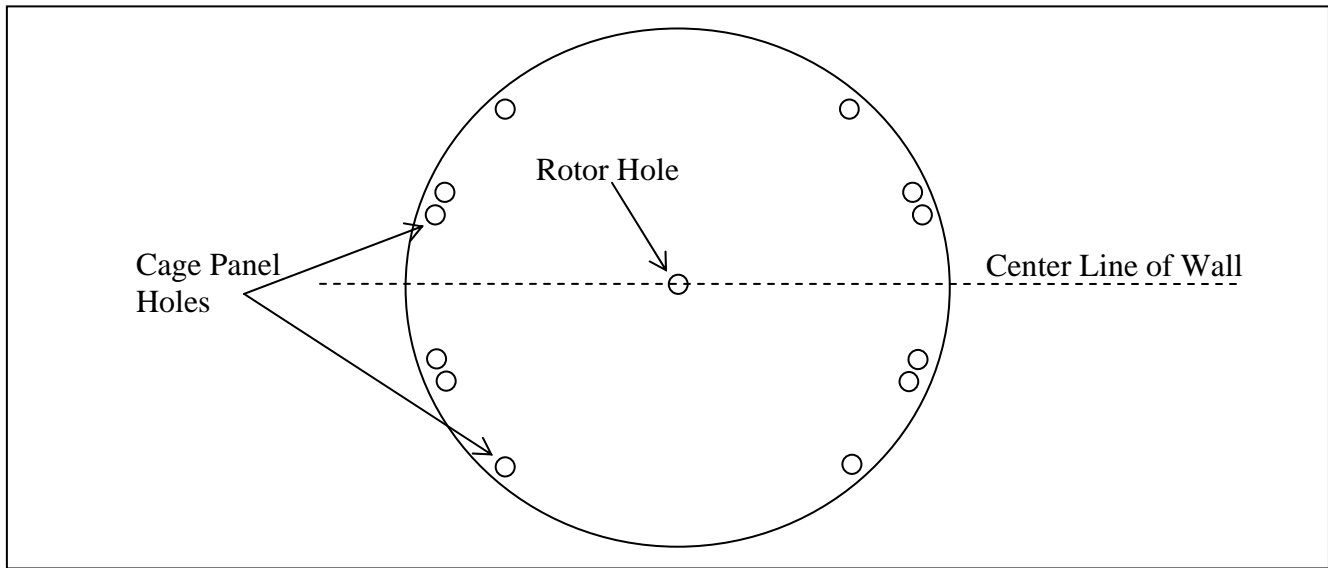




1. PREPARATION

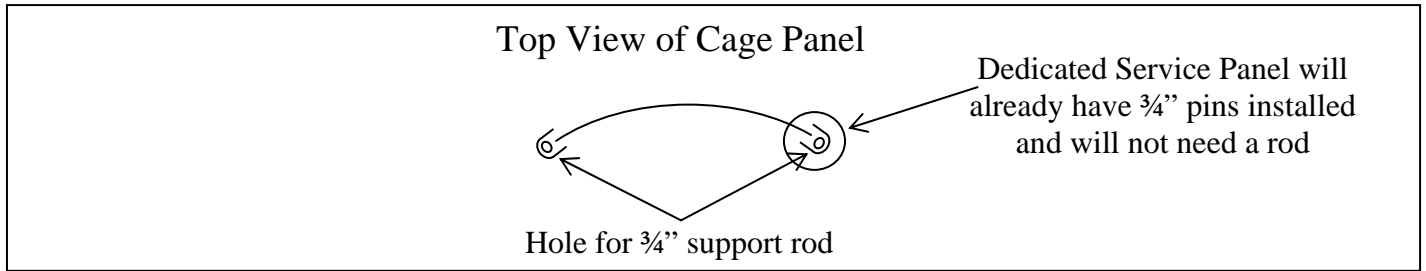
- 1.1 Put canopy plate on the ground where the turnstile will be installed.
- 1.2 Trace holes in canopy for cage anchors and rotor center as shown below



- 1.3 Remove canopy and place rotor bottom flange on the floor centered over the traced rotor circle
- 1.4 Trace the three (3) anchor holes for the bottom bearing
- 1.5 Drill three (3) 3/8" holes to a depth of 2 1/4" for the rotor anchors
- 1.6 Drill twelve (12) 7/8" holes to a depth of 4" for the cage panel anchors
- 1.7 Clean holes and remove all debris (use nylon brush if necessary)

