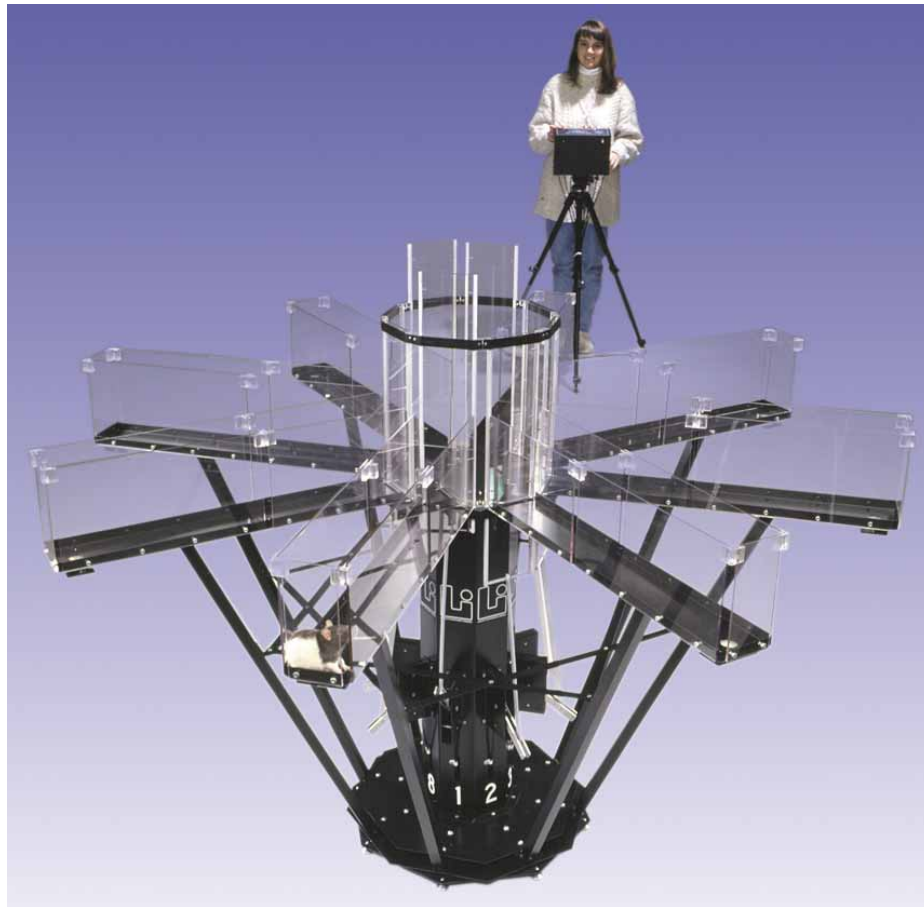


*Model 89000A*

# PATHFINDER MAZE SYSTEM ASSEMBLY INSTRUCTIONS

Traditional Radial Arm Maze

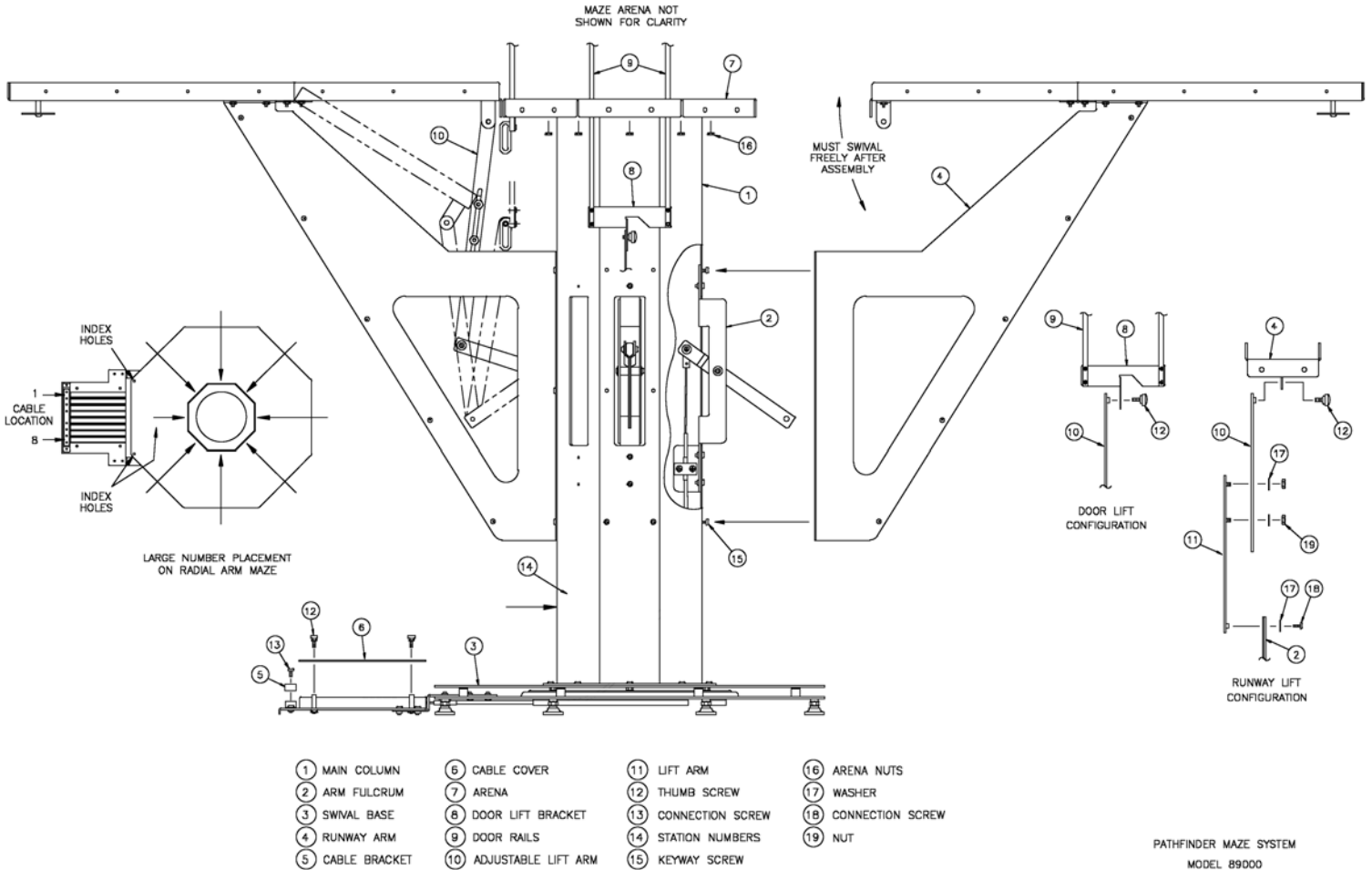


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## *Assembly Instructions:*

### **(A) Installation of the Arena to the Column.**

**\*See diagram on page 8**

#### **Required tools: 5/16" nut driver**

1. Place arena on top of the column, assuring that all (8) threaded studs are seated into the mating slots. Install the (8) kep nuts provided and tighten securely.
2. Check for smooth sliding of the arena doors after installing.

### **(B) Installation of Runway Arms to the Column.**

**\*See diagram on page 8**

#### **Required tools: medium size Phillips head screwdriver**

1. Mount all eight runway arms to the column. Each arm has keyway slots located on the back of the arm tabs. Once mounted tighten all (6) keyway screws Securely. (Runway arms can be installed in any order)

## (C) Connection of Lift Arms to the Runways & Doors

**\*See diagram on page 8**

### **Required tools: none required**

1. At this point you have the option of attaching the lift arms to the under side of the swivel portion of the runways or to the slotted door lift bracket connected to the arena. The provided plastic thumb screws are used for either application.
2. Assure these connections operate smoothly, that there is no binding of the mechanism.
3. Place the eight feeder cups into the open holes located at the end of the runway.
4. At this point rotate the column on the base swivel to assure it moves freely without binding. When the column is positioned with the numeral one facing the cable mounting panel, this is considered the mid point or center of rotation. From this point the column can be rotated 170 degrees to the left or 170 degrees to the right of this center point. Column will not rotate past 170 degrees, as there is a built in rotation stop to prevent the cables from binding.

