

Installation Instructions

Roll-Up Gym Divider by Draper

⚠ Caution

- ① Locate and identify all parts using the hardware list and the drawings. "As built" drawings and hardware list are packed in hardware carton. Do not discard with packing material.
- ② DO NOT touch divider curtain while it is in motion.
- ③ Key switch is packed in winch crate, do not discard.
- ④ Divider operates on 110-120V, 60 Hz current (unless noted otherwise).
- ⑤ **Key switch or controls to be in full view of both sides of curtain during operation.**
- ⑥ Wiring diagram can be found inside winch limit cover panel.
- ⑦ Instructions for attaching and wiring the winch are packed in winch carton.

NOTE: Winch has been tested at the factory and found to be operating correctly prior to shipment.

These instructions are meant as a guide only. They do not bind Draper, Inc. in any way and do not imply any responsibility of Draper, Inc. for improper installation or faulty workmanship at the jobsite.

Hardware Installation

- ① Verify overall height and width with shop drawing to determine possible discrepancies.
- ② Attach winch support brackets to winch housing and install winch per location shown on shop drawing.
- ③ Install drive pipe support assembly (typically Z-Bracket and Flange Clamps) per locations shown on shop drawing.
- ④ Attach drive pipe support assemblies to Z-Bracket with threaded rod. Adjust assemblies vertically to proper height shown on shop drawing (see Fig. 1).
- ⑤ Install double drive pipe support assemblies to Z-Bracket with threaded rod at positions shown on shop drawing (typically adjacent to belts only)(see Fig. 2).
- ⑥ Using project specific drawings, identify the 2-3/8" drive tube sections that attach to the winch. Attach drive tubes to winch output shafts using supplied couplers, key stock and set screws. **ATTENTION Always insert the key stock into the slot on the motor shaft, first then slide the coupler onto the motor shaft. DO NOT INSERT KEY STOCK IN COUPLER FIRST. Tighten coupler set screw securely, making sure it hits the key stock.**
- ⑦ Raise the other drive pipe sections as indicated on project drawings.
- ⑧ Attach pipes together with drive pipe splicers to obtain one long continuous run of drive (see Fig. 3).
- ⑨ Operate the winch to determine that the drive pipe is rolling level. Make adjustments accordingly.
- ⑩ Position lift cables onto drive pipe in preparation of lifting curtain (lift cable not supplied).

Curtain Installation

- ① Lay the curtain out with the top of the curtain close to the lift cables hanging down from the drive pipe.
 - ② Slide 1 5/8" top and bottom batten tubes into pocket one section at a time, assembling as you go. Use 1 3/8" OD x 14" tube to connect section of batten tube. Splice should be installed so equal portions are inside tube that is being connected (see Fig. 3). Rotate batten to align the pre-drilled and tapped holes in batten. Secure with 5/16" x 1/4" set screws. (See Figs. 4 and 5).
 - ③ Assemble 4" bottom batten as shown on shop drawings using 3 3/4" OD x 18" splice tubes. (See Fig. 5).
 - ④ Using a chalk line, mark along the length of the assembled 4" batten tube to be used as a guide when attaching the curtain.
 - ⑤ Attach the square raw bottom edge of curtain fabric to the 4" bottom tube using adhesive strip. Make sure the curtain is flat, square and rolled straight.
- Please Note:** Use of floor rollers or of inverted top cradles used in Draper Roll-Up Dividers make it easier to keep fabric square to 4" tube.
- ⑥ Curtain fabric is 6"± wider than 4" bottom tube. Attach fabric so equal amounts of fabric overhang each end. Do not allow fabric to extend onto the heat seamed edging of curtain fabric. Cut 4" bottom tube if necessary.
 - ⑦ Refer to shop drawing and mark finished height of curtain. The typical curtain height received is 20" longer than shown on shop drawing, allowing 1 1/2± revolutions around pipe.
 - ⑧ Roll curtain on tube to desired position. Attach stop strip in predrilled holes with self-tapping screws supplied. Installer should use a file to round the corners of the stop strip to lessen the possibility of curtain tears (see Fig. 6).

