

Tilt Actuator [002-1731-0x]

Applies to Models:

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

Special Tools:

none

Language of origin: English



WARNING

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



Equipment Alert

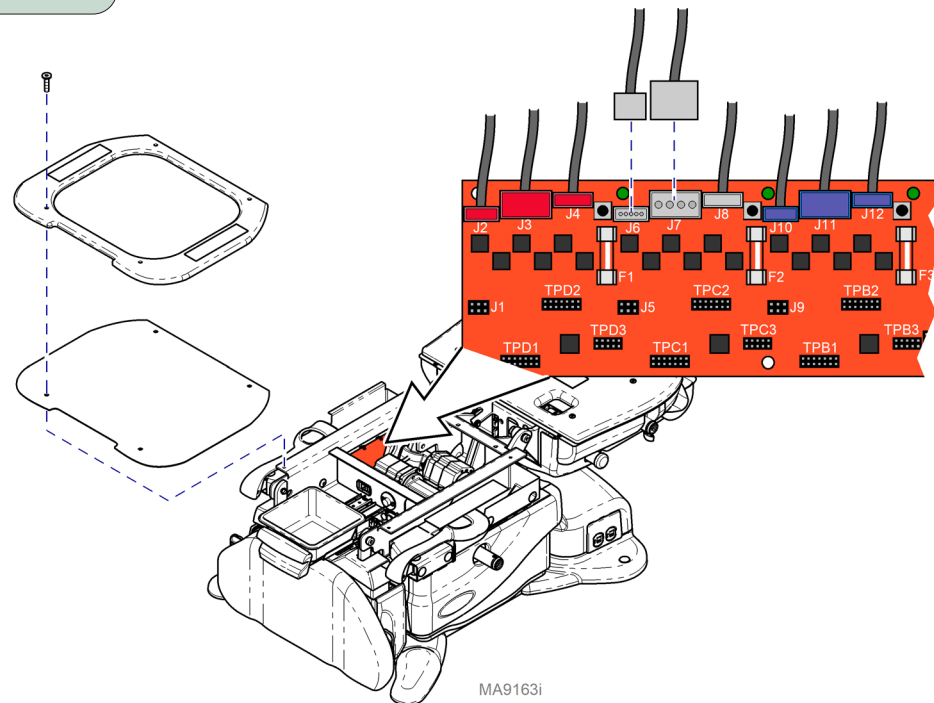
The wire connections and wire routing must be put back in original locations before installing covers.

Step: 1

- Remove cladding, bail, and outer shrouds.
- Remove seat / back upholstery.
- Remove four screws, seat mounting board, and seat cover plate.
- Disconnect wire connections J6 and J7 from Motor Control Hub PC Board.



