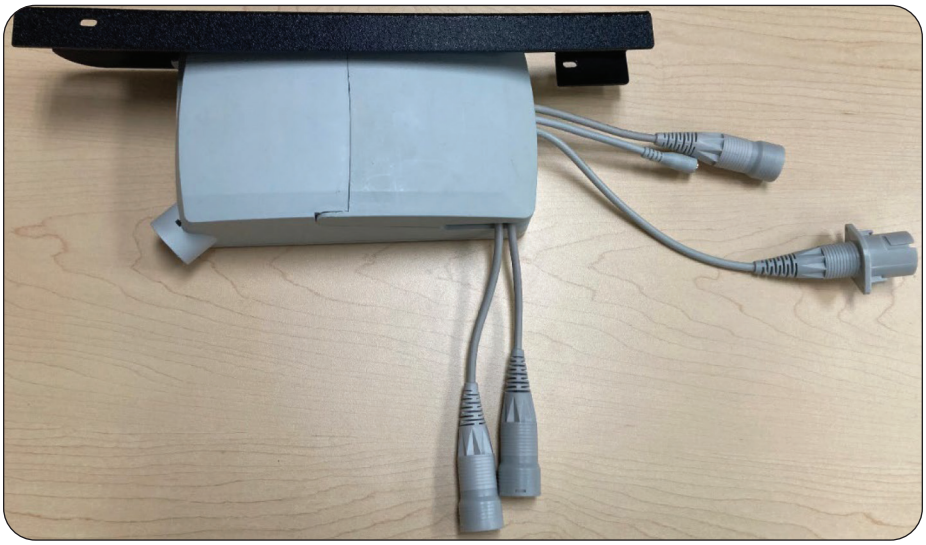
# 3500300 Control Box Replacement
# For Brewer Access FLEX and High-Low Table



| Description | Qty |
|---|---|
| Control Box | 1 |

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**The Brewer Company, LLC**
N88 W13901 Main Street, Suite 100
Menomonee Falls, WI 53051
P 800.558.8777
F 262.251.2332
E customerservice@brewercompany.com
www.brewercompany.com

# 3500300 Control Box Replacement
# For Brewer Access FLEX and High-Low Table

Brewer

### *Tools Required*

1/8" Allen Wrench
3/8" Nut Driver or Socket & Ratchet
1/8" Flat Blade Screwdriver
3/8" Flat Blade Screwdriver
T-20 Torx Wrench
Long Needle Nose Pliers

### *Equipment Required*

Support Device - A support device capable of supporting a load of approximately 125 lbs. plus any safety factor must be used.

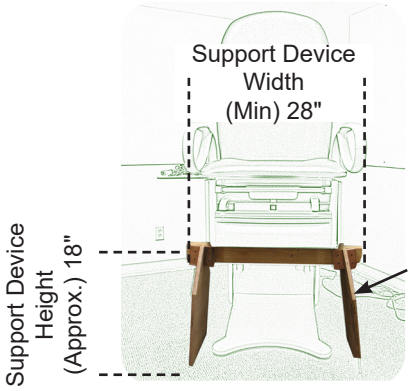
## A Special Note to Repair Personnel

Please read this before proceeding with repair. The approach to repairing the table depends on the age of the table, and the failure situation encountered.

**⚠ WARNING**

**CRUSH HAZARD**

**Failure to support seat section during service could result in death or severe injury.**



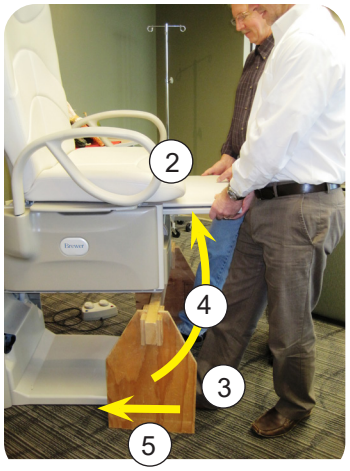

All control box replacement situations require working beneath the front seat section while it is raised. A device capable of supporting a minimum of 125 lbs. must be under the front seat section. Do not rely on the lift actuators alone to support the front seat section when working beneath it.

## About the Actuators

Both the lift actuators and the backrest actuator (on power back models) are “Push Only”; that is, the actuators push the component they are attached to when they extend. They do not pull the component they are attached to when they retract. The actuators retract internally, but there is no solid physical connection - it is the weight of the component that causes it to lower. Therefore, you will have the ability to push the backrest up or lift the seat manually if necessary.

## Lifting the Seat Section

1. Have support device ready for placement beneath seat section.
2. Pull leg extension out approximately 8". Note: do not lift by the small 6" extender if equipped. Lift by the larger main section of the leg extension.
3. Place foot on base of table to prevent table from tipping.
4. Lift in an upward and forward arc.
5. Place support device beneath seat section.




Manually lifting the seat section

## To Ensure a Successful Repair

For successful replacement of the control box it is essential that plugs are pushed all the way into ports until firmly seated, and that both ends of the locking clip are latched in place.

## Determining Which Repair Path to Take

Please make note of the following (3) conditions for the best repair path to take.

### Control Box Screw Access Hole

1. Verify that there is an access hole present. This is only applicable for High-Low table models.
2. If there is no access hole on the High-Low table, please call the Brewer Company 800.558.8777 for Tech Support.


Push top rear pass-through drawer to the right (from a seated patient's perspective).

Location of control box screw access hole

### Seat Function Still Operates

3. If the seat lift and lower does not operate, is the seat stuck up or down?

Note: it may be that the backrest recline and raise function does not operate, but the seat lift and lower function still operates.

### Seat Function does not Operate

Seat stuck up

Seat stuck down

## High-Low Table

1. To position your High-Low Table safely to perform this service replacement, please follow the steps below depending on the product's failure state.

*Note: Please read the following sections on page 2 before proceeding "A Special Note to Repair Personnel", "About the Actuators" and "Lifting the Seat Section".*

**⚠ WARNING**

**CRUSH HAZARD**

**Failure to support seat section during service could result in death or serious injury.**

**⚠ WARNING**

**SHOCK HAZARD**

**Failure to unplug table from wall receptacle during service could result in death or serious injury.**

## High-Low Table

### Seat Operates

A. Plug unit into electrical outlet and turn power on.
B. Raise seat to the full up position.
C. Place support device beneath seat. Refer to A Special Note to Repair Personnel on page 2 for more on the support device.
D. Unplug table from wall receptacle.