## (D) Attaching Control Head to the Column

**\*See diagram on page 8**

### **Required tools: medium size Phillips screwdriver**

1. First mount the control head to a sturdy tripod or permanently mount using the provided keyway slots located on back of head. Distance from control head to column is approximately 12 feet.
2. Extend the cables toward the column, and assure the cables are laying flat and are not twisted. At the column remove the four thumb screws holding the cable cover down.
3. Attach the cable mounting bracket located at the end of the extended cables to the cable mounting bracket located on the column. This bracket is located directly in front of the large numeral (1) on the column. Secure using the two provided connection screws and tighten.
4. Connect cables to column by hand screwing each connector to its respective mating cable, and assure they lay flat in the provided channels. As you are facing the front of the column at the numeral (1) position the cables run from the left to right (1 to 8). This should match the control head lever numerals.
5. Reinstall the cable cover with the four thumb screws.
6. At the control head test pull each lever for free and smooth travel, and check for smooth travel of lift doors and runways.
7. Slight travel adjustments can be made to the system if needed by loosening the two nuts on the adjustable lift arms located under the runway arms. Slide the adjustable lift arms up or down to suit and retighten. This should not be necessary as the travel has been preset at the factory prior to shipping. However, adding cable extensions may require readjustment.

## (E) Connection of the Manual Control Lever Box (Opened and Closed Configuration)

**Required tools: None**

- The maze comes with 12 feet of cable for each arm. At this point, it is important to determine if 12 feet is long. The figures below show the most common methods of connecting the control box to the maze and managing the cabling. **Figure 1** shows a straight connection between the control box and the maze (typical for 12 feet). This is the best possible and most reliable connection scheme. **Figure 2** shows a single turn connection, but it is still the most reliable way to deal with long cabling. The turning radius of the cable in this scheme should not be less than 2 feet. **Figure 3** shows a multiple turn connection between the control box and maze. This layout, while it might work sometimes, is not very reliable and should be avoided. The more turns you have, the less reliable the system becomes. Once again, the turning radius of the cables should not be less than 2 feet. **Figure 4 does not work at all!!!** Looping the cables will not allow the cables inside the cable housing to move at all. Needless to say, avoid this configuration. If you have placed the control box at the most convenient location and find that there is not enough cable Please contact LIC for a cable extension.



Fig. 1  
Straight Connection  
(Best)

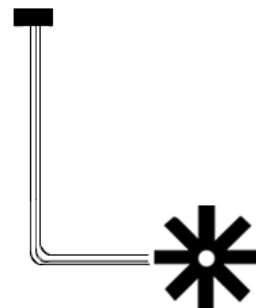


Fig. 2  
Single Turn Connection  
(Good)

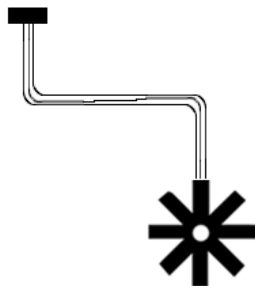


Fig. 3  
Multiple Turn Connection  
(Fair/Poor)

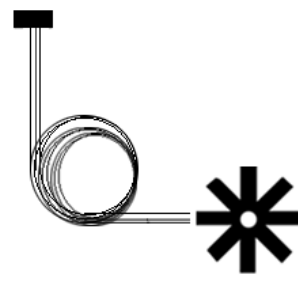


Fig. 4  
Looped Cable Connection  
(AVOID: Does not work)

