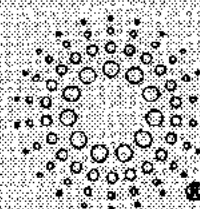




A product of



Everbrite

401 S. Main St.
Pardeeville, WI 53954
(608) 429-2121 / (800) 356-8146

OPERATING INSTRUCTIONS AND SERVICE MANUAL

VOLLEYBALL SCOREBOARD

MODEL MP-2611

LOGO PANEL

GUEST GAME HOME

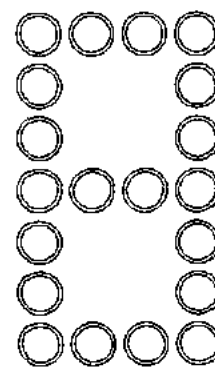
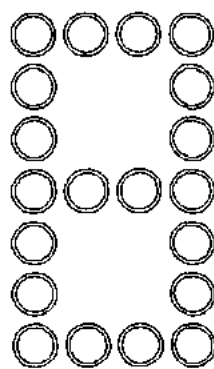
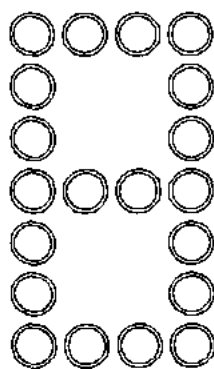


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1. GENERAL INFORMATION

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
401 S. 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 display. When contacting the factory for assistance it is important that the model number 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 the 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 it must be 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, properly filled out, 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

2. INSTALLATION

2.1 General Information

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

- 1 ea Baseball Display
- 1 ea Control Console
- 1 ea Service Manual
- 1 ea Mounting Hardware Package
- 1 ea Press Box Junction Box
- ? ft Control Cable (if ordered)

IMPORTANT!

The MP-40 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.

2.3 Data Cable Installation

The MP-40 data cable carries only low voltage signals and therefore can be installed with or without conduit. Consult section 6 for junction box and scoreboard wiring.

2.4 Electrical connections

This scoreboard requires one 110 V. 15 AMP AC circuit for the exclusive use of the scoreboard.

IMPORTANT !!!

To protect the MP-2003 control from damage, it is advisable to disconnect the control and store in a dry secure area when not in use.

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 Scoreboard Power

Turn on the branch circuit(s) to the scoreboard(s). The scoreboard lamps will come on in a random fashion.

3.2 Console Display

The Liquid Crystal Display module displays the scoreboard information entered from the control console.

3.3 Console Power

Plug the control console cable into the Press Box junction box.

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

Push **ON/OFF** a second time to shut the console off.

When first turned on; the console display should show **CODE**.

3.4 Initializing Scoreboard

Enter the four digit code (2310) shown in the lower center of the keyboard as in the following example:

Push **CODE** **2** **3** **1** **0** **ENTER** .

When the proper code has been entered, the console display will show 0000.

3.5 Team Scores

The Home and Guest Scores can be changed in three different ways.

(A) To add 1 to the existing score: Push **+1**.

(B) To directly enter or correct a score: Push **HOME** or **GUEST** followed by the desired number, then **ENTER**.

Example: Present Home Score is 15. Change the score from 15 to 23.

Push: **HOME** **2** **3** **ENTER**.

(E) To clear the score: Push **SCORE** **0**.

3.6 Game

Entry to the above function is made in the same manner as direct entry for Team Scores.

WARNING

110 VAC wires are exposed whenever the cover over the controller assembly is removed from the scoreboard. Use extreme caution during troubleshooting or repair. To avoid possible damage to equipment or personal injury, always turn off the main power before removing the cover or replacing assemblies, or replacing lamps.

4. MAINTENANCE AND TROUBLESHOOTING

4.1 Introduction

This section gives maintenance and troubleshooting information. Included are troubleshooting guides for typical scoreboard malfunctions. If the cause of a problem cannot be determined, please contact the Customer Service Department.

4.2 Test Equipment

A simple analog or digital voltmeter will be sufficient for all user repairable problems. Printed circuit boards requiring troubleshooting should be returned to the factory.

4.3 Troubleshooting

Whenever possible, follow the troubleshooting guides prior to contacting the Customer Service Department. If a problem not described in the guides exists, contact the customer service department immediately. Refer to the diagrams provided for assistance in troubleshooting scoreboard malfunctions.

4.4 Troubleshooting Guides

(A) Scoreboard doesn't light and console doesn't work

- (a) Check that the main power switch is turned on.
- (b) Replace any defective or blown fuses.
- (c) Check the power connections and voltages at the scoreboard.
- (d) Contact the Customer Service Department.

(B) Scoreboard digits don't light, but the console works

- (a) With the main power switch "off"; remove the cover over the controller assembly.
- (b) Check all connections.
- (c) Turn the main power "on".
- (d) If the scoreboard still doesn't light, check the transformer voltage going to the receiver PCB (printed circuit board) assembly (blue wires) using a voltmeter set on the 12 VAC or higher scale.

If the voltage is less than 8 VAC contact the Customer Service Department.

If the voltage is between 8-12 VAC see the replacement parts list for a receiver PCB assembly, and contact the Customer Service Department.

(C) The scoreboard digits light but the console doesn't work

- (a) Check for continuity between the scoreboard and the junction box.
- (b) If an open circuit is found, the problem is either the cable or a cable connection.
- (c) If the continuity test checks good, check the voltage between the green wire and the shield in the junction box, using a voltmeter set on the 12 VAC or higher scale.

