



Cisco TelePresence System 3200 Assembly Guide Use & Care Guide Field-Replaceable Unit Guide

July 28, 2008

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Cisco TelePresence System 3200

Assembly Guide

Use & Care Guide

Field-Replaceable Unit Guide

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Preface

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Introduction

The *Cisco TelePresence 3200 Assembly Guide* outlines the steps and best practices for assembling and installing the Cisco TelePresence 3200.

This guide is intended primarily for installers of the Cisco TelePresence System 3200. Site planners, network administrators, and facility maintenance personnel may also find this document useful.

This preface provides the following information for using this guide and for accessing other resources.

- [Conventions, page ix](#)
- [Obtaining Documentation, Obtaining Support, and Security Guidelines, page x](#)
- [Related Documentation, page x](#)

Conventions

This document uses the following conventions to convey information and alert the user to conditions requiring special awareness.



Warning

This warning symbol means danger. You are in a situation that could cause bodily injury. Before you work on any equipment, you must be aware of the hazards involved with electrical circuitry and familiar with standard practices for preventing accidents.



Caution

Means *reader be careful*. In this situation, you might do something that could result in equipment damage or loss of data.



Note

Means *reader take note*. Notes contain helpful suggestions or references to material not covered in the publication.

**Tip**

Means the information contains useful tips.

Obtaining Documentation, Obtaining Support, and Security Guidelines

For information on obtaining documentation, submitting a service request, and gathering additional information, see the monthly *What's New in Cisco Product Documentation*, which also lists all new and revised Cisco technical documentation, at:

<http://www.cisco.com/en/US/docs/general/whatsnew/whatsnew.html>

Subscribe to the *What's New in Cisco Product Documentation* as a Really Simple Syndication (RSS) feed and set content to be delivered directly to your desktop using a reader application. The RSS feeds are a free service and Cisco currently supports RSS version 2.0.

Related Documentation

The Cisco TelePresence system documentation set includes a variety of online and printed guides designed to aid the assemblers, installers, system administrators, and users in the setup, configuration, administration, and use of the Cisco TelePresence. These documents include:

- *Cisco TelePresence Hardware Options and Upgrade Guide*, OL-16441-01
- *Cisco TelePresence System 1000 Assembly, Use & Care, and Field Replacement Unit Guide*, OL-16247-01. There is also a pointer document for this guide, 78-17800-02.
- *Cisco TelePresence System 3000 Assembly, Use & Care, and Field Replacement Unit Guide*, OL-16246-01. There is also a pointer document for this guide, 78-17795-02.
- *Cisco TelePresence and Cisco Unified Communications Manager Installation and Configuration Guide*, OL-11326-02
- *Cisco TelePresence System Release 1.4 Administrator's Guide*, OL-13676-03
- *Release Notes for Cisco TelePresence System, Release 1.4*, OL-12074-05
- *Cisco TelePresence Meeting User's Guide*, 78-17791-01
- *Cisco TelePresence System Release 1.4 Meeting Quick Reference*, 78-17792-02
- *Cisco TelePresence Manager Release 1.3 Administration and Installation Guide*, OL-13673-02
- *Cisco TelePresence Manager Release Notes*, OL-11298-01

All of these documents are available at the Cisco documentation website.



CHAPTER 1

Overview

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Chapter Organization

Chapter 1, "Overview" (this chapter)

- Provides chapter organization and content of this document and an overview of the steps you perform to install a CTS-3200 system.

Chapter 2, "Building the Display Assembly"

- The steps for assembling the three Display structures, connecting them, and positioning them in the conference room are described in a series of illustrations.
- Each illustration builds upon the previous illustration to describe the complete process of building the Display assembly.
- Each illustration is keyed numerically to the Chapter Parts List, appearing at the beginning of the chapter. You can refer to the Parts List to identify the specific fastener or bracket being used in an illustration.
- Additional information may appear below each illustration.

Chapter 3, "Mounting and Leveling the Plasma Displays"

- This chapter uses illustrations to describe the leveling alignment points and the processes used to level the plasma displays. This chapter is organized the same as Chapter 2.

Chapter 4, "Building the Lighting Assembly"

- This chapter describes the procedures used to build the lighting assembly and is organized the same as Chapter 2.

Chapter 5, "Building the Display Shelf Assembly"

- This chapter describes how to build the display shelf assembly and is organized the same as Chapter 2.

Chapter 6, "Building the First Row Table Assembly"

- This chapter describes the procedure to build the first row table and is organized the same as Chapter 2.

Chapter 7, “Building the Second Row Table Assembly”

- This chapter describes how to build the second row table and is organized the same as Chapter 2.

Chapter 8, “Assembling the Remaining Cisco TelePresence Elements”

- This chapter is organized the same as Chapter 2.
- Each element is described using one or more illustrations. The elements are:
 - **Camera assembly**—attaches to the center Display structure
 - **Front row table leg wiring assembly**—wired for power and network connectivity
 - **Projector assembly**—attaches to the underside of the center table segment
 - **Codec and Audio/Video Expansion Unit assembly**—attach the codecs to each Display structure and attach the extension unit to the center display structure
 - **Speaker assembly**—attach to the underside of the Display shelf
 - **Projector Screen assembly**—attaches to the underside of the Display shelf
 - **Cisco Unified IP Phone 7975**—used for initial configuration of the Cisco TelePresence system and to join meetings
 - **Camera Target assembly**—used for camera focus and alignment

Chapter 9, “Routing Power and Signal Cables”

- A series of illustrations are used to describe the routing and connection of power and signal cables for the front row and the display assembly area.
- Illustrations show you the routing path to take for all cables.
- Illustrations showing cables terminating in a Codec include a close-up of the Codec.

Chapter 10, “First-Time Setup”

- This chapter describes the configuration you perform to set up your Cisco TelePresence System 3200 for the first time.

Chapter 11, “Use & Care Guide”

- This chapter provides information on maintaining several elements of the Cisco TelePresence System 3200, including the tabletop and plasma displays.

Chapter 12, “Field-Replaceable Unit Guide”

- This chapter describes removal and replacement processes for various elements of the Cisco TelePresence System 3200.

Appendix A: Parts List Sorted by Carton

- This appendix lists all parts included in the individual chapter parts lists, and sorts the list by carton.

Appendix B: Region- and Country-Specific Equipment

- This appendix lists the part numbers for all region- and country-specific equipment, including table leg wiring and power cords.

Figure 1-1 View of an Assembled Cisco TelePresence System 3200, Standard Configuration

- Step 1** Install and connect the camera assembly. See [Step 1](#) and [Step 2](#) in [Chapter 8, “Assembling the Remaining Cisco TelePresence Elements”](#) to install the camera assembly and [Step 14](#) in [Chapter 9, “Routing Power and Signal Cables”](#) to connect the camera cables.

- Step 2** Install and connect the PDUs for the display and first row table assembly. See [Step 1 through Step 3 in Chapter 9, “Routing Power and Signal Cables”](#) to install the PDUs and [Step 4 in Chapter 9, “Routing Power and Signal Cables”](#) to connect the cables.
- Step 3** Connect the projector to the projector mounting bracket and connect the projector and bracket to the table assembly. See [Step 2 and Step 3 in Chapter 8, “Assembling the Remaining Cisco TelePresence Elements”](#) to connect the projector to the table assembly and [Step 4 in Chapter 9, “Routing Power and Signal Cables”](#) to connect the cables.
- Step 4** Place the Cisco Unified IP Phone on the first row table and connect the phone cable. See [Step 4 in Chapter 9, “Routing Power and Signal Cables”](#) to connect the cable.
- Step 5** Install the privacy panels for the first row table. See [Step 15 through Step 18 in Chapter 6, “Building the First Row Table Assembly.”](#)
- Step 6** Install the speaker boards and speakers. See [Step 8 through Step 10 in Chapter 8, “Assembling the Remaining Cisco TelePresence Elements.”](#)
- Step 7** Install the projector screen. Refer to the projector screen installation guide that is packaged with the assembly.
- Step 8** Connect the power cables for the codecs, lighting and table leg power connections by completing [Step 4 in Chapter 9, “Routing Power and Signal Cables.”](#)
- Step 9** Connect the signal cables for the first row table by completing [Step 5 in Chapter 9, “Routing Power and Signal Cables.”](#)
- Step 10** Assemble the camera targets by completing [Step 15 in Chapter 8, “Assembling the Remaining Cisco TelePresence Elements.”](#)
- Step 11** Perform first-time setup using the instructions in [Chapter 10, “First-Time Setup.”](#)

Conventions and Terminology

- The directions *left* and *right* in this guide are synonymous with *participant’s left* and *participant’s right*. They refer to the assembly as you face the Plasma displays.
- Cable connections to the Codecs are labeled with a color-coded symbol system.
 - A single dot on a green background indicates a **center** element.
 - Two dots on a white background indicate a **left** element.
 - Three dots on a red background indicate a **right** element.

Figure 1-2 Cable Connection Labeling System



Tools and Equipment List

To assemble the Cisco TelePresence System 3200, you need the following tools and equipment:

Uncrating and Unpacking:

- Claw hammer or small pry bar

- Large Phillips screwdriver
- Tin snips*
- Pallet jack or hand cart (for moving component boxes to installation site)*
- Safety gloves*
- Safety glasses*
- Box cutters*

Cisco TelePresence System 3200 Structure, Accessory, and Adjustment Assembly:

- Power screwdriver with 3, 4, 5, and 6 mm (standard or round) Allen bits, or standard 3, 4, 5, and 6 mm Allen wrenches

**Tip**

A round-head Allen bit can work at an angle instead of just straight out, a helpful feature in tight spots.

- Manual screwdrivers, #2 and #4 Phillips and flathead types
- Metric wrenches, 10 to 15 mm
- 9/64-inch Allen wrench (included with speakers)
- Tape measure
- Level
- Masking tape*
- Tie wraps*
- Knee pads or kneeling cushion*
- Laptop computer attached to network (for troubleshooting or reference)*
- Hand vacuum or facilities vacuum*
- Stepladder*
- 10mm open end ratcheting wrench**
- Mechanical lift (optional, for hanging display screens)

* Recommended for best results

**Useful for securing the draw bolts between table sections



CHAPTER 2

Building the Display Assembly

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Parts List

Key	Part Description	Part Number	Qty	Ctn	Notes
1	Display structure	700-23358-xx	3	35, 36, 37	
2	Rear foot stabilizer	700-23360-xx Kit# 69-1625-xx	6	18	
3	Front foot stabilizer	700-23359-xx Kit # 69-1624-xx	6	15, 16, 17	
4	Leveling foot	51-4540-xx Kit # 69-1654-xx	12	1	
5	Display shelf support left	700-23339-xx Kit # 69-1626-xx	51	45	
6	Display shelf support right	700-23340-xx Kit # 69-1626-01	51	45	
7	Display tilt bracket	700-23363-xx	6	13	
8	Codec safety tray	700-23341-xx Kit # 69-1626-xx	3	51	If you are installing a presentation codec, use the double-wide codec tray part no. 700-25301-01 for the center display assembly.
9	Camera assembly bracket	700-23346-xx Kit # 69-1627-xx	1	12	For center display structure only
10	Support crossbars	700-23361-xx Kit # 69-1623-xx	4	33	
11	M8 x 70 mm screws	48-2274-01		1	
12	M8 washers	49-1165-01		1	
13	M8 x 20 mm screws	48-2273-01		1	

**Caution**

The display structures are unstable during assembly. Use caution, and support all structures as required.

**Warning**

Only trained and qualified personnel should be allowed to install, replace, or service this equipment.

**Note**

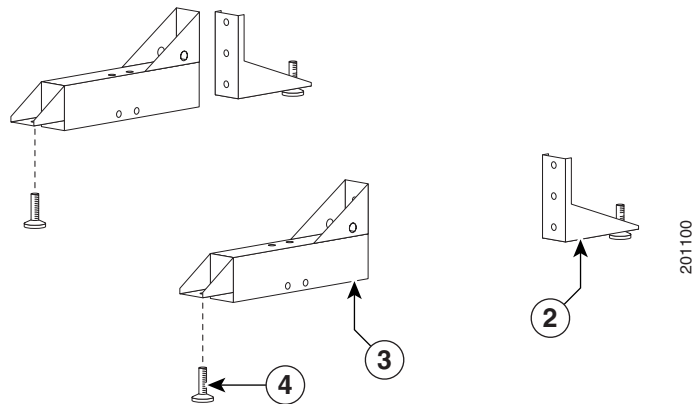
The directions *left* and *right* refer to the assembly as you face the Plasma displays.

**Note**

Before you start to build the structure, make sure that the floor in the installation room is level. An uneven floor can make it difficult or, in severe cases, impossible to align the plasma displays after you build the structure and mount the displays.

Step 1 Attach the Leveling feet to the Rear and Front Foot stabilizers.

Figure 2-1 Leveling feet

**Note**

[Figure 2-9](#) shows the correct positioning of the display structure; keep this in mind as you build the structure.

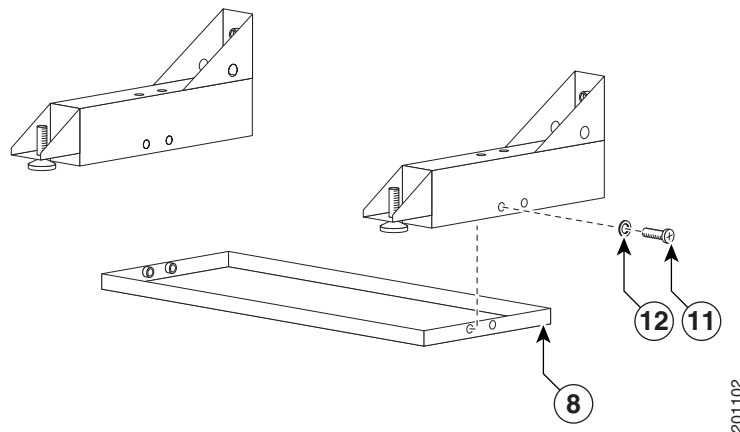
Step 2 Attach the Codec Safety trays to the Front Foot stabilizers.



Note

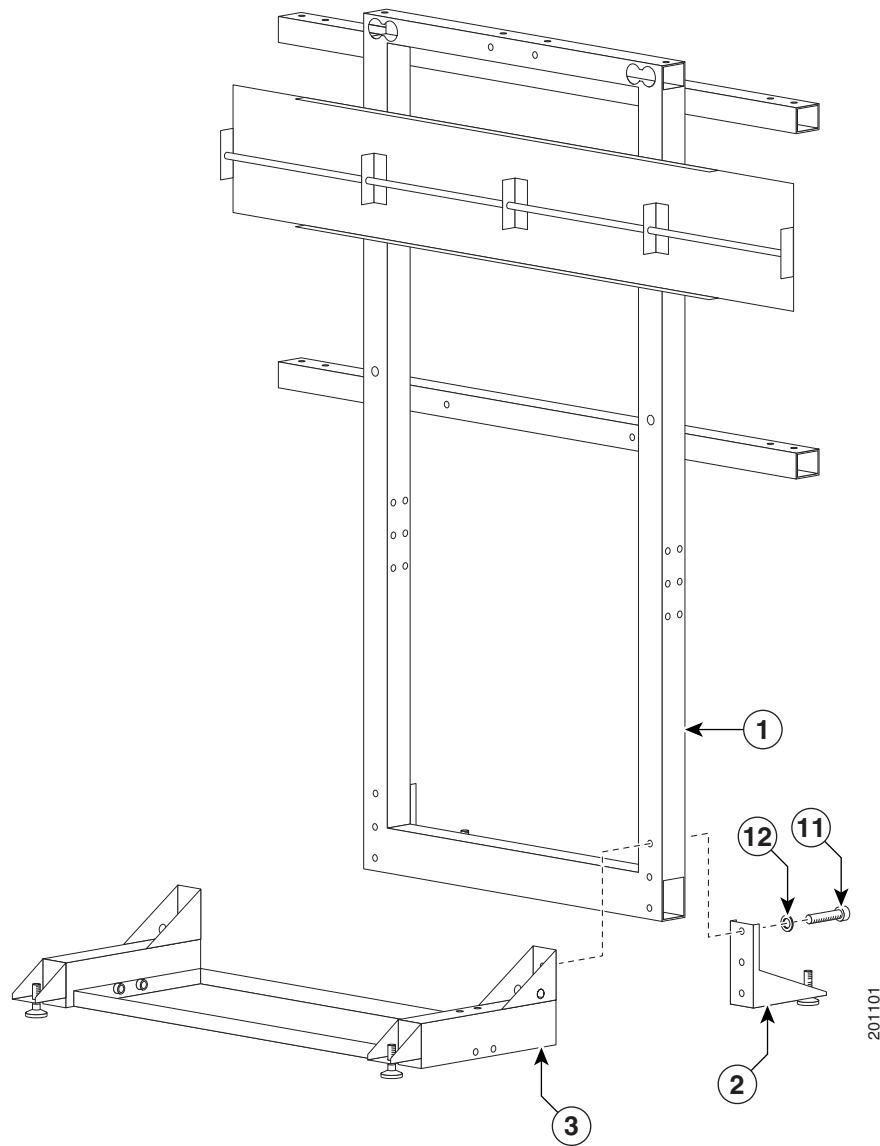
If you ordered a Presentation Codec, attach the larger tray that comes with the Presentation Codec package, part no. 700-25301-01, in the center display. Refer to the [Cisco TelePresence Hardware Options and Upgrade Guide](#) for more information.

Figure 2-2 Codec Safety trays



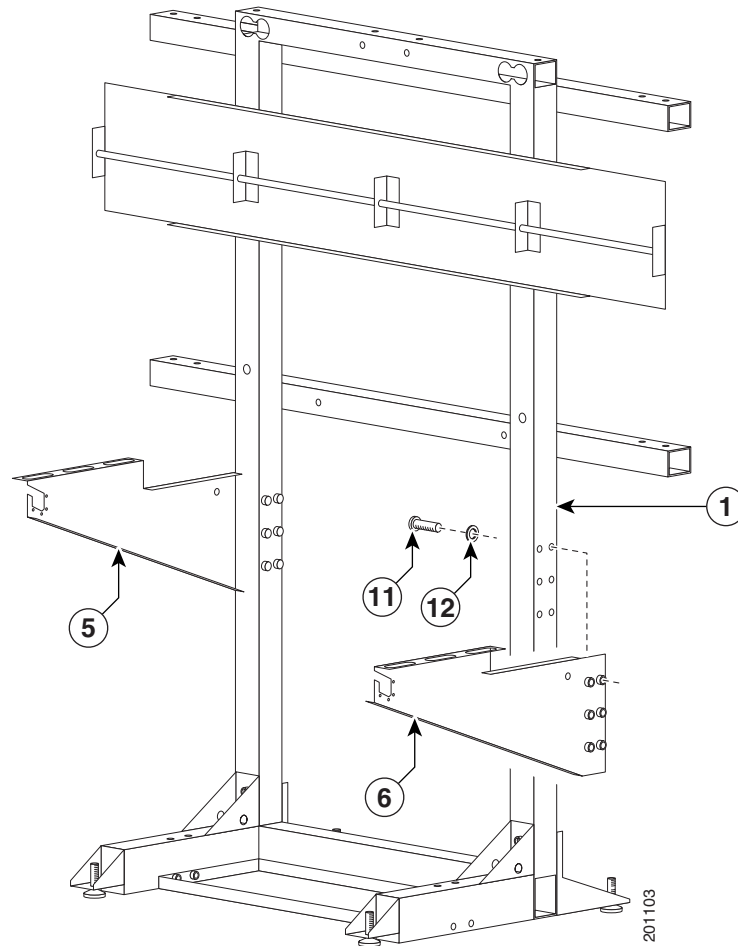
Step 3 Attach the Rear and Front Foot stabilizers to the Display structures.

Figure 2-3 *Rear and Front Foot stabilizers*



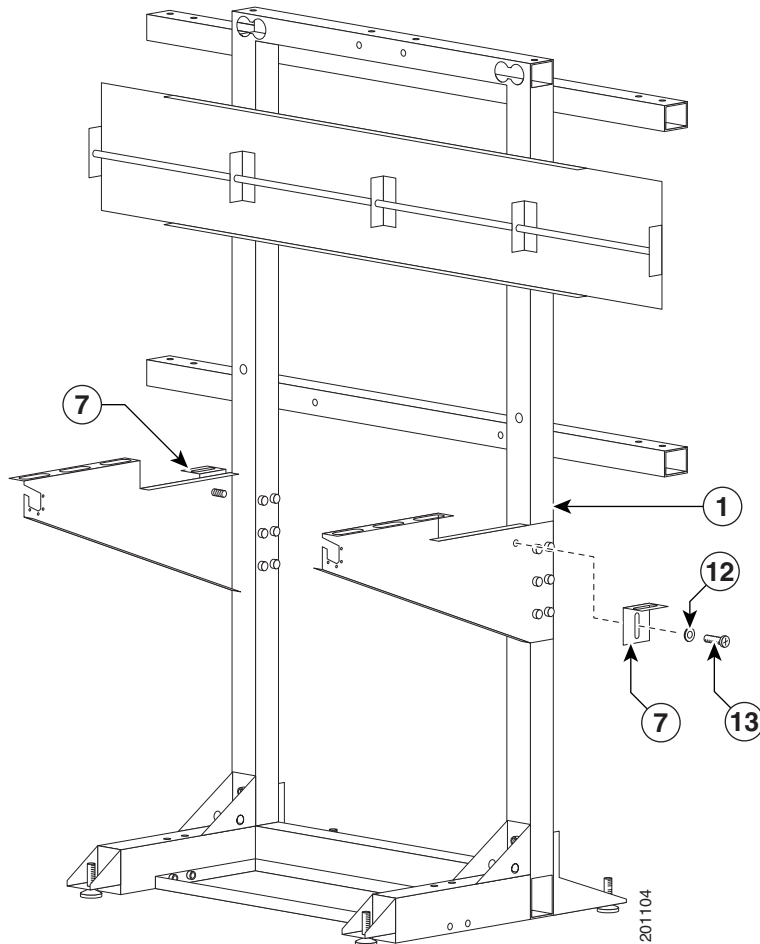
Step 4 Attach the left and right Display Shelf supports to each Display structure.

Figure 2-4 *Left and Right Display Shelf supports*



Step 5 Attach the Display Tilt brackets to each Display structure.

Figure 2-5 *Display Tilt brackets*

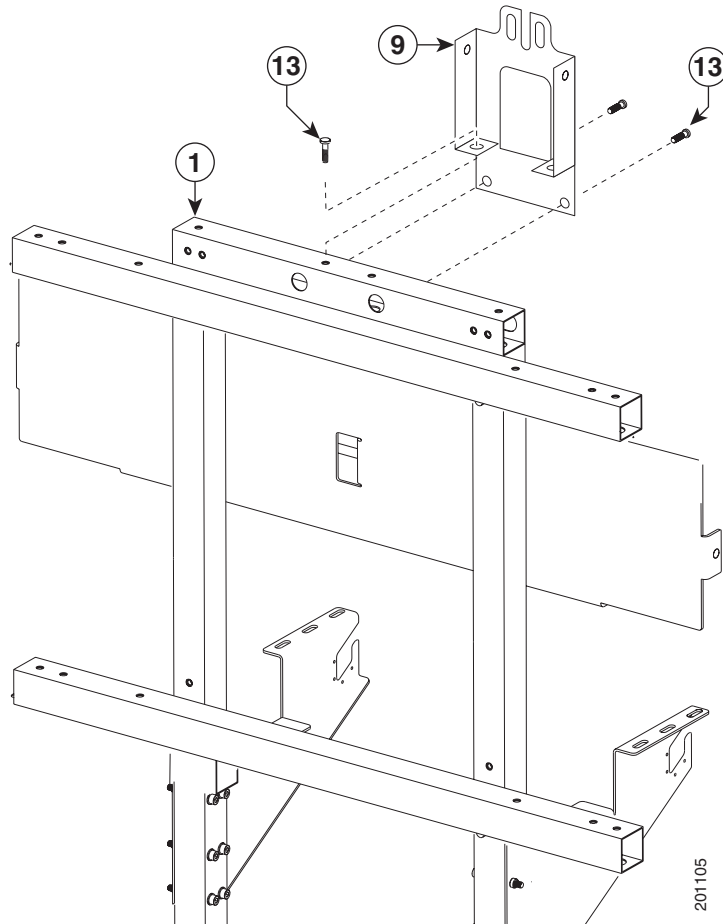


Note

Do not tighten the Display Tilt brackets. You will need to adjust them to level the Plasma displays in [Chapter 3, “Mounting and Leveling the Plasma Displays.”](#)

- Step 6** Attach the Camera Assembly bracket to the center Display structure, making sure that this structure uses the larger codec tray.

Figure 2-6 Camera Assembly bracket

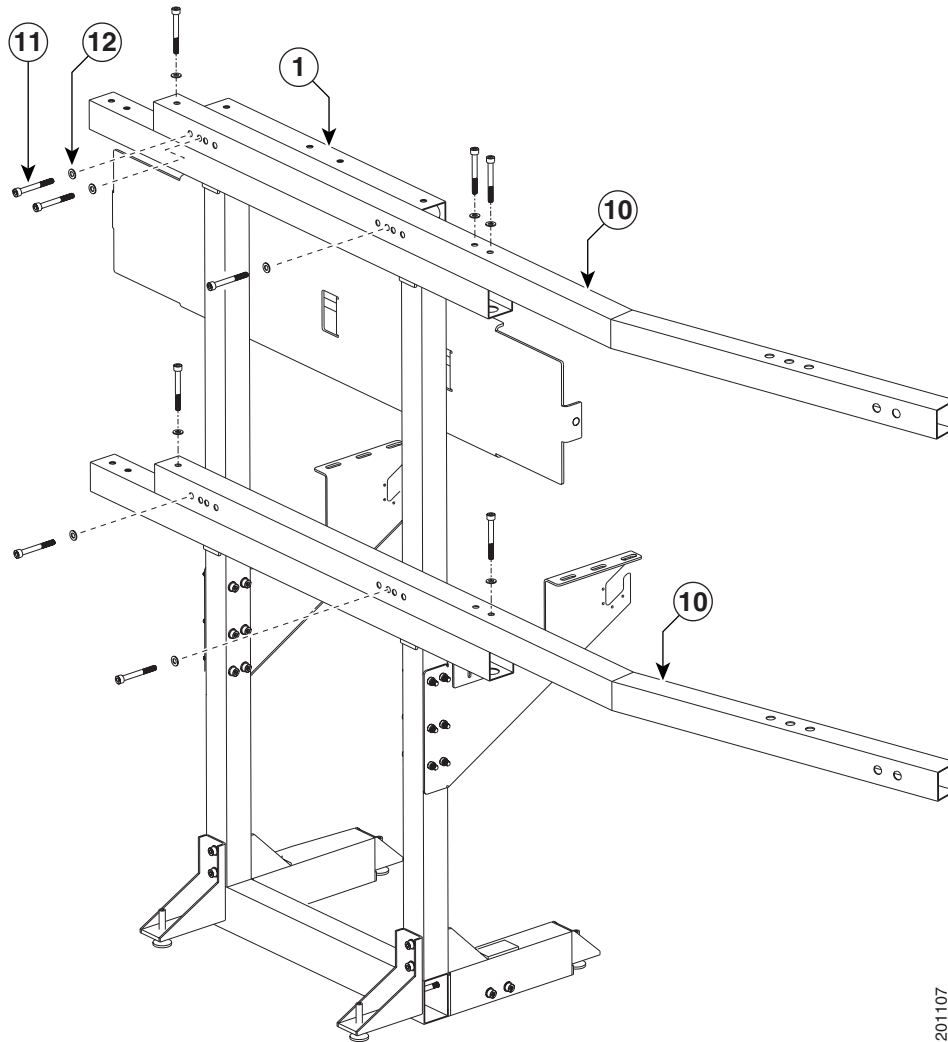


Note

The Camera Assembly bracket attaches to the center Display structure.

Step 7 Attach the upper and lower Support crossbars to the left and right Display structures.

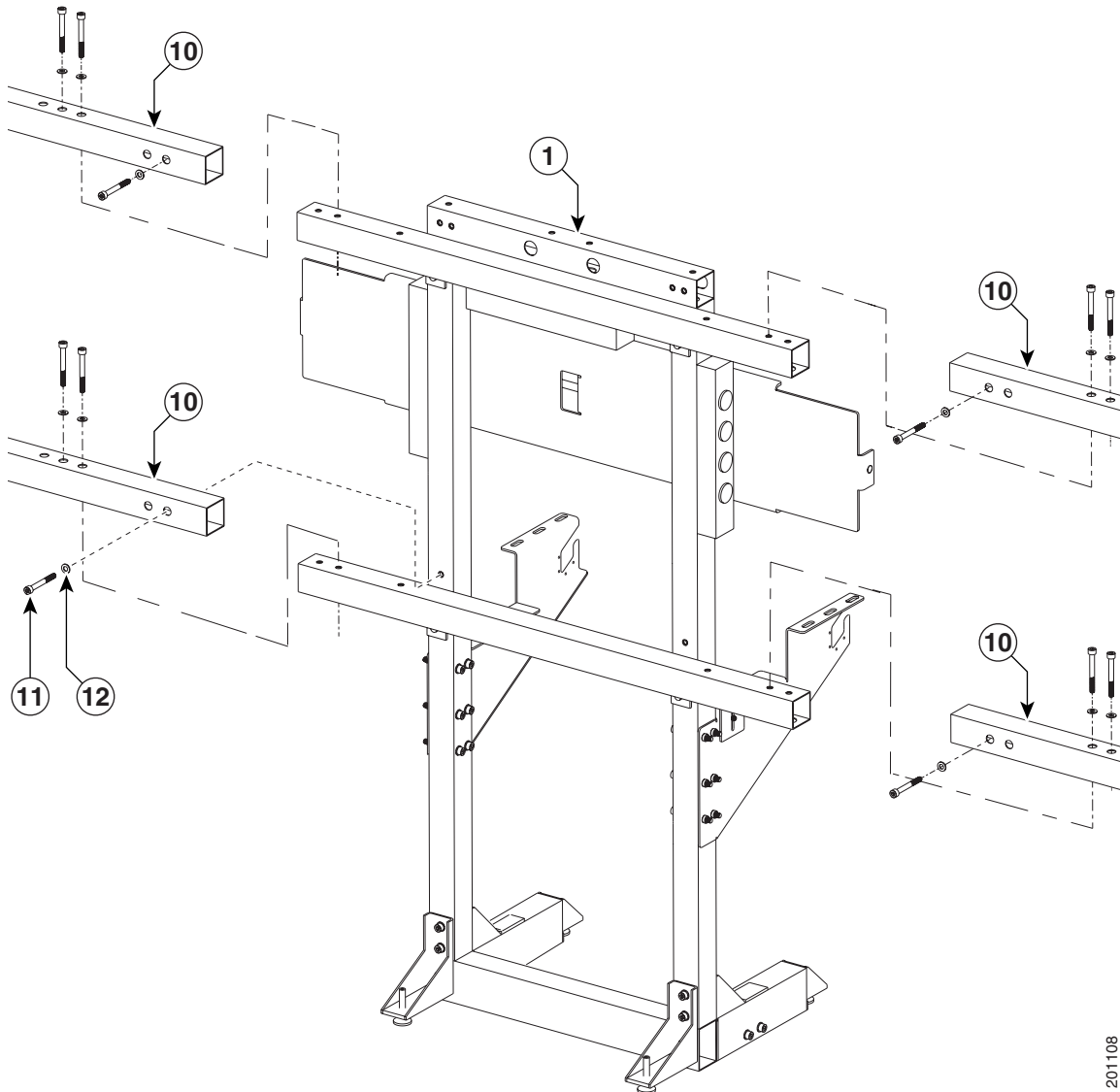
Figure 2-7 Upper and Lower Support crossbars



201107

Step 8 Attach the upper and lower Support crossbars to the center Display structure.

Figure 2-8 Upper and Lower Support crossbars



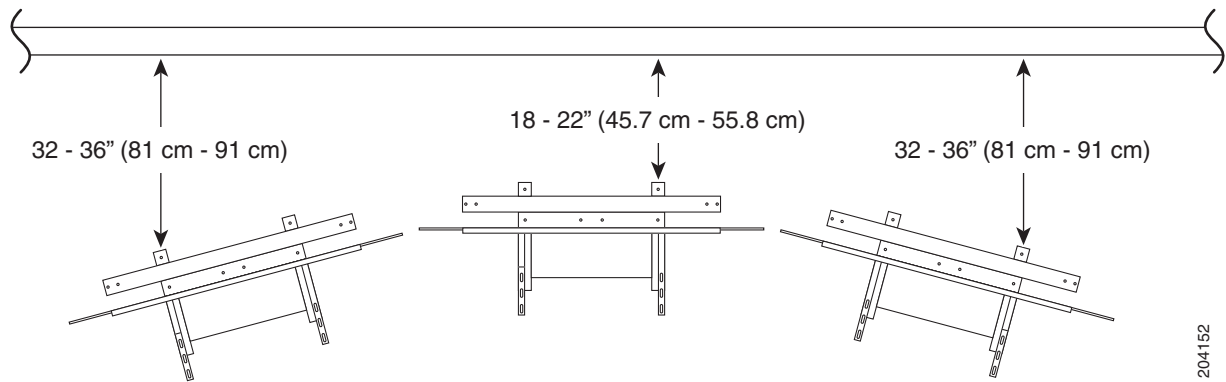
201108

**Tip**

Use the screw holes nearest the ends of the Support crossbars.

Step 9 Position the three Display structures relative to the rear wall.

Figure 2-9 *Positioning the Display Structures*



204152



CHAPTER 3

Mounting and Leveling the Plasma Displays

Revised: July 28, 2008, OL-14521-01

Parts List

Key	Part Description	Part Number	Qty	Ctn	Notes
1	65-inch high-definition display	CTS-DISP-65-GEN2 74-4881-xx	3	23, 24, 25	
2	Black buffer strips	700-23981-xx	2	1	
	Display shelf section: left	95-9692-xx Kit # 74-5304-xx	1	58	The Display shelves are used in this chapter for leveling purposes only. The Display shelves and the attaching bracketing hardware are described in Chapter 5, “Building the Display Shelf Assembly.”
	Display shelf section: center	95-9694-xx Kit # 74-5306-xx	1	58	
	Display shelf section: right	95-9693-xx Kit # 74-5305-xx	1	58	
	M8 x 20 mm screws	48-2273-01		1	



Warning

Only trained and qualified personnel should be allowed to install, replace, or service this equipment.



Note

The directions *left* and *right* refer to the assembly as you face the Plasma displays.

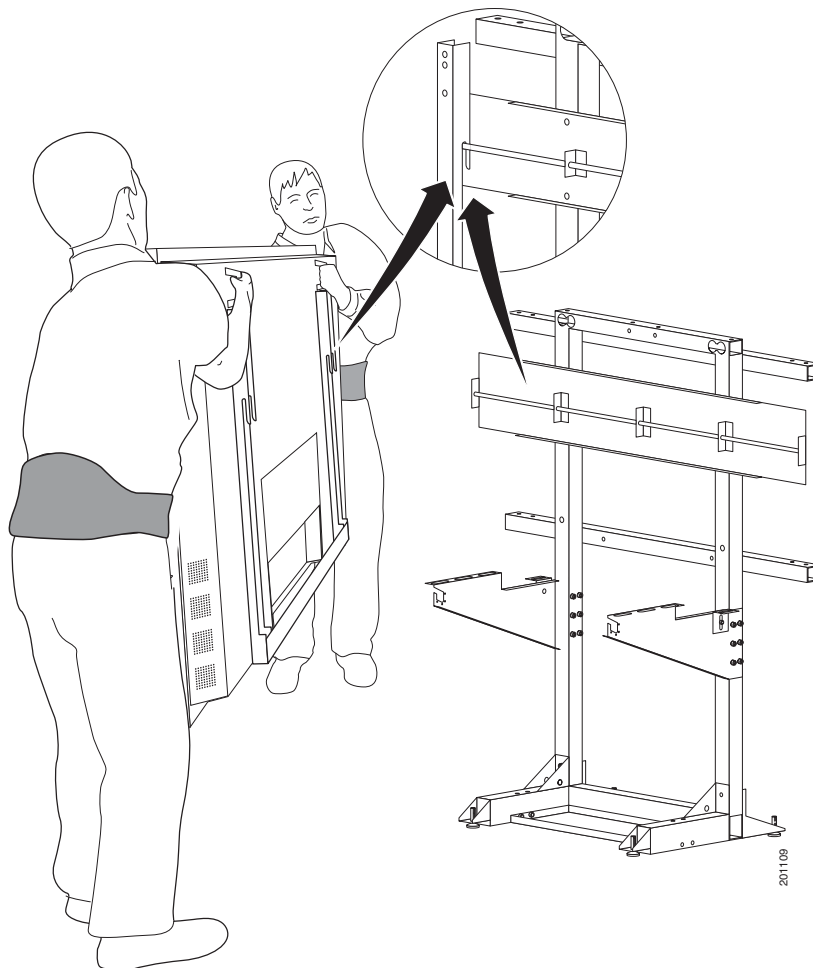


Note

[Figure 3-3](#) through [Figure 3-8](#) illustrate the process of leveling the Plasma displays. You may want to review all of this chapter before beginning the leveling process.

- Step 1** Hang the left, center, and right Plasma displays on the Display structure crossbars.

Figure 3-1 The left, center, and right Plasma displays



Caution

The edges of the Plasma displays are sharp and uncomfortable to lift with bare hands. Nonslip gloves are recommended.



Note

Make sure the Plasma display Leveling feet remain firmly seated on top of the Display shelf supports.



Caution

Do not lift the display without appropriate back support, foot protection (such as steel-toed shoes), and room to lift the display using your legs and not your back.

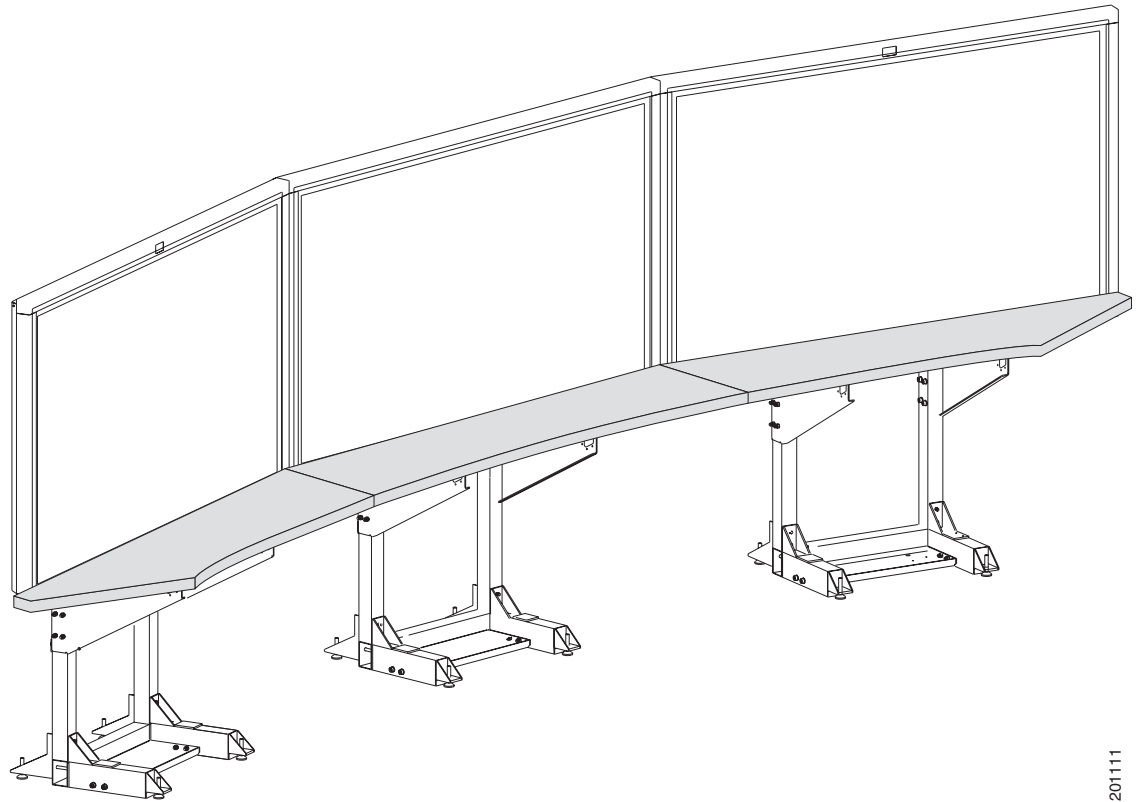


Warning

The displays are heavy and may cause injury or damage if care is not taken to support them properly while mounting. Use caution and additional assistance as needed.

Step 2 Loosely attach the Display shelves to the Display shelf supports.

Figure 3-2 *Loosely Attach the Display shelves to the Display Shelf Supports*



201111

**Note**

The Display shelves are used in this chapter for leveling purposes only. See [Chapter 5, “Building the Display Shelf Assembly”](#) and use the M8 x 20 mm screws in the Accessory Kit to attach the display shelves.

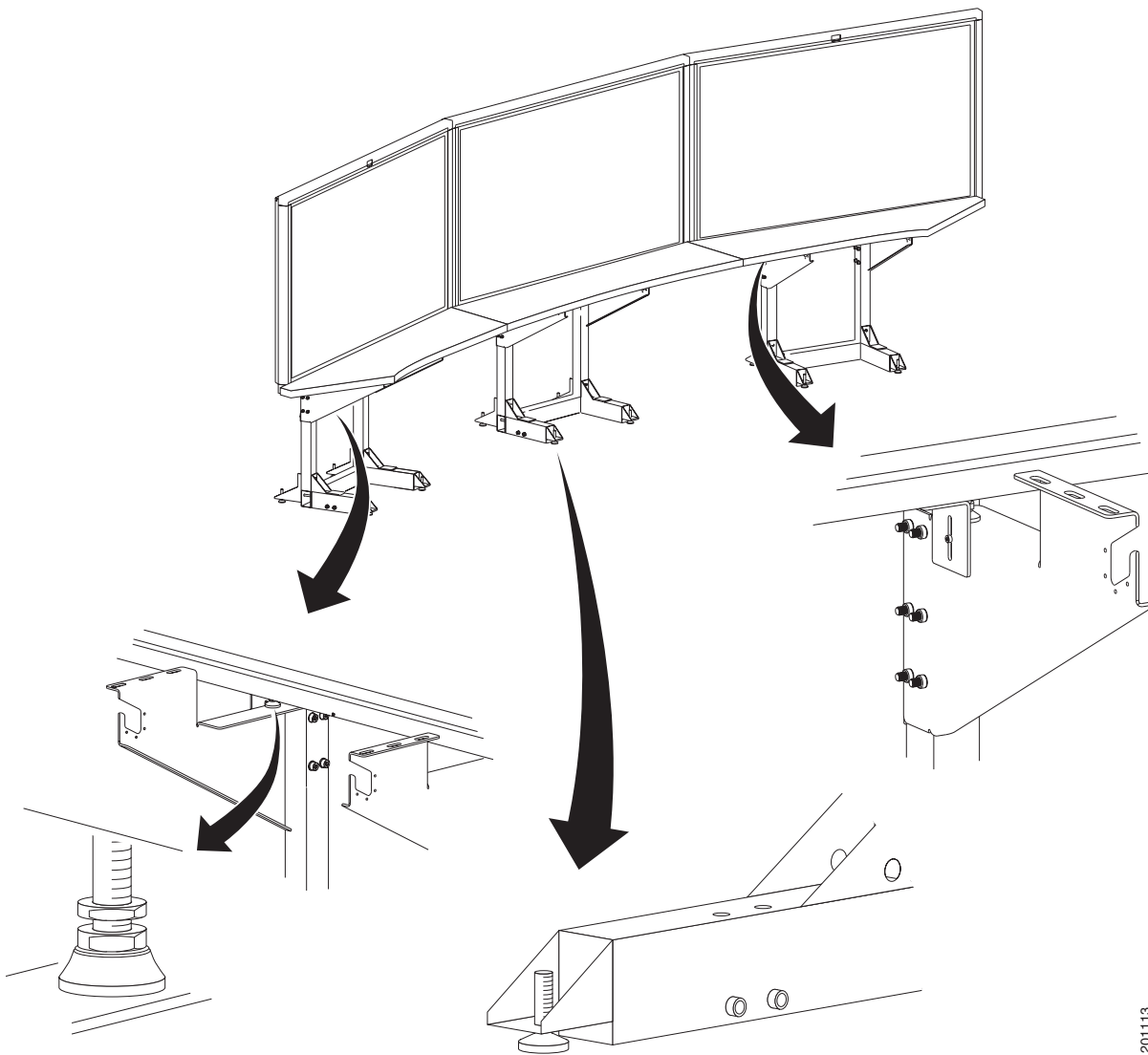
Purpose of Leveling the Plasma displays

The three Plasma displays act as windows allowing a three-way view into the remote Cisco TelePresence conference room. The Display shelf in front of each Plasma display acts as a visual bridge between the local and remote conference rooms. In order to provide the experience of one seamless conference area, the Display shelf must appear seamlessly integrated with the remote conference tables.

Leveling Alignment Points

Step 3 Use the leveling alignment points to level and align the Plasma displays.

Figure 3-3 Leveling Alignment Points



Note

You can use a 5 mm hex key to adjust the display structure's front and rear Foot Levelers.

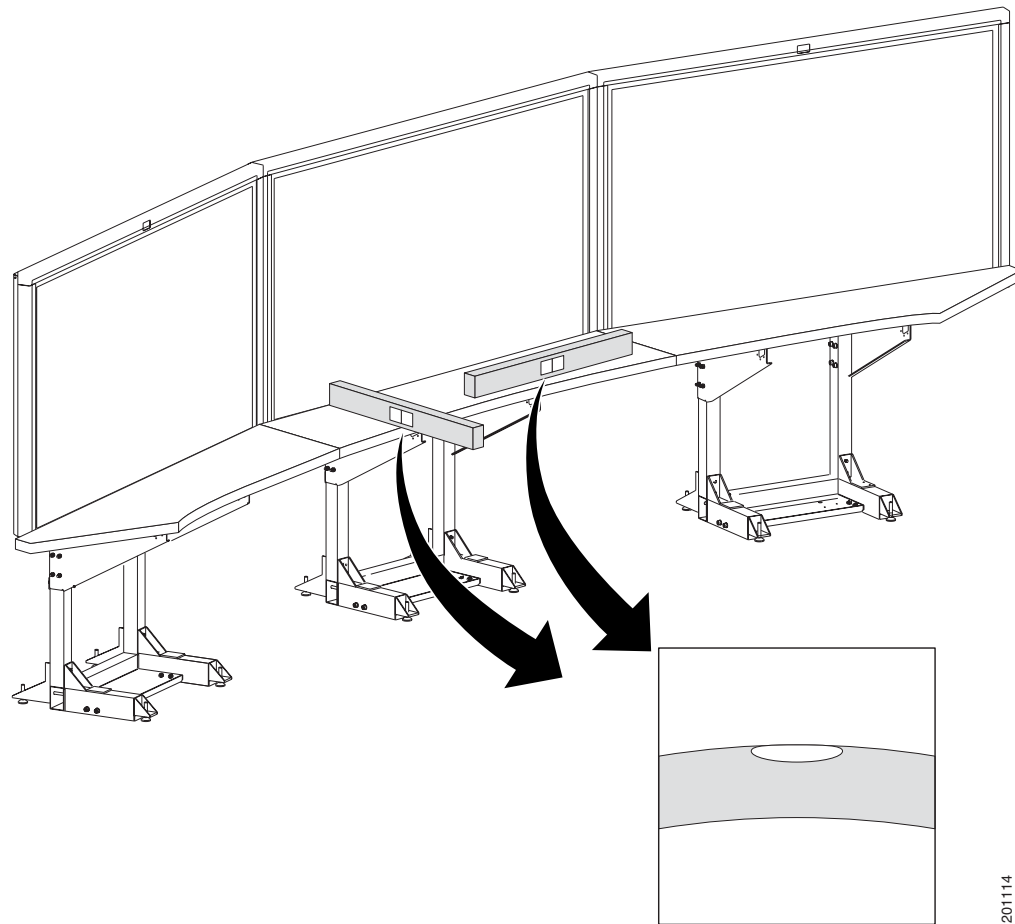
Leveling Goals

Leveling the Display shelves and the Plasma displays, and aligning the seams of the Display shelves with the edges of the Plasma displays ensure that images displayed from the remote conference room match the local conference room configuration.

The leveling goals illustrated in [Figure 3-4](#) through [Figure 3-8](#) show how to use the leveling alignment points in [Figure 3-3](#). You may need to perform any or all of the illustrated goals several times while aligning and leveling the Plasma displays, and make additional adjustments later if the displays have settled.

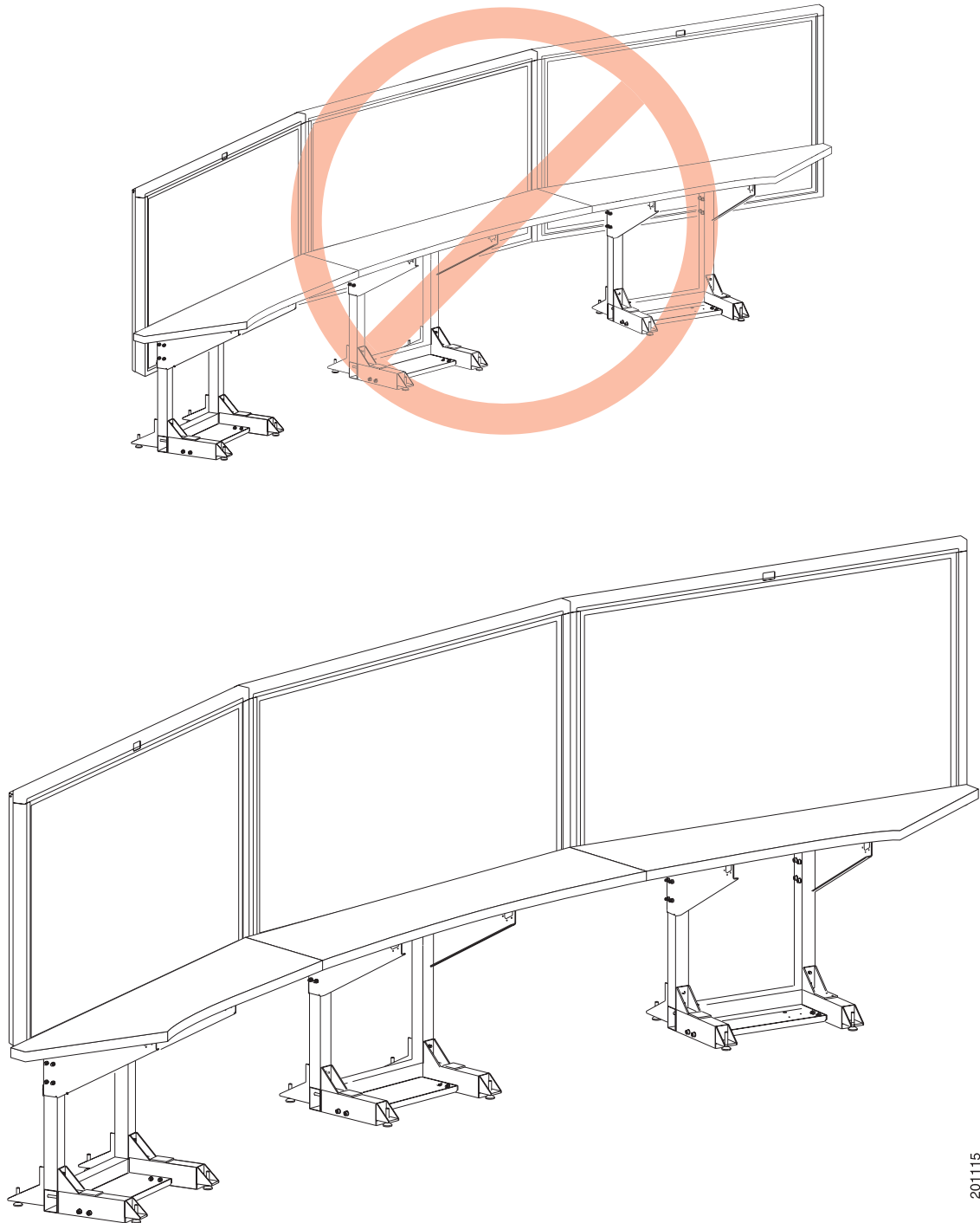
- Step 4** Use the four Leveling feet on each Display structure to level the Display shelves along the X and Y axes. Leveling the Display shelves ensures the Display structures are level. The Display structures should be level before attempting to level the Plasma displays.

Figure 3-4 *Level the Display shelves along the X and Y axes*



- Step 5** The surface of the Display shelves should not obstruct any lines of resolution. Use the Plasma display Leveling feet to raise or lower the Plasma displays and make sure all lines of resolution can be seen when sitting at both the first and second conference tables.

Figure 3-5 *Make sure no lines of resolution are blocked by the Display shelves*



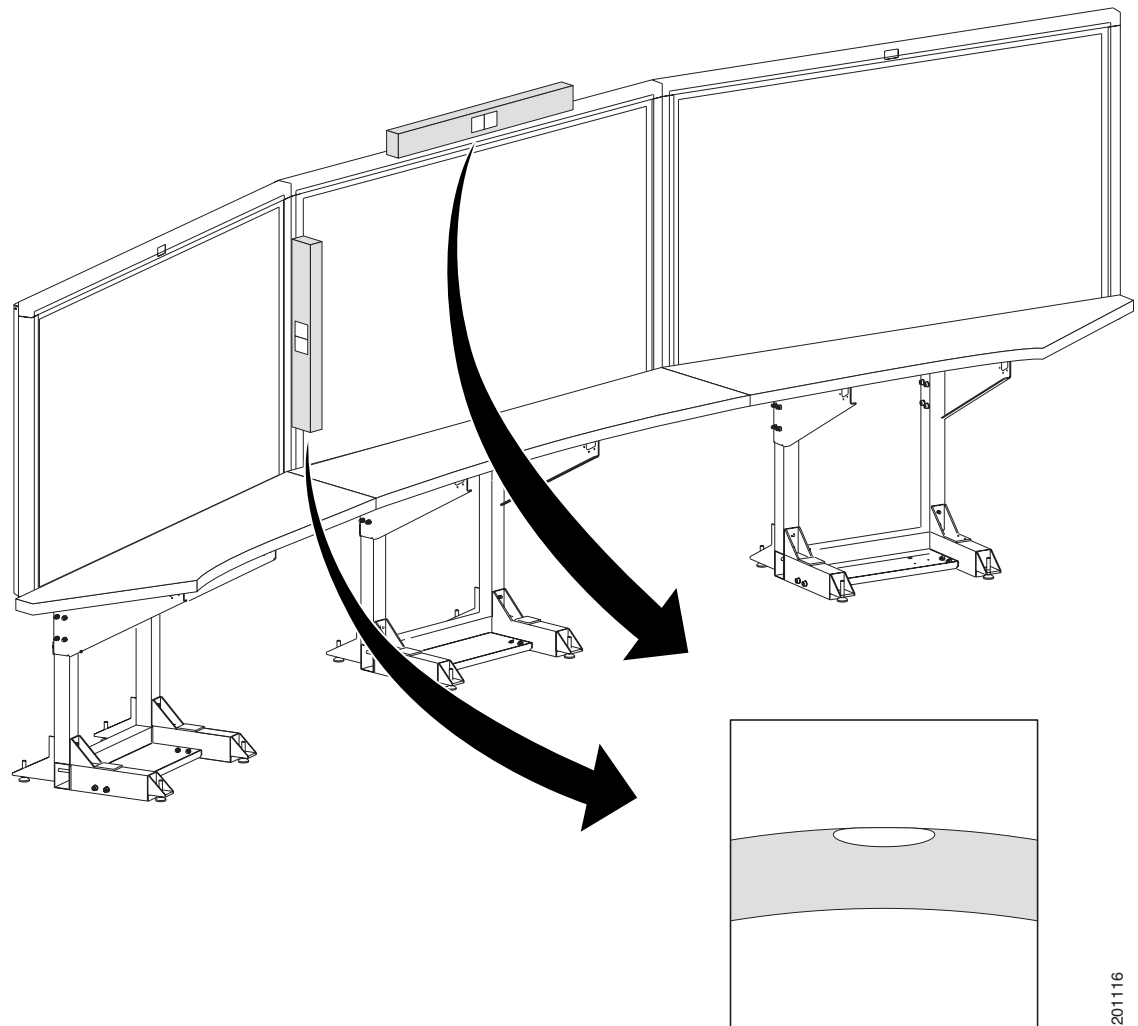
201115

- Step 6** Use the Plasma display Leveling feet to level the Plasma displays along the X axis.
Use the Display tilt brackets to level the Plasma displays along the Y axis.

**Tip**

You should level the center Plasma display first. Then align the left and right Plasma displays to the center display.

Figure 3-6 Level the Plasma displays along the X and Y axes

**Caution**

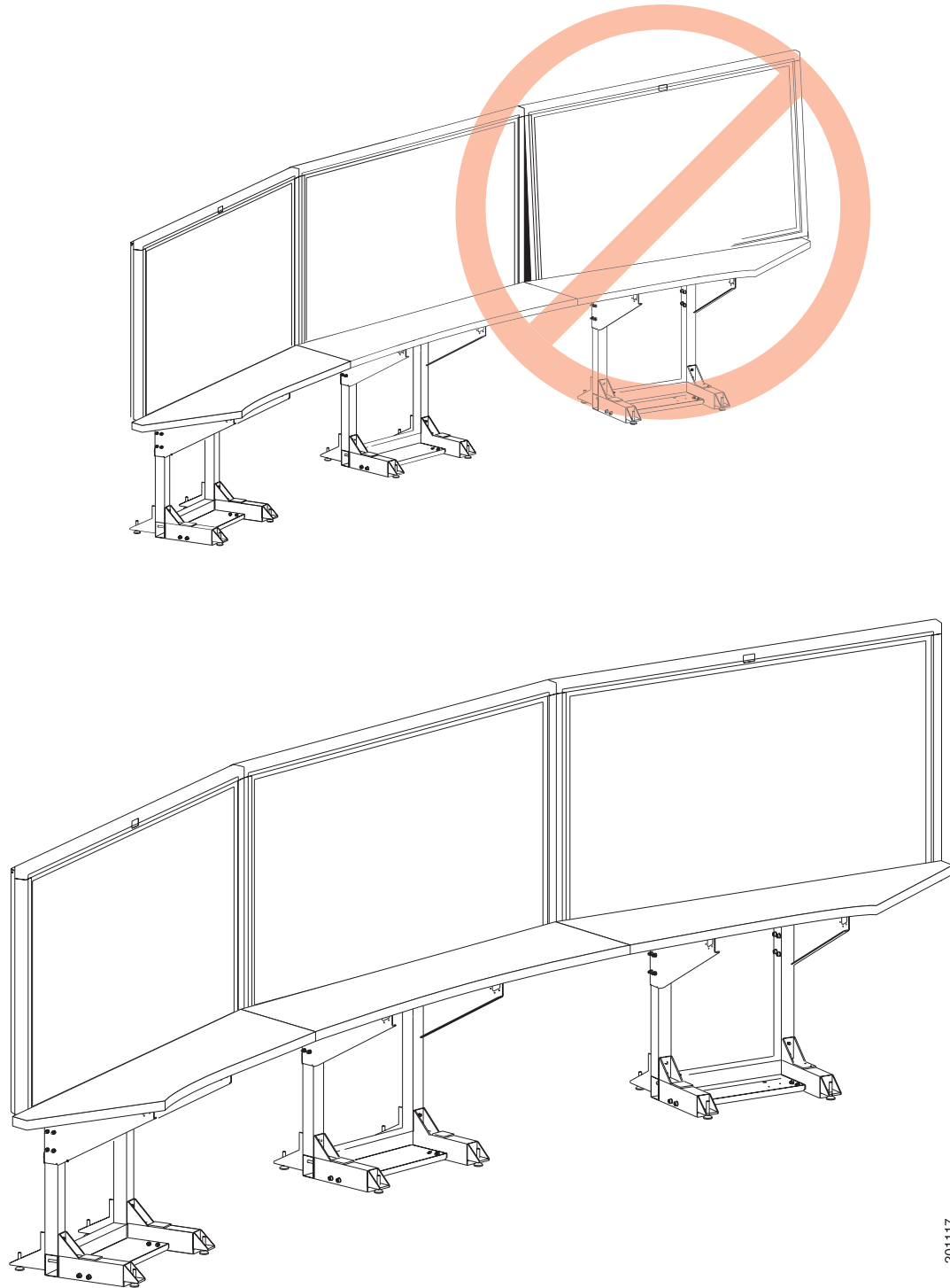
Do not place the level against the Plasma display screen. Place the level against the Plasma display bezel.

201116

Step 7 Align the edges of Plasma displays

The gap between Plasma displays should be uniformly even from the top edge of the Plasma display to the bottom edge. You should try to make the gap as small as possible.

Figure 3-7 *Align the edges of Plasma displays*



201117

Step 8 Align the seams of the Display shelves with the seams between Plasma displays.

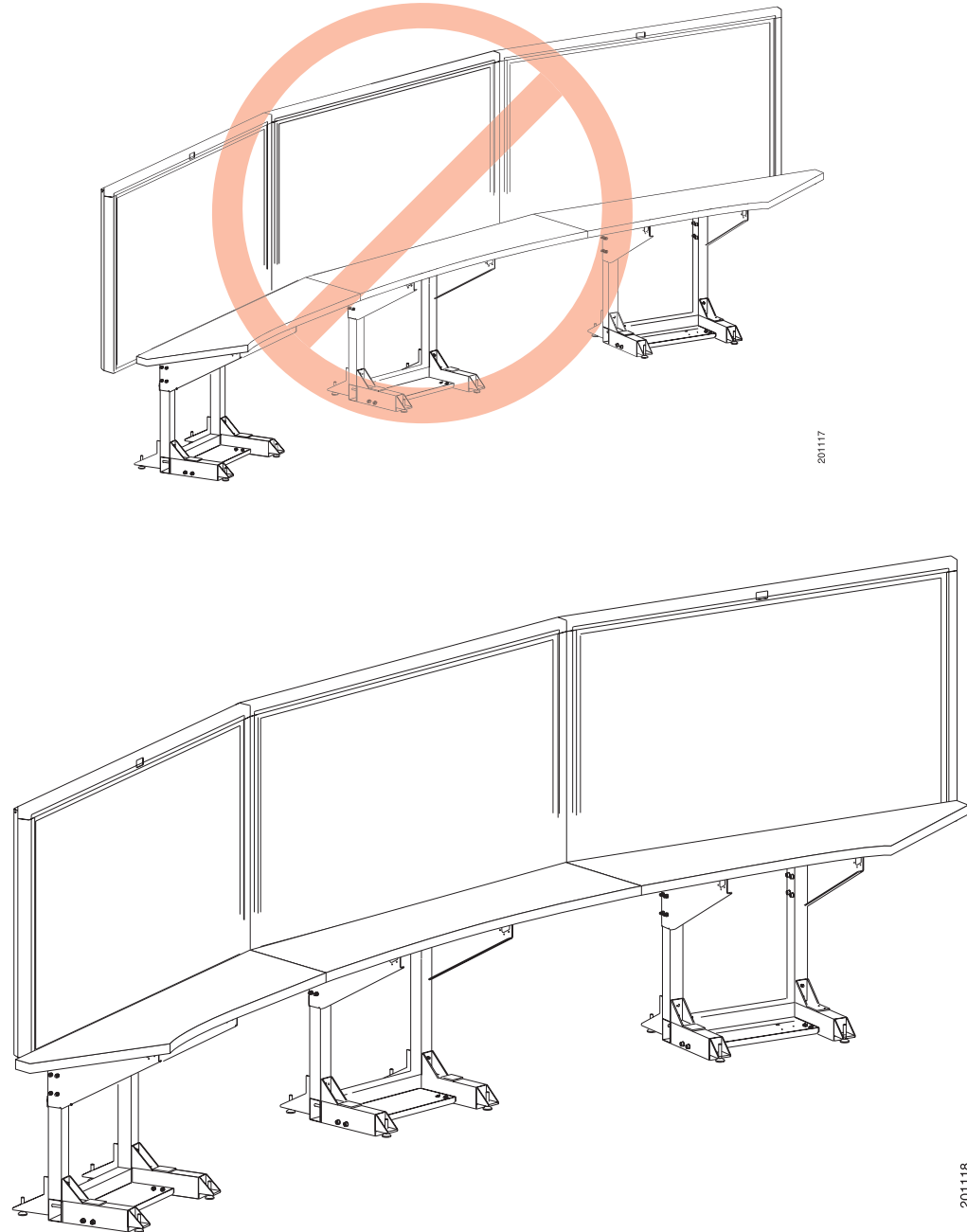
You may need to adjust the Plasma displays left to right so the seam created between the edges of two Plasma displays are aligned to the corresponding Display shelf seam.



Caution

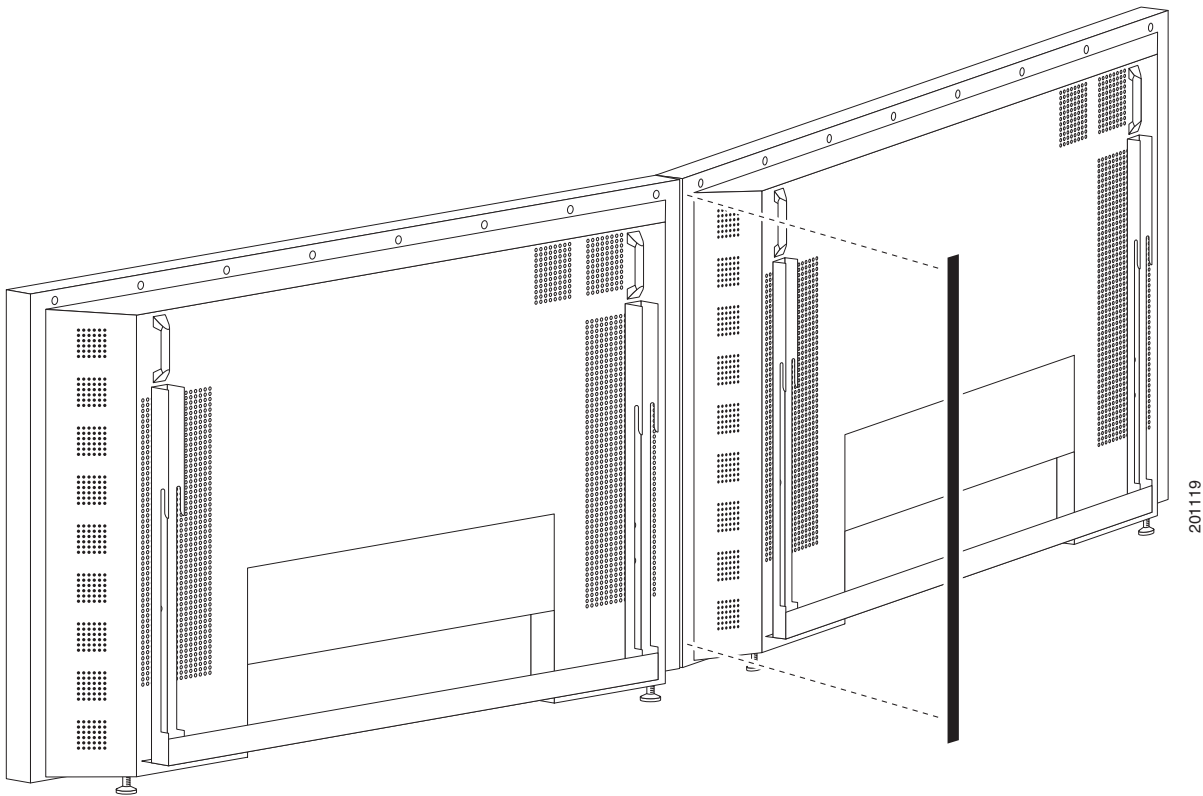
While moving the Plasma display to the left or right you need to make sure the Plasma display Leveling feet remain firmly seated on top of the Display shelf supports.

Figure 3-8 *Align the seams of the Display shelves with the seams between Plasma displays*



Step 9 Complete the plasma display screen setup by applying the Black Buffer strips.

Figure 3-9 *Apply the Black Buffer strips*





CHAPTER 5

Building the Display Shelf Assembly

Revised: July 28, 2008, OL-14521-01

Parts List

Display Shelf, Type 1					
Key	Part Description	Part Number	Qty	Ctn	Notes
1	Display shelf section: left	95-9692-xx Kit # 74-5304-xx	1	58	
2	Display shelf section: center	95-9694-xx Kit # 74-5306-xx	1	58	
3	Display shelf section: right	95-9693-xx Kit # 74-5305-xx	1	58	
4	Not used				
5	Left accessory cabinet attachment bracket	700-23336-xx	1	19	
6	Right accessory cabinet attachment bracket	700-23337-xx	1	19	
7	Not used				
8	Connecting plates	700-23345-xx	2	13	
9	Speaker board brackets	700-23944-xx	6	13	
10	Splines	No part number	2	58	
11	Draw bolts	51-4579-xx	6	58	
12	M8 x 20 mm screws	48-2273-01		1	
13	M8 x 30 mm screw	48-2313-01	15	1	
Accessory Cabinet					
1	Accessory Cabinet, Right	74-5297-xx Kit # 69-1837-xx	1	47	
2	Accessory Cabinet, Left	74-5298-xx Kit #69-1838-xx	1	48	

Display Shelf, Type 1

Key	Part Description	Part Number	Qty	Ctn	Notes
3	Assembly Screen Supports	No part number	2		Located inside of assembly cabinet. These brackets are only required if you use a Type 1 projector screen, part number 800-28681-01. If your installation uses the projector screen with a product ID of CTS3K-SCREEN and a part number of 74-5416-01, do not install these brackets.
4	M8 x 20 mm screws	48-2273-01	14	1	

**Caution**

The shelf segments are unstable during assembly. Use caution, and support all structures as required.

**Warning**

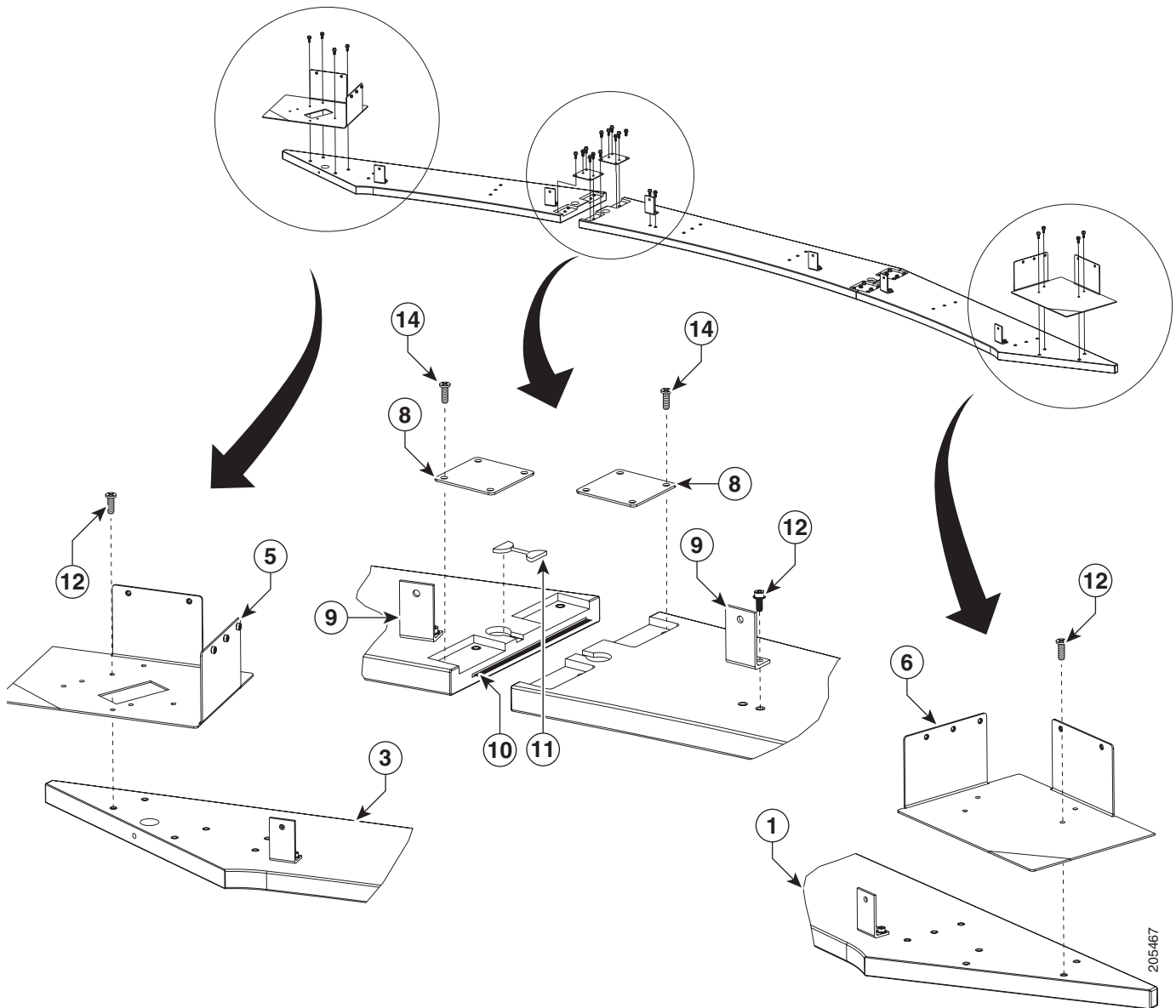
Only trained and qualified personnel should be allowed to install, replace, or service this equipment.

**Caution**

In order to prevent scratching the Display shelves, you should avoid putting any tools on the shelf surfaces.

**Note**

The directions *left* and *right* refer to the assembly as you face the Plasma displays.

Step 1 Attach the Display shelf hardware.**Figure 5-1** Display shelf hardware**Note**

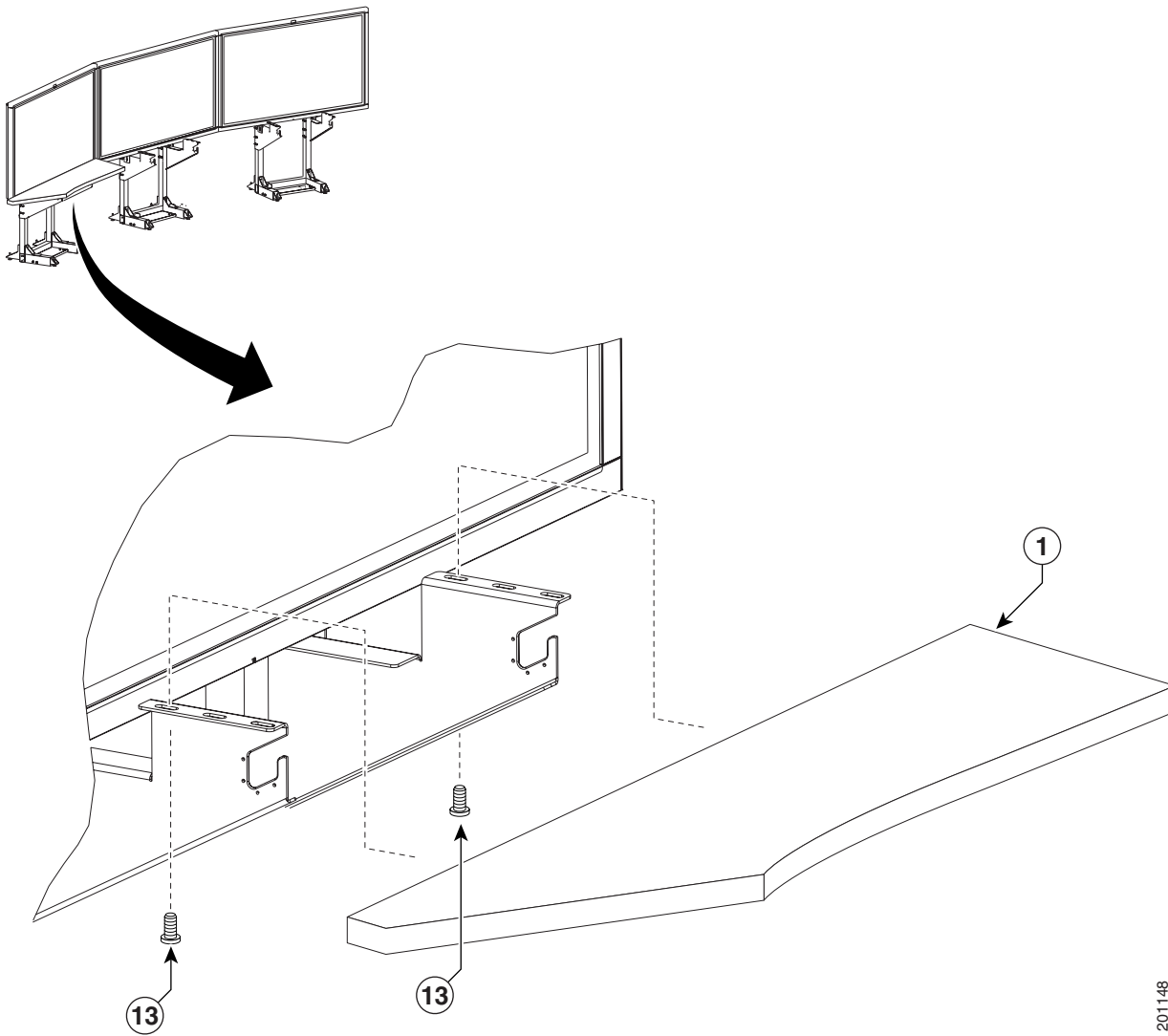
The Right Accessory Cabinet attachment bracket (marked “6” in the illustration), has a central rectangular hole that differentiates it from the Left Accessory Cabinet attachment bracket.

