

This manual instructs the user how to install the electronic gate control for use with YellowGate XL 108490-XL

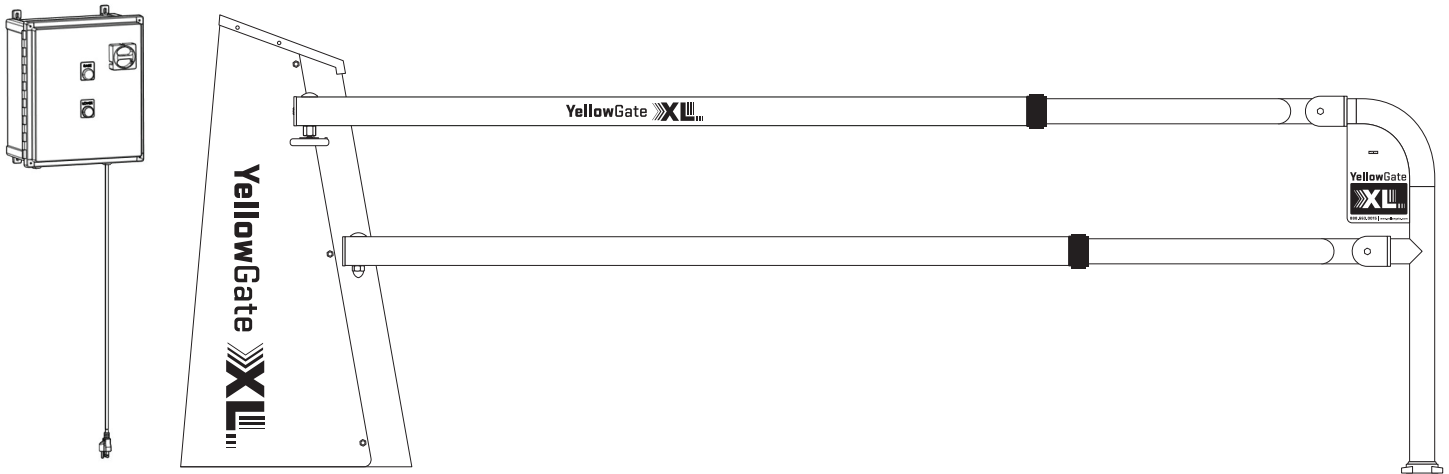
YGXLP52021.10.001



**NOTICE:**

 EYE PROTECTION REQUIRED

 GLOVES RECOMMENDED



Part No. 111738  
YELLOWGATEXL-2021-POWER-SYSTEM

Part No. 113021 (Add-on Option)  
YELLOWGATEXL-2021-POWER-WIRELESS REMOTE

## IMPORTANT NOTES AND SPECIFICATIONS



Read carefully and understand all instructions before starting installation. Adhere to all instructions in manual.

**FAILURE TO FOLLOW ALL INSTRUCTIONS MAY RESULT IN SERIOUS PERSONAL INJURY OR DEATH**

Prior to installation, ensure that mounting surface is adequate to support equipment and opening size is appropriate.

Equipment should not be altered or modified from its original design without consultation with the manufacturer.

Equipment which is damaged or becomes damaged during use, handling, or shipping should be set aside and not used.

Do not use impact wrenches to tighten fasteners. Doing so may cause damage to the equipment and its safe operation.



**WARNING!:** Keep hands away from potential pinch points and moving parts during operation.



**WARNING!:** All electrical connections should be done by a qualified electrician. The YellowGateXL should be fully assembled & operational prior to installing the power system. Follow all safety precautions during each installation.

This product and/or it's components may be covered by one or more patents. For more information, go to [www.saferack.com/patents](http://www.saferack.com/patents)



**WARNING!:** This product can expose you to chemicals including cadmium, which is known to the State of California to cause cancer, and/or birth defector other reproductive harm.

For more information, go to [www.p65warnings.ca.gov](http://www.p65warnings.ca.gov)



Contact our Customer Service team for help.  
Call: **888-663-0015** (toll free) Visit:  
**[www.yellowgate.com](http://www.yellowgate.com)**

Scan QR code to download the YellowGateXL Power System manual

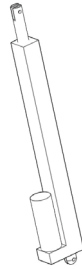


# PARTS LIST

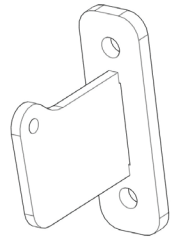
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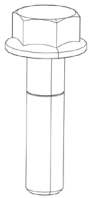
Electrical Control Box



Actuator



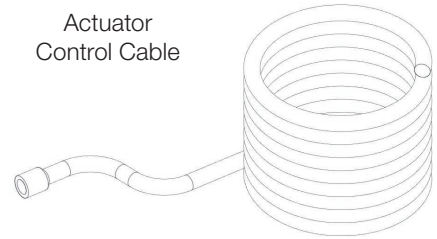
Actuator Mounting Bracket



(2) 5/16" Flange Bolt



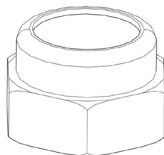
(2) Shoulder Bolt



Actuator Control Cable



(2) Flange Nut

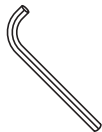


(2) Nyloc Nut

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## Recommended tools required:

Allen Wrench  
1/8"



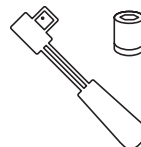
Combination Wrench  
3/8"



Combination Wrench  
1/2"



