

Indoor Basketball LED Scoreboards

Installation and Maintenance Manual

ED-11985

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Models

BB-1113-9	BB-2015-9	BB-2025-9	BB-2041-9	FP-257-9	SD-2003-9
BB-1813-9	BB-2021-9	BB-2026-9	BB-2046-9	SD-2001-9	SD-2004-9
BB-2014-9	BB-2023-9	BB-2039-9	FP-15-9	SD-2002-9	TI-413-9

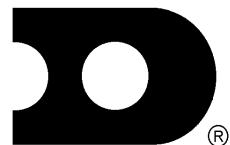
**ED-11985
Product 1152
Rev 7 – 25 July 2001**

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Display Serial No. _____

Display Model No. _____

Date Installed _____



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Section 1: Introduction

1.1 How To Use This Manual

This manual explains the installation and maintenance of Daktronics indoor LED basketball scoreboards. For questions regarding the safety, installation, operation or service of this system, please refer to the telephone numbers listed on the cover page of this manual.

Important Safeguards:

1. Read and understand these instructions before installing.
2. Do not drop the control console or allow it to get wet.
3. *Disconnect power when not using the scoreboard.*
4. *Disconnect power when servicing the scoreboard.*
5. Do not modify the scoreboard structure or attach any panels or coverings to the scoreboard without the express written consent of Daktronics, Inc.

Daktronics identifies manuals by their engineering document number, or ED number, located on the cover page of each manual. Any reference manual called out in this manual will be identified by its ED number. This manual, for example, would be referred to as **ED-11985**.

The box below illustrates the Daktronics drawing numbering system. Daktronics identifies individual drawings by drawing number (7087-P08A-69945, below), located in the lower right corner of the drawing. This manual refers to drawings by their last set of digits and the letter preceding them. In the example, the drawing would be referred to as **Drawing A-69945**. All reference drawings are grouped in the **Appendix**.

DAKTRONICS, INC. BROOKINGS, SD 57006		
PROJ: BASKETBALL		
TITLE: SEGMENTATION, 7 SEG BAR DIGIT		
DES. BY: BPETERSON	DRAWN BY: TNELSON	DATE: 8 JUL 01
APPR. BY: AVB		7087-P08A-69945
SCALE: 1 = 4		

This manual covers a wide range of models which use the same components. The sections covering installation and maintenance apply to all of the models. The **Appendix** contains reference drawings which offer more specific installation and maintenance information for each model. Carefully read the service sections and review the model-specific drawings before proceeding with the installation or maintenance of any display.

1.2 Scoreboard Overview

These Daktronics scoreboards are part of a family of display systems designed to offer simple installation, easy readability and reliability. Microprocessor control assures consistent operation and accuracy.

This manual includes basketball, statistics panels and game/shot clock models in the All Sport[®] Indoor LED Scoreboards line. These display configurations contain 5", 7", 10", and 13" LED digits. The reference drawings list dimensions and weight for each display. Scoreboard model number and electrical requirements can be found on a label on the scoreboard entrance panel, typically to the left of the period digit on the front of the scoreboard.

Please note the scoreboard model number, serial number and installation date on the front page of this manual for future reference.

Section 2: Mechanical and Electrical Installation

2.1 Product Safety Approval

Daktronics Indoor LED Scoreboards are ETL-listed, tested to CSA standards, and CE-labeled for indoor use. Contact Daktronics with any questions regarding the testing procedures

2.2 Mounting Details

The scoreboard frame comes equipped with lift eyes for installing the display and holes for attaching the display to the wall.

Due to the variety of wall materials used in sports facilities, Daktronics cannot anticipate a user's individual installation needs or provide mounting hardware suitable for every installation. The required mounting hardware may be purchased at a local hardware store. Bolts with expansion or toggle anchors are available for a variety of wall materials. Choose a method of installation adequate to safely support the weight of the display. For mounting locations and weights, refer to model-specific information in the **Appendix**.

Use the lifting angles on the top of the frame to lift the display. Secure the display to the wall with the holes in the back. Use the holes at the bottom of the display to secure the bottom of the display to the wall in a similar manner. Refer to the drawings in the **Appendix** for model-specific information.

Note: Contact Daktronics about installations which involve suspending the scoreboard. Do not use scoreboard lift eyes as permanent installation support.

2.3 Electrical Installation

Electrical installation involves routing power and control signal wiring through separate conduit or wireways. Control signal cable and some junction boxes, as listed in the reference drawings, are not provided as part of this system and can be purchased locally or from Daktronics.

Power

Reference Drawings:

Schematic, 4 Col LED Driver II Plate	Drawing A-123982
Schematic, LED TNMC for A/S5000	Drawing A-125174
Schematic, LED Driver II Plate.....	Drawing B-115502
Schematic, 2-Driver for A/S5000.....	Drawing B-125172
Schematic, 3-Drivers	Drawing B-125173

Each scoreboard has a 120 V AC, three-prong plug. Install a grounded receptacle near the equipment so that it is easily accessible to plug in the power cord. The reference drawings located in the **Appendix** list maximum power consumption for each scoreboard model.

The control console requires a 120 V AC receptacle and uses less than one amp of power.

Displays operating on 230 V AC are also available, and they come equipped with a universal power plug. Systems requiring 230V should be routed to the display in a similar manner to connections for 120V displays.

Grounding

Connect the scoreboard to earth-ground. Proper grounding assures reliable equipment operation and protects the equipment against damaging electrical disturbances and lightning. The grounding connection on the power cord's three-prong plug connects to the shell of the scoreboard.

Note: The customer must properly ground the 120 V AC outlet. ***Failure to ground the 120 V AC outlet connection voids the warranty for the scoreboard.***

Signal

Reference Drawings:

Signal Connection, Installation.....	Drawing A-28124
Block Diagram, A/S5000 BB, VB & WR #1.....	Drawing A-124686
Block Diagram, A/S5000 BB, VB & WR #2.....	Drawing A-125415
Block Diagram, A/S5000 BB, VB & WR #3.....	Drawing A-124688
Electrical & Signal Specification, BB-2046-9.....	Drawing A-145963
Electrical & Signal Spec, BB-2046-9mw/TNMC	Drawing A-145976

Route conduit and cable between scoreboard location(s) and the control location. Use paired cable, 24 AWG, minimum-shielded, and connect the cable to the junction box at the control end. Install the phone plug provided to the scoreboard end of the cable. Insert plug (P31) into the jack, located on the top or side of the scoreboard.

 ***Special Note to Users of Daktronics All Sport 4000 Series and Daktronics Pro Sport 6000 Control Consoles:***

Current standard models in the Daktronics scoring and timing display lines are configured at the manufacturing plant to operate with the All Sport Series 5000 Control Console. If you receive one of these standard scoreboards, you may need to remove the address plug before your scoreboard can properly receive signal. Simply unplug the address plug, P19, from connector J19 on the LED driver. (The plug is typically looped into the connector cable harness.) If you have problems in this regard, contact the Daktronics Help Desk or your project manager.

2.4 Scoreboard Operating Codes

Refer to the display reference drawings in the **Appendix** and the All Sport controller manual for display operating codes.

Section 3: Maintenance and Troubleshooting



Important Notes:

- 1. Disconnect power before any repair or maintenance work is done on the scoreboard!**
- 2. Any access to internal scoreboard electronics must be made by qualified service personnel.**
- 3. Disconnect power when the scoreboard is not in use.**

3.1 LED Driver

Reference Drawings:

LED Driver II, 16 Column.....	Drawing A-119205
4-Column LED Driver II	Drawing A-122796

The LED driver (refer to **Drawing A-119205**) performs the task of switching LEDs on and off. Each driver has 19 connectors providing power and signal inputs/outputs to digits and indicators. The following table shows the function of these connectors.

Connector No.	Function
1-16	Output to digits and indicators
17	Control signal and power output
18	Control for horn
19	Address

Output connectors 1 through 16 each have 9 pins. Pin 7 provides power to the digit or indicators wired to that connector. The other 8 pins provide switching connections. Refer to **Drawing A-122796** for smaller LED driver function. Refer to the reference drawings for digit driver designation.

☛ Special Note to Users of Daktronics All Sport 4000 Series and Daktronics Pro Sport 6000 Control Consoles:

Current standard models in the Daktronics scoring and timing display lines are configured at the manufacturing plant to operate with the All Sport Series 5000 Control Console. If you receive one of these standard scoreboards, you may need to remove the address plug before your scoreboard can properly receive signal. Simply unplug the address plug, P19, from connector J19 on the LED driver. (The plug is typically looped into the connector cable harness.) If you have problems in this regard, contact the Daktronics Help Desk or your project manager.

3.2 Component Location, Access, and Schematic

Reference Drawings:

Segmentation, 7 Segment Bar Digit	Drawing A-38532
Schematic, Digits	Drawing A-77213
Rear View, A/S 5010 Connectors	Drawing A-102142

The LED driver is located behind a panel, as indicated in the drawings. Release the fasteners securing the panel to gain access.

Refer to the drawings listed above for power and signal connection information and for component location.

Disconnect power before servicing display and when not using the scoreboard! Leaving the power on may shorten the life of some electronic components.

3.3 Adjusting the Horn Volume

 **Caution:** *The horn is a 120VAC device. Turn off the power to the scoreboard before adjusting the horn!*

The horn volume is set at its maximum level at the factory. If the horn is too loud, reduce its volume by adjusting the set screw mounted in the front of the horn. A plastic tip on the screw touches the horn's diaphragm, reducing the volume. Turn the screw clockwise and test the volume by operating the horn from the scoreboard control console. Continue adjusting and testing until the desired volume level is obtained.

Four-sided scoreboards have a horn in each of the four sides (faces).

 If the horn is not loud enough for your facility, a trumpet horn may be purchased. On a four-sided scoreboard, a single trumpet horn may be mounted behind one of the scoreboard faces, pointing down at the court. Contact Daktronics for additional information and pricing.

3.4 Troubleshooting

The following table lists some of the problems that could occur with the scoreboard and suggests corrective actions. Refer to the scoreboard specification sheets to obtain the correct replacement part number for any damaged components.

For assistance with any troubleshooting and to order replacement components, *contact your service provider first*. Your service provider may have spare equipment on hand and may provide same day service in the event of an emergency. Your service provider may direct you to call Daktronics, or a service provider may not be applicable to your facility. In this event, feel free to call Daktronics.

For faster service, please note the make of your scoreboard and any possible assembly numbers, as noted on the scoreboard spec sheet. If you need to order replacement components, it would be helpful to have a purchase order number or any other purchase information available at the time you call.

Symptom/Condition	Possible Cause	Corrective Action
<i>Scoreboard will not light</i>	<ul style="list-style-type: none"> Console not connected or poor connection No power to control console No power to the scoreboard Wrong code entered into All Sport Main fuse blown (if applicable) 	<ul style="list-style-type: none"> Check signal cable Check power to console Check power to scoreboard Verify code to console
<i>Garbled display</i>	<ul style="list-style-type: none"> Internal driver logic malfunction Control console malfunction 	<ul style="list-style-type: none"> Check power Verify code to console
<i>Digit will not light</i>	<ul style="list-style-type: none"> Black wire to digit broken Poor contact at driver connection 	<ul style="list-style-type: none"> Verify power harness in display
<i>Segment will not light</i>	<ul style="list-style-type: none"> Broken LED or connection Driver shift register failure. Broken wire between LED driver and digit/ Poor contact at driver connector. 	<ul style="list-style-type: none"> Replace digit. Replace driver. Secure pins tightly in plugs
<i>Segment stays lit</i>	<ul style="list-style-type: none"> Driver shift register failure Short circuit on digit. 	<ul style="list-style-type: none"> Replace driver.

3.5 Replacement Parts List

The following parts list includes components for many different types of LED scoreboards. For the exact components needed for your scoreboard, refer to the reference drawings in the back of this manual.

Description	Part No.
Main clock, start/stop switch	0A-1166-0003
Shot clock, start/stop switch	0A-1166-0004
Horn, 120 V AC	0A-1152-0332
Fuse MDL-2	F-1002
Fuseholder; panel mount	X-1032
Transformer, 120P/16S, 63A	T-1066
Transformer, 120P/16S, 2A	T-1063
Junction box; phone jack	0A-1196-0013
LED driver, 16-column	0P-1150-0126
LED driver, 4-column	0P-1150-0130
Arrow, 3", red LED	0P-1150-0128
Arrow, 3", green LED	0P-1150-0129
Cable, 20' phone plug	W-1236
Cable, 50' phone plug	W-1237
Cable, 30' phone plug	W-1238
Cable, 10' phone plug	W-1340
Player foul; red and green LED	0P-1150-0055

Description	Part No.
Colon/decimal; 13", red, LED	0P-1150-0056
Colon/decimal; 13", amber, LED	0P-1150-0058
Colon; 7" and 10", green, LED	0P-1150-0060
Colon/decimal; 13", green, LED	0P-1150-0057
Colon; 7" and 10", red, LED	0P-1150-0059
Colon; 7" and 10", amber, LED	0P-1150-0061
Digit, 7" red, 7 seg	0P-1150-0187
Digit, 7" green, 7 seg	0P-1150-0037
Digit, 7" amber, 7 seg	0P-1150-0082
Digit, 7" red, 2 seg	0P-1150-0188
Digit, 7" green, 2 seg	0P-1150-0040
Digit, 7" amber, 2 seg	0P-1150-0041
Digit, 10" red, 7 seg	0P-1150-0189
Digit, 10" green, 7 seg	0P-1150-0043
Digit, 10" amber, 7 seg	0P-1150-0083
Digit, 10" red, 2 seg	0P-1150-0190
Digit, 10" green, 2 seg	0P-1150-0046
Digit, 10" amber, 2 seg	0P-1150-0047
Digit, 13" red, 7 seg	0P-1150-0191
Digit, 13" green, 7 seg	0P-1150-0049
Digit, 13" amber, 7 seg	0P-1150-0084
Digit, 13" red, 2 seg	0P-1150-0192
Digit, 13" green, 2 seg	0P-1150-0052
Digit, 13" amber, 2 seg	0P-1150-0053

3.6 Daktronics Exchange/Repair and Return Programs

To serve customers' repair and maintenance needs, Daktronics offers both an exchange program and a repair and return program.

Daktronics' unique exchange program is a quick, economical service for replacing key components in need of repair. If a component fails, Daktronics sends the customer a reconditioned replacement within 24 hours. The customer, in turn, sends the failed component to Daktronics. This not only saves money but decreases scoreboard downtime. This service is provided to qualified customers who follow the program guidelines explained below.

Daktronics provides this service to ensure users get the most from their Daktronics products. Please call the Help Desk – (877) 605-1115 – if you have questions regarding the exchange program or any other Daktronics service.

When you call the Daktronics Help Desk, a trained service technician will work with you to diagnose the equipment problem and determine which replacement part to ship. (If, after you make the exchange, the equipment still has problems, please contact our Help Desk immediately.) If the replacement part fixes the problem, package the defective part in the same box and wrapping in which the replacement part arrived, fill out and attach the enclosed UPS shipping document, and *RETURN THE PART TO DAKTRONICS*.

For most equipment, you will be invoiced for the replacement part at the time it is shipped. This bill is due when you receive it.

Daktronics expects immediate return of an exchange part if it does not solve the problem. The company also reserves the right to refuse equipment that has been damaged due to acts of nature or causes other than normal wear and tear.

If the defective equipment is not shipped to Daktronics within 30 working days from the invoice date, it is assumed you are purchasing the replacement part, and you will be invoiced for it. This second invoice represents the difference between the exchange price and the full purchase price of the equipment. The balance is due when you receive the second invoice. If you return the exchange equipment after 30 working days from the invoice date, you will be credited for the amount on the second invoice, minus a restocking fee.

©To avoid a restocking charge, please return the defective equipment within 30 days from the invoice date.

Daktronics also offers a repair and return program for items not subject to exchange.

Return Materials Authorization: To return parts for service, contact your local representative prior to shipment to acquire a Return Material Authorization (RMA) number. If you have no local representative, call the Daktronics Help Desk for the RMA. This expedites repair of your component when it arrives at Daktronics.

Packaging for Return: Package and pad the item well so that it will not be damaged in shipment. Electronic components such as printed circuit boards should be installed in an enclosure or placed in an antistatic bag before boxing. Please enclose your name, address, phone number and a clear description of symptoms.

This is how to reach us:

Mail: Customer Service
Daktronics, Inc.,
P.O. Box 5128
331 32nd Avenue
Brookings, SD 57006

Phone: Daktronics Help Desk: 1 (877) 605-1115 (toll free)
or 1 (605) 697-4036

Fax: 1 (605) 697-4444

E-mail: helpdesk@daktronics.com

Appendix: Reference Drawings

Following is the complete list of reference drawings for this manual. All drawings are listed in alphanumeric order. Immediately following this section are several lists of the *same drawings* grouped by *function*, that is, **Basketball Scoreboards**, **Game/Shot Clocks**, and **Statistics Panels**; and **Mechanical And Electrical** (manual Section 2), and **Maintenance and Troubleshooting** (manual Section 3). The drawings are inserted, in order, immediately following these lists.

A Drawings

Signal Connection; Installation	Drawing A-28124
Segmentation, 7 Segment Bar Digit	Drawing A-38532
Mechanical Spec, BB-2029-9	Drawing A-41022
Schematic, Digits & Indicators, BB-1813L	Drawing A-77213
Spec, Mechanical BB-1113-9	Drawing A-90624
Spec, Mechanical BB-1813-9	Drawing A-90640
Backstop Mounting Suggestions	Drawing A-91230
Screen Mounting, Shot Clock	Drawing A-93846
Mechanical Specifications, BB 2023-9	Drawing A-95932
Mounting Plate, Three Sided	Drawing A-97631
Shot Clock on Portable Backstop	Drawing A-98293
Mechanical Specifications, BB 2026-9	Drawing A-99041
Spec, Mechanical BB-2021-9	Drawing A-99480
Spec, Mechanical BB-2025-9	Drawing A-99481
Rear View, A/S 5010 Connector Assignments	Drawing A-102142
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Spec, Electrical/Signal BB-2021-9	Drawing A-115549
Spec, Electrical/Signal BB-2025-9	Drawing A-115552
Spec, Mechanical FP-15-9	Drawing A-118595
Spec, Mechanical FP-257-9	Drawing A-118597
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Spec, Electrical/Signal FP-257-9	Drawing A-118602
LED Driver II, 16 Column	Drawing A-119205
Reference, 4-Column LED Driver II	Drawing A-122796
Schematic, 4 Col LED Driver II Plate w/Xfmr	Drawing A-123982
Block Diagram, A/S 3000 or 5000 BB, VB & WR #1	Drawing A-124686
Block Diagrams, A/S5000 BB, VB & WR #3	Drawing A-124688
Schematic; LED TNMC for A/S 5000	Drawing A-125174
Electrical I Specifications, BB 2026-9	Drawing A-125242
Component Locations, BB 2023-9	Drawing A-125243
Elect. Mech. Signal Spec., BB-2029-9	Drawing A-125302
Spec, Electrical/Signal BB-1113-9	Drawing A-125376
Block Diagram, A/S 3000 or 5000 BB, VB & WR #2	Drawing A-125415
Spec, Electrical/Signal BB-1813-9 w/TNMC	Drawing A-125506
Spec, Electrical/Signal BB-1113-9 w/TNMC	Drawing A-125616
Spec, Electrical/Signal BB-1813-9	Drawing A-125657
Spec, Mechanical BB-1113-9 w/TNMC	Drawing A-125753
Spec, Mechanical BB-1813-9 w/TNMC	Drawing A-125760
Spec, Mechanical BB-2039-9	Drawing A-126125

Electrical Specifications, BB-2014-9	Drawing A-126153
Electrical Specifications, BB-2015-9	Drawing A-126193
Mechanical Specifications, BB-2014-9	Drawing A-126195
Mechanical Specifications, BB-2015-9	Drawing A-126196
Spec, Electrical/Signal TI-413-9	Drawing A-126794
Spec, Mechanical BB-2041-9	Drawing A-130920
Spec, Electrical/Signal BB-2041-9	Drawing A-130928
Spec, Mechanical BB-2041-9 w/TNMC	Drawing A-131027
Spec, Electrical/Signal BB-2041-9 w/TNMC	Drawing A-131028
Spec, Electrical/Signal SD-2003-9	Drawing A-131233
Spec, Mechanical SD-2003-9	Drawing A-131240
Spec, Mechanical SD-2001-9	Drawing A-132279
Spec, Mechanical SD-2002-9	Drawing A-132282
Spec, Electrical/Signal SD-2001-9	Drawing A-132288
Spec, Electrical/Signal SD-2002-9	Drawing A-132298
Mechanical Specification, BB-2046-9	Drawing A-145919
Electrical & Signal Specification, BB-2046-9	Drawing A-145963
Mechanical Specification, BB-2046-9 w/TNMC	Drawing A-145975
Electrical & Signal Specification, BB-2046-9 w/TNMC	Drawing A-145976
Electrical & Signal Specification; SD-2004-9	Drawing A-152861
Mechanical Specifications; SD-2004-9	Drawing A-152862

B Drawings

Schematic, LED Driver II Plate w/Xfmr.....	Drawing B-115502
Schematic; 2-Driver for A/S 5000.....	Drawing B-125172
Schematic; 3 Drivers.....	Drawing B-125173

Basketball Scoreboards (Grouped by Model)

Spec, Mechanical BB-1113-9	Drawing A-90624
Spec, Mechanical BB-1113-9 w/TNMC	Drawing A-125753
Spec, Electrical/Signal BB-1113-9	Drawing A-125376
Spec, Electrical/Signal BB-1113-9 w/TNMC	Drawing A-125616
Spec, Mechanical BB-1813-9	Drawing A-90640
Spec, Mechanical BB-1813-9 w/TNMC	Drawing A-125760
Spec, Electrical/Signal BB-1813-9	Drawing A-125657
Spec, Electrical/Signal BB-1813-9 w/TNMC	Drawing A-125506
Spec, Mechanical BB-2021-9	Drawing A-99480
Spec, Electrical/Signal BB-2021-9	Drawing A-115549
Spec, Mechanical BB-2025-9	Drawing A-99481
Spec, Electrical/Signal BB-2025-9	Drawing A-115552
Spec, Mechanical BB-2039-9	Drawing A-126125
Spec, Electrical/Signal BB-2039-9	Drawing A-115546
Spec, Mechanical BB-2041-9	Drawing A-130920
Spec, Mechanical BB-2041-9 w/TNMC	Drawing A-131027
Spec, Electrical/Signal BB-2041-9	Drawing A-130928
Spec, Electrical/Signal BB-2041-9 w/TNMC	Drawing A-131028
Mechanical Specification, BB-2046-9	Drawing A-145919

Electrical & Signal Specification, BB-2046-9	Drawing A-145963
Mechanical Specification, BB-2046-9 w/TNMC	Drawing A-145975
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Game/Shot Clocks (Grouped by Model)

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Mechanical Specifications, BB-2015-9	Drawing A-126196
Electrical Specifications, BB-2015-9.....	Drawing A-126193
Mechanical Specifications, BB 2023-9	Drawing A-95932
Component Locations, BB 2023-9.....	Drawing A-125243
Mechanical Specifications, BB 2026-9	Drawing A-99041
Electrical I Specifications, BB 2026-9	Drawing A-125242
Mechanical Spec, BB-2029-9	Drawing A-41022
Elect. Mech. Signal Spec., BB-2029-9	Drawing A-125302
Spec, Electrical/Signal TI-413-9	Drawing A-126794
Mounting Plate, Three Sided	Drawing A-97631
Shot Clock on Portable Backstop.....	Drawing A-98293
Backstop Mounting Suggestions	Drawing A-91230
Screen Mounting, Shot Clock.....	Drawing A-93846

Statistics Displays (Grouped by Model)

Spec, Mechanical FP-15-9	Drawing A-118595
Spec, Electrical/Signal FP-15-9.....	Drawing A-118600
Spec, Mechanical FP-257-9	Drawing A-118597
Spec, Electrical/Signal FP-257-9.....	Drawing A-118602
Spec, Mechanical SD-2001-9.....	Drawing A-132279
Spec, Electrical/Signal SD-2001-9	Drawing A-132288
Spec, Mechanical SD-2002-9.....	Drawing A-132282
Spec, Electrical/Signal SD-2002-9	Drawing A-132298
Spec, Mechanical SD-2003-9.....	Drawing A-131240
Spec, Electrical/Signal SD-2003-9	Drawing A-131233
Electrical & Signal Specification; SD-2004-9	Drawing A-152861
Mechanical Specifications; SD-2004-9	Drawing A-152862

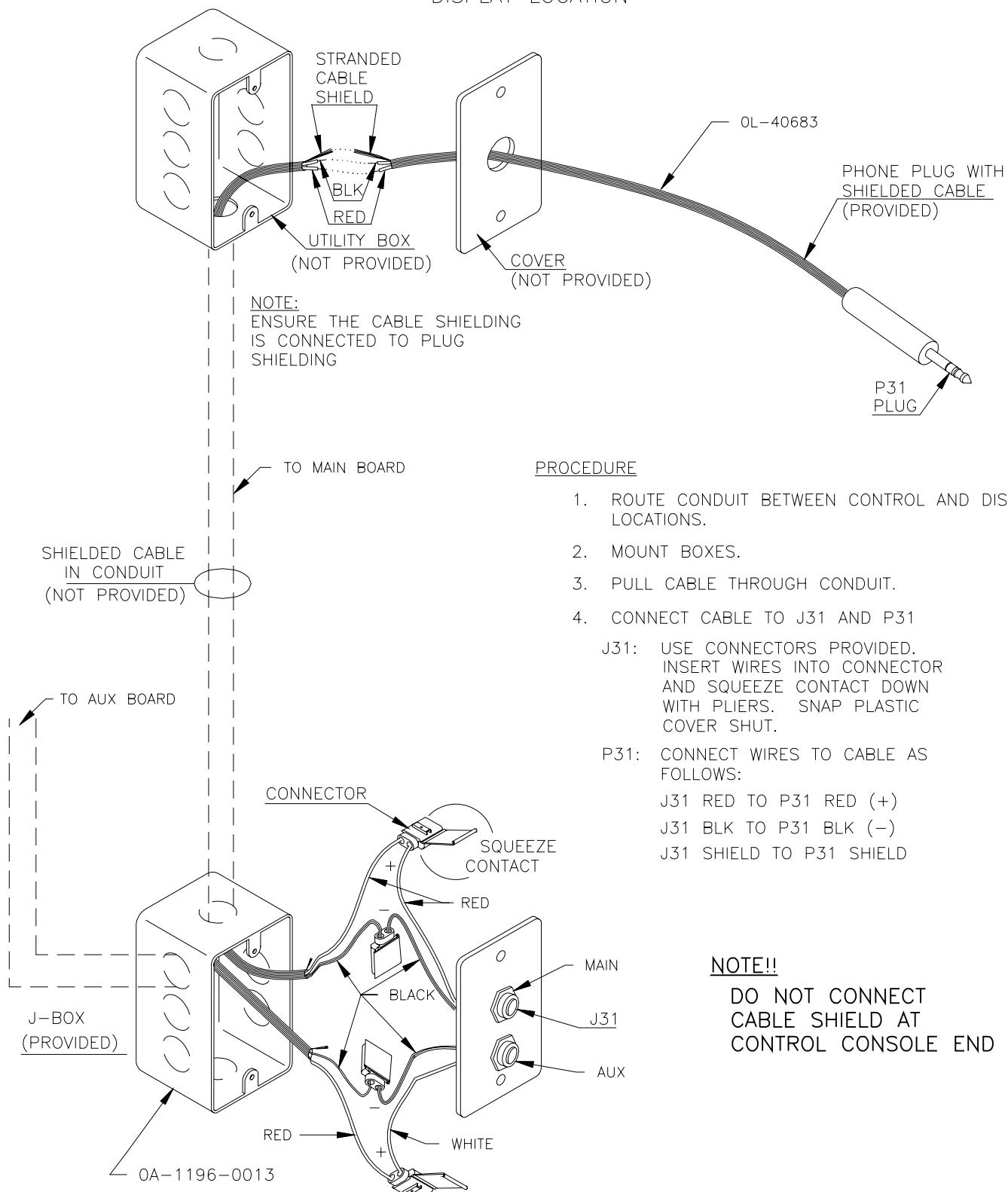
Mechanical and Electrical (Section 2)

Signal Connection; Installation	Drawing A-28124
Schematic, 4 Col LED Driver II Plate w/Xfmr.....	Drawing A-123982
Block Diagram, A/S 3000 or 5000 BB, VB & WR #1	Drawing A-124686
Block Diagrams, A/S5000 BB, VB & WR #3.....	Drawing A-124688
Schematic; LED TNMC for A/S 5000	Drawing A-125174
Block Diagram, A/S 3000 or 5000 BB, VB & WR #2	Drawing A-125415
Schematic, LED Driver II Plate w/Xfmr.....	Drawing B-115502
Schematic; 2-Driver for A/S 5000.....	Drawing B-125172
Schematic; 3 Drivers	Drawing B-125173

Maintenance and Troubleshooting (Section 3)

Segmentation, 7 Segment Bar Digit.....	Drawing A-38532
Schematic, Digits & Indicators, BB-1813L.....	Drawing A-77213
Rear View, A/S 5010 Connector Assignments	Drawing A-102142
LED Driver II, 16 Column	Drawing A-119205
Reference, 4-Column LED Driver II.....	Drawing A-122796

DISPLAY LOCATION



PROCEDURE

1. ROUTE CONDUIT BETWEEN CONTROL AND DISPLAY LOCATIONS.
2. MOUNT BOXES.
3. PULL CABLE THROUGH CONDUIT.
4. CONNECT CABLE TO J31 AND P31

J31: USE CONNECTORS PROVIDED. INSERT WIRES INTO CONNECTOR AND SQUEEZE CONTACT DOWN WITH PLIERS. SNAP PLASTIC COVER SHUT.

P31: CONNECT WIRES TO CABLE AS FOLLOWS:

- J31 RED TO P31 RED (+)
- J31 BLK TO P31 BLK (-)
- J31 SHIELD TO P31 SHIELD

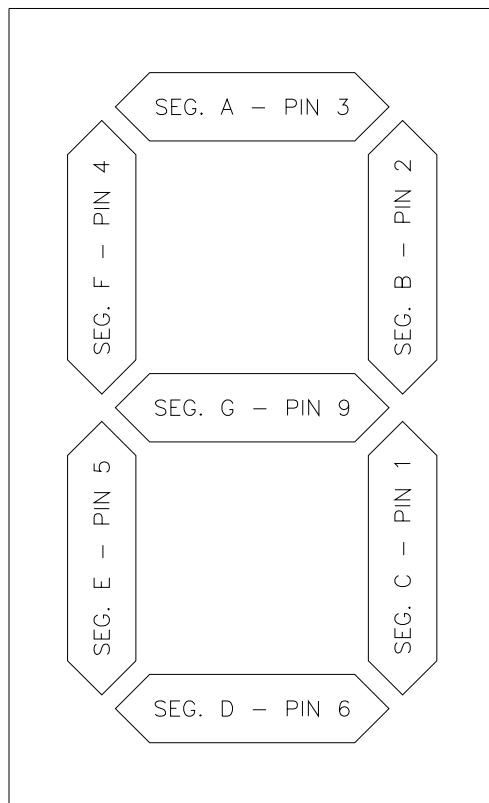
NOTE!!

DO NOT CONNECT CABLE SHIELD AT CONTROL CONSOLE END

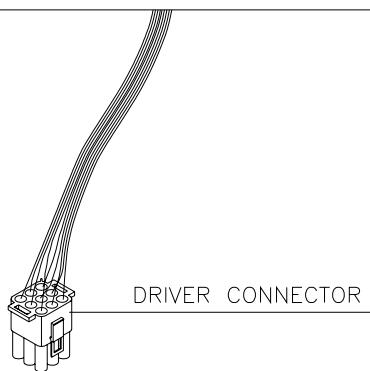
05	30 JUL 03	BOLD FACED GROUNDING NOTE	TLH	
04	17 JUN 03	CHANGED GROUDING PROCEDURES	JJC	MWM
3	17 JAN 02	ADDED AUX TO J-BOX	JJS	
2	25 MAR 92	CHANGED WHITE TO RED	JTC	
1	05 NOV 91	REDREW ON A-SIZE ON ACAD.	JLH	
REV.	DATE	DESCRIPTION	BY	APPR.

CONTROL LOCATION

DAKTRONICS, INC. BROOKINGS, SD 57006				
PROJ: BASKETBALL				
TITLE: SIGNAL CONNECTION; INSTALLATION				
DES. BY: AVB		DRAWN BY: MHART		DATE: 15SEP86
REVISION	APPR. BY: AVB	SCALE: NONE	1009-R10A-28124	
05				

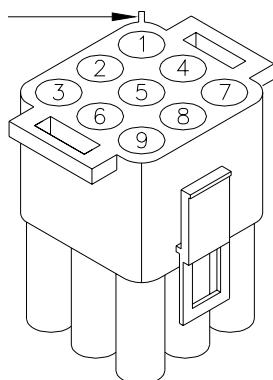


7 SEGMENT BAR DIGIT
FRONT VIEW



CONNECTOR PIN NUMBERING

NOTE SPLINE NEAR NO. 1



COLOR CODE		
PIN NO.	WIRE COLOR	DRIVER SEGMENT
1	ORN	C
2	RED	B
3	BRN	A
4	BLU	F
5	PNK	E
6	TAN	D
7	BLK	COM.
8	GRY	H
9	VIO	G

NOTE: "H" SEGMENT, GRAY WIRE
IS NOT USED ON
7 SEGMENT BAR DIGIT.

THE CONCEPTS EXPRESSED AND DETAILS SHOWN ON THIS DRAWING ARE CONFIDENTIAL AND PROPRIETARY. DO NOT REPRODUCE BY ANY MEANS, INCLUDING ELECTRONICALLY WITHOUT THE EXPRESSED WRITTEN CONSENT OF DAKTRONICS, INC. COPYRIGHT 2003 DAKTRONICS, INC.

DAKTRONICS, INC. BROOKINGS, SD 57006

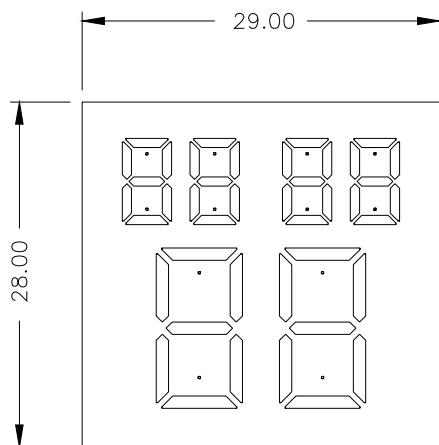
2	30 APR 97	ADDED SEGMENT DESIGNATIONS TO DIGIT FIGURE.	AVB	AVB	PROJ: BASKETBALL
1	2 JAN 92	CHANGED FROM B-SIZE TO A-SIZE DWG.	C FICK		TITLE: SEGMENTATION, 7 SEGMENT BAR DIGIT
REV.	DATE	DESCRIPTION	BY	APPR.	DES. BY: DRAWN BY: HEIDERSCHEIDT DATE: 5 JUN 89
02			REVISION 02	APPR. BY: AVB SCALE: 1=4	1009-R04A-38532

BB-2029-9 SCOREBOARD

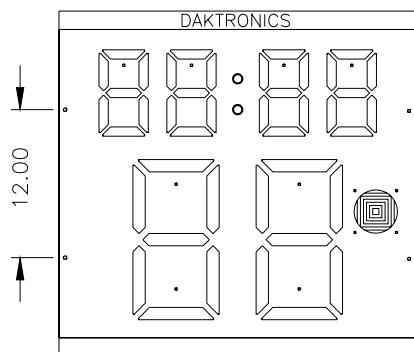
MECHANICAL SPEC

MOUNTING SPEC

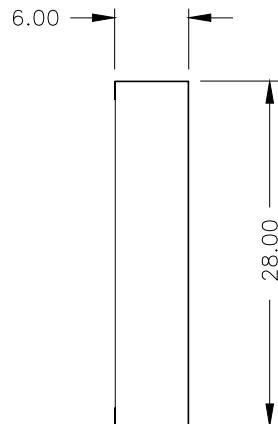
BACK VIEW



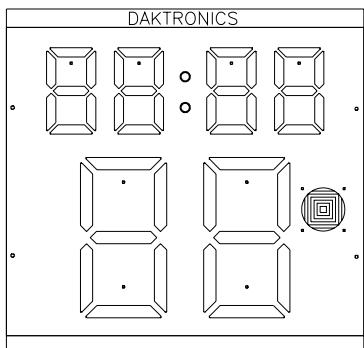
FRONT VIEW



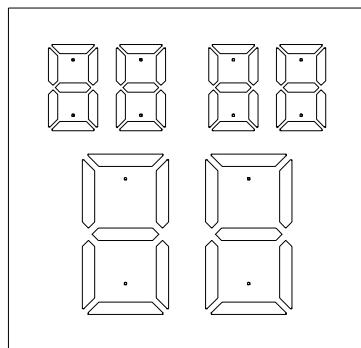
SIDE VIEW



FRONT VIEW



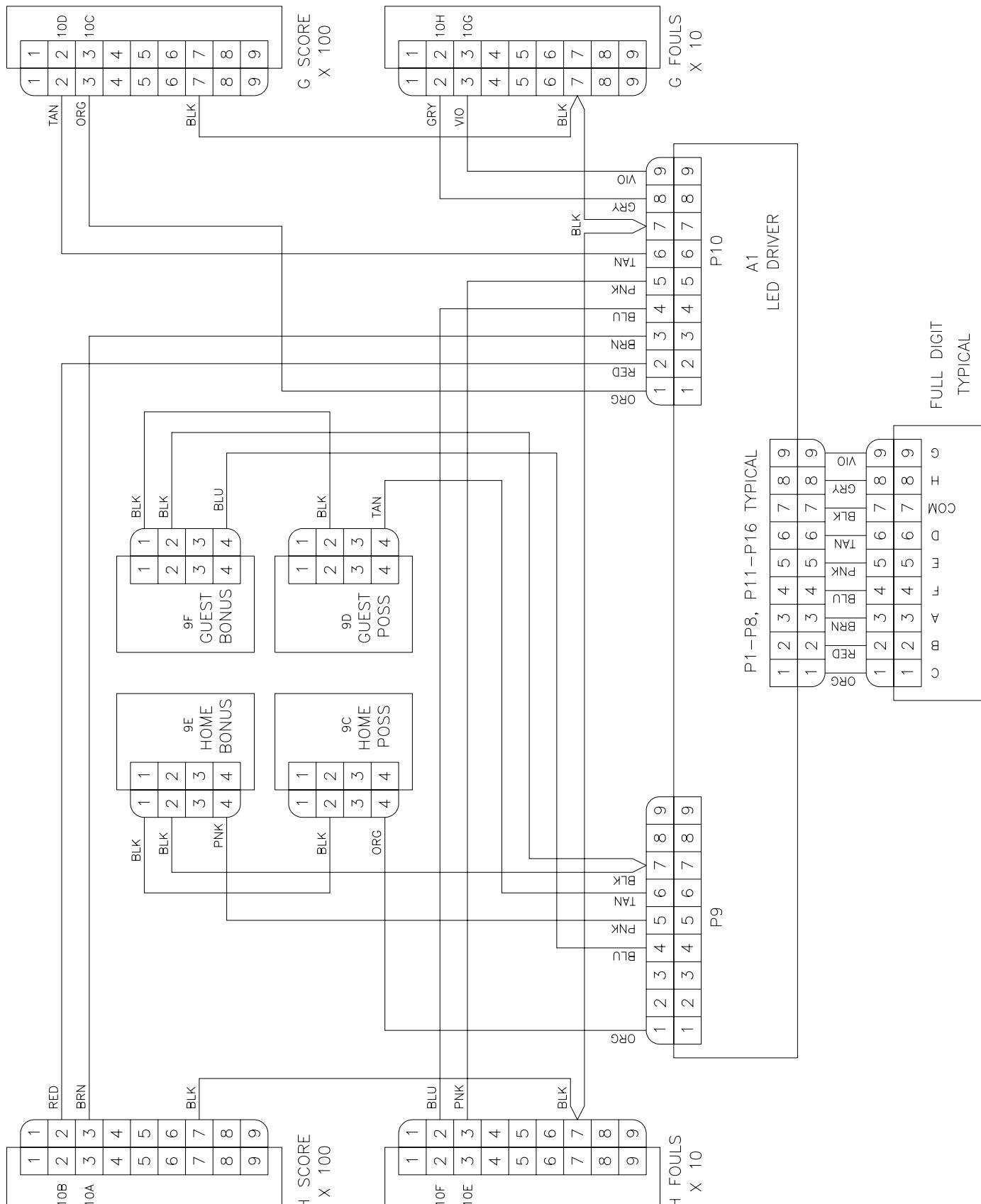
BACK VIEW



DISPLAY SPEC:

- SHIPPING WEIGHT: 70 lbs
 - MOUNTING WEIGHT: 40 lbs
 - DIMENSIONS: 29.00"x 28.00"x 6"

					DAKTRONICS, INC. BROOKINGS, SD 57006		
					PROJ: LED 2 STRING SCOREBOARD		
					TITLE: MECHANICAL SPEC, BB-2029-9		
01	27 MAR 01	CHANGED SHIPPING WEIGHT FROM 45 TO 70 LBS	CPS		DES. BY:	DRAWN BY: DDELEEUW	DATE: 24FEB98
REV.	DATE	DESCRIPTION	BY	APPR.	REVISION	APPR. BY: SCALE: 1=15	1152-E10A-41022



DAKTRONICS, INC. BROOKINGS, SD 57006

PROJ: LED SCOREBOARDS

TITLE: SCHEMATIC, DIGITS & INDICATORS, BB-1813L

DES. BY: DRAWN BY: A VANBEMMEL DATE: 29 NOV 95

REVIS

ON APPR. BY:

DRAWN BY: A VANBEMMEL DATE: 29 NOV 95

1152-R03A-77213

1 22 JUL 98 CORRECTED BLACK WIRES TO 9C, 9D, 9E, & 9F

AVP

AVB

REV. DATE

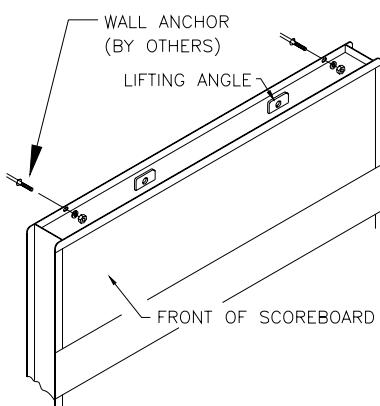
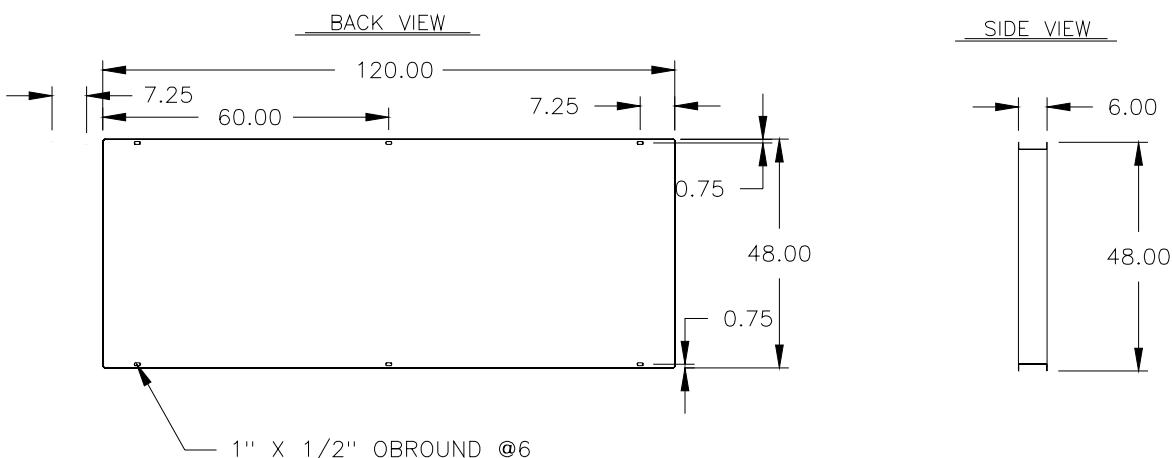
DESCRIPTION

APPR.

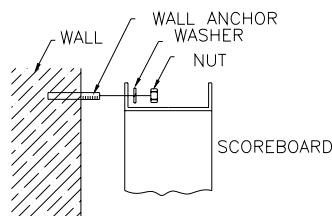
BB-1113-9 SCOREBOARD

MECHANICAL SPEC

MOUNTING SPEC

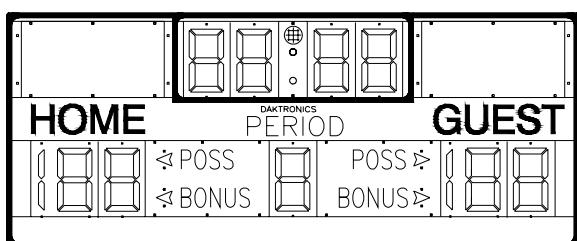


ATTACH THE SCOREBOARD TO THE WALL AT ALL MOUNTING LOCATIONS INDICATED. USE THE APPROPRIATE ANCHORS FOR THE TYPE OF WALL.



NOTE: LIFTING ANGLES WERE DESIGNED ONLY FOR TEMPORARY USE WHILE LIFTING DISPLAY IN PLACE. DO NOT USE LIFTING ANGLES TO SECURE DISPLAY IN PLACE.

