can be tuned to either absorb or deflect sounds.

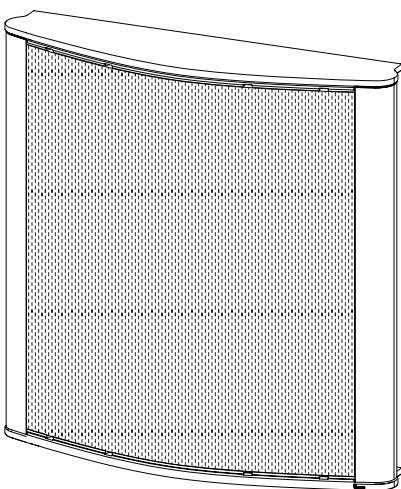
For clarity, panels are shown without fabric covers.



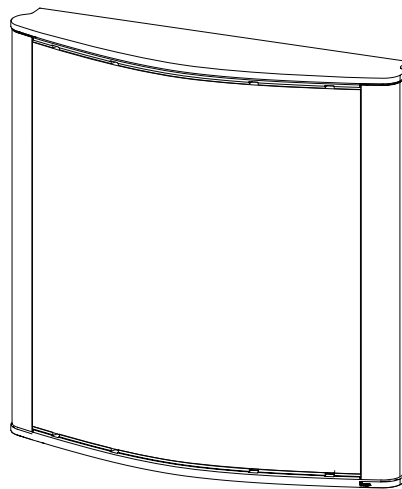
4'x4' Tunable Panel



4' x 8' Stacked Tunable Panels



4'x4' Absorber Only Panel

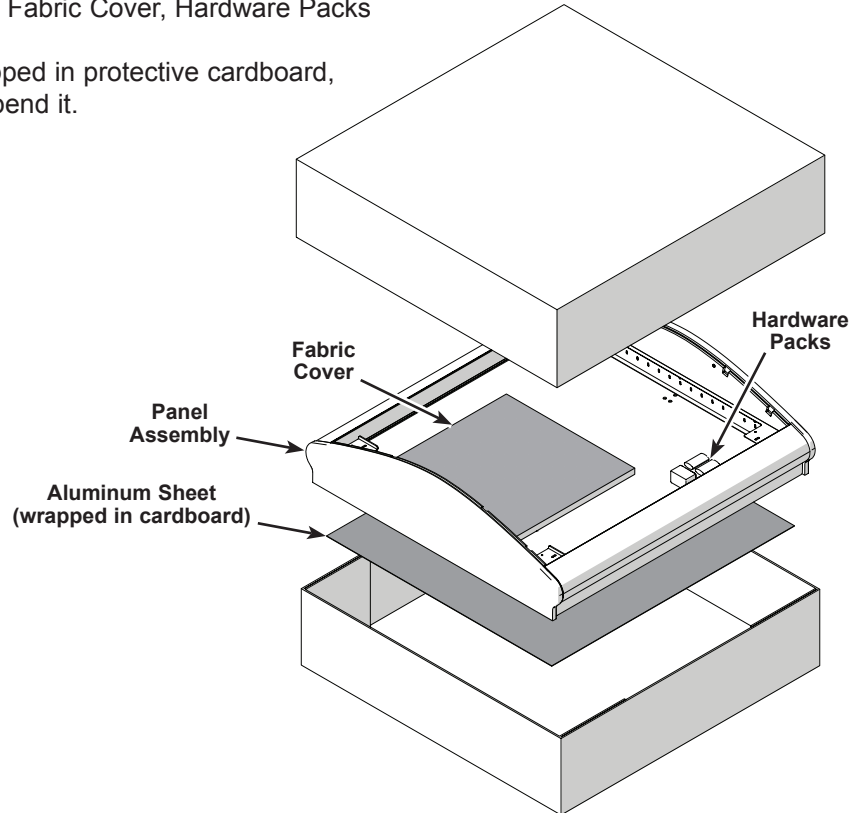


4'x4' Diffuser Only Panel

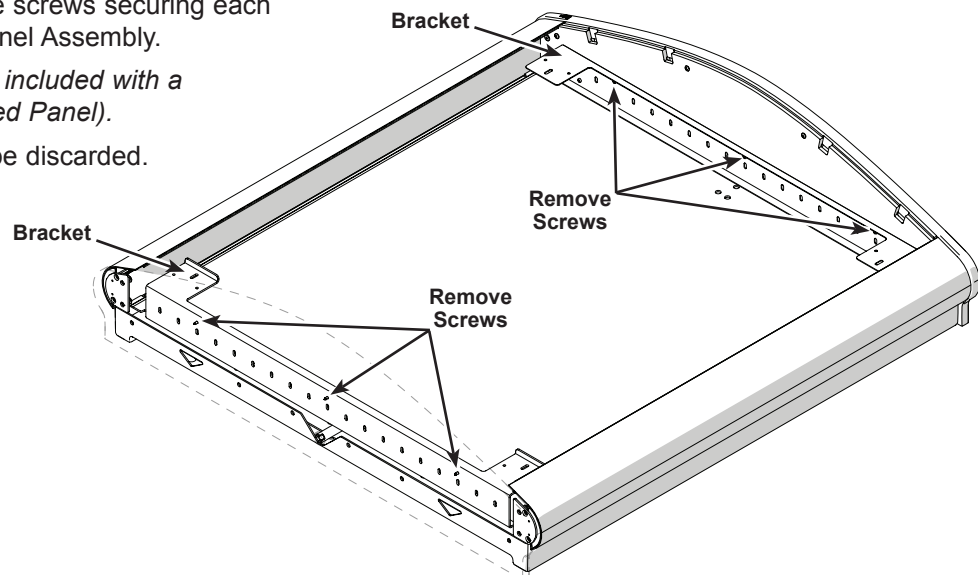
Panel Installation

The following instructions detail the installation procedure for 4' x 8' Stacked Tunable Panels. The procedures for all panel configurations are similar and any variations will be noted.

1. Unpack the Panel Assembly, Fabric Cover, Hardware Packs and the Aluminum Sheet.
The Aluminum Sheet is wrapped in protective cardboard, take care not to damage or bend it.



2. Remove the three screws securing each Bracket to the Panel Assembly.
(Brackets are not included with a Top 4' x 4" Stacked Panel).
The screws can be discarded.



Panel Installation (continued)

3. Mount the Brackets on the wall to position the Panel Assemblies according to the layout plan drawing.

- a. Place the Upper Bracket to be 46-1/2" (118 cm) up from the finished height of the bottom of the Panel Assembly as shown.

The Upper Bracket is identified by the bent tabs.

Be sure that the Bracket is level and attach it to the wall using the appropriate fasteners and method as indicated in the "Fasteners" section.

