

630 Back Replacement Kit [002-10970-00]

Applies to Models:

630 (-010 thru -013)
630 (-020 thru -023)

Special Tools:

Torque Wrench
(33 ft.-lbs. to 55 ft.-lbs.)
Protractor
3/4" Hex Head Socket
5/16" Allen Head Socket
2" X 4" X 24" Support Board



WARNING

Always disconnect chair from power source before removing any covers. Failure to do so may result in personal injury.



WARNING

Do not remove zip ties from replacement Back.

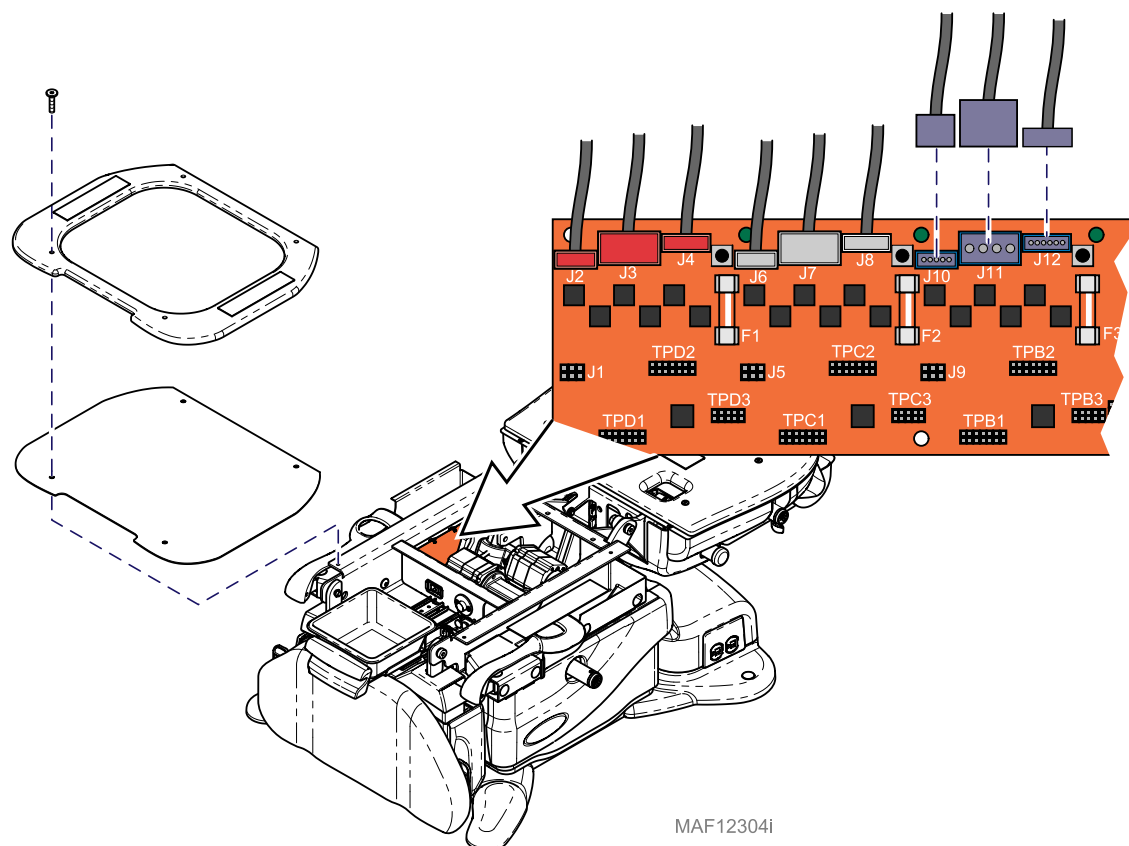


Equipment Alert

The wire connections, zip ties, wire clamps and wire routing must be put back in original locations.

Step: 1

- Position chair with Back section flat. (180 Degrees)
- Disconnect chair from power source.
- Remove Seat and Back upholstery.
- Remove four screws, Seat mounting board, and Seat cover plate.
- Disconnect wire connections J10, J11 and J12 from Motor Control Hub PC Board.
- Remove zip ties and small plastic clamps securing wires.
- Pull wires through Seat assembly so they are hanging below Back assembly.



