

Installation Instructions

Top Roll 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.
 - ⑧ Winch is not rated for continuous duty. Care should be used to not over-heat the winch while setting the limit switches.
- 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 job site.

Hardware Installation

- ① Verify overall height and width with shop drawings to determine possible discrepancies. Curtain fabric will be approximately 30" taller than structure height to insure a minimum of two fabric pre-wraps.

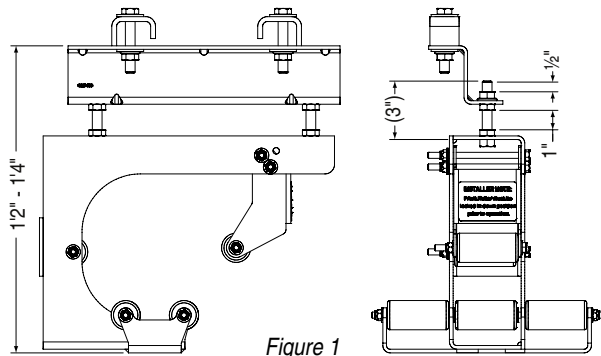


Figure 1

- ② Install any support angles or tubing per locations shown on shop drawings.
- ③ Attach winch support angles or brackets to winch and install per location shown on shop drawings.
- ④ Locate the coupler used to connect universal joint/drive tube assembly to winch. Attach coupler to winch output shaft using supplied key stock and set screw.

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.

- ⑤ Install cradle assemblies per locations shown on shop drawings and adjust vertically to insure drive pipe will be level.
- ⑥ Rotate front roller forward and lock into open position by placing bolt through upper most holes on front top of cradle assembly.
- ⑦ Install any support angles or tubing per locations shown on shop drawings.
- ⑧ Attach winch support angles or brackets to winch and install per location shown on shop drawings.
- ⑨ Locate section of 2³/₈" OD tubing and attach to winch by passing through output shafts, drilling and installing hardware as shown on drawings.
- ⑩ Install cradle assemblies per locations shown on shop drawings and adjust vertically to insure drive pipe will be level.

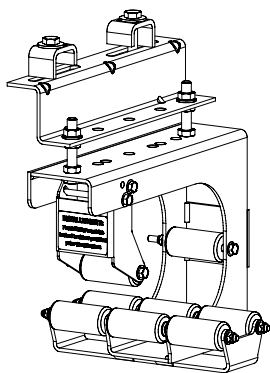


Figure 2

- ⑥ Rotate front roller forward and lock into open position by placing bolt through upper most holes on front top of cradle assembly.
- ⑦ Attach drive pipe together to obtain one long continuous run of drive pipe.
 - a. Locate 5" OD drive tubes and assemble. Assemble starting with the tube that will be located closest to the winch, which will have a gudgeon and 2³/₈" tube attached to one end and tube splice attached to the other. Attach to an intermediate tube, which will have a tube splice on one end and six pre-drilled rivet holes in the opposite end. The tube farthest from the winch will have two open ends and pre-drilled rivet holes in only one end.
 - b. After tube is assembled, drill splice tube for 3¹/₁₆" rivets through pre-drilled holes in outer drive tube. Install rivets with rivet gun.

Curtain Installation

- ① Lay the curtain out with the top of the curtain close to the pre-assembled drive tube.
- ② Using a chalk line, mark a straight line along the length of the assembled 5" drive tube to be used as a guide when attaching the curtain.
- ③ Curtain fabric should be wider than the 5" drive tube. There should be a minimum of 3" of fabric extending beyond each end of the 5" drive tube. Trim the drive tube as necessary. Attach fabric so equal amounts of fabric overhang each end. Do not allow drive tube to extend onto the heat sealed edging of curtain fabric.
- ④ Attach the square raw top edge of curtain fabric to the 5" drive tube using adhesive strip. Attach fabric so that rougher side—where the scrim is most visible—is against the drive tube. The smoothest side should be on the outside of tube as fabric is rolled up. Make sure the curtain is flat, square and straight. Fabric must be stretched tight as it is attached to the drive tube.

Note: Use of floor rollers or inverted top cradles used on Draper Roll-Up dividers make it much easier to keep fabric square to 5" drive tube.

- ⑤ Slide 1⁵/₈" top and bottom batten tubes into pocket one section at a time, assembling as you go. Use 1³/₈" 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 5¹/₁₆" x 1/4" set screws.

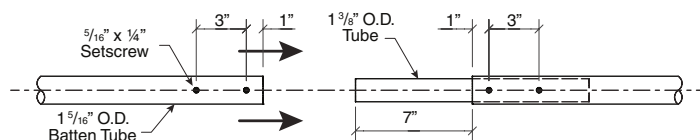


Figure 3

- ⑥ Stretch bottom of curtain taut and trim batten tube so that it is approximately 3" shorter than curtain. Make sure tube ends are free of sharp edges and close bottom pocket at each end using lacing cord, zip ties or short bolts (by installer) through grommets.
- ⑦ Roll all the curtain fabric tightly onto 5" drive tube.
- ⑧ Raise the curtain to overhead attachment point using installer supplied temporary winch or block and tackle. Use caution to not damage curtain fabric with ropes, cables, etc. during lifting.
- ⑨ Position 5" drive tube with curtain wrapped around it into the cradle assemblies (see Fig. 3). Prior to removing from winch or block and tackles used to lift drive tube, lower all front rollers and reassemble bolts, washers and locknuts in the lowest hole on front top of cradle assemblies.
- ⑩ Use the double universal joint to connect drive tube and 2³/₈" tube that is connected to the winch (see Figure 4).

