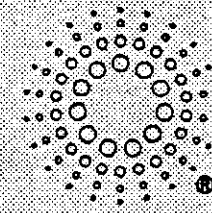




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Everbrite

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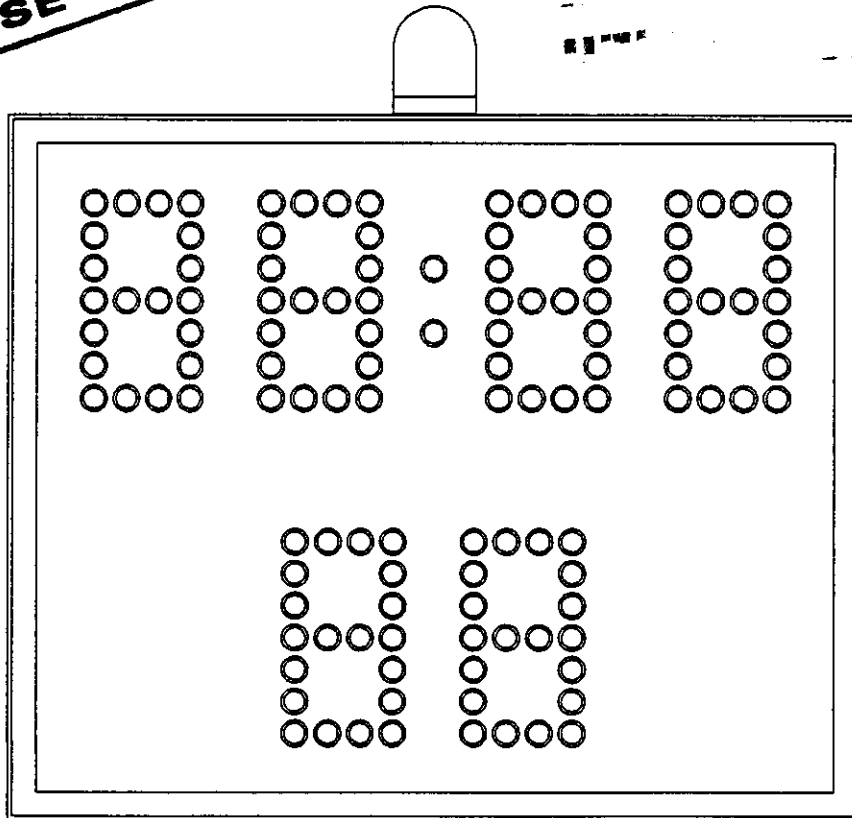
## OPERATING INSTRUCTIONS AND SERVICE MANUAL

### BASKETBALL SHOTCLOCK

WITH GAME TIME AND GOAL LIGHTS

MODEL MP-3298T

**CAUTION**  
INDOOR USE ONLY



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## 1. GENERAL INFORMATION

### 1.1 Description

Your All-American Scoreboard has been carefully inspected and tested before leaving the factory. It is possible, however, that components may be loosened or forced out of adjustment in transit. If this occurs, follow the troubleshooting guide (section 4). If equipment then fails to operate, contact immediately:

**ALL-AMERICAN Service Department  
EVERBRITE Corporation  
P. O. Box 97  
Pardeeville, WI 53954  
Telephone: (608) 429-2121  
Toll Free: 800-356-8146**

Parts being returned for repair are to be sent to:

**ALL-AMERICAN Service Department  
EVERBRITE Corporation  
413 South Main Street  
Pardeeville, WI 53954**

#### NOTE

If you need to send parts in for repair, please call the ALL AMERICAN service department for a returned goods authorization (RGA) number.

### 1.2 Identification

All-American uses a 4 digit serial number for scoreboard identification. The serial number tags are located on the back of the control console and the lower right hand corner on the face of the scoreboard. When contacting the factory for assistance it is important that the model and serial numbers are known.

### 1.3 Damage

Upon receipt, check for visible damage. If this occurs, or if damage is found after shipment has been accepted, follow the damage claim procedure.

### 1.4 Damage Claim Procedure

An instruction sheet is enclosed advising the Consignee in case of damage in transit.

If damage is noted at time of delivery, Consignee must obtain an Inspection of Bad

Order from the delivering carrier. In order to process your claim, this must be properly filled out with a complete statement of all damage and signed by the carrier.

If damage is discovered after delivery, you should call the delivery company. Have them make out a Concealed Damage report. Fifteen days after delivery are allowed, so this should be done PROMPTLY or it is impossible to process this claim.

Advise EVERBRITE Corporation of necessary replacement parts, or repairs. Consignee will be invoiced and then should file a claim with the carrier to recover charges.

TO FILE YOUR CLAIM FOLLOW THIS PROCEDURE:

- (A) Cost of replacement parts or repair charges are invoiced to the carrier by the Consignee.
- (B) The following documents, plus invoice are forwarded to the Trucking Company in support of your claim:
  - (a) Original bill of lading.
  - (b) Original paid freight bill.
  - (c) Certified copy of original invoice.
  - (d) Standard form for Presentation of Loss and Damage Claim, properly filled out.

## 1.5 Care of Equipment

Proper care of the equipment will result in years of reliable service. Misuse, however, will only result in problems. For reliable service make sure that:

When not in use, the control console is stored in a secure area.

Responsible operators are used.

Control cables are routed to prevent possible damage.

Drinks are not spilled on the control console.

