



# **Auto Racing Display Model CH-836H**

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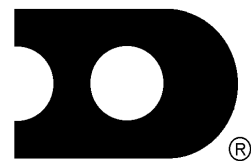
## **Installation & Service Manual**

ED 5965

**ED 5965  
Project#1081  
Rev. 3 - 30 July 1998**

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**DA  
KTRONICS, INC.**

***Setting New Standards Worldwide***

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# Section 1 : Introduction

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## 1.1 How To Use This Manual

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This manual explains the installation and maintenance of the Daktronics CH-836H Auto Racing Display system. Setup of other control equipment or operation of the CHTS-300 timing console are not covered in this manual. 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. Be sure the display is properly grounded with a ground rod at the display location.
4. *Disconnect power to the display when it is not in use.*
5. *Disconnect power when servicing the display.*
6. Do not modify the display structure or attach any panels or coverings to the display without the written consent of Daktronics, Inc.

The box below illustrates Daktronics drawing numbering system. The drawing number “7087-P08A-69945” is how Daktronics identifies individual drawings. This number is located in the lower-right corner of the drawing. This manual refers to drawings by listing the last set of digits and the letter preceding them. In the example below, the drawing would be referred to as **Drawing A-69945**. Referenced drawings are inserted at the *end of the first section which references them*.

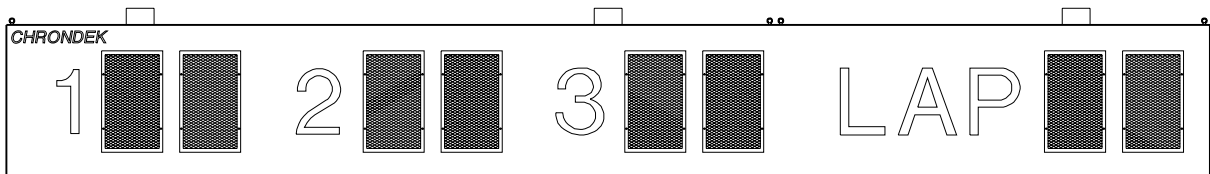
DAKTRONICS, INC. BROOKINGS, SD 57006	
PROJ:	
TITLE:	
DES. BY:	DRAWN BY: DOK DATE: 04-20-95
APPR. BY:	7087-P08A-69945
SCALE: 1=80	

## 1.2 Display Overview

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**Reference Drawing:** Display, CH-836H..... **Drawing A-47099**

**Drawing A-47099** shows a Daktronics CH-836H display. The CH-836H display along with the use of the Daktronics CHTS-300 timing console will display the first three car positions and lap number on the display.



OVERALL DIMENSIONS: 54" H x 432" W x 6" D

WEIGHT: 650 LBS

POWER REQUIREMENTS: 120/240 VAC, 30 AMPS PER LINE

MAXIMUM POWER DEMAND: 4000 WATTS WITH 25W LAMPS.  
4800 WATTS WITH 30W LAMPS.

DIGITS ARE 36" HIGH, 4 x 7 MATRICES, WITH 25W FROSTED  
MED. BASE OR 30W FROSTED, 30R20 REFLECTOR LAMPS.

DAKTRONICS, INC. BROOKINGS, SD 57006

PROJ: CHRONDEK DISPLAYS

TITLE: DISPLAY, CH-836H

DES. BY: CF

DRAWN BY: CF

DATE: 23 APR 91

REV.	DATE	DESCRIPTION	BY	APPR.

REVISION

APPR. BY: AVB

SCALE: 1=60

1081-R08A-47099

# Section 2 : Installation

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## 2.1 General System

---

**Reference Drawings:**

Pwr/Sig Entrance, 1 Driver Display .....	<b>Drawing A-46755</b>
System Layout, CH-836 .....	<b>Drawing A-47101</b>
Display Splice Mounting Detail, CH-836H ..	<b>Drawing A-47102</b>
Display Mounting, CH-836H .....	<b>Drawing A-47108</b>
Installation Specifications, CH-836H.....	<b>Drawing A-47109</b>
Component Locations, CH-836H .....	<b>Drawing A-47112</b>
Connector Plate, CH-836H .....	<b>Drawing A-47128</b>
Color Code, 25-Pin J-Box .....	<b>Drawing A-47207</b>

Refer to **Drawing A-47101** for the general system layout.

The general procedure for installing the CH-836H display is as follows:

1. Select beam and footing recommendations from the table in **Section 2.2**.
2. Dig the footing holes and install the beams and the footings.
3. Route power and signal cables to the display and control locations.
4. Mount the displays to the beams as described in **Drawings A-47102, A-47108, and A-47109** and **Section 2.3**.
5. Route power and signal wires into the displays as described in **Drawings A-46755, A-47112, A-47128, and A-47207** and **Section 2.4**.

## 2.2 Beam and Footing Selection

---

**Reference Drawings:** Installation Specifications, CH-836H ..... **Drawing A-47109**

The table below contains recommendations for W-shape beams and footings to support the display as shown in **Drawing A-47109**. The first column is wind velocity in miles per hour. The distance in the second column is from the ground to the bottom of the display. The choice from these columns depends upon the display location.

The beams listed below are beams which provide maximum wind load strength for the weight and cost of the beams.

Wind Speed	Height (ft)	Beam Section	Footing Depth x Diameter
70 MPH	10	W 10x19	7 ½ ft x 3 ft
	15	W 10x25	8 ¼ ft x 3 ft
80 MPH	10	W 10x25	8 ½ ft x 3 ft
	15	W 10x29	9 ¼ ft x 3 ft
90 MPH	10	W 14x26	9 ½ ft x 3 ft
	15	W 12x31	10 ½ ft x 3 ft

The calculations for footing diameters and depths are based on the assumption that footings are in undisturbed soils, *not fill soils*. Lateral bearing capacity of 300 psf per foot of depth in natural grade was used to derive these figures.

The footings recommendations are based on the allowable soil bearing pressure of 3000 psf vertically and 300 psf/ft of depth horizontally. However, these recommendations *are suggestions only* and soil bearing pressure at the site must be determined by a sample test prior to specifying actual footings. Be sure that the installation complies with local codes and is suitable for the particular soil and wind conditions. *Daktronics assumes no responsibility for displays installed by others.* Daktronics recommends that W-sections of grade 36 steel be used for beams, and that 28-day (strength 3000 psi) concrete be used for footings.

**A note about beam nomenclature:** For a typical beam, W6 x 25 for example, "W" stands for "Wide-Flange Beam". The first number (6) is the approximate front to rear dimension of the beam in inches. The second number (25) is the weight per foot in pounds. This numbering is a standard in the steel industry. Widths are from 6.25 to 10.25 inches in the chart above.

## 2.3 Display Mounting

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**Reference Drawings:** Display Splice Mounting Detail, CH-836H ... **Drawing A-47102**  
Display Mounting, CH-836H ..... **Drawing A-47108**

**Drawing A-47108** shows the typical mounting for the display.

**Note:** The bolts that secure the display to the beams do not go through the beams, but run along both sides of the beam, clamping the display to the beams.

A mounting kit consisting of six (6) mounting angles, two (2) splice channels and 1/2" hardware are provided to mount the display.

1. Position the left display section against the mounting beams and secure the bottom of the display to both beams as shown in **Drawing A-47108**.
2. Secure the top of the display section to the beams. Once mounting angles are attached, the display section may be slid up or down to the desired height.
3. Tighten all nuts securely once the display is positioned as desired.
4. Position the right display section next to the left display section and secure to the beam, repeating the procedure that was used to secure the left display section.

Attach the two (2) splice channels at the top and bottom of the display where the two display sections meet to secure the two sections together as shown in **Drawing A-47102**.



