

631-001 Scissor Harness Kit [002-11294-0x]

Applies to Models:
631 (-001)

Special Tools:
Ball Tip Allen Wrench Set

Note

Instructions for step one can be found at the back of this document.



WARNING

Some steps in this instruction require power to be supplied to chair while covers are removed. Disconnect power when not required.

Step 1:

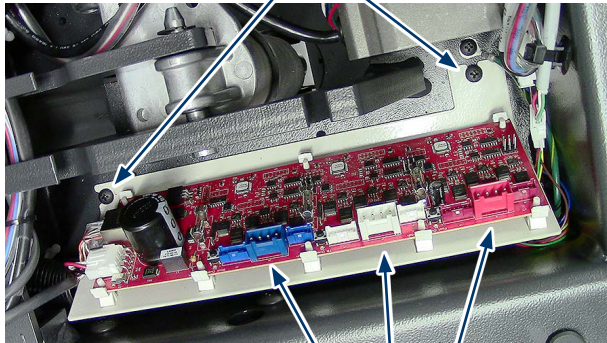
- A) Remove seat / back upholstery.
- B) Remove seat plate.
- C) Remove cladding.
- D) Remove bail and spline weldments.
- E) Remove shrouds.
- F) Remove base cover.
- G) Run back, foot and tilt to the full up position.
- H) Run base to the full up position then lower approximately one inch.



Equipment Alert

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

Screw



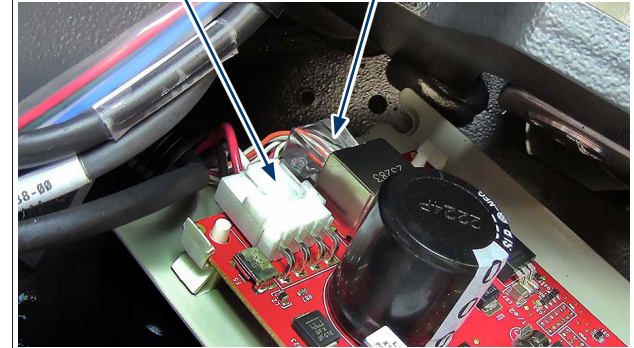
Actuator
Connection



Screw

J13

J15



Step 2:

Disconnect wire connections for the Foot, Tilt and Back actuators from Motor Control Hub PC Board. Remove two screws to loosen mounting bracket and Motor Control Hub PC Board.

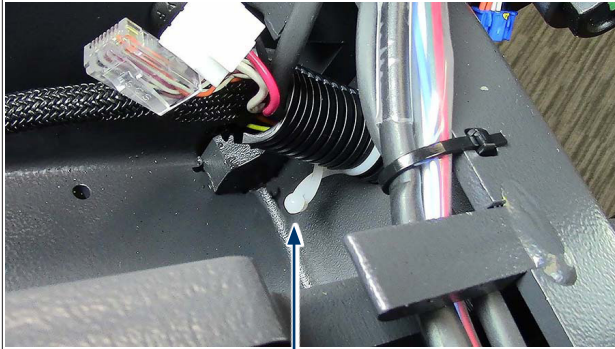
Step 3:

Remove ground wire screw from seat weldment.

Step 4:

Disconnect wire connections J13 and J15 from Motor Control Hub PC Board. Remove Motor Control Hub PC Board, taking note of harness routing behind PC Board.

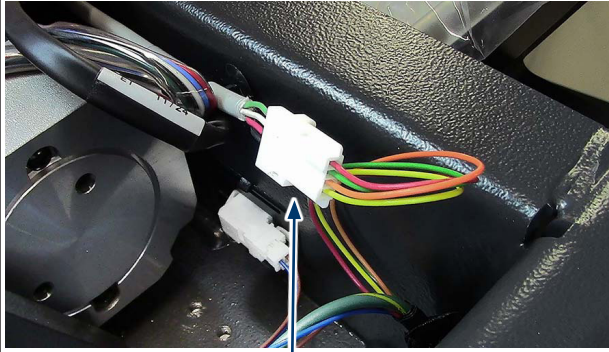




Twist Tie

Step 5:

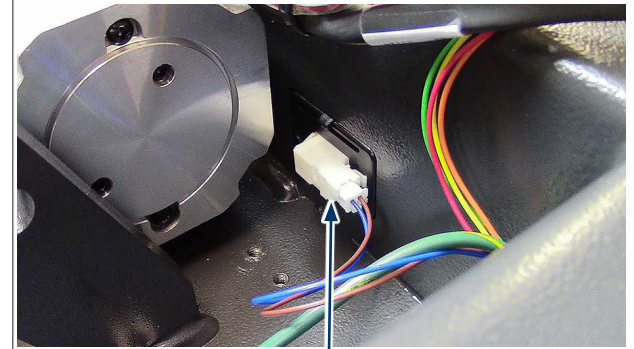
Remove twist tie from scissor harness in seat section.



Foot Smart Sensor
Switches Connection

Step 6:

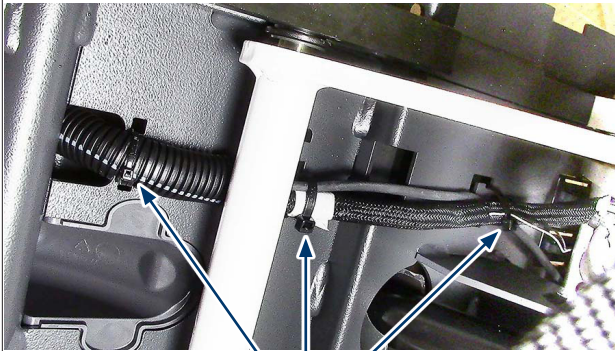
Disconnect wire connection to foot smart sensor switches.



Pan Sensor
Switch Connection

Step 7:

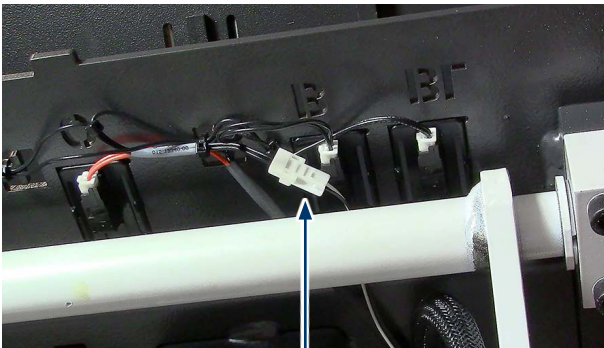
Disconnect wire connection to pan sensor switch.



