

# Brass Game Pattern Indicator Operator's Manual

Arrow International  
Equipment Division



Thank you for choosing to purchase Arrow International's Capitol Bingo Equipment. We are confident that you will be completely satisfied with our high quality, durable bingo equipment. Our Capitol Bingo Equipment has the most technologically-advanced electronics and is designed for easy and reliable operation and trouble-free maintenance by the operator.

**We are proud to announce that we have been given design and safety certification approval on all our bingo equipment from Underwriter's Laboratories, Inc. (UL). Arrow International, Inc. is the only bingo equipment manufacturer that has earned this certification. Look for the UL seal of approval on all our Capitol Bingo Equipment.**

Arrow manufactures the highest furniture quality, hand crafted equipment consoles in the industry. Our metal fabricated steel consoles are constructed of the finest, heavy duty materials available and guaranteed to withstand many years of use.

This equipment manual introduces you to the Brass Game Pattern Indicator. It will take you step by step through unpacking your system and the simple procedures for installation, set up and operation. Easy to follow instructions and illustrations allow you to perform routine service and maintenance.

Arrow's hard work and dedication enable us to offer you a breadth of product line that continues to grow. We are proud to offer you the most extensive charitable fundraising product line consisting of high quality, easy to open Popp-Opens™ tabs; "Top Shelf" banded jar tickets; the largest series of bingo paper available in the largest variety of colors, patterns and cuts to meet your game's needs; Tear Opens™; and our popular Wink® Ink, Ink-A-Dot™ and Electra Dot™ bingo markers. This dedication to providing an extensive line of high quality products is accompanied by our commitment to satisfying your product needs with fast and trouble free service.

We value you as a customer and always welcome and appreciate your comments and suggestions to help improve our products. Our best suggestions always come from our game operators and distributors. We want you to always be a satisfied customer, and we will continue to design and improve our products through the valuable feedback received from you and our reliable network of Arrow Distributors.

Once again, thank you for choosing Arrow International/Capitol for your charitable fundraising needs.



John E. Gallagher, Sr.  
President



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## **Damage Action Process**

*Your Capitol Bingo Equipment contains delicate electronic equipment. It is imperative that you thoroughly inspect the contents of the package before accepting from the carrier. In case of damage, make a note on the bill of lading before accepting, take a photo of the damage, and keep the packaging to aid in recovering the amount of claim against the carrier.*

*In case of severe damage, refuse the equipment from the carrier.*

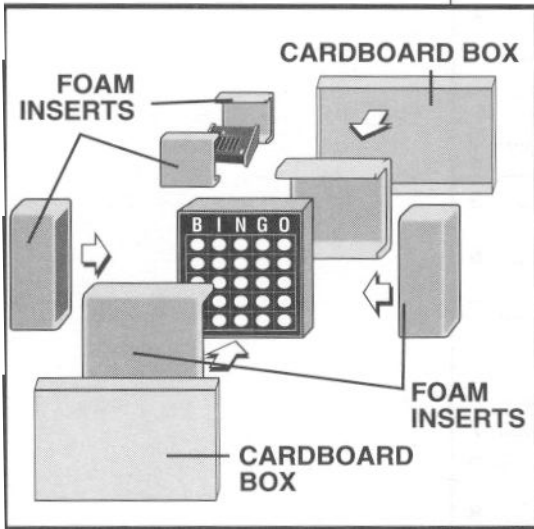
*If the product is damaged but acceptable, take a photo before and after unpacking as a record of the damage and contact the carrier's agent immediately for inspection. Be sure to obtain a copy of the inspection report for your records.*

*If these precautions are not taken, we cannot assist you in recovering the amount of the claim against the carrier.*

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# I. Unpacking



Arrow International designed your game pattern indicator to have a distinctively attractive appearance, and we used careful manufacturing and assembly techniques to preserve this appearance. Each system is inspected for scratches, bumps or abrasions during packing, and is warranted to be free from defects.

This game pattern indicator is banded into a heavy cardboard enclosure with foam inserts at each end. The carton is marked with various warning labels and stampings. Lay the carton down flat, observing labels indicating which side is up.

Before opening, closely inspect the carton for evidence of shipping damage such as puncture holes, tears, and crushed edges or corners. Damage to the carton may alert you to damage to the game pattern indicator.

Care must be used when opening the cardboard box and when removing the plastic wrap. The exterior surface of the game pattern indicator can be easily scratched, and the plexiglass can be cracked.

The game pattern indicator is shipped in a cardboard container with strapping to hold it closed. Lay the unit on the floor, use scissors to cut the strapping, and then lift off the cover. Remove the foam inserts surrounding the indicator and control box. **Carefully** lift each component from the box.

