



Power Track Series Master Unit – PTD

Installation Instructions

80-9344-0705-010 (7-01)

Combination Door Closer-Holder and Releasing Device WITH Integral Smoke Detector

Models

Hinge (Pull) Side of Door Application	Stop (Push) Side of Door Application
400 PTD	P400 PTD

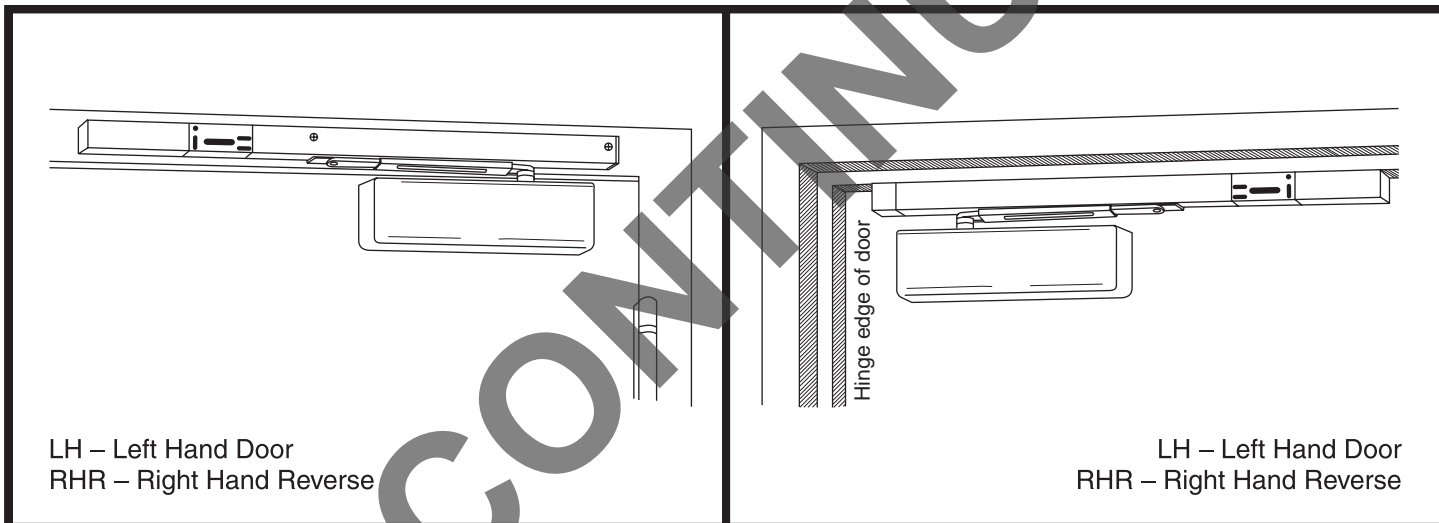
NOTE: For wiring see "Power Track"
"Wiring Instructions" No. 80-9342-0900-021

CAUTION

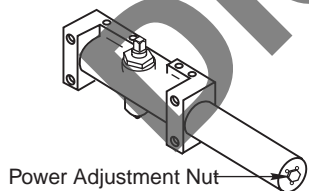
An incorrectly installed or improperly adjusted door closer can cause property damage or personal injury. These instructions should be followed to avoid the possibility of misapplication or misadjustment.

NOTE: For special applications a separate door and frame preparation template is packed with these instructions. Use this instruction sheet for installation sequence and closer adjustments only.

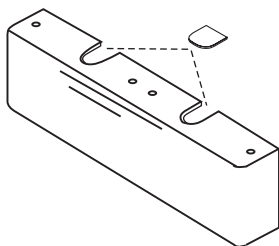
- Use of an auxiliary door stop is always recommended.



