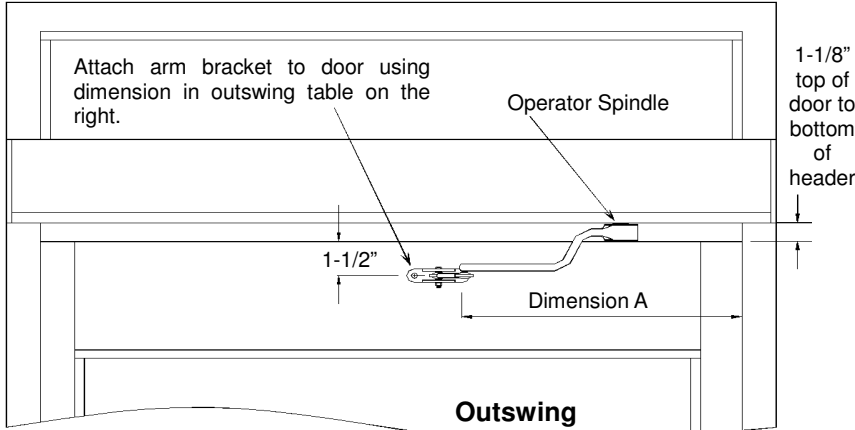


Complete Installation Manuals for this product are available on our website at the address shown above.

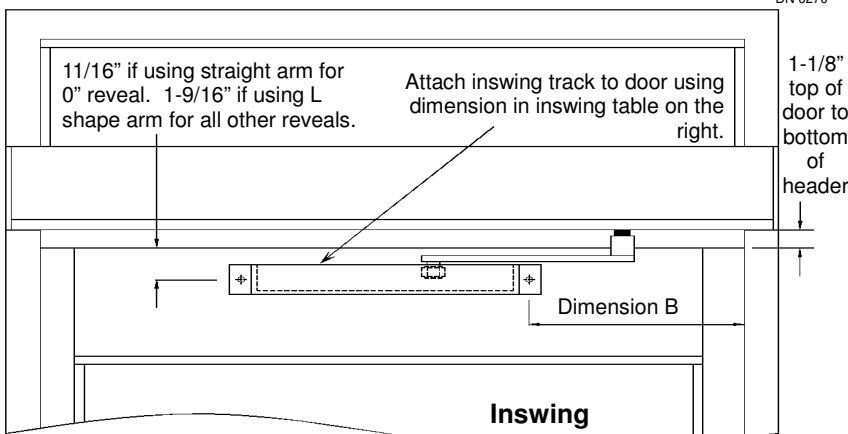
Quick Set-up

Hardware:

1. Mount header assembly to door frame (refer to diagram below)

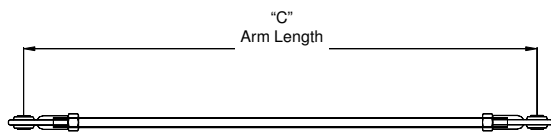


Dimension A — Outswing		
Model	w/ Finger Guard	W/O Finger Guard
8400		
Butt/Offset	N/A	12-7/16"
Center Pivot	16"	15"
8500		
Butt/Offset	N/A	10-3/16"
Center Pivot	13-3/4"	12-3/4"



Dimension B — Inswing both 8400/8500		
Model	w/ Finger Guard	W/O Finger Guard
Std Track		
Butt/Offset	N/A	8-1/4"
Center Pivot	13"	12"
Long Track		
Butt/Offset	N/A	N/A
Center Pivot	3-3/4"	2-3/4"

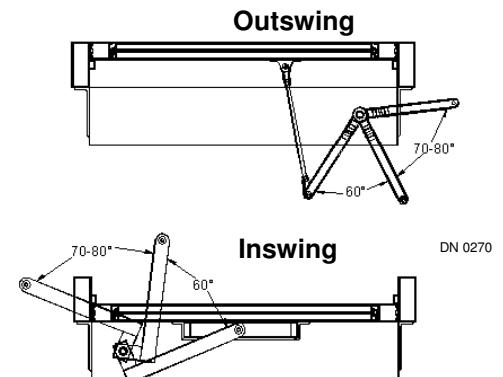
2. Adjust outswing arm length "B" to suit reveal per the tables below.
Note: Inswing arms are pre-sized for reveal when unit is ordered.