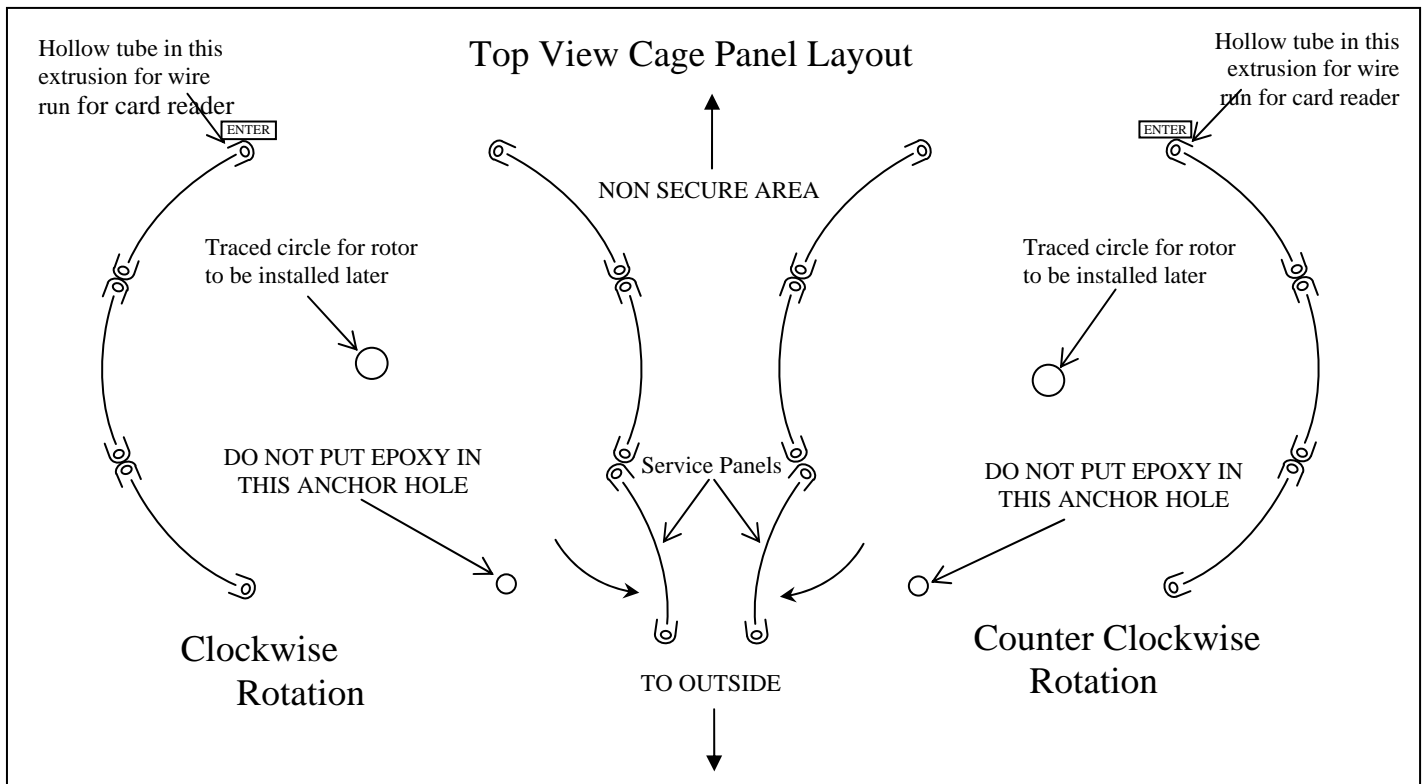
2. CAGE PANELS INSTALLATION

- 2.1 Place two (2) $\frac{3}{4}$ " X 90" rods (threaded on both ends) through the hole in the cage extrusions. One (1) panel for each turnstile will be dedicated as a service panel that will be able to swing out. Therefore the service panel will only have one rod because the other side already has $\frac{3}{4}$ " pins in the top and bottom. Each cage panel has two (2) extrusions, one on each end as shown below:



CAUTION: DO NOT FILL THE $\frac{7}{8}$ " ANCHOR HOLE THAT IS FOR THE SERVICE PANEL WITH EPOXY ANCHORING GEL. ONE (1) PANEL WILL BE ABLE TO SWING OUT TO ALLOW THE ROTOR TO BE PLACED LATER

- 2.2 Fill $\frac{7}{8}$ " anchor holes with Epoxy $\frac{1}{3}$ full except for service panel holes shown below (follow directions provided with epoxy anchoring gel)
- 2.3 There are six (6) cage panels for each turnstile, three (3) on each side as shown below.



