stomdevice

a-dec

A-dec 461 Support Center on A-dec 311/411/511 Dental Chair

Installation Guide

Contents

Install the Rotation Stop 2
Install the Support Link and Arm . 3
Install the Support Center 4
Connect the Wires and Data Line 6
Connect the Tubing 9
Install the Cuspidor 16
Prepare and Adjust the System . 16
Operate the Cuspidor 20
Install the Covers 21
Test the System 23



A-dec 461 Support Center on an A-dec 411 Dental Chair

Product Models and Versions Covered in this Document

Model	Versions	Description
311	B	Dental Chair
411	A	Dental Chair
511	A/B	Dental Chair
461	A	Support Center

86.0387.00 Rev E

https://stomdevice.ru - стоматологическое и зуботехническое оборудование с доставкой по России и СНГ

stomdevice

Before You Begin

NOTE Information that is critical to a successful installation is shaded like this note throughout the guide.

CAUTION When removing or replacing covers, take care not to damage any wiring or tubing. Verify that the covers are secure after replacing them.

ATTENTION Circuit boards are sensitive to static electricity. Electrostatic Discharge (ESD) precautions are required when touching a circuit board or making connections to or from the circuit board. Circuit boards should be installed only by an electrician or qualified service person.

Recommended Tools

Tools Needed For This Installation		
• 3/4" socket and ratchet	• Hex key set	• Diagonal cutters
• Level	• 3/8" combination wrench	• Sleeve pusher
• Phillips head screwdriver		

Install the Rotation Stop

If the system includes the following, install the rotation stop for the system's type of chair:

- **A-dec 311B** - When the system includes a delivery system and support center.
- **A-dec 411** - When the system includes a delivery system and support center.
- **A-dec 511A or 511B** - When the system includes any A-dec 300 Radius-style equipment and a support center.

The instructions for installing the rotation stops ship with the stops.



A-dec 311B and 411 Rotation Stop



A-dec 511A / 511B Rotation Stop

https://stomdevice.ru - стоматологическое и зуботехническое оборудование с доставкой по России и СНГ

stomdevice

Install the Support Link and Arm

The support link and arm installation procedure is the same on an A-dec 311B, 411, 511A and 511B.

Recommended Tools

- 3/4" socket and ratchet
- Level

Task 1.



1. Use the touchpad, footswitch, or jumper to raise the chair base and chair back.
2. Get four bolts and washers from the kit.
3. Attach the support link and arm to the chair with the four bolts and washers but only finger tighten the bolts.

Task 2.



1. Position the support link and arm straight out from the chair.
2. Place a level on the support link.
3. Tighten the bolts to secure the support link while keeping it as level as possible.

https://stomdevice.ru - стоматологическое и зуботехническое оборудование с доставкой по России и СНГ

stomdevice

Install the Support Center

The support center installation procedure is the same on an A-dec 311B, 411, 511A and 511B.

Task 1.

1 Position the cuspidor so it faces and is aligned with the support arm. Slide the support center down all the way onto the post.

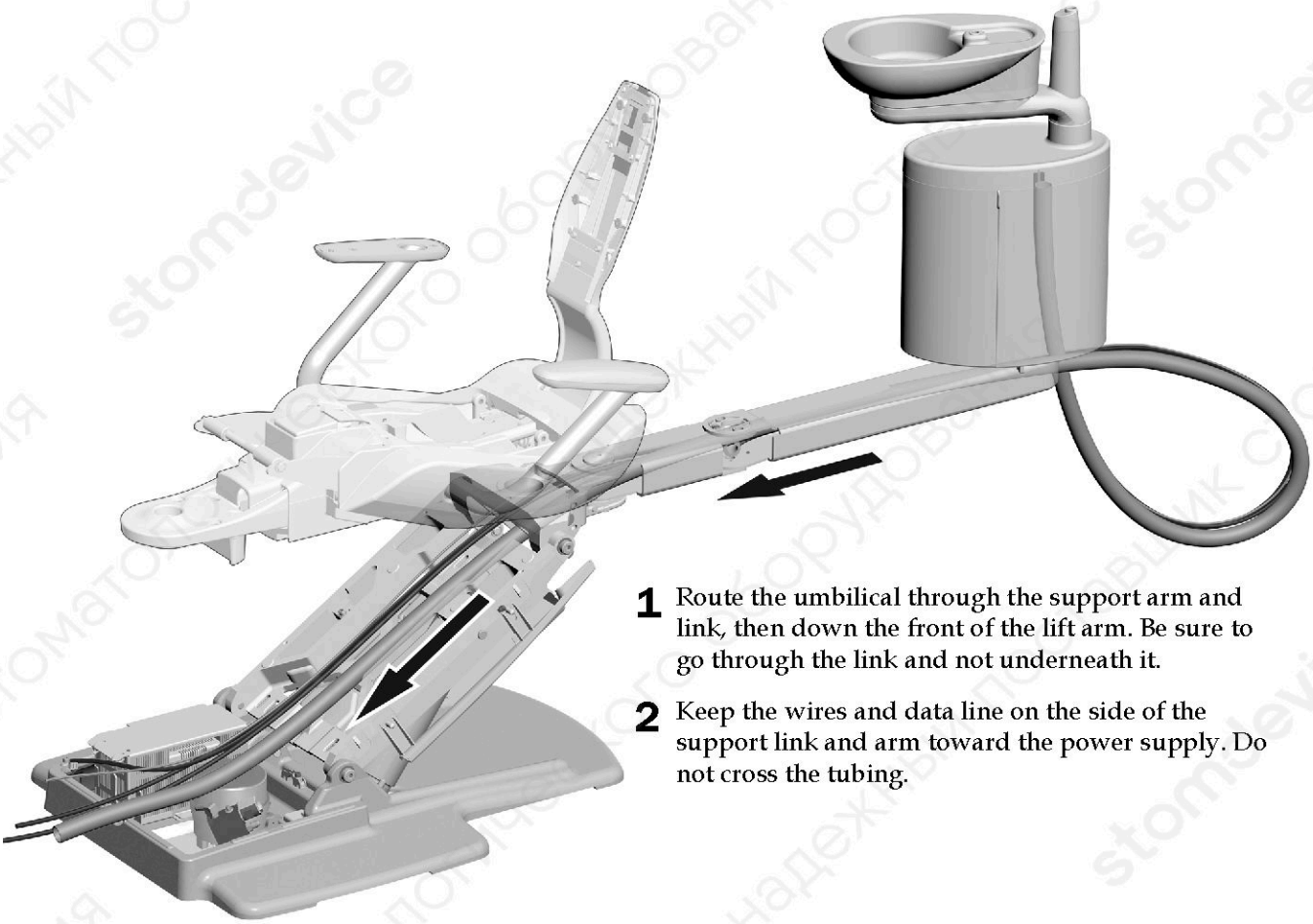
NOTE The support center umbilical routes outside of the post that the support center installs on.



