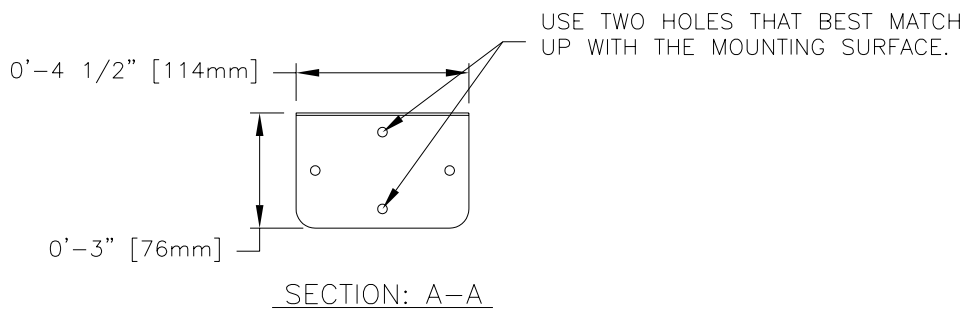
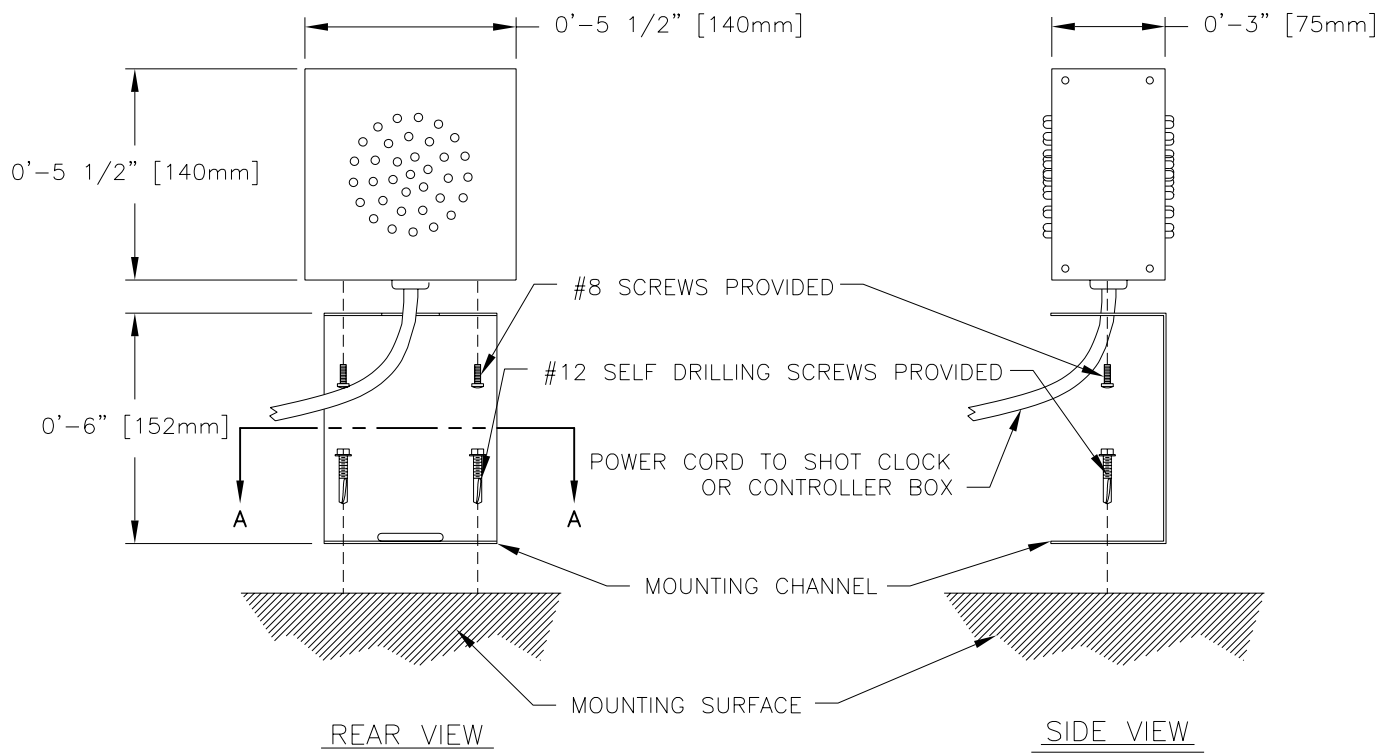


