

## Back Actuator [002-1729-0x]



### WARNING

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

### Note

If possible, position chair with back section flat.

### Note

The 631-001 does not have a seat mounting board.

### Step: 1

- Remove seat / back upholstery.
- Remove screws, seat mounting board and seat cover plate.
- Disconnect wire connections J10 and J11 from Motor Control Hub PC Board.



### Equipment Alert

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

### Applies to Models:

630 (-010 thru -013)  
630 (-020 thru -023)  
631-001

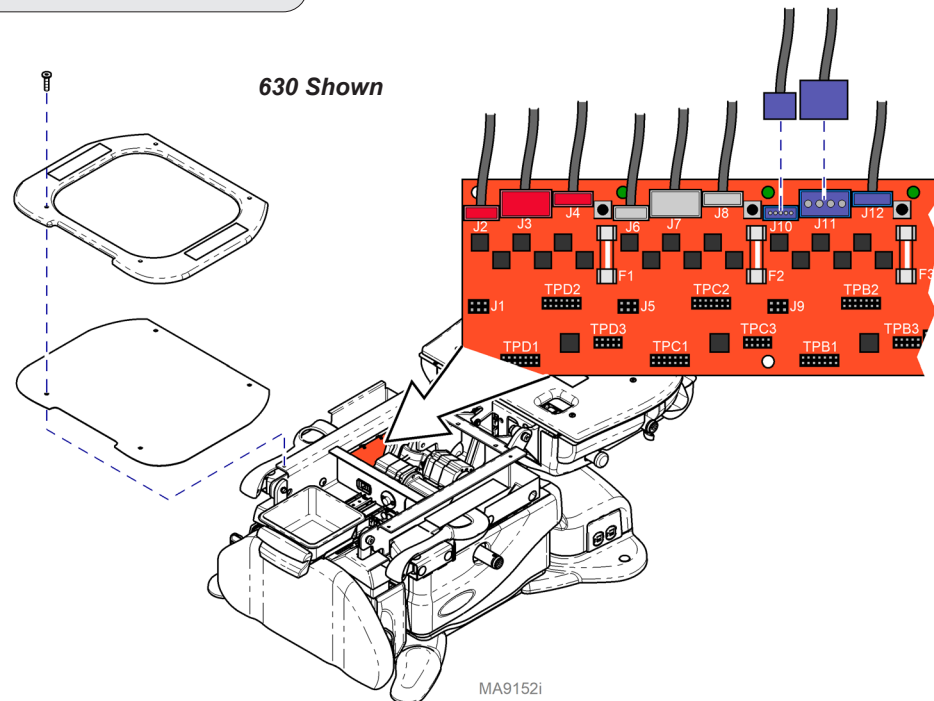
### Special Tools:

none

Language of origin: English



Replace Back Actuator



MA9152i

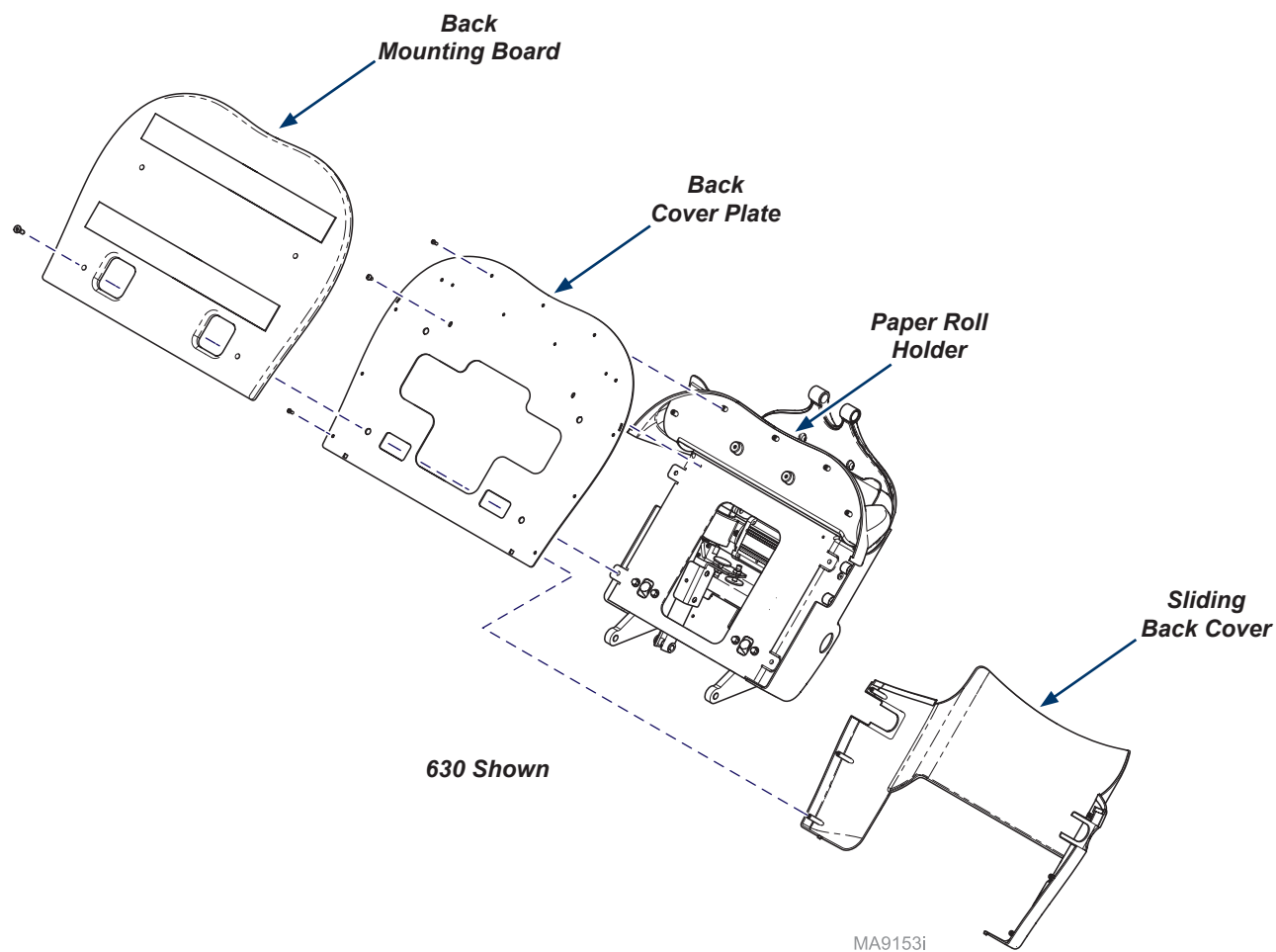
**Note**

The 631-001 does not have a back mounting board.

**Step: 2**

- A) Remove screws and back mounting board.
- B) Remove mounting screws and back cover plate.

**Note:** The sliding back cover and the paper roll holder on 630 models will become loose when screws are removed. The sliding back cover on the 631-001 will not be completely loose when screws are removed. The spline brackets will hold the cover, but allow it to rotate.