FRONT VIEW



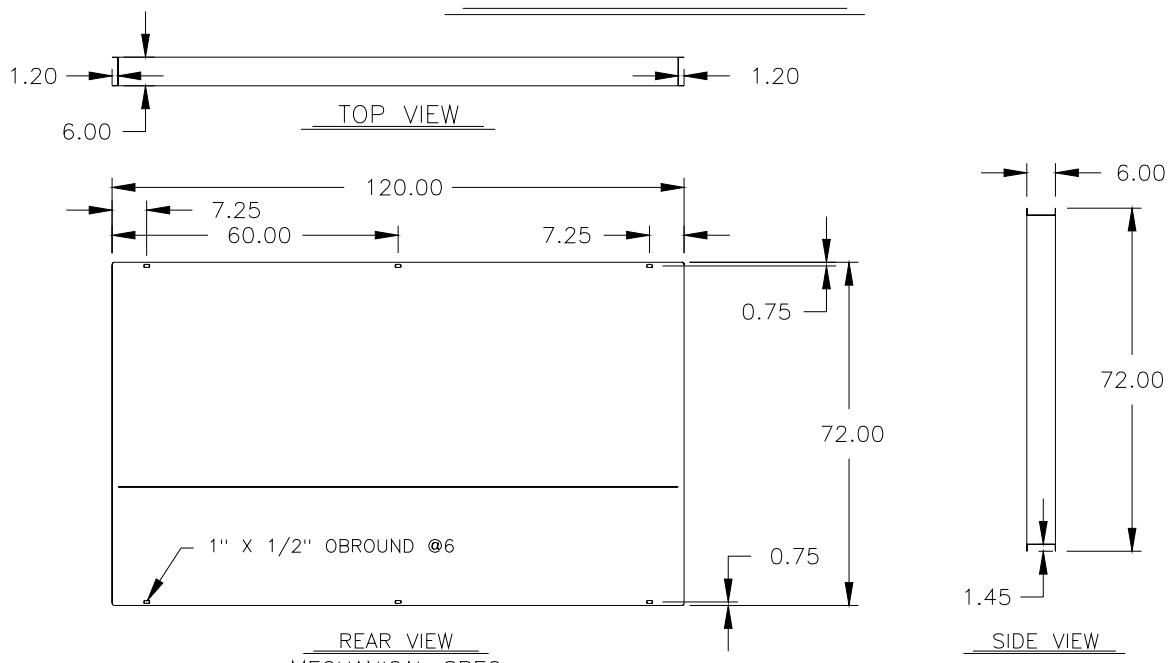
DISPLAY SPEC:

- SHIPPING WEIGHT: 180 lbs
- MOUNTING WEIGHT: 110 lbs
- DIMENSIONS: 120.00"x 48.00"x 6"

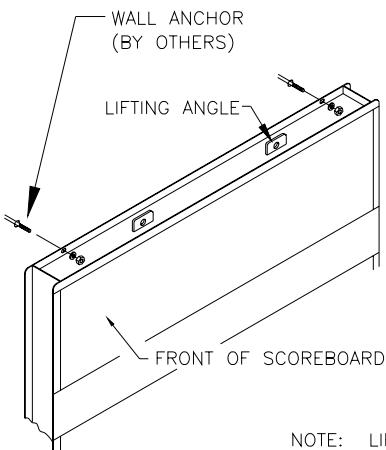
4	10 JUL 00	REMOVED HOME/GUEST CAPTION RAILS. CHANGED MOUNTING WEIGHT FROM 120 TO 110.	EPR	
3	13JAN2000	SWAPPED BONUS AND POSS CAPTIONS	AVB	AVB
2	16 JUNE 98	UPDATED TEXT FOR CLARITY	CJB	
1	06MAR98	REMOVE FRAME OUTLINE AND RIVET HOLES FROM BACK VIEW.	JML	
REV.	DATE	DESCRIPTION	BY	APPR.

		DAKTRONICS, INC. BROOKINGS, SD 57006	
PROJ: LED 2 STRING SCOREBOARDS			
TITLE: MECHANICAL SPEC, BB-1113-9			
DES. BY:	DRAWN BY: HBONER	DATE: 9 FEB 98	
REVISION	APPR. BY:	SCALE: 1=40	1152-E10A-90624

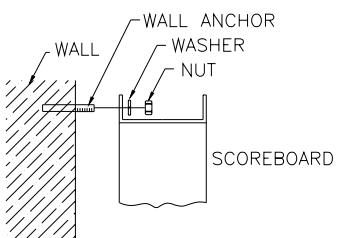
BB-1813 SCOREBOARD



MOUNTING SPEC

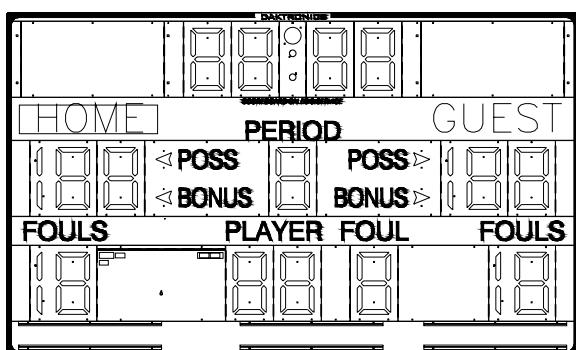


ATTACH THE SCOREBOARD TO THE WALL AT ALL MOUNTING LOCATIONS INDICATED. USE THE APPROPRIATE ANCHORS FOR THE TYPE OF WALL.



NOTE: LIFTING ANGLES WERE DESIGNED ONLY FOR TEMPORARY USE WHILE LIFTING DISPLAY IN PLACE. DO NOT USE LIFTING ANGLES TO SECURE DISPLAY IN PLACE.

FRONT VIEW



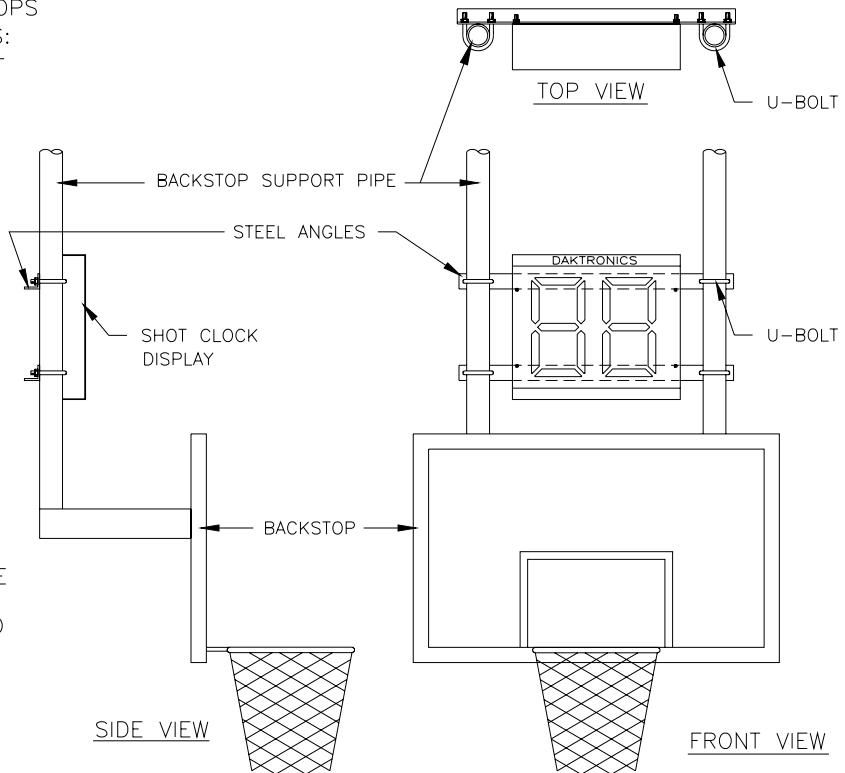
DISPLAY SPEC:

- SHIPPING WEIGHT: 260 lbs
- MOUNTING WEIGHT: 160 lbs
- DIMENSIONS: 120.00" x 72.00" x 6.00"

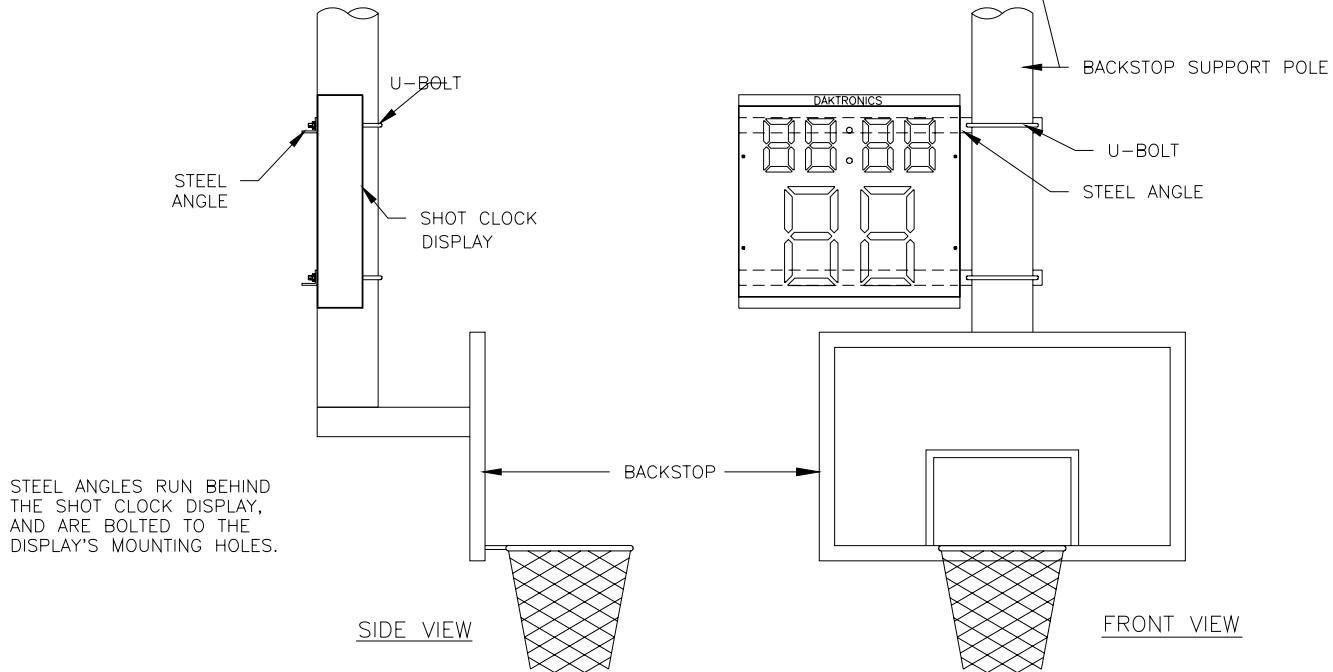
1	06MAR98	REMOVED FRAME OUTLINE AND RIVETS FROM BACK VIEW.	JML	
2	16 JUNE 98	UPDATED TEXT FOR CLARITY.	CJB	
3	03 DEC 98	ADDED TOP VIEW TO MECHANICAL SPEC.	MWJ	
DAKTRONICS, INC. BROOKINGS, SD 57006				
PROJ: LED 2 STRING SCOREBOARDS				
TITLE: MECHANICAL SPEC, BB-1813				
DES. BY:		DRAWN BY: HBONER		DATE: 9 FEB 98
REVISION		APPR. BY:		1152-E10A-90640
REV.		SCALE: 1=40		

6	10 JUL 00	CHANGED MOUNTING WEIGHT FROM 200 TO 160. REMOVED HOME/GUEST CAPTION RAILS.	EPR	
5	24 JAN 00	MADE DRAWING GENERIC TO INCLUDE ALL MODELS.	MWJ	
4	05 JAN 99	SWITCHED BONUS AND POSITION ARROWS.	JNILSE	
REV.	DATE	DESCRIPTION	BY	APPR.

CEILING MOUNTED BACKSTOPS
SUPPORTED BY TWO PIPES:



CEILING MOUNTED BACKSTOPS
SUPPORTED BY ONE PIPE OR POLE:



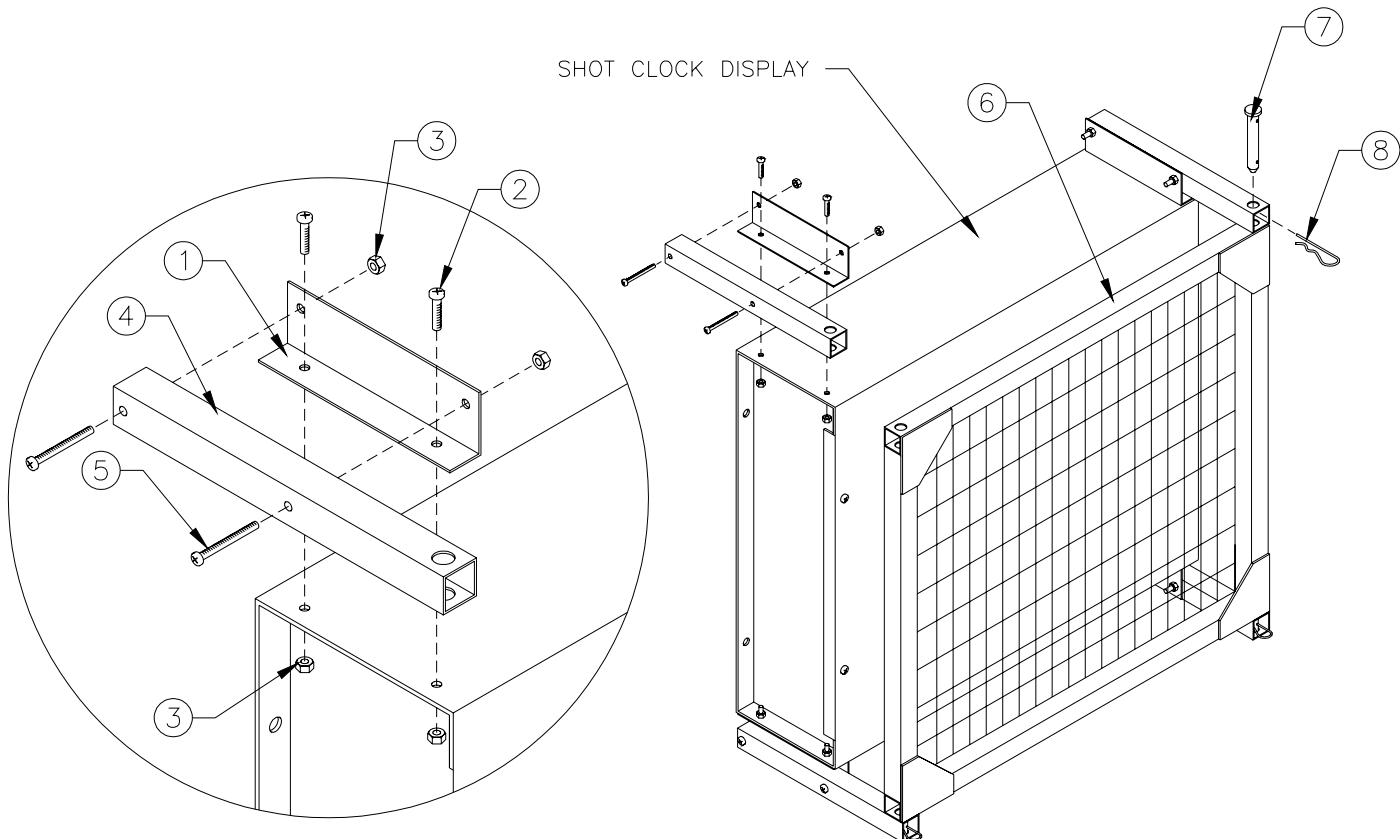
DAKTRONICS, INC. BROOKINGS, SD 57006

PROJ:			
TITLE:	BACKSTOP MOUNTING SUGGESTIONS		
DES. BY:	DRAWN BY: A VANBEMMEL DATE: 13 MAR 97		
REVISION	APPR. BY:		
	SCALE:	NONE	
REV.	DATE	DESCRIPTION	BY APPR.
1009-R10A-91230			

SCREEN INSTALLATION PROCEDURE:

THE NUMBERS IN PARENTHESSES REFER TO THE NUMBERS ON THE DRAWING BELOW, AND IN THE TABLE AT THE BOTTOM OF THE PAGE.

1. SECURE THE ANGLES (1) TO THE TOP OF THE DISPLAY USING THE SHORT SCREWS (2) AND NUTS (3).
2. ATTACH THE EXTENSION TUBES (4) TO THE ANGLES USING THE LONG SCREWS (5). SECURE WITH NUTS (3).
3. POSITION THE SCREEN (6) BETWEEN THE TUBES, ALIGN THE HOLES IN THE SCREEN WITH THE HOLES IN THE TUBES, AND INSERT PINS (7).
4. SECURE THE PINS BY INSERTING CLIPS (8) THROUGH THE ENDS OF THE TUBES, AND INTO THE HOLE NEAREST TO THE HEAD OF THE PIN.



USE WITH BB-2014 →
USE WITH BB-2015 →

REF. NO.	DAKTRONICS PART NUMBER	QTY.	DESCRIPTION
1	OM-93845	4	ANGLE, SCREEN MOUNTING
1	OM-94453	4	ANGLE, SCREEN MOUNTING
2	HC-1022	8	SCREW, 10-24 x 5/8"
3	HC-1243	16	NUT, #10-24 HEX W/ LOCKWASHER
4	OM-32336	4	EXTENSION TUBE, SCREEN MOUNTING
5	HC-1026	8	SCREW, #10-24 x 1 3/4"
6	OA-1065-0170	1	SCREEN, SHOT CLOCK
7	OL-32387	4	PIN, 1/2" DIA x 3"
8	HS-1066	4	CLIP, HAIR PIN COTTER

DAKTRONICS, INC. BROOKINGS, SD 57006

PROJ:

TITLE: SCREEN MOUNTING, SHOT CLOCK

DES. BY: AVB

DRAWN BY: A VANBEMMEL

DATE: 17 JUN 97

REVISION

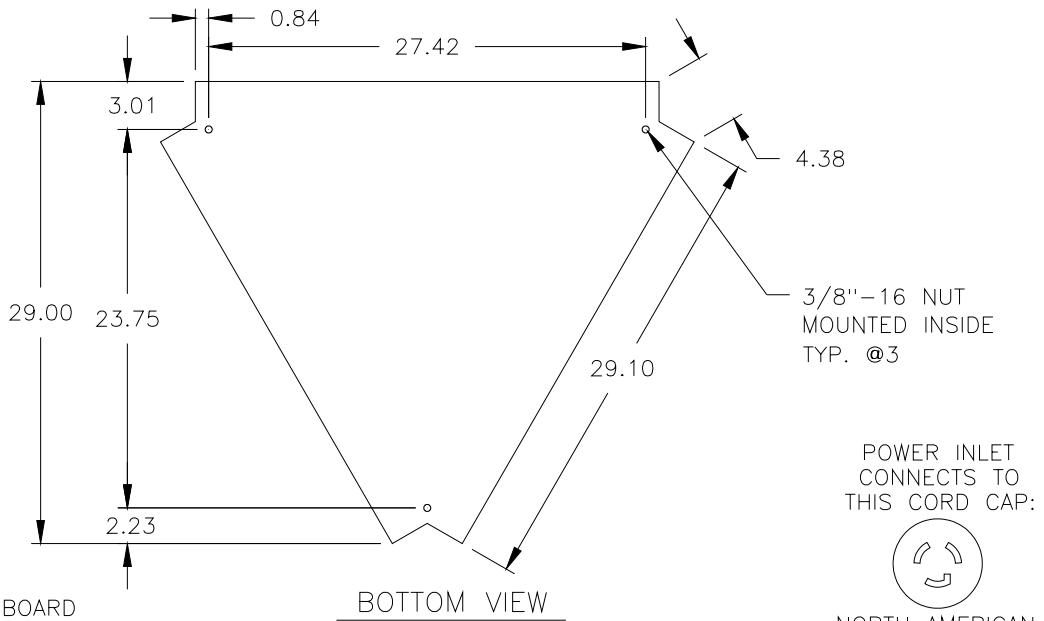
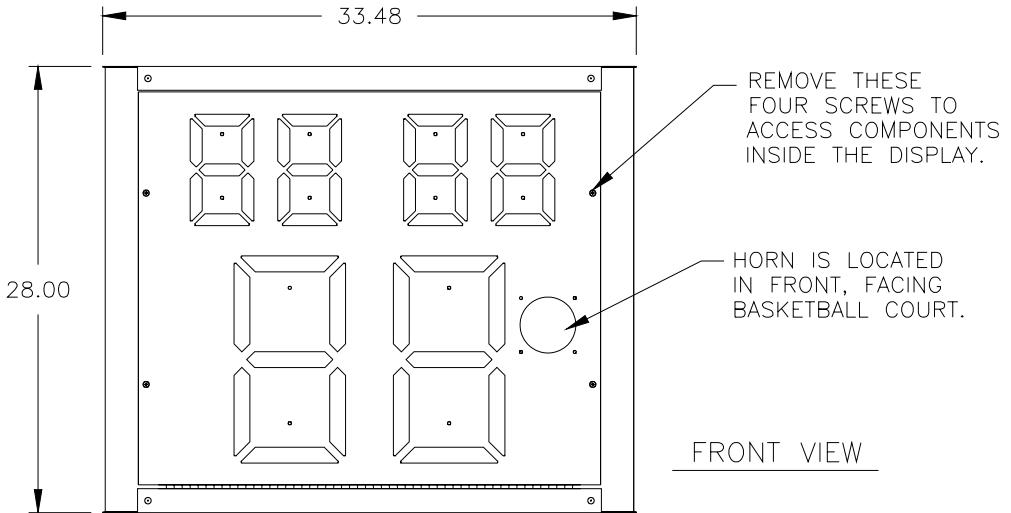
APPR. BY:

SCALE:

1=10

1009-R10A-93846

1	20 JUN 97	CHANGED SPEED NUTS TO HEX NUTS. CHANGED SQUARE HOLES IN ANGLE TO ROUND.	AVB	AVB
REV.	DATE	DESCRIPTION	BY	APPR.



ESTIMATED SCOREBOARD
WEIGHT IS APPROXIMATELY
60 LBS.

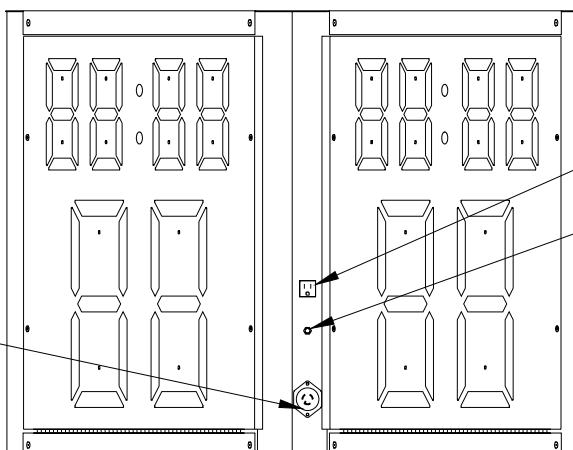
MAXIMUM POWER
CONSUMPTION IS ABOUT
200 WATTS.

POWER IN, 120V AC

POWER INLET
CONNECTS TO
THIS CORD CAP:



NORTH AMERICAN
LOCKING
NEMA L5-15R

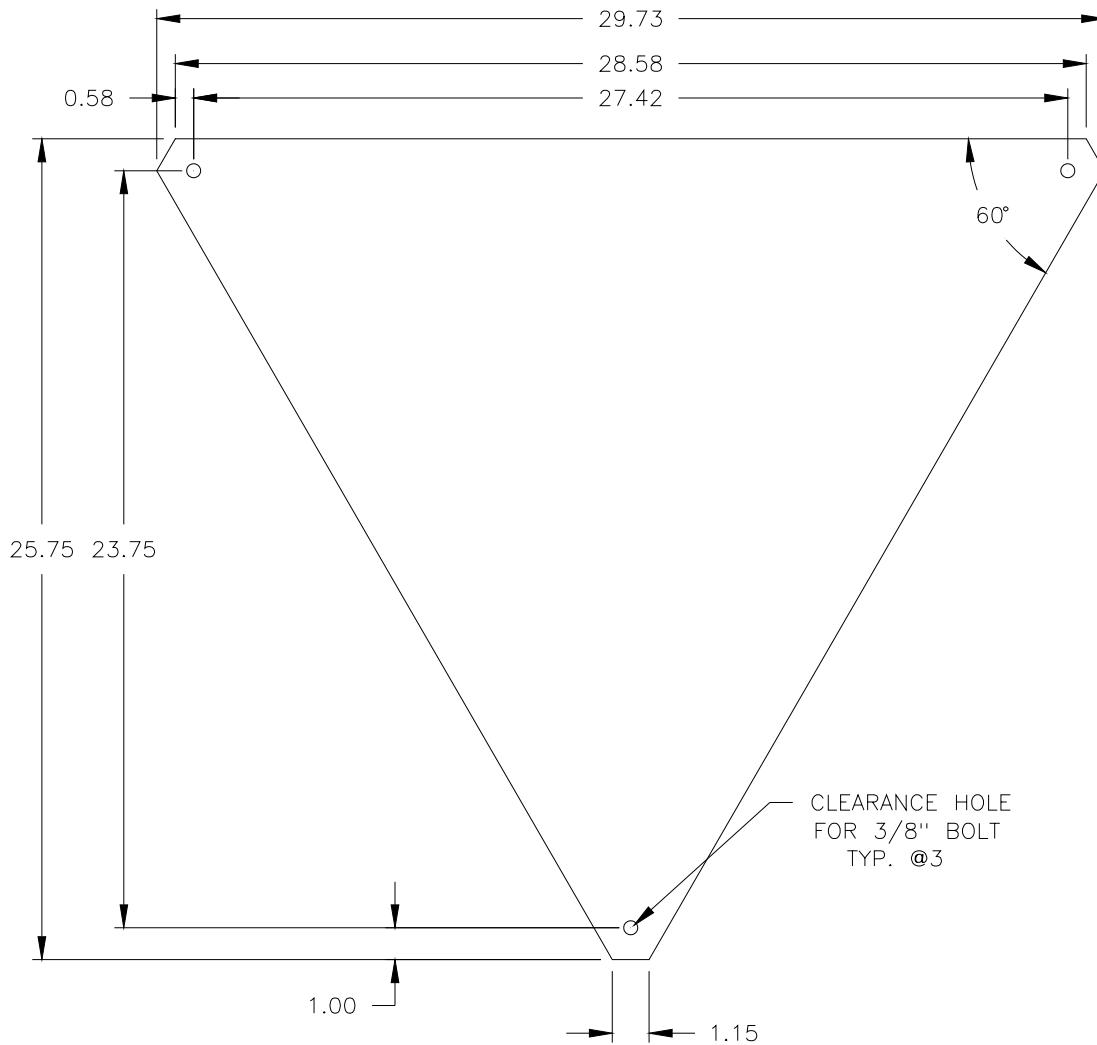


REAR VIEW

4	27 MAR 01	CHANGED MAXIMUM POWER CONSUMPTION FROM 100 WATTS TO 200 WATTS	CPS	
3	10 JUL 00	REMOVED THE FUSE.	EPR	
2	15 OCT 97	CHANGED MOUNTING NUT LOCATIONS FROM TWO NUTS TO THREE, MOVED TO CORNERS.	AVB	
1	10 OCT 97	CORRECTED FACE PANEL WIDTH AND DIGIT OUTLINES.	AVB	AVB
REV.	DATE	DESCRIPTION	BY	APPR.

DAKTRONICS, INC. BROOKINGS, SD 57006	
PROJ: LED BASKETBALL SCOREBOARDS	
TITLE: MECHANICAL SPEC; BB-2023-9	
DES. BY: AVB	DRAWN BY: MBESSLER
REVISION	APPR. BY:
	SCALE: 1=12
1152-E10A-95932	

RECOMMENDED MOUNTING PLATE LAYOUT



MODEL BB-2023 3-SIDED GAME/SHOT CLOCK IS EQUIPPED WITH THREE 3/8-16 NUTS, MOUNTED INSIDE THE BOTTOM. FOR PROPER MOUNTING, PROVIDE A STURDY MOUNTING PLATE OR STRUCTURE WITH HOLES LOCATED AS SHOWN. INSERT 3/8-16 BOLTS THROUGH HOLES AND THREAD INTO THE INTERNAL NUTS.

BE SURE THE STRUCTURE IS ADEQUATE TO SAFELY SUPPORT THE DISPLAY, WHICH WEIGHS ABOUT 60 LB. STRESSES INCURRED WHEN THE BACKSTOP MOVES DURING PLAY MUST BE TAKEN INTO CONSIDERATION.

DAKTRONICS, INC. IS NOT RESPONSIBLE FOR MOUNTING STRUCTURES DESIGNED AND INSTALLED BY OTHERS.

SEE DRAWING 1152-E10A-95932 FOR DIMENSIONS OF MODEL BB-2023 DISPLAY, AND OTHER DETAILS.

DAKTRONICS, INC. BROOKINGS, SD 57006

PROJ:

TITLE: MOUNTING PLATE RECOMMENDATIONS, BB-2023

DES. BY: AVB

DRAWN BY: A VANBEMMEL

DATE: 17 OCT 97

REVISION

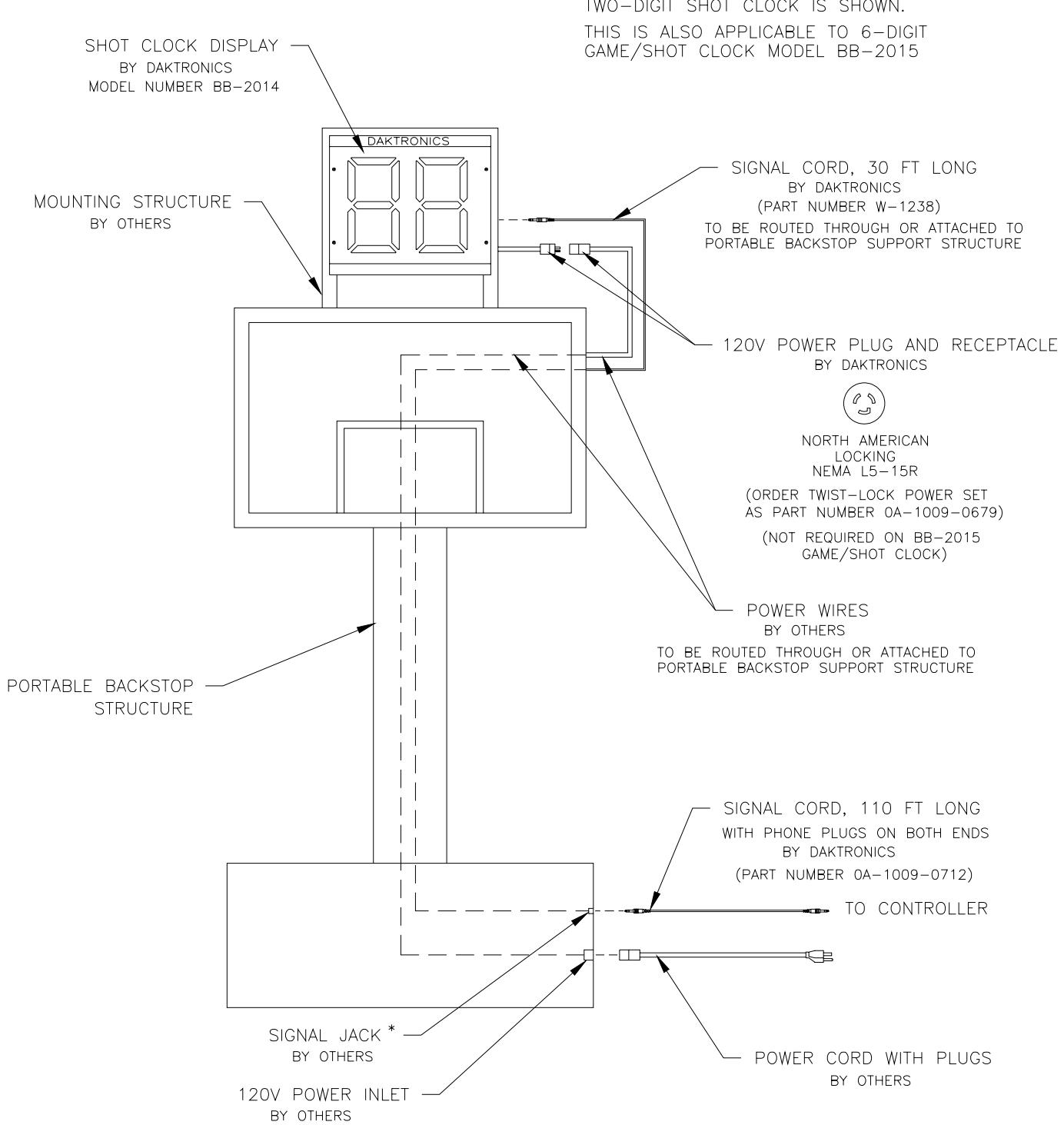
APPR. BY:

APPR.

SCALE: 1=6

1152-R07A-97631

1	23DEC97	3/8-16 WAS 3/8-13.	RJL	
REV.	DATE	DESCRIPTION	BY	APPR.

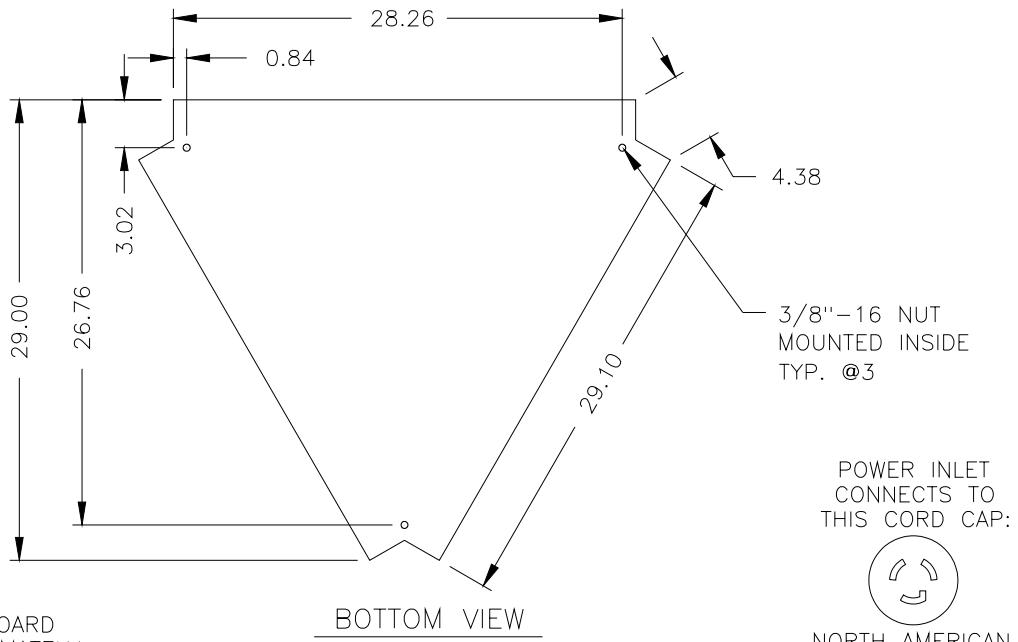
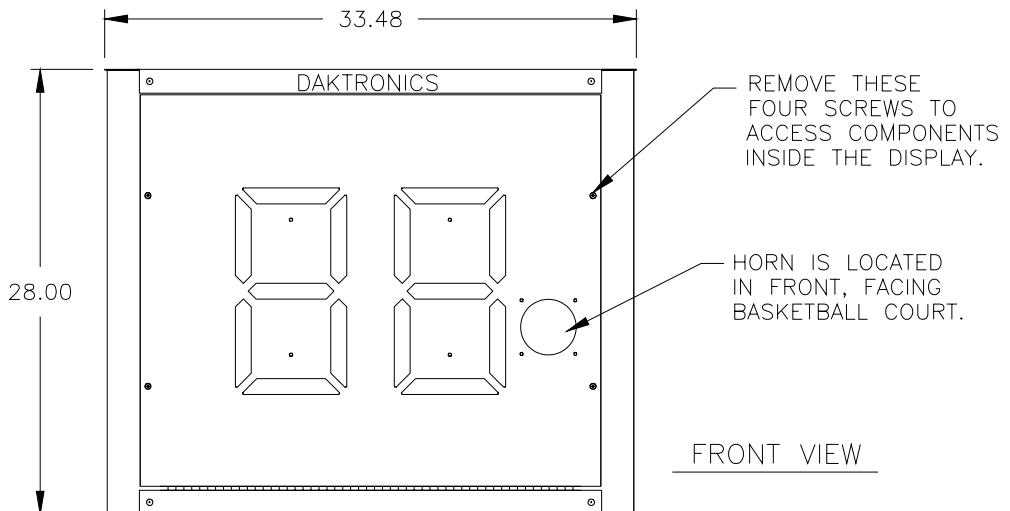


* SIGNAL CONNECTORS ARE 1/4" STEREO HEADPHONE PLUGS

DAKTRONICS, INC. BROOKINGS, SD 57006

2	29 JUN 99	DELETED TABLE. ADDED NOTE ABOUT BB-2015	AVB	AVB
1	10FEB98	ADDED NEW MODELS TO THE TABLE	DDL	
REV.	DATE	DESCRIPTION	BY	APPR.

PROJ:	TITLE: WIRING FOR SHOT CLOCK ON PORTABLE BACKSTOP		
DES. BY: AVB	DRAWN BY: A VANBEMMEL	DATE: 07 NOV 97	
REVISION	APPR. BY:	SCALE: NONE	1009-R04A-98293



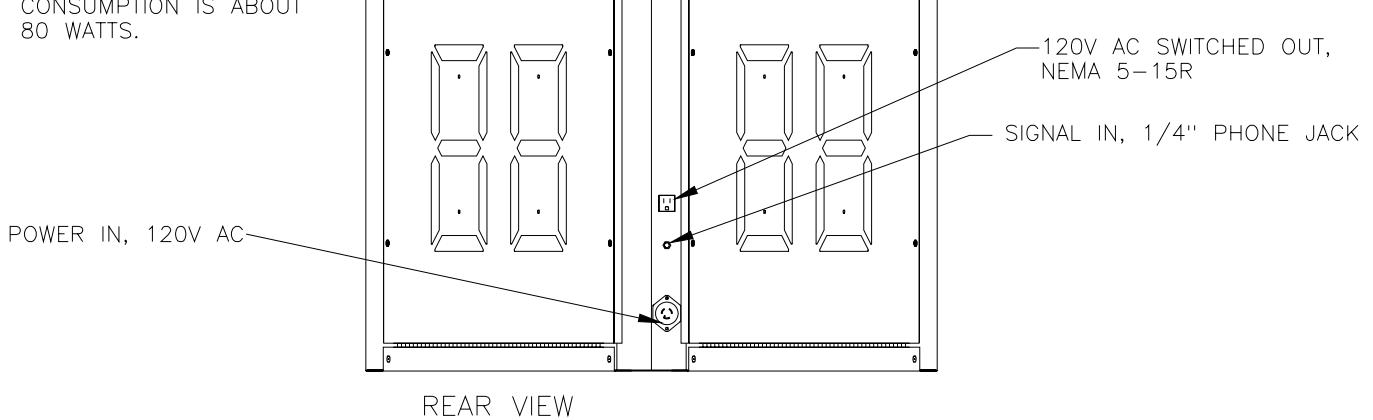
ESTIMATED SCOREBOARD
WEIGHT IS APPROXIMATELY
45 LBS.

MAXIMUM POWER
CONSUMPTION IS ABOUT
80 WATTS.

POWER INLET
CONNECTS TO
THIS CORD CAP:



NORTH AMERICAN
LOCKING
NEMA L5-15R

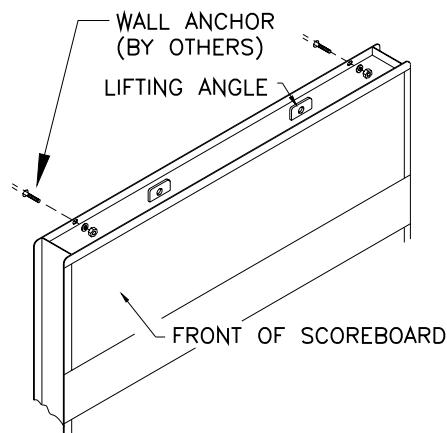
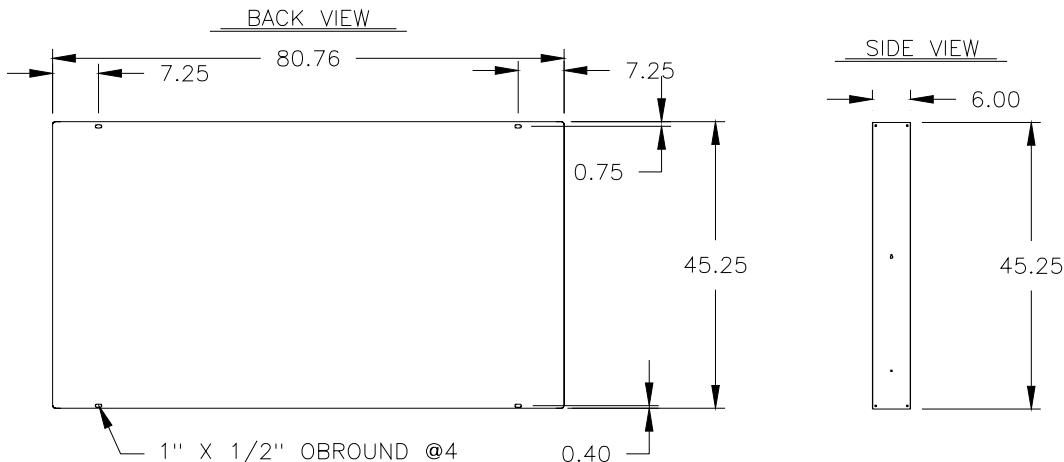


3	27 MAR 01	CHANGED SCOREBOARD WEIGHT FROM 60 TO 45 LBS. CHANGED MAXIMUM POWER CONSUMPTION FROM 100 TO 80 WATTS.	CPS		DAKTRONICS, INC. BROOKINGS, SD 57006		
2	10 JUL 00	REMOVED THE FUSE.	EPR		PROJ: LED BASKETBALL SCOREBOARDS		
1	05 JAN 00	CORRECTED DIMENSIONS.	JNILSE		TITLE: MECHANICAL SPEC; BB-2026-9		
REV.	DATE	DESCRIPTION	BY	APPR.	DES. BY: AVB	DRAWN BY: DDEEEUW	DATE: 10 DEC 97

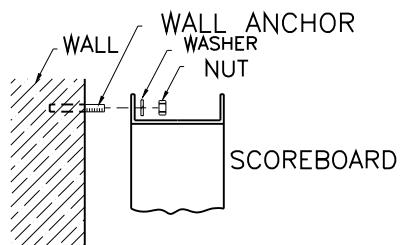
BB-2021 SCOREBOARD

MECHANICAL SPEC

MOUNTING SPEC

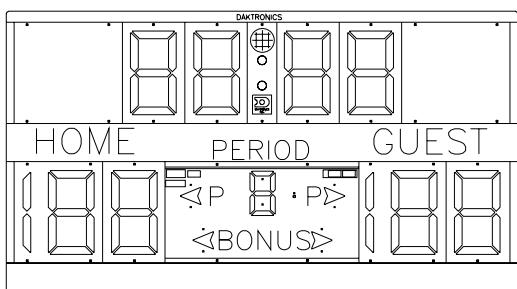


ATTACH THE SCOREBOARD TO THE WALL AT ALL MOUNTING LOCATIONS INDICATED. USE THE APPROPRIATE ANCHORS FOR THE TYPE OF WALL.



NOTE: LIFTING ANGLES WERE DESIGNED ONLY FOR TEMPORARY USE WHILE LIFTING DISPLAY IN PLACE. DO NOT USE LIFTING ANGLES TO SECURE DISPLAY IN PLACE.

FRONT VIEW



DISPLAY SPEC:

- SHIPPING WEIGHT: 120 lbs
- MOUNTING WEIGHT: 80 lbs
- DIMENSIONS: 80.76"x 45.25"x 6.00"

3	10 JUL 00	CHANGED MOUNTING WEIGHT FROM 70 TO 80.	EPR	
2	06MAR98	REMOVED FRAME OUTLINE AND RIVETS HOLES FROM BACK VIEW.	JML	
1	26 JAN 98	CHANGED DRAWING TITLE AND SPLIT ELECTRICAL AND MECHANICAL SPEC SHEETS INTO TWO DRAWINGS.	HBB	
REV.	DATE	DESCRIPTION	BY	APPR.

