



**Auto Racing Display
Models CH-1036V & CH-1436V**

Installation & Maintenance Manual

ED 8660

**ED 8660
Project#1081
Rev. 2 - 19 August 1998**

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KTRONICS, INC.**
Setting New Standards Worldwide

P.O. Box 5128 331 32nd Ave. Brookings, SD 57006
Phone (605)697-4400 or (800) 843-9879 Fax 697-4444



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Section 1 : Introduction

1.1 How To Use This Manual

This manual explains the installation and maintenance of the Daktronics CH-1036V & CH-1436V auto racing display systems. 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.

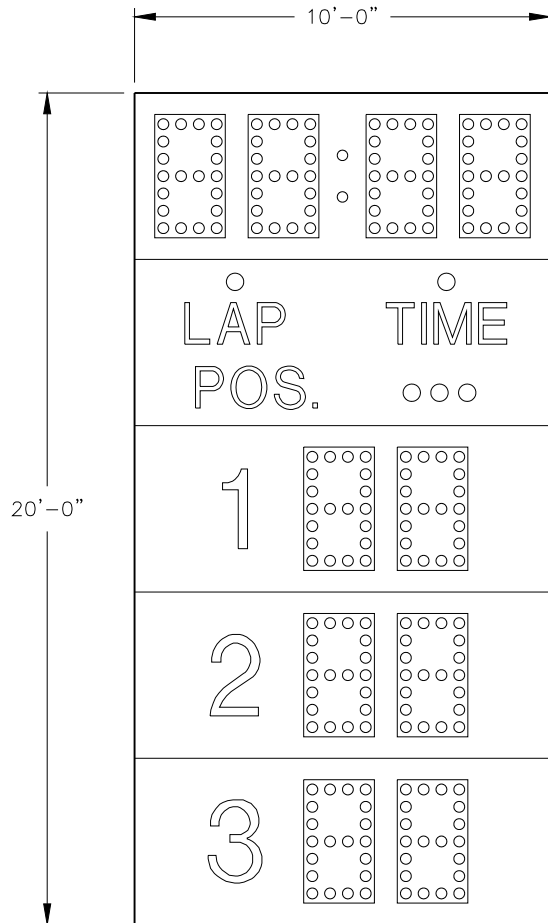
The box below illustrates Daktronics drawing numbering system. The drawing number “7087-P08A-69945” is how Daktronics identifies individual drawings. This number is located in the lower-right corner of the drawing. This manual refers to drawings by listing the last set of digits and the letter preceding 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:	DATE: 04-20-95
APPR. BY:	7087-P08A-69945
SCALE: 1=80	

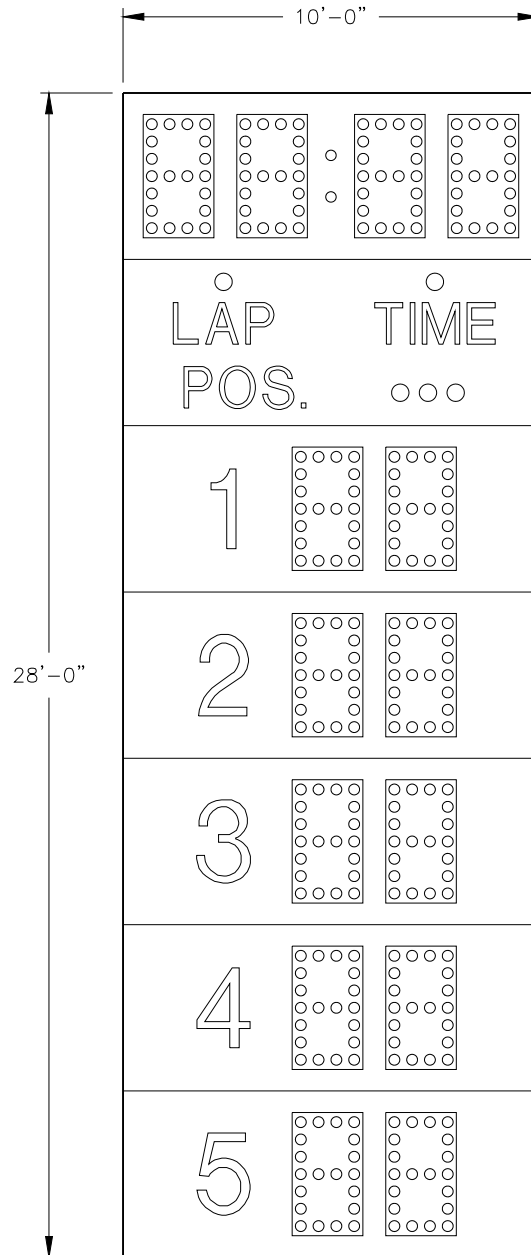
1.2 Display Overview

Reference Drawing: Models CH-1036V and CH-1436V **Drawing A-78611**

Refer to **Drawing A-78611** for an illustration of the Daktronics CH-1036V and CH-1436V displays. These displays along with the Daktronics CHTS-300 timing console will show the car positions, time or lap number and the track status.



CH-1036V



CH-1436V

EACH DISPLAY IS SHIPPED IN 10' X 4' SECTIONS
 CABINET DEPTH IS 9".
 DIGITS ARE 36" HIGH, USING A 4X7 LAMP PATTERN
 DIGIT LAMPS ARE 30 WATT TYPE R20 (30R20)
 INDICATOR LAMPS ARE 85 WATT TYPE PAR-38 (85PAR38)

MAXIMUM POWER CONSUMPTION:

CH-1036V: 6485 WATTS

CH-1436V: 8885 WATTS

EITHER DISPLAY REQUIRES A 120/240V
 OR 120/208V 50 AMP CIRCUIT.

POWER CONSUMPTION AND CIRCUIT REQUIREMENT WILL INCREASE
 IF OPTIONAL BACKLIT SPONSOR PANELS ARE ADDED.

VERTICAL MOUNTING BEAMS MUST EXTEND TO THE TOP OF THE DISPLAY. IF OPTIONAL SPONSOR PANELS
 ARE ADDED, BEAM HEIGHT MUST INCREASE BY THE HEIGHT OF THE SPONSOR PANELS.

DAKTRONICS, INC. BROOKINGS, SD 57006

PROJ: CHRONDEK DISPLAYS

TITLE: MODELS CH-1036V AND CH-1436V

DES. BY: DRAWN BY: A VANBEMMEL DATE: 29JAN96

REVISION

APPR. BY:

SCALE: 1=50

1081-R08A-78611

REV.	DATE	DESCRIPTION	BY	APPR.

Section 2 : Installation

2.1 General System

Reference Drawing: System Diagram, CH-1036V & CH-1436V **Drawing A-78612**

Refer to **Drawing A-78612** for a general system layout.

The general procedure for installing the CH-1036V or CH-1436V display is as follows:

1. Dig the footing holes and install beams and footings.
2. Route power and signal cables to the display and control locations.
3. Mount the displays to the beams as described in **Section 2.2**.
4. Route power and signal wires into the displays as described in **Section 2.3** and **2.4**.