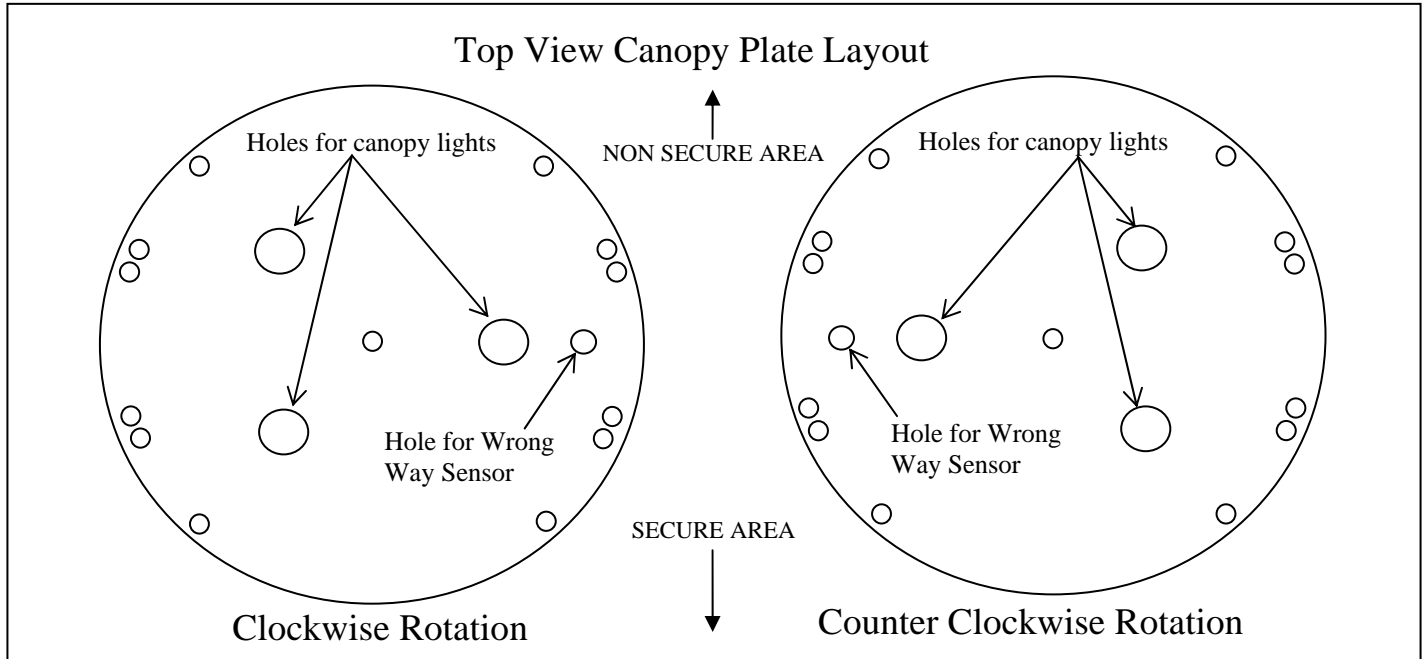
- 2.4 Move cage panels in place and allow the $\frac{3}{4}$ " cage panel support rods to drop into the anchor hole
- 2.5 Be sure to wipe up any epoxy that over flows as a result of the rod being placed in the hole

3. CANOPY INSTALLATION

3.1 Raise canopy plate above the cage panels

CAUTION: BE SURE THAT THE CANOPY IS PLACED IN THE CORRECT ROTATION SO THAT THE HOLE FOR THE WRONG WAY SENSOR IS ABOVE THE CORRECT AREA. SEE BELOW FOR CANOPY ORIENTATION