Zip Tie

Step 8:

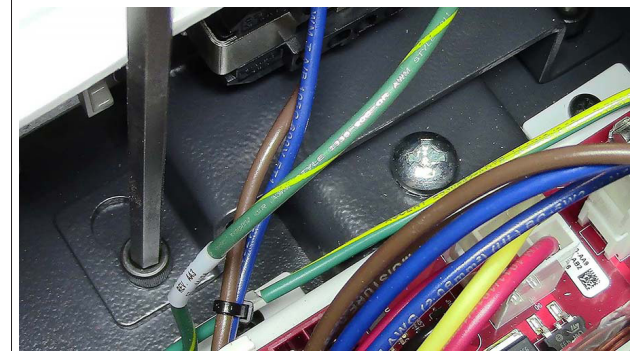
Cut three zip ties under column top.



Seat Smart Sensor
Switches Connection

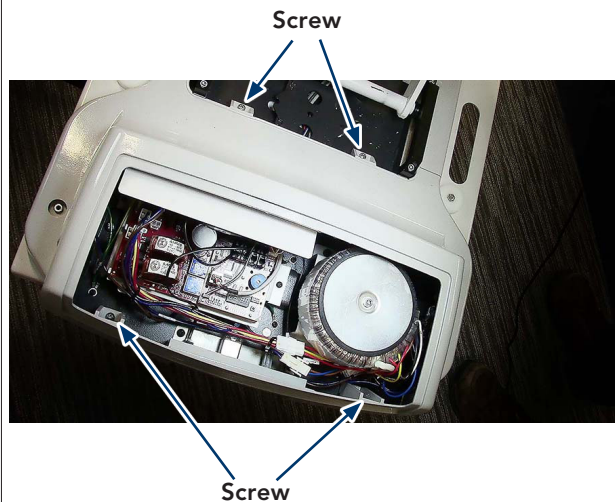
Step 9:

Disconnect wire connection to seat smart sensor switches under column top.



Step 10:

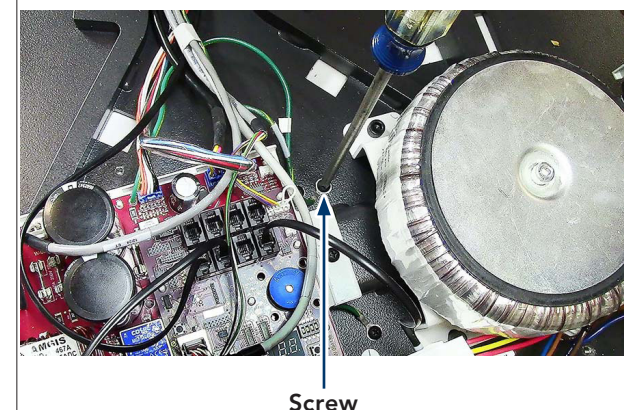
Using a ball tip allen wrench, loosen two receptacle mounting screws on each side of chair.
(to allow for clearance to remove back base casting)



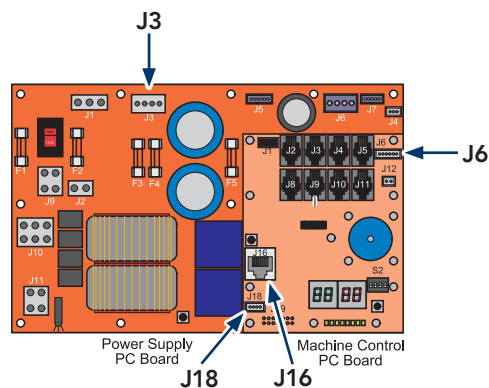
Step 11:
Remove four screws and back base casting.



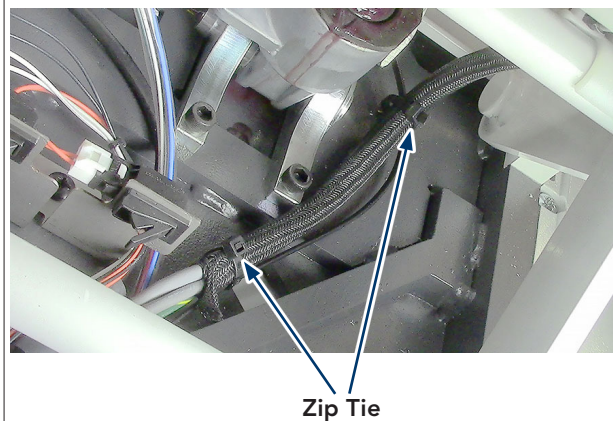
Step 12:
Remove two screws and fluid ingress bracket.



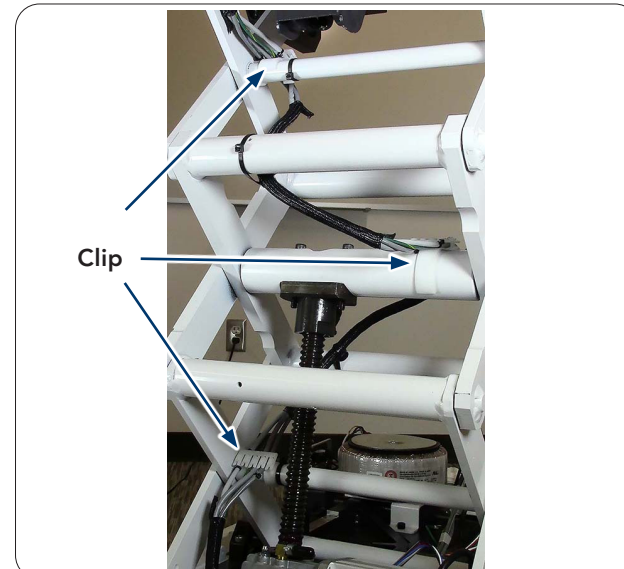
Step 13:
Remove ground wire screw from base weldment.



