

A-dec 311 Dental Chair Link Arm and Lift Arm Bolt

Recommended Tools

- 5/16" and 3/8" hex bit sockets
- Breaker bar (16" recommended)
- Ratchet
- Torque wrench (10-150 ft-lb [14 - 203 N-m])

Important Information

Read the entire installation guide before starting the procedure.



CAUTION Start screwing in the bolts by hand to avoid cross-threading the bolts.



CAUTION When removing the bolts ensure that your hands are not in pinch points. The chair may move significantly when a bolt is removed and result in significant injury.



www.a-dec.com/860664

中国 [简体]

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Español

Türkçe

Installation Video



www.a-dec.com/v/sk/860664_001

Bolt Replacement Overview

Before replacing the bolts, use a 5/16" hex bit socket with a breaker bar to break the lock on each bolt.

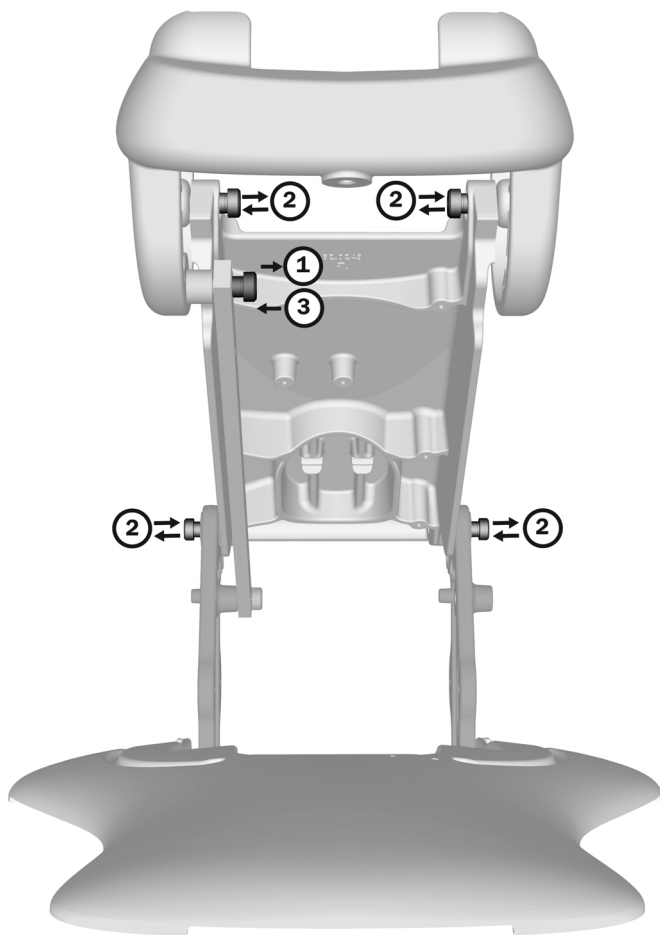
1. Remove the bolt at location 1. See page 5.



