

HQ HIGHRISE®

Installation and Operation



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Contents of the HQ HighRise™ kit

The HQ HighRise works with the straight-leg HQ Studio Frame and HQ Fusion Frame systems. Be sure to verify that you have the straight-leg frames and not the slanted legs on your frame.

Item	Part Number(s)	Quantity	Photo
A. actuators with cable	QT10800	6 (<i>labeled 1-6</i>)	
B. saddle brackets	QT10817	6	
C. top-left brackets	QT10815	6	
D. top-right brackets	QT10816	6	
E. extension cables of different lengths	QT20110-170 (#5) QT20110-146 (#6) QT20110-113 (#4) QT20110-65 (#3)	4 (<i>labeled 3-6</i>)	
F. controller with mounting plate	QT20105	1	

Item	Part Number(s)	Quantity	Photo
G. power supply	QT20110	1	
H. power cord	QM20277	1	
I. cable ties	not applicable	18	
J. adhesive tie-wrap pads	not applicable	12	
K. fir-tree plugs	not applicable	4	
L. cable sheath	not applicable	2	
M. M6 x 55mm screws	QT10813	6	

Item	Part Number(s)	Quantity	Photo
N. M6 x 50mm screws	QT10819	6	
O. M6 x 35mm screws	QT10812	6	
P. M6 x 16mm screws	QT10811	24	
Q. wireless key fob	QT20108	1	



IMPORTANT: The key fob has been synchronized with your controller. It will not work with another HQ HighRise controller.

Tools required

- Screwdrivers: Phillips screwdriver and flat-blade screwdriver
- Small, adjustable wrench
- 5mm hex wrench, or if available, a 5mm hex-head drill bit mounted in a cordless drill
- Level (*optional*)
- Isopropyl alcohol to wipe the frame before attaching adhesive tie-wrap pads

Installation

To prepare the frame legs for the HQ HighRise

1. Lower the frame to its lowest position.



IMPORTANT: Before proceeding, make sure the frame is level from front to back and from side to side. Use a spirit, or bubble, level if you have one available. If you need to adjust the leveling feet on the frame, use the 17/13/16mm wrench that came with your frame.

2. Remove the frame's leg latches. Use a #3 hex wrench and an adjustable wrench (or 5/16-inch socket wrench) to remove all of the leg latches.



CAUTION: Be careful when removing the screw because the spring is under a slight tension.



IMPORTANT: Keep the leg latches, springs, and screws in case you need to remove the HQ HighRise system.