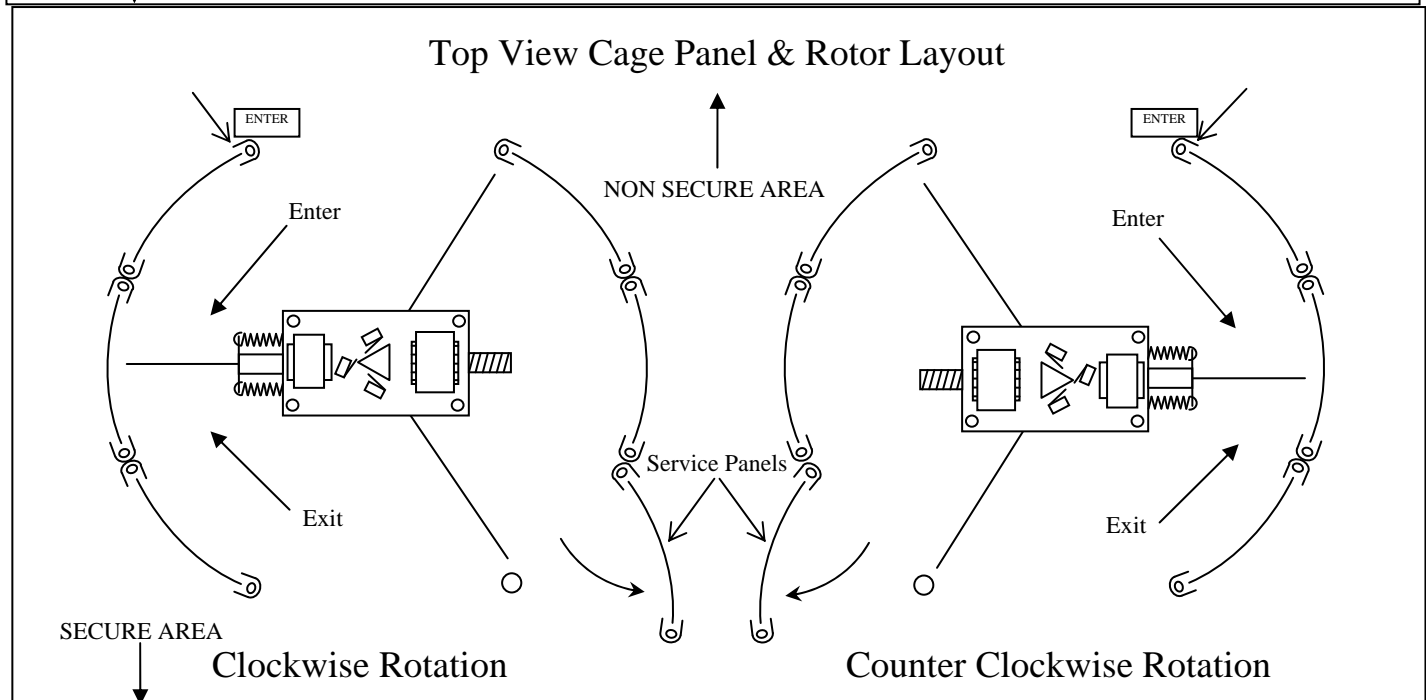
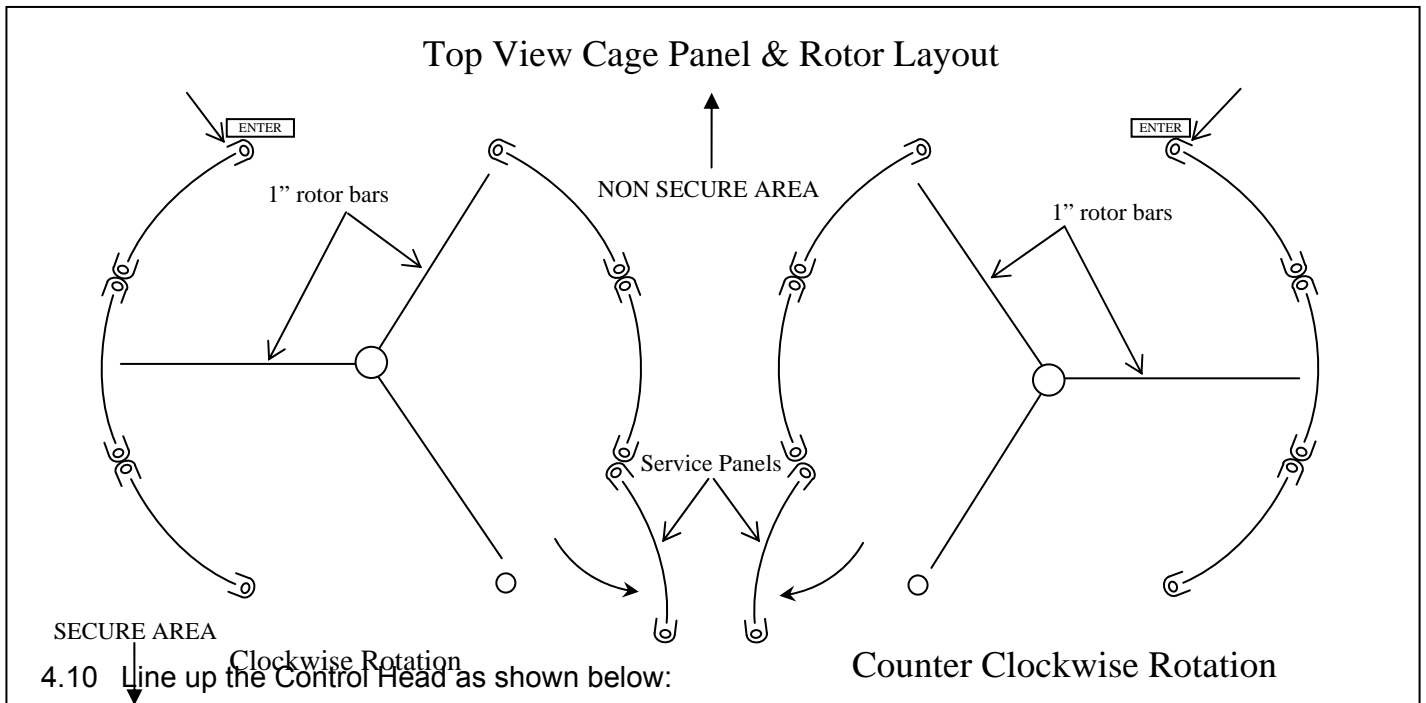
3.2 Line up correct holes with rods as shown below:



