



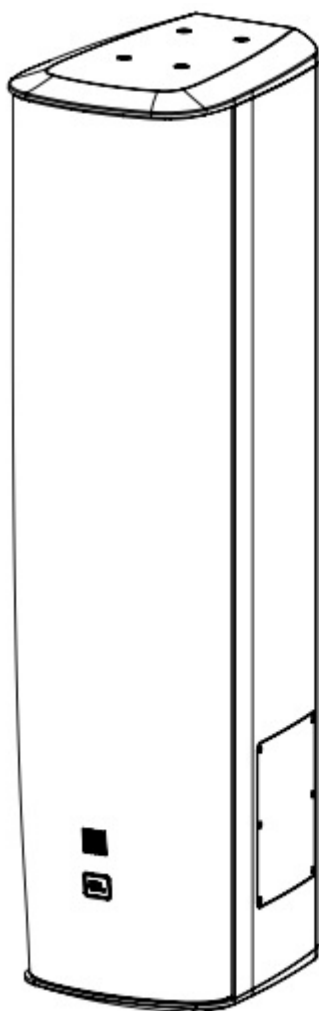
CBT SERIES

Constant Beamwidth Technology™

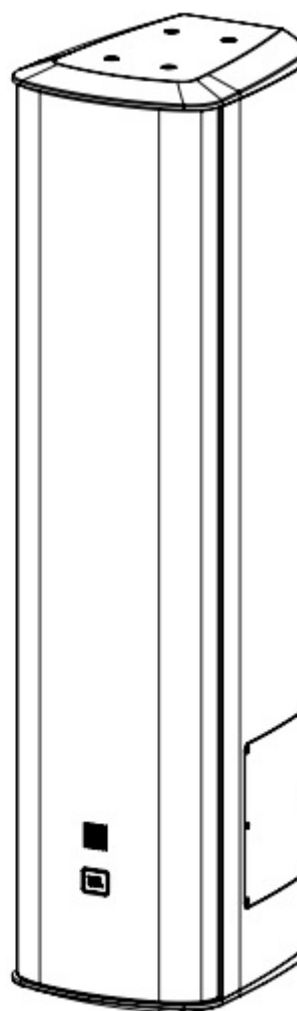
CBT1000 and CBT1000E

Bracket Installation Guide

Rev A



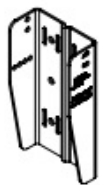
CBT1000



CBT1000E

Hardware Included with CBT1000:

WALL
BRACKETS



SPEAKER
BRACKETS



ARM
LINK



SWIVEL
BRACKETS



4 Bracket Parts for UPPER
Mounting Position on
Cabinet (when set for 0° or
for down-tilting)



3 Bracket Parts for LOWER
Mounting Position on
Cabinet (when set for 0° or
for down-tilting)

Tools Required:

M6 Hex Wrench



#2 Phillips Head Screwdriver



Note: When setting system for UP tilting, the UPPER and LOWER parts get reversed on the cabinet -- see instructions.

M6 x 115 mm
PAN HEADS



M6 x 125 mm
PAN HEADS



M6 x 20 mm
SOCKET HEADS



M8 x 20 mm
PAN HEADS



M6
FLAT WASHERS



M6 SPLIT
LOCK WASHERS



M6 RUBBER
WASHERS



M8
FLAT WASHERS



M8 SPLIT
LOCK WASHERS



M6
CAP NUTS



Hardware Included with CBT1000E:



M8 x 20 mm PAN HEADS



M8 FLAT WASHERS



M8 SPLIT LOCK WASHERS



Tools Required:

#2 Phillips Head Screwdriver



Instructions for CBT 1000 Alone (without 1000E):

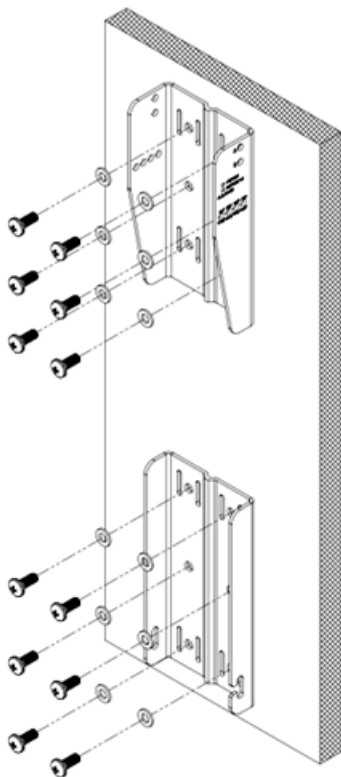
The **BRACKET ASSEMBLY** consists of 2 pieces of **SPEAKER BRACKETS** (the parts that mount on the speaker), 2 pieces of **WALL BRACKETS** (the parts that mount on the wall), 2 pcs of **SWIVEL BRACKETS** (which get added to the **SPEAKER BRACKETS** if utilized for horizontal swivel/pan aiming capability), and an **ARM LINK** (which is utilized for the larger tilt angles).

1) RUN WIRING -- Run the wiring from the power amplifier to the location desired for mounting the JBL CBT Loudspeakers. Note: Connect wire to speaker terminals at a point in the installation process when convenient for your installation circumstances.

2) ATTACHING WALL BRACKET TO WALL -- Using a level to ensure that the **WALL BRACKET** is straight, secure the **WALL BRACKET** to the wall. Be sure to use the appropriate wall anchors for attaching the bracket. Use as many of the screw holes as possible for maximum integrity and safety.

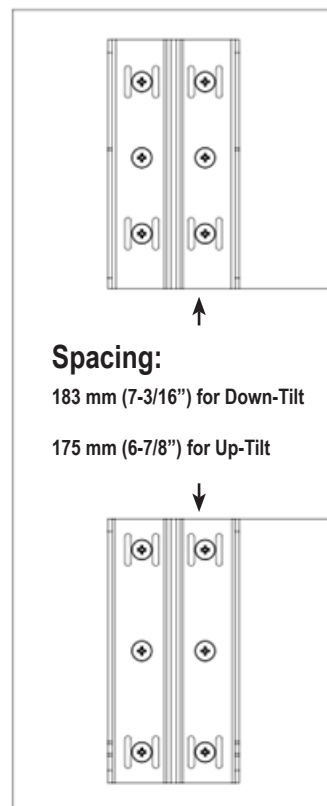
CAUTION: Installation must be done by qualified persons using safe rigging standards.

The installer is responsible for proper selection and use of mounting hardware to properly and safely wall-mount the speakers.



(Drawings show upper and lower bracket orientation as set for down-tilt or 0°. Wall brackets to be reversed in location and flipped for up-tilt applications (see further instructions).

Hardware attaching **WALL BRACKET** to wall is not included. Utilize proper hardware for particular wall structure.



Spacing:

183 mm (7-3/16") for Down-Tilt

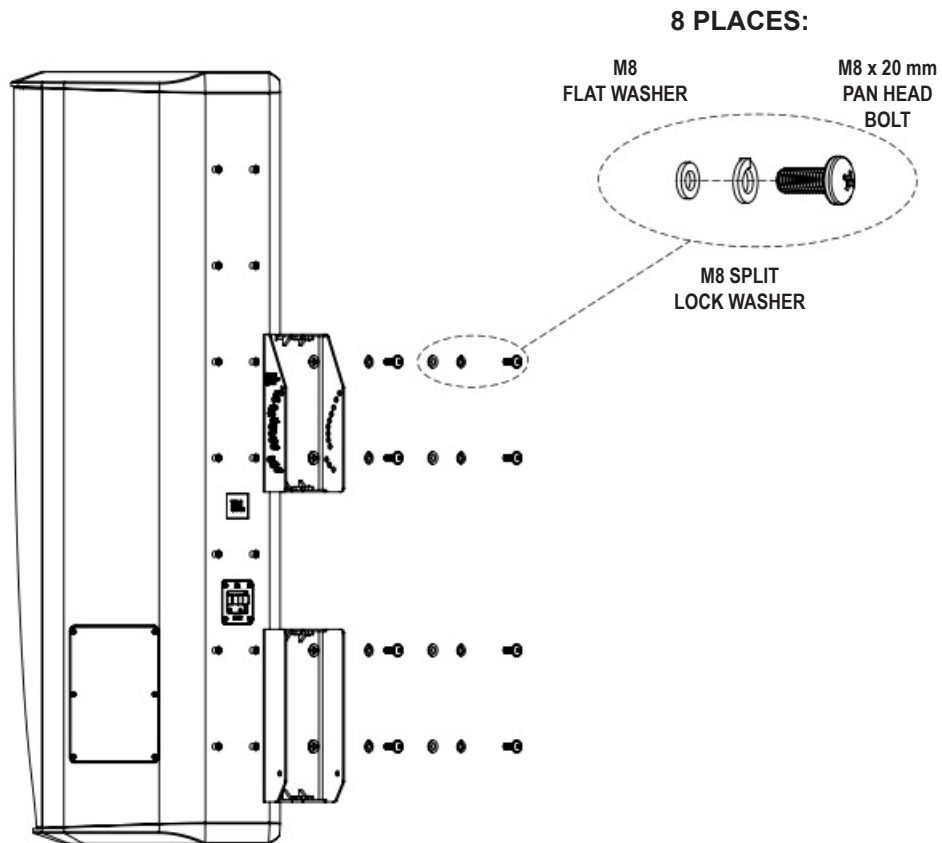
175 mm (6-7/8") for Up-Tilt

Spacing needed between upper and lower **WALL BRACKET** parts with CBT1000 depends on whether speaker will be set with down-tilt or up-tilt.

3) ATTACH SPEAKER SIDE OF BRACKET TO SPEAKER

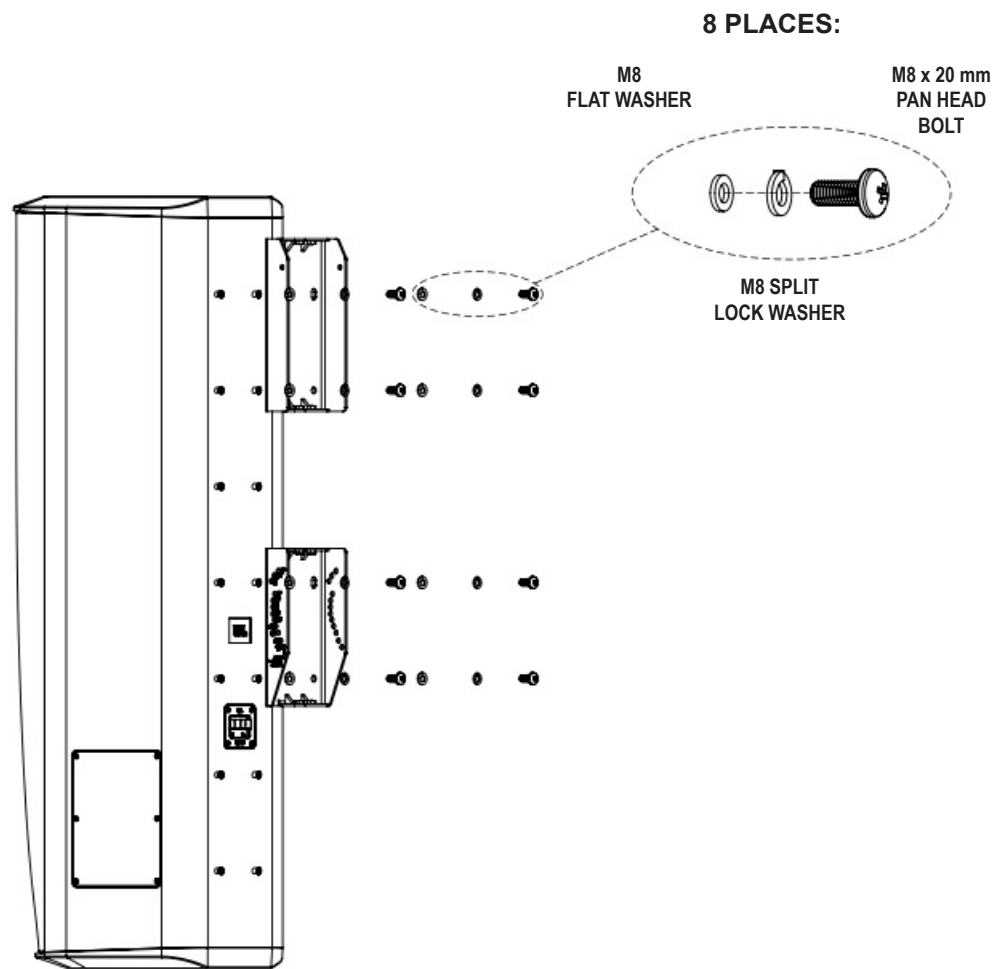
Mount the **SPEAKER BRACKET** (2 pcs) to the speaker with the provided M8 x20 mm pan-head bolts, in the locations shown and in the orientation shown in the diagram below.