## 2.4 Electrical Installation

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### 2.4.1 Control Signal Cable

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**Reference Drawings:** Pwr/Sig Entrance, 1 Driver Display.. **Drawing A-46755**  
Component Locations, CH-836H .... **Drawing A-47112**  
Color Code, 25-Pin J-Box ..... **Drawing A-47207**

For the display, two conductors of 24 AWG are needed. For distances up to 600 ft. or 22 AWG, up to 1000 ft. are required. Daktronics has 24 AWG direct burial cable, Daktronics part no. W-1105 with 6 conductors, and 22 AWG cable that must be pulled through the conduit before burial, Daktronics part no. W-1077 with 2 conductors.

At the control location, mount the signal J-box to a convenient location. Route the cables and connect to the wires leading from the connector in the J-box cover, according to the table below and **Drawing A-47207**.

At the display, open the hinged panel covering the entrance enclosure as shown in **Drawing A-47112**. Remove the cover from the entrance enclosure. Refer to **Drawing A-46755** for an illustration of the components inside the entrance enclosure. Connect the signal wires to TB31 as indicated in the table below.

Control End			Display End
J-box Terminal No.	Wire Color	Output No.	TB31 Terminal No.
14	Red/Wht	1*	1 (+)
15	Grn/Wht		2 (-)

\*Auxiliary display(s) require(s) a different output number(s). Consult the CHTS-300 console manual.

### 2.4.2 Power Wiring

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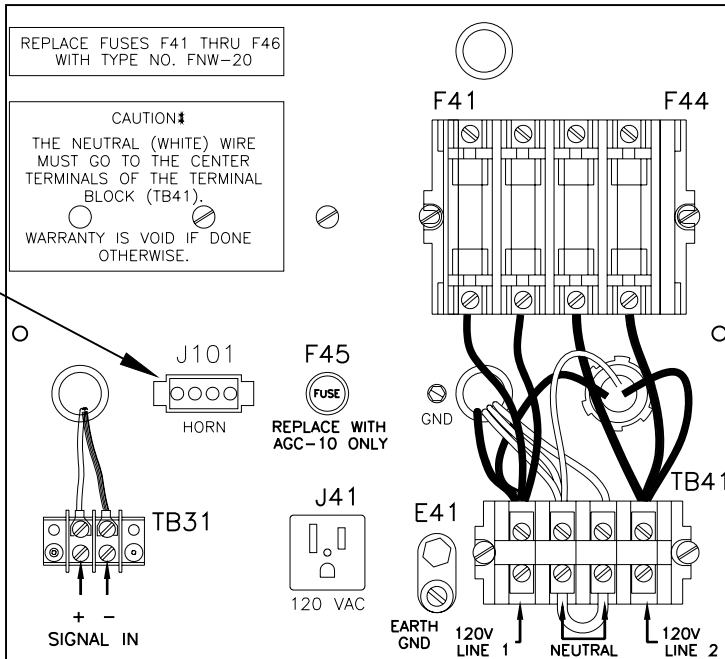
**Reference Drawing:** Pwr/Sig Entrance, 1 Driver Display .... **Drawing A-46755**

The CH-836H display requires a 120/240 VAC, 30 amp circuit per line. When equipped with 25W lamps, the maximum current draw is 33.33 amps. When equipped with 30W 30R20 reflector lamps, the maximum current draw is 40 amps.

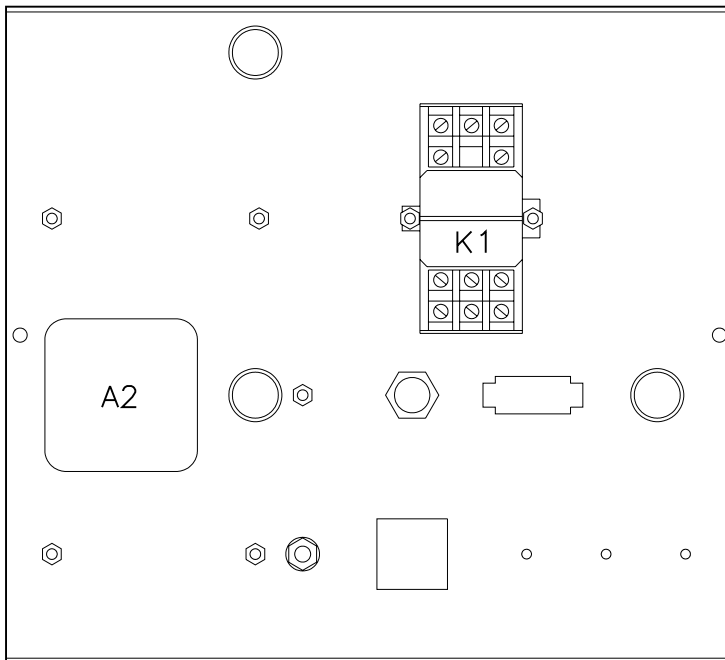
Route the power wires into the display and connect to TB41 in the entrance enclosure, as shown in **Drawing A-46755**.

Connect the ground wire to E41 and to a ground rod near the display according to local codes.





FRONT VIEW



REAR VIEW

3	4 MAR 93	REMOVED LIST OF MODEL NO.'S	C FICK	DAKTRONICS, INC. BROOKINGS, SD 57006
2	27 MAY 92	ADDED CH-1036H TO LIST OF MODEL NO.'S.	C FICK	PROJ: CHRONDEK DISPLAYS
1	25 APR 91	CHANGED DWG TITLE AND ADDED MODEL NO.'S.	CF	TITLE: PWR/SIG ENTRANCE, 1 DRIVER DISPLAY
REV.	DATE	DESCRIPTION	BY	DES. BY: DRAWN BY: CF DATE: 27 MAR 91
			APPR.	REVISION APPR. BY: SCALE: 1=3 1081-R04A-46755



LOCKABLE DISCONNECT SWITCH (BY OTHERS)

120/230 VAC, 30 AMPS PER LINE

EARTH GND

DISPLAY LOCATION

CONTROL SIGNAL CABLE,  
1 PAIR, 24 AWG OR 22 AWG.  
24 AWG UP TO 600 FT.  
22 AWG UP TO 1000 FT.  
IN CONDUIT BY OTHERS OR  
DIRECT BURIAL.