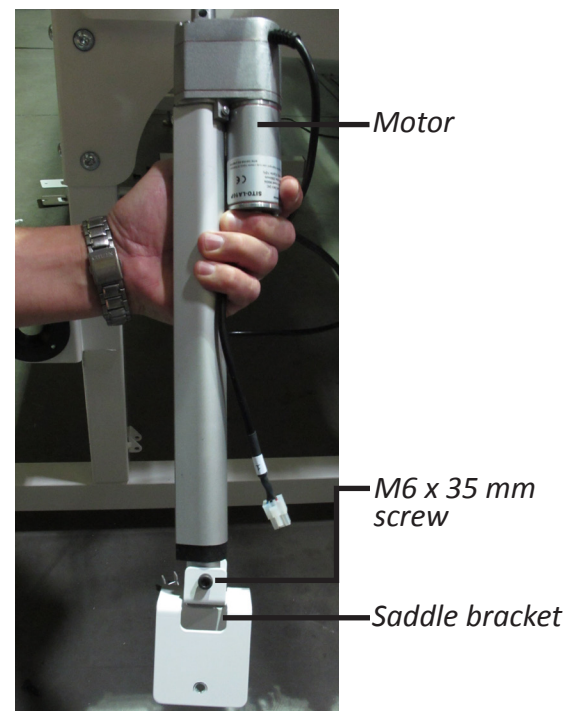


To prepare the actuators for installation

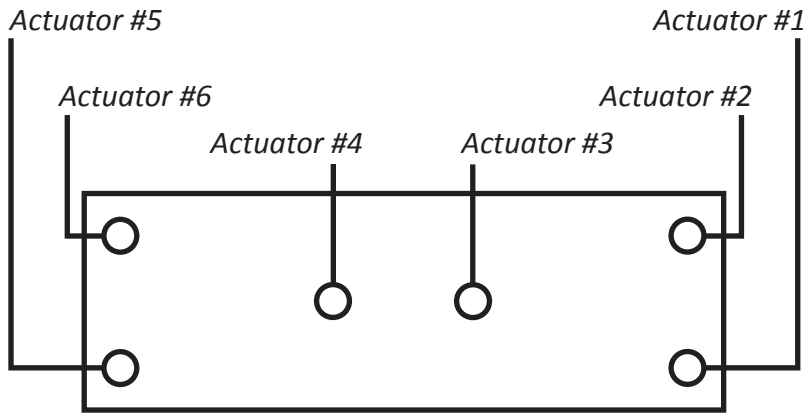
Mount the saddle bracket to the non-motor end of all six actuators with M6 x 35mm screws. Slide the screw through the flat hole on the bracket, then through the opening on the actuator, and out through the hole on the other side of the bracket, tightening as you go.

The number of actuators you will install to the frame depends on the size and configuration of your frame.

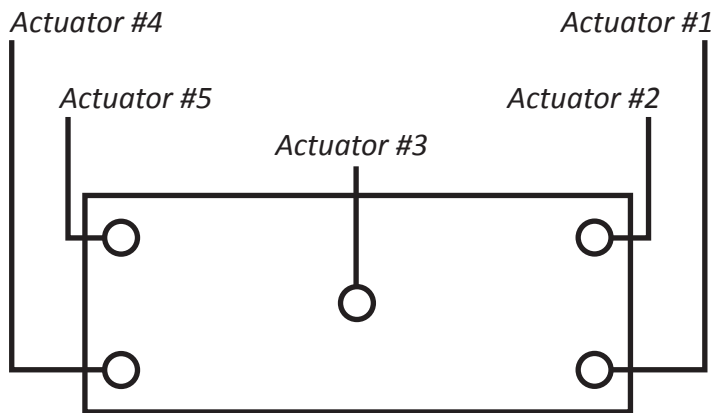
- If you have a 12-foot frame or a 10-foot frame, use all six actuators (*numbers 1 through 6*) – one each on the front and back of the side legs and one on each of the center legs.
- If you have an 8-foot frame or a 6-foot frame, use five actuators (*numbers 1, 2, 3, 4, and 5*) – one each on the front and back of the side legs and one on the center leg.
- If you have a 4-foot frame, use four actuators (*numbers 1, 2, 3, and 4*) – one each on the front and back of the side legs.



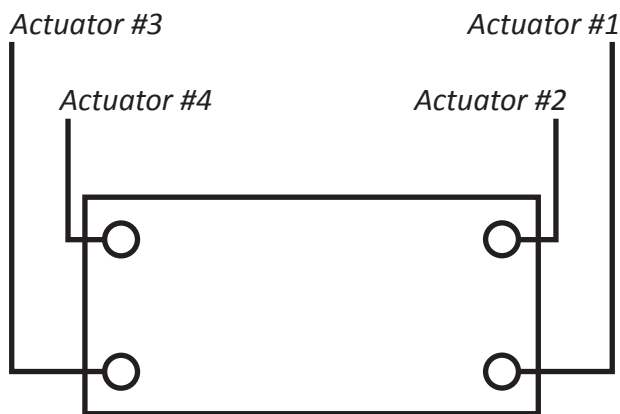
Use the following diagrams to determine which actuator to mount to each leg of the frame. Lay each of the prepared actuators next to the leg to which it will be mounted and double check before proceeding.