Properly grounded outlets or extension cords are used.

The displays are located or installed to prevent damage.

Correct wattage and voltage replacement lamps are used.

## 2. INSTALLATION

### 2.1 General Information

Check shipment and if damaged file damage claim.

Shipping papers accompany each scoreboard. Check carefully to see that you receive the following:

- 2 ea Basketball Shotclock/Gametime Displays
- 1 ea Service Manual
- ? ft Control Cable (if ordered)

**IMPORTANT!**

The MP-41 cable supplied by ALL AMERICAN SCOREBOARDS for use on the Microprocessor based scoreboards is specifically designed for this system. Use of a substitute cable may void the warranty on the scoreboard!

## 2.2 Inspection

Inspect each unit and tighten all screws, lamps, and fittings that may have loosened in shipment.

**NOTE**

A small length of rubber hose may be used as a lamp extractor. Simply taper the inside of the hose with a sharp knife to fit the lamp.

## 2.3 Pre-Test

Before installing shotclock, pre-test all functions.

- (A) Connect power cords to 15 AMP, 120 Volt AC outlets.
- (B) Plug the control cables into the displays and wire to existing scoreboard cable.
- (C) Test operate all functions on shotclock according to operating instructions in section 3 of this manual.
- (D) When all functions test out, disconnect the power and the control cable before mounting the displays or cables.

## 2.4 Data Cable Installation

The MP-41 data cable carries only low voltage signals and therefore can be installed with or without conduit. Consult section 6 for shotclock wiring.

## 2.5 Electrical Connections

These displays require one 120 V. 15 Amp AC circuit for the exclusive use of each display.

### NOTE

This equipment is ETL (Electronics Testing Laboratories) CSA and NRTL approved and complies with the requirements in part 15 of the FCC rules for a class A computing device. Operation of this equipment in a residential area may cause unacceptable interference to radio and television reception, requiring the operator to take whatever steps are necessary to correct the interference.

## 3. CONTROL CONSOLE OPERATION

### 3.1 Shotclock Power

Turn on the branch circuits to the shotclocks or plug in the power cords to both displays.

### 3.2 Console Power

Push **ON/OFF** once to turn the console ON.

Push **CODE** **4** **1** **ENTER** .

When the proper code has been entered each display will show: **0** .

### 3.3 Time Setting and Control

The control console can store 2 preset time periods. One or both of these time periods must be set each time the console is turned on.

To set reset #1 to a 45 second period and reset #2 to a 5 second period; key in the following:

Push **SET 1** **4** **5** **ENTER** . Push **SET 2** **5** **ENTER** .

Push **RESET 1** or **RESET 2** to reset the timer to the preset values.

Any time up to 99 seconds may be preset in a similar manner.

### 3.4 Horn

The horn will sound automatically each time the shot timer reaches zero time.

### 3.5 Shotclock Goal Light (Optional)

The light on the top of the display will light when the timer runs down to zero, to signify a time violation.