Option 3a) CBT 1000 with No Swivel (for Down-Tilt Capability [or 0° tilt] and No Horizontal Swivel/Pan).



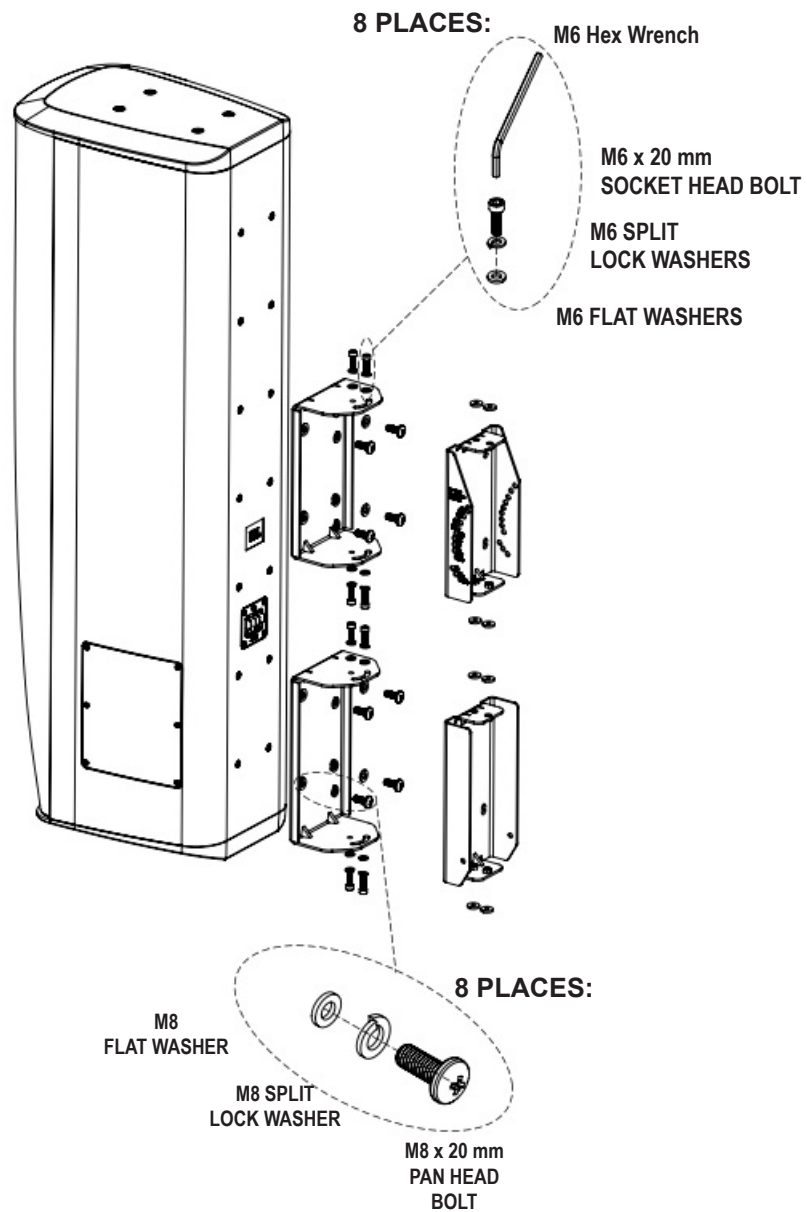
Down-tilt range 0° to -15°

Option 3b) CBT 1000 with Up-Tilt Capability -- No Horizontal Swivel/Pan



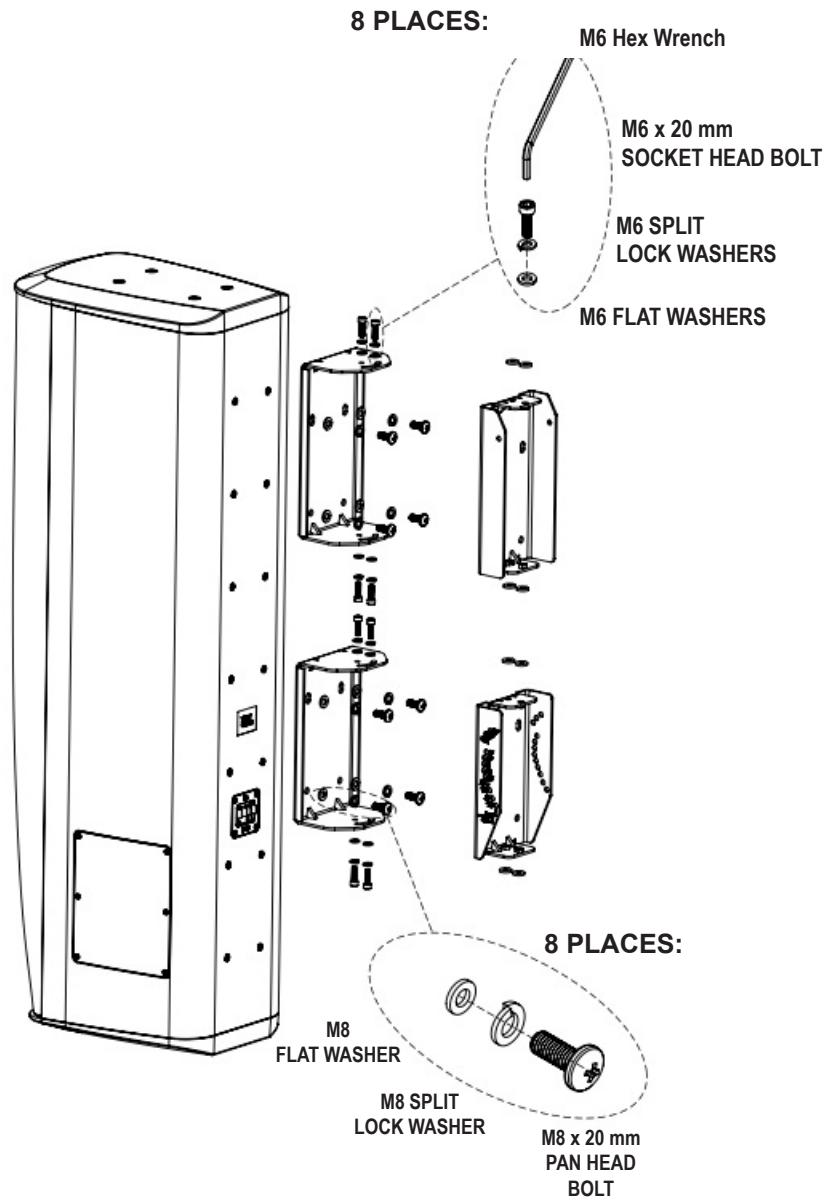
Up-tilt range 0° to +15°

Option 3c) CBT1000 Mounting with Down-Tilt Capability and SWIVEL BRACKET
(for Horizontal Swivel/Pan aiming capability)



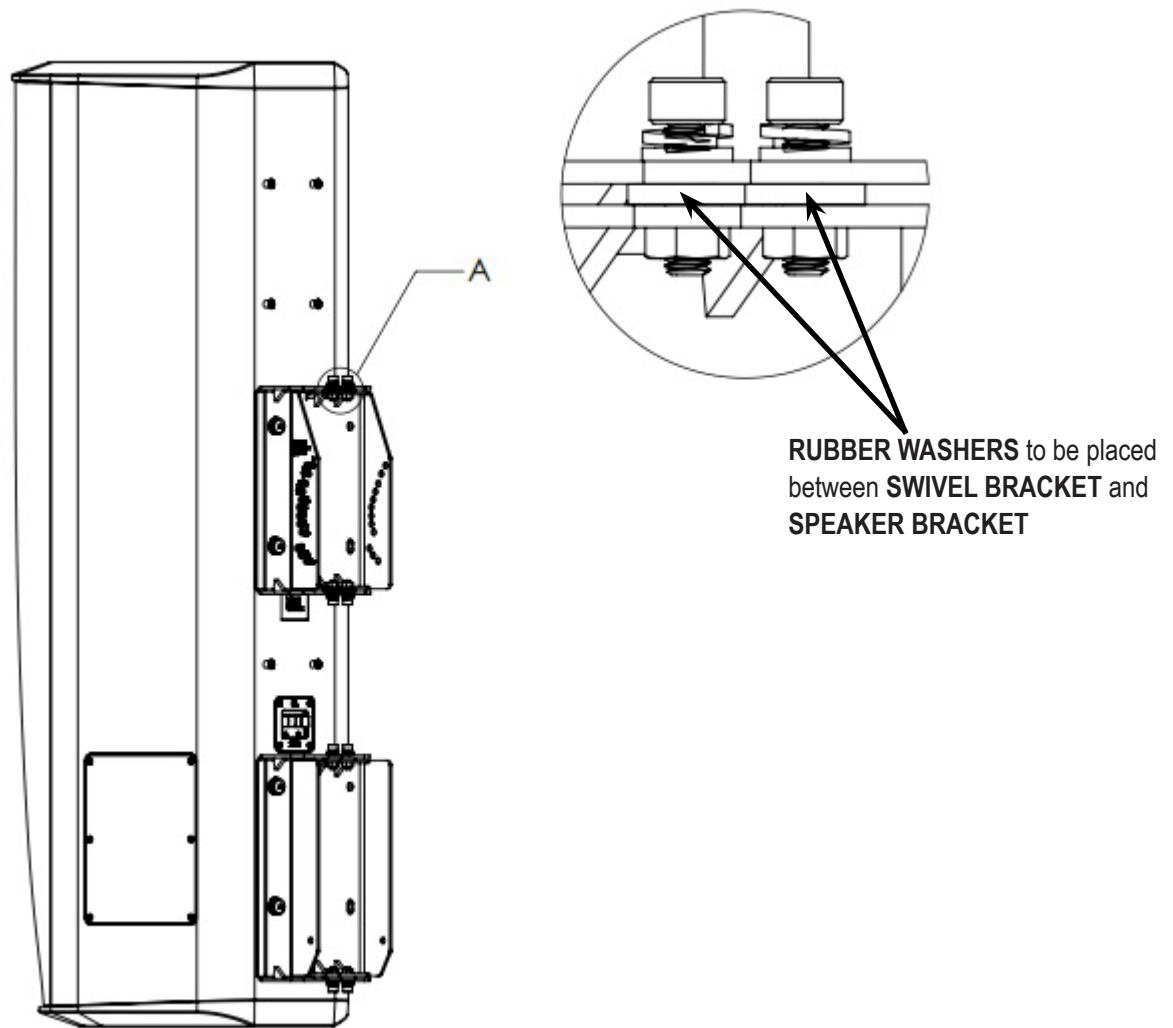
Down-tilt range 0° to -15°

Option 3d) CBT1000 Mounting with Up-Tilt Capability and SWIVEL BRACKET
(for Horizontal Swivel/Pan aiming capability)



Up-tilt range 0° to +15°

For Options 3c and 3d (configurations that include the **SWIVEL BRACKET**), place **RUBBER WASHERS** as shown when using **SWIVEL BRACKET**:



4) Jump to page 15 for CBT 1000 tilt angling instructions.

Instructions for CBT 1000+1000E System:

The **BRACKET ASSEMBLY** consists of 2 pieces of **SPEAKER BRACKETS** (the parts that mount on the speaker), 2 pieces of **WALL BRACKETS** (the parts that mount on the wall), 2 pcs of **SWIVEL BRACKETS** (which get added to the **SPEAKER BRACKETS** if utilized for horizontal swivel/pan aiming capability), and an **ARM LINK** (which is utilized for the larger tilt angles).

