R Y T E C

Pharma-Roll®

Installation Manual



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TABLE OF CONTENTS

-
INTRODUCTION1
DOOR SERIAL NUMBER(S)1
HOW TO USE MANUAL1
INSTALLATION
TOOLS AND EQUIPMENT REQUIRED2
FLOOR LOOP EQUIPMENT REQUIREMENTS
BASIC JOB REQUIREMENTS2
ELECTRICIAN'S RESPONSIBLITIES2
GENERAL ARRANGEMENT OF DOOR PARTS2
ANCHORING METHODS
Concrete, Block, or Brick Walls
Wood, Block, Brick, or Insulated Walls
Insulated Wall
Insulated Wall
LOCATING CENTERLINE OF DOOR OPENING
LOCATING SIDE COLUMNS4
SIDE COLUMNS
SIDE COLUMN MOTOR SUPPORT6
SPREADER ASSEMBLY6
Door without Hood Assembly6
Door with Hood Assembly7
HEAD ASSEMBLY8
ВОТТОМ ВАК10
INSTALL ENCODER
Caulking
PHOTO EYE INSTALLATION11
ELECTRICAL WIRING ROUTING12
Coil Cord Installation13
CONTROL PANEL AND ELECTRICAL CONNECTIONS

OPEN AND CLOSE DOOR LIMIT POSITIONS
Close Limit Position13
Open Limit Position13
PNEUMATIC REVERSING EDGE SWITCH ADJUSTMENT14
Reversing Edge Switch Air Bleed Check14
Reversing Edge Switch Sensitivity Adjustment
PNEUMATIC KILL SWITCH CHECK AND ADJUSTMENT15
Kill Switch Check15
Kill Switch Air Bleed Adjustment15
Kill Switch Sensitivity Adjustment
PHOTO EYE INSPECTION
Indicator Lights16
Photo Eye Test16
Photo Eye Troubleshooting16
RESETTING BOTTOM BAR ASSEMBLY16
INSTALL HOOD17
FINAL CHECKS

INTRODUCTION

The information contained in this manual will allow you to install your Rytec Pharma-Roll[®] Door in a manner that will ensure maximum life and trouble-free operation.

Any unauthorized changes in procedure, or failure to follow the steps as outlined in this manual, will automatically void the warranty. Any changes in the working parts, assemblies, or specifications as written that are not authorized by Rytec Corporation, will also cancel the warranty. The responsibility for the successful operation and performance of this door lies with the owner of the door.

DO NOT OPERATE OR PERFORM MAINTENANCE ON THIS DOOR UNTIL YOU READ AND UNDER-STAND THE INSTRUCTIONS CONTAINED IN THIS MANUAL.

If you have any questions, contact your Rytec representative or call the Rytec Customer Support Department at 800-628-1909. Always refer to the serial number of the door when calling the representative or Customer Support. The serial number plate is located inside one of the side columns.

The wiring connections in this manual are for general information purposes only. A wiring schematic is provided with each individual door specifically covering the control panel and electrical components of that door. That schematic was shipped inside the control panel.

DOOR SERIAL NUMBER(S)

Your **DOOR SERIAL NUMBER** information can be found in three universal locations. These are at the inside of either side column (approximately eye level), on the drive motor, and on the inside door of the System 3 control panel. (See Figure 1.)

IMPORTANT: When installing multiple doors of the same model but in different sizes, verify the serial number in the control panel with the one in the side column.



Figure 1

HOW TO USE MANUAL

Throughout this manual, the following key words are used to alert the reader to potentially hazardous situations, or situations where additional information to successfully perform the procedure is presented:



WARNING is used to indicate the potential for personal injury, if the procedure is not performed as described.



CAUTION is used to indicate the potential for damage to the product or property damage, if the procedure is not followed as described.

IMPORTANT: IMPORTANT is used to relay information CRITICAL to the successful completion of the procedure.

NOTE: NOTE is used to provide additional information to aid in the performance of the procedure or operation of the door, but not necessarily safety related.