MAF12304i

**WARNING**

Sliding Back creates a Pinch Point.

Install Zip Ties supplied with kit.

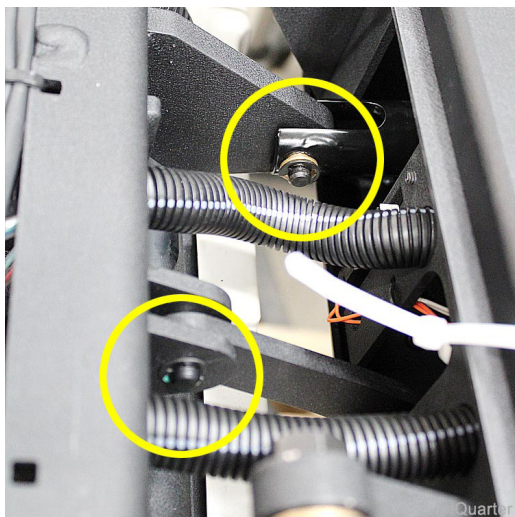
Failure to do so may result in personal injury.

**Step: 2**

Install two zip ties as shown.

**Step: 3**

Remove E-Clips from both Back actuator and pivot bar.

**Step: 4**

While supporting the Back assembly...

A) Remove pivot bar pin.

B) Remove actuator pin.



**Equipment Alert**

Protect harnesses from being pinched during this step.

**Equipment Alert**

Shoulder screws engage through tapped threads in the Back weldment and have a nut on the backside.

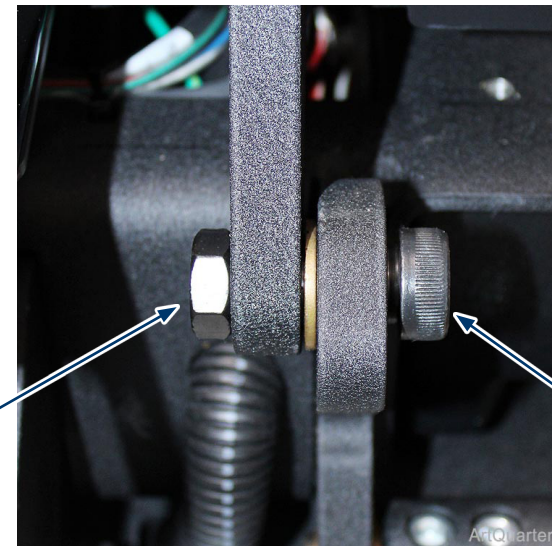
Step: 5

Rotate Back towards Seat base and lay the chair Back facedown on Support Board.

**Step: 6**

While supporting the Back assembly, Remove pivot jam nuts and shoulder screws.

Jam Nut



Shoulder Screw

**Equipment Alert**

Shoulder screws engage through tapped threads in the Back weldment and have a nut on the backside.

**Equipment Alert**

Shoulder screws must be torqued to 55 ft-lbs. and jam nuts on back side must be torqued to 33 ft-lbs.

Step: 7

- A) Remove Back assembly and replace with new Back assembly.
- B) Align holes and install shoulder screws. (Shoulder screws must be torqued to 55 ft-lbs.)
- C) Install jam nuts on back side. (Jam nuts must be torqued to 33 ft-lbs.)