**Note**

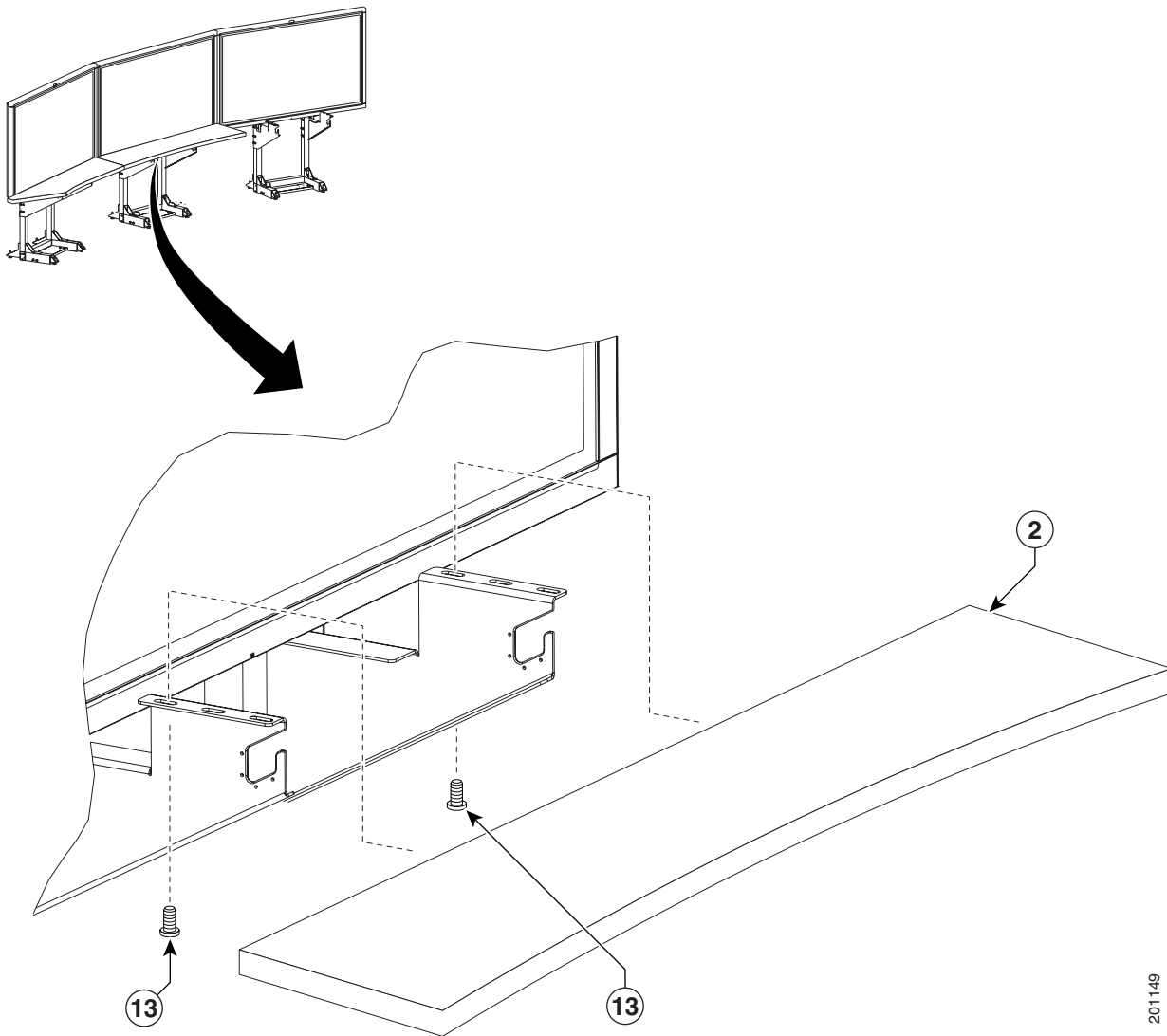
This illustration describes the hardware used to attach the three Display shelves and the hardware used to attach additional assemblies in [Chapter 8, “Assembling the Remaining Cisco TelePresence Elements.”](#) The Display shelves should be attached individually to the Display structures, as illustrated in [Figure 5-2](#), [Figure 5-3](#), and [Figure 5-4](#).

Step 2 Attach the left Display shelf.

Figure 5-2 *Left Display shelf*



201148

Step 3 Attach the center Display shelf**Figure 5-3** Center Display shelf

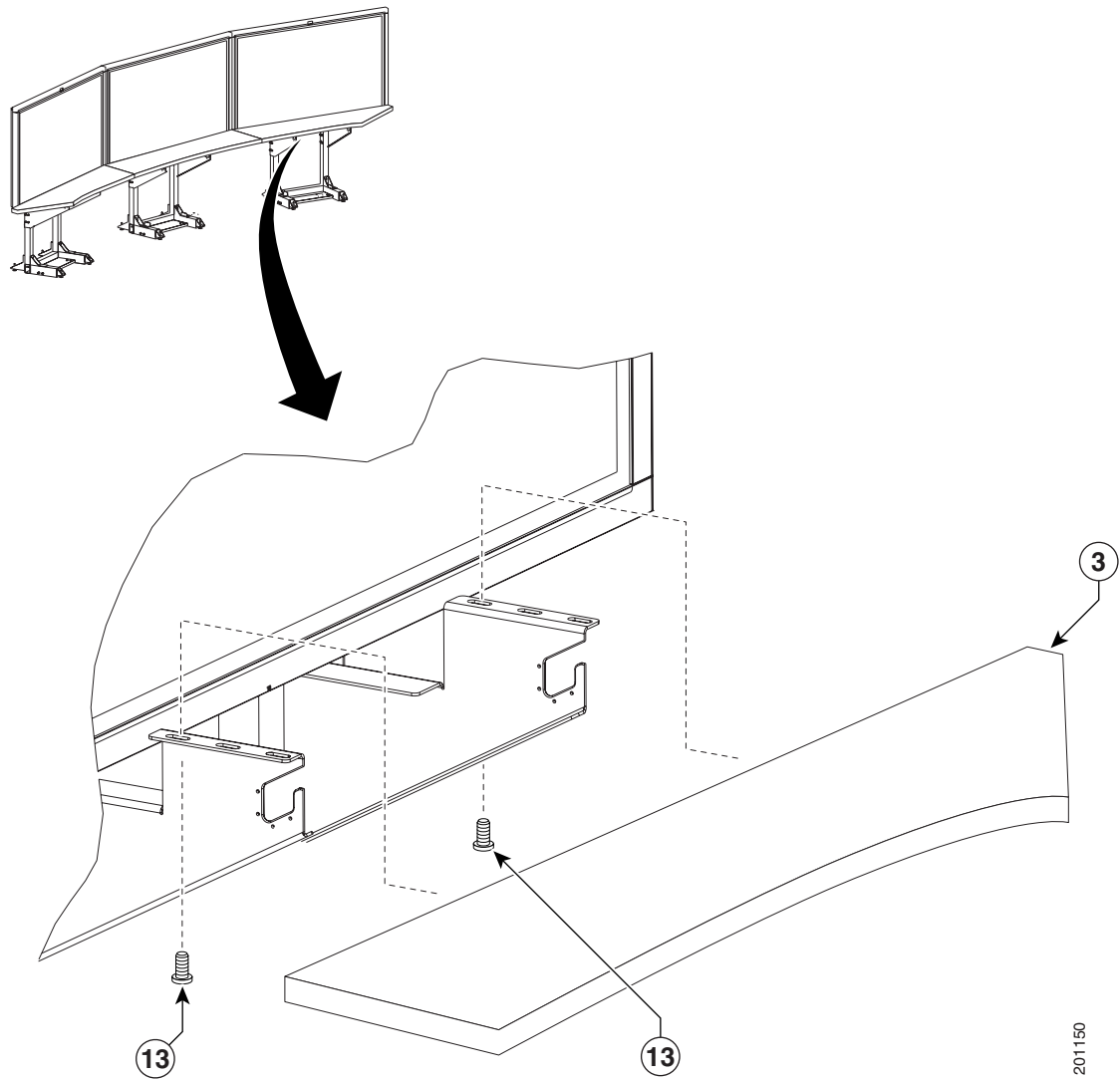
201149

**Note**

Refer to [Figure 5-1](#) to see the hardware used to attach the center Display shelf to the left Display shelf.

Step 4 Attach the right Display shelf.

Figure 5-4 *Right Display shelf*



201150

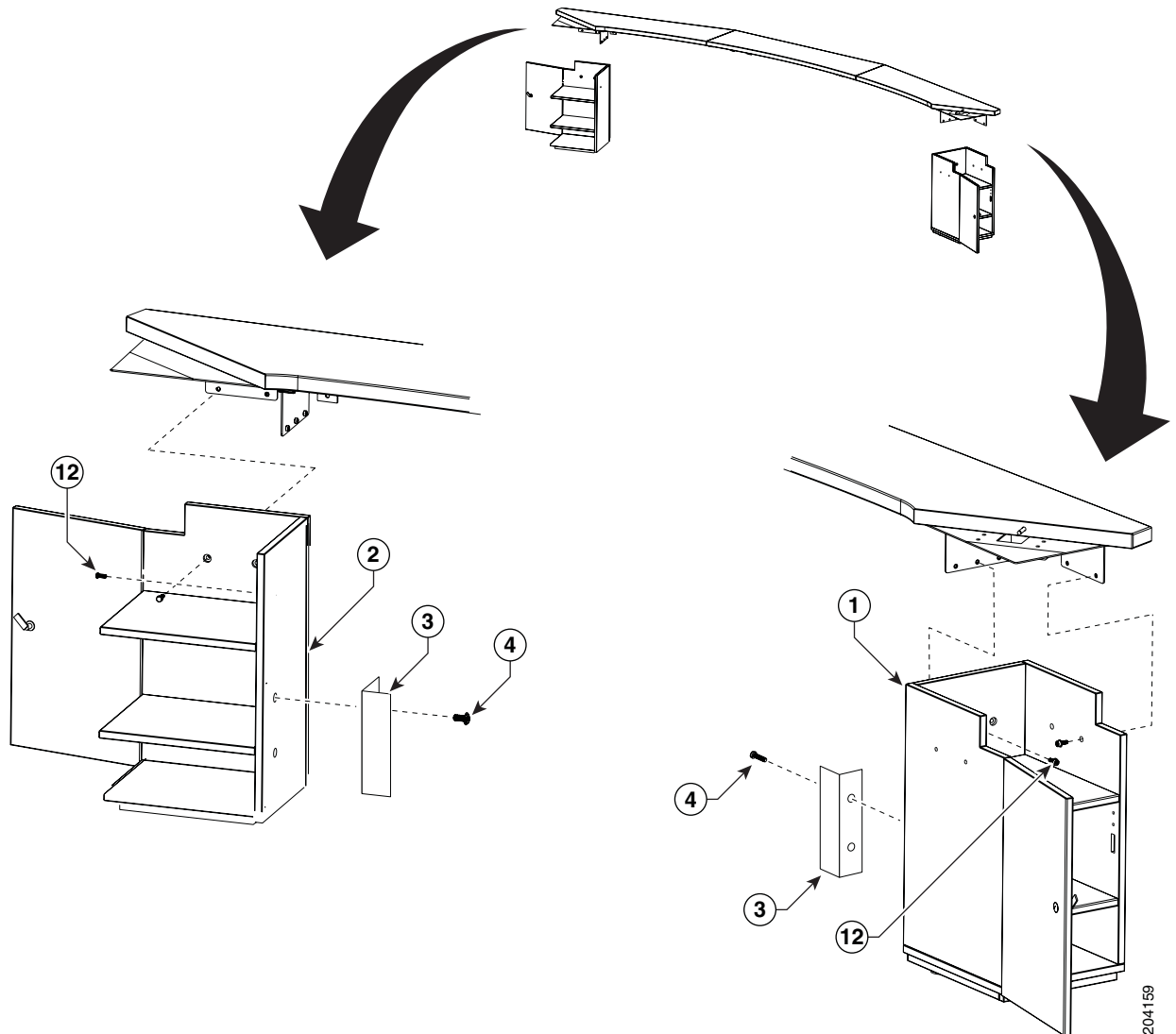
**Note**

Refer to [Figure 5-1](#) to see the hardware used to attach the right Display shelf to the center Display shelf.

Step 5 Attach the screen supports to the accessory cabinets and position, but do not attach, the cabinets to the left and right attachment brackets

These screen supports are only required if you use a Type 1 projector screen, part number 800-28681-01. If your installation uses the projector screen with a product ID of CTS3K-SCREEN and a part number of 74-5416-01, do not install these brackets.

Figure 5-5 Accessory Cabinet



Note

One wall of the left Accessory cabinet was removed from this illustration for clarity.



Note

Before you attach the Accessory cabinets to the brackets, use them as supports while assembling the table segments in [Chapter 6, “Building the First Row Table Assembly.”](#)



CHAPTER 4

Building the Lighting Assembly

Revised: July 28, 2008, OL-14521-01

Parts List

Key	Part Description	Part Number	Qty	Ctn	Notes
1	Lighting support brackets	700-23749-xx	6	49	
2	Support struts	700-23752-xx	6	49	
3	End structure brackets	700-23750-xx	4	49	
4	Plastic diffuser panel: center	700-23745-xx	1	49	
5	Plastic diffuser panel: ends	700-23746-xx	2	49	
6	Plastic diffuser panel: top right	700-23747-xx	1	49	
7	Plastic diffuser panel: top left	700-23748-xx	1	49	
8	L-bracket	700-23899-xx	4	49	
9	Metal trim panel: center left	700-24126-xx	1	49	
10	Metal trim panel: top side	700-23897-xx	2	49	
11	Metal trim panel: end	700-23898-xx	2	49	
12	Metal trim panel: center right	700-23896-xx	1	49	
13	Reflector bottom tray: center	700-23826-xx	1	49	
14	Reflector bottom tray: left side top	700-23827-02	1	49	
15	Reflector bottom: left end	700-23828-02	1	49	
16	Reflector bottom spacer	700-24152-xx	2	49	
17	Reflector top: center	700-23731-xx	1	49	
18	Reflector top: top side	700-23734-xx	2	49	
19	Reflector top: end	700-23735-xx	2	49	
20	Reflector transition piece: left	700-23756-xx	1	49	
21	Reflector transition piece: right	700-23757-xx	1	49	
22	Reflector transition piece: corner	700-23758-xx	2	49	

Parts List

Key	Part Description	Part Number	Qty	Ctn	Notes
23	Light “cup” bracket	700-23737-xx	2	43	
24	5-foot center light fixture	74-4921-xx Kit # 95-8932-xx	3	31	See “ Appendix B: Region- and Country-Specific Equipment ” for Europe- and Japan-specific lighting fixtures.
25	4-foot side light fixture	74-5362-xx Kit # 95-8932-xx	2	30, 31	See “ Appendix B: Region- and Country-Specific Equipment ” for Europe- and Japan-specific lighting fixtures.
26	M8 x 70 mm screws	48-2274-xx	10	1	
27	M8 x 16 mm pan head screw, white	48-2432-xx		1	
28	M8 x 20 mm flat head screw, white	48-2433-xx	10	49	
29	Diffuser Panel braces / H-clips	700-25050-xx	2	49	
30	Compliance sticker for plasma display	47-21525-xx	1	1	
31	M8 x 16 mm pan head screw, black	48-2430-xx	2	1	
32	Reflector bottom tray: right side top	700-27762-xx	1	49	
33	Reflector bottom: right end	700-27763-xx	1	49	
	Touch-up paint, white	74-5247-xx	1	1	Use this paint on the light reflectors to fix any minor cosmetic issues caused by shipping and handling.

**Warning**

Only trained and qualified personnel should be allowed to install, replace, or service this equipment.

**Caution**

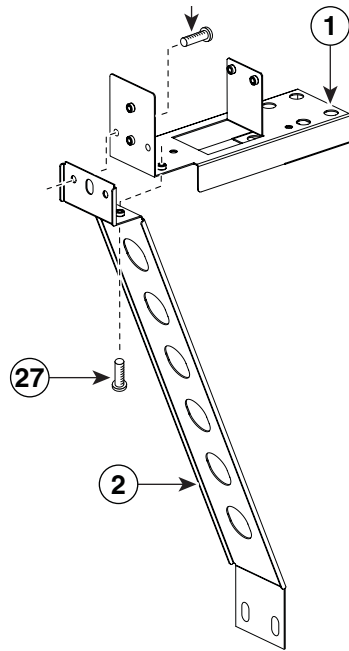
Metal and plastic edges can be sharp. Cisco recommends you wear safety gloves and safety glasses when attaching the lighting assembly.

**Note**

The directions *left* and *right* refer to the assembly as you face the Plasma displays.

Step 1 Assemble the six Support struts and six Lighting Support brackets.

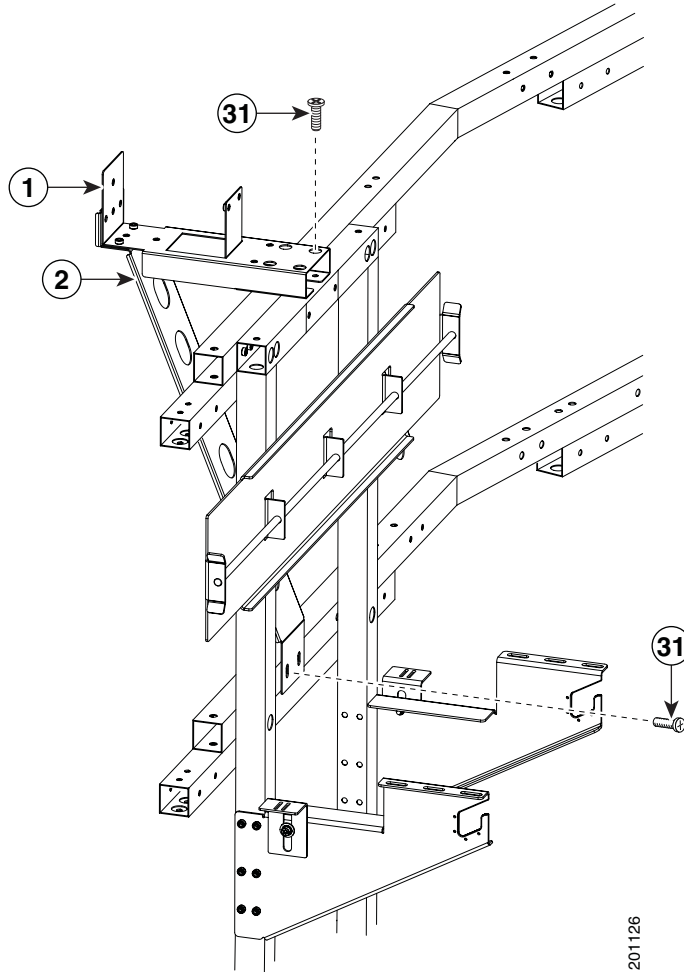
Figure 4-1 Support struts and Lighting Support brackets



201125

- Step 2** Attach the left and right outer Support brackets (from [Figure 4-1](#)) to the horizontal bar on the left and right Display structures.

Figure 4-2 Left and Right outer Support brackets (from [Figure 4-1](#))

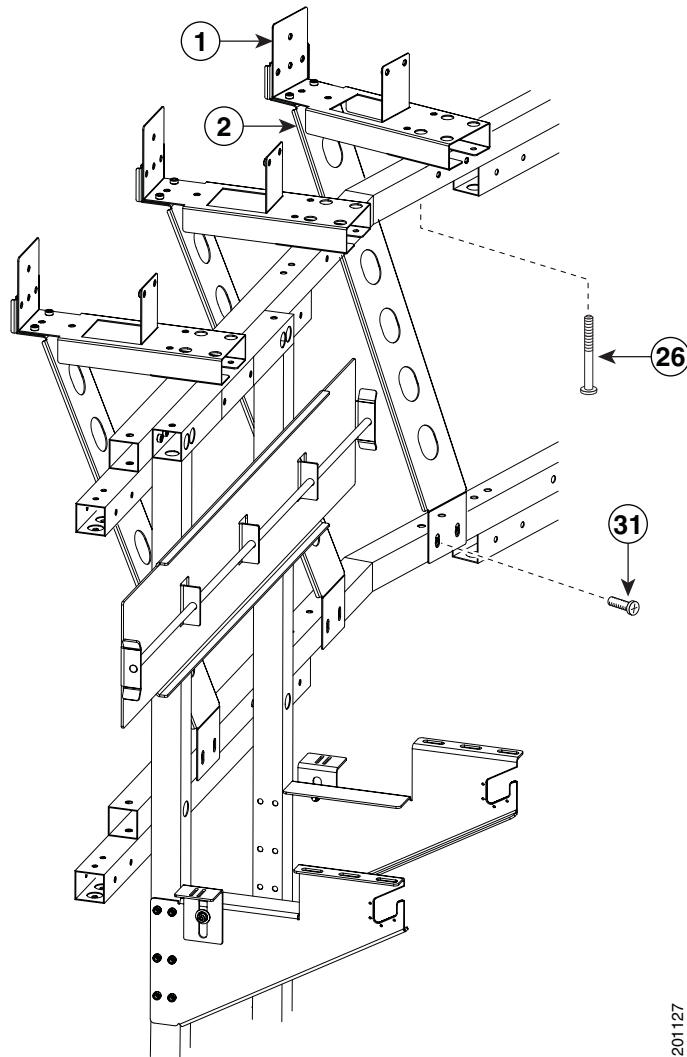


Note

Use any of the six brackets that you assembled in [Step 1](#). There is no physical difference between the outer and inner Support brackets in [Figure 4-1](#).

Step 3 Attach the four inner Support brackets to the Support crossbars.

Figure 4-3 Four inner Support brackets (from [Figure 4-1](#))

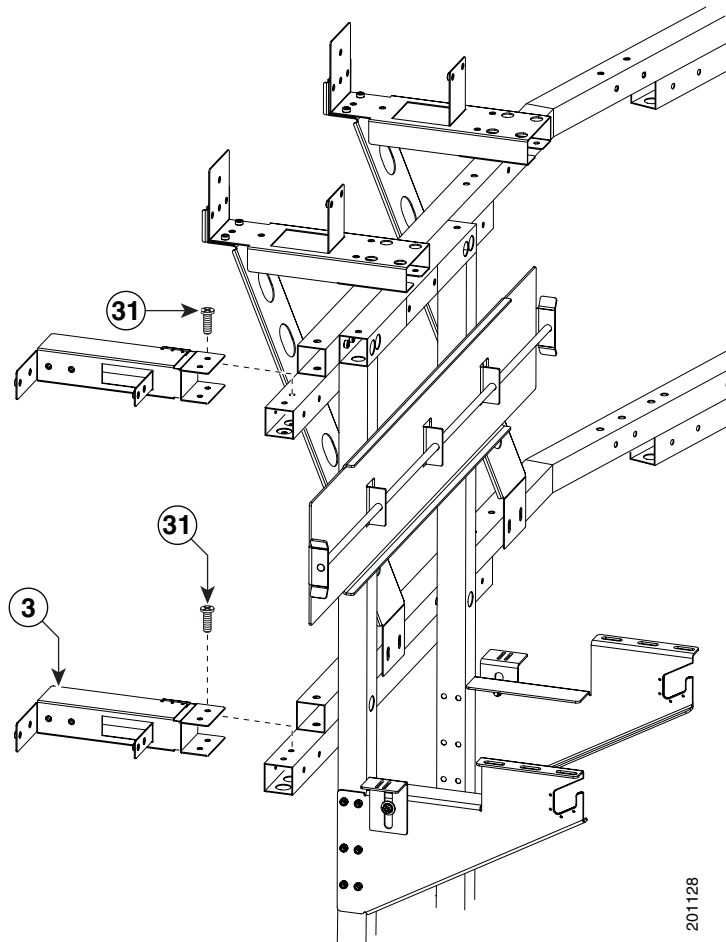


Note

Use any of the six brackets that you assembled in [Step 1](#). There is no physical difference between the outer and inner Support brackets in [Figure 4-1](#).

Step 4 Attach the four End structure brackets to the ends of the Support crossbars.

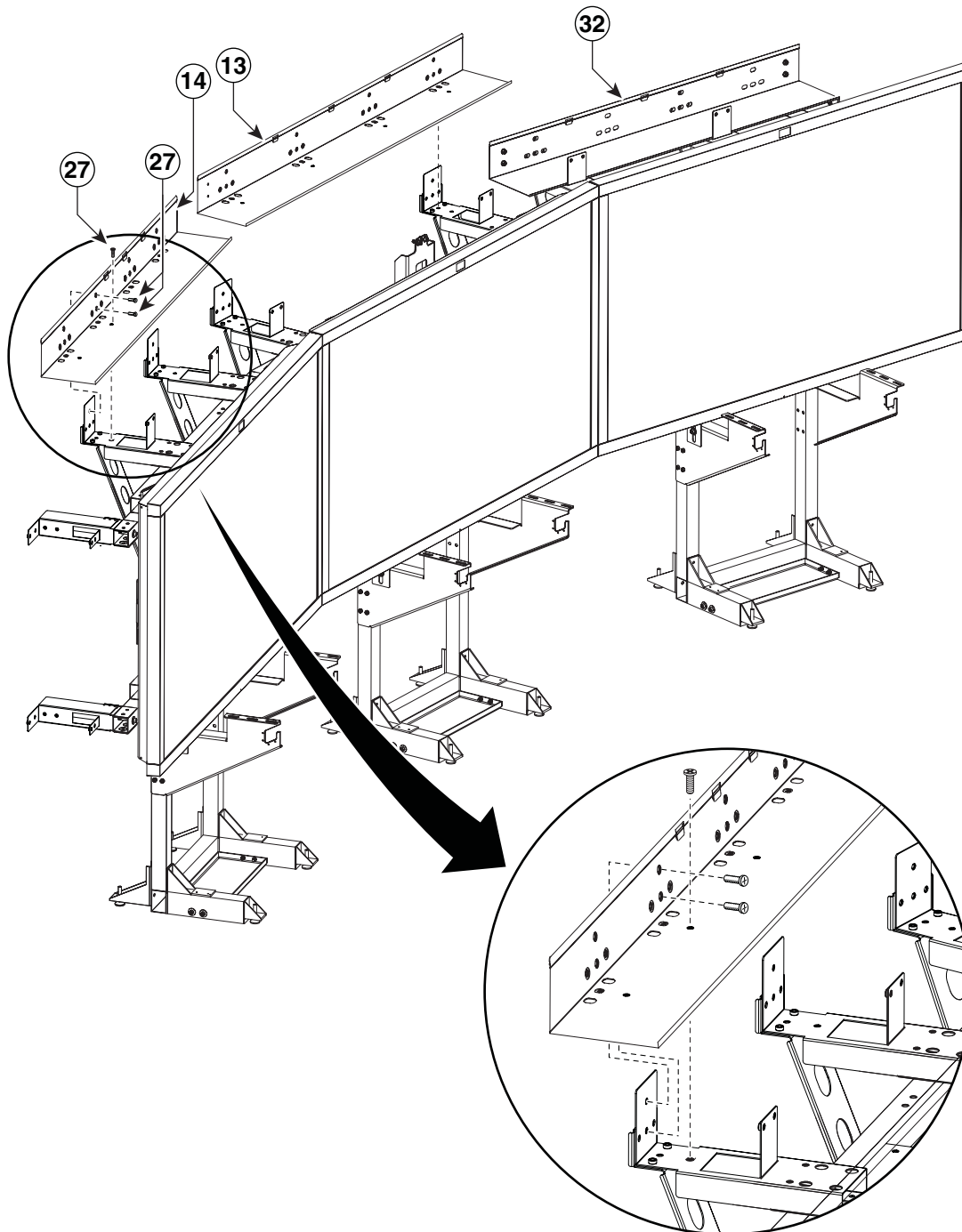
Figure 4-4 *Four End structure brackets*



201128

Step 5 Attach the three Reflector bottom trays to the Support brackets.

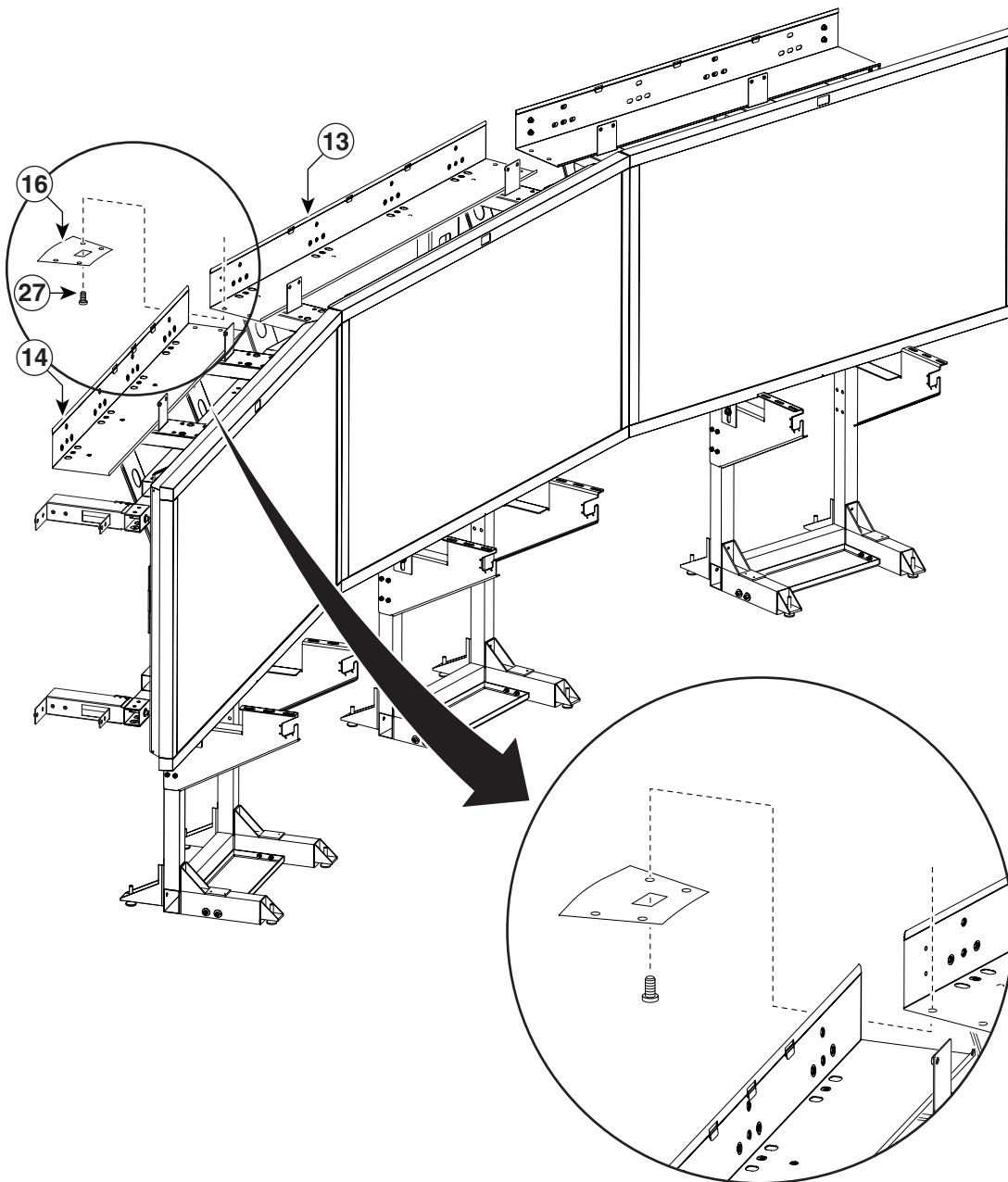
Figure 4-5 Three Reflector bottom trays



201129

Step 6 Attach the two Reflector bottom spacers to join the three Reflector bottom trays.

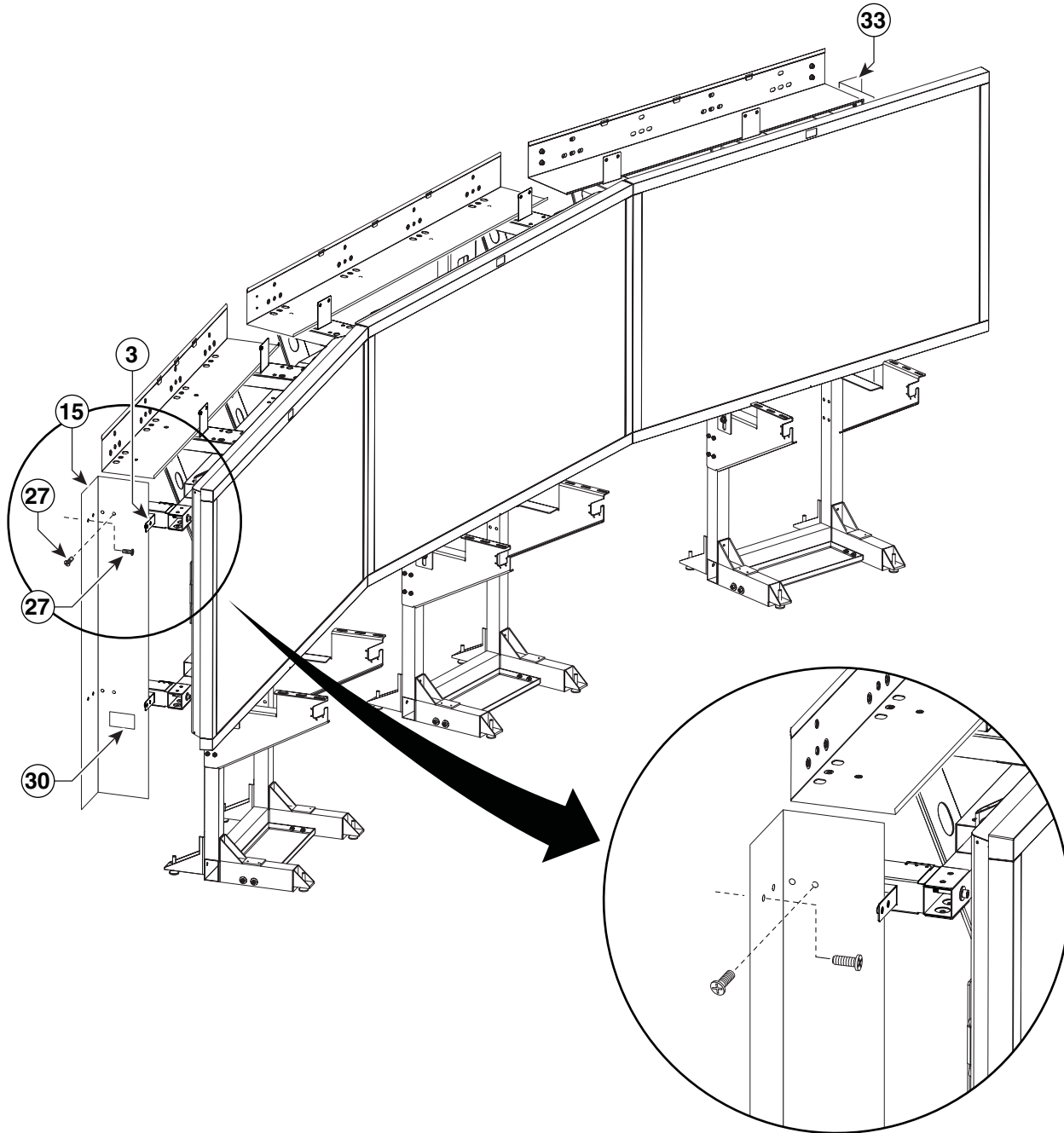
Figure 4-6 Two Reflector bottom spacers



201130

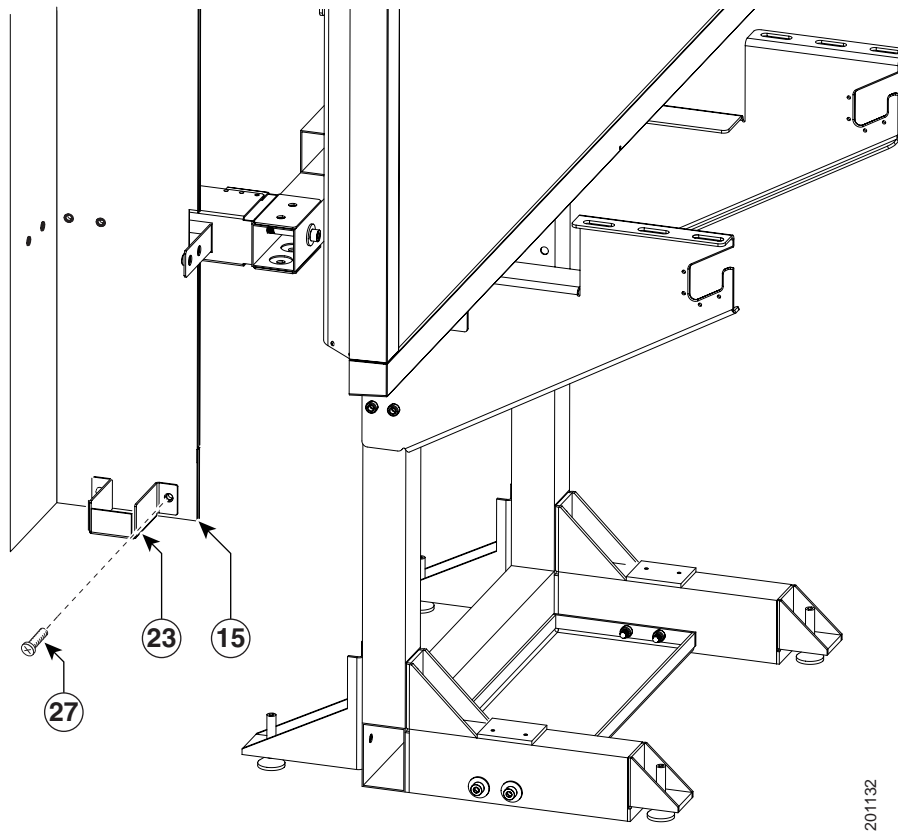
- Step 7** Attach the left and right (vertical) Reflector Bottom ends to the End Structure brackets and attach the compliance sticker to the left reflector bottom end.

Figure 4-7 Left and Right (vertical) Reflector Bottom ends



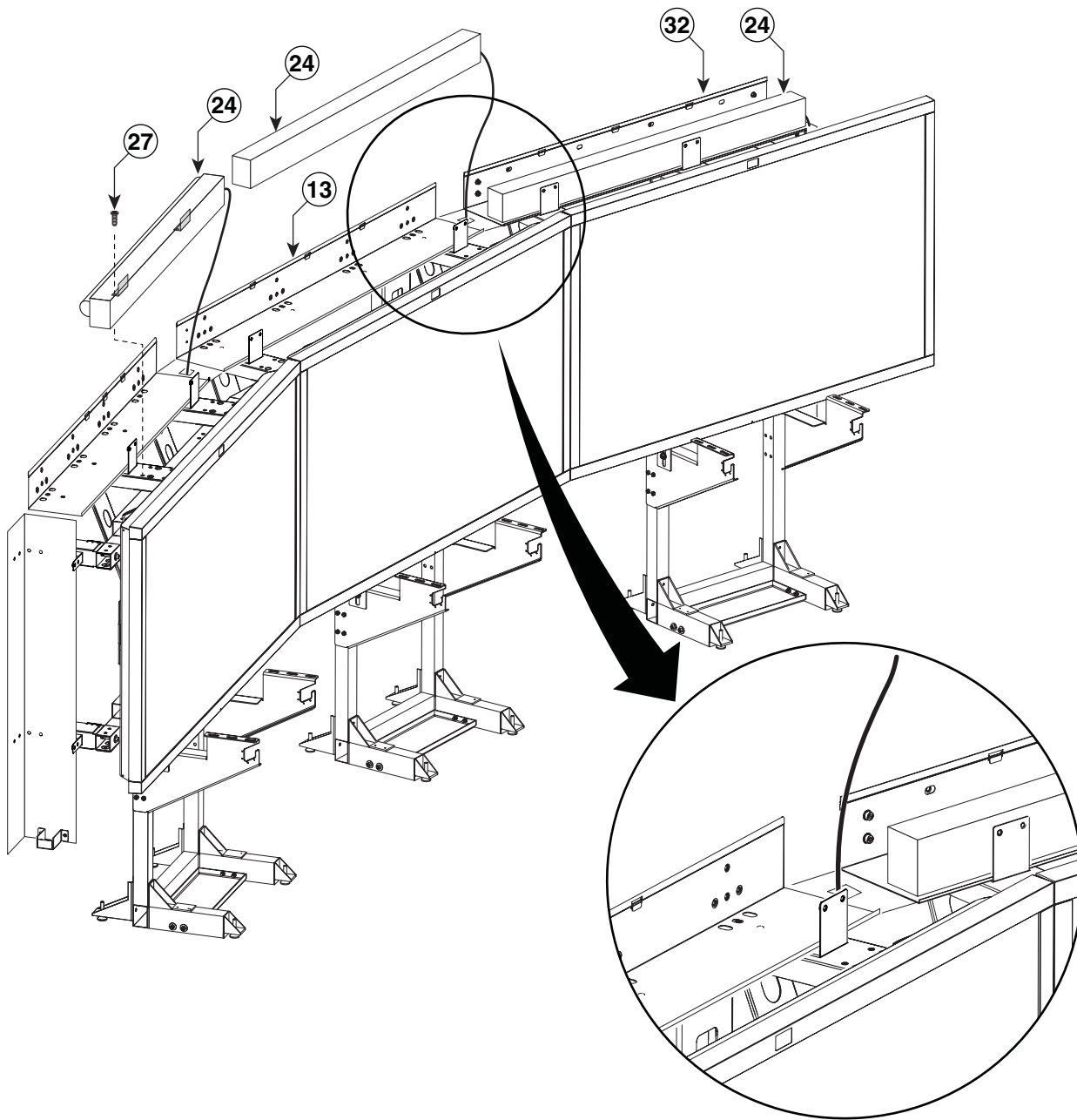
Step 8 Attach the Light Cup bracket to the left and right (vertical) Reflector Bottom ends.

Figure 4-8 *Light Cup bracket*



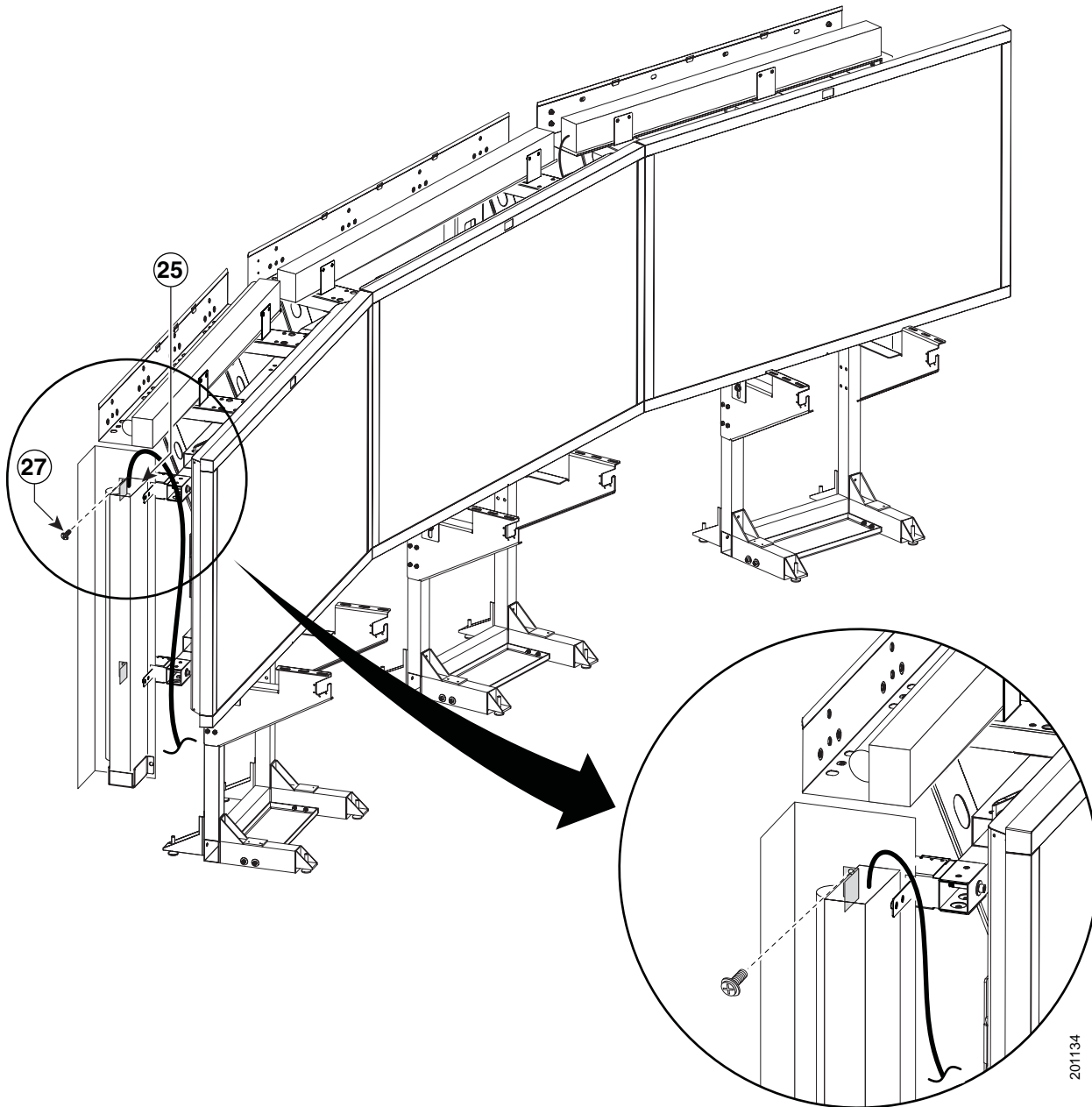
Step 9 Attach the three 5-foot Light fixtures inside the Reflector bottoms.

Figure 4-9 Three 5-foot Light fixtures



Step 10 Attach the left and right 4-foot Side Light fixtures to the left and right (vertical) Reflector Bottom ends.

Figure 4-10 Left and Right 4-foot Side Light fixtures

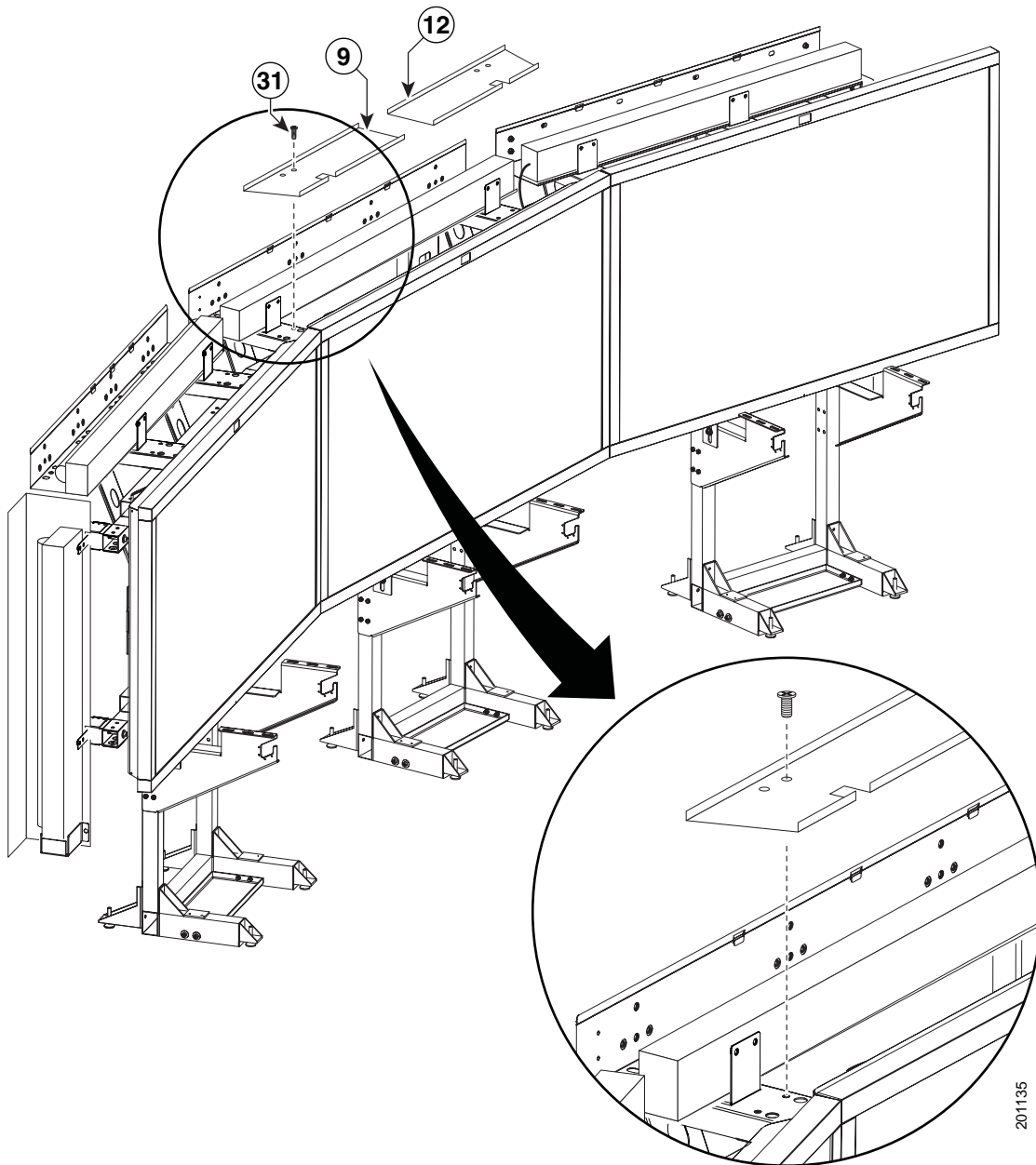


Note

The power cords for the Side Light fixtures should extend from the top through the Light Cup bracket (Figure 4-8).

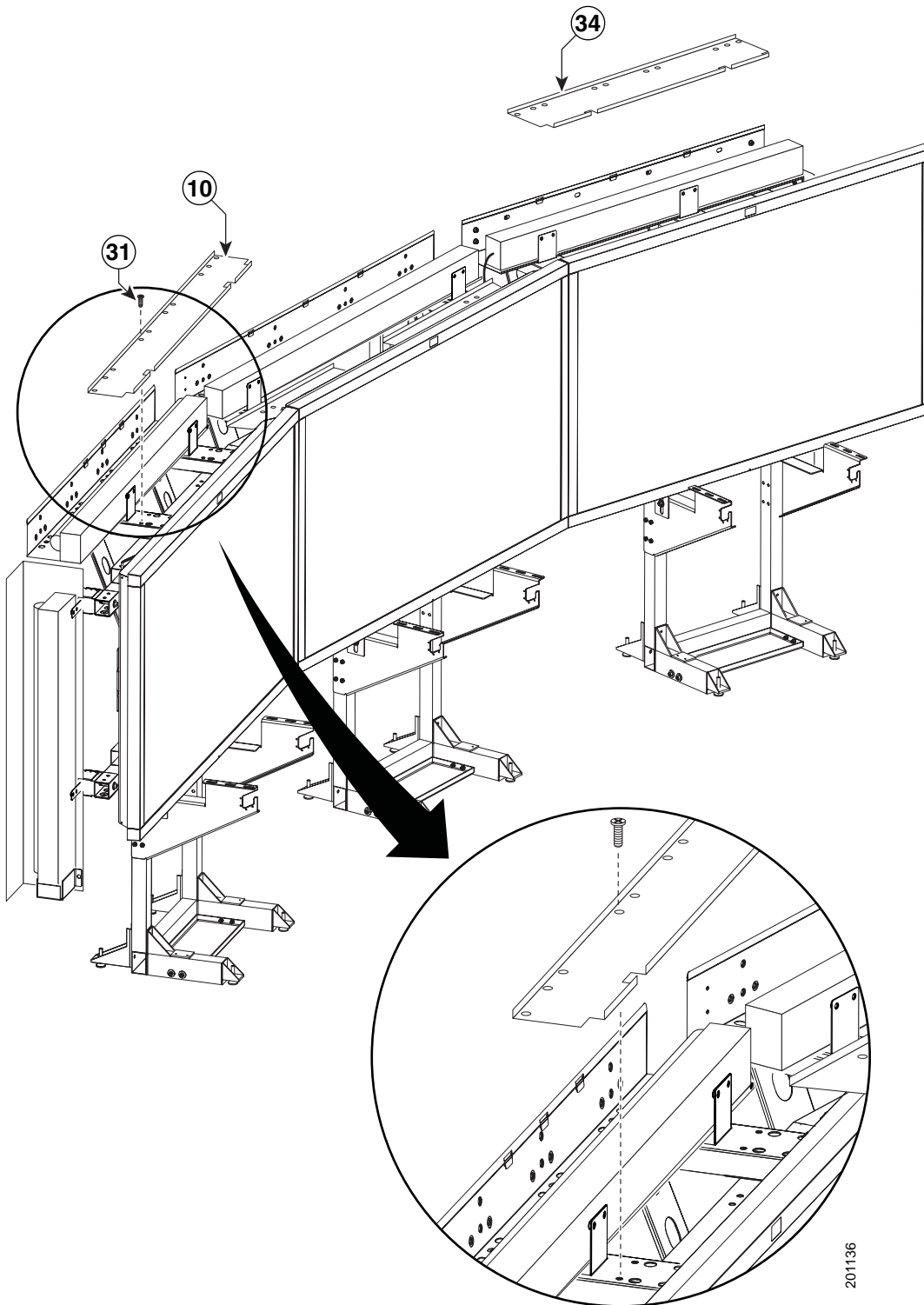
Step 11 Attach the two center Metal Trim panels.

Figure 4-11 Two center Metal Trim panels



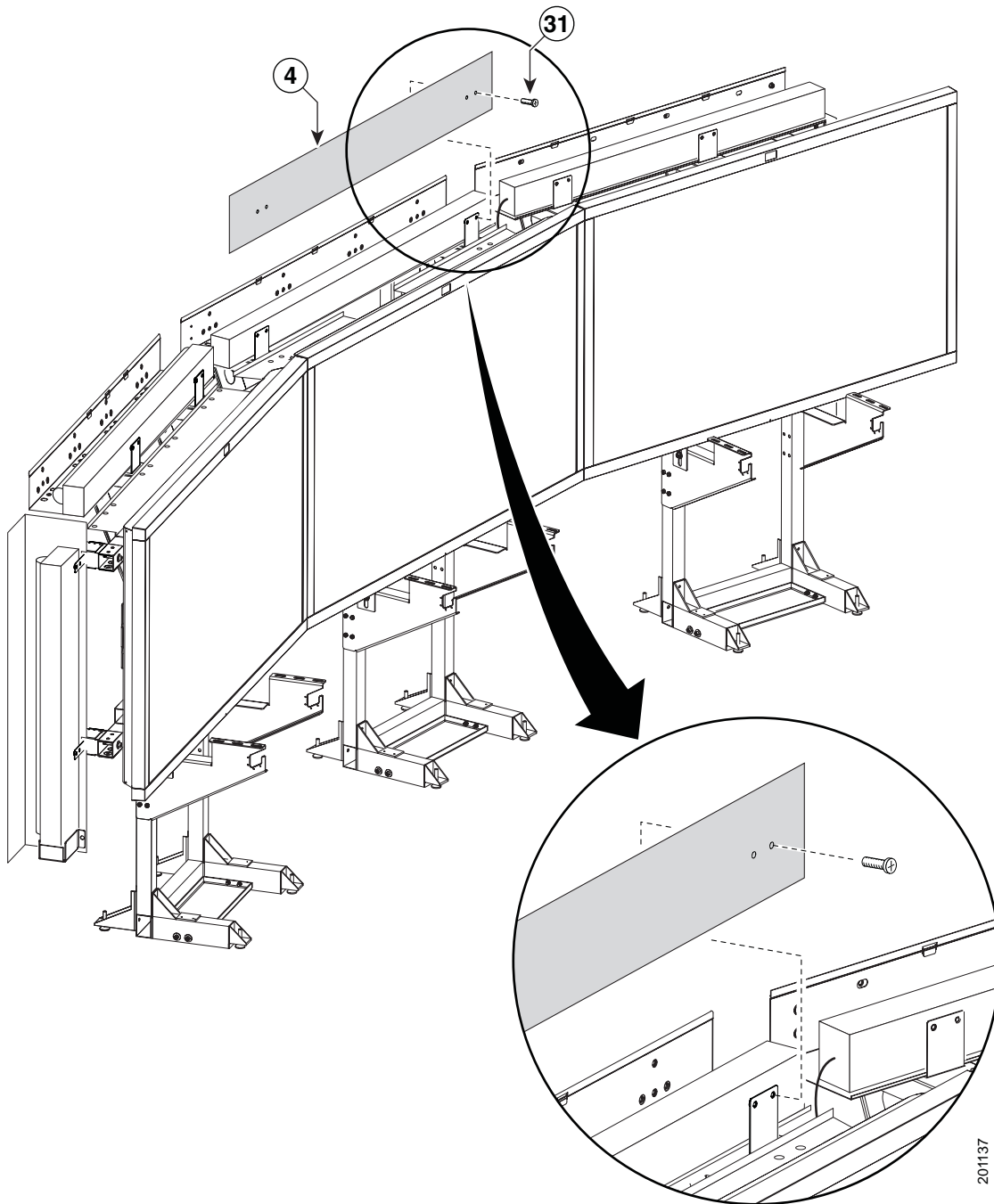
Step 12 Attach the two side Metal Trim panels.

Figure 4-12 Two side Metal Trim panels



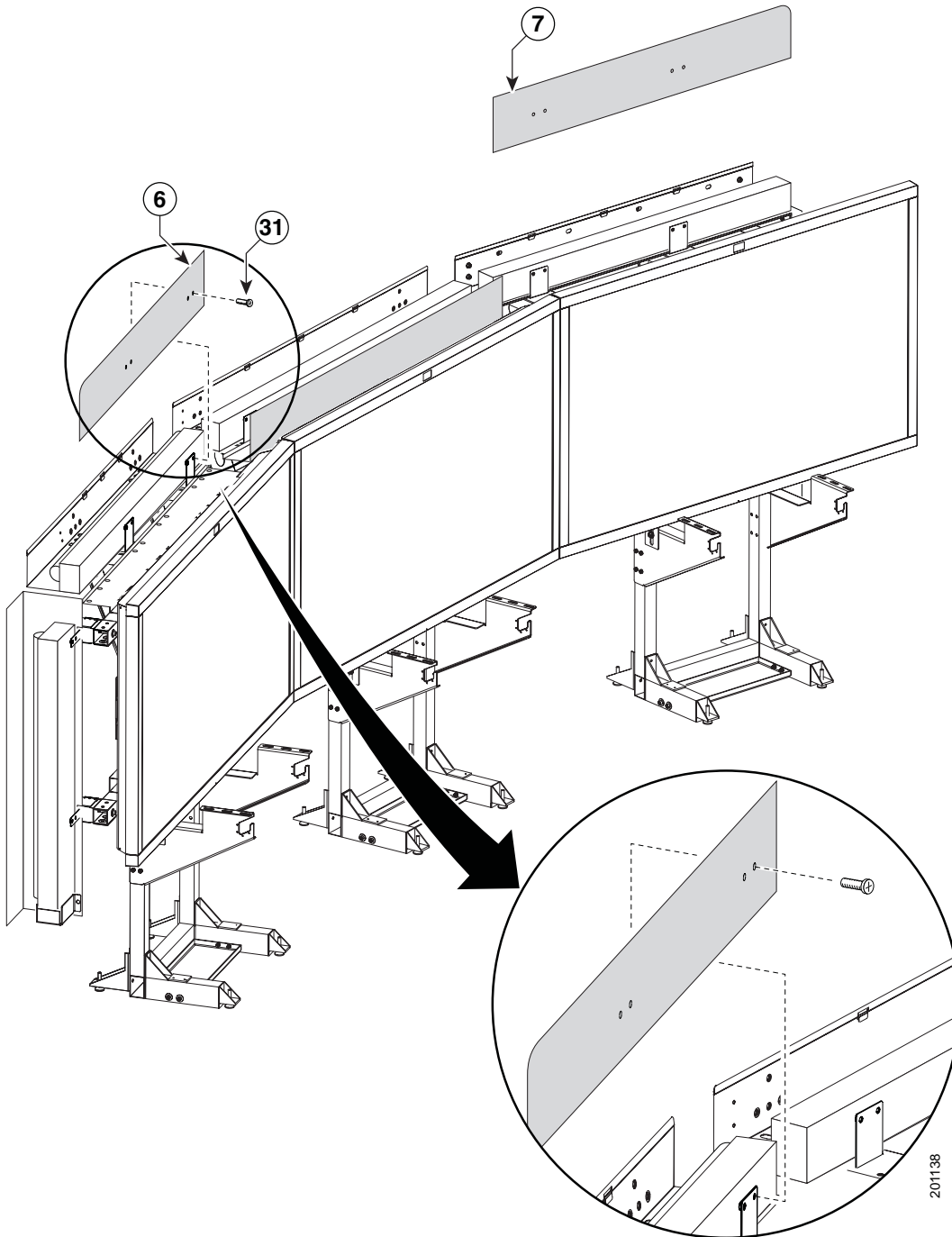
Step 13 Attach the center Plastic Diffuser panel.

Figure 4-13 Center Plastic Diffuser panel



- Step 14** Attach the left and right plastic diffuser panels. Before fully tightening the screws, adjust the panels to the left or right to ensure that the spacing between the diffuser panels are even.

Figure 4-14 Left and Right Plastic Diffuser panels

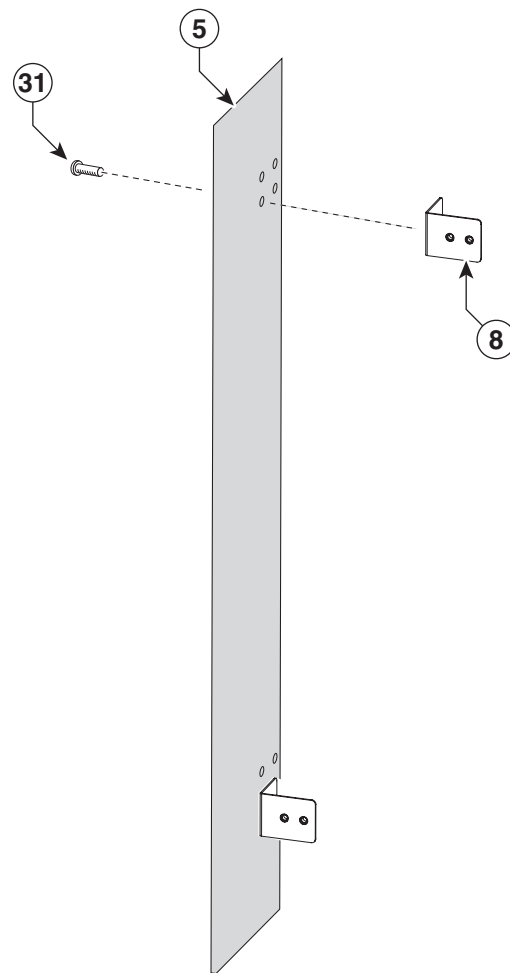


Note

The rounded corners of the left and right plastic diffuser panels point outward.

Step 15 Attach the four L-brackets to the two (vertical) end Plastic Diffuser panels.

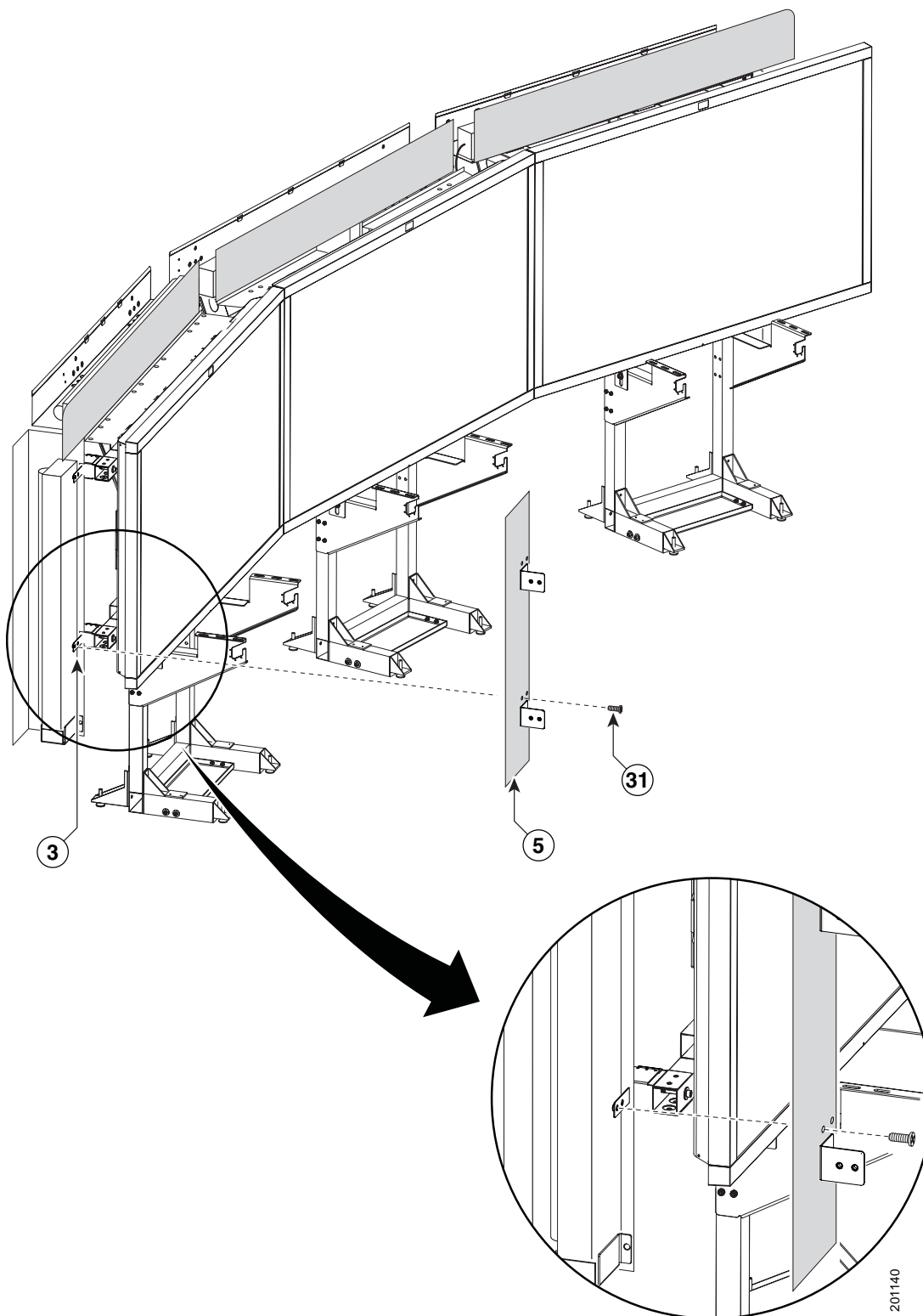
Figure 4-15 Four L-brackets



201139

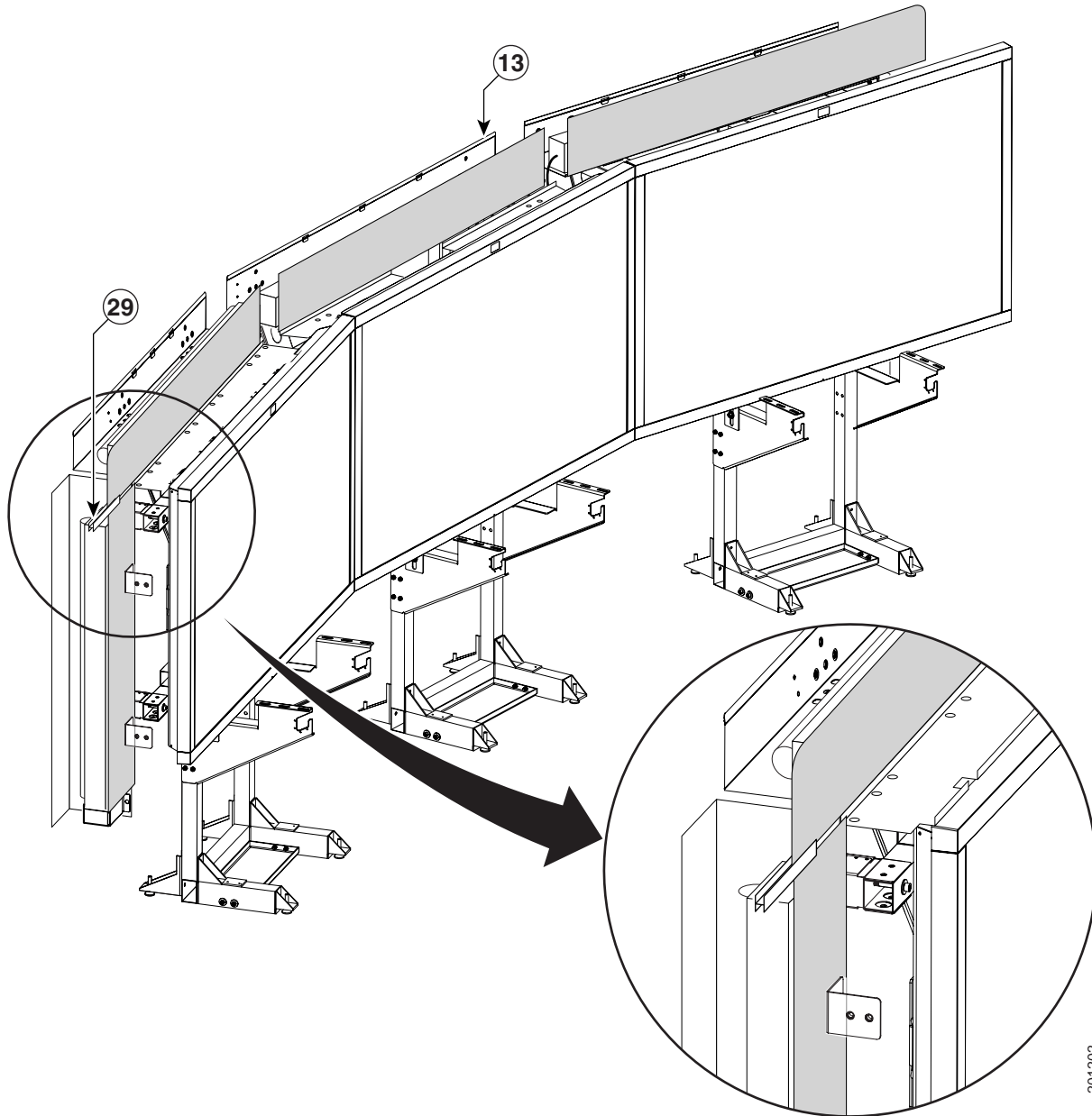
Step 16 Attach the two (vertical) Plastic Diffuser panels to the End Structure brackets.

Figure 4-16 Two (vertical) Plastic Diffuser panels



- Step 17** Slide the Plastic Diffuser Panel brace between the end (vertical) Plastic Diffuser panel and the left and right Plastic Diffuser panels.

Figure 4-17 Plastic Diffuser Panel brace



201202

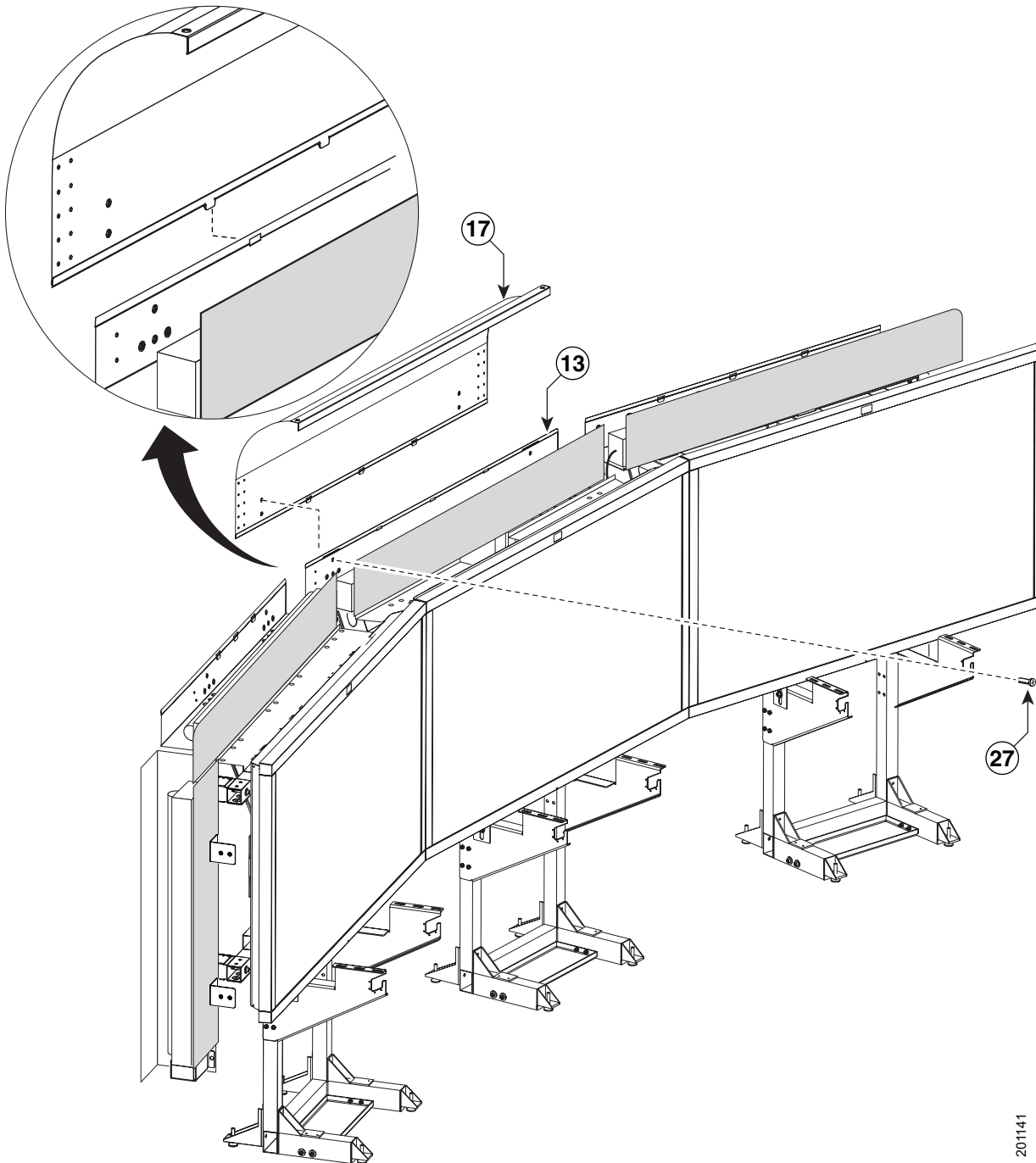


Note

If a diffuser becomes scratched, use a black felt-tip permanent marker to cover the imperfection.

Step 18 Attach the center Reflector top to the center Reflector bottom.

Figure 4-18 Center Reflector top



201141

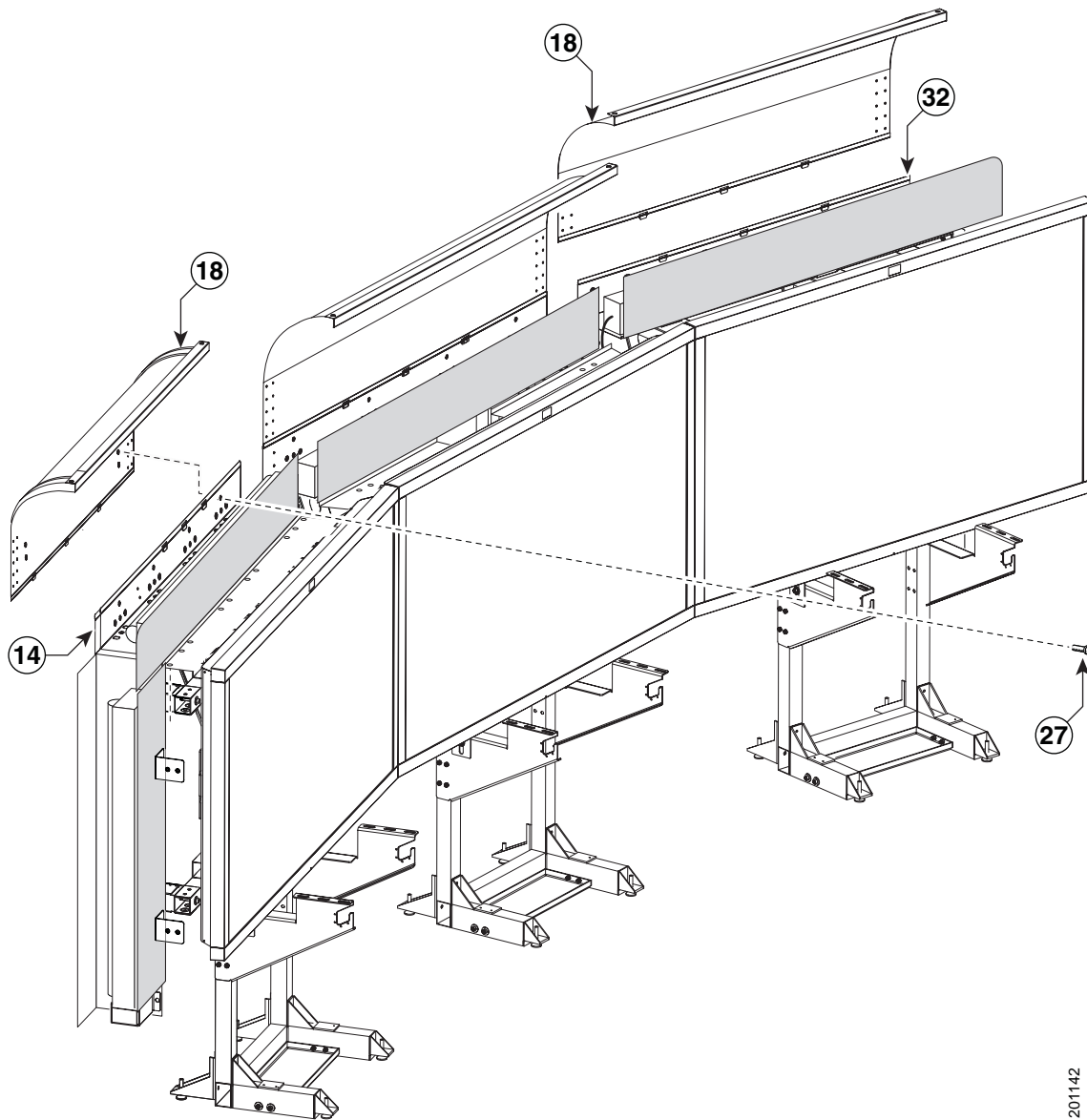


Note

Do not tighten screws until completing [Step 22](#).