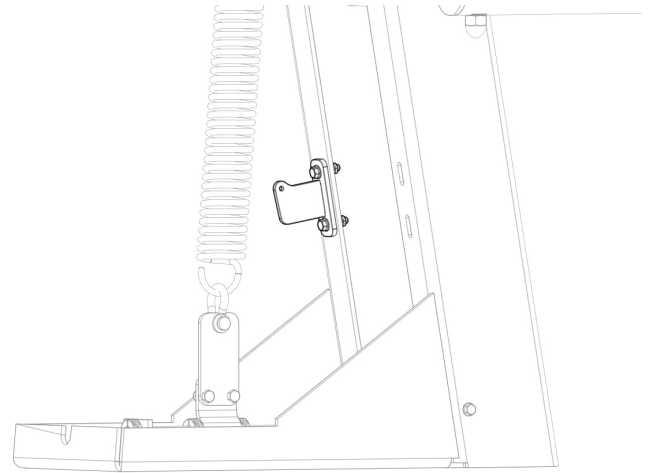
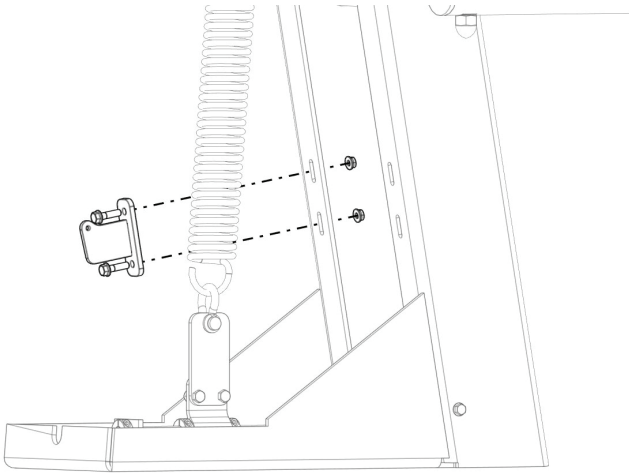
Socket and Ratchet  
1/2"



## STEP 1 ATTACH ACTUATOR MOUNTING BRACKET TO MOUNTING BASE

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- After completing step 12 of YGXL Standard Manual return the gate to the vertical, stored position, and lock into place. Loosely attach actuator mounting bracket using hardware as shown.



**Hardware needed:**

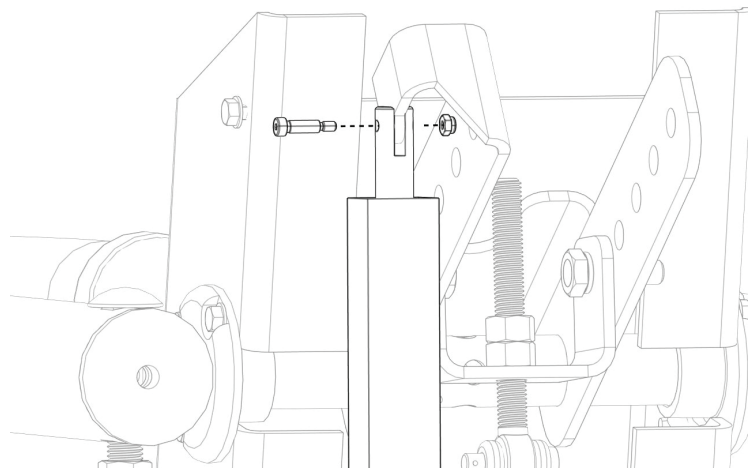
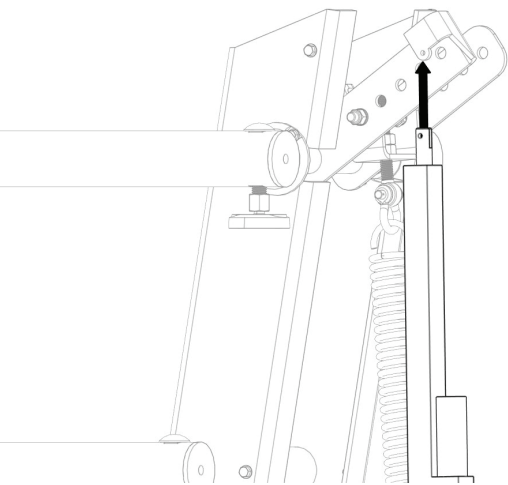
**A** (2) 5/16" Flange Bolt

**B** (2) Flange Nut

## STEP 2 ATTACH ACTUATOR TO LEVER ARM BRACKET

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- Attach actuator rod end to lever arm bracket. Note lever arm bracket may require grinding thickness around mounting hole for actuator rod to fit.