1) RUN WIRING -- Run the wiring from the power amplifier to the location desired for mounting the JBL CBT Loudspeakers. Note: Connect wire to speaker terminals at a point in the installation process when convenient for your installation circumstances.

2) ATTACHING WALL BRACKET TO WALL -- Using a level to ensure that the **WALL BRACKET** is straight, secure the **WALL BRACKET** to the wall. Be sure to use the appropriate wall anchors for attaching the bracket. Use as many of the screw holes as possible for maximum integrity and safety.

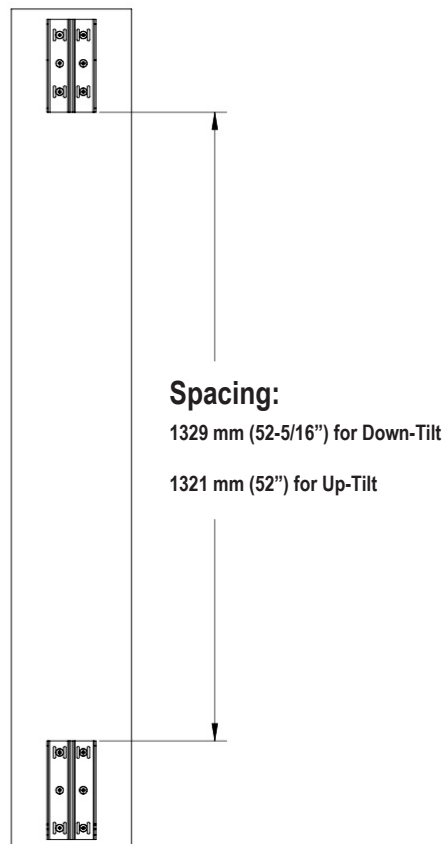
CAUTION: Installation must be done by qualified persons using safe rigging standards.

The installer is responsible for proper selection and use of mounting hardware to properly and safely wall-mount the speakers.

(Drawings show upper and lower bracket orientation as set for down-tilt or 0°. Wall brackets to be reversed in location and flipped for up-tilt applications (see further instructions).



Hardware attaching **WALL BRACKET** to wall is not included. Utilize proper hardware for particular wall structure.

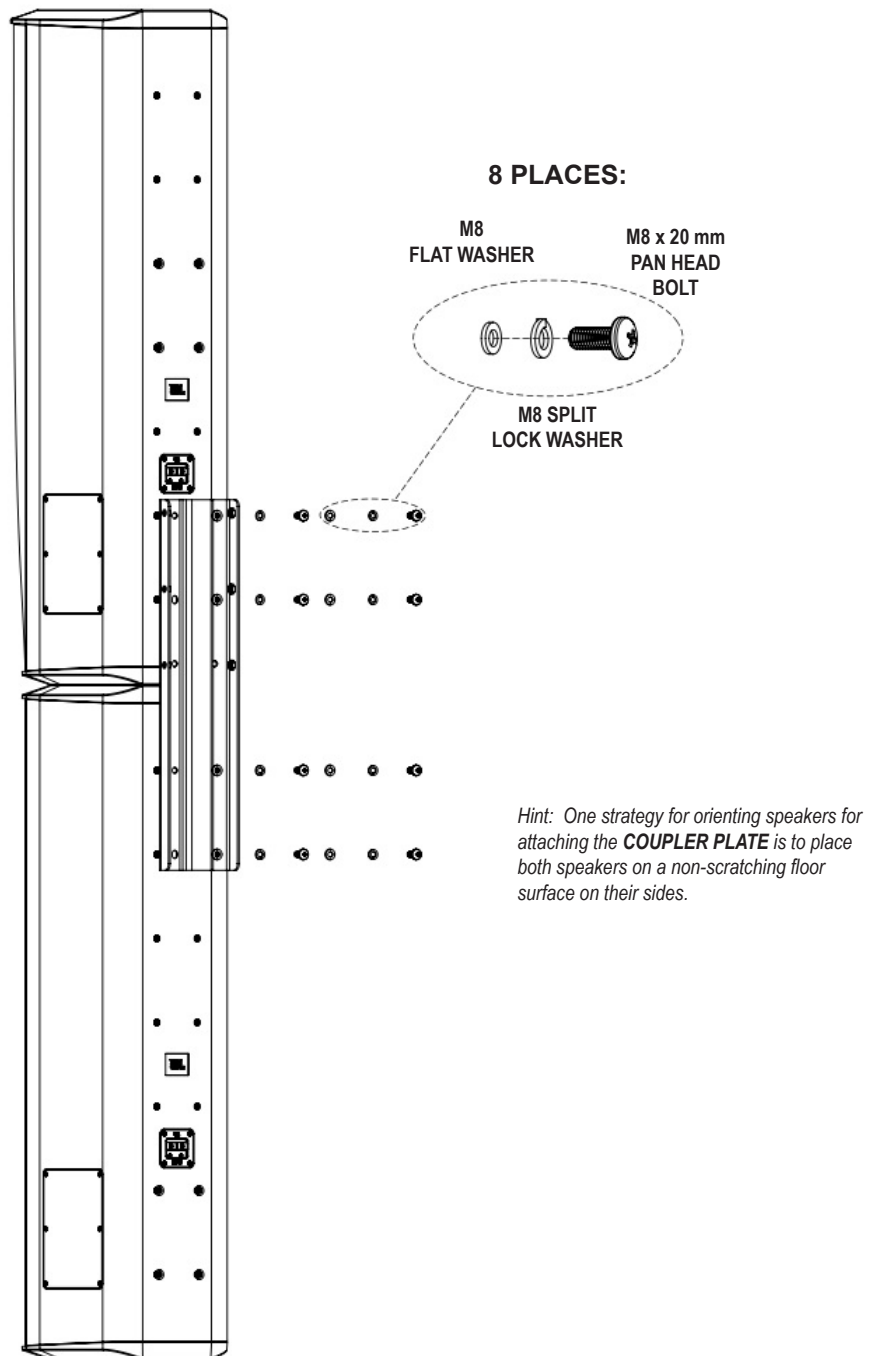


Spacing needed between upper and lower **WALL BRACKET** parts with CBT1000 and CBT1000E depends on whether speaker will be set with down-tilt or up-tilt

3) ATTACHING COUPLER PLATE -- Connect the CBT 1000 and CBT 1000E together by attaching **COUPLER PLATE** to bottom four (4) insert points of the CBT 1000 and to top four (4) insert points of CBT 1000E using 8 pcs **M8 x 20 PAN-HEAD PHILLIPS BOLTS** with **LOCK WASHERS** and **FLAT WASHERS**. Tighten.

IMPORTANT: WHEN THE CBT 1000E IS LOCATED ON THE TOP VERSUS ON THE BOTTOM

The diagram below shows the **COUPLER PLATE** attachment method for when the CBT 1000 is on the top and the CBT 1000E on the bottom. For utilizing with the CBT 1000E on top and the CBT 1000 on the bottom, the depth of the cabinets are different at the junction between them, so it is necessary to use the optional **MTC-CBT-OS3 Offset Bracket** (which is part of the **CBT1K-ACC1** kit). See **Appendix A** for attaching together in this orientation utilizing the **MTC-CBT-OS3** bracket.