## (F) Installation of the Runway/Bridge Walls

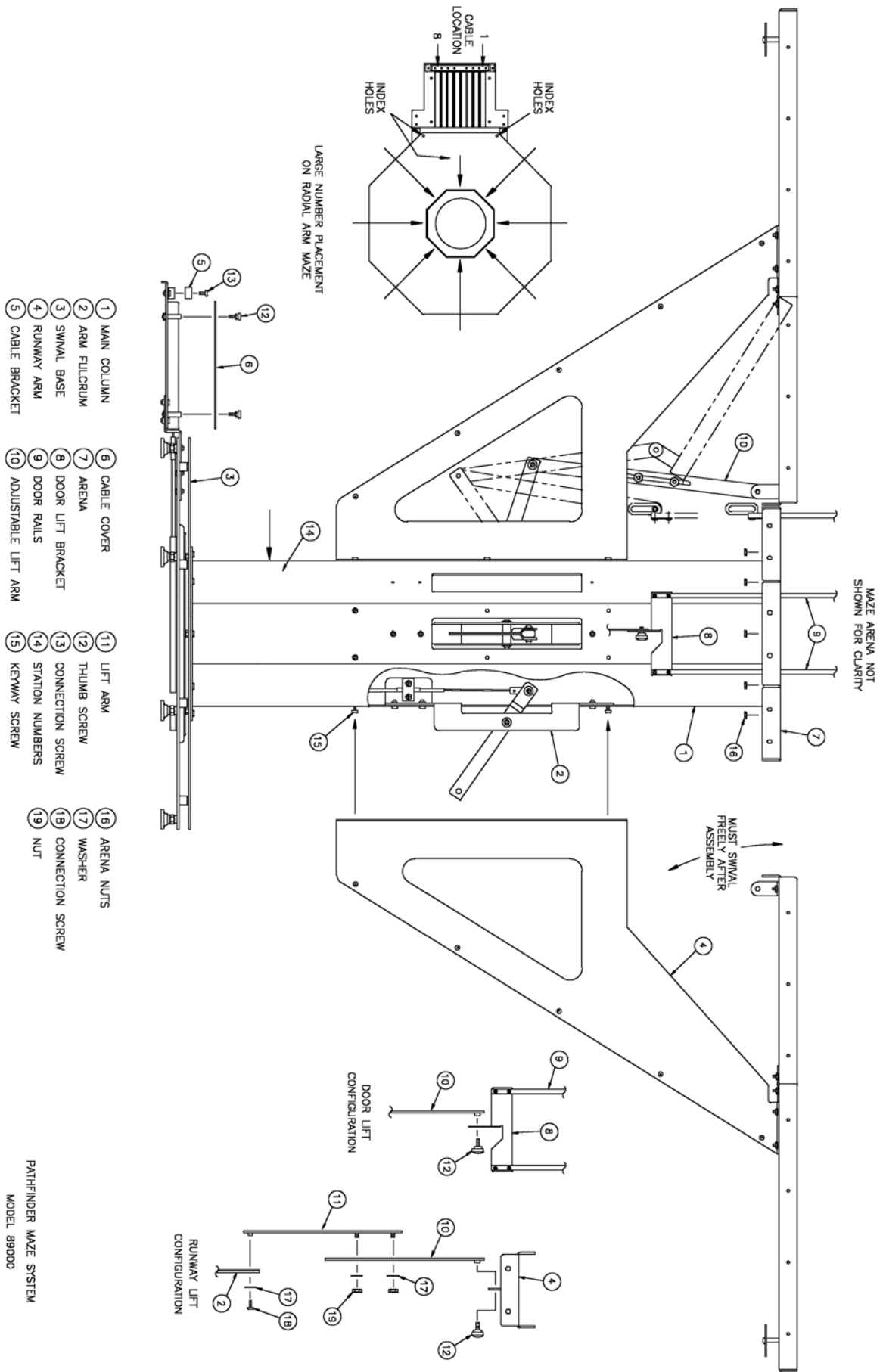
(Closed Configuration ONLY)