Front of 12-foot or 10-foot frame



Front of 8-foot or 6-foot frame



Front of 4-foot

Actuator #4, mounted behind left-center leg



Actuator #3, mounted behind right-center leg

IMPORTANT: The photograph above shows the Studio Frame. If you have a Fusion Frame, the center legs have two vertical posts. Mount the actuator behind the front post of each center leg.

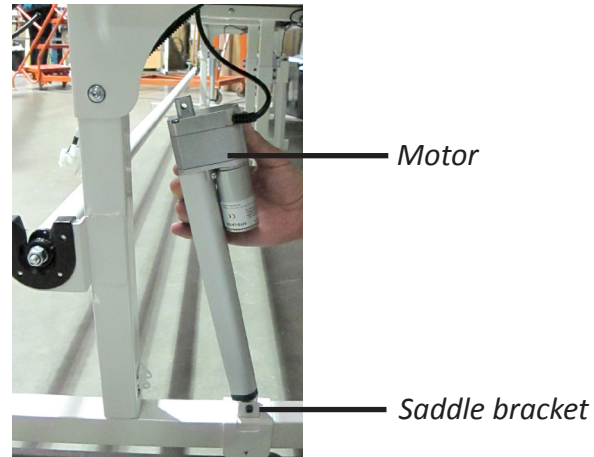


NOTE: The controller can be mounted on the left side or the right side of the frame. These instructions show photographs for mounting the controller on the right side of the frame. If you mount the controller on the left side of the frame, reverse the actuator numbers and positions (e.g. put actuator #1 on the back-left side leg, put actuator #2 on the front-left side leg, etc.). However, you should still connect the cables into the controller according to their numbers as described later.

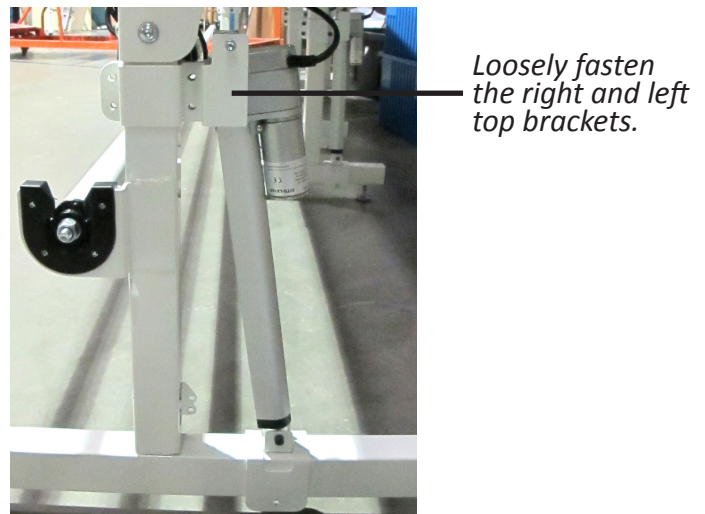
To mount the actuators to the frame's legs

Follow steps 1 through 7 to mount each actuator required for the size and configuration of your frame.

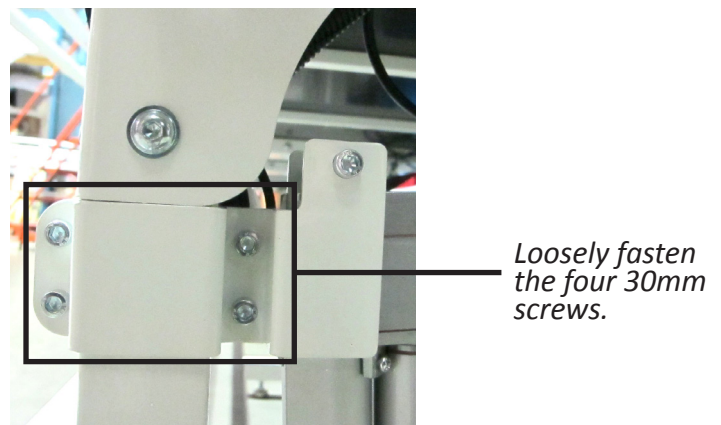
1. Place the bottom saddle bracket over the inside bottom frame tube with the motor side of the actuator facing away from the leg.