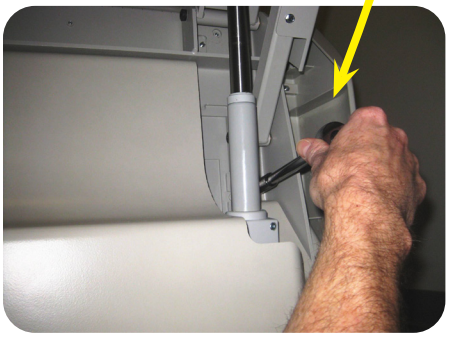
### Seat Does not Operate, Seat Stuck Up

A. Unplug table from wall receptacle.
B. Place support device beneath seat. Refer to A Special Note to Repair Personnel on page 2 for more on the support device.

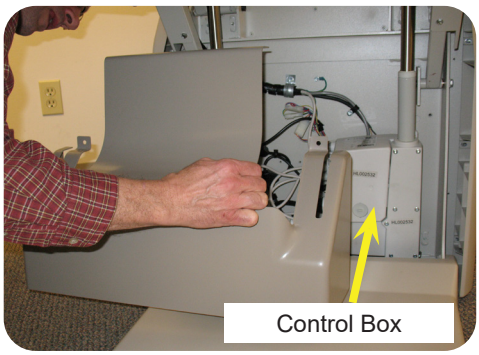
### Seat Does not Operate, Seat Stuck Down

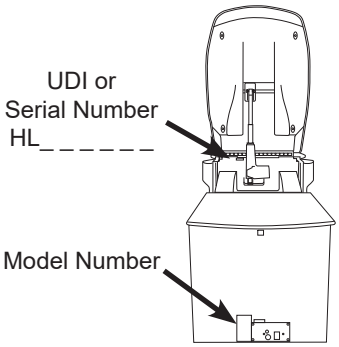
A. Unplug table from wall receptacle.
B. Raise the front seat of the exam table, and place support device beneath seat. Refer to A Special Note to Repair Personnel on page 2 for more on the support device.

2. Remove the two box shroud screws



3. Remove the box shroud and set aside.



4. Once the box shroud is removed, the control box will either be mounted to an actuator or a bracket.
   If it is mounted to the actuator continue with Removing the Control Box Mounted to Actuator below.
   If it is mounted to a bracket go to Removing the Control Box Mounted to Bracket on page 9 for details to replace the control box.

Control Box Mounted to Actuator

Control Box Mounted to Bracket

## Removing the Control Box Mounted to Actuator

1. Push top rear pass-through drawer to the right (from a seated patient's perspective).

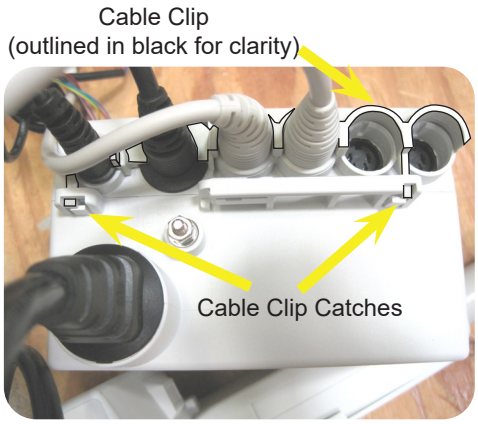
*Note: If the drawer does not move to the right, move to the other side and unscrew the rubber stop located at the end of the rail to remove it.*

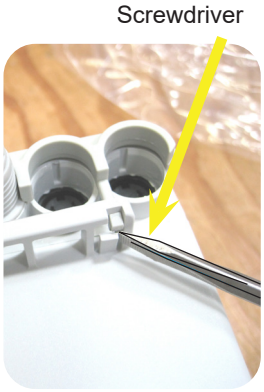

2. Locate the square control box screw access hole on the front of the rear cabinet. This access hole provides access to the screw (T-20) that secures the control box to the actuator.

3. Insert T-20 driver through the access hole to remove the screw.

*Note: Reach around with left hand to pull up on the control box as you loosen the screw. This provides "bite" to the threads which allows for easier removal of the screw. Failure to pull up on the control box will cause screw to spin freely in the hole without backing out.*

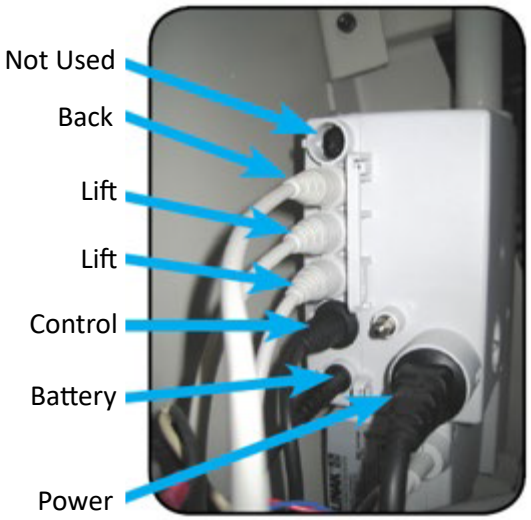
4. Insert a small flat bladed screwdriver into the small gap surrounding the rectangular cable clip catches. Carefully bend the catches forward slightly and push the hook ends of the cable clip downward until they release. Note: when one end of the cable clip is released the other end will twist out easily.



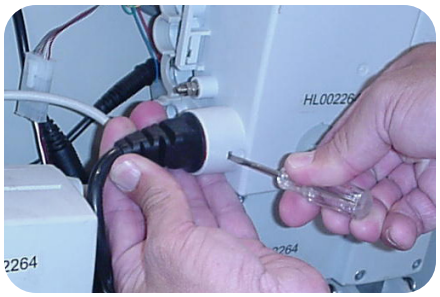



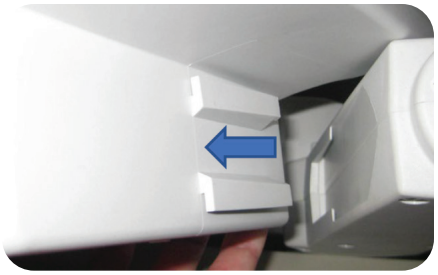

5. Label the cables per the figure to identify their correct location for attachment to the new control box. Disconnect all of the wires from the control box.

*Note: Back and Battery are not used for pneumatic backs which include models 5700/5701/6000/6001.*



6. Pull upward on power cord while pushing tip of small flat bladed screwdriver into power cord locking slot. Power cord will pull out of control box.
7. Pull up on the old control box to slide it off the actuator.
8. Go to Unboxing Control Box and Verifying Cable Rounting Based on Table Model on page 11.

