



Center Drive Divider Curtain

Models: 4050 (Single Motor) and 4050 (Dual Motor)



Installation, Operation and Maintenance Instructions

.....
Please read all instructions before attempting installation or operation of these units
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SAVE THESE INSTRUCTIONS FOR FUTURE USE

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Center Drive Divider Curtain



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Center Drive Divider Curtain



Introduction

Thank you for your purchase of a Model 4050 Center Drive Divider Curtain. To ensure that our equipment will provide years of use to you, we are including this installation, operation, and maintenance guide. This guide will provide information on the proper assembly and installation methods, operating procedures, and preventative maintenance of your gymnasium divider curtain.

Please note that a Bill of Materials is being included with this guide. Please check that all of the parts called out on the Bill of Materials are present prior to beginning assembly and setup. Please do not substitute for factory parts. Please contact the PSS or Gared Sports customer service department and allow them to determine if substitute parts are acceptable.

It is recommended that an individual who has been properly trained perform assembly and set up of the divider curtain. No one under the age of 18 should attempt assembly or set up of the unit, unless properly supervised.

To prevent normal wear and tear from shortening the life of the unit, preventative maintenance inspections and repairs should be performed at least once per year. If the units are subject to high or unusual usage, inspections should be scheduled to occur more frequently. If items are found to be nonconforming, replacements can be ordered from PSS or Gared Sports or one of our authorized dealers. When contacting PSS or Gared Sports, please have information regarding the dealer/installer who sold the unit, the name of the project, and any applicable warranty information.

Please note that PSS or Gared Sports assumes no responsibility for the building structure to support our products. We believe it is the responsibility of the building designers to determine the correct structure to support our products. We will provide the project structural engineer with all the required weight and loading information for the specific project in order for them to calculate the appropriate structure.



Center Drive Divider Curtain



Read and understand the following warnings to prevent possible personal injury and potential damage to the equipment during assembly, setup, and operation.

⚠ WARNING

BEFORE OPERATING DIVIDER CURTAIN MAKE SURE THE AREA AROUND AND UNDER THE CURTAIN IS CLEAR OF OBSTRUCTIONS, EQUIPMENT, AND PEOPLE. MAKE CERTAIN NO PERSONS ARE NEAR THE CURTAIN DURING OPERATION. FAILURE TO FOLLOW THIS PROCEDURE COULD RESULT IN EQUIPMENT DAMAGE AND/OR SERIOUS PERSONAL INJURY

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⚠ CAUTION

ONLY TRAINED AND AUTHORIZED PERSONNEL SHOULD OPERATE THIS EQUIPMENT. OPERATION BY UNTRAINED OR UNAUTHORIZED PERSONNEL MAY RESULT IN DAMAGE TO THE CURTAIN OR CURTAIN STRUCTURE AND/OR INJURY TO ANYONE NEAR THE CURTAIN.

ALWAYS MAKE SURE AREA AROUND AND BELOW THE CURTAIN IS CLEAR OF PERSONNEL AND OBSTACLES BEFORE OPERATING THE DEVICE.

NEVER STAND DIRECTLY UNDER THE CURTAIN DURING OPERATION.

OPERATOR MUST KEEP CURTAIN IN VIEW AT ALL TIMES DURING OPERATION.

KEY SWITCH OR CONTROL PAD MUST BE MOUNTED IN CLEAR VIEW OF THE CURTAIN.

NEVER LEAVE KEY IN KEY SWITCH UNATTENDED.

NEVER SWING OR SWAY THE CURTAIN.

NEVER HANG FROM SIDES OR BOTTOM BATTEN OF CURTAIN DURING OPERATION OR WHEN CURTAIN IS IN THE LOWERED POSITION.

CAUTION SHOULD BE EXERCISED AT ALL TIMES WHEN OPERATING THE CURTAIN.

ALWAYS FOLLOW PROPER SAFETY RULES.

Before proceeding with assembly, **read all instructions and assembly procedures**. Make sure all parts have been received and are not damaged. Verify all parts listed on packing list are present prior to installation. Contact PSS or Gared customer service department for assistance with replacement of any parts missing or damaged.



Center Drive Divider Curtain



Parts Checklist

Item	Part number	Description	Qty	
			Single Motor	Dual Motor
1	1195-01-00	KEYSWITCH ON COVER FOR 1194	1	1
2	1519-01-00	4" SQR COVER F/RECPT 1-19/32" DIA.	1	1
3	1811-01-00	LOCKING PLUG (MALE) - 4 BLADE	1	2
4	701705282	MOTOR SYNCHRONIZER FOR DUAL MOTOR(S)	N/R	1
5	705155043	CROWN ADAPTER - TUBULAR MOTOR	1	2
6	705155626	DRIVE ADAPTER - TUBULAR MOTOR	1	2
7	705155200	TUBULAR MOTOR - FOR CENTER DRIVE	1	2
8	705201102	NYLATRON TUBE BEARING	1	2
9	705201106	PLATE, COUNTERWEIGHT ARM	1	2
10	705201140	COUNTERWEIGHT ARM WELDMENT	1	2
11	705201118	CABLE REEL – CENTER DRIVE CURTAIN	1	2
12	705201119	PLATE, CABLE REEL MOUNT	1	2
13	111126121	RETAINING RING (E-CLIP)	1	2
14	111115416	COTTER PIN, 5/32 X 2"	1	2
15	101655362	HOSE CLAMP 3" TO 5" DIA.	2	2
16	1015-09-00	PLASTIC CAP FOR 1.9" DIA. PIPE	4	4
17	101701016	JUNCTION BOX 2" X 4" X 1.75"	1	2
18	101701017	JUNCTION BOX COVER 2" X 4"	1	2
19	1516-01-00	ROMEX CONNECTOR, 3/8"	2	4
20	234-10-24-8Z	SCREW, MACH PAN HEAD PHILLIPS 10-24 X 1/2"	2	4
21	255-10-24	#10-24 HEX NYLON LOCK NUT	2	4
22	571-4-20-12	HEX FLANGE HD TAP SCREW 1/4-20 X 3/4	4	8
23	6050-11-00	3/16" X 3/16" DRIVE RIVET	See Packing List	
24	705154626	4" ROLLER TUBE FOR TOP-ROLL CURTAIN	See Packing List	
25	705154714	SPLICE TUBE FOR TOP-ROLL CURTAIN	See Packing List	
26	1900-04-00	TUBE,RND,1.9 OD X 0.083WALL HREW KK	See Packing List	
27	1771-27-08	1771 SUPPORT PIPE SLEEVE W/SET SCREW	See Packing List	
28	502-5-18-12Z	BOLT, HEX HEAD 5/16"-18 X 3/4"	See Packing List	
29	502-6-16-16	BOLT, HEX HEAD 3/8"-16 X 1"	See Packing List	
30	502-6-16-20	BOLT, HEX HEAD 3/8" X 1-1/4"	See Packing List	
32	541-6-16	NUT, HEX 3/8" FULL FINISH	See Packing List	
33	548-5-18Z	NUT, WHIZLOCK 5/16"	See Packing List	
34	548-6-16	NUT, WHIZLOCK 3/8"	See Packing List	
35				
36				

IMPORTANT: Check packing list supplied with the product. Some parts required to attach the curtain to the overhead structure may not be listed in the above table because the connections are job dependent and only listed on the packing list for the job.



