

Scoreboard Trumpet Horn

Installation Manual

ED-10006

Rev 7 – 26 August 2013

DAKTRONICS

ED-10006
Project 1091
Rev 7 – 26 August 2013

DAKTRONICS, INC.

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Section 1: 12 VDC Horn Installation (LED)

Refer to **Drawing B-328919** in **Appendix A** for general wiring details of LED scoreboard horns.

The following section describes the 12 VDC trumpet horn installation and compact horn replacement for an LED scoreboard. Assemblies are available for both 120 and 240 VAC scoreboards.

Note: Disconnect power to the scoreboard before installing the horn!

1.1 Equipment

The trumpet horn kit consists of:

- a horn
- a metal mounting angle (trumpet horn only)
- a metal enclosure and 12 volt power plate assembly
- a horn interface card and harness
- assorted #10 screws, tapping screws, and nuts

1.2 Location

The horn entrance panel is typically located in the center of the lower half of the scoreboard (refer to the component location drawings included in the scoreboard manual for specific location). The horn will be mounted directly to this entrance panel. The panel may be secured only by screws, or it may have hinges that allow it to swing open.

1.3 Horn Interface Card & Horn Plate Assembly

- If the horn kit was ordered with the scoreboard, the horn interface card and horn plate assembly were likely installed at the factory; skip ahead to **Section 1.4**.
- If these components have not been installed, follow the instructions under *Horn Interface Card Installation* and *Horn Plate Assembly Installation*.

Horn Interface Card Installation

Reference Drawings:

F.Assy: 12V DC Horn Mounting- Outdoor LED SCBD **Drawing B-242731**
Assy: Horn Card Installation- Gen III and IV Drivers **Drawing B-302328**

- Current 120 V part number: 0P-1192-0399
- Current 240 V part number: 0P-1150-0255
- Pre-2008 part number: 0P-1150-0246

Gen IV LED Scoreboards

Attach the horn interface card inside the scoreboard driver enclosure and make the proper wiring connections from the horn interface card to the driver per **Drawing B-302328**, detail A. Refer also to **Drawing B-242731**, left detail.

GEN I, II, & III LED Scoreboards

Attach the horn interface card inside the scoreboard driver enclosure and make the proper wiring connections from the horn interface card to the driver per **Drawing B-302328**, detail B. Refer also to **Drawing B-242731**, center and right details.

- If the scoreboard is Gen III and built from April - November 2006, a horn interface harness kit (0A-1192-1692) is required.
- If the scoreboard is Gen III and built *prior to* April 2006, an adaptor harness (0A-1192-1687) is also required.

Horn Plate Assembly Installation

Reference Drawings:

Plate Assy: Outdoor SCBD 12VDC Horn, AS5K..... **Drawing A-128944**

Drawing A-128944 shows the components of the horn plate assembly.

1. Open the horn entrance panel (see **Section 1.2**).
2. On the interior of the back panel of scoreboard, drill two $\frac{5}{32}$ " holes 4" apart (these holes may have been pre-drilled at the factory). The enclosure is to be attached to the inside of the scoreboard and accessible when the entrance panel is opened.

Note: Be careful not to damage any internal components when drilling!

3. Attach the enclosure to the scoreboard using the #10 tapping screws provided.
4. Attach the plate assembly to the enclosure using #10 tapping screws provided.
5. Attach the cover to the enclosure using the #10 tapping screws provided.

1.4 Trumpet Horn Installation

Preparation

Reference Drawings:

F.Assy: 12V DC Horn Mounting- Outdoor LED SCBD **Drawing B-242731**

Horn Assembly **Drawing A-320004**

1. Insert bushings into the appropriate $\frac{3}{8}$ " holes in the mounting angle.
2. Thread the two gray wires from the horn through the top of the mounting angle.
3. Attach the horn to the mounting angle using the #10 hardware provided.
4. Thread the two gray wires through the $\frac{3}{8}$ " hole in the rear of the mounting angle.

Installation

Reference Drawings:

Template, Hole Drilling, Trumpet Horn **Drawing A-83502**

F.Assy: 12V DC Horn Mounting- Outdoor LED SCBD **Drawing B-242731**

Assy: Horn Card Installation- Gen III and IV Drivers **Drawing B-302328**

1. Locate the horn entrance panel (see **Section 1.2**). There should be a 2" knockout on this panel. Remove this knockout. If the knockout has not been provided, use **Drawing A-83502** as a guide to drill one $\frac{3}{8}$ " hole and two $\frac{7}{32}$ " holes in the panel.

Note 1: Be careful not to damage any internal components when drilling!

Note 2: The knockout may have been removed at the factory.

2. Thread the two gray wires from the horn through the knockout (or $\frac{3}{8}$ " hole) in the scoreboard access panel.
3. Place horn/angle bracket assembly over the 2" knockout and $\frac{7}{32}$ " holes in the front panel of the scoreboard and attach using #10 hardware provided.
4. Using the wiring nuts provided, connect one gray wire from the horn to the black wire from the plate assembly. Connect the other gray wire to the red wire.
5. Route the 2-pin horn plate harness to A3-J3 on the horn interface card, per **Drawing B-302328** and **Drawing B-242731**. If the harness doesn't reach, connect the 2-pin to 2-pin extension cable between the horn plate and the horn interface card as needed.
6. Close and secure the horn entrance panel.
7. To test the horn, power on the scoreboard and control console, and press HORN.

1.5 Compact Horn Replacement

Reference Drawings:

Assembly Drawing, 12V DC Compact Horn 120V or 240V **Drawing B-1063340**

The compact horn is standard on certain scoreboards. Therefore, this section discusses the replacement of an existing horn.

1. Locate the horn entrance panel and open it (see **Section 1.2**).
2. Unscrew the wiring nuts that connect the existing horn to the plate assembly.
3. Remove the #10 hardware securing the existing horn.
4. Cut the two-pin plug off the new horn and strip $\frac{5}{32}$ " of insulation from each wire.

Note: Remember what wire was connected to which pin of the plug!

5. Using the wiring nuts provided, connect the Pin 2 wire from the horn to the black wire from the plate assembly. Connect the Pin 1 wire to the red wire.
6. Attach the new horn to the bracket using the #10 hardware.
7. Make wiring connections between the horn interface card, the horn plate assembly, and the existing scoreboard driver per **Drawing B-1063340**.
8. Close and secure the horn entrance panel.
9. To test the horn, power on the scoreboard and control console, and press HORN.

1.6 Schematics

Reference Drawings:

Schematic, Outdoor SCBD 12VDC Trumpet Horn, AS5K **Drawing A-128938**

Schematic- Outdoor SCBD 12VDC Compact Horn **Drawing A-198618**

240V Horn Conversation Kit, for 12V Trumpet Assy. **Drawing A-270554**

Schematic, 240V OD SCBD 12VDC Trumpet Horn, AS5K **Drawing A-325028**

Refer to the appropriate drawing above for detailed horn plate wiring schematics.

Section 2: 24 VDC Trumpet Horn Installation (LED Solar Power Option Only)

The following section describes the 24 VDC trumpet horn installation for a solar-powered LED scoreboard.

Note: Disconnect power to the scoreboard before installing the horn!

2.1 Equipment

The trumpet horn kit consists of:

- a horn
- a metal mounting angle
- a 24 volt outdoor horn harness
- assorted #10 screws, tapping screws, and nuts

2.2 Location

The horn entrance panel is typically located in the center of the lower half of the scoreboard (refer to the component location drawings included in the scoreboard manual for specific location). The horn will be mounted directly to this entrance panel. The panel may be secured only by screws, or it may have hinges that allow it to swing open.

2.3 Horn Preparation

Reference Drawings:

Horn Assembly **Drawing A-320004**

1. Insert bushings into the appropriate $\frac{3}{8}$ " holes in the mounting angle.
2. Thread the two wires from the horn through the top of the mounting angle.
3. Attach the horn to the mounting angle using the #10 hardware provided.
4. Thread the two wires through the $\frac{3}{8}$ " hole in the rear of the mounting angle.

2.4 Horn Installation

Reference Drawings:

Template, Hole Drilling, Trumpet Horn **Drawing A-83502**

Installation Diagram: Solar Power Scoreboard **Drawing C-315892**

Assembly Horn Kit Option **Drawing A-321327**

1. Locate the horn entrance panel (see **Section 2.2**). There should be a 2" knockout on this panel. Remove this knockout. If the knockout has not been provided, use **Drawing A-83502** as a guide to drill one $\frac{3}{8}$ " hole and two $\frac{7}{32}$ " holes in the panel.

Note 1: Be careful not to damage any internal components when drilling!

Note 2: The knockout may have been removed at the factory.

2. Thread the two wires from the horn through the knockout (or $\frac{3}{8}$ " hole) in the scoreboard access panel.
3. Place horn/angle bracket assembly over the knockout/hole and $\frac{7}{32}$ " holes in the front panel of the scoreboard and attach using #10 hardware provided.
4. Install the horn harness as shown in **Drawing A-321327**.
5. Make wiring connections between the horn and the existing scoreboard driver per **Drawing C-315892** Electrical Installation Details.
6. Close and secure the horn entrance panel.
7. To test the horn, power on the scoreboard and control console, and press HORN.

Section 3: 120 VAC Trumpet Horn Installation (LED)

Refer to **Drawing B-328919** in **Appendix A** for general wiring details of LED scoreboard horns.

The following section describes the 120 VAC trumpet horn installation for an LED scoreboard. Assemblies are only available for 120 VAC scoreboards.

Note: Disconnect power to the scoreboard before installing the horn!

3.1 Equipment

The trumpet horn kit consists of:

- a horn
- a metal mounting angle
- a horn interface card and harness
- assorted #10 screws, tapping screws, and nuts

3.2 Location

The horn entrance panel is typically located in the center of the lower half of the scoreboard (refer to the component location drawings included in the scoreboard manual for specific location). The horn will be mounted directly to this entrance panel. The panel may be secured only by screws, or it may have hinges that allow it to swing open.

3.3 Basic Horn Installation

- If the horn kit was ordered with the scoreboard, the horn interface card, mounting angle, and horn body were likely installed at the factory; follow the simple instructions below.
- If these components have not been installed, skip ahead to **Section 3.4**.
 1. Locate the horn entrance panel (see **Section 3.2**).
 2. Locate and screw the trumpet part of the horn into the horn body through the 2" knockout on this panel.

3.4 Complete Horn Installation

Horn Interface Card Installation

Reference Drawings:

Assy: Horn Card Installation- Gen III and IV Drivers **Drawing B-302328**

- Current 120 V part number: 0P-1192-0399
- Pre-2008 part number: 0P-1150-0246

Gen IV LED Scoreboards

Attach the horn interface card inside the scoreboard driver enclosure and make the proper wiring connections from the horn interface card to the driver per **Drawing B-302328**, detail A.

GEN I, II, & III LED Scoreboards

Attach the horn interface card inside the scoreboard driver enclosure and make the proper wiring connections from the horn interface card to the driver per **Drawing B-302328**, detail B.

- If the scoreboard is Gen III and built from April - November 2006, a horn interface harness kit (0A-1192-1692) is required.
- If the scoreboard is Gen III and built *prior to* April 2006, an adaptor harness (0A-1192-1687) is also required.

Horn Installation

Reference Drawings:

Template, Hole Drilling, Trumpet Horn	Drawing A-83502
Horn Mounting Instructions, 120V, TI-2003-11	Drawing B-172553
Assy: Horn Card Installation- Gen III and IV Drivers	Drawing A-302328
120V AC Horn Mounting, Outdoor Sports	Drawing A-308058
120V AC Horn Mounting, Outdoor Sports	Drawing A-1055044

1. Locate the horn entrance panel (see **Section 3.2**). There should be a 2" knockout on this panel. Remove this knockout. If the knockout has not been provided, use **Drawing A-83502** as a guide to drill one 2" hole in the panel.

Note 1: Be careful not to damage any internal components when drilling!

Note 2: The knockout may have been removed at the factory.

2. Remove the trumpet from the horn body by unscrewing it.
3. Mount the bracket to the scoreboard frame using #10 hardware provided, and connect the horn harness to the horn wires with included wire nuts. Refer to **Drawing A-308058**. For newer "P1647" scoreboards, refer to **Drawing A-1055044**. For the TI-2003, refer to **Drawing B-172553**.

Note: When replacing a horn:

- 1) Use 1/4" bolts, nuts, and lock washers provided to attach the horn body to the mounting bracket so that the horn is on the same side as the short flange (the horn should be pointing downward).
- 2) Be sure to mount the horn to the bracket so that the wires are facing the bottom of the cabinet to prevent water from running along them.
- 3) Attach the copper ground lug to the bottom-right corner of the mounting bracket using the bolt and serrated washer and nut provided, and connect the green wire from the horn to the ground lug (does not apply to TI-2003).
4. Route the horn harness to A3-J3 on the horn interface card, per **Drawing B-302328**. If the harness doesn't reach, connect the 2-pin to 2-pin extension cable between the horn and the horn interface card as needed.
5. Close the access panel and screw the trumpet back onto the horn body.
6. To test the horn, power on the scoreboard and control console, and press HORN.

3.5 Schematics

Reference Drawings:

Schematic: 120VAC Trumpet Horn	Drawing A-132173
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Section 4: 12 VDC Trumpet Horn Installation (Incandescent)

Refer to **Drawing C-220009** in **Appendix A** for general wiring details of incandescent scoreboard horns.

The following section describes the 12 VDC trumpet horn installation for an incandescent scoreboard.

Note: Disconnect power to the scoreboard before installing the horn!

4.1 Equipment

The trumpet horn kit consists of:

- a horn
- a metal mounting angle
- a metal enclosure and 12 volt power plate assembly
- assorted #10 screws, tapping screws, and nuts

4.2 Location

The horn entrance panel is typically located in the center of the lower half of the scoreboard (refer to the component location drawings included in the scoreboard manual for specific location). The horn will be mounted directly to this entrance panel. The panel may be secured only by screws, or it may have hinges that allow it to swing open.

4.3 Horn Plate Assembly Installation

- If the horn kit was ordered with the scoreboard, the horn plate assembly was likely installed at the factory; skip ahead to **Section 4.4**.
- If these components have not been installed, follow the instructions below.

Reference Drawings:

Relay Enclosure & Plate Assembly..... **Drawing A-86903**

Drawing A-86903 shows the components of the horn plate assembly.

1. Open the horn entrance panel (see **Section 4.2**).
2. On the interior of the back panel of scoreboard, drill two $\frac{5}{32}$ " holes 4" apart (these holes may have been pre-drilled at the factory). The enclosure is to be attached to the inside of the scoreboard and accessible when the entrance panel is opened.

Note: Be careful not to damage any internal components when drilling!

3. Attach the enclosure to the scoreboard using the #10 tapping screws provided.
4. Attach the plate assembly to the enclosure using #10 tapping screws provided.
5. Attach the cover to the enclosure using the #10 tapping screws provided.

4.4 Horn Preparation

Reference Drawings:

Horn Assembly **Drawing A-320004**

1. Insert bushings into the appropriate $\frac{3}{8}$ " holes in the mounting angle.
2. Thread the two wires from the horn through the top of the mounting angle.
3. Attach the horn to the mounting angle using the #10 hardware provided.
4. Thread the two wires through the $\frac{3}{8}$ " hole in the rear of the mounting angle.

4.5 Horn Installation

Reference Drawings:

Template, Hole Drilling, Trumpet Horn **Drawing A-83502**

F.Assy; Incandescent, 12V DC Horn Mounting **Drawing A-83333**

1. Locate the horn entrance panel (see **Section 4.2**). There should be a 2" knockout on this panel. Remove this knockout. If the knockout has not been provided, use **Drawing A-83502** as a guide to drill one $\frac{3}{8}$ " hole and two $\frac{7}{32}$ " holes in the panel.

Note 1: Be careful not to damage any internal components when drilling!

Note 2: The knockout may have been removed at the factory.

2. Thread the two gray wires from the horn through the knockout (or $\frac{3}{8}$ " hole) in the scoreboard access panel.
3. Place horn/angle bracket assembly over the 2" knockout and $\frac{7}{32}$ " holes in the front panel of the scoreboard and attach using #10 hardware provided.
4. Using the wiring nuts provided, connect one gray wire from the horn to the black wire from the plate assembly. Connect the other gray wire to the red wire.
5. Make wiring connections between the horn plate assembly and the existing scoreboard driver per **Drawing A-83333**.

Note: A 2-pin to 4-pin adapter harness may be needed to connect new horn assembly to scoreboards built prior to April 2006.

6. Close and secure the horn entrance panel.
7. To test the horn, power on the scoreboard and control console, and press HORN.

4.6 Schematics

Reference Drawings:

Schematic, Football Trumpet Horn **Drawing A-83329**

Section 5: 120 VAC Trumpet Horn Installation (Incandescent)

Refer to **Drawing C-220009** in **Appendix A** for general wiring details of incandescent scoreboard horns.

The following section describes the 120 VAC trumpet horn installation for an incandescent scoreboard. Assemblies are only available for 120 VAC scoreboards.

Note: Disconnect power to the scoreboard before installing the horn!

5.1 Equipment

The trumpet horn kit consists of:

- a horn
- a metal mounting angle
- assorted #10 screws, tapping screws, and nuts

5.2 Location

The horn entrance panel is typically located in the center of the lower half of the scoreboard (refer to the component location drawings included in the scoreboard manual for specific location). The horn will be mounted directly to this entrance panel. The panel may be secured only by screws, or it may have hinges that allow it to swing open.

5.3 Basic Horn Installation

- If the horn kit was ordered with the scoreboard, the horn interface card, mounting angle, and horn body were likely installed at the factory; follow the simple instructions below.
- If these components have not been installed, skip ahead to **Section 5.4**.
 1. Locate the horn entrance panel (see **Section 5.2**).
 2. Locate and screw the trumpet part of the horn into the horn body through the 2" knockout on this panel.

5.4 Complete Horn Installation

Reference Drawings:

Horn Installation	Drawing A-44197
Template, Hole Drilling, Trumpet Horn	Drawing A-83502
Assy; Trumpet Horn Kit	Drawing A-88563

1. Locate the horn entrance panel (see **Section 5.2**). There should be a 2" knockout on this panel. Remove this knockout. If the knockout has not been provided, use **Drawing A-83502** as a guide to drill one 2" hole in the panel.

Note 1: Be careful not to damage any internal components when drilling!

Note 2: The knockout may have been removed at the factory.

2. Remove the trumpet from the horn body by unscrewing it.
3. Mount the bracket to the scoreboard frame using #10 hardware provided, and connect the horn harness to the horn wires. Refer to **Drawings A-44197** and **A-88563**.

Note: When replacing a horn:

- 1) Use 1/4" bolts, nuts, and lock washers provided to attach the horn body to the mounting bracket so that the horn is on the same side as the short flange (the horn should be pointing downward).
 - 2) Be sure to mount the horn to the bracket so that the wires are facing the bottom of the cabinet to prevent water from running along them.
 - 3) Attach the copper ground lug to the bottom-right corner of the mounting bracket using the bolt and serrated washer and nut provided, and connect the green wire from the horn to the ground lug.
4. Connect horn relay harness with white plug to power entry panel marked HORN or to the right side of driver enclosure to jack marked J-101.

Note: A 2-pin to 4-pin adapter harness may be needed to connect new horn assembly to scoreboards built prior to April 2006.

5. Close the access panel and screw the trumpet back onto the horn body.
6. To test the horn, power on the scoreboard and control console, and press HORN.

5.5 Schematics

Reference Drawings:

Schematic: 120VAC Trumpet Horn **Drawing A-132173**

Section 6: Daktronics Exchange and Repair & Return Programs

6.1 Exchange Program

The Daktronics Exchange Program is a service for quickly replacing key components in need of repair. If a component fails, Daktronics sends a replacement part to the customer who, in turn, returns the failed component to Daktronics. This decreases equipment downtime. Customers who follow the program guidelines explained below will receive this service.

Before Contacting Daktronics

Identify these important part numbers:

Assembly Number: _____

Job/Contract Number: _____

Date Installed: _____

Daktronics Customer ID Number: _____

To participate in the Exchange Program, follow these steps.

1. Call Daktronics Customer Service.

Market Description	Customer Service Number
Schools (including community/junior colleges), religious organizations, municipal clubs and community centers	877-605-1115
Universities and professional sporting events, live events for auditoriums and arenas	866-343-6018

2. When the new exchange part is received, mail the old part to Daktronics.

If the replacement part fixes the problem, send in the problem part being replaced.

- a. Package the old part in the same shipping materials in which the replacement part arrived.
- b. Fill out and attach the enclosed UPS shipping document.
- c. Ship the part to Daktronics.

3. The defective or unused parts must be returned to Daktronics within 5 weeks of initial order shipment.

If any part is not returned within five (5) weeks, a non-refundable invoice will be presented to the customer for the costs of replenishing the exchange parts inventory with a new part.

Daktronics reserves the right to refuse parts that have been damaged due to acts of nature or causes other than normal wear and tear.