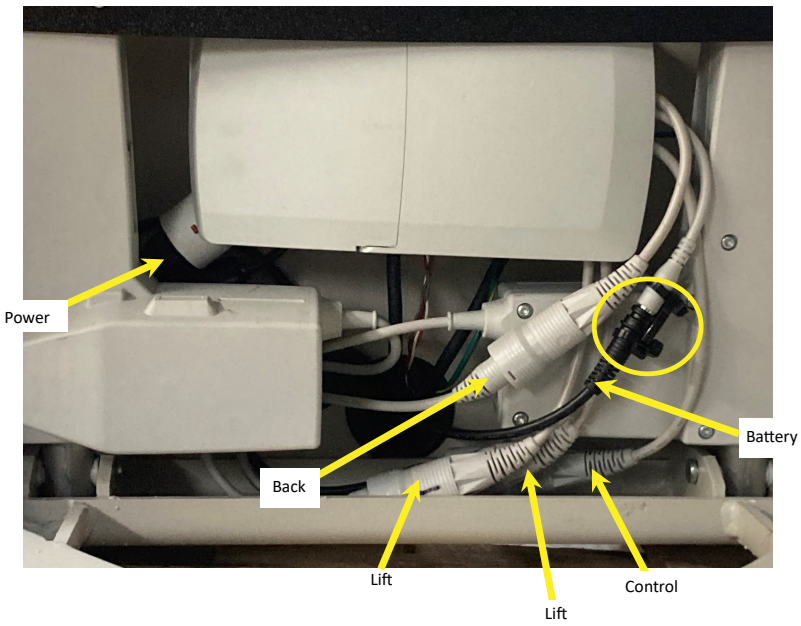




## Removing the Control Box Mounted to Bracket

1. Label the cables per the figure to identify their correct location for attachment to the new control box. Cut the zip ties circled in the figure. Disconnect all of the wires from the control box.

*Note: Back and Battery are not used for pneumatic backs which include models 5700/5701/6000/6001.*




2. To disconnect the actuator/lift cables, use a small flat bladed screwdriver to remove the plastic ring inside the connector. To disconnect the power cable, depress the locking clip with a small flat bladed screwdriver.

3. Push top rear pass-through drawer to the right (from a seated patient's perspective).

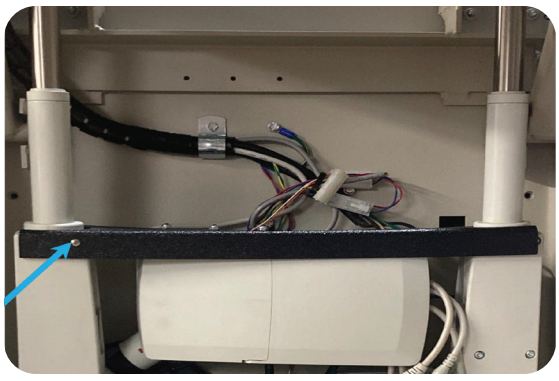
*Note: If the drawer does not move to the right, move to the other side and unscrew the rubber stop located at the end of the rail to remove it.*


4. Locate the square control box screw access hole on the front of the rear cabinet. This access hole provides access to the Phillips screw that secures the control box to the actuator.

5. Insert a Phillips bit through the access hole to remove the screw.

*Note: Reach around with left hand to pull up on the control box as you loosen the screw. This provides "bite" to the threads which allows for easier removal of the screw. Failure to pull up on the control box will cause screw to spin freely in the hole without backing out.*


6. Remove the screw on the front of the bracket. Lift the black bracket up and tip it to remove the control box.

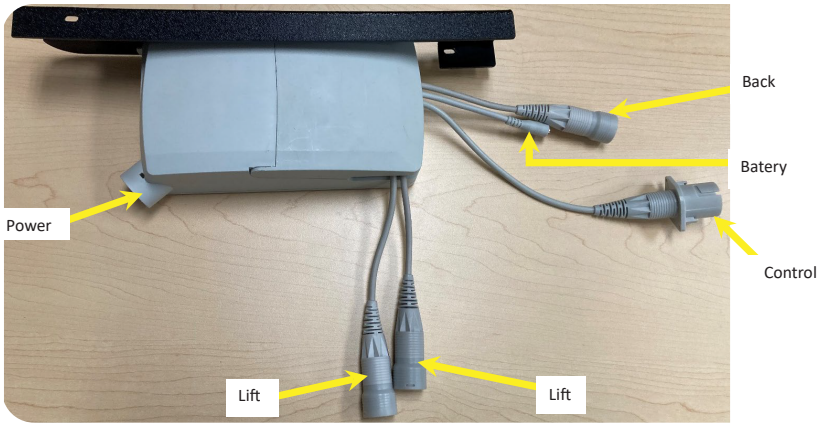


## Unboxing Control Box and Verifying Cable Rounting Based on Table Model

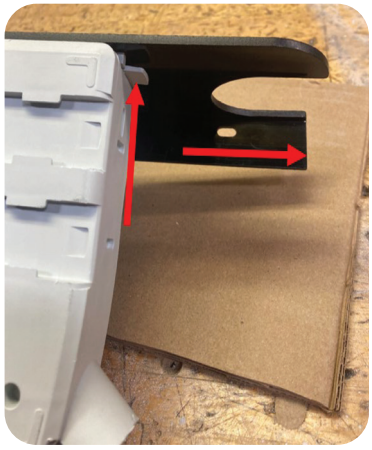
1. Unbox and unwrap the new control box. This unit will be attached to a bracket. If the exam table has a pneumatic back, which includes models 5700/5701/6000/6001, continue below because the control box must be disassembled from the mounting bracket and extra cables removed. If the table has a powered back, which includes models 5800/5801/6500/6501/6800/6801, proceed to Installing the Control Box.

**⚠ WARNING**

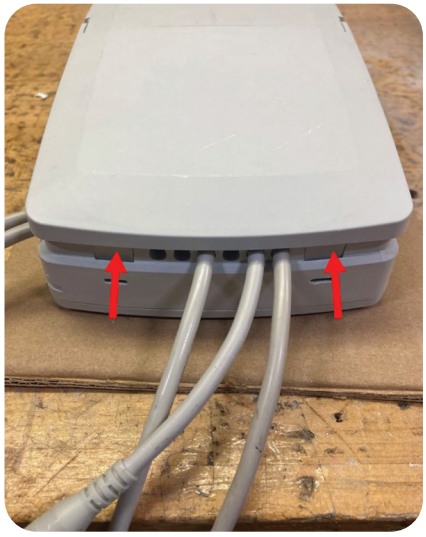
**Leaving unused cables in the control box may lead to permanent damage to the control box.**




2. To remove the control box from the support bracket, push the tab on the control box up and slide the bracket to the right.