Center Drive Divider Curtain



INSTALLATION

Tools Required:

Hammer

3/8" Hand Drill

Drill Bits – 3/16" and 1/2" with 3/8" Shank

3/8" Ratchet Wrench with 1/2" and 9/16" Sockets

1/2" Ratchet Wrench with 9/16", 11/16" and 3/4" Sockets

Wrenches – 1/2", 9/16", 11/16" and 3/4"

3/16" Allen Wrench

4" C-Clamps (2)

4' Level

File (half round)

25' Tape Measure

Cable Cutters

Utility Knives

Wire Stripper

Small Screwdriver

Ratcheting Pulleys (3-5 depending on length of curtain)

75' Ropes (3-5 depending on length of curtain)

100' 16-4 Wire (depending on length of curtain)

Wire Nuts

Duct Tape

Block of Wood (for tapping)

Broom

Shop Vac

IMPORTANT: A minimum of three people (more, depending on size of curtain) is recommended to be available to assist with the installation.



Center Drive Divider Curtain



INSTALLATION INSTRUCTIONS

IMPORTANT: Locate, identify and count all parts before starting the installation to ensure that all are correct and correspond to the packing list/production drawings. Also review production drawings to ensure that building conditions have not changed since the initial field check. Verify overall height and width noted on drawings.

Installation Steps:

1. Site preparation
2. Install overhead support hangers
3. Assemble aluminum drive tube
4. Install curtain fabric onto aluminum drive tube
5. Install top and bottom batten pipes in curtain fabric
6. Raise assembled curtain to overhead and connect top batten to support hangers
7. Allow curtain to hang fully extended and adjust height off finished floor as required
8. Install counterweight(s)
9. Install motors
10. Secure counterweight bearing(s) to aluminum drive tube
11. Install cord reel(s) to overhead structure
12. Connect wiring.
13. Set motor limit switches
14. Test divider curtain operation

Step 1 – Site Preparation:

Finished floor and curtain are easily damaged; therefore care should be taken to protect both. Make sure area is clean and free of debris. Sweep floor before laying protective covering. Protective covering should be at minimum the length and width of curtain. Have shop vacuum handy to sweep up any debris or metal shavings during installation.

Step 2 – Installing Overhead Support Hangers

Because the overhead structure will vary per project, the installation configuration, dimensions, and details are reflected in the production drawing package shipped with the product. Refer to the production drawings for specifics on your particular installation.

It is important to remember that the divider curtain will not roll correctly if the overhead connections are not installed level and in line. Make sure to follow the directions in the production drawing package for installing these connections to provide a level and aligned attachment for the curtain fabric.

Step 3 – Assemble Aluminum Drive Tube

Make sure floor area is clean and free of debris. Sweep if necessary, and lay protective covering before unfolding curtain vinyl.

1. Lay drive tube on the floor aligned with the overhead structure if possible.. Locate the lengths of drive tube according to the installation print provided with the shipment. (Depending on the overhead structure, drive tube may be longer on one or both ends, and center splice may not fall at center of curtain.)
2. Install the splices at each joint of the drive tube. See figure 1.

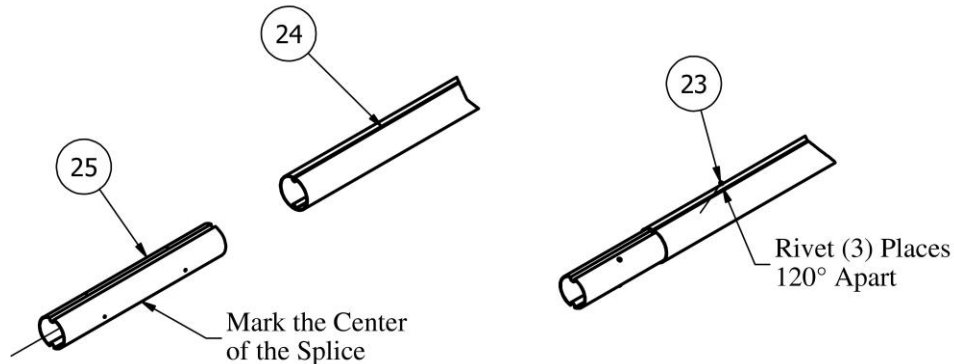


Figure 1

Refer to Figure 1 for the following step

3. Mark center of splice and insert into drive tube. Using a 3/16” drill bit, drill three equally spaced holes through drive tube and splice. Insert rivets and tap into place. To avoid damage to vinyl or mesh, be sure to sweep up all metal shavings left from drilling.
4. Continue process until drive tube has been completely assembled.

Step 4 – Install Curtain Fabric onto Aluminum Drive Tube

1. Lay out the vinyl and mesh panels.
2. The curtain vinyl and mesh panels have been manufactured to include a nylon cord sewn into the upper pocket. This nylon cord is used secure the panels to the aluminum drive tube.
3. Slide the vinyl panel onto one end of the assembled drive tube. A pull loop has been provided on one end of the vinyl to allow for easier insertion into the drive tube. Align the vinyl cord and sewn top pocket into one groove of the drive tube and pull the vinyl along the length of the drive tube. Continue to pull the vinyl until the vinyl panel is centered on the length of the drive tube.
4. Repeat this process with the mesh panel in the opposite groove on the aluminum drive tube.
5. Once the curtain vinyl and mesh panels are installed onto the full length of the drive tube and centered on the drive tube, attach a band clamp to the tail of the vinyl strips on the opposite end from the pull loops. Securely tighten this clamp to hold the vinyl and mesh in position on the tube.

Important: Before tightening the band clamp, make sure the edge of the vinyl panel is in line with the edge of the mesh panel. Make sure the vinyl strips of the mesh panel and the vinyl panel are folded onto the drive tube in the opposite direction of rotation before tightening the clamp. See Figure 2. The curtain will not roll correctly if these strips are not folded in line with the rotation of the curtain.

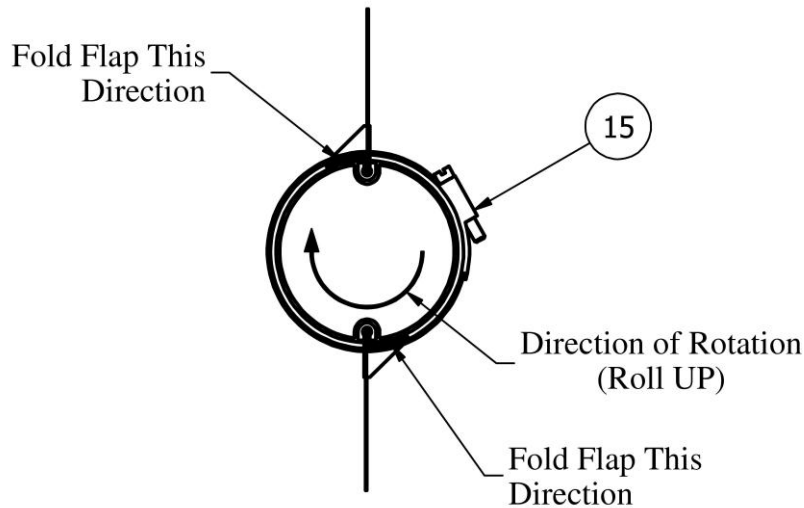


Figure 2

6. Pull the pull loops as tight as possible to stretch the vinyl along the drive tube and attach a second band clamp to the tail of the vinyl strips at the pull loop end. Tighten the band clamp securely. The curtain vinyl is now securely attached to the drive tube to prevent movement of the vinyl during operation.