6.2 Repair & Return Program

For items not subject to exchange, Daktronics offers a Repair & Return Program. To send a part for repair, follow these steps:

1. **Call or fax Daktronics Customer Service:**
Refer to the appropriate market number in the chart listed on the previous page.
Fax: 605-697-4444
2. **Receive a case number before shipping.**
This expedites repair of the part.
3. **Package and pad the item carefully to prevent damage during shipment.**
Electronic components, such as printed circuit boards, should be placed in an antistatic bag before boxing. Daktronics does not recommend using packing 'peanuts' when shipping.
4. **Enclose:**
 - name
 - address
 - phone number
 - the case number
 - a clear description of symptoms

Shipping Address

Daktronics Customer Service
[Case #]
201 Daktronics Drive, Dock E
Brookings, SD 57006

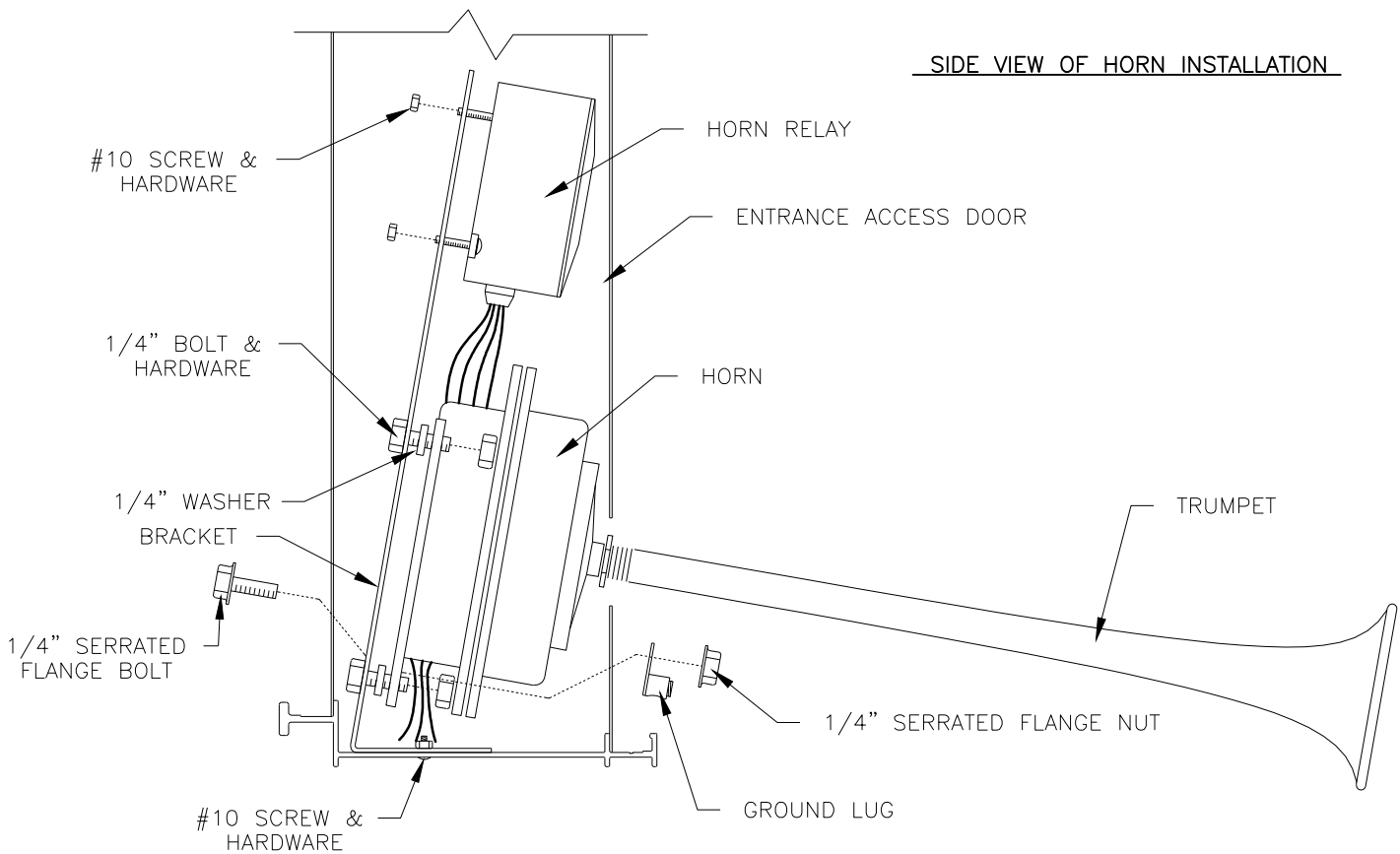
6.3 Daktronics Warranty and Limitation of Liability

The Daktronics Warranty and Limitation of Liability is located in **Appendix B**. The Warranty is independent of Extended Service agreements and is the authority in matters of service, repair, and display operation.

Appendix A: Reference Drawings

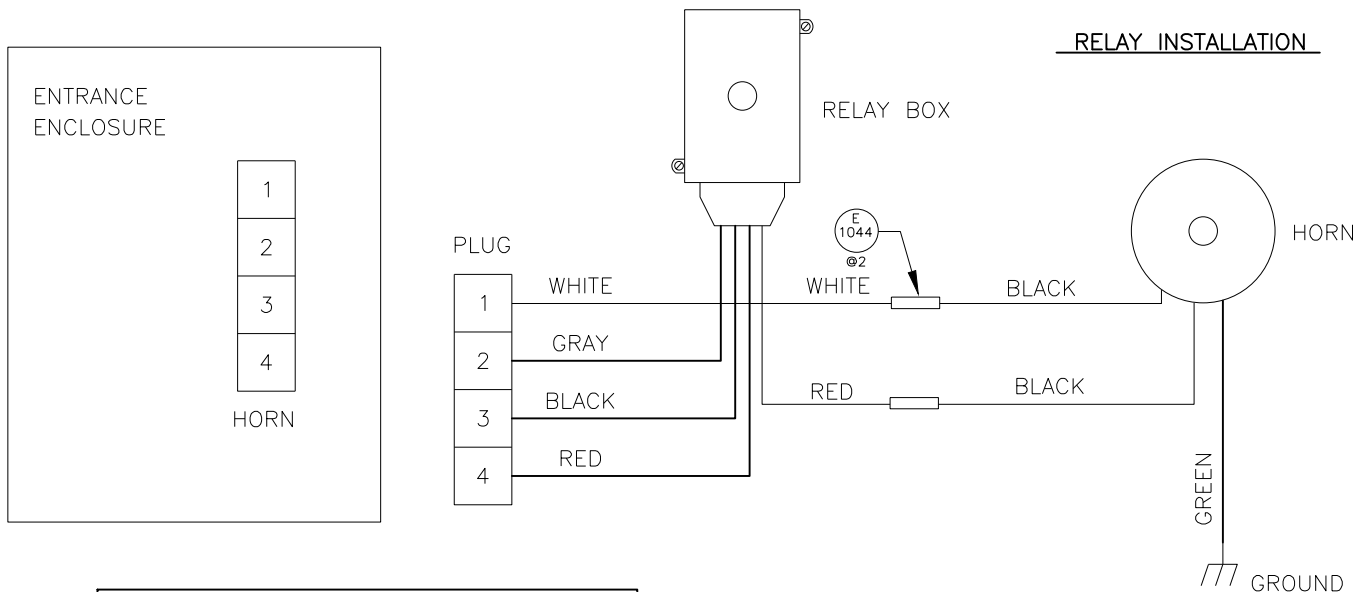
<i>Drawing Title</i>	<i>Drawing Number</i>
Horn Installation.....	A-44197
Schematic, Football Trumpet Horn.....	A-83329
F.Assy; Incandescent, 12V DC Horn Mounting.....	B-83333
Template, Hole Drilling, Trumpet Horn.....	A-83502
Relay Enclosure & Plate Assembly.....	A-86903
Assy; Trumpet Horn Kit.....	A-88563
Schematic, Outdoor SCBD 12VDC Trumpet Horn, AS5K.....	A-128938
Plate Assy: Outdoor SCBD 12VDC Horn, AS5K.....	A-128944
Schematic: 120VAC Trumpet Horn.....	A-132173
Horn Mounting Instructions, 120V, TI-2003-11.....	B-172553
Schematic- Outdoor SCBD 12VDC Compact Horn.....	A-198618
Wiring Guide: Outdoor Horn Kits- Incandescent.....	C-220009
F.Assy: 12V DC Horn Mounting- Outdoor LED SCBD.....	B-242731
240V Horn Conversation Kit, for 12V Trumpet Assy.....	A-270554
Assy: Horn Card Installation- Gen III and IV Drivers.....	B-302328
120V AC Horn Mounting, Outdoor Sports.....	A-308058
Installation Diagram: Solar Power Scoreboard.....	C-315892
Horn Assembly.....	A-320004
Assembly Horn Kit Option.....	A-321327
Schematic, 240V OD SCBD 12VDC Trumpet Horn, AS5K.....	A-325028
Wiring Guide: Outdoor Horn Kits- LED.....	B-328919
120V AC Horn Mounting, Outdoor Sports.....	A-1055044
Assembly Drawing, 12V DC Compact Horn 120V or 240V.....	B-1063340

SIDE VIEW OF HORN INSTALLATION



THIS SCHEMATIC IS FOR SCOREBOARDS PRIOR TO ALLSPORT 5000 PROTOCOL.
SEE DWG A-132173 FOR SCOREBOARDS USING AN ALLSPORT 5000 PROTOCOL.

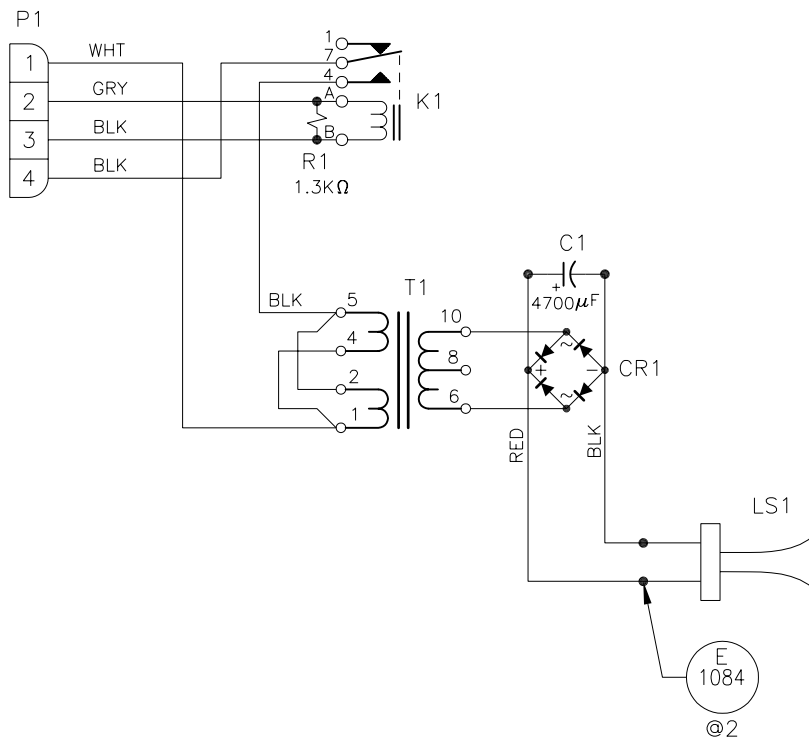
RELAY INSTALLATION



NOTE:
HORN IS TO BE MOUNTED BEHIND ACCESS DOOR THAT HAS 2" DIAMETER KNOCKOUT.

REV 05	DATE: 29 SEP 11	FIXED TEXT SIZES AND TYPING ERRORS UPDATED BOARDER AND TITLE BLOCK	BY: JVL
04	06 FEB 08	ADDED 1/4" WASHER	KZB
02	21 DEC 04	REPLACED E-1084 WITH E-1044	ADH
01	11JAN01	ADDED NOTE ABOUT AS 5000 PROTOCOL RELATING TO SCHEMATIC	MCOPL

DAKTRONICS, INC. BROOKINGS, SD 57006 DO NOT SCALE DRAWING		THE CONCEPTS EXPRESSED AND DETAILS SHOWN ON THIS DRAWING ARE CONFIDENTIAL AND PROPRIETARY. DO NOT REPRODUCE BY ANY MEANS WITHOUT THE EXPRESSED WRITTEN CONSENT OF DAKTRONICS, INC. COPYRIGHT 2011 DAKTRONICS, INC.	
		PROJ: OUTDOOR SCOREBOARDS TITLE: HORN INSTALLATION	
DESIGN: JHEIDER		DRAWN: JHEIDER	
SCALE: 1 = 4		DATE: 16AUG90	
SHEET	REV	JOB NO:	FUNC-TYPE-SIZE
	05	P1091	E-10-A
			44197



DAKTRONICS, INC. BROOKINGS, SD 57006			
PROJ: STANDARD SCOREBOARDS			
TITLE: SCHEMATIC, FOOTBALL TRUMPET HORN			
DES. BY: AVB		DRAWN BY: AVB	
		DATE: 18 JUN 96	
REVISION		APPR. BY:	
01		SCALE: NONE	
1091-R03A-83329			

01	05 OCT 06	SWITCHED TRANSFORMER BLOCK SECONDARY TERMINALS 6 AND 10.	JWC	
REV.	DATE	DESCRIPTION	BY	APPR.

HORN KIT AFTER MARCH 2006

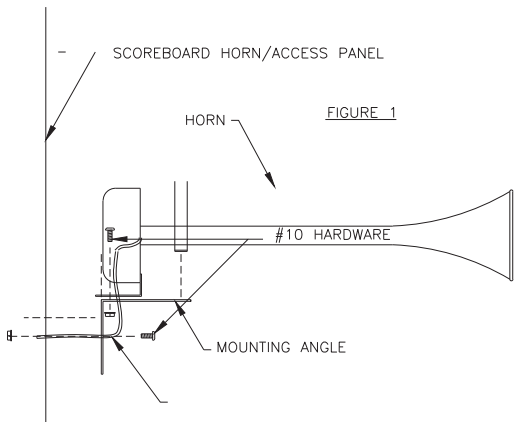
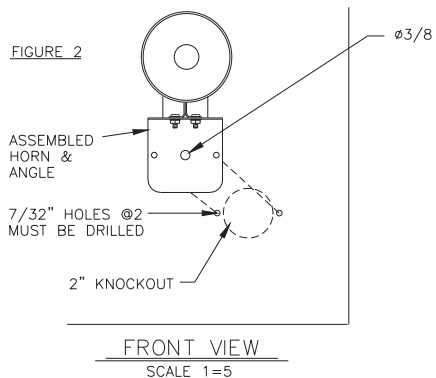


FIGURE 1

THE SCOREBOARD FACE. WIRES ARE THREADED THROUGH THE HOLE IN THE MOUNTING ANGLE AND KNOCKOUT IN

SIDE VIEW
SCALE 1=5

FIGURE 2



FRONT VIEW
SCALE 1=5

ENTRANCE PLATE

FOR COMPLETE INSTALLATION INSTRUCTIONS, REFER TO ED-10006.

LOCATE HORN PANEL OF THE SCOREBOARD.

MOUNTING ENCLOSURE TO INSIDE OF SCOREBOARD

1. OPEN THE HORN PANEL AND LOCATE THE ENTRANCE PLATE. DRILL TWO 5/32" HOLES 4 INCHES APART IN THE BACK OF THE SCOREBOARD NEAR THE ENTRANCE PLATE.
2. ATTACH THE ENCLOSURE TO THE INSIDE OF THE SCOREBOARD OVER THE 5/32" HOLES USING #10 TAPPING SCREWS. ATTACH THE PLATE ASSEMBLY TO THE ENCLOSURE USING #10 HARDWARE.

REMOVE 2" KNOCKOUT IN THE HORN PANEL AND DRILL TWO 7/32" HOLES USING THE TEMPLATE DRAWING A-83502. IF NO KNOCKOUT EXISTS, USE THE TEMPLATE TO DRILL ONE 8/32" HOLE AND TWO 7/32" HOLES IN THE PANEL.

MOUNTING HORN TO SCOREBOARD FACE

1. THREAD THE TWO GRAY WIRES FROM THE HORN THROUGH THE TOP OF THE MOUNTING ANGLE.
2. ATTACH THE HORN TO THE MOUNTING ANGLE USING THE HARDWARE PROVIDED (FIGURE 1).
3. INSERT THE BUSHING INTO THE 3/8" HOLE IN THE MOUNTING ANGLE.
4. MOUNT HORN/ANGLE ASSEMBLY TO THE FACE OF THE SCOREBOARD OVER THE 2" KNOCKOUT AND 7/32" HOLES USING #10 HARDWARE PROVIDED.
5. OPEN THE HORN PANEL AND REMOVE THE COVER FROM THE ENCLOSURE.
6. USING THE WIRE NUTS PROVIDED CONNECT ONE GRAY WIRE FROM THE HORN TO THE BLACK WIRE FROM THE PLATE ASSEMBLY. CONNECT THE OTHER GRAY WIRE TO THE RED WIRE (FIGURE 3).
7. CONNECT THE PLUG FROM THE PLATE ASSEMBLY TO THE HORN JACK ON THE SIDE OF THE ENTRANCE ENCLOSURE OR ON THE ENTRANCE PLATE.
8. ATTACH THE COVER TO THE ENCLOSURE USING #10 HARDWARE.
9. CLOSE AND SECURE THE HORN PANEL.

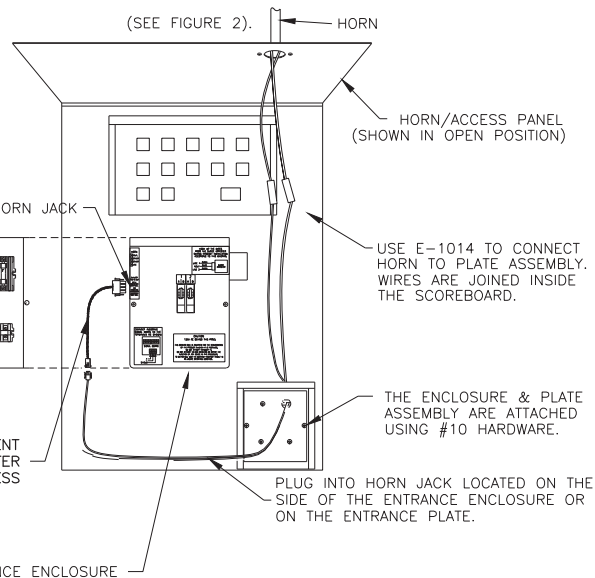


FIGURE 3
HORN CONNECTION

NOTE:
DO NOT USE THE OP-1150-0246 HORN ADAPTER CARD WITH INCANDESCENT SCOREBOARDS!

HORN KIT BEFORE MARCH 2006

FOR COMPLETE INSTALLATION INSTRUCTIONS, REFER TO ED-10006.

LOCATE HORN PANEL OF THE SCOREBOARD.

MOUNTING ENCLOSURE TO INSIDE OF SCOREBOARD

1. OPEN THE HORN PANEL AND LOCATE THE ENTRANCE PLATE. DRILL TWO 5/32" HOLES 4 INCHES APART IN THE BACK OF THE SCOREBOARD NEAR THE ENTRANCE PLATE.
2. ATTACH THE ENCLOSURE TO THE INSIDE OF THE SCOREBOARD OVER THE 5/32" HOLES USING #10 TAPPING SCREWS. ATTACH THE PLATE ASSEMBLY TO THE ENCLOSURE USING #10 HARDWARE.

REMOVE 2" KNOCKOUT IN THE HORN PANEL AND DRILL TWO 7/32" HOLES USING THE TEMPLATE DRAWING A-83502. IF NO KNOCKOUT EXISTS, USE THE TEMPLATE TO DRILL ONE 8/32" HOLE AND TWO 7/32" HOLES IN THE PANEL.

MOUNTING HORN TO SCOREBOARD FACE

1. THREAD THE TWO GRAY WIRES FROM THE HORN THROUGH THE TOP OF THE MOUNTING ANGLE.
2. ATTACH THE HORN TO THE MOUNTING ANGLE USING THE HARDWARE PROVIDED (FIGURE 1).
3. INSERT THE BUSHING INTO THE 3/8" HOLE IN THE MOUNTING ANGLE.
4. MOUNT HORN/ANGLE ASSEMBLY TO THE FACE OF THE SCOREBOARD OVER THE 2" KNOCKOUT AND 7/32" HOLES USING #10 HARDWARE PROVIDED.
5. OPEN THE HORN PANEL AND REMOVE THE COVER FROM THE ENCLOSURE.
6. USING THE WIRE NUTS PROVIDED CONNECT ONE GRAY WIRE FROM THE HORN TO THE BLACK WIRE FROM THE PLATE ASSEMBLY. CONNECT THE OTHER GRAY WIRE TO THE RED WIRE (FIGURE 3).
7. CONNECT THE PLUG FROM THE PLATE ASSEMBLY TO THE HORN JACK ON THE SIDE OF THE ENTRANCE ENCLOSURE OR ON THE ENTRANCE PLATE.
8. ATTACH THE COVER TO THE ENCLOSURE USING #10 HARDWARE.
9. CLOSE AND SECURE THE HORN PANEL.