2. Remove and replace the bolts one at a time at location 2 using this bushing. See page 6.

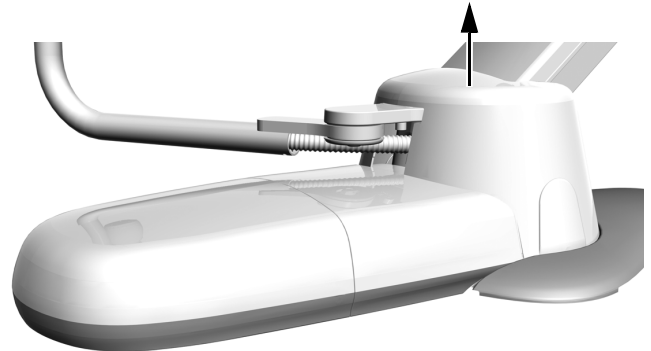


3. Install a new bolt at location 3 using this bushing. See page 7.

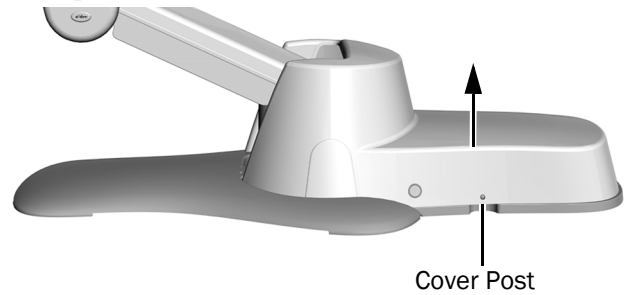


Prepare the Chair

1. For chairs with a contoured floor box, remove the motor pump cover.



2. For chairs with an integrated floor box, pull out at the cover posts and lift off the cover.



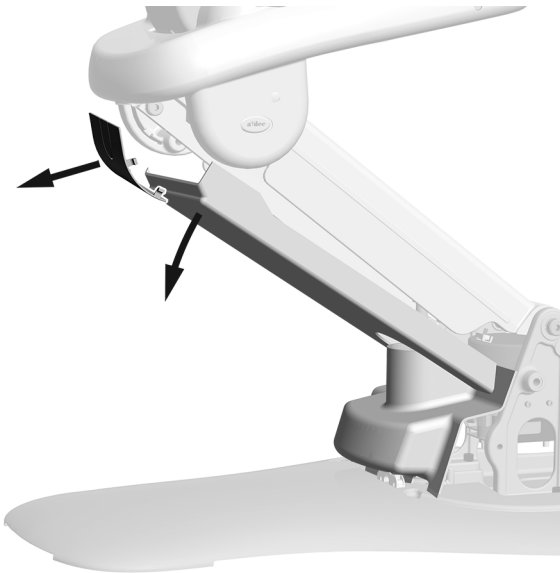
3. Turn on the power to the chair.



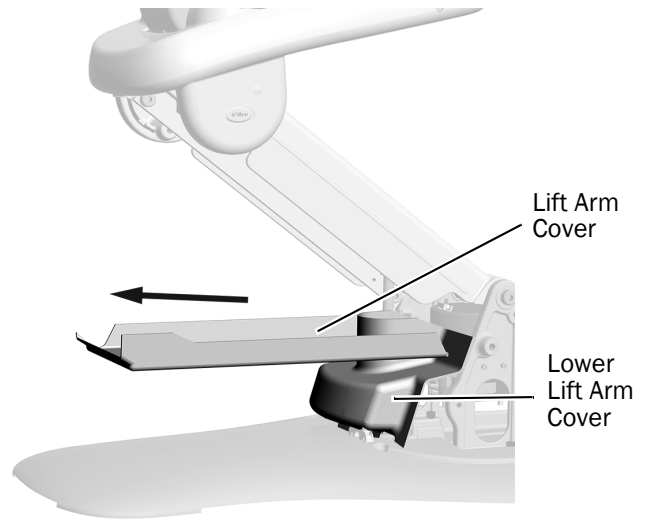
4. Move the chair to the full base-up position.



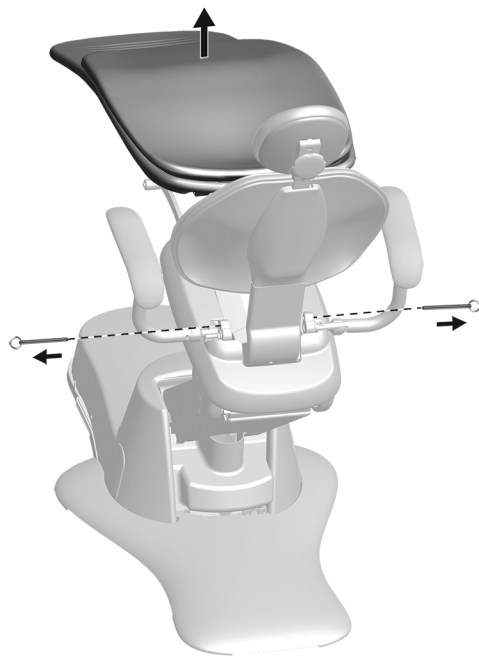
5. Press in on one side of the upper lift arm cover to disengage the tabs on the edge of the cover from the slot in the back of the chair and remove the upper lift arm cover. Catch the lift arm cover as you pull out the upper lift arm cover.



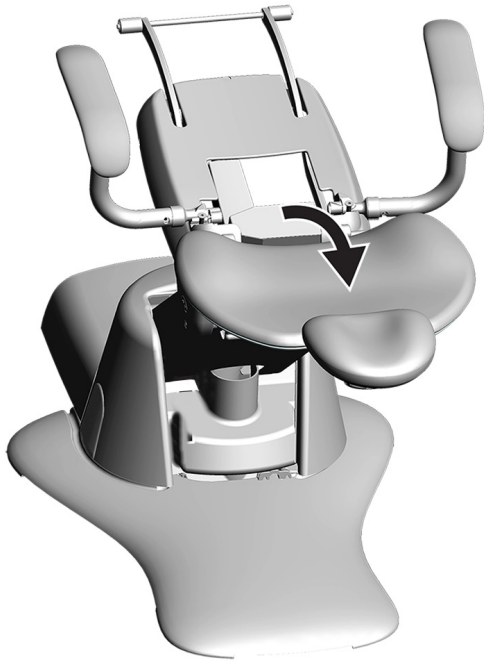
6. Pull up on the lift arm cover and remove it and the lower lift arm cover from the chair.