2.2 Display Mounting

Reference Drawing: Scoreboard Mounting **Drawing A-55101**

Refer to **Drawing A-55101** for an example of a 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 mounting angles, channels and 1/2" hardware is provided to mount the display.

Each display consists of multiple sections. To install the display properly, the bottom section should be attached first followed by the rest of the sections stacked above it. Refer to **Drawing A-55101** for installing each section. To install the display:

1. Position the display against the mounting beams to secure the bottom of the display to the beams as shown.
2. Next, secure the top of the display. Once mounting angles are attached, the display may be slid up or down to the desired height.
3. Once positioned as desired, tighten all the bolts.

2.3 Control Signal Cable

Reference Drawings: Color Code, 25-Pin J-Box..... **Drawing A-47207**
Component Locations,CH-1036V&1436V **Drawing A-78613**

For the display, two conductors of 24 AWG, for distances up to 600 feet, or 22 AWG, for distances up to 1000 feet, are required.

Refer to **Drawing A-47207** and the following table. 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 cover.

At the display, open the hinged panel covering the entrance panel. Remove the cover from the entrance panel. Refer to **Drawing A-78613** for the components inside the enclosure. Connect the signal wires to TB31 as indicated in the following table.

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 displays require a different output number. Consult your CHTS-300 console manual.

2.4 Power Wiring

Reference Drawing: Component Locations, CH-1036V&1436V **Drawing A-78613**

Either CH-1036V or the CH-1436V display requires a 120/240 VAC, 50 amp circuit per line. With all lamps lit, the CH-1036V is capable of drawing a maximum of 40 amps on one line and 14 amps on the other line. The CH-1436V is capable of drawing a maximum of 40 amps on one line and 34 on the other.

Connect the power wires to TB41 in the entrance panel as labeled and as shown in **Drawing A-78613**.

2.5 Grounding

The display *must* be connected to earth-ground. Proper grounding is necessary for reliable equipment operation. It also serves to provide protection to the equipment against damaging electrical disturbances and lightning. *If the following grounding methods are not adhered to, the warranty will be void.*

The steel support structure for the display cannot be used as grounding. The support is generally embedded in concrete, and if in earth, the steel is either primed or it corrodes, making it a poor ground. Use one ground rod at each display support column.

The National Electrical Code requires the use of a lockable power disconnect near the display. Provide a lockable disconnect switch (knife switch) at the display location so that all power lines can be completely disconnected. Use a 3-conductor disconnect so that both hot lines and the neutral can all be disconnected. This is important in protecting the display against lightning.

There are two considerations for power installation, New Power Installation and Existing Power Installation. These two power installations differ slightly, as described in the following paragraphs.

2.5.1 New Power Installation

Reference Drawing: Power Wiring and Grounding..... Drawing A-45220

The power cable must contain a separate earth-ground conductor. When a separate ground conductor is used, do not connect neutral to ground at the disconnect or at the display. To do so would violate electrical codes and void the warranty. Refer to the *top half* of **Drawing A-45220** .

2.5.2 Existing Power Installation

Reference Drawing: Power Wiring and Grounding..... Drawing A-45220

When a separate ground conductor is *not* available, connect the neutral to the earth-ground at the disconnect, *never* at the display. Refer to the *bottom half* of **Drawing A-45220** .

2.6 Lightning Protection

There is a Transient Voltage Surge suppressor (TVSS) in the entrance panel to reduce the brief surge of high voltage that is induced into the power lines when lightning strikes in the vicinity of the display. A varistor in the power lines to the driver logic also helps to reduce this surge in order to protect this circuit.

There is also a relay in the signal line which disconnects the lamp driver from the incoming signal line when the power is turned off. *This will **not** offer protection if the power to the display is left turned on when the display is not in use.* **Disconnect power when the display is not in use!**

The use of a disconnect near the display to completely cut all current-carrying lines is a very significant step in protecting the circuits against lightning damage. It is also required by the national Electric Code. In order for this to provide protection, the power *must* be disconnected when the display is not in use.

The control console should also be disconnected from power and from the signal J-box when the system is not being used. The same surges that may damage the display's driver can also damage the console's circuit.

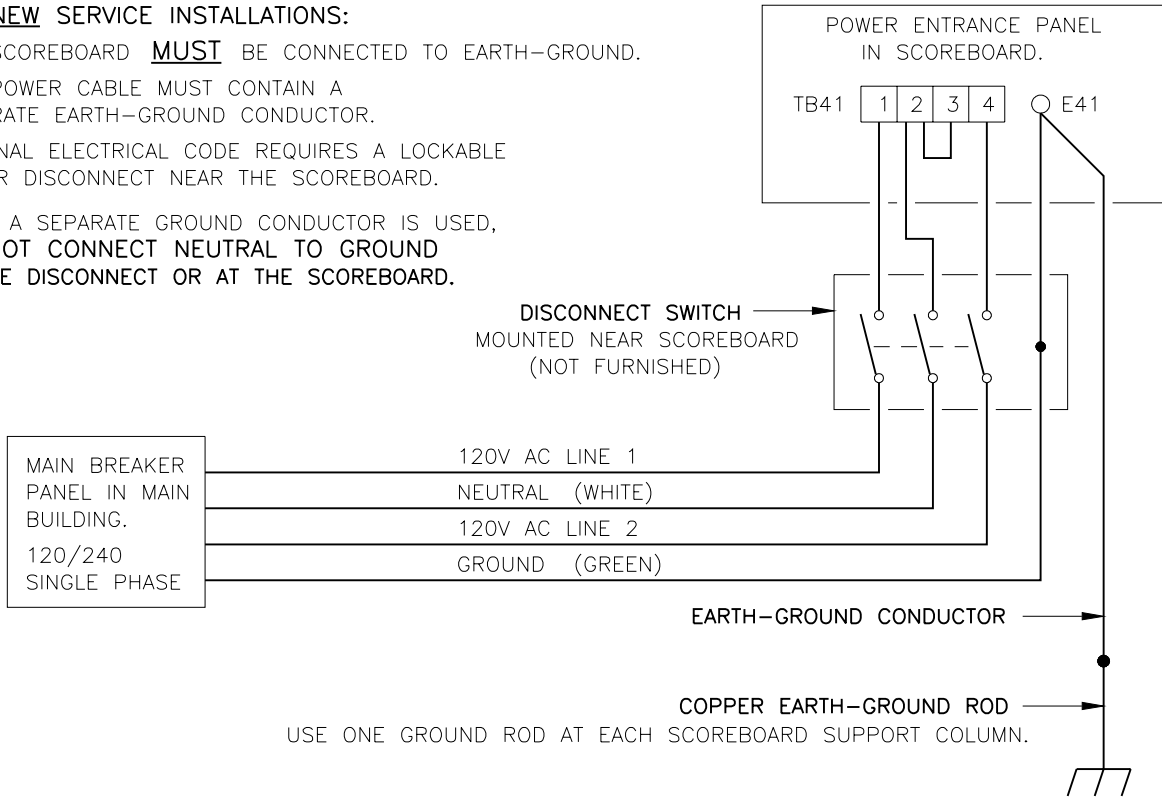
FOR NEW SERVICE INSTALLATIONS:

THE SCOREBOARD **MUST** BE CONNECTED TO EARTH-GROUND.