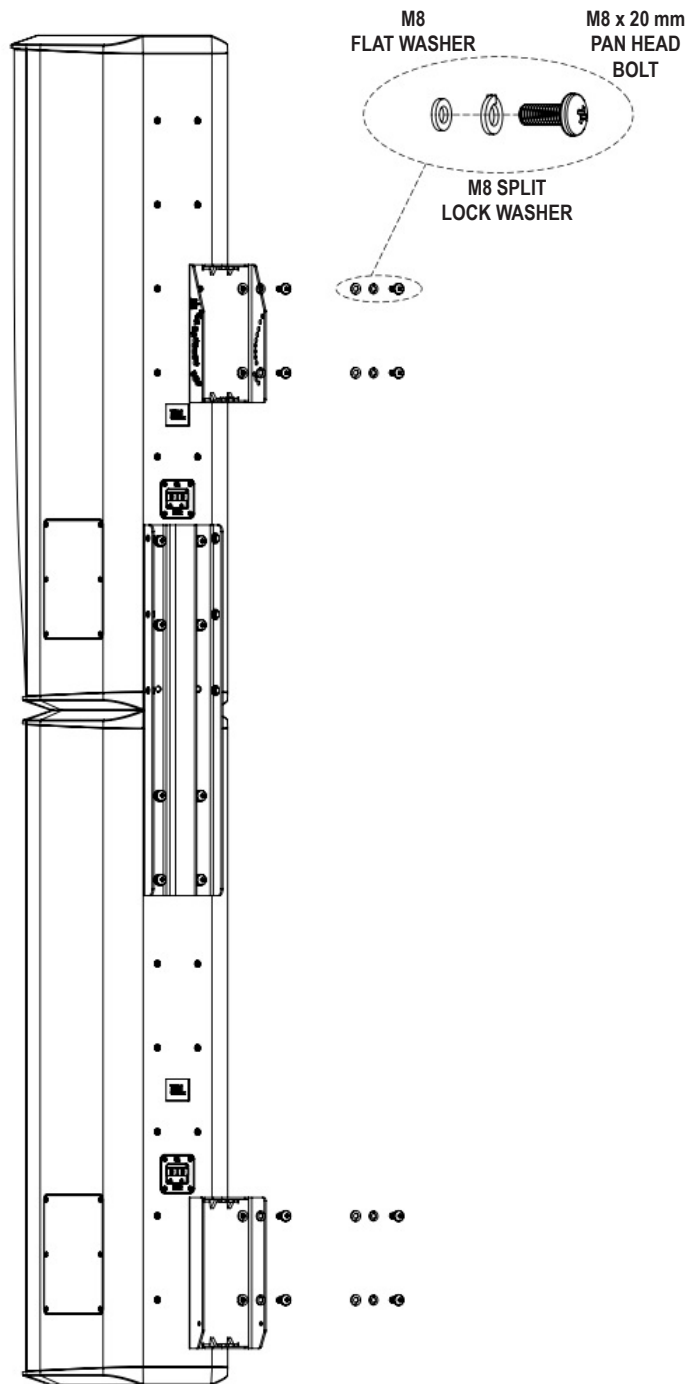


4) ATTACH SPEAKER SIDE OF BRACKET TO SPEAKER

Option 4a) CBT 1000+1000E System with No Swivel

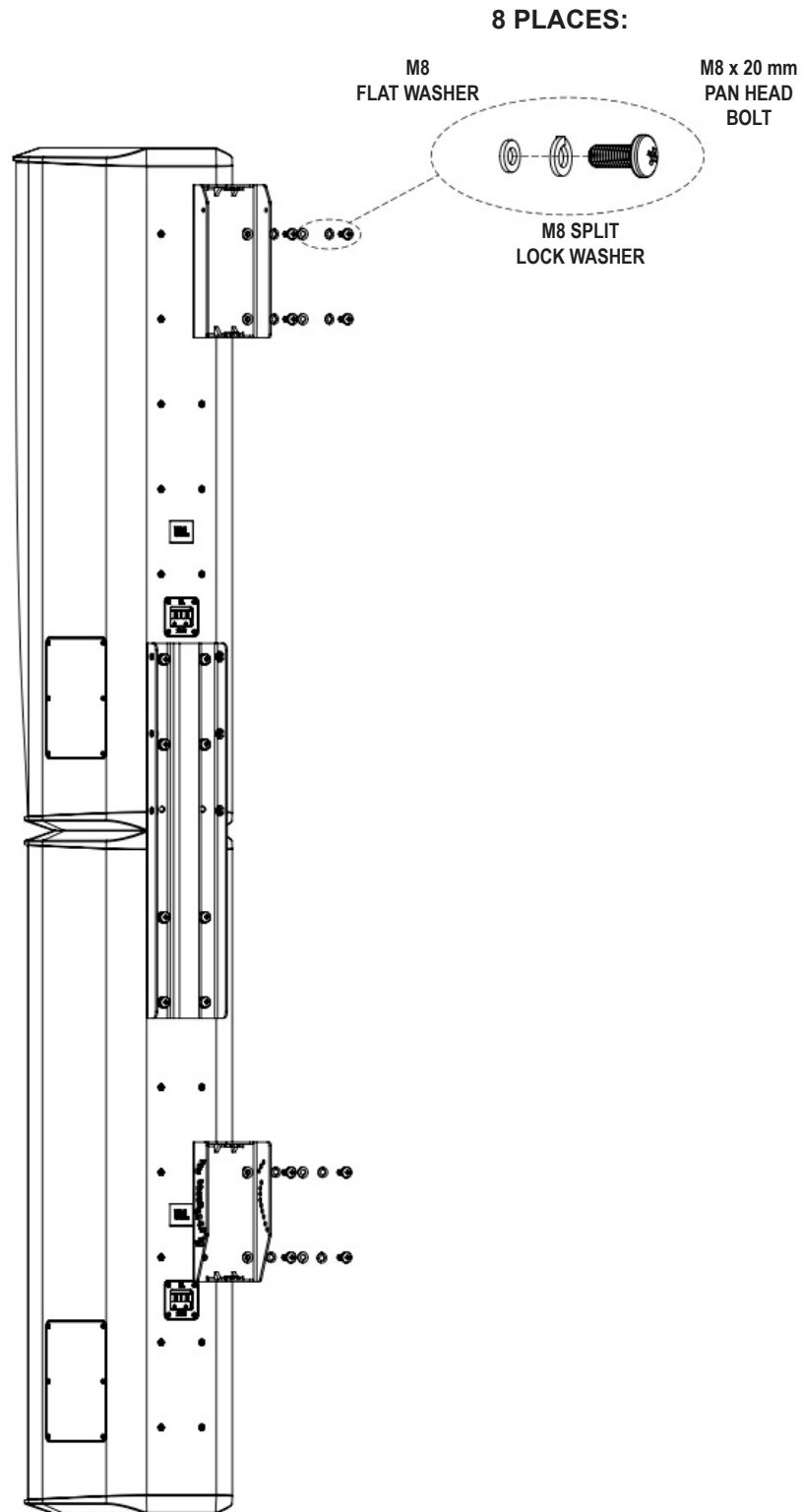
(for Down-Tilt Capability [or 0° tilt] and No Horizontal Swivel/Pan)

8 PLACES:



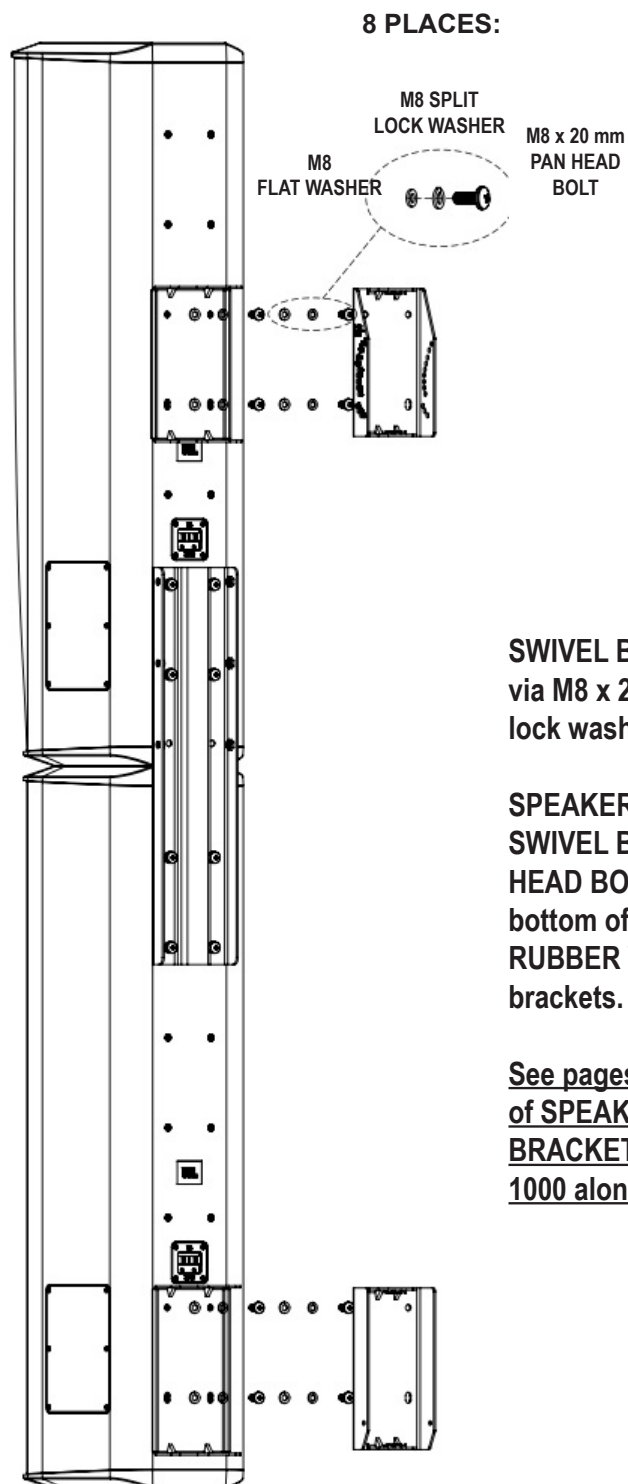
Down-tilt range 0° to -5.25°

Option 4b) CBT1000+1000E System with Up-Tilt Capability
(No Horizontal Swivel/Pan)



Up-tilt range 0° to +5.25°

Option 4c) CBT1000+1000E System with Down-Tilt Capability and Horizontal Swivel/Pan



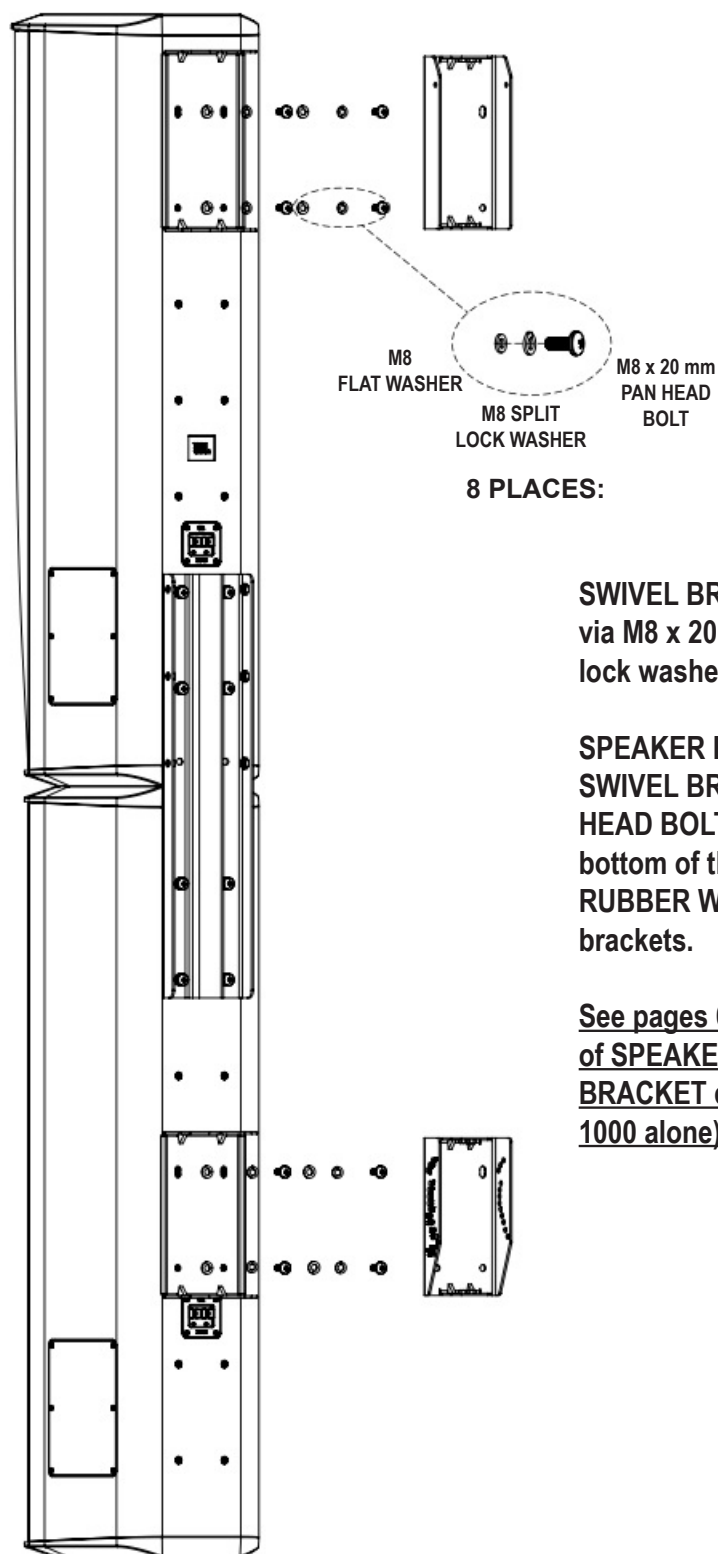
SWIVEL BRACKET attaches to speaker via M8 x 20 mm PAN HEAD BOLTS (with lock washers and flatwashers).

SPEAKER BRACKET attaches to SWIVEL BRACKET via M6 x 20 SOCKET HEAD BOLTS inserted from the top and bottom of the SWIVEL BRACKET, with RUBBER WASHERS between the two brackets.

See pages 6 and 7 for detailed drawings of SPEAKER BRACKET / SWIVEL BRACKET connection (as shown on CBT 1000 alone).

Down-tilt range 0° to -5.25°.
Horizontal ±45° Swivel (Pan)

Option 4d) CBT1000+1000E System with Up-Tilt Capability and Horizontal Swivel/Pan



SWIVEL BRACKET attaches to speaker via M8 x 20 mm PAN HEAD BOLTS (with lock washers and flatwashers).

SPEAKER BRACKET attaches to **SWIVEL BRACKET** via M6 x 20 SOCKET HEAD BOLTS inserted from the top and bottom of the **SWIVEL BRACKET**, with **RUBBER WASHERS** between the two brackets.

See pages 6 and 7 for detailed drawings of **SPEAKER BRACKET / SWIVEL BRACKET** connection (as shown on CBT 1000 alone).

Up-tilt range 0° to +5.25°.
Horizontal ±45° Swivel (Pan)

The following instructions apply to both the CBT1000 by itself and to the CBT 1000+1000E System.

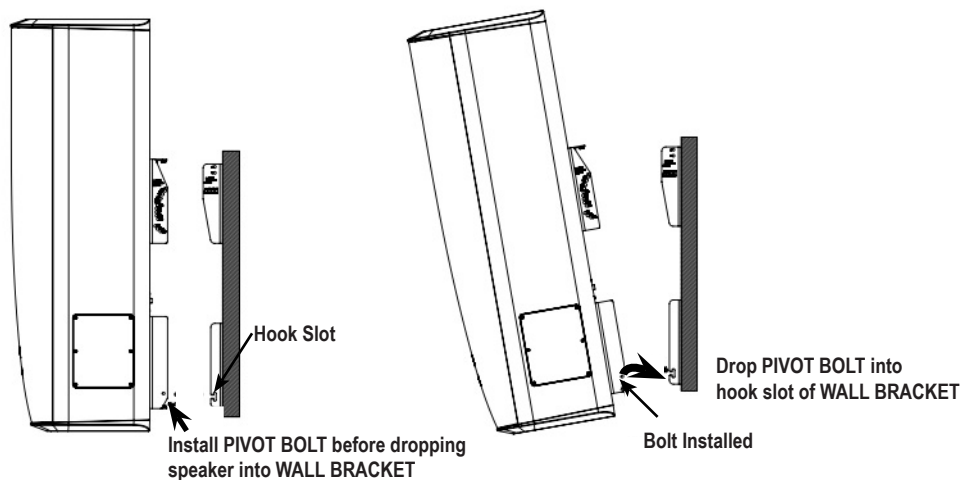
(For simplicity, drawings are shown with CBT1000 only.)