INSTALLATION

TOOLS AND EQUIPMENT REQUIRED

- 1. Socket and wrench set
- ½-in. diameter concrete anchor bolts (See "ANCHORING METHODS" on page 3.)
- 3. ½-in. diameter threaded rod (See "ANCHORING METHODS" on page 3.)
- 4. Two ladders (taller than the door opening height)
- 5. Forklift
- 6. Carpenter's level (4-ft.-long minimum)
- 7. Carpenter's square
- 8. Hammer drill
- 9. 1/2-inch diameter masonry drill bit
- 10. Three or four, 1-ft.-long bar clamps
- 11. Hammer and mallets
- 12. Crowbar or prybar
- 13. Assorted hand tools (pliers, tape measure, etc.)
- 14. Assorted shim stock
- 15. Water level, line level, or transit

FLOOR LOOP EQUIPMENT REQUIREMENTS

- 1. Wet-type concrete saw.
- 2. Wet vac.
- 3. 200–500 feet of 16-gauge, 19-strand, type XLPE, copper, crosslink polyethylene jacket wire (or equivalent). The length of wire is determined by the size of the loop.
- Bondo P606 flexible embedding sealer (or equivalent) — required to fill grooves in floor. For cold temperature sealing applications, Bondo P610 speed set must be added to the P606 to ensure proper curing of the filler.
- 5. Water supply and garden hose (for concrete saw).
- NOTE: For complete floor loop installation instructions, refer to the installation instructions provided with your floor loop.

BASIC JOB REQUIREMENTS

- 1. A forklift must be supplied by the customer, dealer, or installer.
- 2. Two installers are required.
- NOTE: One installer must be a qualified electrical technician and all electrical work must meet applicable codes. If the installer is not qualified, an electrician must be present during installation.

- 3. The customer must guarantee 100% access to the door opening during the installation. No traffic should be allowed through the door during the installation.
- 4. If an electrician is used, that person must make all electrical connections. The electrician should be present one hour after installation begins.
- 5. The Rytec control box and a fused disconnect should be installed prior to the start of the door installation. (See Figure 2 for layout.)

ELECTRICIAN'S RESPONSIBLITIES

For complete details on the responsibilities of the electrician, refer to the Rytec System 3 Drive & Control Installation & Owner's Manual.

GENERAL ARRANGEMENT OF DOOR PARTS

Figure 2 shows the location of the major components of your door. This illustration should be used as reference only and should not be used as part of the installation instructions.



Figure 2

NOTE: The above illustration shows the front side of the door. Left and right are determined when viewing the front side of the door.

ANCHORING METHODS

Correct anchoring of the side columns to the wall and the floor is important for the smooth and safe operation of the door. The wall material should be strong enough to support the weight of the door and all wall anchors.

Figure 3 through Figure 6 show anchoring methods for various types of walls. Use the method that is best suited for your particular installation site.

All necessary anchoring hardware and material required for the installation of this door is the responsibility of the door owner. If you have any questions, call your Rytec representative or the Rytec Customer Support Department at 800-628-1909.

NOTE: Use ½-in. diameter threaded through bolts or ½-in. diameter threaded rods to anchor the door to all wall applications. Use ½-in. diameter concrete anchor bolts to anchor the door to a concrete floor or wall.

If expansion anchors are used, a quarterly inspection should be implemented for safe and secure door operation.

Concrete, Block, or Brick Walls



Figure 3

Wood, Block, Brick, or Insulated Walls





Insulated Wall



Figure 5

Insulated Wall



Figure 6

LOCATING CENTERLINE OF DOOR OPENING

- NOTE: Accurate measurements are critical for the proper installation and operation of your Rytec door. Verify all measurements.
- 1. Measure the width of the door opening.
- Divide the measurement in half to locate the centerline. Then mark the centerline along the floor. (See Figure 7.)