Inspect the **flashboard** to insure that all plexiglass is in place and free of cracks or heavy scratches. Inspect the masonite panels for damage.

The following parts can be found inside the carton with your extruded game pattern indicator:

- (1) customer parts kit which includes:
  - (4) 1820 light bulbs
  - (2) fuses AGC-3AG 3.2 Amp
  - (2) flashboard wall mount J-brackets

If damage to your equipment is evident, or if you have problems in any of the above areas, contact your area distributor immediately for assistance.

## Warranty Assurance

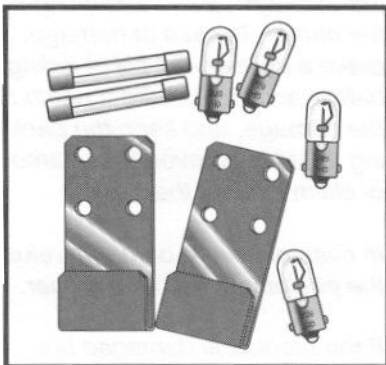
At this time, please verify the serial numbers and fill out the warranty card. On the game pattern indicator, the serial number is located on the left side of the display in the bottom corner and on the rear panel of the control console.

A second warranty card appears on the back cover of this manual. We suggest that you fill out this card and keep the information on hand for future reference.

*Caution: This unit weighs approximately 40 pounds. Get assistance before lifting.*

*Note: Do not destroy or discard carton materials until after final inspection and testing.*

## PARTS KIT



To **validate** your warranty, you must complete the enclosed warranty card and return it to Arrow International, Inc. within 30 days of purchase from your Capitol Bingo Equipment Distributor.

# I. Physical Installation

## Game Pattern Indicator

Dimensions: 31"H X 6"D X 29.5"W

Weight: 40 lbs.

### A. Wall Mounting Preparation

Before you attempt to mount any game pattern indicator display to the wall, you must first determine the wall construction. Use 3/8" or larger lag bolts or screws.

#### 1. Hollow Wall Construction

Use 3/8" or larger toggle bolts. These bolts have a spring loaded wing-nut attached to them. Once the bolt is in the wall, the wing nut acts as an anchor. If possible, mount to studs.

#### 2. Concrete, Brick, or other Masonry Wall Construction

Use 3/8" or larger lag screw expansion shields with suitable length lag screw.

### B. Wall Mounting Instructions

#### 1. Wall Mount J Bracket

Supplied with the display are two (2) J shaped wall mount brackets. Each bracket has four holes for 3/8" bolts. Choose the height you feel is desirable for easy viewing and mark the location on the wall. Then measure in 8-1/2" and 9-7/8" from each end of the game pattern indicator and mark the vertical center lines. Next, from the top of the flashboard, measure up 2" and 3-3/8" from the horizontal center lines. Before drilling any holes, check for possible items behind the holes and make sure that it's level from side to side.

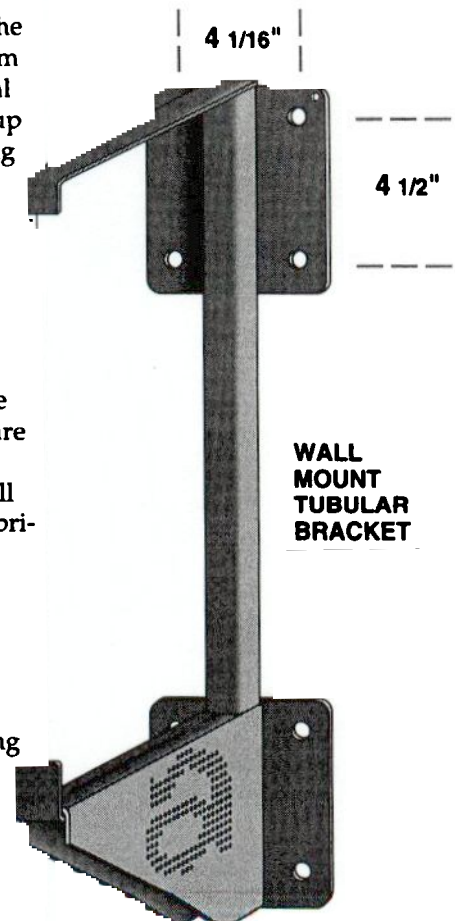
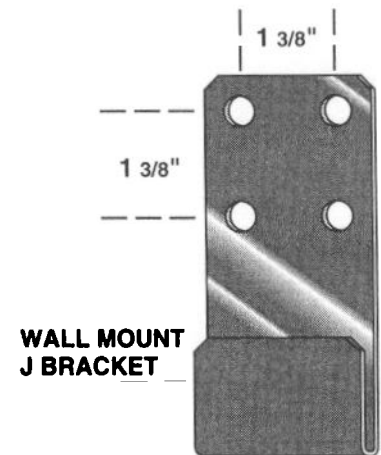
#### 2. Wall Mount Tubular Bracket (Optional)

Choose the proper height for easy viewing and mark the location on the wall. This mounting bracket supports the game pattern indicator display from the bottom and may be used to mark the mounting holes. Make sure the brackets are level and away from any obstructions. Equally space the brackets insuring that all supporting surfaces are level. Drill the proper clearance holes for the mounting method appropriate for your wall.