SIGNAL BOX

SIGNAL CABLE

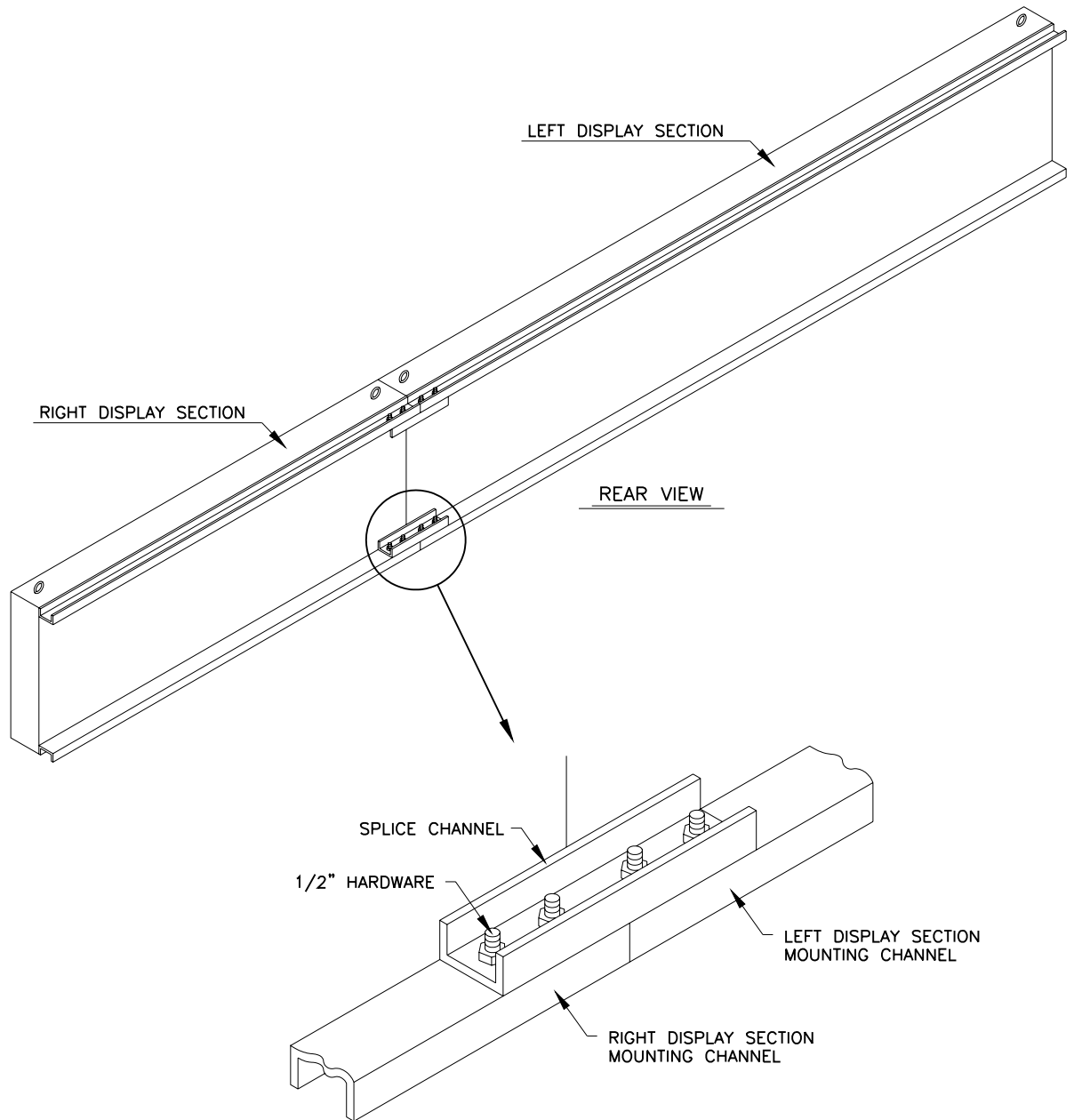
CONTROL LOCATION

120 VAC

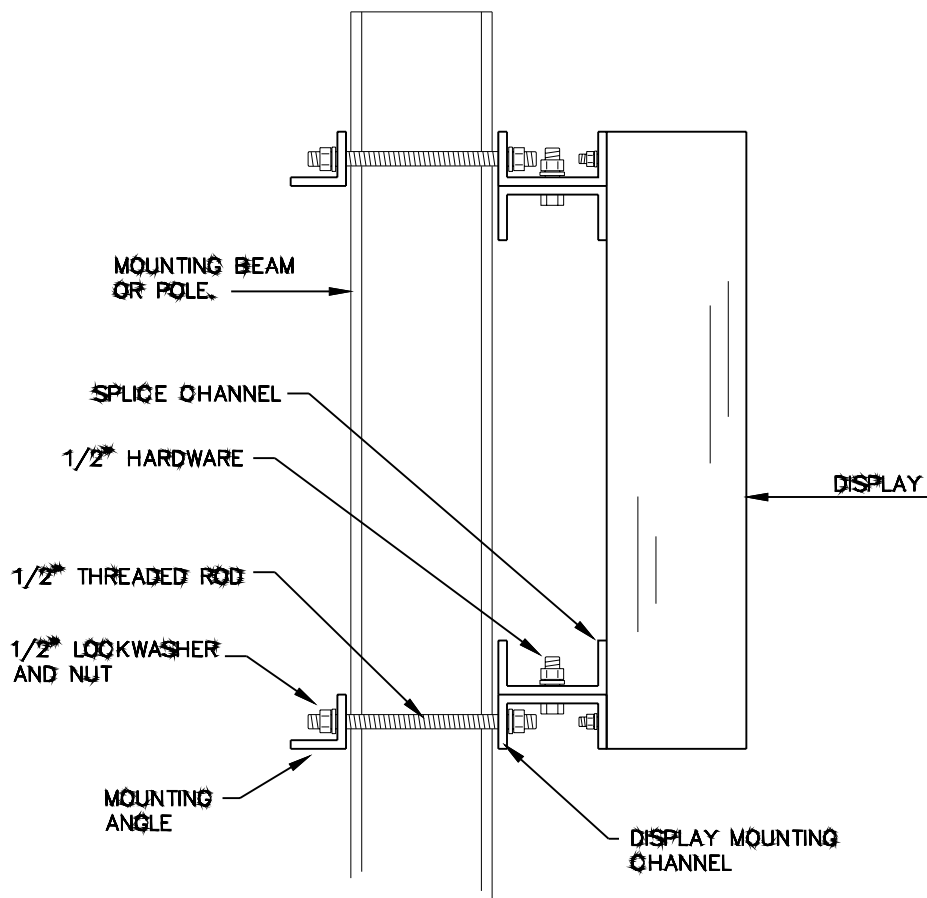
CHTS-300  
TIMING CONSOLE

DAKTRONICS, INC. BROOKINGS, SD 57006			
PROJ: CHRONDEK DISPLAYS			
TITLE: SYSTEM LAYOUT, CH-836H			
DES. BY: CF		DRAWN BY: CF	
		DATE: 23 APR 91	
REVISION	APPR. BY: AVB	1081-R04A-47101	
	SCALE: 1 = 1		

REV.	DATE	DESCRIPTION	BY	APPR.



DAKTRONICS, INC. BROOKINGS, SD 57006				
PROJ: CHRONDEK DISPLAYS				
TITLE: DISPLAY SPLICE MOUNTING DETAIL, CH-836H				
DES. BY: CF		DRAWN BY: CF		DATE: 24 APR 91
REVISION	APPR. BY: AVB	1081-R10A-47102		
	SCALE: 1=60			
2	27 MAY 92	REMOVED NOTE FOR MODEL CH-1336H.	C FICK	
1	24 JAN 92	ADDED NOTE FOR MODEL CH-1336H.	CFICK	
REV.	DATE	DESCRIPTION	BY	APPR.

