

ABM International, Inc.

Innova Electric Lift

ATTENTION CUSTOMER!

PLEASE NOTE:

THE ELECTRIC LIFT SYSTEM IS RATED FOR INTERMITTENT DUTY.

DO NOT OPERATE FOR MORE THAN 30 SECONDS AT A TIME.

OVERUSE OF THE LIFT MAY CAUSE THE MOTORS TO GO INTO THERMAL OVERLOAD AND SHUTDOWN.

IF THE UNIT GOES INTO THERMAL OVERLOAD, ALLOW 30-60 MINUTES FOR THE ASSEMBLY TO COOL DOWN.

1.0: Parts List

Structural frame profiles –

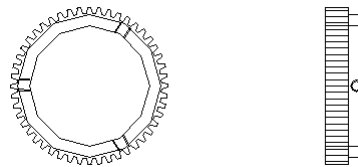
Perforated square tube:



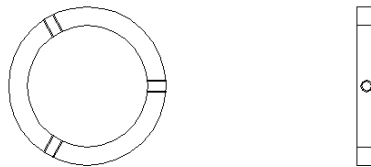
(Qty. 1) length of frame (example: 12' frame = 141", 10' frame = 120")

Commercial Parts -

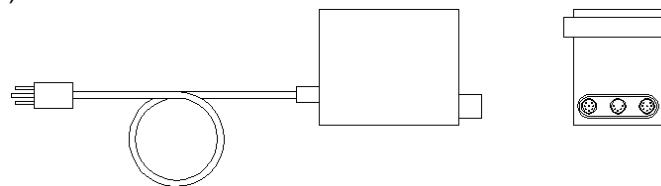
Lifting gear (Qty. 3)



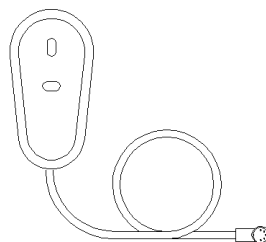
Roller collar (Qty. 2)



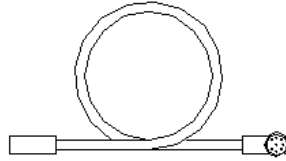
Lift power supply (Qty.1)



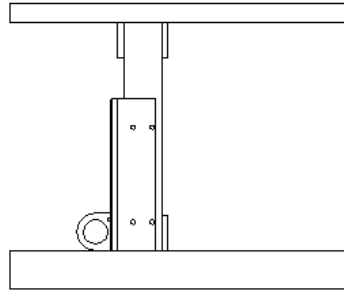
Lift pendant station (Qty. 1)



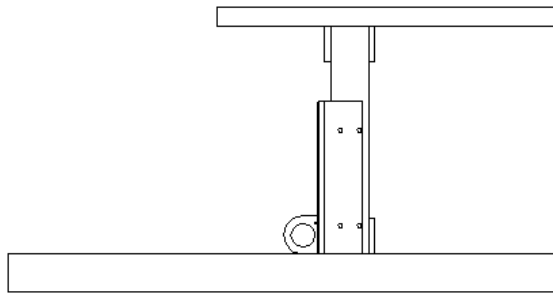
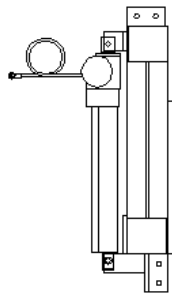
Lift motor extension cable (Qty. 1)



Middle lift assembly (Qty. 1)



Right and left end lift motor assembly (Qty. 2)



Roller tube (Qty. 1) 14' = 152", 12' = 129", 11' = 120", 10' = 108"



Tubing end cap (Qty. 2)



Nylon ties – 4" (1 bag)

Nylon ties – 24" (Qty. 2)

Bolt kit –

Hex head cap screw:



(Qty. 15) 5/16 x 2
(Qty. 3) 5/16 x 3-1/2

Flat washers:



(Qty. 21) 5/16
(Qty. 3) 5/16 Fender washer

Nylon insert lock nuts:

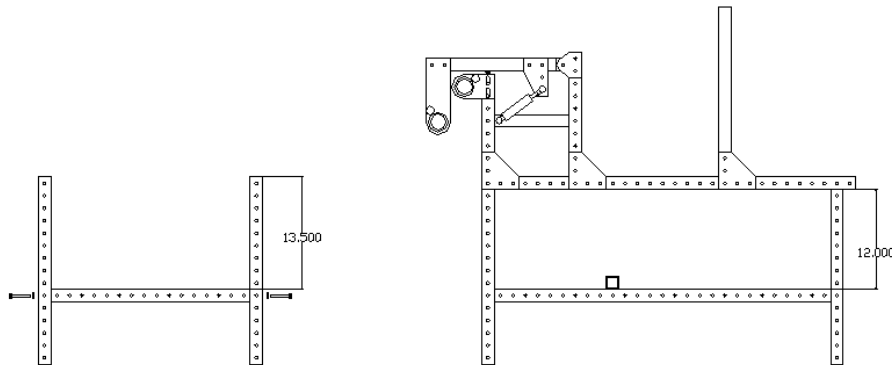


(Qty. 3) 5/16

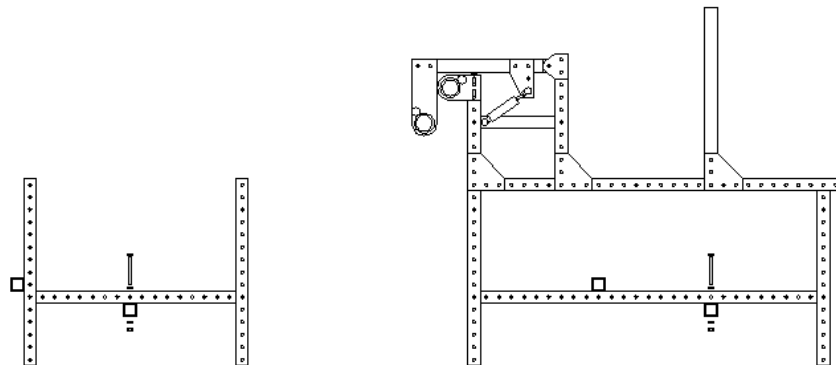
2.0 Electric lift assembly

Step 1: If the lift kit is to be installed on an existing frame, ABM recommends removing the quilting machine and the table top to ease installation.

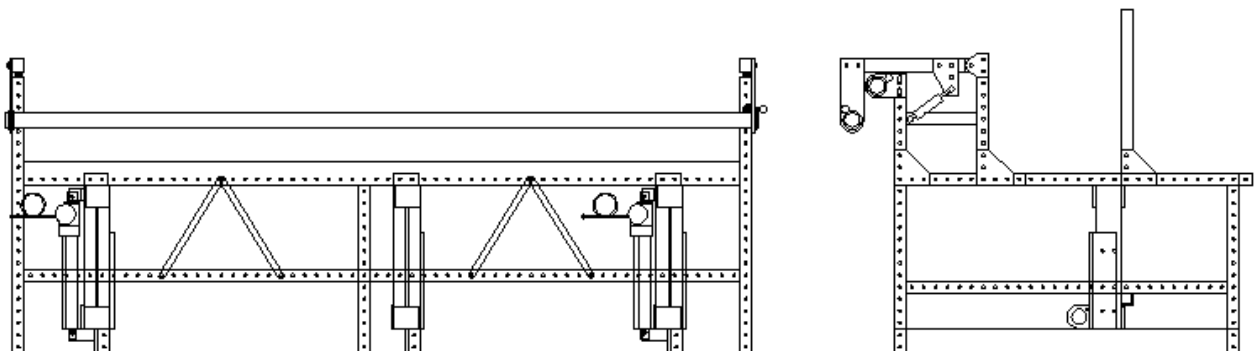
Step 2: Before installing the electric lift kit, check to make sure the lower support tubes on the side frames are 12" below the top beam. Additionally, move the center leg lower support tube so that it measures 13.5" from the top of the center leg verticals.