3. To open the control box to access the wires, push in the two tabs shown here simultaneously and push the cover up. A tool such as a flat bladed screwdriver may be required to push in the tabs.

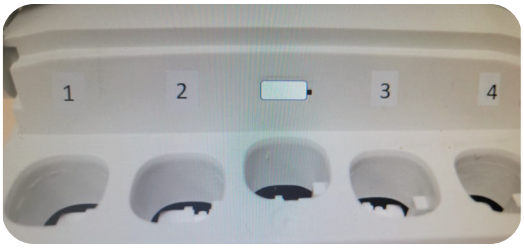


4. Refer to the table below to find your table model to determine the correct cable needs.

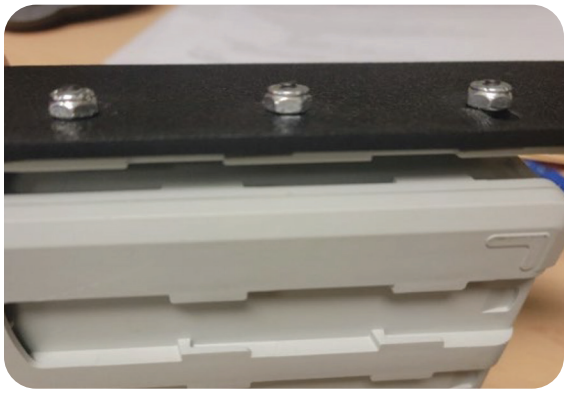
| 6000 / 6001 | | | | | |
|---|---|---|---|---|---|
| **Port 1** | **Port 2** | **Battery** | **Control** | **Port 3** | **Port 4** |
| Lift | Lift | Not used | Yes | Not Used | Not Used |
| **6500 / 6501 / 6800 / 6801** | | | | | |
| **Port 1** | **Port 2** | **Battery** | **Control** | **Port 3** | **Port 4** |
| Lift | Lift | Yes | Yes | Back | Not Used |

6500 / 6501 / 6800 / 6801

6000 / 6001



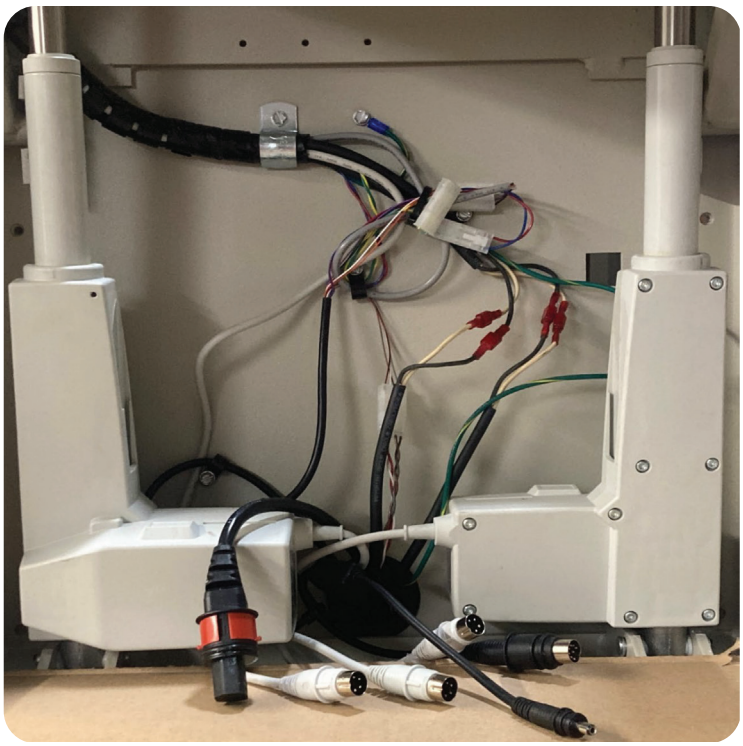

5. Reattach the control box cover and reattach the control box to the support bracket. Align the slots on the control box with the slots on the bracket and slide the bracket to the left. You will hear a click when the control box is locked into the support bracket.



## Installing the Control Box

1. Route the wires as shown.

*Note: The exam table shown has a powered back. Tables with pneumatic backs will have two fewer cables, but routing remains the same.*

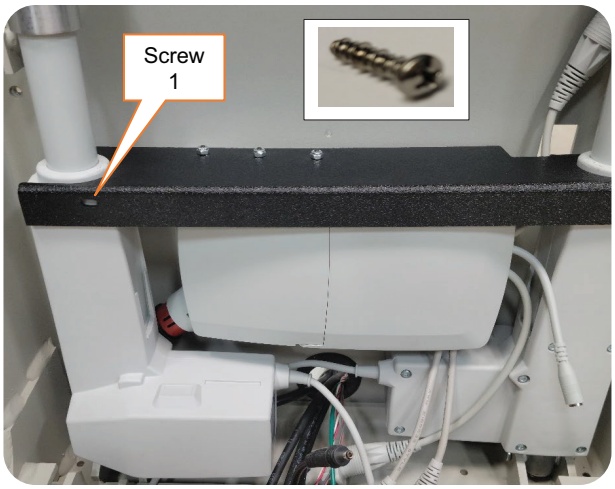


2. Before putting the control box assembly onto the actuators, plug the power cord into the unit as shown.

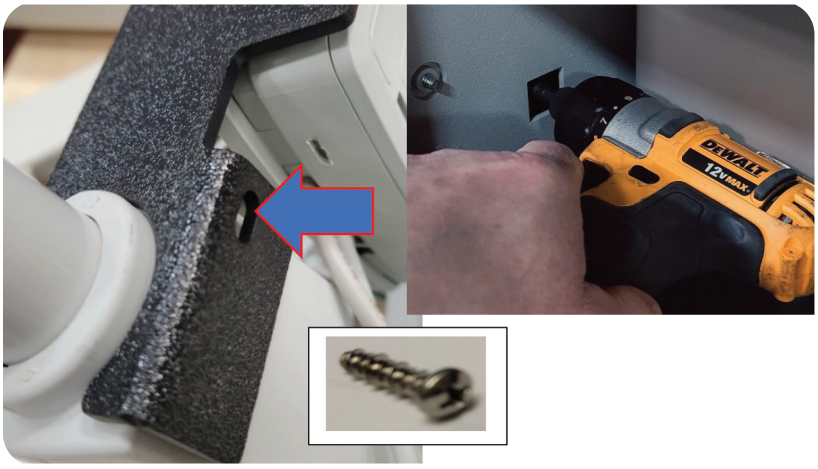
3. To mount the unit, place the right side around the actuator shaft. With the right side started, place the left side around the other actuator. Refer to photo for the correct orientation. Insert one screw into the front of the control box as shown.