**Equipment Alert**

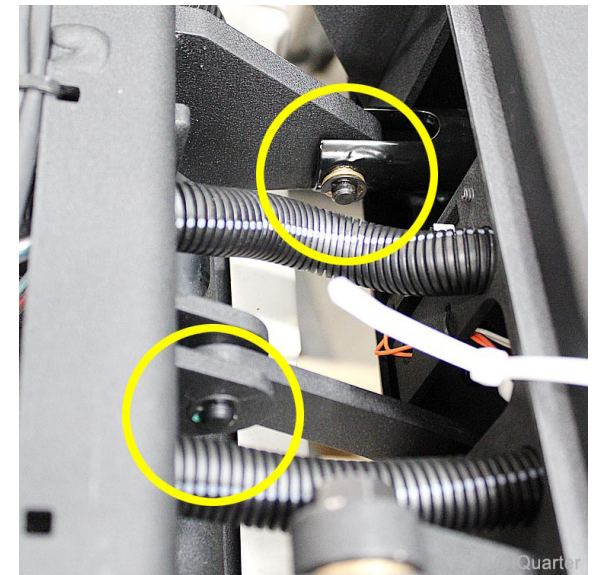
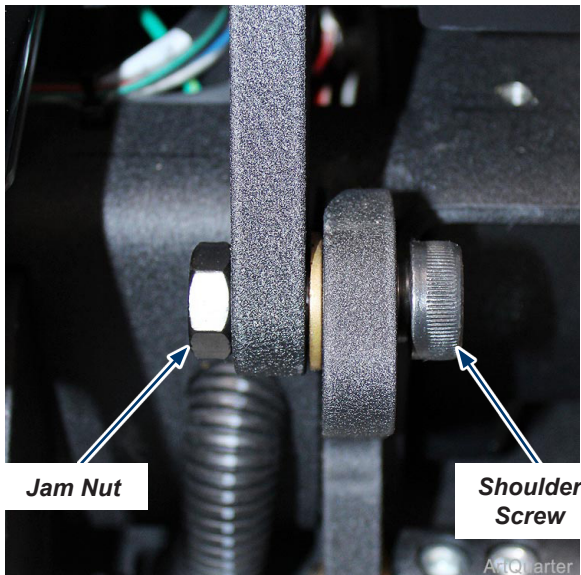
Ensure Flat surface of Limit Stops are aligned with the Limit Switch Buttons.

Step: 8

Ensure Flat surface of Limit Stops are aligned with the Limit Switch Buttons.

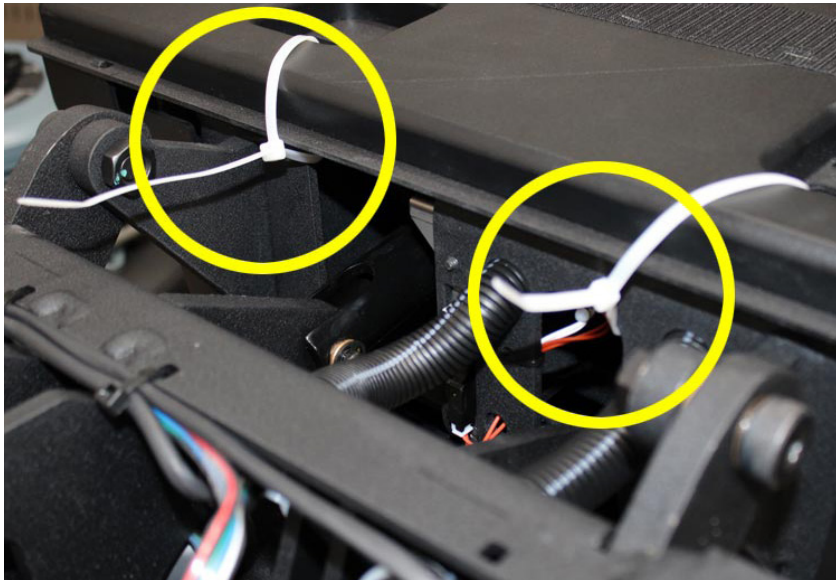
Step: 9

- A) Position chair with Back section flat. (180 Degrees)
- B) Reattach actuator with pin.
- C) Reattach pivot bar with pin.
- D) Secure pins with E-Clips.