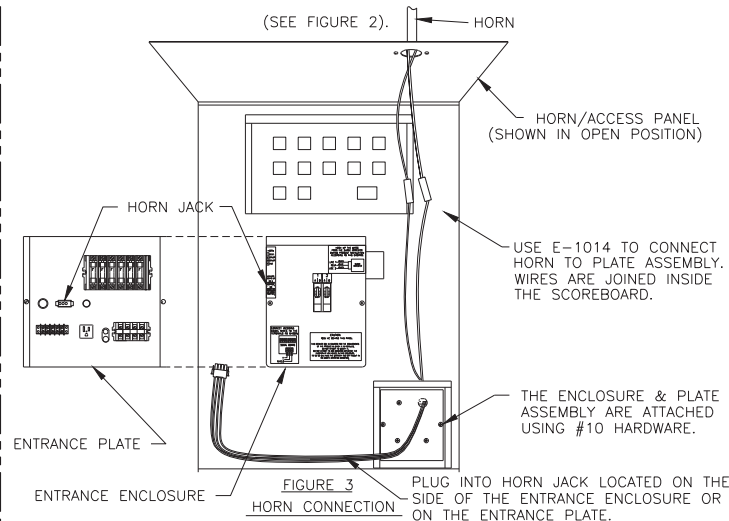
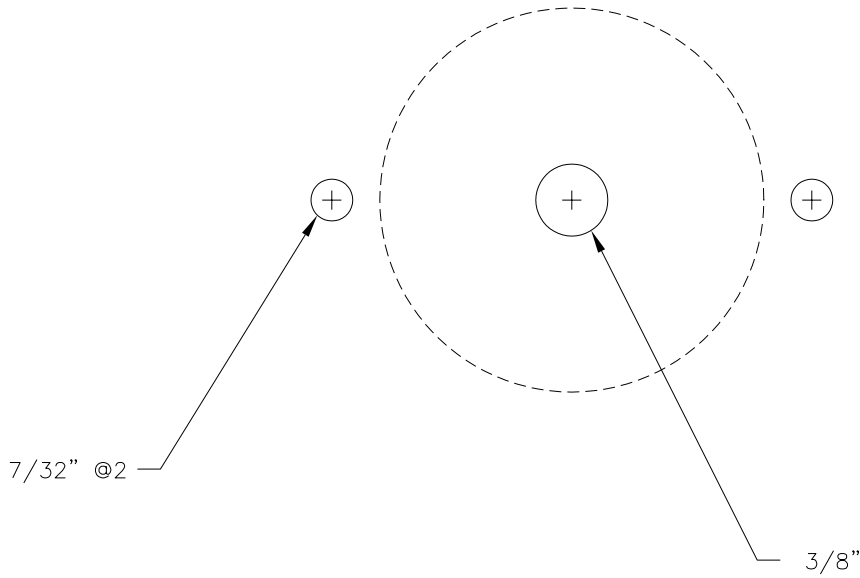


FIGURE 3
HORN CONNECTION

REV	DATE	CORRECTED TYPING ERRORS UPDATED BORDER AND TITLE BLOCK	BY:
06	28 SEP 11		JUL
05	30 MAY 06	ADDED NOTE AND ADAPTER HARNESS FOR HORN TO PLUG INTO EXISTING HORN CONNECTIONS	DMD
04	20 DEC 04	REPLACED E-1084 WITH E-1014	ADH
3	19 JUL 00	UPDATED HORN ENCLOSURE IN FIGURE 3	GDB
2	14 FEB 00	ADDED ENTRANCE ENCLOSURE TO FIGURE 3	BDP
1	23 SEPT 96	CHG SCALE OF FIGURES 1 & 2 SWITCHED POSITIONS OF FIGURES 1 & 2	JEM

DAKTRONICS, INC. BROOKINGS, SD 57006 DO NOT SCALE DRAWING		THE CONCEPTS EXPRESSED AND DETAILS SHOWN ON THIS DRAWING ARE CONFIDENTIAL AND PROPRIETARY. DO NOT REPRODUCE BY ANY MEANS WITHOUT THE EXPRESSED WRITTEN CONSENT OF DAKTRONICS, INC. COPYRIGHT 2011 DAKTRONICS, INC.	
		PROJ: STANDARD SCOREBOARDS TITLE: F.ASSY: INCANDESCENT- 12V DC HORN MOUNTING DESIGN: _____ DRAWN: JMOEN SCALE: 1=10 SHEET _____ REV _____ JOB NO: _____ FUNC-TYPE-SIZE _____	
06	P1091	83333	

0A-1091-0272



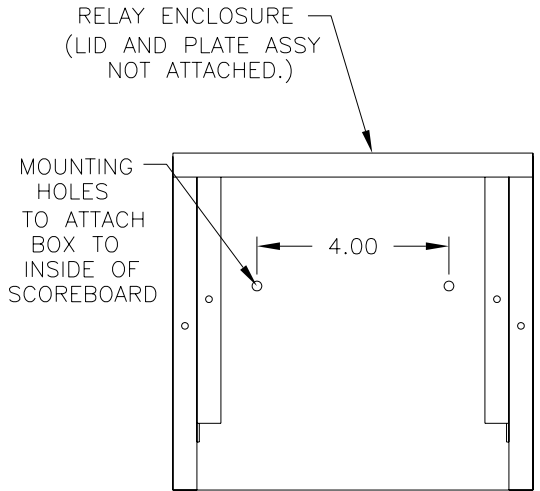
THE DOTTED LINE INDICATES THE 2" KNOCKOUT

LINE UP THE DOTTED LINE WITH THE EDGES OF THE KNOCKOUT. DRILL THE 7/32" HOLES THROUGH THE PAPER.

IF NO KNOCKOUT HOLE EXISTS, DRILL 3/8" & 7/32" HOLES NEAR BOTTOM OF FRONT PANEL NEAR ENTRANCE PLATE. BE CAREFUL NOT TO DAMAGE ANY INTERNAL COMPONENTS.

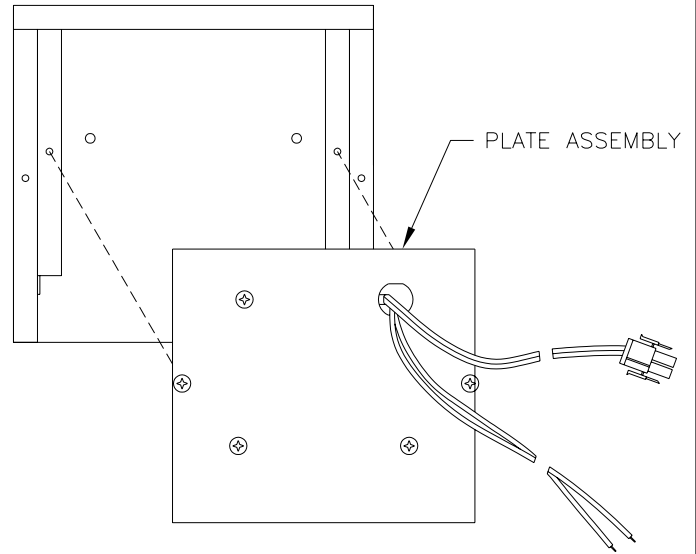
DAKTRONICS, INC. BROOKINGS, SD 57006			
PROJ: STANDARD SCOREBOARDS			
TITLE: TEMPLATE, HOLE DRILLING, TRUMPET HORN			
DES. BY:		DRAWN BY: JMOEN	
		DATE: 20 JUN 96	
REVISION	APPR. BY:	1091-E07A-83502	
00	SCALE: 1=1		

REV.	DATE	DESCRIPTION	BY	APPR.



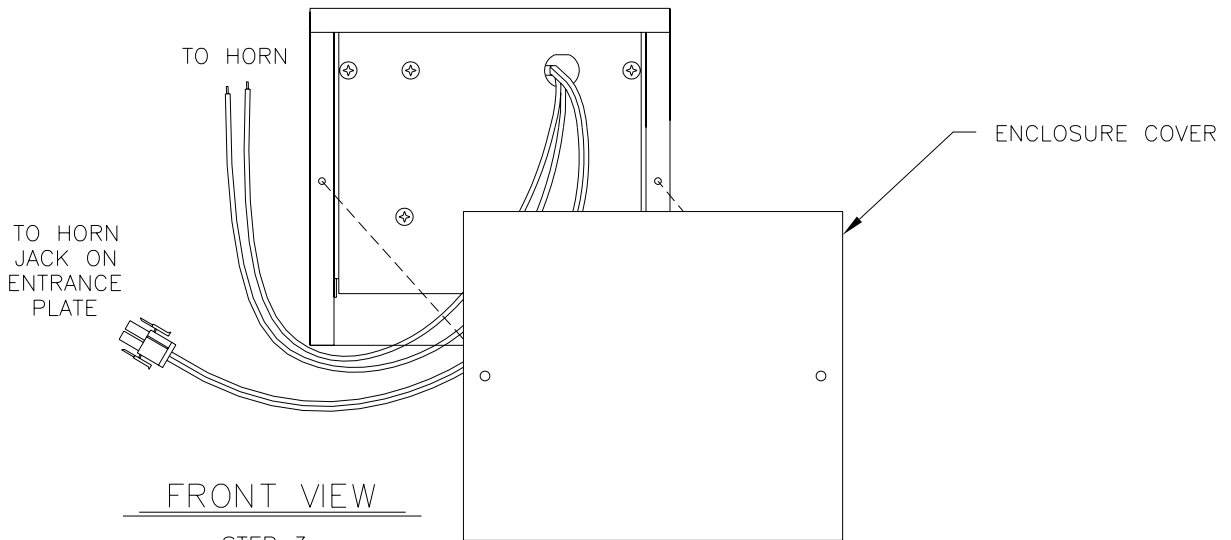
FRONT VIEW

STEP 1
MOUNT RELAY ENCLOSURE
TO INSIDE BACK OF
SCOREBOARD.



FRONT VIEW

STEP 2
ATTACH PLATE ASSEMBLY
TO RELAY ENCLOSURE
AS SHOWN.



FRONT VIEW

STEP 3
ATTACH ENCLOSURE
COVER

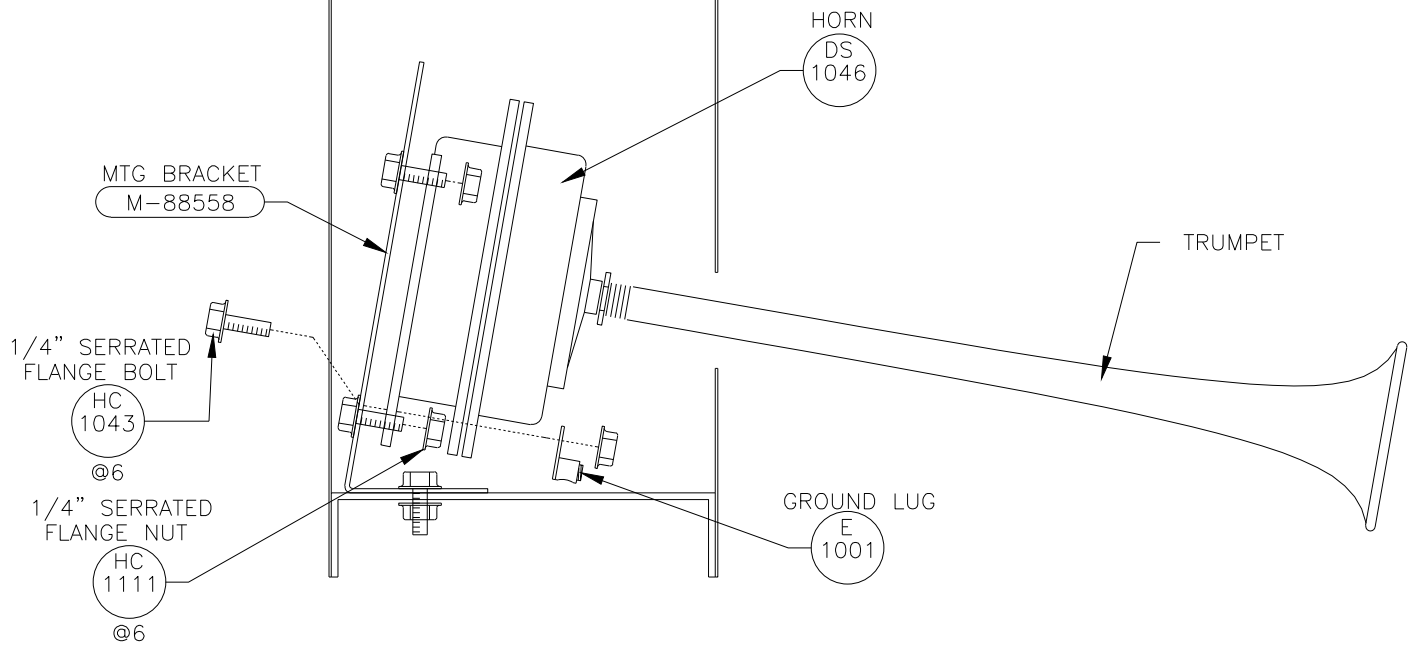
0A-1091-0272

DAKTRONICS, INC. BROOKINGS, SD 57006

02	11 SEPT 06	CHANGE 4 PIN CONNECTOR TO 2 PIN CONNECTOR	AMG	
1	29JUN00	GENERAL REVISION	GDB	
REV.	DATE	DESCRIPTION	BY	APPR.

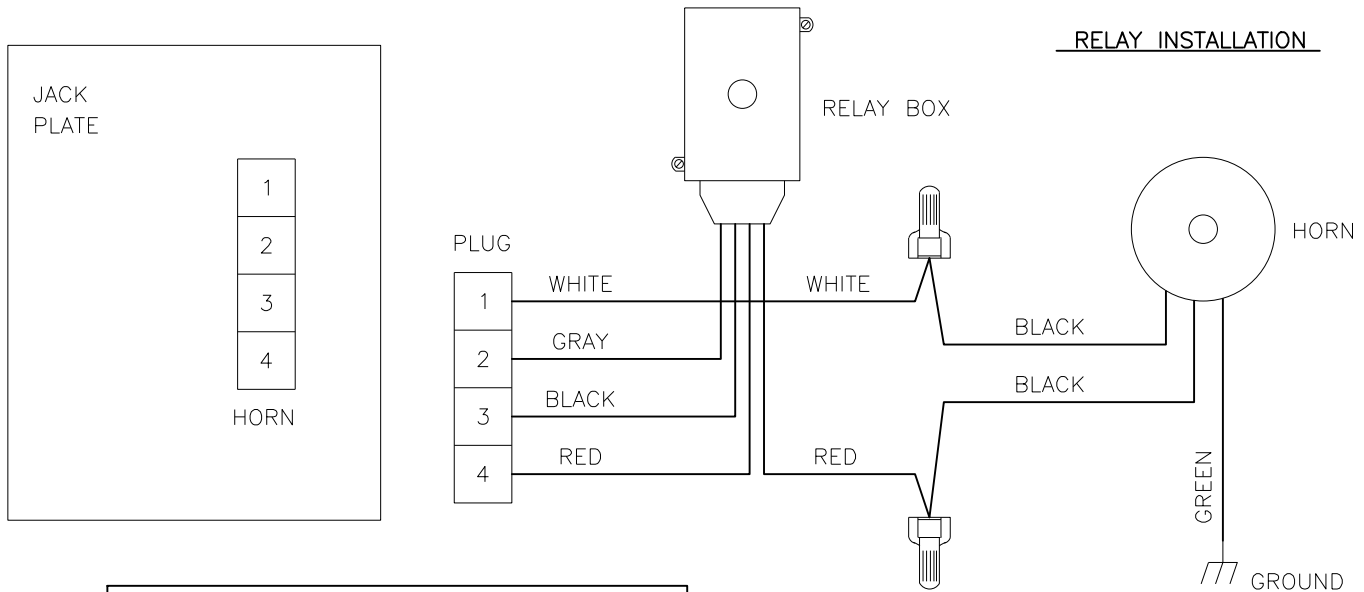
PROJ: OUTDOOR SCOREBOARDS	
TITLE: RELAY ENCLOSURE & PLATE ASSEMBLY	
DES. BY:	DRAWN BY: JMOEN
DATE: 24 SEPT 96	
REVISION	APPR. BY:
02	SCALE: 1=4
1091-R10A-86903	

SIDE VIEW OF HORN INSTALLATION




THIS SCHEMATIC IS FOR SCOREBOARDS PRIOR TO ALL SPORT 5000 PROTOCOL.
SEE DWG A-132173 FOR SCOREBOARDS USING AN ALL SPORT 5000 PROTOCOL.

RELAY INSTALLATION

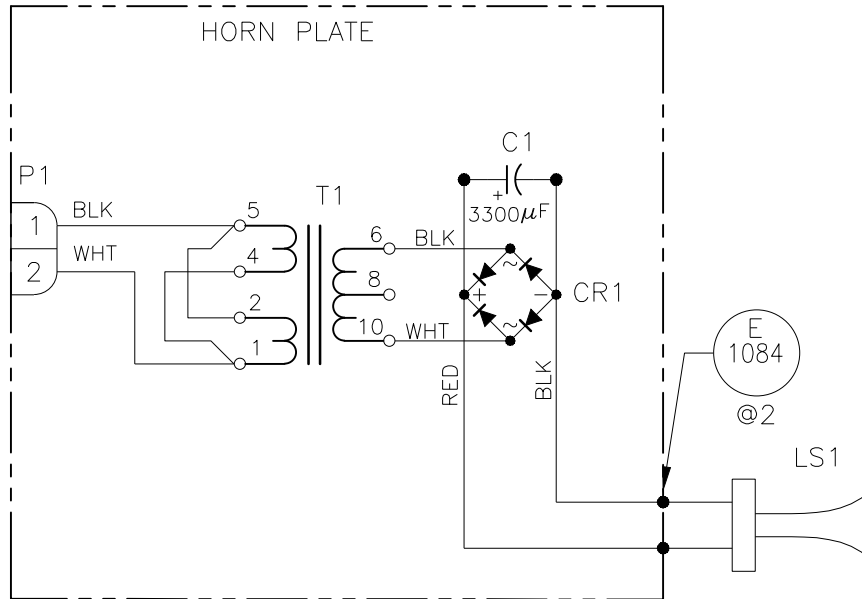


NOTE:
HORN IS TO BE MOUNTED BEHIND PANEL THAT HAS 2" DIAMETER KNOCKOUT OR HOLE.

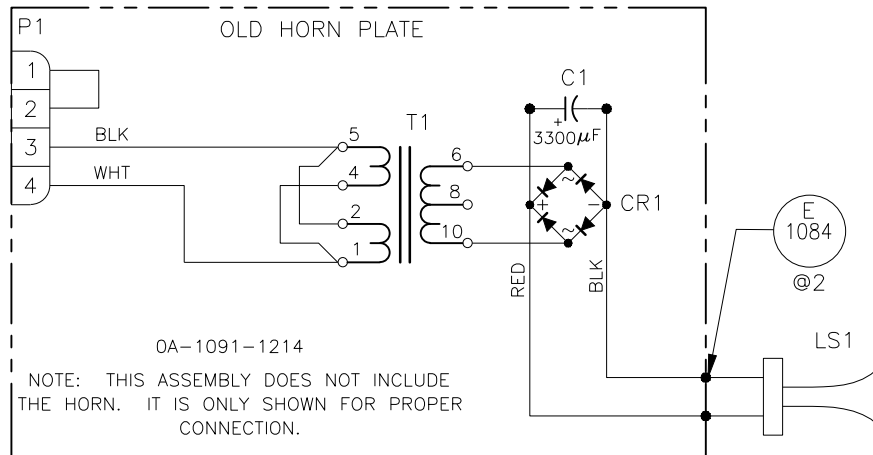
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DO NOT SCALE DRAWING			
PROJ: OUTDOOR INTEGRATED SCORING SYSTEMS TITLE: ASSY: TRUMPET HORN KIT			
DESIGN: BVANDER		DRAWN: BVANDER	
		DATE: 14MAR97	
SCALE: 1 = 4			
SHEET	REV	JOB NO:	FUNC-TYPE-SIZE
01	01	P1157	E-10-A
			88563

REV	DATE:	FIXED TEXT SIZES UPDATED BOARDER AND TITLE BLOCK	BY:
01	29 SEP 11		JJL


0A-1091-1214
12V TRUMPET HORN PLATE ASSY

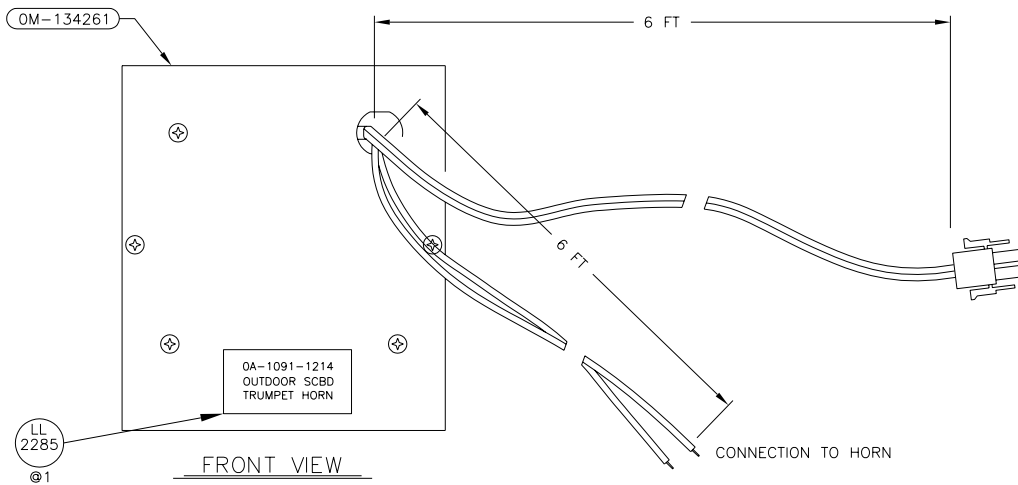
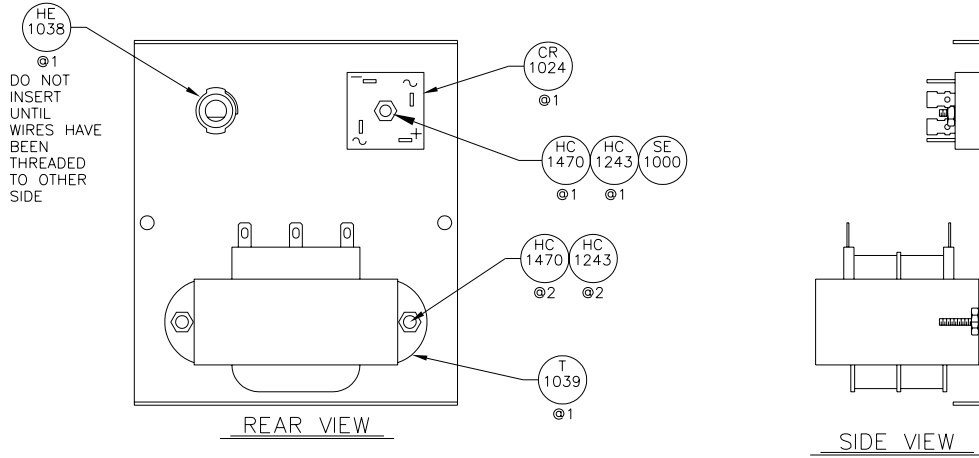