## 5. REPLACEMENT PARTS LIST

### 5.1 Shotclock Display Parts

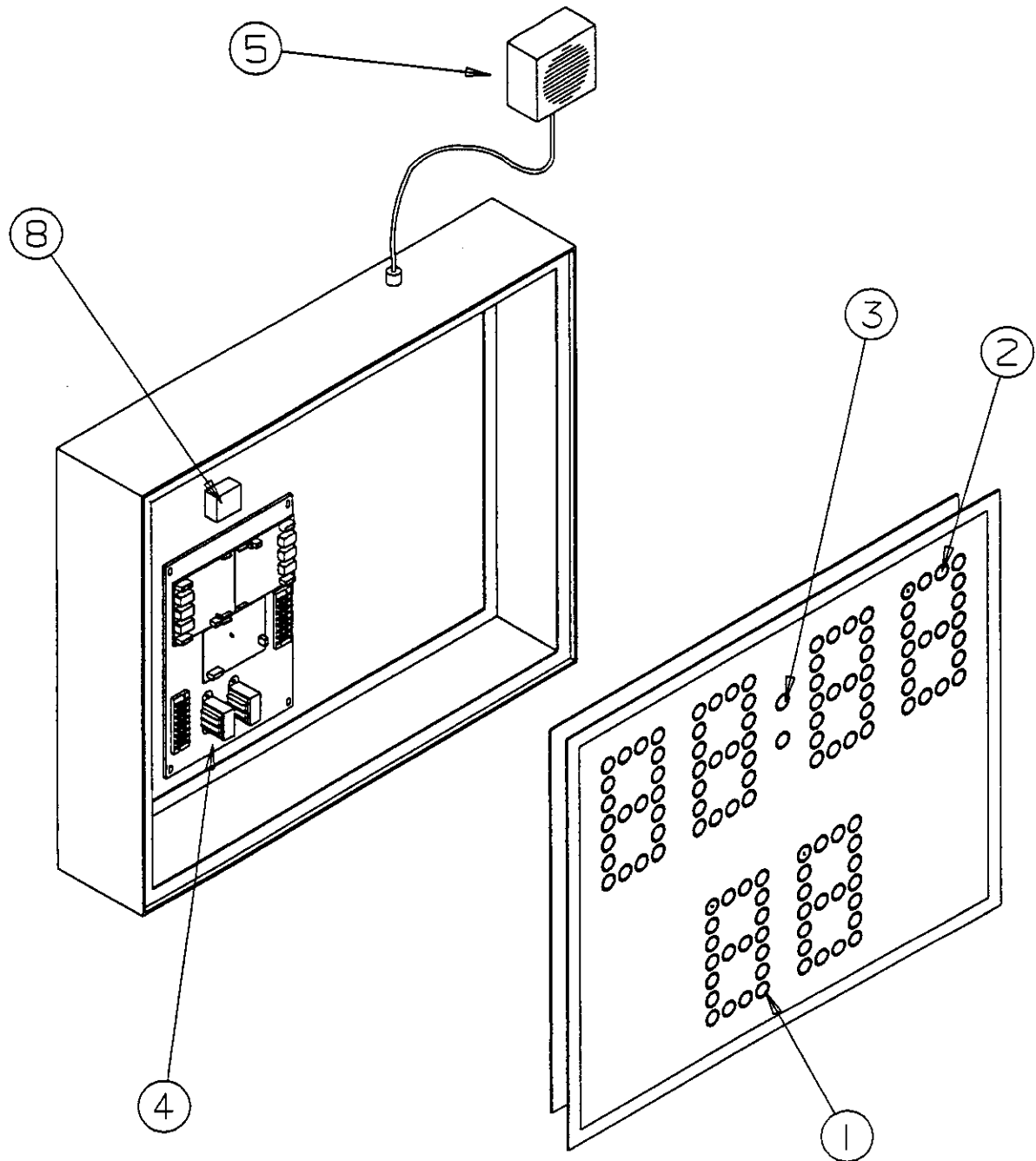


figure 1

DISPLAY ASSEMBLY

## REPLACEMENT PARTS LIST (MP-3298T) P.N. H 0100

| fig. &<br>index                | MFG PART<br>NUMBER                             | DESCRIPTION  | REF<br>DES   | VENDOR<br>PART #                                   |
|--------------------------------|--|--|--------------|--|
| 1-<br>1-1<br>1-2<br>1-3<br>1-4 | 150005<br>850000<br>850001<br>850002<br>150002 | Display Assembly<br>Lamp, 7C7/125V Red<br>Lamp, 7C7/125V White<br>Lamp, 7C7/125V Orange<br>Controller Assembly<br>**** SEE FIGURE 2 **** | A2           | 150005<br>7C7/R<br>7C7/W<br>7C7/O<br>150002        |
| 1-5<br>1-6<br>1-7<br>1-8       | 703609<br>702786<br>700102<br>119337           | Horn, 350N<br>Connector, 5 Pin Female<br>Resistor, 2 OHM 10 Watt<br>Line Filter, 20 Amp  | J3orJ4<br>R1 | 350-N<br>RM12BRD-5S<br>HLM-10-10Z<br>20VB1 Mallory |
|                                | 000000   | Slipsheet,   |              | 000000   |
|                                | 000000<br>702785<br>150500                     | Cable Assy, MP-41 Control<br>Connector, 5 Pin Male CCT<br>Cable, MP-41 Control   | P1-P4        | 000000<br>RM12BPG-5P<br>8723                       |
|                                | 151225<br>850027                               | OPTIONAL RED GOAL LIGHTS<br><br>Globe, Red Light<br>Lamp, 40A19 IF 125V Inside Frosted   |              | 151225<br>40A19IF                                  |