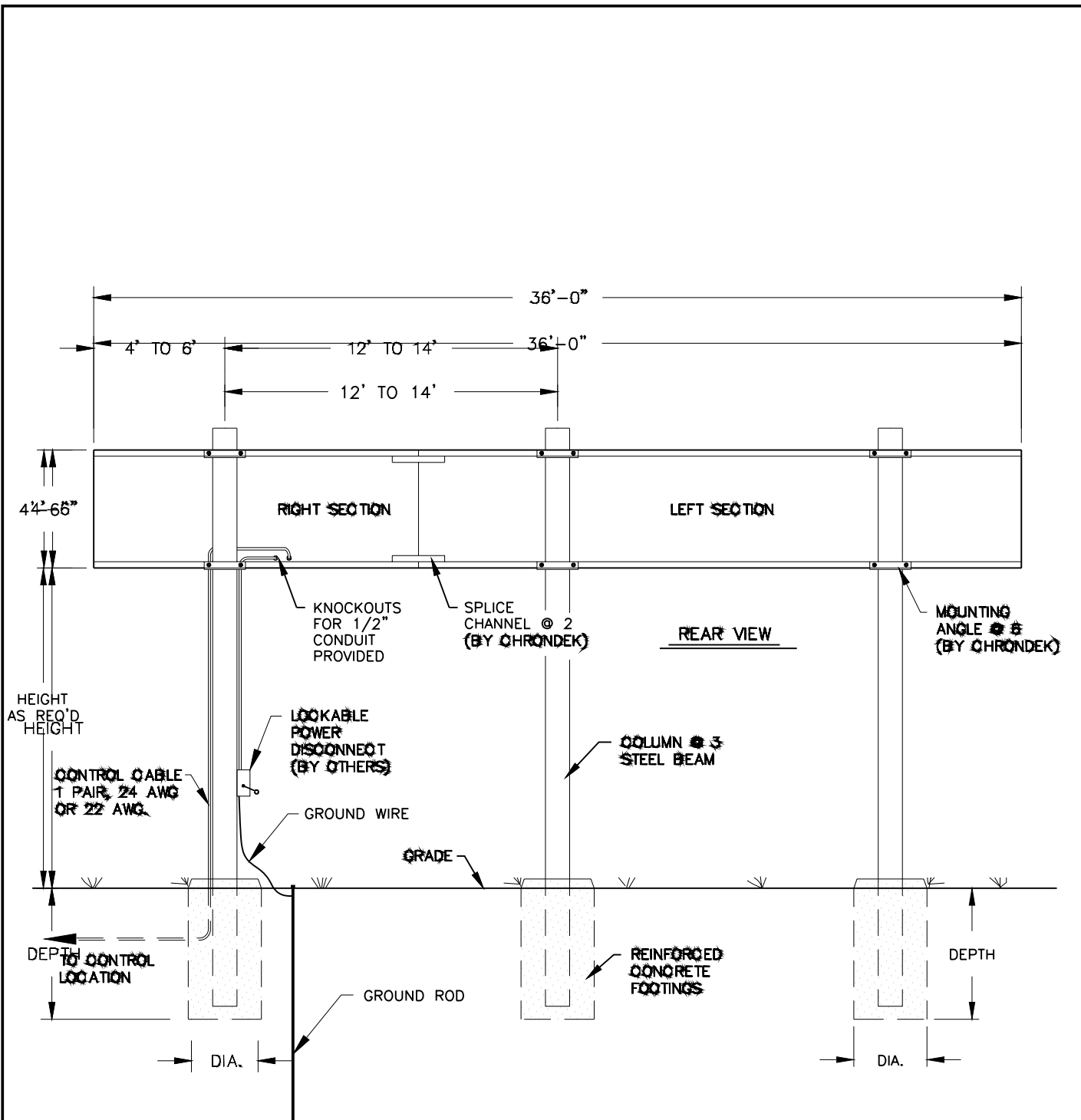


SIDE VIEW

MOUNTING INSTRUCTIONS

- 1.) LOCATE WHERE THE CENTER OF THE BEAMS WILL BE ON THE BACK OF EACH DISPLAY SECTION.
- 2.) DRILL  $9/16$ " HOLES IN THE MTG CHANNELS ON THE BACK OF EACH DISPLAY SECTION AT A DISTANCE OF  $\pm 3.50$ " TO  $4.50$ " FROM CENTER OF EACH BEAM.
- 3.) LIFT THE LEFT DISPLAY SECTION IN PLACE FIRST.
- 4.) ATTACH MOUNTING ANGLES AND  $1/2$ " THREADED RODS AS SHOWN ABOVE.
- 5.) DISPLAY CAN BE SLID UP OR DOWN TO THE HEIGHT REQUIRED.
- 6.) TIGHTEN ALL MOUNTING HARDWARE SECURELY.
- 7.) LIFT THE RIGHT DISPLAY SECTION IN PLACE NEXT TO THE LEFT DISPLAY SECTION AND ATTACH MOUNTING ANGLES AND  $1/2$ " THREADED RODS AS SHOWN ABOVE.
- 8.) ATTACH (2) SPLICE CHANNELS AT TOP AND BOTTOM OF DISPLAY TO MOUNTING CHANNELS ON BACK OF DISPLAY.
- 9.) TIGHTEN ALL MOUNTING HARDWARE SECURELY.

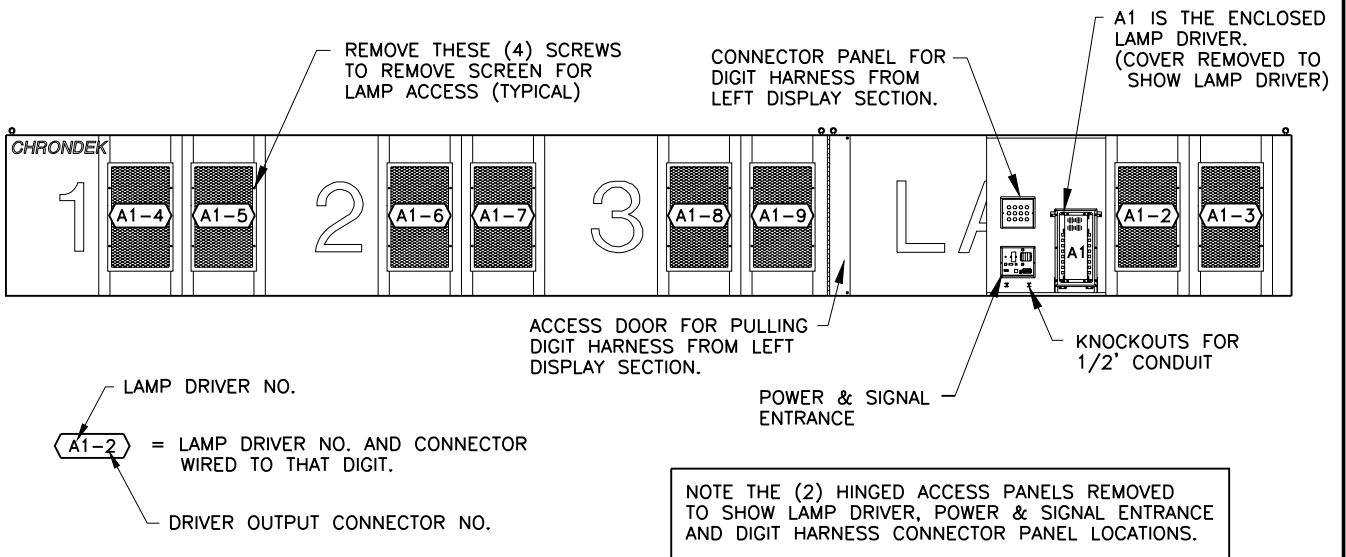
				DAKTRONICS, INC. BROOKINGS, SD 57006		
				PROJ: CHRONDEK DISPLAYS		
				TITLE: DISPLAY MOUNTING, CH-836H		
				DES. BY: CF	DRAWN BY: CF	DATE: 24 APR 91
2	27 MAY 92	REMOVED NOTE FOR CH-1336H	C FICK			
1	24 JAN 92	ADDED NOTE FOR MODEL CH-1336H	CFICK			
REV.	DATE	DESCRIPTION	BY	APPR.		
				REVISION	APPR. BY: AVB	1081-R08A-47108
					SCALE: 1=1	



**SCOREBOARD MUST BE CONNECTED TO A GROUND ROD AT SCOREBOARD LOCATION.**

DAKTRONICS, INC. BROOKINGS, SD 57006	
PROJ: CHRONDEK DISPLAYS	
TITLE: INSTALLATION SPECIFICATIONS, CH-836H	
DES. BY: CF	DATE: 24 APR 91
REVISION	APPR. BY: AVB
	SCALE: 1=65
<b>1081-R10A-47109</b>	

REV.	DATE	DESCRIPTION	BY	APPR.