5) SLIDE SPEAKER WITH SPEAKER BRACKET ONTO WALL BRACKET

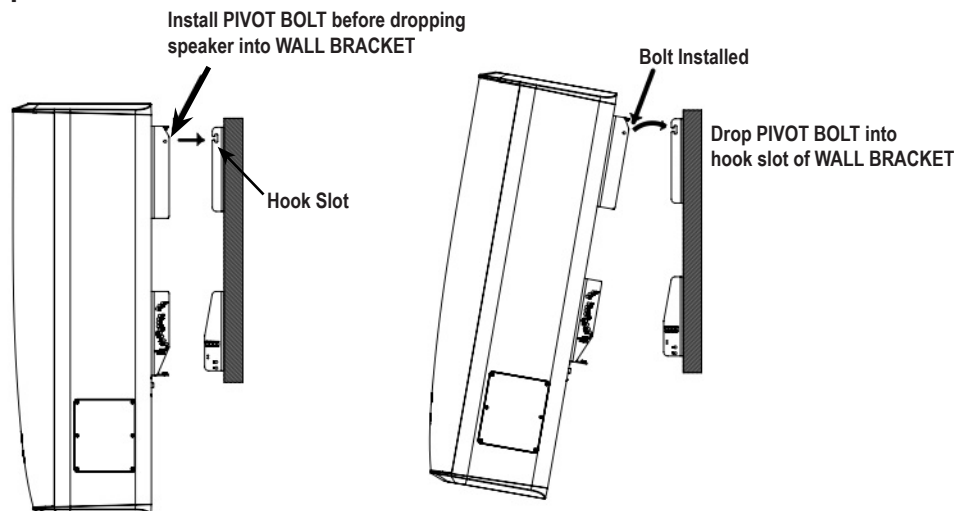
Make sure the **PIVOT BOLT** is installed in-place in the **SPEAKER BRACKET**. The **PIVOT BOLT ASSEMBLY** consists of the M6 x 125 mm bolt with lock washer and flat washer on the head and secured in place with flat washer, lock washer and M6 cap nut. **IMPORTANT:** Leave the nut loose (do not tighten).

Slide the speaker forward so that the **SPEAKER BRACKET** engages into the **WALL BRACKET**, dropping the **PIVOT BOLT ASSEMBLY** into the hook slot of the **WALL BRACKET**.

For Down-Tilt or 0°



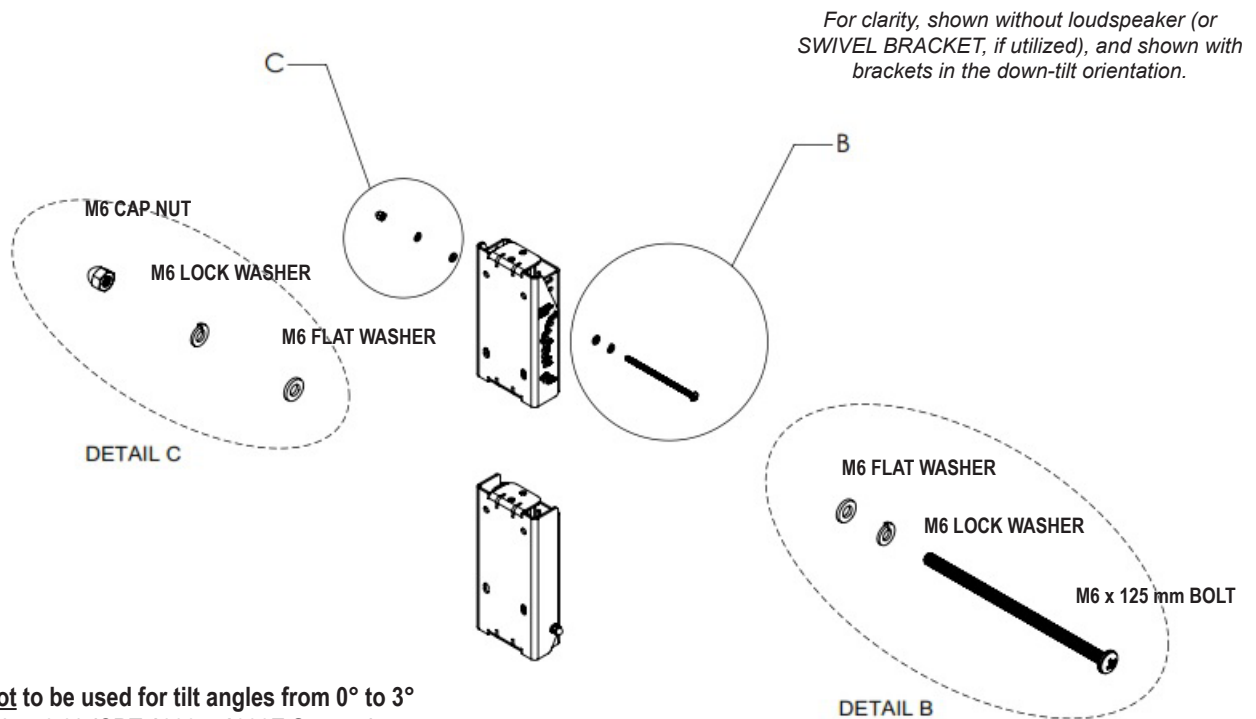
For Up-Tilt



6) SET THE TILT ANGLE

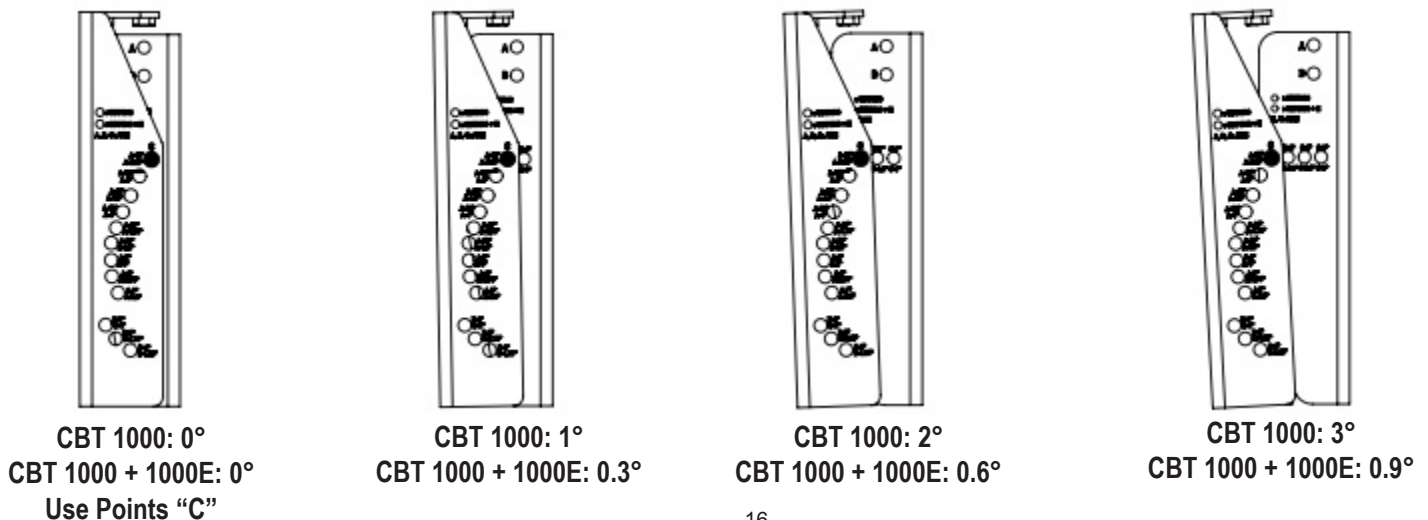
6a) For Setting Shallow Tilt Angles (0° to -3° for CBT1000; 0° to -0.9° for CBT1000+1000E System), do NOT use ARM LINK.

Slide the **M6 x 125 mm BOLT** into labeled hole for desired down-tilt angle. Use LOCK WASHER and FLAT WASHER on head and FLATWASHER, LOCK WASHER, and CAP NUT on end of bolt.



ARM LINK is not to be used for tilt angles from 0° to 3° (CBT1000) or 0° to 0.9° (CBT 1000 + 1000E System)

See full size Tilt Angle Settings Diagram for detail of markings and settings



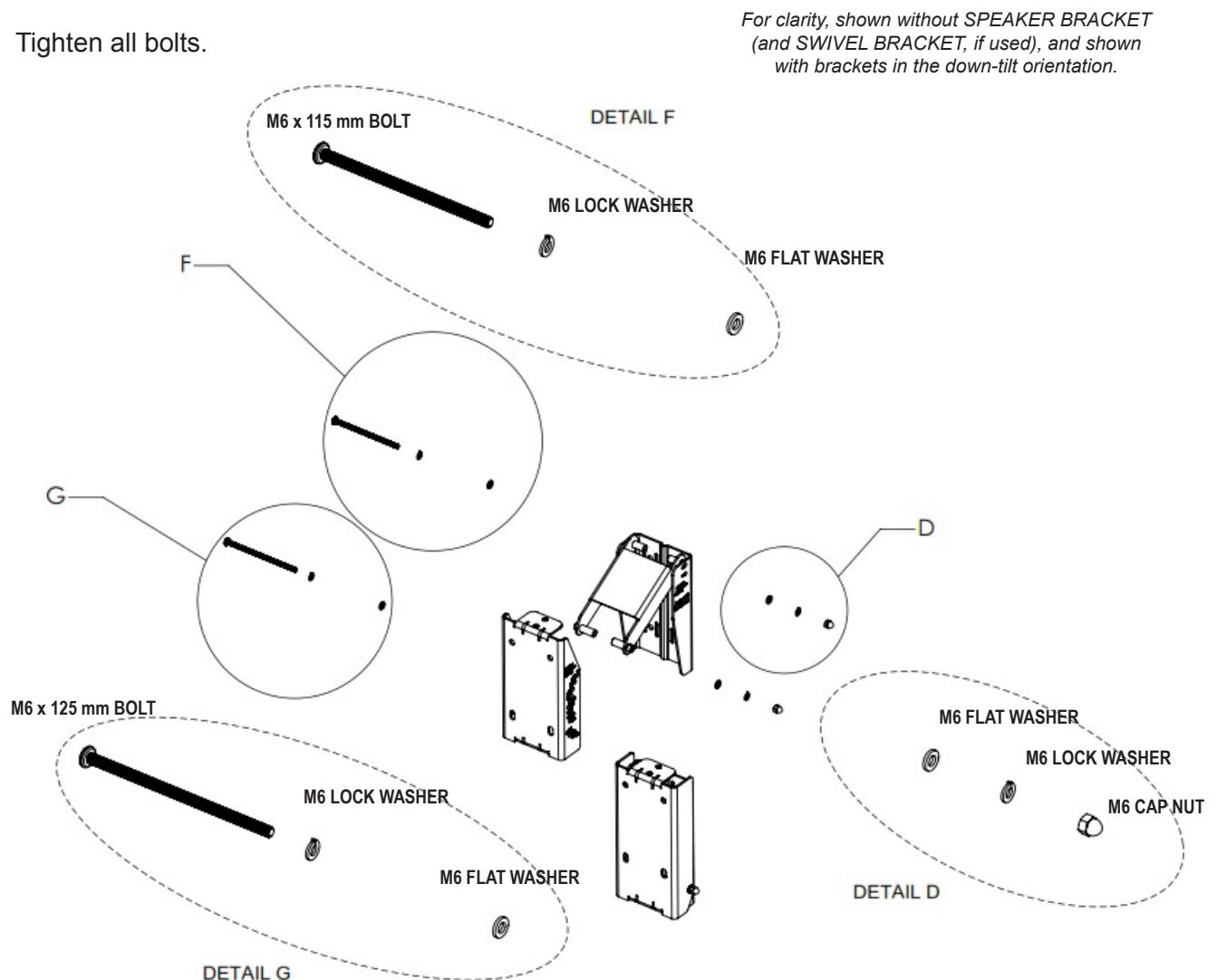
6b) For Setting Larger Tilt Angles (-4° to -15° for CBT1000; -1.25° to -5.25° for CBT1000+E System), Use ARM LINK.

Loosely attach the **ARM LINK** to the **WALL BRACKET** using the M6 x 115 mm bolt in hole A or B (depending on desired tilt angle -- refer to TILT ANGLE SETTINGS DIAGRAM). Use LOCK WASHER and FLAT WASHER on head and FLATWASHER, LOCK WASHER, and **CAP NUT** on end of bolt.

IMPORTANT: Do not tighten yet (leave loose).