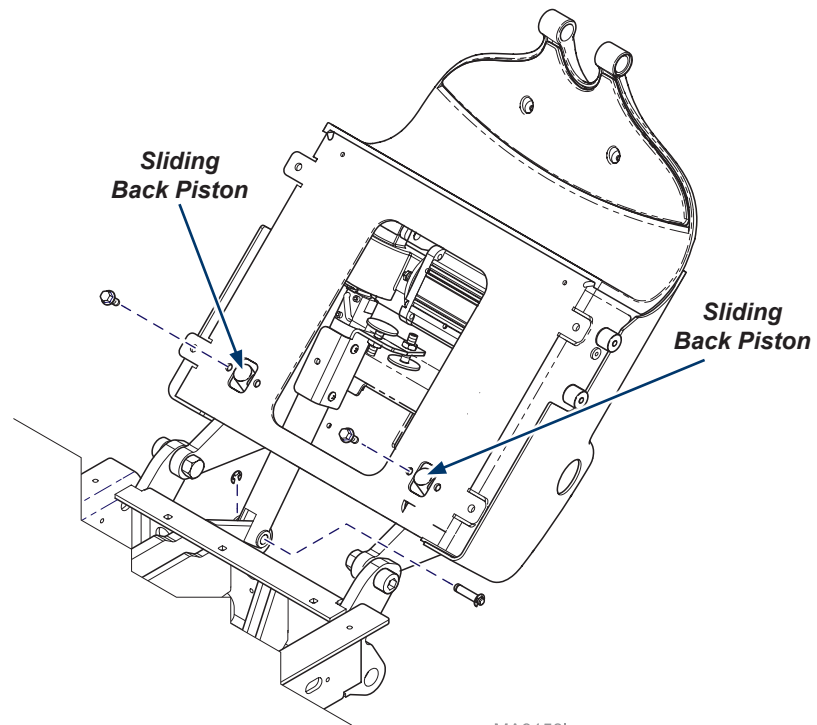


**WARNING**

When sliding back pistons are disconnected, the sliding back weldment will move freely. Use care when handling or serious injury may result.

**Step: 3**

- A) Remove four screws to disconnect sliding back pistons.
- B) Remove e-ring and clevis pin from bottom of actuator.



MA9158i

**WARNING**

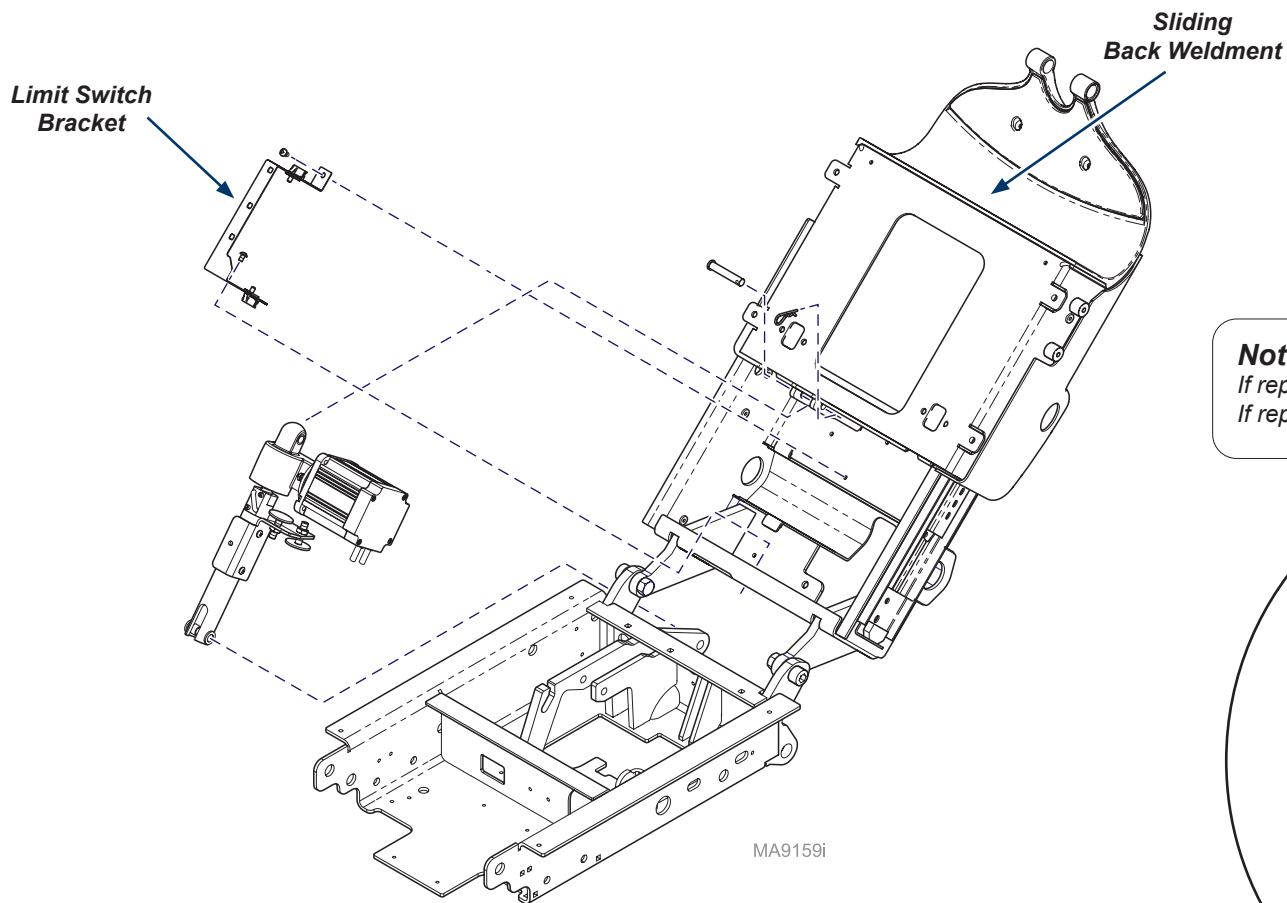
When sliding back pistons are disconnected, the sliding back weldment will move freely. Use care when handling or serious injury may result.