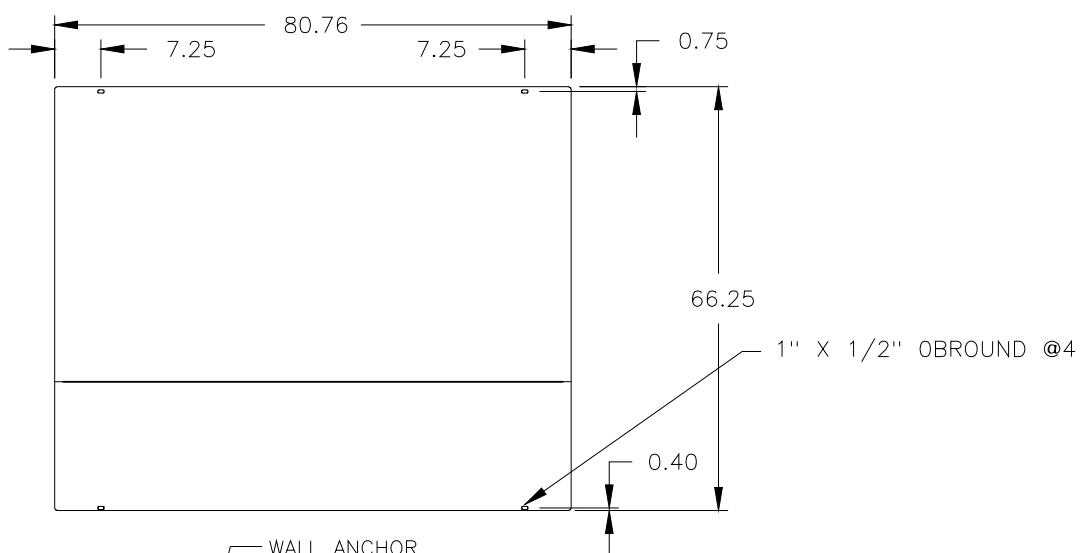
DAKTRONICS, INC. BROOKINGS, SD 57006				
PROJ: LED 2 STRING SCOREBOARD				
TITLE: MECHANICAL SPEC, BB-2021				
DES. BY:	DRAWN BY:	HBB		DATE: 31 DEC 97
REVISION	APPR. BY:		SCALE: 1=30	1152-E10A-99480

MOUNTING SPEC

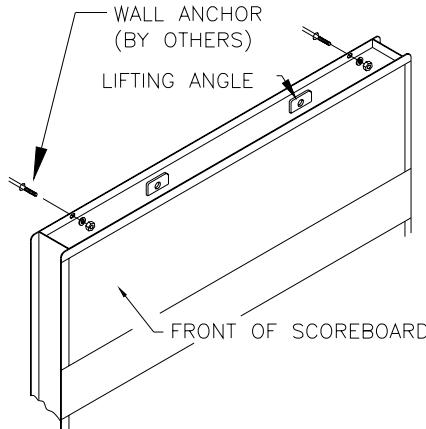
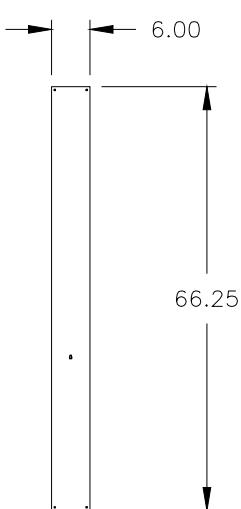
BB-2025 SCOREBOARD

MECHANICAL SPEC

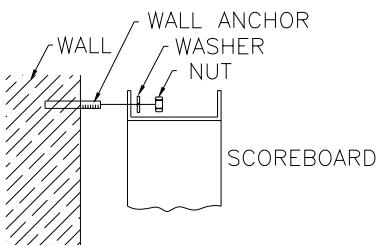
REAR VIEW



SIDE VIEW

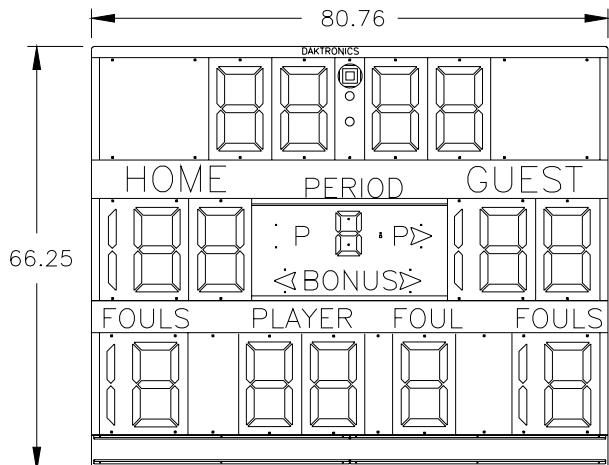


ATTACH THE SCOREBOARD TO THE WALL AT ALL MOUNTING LOCATIONS INDICATED. USE THE APPROPRIATE ANCHORS FOR THE TYPE OF WALL.



NOTE: LIFTING ANGLES WERE DESIGNED ONLY FOR TEMPORARY USE WHILE LIFTING DISPLAY IN PLACE. DO NOT USE LIFTING ANGLES TO SECURE DISPLAY IN PLACE.

FRONT VIEW



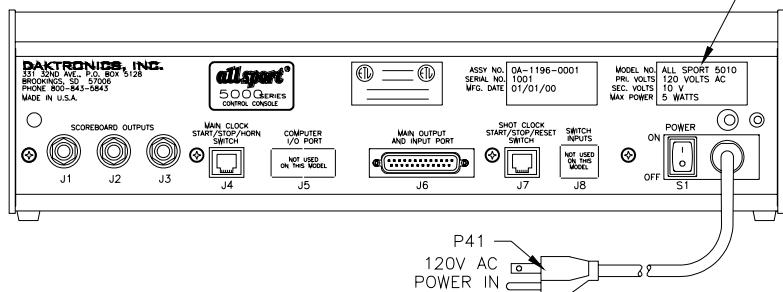
DISPLAY SPEC:

- SHIPPING WEIGHT: 160 lbs
- MOUNTING WEIGHT: 110 lbs
- DIMENSIONS: 80.76"x 66.25"x 6.00"

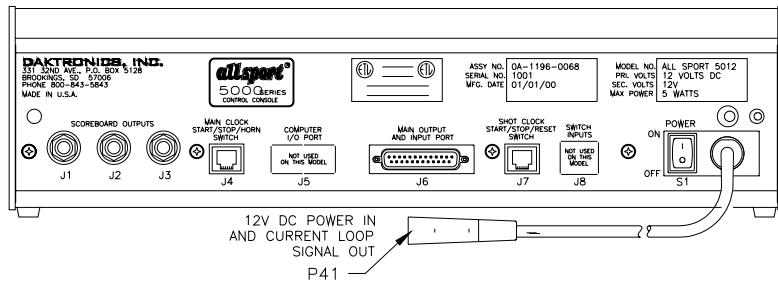
4	10 JUL 00	CHANGED MOUNTING WEIGHT FROM 100 TO 110.	EPR	
3	06MAR98	REMOVED FRAME OUTLINE AND RIVET HOLES FROM BACK VIEW.	JML	
2	29 JAN 98	ADDED CAPTION RAILES.	HBB	
1	26 JAN 98	CHANGED DRAWING TITLE AND SPLIT ELECTRICAL AND MECHANICAL SPEC SHEETS INTO TWO DRAWINGS.	HBB	
REV.	DATE	DESCRIPTION	BY	APPR.

DAKTRONICS, INC. BROOKINGS, SD 57006			
PROJ: LED 2 STRING SCOREBOARD			
TITLE: MECHANICAL SPEC, BB-2025			
DES. BY:	DRAWN BY:	HBB	DATE: 06 JAN 98
REVISION	APPR. BY:	1=30	1152-E10A-99481
SCALE:			

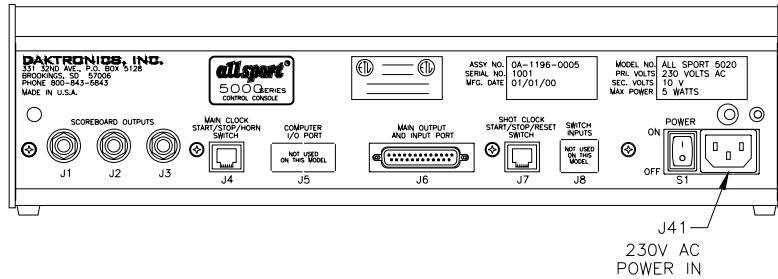
ALL SPORT 5010



ALL SPORT 5012



ALL SPORT 5020



J1-J3 - OUTPUT #1-#3	
CONTACT	FUNCTION
TIP	CURRENT LOOP OUTPUT 1 +
RING	CURRENT LOOP OUTPUT 1 -
SHAFT	GND

J4 - START/STOP/HORN	
PIN #	FUNCTION
1	SWITCH INPUT 2 -
2	SWITCH INPUT 1 -
3	RELAY OUTPUT -
4	RELAY OUTPUT +
5	SWITCH INPUT 1 +
6	SWITCH INPUT 2 +

J6 - MAIN PORT

PIN #	FUNCTION
1	EARTH
2	RS232 RECEIVE +
3	RS232 TRANSMIT +
4	NOT USED
5	NOT USED
6	NOT USED
7	C. L. OUTPUT 4 - /RS232 GND
8	SWITCH INPUT 1 +
9	CURRENT LOOP INPUT +
10	CURRENT LOOP INPUT -
11	RELAY OUTPUT +
12	NOT USED
13	NOT USED
14	CURRENT LOOP OUTPUT 1 +
15	CURRENT LOOP OUTPUT 1 -
16	CURRENT LOOP OUTPUT 2 +
17	CURRENT LOOP OUTPUT 2 -
18	CURRENT LOOP OUTPUT 3 +
19	CURRENT LOOP OUTPUT 3 -
20	NOT USED
21	SWITCH INPUT 1 -
22	CURRENT LOOP OUTPUT 4 +
23	RELAY OUTPUT -
24	10V AC/DC INPUT-P
25	10V AC/DC INPUT-N

J7 - SHOT/PLAY CLOCK

PIN #	FUNCTION
1	SWITCH INPUT 5 -
2	SWITCH INPUT 4 -
3	SWITCH INPUT 3 -
4	SWITCH INPUT 3 +
5	SWITCH INPUT 4 +
6	SWITCH INPUT 5 +

FOR STANDARD CODES, THESE FUNCTIONS ARE USUALLY ASSIGNED TO THE FOLLOWING TASKS:

FUNCTION	USUAL TASK
SW IN 1	MAIN CLOCK STOP/START
SW IN 2	MAIN CLOCK HORN
SW IN 3	NOT USED
SW IN 4	SHOT/PLAY CLOCK STOP
SW IN 5	SHOT/PLAY CLOCK RESET
SW OUT	CLOCK STOP OUT
CL OUT 1	SCOREBOARD OUTPUT
CL OUT 2	SCOREBOARD OUTPUT
CL OUT 3	SCOREBOARD OUTPUT
CL OUT 4	DATA STREAM

ALL SPORT 5000 SERIES MODELS	
MODEL #	FUNCTION
5010	120V, STANDARD PROGRAMMING
5020	230V, STANDARD PROGRAMMING

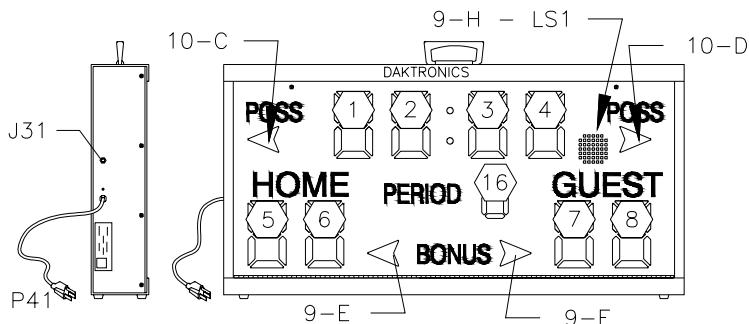
3	05 OCT 01	ADDED A/S 5012 TO LAYOUT CHANGED DWG SCALE FROM 1=3 TO 1=4	NW	
2	24 APR 99	CHANGED TO BE FOR A/S 5010 CONSOLES ONLY	EB	
1	13 APR 99	ADDED J10 ADDED A/S 5010 LAYOUT	EB	
REV.	DATE	DESCRIPTION	BY	APPR.

DAKTRONICS, INC. BROOKINGS, SD 57006
PROJ: ALL SPORT 5000 SERIES CONSOLES
TITLE: REAR VIEW, A/S 5010 CONNECTOR ASSIGNMENTS
DES. BY: EBRAVEK DRAWN BY: EBRAVEK DATE: 27APR98
REVISION APPR. BY: SCALE: 1=4 1196-R04A-102142

BB-2039-9 SCOREBOARD

ELECTRICAL/SIGNAL SPEC

DIGIT, SIGNAL AND POWER SPEC

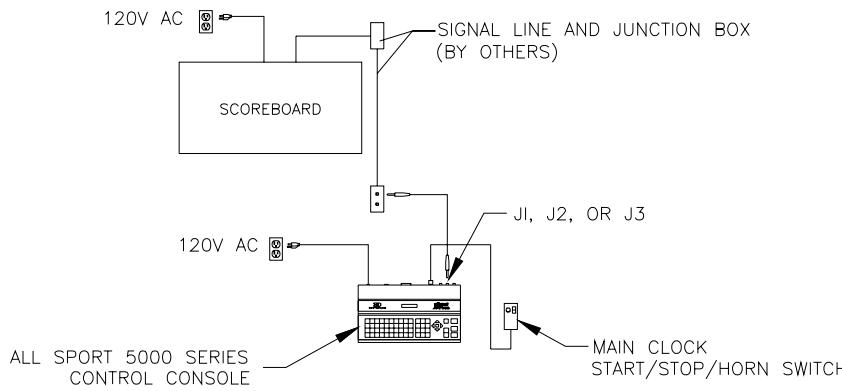


NOTE: THE NUMBER LISTED BY EACH DIGIT INDICATES THE DIGIT DESIGNATION IN RELATION TO THE LED DRIVER.

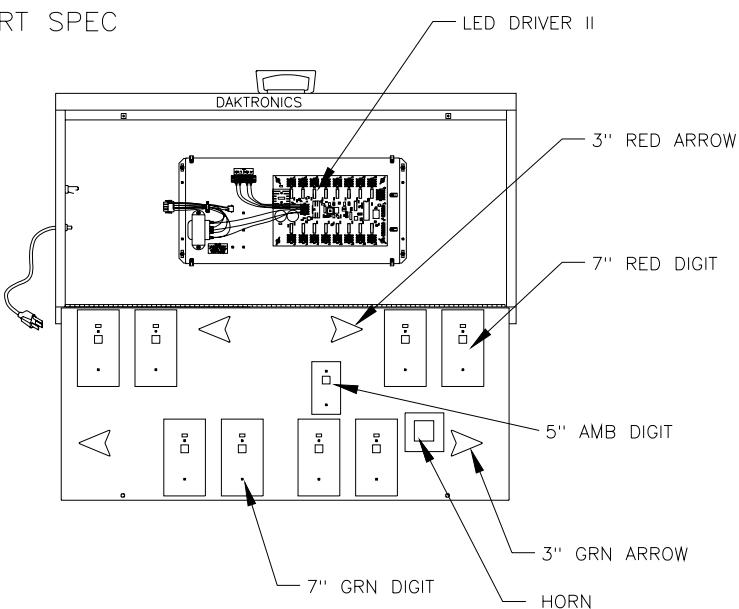
NOTE: REFER TO DRAWING BELOW OR ALLSPORT MANUAL FOR ADDITIONAL WIRING DIAGRAMS OF DISPLAY. USE MINIMUM OF 24AWG, SHIELDED, TWO CONDUCTOR CABLE FOR SIGNAL TERMINATION.

POWER SPEC:

- 120V AC, 15 AMP CIRCUIT REQUIRED.
- 100 WATTS MAXIMUM.
- PRODUCT SAFETY APPROVAL:
ETL LISTED, TESTED TO CSA STANDARDS,
AND CE LABELED FOR INDOOR USE.



PART SPEC



NOTE: TO ACCESS LED DRIVER, REMOVE TWO SCREWS HOLDING ACCESS DOOR CLOSED. THESE SCREWS ARE LOCATED ON TOP OF ACCESS DOOR. SECURE OPEN.

REPLACEMENT PART NUMBERS

PART NO.	DESCRIPTION
0A-1009-0038	J BOX, 1/4 PHONO
0A-1152-0332	HORN, 120V AC W/CAP
OP-1150-0187	PCB; 7" RED 7 SEG LED
OP-1150-0037	PCB; 7" GRN 7 SEG LED
OP-1150-0081	PCB; 5" AMB 7 SEG LED
OP-1150-0126	LED DRIVER II
OP-1150-0185	ARROW; 3" RED LED
OP-1150-0129	ARROW; 3" GRN LED
T-1066	TRANSFORMER, 16V SEC.
W-1236	CABLE, A/S TO J BOX

CAUTION: DO NOT WORK ON ENERGIZED DISPLAY UNLESS YOU ARE A CERTIFIED ELECTRICIAN OR DIRECTED BY DAKTRONICS.

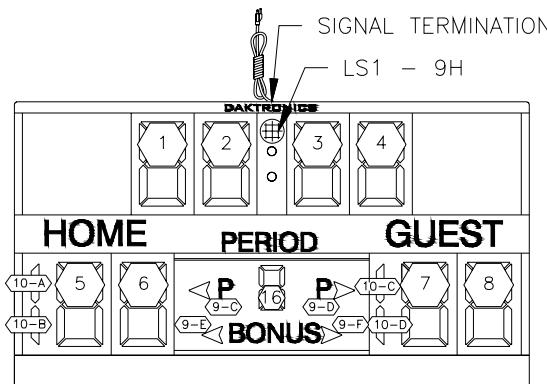
03	19 SEP 01	CHANGED TITLE TO ELECTRICAL & SIGNAL SPEC, BB-2039-9	ALG	
02	19OCT00	CHANGED PART NUMBER OP-1150-0036, 0128 TO OP-1150-0187, 0185	CPS	
01	21DEC99	UPDATED DRAWING TO SHOW ELECTRICAL/SIGNAL SPEC FOR ALL SPORT 5000.	RJN	
REV.	DATE	DESCRIPTION	BY	APPR.

DAKTRONICS, INC. BROOKINGS, SD 57006				
PROJ: STANDARD INDOOR LED SCOREBOARDS				
TITLE: ELECTRICAL & SIGNAL SPEC, BB-2039-9				
DES. BY:		D DELEEUW	DRAWN BY:	DATE: 10 MAY 99
REVISION	APPR. BY:		SCALE: 1=20	1152-E10A-115546

BB-2021 SCOREBOARD

ELECTRICAL/SIGNAL SPEC

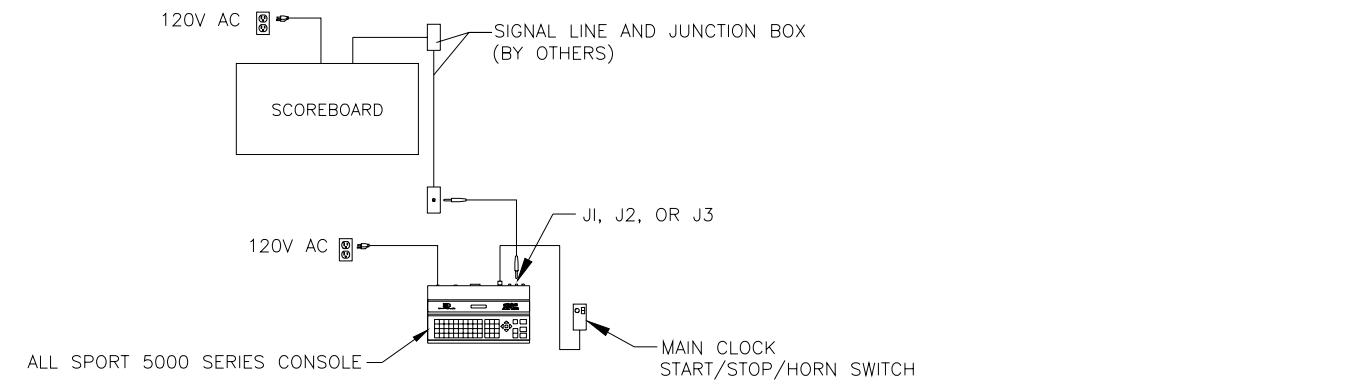
DIGIT, SIGNAL AND POWER SPEC



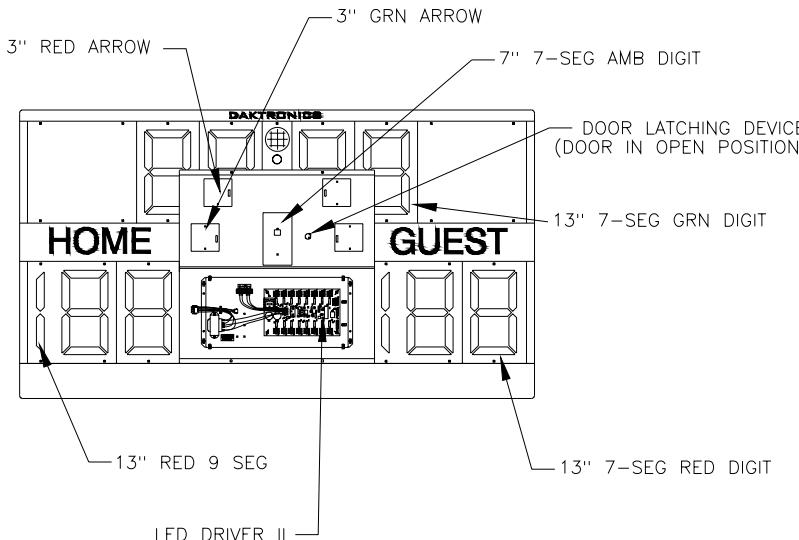
NOTE: THE NUMBER LISTED BY EACH DIGIT INDICATES WHICH DRIVER CONNECTOR IS WIRED TO THAT DIGIT.

POWER SPEC:

- 120V AC, 15 AMP CIRCUIT REQUIRED.
- 100 WATTS MAXIMUM.
- PRODUCT SAFETY APPROVAL:
ETL LISTED, TESTED TO CSA STANDARDS,
AND CE LABELED FOR INDOOR USE.



PART SPEC



NOTE: TO ACCESS LED DRIVER, REMOVE TWO SCREWS HOLDING ACCESS DOOR CLOSED. THESE SCREWS ARE LOCATED ON BOTTOM OF ACCESS DOOR. SECURE OPEN.

REPLACEMENT PART NUMBERS

PART NO.	DESCRIPTION
0A-1009-0038	J BOX, 1/4 PHONO
0A-1150-0033	DIGIT; 13" GRN 7 SEG
0A-1150-0139	DIGIT; 13" RED 7 SEG
0A-1150-0140	DIGIT; 13" RED 9 SEG
0A-1152-0332	HORN, 120V AC W/CAP
OP-1150-0191	PCB; 13" RED 7 SEG LED
OP-1150-0049	PCB; 13" GRN 7 SEG LED
OP-1150-0192	PCB; 13" RED 2 SEG LED
OP-1150-0082	PCB; 7" AMB 7 SEG LED
OP-1150-0126	LED DRIVER II
OP-1150-0185	ARROW; 3" RED LED
OP-1150-0129	ARROW; 3" GRN LED
T-1066	TRANSFORMER, 16V SEC.
W-1236	CABLE, A/S TO J BOX

CAUTION: DO NOT WORK ON ENERGIZED DISPLAY UNLESS YOU ARE A CERTIFIED ELECTRICIAN OR DIRECTED BY DAKTRONICS.

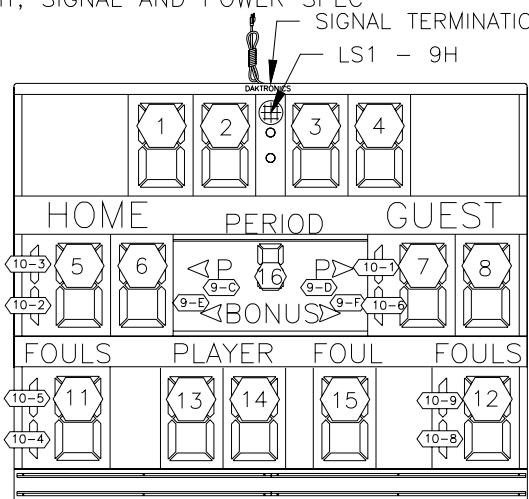
03	19 SEP 01	CHANGED TITLE TO ELECTRICAL & SIGNAL SPEC, BB-2021-9	ALG	
02	19OCT00	CHANGED PART NUMBER OP-1150-0048, 0051, 0128 TO 0191, 0192, 0185 & 0A-1150-0032, 0035 TO 0A-1150-0139, 0140	CPS	
01	21DEC99	UPDATED DRAWING TO SHOW ELECTRICAL/SIGNAL SPEC FOR ALL SPORT 5000.	RJN	
REV.	DATE	DESCRIPTION	BY	APPR.

DAKTRONICS, INC. BROOKINGS, SD 57006				
PROJ: LED 2 STRING SCOREBOARD				
TITLE: ELECTRICAL & SIGNAL SPEC, BB-2021-9				
DES. BY: D DELEEUW	DRAWN BY: D DELEEUW	DATE: 12 MAY 99		
REVISION	APPR. BY:	SCALE: 1=30	1152-E10A-115549	

BB-2025 SCOREBOARD

ELECTRICAL/SIGNAL SPEC

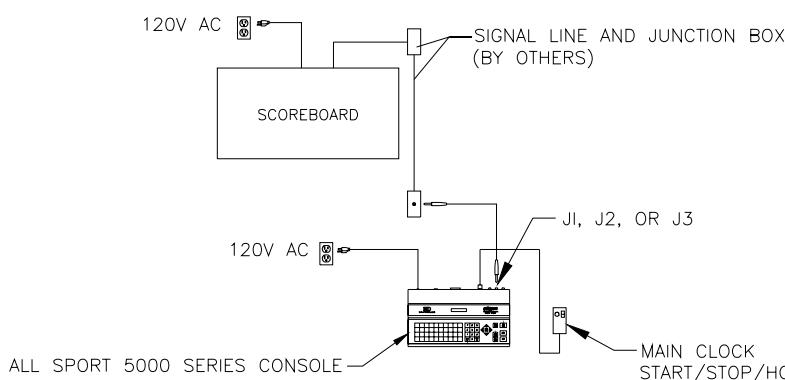
DIGIT, SIGNAL AND POWER SPEC



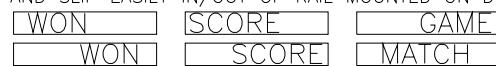
NOTE: THE NUMBER LISTED BY EACH DIGIT INDICATES WHICH CONNECTOR IS WIRED TO THAT DIGIT.

POWER SPEC:

- 120VAC & 230VAC MODULES AVAILABLE.
- 15 AMP CIRCUIT REQUIRED.
- 100 WATTS MAXIMUM.
- PRODUCT SAFETY APPROVAL:
ETL LISTED, TESTED TO CSA STANDARDS,
AND CE LABELED FOR INDOOR USE.



NOTE: VOLLEYBALL AND WRESTLING CAPTION ARE AVAILABLE AND SLIP EASILY IN/OUT OF RAIL MOUNTED ON DISPLAY.



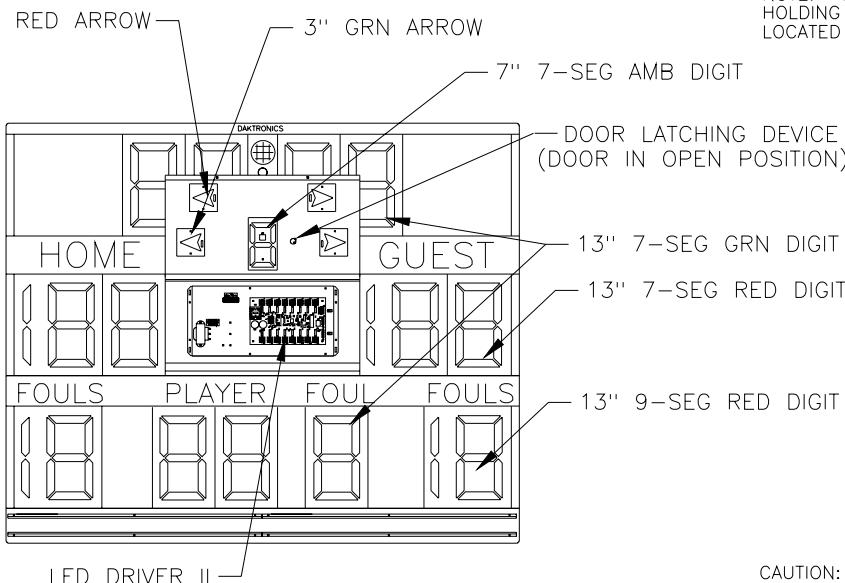
NOTE: OPERATING CODE FOR A BB-2025-9, BASKETBALL DISPLAY IS CODE 03.

NOTE: FOR ADDITIONAL OPERATING CODES FOR OTHER SPORTS, REFER TO YOUR ALL SPORT MANUAL. ANY CODE LISTED FOR BB-18 WILL WORK ON THIS DISPLAY.

PART SPEC

NOTE: REFER TO THE MANUAL FOR WARRANTY AND COMPONENT REPLACEMENT PROCEDURES.

NOTE: TO ACCESS LED DRIVER, REMOVE TWO SCREWS HOLDING ACCESS DOOR CLOSED. THESE SCREWS ARE LOCATED ON BOTTOM OF ACCESS DOOR. SECURE OPEN.

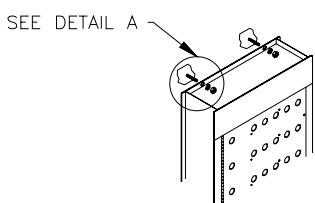
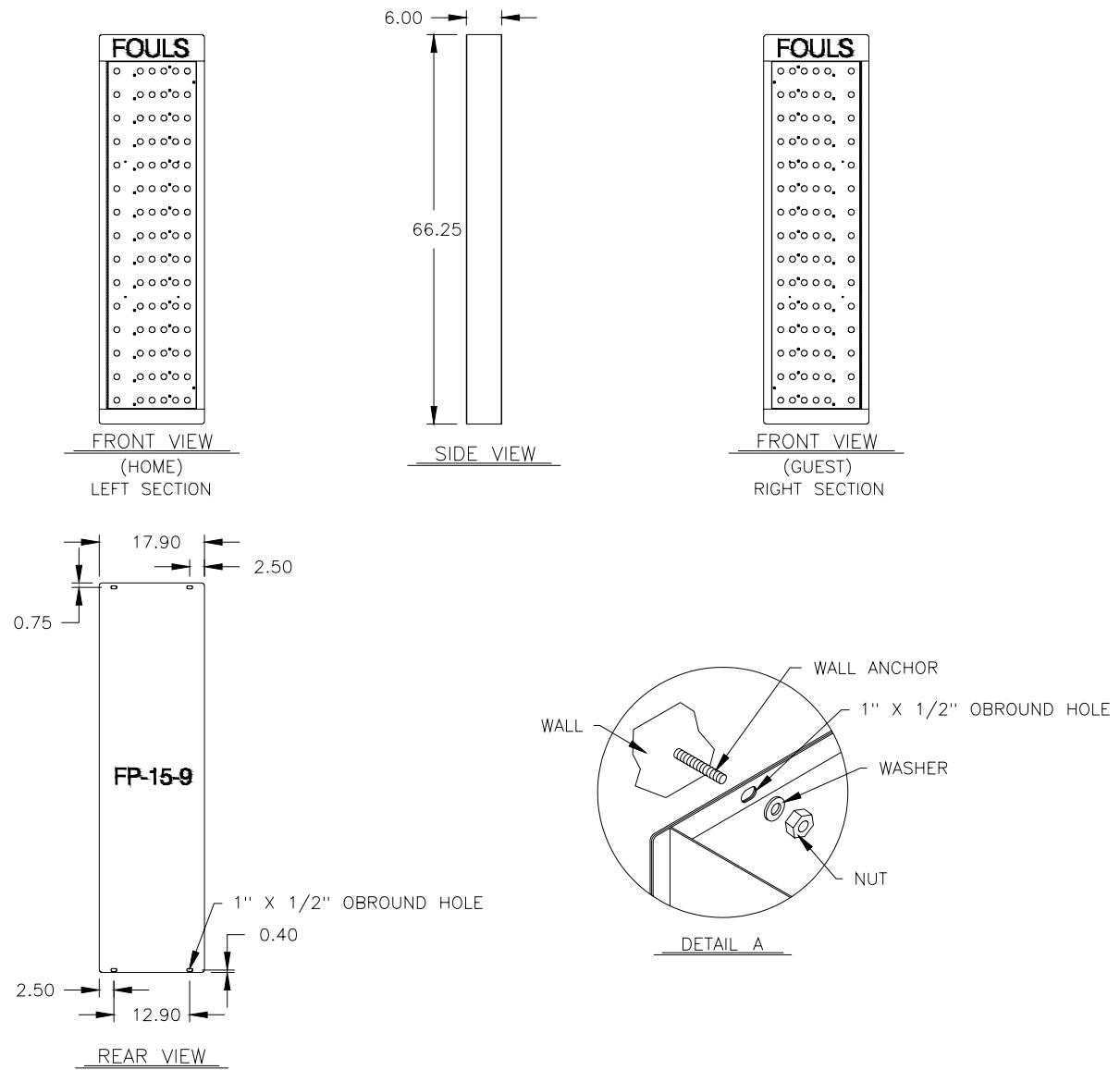


REPLACEMENT PART NUMBERS

PART NO.	DESCRIPTION
OA-1009-0038	J BOX, 1/4 PHONO
OA-1150-0033	DIGIT; 13" GRN 7 SEG
OA-1150-0139	DIGIT; 13" RED 7 SEG
OA-1150-0140	DIGIT; 13" RED 9 SEG
OA-1152-0332	HORN, 120V AC W/CAP
OP-1150-0191	DIGIT; 13" RED 7 SEG LED
OP-1150-0049	DIGIT; 13" GRN 7 SEG LED
OP-1150-0192	DIGIT; 13" RED 2 SEG LED
OP-1150-0082	DIGIT; 7" AMB 7 SEG LED
OP-1150-0126	LED DRIVER II
OP-1150-0185	ARROW; 3" RED LED
OP-1150-0129	ARROW; 3" GRN LED
T-1066	TRANSFORMER, 16V SEC.
W-1236	CABLE, A/S TO J BOX

CAUTION: DO NOT WORK ON ENERGIZED DISPLAY UNLESS YOU ARE A CERTIFIED ELECTRICIAN OR DIRECTED BY DAKTRONICS.

03	19 SEP 01	CHANGED TITLE TO ELECTRICAL & SIGNAL SPEC, BB-2025-9	ALG		DAKTRONICS, INC. BROOKINGS, SD 57006		
02	19OCT00	CHANGED PART NUMBERS OP-1150-0048, 0051, 0128 TO 0191, 0192, 0185 & OA-1150-0032, 0035, TO OA-1150-0139, 0140	CPS		PROJ: LED 2 STRING SCOREBOARD		
01	22DEC99	UPDATED DRAWING TO SHOW ELECTRICAL/SIGNAL SPEC FOR ALL SPORT 5000.	RJN		TITLE: ELECTRICAL & SIGNAL SPEC, BB-2025-9		
REV.	DATE	DESCRIPTION	BY	APPR.	DES. BY: D DELEEUW	DRAWN BY: D DELEEUW	DATE: 12 MAY 99
					REVISION	APPR. BY:	SCALE: 1=30
							1152-E10A-115552

NOTES:

1. USE APPROPRIATE WALL ANCHORS FOR TYPE OF WALL.

SPECIFICATION			
MODEL #	SHIPPING WEIGHT	MOUNTING WEIGHT	DIMENSIONS
FP-15-9	100 LBS	55 LBS	17.90" X 66.25" X 6"

DAKTRONICS, INC. BROOKINGS, SD 57006

PROJ: LED SCOREBOARD

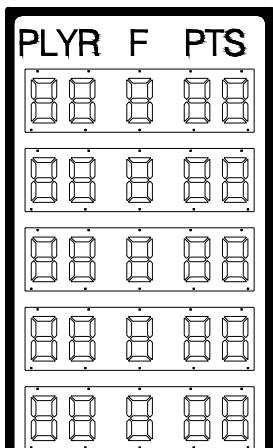
TITLE: MECHANICAL SPECIFICATION; FP-15-9

DES. BY: AVANBEMMEL DRAWN BY: MVANDYK DATE: 15JULY99

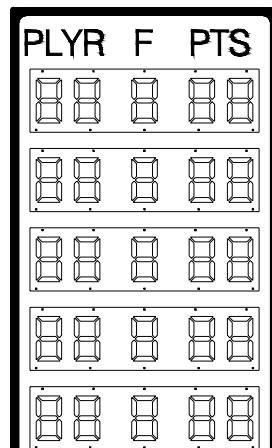
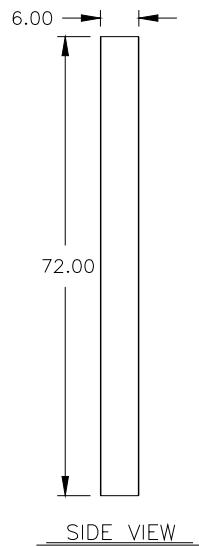
REV.	DATE	DESCRIPTION	BY	APPR.
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REVISION	APPR. BY:	1152-E10A-118595
SCALE:	1=30	

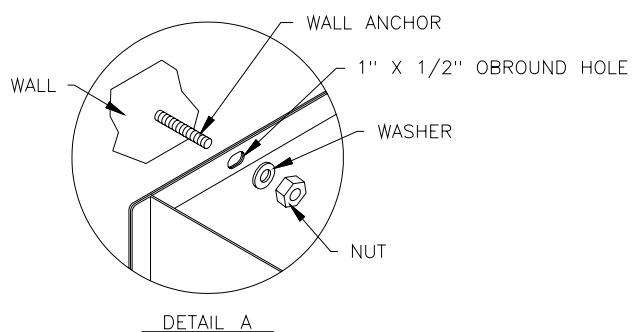
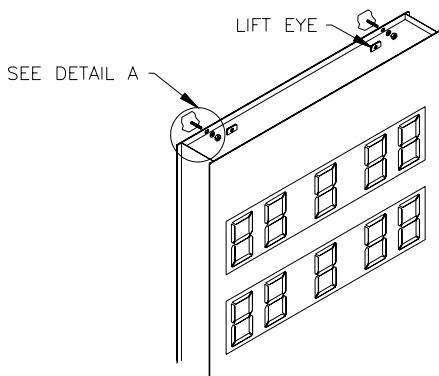
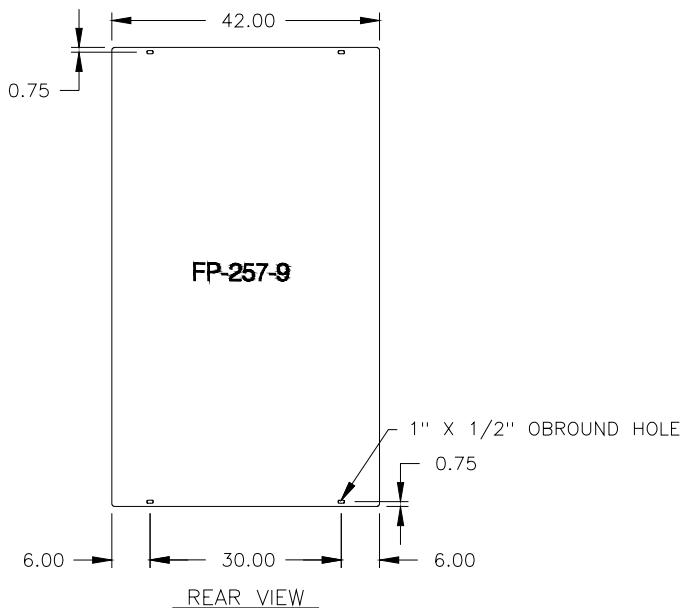
FP-257-9



FRONT VIEW
(HOME)
LEFT SECTION



FRONT VIEW
(GUEST)
RIGHT SECTION



DETAIL A

NOTES:

1. USE APPROPRIATE WALL ANCHORS FOR TYPE OF WALL.
2. LIFT EYES ARE FOR TEMPORARY USE WHILE LIFTING SCOREBOARD DURING INSTALLATION. DO NOT USE LIFT EYES FOR PERMANENT SUSPENSION.

SPECIFICATION			
MODEL #	SHIPPING WEIGHT	MOUNTING WEIGHT	DIMENSIONS
FP-257-9	120 LBS	70 LBS	72" X 42" X 6"

DAKTRONICS, INC. BROOKINGS, SD 57006

PROJ: LED SCOREBOARD

TITLE: MECHANICAL SPECIFICATION; H-257-9

DES. BY: AVANBEMMEL

DRAWN BY: MVANDYK

DATE: 15JULY99

REVISION

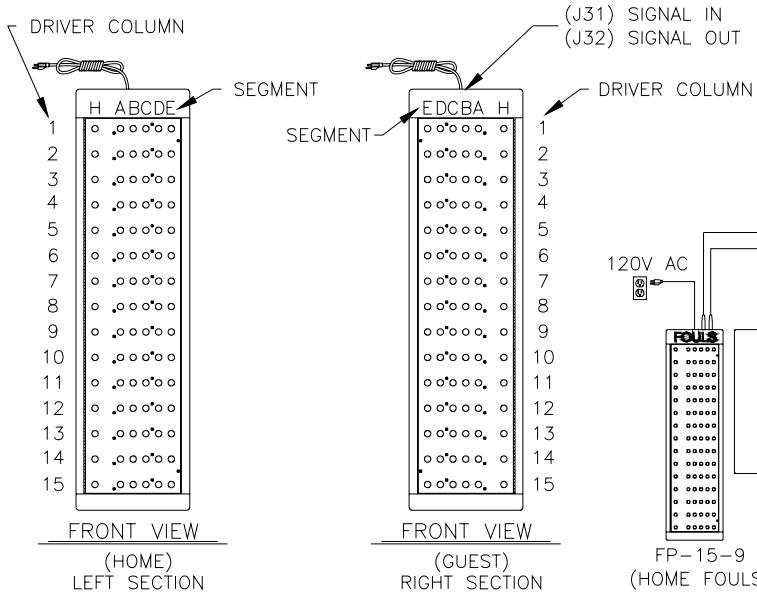
APPR. BY:

SCALE:

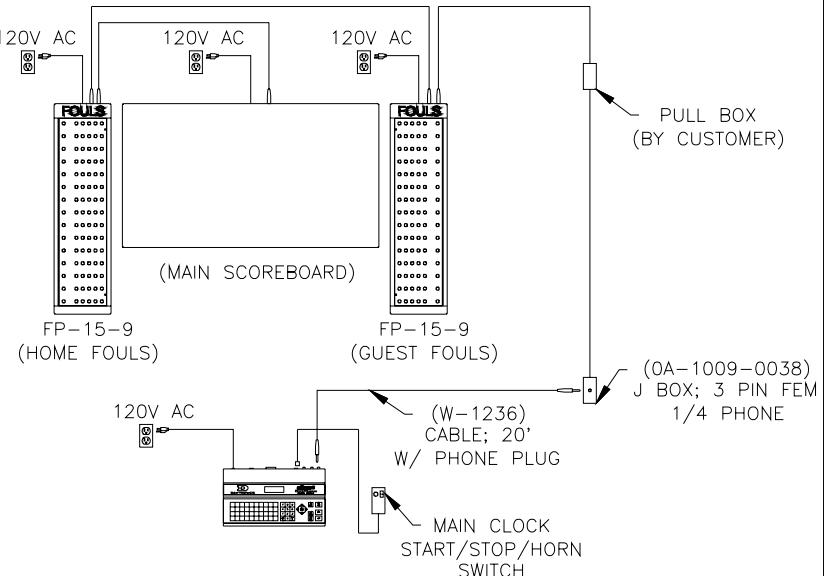
1=30

1152-E10A-118597

DIGIT, SIGNAL, & POWER SPECIFICATION:

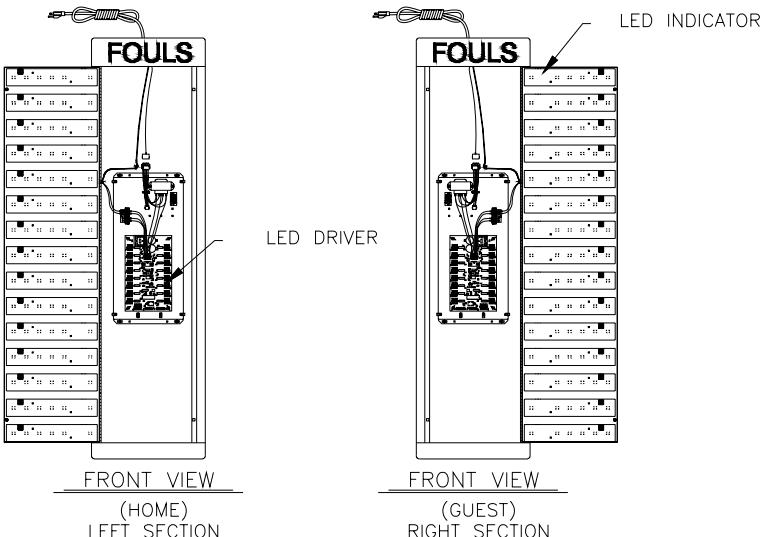


POWER SPECIFICATION	
-	120V AC, 15 AMP CIRCUIT REQUIRED.
-	100 WATTS MAXIMUM.
-	PRODUCT SAFETY APPROVAL:
1.	ETL LISTED
2.	TESTED TO CSA STANDARDS
3.	CE LABELED FOR INDOOR USE



ALL SPORT 5000 SERIES CONSOLE

PART SPECIFICATION:



NOTES:

1. REMOVE THE TWO SCREWS FOUND ON THE SIDE OF THE ACCESS DOOR. OPEN DOOR TO ACCESS LED DRIVER.
2. DO NOT WORK ON ENERGIZED SCOREBOARD UNLESS A CERTIFIED ELECTRICIAN OR DIRECTED BY DAKTRONICS.

REPLACEMENT PART NUMBERS

PART #	DESCRIPTION
OP-1150-0126	LED DRIVER; 16 COL
T-1066	TRANSFORMER; 16V SEC.
OP-1150-0194	LED INDICATOR
W-1236	CABLE; A/S TO J BOX
0A-1196-0013	J BOX; 3 PIN FEM, 1/4 PHONE
ED-11985	MANUAL; INDOOR LED

ADDRESS INFORMATION

(HOME) LEFT SECTION	(GUEST) RIGHT SECTION
ADDRESS: 21	ADDRESS: 22

DAKTRONICS, INC. BROOKINGS, SD 57006

PROJ: LED SCOREBOARD

TITLE: ELECTRICAL & SIGNAL SPEC, FP-15-9

DES. BY: AVANBEMMEL DRAWN BY: MVANDYK DATE: 15JUL99

REVISION

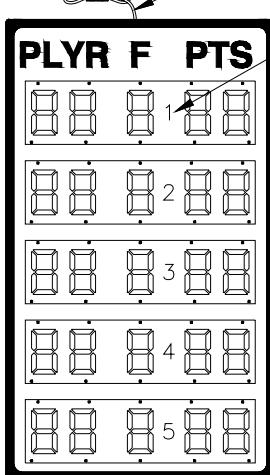
APPR. BY:

SCALE: 1=30

1152-E10A-118600

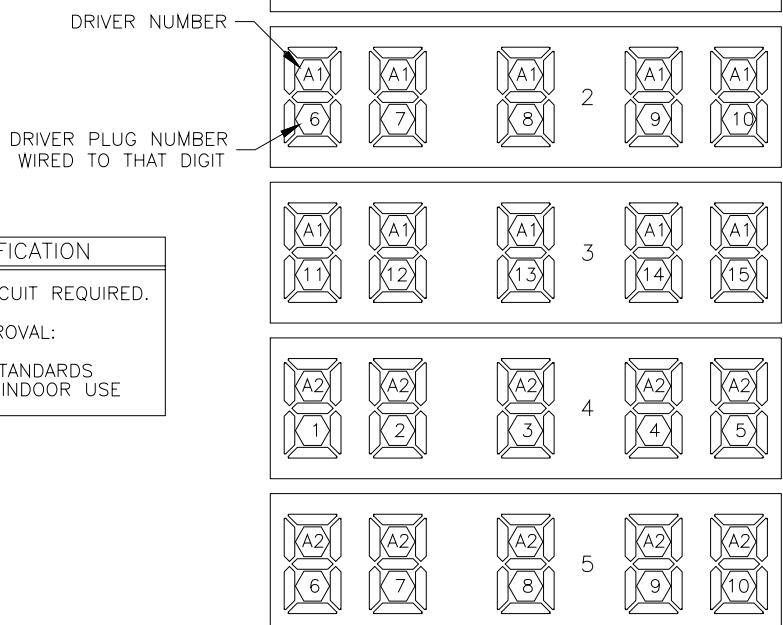
02	18 SEP 01	CHANGED TITLE TO ELECTRICAL & SIGNAL SPEC, FP-15-9	ALG	
01	19OCT00	CHANGED PART NUMBER OP-1150-0055 TO OP-1150-0194	CPS	
REV.	DATE	DESCRIPTION	BY	APPR.