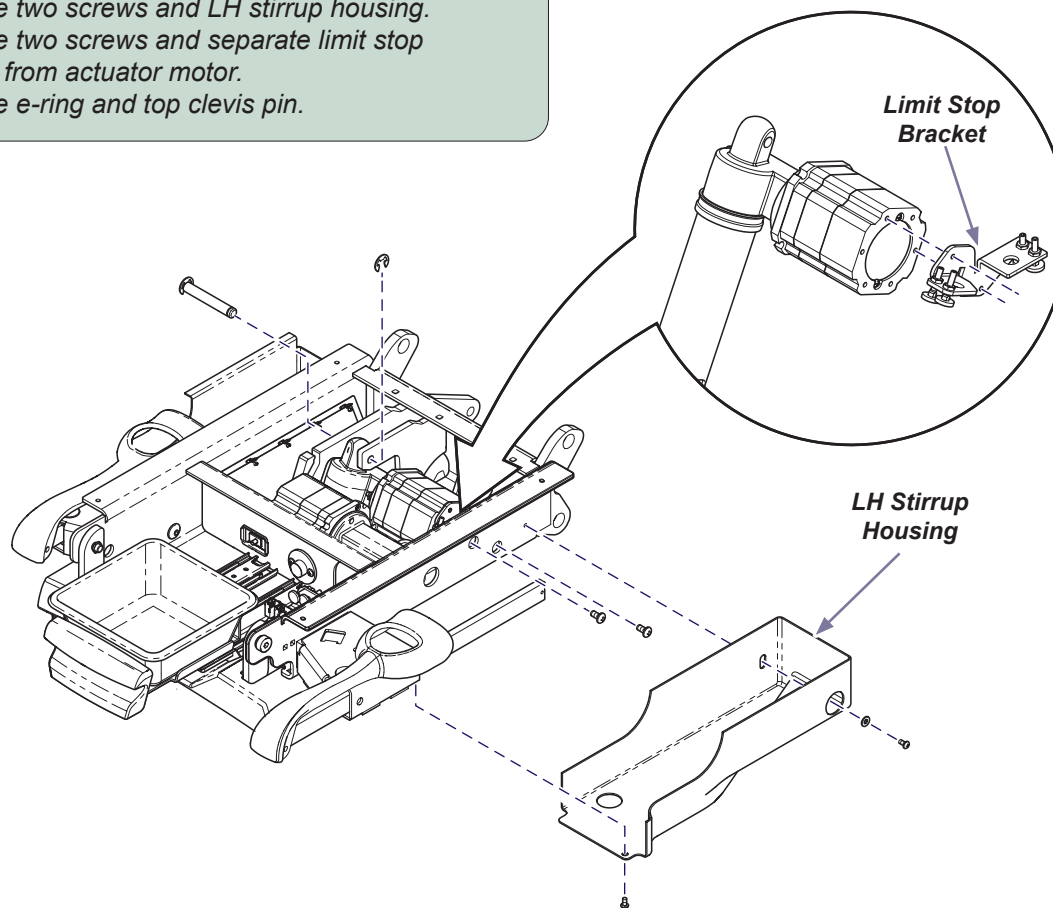
Replace Tilt Actuator



MA9163i

Step: 2

- A) Remove two screws and LH stirrup housing.
- B) Remove two screws and separate limit stop bracket from actuator motor.
- C) Remove e-ring and top clevis pin.



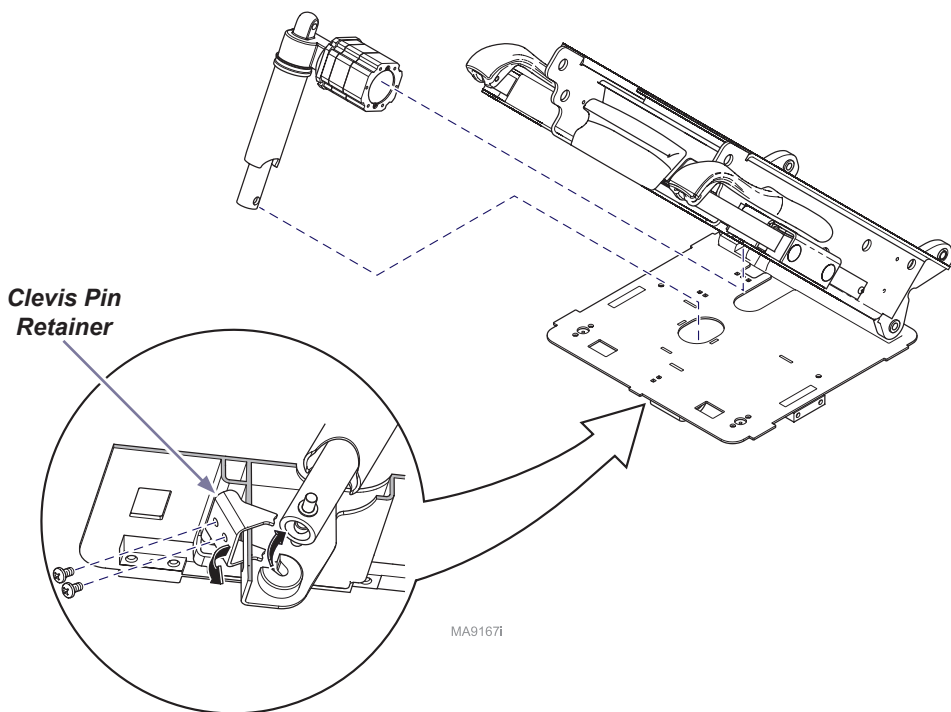
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**WARNING**