**Note**

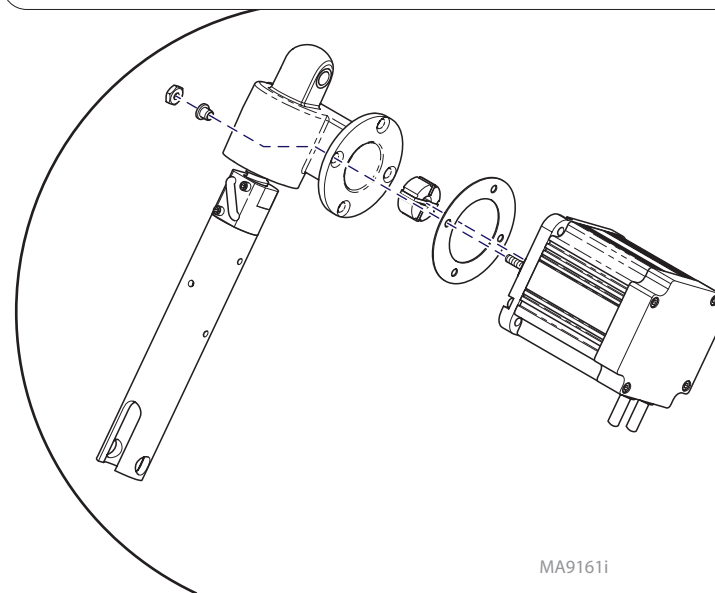
This illustration shows the limit switch bracket removed from back weldment for clarity only.

**Step: 4**

- A) Remove two screws and position limit switch bracket away from actuator.
- B) Remove cotter pin and top clevis pin.
- C) Angle back weldment upward, and remove back actuator.

**Note**

If replacing only the actuator / coupler, refer to the illustration below.  
If replacing complete actuator assembly, go directly to Step 5.



