



## ***Installation Instructions*** **X0130 Power Assist Close Module** **Version 2.0**

### **1.1 Features**

- Microprocessor based
- Multiple operating modes
- Tweak™ mode (Patent Pending) for single button parameter adjustment
- Adjustable close speed regulator included
- Utilizes motor voltage sensing for reliable operation
- Adjustable assist force (torque)
- Adjustable hold-closed force (torque)
- Smooth ramp-up and ramp-down of assist power
- Two LED status indicators

### **1.2 Installation**

Refer to the Wiring Diagram on Page 5.

### **1.3 Setup**

Apply power. Both the red and the green status indicators will blink simultaneously four times.

Attempt to cycle the door by activating it. The door should open normally. If the motor attempts to run backwards (door tries to close instead of opening), disconnect power to the operator and reverse the motor leads where they connect to J3 and J4 on the X0130 module. **The control leads connecting to J1 and J2 must be connected correctly for the module to work.**

Set **CLOSE SPEED** adjustment *R23* on the *X0130* module for the desired closing speed.

Set *Parameter 1 (Pre-Assist Delay)* to the length of time the door must be stalled, after close check, before power assist begins. The *Red* status light illuminates during the delay. Make sure *Parameter 1* is set long enough to allow the door to close completely *under normal conditions*. Possible values are from 1-20 seconds (factory default is 5 seconds).

Set *Parameter 2 (Power Assist Duration)* for the length of time for the power assist to be applied. The *Green* status light illuminates while power assist is being applied. Be sure this parameter is set long enough to allow the door to close completely *under the worst conditions routinely encountered*. The possible values are from 1-20 seconds (factory default is 5 seconds).

Adjust **ASSIST FORCE** pot *R6* to the desired power assist force.

Set *Parameter 3* to desired **Mode of Operation**.

Mode 1: Applies **Assist Force** and is timed-out after set time. (Mode 1 is the factory default)

Mode 2: Applies **Assist Force** to help close the door, and then applies **Hold Force** to keep the door shut. (Typical used where there is stack pressure)

Mode 3: Applies **Assist Force** once the door reaches full open, to help the door close the whole way. (Used only in special circumstances)

Mode 4: Applies **Assist Force** once the door reaches full open, to help the door close the whole way, and then applies **Hold Force** to keep the door shut. (Used only in special circumstances)

**Note:** Manual operation is difficult to impossible while **Hold Force** is applied. Therefore, Mode 1 is always preferred, if possible.

When using Mode 2 or Mode 4, adjust **HOLD FORCE** pot *R11* to the desired hold force.

**Note:** To restore all settings to their default values, hold down the “Tweak” button and apply power. Both the red and green status indicators will blink simultaneously four times followed by a single green blink. Release the “Tweak” button.

### 1.3 Advanced adjustments & optional features

Set *Parameter 4* for desired **Auxiliary 1 Feature**.

Value 1: Door Position Switch

Used to cancel **Assist Power** if the door reaches full closed position on its' own. Mount a door position switch so that it makes contact when door is fully closed.

Value 2: Fail Safe Switch (Door Position)

Used to prevent **Assist Power** from being applied until the switch is closed. Mount a door position switch to the desired close position of the door when Assist power should be applied.

Value 3: Safety Sensor Switch

Used to cancel **Assist Power** and **Hold Power** if the safety sensor is activated during either of those cycles. Safety sensor can be any safety activation device.

Set *Parameter 5* for desired **AUX 1 Polarity**.

Value 0: Normally open

Whatever is attached to the AUX port will close the contact when activated.

Value 1: Normally closed

Whatever is attached to the AUX port will open the contact when activated.

Set *Parameter 6* for desired **AUX 2 Feature**.

Value 1: Door Position Switch

Used to cancel **Assist Power** if the door reaches full closed position on its' own.

Value 2: Fail Safe Switch (Door Position)

Used as a backup in case of obstruction during the close cycle. Mount a door position switch on hinge side of the door. **Assist Force** will not be applied until the switch is closed.

Value 3: Safety Sensor Switch

Used to cancel **Assist Power** and **Hold Power** if someone activates the safety sensor during either of those cycles. Safety sensor can be a motion sensor, presence sensor, etc...

Set *Parameter 7* for desired **AUX 2 Polarity**.

Value 0: Normally open

Whatever is attached to the AUX port will close the contact when activated.

Value 1: Normally closed

Whatever is attached to the AUX port will open the contact when activated.