https://stomdevice.ru - стоматологическое и зуботехническое оборудование с доставкой по России и СНГ

stomdevice

Task 2.



A-dec 411 Dental Chair Shown

1. Route the umbilical through the support arm and link, then down the front of the lift arm. Be sure to go through the link and not underneath it.
2. Keep the wires and data line on the side of the support link and arm toward the power supply. Do not cross the tubing.

https://stomdevice.ru - стоматологическое и зуботехническое оборудование с доставкой по России и СНГ

stomdevice

Connect the Wires and Data Line

CAUTION To avoid damaging or disconnecting wires and tubing, don't connect anything until all of the system's modules are installed.

WARNING Failure to turn off the power before you begin this procedure can lead to product damage and result in serious injury or death.

1. Turn off the power to the system.
2. Complete the connections for the model chair the A-dec 461 is installed on.

Connect to an A-dec 311B/411 Chair 7
Connect to an A-dec 511A/511B Chair 8

https://stomdevice.ru - стоматологическое и зуботехническое оборудование с доставкой по России и СНГ

stomdevice

Connect to an A-dec 311B/411 Chair

Recommended Tools

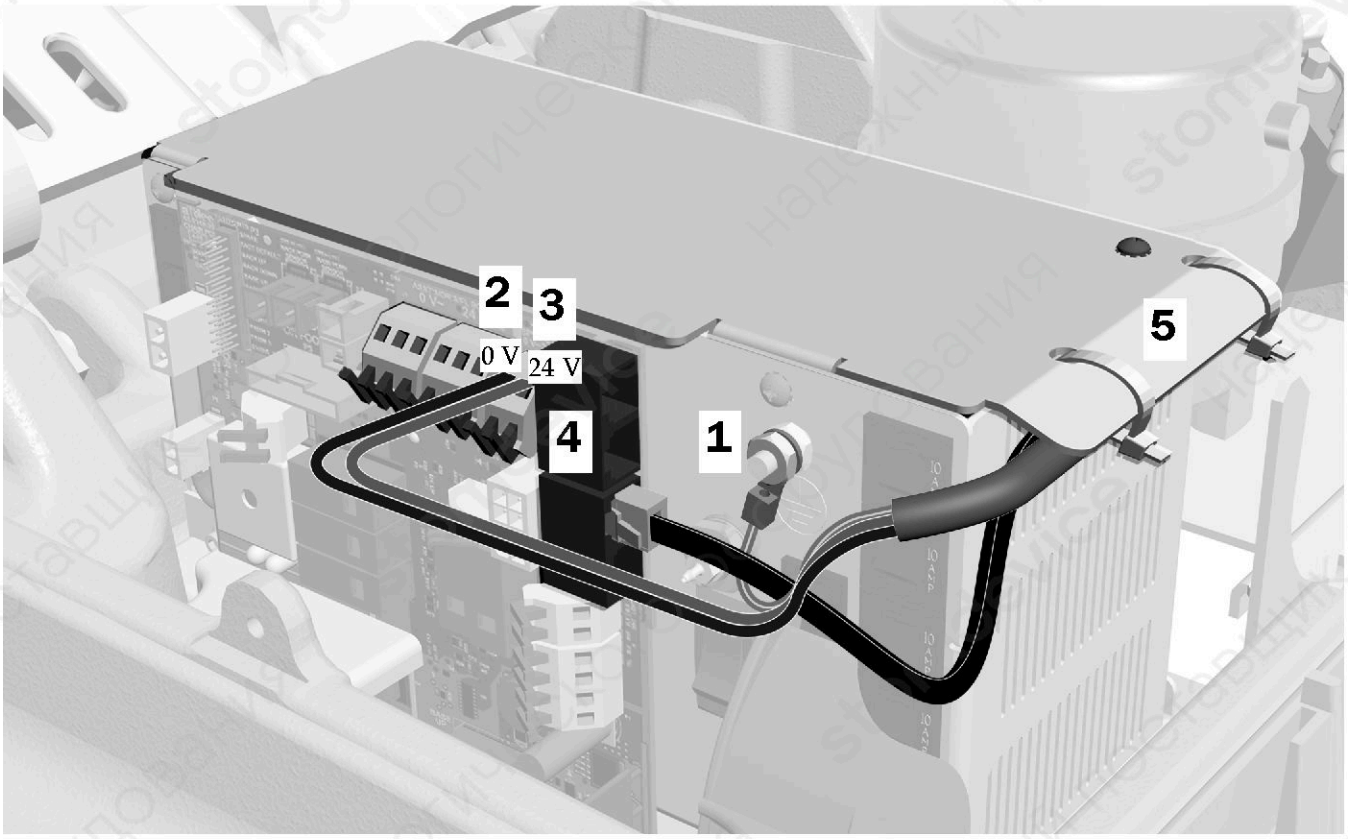
- Diagonal cutters
- 3/8" combination wrench

ATTENTION Circuit boards are sensitive to static electricity. Electrostatic Discharge (ESD) precautions are required when touching a circuit board or making connections to or from the circuit board. Circuit boards should be installed only by an electrician or qualified service person.

1. Attach the support center's ground wire.
2. Connect the black wire to the support center 0 V.
3. Connect the gray wire to the support center 24 V.
4. Plug the data line into any data port.