\*See diagram on page 10

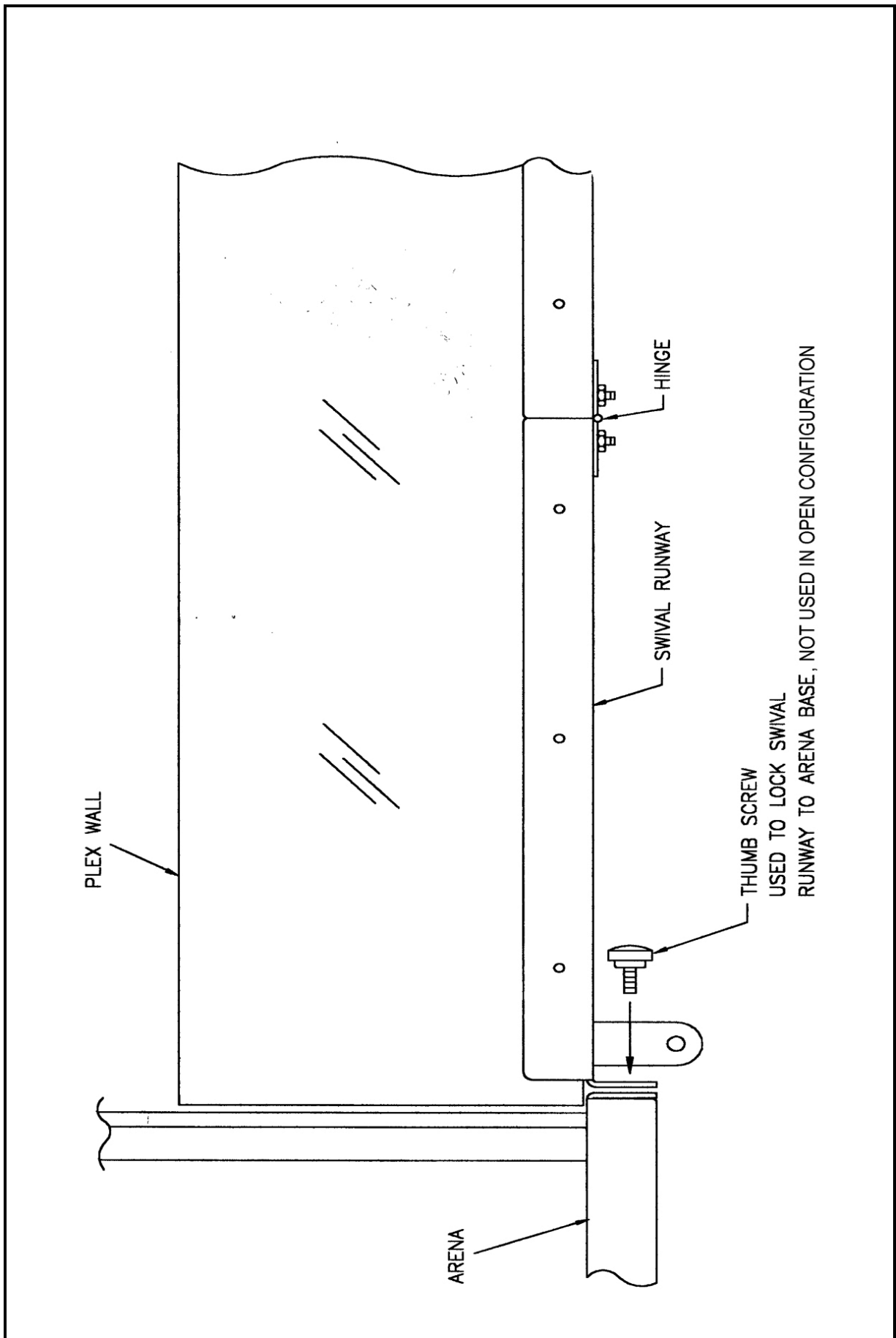
**Required tools:** 1/16" hex wrench (included)  
5/16" nut driver