If the voltage is 0 VDC see the controller parts list for a transformer assembly.

If the voltage is less than 8 VAC consult the controller wiring diagram for instructions on long cable compensation.

If the voltage is between 8 VAC and 12 VAC contact the Customer Service Department.

(D) The scoreboard digits light, the console works, but there is no control of the scoreboard.

- (a) Check the following voltages in the junction box, with respect to the shield, with a voltmeter set on the 3 VDC or higher:

Shield to Red (Clock) = Approximately 1.0 VDC
Shield to Black (Data) = Approximately 1.0 VDC
Shield to White (Sync) = Approximately .1 VDC

- (b) If the voltage is 0 VDC contact the Customer Service Department for assistance.
(c) If the voltage is correct, (2-3 VDC) check that this reading also appears at the scoreboard.
(d) If the correct voltage also appears at the scoreboard, see the replacement parts list for a receiver PCB assembly.

(E) The scoreboard works, but some lights stay on all the time

- (a) With the main power "OFF", switch the plug from the bad digit with the plug for a known good digit.

EXAMPLE: Plug "C" into "D" and "D" into "C" locations.

- (b) Turn the power back on. If the same lamps remain lit all the time, the problem is a shorted lamp socket. If the lamps on a different digit now stay lit all the time, the problem is on the driver PCB assembly. See the replacement parts list for the proper replacement part.

(F) The scoreboard works, but some lights do not come on.

- (a) Check for burned out lamps.

IMPORTANT !!!

In this scoreboard the 120 volt line is on the lamp socket all the time, and the common is switched to turn the lamps on and off. For this reason, to avoid damage to the equipment or personal injury, it is important to turn the main power off when changing the lamps.

- (b) Check for a broken wire or bad connection on the 12 pin connector.
(c) See the replacement parts list for the proper replacement driver board.

5. REPLACEMENT PARTS LIST

5.1 Scoreboard Display Parts

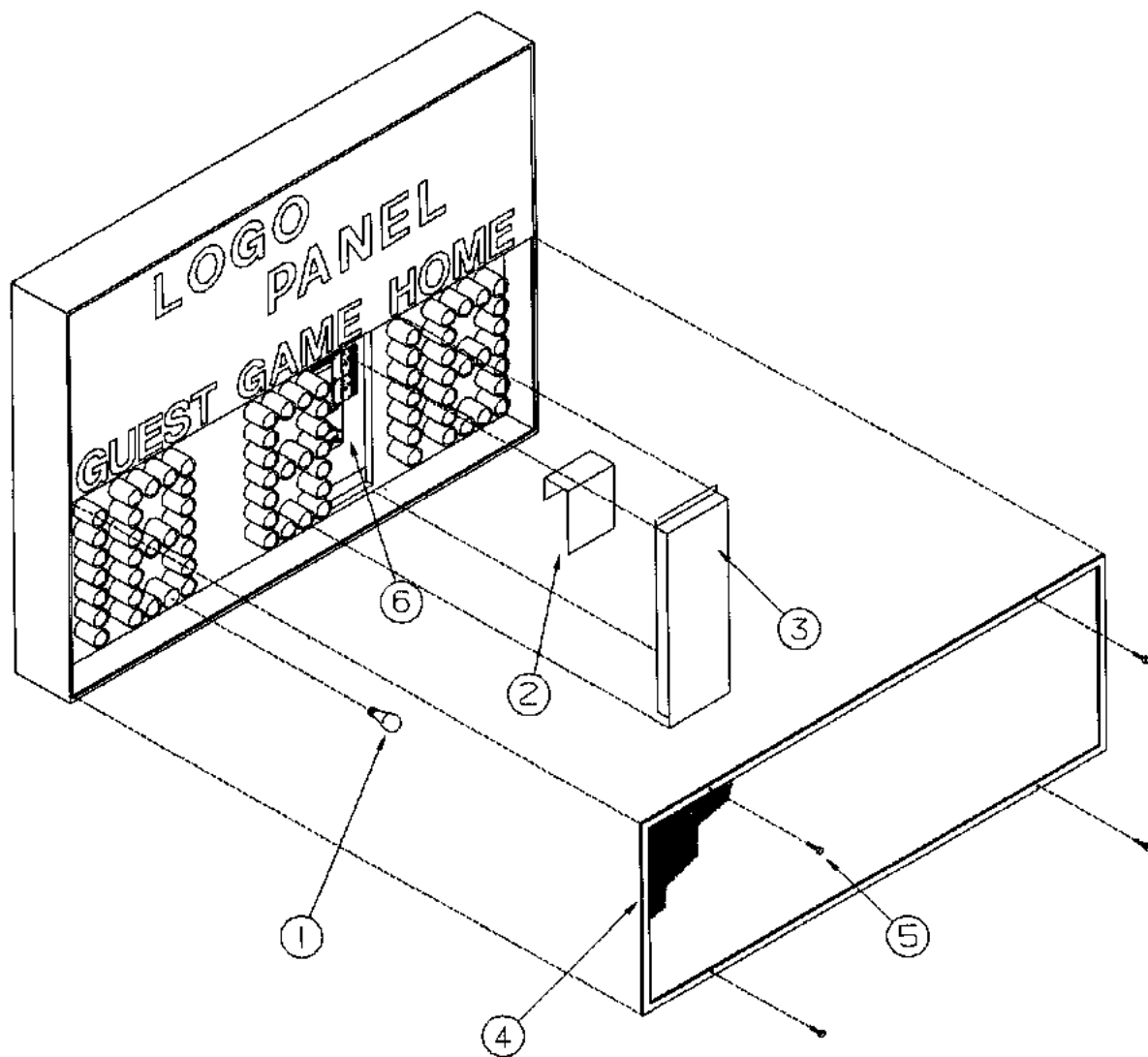


figure 1

DISPLAY ASSEMBLY

REPLACEMENT PARTS LIST (MP-2611 Volleyball)