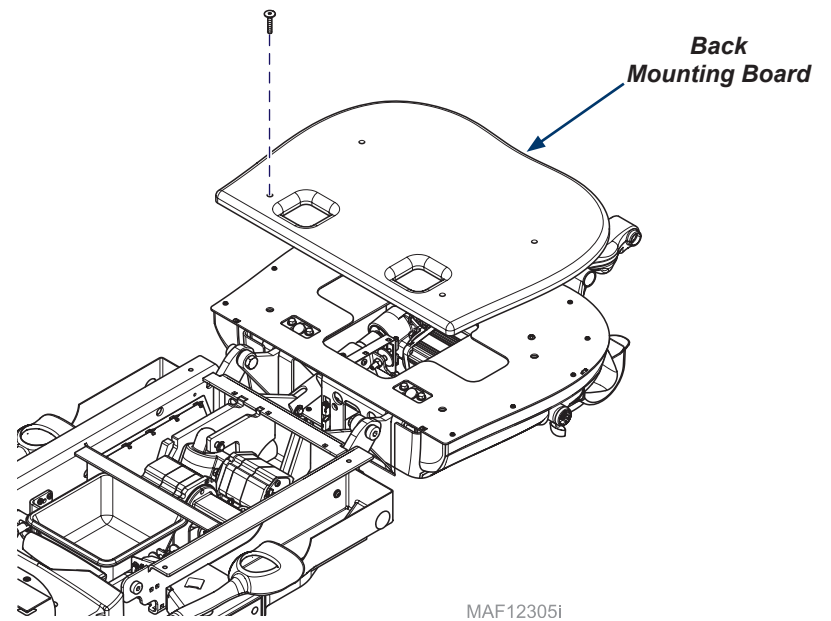
Step: 10

Remove two zip ties from Repalcement Back.



Step: 11

Remove four screws and Back mounting board.



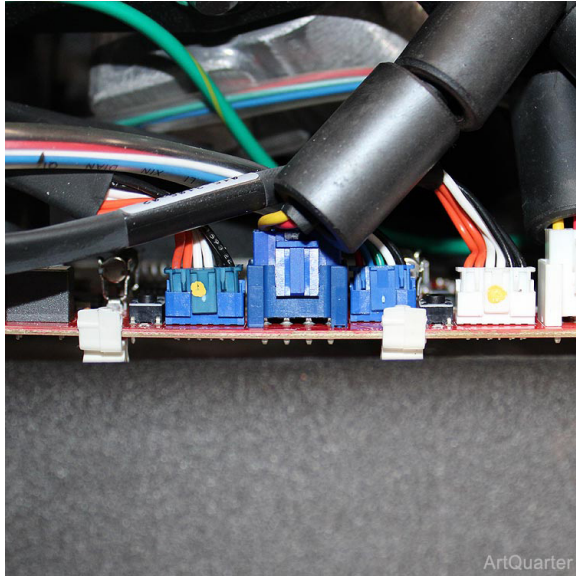


Equipment Alert

The wire connections, zip ties, wire clamps and wire routing must be put back in original locations.

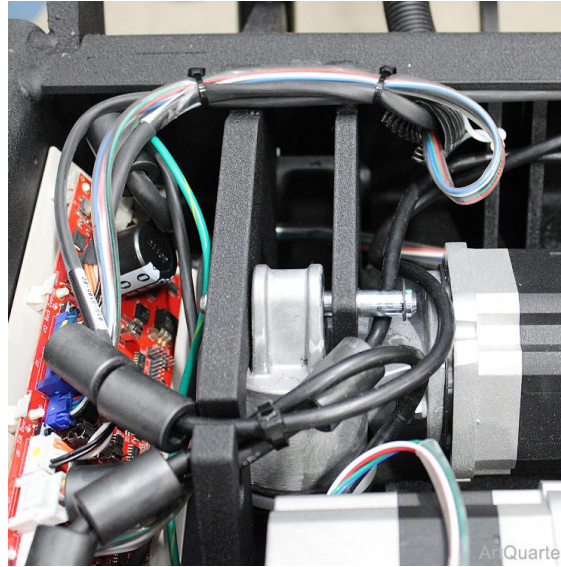
Step: 12

Pull wires to original position in Seat and plug harnesses into original PC Board location.



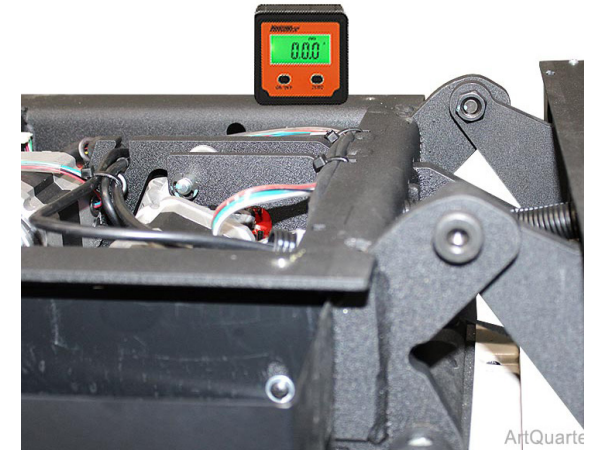
Step: 13

Fasten zip ties and wire clamps to original locations of harnesses.