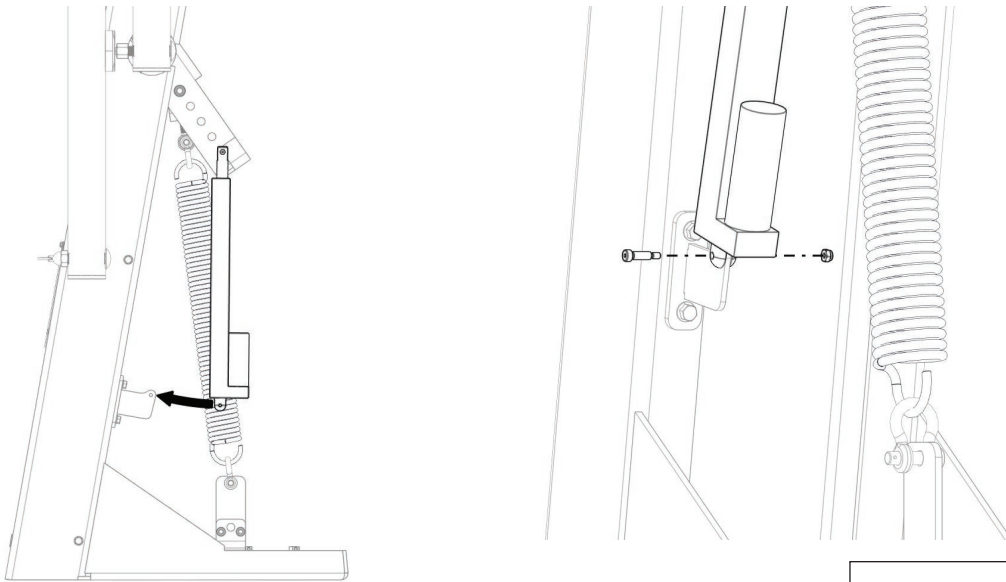
**Hardware needed:**

**A** (1) Shoulder Bolt

**B** (1) Nylock Nut

## STEP 3 ATTACH ACTUATOR TO ACTUATOR MOUNTING BRACKET

- Rotate actuator to line up mounting hole with actuator mounting bracket, adjusting the position of the bracket as needed in the slots. Attach using hardware as shown. Tighten the bracket hardware to the Mounting Base.



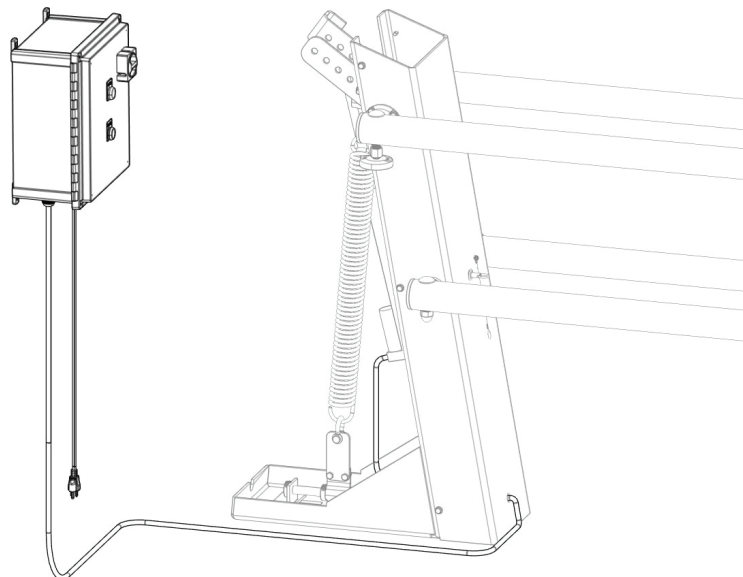
**Hardware needed:**

**A** (1) Shoulder Bolt

**B** (1) Nut

## STEP 4 RUN POWER CABLE FROM ACTUATOR

- Field locate and mount the Electrical Control Box within a 50' cable run from the front of the Mounting Base. If control box needs to be located further away a separate Actuator Control Cable can be purchased at 150' length.
- Attach the Actuator Control Cable's female connector to the male connector on the actuator cable. Run the lead end of the Actuator Control Cable through the front access hole of the Mounting Base. Use conduit as needed from base to control box. Excess wire can be trimmed when terminating the connections.
- Use of professional electrician for wiring is recommended. See following pages for electrical connections and options.