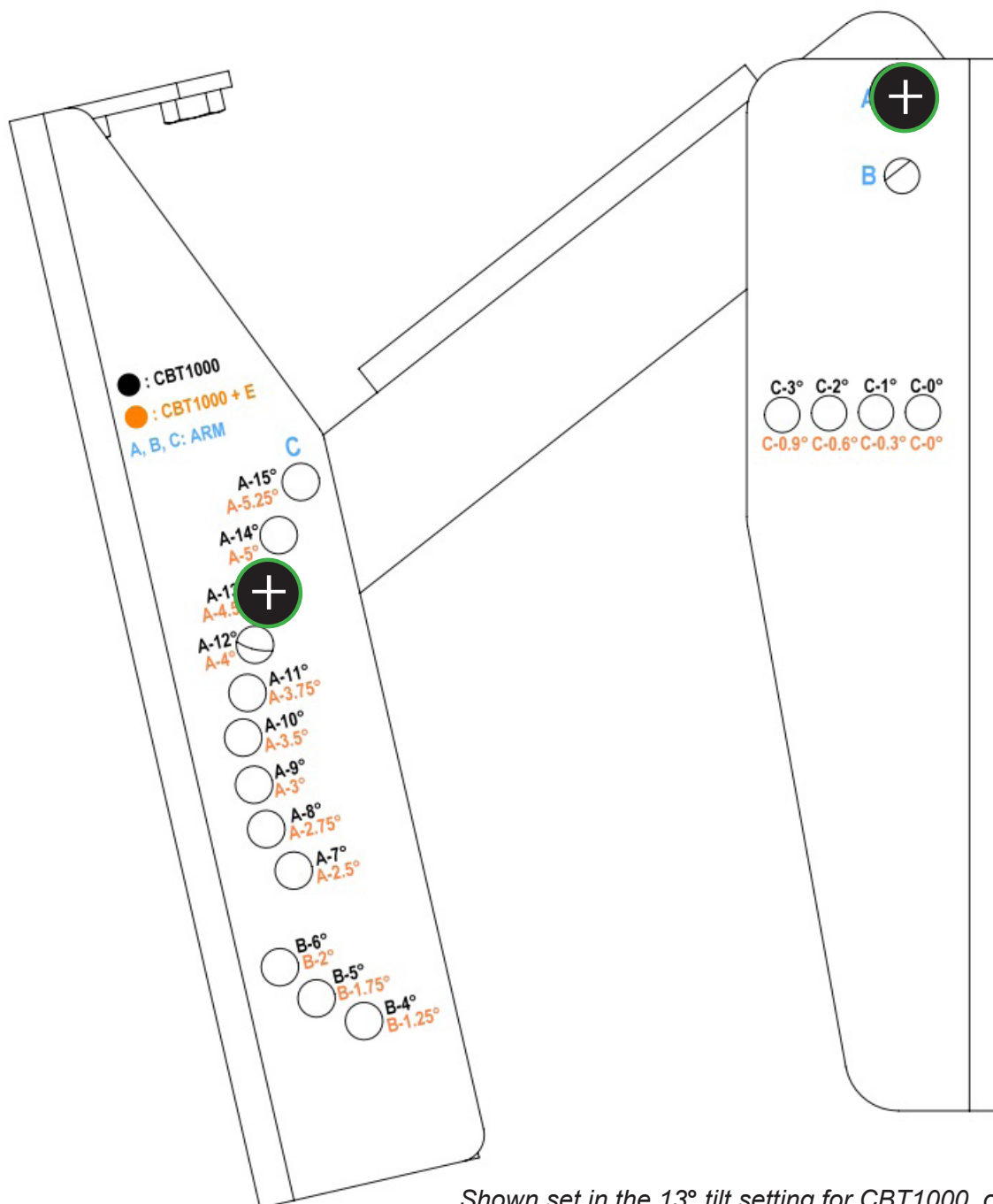
Attach the other end of **ARM LINK** to **SPEAKER BRACKET**. Slide the **M6 x 125 mm BOLT** into labeled hole for desired down-tilt angle through the holes in the lower end of the **ARM LINK**. Use LOCK WASHER and FLAT WASHER on head and FLATWASHER, LOCK WASHER, and **CAP NUT** on end of bolt.

Tighten all bolts.



ARM LINK is to be used for tilt angles greater than 3° (CBT 1000) or 0.9° (CBT 1000 + 1000E System). ARM LINK is to be installed to WALL BRACKET first before setting angle.

Tilt Angle Settings Diagram

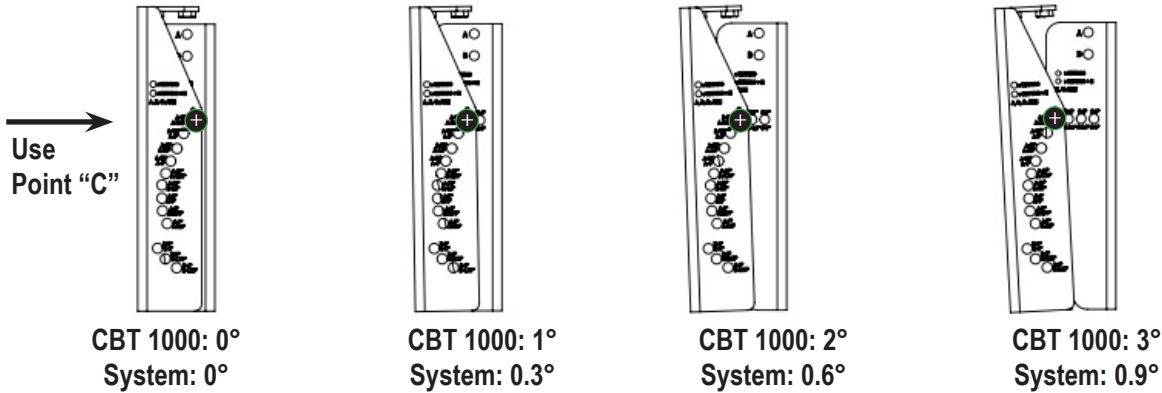


Shown set in the 13° tilt setting for CBT1000, or 4.5° tilt setting for CBT 1000 + 1000E System
(Marked A-13° in black and A-4.5° in orange, so other end of LINK ARM is at Point "A")

See full size Tilt Angle Settings Diagram on previous page for detail of markings and settings

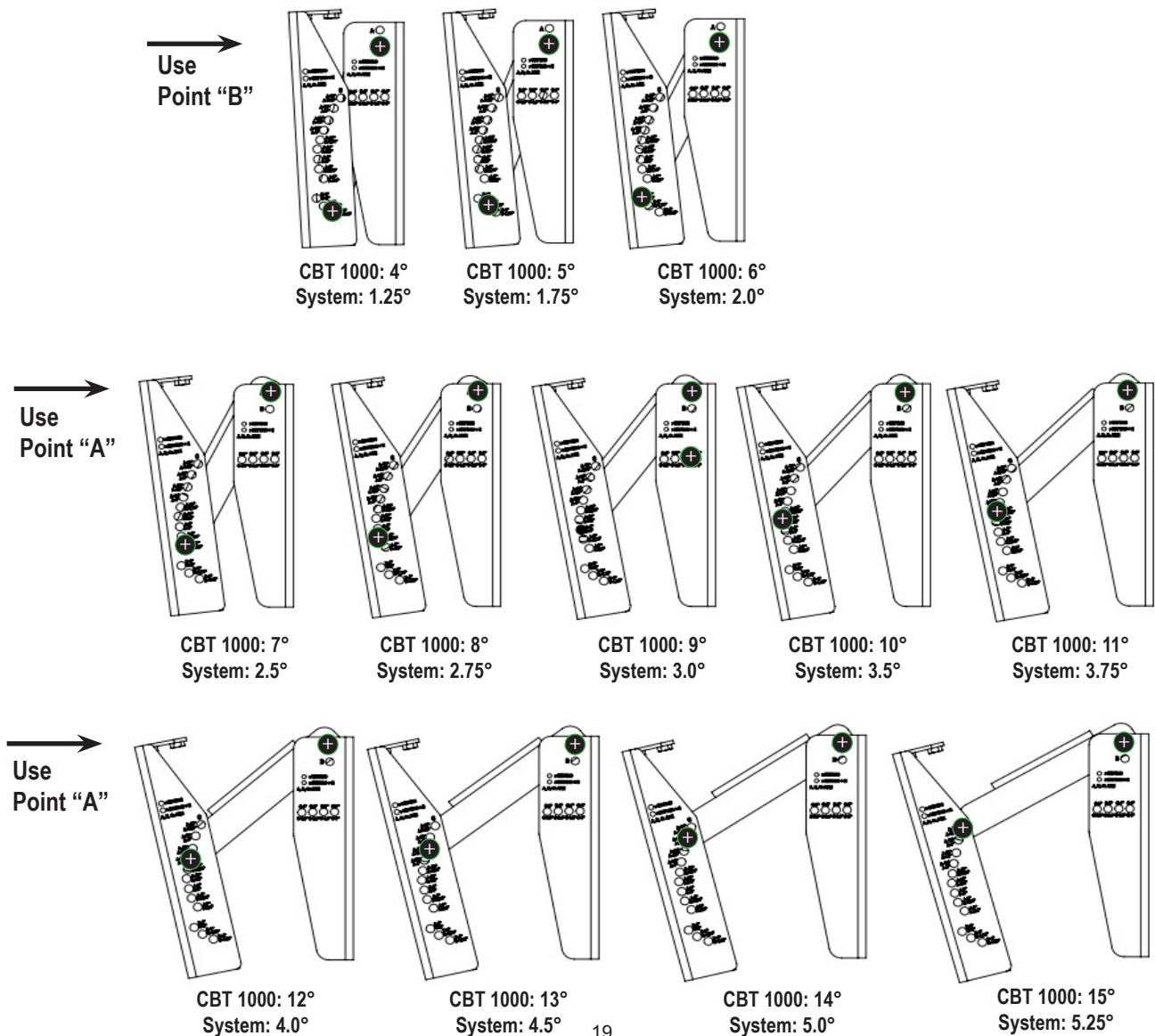
ARM LINK Not Utilized

"System" = CBT 1000 + 1000E  = Bolt Setting Location(s)



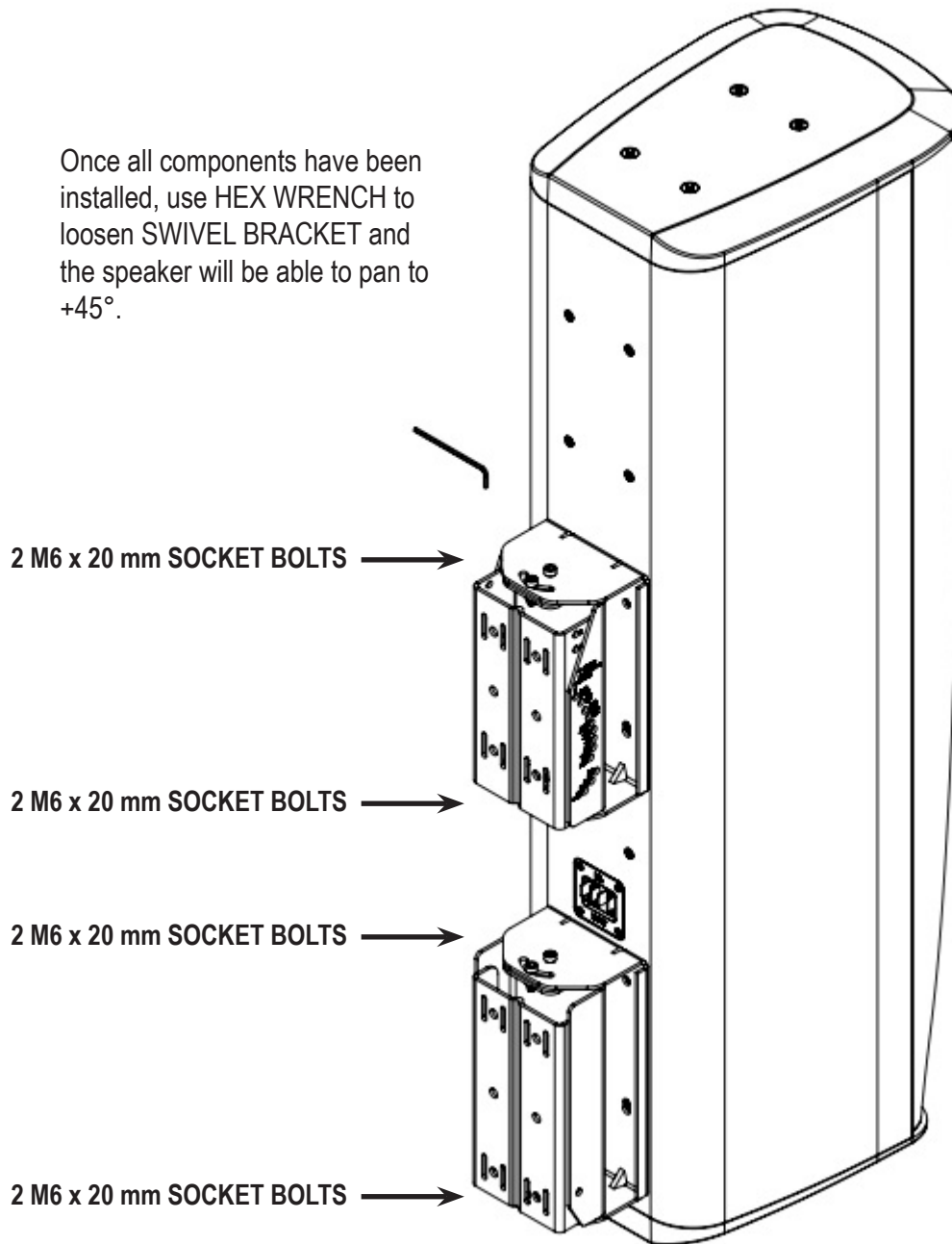
ARM LINK Utilized

"System" = CBT 1000 + 1000E  = Bolt Setting Location(s)



