

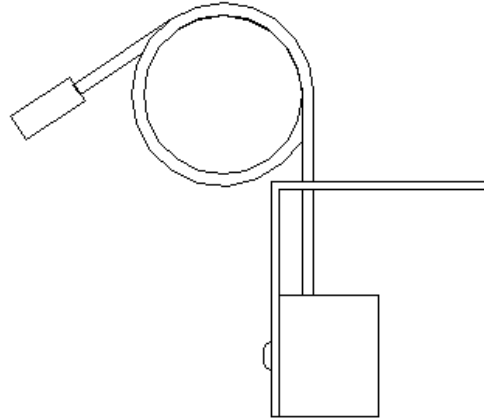
ABM International, Inc.

Innova Electric Channel Locks

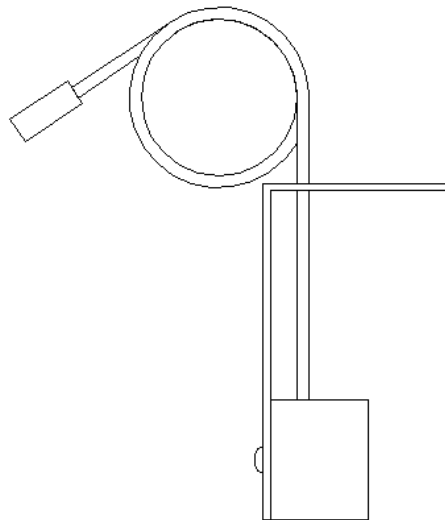
1.0: Parts List

Commercial Parts -

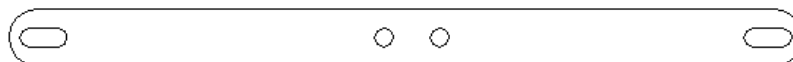
Upper carriage lock assembly (Qty. 1)



Lower carriage lock assembly (Qty. 1)



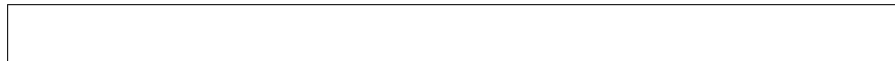
Upper carriage lock strap mount (Qty. 1)



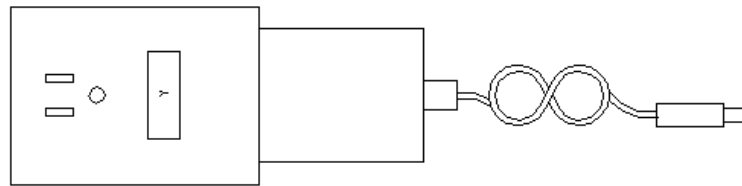
Lower frame metal strip (Qty. 6/12', 5/10', 4/8'). **NOTE: 23" long**



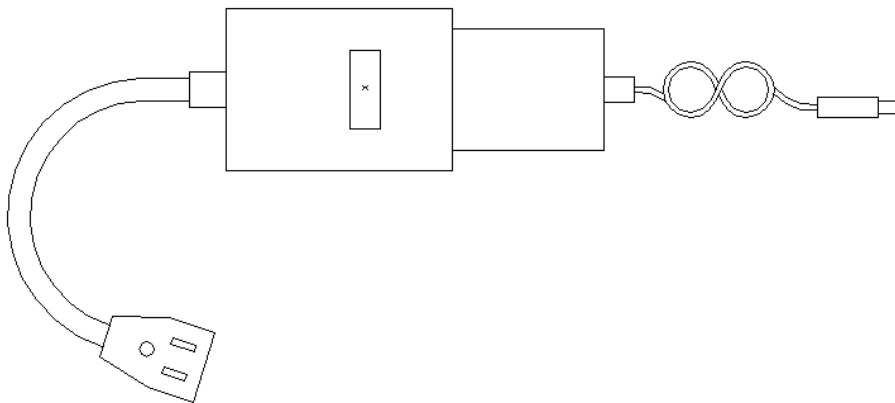
Upper carriage metal strip (Qty. 1). **NOTE: 30" Long**



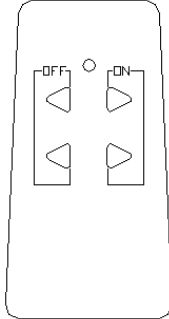
Upper carriage power supply (Qty. 1)