Step: 14

To ZERO Protractor, Place Protractor on Seat weldment.



WARNING

The following procedure requires power to be connected with covers removed. Line voltage is present. Use extreme caution to prevent electric shock.

Step: 15

Fully raise Back, then place Protractor onto Back.



Step: 16 To check Back Up position...

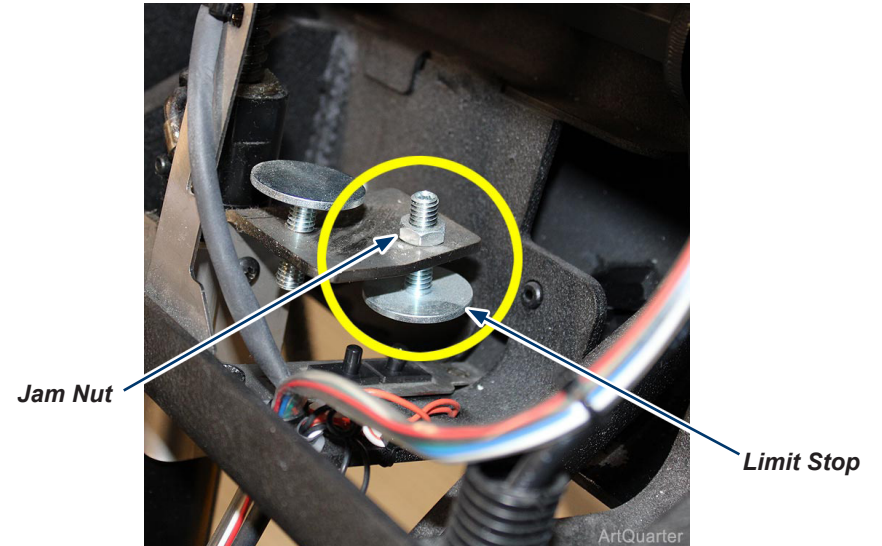
- A) Lower Back.
- B) Fully raise Back and Read Measurement.
(The acceptable measurement is $80^{\circ} \pm .5^{\circ}$)
- C) If measurement is $80^{\circ} \pm .5^{\circ}$, skip Step 17.



ArtQuarter

Step: 17 To set Back Up position...

- A) Lower Back.
- B) Loosen jam nut and adjust Limit Stop in or out.
- C) Fully raise Back and Read Measurement.
- D) Repeat instructions A-C until $80^{\circ} \pm .5^{\circ}$ measurement is reached.
- E) Tighten jam nut onto bracket to secure Back Up setting.



ArtQuarter

Step: 18
Fully lower Back.



ArtQuarter

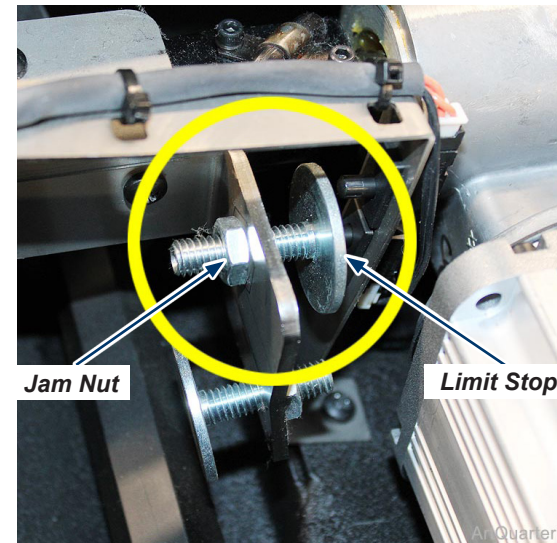
Step: 19 To check Back Down position...

- A) Raise Back.
- B) Fully lower Back and Read Measurement.
(The acceptable measurement is $0^\circ \pm .5^\circ$)
- C) If measurement is $0^\circ \pm .5^\circ$, skip Step 20.