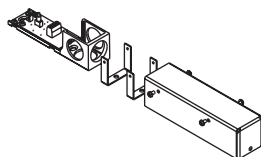
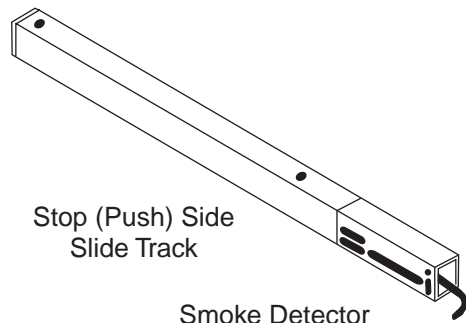
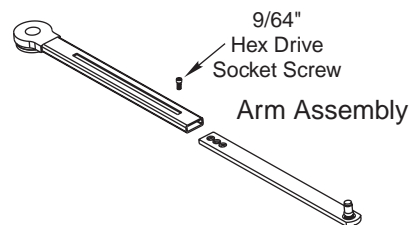
Components:



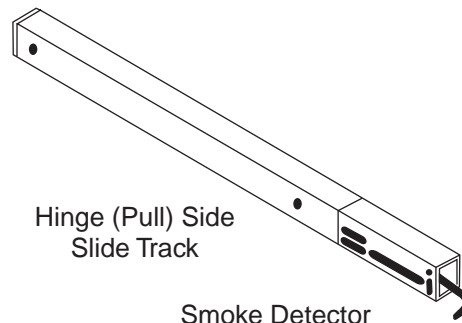
Closer Body

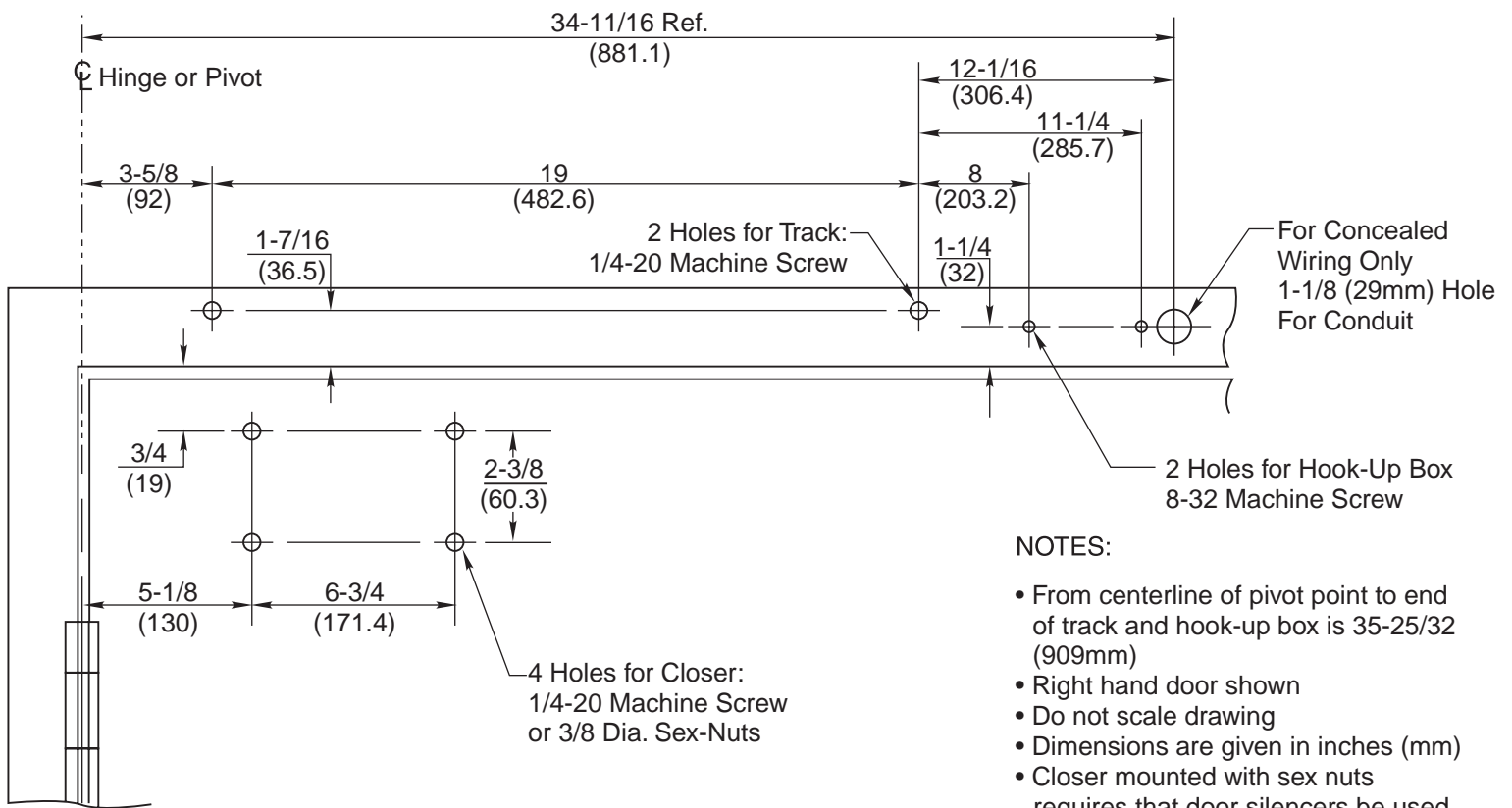


Cover with Insert



Hook-Up Box Chassis And Cover





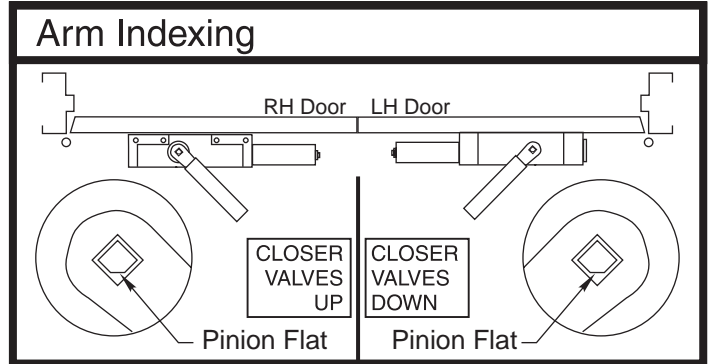
NOTES:

- From centerline of pivot point to end of track and hook-up box is 35-25/32 (909mm)
- Right hand door shown
- Do not scale drawing
- Dimensions are given in inches (mm)
- Closer mounted with sex nuts requires that door silencers be used
- Minimum ceiling clearance for unit is 2" (50mm)
- Maximum door opening is 110°

Preparation for Fasteners

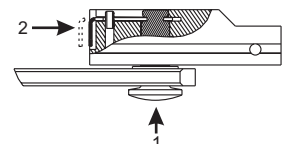
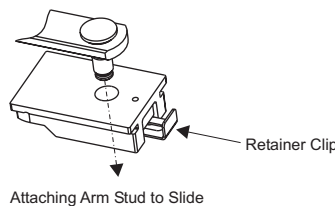
Fasteners	Opening	Fastener Preparation
8-32 Machine Screw	Metal Frame	Drill: #29 [.136" (3.45mm) dia.] 8-32 UNC Tap
1/4-20 Machine Screw	Metal Door or Frame	Drill: #7 [.201" (5.10mm) dia.] 1/4"-20 UNC Tap
3/8 Dia. Sex Nut	Wood or Composite Door	3/8" [.375" (9.50mm) dia.] through