Lower carriage power supply (Qty. 1)



Electric lock remote control (Qty. 1)



Angle nut (Qty. 4)



Bolt kit –

Hex head cap screw:



(Qty. 8) ¼ x 5/8

Flat washers:



(Qty. 8) ¼

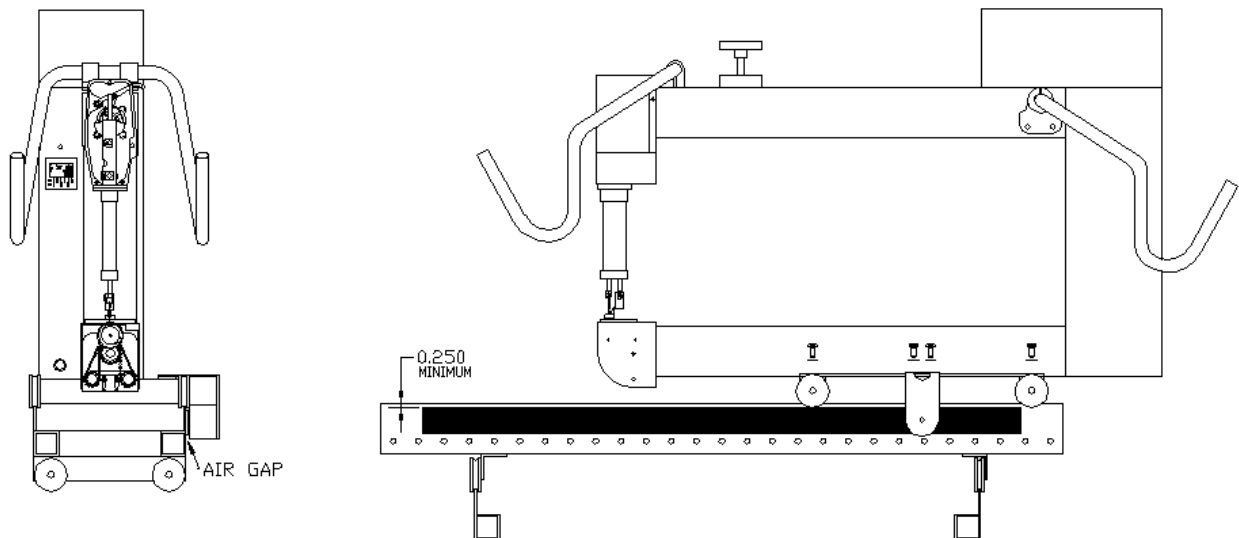
Nylon insert lock nuts:



(Qty. 2) ¼

2.0 Upper carriage lock assembly

- Step 1: Clean any dust or dirt off of the right side face of the carriage rail. A wet towel is sufficient. Dry completely.
- Step 2: With a pencil, mark a straight line at 1/4" from the top edge down the length of the right rail.
- Step 3: On a 26" machine make a vertical hatch mark 5" from the front edge of the upper carriage (hatch mark should intersect the line from Step 2). On 18" machines, no mark is necessary.
- Step 4: Remove the protective film from the adhesive tape on the back side of the upper carriage metal strip.
- Step 5: Install the metal strip so that the top edge of the strip is on the pencil mark. On a 26" machine the 5" hatch mark should be the start of the strip. On 18" machines, the strip will extend the entire length of the rail from front to back.
- Step 6: Press firmly along the length of the metal strip to ensure proper adhesion.