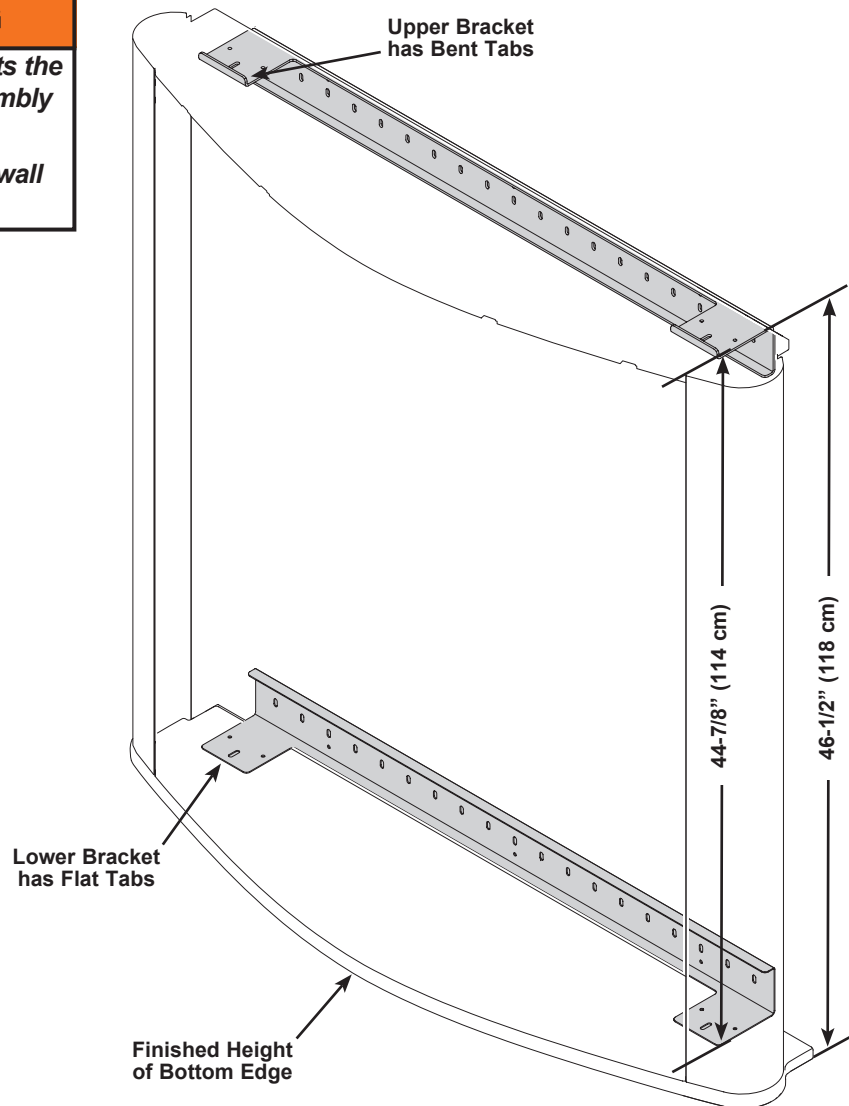
- b. Place the bottom surface of the Lower Bracket 44-7/8" (114 cm) directly below the top surface of the Upper Bracket.

Be sure that the Bracket is level and attach it to the wall using the appropriate fasteners and method as indicated in the "Fasteners" section.

WARNING

The Upper Bracket supports the majority of the Panel Assembly weight.

Be sure to secure it to the wall appropriately.



Panel Installation (continued)

The following step only applies to 4' x 8' Stacked Tunable Panel Configurations.

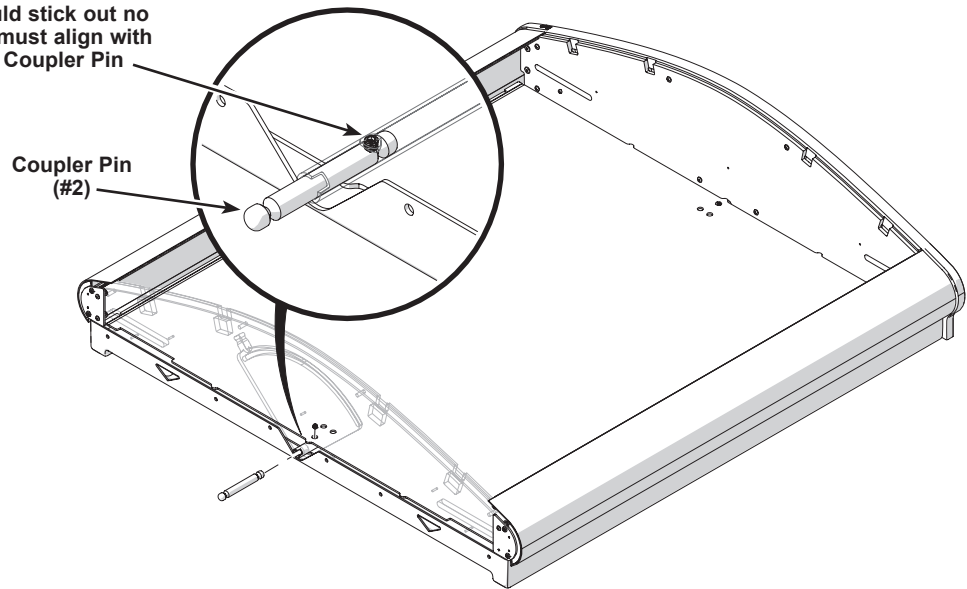
If installing a 4' x 4' Single Tunable Panel, skip ahead to the next step.

If installing an Absorber Only or Diffuser Only Panel, skip ahead two steps.

- Slide the Coupler Pin (#2) into the Actuator Shaft at the top of the Bottom Panel Assembly and secure it into place using one Set Screw (#3).

The Set Screw should stick out no more than 1/8" beyond the Panel Surface and must align with the groove in the Coupler Pin as shown.

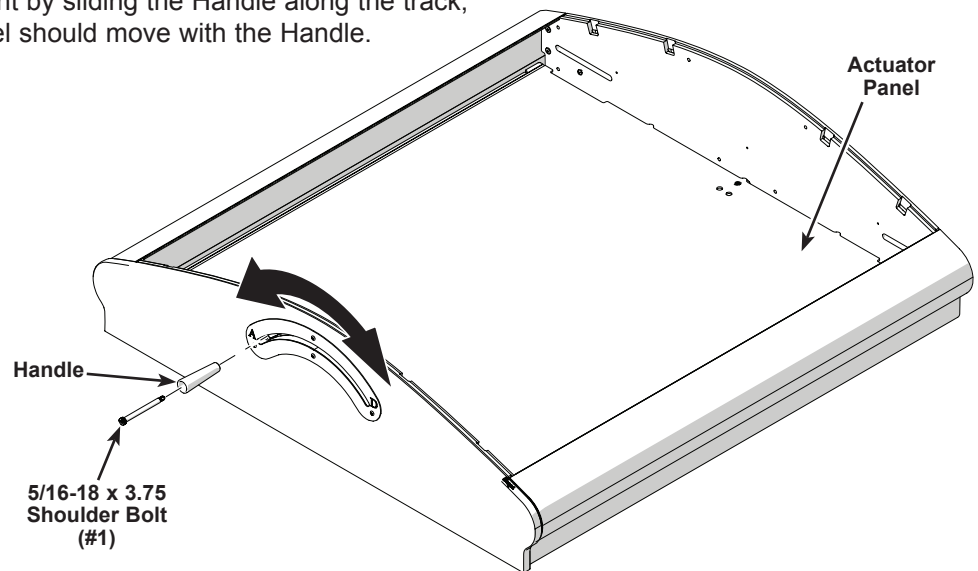
Set Screw (#3) should stick out no more than 1/8" and must align with the groove in the Coupler Pin



The following step only applies to Tunable Panels.