fig.& index	MFG PART NUMBER	DESCRIPTION	REF DES	VENDOR PART #
1- 1-1 1-1A 1-2 1-3 1-4 1-5	151142 850022 850030 150572 154082 120386 903370	Display Assembly Lamp, 15W/130V Clear Lamp, 25W/130V Clear Rainshield Service Door Face Screen Thumbscrew, 10-24 x 1"		151142 15A15 CL 25A19 CL 150572 154082 120386
1-6	150375X	Controller Assembly *****SEE DETAIL FIGURE 2*****	A1	150375X
1-7	701416	Wellnut, 10-24		
	151143 119771 121830 702785	Control Console Control Console Slipsheet Transmitter PCB Assembly Connector, 5 Pin Male CCT	A4 P1	151143 119771 121830 RM12BPG-5P
	121219 702786 150508	Press Box Junction Box Connector, 5 Pin Female Cable, MP-40 Control	J1	121219 RM12BRD-5S YR21233

5.2 Scoreboard Controller Assembly Parts

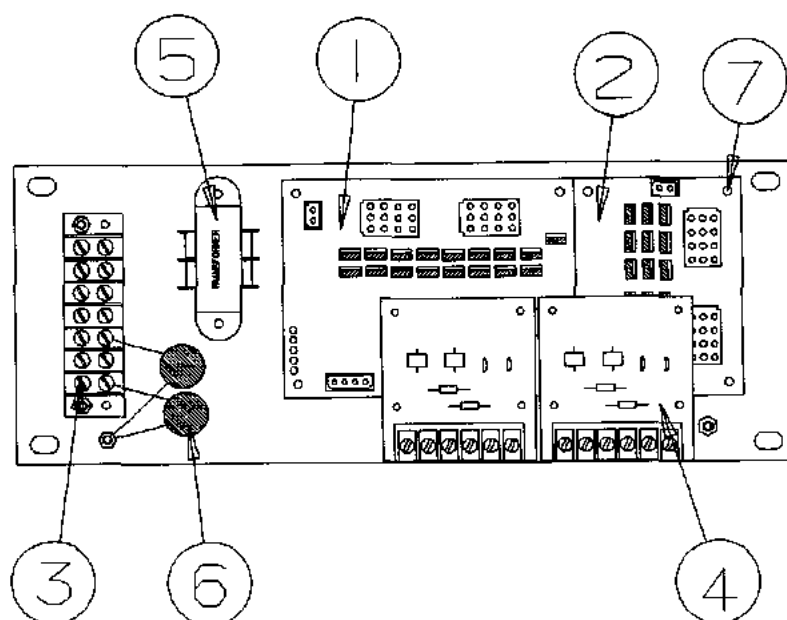


figure 2

CONTROLLER ASSEMBLY

REPLACEMENT PARTS LIST (MP-2310) Controller Assembly				
fig. & index	MFG PART NUMBER	DESCRIPTION	REF DES	VENDOR PART #
2-	150375	Controller Assembly	A2	150375
2-1	150376	Receiver/Driver PCB Assembly	A3	150376
2-2	150377	Scoring Driver PCB Assy	A4	150377
2-3	701136	7 Pin Terminal Block	TB1	671-7
2-4	118522	Lighting Suppressor	A5/A6	118522
2-5	151309	8V/18V Transformer Assembly	T1	CS-697
2-6	700520	Varistor		ERZ-C20DK201U
2-7	705723	Spacer, P.C.Board		LCBS-6-01