### C. Ceiling Mounted Game Pattern Indicator (Optional)

In any ceiling application, the chain or wire must be attached to the steel building frame or girder. Check with your local building inspector for local codes governing weight restrictions and mounting methods.

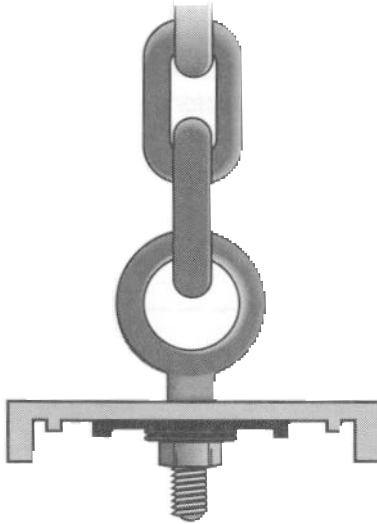
*Caution: before attempting any installation, have a qualified licensed and bonded rigger or electrician verify the type of installation. In many cases, the local building inspector may require a permit as well as an inspection of the site for structural stability.*



There are two different methods for mounting a game indicator from the ceiling.

**1. Chain (Eyebolts optional)**

Use a high quality 3/8" or larger chain link made of high strength alloy, steel grade 80 or its equivalent. Secure the chain together with a 3/8" x 1-3/4" bolt with two flatwashers, a lockwasher and a hex nut.



**EYEBOLT FOR CHAIN MOUNT**



**2. Wire**

Use a high quality 1/8" or larger diameter 19 x 7 strand steel aircraft cable or its equivalent with appropriate cable clamp.

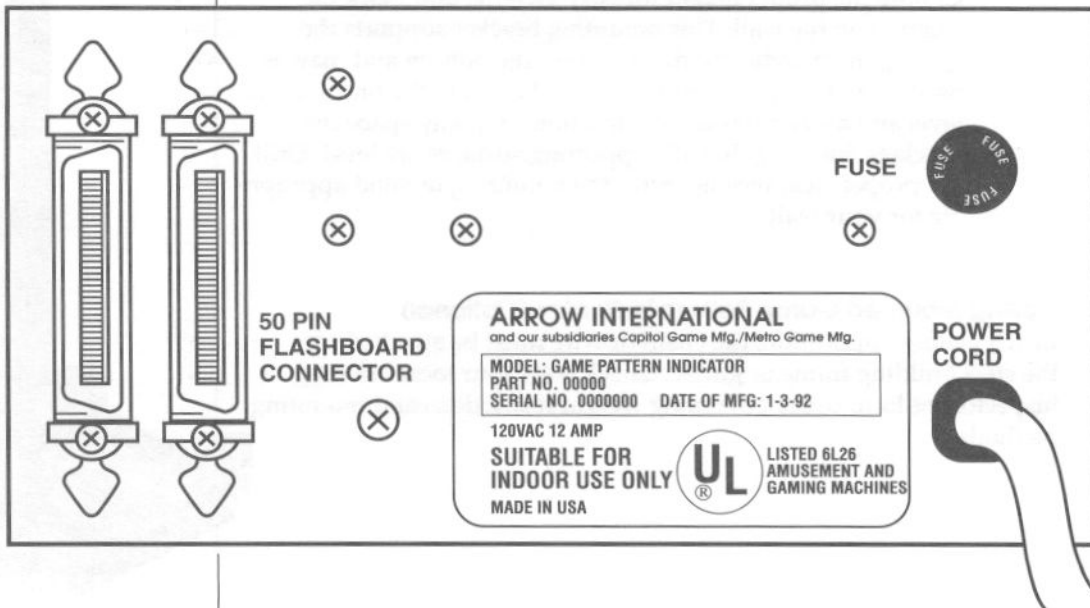
*Note: New models of the Brass Game Pattern Indicator feature a second connector for an additional remote display. Standard cable length is 25 ft with longer lengths (up to 100 ft) available upon request at time of order.*

### III. Electrical Installation

1. Plug the consolette power cord into a 120 volt grounded wall outlet.
2. Connect the data cable between the consolette and the game pattern indicators.