NOTE Perform the next step only if all chair modules have been installed and all other electrical connections have been made. Otherwise, wait to perform this step until all other electrical connections to the power supply have been completed.

5. Once all of the electrical connections have been made for the system's modules, secure the wires under the lip on the power supply.



https://stomdevice.ru - стоматологическое и зуботехническое оборудование с доставкой по России и СНГ

stomdevice

Connect to an A-dec 511A/511B Chair

Recommended Tool

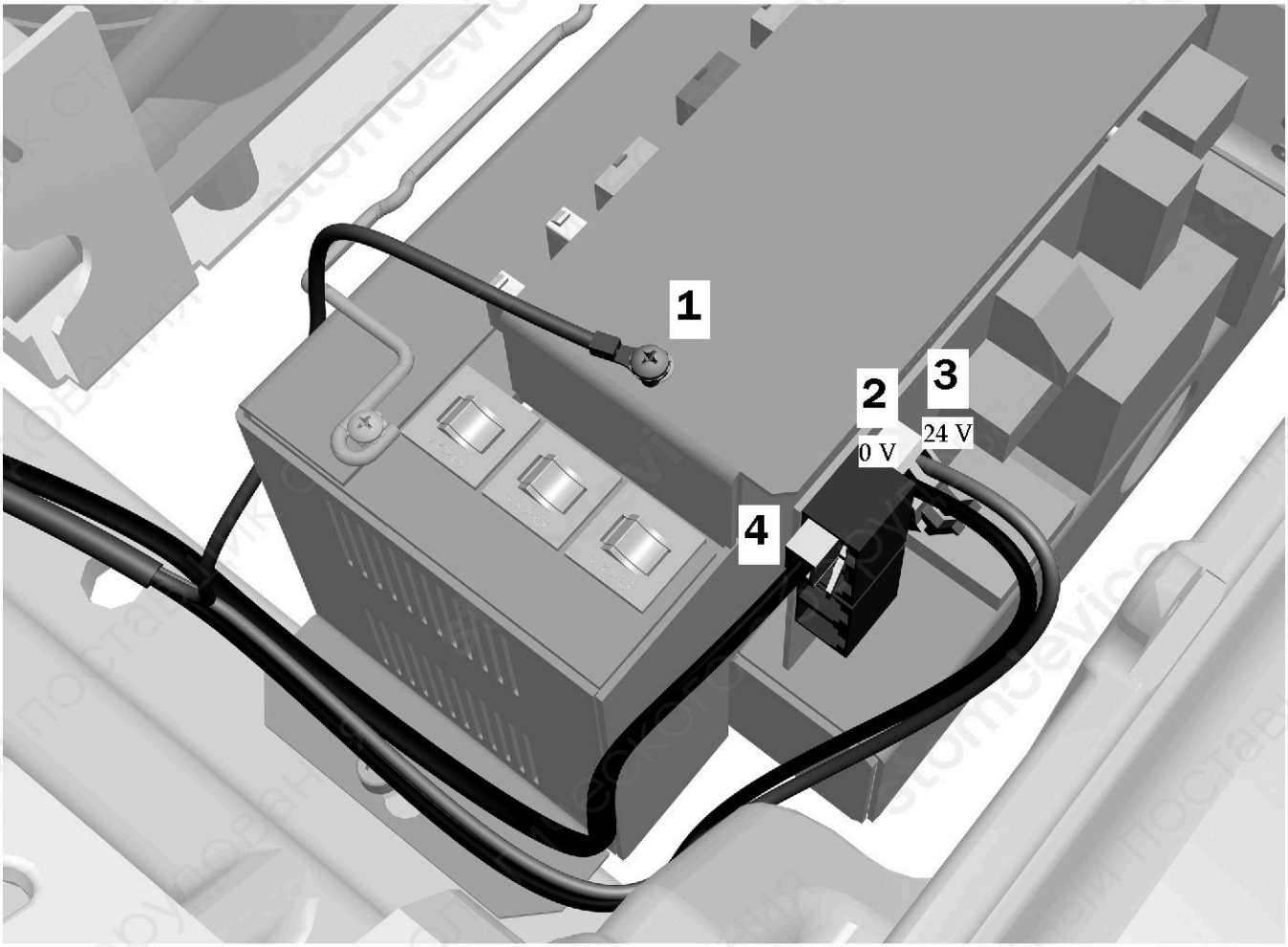
- Phillips head screwdriver

ATTENTION Circuit boards are sensitive to static electricity. Electrostatic Discharge (ESD) precautions are required when touching a circuit board or making connections to or from the circuit board. Circuit boards should be installed only by an electrician or qualified service person.

1. Attach the support center's ground wire.
2. Connect the black wire to 0 V.
3. Connect the gray wire to 24 V.

NOTE To connect more than one module to the 0 V and 24 V terminal strips, use the jumper wires and WAGO® connectors from the kit.

4. Plug the data line into any data port.



https://stomdevice.ru - стоматологическое и зуботехническое оборудование с доставкой по России и СНГ

stomdevice

Connect the Tubing

Complete the procedures for the system's configuration.

Connect the Tubing for Configurations that Include an A-dec 332/333/336 Delivery System 9
Connect the Tubing for Configurations that Include an A-dec 532B/533B Delivery System 12

Connect the Tubing for Configurations that Include an A-dec 332/333/336 Delivery System