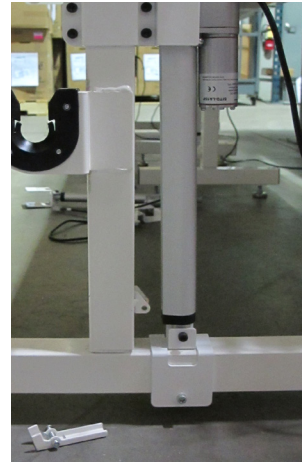
2. Tilt the bottom of the actuator (saddle bracket end) away from the leg and place the right and left top brackets around leg and over the top of the motor end of the actuator.
3. Insert a M6 x 50mm screw between the right and left top brackets and loosely fasten.



4. Insert four M6 x 16mm screws to clamp the right and left top brackets together around leg tube and loosely fasten.



5. Push the bottom of the actuator so the actuator is parallel to the leg.
6. Fully tighten all screws.



7. Insert a M6 x 55mm screw under the bottom frame tube and tighten.
8. Repeat steps 1 through 7 for each actuator you install.



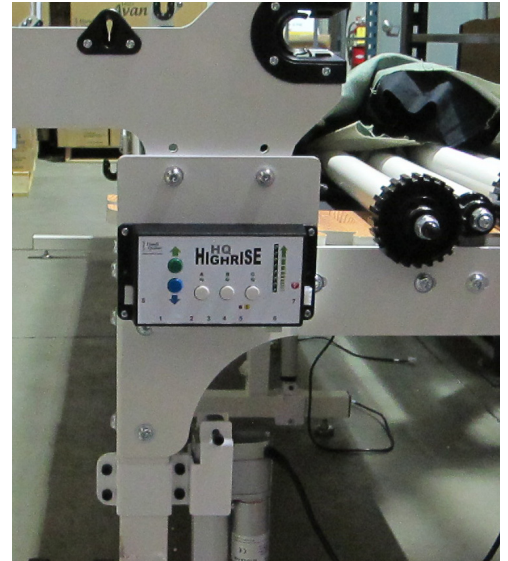
To lay out and connect the cables

1. Lay out extension cables #5 (longest), #6 (next longest), #4, and #3 (shortest) on the floor behind the frame. Make sure the cables are oriented such that the connector ends can be plugged into the actuators.
2. Connect the numbered extension cables to the #5, #6, #4, and #3 actuator cables. If you are using fewer actuators, connect extension cables to only those actuators.
3. Pull the other ends of extension cables over to the right front side of the frame. (They will be connected to the controller later in the setup.)



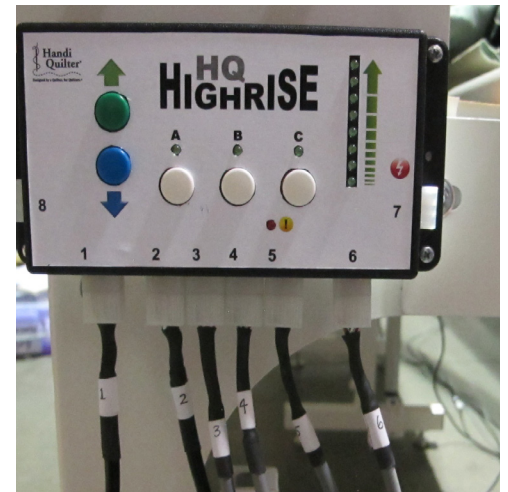
To mount the controller to the side of the frame

1. Remove the front poles from the frame's pole brackets.
2. Use a small, adjustable wrench to remove two bolts from the front right side of the pole brackets.
3. Insert the bolts you just removed through controller's mounting plate and place the bolts back into the front right side of the pole brackets. Tighten the bolts.