Step 19 Attach the left and right Reflector tops to the left and right Reflector bottoms.

Figure 4-19 Left and Right Reflector tops



201142

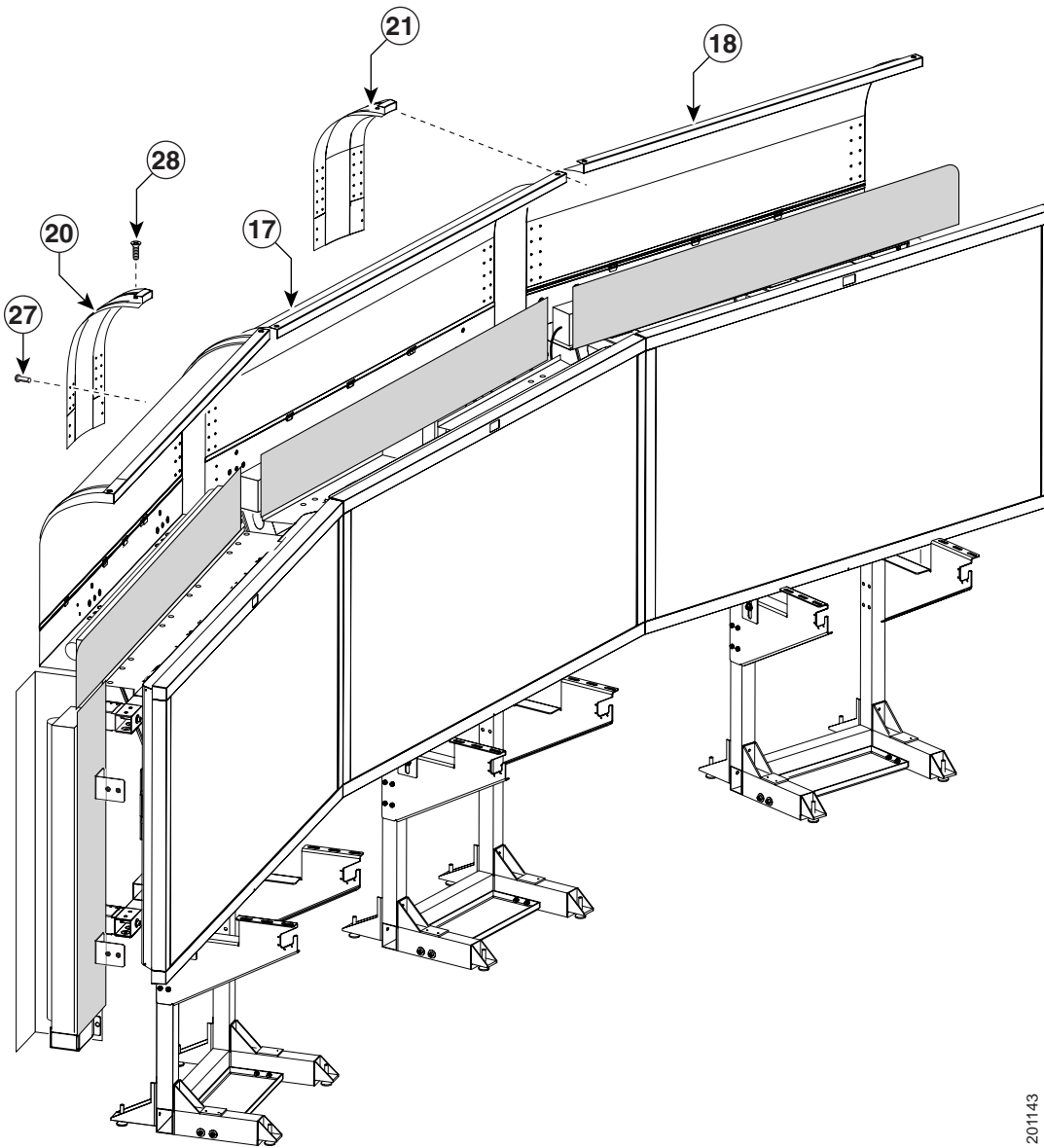


Note

Do not tighten screws until completing [Step 22](#).

Step 20 Join the left, center, and right Reflector tops with the left and right Reflector Transition pieces.

Figure 4-20 Left and Right Reflector Transition pieces



201143

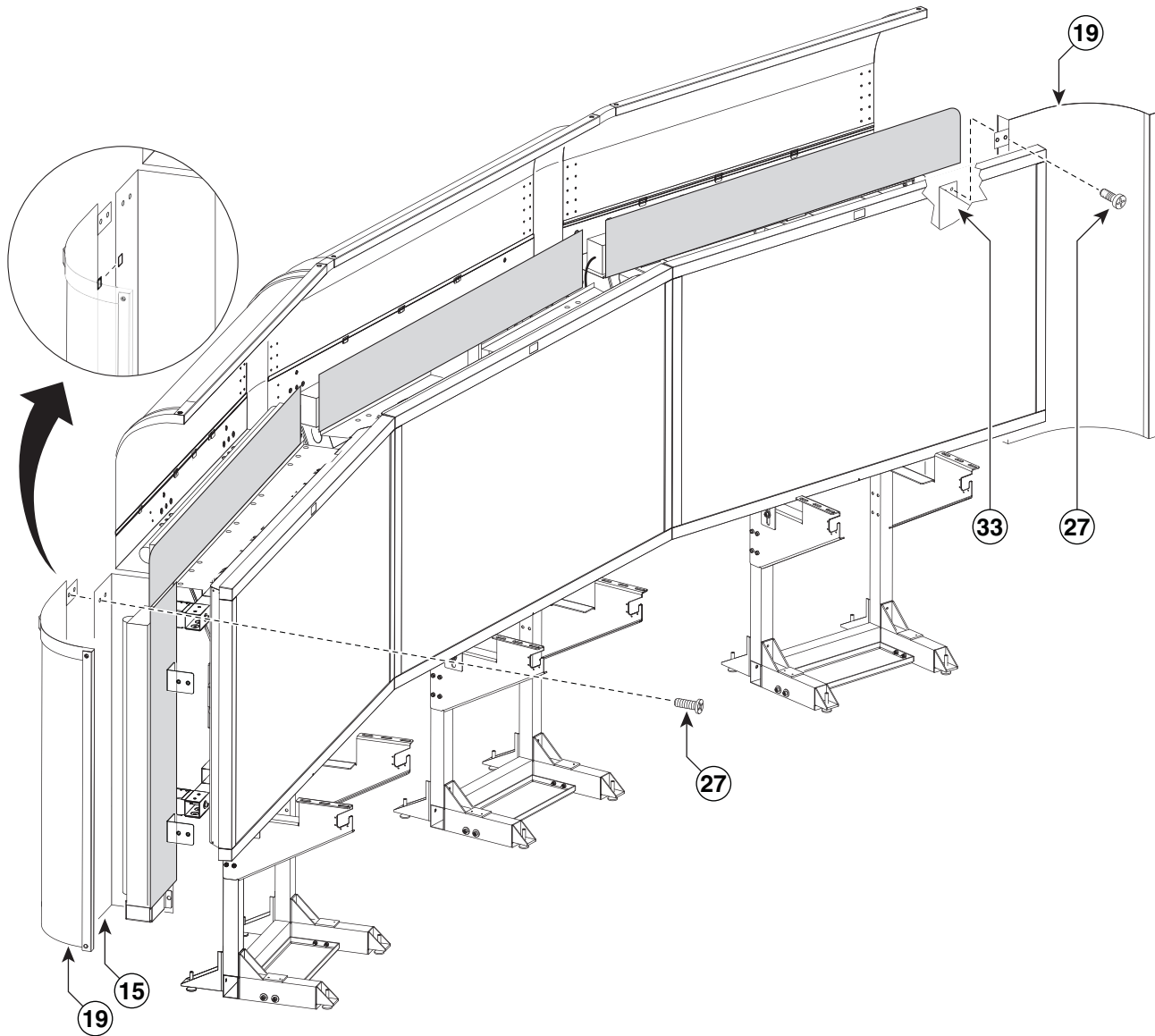


Note

Do not tighten screws until completing [Step 22](#).

Step 21 Attach the left and right (vertical) Reflector ends to the left and right (vertical) Reflector Bottom ends.

Figure 4-21 Left and Right (vertical) Reflector ends



201144

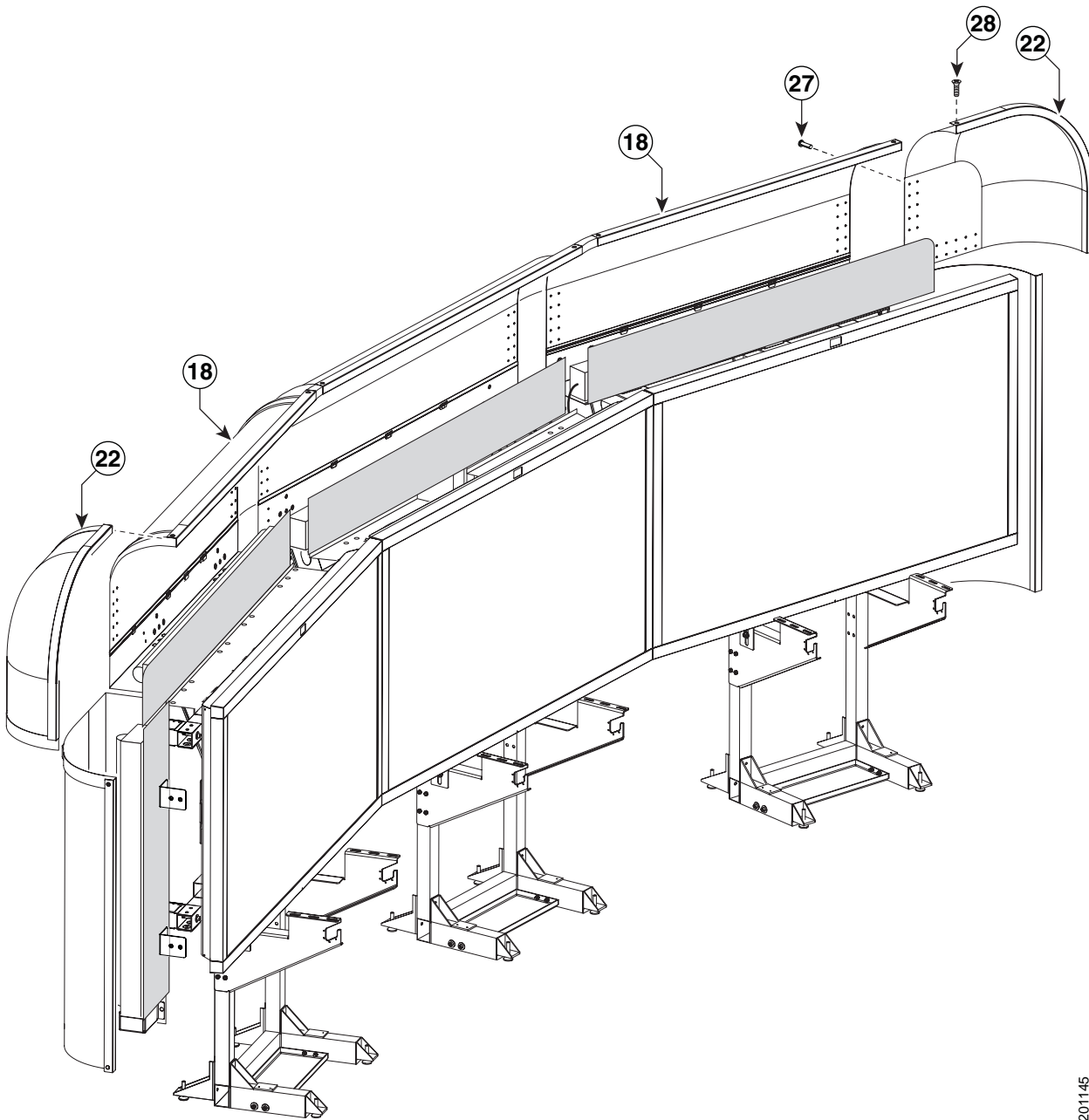


Note

Do not tighten screws until completing [Step 22](#).

Step 22 Attach the left and right corner Reflector Transition pieces to the Reflector tops.

Figure 4-22 Left and Right corner Reflector Transition pieces



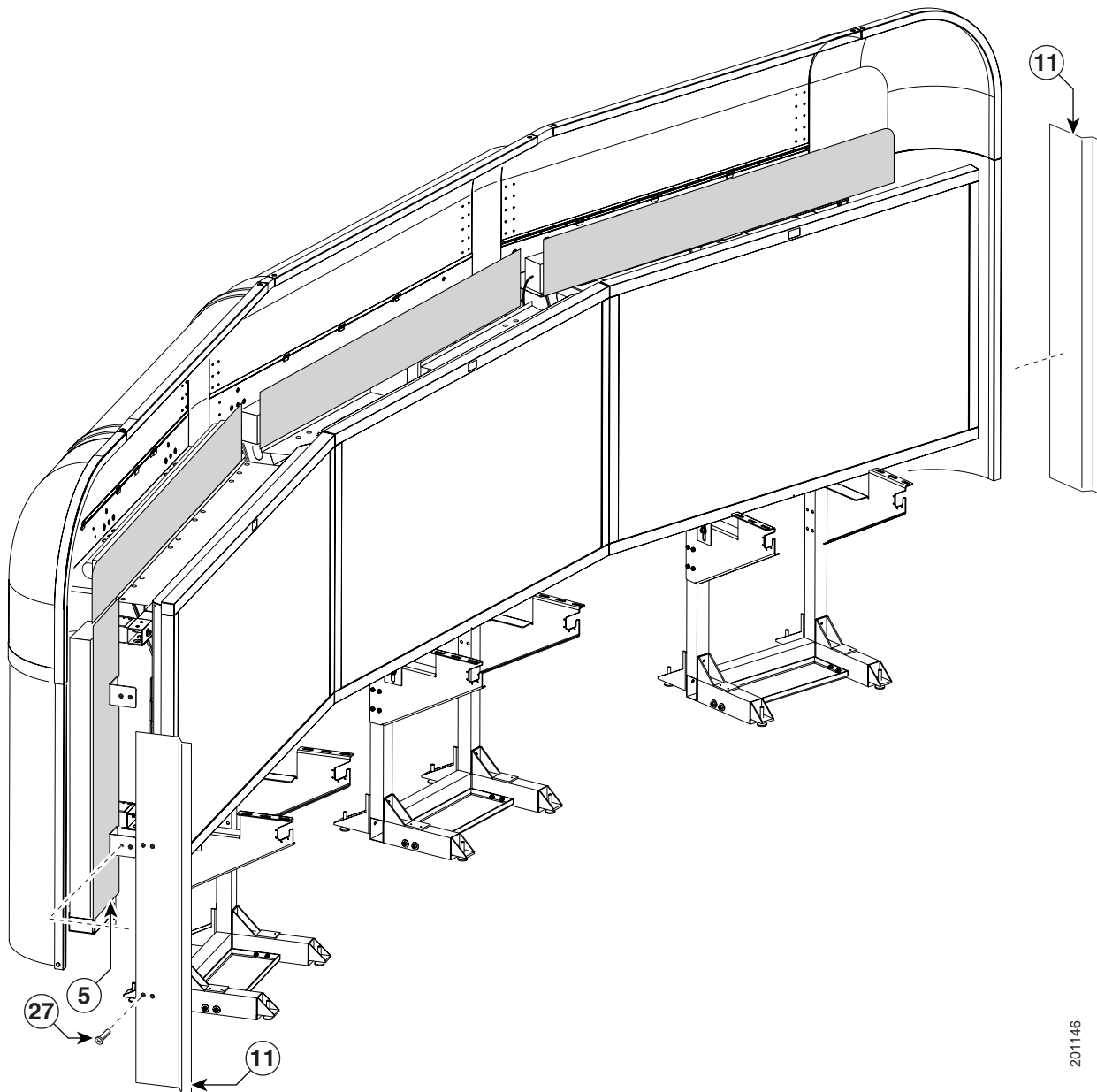
201145

**Note**

Tighten all screws from [Figure 4-18](#) through [Figure 4-22](#). The goal is to ensure the reflector pieces form a “seamless hood” around the lighting assembly.

Step 23 Attach the two Metal Trim panels to the L-brackets attached to the two (vertical) Plastic Diffuser panels.

Figure 4-23 Two Metal Trim panels



Note

Install the codecs before you continue to the next chapter. See [Step 5](#) through [Step 8](#) in [Chapter 8, “Assembling the Remaining Cisco TelePresence Elements”](#) to install the codecs; then see [Chapter 5, “Building the Display Shelf Assembly”](#) to continue the installation.



Note

These Metal Trim panels cover the access opening used to route cables. You may not want to attach these Metal Trim panels until you complete the cable routing in [Chapter 9, “Routing Power and Signal Cables.”](#)

**Tip**

If required, use the white touch-up paint on the light reflectors to fix any minor cosmetic issues caused by assembly, shipping, or handling.



CHAPTER 6

Building the First Row Table Assembly

Revised: July 28, 2008, OL-14521-01

Parts List

Key	Part Description	Part Number	Qty	Ctn	Notes
1	Tabletop leg base	800-28454-xx	3	52-54	
		800-28628-xx (left)	1	52	
2	Metal packaging brace	700-24275-xx	4	41-43, 57	
3	Molded foam bumper	800-28625-xx	4	41-43, 57	
4	Tabletop section: right wing	95-9690-xx Kit # 74-5302-xx	1	58	
5	Tabletop section: Center right	95-9687-xx Kit # 74-5300-xx	1	58	
6	Tabletop section: center	95-9686-xx Kit # 74-5299-xx	1	58	
7	Tabletop section: Center left	95-9689-xx Kit # 74-5301-xx	1	58	
8	Tabletop section: left door	95-9691-xx Kit # 74-5303-xx	1	58	
9	Connecting plate	700-27292-xx	6	50	
10	Draw bolt	No part number	12	1	
11	Left tabletop hinge	51-4539-xx	1	1	
12	Spline	No part number	5	1	
13	“Please close” label	56-15736-xx		1	
14	M8 x 16 mm screws, black	48-2430-xx	30	1	

Key	Part Description	Part Number	Qty	Ctn	Notes
15	M4 x 12 mm flathead screws	48-1641-xx		1	
16	Phillips head wood screws		8	1	Included with Left tabletop hinge.
17	Plate for left side table	Part number to be provided	1		Installs on the side closest to the table door.
18	I/O blank: large	700-23806-xx		1	
19	I/O blank: small	700-23807-xx	6	1	
20	I/O modules: power/Ethernet	74-xxxx-xx	6	1	Part number changes per country. Refer to “Appendix B: Region- and Country-Specific Equipment” for part number.
21	I/O Module Cover plate	700-23305-xx		50-54	
22	10 m Cat6 Ethernet cable	37-0901-xx	6	1	
23	3 m Jumper cord	37-0833-xx	9	1	
24	M4 nuts	49-0326	20	1	
25	M4 x 12 mm screws, black	48-2426-xx Kit # 69-1878-xx	10	1	
26	Microphone	74-4743-xx	3	1	
27	M4 x 30 mm screws			1	Included in Microphone kit.
28	M4 washers			1	Included in Microphone kit.
29	Table hinge safety hinge	To be provided	1		
Privacy Panel Assembly					
1	Privacy panel: Center left	700-23333-xx	1	34	
2	Privacy panel: center	700-23334-xx	1	34	
3	Privacy panel: Center right	700-23332-xx	1	34	
4	Privacy panel: right wing	700-23362-xx	1	14	
5	M8 x 20 mm screws	48-2273-xx		1	

**Caution**

The table segments are unstable during assembly. Use caution, and support all structures as required.

**Warning**

Only trained and qualified personnel should be allowed to install, replace, or service this equipment.

**Caution**

Table elements are heavy, and metal edges can be very sharp. Protect your hands and eyes from injury by wearing safety gloves and glasses.

**Caution**

In order to prevent scratching the Display shelves, you should avoid putting any tools on the shelf surfaces.

**Note**

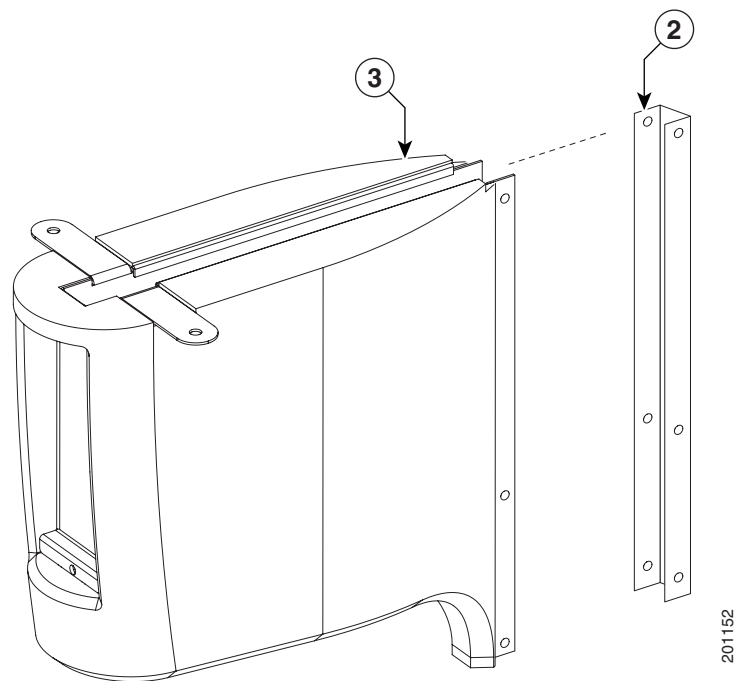
The directions *left* and *right* refer to the assembly as you face it from the front.

**Warning**

Table legs are unstable until they are fully attached to the tabletop. Do not use unattached table legs as tabletop supports while you attach tabletop segments. They can fall and cause injury or damage. Cisco suggests you use the accessory cabinets to support and stabilize the table segments as you install them.

Step 1 Remove the Metal packaging braces from the Molded foam bumpers.

Figure 6-1 Metal packaging braces and their Molded foam bumpers



201152

Step 2 Assemble the four Molded foam bumpers and the four Table leg bases.

Figure 6-2 *Four Molded foam bumpers and the four Table leg bases*

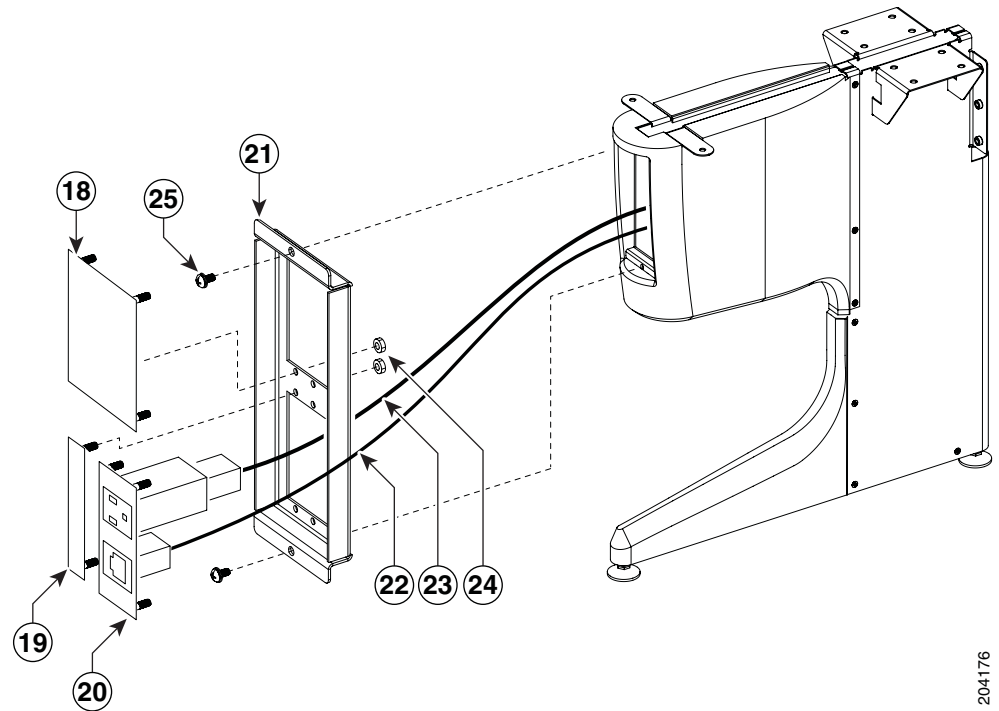


Note

The leg base with only one top right attachment bracket is the left most table leg (see [Figure 6-12](#)). The other three legs each have two attachment brackets.

- Step 3** Assemble the I/O modules for the outside left and outside right molded foam bumpers.
- The outside left and outside right molded foam bumpers only have one I/O module each. The inner molded foam bumpers have two (see [Figure 6-4](#)).

Figure 6-3 Foam Bumper Assembly



204176



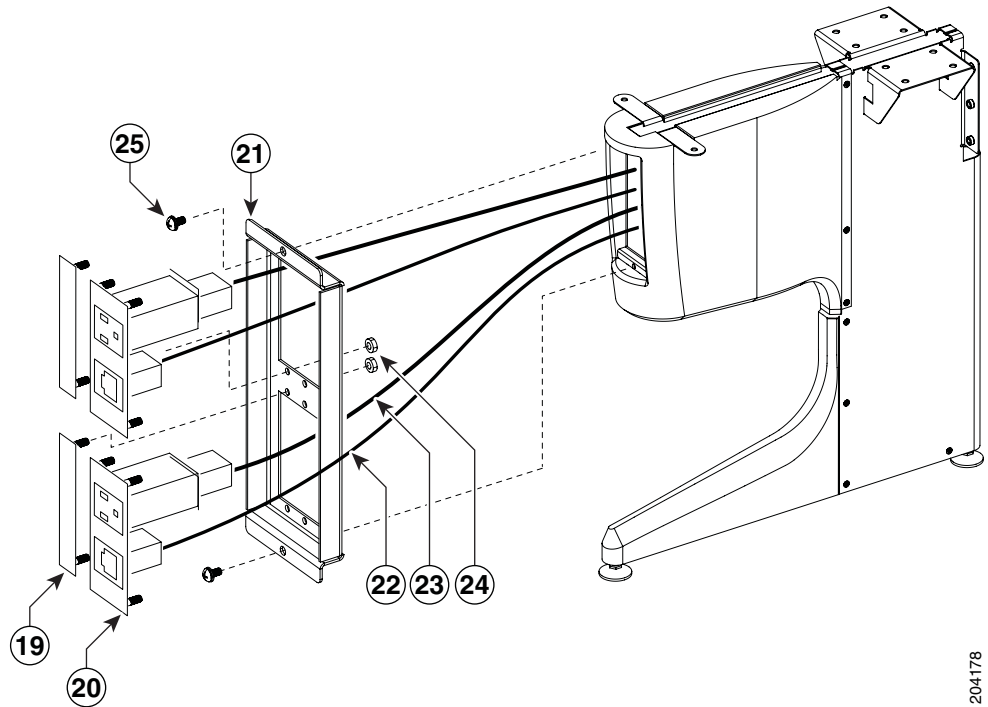
Note Steps for routing the Ethernet and power cables are in [Chapter 9, “Routing Power and Signal Cables.”](#)



Note The flange on the I/O module cover plate is wider on the bottom than on the top.

Step 4 Assemble the I/O modules for the inner molded foam bumpers.

Figure 6-4 *Foam Bumper Assembly*



204178



Note

Steps for routing the Ethernet and power cables are in [Chapter 9, “Routing Power and Signal Cables.”](#)

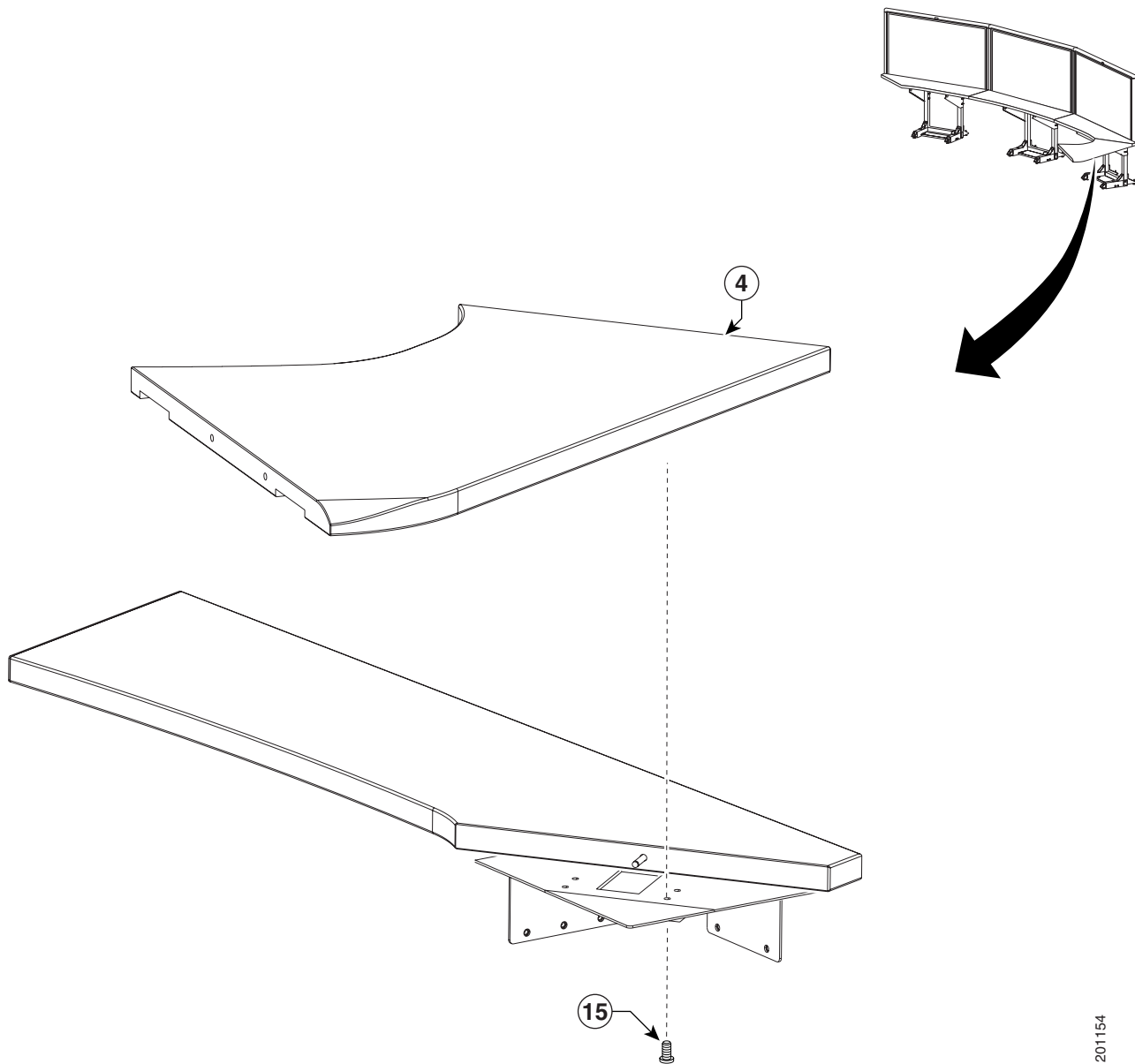


Note

The flange on the I/O module cover plate is wider on the bottom than on the top.

Step 5 Attach the right wing tabletop section to the right Accessory Cabinet bracket.

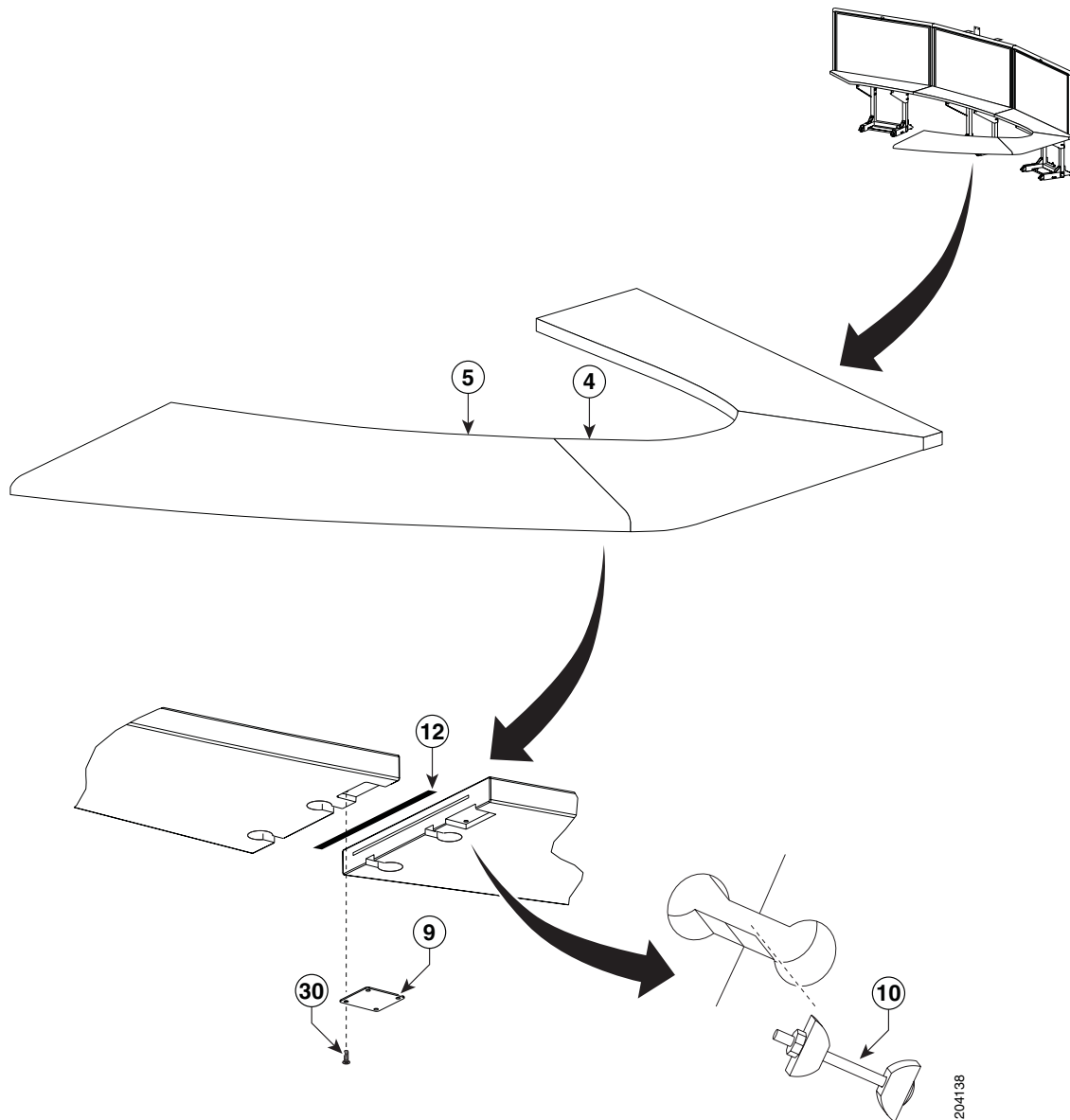
Figure 6-5 *Right Wing Tabletop Section*



Step 6 Attach the right Table segment.

- a. Make sure you tighten the draw bolt evenly on both sides.
- b. While a draw bolt is being tightened, hold the table edges together to avoid damage to the draw bolt or the table segment.
- c. Tighten the draw bolt so the two table segments are connected snugly.
- d. While one person is tightening the draw bolt from below, it is important for the support person to maintain the alignment of the table segment edges.

Figure 6-6 **Right Table segment**

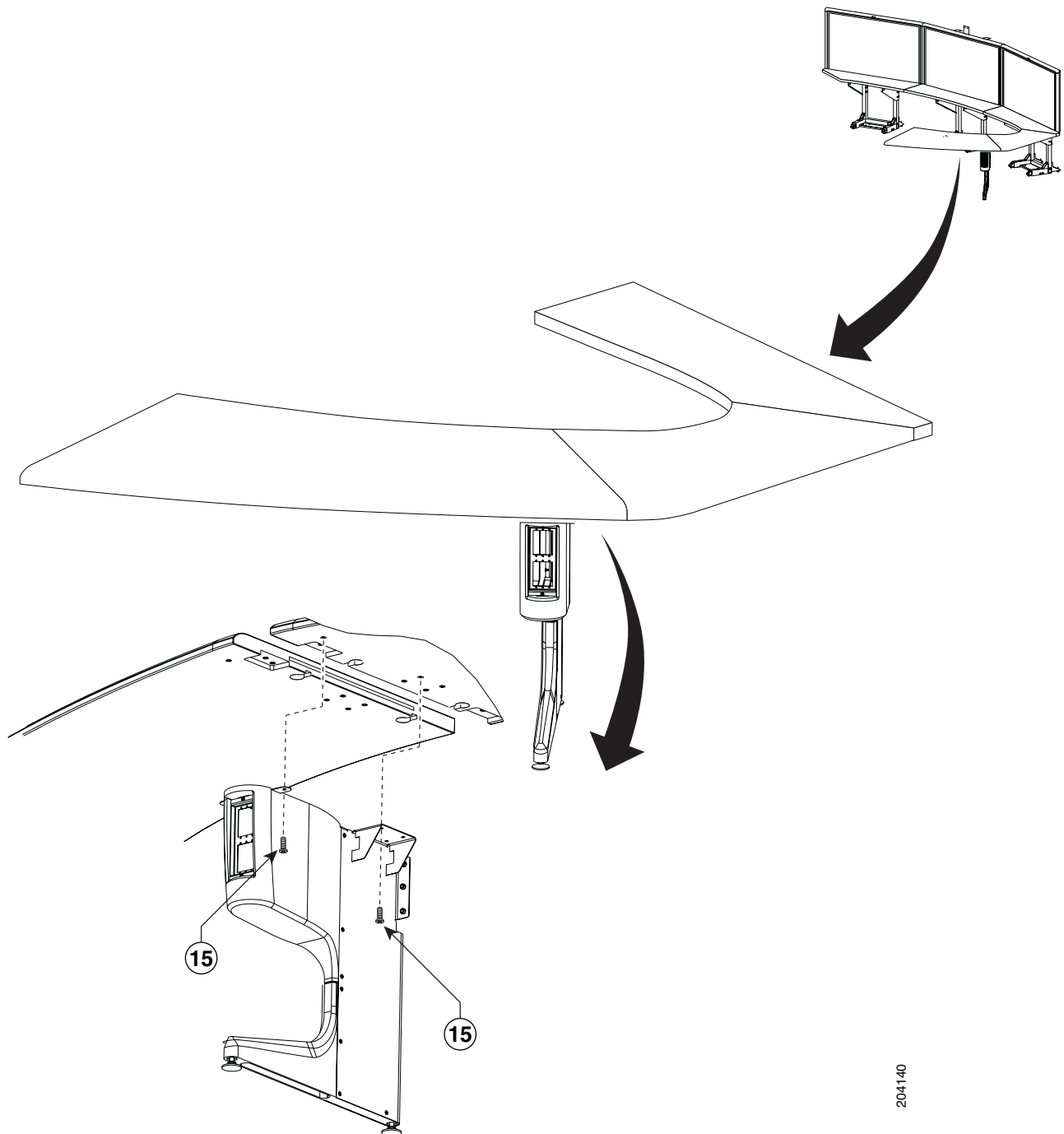



Note

The splines have different lengths. Use a spline that is slightly smaller than the slot in the table top.

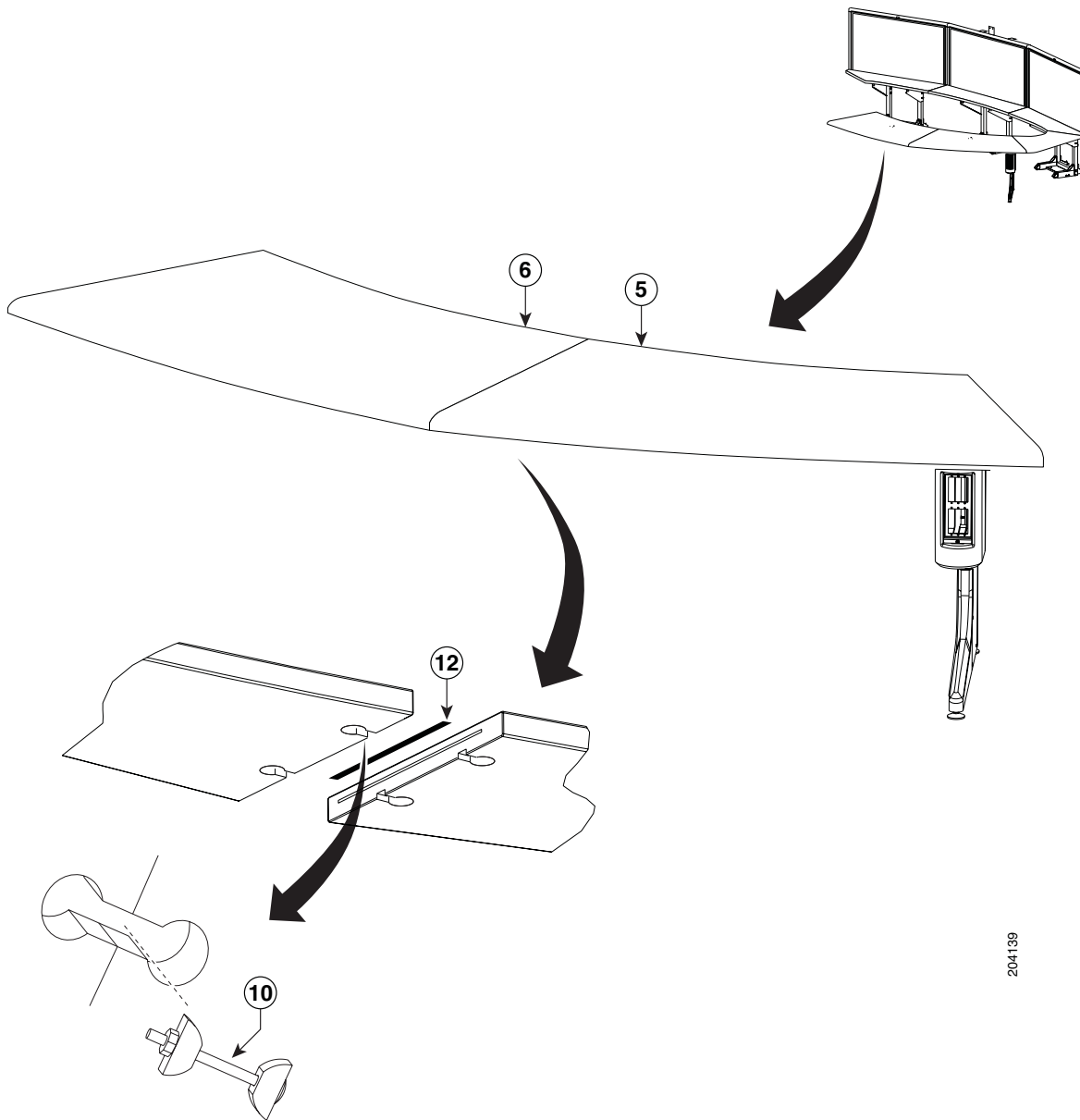
Step 7 Attach the right most Table Leg.

Figure 6-7 *right Most Table Leg*



- Step 8** Attach the center Table segment.
- Make sure you tighten the draw bolt evenly on both sides.
 - While a draw bolt is being tightened, hold the table edges together to avoid damage to the draw bolt or the table segment.
 - Tighten the draw bolts so the two table segments are connected snugly.
 - While one person is tightening the draw bolt from below, it is important for the support person to maintain the alignment of the table segment edges.

Figure 6-8 Center Table segment

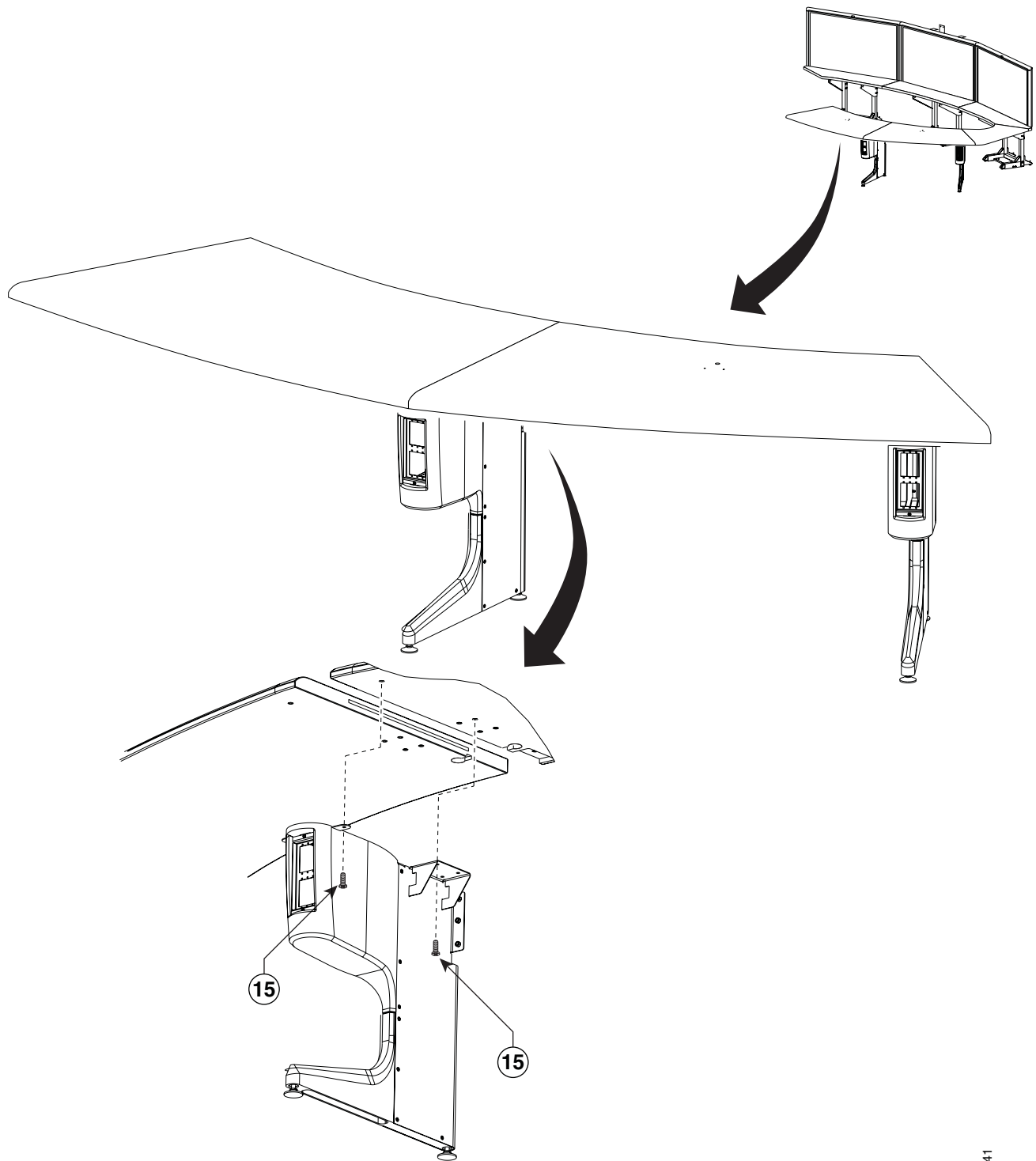


Note

The splines have different lengths. Use a spline that is slightly smaller than the slot in the table top.

Step 9 Attach the right center Table leg.

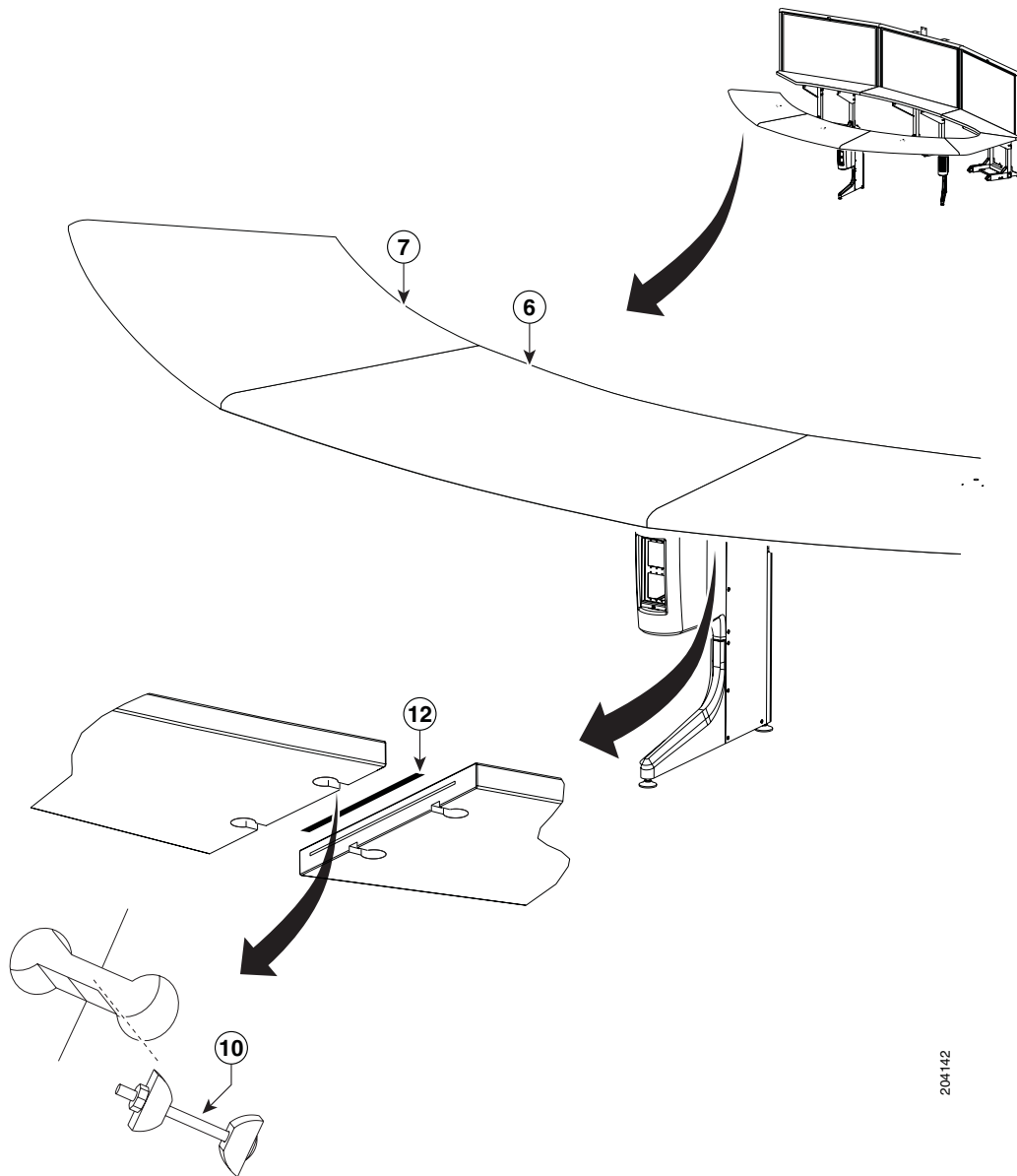
Figure 6-9 *right center Table leg*



204141

- Step 10** Attach the left Table segment.
- The draw bolts have two halves that screw into a center piece.
 - While a draw bolt is being tightened, hold the table edges together to avoid damage to the draw bolt or the table segment.
 - Tighten the draw bolts so the two table segments are connected snugly.
 - While one person is tightening the draw bolts from below, it is important for the support person to maintain the alignment of the table segment edges.

Figure 6-10 Left Table segment

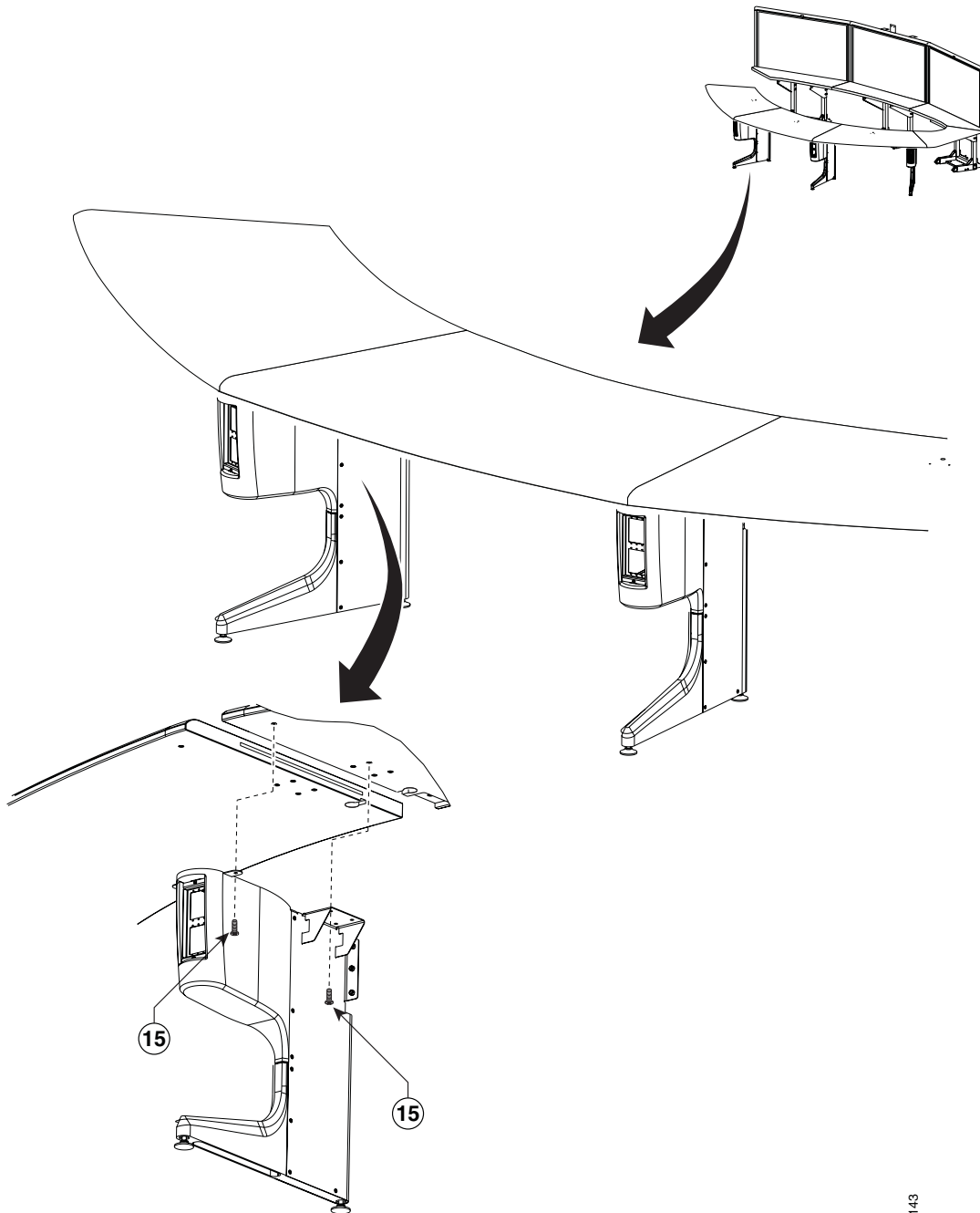


Note

The splines have different lengths. Use a spline that is slightly smaller than the slot in the table top.

Step 11 Attach the left center Table leg.

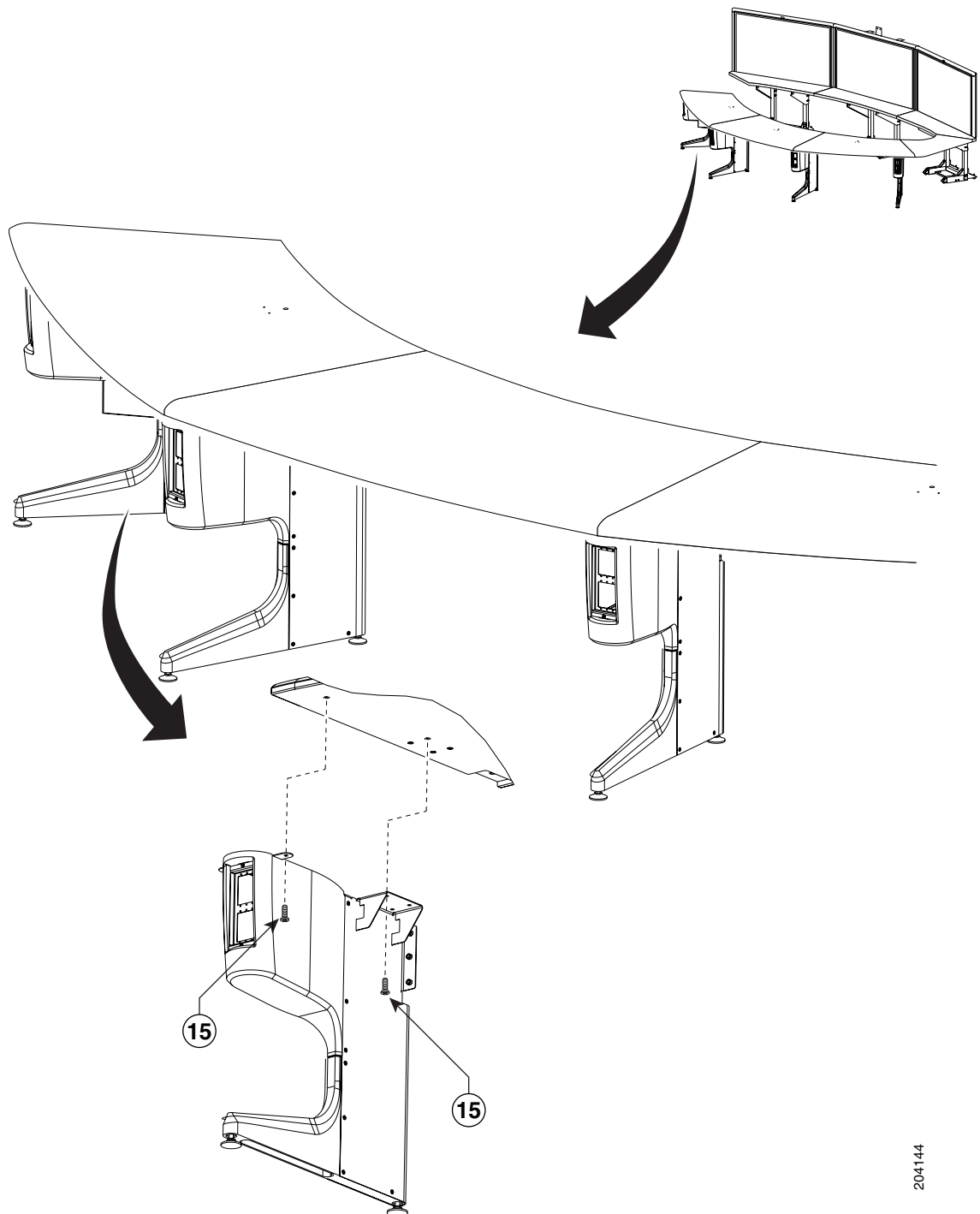
Figure 6-11 Left center Table leg



204143

Step 12 Attach the left most Table leg.

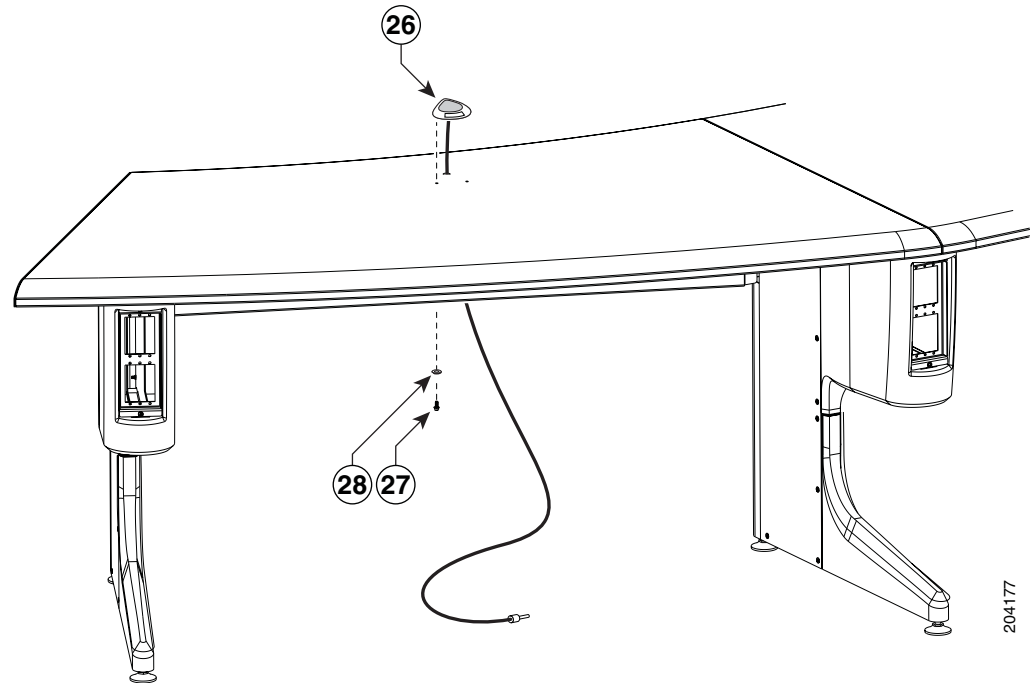
Figure 6-12 *left Most Table Leg*



204144

- Step 13** Attach one microphone to each table segment. There are three microphones for the first row table.
- The center microphone cable for the first row table must be seated in the cable channel on the underside of the center table segment in order to properly install the projector mounting bracket. You can use tape to secure it in place.

Figure 6-13 *Microphone Assembly*



Note

Steps for routing the microphone cables are in [Chapter 9, “Routing Power and Signal Cables.”](#)

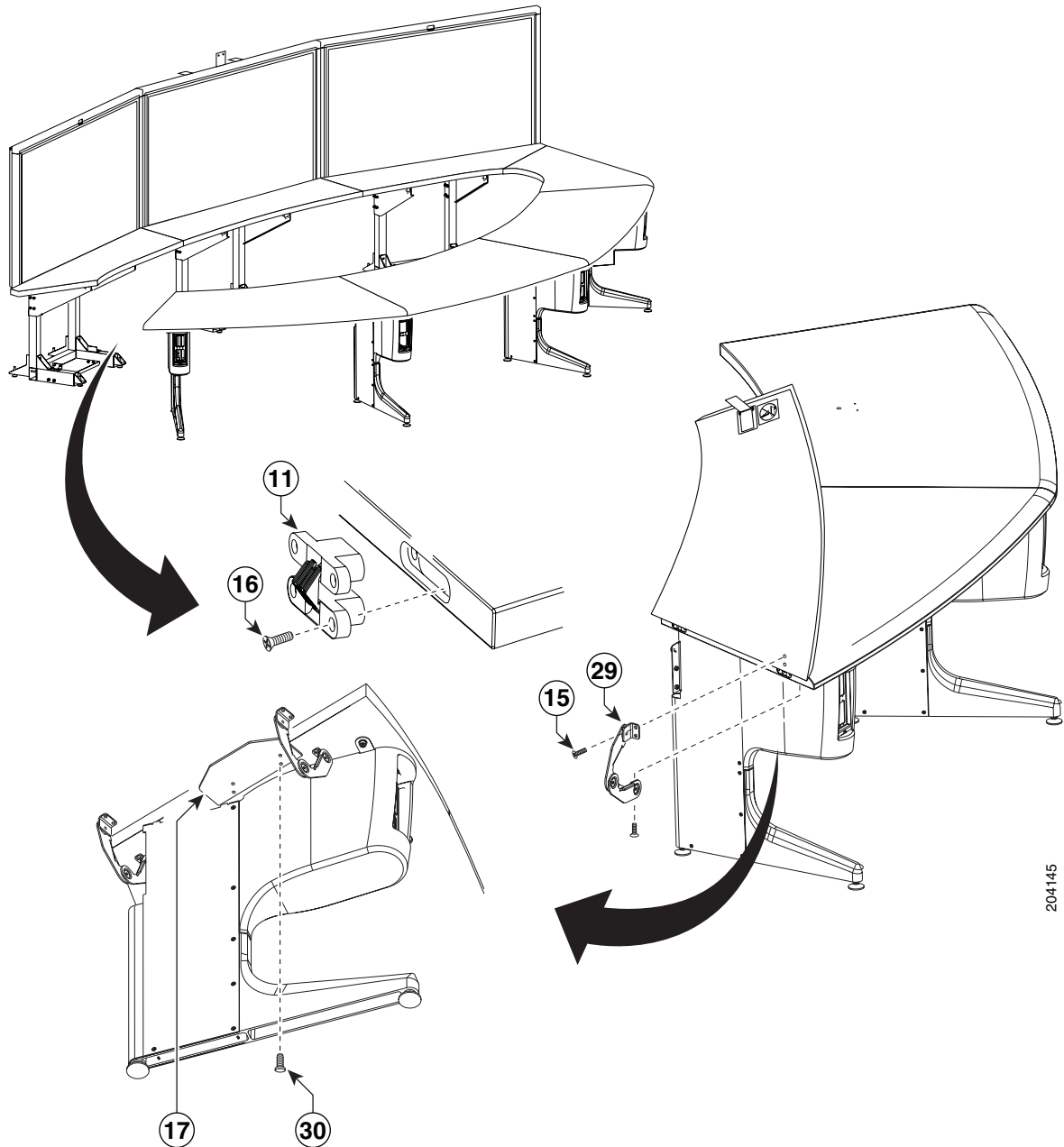


Tip

Label each microphone cable where it exits from the table. You attach the microphones to the Audio/Video Expansion Unit in [Chapter 9, “Routing Power and Signal Cables.”](#)

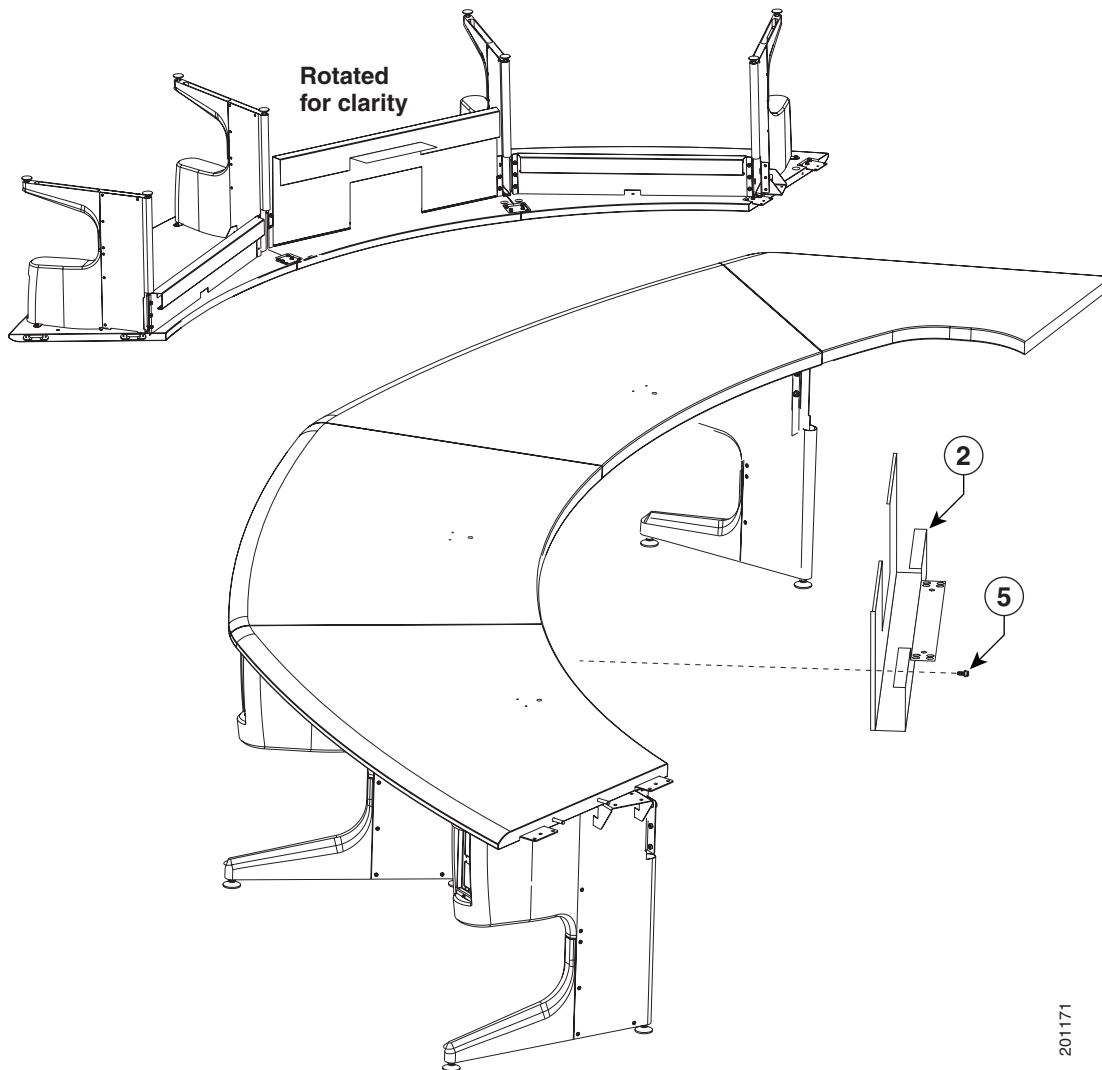
Step 14 Attach the table door to the tabletop sections and attach the “please close” label to the underside of the table door.

Figure 6-14 **Left connecting Tabletop section**



Step 15 Attach the center Privacy panel.

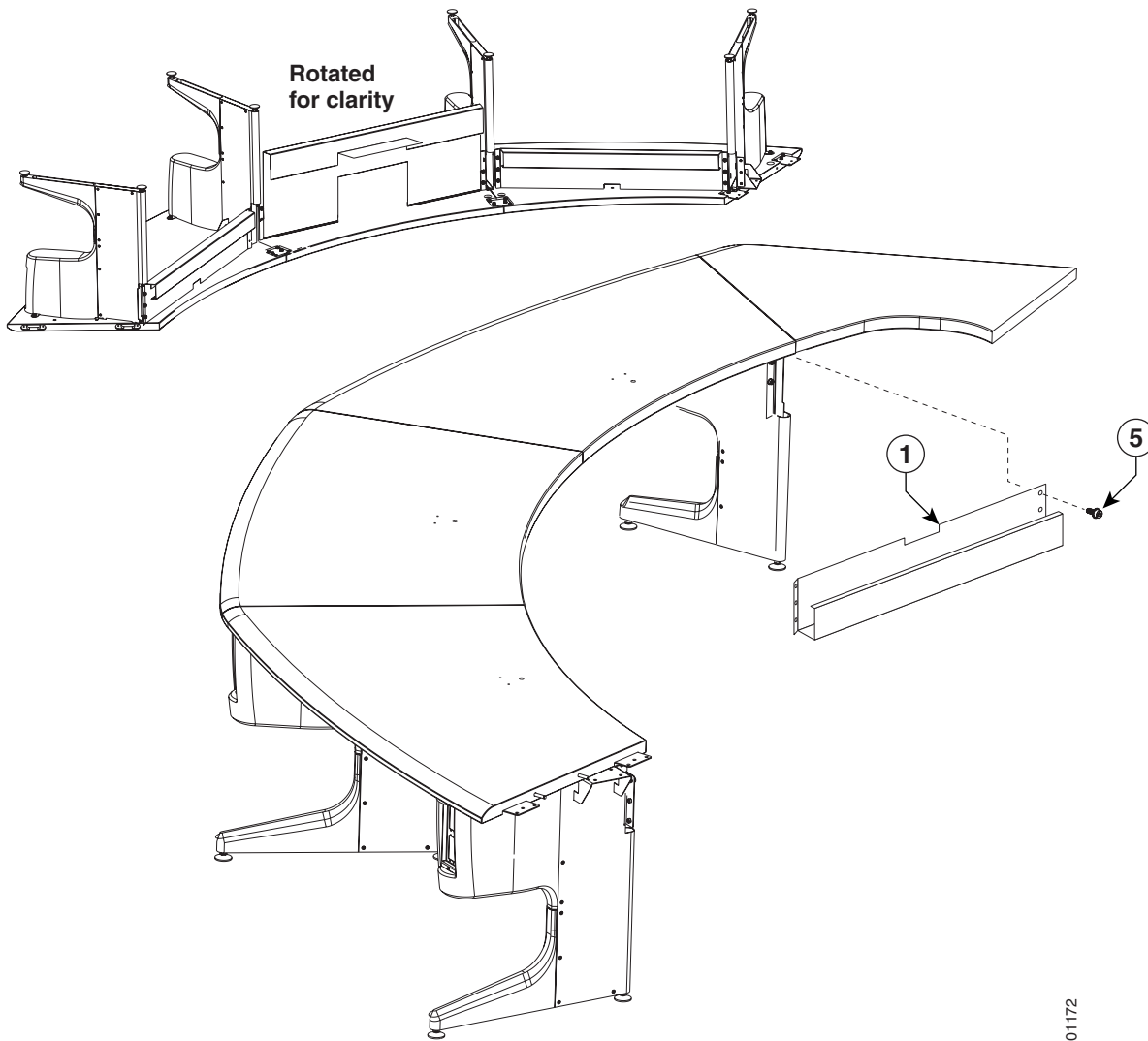
Figure 6-15 Privacy Panel Assembly



201171

Step 16 Attach the left Privacy panel.

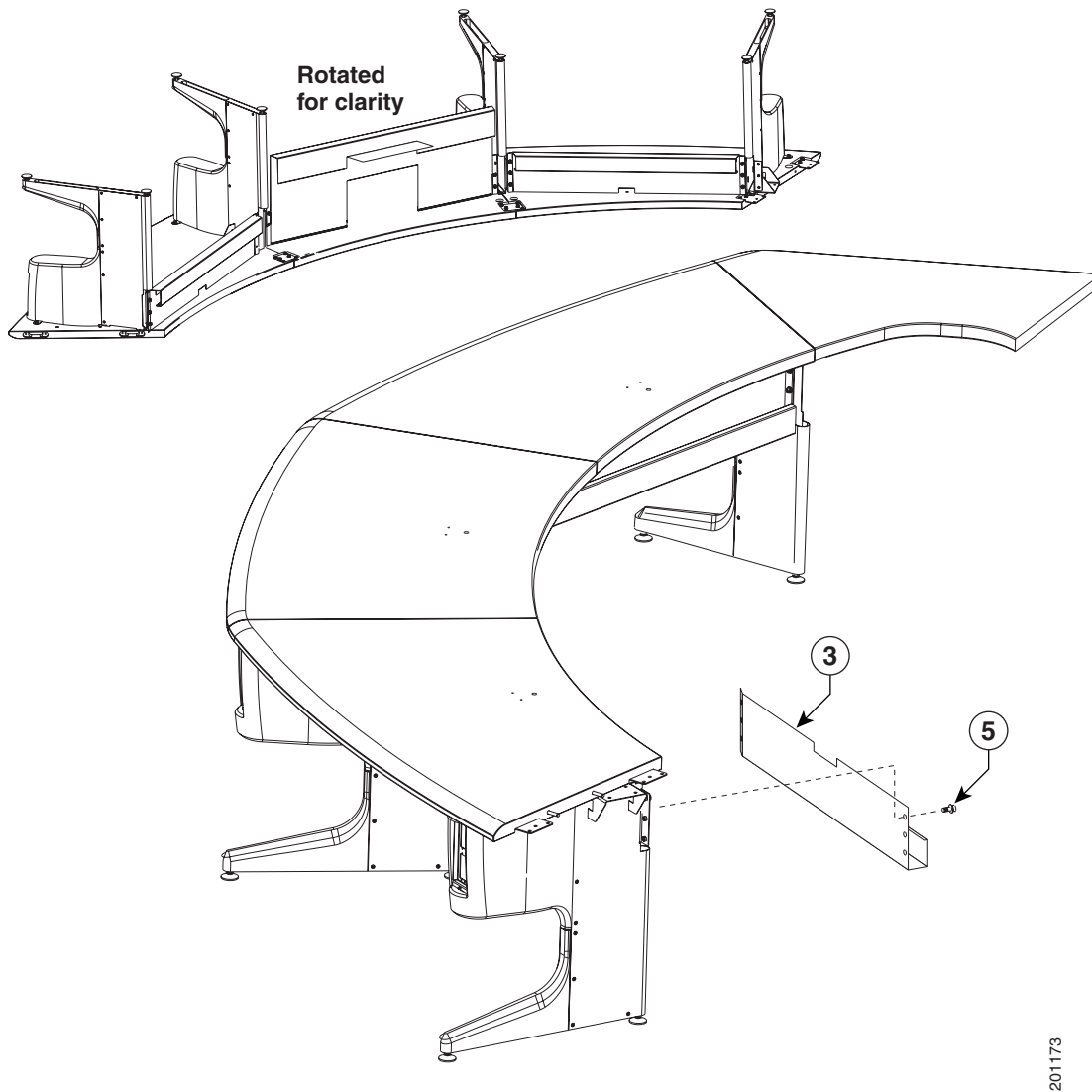
Figure 6-16 Privacy Panel Assembly



201172

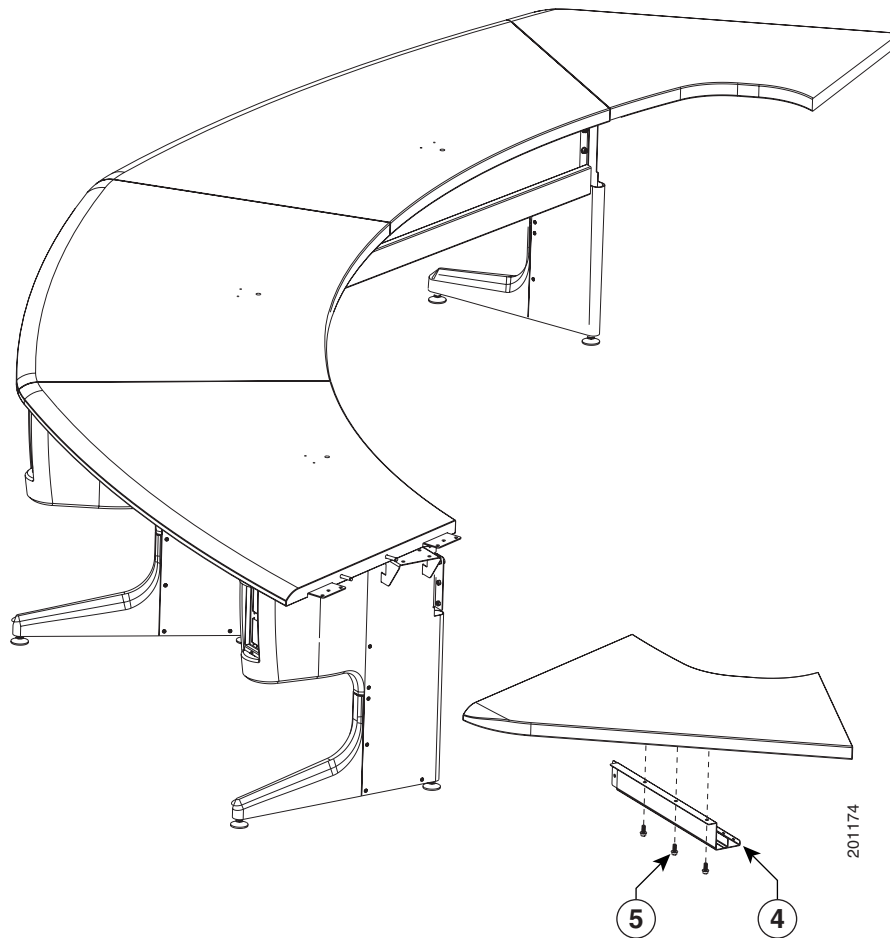
Step 17 Attach the right Privacy panel.