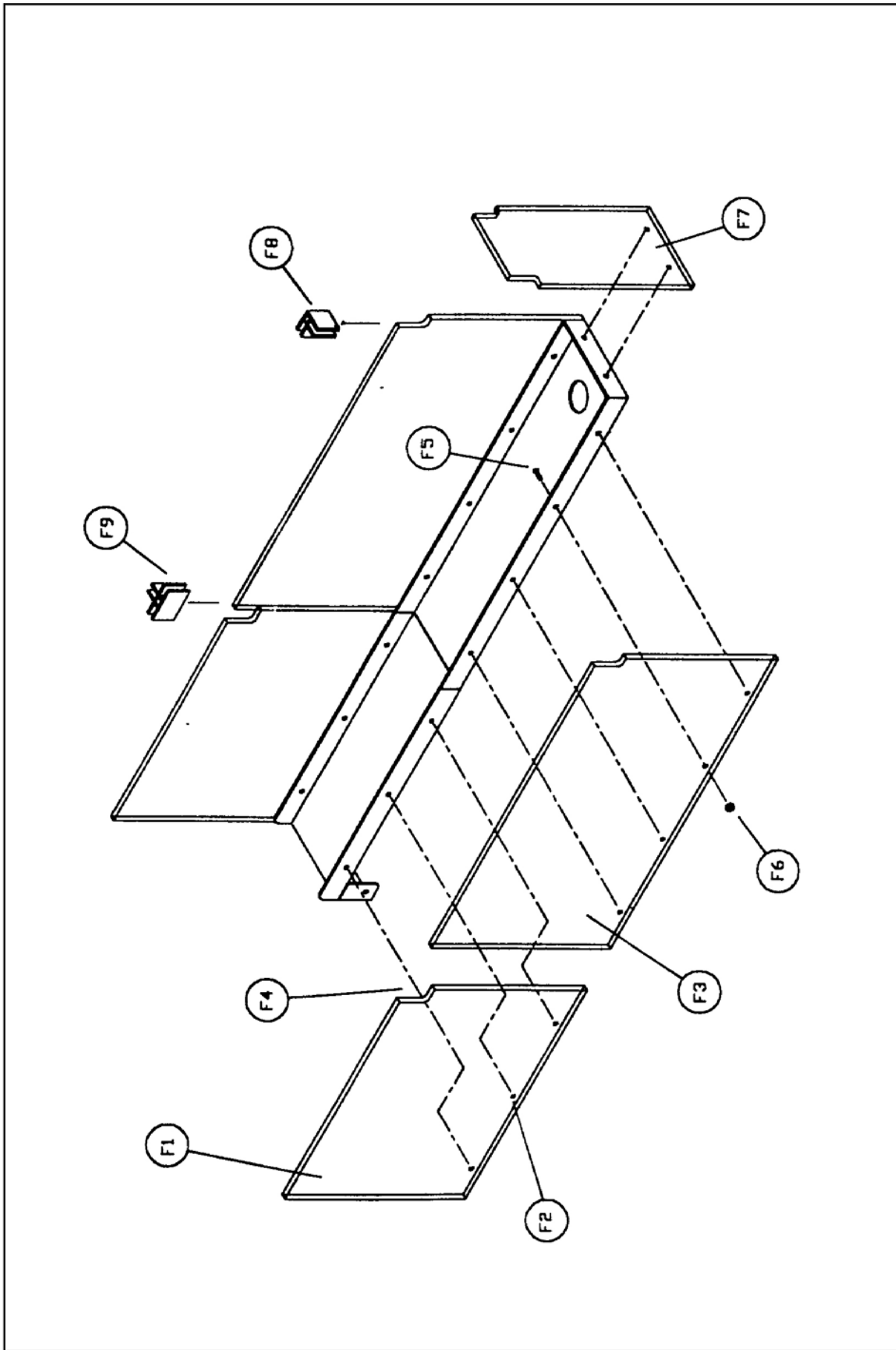
1. All polycarbonate walls (**F1**, **F3**, and **F7**) are shipped with a special covering that helped protect the walls against scratching. The covering must be removed from all walls. This is easily done by peeling back the corner of the covering and continuing to pull until the covering is off.
2. Begin by installing 2 bridge walls (**F1**) on either side of the bridge. The walls are mounted on the outer side of the bridge wall, with the hex screws inserted through the mounting holes from the inside of the bridge wall (**F5**), through the mounting hole (**F2**), and secured with a kep nut on the outside of the wall. Be sure that the notch (**F4**) is in the correct location, at the intersection of the bridge and runway. At this point, finger tighten the kep nuts. **DO NOT TIGHTEN WITH THE NUT DRIVER!**
3. Continue by installing 2 arm walls (**F3**) on either side of the runway using the same procedure outlined in step #2 above.
4. Install the end wall (**F7**) on the end of the runway using the same basic procedure outlined in step #2 above.
5. Install the corner connectors (**F8**) and the straight connectors (**F9**) in the notched areas of the wall as illustrated in the assembly diagram.
6. Tighten all kep nuts (**F6**) with the nut driver.
7. Repeat steps #2 - #6 for all remaining arms.