Important: Before tightening the band clamp, make sure the edge of the vinyl panel is in line with the edge of the mesh panel. Make sure the vinyl strips of the mesh panel and the vinyl panel are folded onto the drive tube in the opposite direction of rotation before tightening the clamp. See Figure 2. The curtain will not roll correctly if these strips are not folded in line with the rotation of the curtain.

7. The pull loop can now be cut off.

Step 5 – Install Top and Bottom Batten Pipes into Curtain Fabric

Installing Bottom Batten

Bottom Batten consists of three or more pieces (depending on size of curtain) of 1.9” O.D. pipe. End batten tubes are drilled on one side only.

1. Remove acorn nut and bolt from bottom vinyl pocket.
2. Slide non-drilled end piece of bottom batten pipe into curtain pocket, leaving 1’ of pipe exposed. Slide first splice into pipe end, aligning pre-drilled holes, and tighten setscrews.
3. Slide next piece of pipe onto splice, and continue above procedure until bottom batten is complete.
4. Replace acorn nut and bolt, and tighten securely.

Installing Top Batten

Top Batten consists of three or more pieces (depending on size of curtain) of 1.9” O.D. pipe. End batten tubes are drilled on one side only.



Center Drive Divider Curtain



1. Install a plastic cap on the non-drilled end piece of bottom batten pipe and slide into curtain pocket, leaving about 1' of pipe exposed. Slide first splice into pipe end, aligning pre-drilled holes, and tighten setscrews.
2. Slide next piece of pipe onto splice, and continue above procedure until top batten is complete.
3. Note the top batten is longer than the mesh width, so about 3" to 6" of pipe will extend from the mesh panel on both ends.

Curtain is now ready to be raised to the overhead.

WARNING

DO NOT install motors or counterweights onto the curtain assembly before attaching the curtain to the overhead connections. Motors and counterweights can only be installed after the curtain has been connected to the overhead structure and is hanging in the full down position. Failure to follow the procedure could result in damage to the motors, drive tube, or serious injury to personnel.

Step 6 – Raise Assembled Curtain to Overhead and Connect To Support Hangers

The following methods of raising the curtain are merely suggestions, as each installation will vary depending on curtain size and facility. Additional equipment needed to raise curtain is not supplied, and is listed under “optional” on the Tool List. We recommend three or more people be available to assist in raising the curtain. If your installation is particularly difficult due to facility conditions, please contact Performance Sports for additional information.

Method #1 -

Make sure curtain is aligned with overhead drops and evenly spaced between end brackets. For convenience, steps 1 and 2 can be done while installing curtain overhead.

1. Evenly space and securely attach standard or ratchet pulleys above overhead using chain or rope.
2. Thread rope through pulleys allowing enough length for rope to dangle on floor.
3. On top batten of the curtain, make a small hole (3/8" or 1/2" depending on rope size) in the mesh loop to allow the rope to connect to the batten pipe, spacing each hole to match pulleys attached to overhead. Make sure the holes are as small as possible so as not to be noticeable once the curtain is raised.
4. Insert ends of ropes through holes in the mesh and tie securely around the top batten.
5. Leaving curtain unrolled, slowly and evenly begin to raise curtain.
6. Once curtain has reached overhead assemblies, make sure ratchet pulleys are secure, or if using standard pulleys, rope is securely tied.

Method #2

1. Using small, 500 lb. capacity electric hoists, secure to hoists above overhead.
2. Attach pulleys using rope or chain, and thread rope through, allowing rope to dangle to ground.
3. Follow steps in Method #1, beginning with step #3.

Method #3

1. If two or more lifts are available, position the lifts parallel to the overhead structure and bring the top batten of the curtain onto the lifts making sure to distribute weight evenly. Secure top batten and slowly raise lifts in an even fashion allowing the curtain to unfold and drape to the floor until desired height is achieved.
2. Attach top batten to the overhead structure with connections as shown in the assembly drawings shipped with the product.

Step 7 – Allow Curtain to Hang Fully Extended and Adjust Height off Finished Floor

With the curtain hanging fully extended, measure the distance from the finished floor to the bottom of the bottom batten. The dimension should be between 1.5” and 2” above the finished floor. It may be necessary to adjust the hangers at the overhead structure to achieve the desired dimension.

Check the level of the aluminum drive tube and adjust the hangers at the overhead as required to make sure the aluminum drive tube is level.

Step 8 – Install the counterweight(s)

1. Pre-assemble the counterweight on the floor before installing on the aluminum drive tube. Refer to Figure 3.

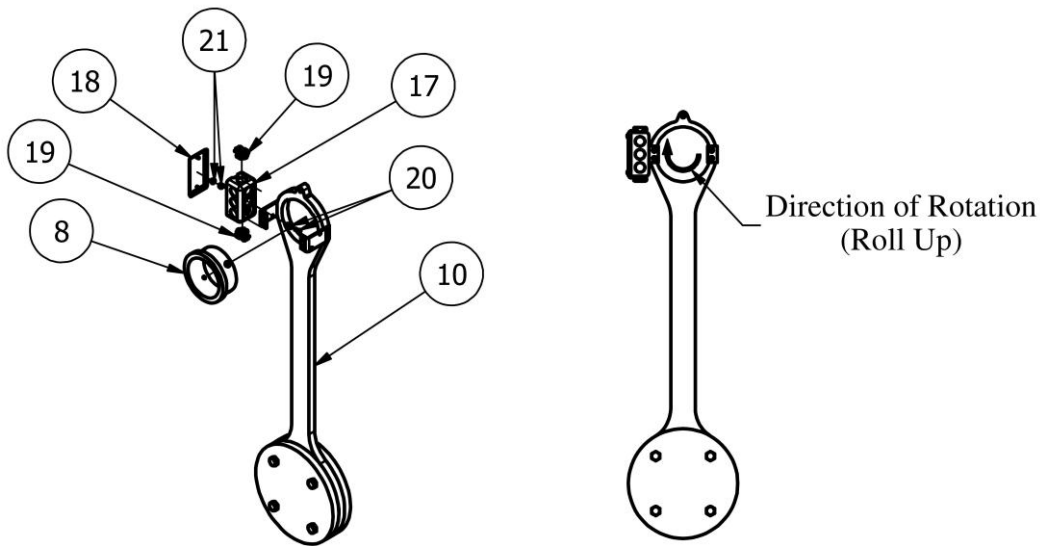


Figure 3

2. Determine the direction of rotation by looking at the end of the aluminum drive tube and the direction of the vinyl strip that were clamped in Step 4. Install the junction box onto the side of the counterweight arm that is in the direction of rotation. For clockwise rotation, install the junction box on the left side of the counterweight. For counter-clockwise rotation, install on the right side of the counterweight. Secure the junction box to the counterweight arm using two #10 x 1/2” screws and #10 nylon lock nuts.
3. Install a Romex connector on the top and bottom openings of the junction box.
4. Install the junction box cover plate.
5. Insert the Nylatron bearing into the counterweight arm making sure the flange of the bearing is on the outboard side (the side with the welded ears) of the arm.

Important: Failure to install the bearing with the flange side out could result in the counterweight slipping off the end of the drive tube causing serious injury or death.

6. Using a sharp utility knife, trim the remaining vinyl strips at the end of the aluminum drive tube flush with the tube to 3" from the end of the tube. Make sure the surface is clean and free of any vinyl for the first 3" to allow the nylon bearing to fit properly.
7. Slide the pre-assembled counterweight assembly onto the end of the aluminum drive tube making sure the Nylatron bearing is fully on the tube and about 3/8" past the end of the tube. Do not install the retaining screws for the bearing at this time. These screws must remain out to provide clearance for the motor to be installed.