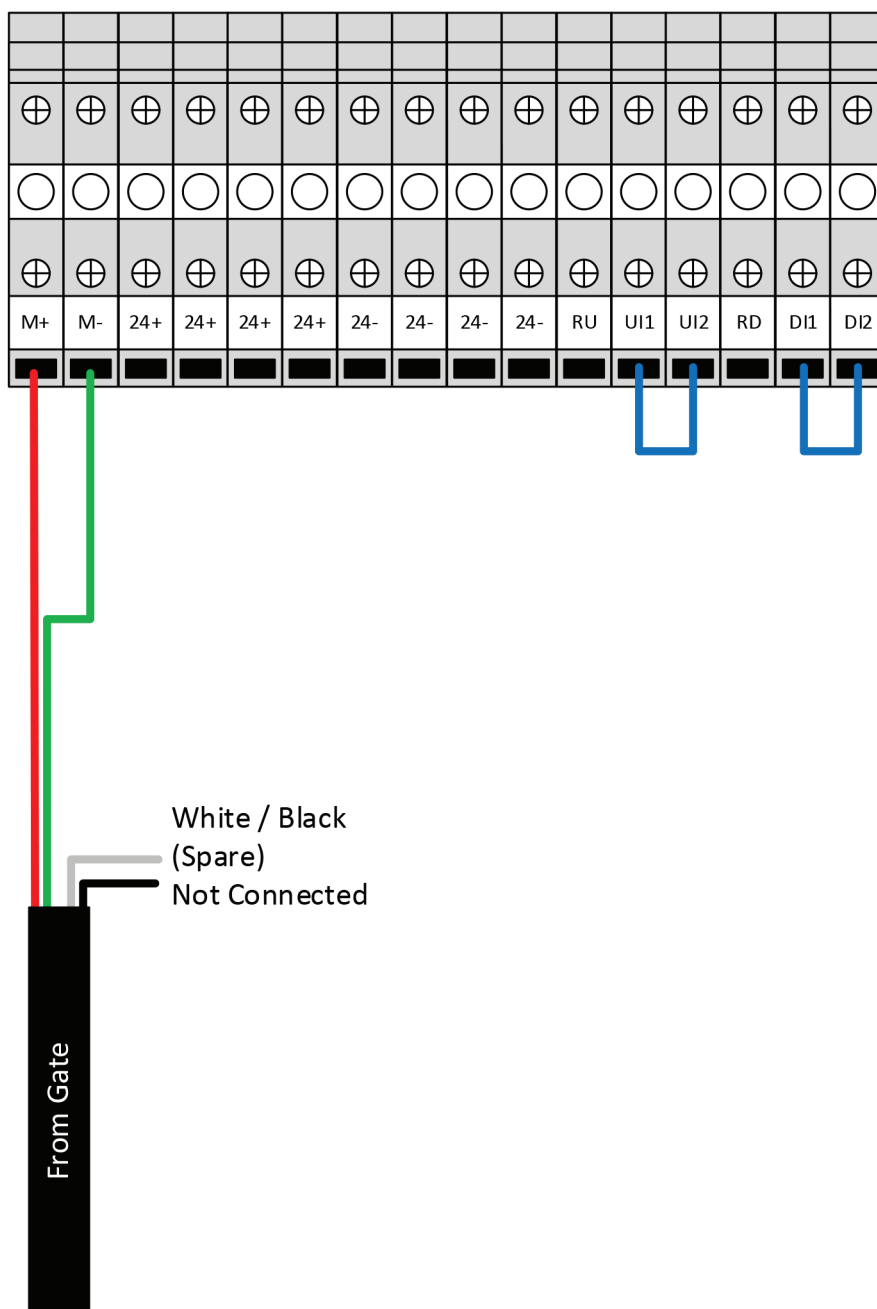


# STEP 5 GATE CORD CONNECTION

Referenced from saferack SR-YGX  
connection and options - Rev E

Insert the gate cord connection into the box and make the wire connections to the terminals as illustrated below:

- 1) Make sure the unit is unplugged and no power is running to the system.
- 2) Connect red wire to terminal M+
- 3) Connect green wire to terminal M-

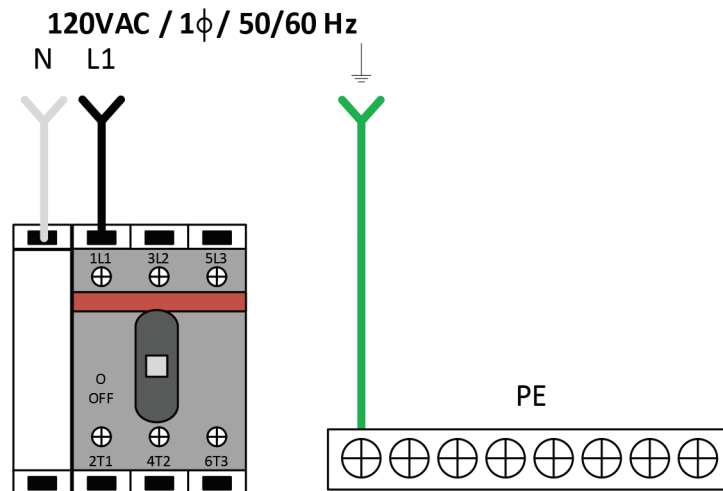


## STEP 6 MAIN POWER CONNECTION

Referenced from saferack SR-YGX  
connection and options - Rev E

- The unit comes equipped with a pre-wired 120VAC plug in power cord for easy connection.

Circuit Current Draw: 10 A



### Optional Main Power Connection

The unit comes equipped with a pre-wired 120VAC plug in power cord. If the unit is being hard wired do the following:

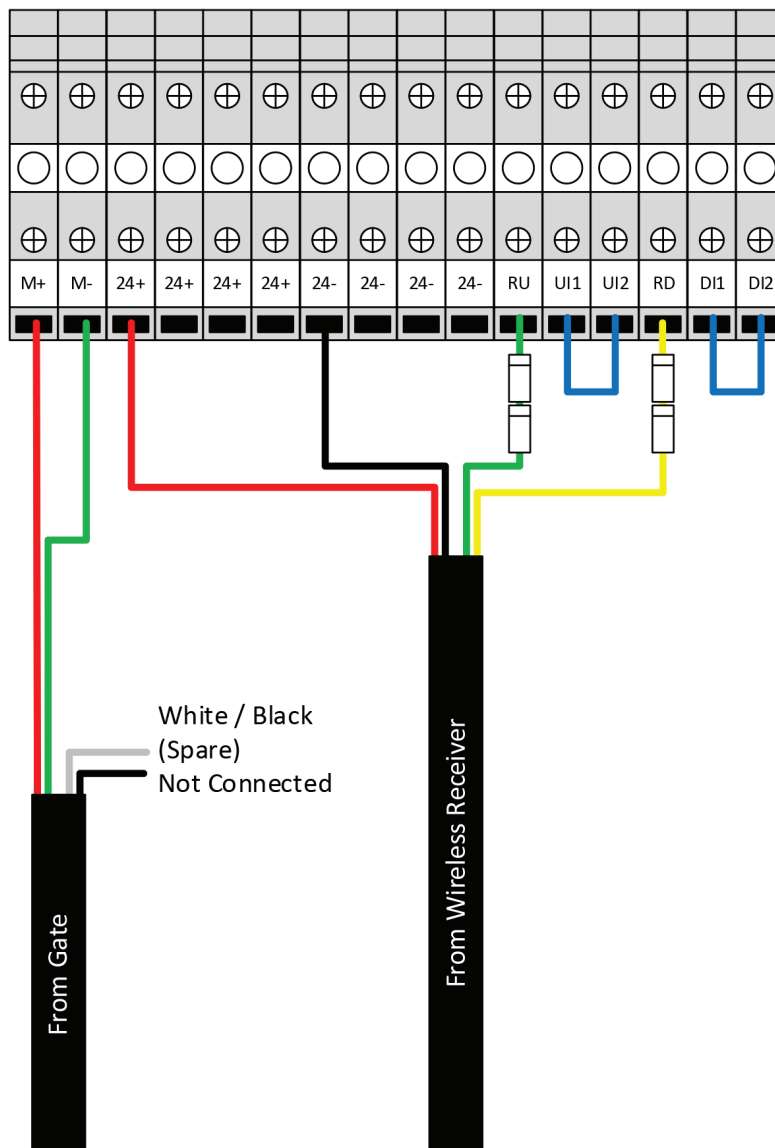
- 1) Make sure the unit is unplugged and no power is running to the system.
- 2) Loosen the screws on the top of the disconnect switch connected to the power cable removing the wires from 1L1, the neutral block, and also the ground wire from the ground bar.
- 3) Remove power cord.
- 4) Run new power wiring into control. Wiring and circuit must be sufficient for 10 Amps.
- 5) Wire per the diagram on the left.
- 6) L1 to 1L1 on the disconnect
- 7) Neutral to the neutral junction block on the side of the disconnect.
- 8) Ground to the ground bar inside the enclosure.