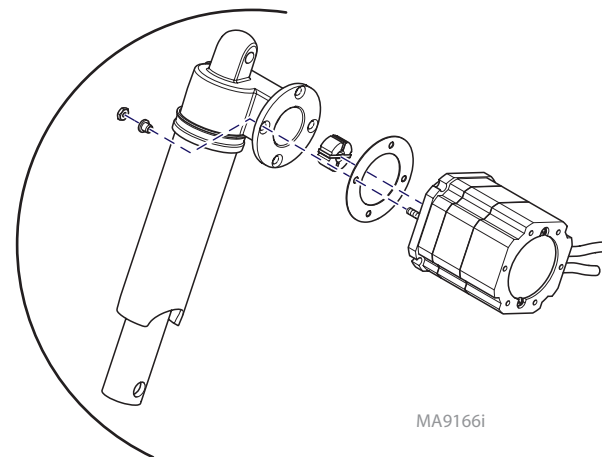
Always disconnect chair from power source before removing any covers. Failure to do so may result in personal injury.

Step: 3

- A) Remove two screws and pull outward on clevis pin retainer.
- B) Manually tilt chair top and remove tilt actuator.

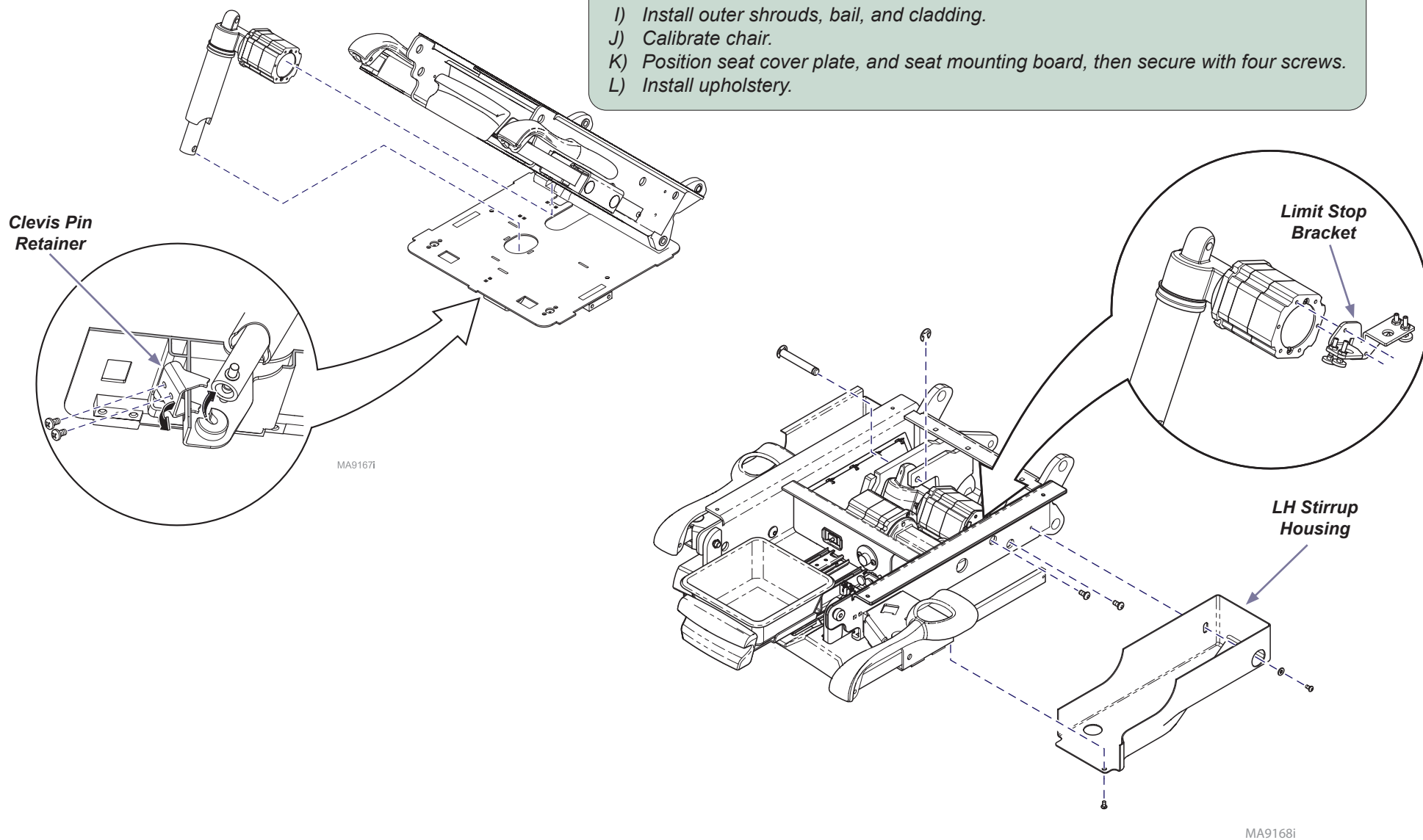
**Note**

If replacing only the actuator / coupler, refer to the illustration below.
If replacing complete actuator assembly, go directly to Step 4.



Step: 4

- A) Angle actuator into seat weldment.
- B) Install clevis pin at head end of actuator and secure with cotter pin.