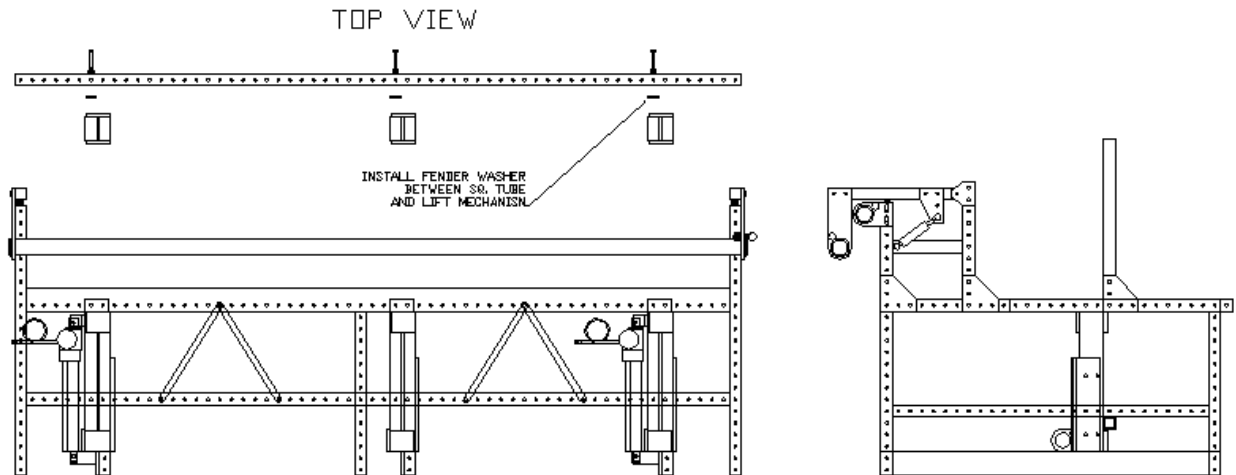
Step 3: Install the long square tube to the bottom sides of the side frame support tubes and to the center leg support beam as well. Use (3) 5/16 x 3-1/2" hex bolts, (6) flat washers and (3) nylon insert lock nuts. Leave the bolt loose for now. Install the tubing end caps in each end of the tube.



Step 4: Using the illustration below, install the left, middle and right lifting assemblies to the frame. The left and right assemblies should be bolted to the 6th and 7th holes from each end of the rails. The middle leg should be bolted to the 4th and 5th hole to the right of the middle leg. Use (12) 5/16 x 2 hex bolts and (12) flat washers. Leave the bolts loose for now. **NOTE: IT MAY BE NECESSARY TO LOOSEN OR MOVE SPACER BARS TO FIT THE ELECTRIC LIFT ASSEMBLIES IN PLACE.**

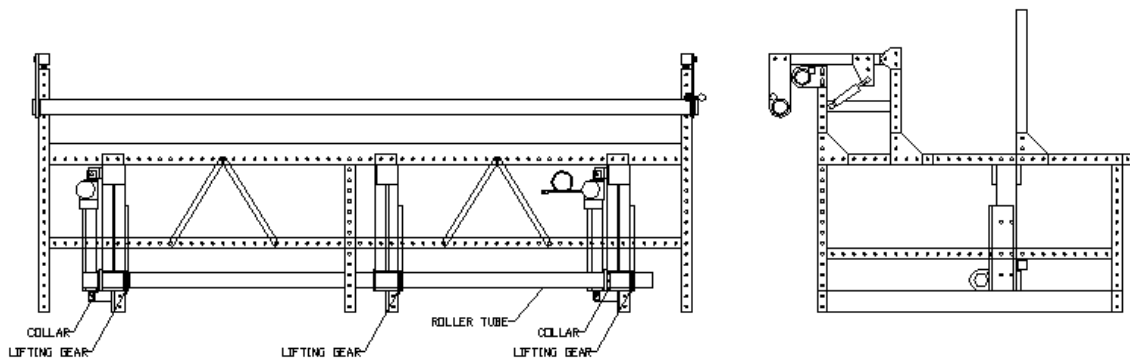


Step 5: Bolt the square tube installed in step 3 to the back side of the three lifting mechanisms using (3) 5/16 x 2 hex bolts, (3) lock washers, (3) flat washers and (3) fender washers. **NOTE: MAKE SURE TO BOLT THE TUBE TO THE VERTICAL SLOTTED BEAM THAT HAS THE T-NUT INSTALLED IN IT FROM THE FACTORY. THE TUBE SHOULD BOLT TO THE BEAM THAT DOES NOT HAVE THE GEAR RACK BOLTED TO IT.**



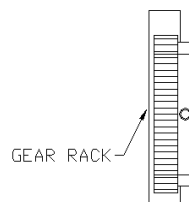
Step 6: Tighten the bolts from steps 3, 4 and 5.