- 3.3 Allow canopy plate to come to rest on top of the cage panels with the support rods extending up through the holes
- 3.4 Place $\frac{3}{4}$ " washer and nut on the rod tops (do not tighten)
- 3.5 If necessary shim cage panels in order to make turnstile level and square
- 3.6 Let the cage panels and the canopy set overnight so the epoxy anchor can cure

4. ROTOR INSTALLATION

- 4.1 Insert "two way expansion" anchors (threaded end first) into holes drilled for the rotor bottom flange (three (3) anchors for each turnstile)
- 4.2 Position rotor bottom flange and bearing on floor above holes
- 4.3 Insert three (3) $\frac{3}{8}$ " X 3" hex screws and tighten
- 4.4 Open the service panel by loosening the screws that are holding the pins at the top and bottom
- 4.5 Slide $\frac{3}{4}$ " bottom pin up then tighten screw and slide the top pin down and tighten screw
- 4.6 Swing service panel open
- 4.7 Place the bottom of the rotor into the bottom flange and lift the canopy plate if necessary
- 4.8 Tighten the set screw at the bottom of the rotor, just above the 1" flange
- 4.9 Position the rotor so that the 1" protruding rods that are 120° apart are lined up as shown below:

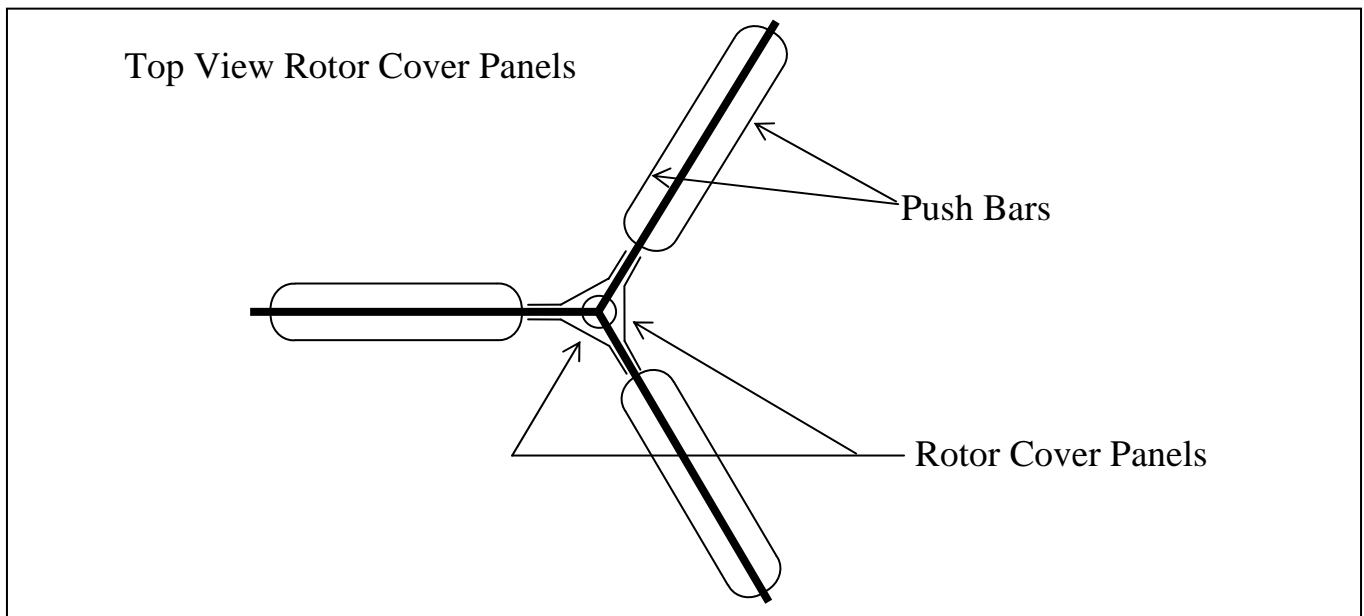


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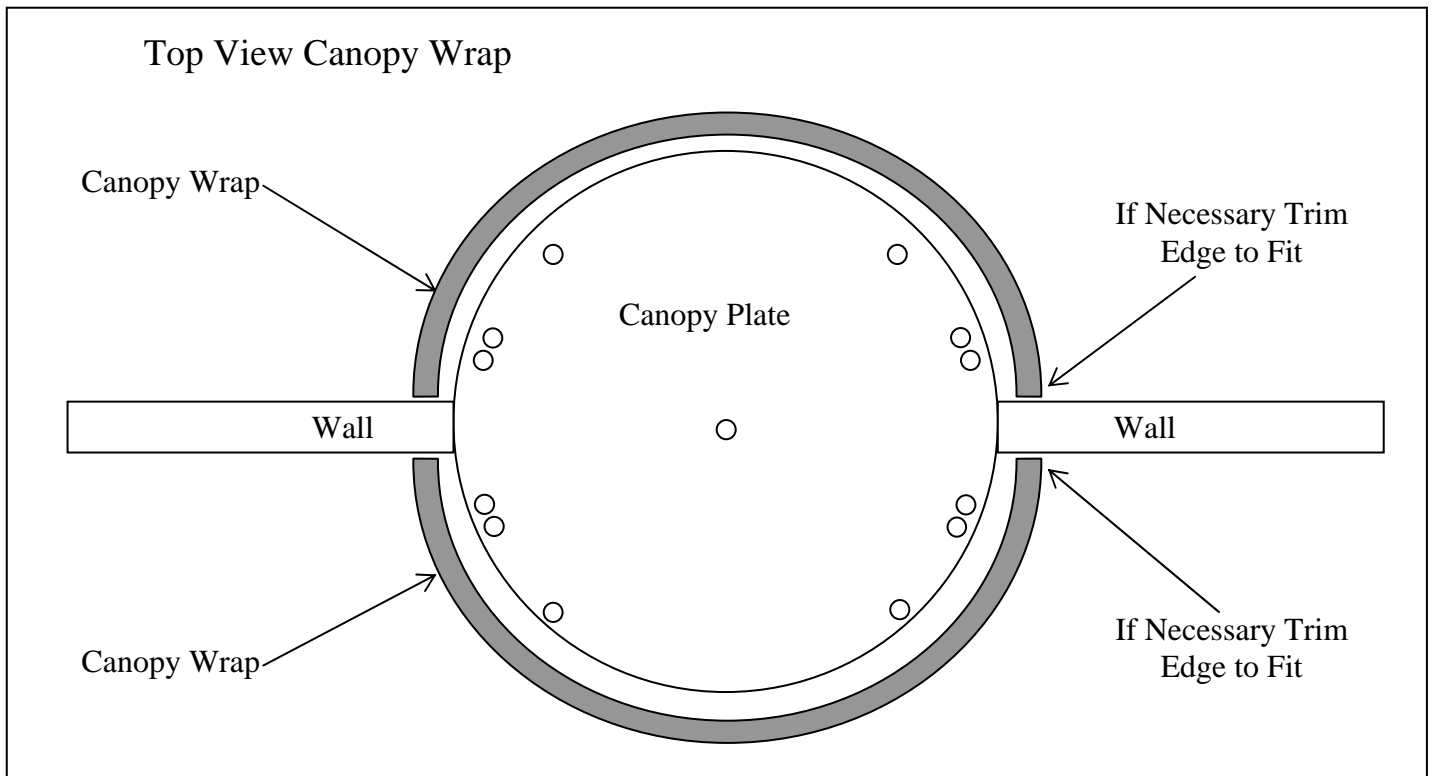
- 4.11 Fit the cam shaft of the control head down into the rotor with 3/8" - 18 studs protruding up through the control head on the four corners
- 4.12 Place 3/8" washer and 3/8 lock washer and 3/8"-18 nut on studs
- 4.13 If Fail-Open one way and Fail-Lock the opposite way, move turnstile rotor and bars to make sure that the entrance direction is locked and that the exit direction can move and that the vanes come to rest in the position shown above.
- 4.14 Tighten down 3/8" - 18 nuts to hold control head in place
- 4.15 Slide door vanes on to the 1" top and bottom bar with the tall metal extrusion kick plate toward the bottom.
- 4.16 To secure door vanes to rotor, screw flat head 5/16" - 18 X 3/4" screws in two (2) pre-drilled places along the top metal extrusion and into two (2) pre-drilled places along the bottom metal extrusion
- 4.17 Place rotor cover panels between the door vanes as shown below and secure with twelve (12) 10-32 flat head machine screws into pre-drilled holes