*Note: You should have two small screws in a bag attached to your bracket. The screws are needed to secure the bracket in place.*

*Note: Do not over tighten screws. Bracket should remain loose.*

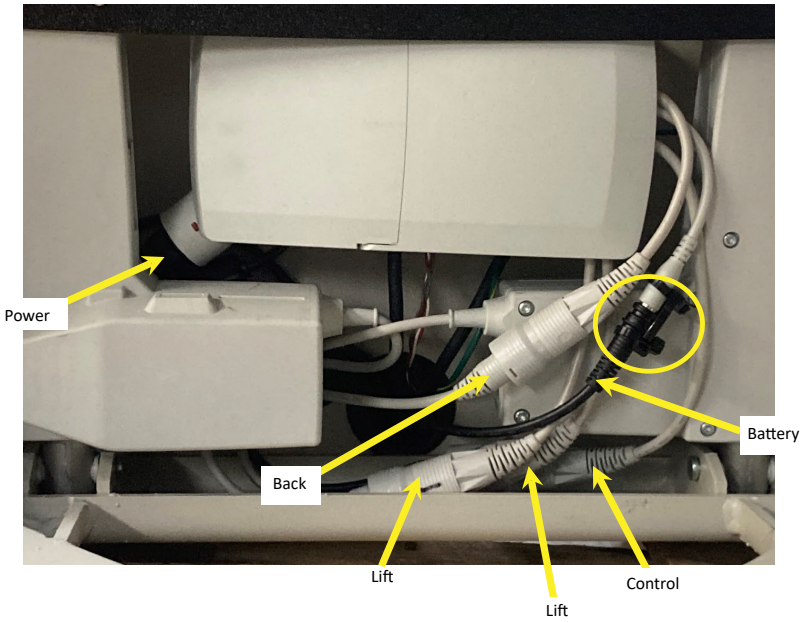



4. Using the second screw provided and a Phillips bit, insert the screw into the back of the control box. Work through the access hole going through the bracket and into the actuator.




5. When connecting the actuator/lift cables, you will need to use a small screwdriver and remove the plastic ring inside the connector. Slide the ring over the mating cable. Once the two cables are together, insert the ring back into the connector. The tab on the ring should click into the slot in the connector.

6. Install the labeled cables to the control box as shown. The battery cables (circled) need to be zip tied together to ensure they do not disconnect. See the following step for directions on how to zip tie the battery cables together.




7. If you have a battery cable, connect it and use three tie wraps as shown to secure the cables together.

*Note: Manage cables using the provided tie wraps to secure cables from hitting the shroud when the table is in its lower position.*

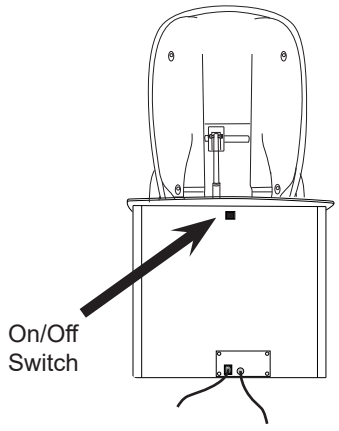
8. Verify the wiring is routed as shown here to prevent cables and wires from getting damaged.

9. Make sure all tools, unused hardware and parts are cleared from table area.
10. Remove support device.
11. Plug table in.
12. Make sure on/off switch at back of table is turned on.

13. Test all functions on the foot control.

**NOTICE**

- If backrest is reclined it will contact the rear cabinet as the seat is lowered causing the seat to stop further downward travel. Raise backrest and resume lowering the seat.
- If seat is lowered the backrest will contact the rear cabinet as it is being reclined stopping further travel of the backrest. Raise seat to allow backrest to clear rear cabinet and resume backrest recline.




14. Raise seat to the full up position.
15. Unplug table.
16. Place support device beneath seat section.
17. Replace box shroud and secure with screws.
18. Plug table in.
19. Remove support device.
20. Control box replacement is complete.

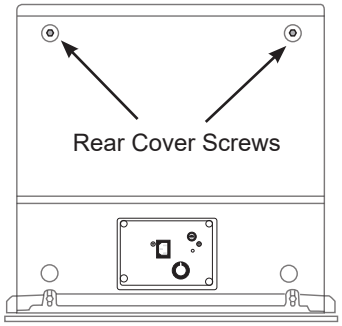
If table is still inoperative please call the Brewer Company 800.558.8777 for Tech Support

## FLEX Table

**WARNING**

**Shock Hazard**
Disconnect power by removing plug from the power outlet before replacing control box.

1. Remove the (2) screws that secure the rear cover.
2. Remove the rear cover by tipping the top of the shroud away from the table and lifting up.
3. Swing the cover to the right using caution to not pull on the cabling.




Cover Screw Location

4. Once the rear cover is removed, the control box will either be mounted to an actuator or a bracket.
   If it is mounted to the actuator continue with Removing the Control Box Mounted to Actuator below.
   If it is mounted to a bracket go to Removing the Control Box Mounted to Bracket on page 20 for details to replace the control box.

***NOTICE***

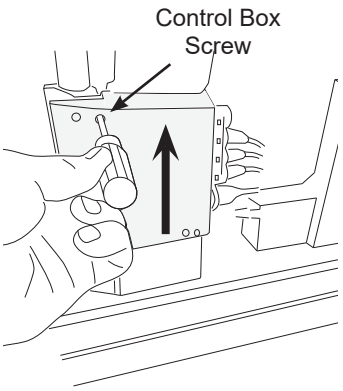
The pictures below are not representative of the view upon opening the rear cover. Rather, they demonstrate the difference between the two methods of mounting the control box and actuators.

Control Box Mounted to Actuator

Control Box Mounted to Bracket

## Removing the Control Box Mounted to Actuator

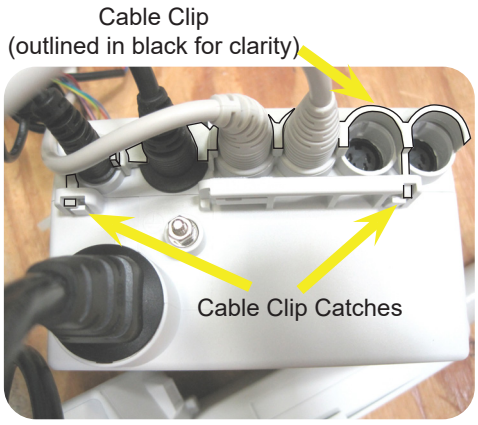
1. Apply upward pressure on the control box while unscrewing the control box securing screw.