Figure 6-17 Privacy Panel Assembly



Step 18 Attach the right wing Privacy panel.

Figure 6-18 Privacy Panel Assembly





CHAPTER 7

Building the Second Row Table Assembly

Revised: July 28, 2008, OL-14521-01

Parts List

Key	Part Description	Part Number	Qty	Ctn	Notes
1	Tabletop leg base	800-28454-xx	7	52-54	
2	Metal packaging brace	700-24275-xx	7	41-43, 57	
3	Molded foam bumper	800-28625-xx	7	41-43, 57	
4	Gutter and privacy panel support bracket, type 1	700-27280-xx	2	50	
5	Gutter and privacy panel support bracket, type 2	700-27279-xx	5	50	
6	Gutter panel, section 1	800-31126-xx	1	50	
7	Gutter panel, section 2	800-31129-xx	1	50	
8	Gutter panel, section 3	800-31131-xx	1	50	
9	Gutter panel, section 4	800-31133-xx	1	50	
10	Gutter panel, section 5	800-31124-xx	2	50	
11	Privacy panel hanger	700-27311-xx	14	50	
12	Floating bracket, type 1	700-27282-xx	2	50	
13	Floating bracket, type 2	700-27281-xx	2	50	
14	Tabletop: section 1	95-9995-01 Kit # 74-5565-01	1	26	
15	Tabletop: section 2	95-10096-01 Kit # 74-5600-01	1	26	

Parts List

Key	Part Description	Part Number	Qty	Ctn	Notes
16	Tabletop: section 3	95-10097-01 Kit # 74-5601-01	1	26	
17	Tabletop: section 4	95-10098-01 Kit # 74-5602-01	1	26	
18	Tabletop: section 5	95-9994-01 Kit # 74-5562	2	26	
19	Tabletop end, left (section 6)	95-10099-01 Kit # 74-5603-01	1	26	
20	Tabletop end, right (section 7)	95-10100-01 Kit # 74-5604	1	26	
21	Tabletop end brace	700-27413-xx	2	50	
22	Privacy panel alignment bracket, section 1	700-27275-xx	1	50	
23	Privacy panel alignment bracket, section 2	700-27276-xx	1	50	
24	Privacy panel alignment bracket, section 3	700-27277-xx	1	50	
25	Privacy panel alignment bracket, section 4	700-27278-xx	1	50	
26	Privacy panel alignment bracket, section 5	700-27274-xx	2	50	
27	Privacy panel, section 1	800-31112-xx	1	50	
28	Privacy panel, section 2	800-31116-xx	1	50	
29	Privacy panel, section 3	800-31117-xx	1	50	
30	Privacy panel, section 4	800-31119-xx	1	50	
31	Privacy panel, section 5	800-31121-xx	2	50	
32	Privacy Panel, left end (section 6)	800-31123-xx	1	50	
33	Privacy Panel, right end (section 7)	800-31122-xx	1	50	
34	Tabletop attachment plate, metal	700-27292-xx	2	50	
35	M8 x 16 mm screws, black	69-1879-01 48-2430-01	58	21	
36	M8 x 2.5mm shoulder screws	69-1880-01 48-2437-01	30	21	
37	M4 x 12 mm pan head screws	69-1878-01 48-2426-01	24	21	
38	Screw, 8 x 50 mm, with plastic knob	69-1877-01 48-2298-01	15	21	
39	Draw bolt	No part number	14	1	
40	Spline	No part number	5	1	
41	Cable Cover for right end privacy panel	700-27312-01	1	50	
42	Velcro attachments for cable guide	No part number	2		Included with cable cover

Key	Part Description	Part Number	Qty	Ctn	Notes
43	I/O blank: large	69-1830-01	2	1	
44	I/O blank: small	700-23807-01	14	1	
45	I/O modules: power/Ethernet	74-xxxx-xx	12	1	Part number changes per country. Refer to “Appendix B: Region- and Country-Specific Equipment” for part number.
46	I/O Module Cover plate	700-23305-01	7	50-54	
47	Cat6 Ethernet cord	37-0887-02 (3M) 37-0901-01 (10M) 37-0965-01 (12M)	1 8 3	1	
48	3 m Jumper cord	37-0833-01	9	1	
49	M4 nuts	49-0326	20	1	
50	M4 x 12 mm screws, black	48-2426-01	10	1	
51	Microphone	74-4743-01	6	1	
52	M4 x 30 mm screws			1	Included in Microphone kit.
53	M4 washers			1	Included in Microphone kit.
54	Power distribution units	74-4787-01	2	1	Chapter 7, 8
55	Screws	To be provided	1	1	
56	M8 shoulder screws for Floating Brackets	69-1880-01 48-2437-01	28	21	
	Microphone extension cords, 9.5M	37-0931-01	6	1	Attach these cords to the microphone cables to reach the audio/video extension unit.
	Touch-up paint, dark gray	79-2269-01	1	1	Use this to cover any imperfections for the privacy panel that are caused by assembly, shipping or handling.
	Touch-up paint, dark gray	95-10160-01	1	1	Use this to cover any imperfections for the privacy panel that are caused by assembly, shipping or handling.

**Caution**

The table segments are unstable during assembly. Use caution, and support all structures as required.

**Warning**

Only trained and qualified personnel should be allowed to install, replace, or service this equipment.

**Caution**

Table elements are heavy, and metal edges can be very sharp. Protect your hands and eyes from injury by wearing safety gloves and glasses.

**Caution**

In order to prevent scratching the table tops, you should avoid putting any tools on the shelf surfaces.

**Note**

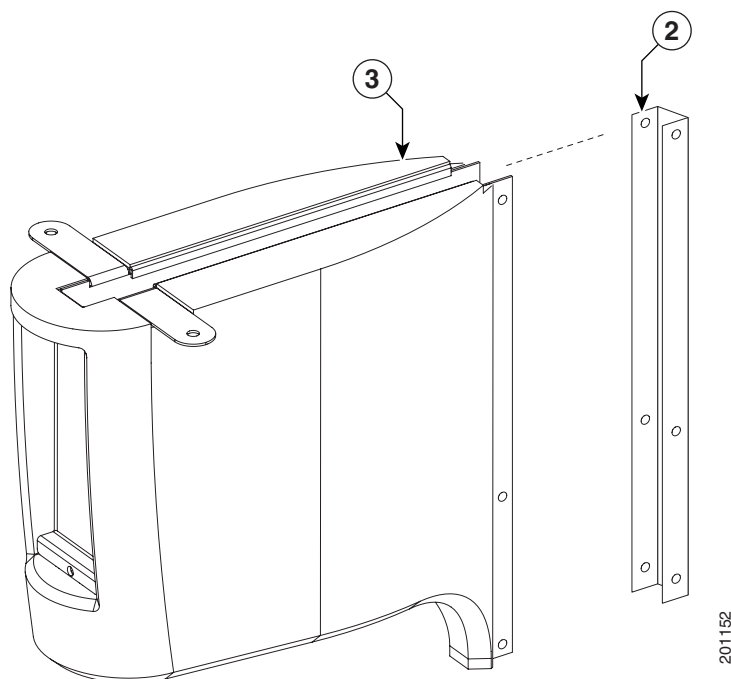
The directions *left* and *right* refer to the assembly as you face it from the front.

**Warning**

Table legs are unstable until they are fully attached to the tabletop. Do not use unattached table legs as tabletop supports while you attach tabletop segments. They can fall and cause injury or damage. Cisco suggests you use the accessory cabinets to support and stabilize the table segments as you install them.

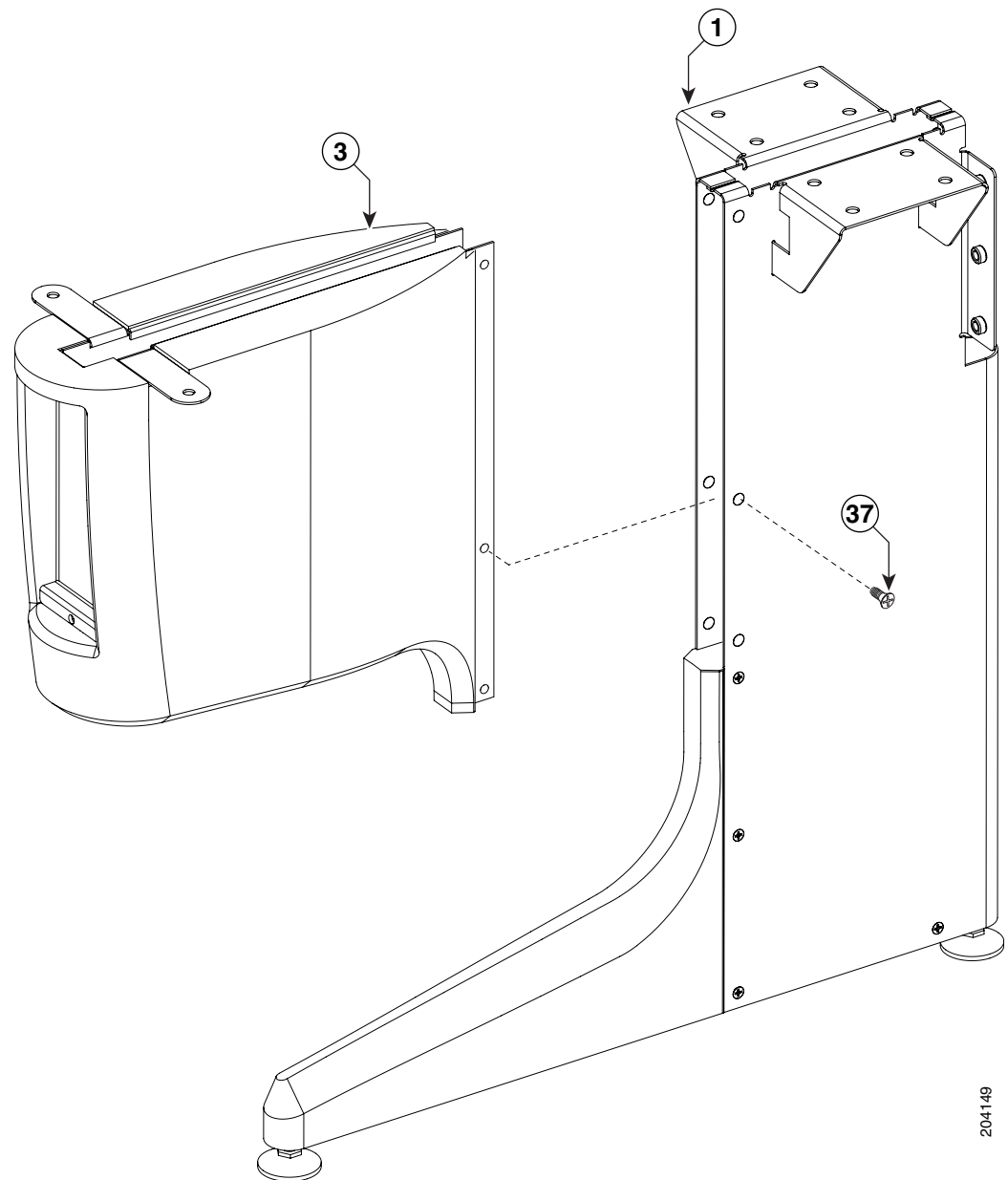
Step 1 Remove the Metal packaging braces from the Molded foam bumpers.

Figure 7-1 Metal packaging braces and their Molded foam bumpers



Step 2 Assemble the seven Molded foam bumpers and the seven Table leg bases.

Figure 7-2 Four Molded foam bumpers and the four Table leg bases



204149

Step 3 Attach the first set of support brackets for the gutter and privacy panel to the table legs.



Note

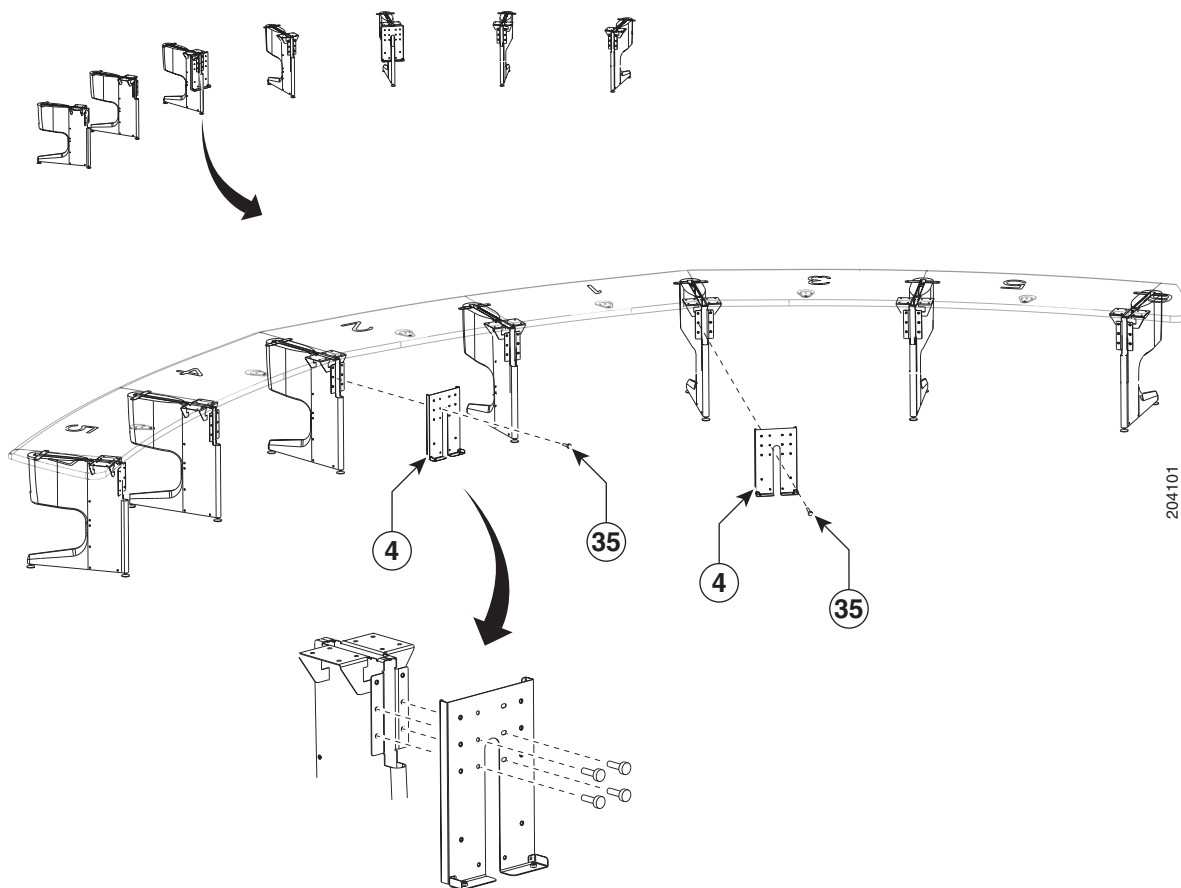
Note the table layout. Each section is numbered as shown in [Figure 7-3](#). Each cable gutter and privacy panel is different. The numbering for the cable gutters and privacy panels correspond to the numbering for the table top.



Tip

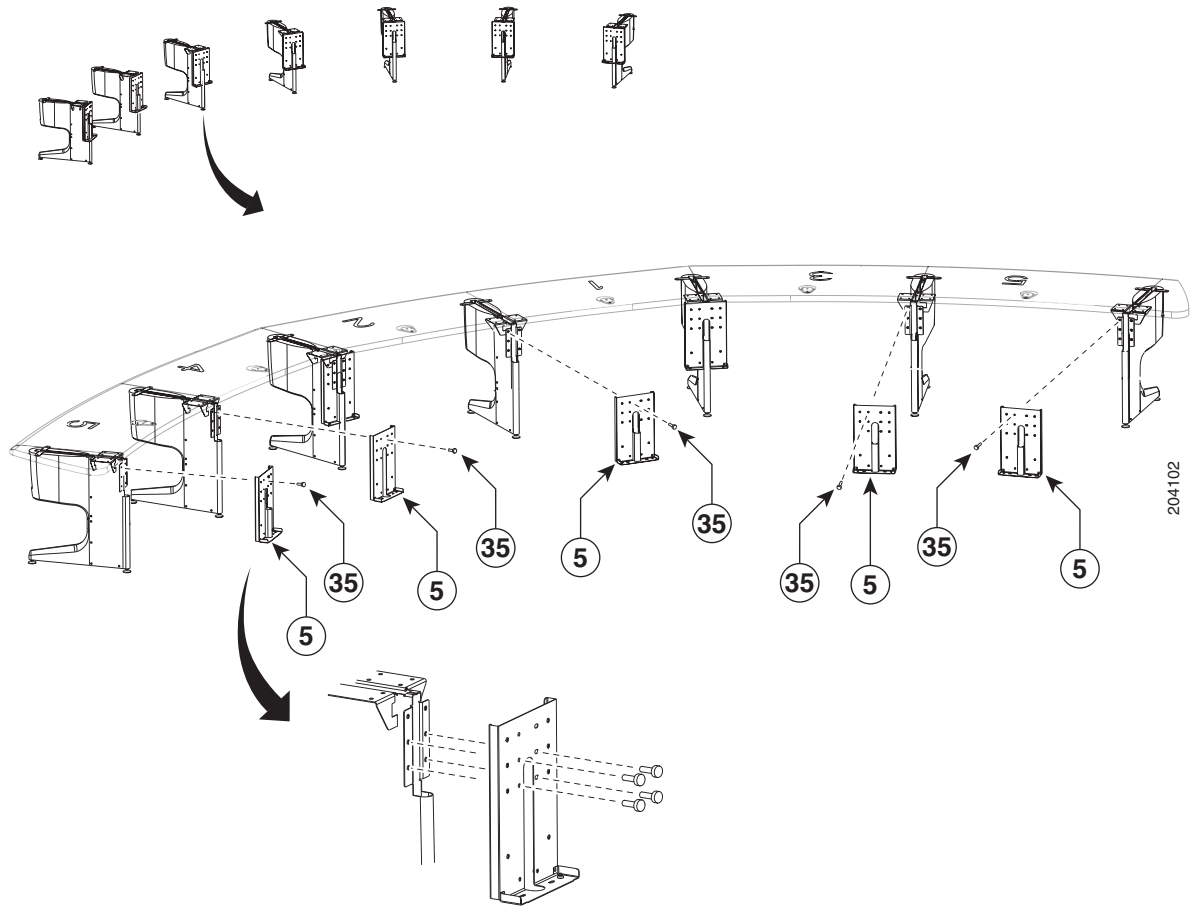
When you attach the support brackets, it can be helpful to turn the table leg upside-down.

Figure 7-3 Gutter and Privacy Panel Support Brackets, Type 1



Step 4 Attach the second set of five support brackets to the table legs.

Figure 7-4 Gutter and Privacy Panel Support Brackets, Type 2

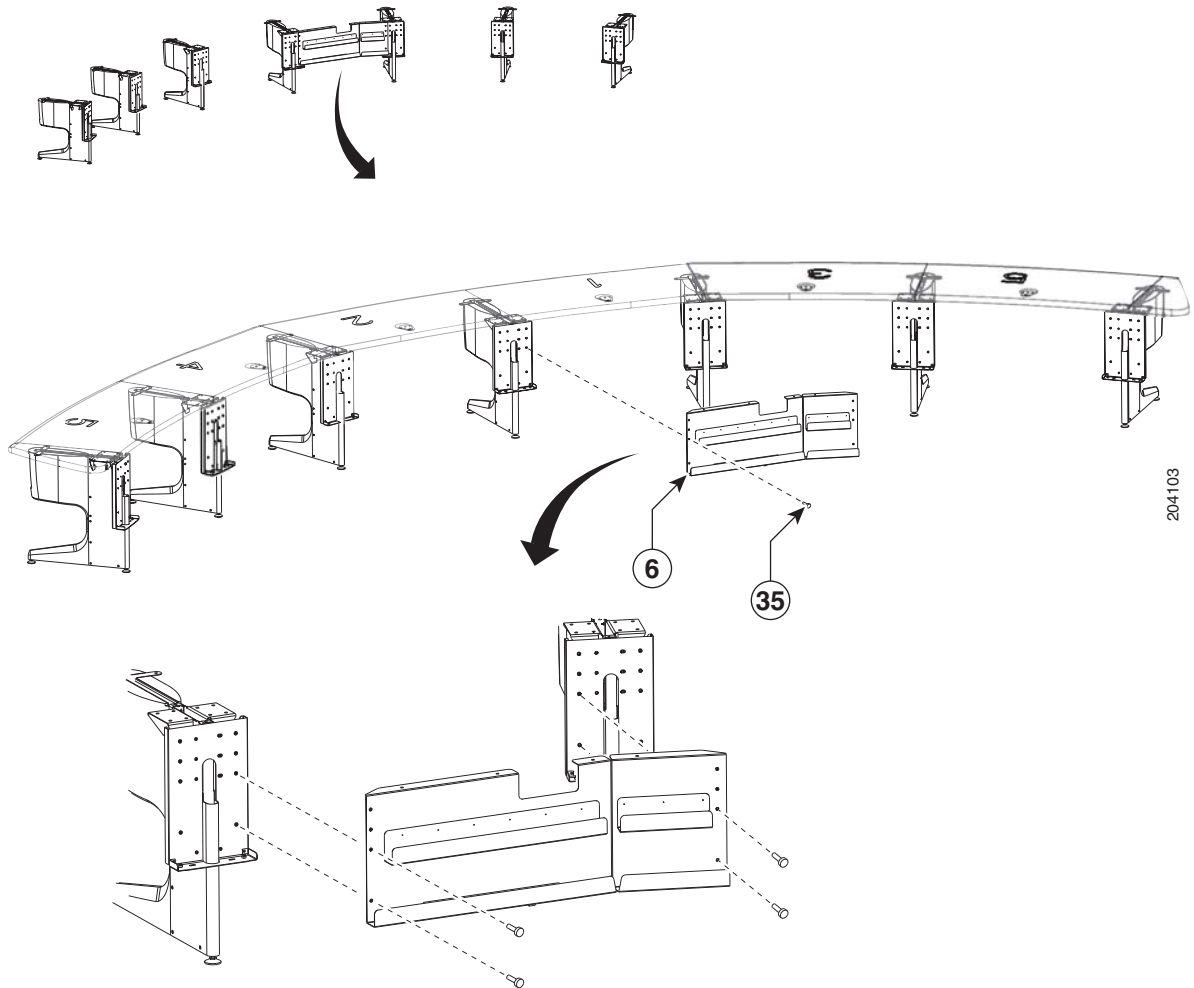


- Step 5** While one or more assistants keep the table legs steady, attach the Section 1 gutter panel to the Section 1 table legs.



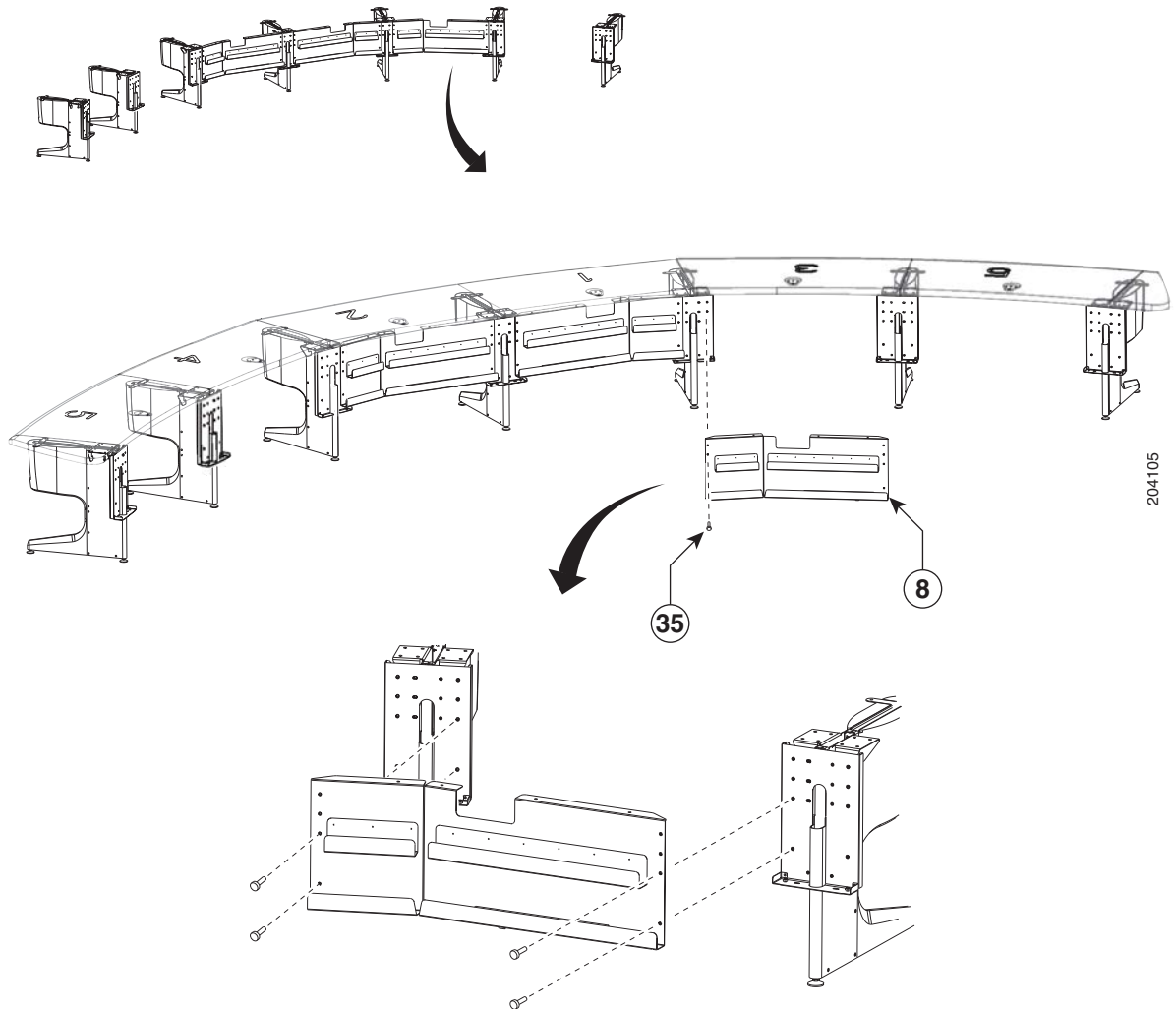
Tip When you attach the support brackets, it can be helpful to turn the table leg upside-down.

Figure 7-5 Section 1 Gutter Panel



Step 7 Attach the Section 3 gutter panel to the Section 3 table legs.

Figure 7-7 Section 3 Gutter Panel



Step 8 Attach the Section 4 gutter panel to the Section 4 table legs.



Note If you are building a Reduced Configuration table (four tabletops instead of six), continue to [Step 11](#) after completing this step.

Figure 7-8 Section 4 Gutter Panel

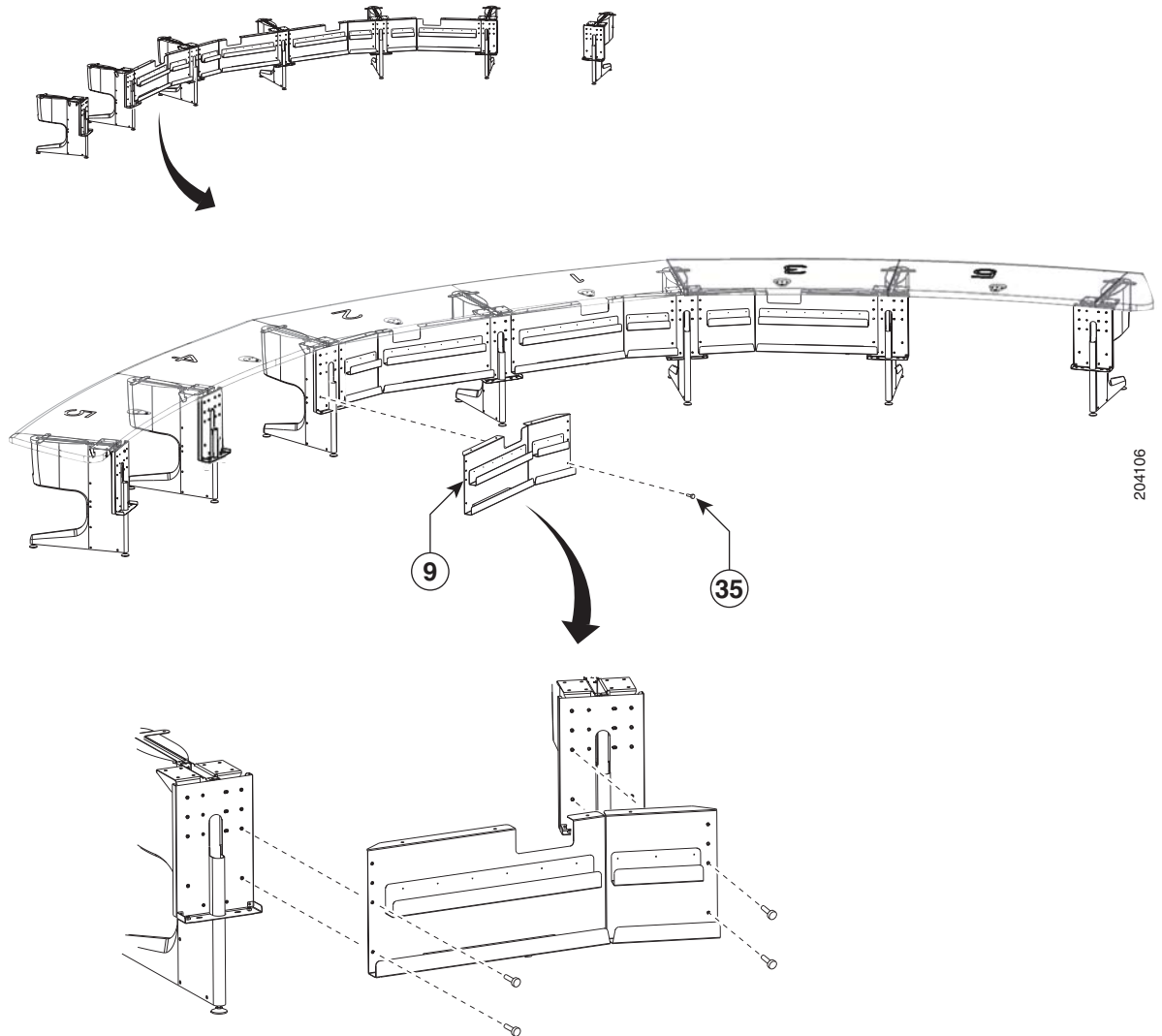
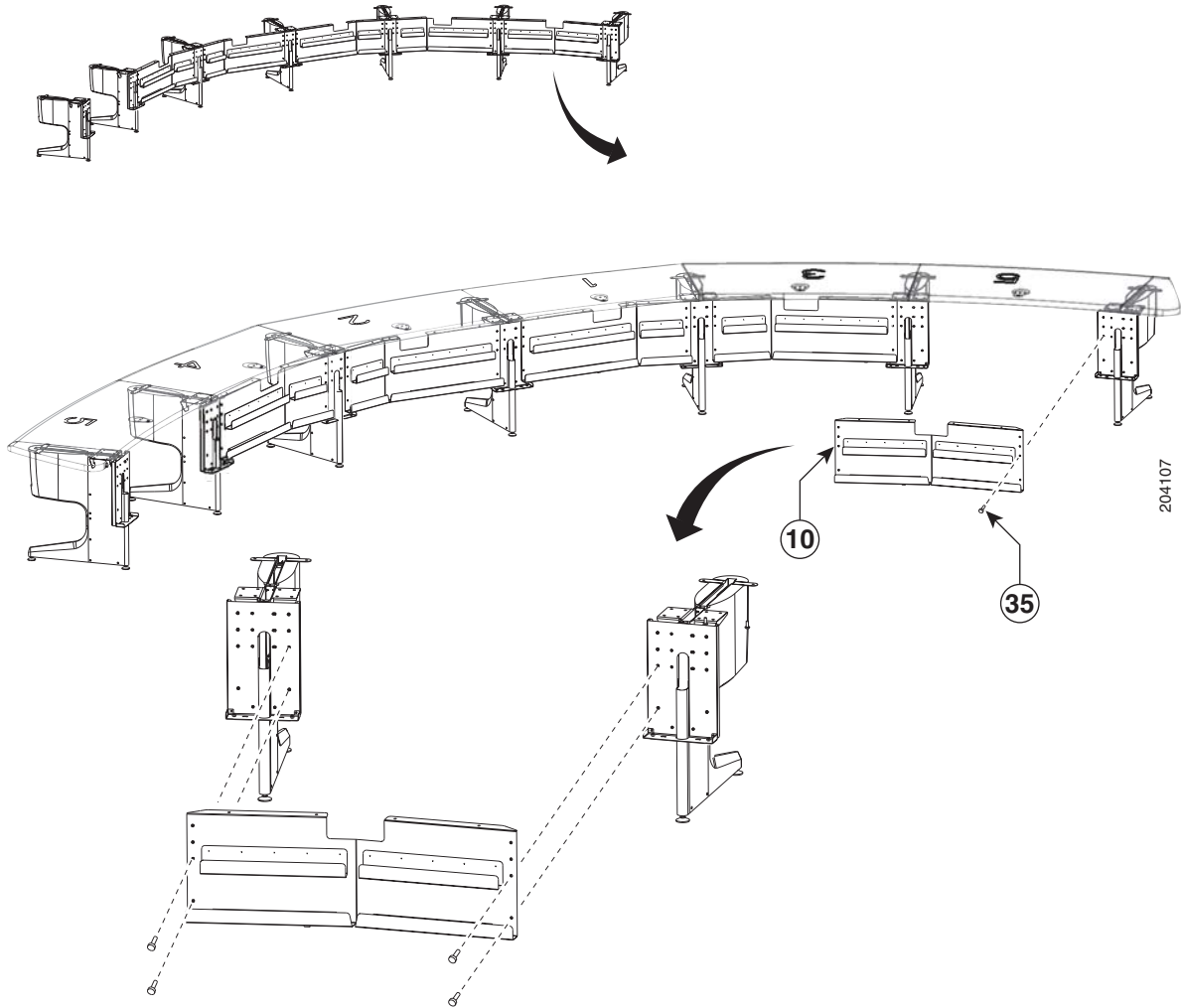
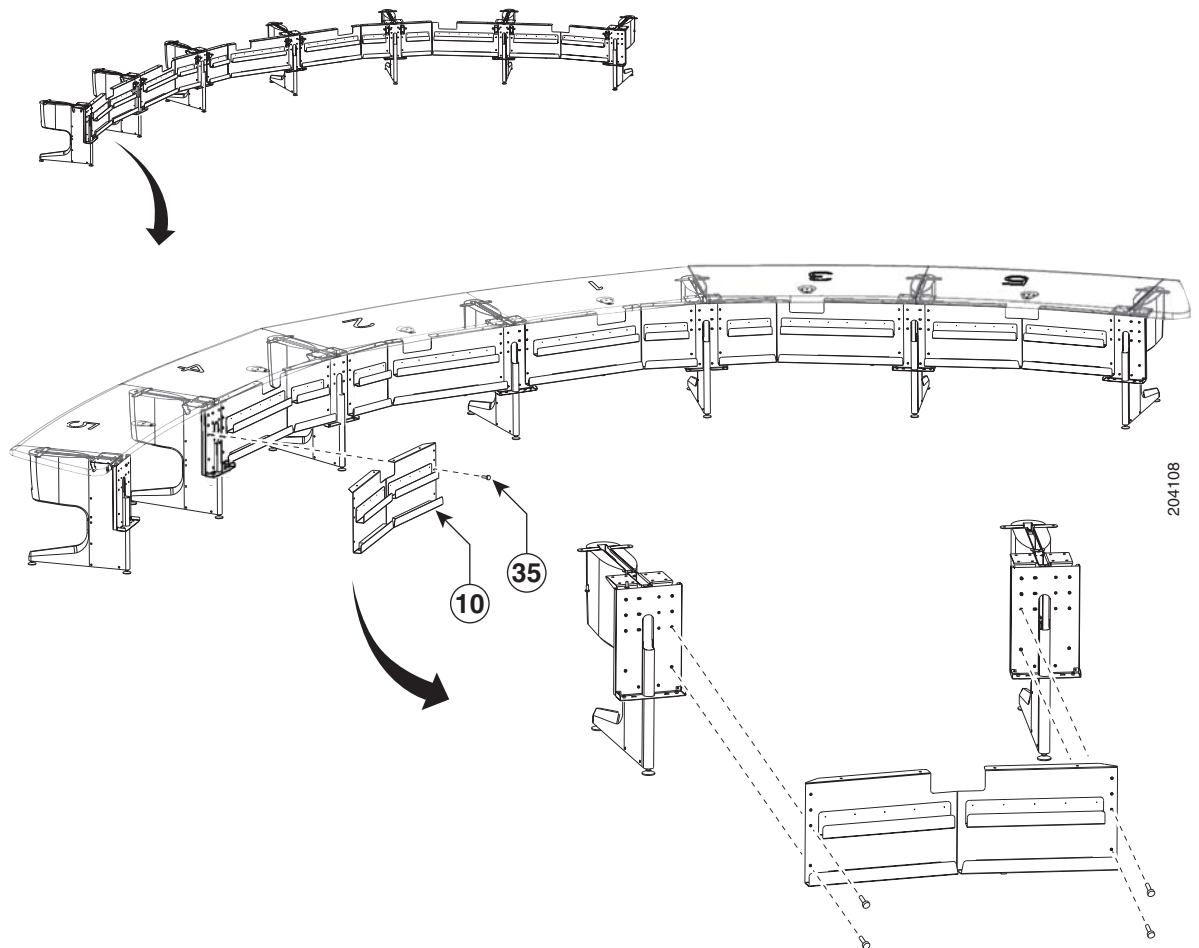


Figure 7-9 **Section 5 (Left) Gutter Panels**



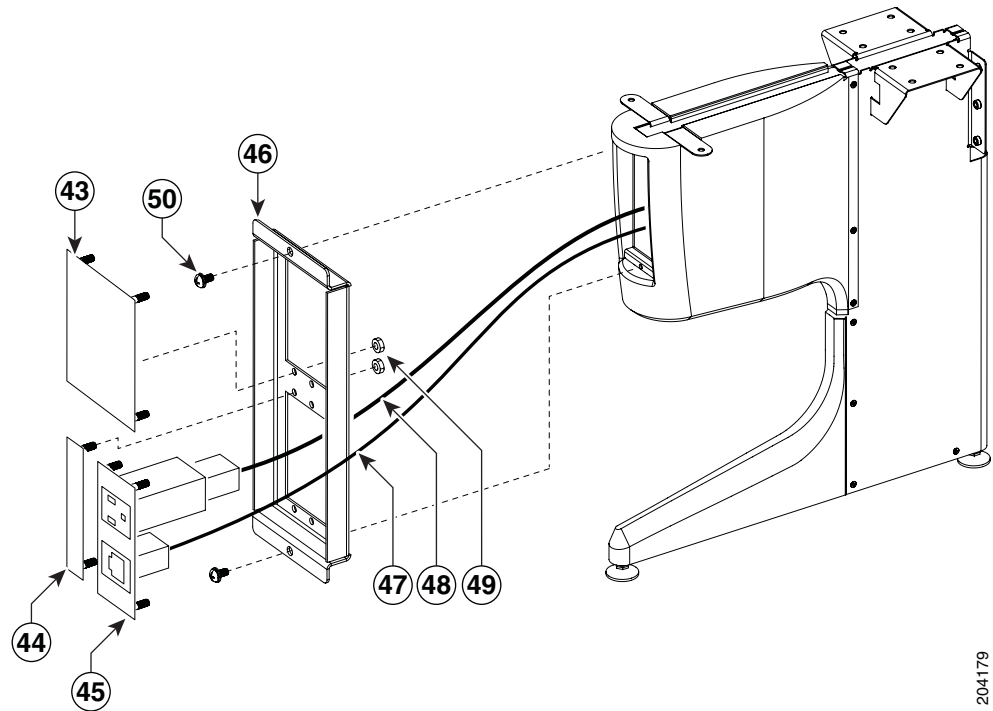
Step 10 Attach the right Section 5 gutter panels to the remaining table legs.

Figure 7-10 Section 5 (Right) Gutter Panels



- Step 11** Assemble the I/O modules for the outside left and outside right molded foam bumpers.
- The outside left and outside right molded foam bumpers only have one I/O module each. The inner molded foam bumpers have two (see [Figure 7-12](#)).

Figure 7-11 Foam Bumper Assembly



Step 12 Assemble the I/O modules for the inner molded foam bumpers.



Note The Ethernet cables are of different lengths. Attach the Ethernet cables to the I/O modules as follows:

- Use the 12M cable, 37-0965-01, for the I/O modules between sections 6 and 5
- Use the 3M cable, 37-0887-02, for the I/O modules between sections 5 and 7

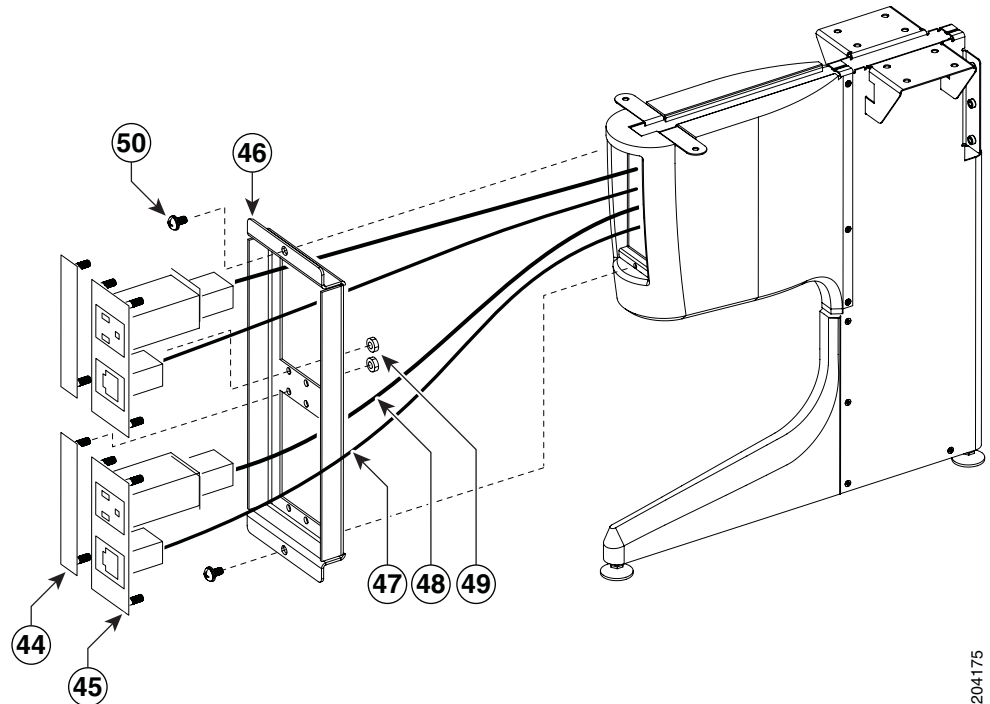


Note Steps for routing the Ethernet and power cables are in [Chapter 9, “Routing Power and Signal Cables.”](#)



Note The flange on the I/O module cover piece is wider on the bottom than on the top.

Figure 7-12 Foam Bumper Assembly



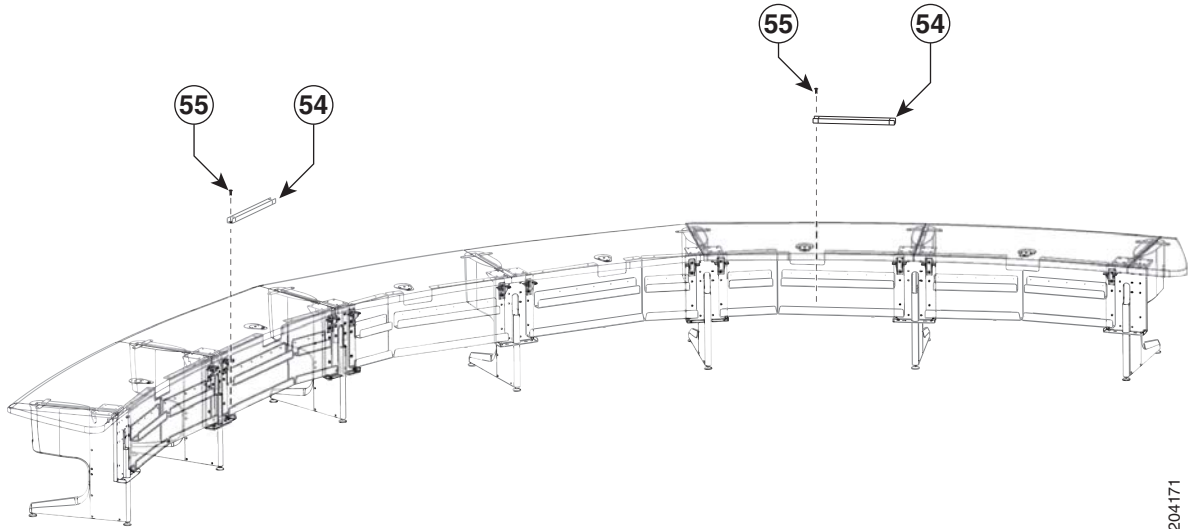
204175

Step 13 Insert the second row PDUs in the lower cable gutters.

**Note**

You install the remaining PDUs and route the cables in [Chapter 9, “Routing Power and Signal Cables.”](#)

Figure 7-13 PDU Cable Routing



204171

Step 14 Attach the first set of floating brackets to the table assembly.

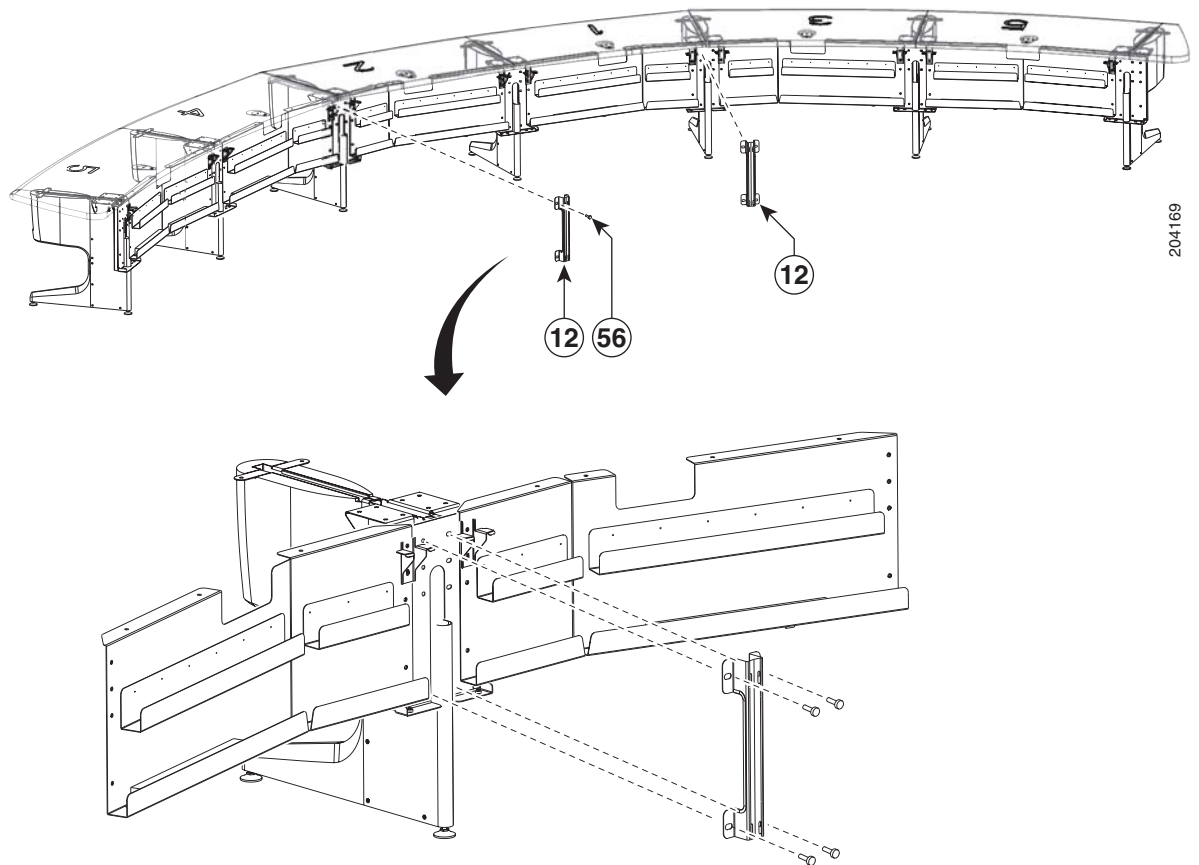


Note Before you attach the floating brackets, route the Ethernet and power cables in [Chapter 9, “Routing Power and Signal Cables.”](#)



Note After you attach the brackets with the shoulder screws, move the brackets left and right to ensure that they can move freely.

Figure 7-14 Floating Brackets, Type 1



Step 15 Attach the second set of floating brackets to the table assembly.

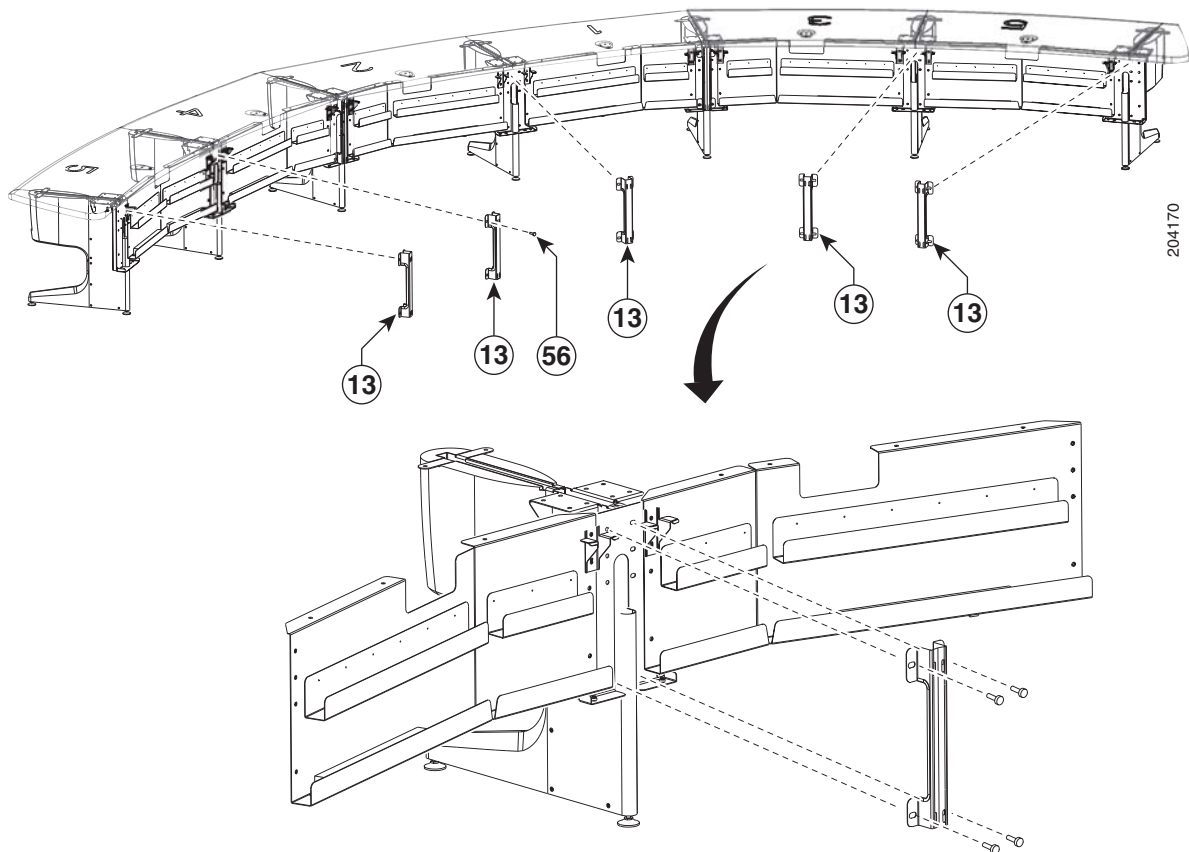


Note Before you attach the floating brackets, route the power cables in [Chapter 9, “Routing Power and Signal Cables.”](#)



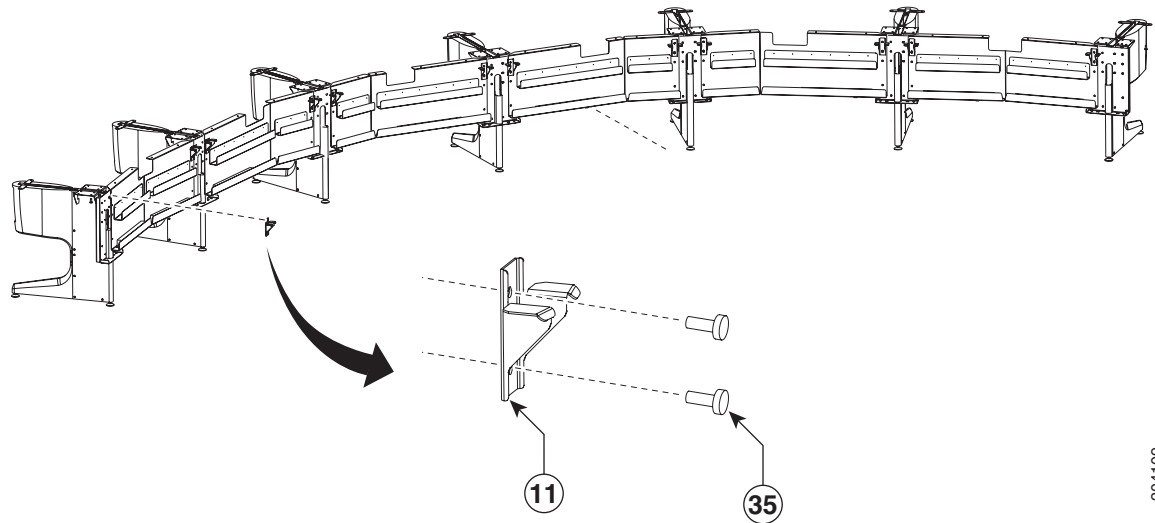
Note After you attach the brackets with the shoulder screws, move the brackets left and right to ensure that they can move freely.

Figure 7-15 Floating Brackets, Type 2



Step 16 Attach the privacy panel hangers to the table assembly.

Figure 7-16 Privacy Panel Hanger



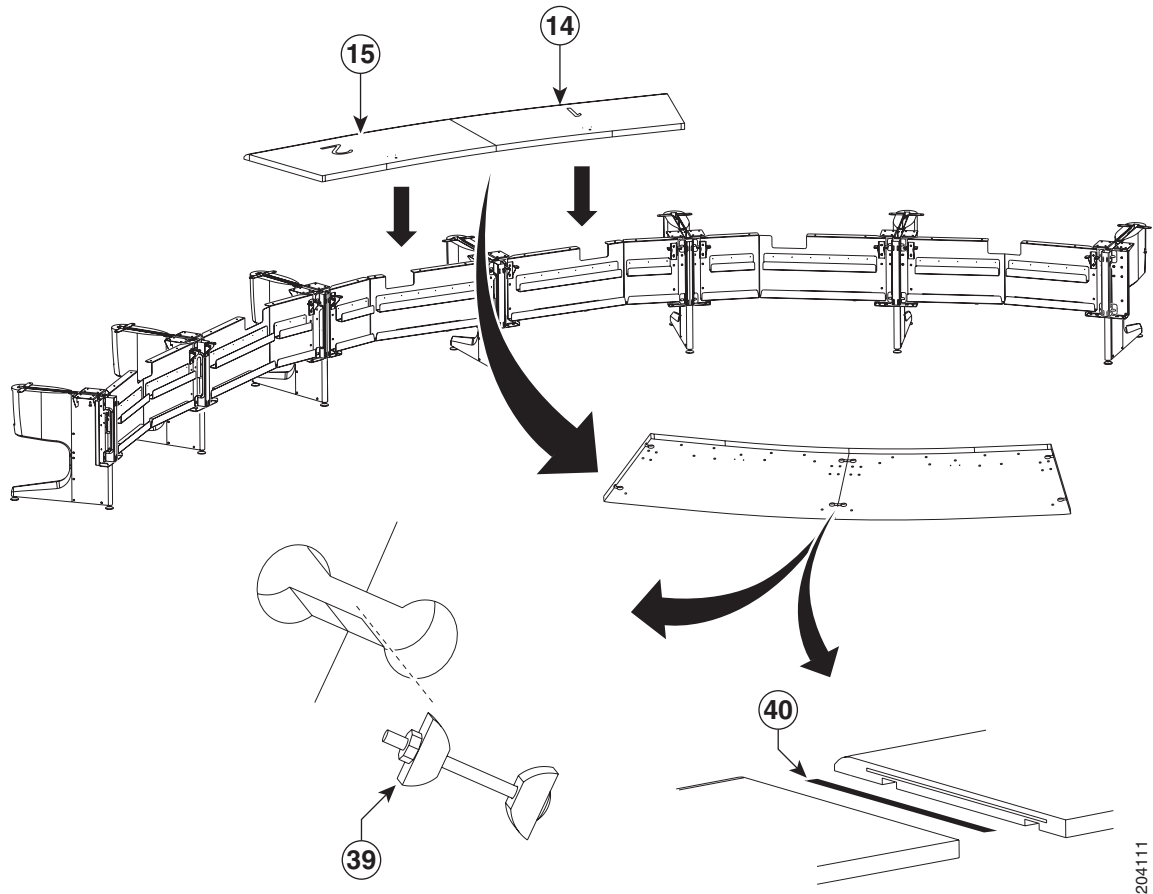
204109

- Step 17** Place the section 1 and section 2 tabletops on the table assembly, insert the plastic spline in the slot of table section 1, and join the tables together, then insert and tighten the draw bolts evenly on each side until the tabletop sections are joined together.

**Note**

As you build the table tops, attempt to align the table feet with the table tops, and make sure that they table tops are supported on at least three sides.

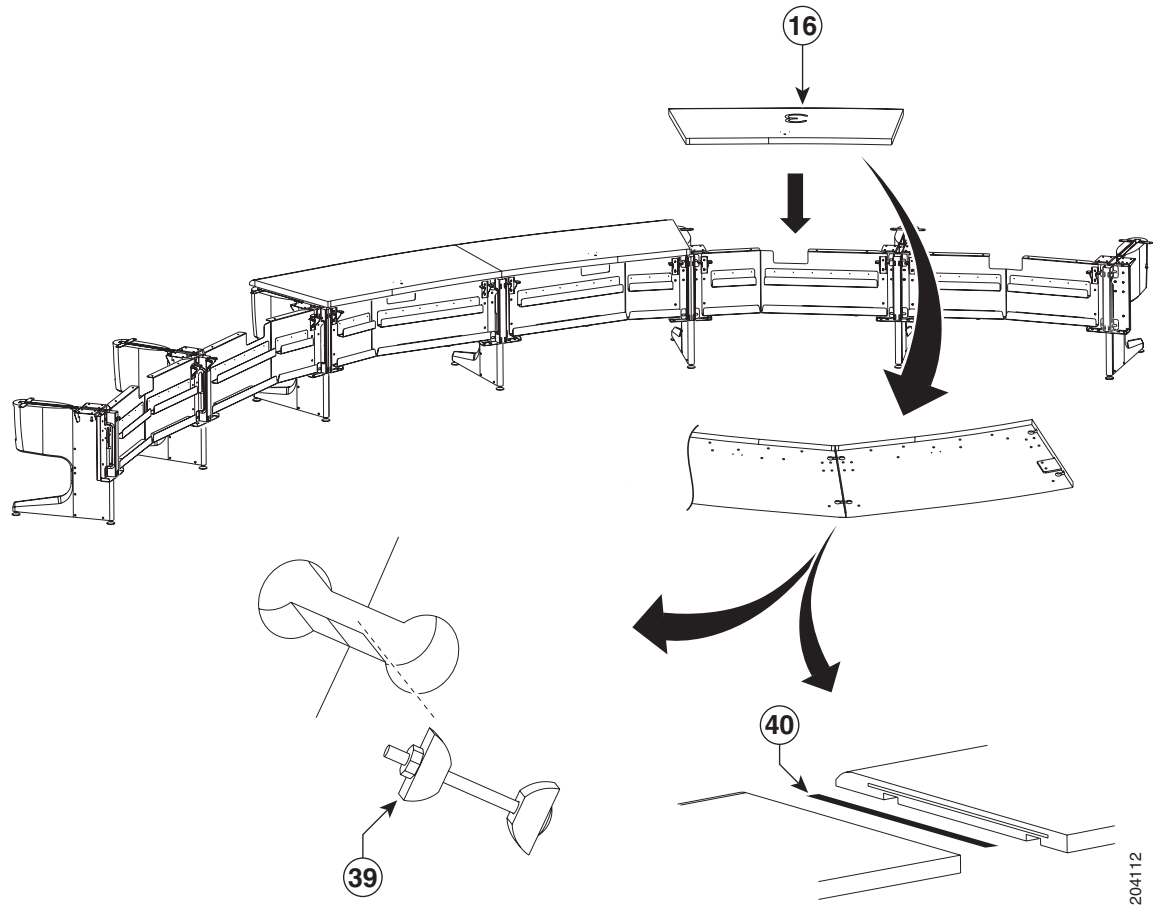
Figure 7-17 *Tabletop Sections 1 and 2, Spline And Draw Bolts*



204111

Step 18 Place the Section 3 tabletop on the table assembly, insert the spline in the slot between the two tabletops, and use the draw bolts to join table tops 1 and 3 together.

Figure 7-18 Tabletop Section 3



204112

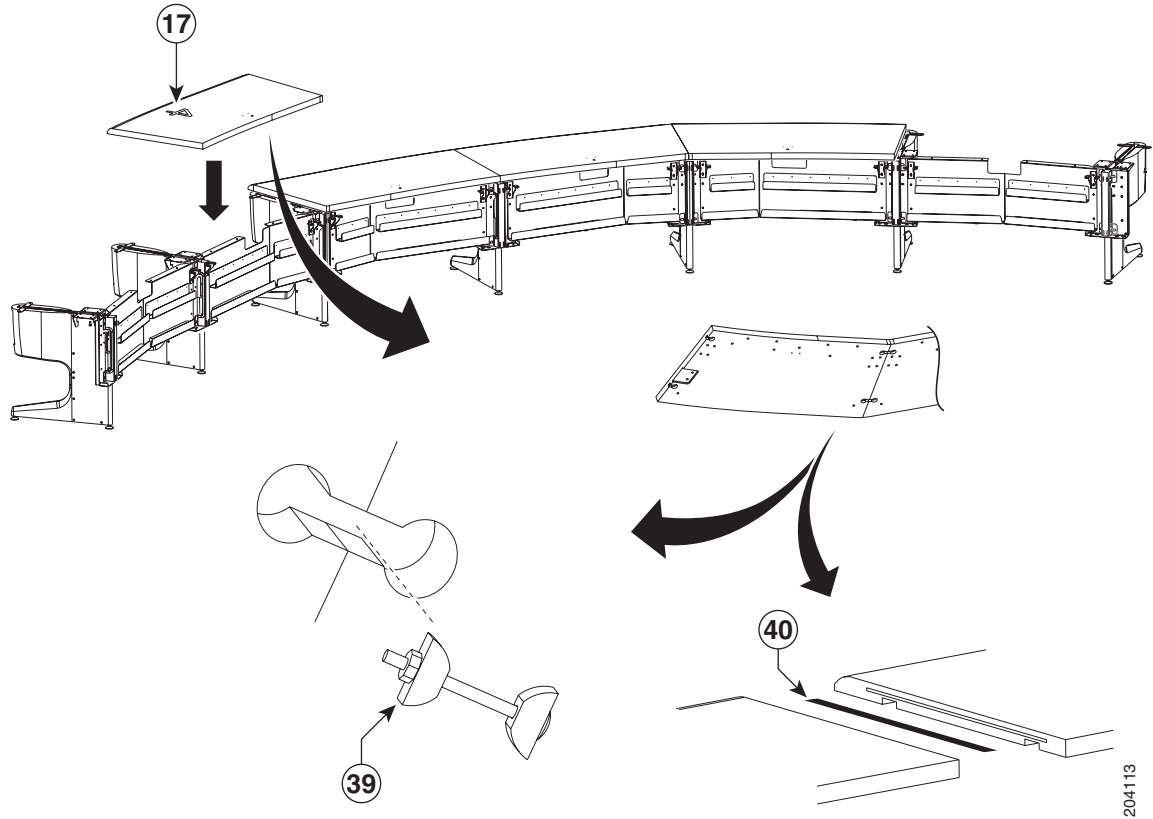
Step 19 Join table section 4 to table section 2 using the draw bolts and spline.



Note

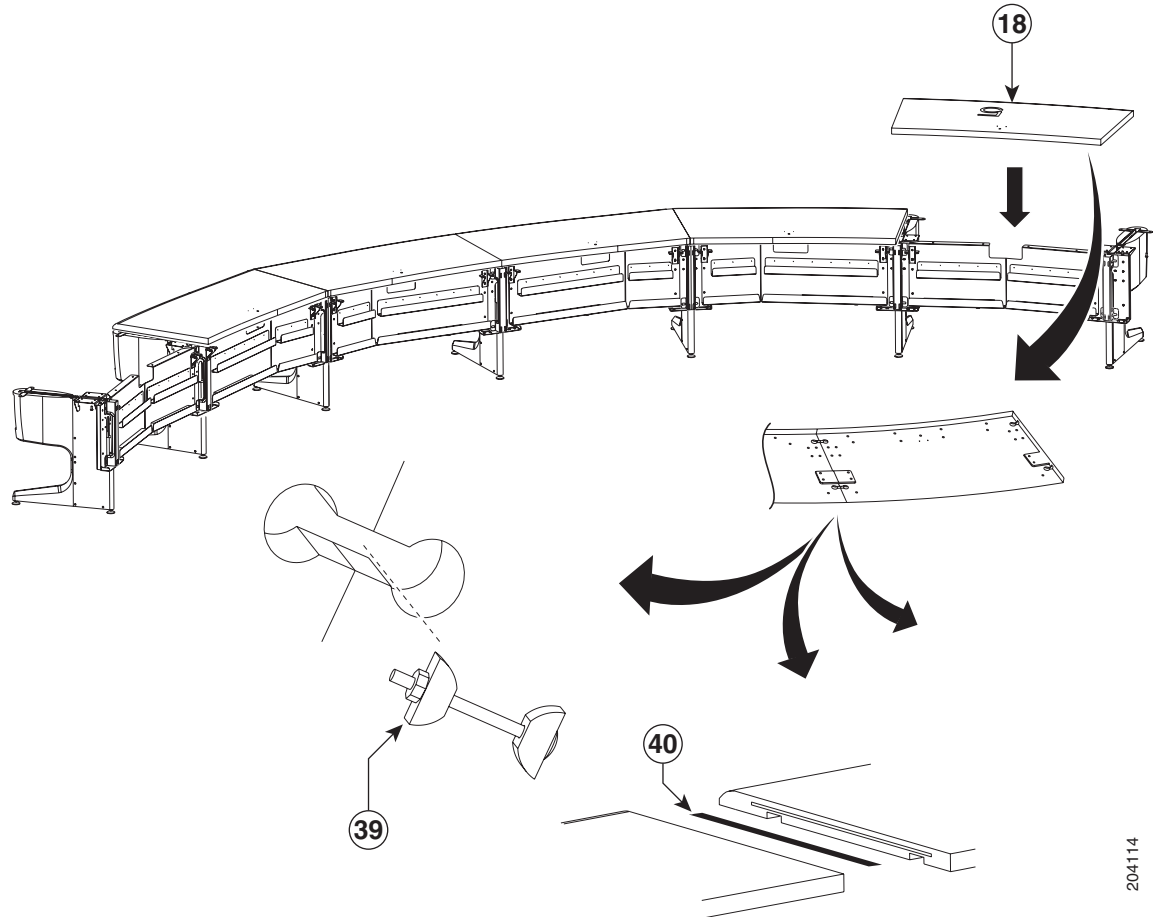
If you are building a Reduced Configuration table (four tabletops instead of six), continue to [Step 22](#) after completing this step.

Figure 7-19 **Tabletop Section 4**



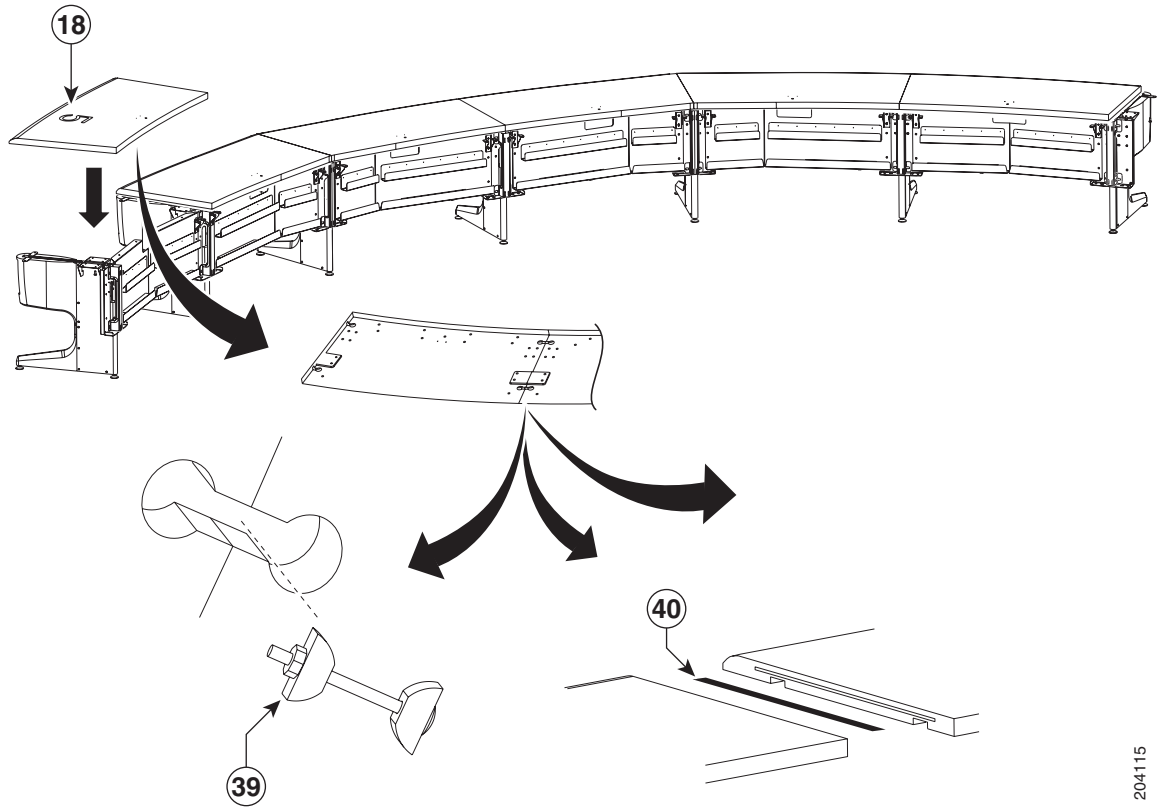
Step 20 Place the left tabletop section 5 on the table assembly and join it to the section 3 tabletop using the draw bolts and spline.

Figure 7-20 Tabletop Section 5 (Left)



Step 21 Place the right tabletop section 5 on the table assembly and join it to the section 4 tabletop.

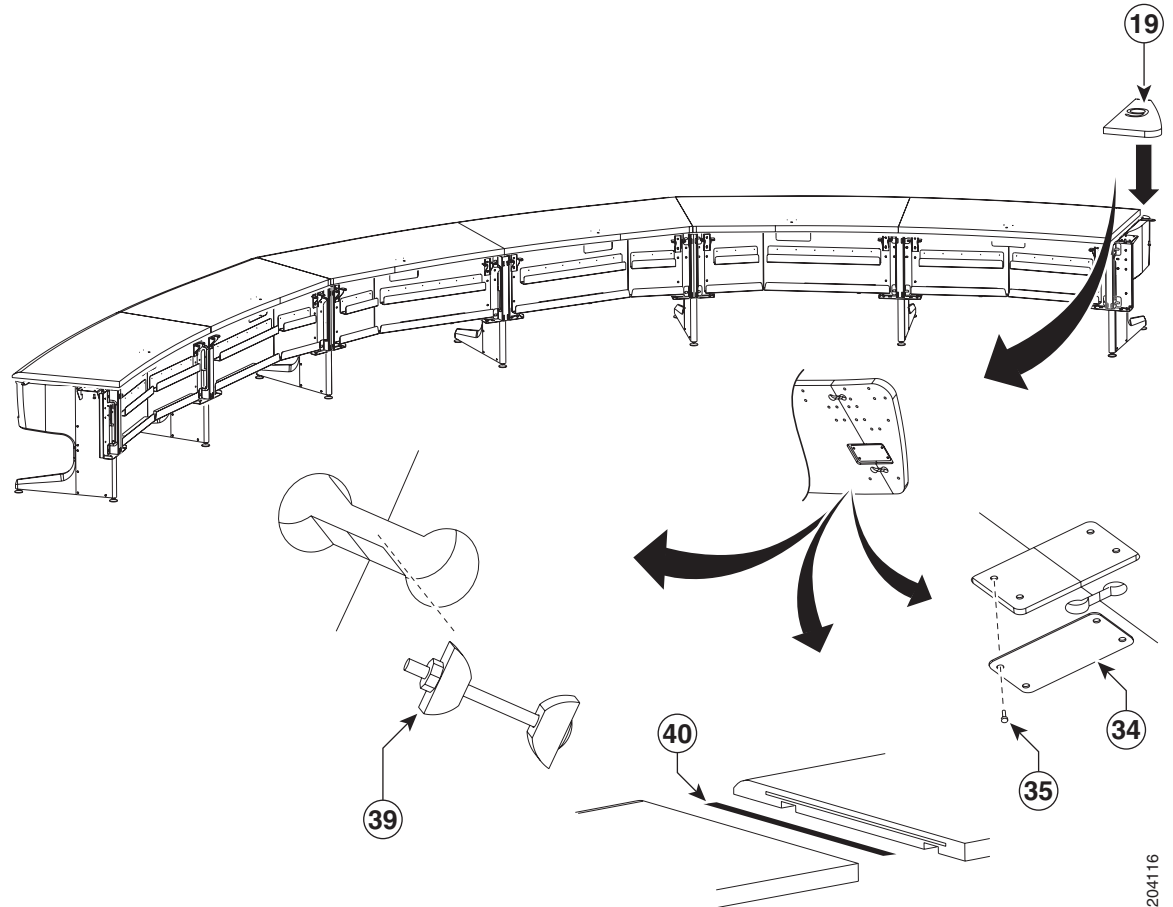
Figure 7-21 *Tabletop Section 5 (Right)*



204115

Step 22 Attach the left tabletop end to tabletop section 5 using the using the draw bolts, spline and alignment plate.