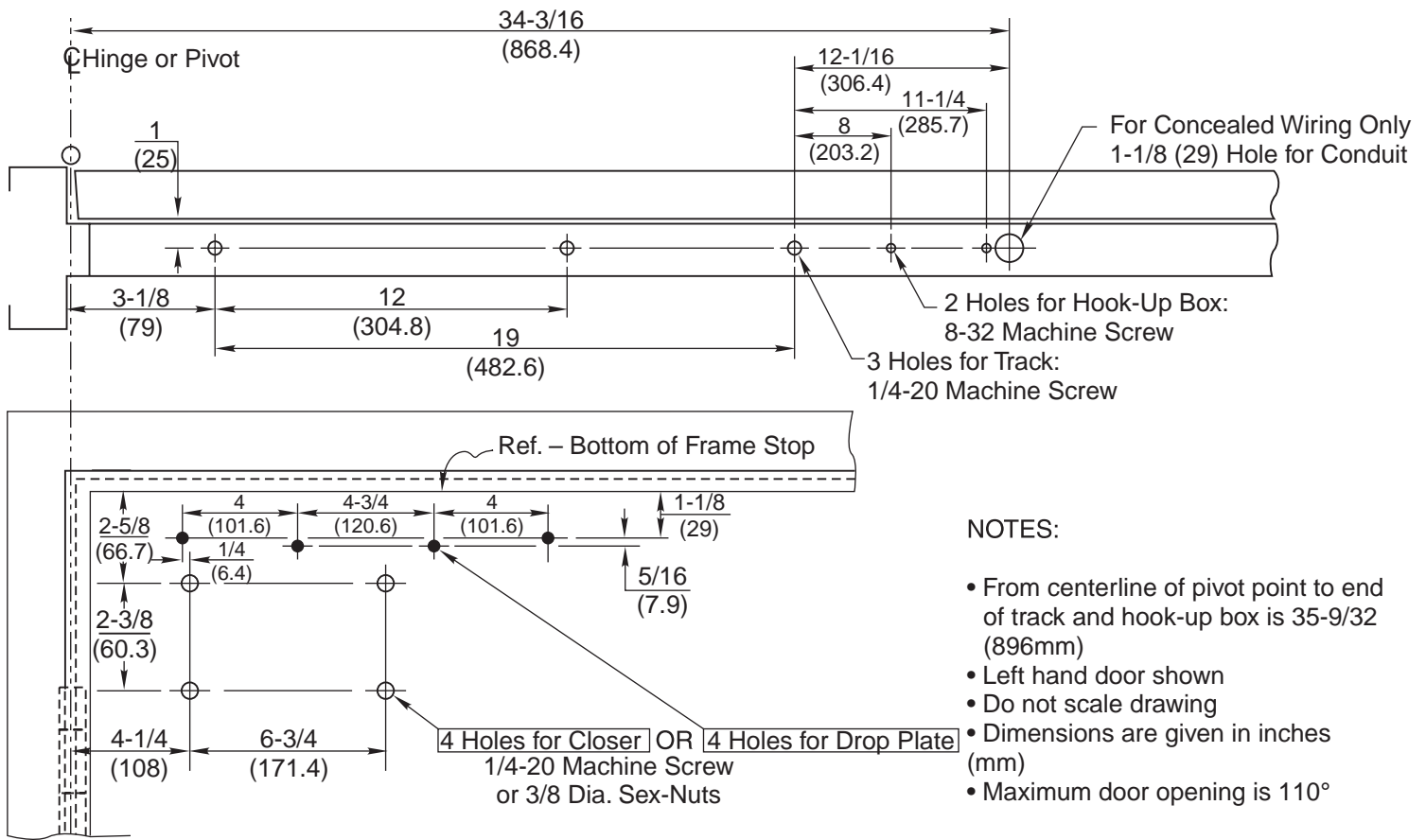
Arm Indexing



1. For Concealed Wire Applications Only:
Locate and drill 1-1/8" (29mm) diameter hole in frame face for the conduit.
2. Locate mounting holes in door and frame using above template:
Door – 4 holes for Closer
Frame – 2 holes for Track. 2 holes for Hook-up Box
3. Prepare mounting holes for fasteners using "Preparation for Fasteners" chart above.
4. Fasten Track Assembly to frame with smoke detector toward lock edge of frame and open side facing down.
5. Remove metal cover and straps from hook-up box assy..
NOTE: Units with a 120V to 24V transformer require that hook-up board be removed from chassis to enable mounting.
6. Fasten Hook-up Box Straps and Chassis to frame with conduit hole openings away from hinge edge of frame.
NOTES: Place Hook-Up Box straps between frame and chassis. Special conduit nut supplied to anchor 3/4" conduit fitting.

7. Mount CLOSER BODY to door with spring adjustment nut toward lock edge of door and closer valves Facing DOWN for LEFT HAND door Facing UP for RIGHT HAND door.
8. Adjust arm to shortest length and install 9/64" hex drive socket head screw from screw pack.
9. Place slide arm on pinion shaft using Arm Indexing instructions above.
10. Secure arm with arm washer and arm screw.
11. Insert arm stud into slide block in track assembly. Secure by pushing in on the retainer clip that extends from the slide block in the track, until it is flush with the slide block.