7. Pull out the pins; then remove the chair upholstery.



8. Move the chair to the full base-up and full back-down positions.



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

9. Turn off the power to the chair.

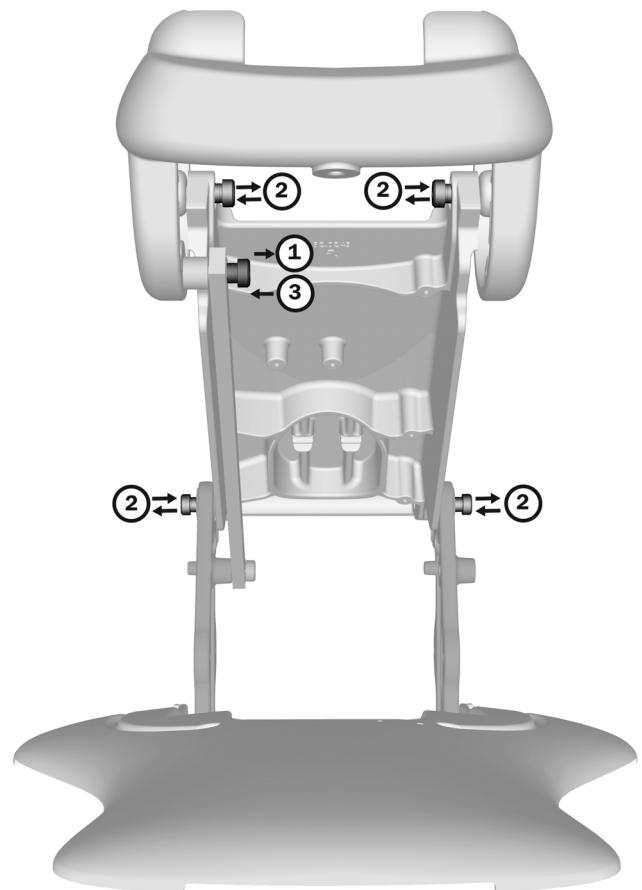
Content Map

Parts and Sequence of Installation

Complete this Section

- | | |
|---|---|
| 1. Remove the existing bolt and bushing from the upper link arm location. | “1—Remove the Link Arm Bolt” on page 5 |
| 2. Remove and replace the bolts and bushings one at a time in the other four locations. | “2—Replace the Lift Arm to Upper Structure and Tower to Lift Arm Bolts” on page 6 |
| 3. Install the bolt and the short black bushing in the upper link arm location. | “3—Install the New Link Arm Bolt” on page 7 |

The bolts to replace are in five locations shown in the image below. Only the bolt for the upper link arm uses the short black bushing assembly. The bolts at the other four locations use the longer metallic bushing assembly. Replace these bolts one at a time.



Bushings

Use at location 2

Use at locations 3



Remove Seized Bolts



CAUTION If a bolt stops turning when you are removing it, do not force it. The bolt may break, which will require replacement of the upper structure.

If you encounter a bolt that will not loosen, watch the video for information on how to loosen it.

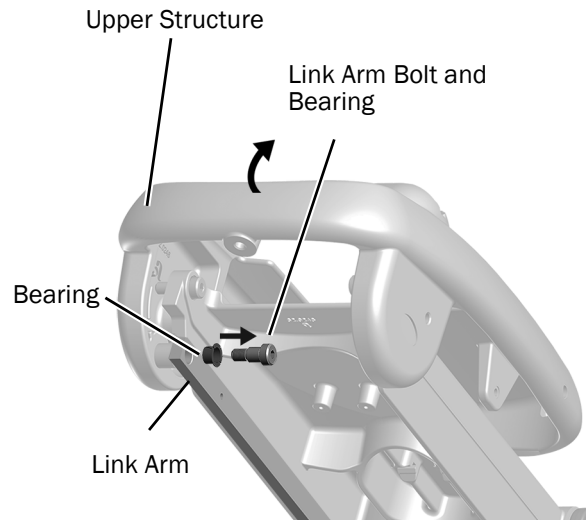


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1—Remove the Link Arm Bolt

This procedure is much easier when the upper link arm bolt is removed first.

1. Use the 5/16" hex bit socket with a breaker bar to loosen the link arm bolt and bearing.
2. Use a ratchet with 5/16" bit socket to remove the bolt.
3. After you remove the bolt, tilt the seat and upper structure forward.



NOTE Install the new link arm bolt after installing all of the new lift arm bolts.