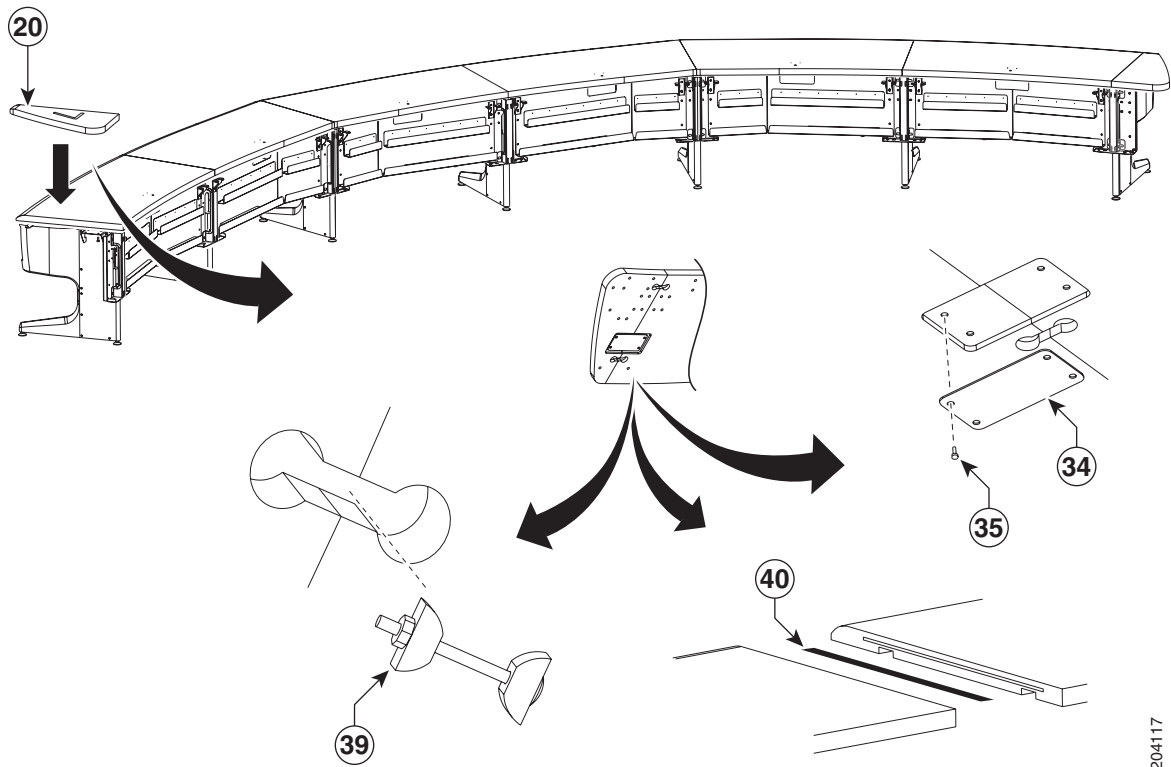
Figure 7-22 Left Tabletop End, Draw Bolts, Spline and Alignment Plate



204116

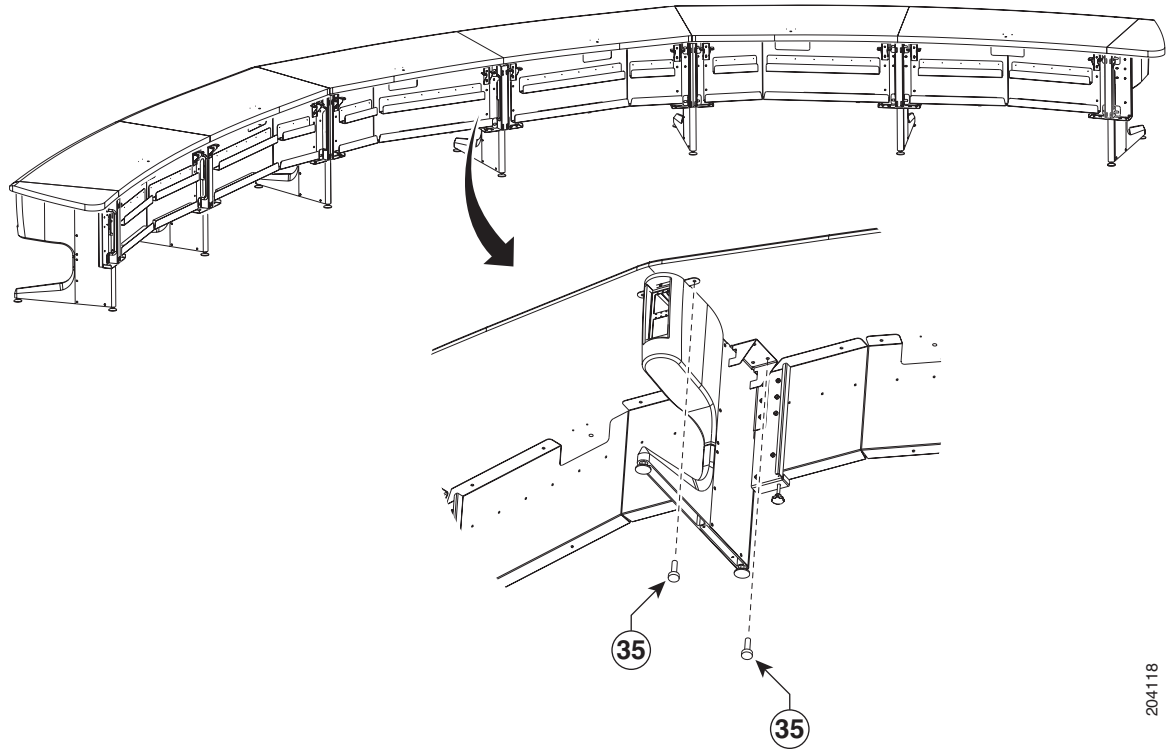
Step 23 Attach the Right tabletop end.

Figure 7-23 *Right Tabletop End*



Step 24 Attach tabletop sections 1 and 2 to the table leg.

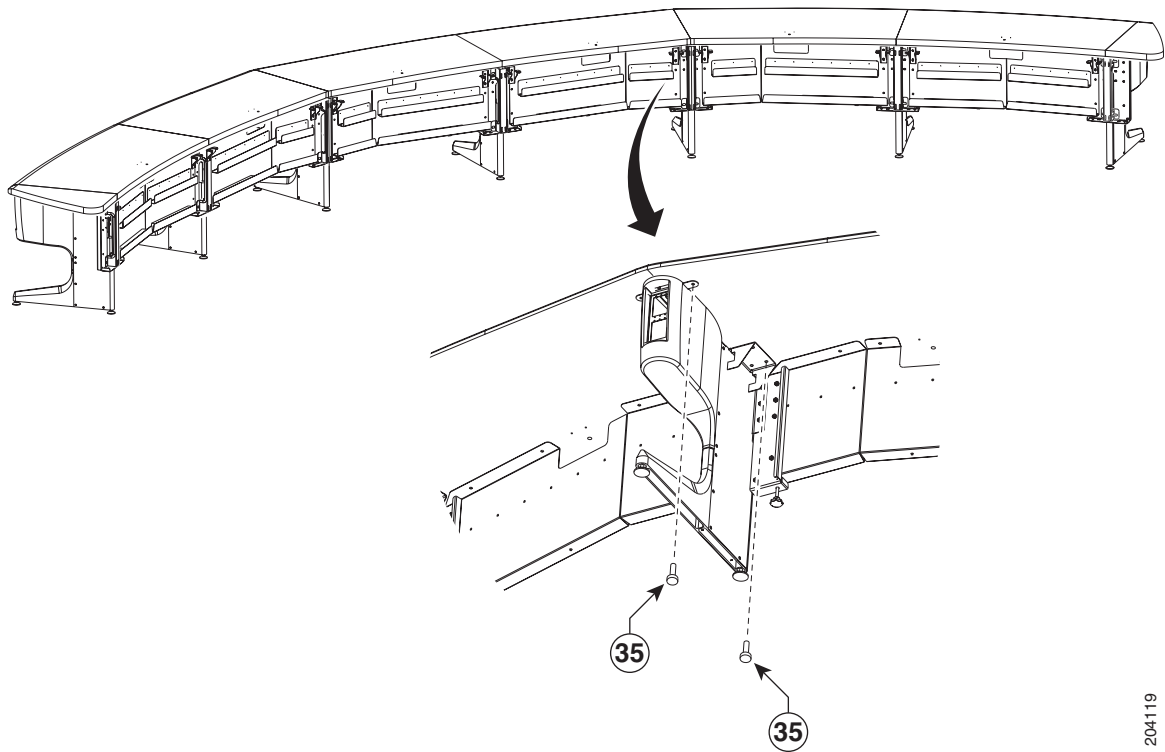
Figure 7-24 *Tabletop Sections 1 and 2 and Table Leg*



204118

Step 25 Attach tabletop sections 1 and 3 to the table leg.

Figure 7-25 *Tabletop Sections 1 and 3 and Table Leg*



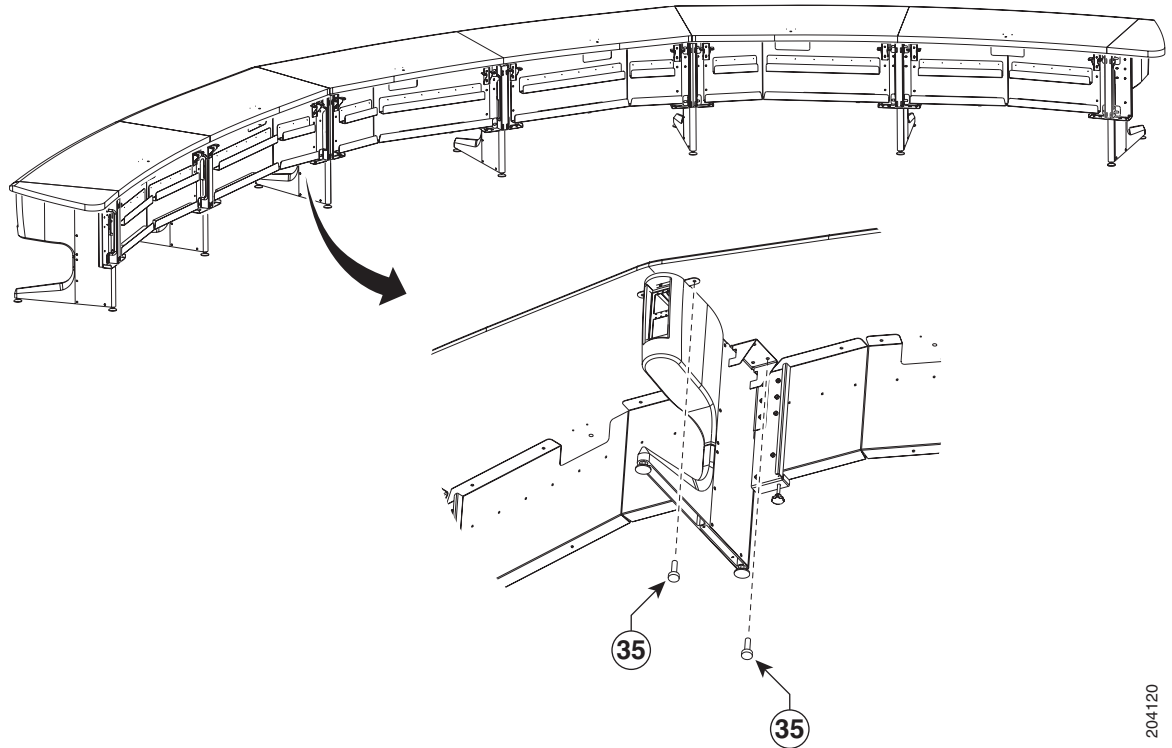
204119

Step 26 Attach tabletop sections 2 and 4 to the table leg.



Note If you are building a Reduced Configuration table (four tabletops instead of six), continue to [Step 30](#) after completing this step.

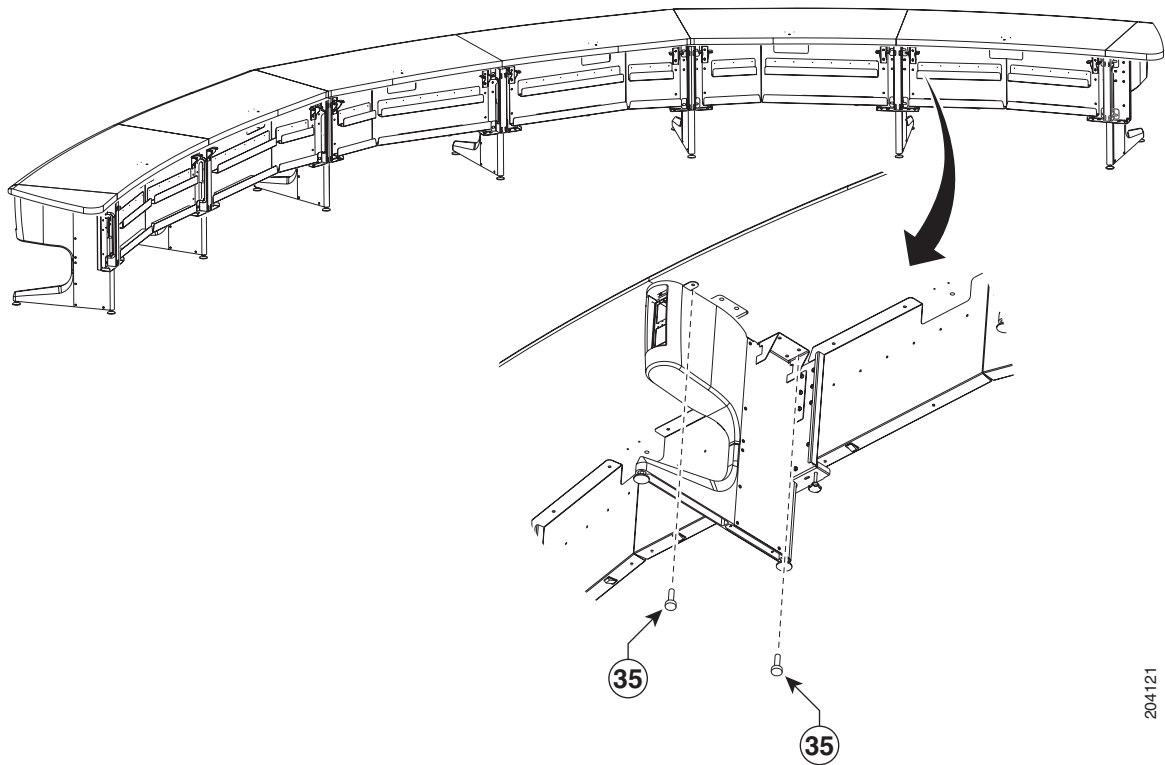
Figure 7-26 Tabletop Sections 2 and 4 and Table Leg



204120

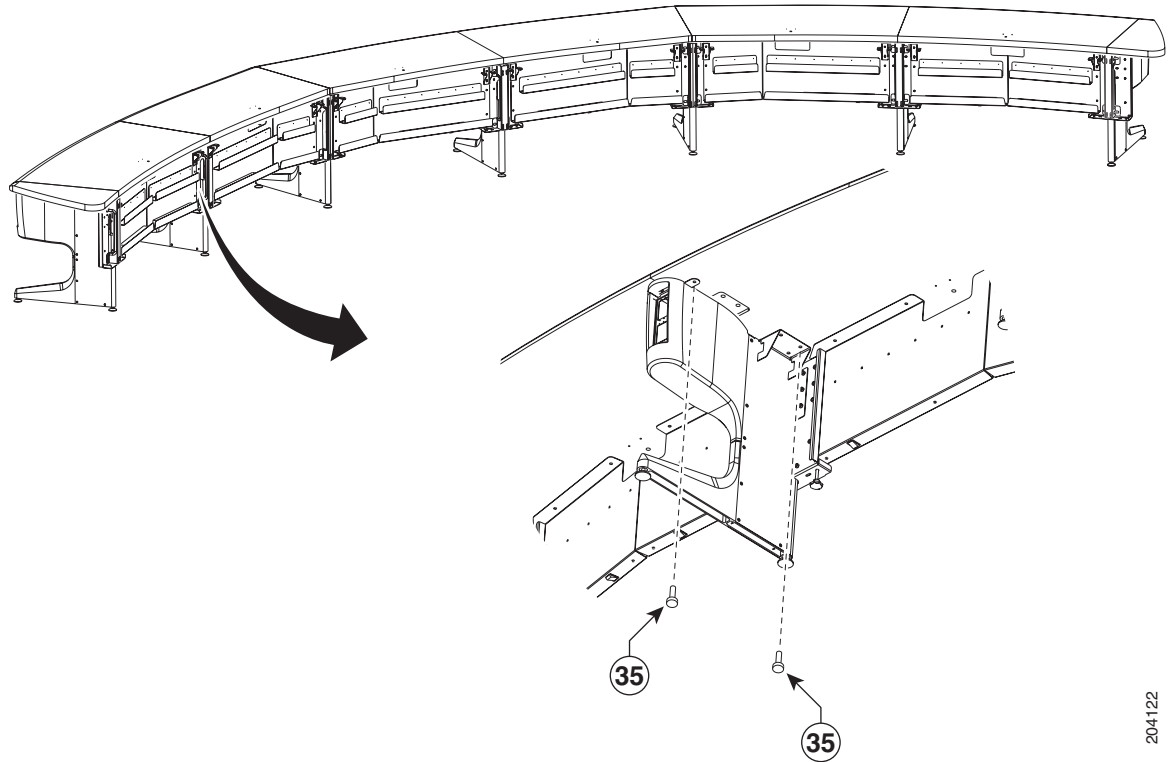
Step 27 Attach tabletop sections 3 and 5 to the table leg.

Figure 7-27 *Tabletop Sections 3 and 5 and Table Leg*



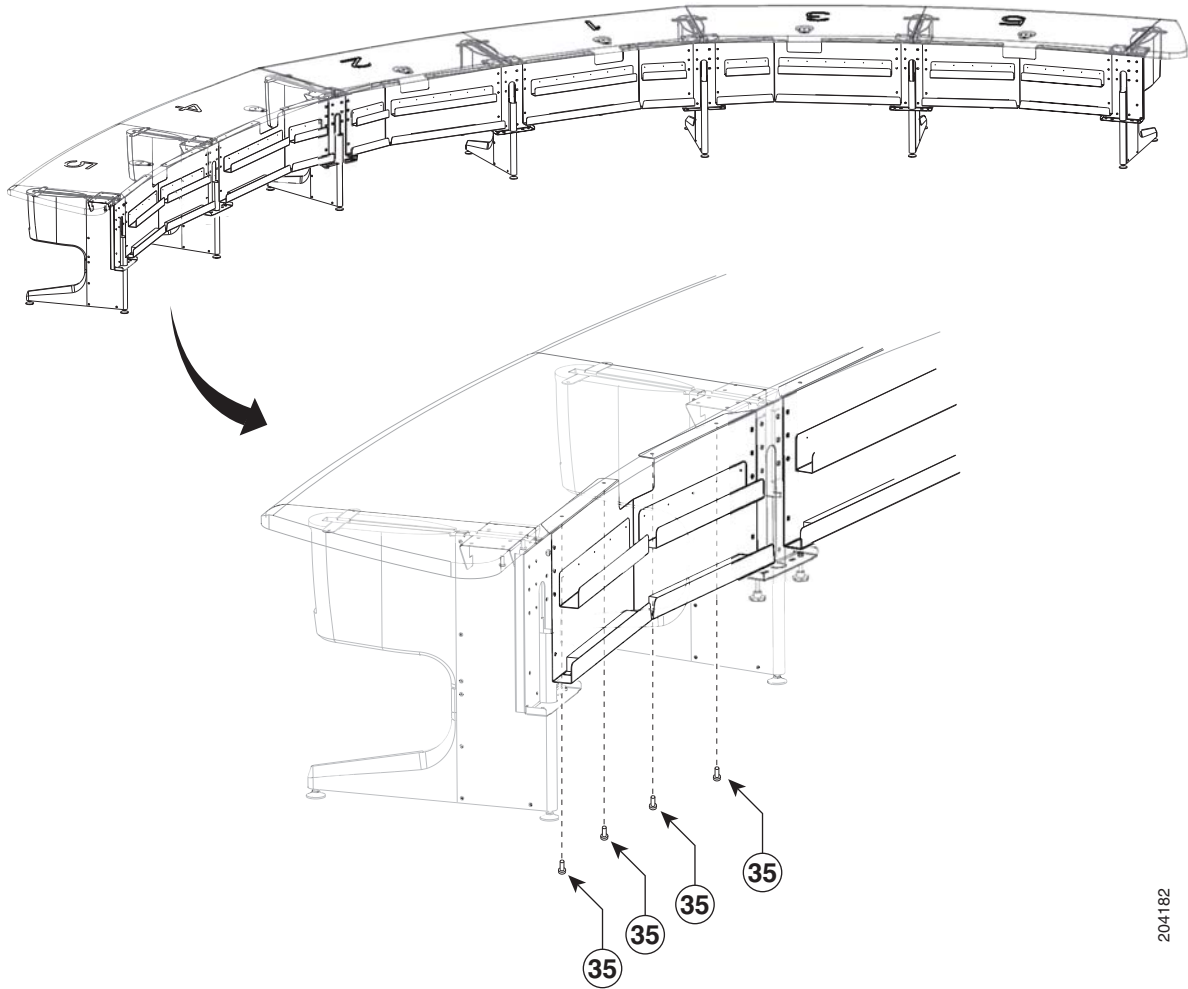
Step 28 Attach tabletop sections 4 and 5 to the table leg.

Figure 7-28 Tabletop Sections 4 and 5 and Table Leg



Step 29 Attach the reinforcement screws for the gutter panels.

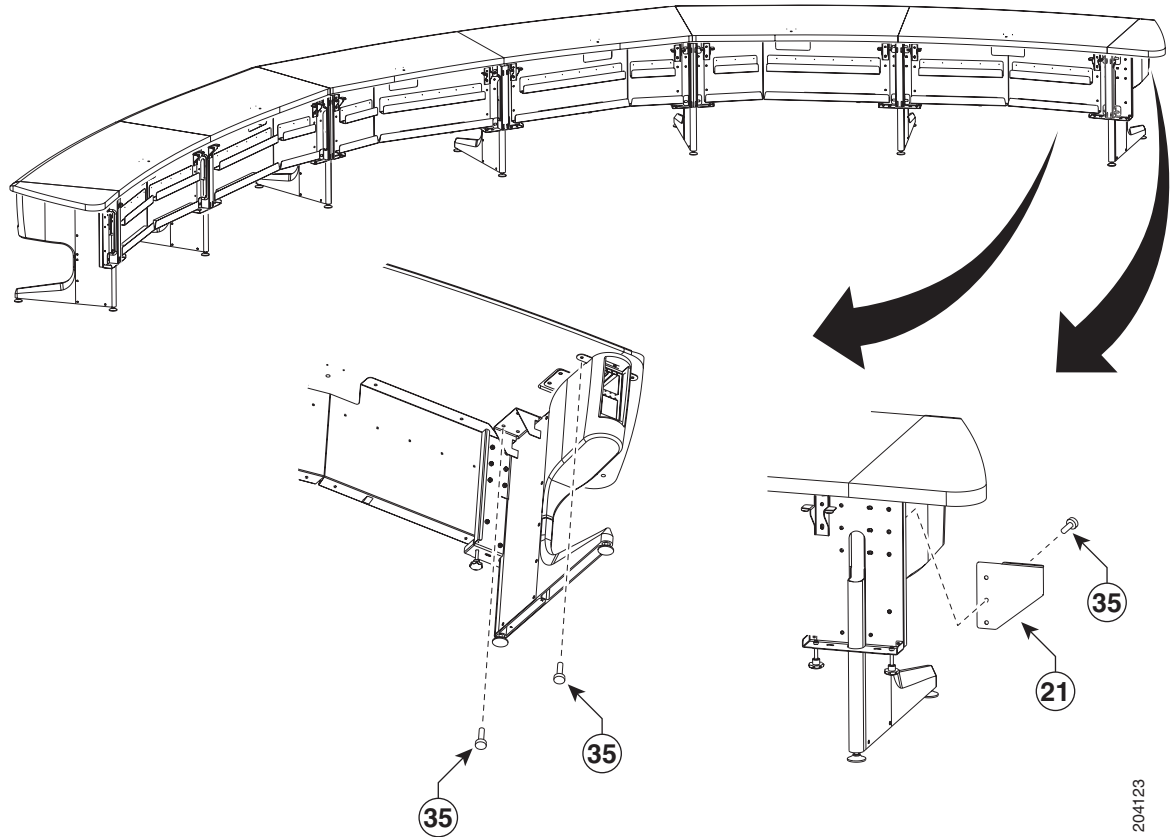
Figure 7-29 Gutter Panel Reinforcement Screws



204182

Step 30 Attach the panel end brace to the table leg and left tabletop end and attach the table leg to the tabletop and tabletop end.

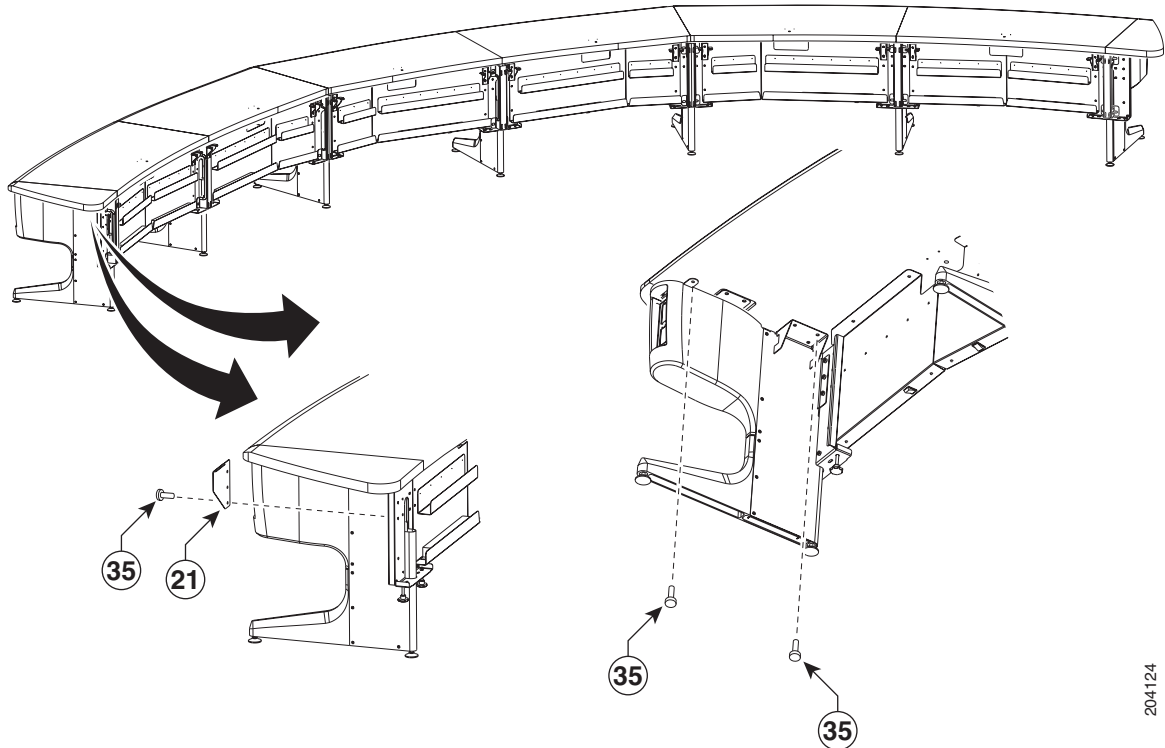
Figure 7-30 Panel End Braces, Table Leg, Left Tabletop End and Table Section 5



204123

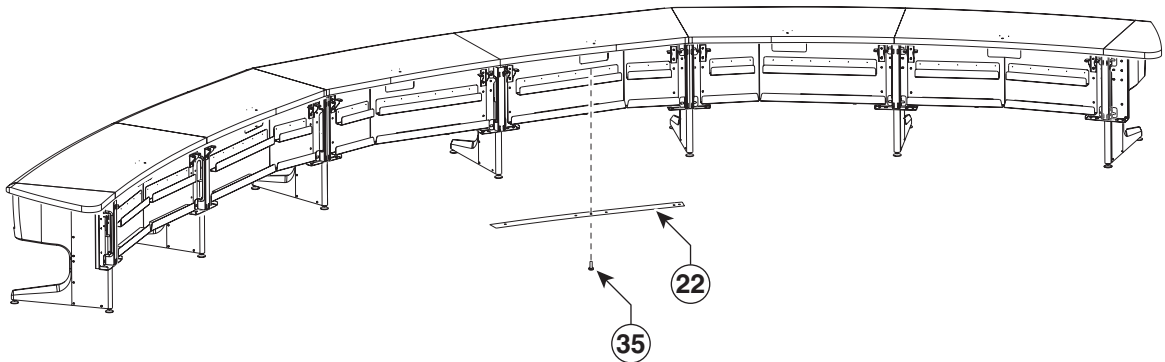
- Step 31** Attach the panel end brace to the table leg and right tabletop end, then attach the table leg to the tabletop and tabletop end.

Figure 7-31 *Panel End Braces, Table Leg, Right Tabletop End and Table Section 5*



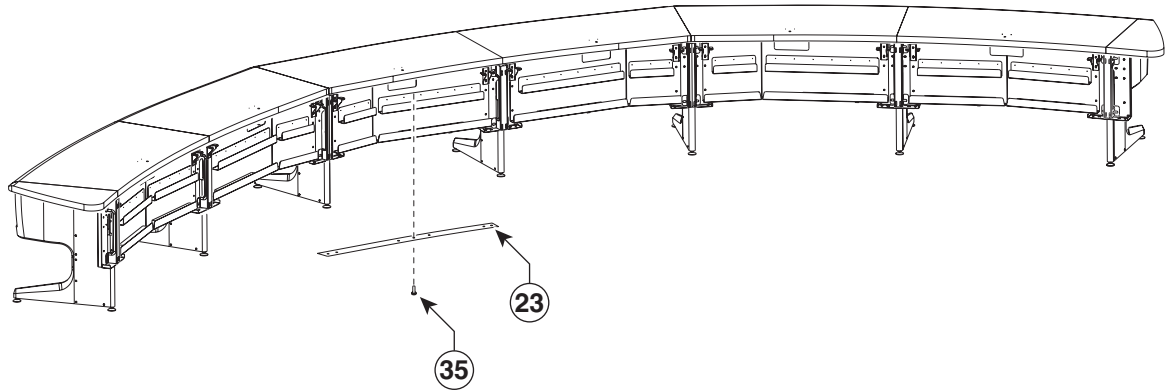
- Step 32** Attach the privacy panel alignment bracket to the underside of table section 1.

Figure 7-32 *Section 1 Privacy Panel Alignment Bracket*



Step 33 Attach the privacy panel alignment bracket to the underside of table section 2.

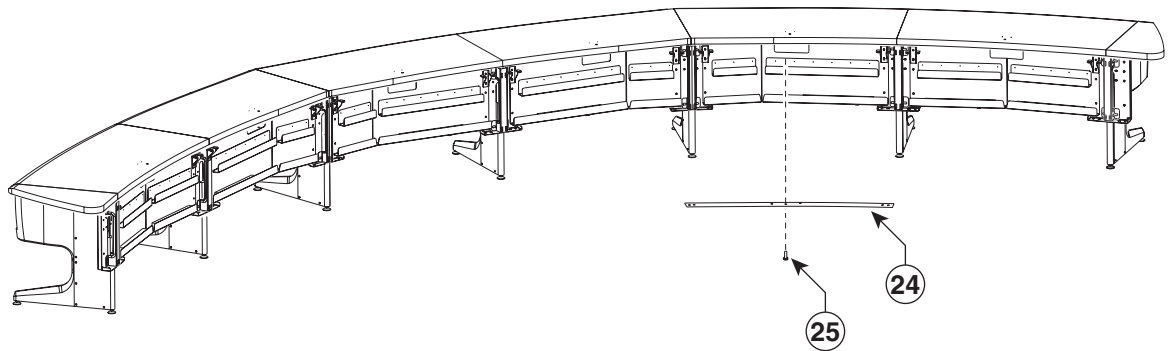
Figure 7-33 Section 2 Privacy Panel Alignment Bracket



204126

Step 34 Attach the privacy panel alignment bracket to the underside of table section 3.

Figure 7-34 Section 3 Privacy Panel Alignment Bracket



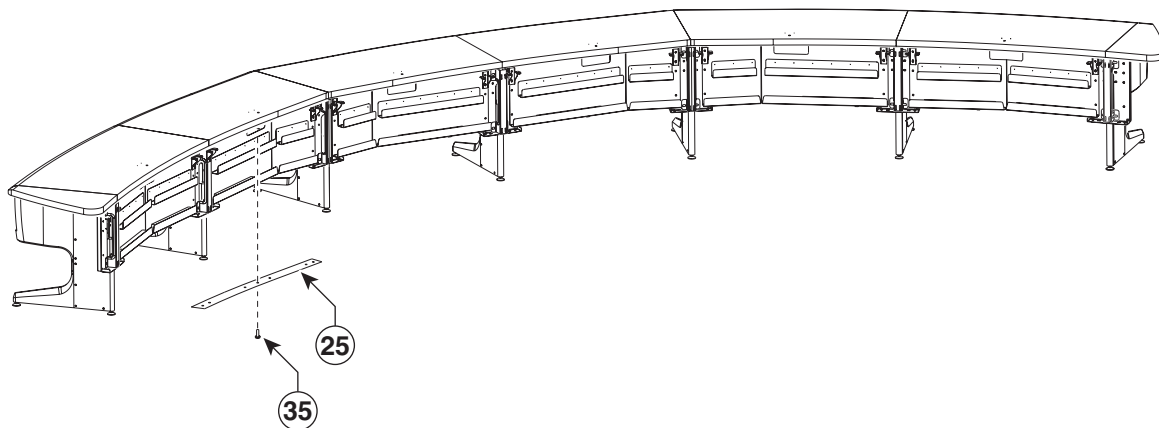
204127

Step 35 Attach the privacy panel alignment bracket to the underside of table section 4.



Note If you are building a Reduced Configuration table (four tabletops instead of six), continue to [Step 38](#) after completing this step.

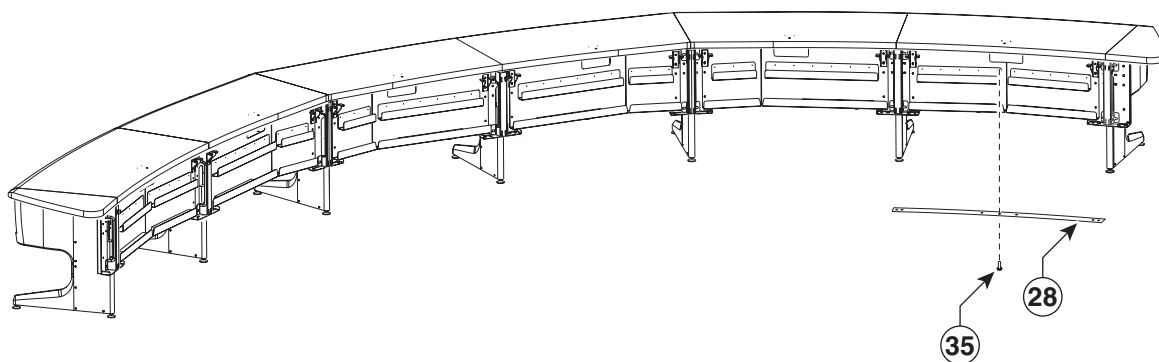
Figure 7-35 Section 4 Privacy Panel Alignment Bracket



204128

Step 36 Attach the privacy panel alignment bracket to the underside of left table section 5.

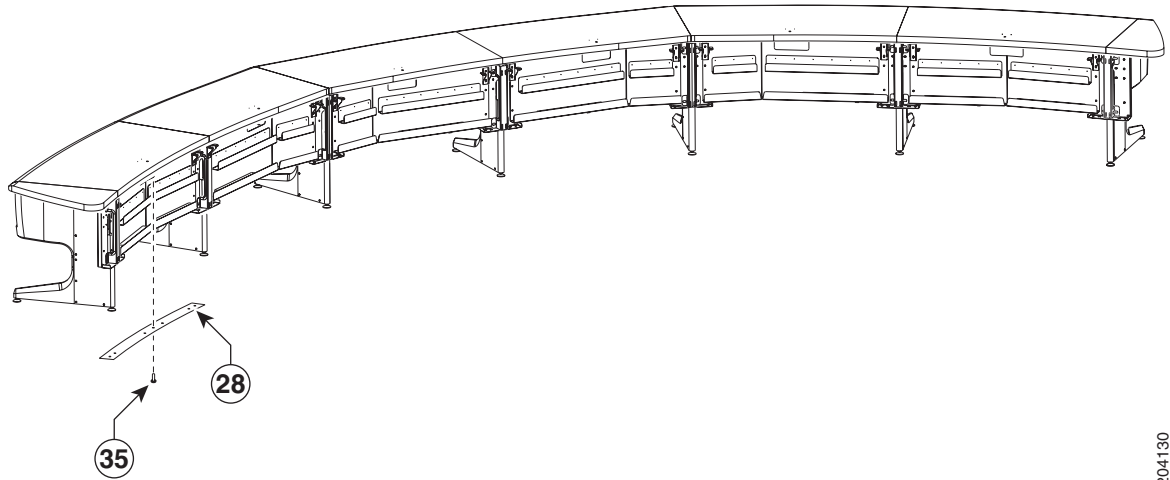
Figure 7-36 Left Section 5 Privacy Panel Alignment Bracket



204129

Step 37 Attach the privacy panel alignment bracket to the underside of right table section 5.

Figure 7-37 Right Section 5 Privacy Panel Alignment Bracket



204130

- Step 38** Attach one microphone to each table segment and attach the microphone extension cords to the microphone cables. There are six microphones for the second row table.

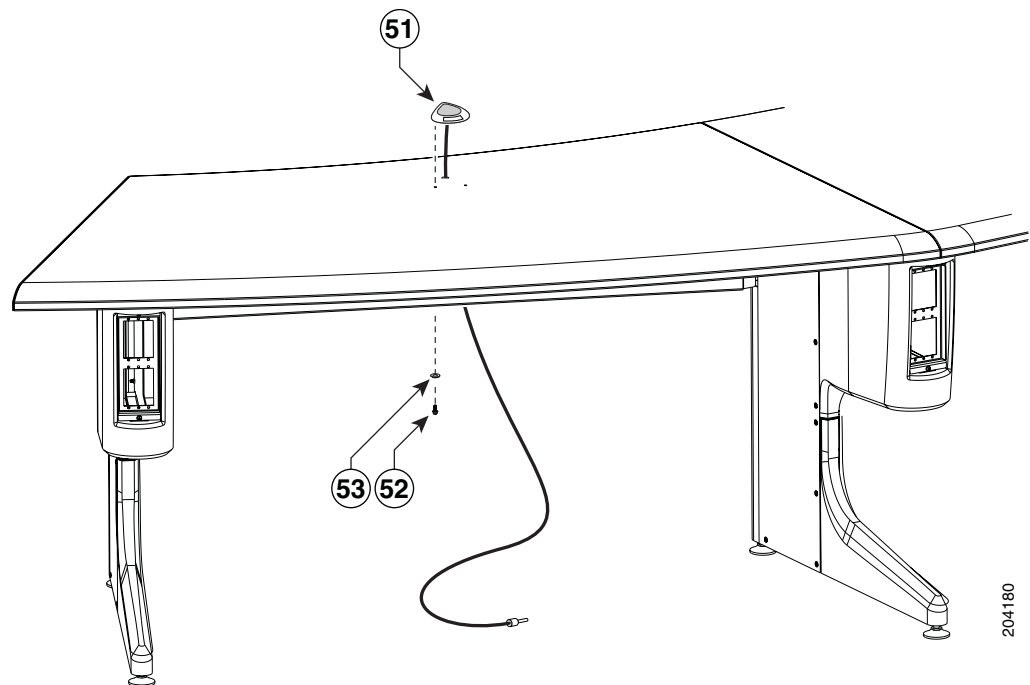
**Note**

Steps for routing the microphone cables are in [Chapter 9, “Routing Power and Signal Cables.”](#)

**Tip**

Label each microphone cable where it exits from the table. You attach the microphones to the Audio/Video Expansion Unit in [Chapter 9, “Routing Power and Signal Cables.”](#)

Figure 7-38 **Microphone Assembly**



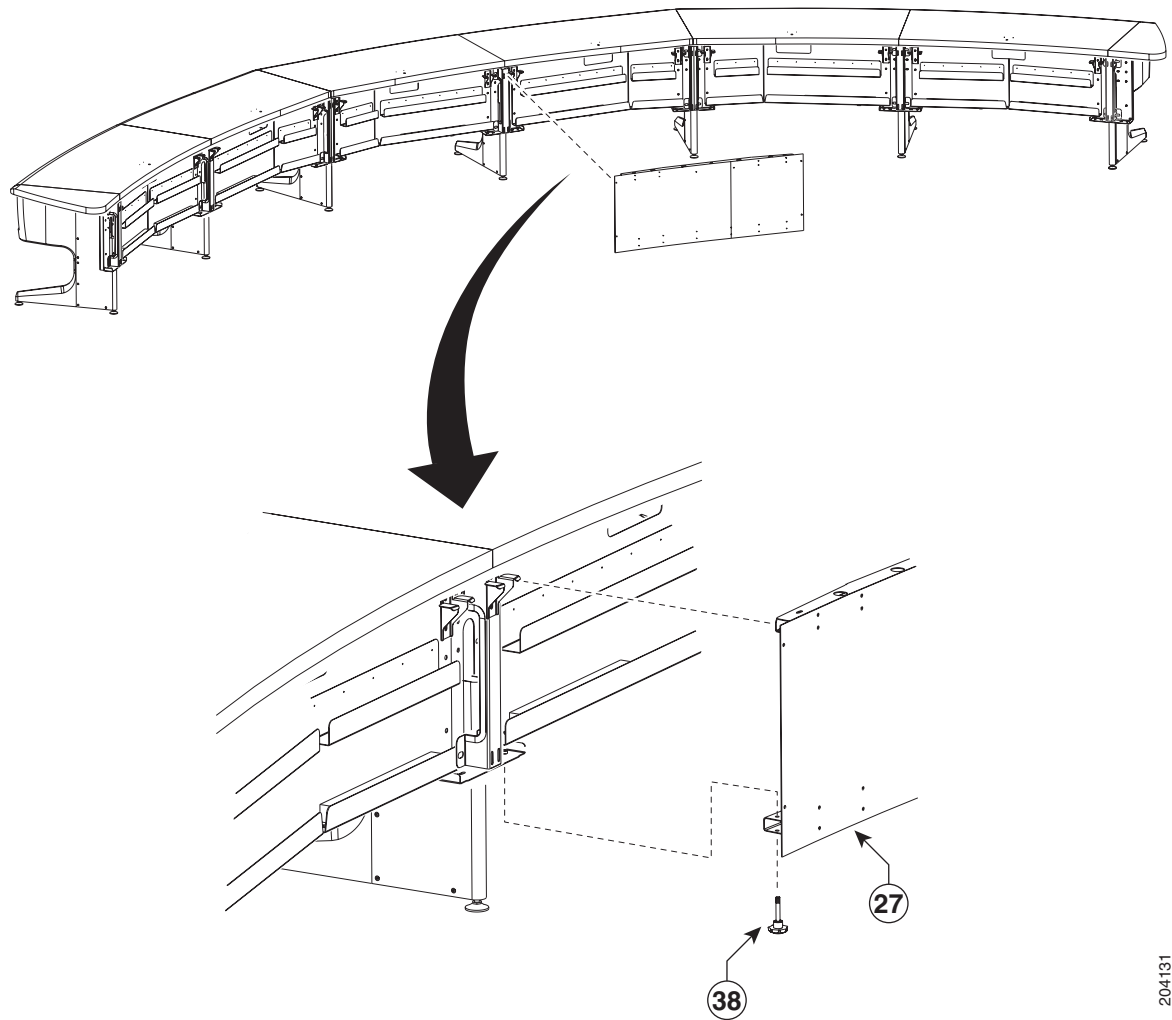
204180

- Step 39** Lift the privacy panel for table section 1 into position until it seats on the locating pins on the table assembly; then, use the plastic knob screws to loosely attach the privacy panel from below.



Note Do not fully tighten the screws until you attach all privacy panels. You perform final spacing adjustments after you attach the last panel.

Figure 7-39 Section 1 Privacy Panel



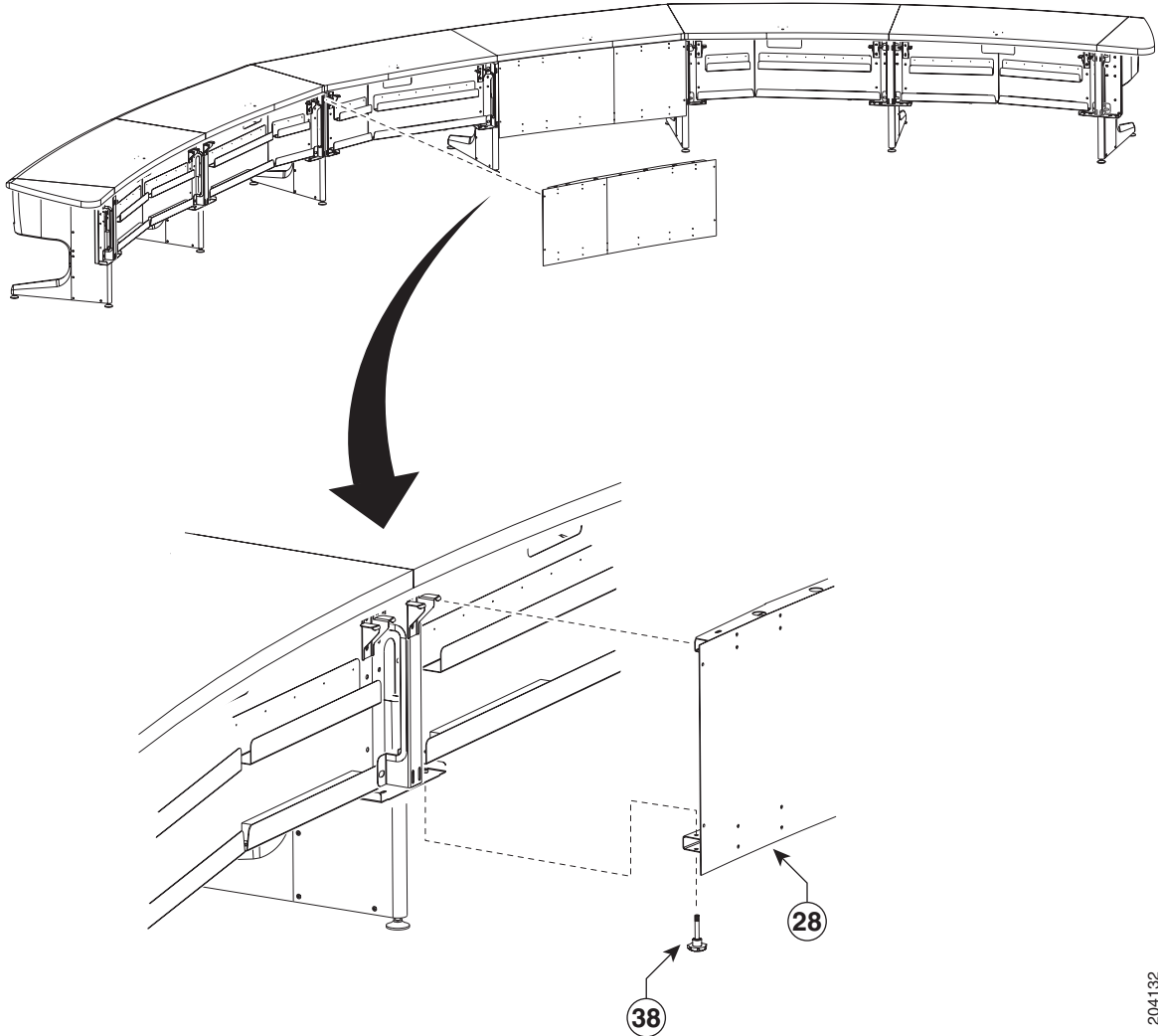
204131

Step 40 Attach the privacy panel for section 2 to the table assembly.



Note Align the panels so that the seam between privacy panels 1 and 2 is aligned with the table top seam for table tops 1 and 2.

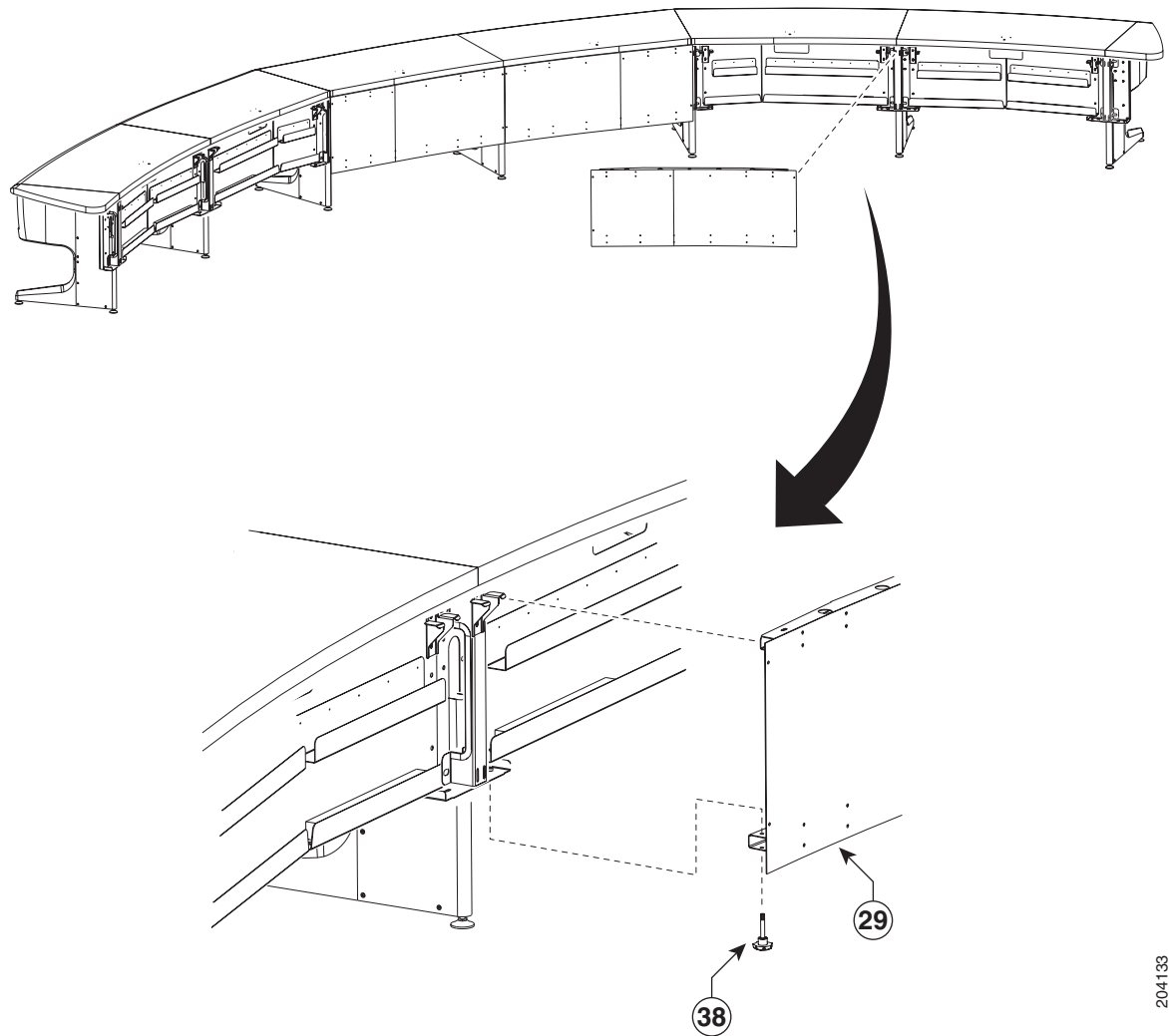
Figure 7-40 Section 2 Privacy Panel



204132

Step 41 Attach the privacy panel for section 3 to the table assembly.

Figure 7-41 Section 3 Privacy Panel



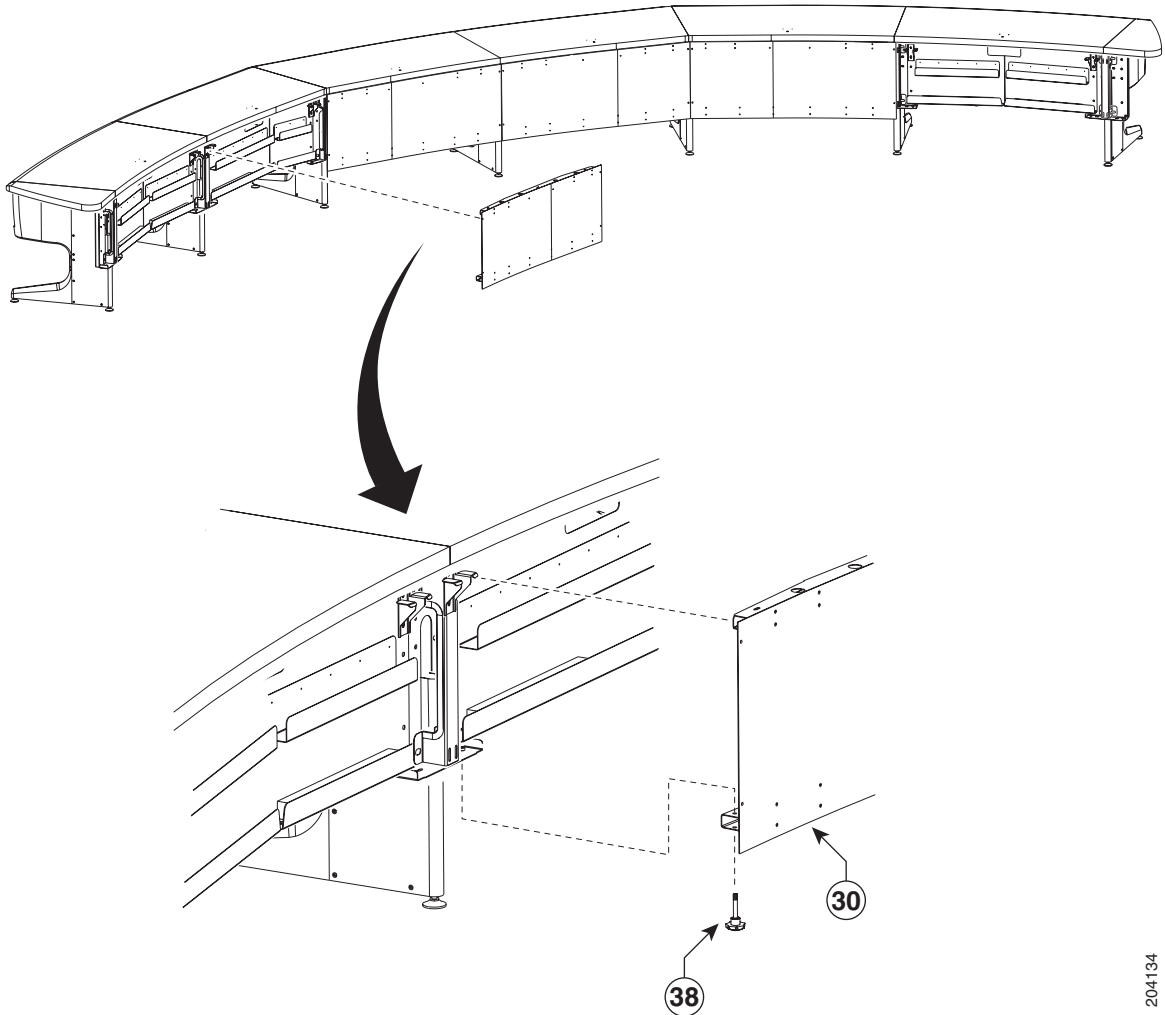
204133

Step 42 Attach the privacy panel for section 4 to the table assembly.



Note If you are building a Reduced Configuration table (four tabletops instead of six), continue to [Step 45](#) after completing this step.

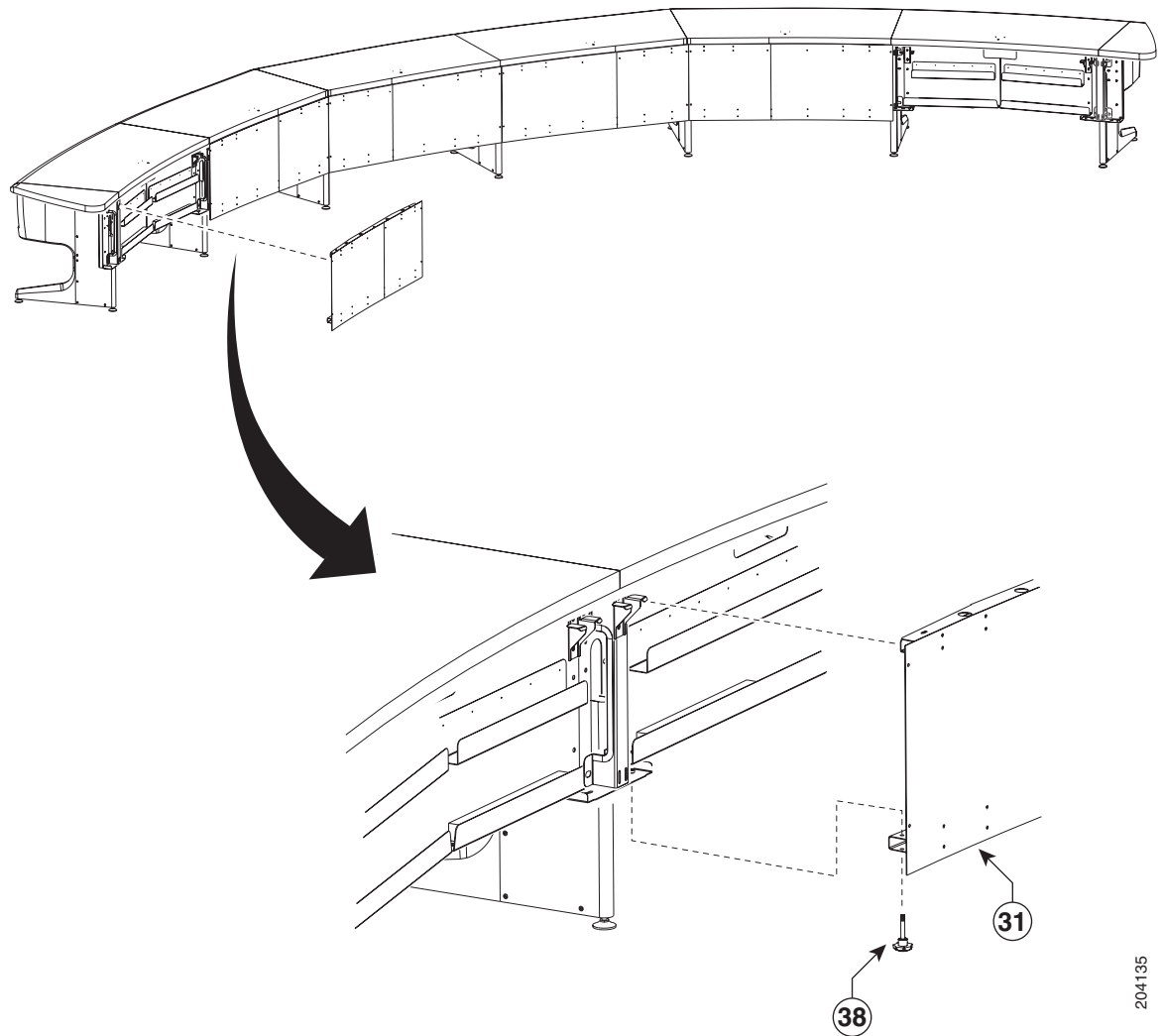
Figure 7-42 Section 4 Privacy Panel



204134

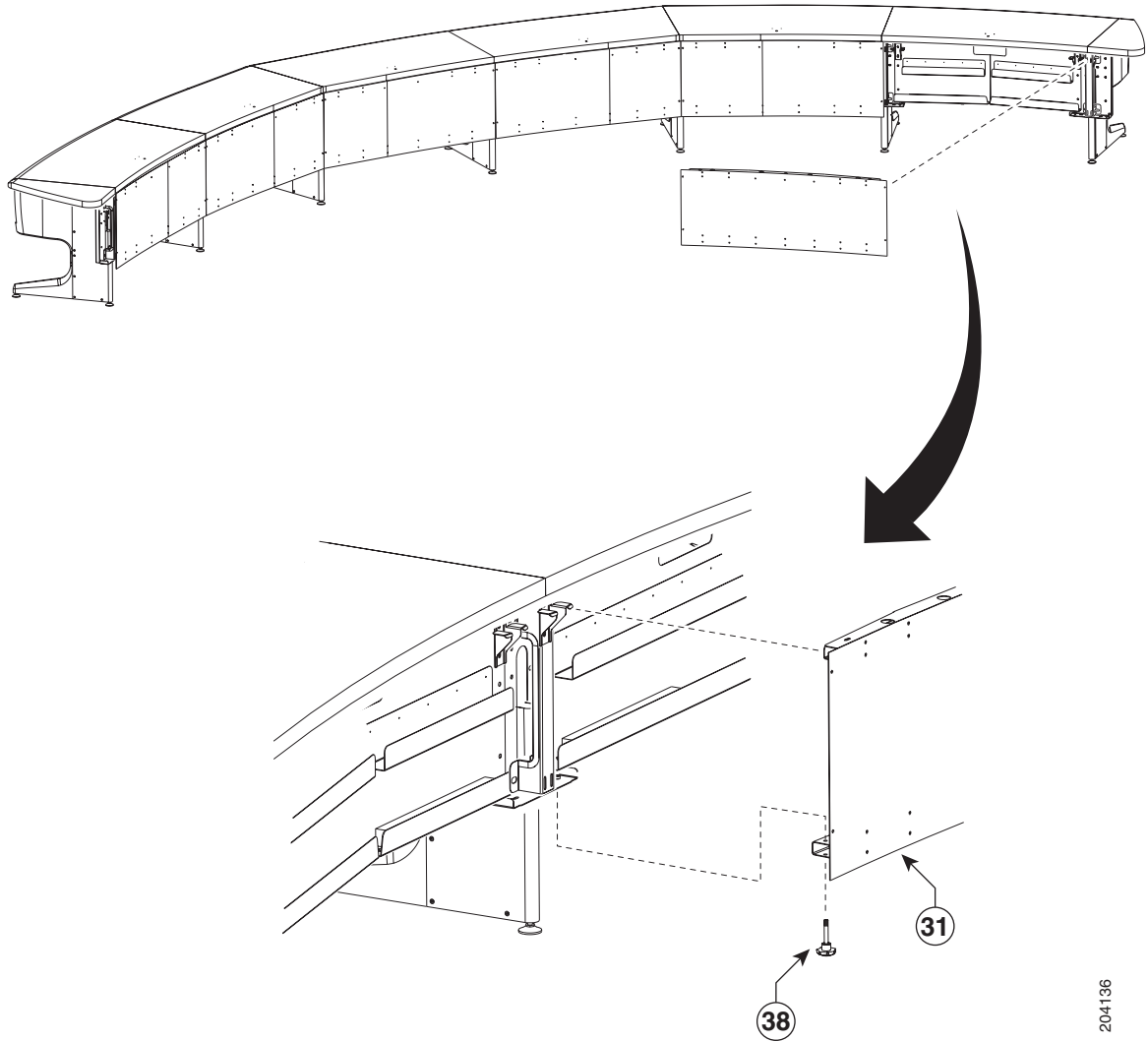
Step 43 Attach the privacy panel for left section 5 to the table assembly.

Figure 7-43 Left Section 5 Privacy Panel



Step 44 Attach the privacy panel for right section 5 to the table assembly.

Figure 7-44 Section 5 Privacy Panel

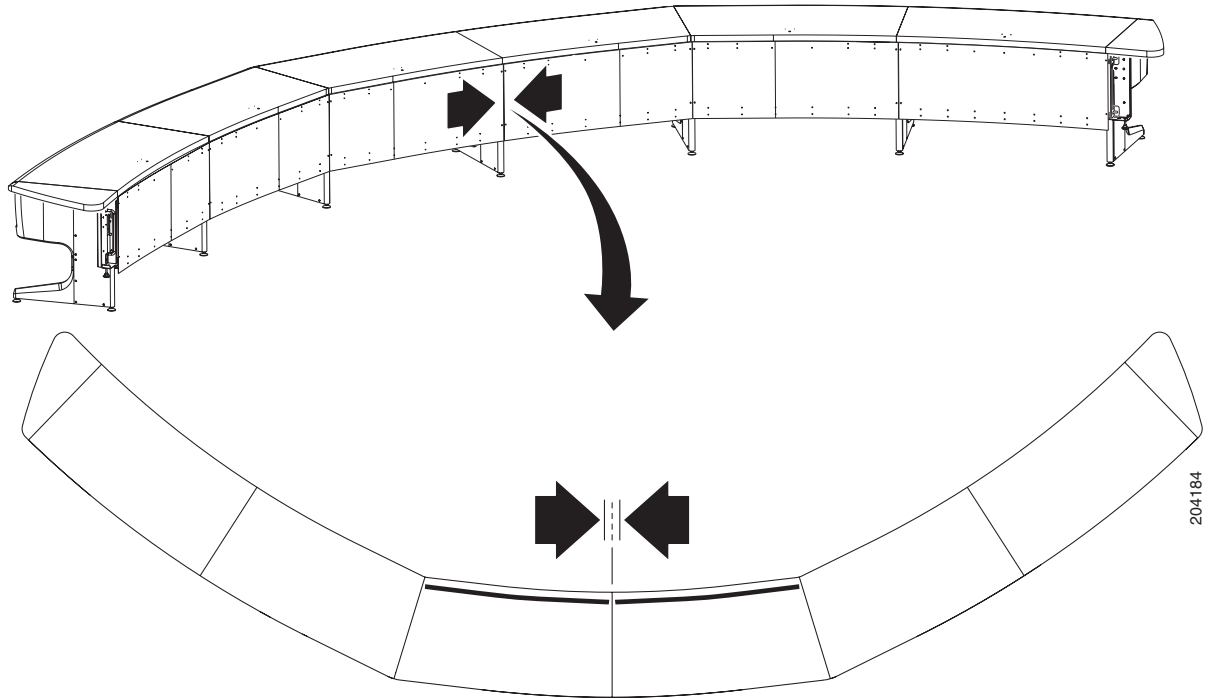


Step 45 Adjust panels until all seams between the panels are even, then fully tighten the knob screws.



Note Start with the seam between sections 1 and 2. The seam between the table tops should align with the seam between the privacy panels.

Figure 7-45 *Adjusting the Privacy Panels*



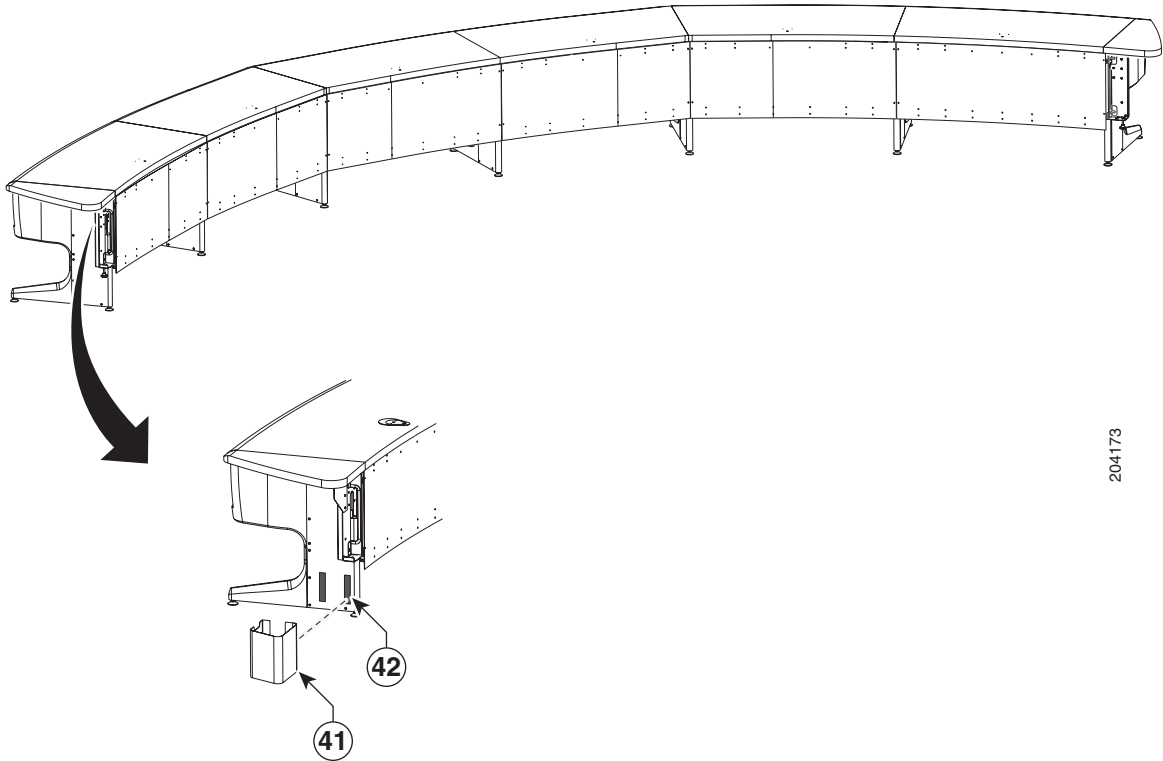
Step 46 Attach the cable cover for the right end privacy panel.



Tip

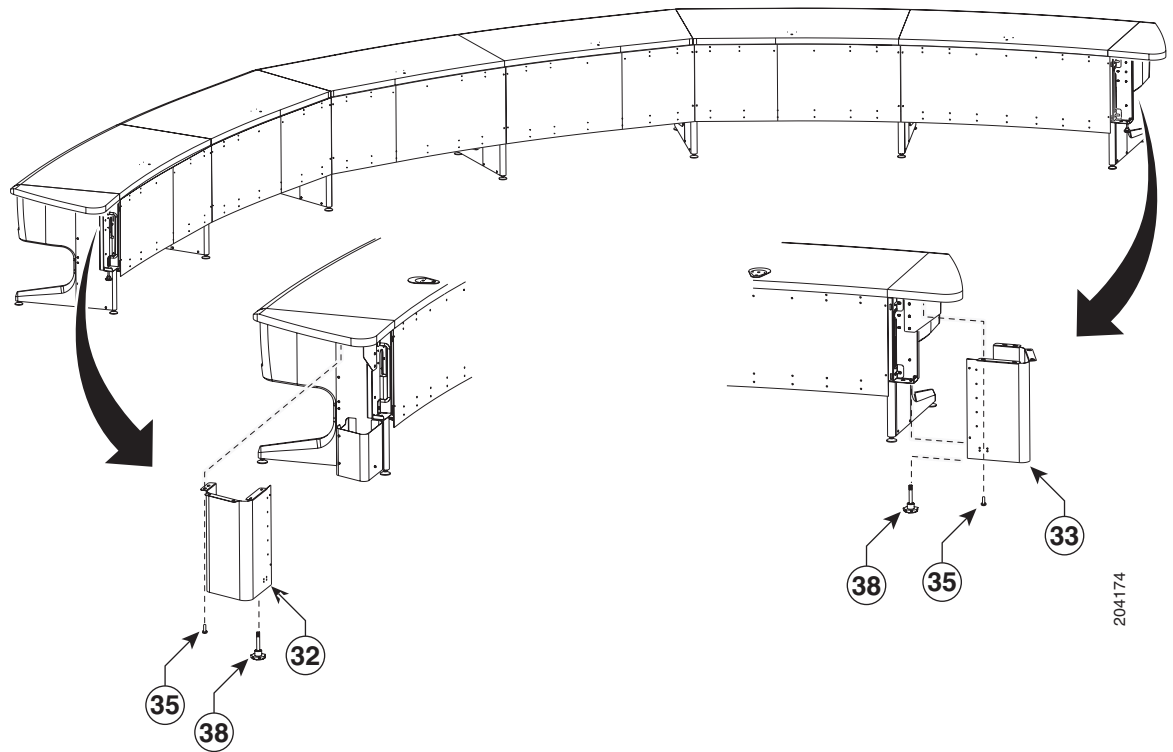
Install the cable cover so that it hides the cables that come out of the right side of the table section.

Figure 7-46 Cable Cover



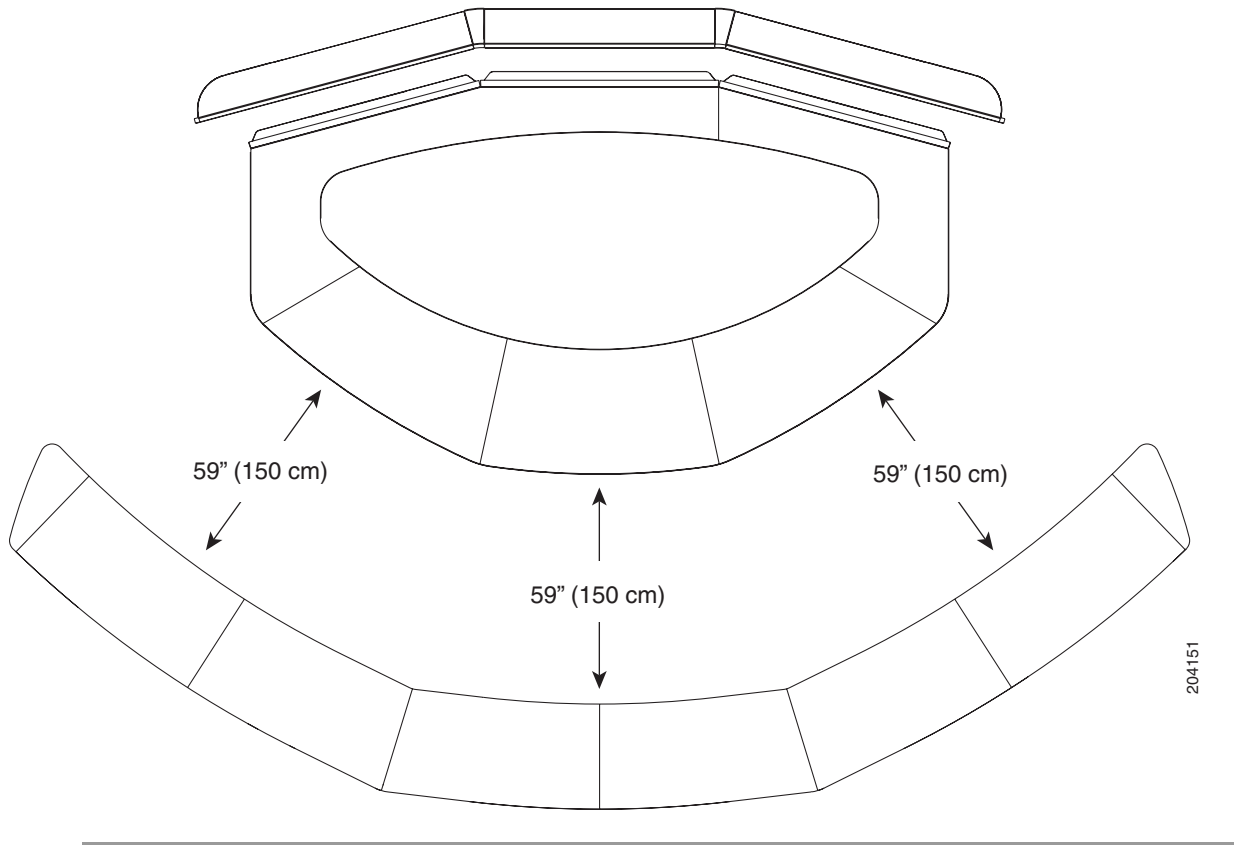
Step 47 Attach the privacy panel end pieces and the cable cover for the right end privacy panel.

Figure 7-47 Privacy Panel End Pieces



- Step 48** Position the second row table so that the trailing edge of the first row table is exactly 59 inches (150 cm) behind the leading edge of the second row table.

Figure 7-48 *Second Row Table Positioning*





CHAPTER 8

Assembling the Remaining Cisco TelePresence Elements

Revised: July 28, 2008, OL-14521-01

Parts List

Key	Part Description	Part Number	Qty	Ctn	Notes
Camera and Camera Assembly					
1	Camera assembly	68-3277-xx	1	4	
8	M8 x 20 mm pan head screws	48-2410-xx	4	1	Used to attach to the Camera assembly bracket on the center Display structure.
7	M4 x 20mm cap screws	48-0654-xx	4	N/A	These screws are included with the camera assembly and are used to attach the top and bottom hoods to the camera assembly.
Projector Assembly					
1	Projector	74-4824-xx	1	7	
2	Projector mounting bracket	700-23824-xx	1	45	
3	VGA Module	69-1691-xx	1	1	
4	M8 x 20 mm screws	48-2273-xx		1	
5	M6 x 10 mm screws	48-1963-xx	4	1	
6	M8 washers	48-2273-xx		1	

Parts List

Key	Part Description	Part Number	Qty	Ctn	Notes
Codec Assembly					
1	Primary codec	84-1321-xx	1	3	
2	Secondary codec	68-2898-xx	2	5, 6, 40	
3	Cable management bar	700-23449-xx	3	3, 5, 6, 40	
4	Codec attachment brackets	700-23342-xx	6	13	
5	M4 x 12 mm screws	48-1045-xx	20	1	
6	M4 washers	49-0735-xx	20	1	
Speaker Assembly					
1	Speaker	74-4740-xx	3	8	
2	Speaker boards left and right	74-5544-xx	2	58	
3	Speaker board center	74-5307-xx	1	58	
4	Speaker cable	37-0849-xx	3	1	
5	Leveling foot	51-4540-xx	6	1	
6	Half-turn bolt	48-2275-xx	6	1	
7	Speaker board brackets	700-23944-xx	6	13	
8	M8 x 20 mm screws	48-2273-xx		1	
9	M8 washers	49-1165-xx		1	
Cisco Unified IP Phone CP-7975G		CP-7975G-CTS 68-3309-xx	1	1	The IP Phone should be placed near the right wing Table segment to prevent it from appearing on screen.
Projector Screen Assembly, Type 1		800-28681-xx	1	46	
Projector Screen Assembly, Type 2		CTS3K-SCREEN 74-5416-xx	1	46	Your system ships with either a Type 1 or Type 2 screen. Refer to the projector screen installation guide that is packaged with the assembly to install the screen.
Audio/Video Extension Unit					
1	Mounting bracket for audio/video extension unit	700-26833-xx	1	1	
2	audio/video extension unit	73-11609-02 800-30442-xx	1	1	
Auxiliary Control Unit					
1	Auxiliary Control Unit	CTS-LIGHT-CTRL 74-5405-xx	1	22	
Camera Target Assembly					
1	Tabletop camera target: large	700-24323-xx	1	32	
2	Tabletop camera target: small	700-24320-xx	1	32	
3	Cardboard ruler	700-24321-xx	1	32	
4	Vertical bar	700-23961-xx	2	32	

Key	Part Description	Part Number	Qty	Ctn	Notes
5	Horizontal bar	700-23960-xx	2	32	
6	M4 x 20 mm screws	48-0654-xx	4	1	

Switch Bracket

Note There are two additional brackets included with the accessory cabinet in Carton 33: 700-23338-xx and 700-23344-xx. These brackets attach the optional Ethernet switch to the left accessory cabinet. If you ordered this switch, refer to the *Cisco TelePresence System Hardware Options & Upgrade Guide* to install the switch.