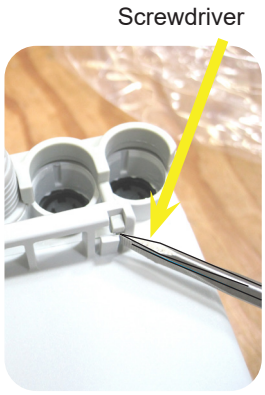



Control Box Screw Location

2. Insert a small flat bladed screwdriver into the small gap surrounding the rectangular cable clip catches. Carefully bend the catches forward slightly and push the hook ends of the cable clip downward until they release.

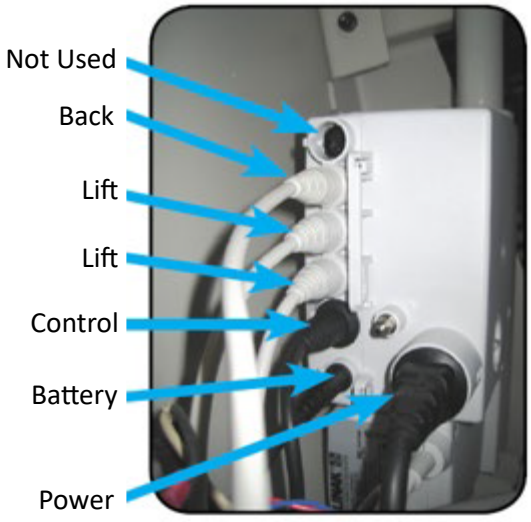
*Note: When one end of the cable clip is released the other end will twist out easily.*



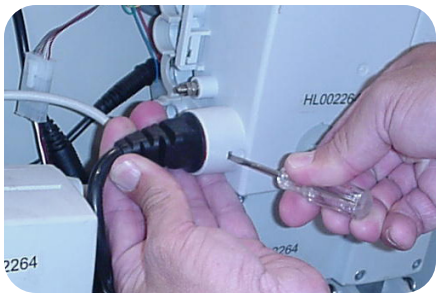



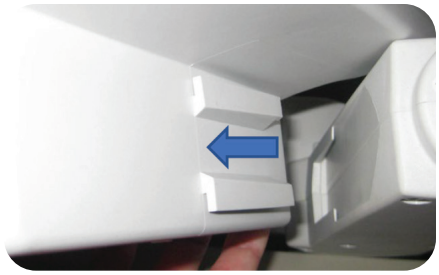

3. Label the cables per the figure to identify their correct location for attachment to the new control box. Disconnect all of the wires from the control box.

*Note: Back and Battery are not used for pneumatic backs which include models 5700/5701.*



4. Pull upward on power cord while pushing tip of small flat bladed screwdriver into power cord locking slot. Power cord will pull out of control box.
5. Pull up on the old control box to slide it off the actuator.
6. Go to Unboxing Control Box and Verifying Cable Rounting Based on Table Model on page 21.

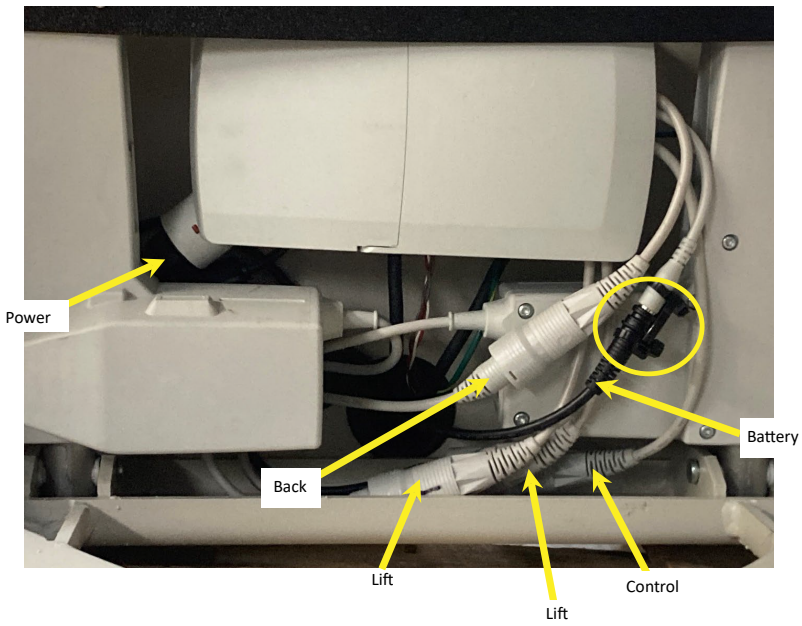




## Removing the Control Box Mounted to Bracket

1. Label the cables per the figure to identify their correct location for attachment to the new control box. Cut the zip ties circled in the figure. Disconnect all of the wires from the control box.

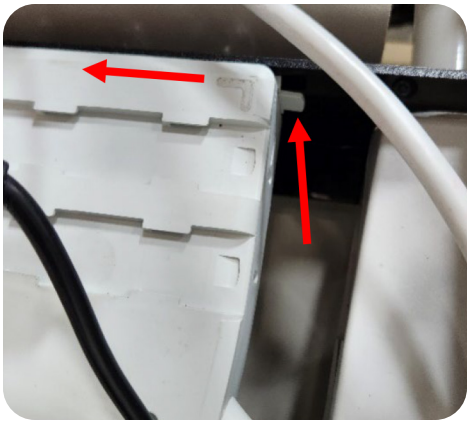
*Note: Back and Battery are not used for pneumatic backs which include models 5700/5701.*




To disconnect the actuator/lift cables, use a small flat bladed screwdriver to remove the plastic ring inside the connector. To disconnect the power cable, depress the locking clip with a small flat bladed screwdriver.

2. To remove the fully disconnected control box from the mounting bracket, depress and hold the tab. Then, slide the control box to the left and down to release.