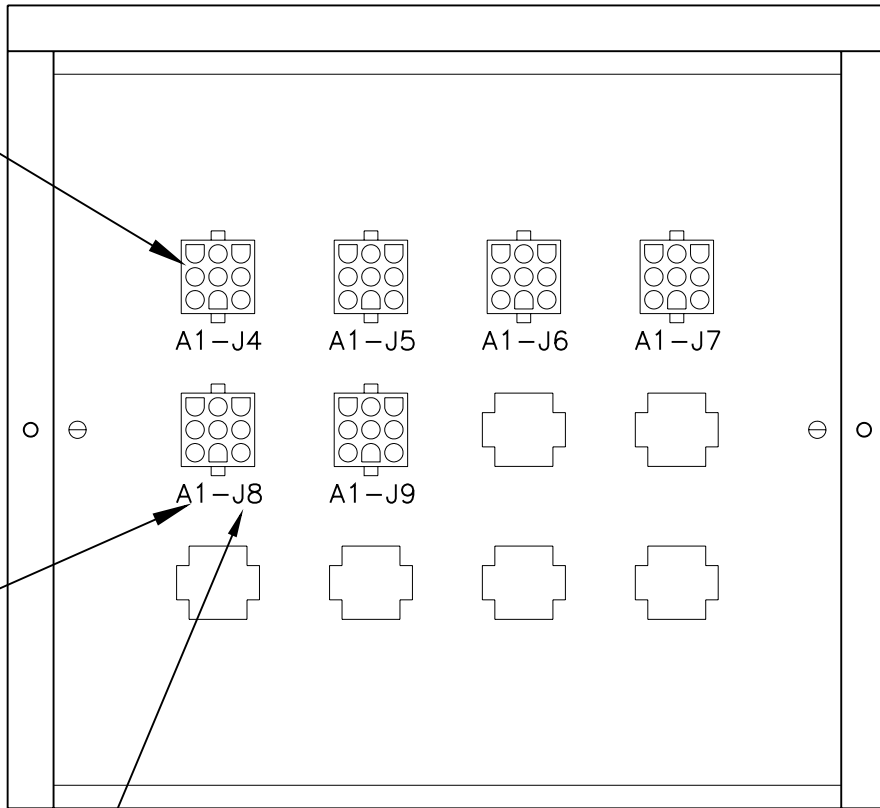


DAKTRONICS, INC. BROOKINGS, SD 57006			
PROJ: CHRONDEK DISPLAYS			
TITLE: COMPONENT LOCATIONS, CH-836H			
DES. BY: CF	DRAWN BY: CF	DATE: 25 APR 91	
REVISION	APPR. BY: AVB	1081-R04A-47112	
	SCALE: 1=60		

1	20 MAR 93	ADDED ACCESS DOOR FOR PULLING DIGIT HARNESS.	C FICK	
REV.	DATE	DESCRIPTION	BY	APPR.



9-PIN JACK  
(TYP)



DRIVER NO.

DRIVER PLUG/DIGIT NO.  
THAT PLUGS INTO THIS  
9-PIN JACK.

FRONT VIEW

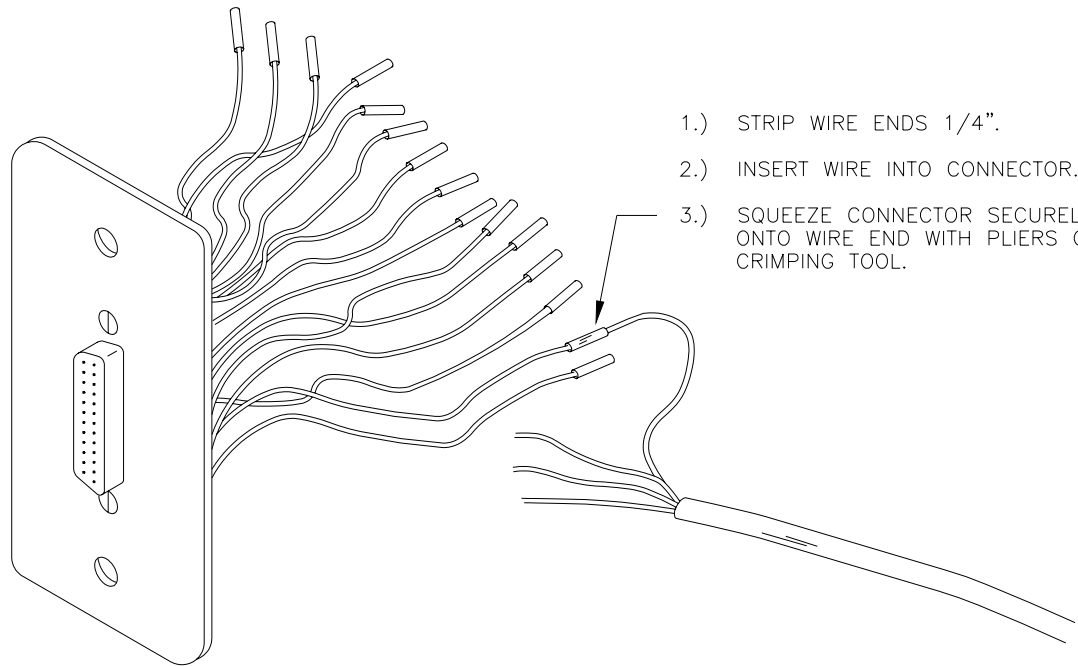
TYPICAL FOR MODELS:

CH-1036H  
CH-1336H

DAKTRONICS, INC. BROOKINGS, SD 57006

REV.	DATE	DESCRIPTION	BY	APPR.
2	18 MAY 93	ADDED MODEL CH-1036H	C FICK	
1	20 JAN 91	ADDED CH-1336H NOTE	CFICK	

PROJ:	CHRONDEK DISPLAYS		
TITLE:	CONNECTOR PLATE, CH-836H		
DES. BY:	CF	DRAWN BY:	CF
			DATE: 25 APR 91
REVISION	APPR. BY: AVB	1081-R04A-47128	
	SCALE: 1=3		



- 1.) STRIP WIRE ENDS 1/4".
- 2.) INSERT WIRE INTO CONNECTOR.
- 3.) SQUEEZE CONNECTOR SECURELY ONTO WIRE END WITH PLIERS OR CRIMPING TOOL.

PIN NO.	WIRE COLOR	FUNCTION	
1	BLACK	PHOTO 1-N	PHOTOCELL POWER INPUTS
2	WHITE	PWR 1-P	
3	RED	GND 1-N	
4	GREEN	PHOTO 2-N	
5	ORANGE	PWR 2-P	
6	BLUE	GND 2-N	
7	WHITE/BLACK	PHOTO 3-N	
8	RED/BLACK	PWR 3-P	
9	GREEN/BLACK	GND 3-N	
10	ORANGE/BLACK	PHOTO 4-N	
11	BLUE/BLACK	PWR 4-P	
12	BLACK/WHITE	GND 4-N	
14	RED/WHITE	1 SIG-P	SCOREBOARD SIGNAL OUTPUTS
15	GREEN/WHITE	1 SIG-N	
16	BLUE/WHITE	2 SIG-P	
17	BLACK/RED	2 SIG-N	
18	WHITE/RED	3 SIG-P	
19	ORANGE/RED	3 SIG-N	
22	BLUE/RED	4 SIG-P	
23	RED/GREEN	4 SIG-N	
13	ORANGE/GREEN	NOT USED	THESE PINS TYPICALLY NOT USED BY CHTS TIMER
20	BLK/WHT/RED	NOT USED	
21	WHT/BLK/RED	NOT USED	
24	RED/BLK/WHT	12 VAC	
25	GRN/BLK/WHT	12 VAC	

REV.	DATE	DESCRIPTION	BY	APPR.
2	10MAR97	ADDED WIRES TO PINS 13,20,21,24,25	EB	
1	4 JUN 92	CHANGED "SIGNAL INPUTS" TO "SIGNAL OUTPUTS"	C FICK	

DAKTRONICS, INC. BROOKINGS, SD 57006			
PROJ: CHRONDEK			
TITLE: COLOR CODE, 25-PIN J-BOX			
DES. BY: CF	DRAWN BY: CF	DATE: 1 MAY 91	
REVISION	APPR. BY: AVB	1067-R10A-47207	
	SCALE: 1=2		

# Section 3 : Maintenance & Troubleshooting

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## IMPORTANT NOTES:

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

### 3.1 Lamp Replacement

---

**Reference Drawing:** Digit Service ..... **Drawing A-27674**

The primary service required by the CH-836H display is to replace burn-out lamps. Refer to **Drawing A-27674** for an illustration of lamp changing. Replacement lamps are 120V, 25W frosted, medium base, available at your local store or directly from Daktronics, part number DS-1029. Some displays may be equipped with 120V, 30W reflector type 30R20 lamps, Daktronics part number DS-1126.