**Note**

Note that the key numbers restart for each element.

**Warning**

Only trained and qualified personnel should be allowed to install, replace, or service this equipment.

**Note**

The directions *left* and *right* refer to the assembly as you face it from the front.

- Step 1** Place the assembly over the center display, then attach the Camera Assembly to the Camera Assembly bracket.

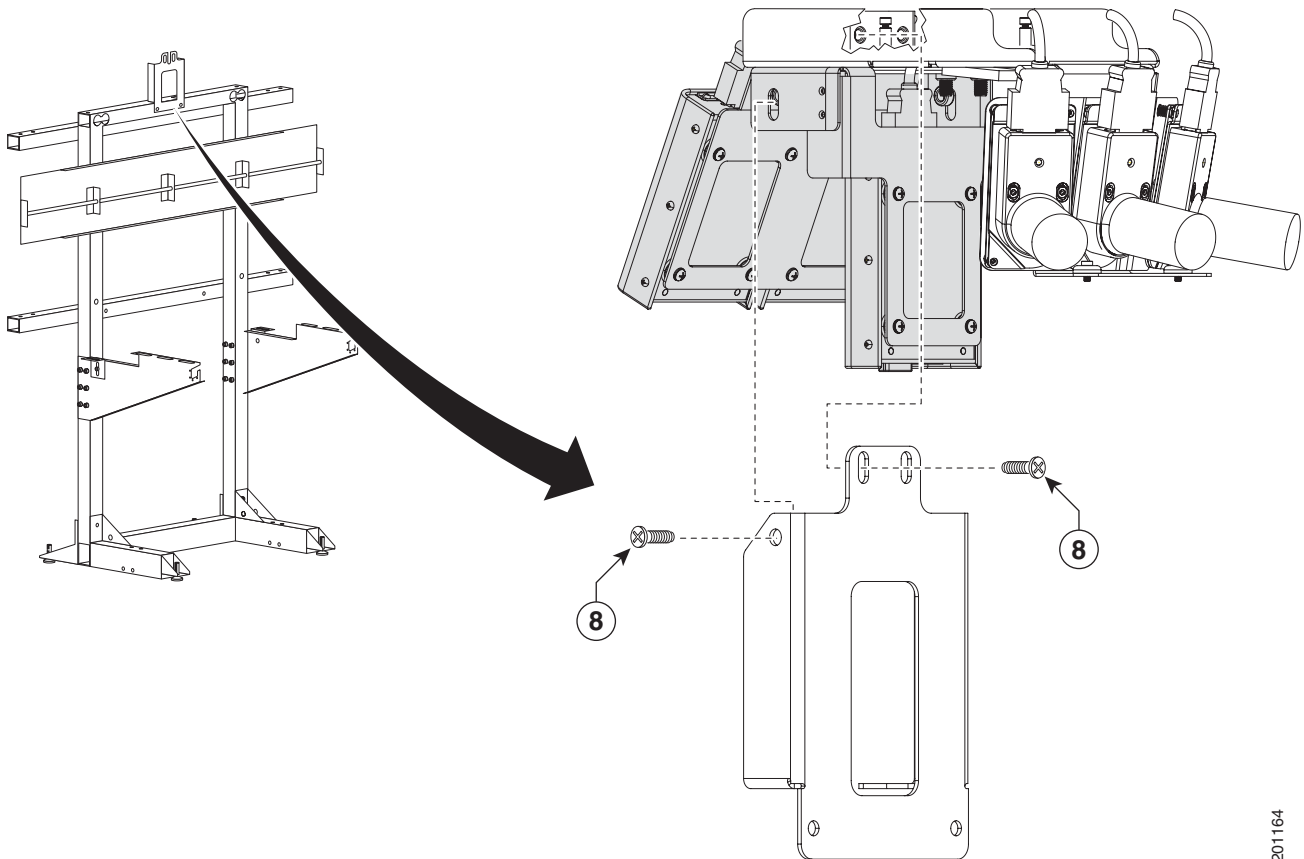
For clarity, the display has been removed from the illustration in [Figure 8-1](#).



Note

There are two foam pads on inside of the camera assembly. Make sure that the foam pad on the top of the camera assembly touches the top of the display, and the foam pad on the front of the assembly touches the front of the display. To make adjustments, loosen the four screws on the top of the camera assembly and move the assembly forward or back as required; then, retighten the four screws.

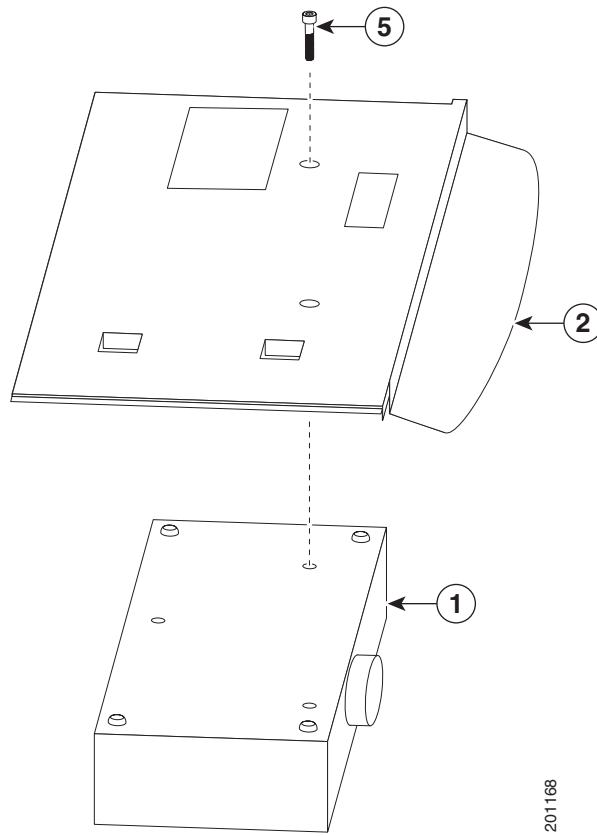
Figure 8-1 Camera Assembly



201164

Step 2 Attach the projector to the projector mounting bracket.

Figure 8-2 *Projector Assembly*

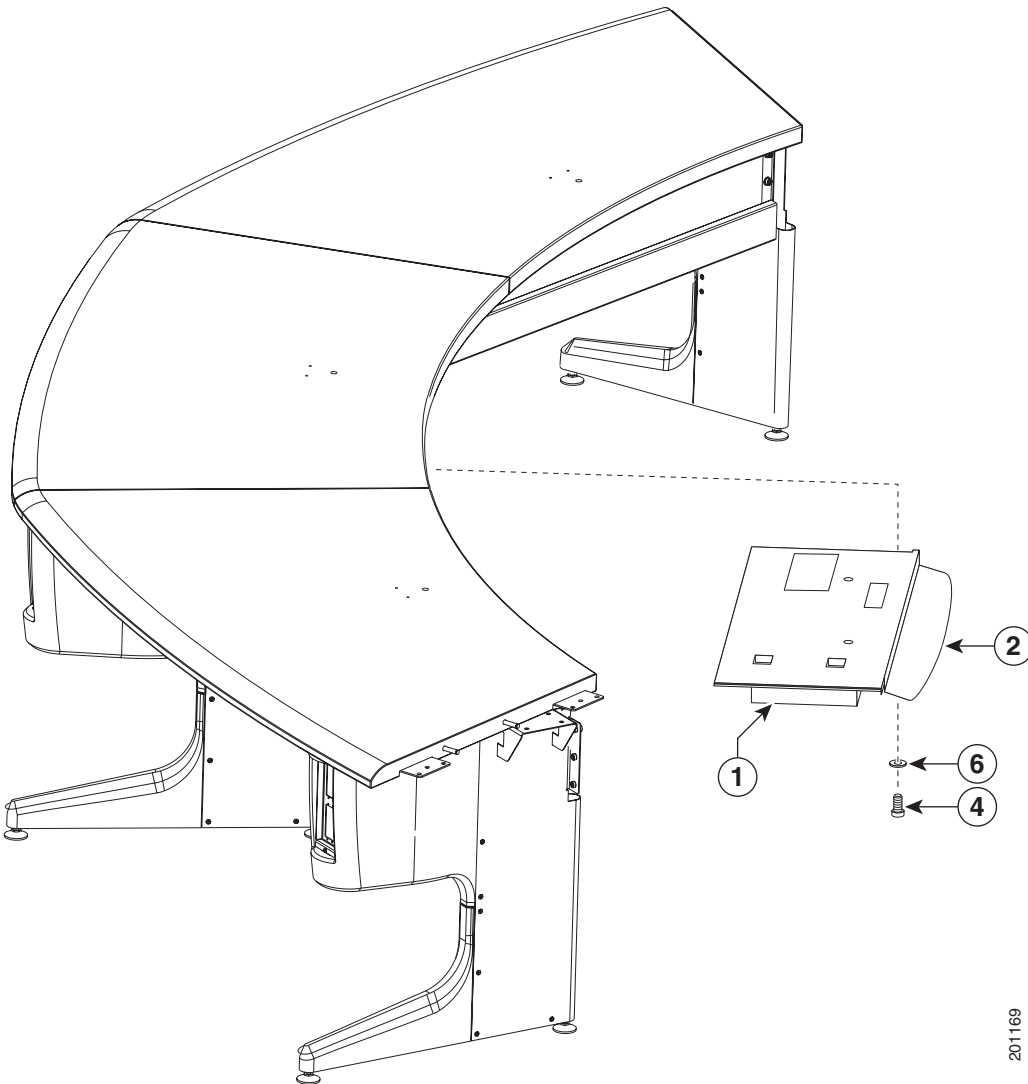


- Step 3** Attach the projector to the projector mounting bracket, and attach the assembly to the underside of the center Table segment.
- a. Make sure the center Microphone cable is routed securely within the cable channel on the underside of the center Table segment before attaching the Projector mounting bracket.
 - a. Insert the screws and washers in the underside of the center Table segment to prepare for attaching the Projector mounting bracket; then, slide the bracket between the two rows of screws and tighten the screws.

**Tip**

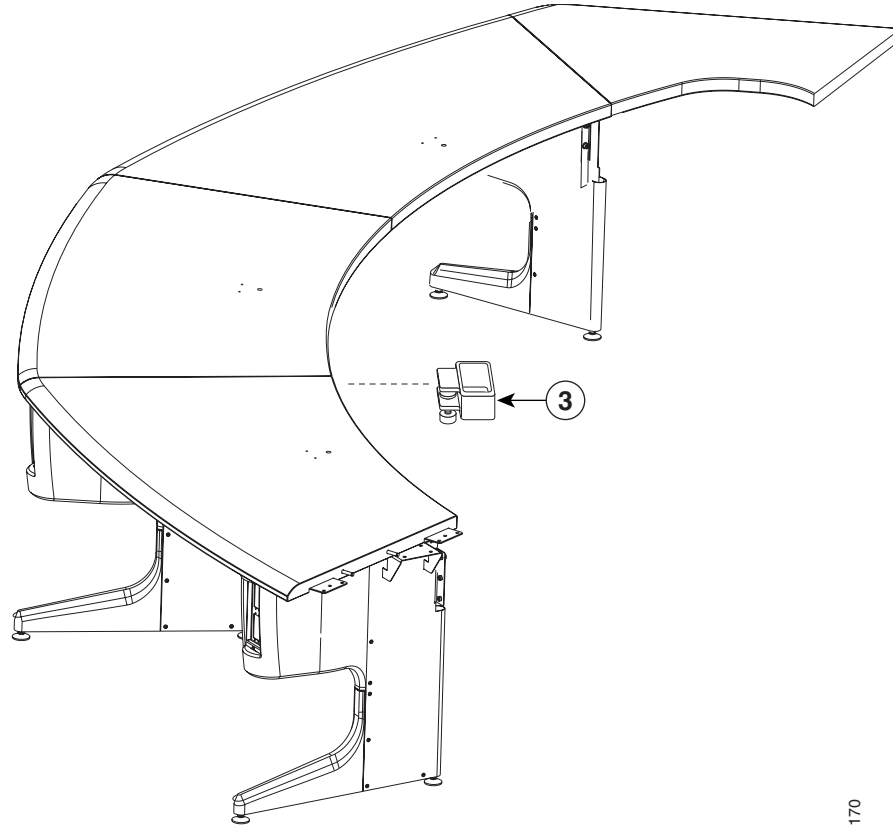
If you have clearance issues, remove the center privacy panel segment before you mount the projector.

Figure 8-3 *Projector Assembly*



- Step 4** Attach the VGA module to the center Table segment.
The VGA module supports the VGA peripheral cable when not in use.

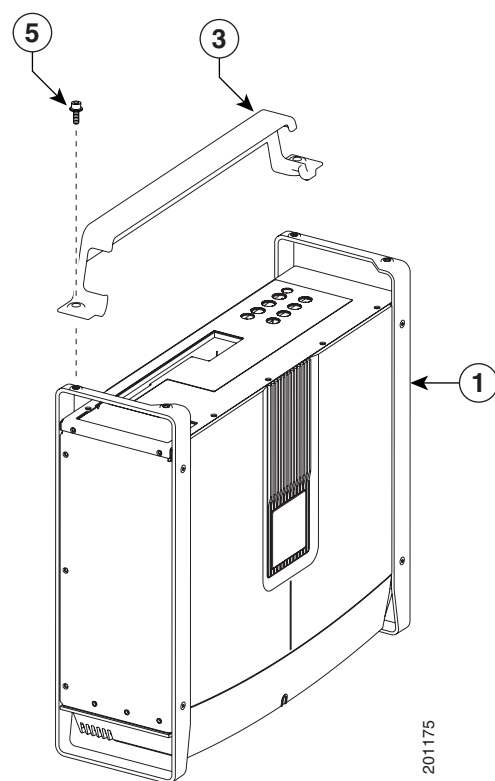
Figure 8-4 *Projector Assembly*



201170

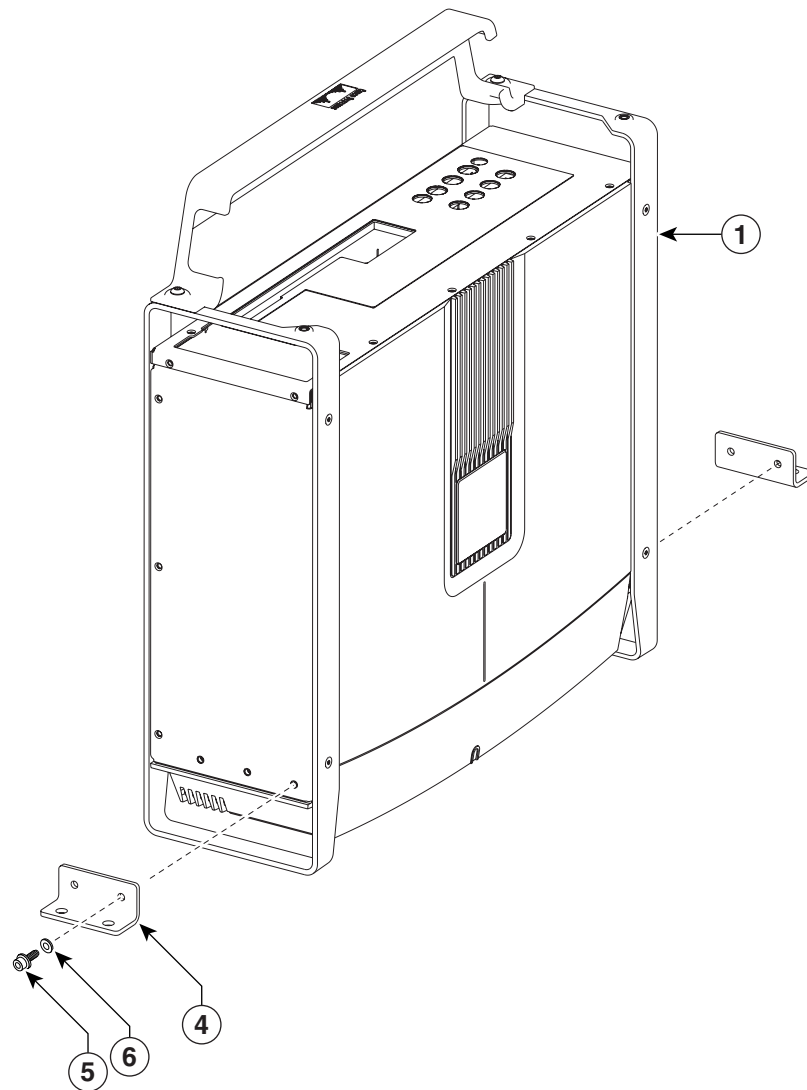
Step 5 Attach the Cable management bars to the three Codecs.

Figure 8-5 Codec Assembly



Step 6 Attach the Codec attachment brackets to the three Codecs.

Figure 8-6 *Codec Assembly*



201176

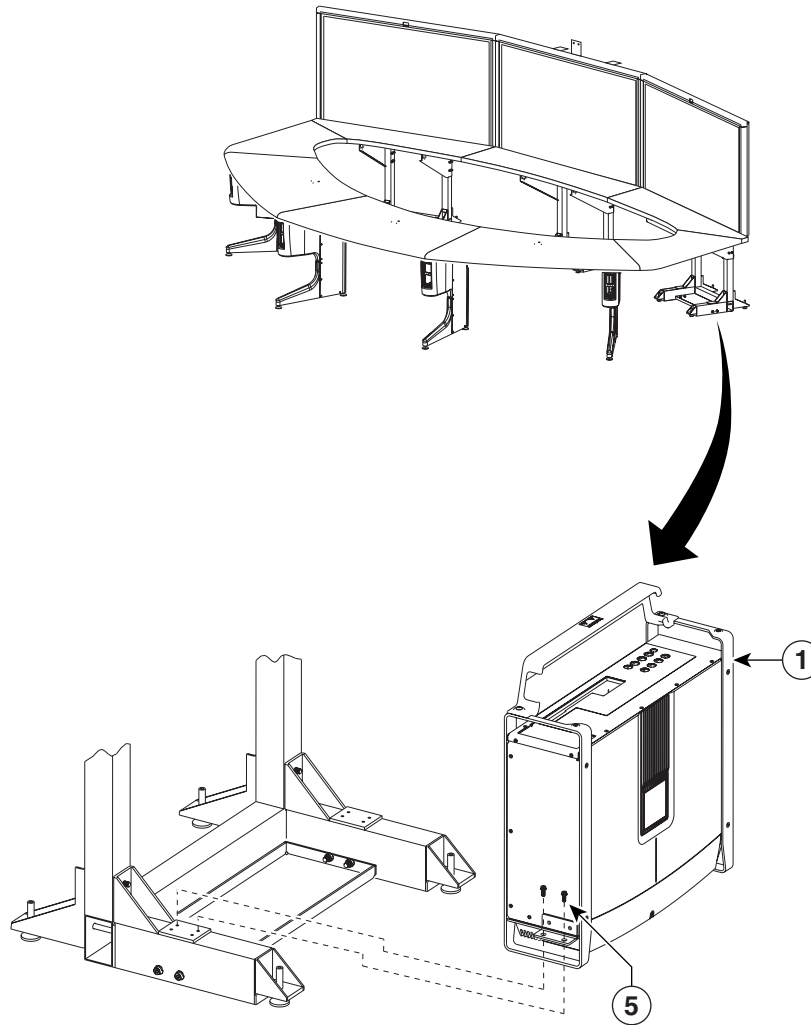
Step 7 Attach the three codecs to the display structure codec safety trays.



Note

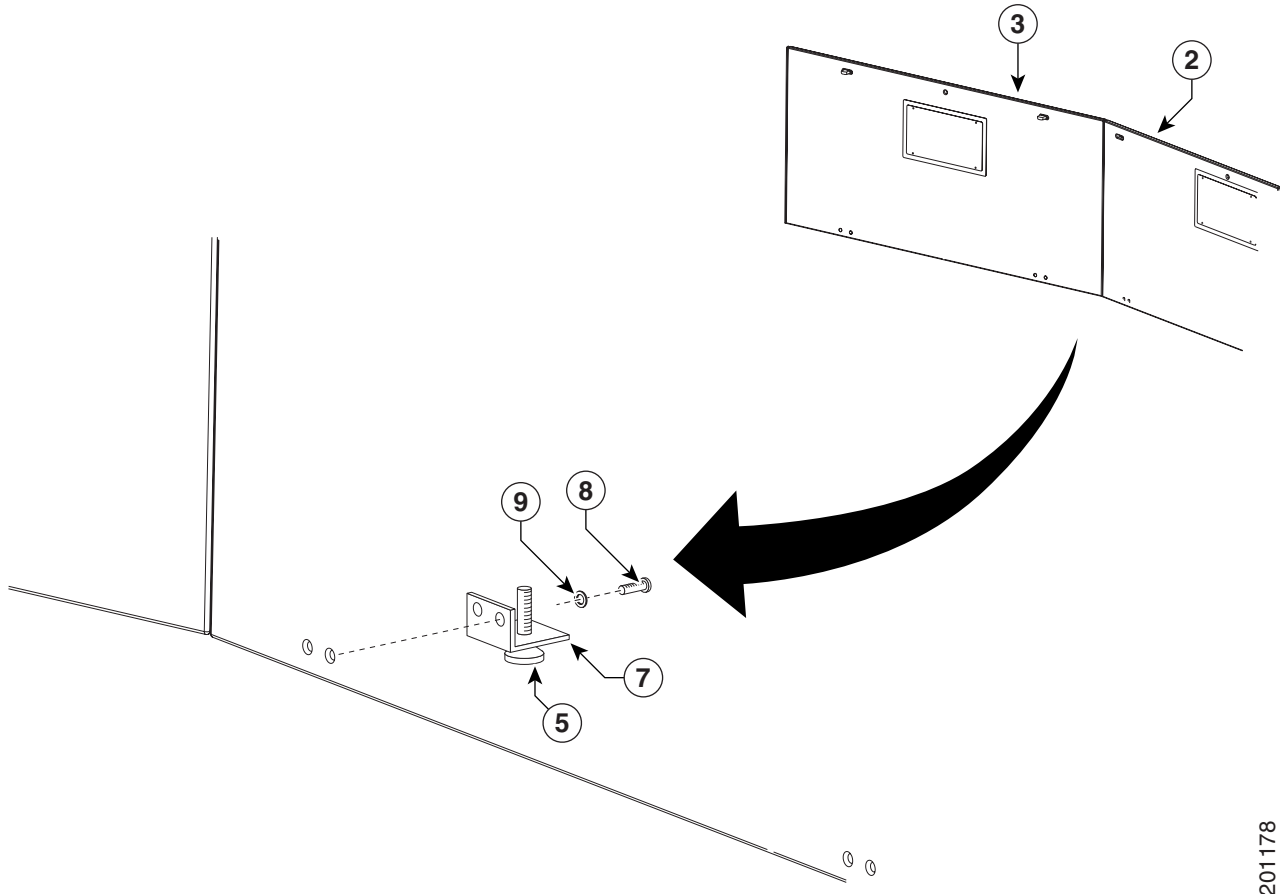
If you ordered a Presentation Codec with your TelePresence system, refer to the [Cisco TelePresence Hardware Options and Upgrade Guide](#) for instructions to install your presentation codec.

Figure 8-7 **Codec Assembly**



- Step 8** Attach the Speaker board brackets and Leveling feet to the Speaker boards.
The Speaker board brackets should angle towards the rear of the Display structure.

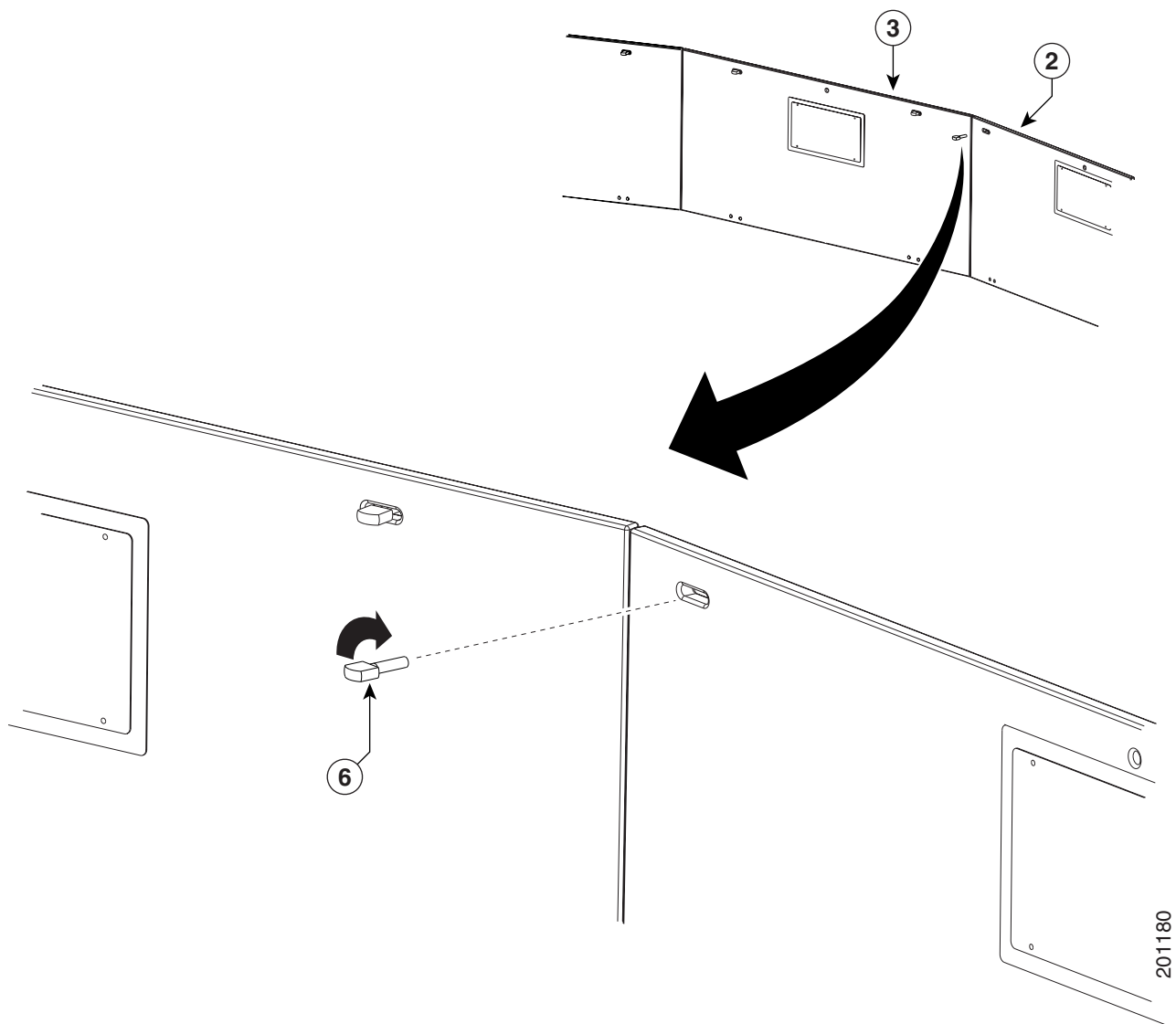
Figure 8-8 *Speaker Assembly*



201178

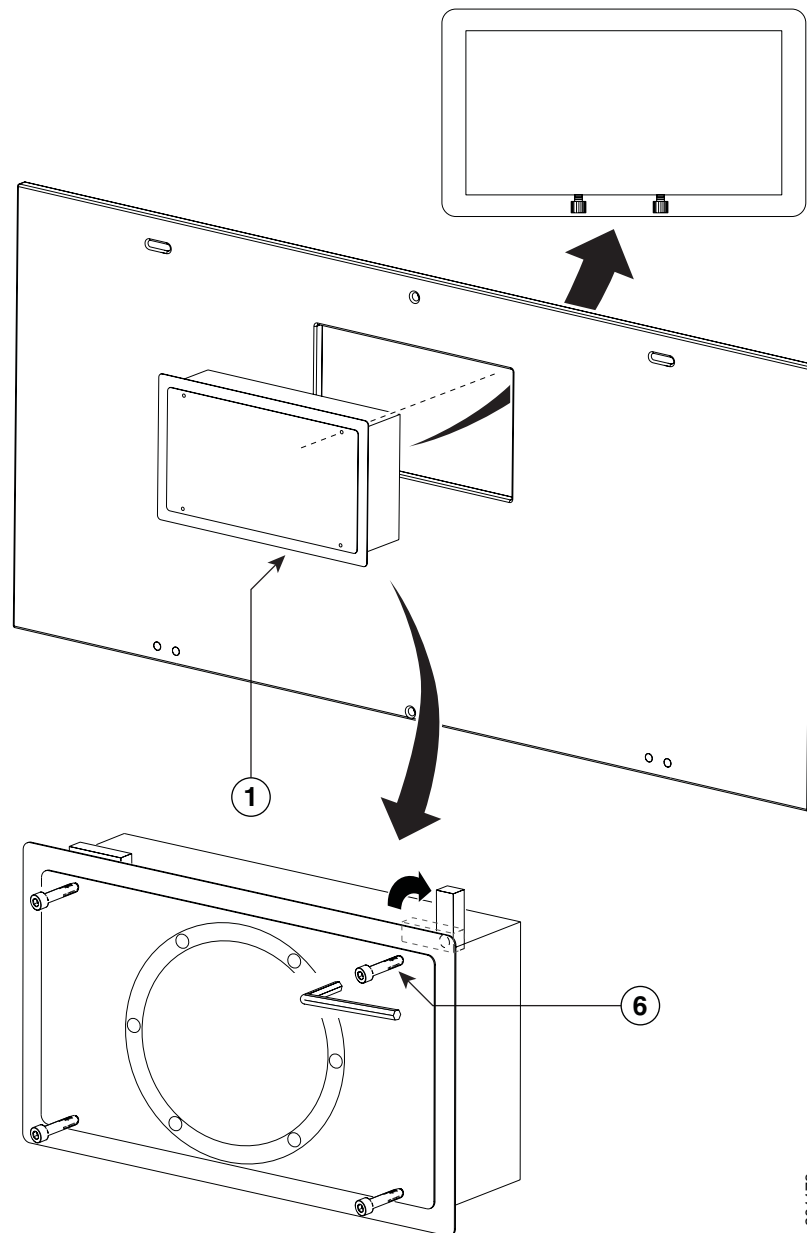
Step 9 Attach the Speaker boards to the Speaker board brackets on the underside of the Display shelves.

Figure 8-9 *Speaker Assembly*



Step 10 Attach the Speakers to the Speaker boards.

Figure 8-10 *Speaker Assembly*



201179

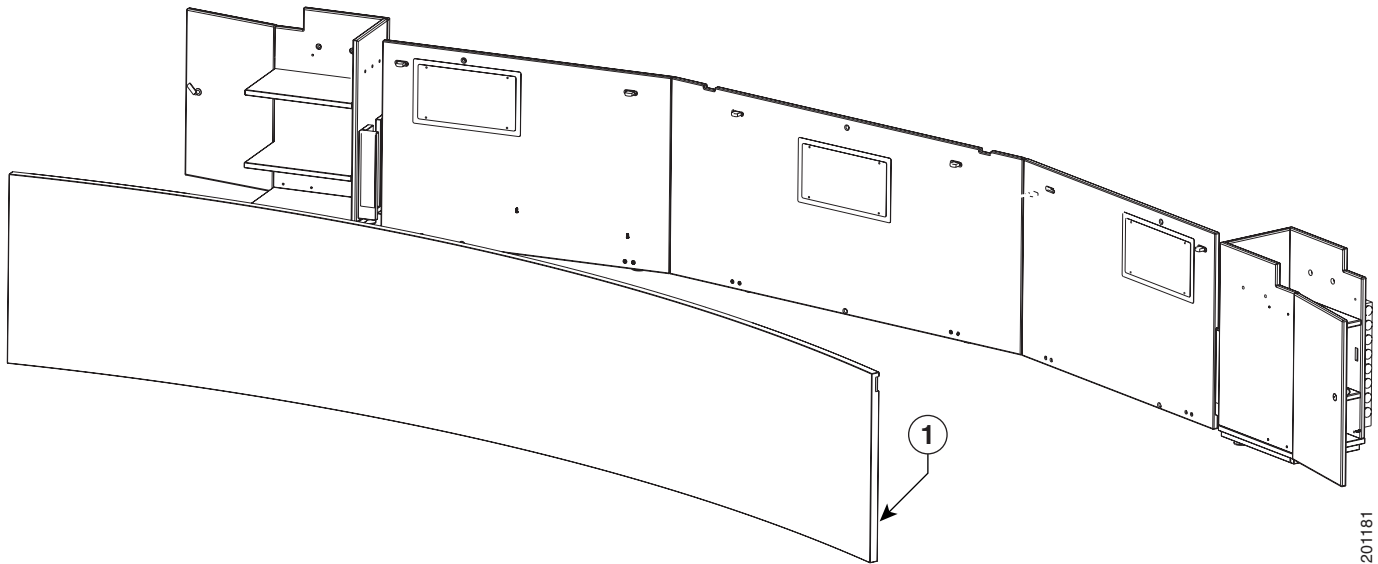
Step 11 Attach the Projector screen to the Display shelves.



Note

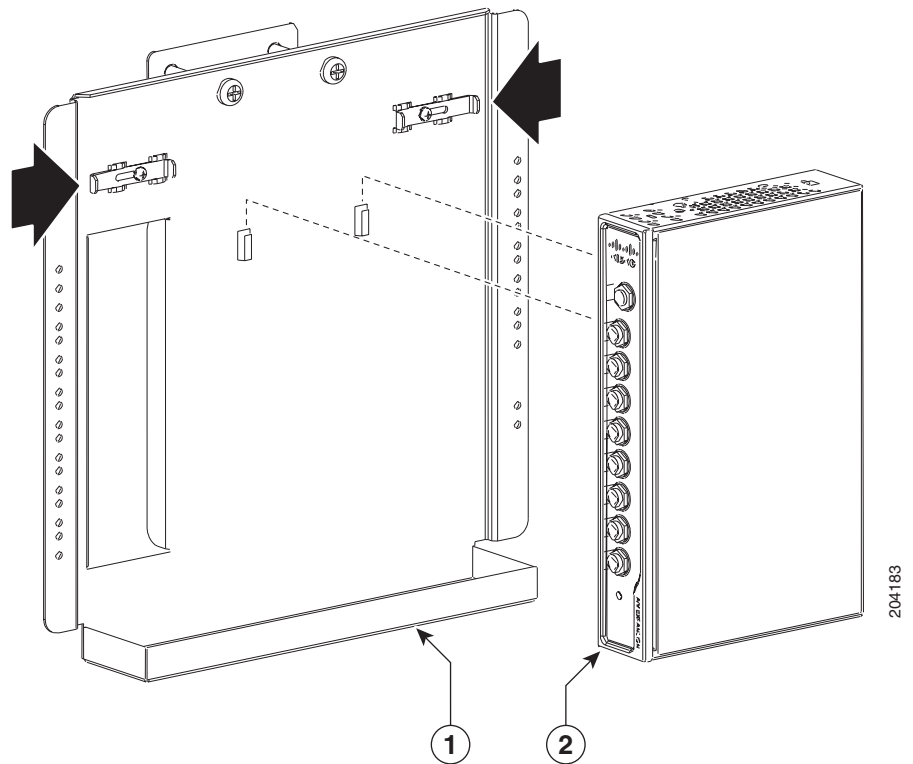
Refer to your Cisco TelePresence Projector Screen Assembly manual for the exact procedures used to build and attach the projector screen. The Projector Screen Assembly manual is included in the projector screen carton.

Figure 8-11 *Projector Screen Assembly*



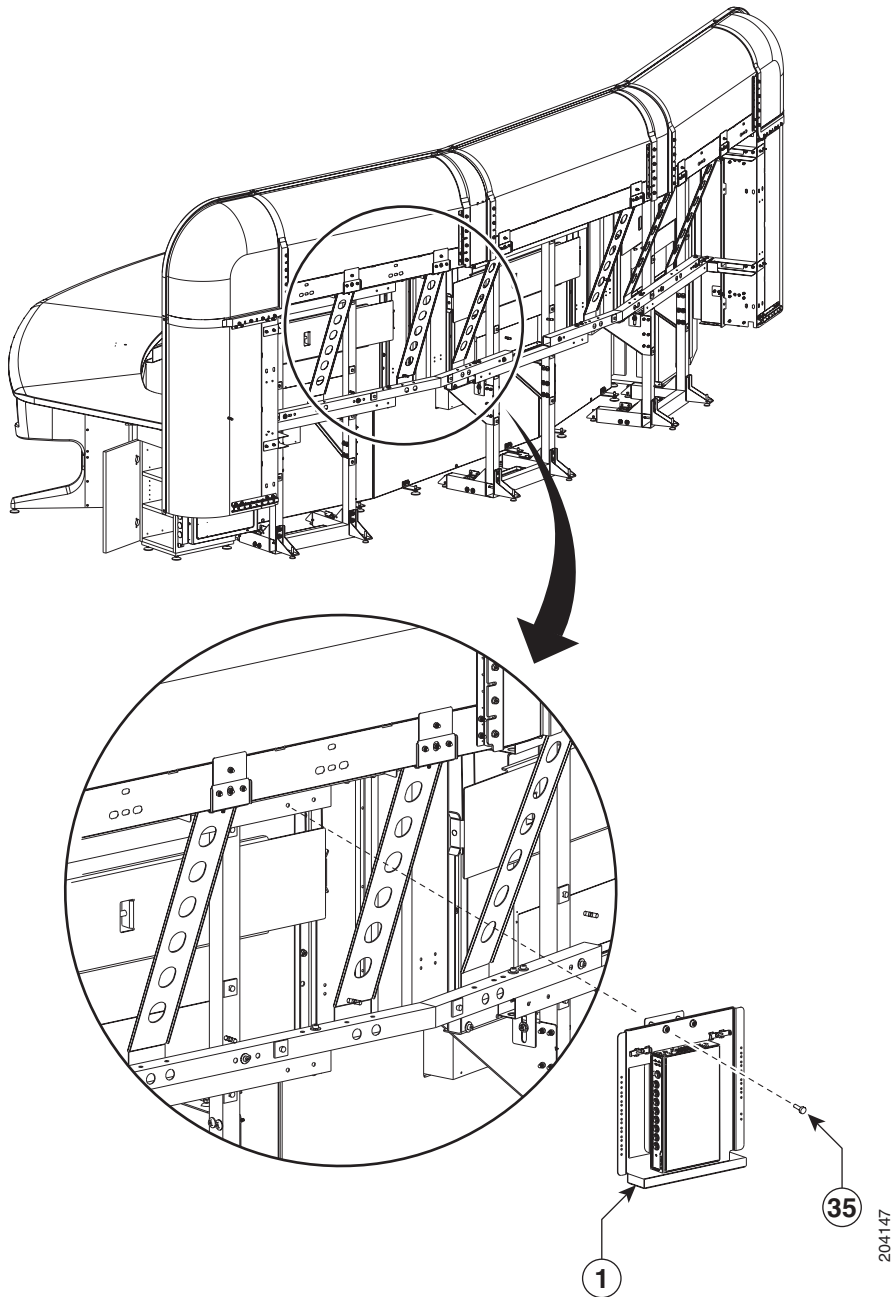
Step 12 Attach the audio/video extension unit to its bracket.

Figure 8-12 Audio/Video Expansion Unit and Bracket



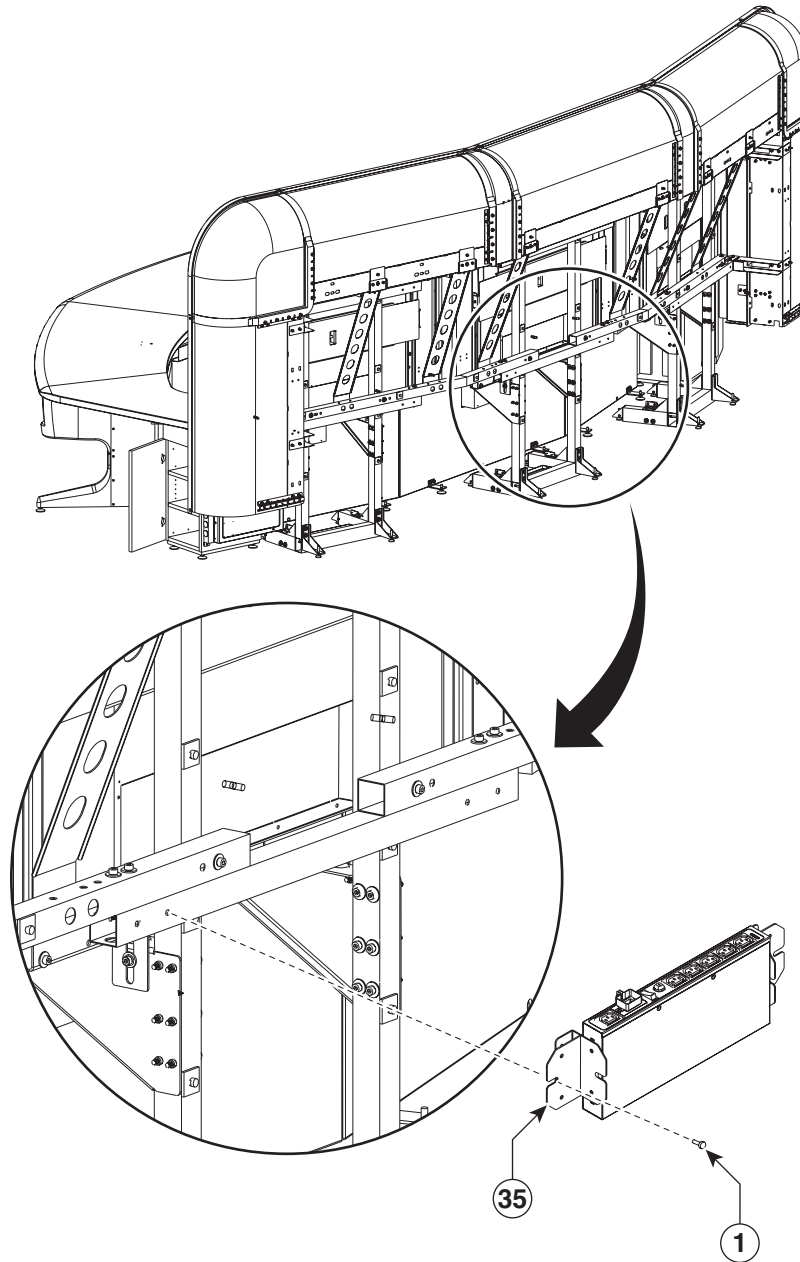
Step 13 Attach the audio/video extension unit to the rear of the display assembly.

Figure 8-13 Audio/Video Extension Unit



- Step 14** Attach the auxiliary control unit to its bracket using 5 mm screws; then, attach the unit and bracket to the rear of the display assembly.

Figure 8-14 Auxiliary Control Unit

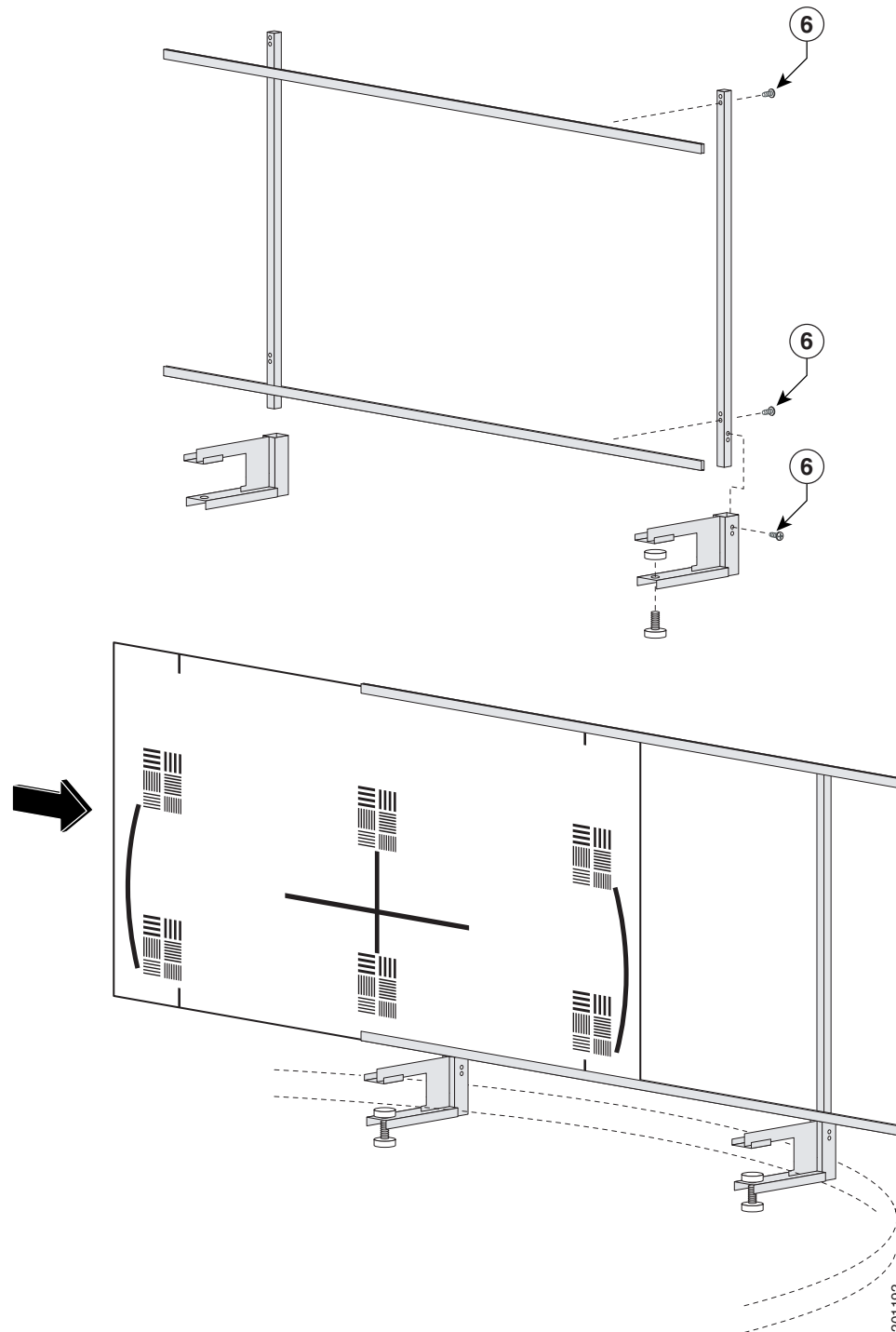


204148

Step 15 Assemble the Large Camera Target.

When you slide the Camera target into the frame, make sure the target is centered in the frame between the vertical lines at the top and bottom of the target.

Figure 8-15 Camera Target Assembly





CHAPTER 9

Routing Power and Signal Cables

Revised: July 28, 2008, OL-14521-01

Parts List

Key	Part Description	Part Number	Qty	Ctn	Notes
1	Power distribution units	74-4787-01	4	1	
2	Speaker cable	37-0849-01	3	1	
3	8 m DVI-to-VGA + audio cable	37-0848-01	1	1	
4	6 m video cable	37-0854-01	2	1	
5	3 m (black) Cat5 Ethernet cable	37-887-01	5	1	
6	10 m Cat6 Ethernet cable, blue	37-0901-01	2	1	
7	7 m power cord	37-xxxx-xx	1		Refer to “Appendix B: Region- and Country-Specific Equipment” for specific part numbers
8	3 m Jumper cord	37-0833-01	9	1	
9	2 m Jumper cord	37-0852-01	1	1	Used for projector.
10	3 m Video-to-DVI cable	37-0853-01	3	1	
11	Cable identification stickers	51-4582-01	3	1	
12	Cable ties	51-4536-01	75	1	
13	Cable tie holders	51-0609-01	75	1	
14	Ferrite Core	36-0244-01	6	1	
15	Tie wrap for ferrite core	51-1152-01	6	1	



Caution

Do not power on the PDUs until all the cables are routed and connected.



Warning

Overcurrent protection is provided by branch circuit protection rated 20A.



Warning

Output receptacles cannot exceed 15A for any one receptacle.



Caution

Correct routing of the various power cords to the appropriate PDU is critical for the safety and success of the Cisco TelePresence System 3200 assembly. Each PDU is routed to a different 20A circuit to prevent circuit overload when all the electrical components are properly installed. PDUs should be plugged into their correct wall receptacles as required in the following table.

Left PDU 1 (Located on Left Accessory Cabinet.)	Left 20A AC wall outlet
Left PDU 2 (Located on Left Accessory Cabinet.)	Center left 20A AC wall outlet
Right PDU (Located on Right Accessory Cabinet.)	Center right 20A AC wall outlet
First Row Table PDU (Located above the projector under the Center table segment.)	Right 20A AC wall outlet
Second Row Table left-center PDU	20A AC wall outlet
Second Row Table right-center PDU	20A AC wall outlet



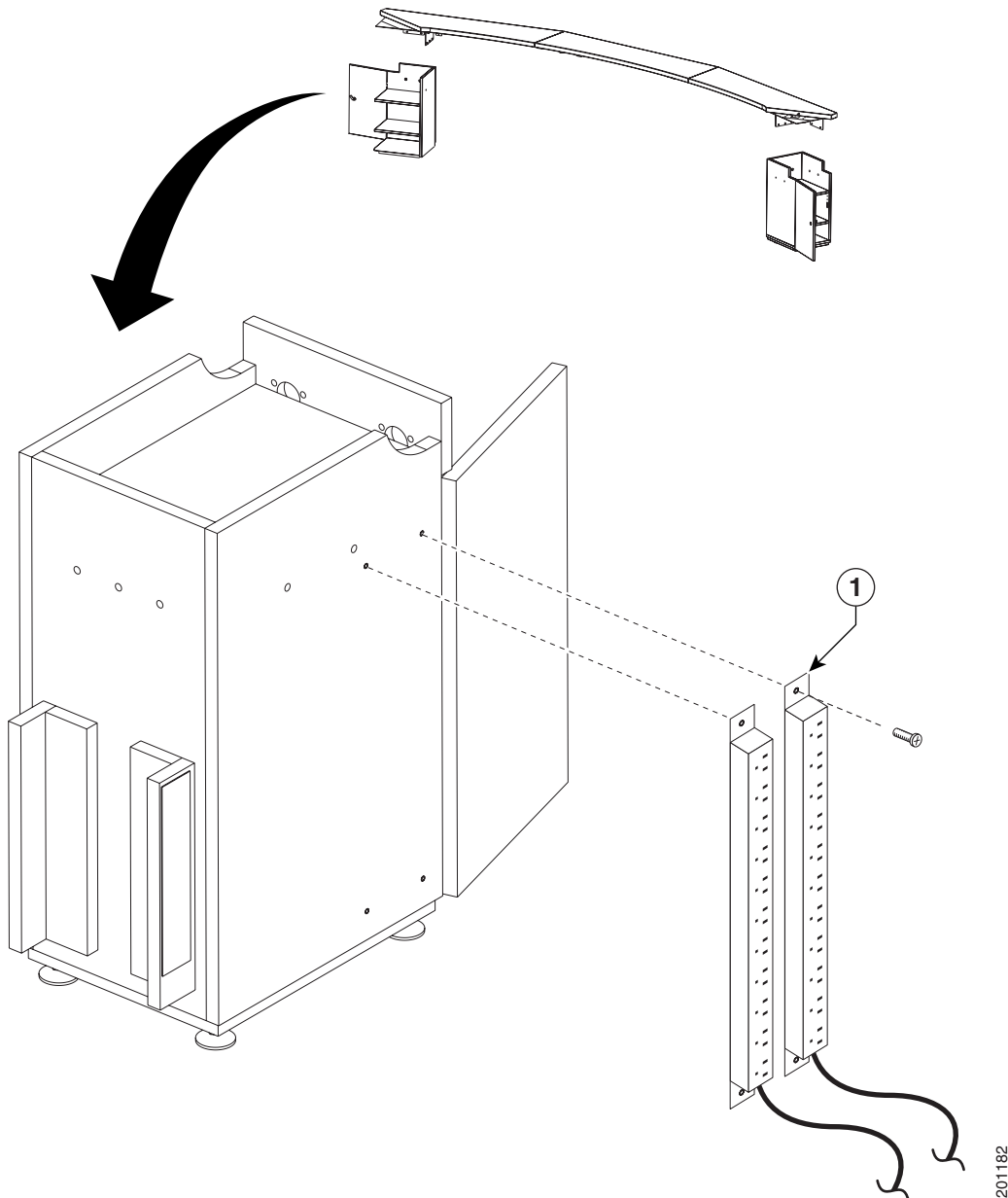
Note

For cable routing for the second row table, see [Chapter 7, “Building the Second Row Table Assembly.”](#)

Step 1 Attach the two left Power Distribution Units (PDU) to the left Accessory cabinet.

The accessory cabinets each have screw holes for two PDUs on one side wall and screw holes for one PDU on the other. When the cabinets are correctly oriented with each door opening out to the side, the right cabinet has the single-PDU side facing the rear wall, and the left cabinet has the double-PDU side facing the rear wall.

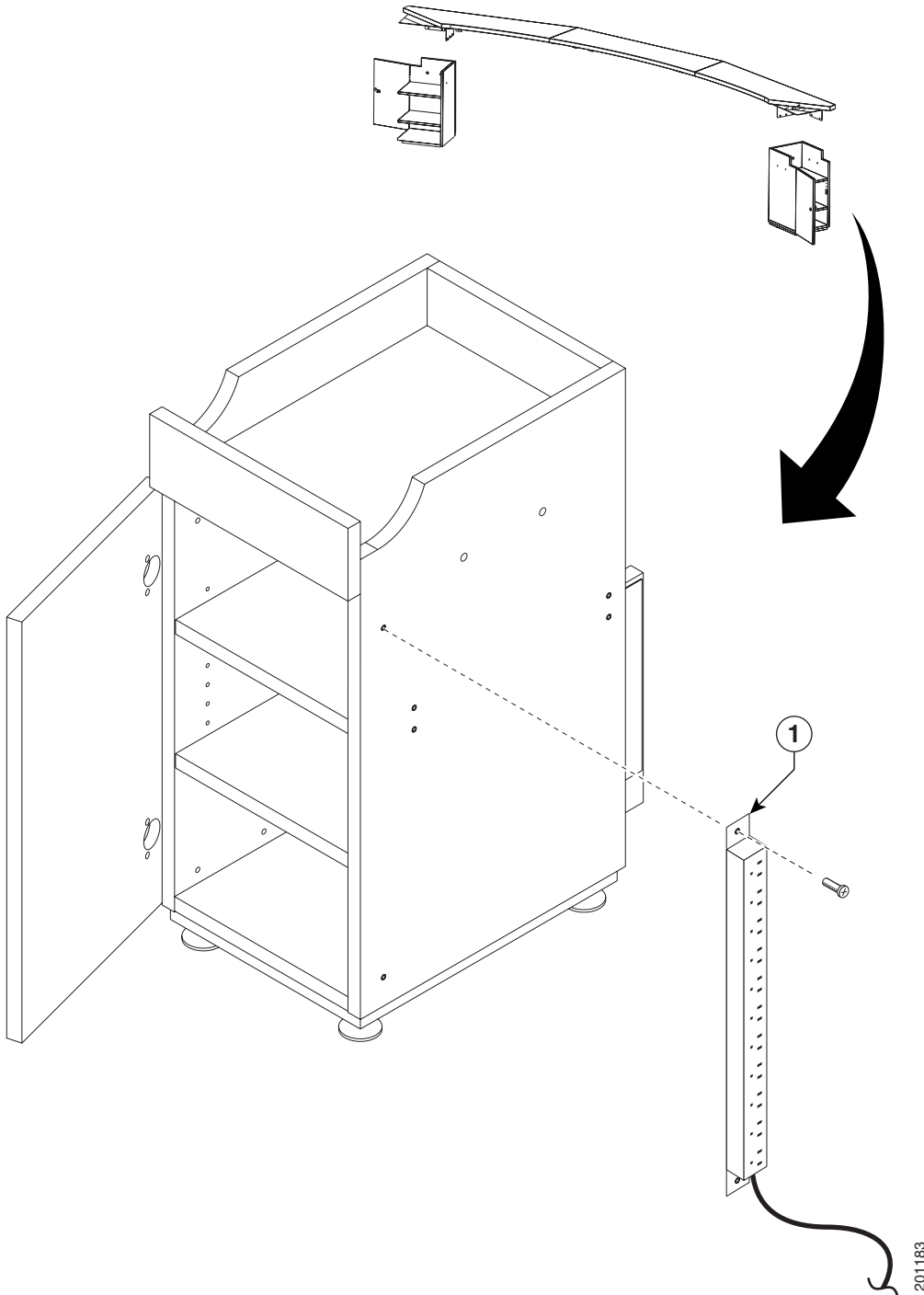
Figure 9-1 Dual PDU installation to left accessory cabinet



Step 2 Attach the right PDU to the right Accessory cabinet.

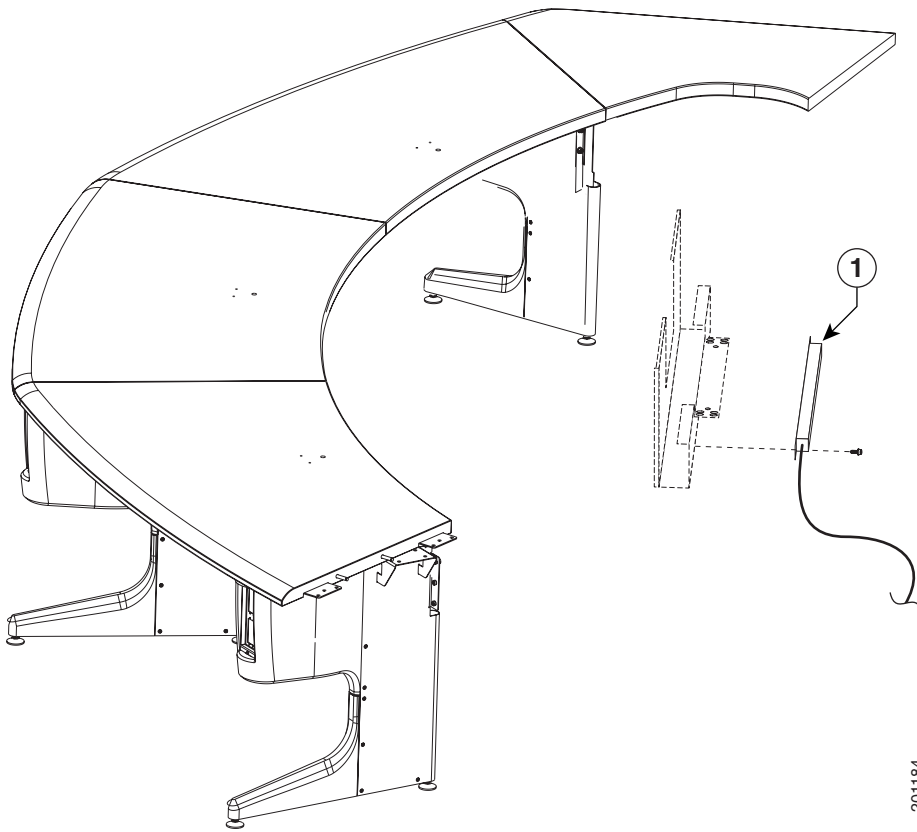
The accessory cabinets each have screw holes for two PDUs on one side wall and screw holes for one PDU on the other. When the cabinets are correctly oriented with each door opening out to the side, the right cabinet has the single-PDU side facing the rear wall, and the left cabinet has the double-PDU side facing the rear wall.

Figure 9-2 *right side PDU installation to right accessory cabinet*



Step 3 Attach the table assembly PDU attachment to the center privacy panel.

Figure 9-3 Table assembly PDU attachment to the center Privacy panel

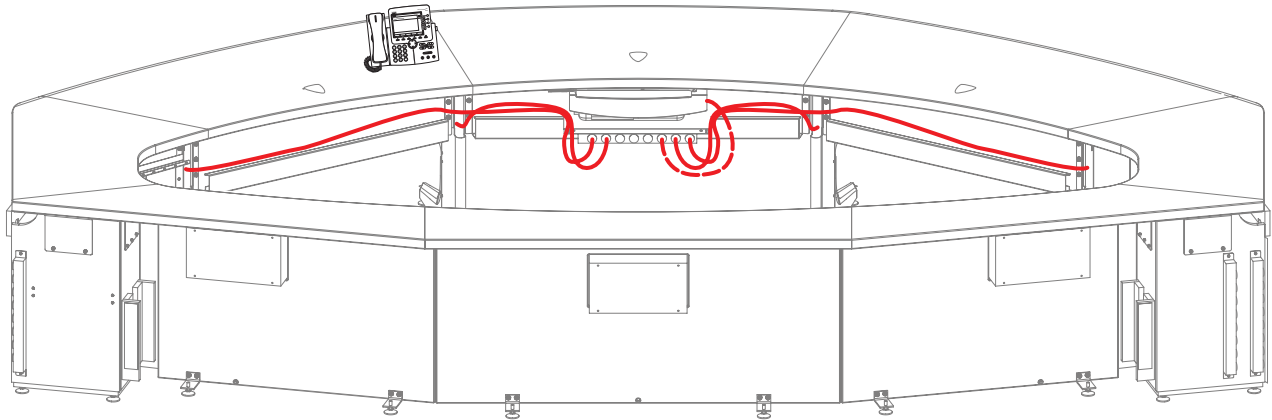


Note

The PDU power cable should extend from the right side.

Step 4 Route the power cables for the first row table assembly.

Figure 9-4 First Row Table Assembly Cable Routing



- 8 — Table Leg Power
- 9 - - - Projector Power

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Note

The six jumper cords from the I/O modules in the table legs route to the center PDU.

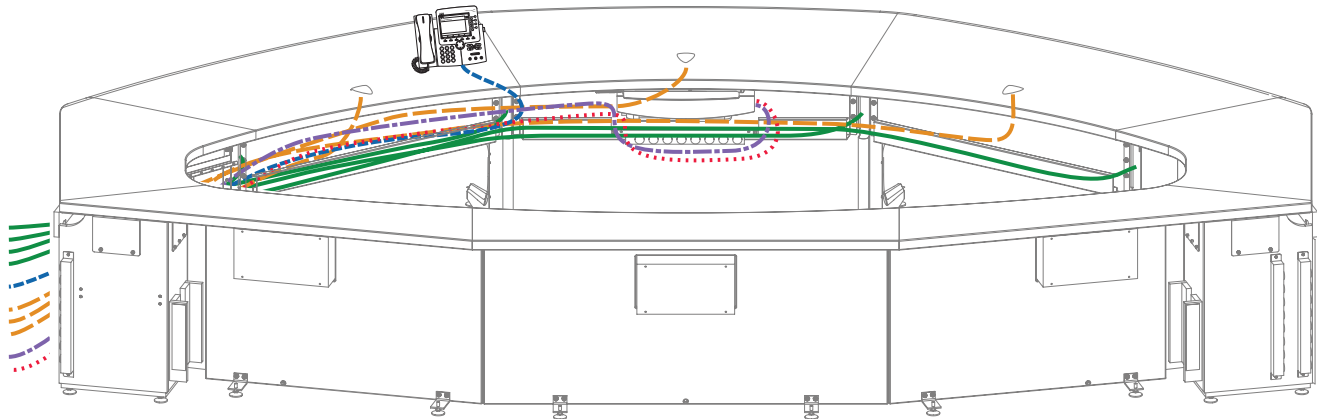


Tip

Before plugging the Table leg jumper cords into the Table PDU, label each one. For example, Outer Left Power, Inner Right Power.

- Step 5** Route the signal cables for the first row microphones, Cisco Unified IP Phone, and (if required) Ethernet connections in the first row table.

Figure 9-5 Table assembly Signal Cable Routing



- ⑤ ————— Table Leg Signal
- ⑤ - - - - - IP Phone Signal
- - - - - Microphone Signal
- ④ - - - - - Projector Signal
- ③ ······ VGA Peripheral

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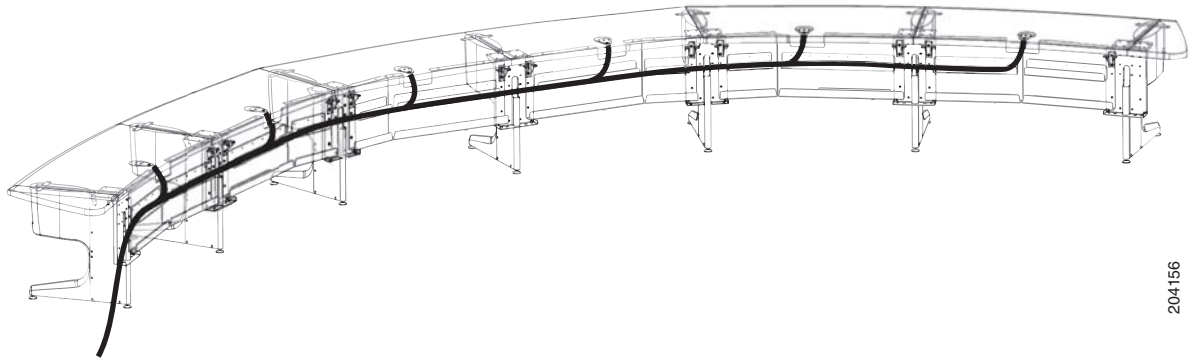


Note

The Table Leg Signal cables are routed behind the Display structure, along with the other signal cables, but do not plug into any Codec.

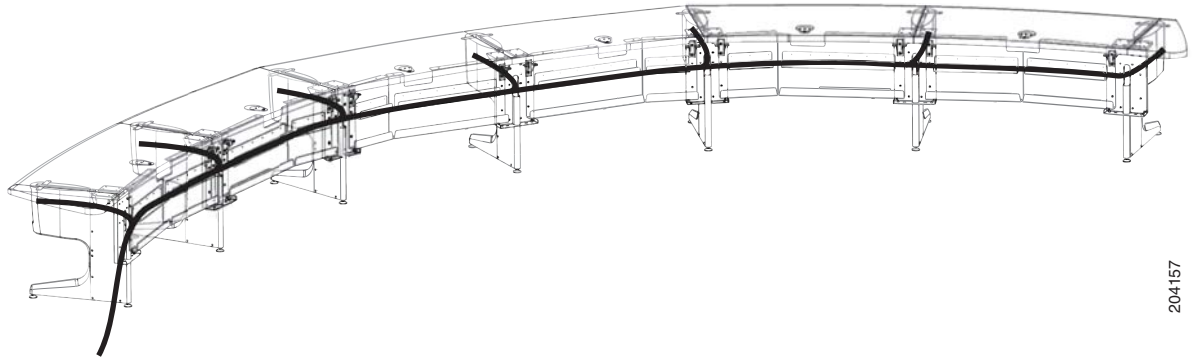
Step 6 Route the second row microphone cables.

Figure 9-6 *Microphone Cable Routing*



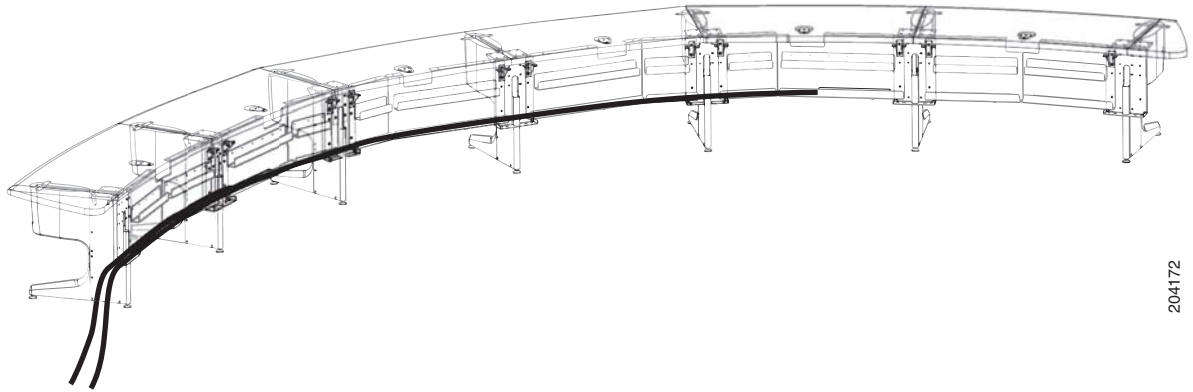
- Step 7** If your installation uses wired Ethernet for the second row participants, attach the Ethernet cables to the modules in the foam bumpers and route the Ethernet cables.

Figure 9-7 Ethernet Cable Routing



Step 8 Route the power cables for the second row table.

Figure 9-8 *Second Row Table Power Cable Routing*



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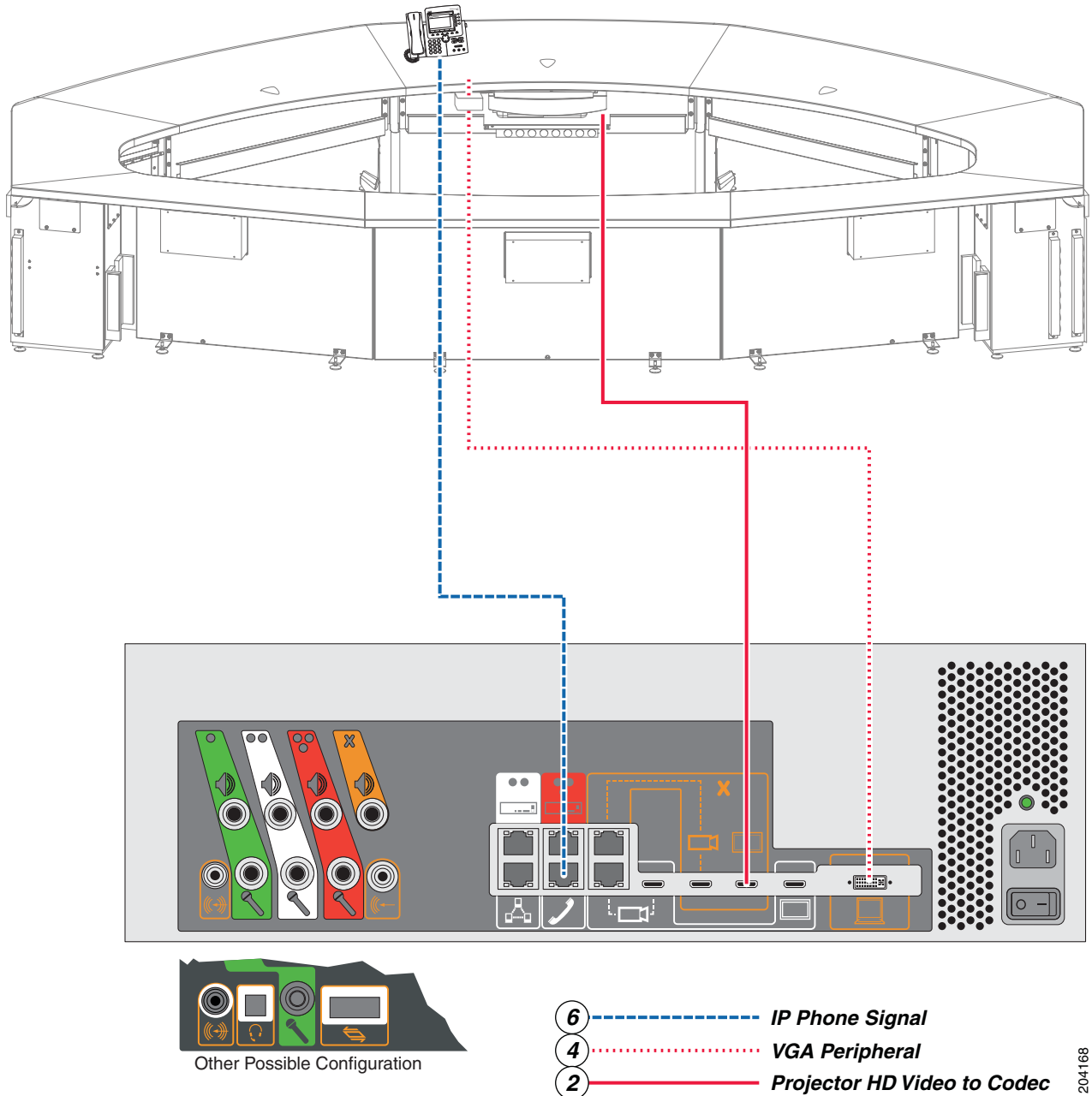
Step 9 Connect the Cisco Unified IP Phone, VGA peripheral, and projector HD video cables.



Note

The VGA Peripheral cable is the free-hanging cable resting in the VGA module attached to the center Table segment.

Figure 9-9 Cabling the Cisco Unified IP Phone, DVI-to-VGA, and Projector HD Video Cables



Note

The VGA Peripheral cable is the free-hanging cable resting in the VGA module attached to the center Table segment.

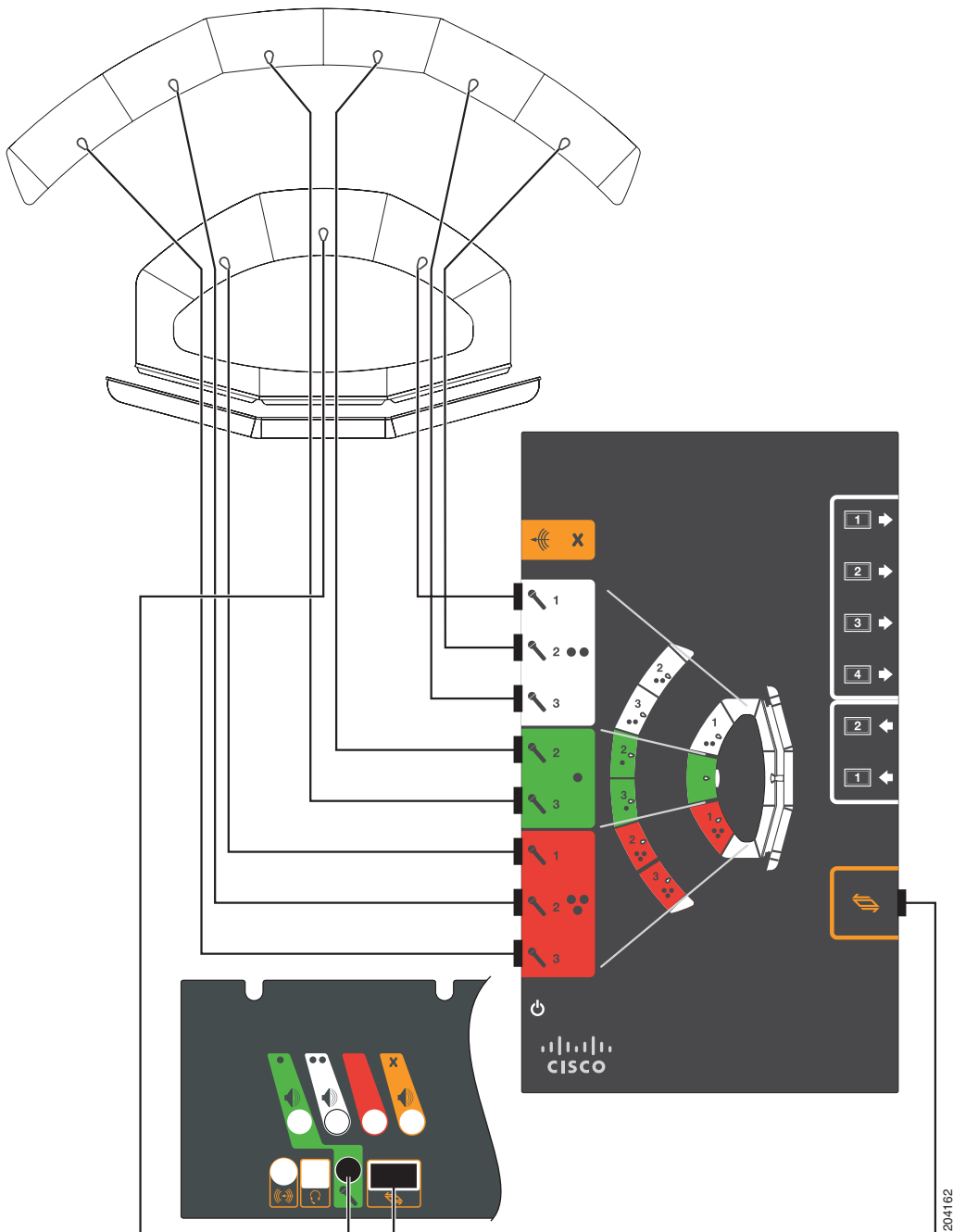
Step 10 Attach the microphone cables to the audio/video extension unit.