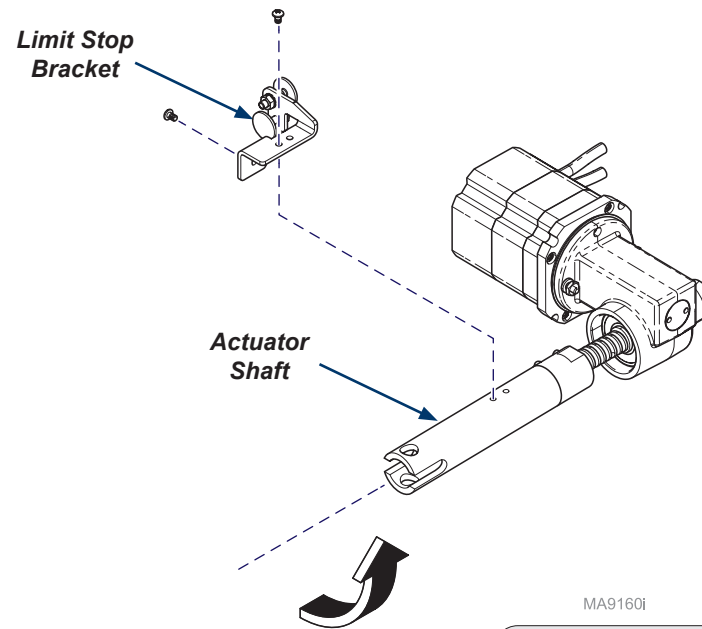
### Step: 5

- A) Remove three screws and limit stop bracket from defective actuator.
- B) Position limit stop bracket on replacement actuator and secure with screws.



### Equipment Alert

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



### Equipment Alert

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

MA9160i

### Step: 6

- A) From full in, spin actuator shaft outward two rotations.
- B) Position actuator into back weldment.
- C) Install clevis pin at top end of actuator and secure with cotter pin.
- D) Install clevis pin at bottom end of the actuator and secure with e-ring.
- E) Position limit switch bracket and secure with two screws.
- F) Connect wire connections to J10 and J11 on Motor Control Hub PC Board, then secure wires with cable ties.
- G) Position sliding back pistons and secure with screws.
- H) Calibrate chair.
- I) Position sliding back cover and paper roll holder, then install back cover plate and back mounting board and secure with screws.
- J) Position seat cover plate, and seat mounting board, then secure with screws.
- K) Install upholstery.

# 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”.

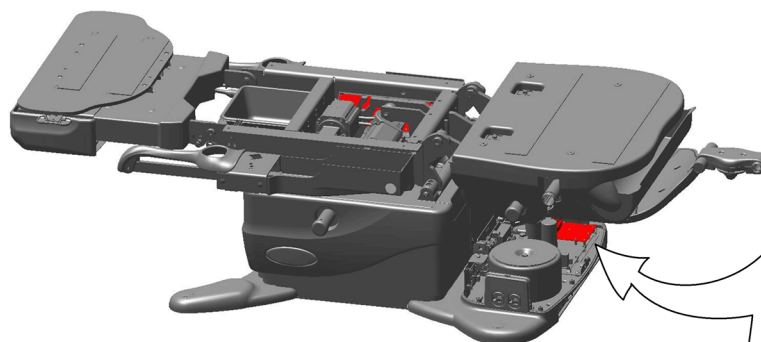
You **must** calibrate the chair in the following situations:

- 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.