THE POWER CABLE MUST CONTAIN A SEPARATE EARTH-GROUND CONDUCTOR.

NATIONAL ELECTRICAL CODE REQUIRES A LOCKABLE POWER DISCONNECT NEAR THE SCOREBOARD.

WHEN A SEPARATE GROUND CONDUCTOR IS USED, **DO NOT CONNECT NEUTRAL TO GROUND AT THE DISCONNECT OR AT THE SCOREBOARD.**



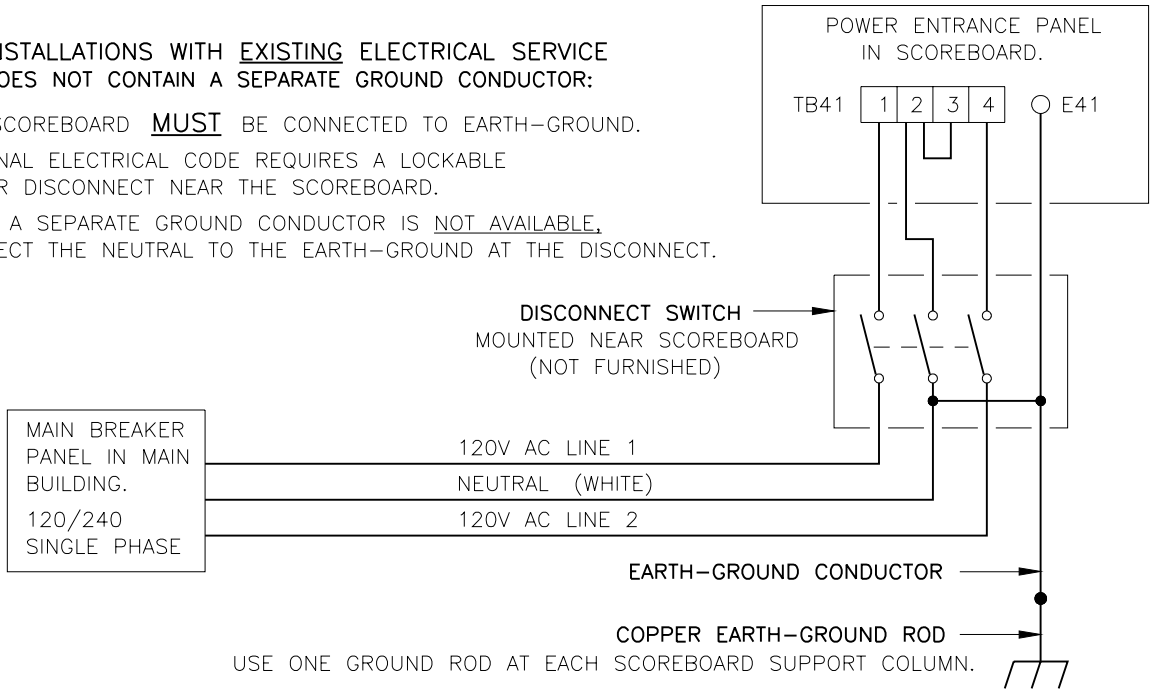
FOR LIGHTNING PROTECTION, DAKTRONICS RECOMMENDS A THREE-CONDUCTOR DISCONNECT THAT CAN BREAK BOTH HOT LINES AND THE NEUTRAL.

FOR INSTALLATIONS WITH EXISTING ELECTRICAL SERVICE THAT DOES NOT CONTAIN A SEPARATE GROUND CONDUCTOR:

THE SCOREBOARD **MUST** BE CONNECTED TO EARTH-GROUND.

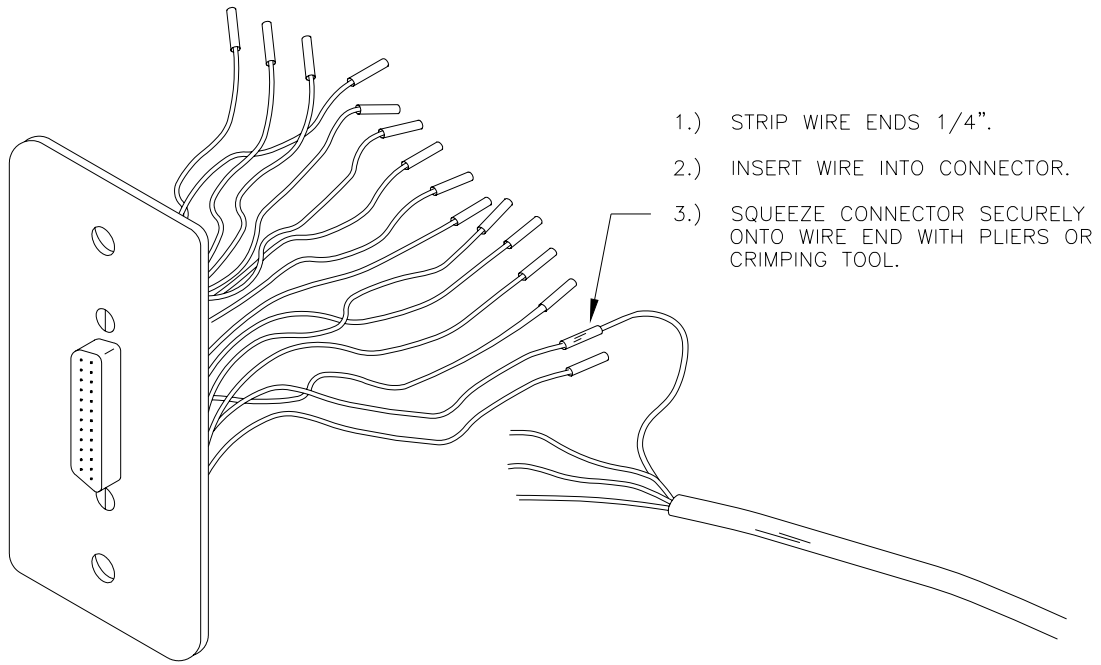
NATIONAL ELECTRICAL CODE REQUIRES A LOCKABLE POWER DISCONNECT NEAR THE SCOREBOARD.

WHEN A SEPARATE GROUND CONDUCTOR IS NOT AVAILABLE, CONNECT THE NEUTRAL TO THE EARTH-GROUND AT THE DISCONNECT.