- C) Position limit stop bracket and secure with two screws.
- D) From full in, spin actuator shaft outward three rotations.
- E) Position foot end of actuator and secure with two screws and clevis pin retainer.
- F) Position LH stirrup housing and secure with two screws.
- H) Connect wire connections to J6 and J7 on Motor Control Hub PC Board, then secure wires with cable ties.
- I) Install outer shrouds, bail, and cladding.
- J) Calibrate chair.
- K) Position seat cover plate, and seat mounting board, then secure with four screws.
- L) Install upholstery.



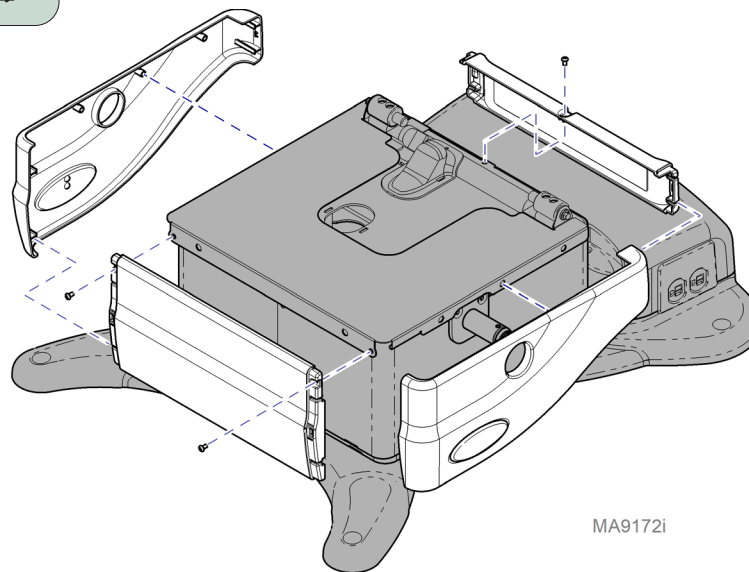
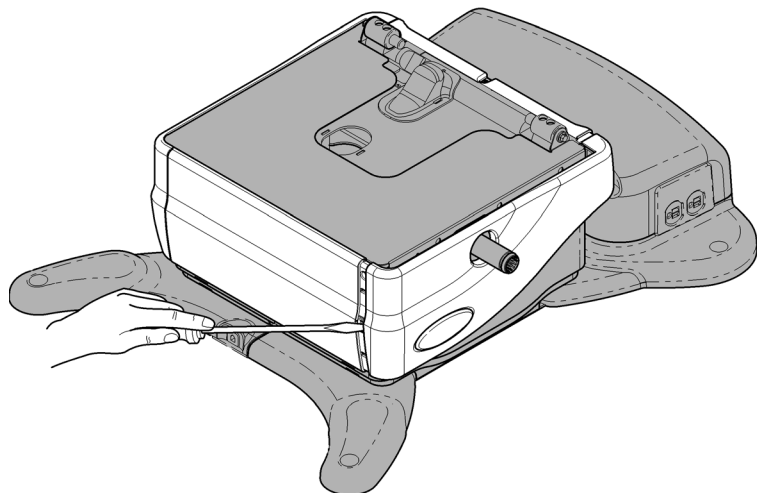
**WARNING**