Recommended Tools

- Diagonal cutters
- Sleeve pusher

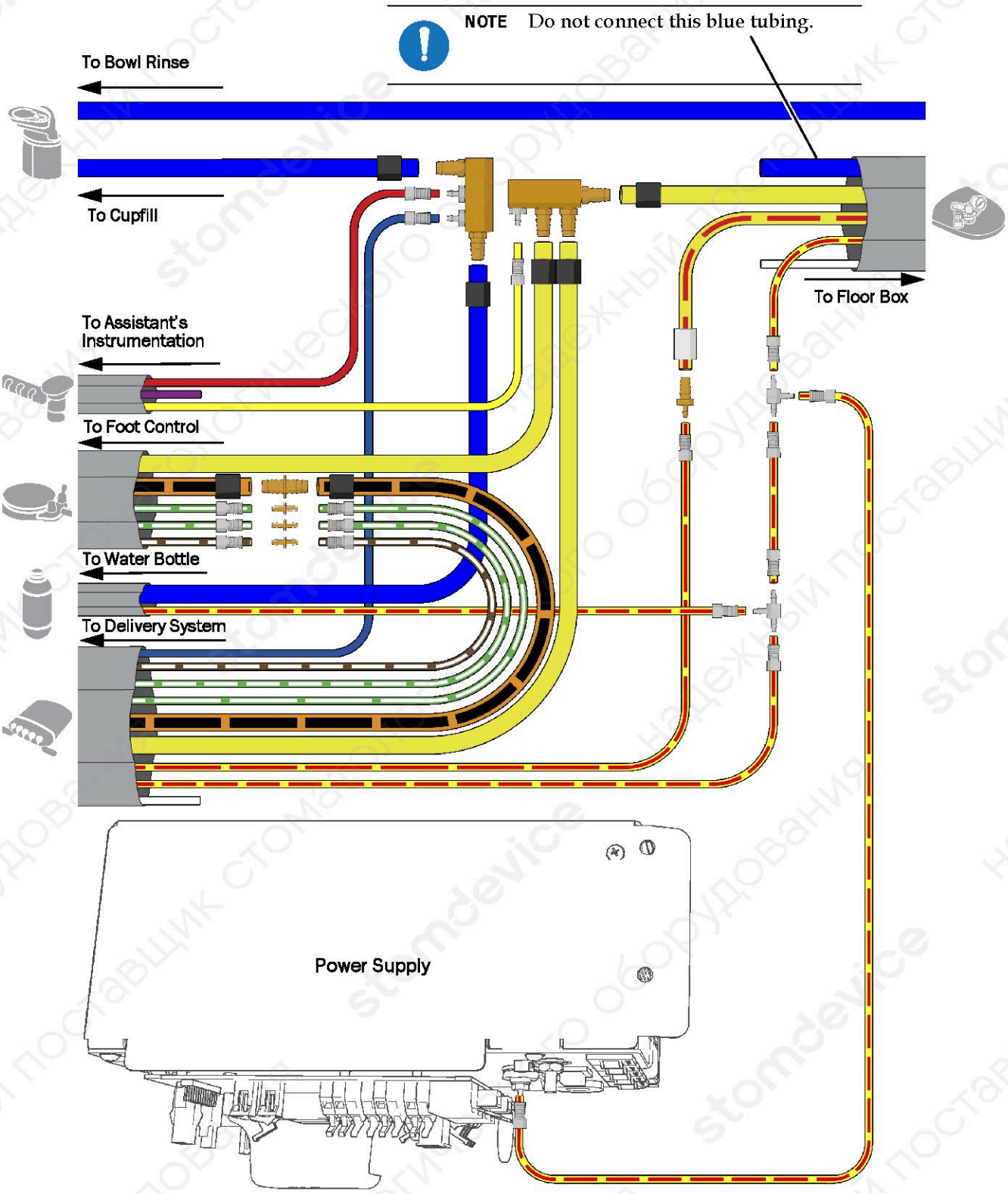
1. If the system includes a delivery system, strip and remove three feet of the sheath from around the water bottle tubing.
2. Connect the tubing according to the flow diagram on the following page.



NOTE When installing the water manifold, be sure to connect to the barb on the end to prevent standing water in the manifold.

https://stomdevice.ru - стоматологическое и зуботехническое оборудование с доставкой по России и СНГ

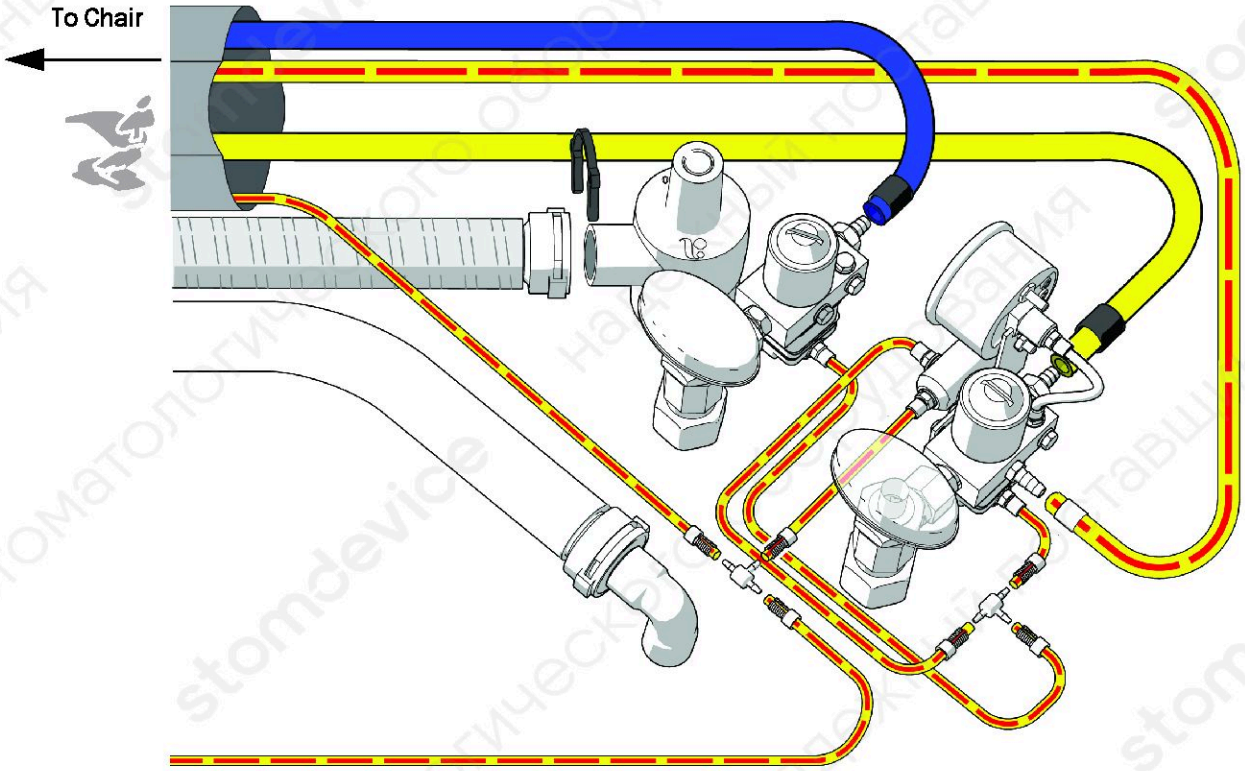
stomdevice



https://stomdevice.ru - стоматологическое и зуботехническое оборудование с доставкой по России и СНГ

stomdevice

NOTE When cutting the tubing to length for the connections, be sure to leave enough room for the gravity drain to move a few inches without kinking.