## 5.2 Scoreboard Controller Assembly Parts

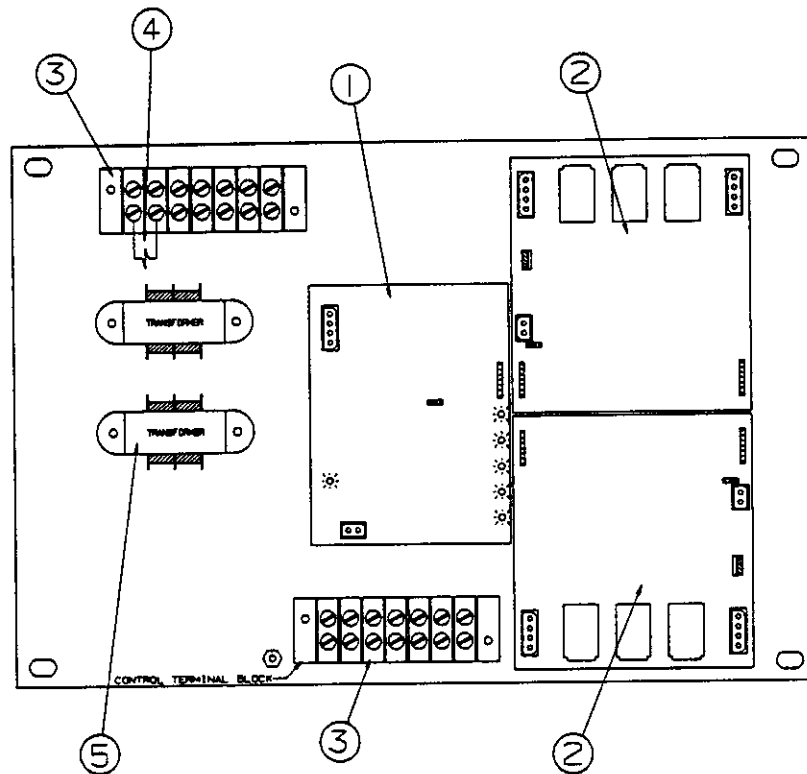


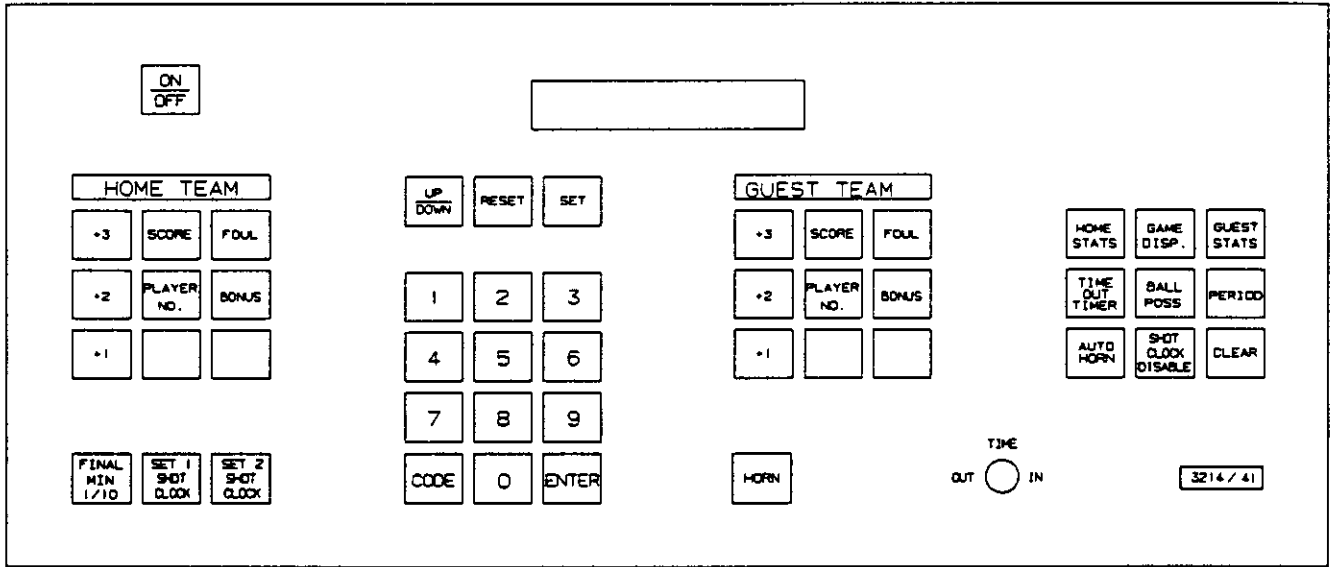
figure 2

### CONTROLLER ASSEMBLY

| REPLACEMENT PARTS LIST (MP-3298T Controller Assembly) |                 |  |         |               |
|---|-----------------|--|---------|---------------|
| fig. & index  | MFG PART NUMBER | DESCRIPTION  | REF DES | VENDOR PART # |
| 2-  | 150002          | Controller Assembly  | A2      | 150002        |
| 2-1   | 119323          | Receiver PCB Assembly, 3 Pos.<br>**** PROGRAM PST END TMR **** | A3      | 119323        |
| 2-2   | 118922          | Driver PCB Assy, 3 Position                                    | A4-A5   | 118922        |
| 2-3   | 701137          | Terminal Block, 7C   |         | 670-7         |
| 2-4   | 703719          | Transformer Assy, 8V/18V                                       | T1/T2   | CS-697        |
| 2-5   | 700520          | Varistor,  |         | ERZ-C20DK201U |
| 2-6   | 705723          | Spacer, P.C.Board  |         | LCBS-6-01     |