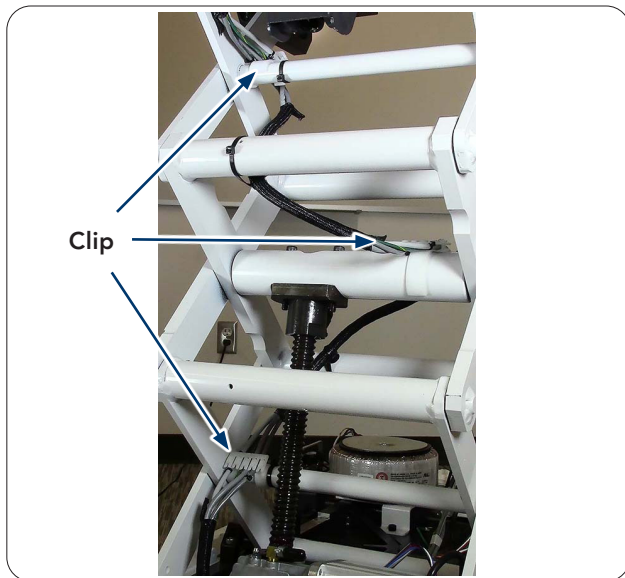
Step 14:
Disconnect wire connections J3, J6, J16 and J18 from Power Supply PC Board and Machine Control PC Board.



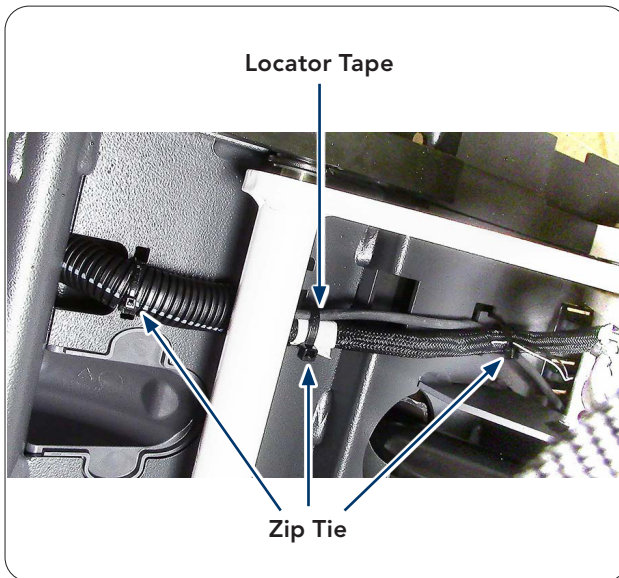
Step 15:
Cut two zip ties on base weldment.



Step 16:
Cut zip ties on scissor assembly, taking note of the positioning of harness, zip ties and clips. Remove harness and clips.



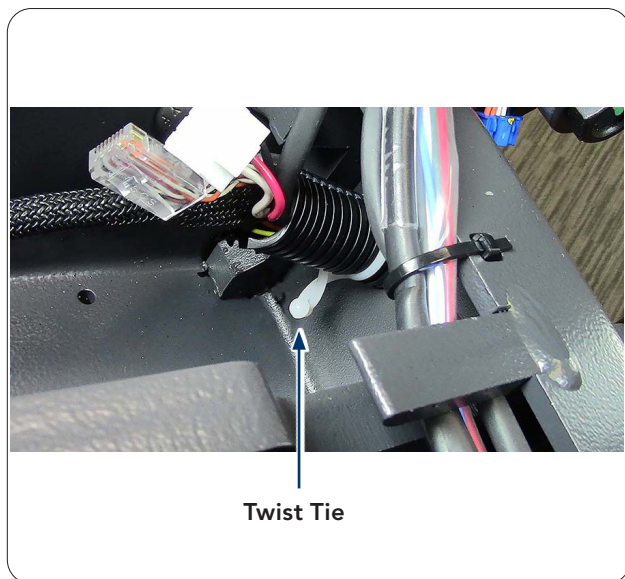
Step 17:
Route harness through chair, positioning clips as shown.



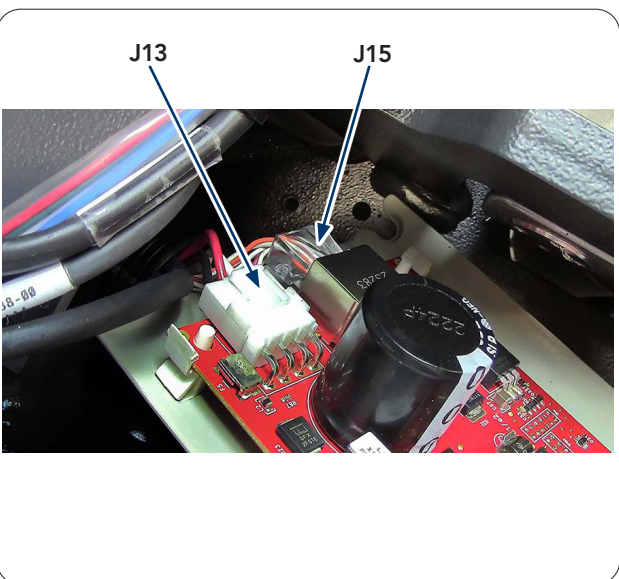
Step 18:
Align grey locator tape with center zip tie mount.
Secure harness under column top with three zip ties.



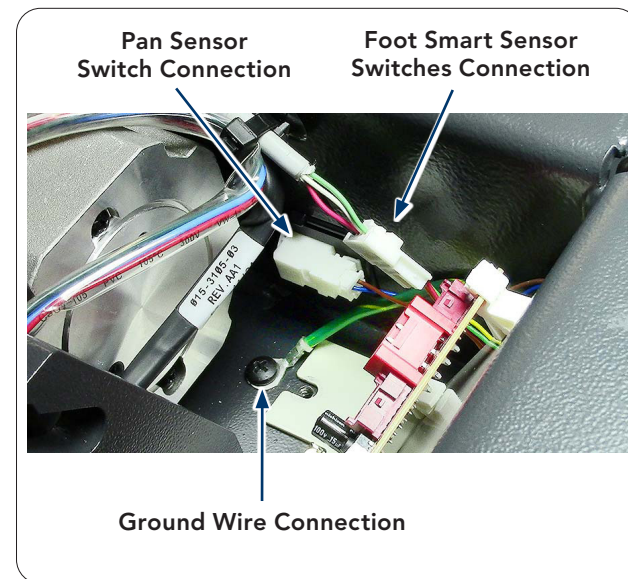
Step 19:
Ensure wire shielding is in place when routing harness into seat weldment.