LOCATING SIDE COLUMNS

- 1. Locate the layout drawing of the door. It should be attached to the small parts carton packed inside the shipping crate. This drawing identifies the production width of your door.
- 2. Using the centerline as a reference point, lay out and mark half of the door's production width along the floor. (See Figure 8.)



This door is equipped with a breakaway bottom bar assembly. To ensure that it works properly, the width of the door opening must not be smaller (narrower) than the production width of the door. If the width of the opening is narrower than the width of the door, do not proceed with the installation. Contact your Rytec representative or Rytec Customer Support Department at 800-628-1909.



Figure 8

- 3. With a carpenter's square placed against the wall, mark both sides of the door along the floor. Extend the line along each edge.
- 4. Check the floor for level across the door opening. The floor must be level within 0.12 in. from side-toside. If one side of the opening is higher than the other, a shim under the side panel will be required.

Figure 9 and Figure 10 show two methods that can be used to ensure level side columns.

NOTE: Contact the Rytec Customer Support Department if the floor is more than 1 in. out of level.



Figure 9





SIDE COLUMNS

- NOTE: DO NOT change the location of the drive motor without first contacting your Rytec representative or the Rytec Customer Support Department at 800-628-1909.
- Remove the drive motor side column from the shipping crate. The drive motor side column is identified by the seal edge that faces inward during installation for a left-hand-side motor mounting. (See Figure 11.)



Figure 11

2. Stand the drive motor side column on the floor and tight against the wall to determine which side of the door to place the side column.

 Align the inside edge of the side column with the production width line laid out earlier on the floor. The side column must be located on the outside edge of the layout line. (See Figure 12.)



Figure 12



It is critical that the side columns are mounted level and square to the wall and floor, both vertically and horizontally. A 4-ft. level and carpenter's square are recommended for this procedure.

The use of bar clamps to secure the side columns to the wall during installation is recommended, as these hold the columns securely in place, while allowing for slight adjustments of either side column during the installation of the head assembly.

NOTE: All necessary anchor hardware and material is the responsibility of the door owner.

- 4. Once the side column is properly positioned, secure it to the wall using the appropriate anchors. (See "ANCHORING METHODS" on page 3.) Anchor holes have been provided in the side column. (See Figure 12.) DO NOT tighten the anchor hardware at this time.
- NOTE: Use ½-in. diameter expansion shell studtype anchors for concrete walls or ½-in. diameter threaded through bolts for brick walls and other applications where expansion bolts are not acceptable.

Use a tape measure to ensure that proper width alignment is maintained between the side columns, at the top and bottom ends of each column. DO NOT tighten the anchors at this time.

5. Mount the other side column to the wall in the same manner as outlined above for the first side column.

SIDE COLUMN MOTOR SUPPORT

On doors greater than 14 feet tall (or wide), a side column motor support will be supplied with the small parts box as seen in Figure 13. Failure to install this part properly may result in equipment failure and/or personal injury.



Figure 13

IMPORTANT: For doors that are oversized beyond 14 ft. in height (or width) should have a side column motor support included in the small parts box.

SPREADER ASSEMBLY

Door without Hood Assembly

 Attach an L-shaped support bracket to each end of the spreader extrusion using two ³/₈-16 x 1¹/₄-in. serrated-flange hex screws and nuts. The brackets and mounting hardware were shipped in the small parts carton. (See Figure 14.)



Figure 14

 Attach the spreader assembly to the inside face of each side column using two ³/₈-16 x 1¹/₄-in. serratedflange hex screws and nuts at each end of the assembly. Face the spreader so the brush is toward the front of the door. (See Figure 15.)



Figure 15

- 3. Check that the side columns are plumb and square with the floor and wall.
- 4. Tighten all anchor hardware securing both side columns to the wall.
- 5. Remove any bar clamps that may have been used to temporarily hold the side columns to the wall.