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To remove cladding...

- A) Insert large, flat blade screwdriver into slot at the front and the back of side cladding and twist to disengage.
- B) Unsnap side cladding to remove.
- C) Remove two screws from front cladding.
- D) Remove one screw from back cladding.

Note: These illustrations show top components removed for clarity only.



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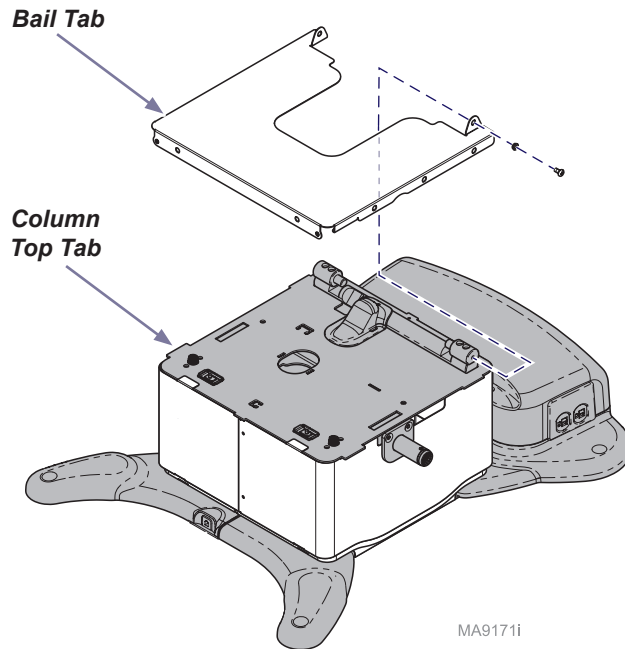
To install cladding...

- A) Position rear cladding and secure with one screw.
- B) Position front cladding and secure with two screws.
- C) Position side cladding and snap into place.

To remove bail...

- A) Remove two screws and two bushings.
- B) Slide bail forward and remove.

Note: For ease of shroud removal, it is recommended to remove the bail. This illustration shows top components removed for clarity only.