6. DIAGRAMS

6.1 Control Console Keyboard and Slipsheet Layout

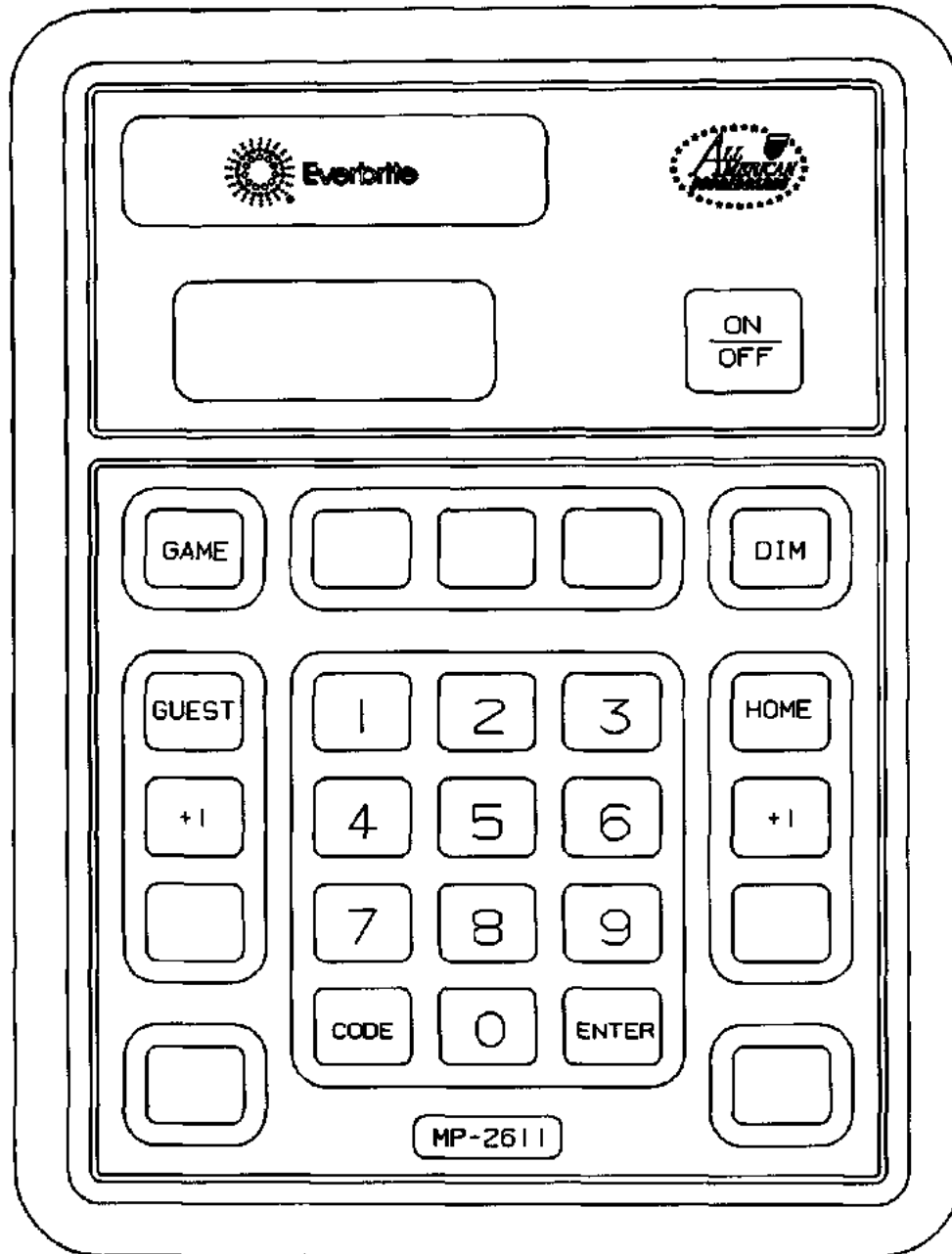


figure 3