DAKTRONICS, INC. BROOKINGS, SD 57006	
PROJ: OUTDOOR SCOREBOARDS	
TITLE: POWER WIRING AND GROUNDING	
DES. BY:	DATE: 09NOV90
DRAWN BY: AVB	
REVISION	1091-R03A-45220
APPR. BY:	SCALE: NONE

REV.	DATE	DESCRIPTION	BY	APPR.
1	06MAY91	ADDED FIGURE FOR USING EXISTING SERVICE.	AVB	



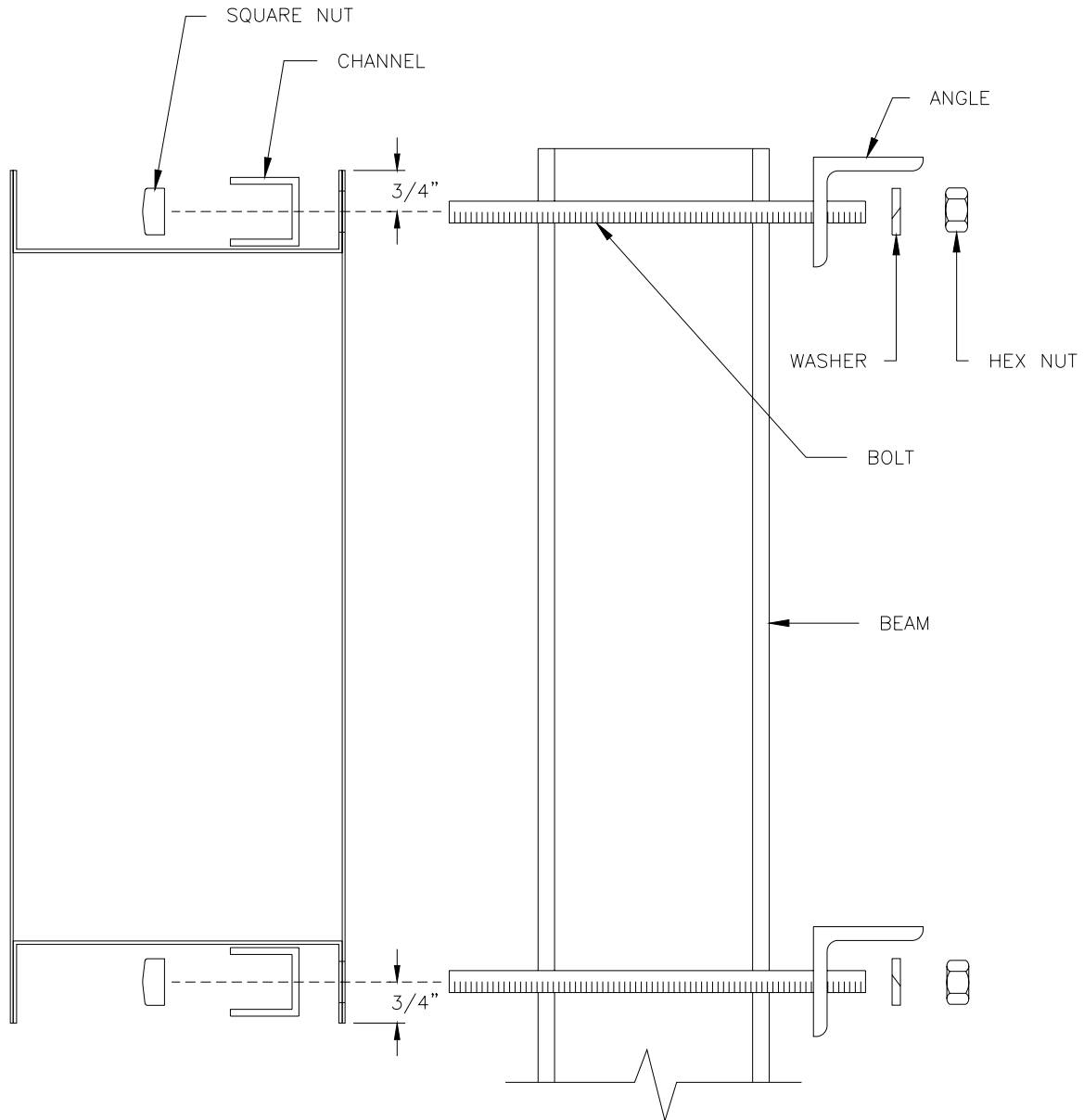
- 1.) STRIP WIRE ENDS 1/4".
- 2.) INSERT WIRE INTO CONNECTOR.
- 3.) SQUEEZE CONNECTOR SECURELY ONTO WIRE END WITH PLIERS OR CRIMPING TOOL.

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	

DAKTRONICS, INC. BROOKINGS, SD 57006

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	

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

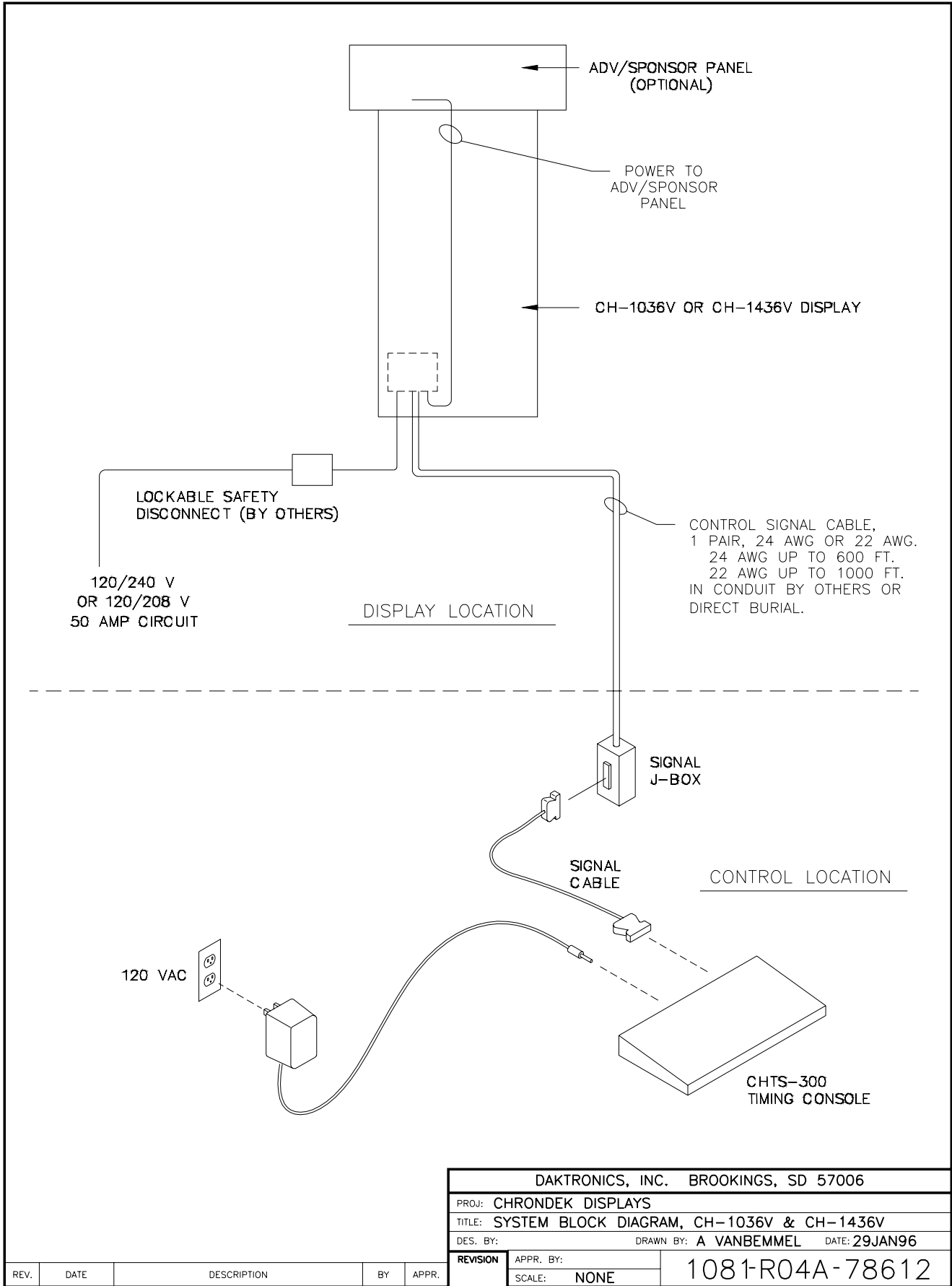


MOUNTING INSTRUCTIONS:

1. USE THE MOUNTING CHANNEL TO DETERMINE WHICH HOLE COMBINATION SHOULD BE USED. BE SURE TO KEEP THE BOLTS AS CLOSE TO THE BEAM AS POSSIBLE.
2. USING THE MOUNTING CHANNEL AS A TEMPLATE, DRILL 9/16" HOLES IN THE UPPER AND LOWER REAR FLANGE OF SCOREBOARD WHERE THE SUPPORTS WILL GO.
3. PLACE SQUARE NUTS INSIDE CHANNEL AND THREAD BOLTS THROUGH.
4. LIFT SCOREBOARD INTO POSITION WITH BOLTS STILL IN PLACE.
5. PLACE MOUNTING ANGLES OVER EACH PAIR OF BOLTS AND SECURE WITH LOCK WASHERS AND HEX NUTS.
6. WHEN SCOREBOARD IS ADJUSTED TO FINAL DESIRED POSITION, TIGHTEN HEX NUTS FIRMLY.

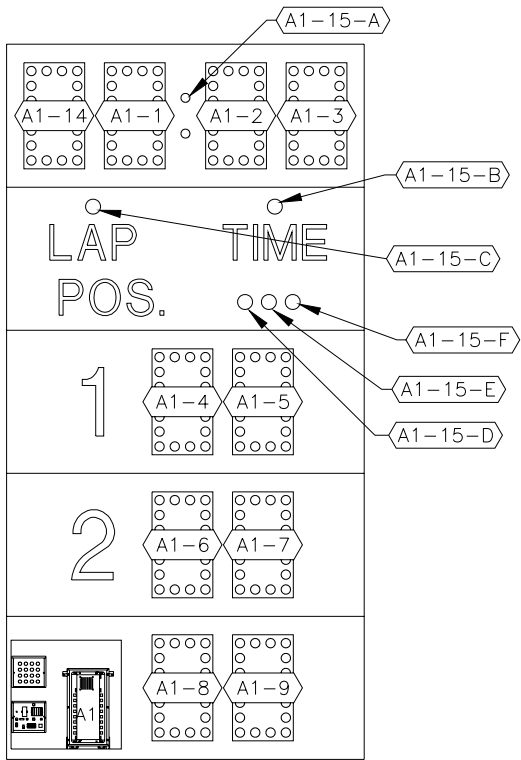
DAKTRONICS, INC. BROOKINGS, SD 57006	
PROJ: OUTDOOR SCOREBOARDS	
TITLE: SCOREBOARD MOUNTING	
DES. BY:	DRAWN BY: A VANBEMMEL DATE: 10FEB93
REVISION	APPR. BY:
	SCALE: NONE
1091-R10A-55101	

REV.	DATE	DESCRIPTION	BY	APPR.

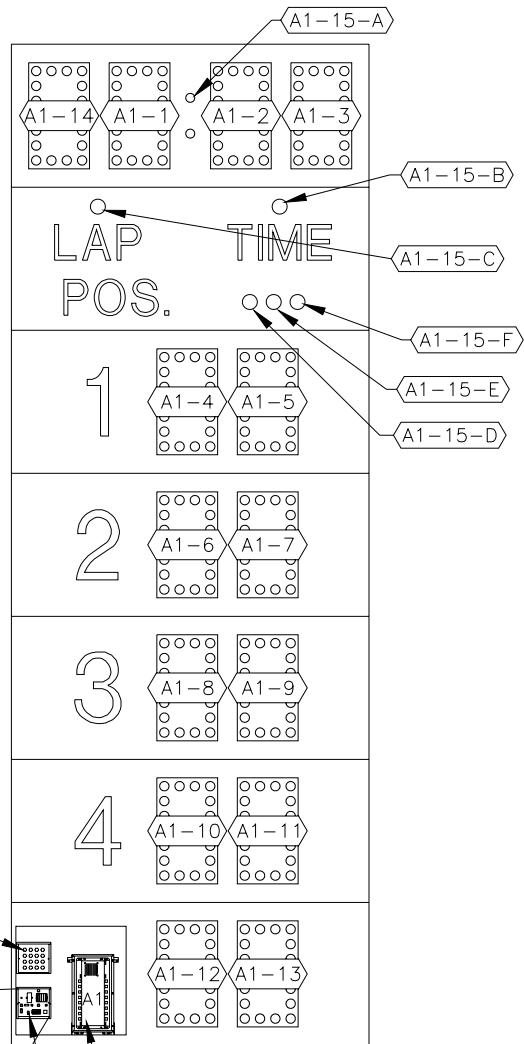


DAKTRONICS, INC. BROOKINGS, SD 57006			
PROJ: CHRONDEK DISPLAYS			
TITLE: SYSTEM BLOCK DIAGRAM, CH-1036V & CH-1436V			
DES. BY:		DRAWN BY: A VANBEMMEL	
		DATE: 29JAN96	
REVISION	APPR. BY:	1081-R04A-78612	
	SCALE: NONE		

REV.	DATE	DESCRIPTION	BY	APPR.

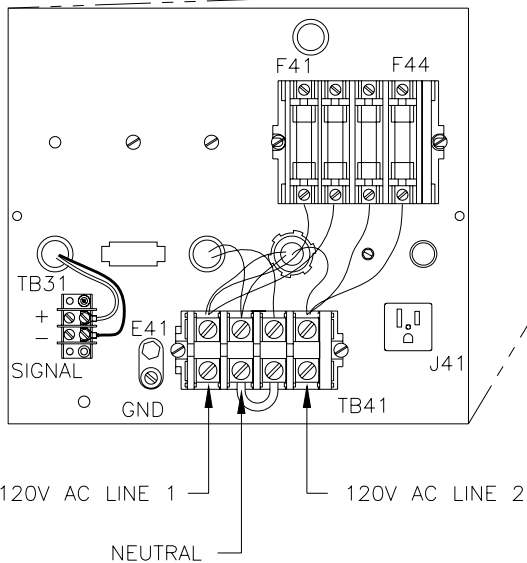


CH-1036V

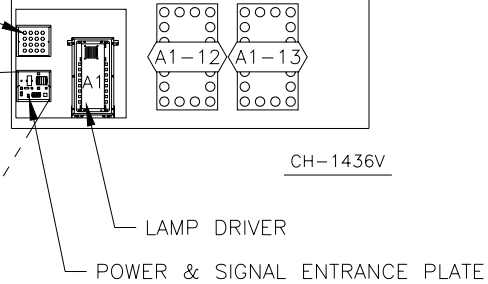


CH-1436V

ENTRANCE PLATE DETAIL



CONNECTOR PANEL



HOOKUP PROCEDURE:
 ROUTE POWER AND SIGNAL WIRES IN THROUGH THE BACK OF THE DISPLAY AND CONNECT TO THE ENTRANCE PLATE. SEE DETAIL AT LEFT.
 ROUTE CABLES FROM THE OTHER SECTIONS TO THE CONNECTOR PANEL AND MATE THE PLUGS TO THE JACKS AS LABELED.