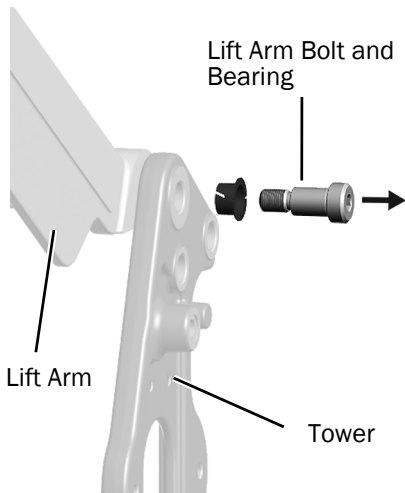
2—Replace the Lift Arm to Upper Structure and Tower to Lift Arm Bolts

Follow the steps in this section to remove and replace the bolt and bushing assembly in the four locations aside from the upper link arm location. See the image in the “Content Map” on page 4. The locations for this section are all labeled 2. The steps for replacing all of the bolts are identical but the right tower to lift arm bolt is shown in the images.



CAUTION The chair may move when you remove a shoulder bolt. Ensure your fingers are not in pinch points.

1. Use the 5/16" hex bit socket with a breaker bar to loosen the lift arm bolt and bearing.
2. Use a ratchet with 5/16" bit socket to remove the bolt.



3. Insert the lift arm bushing assembly into the open hole.



4. Insert the new bolt through the bushing and spacer.



CAUTION Do not use power tools to install the bolt. This can result in cross threading.

5. Align the two holes and start screwing the bolt in by hand.

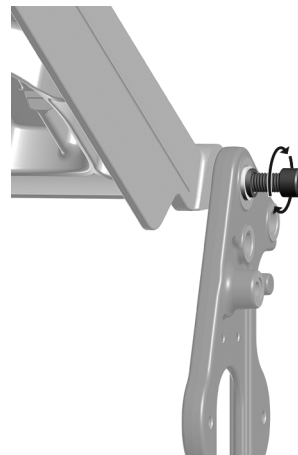


NOTE The bolt may only turn a few times before stopping.



TIP Grab the armrest or upper structure on the opposite side of the chair to help guide the upper structure when aligning the holes.

6. Use a 3/8" hex bit socket and ratchet to tighten the new bolt.



7. Use a torque wrench to tighten the bolt to 60 ft-lb (81 N-m).

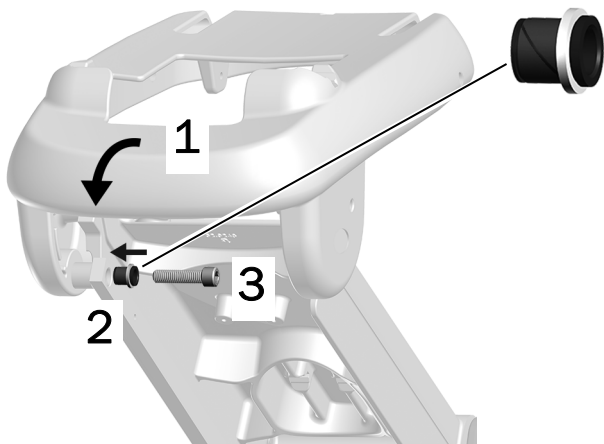


3—Install the New Link Arm Bolt



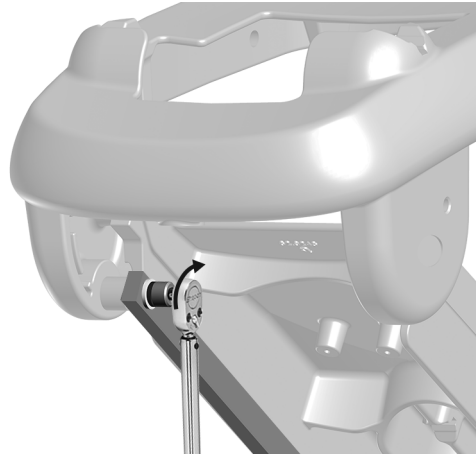
TIP Use your shoulder to support and move the upper structure to help align the holes while installing the bolt assembly.

1. Tilt the seat and upper structure back to align the hole in the link arm with the hole in the upper structure.
2. Insert the dark link arm bushing assembly into the link arm hole.
3. Insert the new bolt into the bushing assembly.
4. Align the two holes and start screwing the bolt in by hand.
5. Tighten the new bolt with a 3/8" hex bit socket and ratchet.



CAUTION To avoid cross-threading the shoulder bolt, make certain that the link arm and upper structure are properly aligned.

6. Use a torque wrench to tighten the bolt to 60 ft-lb (81 N-m).



Test the Chair

1. Turn on the power to the chair.
2. Replace the covers and the upholstery.
3. Use the touchpad or footswitch to move the chair through the full range of motion including full base and back up. Ensure the chair is completely stable while testing it. Test any ancillary products or other system components that were disconnected during this installation for proper operation.

Regulatory Information

Regulatory information mandated by agency requirements is provided in the *Regulatory Information, Specifications, and Warranty* document (p/n 86.0221.00), which is available in the Document Library at www.a-dec.com.

Product Models and Versions Covered in this Document

Models	Versions	Description
311	A	Dental Chair



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