*Note: If already installed, the black mounting bracket does not need to be removed from the table to replace the control box. New control box can be re-clipped onto the existing mounting bracket. In that case, the mounting bracket and hardware that come with the service kit can be discarded. You can also disregard steps for installing the mounting bracket in the next section.*

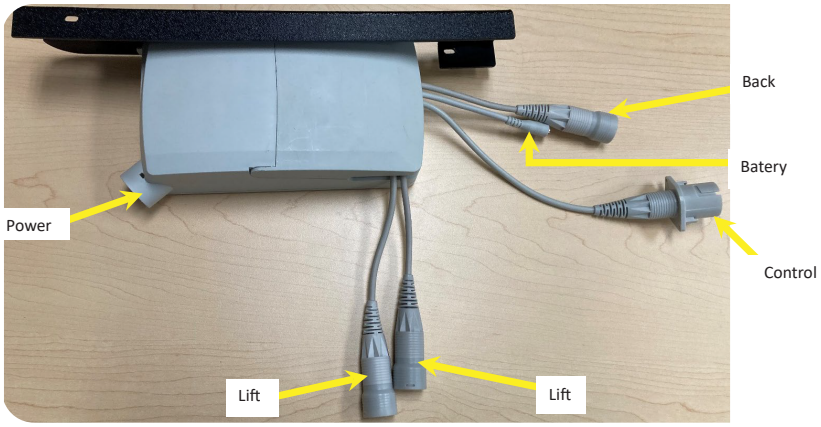


## Unboxing Control Box and Verifying Cable Rounting Based on Table Model

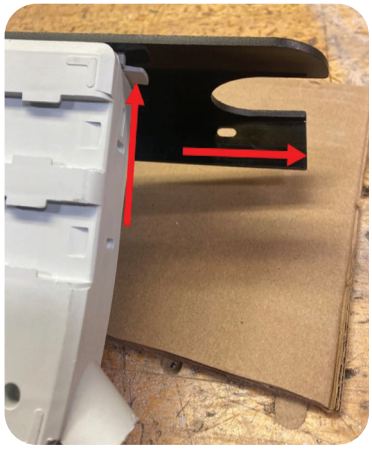
1. Unbox and unwrap the new control box. This unit will be attached to a bracket. If the exam table has a pneumatic back, which includes models 5700/5701, continue below because the control box must be disassembled from the mounting bracket and extra cables removed. If the table has a powered back, which includes models 5800/5801, proceed to Installing the Control Box.

**⚠ WARNING**

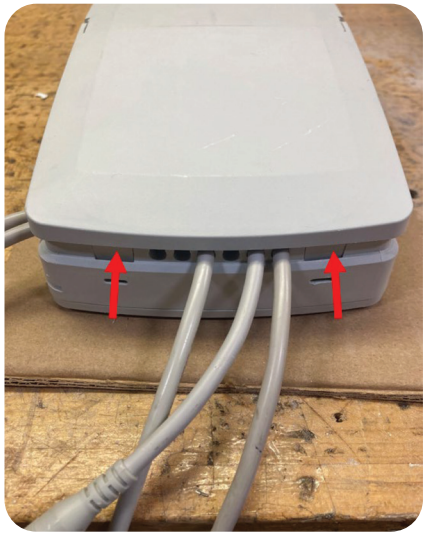
**Leaving unused cables in the control box may lead to permanent damage to the control box.**




2. To remove the control box from the support bracket, push the tab on the control box up and slide the bracket to the right.



3. To open the control box to access the wires, push in the two tabs shown here simultaneously and push the cover up. A tool such as a flat bladed screwdriver may be required to push in the tabs.

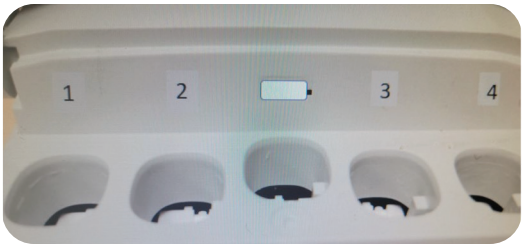


4. Refer to the table below to find your table model to determine the correct cable needs.

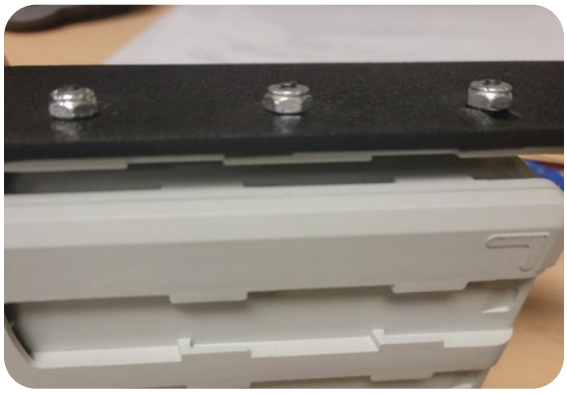
| 5700 / 5701 | | | | | |
|---|---|---|---|---|---|
| **Port 1** | **Port 2** | **Battery** | **Control** | **Port 3** | **Port 4** |
| Lift | Lift | Not used | Yes | Not Used | Not Used |
| **5800 / 5801** | | | | | |
| **Port 1** | **Port 2** | **Battery** | **Control** | **Port 3** | **Port 4** |
| Lift | Lift | Yes | Yes | Back | Not Used |

5800 / 5801

5700 / 5701



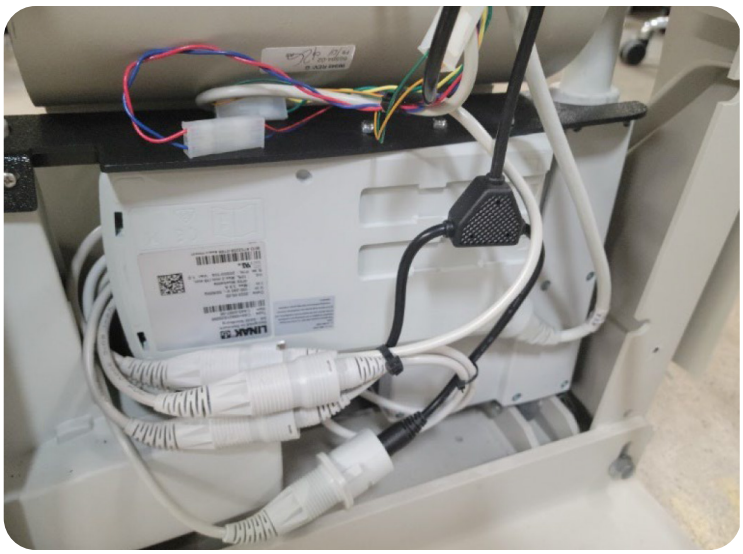

5. Reattach the control box cover and reattach the control box to the support bracket. Align the slots on the control box with the slots on the bracket and slide the bracket to the left. You will hear a click when the control box is locked into the support bracket.