BEFORE APRIL 2006



REV 06	DATE: 08 OCT 12	ADDED WIRE COLOR FROM TRANSFORMER TO CR1 PER EC-7744	BY: JML
REV 05	DATE: 13 APR 07	REMOVED OUTDOOR LED DRIVE FROM SCHEMATIC REMOVED WIRE FROM J17	BY: DKD
REV 04	DATE: 11 SEP 06	CHANGED LABELS ON J1 & J3, REMOVED WIRE FROM J17	BY: AMG
REV 03	DATE: 23 MAY 06	CORRECTED CAP LABEL FROM C-1115 NTO C-1158	BY: SJC
REV 02	DATE: 23 MAR 06	ADDED SOLID STATE HORN RELAY ASSY TO -1214	BY: DMD
REV 01	DATE: 18 MAY 01	PAT NUMBER CHANGED FROM -1213 TO -1214	BY: MWM

 DAKTRONICS, INC. BROOKINGS, SD 57006	THE CONCEPTS EXPRESSED AND DETAILS SHOWN ON THIS DRAWING ARE CONFIDENTIAL AND PROPRIETARY. DO NOT REPRODUCE BY ANY MEANS WITHOUT THE EXPRESSED WRITTEN CONSENT OF DAKTRONICS, INC. COPYRIGHT 2012 DAKTRONICS, INC.	
	DO NOT SCALE DRAWING	
PROJ: STANDARD SCOREBOARDS TITLE: SCHEMATIC- OUTDOOR SCBD 12VDC TRUMPET HORN- AS5K		
DESIGN:	DRAWN: JCM	DATE: 06MAR00
SCALE: NONE		
SHEET 1 OF 1	REV 06	JOB NO: P1091
		FUNC-TYPE-SIZE R-03-A
		128938



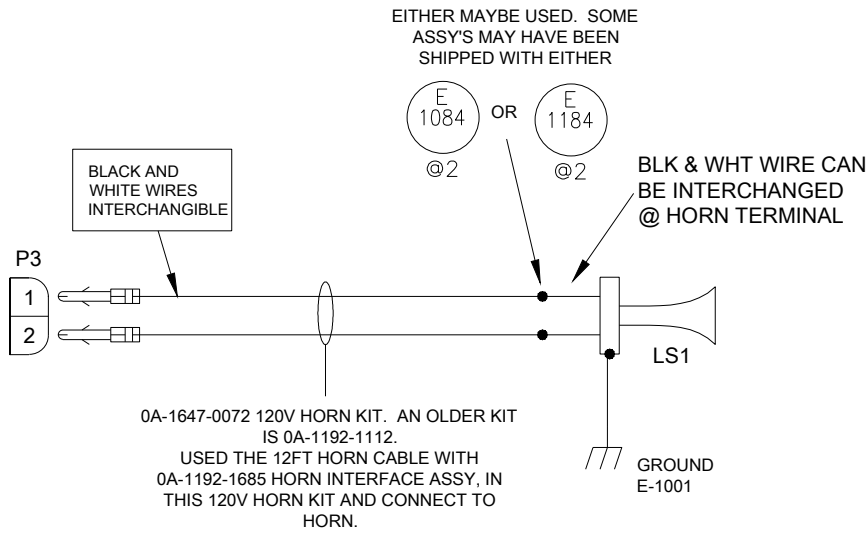
0A-1091-1213- 12V TRUMPET HORN KIT WITH PLATE ASSY AND HORN CARD.

0A-1192-0093- 12V COMPACT HORN KIT WITH PLATE ASSY AND HORN CARD.

0A-1192-3455- 12V TRUMPET HORN KIT WITH PLATE ASSY, 240VAC.

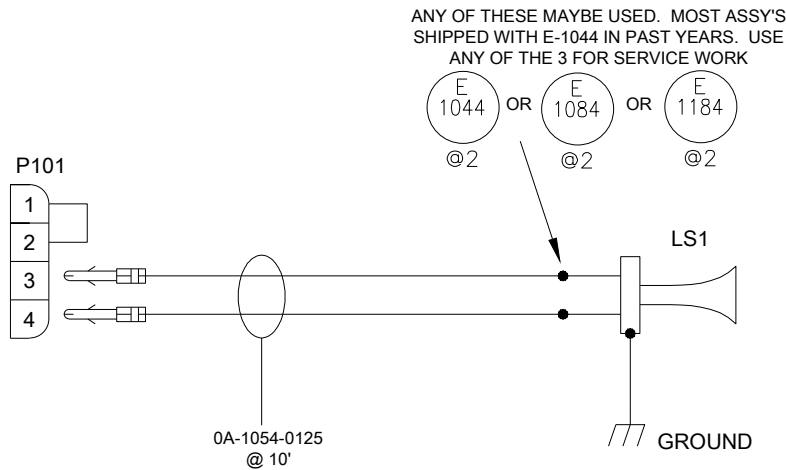
07	13 NOV 07	ADDED 0A-1192-3455 TO DRAWING REFERENCE	JWC	
06	30 MAY 06	CHANGED PLUG FROM A 4 PIN TO A 2 PIN	DMD	
05	20 NOV 02	CHANGED TRANSFORMER FROM T-1042 TO T-1039	ATB	
04	16 MAY 02	REMOVED AF-1007 PER ECO 33209.	MRB	
03	24 APR 02	ADDED LL-2285 PER ECO 33163.	MRB	
02	19 APR 02	CHANGED HC-1022 TO HC-1470.	MRB	
1	29JUN00	REPLACED OM-83330 WITH OM-134261	GDB	
REV.	DATE	DESCRIPTION	BY	APPR.

DAKTRONICS, INC. BROOKINGS, SD 57006			
PROJ: STANDARD SCOREBOARDS			
TITLE: PLATE ASSY: OUTDOOR SCBD 12VDC HORN, AS5K			
DES. BY:	DRAWN BY: CMCADAM	DATE: 06MAR00	
REVISION	APPR. BY:	1091-E10A-128944	
07	SCALE: 1=3		



SCOREBOARDS BUILT BEFORE APRIL 2006

0A-1091-0469
0A-1192-1112



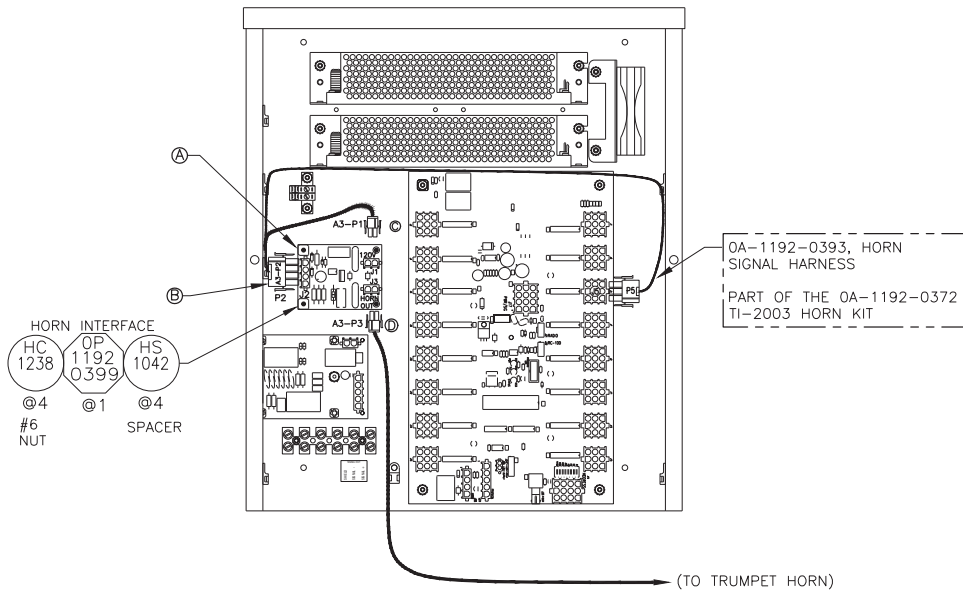
REV	DATE:	ADDED NOTES, CHANGED LABEL ON J1 & J3	BY:
08	11 SEPT 08	ADDED WIRE FROM J17	AMG
07	DATE:	ADDED CONNECT TO WIRE FOR ECU CABLES	BY:
04	8/20/08	ADDED CONNECT TO WIRE FOR ECU CABLES	BY:
03	DATE:	ADDED HORN CABLE FROM 120V & 115V TO CABLE ON 100-1000 PWR ECU CABT	BY:
02	30 JAN 08	ADDED HORN CABLE FROM 120V & 115V TO CABLE ON 100-1000 PWR ECU CABT	BY:
01	DATE:	ADDED HORN CABLE FROM 120V & 115V TO CABLE ON 100-1000 PWR ECU CABT	BY:
01	23 MAR 08	ADDED HORN CABLE FROM 120V & 115V TO CABLE ON 100-1000 PWR ECU CABT	BY:
01	DATE:	ADDED HORN CABLE FROM 120V & 115V TO CABLE ON 100-1000 PWR ECU CABT	BY:
01	08/08/08	ADDED HORN CABLE FROM 120V & 115V TO CABLE ON 100-1000 PWR ECU CABT	BY:

	DAKTRONICS, INC. BROOKINGS, SD 57006	THE CONCEPTS EXPRESSED AND DETAILS SHOWN ON THIS DRAWING ARE CONFIDENTIAL AND PROPRIETARY. DO NOT REPRODUCE BY ANY MEANS WITHOUT THE EXPRESS WRITTEN CONSENT OF DAKTRONICS, INC. COPYRIGHT 2014 DAKTRONICS, INC.
	DO NOT SCALE DRAWING	

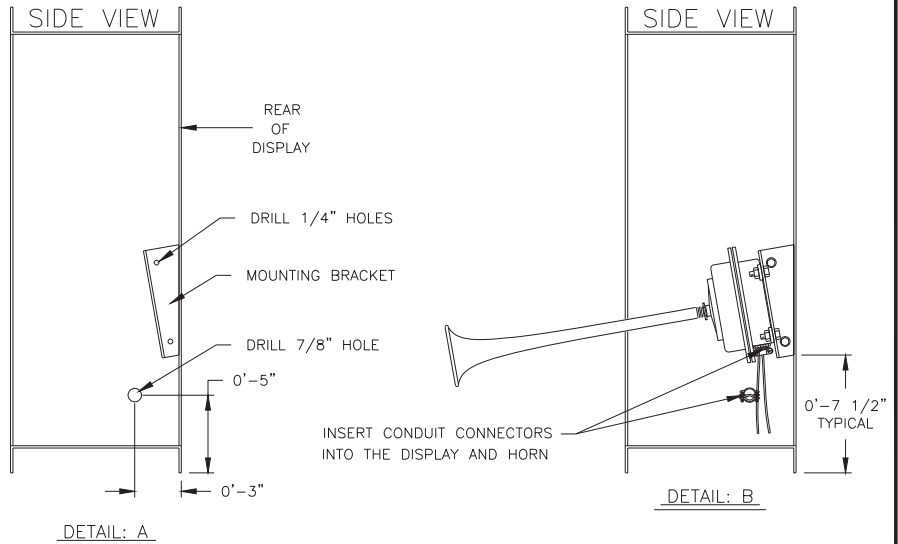
REV 08	DATE: 03 JUN 14	PER SUGGESTIONS FROM TECH WRITERS AND SERVICES, MADE SOME TEXT ADDITIONS TO WIRE NUMBERS AND ETC.	BY: MWM
REV 07	DATE: 22 SEP 09	UPDATED TOP DETAIL TO MAKE IT CORRECT WITH CABLE ASSY # AND CONNECTOR ID.	BY: MWM
REV 06	DATE: 13 APR 07	UPDATED NOTES, CHANGED LABEL ON J1 & J3, REMOVED WIRE FROM J17.	BY: AMG

PROJ: STANDARD OUTDOOR SCOREBOARDS			
TITLE: SCHEMATIC: 120VAC TRUMPET HORN			
DESIGN:	DRAWN: RASMUS	DATE: 16MAY00	
SCALE: 1=1			
SHEET	REV	JOB NO:	FUNC - TYPE - SIZE
	08	P 1091	R - 03 - A
			132173

GEN IV LED DRIVER ASSEMBLIES
DETAIL A



- Ⓐ FROM THE 0A-1192-1685, HORN INTERFACE CARD ASSY. MOUNT OP-1192-0399 HORN SWITCH CARD USING HS-1042 SPACER & HC-1238 LOCK NUT.
- Ⓑ PLUG TI-2003 HORN SIGNAL HARNESS (0A-1192-0372) P5 INTO J5 ON THE DRIVER AND P2 INTO J2 OF OP-1192-0399 HORN SWITCH CARD.
- Ⓒ PLUG POWER A3-P1 POWER HARNESS INTO A3-J1 OF THE HORN INTERFACE CARD.
- Ⓓ PLUG HORN CABLE P3 INTO J3 OF THE OP-1192-0399 AND THE OPPOSITE END ON TO THE HORN.



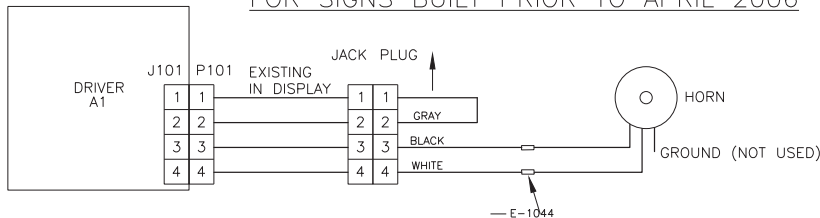
INSTALLATION PROCEDURE:

1. OPEN THE RIGHT DIGIT AND REMOVE THE COVER FROM THE DRIVER.
2. DRILL A 7/8" HOLE IN THE RIGHT SIDE OF THE DISPLAY PER THE DIMENSIONS SHOWN IN DETAIL A.
3. INSERT INCLUDED CONDUIT CONNECTORS INTO THE 7/8" HOLE AND INTO THE BOTTOM OF THE HORN AS SHOWN IN DETAIL B.
4. POSITION THE HORN MOUNTING BRACKET PER DETAIL B.
5. MARK THE MOUNTING BRACKET HOLE LOCATIONS ON THE SIDE OF THE DISPLAY.
6. DRILL 1/4" HOLES WHERE THE MOUNTING BRACKET HOLES WERE MARKED ON THE SIDE OF THE DISPLAY.
7. MOUNT THE HORN MOUNTING BRACKET WITH THE INCLUDED 1/4" HARDWARE.
8. ATTACH THE HORN TO THE BRACKET WITH INCLUDED 1/4" HARDWARE. *THE WIRES PROTRUDE OUT THE BOTTOM OF THE HORN. MAKE SURE THE HORN IS MOUNTED WITH THE BOTTOM DOWN.
9. THE GROUND WIRE WILL NOT BE CONNECTED, CUT THE GREEN WIRE AS SHORT AS POSSIBLE.
10. ROUTE THE WIRES THROUGH THE CONDUIT AND INTO THE DISPLAY.
11. ONCE THE HARNESS HAS BEEN RUN THROUGH THE CONDUIT, CONNECT THE CONDUIT TO THE CONDUIT CONNECTORS IN THE SIDE OF THE DISPLAY AND THE BOTTOM OF THE HORN.

WIRING INSTRUCTIONS:

12. USE HARNESS 0A-1192-1686 (2-WIRE BLK AND WHT @10' LONG) AND TERMINATE THE BLACK WIRE AND THE WHITE WIRE FROM THIS HARNESS TO THE TWO WIRES COMING OUT OF THE BOTTOM OF THE HORN. USE THE INCLUDED E-1044 BUTT SPLICES TO MAKE THIS TERMINATION. NOTE: WIRES FROM THE HORN CAN CONNECT TO EITHER THE BLACK OR WHITE WIRES THIS CONNECTION IS INTERCHANGEABLE.
13. REFERENCE SCHEMATIC DWG-132173 FOR CONNECTIONS MADE INSIDE DISPLAY TO THE HORN CARD (OP-1192-0399) PROVIDED IN HORN ASSY KIT.
14. ATTACH THE COVER ONTO THE DRIVER AND ATTACH THE REMOVED DIGIT TO THE DISPLAY FACE.

FOR SIGNS BUILT PRIOR TO APRIL 2006

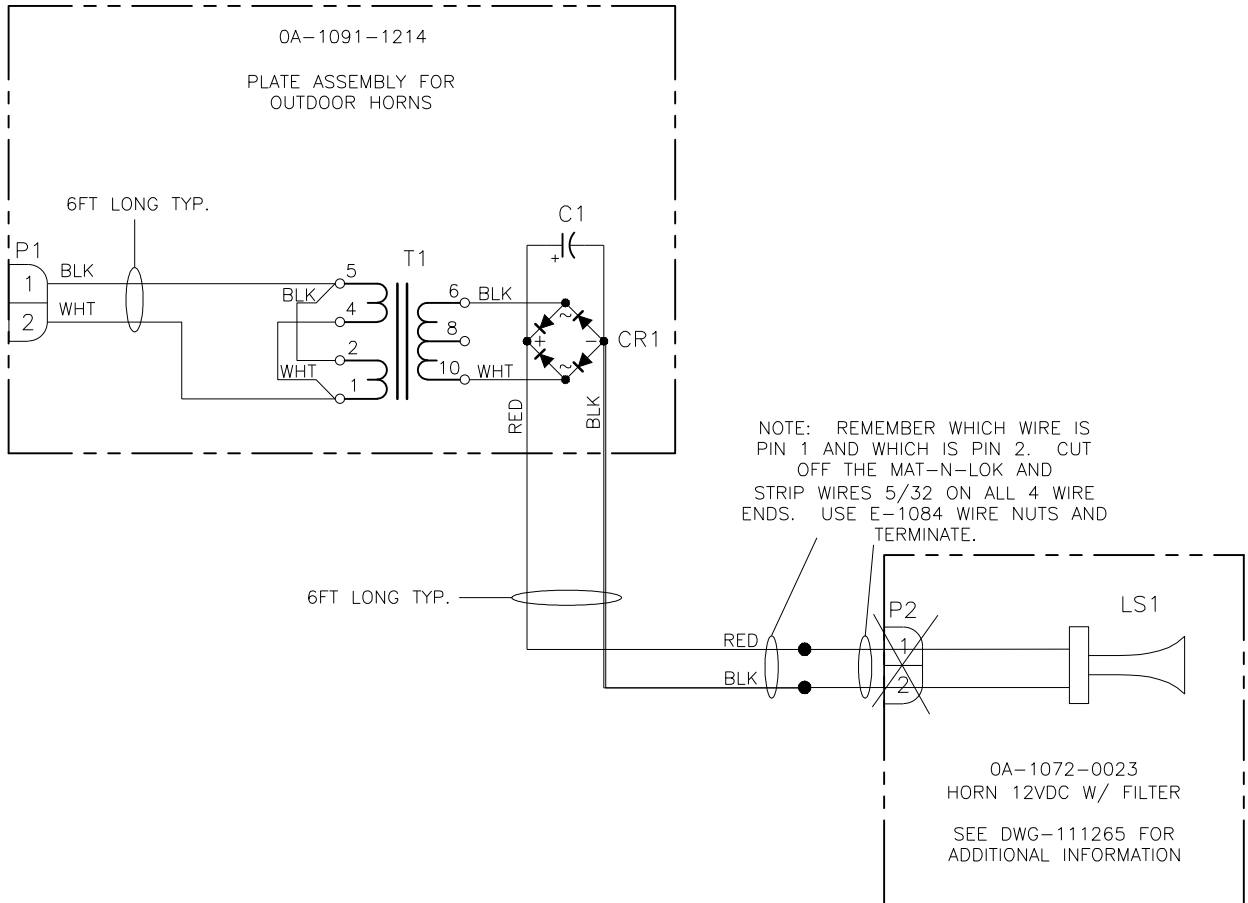


REV 05	DATE: 28 SEP 11	CHANGED OP-1192-0246 TO OP-1192-0399 UPDATED BOARDER AND TITLE BLOCK	BY: JVL	DAKTRONICS, INC. BROOKINGS, SD 57006 DO NOT SCALE DRAWING	THE CONCEPTS EXPRESSED AND DETAILS SHOWN ON THIS DRAWING ARE CONFIDENTIAL AND PROPRIETARY. DO NOT REPRODUCE BY ANY MEANS WITHOUT THE EXPRESSED WRITTEN CONSENT OF DAKTRONICS, INC. COPYRIGHT 2011 DAKTRONICS, INC.
04	8 JAN 08	UPDATED INFO ON GENIV HORN HARNESS.	DKD		
03	15 AUG 07	ADDED GEN IV DRIVER INFO	DKD	PROJ: OUTDOOR LED SCOREBOARDS TITLE: HORN MOUNTING INSTRUCTIONS- 120V- TI-2003-11	DATE: 01AUG02
02	09/11/06	ADDED PRIOR TO APRIL 2006 NOTE ADDED WIRING INSTRUCTION NOTES 12 AND 13	SJC	DESIGN: MCOPLAN DRAWN: MCOPLAN SCALE: 1=8	
01	22 DEC 04	REPLACED E-1084 WITH E-1044	ADH	SHEET 05 REV P1192 JOB NO: E-10-B FLUNC-TYPE-SIZE	172553


0A-1192-0093
12V COMPACT HORN, 120V ACTIVATION

THIS ASSEMBLY INCLUDES 0A-1072-0023 HORN AND
0A-1091-1214 PLATE ASSY SHOWN HERE.

NOTE: 0A-1072-0023 HORN IS PRIMARILY USED IN A FINAL
ASSEMBLY WHICH REQUIRES THE 2 PIN MAT-N-LOK.
0A-1091-1214 ASSEMBLY IS PRIMARILY USED WITH ASSEMBLIES
WHICH REQUIRE WIRE NUTS.