DIGIT, SIGNAL, & POWER SPECIFICATION:



FRONT VIEW

(J31) SIGNAL IN
(J32) SIGNAL OUT
(DIGIT PANEL NUMBER)
REFER TO DIGIT DESIGNATION

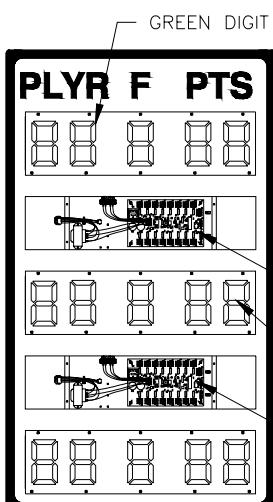


POWER SPECIFICATION

- 120V AC, 15 AMP CIRCUIT REQUIRED.
- 100 WATTS MAXIMUM.
- PRODUCT SAFETY APPROVAL:
 1. ETL LISTED
 2. TESTED TO CSA STANDARDS
 3. CE LABELED FOR INDOOR USE

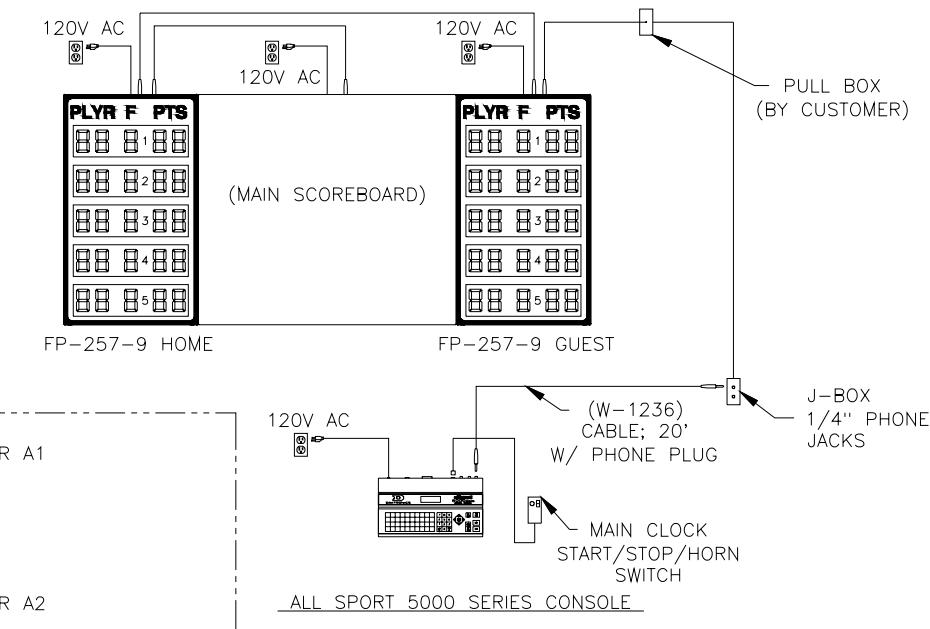
NOTES:

1. REMOVE THE TWO INDICATED DIGIT PANELS TO ACCESS LED DRIVER.
2. DO NOT WORK ON ENERGIZED SCOREBOARD UNLESS A CERTIFIED ELECTRICIAN OR DIRECTED BY DAKTRONICS.



FRONT VIEW

DRIVER ADDRESS INFORMATION:
 HOME DRIVER A1 ADDRESS 23
 HOME DRIVER A2 ADDRESS 24
 GUEST DRIVER A1 ADDRESS 25
 GUEST DRIVER A2 ADDRESS 26



REPLACEMENT PART NUMBERS	
PART #	DESCRIPTION
OP-1150-0126	LED DRIVER; 16 COL
T-1066	TRANSFORMER; 16V SEC.
OP-1150-0187	DIGIT; 7" RED 7-SEG
OP-1150-0037	DIGIT; 7" GREEN 7-SEG
W-1236	CABLE; A/S TO J BOX
OA-1196-0013	J BOX; 1/4 PHONE
ED-11985	MANUAL; INDOOR LED

DAKTRONICS, INC. BROOKINGS, SD 57006

PROJ: LED SCOREBOARD

TITLE: ELECTRICAL & SIGNAL SPEC, FP-257-9

DES. BY: AVANBEMMEL DRAWN BY: MVANDYK DATE: 15JUL99

REVISION

APPR. BY: 1152-E10A-118602

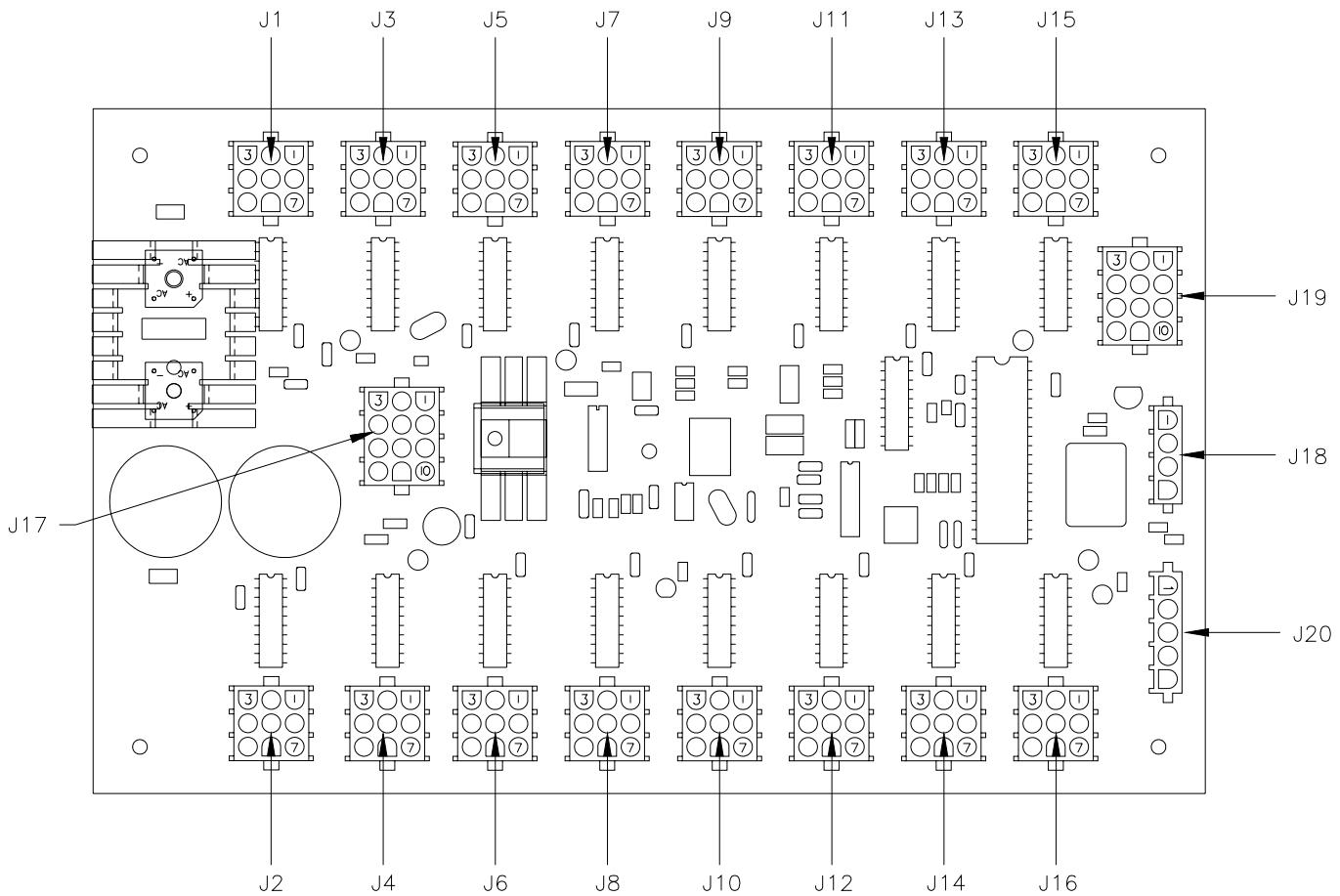
SCALE: 1=30

02	18 SEP 01	CHANGED TITLE TO ELECTRICAL & SIGNAL SPEC, FP-257-9	ALG	
01	19OCT00	CHANGED PART NUMBER OP-1150-0036 TO OP-1150-0187	CPS	
REV.	DATE	DESCRIPTION	BY	APPR.

PIN	FUNCTION
1	SIGNAL IN +
2	SIGNAL IN -
3	GND
4	SIGNAL OUT +
5	SIGNAL OUT -
6	16V AC IN
7	GND
8	EARTH
9	16V AC IN
10	GND
11	+VCC +
12	+VBB +

PIN	FUNCTION
1	AUTO HORN K1 OUT
2	K1 IN, 16V DC (-)
3	120V HOT IN
4	120V SWITCHED OUT

PIN	FUNCTION
1	GND
2	SW0-N
3	SW1-N
4	GND
5	SW2-N
6	SW3-N
7	GND
8	SW4-N
9	SW5-N
10	GND
11	SW6-N
12	SW7-N



J1 THROUGH J16

PIN	FUNCTION
1	SEGMENT C (-)
2	SEGMENT B (-)
3	SEGMENT A (-)
4	SEGMENT F (-)
5	SEGMENT E (-)
6	SEGMENT D (-)
7	COMMON (+)
8	SEGMENT H (-)
9	SEGMENT G (-)

PIN	FUNCTION
1	GND-N
2	PRO-N
3	PR1-N
4	PR2-N
5	PR3-N (TOD)

DAKTRONICS, INC. BROOKINGS, SD 57006

PROJ:

TITLE: LED DRIVER II, 16 COLUMN

DES. BY:

DRAWN BY: MJORDAN

DATE: 26 JUL 99

REVISION

APPR. BY:

01

SCALE: 1=2

1150-R04A-119205

01	20 OCT 03	UPDATED J20 PIN OUT CHART	MWM	
REV.	DATE	DESCRIPTION	BY	APPR.

CONNECTOR FUNCTIONS:

J1 THROUGH J4
DIGIT OUTPUTS

PIN	FUNCTION
1	SEGMENT C (-)
2	SEGMENT B (-)
3	SEGMENT A (-)
4	SEGMENT F (-)
5	SEGMENT E (-)
6	SEGMENT D (-)
7	COMMON (+)
8	SEGMENT H (-)
9	SEGMENT G (-)

J17
POWER & SIGNAL IN

PIN	FUNCTION
1	SIGNAL IN +
2	SIGNAL IN -
3	GND
4	SIGNAL OUT +
5	SIGNAL OUT -
6	16V AC IN
7	GND
8	N.C.
9	16V AC IN
10	N.C.
11	SW INPUT +
12	SW INPUT -

J6
RELAY K1 CONNECTIONS

PIN	FUNCTION
1	HORN OUT (-)
2	K1 COIL IN (-)
3	K1 SW IN
4	K1 SW OUT

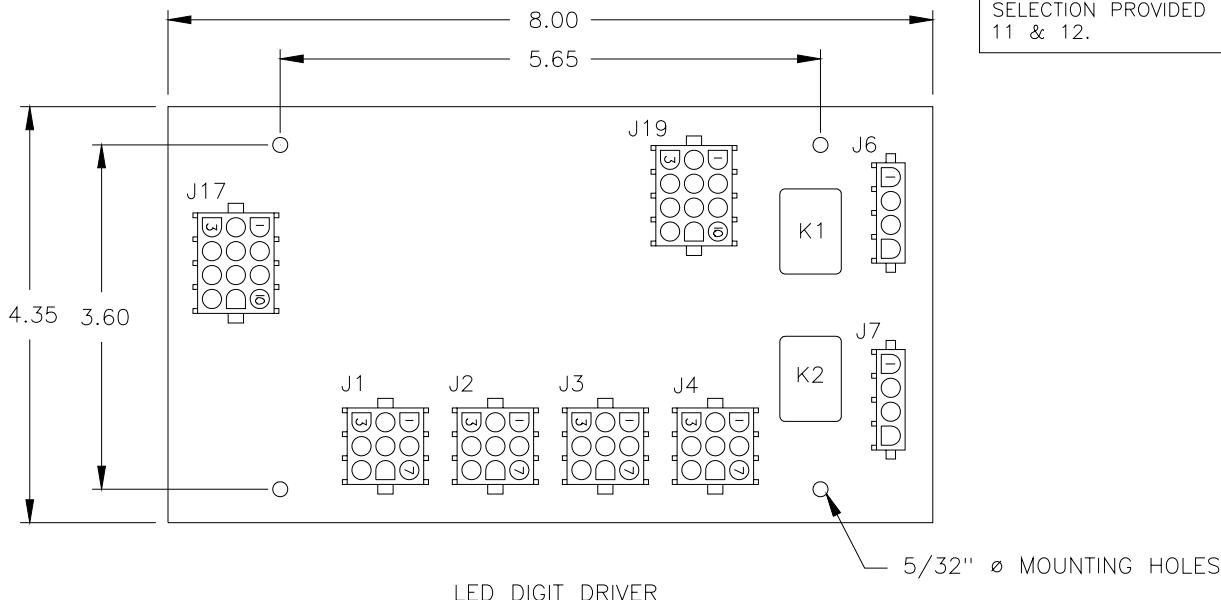
J7
RELAY K2 CONNECTIONS

PIN	FUNCTION
2	K2 COIL IN (-)
3	K2 SW IN
4	K2 SW OUT

J19
ADDRESS

PIN	FUNCTION
1	GND
2	ADDR 0-N
3	ADDR 1-N
4	GND
5	ADDR 2-N
6	ADDR 3-N
7	GND
8	ADDR 4-N
9	ADDR 5-N
10	GND
11	COL SEL1-N
12	COL SEL2-N

SEE NOTE AT BOTTOM FOR AN EXPLANATION OF THE COLUMN SELECTION PROVIDED BY PINS 11 & 12.



LOGIC AND DRIVE COMPONENTS ARE NOT SHOWN.
DAKTRONICS PART NO. IS OP-1150-0130 (NOT
COATED), OR OP-1150-0131 (COATED).

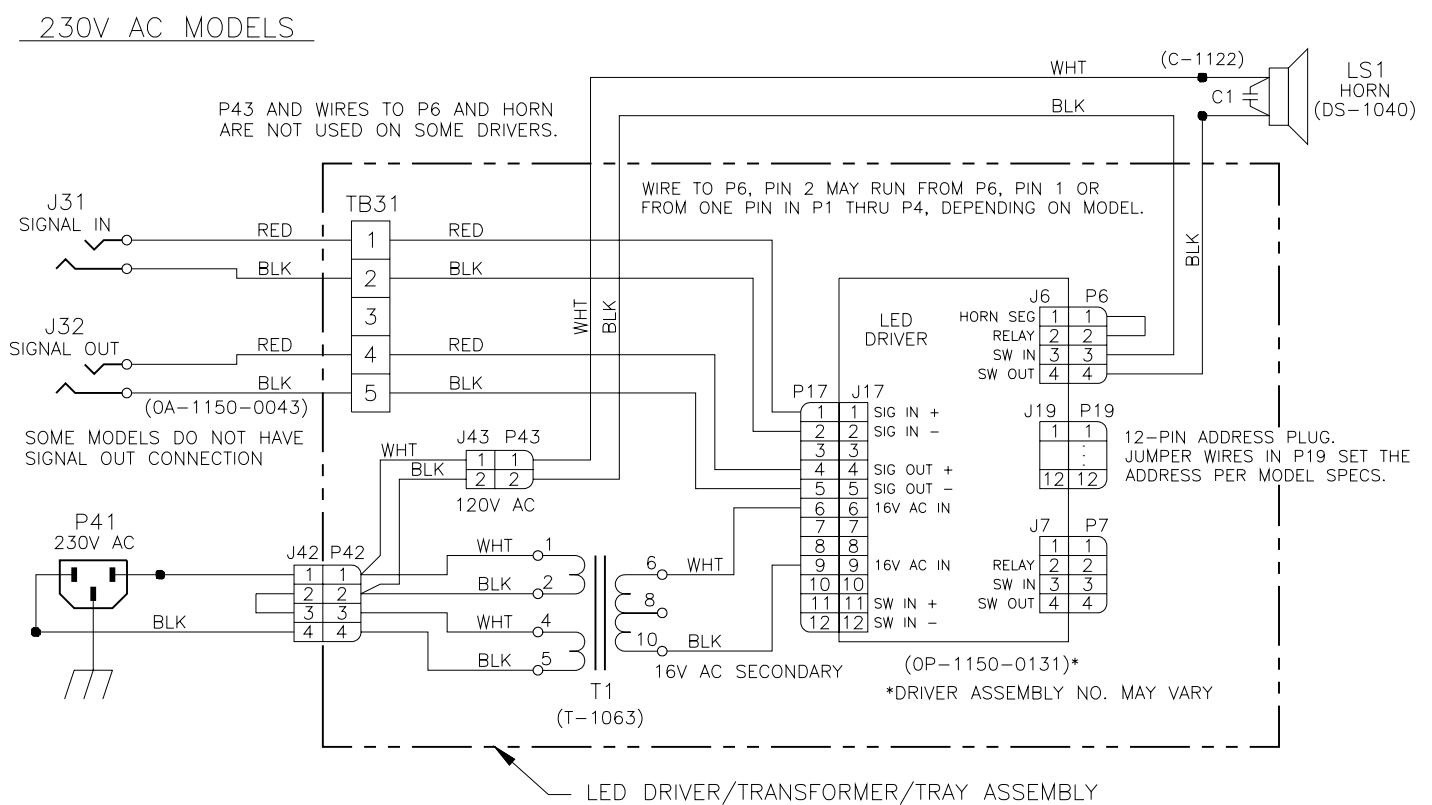
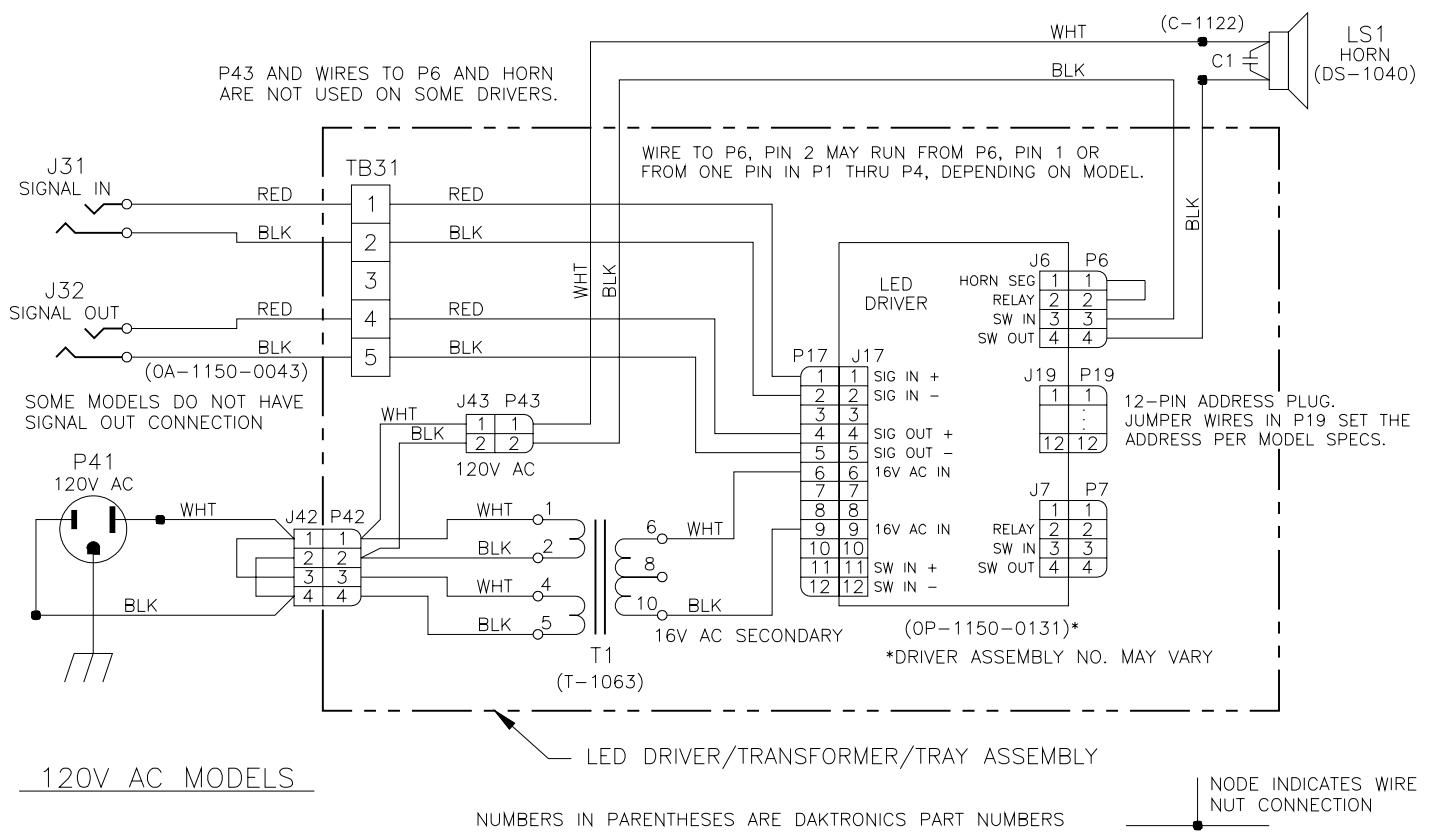
COLUMN SELECT INFORMATION:

SIGNAL INCLUDES DATA FOR UP TO 16 DIGITS, ALTHOUGH THE DRIVER HAS ONLY FOUR DIGIT OUTPUT CONNECTORS. THE DRIVER ADDRESS USES J19 PINS 11 & 12 TO SELECT WHICH DIGIT OUTPUT CONNECTOR IS OPERATED BY EACH INPUT DIGIT IN THE SIGNAL. THIS TABLE SHOWS WHICH INPUT DIGIT IS CONTROLLING EACH DIGIT OUTPUT CONNECTOR, AS DETERMINED BY THE FOUR ADDRESSES.

DATA INPUT DIGIT NUMBER	COLUMN SELECT 0 NO JUMPER CONNECTIONS				COLUMN SELECT 1 CONNECT J19 PIN 10 TO 11				COLUMN SELECT 2 CONNECT J19 PIN 10 TO 12				COLUMN SELECT 3 CONNECT J19 10 TO 11&12			
	5	6	7	8	1	2	3	4	9	10	11	12	13	14	15	16
DIGIT OUTPUT CONNECTOR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4

ALSO, COLUMN SELECT #1 MAKES THESE CHANGES:
INPUT DATA DIGIT 5, SEGMENT H
IS SENT TO DIGIT OUTPUT NO. 1, SEGMENT H.
INPUT DATA DIGIT 9, SEGMENT H
IS SENT TO DIGIT OUTPUT NO. 2, SEGMENT H.

DAKTRONICS, INC. BROOKINGS, SD 57006													
PROJ: TITLE: REFERENCE, 4-COLUMN LED DRIVER II													
DES. BY: MWJ				DRAWN BY: A VANBEMMEL				DATE: 11 OCT 99					
1	17 NOV 99	CHANGED COLUMN SELECT 1 TO READ 10 TO 11. CHANGED COLUMN SELECT 2 TO READ 10 TO 12.			REVISION	APPR. BY:	SCALE: 1=2			1150-R04A-122796			
REV.	DATE	DESCRIPTION			BY	APPR.							



DAKTRONICS, INC. BROOKINGS, SD 57006

PROJ:

TITLE: SCHEMATIC, 4 COL LED DRIVER II PLATE w/ XFRMR

DES. BY: AVB

DRAWN BY: MJORDAN

DATE: 12 NOV 99

REVISION

APPR. BY:

SCALE: NONE

1150-R03A-123982

1	10 FEB 00	CORRECTED REFERENCE TO HORN CONTROL WIRING.	AVB	
REV.	DATE	DESCRIPTION	BY	APPR.

SCOREBOARD J-BOX NOT PROVIDED BY DAKTRONICS.

TYPICAL INSTALLATION SHOWN

1/4" PHONE JUMPER CABLE PROVIDED BY DAKTRONICS.

120V AC

MAIN SCOREBOARD

120V AC

AUXILIARY SCOREBOARD

RECOMMENDED SIGNAL CABLE
1 PAIR, 22 AWG CABLE WITH AN
OVERALL SHIELD. (DAK PART# W-1077)
(ONE CABLE FOR EACH SCOREBOARD)

TO RUN SCOREBOARDS TOGETHER PLUG
ONE A/S 3000 OR 5000 CONTROL
CONSOLE INTO THE JACK LABELED MAIN

DUAL 1/4" PHONE J-BOX W/SHUNT JACK
0A-1196-0013

SCOREBOARD SYSTEM WITHOUT SHOT CLOCKS

120V AC

J4
J1,J2
OR J3

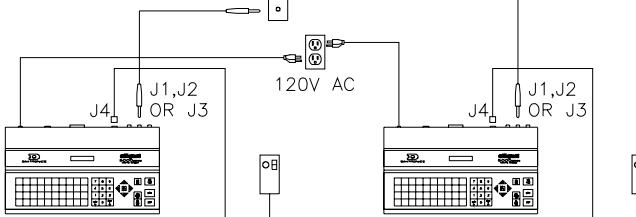
SIGNAL CORD
W-1236, 20 FT
W-1237, 50 FT
W-1238, 30 FT
W-1340, 10 FT

MAIN CLOCK

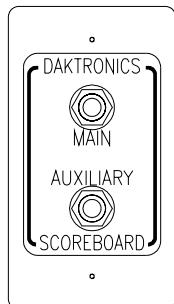
START/STOP/HORN SWITCH
0A-1166-0003

SEPARATE SCOREBOARD CONTROL

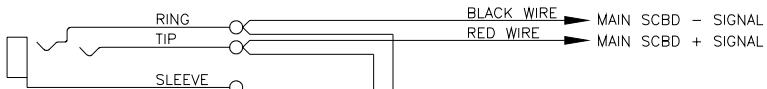
TO RUN SCOREBOARDS SEPARATELY PLUG ONE
A/S 3000 OR 5000 CONTROL CONSOLE INTO
THE JACK LABELED MAIN AND ANOTHER A/S
3000 OR 5000 CONTROL CONSOLE INTO THE
JACK LABELED AUXILIARY



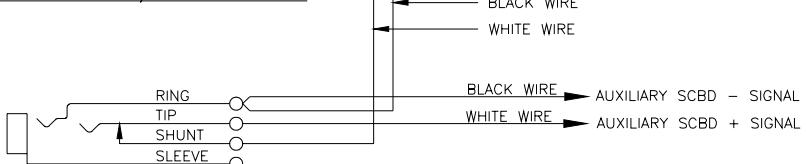
0A-1196-0013 J-BOX



TYPICAL 0A-1196-0013 J-BOX WIRING



SCHEMATIC MAIN 1/4" PHONE JACK



SCHEMATIC AUXILIARY 1/4" PHONE JACK

DAKTRONICS, INC. BROOKINGS, SD 57006

PROJ: ALL SPORT 5000

TITLE: BLOCK DIAGRAM, A/S 3000 OR 5000 BB, VB & WR #1

DES. BY: DRAWN BY: E BRAVEK DATE: 29 NOV 99

REVISION

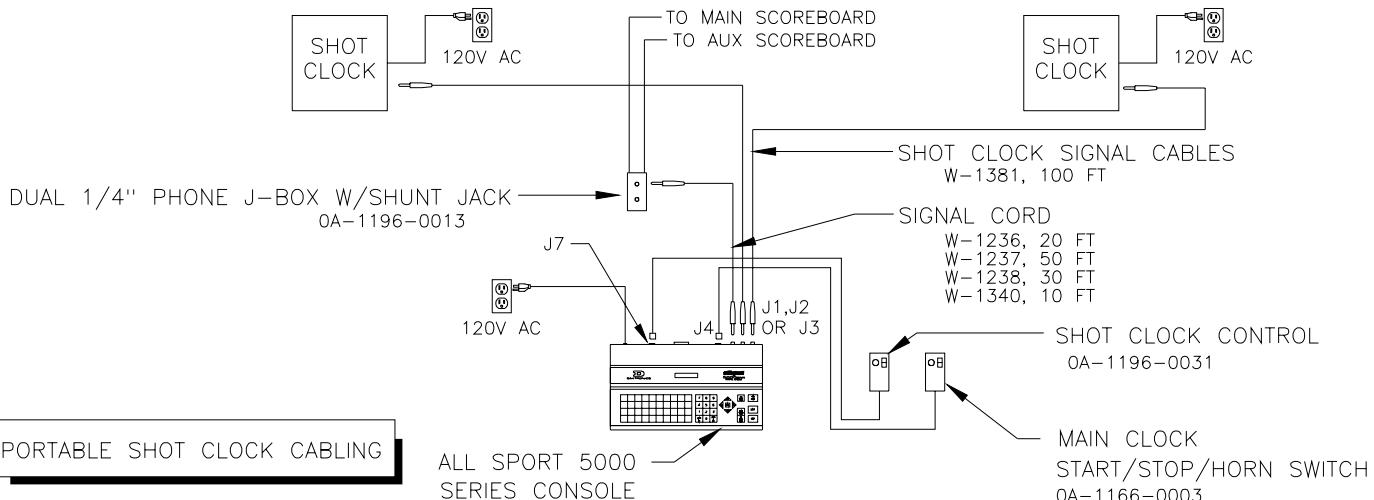
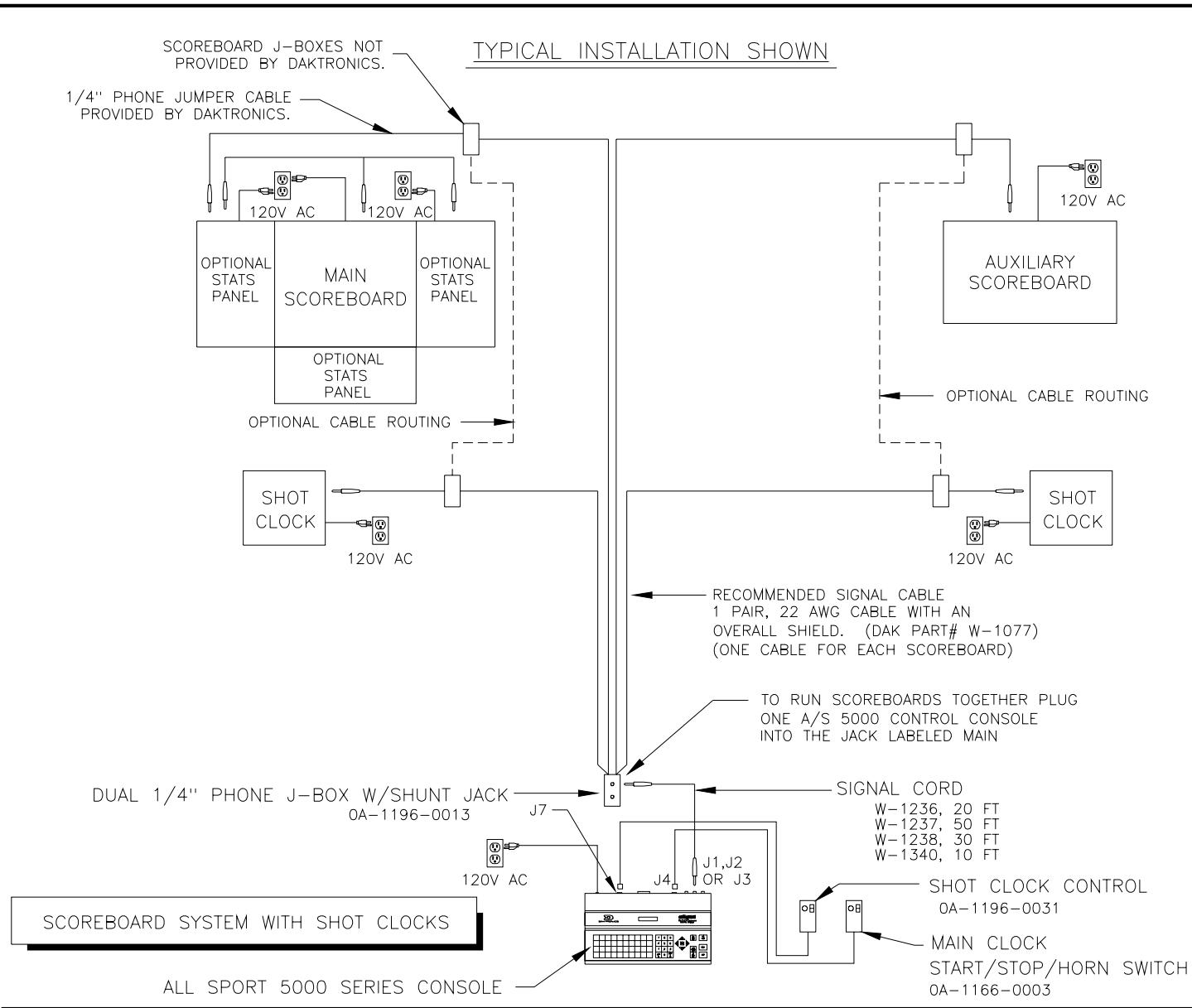
APPR. BY:

DATE:

01	26 APR 00	ADDED A/S 3000	DKD	
REV.	DATE	DESCRIPTION	BY	APPR.

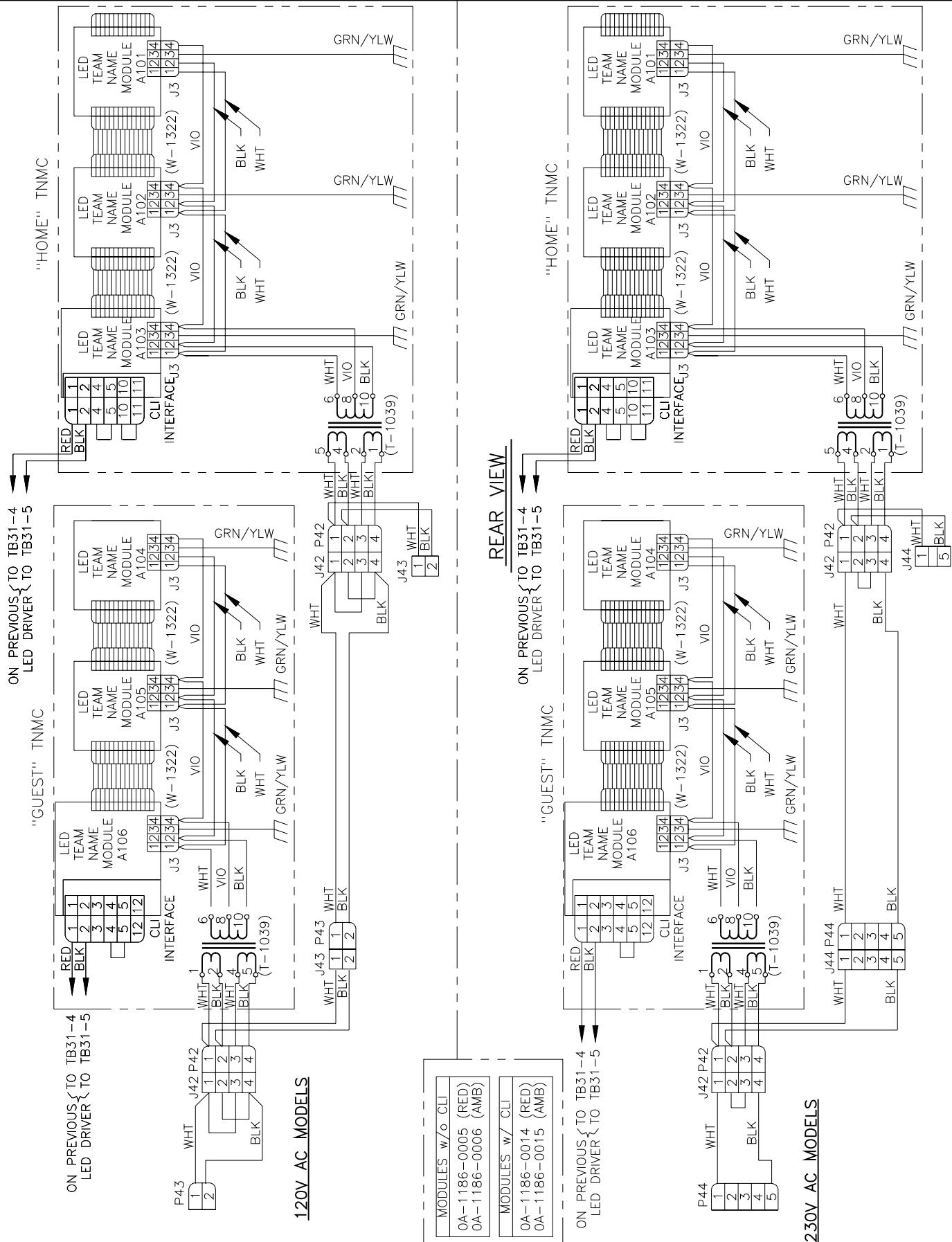
SCALE: NONE

1196-R04A-124686



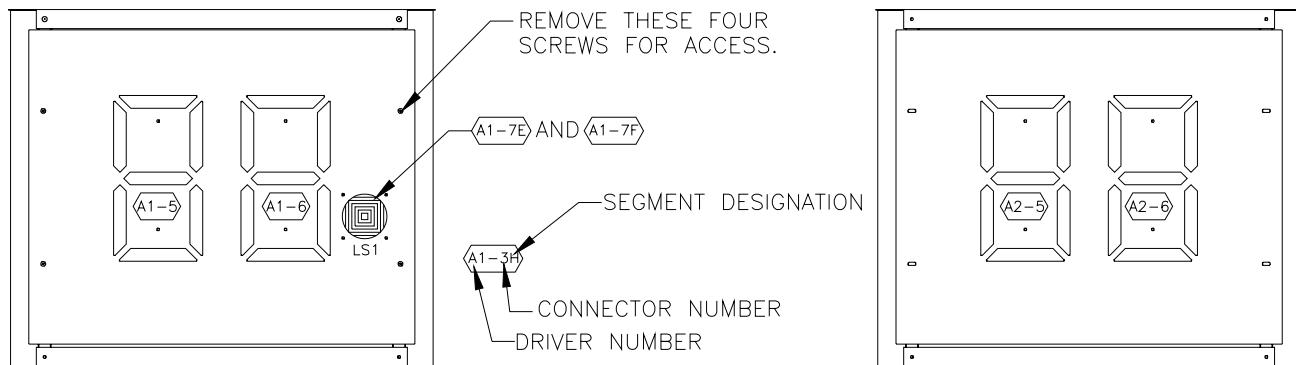
4	17 JAN 02	CHANGED OA-1166-0004 TO OA-1196-0031	JJS	
3	06 SEP 01	ADDED BOTTOM OPTIONAL STATS PANEL TO MAIN BOARD, AND ADDED SIGNAL CABLES TO AND FROM OPTIONAL STATS PANELS.	NW	DAKTRONICS, INC. BROOKINGS, SD 57006
2	14 DEC 00	ADDED 120VAC TO SIDE BOARDS OF MAIN SCOREBOARD	NSW	PROJ: ALL SPORT 5000 TITLE: BLOCK DIAGRAMS, A/S5000 BB, VB & WR #3
1	29 DEC 99	ADDED SHOT CLOCK REMOTE START/STOP TO TOP A/S5000 CONTROLLER	EB	DES. BY: DRAWN BY: E BRAVEK DATE: 29 NOV 99
REV.	DATE	DESCRIPTION	BY APPR.	REVISION APPR. BY: SCALE: NONE 1196-R04A-124688

REAR VIEW



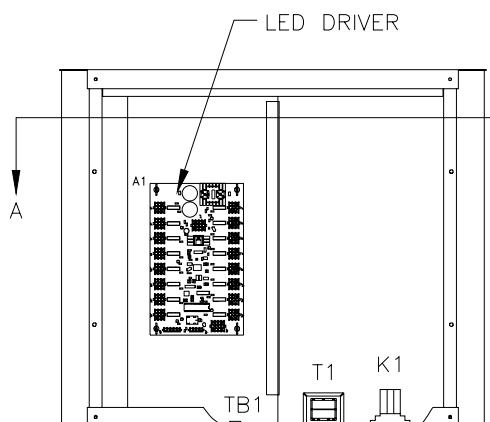
2	10NOV00	REMOVED A-1152-0168 CABLE & CHANGED TO MASTER - MASTER CONFIGURATION	RASMUS
1	29 DEC 99	UPDATED NOTES. CHANGED LAYOUT.	CJB
REV.	DATE	DESCRIPTION	BY APPR.

DAKTRONICS, INC. BROOKINGS, SD 57006

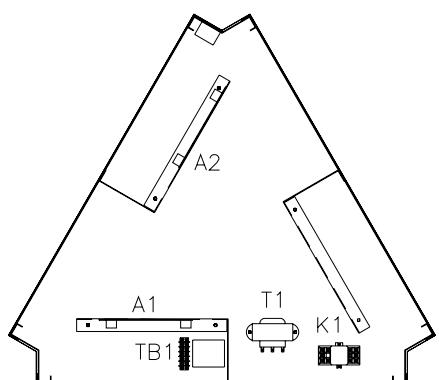


FRONT VIEW

(FACE A)



FRONT VIEW
WITH FACE PANEL REMOVED



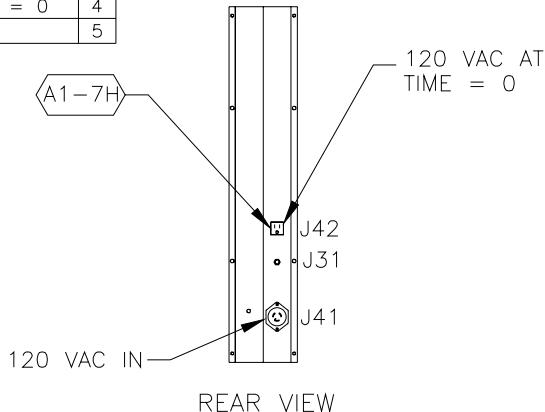
SECTION VIEW A-A

LED SHOT CLOCK DISPLAY MODEL NUMBERS AND DESCRIPTIONS		
MODEL NO.	ASSEMBLY NUMBER	VOLTS
BB-2026-9	0A-1152-0322	120

HORN AND INDICATOR SEGMENTS

SEGMENT	PIN NO.	P7 CONNECTIONS	TB1 POS.
		FUNCTION	
E	5	GAME CLOCK HORN	1
F	4	SHOT CLOCK HORN	2
G	9	GAME CLOCK STOP	3
H	8	GAME CLOCK = 0	4
	7	28V COMMON	5

FACE B OR C



REAR VIEW

REPLACEMENT PART NUMBERS

REF NO.	PART NO.	DESCRIPTION
A1	OP-1150-0126	LED DRIVER
TB1	TB-1007	5-POS TERMINAL BLOCK
K1	K-1015	RELAY, DPDT
T1	T-1066	TRANSFORMER, 16V SEC.
LS1	0A-1152-0332	HORN, 120VAC
DIGITS 5&6	OP-1150-0191	13" RED 7-SEG LED BAR

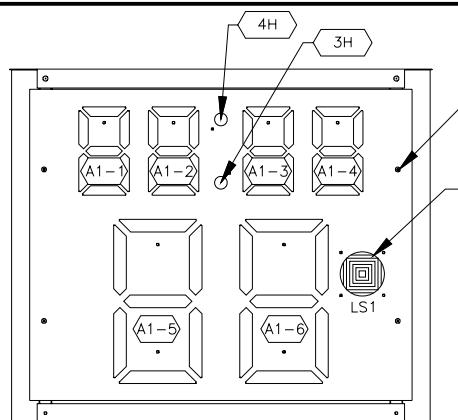
FOR THE STANDARD DISPLAY, LS1 IS WIRED TO THE GAME CLOCK AND SHOT CLOCK HORN SEGMENTS.

K1 IS WIRED TO THE TIME=0 SEGMENT.
K1 SWITCHES 120V TO J42.

TO ENABLE OTHER SEGMENTS, OR TO MAKE OTHER CHANGES, RECONNECT AT TB1.

DAKTRONICS, INC. BROOKINGS, SD 57006

PROJ:	LED BASKETBALL SCOREBOARDS		
TITLE:	COMPONENT LOCATIONS, BB-2026-9 FOR AS-5000		
DES. BY:	AVB	DRAWN BY:	JNILSEN
DATE:	09 DEC 99		
REVISION	APPR. BY:		
REV.	DATE	DESCRIPTION	BY APPR.
			SCALE: 1=15
1152-R04A-125242			

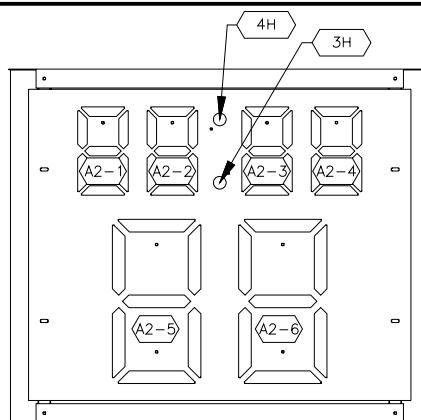


REMOVE THESE FOUR SCREWS FOR ACCESS.