To connect cables and power supply

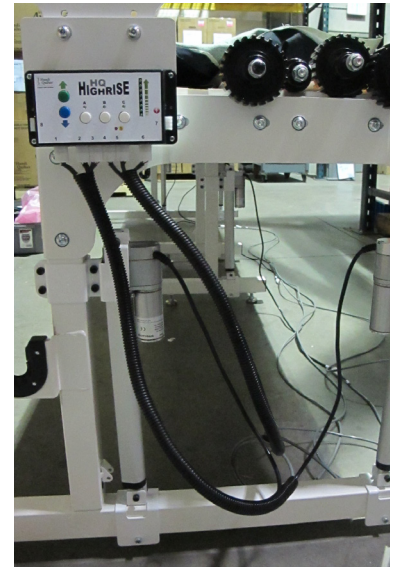
1. Connect the #1 and #2 actuator cables to labeled connectors #1 and #2 on the controller.
2. Connect extension cables #3, #4, #5, and #6 to labeled connectors on the controller. Connectors #7 and #8 are open (*nothing connected*).
3. Lay the power supply inside the right-front bottom frame tube.
4. Connect the power supply cable to the controller. Wrap the power supply cord around the front-right leg and use cable ties to secure the power supply cable near the controller. Ensure there is sufficient slack in the cable to allow for raising the frame.
5. Connect the power cord to the back of the power supply.



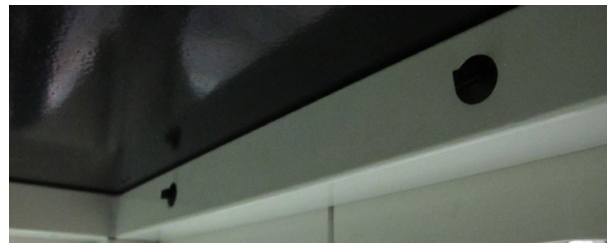
6. Use one piece of cable sheath to bundle cables 1, 2, and 3 connected to the controller. Trim the sheath if necessary with a pair of scissors.
7. Use one piece of cable sheath to bundle the cables 4, 5, and 6 connected to the controller



NOTE: Trim the sheath to appropriate length, if necessary, with scissors.



8. Pull the cables with sheaths behind and underneath the right upper frame tube and push a fir-tree plug into any empty screw hole and then use a cable tie to secure the cable bundles



Fir-tree plugs inserted into open screw holes in the frame.



Cable ties inserted into fir-tree plugs and then wrapped around cables.