If installing an Absorber Only or Diffuser Only Panel, skip ahead to the next step.

- Attach the Handle to the Handle Lever with a 5/16-18 x 3.75 Shoulder Bolt (#1).
- Test the movement by sliding the Handle along the track, the Actuator Panel should move with the Handle.



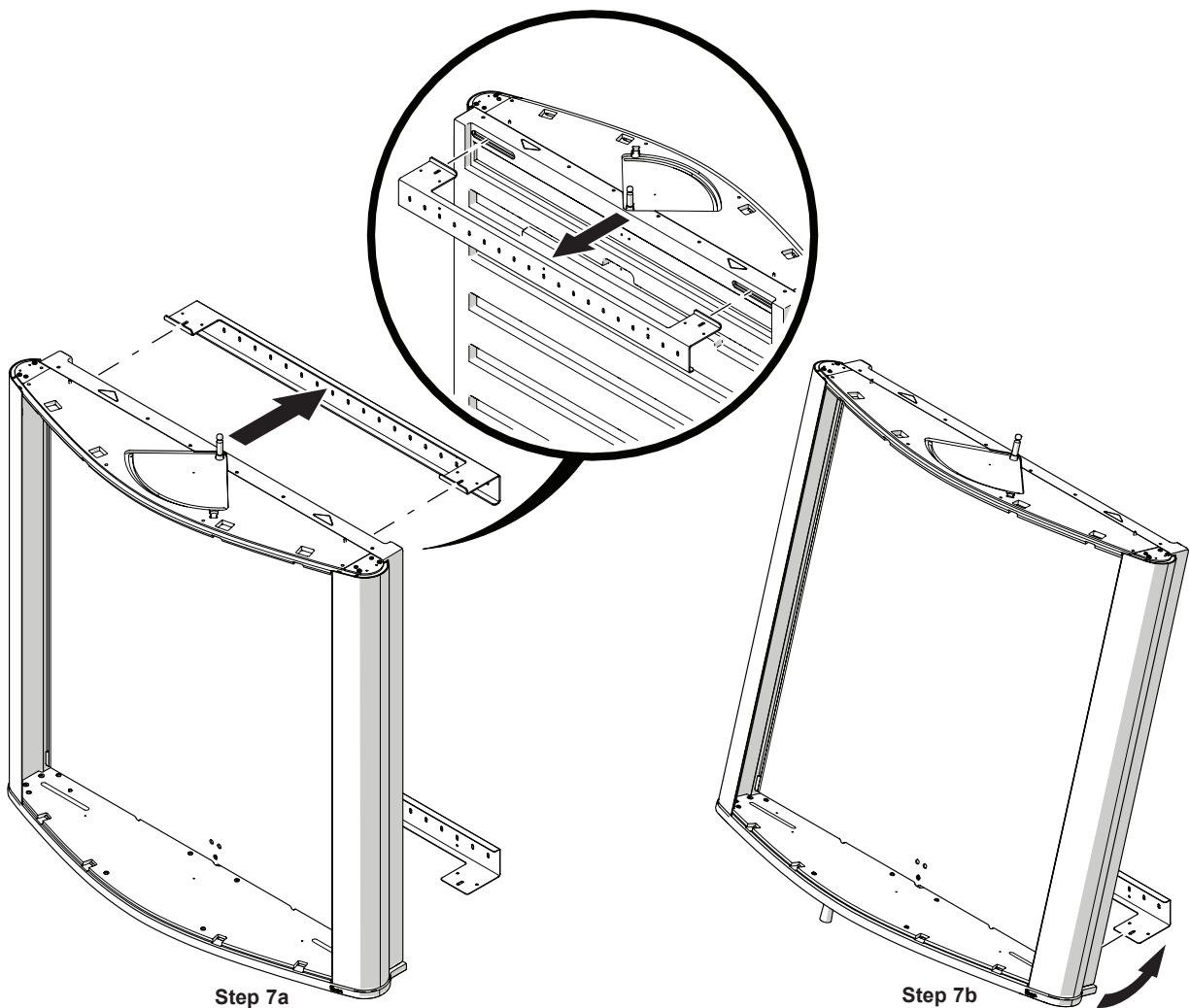
Panel Installation (continued)

7. Using at least two people, lift the Panel Assembly onto the Brackets.

CAUTION

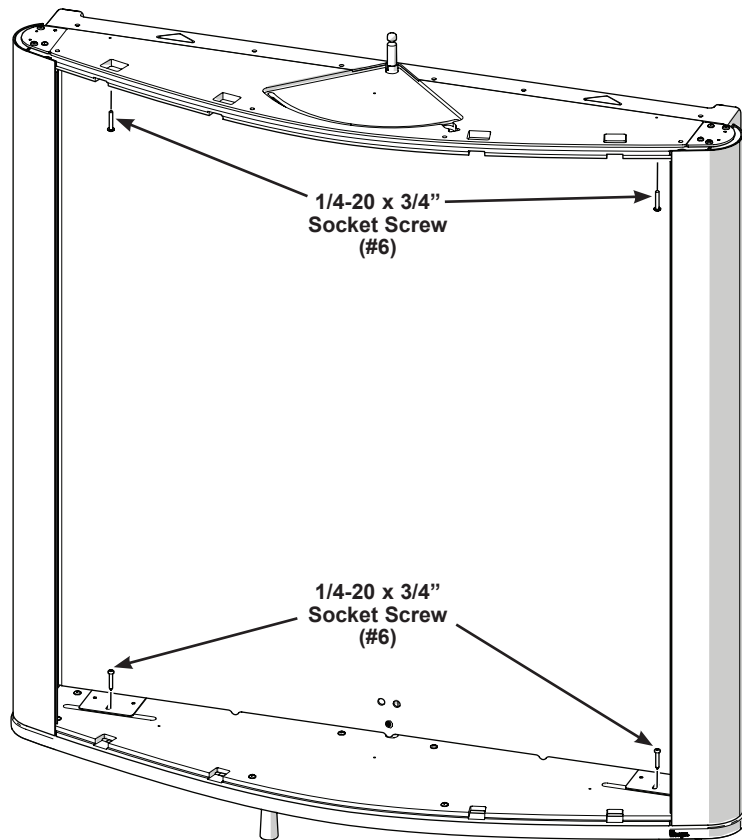
At least two people are required to lift the Panel Assembly.

- *If installing any 4' x 8' system, install the Bottom Panel Assembly with the finished wood side at the bottom as shown.*
 - *If installing a 4' x 4' Tunable Panel, the Handle must be at the bottom.*
 - *If installing a 4' x 4' Absorber Only or Diffuser Only Panel, the top and bottom orientation are interchangeable.*
- a. Slide the two Slots at the Top Rear of the Panel Assembly over the Upper Bracket. The Bent Tabs should fit into the Slits on the inside of the Top Panel.
 - b. Carefully tip the bottom two Slots to fit over the Tabs of the Lower Bracket. The Tabs may have to be bent slightly to fit into the Slots



Panel Installation (continued)

8. Adjust the Panel Assembly to be level and plumb to the wall surface.
9. Attach the Panel Assembly to the Top and Bottom Brackets using a 1/4-20 x 3/4" Socket Screw (#6) in each of the four slotted holes.