Do not use lamps larger than those originally installed in the display. Using higher powered lamps will likely cause fuse failures in the display and could exceed the current levels that the display's circuits can safely handle.

### 3.2 Lamp Driver

---

**Reference Drawings:** Lamp Driver, 16 Col., w/ Fan ..... **Drawing A-37070**  
Component Locations, CH-836H ..... **Drawing A-47112**

In the display, the task of switching lamps on and off is performed by the lamp driver. **Drawing A-47112** in **Section 2** shows the location of the lamp driver in the display. **Drawing A-37070** is an illustration of the lamp driver and the fuses located in it.

The lamp driver has 21 connectors providing power and signal inputs and outputs to digits. The functions of these connectors are as follows:

Connector Number	Function
1-16	Outputs to digits
17	Signal Input
18	Power input for outputs 1-8 (120 V)
19	Power input for driver logic and fan (120V)
20	Power input for outputs 9-16 (120V)
24	Dim option selector

In **Drawing A-47112**, the numbers on the digits refer to the lamp driver output connector wired to each digit.

### 3.3 Digit Segmentation

---

**Reference Drawing:** Segments, 4x7 Lamp Matrix Digit..... **Drawing A-37685**

In a digit certain lamps always go on and off together. These groupings of lamps are known as "segments". Each digit has eight segments, referred to by letters A through H. **Drawing A-37685** illustrates these segments and shows which connector pin and wire color is wired to each segment.

**3.4 Schematic**

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**Reference Drawings:** Schematic, 1 Driver Display ..... **Drawing A-46754**  
Pwr/Sig Entrance, 1 Driver Display ..... **Drawing A-46755**  
Component Locations, CH-836H ..... **Drawing A-47112**

The schematic diagram in **Drawing A-46754** shows the power and signal inputs into the display and to the lamp driver. The component numbers correspond to those shown in **Drawings A-47112** and **A-46755**.

**3.5 Troubleshooting**

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This is a list of possible problems that may occur and their possible solutions. For these symptoms, possible cause and corrective actions are indicated. This list does not include every possible problem, but does represent some of the more common situations that may occur.

<b>Observed Problem</b>	<b>Possible Cause</b>
One lamp won't light	<ul style="list-style-type: none"><li>• Burned-out lamp</li><li>• Broken wire behind digit</li></ul>
Digit segment won't light	<ul style="list-style-type: none"><li>• Broken wire</li><li>• Poor contact at driver connector</li><li>• Internal driver malfunction</li></ul>
Entire digit won't light	<ul style="list-style-type: none"><li>• Broken wire (black)</li><li>• Poor contact at connector, pin 7</li><li>• Fuse blown in driver</li></ul>
Half the display won't light	<ul style="list-style-type: none"><li>• Service breaker tripped</li><li>• Main fuse blown</li><li>• Poor contact at main power connection</li><li>• P18 disconnected</li></ul>
Entire display won't light	<ul style="list-style-type: none"><li>• Power disruption</li><li>• Poor signal connection</li><li>• Driver logic fuse blown</li><li>• Control not connected to display</li><li>• P20 disconnected</li></ul>
Segment stays lit	<ul style="list-style-type: none"><li>• Broken wire behind digit</li><li>• Internal driver malfunction</li></ul>
Garbled display	<ul style="list-style-type: none"><li>• Control malfunction</li><li>• Internal driver malfunction</li></ul>

If a problem is observed in one digit, the cause may be isolated by swapping plugs on the driver (connect the plug from the digit into a different jack). If the same digit shows the same problem, the cause may be in the digit or the wiring. If the problem moves to another digit, then the cause is probably an internal driver problem.

Use a volt meter at driver inputs to determine if power is being supplied to the driver. An ohmmeter can be helpful in finding broken wires and bad connections. Internal electronic problems must be corrected by Daktronics or an authorized service center.

### 3.6 Replacement Parts

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Part Name or Description	Type	Part Number
Lamp Driver		0A-1033-0122
J-Box, CHTS-300 Timer		0A-1067-0056
Fuse, Main Power, 20 A	FNW-20	F-1016
Fuse, Lamp Driver, 10A	AGC-10	F-1006
Fuse, Driver Logic, 1/2A	AGC-1/2	F-1000
Digit Lampbank, 36" 4x7		0A-1081-0038
Digit Screen, 36" 4x7		0S-1081-0038
Socket, Med. Base		X-1046
Lamp, 25W Frosted		DS-1029
Lamp, 30 W Frosted, Reflector	30R20	DS-1126

### 3.9 Unit Exchange/Replacement Procedure

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Daktronics unique exchange program offers our clients the quickest, most economical way of receiving product repairs. If a component fails, Daktronics will send the customer a replacement. The customer, in turn, sends the failed component to Daktronics. This not only saves money but decreases the time the display is inoperable. Daktronics offers repair and return on a timely basis; in urgent situations, every attempt is made to ship by the fastest transit method available.

1. **Packaging for Return:** Package and pad the item well to prevent damage during shipment. Electronic components, such as printed circuit boards, should either be installed in an enclosure or placed in an anti-static bag before boxing.

Please enclose your name and address along with a list of all the symptoms. Please be as specific as possible.

2. **Driver Packaging Instructions:** Drivers should be placed in a static-free enclosure for return shipping. An anti-static convoluted foam packing is available from Daktronics (part number PK-1135). The shipping box (Daktronics part number PK-1006) should be used along with the foam.
3. **Where to Send:** Contact your local representative prior to shipment to acquire a Return Material Authorization Number (RMA#). This will speed up the repair of your unit.

When returning defective items under the exchange program, please use the UPS Blue Return Tags found in the package containing the exchange unit sent from Daktronics. This will speed up the transaction and help avoid confusion when the part is returned

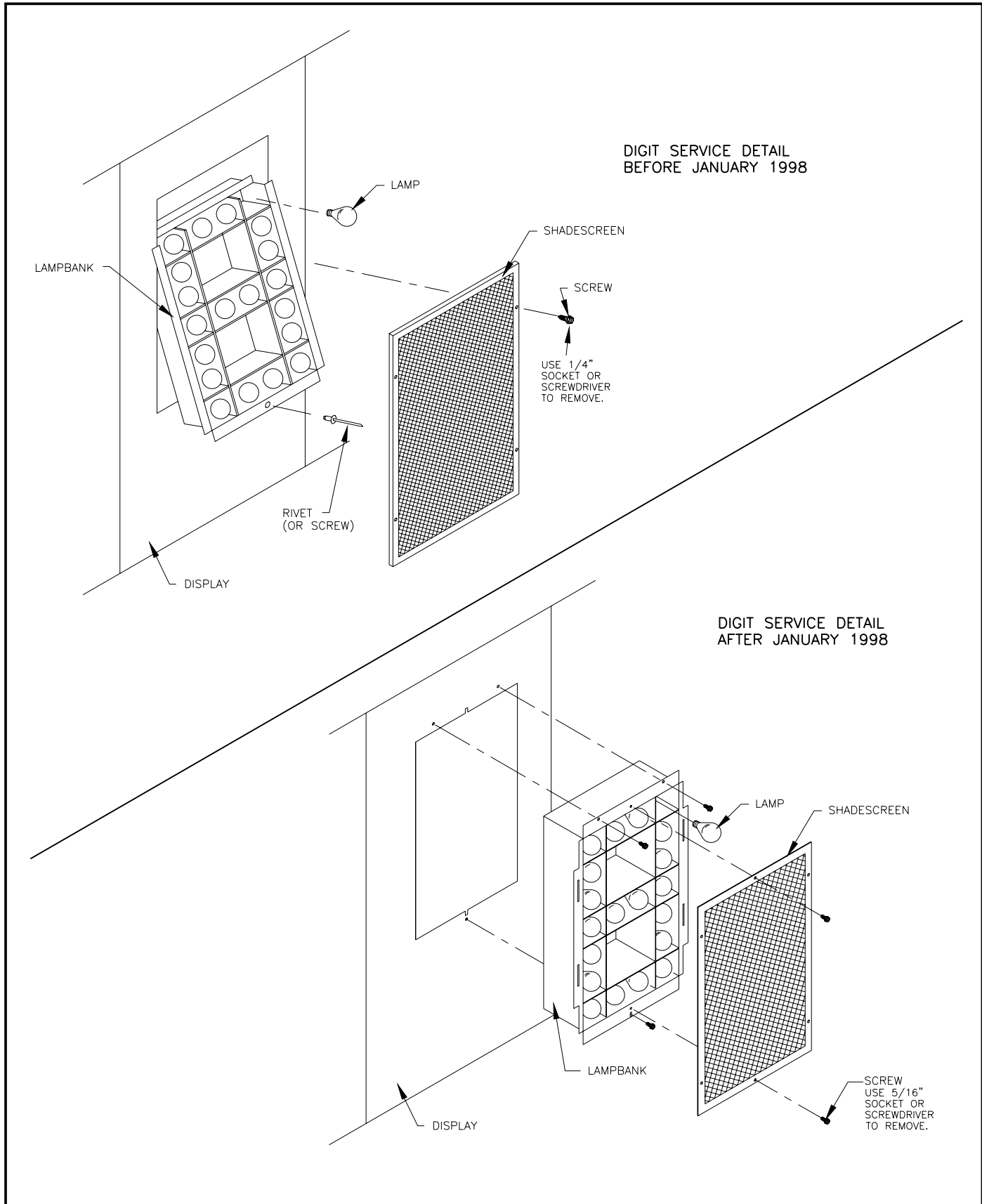
to Daktronics. **The defective item must be returned within 15 days of receiving a replacement part.** Using the UPS Blue Return Tag immediately will eliminate the possibility of late charges being assessed against your account.