# PathFinder Maze System



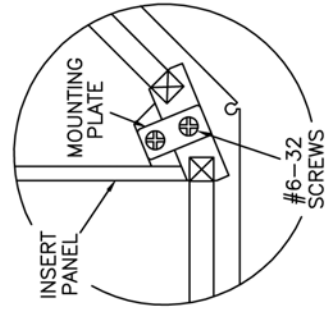
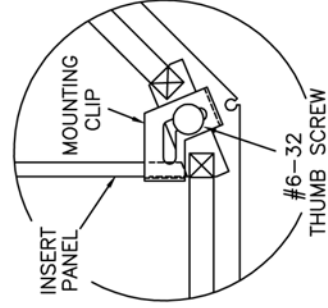
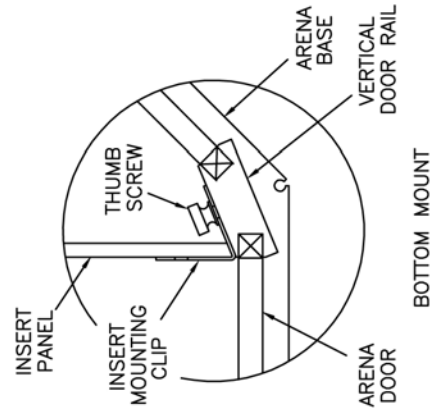
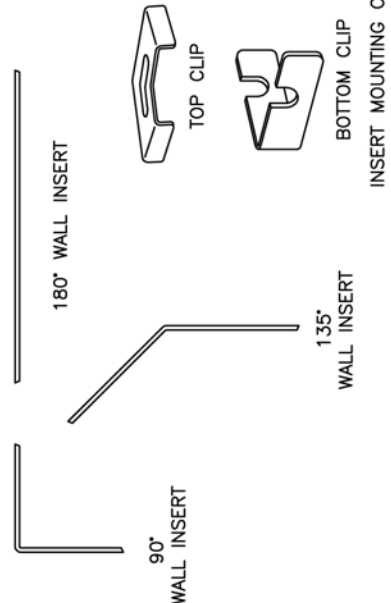
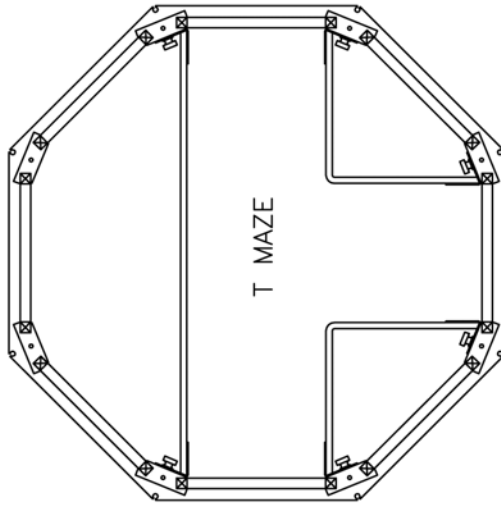
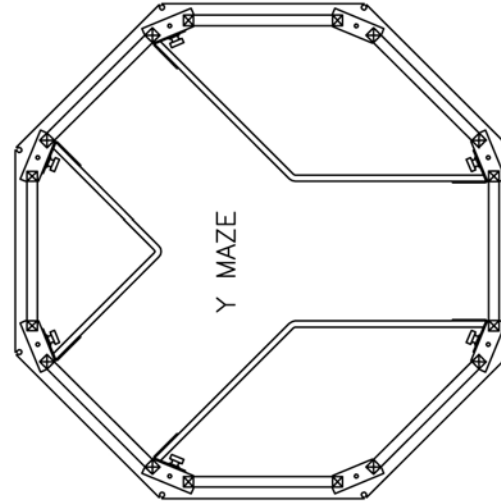
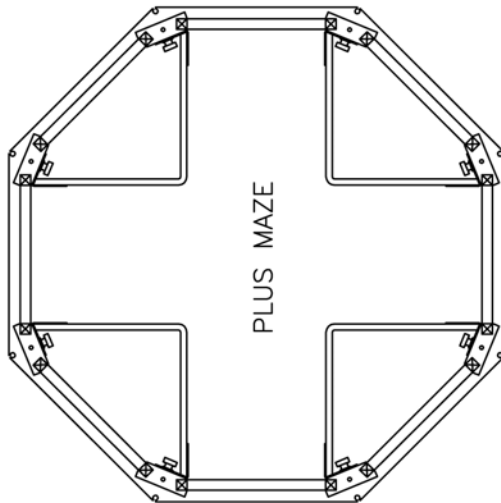