CONSOLE KEYBOARD

6.2 Scoreboard System Layout

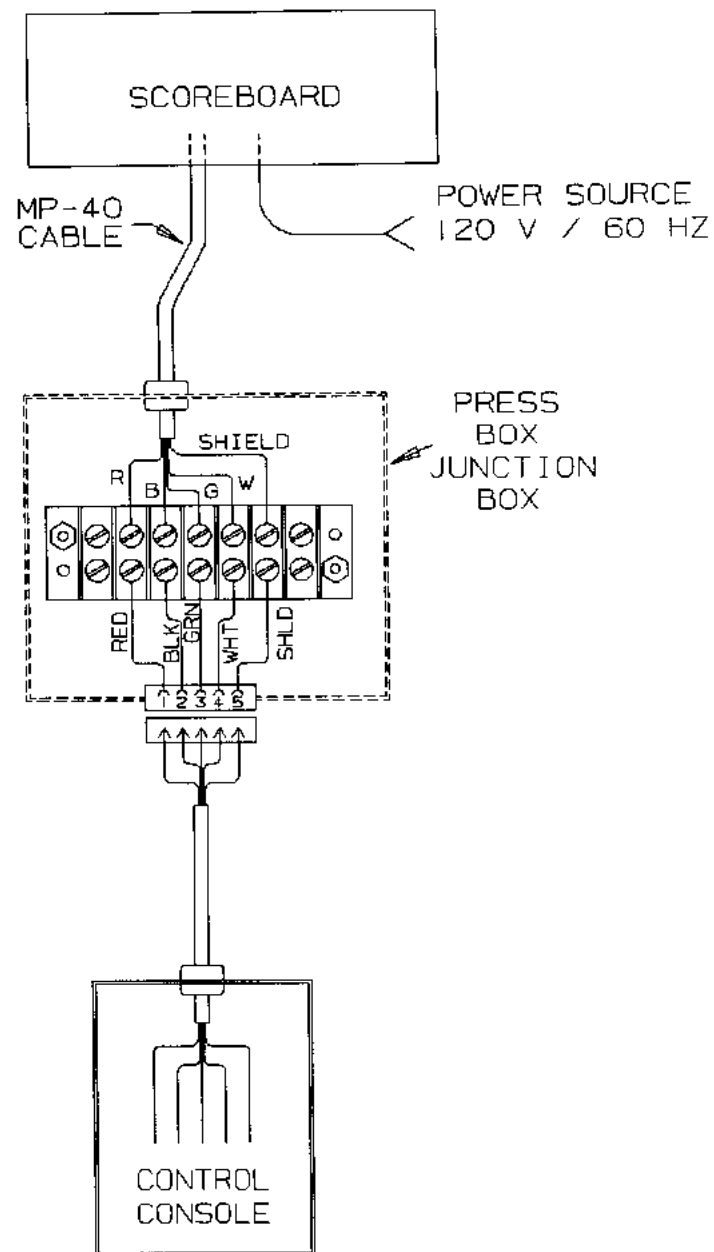
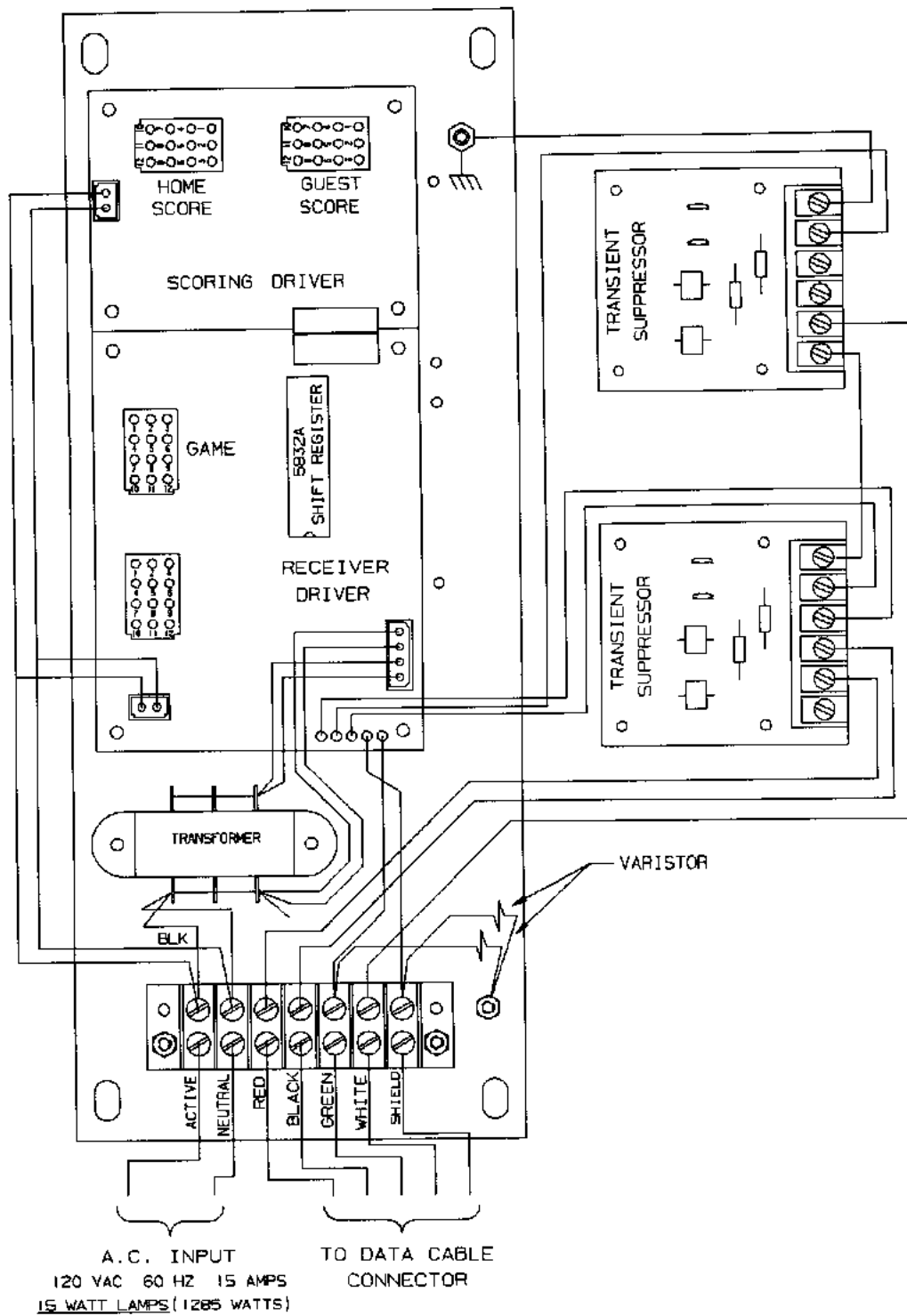