Panel Installation (continued)

The following steps only apply to 4' x 8' Stacked Panels.

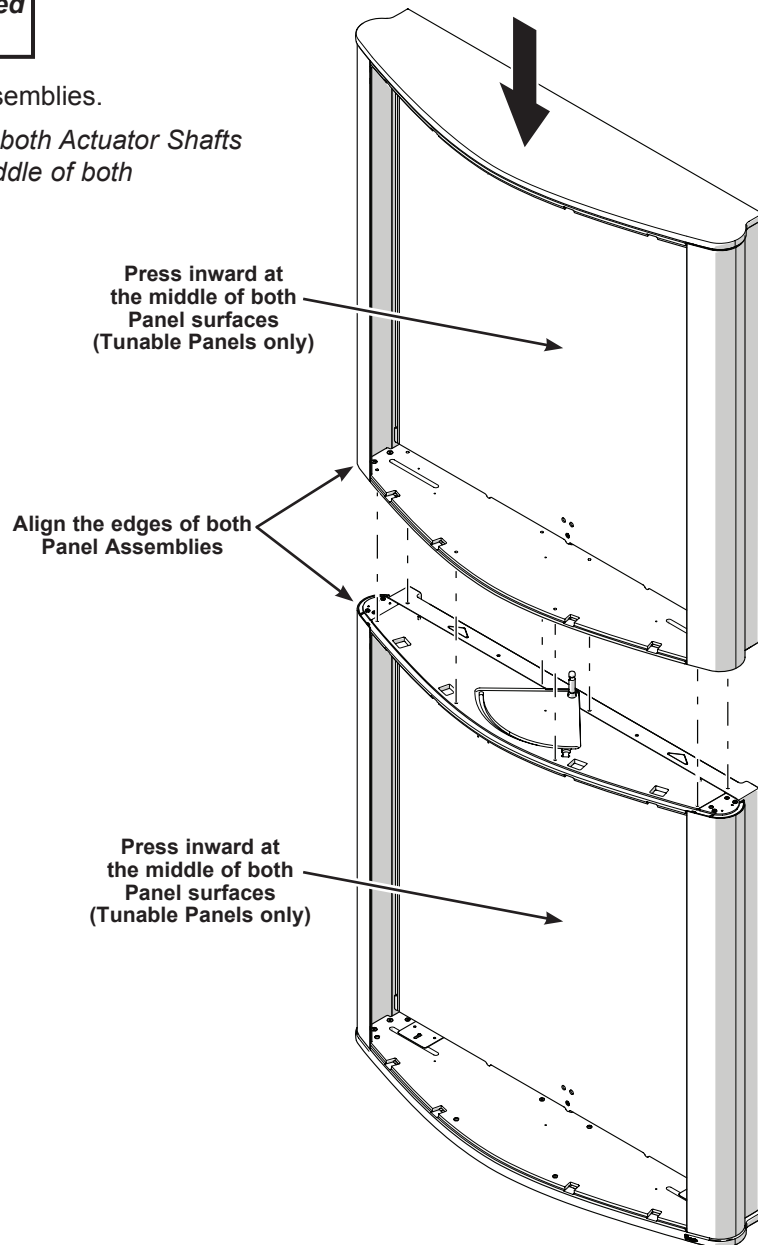
If installing single 4' x 4' Panel, skip ahead to step 16.

10. Using at least two people, carefully lower the Top Panel Assembly directly onto the Mounted Bottom Panel. Align the holes as shown.



11. Align the edges of both Panel Assemblies.

If installing Tunable Panels, align both Actuator Shafts by fully pressing inward at the middle of both Panel surfaces.



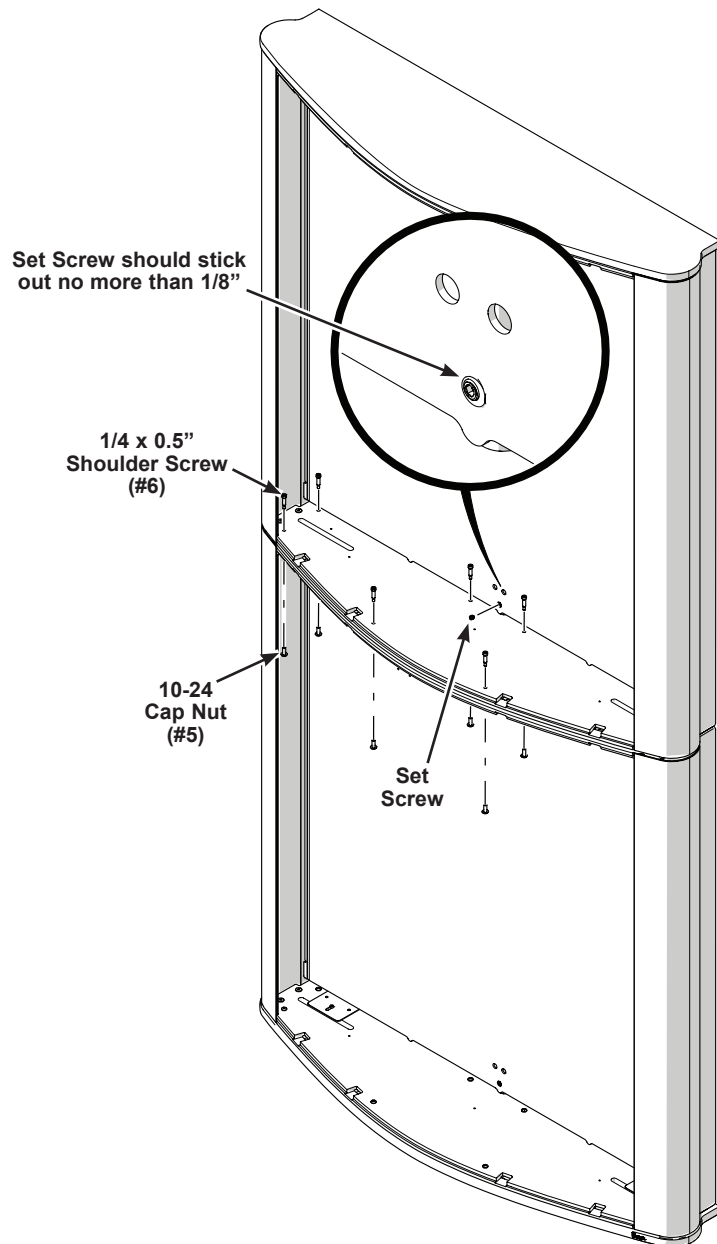
Panel Installation (continued)

12. Attach a Set Screw to the other end of the Coupler Pin as shown. Turning the Set Screw in helps draw the Panel Assemblies together.

To ensure proper fit, the Set Screw should stick out no more than 1/8" beyond the Panel Surface.