- 4.18 Secure the push bars to the door vanes using the pre-drilled holes (follow manufactures mounting instructions for a metal door)
- 4.19 Close the service panel and re-secure the pins to hold the panel in place

5. INSTALLATION OF THE CANOPY WRAP

5.1 There are two (2) canopy wraps for each turnstile, one for each side of the wall. Fit canopy wrap as shown below:



5.2 Secure canopy wrap to the base of the canopy plate every 25" – 27" (1" up from the base of the canopy wrap) using 10-32 flat head machine screws.

6. ELECTRICAL INSTALLATION

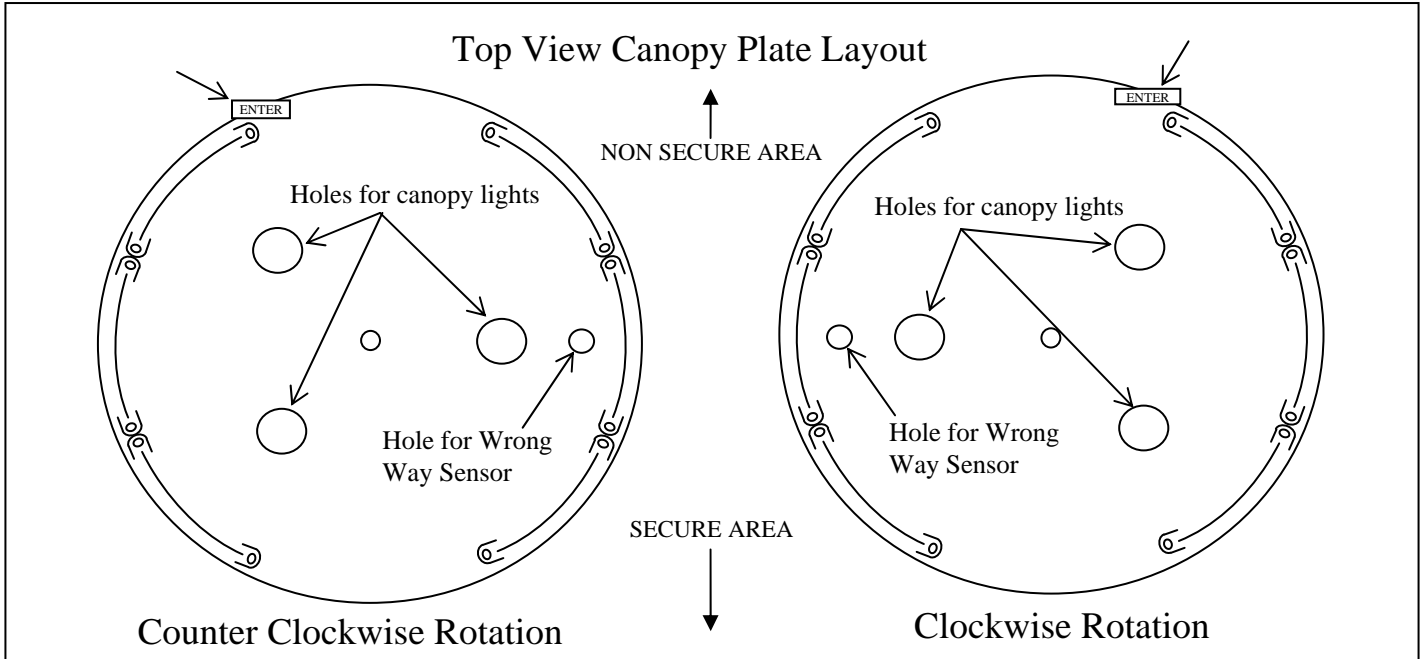
6.1 For Card Reader Plates: (OPTIONAL)