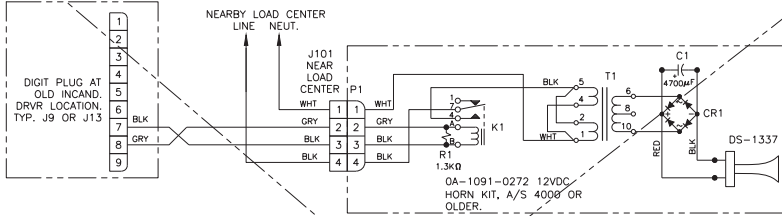


REV 04	DATE: 16 JUL 12	PER EC-6420 REMOVED CAPACITOR VALUE	BY: ZR
REV 03	DATE: 01 AUG 11	UPDATED DETAILS TO SHOW THE ASSEMBLY BETTER	BY: MWM
REV 02	DATE: 30 OCT 07	REPLACED E-1034 WITH E-1084.	BY: MJK
REV 01	DATE: 5 APR 06	UPDATED P1 ON 0A-1192-1214 TO A 2PIN	BY: DMD

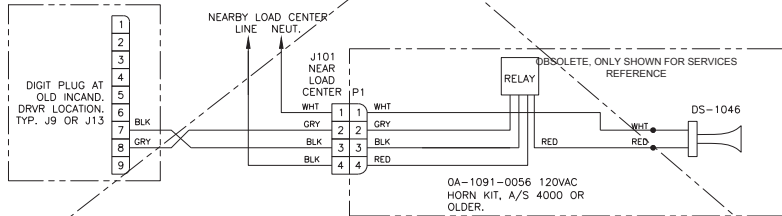
 DAKTRONICS, INC. BROOKINGS, SD 57006 DO NOT SCALE DRAWING	THE CONCEPTS EXPRESSED AND DETAILS SHOWN ON THIS DRAWING ARE CONFIDENTIAL AND PROPRIETARY. DO NOT REPRODUCE BY ANY MEANS WITHOUT THE EXPRESSED WRITTEN CONSENT OF DAKTRONICS, INC. COPYRIGHT 2011 DAKTRONICS, INC.		
	PROJ: STANDARD SCOREBOARDS TITLE: SCHEMATIC- OUTDOOR SCBD 12VDC COMPACT HORN DESIGN: DULSCHM DRAWN: DULSCHM DATE: 17 OCT 03 SCALE: NONE		
SHEET	REV 04	JOB NO: P1192	FUNC-TYPE-SIZE R-03-A
			198618

**NOTE: INCANDESCENT IS
END OF SUPPORT**

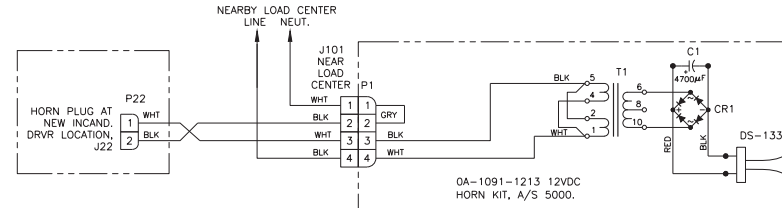
1. OLD INCANDESCENT SCOREBOARDS:
12VDC SETUP, ALL SPORT 4000 OR OLDER, ALSO A/S 3000
OR 5900 USING OLD CODE.



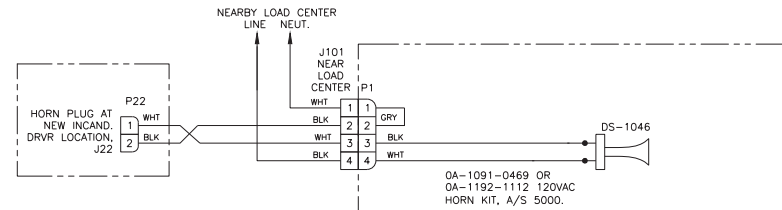
2. OLD INCANDESCENT SCOREBOARDS:
120VAC SETUP, ALL SPORT 4000 OR OLDER, ALSO A/S 3000
OR 5000 USING OLD CODE.



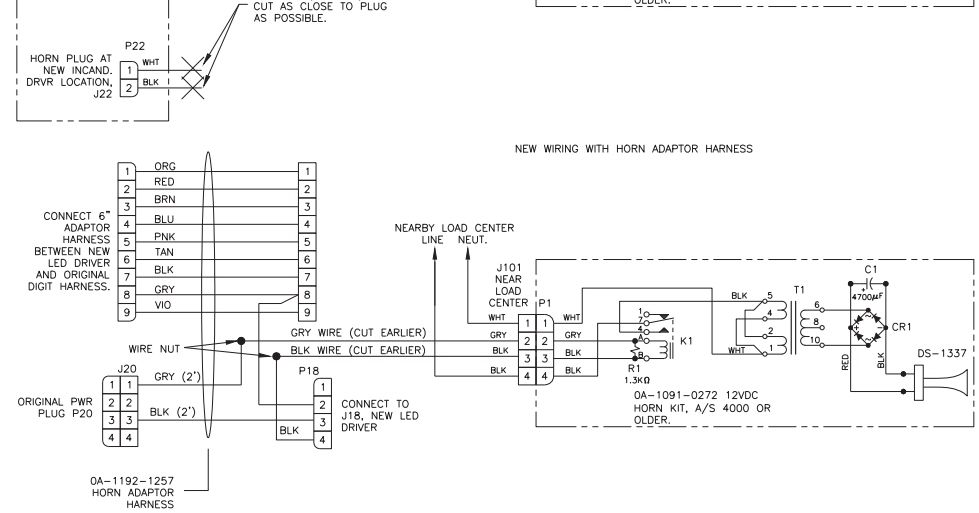
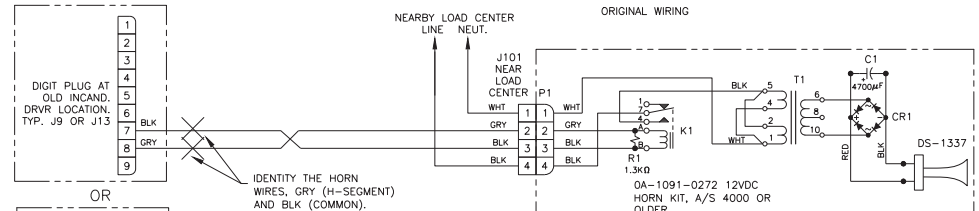
3. NEWER INCANDESCENT SCOREBOARDS:
12VDC ALL SPORT 5000 CONTROL, INCANDESCENT HAS NOT
BEEN SOLD SINCE 2005.



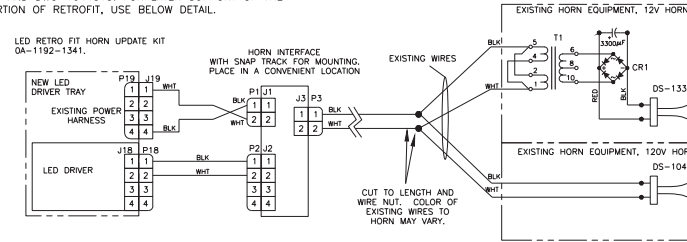
4. NEWER INCANDESCENT SCOREBOARDS:
120VAC ALL SPORT 5000 CONTROL, INCANDESCENT HAS NOT
BEEN SOLD SINCE 2005.



5. INCANDESCENT TO LED RETROFIT
SCOREBOARDS:
12VDC SETUP, FOR ANY TYPE OF ALL SPORT



6. LED RETRO FIT HORN UPDATE KIT:
WITH LED RETROFIT PACKAGE, HORN INTERFACE ADDITION IS
REQUIRED. TO COMPLETE THE LED RETROFIT WORK, REFER TO
ED-13849 AND DWG-1044515. FOR LATER SUPPORT OF THE
HORN PORTION OF RETROFIT, USE BELOW DETAIL.



REV 05	DATE: 23 MAY 14	SECTION 2 A PORTION IS MARKED AS OBSOLETE PER SERVICES REQUEST	BY: MAM	DAKTRONICS, INC. BROOKINGS, SD 57006 50 WEST SCALE DRIVE #400	THE CONCEPTS EXPRESSED AND DETAILS SHOWN ON THIS DRAWING ARE CONFIDENTIAL AND PROPRIETARY. DO NOT REPRODUCE OR USE ANY PARTS THEREOF WITHOUT THE EXPRESS WRITTEN CONSENT OF DAKTRONICS, INC. ©COPYRIGHT 2014 DAKTRONICS, INC.
REV 04	DATE: 02 JUL 13	ADDED SECTION 8	BY: JRB		
REV 03	DATE: 26 AUG 09	SWITCHED TO PIN 2 ON P18	BY: JRB	INDOOR OUTDOOR LED SCOREBOARDS TITLE WIRING GUIDE: OUTDOOR HORN KITS- INCANDESCENT	DATE: 30 JUL 04
REV 02	DATE: 27 SEP 07	MOVED LED TO SEPARATE DWG	BY: JRB	DESIGN: MMILLER	DESIGNER: MMILLER
REV 01	DATE: 01 SEP 06	UPDATED OUTDOOR LED KIT SPORT 5000 HORN DETAILS TO CORRECT PLUG #	BY: MAM	SCALE: NONE	SCALE: NONE
				SHEET 05	TOTAL SHEETS 1192
				REV: R-01-C	220009

GEN IV LED DRIVERS
SYSTEM BUILT FROM
JAN 2007 TO PRESENT

FOR COMPLETE INSTALLATION INSTRUCTIONS, REFER TO ED-10006.

MOUNTING ENCLOSURE TO INSIDE OF SCOREBOARD

1. OPEN THE HORN PANEL AND LOCATE THE ENTRANCE PLATE. DRILL TWO 5/32" HOLES 4 INCHES APART IN THE BACK OF THE SCOREBOARD NEAR THE ENTRANCE PLATE.
2. ATTACH THE ENCLOSURE TO THE INSIDE OF THE SCOREBOARD OVER THE 5/32" HOLES USING #10 TAPPING SCREWS. ATTACH THE PLATE ASSEMBLY TO THE ENCLOSURE USING #10 HARDWARE. REMOVE 2" KNOCKOUT IN THE HORN PANEL AND DRILL TWO 7/32" HOLES USING THE TEMPLATE DRAWING A-83502. IF NO KNOCKOUT EXISTS, USE THE TEMPLATE TO DRILL ONE 8/32" HOLE AND TWO 7/32" HOLES IN THE PANEL.

MOUNTING HORN TO SCOREBOARD FACE

1. THREAD THE TWO GRAY WIRES FROM THE HORN THROUGH THE TOP OF THE MOUNTING ANGLE.
2. ATTACH THE HORN TO THE MOUNTING ANGLE USING THE HARDWARE PROVIDED (FIGURE 1).
3. INSERT THE BUSHING INTO THE 3/8" HOLE IN THE MOUNTING ANGLE.
4. MOUNT HORN/ANGLE ASSEMBLY TO THE FACE OF THE SCOREBOARD OVER THE 2" KNOCKOUT AND 7/32" HOLES USING #10 HARDWARE PROVIDED.
5. OPEN THE HORN PANEL AND REMOVE THE COVER FROM THE ENCLOSURE.
6. USING THE WIRE NUTS PROVIDED CONNECT ONE GRAY WIRE FROM THE HORN TO THE BLACK WIRE FROM THE PLATE ASSEMBLY. CONNECT THE OTHER GRAY WIRE TO THE RED WIRE (FIGURE 3).
7. STEPS FOR INSTALLING THE OA-1192-1685, HORN INTERFACE KIT. (FIGURE 3) OR OA-1192-0395 FOR 240VAC INSTALLATIONS.

- (A) MOUNT OP-1192-0399 HORN SWITCH CARD USING HS-1042 SPACER & HC-1238 LOCK NUT. OTHER HORN CARD PART NUMBERS ARE:
OP-1150-0246 - FROM 2004 - 2009
OP-1150-0255 - HORN CARD FOR 240VAC INSTALLATIONS.
 - (B) PLUG SIGNAL CABLE P18 INTO J18 ON THE DRIVER AND P2 INTO J2 OF THE HORN SWITCH CARD.
 - (C) PLUG POWER A3-P1 POWER HARNESS INTO A3-J1 OF THE HORN INTERFACE CARD.
 - (D) PLUG HORN CABLE INTO J3 OF THE HORN SWITCH CARD. USE 12FT EXTENSION HARNESS WITH THE HORN KIT IF REQUIRED.
8. ATTACH THE COVER TO THE ENCLOSURE USING #10 HARDWARE.
 9. CLOSE AND SECURE THE HORN PANEL.

GEN III LED DRIVERS
SYSTEMS BUILT FROM
MAR 2006 TO JAN 2007

FOR COMPLETE INSTALLATION INSTRUCTIONS, REFER TO ED-10006.

MOUNTING ENCLOSURE TO INSIDE OF SCOREBOARD

1. OPEN THE HORN PANEL AND LOCATE THE ENTRANCE PLATE. DRILL TWO 5/32" HOLES 4 INCHES APART IN THE BACK OF THE SCOREBOARD NEAR THE ENTRANCE PLATE.
2. ATTACH THE ENCLOSURE TO THE INSIDE OF THE SCOREBOARD OVER THE 5/32" HOLES USING #10 TAPPING SCREWS. ATTACH THE PLATE ASSEMBLY TO THE ENCLOSURE USING #10 HARDWARE. REMOVE 2" KNOCKOUT IN THE HORN PANEL AND DRILL TWO 7/32" HOLES USING THE TEMPLATE DRAWING A-83502. IF NO KNOCKOUT EXISTS, USE THE TEMPLATE TO DRILL ONE 8/32" HOLE AND TWO 7/32" HOLES IN THE PANEL.
3. CLEAN METAL AND MOUNT HORN SWITCH CARD (OP-1150-0246 BEFORE 2009 AND OP-1192-0399 AFTER 2009) IN DRIVER ENCLOSURE WITH SNAP TRACK OM-222049 AND ADHESIVE TAPE PROVIDED.

MOUNTING HORN TO SCOREBOARD FACE

1. THREAD THE TWO GRAY WIRES FROM THE HORN THROUGH THE TOP OF THE MOUNTING ANGLE.
2. ATTACH THE HORN TO THE MOUNTING ANGLE USING THE HARDWARE PROVIDED (FIGURE 1).
3. INSERT THE BUSHING INTO THE 3/8" HOLE IN THE MOUNTING ANGLE.
4. MOUNT HORN/ANGLE ASSEMBLY TO THE FACE OF THE SCOREBOARD OVER THE 2" KNOCKOUT AND 7/32" HOLES USING #10 HARDWARE PROVIDED.
5. OPEN THE HORN PANEL AND REMOVE THE COVER FROM THE ENCLOSURE.
6. USING THE WIRE NUTS PROVIDED CONNECT ONE GRAY WIRE FROM THE HORN TO THE BLACK WIRE FROM THE PLATE ASSEMBLY. CONNECT THE OTHER GRAY WIRE TO THE RED WIRE (FIGURE 3).
7. CONNECT THE PLUG FROM THE PLATE ASSEMBLY TO THE HORN JACK ON THE HORN INTERFACE CARD.
- CONNECT THE POWER HARNESS (P101) INTO (J101) OF THE DRIVER ENCLOSURE AND J1 ON THE HORN INTERFACE CARD.
- PLUG THE HORN SIGNAL HARNESS IN TO J18 OF THE DRIVER & J2 OF THE HORN INTERFACE CARD.
8. ATTACH THE COVER TO THE ENCLOSURE USING #10 HARDWARE.
9. CLOSE AND SECURE THE HORN PANEL.

GEN I & II LED DRIVERS
SYSTEMS BUILT FROM
2001 TO MAR 2006

FOR COMPLETE INSTALLATION INSTRUCTIONS, REFER TO ED-10006.

MOUNTING ENCLOSURE TO INSIDE OF SCOREBOARD

1. OPEN THE HORN PANEL AND LOCATE THE ENTRANCE PLATE. DRILL TWO 5/32" HOLES 4 INCHES APART IN THE BACK OF THE SCOREBOARD NEAR THE ENTRANCE PLATE.
2. ATTACH THE ENCLOSURE TO THE INSIDE OF THE SCOREBOARD OVER THE 5/32" HOLES USING #10 TAPPING SCREWS. ATTACH THE PLATE ASSEMBLY TO THE ENCLOSURE USING #10 HARDWARE. REMOVE 2" KNOCKOUT IN THE HORN PANEL AND DRILL TWO 7/32" HOLES USING THE TEMPLATE DRAWING A-83502. IF NO KNOCKOUT EXISTS, USE THE TEMPLATE TO DRILL ONE 8/32" HOLE AND TWO 7/32" HOLES IN THE PANEL.

MOUNTING HORN TO SCOREBOARD FACE

1. THREAD THE TWO GRAY WIRES FROM THE HORN THROUGH THE TOP OF THE MOUNTING ANGLE.
2. ATTACH THE HORN TO THE MOUNTING ANGLE USING THE HARDWARE PROVIDED (FIGURE 1).
3. INSERT THE BUSHING INTO THE 3/8" HOLE IN THE MOUNTING ANGLE.
4. MOUNT HORN/ANGLE ASSEMBLY TO THE FACE OF THE SCOREBOARD OVER THE 2" KNOCKOUT AND 7/32" HOLES USING #10 HARDWARE PROVIDED.
5. OPEN THE HORN PANEL AND REMOVE THE COVER FROM THE ENCLOSURE.
6. USING THE WIRE NUTS PROVIDED CONNECT ONE GRAY WIRE FROM THE HORN TO THE BLACK WIRE FROM THE PLATE ASSEMBLY. CONNECT THE OTHER GRAY WIRE TO THE RED WIRE (FIGURE 3).
7. CONNECT THE PLUG FROM THE PLATE ASSEMBLY TO THE HORN JACK (J101) HARNESS
8. ATTACH THE COVER TO THE ENCLOSURE USING #10 HARDWARE.
9. CLOSE AND SECURE THE HORN PANEL.

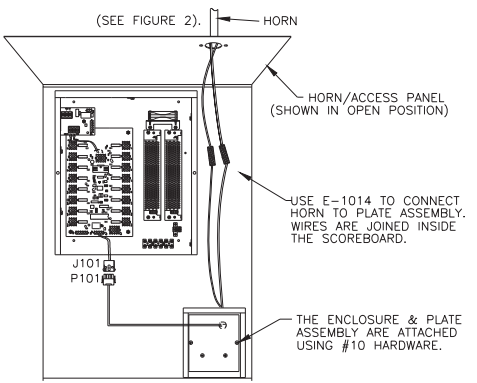
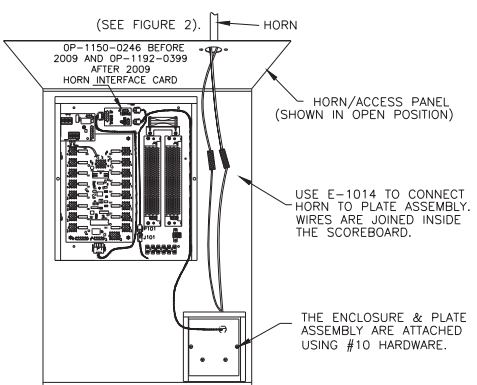
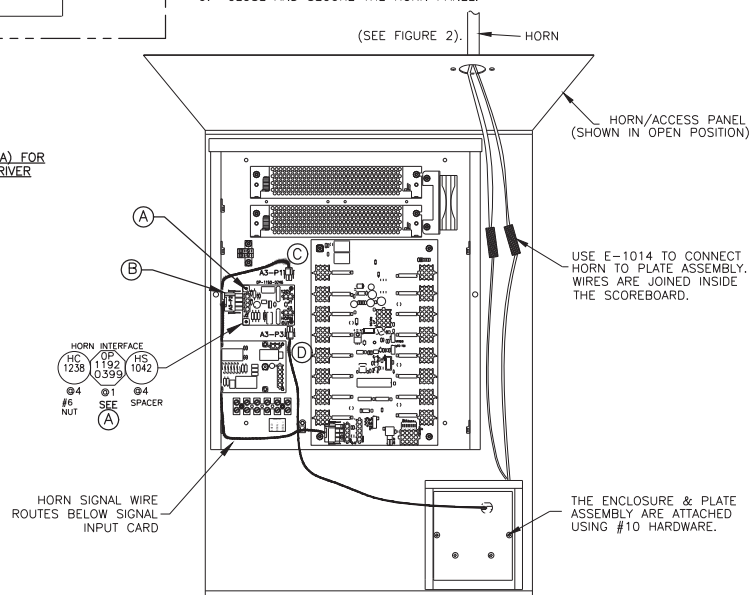
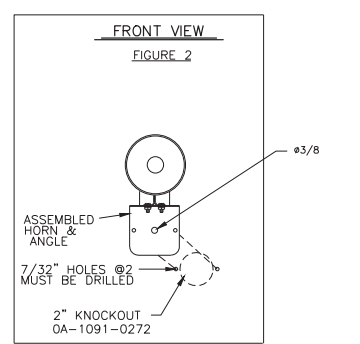
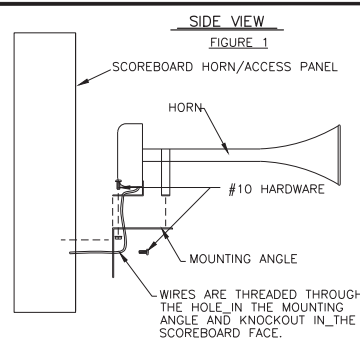


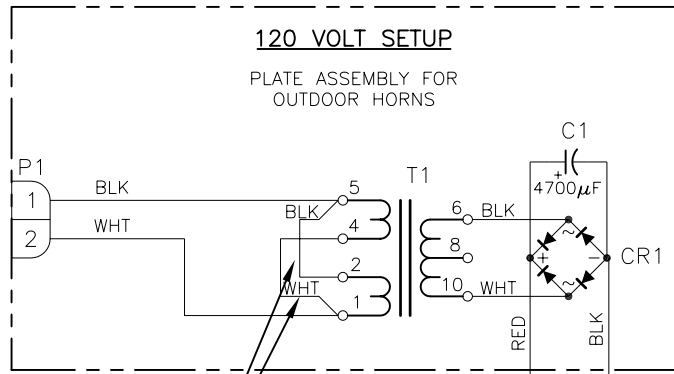
FIGURE 3
HORN CONNECTION
SEE DWG-302328 DETAIL (A) FOR MORE DETAILED VIEW OF DRIVER

FIGURE 3
HORN CONNECTION
SEE DWG-302328 DETAIL (B) FOR MORE DETAILED VIEW OF DRIVER

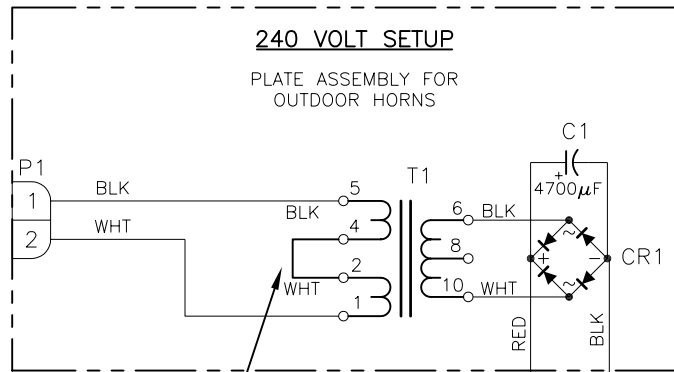
FIGURE 3
HORN CONNECTION

REV	DATE	CHANGED	BY
04	29 SEP 11	CHANGED OP-1150-0246 TO OP-1192-0399 CORRECTED TYPING ERRORS	JUL
03	12 AUG 11	UPDATE BORDER AND TITLE BLOCK. ADDED TO PART NUMBERS IN SOME TEXT AREAS	MWM
02	13 AUG 07	ADDED GEN IV DRIVER	DMD
01	30 MAY 06	ADDED HORN INTERFACE CARD	DMD

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		PROJ: STANDARD SCOREBOARDS TITLE: ASSY: 12V DC HORN MOUNTING- OUTDOOR LED SCBD DESIGN: _____ DRAWN: JMOEN DATE: 20 JUN 96		
SCALE: 1 = 15	SHEET	REV	JOB NO.	FLUNC-TYPE-SIZE
	04	P1091		E-10-B
				242731



CUT THESE TWO WIRES AS CLOSE TO T1 PIN 1, AND PIN 5 AS POSSIBLE. AND DISCARD THE WIRES THAT ARE ON PINS 2&4.