Door with Hood Assembly

- NOTE: DO NOT change the location of the drive motor without first contacting your Rytec representative or the Rytec Customer Support Department at 800-628-1909.
- 1. Identify the drive motor side column by the wire access holes along its outside edge. This is important for the proper installation of the spreader assembly.
- Attach a spreader assembly U-bracket on the outside face of each side column using two 3/6-16 x 11/4-in. serrated-flange hex screws and nuts for each bracket. The U-brackets and mounting hardware were shipped in the small parts carton. (See Figure 16.)
- IMPORTANT: Attach the large U-bracket to the drive motor side column with the screw hole located 6 ¾ in. from the end of the bracket, nearest to the outside face of the side column. (See Figure 16.)



Figure 16

3. Attach the spreader assembly to the U-brackets using two ³/₈-16 x 1¹/₄-in. serrated-flange hex screws and nuts at each end of the assembly. Face the spreader so the brush is toward the front of the door. (See Figure 17.)



Figure 17

- 4. Check that the side columns are plumb and square with the floor and wall.
- 5. Tighten all anchor hardware securing both side columns to the wall.
- 6. Remove any bar clamps that may have been used to temporarily hold the side columns to the wall.

HEAD ASSEMBLY

- 1. Before removing the head/fabric roll assembly from the shipping crate, locate four ½-13 x 1¼-in. ser-rated-flange hex screws, four ½-13 serrated-flange nuts, and the flange bearing assembly in the small parts carton.
- NOTE: The $\frac{1}{2}$ -13 x 6-in. hex screws that were installed earlier will be used to attach the head assembly to the side columns.

Also, some oversized doors require a steel spacer between both side columns and the head assembly. If your door is oversized, locate two 9-in. x 1¾-in. steel spacers shipped in the small parts carton. (The spacers are further identified by a hole at each end.)

2. Remove the head/fabric roll assembly from the shipping crate.

AWARNING

Before the head/fabric roll assembly is lifted into place, make sure both side columns are secured to the building wall.

Also, the head/fabric roll assembly must be secured to the forklift before lifting it in place. Failure to properly secure the side columns or the head/fabric assembly can result in serious personal injury and property damage. DO NOT remove the forklift from under the head/fabric roll assembly until it is secured to both side columns.



Use care when handling the fabric roll to ensure that the fabric is not torn or damaged. DO NOT remove the shipping bands holding the fabric to the roll.

IMPORTANT: Install the head/fabric roll assembly with the bottom bar/ fabric roll coming off the back of the drum assembly.

- 3. Using a forklift, lift the head/fabric roll assembly in place.
- 4. Position the head assembly in front of the pair of holes near the top of each side column. Align the holes in the motor mounting bracket with the holes in the side column. (See Figure 18.)
- IMPORTANT: If your door is oversized, two large spacers were included in the small parts carton. Failure to install a spacer between the motor mounting bracket and flange bearing assembly could result in damage to the door. (See Figure 18 and Figure 19.)
- Attach the motor mounting bracket to the side column using two ½-13 x 1¼-in. serrated-flange hex screws and nuts (or two ½-13 x 2-in. screws and nuts if spacers are required, or nuts only if 6-in. screws were installed earlier). DO NOT tighten the hex nuts at this time. (See Figure 18.)



Figure 18

- 6. Slide the flange bearing assembly over the drum shaft at the non-drive end of the head/fabric roll assembly. (See Figure 19.)
- IMPORTANT: If your door requires spacers, be sure to install a spacer between the flange bearing assembly and the side column. (See Figure 19.)



Figure 19

- 7. Bolt the flange bearing assembly to the side column using two ½-13 x 1¼-in. serrated-flange hex screws and nuts (or two ½-13 x 2-in. screws and nuts if spacers are required, or nuts only if 6-in. screws were installed earlier). DO NOT tighten the hex nuts at this time.
- IMPORTANT: If the drum/fabric roll assembly cannot be made level by adjusting the flange bearing mounting bracket up or down, verify that the side columns are plumb, square and level and make any necessary adjustments.
- 8. Place a carpenter's level along the length of the drum/fabric roll assembly and adjust the flange bearing mounting bracket up or down, as required, until the drum/fabric roll assembly is level.