Drill hole in hollow tube once in place. Mount card reader plate to the extrusion on the cage panel that has existing wires through it. The holes for mounting are pre-drilled for a 10-24 screw

6.2 Mount Ultra-Beam ultrasonic sensor (wrong way sensor) to the canopy plate using the pre-drilled holes

6.3 Mount three (3) canopy lights using pre-drilled holes

7. Wire switches, sensor, control head, and lights per wiring diagram CA-7, RD70.



MATERIALS

QTY	DESCRIPTION
1	ROTOR ASSEMBLY
1	BOTTOM ROTOR FLANGE
1	BOTTOM ROTOR BEARING
3	CAGE PANELS WITH ¼" LEXAN BETWEEN EXTRUSIONS
2	CAGE PANEL WITH EXISTING WIRES INSIDE ONE EXTRUSION THAT WILL BE USED FOR THE CARD READER MOUNTING PLATES
1	CAGE PANEL WITH ¾" PINS IN THE TOP & BOTTOM OF ONE EXTURSION, THIS CAGE PANEL WILL BE USED AS THE SERVICE PANEL
9	¾" X 90" SUPPORT RODS (THREADED BOTH ENDS) FOR CAGE PANELS
2	¾" X 90" SUPPORT ROD HOLLOW (TREADED BOTH ENDS) FOR CAGE PANEL WITH EXISTING WIRES FOR EXIT SWITCH
3	KP DOUBLE "TWO WAY EXPANSION" ANCHORS FOR BOTTOM ROTOR FLANGE
3	STAINLESS STEEL 3/8"X 3" HEX SCREW FOR BOTTOM ROTOR FLANGE
as needed	UNITEX PRO-POXY 300 FAST EPOXY ANCHORING GEL
1	CANOPY PLATE STEEL FRAME WITH ALUMINMUM FACE
2	CANOPY WRAP 23 ½" X 109" X ⅛" ALUMINUM (CUT TO FIT IN FIELD)
1	TOUCH TO EXIT TOUCH PLATE WITH MOUNTING SCREWS
12	¾" WASHERS FOR THE TOP OF THE CAGE PANEL SUPPORT RODS
12	¾" NUTS FOR THE TOP OF THE CAGE PANEL SUPPORT RODS
4	⅜" CONTROL HEAD NUTS
4	⅜" WASHERS FOR THE CONTROL HEAD
4	⅜" LOCK WASHERS FOR THE CONTROL HEAD
1	CONTROL HEAD WITH 3 LIMIT SWITCHES, POWER SUPPLY, AND CONTROL BOARD
12	5/16" – 18 X ¾" FLAT HEAD SCREWS TO SECURE DOOR VANES ONTO THE ROTOR
3	ROTOR COVER PANELS TO COVER ROTOR BETWEEN DOOR VANES
36	10 – 32 X ½" FLAT HEAD MACHINE SCREWS FOR ROTOR COVER PANELS
15	10 – 32 X ½" FLAT HEAD MACHINE SCREWS FOR CANOPY WRAP
3	DOOR VANES WITH CLEAR LEXAN
3	SETS OF PUSH BARS WITH MOUNTING HARDWARE
3	CANOPY LIGHTS WITH LENSE AND FASTENERS
1	ULTRA-BEAM ULTRASONIC SENSOR USED AS WRONG WAY SENSOR

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