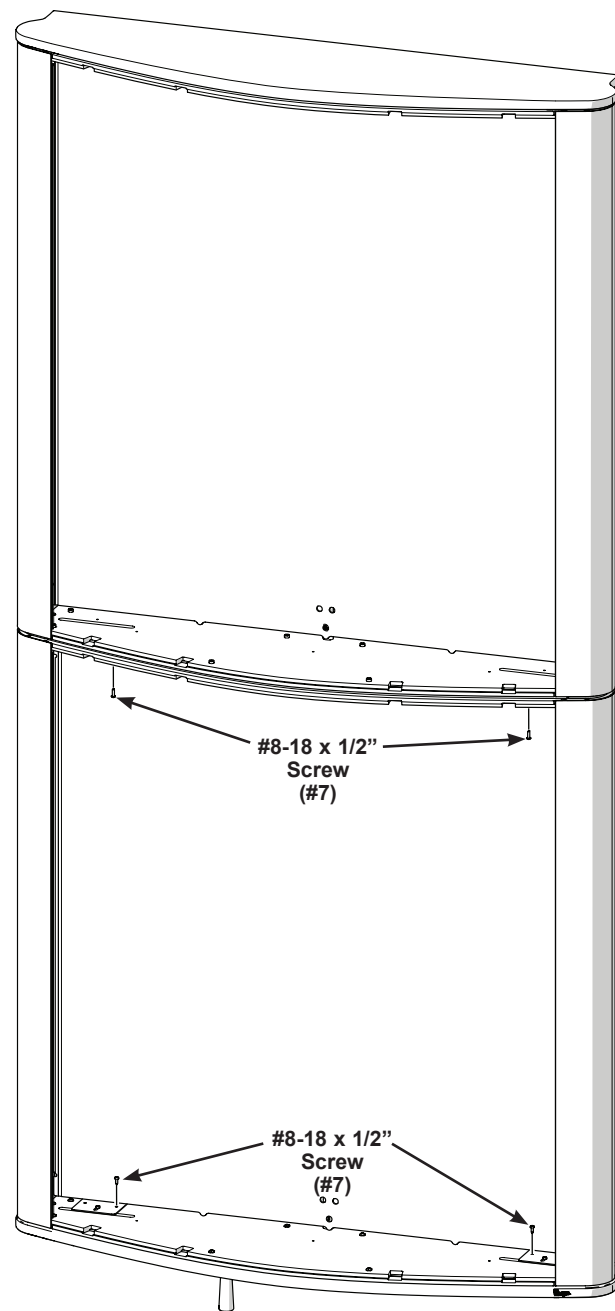
If the Set Screw sticks out farther than 1/8", the Actuator Shafts are not aligned.

13. Attach the Top Panel Assembly to the Bottom Panel Assembly using eight 1/4 x 0.5 Shoulder Screws (#4) and 10-24 Cap Nuts (#5) only finger tight at this time. It is recommended to attach the front connectors first, then the rear.



Panel Installation (continued)

14. Check the Acuator operation again and be sure that the both Panels are level and aligned.
15. Fully tighten the eight Shoulder Screws and Cap Nuts connecting the Panel Assemblies together.
16. Install one #8-18 x 1/2" Screw (#7) in each Bracket lip as shown (one hole is not used).



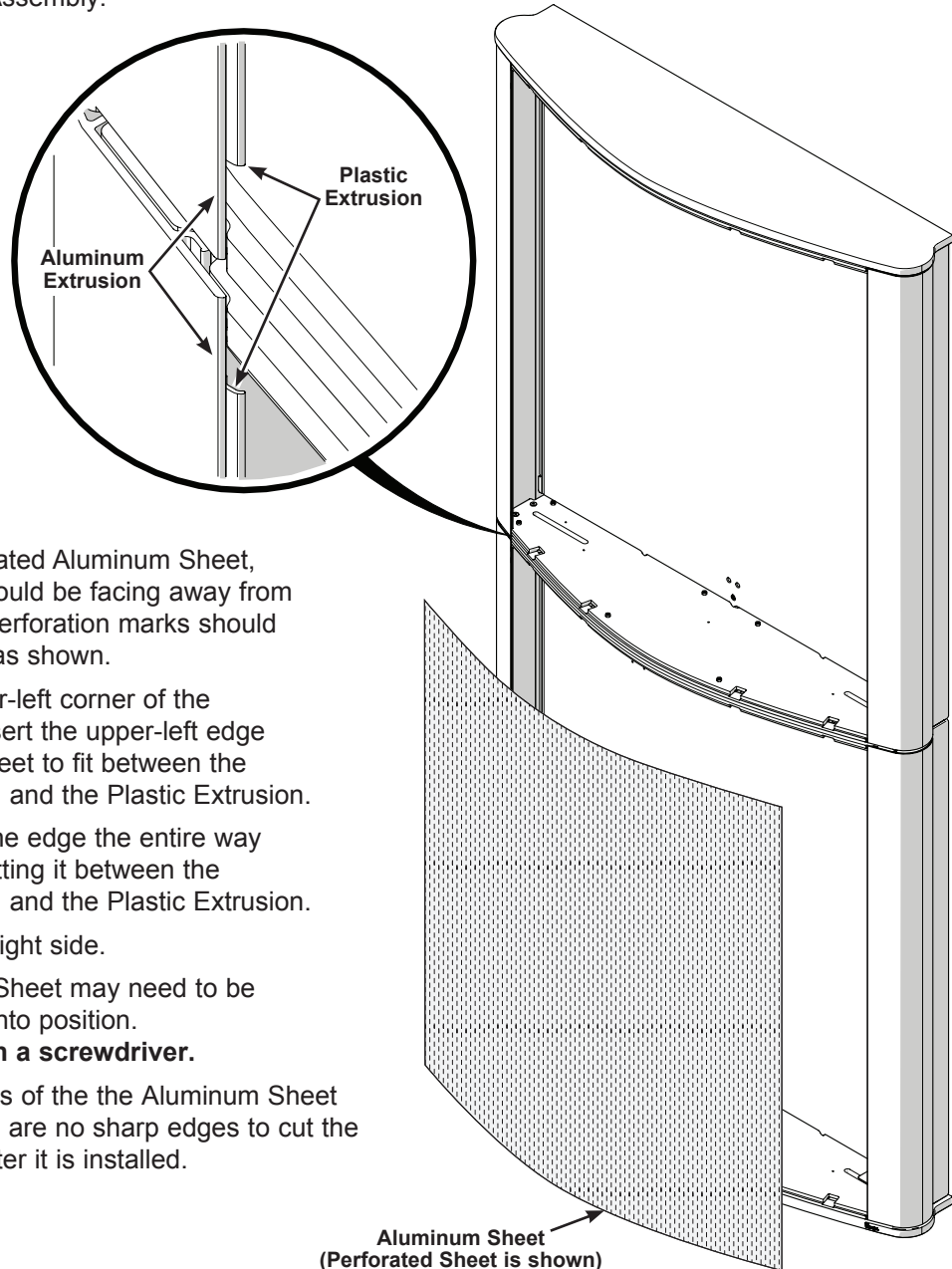
Panel Installation (continued)

17. Carefully unpack the Aluminum Sheet. Do not kink or bend it.

CAUTION

The Aluminum Sheet has sharp edges. Always wear protective gloves when handling.