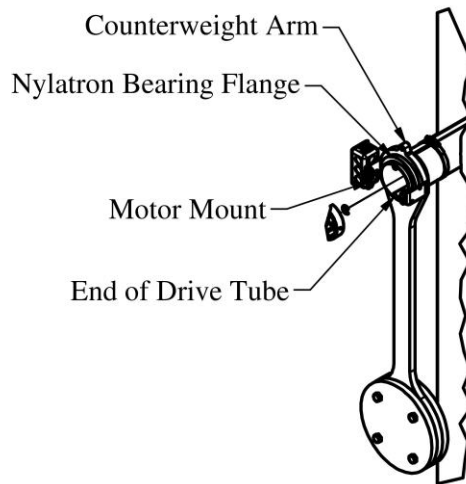


Figure 4

Step 9 – Install the Motor(s)

When the application requires the Dual Motor drive arrangement (refer to your drawings included with the shipment) two motor(s) will be installed. When the application requires a Single Motor, only one motor will be installed.

Important Note:

The drive motor(s) are shipped from the factory with the initial position set in the middle of the limit switch range with approximately 4 motor turns either direction. There are approximately 14 motor turns either direction available between the maximum upper and maximum lower limit positions. Installing motor(s) without pre-adjusting limits of the motor results in only 14 total turns and that may not be enough to allow for total vinyl travel and may result in driving the limit adjuster off the cam rendering the limit useless and requiring a motor change. Always preset the motor(s) per the following instructions before installing in the drive tube of the curtain to insure the largest possible limit switch range.

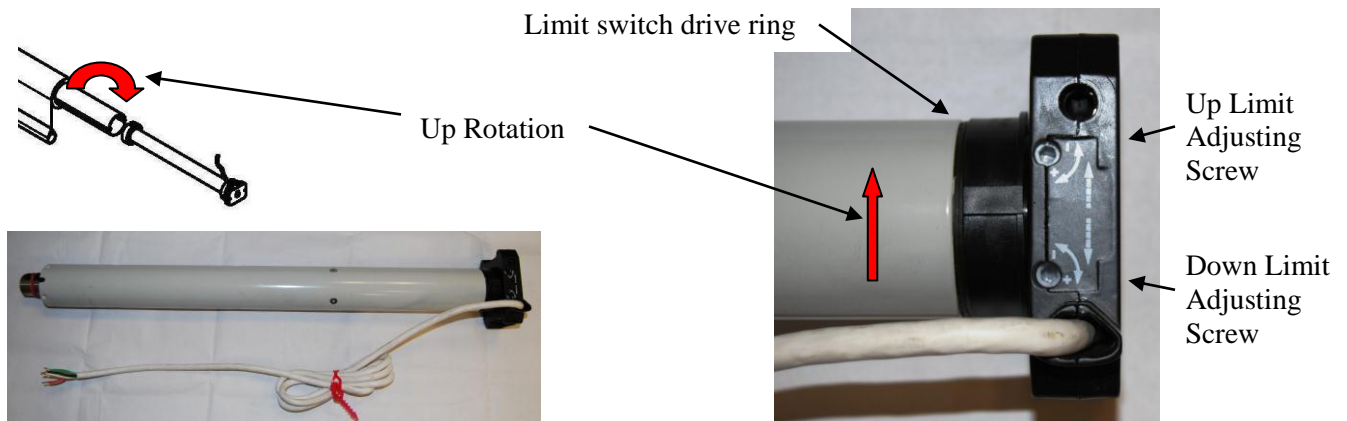
WARNING

Failure to follow the pre-adjustment procedure could result in damage to the motor limit switches while attempting to set the final positions during operation.

Pre-adjusting the motor travel and limits

Single Motor Drive

1. Remove motor from box and position it next to the drive tube as it will be installed. Refer to the Motor Illustration for the next steps.



Motor Illustration

2. Determine the direction of rotation for the curtain (refer to Step 4 of these instructions) and mark the rotation on the top of the motor with a felt pen. The up limit switch is always on the arrow side of the mark while the down limit switch is always at the tail of the mark.
3. Using the adjusting tool (supplied in the motor box), adjust the “DOWN” limit screw 14 turns in the plus (+) direction.
4. Rotate the limit drive ring by hand in the direction of the adjusted limit screw until you hear the limit switch click (about 13.5 to 15 turns). Rotate the limit drive ring back ½ turn making sure you hear the limit switch click.
5. The motor is now ready to be installed in the drive tube.

Dual Motor Drive

1. Remove motors from boxes and position them next to the drive tube as they will be installed. Mark one motor as #1 and the other as #2. Refer to the Motor Illustration for the next steps.
2. Adjust Motor #1 using the single motor procedure above.
3. On motor #2, using the adjusting tool (supplied in the motor box), adjust the up limit screw 14 turns in the plus (+) direction –AND- adjust the down limit screw 14 turns in the plus (+) direction.
4. On both motors, rotate the limit drive ring by hand in the “down” direction until you hear the limit switch click (about 13.5 to 15 turns). Rotate the limit drive ring back ½ turn making sure you hear the limit switch click.
5. The motors are now ready to be installed in the drive tube.

Pre-assemble motor parts according to instructions below.

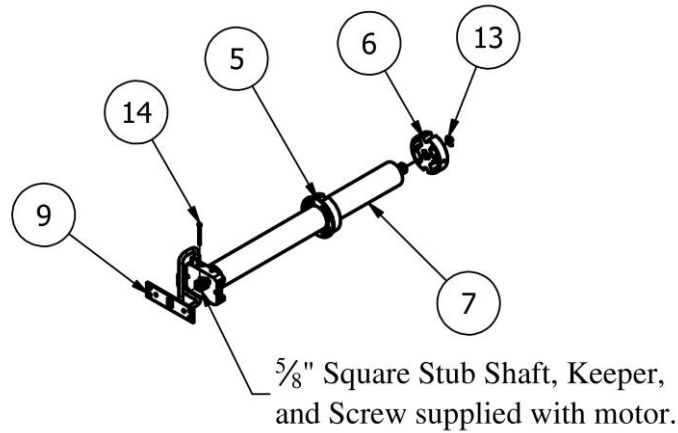


Figure 5

Refer to Figure 5 for the following steps

1. Install Crown (Item 5) and Drive (Item 6) onto motor(s). When the aluminum drive adapter is installed on the motor, install the snap ring (Item 13) on the motor shaft.
2. Install the 5/8" square stub shaft in the end of the motor and secure with the keeper and flat head screw. The 5/8" square stub shaft, keeper, and flat head screw are supplied as part of the motor kit and can be found packed in the motor box.
3. Install the drive plate (Item 9) over the square stub shaft and secure with the cotter pin (Item 14).
4. The motor sub-assembly is now ready to install in the aluminum drive tube.
5. Insert a motor into the end of drive tube by aligning grooves on drive adapter with channels in drive tube. The cord of the motor should be on extending up. Make sure the motor is completely inserted with the crown of the motor fully seated and flush with the end of the drive tube. It may be necessary to tap the counterweight bearing further onto the drive tube to allow the motor drive plate to seat with the counterweight.