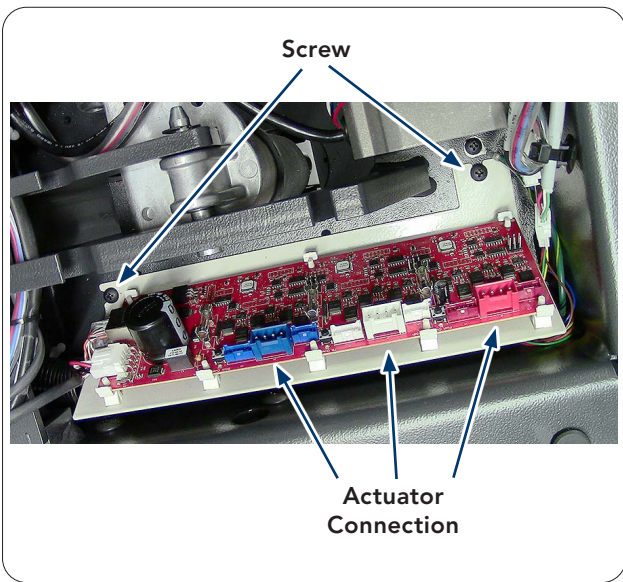
Step 20:
Install twist tie on scissor harness in seat section.



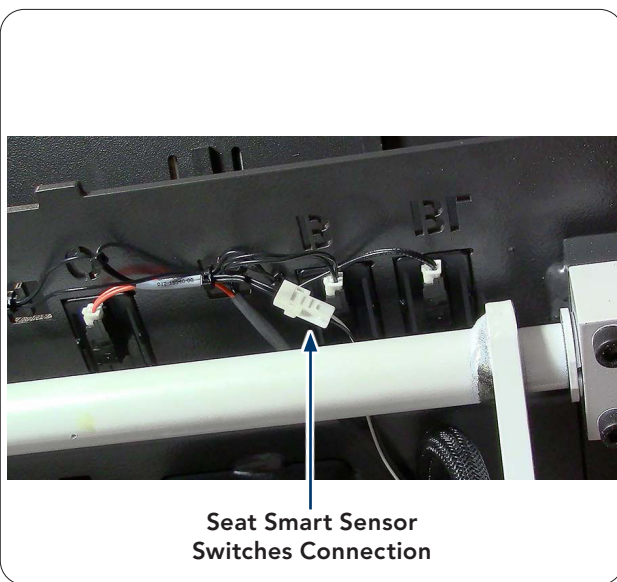
Step 21:
Route ground wire harness behind Motor Control Hub PC Board.
Position Motor Control Hub PC Board and reconnect wire connections J13 and J15 to PC Board.



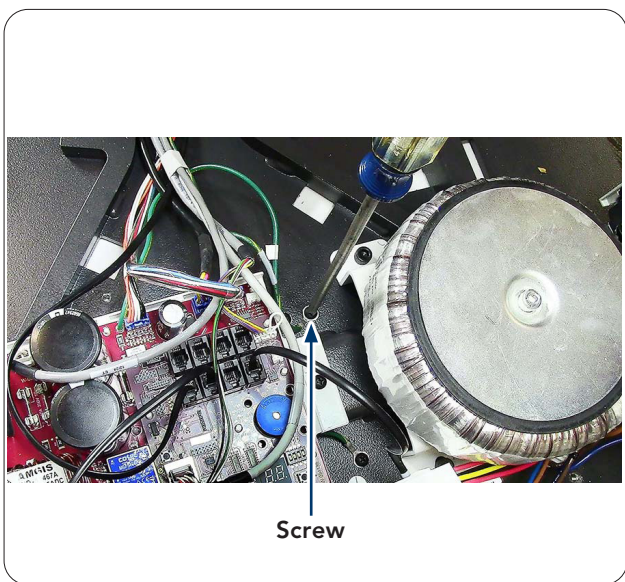
Step 22:
Reconnect ground wire and connections to foot smart sensor switches and pan sensor switch.



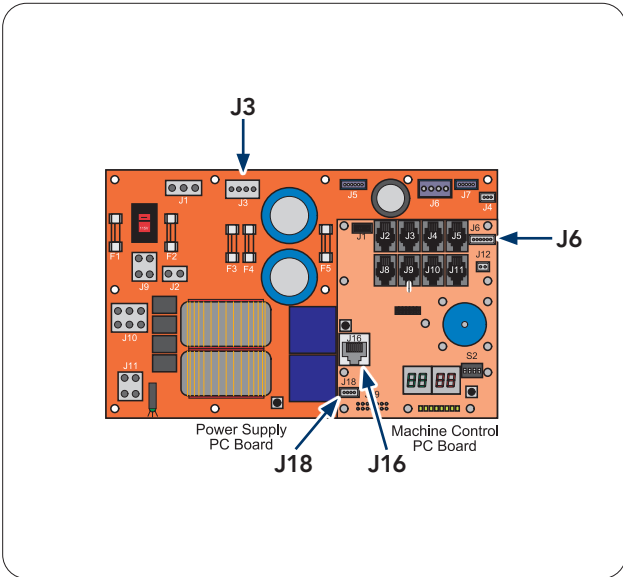
Step 23:
Position mounting bracket and Motor Control Hub PC Board. Secure with two screws. Reconnect wire connections for the Foot, Tilt and Back actuators to PC Board.



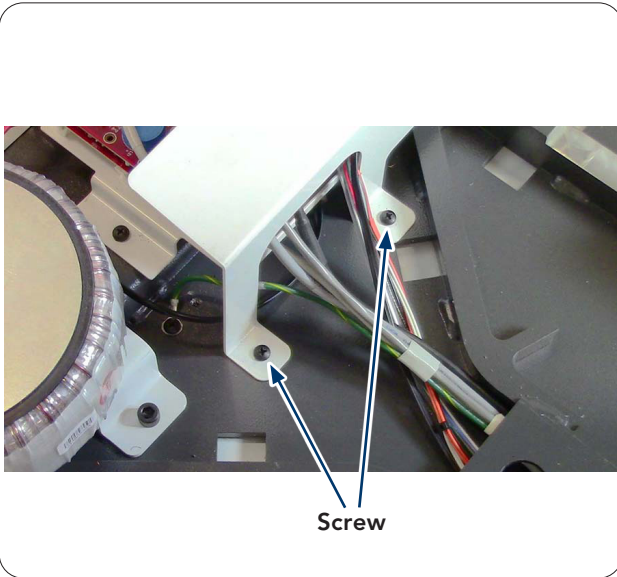
Step 24:
Connect wire connection to seat smart sensor switches under column top.