#### 1.4 Adjusting X0130 parameters with the Tweak™ Mode

1. Press *and hold* the TWEAK button. When the Red LED begins glowing steadily, release the button.
2. While the Red LED is lit, press and release the TWEAK button the proper number of times for the **parameter** you wish to adjust. (Once for parameter 1, twice for parameter 2, etc.)
3. Three seconds after the last button press the Red LED will go off, and the Green LED will come on instead.
4. While the Green LED is lit, press and release the TWEAK button the proper number of times for the **value** you wish. (Once for the value 1, twice for the value 2, etc. Note: for a value of 0, don't press the button at all.)
5. Three seconds after the last button press, a single wink of the Green LED confirms that your new setting has been automatically stored and normal operation resumes.

#### 1.5 Default parameter values

Parameter 1 sets the pre-assist delay from 1-20 seconds. Factory default is 5 seconds.

Parameter 2 sets the duration of the assist 1-20 seconds. Factory default is 5 seconds.

Parameter 3 sets the mode of operation. Factory default is 1 (Mode 1, timed cutoff).

Parameter 4 sets the AUX 1 input function. Factory default is 0.

Parameter 5 sets the AUX 1 input polarity. Factory default is 0.

Parameter 6 sets the AUX 2 input function. Factory default is 0.

Parameter 7 sets the AUX 2 input polarity. Factory default is 0.

## 1.6 Status indicator lights

Both LED's off; module is idle, or no power

Red LED lit; door stall detected, pre-assist delay timer running (during normal operation), **or** module ready to count "parameter" button presses (during "tweak" mode)

Red LED winking repeatedly; defective X0130 module, replacement required

Green LED lit; power assist close being applied at assist force level (during normal operation), **or** module ready to count "value" button presses (during "tweak" mode)

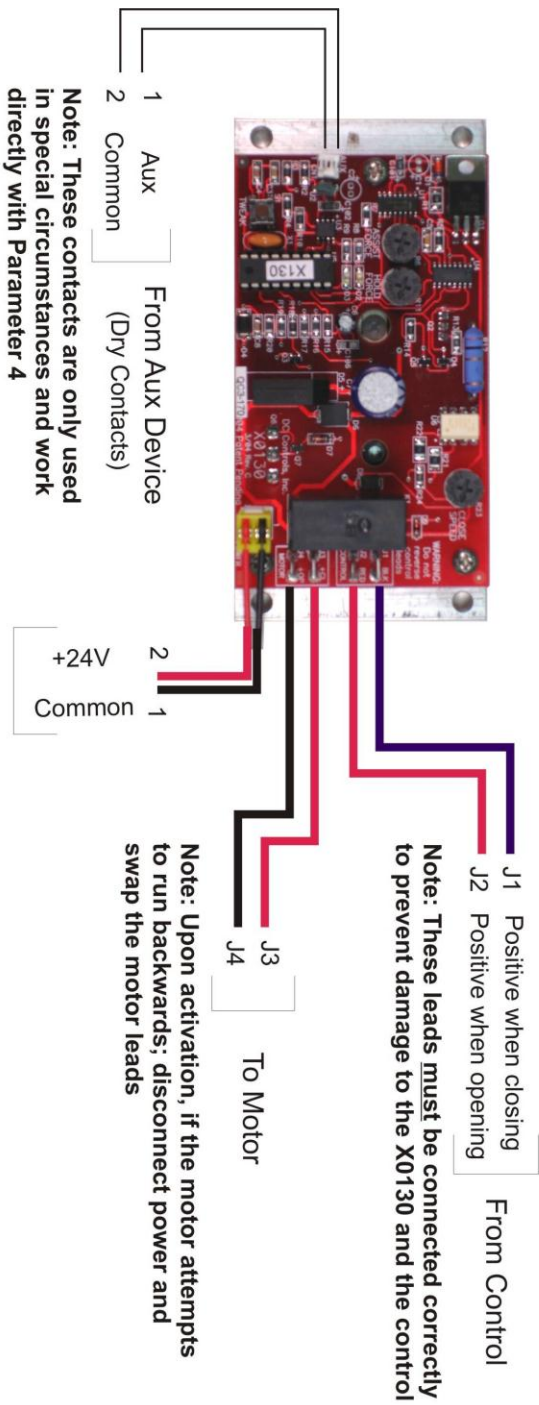
Green LED winking repeatedly; power assist close being applied at hold force level

Green and Red LED's flashing together; normal startup "sanity-check"

Green LED winks once; parameters saved following a "tweak"



## X0130 Power Assist Close Module with Close Speed Control Wiring Diagram



**Note:** Disconnect or disable any existing method of close speed regulation before installing. This may be a large rheostat or potentiometer. On the Z7000 it is the X0110.

(24 VAC/NDC; 2A Peak/1A Max Continuous)

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NEED TO ADD THE NEW WIRING DIAGRAM ONCE WE HAVE NEW DIAGRAM