Tighten the hardware securing the motor and the flange bearing mounting brackets to the side columns. Then tighten the set screw to lock the flange bearing to the drum shaft. (See Figure 20 and Figure 21.)



Verify that the two hex nuts threaded on each 6-in. screw are tight against their associated side column and mounting bracket. Failure to tighten all eight nuts could result in damage to the side columns (See Figure 21.) and hardware associated with side column motor support (See Figure 22.).



Figure 21





DO NOT remove the shipping bands holding the fabric material to the drum roll assembly at this time.

9. Do not remove the shipping bands securing the fabric material to the drum roll. Only remove the fasteners securing the drum assembly to the forklift. Then lower and move the forklift out of the way.

BOTTOM BAR

1. Check the brake release lever located on the motor/ brake assembly. The brake must be in the engaged position. (See Figure 23.)



Figure 23

- NOTE: When released, the motor brake will default to the engaged position.
- 2. Cut and remove the shipping bands holding the fabric to the roll.
- 3. Insert the plastic tabs on the bottom bar into the slot of each side column. (See Figure 24.)



Figure 24

INSTALL ENCODER

- 1. Install the encoder coupling shaft to the end of the motor drive shaft using a ¹/₂-13 x 1-in. hex head cap screw, Eurodrive washer, and a split lock washer.
- 2. Install the FEIG encoder hub shaft end to the end of the encoder coupling shaft and tighten set screw.
- NOTE: Use a low strength thread locker on set screw.
- 3. Install encoder mounting plate with encoder using four M8 x 1¹/₄ x 18 mm socket head cap screws.
- 4. Connect encoder cable to encoder.
- 5. Install plastic zip tie into socket head screw and secure the encoder cable. (See Figure 25.)
- NOTE: The zip tie that is used in the securing of the encoder cable is of special design. The ribbed end inserts into the valley of the socket head cap screw.

All hardware is located in the small parts carton.



Figure 25

Caulking

Caulk between the side columns, the head extrusion, and the wall.

PHOTO EYE INSTALLATION



The disconnect must be in the "OFF" position and properly locked and tagged before performing the following procedure.

NOTE: The door is shipped with two sets of photo eyes. One set monitors the back side of the door. The other set monitors the front side of the door. Each set consists of an emitter module and a receiver module.

> The photo eyes are provided as a safety feature. With the photo eyes correctly installed, interrupting either set of eyes as the door is closing will reverse the direction of the door and hold it in the fully open position until the interruption is removed.





NOTE: Locate the photo eyes on the wall adjacent to the sides of the door. Each eye must be installed 12–36 in. above the floor and as close to the door as possible. They must also be mounted directly across from each other.(See Figure 27)

> The photo eyes, their required wire cables, and mounting brackets were shipped in the small parts carton. You must provide the hardware to install the brackets on your particular wall. The photo eyes provided MUST all be properly installed. (See Figure 27.)





- IMPORTANT: To prevent the eyes on the front side of the door from interfering with the eyes on the back of the door, the emitter modules must be installed diagonally from each other. The same is true for the receiver modules.
- 1. After the mounting brackets are in place, install the emitter module in the left bracket and the receiver module in the right bracket.
- NOTE: The receiver module can be identified by the two small lights, one yellow and one green. The emitter module has only a green light. The yellow alignment light will be lit when the photo eyes are aligned. (See Figure 28)



Figure 28

Position the large, plastic nuts found on the end of each photo eye so that the lens on either eye does not protrude too far past the edge of the mounting bracket. If a lens sticks out too far, that photo eye will be susceptible to damage.

- 2. Thread the connector found on the terminated end of each wire cable onto the end of the photo eyes.
- NOTE: Be sure the path through which the wire cables are routed hides and protects them from damage. If necessary, run conduit to each mounting bracket to protect the cables.
- 3. Route the wire cables from the photo eyes to the control panel in a manner conforming to all applicable codes and regulations. Shielded cable is recommended for all photo eye wires.
- 4. Connect the photo eyes to the control panel as shown on the schematic that was shipped with the door.
- 5. After all work is complete, clean the lens of each photo eye using window cleaner and a soft, clean cloth.