3. Pre-load and install arm on closer spindle. Note: with door closed and arm connected to the door, the scribe mark on the operator spindle should be parallel to the door.

Arm Lengths "C" - Outswing Center Pivot		
Reveal	GT8400	GT8500
1-1/8"	12-1/2"	11-7/8"
2-1/8"	13-1/2"	12-7/8"
3-1/8"	14-1/2"	13-7/8"
4-1/8"	15-1/2"	14-7/8"
5-1/8"	16-1/2"	15-7/8"
6-1/8"	17-1/2"	16-7/8"

Arm Lengths "C" - Outswing Butt Hinge	
Reveal	GT8400/8500
1-1/8"	11-7/8"
2-1/8"	12-7/8"
3-1/8"	13-7/8"
4-1/8"	14-7/8"
5-1/8"	15-7/8"
6-1/8"	16-7/8"



Wiring:

1. Connect activation devices to terminal block. Refer to wiring diagram and terminal block information below.
2. Install supplied door stop block.
3. Connect power and adjust Magnum control by referring to tables below.
4. Before adjusting speeds, set current limit to maximum, adjust open-close-check speeds, then adjust current limit to proper level.

Magnum IV Control LED Information		
LED Color	LED Status	Door Status
Green	Flashing Fast	Opening
	On Steady *	In Back Check *
	Flashing Slow	Closing
	Off	In Latch Check or Closed
Red	Flashing Fast	Safety w/Lockout Activated
	Flashing Slow	Continuous Safety Activated
	On Solid	Recycle Activated

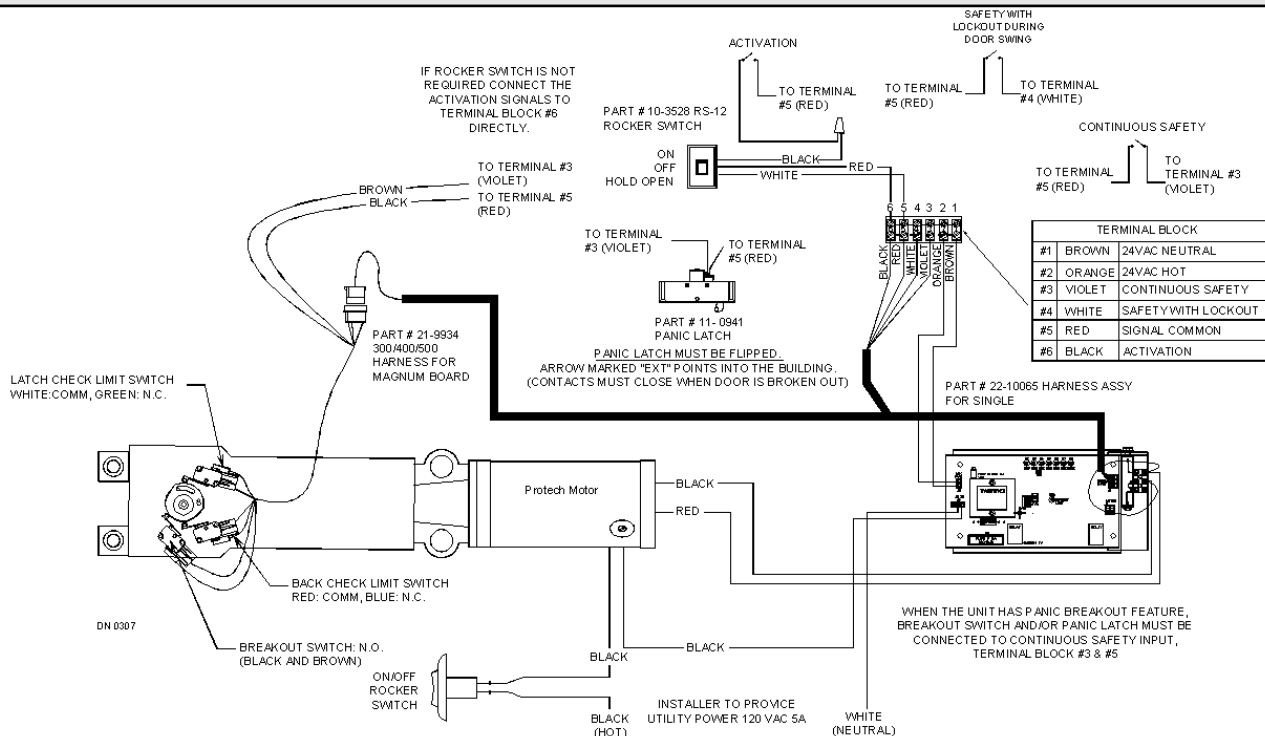
* Green MUST be on steady at back check otherwise door will not hold open correctly. If Green LED is not on steady remove and reposition arm on operator spindle.