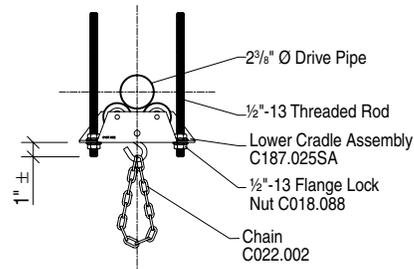


Figure 1

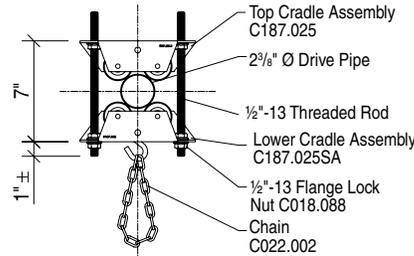


Figure 2

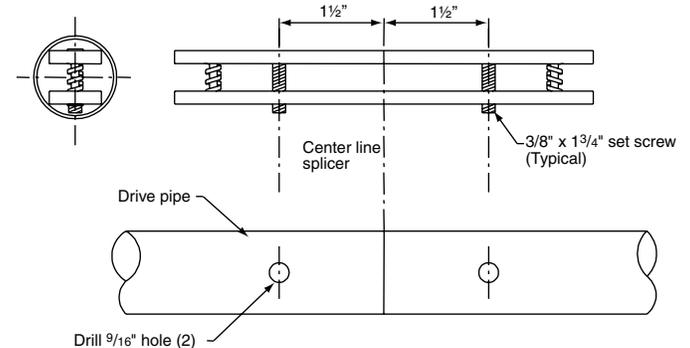


Figure 3

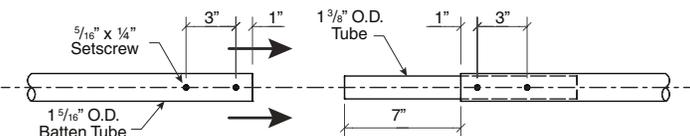


Figure 4

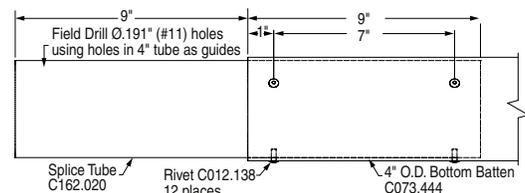


Figure 5

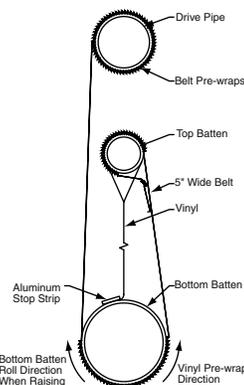


Figure 6

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Curtain installations continued

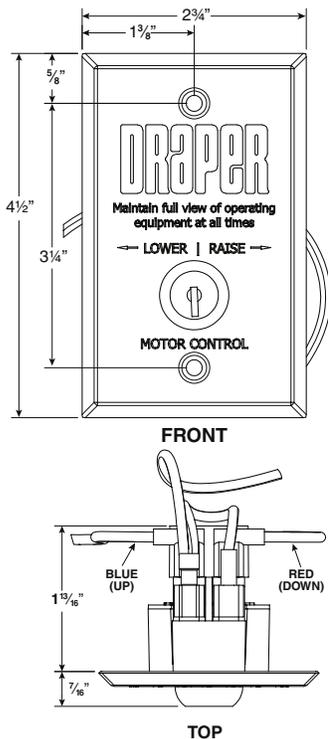
- ⑨ Attach dangling lift cables (supplied by installer) around top 1 5/8" pipe contained in the top pocket of the curtain, and raise curtain.
- ⑩ When the curtain is in the raised position, attach chain from drive pipe support assemblies around top pipe. Small cut in pocket required for chain. As the chains are attached, disconnect the cable from the top pipe.
- ⑪ Attach belts, **shiny side in**, to drive pipe with the aid of double face tape. Position all belts at the same position on the drive pipe and secure with self-tapping screws.
- ⑫ All belts are to be wound onto drive in the same direction. 2'-0", or three complete wraps, should remain on drive when divider is in full down position (called the pre-wrap).
- ⑬ Rolling action of curtain should be against the stop strip, or in other words, the stop strip should never roll under the curtain. The positioning of the belts onto the drive pipe will determine the direction.
- ⑭ Once belting is attached to drive pipe, drop belting to the floor, pass beneath the curtain and raise the belt up to the top 1 5/8" pipe contained in the top pocket of the curtain.
- ⑮ Drill holes in belting for the nuts and bolts used to secure belting around the top 1 5/8" pipe. Small cut required in pocket for belts. Trim excess belt from end.

Adjustments

- ① Operate curtain up to the stored position and set limit (see Fig. 7). Operate curtain to the down position and set limit.
- ② In the down position make sure limit has been set to allow the fabric build up to be fully extended.
- ③ There are two basic vertical adjustments to this divider. One is the threaded rods attaching the drive pipe support assemblies to the drive pipe support angles. The other is the chain from the drive pipe support assembly to the top of the curtain (see Fig. 1).
- ④ If the belt tends to runoff in one direction when the curtain rolls up, instead of stacking up in a uniform pile, shim the belt within the pre-wrap (pre-wrap is described in steps 11-12 above). To shim: cut a 1/2" wide piece of belt from your excess belt. Unroll the curtain all the way and disengage down limit to expose pre-wrap on the drive. Position the 1/2" piece under an edge of pre-wrap (use the edge opposite the direction of runoff) and secure with double face tape. Roll the curtain back up a few turns to cover the pre-wrap and reset the down limit switch. Then continue rolling the curtain up. Repeat as necessary. No two curtains behave the same, so this is a trial and error procedure.