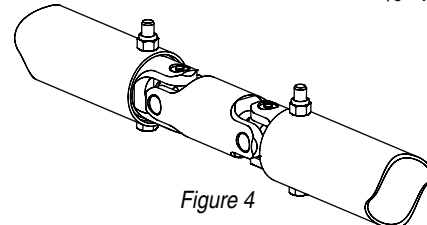
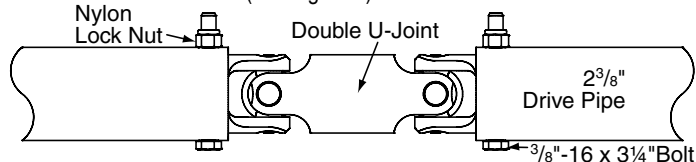


Figure 4

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Adjustments

- ① Operate the curtain to the stored position and set limit switch. Operate curtain to the down position and set limit.
- ② In the down position, make sure limit switch has been set with minimum of two fabric wraps on the 5" drive tube.
- ③ Make sure drive tube is sitting squarely on all carrier assemblies. Level and plumb carriers as necessary—uneven or un-square carriers may cause excessive fabric wear.
- ④ If the curtain tends to run off in one direction, instead of stacking uniformly, shim the curtain in the pre-wrapped fabric. To shim, use extra vinyl, duct tape or similar material. Disengage the down limit switch and unroll the curtain all to expose pre-wrapped fabric. Position the shim at edge of pre-wrapped material on the end opposite the run off. Secure with adhesive tape. Roll the curtain back up and re-set down limit switch. Repeat as necessary. No two curtains behave the same so this is a trial and error process.

⚠ 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.

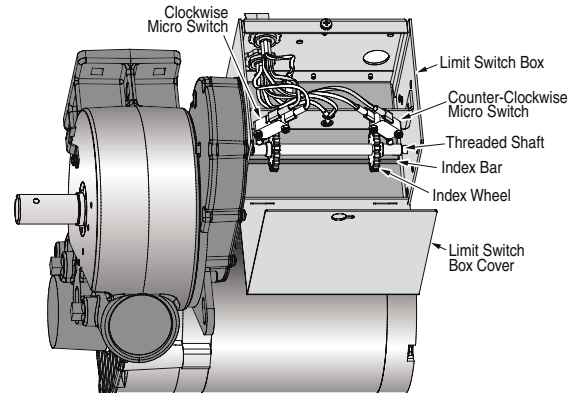
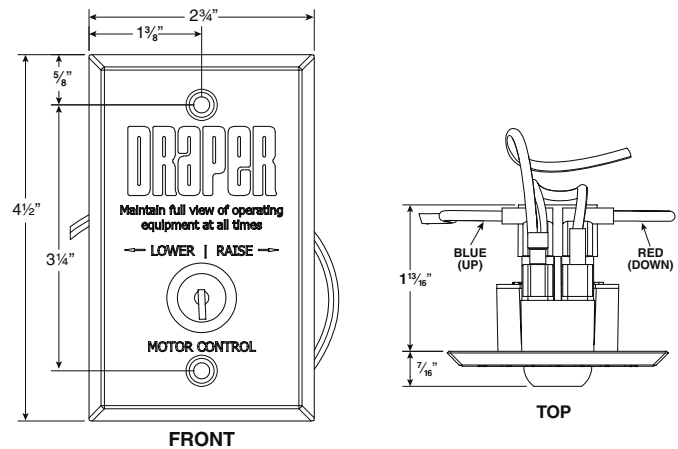
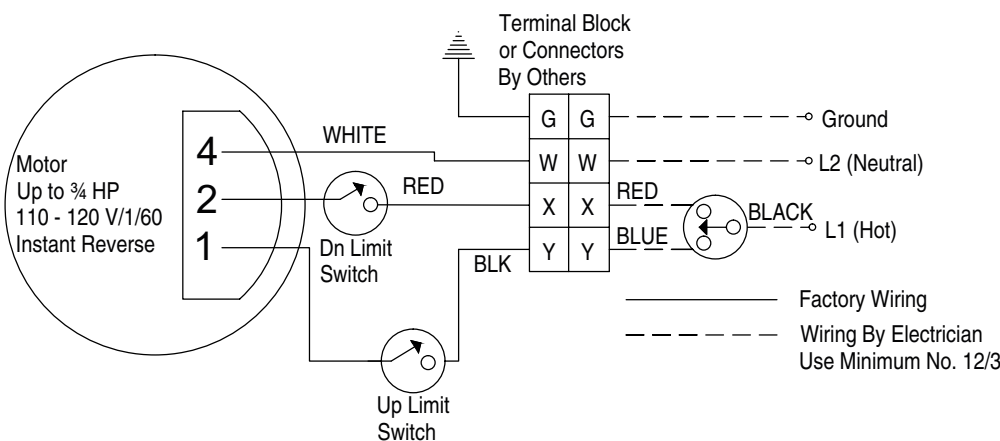


Figure 5

Key Switch



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)	