Potentiometers and Functions	
POT	FUNCTION
STOP	Adjusts how door reacts to continuous safety input (terminal # 3) during Opening. Counterclockwise = door stops and closes, Clockwise = door stops and creeps open
OPEN	Adjusts opening speed. Clockwise = faster
BCHK	Adjusts Back Check speed. Clockwise = faster
TDAS	Adjusts how long door remains open after activation signal. Clockwise = longer
TDPG	Adjusts how long door remains open after Push-N-Go. Clockwise = longer
LCHK	Adjusts Latch Check speed. Clockwise = faster
CLOSE	Adjusts closing speed. Clockwise = faster
Current Limit	Adjusts how hard the door will push against an obstacle (while opening) before recycling. Clockwise = less sensitive

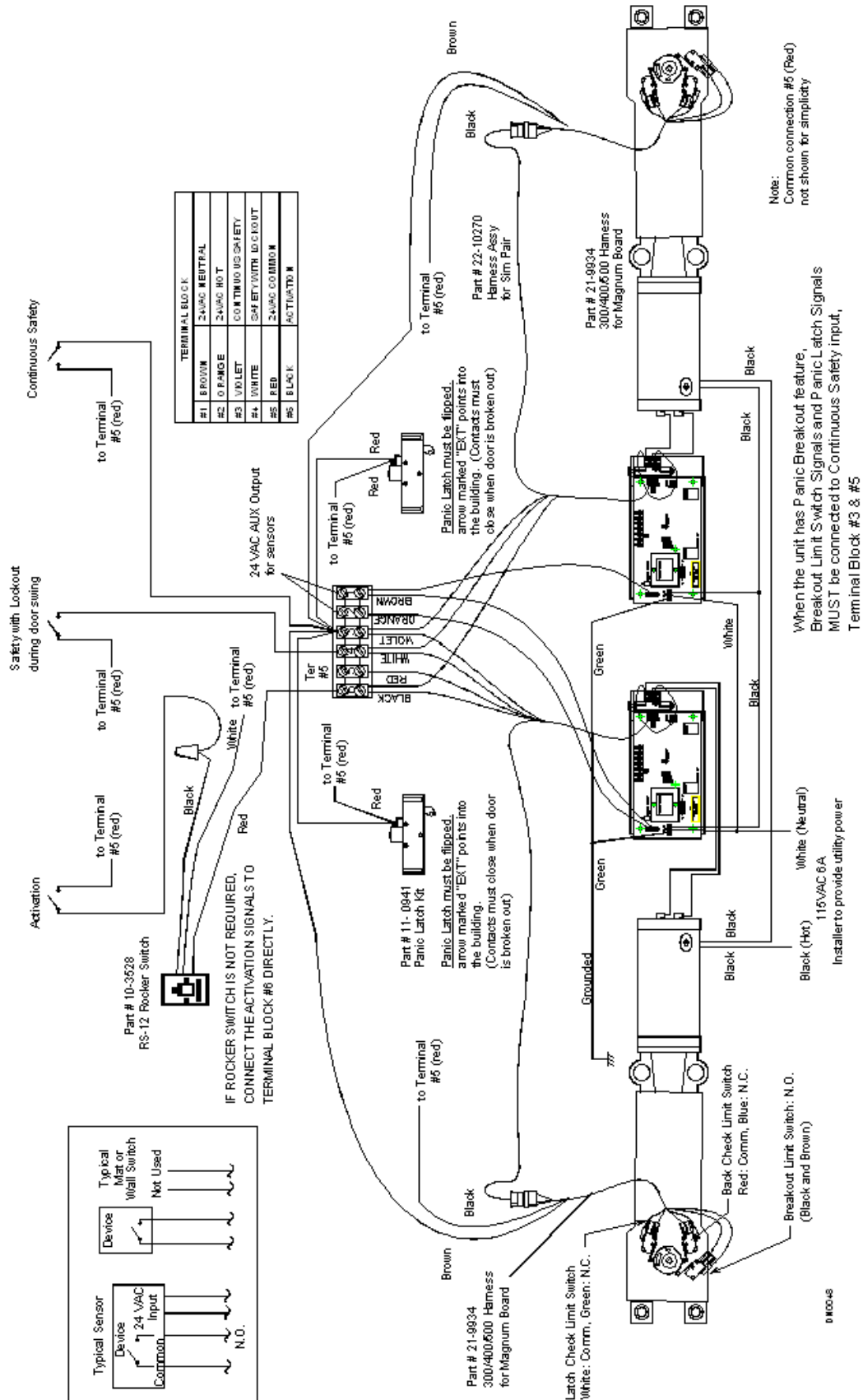
Dip Switch Information		
Dip Switch	On position	Off Position
1	Not Used	Not Used
2	Normally Open Safety	Normally Closed Safety
3	Push-N-Go Inactive	Push-N-Go Active
4	Timer Mode	Sequential Mode