Note

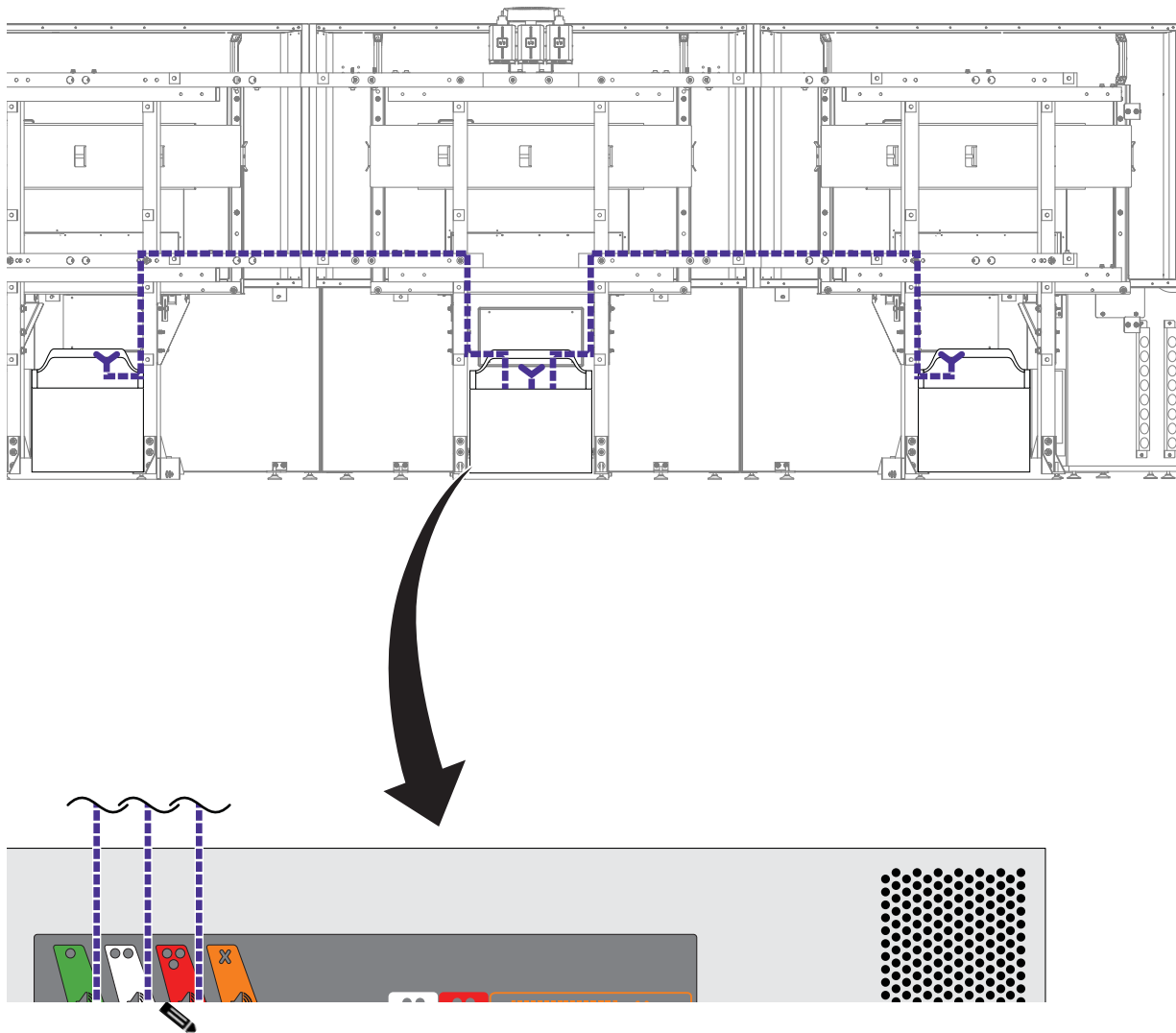
If you have a Reduced Configuration for your second row table (four tabletops instead of six), use the same connections, but omit the connections (white connection 2 and red connection 3) for the two outer table tops.

Figure 9-10 *Cabling the Microphones*



Step 11 Attach and route the cables for the speakers.

Figure 9-11 *Cabling the Speakers*



Note Figure 9-11 displays the rear view of the Cisco TelePresence System 3200. Left and right are reversed.

Tip Before plugging cables into the Codec, label each one. For example, Left Speaker, Center Speaker.

Step 12 Connect the following cables:

- Attach and route the power cables for the lighting assembly by connecting the lights to the auxiliary control unit.
- Connect the serial cable between the projector and the auxiliary control unit.
- Connect the Ethernet cables between the codec and the auxiliary control unit.
- Connect the power cord for the auxiliary control unit to a wall outlet.

Figure 9-12 Cabling the Lighting Assembly Power Cables and Auxiliary Control Unit-to-Projector Serial Cable

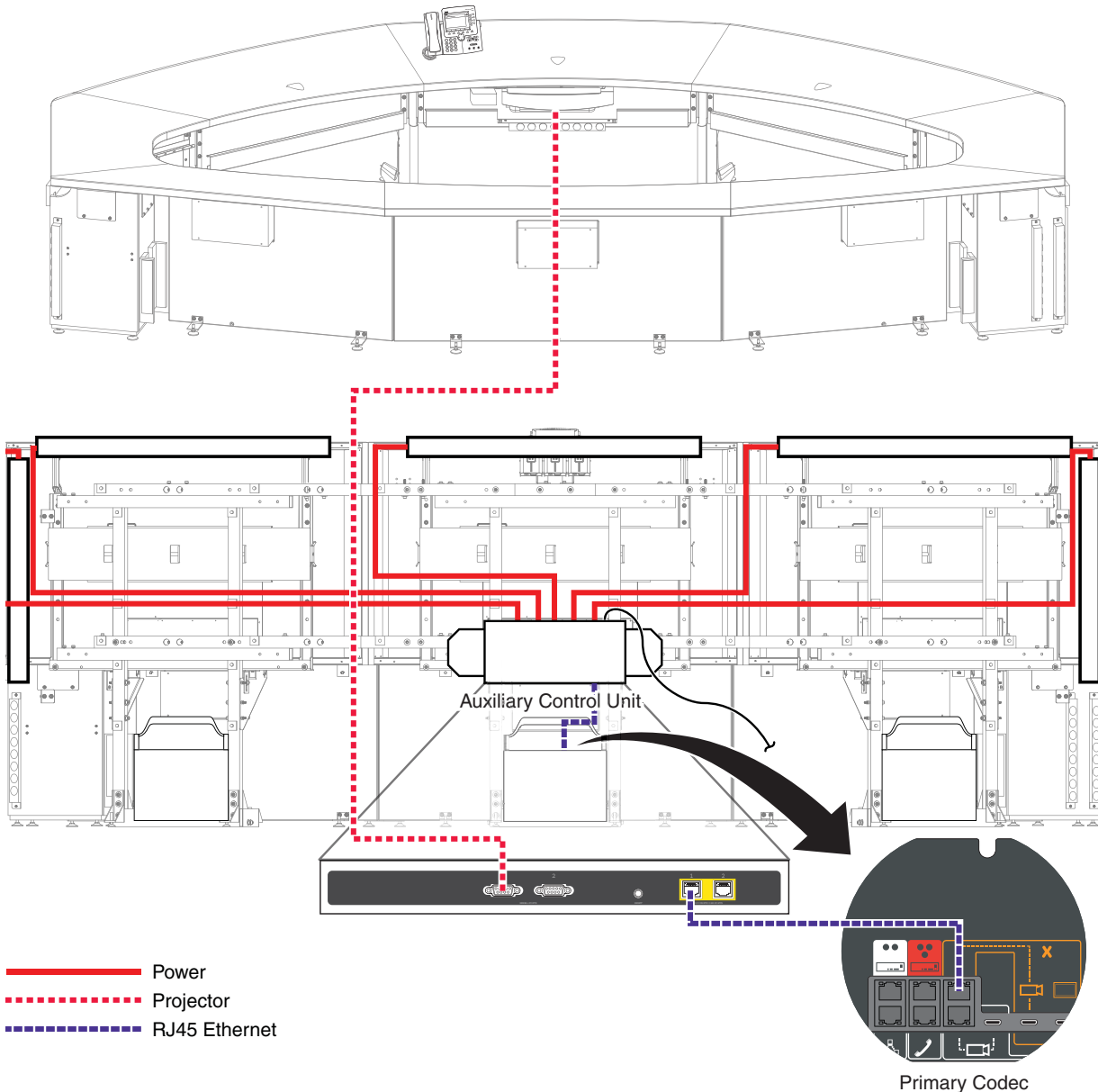
**Note**

Figure 9-12 displays the rear view of the Cisco TelePresence System 3200. Left and right are reversed.

**Tip**

Before plugging the Light fixture power cables into the unit, label each one. For example, 5' Left light, 4' Right light.

Step 13 Attach and route the power and signal cables for the plasma displays.

Figure 9-13 *Cabling the Plasma Display*

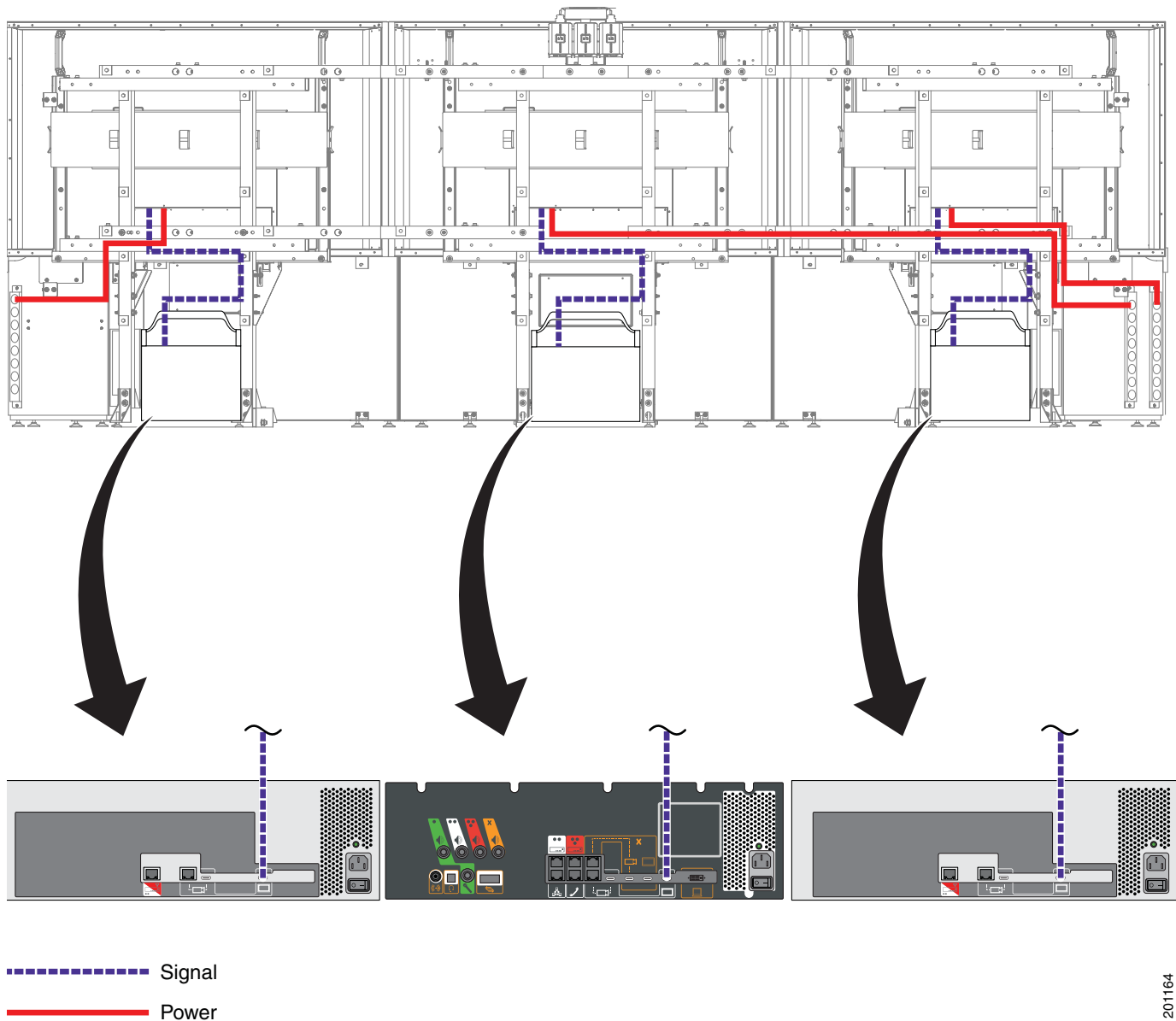
**Note**

Figure 9-13 displays the rear view of the Cisco TelePresence System 3200. Left and right are reversed.

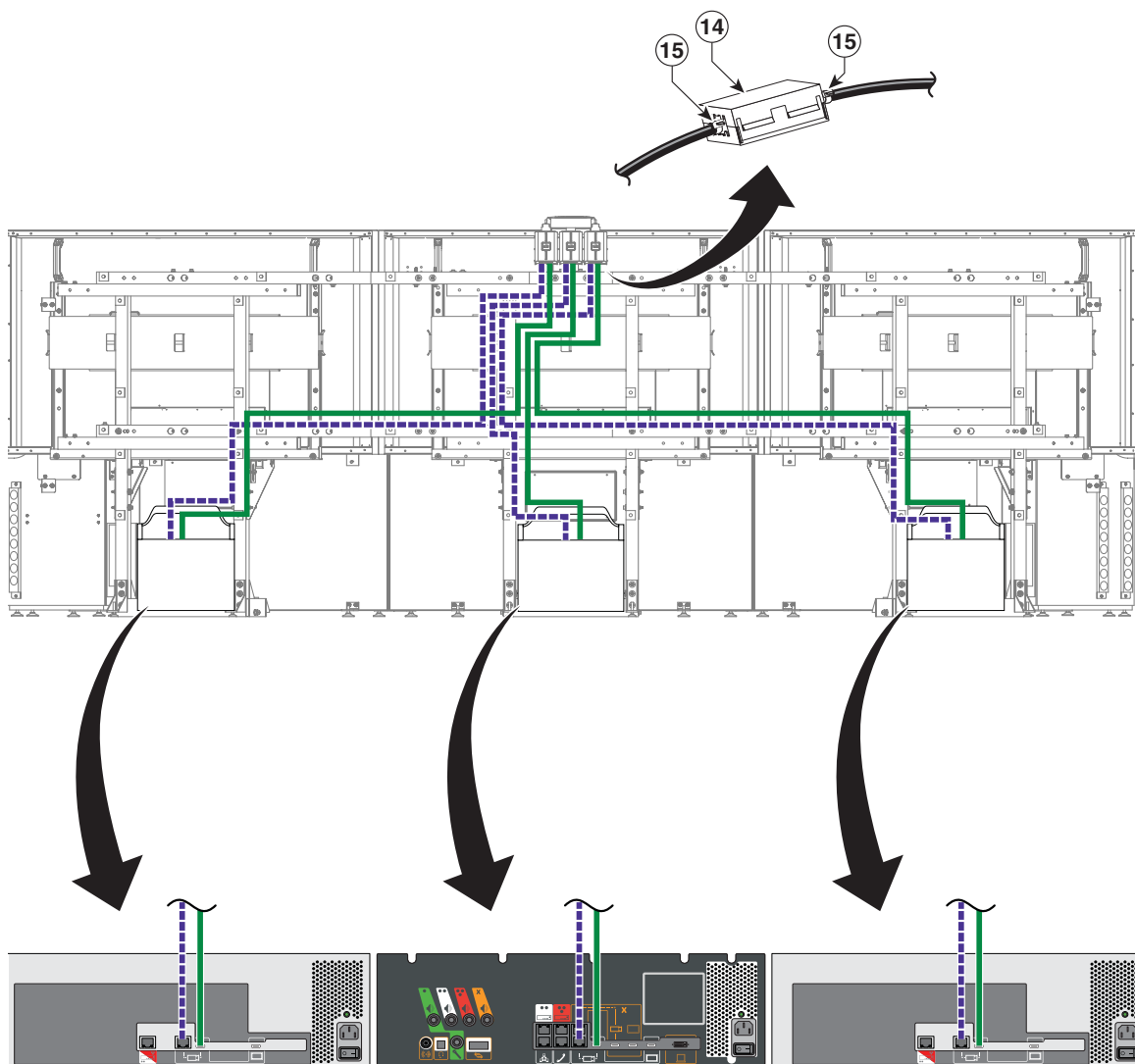
**Tip**

Before you plug cables into a Codec or PDU, label each cable.

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Step 14 Attach and route the power-over-Ethernet and HD Video cables for the camera.

Figure 9-14 *Cabling the Camera Assembly*



- 5 — RJ45 Power over Ethernet
10 — HDMI connector

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Note

The camera cluster can experience radio frequency interference issues if the camera Ethernet and HD Video cables are routed, bundled, or tied together. Cisco recommends that you route the Ethernet and HD Video cables separately and use cable ties to tie them to opposite sides of the frame. In addition, attach the ferrite core and use tie wraps to secure them as shown in [Figure 9-14](#).

[Figure 9-14](#) displays the rear view of the Cisco TelePresence System 3200. Left and right are reversed.



Tip

Before you plug cables into a codec, label each cable.

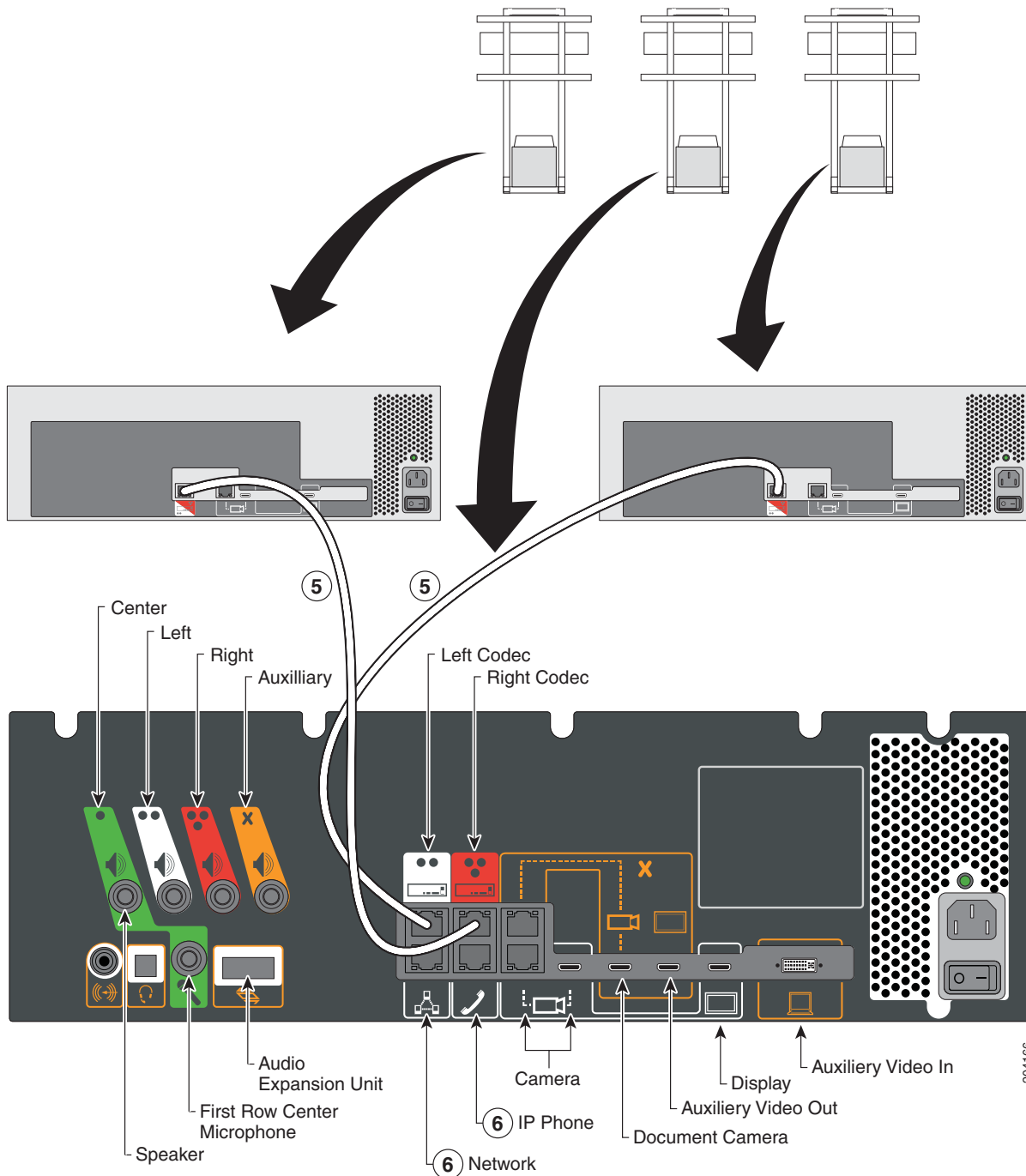
Step 15 Attach the cables between the codecs.



Note

If you ordered a Presentation Codec with your TelePresence system, refer to the [Cisco TelePresence Hardware Options and Upgrade Guide](#) for cabling instructions for the presentation codec.

Figure 9-15 Inter-Codec Cabling

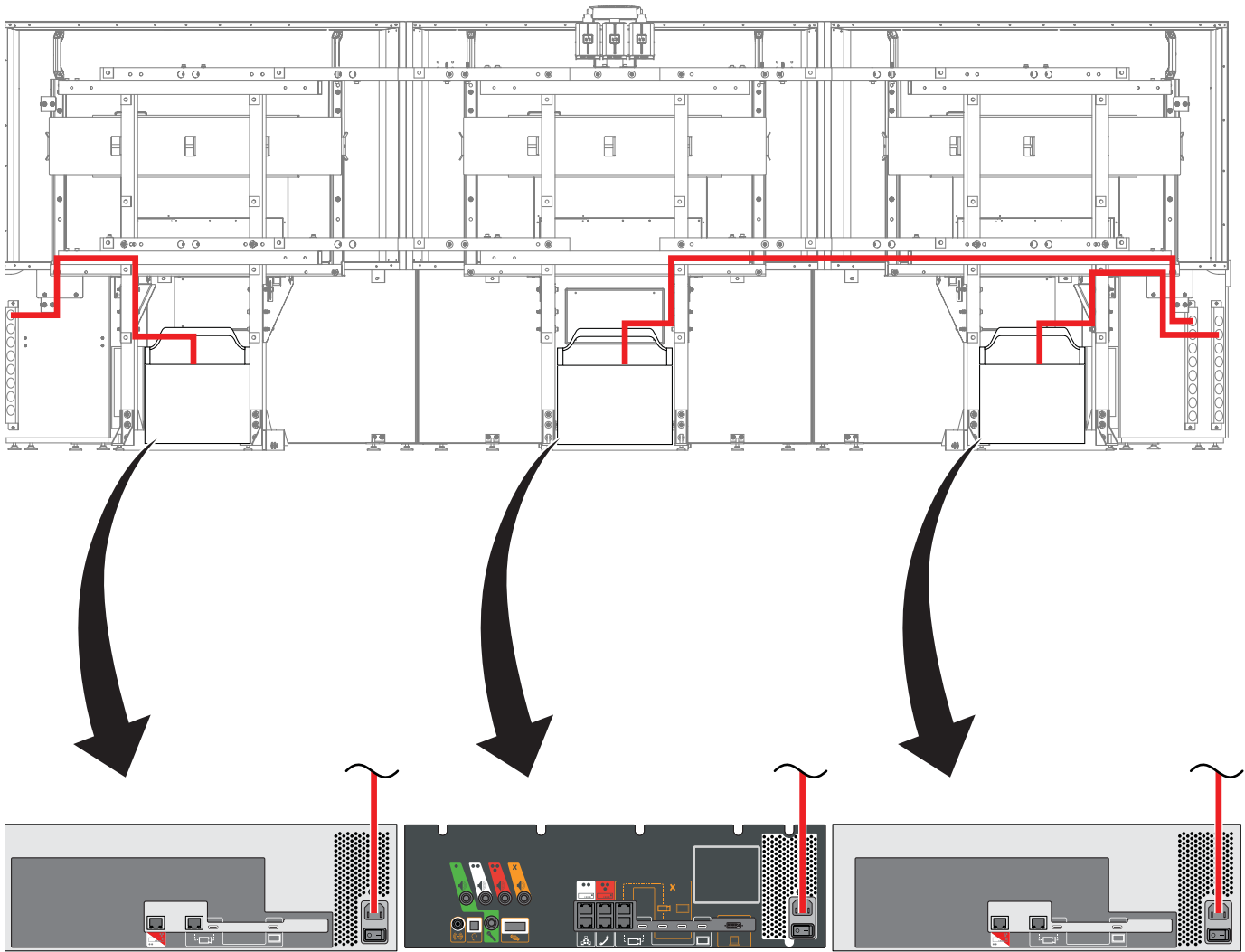


**Note**

Figure 9-15 displays the rear view of the Cisco TelePresence System 3200. Left and right are reversed.

Step 16 Connect the power cables for the codecs.

Figure 9-16 *Cabling the Codecs*

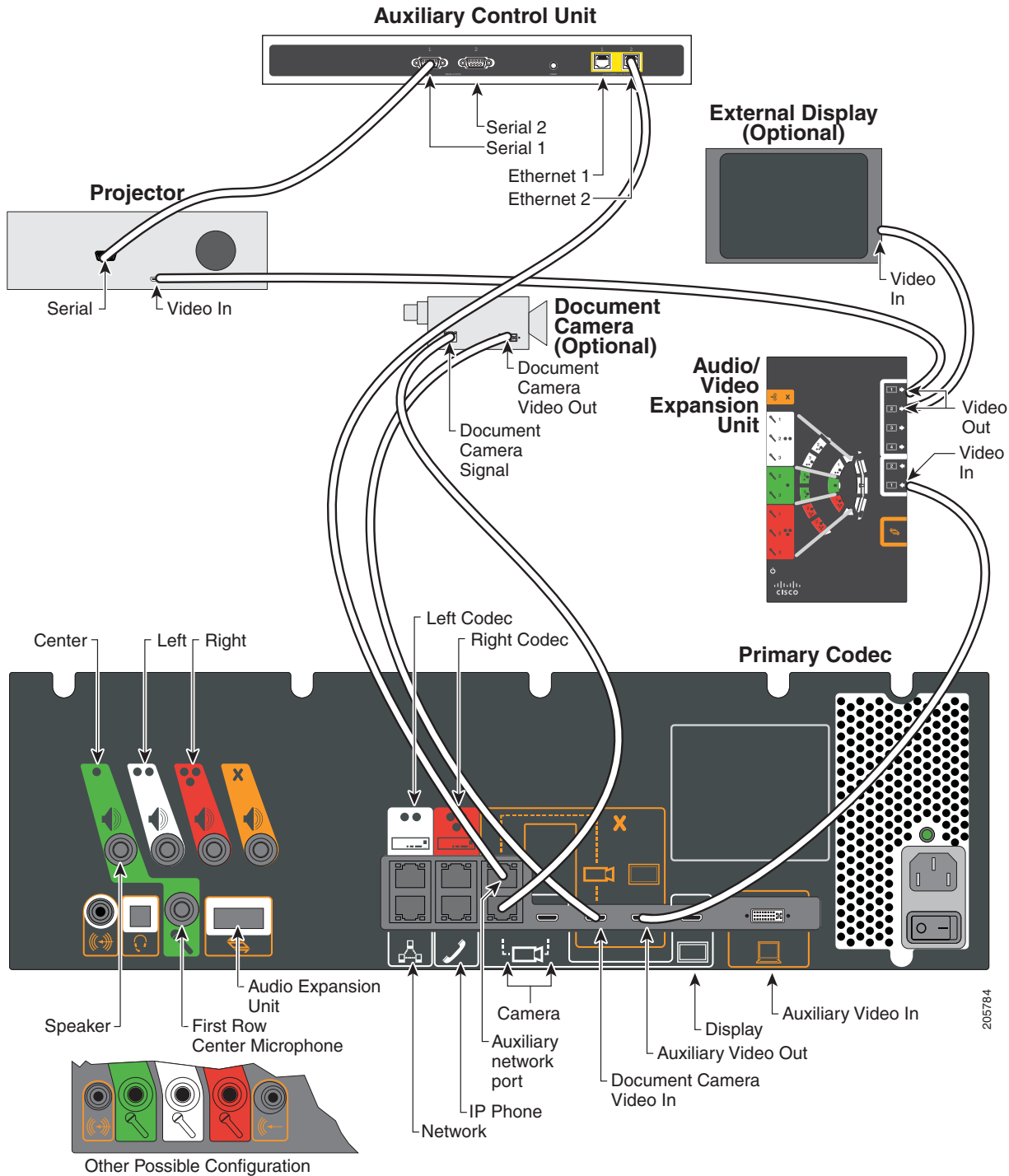


Power

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Step 17 (Optional) If your installation uses an optional external display or a document camera, install and route the cabling.

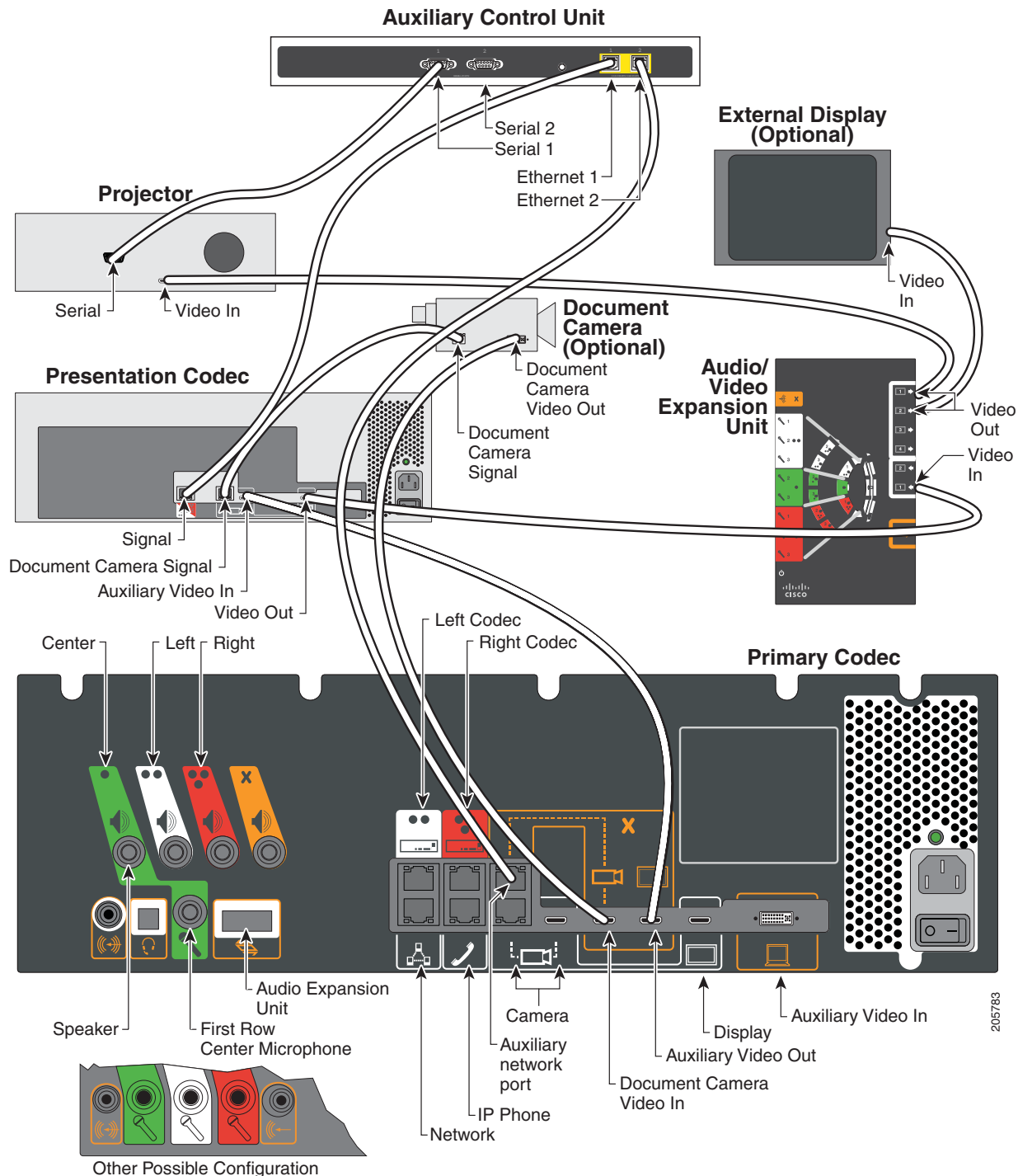
Figure 9-17 Cabling Diagram: CTS-3200 Installations with an External Display and Document Camera



Step 18 (Optional) If your installation uses an external display or a document camera with a presentation codec, install and route the cabling.

Refer to the “Options for the Cisco TelePresence System 3200” chapter of the *Cisco TelePresence Hardware Options and Upgrade Guide* for more information about the presentation codec.

Figure 9-18 *Cabling Diagram: CTS-3200 Installations with a Presentation Codec, External Display and Document Camera*





CHAPTER 10

First-Time Setup

Revised: February 6, 2009, OL-14521-01

After you have assembled the Cisco TelePresence System (CTS), you set up the individual system components (such as displays and cameras) using **Hardware Setup**, located under **Troubleshooting** in the CTS Administration software. This chapter explains how to initially set up CTS components and contains the following sections:

- [Loading CTS Administration Software, page 10-1](#)
- [Setting Up CTS Components, page 10-4](#)



Note

You cannot perform diagnostics during an active Cisco TelePresence system call.

Parts List

Key	Part Description	Part Number	Qty	Ctn	Notes
Camera Hood Assembly (Figure 10-7)					
1	Camera assembly	800-30872-01	1	2	
2	Camera hood cover: top	68-3277-01	1	2	
3	Camera hood cover: bottom		1	2	
7	M4 x 12mm Pan Head screws, black	48-2426-01	2	N/A	

Loading CTS Administration Software

CTS Administration Software is factory-installed on each codec and loads during initial bootup.

To load CTS Administration Software:

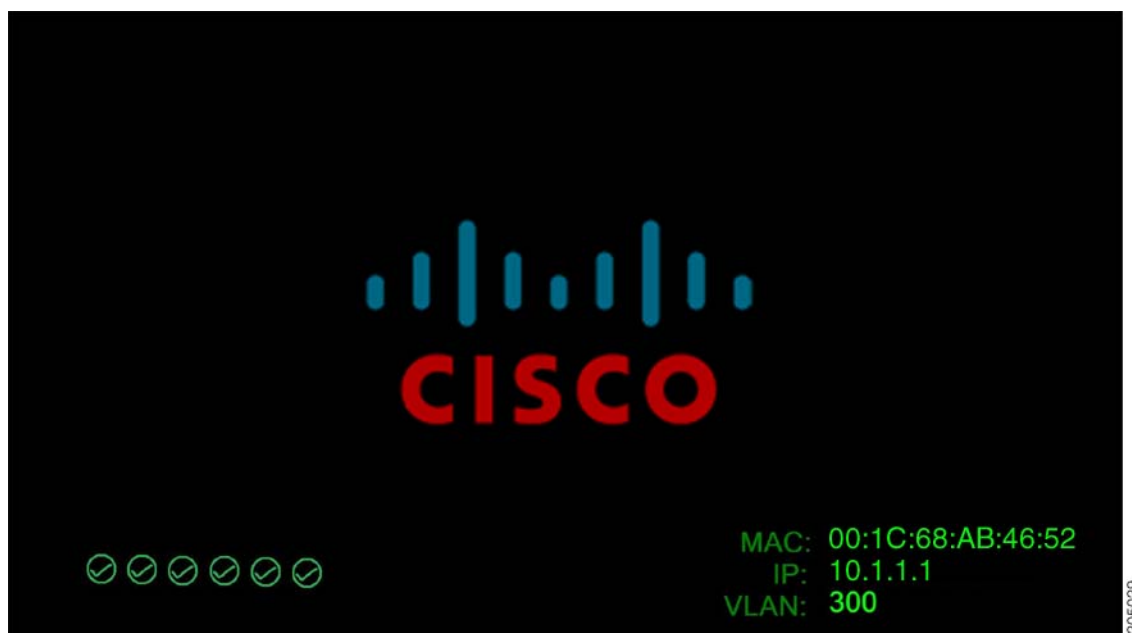
- Step 1** Turn on the Auxiliary Control Unit.
- Step 2** Power on the three PDUs in that are located on the accessory cabinets and the single PDU that is underneath the first row table (near the projector).

**Note**

Make sure that you power on all codecs within 30 seconds to avoid power on detection failure.

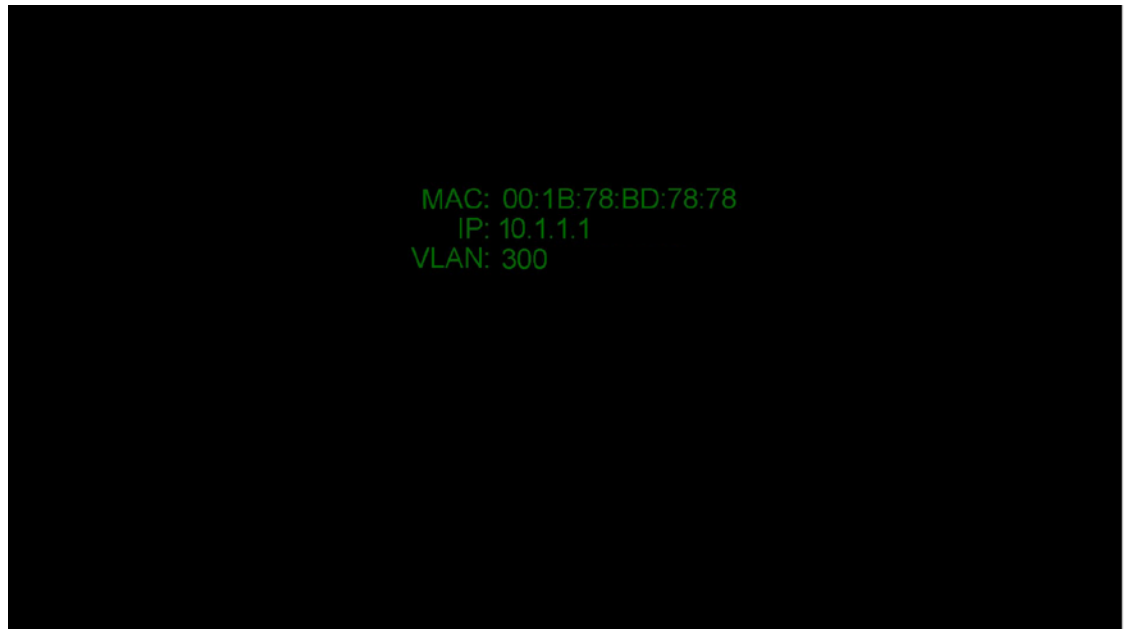
After you turn on the codecs, the displays associated with each codec becomes active. CTS displays green check marks on all displays to show bootup progress. Bootup is complete when the system displays six check marks as shown in [Figure 10-1](#).

Figure 10-1 *Bootup Completed*

**Note**

If the last check mark displayed is a red “X,” there has been a compact flash error. Please contact Cisco Technical Support.

After bootup completes, make a note of the IP address that displays on the center of the screen as shown in [Figure 10-2](#). You use that information to log in to the Cisco TelePresence System Administration. This IP address displays until you log in to Cisco TelePresence System Administration or use Secure Shell (SSH) to log in to the CTS-3000.

Figure 10-2 **System IP Address****Note**

Note If the IP address that displays is 192.168.100.2, the CTS-3200 could not contact the DHCP server or your system does not use DHCP. If your network does not use DHCP, navigate to **Configuration > IP Settings**, change the DHCP Enabled setting to **No**, and specify a static IP address, subnet mask, gateway and DNS server.

Step 3

After successful bootup, the CTS Administration Software loads. When CTS Administration Software loading is complete, the Cisco IP telephone displays a welcome message, which displays the IP address from which you will be able to access the CTS Administration software. The welcome screen only appears the first time the system is booted up after initial installation or after a factory reset.

**Note**

The telephone will not be registered at this time. It will show a directory number of 7000 but the telephone will not function as a telephone at this time.

Step 4

Make a note of the IP address that appears on the display. You use this IP address to log in to the Cisco TelePresence System administration console.

Step 5

If you have not already done so, configure the your Cisco Unified IP Phone in the Cisco Unified Communications Manager IP Phone Device page. For detailed instructions to configure Cisco Unified Communications Manager for use with your CTS-3200, refer to the [Cisco Unified Communications Manager Installation Guide for the Cisco TelePresence System](#) for your software release.

Step 6 From the Cisco IP telephone welcome page, press **Next**. The system reboots.

**Note**

The system might reboot several times during the initial startup process.

Step 7 Open a browser on a computer that is connected to the network.

Step 8 In the URL field, type the IP address that you obtained in [Step 4](#) and press **Enter**. The browser launches Cisco TelePresence System Administration.

**Note**

If you need to obtain the IP address, complete the following steps:

- a. On the IP phone, locate Manual at the bottom of the screen and press the Manual soft key.

**Note**

If you cannot locate the Manual button, proceed to [Step b](#).

- b. Locate Info at the bottom of the screen and press the Info soft key.
- c. Scroll down to the IP Address listing and copy the address.

Step 9 Log in to the system by entering the following information:

Step 10 Log in using the following:

- Username: **admin** (case sensitive)
- Password: **cisco** (case sensitive)

Configuring an Alternate TFTP Server (Optional)

If you need to use an alternative TFTP server, configure the parameters for the alternative TFTP server and related Cisco IP phone parameters in Unified CM in the Cisco Unified Communications Manager IP Phone Device page. For instructions to configure an alternate TFTP server, refer to the “[Configuring the Cisco TelePresence System](#)” chapter of the *Cisco TelePresence System Administrator's Guide* for your software release.

**Note**

If you are using the TFTP address that DHCP supplies for Cisco Unified Communications Manager, do not perform this step.

Setting Up CTS Components

To set up the CTS components:

-
- Step 1** Using the IP address displayed in the Cisco IP telephone welcome message, log in to the CTS Administration software.
- Step 2** From **Troubleshooting**, choose **Hardware Setup** to initially set up the components in the Cisco TelePresence system. Cisco suggests that you set up CTS components in the following order:
- [Setting Up the Displays, page 10-5](#)
 - [Setting Up the Cameras, page 10-6](#)
 - [Setting Up the Speakers, page 10-13](#)
 - [Setting Up the Microphones, page 10-13](#)
 - [Setting Up the Projector, page 10-14](#)
 - [Other Devices, page 10-18](#)

Setting Up the Displays

A display is set up correctly when the color on the display has been adjusted for the lighting in the meeting room. Each display must be set up individually.

- From the **Hardware Setup** page under **Troubleshooting**, click the **Display** radio button.
- Click **Start** to begin the adjustment process.

Each display in the meeting room should now be showing a set of horizontal grey bars and that display's relative position. Select the color temperature of the lighting in the meeting room and click **Apply**.

Selecting the Light Level

When adjusting the images on the display screens for the Cisco TelePresence system, you must take the color temperature of the ambient light in the room into consideration.

Sources of light in most rooms are either incandescent light bulbs that use tungsten filaments or fluorescent lights. Each of these light sources, and the amount of light in terms of lumens or watts, produces a different color temperature. This color temperature is sometimes expressed using terms such *cool*, *warm*, or *daylight*, but can be expressed more precisely in kelvins (K) as a numeric value.

Following are the temperatures that can be selected for adjusting the image on the Cisco TelePresence display screens:

- 3500 K
- 4000 to 4100 K (recommended setting)
- 5000 K
- 6500 K
- 7500 K

In many cases, the color temperature is printed on the light bulb. If you are unable to ascertain the type and color temperature of light bulbs in the meeting room, experiment with color temperature settings until the color and images on the display screen look lifelike.

Troubleshooting Displays

Use [Table 10-1](#) to troubleshoot problems with the images on the displays.

Table 10-1 Troubleshooting Chart for Display Problems

Problem	Possible Cause	Action
Cisco TelePresence 3000/3200 only Power-on test indicates the displays turn on in the wrong sequence. The normal power on sequence is the left, center, then right display screen.	Video cable is not connected to its corresponding codec connector. Ethernet cable from secondary codec is not plugged into the correct port on the primary codec.	Check that the cable from each display is plugged into the correct connector on its corresponding codec. Plug the HD Video-to-HD Video cable into the display connector on the correct codec, as follows. <ul style="list-style-type: none"> • Plug the center display into the primary codec. • Plug the participant's left display into the left secondary codec. • Plug the participant's right display into the right secondary codec.
No image.	Power cable is not plugged in. Power switch on the back of the display is off.	Check power connections and switches on each display.
No image.	The display has no image when you are between calls.	No image expected. Enable a display test from the Web user interface to place the displays in test mode.
No image.	Video cable is not connected.	(CTS-1000 only) Check that the LED is lit at the bottom front of each display and is either green or amber. Contact Cisco technical support if you are certain that the cabling is correct and power is applied to the system, but no image is seen on the display.

Setting Up the Cameras

The cameras are set up correctly when images are centered and in focus on the display screens and the white balance has been configured. The hardware setup software provides a camera Auto Adjust feature and a way to use targets to fine-tune the camera's focus.

Attach the Camera Targets

Two camera targets are provided with the Cisco TelePresence system: a large white target and a smaller target. You attach the large white target to the table prior to performing Auto Adjust (white balancing). Attach the large Camera target to the corresponding Table segment, with the clamps matching the counterbore feature under the table. Center the target on the edge of the table and standing vertical with the clamps underneath the table holding it tight. The target pattern should face the camera.

Start the Software Setup

- From the **Hardware Setup** page under **Troubleshooting**, click the **Camera** radio button.
- Click **Start** to begin the camera setup. You should see output from each camera in the appropriate camera display area.
- Click **Setup** under the image of a display screen to begin adjustments for the camera focused on that screen.

If you need further information about testing or adjusting this device, click **Help** in the content area or see the troubleshooting charts in this section.

**Note**

Make sure that the table edge is between the hash marks on both sides of the display.

Auto Adjust

- After attaching the large white camera target to the table, click **Auto Adjust**.

This action allows software to adjust the camera settings automatically. You will see various images and colors on the displays during the adjustment. Auto Adjust takes approximately 20 seconds.

Align the Camera

- Click **Show Camera Target**.
- Using the zoom ring on the camera lens, and the left/right, up/down, and rotation adjustment screws on the camera, perform the following adjustments:
 - Make manual adjustments to the camera focused on the target to align the red plus sign to the center plus sign on the target.
 - For the center display, zoom and align the camera so that the curved lines on each side of the target touches the sides of the display.
 - For the left display, zoom and align the camera so that the curved line on the right side of the display touches the red adjustment line at the right edge of the display to corresponding lines on the target. On both sides of the display, you will see two small red hash marks. Adjust the camera so that the edge of the table is positioned vertically exactly between the hash marks on either side of the display.

See [Figure 10-3](#) for the location of the adjustment screws on the camera. See [Figure 10-4](#), [Figure 10-5](#), and [Figure 10-6](#) for the correct placement of the curved lines and plus signs on the camera target.

**Note**

If one of the left/right screws is covered by the camera cable, use the other screw to make all left/right adjustments.

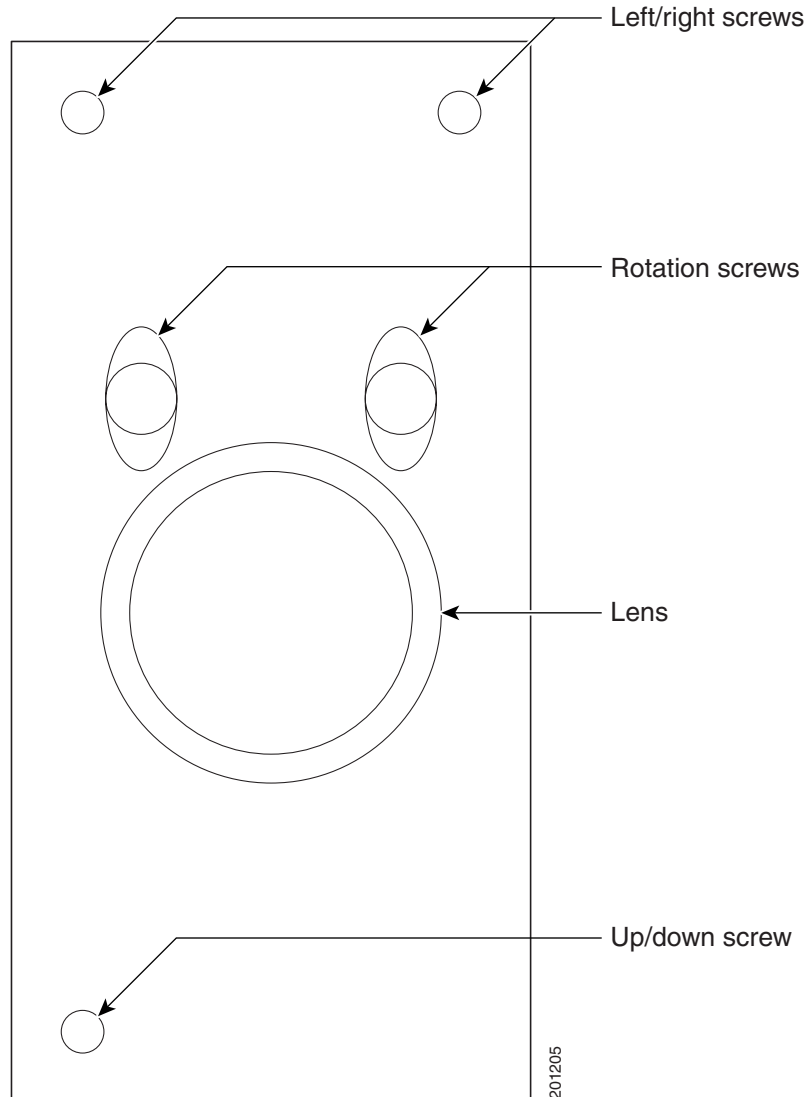
Figure 10-3 **Camera Mounting Plate**

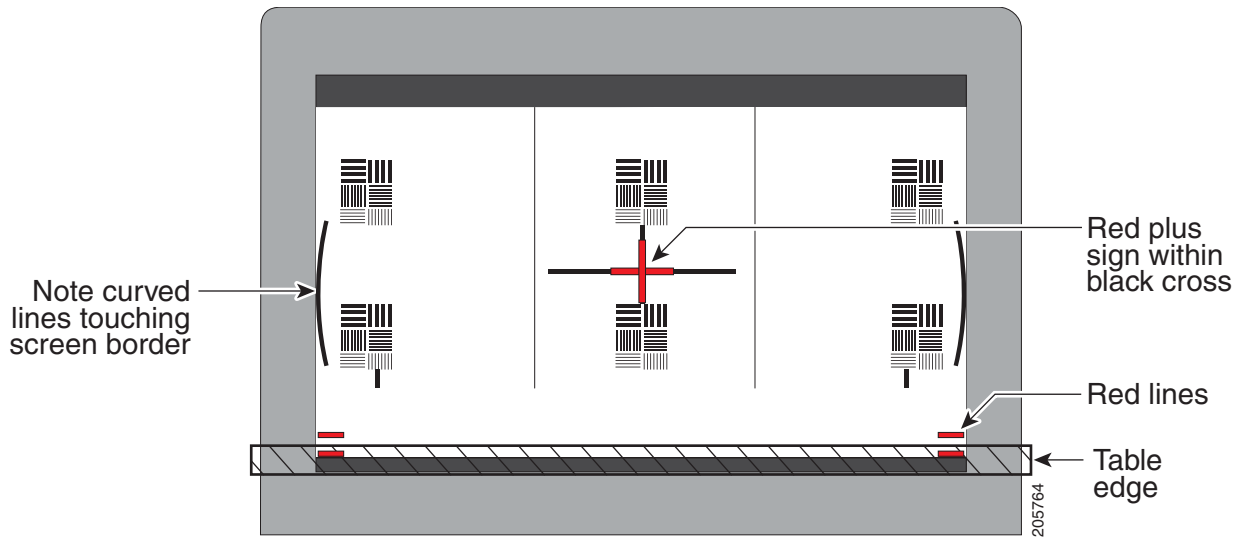
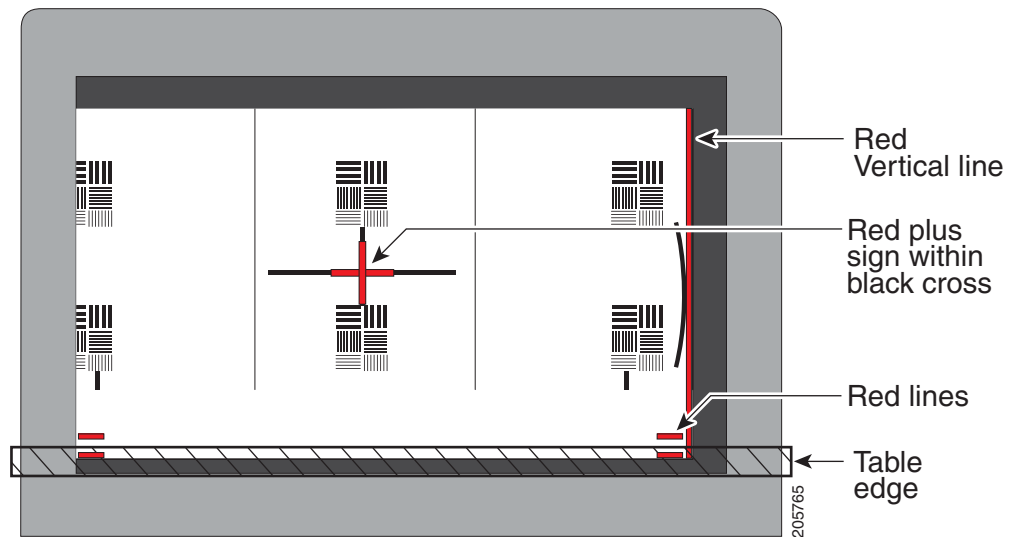
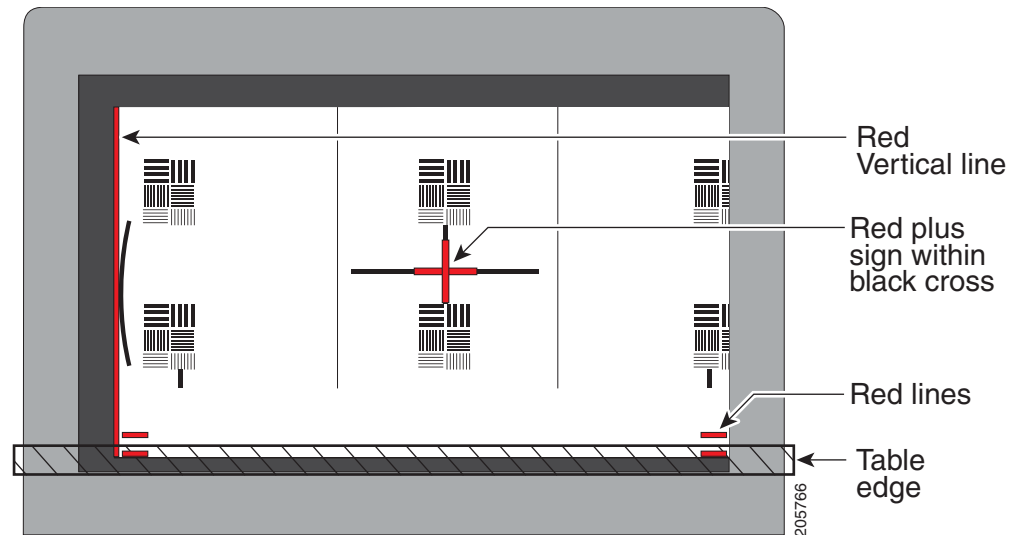
Figure 10-4 *Correct Camera Target Alignment—Center Display***Figure 10-5** *Correct Camera Target Alignment—Right Display*

Figure 10-6 Correct Camera Target Alignment—Left Display



- Click **Hide Camera Target** to remove the alignment images.
- Click **Done** when you complete the adjustment.

Show All Camera Targets

- Click **Show All Camera Targets** to align each camera independent of the other cameras.

Flipping the Video Image

- Click **Flip Video on Each Display** to display a mirror image—meaning to simulate the image that attendees will see—for the selected screen(s). Use this feature to make sure all three cameras are vertically aligned.

Focus the Camera

- Place the small target on the table.
- Click **Setup**, then click **Show Focus Target**.
- Adjust the small target so that the green box encloses some of the patterns on the small target.
- Adjust the focus ring on the camera lens so the lines on the target are in focus. The ring is labeled “N – 8”. The thumbscrew (or 0.9 mm Allen wrench) is used to unlock the focus ring.
- Click **Hide Focus Targets**, then click **Done** when you complete the adjustment.

Attaching the Camera Hood Assembly

- After you complete the camera adjustment, attach the camera hood assembly. See [Figure 10-7](#).



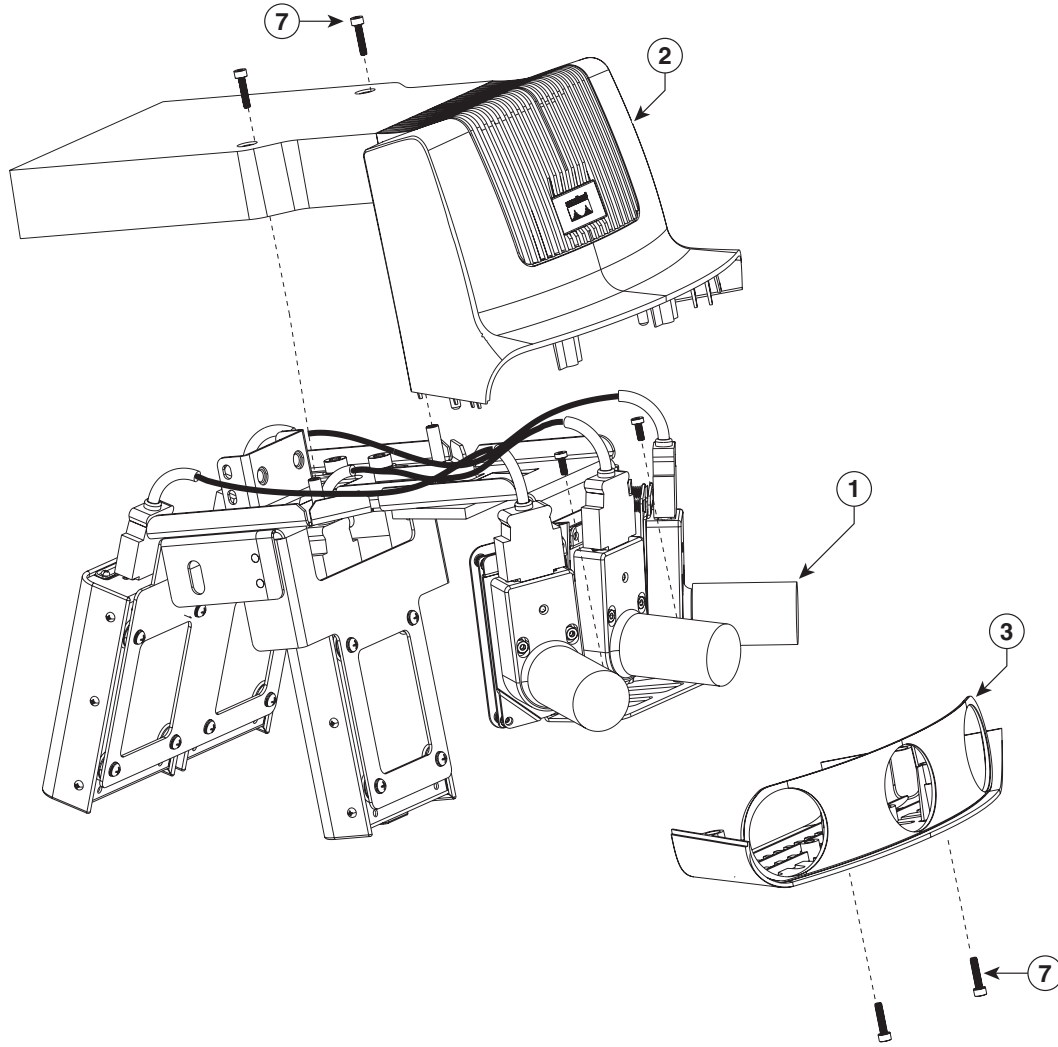
Note

Attach the top hood before attaching the bottom hood.



Caution

Do not overtighten the screws, or use a power screwdriver to tighten the screws. In addition, make sure that you use screws of the correct length (20 mm). Overtightening the screws, or using a screw that is too long, can cause the plastic hoods to break.

Figure 10-7 Attaching the Camera Hood Assembly

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Troubleshooting Cameras

Use [Table 10-2](#) to troubleshoot problems with cameras.

Table 10-2 Troubleshooting Chart for Camera Problems

Problem	Possible Cause	Action
Cisco TelePresence 3000/3200 only Camera image appears on the wrong display.	Cables are plugged into the wrong connector ports.	Check that the cables from each camera are plugged into the correct connector on its respective codec. Two connections are made for the camera, an RJ-45 cable plugs into the large connector and a video-to-DVI-I cable plugs into the small connector. Connect them as follows: <ul style="list-style-type: none"> • Plug the center camera into the primary codec. • Plug the participant's left camera into the left secondary codec. • Plug the participant's right camera into the right secondary codec.
Image not positioned correctly.	Camera is not aligned correctly.	Adjust and focus the camera using the targets.
Image colors are incorrect.	Video cable is only partially connected. Color settings are not correct.	Tug on the plug to see if it is fully plugged in. See separate documentation for the camera adjustment procedures.
No image.	Lens cap is in place. Camera is not plugged in or is plugged in incorrectly.	Remove the lens cap. Check power connections and switches on each display. Verify that the video and Ethernet cables from each camera are plugged into the correct connectors on their respective codecs.
No image.	Camera or display is broken.	Contact Cisco technical support if you are certain that the cabling is correct, power is applied, and a display and camera test has been run, but no image is seen on the display.

Setting Up the Speakers

The speakers are set up correctly you can hear sound clearly from each one. You can choose whether you want to cycle through the speakers automatically or manually.

- Click **Speakers** on the Hardware Setup window to select the speaker test.
- Click **Start** to begin the speaker setup.
- Click **Cycle Through Speakers** to have sound cycled automatically for 5 seconds on each speaker.
- Click **Manually Step Through Speakers** to test sound on each speaker. Click **Next Speaker** to progress to the next speaker.

Troubleshooting Speakers

Use [Table 10-3](#) to troubleshoot problems with speakers.

Table 10-3 *Troubleshooting Chart for Speaker Problems*

Problem	Possible Cause	Possible Solution
No sound is heard.	Speaker cable is not connected or is only partially connected.	Check that the red and black pronged ends of the speaker cable are securely fastened under their corresponding connectors on the speaker. Check that the speaker cable is plugged into the correct receptor on the primary codec. Tug on the plug to see if it is fully plugged in. Press the plug in firmly until a click is heard.
Cisco TelePresence 3000/3200 only Sound heard at wrong speaker.	Speaker cable is not connected in the correct connector.	Check that the speaker cable is plugged into the correct receptor on the primary codec. Plug all speakers into the primary codec.
Sound is not synchronized with video.	—	Contact Cisco technical support.

Setting Up the Microphones

The microphones are set up correctly when each microphone registers sound. You must supply sound at each microphone to complete setup.

The Microphone Troubleshooting screen displays the number of microphones available for testing. For You will see three screens with either two of three microphones per screen, depending on the number of microphones installed. The top microphone represents the microphone in the front row; the bottom microphone icons represent the back row microphones.

- Click **Microphones** on the **Hardware Setup** window.
- Click **Start** to begin setup.
- Lightly tap each microphone and watch the audio meter on the corresponding display screen to see that sound registers.

- Click **Refresh Microphones Status** (CTS-3200s only) to update the on/off status of all microphones.
- Click **Stop** when setup is complete.

Troubleshooting Microphones

Use [Table 10-4](#) to troubleshoot problems with microphones.

Table 10-4 *Troubleshooting Chart for Microphone Problems*

Problem	Possible Cause	Possible Solution
Sound is muffled.	Something near or on the microphone is distorting the sound.	Move objects away from the microphone.
Cisco TelePresence 3000/3200 only Sound registers at the wrong microphone.	Microphone cable is not connected to its corresponding codec.	Check that the cable from the microphone is plugged into the correct receptor on the codec. Plug all microphones into the primary codec.
No sound registers.	Microphone cable is not connected or is only partially connected.	<p>Check that the system is plugged in and power is on.</p> <p>Check that the microphone plug is firmly seated in the correct connector on the primary codec.</p> <p>Check that the mute light on each microphone is lit. An unlit light indicates that the microphone is not plugged in.</p> <p>Lightly tap the microphone to see if sound registers.</p> <p>Contact Cisco technical support if you are certain that the cabling is correct and power is applied to the system, but no sound registers on the microphone.</p>
Microphone icon with red pipe displays.	Microphone is not connected.	Check that the microphone is properly plugged in.
Microphone icon with question mark displays.	One of the microphones is unplugged.	Check that the microphone is properly plugged in.

Setting Up the Projector

To set up the projector, complete the following steps:



Note

The following procedures are specific to the Sanyo PLV-Z4 and PLV-Z5 projectors.

- Step 1** Make sure that a serial cable is connected from your projector to the Serial output of the auxiliary control unit. See [Chapter 9, “Routing Power and Signal Cables”](#) for information about cabling your system with an Auxiliary Control Unit.
- Step 2** Start a test pattern display for the projector by completing the following steps:
- Open a browser that is connected to the network.
 - Enter the IP address of the primary codec to log in to Cisco TelePresence System Administration.
 - Select **Troubleshooting > Hardware Setup**, then click the **Presentation Devices** radio button.
 - Select the **Test Pattern** radio button.
 - Click **Start** to begin the test.

- Step 3** Turn on the projector by turning the projector power rocker switch to the **ON** position.
- The projector takes approximately 15-30 seconds to warm up, and should be fully initialized within one minute. If the projector is not receiving video, the screen will be blue. If the projector does not receive video for five minutes and 30 seconds, the projector turns off.

If the test pattern is displaying correctly, you should see a grid projected on the projection surface. In the center of the grid, you should see a series of horizontal grey bars. You should also see a one-pixel wide green border around the outside of the grid.

- Step 4** From Cisco TelePresence System Administration, click **Set Projector Defaults** to automatically configure the projector for use with the CTS-3200.

- Step 5** Set the group, number and data settings by completing the following steps:

**Note**

Changing these settings allows a projector to be monitored by the System Network Management Protocol (SNMP) when the projector is in an inactive state. If a projector lamp fails, SNMP does not properly report the failure from an inactive projector until you complete these steps.

**Tip**

Use the projector remote control or press the buttons on the projector to complete these steps.

- Press the **Menu** key for 20 seconds.
The letter S displays in the upper left corner of the screen.
- Press the **Screen** key for 3 seconds.
The service menu displays.
- Press **OK** until the group number setting changes to **100**.
- Press the **Down Arrow** key until the No. setting changes to **4**.
- Press the **Left Arrow** key until the Data setting changes to **0**.
- Press the **ON-OFF** key to end the service menu.

- Step 6** Center the projector display within the screen by completing the following steps:
- Locate the lock switch and two dials on the side of the projector.
 - Move the switch to the unlock position.
 - Rotate the vertical dial to position the top of the image 1 inch below the bottom of the wood surface.
 - Rotate the horizontal dial to position the sides of the image 15 inches from each of the seams on the table segments.

Completing this step should center the image in the screen. If the image is not centered, adjust the image until the distance is equal from each table segment seam.

- e. Move the switch to the lock position.

Step 7 Aim the remote control at the lens of the projector.



Tip

You can use the screen to reflect the signal back to the projector if you are sitting at the table.

Leave the projector in this state. When the video signal is turned off or disconnected, the projector will go black for 30 seconds. Then it will count down for 5 minutes and then turn off the lamp.

If a video signal is applied during this 5 minute and 30 second countdown the video will reappear immediately. If the countdown completes, the projector goes into a cooldown mode which will ignore a video signal for 30 seconds. It will then stay in a standby mode and will power back up when a video signal is connected. It will take 15 seconds for the projector to light back up.

Step 8 To check either VGA or document camera input, perform the following steps:

- a. Click **Presentation Devices** on the **Hardware Setup** window.
- b. Perform one of the following steps to test the video input:
 - Click the **VGA** radio button to test input from a VGA device
 - Click the **Document camera** radio button to test input from the document camera

If the input image is displaying correctly, you should see an image projected on the projection surface.

Step 9 If the image is out of focus or is too small, use the projector focus ring to focus the image and use the zoom lever to create the largest possible image.

Step 10 Click **Stop** in Cisco TelePresence System Administration to remove the test pattern and complete the projector test.

Troubleshooting Presentation Devices

Use [Table 10-5](#) to troubleshoot problems with presentation devices.

Table 10-5 Troubleshooting Chart for Presentation Device Problems

Problem	Possible Cause	Possible Solution
Test pattern is not displayed.	Projector power switch is off.	Check projector power switch. Switch the projector on/off rocker switch to the ON position.
Test pattern is not displayed.	Power cable is not connected.	Check to see if the LED on the top of the projector is illuminated; it can be either green or yellow. If the LED light is not illuminated, make sure that the power cable is plugged in.

Table 10-5 Troubleshooting Chart for Presentation Device Problems (continued)

Problem	Possible Cause	Possible Solution
Test pattern is not displayed.	HD Video cable is not connected to the projector or to the primary codec.	Check that the HD Video cable is plugged into the projector and into the correct connector on the primary codec. Contact Cisco technical support if you are certain that the cabling is correct and power is applied to the system but no image is displayed.
Test pattern is not displayed.	Projector is set up to receive PC input instead of input from its HD Video cable connector.	Use the projector remote control to configure the projector for HD Video input. If your system includes an Auxiliary Control Unit, click Set Projector Defaults .
Test pattern is not displayed.	Object is blocking the path of the projector.	Remove any objects blocking the projector lens.
Test pattern is not displayed.	Video cable connector is not securely seated in the projector.	Seat the HD Video cable connector securely.
Test pattern is not displayed.	Video cable connector is not securely seated in the primary codec.	Seat the HD Video cable connector securely.
Test pattern is not displayed.	Video cable connector is not inserted in the correct port on the primary codec.	Check the cabling diagrams in “Routing Power and Signal Cables” chapter of the <i>Cisco TelePresence System 3200 Assembly, Use & Care, and Field Replacement Unit Guide</i> to identify the correct port into which to insert the HD Video cable connector. The HD Video cable connector should be connected to auxiliary video out.

**Note**

The Cisco TelePresence System can display information from multiple input devices during a meeting; if multiple input devices are sending information, the projector displays the input from the last presentation device sending information. If you do not see an image being projected on the screen, try the following: for VGA devices, unplug the device from the VGA cable, wait 5 seconds, and then plug the device back in; for document cameras: turn the camera off, wait 5 seconds, and then restart the device.

Other Devices

Use **Other Devices** to check the Auxiliary Control Unit, which controls the individual light units surrounding the displays in CTS conference rooms and enables the CTS to get more complete projector status information and to restore projector defaults.

- Click **Other Devices** on the Hardware Setup window.
- Click the **Start** radio button to access the Auxiliary Control Unit to begin testing. To end the test, click **Stop**.
 - Individual light units correspond to the five port numbers of the Auxiliary Control Unit. Click the appropriate box to select a specific port number; Click **Select All** to select all ports (and all light units) or **Select None**.
 - Click the **Refresh On/Off Status** button to update the on/off status of each port.
 - Click the **Turn Selected Lights On/Off** to test the selected light unit(s).
 - Click the **Reset Auxiliary Control Unit** to power cycle the Auxiliary Control Unit.



CHAPTER 11

Use & Care Guide

Revised: July 28, 2008, OL-14521-01

Maintaining the Tabletop

Cleaning your wood surfaces

To avoid the build-up of dirt, dust all wood surfaces on a regular basis. This should be done with a soft, lint free cloth, slightly moistened with water only. Wipe lightly in the direction of the wood grain and dry immediately with another cloth. Remember to wipe lightly as dust is abrasive and can cause fine scratches.

Should a more thorough cleaning become necessary, use a very mild liquid detergent at 1 teaspoon per quart (5 ml per liter) of lukewarm water. Wipe with a soft, lint free cloth in the direction of the wood grain. Follow this with a cloth dampened with rinse water and then wipe dry with a third cloth. A quality glass cleaner could be used as an alternative to the soapy water.

Avoid using waxes or polishes of any kind, especially those containing silicone.

Protecting your wood surfaces

Always use felt backed desk pads and coasters as well as felt pads under your office equipment. Avoid leaving any plastic materials in one spot on a wood surface for any prolonged periods.

Blot, do not wipe, any liquid spills as soon as possible and follow this with the dusting procedure mentioned above.

Never expose wood surfaces to extremes of temperature or humidity. Do not place near heaters, vents or open windows. All natural wood products will change color over time due to exposure to light. Avoid placing your wood surfaces in direct sunlight and occasionally move the objects on the surface around, to assist with an even aging of the wood.

Cleaning the Plasma displays

Per industry-standard best practice recommendations for cleaning plasma displays:

The plasma displays require special consideration when cleaning. Wipe the panel surface gently using only a cleaning cloth or a soft, lint-free cloth. If the surface is particularly dirty, wipe with a soft, lint-free cloth which has been soaked in pure water or water to which a small amount of neutral detergent has been added, and then wipe it evenly with a dry cloth of the same type until the surface is dry.

Cleaning the Camera lens

**Caution**

Do not touch the camera after installation is completed. If you need to clean the camera lens, use a dry microfiber cloth. After cleaning, you will need to realign the camera.

Maintaining the Projector

**Note**

Refer to the Projector User Guide included with your projector for maintenance issues such as cleaning the projector lens. To replace the projector lamp, see the [“Replacing the Projector Lamp—Part Number CTS-PRJTR-BL-GEN1” section on page 12-17](#). To replace the projector, see the [“Replacing the Projector—Part Number CTS-PRJTR-GEN1” section on page 12-18](#).

**Warning**

Only trained and qualified personnel should be allowed to install, replace, or service this equipment.

**Warning**

Installation of the equipment must comply with local and national electrical codes.



CHAPTER 12

Field-Replaceable Unit Guide

Revised: July 28, 2008, OL-14521-01

This chapter describes the steps you perform to replace the field-replaceable units (FRUs) for the Cisco TelePresence system and includes the following sections:

- [Powering On the System, page 12-1](#)
- [Replacing the Camera Cluster—Part Number CTS3K-CAM-CLST-G2, page 12-2](#)
- [Replacing a Plasma Display—Part Number CTS-DISP-65-GEN2, page 12-4](#)
- [Replacing a Speaker—Part Number CTS-LDSPKR, page 12-8](#)
- [Replacing a Codec Unit—Part Number CTS-CODEC-PRI-G2 \(Primary Codec\) or CTS-CODEC-SEC \(Secondary Codec\), page 12-10](#)
- [Replacing a Microphone—Part Number CTS-MIC, page 12-12](#)
- [Replacing a Light Fixture—Part Number CTS-LIGHT-FIXT, page 12-14](#)
- [Replacing the Audio/Video Extension Unit—Part Number CTS-AV-EXP, page 12-15](#)
- [Replacing the Auxiliary Control Unit—Part Number CTS-LIGHT-CTRL, page 12-16](#)
- [Replacing the Cisco Unified IP Phone—Part Number CP-7975G-CTS, page 12-17](#)
- [Replacing the Projector Lamp—Part Number CTS-PRJTR-BL-GEN1, page 12-17](#)
- [Replacing the Projector—Part Number CTS-PRJTR-GEN1, page 12-18](#)
- [Replacing a PDU—Part Number CTS-PWR-PDU, page 12-19](#)
- [Replacing a Display Shelf, page 12-20](#)
- [Replacing a First Row Table Top Section, page 12-22](#)
- [Replacing a Second Row Table Top Section, page 12-24](#)

Powering On the System

Use this procedure for sections in this chapter that require you to power on the system.

-
- Step 1** If you replaced the primary codec, reconfigure the codec for the new MAC address in Cisco Unified Communications Manager by performing the following actions:
- a. Log in to Cisco Unified Communications Manager.

- b.** Change the device MAC address to the MAC address for the new primary codec. The MAC address should be displayed on the codec.
- Step 2** Power on the Cisco TelePresence 3200 by turning the power switches to the On position on the two left PDUs, single right PDU, and auxiliary control unit.
Six check boxes display on the lower left corner of the center display screen.
- Step 3** Wait while the system checks each check box and clears the screen.
The system IP address displays on the lower right corner of the center display screen.
- Step 4** Write down the IP address. This is the address of the primary codec.
- Step 5** Log in to the system by entering the following information:
 - a.** In the Admin field, type **admin**.
 - b.** In the Password field, type **cisco**.



Note If your administrator has changed the user name or password, enter those values.

- Step 6** Click **Login**.
- Step 7** Verify the status of the Cisco Unified Communications Manager (seen in the lower left portion of the window) is **Enabled/Up**.
- Step 8** Select **Hardware Setup** to verify the cameras, displays, speakers, and microphones are working properly.
- Step 9** If you are replacing a primary codec, perform the following steps:



Note If you are not replacing a primary codec, do not perform the following steps.

- a.** Navigate to the **Device Information > Configuration > CUCM settings** window, then perform the following actions:
 - b.** In the Certificate Trust List (CTL) area, delete the CTL from your system by clicking **Delete CTL**.
 - c.** In the Use Configuration TFTP Server area, click **Automatic** to set TFTP conditions to their default value and remove any alternate TFTP servers.
-

Replacing the Camera Cluster—Part Number CTS3K-CAM-CLST-G2

Required Information, Tools, and Equipment

To remove and replace the camera cluster for the Cisco TelePresence 3200, you need the following information, tools, and equipment:

- *Cisco TelePresence System Release 1.4 Administrator's Guide*, OL-13676-03
- *Release Notes for Cisco TelePresence System, Release 1.4*, OL-12074-05

- Power screwdriver with 2.5, 3, and 6 mm (standard or round) Allen bits, or standard 2.5, 3, and 6 mm Allen wrenches
- 0.9mm Allen wrench for camera lens adjustments (if the lens uses a thumbscrew, no tools are required)
- Manual screwdrivers, Phillips and flat head types
- Metric wrenches, 10 to 15 mm
- Masking tape
- Laptop computer attached to network

Removing and Replacing the Camera Cluster

**Note**

Make sure to retain all screws, brackets, and other parts during the disassembly.

**Caution**

Take care not to scratch or mar the display screen during the replacement procedure.

**Note**

The directions *left* and *right* refer to the assembly as you face it.

Step 1

Power off the system by completing turning off the following units:

- The two left PDUs on the left accessory cabinet
- The single right PDU on the right accessory cabinet
- The auxiliary control unit on the center display structure

**Caution**

Make sure all system power is turned off before beginning this disassembly.

Step 2

Remove the top camera hood by removing the screws that secure it to the bracket.

Step 3

Remove the lens hood by removing the two screws on the bottom of the hood.

Step 4

At the back of the camera cluster, disconnect the six cables: one Ethernet and one signal cable from each of the three camera processors. As you remove each cable, attach a strip of temporary masking tape and mark as “left,” “right,” or “center” for identification.

**Tip**

To enable easier access to the loose cables, temporarily attach them to the upper back of the display with masking tape.

Step 5

Remove the camera assembly by removing the screws from the top and side flanges of the camera assembly support bracket. Retain the screws and set the assembly aside.