DRIVER ASSIGNMENT DESIGNATIONS:
 A1-15-D
 DRIVER NO. — PLUG NO. — SEGMENT DESIGNATION

DAKTRONICS, INC. BROOKINGS, SD 57006			
PROJ: CHRONDEK DISPLAYS			
TITLE: COMPONENT LOCATIONS, CH-1036V & CH-1436V			
DES. BY: AVB		DRAWN BY: A VANBEMMEL DATE: 29JAN96	
REVISION	APPR. BY:	1081-R04A-78613	
	SCALE: 1=60		

REV.	DATE	DESCRIPTION	BY	APPR.

Section 3 : Maintenance & Troubleshooting



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.
4. Displays are FRONT access only!

3.1 Lamp Replacement

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

The primary service required by the displays is to replace burned-out lamps. Refer to **Drawing A-27674** for an illustration of lamp changing. 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.

The Lap/Time indicators use 120 volt, 55 watt clear flood lamps, type 55PAR38. The Status indicators use 120 volt, 85 watt flood lamps, type 85PAR38. Digits use 130 volt, 30 watt reflector lamps, type 30R20.

3.2 The Lamp Driver

Reference Drawing: Lamp Driver, 16 Col. w/ Fan..... **Drawing A-37070**

Refer to **Drawing A-37070** for an illustration of the lamp driver. In the display, the task of switching lamps on and off is performed by the lamp driver. The lamp driver has 21 connectors, providing power and signal inputs and outputs to digits. The functions of these connectors are illustrated in the following table.

Connector No.	Function
1-16	Outputs to digits and indicators
17	Control signal input
18	Power input for outputs 1-8
19	Power input (120V) for driver logic
20	Power input for outputs 9-16
24	Dim option selector

3.3 Digit Segmentation

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

Refer to **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.

3.4 Fuses

Reference Drawing: Lamp Driver, 16 Col. w/ Fan..... **Drawing A-37070**

Refer to **Drawing A-37070**. The lamp driver has 17 fuses. There is one fuse to protect each digit circuit. F1 through F16 are type AGC-10 and are located near each output connector under the driver's metal cover. The other lamp driver fuse, F17, is type AGC-1/2 and it protects the driver's logic circuit and fan.

3.5 Schematic

Reference Drawing: Schematic, 1 Driver Display **Drawing A-46754**

The schematic diagram in **Drawing A-46754** shows the power and signal inputs into the display and to the lamp driver.

3.6 Troubleshooting

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

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.

3.7 Replacement Parts List

Parts Description or Name	Type	Part Number
Lamp driver		0A-1033-0122
Fuse, driver logic, AGC-1/2	AGC-1/2	F-1000
Fuse, lamp driver, AGC-10	AGC-10	F-1006
Socket, med. base lamp		X-1046
Digit lampbank, 36" 4x7		0A-1081-0073
Digit screen, 36"		0S-1064-0002
J-Box, CHTS-300 timer		0A-1067-0056
Lamp, 30W Reflector	30R20	DS-1126
Lamp, 55W Clear Flood	55PAR38	DS-1101
Lamp, 85W Amber Flood	85PAR38	DS-1184
Lamp, 85W Green Flood	85PAR38	DS-1185
Lamp, 85W Red Flood	85PAR38	DS-1186

3.8 Unit Exchange/Replacement Procedure

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.

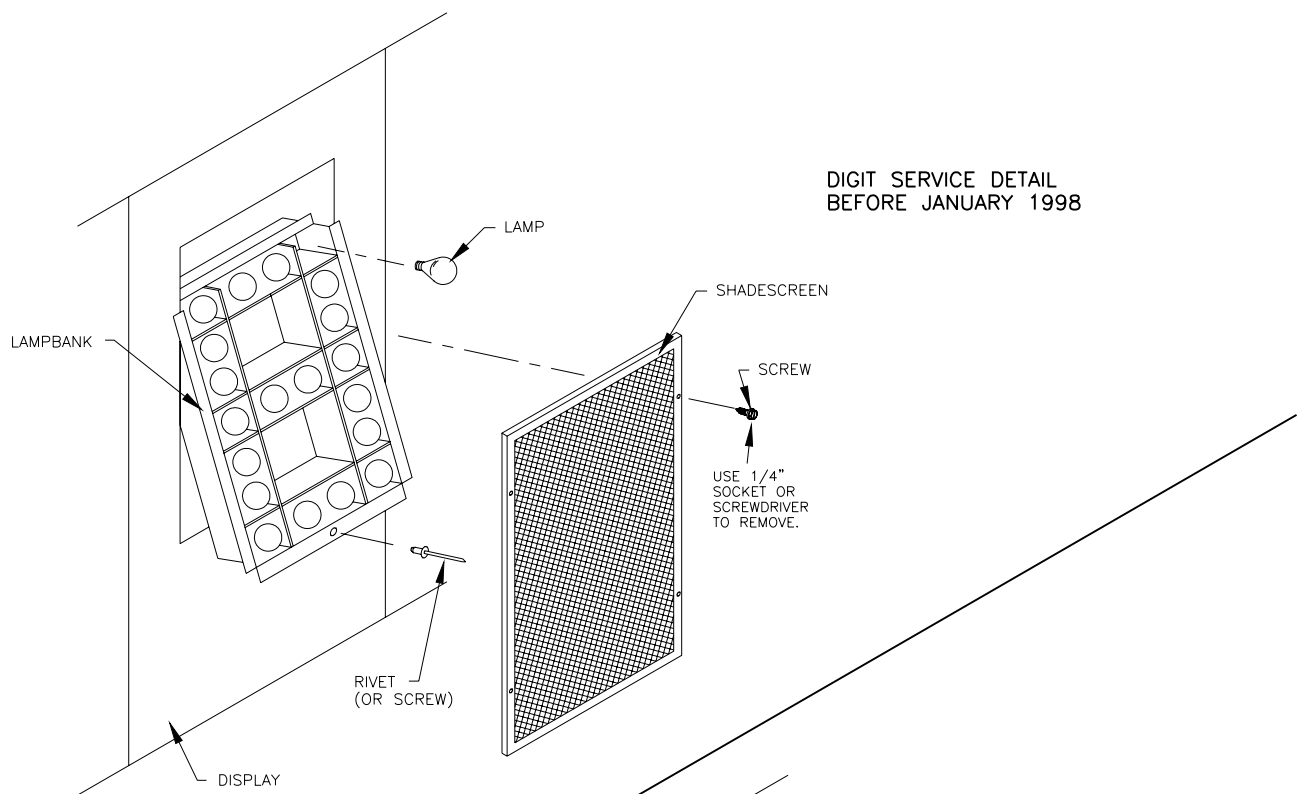
This will speed up the transaction and help avoid confusion when the part is returned to Daktronics. **The defective item must be returned within 15 days of receiving a replacement part.** Using the UPS Blue Return Tag immediately will eliminate the possibility of late charges being assessed against your account.