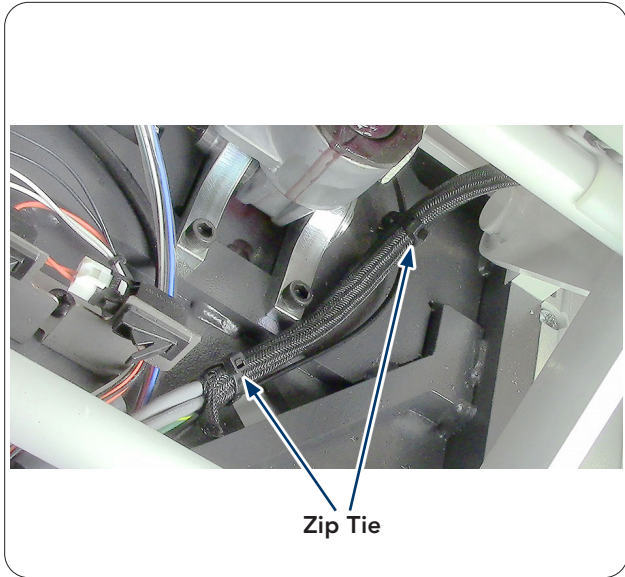
Step 25:
Reattach ground wire to base weldment.



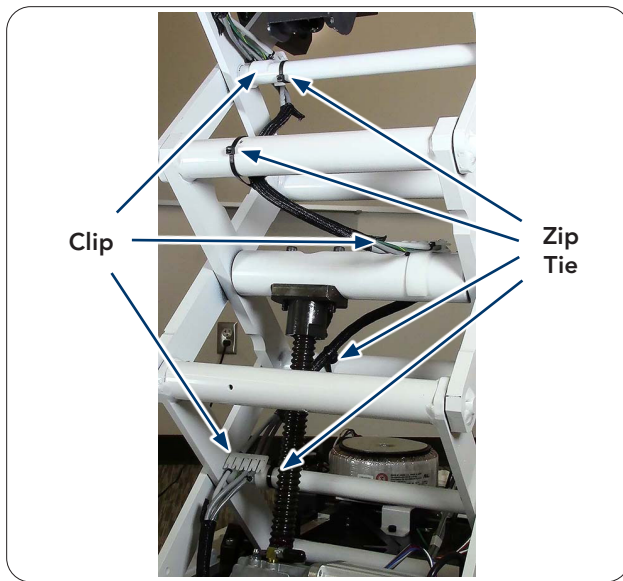
Step 26:
Reconnect wire connections J3, J6, J16 and J18 from Power Supply PC Board and Machine Control PC Board.



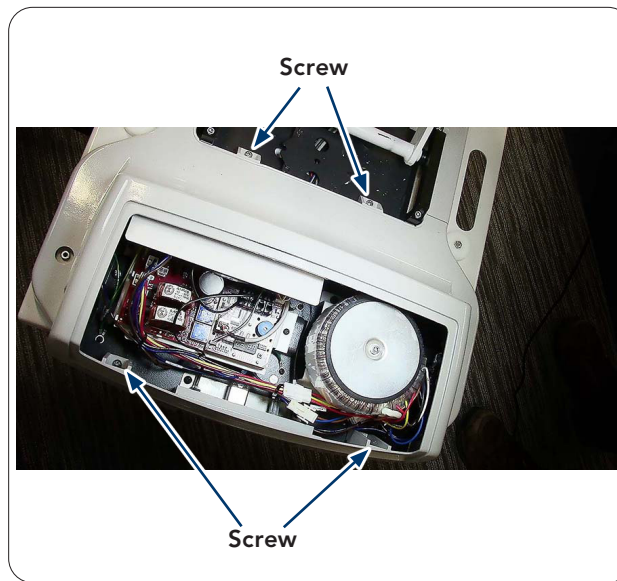
Step 27:
Position fluid ingress bracket and secure with two screws.



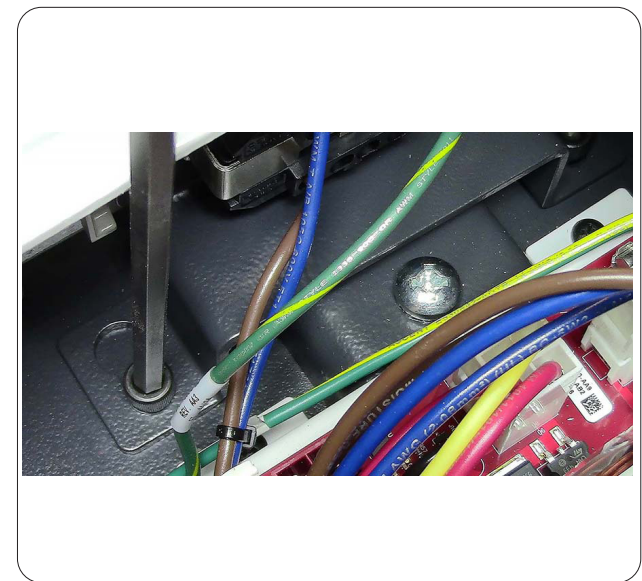
Step 28:
Position harness in base weldment and secure with two zip ties.



Step 29:
Positioning clips as shown and secure in place with zip ties. Secure harness with zip ties.



Step 30:
Position back base casting and secure with four screws.



Step 31:
Position receptacles and tighten screws.

Note

Instructions for the following step can be found at the back of this document.



Equipment Alert

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

Step 32:

- A) Install shrouds.
- B) Install spline weldments and bail.
- C) Install seat plate.
- D) Install cladding.
- E) Perform Calibration Procedure.
- F) Install base cover.
- G) Install seat / back upholstery.