A1-7E AND A1-7F

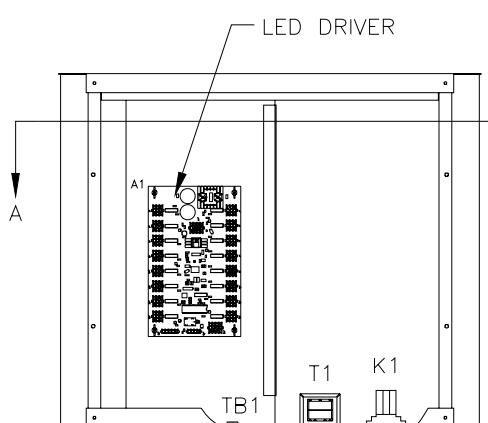
SEGMENT DESIGNATION

A1-3H
CONNECTOR NUMBER
DRIVER NUMBER



FRONT VIEW

(FACE A)

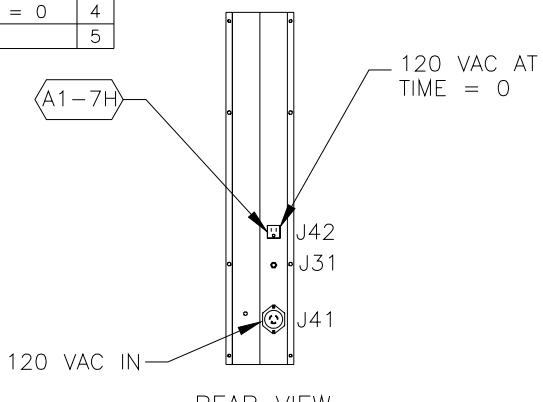


HORN AND INDICATOR SEGMENTS

SEGMENT	PIN NO.	P7 CONNECTIONS	TB1 POS.
		FUNCTION	
E	5	GAME CLOCK HORN	1
F	4	SHOT CLOCK HORN	2
G	9	GAME CLOCK STOP	3
H	8	GAME CLOCK = 0	4
	7	28V COMMON	5

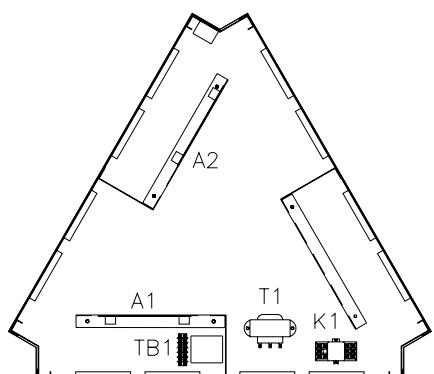
FACE B OR C

UNITS BUILT BEFORE 01 MAY 2000
DO NOT HAVE LIGHTED COLON.



FRONT VIEW

WITH FACE PANEL REMOVED



SECTION VIEW A-A

REPLACEMENT PART NUMBERS

REF NO.	PART NO.	DESCRIPTION
A1, A2	OP-1150-0126	LED DRIVER
TB1	TB-1007	5-POS TERMINAL BLOCK
K1	K-1015	RELAY, DPDT
T1	T-1066	TRANSFORMER, 16V SEC.
LS1	OA-1152-0332	HORN, 120VAC
DIGITS 1-4	OP-1150-0082	7" AMBER 7-SEG LED BAR
DIGITS 5&6	OP-1150-0191	13" RED 7-SEG LED BAR
	OP-1150-0093	COLON, AMBER

FOR THE STANDARD DISPLAY, LS1 IS WIRED TO THE GAME CLOCK AND SHOT CLOCK HORN SEGMENTS.

K1 IS WIRED TO THE TIME=0 SEGMENT.
K1 SWITCHES 120V TO J42.

TO ENABLE OTHER SEGMENTS, OR TO MAKE OTHER CHANGES, RECONNECT AT TB1.

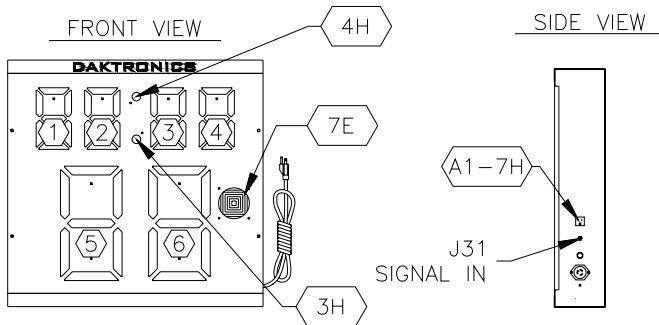
LED GAME/SHOT CLOCK DISPLAY MODEL NUMBERS AND DESCRIPTIONS		
MODEL NO.	ASSEMBLY NUMBER	VOLTS
BB-2023-9	0A-1152-0321	120

03	200CTOO	CHANGED PART NUMBER OP-1150-0048 TO OP-1150-0191	CPS	
02	10 JUL 00	REMOVED THE FUSE.	EPR	
01	20 MAR 00	ADDED SPEC FOR LIGHTED COLON.	DJW	
REV.	DATE	DESCRIPTION	BY	APPR.

DAKTRONICS, INC. BROOKINGS, SD 57006				
PROJ: LED BASKETBALL SCOREBOARDS				
TITLE: COMPONENT LOCATIONS, BB-2023-9 FOR AS-5000				
DES. BY: AVB	DRAWN BY: JNILSEN			DATE: 09 DEC 99
REVISION	APPR. BY:			
	SCALE: 1=15			1152-R04A-125243

BB-2029-9 SHOT CLOCK
MECHANICAL/ELECTRICAL/SIGNAL SPEC

DIGIT, SIGNAL AND POWER SPEC

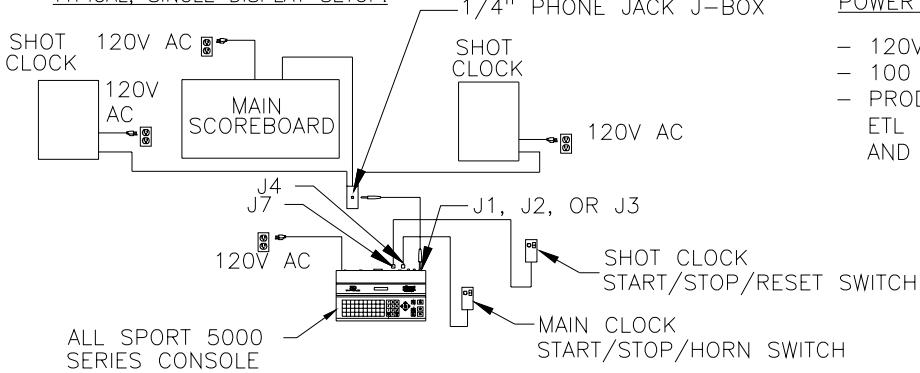


SIDE VIEW

NOTE: THE NUMBER LISTED BY EACH DIGIT INDICATES WHICH DRIVER CONNECTOR IS WIRED TO THAT DIGIT. UNITS BUILT BEFORE 01 MAY 2000 DO NOT HAVE LIGHTED COLON.

NOTE: ARROW INDICATES SIGNAL TERMINATION POINT ON DISPLAY. REFER TO DRAWING BELOW OR ALLSPORT MANUAL FOR ADDITIONAL WIRING DIAGRAMS OF DISPLAY. USE 24AWG MINIMUM, SHIELDED, TWO CONDUCTOR CABLE FOR SIGNAL TERMINATION.

TYPICAL, SINGLE DISPLAY SETUP:



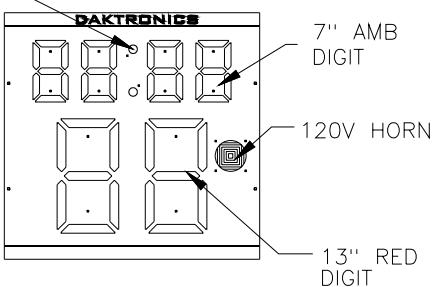
POWER SPEC:

- 120VAC, 15 AMP CIRCUIT REQUIRED.
- 100 WATTS MAXIMUM.
- PRODUCT SAFETY APPROVAL:
ETL LISTED, TESTED TO CSA STANDARDS,
AND CE LABELED FOR INDOOR USE.

PART SPEC

FRONT VIEW

LIGHTED COLON

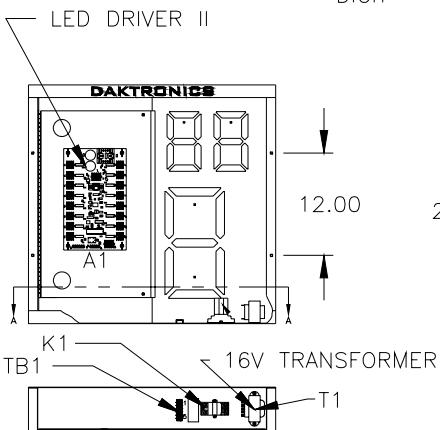


REAR VIEW

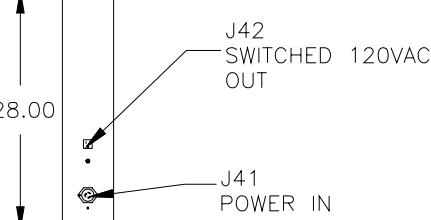
NOTE:
REMOVE FOUR SCREWS THAT SECURE THE FACE PANEL ON TO ACCESS DRIVER.

REPLACEMENT PART NUMBERS

PART NO.	DESCRIPTION	QTY.
OP-1150-0126	LED DRIVER II; 16 COL	1
T-1066	TRANSFORMER; 16V SEC.	1
OA-1171-4073	RELAY; 12VDC COIL	1
OP-1150-0082	DIGIT; 7" AMB 7 SEG	8
OP-1150-0191	DIGIT; 13" RED 7-SEG	4
OA-1152-0332	HORN; 120V AC W/CAP	1
OP-1150-0093	COLON, AMBER	1



SIDE VIEW



NOTE: DO NOT WORK ON ENERGIZED DISPLAY UNLESS YOU ARE A CERTIFIED ELECTRICIAN OR DIRECTED BY DAKTRONICS.

DAKTRONICS, INC. BROOKINGS, SD 57006

PROJ: LED 2 STRING SCOREBOARD

TITLE: ELEC, MECH, SIGNAL SPEC, BB-2029-9 FOR AS-5000

DES. BY: DRAWN BY: J NILSEN DATE: 13 DEC 99

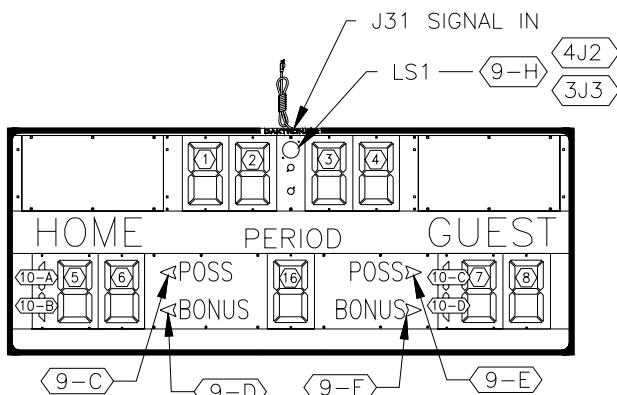
REVISION	APPR. BY:	1152-A10E-125302
REV.	SCALE: 1=22	

O2	10 JUL 00	REMOVED THE FUSE.	EPR	
01	20 MAR 00	ADDED SPEC FOR LIGHTED COLON.	D JW	
REV.	DATE	DESCRIPTION	BY	APPR.

BB-1113-9 SCOREBOARD

ELECTRICAL/SIGNAL SPEC

DIGIT, SIGNAL AND POWER SPEC



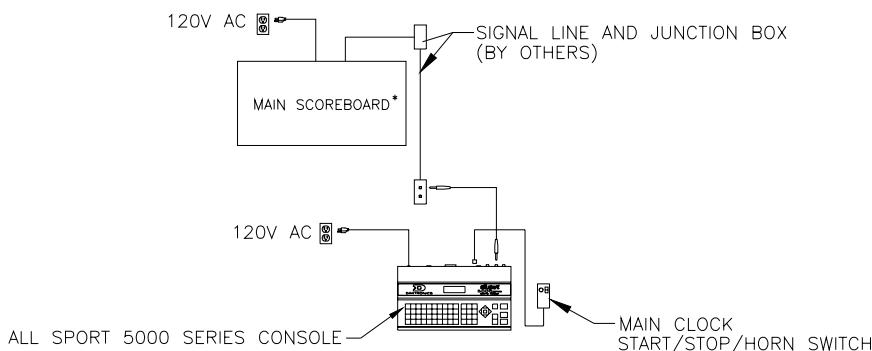
NOTE: THE NUMBER LISTED BY EACH DIGIT INDICATES THE DIGIT DESIGNATION IN RELATION TO THE LED DRIVER.

USE MINIMUM OF 24AWG, SHIELDED, TWO CONDUCTOR CABLE FOR SIGNAL TERMINATION.

POWER SPEC:

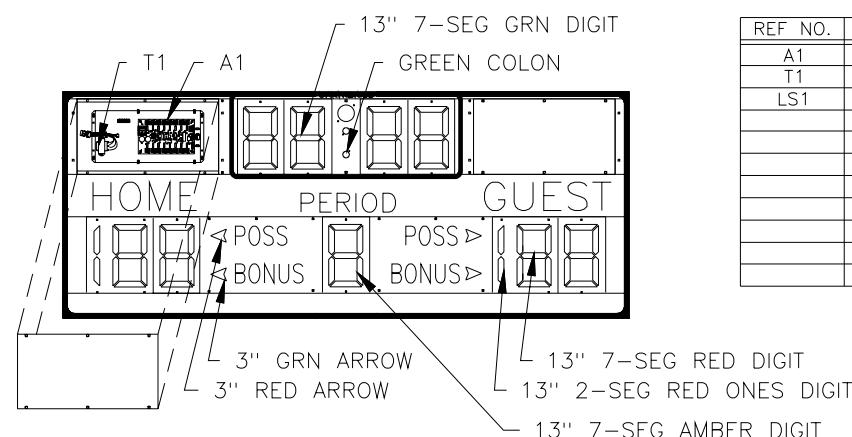
- 10 AMP CIRCUIT REQUIRED.
- 100 WATTS MAXIMUM.
- PRODUCT SAFETY APPROVAL:
CE LABELED FOR INDOOR USE.

TYPICAL SINGLE DISPLAY SETUP:



PART SPEC

NOTE: TO ACCESS LED DRIVER, REMOVE THE SIX SCREWS USED TO FASTEN PANEL TO THE SCOREBOARD. THEN REMOVE FACE PANEL.



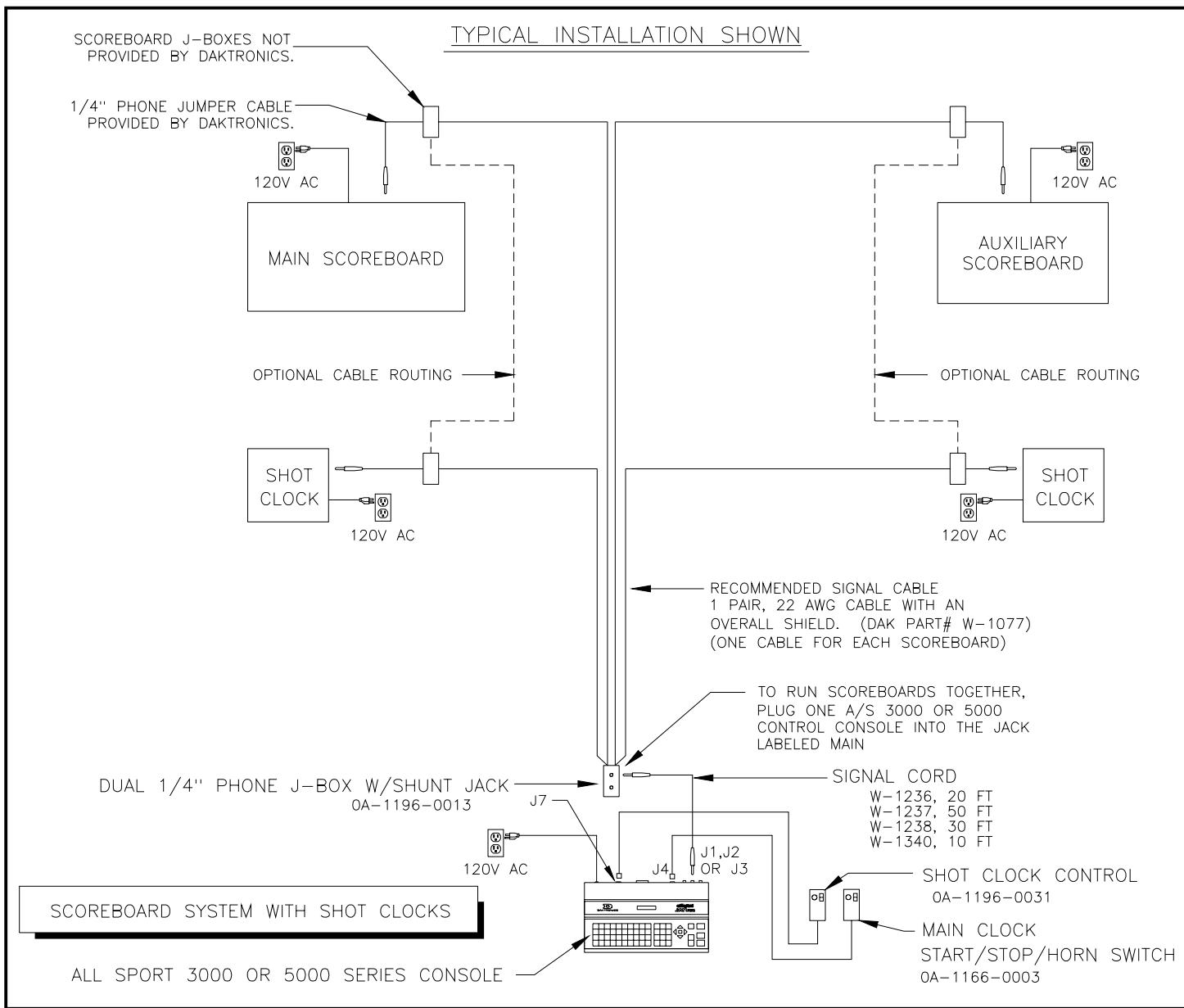
REPLACEMENT PART NUMBERS

REF NO.	PART NO.	DESCRIPTION	QTY.
A1	OP-1150-0126	LED DRIVER II	1
T1	T-1066	TRANSFORMER, 16V SEC.	1
LS1	OA-1152-0332	HORN, 120VAC	1
	OA-1150-0139	DIGIT; 13" RED 7-SEG	2
	OA-1150-0033	DIGIT; 13" GRN 7-SEG	4
	OA-1150-0140	DIGIT; 13" RED 9-SEG	2
	OA-1150-0034	DIGIT; 13" AMB 7-SEG	1
	OP-1150-0185	3" LED ARROW II; RED	2
	OP-1150-0129	3" LED ARROW II; GRN	1
	W-1236	CABLE, A/S TO J BOX	1
	OA-1196-0013	J BOX, 1/4" PHONO	1

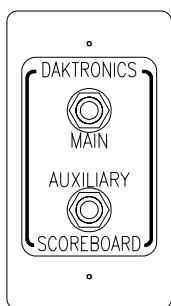
NOTE: DO NOT WORK ON ENERGIZED DISPLAY UNLESS YOU ARE A CERTIFIED ELECTRICIAN OR DIRECTED BY DAKTRONICS.

05	18 SEP 01	CHANGED TITLE TO ELECTRICAL & SIGNAL SPEC, BB-1113-9 FOR AS 5000	ALG	
04	19 OCT 00	CHANGED PART NUMBERS OP-1150-0185 TO OP-1150-0185 AND OA-1150-0032, 0035 TO OA-1150-0139, 0140	CPS	
3	10 JUL 00	REMOVED THE HOME/GUEST CAPTION RAILS.	EPR	
2	29 FEB 00	SWAPPED BONUS AND POSS CAPTIONS	AVB	AVB
1	21 JAN 00	REVISED TABLE TO SHOW REFERENCE TAGS. ENLARGED THE DIGIT ADDRESS LABELS.	MWJ	
REV.	DATE	DESCRIPTION	BY	APPR.

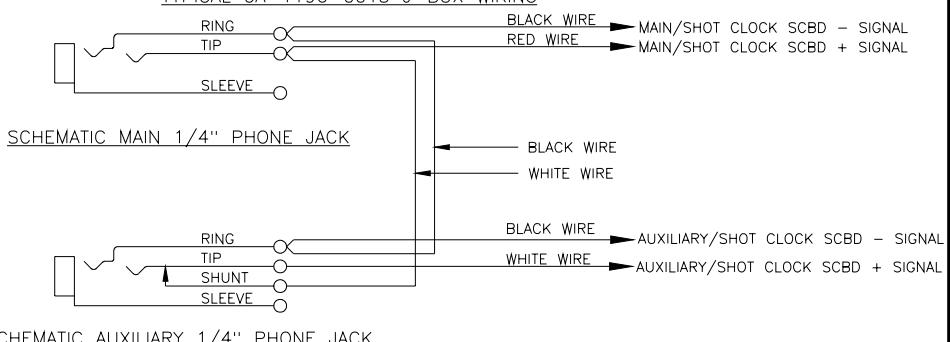
DAKTRONICS, INC. BROOKINGS, SD 57006	
PROJ: LED 2 STRING SCOREBOARD	
TITLE: ELECTRICAL & SIGNAL SPEC, BB-1113-9	
DES. BY:	DRAWN BY: J NILSEN
REVISION	APPR. BY:
	SCALE: 1=40
1152-E10A-125376	



0A-1196-0013 J-BOX



TYPICAL 0A-1196-0013 J-BOX WIRING

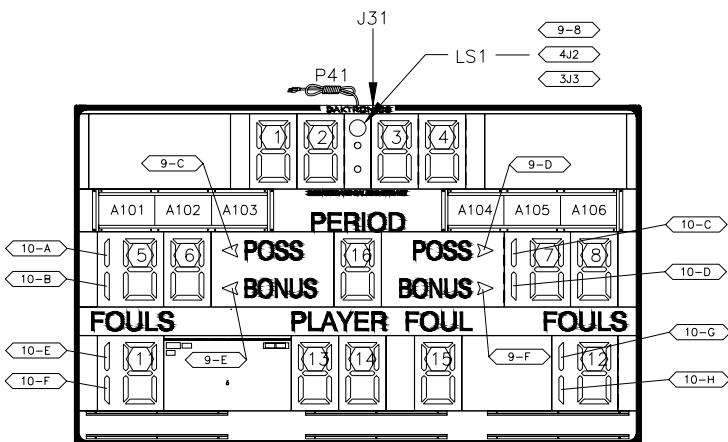


3	17 JAN 02	CHANGED 0A-1166-4 TO 0A-1196-31	JJS		DAKTRONICS, INC. BROOKINGS, SD 57006		
02	26 APR 00	ADDED A/S 3000	DKD		PROJ: ALL SPORT 5000		
1	29 DEC 99	ADDED SHOT CLOCK REMOTE START STOP TO A/S 5000 CONTROLLER	EB		TITLE: BLOCK DIAGRAM, A/S 3000 OR 5000 BB, VB & WR #2		
REV.	DATE	DESCRIPTION	BY	APPR.	DES. BY:	DRAWN BY: E BRAVEK	DATE: 15 DEC 99
03					REVISION 03	APPR. BY: NONE	1196-R04A-125415

BB-1813-9 W/TNMC SCOREBOARD

ELECTRICAL/SIGNAL SPEC

DIGIT, SIGNAL AND POWER SPEC



NOTE: THE NUMBER LISTED BY EACH DIGIT INDICATES WHICH DRIVER CONNECTOR IS WIRED TO THAT DIGIT.

USE MINIMUM OF 24AWG, SHIELDED, TWO CONDUCTOR CABLE FOR SIGNAL TERMINATION.

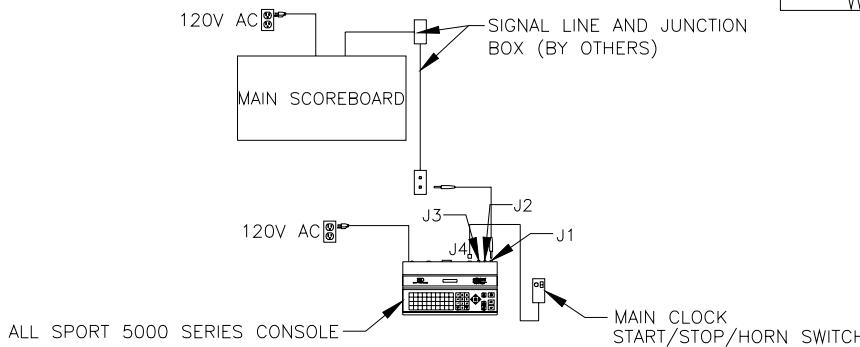
POWER SPEC:

- 120V AC, 15 AMP CIRCUIT REQUIRED.
- 200 WATTS MAXIMUM.
- PRODUCT SAFETY APPROVAL:
ETL LISTED, TESTED TO CSA STANDARDS,
AND CE LABELED FOR INDOOR USE.

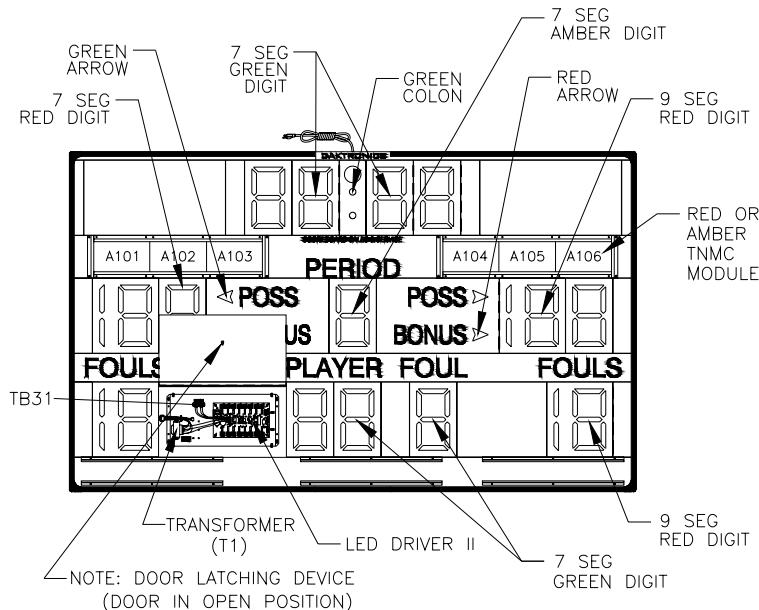
NOTE: VOLLEYBALL AND WRESTLING CAPTIONS ARE AVAILABLE
AND SLIP EASILY IN/OUT OF RAILS MOUNTED ON SCOREBOARD.



TYPICAL, SINGLE DISPLAY SETUP:



PART SPEC



NOTE: TO ACCESS LED DRIVER, REMOVE TWO SCREWS HOLDING ACCESS DOOR CLOSED. THESE SCREWS ARE LOCATED ON BOTTOM OF ACCESS DOOR. SECURE OPEN.

REPLACEMENT PART NUMBERS

COMP. DES.	PART NO.	DESCRIPTION
	ED-11985	MANUAL; LED SCOREBOARD
A1	OP-1150-0126	LED DRIVER II
T1	T-1066	TRANSFORMER, 16V SEC.
LS1	0A-1152-0332	HORN, 120VAC
	0A-1150-0139	DIGIT; 13" RED 7-SEG
	0A-1150-0033	DIGIT; 13" GRN 7-SEG
	0A-1150-0034	DIGIT; 13" AMB 7-SEG
	0A-1150-0140	DIGIT; 13" RED 9-SEG
OP-1150-0185	3" LED ARROW II; RED	
OP-1150-0129	3" LED ARROW II; GREEN	
OP-1150-0060	COLON; 7" & 10" GREEN LED	
OP-1150-0191	DIGIT; 13" RED 7-SEG LED	
OP-1150-0049	DIGIT; 13" GRN 7-SEG LED	
OP-1150-0084	DIGIT; 13" AMB 7-SEG LED	
OP-1150-0192	DIGIT; 13" RED 2-SEG LED	
W-1236	CABLE, A/S TO J BOX	
0A-1196-0013	J BOX, DUAL 1/4" PHONE	
A101-A105	0A-1186-0005	MODULE ASSY; 816-5-RED-SHIFT
A106	0A-1186-0014	MODULE ASSY; 816-5-RED-CLI
A101-A105	0A-1186-0006	MODULE ASSY; 816-5-AMB-SHIFT
A106	0A-1186-0015	MODULE ASSY; 816-5-AMB-CLI

NOTE: DO NOT WORK ON ENERGIZED DISPLAY UNLESS YOU ARE A CERTIFIED ELECTRICIAN OR DIRECTED BY DAKTRONICS.

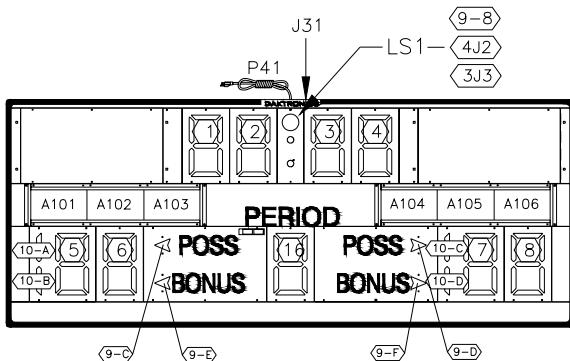
DAKTRONICS, INC. BROOKINGS, SD 57006

PROJ:	STANDARD INDOOR LED SCOREBOARDS		
TITLE:	ELECTRICAL & SIGNAL SPEC, BB-1813-9 W/TNMC		
DES. BY:	AVB	DRAWN BY:	CGROSS
DATE:	18 SEP 10	DATE:	18 DEC 99
REVISION	APPR. BY:		
REV.	DATE	DESCRIPTION	BY APPR.
			SCALE: 1=40
			1152-E10A-125506

BB-1113-9 W/TNMC SCOREBOARD

ELECTRICAL/SIGNAL SPEC

DIGIT, SIGNAL AND POWER SPEC



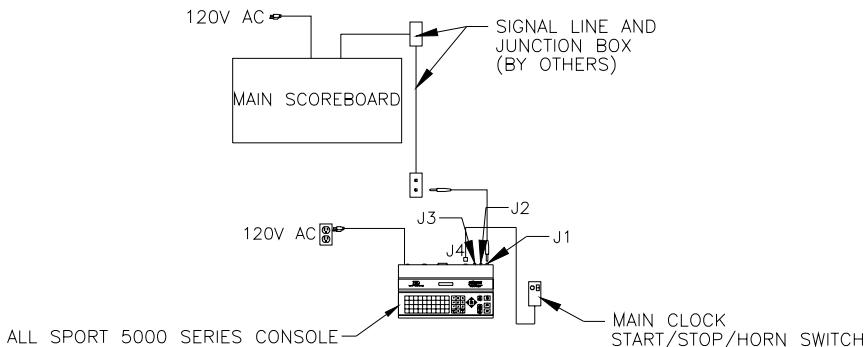
NOTE: THE NUMBER LISTED BY EACH DIGIT INDICATES THE DIGIT DESIGNATION IN RELATION TO THE LED DRIVER.

USE MINIMUM OF 24AWG, SHIELDED, TWO CONDUCTOR CABLE FOR SIGNAL TERMINATION.

POWER SPEC:

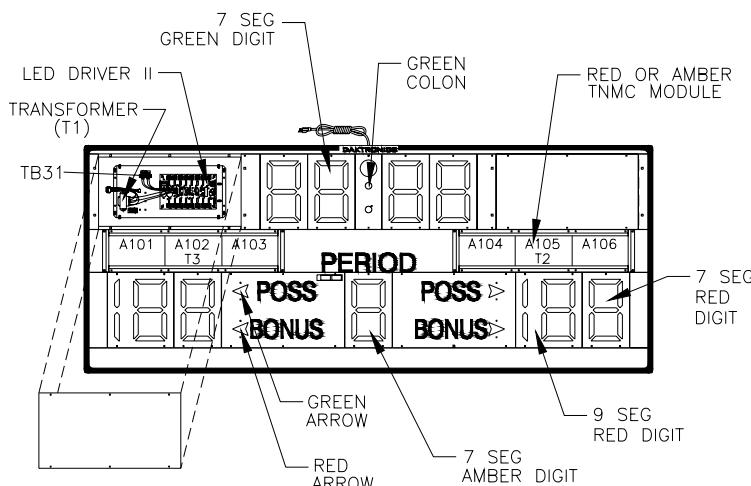
- 120V AC, 15 AMP CIRCUIT REQUIRED.
- 100 WATTS MAXIMUM.
- PRODUCT SAFETY APPROVAL:
ETL LISTED, TESTED TO CSA STANDARDS,
AND CE LABELED FOR INDOOR USE.

TYPICAL, SINGLE DISPLAY SETUP:



PART SPEC

NOTE: TO ACCESS LED DRIVER, REMOVE SIX SCREWS HOLDING ACCESS PANEL TO SCOREBOARD, AND REMOVE PANEL.



REPLACEMENT PART NUMBERS		
COMP. DES.	PART NO.	DESCRIPTION
	ED-11985	MANUAL; LED SCOREBOARD
A1	OP-1150-0126	LED DRIVER II
T1	T-1066	TRANSFORMER, 16V SEC.
T2 - T3	T-1039	TRANSFORMER, 10V SEC.
LS1	OA-1152-0332	HORN, 120VAC
	OA-1150-0139	DIGIT; 13" RED 7-SEG
	OA-1150-0033	DIGIT; 13" GRN 7-SEG
	OA-1150-0034	DIGIT; 13" AMB 7-SEG
	OA-1150-0140	DIGIT; 13" RED 9-SEG
	OP-1150-0185	3" LED ARROW II; RED
	OP-1150-0129	3" LED ARROW II; GREEN
	OP-1150-0060	COLON; 7" & 10" GREEN LED
	OP-1150-0191	DIGIT; 13" RED 7-SEG LED
	OP-1150-0049	DIGIT; 13" GRN 7-SEG LED
	OP-1150-0084	DIGIT; 13" AMB 7-SEG LED
	OP-1150-0192	DIGIT; 13" RED 2-SEG LED
	W-1236	CABLE, A/S TO J BOX
A101-A105	OA-1196-0013	J BOX, DUAL 1/4" PHONE
A106	OA-1186-0014	MODULE ASSY; 816-5-RED-SHIFT
A101-A105	OA-1186-0006	MODULE ASSY; 816-5-RED-CLI
A106	OA-1186-0015	MODULE ASSY; 816-5-AMB-SHIFT

NOTE: DO NOT WORK ON ENERGIZED DISPLAY UNLESS YOU ARE A CERTIFIED ELECTRICIAN OR DIRECTED BY DAKTRONICS.

DAKTRONICS, INC. BROOKINGS, SD 57006

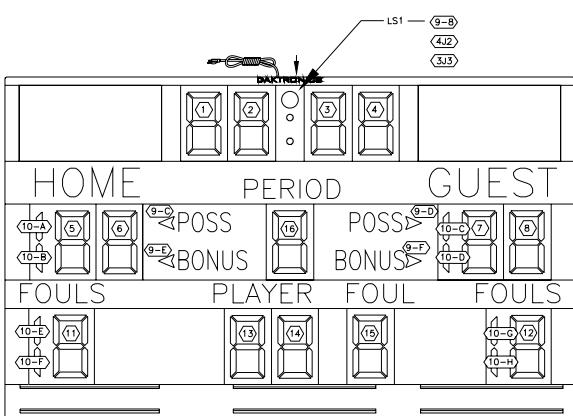
PROJ: STANDARD INDOOR LED SCOREBOARDS		
TITLE: ELECTRICAL AND SIGNAL SPEC, BB-1113-9 W/TNMC		
DES. BY: AVB	DRAWN BY: CGROSS	DATE: 20 DEC 99
REVISION	APPR. BY:	1152-E10A-125616
REV.	SCALE: 1=40	

02	19OCT00	CHANGED PART NUMBER OP-1150-0048, 0051, 0128 TO 0191, 0192, 0185 & OA-1150-0032, 0035, TO OA-1150-0139, 0140	CPS	
1	19 JAN 00	ADDED T2 AND T3 TO FRONT VIEW. ADDED T-1039 PART TO TABLE.	MWJ	
REV.	DATE	DESCRIPTION	BY	APPR.

BB-1813-9 SCOREBOARD

ELECTRICAL/SIGNAL SPEC

DIGIT, SIGNAL AND POWER SPEC



USE MINIMUM OF 24AWG, SHIELDED, TWO CONDUCTOR CABLE FOR SIGNAL TERMINATION.

THE NUMBER LISTED BY EACH DIGIT INDICATES WHICH DRIVER CONNECTOR IS WIRED TO THAT DIGIT.

POWER SPEC:

- 120V AC, 15 AMP CIRCUIT REQUIRED.

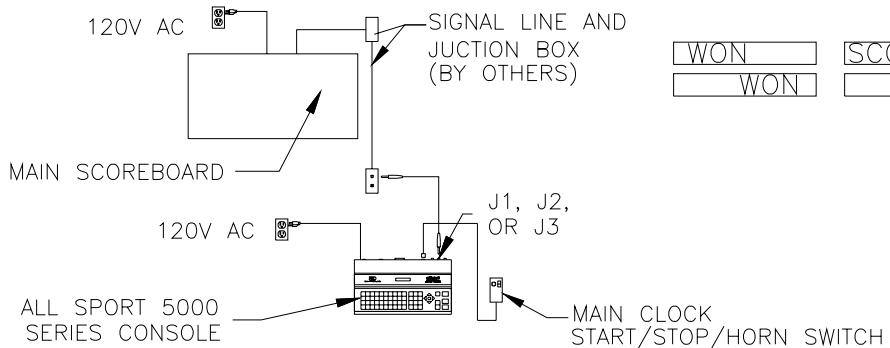
- 100 WATTS MAXIMUM.

- PRODUCT SAFETY APPROVAL:

ETL LISTED, TESTED TO CSA STANDARDS,
AND CE LABELED FOR INDOOR USE.

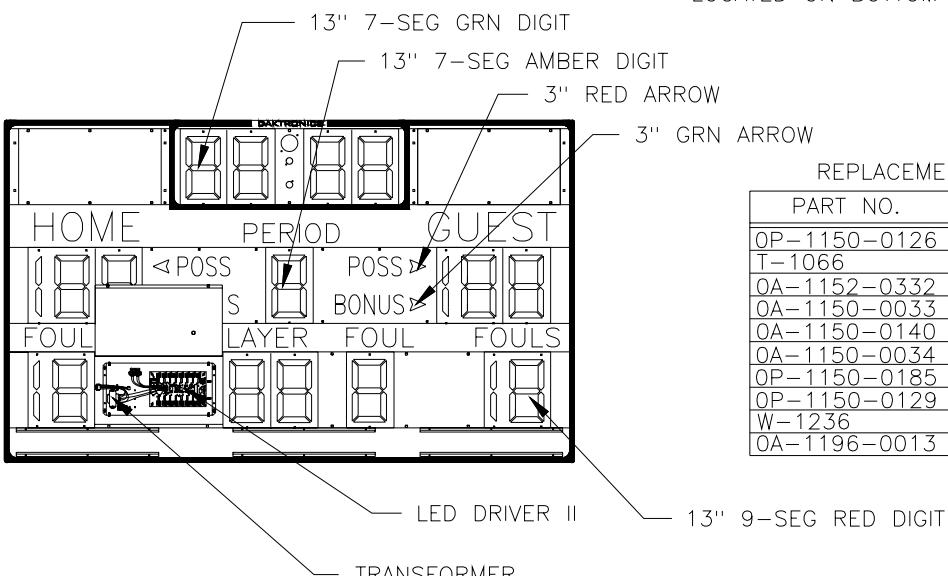
NOTE: VOLLEYBALL AND WRESTLING CAPTIONS ARE AVAILABLE
AND SLIP EASILY IN/OUT OF RAILS MOUNTED ON DISPLAY.

TYPICAL, SINGLE DISPLAY SETUP:



PART SPEC

NOTE: TO ACCESS LED DRIVER, REMOVE TWO SCREWS HOLDING ACCESS DOOR CLOSED. THESE SCREWS ARE LOCATED ON BOTTOM OF ACCESS DOOR. SECURE OPEN.



REPLACEMENT PART NUMBERS

PART NO.	DESCRIPTION	QTY.
OP-1150-0126	LED DRIVER II	1
T-1066	TRANSFORMER, 16V SEC.	1
OA-1152-0332	HORN, 120VAC	1
OA-1150-0033	DIGIT: 13" GRN 7-SEG	7
OA-1150-0140	DIGIT: 13" RED 9-SEG	4
OA-1150-0034	DIGIT: 13" AMB 7-SEG	1
OP-1150-0185	3" LED ARROW II; RED	2
OP-1150-0129	3" LED ARROW II; GRN	2
W-1236	CABLE, A/S TO J BOX	1
OA-1196-0013	J BOX, 1/4" PHONO	1

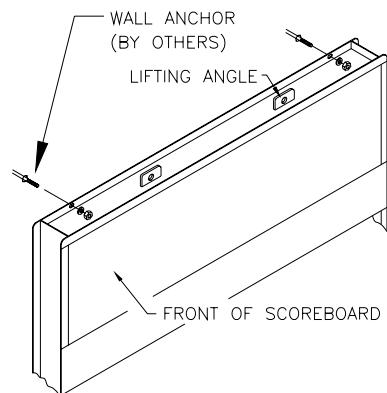
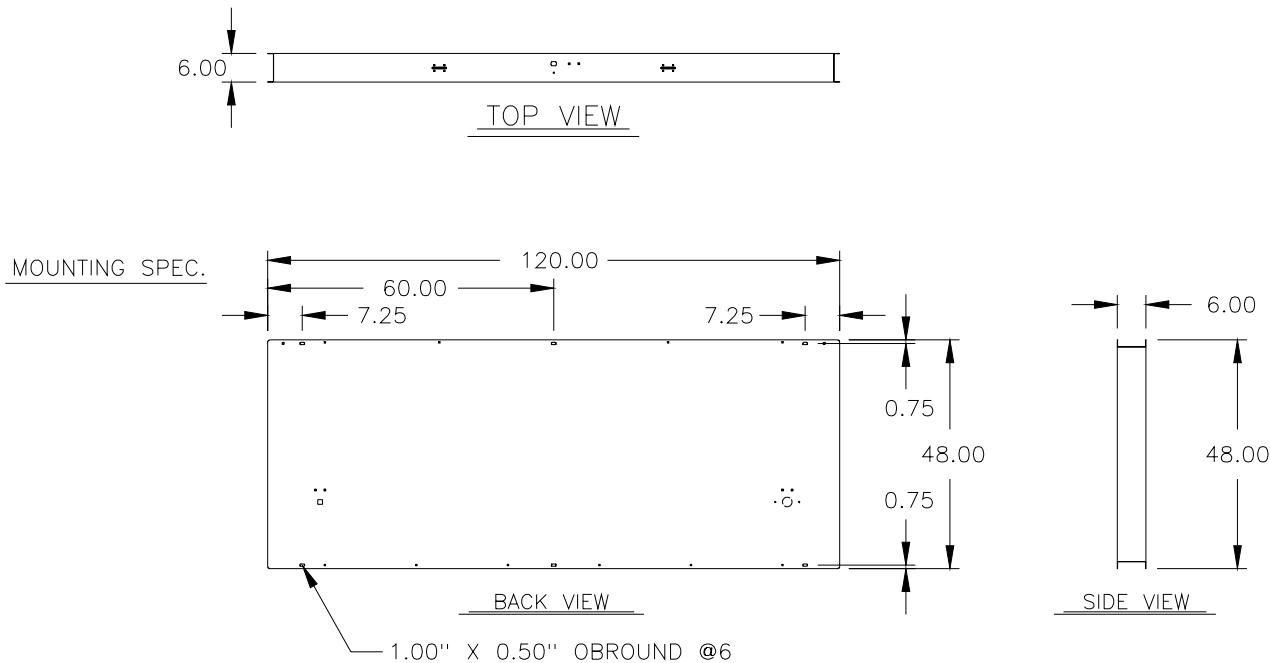
NOTE: DO NOT WORK ON ENERGIZED DISPLAY UNLESS YOU ARE A CERTIFIED ELECTRICIAN OR DIRECTED BY DAKTRONICS.

03	18 SEP 01	CHANGED TITLE TO ELECTRICAL & SIGNAL SPEC, BB-1813-9 FOR AS 5000	ALG	
02	19 OCT 00	CHANGED PART NUMBER OP-1150-0128 TO OP-1150-0185 AND OA-1150-0035 TO OA-1150-0140	CPS	
01	10 JUL 00	REMOVED HOME/GUEST CAPTION RAILS AND CAPTION PANELS.	EPR	
REV.	DATE	DESCRIPTION	BY	APPR.

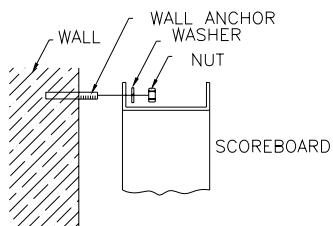
DAKTRONICS, INC. BROOKINGS, SD 57006				
PROJ:	LED 2 STRING SCOREBOARD			
TITLE:	ELECTRICAL & SIGNAL SPEC, BB-1813-9			
DES. BY:		DRAWN BY: J NILSEN		DATE: 21 DEC 99
REVISION	APPR. BY:			
	SCALE: 1=40			1152-E10A-125657

BB-1113-9 W/TNMC SCOREBOARD

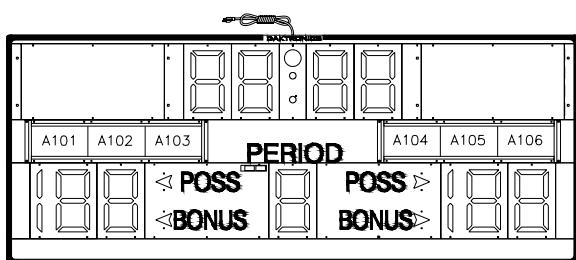
MECHANICAL SPEC



ATTACH THE SCOREBOARD TO THE WALL
AT ALL MOUNTING LOCATIONS INDICATED.
USE THE APPROPRIATE ANCHORS FOR
THE TYPE OF WALL.