INSTALLATION PROCEDURE:

1. USE THE #8-32 SCREWS TO MOUNT THE LED INDICATOR TO THE HOLES IN THE TOP OF THE DISPLAY.
2. CUT OFF THE END OF THE POWER CORD AND STRIP ABOUT 1/2" OF INSULATION FROM THE ENDS OF THE WHITE AND BLACK WIRES.
3. ROUTE THE END OF THE WIRES TO THE WIRES ON THE RECEPTACLE ON THE SIDE OF THE DISPLAY. REMOVE THE WIRE NUTS THAT MAKE THESE CONNECTIONS AND ADD THE WIRES FROM THE LIGHT TO THE CONNECTIONS AND SECURE WITH THE WIRE NUTS. BE SURE TO MATCH BLACK TO BLACK AND WHITE.

DAKTRONICS, INC. BROOKINGS, SD 57006			
PROJ: TUFF SPORT SCOREBOARDS			
TITLE: BB-2133, LED INDICATOR INSTALLATION ON SHOT CLOCK			
DES. BY: BPETERSON		DRAWN BY: BPETERSON	
		DATE: 03DEC02	
REVISION	APPR. BY:	1237-E10A-179508	
00	SCALE: 1=6		

REV.	DATE	DESCRIPTION	BY	APPR.
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INSTALLATION PROCEDURE:

1. DETERMINE MOUNTING LOCATION AND ATTACH MOUNTING CHANNEL WITH #12 SELF DRILLING SCREWS PROVIDED.
2. ATTACH THE LED INDICATOR TO THE MOUNTING CHANNEL WITH THE #8 SCREWS PROVIDED.
3. ROUTE POWER CORD TO THE SHOT CLOCK OR CONTROL BOX.

NOTE:

IF THIS IS THE 16 VOLT VERSION, PLUG IT INTO THE XLR JACK ON THE SHOT CLOCK OR CONTROL BOX.
IF THIS IS THE 120 VOLT VERSION, PLUG IN INTO THE 120 VOLT OUTLET ON THE SHOT CLOCK.

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DAKTRONICS, INC. BROOKINGS, SD 57006

PROJ: TUFF SPORT SCOREBOARDS

TITLE: BB-2133, LED INDICATOR INSTALLATION

DES. BY: BPETERSON

DRAWN BY: BPETERSON

DATE: 4 DEC 02

REVISION

APPR. BY:

00

SCALE: 1=5

1237-E10A-179569

REV.	DATE	DESCRIPTION	BY	APPR.
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TO INSTALL THE VISUAL HORN INDICATOR (VHI) LED OPTION ON A TUFF SPORT SCOREBOARD, FIRST REMOVE THE CLOCK PANEL. IT HAS THE HORN MOUNTED TO THE BACK, NEAR THE TOP. UNPLUG THE CABLES TO THE DIGITS AND THE HORN AND SET THE PANEL ASIDE.

DRILL A 7/8" HOLE IN THE TOP FOR ROUTING WIRES. IF THE LED IS TO BE MOUNTED TO THE TOP OF THE SCOREBOARD, USE THE #12 SELF DRILLING SCREWS AND SECURE THE MOUNTING CHANNEL TO THE SCOREBOARD. ONCE THE CHANNEL IS IN PLACE USE THE #8 SCREWS TO MOUNT THE LED INDICATOR TO THE CHANNEL. IF THE LIGHT IS TO BE LOCATED ELSEWHERE, INSTALL THE BOX CONNECTOR IN THE HOLE IN THE TOP BEFORE ROUTING THE WIRES.

BOX CONNECTOR

#8 SCREWS PROVIDED
#12 SELF DRILLING SCREWS PROVIDED

HORN WIRES IN SCOREBOARD
120V AC SWITCHED

120V LED INDICATOR

MOUNTING CHANNEL

DAKTRONICS

FRONT VIEW

TAP INTO THE WIRES FEEDING THE HORN CONNECTOR.

HORN MOUNTED BEHIND CLOCK PANEL

HORN CONNECTOR

CROSS SECTION VIEW

ROUTE WIRE FROM THE LED FIXTURE TO THE HORN CONNECTOR IN THE SCOREBOARD. CONNECT THESE WIRES TO THE WIRES FEEDING THE CONNECTOR, USING THE IN-LINE CONNECTORS PROVIDED.