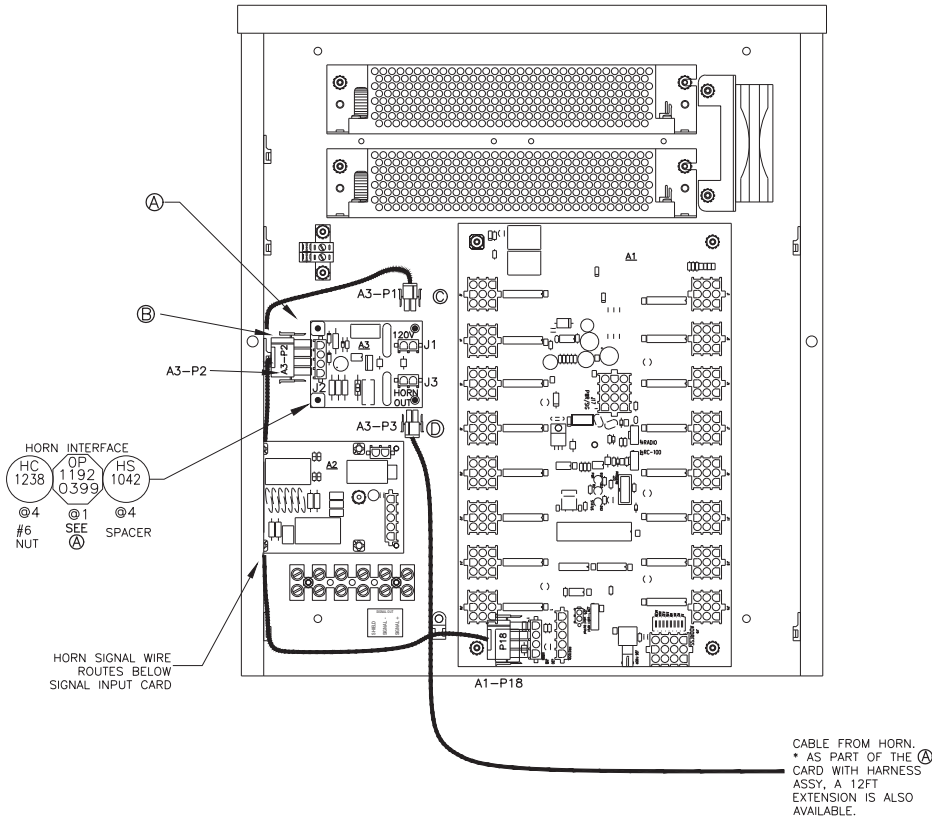


INSTALL 0A-1192-3282, 3" TRANSFORMER CONVERSION JUMPER BETWEEN PINS 2&4

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DAKTRONICS, INC. BROOKINGS, SD 57006			
PROJ: OUTDOOR LED			
TITLE: 240V HORN CONVERSION KIT, FOR 12V TRUMPET ASSY.			
DES. BY:		DRAWN BY: DDINING	
		DATE: 27 APR 06	
REVISION	APPR. BY: MMILLER	1192-R01A-270554	
00	SCALE: NONE		

REV.	DATE	DESCRIPTION	BY	APPR.

GEN IV LED DRIVER ASSEMBLIES
DETAIL A



A FROM THE 0A-1192-1685, 120VAC HORN INTERFACE CARD WITH HARNESS, MOUNT OP-1192-0399 HORN SWITCH CARD USING HS-1042 SPACER & HC-1238 LOCK NUT.

OTHER HORN SWITCH CARD PART NUMBERS ARE:
OP-1150-0246 - FROM 2004- 2009
OP-1150-0255 - HORN CARD FOR 240VAC INSTALLATIONS.

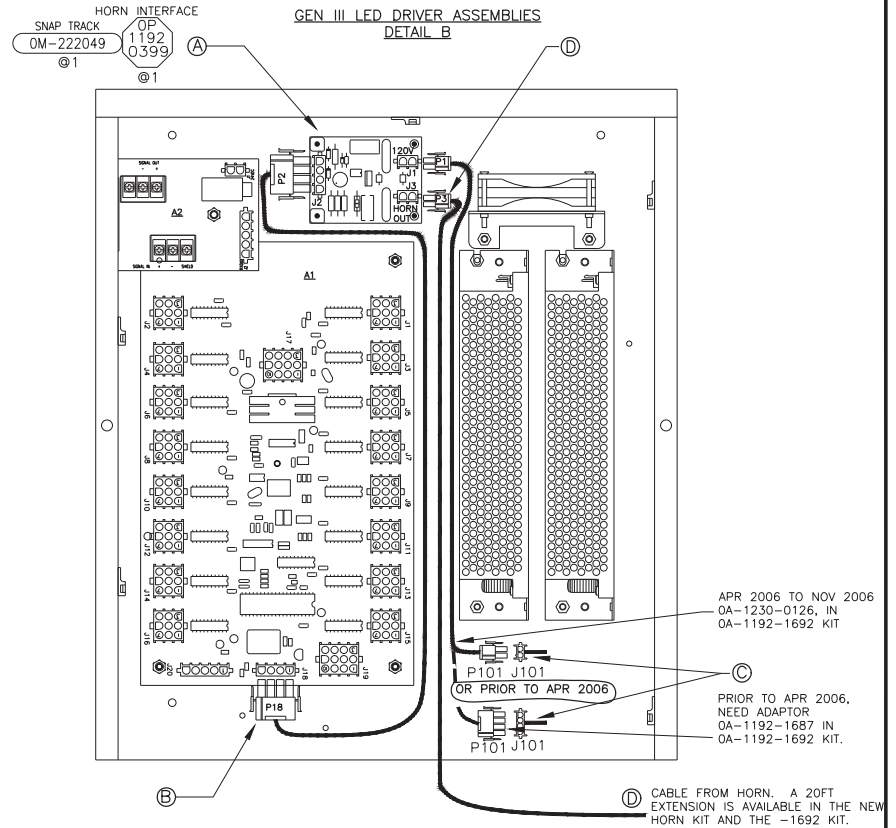
NOTE: FOR 240V INSTALLATIONS, 0A-1192-0395 240VAC HORN INTERFACE CARD WITH HARNESS IS USED.

B PLUG SIGNAL CABLE P18 INTO J18 ON THE DRIVER AND P2 INTO J2 OF OP-1192-0399.

C PLUG POWER A3-P1 POWER HARNESS INTO A3-J1 OF THE HORN INTERFACE CARD.

D PLUG HORN CABLE P3 INTO J3 OF THE OP-1192-0399 AND THE OPPOSITE END ON TO THE HORN.

GEN III LED DRIVER ASSEMBLIES
DETAIL B



A USE THE HORN INTERFACE CARD PROVIDED BY EITHER A NEW HORN KIT, OR THE 0A-1192-1692 120VAC GEN III HORN INTERFACE HARNESS KIT. TO INSTALL INTO THE GEN III ENCLOSURE, USE SNAP TRACK & VELCRO, FROM THE 0A-1192-1692 KIT AND SECURE AS SHOWN ABOVE. **MAKE SURE TO CLEAN HORN CARD MOUNTING AREA WITH ALCOHOL OR OTHER CLEANER TO REMOVE OIL RESIDUE. USE DOUBLE SIDED TAPE ON SNAP TRACK MOUNTING.

OTHER HORN SWITCH CARD PART NUMBERS HAS BEEN USED FOR THIS DESIGN:
OP-1150-0246 - FROM 2004- 2009

B PLUG SIGNAL CABLE FROM NEW HORN KIT, OR USE THE CABLE FROM THE -1692 KIT, P18 INTO J18 ON THE DRIVER AND P2 INTO J2 OF OP-1192-0399.

C PLUG HORN POWER P101 INTO J101 OF THE DRIVER HARNESS PLUG THE OPPOSITE END J1 IN TO THE HORN INTERFACE CARD J1. **NOTE: PRIOR TO APR 2006, THE HARNESS HAD A 4 PIN FEMALE FOR J101 CONNECTION. SO ADAPTOR HARN. 0A-1192-1687 IS NEEDED, WHICH IS PART OF 0A-1192-1692 CUSTOMER SERVICE KIT.

D PLUG HORN CABLE P3, INTO J3 OF THE OP-1192-0399. USE 20FT EXTENSION IF NEEDED FOR THE HORN CONNECTION. THESE ARE AVAILABLE WITH THE NEW HORN KIT OR WITH THE -1692 KIT.

APR 2006 TO NOV 2006
0A-1230-0126, IN
0A-1192-1692 KIT

PRIOR TO APR 2006,
NEED ADAPTOR
0A-1192-1687 IN
0A-1192-1692 KIT.

CABLE FROM HORN. A 20FT
EXTENSION IS AVAILABLE IN THE
NEW HORN KIT AND THE -1692 KIT.

REV	DATE	DESCRIPTION	BY
01	12 JAN 08	PACKAGED BY THE BOARD WITH OP-1192-0399	MWM
02	9 APR 08	FIXED CORN WIRE	MWM
03	15 AUG 08	FIXED SERIAL INFORMATION	MWM

DAKTRONICS, INC.
BROOKINGS, SD 57006
DO NOT SCALE DRAWING

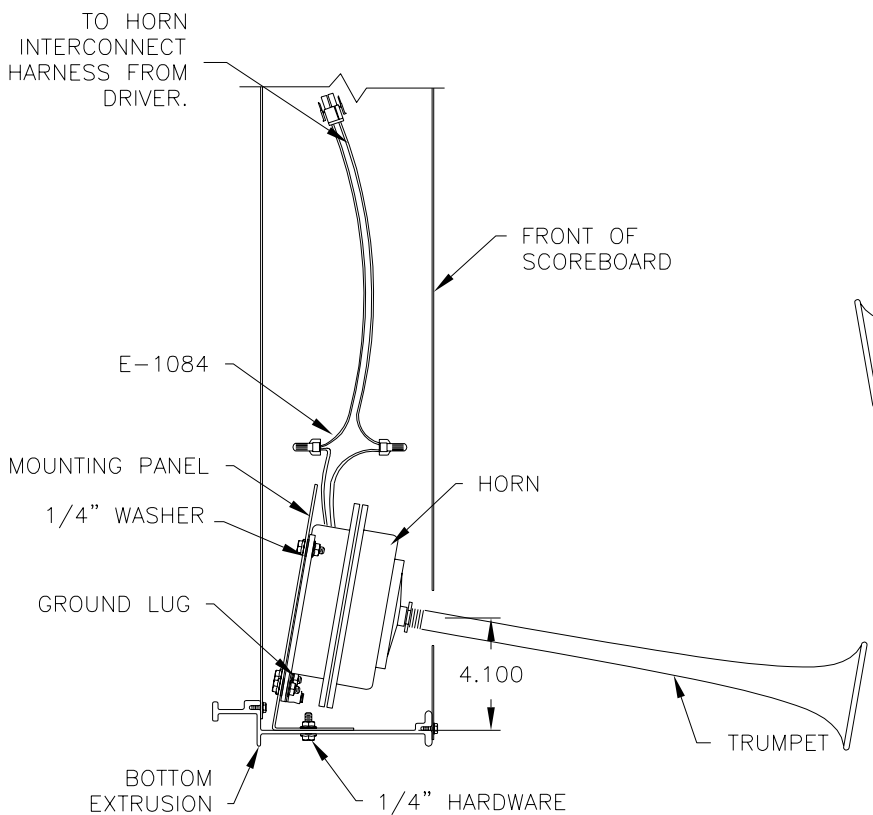
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Proj: OUTDOOR LED SCOREBOARDS			
TITLE: ASSY: HORN CARD INSTALLATION - GEN III AND IV DRIVERS			
DESIGN:	DRAWN: DDINING	DATE:	16 APR 07
SCALE: NONE	REV	JOB NO:	FLUNC-TYPE-SIZE
SHEET	06	P1192	R-03-B

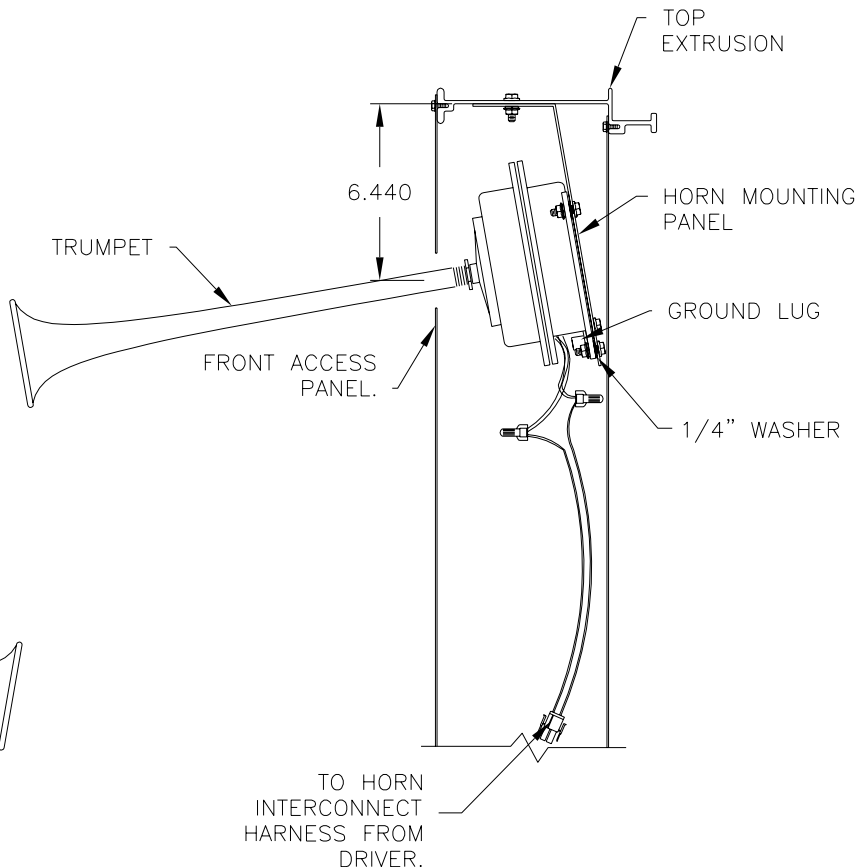
REV 06	DATE: 24 JAN 13	ADDED MORE TEXT TO THE GEN III DETAILS TO HELP EXPLAIN WHAT IS NEEDED PRIOR TO APR 2006 WITH A HARN ADAPTOR	BY: MWM
REV 05	DATE: 28 SEP 11	REMOVED TEXT OP-1150-0246 FROM HORN INTERFACE CORRECTED TYPING ERRORS	BY: JLL
REV 04	DATE: 12 AUG 11	UPDATED BOARDER AND TITLE BLOCK CORRECT PART NUMBERS IN VARIOUS TEXT	BY: MWM

302328

120V HORN MOUNTING



SIDE VIEW
BOTTOM MOUNTING



SIDE VIEW
TOP MOUNTING

NOTES:

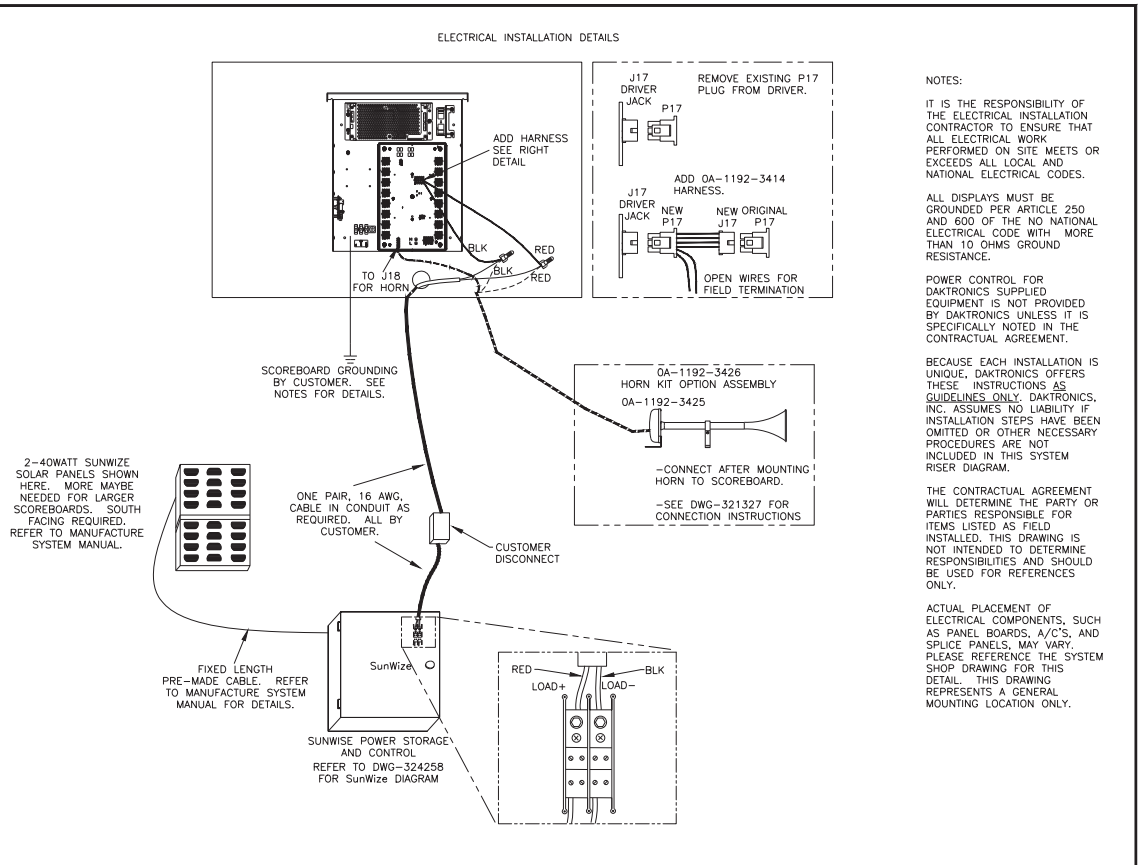
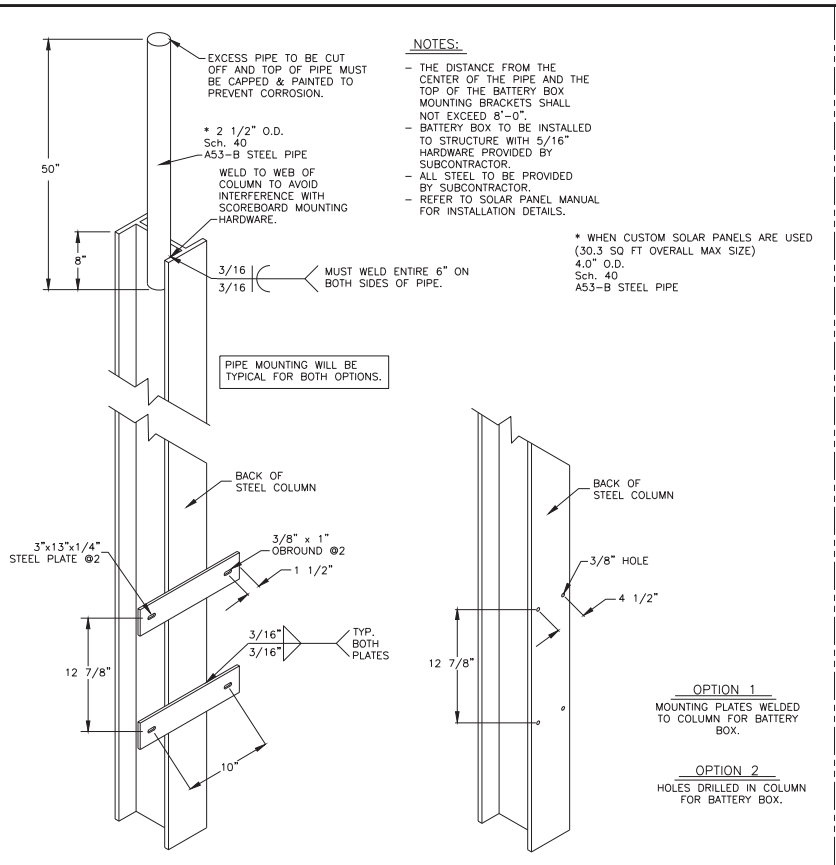
- HORN IS TO BE MOUNTED BEHIND ACCESS PANEL WITH 2" KNOCKOUT. REAR ACCESS PANELS MAY BE PROVIDED FOR EASE OF ACCESS.
- DIMENSIONS GIVEN ARE TO CENTER OF KNOCKOUT FROM INSIDE OF EXTRUSION.