*Note: When laying cable, avoid high traffic areas where the cable may be stepped on or tripped over.*

**GAME PATTERN INDICATOR REAR PANEL**



## IV. Operation

The power switch for the game pattern indicator is located on the front panel of the console. Turn the power switch on. Push the visual indicating switches on the console to create your game pattern. The button will show orange to indicate it has been selected. The corresponding game pattern will light up on the brass game pattern indicator for the players to see.

## V. Periodic Customer Servicing

Periodic servicing of your game pattern indicator should include cleaning, polishing, and lightbulb replacement.

### A. Cleaning your Game Pattern Indicator

#### Metal Surfaces

Use a mild soap solution or cleanser with a clean, soft cloth. Harsh cleansers or solvents may damage the paint or lettering.

#### Plexiglass surfaces

Use a mild soap solution such as a liquid detergent with a clean, soft cloth.

*Caution: Overspraying may remove polish from nearby painted surfaces. The front of the glass is a painted surface.*

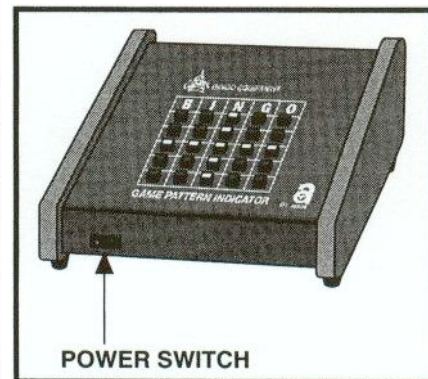
### B. Changing Light Bulbs

*Warning: Before changing light bulbs, always turn the power off.*

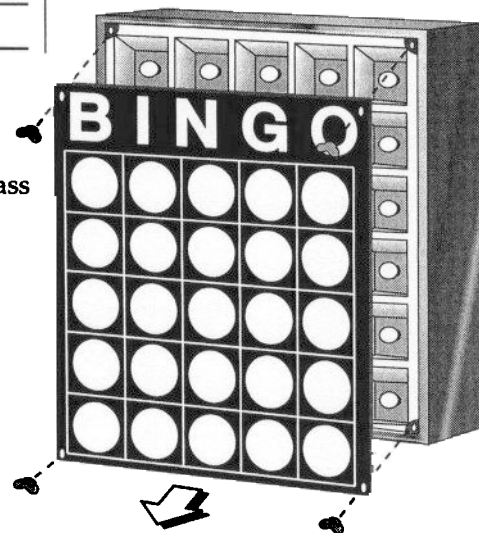
The light bulbs are changed from the front. To gain access to the sockets:

1. Twist and loosen the four (4) wing fasteners holding the plexiglass panel in place, then lift out panel. (Refer to the illustration on the top of page 8 for steps 2-4.)
2. Push light bulb in gently while turning counterclockwise 1/4 turn to remove.
3. To insert new bulb, push in and turn clockwise.
4. Place the plexiglass panel back to its original position, align and tighten the four (4) fasteners.

Additional bulbs may be obtained from your distributor or a local electronics supply house. When ordering replacement bulbs, ask for #1820, 28 volt miniature bayonet light bulbs.

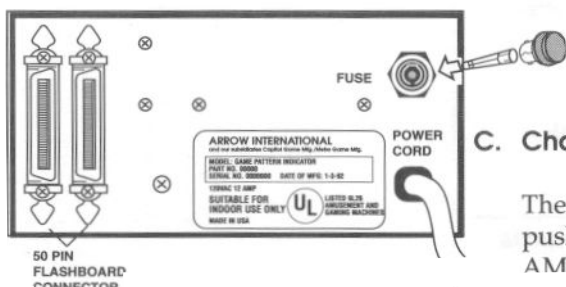
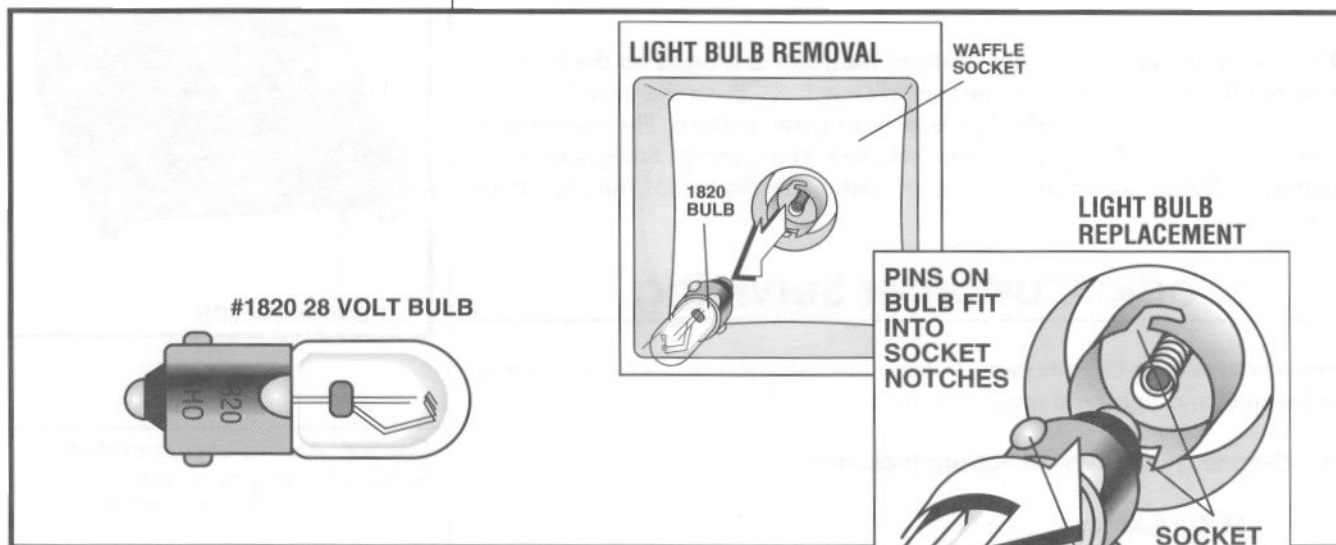