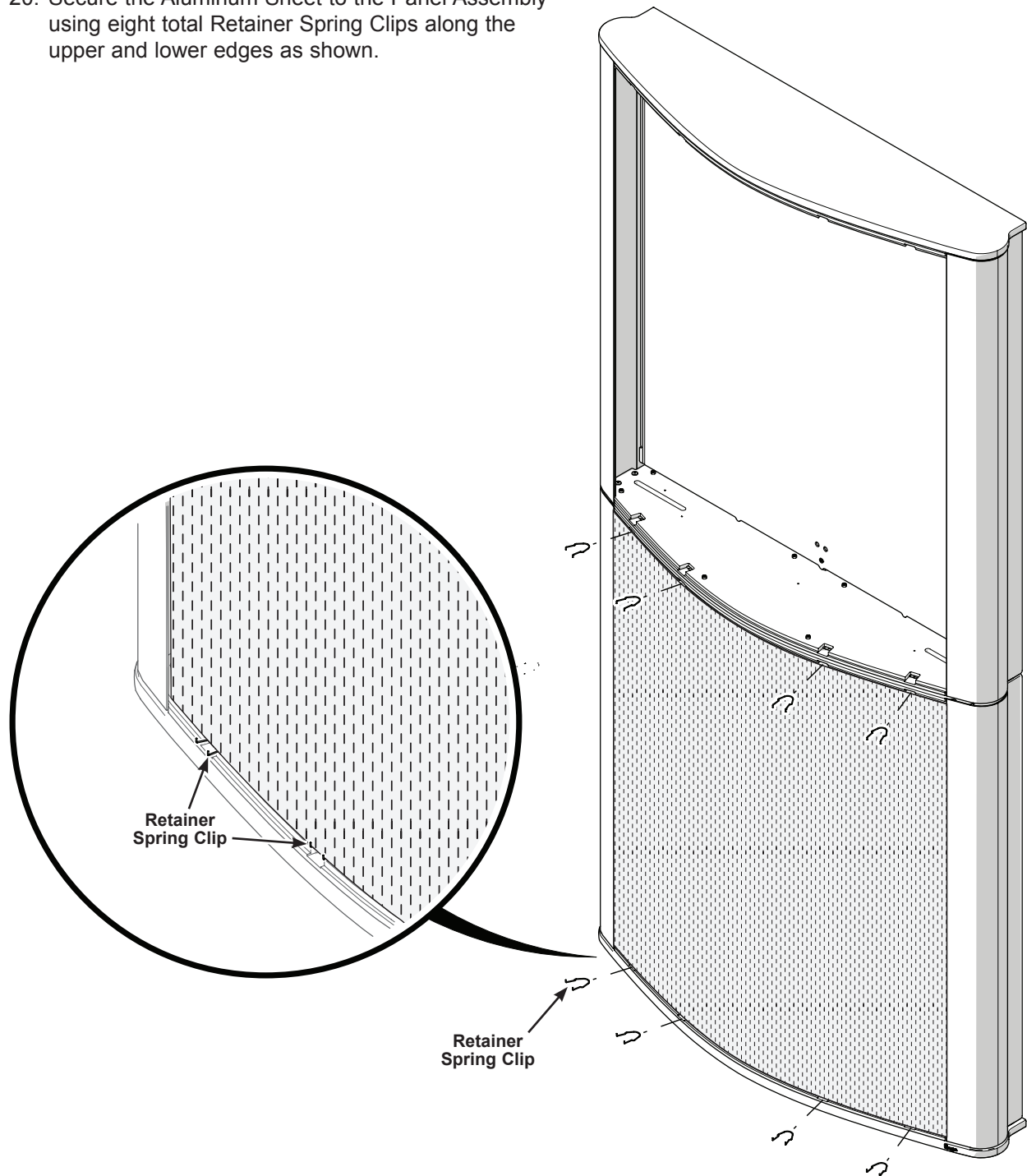
- a. Inspect it for any bends, especially on the corners and edges. Straighten out any bends with a set of pliers.
- b. Check that the Plastic Extrusions are seated behind both Aluminum Extrusions of each Panel Assembly.



18. If installing a Perforated Aluminum Sheet, the rougher side should be facing away from the Panel and the perforation marks should be running vertical as shown.
19. Starting at the upper-left corner of the Panel Assembly, insert the upper-left edge of the Aluminum Sheet to fit between the Aluminum Extrusion and the Plastic Extrusion. Continue to guide the edge the entire way down the left side fitting it between the Aluminum Extrusion and the Plastic Extrusion.
 - b. Repeat for the right side.
 - c. The Aluminum Sheet may need to be gently nudged into position.
Do not pry with a screwdriver.
 - d. Inspect all edges of the the Aluminum Sheet to be sure there are no sharp edges to cut the Fabric Cover after it is installed.

Panel Installation (continued)

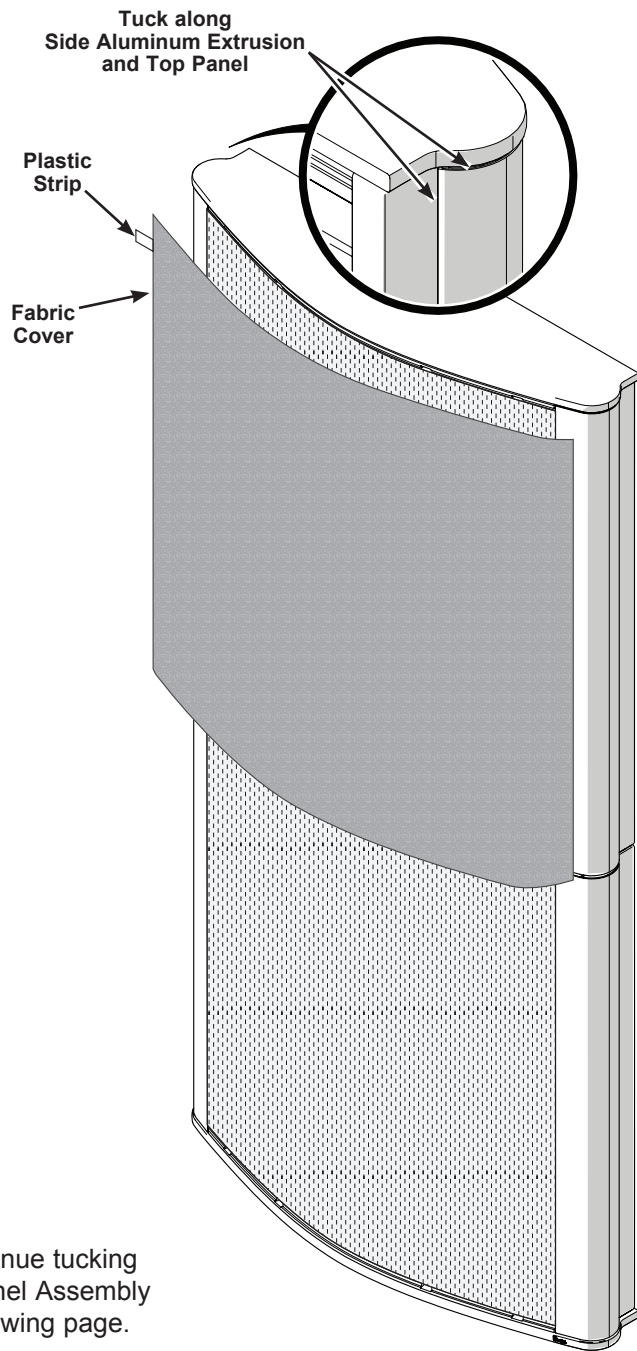
20. Secure the Aluminum Sheet to the Panel Assembly using eight total Retainer Spring Clips along the upper and lower edges as shown.