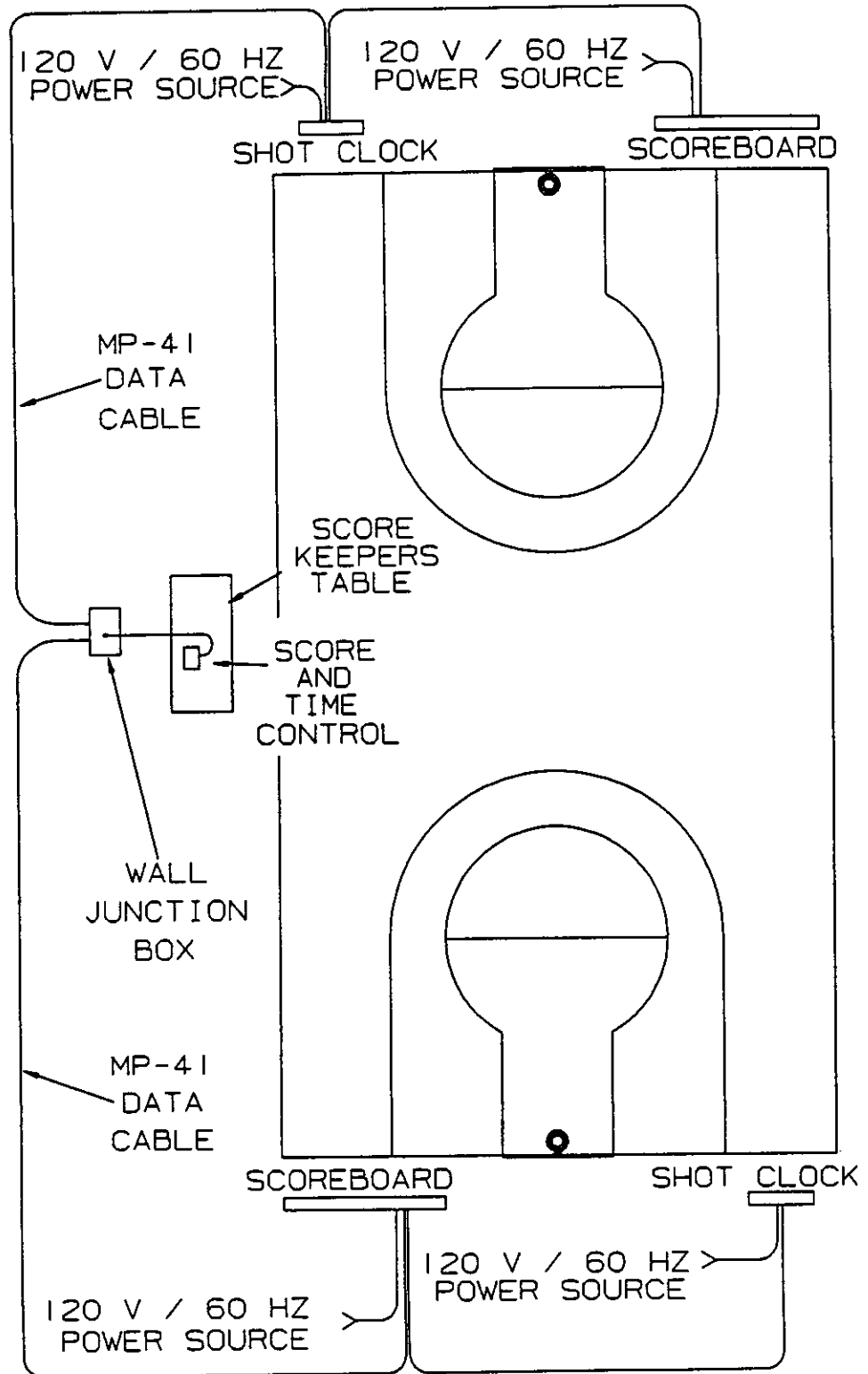
## 6. DIAGRAMS

### 6.1 Typical Control Console Keyboard with Shotlocks



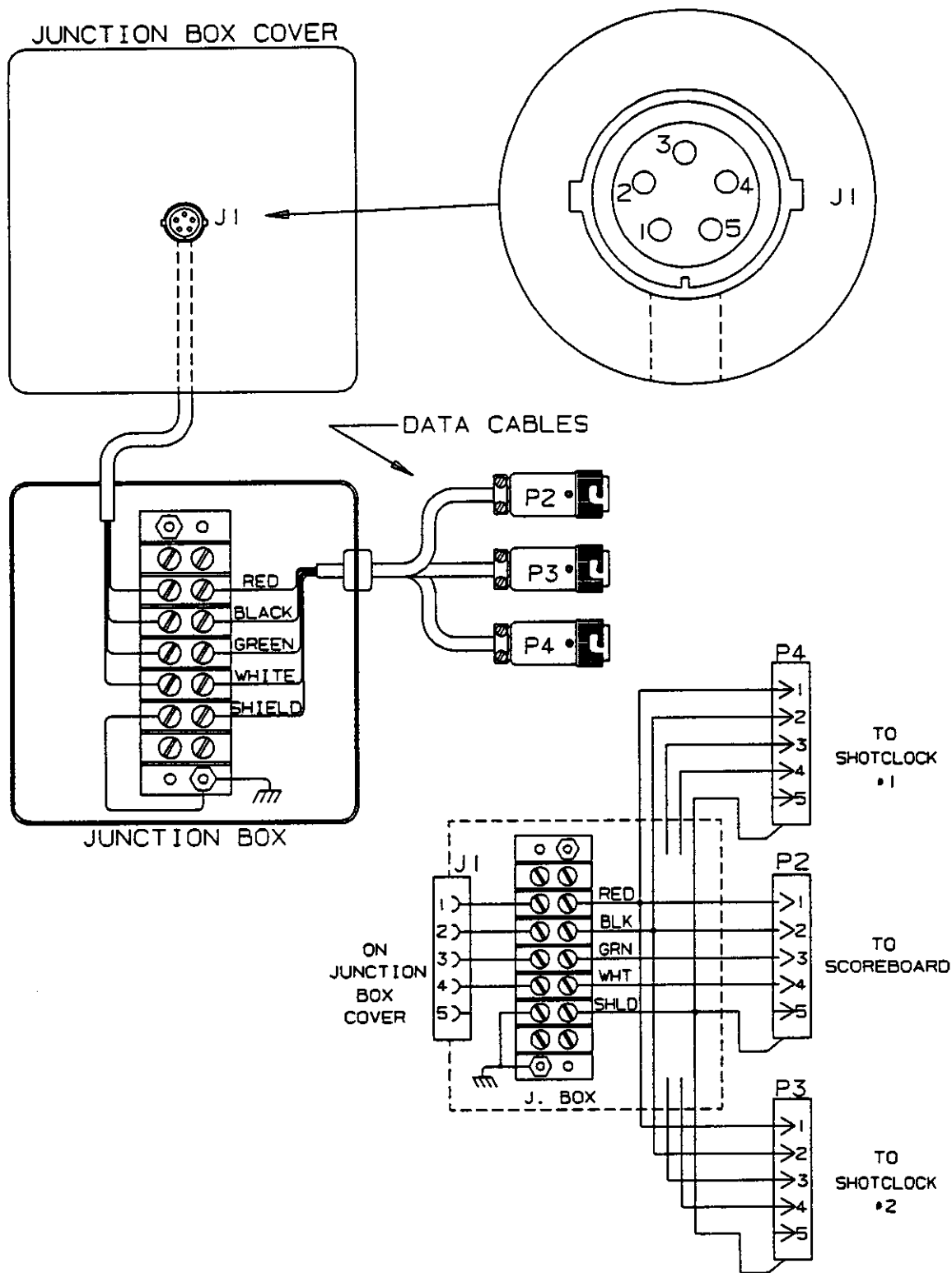
Console Keyboard

## 6.2 Shotclock System Layout



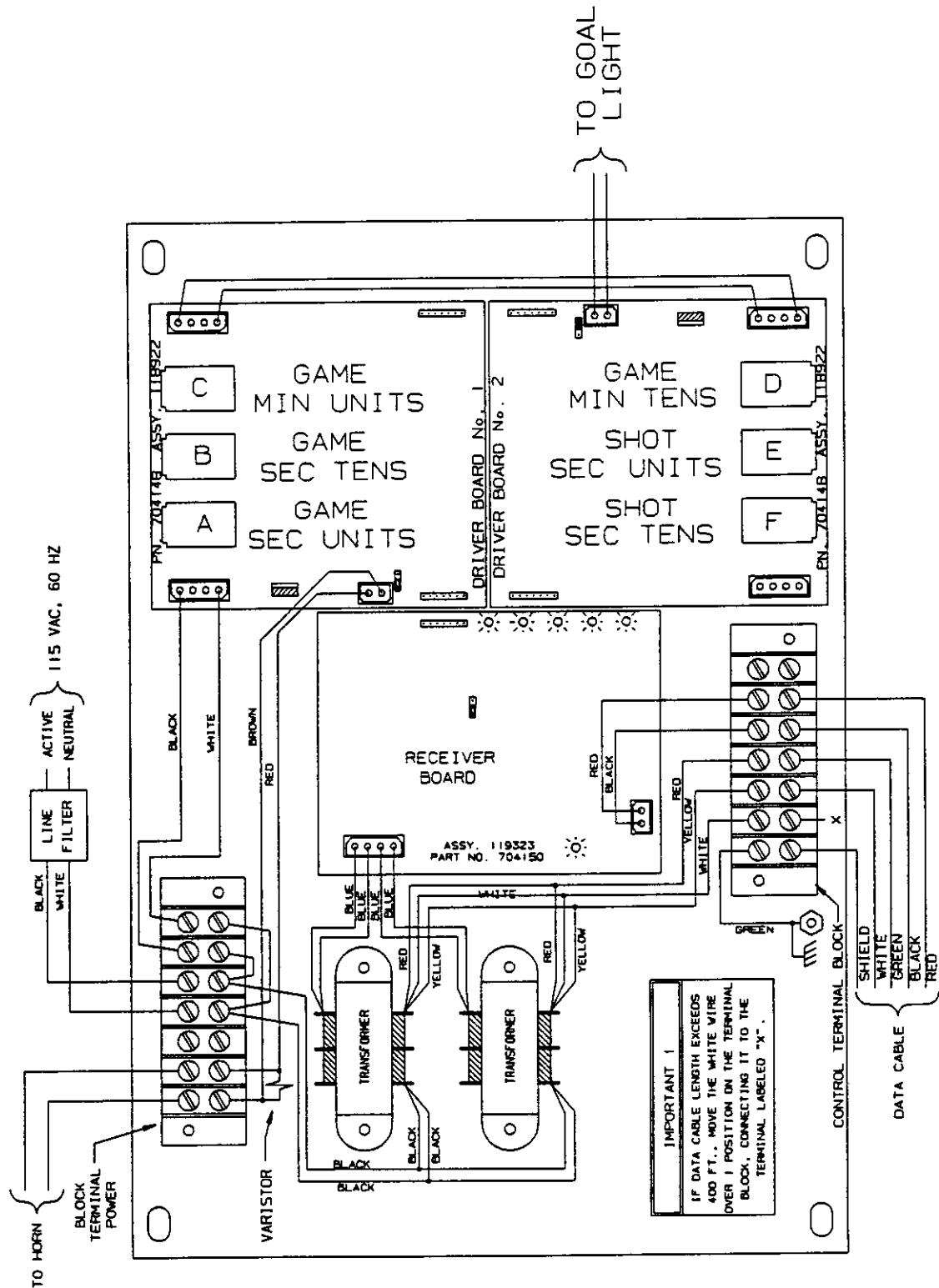
SYSTEM LAYOUT

### 6.3 Wall Junction Box Wiring



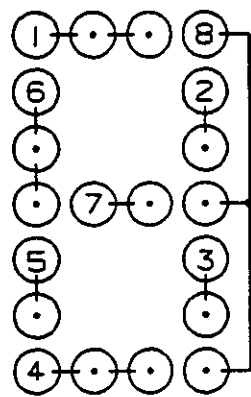