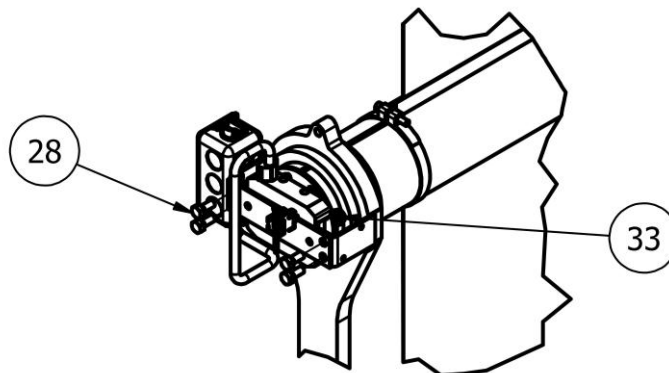


Figure 6

6. Connect the motor drive plate to the counterweight using the four 5/16 x 3/4" bolts (Item 28) and 5/16" Nuts (Item 33). It may be necessary to rotate the counterweight to align the holes.
7. Make sure the motor is fully seated into the drive tube and the Nylatron counterweight bearing flange is seated against the counterweight arm.
8. When the curtain requires two motors, repeat this procedure on the opposite end of the drive tube.

Step 10 – Secure Counterweight Bearing(s) to Aluminum Drive Tube

1. Rotate the bearing to make sure all four pre-drilled holes are aligned on the outer diameter of the drive tube and not on the groove.
2. Drill a 3/16" pilot hole through the aluminum drive tube at each of the four holes in the bearing. Make sure not to drill into the motor once the bit has gone through the drive tube.
3. Install four 1/4" self-tapping flange head bolts to secure the bearing to the drive tube.

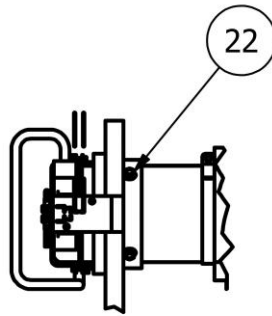


Figure 7

WARNING:

Failure to secure the bearing to the drive tube could result in severe damage to the motor and drive components and serious injury or death to personnel.

Step 11 – Install Cord Reel to Overhead

1. Refer to details in the drawing provided with the product for location and structure to mount the cord reel.

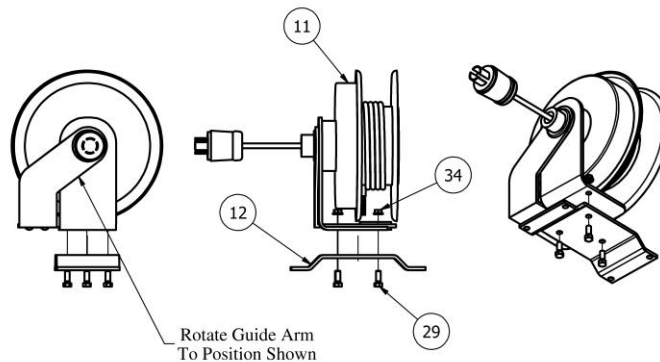
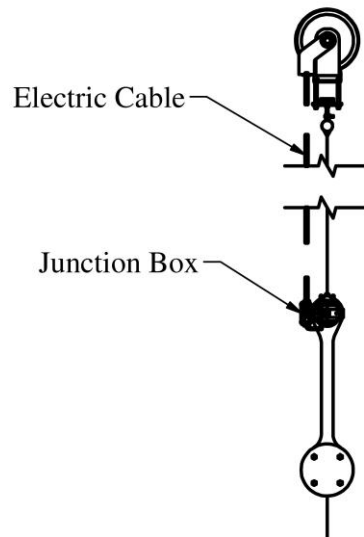


Figure 8

2. Remove bolts securing the guide arm and rotate to position shown in Figure 8. Re install the guide arm bolts.
3. Install the mounting plate to the cable reel using three 3/8x1" hex bolts and 3/8" whizlock nuts.
 NOTE: The mounting plate may be different in some installations. Refer to the drawing package supplied with the equipment to determine the exact configuration of the plate.
4. Follow the instructions in the drawings supplied with the equipment and attach the cable reel assembly to the overhead structure. Make sure the extended cable is directly in line with the junction box on the counterweight assembly to insure smooth operation of the cable during operation.



5. When the curtain installation requires 2 motors, repeat the process for the second cable reel.

Step 12 – Connect Wiring

1. Most installations will require temporary wiring to be connected for power to set the motor limits and test the curtain. Permanent wiring will be installed later by the electrical contractor.
2. For dual motor installations, whenever possible and code allows, the motor synchronizer should be installed on the overhead structure near the center of the curtain. The synchronizer is required to operate a curtain with two motors. Attempting to operate the curtain without the synchronizer could result in damage to the motors.
3. For single motor installations, no synchronizer is required and the motor can be operated with a test cord similar to any backstop installation.
4. Before proceeding with the temporary wiring instructions, open the junction box on the counterweight arm and make the connections of the motor to the cable reel.
5. Route the motor wire around the junction box and insert into the bottom Romex connector. Pull the wire through and cut off any excess wire leaving about 6" of wire inside the box.
6. Route the cable reel wire through the top Romex connector on the junction box and leave about 6" of wire in the box. Tighten both Romex connectors securely on the motor and cable reel wires.

7. Strip the wires of the motor and cable reel wires and connect each wire matching the colors between the two connections (white to white, black to black, red to red, and green to green).
8. On a two motor installation, the second motor should be wired with the red and black wires reversed (motor red to cable reel black and motor black to cable reel red).

Temporary Wiring Motors for the Dual Motor Installation

Refer to wiring diagram (Page 20) for hardwire or temporary wiring instructions of the Dual Motor Drive.

1. For temporary wiring, using 16.4 wire (not provided), divide wire evenly in length between ends of curtain.
2. Wire cable reel power wires and 16.4 wire together (green to green, red to red, etc.) and hold with wire nuts. Drape 16.4 wire to floor or to synchronizer location and attach the 4 prong locking plug (item 3) to the 16.4 wires and plug into Synchronizer Unit according to wiring diagram.
3. Wire key switch to terminal block on Synchronizer Unit with 4' – 5' of temporary wire.
4. Plug the synchronizer into 120V power source.

WARNING: Box is now HOT. Use caution to avoid risk of electrical shock. As a safety precaution, leave Synchronizer Unit on floor or in position and handle only key switch when operating curtain.

Temporary Wiring Motor for the Single Motor Installation

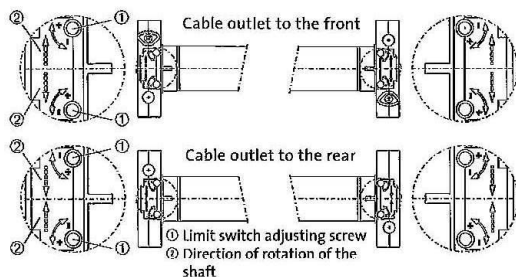
Refer to wiring diagram (Page 19) for hardwire or temporary wiring instructions of the Single Motor Drive.

1. Attach the 4 prong locking plug (item 3) to the cable reel power cable.
2. Connect the test cord (not supplied) to the cable reel power plug. The test cord is normally used to set the limit switches on all backstop hoists.
3. Plug the test cord into 120V outlet.

Step 13 - Setting Motor Limits

Note: The motor(s) operating the curtain have an automatic thermal shut off function after 6 minutes of continuous running to prevent overheating and damaging of fabric. Cool down takes 15-20 minutes depending on fabric wrap and ambient temperature. The motor(s) will not run during this time and will automatically reset themselves.

Operate the adjusting screw according to the direction of travel arrows.