NOTE: LIFTING ANGLES WERE DESIGNED ONLY FOR
TEMPORARY USE WHILE LIFTING DISPLAY IN PLACE. DO
NOT USE LIFTING ANGLES TO SECURE DISPLAY IN PLACE.



FRONT VIEW

DISPLAY SPEC:

- SHIPPING WEIGHT: 180 lbs
- MOUNTING WEIGHT: 125 lbs
- DIMENSIONS: 120.00"x 48.00"x 6"

01	10 JUL 00	CHANGED MOUNTING WEIGHT FROM 120 TO 125.	EPR	
REV.	DATE	DESCRIPTION	BY	APPR.

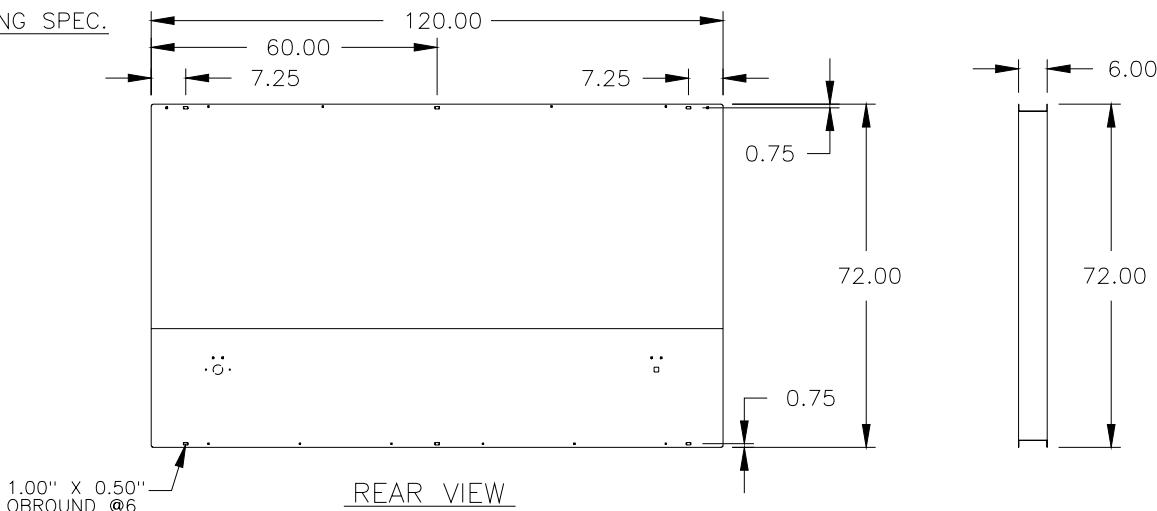
DAKTRONICS, INC. BROOKINGS, SD 57006				
PROJ: STANDARD INDOOR LED SCOREBOARDS				
TITLE: MECHANICAL SPEC; BB-1113-9 W/TNMC				
DES. BY: AVB		DRAWN BY: CGROSS		DATE: 28 DEC 99
REVISION	APPR. BY:			
	SCALE: 1=40			1152-E10A-125753

BB-1813-9 W/TNMC SCOREBOARD

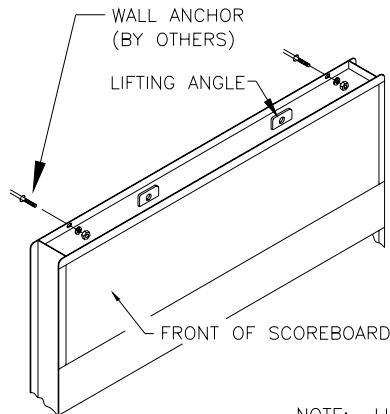
MECHANICAL SPEC.



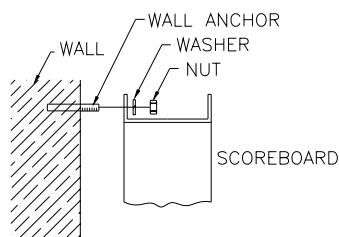
MOUNTING SPEC.



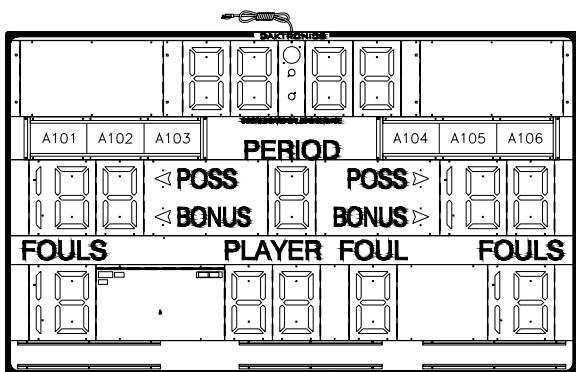
SIDE VIEW



ATTACH THE SCOREBOARD TO THE WALL AT ALL MOUNTING LOCATIONS INDICATED. USE THE APPROPRIATE ANCHORS FOR THE TYPE OF WALL.



NOTE: LIFTING ANGLES WERE DESIGNED ONLY FOR TEMPORARY USE WHILE LIFTING DISPLAY IN PLACE. DO NOT USE LIFTING ANGLES TO SECURE DISPLAY IN PLACE.



FRONT VIEW

DISPLAY SPEC:

- SHIPPING WEIGHT: 260 lbs
- MOUNTING WEIGHT: 170 lbs
- DIMENSIONS: 120.00"x 72.00"x 6"

DAKTRONICS, INC. BROOKINGS, SD 57006

PROJ: STANDARD INDOOR LED SCOREBOARDS

TITLE: MECHANICAL SPEC; BB-1813-9 W/TNMC

DES. BY: AVB

DRAWN BY: CGROSS

DATE: 28 DEC 99

01	10 JUL 00	CHANGED MOUNTING WEIGHT FROM 200 TO 170.	EPR	
REV.	DATE	DESCRIPTION	BY	APPR.

REVISION

APPR. BY:

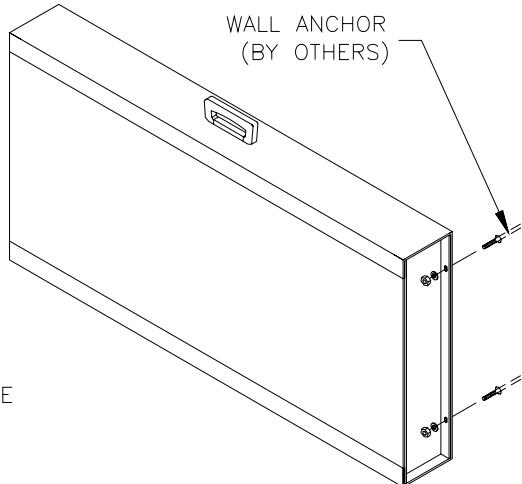
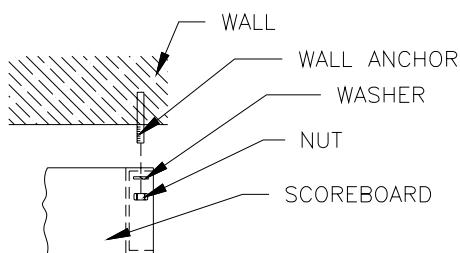
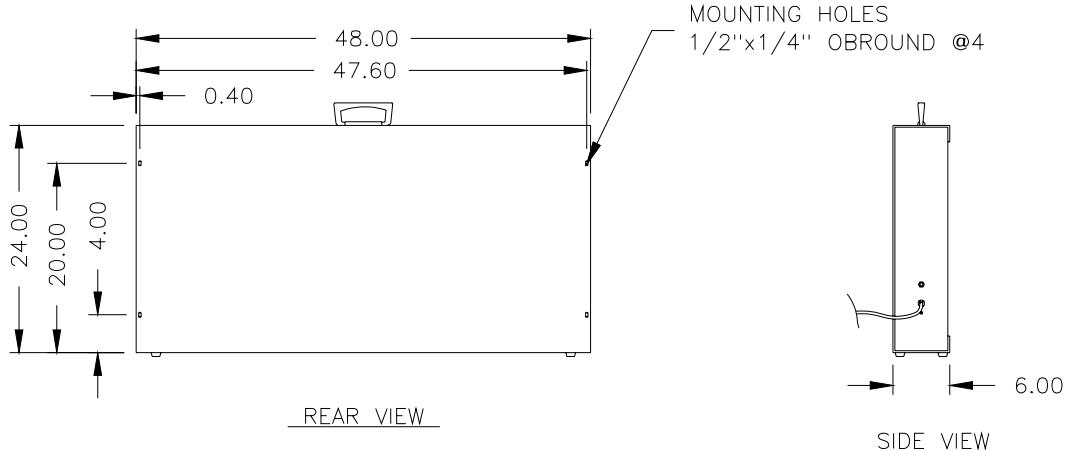
SCALE: 1=40

1152-E10A-125760

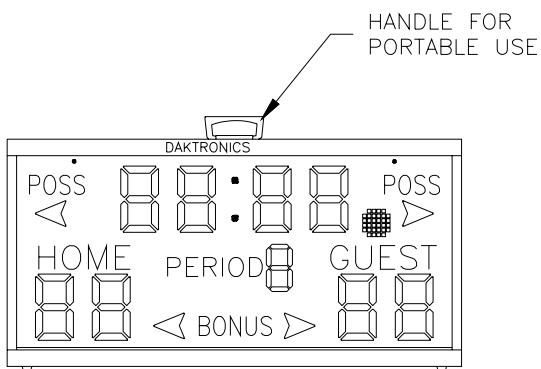
BB-2039 SCOREBOARD

MECHANICAL SPEC

MOUNTING SPEC



ATTACH THE SCOREBOARD TO THE WALL AT ALL MOUNTING LOCATIONS INDICATED. USE THE APPROPRIATE ANCHORS FOR TYPE OF WALL.



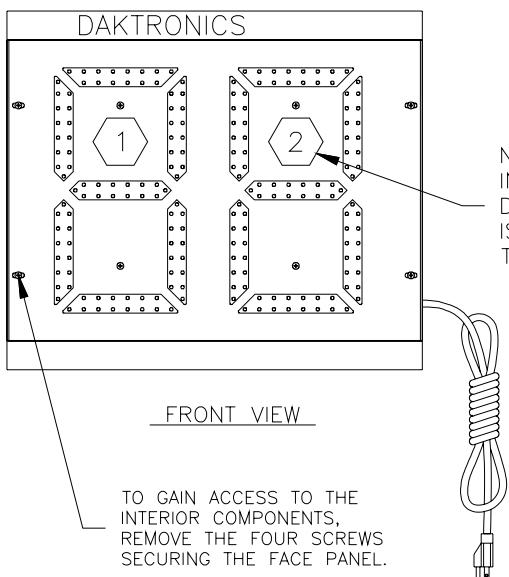
FRONT VIEW

DISPLAY SPEC:

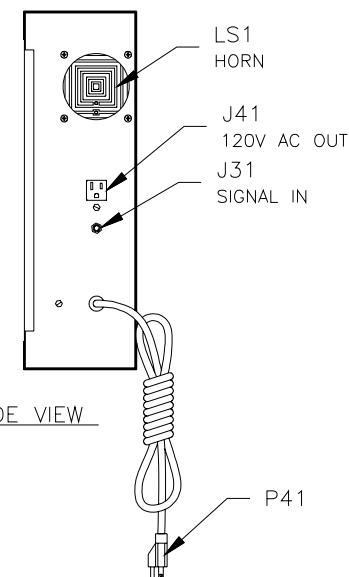
- SHIPPING WEIGHT: 50 lbs
- MOUNTING WEIGHT: 35 lbs
- DIMENSIONS: 48" x 24" x 6"

1	14 FEB 00	ERASED POWER CORD TO GENERALIZE DRAWING.	MWJ	
REV.	DATE	DESCRIPTION	BY	APPR.

DAKTROICS, INC. BROOKINGS, SD 57006				
PROJ: STANDARD LED SCOREBOARDS				
TITLE: MECHANICAL SPEC, BB-2039				
DES. BY: AVB		DRAWN BY: J NILSEN		DATE: 06 JAN 00
REVISION	APPR. BY:			
	SCALE: 1=20		1152-E10A-126125	



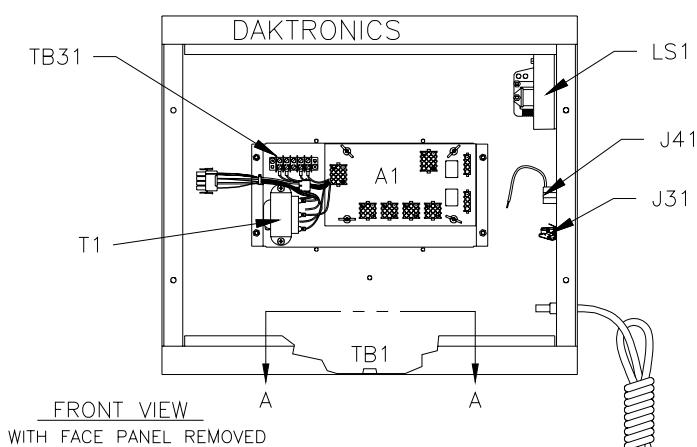
NUMBER ON DIGIT
INDICATES WHICH
DRIVER CONNECTOR
IS WIRED TO
THE DIGIT



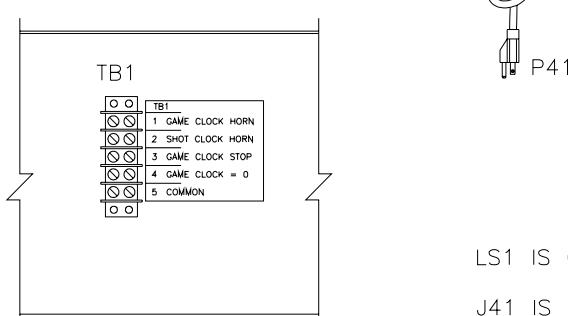
SIDE VIEW

120V AC, 15 AMP CIRCUIT REQUIRED.
40 WATTS MAX.

FOR SIGNAL, USE ONE PAIR, 24 AWG MIN.
SHIELDED CABLE.



FRONT VIEW
WITH FACE PANEL REMOVED



SECTION A-A
SCALE 1=4

REPLACEMENT PARTS LIST

PART	DESCRIPTION	DAKTRONICS PART NUMBER
A1	LED DRIVER, 4-COL.	OP-1150-0130
LS1	HORN, 120V AC W/ CAP	OA-1152-0332
T1	TRANSFORMER, 12V, 2.5A	T-1063
	DIGIT, 13" RED 7-SEG	OP-1150-0191

HORN AND INDICATOR SEGMENTS

SEGMENT P3	P3 CONNECTIONS	TB1 POS
E 5	GAME CLOCK HORN	1
F 4	SHOT CLOCK HORN	2
G 9	GAME CLOCK STOP	3
H 8	GAME CLOCK = 0	4
7	28V COMMON	5

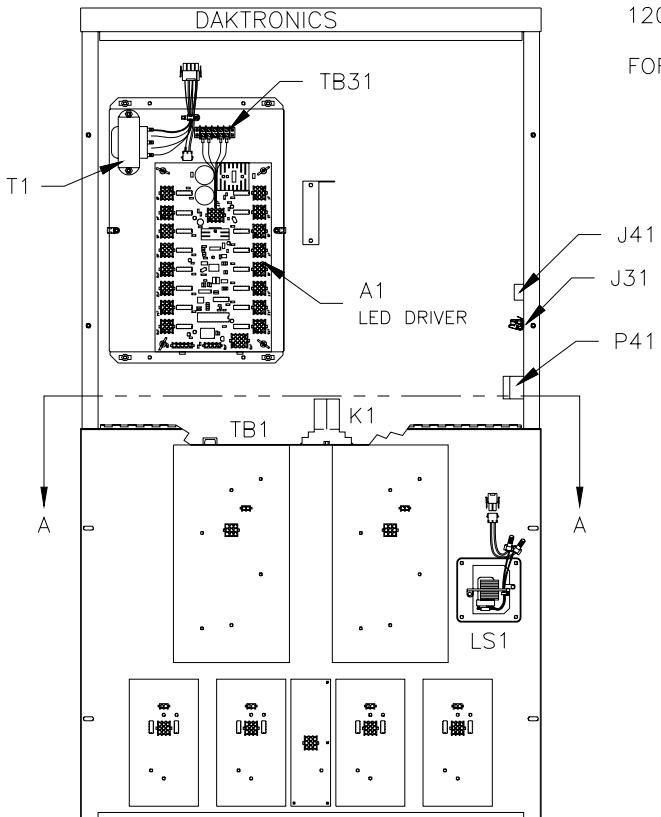
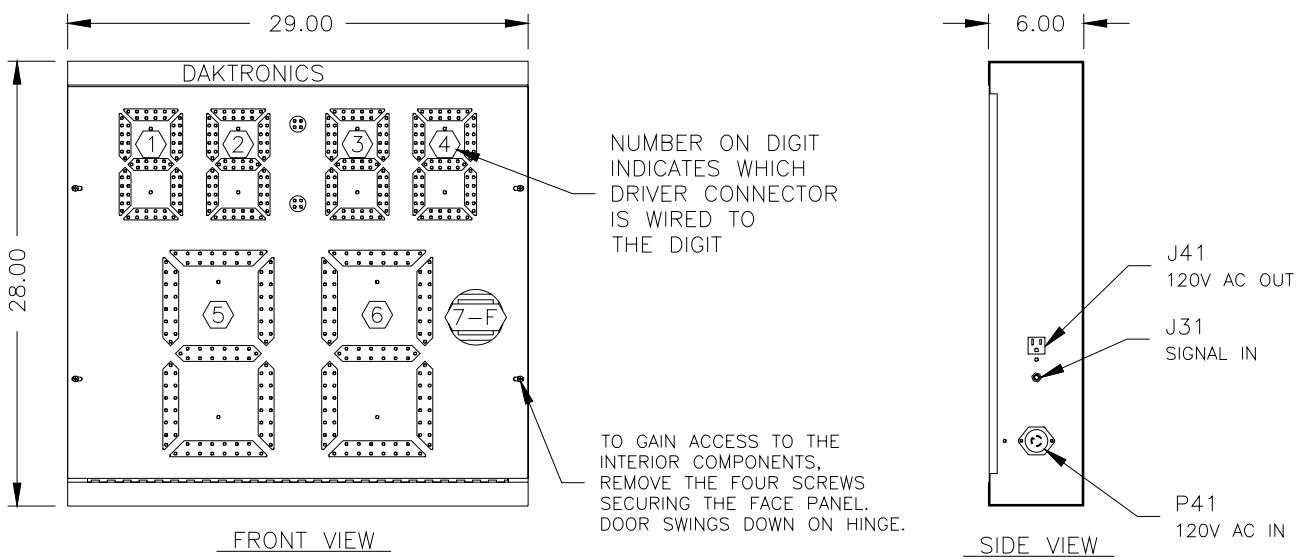
LS1 IS CONNECTED TO THE SHOT CLOCK HORN SEGMENT.

J41 IS CONNECTED TO THE GAME CLOCK=0 SEGMENT.

TO ENABLE OTHER SEGMENTS, OR TO MAKE OTHER CHANGES,
RECONNECT AT TB1.

03	200CTOO	CHANGED PART NUMBER OP-1150-0048 TO OP-1150-0191	CPS	
02	2 OCT 00	CHANGED FROM 100 WATTS TO 40 WATTS	JEP	
01	10 JUL 00	REMOVED THE FUSE.	EPR	
REV.	DATE	DESCRIPTION	BY	APPR.

DAKTRONICS, INC. BROOKINGS, SD 57006				
PROJ:				
TITLE:	ELECTRICAL SPECIFICATIONS, BB-2014-9 FOR AS-5000			
DES. BY:	AVB	DRAWN BY:	A VANBEMMEL	DATE: 07 JAN 2000
REVISION	APPR. BY:			
	SCALE:	1=10	1152-R04A-126153	



120V AC, 15 AMP CIRCUIT REQUIRED, 100 WATTS MAX.

FOR SIGNAL, USE ONE PAIR, 24 AWG MIN. SHIELDED CABLE.

REPLACEMENT PARTS LIST

PART	DESCRIPTION	DAKTRONICS PART NUMBER
A1	LED DRIVER, 16-COL.	OP-1150-0126
LS1	HORN, 120V AC W/ CAP	0A-1152-0332
T1	TRANSFORMER, 12V, 2.5A	T-1063
	DIGIT, 13" RED 7-SEG	OP-1150-0191
	DIGIT, 7" AMBER 7-SEG	OP-1150-0082

HORN AND INDICATOR SEGMENTS

SEGMENT	P7 PIN NO.	P7 CONNECTIONS	POS.
FUNCTION			
E	5	GAME CLOCK HORN	1
F	4	SHOT CLOCK HORN	2
G	9	GAME CLOCK STOP	3
H	8	GAME CLOCK = 0	4
	7	28V COMMON	5

SECTION A-A
SCALE 1=5

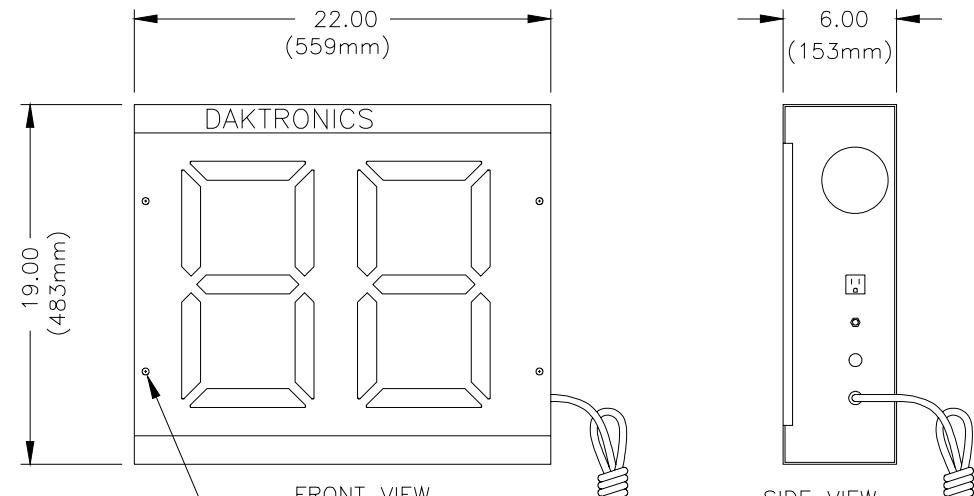
LS1 IS CONNECTED TO THE SHOT CLOCK HORN SEGMENT.

J41 IS CONNECTED TO THE GAME CLOCK=0 SEGMENT.

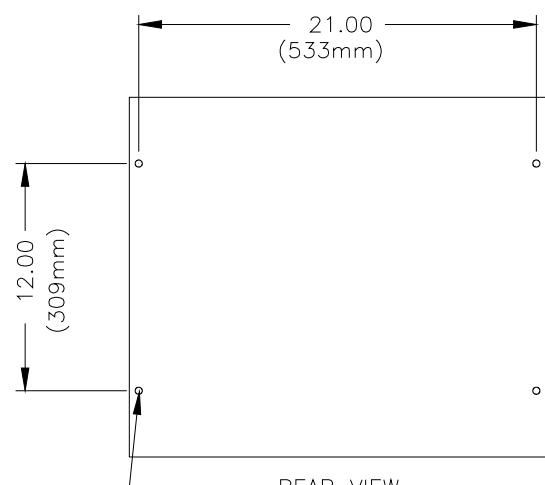
TO ENABLE OTHER SEGMENTS, OR TO MAKE OTHER CHANGES, RECONNECT AT TB1.

04	18 SEP 01	CHANGED TITLE TO ELECTRICAL SPEC, BB-2015-9 FOR AS 5000	ALG	
03	21 MAR 01	CHANGED VINYL COLON TO LED COLON PLACED DRIVER IN THE REAR VIEW, CHANGED DESCRIPTION AND PN# OF A1 DRIVER.	JDW	
02	20OCT00	CHANGED PART NUMBER OP-1150-0048 TO OP-1150-0191	CPS	
01	10 JUL 00	REMOVED THE FUSE.	EPR	
REV.	DATE	DESCRIPTION	BY	APPR.

DAKTRONICS, INC. BROOKINGS, SD 57006	
PROJ: LED SCOREBOARDS	
TITLE: ELECTRICAL & SIGNAL SPEC, BB-2015-9	
DES. BY: AVB	DRAWN BY: A VANBEMMEL DATE: 11JAN2000
REVISION	APPR. BY:
SCALE: 1=12	1152-R04A-126193



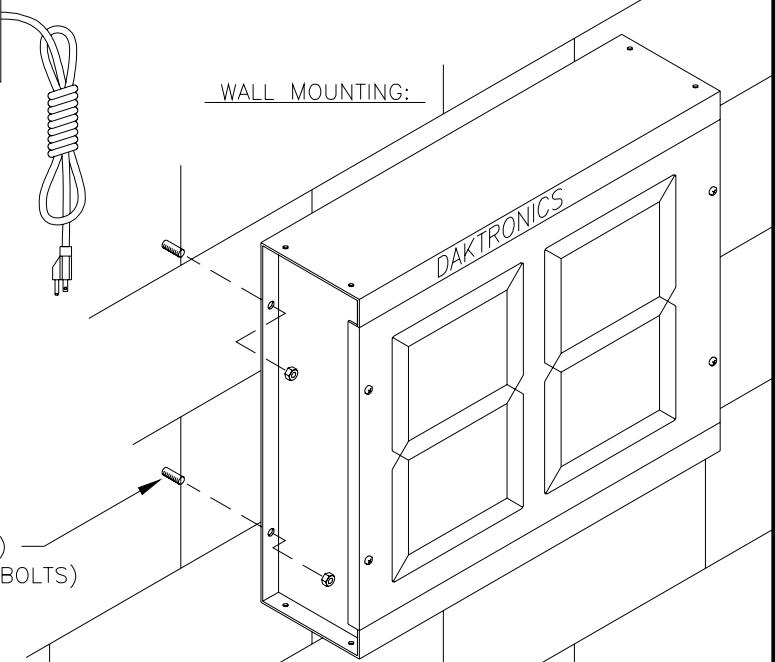
REMOVE THESE
FOUR SCREWS TO
ACCESS COMPONENTS
INSIDE THE DISPLAY.



MOUNTING HOLES
3/8" Ø TYP. @ 4
(9.5mm) Ø

MOUNTING HARDWARE IS NOT PROVIDED.
SEE DRAWING NO. 1009-R10A-91230
FOR SUGGESTIONS ON MOUNTING TO
CEILING-SUSPENDED BACKSTOPS.
FOR PORTABLE BACKSTOPS, CONTACT
THE BACKSTOP MANUFACTURER FOR
MOUNTING HARDWARE.

WALL MOUNTING:



DAKTRONICS, INC. BROOKINGS, SD 57006

PROJ:

TITLE: MECHANICAL SPECIFICATIONS, BB-2014-9

DES. BY: AVB

DRAWN BY: A VANBEMMEL DATE: 10JAN2000

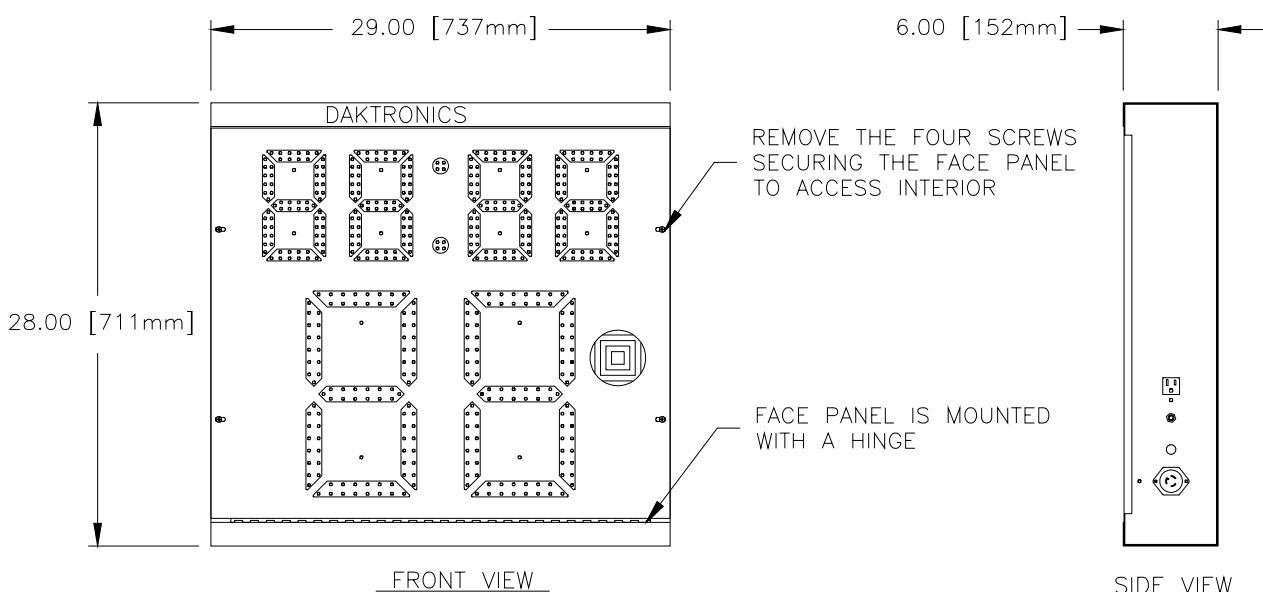
REVISION

APPR. BY:

SCALE: 1=10

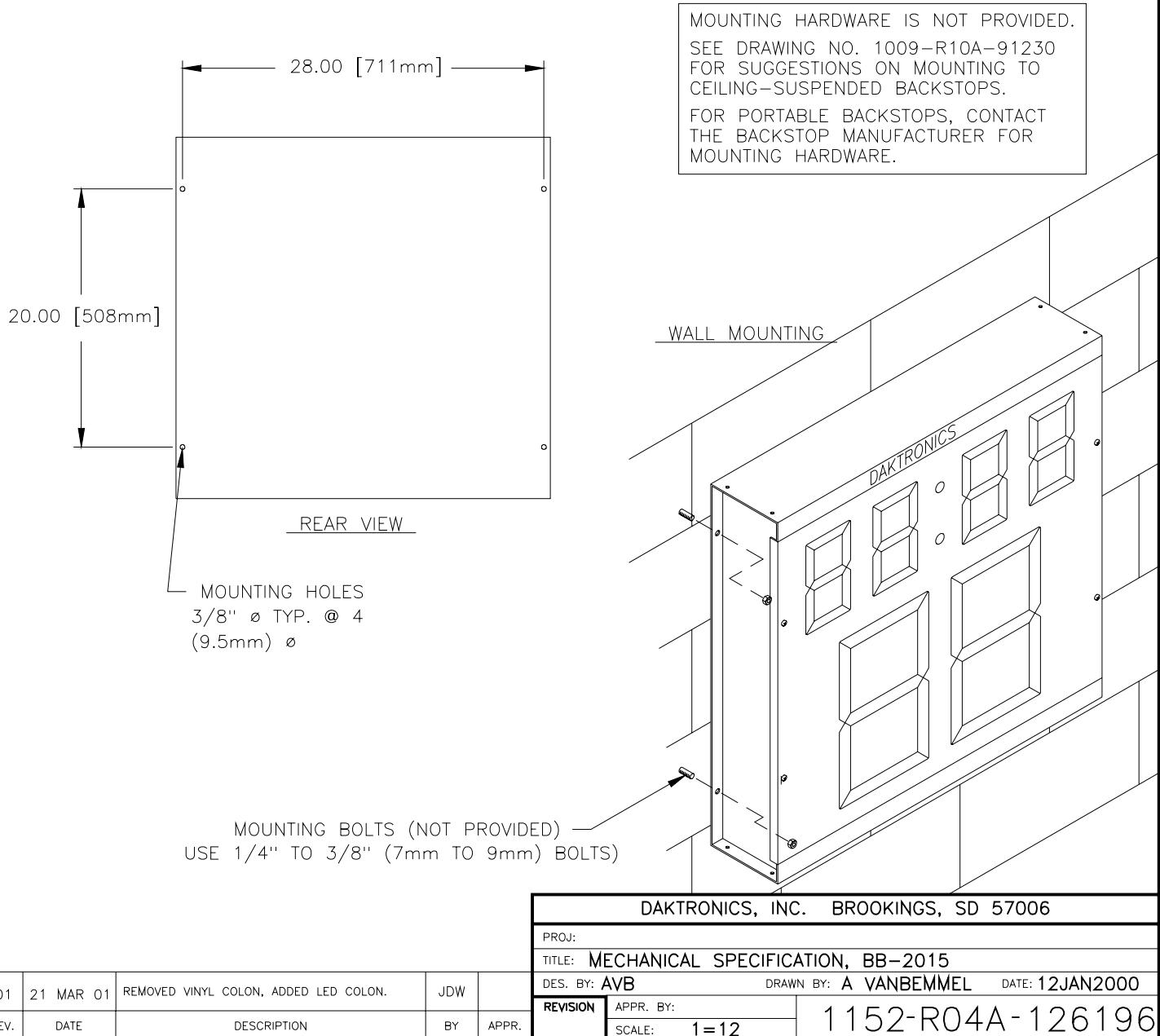
1152-R04A-126195

REV.	DATE	DESCRIPTION	BY	APPR.
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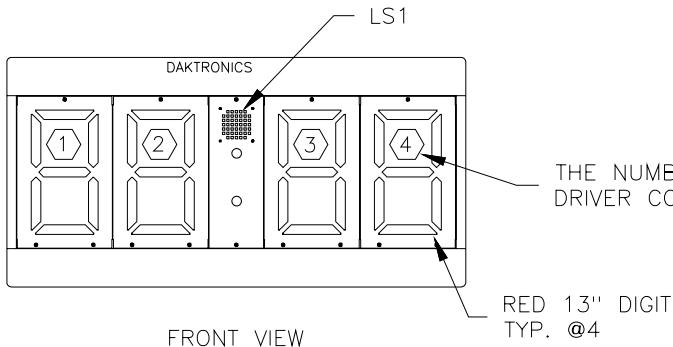
FRONT VIEW

SIDE VIEW



TI-413-9 SCOREBOARD
ELECTRICAL/SIGNAL SPEC

DIGIT, SIGNAL AND POWER SPEC



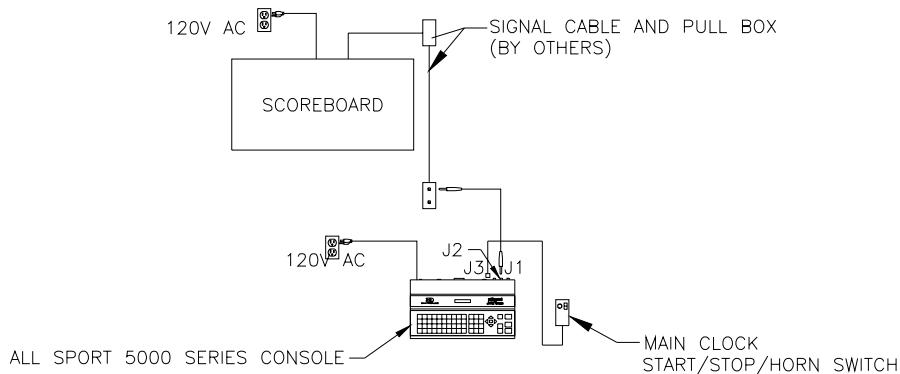
NOTE: REFER TO DRAWING BELOW OR ALLSPORT MANUAL FOR ADDITIONAL WIRING DIAGRAMS OF DISPLAY. USE MINIMUM OF 24AWG, SHIELDED, TWO CONDUCTOR CABLE FOR SIGNAL TERMINATION.

THE NUMBER ON THE DIGIT INDICATES WHICH DRIVER CONNECTOR IS WIRED TO THAT DIGIT.

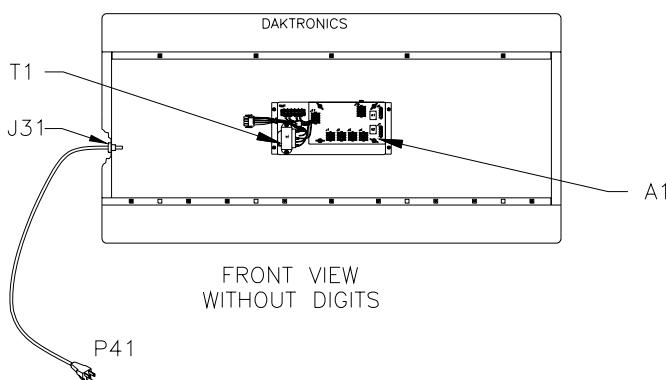
POWER SPEC:

- 120V AC, 15 AMP CIRCUIT REQUIRED.
- 100 WATTS MAXIMUM.
- PRODUCT SAFETY APPROVAL:
ETL LISTED, TESTED TO CSA STANDARDS,
AND CE LABELED FOR INDOOR USE.

TYPICAL, SINGLE DISPLAY SETUP:



PART SPEC



NOTE: TO ACCESS LED DRIVER, REMOVE TWO SCREWS HOLDING THE DIGITS IN. THESE SCREWS ARE LOCATED ON BOTTOM & TOP OF THE DIGITS.

REPLACEMENT PART NUMBERS

	PART NO.	DESCRIPTION
	OA-1150-0139	DIGIT, 13" RED 7SEG LED
A1	OP-1150-0131	LED DRIVER
T1	T-1063	TRANSFORMER, 16V SEC.
	ED-11984	MANUAL, LED SCOREBOARD
	W-1236	CABLE, A/S TO J BOX
	OA-1196-0013	J BOX, 1/4 PHONO
LS1	OA-1152-0332	HORN, 120V AC

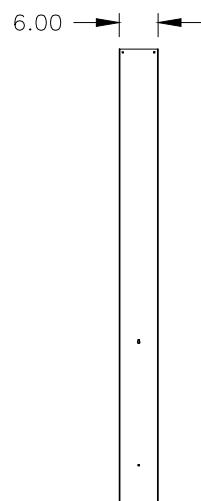
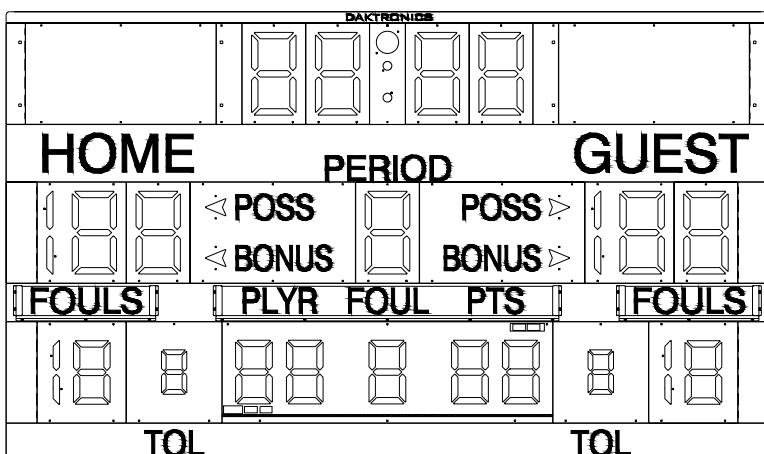
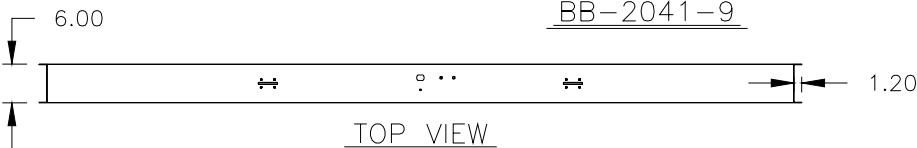
NOTE: DO NOT WORK ON ENERGIZED DISPLAY UNLESS YOU ARE A CERTIFIED ELECTRICIAN OR DIRECTED BY DAKTRONICS.

DAKTRONICS, INC. BROOKINGS, SD 57006

PROJ: STANDARD LED SCOREBOARDS	TITLE: ELECTRICAL & SIGNAL SPEC, TI-413-9	
DES. BY: AVB	DRAWN BY: DWEIBEL	DATE: 20 JAN 00
REVISION	APPR. BY:	1152-E10A-126794
SCALE: 1=20		

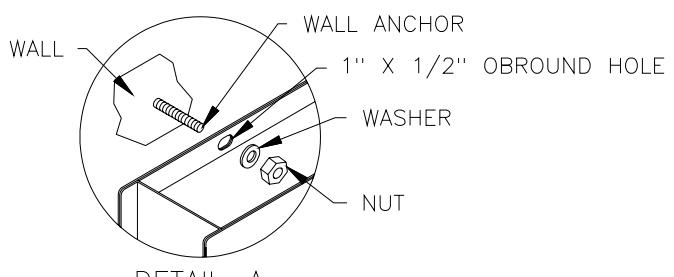
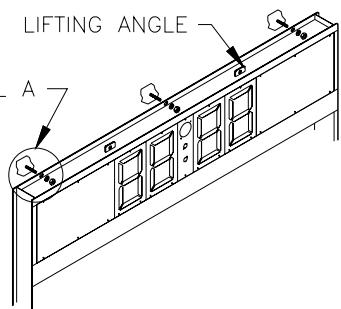
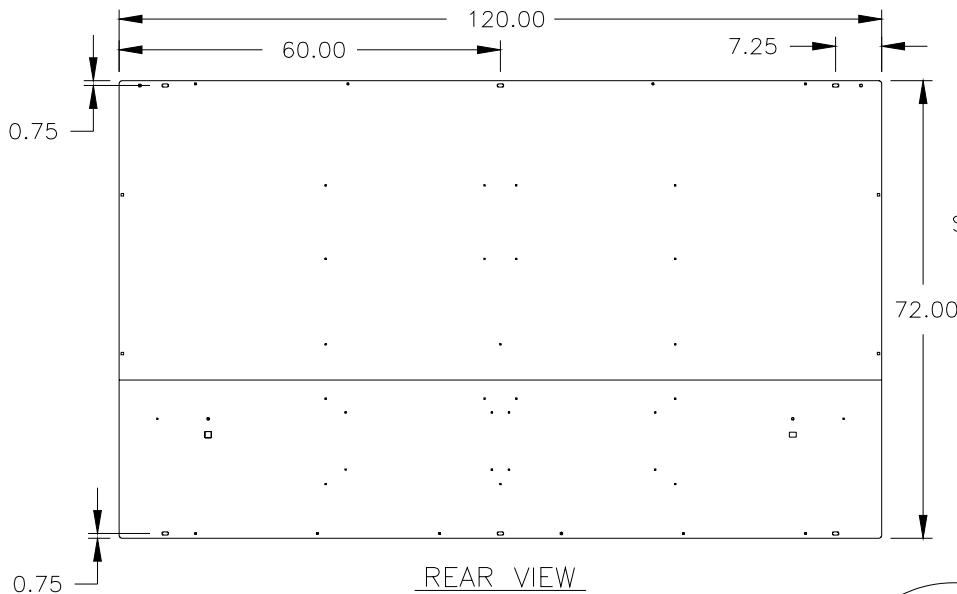
02	19 SEP 01	CHANGED TITLE TO ELECTRICAL & SIGNAL SPEC, TI-413-9	ALG	
01	200CTO0	CHANGED PART NUMBER OP-1150-0032 TO OA-1150-0139	CPS	
REV.	DATE	DESCRIPTION	BY	APPR.

BB-2041-9



FRONT VIEW

SIDE VIEW

NOTES:

1. USE APPROPRIATE WALL ANCHORS FOR TYPE OF WALL.
2. LIFT EYES ARE FOR TEMPORARY USE WHILE LIFTING SCOREBOARD DURING INSTALLATION. DO NOT USE LIFT EYES FOR PERMANENT SUSPENSION.

SPECIFICATION		
MODEL #	SHIPPING WEIGHT	MOUNTING WEIGHT
BB-2041-9	270 LBS	160 LBS

DAKTRONICS, INC. BROOKINGS, SD 57006

PROJ: STANDARD INDOOR LED SCOREBOARDS

TITLE: MECHANICAL SPECIFICATION; BB-2041-9

DES. BY: BPETERSON

DRAWN BY: MVANDYK

DATE: 13APR00

1	06 JUL 00	REMOVED CAPTION RAILS FROM HOME & GUEST.	EPR	
REV.	DATE	DESCRIPTION	BY	APPR.