Step: 20 To set Back Down position...

- A) Raise Back.
- B) Loosen jam nut and adjust Limit Stop in or out.
- C) Fully lower Back and Read Measurement.
- D) Repeat instructions A-C until $0^\circ \pm .5^\circ$ measurement is reached.
- E) Tighten jam nut onto bracket to secure Back Up setting.



Equipment Alert

Anytime the actuator wires are disconnected, the chair must be calibrated.

Step: 21

- A) Calibrate chair. (see instruction on following pages)
- B) Position Back mounting board and secure with screws.
- C) Position Seat cover plate and Seat mounting board, then secure with four screws.
- D) Install upholstery. (see instruction on following pages)
- E) Cycle chair several times prior to putting chair back in service.

Calibration Procedure

During the calibration procedure you will hear a steady pattern of “beeps” .
The chair will run all functions (Base, Back, Tilt, Foot) to their minimum and maximum positions, then return to a lowered flat position.
When calibration is complete, the chair will stop moving and you will hear three short “beeps”.

You **must** calibrate the chair in the following situations:

- After replacing Power Supply PC Board.
- After replacing Motor Control Hub PC Board.
- After replacing Machine Control Board.
- After replacing Base, Back, Tilt or Foot actuators.
- After a limit switch bracket is adjusted.
- When an error code indicates calibration is needed.



Equipment Alert

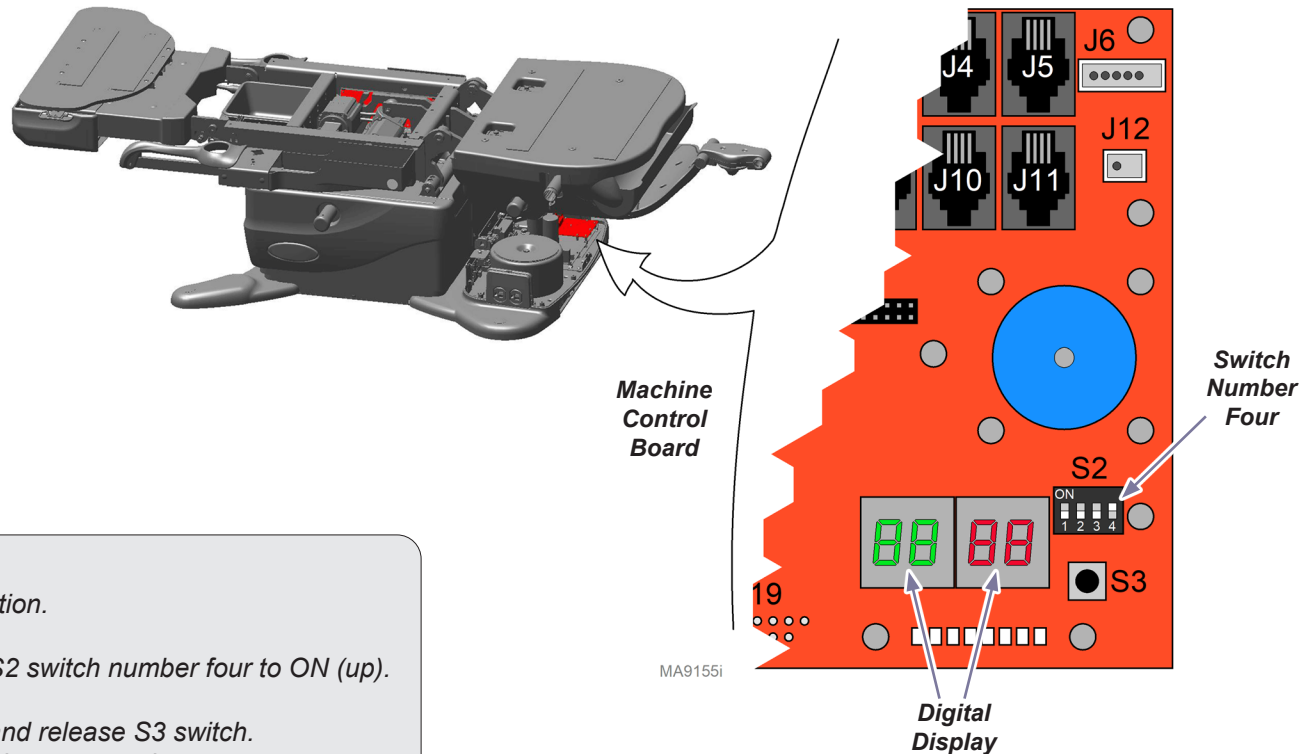
Anytime the PC Board is removed or the actuator wires are disconnected, the chair must be calibrated.