Configurations that Include a Moisture Separator (Optional)

For moisture separator information, see the *Moisture Separator on an A-dec 200, A-dec 300, A-dec 400 or A-dec 500 Dental Chair Installation Guide* (p/n 86.0285.00).

Next Step See "Install the Cuspidor" on page 16.

https://stomdevice.ru - стоматологическое и зуботехническое оборудование с доставкой по России и СНГ

stomdevice

Connect the Tubing for Configurations that Include an A-dec 532B/533B Delivery System

Recommended Tools

- Diagonal cutters
- Sleeve pusher

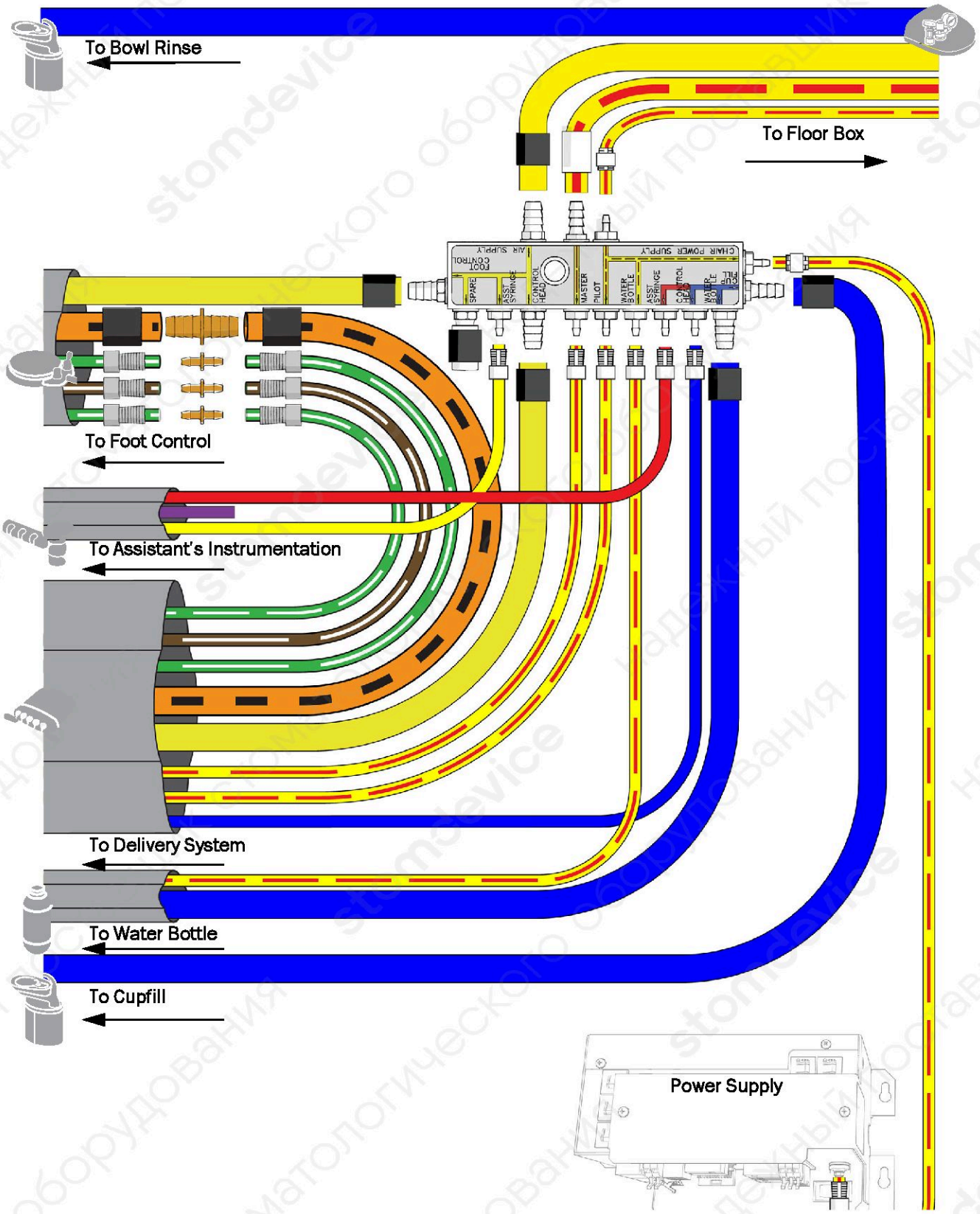
1. If the system includes a delivery system, strip and remove three feet of the sheath from around the water bottle tubing.
2. Connect the tubing according to the flow diagram on page 14.

https://stomdevice.ru - стоматологическое и зуботехническое оборудование с доставкой по России и СНГ

stomdevice

https://stomdevice.ru - стоматологическое и зуботехническое оборудование с доставкой по России и СНГ