Seat Plate and Base Cover

Seat Plate and Base Cover Removal / Installation

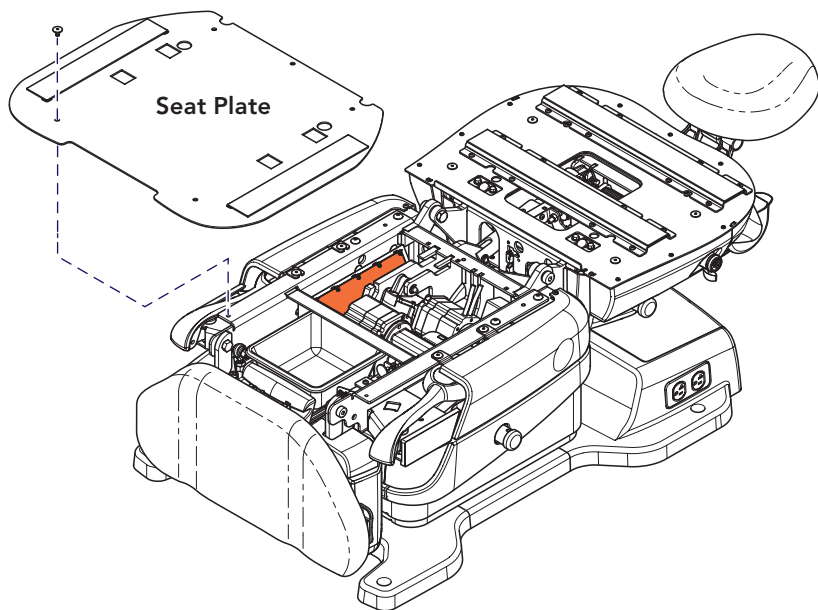


WARNING

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

Removal...

Remove five screws and seat plate.

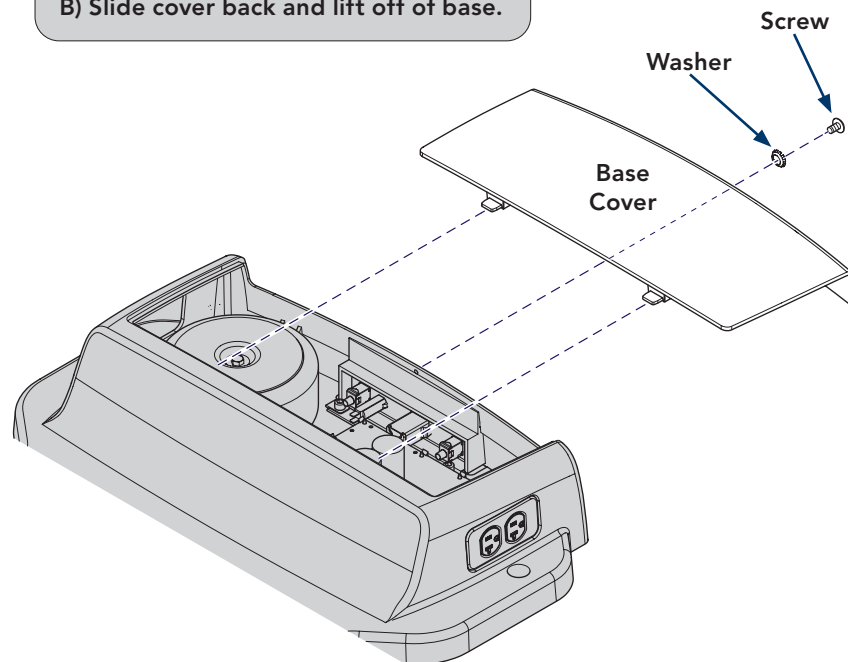


Installation...

Position seat and secure with five screws.

Removal...

- A) Remove one screw and lock washer.
- B) Slide cover back and lift off of base.



Installation...

- A) Align tabs and position cover on base.
- B) Secure with one screw and lock washer.

Cladding

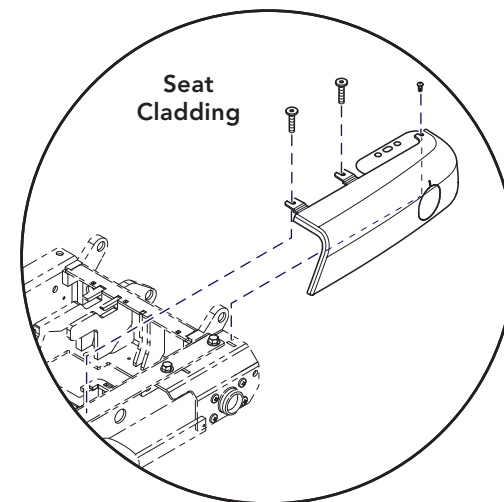
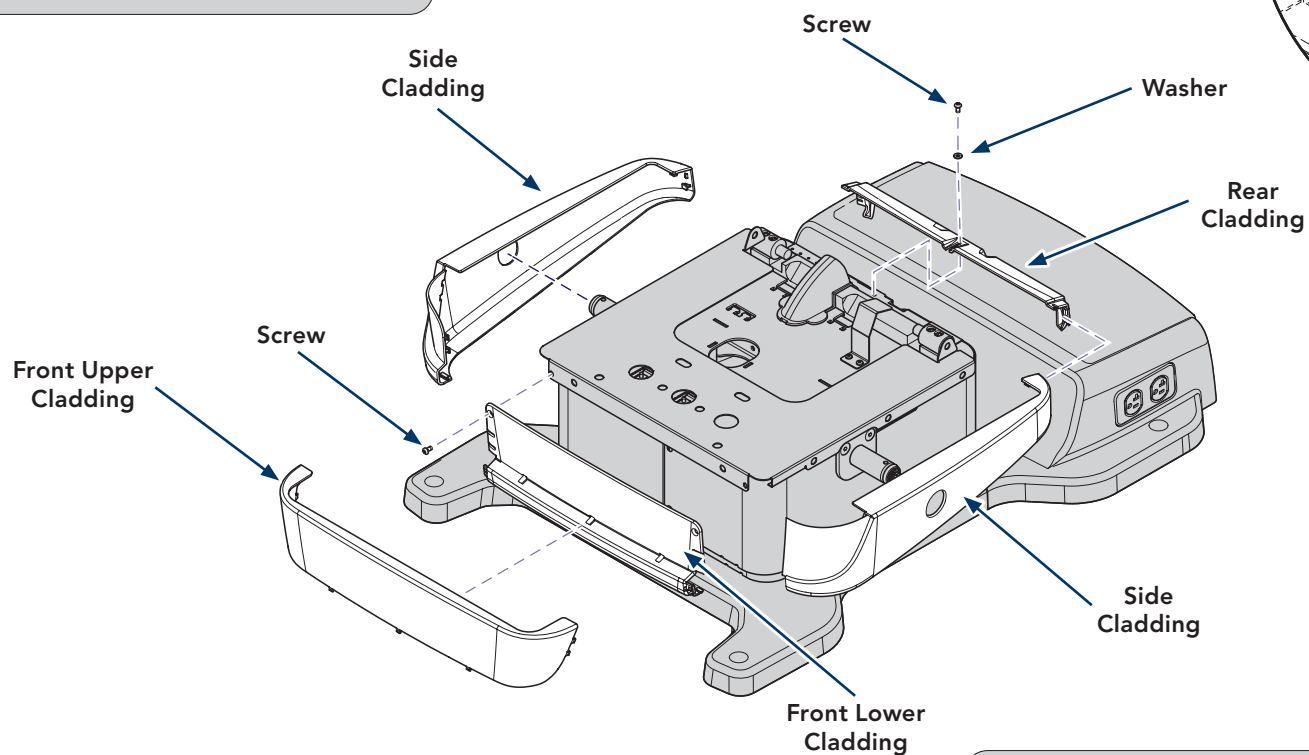
Cladding Removal / Installation