ELECTRICAL WIRING ROUTING

1. Locate the Rytec control box and fused disconnect. (See Figure 29.)



Figure 29

A WARNING

The fused disconnect must be in the OFF position and the fuses removed before wiring of the control box begins.

2. Run wires from the encoder and motor to the control box using approved conduit.

Coil Cord Installation



DO NOT twist the cord during installation. Twisting the coil cord will cause it to tangle or fail, leading to serious problems. Ensure that the coil cord does not have any excessive slack when installation is complete. It should not touch the floor.

- 1. Manually open the door. Allow the cord to hang down to remove any twists in the cord.
- 2. Route the coil cord to a junction box near the side column and through the hole in the junction box.
- 3. Place cord grip nut over the end of the coil cord. The nut was shipped in the small parts carton.
- 4. Tighten the nut to attach the cord grip to the junction box.

CONTROL PANEL AND ELECTRICAL CONNECTIONS

Once the door has been assembled, see the Rytec System 3 Drive & Control Installation & Owner's Manual for information on control panel installation, electrical connections, door limit settings, and initial door start-up procedure.

NOTE: If a floor loop is used, all wiring from the fused disconnect to the control box and from the control box to the motor mount side column, as well as conduit running from the control box to the floor, is provided by the door owner/installer or the electrician. All wiring and conduit must meet all local and state codes. Wires provided with the door are labeled with terminal or contact numbers.

OPEN AND CLOSE DOOR LIMIT POSITIONS

See the Rytec System 3 Drive & Control Installation & Owner's Manual for the proper procedure for setting the open and close door limits. The open and close limit door positions are detailed below.

Close Limit Position

The "close" limit position should be adjusted so that the door travel allows the yellow vinyl loop on the bottom bar to gently seal against the floor. (See Figure 30.)

DO NOT allow the rubber reversing edge, enclosed in the yellow vinyl loop, to come in contact with the floor.



Damage to the rubber reversing edge or other bottom bar parts can occur if the door seal is allowed to seal too tightly against the floor.



Figure 30

Open Limit Position

The open limit position should be adjusted so that the door travel allows the bottom bar assembly to stop at the position shown in (Figure 31.)



Figure 31

PNEUMATIC REVERSING EDGE SWITCH ADJUSTMENT

WARNING

Do not stand under the door panel when making check. If reversing edge switch is not working properly, panel could strike person performing check.

To check the reversing edge switch operation, run the door through the down cycle. As the door is lowering, tap the bottom of the reversing edge. If the reversing edge switch is operating properly, the door should immediately reverse and run to the full open position. Push the control box push button to close the door after the check is completed.

If the door does not reverse, check the air bleed and sensitivity of the reversing edge switch. The switch is in the bottom bar on the side opposite the door motor.

Reversing Edge Switch Air Bleed Check

1. The reversing edge switch is located inside the bottom bar assembly. To inspect and/or adjust the switch, remove the access cover from the face of the bottom bar assembly. (See Figure 32.)



Figure 32

- 2. Make sure the clear PVC hose is in tight contact with the air input post so that air leakage cannot occur and that vibration will not cause the hose to fall off. Make sure the hose is not kinked. (See Figure 33.)
- 3. The air bleed has been set at the factory and should not require adjustment. To check the air bleed, turn the air bleed adjustment screws located on the front and back of the switch fully clockwise, but do not overtighten. Then turn the screws back counterclockwise one full turn. (See Figure 33.)





Reversing Edge Switch Sensitivity Adjustment

- 1. The reversing edge switch is a normally open contact. The PVC hose is on the lower air input post. To adjust the switch, first remove the wires and resistor from the contact terminals and attach an ohmmeter across the two terminals. (See Figure 34.)
- Turn the adjustment screw, located on the face of the switch, clockwise or counterclockwise until continuity is achieved. Then turn the screw 3/4 turn counterclockwise. Ohmmeter should no longer show continuity. Turning the screw counterclockwise decreases sensitivity. Turning the screw clockwise increases sensitivity. (See Figure 34.)