*Caution: Always unplug system before cleaning or servicing.*



**TWIST THE FOUR WING FASTENERS AND REMOVE PLEXIGLASS PANEL TO CHANGE BULBS**

## Changing Light Bulbs (cont.)



### C. Changing Fuses

The fuse is located on the rear panel of the unit. To replace it, simply push in the cap, turn it counterclockwise and pull it out. Use a 3.2 AMP AGC/3AG fuse.

## VI. Troubleshooting

The troubleshooting section will help you, your distributor or a local electrician locate electrical problems that may arise with your game pattern indicator. Several diagrams and schematics have been included in this manual to help you trace any problems. Questions going beyond the information shown here should be directed to your area distributor or directly to Arrow International.

Before referring to the chart, please check to see that the following conditions are met:

1. Check all connections to system. Look for loose connections or broken wires. Do not attempt to service 120VAC components inside the console. Only trained service personnel are qualified to work in this area.
2. Plug into 120VAC grounded wall outlet.
3. Turn power switch on.
4. Consult troubleshooting table.
5. If further difficulties arise, consult an authorized Arrow distributor or the Arrow factory service center.

Troubleshooting Table begins on next page.



**Troubleshooting Table —**

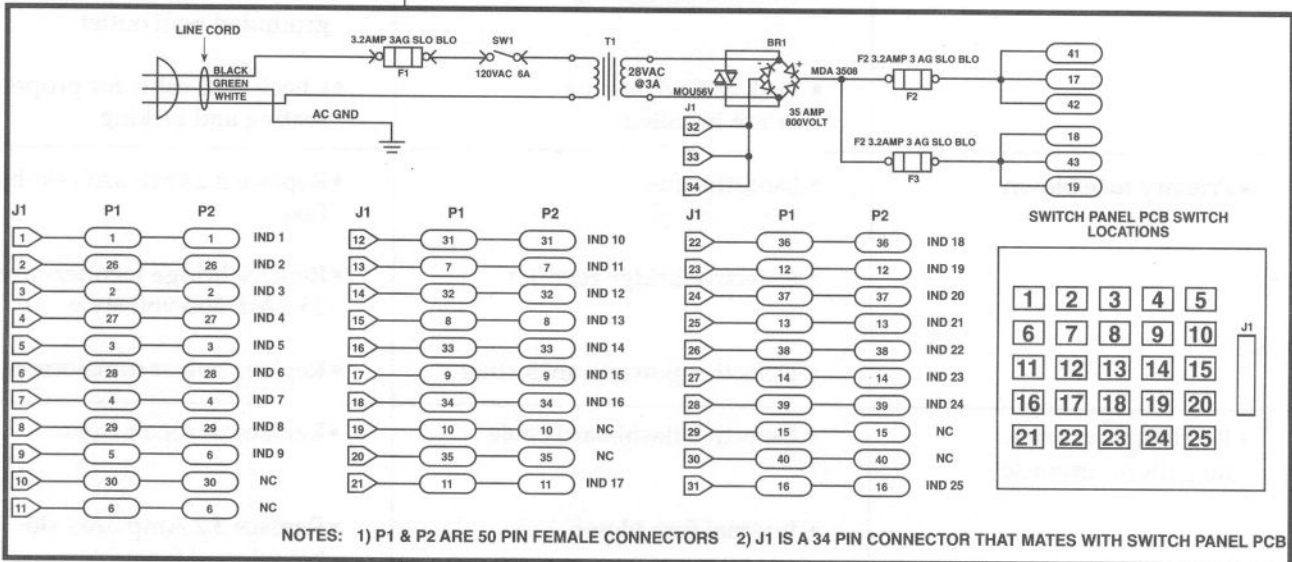
PROBLEM	CAUSE	CORRECTIVE ACTION
<ul style="list-style-type: none"> <li>• No indicator power</li> </ul>	<ul style="list-style-type: none"> <li>• Tripped service breaker</li> <li>• Defective service outlet</li> <li>• Primary fuse blown</li> <li>• Unit not plugged in</li> <li>• Data cable defective or not installed</li> </ul>	<ul style="list-style-type: none"> <li>• Reset service breaker</li> <li>• Consult electrician</li> <li>• Repair or replace outlet</li> <li>• Replace 3.2AMP 3AG external slo-blo fuse</li> <li>• Plug unit into 120VAC grounded wall outlet</li> <li>• Check data cable for proper seating and locking</li> </ul>