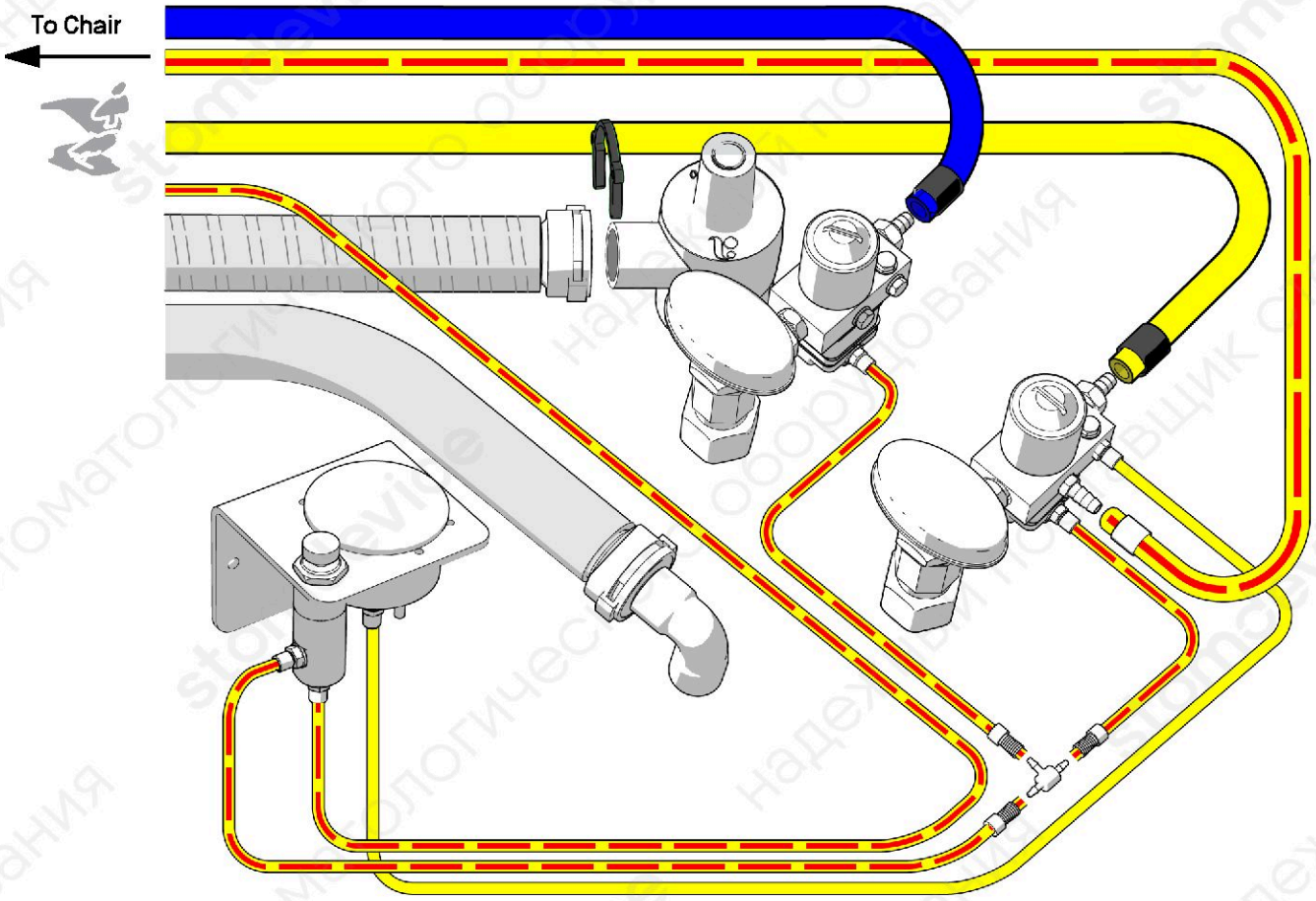
stomdevice



https://stomdevice.ru - стоматологическое и зуботехническое оборудование с доставкой по России и СНГ

stomdevice

NOTE When cutting the tubing to length for the connections, be sure to leave enough room for the gravity drain to move a few inches without kinking.



With a Moisture Separator (Optional)

For moisture separator information, see the *Moisture Separator on an A-dec 200, A-dec 300, A-dec 400 or A-dec 500 Dental Chair Installation Guide* (p/n 86.0285.00).

https://stomdevice.ru - стоматологическое и зуботехническое оборудование с доставкой по России и СНГ

stomdevice

Install the Cuspidor



CAUTION Do not rotate the cupfill spout or it may break.

1. Insert the cupfill spout.
2. Insert the bowl rinse spout.
3. Insert the bowl screen.

Prepare and Adjust the System

Secure the Wires and Tubing

Recommend Tool

- Diagonal cutters



1. Install the bail. It ships in the floor box kit.



Bail

CAUTION Do not secure the tubing to the lift arm. The tubing needs to move freely when the chair moves.

2. Use cable ties to group the tubing and wiring for a neat appearance.

https://stomdevice.ru - стоматологическое и зуботехническое оборудование с доставкой по России и СНГ

stomdevice

Install the Water Bottle

IMPORTANT A-dec recommends that the dental team perform a shock treatment on the dental unit waterlines before they use the system for the first time, and establish an ongoing waterline maintenance program. For more information, see the *Waterline Maintenance Guide* (p/n 85.0983.00) and the *A-dec Self-Contained Water System Instructions for Use* (p/n 86.0609.00).



1. Apply A-dec silicone lubricant on the receptacle O-ring.
2. Push the water bottle up onto the water bottle receptacle and turn it to the right.

https://stomdevice.ru - стоматологическое и зуботехническое оборудование с доставкой по России и СНГ

stomdevice

Adjust the Cuspidor Bowl Rinse Settings

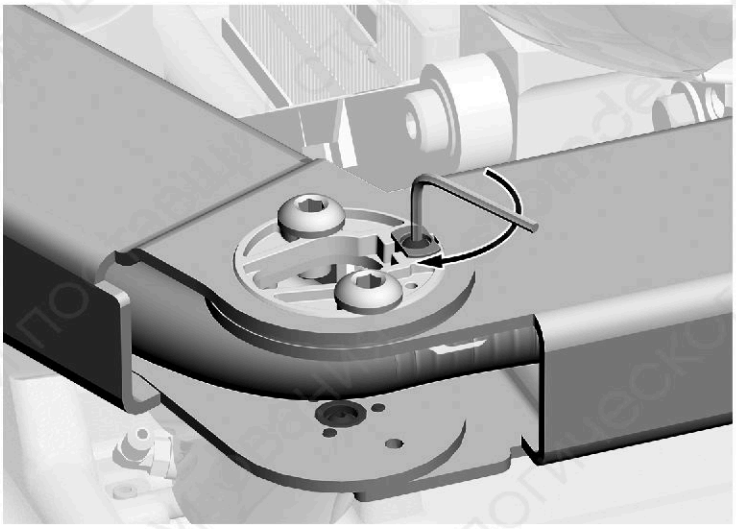


1. Remove the support center cover.
2. Turn on the bowl rinse.
3. Tighten or loosen the pinch valve to adjust the flow.
4. To adjust the flow pattern and achieve the best rinsing action, rotate the bowl rinse spout.
5. To set the length of cupfill and bowl rinse flow, use the touchpad buttons. See "Operate the Cuspidor" on page 20.