Note

This illustration shows top components removed for clarity only.

To remove Cladding...

- A) Pull outward on the top of front upper cladding and unsnap.
- B) Unsnap side cladding from front lower cladding and rear cladding to remove.
- C) Remove two screws from front lower cladding.
- D) Remove one screw and washer from rear cladding.



To install cladding...

- A) Position rear cladding and secure with washer and screw.
- B) Position front lower cladding and secure with two screws.
- C) Position side cladding and snap into place.
- D) Engage bottom tabs of front upper cladding and snap onto front lower cladding.

Bail and Spline Weldments

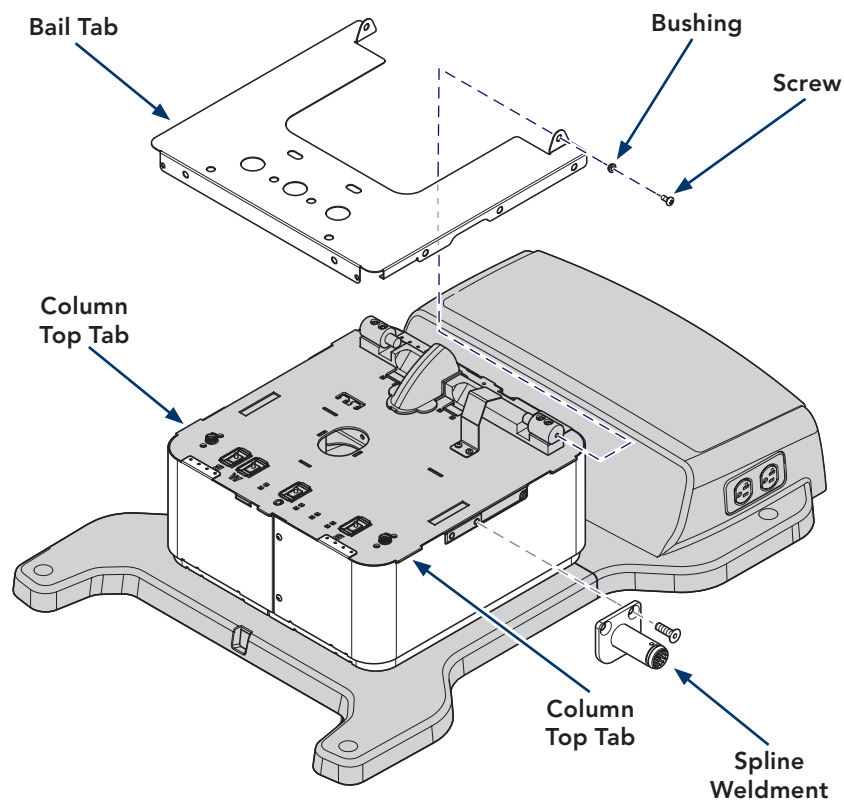
Bail and Spline Weldments Removal / Installation

Note

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

To remove bail and spline weldments...

- A) Remove two screws and two bushings.
- B) Slide bail forward and remove.
- C) Remove two screws and spline weldment from each side of chair.



Equipment Alert

Be sure front bail tabs capture the column top tabs.

To install bail and spline weldments...

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

Shrouds

Shrouds Removal / Installation



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 shrouds...

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

Note

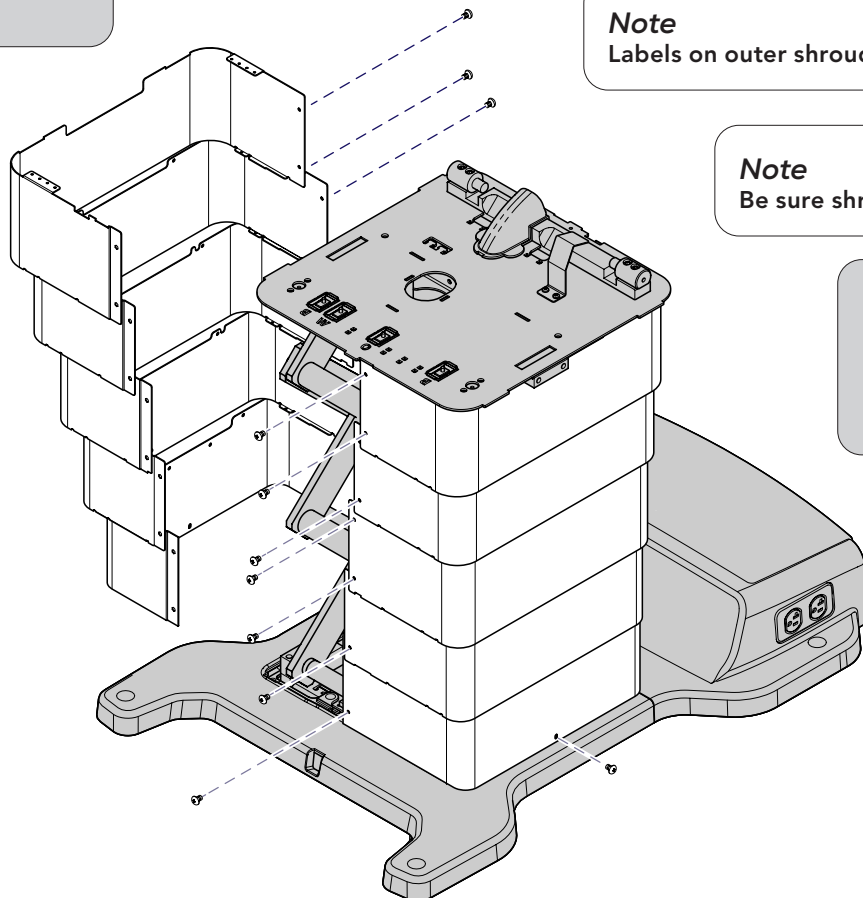
Labels on outer shrouds must be on the back of the chair.