21. If installing 4'x 8' Stacked Panels, repeat the previous steps to install the remaining Aluminum Panel.
22. If installing a Tunable Panel, check the operation of the Handle.

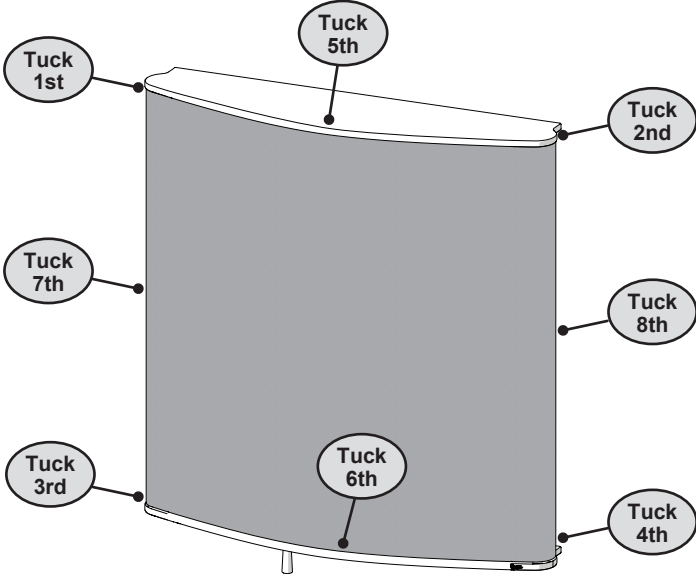
Panel Installation (continued)

23. Attach the Fabric Cover to the front of the Panel Assembly.
 - a. Clean hands to avoid getting fabric dirty.
 - b. Locate the Plastic Strip at one corner of the Fabric Cover.
 - c. Starting at the upper left corner of the Panel Assembly, tuck the plastic edging along this corner approximately 6" vertically and horizontally fitting it behind the Side Aluminum Extrusion and under the Top Panel.
 - d. Pull the Fabric Cover snug and repeat in the upper right corner.

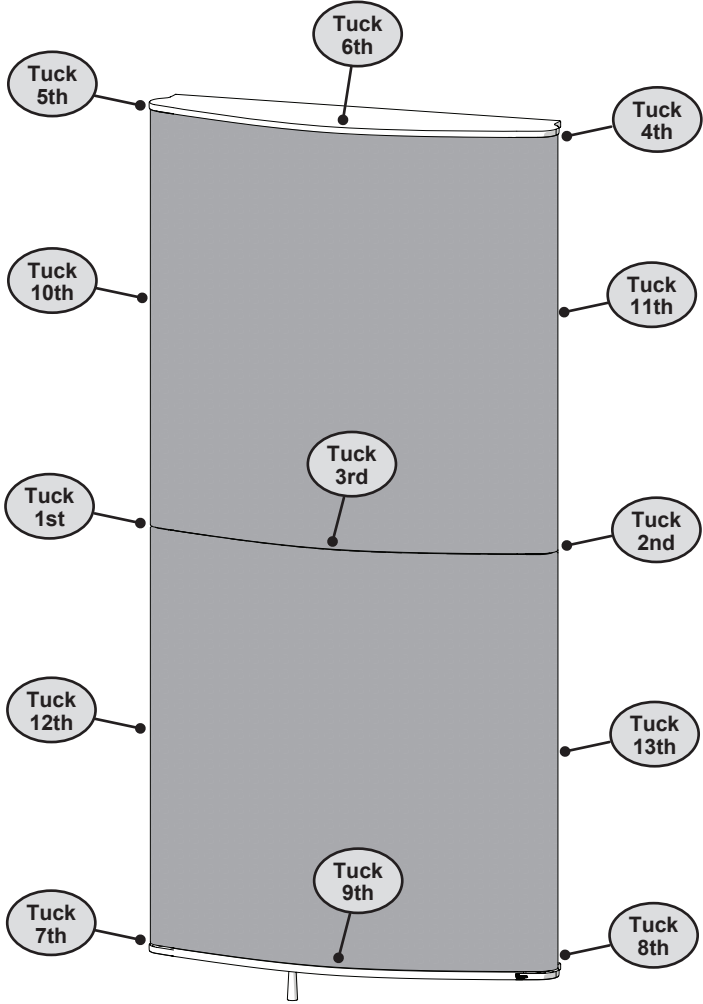


- e. Depending on panel configuration, continue tucking the rest of the Fabric Cover into the Panel Assembly according to the illustrations on the following page.
 24. The Fabric Cover can be removed by pulling on the Plastic Strip.
-

Panel Installation (continued)



