

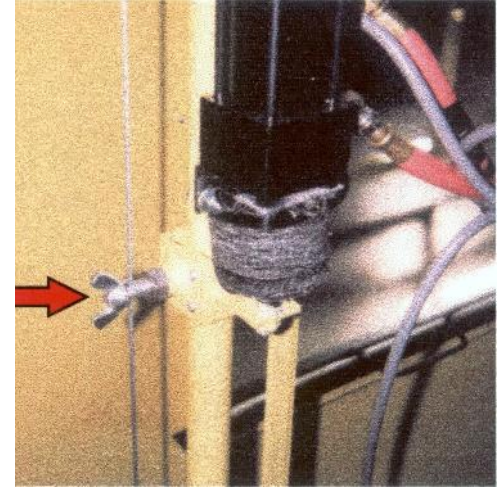
Model J Extended Vertical Motion Installation Instructions



Revised 12-23-2015

Step #1 - Remove connection from vertical slide to cable

- Fully retract vertical cylinder.
- Loosen wingnut on vertical slide.
- Allow vertical cable to slip so nozzle trolley gently rolls to bottom of track.
- Remove wingnut, threaded stud, and hex nut from vertical slide.



Step #2 - Mount tab at top of carriage

- Loosen and remove two 3/8" bolts that attach top of vertical cylinder to carriage.
- Insert two longer bolts in cylinder mounting holes.
- Place new tab on back side of mounting plate.
- Reinstall nuts and lockwashers.



Step #3- Mount tab at bottom of carriage

- Loosen and remove nut and lockwasher that secures bottom V-groove wheel.
- Allow wheel and bolt to remain in place.
- Place new tab on protruding bolt.
- Reinstall nut and lockwasher.



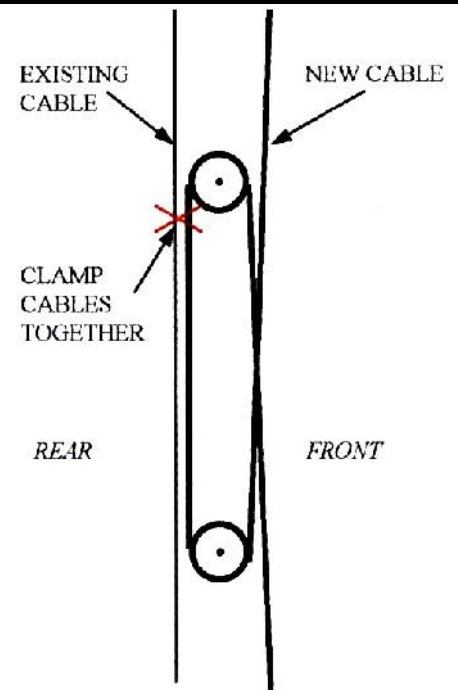
Step #4 - Mount new cable trolley

- Hold cable trolley next to carriage. U-shaped guide is located at top of trolley.
- Slip guide over 1" steel pipe behind vertical cylinder.
- Attach trolley to vertical slide with 1/2" bolt and lockwasher
- Extend screw on back of guide to loosely capture guide on pipe.



Step #5 - Install new cable

- Refer to photo in Step #2
 - Suspend tension spring from bottom hole in top tab.
 - Create small loop in cable with cable clamp.
 - Hook loop over end of tension spring.
- Refer to cable diagram at right
 - Extend cable from spring down to front groove on bottom 3" plastic wheel. Loop around wheel and up to rear groove on top wheel. Loop over wheel and down to bottom tab.
 - Run cable through clamp on bottom tab. pull on free end of cable to stretch spring tighten clamp.
 - At top tab. attach free end of cable with clamp. this prevents overextending spring.



Step #6 - New cable connection

- Clamp new cable to existing cable near rear of top 3" wheel.

Step #7 - Testing

- Start model J and test run.
- Move horizontal and vertical limit switches to ends of their tracks.
- Adjust sandhose to allow extended travel.

Step #8 - Lubrication

- Grease 3" plastic wheels,