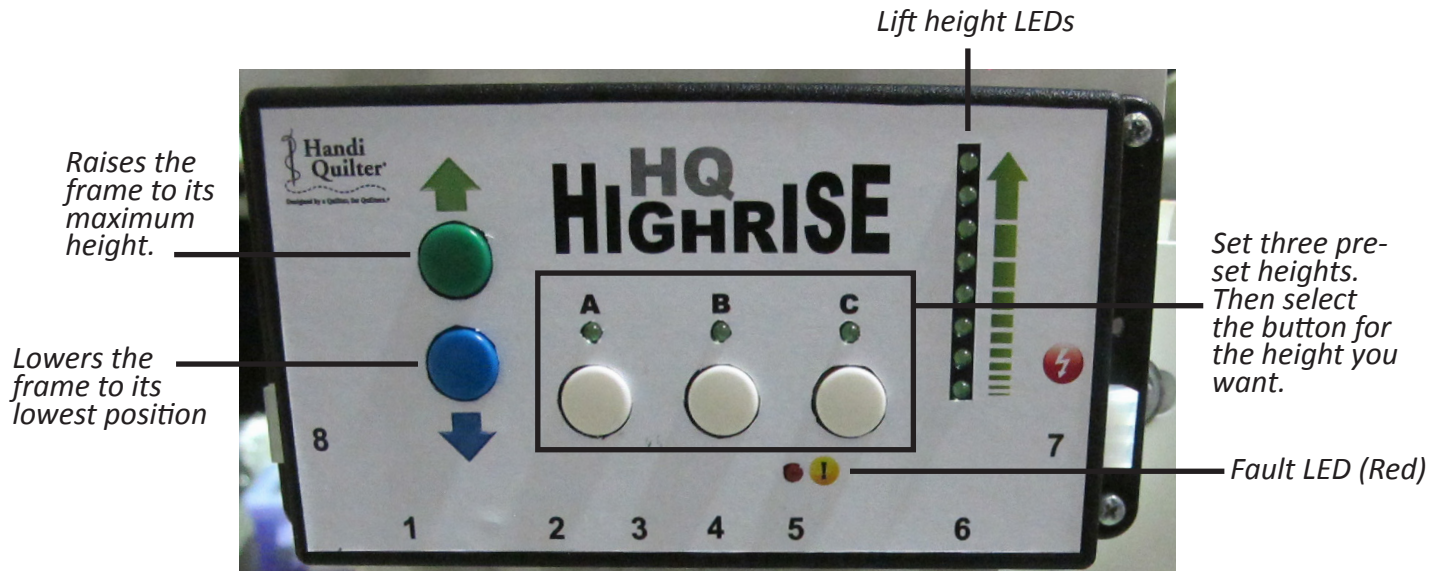
9. Use adhesive tie-wrap pads and cable ties to secure cable bundles to the back of the frame.



NOTE: To ensure good adhesion, wipe the frame with isopropyl alcohol and allow it to dry before sticking the adhesive tie-wrap pad.

Operation of the HQ HighRise

The HQ HighRise is simple to operate.



First-time operation

1. Plug in the power cord from power supply to an outlet. At least one LED on the controller will light, indicating power is on.
2. Press the green up arrow button for a few seconds. All actuators should lift. If not, refer to the troubleshooting section of this manual.
3. Press the blue down arrow button for a few seconds. All actuators should lower. If not, refer to the troubleshooting section of this manual.

Your HQ HighRise is now operational.

CAUTION: When the actuators are extended, there may be a small amount of oil on the inside actuator tube. This is normal. Keep fabrics and other objects away from these inside tubes.

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IMPORTANT: The actuators have a 10% duty cycle which requires that the HQ HighRise is not operated constantly. The actuator motors may overheat if the system is run constantly.

To raise the frame

- Press and hold the green up button until the frame raises to your desired height. It will be at its maximum height when all eight LEDs are lit and motion has stopped because the frame can't go any higher.
- Alternately, press and hold the top button on the key fob for longer than one second and until the frame raises to your desired height.

To lower the frame

- Press and hold the blue down button until the frame lowers to your desired height. It will be at its lowest position when a single LED is lit and motion has stopped because the frame can't go any lower.
- Alternately, press and hold the bottom button on the key fob for longer than one second and until the frame lowers to your desired height.

To customize the three preset frame heights

Preset three frame heights and quickly recall a height by pressing one of the preset buttons.