Turn the limit switch adjusting screws as follows:

- **Minus (-)** = shorter travel
- **Plus (+)** = longer travel

(For Single Motor Installation)



Center Drive Divider Curtain



Note: Use the temporary wiring for Single Motor Installation

When starting with the vinyl down (unwrapped), adjust the down limit first then adjust the up limit.
When starting with the vinyl up (wrapped), adjust the up limit first then adjust the down limit.

Raise -OR- lower the vinyl about 6" before proceeding.

Adjustment of the "Up" direction

1. Allow the motor to run in the "up" direction. At the same time, turn the "up" adjusting screw in the "-" (minus) direction until the motor stops.
2. Then hold the "up" button on the test cable on. At the same time, turn the "up" adjusting screw in the "+" (plus) direction until the desired end position is reached.

Adjustment of the "Down" direction

1. Allow the motor to run in the "down" direction. At the same time, turn the "down" adjusting screw in the "-" (minus) direction until the motor stops.
2. Then hold the "down" button on the test cable on. At the same time, turn the "down" adjusting screw in the "+" (plus) direction until the desired end position is reached.

(For Dual Motor Installation ONLY)

Note: Use the temporary wiring for Dual Motor Installation

Set the limits on Motor #1 first.

When starting with the vinyl down (unwrapped), adjust the down limit first then adjust the up limit.
When starting with the vinyl up (wrapped), adjust the up limit first then adjust the down limit.

Raise -OR- lower the vinyl about 6" before proceeding.

Adjustment of the "Up" direction

1. Allow the motor to run in the "up" direction. At the same time, turn the "up" adjusting screw in the "-" (minus) direction until the motor stops.
2. Then hold the "up" button on the test cable on. At the same time, turn the "up" adjusting screw in the "+" (plus) direction until the desired end position is reached.

Adjustment of the "Down" direction

1. Allow the motor to run in the "down" direction. At the same time, turn the "down" adjusting screw in the "-" (minus) direction until the motor stops.
2. Then hold the "down" button on the test cable on. At the same time, turn the "down" adjusting screw in the "+" (plus) direction until the desired end position is reached.

Setting the limits of Motor #2

1. Raise the curtain until it stops (the Motor #1 limit will stop the curtain) then lower the curtain approximately 6".
2. Allow the motor to run in the "up" direction. At the same time, turn the "up" adjusting screw in the "-" (minus) direction until the motor stops.



Center Drive Divider Curtain



3. Then hold the “up” button on the test cable on. At the same time, turn the adjusting screw “up” in the “+” (plus) direction until the desired end position is reached.
4. Lower the curtain until it stops (the Motor #1 limit will stop the curtain) then raise the curtain approximately 6”.
5. Allow the motor to run in the “down” direction. At the same time, turn the “down” adjusting screw in the “-” (minus) direction until the motor stops.
6. Then hold the “down” button on the test cable on. At the same time, turn the “down” adjusting in the “+” (plus) direction until the desired end position is reached.

Step 14 - Checking the limit positions

1. Deploy and retract the curtain 1 or 2 more times to ensure that the limits are set correctly and that the motor(s) are wired correctly.

Keep in mind that for every second of run time on the motor(s) they should have a second of rest after reaching the set limit. (Example: If it takes 3 minutes to deploy the divider the motor should be at rest for 3 minutes)

2. Determine whether to leave curtain in up or down position. (Leaving curtain in down position will help remove wrinkles from vinyl.)
3. Disconnect temporary wiring, and leave synchronizer unit and key switch with Electrician or General Contractor. Make sure Facility Electrician or Facility Manager has a copy of the wiring schematic that was furnished with the installation drawings.

Permanent Wiring Motor(s) for Installation

A qualified electrician should complete all permanent wiring.

The permanent wiring should be installed in accordance with the electrical schematic furnished with the installation drawings at time of delivery of the product.

Notes to Electrician

Make sure the wiring from the synchronizer box to each motor is connected as shown on the wiring diagram. If the motor(s) are not wired in opposite directions, the curtain will not function properly. The limit switches should already be set by the installer, but if not refer to the “Setting Motor Limits” section.

Make sure vinyl rolls over the top of the tube when raising the curtain. DO NOT allow vinyl to roll under the tube. Refer to Figures 6 and 7 for proper direction of roll.

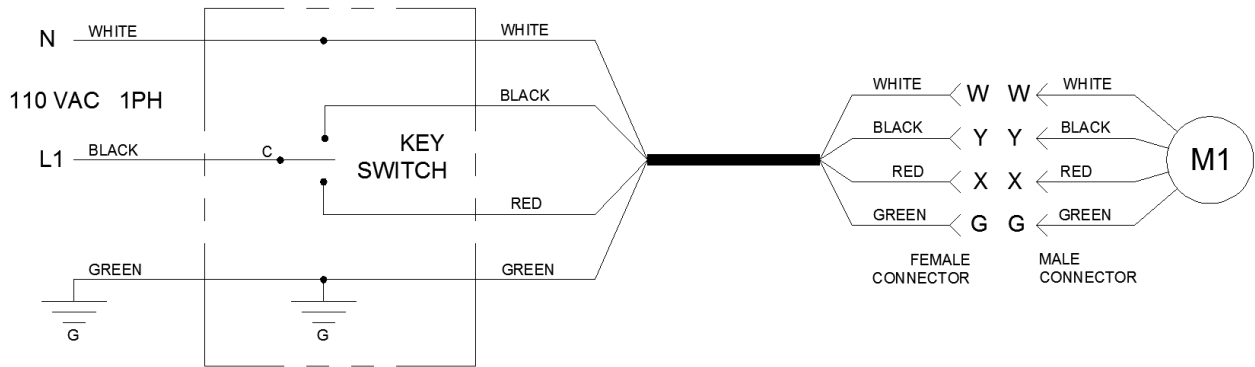
120 V Wiring Diagram



Center Drive Divider Curtain

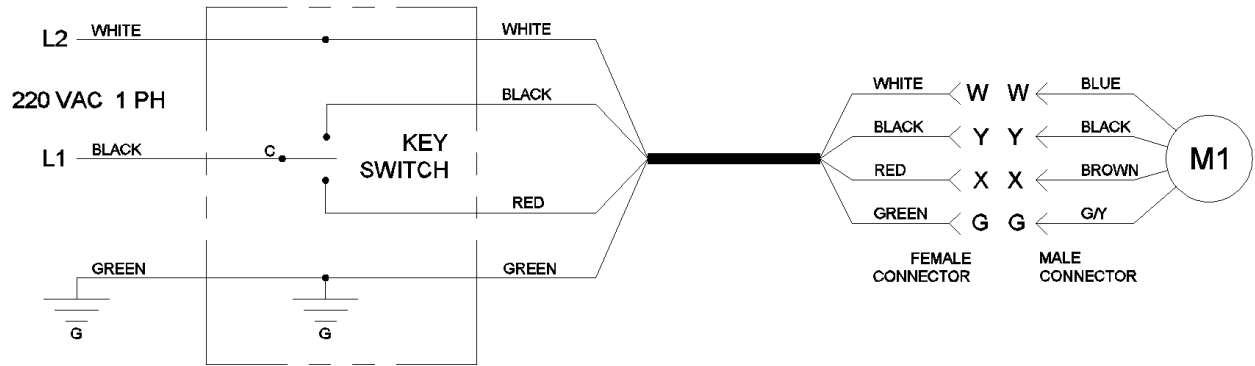


(Single Motor Installation ONLY)