Note

Be sure shroud tabs stack on top of each other.

To install shrouds...

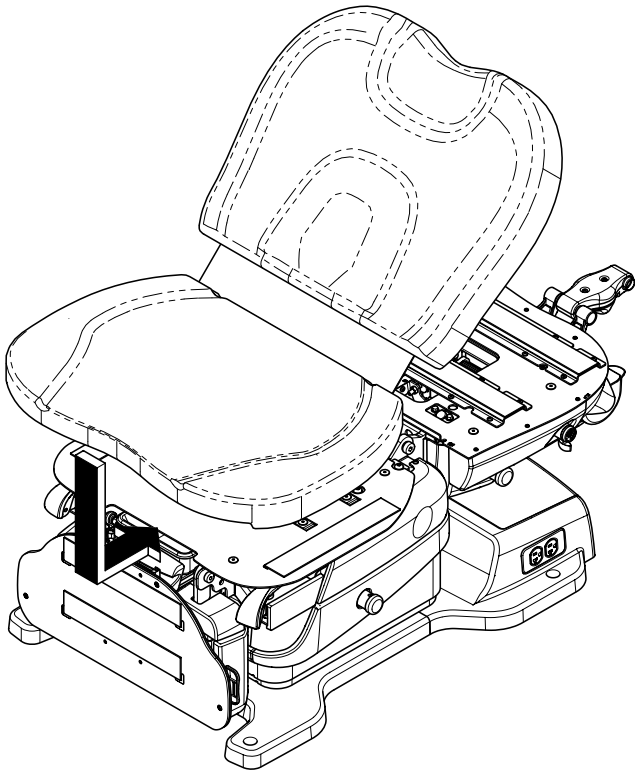
- A) Position inner shrouds and secure with two screws.
- B) Position middle and outer shrouds and secure with screws at both ends.



Seat / Back Upholstery

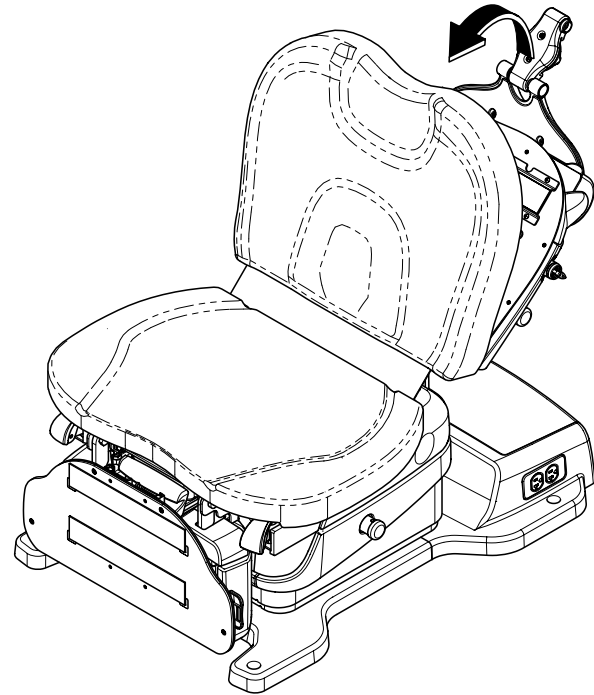
Step 1:

- A) Place the seat section on the chair insuring that the front is up against the seat plate and centered.
- B) Press on seat section firmly to secure.



Step 2:

- A) Raise back section fully up to engage the upholstery to the top of the back plate.
- B) Press on back section firmly to secure.



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”.

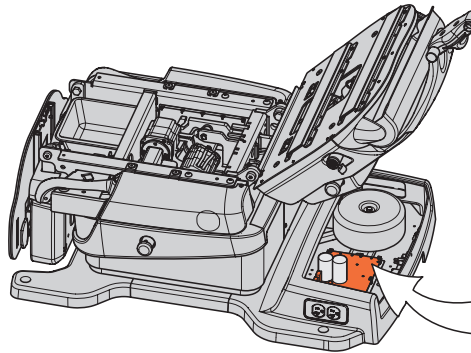
You must calibrate the chair in the following situations:

- 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.



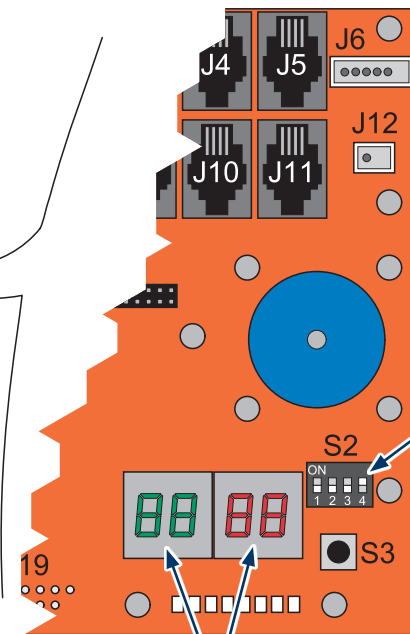
Machine
Control
Board

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.



Switch
Number
Four

Digital
Display