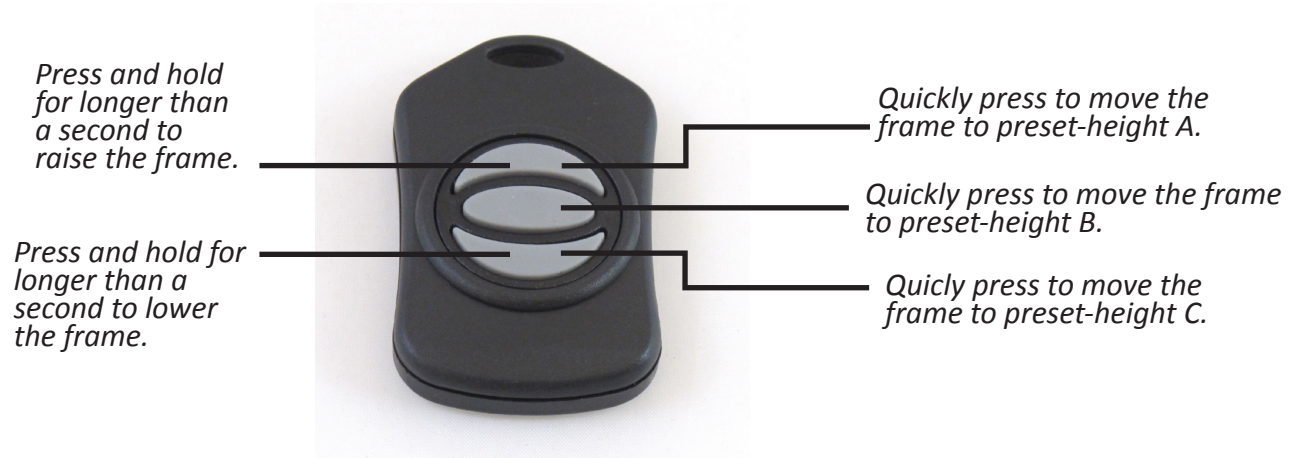
1. Set the frame to the desired height using the up (*green*) and down (*blue*) buttons.
2. Press and hold one of the three preset buttons for two to three seconds. The LED above the button will blink, then the LED will stay illuminated indicating the button is programmed.
3. Repeat these steps for the other two buttons with two other preset frame heights.

To recall a preset frame height

- Quickly press one of the preset-height buttons. The HQ HighRise will adjust the frame to the preset height.

To use the wireless key fob

The hole indicates the top of the key fob.



To use the key fob to raise or lower the frame

- Press and hold the top button for longer than a second to raise the frame. When the frame is at the desired height, release the button.
- Press and hold the bottom button for longer than a second to lower the frame. When the frame is at the desired height, release the button.

To use the key fob to adjust the frame to a preset height

- Quickly press one of the buttons on the key fob. The HQ HighRise adjusts the frame to the preset height. The top button adjusts the frame to preset-height A; the middle button adjusts the frame to preset-height B; and the bottom button adjusts the frame to preset-height C



NOTE: When the actuators are extended, there may be a small amount of oil on the inside actuator tube. This is normal. Keep fabrics and other objects away from these inside tubes.

Troubleshooting

Your HQ HighRise requires no maintenance

Troubleshooting

Problem or Symptom	Corrective Measure
Fault LED (red) is illuminated	<p>Fault LED (red) is illuminated Look at the lift height LEDs. The illuminated LED indicates which actuator has a fault. The bottom LED corresponds to actuator 1; the second LED from the bottom corresponds to actuator 2; and so forth for the bottom six LEDs.</p> <p>Disconnect the power cord from the wall socket and check all of the cable connections, including the extension cables. Reconnect the power cord.</p> <p>If the red fault LED is no longer illuminated, try to raise or lower the frame. If the red fault LED comes on, disconnect the power cord from the wall and call Handi Quilter technical support.</p>
Fault LED (red) is illuminated. LED 7 (second lift height LED from the top) is illuminated.	<p>One (or more) of the actuators or extension cables is not plugged in. Disconnect the power cord from the wall socket and check that the cables are plugged into the correct connectors on the controller. See To connect cables and power supply and the two notes marked IMPORTANT on page 8 for more information. Reconnect the power cord and confirm that LED 7 and the fault LED are no longer illuminated.</p>
One or more actuator(s) have stopped lifting or lowering the table.	<p>Stop pressing buttons on the controller. Disconnect the power cord from the wall socket and call Handi Quilter technical support</p>
Actuators raise or lower the table with an uneven, nonlevel motion.	<p>Stop pressing buttons on the controller. Disconnect the power cord from the wall socket and call Handi Quilter technical support</p>