figure 4

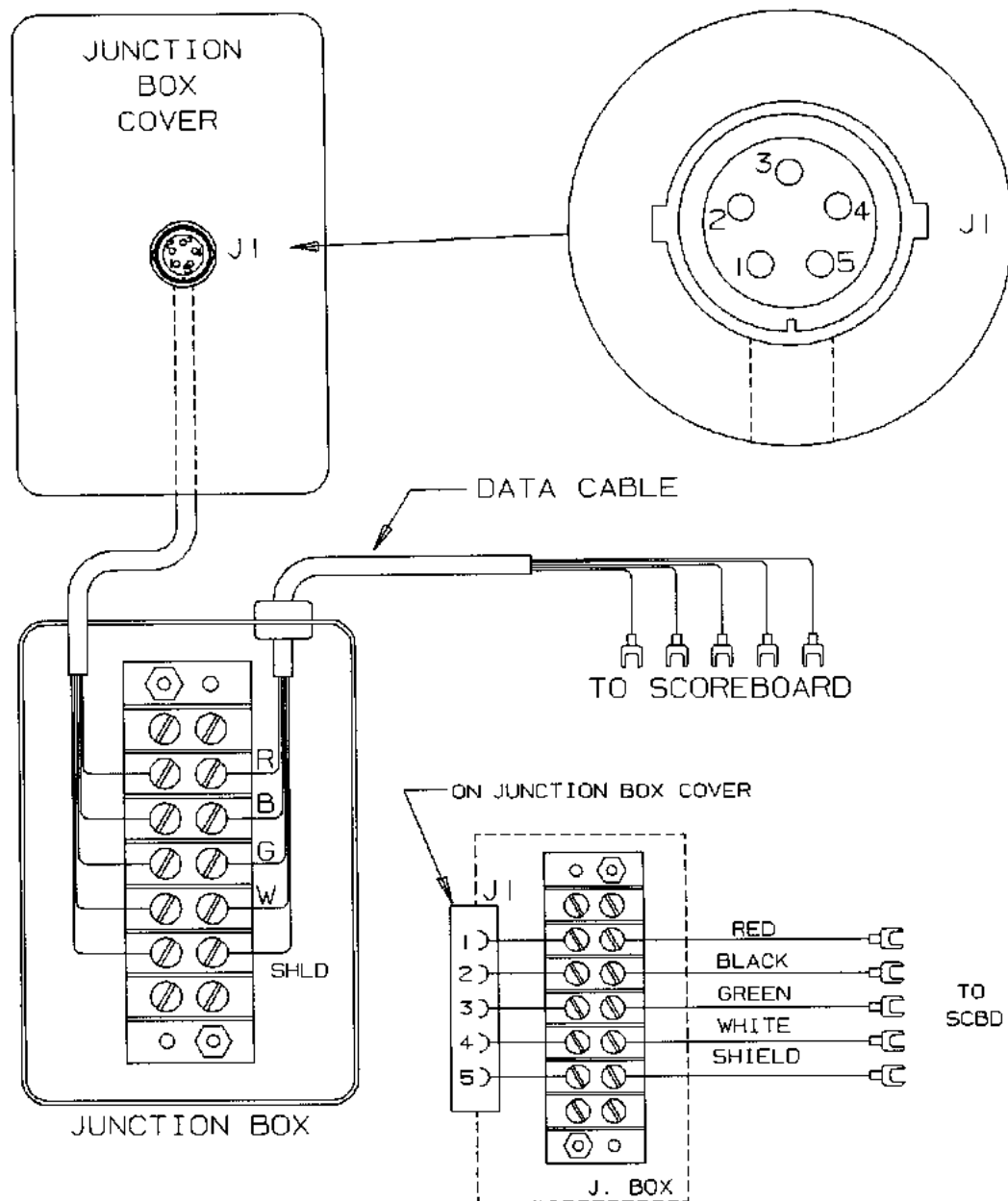
SYSTEM LAYOUT

6.4 Controller Assembly Wiring



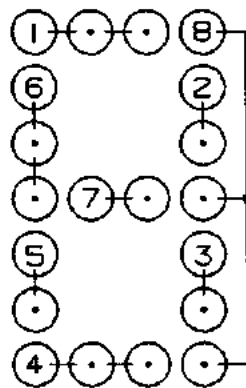
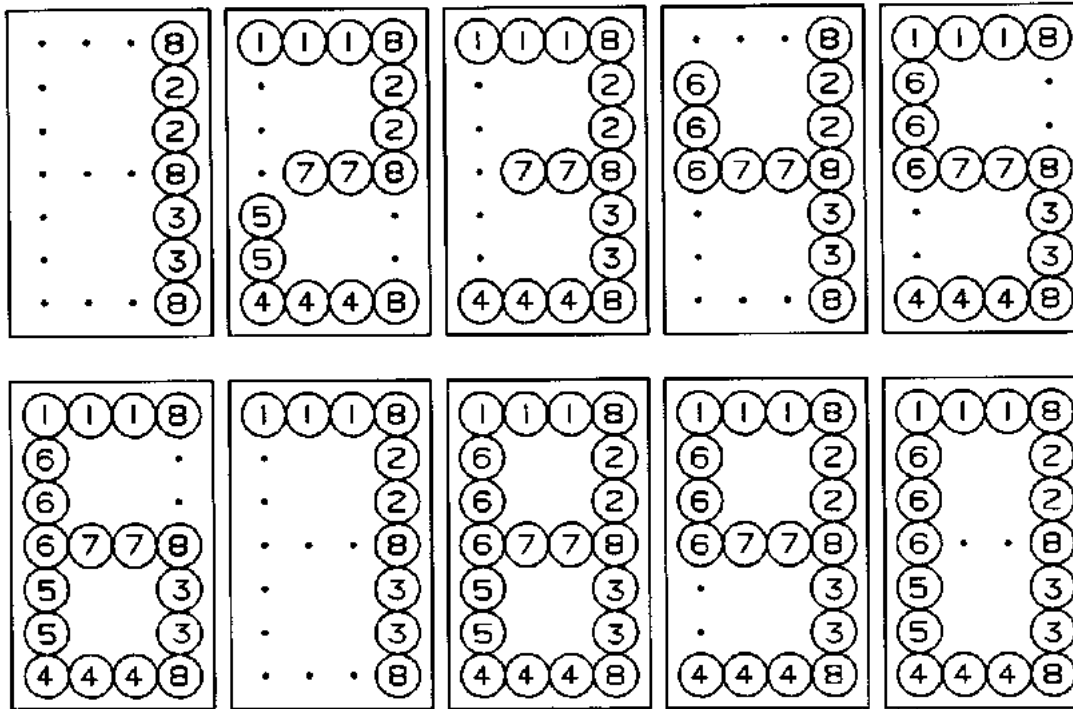
CONTROLLER ASSEMBLY