Adjust the Support Arm Rotation Tension (Optional)

Recommended Tool

- 1/8" hex key

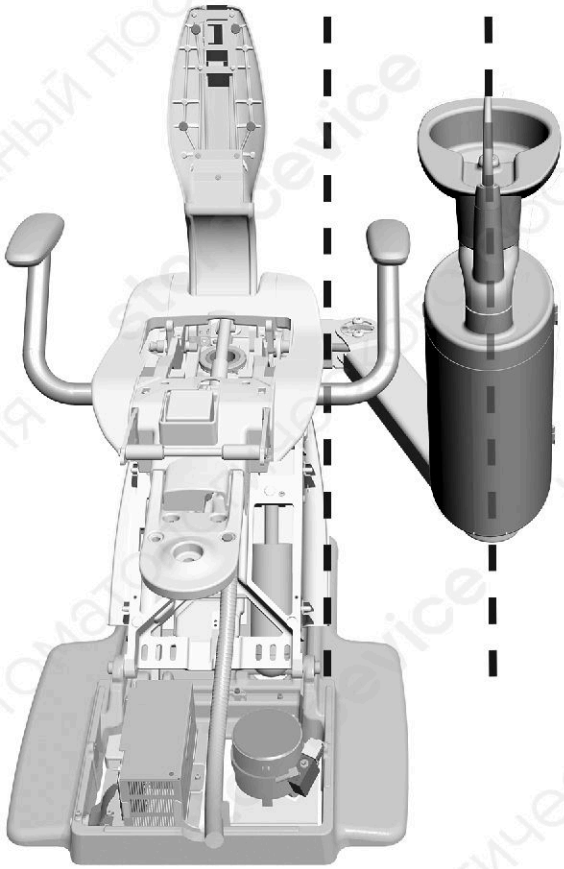


1. Use a hex key to adjust the tension so that the arm moves smoothly but holds position when the cuspidor is moved. Clockwise increases the tension.

https://stomdevice.ru - стоматологическое и зуботехническое оборудование с доставкой по России и СНГ

stomdevice

Align the Support Center



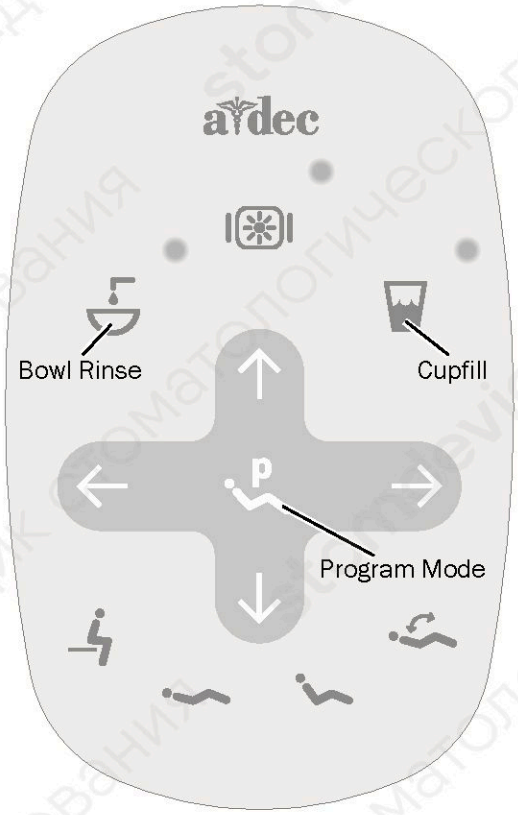
1 Rotate the support center so that it is aligned with the dental chair.

https://stomdevice.ru - стоматологическое и зуботехническое оборудование с доставкой по России и СНГ

stomdevice

Operate the Cuspidor

NOTE Touchpad symbols and icons are proprietary to A-dec Inc.



Standard Touchpad Shown

Turn On/Turn Off Cupfill and Bowl Rinse

Use the touchpad icons or the cuspidor buttons to control cupfill and bowl rinse functions.

Icon/Function	Actions/Options
Cupfill Touchpad Cuspidor	Controls water flow from the cuspidor into a cup. • Press once for a timed operation. The factory preset is a 2.5 second fill. • Press and hold for manual operation.
Bowl Rinse Touchpad Cuspidor	Provides rinse water for the cuspidor bowl. • Press for a timed operation. The factory preset is a 30 second rinse. • Press twice for continuous flow, then press once to stop the flow. • Press and hold for manual operation. Release to stop the flow.

Customize Cupfill and Bowl Rinse Timing

Cupfill and bowl rinse timing can be set at the touchpad or the cuspidor.

Customize Timing From the Touchpad

1. Press and hold P on the touchpad. Release when you hear one beep.
2. Within five seconds, press and hold or for the desired amount of time.
3. Three beeps indicate the new setting is saved.

Customize Timing From the Cuspidor

1. Press and hold and under the cupfill spout. Release when you hear one beep.
2. Within five seconds, press and hold or for the desired amount of time.
3. Three beeps indicate the new setting is saved.