⚠ Caution

Operating the curtain too far in either direction could cause severe damage to the divider.



Limit Switch Adjustment

⚠ CAUTION: Setting the limit switches is a hazardous operation. To set the limit switches you must access the hoist while the cable is installed and observe operation to determine travel direction. Lock out and tag the electrical source prior to making any actual adjustment inside the limit switch box to prevent electric shock and/or injury due to unexpected winch movement.

- ① Remove the limit box cover by loosening limit box cover retaining screw. Cover will slide to one side and hinge open. Cover is on a cable tether to prevent it from falling and damaging the curtain or floor.
- ② Carefully observe the travel of the limit switch index wheels as the winch is operated. Two travel limit switches are provided. Which becomes the upper limit switch and which becomes the lower limit switch depends on the direction of rotation of the winch drum while the curtain is being raised. This is determined by the conditions of each installation. Carefully check which switch is for the upper travel and which is for lower travel before making any adjustments. Failure to do so could result in damage to the winch or curtain system as it may over-travel if wrong switch is adjusted.
- ③ Operate hoist in one direction until desired position is reached or limit switch actuates. If necessary, move index wheel to allow more travel by following steps 4 to 8 below.
- ④ Shut off or disconnect power to winch to prevent chance of electric shock and/or injury due to unexpected winch movement.
- ⑤ Push the index bar toward the electrical box (away from the threaded rod) to disengage index wheel.
- ⑥ Rotate index wheel toward or away from the micro switch as required.
- ⑦ Release index bar ensuring that it engages index wheel.
- ⑧ Turn on or reconnect power to winch and verify travel stops at desired location and repeat steps 4 to 7 as necessary for each direction of travel.
- ⑨ Verify setting in each direction and reattach limit switch box cover.

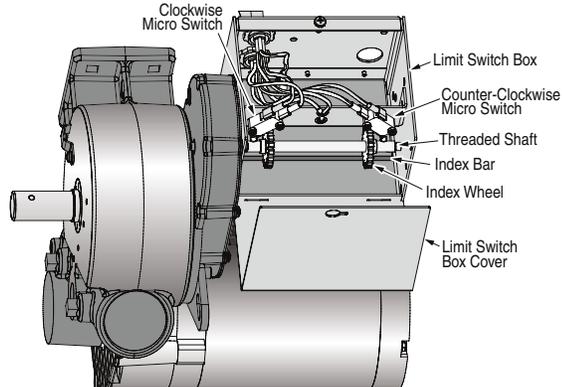
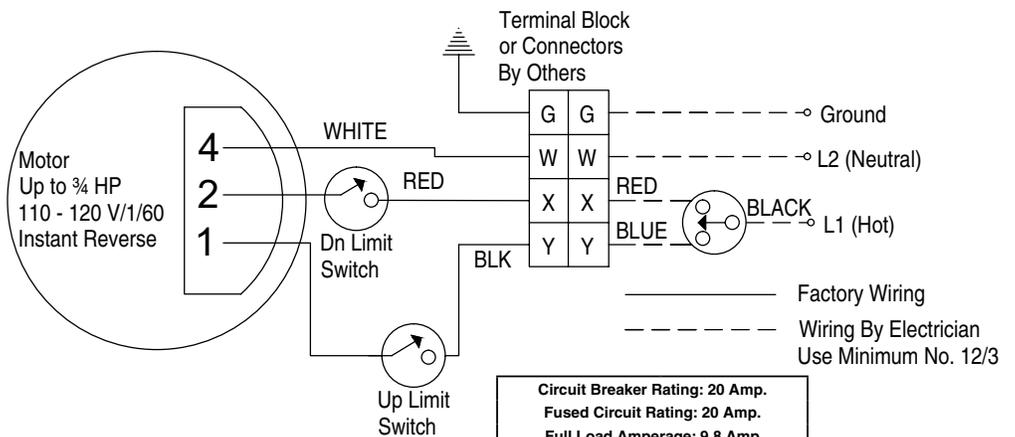


Figure 7

Wiring Diagram



Circuit Breaker Rating: 20 Amp.	
Fused Circuit Rating: 20 Amp.	
Full Load Amperage: 9.8 Amp	
Recommended Minimum Wire Size	
90' Maximum Run	12 AWG
91' to 140' Run	10 AWG
140' to 225' Run	8 AWG
Wire size recommendations based on 3/4 HP Motor, 3% voltage drop, copper wire and are calculated using standard wire size calculation methods	
Size of wall masonry boxes required for single and key switches	
All Boxes: 2" (w) x 3 3/4" (h) x 2 1/2" (d)	