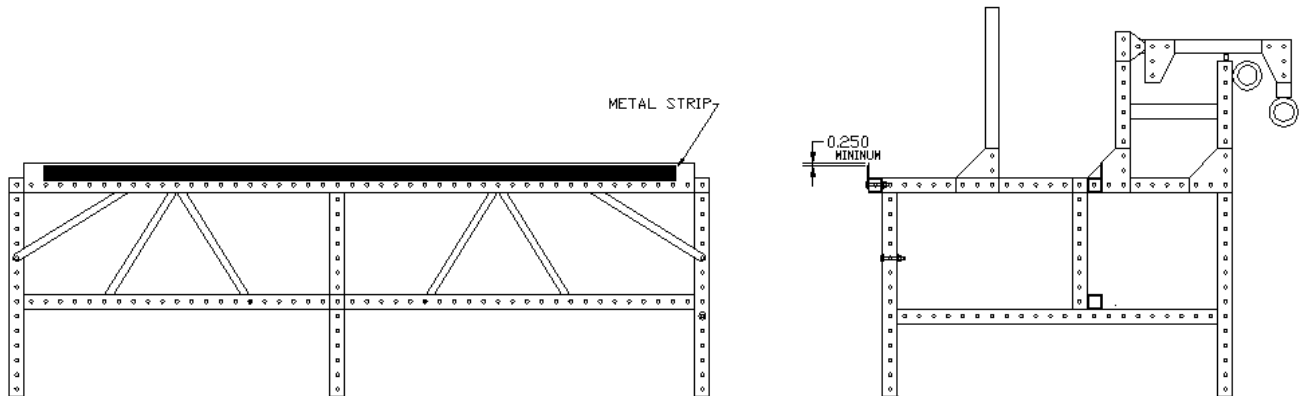
- Step 7: Drop an angle nut into the right front and rear wheel beams of the Innova.
- Step 8: Install the upper carriage lock strap mount to the wheel beams using (2) 1/4 x 5/8" Hex head bolts and (2) flat washers. Leave the bolts loose for adjustments later.
- Step 9: Install the upper carriage lock assembly to the strap using (2) 1/4" x 5/8" Hex head bolts, (2) 1/4" flat washers and (2) 1/4" nylon insert nuts. Tighten completely.
- Step 10: Place a piece of paper folded in half 3 times (8 layers of paper) between the lock assembly and metal strip. Adjust the gap by sliding the carriage lock strap in or out on the wheel beam. Tighten the bolts. **NOTE: The folded piece of paper should be held lightly in place by the lock assembly when the gap is set correctly. If the paper is held tightly, open the gap slightly**

3.0 Lower carriage lock assembly

Step 1: Clean any dust or dirt off of the back face of the rear frame rail. A wet towel is sufficient. Dry completely.

Step 2: With a pencil, mark a straight line at 1/4" from the top edge down the length of the rail.

Step 3: On an 8' frame make a vertical hatch mark with the pencil 1/2" from the left edge of the rail. On a 10' frame make a vertical hatch mark 1" from the left edge. On a 12' frame, no mark is necessary.



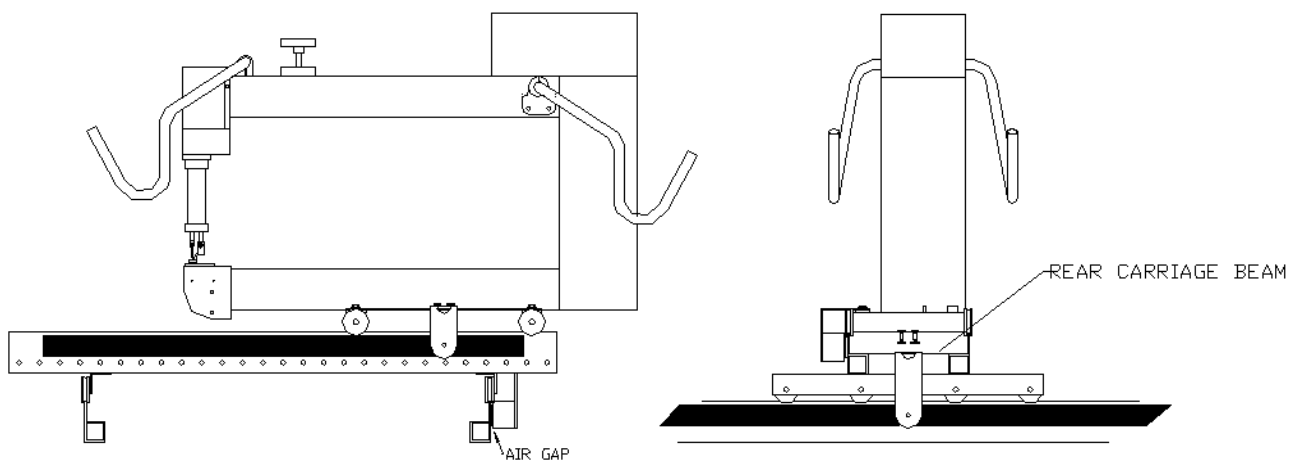
Step 4: Remove the protective film from the adhesive tape on the back side of one of the lower frame metal strips.

Step 5: Starting from the left end, install the metal strip so that the top edge of the strip is on the pencil mark. On an 8' or 10' frame start the strip at the vertical hatch mark.