Step 7: Install the roller tube into the roller supports of the lifting assemblies. Make sure to slide the (2) collars and the (3) lifting gears onto the roller as it is installed. Center the roller in the assemblies so that the tube is hanging out of the left and right ends equally.

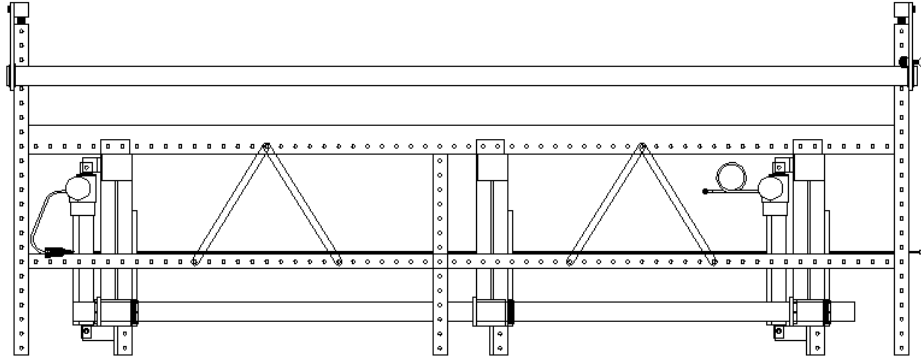


Step 8: Tighten the collar on the left and right ends of the roller. Leave a small gap, approximately 1/32", between the collar and the roller plate. The roller should now be captured in the assembly but it should turn freely. **NOTE: MAKE SURE TO TIGHTEN ALL (3) SET SCREWS ON EACH COLLAR EQUALLY.**

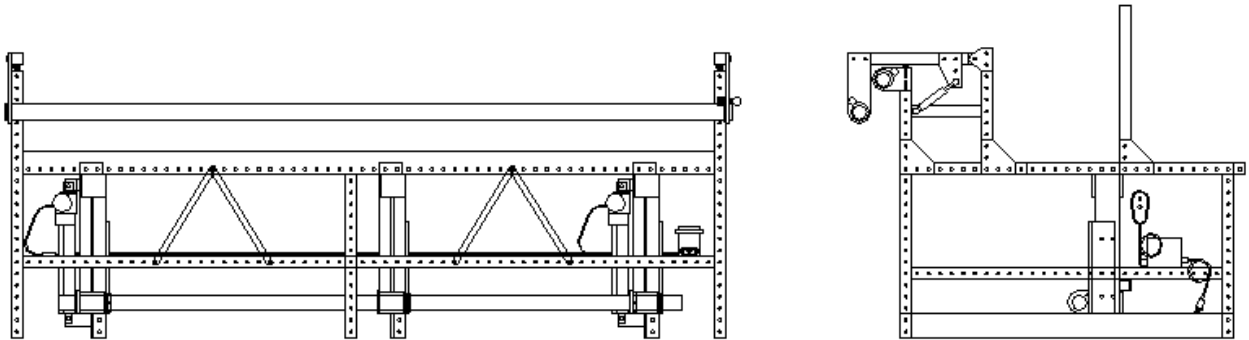
Step 9: Center the (3) lifting gears on the gear rack of each of the lifting assemblies and tighten the set screws. **NOTE: YOU MAY NOT BE ABLE TO ACCESS ALL (3) SET SCREWS ON THE GEARS. TIGHTEN THE SCREWS YOU CAN REACH - AT LEAST 2 PER GEAR.**



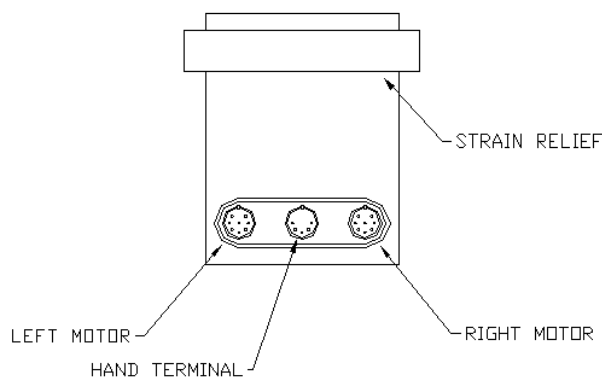
Step 10: Decide from which side, left or right, that the lift pendant station will be accessible. Connect the lift motor extension cable to the opposite end lifting assembly. Wire tie the cable down the length of the square tube to the right end of the machine.