CLOCK PANEL

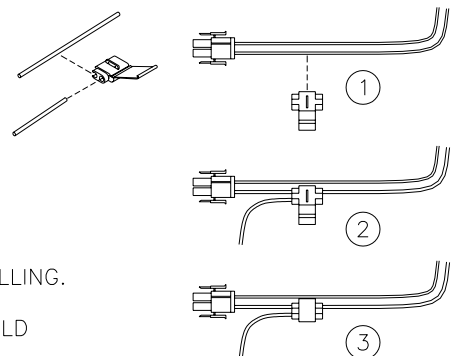
USING THE IN-LINE TAP CONNECTORS:

TO USE THE IN-LINE TAP CONNECTORS, FOLLOW THESE STEPS:

1. SNAP THE CONNECTOR ONTO THE EXISTING WIRE.
2. WITHOUT STRIPPING THE INSULATION, INSERT THE NEW WIRE INTO THE END OF THE CONNECTOR.
3. SQUEEZE THE METAL CONTACT DOWN INTO THE CONNECTOR AND SNAP THE COVER CLOSED.

CONNECT THE OTHER END OF THE WIRES TO THE LED FIXTURE USING THE TWIST-ON WIRE NUTS PROVIDED.

REMOVE ALL METAL FILINGS FROM INSIDE THE SCOREBOARD CAUSED BY DRILLING. CONNECT THE DIGITS AND THE HORN AND INSTALL THE CLOCK PANEL. TEST THE HORN OPERATION FROM THE CONTROL CONSOLE. THE LED SHOULD TURN ON WHENEVER THE HORN SOUNDS.



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DAKTRONICS, INC. BROOKINGS, SD 57006

PROJ: TUFF SPORT INDOOR SCOREBOARDS

TITLE: ASSY. DWG; BB-2133, 120V LED IND. FOR CLOCK PANEL

DES. BY: MMILLER

DRAWN BY: AGEWERT

DATE: 06 JUL 07

REVISION

APPR. BY:

00

SCALE: 1=10

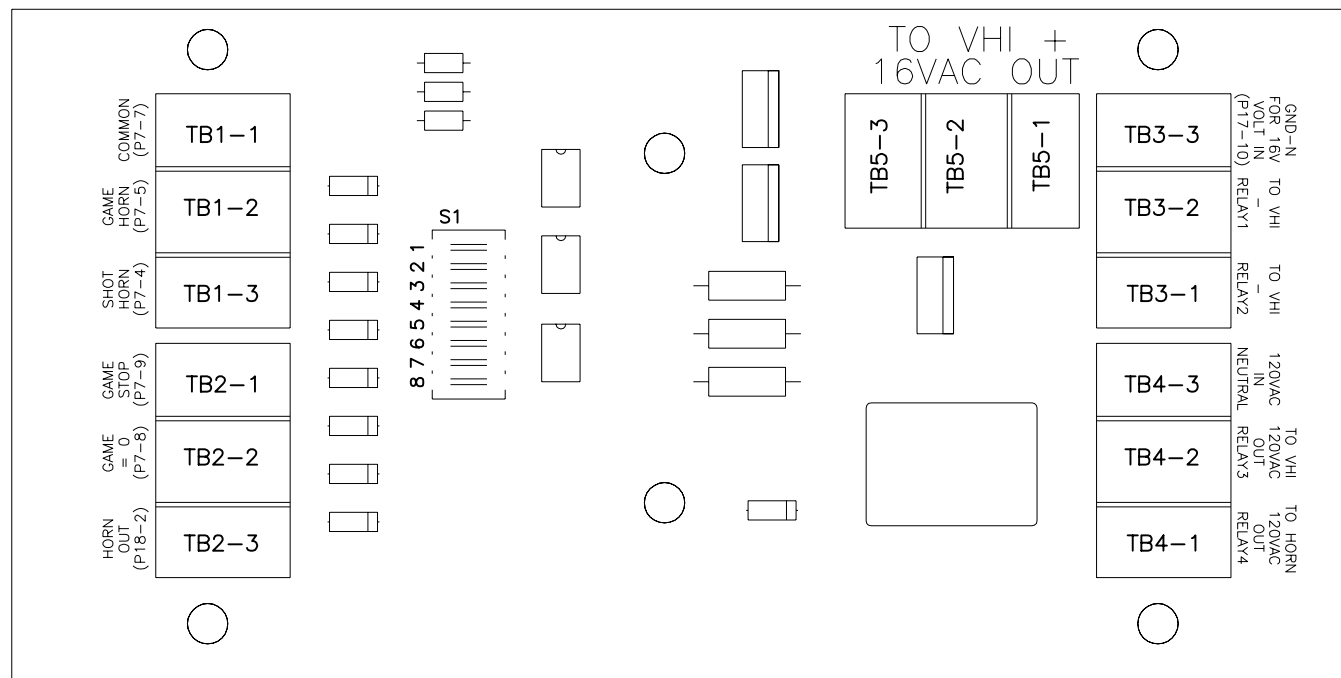
1237-R10A-311301

REV.	DATE	DESCRIPTION	BY	APPR.
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REV.	DATE	DESCRIPTION	BY	APPR.

ASSEMBLY: RELAY BOARD FOR SHOT CLOCKS
ASSEMBLY #: 0P-1150-0235

NOTE:
TB5 IS NOT USED.



INPUTS:

TB1-1; FUNCTION = COMMON WIRE; WIRE COLOR = BLACK; CONNECTED TO P7-7 ON DRIVER.

TB1-2; FUNCTION = GAME HORN; WIRE COLOR = PINK; CONNECTED TO P7-5 ON DRIVER.

TB1-3; FUNCTION = SHOT CLOCK HORN; WIRE COLOR = BLUE; CONNECTED TO P7-4 ON DRIVER.

TB2-1; FUNCTION = GAME CLOCK STOP; WIRE COLOR = VIOLET; CONNECTED TO P7-9 ON DRIVER.

TB2-2; FUNCTION = GAME CLOCK=0; WIRE COLOR = GRAY; CONNECTED TO P7-8 ON DRIVER.

TB2-3; FUNCTION = HORN OUT; NOT CONNECTED

SWITCHES (S1):

SWITCH 1 = SETS TB3-1, TB3-2, AND TB4-2 OUTPUTS TO BE ON WHEN GAME HORN IS ON.

SWITCH 2 = SETS TB3-1, TB3-2, AND TB4-2 OUTPUTS TO BE ON WHEN SHOT CLOCK HORN IS ON.

SWITCH 3 = SETS TB3-1, TB3-2, AND TB4-2 OUTPUTS TO BE ON WHEN GAME CLOCK IS STOPPED.

SWITCH 4 = SETS TB3-1, TB3-2, AND TB4-2 OUTPUTS TO BE ON WHEN GAME CLOCK = 0.

SWITCH 5 = SETS TB4-1 OUTPUT TO BE ON WHEN GAME HORN IS ON.

SWITCH 6 = SETS TB4-1 OUTPUT TO BE ON WHEN SHOT CLOCK HORN IS ON.

SWITCH 7 = SETS TB4-1 OUTPUT TO BE ON WHEN GAME CLOCK IS STOPPED.

SWITCH 8 = SETS TB4-1 OUTPUT TO BE ON WHEN GAME CLOCK = 0.

OUTPUTS:

TB3-3; 16VAC INPUT FOR LED VHI OUTPUTS (TB3-1 AND TB3-2).

TB3-2; 16VAC OUT TO VHI (UP TO 4A); TYPICALLY CONNECT TO AN LED VHI.

TB3-1; 16VAC OUT TO VHI (UP TO 4A); TYPICALLY CONNECTED TO AN LED VHI.

TB4-3; 120VAC INPUT FOR FOR 120VAC OUTPUTS (TB41 & TB4-2).

TB4-2; 120VAC OUT LOW CURRENT (UP TO 4A); TYPICALLY CONNECTED TO AN EXTERNAL VHI.

TB4-1; 120VAC OUT HIGH CURRENT (UP TO 10A); TYPICALLY CONNECTED TO AN EXTERNAL HORN.

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DAKTRONICS, INC. BROOKINGS, SD 57006

PROJ:

TITLE: SPEC DRAWING; RELAY BOARD FOR VHI

DES. BY: CBRECZI

DRAWN BY: CBRECZI

DATE: 22 NOV 02

REVISION

APPR. BY:

SCALE: 1=1

1237-R01A-179151