# STEP 7A WIRELESS REMOTE CONNECTION – OPTIONAL (ADDITIONAL EQUIPMENT NEEDED SOLD SEPARATELY)

Referenced from saferack SR-YGX  
connection and options - Rev E

Follow direction for inside of the Electrical Control Box, illustrated below:

- 1) Make sure the unit is unplugged and no power is running to the system.
- 2) Install the wireless remote receiver using the mounting holes provided on the backplate
- 3) Connect the Red wire from the receiver to 24+
- 4) Connect the Black wire from the receiver to 24-
- 5) Connect the Green wire from the receiver to RU
- 6) Connect the Yellow wire from the receiver to RD



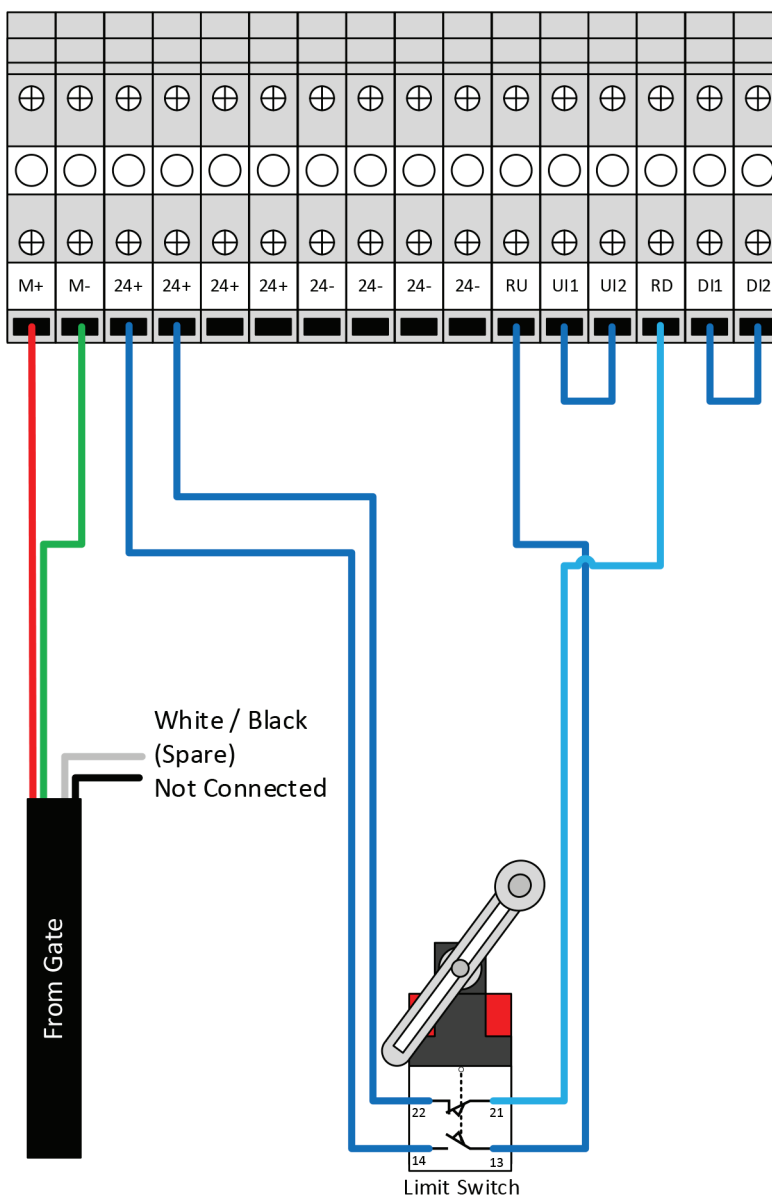


# STEP 7B REMOTE OPERATION CONNECTION – OPTIONAL (ADDITIONAL EQUIPMENT NEEDED SOLD SEPARATELY)

Referenced from saferack SR-YGX  
connection and options - Rev E

To remotely connect to device (e.g., limit switch) for automatic operation.

A connection between 24+ and RU will raise the unit. A connection between 24+ and RD will lower the unit.  
Many options are possible but the illustration below shows a limit switch automatically operating the unit.  
Wired as shown the unit would be down with the limit switch un-actuated and would raise when the limit switch was actuated.