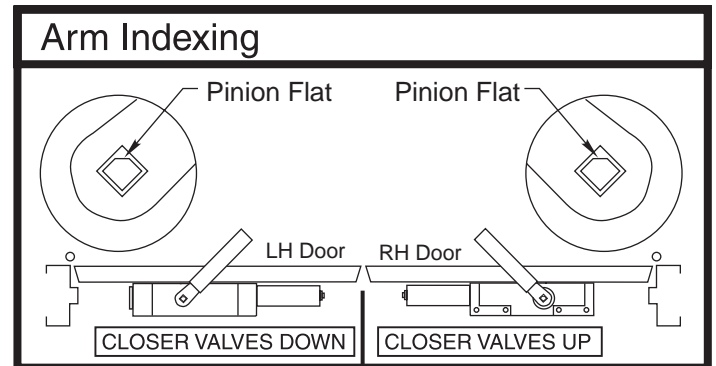




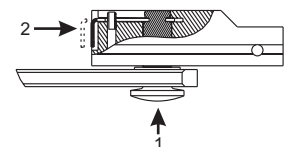
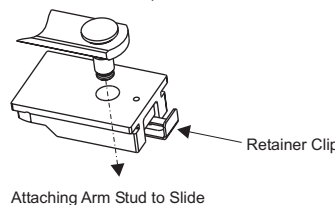
NOTES:

- From centerline of pivot point to end of track and hook-up box is 35-9/32 (896mm)
- Left hand door shown
- Do not scale drawing
- Dimensions are given in inches (mm)
- Maximum door opening is 110°

Preparation for Fasteners		
Fasteners	Opening	Fastener Preparation
8-32 Machine Screw	Metal Frame	Drill: #29 [.136" (3.45mm) dia.] 8-32 UNC Tap
1/4-20 Machine Screw	Metal Door or Frame	Drill: #7 [.201" (5.10mm) dia.] 1/4"-20 UNC Tap
3/8 Dia. Sex Nut	Wood or Composite Door	3/8" [.375" (9.50mm) dia.] through



- For Concealed Wire Applications Only:
Locate and drill 1-1/8" (29mm) diameter hole in frame soffit for the conduit.
- Locate mounting holes in door and frame using above template:
Door – 4 holes for Closer or 488 Drop Plate
Frame – 3 holes for Track. 2 holes for Hook-up Box
- Prepare mounting holes for fasteners using "Preparation for Fasteners" chart above.
- Fasten Track Assembly to frame with smoke detector toward lock edge of frame and open side facing down.
- Remove metal cover and straps from hook-up box assy..
NOTE: Units with a 120V to 24V transformer require that hook-up board be removed from chassis to enable mounting.
- Fasten Hook-up Box Straps and Chassis to frame with conduit hole openings away from hinge edge of frame.
NOTES: Place Hook-Up Box straps between frame and chassis. Special conduit nut supplied to anchor 3/4" conduit fitting.
- Mount CLOSER BODY (or Drop Plate and then Closer Body) to door with spring adjustment nut toward lock edge of door and closer valves:
Facing DOWN for LEFT HAND door
Facing UP for RIGHT HAND door
- Adjust arm to shortest length and install 9/64" hex drive socket head screw from screw pack.
- Place slide arm on pinion shaft using Arm Indexing instructions above.
- Secure arm with arm washer and arm screw.
- Insert arm stud into slide block in track assembly. Secure by pushing in on the retainer clip that extends from the slide block in the track, until it is flush with the slide block.



DOOR CLOSER ADJUSTMENTS

Arm Attachment to Track

Insert arm stud into slide block in track.
Secure by pushing in on the retainer clip that extends from the slide block, until it is flush with the slide block, see illustration on page 2 of these instructions.

Hold Open Angle:

Place door in the Hold Open position. Remove 9/64" hex drive socket head screw from arm. Open door to desired angle and install hex-drive socket head screw into hole in adjusting rod that is aligned with the hole in the adjusting tube.

Closing Power

Closing Power can be increased by 50%.
To increase power, see Figure 1, rotate "Spring Adjustment Nut" clockwise using a 11/16" wrench or socket. 15 full turns (360°) will provide maximum available power.

Closing Cycle (hydraulic control)

See figure 2A.
Valve "L" controls door speed in Latch range.
Valve "S" controls door speed in Sweep range.

~~Use 1/8" hex-key furnished and adjust as shown in figure 3.~~

Opening Cycle (hydraulic control)

See figure 2B.
Valve "B" cushions (slows) door opening in the backcheck range.
Note: Never close this valve completely or damage to closer may occur.
Valve "P" allows "backcheck" to begin later in the opening cycle.