Step 6: Press firmly along the length of the metal strip to ensure proper adhesion.

Step 7: Remove the protective film and install the remaining metal strips end to end leaving a small gap between strips. Ensure that the top edge of the metal strip is on the pencil mark.

Step 8: Press firmly along the lengths of the metal strips to ensure proper adhesion.



Step 9: Drop (2) angle nuts in the top of the rear carriage beam.

Step 10: Install the lower carriage lock assembly onto the rear carriage beam using (2) ¼" x 5/8" Hex head bolts and (2) ¼" flat washers. Leave bolts loose for adjustment.

Step 11: Place a piece of paper folded in half 3 times (8 layers of paper) between the lock assembly and metal strip. Adjust the gap by moving the carriage lock assembly in or out on the rear carriage beam. **NOTE: The folded piece of paper should be held lightly in place by the lock assembly when the gap is set correctly. If the paper is held tightly, open the gap slightly.**

4.0 Final assembly

Step 1: Run the upper carriage lock cable to the back of the Innova and wire tie it to the power cord exiting the back of the Innova with a supplied nylon tie.

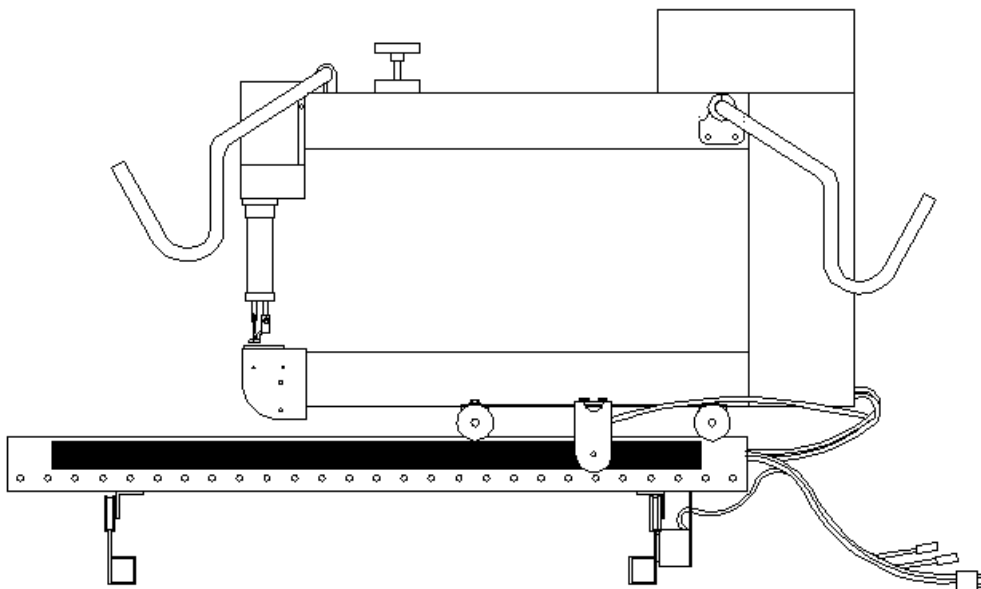
Step 2: Continue down the length of the Innova power cord and nylon tie the upper carriage lock cable to it until you get to the wire mount located on the rear carriage beam.

Step 3: Run the lower carriage lock cable to the wire mount and continue to wire tie the upper and lower carriage lock cables to the Innova power cord.

Step 4: Connect the lower carriage cable to the power supply marked "X".

Step 5: Connect the upper carriage cable to the power supply marked "Y".

Step 6: Plug in both the upper and lower carriage supplies.



5.0 Operation and Safety

The operation section provides a quick reference to the proper functions of the electric locks.

ABM recommends that the power locks are disconnected from the power source whenever the machine is not in use. To ensure the locks are OFF, unplug the power supplies from the wall outlet or, if a power strip is used, turn off the power strip.

5.1 Powering the locks

1. Plug in the upper and lower power supplies.
2. If you are using a power strip, turn on the power strip.
3. The power locks are now ready to use.

5.2 Locking and Unlocking the Innova

1. Move the Innova to the desired location to be locked.
2. For left / right locking press the ON button next to the X label. For in / out locking press the ON button next to the Y label.
3. To turn OFF the locks, press the OFF button for the desired lock. "X" is left / right. "Y" is in / out.