Figure 34

- 3. Attach the resistor and wires and then replace the access cover on the bottom bar.
- NOTE: Replace the resistor and mount to either the coil cord wires or the reversing edge switch. The reversing edge connection is dependent on the resistor being present on either the coil cord wires or the reversing edge switch.

NOTE: If the reversing edge is set too sensitive, the door may reverse direction during the closing cycle, without the reversing edge coming in contact with an object. If this occurs, readjust the reversing edge switch.

PNEUMATIC KILL SWITCH CHECK AND ADJUSTMENT

A kill switch has been mounted in the bottom bar assembly to prevent door operation if the breakaway bottom bar becomes separated from either side column.

Kill Switch Check



Take precautions to prevent the door from being opened or closed while performing the following procedure.

- 1. Raise or lower the door to approximately head or chest height and stop the door.
- NOTE: It should not be possible to restart the door until the door has been reassembled and the control system reset.
- 2. Push the breakaway bottom bar out of the side column. Door should not operate until control box is reset. (See Figure 35 and Figure 36.)

If the kill switch did not operate properly: Adjust the kill switch and then recheck it. (See "Kill Switch Air Bleed Adjustment" on this page.)

If the kill switch operated properly: Reinstall the bottom bar into the side column. (See "RESET-TING BOTTOM BAR ASSEMBLY" on page 16.)



Figure 35



Figure 36

Kill Switch Air Bleed Adjustment

1. The kill switch is mounted in the bottom bar assembly, on the same side as the door motor. To access the switch, first remove the access cover. (See Figure 37.)



Figure 37

2. Make sure the clear PVC hose is tight on the air input post so that air leakage cannot occur and vibration will not cause the hose to fall off. Also make sure the hose is not kinked. (See Figure 38.)



Figure 38

- 3. The air bleed has been set at the factory and should not require adjustment. To adjust the air bleed, turn the air bleed adjustment screws located on the front and back of the switch fully clockwise, but do not overtighten. Then turn each screw back counterclockwise one full turn. (See Figure 38.)
- 4. To adjust the kill switch sensitivity, see "Kill Switch Sensitivity Adjustment" on page 16.

Kill Switch Sensitivity Adjustment

The kill switch assembly is a normally closed contact. The PVC hose is on the upper air input post.

- Remove the wires from the contact terminals and attach an ohmmeter across the two terminals. (See Figure 39.)
- To adjust the switch, turn the small adjusting screw, located on the face of the switch, clockwise or counterclockwise until continuity is achieved. Then turn the screw two turns clockwise for final adjustment. Ohmmeter should continue to show continuity. Turning the screw clockwise decreases sensitivity. Turning the screw counterclockwise increases sensitivity. (See Figure 39.)



Figure 39

- 3. Reconnect the wires onto the switch. Replace the access cover on bottom bar.
- NOTE: If the kill switch is set too sensitive, it may cause the door to stop during the opening or closing cycles. If this occurs, readjust the kill switch sensitivity setting.

PHOTO EYE INSPECTION

NOTE: The door has two sets of safety photo eyes used as a safety device to prevent the door from closing if an object is in the path of the door panel. The photo eyes are not meant to be used as door activators. Both sets of eyes must be working correctly for the door to operate.

Indicator Lights

With power applied to the control panel, the green light on each photo eye indicates the eye is powered up. When the yellow light on the receiver module is also lit, the emitter and receiver module, from the same set, are properly aligned.

Placing your hand in front of the receiver breaks the light path and causes the yellow light to go out. Removing your hand causes the yellow light to go back on.

Photo Eye Test



Personnel and objects should not be in the path of the door when the following inspection is performed. If the photo eyes are not working properly, the door could strike the personnel or object in its path.