Step 6

Attach the new camera assembly to the mounting bracket using the same M8 screws that were removed. See [Chapter 8, “Assembling the Remaining Cisco TelePresence Elements”](#) for more information.

- Step 7** Reattach the Ethernet and signal cables according to your temporary markings. Do not attach the camera hoods at this time.
- Step 8** Power on the system by completing the steps in the [“Powering On the System” section on page 12-1](#).
- Step 9** Perform the camera adjustment procedure and, if required, refocus and realign the camera. See the [“Setting Up the Cameras” section on page 10-6](#) for more information.
- Step 10** Re-attach the camera hood and lens hood.
-

Replacing a Plasma Display—Part Number CTS-DISP-65-GEN2

Required Information, Tools, and Equipment

To replace a display, you need the following information, tools, and equipment:

- *Release Notes for Cisco TelePresence System, Release 1.4*, OL-12074-05
- *Cisco TelePresence System Release 1.4 Administrator's Guide*, OL-13676-03

Uncrating and unpacking:

- Claw hammer or small pry bar
- Large Phillips screwdriver
- * Tin snips
- * Pallet jack or hand cart (for moving components)
- * Safety gloves
- * Safety glasses
- * Box cutters

Cisco TelePresence 3200 Structure, Accessory, and Adjustment Assembly:

- Power screwdriver with 2.5, 3, and 6 mm (standard or round) Allen bits, or standard 2.5, 3, and 6 mm Allen wrenches



Tip A round-head Allen bit allows the bit to work at an angle instead of only straight out, which is helpful in tight spots.

- Manual screwdrivers, Phillips and flat head types
- Metric wrenches, 10 to 15 mm
- 9/64-inch Allen wrench (supplied with speakers)
- 0.9mm Allen wrench for camera lens adjustments (if the lens uses a thumbscrew no tools are required)
- Level
- Masking tape
- * Tie wraps

- Laptop computer attached to network
- * Step ladder

* Recommended for best results

Removing Audio Components

**Caution**

Take care not to mar or introduce smudges or dirt to the surface of the projector screen.

Step 1

Power off the system by completing turning off the following units:

- The two left PDUs on the left accessory cabinet
- The single right PDU on the right accessory cabinet
- The auxiliary control unit on the center display structure

**Caution**

Make sure all system power is turned off before beginning this disassembly.

Step 2

Remove the Projector screen by performing one of the following actions:

- If your projector screen is slightly recessed and uses black side trims, complete the following steps:
 - a. Remove the side trims from the edges of the display.
Be careful not to mar the screen when you perform this step.
 - b. Use an open-ended wrench to loosen the feet on the bottom of the screen, and lower the screen.
 - c. After you have created a gap of approximately 1/2 inch (1 centimeter) between the screen and the display shelf, detach the holes on the top screen from the locating pins on the underside of the display shelves and remove the screen.
- If your projector screen does not have side trims and is flush with the display cabinet, grasp the outer edges of the screen and pull it up and away from the Projector clips that hold the screen to the Display shelves.

Step 3 Disconnect the Speaker cables from the Speaker terminals.

Step 4 Loosen the half-turn bolts on either side of the left Speaker board. Slip the Speaker board over the half-turn bolts and remove it from the work area.

Step 5 If you are replacing the center or right Plasma display, remove the center speaker board by repeating [Step 3](#) and [Step 4](#).

Step 6 If you are replacing the center Plasma display, proceed to the next section, [“Removing the Camera Cluster”](#).

Step 7 If you are replacing the right Plasma display, remove the right speaker board by repeating [Step 3](#) and [Step 4](#).

Step 8 If you are replacing the right Plasma display, skip to the [“Removing the Left Door”](#) section on page 12-6.

Step 9 When you complete the procedure, power on the system by completing the steps in the [“Powering On the System”](#) section on page 12-1.

Removing the Camera Cluster

If you are replacing the center Plasma display, you must remove the camera cluster. Refer to the previous section, [Removing and Replacing the Camera Cluster](#) for this procedure.

Removing the Left Door

The left tabletop door section must be removed to allow room to move the Plasma displays in and out of the work area.

**Note**

Make sure to retain all screws, connectors, and other parts during the disassembly.

-
- Step 1** Remove the safety straps from the underside of the left tabletop section.
- Step 2** Unscrew one side of the hinges connecting the left tabletop wing section to the left Table segment.
- Step 3** Remove the left tabletop wing section and set it aside.
-

Removing a Display Shelf

**Note**

Make sure to retain all screws, connectors, and other parts during the disassembly.

-
- Step 1** Unscrew the left Accessory cabinet from the left Accessory cabinet attachment bracket. Remove the Accessory cabinet from the work area.
- Step 2** From the underside of the left Display shelf, unscrew one side of each metal plate connector.
- Step 3** Loosen each draw bolt.
- Step 4** Unscrew the left Display shelf from the two Display Shelf support brackets.
- Step 5** Pull the left Display shelf away from the center Display shelf and set aside.
- Step 6** If you are replacing the left Plasma display, skip to the next section, [“Removing the Display Screen and Completing the Procedure”](#).
- Step 7** If you are replacing the center or right Plasma display, repeat [Step 2](#) through [Step 5](#) for the center display shelf section.
- Step 8** If you are replacing the center Plasma display, skip to the next section, [“Removing the Display Screen and Completing the Procedure”](#).
- Step 9** If you are replacing the right Plasma display, unscrew the right Accessory cabinet from the right Accessory cabinet.
- Step 10** Place the Accessory cabinet under the right Tabletop wing segment to support it.
- Step 11** Unscrew the right Tabletop wing segment from the Accessory cabinet attachment bracket.
- Step 12** Unscrew the right Display shelf from the two Display Shelf support brackets. Set aside the Display shelf.
-

Removing the Display Screen and Completing the Procedure

- Step 1** Detach the display screen's signal cable from the correct codec unit.
See [Chapter 9, "Routing Power and Signal Cables"](#) for cable locations and reference.
- Step 2** Detach the display screen's power cable from the correct PDU.
See [Chapter 9, "Routing Power and Signal Cables"](#) for cable locations and reference.
- Step 3** Remove the black tape from the seam behind and between the display screens.
- Step 4** Remove the left and right Display tilt brackets from the Display shelf supports.
- Step 5** Using a minimum of two people, lift the Plasma display straight up to disengage the hooks on the back of the display from the horizontal mounting rod on the Display structure.
- Step 6** Move the Plasma display out of the work area to a temporary location safe from potential damage.
- Step 7** Unpack the new display.



Note Take care to minimize damaging the packaging material so it may be reused to package the old display screen.

- Step 8** Turn the power switch on the Plasma display to the On position and make sure the cables are unbundled and hanging freely. Once the display is hung, these items may not be accessible.
- Step 9** Hang the replacement Plasma display.
- Step 10** Plug in the signal cable to the correct codec.
See [Chapter 9, "Routing Power and Signal Cables."](#)
- Step 11** Plug in the power cable to the correct PDU.
See [Chapter 9, "Routing Power and Signal Cables."](#)
- Step 12** Align and level the display and add the black seam tape.
See [Chapter 3, "Mounting and Leveling the Plasma Displays."](#)
- Step 13** If required, attach the camera cluster.
See [Chapter 8, "Assembling the Remaining Cisco TelePresence Elements"](#) and [Chapter 9, "Routing Power and Signal Cables."](#)
- Step 14** Reassemble the display shelf sections.
See [Chapter 5, "Building the Display Shelf Assembly."](#)
- Step 15** Hang the speaker boards.
See [Chapter 8, "Assembling the Remaining Cisco TelePresence Elements."](#)
- Step 16** Power on the system by completing the steps in the ["Powering On the System"](#) section on page 12-1.
- Step 17** Reattach the projector screen.



Tip The projector screen comes with printed instructions that should assist you with replacing it. If you cannot find the instructions, reverse the order of removal to install it.

- Step 18** Reassemble the left door tabletop section.
See [Chapter 6, "Building the First Row Table Assembly."](#)

- Step 19** Perform the display adjustment procedure.
See the [“Setting Up the Displays” section on page 10-5](#) for more information.
- Step 20** If you moved the camera, complete the following steps:
- Perform the camera adjustment procedure and, if required, refocus and realign the camera.
See the [“Setting Up the Cameras” section on page 10-6](#) for more information.
 - Attach the camera hood and lens hood.
See [Chapter 8, “Assembling the Remaining Cisco TelePresence Elements.”](#)
- Step 21** Repackage the old display using the new display box and packing materials.
-

Replacing a Speaker—Part Number CTS-LDSPKR

Required Information, Tools, and Equipment

To remove and replace a speaker for the Cisco TelePresence 3200, you need the following information, tools, and equipment:

- Cisco TelePresence System Release 1.4 Administrator's Guide*, OL-13676-03
- Power screwdriver with 2.5, 3, and 6 mm (standard or round) Allen bits, or standard 2.5, 3, and 6 mm Allen wrenches



Tip A round-head Allen bit allows the bit to work at an angle instead of only straight out, which is helpful in tight spots.

- Manual screwdrivers, Phillips and flat head types
- Metric wrenches, 10 to 15 mm
- 9/64-inch Allen wrench (supplied with speakers)
- Laptop computer attached to network (for troubleshooting or reference)

Removing and Replacing a Speaker



Note Make sure to retain all screws, connectors, and other parts during the disassembly.



Caution Take care not to mar the surface nor introduce smudges or dirt to the surface of the projector screen.

- Step 1** Power off the system by completing turning off the following units:
- The two left PDUs on the left accessory cabinet
 - The single right PDU on the right accessory cabinet

- The auxiliary control unit on the center display structure

**Caution**

Make sure all system power is turned off before beginning this disassembly.

Step 2

Remove the Projector screen by performing one of the following actions:

- If your projector screen is slightly recessed and uses black side trims, complete the following steps:
 - a. Remove the side trims from the edges of the display.

Be careful not to mar the screen when you perform this step.
 - b. Use an open-ended wrench to loosen the feet on the bottom of the screen, and lower the screen.
 - c. After you have created a gap of approximately 1/2 inch (1 centimeter) between the screen and the display shelf, detach the holes on the top screen from the locating pins on the underside of the display shelves and remove the screen.
- If your projector screen does not have side trims and is flush with the display cabinet, grasp the outer edges of the screen and pull it up and away from the Projector clips that hold the screen to the Display shelves.

Step 3

Disconnect the Speaker cable clips from the Speaker terminals.

Step 4

Remove the magnetically-held face plate cover from the speaker. You can pry the cover off by carefully inserting the tip of a small screwdriver blade under the edge.

Step 5

Loosen the corner screws on the speaker with a 9/64-inch Allen wrench. The white fasteners on the rear side of the Speaker board should end up in a horizontal, releasing position.

Step 6

Pull the speaker out and set it aside.

Step 7

Insert the replacement speaker and secure it in place.

Step 8

Connect the Speaker cable clips to the Speaker terminals.

Step 9

Power on the system by completing the steps in the [“Powering On the System”](#) section on page 12-1. Refer to the [Cisco TelePresence System Administrator's Guide](#) for your software release for more information.

Step 10

Reattach the projector screen.

**Tip**

The projector screen comes with printed instructions that should assist you with replacing it. If you cannot find the instructions, reverse the order of removal to install it.

Step 11

Perform the speaker adjustment procedure. See the [“Setting Up the Speakers”](#) section on page 10-13.

Replacing a Codec Unit—Part Number CTS-CODEC-PRI-G2 (Primary Codec) or CTS-CODEC-SEC (Secondary Codec)

Required Information, Tools, and Equipment

To remove and replace a codec unit for the Cisco TelePresence 3200, you need the following information, tools, and equipment:

- *Cisco TelePresence System Release 1.4 Administrator's Guide*, OL-13676-03
- Power screwdriver with 2.5, 3, and 6 mm (standard or round) Allen bits, or standard 2.5, 3, and 6 mm Allen wrenches



Tip

A round-head Allen bit allows the bit to work at an angle instead of only straight out, which is helpful in tight spots.

- Manual screwdrivers, Phillips and flat head types
- Metric wrenches, 10 to 15 mm
- Masking tape
- Laptop computer attached to the network

Removing and Replacing a Codec



Note

Make sure to retain all screws, connectors, and other parts during the disassembly.

Step 1 Power off the system by completing turning off the following units:

- The two left PDUs on the left accessory cabinet
- The single right PDU on the right accessory cabinet
- The auxiliary control unit on the center display structure



Caution

Make sure all system power is turned off before beginning this disassembly.

Step 2 From the back of the Cisco TelePresence 3200, access the codec to be removed. Turn the power switch on the codec to the Off position.

Step 3 Remove all cable ties holding the cables to the cable management bar. Take note of the organization of the cables.

Step 4 Remove the cables from the codec. Label each cable with masking tape for identification as it is removed.

See [Chapter 9, "Routing Power and Signal Cables"](#) for additional information.

Step 5 Remove and retain the screws that attach the codec's L-brackets to the Display structure Front feet.

See [Chapter 8, "Assembling the Remaining Cisco TelePresence Elements"](#) for additional information.

- Step 6** Remove the codec from the Display structure.
- Step 7** Remove the L brackets from the codec.
See [Chapter 8, “Assembling the Remaining Cisco TelePresence Elements”](#) for additional information.
- Step 8** Remove the cable management bar from the codec. Retain the bar and the screws.
See [Chapter 8, “Assembling the Remaining Cisco TelePresence Elements”](#) for additional information.
- Step 9** Make a note of the MAC address of the new primary codec. The MAC address should be printed on a sticker on the codec. You configure Cisco Unified Communications Manager to use the new MAC address in the [“Powering On the System”](#) section on page 12-1.
- Step 10** Attach the L-brackets and Cable management bar to the replacement codec.
See [Chapter 8, “Assembling the Remaining Cisco TelePresence Elements”](#) for additional information.
- Step 11** Attach the new codec to the display structure front feet using the screws that you removed in [Step 5](#).
- Step 12** Turn the codec power switch to the On position.



Caution Make sure each PDU power switch is still in the Off position.

- Step 13** Reattach the cables according to your temporary masking tape identification.
See [Chapter 9, “Routing Power and Signal Cables”](#) for additional information.
- Step 14** Attach the cables to the cable management bar using tie wraps.
- Step 15** If the replacement unit was the Primary codec, follow these steps to reset the MAC address in Cisco Unified Communications Manager:
- Open a browser on a computer connected to the network.
 - Access the Cisco Unified Communications Manager interface.
 - Change the MAC address for the Primary codec to its new address.
- Step 16** Power on the system by completing the steps in the [“Powering On the System”](#) section on page 12-1.
Refer to the [Cisco TelePresence System Administrator's Guide](#) for your software release for more information.
- Step 17** Perform the **Auto Adjust** camera setup procedure. This sets the white balance to the correct levels. See the [“Setting Up the Cameras”](#) section on page 10-6 for detailed instructions.



Note If you are replacing the primary codec, power it on and complete all steps before powering on the secondary codecs. This prevents the secondary codecs from being affected by any software and peripheral upgrades to the primary codec.

Replacing a Microphone—Part Number CTS-MIC

Required Information, Tools, and Equipment

To remove and replace a microphone for the Cisco TelePresence 3200, you need the following information, tools, and equipment:

- *Cisco TelePresence System Release 1.4 Administrator's Guide*, OL-13676-03
- Power screwdriver with 2.5, 3, and 6 mm (standard or round) Allen bits, or standard 2.5, 3, and 6 mm Allen wrenches



Tip A round-head Allen bit allows the bit to work at an angle instead of only straight out, which is helpful in tight spots.

- Manual screwdrivers, Phillips and flat head types
- Metric wrenches, 10 to 15 mm
- Masking tape
- Laptop computer attached to the network



Caution

Make sure all system power is turned off before beginning this disassembly.

Removing and Replacing a First Row Microphone



Note

Make sure to retain all screws, brackets, and other parts during the disassembly.

- Step 1** From the back of the Cisco TelePresence 3200, access the audio/video expansion unit.
- Step 2** Detach the specific microphone cable from the audio/video expansion unit. Note the location for later reference.
- Step 3** Remove the microphone cable by pulling it to the right through the various cable management systems. Take note of how the cable is routed.
- See [Chapter 9, “Routing Power and Signal Cables”](#) for additional information.
- Step 4** If you are replacing the left or right microphones in the first row, skip to [Step 6](#).
- Step 5** If you are replacing the center microphone, follow these steps.
- a. Loosen, but do not remove, the mounting screws holding the projector assembly to the underside of the center tabletop.
 - b. Remove the projector assembly by sliding the unit to the left and away from the mounting screws.
 - c. Alternately, if the fit is too tight to remove in this manner, remove the mounting screws from the tabletop. Ensure the projector assembly is secured while removing the screws.
- See [Chapter 8, “Assembling the Remaining Cisco TelePresence Elements”](#) for more information.
- Step 6** From the underside of the tabletop, remove the two screws securing the microphone. Retain the screws.

Step 7 Pull the cable out through the hole and set the microphone aside.



Note If you are replacing a microphone in the second row, you must also remove the privacy panel for that

Step 8 Pull the replacement microphone cable through the hole in the tabletop.

Step 9 From the underside of the tabletop, attach the microphone by screwing in the two screws.

Step 10 Run the microphone cable to the codec in a similar manner as the original cable and attach it to the appropriate connection on the codec.

Step 11 If required, reattach the projector assembly and perform the first-time projector setup procedure. See [Chapter 8, “Assembling the Remaining Cisco TelePresence Elements”](#) and the [“Setting Up the Projector”](#) section on page 10-14 for more information.

Step 12 Test the microphone by performing the procedures in the [“Setting Up the Microphones”](#) section on page 10-13.

Removing and Replacing a Second Row Microphone



Note Make sure to retain all screws, brackets, and other parts during the disassembly.

Step 1 Remove the privacy panel from the following table top sections:

- The table top section to be replaced
- All table sections to the right of the table top section to be replaced



Note See [Chapter 7, “Building the Second Row Table Assembly”](#) for expanded views of the privacy panels.

Step 2 Remove the microphone from the table top section to be replaced. See [Figure 7-38](#) for an expanded view of the microphone and its attachment hardware.

Step 3 Disconnect the microphone from the audio/video expansion unit, route the cable through the table top section, and remove the microphone.

The microphone cable routes from the audio/video expansion unit to the table top section by way of the cable gutters on the second row table. The gutters are behind the privacy panels that you removed in [Step 1](#).

Step 4 If required, remove the cable cover for the right end privacy panel as shown in [Figure 7-46](#) and remove cable ties that bundle the microphone cable with other cables.

Step 5 Insert the microphone cable into the hole in the table top and route the cable through the cable gutters to the audio/video extension unit.

Step 6 Connect the microphone cable to the audio/video extension unit.

Step 7 Reconnect the microphone to the new table top section.

See [Figure 7-38](#) for microphone installation instructions.

Step 8 Attach the privacy panels to the table sections.



Note If required, adjust the privacy panel sections so that there is an equal amount of space between each section.

Step 9 If required, replace the cable cover for the right end privacy panel as shown in [Figure 7-46](#) and add cable ties to bundle the microphone cable with other cables.

Step 10 Test the microphone by performing the procedures in the “[Setting Up the Microphones](#)” section on [page 10-13](#).

Replacing a Light Fixture—Part Number CTS-LIGHT-FIXT

Required Information, Tools, and Equipment

To disassemble and reassemble portions of the Cisco TelePresence 3200, you need the following information, tools, and equipment:

- *Cisco TelePresence System Release 1.4 Administrator's Guide*, OL-13676-03
- Power screwdriver with 2.5, 3, and 6 mm (standard or round) Allen bits, or standard 2.5, 3, and 6 mm Allen wrenches



Tip A round-head Allen bit allows the bit to work at an angle instead of only straight out, which is helpful in tight spots.

- Manual screwdrivers, Phillips and flat head types
- Metric wrenches, 10 to 15 mm
- Masking tape
- Step stool or small step ladder
- Laptop computer attached to network (for troubleshooting or reference)

Replacement Bulbs

A Field Replacement Unit consisting of three 5-foot and two 4-foot 4100 K bulbs is available from Cisco Customer Service. The part number is CTS-3000-BULBS.

If one or more bulbs need replacement, it is recommended that all five bulbs are replaced for lighting uniformity.



Note The light fixtures installed during assembly have a 4100 K rating. If you set the Plasma display to another value you need to purchase and replace the light fixtures to match the new color temperature setting.

Replacing a Light Fixture

Step 1 Power off the Auxiliary Control Unit by turning the power switch to the Off position.



Note

The Auxiliary Control Unit is located in the center of the display assembly. See [Chapter 9, “Routing Power and Signal Cables”](#) for more information.

Step 2 Unplug the light fixture cord(s) from the Auxiliary Control Unit.

Step 3 For the right and left vertical light fixtures, follow these steps.

- a. Remove the screws from the light fixture holding bracket. The bracket is located in the middle of the fixture. Retain the screws.
- b. Lift the light fixture up and out of the lower cup bracket.

Step 4 For the horizontal light fixtures, follow these steps.

- a. Using the step stool or a small step ladder, reach over the display and remove the two screws from the light fixture holding bracket. The bracket is located in the middle of the fixture.
- b. Lift the light fixture up and out, being careful the cable does not mar the surface of the display.

Step 5 Place the replacement light fixture in the bracket and secure with the screws.

See [Chapter 4, “Building the Lighting Assembly”](#) for more information.

Step 6 Plug the light fixture into the Auxiliary Control Unit.

See [Chapter 9, “Routing Power and Signal Cables”](#) for more information.

Step 7 Turn the power switch on the Auxiliary Control Unit to the On position.

Replacing the Audio/Video Extension Unit—Part Number CTS-AV-EXP

To remove and replace the audio/video extension unit for the Cisco TelePresence 3200, you need the following tools and equipment:

- Medium Phillips head screwdriver (for attaching the unit to its bracket)
- Large Phillips head screwdriver (for attaching the unit and bracket to the display structure)
- Masking tape

Remove and replace the audio/video extension unit by performing the following procedure:

Step 1 Power off the system by completing turning off the following units:

- The two left PDUs on the left accessory cabinet
- The single right PDU on the right accessory cabinet
- The auxiliary control unit on the center display structure

**Caution**

Make sure all system power is turned off before beginning this disassembly.

- Step 2** Remove the cables from the audio/video extension unit. Label each cable with masking tape for identification as it is removed.
- See [Chapter 9, “Routing Power and Signal Cables”](#) for additional information.
- Step 3** Use the screwdriver to remove the two screws that attach the extension unit and remove the unit from the display structure.
- Step 4** Attach the new audio/video extension unit to its bracket, then attach the unit and bracket to the display structure. See [Figure 8-12](#) and [Figure 8-13](#) for more information.
- Step 5** Attach the cables to the new extension unit using the masking tape labels as a guide.
- Step 6** Power on the system by completing the steps in the [“Powering On the System”](#) section on page 12-1.
- Step 7** Test the microphone by performing the procedures in the [“Setting Up the Microphones”](#) section on page 10-13.

Replacing the Auxiliary Control Unit—Part Number CTS-LIGHT-CTRL

To remove and replace the auxiliary control unit Cisco TelePresence 3200, you need the following tools and equipment:

- Medium Phillips head screwdriver (for attaching the unit to its bracket)
- Large Phillips head screwdriver (for attaching the unit and bracket to the display structure)
- Masking tape

Remove and replace the auxiliary control unit by performing the following procedure:

- Step 1** Power off the system by completing turning off the following units:
- The two left PDUs on the left accessory cabinet
 - The single right PDU on the right accessory cabinet
 - The auxiliary control unit on the center display structure

**Caution**

Make sure all system power is turned off before beginning this disassembly.

- Step 2** Remove the cables from the auxiliary control unit. Label each cable with masking tape for identification as it is removed.
- See [Chapter 9, “Routing Power and Signal Cables”](#) for additional information.
- Step 3** Use the screwdriver to remove the two screws that attach the auxiliary control unit and remove the unit from the display structure.
- Step 4** Attach the new auxiliary control unit to its bracket, then attach the unit and bracket to the display structure. See [Figure 8-14](#) for more information.

- Step 5** Attach the cables to the new auxiliary control unit using the masking tape labels as a guide.
- Step 6** Power on the system by completing the steps in the [“Powering On the System”](#) section on page 12-1.
-

Replacing the Cisco Unified IP Phone—Part Number CP-7975G-CTS

- Step 1** Open a browser on a computer connected to the network.
- Step 2** Type in the IP address of the Cisco Unified Communications Manager. Enter the required information at the login screen.
- Step 3** Go to **Device > Phone** and find the phone you are replacing.
- Step 4** In the Cisco Unified Communications Manager interface, enter the new MAC address for the replacement IP phone and press **Save**.
- Step 5** Unplug the Ethernet cable from the back of the current Cisco IP phone and set the phone aside.
- Step 6** Plug the Ethernet cable into the new IP phone and place it in the same location on the tabletop as the old phone.
- Cisco Unified Communications Manager may download a new version of the phone software.
- When the phone has completed its booting and upgrade, perform a reset on the Cisco TelePresence System from the Cisco Unified Communications Manager device page.
- Step 7** If the new IP phone has not displayed a ready screen within five minutes, refer to the *Cisco TelePresence Troubleshooting Guide* OL-11293-01.



Note When you set up the Cisco Unified IP Phone, make sure that the parameter **Alternative TFTP** is set to the default setting of **NO**.

Replacing the Projector Lamp—Part Number CTS-PRJTR-BL-GEN1

A likely cause of a malfunctioning projector is a burnt-out projector lamp. The life of the light bulb is approximately 2000 hours. Cisco does not stock this lamp but you can order it from a variety of outside vendors. The Sanyo part number is POA-LMP94.

- Step 1** Power off the projector by turning off the power switch on the back of the unit.
- Step 2** Allow the project to cool down for at least 45 minutes, or wear heat-resistant gloves during the replacement process.
- Step 3** Unplug the HD Video cable, power cable, and serial cable from the rear of the unit.
- Step 4** Loosen the six screws that attach the projector assembly to the tabletop.

- Step 5** Remove the projector assembly by sliding the unit to the front until the projector mounting bracket disengages from the loosened mounting screws.
- Step 6** Loosen the screw that secures the lamp cover, then open the lamp cover. Access the cover through the cut-out rectangle on the projector mounting bracket.
- Step 7** Use the screwdriver to loosen the two screws that secure the lamp fixture in place.
- Step 8** Use the handles to remove the lamp module.



Note You may need to rock the unit backward and forward to unseat it.

- Step 9** Install the replacement lamp module and secure the module and cover with the screws.
- Step 10** Place the projector and bracket in position on the bottom of the table and slide the assembly into place.
- Step 11** Tighten the screws that secure the mounting bracket and replace the two screws at the rear of the bracket.
- Step 12** Reattach the power, video, and signal cables.
- Step 13** Turn the power switch on the back of the projector to the ON position.
- Step 14** Reset the lamp replacement counter by completing the following steps:
- Press the MENU button to display the on-screen menu.



Note You can either use the remote or press the button on the projector to perform these steps. The MENU and other buttons are on the underside of the projector after you attach it to the table.

- Use the Up and Down arrow keys to select **Setting**.
- Use the Right and Left arrow keys to select **Lamp counter reset**.
- When you are prompted to reset the lamp counter, Select **Yes** and press the **OK** button.
- Select **Yes** and press the **OK** button to reconfirm your choice.

Replacing the Projector—Part Number CTS-PRJTR-GEN1

- Step 1** Power off the projector by turning off the power switch located on the back of the unit.
- Step 2** Unplug the VGA cable, power cable and serial cable from the rear of the unit.
- Step 3** Remove two of the six screws that hold the projector assembly to the underside of the center tabletop. These screws are the rear-most of the six screws and the farthest away from the projector lens.
- Step 4** Loosen the remaining four mounting screws.
- Step 5** Remove the projector assembly by sliding the unit to the front until the projector mounting bracket disengages from the loosened mounting screws.
- Step 6** Remove the screws that attach the mounting plate to the projector and remove the plate.
- Step 7** Attach the mounting plate to the replacement projector.
- Step 8** Reattach the assembly to the underside of the tabletop.
- Step 9** Reattach the VGA cable to the projector.

- Step 10** Reattach the power cable to the projector.
- Step 11** Reattach the serial cable to the auxiliary control unit.
- Step 12** Power on the projector by turning on the power switch located on the back of the unit.
- Step 13** Perform first-time setup procedures for the projector by completing the steps in the [“Setting Up the Projector”](#) section on page 10-14.
-

Replacing a PDU—Part Number CTS-PWR-PDU

There are seven PDUs in the following places:

- Two PDUs attached to the left accessory cabinet
 - One PDU attached to the right accessory cabinet
 - One PDU attached to the underside of the first row tabletop, on the center privacy panel
 - One PDU in the cable gutter on the second row table section, Section 4 (second from the left)
 - One PDU in the cable gutter on the second row table section, Section 3 (second from the right)
-

- Step 1** On the PDU to be replaced, turn the power switch to Off and remove the plug from the wall receptacle.
- Step 2** Remove any cables plugged into the PDU.
- Step 3** Remove the PDU by performing one of the following steps:
- Remove a PDU from the accessory cabinet or the first row center privacy panel by removing the mounting screws.
 - Remove the PDU from the second row table section by removing the plastic knob screws on the underside of the table, removing the privacy panel, and removing the PDU that is placed in the lower cable gutter.
- Step 4** Attach the replacement PDU.
- Step 5** Plug in the jumper cords that were removed and turn the power switch to the On position.
- Step 6** Plug the PDU power cord into the wall receptacle.
- Step 7** Open a browser on a computer connected to the network.
- Step 8** Get the IP address for the system codec as follows:
- a. On the IP phone, locate Manual at the bottom of the screen and press the soft key.



Note If you cannot locate the Manual button, proceed to Step [b](#).

- b. Locate Info at the bottom of the screen and press the soft key.
 - c. Scroll down to the IP Address listing and copy the address.
- Step 9** Type in the IP address of the system codec. Log in to the system by entering the following information:
- a. In the Admin field, type **admin**.
 - b. In the Password field, type **cisco**.



Note If your administrator has changed the user name or password, enter those values.

- Step 10** Click **Login**.
- Step 11** Verify the status of the Cisco Unified Communications Manager (seen in the lower left portion of the window) is **Enabled/Up**.
- Step 12** Choose **System Restart** to perform a software reset.
- Refer to the [Cisco TelePresence System Administrator's Guide](#) for your software release for more information.

Replacing a Display Shelf

The display shelves are the table sections that sit directly below the display screens.

Required Information, Tools, and Equipment

To remove and replace a display shelf, you need the following tools:

- Medium and large Phillips screwdriver
- 10 mm wrench



Tip A 10 mm open end ratcheting wrench is useful to loosen and tighten the draw bolts.



Note Make sure to retain all screws, connectors, and other parts during the disassembly.

Removing and Replacing a Display Shelf Row Table Section

- Step 1** Power off the system by completing turning off the following units:
- The two left PDUs on the left accessory cabinet
 - The single right PDU on the right accessory cabinet
 - The auxiliary control unit on the center display structure



Caution Make sure all system power is turned off before beginning this disassembly.

- Step 2** Open the table door.
- Step 3** Remove the Projector screen by performing one of the following actions:
- If your projector screen is slightly recessed and uses black side trims, complete the following steps:
 - a. Remove the side trims from the edges of the display.

Be careful not to mar the screen when you perform this step.

- b. Use an open-ended wrench to loosen the feet on the bottom of the screen, and lower the screen.
- c. After you have created a gap of approximately 1/2 inch (1 centimeter) between the screen and the display shelf, detach the holes on the top screen from the locating pins on the underside of the display shelves and remove the screen.
 - If your projector screen does not have side trims and is flush with the display cabinet, grasp the outer edges of the screen and pull it up and away from the Projector clips that hold the screen to the Display shelves.

Step 4 Disconnect the speaker cables from the speaker terminals.

Step 5 Loosen the half-turn bolts on either side of the speaker boards.

Step 6 Slip the speaker boards over the half-turn bolts and remove them from the work area.

Step 7 From the underside of the display structure, remove all the screws that attach the display shelves to the display assembly.



Note The Display shelves are attached individually to the display structures as illustrated in [Figure 5-2](#), [Figure 5-3](#), and [Figure 5-4](#).

Step 8 Loosen the draw bolts and remove the connecting plates that attach the display shelf to be replaced to its adjoining shelf or shelves.



Note See [Figure 5-1](#) for the draw bolt and plate locations.

Step 9 Slightly separate the shelf to be replaced from the other shelves.



Caution Make sure that all remaining shelves stay on the display structure and do not fall between the structure supports.



Tip Slide the shelves to the left; there is space on the left that is created by the open table door.

Step 10 Remove the splines from the slot at both edges of the shelf to be replaced.

Step 11 Place the new shelf on the display assembly.

Step 12 Place the splines in the slots at the edges of the new shelf.

Step 13 Press the shelves together.

Step 14 Attach the new shelf to its adjoining shelf or shelves using the splines.

Step 15 From the underside of the display structure, insert the draw bolts and tighten them; then, attach the connecting plate between the new shelf and its adjoining shelf or shelves.

Step 16 Attach the screws that connect the display shelves to the display assembly.

Step 17 Reattach the speaker boards and speaker cables. See [Chapter 8, “Assembling the Remaining Cisco TelePresence Elements”](#) for detailed instructions.

Step 18 Reattach the projector screen.

**Tip**

The projector screen comes with printed instructions that should assist you with replacing it. If you cannot find the instructions, reverse the order of removal to install it.

- Step 19** Power on the system by completing the steps in the [“Powering On the System”](#) section on page 12-1.

Replacing a First Row Table Top Section

Complete these steps to replace a first row table top section.

Required Information, Tools, and Equipment

To remove and replace a first row table top section, you need the following tools:

- Medium and large Phillips screwdriver
- 10 mm wrench


**Tip**

A 10 mm open end ratcheting wrench is useful to loosen and tighten the draw bolts.

**Note**

Make sure to retain all screws, connectors, and other parts during the disassembly.

Removing and Replacing a First Row Table Top Section

- Step 1** Open the table door.
- Step 2** Perform the following actions for specific first-row table top sections:
- If you are replacing the table door or the left-center table top section, remove the table door. See [Figure 6-14](#) for an exploded diagram of the parts for the door.
 - If you are replacing the center table top section, remove the projector. See [Figure 8-3](#) for an exploded diagram of the projector assembly.
- Step 3** Detach the microphone from the table top section to be replaced. See [Figure 6-13](#) for an exploded diagram of the microphone and its attachment hardware.
- Step 4** Disconnect the microphone from the audio/video expansion unit, route the cable through the table top section, and remove the microphone.
- Step 5** Remove the privacy panel from the table top section to be replaced.
-  **Tip** [Chapter 6, “Building the First Row Table Assembly”](#) has exploded drawings of the privacy panels.
- Step 6** Remove the screws from the table legs that support the table top section.
- Step 7** Move one of the table legs to allow access to the draw bolts.

**Note**

Make sure that the leg still supports both table top sections.

- Step 8** Remove the draw bolts between the table top sections on the side that you moved. See [Chapter 6, “Building the First Row Table Assembly”](#) for the location of the draw bolts.
- Step 9** If required, reposition the table leg so that it fully supports both table sections.
- Step 10** Move the table leg on the other side of the table top to allow access to the draw bolts, making sure that the leg still supports both table top sections.
- Step 11** Remove the draw bolts between the table top sections on the side that you moved.
- Step 12** Separate the table top sections to create a space between the section to be replaced of approximately one inch (2.5 centimeters); this step allows you to remove the splines between the table top sections.

**Tip**

Move the sections to the left and use the space created by the open table door.

**Caution**

Be sure that the legs support all table top sections and do not allow any of the sections to fall.

- Step 13** Remove the splines from the slot in the edges of the table top section.
- Step 14** Remove the table top section from the table legs.
- Step 15** Place the new table top section on the table legs.
- Step 16** Place the splines in the slots on the edge of the new table top section.
- Step 17** Press the table top sections together.
- Step 18** Insert the draw bolts and tighten them between the new table top section and the adjoining table top sections. See [Chapter 6, “Building the First Row Table Assembly”](#) for the location of the draw bolts.
- Step 19** Attach the legs to the table top sections with the screws. See [Chapter 6, “Building the First Row Table Assembly”](#) for the location of the table legs and screw attachment locations.
- Step 20** Reconnect the microphone to the new table top section.
- Step 21** Route the microphone cable to the audio/video extension unit and connect the cable to the unit. See [Figure 6-13](#) for microphone installation instructions.
- Step 22** Close the table door.
- Step 23** If you removed the table door, replace the door. See [Figure 6-14](#) for table door installation instructions.

Replacing a Second Row Table Top Section

Complete these steps to replace a second row table top section.

Required Information, Tools, and Equipment

To remove and replace a second row table top, you need the following tools:

- Medium and large Phillips screwdriver
- 10 mm wrench

**Tip**

A 10 mm open end ratcheting wrench is useful to loosen and tighten the draw bolts.

- Furniture sliders (recommended but not required)

**Note**

Furniture sliders are flat plastic pieces that you place under the table legs before you move the table. Using furniture sliders can make moving the second row table easier.

**Note**

Make sure to retain all screws, connectors, and other parts during the disassembly.

Removing and Replacing a Second Row Table Top Section

Step 1 Remove the privacy panel from the following table top sections:

- The table top section to be replaced
- All table sections to the right of the table top section to be replaced

**Note**

See [Chapter 7, “Building the Second Row Table Assembly”](#) for expanded views of the privacy panels.

Step 2 Remove the microphone from the table top section to be replaced. See [Figure 7-38](#) for an expanded view of the microphone and its attachment hardware.

Step 3 Disconnect the microphone from the audio/video expansion unit, route the cable through the table top section, and remove the microphone.

The microphone cable routes from the audio/video expansion unit to the table top section by way of the cable gutters on the second row table. The gutters are behind the privacy panels that you removed in [Step 1](#).

Step 4 If required, remove the cable cover for the right end privacy panel as shown in [Figure 7-46](#) and remove cable ties that bundle the microphone cable with other cables.

Step 5 Remove the privacy panel alignment bracket.

See [Chapter 7, “Building the Second Row Table Assembly”](#) for the location of the privacy panel alignment brackets.

- Step 6** If you are replacing the left or right tabletop end, remove the privacy panel end piece and panel end brace. See [Figure 7-47](#) for the privacy panel end piece locations and [Figure 7-30](#) for the panel end brace locations.
- Step 7** Remove the privacy panel hangers from the table legs that support the table top section to be replaced. See [Chapter 7, “Building the Second Row Table Assembly”](#) for the privacy panel hanger attachment points and screw locations.
- Step 8** Remove the floating bracket on each side of the table top section to be replaced. See [Chapter 7, “Building the Second Row Table Assembly”](#) for the floating bracket attachment points and screw locations.
- Step 9** Remove the gutter panel for the table top section to be replaced. See [Chapter 7, “Building the Second Row Table Assembly”](#) for the gutter panel attachment points and screw locations.
- Step 10** Remove the gutter and privacy panel support brackets from the table legs that support the table top section to be replaced. See [Chapter 7, “Building the Second Row Table Assembly”](#) for the screw locations for the gutter and privacy panel support brackets.
- Step 11** Remove the screws from the table legs that support the table top section.
- Step 12** Move one of the table legs to allow access to the draw bolts and remove the draw bolts from the adjoining table top sections. See [Chapter 7, “Building the Second Row Table Assembly”](#) for the location of the draw bolts.



Note Make sure that the leg still supports both table top sections.

- Step 13** If you are replacing an end piece, remove the attachment plates.
- Step 14** If required, reposition the table leg so that it fully supports both table sections.
- Step 15** Move the table leg on the other side of the table top to allow access to the draw bolts and remove the draw bolts from the adjoining table top sections.



Note Make sure that the leg still supports both table top sections.

- Step 16** Separate the table top sections to create a space between the section to be replaced of approximately one inch (2.5 centimeters); this step allows you to remove the splines between the table top sections.



Tip To ease movement of the sections, you can place furniture sliders under each table leg before you move the sections.



Caution Be sure that the legs support all table top sections and do not allow any of the sections to fall to the ground.

- Step 17** Remove the splines from the slot in the edges of the table top section.
- Step 18** Remove the table top section to be replaced.
- Step 19** Place the new table top section on the table legs.

- Step 20** Place the splines in the slots on the edge of the new table top section.
- Step 21** Press the table top sections together.
- Step 22** Insert the draw bolts and tighten them between the new table top section and the adjoining table top sections. See [Chapter 7, “Building the Second Row Table Assembly”](#) for the location of the draw bolts.
- Step 23** If you are replacing an end piece, insert and attach the attachment plates.
- Step 24** Attach the legs to the table top sections with the screws. See [Chapter 6, “Building the First Row Table Assembly”](#) for the location of the table legs and screw attachment locations.
- Step 25** Attach the gutter and privacy panel support brackets to the table assembly.
See [Chapter 7, “Building the Second Row Table Assembly”](#) for the gutter and privacy panel support bracket attachment points and screw locations.
- Step 26** Attach the gutter panel for the table top section.
See [Chapter 7, “Building the Second Row Table Assembly”](#) for the gutter panel attachment points and screw locations.
- Step 27** Attach the floating bracket on each side of the table top section.
See [Chapter 7, “Building the Second Row Table Assembly”](#) for the floating bracket attachment points and screw locations.
- Step 28** Attach the privacy panel hangers to the table legs that support each side of the table top section.
See [Chapter 7, “Building the Second Row Table Assembly”](#) for the privacy panel support bracket attachment points and screw locations.
- Step 29** Attach the privacy panel alignment bracket.
See [Chapter 7, “Building the Second Row Table Assembly”](#) for the location of the privacy panel support brackets.
- Step 30** If you are replacing the left or right tabletop end, attach the privacy panel end pieces and panel end brace. See [Figure 7-47](#) for the privacy panel end piece locations and [Figure 7-30](#) for the end brace locations.
- Step 31** Insert the microphone cable into the hole in the table top and route the cable through the cable gutters to the audio/video extension unit.
- Step 32** Connect the microphone cable to the audio/video extension unit.
- Step 33** Reconnect the microphone to the new table top section.
See [Figure 7-38](#) for microphone installation instructions.
- Step 34** Attach the privacy panels to the table sections.



Note If required, adjust the privacy panel sections so that there is an equal amount of space between each section.

- Step 35** If required, replace the cable cover for the right end privacy panel as shown in [Figure 7-46](#) and add cable ties to bundle the microphone cable with other cables.
- Step 36** Reposition the second row table so that the trailing edge of the first row table is exactly 59 inches (150 cm) behind the leading edge of the second row table. See [Figure 7-48](#) for the correct second row table positioning.



APPENDIX **A**

Appendix A: Parts List Sorted by Carton

Revised: July 28, 2008, OL-14521-01

Overview

- Each table represents a separate carton.
- Each carton may contain multiple parts. Some of these parts are grouped together in kits. Each kit is a smaller box contained within a larger carton.
- If the kit box also contains boxes or bags, each one is identified with an ID number.

Carton 1 of 58: Mechanical Accessory Kit, CTS3K-ACC-KIT, 53-2855-xx

Kit ID Number	Sub-Kit ID Number	Part Number	Part Description	Qty	Chapter Parts List Reference
69-1650-xx		37-0853-01	3 m Video-to-DVI cable	3	Chapter 8
		37-0901-01	10 m Cat6 Ethernet cable	4	Chapter 7, 8
69-1651-xx		37-0848-02	8 m DVI-to-VGA + audio cable	1	Chapter 8
		37-0849-01	Speaker cable	3	Chapter 7, 8
		37-0854-01	6 m HD Video cable	1	Chapter 8
		37-0887-02	3 m Cat6 Ethernet cable, black	5	Chapter 8
		37-0901-01	10 m Cat6 Ethernet cable	4	Chapter 8
69-1656-xx		47-21524-01	Compliance sticker for plasma display	3	Chapter 8
		51-4582-02	Cable identification stickers	3	Chapter 8
		78-17792-04	Cisco TelePresence Meeting Quick Reference document		N/A
		78-17795-02	Cisco TelePresence System 3000 Assembly, Use & Care, and Field Replacement Unit Guide (pointer to online document)	1	N/A

Carton 1 of 58: Mechanical Accessory Kit, CTS3K-ACC-KIT, 53-2855-xx

Kit ID Number	Sub-Kit ID Number	Part Number	Part Description	Qty	Chapter Parts List Reference
		78-17839-04	Regulatory Compliance and Safety Information	1	N/A
		78-18735-01	Cisco TelePresence System 3200 Assembly, Use & Care, and Field Replacement Unit Guide (pointer to online document)	1	N/A
		79-0087-02	ESD wrist strap	1	N/A
	69-1694-03	700-23825-03	Table hinge safety strap	1	Chapter 6
		47-21001-01	"Please close" label	1	Chapter 6
		700-26753-01	Cabinet hole covers	14	Chapter 6
	69-1706-xx	48-2313-01	M8 x 30 mm screw	15	
	69-1709-xx	48-1045-01	M4 x 12 mm screws	20	Chapter 7
		49-0735-01	M4 washers	20	Chapter 7
69-1600-xx		700-23807-01	I/O blanks: small	6	Chapter 7
		700-23806-01	I/O blanks: large	2	Chapter 7
		49-0326	M4 nuts	20	Chapter 7
69-1727-xx	69-1673-02	48-0654-01	M4 x 20 mm screws	15	Chapter 2, 7, 8
	69-1728-01	48-1641-01	M4 x 12 mm flathead screws	25	Chapter 6
	69-1657-01	48-2273-01	M8 x 20 mm screws	500	Chapter 2, 3, 4, 5, 6, 7
	69-1661-01	48-2274-01	M8 x 70 mm screws	100	Chapter 2, 4
	69-1660-01	48-2275-01	Half-turn bolt	6	Chapter 7
69-1652-xx	69-1659-xx	49-1165-01	M8 washers	100	Chapter 7
69-1653-xx	69-1662-xx	51-0609-01	Cable tie holders	40	Chapter 8
	69-1663-xx	51-4536-01	Cable ties	40	Chapter 8
	69-1654-01	51-4540-01	Leveling feet	18	Chapter 2, 7
	69-1693-01	700-23981-01	Black buffer strips	2	Chapter 3
69-1725-xx		69-1600-02	Leg Blank	1	
		69-1768-01	Plate	4	
		69-1769-01	Table joint plate	1	
		69-1770-01	Speaker panel clip	1	
		69-1771-01	Leg Blank	1	
		69-1772-01	Panel Bracket	1	
		69-1773-01	Angle Bracket	1	
		69-1774-01	Joint Clip	1	
69-1863-xx		48-2426-01	M4 x 12mm screws, black	10	Chapter 7
69-1813-xx		74-5247-01	Touch-up paint bottle, white	1	Chapter 4
N/A		37-0833-01	3 m Jumper cord	9	Chapter 7, 8
N/A		37-0852-01	2 m Jumper cord	1	Chapter 8

Kit ID Number	Sub-Kit ID Number	Part Number	Part Description	Qty	Chapter Parts List Reference
800-30442-01		73-11609-02 CTS-AV-EXP	Cisco TelePresence Audio/Video Extension Unit with mounting accessories	1	Chapter 8
N/A ¹		48-2426-01	M8 x 12 mm screw, black	4	Chapter 7
CP-7975G-CTS		68-3309-01	Cisco IP Phone 7975G	1	Chapter 7
N/A		69-1691-01	VGA Module	1	Chapter 7
N/A		74-4743-01	Microphones	3	Chapter 7
N/A		74-4787-01	Power distribution units	7	Chapter 7, 8
N/A		74-xxxx-xx	I/O modules: power/Ethernet	18	Chapter 6, 7 See “Appendix B: Region- and Country-Specific Equipment” for specific part numbers.
69-1897-xx		48-2430-01	M8 x 16 mm pan head screw, black		Chapter 4
		48-2432-01	M8 x 16 mm pan head screw, white		Chapter 7, 8

1. These screws are included with the camera hood assembly and are not a separate item.

Carton 2 of 58: Mechanical Accessory Kit, 53-2855-xx, CTS3K-ACC2-KIT

Kit ID Number	Sub-Kit ID Number	Part Number	Part Description	Qty	Chapter Parts List Reference
Part numbers to be provided					

Carton 3 of 58: Primary Codec, CTS-CODEC-PRI-G2, 800-30638-xx

Kit ID Number	Sub-Kit ID Number	Part Number	Part Description	Qty	Chapter Parts List Reference
800-30638-01		48-1962-01	M5 x 12 mm screws	2	Chapter 8
		700-23449-xx	Cable management bar	1	Chapter 8
		84-1321-01	Primary Codec	1	Chapter 8

Carton 4 of 58: Camera Cluster, 800-30872-xx, CTS3K-CAM-CLST-G2

Kit ID Number	Sub-Kit ID Number	Part Number	Part Description	Qty	Chapter Parts List Reference
800-30872-01		68-3277-01	Camera Assembly	1	Chapter 8
	69-1829-01	48-0654-01	M4 x 20 pan head screws	4	Chapter 8
		48-2410-01	M8 x 20 cap screws	4	Chapter 8

Carton 5 of 58: Secondary Codec, 800-28202-xx, CTS-CODEC-SEC

Kit ID Number	Sub-Kit ID Number	Part Number	Part Description	Qty	Chapter Parts List Reference
53-2907-01		48-1962-01	M5 x 12 mm screws	2	Chapter 8
		700-23449-xx	Cable management bar	1	Chapter 8
N/A		68-2898-xx	Secondary Codec	1	Chapter 8

Carton 6 of 58: Secondary Codec, 800-28202-xx, CTS-CODEC-SEC

Kit ID Number	Sub-Kit ID Number	Part Number	Part Description	Qty	Chapter Parts List Reference
53-2907-01		48-1962-01	M5 x 12 mm screws	2	Chapter 8
		700-23449-xx	Cable management bar	1	Chapter 8
N/A		68-2898-xx	Secondary Codec	1	Chapter 8

Carton 7 of 58: Projector, 74-4824-xx, CTS-PRJTR-GEN1

Kit ID Number	Sub-Kit ID Number	Part Number	Part Description	Qty	Chapter Parts List Reference
74-4824-xx		74-5178-xx	Projector	1	Chapter 8

Carton 8 of 58: Speaker, 74-4740-xx, CTS-LDSPKR

Kit ID Number	Sub-Kit ID Number	Part Number	Part Description	Qty	Chapter Parts List Reference
74-4740-xx		74-4740-01	Speaker	1	Chapter 8

Carton 9 of 58: Speaker, 74-4740-xx, CTS-LDSPKR

Kit ID Number	Sub-Kit ID Number	Part Number	Part Description	Qty	Chapter Parts List Reference
74-4740-xx		74-4740-01	Speaker	1	Chapter 8

Carton 10 of 58: Speaker, 74-4740-xx, CTS-LDSPKR

Kit ID Number	Sub-Kit ID Number	Part Number	Part Description	Qty	Chapter Parts List Reference
74-4740-xx		74-4740-01	Speaker	1	Chapter 8

Carton 11 of 58: Power Cord, 37-08xx-xx, PWR-CORD10-xx

Kit ID Number	Sub-Kit ID Number	Part Number	Part Description	Qty	Chapter Parts List Reference
N/A		37-xxxx-xx	Power cord	4	Chapter 8 See “Appendix B: Region- and Country-Specific Equipment” for specific part numbers.

Carton 12 of 58: Camera Assembly Bracket, 69-1627-xx, CTS3K-STRUCTURE

Kit ID Number	Sub-Kit ID Number	Part Number	Part Description	Qty	Chapter Parts List Reference
69-1627-xx		700-23346-xx	Camera assembly bracket	1	Chapter 2

Carton 13 of 58: Brackets, 69-1632-xx, CTS3K-STRUCTURE

Kit ID Number	Sub-Kit ID Number	Part Number	Part Description	Qty	Chapter Parts List Reference
69-1632-xx		700-23338-xx	Switch bracket, left ¹	1	Chapter 6
		700-23342-xx	Codec attachment brackets	6	Chapter 8
		700-23344-xx	Switch bracket, right ¹	1	Chapter 6
		700-23345-01	Connecting plates	10	Chapter 5, 6
		700-23363-xx	Display tilt bracket	6	Chapter 2
		700-23426-xx	Projector screen clips	4	Not used
		700-23944-xx	Speaker board brackets	12	Chapter 8

1. These brackets are for an optional Ethernet switch; if you did not order this option, disregard these parts.

Carton 14 of 58: Privacy Panel, Right Wing, 69-1628-xx, CTS3K-STRUCTURE

Kit ID Number	Sub-Kit ID Number	Part Number	Part Description	Qty	Chapter Parts List Reference
69-1628-xx		700-23362-xx	Privacy panel: right wing	1	Chapter 6

Carton 15 of 58: Front Foot Stabilizer, 69-1624-xx, CST3K-STRUCTURE

Kit ID Number	Sub-Kit ID Number	Part Number	Part Description	Qty	Chapter Parts List Reference
69-1624-xx		700-23359-xx	Front foot stabilizer	2	Chapter 2

Carton 16 of 58: Front Foot Stabilizer, 69-1624-xx, CST3K-STRUCTURE

Kit ID Number	Sub-Kit ID Number	Part Number	Part Description	Qty	Chapter Parts List Reference
69-1624-xx		700-23359-xx	Front foot stabilizer	2	Chapter 2

Carton 17 of 58: Front Foot Stabilizer, 69-1624-xx, CST3K-STRUCTURE

Kit ID Number	Sub-Kit ID Number	Part Number	Part Description	Qty	Chapter Parts List Reference
69-1624-xx		700-23359-xx	Front foot stabilizer	2	Chapter 2

Carton 18 of 58: Display Structure Rear Feet, 69-1625-xx, CTS3K-STRUCTURE

Kit ID Number	Sub-Kit ID Number	Part Number	Part Description	Qty	Chapter Parts List Reference
69-1625-xx		700-23360-xx	Rear foot stabilizer	6	Chapter 2

Carton 19 of 58: Accessory Cabinet Brackets, 69-1630-xx, CTS3K-STRUCTURE

Kit ID Number	Sub-Kit ID Number	Part Number	Part Description	Qty	Chapter Parts List Reference
69-1630-xx		700-23336-xx	Left accessory cabinet attachment bracket	1	Chapter 5
		700-23337-xx	Right accessory cabinet attachment bracket	1	Chapter 5

Carton 20 of 58: Accessory Kit for CTS-3200, 53-3108-xx, CTS32-ACC-KIT

Kit ID Number	Subkit ID Number	Part Number	Part Description	Qty	Chapter Parts List Reference
53-3108-01		78-17792-02	Cisco TelePresence Meeting Quick Reference document	1	
		78-17839-02	Regulatory Compliance and Safety Information	1	
		37-0887-02	3M Ethernet Cable, Black	1	Chapter 7
		37-0901-01	10M Ethernet Cable, Black	8	Chapter 7
		37-0965-01	12M Ethernet Cable, Black	3	Chapter 7
		37-0931-01	Microphone extension cords, 9.5M	6	Chapter 7
		69-1830-01	I/O blank, large	2	Chapter 7
		700-23807-01	I/O blank, small	14	Chapter 7
		69-1663-01	Cable Ties	40	Chapter 7
	69-1877-01	48-2298-01	Screw, 8 x 50 mm, with plastic knob	15	Chapter 7
	69-1878-01	48-2426-01	M4 x 12 mm screws, black	24	Chapter 7
	69-1879-01	48-2430-01	M8 x 16 mm pan head screw, black	58	Chapter 7
	69-1880-01	48-2437-01	M8 x 2.5mm screws	30	Chapter 7
	69-1886-01	79-2269-01/ 95-10160-01	Touch-up paint, dark grey	1	Chapter 7

Carton 22 of 58: Auxiliary Control Unit, CTS-LIGHT-CTRL

Kit ID Number	Sub-Kit ID Number	Part Number	Part Description	Qty	Chapter Parts List Reference
		74-5405-01	Auxiliary Control Unit	1	Chapter 8

Carton 23 of 58: Plasma Display, 74-4881-xx, CTS-DISP-65-GEN2

Kit ID Number	Sub-Kit ID Number	Part Number	Part Description	Qty	Chapter Parts List Reference
74-4881-xx		74-4605-xx	65-inch high-definition display	1	Chapter 3

Carton 24 of 58: Plasma Display, 74-4881-xx, CTS-DISP-65-GEN2

Kit ID Number	Sub-Kit ID Number	Part Number	Part Description	Qty	Chapter Parts List Reference
74-4605-xx		74-4605-xx	65-inch high-definition display	1	Chapter 3

Carton 25 of 58: Plasma Display, 74-4881-xx, CTS-DISP-65-GEN2

Kit ID Number	Sub-Kit ID Number	Part Number	Part Description	Qty	Chapter Parts List Reference
74-4605-xx		74-4605-xx	65-inch high-definition display	1	Chapter 3

Carton 26 of 58: Second Row Tabletops and Accessory Kit, CTS32-M-2TBL-G2, 69-1853-xx


Note

Each part number has a separate carton, however all cartons are packaged in a wooden box.

Kit ID Number	Sub-Kit ID Number	Part Number	Part Description	Qty	Chapter Parts List Reference
74-5562-01		95-9994-01	Tabletop: Section 5	2	Chapter 7
		74-5564-01	Wood Top Accessory Kit	1	Chapter 7
74-5565-01		95-9995-01	Tabletop: Section 1	1	Chapter 7
74-5600-01		95-10096-01	Tabletop: Section 2	1	Chapter 7
74-5601-01		95-10097-01	Tabletop: Section 3	1	Chapter 7
74-5602-01		95-10098-01	Tabletop: Section 4	1	Chapter 7
74-5603-01		95-10099-01	Tabletop End, Left (Section 6)	1	Chapter 7
74-5604-01		95-10100-01	Tabletop End, Right (Section 7)	1	Chapter 7

Carton 27 of 58: Light Fixture, 74-5361-xx, CTS-LIGHT-FIXT

Kit ID Number	Sub-Kit ID Number	Part Number	Part Description	Qty	Chapter Parts List Reference
74-5361-xx		74-5361-01	5 foot light fixture	1	Chapter 4 See “Appendix B: Region- and Country-Specific Equipment” for lighting fixtures for Europe and Japan.

Carton 28 of 58: Light Fixture, 74-5361-xx, CTS-LIGHT-FIXT

Kit ID Number	Sub-Kit ID Number	Part Number	Part Description	Qty	Chapter Parts List Reference
74-5361-xx		74-5361-01	5 foot light fixture	1	Chapter 4 See “Appendix B: Region- and Country-Specific Equipment” for lighting fixtures for Europe and Japan.

Carton 29 of 58: Light Fixture, 74-5361-xx, CTS-LIGHT-FIXT

Kit ID Number	Sub-Kit ID Number	Part Number	Part Description	Qty	Chapter Parts List Reference
74-5361-xx		74-5361-01	5 foot light fixture	1	Chapter 4 See “Appendix B: Region- and Country-Specific Equipment” for country-specific lighting fixtures.

Carton 30 of 58: Light Fixture, 74-5362-xx, CTS-LIGHT-FIXT

Kit ID Number	Sub-Kit ID Number	Part Number	Part Description	Qty	Chapter Parts List Reference
74-5362-xx		74-5362-01	4 foot light fixture	1	Chapter 4 See “Appendix B: Region- and Country-Specific Equipment” for lighting fixtures for Europe and Japan.

Carton 31 of 58: Light Fixture, 74-5362-xx, CTS-LIGHT-FIXT

Kit ID Number	Sub-Kit ID Number	Part Number	Part Description	Qty	Chapter Parts List Reference
74-5362-xx		74-4921-01	4 foot light fixture	1	Chapter 4 See “Appendix B: Region- and Country-Specific Equipment” for lighting fixtures for Europe and Japan.

Carton 32 of 58: Camera Target, 69-1674-xx, CTS-CAM-TOOL

Kit ID Number	Sub-Kit ID Number	Part Number	Part Description	Qty	Chapter Parts List Reference
69-1674-xx		700-23960-01	Horizontal bar	2	Chapter 7
		700-23961-01	Vertical bar	2	Chapter 7
		700-24320-01	Tabletop camera target: small	1	Chapter 7
		700-24321-01	Cardboard ruler	1	Chapter 7
		700-24323-01	Tabletop camera target: large	1	Chapter 7

Carton 33 of 58: Support Crossbars, 69-1623-01, CTS3K-STRUCTURE

Kit ID Number	Sub-Kit ID Number	Part Number	Part Description	Qty	Chapter Parts List Reference
69-1623-01		700-23361-01	Support Crossbars	4	Chapter 2

Carton 34 of 58: Privacy Panels, 69-1629-xx, CTS3K-STRUCTURE

Kit ID Number	Sub-Kit ID Number	Part Number	Part Description	Qty	Chapter Parts List Reference
69-1629-xx		700-23332-xx	Privacy panel: Center right	1	Chapter 7
		700-23333-xx	Privacy panel: Center left	1	Chapter 7
		700-23334-xx	Privacy panel: center	1	Chapter 7

Carton 35 of 58: Display Structure, 69-1622-xx, CTS3K-STRUCTURE

Kit ID Number	Sub-Kit ID Number	Part Number	Part Description	Qty	Chapter Parts List Reference
69-1622-xx		700-23358-xx	Display structure	1	Chapter 2

Carton 36 of 58: Display Structure, 69-1622-xx, CTS3K-STRUCTURE

Kit ID Number	Sub-Kit ID Number	Part Number	Part Description	Qty	Chapter Parts List Reference
69-1622-xx		700-23358-xx	Display structure	1	Chapter 2

Carton 37 of 58: Display Structure, 69-1622-xx, CTS3K-STRUCTURE

Kit ID Number	Sub-Kit ID Number	Part Number	Part Description	Qty	Chapter Parts List Reference
69-1622-xx		700-23358-xx	Display structure	1	Chapter 2

Carton 38 of 58: Presentation Codec, 69-1887-xx, CTS-HFR-COLLAB-3K



Note

The presentation codec is an option for the Cisco TelePresence System 3200. For information about the presentation codec, refer to the [Cisco TelePresence System Hardware Options & Upgrade Guide](#).

Kit ID Number	Sub-Kit ID Number	Part Number	Part Description	Qty	Chapter Parts List Reference
69-1887-01		800-28202-07	Presentation Codec	1	N/A
69-1887-01		37-0854-01	6 m HD Video cable	1	
		37-0887-02	3 m Cat6 Ethernet cable, black	1	
		37-0900-01	8 M video-to-DVI cable	1	
		37-0901-01	10 m Cat6 Ethernet cable	1	
		700-25301-01	Double-wide codec tray	1	
		700-25306-01	Codec attachment bracket, left	3	
		700-27374-01	Codec attachment brackets, right	1	
	69-1863-01	48-2426-01	M4 x 12 mm screws, black	10	

Carton 39 of 58: Spare Fluorescent Bulbs for Light Fixture, 74-5232-xx, CTS-3000-SPR-BULBS

Kit ID Number	Sub-Kit ID Number	Part Number	Part Description	Qty	Chapter Parts List Reference
74-5232-01		95-9611-01	Spare lights for light fixture	1	Chapter 4

Carton 40 of 58: Secondary Codec, 800-28202-xx, CTS-CODEC-SEC

Kit ID Number	Sub-Kit ID Number	Part Number	Part Description	Qty	Chapter Parts List Reference
53-2907-01		48-1962-01	M5 x 12 mm screws	2	Chapter 8
		700-23449-xx	Cable management bar	1	Chapter 8
N/A		68-2898-xx	Secondary Codec	1	Chapter 8

Carton 41 of 58: Foam Bumpers, 69-1634-xx, CTS3K-STRUCTURE

Kit ID Number	Sub-Kit ID Number	Part Number	Part Description	Qty	Chapter Parts List Reference
69-1634-xx		700-24275-xx	Metal packaging brace	1	Chapter 6
		800-28625-xx	Molded foam bumper	1	Chapter 6

Carton 42 of 58: Foam Bumpers, 69-1634-xx, CTS3K-STRUCTURE

Kit ID Number	Sub-Kit ID Number	Part Number	Part Description	Qty	Chapter Parts List Reference
69-1634-xx		700-24275-xx	Metal packaging brace	1	Chapter 6
		800-28625-xx	Molded foam bumper	1	Chapter 6

Carton 43 of 58: Foam Bumpers, 69-1634-xx, CTS3K-STRUCTURE

Kit ID Number	Sub-Kit ID Number	Part Number	Part Description	Qty	Chapter Parts List Reference
69-1634-xx		700-24275-xx	Metal packaging brace	1	Chapter 6
		800-28625-xx	Molded foam bumper	1	Chapter 6

Carton 44 of 58: Lighting Assembly, 69-1613-xx, CTS3K-LIGHT-STR

Kit ID Number	Sub-Kit ID Number	Part Number	Part Description	Qty	Chapter Parts List Reference
69-1613-xx		700-23756-xx	Reflector transition piece: left	1	Chapter 4
		700-23757-xx	Reflector transition piece: right	1	Chapter 4
		700-23758-xx	Reflector transition piece: corner	1	Chapter 4

Carton 45 of 58: Projector Bracket, 69-1631-xx, CTS3K-STRUCTURE

Kit ID Number	Sub-Kit ID Number	Part Number	Part Description	Qty	Chapter Parts List Reference
69-1631-xx		48-1963-01	M6 x 10 mm screws	4	Chapter 7
		700-23824-xx	Projector mounting bracket	1	Chapter 7

Carton 46 of 58: Projector Screen, 74-5416-xx, CTS3K-SCREEN

Kit ID Number	Sub-Kit ID Number	Part Number	Part Description	Qty	Chapter Parts List Reference
74-5416-xx			Projector screen assembly	1	Chapter 7 ¹

1. Refer to the installation guide that is packaged with the assembly to install the projector screen.

Carton 47 of 58: Accessory Cabinet, Right, 69-1837-xx, CTS3K-M-TABLE-G2

Kit ID Number	Sub-Kit ID Number	Part Number	Part Description	Qty	Chapter Parts List Reference
69-1837-01		74-5297-01	Accessory cabinet, Right	1	Chapter 5, 6

Carton 48 of 58: Accessory Cabinet, Left, 69-1838-xx, CTS3K-M-TABLE-G2

Kit ID Number	Sub-Kit ID Number	Part Number	Part Description	Qty	Chapter Parts List Reference
69-1838-01		74-5298-01	Accessory cabinet, Left	1	Chapter 5, 6

Carton 49 of 58: Lighting Assembly, 69-1612-xx, CTS3K-LIGHT-STR

Kit ID Number	Sub-Kit ID Number	Part Number	Part Description	Qty	Chapter Parts List Reference
69-1612-xx		700-23731-xx	Reflector top: center	1	Chapter 4
		700-23734-xx	Reflector top: top side	2	Chapter 4
		700-23735-xx	Reflector top: end	2	Chapter 4
		700-23737-xx	Light “cup” bracket	2	Chapter 4
		700-23745-xx	Plastic diffuser panel: center	1	Chapter 4
		700-23746-xx	Plastic diffuser panel: ends	2	Chapter 4
		700-23747-xx	Plastic diffuser panel: top right	1	Chapter 4
		700-23748-xx	Plastic diffuser panel: top left	1	Chapter 4
		700-23826-xx	Reflector bottom: center	1	Chapter 4
		700-23827-xx	Reflector bottom: left side top	2	Chapter 4
		700-23828-xx	Reflector bottom: left end	2	Chapter 4
		700-23896-xx	Metal trim panel: center right	1	Chapter 4
		700-23897-xx	Metal trim panel: top side	2	Chapter 4
		700-23898-xx	Metal trim panel: end	2	Chapter 4
		700-24126-xx	Metal trim panel: center left	1	Chapter 4
		700-24152-xx	Reflector bottom spacer	2	Chapter 4
		700-27762-01	Reflector bottom: right side top	1	Chapter 4
		700-27763-01	Reflector bottom: right end	1	Chapter 4
	69-1619-xx	700-23749-xx	Lighting support brackets	6	Chapter 4
		700-23750-xx	End structure brackets	4	Chapter 4
		700-23899-xx	L-brackets	4	Chapter 4
		700-23752-xx	Support struts	6	Chapter 4
		700-25050-01	Diffuser Panel braces / H-clips	3	Chapter 4
	69-1615-xx	48-2274-01	M8 x 70 mm screws	10	Chapter 4

Kit ID Number	Sub-Kit ID Number	Part Number	Part Description	Qty	Chapter Parts List Reference
		48-2285-01	M8 x 12 mm flat-head screws	10	Chapter 4
		49-1165-01	M8 washers	10	Chapter 4
		48-2433-01	M8 x 20 mm flat head screw, white	10	Chapter 4
	69-1657-xx	48-2273-01	M8 x 20 mm screws	50	Chapter 7

Carton 50 of 58: Cisco TelePresence 3200 Structure—Addition to Standard CTS-3000, CTS32-STRUCTURE, 69-1854-01

Kit ID Number	Subkit ID Number	Part Number	Part Description	Qty	Chapter Parts List Reference
69-1854-01			MECHKIT,STRUCTURE,REAR TABLE,CTS32K		
		800-31112-01	Privacy panel, section 1	1	
		800-31116-01	Privacy panel, section 2	1	
		800-31117-01	Privacy panel, section 3	1	
		800-31119-01	Privacy panel, section 4	1	
		800-31121-01	Privacy panel, section 5	2	
		800-31122-01	Privacy Panel, right end (section 7)	1	
		800-31123-01	Privacy Panel, left end (section 6)	1	
	700-27273-01		FABMTL,STMP,PLT,END ALIGNMENT,32K	2	
	700-27274-01		Privacy panel support alignment bracket, section 5	2	
	700-27275-01		Privacy panel support alignment bracket, section 1	1	
	700-27276-01		Privacy panel support alignment bracket, section 2	1	
	700-27277-01		Privacy panel support alignment bracket, section 3	1	
	700-27278-01		Privacy panel support alignment bracket, section 4	1	
		700-27279-01	Gutter support bracket, type 2	5	
		700-27280-01	Gutter support bracket, type 1	2	
		700-27281-01	Floating bracket, type 2	5	
		700-27282-01	Floating bracket, type 1	2	
		800-31124-01	Gutter panel, section 5	2	
		800-31126-01	Gutter panel, section 1	1	
		800-31129-01	Gutter panel, section 2	1	
		800-31131-01	Gutter panel, section 3	1	
		800-31133-01	Gutter panel, section 4	1	
		700-27292-01	Tabletop attachment plate, metal	2	
		700-27311-01	Privacy Panel Hangers	12	

Carton 51 of 58: Display Shelf Supports and Codec Tray, 69-1626-xx, CTS3K-STRUCTURE

Kit ID Number	Subkit ID Number	Part Number	Part Description	Qty	Chapter Parts List Reference
	700-27312-01		Cable Cover for right end privacy panel	1	
		700-27413-01	Tabletop end brace	2	
	69-1635-xx		Table leg screws	4	
		48-1641-01	M4 x 12mm flat head screws	6	
		48-2426-01	M4.0x10mm pan head screws	2	
		700-23305-01	I/O Module Cover plate	1	
	55-3869-01		PKG,DST,LID,WOOD SPKR PANL,JW3	1	

Carton 51 of 58: Display Shelf Supports and Codec Tray, 69-1626-xx, CTS3K-STRUCTURE

Kit ID Number	Sub-Kit ID Number	Part Number	Part Description	Qty	Chapter Parts List Reference
69-1626-xx		700-23339-xx	Display shelf support left	3	Chapter 2
		700-23340-xx	Display shelf support right	3	Chapter 2
		700-23341-xx	Codec safety tray	3	Chapter 2

Carton 52 of 58: Tabletop Leg Base, 69-1620-xx, CTS3K-STRUCTURE

Kit ID Number	Sub-Kit ID Number	Part Number	Part Description	Qty	Chapter Parts List Reference
69-1620-xx	69-1636-xx	700-23305-01	I/O Module Cover plate	4	Chapter 7
		800-28454-xx	Tabletop leg base	3	Chapter 6
		800-28628-xx	Tabletop leg base, left	1	Chapter 6

Carton 53 of 58: Tabletop Leg Base, 69-1914-xx, CTS3K-STRUCTURE

Kit ID Number	Sub-Kit ID Number	Part Number	Part Description	Qty	Chapter Parts List Reference
69-1620-xx	69-1636-xx	700-23305-01	I/O Module Cover plate	4	Chapter 7
		800-28454-xx	Tabletop leg base	4	Chapter 6

Carton 54 of 58: Tabletop Leg Base, 69-1915-xx, CTS3K-STRUCTURE

Kit ID Number	Sub-Kit ID Number	Part Number	Part Description	Qty	Chapter Parts List Reference
69-1620-xx	69-1636-xx	700-23305-01	I/O Module Cover plate	3	Chapter 7
		800-28454-xx	Tabletop leg base	3	Chapter 6

Carton 55 of 58: Lighting Assembly, 69-1613-xx, CTS3K-LIGHT-STR

Kit ID Number	Sub-Kit ID Number	Part Number	Part Description	Qty	Chapter Parts List Reference
69-1613-xx		700-23756-xx	Reflector transition piece: left	1	Chapter 4
		700-23757-xx	Reflector transition piece: right	1	Chapter 4
		700-23758-xx	Reflector transition piece: corner	1	Chapter 4

Carton 56 of 58: Projector Bracket, 69-1631-xx, CTS3K-STRUCTURE

Kit ID Number	Sub-Kit ID Number	Part Number	Part Description	Qty	Chapter Parts List Reference
69-1631-xx		48-1963-01	M6 x 10 mm screws	4	Chapter 7
		700-23824-xx	Projector mounting bracket	1	Chapter 7

Carton 57 of 58: Foam Bumpers, 69-1634-xx, CTS3K-STRUCTURE

Kit ID Number	Sub-Kit ID Number	Part Number	Part Description	Qty	Chapter Parts List Reference
69-1634-xx		700-24275-xx	Metal packaging brace	7	Chapter 6
		800-28625-xx	Molded foam bumper	7	Chapter 6

Carton 58 of 58: Tabletop Sections, Display Shelves, and Speaker Boards, 69-1835-xx, CTS3K-M


Note

Each part number has a separate carton, however all cartons are packaged in a wooden box.

Kit ID Number	Sub-Kit ID Number	Part Number	Part Description	Qty	Chapter Parts List Reference
74-5299-01		95-9686-01	Tabletop section: Center	1	Chapter 6
74-5300-01		95-9687-01	Tabletop section: Center right	1	Chapter 6
74-5301-01		95-9689-01	Tabletop section: Center left	1	Chapter 6
74-5302-01		95-9690-01	Tabletop section: Right wing	1	Chapter 6
74-5303-01		95-9691-01	Tabletop section: Left door	1	Chapter 6
74-5304-01		95-9692-01	Display shelf section: Left	1	Chapter 5
74-5305-01		95-9693-01	Display shelf section: Right	1	Chapter 5
74-5306-01		95-9694-01	Display shelf section: Center	1	Chapter 5
74-5309-01		95-9697-01	Accessory Kit for Tabletops	1	Chapter 5, 6, 7
69-1836-01		74-5307-01	Speaker board center	1	Chapter 7
		74-5544-01	Speaker boards left and right	2	Chapter 7



APPENDIX **B**

Appendix B: Region- and Country-Specific Equipment

Revised: July 28, 2008, OL-14521-01

The following countries and regions have equipment manufactured to local regulations:

Asia Pacific

Part Description	Part Number	Qty	Notes
TelePresence Power Cord	PWR-CORD10-AP 37-0831-01	6	
I/O modules: power/Ethernet	CTS-LAPCONN-AP 74-4861-01	18	

Argentina

Part Description	Part Number	Qty	Notes
TelePresence Power Cord	PWR_CORD10-AR 37-0841-01	6	
I/O modules: power/Ethernet	CTS-LAPCONN-AR 74-4866-01	18	

Australia

Part Description	Part Number	Qty	Notes
TelePresence Power Cord	PWR-CORD10-AU 37-0840-01	6	
I/O modules: power/Ethernet	CTS-LAPCONN-AU 74-4866-01	18	

Central Europe

Part Description	Part Number	Qty	Notes
TelePresence Power Cord	PWR-CORD10-CE 37-0832-01	6	
I/O modules: power/Ethernet	CTS-LAPCONN-CE 74-4865-01	18	

China

Part Description	Part Number	Qty	Notes
TelePresence Power Cord	PWR-CORD10-CN 37-0837-01	6	
I/O modules: power/Ethernet	CTS-LAPCONN-CN 74-4914-01	18	

Europe

Part Description	Part Number	Qty	Notes
5-foot center light fixture	CTS-LIGHT-FIXT-EU 74-4921-01	3	
4-foot side light fixture	CTS-LIGHT-FIXT-EU 74-4920-01	3	

India, UAE, South Africa

Part Description	Part Number	Qty	Notes
TelePresence Power Cord	PWR-CORD10-ID 37-0838-01	6	
I/O modules: power/Ethernet	CTS-LAPCONN-ID 74-4864-01	18	

Israel

Part Description	Part Number	Qty	Notes
TelePresence Power Cord	PWR-CORD10-ISR 37-0842-01	6	
I/O modules: power/Ethernet	CTS-LAPCONN-ISR 74-4863-01	18	

Italy

Part Description	Part Number	Qty	Notes
TelePresence Power Cord	PWR-CORD10-ITA 37-0832-01	6	
I/O modules: power/Ethernet	CTS-LAPCONN-ITA 74-4865-01	18	

Japan

Part Description	Part Number	Qty	Notes
TelePresence Power Cord	PWR-CORD10-JP 37-0847-01	6	
I/O modules: power/Ethernet	CTS-LAPCONN-JP 74-4951-01	18	
5-foot center light fixture	CTS-LIGHT-FIXT-JP 74-5361-01	3	
4-foot side light fixture	CTS-LIGHT-FIXT-JP 74-5362-01	3	

North America

Part Description	Part Number	Qty	Notes
TelePresence Power Cord	PWR-CORD10-NA 37-0847-01	6	
I/O modules: power/Ethernet	CTS-LAPCONN-NA 74-4868-01	18	

Switzerland

Part Description	Part Number	Qty	Notes
TelePresence Power Cord	PWR-CORD10-SWI 37-0843-01	6	
I/O modules: power/Ethernet	CTS-LAPCONN-SWI 74-4862-01	18	

United Kingdom

Part Description	Part Number	Qty	Notes
TelePresence Power Cord	PWR-CORD10-UK 37-0831-01	6	
I/O modules: power/Ethernet	CTS-LAPCONN-UK 74-4861-01	18	