Step 11: Make sure the extension cables from the lift assemblies can reach the power supply. Using the two large 24" wire ties supplied, wire tie the lift power supply to the frame as shown below.



Step 12: Connect the left and right motor cables to the power supply terminals shown below. Pass the cables through the strain relief of the power supply. Make sure to tie up any extra cable.

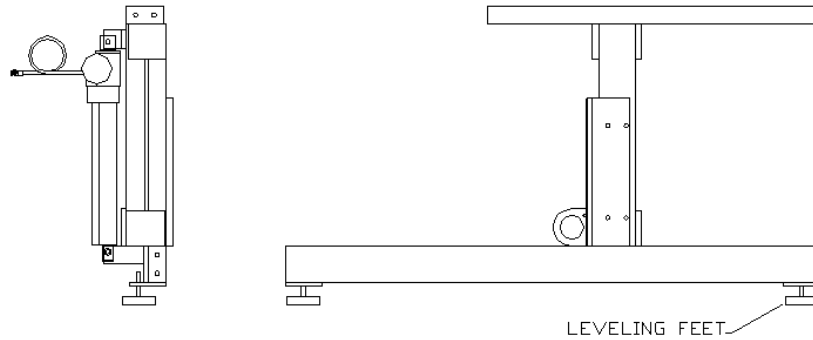


Step 13: Connect the hand terminal to the power supply terminal illustrated above. Pass the cable through the strain relief of the power supply.

Step 14: Plug in the power supply to an available outlet.

Step 15: Press the extend button to raise the table slightly and gain access to the third set screw on each of the lifting gears. Tighten the gears.

Step 16: Press the extend button to raise the table approximately 6". Check and adjust the level of the table front to back and left to right. Loosen and raise or lower the leveling feet to adjust the level.



Step 17: Check for any loose cabling that may be cut or damaged by the lifting table. Tie up any loose cables using the provided wire ties.

3.0 Electric lift operation

The electric lift for Innova Pro-frames allows the user to adjust the frame height by 10 inches. The user can adjust the height with the switches located on the hand terminal.

Adjusting the frame height:

- 1) Ensure there are no obstructions above or below the frame.
- 2) If the frame is equipped with a light bar, ensure the lights do not contact the ceiling of the room.
- 3) Check to make sure that all electrical cables are clear of the moving frame. Any cables that may interfere with the moving frame should be relocated and secured so that they are not pinched or broken.
- 4) Press and hold the retract or extend button until the frame is at the desired height.

Maintenance:

The Pro-frame electric lift system is designed to be maintenance free. All motors and actuators are sealed for the life of the unit and do not require any lubrication or adjustment.

The lift system is equipped with short-circuit and overload protection for each of the individual lift motors. If a motor encounters a jam, excessive load, or if a short circuit is detected the control unit will shut down the actuator. Once the problem is corrected, or sufficient cooling time has elapsed, the power supply will allow the actuator to move again.

4.0 Electric lift with casters

The electric lift for Innova Pro-frames allows the user to adjust the frame height by 10 inches. It should be noted that the overall adjustable height of the electric lift is reduced with casters.

Adjusting the frame height with casters:

- 1) Ensure there are no obstructions above or below the frame.
- 2) If the frame is equipped with a light bar, ensure the lights do not contact the ceiling of the room.
- 3) Check to make sure that all electrical cables are clear of the moving frame. Any cables that may interfere with the moving frame should be relocated and secured so that they are not pinched or broken.
- 4) Press and hold the retract or extend button until the frame is at the desired height.

Adjusting the frame height to make the frame with casters mobile:

- 1) Ensure there are no obstructions above or below the frame.
- 2) If the frame is equipped with a light bar, ensure the lights do not contact the ceiling of the room.
- 3) Check to make sure that all electrical cables are clear of the moving frame. Any cables that may interfere with the moving frame should be relocated and secured so that they are not pinched or broken.
- 4) Press and hold the retract button until the lift has retracted off of the ground and has come to a complete stop. **DO NOT ATTEMPT TO MOVE THE FRAME UNLESS THE ELECTRIC LIFT IS COMPLETELY RETRACTED OR DAMAGE MAY OCCUR.**
- 5) Move the frame to the new desired location.
- 6) Press and hold the extend button until the lift has contacted the ground and is at the desired height.