~~Use 1/8" hex-key furnished and adjust as shown in figure 4.~~

Installation of Cover:

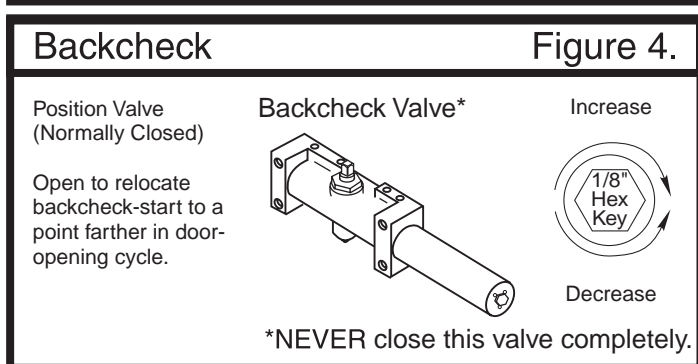
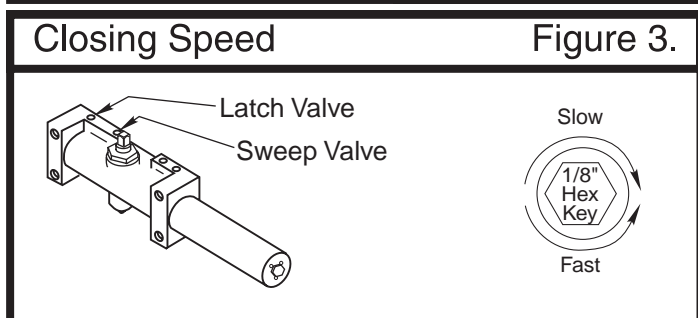
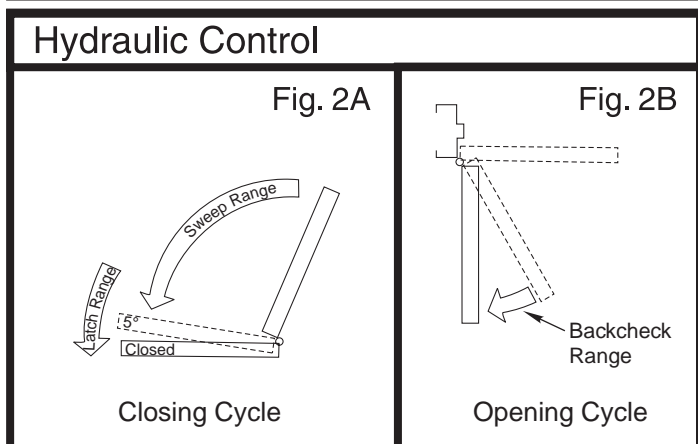
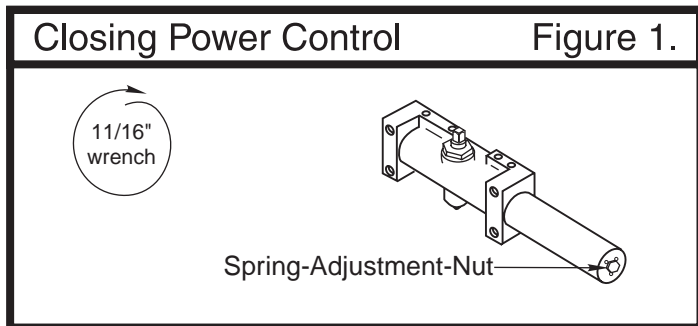
Fasten cover to closer with two screws provided:
• Molded Cover fastened at the top of closer.
• Metal Cover fastened at each end of closer.
Using four screws provided, fasten metal hook-up box cover.

Hold Open Power Adjustment:

If more hold open power is required, the power may be increased by turning the adjustment screw in the end of the track nearest the hinges. Use 9/64" hex wrench provided and rotate adjustment screw clockwise to increase holding power.

MAKE ELECTRICAL CONNECTIONS

Refer to "Power Track" "Wiring Instructions"
No. 80-9342-0900-021 for making wiring connections.



IMPORTANT!

After making all wiring connections:

- Turn power to unit "on". Green LED should be illuminated.
- Open door to the hold open position. Manually pull door out of hold open and release ... door should close.
- Again, open door to the hold open position. Depress "Test Switch" button on the hook-up board ... door should close.