**Mail:** Daktronics, Inc., Customer Service  
PO Box 5128  
331 32<sup>nd</sup> Avenue  
Brookings, SD 57006

**Phone:** Toll Free: 1-800-843-9879  
or 1-605-697-4400

**Customer Service Fax:** 1-605-697-4444

**E-Mail:** [helpdesk@daktronics.com](mailto:helpdesk@daktronics.com)

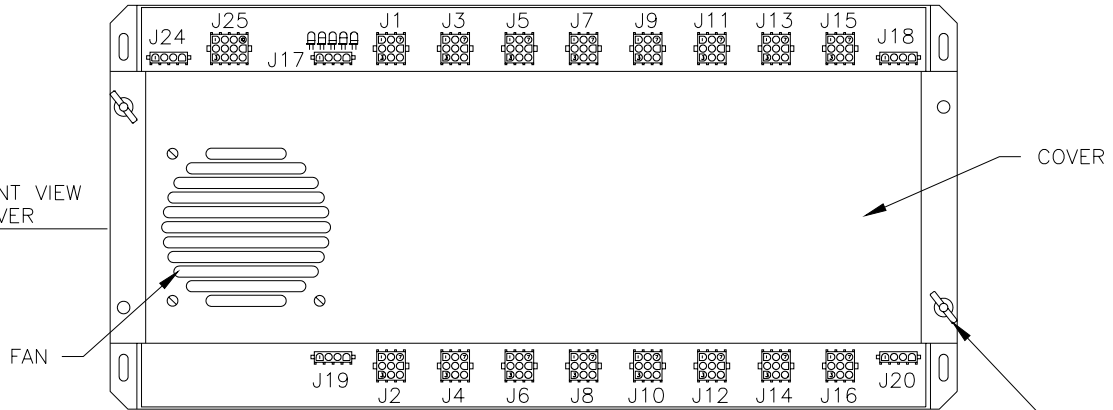


DAKTRONICS, INC. BROOKINGS, SD 57006

REV.	DATE	DESCRIPTION	BY	APPR.
2	10 NOV 97	ADDED DIGIT SERVICE AFTER JANUARY 1998 CHANGED SCALE FROM 1=10 TO 1=15	BDP	
1	5 MAR 91	CHANGED FROM "B" TO "A" SIZE DWG.	CF	

PROJ: OUTDOOR SCOREBOARDS	
TITLE: DIGIT SERVICE	
DES. BY:	DRAWN BY: TERRY P. DATE: 31 JULY 86
REVISION	APPR. BY:
SCALE: 1=15	1064-E10A-27674

DRIVER FRONT VIEW WITH COVER



REMOVE TWO WING NUTS TO REMOVE COVER AND GAIN ACCESS TO FUSES.

J24

PIN	FUNCTION	PIN	FUNCTION
1	NETWORK+	7	ADDR 3 -
2	NETWORK-	8	NTW GND -
3	NTWREF-P	9	NTW GND -
4	ADDR 0 -	10	FAN SW HOT
5	ADDR 1 -	11	FAN HOT
6	ADDR 2 -	12	NEUT

J17

PIN	FUNCTION
1	SIGNAL +
2	SIGNAL -
3	N.C.
4	N.C.

J1 - J16

PIN	FUNCTION
1	SEG C
2	SEG B
3	SEG A
4	SEG F
5	SEG E
6	SEG D
7	COMMON
8	SEG H
9	SEG G

J18

PIN	FUNCTION
1	LAMP NEUT
2	LAMP NEUT
3	LAMP HOT 1, 3, 5, 7
4	LAMP HOT 2, 4, 6, 8

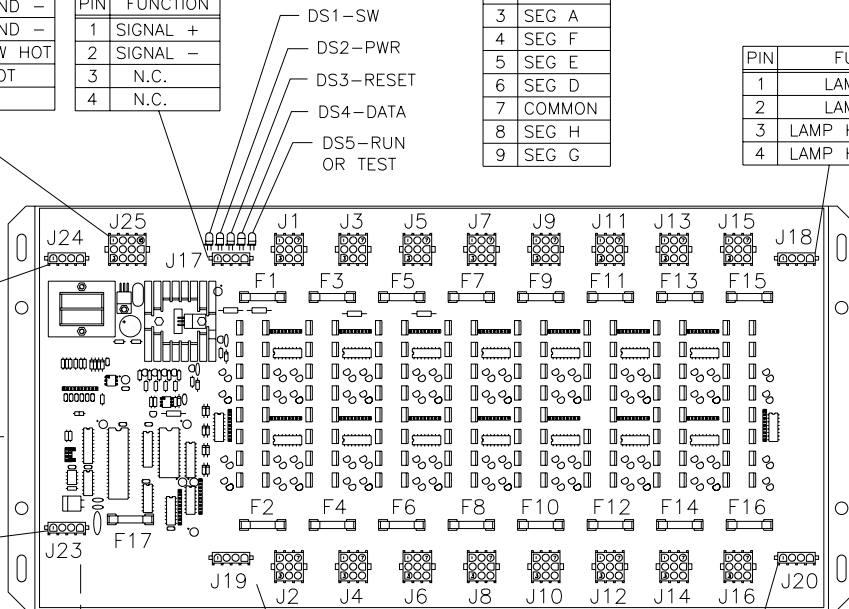
DRIVER FRONT VIEW WITH COVER REMOVED

J24

PIN	FUNCTION
1	-5V
2	DIM SEL 1
3	-5V
4	DIM SEL 2

J23

PIN	FUNCTION
1	FAN SW HOT
2	N.C.
3	FAN HOT
4	NEUT



J19

PIN	FUNCTION
1	NEUTRAL
2	NEUTRAL
3	120V HOT
4	120V HOT

J20

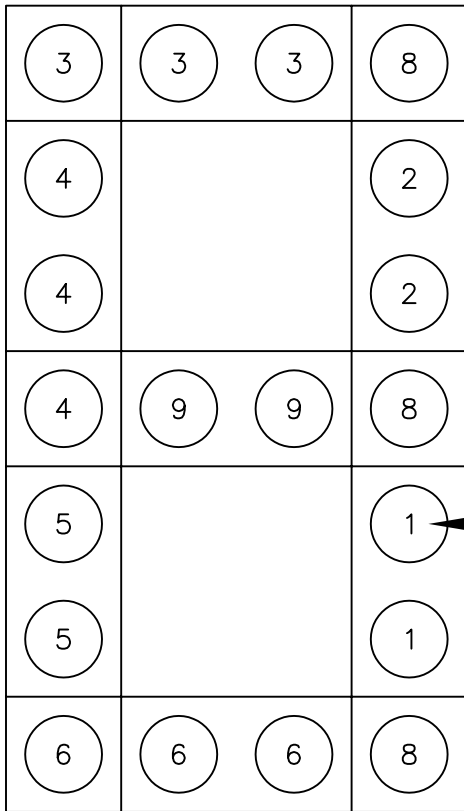
PIN	FUNCTION
1	LAMP NEUT
2	LAMP NEUT
3	LAMP HOT 9,11,13,15
4	LAMP HOT 10,12,14,16