Fabric Cover tucking order for 4' x 4' Panels

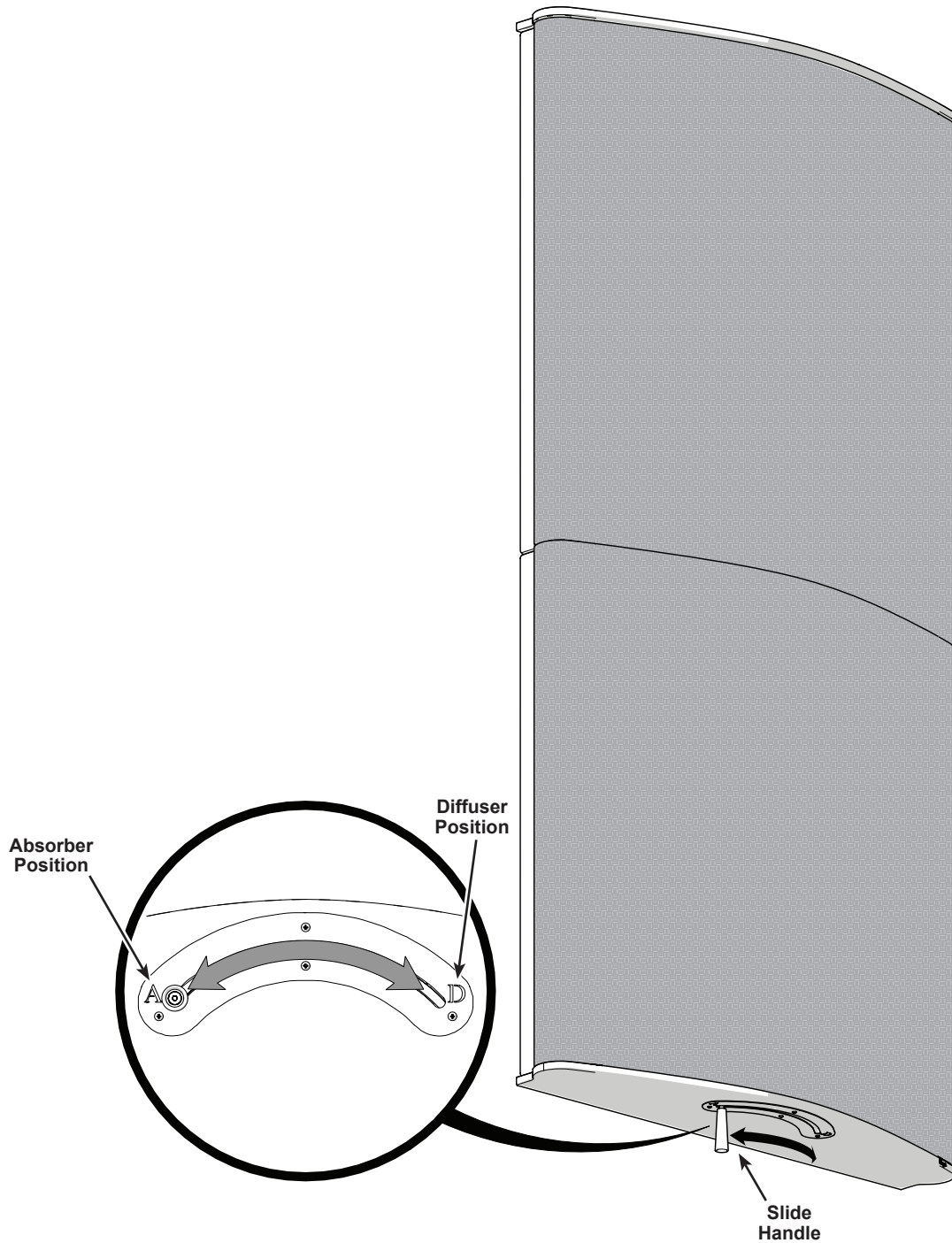


Fabric Cover tucking order for 4' x 8' Panels

Operation

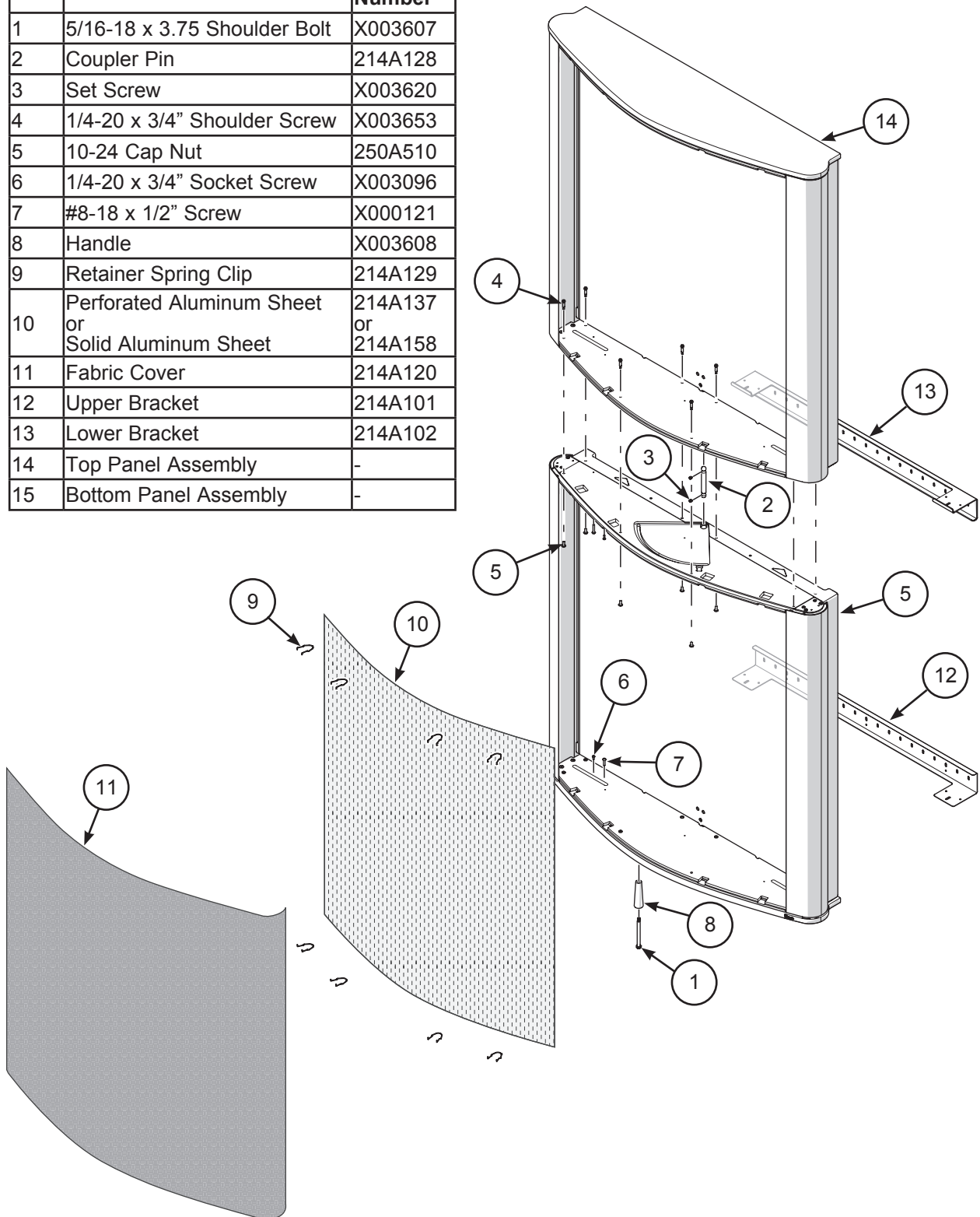
The following only applies to Tunable Panels.

1. The Tunable Panel can be changed to act as an Absorber Panel or a Diffuser Panel.
2. Slide the Handle to the left, all of the way to the "A" position for an Absorber Panel.
Slide the Handle to the right, all of the way to the "D" position for a Diffuser Panel.



Replacement Parts List

Item	Description	Part Number
1	5/16-18 x 3.75 Shoulder Bolt	X003607
2	Coupler Pin	214A128
3	Set Screw	X003620
4	1/4-20 x 3/4" Shoulder Screw	X003653
5	10-24 Cap Nut	250A510
6	1/4-20 x 3/4" Socket Screw	X003096
7	#8-18 x 1/2" Screw	X000121
8	Handle	X003608
9	Retainer Spring Clip	214A129
10	Perforated Aluminum Sheet or Solid Aluminum Sheet	214A137 or 214A158
11	Fabric Cover	214A120
12	Upper Bracket	214A101
13	Lower Bracket	214A102
14	Top Panel Assembly	-
15	Bottom Panel Assembly	-



Maintenance

Cleaning Laminate Surfaces

Use a soft, damp cloth to clean all laminate surfaces.

For smudges or fingerprints, dampen a cloth with any standard non-abrasive household cleaner and wipe clean.

Cleaning Fabric

Use a soft, damp cloth to clean or use a fabric cleaner.

Never hose down or soak the fabric.

Mechanical Check

Periodically (every three or four uses) check for loose or damaged parts and for loose fasteners.

Replace or repair damaged parts promptly. Refer to the Replacement Parts List.