REV.	DATE	DESCRIPTION	BY	APPR.
02	12/21/07	CHANGE FROM E-1044 TO E-1084 AS PER ECO 58878	JTK	
01	09 OCT 07	ADDED HG-1090	KDD	

PROJ: OUTDOOR LED SCOREBOARDS TITLE: 120V AC HORN MOUNTING, OUTDOOR SPORTS DES. BY: BCURTIS DRAWN BY: BCURTIS DATE: 07 JUN 07	
REVISION 02	APPR. BY: SCALE: 1=7 1407-E10A-308058

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PROJ: OUTDOOR LED SCOREBOARDS
 DAKTRONICS, INC. BROOKINGS, SD 57006



NOTES:

IT IS THE RESPONSIBILITY OF THE ELECTRICAL INSTALLATION CONTRACTOR TO ENSURE THAT ALL ELECTRICAL WORK PERFORMED ON SITE MEETS OR EXCEEDS ALL LOCAL AND NATIONAL ELECTRICAL CODES.

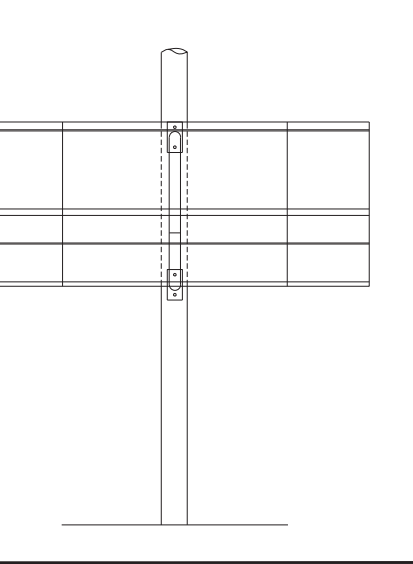
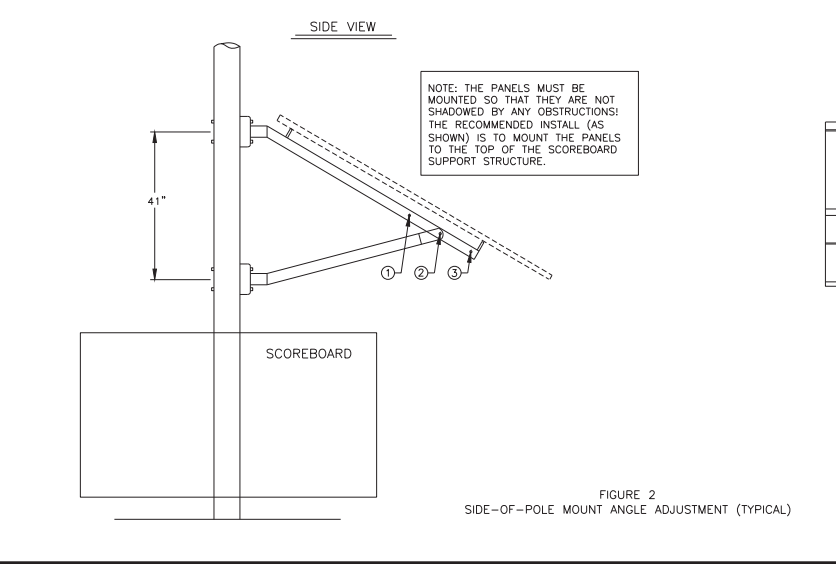
ALL DISPLAYS MUST BE GROUNDED PER ARTICLE 250 AND 500 OF THE NATIONAL ELECTRICAL CODE WITH MORE THAN 10 OHMS GROUND RESISTANCE.

POWER CONTROL FOR DAKTRONICS SUPPLIED EQUIPMENT IS NOT PROVIDED BY DAKTRONICS UNLESS IT IS SPECIFICALLY NOTED IN THE CONTRACTUAL AGREEMENT.

BECAUSE EACH INSTALLATION IS UNIQUE, DAKTRONICS OFFERS THESE INSTRUCTIONS AS GUIDELINES ONLY. DAKTRONICS, INC. ASSUMES NO LIABILITY IF INSTALLATION STEPS HAVE BEEN OMITTED OR OTHER NECESSARY PROCEDURES ARE NOT INCLUDED IN THIS SYSTEM RISER DIAGRAM.

THE CONTRACTUAL AGREEMENT WILL DETERMINE THE PARTY OR PARTIES RESPONSIBLE FOR ITEMS LISTED AS FIELD INSTALLED. THIS DRAWING IS NOT INTENDED TO DETERMINE RESPONSIBILITIES AND SHOULD BE USED FOR REFERENCES ONLY.

ACTUAL PLACEMENT OF ELECTRICAL COMPONENTS, SUCH AS PANEL BOARDS, A/C'S, AND SPLICE PANELS, MAY VARY. PLEASE REFERENCE THE SYSTEM SHOP DRAWING FOR THIS DETAIL. THIS DRAWING REPRESENTS A GENERAL MOUNTING LOCATION ONLY.



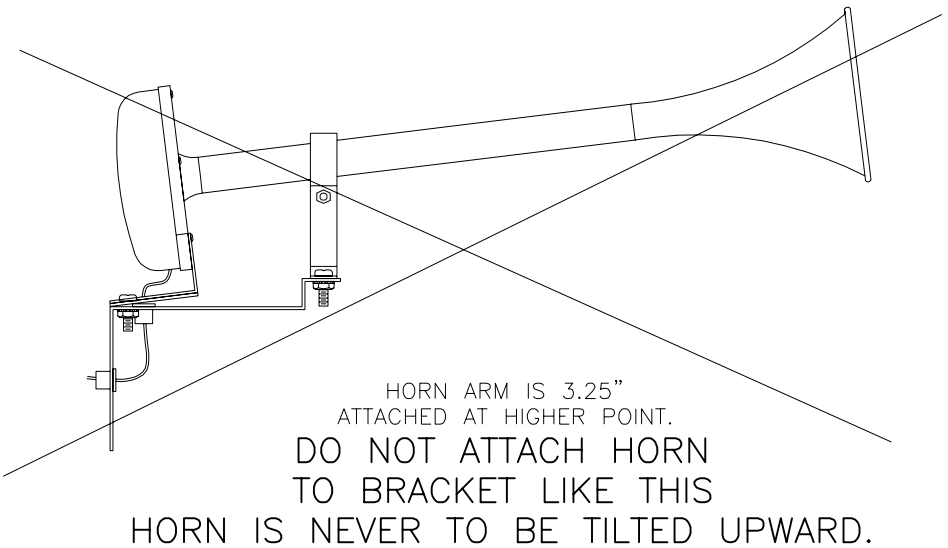
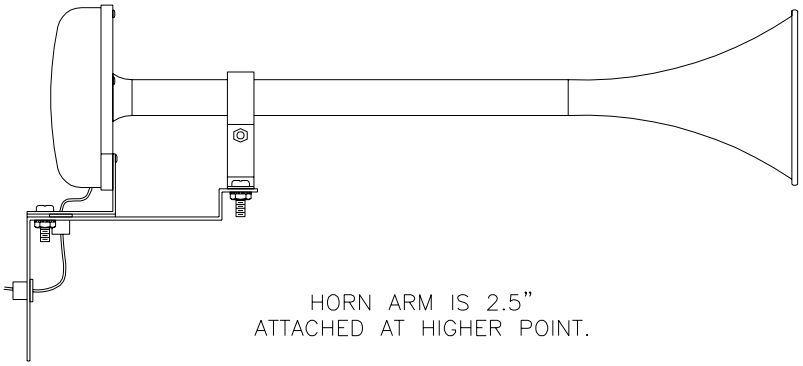
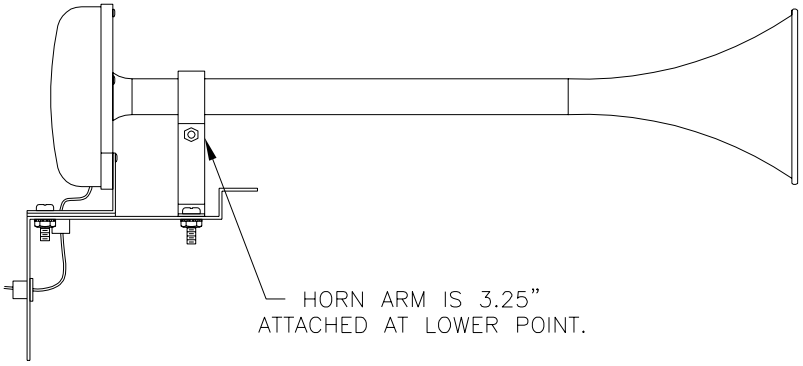
ELEVATIONS ANGLE DEGREE FROM HORIZONTAL	DISTANCE X	HOLE NO
55	41"	2

THIS PANEL ANGLE WILL BE SUFFICIENT FOR MOST U.S. INSTALLATIONS. FOR EXTREME NORTH AND SOUTH SITES REFER TO THE SOLAR SYSTEM INSTALLATION MANUAL FOR MORE ACCURATE POSITIONING.

- SYSTEM INSTALL:** REFER TO THE MANUFACTURER'S MANUAL FOR DETAILED INSTRUCTIONS (FUSES MAY NEED TO BE REMOVED PRIOR TO ELECTRICAL CONNECTION).
- SYSTEM TEST:**
1. REFER TO THE MANUFACTURER'S MANUAL TO VERIFY THAT THE STATUS LEDS ON THE CHARGE CONTROLLER INDICATE NORMAL OPERATION AND FULLY CHARGE BATTERIES. ENSURE THAT THE BATTERIES DO FULLY CHARGE BEFORE TURNING THE SYSTEM OVER TO THE CUSTOMER
 2. MEASURE THE VOLTAGE BETWEEN THE PV+ AND PV- TERMINALS ON THE CHARGE CONTROLLER. IF THE PANELS ARE PROPERLY CONNECTED THERE SHOULD BE MORE THAN 24V ON THESE TERMINALS. THERE MAY BE SLIGHTLY LESS IF THE BATTERIES ARE NOT FULLY CHARGED.

FIGURE 2
SIDE-OF-POLE MOUNT ANGLE ADJUSTMENT (TYPICAL)

REV 07	DATE 29 MAY 15	REPLACED PCB IN ELECTRICAL INSTALLATION DETAILS	BY: MJP	DAKTRONICS, INC. BROOKINGS, SD 57006 DO NOT SCALE DRAWING	THE CONCEPTS EXPRESSED AND DETAILS SHOWN ON THIS DRAWING ARE CONCEPTS AND PROPOSALS. DO NOT REPRODUCE BY ANY MEANS WITHOUT THE EXPRESS WRITTEN CONSENT OF DAKTRONICS, INC. COPYRIGHT 2010 DAKTRONICS, INC.
REV 06	DATE 28 JUL 14	ADDED NOTE ABOUT CUSTOM SOLAR PANEL SIZES AND STEEL PIPE SIZES	BY: MJP		
REV 05	DATE 10 MAR 11	UPDATED TITLE BLOCK AND BORDER. SET ALL TEXT TO "000 SIZE"	BY: MMW	800-OUTDOOR LED SCOREBOARD TITLE INSTALLATION DIAGRAM: SOLAR POWER SCOREBOARD	DESIGNER: JMMILLER JOURNAL: ARICHTHE DATE: 23 AUG 07
REV 04	DATE 17 MAY 10	UPDATED SCHEM AND HARNESS SECTION PER ADDITIONAL ABILITIES FOR MULTI-DRIVER SOLAR	BY: MMW	SCALE: 1=1	
REV 03	DATE 08 JUN 09	ADDED INSTALLATION NOTES ON SIDE VIEW	BY: MJS	SHEET 07 JOB NO: P-1192	DRAWN/TITLE: R-01-C 315892



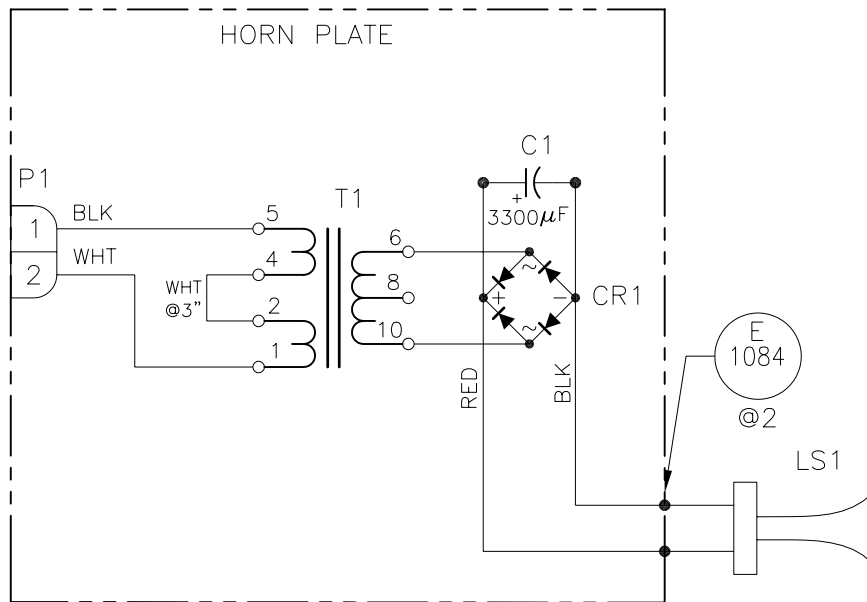
NOTE:

1. LOCATION OF HORN ARM STAND MUST BE AT LOWER POINT ON BRACKET IF ARM IS 3.25" TO INSURE THAT HORN TILTS DOWN
2. IF HORN ARM IS LESS THEN 2.5" THEN ATTACH TO HIGHER POINT ON BRACKET.

REV.	01	18 JUL 08	ADDED "HORN IS NEVER TO BE TILTED UPWARD"	DESCRIPTION	BY	KDD	APPR.
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PROD: OUTDOOR TENNIS DISPLAYS DAKTRONICS, INC. BROOKINGS, SD 57006	
TITLE: HORN ASSEMBLY	
DES. BY: KDRAGT	DRAWN BY: KDRAGT
DATE: 12 NOV 07	
REVISION	APPR. BY:
01	1=4
1192-E10A-320004	

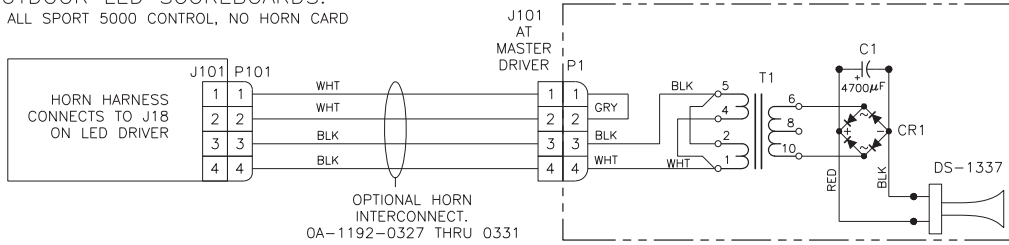
OA-1192-3461
 12V TRUMPET HORN PLATE ASSY, 240VAC



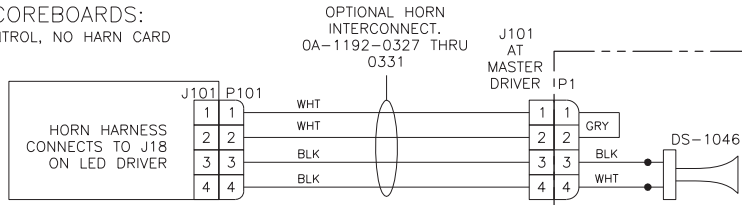
DAKTRONICS, INC. BROOKINGS, SD 57006			
PROJ: OUTDOOR STANDARD SCOREBOARDS			
TITLE: SCHEMATIC, 240V OD SCBD 12VDC TRUMPET HORN, AS5K			
DES. BY:		DRAWN BY: JWCARLSO	
		DATE: 09 NOV 07	
REVISION	APPR. BY:	1192-R03A-325028	
00	SCALE: NONE		

REV.	DATE	DESCRIPTION	BY	APPR.

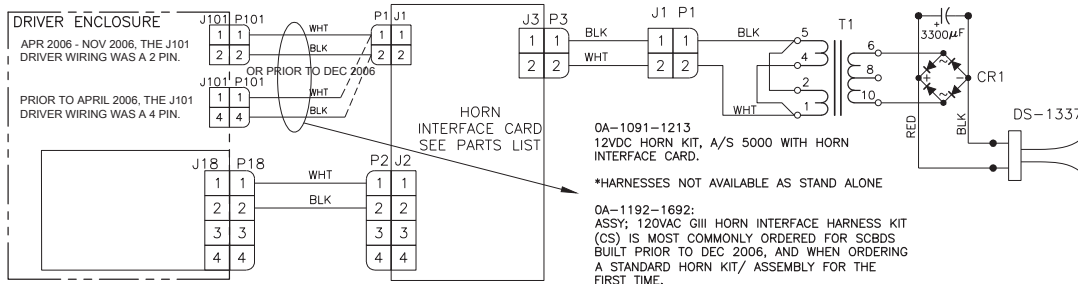
1. OUTDOOR LED SCOREBOARDS:
12VDC ALL SPORT 5000 CONTROL, NO HORN CARD



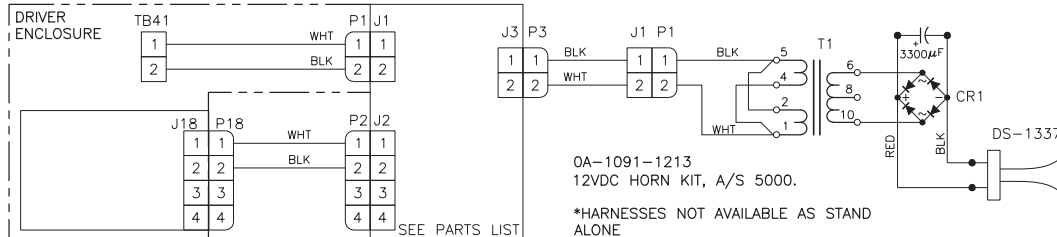
2. OUTDOOR LED SCOREBOARDS:
120VAC ALL SPORT 5000 CONTROL, NO HORN CARD



3. OUTDOOR LED SCOREBOARDS: GEN III DESIGN
12VDC ALL SPORT 5000 CONTROL



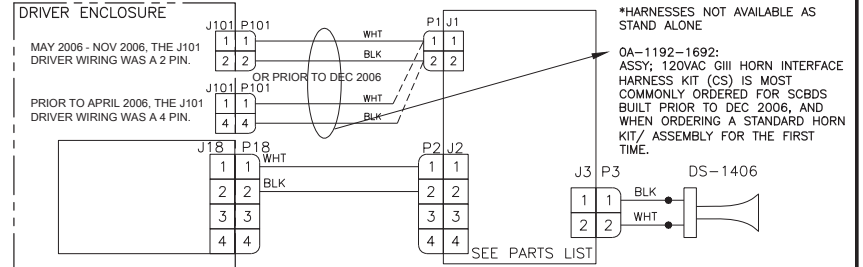
4. OUTDOOR LED SCOREBOARDS: GEN IV DESIGN
12VDC ALL SPORT 5000 CONTROL



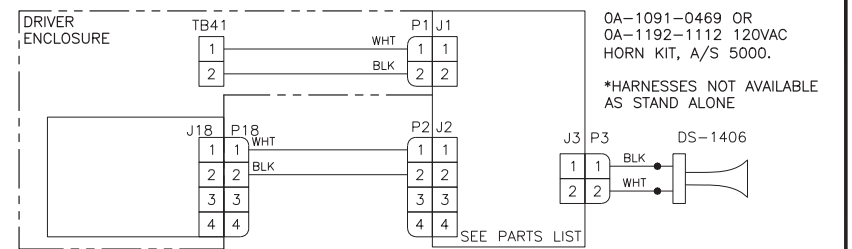
5. MISC PARTS

HORN INTERFACE BOARDS
 OP-1150-0246 - 12VDC HORN CARD
 OP-1150-0248 - 24VDC HORN CARD
 OP-1192-0399 - HORN INTERFACE; 5-35V IN, 120V OUT
 OP-1150-0255 - 240VAC HORN CARD