REVISION

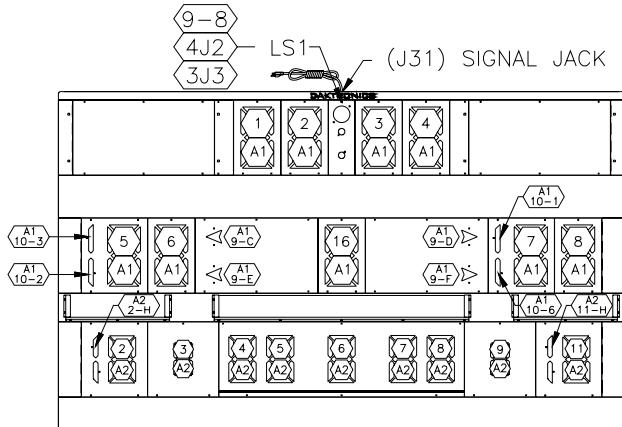
APPR. BY:

SCALE: 1=30

1152-E10A-130920

BB-2041-9 SCOREBOARD
ELECTRICAL / SIGNAL SPECIFICATION

DIGIT, SIGNAL, & POWER SPECIFICATION:



FRONT VIEW

NOTES:

1. USE MINIMUM OF 24AWG, SHEIELDED, TWO CONDUCTOR CABLE FOR SIGNAL TERMINATION.

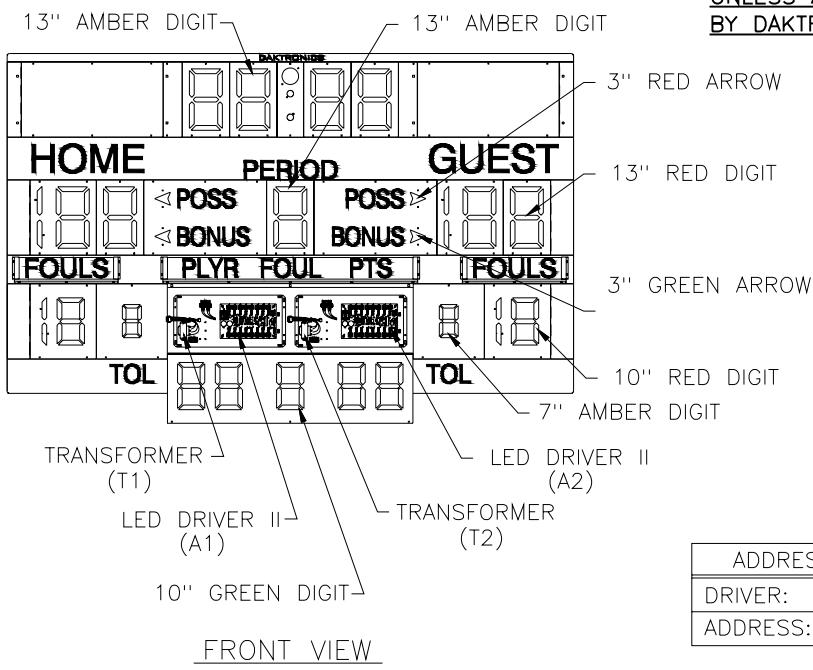
= DRIVER ASSIGNMENT
 = DRIVER

DIGIT DETAIL

POWER SPECIFICATION

- 120V AC, 15 AMP CIRCUIT REQUIRED.
- 100 WATTS MAXIMUM.
- PRODUCT SAFETY APPROVAL:
 1. ETL LISTED
 2. TESTED TO CSA STANDARDS
 3. CE LABELED FOR INDOOR USE

PART SPECIFICATION:



NOTES:

1. REMOVE THE THREE SCREWS FOUND ON THE TOP OF THE ACCESS DOOR. OPEN DOOR TO ACCESS LED DRIVER.
2. DO NOT WORK ON ENERGIZED SCOREBOARD UNLESS A CERTIFIED ELECTRICIAN OR DIRECTED BY DAKTRONICS.

REPLACEMENT PART NUMBERS		
	PART NO.	DESCRIPTION
A1-A2	OP-1150-0126	LED DRIVER II
T1-T2	T-1066	TRANSFORMER; 16V SEC.
	0A-1150-0139	DIGIT; 13" RED 7-SEG
	0A-1150-0140	DIGIT; 13" RED 9-SEG
	0A-1150-0034	DIGIT; 13" AMBER 7-SEG
	0A-1150-0147	DIGIT; 10" RED 9-SEG
	OP-1150-0178	DIGIT; 10" GREEN 7-SEG
	OP-1150-0082	DIGIT; 7" AMBER 7-SEG
	OP-1150-0185	3" LED ARROW II; RED
	OP-1150-0129	3" LED ARROW II; GREEN
	W-1236	CABLE; A/S TO J BOX
LS1	0A-1152-0390	HORN; 120V AC

ADDRESS INFORMATION	ADDRESS INFORMATION
DRIVER: A1	DRIVER: A2
ADDRESS: 12	ADDRESS: 14

03	17 SEP 01	CHANGED TITLE TO ELECTRICAL & SIGNAL SPEC, BB-2041-9	ALG	
02	200CT00	CHANGED PART NUMBER OP-1150-0128 TO OP-1150-0185 AND 0A-1150-0032, 0035, 0397 TO 0A-1150-0139, 0140, 0147	CPS	
1	06 JUL 00	REMOVED CAPTION RAILS FROM HOME & GUEST.	EPR	
REV.	DATE	DESCRIPTION	BY	APPR.

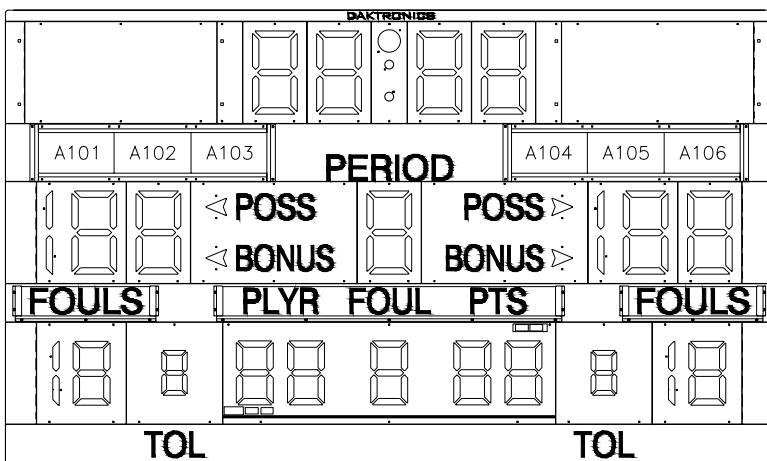
DAKTRONICS, INC. BROOKINGS, SD 57006				
PROJ:	STANDARD INDOOR LED SCOREBOARDS			
TITLE:	ELECTRICAL & SIGNAL SPEC, BB-2041-9			
DES. BY:	BPETERSON	DRAWN BY:	MVANDYK	DATE: 13APR00
REVISION	APPR. BY:			
SCALE:	1=40	1152-E10A-130928		

BB-2041-9 W/ TNMC

6.00

1.20

TOP VIEW



6.00

6.00

PERIOD

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BONUS >

FOULS

PLYR FOUL

PTS

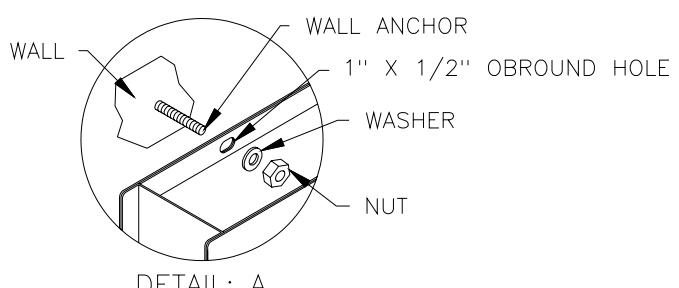
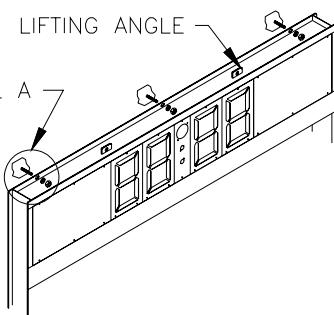
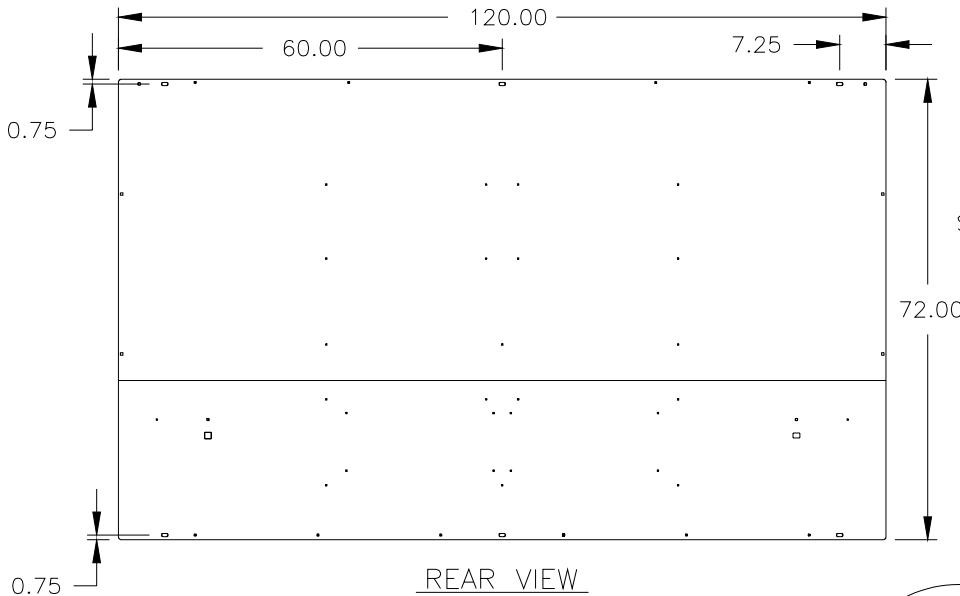
FOULS

TOL

TOL

FRONT VIEW

SIDE VIEW

NOTES:

1. USE APPROPRIATE WALL ANCHORS FOR TYPE OF WALL.
2. LIFT EYES ARE FOR TEMPORARY USE WHILE LIFTING SCOREBOARD DURING INSTALLATION. DO NOT USE LIFT EYES FOR PERMANENT SUSPENSION.

SPECIFICATION			
MODEL #	SHIPPING WEIGHT	MOUNTING WEIGHT	
BB-2041-9 W/ TNMC	270 LBS	180 LBS	

DAKTRONICS, INC. BROOKINGS, SD 57006

PROJ: STANDARD INDOOR LED SCOREBOARDS

TITLE: MECHANICAL SPECIFICATION; BB-2041-9 W/ TNMC

DES. BY: BPETERSON DRAWN BY: MVANDYK DATE: 17APR00

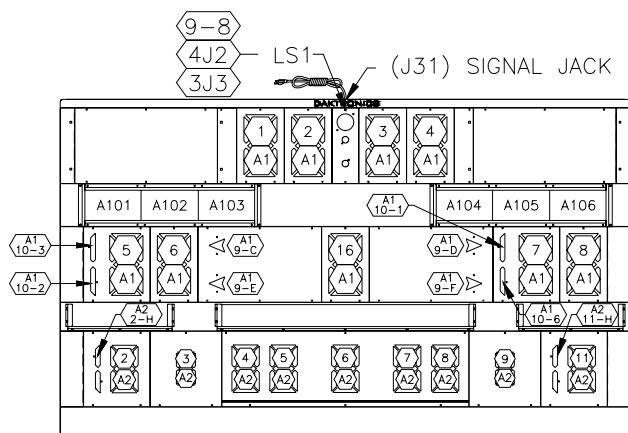
REVISION APPR. BY: SCALE: 1=30 1152-E10A-131027

1	06JUL00	UPDATED MOUNTING WEIGHT.	BDP	
REV.	DATE	DESCRIPTION	BY	APPR.

BB-2041-9 W/ TNMC SCOREBOARD

ELECTRICAL / SIGNAL SPECIFICATION

DIGIT, SIGNAL, & POWER SPECIFICATION:



FRONT VIEW

NOTES:

1. USE MINIMUM OF 24AWG, SHEIELDED, TWO CONDUCTOR CABLE FOR SIGNAL TERMINATION.

= DRIVER ASSIGNMENT
 = DRIVER

DIGIT DETAIL

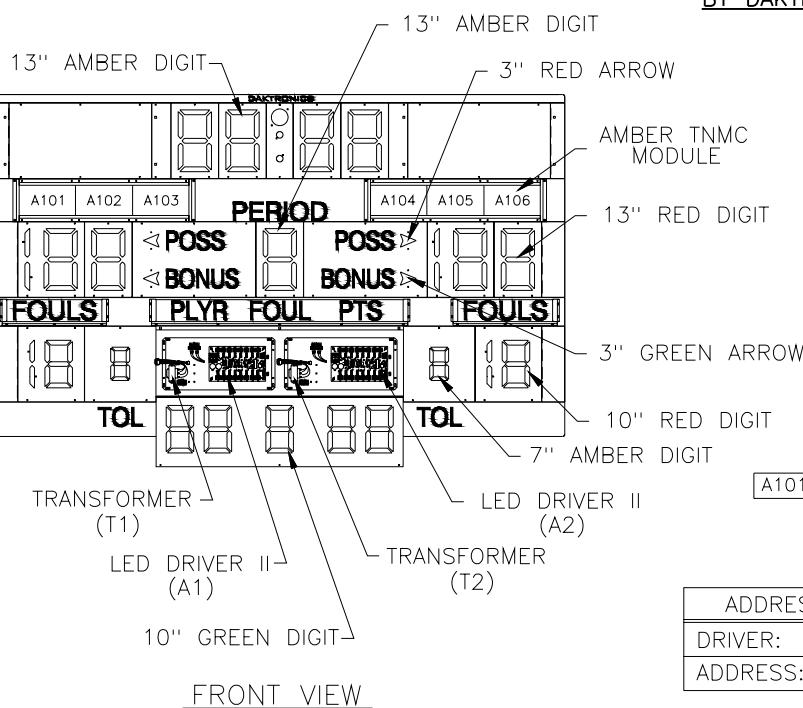
POWER SPECIFICATION

- 120V AC, 15 AMP CIRCUIT REQUIRED.
- 200 WATTS MAXIMUM.
- PRODUCT SAFETY APPROVAL:
 1. ETL LISTED
 2. TESTED TO CSA STANDARDS
 3. CE LABELED FOR INDOOR USE

PART SPECIFICATION:

NOTES:

1. REMOVE THE THREE SCREWS FOUND ON THE TOP OF THE ACCESS DOOR. OPEN DOOR TO ACCESS LED DRIVER.
2. DO NOT WORK ON ENERGIZED SCOREBOARD UNLESS A CERTIFIED ELECTRICIAN OR DIRECTED BY DAKTRONICS.



FRONT VIEW

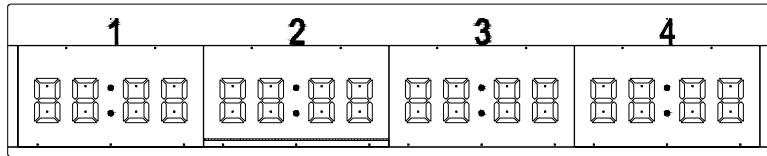
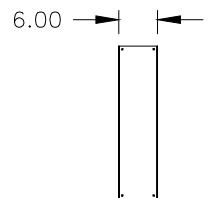
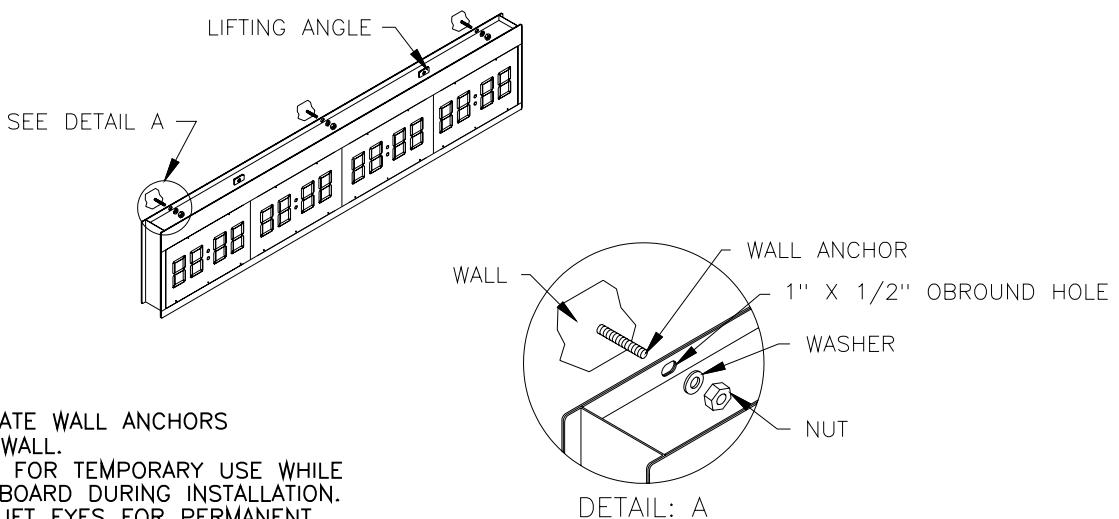
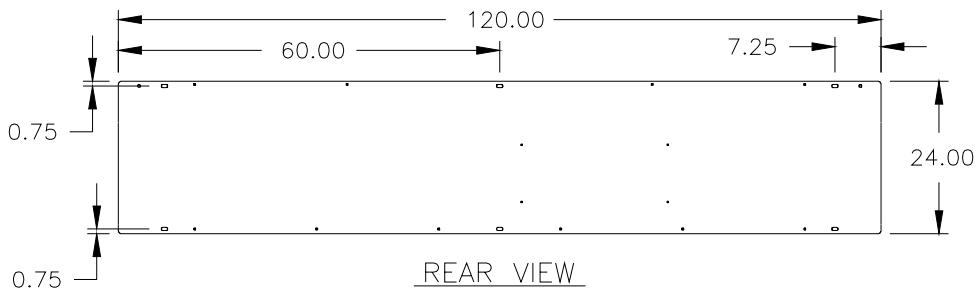
REPLACEMENT PART NUMBERS		
	PART NO.	DESCRIPTION
A1	OP-1150-0126	LED DRIVER II
A2	OP-1150-0126	LED DRIVER II
T1	T-1066	TRANSFORMER; 16V SEC.
T2	T-1066	TRANSFORMER; 16V SEC.
OA-1150-0139	DIGIT; 13" RED 7-SEG	
OA-1150-0140	DIGIT; 13" RED 9-SEG	
OA-1150-0034	DIGIT; 13" AMBER 7-SEG	
OA-1150-0147	DIGIT; 10" RED 9-SEG	
OP-1150-0178	DIGIT; 10" GREEN 7-SEG	
OP-1150-0082	DIGIT; 7" AMBER 7-SEG	
OP-1150-0185	3" LED ARROW II; RED	
OP-1150-0129	3" LED ARROW II; GREEN	
W-1236	CABLE; A/S TO J BOX	
LS1	OA-1152-0390	HORN; 120V AC
A101-A105	OA-1186-0006	MODULE ASSY; 816-5-AMB-SHIFT
A106	OA-1186-0015	MODULE ASSY; 816-5-AMB-CLI

ADDRESS INFORMATION	ADDRESS INFORMATION
DRIVER: A1	DRIVER: A2
ADDRESS: 12	ADDRESS: 14

DAKTRONICS, INC. BROOKINGS, SD 57006

PROJ:	STANDARD INDOOR LED SCOREBOARDS
TITLE:	ELECTRICAL & SIGNAL SPEC, BB-2041-9 W/ TNMC
DES. BY:	BPETERSON
DRAWN BY:	MVANDYK
DATE:	17APR00
REVISION	APPR. BY:
SCALE:	1=40
	1152-E10A-131028

02	17 SEP01	CHANGED TITLE TO ELECTRICAL & SIGNAL SPEC, BB-2041-9 W/ TNMC	ALG	
01	20OCT00	CHANGED PART NUMBERS OP-1150-0128 TO OP-1150-0185 AND OA-1150-0032, 0035, 0397 TO OA-1150-0139, 0140, 0147	CPS	
REV.	DATE	DESCRIPTION	BY	APPR.

FRONT VIEWSIDE VIEWNOTES:

1. USE APPROPRIATE WALL ANCHORS FOR TYPE OF WALL.
2. LIFT EYES ARE FOR TEMPORARY USE WHILE LIFTING SCOREBOARD DURING INSTALLATION. DO NOT USE LIFT EYES FOR PERMANENT SUSPENSION.

SPECIFICATION		
MODEL #	SHIPPING WEIGHT	MOUNTING WEIGHT
SD-2003-9	90 LBS	70 LBS

DAKTRONICS, INC. BROOKINGS, SD 57006

PROJ: STANDARD INDOOR LED SCOREBOARDS

TITLE: MECHANICAL SPECIFICATION; SD-2003-9

DES. BY: BPETERSON

DRAWN BY: MVANDYK

DATE: 19APR00

REVISION

APPR. BY:

SCALE:

1=30

1152-E10A-131233

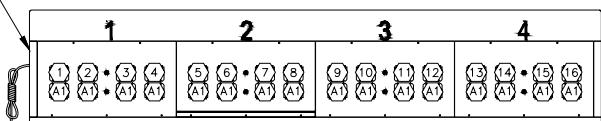
SD-2003-9 SCOREBOARD
ELECTRICAL / SIGNAL SPECIFICATION

DIGIT, SIGNAL, & POWER SPECIFICATION:

NOTES:

1. USE MINIMUM OF 24AWG, SHEILEDDED, TWO CONDUCTOR CABLE FOR SIGNAL TERMINATION.

(J31) SIGNAL JACK



FRONT VIEW

= DRIVER ASSIGNMENT
 = DRIVER

DIGIT DETAIL

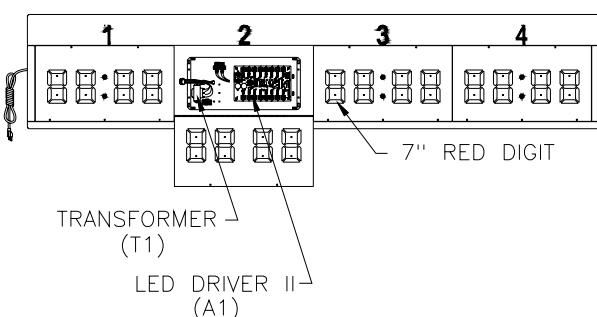
POWER SPECIFICATION

- 120V AC, 15 AMP CIRCUIT REQUIRED.
- 100 WATTS MAXIMUM.
- PRODUCT SAFETY APPROVAL:
 1. ETL LISTED
 2. TESTED TO CSA STANDARDS
 3. CE LABELED FOR INDOOR USE

PART SPECIFICATION:

NOTES:

1. REMOVE THE TWO SCREWS FOUND ON THE TOP OF THE ACCESS DOOR. OPEN DOOR TO ACCESS LED DRIVER.
2. DO NOT WORK ON ENERGIZED SCOREBOARD UNLESS A CERTIFIED ELECTRICIAN OR DIRECTED BY DAKTRONICS.



FRONT VIEW

REPLACEMENT PART NUMBERS		
	PART NO.	DESCRIPTION
A1	OP-1150-0126	LED DRIVER II
T1	T-1066	TRANSFORMER; 16V SEC.
	OP-1150-0187	DIGIT; 7" RED 7-SEG
	W-1236	CABLE; A/S TO J BOX

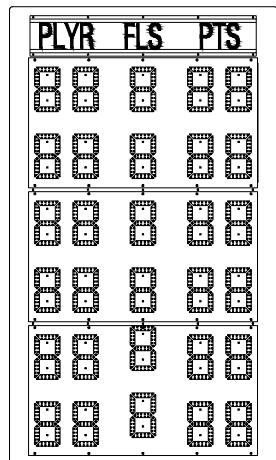
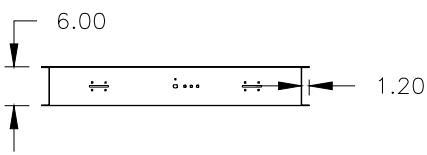
ADDRESS INFORMATION

DRIVER:	A1
ADDRESS:	15

DAKTRONICS, INC. BROOKINGS, SD 57006

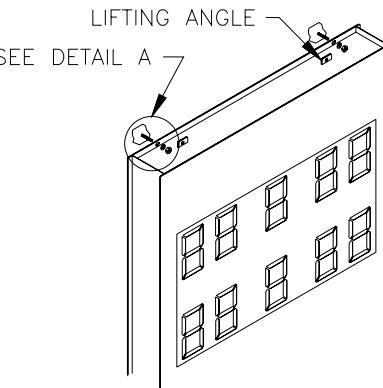
PROJ:	STANDARD INDOOR LED SCOREBOARDS	
TITLE:	ELECTRICAL & SIGNAL SPEC, SD-2003-9	
DES. BY:	B PETERSON	DRAWN BY: M VANDYK DATE: 19APR00
REVISION	APPR. BY:	
REV.	DATE	DESCRIPTION BY APPR. SCALE: 1=40 1152-E10A-131240

SD-2001-9

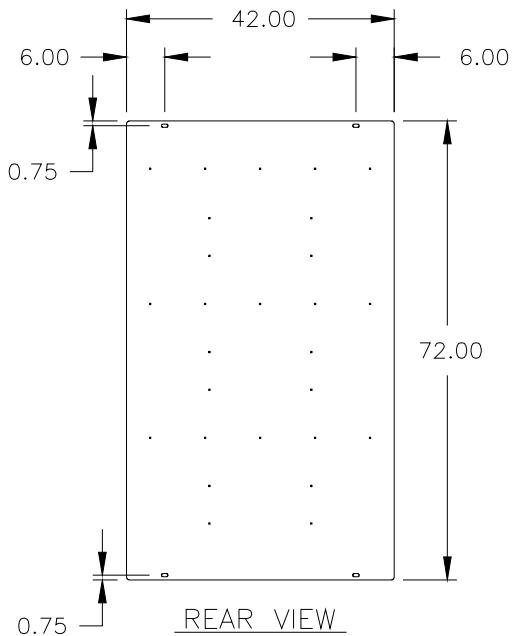


FRONT VIEW

6.00



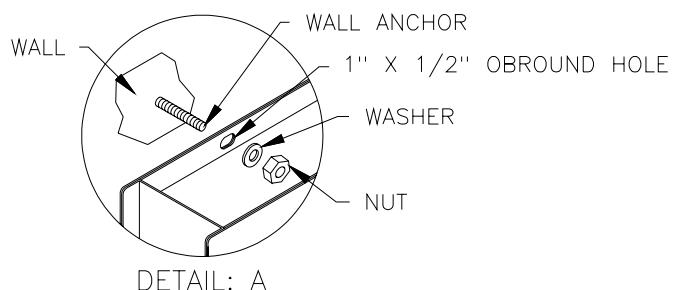
SIDE VIEW



REAR VIEW

NOTES:

1. USE APPROPRIATE WALL ANCHORS FOR TYPE OF WALL.
2. LIFT EYES ARE FOR TEMPORARY USE WHILE LIFTING SCOREBOARD DURING INSTALLATION. DO NOT USE LIFT EYES FOR PERMANENT SUSPENSION.



DETAIL: A

SPECIFICATION

MODEL #	SHIPPING WEIGHT	MOUNTING WEIGHT
SD-2001-9	135 LBS	75 LBS

DAKTRONICS, INC. BROOKINGS, SD 57006

PROJ: STANDARD INDOOR LED SCOREBOARDS

TITLE: MECHANICAL SPECIFICATION; SD-2001-9

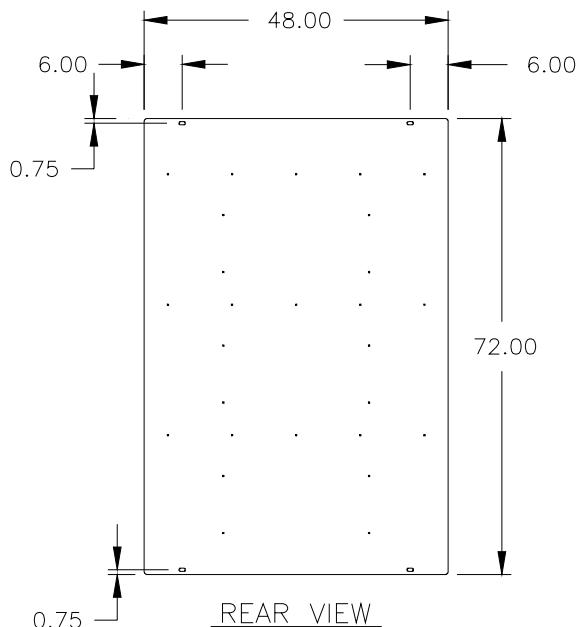
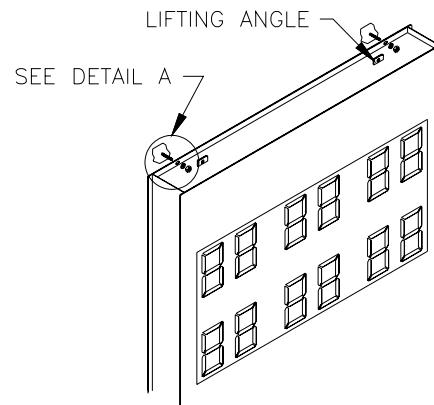
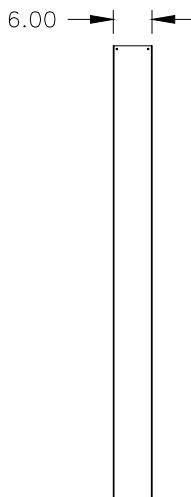
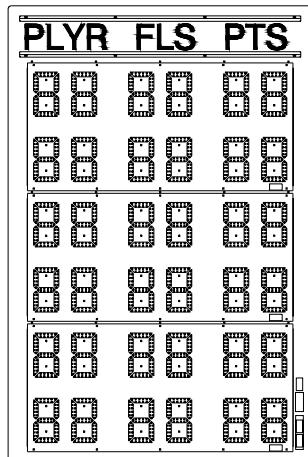
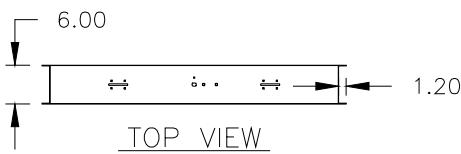
DES. BY: BPETERSON DRAWN BY: MVANDYK DATE: 18MAY00

REVISION

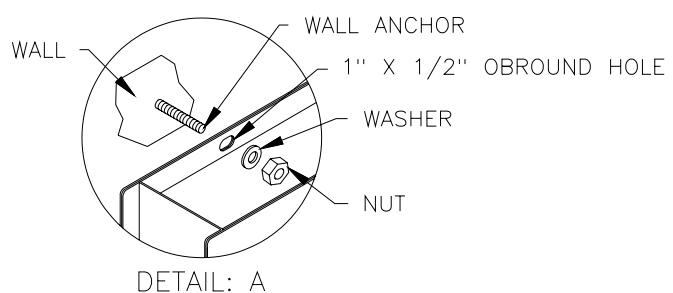
APPR. BY:

SCALE: 1=30

1152-E10A-132279

NOTES:

1. USE APPROPRIATE WALL ANCHORS FOR TYPE OF WALL.
2. LIFT EYES ARE FOR TEMPORARY USE WHILE LIFTING SCOREBOARD DURING INSTALLATION. DO NOT USE LIFT EYES FOR PERMANENT SUSPENSION.

SPECIFICATION

MODEL #	SHIPPING WEIGHT	MOUNTING WEIGHT
SD-2002-9	145 LBS	85 LBS

DAKTRONICS, INC. BROOKINGS, SD 57006

PROJ: STANDARD INDOOR LED SCOREBOARDS

TITLE: MECHANICAL SPECIFICATION; SD-2002-9

DES. BY: BPETERSON

DRAWN BY: MVANDYK

DATE: 18MAY00

01	17 APR 01	UPDATED OBROUND HOLES FROM 9.00" TO 6.00" FROM EDGES.	JDW	
REV.	DATE	DESCRIPTION	BY	APPR.

REVISION

APPR. BY:

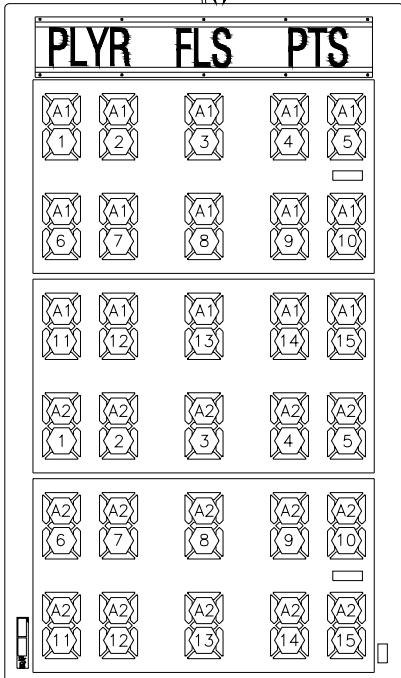
SCALE: 1=30

1152-E10A-132282

SD-2001-9 SCOREBOARD

DIGIT, SIGNAL, & POWER SPECIFICATION: ELECTRICAL / SIGNAL SPECIFICATION

(J31) SIGNAL JACK
HOME/GUEST LABEL
NEAR SIGNAL IN



FRONT VIEW

NOTES:

1. USE MINIMUM OF 24AWG, SHEILEDDED, TWO CONDUCTOR CABLE FOR SIGNAL TERMINATION.

= DRIVER

= DRIVER ASSIGNMENT

DIGIT DETAIL

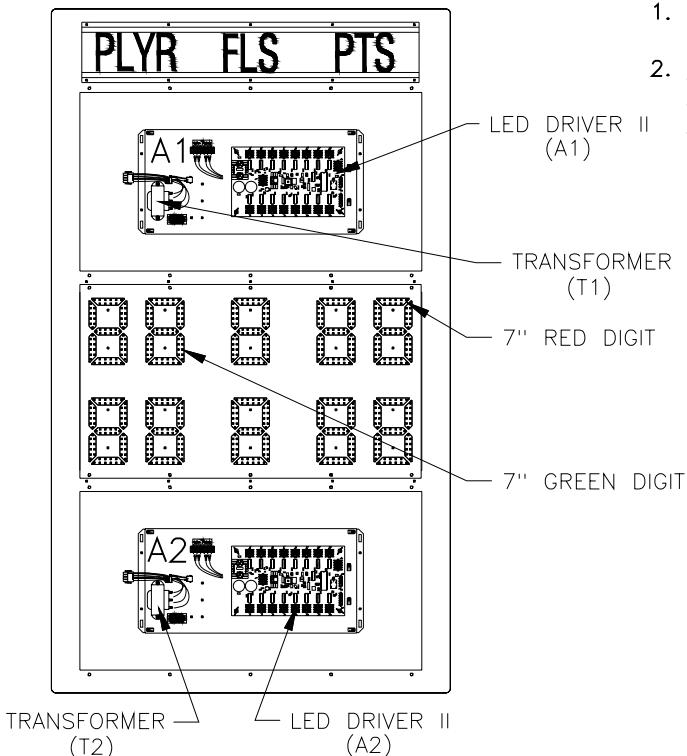
POWER SPECIFICATION

- 120V AC, 15 AMP CIRCUIT REQUIRED.
- 100 WATTS MAXIMUM.
- PRODUCT SAFETY APPROVAL:
 1. ETL LISTED
 2. TESTED TO CSA STANDARDS
 3. CE LABELED FOR INDOOR USE

PART SPECIFICATION:

NOTES:

1. REMOVE THE SCREWS FOUND ON THE TOP & BOTTOM OF THE ACCESS PANEL. REMOVE PANEL TO ACCESS LED DRIVER.
2. DO NOT WORK ON ENERGIZED SCOREBOARD UNLESS A CERTIFIED ELECTRICIAN OR DIRECTED BY DAKTRONICS.



FRONT VIEW

REPLACEMENT PART NUMBERS		
	PART NO.	DESCRIPTION
A1-A2	OP-1150-0126	LED DRIVER II
T1-T2	T-1066	TRANSFORMER; 16V SEC.
	OP-1150-0187	DIGIT; 7" RED 7-SEG
	OP-1150-0037	DIGIT; 7" GREEN 7-SEG
	W-1236	CABLE; A/S TO J BOX

ADDRESS INFORMATION	
LEFT STATS SECTION	RIGHT STATS SECTION
DRIVER: A1	DRIVER: A1
ADDRESS: 23	ADDRESS: 25
DRIVER: A2	DRIVER: A2
ADDRESS: 24	ADDRESS: 26

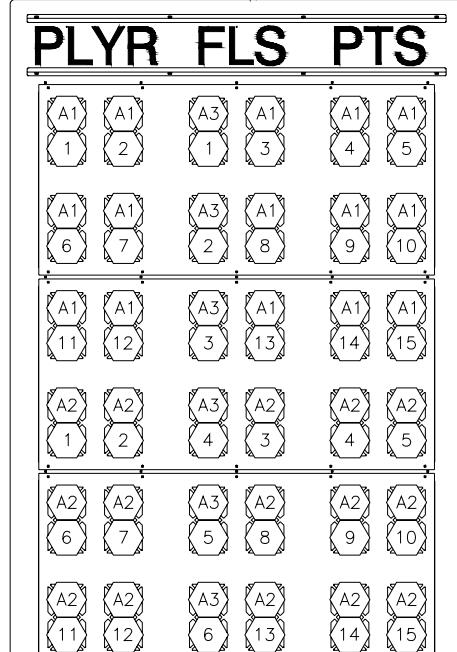
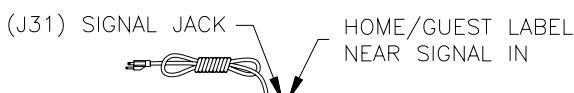
01	200CTOO	CHANGED PART NUMBER OP-1150-0036 TO OP-1150-0187	CPS	
DAKTRONICS, INC. BROOKINGS, SD 57006				
PROJ: STANDARD INDOOR LED SCOREBOARDS				
TITLE: ELECTRICAL & SIGNAL SPECIFICATION; SD-2001-9				
DES. BY: BPETERSON	DRAWN BY: MVANDYK	DATE: 18MAY00		
REVISION	APPR. BY:			
	SCALE: 1=20		1152-E10A-132288	

03	12 DEC 01]	ADDED HOME/GUEST LABEL NOTE.	ALG	
02	17 SEP 01	CHANGED TITLE TO ELECTRICAL & SIGNAL SPEC, SD-2001-9	ALG	
REV.	DATE	DESCRIPTION	BY	APPR.

SD-2002-9 SCOREBOARD
ELECTRICAL / SIGNAL SPECIFICATION

 = DRIVER
 = DRIVER ASSIGNMENT

DIGIT, SIGNAL, & POWER SPECIFICATION:



FRONT VIEW

NOTES:

1. USE MINIMUM OF 24AWG, SHEILEDDED, TWO CONDUCTOR CABLE FOR SIGNAL TERMINATION.

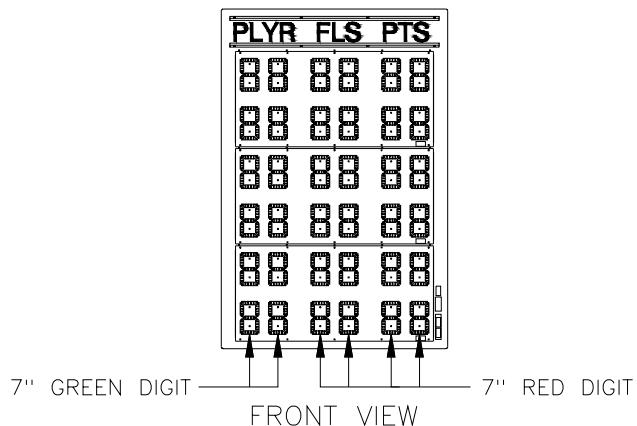
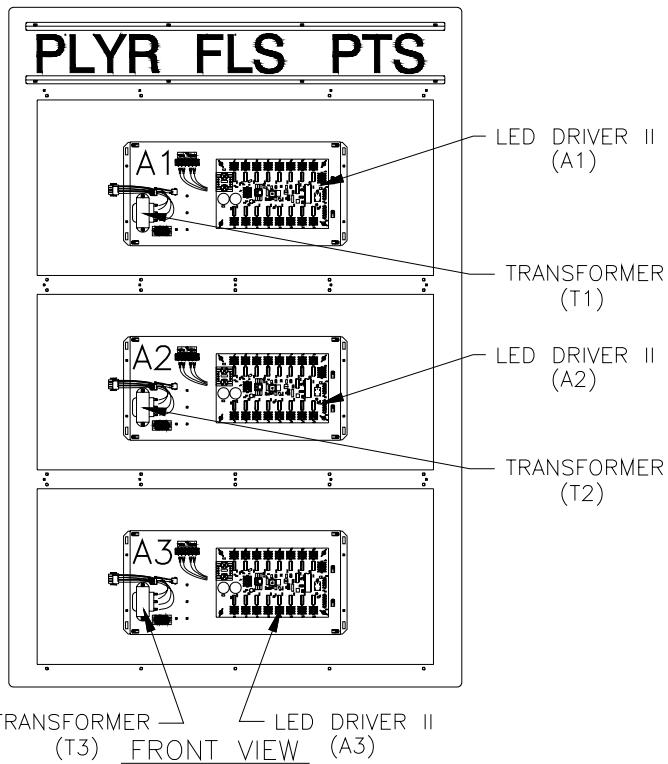
POWER SPECIFICATION
- 120V AC, 15 AMP CIRCUIT REQUIRED.
- 100 WATTS MAXIMUM.
- PRODUCT SAFETY APPROVAL:
1. ETL LISTED
2. TESTED TO CSA STANDARDS
3. CE LABELED FOR INDOOR USE

NOTES:

1. REMOVE THE SCREWS FOUND ON THE TOP & BOTTOM OF THE ACCESS PANEL. REMOVE PANEL TO ACCESS LED DRIVER.
2. DO NOT WORK ON ENERGIZED SCOREBOARD UNLESS A CERTIFIED ELECTRICIAN OR DIRECTED BY DAKTRONICS.

REPLACEMENT PART NUMBERS		
	PART NO.	DESCRIPTION
A1-A3	OP-1150-0126	LED DRIVER II
T1-T3	T-1066	TRANSFORMER; 16V SEC.
	OP-1150-0187	DIGIT; 7" RED 7-SEG
	OP-1150-0037	DIGIT; 7" GREEN 7-SEG
	W-1236	CABLE; A/S TO J BOX

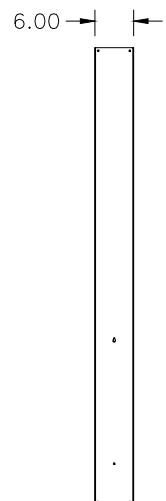
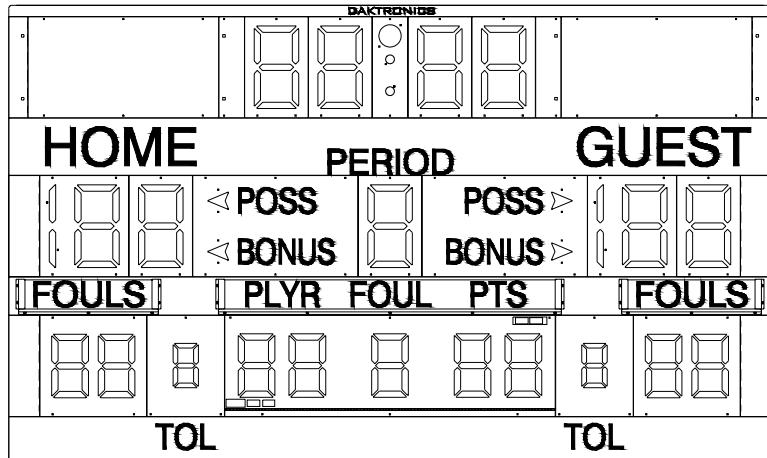
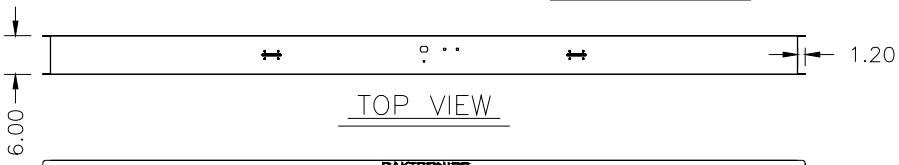
PART SPECIFICATION:



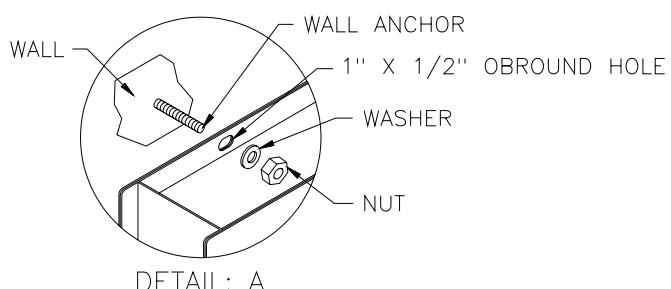
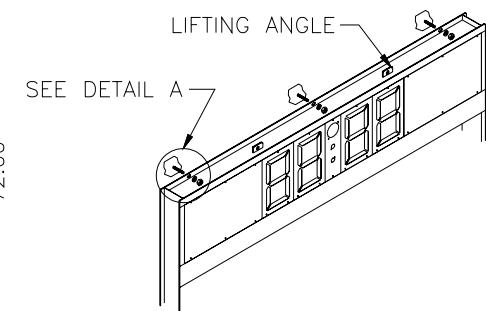
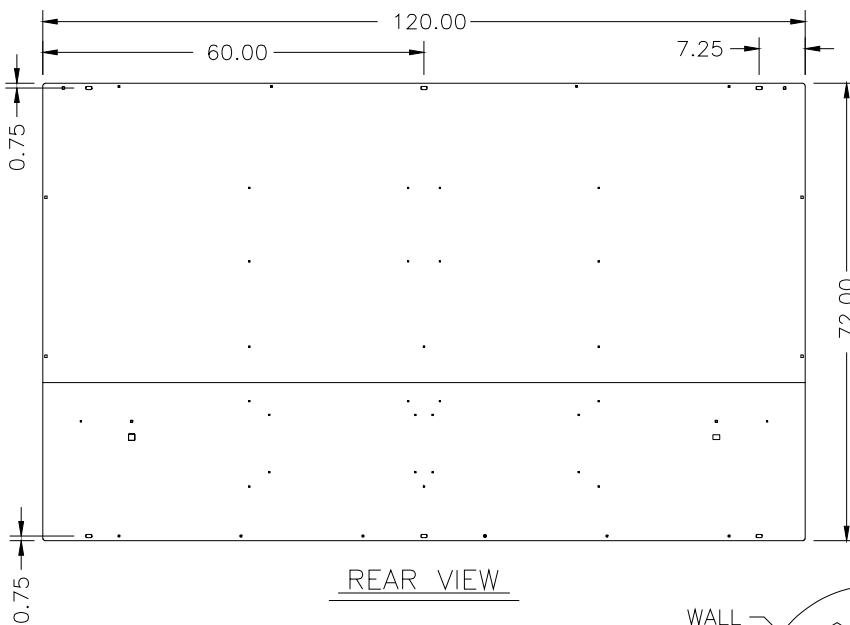
ADDRESS INFORMATION			
LEFT STATS SECTION	RIGHT STATS SECTION		
DRIVER: A1	DRIVER: A1		
ADDRESS: 23	ADDRESS: 25		
DRIVER: A2	DRIVER: A2		
ADDRESS: 24	ADDRESS: 26		
DRIVER: A3	DRIVER: A3		
ADDRESS: 27	ADDRESS: 28		

03	12 DEC 01	ADDED HOME/GUEST LABEL NOTE.	ALG		DAKTRONICS, INC. BROOKINGS, SD 57006		
02	17 SEP 01	CHANGED TITLE TO ELECTRICAL & SIGNAL SPEC, SD-2002-9	ALG		PROJ: STANDARD INDOOR LED SCOREBOARDS		
01	20OCT00	CHANGED PART NUMBER OP-1150-0036 TO OP-1150-0187	CPS		TITLE: ELECTRICAL & SIGNAL SPEC, SD-2002-9		
REV.	DATE	DESCRIPTION	BY	APPR.	DES. BY: BPETERSON	DRAWN BY: MVANDYK	DATE: 18MAY00
					REVISION	APPR. BY:	SCALE: 1=20
							1152-E10A-132298

BB-2046-9



SIDE VIEW



NOTES:

1. USE APPROPRIATE WALL ANCHORS FOR TYPE OF WALL.
2. LIFT EYES ARE FOR TEMPORARY USE WHILE LIFTING SCOREBOARD DURING INSTALLATION. DO NOT USE LIFT EYES FOR PERMANENT SUSPENSION.