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**WARNING**

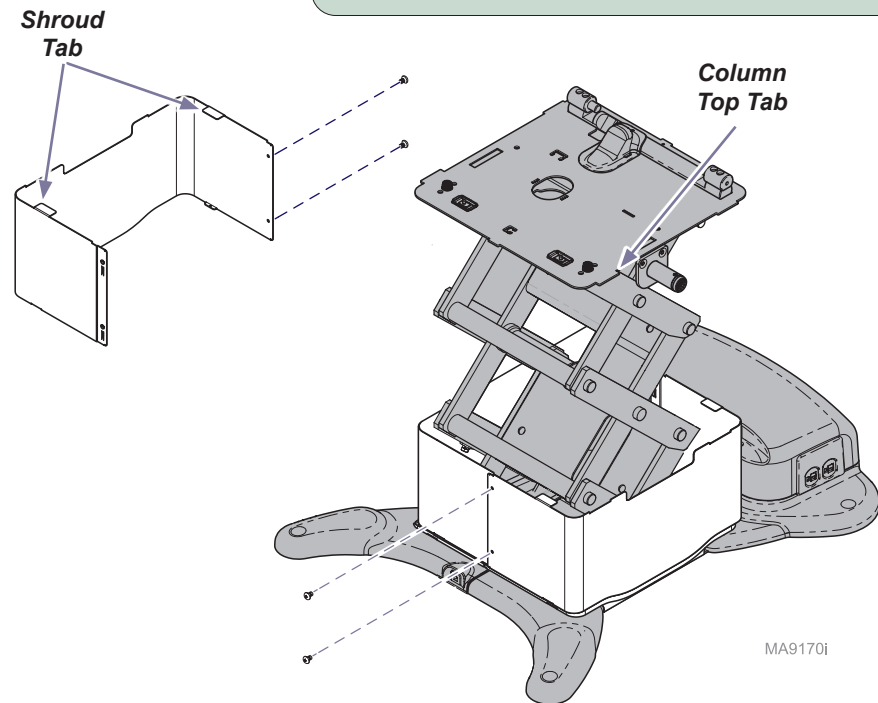
Always disconnect chair from power source before removing any covers. Failure to do so may result in personal injury.

**Equipment Alert**

Lower the base before removing the shrouds. This illustration shows the base raised and top components removed for clarity only.

To remove outer shrouds...

- A) Lower base completely, then raise four to six inches.
- B) Remove two screws from both ends of outer shrouds.
- C) Pull shrouds outward to disengage tabs, and remove.



MA9170i

**Equipment Alert**

Be sure front bail tabs capture the column top tabs.

To install bail...

- A) Position bail on top of column.
- B) Secure with two bushings and two screws.

To install shrouds...

- A) Position inner shrouds and secure with two screws.
- B) Position middle and outer shrouds and secure with screws at both ends.

Note: Be sure shroud tabs stack on top of each other.

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”.

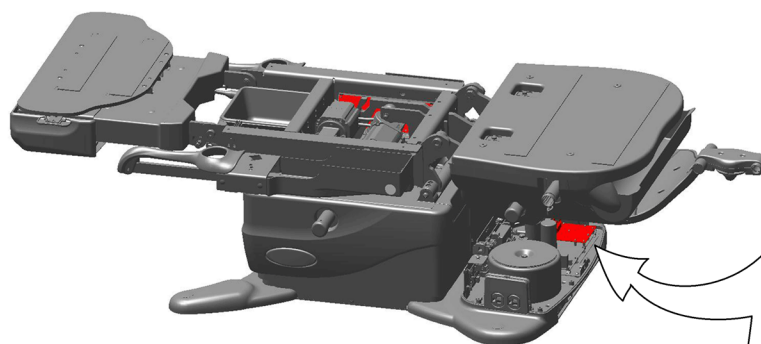
You **must** calibrate the chair in the following situations:

- 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.