# STEP 7C REMOTE PLC OPERATION CONNECTION – OPTIONAL (ADDITIONAL EQUIPMENT NEEDED SOLD SEPARATELY)

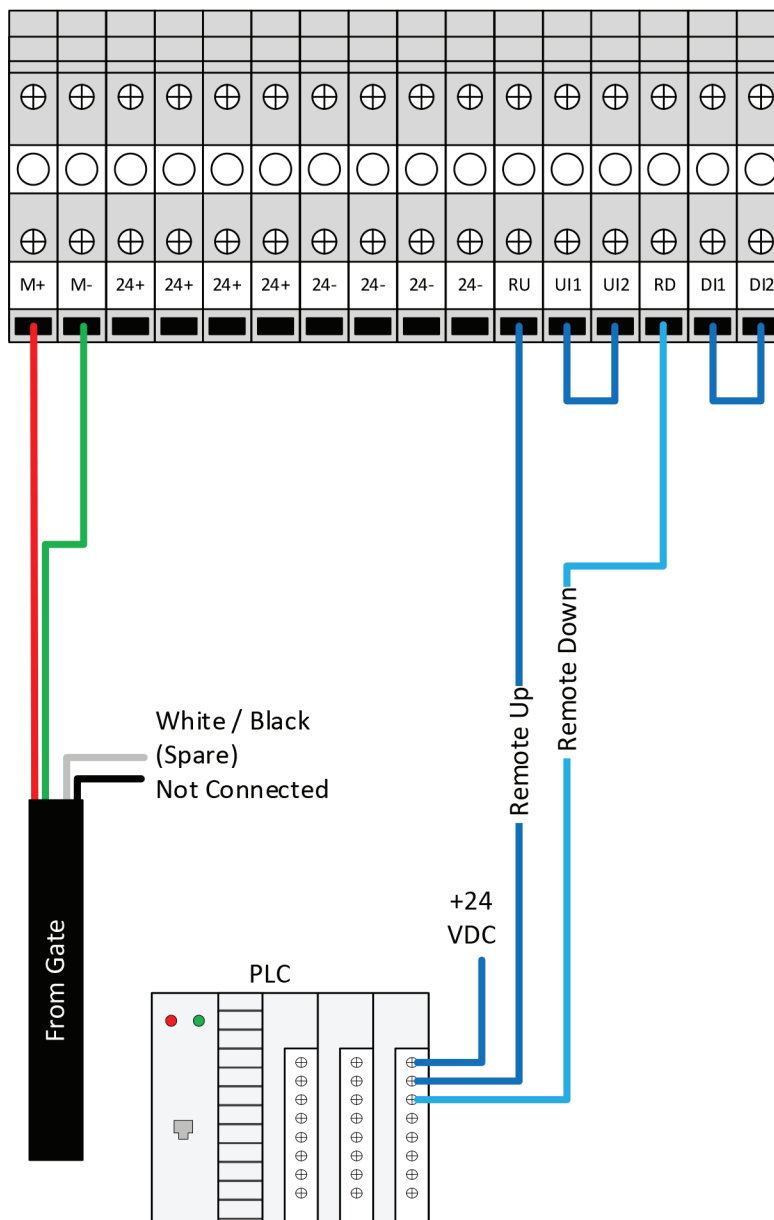
Referenced from saferack SR-YGX  
connection and options - Rev E

Remote Up and Down Signal from PLC or other device.

The unit can be operated by a PLC by supplying +24VDC from an output to RU or RD.

- A connection between +24VDC and RU will move the unit upward.
- A connection between +24VDC and RD will lower the unit downward
- The signal to RU or RD must be maintained to move the unit. Removing the signal prior to reaching full up or full down will stop the gate in the current position.
- If the signal to RU or RD is maintained the unit will stop when the end of travel limit (internal to actuator) is hit.

Power Requirements: 6W coil 250mA @ 24VDC



# STEP 7D INTERLOCKING CONNECTION – OPTIONAL (ADDITIONAL EQUIPMENT NEEDED SOLD SEPARATELY)

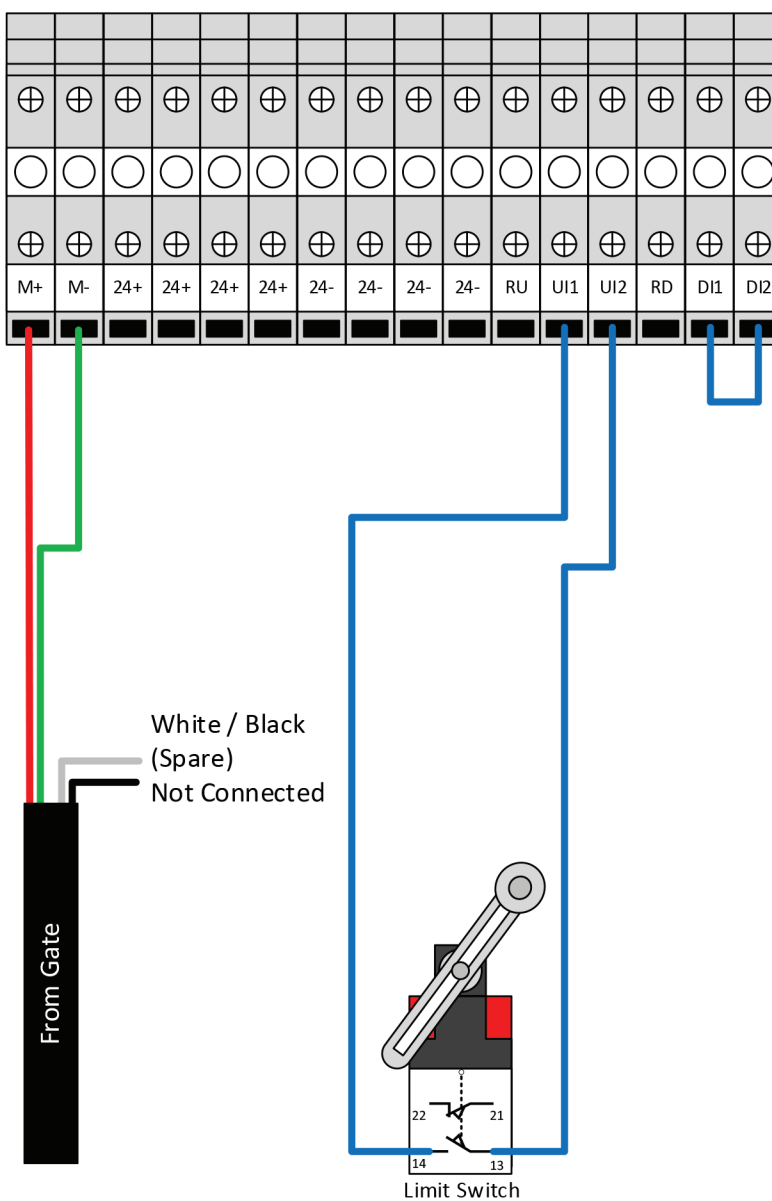
Referenced from saferack SR-YGX  
connection and options - Rev E