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

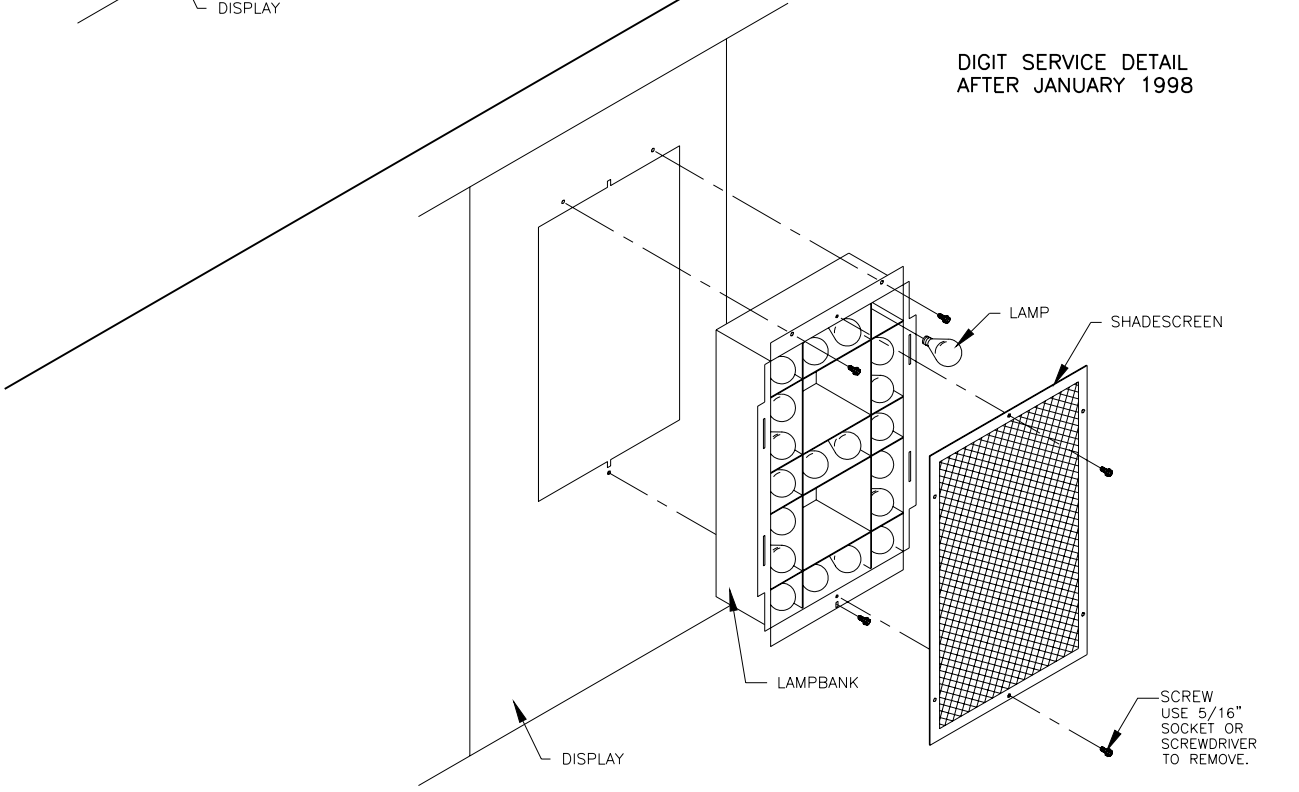
Phone: Toll Free: 1-800-843-9879
or 1-605-697-4400

Customer Service Fax: 1-605-697-4444

E-Mail: helpdesk@daktronics.com



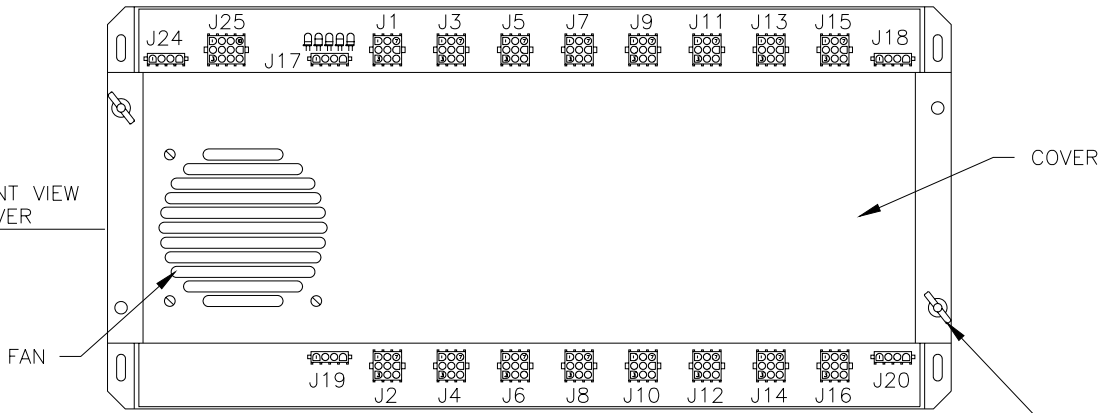
DIGIT SERVICE DETAIL
BEFORE JANUARY 1998



DIGIT SERVICE DETAIL
AFTER JANUARY 1998

DAKTRONICS, INC. BROOKINGS, SD 57006				
PROJ: OUTDOOR SCOREBOARDS				
TITLE: DIGIT SERVICE				
DES. BY:		DRAWN BY: TERRY P.		DATE: 31 JULY 86
REVISION	DATE	DESCRIPTION	BY	APPR.
2	10NOV97	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	
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.

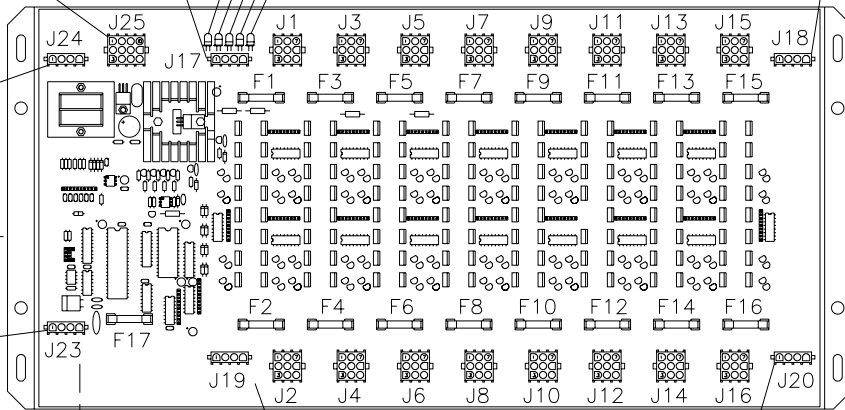
J1 - J16	
PIN	FUNCTION
1	SEG C
2	SEG B
3	SEG A
4	SEG F
5	SEG E
6	SEG D
7	COMMON
8	SEG H
9	SEG G