- 1. Raise the door to the fully open position.
- 2. Place an object in the path of the front photo eye beam. Then attempt to close the door by pressing the button on the control panel. The door should not operate.
- 3. Remove the object and cycle the door to verify that the front set of eyes is working properly. If the eyes are not working properly, see "Photo Eye Troubleshooting" below.
- 4. Repeat the above steps on the rear set of photo eyes to verify that both sets are working properly.

Photo Eye Troubleshooting

If either green light is not lit, make sure power is turned on, and that all wiring has continuity and is installed and connected properly. If the green lights are on, but the yellow light is off, check the alignment of the emitter and receiver modules.

RESETTING BOTTOM BAR ASSEMBLY



Turn off power to the door. Make sure power is locked off and properly tagged.

1. Position the breakaway tabs on one end of the bottom bar assembly in the side column channel. Lift the other end of the bottom bar and position the breakaway tabs in the remaining side column channel. (See Figure 40.)



Figure 40

2. Check to make sure that the fabric is inside each channel. (See Figure 41.)



Figure 41

- 3. Turn power ON.
- NOTE: It should not be possible to restart the door until the door has been reassembled and the control system reset.
- 4. Check operation of door.

INSTALL HOOD

- NOTE: These procedures are required only if your door is equipped with an optional hood.
- Attach the end covers to the head extrusion support brackets using four (two each side) ³/₈-16 x
 ³/₄-in. LG Button Head, 18-8 SS screws and ³/₈-16 serrated-flange nuts. (See Figure 42.)



Figure 42

 Attach the hood cover section to the head extrusion. (See Figure 43.) Secure cover to extrusion and end panels using ¹/₄ -14 x ³/₄-in. LG, 410 SS screws.



Figure 43

- Attach motor cover to end cover and hood with ³/₈-16 x ³/₄-in. LG Button Head, 18-8 SS screws and ³/₈-16 serrated-flange nuts.
- Route motor wiring through cord grip nut ³/₈ NPT and attach to slot on bottom cover and attach bottom cover to motor cover with ³/₈-16 x ³/₄-in. LG Button Head, 18-8 SS screws and ³/₈-16 serratedflange nuts. (See Figure 44.)
- 5. Affix motor cover removal label to motor cover.



Figure 44

FINAL CHECKS

Side Columns: Check to see that the side columns are installed plumb and square and that all anchor bolts are securely tightened.

Header Assembly: Check all mounting hardware to see if they are tight.

Head Assembly: Fabric roll must be level. All mounting hardware tight.

Caulking: See that side columns and head assembly have been caulked where they meet the building wall.

Bottom Bar: Must travel up and down in side column without binding.

Open and Close Limits: Set properly. Downward travel of door panel must stop when the yellow vinyl loop seals against the floor as shown in Figure 30. Upward travel should be as shown in Figure 31.

Motor Operation: Motor cycles door in proper direction when keys on front of the control box are pressed.

Reversing Edge Switch: Working properly. Door should return to full open position if reversing edge on the bottom bar comes in contact with an object during the down travel of the door panel. See "PNEUMATIC REVERSING EDGE SWITCH ADJUSTMENT" on page 14" for test and adjustment procedures.

Kill Switch: Working properly. Door travel should stop when bottom bar is disengaged from one or both of the side columns. See "PNEUMATIC KILL SWITCH CHECK AND ADJUSTMENT" on page 15" for test and adjustment procedures.

Timers: Timers must be set to ensure proper closing of the door. See Rytec System 3 Drive & Control Installation & Owner's Manual for more information on timer settings.

Activator Settings: Recheck all settings and adjust as required.

Coil Cord: Run the door through two or three cycles. Check the coil cord when the door is in the closed position. The coil cord should not contact the floor or hang in front of or interfere in any way with the photo eye.

Photo Eyes: Make sure the photo eyes are working as described in "PHOTO EYE INSPECTION" on page 16.

Refer to OWNER'S MANUAL for proper complete operating, inspection, and maintenance procedures.