To remotely interlock and prevent operation unless a signal is present.

To enable an external signal to inhibit upwards operation.

- 1) Make sure the unit is unplugged and no power is running to the system.
- 2) Remove the jumper between UI1 and UI2
- 3) Wire set of contacts that will inhibit motion between terminals UI1 and UI2

**NOTE:** A signal from UI1 to UI2 must be present for the unit to go up. Thus, in the example below with the normally open contact wired to UI1 and UI2 unless the limit is made the unit will not be able to go up.



# STEP 7E INTERLOCKING CONNECTION – OPTIONAL (ADDITIONAL EQUIPMENT NEEDED SOLD SEPARATELY)

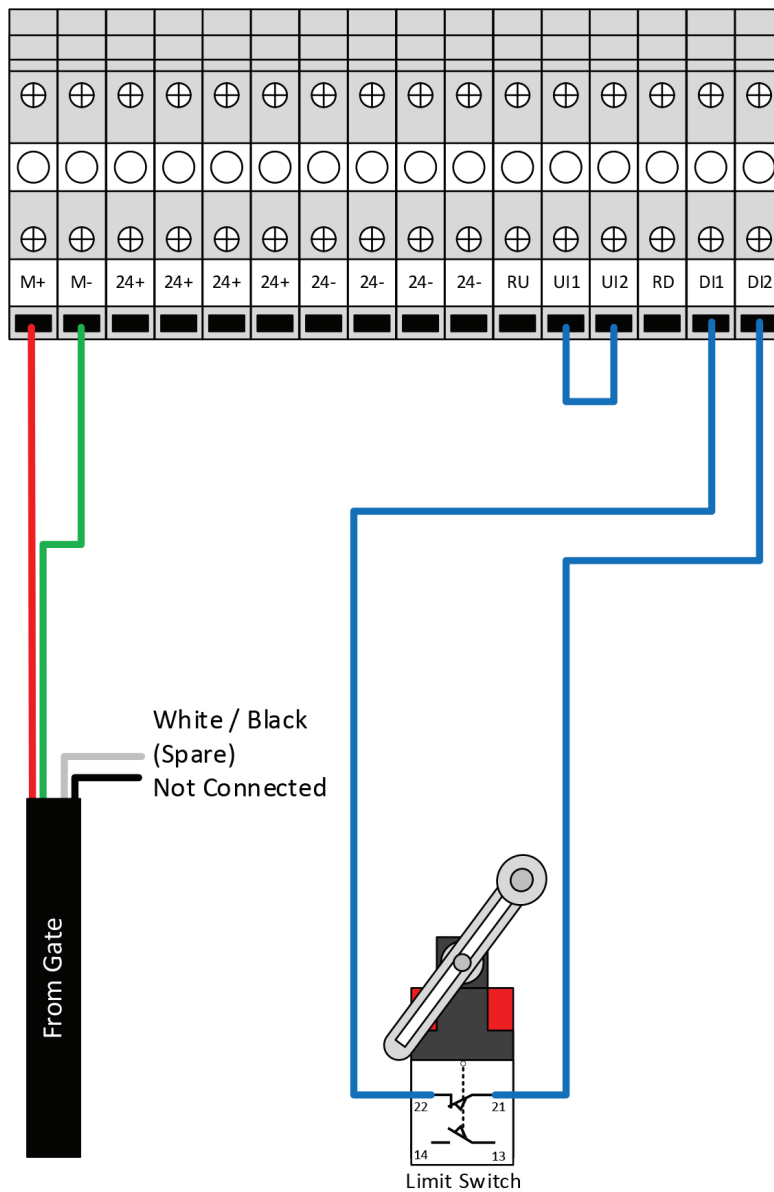
Referenced from saferack SR-YGX  
connection and options - Rev E