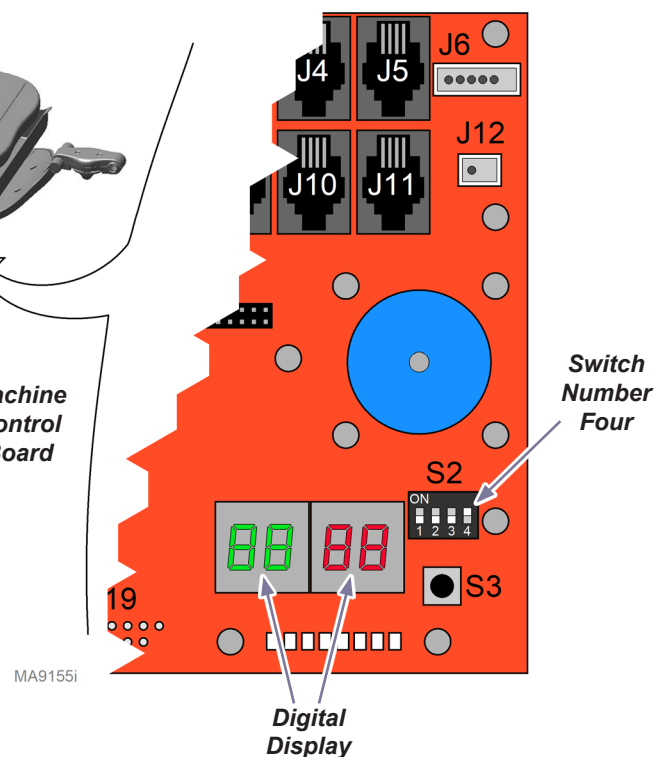
Machine  
Control  
Board

## 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...

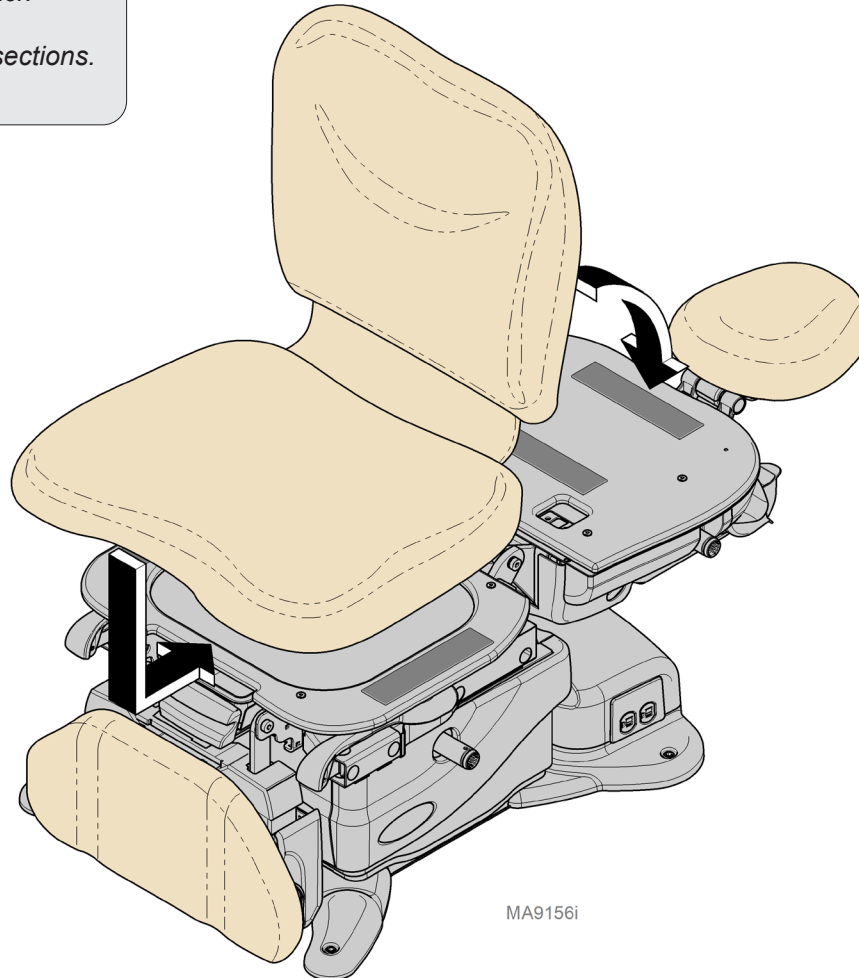
- Slide foot section to highest stowed position.
- Unplug chair power cord.
- When the digital display darkens, move S2 switch number four to ON (up).
- Plug in chair power cord.
- When the digital display darkens, press and release S3 switch.
- When calibration is complete, unplug chair power cord.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



## 630 Models

### **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

**To install seat / back upholstery...**

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