## Installing the Control Box

1. Route the wires as shown.

*Note: The exam table shown has a powered back. Tables with pneumatic backs will have two fewer cables, but routing remains the same.*

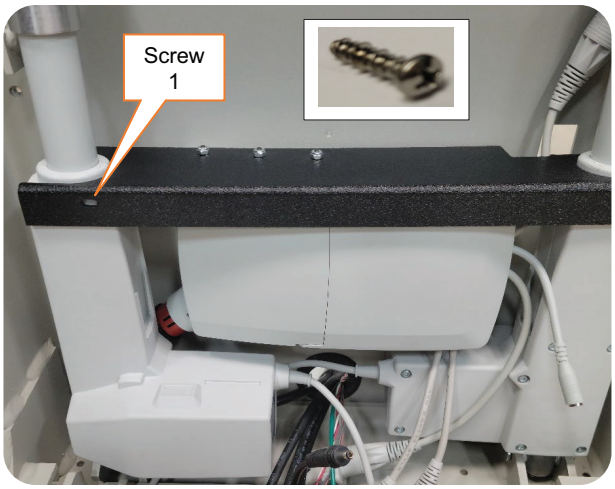


2. Before putting the control box assembly onto the actuators, plug the power cord into the unit as shown.

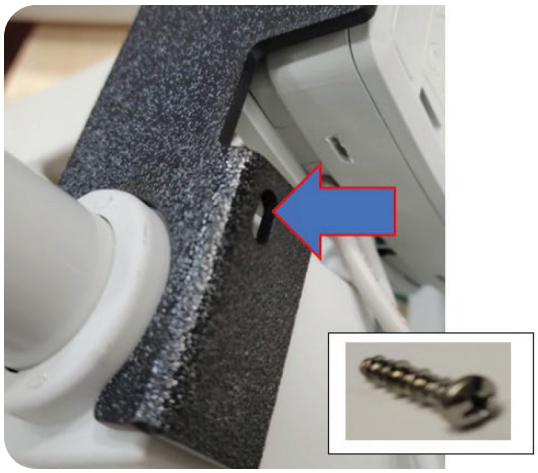
3. To mount the unit, place the right side around the actuator shaft. With the right side started, place the left side around the other actuator. Refer to photo for the correct orientation. Insert one screw into the front of the control box as shown.

*Note: You should have two small screws in a bag attached to your bracket. The screws are needed to secure the bracket in place.*

*Note: Do not over tighten screws. Bracket should remain loose.*

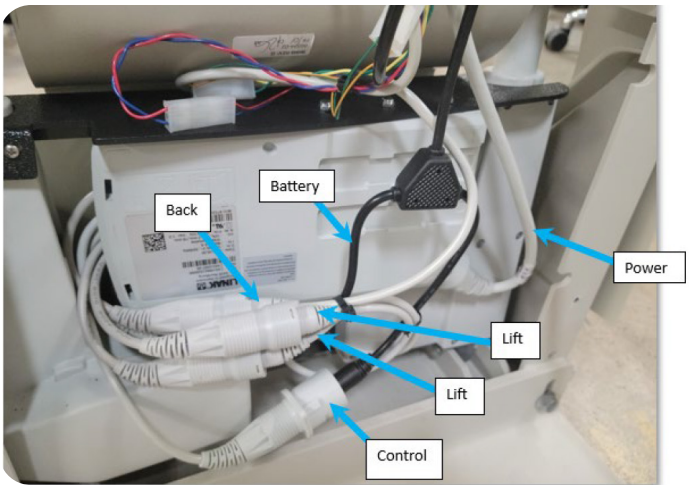



4. Using the second screw provided and a Phillips bit, insert the screw into the back of the control box. Work through the access hole going through the bracket and into the actuator.



5. When connecting the actuator/lift cables, you will need to use a small screwdriver and remove the plastic ring inside the connector. Slide the ring over the mating cable. Once the two cables are together, insert the ring back into the connector. The tab on the ring should click into the slot in the connector.

6. Install the labeled cables to the control box as shown. The battery cables need to be zip tied together to ensure they do not disconnect. See the following step for directions on how to zip tie the battery cables together.




7. If you have a battery cable, connect it and use three tie wraps as shown to secure the cables together.

*Note: Manage cables using the provided tie wraps to secure cables from hitting the shroud when the table is in its lower position.*

8. Verify the wiring is routed as shown here to prevent cables and wires from getting damaged.
9. Make sure all tools, unused hardware and parts are cleared from table area.
10. Remove support device.
11. Plug table in.

12. Make sure that all protective shrouds and covers are in place.
13. Test all functions on the foot control.

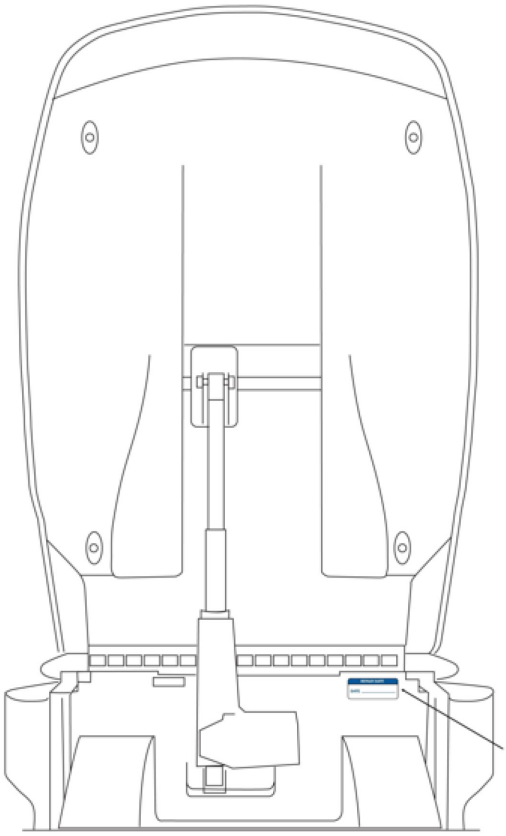
**NOTICE**

- If backrest is reclined it will contact the limit switch on the top shroud as the seat is lowered causing the seat to stop further downward travel. Raise backrest and resume lowering the seat.

14. For warranty repairs, fill out the **Brewer High-Low and Flex Exam Table Inspection Checklist.**

If table is still inoperative please call the Brewer Company 800.558.8777 for Tech Support

## Final Repair Step – All Tables



For seamless serviceability in the future, mark the date of replacement on the supplied “Repair Date” sticker and attach it to the right side of the hinge behind the seat, as shown in the drawing.