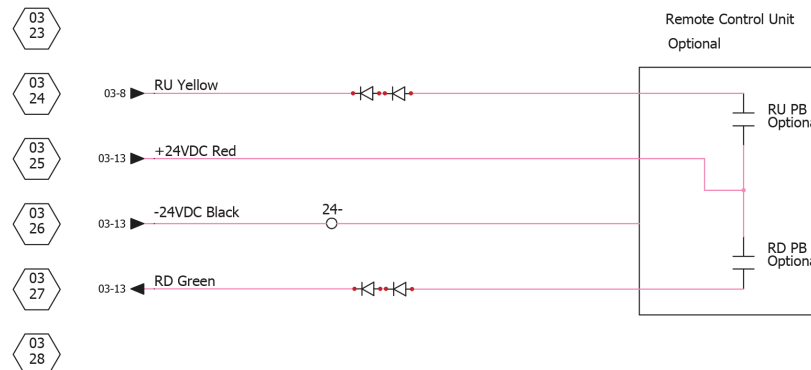
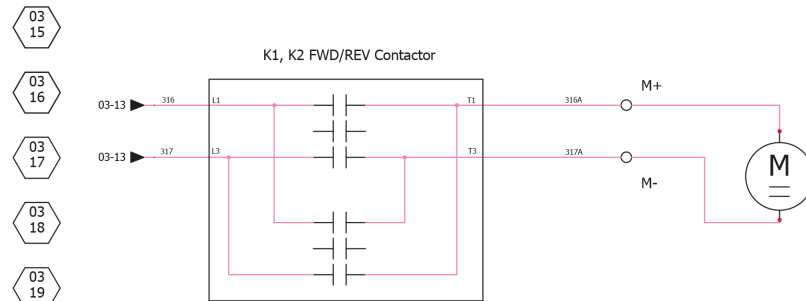
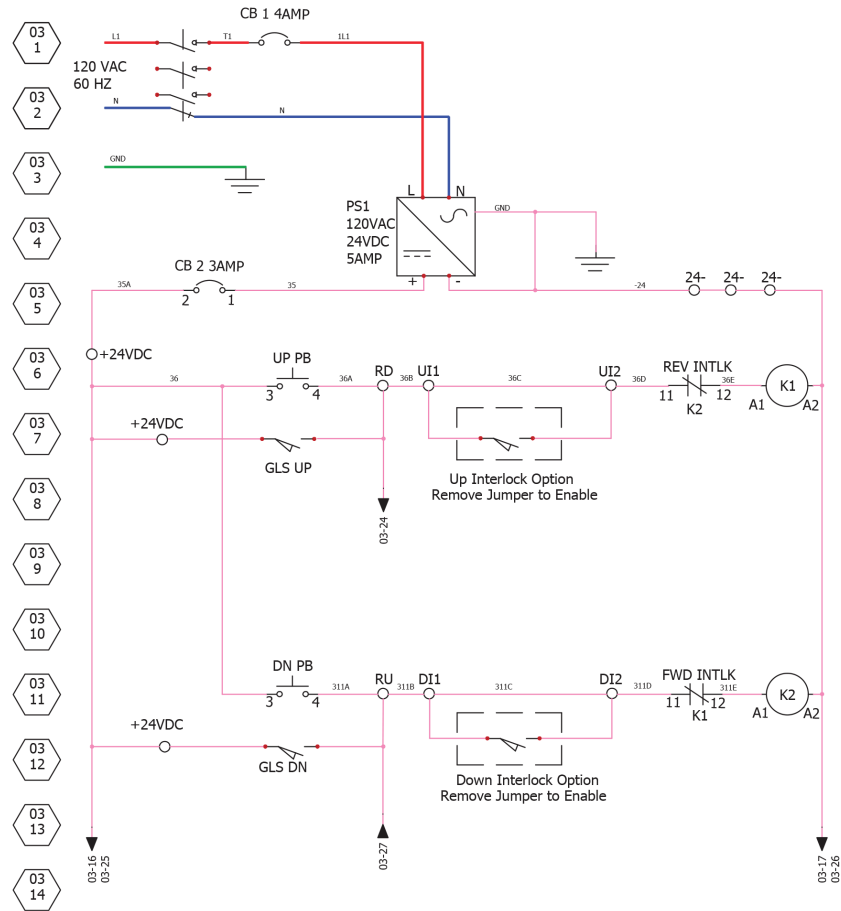
To remotely interlock and prevent operation unless a signal is present.

To enable an external signal to inhibit downwards operation.

- 1) Make sure the unit is unplugged and no power is running to the system.
- 2) Remove the jumper between DI1 and DI2
- 3) Wire set of contacts that will inhibit motion between terminals DI1 and DI2

**NOTE:** A signal from DI1 to DI2 must be present for the unit to go down. Thus, in the example to the left with the normally closed contact wired to DI1 and DI2 if the limit is made the unit will not be able to go down.





## **STEP 9** ADJUST ACTUATOR MOUNTING BRACKET

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- Once all wiring has been terminated and the 120-volt power supply is connected, remove the locking pin and push the down control button to lower the gate. **FAILURE TO REMOVE THE LOCKING PIN CAN DAMAGE THE ACTUATOR AND/OR GATE COMPONENTS. WARNING KEEP HANDS AWAY FROM SPRING OR ACTUATOR WHEN RAISING OR LOWERING.**
- When gate is in the down position the actuator should be fully extended. The foot of gate should be fully on the ground.
- When gate is raised the actuator should be fully retracted. The locking pin should slide in and out freely.
- Adjust the actuator mounting bracket by loosening the bolts connecting the bracket to the base and adjust the position of the bracket to achieve optimal operation.
- Tighten the bolted connection once again and retest the operation of the gate.

## **STEP 10** REPLACE THE BASE COVER

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- Refer back to step 13 in YGXL Standard Manual.

# NOTES

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A series of horizontal dotted lines for writing notes.



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