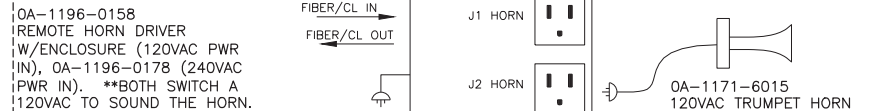
6. OUTDOOR LED SCOREBOARDS: GEN III DESIGN
120VAC ALL SPORT 5000 CONTROL



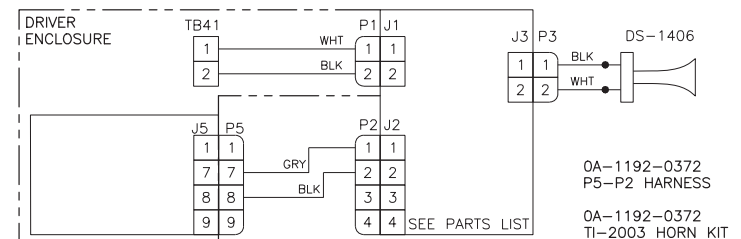
7. OUTDOOR LED SCOREBOARDS: GEN IV DESIGN
120VAC ALL SPORT 5000 CONTROL



8. INDOOR/OUTDOOR MATRIX REMOTE HORN



9. TI-2003 LED SCOREBOARD: GEN IV DESIGN
12VDC ALL SPORT 5000 CONTROL

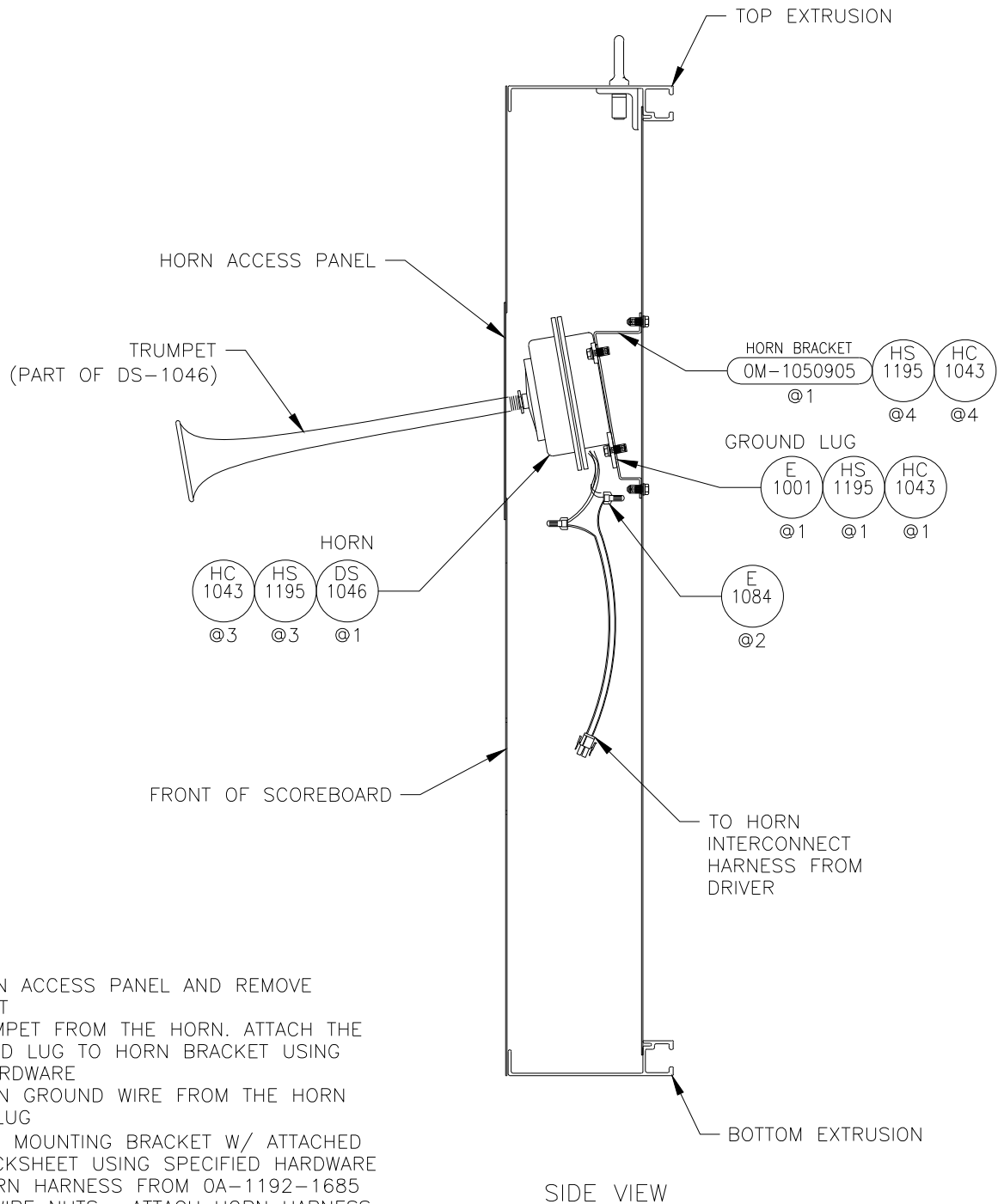


DAKTRONICS, INC.
BROOKINGS, SD 57006
DO NOT SCALE DRAWING

PROJ: OUTDOOR LED SCOREBOARDS			
TITLE: WIRING GUIDE: OUTDOOR HORN KITS- LED			
DESIGN: KBIERBA	DRAWN: KBIERBA	DATE: 27 SEP 07	
SCALE: NONE			
SHEET	REV	JOB NO.	FUNC-TYPE-SIZE
	03	P1192	R-01-B


REV	DATE	ADDED MORE INFORMATION TO #3 AND #6 LAYOUTS FOR AN ADAPTOR HARNESS USED FOR DESIGN PRIOR TO APR 2006	BY:
03	24 JAN 13		M/M/M
REV	DATE	REMOVED ALL SPECS FOR OP-1150-0248 WHICH IS OLD BOARD-NEW BOARD USED CURRENTLY IS OP-1192-0399-IN PARTS LIST	BY:
02	24 NOV 09		L/M/X
REV	DATE	ADD GEN IV DESIGNS	BY:
01	11 FEB 08		K/Z/B

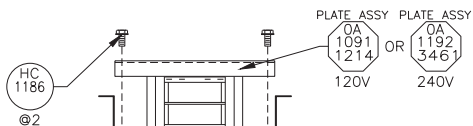
THE CONCEPTS EXPRESSED AND DETAILS SHOWN ON THIS DRAWING ARE CONFIDENTIAL AND PROPRIETARY. DO NOT REPRODUCE BY ANY MEANS WITHOUT THE EXPRESSED WRITTEN CONSENT OF DAKTRONICS, INC. COPYRIGHT 2013 DAKTRONICS, INC.



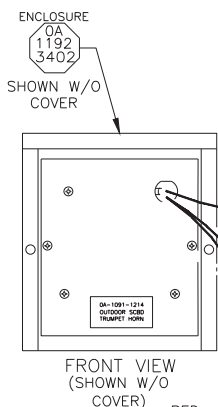
NOTES:

- REMOVE THE HORN ACCESS PANEL AND REMOVE REMOVE KNOCKOUT
- REMOVE THE TRUMPET FROM THE HORN. ATTACH THE HORN AND GROUND LUG TO HORN BRACKET USING THE SPECIFIED HARDWARE
- ATTACH THE GREEN GROUND WIRE FROM THE HORN TO THE GROUND LUG
- ATTACH THE HORN MOUNTING BRACKET W/ ATTACHED HORN TO THE BACKSHEET USING SPECIFIED HARDWARE
- CONNECT THE HORN HARNESS FROM 0A-1192-1685 TO HORN USING WIRE NUTS. ATTACH HORN HARNESS TO THE HORN INTERCONNECT CABLE JACK LABELED J101.
- REATTACH HORN ACCESS COVER AND TRUMPET
- TEST THE HORN WITH THE SCOREBOARD TEST CONSOLE
- AFTER TESTING REMOVE THE TRUMPET AND WRAP THE TRUMPET IN BUBBLE WRAP. SECURE TRUMPET INSIDE THE DOOR BELOW THE HORN ACCESS PANEL

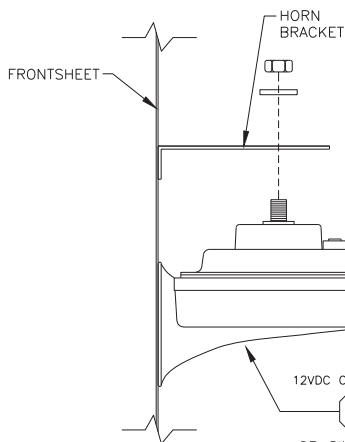
 DAKTRONICS, INC. BROOKINGS, SD 57006		THE CONCEPTS EXPRESSED AND DETAILS SHOWN ON THIS DRAWING ARE CONFIDENTIAL AND PROPRIETARY. DO NOT REPRODUCE BY ANY MEANS WITHOUT THE EXPRESSED WRITTEN CONSENT OF DAKTRONICS, INC. COPYRIGHT 2011 DAKTRONICS, INC.	
		DO NOT SCALE DRAWING	
PROJ: OUTDOOR SCOREBOARD			
TITLE: 120V AC HORN MOUNTING, OUTDOOR SPORTS			
DESIGN: MCARSRU		DRAWN: MCARSRU	
SCALE: 1/8		DATE: 26 MAY 11	
REV 01	DATE: 10 OCT 12	CHANGED LOCATION OF GROUNDING LUG PER EC-8073	BY: JLR
SHEET		REV 01	JOB NO: P1647
FUNC-TYPE-SIZE E-10-A		1055044	



BOTTOM VIEW



FRONT VIEW (SHOWN W/O COVER)



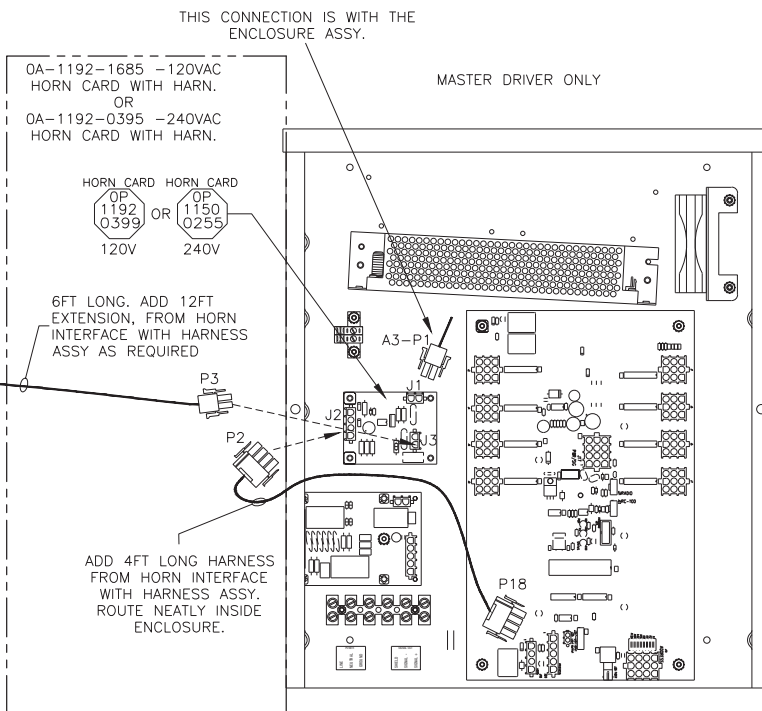
SIDE VIEW

WIRE MARKED POS (+) RED BLK

IDENTIFY WHICH WIRE IS POS(+) AND NEG(-) AND WIRE NUT WITH E-1184'S TO RED AND BLACK FROM THE PLATE ASSY.

NOTE: BOTH ASSEMBLIES ARE PRIMARILY USED IN OTHER SITUATIONS REQUIRING THE WIRES TO BE THIS WAY.

NOTE: BEFORE JUNE 2013, OA-1072-0023 ASSY WAS USED.



NOTES:

- THIS DRAWING DOES NOT DEPICT THE ACTUAL LAYOUT OF COMPONENTS.
- THIS DRAWING EXPLAINS HOW THE HORN COMPONENTS ARE CONNECTED TO EACH OTHER.
- HORN BRACKET WILL BE ATTACHED TO THE FRONTSHEET/DOOR WITH EITHER SCREWS OR RIVETS.
- HORN ATTACHES TO HORN BRACKET WITH HARDWARE PROVIDED WITH THE HORN.

DAKTRONICS, INC.		BROOKINGS, SD 57006		THE CONCEPTS EXPRESSED AND DETAILS SHOWN ON THIS DRAWING ARE CONFIDENTIAL AND PROPRIETARY. DO NOT REPRODUCE BY ANY MEANS WITHOUT THE EXPRESSED WRITTEN CONSENT OF DAKTRONICS, INC. COPYRIGHT 2011 DAKTRONICS, INC.	
DO NOT SCALE DRAWING					
PROJ: OUTDOOR LED SCOREBOARDS					
TITLE: ASSEMBLY DRAWING, 12V DC COMPACT HORN 120V OR 240V					
DESIGN: CHAMILT		DRAWN: CHAMILT		DATE: 28 JUL 11	
SCALE: 1:4					
SHEET	REV	JOB NO.	FLUNC-TYPE-SIZE		
01	01	P1192	E-10-B	1063340	

REV	DATE	PER EC 10398. UPDATED DRAWING TO SHOW A DIFFERENT 12V HORN ASSY WITH OUT A 2 PIN MAT-N-LOK	BY:	MWM
01	13 MAY 13			

Appendix B: Daktronics Warranty and Limitation of Liability

DAKTRONICS WARRANTY & LIMITATION OF LIABILITY

This Warranty and Limitation of Liability (the "Warranty") sets forth the warranty provided by Daktronics with respect to the Equipment. By accepting delivery of the Equipment, Purchaser agrees to be bound by and accept these terms and conditions. Unless otherwise defined herein, all terms within the Warranty shall have the same meaning and definition as provided elsewhere in the Agreement.

DAKTRONICS WILL ONLY BE OBLIGATED TO HONOR THE WARRANTY SET FORTH IN THESE TERMS AND CONDITIONS UPON RECEIPT OF FULL PAYMENT FOR THE EQUIPMENT.

1. Warranty Coverage

A. Daktronics warrants to the original end-user that the Equipment will be free from Defects (as defined below) in materials and workmanship for a period of one (1) year (the "Warranty Period"). The Warranty Period shall commence on the earlier of: (i) four weeks from the date that the Equipment leaves Daktronics' facility; or (ii) Substantial Completion as defined herein. The Warranty Period shall expire on the first anniversary of the commencement date.

"Substantial Completion" means the operational availability of the Equipment to the Purchaser in accordance with the Equipment's specifications, without regard to punch-list items, or other non-substantial items which do not affect the operation of the Equipment.

B. Daktronics' obligation under this Warranty is limited to, at Daktronics' option, replacing or repairing, any Equipment or part thereof that is found by Daktronics not to conform to the Equipment's specifications. Unless otherwise directed by Daktronics, any defective part or component shall be returned to Daktronics for repair or replacement. This Warranty does not include on-site labor charges to remove or install these components. Daktronics may, at its option, provide on-site warranty service. Daktronics shall have a reasonable period of time to make such replacements or repairs and all labor associated therewith shall be performed during regular working hours. Regular working hours are Monday through Friday between 8:00 a.m. and 5:00 p.m. at the location where labor is performed, excluding any holidays observed by either Purchaser or Daktronics.

C. Daktronics shall pay ground transportation charges for the return of any defective component of the Equipment. All such items shall be shipped by Purchaser DDP Daktronics; designated facility. If returned Equipment is repaired or replaced under the terms of this warranty, Daktronics will prepay ground transportation charges back to Purchaser and shall ship such items DDP Purchaser's designated facility; otherwise, Purchaser shall pay transportation charges to return the Equipment back to the Purchaser and such Equipment shall be shipped Ex Works Daktronics designated facility. All returns must be pre-approved by Daktronics before shipment. Daktronics shall not be obligated to pay freight for any unapproved return. Purchaser shall pay any upgraded or expedited transportation charges.

D. Any replacement parts or Equipment will be new or serviceably used, comparable in function and performance to the original part or Equipment, and warranted for the remainder of the Warranty Period. Purchasing additional parts or Equipment from the Seller does not extend the Warranty Period.

E. Defects shall be defined as follows. With regard to the Equipment (excepting LEDs), a "Defect" shall refer to a material variance from the design specifications that prohibit the Equipment from operating for its intended use. With respect to LEDs, "Defects" are defined as LED pixels that cease to emit light. The limited warranty provided by Daktronics does not impose any duty or liability upon Daktronics for partial LED pixel degradation nor does the limited warranty provide for the replacement or installation of communication methods including but not limited to, wire, fiber optic cable, conduit, trenching, or for the purpose of overcoming local site interference radio equipment substitutions.

EXCEPT AS OTHERWISE EXPRESSLY SET FORTH IN THIS WARRANTY, TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, DAKTRONICS DISCLAIMS ANY AND ALL OTHER PROMISES, REPRESENTATIONS AND WARRANTIES APPLICABLE TO THE EQUIPMENT AND REPLACES ALL OTHER WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO ANY IMPLIED WARRANTIES OR CONDITIONS OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, ACCURACY OR QUALITY OF DATA. NO ORAL OR WRITTEN INFORMATION, OR ADVICE GIVEN BY THE COMPANY, ITS AGENTS OR EMPLOYEES, SHALL CREATE A WARRANTY OR IN ANY WAY INCREASE THE SCOPE OF THIS LIMITED WARRANTY.

THIS LIMITED WARRANTY IS NOT TRANSFERABLE.

2. Exclusion from Warranty Coverage

The limited warranty provided by Daktronics does not impose any duty or liability upon Daktronics for:

A. Any damage occurring, at any time, during shipment of Equipment unless otherwise provided for in the Agreement. When returning Equipment to Daktronics for repair or replacement, Purchaser assumes all risk of loss or damage, and agrees to use any shipping containers that might be provided by Daktronics and to ship the Equipment in the manner prescribed by Daktronics;

B. Any damage caused by the improper installation, adjustment, repair or service of the Equipment by anyone other than personnel of Daktronics or its authorized repair agents;

C. Damage caused by the failure to provide a continuously suitable environment, including, but not limited to: (i) neglect or misuse, (ii) a failure or sudden surge of electrical power, (iii) improper air conditioning, humidity control, or other environmental conditions outside of the Equipment's technical specifications such as extreme temperatures, corrosives and metallic pollutants, or (iv) any other cause other than ordinary use;

D. Damage caused by fire, flood, earthquake, water, wind, lightning or other natural disaster, strike, inability to obtain materials or utilities, war, terrorism, civil disturbance or any other cause beyond Daktronics' reasonable control;

DAKTRONICS WARRANTY & LIMITATION OF LIABILITY

E. Failure to adjust, repair or replace any item of Equipment if it would be impractical for Daktronics personnel to do so because of connection of the Equipment by mechanical or electrical means to another device not supplied by Daktronics, or the existence of general environmental conditions at the site that pose a danger to Daktronics personnel;

F. Any statements made about the product by any salesperson, dealer, distributor or agent, unless such statements are in a written document signed by an officer of Daktronics. Such statements as are not included in a signed writing do not constitute warranties, shall not be relied upon by Purchaser and are not part of the contract of sale;

G. Any damage arising from the use of Daktronics products in any application other than the commercial and industrial applications for which they are intended, unless, upon request, such use is specifically approved in writing by Daktronics;

H. Any performance of preventive maintenance;

J. Third-party systems and other ancillary equipment including without limitation front-end video control systems, audio systems, video processors and players, HVAC equipment, batteries and LCD screens;

K. Incorporation of accessories, attachments, software or other devices not furnished by Daktronics; or

L. Paint or refinishing the Equipment or furnishing material for this purpose.

3. **Limitation of Liability**

Daktronics shall be under no obligation to furnish continued service under this Warranty if alterations are made to the Equipment without the prior written approval of Daktronics.

It is specifically agreed that the price of the Equipment is based upon the following limitation of liability. In no event shall Daktronics (including its subsidiaries, affiliates, officers, directors, employees, or agents) be liable for any special, consequential, incidental or exemplary damages arising out of or in any way connected with the Equipment or otherwise, including but not limited to damages for lost profits, cost of substitute or replacement equipment, down time, lost data, injury to property or any damages or sums paid by Purchaser to third parties, even if Daktronics has been advised of the possibility of such damages. The foregoing limitation of liability shall apply whether any claim is based upon principles of contract, tort or statutory duty, principles of indemnity or contribution, or otherwise.

In no event shall Daktronics be liable to Purchaser or any other party for loss, damage, or injury of any kind or nature arising out of or in connection with this Warranty in excess of the purchase price of the Equipment actually delivered to and paid for by the Purchaser. The Purchaser's remedy in any dispute under this Warranty shall be ultimately limited to the Purchase Price of the Equipment to the extent the Purchase Price has been paid.

4. **Assignment of Rights**

The Warranty contained herein extends only to the original end-user (which may be the Purchaser) of the Equipment and no attempt to extend the Warranty to any subsequent user-transferee of the Equipment shall be valid or enforceable without the express written consent of Daktronics.

5. **Governing Law**

The rights and obligations of the parties under this warranty shall not be governed by the provisions of the United Nations Convention on Contracts for the International Sales of Goods of 1980. Both parties consent to the application of the laws of the State of South Dakota to govern, interpret, and enforce all of Purchaser and Daktronics rights, duties, and obligations arising from, or relating in any manner to, the subject matter of this Warranty, without regard to conflict of law principles.

6. **Availability of Extended Service Agreement**

For Purchaser's protection, in addition to that afforded by the warranties set forth herein, Purchaser may purchase extended warranty services to cover the Equipment. The Extended Service Agreement, available from Daktronics, provides for electronic parts repair and/or on-site labor for an extended period from the date of expiration of this warranty. Alternatively, an Extended Service Agreement may be purchased in conjunction with this warranty for extended additional services. For further information, contact Daktronics Customer Service at 1-800-DAKTRONICS (1-800-325-8766).