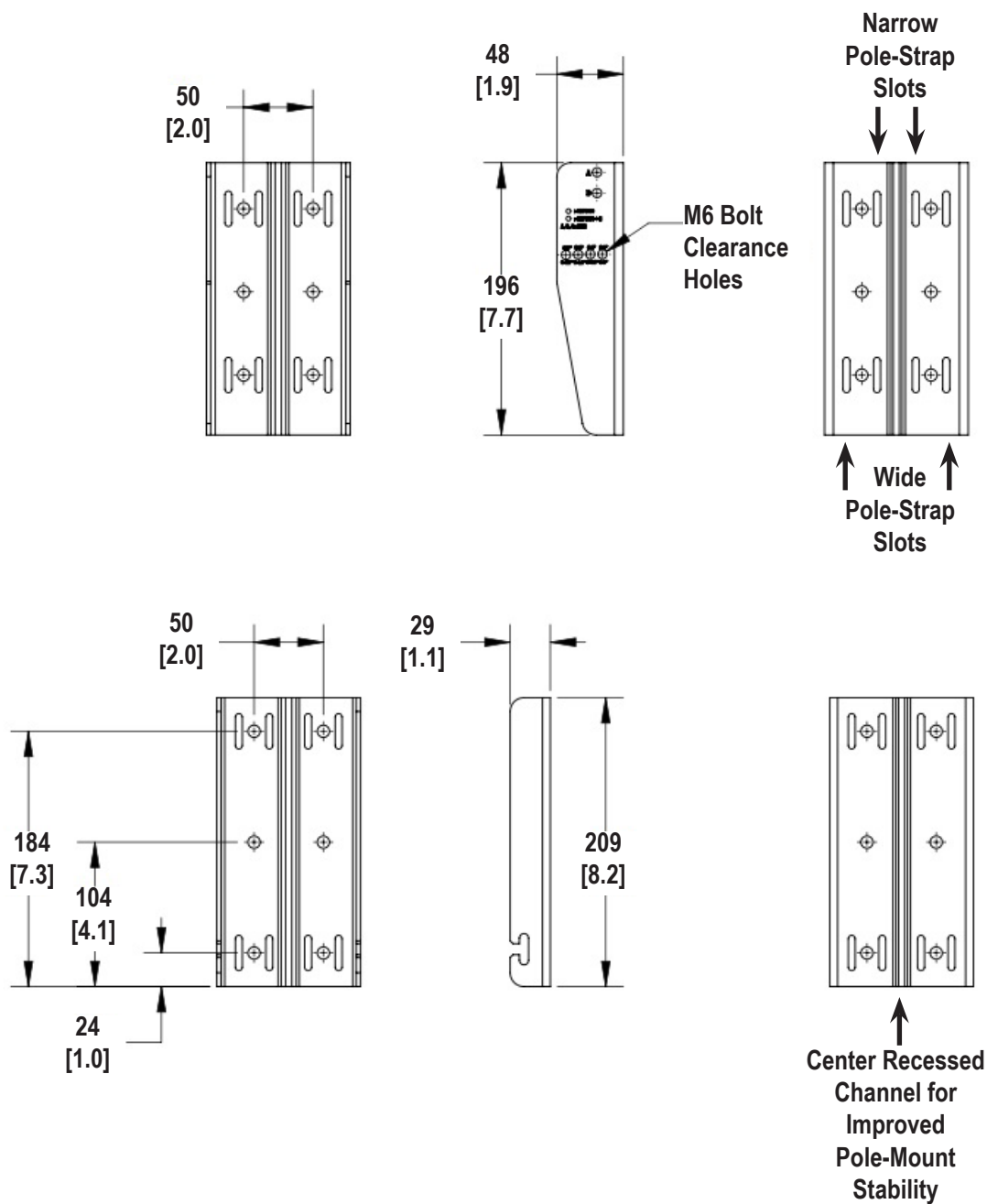
7) SETTING HORIZONTAL SWIVEL (PAN) AIMING – With the 8 M6 x 20 mm SOCKET HEAD swivel screws loose (4 on top bracket and 4 on bottom bracket), set the horizontal swivel (pan) aiming angle. Tighten all 8 swivel screws.

Once all components have been installed, use HEX WRENCH to loosen SWIVEL BRACKET and the speaker will be able to pan to +45°.



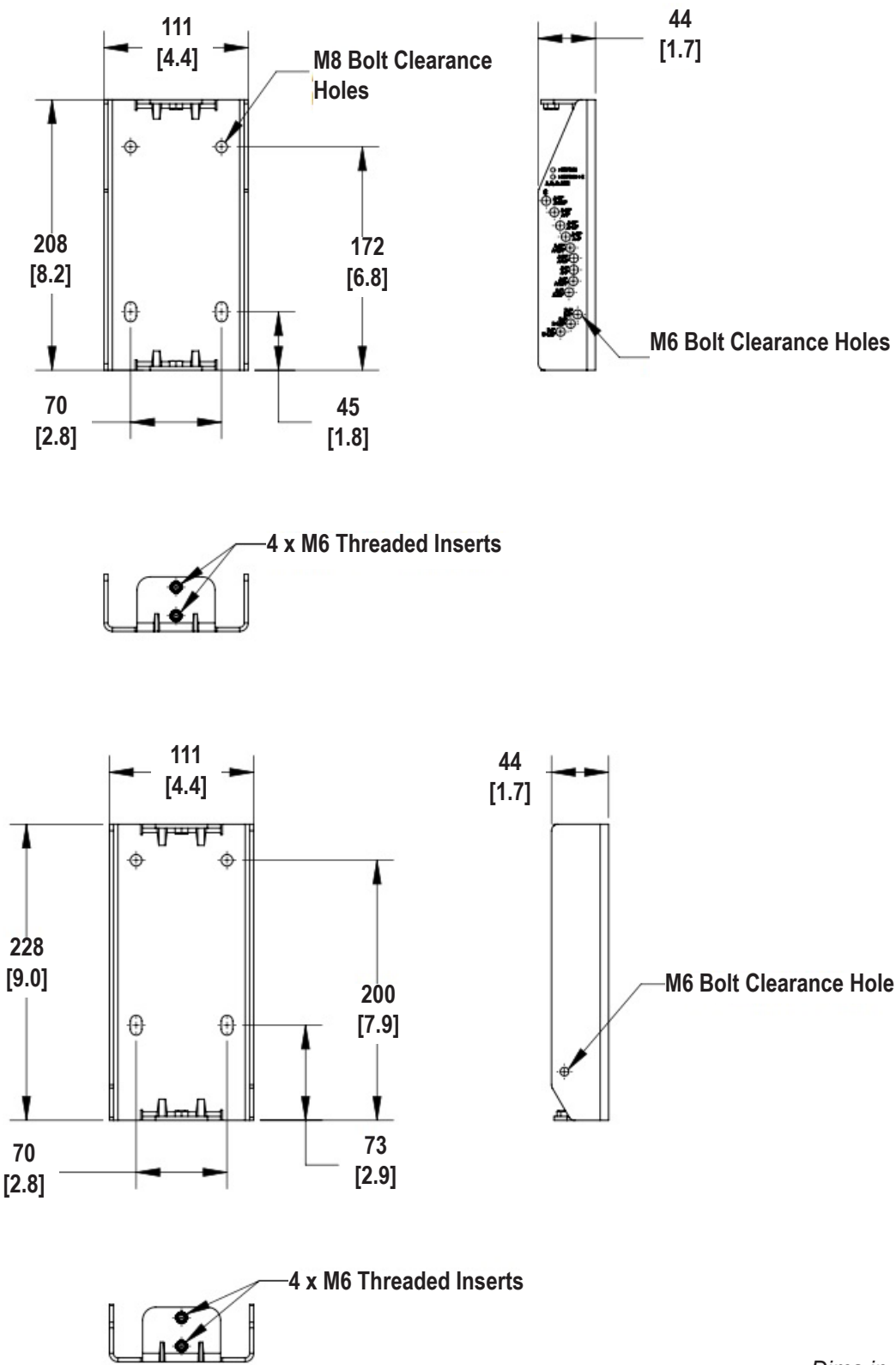
BRACKET PARTS DIMENSIONAL DIAGRAMS

WALL BRACKET TOP/BOTTOM SECTIONS



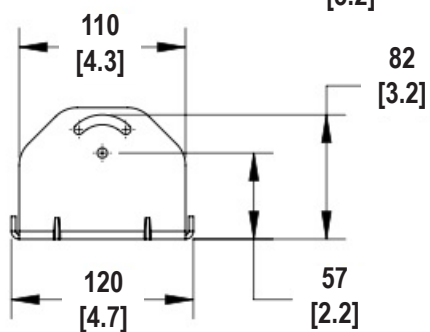
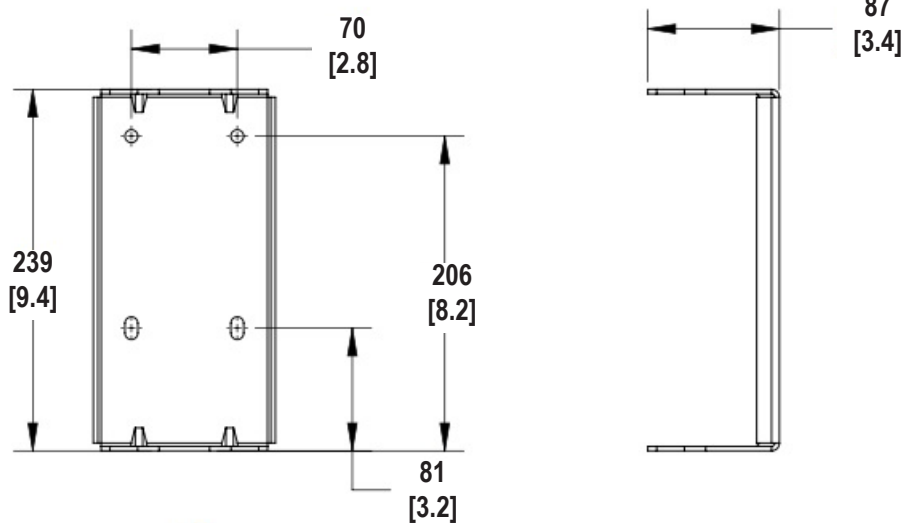
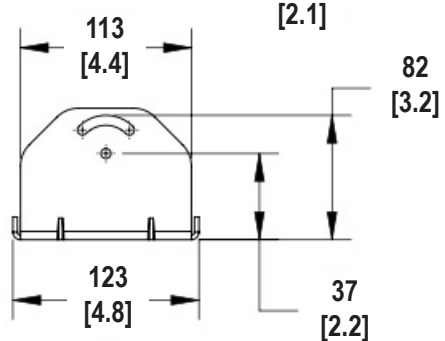
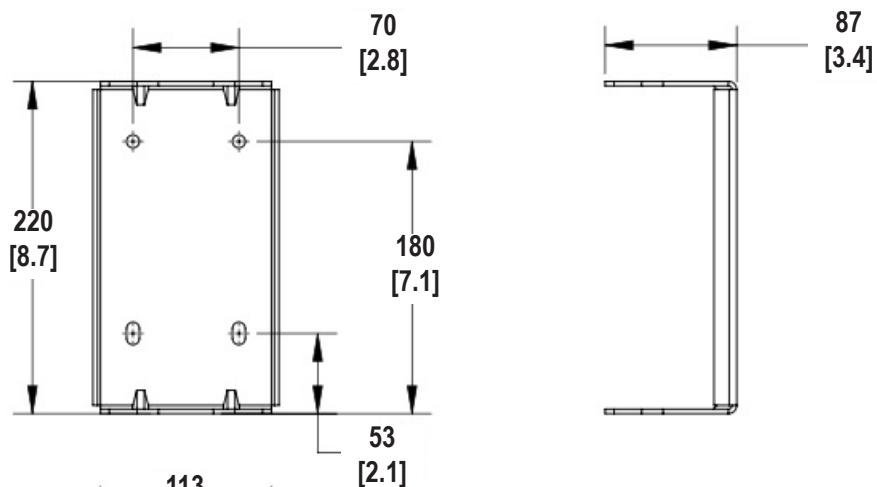
Dims in mm [in]