<ul style="list-style-type: none"> <li>• Primary fuse blown</li> </ul>	<ul style="list-style-type: none"> <li>• Defective fuse</li> <li>• Defective bridge rectifier</li> <li>• Defective power transformer</li> </ul>	<ul style="list-style-type: none"> <li>• Replace 3.2AMP 3AG slo-blo fuse</li> <li>• Replace bridge rectifier- use 35 AMP 800 volt style</li> <li>• Replace power transformer</li> </ul>
<ul style="list-style-type: none"> <li>• B-O lamps on with no pattern response</li> </ul>	<ul style="list-style-type: none"> <li>• Defective flashboard cable</li> <li>• Internal fuse blown</li> <li>• Lamp failure</li> <li>• Socket failure</li> <li>• Defective crimp on ribbon cable</li> </ul>	<ul style="list-style-type: none"> <li>• Replace or repair cable</li> <li>• Replace 3.2 Amp 3AG slo-blo internal fuse</li> <li>• Replace lamp in FB-#1820 bulb</li> <li>• Replace FB lamp socket</li> <li>• Re-crimp connection</li> </ul>
<ul style="list-style-type: none"> <li>• Game pattern segment remains illuminated</li> </ul>	<ul style="list-style-type: none"> <li>• Defective switch in consolette</li> </ul>	<ul style="list-style-type: none"> <li>• Replace console ball switch</li> </ul>
<ul style="list-style-type: none"> <li>• Lamps dim</li> </ul>	<ul style="list-style-type: none"> <li>• Defective primary fuse</li> <li>• Defective bridge rectifier</li> <li>• Low line voltage</li> </ul>	<ul style="list-style-type: none"> <li>• Replace 3.2 AMP 3AG slo-blo fuse</li> <li>• Replace bridge rectifier- 35 AMP 800V</li> <li>• Check service (main power grid-call local power co.)</li> </ul>
<ul style="list-style-type: none"> <li>• Inoperable lamp</li> </ul>	<ul style="list-style-type: none"> <li>• Defective switch in consolette</li> <li>• Defective crimp on ribbon cable</li> <li>• Lamp failure</li> </ul>	<ul style="list-style-type: none"> <li>• Replace switch</li> <li>• Re-crimp connection</li> <li>• Replace lamp in FB-#1820 bulb</li> </ul>