PLUG FROM FAN IN COVER CONNECTS TO J23

F1 THRU F16 ARE TYPE AGC-10, DAKTRONICS PART NUMBER F-1006. F17 IS TYPE AGC-1/2, DAKTRONICS PART NUMBER F-1000

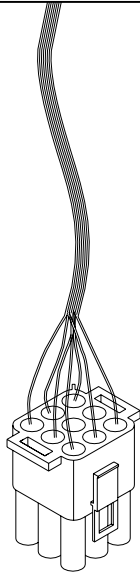
DAKTRONICS, INC. BROOKINGS, SD 57006			
2	29 APR 97	ADDED TABLES OF PINS AND FUNCTIONS.	AVB AVB
1	5 MAR 91	CHANGED FROM "B" TO "A" SIZE DWG.	CF
REV.	DATE	DESCRIPTION	BY APPR.
PROJ: MULTIPLEX CONTROLLERS		DES. BY: JLH DRAWN BY: JLH DATE: 20 FEB 89	
TITLE: LAMP DRIVER, 16 COL., W/FAN		REVISION	
SCALE: 1=5		1033-R04A-37070	





4 x 7 LAMP MATRIX DIGIT

CONNECTOR PIN NUMBER  
WIRED TO THAT SEGMENT

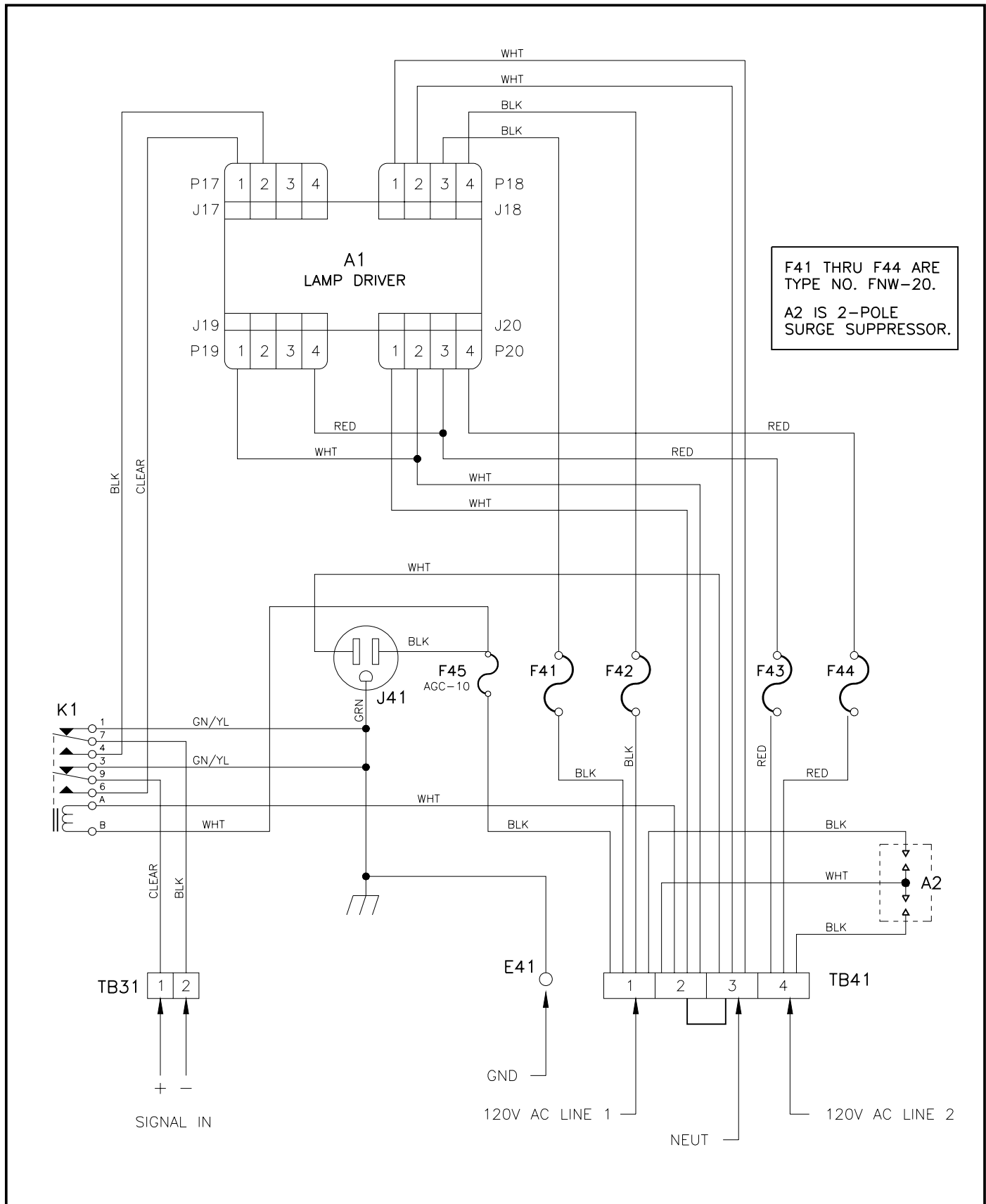


LAMP DRIVER  
CONNECTOR

COLOR CODE		
PIN NO.	WIRE COLOR	DRIVER SEGMENT
1	ORANGE	C
2	RED	B
3	BROWN	A
4	BLUE	F
5	GRN OR PNK	E
6	YEL OR TAN	D
7	BLACK	COMMON
8	GRAY	H
9	VIOLET	G

DAKTRONICS, INC. BROOKINGS, SD 57006		
PROJ: OUTDOOR SCOREBOARDS		
TITLE: SEGMENTS, 4 x 7 LAMP MATRIX DIGIT		
DES. BY:	DRAWN BY: AVB	DATE: 18 APR 89
REVISION	APPR. BY:	1064-R04A-37685
	SCALE: 1=1	

1	5 MAR 91	CHANGED FROM "B" TO "A" SIZE DWG.	CF	
REV.	DATE	DESCRIPTION	BY	APPR.



F41 THRU F44 ARE  
TYPE NO. FNW-20.  
A2 IS 2-POLE  
SURGE SUPPRESSOR.

3	4 MAR 93	REMOVED MODEL NO.'S LIST.	C FICK	DAKTRONICS, INC. BROOKINGS, SD 57006	
2	26 MAY 92	ADDED MODEL CH-1036H TO LIST OF MODEL NO.'S.	C FICK	PROJ: CHRONDEK DISPLAYS	
1	25 APR 91	CHANGED DWG TITLE AND ADDED MODEL NO.'S	CF	TITLE: SCHEMATIC, 1 DRIVER DISPLAY	
REV.	DATE	DESCRIPTION	BY	APPR.	DES. BY: DRAWN BY: CF DATE: 27 MAR 91
					REVISION APPR. BY: SCALE: NONE 1081-R03A-46754