6.3 Press Box Junction Box Wiring



SINGLE JUNCTION BOX WIRING

6.5 Microprocessor 4 X 7 Lamp Pattern (8 Bit)

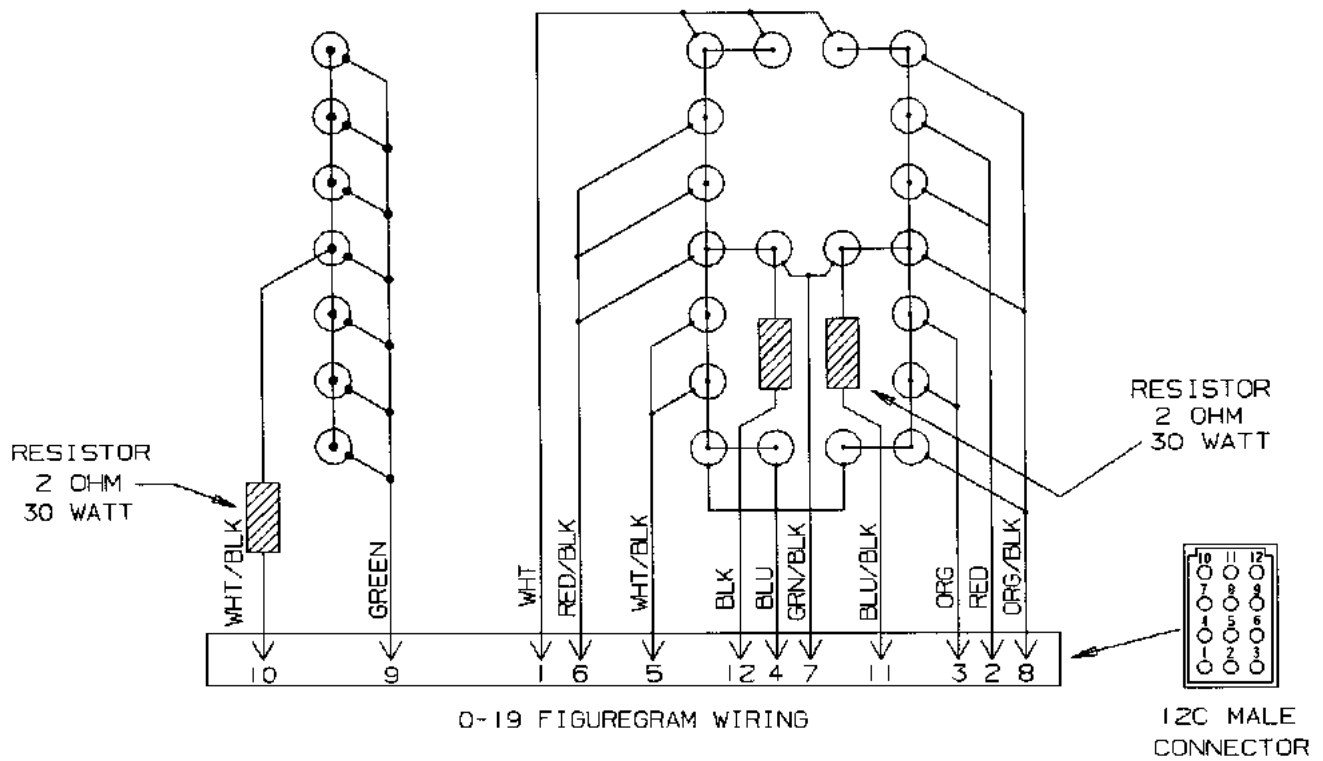


NUMERALS

	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

MICROPROCESSOR 4 X 7 (8 BIT) LAMP PATTERN

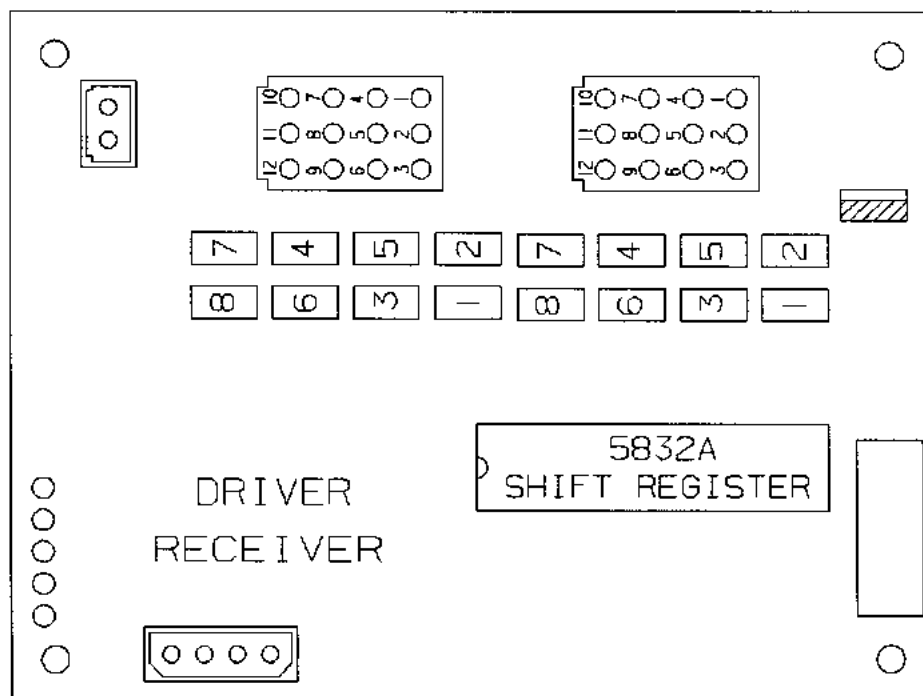
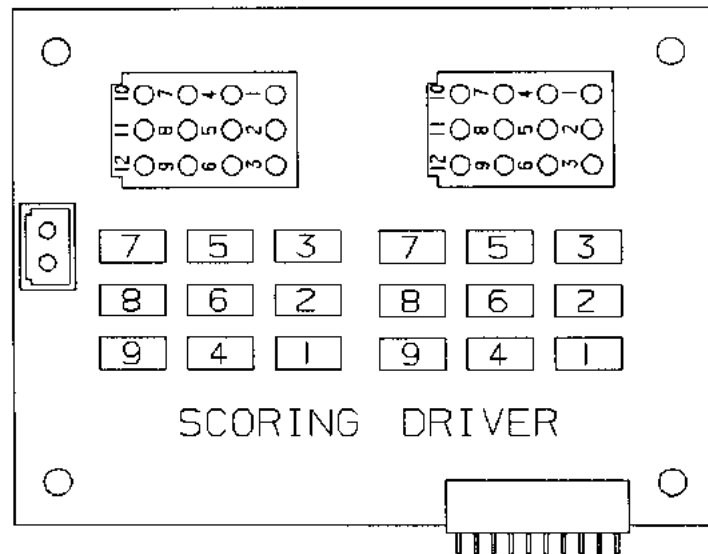
6.6 Figuregram Wiring