# VII. Electrical Specifications

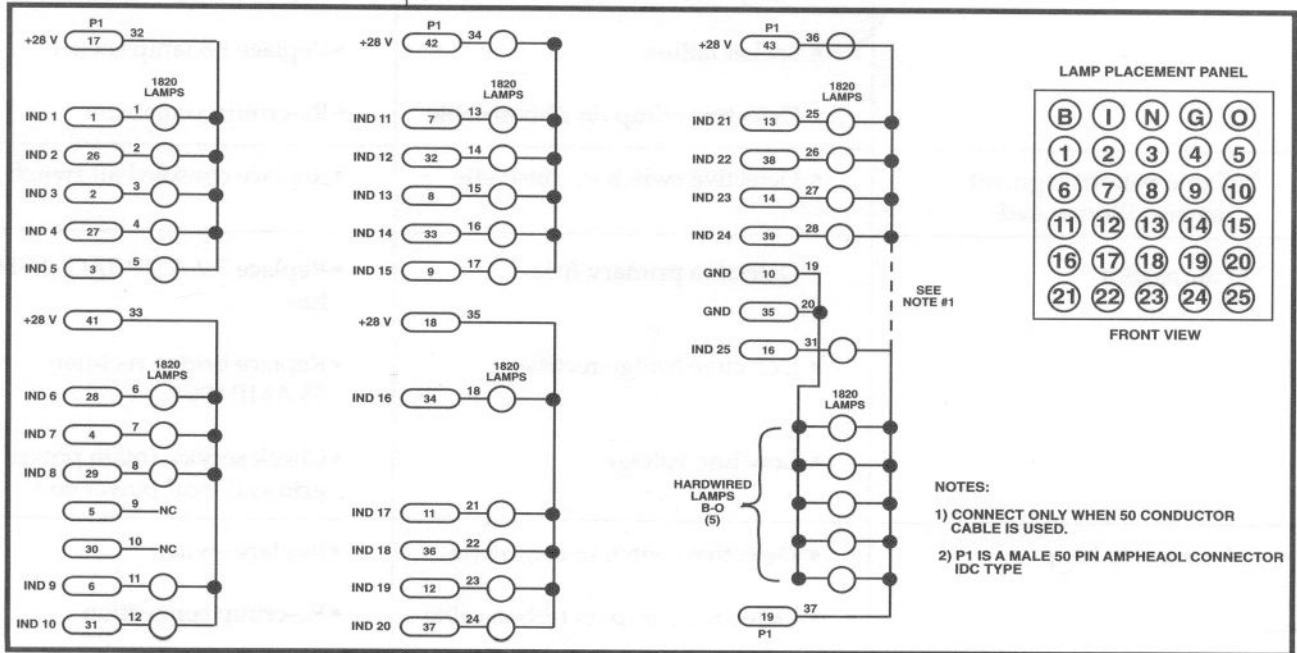
All systems: 120 VAC 60 HZ  
 Total power required: 2 Amps or 240W  
 Primary fuse rating: 3.2 Amp 3AG slo-blo  
 Secondary fuse rating: 3.2 Amp 3AG slo-blo

# VIII. Wiring Diagrams

## A. Console Schematic



## B. Game Pattern Indicator Schematic



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# Capitol Bingo Equipment Limited Warranty

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Set out below are the terms of the Limited Warranty made by Arrow International, Inc. ("Arrow") in connection with the sale of the Capitol Bingo Equipment (the "Equipment").

## 1. Limited Warranty

Arrow warrants to the original purchaser ("Purchaser") that the Equipment will, for a period of one year from the date of original purchase from an authorized Arrow dealer, be free from manufacturing defects in material and workmanship. Purchaser represents to Arrow that no employee, agent, or representative of Arrow (or of an Arrow dealer) has made any representation or warranty regarding the Equipment except as set out herein.

THE WARRANTY CARD MUST BE COMPLETED AND RETURNED TO ARROW WITHIN 30 DAYS OF PURCHASE FROM AN AUTHORIZED CAPITOL BINGO EQUIPMENT DISTRIBUTOR FOR THIS LIMITED WARRANTY TO BE EFFECTIVE. A purchase receipt or other proof of date of original purchase must be submitted with the Warranty Card and will be required before warranty service is rendered.

This Limited Warranty applies to normal commercial use and does not cover damage which occurs in shipment; failures which are caused by products not supplied by Arrow, failures which result from accident, misuse, abuse, neglect, mishandling, misapplication, alteration, set-up adjustments or modifications. This Limited Warranty does not cover any damage to the Equipment resulting from failure to install in strict conformity with both local fire and building codes and regulations, or if installation does not comply with the installation instructions provided by Arrow.

## 2. Disclaimer of Warranties

Arrow makes no warranties, express or implied (including, without limitation, merchantability, fitness for particular purpose, or against infringement of any patent), except as expressly provided herein. The express warranties provided herein are in lieu of and exclude all other warranties, guarantees or representations, express or implied, whether arising by operation of law or otherwise.

## 3. Limitation of Remedies

If the Equipment supplied does not conform to the Limited Warranty set out above, Arrow will, at its option, (a) repair or replace the Equipment, or part thereof, which is defective or (b) refund so much of the purchase price as Purchaser has paid for the defective Equipment, less 1/24th of the purchase price for each month between the date of the purchase from an authorized Arrow dealer and the date of the discovery of the defect, provided that written notice of the defect and its nature is given to Arrow as soon as practical after discovery of the defect, but in no event later than 90 days from the date of the discovery of the defect.