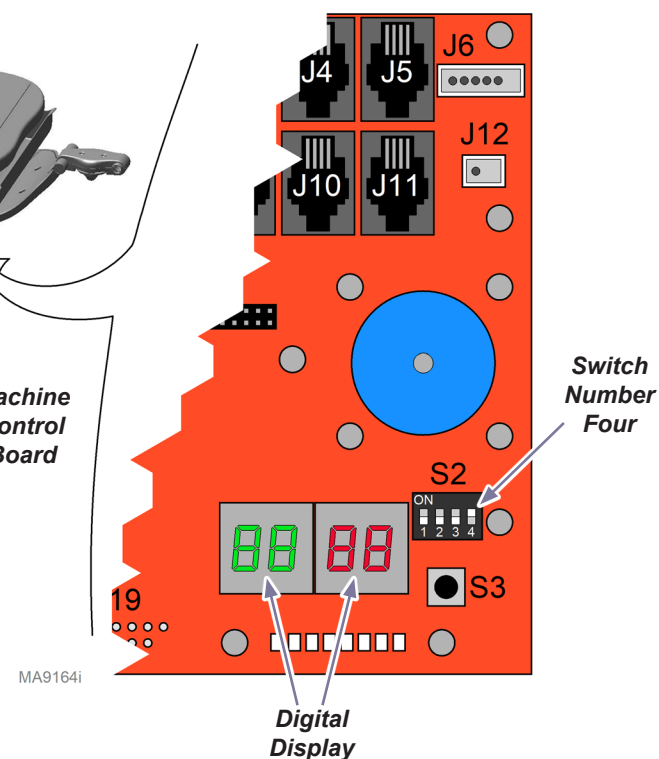
Machine
Control
Board

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.

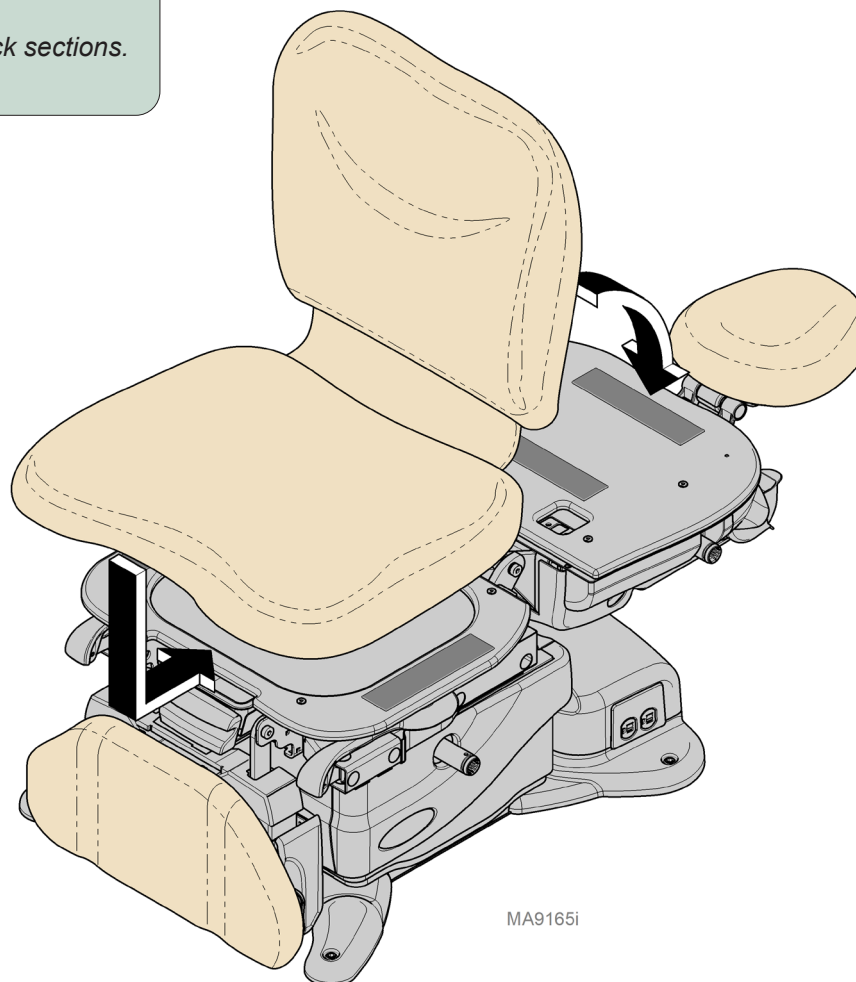
To calibrate...

- 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.



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