MAZE INSERT KIT CONFIGURATION

MODELS 89000A & 89000B



***Notes:***

**Notes:**

# PathFinder Maze System

## Model 89000A Assembly Instructions

### Ordering Information:

All phone orders must be accompanied by a hard copy of your order. All must include the following information:

- 1) Complete billing and shipping addresses
- 2) Name and department of end user
- 3) Model number and description of desired item(s)
- 4) Quantity of each item desired
- 5) Purchase order number or method of payment
- 6) Telephone number

#### DOMESTIC TERMS

There is a \$50 minimum order. Open accounts can be extended to most recognized educational institutions, hospitals and government agencies. Net amount due 30 days from the date of shipment. Enclose payment with the order; charge with VISA, MasterCard, American Express; or pay COD. We must have a hard copy of your order by mail or fax. Students, individuals and private companies may call for a credit application.

#### INTERNATIONAL PAYMENT INFORMATION

There is a \$50 minimum order. Payment must be made in advance by: draft drawn on a major US bank; wire transfer to our account; charge with VISA, MasterCard, American Express; or confirmed irrevocable letter of credit. Proforma invoices will be provided upon request.

#### RETURNS

**Equipment may not be returned without first receiving a Return Goods Authorization Number (RGA).**

When returning equipment for service, please call Lafayette Instrument to receive a RGA number. Your RGA number will be good for 30 days. Address the shipment to: Lafayette Instrument Company, 3700 Sagamore Parkway North, Lafayette, IN 47904, U.S.A. Shipments cannot be received at the PO Box. The items should be packed well, insured for full value, and returned along with a cover letter

explaining the malfunction. Please also state the name of the Lafayette Instrument representative authorizing the return. An estimate of repair will be given prior to completion ONLY if requested in your enclosed cover letter. We must have a hard copy of your purchase order by mail or fax, or repair work cannot commence.

#### WARRANTY

Lafayette Instrument guarantees its equipment against all defects in materials and workmanship to the ORIGINAL PURCHASER for a period of one (1) year from the date of shipment, unless otherwise stated. During this period, Lafayette Instrument will repair or replace, at its option, any equipment found to be defective in materials or workmanship. If a problem arises, please contact our office for prior authorization before returning the item. This warranty does not extend to damaged equipment resulting from alteration, misuse, negligence or abuse, normal wear or accident. In no event shall Lafayette Instrument be liable for incidental or consequential damages. There are no implied warranties or merchantability of fitness for a particular use, or of any other nature. Warranty period for repairs or used equipment purchased from Lafayette Instrument is 90 days.

#### DAMAGED GOODS

**Damaged equipment should not be returned to Lafayette Instrument prior to thorough inspection.**

When a shipment arrives damaged, note damage on delivery bill and have the driver sign it to acknowledge the damage. Contact the delivery service, and they will file an insurance claim. When damage is not detected at the time of delivery, contact the carrier and request an inspection within 10 days of the original delivery. Please call the Lafayette Instrument Customer Service Department for a return authorization for repair or replacement of the damaged merchandise.



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