FIGUREGRAM WIRING

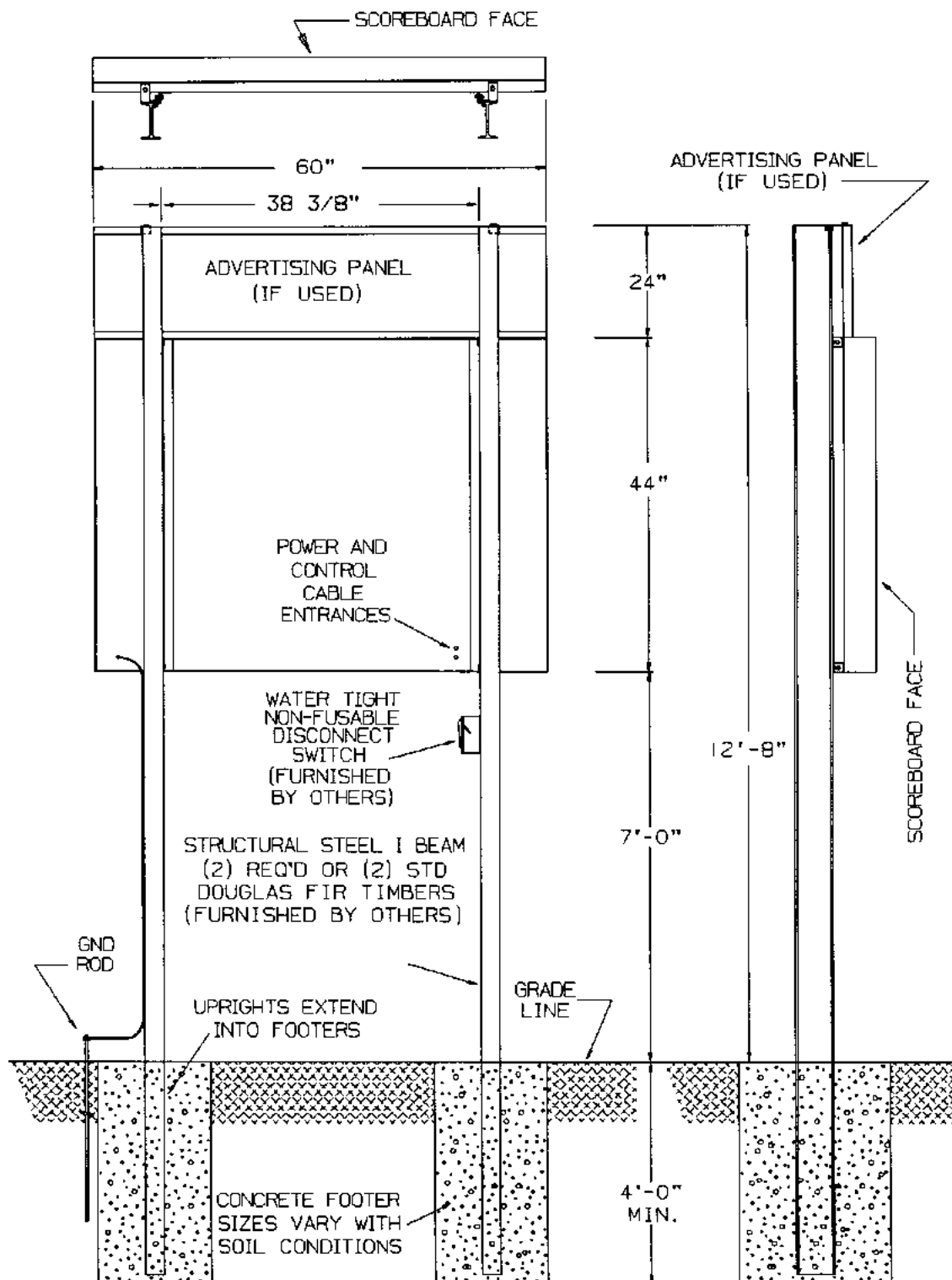
6.7 Triac Placement

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

6.8 Installation Drawings



6.8 Installation Drawing Cont.