SPEAKER BRACKET TOP/BOTTOM SECTIONS



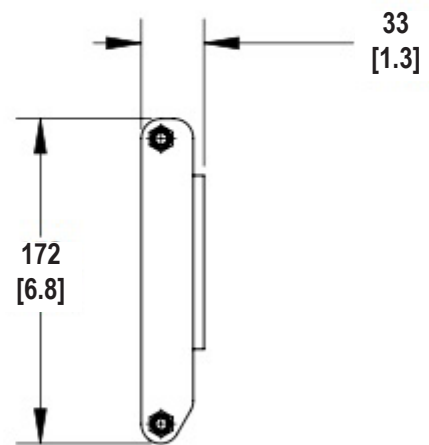
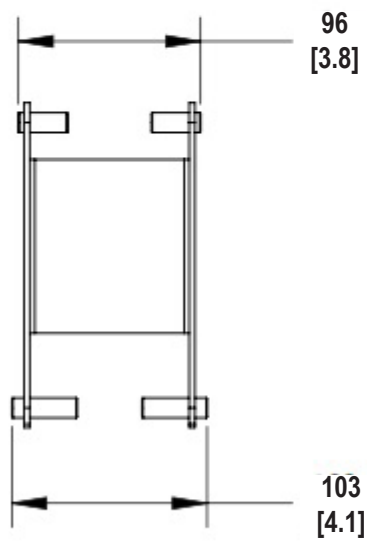
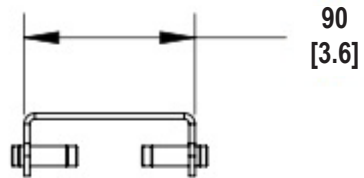
Dims in mm [in]

SWIVEL BRACKET TOP/BOTTOM SECTIONS



Dims in mm [in]

LINK ARM

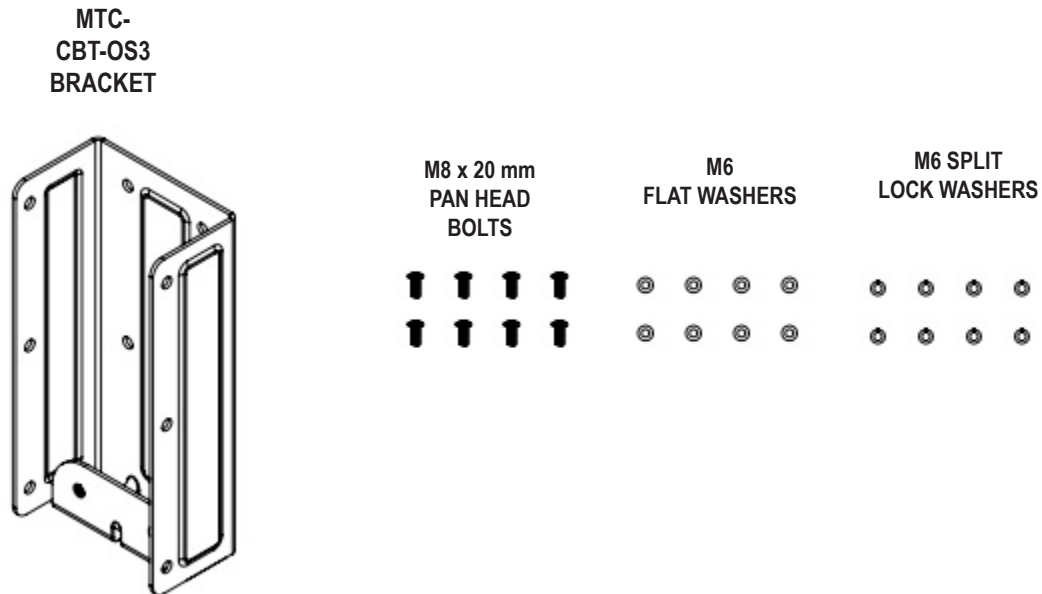


APPENDIX A — MTC-CBT-OS2 Offset Bracket

MTC-CBT-OS3 Offset Bracket must be used when the CBT 1000E (extender) is located on the top versus on the bottom of the CBT 1000 (full-range speaker).

The optional MTC-CBT-OS3 bracket is part of the CBT1K-ACC1 kit.

Hardware Included with MTC-CBT-OS3:



Tool Required:



#2 Phillips Head
Screwdriver

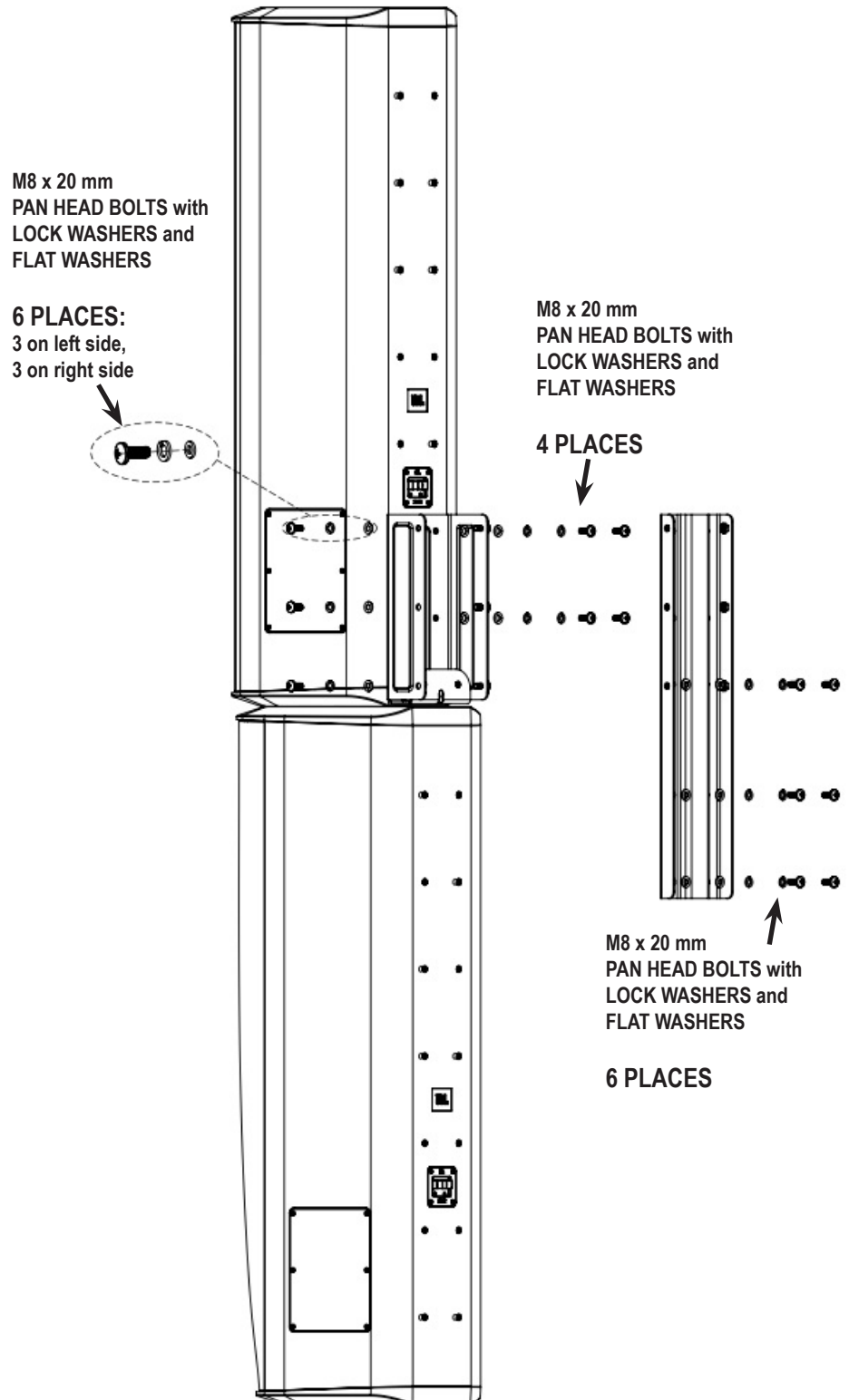
1) Attach MTC-CBT-OS3 to bottom 4 inserts of CBT 1000E using M8 PAN HEAD BOLTS with LOCKWASHERS AND FLATWASHERS

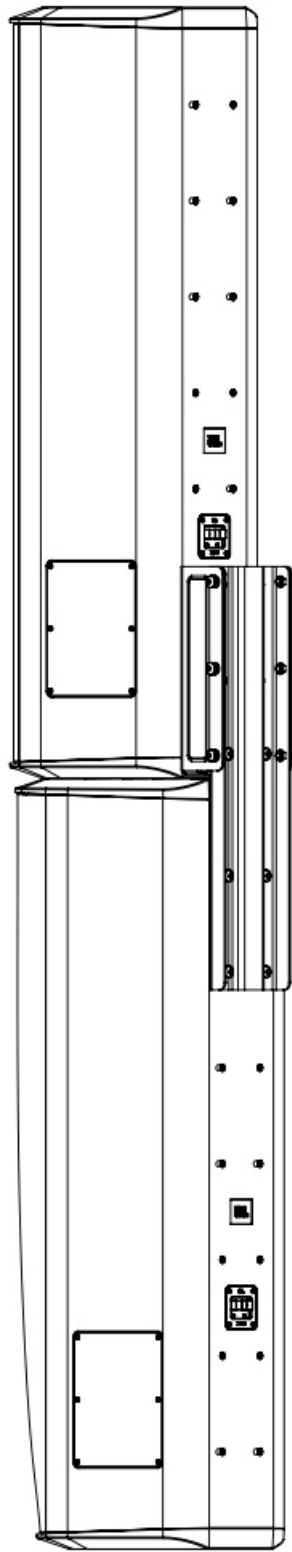
2) Attach top of COUPLER PLATE to MTC-CBT-OS3 BRACKET by inserting bolts through holes in MTC-CBT-OS3 BRACKET (3 on left side; 3 on right side) and thread into captured nuts in COUPLER PLATE (6 places)

3) Attach bottom of COUPLER PLATE to CBT 1000 via the normal method, using M8 PAN HEAD BOLTS with LOCK WASHERS and FLAT WASHERS (4 places)

4) Insert 2 bolts through middle holes in the back panel of the COUPLER PLATE and thread into captured nuts at the bottom of MTC-CBT-OS3 bracket.

Make sure all bolts are tight.





Completed Assembly



JBL Professional
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Northridge, CA 91329
U.S.A.

CBT1000 Brkt RevA
11/16