## 4. Limitation of Liability

The remedy of repair, replacement, or refund of the purchase price is Purchaser's sole and exclusive remedy and will satisfy all of Arrow's liabilities, whether based on contract, negligence, tort, product liability, strict liability, or otherwise. IN NO EVENT WILL ARROW BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES, NOR WILL ITS INABILITY IN CONNECTION WITH ANY EQUIPMENT OR SERVICE SOLD (INCLUDING NONDELIVERY OR LATE DELIVERY THEREOF) EXCEED THE SALES PRICE OF SUCH EQUIPMENT OR SERVICE.

## 5. Warranty Voided

Any obligations of Arrow under this Limited Warranty will be deemed to have been satisfied if anyone other than an authorized Capitol Bingo Equipment Dealer services the Equipment.

## 6. Transfer of Limited Warranty

Purchaser may transfer its rights under this Limited Warranty, subject to the terms and conditions hereof, to a buyer ("Buyer") from Purchaser of the Equipment. Thereafter, the rights under this Limited Warranty are not transferable. For the transfer by Purchaser of the Limited Warranty to be effective, the following conditions must have occurred no later than the 30th day following the date of resale to Buyer:

- A. Purchaser must have complied with all requirements to make the Limited Warranty effective as to Purchaser;
- B. The Equipment (as an entire unit and as purchased by Purchaser) must be transferred to Buyer; and
- C. Buyer must have submitted a new warranty card together with proof of purchase by Buyer from Purchaser.

Upon an effective transfer of this Limited Warranty, Buyer will be considered to be "Purchaser" for paragraphs 1 and 4 hereof.

## 7. Inspection

With respect to any claim that the Equipment is defective, Arrow will be allowed a reasonable time to inspect the Equipment, in place. If the Equipment is altered or removed before Arrow has made such inspection or waived its right to do so, the obligations of Arrow will be deemed to have been satisfied.

## 8. Limitation of Actions

Any legal action against Arrow for a default of its obligations under this Limited Warranty must be commenced within two years from the date the Equipment was sold by an authorized dealer of the Equipment.

## 9. How to Obtain Service

If a problem with this Equipment develops during or after the warranty period, proceed as follows:

- A. Refer to your Operator's Manual and follow the Troubleshooting Table within the "Service Section."
- B. Contact the authorized Capitol Bingo Equipment Distributor from whom you purchased the Equipment.
- C. Contact the Capitol Bingo Equipment Service Manager at the most convenient phone number listed below:

1 (800) 321-0757 outside Ohio, but within the U.S.A.  
1 (800) 537-3479 within the state of Ohio  
1 (216) 961-3500 within the 216 area code or  
outside the continental U.S.A.  
1 (216) 281-5250 FAX

SERVICE CALLS WHICH DO NOT INVOLVE DEFECTIVE MATERIALS OR WORKMANSHIP AS DETERMINED BY ARROW IN ITS SOLE DISCRETION, ARE NOT COVERED. COST OF SUCH SERVICE CALLS ARE THE RESPONSIBILITY OF THE PURCHASER.

Arrow wants you to remain a satisfied customer. If a problem occurs that cannot be resolved to your satisfaction, please contact us immediately. Phone one of the numbers listed above or write to:

Capitol Bingo Equipment Division  
c/o National Service Manager  
9900 Clinton Rd.  
Cleveland, Ohio 44144

Please be sure to include the name, model number, serial number, date of original purchase, and the distributor from whom you purchased the Equipment, as well as any actions taken to correct the problem.

MANUAL 121 EXTRUDED GAME IND



48239

**CUSTOMER WARRANTY CARD**  
**CAPITOL BINGO EQUIPMENT OWNER REGISTRATION CARD**

Model No \_\_\_\_\_ PCB No(s) \_\_\_\_\_  
Serial No. \_\_\_\_\_ Date Purchased \_\_\_\_\_  
Distributor Purchased From \_\_\_\_\_  
Name of Organization \_\_\_\_\_  
Address \_\_\_\_\_ Phone (    ) \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_  
Chairman \_\_\_\_\_  
Address \_\_\_\_\_ Phone (    ) \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_  
Additional Information (Optional)      ATTACH PROOF OF PURCHASE DATE  
Purchase Price \_\_\_\_\_ Average Attendance \_\_\_\_\_  
No. Of Night Games Played \_\_\_\_\_  
Time Games Played \_\_\_\_\_ Average Spending Per Person \_\_\_\_\_

**ARROW INTERNATIONAL, INC.**

and our subsidiaries

CAPITAL GAME MANUFACTURING

METRO GAME MANUFACTURING

9900 Clinton Rd., Cleveland, Ohio 44144

1 (800)-321-0757 outside Ohio, but within the U.S.A.

1 (800)-537-3479 within the state of Ohio

1 (216)-961-3500 within the 216 area code or outside the continental U.S.A.

1 (216)-281-5250 FAX

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Revision 1-8-1992



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CAPITAL GAME