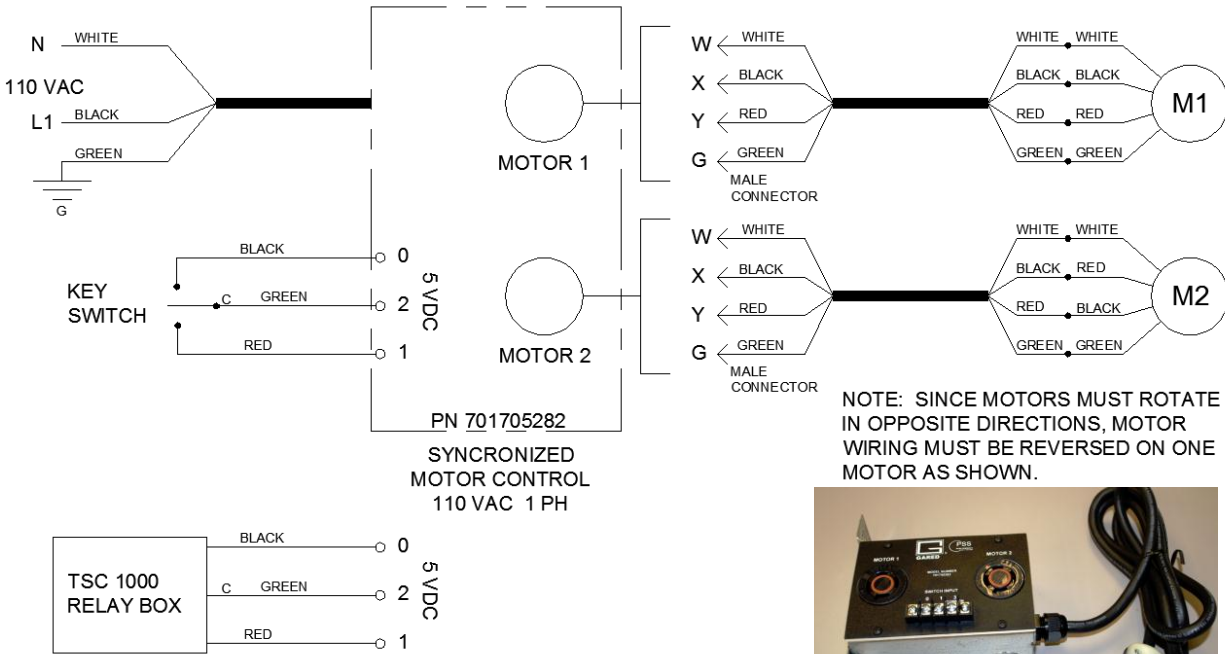


220 V Wiring Diagram

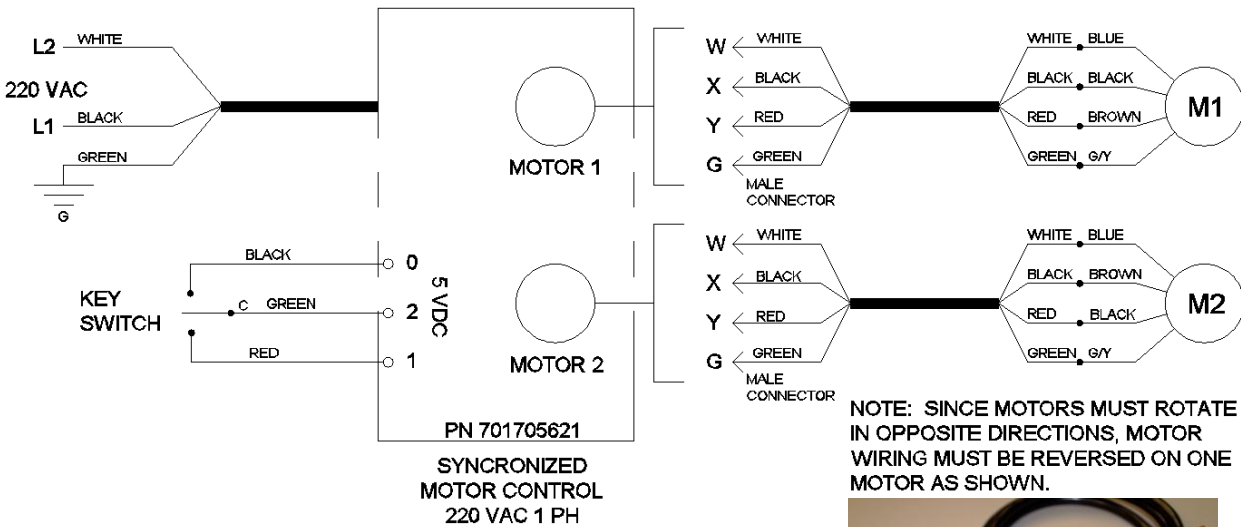
(Single Motor Installation ONLY)



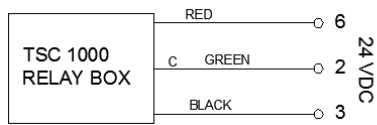
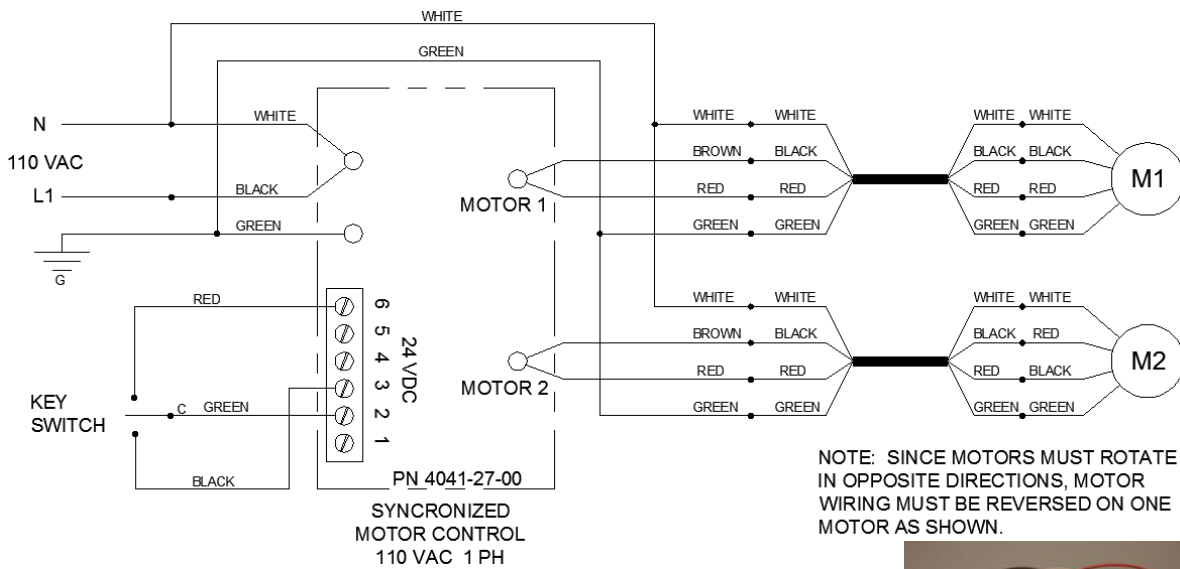
120 V Wiring Diagram w/ 701705282 Controller (Dual Motor Installation ONLY)