J18	
PIN	FUNCTION
1	LAMP NEUT
2	LAMP NEUT
3	LAMP HOT 1, 3, 5, 7
4	LAMP HOT 2, 4, 6, 8

J24	
PIN	FUNCTION
1	-5V
2	DIM SEL 1
3	-5V
4	DIM SEL 2

DRIVER FRONT VIEW WITH COVER REMOVED

J23	
PIN	FUNCTION
1	FAN SW HOT
2	N.C.
3	FAN HOT
4	NEUT



PLUG FROM FAN IN COVER CONNECTS TO J23



J19	
PIN	FUNCTION
1	NEUTRAL
2	NEUTRAL
3	120V HOT
4	120V HOT

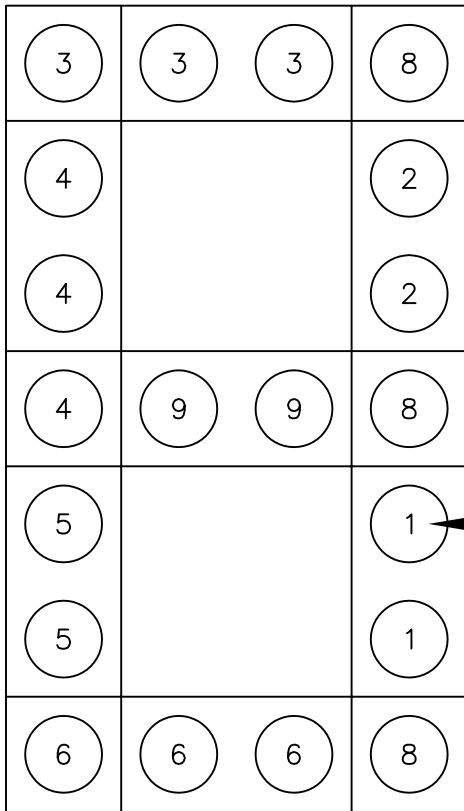
J20	
PIN	FUNCTION
1	LAMP NEUT
2	LAMP NEUT
3	LAMP HOT 9,11,13,15
4	LAMP HOT 10,12,14,16

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

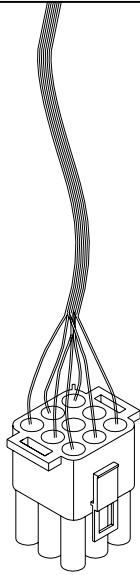
REV.	DATE	DESCRIPTION	BY	APPR.
2	29 APR 97	ADDED TABLES OF PINS AND FUNCTIONS.	AVB	AVB
1	5 MAR 91	CHANGED FROM "B" TO "A" SIZE DWG.	CF	

PROJ: MULTIPLEX CONTROLLERS	
TITLE: LAMP DRIVER, 16 COL., W/FAN	
DES. BY: JLH	DRAWN BY: JLH
DATE: 20 FEB 89	
REVISION	APPR. BY:
SCALE: 1=5	1033-R04A-37070



4 x 7 LAMP MATRIX DIGIT

CONNECTOR PIN NUMBER
WIRED TO THAT SEGMENT

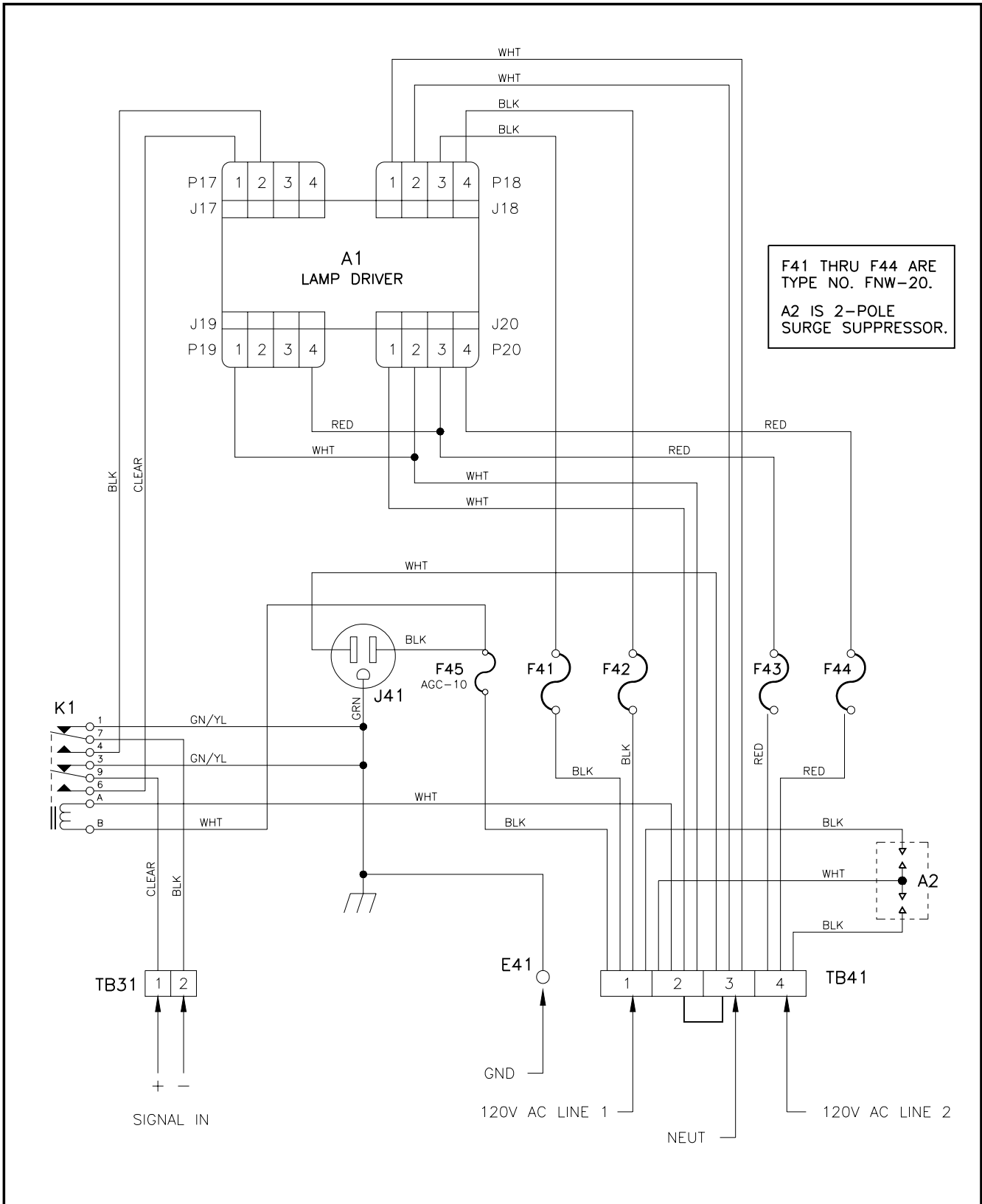


LAMP DRIVER
CONNECTOR

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.



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