Note

When S3 switch is pressed, then released you will hear a steady pattern of “beeps”. When calibration is completed you will hear three short beeps.

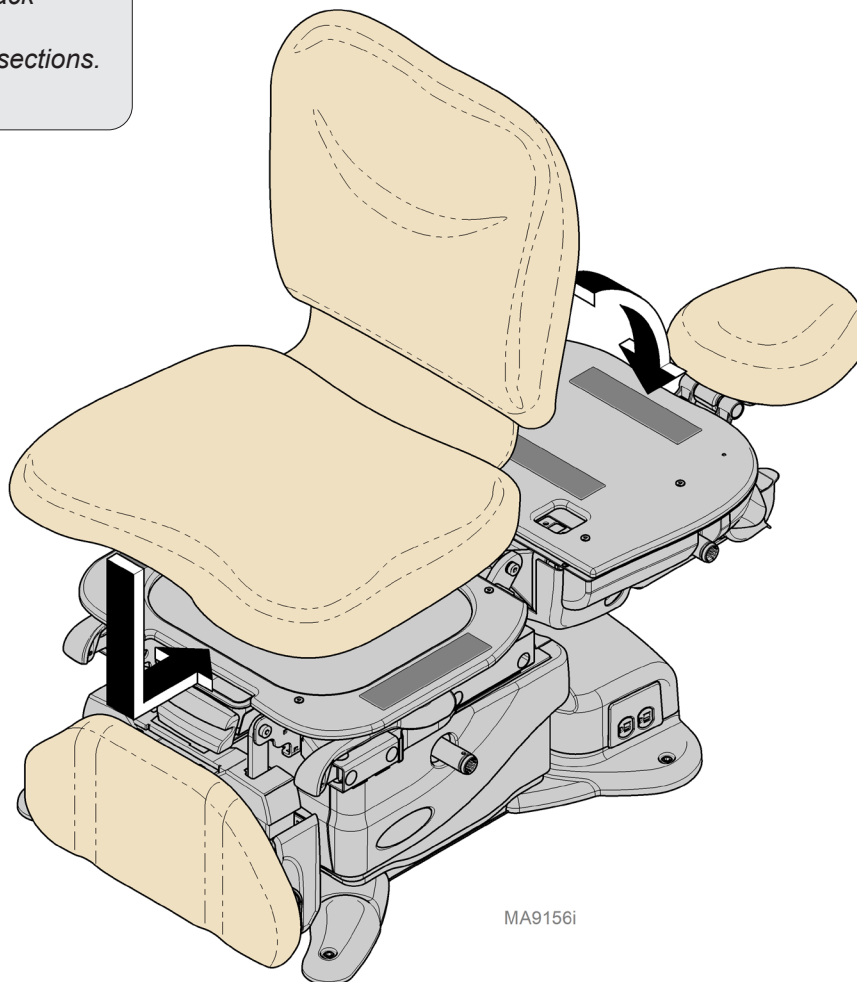
To calibrate...

- Slide Foot section to highest stowed position.
- Unplug chair power cord.
- When the digital display darkens, move S2 switch number four to ON (up).
- Plug in chair power cord.
- When the digital display darkens, press and release S3 switch.
- When calibration is complete, unplug chair power cord.
- Move S2 switch number four to OFF (down).
- When the digital display darkens, plug in chair power cord.



To install Seat / Back upholstery...

- A) Position Back section of chair flat.
- B) Position front of Seat section against seat mounting board.
- C) Press Seat section down firmly.
- D) Position top of Back section against the top of the Back mounting board.
- E) Check for a consistent gap between Seat and Back sections.
- F) Press Back section down firmly.



MA9156i



Equipment Alert

Be sure to cycle chair several times prior to putting chair back in service.