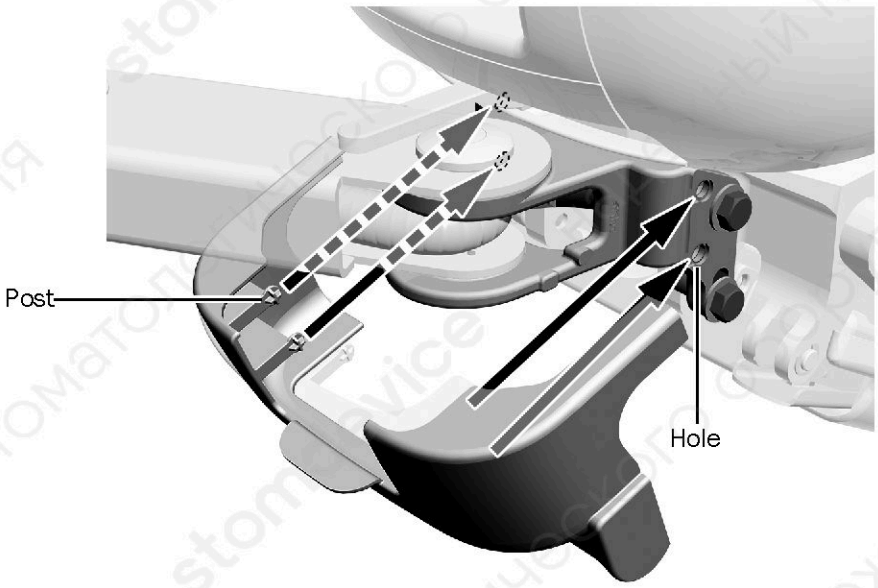
https://stomdevice.ru - стоматологическое и зуботехническое оборудование с доставкой по России и СНГ

stomdevice

Install the Covers

CAUTION When removing or replacing covers, take care not to damage any wiring or tubing. Verify that the covers are secure after replacing them.

Install the Mount Cover



1 Snap the slotted mount cover in place.
The four posts go into the holes on the mount.

https://stomdevice.ru - стоматологическое и зуботехническое оборудование с доставкой по России и СНГ

stomdevice

Install the Support Arm Cap

Recommended Tool

- 5/32" hex key



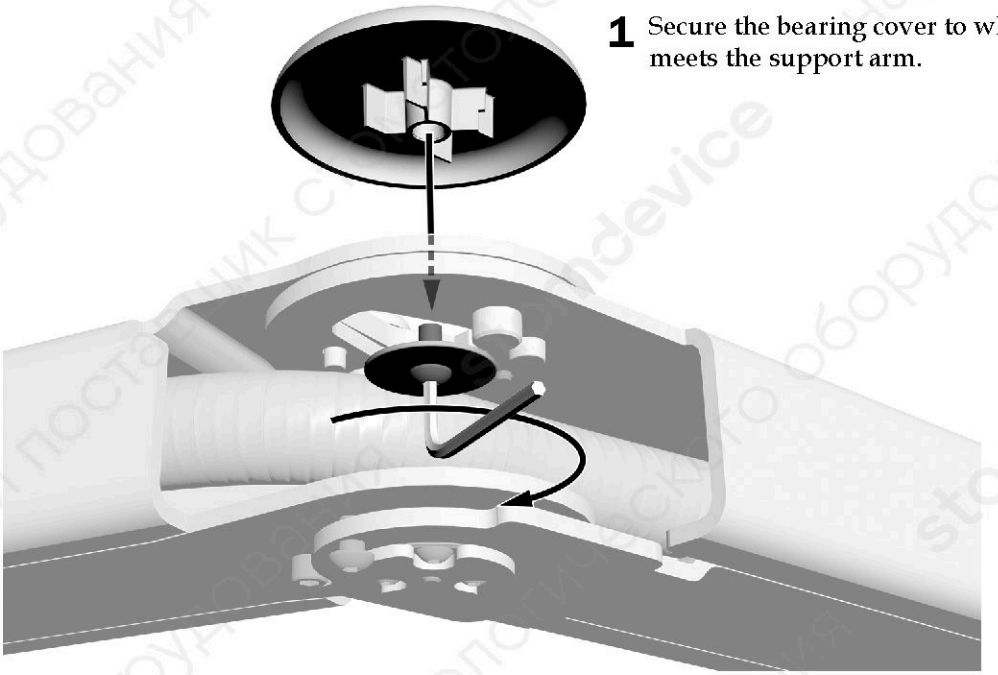
1. Use the 5/32" hex key to partially install the screw.
2. Slide the support arm cap onto the end of the arm. The screw goes into the slot in the cap.
3. Secure the cap.

Install the Bearing Cover (Optional)

This cap is only used with systems that do not include an assistant's instrumentation.

Recommended Tool

- 5/32" hex key



1. Secure the bearing cover to where the support link meets the support arm.

https://stomdevice.ru - стоматологическое и зуботехническое оборудование с доставкой по России и СНГ

stomdevice

Install the Support Link Cover

The support link cover installs the same way on all systems.



1 Snap the support link cover into place.

Test the System

After you have completed the installation, use the following checklist to test the system, then follow up with the customer.

Utilities

- Regulated air pressure to the delivery system is at 80 psi (552 kPa).
- Floor box is free of air and water leaks.
- The gravity drain functions properly.
- Tubing and connections are not kinked and are free of air and water leaks.
- Excess tubing and wires are coiled and stored away from moving parts.
- Cuspidor limit switch functions properly.

Cuspidor and Cupfill

- Cupfill timing is set properly.
- Cuspidor flow pattern effectively rinses the bowl, bowl drains properly.

https://stomdevice.ru - стоматологическое и зуботехническое оборудование с доставкой по России и СНГ

stomdevice

Regulatory Information and Warranty

For required regulatory information and the A-dec warranty, see the *Regulatory Information, Specifications, and Warranty* document (p/n 86.0221.00) available in the Resource Center at www.a-dec.com.

надежный поставщик стоматологического оборудования

All other trademarks are the property of their respective owners.

A-dec Headquarters
2601 Crestview Drive
Newberg, OR 97132 USA
Tel: 1.800.547.1883 Within USA/CAN
Tel: +1.503.538.7478 Outside USA/CAN
www.a-dec.com

A-dec Inc. makes no warranty of any kind with regard to the content in this document including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose.

86.0387.00 Rev E
Date of Issue 2021-05-07
Copyright 2021 A-dec Inc.
All rights reserved.
lGgrphpor18

https://stomdevice.ru - стоматологическое и зуботехническое оборудование с доставкой по России и СНГ