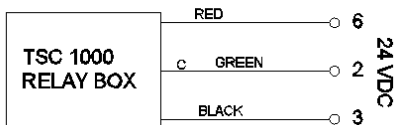
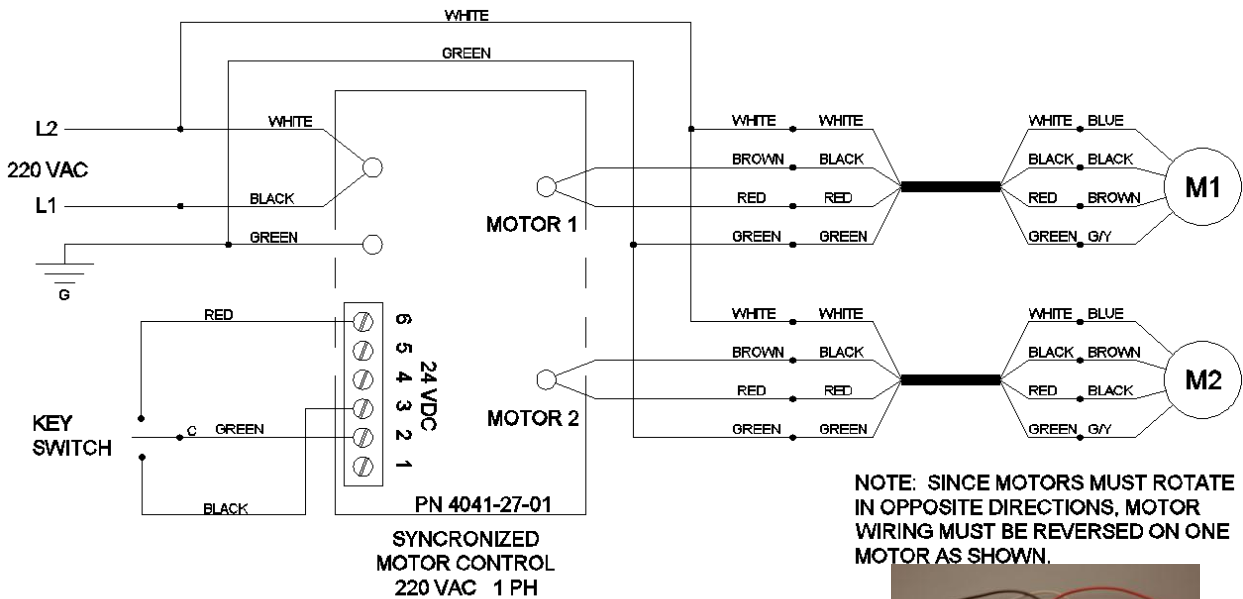
220 V Wiring Diagram w/ 701705621 Controller (Dual Motor Installation ONLY)



120 V Wiring Diagram w/ 4041-27-00 Controller (Dual Motor Installation ONLY)



220 V Wiring Diagram w/ 4041-27-01 Controller (Dual Motor Installation ONLY)





Center Drive Divider Curtain



PLEASE DO NOT ATTEMPT TO OPERATE THIS EQUIPMENT BEFORE READING THE FOLLOWING INFORMATION!!!

MODEL #4050 CENTER DRIVE DIVIDER CURTAIN

PRODUCT OVERVIEW

The following information is designed to assist you with the operation and maintenance of your Model #4050 Center Drive Divider Curtain. We recommend that you carefully read this literature to become familiar with your new divider curtain, then develop an operation and maintenance program for the designated operator of the curtain.

It is very important that this divider curtain be operated by **AUTHORIZED PERSONNEL ONLY**. This curtain has been manufactured with safety in mind, but even the safest equipment can be damaged or cause damage to a person or persons when operated by unauthorized or untrained users.

- Tremendous force is created when this curtain is in motion.
- Only authorized personnel may operate curtain.
- Care must be taken to make sure the curtain and areas above and below the curtain are free and clear of any obstructions.
- Do not stand directly below the curtain when raising or lowering.
- Never swing or sway curtain.
- Structure and motor units were designed to lift the weight of the curtain only.
- Never hang from sides or bottom of curtain during operation or when curtain is in the lowered position.
- Never attach or place foreign objects on the curtain.

OPERATION OF THE MODEL #4050 CENTER DRIVE DIVIDER CURTAIN:

1. The key switch used to control the up/down motion of this curtain must be flush mounted on a wall that gives the operator a clear and full view of the curtain. Never operate the curtain if conditions do not allow for a clear and full view of the curtain.
2. The curtain may be raised or lowered by turning the key to the appropriate “Up” or “Down” position, as indicated on the switch cover plate.
3. The key that operates the curtain must remain in the possession of the authorized operator.



Center Drive Divider Curtain



NEVER LEAVE THE KEY UNATTENDED IN THE KEY SWITCH

4. The motor(s) that control the movement of the curtain have been programmed to stop the curtain at a predetermined “up” and “down” position. Should the curtain stop before it reaches these predetermined positions the motor(s) may have over heated and need to cool off. Allow the divider to rest for approximately 20 minutes and try to run again. If the divider still does not run contact your dealer or installation company immediately.

This divider curtain should be lowered to its full down position periodically to allow the vinyl to naturally stretch and remove any minor wrinkles caused form normal operation. It is recommended that the divider curtain be extended to the full down position and left in the down position for a period of 24 to 48 hours at least twice monthly.

This divider curtain has been custom manufactured according to the Owner’s/Architect’s specifications. When operated and maintained with proper care, this curtain should provide years of safe, trouble-free service.

MAINTENANCE INFORMATION – PLEASE RETAIN FOR FUTURE REFERENCE!!!



Center Drive Divider Curtain



MODEL #4050 CENTER DRIVE DIVIDER CURTAIN

MAINTENANCE OVERVIEW

!!!ALWAYS DISCONNECT POWER SOURCE BEFORE PERFORMING ANY MAINTENANCE CHECK OR OPERATION ON THIS EQUIPMENT!!!

STRUCTURE:

We recommend a yearly inspection (or more frequently depending on usage) of the nuts and bolts, checking for tightness.

MOTOR(S):

The tubular motor(s) that operate your divider curtain do not require any maintenance. We do recommend however, that the limit switches be checked on a regular basis to ensure the settings are accurate.

CURTAIN VINYL:

The curtain vinyl should be checked on a regular basis for rips or tears. Should the vinyl become ripped or torn, it must be repaired or replaced. Contact your dealer or installation company for information on repair or replacement of the vinyl.

DO NOT operate the curtain if the vinyl is ripped or torn, as it could snag on the carrier assemblies.

The vinyl should be cleaned with a damp cloth. A cloth dampened with water will be adequate for most conditions, however, for heavier dirt or spots, a specific vinyl cleaner can be used.

This Model #4050 Center Drive Divider Curtain has been custom manufactured according to the Owner's/Architect's specifications. When operated and maintained with proper care, this curtain should provide years of safe, trouble free service.



Center Drive Divider Curtain



ATTENTION: MAINTENANCE DEPARTMENT

To confirm that you have received maintenance and warranty information, and to better serve you if you contact us, please fill out the following information and fax or mail to the address below.

Please refer to the facility name and/or the installation company below when you contact Performance Sports Systems, and include it on any correspondence.

I have received the maintenance and warranty information provided by Performance Sports Systems on the Center Drive Curtain.

Facility/School Name:

Installation Date:

Installed by:

Maintenance Dept. Contact:

Signature:

Date:

Fax to: 1-317-774-9841

Attn: Customer Service

Or

Mail to: Performance Sports Systems

Attn: Customer Service

9200 E. 146th St., Ste. A

Noblesville, IN 46060

800-848-8034



Center Drive Divider Curtain



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