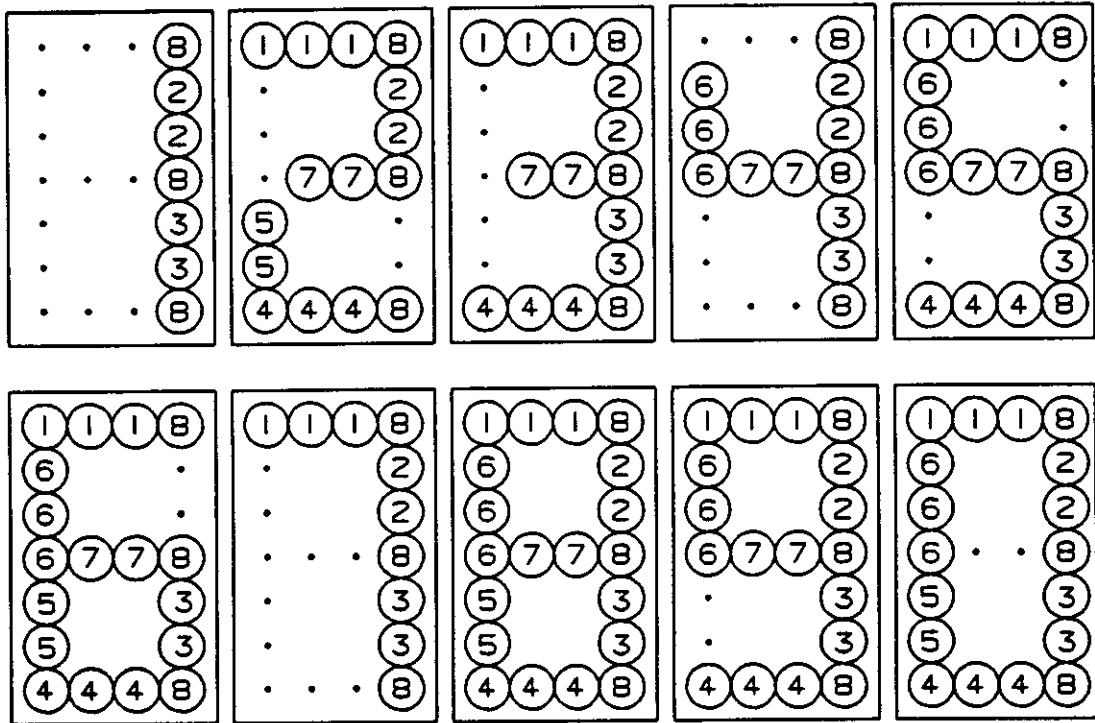
JUNCTION BOX WIRING

# 6.4 Controller Assy Wiring and Layout



DISPLAY WIRING

### 6.5 Microprocessor 4X7 Lamp Pattern (8 Bit)

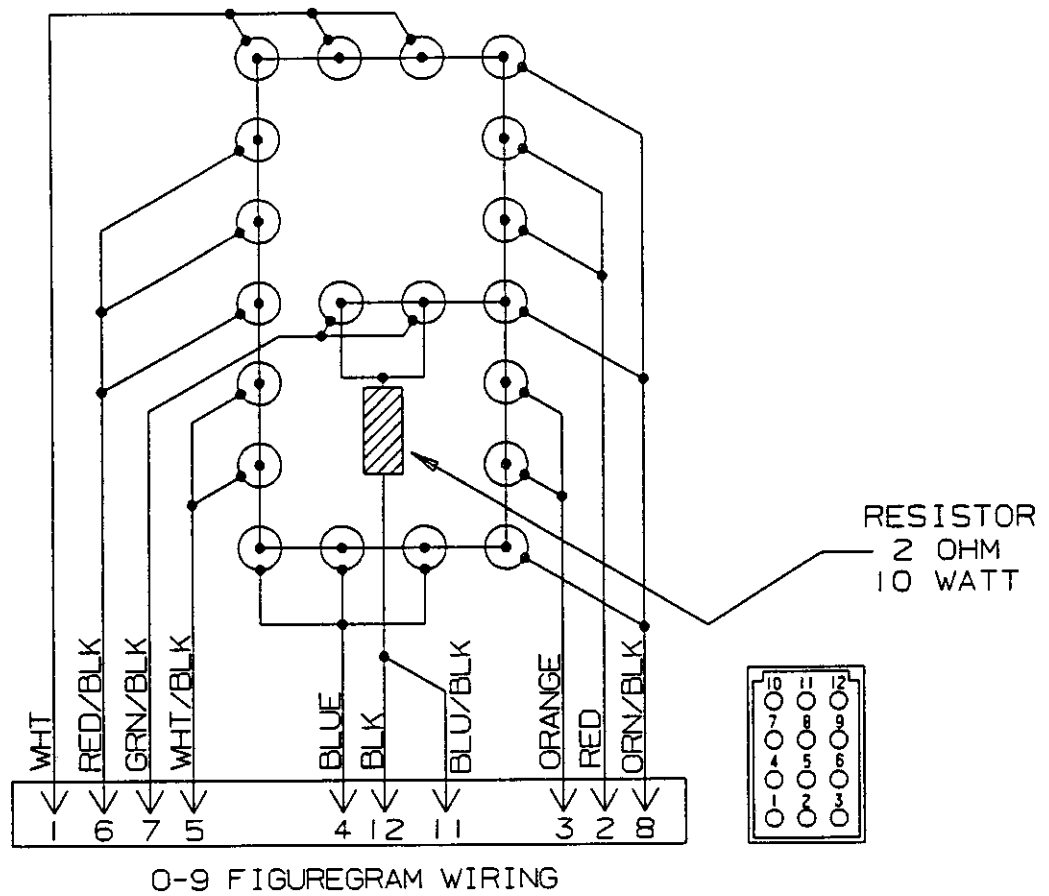


NUMERALS

|   | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0 | . | 2 | 3 | . | 5 | 6 | 7 | 8 | 9 |
| 2 | 0 | 1 | 2 | 3 | 4 | . | . | 7 | 8 | 9 |
| 3 | 0 | 1 | . | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 4 | 0 | . | 2 | 3 | . | 5 | 6 | . | 8 | 9 |
| 5 | 0 | . | 2 | . | . | . | 6 | . | 8 | . |
| 6 | 0 | . | . | . | 4 | 5 | 6 | . | 8 | 9 |
| 7 | . | . | 2 | 3 | 4 | 5 | 6 | . | 8 | 9 |
| 8 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |

LAMP PATTERN

## 6.6 Figuregram Wiring

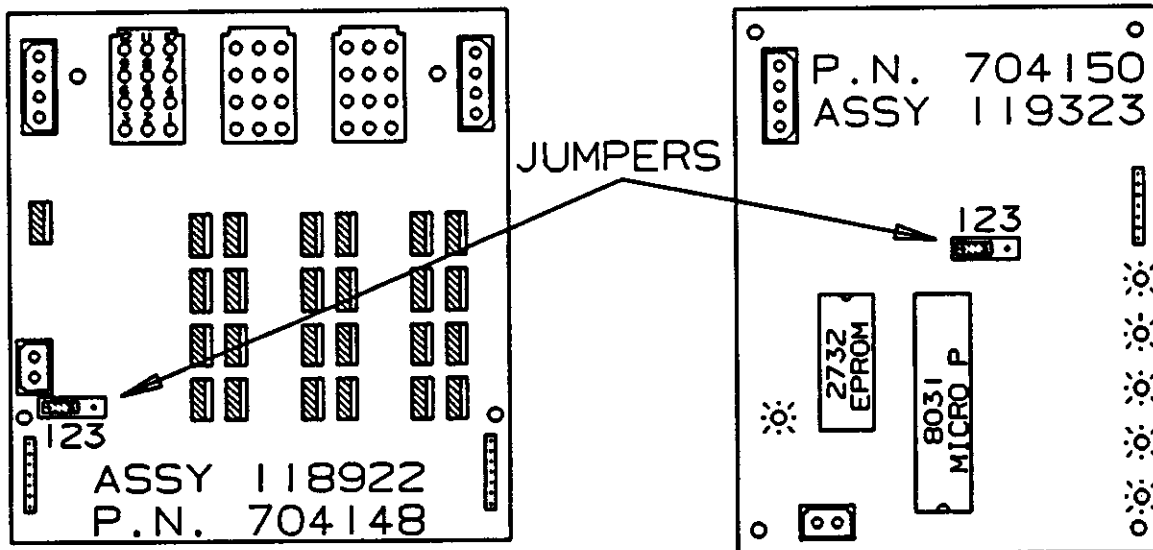


8 BIT FIGUREGRAM WIRING (Face View)

## 6.7 Jumper Location on 3 Position System

All of the 3 position drivers and receivers are identical except for the jumper on each board. Make sure the jumpers are set for the model of scoreboard you are installing them into.

- (A) On the receiver board (refer to figure); Jumper pins 2 & 3 for models MP-3385, MP-3312, MP-3529, and MP-3549. Jumper pins 1 & 2 for all other models.
- (B) On the driver board (refer to figure); Jumper pins 1 & 2 for use of a horn. Jumper pins 2 & 3 for all others.

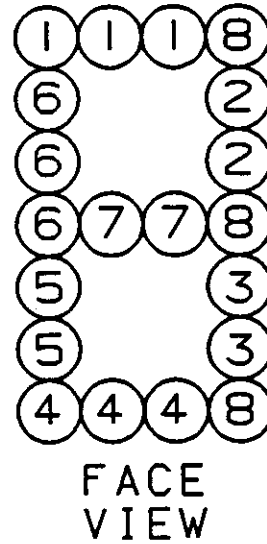
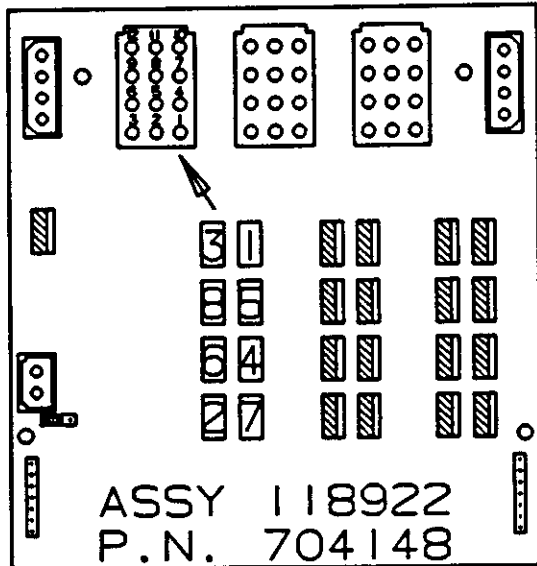


JUMPER LOCATION



## 6.8 Triac Placement

The triac is the switch that controls the figuregram lamps. The triacs for any given figuregram are adjacent to the twelve pin connector on the driver board that controls that figuregram. Shown below is the triac placement and bit designation relative to the figuregram bit pattern.



MP TRIAC PLACEMENT

6.9 Installation