SPECIFICATION		
MODEL #	SHIPPING WEIGHT	MOUNTING WEIGHT
BB-2046-9	275 LBS	160 LBS

DAKTRONICS, INC. BROOKINGS, SD 57006

PROJ: STANDARD INDOOR LED SCOREBOARDS

TITLE: MECHANICAL SPECIFICATION; BB-2046-9

DES. BY: B.PETERSON

DRAWN BY: J.WHITLOCK

DATE: 13 MAR 01

REVISION

APPR. BY:

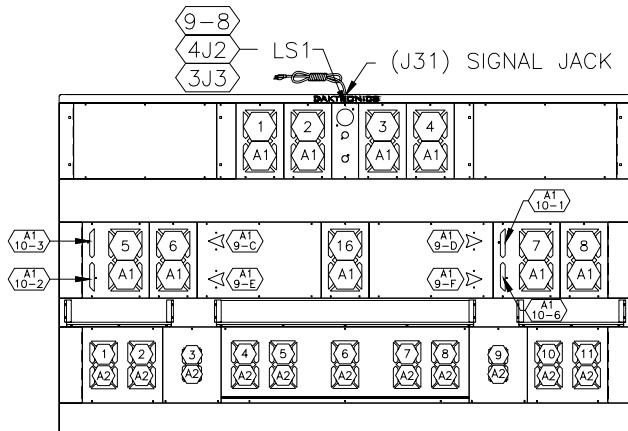
SCALE:

1=30

1152-E10A-145919

BB-2046-9 SCOREBOARD
ELECTRICAL / SIGNAL SPECIFICATION

DIGIT, SIGNAL, & POWER SPECIFICATION:



FRONT VIEW

NOTES:

1. USE MINIMUM OF 24AWG, SHEILEDDED, TWO CONDUCTOR CABLE FOR SIGNAL TERMINATION.

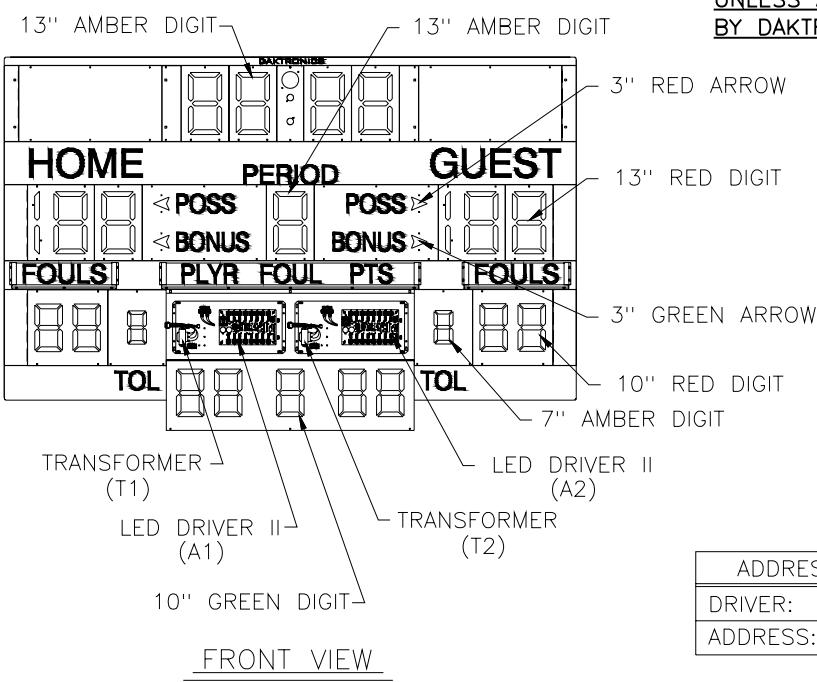
= DRIVER ASSIGNMENT
 = DRIVER

DIGIT DETAIL

POWER SPECIFICATION

- 120V AC, 15 AMP CIRCUIT REQUIRED.
- 100 WATTS MAXIMUM.
- PRODUCT SAFETY APPROVAL:
 1. ETL LISTED
 2. TESTED TO CSA STANDARDS
 3. CE LABELED FOR INDOOR USE

PART SPECIFICATION:



FRONT VIEW

NOTES:

1. REMOVE THE THREE SCREWS FOUND ON THE TOP OF THE ACCESS DOOR. OPEN DOOR TO ACCESS LED DRIVER.
2. DO NOT WORK ON ENERGIZED SCOREBOARD UNLESS A CERTIFIED ELECTRICIAN OR DIRECTED BY DAKTRONICS.

REPLACEMENT PART NUMBERS		
	PART NO.	DESCRIPTION
A1-A2	OP-1150-0126	LED DRIVER II
T1-T2	T-1066	TRANSFORMER; 16V SEC.
	OA-1150-0139	DIGIT; 13" RED 7-SEG
	OA-1150-0140	DIGIT; 13" RED 9-SEG
	OA-1150-0034	DIGIT; 13" AMBER 7-SEG
	OA-1150-0651	DIGIT; 10" RED 14 SEG
	OP-1150-0175	DIGIT; 10" GREEN 7-SEG
	OP-1150-0082	DIGIT; 7" AMBER 7-SEG
	OP-1150-0185	3" LED ARROW II; RED
	OP-1150-0129	3" LED ARROW II; GREEN
	W-1236	CABLE; A/S TO J BOX
LS1	OA-1152-0390	HORN; 120V AC

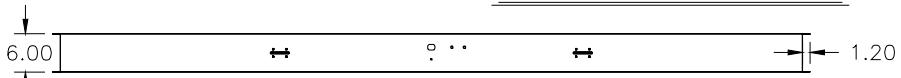
ADDRESS INFORMATION	ADDRESS INFORMATION
DRIVER: A1	DRIVER: A2
ADDRESS: 12	ADDRESS: 14

DAKTRONICS, INC. BROOKINGS, SD 57006

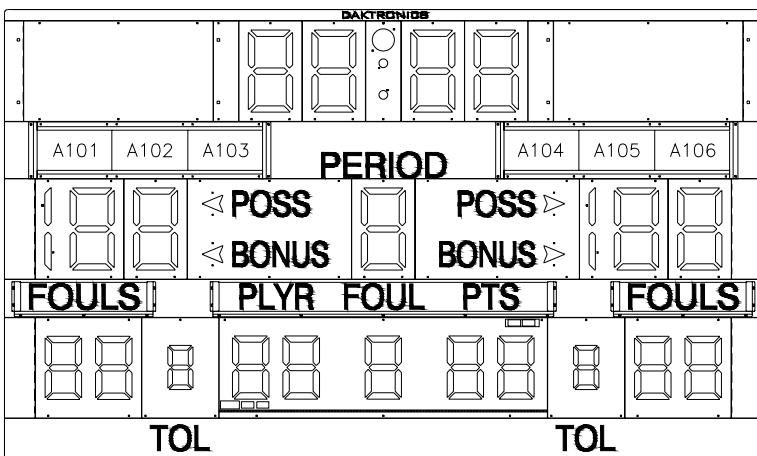
PROJ: STANDARD INDOOR LED SCOREBOARDS
TITLE: ELECTRICAL & SIGNAL SPEC, BB-2046-9

DES. BY: B.PETERSON DRAWN BY: J.WHITLOCK DATE: 13 MAR 01
REVISION APPR. BY:
SCALE: 1=40 1152-E10A-145963

01	18 SEP 01	CHANGED TITLE TO ELECTRICAL & SIGNAL SPEC, BB-2046-9	ALG	
REV.	DATE	DESCRIPTION	BY	APPR.

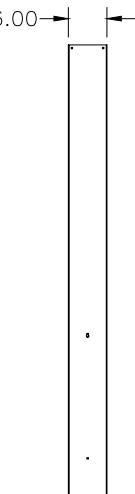


TOP VIEW

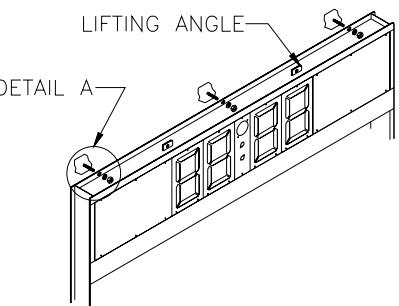
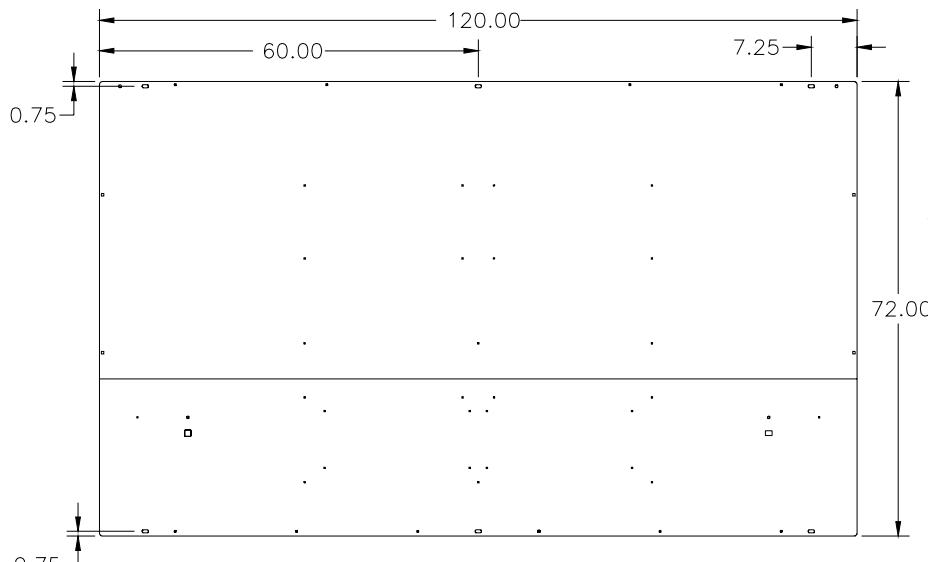


FRONT VIEW

6.00

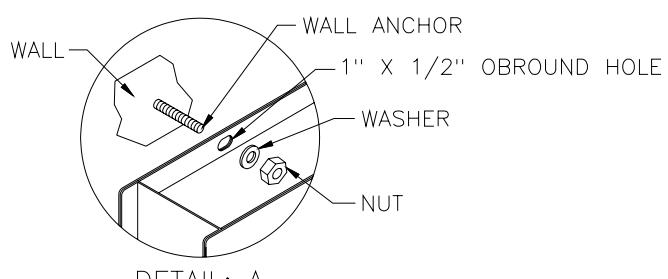


SIDE VIEW



NOTES:

1. USE APPROPRIATE WALL ANCHORS FOR TYPE OF WALL.
2. LIFT EYES ARE FOR TEMPORARY USE WHILE LIFTING SCOREBOARD DURING INSTALLATION. DO NOT USE LIFT EYES FOR PERMANENT SUSPENSION.



DETAIL: A

SPECIFICATION

MODEL #	SHIPPING WEIGHT	MOUNTING WEIGHT
BB-2046-9 W/ TNMC	290 LBS	180 LBS

DAKTRONICS, INC. BROOKINGS, SD 57006

PROJ: INDOOR LED SCOREBOARDS

TITLE: MECHANICAL SPECIFICATION; BB-2046-9 W/TNMC

DES. BY: B.PETERSON

DRAWN BY: J.WHITLOCK

DATE: 13 MAR 01

REVISION

APPR. BY:

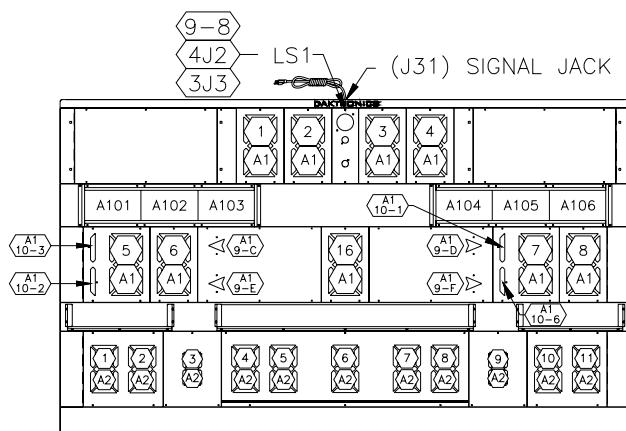
SCALE: 1=30

1152-E10A-145975

BB-2046-9 W/ TNMC SCOREBOARD

ELECTRICAL / SIGNAL SPECIFICATION

DIGIT, SIGNAL, & POWER SPECIFICATION:



FRONT VIEW

NOTES:

1. USE MINIMUM OF 24AWG, SHEIELDED, TWO CONDUCTOR CABLE FOR SIGNAL TERMINATION.

= DRIVER ASSIGNMENT
 = DRIVER

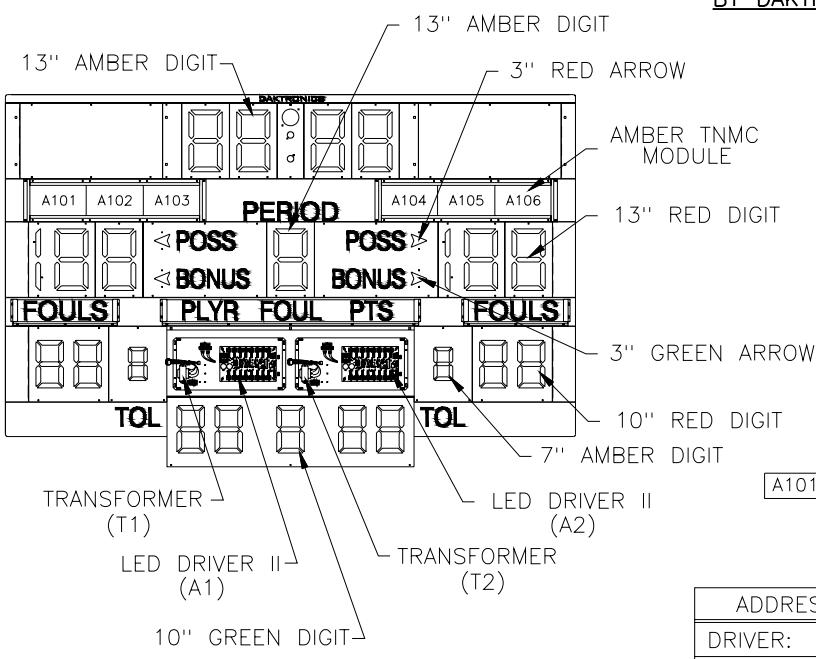
DIGIT DETAIL

POWER SPECIFICATION	
-	120V AC, 15 AMP CIRCUIT REQUIRED.
-	200 WATTS MAXIMUM.
-	PRODUCT SAFETY APPROVAL:
	1. ETL LISTED
	2. TESTED TO CSA STANDARDS
	3. CE LABELED FOR INDOOR USE

NOTES:

PART SPECIFICATION:

1. REMOVE THE THREE SCREWS FOUND ON THE TOP OF THE ACCESS DOOR. OPEN DOOR TO ACCESS LED DRIVER.
2. DO NOT WORK ON ENERGIZED SCOREBOARD UNLESS A CERTIFIED ELECTRICIAN OR DIRECTED BY DAKTRONICS.



FRONT VIEW

REPLACEMENT PART NUMBERS	
PART NO.	DESCRIPTION
A1	OP-1150-0126 LED DRIVER II
A2	OP-1150-0126 LED DRIVER II
T1	T-1066 TRANSFORMER; 16V SEC.
T2	T-1066 TRANSFORMER; 16V SEC.
0A-1150-0139	DIGIT; 13" RED 7-SEG
0A-1150-0140	DIGIT; 13" RED 9-SEG
0A-1150-0034	DIGIT; 13" AMBER 7-SEG
0A-1150-0147	DIGIT; 10" RED 9-SEG
OP-1150-0175	DIGIT; 10" GREEN 7-SEG
OP-1150-0082	DIGIT; 7" AMBER 7-SEG
OP-1150-0185	3" LED ARROW II; RED
OP-1150-0129	3" LED ARROW II; GREEN
W-1236	CABLE; A/S TO J BOX
LS1	0A-1152-0390 HORN; 120V AC
A101-A105	0A-1186-0006 MODULE ASSY; 816-5-AMB-SHIFT
A106	0A-1186-0015 MODULE ASSY; 816-5-AMB-CLI

ADDRESS INFORMATION	ADDRESS INFORMATION
DRIVER: A1	DRIVER: A2
ADDRESS: 12	ADDRESS: 14

DAKTRONICS, INC. BROOKINGS, SD 57006

PROJ: STANDARD INDOOR SCOREBOARDS

TITLE: ELECTRICAL & SIGNAL SPEC, BB-2046-9 W/TNMC

DES. BY: B.PETERSON DRAWN BY: J.WHITLOCK DATE: 13 MAR 01

REVISION	APPR. BY:	1152-E10A-145976
REV.	SCALE: 1=40	

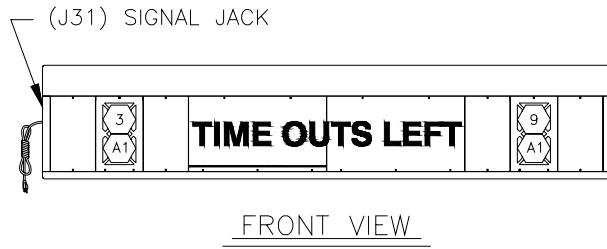
01	17 SEP 01	CHANGED TITLE TO ELECTRICAL & SIGNAL SPEC, BB-2046-9 W/ TNMC	ALG	
REV.	DATE	DESCRIPTION	BY	APPR.

SD-2004-9 SCOREBOARD
ELECTRICAL / SIGNAL SPECIFICATION

DIGIT, SIGNAL, & POWER SPECIFICATION:

NOTES:

1. USE MINIMUM OF 24AWG, SHEILEDDED, TWO CONDUCTOR CABLE FOR SIGNAL TERMINATION.



= DRIVER ASSIGNMENT
 = DRIVER

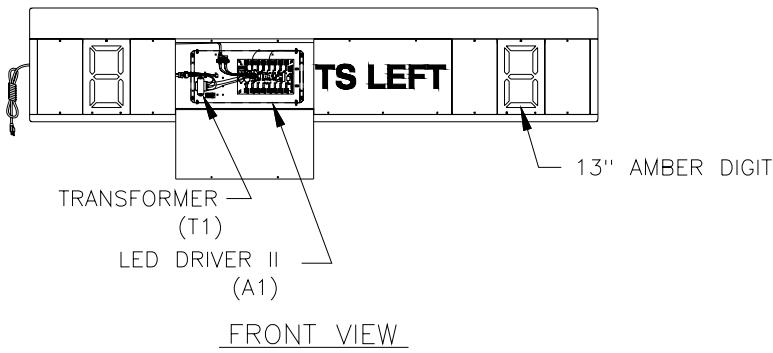
DIGIT DETAIL

POWER SPECIFICATION	
- 120V AC, 15 AMP CIRCUIT REQUIRED.	
- 40 WATTS MAXIMUM.	
- PRODUCT SAFETY APPROVAL:	
1. ETL LISTED	
2. TESTED TO CSA STANDARDS	
3. CE LABELED FOR INDOOR USE	

PART SPECIFICATION:

NOTES:

1. REMOVE THE TWO SCREWS FOUND ON THE TOP OF THE ACCESS DOOR. OPEN DOOR TO ACCESS LED DRIVER.
2. DO NOT WORK ON ENERGIZED SCOREBOARD UNLESS A CERTIFIED ELECTRICIAN OR DIRECTED BY DAKTRONICS.

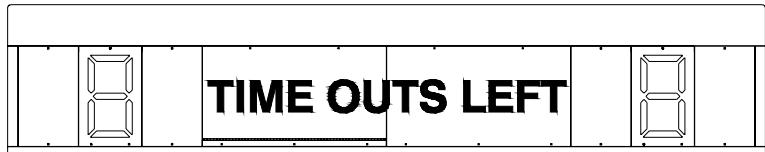
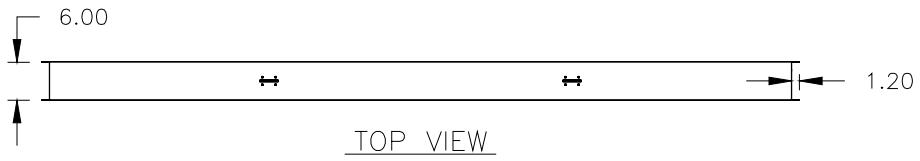


ADDRESS INFORMATION	
DRIVER:	A1
ADDRESS:	14

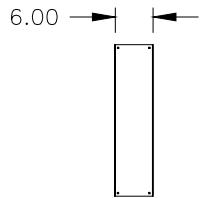
DAKTRONICS, INC. BROOKINGS, SD 57006

02	17 SEP 01	CHANGED TITLE TO ELECTRICAL & SIGNAL SPEC, SD-2004-9	ALG		PROJ: STANDARD INDOOR LED SCOREBOARDS	
01	16 AUG 01	CHANGED THE DRIVER TO OA-1150-0060, AND CHANGED THE ADDRESS TO 14	ALG		TITLE: ELECTRICAL & SIGNAL SPEC, SD-2004-9	
REV.	DATE	DESCRIPTION	BY	APPR.	DES. BY: BPETERSON DRAWN BY: JJSYRSTAD	DATE: 23 JUL 01
					REVISION APPR. BY: SCALE: 1=40	1152-E10A-152861

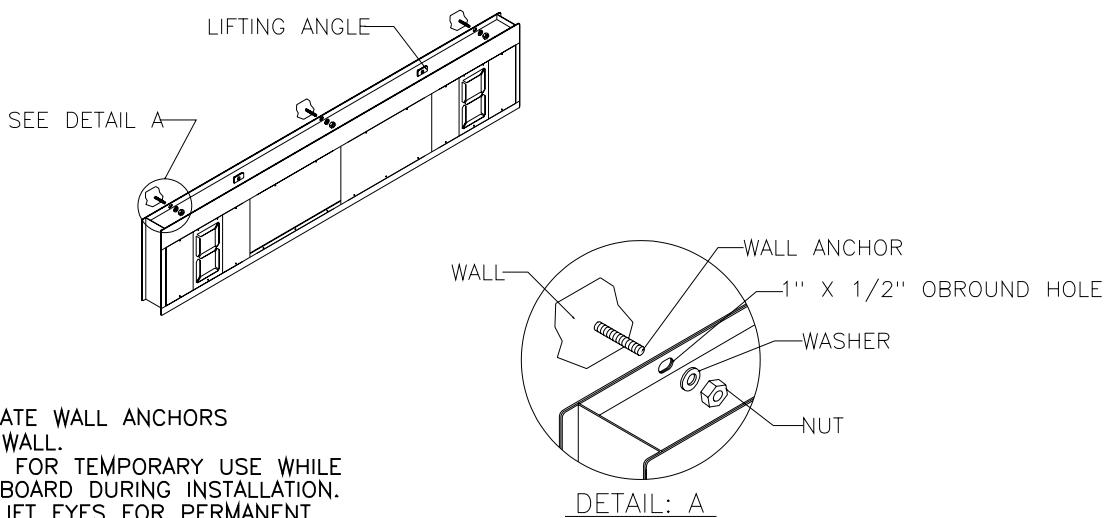
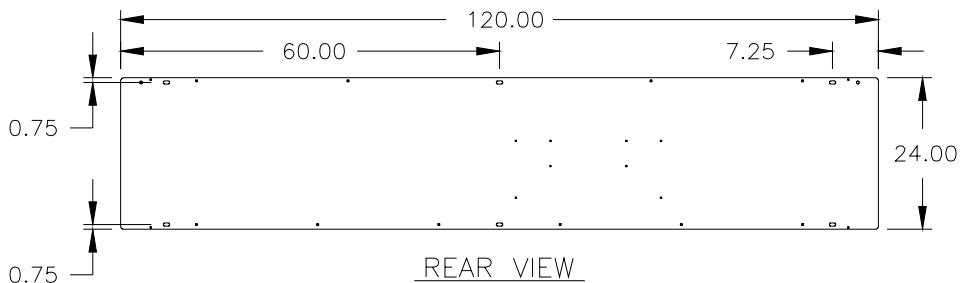
SD-2004-9



FRONT VIEW



SIDE VIEW



NOTES:

1. USE APPROPRIATE WALL ANCHORS FOR TYPE OF WALL.
2. LIFT EYES ARE FOR TEMPORARY USE WHILE LIFTING SCOREBOARD DURING INSTALLATION. DO NOT USE LIFT EYES FOR PERMANENT SUSPENSION.

SPECIFICATION		
MODEL #	SHIPPING WEIGHT	MOUNTING WEIGHT
SD-2004-9	90 LBS	70 LBS

DAKTRONICS, INC. BROOKINGS, SD 57006

PROJ: STANDARD INDOOR LED SCOREBOARDS

TITLE: MECHANICAL SPECIFICATIONS; SD-2004-9

DES. BY: BPETERSON DRAWN BY: JJSYRSTAD

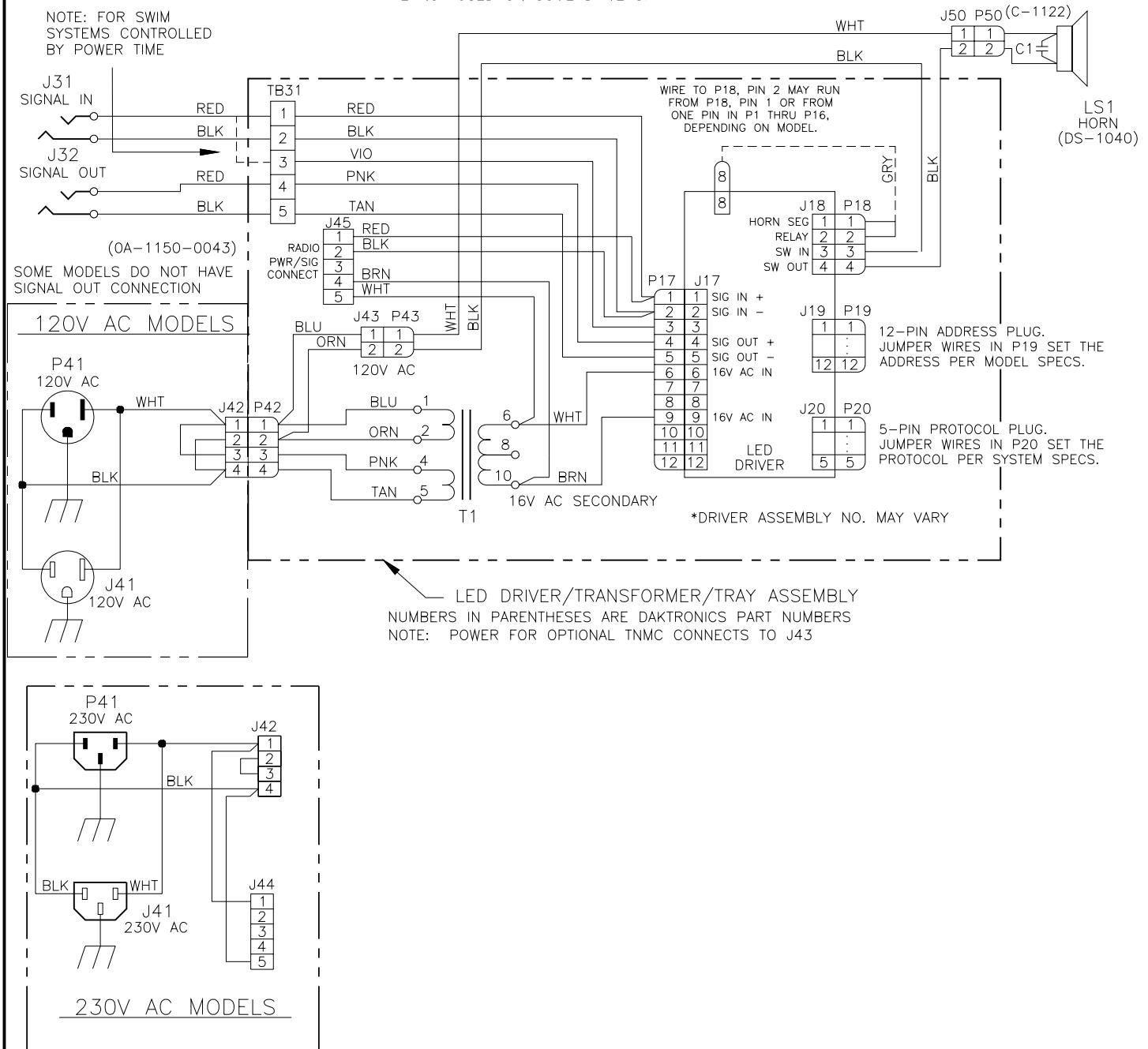
DATE: 23 JUL 01

REV. DATE DESCRIPTION BY APPR.

REVISION APPR. BY:
SCALE: 1=30 1152-E10A-152862

120V AND 230VAC MODELS

P43 AND WIRES TO P18 AND HORN
ARE NOT USED ON SOME DRIVERS.

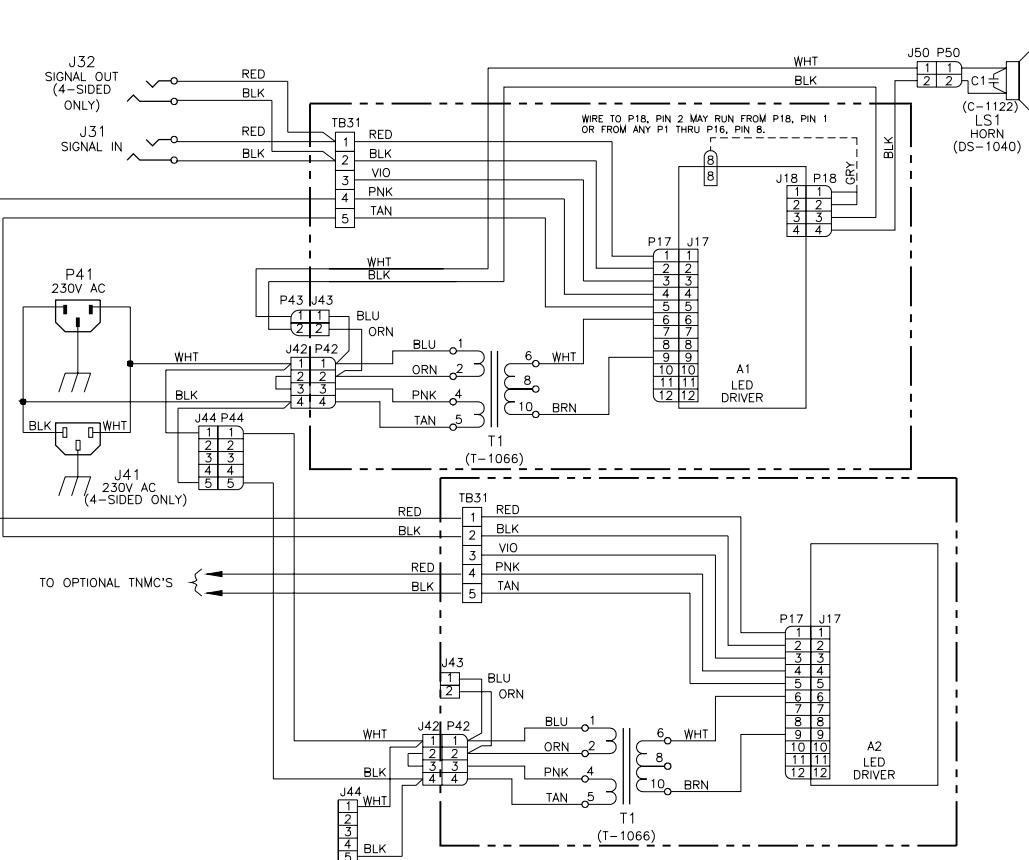
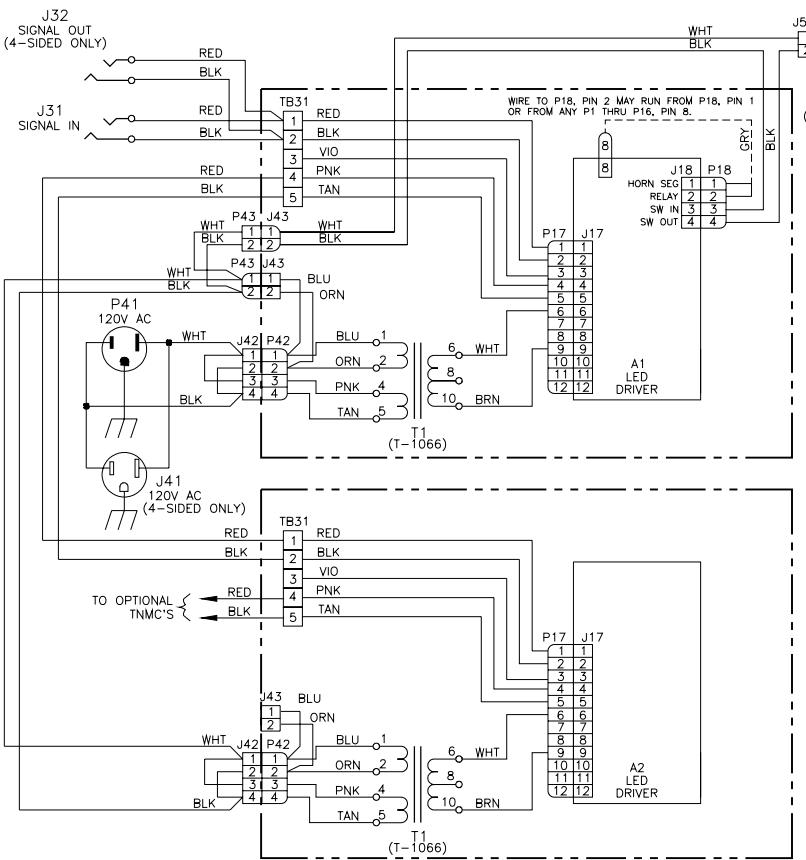


13	13 FEB 03	MOVED TAP 8 TO A DOUBLE CRIMP ON TAP 10 ON TRANSFORMER T1 CONNECTED TO J45.	CME	
12	18 OCT 01	CHANGED DWG FROM B TO A, MOVED J31 IN TO TB31-1 AND ADDED HATCH LINE TO TB31-3	NMB	RDA
11	06 JUN 01	CHANGED SIGNAL IN TERMINATION	GWS	
10	21 MAY 01	UPDATED LABELS OF HORN PLUG & JACK	RDA	CMC
09	18 MAY 01	ADDED PLUG & JACK FOR HORN	RDA	CMC
08	30 APR 01	UPDATED DWG FROM A TO B SIZE, SO ALL REV BLOCKS ARE PRESENT	ORS	HBB
07	08 FEB 01	CHANGED BLK WIRE TO BRN TO MATCH HARNESS	RDA	
06	27 NOV 00	UPDATED TRANSFORMER WIRE COLORS TO ELIMINATE WIRE LABELS	CJB	
REV.	DATE	DESCRIPTION	BY	APPR.

05	07 SEP 00	ADDED INFORMATION FOR 4 COLUMN DRIVER & CHANGED DOUBLE CRIMP ON TB31 TO P17	RDA	CMC
04	13 JUL 00	ADDED J45 FOR POWER AND SIGNAL FOR RADIO INTERFACE	CMC	
03	13 MAR 00	UPDATED SIGNAL WIRES, ADDED VIOLET WIRE FOR RS485, UPDATED COLORS TO BE DIFFERENT FOR EACH SIGNAL WIRE COMING IN	CJB	
02	10 FEB 00	CHANGED REFERENCE TO P18 WIRING	AVB	
01	09 DEC 99	UPDATED WIRING FOR TNMC, UPDATED WIRING FOR 230VAC MODEL	CJB	

DAKTRONICS, INC. BROOKINGS, SD 57006

PROJ:
TITLE: SCHEMATIC; LED DRIVER II PLATE W/XFMR; 16 COLUMN
DES. BY: AVB DRAWN BY: A VANBEMMEL DATE: 12 MAY 99
REVISION APPR. BY:
SCALE: NONE 1152-R03A-115502



NOTE: POWER FOR OPTIONAL TNMC CONNECTS TO J43 ON 2ND DRIVER

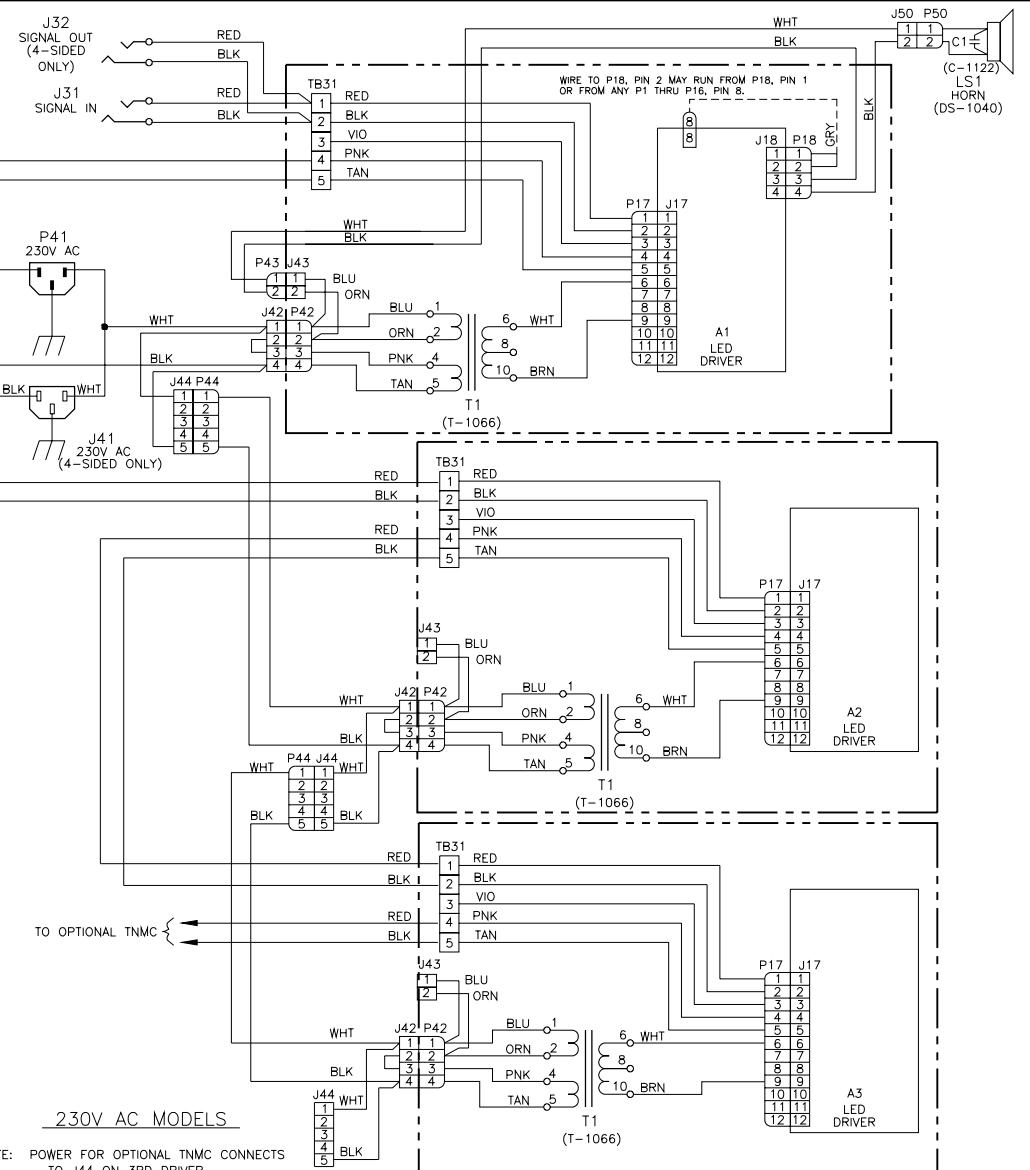
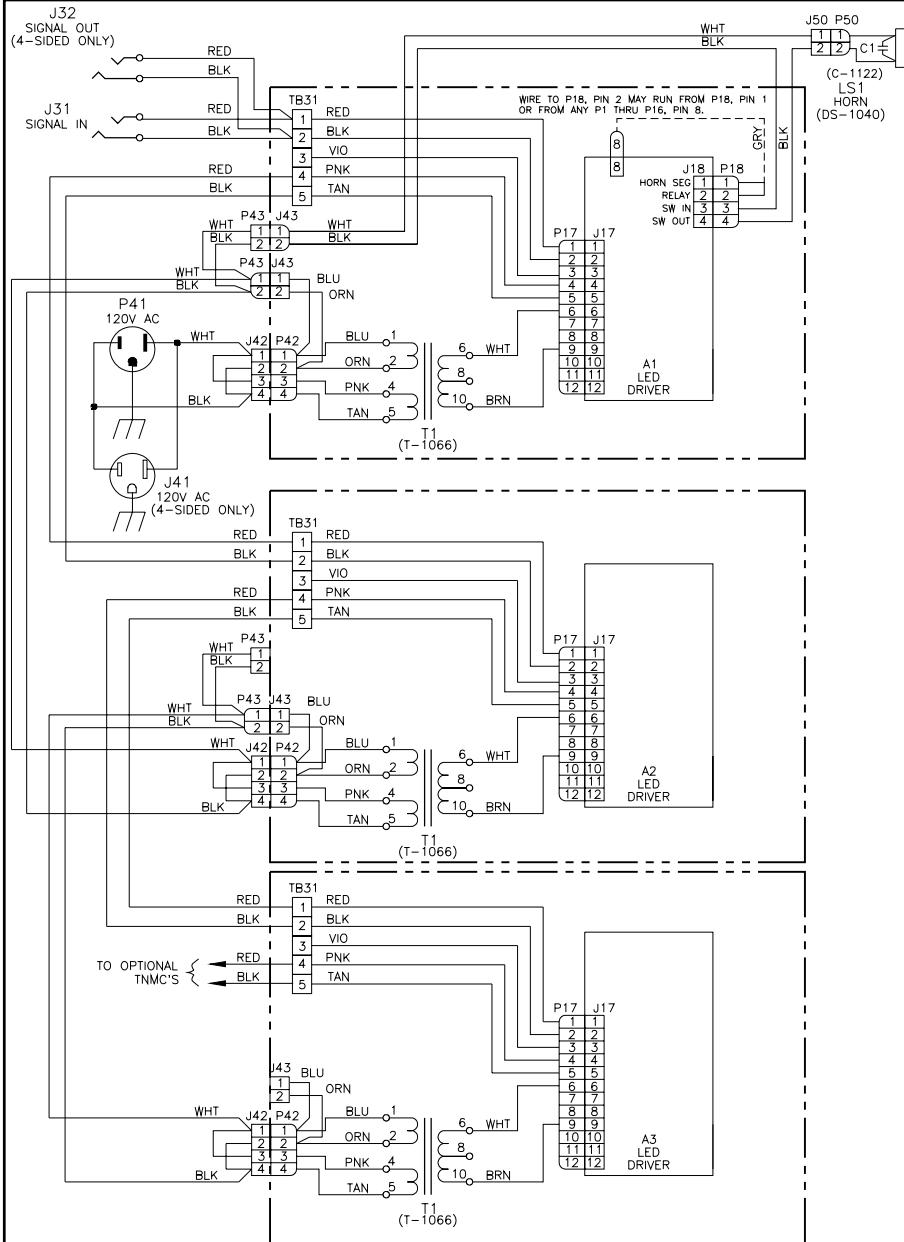
NOTE: POWER FOR OPTIONAL TNMC CONNECTS TO J44 ON 2ND DRIVER

230V AC MODELS

04	20 NOV 01	CORRECTED P43 AND J43 INTERCONNECT TO SHOW CORRECT PINOUTS.	MWM	
3	5JUN01	ADDED PLUG & JACK HORN	RASMUS	CMC
2	27 NOV 00	UPDATED WIRE COLORS ON TRANSFORMER.	CJB	
1	13 MAR 00	UPDATED SCHEMATIC TO SHOW DIFFERENT WIRE COLORS FOR SIGNAL	CJB	
REV.	DATE	DESCRIPTION	BY	APPR.

DAKTRONICS, INC. BROOKINGS, SD 57006				
PROJ:				
TITLE:	SCHEMATIC: 2-DRIVER FOR A/S 5000			
DES. BY:	CBRECZI	DRAWN BY:	CBRECZI	DATE: 09 DEC 99
REVISION	APPR. BY:			SCALE: 1=1

1152-R03B-125172



DAKTRONICS, INC. BROOKINGS, SD 57006		PROJ:	TITLE: SCHEMATIC; 3 DRIVERS	
		DES. BY: CBRELCZI	DRAWN BY: CBRELCZI	DATE: 20 DEC 99
04	20 NOV 01	CORRECTED P43 AND J43 INTERCONNECT TO SHOW CORRECT PINOUTS.	MWM	
3	5JUN01	ADDED PLUG & JACK FOR HORN	RASMUS	CMC
REV.	DATE	DESCRIPTION	BY	APPR.

2	27 NOV 00	UPDATED WIRE COLORS ON TRANSFORMER.	CJB
1	13 MAR 00	UPDATED SIGNAL WIRES.	CJB

1152-R03B-125173