Slide Switch	
Up	Low Energy - GT500
Down	High Energy - GT300, GT400 (door opens faster)

General Wiring Diagram



Magnum Simultaneous Pair Wiring



Troubleshooting Guide

Symptom	Action/Cause	Solution
Operator does not function	<ol style="list-style-type: none"> 1 Check fuse 2 Check for 120 VAC 3 Check power to activation device 4 Check activation device signal wires 	<ol style="list-style-type: none"> 1 Replace fuse 2 Check incoming power. If power is good, check connection to motor. 3 Correct wiring 4 Correct wiring
Motor spins but operator does not function, or tries to close on activation.	<ol style="list-style-type: none"> 1 Clutchless operator (U series Microprocessor) - Motor is connected backwards - door tries to close Clutched operator (Magnum or Analog) - Motor is connected backwards - motor spins 2 Operator is wrong hand 3 Spyder coupling loose between motor and gearbox 	<ol style="list-style-type: none"> 1 Clutchless operator - install or remove handing harness Clutched operator - Reverse motor leads 2 Change operator to correct hand 3 Remove motor and tighten coupling on motor and gearbox with Allen wrench.
Door is staying open on activation	<ol style="list-style-type: none"> 1 Spring broken in operator 2 Broken or jammed gear train internally 3 Slide block jamming (OHC units only) 4 Plastic Lovejoy coupling disintegrated and jammed between motor and operator. 5 Time delay set too high on controller 6 Controller is in sequential mode 	<ol style="list-style-type: none"> 1 Replace operator 2 Replace operator 3 Check top track for any obstructions. 4 Remove motor/operator assy and replace Lovejoy coupling 5 Adjust "TDAS" potentiometer on Magnum board or Extended Time Delay on U-series microprocessor 6 Set dip switch 4 on Magnum board to On for timer mode
Door slams closed	<ol style="list-style-type: none"> 1 Gear or linkages slipping internally in operator 2 Open circuit between motor and control 3 Magnum - latch check speed not set 4 Magnum - incorrect latch check position 	<ol style="list-style-type: none"> 1 Replace operator 2 Repair circuit 3 Adjust LCHK potentiometer (aka R7) 4 Adjust preload on swing arm or cam on operator so that latchcheck micro switch engages properly
Door slams open	<ol style="list-style-type: none"> 1 Door is not going into backcheck at all 2 Defective backcheck switch 3 Back check speed set too fast 	<ol style="list-style-type: none"> 1 Re-position arm on spindle so that backcheck micro switch engages properly. (does not apply to "U" Series controller) Verify adjustment of backcheck micro switch by adjusting cam for proper switch roller contact. 2 Replace backcheck switch 3 Adjust back check potentiometer on Magnum
Door does not stay tightly closed.	<ol style="list-style-type: none"> 1 Preload on swing arm is not correct. 2 Hold closed not selected on U-series MP 	<ol style="list-style-type: none"> 1 Set pre-load on arm. 2 Go to "Special Function" and set "Hold Close" to Y